

superior conj	13100 Jan 13 19:37	3° \approx 33'42	1°27'00	asc. node	13100 Dec 11 06:24	12° \approx 04'39	
minimum elong	13100 Jan 13 21:38	3° \approx 44'20	1°27'43		13100 Dec 20 15:44	0° \approx	
max. Earth dist.	13100 Jan 17 23:15	12° \approx 07'12	1.34585 AU	morning set	13100 Dec 22 04:02	3° \approx 12'02	
evening rise	13100 Jan 22 05:30	20° \approx 29'44					
desc. node	13100 Jan 26 06:33	28° \approx 01'05		superior conj	13100 Dec 29 00:56	18° \approx 06'22	1°35'49
	13100 Jan 27 09:03	0° \approx		minimum elong	13100 Dec 29 01:56	18° \approx 11'47	1°36'45
	13100 Feb 15 17:39	0° \approx		max. Earth dist.	13100 Dec 31 19:22	24° \approx 02'30	1.33029 AU
evening max el	13100 Feb 26 07:53	12° \approx 15'57	26°49'01		13101 Jan 03 15:50	0° \approx	
retrograde	13100 Mar 11 13:14	19° \approx 40'43		evening rise	13101 Jan 05 17:18	4° \approx 10'33	
evening set	13100 Mar 18 00:37	17° \approx 08'19		desc. node	13101 Jan 13 03:18	18° \approx 12'25	
min. Earth dist.	13100 Mar 22 00:52	13° \approx 09'14	0.66049 AU		13101 Jan 20 03:06	0° \approx	
asc. node	13100 Mar 22 06:34	12° \approx 52'51		evening max el	13101 Feb 08 21:06	25° \approx 42'37	27°24'54
inferior conj	13100 Mar 24 02:03	10° \approx 45'22	0°34'28		13101 Feb 14 01:18	0° \approx	
minimum elong	13100 Mar 24 01:09	10° \approx 48'01	0°34'01	retrograde	13101 Feb 22 12:38	3° \approx 09'01	
morning rise	13100 Mar 30 02:56	5° \approx 08'10		evening set	13101 Mar 01 07:33	0° \approx 39'38	
direct	13100 Apr 02 00:32	4° \approx 21'53			13101 Mar 02 03:56	30° \approx	
morning max el	13100 Apr 08 09:58	7° \approx 44'03	18°12'10	min. Earth dist.	13101 Mar 05 03:38	27° \approx 12'04	0.64352 AU
desc. node	13100 Apr 24 08:44	0° \approx 31'19		inferior conj	13101 Mar 07 16:24	24° \approx 30'37	-0°28'55
	13100 Apr 24 00:56	0° \approx		minimum elong	13101 Mar 07 17:17	24° \approx 28'17	0°28'23
morning set	13100 Apr 27 14:32	5° \approx 43'46		asc. node	13101 Mar 09 04:01	22° \approx 57'40	
				morning rise	13101 Mar 14 05:00	19° \approx 07'10	
superior conj	13100 May 12 20:21	29° \approx 55'25	-1°53'58	direct	13101 Mar 16 17:53	18° \approx 34'17	
minimum elong	13100 May 12 11:37	29° \approx 21'09	1°54'07	morning max el	13101 Mar 23 03:03	21° \approx 52'12	17°50'50
	13100 May 12 21:32	0° \approx			13101 Mar 29 11:55	0° \approx	
max. Earth dist.	13100 May 14 15:17	2° \approx 43'18	1.45793 AU	morning set	13101 Apr 09 04:36	17° \approx 27'13	
evening rise	13100 May 28 21:47	24° \approx 56'03		desc. node	13101 Apr 11 05:21	20° \approx 51'39	
	13100 Jun 01 04:01	0° \approx			13101 Apr 16 17:26	0° \approx	
greatest brilliancy	13100 Jun 09 09:02	12° \approx 37'55	-0.7m				
asc. node	13100 Jun 18 04:08	25° \approx 02'59		superior conj	13101 Apr 22 15:28	9° \approx 36'58	-1°20'28
evening max el	13100 Jun 21 11:14	28° \approx 46'56	19°10'38	minimum elong	13101 Apr 22 07:22	9° \approx 04'25	1°20'03
	13100 Jun 22 18:35	0° \approx		max. Earth dist.	13101 Apr 27 11:03	17° \approx 16'42	1.45226 AU
retrograde	13100 Jun 28 09:29	2° \approx 37'51			13101 May 05 15:00	0° \approx	
evening set	13100 Jul 01 22:06	1° \approx 25'40		evening rise	13101 May 08 10:55	4° \approx 20'52	
	13100 Jul 03 15:23	30° \approx		greatest brilliancy	13101 May 23 11:03	26° \approx 51'07	-0.6m
inferior conj	13100 Jul 07 08:47	25° \approx 37'21	3°05'59		13101 May 25 15:47	0° \approx	
minimum elong	13100 Jul 07 09:56	25° \approx 33'36	3°04'55	evening max el	13101 Jun 04 15:27	12° \approx 34'44	20°06'07
min. Earth dist.	13100 Jul 08 20:43	23° \approx 41'13	0.66784 AU	asc. node	13101 Jun 05 01:10	12° \approx 58'44	
morning rise	13100 Jul 12 21:10	19° \approx 13'30		retrograde	13101 Jun 12 08:04	16° \approx 58'28	
direct	13100 Jul 19 00:34	16° \approx 33'54		evening set	13101 Jun 16 06:21	15° \approx 29'27	
desc. node	13100 Jul 21 08:27	16° \approx 53'45		inferior conj	13101 Jun 21 13:24	9° \approx 28'01	3°13'08
morning max el	13100 Jul 31 16:08	24° \approx 07'28	26°01'32	minimum elong	13101 Jun 21 13:30	9° \approx 27'39	3°12'07
	13100 Aug 05 22:31	0° \approx		min. Earth dist.	13101 Jun 22 11:00	8° \approx 14'42	0.67959 AU
	13100 Aug 26 17:46	0° \approx		morning rise	13101 Jun 26 20:19	3° \approx 06'26	
morning set	13100 Sep 05 15:56	17° \approx 18'26		direct	13101 Jul 02 12:36	0° \approx 36'04	
max. Earth dist.	13100 Sep 09 10:18	24° \approx 24'45	1.35256 AU	desc. node	13101 Jul 08 05:43	2° \approx 35'15	
	13100 Sep 12 06:49	0° \approx		morning max el	13101 Jul 14 02:20	7° \approx 32'16	24°38'30
asc. node	13100 Sep 14 05:15	3° \approx 52'42			13101 Jul 31 15:29	0° \approx	
				morning set	13101 Aug 18 19:58	29° \approx 10'53	
superior conj	13100 Sep 14 23:51	5° \approx 27'00	0°07'21		13101 Aug 19 07:09	0° \approx	
minimum elong	13100 Sep 14 23:26	5° \approx 24'52	0°07'16	max. Earth dist.	13101 Aug 22 09:59	5° \approx 34'50	1.37426 AU
behind sun begin	13100 Sep 14 17:59	4° \approx 57'09					
behind sun end	13100 Sep 15 04:53	5° \approx 52'38		superior conj	13101 Aug 29 08:18	18° \approx 36'56	-0°25'20
evening rise	13100 Sep 22 16:51	21° \approx 24'23		minimum elong	13101 Aug 29 10:00	18° \approx 45'10	0°25'18
	13100 Sep 26 22:42	0° \approx		asc. node	13101 Sep 01 01:51	23° \approx 58'25	
evening max el	13100 Oct 11 02:25	21° \approx 44'40	20°29'36		13101 Sep 04 02:22	0° \approx	
desc. node	13100 Oct 17 04:48	26° \approx 09'10		evening rise	13101 Sep 06 20:08	5° \approx 29'46	
retrograde	13100 Oct 22 04:25	27° \approx 15'08			13101 Sep 20 22:35	0° \approx	
evening set	13100 Oct 24 08:52	27° \approx 03'15		evening max el	13101 Sep 23 15:16	3° \approx 03'19	19°21'23
inferior conj	13100 Nov 02 08:43	23° \approx 07'57	-4°39'41	retrograde	13101 Oct 03 01:17	7° \approx 45'51	
minimum elong	13100 Nov 01 22:39	23° \approx 22'34	4°36'14	desc. node	13101 Oct 04 02:16	7° \approx 42'36	
min. Earth dist.	13100 Nov 03 15:45	22° \approx 22'53	0.54692 AU	evening set	13101 Oct 04 21:52	7° \approx 35'39	
morning rise	13100 Nov 10 12:01	19° \approx 08'01		inferior conj	13101 Oct 13 12:54	3° \approx 27'12	-2°56'39
direct	13100 Nov 14 22:53	18° \approx 25'21		minimum elong	13101 Oct 13 05:19	3° \approx 39'36	2°53'23
morning max el	13100 Nov 28 07:31	24° \approx 56'08	23°37'20	min. Earth dist.	13101 Oct 16 02:02	1° \approx 47'31	0.55712 AU
	13100 Dec 02 23:30	0° \approx			13101 Oct 19 03:16	30° \approx	

morning rise	13101 Oct 21 10:25	28° Ω 56'43		morning rise	13102 Oct 02 02:22	9° Ω 19'32	
direct	13101 Oct 26 17:29	27° Ω 53'16		direct	13102 Oct 08 02:02	7° Ω 49'51	
	13101 Nov 03 05:03	0° \mathbb{M}		morning max el	13102 Oct 22 09:13	15° Ω 20'16	26°50'08
morning max el	13101 Nov 09 17:44	4° \mathbb{M} 56'57	25°23'23		13102 Nov 03 05:57	0° \mathbb{M}	
	13101 Nov 27 16:09	0° \mathbb{A}		asc. node	13102 Nov 15 00:12	20° \mathbb{M} 06'31	
asc. node	13101 Nov 28 03:22	0° \mathbb{A} 51'07			13102 Nov 19 21:36	0° \mathbb{A}	
morning set	13101 Dec 06 15:40	17° \mathbb{A} 54'18		morning set	13102 Nov 21 01:28	2° \mathbb{A} 27'45	
	13101 Dec 12 04:01	0° \mathbb{B}					
				superior conj	13102 Nov 27 21:40	17° \mathbb{A} 31'27	1°34'50
superior conj	13101 Dec 13 10:19	2° \mathbb{B} 47'38	1°38'19	minimum elong	13102 Nov 27 20:33	17° \mathbb{A} 25'12	1°35'44
minimum elong	13101 Dec 13 10:12	2° \mathbb{B} 47'00	1°39'20	max. Earth dist.	13102 Nov 28 06:13	18° \mathbb{A} 19'12	1.31337 AU
max. Earth dist.	13101 Dec 14 22:38	6° \mathbb{B} 07'41	1.31939 AU		13102 Dec 03 13:32	0° \mathbb{B}	
evening rise	13101 Dec 20 14:20	18° \mathbb{B} 13'34		evening rise	13102 Dec 04 18:00	2° \mathbb{B} 32'09	
	13101 Dec 26 13:10	0° \approx		desc. node	13102 Dec 17 21:05	27° \mathbb{B} 28'38	
desc. node	13101 Dec 31 00:08	8° \approx 04'11			13102 Dec 19 10:09	0° \approx	
	13102 Jan 14 13:51	0° \mathbb{H}		evening max el	13103 Jan 04 13:04	20° \approx 50'41	27°05'45
evening max el	13102 Jan 22 07:43	8° \mathbb{H} 38'17	27°32'03	retrograde	13103 Jan 18 11:55	28° \approx 04'09	
retrograde	13102 Feb 05 04:28	15° \mathbb{H} 59'40		evening set	13103 Jan 25 07:08	26° \approx 03'33	
evening set	13102 Feb 12 02:47	13° \mathbb{H} 40'37		min. Earth dist.	13103 Jan 29 03:24	23° \approx 21'48	0.60207 AU
min. Earth dist.	13102 Feb 15 20:48	10° \mathbb{H} 40'06	0.62364 AU	inferior conj	13103 Feb 01 07:39	20° \approx 43'39	-3°04'02
inferior conj	13102 Feb 18 19:25	7° \mathbb{H} 52'59	-1°42'46	minimum elong	13103 Feb 01 14:13	20° \approx 30'00	3°00'54
minimum elong	13102 Feb 18 22:55	7° \mathbb{H} 44'40	1°40'53	morning rise	13103 Feb 09 00:22	15° \approx 57'07	
asc. node	13102 Feb 24 01:27	3° \mathbb{H} 37'28		asc. node	13103 Feb 10 22:51	15° \approx 40'25	
morning rise	13102 Feb 25 21:43	2° \mathbb{H} 46'27		direct	13103 Feb 11 02:07	15° \approx 40'20	
direct	13102 Feb 28 03:45	2° \mathbb{H} 23'23		morning max el	13103 Feb 18 11:07	19° \approx 21'09	18°02'02
morning max el	13102 Mar 06 20:33	5° \mathbb{H} 47'34	17°47'09		13103 Feb 26 06:17	0° \mathbb{H}	
morning set	13102 Mar 22 18:11	0° \mathbb{Y} 17'27		morning set	13103 Mar 06 01:05	13° \mathbb{H} 55'39	
	13102 Mar 22 14:13	0° \mathbb{Y}			13103 Mar 14 20:02	0° \mathbb{Y}	
desc. node	13102 Mar 29 01:53	11° \mathbb{Y} 21'30		desc. node	13103 Mar 15 22:23	1° \mathbb{Y} 57'04	
superior conj	13102 Apr 03 08:59	20° \mathbb{Y} 22'35	-0°40'26	superior conj	13103 Mar 16 02:36	2° \mathbb{Y} 15'42	-0°01'24
minimum elong	13102 Apr 03 05:02	20° \mathbb{Y} 06'01	0°40'04	minimum elong	13103 Mar 16 02:29	2° \mathbb{Y} 15'11	0°01'19
	13102 Apr 09 05:11	0° \mathbb{B}		behind sun begin	13103 Mar 15 18:38	1° \mathbb{Y} 40'26	
max. Earth dist.	13102 Apr 10 04:20	1° \mathbb{B} 33'27	1.43975 AU	behind sun end	13103 Mar 16 10:20	2° \mathbb{Y} 49'50	
evening rise	13102 Apr 18 00:16	13° \mathbb{B} 54'38		max. Earth dist.	13103 Mar 23 16:59	15° \mathbb{Y} 17'37	1.42175 AU
	13102 Apr 28 15:53	0° \mathbb{I}		evening rise	13103 Mar 29 03:39	24° \mathbb{Y} 10'09	
evening max el	13102 May 18 13:46	26° \mathbb{I} 22'51	21°14'36		13103 Apr 01 20:23	0° \mathbb{B}	
asc. node	13102 May 22 22:18	0° \mathbb{B} 00'27			13103 Apr 22 14:55	0° \mathbb{I}	
	13102 May 22 22:01	0° \mathbb{B}		evening max el	13103 May 01 07:10	10° \mathbb{I} 12'06	22°32'04
retrograde	13102 May 27 06:46	1° \mathbb{B} 27'49		asc. node	13103 May 09 19:33	15° \mathbb{I} 52'43	
	13102 May 31 06:21	30° \mathbb{R} \mathbb{I}		retrograde	13103 May 11 03:59	16° \mathbb{I} 01'10	
evening set	13102 May 31 15:25	29° \mathbb{I} 42'18		evening set	13103 May 15 23:40	14° \mathbb{I} 00'23	
inferior conj	13102 Jun 05 21:28	23° \mathbb{I} 29'15	3°08'25	inferior conj	13103 May 21 07:00	7° \mathbb{I} 37'57	2°53'05
minimum elong	13102 Jun 05 20:36	23° \mathbb{I} 32'17	3°07'21	minimum elong	13103 May 21 05:22	7° \mathbb{I} 43'39	2°51'55
min. Earth dist.	13102 Jun 06 05:27	23° \mathbb{I} 01'29	0.68665 AU	min. Earth dist.	13103 May 21 02:03	7° \mathbb{I} 55'12	0.68895 AU
morning rise	13102 Jun 11 01:35	17° \mathbb{I} 12'19		morning rise	13103 May 26 10:56	1° \mathbb{I} 27'11	
direct	13102 Jun 16 05:17	14° \mathbb{I} 57'34			13103 May 28 18:11	30° \mathbb{R} \mathbb{B}	
desc. node	13102 Jun 25 02:52	19° \mathbb{I} 42'49		direct	13103 May 31 01:40	29° \mathbb{B} 31'46	
morning max el	13102 Jun 26 12:57	21° \mathbb{I} 05'20	23°08'56		13103 Jun 02 12:20	0° \mathbb{I}	
	13102 Jul 04 04:47	0° \mathbb{B}		morning max el	13103 Jun 09 02:44	4° \mathbb{I} 47'40	21°41'48
	13102 Jul 24 21:09	0° \mathbb{Q}		desc. node	13103 Jun 11 23:52	7° \mathbb{I} 54'04	
morning set	13102 Jul 31 01:51	10° \mathbb{Q} 03'14			13103 Jun 28 07:55	0° \mathbb{B}	
max. Earth dist.	13102 Aug 04 08:04	17° \mathbb{Q} 16'00	1.39769 AU	morning set	13103 Jul 11 06:35	19° \mathbb{B} 49'37	
	13102 Aug 11 11:56	0° \mathbb{M}		max. Earth dist.	13103 Jul 17 10:05	29° \mathbb{B} 46'57	1.42013 AU
					13103 Jul 17 13:14	0° \mathbb{Q}	
superior conj	13102 Aug 12 01:57	1° \mathbb{M} 04'18	-1°00'07	superior conj	13103 Jul 25 00:28	12° \mathbb{Q} 40'09	-1°33'33
minimum elong	13102 Aug 12 06:21	1° \mathbb{M} 24'34	0°59'59	minimum elong	13103 Jul 25 07:12	13° \mathbb{Q} 09'27	1°33'34
asc. node	13102 Aug 18 22:26	13° \mathbb{M} 59'03			13103 Aug 03 16:34	0° \mathbb{M}	
evening rise	13102 Aug 21 15:31	19° \mathbb{M} 11'31		evening rise	13103 Aug 04 23:17	2° \mathbb{M} 20'37	
	13102 Aug 27 09:25	0° \mathbb{A}		asc. node	13103 Aug 05 19:05	3° \mathbb{M} 51'12	
evening max el	13102 Sep 06 16:16	15° \mathbb{A} 07'49	18°34'59	evening max el	13103 Aug 21 01:34	27° \mathbb{M} 50'38	18°09'22
retrograde	13102 Sep 14 16:23	19° \mathbb{A} 09'53			13103 Aug 23 16:38	0° \mathbb{A}	
evening set	13102 Sep 16 15:32	18° \mathbb{A} 56'05		retrograde	13103 Aug 28 01:58	1° \mathbb{A} 25'06	
desc. node	13102 Sep 20 23:46	17° \mathbb{A} 00'13		evening set	13103 Aug 30 08:05	1° \mathbb{A} 03'25	
inferior conj	13102 Sep 24 13:23	14° \mathbb{A} 27'59	-1°07'39		13103 Sep 01 15:30	30° \mathbb{R} \mathbb{M}	
minimum elong	13102 Sep 24 10:41	14° \mathbb{A} 33'10	1°06'25	inferior conj	13103 Sep 06 11:28	26° \mathbb{M} 14'51	0°25'51
min. Earth dist.	13102 Sep 27 18:13	12° \mathbb{A} 02'03	0.57451 AU				

minimum elong	13103 Sep 06 12:19	26° \mathbb{M} 12'58	0°25'22	evening set	13104 Aug 12 16:58	13° \mathbb{M} 50'19	
desc. node	13103 Sep 07 21:15	24° \mathbb{M} 59'04		inferior conj	13104 Aug 19 04:15	8° \mathbb{M} 42'34	1°36'40
min. Earth dist.	13103 Sep 09 18:22	23° \mathbb{M} 20'14	0.59624 AU	minimum elong	13104 Aug 19 06:37	8° \mathbb{M} 36'31	1°35'27
morning rise	13103 Sep 13 13:12	20° \mathbb{M} 33'12		min. Earth dist.	13104 Aug 22 03:37	5° \mathbb{M} 41'37	0.61916 AU
direct	13103 Sep 20 00:23	18° \mathbb{M} 35'38		desc. node	13104 Aug 24 18:43	3° \mathbb{M} 21'05	
morning max el	13103 Oct 04 08:17	26° \mathbb{M} 25'32	27°43'33	morning rise	13104 Aug 25 17:49	2° \mathbb{M} 37'59	
	13103 Oct 07 17:17	0° \mathbb{L}		direct	13104 Sep 01 10:05	0° \mathbb{M} 16'59	
	13103 Oct 27 19:20	0° \mathbb{M}		morning max el	13104 Sep 15 13:47	8° \mathbb{M} 17'10	27°58'08
asc. node	13103 Nov 01 20:57	9° \mathbb{M} 42'45			13104 Oct 02 06:33	0° \mathbb{L}	
morning set	13103 Nov 05 07:37	16° \mathbb{M} 47'16		asc. node	13104 Oct 18 17:38	29° \mathbb{L} 33'46	
	13103 Nov 11 09:26	0° \mathbb{X}			13104 Oct 18 22:47	0° \mathbb{M}	
max. Earth dist.	13103 Nov 11 14:34	0° \mathbb{X} 28'32	1.31251 AU	morning set	13104 Oct 19 08:10	0° \mathbb{M} 48'04	
				max. Earth dist.	13104 Oct 24 19:57	12° \mathbb{M} 26'54	1.31697 AU
superior conj	13103 Nov 12 09:08	2° \mathbb{X} 11'57	1°25'35				
minimum elong	13103 Nov 12 07:15	2° \mathbb{X} 01'28	1°26'13	superior conj	13104 Oct 26 18:53	16° \mathbb{M} 44'07	1°10'40
evening rise	13103 Nov 19 02:04	17° \mathbb{X} 00'19		minimum elong	13104 Oct 26 16:38	16° \mathbb{M} 31'42	1°10'59
	13103 Nov 25 10:12	0° \mathbb{Z}			13104 Nov 01 19:25	0° \mathbb{X}	
desc. node	13103 Dec 04 18:07	16° \mathbb{Z} 14'30		evening rise	13104 Nov 02 12:40	1° \mathbb{X} 33'21	
	13103 Dec 15 06:32	0° \mathbb{Z}			13104 Nov 17 18:28	0° \mathbb{Z}	
evening max el	13103 Dec 17 10:48	2° \mathbb{Z} 11'12	26°05'19	desc. node	13104 Nov 20 15:17	4° \mathbb{Z} 07'16	
retrograde	13103 Dec 31 09:19	9° \mathbb{Z} 15'12		evening max el	13104 Nov 28 00:35	12° \mathbb{Z} 42'57	24°36'59
evening set	13104 Jan 06 16:24	7° \mathbb{Z} 41'07		retrograde	13104 Dec 11 18:23	19° \mathbb{Z} 34'41	
min. Earth dist.	13104 Jan 10 23:56	5° \mathbb{Z} 04'48	0.58072 AU	evening set	13104 Dec 17 02:32	18° \mathbb{Z} 31'41	
inferior conj	13104 Jan 14 01:30	2° \mathbb{Z} 52'15	-4°24'58	min. Earth dist.	13104 Dec 22 12:20	15° \mathbb{Z} 43'36	0.56225 AU
minimum elong	13104 Jan 14 10:08	2° \mathbb{Z} 36'38	4°21'34	inferior conj	13104 Dec 24 22:42	14° \mathbb{Z} 11'45	-5°29'49
	13104 Jan 18 09:59	30° \mathbb{R} \mathbb{Z}		minimum elong	13104 Dec 25 05:40	14° \mathbb{Z} 00'45	5°27'43
morning rise	13104 Jan 22 06:45	28° \mathbb{Z} 27'32		morning rise	13105 Jan 02 10:53	10° \mathbb{Z} 07'57	
direct	13104 Jan 24 08:34	28° \mathbb{Z} 13'29		direct	13105 Jan 04 20:05	9° \mathbb{Z} 52'30	
asc. node	13104 Jan 28 20:13	29° \mathbb{Z} 23'14		morning max el	13105 Jan 14 15:37	14° \mathbb{Z} 36'08	19°34'26
	13104 Jan 29 21:21	0° \mathbb{Z}		asc. node	13105 Jan 14 17:29	14° \mathbb{Z} 40'39	
morning max el	13104 Feb 01 18:51	2° \mathbb{Z} 21'10	18°37'07		13105 Jan 25 10:42	0° \mathbb{Z}	
morning set	13104 Feb 17 20:01	28° \mathbb{Z} 05'30		morning set	13105 Jan 31 23:06	12° \mathbb{Z} 35'50	
	13104 Feb 18 19:40	0° \mathbb{X}					
superior conj	13104 Feb 26 16:43	15° \mathbb{X} 04'31	0°32'25	superior conj	13105 Feb 08 22:46	28° \mathbb{Z} 36'31	0°59'17
minimum elong	13104 Feb 26 18:50	15° \mathbb{X} 14'19	0°32'26	minimum elong	13105 Feb 09 01:34	28° \mathbb{Z} 50'15	0°59'29
desc. node	13104 Mar 01 18:55	22° \mathbb{X} 34'12			13105 Feb 09 15:50	0° \mathbb{X}	
max. Earth dist.	13104 Mar 05 00:52	28° \mathbb{X} 19'01	1.40033 AU	max. Earth dist.	13105 Feb 15 07:07	10° \mathbb{X} 41'44	1.37787 AU
	13104 Mar 06 00:11	0° \mathbb{Y}		desc. node	13105 Feb 16 15:29	13° \mathbb{X} 09'34	
evening rise	13104 Mar 09 03:37	5° \mathbb{Y} 20'22		evening rise	13105 Feb 19 00:23	17° \mathbb{X} 23'59	
	13104 Mar 24 23:25	0° \mathbb{X}			13105 Feb 26 11:10	0° \mathbb{Y}	
evening max el	13104 Apr 12 21:37	24° \mathbb{X} 03'06	23°53'05	evening max el	13105 Mar 19 08:39	0° \mathbb{X}	
	13104 Apr 21 02:40	0° \mathbb{I}			13105 Mar 26 11:14	7° \mathbb{X} 55'53	25°10'49
retrograde	13104 Apr 23 22:16	0° \mathbb{I} 32'05		retrograde	13105 Apr 07 12:21	14° \mathbb{X} 55'05	
asc. node	13104 Apr 25 16:52	0° \mathbb{I} 17'48		asc. node	13105 Apr 12 14:16	13° \mathbb{X} 04'25	
	13104 Apr 26 13:35	30° \mathbb{R} \mathbb{X}		evening set	13105 Apr 13 07:16	12° \mathbb{X} 30'33	
evening set	13104 Apr 29 05:28	28° \mathbb{X} 18'01		min. Earth dist.	13105 Apr 17 16:52	7° \mathbb{X} 37'14	0.67978 AU
min. Earth dist.	13104 May 03 22:35	22° \mathbb{X} 48'51	0.68660 AU	inferior conj	13105 Apr 18 22:39	6° \mathbb{X} 00'00	1°52'03
inferior conj	13104 May 04 16:01	21° \mathbb{X} 49'25	2°27'38	minimum elong	13105 Apr 18 20:33	6° \mathbb{X} 06'53	1°50'54
minimum elong	13104 May 04 13:56	21° \mathbb{X} 56'32	2°26'24	morning rise	13105 Apr 24 10:09	0° \mathbb{X} 05'29	
morning rise	13104 May 09 22:25	15° \mathbb{X} 46'05			13105 Apr 24 13:24	30° \mathbb{R} \mathbb{Y}	
direct	13104 May 14 00:32	14° \mathbb{X} 11'27		direct	13105 Apr 28 00:25	28° \mathbb{Y} 51'13	
morning max el	13104 May 21 22:32	18° \mathbb{X} 40'18	20°24'04		13105 May 01 16:14	0° \mathbb{X}	
desc. node	13104 May 28 20:46	26° \mathbb{X} 51'06		morning max el	13105 May 05 01:55	2° \mathbb{X} 43'46	19°20'09
	13104 May 31 04:47	0° \mathbb{I}		desc. node	13105 May 15 17:35	16° \mathbb{X} 21'40	
morning set	13104 Jun 19 13:46	28° \mathbb{I} 40'49		greatest brilliancy	13105 May 17 20:00	19° \mathbb{X} 26'35	-0.7m
	13104 Jun 20 10:14	0° \mathbb{L}			13105 May 24 20:00	0° \mathbb{I}	
max. Earth dist.	13104 Jun 28 18:37	13° \mathbb{L} 09'05	1.43886 AU	morning set	13105 May 29 15:34	7° \mathbb{I} 23'04	
				max. Earth dist.	13105 Jun 11 09:40	27° \mathbb{I} 13'05	1.45189 AU
					13105 Jun 13 04:00	0° \mathbb{L}	
superior conj	13104 Jul 05 00:04	23° \mathbb{L} 16'54	-2°00'15				
minimum elong	13104 Jul 05 06:35	23° \mathbb{L} 43'50	2°00'45	superior conj	13105 Jun 15 00:26	2° \mathbb{L} 55'58	-2°13'11
	13104 Jul 09 00:39	0° \mathbb{L}		minimum elong	13105 Jun 15 01:53	3° \mathbb{L} 01'47	2°14'10
evening rise	13104 Jul 17 14:43	14° \mathbb{L} 45'17		evening rise	13105 Jun 29 08:42	26° \mathbb{L} 13'24	
asc. node	13104 Jul 22 15:48	23° \mathbb{L} 30'29			13105 Jul 01 15:25	0° \mathbb{L}	
	13104 Jul 26 12:48	0° \mathbb{M}		asc. node	13105 Jul 09 12:37	12° \mathbb{L} 51'00	
evening max el	13104 Aug 03 15:09	11° \mathbb{M} 02'10	18°03'16	evening max el	13105 Jul 18 05:24	24° \mathbb{L} 32'22	18°15'38
retrograde	13104 Aug 10 02:39	14° \mathbb{M} 23'26		retrograde	13105 Jul 24 14:01	27° \mathbb{L} 54'42	

evening set	13105 Jul 27 12:47	27° Ω 07'30		inferior conj	13106 Jul 17 05:45	5° Ω 07'14	2°55'46
inferior conj	13105 Aug 02 11:37	21° Ω 42'29	2°25'34	minimum elong	13106 Jul 17 07:29	5° Ω 01'52	2°54'37
minimum elong	13105 Aug 02 14:04	21° Ω 35'30	2°24'16	min. Earth dist.	13106 Jul 19 01:58	2° Ω 49'48	0.65909 AU
min. Earth dist.	13105 Aug 04 22:20	18° Ω 55'39	0.64069 AU		13106 Jul 21 14:01	30° \mathcal{R} \mathfrak{E}	
morning rise	13105 Aug 08 13:49	15° Ω 24'42		morning rise	13106 Jul 22 22:29	28° \mathfrak{E} 43'55	
desc. node	13105 Aug 11 16:12	13° Ω 32'07		direct	13106 Jul 29 07:01	26° \mathfrak{E} 03'15	
direct	13105 Aug 15 04:43	12° Ω 48'58		desc. node	13106 Jul 29 13:36	26° \mathfrak{E} 03'31	
morning max el	13105 Aug 28 23:21	20° Ω 48'58	27°35'41		13106 Aug 07 04:58	0° Ω	
	13105 Sep 05 21:52	0° \mathfrak{M}		morning max el	13106 Aug 11 10:35	3° Ω 50'43	26°42'35
	13105 Sep 25 09:09	0° \mathfrak{A}			13106 Aug 31 07:14	0° \mathfrak{M}	
morning set	13105 Oct 03 00:39	14° \mathfrak{A} 23'28		morning set	13106 Sep 16 06:06	27° \mathfrak{M} 26'42	
asc. node	13105 Oct 05 14:16	19° \mathfrak{A} 33'59			13106 Sep 17 14:08	0° \mathfrak{A}	
max. Earth dist.	13105 Oct 07 18:47	24° \mathfrak{A} 06'06	1.32682 AU	max. Earth dist.	13106 Sep 20 08:12	5° \mathfrak{A} 24'00	1.34187 AU
	13105 Oct 10 13:25	0° \mathfrak{M}		asc. node	13106 Sep 22 10:53	9° \mathfrak{A} 39'22	
superior conj	13105 Oct 11 00:52	1° \mathfrak{M} 01'32	0°50'10	superior conj	13106 Sep 25 00:48	14° \mathfrak{A} 58'27	0°24'22
minimum elong	13105 Oct 10 22:46	0° \mathfrak{M} 50'14	0°50'13	minimum elong	13106 Sep 24 23:32	14° \mathfrak{A} 51'52	0°24'17
evening rise	13105 Oct 17 23:51	16° \mathfrak{M} 05'32		evening rise	13106 Oct 02 09:44	0° \mathfrak{M} 32'01	
	13105 Oct 24 19:47	0° \mathfrak{A}			13106 Oct 02 03:39	0° \mathfrak{M}	
desc. node	13105 Nov 07 12:33	20° \mathfrak{A} 46'27			13106 Oct 19 09:33	0° \mathfrak{A}	
evening max el	13105 Nov 09 10:36	22° \mathfrak{A} 45'37	22°55'17	evening max el	13106 Oct 22 02:08	2° \mathfrak{A} 56'27	21°18'03
retrograde	13105 Nov 22 14:13	29° \mathfrak{A} 17'31		desc. node	13106 Oct 25 09:54	5° \mathfrak{A} 47'00	
evening set	13105 Nov 26 14:10	28° \mathfrak{A} 42'46		retrograde	13106 Nov 03 01:50	8° \mathfrak{A} 53'52	
min. Earth dist.	13105 Dec 03 19:32	25° \mathfrak{A} 24'16	0.54958 AU	evening set	13106 Nov 05 18:16	8° \mathfrak{A} 37'08	
inferior conj	13105 Dec 05 00:50	24° \mathfrak{A} 42'26	-5°55'37	inferior conj	13106 Nov 14 16:41	4° \mathfrak{A} 43'13	-5°23'36
minimum elong	13105 Dec 05 00:30	24° \mathfrak{A} 42'54	5°54'38	minimum elong	13106 Nov 14 08:19	4° \mathfrak{A} 54'58	5°21'13
morning rise	13105 Dec 13 12:18	20° \mathfrak{A} 53'31		min. Earth dist.	13106 Nov 15 01:34	4° \mathfrak{A} 30'42	0.54518 AU
direct	13105 Dec 16 13:34	20° \mathfrak{A} 31'49		morning rise	13106 Nov 22 23:04	0° \mathfrak{A} 53'28	
morning max el	13105 Dec 27 22:18	25° \mathfrak{A} 57'02	20°54'54	direct	13106 Nov 26 21:15	0° \mathfrak{A} 20'19	
	13105 Dec 31 14:46	0° \mathfrak{B}		morning max el	13106 Dec 09 15:42	6° \mathfrak{A} 28'06	22°35'03
asc. node	13106 Jan 01 14:41	1° \mathfrak{B} 16'33		asc. node	13106 Dec 19 11:47	18° \mathfrak{A} 54'24	
morning set	13106 Jan 16 07:19	27° \mathfrak{B} 17'21			13106 Dec 25 19:49	0° \mathfrak{B}	
	13106 Jan 17 14:35	0° \mathfrak{A}		morning set	13106 Dec 31 18:19	12° \mathfrak{B} 03'21	
superior conj	13106 Jan 23 16:28	12° \mathfrak{A} 39'25	1°18'54	superior conj	13107 Jan 07 18:21	27° \mathfrak{B} 03'29	1°31'32
minimum elong	13106 Jan 23 18:57	12° \mathfrak{A} 52'09	1°19'26	minimum elong	13107 Jan 07 19:58	27° \mathfrak{B} 12'05	1°32'22
max. Earth dist.	13106 Jan 28 16:13	22° \mathfrak{A} 40'00	1.35666 AU		13107 Jan 09 03:40	0° \mathfrak{A}	
evening rise	13106 Feb 01 15:04	0° \mathfrak{H} 12'08		max. Earth dist.	13107 Jan 11 07:44	4° \mathfrak{A} 31'33	1.33864 AU
	13106 Feb 01 12:28	0° \mathfrak{H}		evening rise	13107 Jan 15 20:06	13° \mathfrak{A} 35'44	
desc. node	13106 Feb 03 12:07	3° \mathfrak{H} 39'05		desc. node	13107 Jan 21 08:49	23° \mathfrak{A} 58'16	
	13106 Feb 19 14:58	0° \mathfrak{Y}			13107 Jan 24 19:12	0° \mathfrak{H}	
evening max el	13106 Mar 09 00:57	21° \mathfrak{Y} 45'33	26°18'04		13107 Feb 14 13:16	0° \mathfrak{Y}	
retrograde	13106 Mar 21 21:24	29° \mathfrak{Y} 03'45		evening max el	13107 Feb 19 14:26	5° \mathfrak{Y} 22'43	27°07'26
evening set	13106 Mar 28 03:22	26° \mathfrak{Y} 32'37		retrograde	13107 Mar 05 00:35	12° \mathfrak{Y} 49'23	
asc. node	13106 Mar 30 11:41	24° \mathfrak{Y} 17'55		evening set	13107 Mar 11 15:45	10° \mathfrak{Y} 17'06	
min. Earth dist.	13106 Apr 01 06:41	22° \mathfrak{Y} 14'25	0.66868 AU	min. Earth dist.	13107 Mar 15 13:56	6° \mathfrak{Y} 32'12	0.65364 AU
inferior conj	13106 Apr 03 00:52	20° \mathfrak{Y} 05'22	1°06'00	asc. node	13107 Mar 17 09:09	4° \mathfrak{Y} 30'52	
minimum elong	13106 Apr 02 23:19	20° \mathfrak{Y} 10'07	1°05'10	inferior conj	13107 Mar 17 20:17	3° \mathfrak{Y} 59'22	0°08'56
morning rise	13106 Apr 08 20:07	14° \mathfrak{Y} 21'24		minimum elong	13107 Mar 17 20:02	4° \mathfrak{Y} 00'05	0°08'52
direct	13106 Apr 11 23:31	13° \mathfrak{Y} 25'39		transit middle	13107 Mar 17 20:02	4° \mathfrak{Y} 00'05	0°08'52
morning max el	13106 Apr 18 12:26	16° \mathfrak{Y} 55'01	18°32'15	transit begin	13107 Mar 17 17:31	4° \mathfrak{Y} 07'09	
	13106 Apr 28 12:05	0° \mathfrak{B}		transit end	13107 Mar 17 22:32	3° \mathfrak{Y} 53'01	
desc. node	13106 May 02 14:19	6° \mathfrak{B} 16'55			13107 Mar 21 18:30	30° \mathcal{R} \mathfrak{H}	
morning set	13106 May 09 09:49	16° \mathfrak{B} 58'06		morning rise	13107 Mar 24 01:53	28° \mathfrak{H} 28'00	
	13106 May 17 17:03	0° \mathfrak{I}		direct	13107 Mar 26 19:37	27° \mathfrak{H} 47'52	
superior conj	13106 May 25 09:41	12° \mathfrak{I} 01'15	-2°06'41		13107 Mar 31 22:17	0° \mathfrak{Y}	
minimum elong	13106 May 25 03:33	11° \mathfrak{I} 37'19	2°07'20	morning max el	13107 Apr 02 03:56	1° \mathfrak{Y} 06'39	18°01'06
max. Earth dist.	13106 May 25 04:59	11° \mathfrak{I} 42'54	1.45788 AU	desc. node	13107 Apr 19 10:58	26° \mathfrak{Y} 29'26	
	13106 Jun 05 20:50	0° \mathfrak{E}		morning set	13107 Apr 20 07:48	27° \mathfrak{Y} 54'44	
evening rise	13106 Jun 10 02:17	6° \mathfrak{E} 40'57			13107 Apr 21 14:27	0° \mathfrak{B}	
greatest brilliancy	13106 Jun 18 12:34	20° \mathfrak{E} 00'02	-0.8m	superior conj	13107 May 04 20:21	21° \mathfrak{B} 17'06	-1°41'10
	13106 Jun 25 03:18	0° Ω		minimum elong	13107 May 04 11:09	20° \mathfrak{B} 40'48	1°41'00
asc. node	13106 Jun 26 09:31	1° Ω 46'10		max. Earth dist.	13107 May 08 01:05	26° \mathfrak{B} 18'41	1.45637 AU
evening max el	13106 Jul 01 17:19	8° Ω 13'39	18°45'38		13107 May 10 09:44	0° \mathfrak{I}	
retrograde	13106 Jul 08 08:12	11° Ω 50'37		evening rise	13107 May 20 22:36	16° \mathfrak{I} 19'14	
evening set	13106 Jul 11 15:38	10° Ω 47'45			13107 May 29 21:03	0° \mathfrak{E}	

greatest brilliancy	13107 Jun 03 07:11	6°☿37'40	-0.7m			13108 May 23 01:35	0°☿	
asc. node	13107 Jun 13 06:31	20°☿06'37		evening max el		13108 May 28 02:17	5°☿47'20	20°33'48
evening max el	13107 Jun 15 00:38	21°☿59'35	19°32'19	asc. node		13108 May 30 03:35	7°☿41'06	
retrograde	13107 Jun 22 05:58	26°☿03'36		retrograde		13108 Jun 05 04:53	10°☿28'13	
evening set	13107 Jun 25 22:33	24°☿44'16		evening set		13108 Jun 09 07:22	8°☿52'19	
inferior conj	13107 Jul 01 07:20	18°☿49'56	3°10'33	inferior conj		13108 Jun 14 13:41	2°☿45'42	3°12'28
minimum elong	13107 Jul 01 08:02	18°☿47'35	3°09'31	minimum elong		13108 Jun 14 13:22	2°☿46'50	3°11'27
min. Earth dist.	13107 Jul 02 13:02	17°☿11'31	0.67341 AU	min. Earth dist.		13108 Jun 15 05:28	1°☿51'23	0.68318 AU
morning rise	13107 Jul 06 17:03	12°☿26'26				13108 Jun 16 14:37	30°☿II	
direct	13107 Jul 12 15:49	9°☿49'59		morning rise		13108 Jun 19 19:04	26°II25'35	
desc. node	13107 Jul 16 10:55	10°☿42'47		direct		13108 Jun 25 06:06	24°II01'03	
morning max el	13107 Jul 24 21:24	17°☿09'52	25°27'35	desc. node		13108 Jul 02 08:09	27°II03'41	
	13107 Aug 04 14:24	0°♈				13108 Jul 05 16:08	0°☿	
	13107 Aug 24 06:24	0°♍		morning max el		13108 Jul 06 07:31	0°☿38'17	24°00'30
morning set	13107 Aug 29 20:43	9°♍48'17				13108 Jul 28 11:49	0°♈	
max. Earth dist.	13107 Sep 02 11:45	16°♍29'14	1.36144 AU	morning set		13108 Aug 10 15:55	21°♈16'43	
				max. Earth dist.		13108 Aug 14 09:27	27°♈47'06	1.38416 AU
superior conj	13107 Sep 08 15:51	28°♍27'34	-0°06'09			13108 Aug 15 15:14	0°♍	
minimum elong	13107 Sep 08 16:14	28°♍29'28	0°06'12	superior conj		13108 Aug 21 18:31	11°♍20'30	-0°40'00
behind sun begin	13107 Sep 08 10:22	28°♍00'12		minimum elong		13108 Aug 21 21:20	11°♍33'49	0°39'55
behind sun end	13107 Sep 08 22:06	28°♍58'47		asc. node		13108 Aug 26 04:03	19°♍49'35	
asc. node	13107 Sep 09 07:29	29°♍45'49		evening rise		13108 Aug 30 16:27	28°♍42'46	
	13107 Sep 09 10:18	0°♊				13108 Aug 31 08:10	0°♊	
evening rise	13107 Sep 16 16:08	14°♊46'44		evening max el		13108 Sep 16 01:16	25°♊26'13	18°59'01
	13107 Sep 24 12:32	0°♌		retrograde		13108 Sep 24 19:44	29°♊49'49	
evening max el	13107 Oct 04 06:44	13°♌46'59	19°57'51	evening set		13108 Sep 26 16:31	29°♊38'40	
desc. node	13107 Oct 12 07:18	18°♌41'42		desc. node		13108 Sep 28 04:46	29°♊14'18	
retrograde	13107 Oct 14 15:56	18°♌57'16		inferior conj		13108 Oct 05 00:51	25°♊22'45	-2°09'28
evening set	13107 Oct 16 14:58	18°♌47'02		minimum elong		13108 Oct 04 19:20	25°♊32'22	2°06'59
inferior conj	13107 Oct 25 12:36	14°♌47'19	-3°58'39	min. Earth dist.		13108 Oct 07 22:46	23°♊21'25	0.56379 AU
minimum elong	13107 Oct 25 02:55	15°♌02'00	3°54'55	morning rise		13108 Oct 12 19:06	20°♊36'04	
min. Earth dist.	13107 Oct 27 09:59	13°♌38'24	0.55017 AU	direct		13108 Oct 18 09:56	19°♊21'36	
morning rise	13107 Nov 02 13:34	10°♌35'44		morning max el		13108 Nov 01 13:57	26°♊38'10	26°03'36
direct	13107 Nov 07 09:03	9°♌45'06				13108 Nov 04 19:29	0°♌	
morning max el	13107 Nov 21 02:11	16°♌31'24	24°23'46	asc. node		13108 Nov 22 05:42	26°♌19'17	
	13107 Dec 01 21:51	0°♉				13108 Nov 24 03:40	0°♉	
asc. node	13107 Dec 06 08:48	7°♉19'34		morning set		13108 Nov 29 17:15	11°♉27'24	
morning set	13107 Dec 16 06:13	26°♉48'40						
	13107 Dec 17 17:41	0°♊		superior conj		13108 Dec 06 12:07	26°♉24'02	1°37'34
superior conj	13107 Dec 23 01:41	11°♊41'00	1°37'38	minimum elong		13108 Dec 06 11:34	26°♉20'55	1°38'32
minimum elong	13107 Dec 23 02:12	11°♊43'52	1°38'37	max. Earth dist.		13108 Dec 07 12:14	28°♉37'48	1.31618 AU
max. Earth dist.	13107 Dec 25 06:54	16°♊30'05	1.32497 AU			13108 Dec 08 03:05	0°♊	
evening rise	13107 Dec 30 12:09	27°♊26'57		evening rise		13108 Dec 13 12:18	11°♊37'22	
	13107 Dec 31 18:35	0°♋				13108 Dec 22 23:22	0°♋	
desc. node	13108 Jan 08 05:34	14°♋02'03		desc. node		13108 Dec 25 02:25	3°♋42'58	
	13108 Jan 18 01:31	0°♌				13109 Jan 13 04:24	0°♌	
evening max el	13108 Feb 02 02:37	18°♌37'07	27°31'50	evening max el		13109 Jan 14 11:21	1°♌15'44	27°25'14
retrograde	13108 Feb 15 21:09	26°♌03'01		retrograde		13109 Jan 28 09:43	8°♌34'18	
evening set	13108 Feb 22 18:05	23°♌36'47		evening set		13109 Feb 04 07:24	6°♌22'19	
min. Earth dist.	13108 Feb 26 12:47	20°♌21'36	0.63527 AU	min. Earth dist.		13109 Feb 08 01:43	3°♌30'44	0.61452 AU
inferior conj	13108 Feb 29 06:11	17°♌35'44	-0°59'05	inferior conj		13109 Feb 11 03:20	0°♌45'31	-2°16'42
minimum elong	13108 Feb 29 08:05	17°♌30'54	0°57'59	minimum elong		13109 Feb 11 08:07	0°♌34'42	2°14'13
asc. node	13108 Mar 03 06:35	14°♌42'55				13109 Feb 11 23:42	30°♌	
morning rise	13108 Mar 07 00:27	12°♌19'21		morning rise		13109 Feb 18 11:47	25°♌46'56	
direct	13108 Mar 09 10:03	11°♌51'13		asc. node		13109 Feb 18 04:00	25°♌53'14	
morning max el	13108 Mar 15 21:38	15°♌10'45	17°47'08	direct		13109 Feb 20 15:28	25°♌27'04	
	13108 Mar 26 09:30	0°♍		morning max el		13109 Feb 27 14:16	28°♌57'29	17°51'05
morning set	13108 Apr 01 08:36	10°♍08'34				13109 Feb 28 14:19	0°♌	
desc. node	13108 Apr 05 07:33	16°♍54'13		morning set		13109 Mar 15 06:15	23°♌20'50	
	13108 Apr 13 03:39	0°♎				13109 Mar 18 23:07	0°♍	
superior conj	13108 Apr 14 00:18	1°♎24'25	-1°03'48	desc. node		13109 Mar 23 04:03	7°♍26'26	
minimum elong	13108 Apr 13 17:48	0°♎57'53	1°03'20	superior conj		13109 Mar 26 04:10	12°♍38'30	-0°23'25
max. Earth dist.	13108 Apr 19 19:31	10°♎44'46	1.44765 AU	minimum elong		13109 Mar 26 02:01	12°♍29'15	0°23'12
evening rise	13108 Apr 29 09:45	25°♎42'21		max. Earth dist.		13109 Apr 02 10:36	24°♍47'24	1.43265 AU
	13108 May 02 05:16	0°♏				13109 Apr 05 16:04	0°♎	

evening rise	13109 Apr 09 03:42	5°♄30'29		max. Earth dist.	13110 Mar 15 21:26	8°♄14'52	1.41295 AU
	13109 Apr 25 12:43	0°♄		evening rise	13110 Mar 20 15:26	16°♄08'07	
evening max el	13109 May 10 22:25	19°♄36'01	21°46'52		13110 Mar 29 11:06	0°♄	
asc. node	13109 May 17 00:45	24°♄15'16			13110 Apr 20 09:38	0°♄	
retrograde	13109 May 20 03:02	24°♄59'33		evening max el	13110 Apr 23 14:23	3°♄25'49	23°06'36
evening set	13109 May 24 16:16	23°♄07'32		retrograde	13110 May 03 23:00	9°♄32'05	
inferior conj	13109 May 29 22:38	16°♄50'27	3°03'10	asc. node	13110 May 03 22:02	9°♄32'04	
minimum elong	13109 May 29 21:24	16°♄54'43	3°02'04	evening set	13110 May 08 23:39	7°♄25'17	
min. Earth dist.	13109 May 30 01:08	16°♄41'44	0.68820 AU	inferior conj	13110 May 14 08:08	1°♄00'02	2°43'31
morning rise	13109 Jun 04 02:20	10°♄35'56		minimum elong	13110 May 14 06:16	1°♄06'30	2°42'19
direct	13109 Jun 09 00:38	8°♄28'47		min. Earth dist.	13110 May 13 21:51	1°♄35'39	0.68850 AU
morning max el	13109 Jun 18 18:54	14°♄14'15	22°31'06		13110 May 15 01:34	30°♄	
desc. node	13109 Jun 19 05:15	14°♄40'34		morning rise	13110 May 19 12:49	24°♄52'30	
	13109 Jul 01 12:36	0°♄		direct	13110 May 23 22:12	23°♄05'48	
	13109 Jul 21 10:18	0°♄		morning max el	13110 Jun 01 10:54	28°♄00'05	21°07'22
morning set	13109 Jul 22 11:18	1°♄41'29			13110 Jun 03 08:26	0°♄	
max. Earth dist.	13109 Jul 27 08:34	9°♄48'03	1.40754 AU	desc. node	13110 Jun 06 02:14	3°♄12'35	
					13110 Jun 25 02:03	0°♄	
superior conj	13109 Aug 04 04:42	23°♄28'05	-1°14'43	morning set	13110 Jul 02 05:46	11°♄00'46	
minimum elong	13109 Aug 04 10:14	23°♄52'55	1°14'36	max. Earth dist.	13110 Jul 09 13:52	22°♄43'41	1.42869 AU
	13109 Aug 07 18:49	0°♄			13110 Jul 13 23:36	0°♄	
asc. node	13109 Aug 13 00:40	9°♄47'20		superior conj	13110 Jul 16 17:50	4°♄39'17	-1°46'05
evening rise	13109 Aug 14 07:27	12°♄12'19		minimum elong	13110 Jul 17 00:57	5°♄09'34	1°46'15
	13109 Aug 24 06:52	0°♄		evening rise	13110 Jul 28 08:54	25°♄04'03	
evening max el	13109 Aug 30 06:28	7°♄49'11	18°21'37	asc. node	13110 Jul 30 21:20	29°♄34'30	
retrograde	13109 Sep 06 18:52	11°♄37'19			13110 Jul 31 03:03	0°♄	
evening set	13109 Sep 08 20:53	11°♄20'31		evening max el	13110 Aug 13 18:04	20°♄45'13	18°04'24
desc. node	13109 Sep 15 02:17	7°♄48'45		retrograde	13110 Aug 20 11:38	24°♄12'24	
inferior conj	13109 Sep 16 10:45	6°♄43'36	-0°25'26	evening set	13110 Aug 22 21:13	23°♄46'10	
minimum elong	13109 Sep 16 09:48	6°♄45'33	0°25'02	inferior conj	13110 Aug 29 17:18	18°♄48'48	0°58'42
min. Earth dist.	13109 Sep 19 17:57	4°♄03'05	0.58349 AU	minimum elong	13110 Aug 29 19:01	18°♄44'44	0°57'47
morning rise	13109 Sep 23 19:15	1°♄20'24		desc. node	13110 Sep 01 23:48	15°♄44'25	
	13109 Sep 27 04:29	30°♄		min. Earth dist.	13110 Sep 01 21:42	15°♄49'07	0.60604 AU
direct	13109 Sep 30 00:49	29°♄38'38		morning rise	13110 Sep 05 13:53	12°♄56'08	
	13109 Oct 02 22:17	0°♄		direct	13110 Sep 12 03:55	10°♄48'10	
morning max el	13109 Oct 14 08:26	7°♄17'27	27°17'22	morning max el	13110 Sep 26 10:36	18°♄42'47	27°54'32
	13109 Oct 31 09:47	0°♄			13110 Oct 05 23:25	0°♄	
asc. node	13109 Nov 09 02:31	15°♄44'29			13110 Oct 24 04:55	0°♄	
morning set	13109 Nov 14 01:44	25°♄55'22		asc. node	13110 Oct 26 23:14	5°♄27'30	
	13109 Nov 15 23:14	0°♄		morning set	13110 Oct 29 05:48	10°♄07'29	
superior conj	13109 Nov 20 23:46	11°♄07'02	1°31'36	max. Earth dist.	13110 Nov 04 04:29	22°♄56'39	1.31384 AU
minimum elong	13109 Nov 20 22:17	10°♄58'46	1°32'24	superior conj	13110 Nov 05 10:44	25°♄44'19	1°19'56
max. Earth dist.	13109 Nov 20 20:41	10°♄49'52	1.31245 AU	minimum elong	13110 Nov 05 08:39	25°♄32'41	1°20'26
evening rise	13109 Nov 27 18:08	26°♄00'56			13110 Nov 07 08:42	0°♄	
	13109 Nov 29 15:28	0°♄		evening rise	13110 Nov 12 03:33	10°♄31'44	
desc. node	13109 Dec 11 23:23	22°♄52'11			13110 Nov 21 22:34	0°♄	
	13109 Dec 16 15:33	0°♄		desc. node	13110 Nov 28 20:29	11°♄17'28	
evening max el	13109 Dec 27 13:56	13°♄07'02	26°44'01	evening max el	13110 Dec 09 08:08	24°♄05'17	25°30'18
retrograde	13110 Jan 10 12:47	20°♄15'38			13110 Dec 17 22:36	0°♄	
evening set	13110 Jan 17 04:04	18°♄25'50		retrograde	13110 Dec 23 04:55	1°♄04'12	
min. Earth dist.	13110 Jan 21 03:56	15°♄48'06	0.59287 AU		13110 Dec 28 11:31	30°♄	
inferior conj	13110 Jan 24 08:08	13°♄19'12	-3°39'09	evening set	13110 Dec 29 03:54	29°♄42'51	
minimum elong	13110 Jan 24 15:50	13°♄04'06	3°35'44	min. Earth dist.	13111 Jan 02 20:22	27°♄04'07	0.57239 AU
morning rise	13110 Feb 01 06:35	8°♄41'26		inferior conj	13111 Jan 05 17:20	25°♄07'18	-4°55'39
direct	13110 Feb 03 07:48	8°♄26'10		minimum elong	13111 Jan 06 01:55	24°♄52'43	4°52'40
asc. node	13110 Feb 05 01:24	8°♄37'33		morning rise	13111 Jan 14 02:28	20°♄52'03	
morning max el	13110 Feb 11 02:19	12°♄17'13	18°14'19	direct	13111 Jan 16 06:34	20°♄37'51	
	13110 Feb 22 21:53	0°♄		asc. node	13111 Jan 22 22:45	23°♄02'12	
morning set	13110 Feb 26 18:49	7°♄13'49		morning max el	13111 Jan 25 05:52	24°♄59'19	18°58'45
					13111 Jan 29 11:37	0°♄	
superior conj	13110 Mar 08 06:59	24°♄55'56	0°13'47	morning set	13111 Feb 10 17:40	21°♄33'52	
minimum elong	13110 Mar 08 08:01	25°♄00'38	0°13'47		13111 Feb 15 00:22	0°♄	
behind sun begin	13110 Mar 08 04:14	24°♄43'32		superior conj	13111 Feb 19 04:31	8°♄05'11	0°44'42
behind sun end	13110 Mar 08 11:48	25°♄17'44		minimum elong	13111 Feb 19 07:04	8°♄17'22	0°44'47
desc. node	13110 Mar 10 00:33	28°♄02'32					
	13110 Mar 11 03:01	0°♄					

desc. node	13111 Feb 24 21:05	18° X 39'21		max. Earth dist.	13112 Feb 08 11:07	3° X 09'07	1.36850 AU
max. Earth dist.	13111 Feb 26 04:34	21° X 00'29	1.39072 AU	desc. node	13112 Feb 11 17:39	9° X 12'36	
evening rise	13111 Mar 02 00:30	27° X 41'44		evening rise	13112 Feb 12 05:20	10° X 05'25	
	13111 Mar 03 09:03	0° Y			13112 Feb 24 01:30	0° Y	
	13111 Mar 22 23:13	0° X			13112 Mar 17 14:09	0° X	
evening max el	13111 Apr 06 04:12	17° X 17'32	24°26'57	evening max el	13112 Mar 18 17:34	1° X 08'51	25°41'07
retrograde	13111 Apr 17 15:38	24° X 00'48		retrograde	13112 Mar 31 03:51	8° X 18'26	
asc. node	13111 Apr 20 19:25	23° X 16'25		evening set	13112 Apr 06 03:34	5° X 50'21	
evening set	13111 Apr 23 03:58	21° X 41'32		asc. node	13112 Apr 06 16:50	5° X 21'16	
min. Earth dist.	13111 Apr 27 17:36	16° X 27'59	0.68422 AU	min. Earth dist.	13112 Apr 10 10:16	1° X 12'06	0.67553 AU
inferior conj	13111 Apr 28 16:23	15° X 11'32	2°13'49		13112 Apr 11 08:57	30° R Y	
minimum elong	13111 Apr 28 14:14	15° X 18'46	2°12'35	inferior conj	13112 Apr 11 21:24	29° Y 20'12	1°33'51
morning rise	13111 May 04 00:39	9° X 12'03		minimum elong	13112 Apr 11 19:27	29° Y 26'26	1°32'47
direct	13111 May 07 21:35	7° X 46'23		morning rise	13112 Apr 17 11:53	23° Y 30'00	
morning max el	13111 May 15 10:01	11° X 58'10	19°55'07	direct	13112 Apr 20 21:17	22° Y 24'07	
desc. node	13111 May 23 23:06	22° X 25'09		morning max el	13112 Apr 27 16:38	26° Y 05'33	18°57'44
	13111 May 29 06:35	0° II			13112 May 01 04:22	0° X	
morning set	13111 Jun 11 08:03	19° II 40'56		desc. node	13112 May 09 19:52	12° X 06'51	
	13111 Jun 17 23:40	0° X		greatest brilliancy	13112 May 11 01:44	13° X 59'20	-0.8m
max. Earth dist.	13111 Jun 22 01:37	6° X 26'11	1.44516 AU	morning set	13112 May 20 14:22	28° X 38'16	
					13112 May 21 11:27	0° II	
superior conj	13111 Jun 27 07:09	14° X 49'39	-2°07'49	max. Earth dist.	13112 Jun 03 18:07	20° II 40'21	1.45528 AU
minimum elong	13111 Jun 27 12:09	15° X 09'59	2°08'35				
	13111 Jul 06 11:19	0° X		superior conj	13112 Jun 05 23:27	24° II 09'31	-2°12'58
evening rise	13111 Jul 10 15:50	7° X 06'04		minimum elong	13112 Jun 05 21:35	24° II 02'13	2°13'56
asc. node	13111 Jul 17 18:05	19° X 06'28			13112 Jun 09 16:19	0° X	
	13111 Jul 24 20:46	0° X		evening rise	13112 Jun 20 23:30	18° X 07'35	
evening max el	13111 Jul 28 08:16	4° X 05'07	18°06'15		13112 Jun 28 07:25	0° X	
retrograde	13111 Aug 03 17:32	7° X 25'32		asc. node	13112 Jul 03 14:56	8° X 17'02	
evening set	13111 Aug 06 11:19	6° X 46'48		evening max el	13112 Jul 10 21:47	17° X 40'28	18°26'21
inferior conj	13111 Aug 12 16:50	1° X 31'20	1°59'54	retrograde	13112 Jul 17 08:11	21° X 07'38	
minimum elong	13111 Aug 12 19:22	1° X 24'31	1°58'35	evening set	13112 Jul 20 10:30	20° X 14'06	
	13111 Aug 14 02:39	30° R X		inferior conj	13112 Jul 26 05:13	14° X 42'31	2°40'25
min. Earth dist.	13111 Aug 15 11:09	28° X 34'05	0.62857 AU	minimum elong	13112 Jul 26 07:24	14° X 35'59	2°39'11
morning rise	13111 Aug 19 01:21	25° X 19'40		min. Earth dist.	13112 Jul 28 09:58	12° X 06'17	0.64891 AU
desc. node	13111 Aug 19 21:18	24° X 44'51		morning rise	13112 Aug 01 03:05	8° X 21'26	
direct	13111 Aug 25 17:33	22° X 51'20		desc. node	13112 Aug 05 18:45	5° X 54'38	
	13111 Sep 07 20:38	0° X		direct	13112 Aug 07 15:49	5° X 42'03	
morning max el	13111 Sep 08 18:27	0° X 53'25	27°52'49	morning max el	13112 Aug 21 05:00	13° X 39'21	27°16'22
	13111 Sep 30 03:12	0° X			13112 Sep 03 10:12	0° X	
morning set	13111 Oct 13 03:18	23° X 58'26			13112 Sep 21 18:32	0° X	
asc. node	13111 Oct 13 19:54	25° X 22'52		morning set	13112 Sep 25 15:33	7° X 21'49	
	13111 Oct 16 01:24	0° X		asc. node	13112 Sep 29 16:31	15° X 26'02	
max. Earth dist.	13111 Oct 18 07:36	4° X 47'52	1.32051 AU	max. Earth dist.	13112 Sep 30 02:30	16° X 17'08	1.33252 AU
superior conj	13111 Oct 20 19:10	10° X 10'44	1°02'38	superior conj	13112 Oct 03 22:56	24° X 20'47	0°39'52
minimum elong	13111 Oct 20 16:54	9° X 58'22	1°02'50	minimum elong	13112 Oct 03 21:06	24° X 11'01	0°39'51
evening rise	13111 Oct 27 14:38	25° X 04'45			13112 Oct 06 14:19	0° X	
	13111 Oct 29 22:15	0° X		evening rise	13112 Oct 11 01:32	9° X 35'25	
desc. node	13111 Nov 15 17:42	28° X 41'47			13112 Oct 21 13:35	0° X	
	13111 Nov 16 19:06	0° X		evening max el	13112 Nov 01 06:29	14° X 22'36	22°12'34
evening max el	13111 Nov 20 19:11	4° X 20'03	23°54'10	desc. node	13112 Nov 01 15:01	14° X 43'12	
retrograde	13111 Dec 04 08:39	11° X 05'38		retrograde	13112 Nov 14 00:21	20° X 41'51	
evening set	13111 Dec 09 03:52	10° X 15'19		evening set	13112 Nov 17 09:36	20° X 16'33	
min. Earth dist.	13111 Dec 15 06:06	7° X 16'27	0.55594 AU	min. Earth dist.	13112 Nov 25 12:49	16° X 39'30	0.54656 AU
inferior conj	13111 Dec 17 05:51	6° X 04'48	-5°47'01	inferior conj	13112 Nov 26 02:16	16° X 20'36	-5°49'35
minimum elong	13111 Dec 17 10:20	5° X 58'04	5°45'36	minimum elong	13112 Nov 25 22:04	16° X 26'30	5°48'17
morning rise	13111 Dec 25 18:40	2° X 08'54		morning rise	13112 Dec 04 11:43	12° X 33'21	
direct	13111 Dec 28 09:30	1° X 51'37		direct	13112 Dec 07 21:27	12° X 07'27	
morning max el	13112 Jan 07 21:01	6° X 52'24	20°05'59	morning max el	13112 Dec 19 21:47	17° X 51'45	21°35'26
asc. node	13112 Jan 09 20:00	8° X 55'12		asc. node	13112 Dec 26 17:10	25° X 59'53	
	13112 Jan 22 21:42	0° X			13112 Dec 29 08:14	0° X	
morning set	13112 Jan 25 23:15	6° X 09'46		morning set	13113 Jan 09 08:55	20° X 54'04	
					13113 Jan 13 16:13	0° X	
superior conj	13112 Feb 02 16:02	21° X 51'58	1°08'28				
minimum elong	13112 Feb 02 18:48	22° X 05'46	1°08'49	superior conj	13113 Jan 16 13:37	6° X 05'17	1°25'04
	13112 Feb 06 19:24	0° X		minimum elong	13113 Jan 16 15:47	6° X 16'34	1°25'44

max. Earth dist.	13113 Jan 20 22:22	15° \approx 01'26	1.34855 AU	morning set	13113 Dec 24 20:31	5° \approx 34'14	
evening rise	13113 Jan 25 02:37	23° \approx 10'23					
desc. node	13113 Jan 28 14:18	29° \approx 38'27		superior conj	13113 Dec 31 18:06	20° \approx 35'35	1°34'54
	13113 Jan 28 19:04	0° \approx		minimum elong	13113 Dec 31 19:16	20° \approx 34'52	1°35'48
	13113 Feb 16 17:49	0° \approx		max. Earth dist.	13114 Jan 03 17:21	26° \approx 55'41	1.33235 AU
evening max el	13113 Mar 01 07:21	14° \approx 54'39	26°41'40		13114 Jan 05 04:38	0° \approx	
retrograde	13113 Mar 14 10:37	22° \approx 17'55		evening rise	13114 Jan 08 12:44	6° \approx 46'45	
evening set	13113 Mar 20 20:38	19° \approx 45'47		desc. node	13114 Jan 15 11:02	19° \approx 51'50	
asc. node	13113 Mar 24 14:17	16° \approx 03'01			13114 Jan 21 09:28	0° \approx	
min. Earth dist.	13113 Mar 24 21:40	15° \approx 41'43	0.66274 AU	evening max el	13114 Feb 11 20:45	28° \approx 24'26	27°21'16
inferior conj	13113 Mar 26 21:01	13° \approx 21'29	0°43'09		13114 Feb 13 14:19	0° \approx	
minimum elong	13113 Mar 26 19:55	13° \approx 24'45	0°42'36	retrograde	13114 Feb 25 10:56	5° \approx 50'52	
morning rise	13113 Apr 01 20:21	7° \approx 42'20		evening set	13114 Mar 04 05:02	3° \approx 20'34	
direct	13113 Apr 04 19:25	6° \approx 53'39			13114 Mar 07 21:17	30° \approx	
morning max el	13113 Apr 11 05:29	10° \approx 17'21	18°16'47	min. Earth dist.	13114 Mar 08 01:38	29° \approx 48'38	0.64623 AU
	13113 Apr 25 07:50	0° \approx		inferior conj	13114 Mar 10 12:46	27° \approx 09'10	-0°18'36
desc. node	13113 Apr 26 16:32	2° \approx 09'56		minimum elong	13114 Mar 10 13:19	27° \approx 07'40	0°18'14
morning set	13113 Apr 30 19:49	8° \approx 46'09		asc. node	13114 Mar 11 11:43	26° \approx 07'42	
	13113 May 14 05:40	0° \approx		morning rise	13114 Mar 16 23:28	21° \approx 43'33	
				direct	13114 Mar 19 13:37	21° \approx 08'50	
superior conj	13113 May 16 06:59	3° \approx 12'59	-1°57'52	morning max el	13114 Mar 25 22:14	24° \approx 26'31	17°52'58
minimum elong	13113 May 15 22:42	2° \approx 40'35	1°58'09		13114 Mar 30 12:50	0° \approx	
max. Earth dist.	13113 May 17 13:43	5° \approx 13'02	1.45817 AU	morning set	13114 Apr 12 05:52	20° \approx 18'08	
evening rise	13113 Jun 01 06:57	28° \approx 10'14		desc. node	13114 Apr 13 13:08	22° \approx 28'25	
	13113 Jun 02 11:04	0° \approx			13114 Apr 18 02:14	0° \approx	
greatest brilliancy	13113 Jun 12 00:31	14° \approx 49'36	-0.8m				
asc. node	13113 Jun 20 11:51	26° \approx 58'23		superior conj	13114 Apr 25 23:30	12° \approx 46'52	-1°26'11
	13113 Jun 23 00:10	0° \approx		minimum elong	13114 Apr 25 14:58	12° \approx 12'45	1°25'48
evening max el	13113 Jun 24 08:00	1° \approx 24'10	19°03'41	max. Earth dist.	13114 Apr 30 09:53	19° \approx 48'32	1.45356 AU
retrograde	13113 Jul 01 04:02	5° \approx 10'56			13114 May 06 22:39	0° \approx	
evening set	13113 Jul 04 15:20	4° \approx 01'08		evening rise	13114 May 11 21:32	7° \approx 13'38	
	13113 Jul 08 17:24	30° \approx		greatest brilliancy	13114 May 26 16:55	29° \approx 15'20	-0.6m
inferior conj	13113 Jul 10 02:48	28° \approx 14'52	3°03'44		13114 May 26 18:46	0° \approx	
minimum elong	13113 Jul 10 04:07	28° \approx 10'40	3°02'39	asc. node	13114 Jun 07 08:53	15° \approx 01'07	
min. Earth dist.	13113 Jul 11 16:53	26° \approx 12'59	0.66571 AU	evening max el	13114 Jun 07 13:02	15° \approx 11'37	19°56'52
morning rise	13113 Jul 15 16:14	21° \approx 51'07		retrograde	13114 Jun 15 02:28	19° \approx 29'51	
direct	13113 Jul 21 21:06	19° \approx 10'57		evening set	13114 Jun 18 23:17	18° \approx 03'15	
desc. node	13113 Jul 23 16:07	19° \approx 22'41		inferior conj	13114 Jun 24 06:41	12° \approx 03'31	3°12'47
morning max el	13113 Aug 03 15:54	26° \approx 48'24	26°12'47	minimum elong	13114 Jun 24 06:57	12° \approx 02'38	3°11'47
	13113 Aug 06 15:14	0° \approx		min. Earth dist.	13114 Jun 25 06:19	10° \approx 43'43	0.67817 AU
	13113 Aug 28 01:08	0° \approx		morning rise	13114 Jun 29 14:16	5° \approx 41'26	
morning set	13113 Sep 08 15:08	20° \approx 08'04		direct	13114 Jul 05 08:16	3° \approx 09'22	
max. Earth dist.	13113 Sep 12 11:14	27° \approx 26'07	1.34965 AU	desc. node	13114 Jul 10 13:23	4° \approx 48'43	
	13113 Sep 13 18:40	0° \approx		morning max el	13114 Jul 17 02:14	10° \approx 11'53	24°51'29
asc. node	13113 Sep 16 13:04	5° \approx 32'04			13114 Aug 01 19:18	0° \approx	
					13114 Aug 20 16:52	0° \approx	
superior conj	13113 Sep 17 19:27	8° \approx 06'47	0°11'59	morning set	13114 Aug 21 22:00	2° \approx 07'52	
minimum elong	13113 Sep 17 18:47	8° \approx 03'21	0°11'53	max. Earth dist.	13114 Aug 25 11:48	8° \approx 34'03	1.37089 AU
behind sun begin	13113 Sep 17 14:42	7° \approx 42'32					
behind sun end	13113 Sep 17 22:51	8° \approx 24'12		superior conj	13114 Sep 01 05:40	21° \approx 21'24	-0°20'11
evening rise	13113 Sep 25 10:10	23° \approx 57'19		minimum elong	13114 Sep 01 06:59	21° \approx 27'53	0°20'11
	13113 Sep 28 08:56	0° \approx		asc. node	13114 Sep 03 09:39	25° \approx 37'45	
evening max el	13113 Oct 14 03:11	24° \approx 48'13	20°41'33		13114 Sep 05 14:05	0° \approx	
desc. node	13113 Oct 19 12:25	28° \approx 15'34		evening rise	13114 Sep 09 14:18	8° \approx 04'56	
	13113 Oct 22 07:04	0° \approx			13114 Sep 21 17:14	0° \approx	
retrograde	13113 Oct 25 10:56	0° \approx 25'45		evening max el	13114 Sep 26 13:50	5° \approx 58'39	19°30'07
evening set	13113 Oct 27 18:03	0° \approx 12'54		retrograde	13114 Oct 06 05:44	10° \approx 48'23	
	13113 Oct 28 17:34	30° \approx		desc. node	13114 Oct 06 09:51	10° \approx 48'18	
inferior conj	13113 Nov 05 18:00	26° \approx 18'23	-4°52'39	evening set	13114 Oct 08 02:34	10° \approx 38'21	
minimum elong	13113 Nov 05 08:06	26° \approx 32'34	4°49'27	inferior conj	13114 Oct 16 19:36	6° \approx 32'17	-3°13'18
min. Earth dist.	13113 Nov 06 19:27	25° \approx 41'50	0.54621 AU	minimum elong	13114 Oct 16 11:21	6° \approx 45'29	3°09'49
morning rise	13113 Nov 13 22:05	22° \approx 21'52		min. Earth dist.	13114 Oct 19 05:03	5° \approx 00'27	0.55506 AU
direct	13113 Nov 18 05:49	21° \approx 41'47		morning rise	13114 Oct 24 18:05	2° \approx 07'03	
morning max el	13113 Dec 01 10:59	28° \approx 06'33	23°21'01	direct	13114 Oct 29 22:10	1° \approx 07'11	
	13113 Dec 03 08:15	0° \approx		morning max el	13114 Nov 12 20:58	8° \approx 06'28	25°08'29
asc. node	13113 Dec 13 14:13	13° \approx 59'24			13114 Nov 28 23:08	0° \approx	
	13113 Dec 22 03:36	0° \approx		asc. node	13114 Nov 30 11:09	2° \approx 40'20	

morning set	13114 Dec 09 08:16	20° ♄ 23'22		morning set	13115 Nov 23 18:29	4° ♄ 58'41	
	13114 Dec 13 17:47	0° ♄					
superior conj	13114 Dec 16 02:59	5° ♄ 15'57	1°38'20	superior conj	13115 Nov 30 14:12	20° ♄ 00'07	1°35'45
minimum elong	13114 Dec 16 03:02	5° ♄ 16'15	1°39'20	minimum elong	13115 Nov 30 13:13	19° ♄ 54'39	1°36'40
max. Earth dist.	13114 Dec 17 19:40	8° ♄ 59'20	1.32067 AU	max. Earth dist.	13115 Dec 01 02:47	21° ♄ 10'17	1.31389 AU
evening rise	13114 Dec 23 08:33	20° ♄ 46'43			13115 Dec 05 02:47	0° ♄	
	13114 Dec 27 23:44	0° ♄		evening rise	13115 Dec 07 11:23	5° ♄ 03'38	
desc. node	13115 Jan 02 07:49	9° ♄ 46'53		desc. node	13115 Dec 20 04:43	29° ♄ 16'07	
	13115 Jan 15 10:24	0° ♄			13115 Dec 20 15:15	0° ♄	
evening max el	13115 Jan 25 07:47	11° ♄ 25'09	27°33'02	evening max el	13116 Jan 07 14:03	23° ♄ 44'50	27°11'56
retrograde	13115 Feb 08 03:59	18° ♄ 47'52			13116 Jan 16 15:23	0° ♄	
evening set	13115 Feb 15 02:12	16° ♄ 26'34		retrograde	13116 Jan 21 12:58	1° ♄ 00'00	
min. Earth dist.	13115 Feb 18 20:14	13° ♄ 22'37	0.62672 AU		13116 Jan 26 06:48	30° ♄	
inferior conj	13115 Feb 21 17:40	10° ♄ 35'18	-1°31'01	evening set	13116 Jan 28 09:02	28° ♄ 56'07	
minimum elong	13115 Feb 21 20:43	10° ♄ 27'54	1°29'20	min. Earth dist.	13116 Feb 01 04:31	26° ♄ 12'12	0.60531 AU
asc. node	13115 Feb 26 09:11	6° ♄ 38'15		inferior conj	13116 Feb 04 08:21	23° ♄ 31'33	-2°51'29
morning rise	13115 Feb 28 17:51	5° ♄ 26'14		minimum elong	13116 Feb 04 14:28	23° ♄ 18'34	2°48'31
direct	13115 Mar 03 00:45	5° ♄ 01'57		morning rise	13116 Feb 11 22:59	18° ♄ 41'55	
morning max el	13115 Mar 09 15:54	8° ♄ 24'29	17°46'35	asc. node	13116 Feb 13 06:36	18° ♄ 26'54	
	13115 Mar 23 23:20	0° ♄		direct	13116 Feb 14 01:04	18° ♄ 24'29	
morning set	13115 Mar 25 16:20	2° ♄ 59'25		morning max el	13116 Feb 21 07:12	22° ♄ 02'19	17°58'33
desc. node	13115 Mar 31 09:40	12° ♄ 56'55			13116 Feb 27 10:25	0° ♄	
				morning set	13116 Mar 07 21:02	16° ♄ 31'29	
superior conj	13115 Apr 06 13:24	23° ♄ 22'24	-0°46'34		13116 Mar 15 06:31	0° ♄	
minimum elong	13115 Apr 06 08:47	23° ♄ 03'09	0°46'12	desc. node	13116 Mar 17 06:11	3° ♄ 31'43	
	13115 Apr 10 14:05	0° ♄					
max. Earth dist.	13115 Apr 13 03:35	4° ♄ 08'17	1.44196 AU	superior conj	13116 Mar 18 03:36	5° ♄ 05'49	-0°07'03
evening rise	13115 Apr 21 09:48	17° ♄ 07'21		minimum elong	13116 Mar 18 03:00	5° ♄ 03'11	0°06'57
	13115 Apr 29 21:42	0° ♄		behind sun begin	13116 Mar 17 19:42	4° ♄ 31'13	
evening max el	13115 May 21 12:11	28° ♄ 59'33	21°03'39	behind sun end	13116 Mar 18 10:17	5° ♄ 35'06	
	13115 May 22 13:07	0° ♄		max. Earth dist.	13116 Mar 25 16:41	17° ♄ 56'47	1.42472 AU
asc. node	13115 May 25 06:02	2° ♄ 12'05		evening rise	13116 Mar 31 10:29	27° ♄ 15'06	
retrograde	13115 May 30 01:20	3° ♄ 58'17			13116 Apr 02 04:16	0° ♄	
evening set	13115 Jun 03 08:22	2° ♄ 15'12			13116 Apr 22 15:22	0° ♄	
	13115 Jun 05 14:25	30° ♄		evening max el	13116 May 03 06:12	12° ♄ 48'15	22°20'11
inferior conj	13115 Jun 08 14:24	26° ♄ 03'39	3°09'48	asc. node	13116 May 11 03:16	18° ♄ 15'39	
minimum elong	13115 Jun 08 13:40	26° ♄ 06'12	3°08'46	retrograde	13116 May 12 22:54	18° ♄ 30'57	
min. Earth dist.	13115 Jun 09 00:21	25° ♄ 29'04	0.68590 AU	evening set	13116 May 17 16:50	16° ♄ 32'26	
morning rise	13115 Jun 13 18:45	19° ♄ 45'46		inferior conj	13116 May 22 23:51	10° ♄ 11'16	2°56'04
direct	13115 Jun 19 00:19	17° ♄ 28'26		minimum elong	13116 May 22 22:19	10° ♄ 16'36	2°54'56
desc. node	13115 Jun 27 10:33	21° ♄ 44'53		min. Earth dist.	13116 May 22 20:50	10° ♄ 21'46	0.68891 AU
morning max el	13115 Jun 29 12:44	23° ♄ 44'10	23°22'16	morning rise	13116 May 28 03:38	3° ♄ 59'22	
	13115 Jul 05 02:05	0° ♄		direct	13116 Jun 01 20:19	2° ♄ 00'49	
	13115 Jul 26 04:30	0° ♄		morning max el	13116 Jun 11 01:48	7° ♄ 24'30	21°54'16
morning set	13115 Aug 03 07:30	13° ♄ 10'08		desc. node	13116 Jun 13 07:37	9° ♄ 47'29	
max. Earth dist.	13115 Aug 07 09:37	20° ♄ 08'34	1.39421 AU		13116 Jun 28 12:59	0° ♄	
	13115 Aug 12 22:33	0° ♄		morning set	13116 Jul 13 16:01	23° ♄ 06'15	
					13116 Jul 17 22:06	0° ♄	
superior conj	13115 Aug 15 01:48	3° ♄ 55'42	-0°54'50	max. Earth dist.	13116 Jul 19 10:35	2° ♄ 30'42	1.41695 AU
minimum elong	13115 Aug 15 05:47	4° ♄ 14'11	0°54'42				
asc. node	13115 Aug 21 06:15	15° ♄ 39'22		superior conj	13116 Jul 27 03:30	15° ♄ 39'59	-1°28'48
evening rise	13115 Aug 24 11:06	21° ♄ 50'46		minimum elong	13116 Jul 27 09:58	16° ♄ 08'24	1°28'44
	13115 Aug 28 17:39	0° ♄			13116 Aug 04 02:36	0° ♄	
evening max el	13115 Sep 09 13:16	17° ♄ 56'47	18°40'31	evening rise	13116 Aug 06 20:54	5° ♄ 05'28	
retrograde	13115 Sep 17 17:53	22° ♄ 04'08		asc. node	13116 Aug 07 02:53	5° ♄ 33'05	
evening set	13115 Sep 19 16:11	21° ♄ 51'12			13116 Aug 22 08:03	0° ♄	
desc. node	13115 Sep 23 07:19	20° ♄ 24'22		evening max el	13116 Aug 22 21:41	0° ♄ 34'58	18°11'56
inferior conj	13115 Sep 27 16:51	17° ♄ 26'24	-1°23'31	retrograde	13116 Aug 30 00:50	4° ♄ 12'25	
minimum elong	13115 Sep 27 13:26	17° ♄ 32'47	1°21'55	evening set	13116 Sep 01 05:50	3° ♄ 52'08	
min. Earth dist.	13115 Sep 30 20:22	15° ♄ 06'13	0.57153 AU		13116 Sep 07 11:05	30° ♄	
morning rise	13115 Oct 05 07:16	12° ♄ 23'23		inferior conj	13116 Sep 08 11:53	29° ♄ 06'40	0°13'05
direct	13115 Oct 11 04:45	10° ♄ 57'42		minimum elong	13116 Sep 08 12:19	29° ♄ 05'42	0°12'48
morning max el	13115 Oct 25 11:28	18° ♄ 25'08	26°39'09	transit middle	13116 Sep 08 12:19	29° ♄ 05'42	0°12'48
	13115 Nov 04 04:43	0° ♄		transit begin	13116 Sep 08 10:14	29° ♄ 10'15	
asc. node	13115 Nov 17 08:01	21° ♄ 51'58		transit end	13116 Sep 08 14:25	29° ♄ 01'08	
	13115 Nov 21 09:45	0° ♄		desc. node	13116 Sep 09 04:51	28° ♄ 29'29	
				min. Earth dist.	13116 Sep 11 19:15	26° ♄ 14'56	0.59287 AU

morning rise	13116 Sep 15 15:24	23° \mathbb{M} 29'32		morning rise	13117 Aug 28 17:35	5° \mathbb{M} 27'25	
direct	13116 Sep 22 01:25	21° \mathbb{M} 35'47		direct	13117 Sep 04 09:31	3° \mathbb{M} 09'33	
morning max el	13116 Oct 06 09:20	29° \mathbb{M} 23'14	27°38'01	morning max el	13117 Sep 18 14:00	11° \mathbb{M} 08'15	27°58'23
	13116 Oct 07 00:07	0° \mathbb{L}			13117 Oct 03 09:47	0° \mathbb{L}	
	13116 Oct 28 03:46	0° \mathbb{M}			13117 Oct 20 10:46	0° \mathbb{M}	
asc. node	13116 Nov 03 04:47	11° \mathbb{M} 25'21		asc. node	13117 Oct 21 01:29	1° \mathbb{M} 14'27	
morning set	13116 Nov 07 01:18	19° \mathbb{M} 20'22		morning set	13117 Oct 22 02:50	3° \mathbb{M} 24'10	
	13116 Nov 11 23:12	0° \mathbb{J}		max. Earth dist.	13117 Oct 27 17:21	15° \mathbb{M} 20'54	1.31602 AU
max. Earth dist.	13116 Nov 13 11:11	3° \mathbb{J} 19'58	1.31229 AU				
				superior conj	13117 Oct 29 11:55	19° \mathbb{M} 15'02	1°13'17
superior conj	13116 Nov 14 01:47	4° \mathbb{J} 41'23	1°27'21	minimum elong	13117 Oct 29 09:41	19° \mathbb{M} 02'44	1°13'40
minimum elong	13116 Nov 13 23:59	4° \mathbb{J} 31'25	1°28'03		13117 Nov 03 08:36	0° \mathbb{J}	
evening rise	13116 Nov 20 18:57	19° \mathbb{J} 30'40		evening rise	13117 Nov 05 05:19	4° \mathbb{J} 03'20	
	13116 Nov 25 20:36	0° \mathbb{Z}			13117 Nov 18 20:06	0° \mathbb{Z}	
desc. node	13116 Dec 06 01:46	18° \mathbb{Z} 08'27		desc. node	13117 Nov 22 22:55	6° \mathbb{Z} 10'07	
	13116 Dec 14 15:59	0° \mathbb{W}		evening max el	13117 Dec 01 04:02	15° \mathbb{Z} 51'28	24°51'21
evening max el	13116 Dec 19 13:07	5° \mathbb{W} 13'25	26°16'23	retrograde	13117 Dec 14 22:43	22° \mathbb{Z} 44'54	
retrograde	13117 Jan 02 11:59	12° \mathbb{W} 18'45		evening set	13117 Dec 20 11:06	21° \mathbb{Z} 37'13	
evening set	13117 Jan 08 21:25	10° \mathbb{W} 40'31		min. Earth dist.	13117 Dec 25 15:54	18° \mathbb{Z} 52'10	0.56472 AU
min. Earth dist.	13117 Jan 13 02:36	8° \mathbb{W} 04'15	0.58378 AU	inferior conj	13117 Dec 28 05:25	17° \mathbb{Z} 13'37	-5°21'58
inferior conj	13117 Jan 16 05:09	5° \mathbb{W} 47'00	-4°13'15	minimum elong	13117 Dec 28 13:00	17° \mathbb{Z} 01'26	5°19'36
minimum elong	13117 Jan 16 13:39	5° \mathbb{W} 31'19	4°09'50	morning rise	13118 Jan 05 17:04	13° \mathbb{Z} 06'54	
morning rise	13117 Jan 24 08:48	1° \mathbb{W} 18'48		direct	13118 Jan 08 00:43	12° \mathbb{Z} 51'53	
direct	13117 Jan 26 10:12	1° \mathbb{W} 04'35		asc. node	13118 Jan 17 01:16	16° \mathbb{Z} 57'52	
asc. node	13117 Jan 30 03:58	1° \mathbb{W} 54'16		morning max el	13118 Jan 17 14:46	17° \mathbb{Z} 29'34	19°24'28
morning max el	13117 Feb 03 16:11	5° \mathbb{W} 07'49	18°30'30		13118 Jan 26 17:31	0° \mathbb{W}	
	13117 Feb 19 06:41	0° \mathbb{X}		morning set	13118 Feb 03 16:34	15° \mathbb{W} 05'20	
morning set	13117 Feb 19 14:30	0° \mathbb{X} 37'31			13118 Feb 11 03:55	0° \mathbb{X}	
				superior conj	13118 Feb 11 18:54	1° \mathbb{X} 13'13	0°55'40
superior conj	13117 Feb 28 14:57	17° \mathbb{X} 47'01	0°27'42	minimum elong	13118 Feb 11 21:40	1° \mathbb{X} 26'43	0°55'50
minimum elong	13117 Feb 28 16:50	17° \mathbb{X} 55'41	0°27'43	max. Earth dist.	13118 Feb 18 07:42	13° \mathbb{X} 33'40	1.38118 AU
desc. node	13117 Mar 04 02:42	24° \mathbb{X} 08'39		desc. node	13118 Feb 18 23:15	14° \mathbb{X} 44'19	
	13117 Mar 07 10:16	0° \mathbb{Y}		evening rise	13118 Feb 22 01:06	20° \mathbb{X} 13'08	
max. Earth dist.	13117 Mar 08 01:13	1° \mathbb{Y} 04'47	1.40368 AU		13118 Feb 27 19:33	0° \mathbb{Y}	
evening rise	13117 Mar 12 07:18	8° \mathbb{Y} 17'12			13118 Mar 20 06:32	0° \mathbb{X}	
	13117 Mar 26 04:38	0° \mathbb{Z}		evening max el	13118 Mar 29 10:45	10° \mathbb{Z} 32'20	24°59'45
evening max el	13117 Apr 15 21:04	26° \mathbb{Z} 39'23	23°41'06	retrograde	13118 Apr 10 08:23	17° \mathbb{Z} 27'30	
	13117 Apr 19 15:16	0° \mathbb{I}		asc. node	13118 Apr 14 22:00	15° \mathbb{Z} 57'05	
retrograde	13117 Apr 26 17:38	3° \mathbb{I} 02'37		evening set	13118 Apr 16 01:38	15° \mathbb{Z} 04'12	
asc. node	13117 Apr 28 00:36	2° \mathbb{I} 55'02		min. Earth dist.	13118 Apr 20 12:15	10° \mathbb{Z} 05'45	0.68109 AU
evening set	13117 May 01 23:08	0° \mathbb{I} 50'27		inferior conj	13118 Apr 21 16:14	8° \mathbb{Z} 33'45	1°58'11
	13117 May 02 20:49	30° \mathbb{R} \mathbb{Z}		minimum elong	13118 Apr 21 14:05	8° \mathbb{Z} 40'47	1°56'59
min. Earth dist.	13117 May 06 17:33	25° \mathbb{Z} 15'56	0.68725 AU	morning rise	13118 Apr 27 02:48	2° \mathbb{Z} 37'57	
inferior conj	13117 May 07 09:06	24° \mathbb{Z} 22'40	2°32'12	direct	13118 Apr 30 18:49	1° \mathbb{Z} 20'44	
minimum elong	13117 May 07 07:04	24° \mathbb{Z} 29'40	2°30'57	morning max el	13118 May 07 22:49	5° \mathbb{Z} 17'41	19°28'42
morning rise	13117 May 12 14:58	18° \mathbb{Z} 18'08		desc. node	13118 May 18 01:23	18° \mathbb{Z} 04'46	
direct	13117 May 16 18:58	16° \mathbb{Z} 40'17		greatest brilliancy	13118 May 20 14:46	21° \mathbb{Z} 47'58	-0.7m
morning max el	13117 May 24 20:32	21° \mathbb{Z} 15'20	20°34'50		13118 May 26 02:20	0° \mathbb{I}	
desc. node	13117 May 31 04:34	28° \mathbb{Z} 38'33		morning set	13118 Jun 02 02:56	10° \mathbb{I} 43'35	
	13117 Jun 01 05:24	0° \mathbb{I}		max. Earth dist.	13118 Jun 14 08:49	29° \mathbb{I} 46'30	1.45039 AU
	13117 Jun 21 17:43	0° \mathbb{O}			13118 Jun 14 12:15	0° \mathbb{O}	
morning set	13117 Jun 23 01:44	2° \mathbb{O} 03'41		superior conj	13118 Jun 18 10:14	6° \mathbb{O} 12'52	-2°12'22
max. Earth dist.	13117 Jul 01 18:18	15° \mathbb{O} 46'33	1.43640 AU	minimum elong	13118 Jun 18 12:47	6° \mathbb{O} 23'00	2°13'20
				evening rise	13118 Jul 02 12:35	29° \mathbb{O} 15'04	
superior conj	13117 Jul 08 06:42	26° \mathbb{O} 26'10	-1°56'55		13118 Jul 02 23:22	0° \mathbb{O}	
minimum elong	13117 Jul 08 13:32	26° \mathbb{O} 54'36	1°57'20	asc. node	13118 Jul 11 20:24	14° \mathbb{O} 38'34	
	13117 Jul 10 09:48	0° \mathbb{O}		evening max el	13118 Jul 21 01:16	27° \mathbb{O} 11'01	18°12'37
evening rise	13117 Jul 20 15:07	17° \mathbb{O} 37'45			13118 Jul 24 22:27	0° \mathbb{M}	
asc. node	13117 Jul 24 23:36	25° \mathbb{O} 14'47		retrograde	13118 Jul 27 09:44	0° \mathbb{M} 32'25	
	13117 Jul 27 18:14	0° \mathbb{M}			13118 Jul 29 20:37	30° \mathbb{R} \mathbb{O}	
evening max el	13117 Aug 06 10:57	13° \mathbb{M} 43'18	18°03'00	evening set	13118 Jul 30 07:13	29° \mathbb{O} 47'27	
retrograde	13117 Aug 12 23:37	17° \mathbb{M} 05'33		inferior conj	13118 Aug 05 07:39	24° \mathbb{O} 24'42	2°19'24
evening set	13117 Aug 15 12:45	16° \mathbb{M} 34'15		minimum elong	13118 Aug 05 10:09	24° \mathbb{O} 17'41	2°18'05
inferior conj	13117 Aug 22 02:12	11° \mathbb{M} 29'07	1°27'23	min. Earth dist.	13118 Aug 07 20:21	21° \mathbb{O} 34'47	0.63765 AU
minimum elong	13117 Aug 22 04:27	11° \mathbb{M} 23'28	1°26'12	morning rise	13118 Aug 11 11:26	18° \mathbb{O} 08'16	
min. Earth dist.	13117 Aug 25 03:03	8° \mathbb{M} 27'54	0.61581 AU				
desc. node	13117 Aug 27 02:23	6° \mathbb{M} 41'51					

desc. node	13118 Aug 13 23:52	16°♎32'48		minimum elong	13119 Jul 20 02:14	7°♎40'25	2°51'02
direct	13118 Aug 18 02:48	15°♎34'17		min. Earth dist.	13119 Jul 21 22:48	5°♎23'29	0.65660 AU
morning max el	13118 Aug 31 23:15	23°♎35'00	27°41'10	morning rise	13119 Jul 25 18:21	1°♎23'06	
	13118 Sep 06 16:57	0°♎			13119 Jul 27 16:30	30°♎	
	13118 Sep 26 17:57	0°♎		desc. node	13119 Jul 31 21:18	28°♎42'48	
morning set	13118 Oct 05 20:41	17°♎03'48		direct	13119 Aug 01 04:01	28°♎42'30	
asc. node	13118 Oct 07 22:07	21°♎13'30			13119 Aug 06 01:29	0°♎	
max. Earth dist.	13118 Oct 10 17:27	27°♎03'44	1.32504 AU	morning max el	13119 Aug 14 10:25	6°♎33'11	26°52'04
	13118 Oct 12 02:38	0°♎			13119 Sep 01 12:14	0°♎	
				morning set	13119 Sep 19 03:59	0°♎12'26	
superior conj	13118 Oct 13 18:36	3°♎34'55	0°53'38		13119 Sep 19 01:23	0°♎	
minimum elong	13118 Oct 13 16:26	3°♎23'13	0°53'43	max. Earth dist.	13119 Sep 23 08:19	8°♎24'17	1.33927 AU
evening rise	13118 Oct 20 16:31	18°♎35'57		asc. node	13119 Sep 24 18:42	11°♎18'19	
	13118 Oct 26 05:04	0°♎					
desc. node	13118 Nov 09 20:10	23°♎02'03		superior conj	13119 Sep 27 19:34	17°♎35'14	0°28'37
evening max el	13118 Nov 12 14:00	25°♎56'05	23°10'29	minimum elong	13119 Sep 27 18:08	17°♎27'41	0°28'32
	13118 Nov 17 16:42	0°♎			13119 Oct 03 16:01	0°♎	
retrograde	13118 Nov 25 20:29	2°♎31'59		evening rise	13119 Oct 05 02:42	3°♎03'31	
evening set	13118 Nov 30 01:37	1°♎53'24			13119 Oct 20 00:41	0°♎	
	13118 Dec 04 13:47	30°♎		evening max el	13119 Oct 25 04:03	6°♎03'23	21°31'42
min. Earth dist.	13118 Dec 06 23:30	28°♎40'36	0.55097 AU	desc. node	13119 Oct 27 17:31	8°♎19'37	
inferior conj	13118 Dec 08 10:00	27°♎50'50	-5°55'14	retrograde	13119 Nov 06 08:59	12°♎07'14	
minimum elong	13118 Dec 08 11:02	27°♎49'21	5°54'12	evening set	13119 Nov 09 05:20	11°♎48'41	
morning rise	13118 Dec 16 22:02	24°♎00'40		inferior conj	13119 Nov 18 02:34	7°♎54'36	-5°32'19
direct	13118 Dec 19 20:24	23°♎40'17		minimum elong	13119 Nov 17 19:06	8°♎05'04	5°30'16
morning max el	13118 Dec 30 23:38	28°♎58'56	20°41'36	min. Earth dist.	13119 Nov 18 05:38	7°♎50'18	0.54519 AU
	13119 Jan 01 00:10	0°♎		morning rise	13119 Nov 26 09:45	4°♎06'09	
asc. node	13119 Jan 03 22:27	3°♎23'10		direct	13119 Nov 30 04:33	3°♎35'09	
morning set	13119 Jan 19 00:10	29°♎45'54		morning max el	13119 Dec 12 18:49	9°♎37'07	22°19'15
	13119 Jan 19 02:54	0°♎		asc. node	13119 Dec 21 19:34	20°♎52'54	
					13119 Dec 27 04:29	0°♎	
superior conj	13119 Jan 26 11:06	15°♎12'34	1°16'23	morning set	13120 Jan 03 10:51	14°♎31'41	
minimum elong	13119 Jan 26 13:41	15°♎25'42	1°16'51				
max. Earth dist.	13119 Jan 31 16:05	25°♎34'38	1.35961 AU	superior conj	13120 Jan 10 11:56	29°♎34'15	1°30'03
	13119 Feb 02 23:41	0°♎		minimum elong	13120 Jan 10 13:42	29°♎43'36	1°30'50
evening rise	13119 Feb 04 13:19	2°♎55'25			13120 Jan 10 16:48	0°♎	
desc. node	13119 Feb 05 19:50	5°♎15'05		max. Earth dist.	13120 Jan 14 06:17	7°♎25'25	1.34103 AU
	13119 Feb 20 19:32	0°♎		evening rise	13120 Jan 18 16:24	16°♎14'26	
evening max el	13119 Mar 12 00:18	24°♎22'45	26°08'58	desc. node	13120 Jan 23 16:29	25°♎36'10	
	13119 Mar 19 04:10	0°♎			13120 Jan 26 04:01	0°♎	
retrograde	13119 Mar 24 18:14	1°♎39'09			13120 Feb 15 07:12	0°♎	
	13119 Mar 29 19:12	30°♎		evening max el	13120 Feb 22 13:48	8°♎02'17	27°01'30
evening set	13119 Mar 30 22:42	29°♎08'33		retrograde	13120 Mar 06 22:27	15°♎28'44	
asc. node	13119 Apr 01 19:25	27°♎23'35		evening set	13120 Mar 13 12:20	12°♎56'12	
min. Earth dist.	13119 Apr 04 02:49	24°♎45'19	0.67060 AU	min. Earth dist.	13120 Mar 17 11:09	9°♎06'27	0.65610 AU
inferior conj	13119 Apr 05 19:12	22°♎40'22	1°13'43	asc. node	13120 Mar 18 16:52	7°♎42'11	
minimum elong	13119 Apr 05 17:32	22°♎45'35	1°12'49	inferior conj	13120 Mar 19 15:45	6°♎36'26	0°18'18
morning rise	13119 Apr 11 13:09	16°♎54'50		minimum elong	13120 Mar 19 15:15	6°♎37'53	0°18'06
direct	13119 Apr 14 18:04	15°♎56'35		morning rise	13120 Mar 25 19:40	1°♎03'02	
morning max el	13119 Apr 21 08:24	19°♎28'36	18°38'21	direct	13120 Mar 28 14:42	0°♎20'51	
	13119 Apr 29 15:34	0°♎		morning max el	13120 Apr 03 23:17	3°♎40'39	18°04'38
desc. node	13119 May 04 22:06	7°♎56'50		desc. node	13120 Apr 20 18:42	28°♎07'00	
morning set	13119 May 12 17:39	20°♎08'02			13120 Apr 21 22:30	0°♎	
	13119 May 19 00:58	0°♎		morning set	13120 Apr 22 11:17	0°♎51'57	
max. Earth dist.	13119 May 28 03:33	14°♎13'15	1.45748 AU				
				superior conj	13120 May 07 06:09	24°♎32'19	-1°46'01
superior conj	13119 May 28 20:51	15°♎20'51	-2°09'00	minimum elong	13120 May 06 20:58	23°♎56'14	1°45'57
minimum elong	13119 May 28 15:44	15°♎00'52	2°09'45	max. Earth dist.	13120 May 09 23:23	28°♎48'09	1.45707 AU
	13119 Jun 07 04:45	0°♎			13120 May 10 17:46	0°♎	
evening rise	13119 Jun 13 09:50	9°♎51'35		evening rise	13120 May 23 08:41	19°♎35'17	
greatest brilliancy	13119 Jun 20 22:07	21°♎48'36	-0.9m		13120 May 30 02:58	0°♎	
	13119 Jun 26 05:21	0°♎		greatest brilliancy	13120 Jun 05 02:13	9°♎02'15	-0.7m
asc. node	13119 Jun 28 17:17	3°♎38'10		asc. node	13120 Jun 14 14:15	22°♎04'51	
evening max el	13119 Jul 04 13:37	10°♎50'44	18°40'01	evening max el	13120 Jun 16 21:43	24°♎36'31	19°24'23
retrograde	13119 Jul 11 03:06	14°♎24'51		retrograde	13120 Jun 24 00:27	28°♎35'46	
evening set	13119 Jul 14 09:10	13°♎24'29		evening set	13120 Jun 27 15:37	27°♎19'01	
inferior conj	13119 Jul 20 00:22	7°♎46'10	2°52'11	inferior conj	13120 Jul 03 01:00	21°♎26'47	3°09'08

minimum elong	13120 Jul 03 01:52	21°☿23'55	3°08'07	minimum elong	13121 Jun 17 06:37	5°☿21'34	3°11'54
min. Earth dist.	13120 Jul 04 08:54	19°☿41'56	0.67156 AU	min. Earth dist.	13121 Jun 18 00:37	4°☿19'54	0.68203 AU
morning rise	13120 Jul 08 11:36	15°☿03'01			13121 Jun 21 12:13	30°☿II	
direct	13120 Jul 14 12:02	12°☿25'16		morning rise	13121 Jun 22 12:40	29°☿II00'18	
desc. node	13120 Jul 17 18:37	13°☿04'35		direct	13121 Jun 28 01:35	26°☿II33'32	
morning max el	13120 Jul 26 21:18	19°☿50'28	25°39'43	desc. node	13121 Jul 04 15:50	29°☿II12'04	
	13120 Aug 04 13:41	0°☿			13121 Jul 05 16:53	0°☿	
	13120 Aug 24 14:55	0°☿		morning max el	13121 Jul 09 07:20	3°☿17'37	24°13'52
morning set	13120 Aug 31 21:05	12°☿41'21			13121 Jul 29 17:22	0°☿	
max. Earth dist.	13120 Sep 04 13:02	19°☿29'51	1.35825 AU	morning set	13121 Aug 13 19:27	24°☿18'27	
	13120 Sep 09 22:18	0°☿			13121 Aug 17 01:19	0°☿	
				max. Earth dist.	13121 Aug 17 11:11	0°☿44'06	1.38070 AU
superior conj	13120 Sep 10 12:09	1°☿09'28	-0°01'14				
minimum elong	13120 Sep 10 12:14	1°☿09'51	0°01'19	superior conj	13121 Aug 24 16:56	14°☿08'42	-0°34'43
behind sun begin	13120 Sep 10 06:02	0°☿38'43		minimum elong	13121 Aug 24 19:20	14°☿20'11	0°34'40
behind sun end	13120 Sep 10 18:26	1°☿41'03		asc. node	13121 Aug 28 11:51	21°☿29'48	
asc. node	13120 Sep 10 15:18	1°☿25'18			13121 Sep 01 18:59	0°☿	
evening rise	13120 Sep 18 09:45	17°☿20'39		evening rise	13121 Sep 02 11:10	1°☿20'11	
	13120 Sep 24 19:31	0°☿		evening max el	13121 Sep 18 23:12	28°☿19'50	19°06'23
evening max el	13120 Oct 06 06:35	16°☿47'36	20°08'33		13121 Sep 20 19:46	0°☿	
desc. node	13120 Oct 13 14:57	21°☿35'24		retrograde	13121 Sep 27 22:54	2°☿49'42	
retrograde	13120 Oct 16 21:44	22°☿04'58		evening set	13121 Sep 29 19:27	2°☿38'58	
evening set	13120 Oct 18 22:18	21°☿54'20		desc. node	13121 Sep 30 12:26	2°☿29'29	
inferior conj	13120 Oct 27 21:00	17°☿56'30	-4°13'53		13121 Oct 05 21:07	30°☿☿	
minimum elong	13120 Oct 27 11:03	18°☿11'21	4°10'12	inferior conj	13121 Oct 08 06:16	28°☿25'48	-2°26'13
min. Earth dist.	13120 Oct 29 13:38	16°☿55'50	0.54884 AU	minimum elong	13121 Oct 07 24:00	28°☿36'29	2°23'25
morning rise	13120 Nov 04 22:46	13°☿49'16		min. Earth dist.	13121 Oct 11 01:28	26°☿31'49	0.56135 AU
direct	13120 Nov 09 15:19	13°☿01'30		morning rise	13121 Oct 16 01:43	23°☿44'58	
morning max el	13120 Nov 23 05:45	19°☿42'43	24°07'36	direct	13121 Oct 21 14:01	22°☿34'22	
	13120 Dec 01 20:57	0°☿		morning max el	13121 Nov 04 16:45	29°☿46'28	25°50'00
asc. node	13120 Dec 07 16:34	9°☿11'53			13121 Nov 04 22:23	0°☿	
morning set	13120 Dec 17 22:43	29°☿17'24		asc. node	13121 Nov 24 13:28	28°☿07'01	
	13120 Dec 18 06:40	0°☿			13121 Nov 25 13:26	0°☿	
				morning set	13121 Dec 02 10:01	13°☿57'28	
superior conj	13120 Dec 24 18:36	14°☿10'13	1°37'06				
minimum elong	13120 Dec 24 19:18	14°☿14'00	1°38'04	superior conj	13121 Dec 09 04:43	28°☿52'48	1°37'57
max. Earth dist.	13120 Dec 27 04:20	19°☿22'29	1.32673 AU	minimum elong	13121 Dec 09 04:19	28°☿50'34	1°38'56
evening rise	13121 Jan 01 07:01	0°☿02'13			13121 Dec 09 16:51	0°☿	
	13121 Jan 01 06:35	0°☿		max. Earth dist.	13121 Dec 10 09:01	1°☿29'27	1.31721 AU
desc. node	13121 Jan 09 13:15	15°☿42'46		evening rise	13121 Dec 16 06:09	14°☿10'19	
	13121 Jan 18 05:02	0°☿			13121 Dec 24 08:08	0°☿	
evening max el	13121 Feb 04 02:21	21°☿21'01	27°30'04	desc. node	13121 Dec 27 10:07	5°☿27'55	
retrograde	13121 Feb 17 20:02	28°☿47'22			13122 Jan 13 13:04	0°☿	
evening set	13121 Feb 24 16:18	26°☿19'55		evening max el	13122 Jan 17 11:54	4°☿06'15	27°28'23
min. Earth dist.	13121 Feb 28 11:27	23°☿00'26	0.63819 AU	retrograde	13122 Jan 31 09:47	11°☿25'42	
inferior conj	13121 Mar 03 03:16	20°☿15'49	-0°48'08	evening set	13122 Feb 07 07:47	9°☿11'12	
minimum elong	13121 Mar 03 04:47	20°☿11'53	0°47'13	min. Earth dist.	13122 Feb 11 01:56	6°☿16'38	0.61771 AU
asc. node	13121 Mar 05 14:19	17°☿49'51		inferior conj	13122 Feb 14 02:34	3°☿30'30	-2°04'27
morning rise	13121 Mar 09 19:30	14°☿56'52		minimum elong	13122 Feb 14 06:54	3°☿20'33	2°02'11
direct	13121 Mar 12 06:11	14°☿27'11			13122 Feb 18 08:31	30°☿☿	
morning max el	13121 Mar 18 16:47	17°☿46'01	17°48'02	asc. node	13122 Feb 20 11:45	28°☿48'40	
	13121 Mar 27 15:38	0°☿		morning rise	13122 Feb 21 08:50	28°☿28'59	
morning set	13121 Apr 04 08:23	12°☿55'10		direct	13122 Feb 23 13:19	28°☿08'03	
desc. node	13121 Apr 07 15:15	18°☿29'59			13122 Feb 28 13:09	0°☿	
	13121 Apr 14 12:39	0°☿		morning max el	13122 Mar 02 09:49	1°☿36'06	17°49'19
				morning set	13122 Mar 18 03:23	26°☿00'29	
superior conj	13121 Apr 17 06:45	4°☿29'52	-1°09'49		13122 Mar 20 09:01	0°☿	
minimum elong	13121 Apr 16 23:38	4°☿00'59	1°09'22	desc. node	13122 Mar 25 11:47	9°☿01'37	
max. Earth dist.	13121 Apr 22 18:10	13°☿16'30	1.44938 AU				
evening rise	13121 May 02 20:06	28°☿57'51		superior conj	13122 Mar 29 07:02	15°☿34'16	-0°29'26
	13121 May 03 12:21	0°☿		minimum elong	13122 Mar 29 04:15	15°☿22'28	0°29'10
	13121 May 23 23:45	0°☿		max. Earth dist.	13122 Apr 05 10:09	27°☿24'54	1.43522 AU
evening max el	13121 May 31 00:16	8°☿24'30	20°23'53		13122 Apr 07 00:33	0°☿	
asc. node	13121 Jun 01 11:20	9°☿47'27		evening rise	13122 Apr 12 12:13	8°☿40'45	
retrograde	13121 Jun 07 23:16	12°☿59'12			13122 Apr 26 16:53	0°☿	
evening set	13121 Jun 12 00:16	11°☿25'44		evening max el	13122 May 13 21:13	22°☿13'30	21°35'25
inferior conj	13121 Jun 17 06:48	5°☿20'58	3°12'54	asc. node	13122 May 19 08:32	26°☿32'15	

retrograde	13122 May 22 21:39	27° Π 30'21		retrograde	13123 May 06 18:06	12° Π 03'19	
evening set	13122 May 27 09:18	25° Π 40'33		evening set	13123 May 11 17:02	9° Π 58'29	
inferior conj	13122 Jun 01 15:30	19° Π 24'54	3°05'15	min. Earth dist.	13123 May 16 16:37	4° Π 03'29	0.68875 AU
minimum elong	13122 Jun 01 14:24	19° Π 28'44	3°04'10	inferior conj	13123 May 17 01:04	3° Π 34'09	2°47'10
min. Earth dist.	13122 Jun 01 19:54	19° Π 09'31	0.68776 AU	minimum elong	13123 May 16 23:17	3° Π 40'22	2°45'59
morning rise	13122 Jun 06 19:18	13° Π 09'33			13123 May 19 17:37	30° \mathbb{R} 8	
direct	13122 Jun 11 19:31	10° Π 59'40		morning rise	13123 May 22 05:26	27° \mathbb{S} 25'32	
desc. node	13122 Jun 21 12:56	16° Π 39'09		direct	13123 May 26 16:41	25° \mathbb{S} 35'48	
morning max el	13122 Jun 21 18:24	16° Π 52'48	22°44'16		13123 Jun 03 18:15	0° Π	
	13122 Jul 02 14:14	0° \mathbb{S}		morning max el	13123 Jun 04 09:37	0° Π 37'28	21°19'13
	13122 Jul 22 18:18	0° \mathbb{N}		desc. node	13123 Jun 08 09:56	5° Π 04'00	
morning set	13122 Jul 25 18:37	4° \mathbb{N} 53'23			13123 Jun 26 08:09	0° \mathbb{S}	
max. Earth dist.	13122 Jul 30 10:02	12° \mathbb{N} 38'53	1.40418 AU	morning set	13123 Jul 05 16:35	14° \mathbb{S} 21'56	
				max. Earth dist.	13123 Jul 12 14:15	25° \mathbb{S} 26'19	1.42578 AU
					13123 Jul 15 08:34	0° \mathbb{N}	
superior conj	13122 Aug 07 05:52	26° \mathbb{N} 23'52	-1°09'34	superior conj	13123 Jul 19 22:22	7° \mathbb{N} 43'52	-1°41'48
minimum elong	13122 Aug 07 11:01	26° \mathbb{N} 47'10	1°09'24	minimum elong	13123 Jul 20 05:25	8° \mathbb{N} 14'07	1°41'53
	13122 Aug 09 05:14	0° \mathbb{N}		evening rise	13123 Jul 31 07:38	27° \mathbb{N} 52'56	
asc. node	13122 Aug 15 08:29	11° \mathbb{N} 29'06			13123 Aug 01 11:47	0° \mathbb{N}	
evening rise	13122 Aug 17 03:51	14° \mathbb{N} 54'38		asc. node	13123 Aug 02 05:11	1° \mathbb{N} 18'26	
	13122 Aug 25 10:15	0° \mathbb{S}		evening max el	13123 Aug 16 13:56	23° \mathbb{N} 28'33	18°05'44
evening max el	13122 Sep 02 03:03	10° \mathbb{S} 36'42	18°25'48	retrograde	13123 Aug 23 09:43	26° \mathbb{N} 58'05	
retrograde	13122 Sep 09 19:16	14° \mathbb{S} 29'25		evening set	13123 Aug 25 18:02	26° \mathbb{N} 33'33	
evening set	13122 Sep 11 20:15	14° \mathbb{S} 13'43		inferior conj	13123 Sep 01 16:37	21° \mathbb{N} 39'11	0°47'24
desc. node	13122 Sep 17 09:57	11° \mathbb{S} 18'10		minimum elong	13123 Sep 01 18:04	21° \mathbb{N} 35'50	0°46'38
inferior conj	13122 Sep 19 12:54	9° \mathbb{S} 39'47	-0°40'04	desc. node	13123 Sep 04 07:27	19° \mathbb{N} 13'23	
minimum elong	13122 Sep 19 11:22	9° \mathbb{S} 42'51	0°39'24	min. Earth dist.	13123 Sep 04 22:01	18° \mathbb{N} 40'51	0.60259 AU
min. Earth dist.	13122 Sep 22 19:30	7° \mathbb{S} 04'01	0.58033 AU	morning rise	13123 Sep 08 15:00	15° \mathbb{N} 50'07	
morning rise	13122 Sep 26 23:01	4° \mathbb{S} 21'38		direct	13123 Sep 15 04:08	13° \mathbb{N} 45'42	
direct	13122 Oct 03 02:38	2° \mathbb{S} 44'08		morning max el	13123 Sep 29 11:26	21° \mathbb{N} 38'58	27°51'33
morning max el	13122 Oct 17 10:11	10° \mathbb{S} 19'55	27°08'35		13123 Oct 06 18:58	0° \mathbb{S}	
	13122 Nov 01 13:52	0° \mathbb{N}			13123 Oct 25 15:00	0° \mathbb{N}	
asc. node	13122 Nov 11 10:18	17° \mathbb{N} 28'54		asc. node	13123 Oct 29 07:04	7° \mathbb{N} 10'07	
morning set	13122 Nov 16 19:01	28° \mathbb{N} 27'34		morning set	13123 Oct 31 23:55	12° \mathbb{N} 43'00	
	13122 Nov 17 12:18	0° \mathbb{S}		max. Earth dist.	13123 Nov 07 01:29	25° \mathbb{N} 50'26	1.31325 AU
superior conj	13122 Nov 23 16:20	13° \mathbb{S} 36'14	1°32'52	superior conj	13123 Nov 08 03:34	28° \mathbb{N} 15'18	1°22'04
minimum elong	13122 Nov 23 14:58	13° \mathbb{S} 28'39	1°33'43	minimum elong	13123 Nov 08 01:32	28° \mathbb{N} 04'02	1°22'38
max. Earth dist.	13122 Nov 23 17:20	13° \mathbb{S} 41'50	1.31267 AU		13123 Nov 08 22:22	0° \mathbb{S}	
evening rise	13122 Nov 30 11:19	28° \mathbb{S} 32'21		evening rise	13123 Nov 14 20:20	13° \mathbb{S} 02'50	
	13122 Dec 01 03:50	0° \mathbb{S}			13123 Nov 23 06:16	0° \mathbb{S}	
desc. node	13122 Dec 14 07:06	24° \mathbb{S} 42'55		desc. node	13123 Dec 01 04:12	13° \mathbb{S} 16'16	
	13122 Dec 17 15:54	0° \mathbb{S}		evening max el	13123 Dec 12 10:57	27° \mathbb{S} 11'25	25°43'04
evening max el	13122 Dec 30 15:32	16° \mathbb{S} 05'13	26°52'20		13123 Dec 15 17:48	0° \mathbb{S}	
retrograde	13123 Jan 13 14:20	23° \mathbb{S} 15'24		retrograde	13123 Dec 26 08:26	4° \mathbb{S} 12'20	
evening set	13123 Jan 20 07:13	21° \mathbb{S} 21'40		evening set	13124 Jan 01 10:30	2° \mathbb{S} 46'24	
min. Earth dist.	13123 Jan 24 05:38	18° \mathbb{S} 42'53	0.59606 AU	min. Earth dist.	13124 Jan 05 23:28	0° \mathbb{S} 08'54	0.57522 AU
inferior conj	13123 Jan 27 10:03	16° \mathbb{S} 10'27	-3°26'41		13124 Jan 06 04:45	30° \mathbb{R} 3	
minimum elong	13123 Jan 27 17:23	15° \mathbb{S} 55'47	3°23'22	inferior conj	13124 Jan 08 22:21	28° \mathbb{S} 06'15	-4°45'11
morning rise	13123 Feb 04 06:33	11° \mathbb{S} 29'36		minimum elong	13124 Jan 09 07:04	27° \mathbb{S} 51'08	4°42'01
direct	13123 Feb 06 07:53	11° \mathbb{S} 13'51		morning rise	13124 Jan 17 06:18	23° \mathbb{S} 47'49	
asc. node	13123 Feb 07 09:09	11° \mathbb{S} 18'08		direct	13124 Jan 19 09:25	23° \mathbb{S} 33'47	
morning max el	13123 Feb 13 22:51	15° \mathbb{S} 01'02	18°09'38	asc. node	13124 Jan 25 06:29	25° \mathbb{S} 28'26	
	13123 Feb 24 06:14	0° \mathbb{S}		morning max el	13124 Jan 28 04:00	27° \mathbb{S} 50'11	18°50'43
morning set	13123 Mar 01 14:06	9° \mathbb{S} 48'46			13124 Jan 30 04:13	0° \mathbb{S}	
superior conj	13123 Mar 11 06:45	27° \mathbb{S} 43'34	0°08'28	morning set	13124 Feb 13 11:41	24° \mathbb{S} 05'44	
minimum elong	13123 Mar 11 07:25	27° \mathbb{S} 46'33	0°08'31		13124 Feb 16 11:56	0° \mathbb{S}	
behind sun begin	13123 Mar 11 00:56	27° \mathbb{S} 17'26		superior conj	13124 Feb 22 01:50	10° \mathbb{S} 46'21	0°40'26
behind sun end	13123 Mar 11 13:54	28° \mathbb{S} 15'37		minimum elong	13124 Feb 22 04:15	10° \mathbb{S} 57'47	0°40'29
desc. node	13123 Mar 12 08:18	29° \mathbb{S} 37'39		desc. node	13124 Feb 27 04:51	20° \mathbb{S} 14'54	
	13123 Mar 12 13:20	0° \mathbb{Y}		max. Earth dist.	13124 Feb 29 05:03	23° \mathbb{S} 49'58	1.39410 AU
max. Earth dist.	13123 Mar 18 21:48	10° \mathbb{Y} 59'03	1.41608 AU		13124 Mar 03 18:22	0° \mathbb{Y}	
evening rise	13123 Mar 23 20:58	19° \mathbb{Y} 10'28		evening rise	13124 Mar 04 02:53	0° \mathbb{Y} 36'13	
	13123 Mar 30 17:53	0° \mathbb{S}			13124 Mar 23 02:02	0° \mathbb{S}	
	13123 Apr 21 03:42	0° Π		evening max el	13124 Apr 08 03:34	19° \mathbb{S} 54'12	24°15'11
evening max el	13123 Apr 26 13:38	6° Π 02'59	22°54'29				
asc. node	13123 May 06 05:50	12° Π 02'06					

retrograde	13124 Apr 19 11:21	26°♄32'52		retrograde	13125 Apr 03 00:18	10°♄52'34	
asc. node	13124 Apr 22 03:10	26°♄01'10		evening set	13125 Apr 08 22:18	8°♄25'42	
evening set	13124 Apr 24 21:54	24°♄15'18		asc. node	13125 Apr 09 00:33	8°♄20'54	
min. Earth dist.	13124 Apr 29 12:42	18°♄56'17	0.68515 AU	min. Earth dist.	13125 Apr 13 05:59	3°♄42'08	0.67710 AU
inferior conj	13124 Apr 30 09:38	17°♄45'37	2°19'00	inferior conj	13125 Apr 14 15:14	1°♄55'14	1°40'37
minimum elong	13124 Apr 30 07:29	17°♄52'51	2°17'46	minimum elong	13125 Apr 14 13:13	2°♄01'44	1°39'31
morning rise	13124 May 05 17:11	11°♄44'44			13125 Apr 16 03:46	30°♄	
direct	13124 May 09 15:53	10°♄16'01		morning rise	13125 Apr 20 04:37	26°♄03'26	
morning max el	13124 May 17 07:34	14°♄33'35	20°04'54	direct	13125 Apr 23 15:41	24°♄54'39	
desc. node	13124 May 25 06:49	24°♄11'09		morning max el	13125 Apr 30 13:03	28°♄39'47	19°05'12
	13124 May 29 10:25	0°♄			13125 May 01 20:02	0°♄	
morning set	13124 Jun 13 20:06	23°♄04'24		desc. node	13125 May 12 03:36	13°♄49'11	
	13124 Jun 18 07:23	0°♄		greatest brilliancy	13125 May 13 15:06	16°♄01'38	-0.7m
max. Earth dist.	13124 Jun 24 00:41	9°♄00'59	1.44306 AU		13125 May 22 18:31	0°♄	
				morning set	13125 May 24 00:24	1°♄55'23	
superior conj	13124 Jun 29 15:10	18°♄02'52	-2°05'27	max. Earth dist.	13125 Jun 06 16:41	23°♄11'56	1.45424 AU
minimum elong	13124 Jun 29 20:50	18°♄25'59	2°06'09				
	13124 Jul 06 20:04	0°♄		superior conj	13125 Jun 09 10:06	27°♄29'10	-2°13'28
evening rise	13124 Jul 12 17:35	10°♄02'45		minimum elong	13125 Jun 09 09:27	27°♄26'36	2°14'28
asc. node	13124 Jul 19 01:55	20°♄53'01			13125 Jun 11 00:18	0°♄	
	13124 Jul 24 19:03	0°♄		evening rise	13125 Jun 24 04:54	21°♄13'43	
evening max el	13124 Jul 30 03:58	6°♄45'31	18°04'53		13125 Jun 29 13:44	0°♄	
retrograde	13124 Aug 05 13:52	10°♄06'02		asc. node	13125 Jul 05 22:44	10°♄07'23	
evening set	13124 Aug 08 06:24	9°♄29'22		evening max el	13125 Jul 13 17:48	20°♄19'21	18°22'16
inferior conj	13124 Aug 14 13:51	4°♄16'37	1°51'58	retrograde	13125 Jul 20 03:21	23°♄44'27	
minimum elong	13124 Aug 14 16:21	4°♄10'00	1°50'42	evening set	13125 Jul 23 04:27	22°♄53'10	
min. Earth dist.	13124 Aug 17 10:03	1°♄17'36	0.62528 AU	inferior conj	13125 Jul 29 00:32	17°♄23'57	2°35'25
	13124 Aug 18 17:58	30°♄		minimum elong	13125 Jul 29 02:49	17°♄17'12	2°34'09
morning rise	13124 Aug 21 00:06	28°♄07'12		min. Earth dist.	13125 Jul 31 07:25	14°♄43'40	0.64610 AU
desc. node	13124 Aug 21 04:57	27°♄58'29		morning rise	13125 Aug 03 23:52	11°♄03'53	
direct	13124 Aug 27 16:25	25°♄41'09		desc. node	13125 Aug 08 02:23	8°♄47'00	
	13124 Sep 06 15:10	0°♄		direct	13125 Aug 10 13:30	8°♄25'32	
morning max el	13124 Sep 10 18:28	3°♄43'03	27°55'27	morning max el	13125 Aug 24 04:39	16°♄24'03	27°23'43
	13124 Sep 30 09:11	0°♄			13125 Sep 04 10:39	0°♄	
morning set	13124 Oct 14 22:30	26°♄37'34			13125 Sep 23 04:23	0°♄	
asc. node	13124 Oct 15 03:43	27°♄04'07		morning set	13125 Sep 28 12:15	10°♄05'05	
	13124 Oct 16 13:52	0°♄		asc. node	13125 Oct 02 00:19	17°♄06'16	
max. Earth dist.	13124 Oct 20 05:25	7°♄44'11	1.31914 AU	max. Earth dist.	13125 Oct 03 01:37	19°♄16'29	1.33041 AU
superior conj	13124 Oct 22 12:28	12°♄43'51	1°05'38	superior conj	13125 Oct 06 17:01	26°♄56'32	0°43'41
minimum elong	13124 Oct 22 10:12	12°♄31'24	1°05'53	minimum elong	13125 Oct 06 15:04	26°♄46'08	0°43'41
evening rise	13124 Oct 29 07:15	27°♄35'54			13125 Oct 08 03:14	0°♄	
	13124 Oct 30 10:10	0°♄		evening rise	13125 Oct 13 18:14	12°♄07'01	
	13124 Nov 16 09:50	0°♄			13125 Oct 22 18:42	0°♄	
desc. node	13124 Nov 17 01:24	0°♄51'17		desc. node	13125 Nov 03 22:41	17°♄06'40	
evening max el	13124 Nov 22 22:48	7°♄31'34	24°09'21	evening max el	13125 Nov 04 09:28	17°♄33'24	22°27'21
retrograde	13124 Dec 06 14:07	14°♄19'36		retrograde	13125 Nov 17 07:01	23°♄57'12	
evening set	13124 Dec 11 13:59	13°♄24'58		evening set	13125 Nov 20 21:20	23°♄28'52	
min. Earth dist.	13124 Dec 17 10:06	10°♄30'12	0.55802 AU	min. Earth dist.	13125 Nov 28 16:54	19°♄58'39	0.54746 AU
inferior conj	13124 Dec 19 13:50	9°♄11'19	-5°41'53	inferior conj	13125 Nov 29 12:00	19°♄31'43	-5°53'01
minimum elong	13124 Dec 19 19:20	9°♄02'56	5°40'14	minimum elong	13125 Nov 29 09:08	19°♄35'45	5°51'54
morning rise	13124 Dec 28 02:38	5°♄12'47		morning rise	13125 Dec 07 22:12	15°♄44'10	
direct	13124 Dec 30 15:14	4°♄56'17		direct	13125 Dec 11 04:56	15°♄19'48	
morning max el	13125 Jan 09 21:11	9°♄51'06	19°54'26	morning max el	13125 Dec 22 23:53	20°♄57'29	21°20'49
asc. node	13125 Jan 11 03:44	11°♄08'55		asc. node	13125 Dec 29 00:53	28°♄03'29	
	13125 Jan 23 07:41	0°♄			13125 Dec 30 09:12	0°♄	
morning set	13125 Jan 27 16:25	8°♄39'41		morning set	13126 Jan 12 01:34	23°♄22'54	
					13126 Jan 15 05:05	0°♄	
superior conj	13125 Feb 04 11:29	24°♄28'04	1°05'19	superior conj	13126 Jan 19 07:44	8°♄37'38	1°23'00
minimum elong	13125 Feb 04 14:17	24°♄41'56	1°05'36	minimum elong	13126 Jan 19 10:01	8°♄49'29	1°23'36
	13125 Feb 07 07:05	0°♄		max. Earth dist.	13126 Jan 23 21:41	17°♄56'33	1.35134 AU
max. Earth dist.	13125 Feb 10 11:15	6°♄02'37	1.37175 AU	evening rise	13126 Jan 27 23:59	25°♄52'12	
desc. node	13125 Feb 13 01:25	10°♄48'59			13126 Jan 30 05:20	0°♄	
evening rise	13125 Feb 14 04:57	12°♄53'05		desc. node	13126 Jan 30 22:02	1°♄16'05	
	13125 Feb 24 08:26	0°♄			13126 Feb 17 19:20	0°♄	
	13125 Mar 18 03:05	0°♄		evening max el	13126 Mar 04 06:48	17°♄33'40	26°33'50
evening max el	13125 Mar 21 17:01	3°♄46'17	25°30'46				

retrograde	13126 Mar 17 07:48	24°♄55'15		13127 Jan 22 16:22	0°♄	
evening set	13126 Mar 23 16:25	22°♄23'25		13127 Feb 13 17:16	0°♄	
asc. node	13126 Mar 26 21:59	19°♄12'55		evening max el	13127 Feb 14 20:18	1°♄06'36 27°16'57
min. Earth dist.	13126 Mar 27 18:16	18°♄14'25 0.66490 AU		retrograde	13127 Feb 28 09:06	8°♄33'07
inferior conj	13126 Mar 29 15:47	15°♄58'00 0°51'34		evening set	13127 Mar 07 02:16	6°♄02'00
minimum elong	13126 Mar 29 14:31	16°♄01'51 0°50'55		min. Earth dist.	13127 Mar 10 23:23	2°♄25'39 0.64892 AU
morning rise	13126 Apr 04 13:38	10°♄17'03		inferior conj	13127 Mar 13 08:53	29°♄48'16 -0°08'30
direct	13126 Apr 07 14:12	9°♄25'56		minimum elong	13127 Mar 13 09:08	29°♄47'35 0°08'18
morning max el	13126 Apr 14 01:04	12°♄51'19 18°21'50		transit middle	13127 Mar 13 09:08	29°♄47'35 0°08'18
	13126 Apr 26 13:51	0°♄		transit begin	13127 Mar 13 06:32	29°♄54'45
desc. node	13126 Apr 29 00:16	3°♄49'32		transit end	13127 Mar 13 11:44	29°♄40'26
morning set	13126 May 04 01:47	11°♄51'27			13127 Mar 13 04:38	30°♄
	13126 May 15 13:35	0°♄		asc. node	13127 Mar 13 19:26	29°♄19'26
				morning rise	13127 Mar 19 17:46	24°♄20'37
superior conj	13126 May 19 17:52	6°♄32'15 -2°01'23		direct	13127 Mar 22 09:10	23°♄44'02
minimum elong	13126 May 19 10:13	6°♄02'22 2°01'48		morning max el	13127 Mar 28 17:28	27°♄01'45 17°55'27
max. Earth dist.	13126 May 20 12:17	7°♄44'12 1.45825 AU			13127 Mar 31 09:18	0°♄
	13126 Jun 03 18:11	0°♄		morning set	13127 Apr 15 07:43	23°♄11'33
evening rise	13126 Jun 04 15:48	1°♄24'44		desc. node	13127 Apr 15 20:52	24°♄05'59
greatest brilliancy	13126 Jun 14 14:47	16°♄57'34 -0.8m			13127 Apr 19 10:41	0°♄
asc. node	13126 Jun 22 19:39	28°♄53'48				
	13126 Jun 23 16:05	0°♄		superior conj	13127 Apr 29 08:04	15°♄59'14 -1°31'43
evening max el	13126 Jun 27 04:38	4°♄02'11 18°57'00		minimum elong	13127 Apr 28 23:11	15°♄23'56 1°31'24
retrograde	13126 Jul 03 22:38	7°♄45'09		max. Earth dist.	13127 May 03 08:39	22°♄20'46 1.45471 AU
evening set	13126 Jul 07 08:36	6°♄37'45			13127 May 08 06:16	0°♄
inferior conj	13126 Jul 12 20:56	0°♄53'26 3°01'08		evening rise	13127 May 15 08:08	10°♄55'24
minimum elong	13126 Jul 12 22:24	0°♄48'47 3°00'02			13127 May 27 22:34	0°♄
	13126 Jul 13 13:43	30°♄		greatest brilliancy	13127 May 29 17:14	2°♄36'47 -0.6m
min. Earth dist.	13126 Jul 14 13:08	28°♄46'00 0.66352 AU		asc. node	13127 Jun 09 16:41	17°♄03'13
morning rise	13126 Jul 18 11:29	24°♄29'49		evening max el	13127 Jun 10 10:30	17°♄49'15 19°47'55
direct	13126 Jul 24 17:42	21°♄49'19		retrograde	13127 Jun 17 20:55	22°♄02'16
desc. node	13126 Jul 25 23:46	21°♄55'02		evening set	13127 Jun 21 16:16	20°♄38'10
morning max el	13126 Aug 06 15:38	29°♄30'21 26°23'36		inferior conj	13127 Jun 27 00:05	14°♄40'15 3°12'14
	13126 Aug 07 03:14	0°♄		minimum elong	13127 Jun 27 00:30	14°♄38'49 3°11'12
	13126 Aug 29 07:45	0°♄		min. Earth dist.	13127 Jun 28 01:49	13°♄13'54 0.67663 AU
morning set	13126 Sep 11 13:55	22°♄57'00		morning rise	13127 Jul 02 08:22	8°♄17'33
	13126 Sep 15 06:16	0°♄		direct	13127 Jul 08 04:02	5°♄43'56
max. Earth dist.	13126 Sep 15 11:56	0°♄27'46 1.34684 AU		desc. node	13127 Jul 12 21:03	7°♄05'04
asc. node	13126 Sep 18 20:54	7°♄11'57		morning max el	13127 Jul 20 02:12	12°♄52'42 25°04'16
					13127 Aug 02 22:00	0°♄
superior conj	13126 Sep 20 14:46	10°♄46'07 0°16'31			13127 Aug 22 02:08	0°♄
minimum elong	13126 Sep 20 13:52	10°♄41'29 0°16'25		morning set	13127 Aug 24 23:35	5°♄04'28
evening rise	13126 Sep 28 03:19	26°♄30'18		max. Earth dist.	13127 Aug 28 13:34	11°♄34'33 1.36756 AU
	13126 Sep 29 19:49	0°♄				
evening max el	13126 Oct 17 04:11	27°♄52'55 20°53'57		superior conj	13127 Sep 04 02:45	24°♄05'46 -0°15'07
	13126 Oct 19 13:07	0°♄		minimum elong	13127 Sep 04 03:43	24°♄10'34 0°15'08
desc. node	13126 Oct 21 20:03	1°♄35'21		behind sun begin	13127 Sep 04 01:27	23°♄59'22
retrograde	13126 Oct 28 17:37	3°♄37'35		behind sun end	13127 Sep 04 05:59	24°♄21'46
evening set	13126 Oct 31 03:43	3°♄23'34		asc. node	13127 Sep 05 17:29	27°♄17'50
	13126 Nov 08 05:54	30°♄			13127 Sep 07 01:52	0°♄
inferior conj	13126 Nov 09 03:24	29°♄29'33 -5°04'42		evening rise	13127 Sep 12 08:19	10°♄40'26
minimum elong	13126 Nov 08 17:53	29°♄43'04 5°01'45			13127 Sep 22 17:02	0°♄
min. Earth dist.	13126 Nov 09 23:10	29°♄01'26 0.54563 AU		evening max el	13127 Sep 29 12:41	8°♄55'48 19°39'20
morning rise	13126 Nov 17 08:17	25°♄35'57		desc. node	13127 Oct 08 17:30	13°♄51'19
direct	13126 Nov 21 12:44	24°♄58'25		retrograde	13127 Oct 09 10:36	13°♄52'47
	13126 Dec 03 03:50	0°♄		evening set	13127 Oct 11 07:54	13°♄42'48
morning max el	13126 Dec 04 14:21	1°♄17'15 23°04'53		inferior conj	13127 Oct 20 02:45	9°♄39'05 -3°29'44
asc. node	13126 Dec 15 21:56	15°♄55'35		minimum elong	13127 Oct 19 17:55	9°♄52'58 3°26'06
	13126 Dec 23 14:36	0°♄		min. Earth dist.	13127 Oct 22 08:15	8°♄15'09 0.55314 AU
morning set	13126 Dec 27 13:01	8°♄09'27		morning rise	13127 Oct 28 02:07	5°♄18'51
				direct	13127 Nov 02 03:12	4°♄22'24
superior conj	13127 Jan 03 11:21	23°♄06'08 1°33'49		morning max el	13127 Nov 16 00:21	11°♄17'22 24°53'15
minimum elong	13127 Jan 03 12:41	23°♄13'16 1°34'42			13127 Nov 30 04:25	0°♄
max. Earth dist.	13127 Jan 06 15:34	29°♄50'25 1.33445 AU		asc. node	13127 Dec 02 18:55	4°♄30'52
	13127 Jan 06 17:24	0°♄		morning set	13127 Dec 12 00:52	22°♄53'16
evening rise	13127 Jan 11 08:23	9°♄24'31			13127 Dec 15 07:17	0°♄
desc. node	13127 Jan 17 18:45	21°♄31'50				

superior conj	13127 Dec 18 19:44	7°345'25	1°38'11	minimum elong	13128 Dec 02 05:56	22°24'37	1°37'28
minimum elong	13127 Dec 18 19:58	7°346'39	1°39'13	max. Earth dist.	13128 Dec 02 23:19	24°20'27	1.31456 AU
max. Earth dist.	13127 Dec 20 16:49	11°352'05	1.32201 AU		13128 Dec 05 16:12	0°3	
evening rise	13127 Dec 26 02:55	23°321'14		evening rise	13128 Dec 09 04:54	7°335'52	
	13127 Dec 29 10:37	0°			13128 Dec 20 21:32	0°	
desc. node	13128 Jan 04 15:33	11°330'04		desc. node	13128 Dec 21 12:29	1°303'32	
	13128 Jan 16 09:09	0°		evening max el	13129 Jan 09 14:53	26°38'12	27°17'19
evening max el	13128 Jan 28 07:43	14°12'08	27°33'18		13129 Jan 13 14:33	0°	
retrograde	13128 Feb 11 03:25	21°136'13		retrograde	13129 Jan 23 13:45	3°154'50	
evening set	13128 Feb 18 01:20	19°112'55		evening set	13129 Jan 30 10:31	1°147'58	
min. Earth dist.	13128 Feb 21 19:29	16°105'17	0.62977 AU		13129 Feb 02 00:28	30°	
inferior conj	13128 Feb 24 15:38	13°118'04	-1°19'24	min. Earth dist.	13129 Feb 03 05:26	29°01'34	0.60852 AU
minimum elong	13128 Feb 24 18:16	13°111'35	1°17'55	inferior conj	13129 Feb 06 08:38	26°18'54	-2°39'01
asc. node	13128 Feb 28 16:54	9°142'02		minimum elong	13129 Feb 06 14:17	26°06'39	2°36'12
morning rise	13128 Mar 02 13:44	8°106'28		morning rise	13129 Feb 13 21:08	21°26'08	
direct	13128 Mar 04 21:31	7°140'56		asc. node	13129 Feb 14 14:18	21°15'57	
morning max el	13128 Mar 11 11:15	11°102'08	17°46'23	direct	13129 Feb 15 23:40	21°07'57	
	13128 Mar 24 07:43	0°		morning max el	13129 Feb 23 03:06	24°43'03	17°55'32
morning set	13128 Mar 27 14:55	5°143'23			13129 Feb 27 11:18	0°	
desc. node	13128 Apr 01 17:24	14°133'01		morning set	13129 Mar 10 17:16	19°108'36	
					13129 Mar 16 16:51	0°	
superior conj	13128 Apr 08 18:23	26°124'34	-0°52'44	desc. node	13129 Mar 19 13:57	5°106'47	
minimum elong	13128 Apr 08 13:05	26°102'40	0°52'19				
	13128 Apr 10 22:51	0°		superior conj	13129 Mar 21 05:02	7°157'40	-0°12'49
max. Earth dist.	13128 Apr 15 02:36	6°142'45	1.44409 AU	minimum elong	13129 Mar 21 03:54	7°152'48	0°12'39
evening rise	13128 Apr 23 19:38	20°121'37		behind sun begin	13129 Mar 20 22:52	7°130'51	
	13128 Apr 30 03:48	0°		behind sun end	13129 Mar 21 08:57	8°114'43	
	13128 May 21 21:44	0°		max. Earth dist.	13129 Mar 28 16:14	20°135'33	1.42758 AU
evening max el	13128 May 23 10:30	1°36'57	20°52'59	evening rise	13129 Apr 03 17:45	0°121'50	
asc. node	13128 May 26 13:50	4°322'51			13129 Apr 03 12:13	0°	
retrograde	13128 May 31 19:55	6°329'29			13129 Apr 23 17:01	0°	
evening set	13128 Jun 05 01:20	4°348'54		evening max el	13129 May 06 05:13	15°125'25	22°08'27
	13128 Jun 09 07:51	30°13'11		asc. node	13129 May 13 11:03	20°137'30	
inferior conj	13128 Jun 10 07:25	28°138'59	3°10'59	retrograde	13129 May 15 17:44	21°101'30	
minimum elong	13128 Jun 10 06:49	28°141'01	3°09'57	evening set	13129 May 20 10:00	19°105'18	
min. Earth dist.	13128 Jun 10 19:23	27°157'29	0.68504 AU	inferior conj	13129 May 25 16:44	12°145'30	2°58'49
morning rise	13128 Jun 15 12:04	22°120'14		minimum elong	13129 May 25 15:19	12°150'29	2°57'41
direct	13128 Jun 20 19:32	20°100'18		min. Earth dist.	13129 May 25 15:40	12°149'14	0.68875 AU
desc. node	13128 Jun 28 18:13	23°149'05		morning rise	13129 May 30 20:26	6°132'35	
morning max el	13128 Jul 01 12:36	26°123'55	23°35'38	direct	13129 Jun 04 15:04	4°130'57	
	13128 Jul 04 20:16	0°		morning max el	13129 Jun 14 00:59	10°102'17	22°06'56
	13128 Jul 26 11:16	0°		desc. node	13129 Jun 15 15:18	11°142'33	
morning set	13128 Aug 05 12:39	16°116'36			13129 Jun 29 17:07	0°	
max. Earth dist.	13128 Aug 09 11:14	23°103'02	1.39070 AU	morning set	13129 Jul 17 00:56	26°22'27	
	13128 Aug 13 08:54	0°			13129 Jul 19 06:36	0°	
				max. Earth dist.	13129 Jul 22 11:19	5°116'49	1.41371 AU
superior conj	13128 Aug 17 01:19	6°147'09	-0°49'33				
minimum elong	13128 Aug 17 04:52	7°103'48	0°49'25	superior conj	13129 Jul 30 06:04	18°139'37	-1°23'53
asc. node	13128 Aug 22 14:07	17°120'36		minimum elong	13129 Jul 30 12:14	19°106'57	1°23'47
evening rise	13128 Aug 26 06:30	24°130'27			13129 Aug 05 12:40	0°	
	13128 Aug 29 02:44	0°		asc. node	13129 Aug 09 10:46	7°115'48	
evening max el	13128 Sep 11 10:33	20°147'56	18°46'32	evening rise	13129 Aug 09 18:13	7°150'22	
retrograde	13128 Sep 19 19:51	25°100'43			13129 Aug 22 20:28	0°	
evening set	13128 Sep 21 17:28	24°148'32		evening max el	13129 Aug 25 17:58	3°21'03	18°14'55
desc. node	13128 Sep 24 15:00	23°147'15		retrograde	13129 Sep 02 00:05	7°101'51	
inferior conj	13128 Sep 29 20:53	20°126'56	-1°39'38	evening set	13129 Sep 04 04:02	6°142'52	
minimum elong	13128 Sep 29 16:45	20°134'30	1°37'44	inferior conj	13129 Sep 11 12:47	2°100'24	-0°00'13
min. Earth dist.	13128 Oct 02 22:46	18°112'58	0.56872 AU	minimum elong	13129 Sep 11 12:46	2°100'26	0°00'17
morning rise	13128 Oct 07 12:40	15°129'31		transit middle	13129 Sep 11 12:46	2°100'26	0°00'17
direct	13128 Oct 13 07:57	14°107'44		transit begin	13129 Sep 11 09:19	2°107'46	
morning max el	13128 Oct 27 13:54	21°131'42	26°27'21	transit end	13129 Sep 11 16:13	1°153'04	
	13128 Nov 04 00:03	0°		desc. node	13129 Sep 11 12:31	2°100'59	
asc. node	13128 Nov 18 15:48	23°138'17			13129 Sep 13 21:10	30°	
	13128 Nov 21 21:18	0°		min. Earth dist.	13129 Sep 14 20:21	29°12'08	0.58957 AU
morning set	13128 Nov 25 11:25	7°129'47		morning rise	13129 Sep 18 18:04	26°128'01	
				direct	13129 Sep 25 02:44	24°138'19	
superior conj	13128 Dec 02 06:46	22°129'15	1°36'31		13129 Oct 06 19:56	0°	

morning max el	13129 Oct 09 10:33	2°♄22'50	27°31'33		13130 Oct 04 11:23	0°♄	
	13129 Oct 29 11:06	0°♄			13130 Oct 21 22:15	0°♄	
asc. node	13129 Nov 05 12:36	13°♄08'46		asc. node	13130 Oct 23 09:19	2°♄55'49	
morning set	13129 Nov 09 18:52	21°♄53'35		morning set	13130 Oct 24 21:18	6°♄00'10	
	13129 Nov 13 12:48	0°♄		max. Earth dist.	13130 Oct 30 14:38	18°♄15'03	1.31517 AU
superior conj	13129 Nov 16 18:25	7°♄11'10	1°29'00	superior conj	13130 Nov 01 04:52	21°♄46'00	1°15'47
minimum elong	13129 Nov 16 16:44	7°♄01'46	1°29'44	minimum elong	13130 Nov 01 02:40	21°♄33'52	1°16'12
max. Earth dist.	13129 Nov 16 07:48	6°♄11'55	1.31225 AU		13130 Nov 04 21:58	0°♄	
evening rise	13129 Nov 23 11:55	22°♄01'43		evening rise	13130 Nov 07 21:58	6°♄33'42	
	13129 Nov 27 07:36	0°♄			13130 Nov 19 23:52	0°♄	
desc. node	13129 Dec 08 09:30	20°♄01'56		desc. node	13130 Nov 25 06:37	8°♄12'10	
	13129 Dec 15 07:28	0°♄		evening max el	13130 Dec 04 07:18	18°♄59'33	25°05'21
evening max el	13129 Dec 22 15:17	8°♄14'48	26°26'42	retrograde	13130 Dec 18 02:44	25°♄54'46	
retrograde	13130 Jan 05 14:16	15°♄21'10		evening set	13130 Dec 23 19:07	24°♄42'17	
evening set	13130 Jan 12 01:52	13°♄38'54		min. Earth dist.	13130 Dec 28 19:17	21°♄59'52	0.56729 AU
min. Earth dist.	13130 Jan 16 04:59	11°♄02'22	0.58688 AU	inferior conj	13130 Dec 31 11:39	20°♄14'48	-5°13'18
inferior conj	13130 Jan 19 08:17	8°♄40'47	-4°01'21	minimum elong	13130 Dec 31 19:43	20°♄01'36	5°10'42
minimum elong	13130 Jan 19 16:33	8°♄25'11	3°57'54	morning rise	13131 Jan 08 22:36	16°♄05'08	
morning rise	13130 Jan 27 10:11	4°♄09'09		direct	13131 Jan 11 04:51	15°♄50'30	
direct	13130 Jan 29 11:23	3°♄54'38		asc. node	13131 Jan 19 08:57	19°♄17'16	
asc. node	13130 Feb 01 11:39	4°♄27'35		morning max el	13131 Jan 20 13:34	20°♄22'17	19°15'02
morning max el	13130 Feb 06 13:13	7°♄53'34	18°24'26		13131 Jan 27 22:05	0°♄	
	13130 Feb 20 17:07	0°♄		morning set	13131 Feb 06 10:07	17°♄35'33	
morning set	13130 Feb 22 09:08	3°♄10'28			13131 Feb 12 15:52	0°♄	
superior conj	13130 Mar 03 13:31	20°♄30'54	0°22'52	superior conj	13131 Feb 14 15:16	3°♄51'07	0°51'54
minimum elong	13130 Mar 03 15:08	20°♄38'17	0°22'51	minimum elong	13131 Feb 14 17:59	4°♄04'15	0°52'01
desc. node	13130 Mar 06 10:29	25°♄43'39		desc. node	13131 Feb 21 07:01	16°♄19'38	
	13130 Mar 08 20:23	0°♄		max. Earth dist.	13131 Feb 21 08:20	16°♄25'32	1.38448 AU
max. Earth dist.	13130 Mar 11 01:37	3°♄50'48	1.40694 AU	evening rise	13131 Feb 25 02:10	23°♄03'39	
evening rise	13130 Mar 15 11:25	11°♄15'42			13131 Mar 01 04:12	0°♄	
	13130 Mar 27 10:15	0°♄			13131 Mar 21 06:07	0°♄	
evening max el	13130 Apr 18 20:30	29°♄16'33	23°29'04	evening max el	13131 Apr 01 10:09	13°♄08'54	24°48'26
	13130 Apr 19 14:17	0°♄		retrograde	13131 Apr 13 04:15	20°♄00'01	
retrograde	13130 Apr 29 12:54	5°♄33'50		asc. node	13131 Apr 17 05:40	18°♄47'54	
asc. node	13130 Apr 30 08:20	5°♄30'50		evening set	13131 Apr 18 19:50	17°♄38'01	
evening set	13130 May 04 16:42	3°♄23'31		min. Earth dist.	13131 Apr 23 07:28	12°♄34'22	0.68229 AU
	13130 May 07 19:35	30°♄8'8		inferior conj	13131 Apr 24 09:38	11°♄07'41	2°04'00
min. Earth dist.	13130 May 09 12:25	27°♄43'44	0.68780 AU	minimum elong	13131 Apr 24 07:29	11°♄14'49	2°02'48
inferior conj	13130 May 10 02:07	26°♄56'37	2°36'28	morning rise	13131 Apr 29 19:21	5°♄10'37	
minimum elong	13130 May 10 00:08	27°♄03'27	2°35'15	direct	13131 May 03 13:05	3°♄50'28	
morning rise	13130 May 15 07:31	20°♄51'00		morning max el	13131 May 10 19:51	7°♄52'12	19°37'39
direct	13130 May 19 13:26	19°♄09'58		desc. node	13131 May 20 09:05	19°♄48'31	
morning max el	13130 May 27 18:42	23°♄51'27	20°45'56	greatest brilliancy	13131 May 23 12:09	24°♄19'11	-0.6m
	13130 Jun 02 03:40	0°♄			13131 May 27 08:05	0°♄	
desc. node	13130 Jun 02 12:15	0°♄27'10		morning set	13131 Jun 05 14:36	14°♄05'30	
	13130 Jun 23 00:45	0°♄			13131 Jun 15 20:19	0°♄	
morning set	13130 Jun 26 13:29	5°♄26'51		max. Earth dist.	13131 Jun 17 07:59	2°♄20'37	1.44873 AU
max. Earth dist.	13130 Jul 04 18:18	18°♄26'12	1.43384 AU	superior conj	13131 Jun 21 19:37	9°♄29'04	-2°11'08
superior conj	13130 Jul 11 12:48	29°♄34'39	-1°53'17	minimum elong	13131 Jun 21 23:08	9°♄43'11	2°12'02
minimum elong	13130 Jul 11 19:49	0°♄04'08	1°53'37		13131 Jul 04 07:33	0°♄	
	13130 Jul 11 18:50	0°♄		evening rise	13131 Jul 05 15:53	2°♄15'33	
evening rise	13130 Jul 23 15:03	20°♄29'35		asc. node	13131 Jul 14 04:13	16°♄26'09	
asc. node	13130 Jul 27 07:29	26°♄59'31		evening max el	13131 Jul 23 21:00	29°♄49'56	18°10'00
	13130 Jul 29 00:55	0°♄			13131 Jul 24 01:07	0°♄	
evening max el	13130 Aug 09 06:43	16°♄25'08	18°03'05	retrograde	13131 Jul 30 05:34	3°♄10'46	
retrograde	13130 Aug 15 20:49	19°♄48'44		evening set	13131 Aug 02 01:45	2°♄28'01	
evening set	13130 Aug 18 08:45	19°♄19'14			13131 Aug 05 09:56	30°♄8'8	
inferior conj	13130 Aug 25 00:26	14°♄16'44	1°17'33	inferior conj	13131 Aug 08 03:53	27°♄07'41	2°12'46
minimum elong	13130 Aug 25 02:32	14°♄11'35	1°16'28	minimum elong	13131 Aug 08 06:24	27°♄00'41	2°11'29
min. Earth dist.	13130 Aug 28 02:38	11°♄15'42	0.61243 AU	min. Earth dist.	13131 Aug 10 18:34	24°♄14'54	0.63452 AU
desc. node	13130 Aug 29 10:00	10°♄05'10		morning rise	13131 Aug 14 09:17	20°♄52'43	
morning rise	13130 Aug 31 17:38	8°♄18'02		desc. node	13131 Aug 16 07:28	19°♄36'51	
direct	13130 Sep 07 09:03	6°♄03'32		direct	13131 Aug 21 01:00	18°♄20'36	
morning max el	13130 Sep 21 14:21	14°♄00'45	27°57'50	morning max el	13131 Sep 03 23:10	26°♄22'01	27°45'59

	13131 Sep 07 08:25	0°♍		desc. node	13132 Aug 02 04:53	1°♌25'15	
	13131 Sep 28 02:02	0°♌		direct	13132 Aug 03 01:12	1°♌22'40	
morning set	13131 Oct 08 16:29	19°♌43'59		morning max el	13132 Aug 16 10:12	9°♌16'11	27°01'05
asc. node	13131 Oct 10 05:58	22°♌53'51			13132 Sep 01 16:15	0°♍	
max. Earth dist.	13131 Oct 13 15:55	0°♍01'22	1.32331 AU		13132 Sep 19 12:15	0°♌	
	13131 Oct 13 15:39	0°♍		morning set	13132 Sep 21 01:34	2°♌57'45	
				max. Earth dist.	13132 Sep 25 08:11	11°♌24'33	1.33677 AU
superior conj	13131 Oct 16 12:11	6°♍08'19	0°56'59	asc. node	13132 Sep 26 02:33	12°♌58'00	
minimum elong	13131 Oct 16 09:58	5°♍56'18	0°57'06				
evening rise	13131 Oct 23 09:09	21°♍06'42		superior conj	13132 Sep 29 14:09	20°♌11'54	0°32'45
	13131 Oct 27 15:14	0°♌		minimum elong	13132 Sep 29 12:33	20°♌03'28	0°32'41
desc. node	13131 Nov 12 03:50	25°♌16'22			13132 Oct 04 04:38	0°♍	
evening max el	13131 Nov 15 17:28	29°♌07'17	23°25'50	evening rise	13132 Oct 06 19:36	5°♍35'08	
	13131 Nov 16 16:00	0°♌			13132 Oct 19 21:39	0°♌	
retrograde	13131 Nov 29 02:38	5°♌46'59		evening max el	13132 Oct 27 06:19	9°♌11'52	21°45'46
evening set	13131 Dec 03 12:53	5°♌04'23		desc. node	13132 Oct 29 01:10	10°♌49'59	
min. Earth dist.	13131 Dec 10 03:30	1°♌56'52	0.55255 AU	retrograde	13132 Nov 08 16:13	15°♌21'35	
inferior conj	13131 Dec 11 18:58	0°♌59'16	-5°53'28	evening set	13132 Nov 11 16:46	15°♌00'58	
minimum elong	13131 Dec 11 21:18	0°♌55'50	5°52'21	inferior conj	13132 Nov 20 12:35	11°♌06'27	-5°39'47
	13131 Dec 13 12:03	30°♌♌		minimum elong	13132 Nov 20 06:10	11°♌15'28	5°38'01
morning rise	13131 Dec 20 07:26	27°♌07'26		min. Earth dist.	13132 Nov 20 09:48	11°♌10'22	0.54545 AU
direct	13131 Dec 23 03:00	26°♌48'16		morning rise	13132 Nov 28 20:34	7°♌18'50	
	13131 Dec 31 16:17	0°♌		direct	13132 Dec 02 12:06	6°♌49'45	
morning max el	13132 Jan 03 00:43	2°♌00'29	20°28'39	morning max el	13132 Dec 14 21:48	12°♌45'46	22°03'36
asc. node	13132 Jan 06 06:10	5°♌31'40		asc. node	13132 Dec 23 03:18	22°♌52'41	
	13132 Jan 20 14:43	0°♌			13132 Dec 27 11:41	0°♌	
morning set	13132 Jan 21 17:03	2°♌14'48		morning set	13133 Jan 05 03:25	17°♌00'02	
					13133 Jan 11 05:58	0°♌	
superior conj	13132 Jan 29 05:55	17°♌46'29	1°13'41				
minimum elong	13132 Jan 29 08:34	17°♌59'56	1°14'06	superior conj	13133 Jan 12 05:41	2°♌05'22	1°28'23
max. Earth dist.	13132 Feb 03 15:57	28°♌28'47	1.36267 AU	minimum elong	13133 Jan 12 07:36	2°♌15'27	1°29'08
	13132 Feb 04 11:04	0°♌		max. Earth dist.	13133 Jan 16 05:01	10°♌19'24	1.34359 AU
evening rise	13132 Feb 07 11:53	5°♌39'40		evening rise	13133 Jan 20 13:01	18°♌53'55	
desc. node	13132 Feb 08 03:37	6°♌51'25		desc. node	13133 Jan 25 00:17	27°♌14'11	
	13132 Feb 22 00:55	0°♌			13133 Jan 26 13:22	0°♌	
evening max el	13132 Mar 13 23:36	26°♌59'28	25°59'29		13133 Feb 15 04:04	0°♌	
	13132 Mar 17 08:05	0°♌		evening max el	13133 Feb 24 13:11	10°♌41'12	26°55'00
retrograde	13132 Mar 26 14:57	4°♌13'49		retrograde	13133 Mar 09 20:09	18°♌06'57	
evening set	13132 Apr 01 17:48	1°♌43'54		evening set	13133 Mar 16 08:42	15°♌34'25	
asc. node	13132 Apr 03 03:04	0°♌27'30		min. Earth dist.	13133 Mar 20 08:16	11°♌39'40	0.65849 AU
	13132 Apr 03 13:46	30°♌♌		asc. node	13133 Mar 21 00:31	10°♌53'12	
min. Earth dist.	13132 Apr 05 22:45	27°♌15'31	0.67243 AU	inferior conj	13133 Mar 22 11:03	9°♌12'49	0°27'28
inferior conj	13132 Apr 07 13:21	25°♌14'52	1°21'10	minimum elong	13133 Mar 22 10:19	9°♌14'57	0°27'06
minimum elong	13132 Apr 07 11:33	25°♌20'29	1°20'12	morning rise	13133 Mar 28 13:17	3°♌37'21	
morning rise	13132 Apr 13 06:02	19°♌27'44		direct	13133 Mar 31 09:41	2°♌53'00	
direct	13132 Apr 16 12:29	18°♌26'54		morning max el	13133 Apr 06 18:40	6°♌14'01	18°08'32
morning max el	13132 Apr 23 04:26	22°♌01'55	18°44'47	desc. node	13133 Apr 23 02:28	29°♌44'40	
	13132 Apr 29 17:17	0°♌			13133 Apr 23 06:16	0°♌	
desc. node	13132 May 06 05:49	9°♌36'54		morning set	13133 Apr 25 15:21	3°♌50'34	
morning set	13132 May 15 02:00	23°♌19'17					
	13132 May 19 08:44	0°♌		superior conj	13133 May 10 16:16	27°♌48'12	-1°50'32
max. Earth dist.	13132 May 30 01:55	16°♌43'00	1.45687 AU	minimum elong	13133 May 10 07:15	27°♌12'53	1°50'36
					13133 May 12 01:54	0°♌	
superior conj	13132 May 31 07:53	18°♌40'10	-2°10'50	max. Earth dist.	13133 May 12 21:38	1°♌17'07	1.45758 AU
minimum elong	13132 May 31 03:52	18°♌24'30	2°11'41	evening rise	13133 May 26 18:28	22°♌50'36	
	13132 Jun 07 12:46	0°♌			13133 May 31 09:26	0°♌	
evening rise	13132 Jun 15 16:45	13°♌00'37		greatest brilliancy	13133 Jun 07 20:04	11°♌22'31	-0.7m
greatest brilliancy	13132 Jun 22 02:11	23°♌15'13	-0.9m	asc. node	13133 Jun 16 22:01	24°♌02'05	
	13132 Jun 26 09:04	0°♌		evening max el	13133 Jun 19 18:42	27°♌13'35	19°16'48
asc. node	13132 Jun 30 01:04	5°♌29'41			13133 Jun 23 04:26	0°♌	
evening max el	13132 Jul 06 09:47	13°♌28'03	18°34'53	retrograde	13133 Jun 26 18:58	1°♌08'13	
retrograde	13132 Jul 12 22:03	16°♌59'34		evening set	13133 Jun 30 08:44	29°♌53'58	
evening set	13132 Jul 16 02:46	16°♌01'39			13133 Jun 30 05:10	30°♌♌	
inferior conj	13132 Jul 21 19:08	10°♌25'38	2°48'18	inferior conj	13133 Jul 05 18:47	24°♌03'50	3°07'28
minimum elong	13132 Jul 21 21:07	10°♌19'34	2°47'06	minimum elong	13133 Jul 05 19:49	24°♌00'28	3°06'24
min. Earth dist.	13132 Jul 23 19:48	7°♌57'55	0.65398 AU	min. Earth dist.	13133 Jul 07 04:52	22°♌12'49	0.66961 AU
morning rise	13132 Jul 27 14:25	4°♌03'02		morning rise	13133 Jul 11 06:20	17°♌39'57	

direct	13133 Jul 17 08:24	15°☿01'06		min. Earth dist.	13134 Jun 20 19:51	6°☿48'23	0.68078 AU
desc. node	13133 Jul 20 02:14	15°☿28'42		morning rise	13134 Jun 25 06:25	1°☿34'54	
morning max el	13133 Jul 29 21:07	22°☿31'02	25°51'35		13134 Jun 27 11:05	30°☿II	
	13133 Aug 05 10:59	0°☿		direct	13134 Jun 30 21:09	29°☿II06'08	
	13133 Aug 25 23:04	0°☿			13134 Jul 04 14:19	0°☿	
morning set	13133 Sep 03 21:03	15°☿33'03		desc. node	13134 Jul 06 23:29	1°☿21'53	
max. Earth dist.	13133 Sep 07 14:09	22°☿30'25	1.35518 AU	morning max el	13134 Jul 12 07:12	5°☿56'44	24°27'09
	13133 Sep 11 10:17	0°☿			13134 Jul 30 22:25	0°☿	
asc. node	13133 Sep 12 23:09	3°☿04'42		morning set	13134 Aug 16 22:30	27°☿18'21	
					13134 Aug 18 11:22	0°☿	
superior conj	13133 Sep 13 08:13	3°☿50'29	0°03'35	max. Earth dist.	13134 Aug 20 13:04	3°☿42'00	1.37727 AU
minimum elong	13133 Sep 13 08:00	3°☿49'27	0°03'31				
behind sun begin	13133 Sep 13 02:00	3°☿19'04		superior conj	13134 Aug 27 15:01	16°☿55'27	-0°29'29
behind sun end	13133 Sep 13 14:01	4°☿19'53		minimum elong	13134 Aug 27 17:01	17°☿05'07	0°29'26
evening rise	13133 Sep 21 03:17	19°☿54'03		asc. node	13134 Aug 30 19:44	23°☿09'51	
	13133 Sep 26 04:05	0°☿			13134 Sep 03 06:18	0°☿	
evening max el	13133 Oct 09 06:46	19°☿49'05	20°19'39	evening rise	13134 Sep 05 05:44	3°☿56'36	
desc. node	13133 Oct 15 22:34	24°☿25'29			13134 Sep 20 17:32	0°☿	
retrograde	13133 Oct 20 03:47	25°☿13'26		evening max el	13134 Sep 21 21:23	1°☿13'44	19°14'12
evening set	13133 Oct 22 06:17	25°☿02'13		retrograde	13134 Oct 01 02:30	5°☿50'16	
inferior conj	13133 Oct 31 05:44	21°☿05'53	-4°28'26	evening set	13134 Oct 02 23:01	5°☿39'51	
minimum elong	13133 Oct 30 19:39	21°☿20'42	4°24'50	desc. node	13134 Oct 02 20:03	5°☿41'11	
min. Earth dist.	13133 Nov 01 17:20	20°☿13'33	0.54774 AU	inferior conj	13134 Oct 11 12:09	1°☿29'16	-2°42'59
morning rise	13133 Nov 08 08:18	17°☿02'44		minimum elong	13134 Oct 11 05:09	1°☿40'56	2°39'55
direct	13133 Nov 12 21:50	16°☿17'42			13134 Oct 13 17:44	30°☿☿	
morning max el	13133 Nov 26 09:16	22°☿53'25	23°51'21	min. Earth dist.	13134 Oct 14 04:17	29°☿42'50	0.55902 AU
	13133 Dec 02 16:16	0°☿		morning rise	13134 Oct 19 08:44	26°☿54'05	
asc. node	13133 Dec 10 00:22	11°☿04'50		direct	13134 Oct 24 18:18	25°☿47'20	
	13133 Dec 19 19:22	0°☿			13134 Nov 04 10:07	0°☿	
morning set	13133 Dec 20 15:15	1°☿45'46		morning max el	13134 Nov 07 19:45	2°☿54'55	25°36'00
				asc. node	13134 Nov 26 21:19	29°☿55'11	
superior conj	13133 Dec 27 11:39	16°☿39'17	1°36'25		13134 Nov 26 22:22	0°☿	
minimum elong	13133 Dec 27 12:30	16°☿43'59	1°37'23	morning set	13134 Dec 05 02:47	16°☿27'08	
max. Earth dist.	13133 Dec 30 01:59	22°☿14'57	1.32860 AU		13134 Dec 11 06:44	0°☿	
	13134 Jan 02 19:00	0°☿		superior conj	13134 Dec 11 21:24	1°☿21'17	1°38'12
evening rise	13134 Jan 04 02:08	2°☿37'43		minimum elong	13134 Dec 11 21:10	1°☿19'57	1°39'12
desc. node	13134 Jan 11 21:01	17°☿23'07		max. Earth dist.	13134 Dec 13 05:59	4°☿21'16	1.31828 AU
	13134 Jan 19 09:52	0°☿		evening rise	13134 Dec 19 00:11	16°☿43'17	
evening max el	13134 Feb 07 02:07	24°☿04'08	27°27'37		13134 Dec 25 17:43	0°☿	
	13134 Feb 15 00:50	0°☿		desc. node	13134 Dec 29 17:52	7°☿12'07	
retrograde	13134 Feb 20 18:44	1°☿30'39			13135 Jan 14 03:39	0°☿	
	13134 Feb 26 02:46	30°☿☿		evening max el	13135 Jan 20 12:22	6°☿55'41	27°30'46
evening set	13134 Feb 27 14:18	29°☿02'09		retrograde	13135 Feb 03 09:41	14°☿16'10	
min. Earth dist.	13134 Mar 03 09:56	25°☿38'20	0.64105 AU	evening set	13135 Feb 10 07:53	11°☿59'11	
inferior conj	13134 Mar 06 00:07	22°☿55'17	-0°37'20	min. Earth dist.	13135 Feb 14 01:55	9°☿01'31	0.62090 AU
minimum elong	13134 Mar 06 01:17	22°☿52'15	0°36'38	inferior conj	13135 Feb 17 01:32	6°☿14'42	-1°52'19
asc. node	13134 Mar 07 22:00	20°☿58'17		minimum elong	13135 Feb 17 05:24	6°☿05'39	1°50'15
morning rise	13134 Mar 12 14:22	17°☿33'52		asc. node	13135 Feb 22 19:28	1°☿46'30	
direct	13134 Mar 15 02:14	17°☿02'30		morning rise	13135 Feb 24 05:39	1°☿10'26	
morning max el	13134 Mar 21 11:59	20°☿20'44	17°49'23	direct	13135 Feb 26 10:57	0°☿48'22	
	13134 Mar 28 20:24	0°☿		morning max el	13135 Mar 05 05:21	4°☿14'13	17°47'57
morning set	13134 Apr 07 08:43	15°☿43'08		morning set	13135 Mar 21 00:54	28°☿40'53	
desc. node	13134 Apr 09 23:03	20°☿06'02			13135 Mar 21 18:44	0°☿	
	13134 Apr 15 21:42	0°☿		desc. node	13135 Mar 27 19:36	10°☿36'49	
superior conj	13134 Apr 20 13:49	7°☿36'42	-1°15'46	superior conj	13135 Apr 01 10:30	18°☿31'19	-0°35'32
minimum elong	13134 Apr 20 06:08	7°☿05'42	1°15'19	minimum elong	13135 Apr 01 07:05	18°☿16'54	0°35'13
max. Earth dist.	13134 Apr 25 16:54	15°☿48'01	1.45098 AU		13135 Apr 08 09:20	0°☿	
	13134 May 04 19:45	0°☿		max. Earth dist.	13135 Apr 08 09:46	0°☿01'41	1.43773 AU
evening rise	13134 May 06 06:38	2°☿13'46		evening rise	13135 Apr 15 21:11	11°☿51'44	
	13134 May 25 00:19	0°☿			13135 Apr 27 21:54	0°☿	
evening max el	13134 Jun 02 22:11	11°☿01'28	20°14'11	evening max el	13135 May 16 19:54	24°☿50'08	21°24'06
asc. node	13134 Jun 03 19:06	11°☿52'08		asc. node	13135 May 21 16:17	28°☿46'40	
retrograde	13134 Jun 10 17:40	15°☿30'07			13135 May 25 09:05	0°☿	
evening set	13134 Jun 14 17:13	13°☿59'02		retrograde	13135 May 25 16:16	0°☿00'27	
inferior conj	13134 Jun 19 23:59	7°☿56'07	3°13'06		13135 May 25 23:24	30°☿☿II	
minimum elong	13134 Jun 19 23:58	7°☿56'10	3°12'05				

evening set	13135 May 30 02:19	28° Π 12'55		evening set	13136 May 13 10:19	12° Π 30'40	
inferior conj	13135 Jun 04 08:24	21° Π 58'38	3°07'05	inferior conj	13136 May 18 17:58	6° Π 07'19	2°50'33
minimum elong	13135 Jun 04 07:26	22° Π 02'02	3°06'01	minimum elong	13136 May 18 16:15	6° Π 13'15	2°49'23
min. Earth dist.	13135 Jun 04 14:44	21° Π 36'38	0.68724 AU	min. Earth dist.	13136 May 18 11:23	6° Π 30'11	0.68893 AU
morning rise	13135 Jun 09 12:22	15° Π 42'27		morning rise	13136 May 23 22:04	29° \mathcal{B} 57'31	
direct	13135 Jun 14 14:28	13° Π 29'57			13136 May 23 20:54	30° \mathcal{R} 8	
desc. node	13135 Jun 23 20:37	18° Π 38'17		direct	13136 May 28 11:10	28° \mathcal{B} 04'45	
morning max el	13135 Jun 24 18:02	19° Π 30'53	22°57'28		13136 Jun 02 13:54	0° Π	
	13135 Jul 03 14:47	0° \mathcal{E}		morning max el	13136 Jun 06 08:28	3° Π 14'03	21°31'14
	13135 Jul 24 02:13	0° \mathcal{Q}		desc. node	13136 Jun 09 17:38	6° Π 55'26	
morning set	13135 Jul 29 01:19	8° \mathcal{Q} 02'44			13136 Jun 26 14:06	0° \mathcal{E}	
max. Earth dist.	13135 Aug 02 11:34	15° \mathcal{Q} 29'45	1.40074 AU	morning set	13136 Jul 08 02:53	17° \mathcal{E} 40'46	
				max. Earth dist.	13136 Jul 14 14:31	28° \mathcal{E} 08'07	1.42275 AU
					13136 Jul 15 17:38	0° \mathcal{Q}	
superior conj	13135 Aug 10 06:33	29° \mathcal{Q} 17'21	-1°04'20	superior conj	13136 Jul 22 02:19	10° \mathcal{Q} 45'57	-1°37'19
minimum elong	13135 Aug 10 11:17	29° \mathcal{Q} 39'01	1°04'11	minimum elong	13136 Jul 22 09:13	11° \mathcal{Q} 15'49	1°37'21
	13135 Aug 10 15:52	0° \mathcal{M}			13136 Aug 01 21:12	0° \mathcal{M}	
asc. node	13135 Aug 17 16:21	13° \mathcal{M} 09'57		evening rise	13136 Aug 02 05:55	0° \mathcal{M} 39'38	
evening rise	13135 Aug 19 23:55	17° \mathcal{M} 35'13		asc. node	13136 Aug 03 13:01	3° \mathcal{M} 01'03	
	13135 Aug 26 16:06	0° \mathcal{L}		evening max el	13136 Aug 18 09:51	26° \mathcal{M} 11'35	18°07'32
evening max el	13135 Sep 04 23:45	13° \mathcal{L} 24'09	18°30'30	retrograde	13136 Aug 25 08:03	29° \mathcal{M} 43'44	
retrograde	13135 Sep 12 20:05	17° \mathcal{L} 21'47		evening set	13136 Aug 27 15:09	29° \mathcal{M} 20'48	
evening set	13135 Sep 14 20:04	17° \mathcal{L} 07'08		inferior conj	13136 Sep 03 16:17	24° \mathcal{M} 29'31	0°35'34
desc. node	13135 Sep 19 17:33	14° \mathcal{L} 45'43		minimum elong	13136 Sep 03 17:25	24° \mathcal{M} 26'58	0°34'57
inferior conj	13135 Sep 22 15:31	12° \mathcal{L} 36'17	-0°55'11	desc. node	13136 Sep 05 15:02	22° \mathcal{M} 42'50	
minimum elong	13135 Sep 22 13:21	12° \mathcal{L} 40'31	0°54'12	min. Earth dist.	13136 Sep 06 22:33	21° \mathcal{M} 33'00	0.59913 AU
min. Earth dist.	13135 Sep 25 21:16	10° \mathcal{L} 05'39	0.57717 AU	morning rise	13136 Sep 10 16:27	18° \mathcal{M} 44'21	
morning rise	13135 Sep 30 03:10	7° \mathcal{L} 23'18		direct	13136 Sep 17 04:35	16° \mathcal{M} 43'32	
direct	13135 Oct 06 04:44	5° \mathcal{L} 50'01		morning max el	13136 Oct 01 12:17	24° \mathcal{M} 35'07	27°47'39
morning max el	13135 Oct 20 12:09	13° \mathcal{L} 22'55	26°59'04		13136 Oct 06 11:07	0° \mathcal{L}	
	13135 Nov 02 16:23	0° \mathcal{M}			13136 Oct 26 00:35	0° \mathcal{M}	
asc. node	13135 Nov 13 18:09	19° \mathcal{M} 13'35		asc. node	13136 Oct 30 14:53	8° \mathcal{M} 52'22	
	13135 Nov 19 01:08	0° \mathcal{X}		morning set	13136 Nov 02 17:49	15° \mathcal{M} 17'04	
morning set	13135 Nov 19 12:13	0° \mathcal{X} 59'02		max. Earth dist.	13136 Nov 08 22:16	28° \mathcal{M} 42'41	1.31281 AU
				superior conj	13136 Nov 09 20:16	0° \mathcal{X} 45'05	1°24'06
superior conj	13135 Nov 26 08:53	16° \mathcal{X} 04'54	1°34'02	minimum elong	13136 Nov 09 18:19	0° \mathcal{X} 34'15	1°24'42
minimum elong	13135 Nov 26 07:40	15° \mathcal{X} 58'03	1°34'54		13136 Nov 09 12:10	0° \mathcal{X}	
max. Earth dist.	13135 Nov 26 13:58	16° \mathcal{X} 33'19	1.31297 AU	evening rise	13136 Nov 16 13:06	15° \mathcal{X} 32'56	
	13135 Dec 02 16:40	0° \mathcal{Z}			13136 Nov 23 15:14	0° \mathcal{Z}	
evening rise	13135 Dec 03 04:33	1° \mathcal{Z} 03'27		desc. node	13136 Dec 02 11:53	15° \mathcal{Z} 12'47	
desc. node	13135 Dec 16 14:49	26° \mathcal{Z} 32'19			13136 Dec 14 07:06	0° \mathcal{Z}	
	13135 Dec 18 18:25	0° \mathcal{A}		evening max el	13136 Dec 14 13:31	0° \mathcal{A} 15'19	25°55'15
evening max el	13136 Jan 02 16:55	19° \mathcal{A} 01'42	26°59'56	retrograde	13136 Dec 28 11:36	7° \mathcal{A} 17'59	
retrograde	13136 Jan 16 15:44	26° \mathcal{A} 13'43		evening set	13137 Jan 03 16:28	5° \mathcal{A} 47'39	
evening set	13136 Jan 23 09:59	24° \mathcal{A} 16'13		min. Earth dist.	13137 Jan 08 02:22	3° \mathcal{A} 10'55	0.57815 AU
min. Earth dist.	13136 Jan 27 07:09	21° \mathcal{A} 36'01	0.59927 AU	inferior conj	13137 Jan 11 02:49	1° \mathcal{A} 02'46	-4°34'13
inferior conj	13136 Jan 30 11:35	19° \mathcal{A} 00'19	-3°14'11	minimum elong	13137 Jan 11 11:32	0° \mathcal{A} 47'19	4°30'55
minimum elong	13136 Jan 30 18:30	18° \mathcal{A} 46'11	3°10'57		13137 Jan 12 14:45	30° \mathcal{R} 3	
morning rise	13136 Feb 07 06:05	14° \mathcal{A} 16'26		morning rise	13137 Jan 19 09:25	26° \mathcal{Z} 41'01	
direct	13136 Feb 09 07:35	14° \mathcal{A} 00'10		direct	13137 Jan 21 11:44	26° \mathcal{Z} 27'02	
asc. node	13136 Feb 09 16:52	14° \mathcal{A} 00'46		asc. node	13137 Jan 26 14:11	27° \mathcal{Z} 55'29	
morning max el	13136 Feb 16 19:14	17° \mathcal{A} 43'46	18°05'20		13137 Jan 29 09:16	0° \mathcal{A}	
	13136 Feb 25 13:27	0° \mathcal{X}		morning max el	13137 Jan 30 01:47	0° \mathcal{A} 38'41	18°43'12
morning set	13136 Mar 03 09:36	12° \mathcal{X} 23'42		morning set	13137 Feb 15 05:47	26° \mathcal{A} 36'45	
	13136 Mar 12 23:48	0° \mathcal{Y}			13137 Feb 16 23:30	0° \mathcal{X}	
				superior conj	13137 Feb 23 23:24	13° \mathcal{X} 27'07	0°36'02
superior conj	13136 Mar 13 06:57	0° \mathcal{Y} 31'51	0°03'03	minimum elong	13137 Feb 24 01:39	13° \mathcal{X} 37'41	0°36'02
minimum elong	13136 Mar 13 07:12	0° \mathcal{Y} 32'58	0°03'06	desc. node	13137 Feb 28 12:39	21° \mathcal{X} 49'41	
behind sun begin	13136 Mar 12 23:34	29° \mathcal{X} 58'58		max. Earth dist.	13137 Mar 03 05:23	26° \mathcal{X} 37'07	1.39746 AU
behind sun end	13136 Mar 13 14:50	1° \mathcal{Y} 06'52			13137 Mar 05 04:08	0° \mathcal{Y}	
desc. node	13136 Mar 13 16:07	1° \mathcal{Y} 12'33		evening rise	13137 Mar 07 05:41	3° \mathcal{Y} 30'44	
max. Earth dist.	13136 Mar 20 21:56	13° \mathcal{Y} 41'09	1.41919 AU		13137 Mar 24 06:03	0° \mathcal{B}	
evening rise	13136 Mar 26 02:58	22° \mathcal{Y} 13'27		evening max el	13137 Apr 11 02:56	22° \mathcal{B} 30'08	24°03'19
	13136 Mar 31 01:15	0° \mathcal{B}		retrograde	13137 Apr 22 06:57	29° \mathcal{B} 03'44	
	13136 Apr 21 01:00	0° Π					
evening max el	13136 Apr 28 12:47	8° Π 39'03	22°42'22				
asc. node	13136 May 07 13:32	14° Π 28'56					
retrograde	13136 May 08 13:07	14° Π 33'24					

asc. node	13137 Apr 24 10:50	28° ♁ 42'39		asc. node	13138 Apr 11 08:12	11° ♁ 17'50	
evening set	13137 Apr 27 15:42	26° ♁ 48'01		evening set	13138 Apr 11 16:52	11° ♁ 00'04	
min. Earth dist.	13137 May 02 07:43	21° ♁ 23'32	0.68599 AU	min. Earth dist.	13138 Apr 16 01:34	6° ♁ 11'16	0.67858 AU
inferior conj	13137 May 03 02:46	20° ♁ 18'51	2°23'56	inferior conj	13138 Apr 17 08:57	4° ♁ 29'31	1°47'10
minimum elong	13137 May 03 00:39	20° ♁ 26'01	2°22'42	minimum elong	13138 Apr 17 06:53	4° ♁ 36'15	1°46'01
morning rise	13137 May 08 09:40	14° ♁ 16'37			13138 Apr 21 04:38	30° ♁	
direct	13137 May 12 10:12	12° ♁ 44'43		morning rise	13138 Apr 22 21:17	28° ♁ 36'12	
morning max el	13137 May 20 05:14	17° ♁ 08'17	20°15'02	direct	13138 Apr 26 10:04	27° ♁ 24'29	
desc. node	13137 May 27 14:33	25° ♁ 57'08			13138 May 02 01:26	0° ♁	
	13137 May 30 13:23	0° ♁		morning max el	13138 May 03 09:36	1° ♁ 13'31	19°13'06
morning set	13137 Jun 17 08:11	26° ♁ 27'17		desc. node	13138 May 14 11:21	15° ♁ 31'33	
	13137 Jun 19 15:09	0° ♁		greatest brilliancy	13138 May 16 06:46	18° ♁ 12'01	-0.7m
max. Earth dist.	13137 Jun 26 23:53	11° ♁ 35'53	1.44086 AU		13138 May 24 01:26	0° ♁	
				morning set	13138 May 27 11:00	5° ♁ 13'43	
superior conj	13137 Jul 02 22:43	21° ♁ 14'13	-2°02'44	max. Earth dist.	13138 Jun 09 15:29	25° ♁ 43'57	1.45308 AU
minimum elong	13137 Jul 03 04:54	21° ♁ 39'39	2°03'19		13138 Jun 12 08:29	0° ♁	
	13137 Jul 08 05:08	0° ♁					
evening rise	13137 Jul 15 18:49	12° ♁ 57'18		superior conj	13138 Jun 12 20:33	0° ♁ 47'46	-2°13'30
asc. node	13137 Jul 21 09:43	22° ♁ 38'07		minimum elong	13138 Jun 12 21:06	0° ♁ 49'54	2°14'30
	13137 Jul 25 21:06	0° ♁		evening rise	13138 Jun 27 09:48	24° ♁ 17'57	
evening max el	13137 Aug 01 23:38	9° ♁ 25'26	18°03'52		13138 Jun 30 20:54	0° ♁	
retrograde	13137 Aug 08 10:19	12° ♁ 46'15		asc. node	13138 Jul 08 06:31	11° ♁ 56'09	
evening set	13137 Aug 11 01:38	12° ♁ 11'33		evening max el	13138 Jul 16 13:44	22° ♁ 57'32	18°18'29
inferior conj	13137 Aug 17 11:08	7° ♁ 01'31	1°43'36	retrograde	13138 Jul 22 22:40	26° ♁ 20'56	
minimum elong	13137 Aug 17 13:34	6° ♁ 55'11	1°42'21	evening set	13138 Jul 25 22:31	25° ♁ 31'53	
min. Earth dist.	13137 Aug 20 09:05	4° ♁ 01'14	0.62198 AU	inferior conj	13138 Jul 31 20:03	20° ♁ 04'53	2°30'02
morning rise	13137 Aug 23 23:09	0° ♁ 54'37		minimum elong	13138 Jul 31 22:26	19° ♁ 58'00	2°28'45
desc. node	13137 Aug 23 12:32	1° ♁ 14'09		min. Earth dist.	13138 Aug 03 05:01	17° ♁ 20'58	0.64326 AU
	13137 Aug 25 09:10	30° ♁		morning rise	13138 Aug 06 20:56	13° ♁ 46'00	
direct	13137 Aug 30 15:30	28° ♁ 31'10		desc. node	13138 Aug 10 09:59	11° ♁ 41'44	
	13137 Sep 05 06:44	0° ♁		direct	13138 Aug 13 11:18	11° ♁ 08'59	
morning max el	13137 Sep 13 18:30	6° ♁ 32'20	27°57'15	morning max el	13138 Aug 27 04:21	19° ♁ 08'20	27°30'24
	13137 Oct 01 14:23	0° ♁			13138 Sep 05 09:39	0° ♁	
asc. node	13137 Oct 17 11:33	28° ♁ 44'42			13138 Sep 24 14:02	0° ♁	
morning set	13137 Oct 17 17:27	29° ♁ 14'51		morning set	13138 Oct 01 08:40	12° ♁ 46'24	
	13137 Oct 18 02:16	0° ♁		asc. node	13138 Oct 04 08:11	18° ♁ 45'46	
max. Earth dist.	13137 Oct 23 02:58	10° ♁ 38'44	1.31791 AU	max. Earth dist.	13138 Oct 06 00:31	22° ♁ 14'10	1.32841 AU
superior conj	13137 Oct 25 05:37	15° ♁ 15'28	1°08'30	superior conj	13138 Oct 09 10:57	29° ♁ 30'36	0°47'21
minimum elong	13137 Oct 25 03:21	15° ♁ 03'00	1°08'47	minimum elong	13138 Oct 09 08:55	29° ♁ 19'39	0°47'23
evening rise	13137 Oct 31 23:49	0° ♁ 05'49			13138 Oct 09 16:26	0° ♁	
	13137 Oct 31 22:44	0° ♁		evening rise	13138 Oct 16 10:54	14° ♁ 37'23	
	13137 Nov 17 06:00	0° ♁			13138 Oct 24 01:52	0° ♁	
desc. node	13137 Nov 19 09:02	2° ♁ 57'41		desc. node	13138 Nov 06 06:18	19° ♁ 26'32	
evening max el	13137 Nov 26 02:21	10° ♁ 41'27	24°24'19	evening max el	13138 Nov 07 12:36	20° ♁ 43'31	22°42'22
retrograde	13137 Dec 09 19:09	17° ♁ 31'28		retrograde	13138 Nov 20 13:31	27° ♁ 11'45	
evening set	13137 Dec 14 23:30	16° ♁ 32'23		evening set	13138 Nov 24 09:03	26° ♁ 40'02	
min. Earth dist.	13137 Dec 20 13:56	13° ♁ 41'19	0.56024 AU	min. Earth dist.	13138 Dec 01 20:56	23° ♁ 16'20	0.54849 AU
inferior conj	13137 Dec 22 21:19	12° ♁ 15'26	-5°35'41	inferior conj	13138 Dec 02 21:34	22° ♁ 41'25	-5°55'07
minimum elong	13137 Dec 23 03:41	12° ♁ 05'33	5°33'48	minimum elong	13138 Dec 02 20:05	22° ♁ 43'30	5°54'05
morning rise	13137 Dec 31 09:53	8° ♁ 14'04		morning rise	13138 Dec 11 08:29	18° ♁ 53'16	
direct	13138 Jan 02 20:32	7° ♁ 58'12		direct	13138 Dec 14 12:13	18° ♁ 30'23	
morning max el	13138 Jan 12 20:54	12° ♁ 47'03	19°43'28	morning max el	13138 Dec 26 01:43	24° ♁ 01'24	21°06'42
asc. node	13138 Jan 13 11:26	13° ♁ 23'05		asc. node	13138 Dec 31 08:38	0° ♁ 07'46	
	13138 Jan 24 16:48	0° ♁			13138 Dec 31 06:20	0° ♁	
morning set	13138 Jan 30 09:37	11° ♁ 08'43		morning set	13139 Jan 14 18:17	25° ♁ 51'22	
					13139 Jan 16 17:51	0° ♁	
superior conj	13138 Feb 07 07:07	27° ♁ 03'38	1°02'00	superior conj	13139 Jan 22 02:00	11° ♁ 09'51	1°20'45
minimum elong	13138 Feb 07 09:55	27° ♁ 17'28	1°02'14	minimum elong	13139 Jan 22 04:24	11° ♁ 22'14	1°21'19
	13138 Feb 08 19:03	0° ♁		max. Earth dist.	13139 Jan 26 21:15	20° ♁ 51'32	1.35417 AU
max. Earth dist.	13138 Feb 13 11:31	8° ♁ 54'59	1.37500 AU	evening rise	13139 Jan 30 21:38	28° ♁ 34'10	
desc. node	13138 Feb 15 09:13	12° ♁ 24'32			13139 Jan 31 16:04	0° ♁	
evening rise	13138 Feb 17 04:55	15° ♁ 40'38		desc. node	13139 Feb 02 05:49	2° ♁ 53'04	
	13138 Feb 25 16:05	0° ♁			13139 Feb 18 22:15	0° ♁	
	13138 Mar 18 20:27	0° ♁		evening max el	13139 Mar 07 06:15	20° ♁ 11'51	26°25'33
evening max el	13138 Mar 24 16:29	6° ♁ 23'03	25°20'11	retrograde	13139 Mar 20 04:51	27° ♁ 31'41	
retrograde	13138 Apr 05 20:32	13° ♁ 25'42					

evening set	13139 Mar 26 12:04	25° Υ 00'12		13140 Feb 14 04:08	0° Υ	
asc. node	13139 Mar 29 05:39	22° Υ 21'22		evening max el	13140 Feb 17 19:48	3° Υ 47'34 27°12'01
min. Earth dist.	13139 Mar 30 14:42	20° Υ 46'17	0.66698 AU	retrograde	13140 Mar 02 07:09	11° Υ 14'09
inferior conj	13139 Apr 01 10:25	18° Υ 33'45	0°59'46	evening set	13140 Mar 08 23:19	8° Υ 42'18
minimum elong	13139 Apr 01 08:59	18° Υ 38'08	0°59'01	min. Earth dist.	13140 Mar 12 20:58	5° Υ 01'26 0.65155 AU
morning rise	13139 Apr 07 06:50	12° Υ 51'10		inferior conj	13140 Mar 15 04:49	2° Υ 26'20 0°01'22
direct	13139 Apr 10 08:57	11° Υ 57'33		minimum elong	13140 Mar 15 04:46	2° Υ 26'27 0°01'24
morning max el	13139 Apr 16 20:49	15° Υ 24'55	18°27'17	transit middle	13140 Mar 15 04:46	2° Υ 26'27 0°01'24
	13139 Apr 27 19:12	0° Z		transit begin	13140 Mar 15 01:46	2° Υ 34'51
desc. node	13139 May 01 08:03	5° Z 29'05		transit end	13140 Mar 15 07:47	2° Υ 18'03
morning set	13139 May 07 08:27	14° Z 58'16		asc. node	13140 Mar 15 03:07	2° Υ 31'03
	13139 May 16 21:36	0° II			13140 Mar 17 11:35	30° R H
				morning rise	13140 Mar 21 11:54	26° H 56'41
superior conj	13139 May 23 04:56	9° II 51'38	-2°04'29	direct	13140 Mar 24 04:34	26° H 18'12
minimum elong	13139 May 22 22:04	9° II 24'49	2°05'02	morning max el	13140 Mar 30 12:46	29° H 36'18 17°58'17
max. Earth dist.	13139 May 23 10:59	10° II 15'13	1.45816 AU		13140 Mar 30 22:17	0° Υ
	13139 Jun 05 01:41	0° E		morning set	13140 Apr 17 10:06	26° Υ 05'44
evening rise	13139 Jun 08 00:15	4° E 37'53		desc. node	13140 Apr 17 04:41	25° Υ 43'29
greatest brilliancy	13139 Jun 17 03:50	19° E 00'16	-0.8m		13140 Apr 19 19:08	0° E
	13139 Jun 24 13:28	0° Ω				
asc. node	13139 Jun 25 03:25	0° Ω 47'41		superior conj	13140 May 01 17:04	19° E 12'08 -1°37'02
evening max el	13139 Jun 30 01:11	6° Ω 39'43	18°50'40	minimum elong	13140 May 01 07:58	18° E 36'05 1°36'47
retrograde	13139 Jul 06 17:24	10° Ω 19'17		max. Earth dist.	13140 May 05 07:14	24° E 51'32 1.45570 AU
evening set	13139 Jul 10 02:00	9° Ω 14'19			13140 May 08 14:11	0° II
inferior conj	13139 Jul 15 15:16	3° Ω 32'00	2°58'12	evening rise	13140 May 17 18:34	14° II 12'08
minimum elong	13139 Jul 15 16:53	3° Ω 26'56	2°57'04		13140 May 28 03:23	0° E
min. Earth dist.	13139 Jul 17 09:38	1° Ω 19'07	0.66122 AU	greatest brilliancy	13140 May 31 15:10	5° E 11'23 -0.6m
	13139 Jul 18 11:59	30° R E		asc. node	13140 Jun 11 00:26	19° E 03'29
morning rise	13139 Jul 21 07:00	27° E 08'29		evening max el	13140 Jun 12 07:51	20° E 26'19 19°39'23
direct	13139 Jul 27 14:28	24° E 27'52		retrograde	13140 Jun 19 15:28	24° E 34'24
desc. node	13139 Jul 28 07:24	24° E 29'40		evening set	13140 Jun 23 09:19	23° E 12'52
	13139 Aug 07 08:14	0° Ω		inferior conj	13140 Jun 28 17:37	17° E 16'49 3°11'21
morning max el	13139 Aug 09 15:28	2° Ω 12'21	26°33'57	minimum elong	13140 Jun 28 18:12	17° E 14'53 3°10'19
	13139 Aug 30 13:54	0° M		min. Earth dist.	13140 Jun 29 21:28	15° E 43'58 0.67495 AU
morning set	13139 Sep 14 12:26	25° M 44'36		morning rise	13140 Jul 04 02:40	10° E 53'38
	13139 Sep 16 17:50	0° E		direct	13140 Jul 09 23:59	8° E 18'30
max. Earth dist.	13139 Sep 18 12:33	3° E 29'08	1.34410 AU	desc. node	13140 Jul 14 04:43	9° E 23'03
asc. node	13139 Sep 21 04:48	8° E 51'27		morning max el	13140 Jul 22 02:14	15° E 33'27 25°16'53
					13140 Aug 02 23:39	0° Ω
superior conj	13139 Sep 23 09:55	13° E 24'21	0°20'56		13140 Aug 22 11:09	0° M
minimum elong	13139 Sep 23 08:49	13° E 18'35	0°20'51	morning set	13140 Aug 27 00:49	7° M 59'59
evening rise	13139 Sep 30 20:28	29° E 02'40		max. Earth dist.	13140 Aug 30 15:15	14° M 35'22 1.36426 AU
	13139 Oct 01 07:26	0° M				
	13139 Oct 19 06:52	0° Z		superior conj	13140 Sep 05 23:36	26° M 49'23 -0°10'06
evening max el	13139 Oct 20 05:33	0° Z 58'19	21°06'49	minimum elong	13140 Sep 06 00:15	26° M 52'33 0°10'07
desc. node	13139 Oct 24 03:39	4° Z 13'28		behind sun begin	13140 Sep 05 19:14	26° M 27'39
retrograde	13139 Nov 01 00:36	6° Z 50'03		behind sun end	13140 Sep 06 05:16	27° M 17'29
evening set	13139 Nov 03 14:01	6° Z 34'39		asc. node	13140 Sep 07 01:23	28° M 57'48
inferior conj	13139 Nov 12 13:06	2° Z 40'52	-5°15'40		13140 Sep 07 13:47	0° E
minimum elong	13139 Nov 12 04:08	2° Z 53'30	5°13'01	evening rise	13140 Sep 14 02:17	13° E 15'33
min. Earth dist.	13139 Nov 13 03:02	2° Z 21'10	0.54524 AU		13140 Sep 22 20:23	0° M
	13139 Nov 17 15:00	30° R M		evening max el	13140 Oct 01 11:56	11° M 54'21 19°49'03
morning rise	13139 Nov 20 18:46	28° M 49'38		desc. node	13140 Oct 10 01:06	16° M 51'03
direct	13139 Nov 24 19:52	28° M 14'32		retrograde	13140 Oct 11 15:55	16° M 58'30
	13139 Dec 01 15:35	0° Z		evening set	13140 Oct 13 14:00	16° M 48'27
morning max el	13139 Dec 07 17:45	4° Z 27'30	22°48'48	inferior conj	13140 Oct 22 10:26	12° M 46'58 -3°45'51
asc. node	13139 Dec 18 05:45	17° Z 52'33		minimum elong	13140 Oct 22 01:06	13° M 01'22 3°42'09
	13139 Dec 25 00:54	0° Z		min. Earth dist.	13140 Oct 24 11:42	11° M 31'04 0.55145 AU
morning set	13139 Dec 30 05:34	10° Z 38'18		morning rise	13140 Oct 30 10:39	8° M 31'32
				direct	13140 Nov 04 08:46	7° M 38'14
superior conj	13140 Jan 06 04:46	25° Z 36'39	1°32'35	morning max el	13140 Nov 18 03:55	14° M 28'43 24°37'35
minimum elong	13140 Jan 06 06:15	25° Z 44'37	1°33'26		13140 Nov 30 07:51	0° Z
	13140 Jan 08 06:25	0° \approx		asc. node	13140 Dec 04 02:46	6° Z 22'07
max. Earth dist.	13140 Jan 09 13:58	2° \approx 44'57	1.33665 AU	morning set	13140 Dec 13 17:29	25° Z 22'47
evening rise	13140 Jan 14 04:18	12° \approx 02'27			13140 Dec 15 20:40	0° Z
desc. node	13140 Jan 20 02:31	23° \approx 11'04				
	13140 Jan 24 00:08	0° H		superior conj	13140 Dec 20 12:37	10° Z 14'51 1°37'56

minimum elong	13140 Dec 20 13:00	10° ♄ 17'00	1°38'55	max. Earth dist.	13141 Dec 05 19:53	26° ♄ 52'26	1.31537 AU
max. Earth dist.	13140 Dec 22 14:04	14° ♄ 44'28	1.32353 AU		13141 Dec 07 05:47	0° ♄	
evening rise	13140 Dec 27 21:31	25° ♄ 56'01		evening rise	13141 Dec 11 22:31	10° ♄ 08'16	
	13140 Dec 29 22:04	0° \approx			13141 Dec 22 04:56	0° \approx	
desc. node	13141 Jan 05 23:17	13° \approx 12'12		desc. node	13141 Dec 23 20:09	2° \approx 49'40	
	13141 Jan 16 10:04	0° ♄		evening max el	13142 Jan 12 15:37	29° \approx 30'35	27°21'57
evening max el	13141 Jan 30 07:35	16° ♄ 57'43	27°32'49		13142 Jan 13 04:12	0° ♄	
retrograde	13141 Feb 13 02:43	24° ♄ 22'59		retrograde	13142 Jan 26 14:19	6° ♄ 48'23	
evening set	13141 Feb 20 00:09	21° ♄ 58'01		evening set	13142 Feb 02 11:35	4° ♄ 38'46	
min. Earth dist.	13141 Feb 23 18:34	18° ♄ 46'23	0.63276 AU	min. Earth dist.	13142 Feb 06 06:07	1° ♄ 49'40	0.61171 AU
inferior conj	13141 Feb 26 13:17	15° ♄ 59'42	-1°08'00		13142 Feb 08 08:05	30° ♄	
minimum elong	13141 Feb 26 15:30	15° ♄ 54'08	1°06'45	inferior conj	13142 Feb 09 08:32	29° \approx 05'26	-2°26'38
asc. node	13141 Mar 02 00:35	12° ♄ 46'57		minimum elong	13142 Feb 09 13:43	28° \approx 53'58	2°24'00
morning rise	13141 Mar 05 09:18	10° ♄ 45'32		morning rise	13142 Feb 16 18:52	24° \approx 09'32	
direct	13141 Mar 07 18:03	10° ♄ 18'40		asc. node	13142 Feb 16 22:01	24° \approx 07'17	
morning max el	13141 Mar 14 06:33	13° ♄ 38'50	17°46'36	direct	13142 Feb 18 21:57	23° \approx 50'30	
	13141 Mar 25 15:28	0° ♄		morning max el	13142 Feb 25 22:51	27° \approx 23'03	17°52'58
morning set	13141 Mar 30 13:55	8° ♄ 28'07			13142 Feb 28 07:08	0° ♄	
desc. node	13141 Apr 04 01:15	16° ♄ 09'19		morning set	13142 Mar 13 13:48	21° ♄ 46'45	
					13142 Mar 18 03:02	0° ♄	
superior conj	13141 Apr 11 23:55	29° ♄ 27'52	-0°58'52	desc. node	13142 Mar 21 21:45	6° ♄ 42'20	
minimum elong	13141 Apr 11 17:57	29° ♄ 03'22	0°58'26				
	13141 Apr 12 07:45	0° ♄		superior conj	13142 Mar 24 06:56	10° ♄ 51'01	-0°18'39
max. Earth dist.	13141 Apr 18 01:23	9° ♄ 15'43	1.44606 AU	minimum elong	13142 Mar 24 05:16	10° ♄ 43'46	0°18'29
evening rise	13141 Apr 27 05:41	23° ♄ 36'22		max. Earth dist.	13142 Mar 31 15:48	23° ♄ 14'11	1.43033 AU
	13141 May 01 10:21	0° ♄			13142 Apr 04 20:20	0° ♄	
	13141 May 22 13:47	0° ♄		evening rise	13142 Apr 07 01:28	3° ♄ 30'09	
evening max el	13141 May 26 08:43	4° ♄ 14'17	20°42'35		13142 Apr 24 19:43	0° ♄	
asc. node	13141 May 28 21:32	6° ♄ 31'50		evening max el	13142 May 09 04:11	18° ♄ 03'04	21°56'47
retrograde	13141 Jun 03 14:27	9° ♄ 00'36		asc. node	13142 May 15 18:43	22° ♄ 57'43	
evening set	13141 Jun 07 18:17	7° ♄ 22'31		retrograde	13142 May 18 12:26	23° ♄ 32'21	
inferior conj	13141 Jun 13 00:27	1° ♄ 14'23	3°11'52	evening set	13142 May 23 03:04	21° ♄ 38'25	
minimum elong	13141 Jun 13 00:01	1° ♄ 15'54	3°10'51	inferior conj	13142 May 28 09:35	15° ♄ 20'04	3°01'20
min. Earth dist.	13141 Jun 13 14:29	0° ♄ 25'55	0.68407 AU	minimum elong	13142 May 28 08:16	15° ♄ 24'40	3°00'13
	13141 Jun 13 22:02	30° ♄		min. Earth dist.	13142 May 28 10:26	15° ♄ 17'04	0.68852 AU
morning rise	13141 Jun 18 05:29	24° ♄ 54'49		morning rise	13142 Jun 02 13:16	9° ♄ 06'15	
direct	13141 Jun 23 14:51	22° ♄ 32'22		direct	13142 Jun 07 09:52	7° ♄ 01'37	
desc. node	13141 Jul 01 01:56	25° ♄ 54'46		morning max el	13142 Jun 17 00:14	12° ♄ 40'29	22°19'49
morning max el	13141 Jul 04 12:28	29° ♄ 03'32	23°49'02	desc. node	13142 Jun 17 23:02	13° ♄ 39'12	
	13141 Jul 05 10:20	0° ♄			13142 Jun 30 20:22	0° ♄	
	13141 Jul 27 17:38	0° ♄		morning set	13142 Jul 20 09:17	29° ♄ 37'15	
morning set	13141 Aug 08 17:15	19° ♄ 21'29			13142 Jul 20 14:54	0° ♄	
max. Earth dist.	13141 Aug 12 12:51	25° ♄ 58'12	1.38719 AU	max. Earth dist.	13142 Jul 25 12:19	8° ♄ 04'48	1.41045 AU
	13141 Aug 14 19:09	0° ♄					
superior conj	13141 Aug 20 00:27	9° ♄ 37'29	-0°44'13	superior conj	13142 Aug 02 08:05	21° ♄ 37'57	-1°18'51
minimum elong	13141 Aug 20 03:35	9° ♄ 52'18	0°44'08	minimum elong	13142 Aug 02 13:55	22° ♄ 03'59	1°18'44
asc. node	13141 Aug 24 21:58	19° ♄ 01'27			13142 Aug 06 22:51	0° ♄	
evening rise	13141 Aug 29 01:39	27° ♄ 09'19		asc. node	13142 Aug 11 18:33	8° ♄ 58'00	
	13141 Aug 30 12:38	0° ♄		evening rise	13142 Aug 12 15:07	10° ♄ 34'16	
evening max el	13141 Sep 14 08:04	23° ♄ 39'56	18°53'00		13142 Aug 23 17:16	0° ♄	
retrograde	13141 Sep 22 22:12	27° ♄ 58'24		evening max el	13142 Aug 28 14:18	6° ♄ 07'37	18°18'19
evening set	13141 Sep 24 19:17	27° ♄ 46'49		retrograde	13142 Sep 04 23:39	9° ♄ 52'11	
desc. node	13141 Sep 26 22:35	27° ♄ 07'32		evening set	13142 Sep 07 02:34	9° ♄ 34'24	
inferior conj	13141 Oct 03 01:24	23° ♄ 28'19	-1°56'05	desc. node	13142 Sep 13 20:06	5° ♄ 32'01	
minimum elong	13141 Oct 02 20:30	23° ♄ 37'01	1°53'50	inferior conj	13142 Sep 14 14:04	4° ♄ 54'55	-0°14'01
min. Earth dist.	13141 Oct 06 01:19	21° ♄ 20'58	0.56605 AU	minimum elong	13142 Sep 14 13:33	4° ♄ 55'59	0°13'50
morning rise	13141 Oct 10 18:31	18° ♄ 36'39		transit middle	13142 Sep 14 13:33	4° ♄ 55'59	0°13'50
direct	13141 Oct 16 11:28	17° ♄ 18'44		transit begin	13142 Sep 14 11:45	4° ♄ 59'44	
morning max el	13141 Oct 30 16:27	24° ♄ 38'48	26°14'51	transit end	13142 Sep 14 15:21	4° ♄ 52'13	
	13141 Nov 04 15:01	0° ♄		min. Earth dist.	13142 Sep 17 21:33	2° ♄ 10'38	0.58631 AU
asc. node	13141 Nov 20 23:40	25° ♄ 25'22			13142 Sep 20 22:47	30° ♄	
	13141 Nov 23 08:17	0° ♄		morning rise	13142 Sep 21 21:05	29° ♄ 27'25	
morning set	13141 Nov 28 04:17	10° ♄ 00'22		direct	13142 Sep 28 04:11	27° ♄ 41'55	
					13142 Oct 05 16:20	0° ♄	
superior conj	13141 Dec 04 23:20	24° ♄ 58'11	1°37'09	morning max el	13142 Oct 12 11:53	5° ♄ 23'21	27°24'17
minimum elong	13141 Dec 04 22:39	24° ♄ 54'24	1°38'07		13142 Oct 30 17:18	0° ♄	
				asc. node	13142 Nov 07 20:27	14° ♄ 53'00	

morning set	13142 Nov 12 12:17	24°♄26'27		morning set	13143 Oct 27 15:36	8°♄36'08	
	13142 Nov 15 02:11	0°♄		max. Earth dist.	13143 Nov 02 11:47	21°♄09'25	1.31438 AU
superior conj	13142 Nov 19 10:58	9°♄40'48	1°30'30	superior conj	13143 Nov 03 21:42	24°♄17'05	1°18'09
minimum elong	13142 Nov 19 09:24	9°♄32'01	1°31'17	minimum elong	13143 Nov 03 19:34	24°♄05'12	1°18'38
max. Earth dist.	13142 Nov 19 04:23	9°♄04'01	1.31229 AU		13143 Nov 06 11:25	0°♄	
evening rise	13142 Nov 26 04:54	24°♄33'03		evening rise	13143 Nov 10 14:37	9°♄04'33	
	13142 Nov 28 19:06	0°♄			13143 Nov 21 05:16	0°♄	
desc. node	13142 Dec 10 17:09	21°♄54'22		desc. node	13143 Nov 27 14:15	10°♄13'10	
	13142 Dec 16 03:04	0°♄		evening max el	13143 Dec 07 10:24	22°♄07'25	25°19'01
evening max el	13142 Dec 25 17:17	11°♄15'35	26°36'25	retrograde	13143 Dec 21 06:34	29°♄04'38	
retrograde	13143 Jan 08 16:13	18°♄23'09		evening set	13143 Dec 27 02:39	27°♄47'23	
evening set	13143 Jan 15 05:51	16°♄36'50		min. Earth dist.	13143 Dec 31 22:31	25°♄07'08	0.56997 AU
min. Earth dist.	13143 Jan 19 07:09	13°♄59'48	0.59003 AU	inferior conj	13144 Jan 03 17:29	23°♄15'40	-5°03'54
inferior conj	13143 Jan 22 11:01	11°♄34'11	-3°49'10	minimum elong	13144 Jan 04 01:54	23°♄01'38	5°01'04
minimum elong	13143 Jan 22 18:59	11°♄18'48	3°45'43	morning rise	13144 Jan 12 03:33	19°♄03'03	
morning rise	13143 Jan 30 11:05	6°♄59'12		direct	13144 Jan 14 08:34	18°♄48'42	
direct	13143 Feb 01 12:13	6°♄44'20		asc. node	13144 Jan 21 16:43	21°♄39'42	
asc. node	13143 Feb 03 19:24	7°♄03'59		morning max el	13144 Jan 23 12:08	23°♄14'51	19°06'04
morning max el	13143 Feb 09 10:03	10°♄39'00	18°18'50		13144 Jan 28 23:26	0°♄	
	13143 Feb 22 02:48	0°♄		morning set	13144 Feb 09 03:48	20°♄06'47	
morning set	13143 Feb 25 03:58	5°♄44'29			13144 Feb 14 03:38	0°♄	
superior conj	13143 Mar 06 12:28	23°♄16'26	0°17'50	superior conj	13144 Feb 17 11:58	6°♄30'38	0°47'56
minimum elong	13143 Mar 06 13:46	23°♄22'22	0°17'50	minimum elong	13144 Feb 17 14:36	6°♄43'16	0°48'02
desc. node	13143 Mar 08 18:16	27°♄19'05		desc. node	13144 Feb 23 14:47	17°♄55'22	
	13143 Mar 10 06:31	0°♄		max. Earth dist.	13144 Feb 24 08:56	19°♄17'04	1.38784 AU
max. Earth dist.	13143 Mar 14 02:05	6°♄36'53	1.41020 AU	evening rise	13144 Feb 28 03:42	25°♄55'59	
evening rise	13143 Mar 18 16:01	14°♄15'57			13144 Mar 01 13:04	0°♄	
	13143 Mar 28 16:15	0°♄			13144 Mar 21 07:02	0°♄	
	13143 Apr 20 00:04	0°♄		evening max el	13144 Apr 03 09:32	15°♄45'47	24°36'54
evening max el	13143 Apr 21 19:51	1°♄53'57	23°16'55	retrograde	13144 Apr 15 00:04	22°♄32'45	
retrograde	13143 May 02 08:01	8°♄05'14		asc. node	13144 Apr 18 13:22	21°♄36'57	
asc. node	13143 May 02 16:00	8°♄04'44		evening set	13144 Apr 20 13:56	20°♄12'09	
evening set	13143 May 07 10:09	5°♄56'45		min. Earth dist.	13144 Apr 25 02:36	15°♄03'13	0.68341 AU
	13143 May 12 10:35	30°♄		inferior conj	13144 Apr 26 02:58	13°♄41'57	2°09'37
inferior conj	13143 May 12 19:03	29°♄30'46	2°40'31	minimum elong	13144 Apr 26 00:49	13°♄49'10	2°08'23
minimum elong	13143 May 12 17:08	29°♄37'24	2°39'18	morning rise	13144 May 01 11:53	7°♄43'36	
min. Earth dist.	13143 May 12 07:11	0°♄11'42	0.68829 AU	direct	13144 May 05 07:20	6°♄20'30	
morning rise	13143 May 18 00:02	23°♄24'06		morning max el	13144 May 12 17:04	10°♄27'28	19°46'53
direct	13143 May 22 07:50	21°♄39'59		desc. node	13144 May 21 16:51	21°♄33'41	
morning max el	13143 May 30 17:01	26°♄28'10	20°57'17	greatest brilliancy	13144 May 25 14:55	27°♄10'11	-0.6m
	13143 Jun 02 22:44	0°♄			13144 May 27 13:08	0°♄	
desc. node	13143 Jun 04 19:59	2°♄17'10		morning set	13144 Jun 08 02:29	17°♄28'38	
	13143 Jun 24 07:22	0°♄			13144 Jun 16 04:09	0°♄	
morning set	13143 Jun 30 00:53	8°♄49'26		max. Earth dist.	13144 Jun 19 07:05	4°♄55'22	1.44689 AU
max. Earth dist.	13143 Jul 07 18:23	21°♄06'59	1.43118 AU				
	13143 Jul 13 03:47	0°♄		superior conj	13144 Jun 24 04:33	12°♄44'48	-2°09'29
superior conj	13143 Jul 14 18:15	2°♄41'42	-1°49'25	minimum elong	13144 Jun 24 08:57	13°♄02'32	2°10'19
minimum elong	13143 Jul 15 01:22	3°♄11'47	1°49'39		13144 Jul 04 15:53	0°♄	
evening rise	13143 Jul 26 14:27	23°♄20'17		evening rise	13144 Jul 07 18:39	5°♄15'19	
asc. node	13143 Jul 29 15:12	28°♄43'39		asc. node	13144 Jul 15 11:58	18°♄13'37	
	13143 Jul 30 08:29	0°♄			13144 Jul 23 10:50	0°♄	
evening max el	13143 Aug 12 02:26	19°♄07'22	18°03'37	evening max el	13144 Jul 25 16:42	2°♄29'52	18°07'49
retrograde	13143 Aug 18 18:18	22°♄32'46		retrograde	13144 Aug 01 01:34	5°♄50'25	
evening set	13143 Aug 21 04:57	22°♄05'03		evening set	13144 Aug 03 20:27	5°♄09'52	
inferior conj	13143 Aug 27 22:59	17°♄05'13	1°07'17		13144 Aug 09 21:28	30°♄	
minimum elong	13143 Aug 28 00:53	17°♄00'38	1°06'17	inferior conj	13144 Aug 10 00:22	29°♄52'07	2°05'45
min. Earth dist.	13143 Aug 31 02:24	14°♄04'47	0.60900 AU	minimum elong	13144 Aug 10 02:54	29°♄45'11	2°04'26
desc. node	13143 Aug 31 17:37	13°♄30'31		min. Earth dist.	13144 Aug 12 17:02	26°♄56'45	0.63132 AU
morning rise	13143 Sep 03 17:59	11°♄09'43		morning rise	13144 Aug 16 07:26	23°♄38'48	
direct	13143 Sep 10 08:44	8°♄58'41		desc. node	13144 Aug 17 15:06	22°♄44'53	
morning max el	13143 Sep 24 14:47	16°♄54'29	27°56'28	direct	13144 Aug 22 23:25	21°♄08'40	
	13143 Oct 05 11:02	0°♄		morning max el	13144 Sep 05 23:10	29°♄10'36	27°50'02
	13143 Oct 23 09:11	0°♄			13144 Sep 06 18:33	0°♄	
asc. node	13143 Oct 25 17:08	4°♄37'57		morning set	13144 Sep 28 09:17	0°♄	
					13144 Oct 10 12:03	22°♄24'14	

asc. node	13144 Oct 11 13:47	24° Ω 34'46			13145 Sep 02 18:56	0° \mathbb{M}		
	13144 Oct 14 04:25	0° \mathbb{M}			13145 Sep 20 22:40	0° Ω		
max. Earth dist.	13144 Oct 15 14:09	2° \mathbb{M} 59'02	1.32173 AU	morning set	13145 Sep 23 22:52	5° Ω 42'58		
				asc. node	13145 Sep 28 10:23	14° Ω 38'13		
superior conj	13144 Oct 18 05:39	8° \mathbb{M} 41'59	1°00'11	max. Earth dist.	13145 Sep 28 07:45	14° Ω 24'50	1.33444 AU	
minimum elong	13144 Oct 18 03:24	8° \mathbb{M} 29'44	1°00'22					
evening rise	13144 Oct 25 01:46	23° \mathbb{M} 37'55		superior conj	13145 Oct 02 08:36	22° Ω 48'48	0°36'46	
	13144 Oct 28 02:08	0° \mathbb{M}		minimum elong	13145 Oct 02 06:51	22° Ω 39'36	0°36'44	
desc. node	13144 Nov 13 11:28	27° \mathbb{M} 29'00			13145 Oct 05 17:22	0° \mathbb{M}		
	13144 Nov 15 15:15	0° \mathbb{M}		evening rise	13145 Oct 09 12:27	8° \mathbb{M} 07'13		
evening max el	13144 Nov 17 20:58	2° \mathbb{M} 18'47	23°41'07		13145 Oct 20 22:30	0° \mathbb{M}		
retrograde	13144 Dec 01 08:34	9° \mathbb{M} 01'48		evening max el	13145 Oct 30 08:52	12° \mathbb{M} 21'32	22°00'04	
evening set	13144 Dec 05 23:44	8° \mathbb{M} 15'04		desc. node	13145 Oct 31 08:48	13° \mathbb{M} 18'01		
min. Earth dist.	13144 Dec 12 07:29	5° \mathbb{M} 12'22	0.55432 AU	retrograde	13145 Nov 11 23:14	18° \mathbb{M} 36'31		
inferior conj	13144 Dec 14 03:33	4° \mathbb{M} 07'07	-5°50'29	evening set	13145 Nov 15 04:20	18° \mathbb{M} 13'30		
minimum elong	13144 Dec 14 07:07	4° \mathbb{M} 01'50	5°49'12	inferior conj	13145 Nov 23 22:31	14° \mathbb{M} 18'21	-5°45'47	
morning rise	13144 Dec 22 16:19	0° \mathbb{M} 13'13		minimum elong	13145 Nov 23 17:16	14° \mathbb{M} 25'43	5°44'18	
	13144 Dec 23 23:52	30° \mathbb{M} 13'13		min. Earth dist.	13145 Nov 23 14:00	14° \mathbb{M} 30'17	0.54596 AU	
direct	13144 Dec 25 09:14	29° \mathbb{M} 55'08		morning rise	13145 Dec 02 07:17	10° \mathbb{M} 31'04		
	13144 Dec 26 18:06	0° \mathbb{M}		direct	13145 Dec 05 19:40	10° \mathbb{M} 03'44		
morning max el	13145 Jan 05 01:28	5° \mathbb{M} 01'10	20°16'14	morning max el	13145 Dec 18 00:29	15° \mathbb{M} 53'36	21°48'19	
asc. node	13145 Jan 07 13:58	7° \mathbb{M} 42'21		asc. node	13145 Dec 25 11:07	24° \mathbb{M} 54'14		
	13145 Jan 21 01:56	0° \mathbb{M}			13145 Dec 28 16:59	0° \mathbb{M}		
morning set	13145 Jan 23 10:01	4° \mathbb{M} 44'08		morning set	13146 Jan 07 20:02	19° \mathbb{M} 28'48		
					13146 Jan 12 19:03	0° \mathbb{M}		
superior conj	13145 Jan 31 00:57	20° \mathbb{M} 21'20	1°10'49					
minimum elong	13145 Jan 31 03:40	20° \mathbb{M} 35'00	1°11'12	superior conj	13146 Jan 14 23:34	4° \mathbb{M} 37'10	1°26'35	
	13145 Feb 04 22:34	0° \mathbb{M}		minimum elong	13146 Jan 15 01:37	4° \mathbb{M} 47'56	1°27'17	
max. Earth dist.	13145 Feb 05 15:53	1° \mathbb{M} 22'41	1.36579 AU	max. Earth dist.	13146 Jan 19 03:55	13° \mathbb{M} 13'48	1.34620 AU	
evening rise	13145 Feb 09 10:48	8° \mathbb{M} 25'13		evening rise	13146 Jan 23 09:53	21° \mathbb{M} 34'30		
desc. node	13145 Feb 09 11:22	8° \mathbb{M} 27'48		desc. node	13146 Jan 27 08:01	28° \mathbb{M} 52'15		
	13145 Feb 22 06:57	0° \mathbb{M}			13146 Jan 27 23:03	0° \mathbb{M}		
evening max el	13145 Mar 16 22:55	29° \mathbb{M} 36'37	25°49'45		13146 Feb 16 02:55	0° \mathbb{M}		
	13145 Mar 17 08:33	0° \mathbb{M}		evening max el	13146 Feb 27 12:38	13° \mathbb{M} 20'44	26°48'07	
retrograde	13145 Mar 29 11:38	6° \mathbb{M} 48'38		retrograde	13146 Mar 12 17:44	20° \mathbb{M} 45'25		
evening set	13145 Apr 04 12:48	4° \mathbb{M} 19'36		evening set	13146 Mar 19 04:55	18° \mathbb{M} 13'04		
asc. node	13145 Apr 05 10:49	3° \mathbb{M} 30'17		min. Earth dist.	13146 Mar 23 05:15	14° \mathbb{M} 13'19	0.66077 AU	
	13145 Apr 08 14:08	30° \mathbb{M} 13'17		asc. node	13146 Mar 23 08:17	14° \mathbb{M} 04'37		
min. Earth dist.	13145 Apr 08 18:39	29° \mathbb{M} 45'58	0.67413 AU	inferior conj	13146 Mar 25 06:12	11° \mathbb{M} 49'54	0°36'21	
inferior conj	13145 Apr 10 07:24	27° \mathbb{M} 49'53	1°28'23	minimum elong	13146 Mar 25 05:15	11° \mathbb{M} 52'42	0°35'53	
minimum elong	13145 Apr 10 05:31	27° \mathbb{M} 55'52	1°27'21	morning rise	13146 Mar 31 06:50	6° \mathbb{M} 12'27		
morning rise	13145 Apr 15 22:52	22° \mathbb{M} 01'07		direct	13146 Apr 03 04:39	5° \mathbb{M} 25'48		
direct	13145 Apr 19 06:53	20° \mathbb{M} 57'35		morning max el	13146 Apr 09 14:10	8° \mathbb{M} 48'10	18°12'49	
morning max el	13145 Apr 26 00:37	24° \mathbb{M} 36'00	18°51'36		13146 Apr 24 13:22	0° \mathbb{M}		
	13145 Apr 30 16:17	0° \mathbb{M}		desc. node	13146 Apr 25 10:16	1° \mathbb{M} 23'38		
desc. node	13145 May 08 13:36	11° \mathbb{M} 18'22		morning set	13146 Apr 28 20:07	6° \mathbb{M} 52'09		
greatest brilliancy	13145 May 09 18:34	13° \mathbb{M} 08'18	-0.8m		13146 May 13 09:52	0° \mathbb{M}		
morning set	13145 May 18 11:01	26° \mathbb{M} 33'16						
	13145 May 20 16:11	0° \mathbb{M}		superior conj	13146 May 14 02:43	1° \mathbb{M} 06'00	-1°54'45	
max. Earth dist.	13145 Jun 02 00:21	19° \mathbb{M} 13'50	1.45607 AU	minimum elong	13146 May 13 18:03	0° \mathbb{M} 32'03	1°54'55	
				max. Earth dist.	13146 May 15 19:58	3° \mathbb{M} 47'19	1.45796 AU	
superior conj	13145 Jun 03 18:54	22° \mathbb{M} 00'30	-2°12'12	evening rise	13146 May 30 04:00	26° \mathbb{M} 06'20		
minimum elong	13145 Jun 03 16:04	21° \mathbb{M} 49'23	2°13'08		13146 Jun 01 16:05	0° \mathbb{M}		
	13145 Jun 08 20:41	0° \mathbb{M}		greatest brilliancy	13146 Jun 10 12:43	13° \mathbb{M} 39'15	-0.7m	
evening rise	13145 Jun 18 23:13	16° \mathbb{M} 09'28		asc. node	13146 Jun 19 05:49	25° \mathbb{M} 59'12		
	13145 Jun 27 13:51	0° \mathbb{M}		evening max el	13146 Jun 22 15:37	29° \mathbb{M} 51'39	19°09'33	
asc. node	13145 Jul 02 08:50	7° \mathbb{M} 21'21			13146 Jun 22 18:59	0° \mathbb{M}		
evening max el	13145 Jul 09 05:56	16° \mathbb{M} 06'43	18°30'06	retrograde	13146 Jun 29 13:31	3° \mathbb{M} 41'53		
retrograde	13145 Jul 15 17:07	19° \mathbb{M} 35'46		evening set	13146 Jul 03 01:57	2° \mathbb{M} 30'03		
evening set	13145 Jul 18 20:32	18° \mathbb{M} 40'16			13146 Jul 05 20:03	30° \mathbb{M} 13'16		
inferior conj	13145 Jul 24 14:08	13° \mathbb{M} 06'38	2°44'00	inferior conj	13146 Jul 08 12:44	26° \mathbb{M} 42'02	3°05'24	
minimum elong	13145 Jul 24 16:14	13° \mathbb{M} 00'17	2°42'46	minimum elong	13146 Jul 08 13:56	26° \mathbb{M} 38'11	3°04'21	
min. Earth dist.	13145 Jul 26 17:00	10° \mathbb{M} 34'11	0.65129 AU	min. Earth dist.	13146 Jul 10 00:59	24° \mathbb{M} 45'03	0.66759 AU	
morning rise	13145 Jul 30 10:47	6° \mathbb{M} 44'44		morning rise	13146 Jul 14 01:18	20° \mathbb{M} 18'09		
desc. node	13145 Aug 04 12:34	4° \mathbb{M} 12'02		direct	13146 Jul 20 04:54	17° \mathbb{M} 38'30		
direct	13145 Aug 05 22:40	4° \mathbb{M} 04'47		desc. node	13146 Jul 22 09:55	17° \mathbb{M} 56'22		
morning max el	13145 Aug 19 10:00	12° \mathbb{M} 00'35	27°09'32	morning max el	13146 Aug 01 20:55	25° \mathbb{M} 12'32	26°03'05	

	13146 Aug 06 05:27	0°♎	direct	13147 Jul 03 16:48	1°♊39'55	
	13146 Aug 27 06:35	0°♏	desc. node	13147 Jul 09 07:10	3°♊34'31	
morning set	13146 Sep 06 20:36	18°♏24'16	morning max el	13147 Jul 15 07:07	8°♊36'57	24°40'16
max. Earth dist.	13146 Sep 10 15:10	25°♏31'57 1.35220 AU		13147 Aug 01 02:32	0°♎	
	13146 Sep 12 22:03	0°♎		13147 Aug 19 21:01	0°♏	
asc. node	13146 Sep 15 06:59	4°♎44'40	morning set	13147 Aug 20 01:02	0°♏17'36	
			max. Earth dist.	13147 Aug 23 15:00	6°♏41'42	1.37383 AU
superior conj	13146 Sep 16 04:02	6°♎31'30 0°08'19				
minimum elong	13146 Sep 16 03:34	6°♎29'05 0°08'13	superior conj	13147 Aug 30 12:44	19°♏41'59	-0°24'17
behind sun begin	13146 Sep 15 22:19	6°♎02'25	minimum elong	13147 Aug 30 14:22	19°♏49'52	0°24'16
behind sun end	13146 Sep 16 08:48	6°♎55'49	asc. node	13147 Sep 02 03:34	24°♏50'18	
evening rise	13146 Sep 23 20:42	22°♎27'48		13147 Sep 04 17:42	0°♎	
	13146 Sep 27 13:39	0°♏	evening rise	13147 Sep 08 00:07	6°♎33'23	
evening max el	13146 Oct 12 07:16	22°♏52'12 20°31'12		13147 Sep 21 06:44	0°♏	
desc. node	13146 Oct 18 06:12	27°♏13'02	evening max el	13147 Sep 24 19:48	4°♏09'35	19°22'32
retrograde	13146 Oct 23 10:03	28°♏23'36	retrograde	13147 Oct 04 06:37	8°♏53'08	
evening set	13146 Oct 25 14:54	28°♏11'34	desc. node	13147 Oct 05 03:38	8°♏50'51	
inferior conj	13146 Nov 03 14:44	24°♏16'24 -4°42'08	evening set	13147 Oct 06 03:14	8°♏42'58	
minimum elong	13146 Nov 03 04:41	24°♏30'58 4°38'44	inferior conj	13147 Oct 14 18:33	4°♏34'52	-2°59'50
min. Earth dist.	13146 Nov 04 21:03	23°♏32'27 0.54682 AU	minimum elong	13147 Oct 14 10:50	4°♏47'26	2°56'30
morning rise	13146 Nov 11 18:06	20°♏16'59	min. Earth dist.	13147 Oct 17 07:12	2°♏56'13	0.55681 AU
direct	13146 Nov 16 04:35	19°♏34'38	morning rise	13147 Oct 22 16:08	0°♏05'10	
morning max el	13146 Nov 29 12:46	26°♏04'35 23°35'07		13147 Oct 22 21:35	30°♏♎	
	13146 Dec 03 05:49	0°♏	direct	13147 Oct 27 22:51	29°♎02'10	
asc. node	13146 Dec 12 08:10	12°♏59'27		13147 Nov 01 23:25	0°♏	
	13146 Dec 21 07:26	0°♏	morning max el	13147 Nov 10 22:56	6°♏05'17	25°21'26
morning set	13146 Dec 23 07:46	4°♏14'53		13147 Nov 28 05:54	0°♏	
			asc. node	13147 Nov 29 05:06	1°♏44'53	
superior conj	13146 Dec 30 04:45	19°♏09'18 1°35'37	morning set	13147 Dec 07 19:28	18°♏57'34	
minimum elong	13146 Dec 30 05:47	19°♏14'54 1°36'32		13147 Dec 12 20:24	0°♏	
max. Earth dist.	13147 Jan 01 23:51	25°♏08'49 1.33054 AU				
	13147 Jan 04 07:31	0°♏	superior conj	13147 Dec 14 14:05	3°♏50'43	1°38'19
evening rise	13147 Jan 06 21:26	5°♏14'31	minimum elong	13147 Dec 14 14:01	3°♏50'18	1°39'20
desc. node	13147 Jan 14 04:44	19°♏03'43	max. Earth dist.	13147 Dec 16 03:03	7°♏14'17	1.31950 AU
	13147 Jan 20 15:29	0°♏	evening rise	13147 Dec 21 18:20	19°♏17'26	
evening max el	13147 Feb 10 01:53	26°♏47'43 27°24'32		13147 Dec 27 03:44	0°♏	
	13147 Feb 13 18:22	0°♏	desc. node	13148 Jan 01 01:33	8°♏56'15	
retrograde	13147 Feb 23 17:16	4°♏14'14		13148 Jan 14 22:02	0°♏	
evening set	13147 Mar 02 12:03	1°♏44'45	evening max el	13148 Jan 23 12:35	9°♏44'28	27°32'19
	13147 Mar 04 14:11	30°♏♏	retrograde	13148 Feb 06 09:17	17°♏06'07	
min. Earth dist.	13147 Mar 06 08:11	28°♏16'36 0.64386 AU	evening set	13148 Feb 13 07:34	14°♏46'45	
inferior conj	13147 Mar 08 20:46	25°♏35'20 -0°26'47	min. Earth dist.	13148 Feb 17 01:35	11°♏45'48	0.62407 AU
minimum elong	13147 Mar 08 21:34	25°♏33'10 0°26'16	inferior conj	13148 Feb 20 00:04	8°♏58'33	-1°40'22
asc. node	13147 Mar 10 05:46	24°♏08'48	minimum elong	13148 Feb 20 03:29	8°♏50'25	1°38'31
morning rise	13147 Mar 15 09:04	20°♏11'36	asc. node	13148 Feb 25 03:10	4°♏46'45	
direct	13147 Mar 17 22:09	19°♏38'27	morning rise	13148 Feb 27 02:04	3°♏51'39	
morning max el	13147 Mar 24 07:12	22°♏56'16 17°51'07	direct	13148 Feb 29 08:13	3°♏28'25	
	13147 Mar 29 22:49	0°♏	morning max el	13148 Mar 07 00:45	6°♏52'17	17°47'01
morning set	13147 Apr 10 09:35	18°♏33'36		13148 Mar 22 03:59	0°♏	
desc. node	13147 Apr 12 06:50	21°♏43'13	morning set	13148 Mar 22 22:44	1°♏22'37	
	13147 Apr 17 06:27	0°♏	desc. node	13148 Mar 29 03:23	12°♏12'44	
superior conj	13147 Apr 23 21:25	10°♏46'04 -1°21'35	superior conj	13148 Apr 03 14:26	21°♏30'18	-0°41'38
minimum elong	13147 Apr 23 13:14	10°♏13'13 1°21'11	minimum elong	13148 Apr 03 10:22	21°♏13'12	0°41'18
max. Earth dist.	13147 Apr 28 15:47	18°♏20'45 1.45244 AU		13148 Apr 08 18:05	0°♏	
	13147 May 06 03:08	0°♏	max. Earth dist.	13148 Apr 10 09:08	2°♏37'48	1.44010 AU
evening rise	13147 May 09 17:15	5°♏31'02	evening rise	13148 Apr 18 06:26	15°♏04'00	
greatest brilliancy	13147 May 24 17:42	28°♏02'41 -0.6m		13148 Apr 28 03:19	0°♏	
	13147 May 26 02:19	0°♏	evening max el	13148 May 18 18:23	27°♏27'02	21°12'59
evening max el	13147 Jun 05 19:58	13°♏39'12 20°04'43		13148 May 21 14:21	0°♏	
asc. node	13147 Jun 06 02:53	13°♏56'22	asc. node	13148 May 23 00:01	0°♏59'50	
retrograde	13147 Jun 13 12:05	18°♏02'04	retrograde	13148 May 27 10:49	2°♏31'02	
evening set	13147 Jun 17 10:11	16°♏33'23	evening set	13148 May 31 19:16	0°♏45'50	
inferior conj	13147 Jun 22 17:16	10°♏32'11 3°12'58		13148 Jun 01 15:50	30°♏♏	
minimum elong	13147 Jun 22 17:24	10°♏31'43 3°11'58	inferior conj	13148 Jun 06 01:17	24°♏33'00	3°08'41
min. Earth dist.	13147 Jun 23 15:09	9°♏17'56 0.67945 AU	minimum elong	13148 Jun 06 00:27	24°♏35'54	3°07'37
morning rise	13147 Jun 28 00:17	4°♏10'29	min. Earth dist.	13148 Jun 06 09:34	24°♏04'14	0.68659 AU

morning rise	13148 Jun 11 05:27	18° Π 15'54		morning rise	13149 May 26 14:43	2° Π 30'13	
direct	13148 Jun 16 09:24	16° Π 00'47		direct	13149 May 31 05:43	0° Π 34'21	
desc. node	13148 Jun 25 04:20	20° Π 39'30		morning max el	13149 Jun 09 07:25	5° Π 51'23	21°43'32
morning max el	13148 Jun 26 17:44	22° Π 09'43	23°10'46	desc. node	13149 Jun 12 01:23	8° Π 48'44	
	13148 Jul 03 13:22	0° \mathfrak{C}			13149 Jun 27 19:22	0° \mathfrak{C}	
	13148 Jul 24 09:38	0° Ω		morning set	13149 Jul 11 12:45	20° \mathfrak{C} 59'06	
morning set	13148 Jul 31 07:27	11° Ω 11'22			13149 Jul 17 02:25	0° Ω	
max. Earth dist.	13148 Aug 04 13:04	18° Ω 22'01	1.39722 AU	max. Earth dist.	13149 Jul 17 14:55	0° Ω 51'36	1.41965 AU
	13148 Aug 11 02:20	0° \mathfrak{M}					
superior conj	13148 Aug 12 06:46	2° \mathfrak{M} 10'22	-0°59'05	superior conj	13149 Jul 25 05:45	13° Ω 47'22	-1°32'40
minimum elong	13148 Aug 12 11:05	2° \mathfrak{M} 30'18	0°58'56	minimum elong	13149 Jul 25 12:26	14° Ω 16'33	1°32'38
asc. node	13148 Aug 19 00:09	14° \mathfrak{M} 51'07			13149 Aug 03 06:53	0° \mathfrak{M}	
evening rise	13148 Aug 21 19:44	20° \mathfrak{M} 15'50		evening rise	13149 Aug 05 03:48	3° \mathfrak{M} 25'48	
	13148 Aug 26 23:23	0° \mathfrak{L}		asc. node	13149 Aug 05 20:47	4° \mathfrak{M} 43'37	
evening max el	13148 Sep 06 20:37	16° \mathfrak{L} 13'19	18°35'42	evening max el	13149 Aug 21 05:51	28° \mathfrak{M} 55'45	18°09'45
retrograde	13148 Sep 14 21:21	20° \mathfrak{L} 16'07			13149 Aug 22 09:51	0° \mathfrak{L}	
evening set	13148 Sep 16 20:21	20° \mathfrak{L} 02'27		retrograde	13149 Aug 28 06:39	2° \mathfrak{L} 30'41	
desc. node	13148 Sep 21 01:09	18° \mathfrak{L} 12'33		evening set	13149 Aug 30 12:35	2° \mathfrak{L} 09'14	
inferior conj	13148 Sep 24 18:38	15° \mathfrak{L} 34'50	-1°10'46		13149 Sep 03 11:44	30° \mathfrak{R} \mathfrak{M}	
minimum elong	13148 Sep 24 15:47	15° \mathfrak{L} 40'15	1°09'26	inferior conj	13149 Sep 06 16:21	27° \mathfrak{M} 21'06	0°23'15
min. Earth dist.	13148 Sep 27 23:16	13° \mathfrak{L} 09'42	0.57409 AU	minimum elong	13149 Sep 06 17:07	27° \mathfrak{M} 19'24	0°22'48
morning rise	13148 Oct 02 07:45	10° \mathfrak{L} 27'11		desc. node	13149 Sep 07 22:41	26° \mathfrak{M} 13'18	
direct	13148 Oct 08 07:11	8° \mathfrak{L} 57'59		min. Earth dist.	13149 Sep 09 23:19	24° \mathfrak{M} 26'56	0.59574 AU
morning max el	13148 Oct 22 14:18	16° \mathfrak{L} 27'58	26°48'42	morning rise	13149 Sep 13 18:19	21° \mathfrak{M} 40'09	
	13148 Nov 02 16:32	0° \mathfrak{M}		direct	13149 Sep 20 05:21	19° \mathfrak{M} 43'05	
asc. node	13148 Nov 15 01:56	20° \mathfrak{M} 59'21		morning max el	13149 Oct 04 13:15	27° \mathfrak{M} 32'34	27°42'49
	13148 Nov 19 13:23	0° \mathfrak{J}			13149 Oct 06 22:07	0° \mathfrak{L}	
morning set	13148 Nov 21 05:18	3° \mathfrak{J} 31'00			13149 Oct 27 09:24	0° \mathfrak{M}	
				asc. node	13149 Nov 01 22:41	10° \mathfrak{M} 35'06	
superior conj	13148 Nov 28 01:25	18° \mathfrak{J} 34'17	1°35'02	morning set	13149 Nov 05 11:34	17° \mathfrak{M} 50'54	
minimum elong	13148 Nov 28 00:19	18° \mathfrak{J} 28'13	1°35'56		13149 Nov 11 01:53	0° \mathfrak{J}	
max. Earth dist.	13148 Nov 28 10:33	19° \mathfrak{J} 25'16	1.31342 AU	max. Earth dist.	13149 Nov 11 18:56	1° \mathfrak{J} 34'46	1.31248 AU
	13148 Dec 03 05:39	0° \mathfrak{Z}					
evening rise	13148 Dec 04 21:52	3° \mathfrak{Z} 35'24		superior conj	13149 Nov 12 12:55	3° \mathfrak{J} 14'58	1°25'58
desc. node	13148 Dec 17 22:28	28° \mathfrak{Z} 21'10		minimum elong	13149 Nov 12 11:03	3° \mathfrak{J} 04'36	1°26'38
	13148 Dec 18 22:28	0° \approx		evening rise	13149 Nov 19 05:53	18° \mathfrak{J} 03'27	
evening max el	13149 Jan 04 18:00	21° \approx 57'10	27°06'41		13149 Nov 25 01:05	0° \mathfrak{Z}	
retrograde	13149 Jan 18 16:53	29° \approx 10'57		desc. node	13149 Dec 04 19:31	17° \mathfrak{Z} 08'07	
evening set	13149 Jan 25 12:11	27° \approx 09'57			13149 Dec 14 10:50	0° \approx	
min. Earth dist.	13149 Jan 29 08:22	24° \approx 27'52	0.60251 AU	evening max el	13149 Dec 17 15:57	3° \approx 18'38	26°06'52
inferior conj	13149 Feb 01 12:35	21° \approx 49'19	-3°01'36	retrograde	13149 Dec 31 14:31	10° \approx 22'44	
minimum elong	13149 Feb 01 19:04	21° \approx 35'47	2°58'31	evening set	13150 Jan 06 21:54	8° \approx 48'07	
morning rise	13149 Feb 09 05:01	17° \approx 02'22		min. Earth dist.	13150 Jan 11 05:08	6° \approx 11'45	0.58115 AU
direct	13149 Feb 11 06:48	16° \approx 45'31		inferior conj	13150 Jan 14 06:49	3° \approx 58'34	-4°22'50
asc. node	13149 Feb 11 00:34	16° \approx 45'47		minimum elong	13150 Jan 14 15:27	3° \approx 42'55	4°19'27
morning max el	13149 Feb 18 15:24	20° \approx 25'53	18°01'31		13150 Jan 20 23:53	30° \mathfrak{R} \mathfrak{Z}	
	13149 Feb 25 18:49	0° \mathfrak{H}		morning rise	13150 Jan 22 11:54	29° \mathfrak{Z} 33'20	
morning set	13149 Mar 06 05:18	14° \mathfrak{H} 59'24		direct	13150 Jan 24 13:36	29° \mathfrak{Z} 19'17	
	13149 Mar 14 10:12	0° \mathfrak{Y}			13150 Jan 27 23:53	0° \approx	
desc. node	13149 Mar 15 23:53	2° \mathfrak{Y} 47'39		asc. node	13150 Jan 28 21:55	0° \approx 25'00	
				morning max el	13150 Feb 01 23:17	3° \approx 26'22	18°36'10
superior conj	13149 Mar 16 07:32	3° \mathfrak{Y} 21'28	-0°02'33	morning set	13150 Feb 18 00:01	29° \approx 08'27	
minimum elong	13149 Mar 16 07:20	3° \mathfrak{Y} 20'33	0°02'28		13150 Feb 18 10:41	0° \mathfrak{H}	
behind sun begin	13149 Mar 15 23:31	2° \mathfrak{Y} 45'59		superior conj	13150 Feb 26 21:16	16° \mathfrak{H} 09'00	0°31'27
behind sun end	13149 Mar 16 15:09	3° \mathfrak{Y} 55'03		minimum elong	13150 Feb 26 23:19	16° \mathfrak{H} 18'34	0°31'28
max. Earth dist.	13149 Mar 23 21:43	16° \mathfrak{Y} 21'43	1.42219 AU	desc. node	13150 Mar 02 20:23	23° \mathfrak{H} 24'26	
evening rise	13149 Mar 29 09:23	25° \mathfrak{Y} 17'49		max. Earth dist.	13150 Mar 06 05:41	29° \mathfrak{H} 23'52	1.40080 AU
	13149 Apr 01 08:49	0° \mathfrak{B}			13150 Mar 06 14:01	0° \mathfrak{Y}	
	13149 Apr 22 00:12	0° Π		evening rise	13150 Mar 10 08:54	6° \mathfrak{Y} 26'47	
evening max el	13149 May 01 11:50	11° Π 15'44	22°30'24		13150 Mar 25 10:43	0° \mathfrak{B}	
asc. node	13149 May 09 21:13	16° Π 54'11		evening max el	13150 Apr 14 02:21	25° \mathfrak{B} 06'47	23°51'25
retrograde	13149 May 11 08:04	17° Π 03'55			13150 Apr 20 02:36	0° Π	
evening set	13149 May 16 03:32	15° Π 03'24		retrograde	13150 Apr 25 02:25	1° Π 34'57	
inferior conj	13149 May 21 10:48	8° Π 41'11	2°53'46	asc. node	13150 Apr 26 18:33	1° Π 22'17	
minimum elong	13149 May 21 09:11	8° Π 46'47	2°52'35		13150 Apr 29 13:48	30° \mathfrak{R} \mathfrak{B}	
min. Earth dist.	13149 May 21 06:08	8° Π 57'25	0.68895 AU	evening set	13150 Apr 30 09:24	29° \mathfrak{B} 21'08	

min. Earth dist.	13150 May 05 02:42	23° ♄ 51'14	0.68671 AU	minimum elong	13151 Apr 20 00:29	7° ♄ 10'37	1°52'16
inferior conj	13150 May 05 19:52	22° ♄ 52'39	2°28'41	morning rise	13151 Apr 25 13:57	1° ♄ 08'59	
minimum elong	13150 May 05 17:47	22° ♄ 59'44	2°27'26		13151 Apr 28 04:18	30° ♄ 0'0	
morning rise	13150 May 11 02:10	16° ♄ 49'08		direct	13151 Apr 29 04:28	29° ♄ 54'16	
direct	13150 May 15 04:35	15° ♄ 14'01			13151 Apr 30 05:03	0° ♄	
morning max el	13150 May 23 03:04	19° ♄ 43'43	20°25'33	morning max el	13151 May 06 06:20	3° ♄ 47'24	19°21'20
desc. node	13150 May 29 22:19	27° ♄ 44'30		desc. node	13151 May 16 19:07	17° ♄ 14'19	
	13150 May 31 14:50	0° ♄		greatest brilliancy	13151 May 19 00:02	20° ♄ 28'10	-0.7m
morning set	13150 Jun 20 20:15	29° ♄ 50'50			13151 May 25 08:00	0° ♄	
	13150 Jun 20 22:37	0° ♄		morning set	13151 May 30 22:02	8° ♄ 33'17	
max. Earth dist.	13150 Jun 29 23:23	14° ♄ 12'47	1.43855 AU	max. Earth dist.	13151 Jun 12 14:26	28° ♄ 16'36	1.45175 AU
					13151 Jun 13 16:41	0° ♄	
superior conj	13150 Jul 06 05:47	24° ♄ 24'57	-1°59'39				
minimum elong	13150 Jul 06 12:23	24° ♄ 52'14	2°00'09	superior conj	13151 Jun 16 06:40	4° ♄ 05'28	-2°13'03
	13150 Jul 09 14:08	0° ♄		minimum elong	13151 Jun 16 08:20	4° ♄ 12'07	2°14'03
evening rise	13150 Jul 18 19:36	15° ♄ 51'03		evening rise	13151 Jun 30 14:09	27° ♄ 20'47	
asc. node	13150 Jul 23 17:30	24° ♄ 23'00			13151 Jul 02 04:34	0° ♄	
	13150 Jul 27 01:24	0° ♄		asc. node	13151 Jul 10 14:19	13° ♄ 44'17	
evening max el	13150 Aug 04 19:22	12° ♄ 06'12	18°03'13	evening max el	13151 Jul 19 09:38	25° ♄ 35'55	18°15'07
retrograde	13150 Aug 11 07:01	15° ♄ 27'35		retrograde	13151 Jul 25 18:12	28° ♄ 58'04	
evening set	13150 Aug 13 21:09	14° ♄ 54'45		evening set	13151 Jul 28 16:47	28° ♄ 11'12	
inferior conj	13150 Aug 20 08:45	9° ♄ 47'22	1°34'44	inferior conj	13151 Aug 03 15:51	22° ♄ 46'26	2°24'12
minimum elong	13150 Aug 20 11:06	9° ♄ 41'23	1°33'32	minimum elong	13151 Aug 03 18:18	22° ♄ 39'27	2°22'55
min. Earth dist.	13150 Aug 23 08:19	6° ♄ 46'23	0.61869 AU	min. Earth dist.	13151 Aug 06 02:49	19° ♄ 59'10	0.64031 AU
desc. node	13150 Aug 25 20:13	4° ♄ 32'38		morning rise	13151 Aug 09 18:17	16° ♄ 28'49	
morning rise	13150 Aug 26 22:34	3° ♄ 43'10		desc. node	13151 Aug 12 17:41	14° ♄ 39'36	
direct	13150 Sep 02 14:48	1° ♄ 22'38		direct	13151 Aug 16 09:15	13° ♄ 53'20	
morning max el	13150 Sep 16 18:36	9° ♄ 22'33	27°58'13	morning max el	13151 Aug 30 04:07	21° ♄ 53'22	27°36'28
	13150 Oct 02 18:26	0° ♄			13151 Sep 06 06:28	0° ♄	
asc. node	13150 Oct 19 19:22	0° ♄ 25'17			13151 Sep 25 23:13	0° ♄	
	13150 Oct 19 14:24	0° ♄		morning set	13151 Oct 04 04:55	15° ♄ 27'12	
morning set	13150 Oct 20 12:14	1° ♄ 51'30		asc. node	13151 Oct 06 16:01	20° ♄ 25'04	
max. Earth dist.	13150 Oct 26 00:23	13° ♄ 32'47	1.31680 AU	max. Earth dist.	13151 Oct 08 23:21	25° ♄ 11'56	1.32651 AU
					13151 Oct 11 05:39	0° ♄	
superior conj	13150 Oct 27 22:42	17° ♄ 46'49	1°11'13				
minimum elong	13150 Oct 27 20:27	17° ♄ 34'25	1°11'34	superior conj	13151 Oct 12 04:48	2° ♄ 04'20	0°50'55
	13150 Nov 02 11:41	0° ♄		minimum elong	13151 Oct 12 02:41	1° ♄ 52'56	0°50'58
evening rise	13150 Nov 03 16:25	2° ♄ 35'53		evening rise	13151 Oct 19 03:37	17° ♄ 07'52	
	13150 Nov 18 05:46	0° ♄			13151 Oct 25 10:27	0° ♄	
desc. node	13150 Nov 21 16:41	5° ♄ 02'28		desc. node	13151 Nov 08 13:58	21° ♄ 44'08	
evening max el	13150 Nov 29 05:55	13° ♄ 51'14	24°39'06	evening max el	13151 Nov 10 15:55	23° ♄ 54'01	22°57'31
retrograde	13150 Dec 12 23:50	20° ♄ 43'08			13151 Nov 20 10:19	0° ♄	
evening set	13150 Dec 18 08:37	19° ♄ 39'27		retrograde	13151 Nov 23 19:57	0° ♄ 26'31	
min. Earth dist.	13150 Dec 23 17:42	16° ♄ 51'49	0.56256 AU		13151 Nov 27 07:29	30° ♄ 0'0	
inferior conj	13150 Dec 26 04:30	15° ♄ 19'05	-5°28'35	evening set	13151 Nov 27 20:42	29° ♄ 51'12	
minimum elong	13150 Dec 26 11:36	15° ♄ 07'51	5°26'25	min. Earth dist.	13151 Dec 05 00:56	26° ♄ 33'35	0.54970 AU
morning rise	13151 Jan 03 16:39	11° ♄ 14'51		inferior conj	13151 Dec 06 06:58	25° ♄ 50'40	-5°55'50
direct	13151 Jan 06 01:34	10° ♄ 59'31		minimum elong	13151 Dec 06 06:53	25° ♄ 50'47	5°54'50
asc. node	13151 Jan 15 19:13	15° ♄ 39'38		morning rise	13151 Dec 14 18:33	22° ♄ 01'38	
morning max el	13151 Jan 15 20:21	15° ♄ 42'22	19°33'00	direct	13151 Dec 17 19:21	21° ♄ 40'09	
	13151 Jan 26 00:29	0° ♄		morning max el	13151 Dec 29 03:22	27° ♄ 04'33	20°53'01
morning set	13151 Feb 02 02:59	13° ♄ 38'37			13151 Dec 31 21:24	0° ♄	
				asc. node	13152 Jan 02 16:26	2° ♄ 13'29	
superior conj	13151 Feb 10 03:02	29° ♄ 40'23	0°58'31	morning set	13152 Jan 17 11:08	28° ♄ 20'11	
minimum elong	13151 Feb 10 05:50	29° ♄ 54'03	0°58'42		13152 Jan 18 06:22	0° ♄	
	13151 Feb 10 07:03	0° ♄					
max. Earth dist.	13151 Feb 16 12:03	11° ♄ 47'56	1.37833 AU	superior conj	13152 Jan 24 20:32	13° ♄ 42'52	1°18'21
desc. node	13151 Feb 17 16:56	13° ♄ 59'47		minimum elong	13152 Jan 24 23:02	13° ♄ 55'41	1°18'52
evening rise	13151 Feb 20 05:19	18° ♄ 29'39		max. Earth dist.	13152 Jan 29 21:05	23° ♄ 46'47	1.35707 AU
	13151 Feb 27 00:07	0° ♄			13152 Feb 02 03:08	0° ♄	
	13151 Mar 19 16:47	0° ♄		evening rise	13152 Feb 02 19:39	1° ♄ 17'04	
evening max el	13151 Mar 27 16:00	8° ♄ 59'56	25°09'15	desc. node	13152 Feb 04 13:32	4° ♄ 29'22	
retrograde	13151 Apr 08 16:38	15° ♄ 58'36			13152 Feb 20 02:16	0° ♄	
asc. node	13151 Apr 13 15:58	14° ♄ 12'27		evening max el	13152 Mar 09 05:41	22° ♄ 49'30	26°16'44
evening set	13151 Apr 14 11:20	13° ♄ 34'13			13152 Mar 20 14:31	0° ♄	
min. Earth dist.	13151 Apr 18 21:03	8° ♄ 40'12	0.68000 AU	retrograde	13152 Mar 22 01:47	0° ♄ 07'27	
inferior conj	13151 Apr 20 02:35	7° ♄ 03'41	1°53'27		13152 Mar 23 12:03	30° ♄ 0'0	

evening set	13152 Mar 28 07:32	27° Υ 36'23		retrograde	13153 Mar 05 05:07	13° Υ 53'42	
asc. node	13152 Mar 30 13:25	25° Υ 28'05		evening set	13153 Mar 11 20:06	11° Υ 21'23	
min. Earth dist.	13152 Apr 01 10:57	23° Υ 17'29	0.66902 AU	min. Earth dist.	13153 Mar 15 18:22	7° Υ 35'48	0.65405 AU
inferior conj	13152 Apr 03 04:55	21° Υ 08'56	1°07'40	asc. node	13153 Mar 17 10:52	5° Υ 41'56	
minimum elong	13152 Apr 03 03:20	21° Υ 13'47	1°06'50	inferior conj	13153 Mar 18 00:30	5° Υ 03'17	0°10'55
morning rise	13152 Apr 08 23:58	15° Υ 24'46		minimum elong	13153 Mar 18 00:11	5° Υ 04'09	0°10'50
direct	13152 Apr 12 03:36	14° Υ 28'39		transit middle	13153 Mar 18 00:11	5° Υ 04'09	0°10'50
morning max el	13152 Apr 18 16:40	17° Υ 58'18	18°33'01	transit begin	13153 Mar 17 21:59	5° Υ 10'24	
	13152 Apr 27 23:35	0° ♄		transit end	13153 Mar 18 02:24	4° Υ 57'54	
desc. node	13152 May 02 15:48	7° ♄ 08'24			13153 Mar 23 09:25	30° ♄	
morning set	13152 May 09 15:42	18° ♄ 06'17		morning rise	13153 Mar 24 05:51	29° ♄ 31'37	
	13152 May 17 05:38	0° ♄		direct	13153 Mar 26 23:46	28° ♄ 51'11	
					13153 Mar 30 15:09	0° Υ	
superior conj	13152 May 25 16:02	13° ♄ 10'41	-2°07'10	morning max el	13153 Apr 02 08:06	2° Υ 10'02	18°01'29
minimum elong	13152 May 25 10:05	12° ♄ 47'26	2°07'49	desc. node	13153 Apr 19 12:24	27° Υ 20'16	
max. Earth dist.	13152 May 25 09:35	12° ♄ 45'28	1.45788 AU	morning set	13153 Apr 20 13:02	29° Υ 00'56	
	13152 Jun 05 09:29	0° ♄			13153 Apr 21 03:29	0° ♄	
evening rise	13152 Jun 10 08:12	7° ♄ 49'17					
greatest brilliancy	13152 Jun 18 15:33	20° ♄ 57'28	-0.8m	superior conj	13153 May 05 02:27	22° ♄ 25'45	-1°42'06
	13152 Jun 24 14:07	0° ♄		minimum elong	13153 May 04 17:16	21° ♄ 49'29	1°41'57
asc. node	13152 Jun 26 11:14	2° ♄ 40'26		max. Earth dist.	13153 May 08 05:37	27° ♄ 21'03	1.45651 AU
evening max el	13152 Jul 01 21:36	9° ♄ 16'56	18°44'47		13153 May 09 22:17	0° ♄	
retrograde	13152 Jul 08 12:16	12° ♄ 53'27		evening rise	13153 May 21 04:47	17° ♄ 28'01	
evening set	13152 Jul 11 19:30	11° ♄ 50'57			13153 May 29 09:00	0° ♄	
inferior conj	13152 Jul 17 09:46	6° ♄ 10'45	2°54'55	greatest brilliancy	13153 Jun 03 11:24	7° ♄ 39'47	-0.7m
minimum elong	13152 Jul 17 11:31	6° ♄ 05'17	2°53'46	asc. node	13153 Jun 13 08:13	21° ♄ 02'17	
min. Earth dist.	13152 Jul 19 06:19	3° ♄ 52'31	0.65875 AU	evening max el	13153 Jun 15 05:01	23° ♄ 02'51	19°31'11
	13152 Jul 22 20:53	30° ♄		retrograde	13153 Jun 22 09:58	27° ♄ 06'09	
morning rise	13152 Jul 23 02:42	29° ♄ 47'23		evening set	13153 Jun 26 02:22	25° ♄ 47'11	
direct	13152 Jul 29 11:21	27° ♄ 06'47		inferior conj	13153 Jul 01 11:12	19° ♄ 53'10	3°10'11
desc. node	13152 Jul 29 15:05	27° ♄ 06'52		minimum elong	13153 Jul 01 11:57	19° ♄ 50'42	3°09'09
	13152 Aug 05 23:31	0° ♄		min. Earth dist.	13153 Jul 02 17:14	18° ♄ 13'48	0.67315 AU
morning max el	13152 Aug 11 15:21	4° ♄ 54'45	26°43'56	morning rise	13153 Jul 06 21:04	13° ♄ 29'35	
	13152 Aug 30 19:21	0° ♄		direct	13153 Jul 12 20:03	10° ♄ 53'00	
morning set	13152 Sep 16 10:39	28° ♄ 31'22		desc. node	13153 Jul 16 12:23	11° ♄ 42'42	
	13152 Sep 17 05:13	0° ♄		morning max el	13153 Jul 25 02:10	18° ♄ 13'43	25°29'17
max. Earth dist.	13152 Sep 20 13:01	6° ♄ 30'29	1.34145 AU		13153 Aug 04 00:02	0° ♄	
asc. node	13152 Sep 22 12:37	10° ♄ 30'27			13153 Aug 23 19:55	0° ♄	
				morning set	13153 Aug 30 01:33	10° ♄ 53'49	
superior conj	13152 Sep 25 04:55	16° ♄ 01'56	0°25'17	max. Earth dist.	13153 Sep 02 16:41	17° ♄ 35'40	1.36101 AU
minimum elong	13152 Sep 25 03:37	15° ♄ 55'09	0°25'11				
	13152 Oct 01 19:35	0° ♄		superior conj	13153 Sep 08 20:08	29° ♄ 31'37	-0°05'08
evening rise	13152 Oct 02 13:33	1° ♄ 34'41		minimum elong	13153 Sep 08 20:28	29° ♄ 33'14	0°05'12
	13152 Oct 18 16:30	0° ♄		behind sun begin	13153 Sep 08 14:28	29° ♄ 03'17	
evening max el	13152 Oct 22 07:14	4° ♄ 04'22	21°20'01	behind sun end	13153 Sep 09 02:27	0° ♄ 03'14	
desc. node	13152 Oct 25 11:20	6° ♄ 48'20		asc. node	13153 Sep 09 09:11	0° ♄ 36'57	
retrograde	13152 Nov 03 07:42	10° ♄ 02'46			13153 Sep 09 01:49	0° ♄	
evening set	13152 Nov 06 00:44	9° ♄ 45'46		evening rise	13153 Sep 16 20:02	15° ♄ 49'37	
inferior conj	13152 Nov 14 22:54	5° ♄ 51'55	-5°25'23		13153 Sep 24 02:16	0° ♄	
minimum elong	13152 Nov 14 14:41	6° ♄ 03'27	5°23'04	evening max el	13153 Oct 04 11:29	14° ♄ 53'32	19°59'18
min. Earth dist.	13152 Nov 15 06:59	5° ♄ 40'33	0.54512 AU	desc. node	13153 Oct 12 08:46	19° ♄ 46'55	
morning rise	13152 Nov 23 05:23	2° ♄ 02'26		retrograde	13153 Oct 14 21:30	20° ♄ 04'46	
direct	13152 Nov 27 03:06	1° ♄ 29'36		evening set	13153 Oct 16 20:45	19° ♄ 54'29	
morning max el	13152 Dec 09 21:01	7° ♄ 36'42	22°32'50	inferior conj	13153 Oct 25 18:30	15° ♄ 55'02	-4°01'33
asc. node	13152 Dec 19 13:32	19° ♄ 49'44		minimum elong	13153 Oct 25 08:47	16° ♄ 09'46	3°57'48
	13152 Dec 25 10:21	0° ♄		min. Earth dist.	13153 Oct 27 15:17	14° ♄ 47'14	0.54998 AU
morning set	13152 Dec 31 22:07	13° ♄ 06'19		morning rise	13153 Nov 02 19:32	11° ♄ 44'06	
				direct	13153 Nov 07 14:41	10° ♄ 53'48	
superior conj	13153 Jan 07 22:17	28° ♄ 06'45	1°31'12	morning max el	13153 Nov 21 07:27	17° ♄ 39'26	24°21'35
minimum elong	13153 Jan 07 23:56	28° ♄ 15'30	1°32'01		13153 Dec 01 09:01	0° ♄	
	13153 Jan 08 19:38	0° ♄		asc. node	13153 Dec 06 10:31	8° ♄ 13'03	
max. Earth dist.	13153 Jan 11 12:26	5° ♄ 38'24	1.33896 AU	morning set	13153 Dec 16 10:00	27° ♄ 51'05	
evening rise	13153 Jan 16 00:25	14° ♄ 40'09			13153 Dec 17 09:56	0° ♄	
desc. node	13153 Jan 21 10:13	24° ♄ 48'57					
	13153 Jan 24 08:44	0° ♄		superior conj	13153 Dec 23 05:29	12° ♄ 43'25	1°37'30
	13153 Feb 13 20:04	0° Υ		minimum elong	13153 Dec 23 06:03	12° ♄ 46'29	1°38'30
evening max el	13153 Feb 19 19:10	6° Υ 27'03	27°06'34	max. Earth dist.	13153 Dec 25 11:20	17° ♄ 35'45	1.32517 AU

max. Earth dist.	13155 Nov 22 01:02	11° ♄ 55'55	1.31242 AU	superior conj	13156 Nov 05 14:32	26° ♄ 47'30	1°20'24
evening rise	13155 Nov 28 21:59	27° ♄ 04'07		minimum elong	13156 Nov 05 12:27	26° ♄ 35'56	1°20'56
	13155 Nov 30 07:14	0° ♄			13156 Nov 07 01:08	0° ♄	
desc. node	13155 Dec 13 00:52	23° ♄ 45'35		evening rise	13156 Nov 12 07:20	11° ♄ 34'56	
	13155 Dec 17 01:57	0° ♄			13156 Nov 21 12:19	0° ♄	
evening max el	13155 Dec 28 19:03	14° ♄ 14'29	26°45'21	desc. node	13156 Nov 28 21:58	12° ♄ 12'31	
retrograde	13156 Jan 11 17:53	21° ♄ 23'24		evening max el	13156 Dec 09 13:22	25° ♄ 13'41	25°32'12
evening set	13156 Jan 18 09:23	19° ♄ 33'05			13156 Dec 15 19:15	0° ♄	
min. Earth dist.	13156 Jan 22 09:04	16° ♄ 55'13	0.59326 AU	retrograde	13156 Dec 23 10:16	2° ♄ 12'55	
inferior conj	13156 Jan 25 13:18	14° ♄ 25'48	-3°36'47	evening set	13156 Dec 29 09:41	0° ♄ 50'56	
minimum elong	13156 Jan 25 20:56	14° ♄ 10'47	3°33'24		13156 Dec 31 02:52	30° ♄	
morning rise	13156 Feb 02 11:29	9° ♄ 47'38		min. Earth dist.	13157 Jan 03 01:39	28° ♄ 12'22	0.57276 AU
direct	13156 Feb 04 12:41	9° ♄ 32'19		inferior conj	13157 Jan 05 22:53	26° ♄ 14'44	-4°53'52
asc. node	13156 Feb 06 03:05	9° ♄ 42'02		minimum elong	13157 Jan 06 07:31	26° ♄ 00'02	4°50'49
morning max el	13156 Feb 12 06:42	13° ♄ 22'49	18°13'41	morning rise	13157 Jan 14 07:55	21° ♄ 59'02	
	13156 Feb 23 11:54	0° ♄		direct	13157 Jan 16 11:49	21° ♄ 44'54	
morning set	13156 Feb 27 23:01	8° ♄ 18'10		asc. node	13157 Jan 23 00:26	24° ♄ 03'21	
				morning max el	13157 Jan 25 10:28	26° ♄ 05'42	18°57'36
superior conj	13156 Mar 08 11:51	26° ♄ 02'12	0°12'40		13157 Jan 28 20:26	0° ♄	
minimum elong	13156 Mar 08 12:49	26° ♄ 06'32	0°12'41	morning set	13157 Feb 10 21:39	22° ♄ 37'25	
behind sun begin	13156 Mar 08 08:14	25° ♄ 45'51			13157 Feb 14 15:29	0° ♄	
behind sun end	13156 Mar 08 17:23	26° ♄ 27'12					
desc. node	13156 Mar 10 02:02	28° ♄ 53'31		superior conj	13157 Feb 19 08:58	9° ♄ 10'06	0°43'49
	13156 Mar 10 16:59	0° ♄		minimum elong	13157 Feb 19 11:30	9° ♄ 22'07	0°43'52
max. Earth dist.	13156 Mar 16 02:27	9° ♄ 20'52	1.41342 AU	desc. node	13157 Feb 24 22:34	19° ♄ 30'12	
evening rise	13156 Mar 20 21:06	17° ♄ 16'23		max. Earth dist.	13157 Feb 26 09:27	22° ♄ 06'28	1.39120 AU
	13156 Mar 28 23:00	0° ♄		evening rise	13157 Mar 02 05:39	28° ♄ 48'27	
	13156 Apr 19 16:04	0° ♄			13157 Mar 02 22:27	0° ♄	
evening max el	13156 Apr 23 19:08	4° ♄ 30'13	23°04'47		13157 Mar 22 09:27	0° ♄	
asc. node	13156 May 03 23:45	10° ♄ 35'29		evening max el	13157 Apr 06 08:56	18° ♄ 21'50	24°25'18
retrograde	13156 May 04 03:07	10° ♄ 35'35		retrograde	13157 Apr 17 19:52	25° ♄ 04'31	
evening set	13156 May 09 03:33	8° ♄ 29'00		asc. node	13157 Apr 20 21:07	24° ♄ 23'02	
inferior conj	13156 May 14 11:58	2° ♄ 03'55	2°44'20	evening set	13157 Apr 23 07:59	22° ♄ 45'27	
minimum elong	13156 May 14 10:07	2° ♄ 10'19	2°43'08	min. Earth dist.	13157 Apr 27 21:45	17° ♄ 31'10	0.68437 AU
min. Earth dist.	13156 May 14 01:57	2° ♄ 38'37	0.68863 AU	inferior conj	13157 Apr 28 20:17	16° ♄ 15'29	2°14'59
	13156 May 16 00:20	30° ♄		minimum elong	13157 Apr 28 18:08	16° ♄ 22'44	2°13'45
morning rise	13156 May 19 16:37	25° ♄ 56'11		morning rise	13157 May 04 04:26	10° ♄ 15'48	
direct	13156 May 24 02:16	24° ♄ 09'03		direct	13157 May 08 01:37	8° ♄ 49'43	
morning max el	13156 Jun 01 15:33	29° ♄ 04'19	21°08'56	morning max el	13157 May 15 14:30	13° ♄ 02'18	19°56'28
	13156 Jun 02 13:18	0° ♄		desc. node	13157 May 24 00:34	23° ♄ 18'35	
desc. node	13156 Jun 06 03:41	4° ♄ 06'58			13157 May 28 17:39	0° ♄	
	13156 Jun 24 13:54	0° ♄		morning set	13157 Jun 11 14:35	20° ♄ 51'51	
morning set	13156 Jul 02 12:02	12° ♄ 10'37			13157 Jun 17 12:02	0° ♄	
max. Earth dist.	13156 Jul 09 18:39	23° ♄ 47'59	1.42835 AU	max. Earth dist.	13157 Jun 22 06:19	7° ♄ 30'11	1.44489 AU
	13156 Jul 13 12:55	0° ♄					
superior conj	13156 Jul 16 23:15	5° ♄ 46'46	-1°45'18	superior conj	13157 Jun 27 13:07	15° ♄ 59'03	-2°07'24
minimum elong	13156 Jul 17 06:22	6° ♄ 17'06	1°45'27	minimum elong	13157 Jun 27 18:16	16° ♄ 19'57	2°08'10
evening rise	13156 Jul 28 13:31	26° ♄ 09'22			13157 Jul 06 00:36	0° ♄	
asc. node	13156 Jul 30 23:04	0° ♄		evening rise	13157 Jul 10 20:57	8° ♄ 13'15	
	13156 Jul 30 16:59	0° ♄		asc. node	13157 Jul 17 19:50	20° ♄ 00'19	
evening max el	13156 Aug 13 22:14	21° ♄ 49'33	18°04'34		13157 Jul 24 06:04	0° ♄	
retrograde	13156 Aug 20 16:08	25° ♄ 17'06		evening max el	13157 Jul 28 12:27	5° ♄ 09'41	18°06'01
evening set	13156 Aug 23 01:30	24° ♄ 51'08		retrograde	13157 Aug 03 21:48	8° ♄ 30'07	
inferior conj	13156 Aug 29 21:57	19° ♄ 54'10	0°56'25	evening set	13157 Aug 06 15:23	7° ♄ 51'42	
minimum elong	13156 Aug 29 23:37	19° ♄ 50'14	0°55'32	inferior conj	13157 Aug 12 21:12	2° ♄ 36'37	1°58'10
min. Earth dist.	13156 Sep 02 02:29	16° ♄ 54'41	0.60554 AU	minimum elong	13157 Aug 12 23:43	2° ♄ 29'51	1°56'53
desc. node	13156 Sep 02 01:15	16° ♄ 57'27			13157 Aug 15 07:43	30° ♄	
morning rise	13156 Sep 05 18:45	14° ♄ 02'03		min. Earth dist.	13157 Aug 15 15:47	29° ♄ 39'07	0.62811 AU
direct	13156 Sep 12 08:41	11° ♄ 54'32		morning rise	13157 Aug 19 05:58	26° ♄ 25'16	
morning max el	13156 Sep 26 15:28	19° ♄ 49'00	27°54'15	desc. node	13157 Aug 19 22:45	25° ♄ 55'45	
	13156 Oct 05 08:34	0° ♄		direct	13157 Aug 25 22:10	23° ♄ 57'16	
	13156 Oct 23 19:42	0° ♄			13157 Sep 06 21:04	0° ♄	
asc. node	13156 Oct 27 00:57	6° ♄ 19'41		morning max el	13157 Sep 08 23:15	1° ♄ 59'21	27°53'14
morning set	13156 Oct 29 09:48	11° ♄ 11'20			13157 Sep 29 15:58	0° ♄	
max. Earth dist.	13156 Nov 04 08:53	24° ♄ 03'06	1.31370 AU	morning set	13157 Oct 13 07:26	25° ♄ 03'01	
				asc. node	13157 Oct 13 21:38	26° ♄ 15'12	
					13157 Oct 15 17:10	0° ♄	

max. Earth dist.	13157 Oct 18 12:07	5°♄54'54	1.32029 AU	max. Earth dist.	13158 Oct 01 07:04	17°♄23'44	1.33224 AU
superior conj	13157 Oct 20 23:02	11°♄14'26	1°03'17	superior conj	13158 Oct 05 02:53	25°♄24'31	0°40'40
minimum elong	13157 Oct 20 20:46	11°♄02'03	1°03'30	minimum elong	13158 Oct 05 01:01	25°♄14'37	0°40'39
evening rise	13157 Oct 27 18:23	26°♄08'08			13158 Oct 07 06:22	0°♄	
	13157 Oct 29 13:54	0°♄		evening rise	13158 Oct 12 05:15	10°♄38'29	
desc. node	13157 Nov 15 19:10	29°♄39'01			13158 Oct 22 02:25	0°♄	
	13157 Nov 16 01:49	0°♄		evening max el	13158 Nov 02 11:39	15°♄31'14	22°14'37
evening max el	13157 Nov 21 00:32	5°♄29'19	23°56'21	desc. node	13158 Nov 02 16:28	15°♄42'54	
retrograde	13157 Dec 04 14:16	12°♄15'10		retrograde	13158 Nov 15 06:03	21°♄51'06	
evening set	13157 Dec 09 10:10	11°♄24'13		evening set	13158 Nov 18 16:02	21°♄25'22	
min. Earth dist.	13157 Dec 15 11:29	8°♄25'57	0.55623 AU	inferior conj	13158 Nov 27 08:22	17°♄29'23	-5°50'25
inferior conj	13157 Dec 17 11:48	7°♄13'19	-5°46'17	minimum elong	13158 Nov 27 04:23	17°♄34'58	5°49'10
minimum elong	13157 Dec 17 16:28	7°♄06'16	5°44'48	min. Earth dist.	13158 Nov 26 18:11	17°♄49'18	0.54664 AU
morning rise	13157 Dec 26 00:41	3°♄17'00		morning rise	13158 Dec 05 17:55	13°♄42'08	
direct	13157 Dec 28 15:07	2°♄59'52		direct	13158 Dec 09 03:13	13°♄16'28	
morning max el	13158 Jan 08 01:54	7°♄59'52	20°04'18	morning max el	13158 Dec 21 02:52	19°♄00'00	21°33'26
asc. node	13158 Jan 09 21:42	9°♄53'47		asc. node	13158 Dec 27 18:51	26°♄56'30	
	13158 Jan 22 12:36	0°♄			13158 Dec 29 19:54	0°♄	
morning set	13158 Jan 26 03:05	7°♄12'59		morning set	13159 Jan 10 12:41	21°♄57'26	
					13159 Jan 14 08:04	0°♄	
superior conj	13158 Feb 02 20:11	22°♄56'04	1°07'48	superior conj	13159 Jan 17 17:35	7°♄09'08	1°24'37
minimum elong	13158 Feb 02 22:57	23°♄09'53	1°08'07	minimum elong	13159 Jan 17 19:46	7°♄20'32	1°25'16
	13158 Feb 06 10:21	0°♄		max. Earth dist.	13159 Jan 22 03:04	16°♄08'38	1.34890 AU
max. Earth dist.	13158 Feb 08 15:55	4°♄15'37	1.36895 AU	evening rise	13159 Jan 26 07:02	24°♄15'40	
desc. node	13158 Feb 11 19:08	10°♄03'37			13159 Jan 29 09:10	0°♄	
evening rise	13158 Feb 12 10:04	11°♄11'09		desc. node	13159 Jan 29 15:46	0°♄29'58	
	13158 Feb 23 13:46	0°♄			13159 Feb 17 03:36	0°♄	
	13158 Mar 17 18:17	0°♄		evening max el	13159 Mar 02 12:07	15°♄59'53	26°40'39
evening max el	13158 Mar 19 22:19	2°♄13'22	25°39'44	retrograde	13159 Mar 15 15:05	23°♄23'01	
retrograde	13158 Apr 01 08:13	9°♄22'36		evening set	13159 Mar 22 00:54	20°♄50'56	
evening set	13158 Apr 07 07:41	6°♄54'39		asc. node	13159 Mar 25 15:58	17°♄15'13	
asc. node	13158 Apr 07 18:33	6°♄31'01		min. Earth dist.	13159 Mar 26 02:02	16°♄46'13	0.66304 AU
min. Earth dist.	13158 Apr 11 14:30	2°♄15'42	0.67574 AU	inferior conj	13159 Mar 28 01:09	14°♄26'27	0°44'59
inferior conj	13158 Apr 13 01:23	0°♄24'27	1°35'20	minimum elong	13159 Mar 28 00:00	14°♄29'50	0°44'25
minimum elong	13158 Apr 12 23:25	0°♄30'44	1°34'16	morning rise	13159 Apr 03 00:14	8°♄47'03	
	13158 Apr 13 09:03	30°♄		direct	13159 Apr 05 23:33	7°♄58'00	
morning rise	13158 Apr 18 15:41	24°♄34'02		morning max el	13159 Apr 12 09:42	11°♄21'53	18°17'29
direct	13158 Apr 22 01:19	23°♄27'43			13159 Apr 25 19:57	0°♄	
morning max el	13158 Apr 28 20:57	27°♄09'41	18°58'46	desc. node	13159 Apr 27 17:59	3°♄02'26	
	13158 May 01 11:34	0°♄		morning set	13159 May 02 01:31	9°♄55'13	
desc. node	13158 May 10 21:19	12°♄59'39			13159 May 14 17:56	0°♄	
greatest brilliancy	13158 May 12 04:38	14°♄57'21	-0.7m	superior conj	13159 May 17 13:24	4°♄24'03	-1°58'34
morning set	13158 May 21 20:37	29°♄48'33		minimum elong	13159 May 17 05:13	3°♄52'06	1°58'53
	13158 May 21 23:35	0°♄		max. Earth dist.	13159 May 18 18:24	6°♄17'23	1.45821 AU
max. Earth dist.	13158 Jun 04 22:49	21°♄44'27	1.45515 AU	evening rise	13159 Jun 02 13:08	29°♄20'47	
superior conj	13158 Jun 07 05:48	25°♄20'11	-2°13'06		13159 Jun 02 23:11	0°♄	
minimum elong	13158 Jun 07 04:10	25°♄13'46	2°14'05	greatest brilliancy	13159 Jun 13 04:06	15°♄50'50	-0.8m
	13158 Jun 10 04:46	0°♄		asc. node	13159 Jun 21 13:37	27°♄54'49	
evening rise	13158 Jun 22 05:10	19°♄16'31			13159 Jun 23 05:59	0°♄	
	13158 Jun 28 19:47	0°♄		evening max el	13159 Jun 25 12:23	2°♄29'07	19°02'37
asc. node	13158 Jul 04 16:41	9°♄11'59		retrograde	13159 Jul 02 08:04	6°♄15'15	
evening max el	13158 Jul 12 02:03	18°♄45'05	18°25'40	evening set	13159 Jul 05 19:11	5°♄05'47	
retrograde	13158 Jul 18 12:17	22°♄11'52			13159 Jul 10 18:10	30°♄	
evening set	13158 Jul 21 14:25	21°♄18'41		inferior conj	13159 Jul 11 06:47	29°♄19'48	3°03'06
inferior conj	13158 Jul 27 09:20	15°♄47'25	2°39'16	minimum elong	13159 Jul 11 08:07	29°♄15'30	3°02'00
minimum elong	13158 Jul 27 11:33	15°♄40'50	2°38'02	min. Earth dist.	13159 Jul 12 21:10	27°♄17'06	0.66546 AU
min. Earth dist.	13158 Jul 29 14:23	13°♄10'37	0.64857 AU	morning rise	13159 Jul 16 20:24	22°♄56'00	
morning rise	13158 Aug 02 07:26	9°♄26'26		direct	13159 Jul 23 01:26	20°♄15'50	
desc. node	13158 Aug 06 20:11	7°♄01'33		desc. node	13159 Jul 24 17:33	20°♄26'03	
direct	13158 Aug 08 20:18	6°♄47'13		morning max el	13159 Aug 04 20:39	27°♄53'41	26°14'15
morning max el	13158 Aug 22 09:43	14°♄44'37	27°17'20		13159 Aug 06 20:32	0°♄	
	13158 Sep 03 20:28	0°♄			13159 Aug 28 13:39	0°♄	
	13158 Sep 22 08:53	0°♄		morning set	13159 Sep 09 19:45	21°♄13'59	
morning set	13158 Sep 26 19:51	8°♄26'34		max. Earth dist.	13159 Sep 13 16:04	28°♄33'30	1.34929 AU
asc. node	13158 Sep 30 18:15	16°♄18'06					

	13159 Sep 14 09:46	0°♄		morning max el	13160 Jul 17 07:03	11°♄17'07	24°53'18
asc. node	13159 Sep 17 14:50	6°♄24'27			13160 Aug 01 05:51	0°♄	
					13160 Aug 20 06:26	0°♄	
superior conj	13159 Sep 18 23:36	9°♄11'24	0°12'55	morning set	13160 Aug 22 03:03	3°♄15'24	
minimum elong	13159 Sep 18 22:53	9°♄07'44	0°12'50	max. Earth dist.	13160 Aug 25 16:53	9°♄42'06	1.37041 AU
behind sun begin	13159 Sep 18 19:14	8°♄49'06					
behind sun end	13159 Sep 19 02:31	9°♄26'23		superior conj	13160 Sep 01 10:06	22°♄27'21	-0°19'09
evening rise	13159 Sep 26 13:59	25°♄00'56		minimum elong	13160 Sep 01 11:22	22°♄33'29	0°19'08
	13159 Sep 29 00:09	0°♄		asc. node	13160 Sep 03 11:25	26°♄30'38	
evening max el	13159 Oct 15 08:03	25°♄56'06	20°43'12		13160 Sep 05 05:19	0°♄	
desc. node	13159 Oct 20 13:50	29°♄57'12		evening rise	13160 Sep 09 18:17	9°♄09'34	
	13159 Oct 20 15:56	0°♄			13160 Sep 21 03:31	0°♄	
retrograde	13159 Oct 26 16:34	1°♄34'36		evening max el	13160 Sep 26 18:28	7°♄06'19	19°31'23
evening set	13159 Oct 29 00:07	1°♄21'35		retrograde	13160 Oct 06 11:13	11°♄57'05	
	13159 Nov 02 04:28	30°♄		desc. node	13160 Oct 06 11:17	11°♄57'05	
inferior conj	13159 Nov 06 24:00	27°♄27'12	-4°55'01	evening set	13160 Oct 08 08:07	11°♄47'03	
minimum elong	13159 Nov 06 14:10	27°♄41'18	4°51'50	inferior conj	13160 Oct 17 01:24	7°♄41'19	-3°16'28
min. Earth dist.	13159 Nov 08 00:44	26°♄51'44	0.54609 AU	minimum elong	13160 Oct 16 17:02	7°♄54'40	3°12'57
morning rise	13159 Nov 15 04:09	23°♄31'10		min. Earth dist.	13160 Oct 19 10:17	6°♄10'37	0.55478 AU
direct	13159 Nov 19 11:30	22°♄51'25		morning rise	13160 Oct 24 23:57	3°♄16'51	
morning max el	13159 Dec 02 16:13	29°♄15'29	23°18'52	direct	13160 Oct 30 03:41	2°♄17'25	
	13159 Dec 03 10:37	0°♄		morning max el	13160 Nov 13 02:15	9°♄16'05	25°06'23
asc. node	13159 Dec 14 15:54	14°♄54'42			13160 Nov 28 12:07	0°♄	
	13159 Dec 22 18:55	0°♄		asc. node	13160 Nov 30 12:51	3°♄34'52	
morning set	13159 Dec 26 00:16	6°♄43'51		morning set	13160 Dec 09 12:04	21°♄27'24	
					13160 Dec 13 10:00	0°♄	
superior conj	13160 Jan 01 21:56	21°♄39'22	1°34'38				
minimum elong	13160 Jan 01 23:08	21°♄45'50	1°35'33	superior conj	13160 Dec 16 06:47	6°♄19'50	1°38'17
max. Earth dist.	13160 Jan 04 21:56	28°♄03'07	1.33258 AU	minimum elong	13160 Dec 16 06:52	6°♄20'20	1°39'18
	13160 Jan 05 20:15	0°♄		max. Earth dist.	13160 Dec 18 00:06	10°♄06'40	1.32084 AU
evening rise	13160 Jan 09 16:55	7°♄51'37		evening rise	13160 Dec 23 12:34	21°♄51'22	
desc. node	13160 Jan 16 12:28	20°♄43'53			13160 Dec 27 14:24	0°♄	
	13160 Jan 21 21:59	0°♄		desc. node	13161 Jan 02 09:18	10°♄39'42	
evening max el	13160 Feb 13 01:30	29°♄30'12	27°20'44		13161 Jan 14 19:28	0°♄	
	13160 Feb 13 14:04	0°♄		evening max el	13161 Jan 25 12:34	12°♄31'32	27°33'06
retrograde	13160 Feb 26 15:31	6°♄56'41		retrograde	13161 Feb 08 08:43	19°♄54'32	
evening set	13160 Mar 04 09:28	4°♄26'18		evening set	13161 Feb 15 06:53	17°♄33'00	
min. Earth dist.	13160 Mar 08 06:08	0°♄53'47	0.64663 AU	min. Earth dist.	13161 Feb 19 00:56	14°♄28'31	0.62716 AU
	13160 Mar 09 02:18	30°♄		inferior conj	13161 Feb 21 22:13	11°♄41'09	-1°28'37
inferior conj	13160 Mar 10 17:04	28°♄14'29	-0°16'27	minimum elong	13161 Feb 22 01:12	11°♄33'55	1°27'00
minimum elong	13160 Mar 10 17:33	28°♄13'10	0°16'07	asc. node	13161 Feb 26 10:50	7°♄48'24	
asc. node	13160 Mar 11 13:24	27°♄19'52		morning rise	13161 Feb 28 22:07	6°♄31'44	
morning rise	13160 Mar 17 03:30	22°♄48'36		direct	13161 Mar 03 05:08	6°♄07'18	
direct	13160 Mar 19 17:50	22°♄13'37		morning max el	13161 Mar 09 20:04	9°♄29'33	17°46'30
morning max el	13160 Mar 26 02:22	25°♄31'13	17°53'15		13161 Mar 23 12:47	0°♄	
	13160 Mar 29 22:06	0°♄		morning set	13161 Mar 25 20:54	4°♄05'04	
morning set	13160 Apr 12 10:55	21°♄25'09		desc. node	13161 Mar 31 11:07	13°♄48'33	
desc. node	13160 Apr 13 14:34	23°♄20'18					
	13160 Apr 17 15:07	0°♄		superior conj	13161 Apr 06 18:52	24°♄30'35	-0°47'47
				minimum elong	13161 Apr 06 14:07	24°♄10'50	0°47'24
superior conj	13160 Apr 26 05:28	13°♄56'27	-1°27'15		13161 Apr 10 02:54	0°♄	
minimum elong	13160 Apr 25 20:52	13°♄22'07	1°26'54	max. Earth dist.	13161 Apr 13 08:13	5°♄12'32	1.44231 AU
max. Earth dist.	13160 Apr 30 14:32	20°♄52'39	1.45376 AU	evening rise	13161 Apr 21 15:55	18°♄17'00	
	13160 May 06 10:46	0°♄			13161 Apr 29 09:10	0°♄	
evening rise	13160 May 12 03:48	8°♄47'57		evening max el	13161 May 21 16:44	0°♄04'02	21°02'09
	13160 May 26 05:37	0°♄			13161 May 21 15:08	0°♄	
greatest brilliancy	13160 May 26 22:00	0°♄59'39	-0.6m	asc. node	13161 May 25 07:44	3°♄11'32	
asc. node	13160 Jun 07 10:38	15°♄58'52		retrograde	13161 May 30 05:21	5°♄01'53	
evening max el	13160 Jun 07 17:31	16°♄16'20	19°55'36	evening set	13161 Jun 03 12:11	3°♄19'07	
retrograde	13160 Jun 15 06:30	20°♄33'48			13161 Jun 06 15:08	30°♄	
evening set	13160 Jun 19 03:07	19°♄07'32		inferior conj	13161 Jun 08 18:13	27°♄07'49	3°10'03
inferior conj	13160 Jun 24 10:33	13°♄08'04	3°12'38	minimum elong	13161 Jun 08 17:31	27°♄10'14	3°09'00
minimum elong	13160 Jun 24 10:51	13°♄07'04	3°11'37	min. Earth dist.	13161 Jun 09 04:28	26°♄32'12	0.68579 AU
min. Earth dist.	13160 Jun 25 10:30	11°♄47'19	0.67795 AU	morning rise	13161 Jun 13 22:37	20°♄49'46	
morning rise	13160 Jun 29 18:15	6°♄45'51		direct	13161 Jun 19 04:25	18°♄32'06	
direct	13160 Jul 05 12:28	4°♄13'38		desc. node	13161 Jun 27 11:59	22°♄42'16	
desc. node	13160 Jul 10 14:49	5°♄48'45		morning max el	13161 Jun 29 17:30	24°♄48'59	23°24'08

	13161 Jul 04 09:28	0°☿		morning max el	13162 Jun 12 06:30	8°☿29'28	21°56'02
	13161 Jul 25 16:38	0°♊		desc. node	13162 Jun 14 09:03	10°☿43'21	
morning set	13161 Aug 03 13:01	14°♊18'47			13162 Jun 28 23:52	0°☿	
max. Earth dist.	13161 Aug 07 14:37	21°♊15'26	1.39369 AU	morning set	13162 Jul 14 22:05	24°☿16'32	
	13161 Aug 12 12:42	0°♋			13162 Jul 18 10:57	0°♊	
				max. Earth dist.	13162 Jul 20 15:29	3°♊36'41	1.41652 AU
superior conj	13161 Aug 15 06:33	5°♋02'25	-0°53'48				
minimum elong	13161 Aug 15 10:28	5°♋20'33	0°53'39	superior conj	13162 Jul 28 08:42	16°♊47'58	-1°27'51
asc. node	13161 Aug 21 08:00	16°♋32'25		minimum elong	13162 Jul 28 15:07	17°♊16'13	1°27'47
evening rise	13161 Aug 24 15:16	22°♋55'52			13162 Aug 04 16:47	0°♋	
	13161 Aug 28 07:51	0°♌		evening rise	13162 Aug 08 01:22	6°♋11'22	
evening max el	13161 Sep 09 17:41	19°♌03'33	18°41'23	asc. node	13162 Aug 08 04:40	6°♋26'34	
retrograde	13161 Sep 17 23:00	23°♌11'44			13162 Aug 22 12:43	0°♌	
evening set	13161 Sep 19 21:11	22°♌58'55		evening max el	13162 Aug 24 01:59	1°♌40'55	18°12'20
desc. node	13161 Sep 23 08:48	21°♌37'20		retrograde	13162 Aug 31 05:32	5°♌18'52	
inferior conj	13161 Sep 27 22:14	18°♌34'32	-1°26'37	evening set	13162 Sep 02 10:22	4°♌58'47	
minimum elong	13161 Sep 27 18:41	18°♌41'09	1°24'59	inferior conj	13162 Sep 09 16:49	0°♌13'43	0°10'24
min. Earth dist.	13161 Oct 01 01:31	16°♌15'16	0.57114 AU	minimum elong	13162 Sep 09 17:10	0°♌12'57	0°10'10
morning rise	13161 Oct 05 12:47	13°♌32'21		transit middle	13162 Sep 09 17:10	0°♌12'57	0°10'10
direct	13161 Oct 11 10:01	12°♌07'09		transit begin	13162 Sep 09 14:31	0°♌18'44	
morning max el	13161 Oct 25 16:36	19°♌34'01	26°37'30	transit end	13162 Sep 09 19:50	0°♌07'10	
	13161 Nov 03 13:58	0°♍			13162 Sep 09 23:07	30°♍	
asc. node	13161 Nov 17 09:43	22°♍45'35		desc. node	13162 Sep 10 06:18	29°♍44'19	
	13161 Nov 21 01:11	0°♎		min. Earth dist.	13162 Sep 13 00:13	27°♍22'30	0.59241 AU
morning set	13161 Nov 23 22:18	6°♎02'36		morning rise	13162 Sep 16 20:33	24°♍37'17	
				direct	13162 Sep 23 06:26	22°♍44'04	
superior conj	13161 Nov 30 17:57	21°♎03'40	1°35'55		13162 Oct 07 01:28	0°♏	
minimum elong	13161 Nov 30 17:01	20°♎58'23	1°36'51	morning max el	13162 Oct 07 14:19	0°♏31'03	27°37'10
max. Earth dist.	13161 Dec 01 07:06	22°♎16'55	1.31399 AU		13162 Oct 28 17:19	0°♏	
	13161 Dec 04 18:55	0°♐		asc. node	13162 Nov 04 06:32	12°♏18'32	
evening rise	13161 Dec 07 15:17	6°♐07'37		morning set	13162 Nov 08 05:15	20°♏24'40	
desc. node	13161 Dec 20 06:14	0°♑09'31			13162 Nov 12 15:29	0°♐	
	13161 Dec 20 03:58	0°♑		max. Earth dist.	13162 Nov 14 15:33	4°♐26'54	1.31226 AU
evening max el	13162 Jan 07 18:58	24°♑51'40	27°12'43				
	13162 Jan 14 12:31	0°♒		superior conj	13162 Nov 15 05:34	5°♐45'08	1°27'43
retrograde	13162 Jan 21 17:54	2°♒07'05		minimum elong	13162 Nov 15 03:48	5°♐35'17	1°28'25
evening set	13162 Jan 28 14:01	0°♒02'51		evening rise	13162 Nov 21 22:47	20°♐34'35	
	13162 Jan 28 15:56	30°♒			13162 Nov 26 11:37	0°♑	
min. Earth dist.	13162 Feb 01 09:27	27°♒18'34	0.60573 AU	desc. node	13162 Dec 07 03:16	19°♑03'04	
inferior conj	13162 Feb 04 13:12	24°♒37'38	-2°49'06		13162 Dec 14 22:32	0°♒	
minimum elong	13162 Feb 04 19:14	24°♒24'46	2°46'09	evening max el	13162 Dec 20 18:17	6°♒21'42	26°17'54
morning rise	13162 Feb 12 03:32	19°♒47'33		retrograde	13163 Jan 03 17:09	13°♒27'06	
asc. node	13162 Feb 13 08:14	19°♒33'17		evening set	13163 Jan 10 02:52	11°♒48'21	
direct	13162 Feb 14 05:39	19°♒30'03		min. Earth dist.	13163 Jan 14 07:47	9°♒12'01	0.58419 AU
morning max el	13162 Feb 21 11:25	23°♒07'31	17°58'08	inferior conj	13163 Jan 17 10:26	6°♒54'10	-4°11'08
	13162 Feb 26 21:39	0°♓		minimum elong	13163 Jan 17 18:54	6°♒38'29	4°07'40
morning set	13162 Mar 09 01:17	17°♓36'10		morning rise	13163 Jan 25 13:52	2°♒25'28	
	13162 Mar 15 20:31	0°♈		direct	13163 Jan 27 15:11	2°♒11'14	
desc. node	13162 Mar 18 07:41	4°♈23'12		asc. node	13163 Jan 31 05:38	2°♒57'27	
				morning max el	13163 Feb 04 20:36	6°♒13'53	18°29'37
superior conj	13162 Mar 19 08:35	6°♈12'40	-0°08'13		13163 Feb 19 21:20	0°♉	
minimum elong	13162 Mar 19 07:54	6°♈09'37	0°08'06	morning set	13163 Feb 20 18:32	1°♉41'39	
behind sun begin	13162 Mar 19 00:54	5°♈38'56					
behind sun end	13162 Mar 19 14:53	6°♈40'14		superior conj	13163 Mar 01 19:33	18°♉52'45	0°26'43
max. Earth dist.	13162 Mar 26 21:26	19°♈01'52	1.42510 AU	minimum elong	13163 Mar 01 21:23	19°♉01'09	0°26'42
evening rise	13162 Apr 01 16:17	28°♈23'59		desc. node	13163 Mar 05 04:12	25°♉00'04	
	13162 Apr 02 16:34	0°♉			13163 Mar 07 23:57	0°♈	
	13162 Apr 23 00:54	0°♊		max. Earth dist.	13163 Mar 09 06:06	2°♈10'59	1.40413 AU
evening max el	13162 May 04 10:53	13°♊53'13	22°18'30	evening rise	13163 Mar 13 12:40	9°♈24'58	
asc. node	13162 May 12 04:57	19°♊17'56			13163 Mar 26 15:53	0°♉	
retrograde	13162 May 14 02:59	19°♊34'56		evening max el	13163 Apr 17 01:48	27°♉44'17	23°39'22
evening set	13162 May 18 20:42	17°♊36'44			13163 Apr 19 12:09	0°♊	
inferior conj	13162 May 24 03:39	11°♊15'46	2°56'41	retrograde	13163 Apr 27 21:47	4°♊06'40	
minimum elong	13162 May 24 02:09	11°♊21'02	2°55'32	asc. node	13163 Apr 29 02:17	4°♊00'15	
min. Earth dist.	13162 May 24 00:56	11°♊25'17	0.68891 AU	evening set	13163 May 03 03:03	1°♊54'43	
morning rise	13162 May 29 07:26	5°♊03'42			13163 May 05 00:42	30°♊	
direct	13162 Jun 03 00:24	3°♊04'42		min. Earth dist.	13163 May 07 21:39	26°♊19'29	0.68738 AU

inferior conj	13163 May 08 12:56	25°♄27'06	2°33'07	morning rise	13164 Apr 27 06:34	3°♄42'08	
minimum elong	13163 May 08 10:54	25°♄34'03	2°31'53	direct	13164 Apr 30 22:50	2°♄24'29	
morning rise	13163 May 13 18:43	19°♄22'23		morning max el	13164 May 08 03:12	6°♄22'01	19°29'53
direct	13163 May 17 23:01	17°♄44'04		desc. node	13164 May 18 02:49	18°♄58'01	
morning max el	13163 May 26 01:05	22°♄20'00	20°36'21	greatest brilliancy	13164 May 20 18:59	22°♄50'57	-0.7m
desc. node	13163 Jun 01 06:00	29°♄32'56			13164 May 25 13:59	0°♄	
	13163 Jun 01 14:20	0°♄		morning set	13164 Jun 02 09:21	11°♄54'20	
	13163 Jun 22 05:43	0°♄			13164 Jun 14 00:41	0°♄	
morning set	13163 Jun 24 08:10	3°♄14'41		max. Earth dist.	13164 Jun 14 13:29	0°♄50'28	1.45022 AU
max. Earth dist.	13163 Jul 02 23:06	16°♄51'23	1.43612 AU				
superior conj	13163 Jul 09 12:21	27°♄34'59	-1°56'16	superior conj	13164 Jun 18 16:20	7°♄22'40	-2°12'11
minimum elong	13163 Jul 09 19:14	28°♄03'40	1°56'40	minimum elong	13164 Jun 18 19:04	7°♄33'35	2°13'08
	13163 Jul 10 23:03	0°♄		evening rise	13164 Jul 02 17:53	0°♄22'48	
evening rise	13163 Jul 21 19:56	18°♄44'13			13164 Jul 02 12:25	0°♄	
asc. node	13163 Jul 26 01:22	26°♄08'24		asc. node	13164 Jul 11 22:08	15°♄32'46	
	13163 Jul 28 07:12	0°♄		evening max el	13164 Jul 21 05:26	28°♄15'18	18°12'11
evening max el	13163 Aug 07 15:07	14°♄48'01	18°02'57		13164 Jul 23 06:12	0°♄	
retrograde	13163 Aug 14 03:58	18°♄10'25		retrograde	13164 Jul 27 13:54	1°♄36'37	
evening set	13163 Aug 16 16:55	17°♄39'24		evening set	13164 Jul 30 11:11	0°♄51'59	
inferior conj	13163 Aug 23 06:41	12°♄34'36	1°25'20		13164 Jul 31 20:44	30°♄	
minimum elong	13163 Aug 23 08:55	12°♄29'03	1°24'12	inferior conj	13164 Aug 05 11:52	25°♄29'33	2°17'57
min. Earth dist.	13163 Aug 26 07:44	9°♄33'25	0.61534 AU	minimum elong	13164 Aug 05 14:22	25°♄22'31	2°16'40
desc. node	13163 Aug 28 03:48	7°♄54'27		min. Earth dist.	13164 Aug 08 00:51	22°♄39'11	0.63722 AU
morning rise	13163 Aug 29 22:19	6°♄33'19		morning rise	13164 Aug 11 15:53	19°♄13'16	
direct	13163 Sep 05 14:13	4°♄15'55		desc. node	13164 Aug 14 01:15	17°♄41'44	
morning max el	13163 Sep 19 18:48	12°♄14'25	27°58'27	direct	13164 Aug 18 07:17	16°♄39'33	
	13163 Oct 03 20:54	0°♄		morning max el	13164 Sep 01 03:59	24°♄40'22	27°41'55
	13163 Oct 21 02:01	0°♄			13164 Sep 06 00:02	0°♄	
asc. node	13163 Oct 22 03:16	2°♄07'11			13164 Sep 26 07:31	0°♄	
morning set	13163 Oct 23 06:55	4°♄28'41		morning set	13164 Oct 06 00:55	18°♄08'34	
max. Earth dist.	13163 Oct 28 21:46	16°♄27'48	1.31580 AU	asc. node	13164 Oct 07 23:53	22°♄05'55	
				max. Earth dist.	13164 Oct 10 22:02	28°♄10'49	1.32473 AU
					13164 Oct 11 18:37	0°♄	
superior conj	13163 Oct 30 15:46	20°♄18'50	1°13'50	superior conj	13164 Oct 13 22:30	4°♄38'45	0°54'21
minimum elong	13163 Oct 30 13:32	20°♄06'34	1°14'14	minimum elong	13164 Oct 13 20:20	4°♄26'58	0°54'27
	13163 Nov 04 00:47	0°♄		evening rise	13164 Oct 20 20:17	19°♄39'24	
evening rise	13163 Nov 06 09:05	5°♄07'02			13164 Oct 25 19:56	0°♄	
	13163 Nov 19 08:01	0°♄		desc. node	13164 Nov 09 21:37	24°♄00'33	
desc. node	13163 Nov 24 00:23	7°♄06'33		evening max el	13164 Nov 12 19:21	27°♄05'41	23°12'46
evening max el	13163 Dec 02 09:24	17°♄01'10	24°53'32		13164 Nov 16 04:56	0°♄	
retrograde	13163 Dec 16 04:12	23°♄54'53		retrograde	13164 Nov 26 02:15	3°♄42'10	
evening set	13163 Dec 21 17:12	22°♄46'31		evening set	13164 Nov 30 08:10	3°♄03'00	
min. Earth dist.	13163 Dec 26 21:18	20°♄01'55	0.56503 AU		13164 Dec 06 22:38	30°♄	
inferior conj	13163 Dec 29 11:14	18°♄22'26	-5°20'31	min. Earth dist.	13164 Dec 07 04:55	29°♄51'01	0.55113 AU
minimum elong	13163 Dec 29 18:56	18°♄10'02	5°18'06	inferior conj	13164 Dec 08 16:08	29°♄00'08	-5°55'08
morning rise	13164 Jan 06 22:50	14°♄15'19		minimum elong	13164 Dec 08 17:25	28°♄58'18	5°54'06
direct	13164 Jan 09 06:14	14°♄00'24		morning rise	13164 Dec 17 04:17	25°♄09'47	
asc. node	13164 Jan 18 02:57	17°♄58'38		direct	13164 Dec 20 02:12	24°♄49'37	
morning max el	13164 Jan 18 19:30	18°♄37'16	19°23'03	morning max el	13164 Dec 31 04:42	0°♄07'27	20°39'44
	13164 Jan 27 06:12	0°♄			13164 Dec 31 01:33	0°♄	
morning set	13164 Feb 04 20:30	16°♄09'36		asc. node	13165 Jan 04 00:10	4°♄21'17	
	13164 Feb 11 18:55	0°♄			13165 Jan 18 18:22	0°♄	
superior conj	13164 Feb 12 23:14	2°♄18'34	0°54'52	morning set	13165 Jan 19 04:00	0°♄49'37	
minimum elong	13164 Feb 13 02:00	2°♄31'58	0°55'00	superior conj	13165 Jan 26 15:12	16°♄16'57	1°15'47
max. Earth dist.	13164 Feb 19 12:41	14°♄41'12	1.38168 AU	minimum elong	13165 Jan 26 17:48	16°♄30'09	1°16'14
desc. node	13164 Feb 20 00:45	15°♄36'00		max. Earth dist.	13165 Jan 31 20:57	26°♄42'06	1.36006 AU
evening rise	13164 Feb 23 06:06	21°♄20'15			13165 Feb 02 14:19	0°♄	
	13164 Feb 28 08:24	0°♄		evening rise	13165 Feb 04 17:57	4°♄01'14	
	13164 Mar 19 15:09	0°♄		desc. node	13165 Feb 05 21:21	6°♄06'34	
evening max el	13164 Mar 29 15:30	11°♄37'11	24°58'04		13165 Feb 20 07:00	0°♄	
retrograde	13164 Apr 10 12:37	18°♄31'43		evening max el	13165 Mar 12 05:01	25°♄27'16	26°07'36
asc. node	13164 Apr 14 23:39	17°♄05'25			13165 Mar 17 15:05	0°♄	
evening set	13164 Apr 16 05:39	16°♄08'35		retrograde	13165 Mar 24 22:36	2°♄43'23	
min. Earth dist.	13164 Apr 20 16:24	11°♄09'24	0.68134 AU	evening set	13165 Mar 31 02:50	0°♄12'49	
inferior conj	13164 Apr 21 20:07	9°♄38'07	1°59'28		13165 Mar 31 08:56	30°♄	
minimum elong	13164 Apr 21 17:59	9°♄45'11	1°58'15				

asc. node	13165 Apr 01 21:04	28° Υ 34'12		evening set	13166 Mar 14 16:40	14° Υ 00'50	
min. Earth dist.	13165 Apr 04 07:03	25° Υ 48'54	0.67092 AU	min. Earth dist.	13166 Mar 18 15:35	10° Υ 10'24	0.65645 AU
inferior conj	13165 Apr 05 23:13	23° Υ 44'29	1°15'22	asc. node	13166 Mar 19 18:30	8° Υ 53'56	
minimum elong	13165 Apr 05 21:31	23° Υ 49'47	1°14'26	inferior conj	13166 Mar 20 19:57	7° Υ 40'43	0°20'19
morning rise	13165 Apr 11 16:58	17° Υ 58'44		minimum elong	13166 Mar 20 19:23	7° Υ 42'19	0°20'03
direct	13165 Apr 14 22:07	17° Υ 00'06		morning rise	13166 Mar 26 23:36	2° Υ 07'03	
morning max el	13165 Apr 21 12:38	20° Υ 32'28	18°39'09	direct	13166 Mar 29 18:50	1° Υ 24'33	
	13165 Apr 29 02:15	0° ♄		morning max el	13166 Apr 05 03:27	4° Υ 44'27	18°05'07
desc. node	13165 May 04 23:33	8° ♄ 49'04		desc. node	13166 Apr 21 20:12	28° Υ 58'40	
morning set	13165 May 12 23:33	21° ♄ 16'56			13166 Apr 22 11:18	0° ♄	
	13165 May 18 13:18	0° ♂		morning set	13166 Apr 23 16:37	1° ♄ 59'03	
max. Earth dist.	13165 May 28 08:06	15° ♂ 16'29	1.45741 AU				
				superior conj	13166 May 08 12:19	25° ♄ 41'47	-1°46'53
superior conj	13165 May 29 03:08	16° ♂ 30'51	-2°09'22	minimum elong	13166 May 08 03:10	25° ♄ 05'48	1°46'51
minimum elong	13165 May 28 22:13	16° ♂ 11'39	2°10'09	max. Earth dist.	13166 May 11 03:56	29° ♄ 51'08	1.45717 AU
	13165 Jun 06 17:14	0° ♄			13166 May 11 06:12	0° ♂	
evening rise	13165 Jun 13 15:37	11° ♄ 00'24		evening rise	13166 May 24 14:51	20° ♂ 44'44	
greatest brilliancy	13165 Jun 21 00:47	22° ♄ 45'39	-0.9m		13166 May 30 14:57	0° ♄	
	13165 Jun 25 16:39	0° ♄		greatest brilliancy	13166 Jun 06 06:16	10° ♄ 04'22	-0.7m
asc. node	13165 Jun 28 19:00	4° ♄ 33'13		asc. node	13166 Jun 15 15:57	23° ♄ 00'50	
evening max el	13165 Jul 04 17:52	11° ♄ 54'58	18°39'16	evening max el	13166 Jun 18 02:05	25° ♄ 40'26	19°23'16
retrograde	13165 Jul 11 07:10	15° ♄ 28'42		retrograde	13166 Jun 25 04:27	29° ♄ 38'59	
evening set	13165 Jul 14 13:02	14° ♄ 28'42		evening set	13166 Jun 28 19:25	28° ♄ 22'35	
inferior conj	13165 Jul 20 04:24	8° ♄ 50'42	2°51'18	inferior conj	13166 Jul 04 04:54	22° ♄ 30'39	3°08'44
minimum elong	13165 Jul 20 06:17	8° ♄ 44'53	2°50'08	minimum elong	13166 Jul 04 05:48	22° ♄ 27'40	3°07'41
min. Earth dist.	13165 Jul 22 03:08	6° ♄ 27'17	0.65622 AU	min. Earth dist.	13166 Jul 05 13:07	20° ♄ 44'54	0.67132 AU
morning rise	13165 Jul 25 22:35	2° ♄ 27'39		morning rise	13166 Jul 09 15:39	16° ♄ 06'48	
	13165 Jul 30 11:44	30° ♄		direct	13166 Jul 15 16:17	13° ♄ 28'56	
desc. node	13165 Jul 31 22:39	29° ♄ 47'44		desc. node	13166 Jul 18 20:00	14° ♄ 05'29	
direct	13165 Aug 01 08:23	29° ♄ 47'08		morning max el	13166 Jul 28 02:01	20° ♄ 54'47	25°41'20
	13165 Aug 03 06:43	0° ♄			13166 Aug 04 22:25	0° ♄	
morning max el	13165 Aug 14 15:10	7° ♄ 38'17	26°53'22		13166 Aug 25 04:08	0° ♄	
	13165 Aug 31 23:44	0° ♄		morning set	13166 Sep 02 01:50	13° ♄ 46'58	
	13165 Sep 18 16:06	0° ♄		max. Earth dist.	13166 Sep 05 17:53	20° ♄ 36'28	1.35785 AU
morning set	13165 Sep 19 08:27	1° ♄ 17'52			13166 Sep 10 13:41	0° ♄	
max. Earth dist.	13165 Sep 23 13:05	9° ♄ 31'42	1.33892 AU				
asc. node	13165 Sep 24 20:29	12° ♄ 10'40		superior conj	13166 Sep 11 16:22	2° ♄ 13'41	-0°00'16
				minimum elong	13166 Sep 11 16:23	2° ♄ 13'46	0°00'19
superior conj	13165 Sep 27 23:37	18° ♄ 39'29	0°29'29	behind sun begin	13166 Sep 11 10:12	1° ♄ 42'37	
minimum elong	13165 Sep 27 22:09	18° ♄ 31'45	0°29'26	behind sun end	13166 Sep 11 22:35	2° ♄ 44'58	
	13165 Oct 03 07:54	0° ♄		asc. node	13166 Sep 11 17:02	2° ♄ 17'03	
evening rise	13165 Oct 05 06:30	4° ♄ 06'59		evening rise	13166 Sep 19 13:37	18° ♄ 23'42	
	13165 Oct 19 09:59	0° ♄			13166 Sep 25 09:49	0° ♄	
evening max el	13165 Oct 25 09:09	7° ♄ 12'04	21°33'40	evening max el	13166 Oct 07 11:19	17° ♄ 54'26	20°10'01
desc. node	13165 Oct 27 18:56	9° ♄ 20'55		desc. node	13166 Oct 14 16:20	22° ♄ 40'01	
retrograde	13165 Nov 06 14:49	13° ♄ 16'41		retrograde	13166 Oct 18 03:16	23° ♄ 12'43	
evening set	13165 Nov 09 11:46	12° ♄ 57'50		evening set	13166 Oct 20 04:07	23° ♄ 02'00	
inferior conj	13165 Nov 18 08:45	9° ♄ 03'43	-5°33'55	inferior conj	13166 Oct 29 02:54	19° ♄ 04'25	-4°16'38
minimum elong	13165 Nov 18 01:27	9° ♄ 13'57	5°31'53	minimum elong	13166 Oct 28 16:55	19° ♄ 19'17	4°12'56
min. Earth dist.	13165 Nov 18 11:02	9° ♄ 00'31	0.54521 AU	min. Earth dist.	13166 Oct 30 18:54	18° ♄ 04'48	0.54867 AU
morning rise	13165 Nov 26 16:02	5° ♄ 15'23		morning rise	13166 Nov 06 04:43	14° ♄ 57'47	
direct	13165 Nov 30 10:23	4° ♄ 44'38		direct	13166 Nov 10 20:55	14° ♄ 10'19	
morning max el	13165 Dec 13 00:04	10° ♄ 45'52	22°17'05	morning max el	13166 Nov 24 10:58	20° ♄ 50'51	24°05'28
asc. node	13165 Dec 21 21:17	21° ♄ 48'47			13166 Dec 02 06:43	0° ♄	
	13165 Dec 26 18:24	0° ♄		asc. node	13166 Dec 08 18:18	10° ♄ 06'00	
morning set	13166 Jan 03 14:38	15° ♄ 34'54			13166 Dec 18 22:43	0° ♄	
	13166 Jan 10 08:45	0° ♄		morning set	13166 Dec 19 02:30	0° ♄ 20'14	
superior conj	13166 Jan 10 15:53	0° ♄ 37'48	1°29'40	superior conj	13166 Dec 25 22:26	15° ♄ 13'08	1°36'57
minimum elong	13166 Jan 10 17:41	0° ♄ 47'19	1°30'27	minimum elong	13166 Dec 25 23:10	15° ♄ 17'08	1°37'56
max. Earth dist.	13166 Jan 14 10:56	8° ♄ 32'15	1.34137 AU	max. Earth dist.	13166 Dec 28 08:48	20° ♄ 28'40	1.32691 AU
evening rise	13166 Jan 18 20:45	17° ♄ 19'13			13167 Jan 01 22:06	0° ♄	
desc. node	13166 Jan 23 18:00	26° ♄ 27'37		evening rise	13167 Jan 02 11:09	1° ♄ 06'08	
	13166 Jan 25 17:42	0° ♄		desc. node	13167 Jan 10 14:45	16° ♄ 34'25	
	13166 Feb 14 15:05	0° ♄			13167 Jan 18 16:45	0° ♄	
evening max el	13166 Feb 22 18:31	9° ♄ 06'54	27°00'37	evening max el	13167 Feb 05 07:11	22° ♄ 26'31	27°29'52
retrograde	13166 Mar 08 02:57	16° ♄ 33'22		retrograde	13167 Feb 19 00:46	29° ♄ 53'02	

evening set	13167 Feb 25 20:54	27° H 25'29		evening max el	13168 Jan 18 16:49	5° H 12'20	27°28'52
min. Earth dist.	13167 Mar 01 16:06	24° H 05'25	0.63855 AU	retrograde	13168 Feb 01 14:39	12° H 32'02	
inferior conj	13167 Mar 04 07:43	21° H 20'56	-0°45'49	evening set	13168 Feb 08 12:39	10° H 17'14	
minimum elong	13167 Mar 04 09:09	21° H 17'11	0°44'59	min. Earth dist.	13168 Feb 12 06:48	7° H 22'14	0.61812 AU
asc. node	13167 Mar 06 15:58	19° H 01'06		inferior conj	13168 Feb 15 07:19	4° H 35'57	-2°02'02
morning rise	13167 Mar 10 23:39	16° H 01'38		minimum elong	13168 Feb 15 11:33	4° H 26'10	1°59'48
direct	13167 Mar 13 10:31	15° H 31'42			13168 Feb 21 10:40	30° R \approx	
morning max el	13167 Mar 19 20:59	18° H 50'25	17°48'14	asc. node	13168 Feb 21 13:26	29° \approx 56'51	
	13167 Mar 28 03:53	0° Y		morning rise	13168 Feb 22 13:16	29° \approx 34'03	
morning set	13167 Apr 05 13:18	14° Y 01'25		direct	13168 Feb 24 17:51	29° \approx 12'58	
desc. node	13167 Apr 08 16:47	19° Y 21'35			13168 Feb 27 23:12	0° H	
	13167 Apr 15 01:42	0° B		morning max el	13168 Mar 02 14:02	2° H 40'40	17°49'08
				morning set	13168 Mar 18 07:53	27° H 05'17	
superior conj	13167 Apr 18 12:38	5° B 38'48	-1°11'00		13168 Mar 19 23:02	0° Y	
minimum elong	13167 Apr 18 05:25	5° B 09'30	1°10'33	desc. node	13168 Mar 25 13:19	9° Y 52'39	
max. Earth dist.	13167 Apr 23 22:55	14° B 20'33	1.44965 AU				
evening rise	13167 May 04 02:28	0° II 07'56		superior conj	13168 Mar 29 12:24	16° Y 41'27	-0°30'39
	13167 May 04 00:24	0° II		minimum elong	13168 Mar 29 09:30	16° Y 29'08	0°30'23
	13167 May 24 09:18	0° E		max. Earth dist.	13168 Apr 05 15:02	28° Y 29'25	1.43562 AU
evening max el	13167 Jun 01 04:49	9° E 28'40	20°22'24		13168 Apr 06 13:26	0° B	
asc. node	13167 Jun 02 13:01	10° E 45'10		evening rise	13168 Apr 12 18:20	9° B 49'44	
retrograde	13167 Jun 09 03:16	14° E 02'20			13168 Apr 26 04:03	0° II	
evening set	13167 Jun 13 04:05	12° E 29'12		evening max el	13168 May 14 01:52	23° II 17'21	21°33'44
inferior conj	13167 Jun 18 10:39	6° E 24'43	3°12'54	asc. node	13168 May 19 10:12	27° II 31'52	
minimum elong	13167 Jun 18 10:30	6° E 25'11	3°11'52	retrograde	13168 May 23 01:42	28° II 33'10	
min. Earth dist.	13167 Jun 19 04:46	5° E 22'39	0.68194 AU	evening set	13168 May 27 13:08	26° II 43'39	
morning rise	13167 Jun 23 16:37	0° E 03'54		inferior conj	13168 Jun 01 19:19	20° II 28'11	3°05'37
	13167 Jun 23 18:22	30° R II		minimum elong	13168 Jun 01 18:15	20° II 31'55	3°04'32
direct	13167 Jun 29 05:47	27° II 36'53		min. Earth dist.	13168 Jun 02 00:00	20° II 11'51	0.68777 AU
	13167 Jul 05 11:32	0° E		morning rise	13168 Jun 06 23:09	14° II 12'42	
desc. node	13167 Jul 05 17:16	0° E 10'08		direct	13168 Jun 11 23:38	12° II 02'28	
morning max el	13167 Jul 10 12:07	4° E 21'47	24°15'37	desc. node	13168 Jun 21 14:24	17° II 34'50	
	13167 Jul 30 05:01	0° Q		morning max el	13168 Jun 21 23:10	17° II 56'39	22°46'02
morning set	13167 Aug 15 00:37	25° Q 24'59			13168 Jul 02 00:05	0° E	
	13167 Aug 17 15:26	0° P			13168 Jul 22 07:07	0° Q	
max. Earth dist.	13167 Aug 18 16:10	1° P 50'11	1.38027 AU	morning set	13168 Jul 26 00:18	6° Q 01'09	
				max. Earth dist.	13168 Jul 30 14:58	13° Q 43'53	1.40372 AU
superior conj	13167 Aug 25 21:26	15° P 13'31	-0°33'41				
minimum elong	13167 Aug 25 23:46	15° P 24'39	0°33'37	superior conj	13168 Aug 07 10:45	27° Q 29'33	-1°08'32
asc. node	13167 Aug 29 13:37	22° P 21'36		minimum elong	13168 Aug 07 15:50	27° Q 52'34	1°08'24
	13167 Sep 02 10:15	0° A			13168 Aug 08 19:45	0° P	
evening rise	13167 Sep 03 15:11	2° A 23'28		asc. node	13168 Aug 15 10:14	12° P 20'57	
evening max el	13167 Sep 20 03:41	29° A 25'29	19°07'26	evening rise	13168 Aug 17 08:05	15° P 58'30	
	13167 Sep 20 17:57	0° M			13168 Aug 24 23:18	0° A	
retrograde	13167 Sep 29 04:06	3° M 56'16		evening max el	13168 Sep 02 07:21	11° A 41'32	18°26'27
evening set	13167 Oct 01 00:40	3° M 45'36		retrograde	13168 Sep 10 00:10	15° A 35'00	
desc. node	13167 Oct 01 13:49	3° M 38'31		evening set	13168 Sep 12 00:58	15° A 19'29	
	13167 Oct 08 19:42	30° R A		desc. node	13168 Sep 17 11:20	12° A 30'51	
inferior conj	13167 Oct 09 11:48	29° A 32'47	-2°29'23	inferior conj	13168 Sep 19 18:02	10° A 45'57	-0°43'03
minimum elong	13167 Oct 09 05:24	29° A 43'39	2°26'31	minimum elong	13168 Sep 19 16:23	10° A 49'15	0°42'18
min. Earth dist.	13167 Oct 12 06:35	27° A 39'49	0.56101 AU	min. Earth dist.	13168 Sep 23 00:30	8° A 10'56	0.57985 AU
morning rise	13167 Oct 17 07:21	24° A 52'47		morning rise	13168 Sep 27 04:19	5° A 28'36	
direct	13167 Oct 22 19:22	23° A 42'38		direct	13168 Oct 03 07:41	3° A 51'39	
	13167 Nov 04 22:36	0° M		morning max el	13168 Oct 17 15:13	11° A 27'01	27°07'23
morning max el	13167 Nov 05 21:54	0° M 54'07	25°48'12		13168 Nov 01 01:49	0° M	
asc. node	13167 Nov 25 15:14	29° M 00'11		asc. node	13168 Nov 11 12:04	18° M 21'33	
	13167 Nov 26 04:00	0° J		morning set	13168 Nov 16 22:54	29° M 30'44	
morning set	13167 Dec 03 13:49	15° J 00'16			13168 Nov 17 04:23	0° J	
superior conj	13167 Dec 10 08:29	29° J 55'22	1°38'00	superior conj	13168 Nov 23 20:05	14° J 38'57	1°33'08
minimum elong	13167 Dec 10 08:07	29° J 53'20	1°39'00	minimum elong	13168 Nov 23 18:46	14° J 31'31	1°33'59
	13167 Dec 10 09:19	0° Z		max. Earth dist.	13168 Nov 23 21:42	14° J 47'57	1.31267 AU
max. Earth dist.	13167 Dec 11 13:24	2° Z 35'26	1.31729 AU	evening rise	13168 Nov 30 15:10	29° J 35'27	
evening rise	13167 Dec 17 10:07	15° Z 13'37			13168 Nov 30 19:47	0° Z	
	13167 Dec 24 22:23	0° \approx		desc. node	13168 Dec 14 08:34	25° Z 35'53	
desc. node	13167 Dec 28 11:35	6° \approx 19'58			13168 Dec 17 03:12	0° \approx	
	13168 Jan 13 18:53	0° H		evening max el	13168 Dec 30 20:35	17° \approx 12'04	26°53'30

retrograde	13169 Jan 13 19:23	24° \approx 22'34		evening max el	13169 Dec 12 16:06	28° \approx 18'33	25°44'50
evening set	13169 Jan 20 12:27	22° \approx 28'20			13169 Dec 14 13:24	0° \approx	
min. Earth dist.	13169 Jan 24 10:42	19° \approx 49'20	0.59650 AU	retrograde	13169 Dec 26 13:41	5° \approx 19'43	
inferior conj	13169 Jan 27 15:09	17° \approx 16'23	-3°24'20	evening set	13170 Jan 01 16:08	3° \approx 53'11	
minimum elong	13169 Jan 27 22:24	17° \approx 01'49	3°21'01	min. Earth dist.	13170 Jan 06 04:40	1° \approx 15'47	0.57560 AU
morning rise	13169 Feb 04 11:23	12° \approx 35'07			13170 Jan 08 00:36	30° \approx 3	
direct	13169 Feb 06 12:43	12° \approx 19'19		inferior conj	13170 Jan 09 03:46	29° \approx 12'23	-4°43'15
asc. node	13169 Feb 07 10:50	12° \approx 22'36		minimum elong	13170 Jan 09 12:30	28° \approx 57'12	4°40'04
morning max el	13169 Feb 14 03:11	16° \approx 05'57	18°09'00	morning rise	13170 Jan 17 11:35	24° \approx 53'29	
	13169 Feb 23 19:55	0° \approx		direct	13170 Jan 19 14:31	24° \approx 39'29	
morning set	13169 Mar 01 18:17	10° \approx 52'24		asc. node	13170 Jan 25 08:11	26° \approx 29'01	
				morning max el	13170 Jan 28 08:30	28° \approx 55'18	18°49'40
superior conj	13169 Mar 11 11:37	28° \approx 49'10	0°07'23		13170 Jan 29 09:40	0° \approx	
minimum elong	13169 Mar 11 12:12	28° \approx 51'46	0°07'24	morning set	13170 Feb 13 15:37	25° \approx 08'19	
behind sun begin	13169 Mar 11 05:23	28° \approx 21'13			13170 Feb 16 03:09	0° \approx	
behind sun end	13169 Mar 11 19:01	29° \approx 22'15					
desc. node	13169 Mar 12 09:50	0° \approx 28'20		superior conj	13170 Feb 22 06:16	11° \approx 50'23	0°39'32
	13169 Mar 12 03:28	0° \approx		minimum elong	13170 Feb 22 08:39	12° \approx 01'38	0°39'33
max. Earth dist.	13169 Mar 19 02:39	12° \approx 03'45	1.41654 AU	desc. node	13170 Feb 27 06:22	21° \approx 05'13	
evening rise	13169 Mar 24 02:38	20° \approx 18'01		max. Earth dist.	13170 Mar 01 09:54	24° \approx 55'00	1.39454 AU
	13169 Mar 30 06:07	0° \approx			13170 Mar 04 08:04	0° \approx	
	13169 Apr 20 11:40	0° \approx		evening rise	13170 Mar 05 08:02	1° \approx 42'09	
evening max el	13169 Apr 26 18:21	7° \approx 06'41	22°52'43		13170 Mar 23 12:50	0° \approx	
asc. node	13169 May 06 07:29	13° \approx 04'25		evening max el	13170 Apr 09 08:18	20° \approx 57'59	24°13'33
retrograde	13169 May 06 22:13	13° \approx 06'09		retrograde	13170 Apr 20 15:35	27° \approx 36'02	
evening set	13169 May 11 20:56	11° \approx 01'34		asc. node	13170 Apr 23 04:49	27° \approx 06'50	
inferior conj	13169 May 17 04:54	4° \approx 37'22	2°47'54	evening set	13170 Apr 26 01:53	25° \approx 18'41	
minimum elong	13169 May 17 03:08	4° \approx 43'31	2°46'43	min. Earth dist.	13170 Apr 30 16:50	19° \approx 58'55	0.68526 AU
min. Earth dist.	13169 May 16 20:43	5° \approx 05'47	0.68883 AU	inferior conj	13170 May 01 13:30	18° \approx 49'05	2°20'07
	13169 May 20 19:18	30° \approx 8		minimum elong	13170 May 01 11:22	18° \approx 56'18	2°18'53
morning rise	13169 May 22 09:14	28° \approx 28'33		morning rise	13170 May 06 20:57	12° \approx 48'01	
direct	13169 May 26 20:44	26° \approx 38'24		direct	13170 May 10 19:55	11° \approx 18'48	
	13169 Jun 02 18:56	0° \approx		morning max el	13170 May 18 12:05	15° \approx 37'17	20°06'21
morning max el	13169 Jun 04 14:17	1° \approx 41'07	21°20'51	desc. node	13170 May 26 08:18	25° \approx 04'19	
desc. node	13169 Jun 08 11:25	5° \approx 58'07			13170 May 29 21:15	0° \approx	
	13169 Jun 25 19:58	0° \approx		morning set	13170 Jun 15 02:43	24° \approx 15'08	
morning set	13169 Jul 05 22:50	15° \approx 31'16			13170 Jun 18 19:49	0° \approx	
max. Earth dist.	13169 Jul 12 19:04	26° \approx 30'22	1.42540 AU	max. Earth dist.	13170 Jun 25 05:30	10° \approx 04'58	1.44279 AU
	13169 Jul 14 21:56	0° \approx					
superior conj	13169 Jul 20 03:45	8° \approx 50'51	-1°40'57	superior conj	13170 Jun 30 21:09	19° \approx 11'52	-2°04'59
minimum elong	13169 Jul 20 10:47	9° \approx 21'04	1°41'03	minimum elong	13170 Jul 01 02:56	19° \approx 35'30	2°05'38
evening rise	13169 Jul 31 12:14	28° \approx 57'47			13170 Jul 07 09:30	0° \approx	
	13169 Aug 01 02:00	0° \approx		evening rise	13170 Jul 13 22:42	11° \approx 09'25	
asc. node	13169 Aug 02 06:54	2° \approx 10'33		asc. node	13170 Jul 20 03:39	21° \approx 04'02	
evening max el	13169 Aug 16 18:08	24° \approx 32'34	18°05'55		13170 Jul 25 06:08	0° \approx	
retrograde	13169 Aug 23 14:14	28° \approx 02'30		evening max el	13170 Jul 31 08:10	7° \approx 49'30	18°04'37
evening set	13169 Aug 25 22:22	27° \approx 38'13		retrograde	13170 Aug 06 18:09	11° \approx 09'59	
inferior conj	13169 Sep 01 21:19	22° \approx 44'15	0°45'01	evening set	13170 Aug 09 10:29	10° \approx 33'38	
minimum elong	13169 Sep 01 22:42	22° \approx 41'03	0°44'16	inferior conj	13170 Aug 15 18:15	5° \approx 21'14	1°50'11
desc. node	13169 Sep 04 08:51	20° \approx 26'21		minimum elong	13170 Aug 15 20:44	5° \approx 14'41	1°48'55
min. Earth dist.	13169 Sep 05 02:51	19° \approx 46'09	0.60211 AU	min. Earth dist.	13170 Aug 18 14:41	2° \approx 22'03	0.62488 AU
morning rise	13169 Sep 08 19:55	16° \approx 55'43			13170 Aug 21 04:06	30° \approx 8	
direct	13169 Sep 15 08:56	14° \approx 51'47		morning rise	13170 Aug 22 04:46	29° \approx 12'08	
morning max el	13169 Sep 29 16:17	22° \approx 44'46	27°51'04	desc. node	13170 Aug 22 06:20	29° \approx 09'17	
	13169 Oct 06 03:05	0° \approx		direct	13170 Aug 28 21:07	26° \approx 04'27	
	13169 Oct 25 05:40	0° \approx			13170 Sep 06 08:58	0° \approx	
asc. node	13169 Oct 29 08:49	8° \approx 01'55		morning max el	13170 Sep 11 23:16	4° \approx 48'10	27°55'41
morning set	13169 Nov 01 03:51	13° \approx 45'57			13170 Sep 30 21:50	0° \approx	
max. Earth dist.	13169 Nov 07 05:49	26° \approx 55'55	1.31316 AU	morning set	13170 Oct 16 02:35	27° \approx 40'48	
				asc. node	13170 Oct 16 05:29	27° \approx 55'35	
superior conj	13169 Nov 08 07:18	29° \approx 17'35	1°22'31		13170 Oct 17 05:44	0° \approx	
minimum elong	13169 Nov 08 05:18	29° \approx 06'24	1°23'05	max. Earth dist.	13170 Oct 21 09:48	8° \approx 49'31	1.31895 AU
	13169 Nov 08 14:56	0° \approx					
evening rise	13169 Nov 15 00:05	14° \approx 05'08		superior conj	13170 Oct 23 16:17	13° \approx 46'16	1°06'15
	13169 Nov 22 20:39	0° \approx		minimum elong	13170 Oct 23 14:01	13° \approx 33'48	1°06'30
desc. node	13169 Dec 01 05:37	14° \approx 10'02		evening rise	13170 Oct 30 10:58	28° \approx 13'59	
					13170 Oct 31 02:15	0° \approx	

	13170 Nov 16 19:01	0°♄			13171 Oct 23 08:29	0°♄	
desc. node	13170 Nov 18 02:47	1°♄46'43		desc. node	13171 Nov 05 00:03	18°♄05'03	
evening max el	13170 Nov 24 04:05	8°♄39'23	24°11'29	evening max el	13171 Nov 05 14:43	18°♄41'35	22°29'30
retrograde	13170 Dec 07 19:37	15°♄27'40		retrograde	13171 Nov 18 12:44	25°♄06'01	
evening set	13170 Dec 12 20:07	14°♄32'24		evening set	13171 Nov 22 03:51	24°♄37'11	
min. Earth dist.	13170 Dec 18 15:27	11°♄38'11	0.55827 AU	min. Earth dist.	13171 Nov 29 22:19	21°♄07'57	0.54753 AU
inferior conj	13170 Dec 20 19:39	10°♄18'24	-5°40'58	inferior conj	13171 Nov 30 18:09	20°♄39'58	-5°53'41
minimum elong	13170 Dec 21 01:19	10°♄09'43	5°39'17	minimum elong	13171 Nov 30 15:32	20°♄43'40	5°52'34
morning rise	13170 Dec 29 08:28	6°♄19'28		morning rise	13171 Dec 09 04:28	16°♄52'24	
direct	13170 Dec 31 20:43	6°♄03'06		direct	13171 Dec 12 10:45	16°♄28'16	
morning max el	13171 Jan 11 01:57	10°♄57'12	19°52'54	morning max el	13171 Dec 24 05:00	22°♄05'11	21°18'52
asc. node	13171 Jan 12 05:27	12°♄06'54		asc. node	13171 Dec 30 02:37	28°♄59'54	
	13171 Jan 23 22:22	0°♄			13171 Dec 30 19:38	0°♄	
morning set	13171 Jan 28 20:14	9°♄42'02		morning set	13172 Jan 13 05:22	24°♄25'47	
					13172 Jan 15 21:00	0°♄	
superior conj	13171 Feb 05 15:38	25°♄31'21	1°04'36	superior conj	13172 Jan 20 11:44	9°♄41'01	1°22'30
minimum elong	13171 Feb 05 18:25	25°♄45'12	1°04'53	minimum elong	13172 Jan 20 14:03	9°♄52'59	1°23'06
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max. Earth dist.	13171 Feb 11 16:04	7°♄08'23	1.37217 AU	max. Earth dist.	13172 Jan 29 04:28	26°♄57'02	
desc. node	13171 Feb 14 02:53	11°♄39'16		evening rise	13172 Jan 30 19:45	0°♄	
evening rise	13171 Feb 15 09:42	13°♄58'04			13172 Jan 31 23:31	2°♄06'55	
	13171 Feb 24 21:06	0°♄		desc. node	13172 Feb 18 05:53	0°♄	
	13171 Mar 18 09:20	0°♄			13172 Mar 04 11:34	18°♄38'00	26°32'40
evening max el	13171 Mar 22 21:44	4°♄50'02	25°29'20	evening max el	13172 Mar 17 12:13	25°♄59'20	
retrograde	13171 Apr 04 04:35	11°♄55'56		retrograde	13172 Mar 23 20:38	23°♄27'33	
evening set	13171 Apr 10 02:22	9°♄29'12		evening set	13172 Mar 26 23:37	20°♄24'02	
asc. node	13171 Apr 10 02:13	9°♄29'32		asc. node	13172 Mar 27 22:35	19°♄17'53	0.66525 AU
min. Earth dist.	13171 Apr 14 10:11	4°♄44'56	0.67732 AU	min. Earth dist.	13172 Mar 29 19:53	17°♄01'56	0°53'24
inferior conj	13171 Apr 15 19:11	2°♄58'43	1°42'05	inferior conj	13172 Mar 29 18:34	17°♄05'53	0°52'42
minimum elong	13171 Apr 15 17:09	3°♄05'17	1°40'58	minimum elong	13172 Apr 04 17:30	11°♄20'45	
	13171 Apr 18 05:08	30°♄		morning rise	13172 Apr 07 18:19	10°♄29'15	
morning rise	13171 Apr 21 08:23	27°♄06'42		direct	13172 Apr 14 05:17	13°♄54'50	18°22'31
direct	13171 Apr 24 19:43	25°♄57'29		morning max el	13172 Apr 26 01:58	0°♄	
morning max el	13171 May 01 17:22	29°♄43'08	19°06'17		13172 Apr 29 01:46	4°♄41'14	
	13171 May 02 00:10	0°♄		desc. node	13172 May 04 07:30	12°♄59'22	
desc. node	13171 May 13 05:04	14°♄41'24		morning set	13172 May 15 02:09	0°♄	
greatest brilliancy	13171 May 14 18:33	17°♄00'57	-0.7m				
	13171 May 23 06:45	0°♄					
morning set	13171 May 25 06:44	3°♄05'06		superior conj	13172 May 20 00:11	7°♄41'48	-2°02'00
max. Earth dist.	13171 Jun 07 21:21	24°♄15'07	1.45412 AU	minimum elong	13172 May 19 16:40	7°♄12'26	2°02'27
				max. Earth dist.	13172 May 20 16:55	8°♄47'06	1.45829 AU
superior conj	13171 Jun 10 16:25	28°♄38'51	-2°13'31		13172 Jun 03 06:40	0°♄	
minimum elong	13171 Jun 10 15:59	28°♄37'11	2°14'31	evening rise	13172 Jun 04 21:48	2°♄33'31	
	13171 Jun 11 12:58	0°♄		greatest brilliancy	13172 Jun 14 18:07	17°♄56'39	-0.8m
evening rise	13171 Jun 25 10:29	22°♄21'31		asc. node	13172 Jun 22 21:19	29°♄48'35	
	13171 Jun 30 02:35	0°♄			13172 Jun 23 00:47	0°♄	
asc. node	13171 Jul 07 00:26	11°♄01'06		evening max el	13172 Jun 27 08:58	5°♄05'51	18°56'05
evening max el	13171 Jul 14 22:02	21°♄23'02	18°21'39	retrograde	13172 Jul 04 02:42	8°♄48'18	
retrograde	13171 Jul 21 07:29	24°♄47'50		evening set	13172 Jul 07 12:29	7°♄41'14	
evening set	13171 Jul 24 08:23	23°♄56'54		inferior conj	13172 Jul 13 00:56	1°♄57'13	3°00'26
inferior conj	13171 Jul 30 04:41	18°♄27'57	2°34'12	minimum elong	13172 Jul 13 02:26	1°♄52'28	2°59'20
minimum elong	13171 Jul 30 07:00	18°♄21'11	2°32'57	min. Earth dist.	13172 Jul 14 17:27	29°♄48'59	0.66320 AU
min. Earth dist.	13171 Aug 01 11:52	15°♄47'09	0.64574 AU		13172 Jul 14 13:56	30°♄	
morning rise	13171 Aug 05 04:16	12°♄08'02		morning rise	13172 Jul 18 15:40	25°♄33'33	
desc. node	13171 Aug 09 03:47	9°♄53'40		direct	13172 Jul 24 22:02	22°♄53'06	
direct	13171 Aug 11 18:00	9°♄29'53		desc. node	13172 Jul 26 01:11	22°♄57'46	
morning max el	13171 Aug 25 09:23	17°♄28'26	27°24'38		13172 Aug 06 06:33	0°♄	
	13171 Sep 04 20:33	0°♄		morning max el	13172 Aug 06 20:25	0°♄34'39	26°25'03
	13171 Sep 23 18:45	0°♄			13172 Aug 28 20:14	0°♄	
morning set	13171 Sep 29 16:34	11°♄09'03		morning set	13172 Sep 11 18:32	24°♄02'09	
asc. node	13171 Oct 03 02:06	17°♄57'42			13172 Sep 14 21:26	0°♄	
max. Earth dist.	13171 Oct 04 06:13	20°♄22'24	1.33010 AU	max. Earth dist.	13172 Sep 15 16:51	1°♄34'49	1.34644 AU
				asc. node	13172 Sep 18 22:40	8°♄03'34	
superior conj	13171 Oct 07 20:59	27°♄59'30	0°44'27				
minimum elong	13171 Oct 07 19:01	27°♄48'59	0°44'29	superior conj	13172 Sep 20 18:55	11°♄50'04	0°17'26
	13171 Oct 08 19:28	0°♄		minimum elong	13172 Sep 20 17:59	11°♄45'11	0°17'22
evening rise	13171 Oct 14 22:00	13°♄09'23		evening rise	13172 Sep 28 07:11	27°♄33'22	






































































































































	13172 Sep 29 11:25	0°♄		superior conj	13173 Sep 04 07:10	25°♄10'49	-0°14'04
evening max el	13172 Oct 17 09:12	29°♄00'42	20°55'44	minimum elong	13173 Sep 04 08:04	25°♄15'17	0°14'05
	13172 Oct 18 10:12	0°♄		behind sun begin	13173 Sep 04 04:53	24°♄59'35	
desc. node	13172 Oct 21 21:26	2°♄37'48		behind sun end	13173 Sep 04 11:15	25°♄31'01	
retrograde	13172 Oct 28 23:24	4°♄46'21		asc. node	13173 Sep 05 19:15	28°♄09'48	
evening set	13172 Oct 31 10:01	4°♄32'07			13173 Sep 06 17:16	0°♄	
inferior conj	13172 Nov 09 09:34	0°♄38'08	-5°06'52	evening rise	13173 Sep 12 12:19	11°♄44'15	
minimum elong	13172 Nov 09 00:08	0°♄51'32	5°03'57		13173 Sep 22 05:04	0°♄	
min. Earth dist.	13172 Nov 10 04:31	0°♄11'12	0.54557 AU	evening max el	13173 Sep 29 17:25	10°♄03'02	19°40'42
	13172 Nov 10 12:26	30°♄		desc. node	13173 Oct 08 18:53	14°♄58'45	
morning rise	13172 Nov 17 14:32	26°♄44'55		retrograde	13173 Oct 09 16:13	15°♄01'02	
direct	13172 Nov 21 18:34	26°♄07'42		evening set	13173 Oct 11 13:37	14°♄51'03	
	13172 Dec 01 22:51	0°♄		inferior conj	13173 Oct 20 08:41	10°♄47'37	-3°32'51
morning max el	13172 Dec 04 19:40	2°♄25'45	23°02'38	minimum elong	13173 Oct 19 23:45	11°♄01'37	3°29'12
asc. node	13172 Dec 15 23:42	16°♄50'30		min. Earth dist.	13173 Oct 22 13:35	9°♄24'50	0.55292 AU
	13172 Dec 23 05:47	0°♄		morning rise	13173 Oct 28 08:07	6°♄28'06	
morning set	13172 Dec 27 16:48	9°♄12'13		direct	13173 Nov 02 08:50	5°♄32'02	
				morning max el	13173 Nov 16 05:42	12°♄26'18	24°51'01
superior conj	13173 Jan 03 15:15	24°♄09'04	1°33'32		13173 Nov 29 16:57	0°♄	
minimum elong	13173 Jan 03 16:37	24°♄16'24	1°34'25	asc. node	13173 Dec 02 20:42	5°♄24'54	
	13173 Jan 06 09:19	0°♄		morning set	13173 Dec 12 04:40	23°♄56'16	
max. Earth dist.	13173 Jan 06 20:11	0°♄56'55	1.33475 AU		13173 Dec 14 23:38	0°♄	
evening rise	13173 Jan 11 12:38	10°♄28'34					
desc. node	13173 Jan 17 20:13	22°♄22'48		superior conj	13173 Dec 18 23:34	8°♄48'20	1°38'08
	13173 Jan 22 05:30	0°♄		minimum elong	13173 Dec 18 23:50	8°♄49'46	1°39'08
	13173 Feb 12 21:02	0°♄		max. Earth dist.	13173 Dec 20 21:16	12°♄58'12	1.32225 AU
evening max el	13173 Feb 15 01:02	2°♄11'02	27°16'17	evening rise	13173 Dec 26 07:00	24°♄24'56	
retrograde	13173 Feb 28 13:38	9°♄37'37			13173 Dec 29 01:45	0°♄	
evening set	13173 Mar 07 06:40	7°♄06'25		desc. node	13174 Jan 04 17:00	12°♄21'30	
min. Earth dist.	13173 Mar 11 03:52	3°♄29'27	0.64931 AU		13174 Jan 15 19:25	0°♄	
inferior conj	13173 Mar 13 13:09	0°♄52'19	-0°06'24	evening max el	13174 Jan 28 12:31	15°♄17'09	27°33'15
minimum elong	13173 Mar 13 13:20	0°♄51'48	0°06'14	retrograde	13174 Feb 11 08:10	22°♄41'29	
transit middle	13173 Mar 13 13:20	0°♄51'48	0°06'14	evening set	13174 Feb 18 05:58	20°♄18'01	
transit begin	13173 Mar 13 10:32	0°♄59'32		min. Earth dist.	13174 Feb 22 00:09	17°♄09'48	0.63017 AU
transit end	13173 Mar 13 16:08	0°♄44'06		inferior conj	13174 Feb 24 20:08	14°♄22'36	-1°17'05
asc. node	13173 Mar 13 21:05	0°♄30'32		minimum elong	13174 Feb 24 22:41	14°♄16'18	1°15'40
	13173 Mar 14 08:20	30°♄		asc. node	13174 Feb 28 18:34	10°♄51'16	
morning rise	13173 Mar 19 21:45	25°♄24'24		morning rise	13174 Mar 03 17:55	9°♄10'40	
direct	13173 Mar 22 13:21	24°♄47'33		direct	13174 Mar 06 01:51	8°♄44'57	
morning max el	13173 Mar 28 21:36	28°♄05'14	17°55'48	morning max el	13174 Mar 12 15:24	12°♄05'59	17°46'25
	13173 Mar 30 16:23	0°♄			13174 Mar 24 21:11	0°♄	
morning set	13173 Apr 15 12:49	24°♄17'37		morning set	13174 Mar 28 19:34	6°♄48'18	
desc. node	13173 Apr 15 22:24	24°♄57'15		desc. node	13174 Apr 02 18:58	15°♄24'09	
	13173 Apr 18 23:48	0°♄					
superior conj	13173 Apr 29 14:05	17°♄07'52	-1°32'45	superior conj	13174 Apr 09 23:58	27°♄32'11	-0°53'55
minimum elong	13173 Apr 29 05:10	16°♄32'25	1°32'27	minimum elong	13174 Apr 09 18:33	27°♄09'47	0°53'32
max. Earth dist.	13173 May 03 13:15	23°♄23'34	1.45488 AU		13174 Apr 11 11:56	0°♄	
	13173 May 07 18:43	0°♄		max. Earth dist.	13174 Apr 16 07:15	7°♄46'10	1.44436 AU
evening rise	13173 May 15 14:22	12°♄04'33		evening rise	13174 Apr 25 01:49	21°♄30'45	
	13173 May 27 10:02	0°♄			13174 Apr 30 15:38	0°♄	
greatest brilliancy	13173 May 29 21:51	3°♄40'30	-0.6m	evening max el	13174 May 22 03:36	0°♄	
asc. node	13173 Jun 09 18:20	17°♄59'28		asc. node	13174 May 24 15:03	2°♄40'51	20°51'28
evening max el	13173 Jun 10 14:56	18°♄52'54	19°46'43	retrograde	13174 May 27 15:28	5°♄21'13	
retrograde	13173 Jun 18 00:58	23°♄05'13		evening set	13174 Jun 01 23:56	7°♄32'27	
evening set	13173 Jun 21 20:06	21°♄41'28		inferior conj	13174 Jun 06 05:08	5°♄52'12	
inferior conj	13173 Jun 27 03:58	15°♄43'49	3°11'59	minimum elong	13174 Jun 11 11:13	29°♄42'34	3°11'08
minimum elong	13173 Jun 27 04:25	15°♄42'17	3°10'58		13174 Jun 11 10:40	29°♄44'29	3°10'06
min. Earth dist.	13173 Jun 28 06:00	14°♄16'31	0.67638 AU		13174 Jun 11 06:11	30°♄	
morning rise	13173 Jul 02 12:22	9°♄21'02		min. Earth dist.	13174 Jun 11 23:30	29°♄00'01	0.68494 AU
direct	13173 Jul 08 08:15	6°♄47'15		morning rise	13174 Jun 16 15:57	23°♄23'38	
desc. node	13173 Jul 12 22:31	8°♄04'35		direct	13174 Jun 21 23:39	21°♄03'23	
morning max el	13173 Jul 20 07:01	13°♄57'00	25°06'05	desc. node	13174 Jun 29 19:44	24°♄46'17	
	13173 Aug 02 08:23	0°♄		morning max el	13174 Jul 02 17:22	27°♄28'04	23°37'29
	13173 Aug 21 15:46	0°♄			13174 Jul 05 02:25	0°♄	
morning set	13173 Aug 25 04:36	6°♄11'05			13174 Jul 26 23:27	0°♄	
max. Earth dist.	13173 Aug 28 18:38	12°♄41'52	1.36707 AU	morning set	13174 Aug 06 18:03	17°♄24'02	
				max. Earth dist.	13174 Aug 10 16:12	24°♄09'01	1.39023 AU

	13174 Aug 13 23:11	0°♎			13175 Jul 19 19:32	0°♏	
			max. Earth dist.		13175 Jul 23 16:12	6°♏22'06	1.41334 AU
superior conj	13174 Aug 18 05:59	7°♎52'38 -0°48'29		superior conj	13175 Jul 31 11:08	19°♏46'27 -1°22'55	
minimum elong	13174 Aug 18 09:28	8°♎08'57 0°48'22		minimum elong	13175 Jul 31 17:15	20°♏13'33 1°22'49	
asc. node	13174 Aug 23 15:50	18°♎12'25			13175 Aug 06 03:03	0°♎	
evening rise	13174 Aug 27 10:36	25°♎34'17		evening rise	13175 Aug 10 22:34	8°♎55'06	
	13174 Aug 29 17:28	0°♏		asc. node	13175 Aug 10 12:27	8°♎08'01	
evening max el	13174 Sep 12 14:58	21°♏53'35 18°47'26			13175 Aug 23 05:28	0°♏	
retrograde	13174 Sep 21 00:56	26°♏07'13		evening max el	13175 Aug 26 22:11	4°♏25'53 18°15'20	
evening set	13174 Sep 22 22:28	25°♏55'07		retrograde	13175 Sep 03 04:45	8°♏07'11	
desc. node	13174 Sep 25 16:24	24°♏58'25		evening set	13175 Sep 05 08:31	7°♏48'23	
inferior conj	13174 Oct 01 02:17	21°♏33'59 -1°42'49		inferior conj	13175 Sep 12 17:41	3°♏06'19 -0°02'55	
minimum elong	13174 Sep 30 22:00	21°♏41'45 1°40'50		minimum elong	13175 Sep 12 17:34	3°♏06'33 0°02'56	
min. Earth dist.	13174 Oct 04 03:55	19°♏20'54 0.56834 AU		transit middle	13175 Sep 12 17:34	3°♏06'33 0°02'56	
morning rise	13174 Oct 08 18:12	16°♏37'25		transit begin	13175 Sep 12 14:10	3°♏13'45	
direct	13174 Oct 14 13:13	15°♏16'07		transit end	13175 Sep 12 20:58	2°♏59'19	
morning max el	13174 Oct 28 19:02	22°♏39'33 26°25'43		desc. node	13175 Sep 12 13:55	3°♏14'18	
	13174 Nov 04 08:09	0°♎		min. Earth dist.	13175 Sep 16 01:14	0°♏18'36 0.58912 AU	
asc. node	13174 Nov 19 17:36	24°♎31'30			13175 Sep 16 10:34	30°♎	
	13174 Nov 22 12:39	0°♎		morning rise	13175 Sep 19 23:10	27°♎34'40	
morning set	13174 Nov 26 15:16	8°♎32'59		direct	13175 Sep 26 07:41	25°♎45'29	
					13175 Oct 06 15:39	0°♏	
superior conj	13174 Dec 03 10:32	23°♎32'10 1°36'39		morning max el	13175 Oct 10 15:28	3°♏29'34 27°30'41	
minimum elong	13174 Dec 03 09:44	23°♎27'43 1°37'37			13175 Oct 30 00:25	0°♎	
max. Earth dist.	13174 Dec 04 03:40	25°♎07'33 1.31462 AU		asc. node	13175 Nov 06 14:22	14°♎01'28	
	13174 Dec 06 08:31	0°♎		morning set	13175 Nov 10 22:46	22°♎57'06	
evening rise	13174 Dec 10 08:49	8°♎39'19			13175 Nov 14 05:06	0°♎	
	13174 Dec 21 10:50	0°♎					
desc. node	13174 Dec 22 13:54	1°♎55'54		superior conj	13175 Nov 17 22:10	8°♎14'13 1°29'19	
evening max el	13175 Jan 10 19:52	27°♎44'50 27°18'06		minimum elong	13175 Nov 17 20:30	8°♎04'57 1°30'05	
	13175 Jan 13 09:08	0°♎		max. Earth dist.	13175 Nov 17 12:07	7°♎18'06 1.31217 AU	
retrograde	13175 Jan 24 18:45	5°♎01'43		evening rise	13175 Nov 24 15:43	23°♎05'02	
evening set	13175 Jan 31 15:32	2°♎54'30			13175 Nov 27 22:57	0°♎	
min. Earth dist.	13175 Feb 04 10:25	0°♎07'44 0.60893 AU		desc. node	13175 Dec 09 10:54	20°♎55'40	
	13175 Feb 04 14:06	30°♎			13175 Dec 15 15:50	0°♎	
inferior conj	13175 Feb 07 13:31	27°♎24'48 -2°36'36		evening max el	13175 Dec 23 20:26	9°♎22'53 26°28'16	
minimum elong	13175 Feb 07 19:05	27°♎12'41 2°33'49		retrograde	13176 Jan 06 19:27	16°♎29'30	
morning rise	13175 Feb 15 01:42	22°♎31'35		evening set	13176 Jan 13 07:19	14°♎46'42	
asc. node	13175 Feb 15 16:02	22°♎22'46		min. Earth dist.	13176 Jan 17 10:11	12°♎10'07 0.58729 AU	
direct	13175 Feb 17 04:17	22°♎13'18		inferior conj	13176 Jan 20 13:35	9°♎47'56 -3°59'05	
morning max el	13175 Feb 24 07:22	25°♎48'03 17°55'09		minimum elong	13176 Jan 20 21:49	9°♎32'22 3°55'37	
	13175 Feb 27 20:52	0°♎		morning rise	13176 Jan 28 15:16	5°♎15'49	
morning set	13175 Mar 11 21:36	20°♎13'14		direct	13176 Jan 30 16:24	5°♎01'17	
	13175 Mar 17 06:56	0°♎		asc. node	13176 Feb 02 13:25	5°♎31'27	
desc. node	13175 Mar 20 15:28	5°♎58'02		morning max el	13176 Feb 07 17:39	8°♎59'36 18°23'34	
					13176 Feb 21 07:35	0°♎	
superior conj	13175 Mar 22 10:09	9°♎04'34 -0°13'59		morning set	13176 Feb 23 13:13	4°♎14'35	
minimum elong	13175 Mar 22 08:55	8°♎59'13 0°13'51					
behind sun begin	13175 Mar 22 04:47	8°♎41'16		superior conj	13176 Mar 03 18:12	21°♎36'41 0°21'48	
behind sun end	13175 Mar 22 13:03	9°♎17'09		minimum elong	13176 Mar 03 19:44	21°♎43'46 0°21'49	
max. Earth dist.	13175 Mar 29 21:05	21°♎40'35 1.42797 AU		desc. node	13176 Mar 06 11:57	26°♎34'41	
	13175 Apr 04 00:44	0°♎			13176 Mar 08 10:12	0°♎	
evening rise	13175 Apr 04 23:41	1°♎30'48		max. Earth dist.	13176 Mar 11 06:32	4°♎56'45 1.40745 AU	
	13175 Apr 24 03:10	0°♎		evening rise	13176 Mar 15 16:52	12°♎23'28	
evening max el	13175 May 07 09:55	16°♎30'02 22°06'43			13176 Mar 26 21:49	0°♎	
asc. node	13175 May 14 12:42	21°♎38'56			13176 Apr 18 16:54	0°♎	
retrograde	13175 May 16 21:48	22°♎05'05		evening max el	13176 Apr 19 01:13	0°♎20'54 23°27'17	
evening set	13175 May 21 13:51	20°♎09'10		retrograde	13176 Apr 29 17:00	6°♎37'17	
inferior conj	13175 May 26 20:33	13°♎49'36 2°59'22		asc. node	13176 Apr 30 10:01	6°♎34'59	
minimum elong	13175 May 26 19:08	13°♎54'29 2°58'14		evening set	13176 May 04 20:35	4°♎27'11	
min. Earth dist.	13175 May 26 19:45	13°♎52'21 0.68879 AU			13176 May 08 18:54	30°♎	
morning rise	13175 Jun 01 00:15	7°♎36'31		min. Earth dist.	13176 May 09 16:30	28°♎46'39 0.68794 AU	
direct	13175 Jun 05 19:10	5°♎34'27		inferior conj	13176 May 10 05:56	28°♎00'26 2°37'22	
morning max el	13175 Jun 15 05:42	11°♎06'49 22°08'41		minimum elong	13176 May 10 03:57	28°♎07'14 2°36'07	
desc. node	13175 Jun 16 16:48	12°♎38'24		morning rise	13176 May 15 11:15	21°♎54'39	
	13175 Jun 30 03:51	0°♎		direct	13176 May 19 17:26	20°♎13'11	
morning set	13175 Jul 18 06:53	27°♎31'36					

morning max el	13176 May 27 23:14	24° ♄ 55'34	20°47'26	greatest brilliancy	13177 May 23 16:39	25° ♄ 22'59	-0.6m
	13176 Jun 01 11:39	0° ♄			13177 May 26 19:34	0° ♄	
desc. node	13176 Jun 02 13:44	1° ♄ 21'27		morning set	13177 Jun 05 21:01	15° ♄ 16'07	
	13176 Jun 22 12:43	0° ♄			13177 Jun 15 08:43	0° ♄	
morning set	13176 Jun 26 19:50	6° ♄ 37'12		max. Earth dist.	13177 Jun 17 12:39	3° ♄ 24'34	1.44850 AU
max. Earth dist.	13176 Jul 04 23:02	19° ♄ 30'35	1.43351 AU				
	13176 Jul 11 08:07	0° ♄		superior conj	13177 Jun 22 01:38	10° ♄ 38'38	-2°10'52
				minimum elong	13177 Jun 22 05:20	10° ♄ 53'29	2°11'46
superior conj	13176 Jul 11 18:21	0° ♄ 42'52	-1°52'36		13177 Jul 03 20:41	0° ♄	
minimum elong	13176 Jul 12 01:24	1° ♄ 12'32	1°52'54	evening rise	13177 Jul 05 21:06	3° ♄ 23'08	
evening rise	13176 Jul 23 19:47	21° ♄ 35'35		asc. node	13177 Jul 14 05:54	17° ♄ 20'05	
asc. node	13176 Jul 27 09:09	27° ♄ 52'28			13177 Jul 23 04:11	0° ♄	
	13176 Jul 28 14:19	0° ♄		evening max el	13177 Jul 24 01:10	0° ♄ 54'30	18°09'39
evening max el	13176 Aug 09 10:52	17° ♄ 29'42	18°03'07	retrograde	13177 Jul 30 09:46	4° ♄ 15'18	
retrograde	13176 Aug 16 01:13	20° ♄ 53'35		evening set	13177 Aug 02 05:45	3° ♄ 32'53	
evening set	13176 Aug 18 12:55	20° ♄ 24'21			13177 Aug 06 16:21	30° ♄	
inferior conj	13176 Aug 25 04:58	15° ♄ 22'12	1°15'28	inferior conj	13177 Aug 08 08:08	28° ♄ 12'54	2°11'17
minimum elong	13176 Aug 25 07:01	15° ♄ 17'09	1°14'23	minimum elong	13177 Aug 08 10:40	28° ♄ 05'55	2°09'58
min. Earth dist.	13176 Aug 28 07:19	12° ♄ 21'15	0.61194 AU	min. Earth dist.	13177 Aug 10 23:05	25° ♄ 19'45	0.63407 AU
desc. node	13176 Aug 29 11:25	11° ♄ 17'59		morning rise	13177 Aug 14 13:46	21° ♄ 58'08	
morning rise	13176 Aug 31 22:24	9° ♄ 23'58		desc. node	13177 Aug 16 08:54	20° ♄ 46'38	
direct	13176 Sep 07 13:44	7° ♄ 09'56		direct	13177 Aug 21 05:31	19° ♄ 26'19	
morning max el	13176 Sep 21 19:08	15° ♄ 06'57	27°57'46	morning max el	13177 Sep 04 03:56	27° ♄ 27'49	27°46'35
	13176 Oct 03 21:50	0° ♄			13177 Sep 06 13:42	0° ♄	
	13176 Oct 21 13:19	0° ♄			13177 Sep 27 15:16	0° ♄	
asc. node	13176 Oct 23 11:03	3° ♄ 48'20		morning set	13177 Oct 08 20:39	20° ♄ 48'40	
morning set	13176 Oct 25 01:19	7° ♄ 04'27		asc. node	13177 Oct 10 07:40	23° ♄ 46'01	
max. Earth dist.	13176 Oct 30 19:02	19° ♄ 21'54	1.31499 AU		13177 Oct 13 07:32	0° ♄	
				max. Earth dist.	13177 Oct 13 20:26	1° ♄ 08'23	1.32309 AU
superior conj	13176 Nov 01 08:39	22° ♄ 49'34	1°16'18				
minimum elong	13176 Nov 01 06:29	22° ♄ 37'29	1°16'45	superior conj	13177 Oct 16 16:03	7° ♄ 12'04	0°57'40
	13176 Nov 04 14:15	0° ♄		minimum elong	13177 Oct 16 13:49	6° ♄ 59'59	0°57'49
evening rise	13176 Nov 08 01:43	7° ♄ 37'16		evening rise	13177 Oct 23 12:53	22° ♄ 10'02	
	13176 Nov 19 12:34	0° ♄			13177 Oct 27 06:27	0° ♄	
desc. node	13176 Nov 25 08:01	9° ♄ 07'51		desc. node	13177 Nov 12 05:14	26° ♄ 13'59	
evening max el	13176 Dec 04 12:37	20° ♄ 08'47	25°07'25		13177 Nov 15 16:03	0° ♄	
retrograde	13176 Dec 18 08:10	27° ♄ 04'19		evening max el	13177 Nov 15 22:43	0° ♄ 16'14	23°27'57
evening set	13176 Dec 24 01:05	25° ♄ 51'10		retrograde	13177 Nov 29 08:14	6° ♄ 56'22	
min. Earth dist.	13176 Dec 29 00:35	23° ♄ 09'06	0.56764 AU	evening set	13177 Dec 03 19:11	6° ♄ 13'10	
inferior conj	13176 Dec 31 17:22	21° ♄ 23'07	-5°11'42	min. Earth dist.	13177 Dec 10 08:50	3° ♄ 06'19	0.55276 AU
minimum elong	13177 Jan 01 01:31	21° ♄ 09'44	5°09'02	inferior conj	13177 Dec 12 00:54	2° ♄ 07'44	-5°53'10
morning rise	13177 Jan 09 04:14	17° ♄ 13'03		minimum elong	13177 Dec 12 03:28	2° ♄ 03'58	5°52'01
direct	13177 Jan 11 10:16	16° ♄ 58'29			13177 Dec 15 21:11	30° ♄	
asc. node	13177 Jan 19 10:42	20° ♄ 18'19		morning rise	13177 Dec 20 13:28	28° ♄ 15'37	
morning max el	13177 Jan 20 18:15	21° ♄ 29'31	19°13'42	direct	13177 Dec 23 08:35	27° ♄ 56'39	
	13177 Jan 27 09:44	0° ♄			13177 Dec 30 05:18	0° ♄	
morning set	13177 Feb 06 14:03	18° ♄ 39'32		morning max el	13178 Jan 03 05:38	3° ♄ 08'08	20°26'58
	13177 Feb 12 06:56	0° ♄		asc. node	13178 Jan 06 07:54	6° ♄ 29'47	
					13178 Jan 20 06:02	0° ♄	
superior conj	13177 Feb 14 19:39	4° ♄ 56'17	0°51'02	morning set	13178 Jan 21 20:52	3° ♄ 18'13	
minimum elong	13177 Feb 14 22:20	5° ♄ 09'18	0°51'10				
desc. node	13177 Feb 21 08:29	17° ♄ 10'47		superior conj	13178 Jan 29 10:01	18° ♄ 50'42	1°13'04
max. Earth dist.	13177 Feb 21 13:17	17° ♄ 32'29	1.38500 AU	minimum elong	13178 Jan 29 12:41	19° ♄ 04'12	1°13'28
evening rise	13177 Feb 25 07:13	24° ♄ 10'34		max. Earth dist.	13178 Feb 03 20:45	29° ♄ 35'46	1.36307 AU
	13177 Feb 28 17:17	0° ♄			13178 Feb 04 01:49	0° ♄	
	13177 Mar 20 15:28	0° ♄		evening rise	13178 Feb 07 16:32	6° ♄ 45'25	
evening max el	13177 Apr 01 14:53	14° ♄ 13'24	24°46'46	desc. node	13178 Feb 08 05:04	7° ♄ 42'35	
retrograde	13177 Apr 13 08:28	21° ♄ 03'53			13178 Feb 21 12:41	0° ♄	
asc. node	13177 Apr 17 07:23	19° ♄ 55'23		evening max el	13178 Mar 15 04:18	28° ♄ 04'16	25°58'11
evening set	13177 Apr 18 23:50	18° ♄ 42'02			13178 Mar 17 06:05	0° ♄	
min. Earth dist.	13177 Apr 23 11:35	13° ♄ 37'40	0.68251 AU	retrograde	13178 Mar 27 19:20	5° ♄ 18'26	
inferior conj	13177 Apr 24 13:31	12° ♄ 11'42	2°05'16	evening set	13178 Apr 02 21:57	2° ♄ 48'36	
minimum elong	13177 Apr 24 11:22	12° ♄ 18'51	2°04'02	asc. node	13178 Apr 04 04:47	1° ♄ 38'11	
morning rise	13177 Apr 29 23:07	6° ♄ 14'28			13178 Apr 05 17:23	30° ♄	
direct	13177 May 03 17:06	4° ♄ 53'53		min. Earth dist.	13178 Apr 07 03:01	28° ♄ 19'31	0.67267 AU
morning max el	13177 May 11 00:15	8° ♄ 56'18	19°38'51	inferior conj	13178 Apr 08 17:22	26° ♄ 19'27	1°22'47
desc. node	13177 May 20 10:34	20° ♄ 41'54		minimum elong	13178 Apr 08 15:33	26° ♄ 25'09	1°21'47

morning rise	13178 Apr 14 09:51	20° Υ 32'06		direct	13179 Apr 01 13:50	3° Υ 57'33	
direct	13178 Apr 17 16:32	19° Υ 30'52		morning max el	13179 Apr 07 22:53	7° Υ 18'43	18°09'07
morning max el	13178 Apr 24 08:44	23° Υ 06'21	18°45'43		13179 Apr 23 18:45	0° \mathcal{B}	
	13178 Apr 30 02:57	0° \mathcal{B}		desc. node	13179 Apr 24 03:58	0° \mathcal{B} 37'11	
desc. node	13178 May 07 07:19	10° \mathcal{B} 29'51		morning set	13179 Apr 26 20:52	4° \mathcal{B} 59'03	
morning set	13178 May 16 08:05	24° \mathcal{B} 29'18					
	13178 May 19 20:55	0° Π		superior conj	13179 May 11 22:33	28° \mathcal{B} 58'51	-1°51'23
max. Earth dist.	13178 May 31 06:33	17° Π 47'00	1.45678 AU	minimum elong	13179 May 11 13:37	28° \mathcal{B} 23'46	1°51'27
					13179 May 12 14:10	0° Π	
superior conj	13178 Jun 01 14:15	19° Π 51'00	-2°11'08	max. Earth dist.	13179 May 14 02:16	2° Π 21'14	1.45769 AU
minimum elong	13178 Jun 01 10:27	19° Π 36'09	2°12'00	evening rise	13179 May 28 00:40	24° Π 00'57	
	13178 Jun 08 01:10	0° \mathcal{E}			13179 May 31 21:22	0° \mathcal{E}	
evening rise	13178 Jun 16 22:33	14° \mathcal{E} 10'00		greatest brilliancy	13179 Jun 08 23:51	12° \mathcal{E} 24'19	-0.7m
greatest brilliancy	13178 Jun 23 02:42	24° \mathcal{E} 04'06	-0.9m	asc. node	13179 Jun 17 23:44	24° \mathcal{E} 58'35	
	13178 Jun 26 20:47	0° Ω		evening max el	13179 Jun 20 23:05	28° \mathcal{E} 18'16	19°15'43
asc. node	13178 Jul 01 02:46	6° Ω 24'58			13179 Jun 22 20:09	0° Ω	
evening max el	13178 Jul 07 14:03	14° Ω 32'50	18°34'09	retrograde	13179 Jun 27 22:59	2° Ω 12'10	
retrograde	13178 Jul 14 02:10	18° Ω 03'59		evening set	13179 Jul 01 12:35	0° Ω 58'16	
evening set	13178 Jul 17 06:41	17° Ω 06'25			13179 Jul 02 17:48	30° \mathcal{R} \mathcal{E}	
inferior conj	13178 Jul 22 23:13	11° Ω 30'45	2°47'17	inferior conj	13179 Jul 06 22:45	25° \mathcal{E} 08'27	3°06'55
minimum elong	13178 Jul 23 01:14	11° Ω 24'37	2°46'06	minimum elong	13179 Jul 06 23:49	25° \mathcal{E} 04'58	3°05'53
min. Earth dist.	13178 Jul 25 00:12	9° Ω 02'20	0.65363 AU	min. Earth dist.	13179 Jul 08 09:08	23° \mathcal{E} 16'31	0.66938 AU
morning rise	13178 Jul 28 18:44	5° Ω 08'12		morning rise	13179 Jul 12 10:27	18° \mathcal{E} 44'30	
desc. node	13178 Aug 03 06:21	2° Ω 31'18		direct	13179 Jul 18 12:42	16° \mathcal{E} 05'35	
direct	13178 Aug 04 05:39	2° Ω 27'54		desc. node	13179 Jul 21 03:43	16° \mathcal{E} 30'52	
morning max el	13178 Aug 17 14:58	10° Ω 21'44	27°02'14	morning max el	13179 Jul 31 01:53	23° \mathcal{E} 36'03	25°53'07
	13178 Sep 02 03:15	0° \mathcal{M}			13179 Aug 05 18:37	0° Ω	
	13178 Sep 20 02:47	0° \mathcal{A}			13179 Aug 26 11:57	0° \mathcal{M}	
morning set	13178 Sep 22 05:58	4° \mathcal{A} 03'10		morning set	13179 Sep 05 01:45	16° \mathcal{M} 39'15	
max. Earth dist.	13178 Sep 26 12:52	12° \mathcal{A} 31'51	1.33646 AU	max. Earth dist.	13179 Sep 08 19:01	23° \mathcal{M} 37'47	1.35475 AU
asc. node	13178 Sep 27 04:16	13° \mathcal{A} 50'13			13179 Sep 12 01:28	0° \mathcal{A}	
				asc. node	13179 Sep 14 00:52	3° \mathcal{A} 57'00	
superior conj	13178 Sep 30 18:10	21° \mathcal{A} 16'11	0°33'35				
minimum elong	13178 Sep 30 16:32	21° \mathcal{A} 07'35	0°33'33	superior conj	13179 Sep 14 12:25	4° \mathcal{A} 55'24	0°04'34
	13178 Oct 04 20:34	0° \mathcal{M}		minimum elong	13179 Sep 14 12:10	4° \mathcal{A} 54'03	0°04'29
evening rise	13178 Oct 07 23:22	6° \mathcal{M} 38'39		behind sun begin	13179 Sep 14 06:15	4° \mathcal{A} 24'09	
	13178 Oct 20 08:38	0° \mathcal{X}		behind sun end	13179 Sep 14 18:04	5° \mathcal{A} 24'01	
evening max el	13178 Oct 28 11:25	10° \mathcal{X} 20'32	21°47'43	evening rise	13179 Sep 22 07:08	20° \mathcal{A} 57'52	
desc. node	13178 Oct 30 02:34	11° \mathcal{X} 50'43			13179 Sep 26 18:41	0° \mathcal{M}	
retrograde	13178 Nov 09 21:55	16° \mathcal{X} 30'54		evening max el	13179 Oct 10 11:37	20° \mathcal{M} 57'14	20°21'18
evening set	13178 Nov 12 23:09	16° \mathcal{X} 09'56		desc. node	13179 Oct 16 23:59	25° \mathcal{M} 30'40	
inferior conj	13178 Nov 21 18:41	12° \mathcal{X} 15'24	-5°41'02	retrograde	13179 Oct 21 09:26	26° \mathcal{M} 22'36	
minimum elong	13178 Nov 21 12:27	12° \mathcal{X} 24'08	5°39'20	evening set	13179 Oct 23 12:18	26° \mathcal{M} 11'15	
min. Earth dist.	13178 Nov 21 15:11	12° \mathcal{X} 20'19	0.54550 AU	inferior conj	13179 Nov 01 11:46	22° \mathcal{M} 15'09	-4°31'06
morning rise	13178 Nov 30 02:45	8° \mathcal{X} 27'49		minimum elong	13179 Nov 01 01:40	22° \mathcal{M} 29'57	4°27'31
direct	13178 Dec 03 17:52	7° \mathcal{X} 58'59		min. Earth dist.	13179 Nov 02 22:39	21° \mathcal{M} 23'58	0.54756 AU
morning max el	13178 Dec 16 02:57	13° \mathcal{X} 54'17	22°01'32	morning rise	13179 Nov 09 14:23	18° \mathcal{M} 12'36	
asc. node	13178 Dec 24 05:02	23° \mathcal{X} 48'59		direct	13179 Nov 14 03:34	17° \mathcal{M} 27'54	
	13178 Dec 28 00:53	0° \mathcal{Z}		morning max el	13179 Nov 27 14:34	24° \mathcal{M} 02'55	23°49'09
morning set	13179 Jan 06 07:11	18° \mathcal{Z} 03'25			13179 Dec 02 23:53	0° \mathcal{X}	
	13179 Jan 11 21:52	0° \approx		asc. node	13179 Dec 11 02:05	12° \mathcal{X} 00'12	
					13179 Dec 20 11:02	0° \mathcal{Z}	
superior conj	13179 Jan 13 09:37	3° \approx 09'09	1°28'00	morning set	13179 Dec 21 19:02	2° \mathcal{Z} 49'44	
minimum elong	13179 Jan 13 11:33	3° \approx 19'24	1°28'44				
max. Earth dist.	13179 Jan 17 09:38	11° \approx 26'19	1.34389 AU	superior conj	13179 Dec 28 15:30	17° \mathcal{Z} 43'21	1°36'15
evening rise	13179 Jan 21 17:22	19° \approx 59'01		minimum elong	13179 Dec 28 16:24	17° \mathcal{Z} 48'15	1°37'12
desc. node	13179 Jan 26 01:43	28° \approx 05'42		max. Earth dist.	13179 Dec 31 06:33	23° \mathcal{Z} 22'38	1.32883 AU
	13179 Jan 27 03:10	0° \mathcal{H}			13180 Jan 03 10:26	0° \approx	
	13179 Feb 15 12:41	0° Υ		evening rise	13180 Jan 05 06:19	3° \approx 42'52	
evening max el	13179 Feb 25 17:56	11° Υ 46'35	26°54'08	desc. node	13180 Jan 12 22:28	18° \approx 15'28	
retrograde	13179 Mar 11 00:42	19° Υ 12'19			13180 Jan 19 21:46	0° \mathcal{H}	
evening set	13179 Mar 17 13:02	16° Υ 39'50		evening max el	13180 Feb 08 06:58	25° \mathcal{H} 10'31	27°27'15
min. Earth dist.	13179 Mar 21 12:41	12° Υ 44'26	0.65880 AU		13180 Feb 14 06:48	0° Υ	
asc. node	13179 Mar 22 02:15	12° Υ 05'38		retrograde	13180 Feb 21 23:25	2° Υ 37'06	
inferior conj	13179 Mar 23 15:14	10° Υ 17'58	0°29'23	evening set	13180 Feb 28 18:50	0° Υ 08'30	
minimum elong	13179 Mar 23 14:27	10° Υ 20'15	0°29'01		13180 Feb 28 23:27	30° \mathcal{R} \mathcal{H}	
morning rise	13179 Mar 29 17:14	4° Υ 42'15		min. Earth dist.	13180 Mar 03 14:33	26° \mathcal{H} 44'05	0.64146 AU

inferior conj	13180 Mar 06 04:32	24° X 01'13	-0°35'05	inferior conj	13181 Feb 17 06:09	7° X 20'30	-1°49'55
minimum elong	13180 Mar 06 05:37	23° X 58'21	0°34'26	minimum elong	13181 Feb 17 09:56	7° X 11'38	1°47'54
asc. node	13180 Mar 07 23:42	22° X 10'34		asc. node	13181 Feb 22 21:09	2° X 55'33	
morning rise	13180 Mar 12 18:29	18° X 39'27		morning rise	13181 Feb 24 09:58	2° X 15'53	
direct	13180 Mar 15 06:32	18° X 07'49		direct	13181 Feb 26 15:24	1° X 53'39	
morning max el	13180 Mar 21 16:09	21° X 25'57	17°49'36	morning max el	13181 Mar 05 09:30	5° X 19'10	17°47'48
	13180 Mar 28 07:40	0° Y		morning set	13181 Mar 21 05:23	29° X 46'15	
morning set	13180 Apr 07 13:42	16° Y 50'20			13181 Mar 21 08:29	0° Y	
desc. node	13180 Apr 10 00:34	20° Y 58'22		desc. node	13181 Mar 27 21:05	11° Y 28'29	
	13180 Apr 15 10:34	0° Z					
superior conj	13180 Apr 20 19:45	8° Z 46'34	-1°16'54	superior conj	13181 Apr 01 15:51	19° Y 39'12	-0°36'43
minimum elong	13180 Apr 20 11:59	8° Z 15'12	1°16'29	minimum elong	13181 Apr 01 12:18	19° Y 24'15	0°36'25
max. Earth dist.	13180 Apr 25 21:40	16° Z 52'50	1.45125 AU		13181 Apr 07 22:05	0° Z	
	13180 May 04 07:42	0° II		max. Earth dist.	13181 Apr 08 14:29	1° Z 06'22	1.43807 AU
evening rise	13180 May 06 13:01	3° II 24'38		evening rise	13181 Apr 16 03:16	13° Z 01'23	
	13180 May 24 10:21	0° III			13181 Apr 27 09:03	0° II	
evening max el	13180 Jun 03 02:43	12° III 06'21	20°12'45	evening max el	13181 May 17 00:31	25° II 54'57	21°22'29
asc. node	13180 Jun 03 20:49	12° III 50'23		asc. node	13181 May 21 17:58	29° II 47'01	
retrograde	13180 Jun 10 21:41	16° III 34'03			13181 May 22 03:07	0° III	
evening set	13180 Jun 14 21:02	15° III 03'16		retrograde	13181 May 25 20:18	1° III 04'21	
inferior conj	13180 Jun 20 03:51	9° III 00'35	3°13'00		13181 May 29 06:36	30° R II	
minimum elong	13180 Jun 20 03:52	9° III 00'31	3°11'59	evening set	13181 May 30 06:08	29° II 17'06	
min. Earth dist.	13180 Jun 21 00:01	7° III 51'54	0.68067 AU	inferior conj	13181 Jun 04 12:12	23° II 03'04	3°07'26
morning rise	13180 Jun 25 10:23	2° III 39'16		minimum elong	13181 Jun 04 11:16	23° II 06'20	3°06'21
direct	13180 Jul 01 01:22	0° III 10'17		min. Earth dist.	13181 Jun 04 18:49	22° II 40'02	0.68717 AU
desc. node	13180 Jul 07 00:59	2° III 21'13		morning rise	13181 Jun 09 16:12	16° II 46'42	
morning max el	13180 Jul 12 12:00	7° III 01'45	24°28'53	direct	13181 Jun 14 18:33	14° II 33'51	
	13180 Jul 30 09:34	0° IV		desc. node	13181 Jun 23 22:07	19° II 35'32	
morning set	13180 Aug 17 03:37	28° IV 25'38		morning max el	13181 Jun 24 22:49	20° II 35'57	22°59'21
	13180 Aug 18 01:11	0° V			13181 Jul 02 23:37	0° III	
max. Earth dist.	13180 Aug 20 18:02	4° V 49'01	1.37680 AU		13181 Jul 23 14:35	0° IV	
superior conj	13180 Aug 27 19:30	18° V 01'09	-0°28'27	morning set	13181 Jul 29 07:01	9° IV 11'55	
minimum elong	13180 Aug 27 21:26	18° V 10'27	0°28'24	max. Earth dist.	13181 Aug 02 16:35	16° IV 36'30	1.40027 AU
asc. node	13180 Aug 30 21:28	24° V 02'19		superior conj	13181 Aug 10 11:26	0° V 24'24	-1°03'18
	13180 Sep 02 21:28	0° VI		minimum elong	13181 Aug 10 16:06	0° V 45'44	1°03'09
evening rise	13180 Sep 05 09:44	5° VI 00'53			13181 Aug 10 06:06	0° VI	
	13180 Sep 19 23:04	0° VII		asc. node	13181 Aug 17 18:05	14° V 02'53	
evening max el	13180 Sep 22 01:56	2° VII 20'46	19°15'21	evening rise	13181 Aug 20 04:11	18° V 40'28	
retrograde	13180 Oct 01 07:51	6° VII 58'19			13181 Aug 26 05:34	0° VII	
desc. node	13180 Oct 02 21:28	6° VII 50'53		evening max el	13181 Sep 05 04:05	14° VI 30'22	18°31'10
evening set	13180 Oct 03 04:22	6° VII 47'57		retrograde	13181 Sep 13 01:03	18° VI 28'46	
inferior conj	13180 Oct 11 17:49	2° VII 37'43	-2°46'14	evening set	13181 Sep 15 00:51	18° VI 14'17	
minimum elong	13180 Oct 11 10:40	2° VII 49'34	2°43'05	desc. node	13181 Sep 19 18:59	15° VI 59'13	
min. Earth dist.	13180 Oct 14 09:26	0° VIII 52'24	0.55868 AU	inferior conj	13181 Sep 22 20:44	13° VI 43'52	-0°58'14
morning rise	13180 Oct 15 18:58	30° R VI		minimum elong	13181 Sep 22 18:26	13° VI 48'20	0°57'10
direct	13180 Oct 19 14:27	28° VI 03'24		min. Earth dist.	13181 Sep 26 02:19	11° VI 14'00	0.57674 AU
	13180 Oct 24 23:42	26° VI 57'06		morning rise	13181 Sep 30 08:32	8° VI 31'40	
	13180 Nov 03 00:04	0° VIII		direct	13181 Oct 06 09:51	6° VI 58'54	
morning max el	13180 Nov 08 00:57	4° VIII 04'03	25°34'03	morning max el	13181 Oct 20 17:14	14° VI 31'21	26°57'42
asc. node	13180 Nov 26 23:02	0° IX 49'29			13181 Nov 02 03:20	0° VIII	
	13180 Nov 26 12:14	0° X		asc. node	13181 Nov 13 19:53	20° VIII 07'07	
morning set	13180 Dec 05 06:34	17° X 31'04			13181 Nov 18 16:52	0° IX	
	13180 Dec 10 23:00	0° XI		morning set	13181 Nov 19 16:04	2° X 03'05	
superior conj	13180 Dec 12 01:10	2° XI 24'59	1°38'13	superior conj	13181 Nov 26 12:38	17° X 08'27	1°34'14
minimum elong	13180 Dec 12 00:58	2° XI 23'51	1°39'14	minimum elong	13181 Nov 26 11:26	17° X 01'47	1°35'08
max. Earth dist.	13180 Dec 13 10:24	5° XI 28'29	1.31843 AU	max. Earth dist.	13181 Nov 26 18:18	17° X 40'11	1.31301 AU
evening rise	13180 Dec 19 04:10	17° XI 47'43			13181 Dec 02 08:35	0° XI	
	13180 Dec 25 08:01	0° XII		evening rise	13181 Dec 03 08:24	2° XI 07'23	
desc. node	13180 Dec 29 19:18	8° XII 04'49		desc. node	13181 Dec 16 16:13	27° XI 25'43	
	13181 Jan 13 10:55	0° XIII			13181 Dec 18 06:12	0° XII	
evening max el	13181 Jan 20 17:12	8° XIII 02'10	27°31'02	evening max el	13182 Jan 02 21:52	20° XII 08'57	27°00'57
retrograde	13181 Feb 03 14:26	15° XIII 22'51		retrograde	13182 Jan 16 20:42	27° XII 21'13	
evening set	13181 Feb 10 12:38	13° XIII 05'35		evening set	13182 Jan 23 15:04	25° XII 23'15	
				min. Earth dist.	13182 Jan 27 12:06	22° XII 42'46	0.59971 AU
min. Earth dist.	13181 Feb 14 06:41	10° XIII 07'26	0.62134 AU	inferior conj	13182 Jan 30 16:32	20° XII 06'38	-3°11'47

minimum elong	13182 Jan 30 23:23	19°  52'36	3°08'35	retrograde	13182 Dec 29 16:53	8°  26'35	
morning rise	13182 Feb 07 10:46	15°  22'19		evening set	13183 Jan 04 22:05	6°  55'40	
direct	13182 Feb 09 12:17	15°  06'00		min. Earth dist.	13183 Jan 09 07:36	4°  19'01	0.57849 AU
asc. node	13182 Feb 09 18:34	15°  06'16		inferior conj	13183 Jan 12 08:14	2°  10'10	-4°32'13
morning max el	13182 Feb 16 23:30	18°  49'07	18°04'46	minimum elong	13183 Jan 12 16:58	1°  54'39	4°28'53
	13182 Feb 25 02:19	0°  ✠			13183 Jan 15 13:28	30°  R 	
morning set	13182 Mar 04 13:45	13°  ✠27'56		morning rise	13183 Jan 20 14:39	27°  Z47'57	
	13182 Mar 13 13:47	0°  Y		direct	13183 Jan 22 16:49	27°  Z33'59	
				asc. node	13183 Jan 27 15:54	28°  Z57'55	
superior conj	13182 Mar 14 11:47	1°  Y38'06	0°01'56		13183 Jan 29 05:34	0°  ≈	
minimum elong	13182 Mar 14 11:57	1°  Y38'49	0°01'59	morning max el	13183 Jan 31 06:17	1°  ≈45'03	18°42'12
behind sun begin	13182 Mar 14 04:14	1°  Y04'28		morning set	13183 Feb 16 09:45	27°  ≈40'45	
behind sun end	13182 Mar 14 19:40	2°  Y13'06			13183 Feb 17 14:22	0°  ✠	
desc. node	13182 Mar 14 17:36	2°  Y03'54					
max. Earth dist.	13182 Mar 22 02:41	14°  Y46'14	1.41959 AU	superior conj	13183 Feb 25 03:54	14°  ✠32'38	0°35'04
evening rise	13182 Mar 27 08:35	23°  Y21'40		minimum elong	13183 Feb 25 06:06	14°  ✠42'59	0°35'05
	13182 Mar 31 13:23	0°  B		desc. node	13183 Mar 01 14:04	22°  ✠40'48	
	13182 Apr 21 09:32	0°  II		max. Earth dist.	13183 Mar 04 10:16	27°  ✠43'32	1.39791 AU
evening max el	13182 Apr 29 17:27	9°  II43'47	22°40'42		13183 Mar 05 17:39	0°  Y	
asc. node	13182 May 08 15:13	15°  II31'52		evening rise	13183 Mar 08 10:55	4°  Y38'12	
retrograde	13182 May 09 17:14	15°  II37'17			13183 Mar 24 16:51	0°  B	
evening set	13182 May 14 14:11	13°  II34'49		evening max el	13183 Apr 12 07:40	23°  B35'01	24°01'37
inferior conj	13182 May 19 21:45	7°  II11'39	2°51'17		13183 Apr 22 02:05	0°  II	
minimum elong	13182 May 19 20:04	7°  II17'30	2°50'06	retrograde	13183 Apr 23 11:08	0°  II07'54	
min. Earth dist.	13182 May 19 15:27	7°  II33'35	0.68894 AU		13183 Apr 24 19:08	30°  R 	
morning rise	13182 May 25 01:50	1°  II01'40		asc. node	13183 Apr 25 12:32	29°  B48'47	
	13182 May 26 12:55	30°  R 		evening set	13183 Apr 28 19:39	27°  B52'24	
direct	13182 May 29 15:12	29°  B08'28		min. Earth dist.	13183 May 03 11:51	22°  B27'08	0.68612 AU
	13182 Jun 01 23:10	0°  II		inferior conj	13183 May 04 06:37	21°  B23'19	2°25'01
morning max el	13182 Jun 07 13:08	4°  II18'54	21°32'58	minimum elong	13183 May 04 04:31	21°  B30'29	2°23'46
desc. node	13182 Jun 10 19:07	7°  II50'59		morning rise	13183 May 09 13:26	15°  B20'53	
	13182 Jun 27 01:23	0°  ☿		direct	13183 May 13 14:14	13°  B48'31	
morning set	13182 Jul 09 09:06	18°  ☿51'20		morning max el	13183 May 21 09:45	18°  B12'56	20°16'29
max. Earth dist.	13182 Jul 15 19:27	29°  ☿13'57	1.42237 AU	desc. node	13183 May 28 16:00	26°  B51'21	
	13182 Jul 16 06:37	0°  ♁			13183 May 30 23:26	0°  II	
				morning set	13183 Jun 18 14:43	27°  II38'40	
superior conj	13182 Jul 23 07:38	11°  ♁54'04	-1°36'26		13183 Jun 20 03:16	0°  ☿	
minimum elong	13182 Jul 23 14:31	12°  ♁23'52	1°36'27	max. Earth dist.	13183 Jun 28 04:38	12°  ☿40'37	1.44059 AU
	13182 Aug 02 11:17	0°  ♎					
evening rise	13182 Aug 03 10:28	1°  ♎45'35		superior conj	13183 Jul 04 04:33	22°  ☿23'42	-2°02'10
asc. node	13182 Aug 04 14:43	3°  ♎54'10		minimum elong	13183 Jul 04 10:50	22°  ☿49'33	2°02'45
evening max el	13182 Aug 19 14:03	27°  ♎16'47	18°07'44		13183 Jul 08 18:20	0°  ♁	
	13182 Aug 23 05:06	0°  ♎		evening rise	13183 Jul 16 23:49	14°  ♁04'26	
retrograde	13182 Aug 26 12:36	0°  ♎49'17		asc. node	13183 Jul 22 11:25	23°  ♁31'49	
evening set	13182 Aug 28 19:30	0°  ♎26'35			13183 Jul 26 08:59	0°  ♎	
	13182 Aug 29 22:13	30°  R 		evening max el	13183 Aug 03 03:50	10°  ♎30'17	18°03'42
inferior conj	13182 Sep 04 21:03	25°  ♎35'43	0°33'07	retrograde	13183 Aug 09 14:38	13°  ♎51'09	
minimum elong	13182 Sep 04 22:06	25°  ♎33'20	0°32'32	evening set	13183 Aug 12 05:46	13°  ♎16'44	
desc. node	13182 Sep 06 16:30	23°  ♎56'47		inferior conj	13183 Aug 18 15:35	8°  ♎07'01	1°41'43
min. Earth dist.	13182 Sep 08 03:24	22°  ♎39'31	0.59871 AU	minimum elong	13183 Aug 18 18:00	8°  ♎00'46	1°40'29
morning rise	13182 Sep 11 21:26	19°  ♎51'07		min. Earth dist.	13183 Aug 21 13:45	5°  ♎06'40	0.62157 AU
direct	13182 Sep 18 09:28	17°  ♎50'46		desc. node	13183 Aug 24 13:59	2°  ♎26'08	
morning max el	13182 Oct 02 17:11	25°  ♎42'01	27°47'01	morning rise	13183 Aug 25 03:51	2°  ♎00'29	
	13182 Oct 06 17:19	0°  ♎			13183 Aug 29 03:54	30°  R 	
	13182 Oct 26 14:48	0°  ♎		direct	13183 Aug 31 20:12	29°  ♁37'25	
asc. node	13182 Oct 31 16:37	9°  ♎44'54			13183 Sep 03 14:51	0°  ♎	
morning set	13182 Nov 03 21:45	16°  ♎20'49		morning max el	13183 Sep 14 23:16	7°  ♎38'17	27°57'23
max. Earth dist.	13182 Nov 10 02:33	29°  ♎48'46	1.31270 AU		13183 Oct 02 02:23	0°  ♎	
	13182 Nov 10 04:34	0°  ♎		morning set	13183 Oct 18 21:32	0°  ♎18'56	
				asc. node	13183 Oct 18 13:16	29°  ♎36'45	
superior conj	13182 Nov 11 00:01	1°  ♎48'14	1°24'29		13183 Oct 18 17:50	0°  ♎	
minimum elong	13182 Nov 10 22:05	1°  ♎37'29	1°25'07	max. Earth dist.	13183 Oct 24 07:21	11°  ♎44'55	1.31773 AU
evening rise	13182 Nov 17 16:51	16°  ♎36'09					
	13182 Nov 24 05:49	0°  Z		superior conj	13183 Oct 26 09:27	16°  ♎18'48	1°09'05
desc. node	13182 Dec 03 13:17	16°  Z07'15		minimum elong	13183 Oct 26 07:11	16°  ♎06'21	1°09'24
	13182 Dec 14 08:44	0°  ≈			13183 Nov 01 14:49	0°  ♎	
evening max el	13182 Dec 15 18:41	1°  ≈23'37	25°57'03	evening rise	13183 Nov 02 03:34	1°  ♎08'56	

	13183 Nov 17 16:24	0°♄				13184 Oct 23 16:02	0°♄	
desc. node	13183 Nov 20 10:28	3°♄53'54			desc. node	13184 Nov 06 07:45	20°♄25'37	
evening max el	13183 Nov 27 07:42	11°♄50'27	24°26'29		evening max el	13184 Nov 07 17:57	21°♄52'53	22°44'30
retrograde	13183 Dec 11 00:39	18°♄40'45			retrograde	13184 Nov 20 19:16	28°♄21'37	
evening set	13183 Dec 16 05:39	17°♄41'02			evening set	13184 Nov 24 15:36	27°♄49'22	
min. Earth dist.	13183 Dec 21 19:19	14°♄50'30	0.56048 AU		min. Earth dist.	13184 Dec 02 02:22	24°♄26'31	0.54866 AU
inferior conj	13183 Dec 24 03:10	13°♄23'43	-5°34'38		inferior conj	13184 Dec 03 03:44	23°♄50'30	-5°55'26
minimum elong	13183 Dec 24 09:41	13°♄13'34	5°32'40		minimum elong	13184 Dec 03 02:30	23°♄52'15	5°54'26
morning rise	13184 Jan 01 15:44	9°♄21'58			morning rise	13184 Dec 11 14:47	20°♄02'15	
direct	13184 Jan 04 02:04	9°♄06'13			direct	13184 Dec 14 18:06	19°♄39'34	
morning max el	13184 Jan 14 01:41	13°♄54'22	19°42'00		morning max el	13184 Dec 26 06:51	25°♄09'43	21°04'45
asc. node	13184 Jan 14 13:10	14°♄22'40				13184 Dec 30 14:35	0°♄	
	13184 Jan 25 06:46	0°♄			asc. node	13184 Dec 31 10:21	1°♄04'56	
morning set	13184 Jan 31 13:31	12°♄12'26			morning set	13185 Jan 14 22:08	26°♄54'47	
						13185 Jan 16 09:38	0°♄	
superior conj	13184 Feb 08 11:22	28°♄08'20	1°01'15		superior conj	13185 Jan 22 06:05	12°♄13'51	1°20'14
minimum elong	13184 Feb 08 14:10	28°♄22'07	1°01'28		minimum elong	13185 Jan 22 08:30	12°♄26'19	1°20'46
	13184 Feb 09 10:05	0°♄			max. Earth dist.	13185 Jan 27 02:06	21°♄58'46	1.35459 AU
max. Earth dist.	13184 Feb 14 16:28	10°♄02'12	1.37547 AU		evening rise	13185 Jan 31 02:13	29°♄39'35	
desc. node	13184 Feb 16 10:38	13°♄15'28				13185 Jan 31 06:35	0°♄	
evening rise	13184 Feb 18 09:47	16°♄47'04			desc. node	13185 Feb 02 07:16	3°♄43'59	
	13184 Feb 26 04:44	0°♄				13185 Feb 18 09:12	0°♄	
	13184 Mar 18 03:45	0°♄			evening max el	13185 Mar 07 11:00	21°♄16'20	26°24'17
evening max el	13184 Mar 24 21:14	7°♄27'36	25°18'36		retrograde	13185 Mar 20 09:14	28°♄35'53	
retrograde	13184 Apr 06 00:48	14°♄29'38			evening set	13185 Mar 26 16:15	26°♄04'27	
asc. node	13184 Apr 11 09:56	12°♄26'30			asc. node	13185 Mar 29 07:22	23°♄32'14	
evening set	13184 Apr 11 20:55	12°♄04'09			min. Earth dist.	13185 Mar 30 19:00	21°♄49'50	0.66732 AU
min. Earth dist.	13184 Apr 16 05:45	7°♄14'37	0.67884 AU		inferior conj	13185 Apr 01 14:29	19°♄37'49	1°01'29
inferior conj	13184 Apr 17 12:53	5°♄33'35	1°48'33		minimum elong	13185 Apr 01 13:01	19°♄42'18	1°00'43
minimum elong	13184 Apr 17 10:48	5°♄40'21	1°47'23		morning rise	13185 Apr 07 10:41	13°♄55'00	
	13184 Apr 22 13:59	30°♄♄			direct	13185 Apr 10 13:02	13°♄01'01	
morning rise	13184 Apr 23 01:04	29°♄40'03			morning max el	13185 Apr 17 01:02	16°♄28'36	18°28'01
direct	13184 Apr 26 14:07	28°♄27'52				13185 Apr 27 06:54	0°♄	
	13184 Apr 30 20:22	0°♄			desc. node	13185 May 01 09:31	6°♄20'52	
morning max el	13184 May 03 13:56	2°♄17'23	19°14'10		morning set	13185 May 07 14:14	16°♄06'32	
desc. node	13184 May 14 12:48	16°♄24'14				13185 May 16 10:05	0°♄	
greatest brilliancy	13184 May 16 10:33	19°♄13'05	-0.7m					
	13184 May 23 13:26	0°♄			superior conj	13185 May 23 11:14	11°♄01'16	-2°05'02
morning set	13184 May 27 17:18	6°♄23'46			minimum elong	13185 May 23 04:32	10°♄35'05	2°05'36
max. Earth dist.	13184 Jun 09 20:05	26°♄47'20	1.45292 AU		max. Earth dist.	13185 May 23 15:34	11°♄18'12	1.45815 AU
	13184 Jun 11 21:00	0°♄				13185 Jun 04 14:10	0°♄	
superior conj	13184 Jun 13 02:44	1°♄57'31	-2°13'28		evening rise	13185 Jun 08 06:10	5°♄46'34	
minimum elong	13184 Jun 13 03:29	2°♄00'29	2°14'28		greatest brilliancy	13185 Jun 17 07:00	19°♄58'55	-0.8m
evening rise	13184 Jun 27 15:14	25°♄25'49				13185 Jun 23 23:31	0°♄	
	13184 Jun 30 09:47	0°♄			asc. node	13185 Jun 25 05:08	1°♄42'37	
asc. node	13184 Jul 08 08:14	12°♄50'24			evening max el	13185 Jun 30 05:28	7°♄43'33	18°49'51
evening max el	13184 Jul 16 17:58	24°♄01'55	18°18'01		retrograde	13185 Jul 06 21:28	11°♄22'40	
retrograde	13184 Jul 23 02:50	27°♄25'09			evening set	13185 Jul 10 05:53	10°♄18'03	
evening set	13184 Jul 26 02:30	26°♄36'24			inferior conj	13185 Jul 15 19:17	4°♄36'02	2°57'27
inferior conj	13184 Aug 01 00:15	21°♄09'45	2°28'43		minimum elong	13185 Jul 15 20:55	4°♄30'52	2°56'19
minimum elong	13184 Aug 01 02:39	21°♄02'50	2°27'27		min. Earth dist.	13185 Jul 17 13:57	2°♄22'22	0.66085 AU
min. Earth dist.	13184 Aug 03 09:30	18°♄25'21	0.64281 AU			13185 Jul 19 14:56	30°♄♄	
morning rise	13184 Aug 07 01:21	14°♄51'01			morning rise	13185 Jul 21 11:11	28°♄12'30	
desc. node	13184 Aug 10 11:27	12°♄49'44			direct	13185 Jul 27 18:48	25°♄31'56	
direct	13184 Aug 13 15:47	12°♄14'15			desc. node	13185 Jul 28 08:52	25°♄33'11	
morning max el	13184 Aug 27 09:06	20°♄13'43	27°31'20			13185 Aug 06 07:14	0°♄	
	13184 Sep 04 18:29	0°♄			morning max el	13185 Aug 09 20:14	3°♄16'59	26°35'25
	13184 Sep 24 03:58	0°♄				13185 Aug 30 02:00	0°♄	
morning set	13184 Oct 01 13:00	13°♄51'30			morning set	13185 Sep 14 17:00	26°♄50'02	
asc. node	13184 Oct 04 09:54	19°♄37'48				13185 Sep 16 08:49	0°♄	
max. Earth dist.	13184 Oct 06 05:13	23°♄21'41	1.32813 AU		max. Earth dist.	13185 Sep 18 17:26	4°♄36'40	1.34371 AU
	13184 Oct 09 08:28	0°♄			asc. node	13185 Sep 21 06:29	9°♄43'07	
superior conj	13184 Oct 09 14:57	0°♄34'44	0°48'08		superior conj	13185 Sep 23 14:02	14°♄28'34	0°21'52
minimum elong	13184 Oct 09 12:53	0°♄23'41	0°48'10		minimum elong	13185 Sep 23 12:53	14°♄22'34	0°21'46
evening rise	13184 Oct 16 14:43	15°♄41'00				13185 Sep 30 23:09	0°♄	

evening rise	13185 Oct 01 00:18	0° \mathbb{M} 06'02		superior conj	13186 Sep 07 03:55	27° \mathbb{M} 53'50	-0°09'05
	13185 Oct 18 11:13	0° \mathbb{M}		minimum elong	13186 Sep 07 04:29	27° \mathbb{M} 56'40	0°09'07
evening max el	13185 Oct 20 10:36	2° \mathbb{M} 06'30	21°08'39	behind sun begin	13186 Sep 06 23:11	27° \mathbb{M} 30'19	
desc. node	13185 Oct 24 05:08	5° \mathbb{M} 15'43		behind sun end	13186 Sep 07 09:48	28° \mathbb{M} 23'04	
retrograde	13185 Nov 01 06:23	7° \mathbb{M} 59'08		asc. node	13186 Sep 08 03:05	29° \mathbb{M} 49'22	
evening set	13185 Nov 03 20:22	7° \mathbb{M} 43'28			13186 Sep 08 05:13	0° \mathbb{M}	
inferior conj	13185 Nov 12 19:16	3° \mathbb{M} 49'40	-5°17'36	evening rise	13186 Sep 15 06:11	14° \mathbb{M} 18'46	
minimum elong	13185 Nov 12 10:26	4° \mathbb{M} 02'08	5°15'00		13186 Sep 23 09:32	0° \mathbb{M}	
min. Earth dist.	13185 Nov 13 08:25	3° \mathbb{M} 31'07	0.54525 AU	evening max el	13186 Oct 02 16:38	13° \mathbb{M} 01'08	19°50'29
	13185 Nov 20 23:09	30° \mathbb{R} \mathbb{M}		desc. node	13186 Oct 11 02:34	17° \mathbb{M} 57'14	
morning rise	13185 Nov 21 01:03	29° \mathbb{M} 58'40		retrograde	13186 Oct 12 21:29	18° \mathbb{M} 06'18	
direct	13185 Nov 25 01:41	29° \mathbb{M} 23'53		evening set	13186 Oct 14 19:44	17° \mathbb{M} 56'13	
	13185 Nov 29 01:32	0° \mathbb{M}		inferior conj	13186 Oct 23 16:21	13° \mathbb{M} 55'02	-3°48'53
morning max el	13185 Dec 07 23:03	5° \mathbb{M} 36'01	22°46'32	minimum elong	13186 Oct 23 06:56	14° \mathbb{M} 09'31	3°45'08
asc. node	13185 Dec 18 07:27	18° \mathbb{M} 47'28		min. Earth dist.	13186 Oct 25 17:00	12° \mathbb{M} 40'14	0.55123 AU
	13185 Dec 24 15:43	0° \mathbb{M}		morning rise	13186 Oct 31 16:36	9° \mathbb{M} 40'15	
morning set	13185 Dec 30 09:21	11° \mathbb{M} 40'59		direct	13186 Nov 05 14:23	8° \mathbb{M} 47'20	
				morning max el	13186 Nov 19 09:12	15° \mathbb{M} 37'10	24°35'22
superior conj	13186 Jan 06 08:40	26° \mathbb{M} 39'34	1°32'17		13186 Nov 30 19:35	0° \mathbb{M}	
minimum elong	13186 Jan 06 10:12	26° \mathbb{M} 47'43	1°33'07	asc. node	13186 Dec 05 04:27	7° \mathbb{M} 15'41	
	13186 Jan 07 22:24	0° \mathbb{M}		morning set	13186 Dec 14 21:14	26° \mathbb{M} 25'26	
max. Earth dist.	13186 Jan 09 18:33	3° \mathbb{M} 51'03	1.33697 AU		13186 Dec 16 12:56	0° \mathbb{M}	
evening rise	13186 Jan 14 08:34	13° \mathbb{M} 06'28					
desc. node	13186 Jan 20 03:59	24° \mathbb{M} 01'54		superior conj	13186 Dec 21 16:24	11° \mathbb{M} 17'29	1°37'49
	13186 Jan 23 13:34	0° \mathbb{M}		minimum elong	13186 Dec 21 16:50	11° \mathbb{M} 19'51	1°38'50
	13186 Feb 13 10:00	0° \mathbb{M}		max. Earth dist.	13186 Dec 23 18:30	15° \mathbb{M} 50'24	1.32374 AU
evening max el	13186 Feb 18 00:31	4° \mathbb{M} 51'57	27°11'20	evening rise	13186 Dec 29 01:35	26° \mathbb{M} 59'30	
retrograde	13186 Mar 03 11:44	12° \mathbb{M} 18'42			13186 Dec 30 13:23	0° \mathbb{M}	
evening set	13186 Mar 10 03:42	9° \mathbb{M} 46'49		desc. node	13187 Jan 07 00:45	14° \mathbb{M} 03'34	
min. Earth dist.	13186 Mar 14 01:26	6° \mathbb{M} 05'19	0.65187 AU		13187 Jan 16 21:02	0° \mathbb{M}	
inferior conj	13186 Mar 16 09:04	3° \mathbb{M} 30'29	0°03'24	evening max el	13187 Jan 31 12:24	18° \mathbb{M} 02'47	27°32'45
minimum elong	13186 Mar 16 08:58	3° \mathbb{M} 30'46	0°03'25	retrograde	13187 Feb 14 07:29	25° \mathbb{M} 28'15	
transit middle	13186 Mar 16 08:58	3° \mathbb{M} 30'46	0°03'25	evening set	13187 Feb 21 04:48	23° \mathbb{M} 03'08	
transit begin	13186 Mar 16 06:01	3° \mathbb{M} 39'02		min. Earth dist.	13187 Feb 24 23:14	19° \mathbb{M} 50'56	0.63315 AU
transit end	13186 Mar 16 11:55	3° \mathbb{M} 22'32		inferior conj	13187 Feb 27 17:47	17° \mathbb{M} 04'16	-1°05'41
asc. node	13186 Mar 16 04:50	3° \mathbb{M} 42'20		minimum elong	13187 Feb 27 19:55	16° \mathbb{M} 58'54	1°04'29
	13186 Mar 19 18:51	30° \mathbb{R} \mathbb{M}		asc. node	13187 Mar 03 02:18	13° \mathbb{M} 56'43	
morning rise	13186 Mar 22 15:53	28° \mathbb{M} 00'36		morning rise	13187 Mar 06 13:30	11° \mathbb{M} 49'46	
direct	13186 Mar 25 08:44	27° \mathbb{M} 21'50		direct	13187 Mar 08 22:23	11° \mathbb{M} 22'41	
	13186 Mar 30 23:45	0° \mathbb{M}		morning max el	13187 Mar 15 10:42	14° \mathbb{M} 42'43	17°46'39
morning max el	13186 Mar 31 16:56	0° \mathbb{M} 40'00	17°58'44		13187 Mar 26 04:37	0° \mathbb{M}	
desc. node	13186 Apr 18 06:08	26° \mathbb{M} 34'42		morning set	13187 Mar 31 18:38	9° \mathbb{M} 33'17	
morning set	13186 Apr 18 15:21	27° \mathbb{M} 12'32		desc. node	13187 Apr 05 02:41	16° \mathbb{M} 59'58	
	13186 Apr 20 08:08	0° \mathbb{M}			13187 Apr 12 20:53	0° \mathbb{M}	
superior conj	13186 May 02 23:13	20° \mathbb{M} 21'33	-1°38'01	superior conj	13187 Apr 13 05:36	0° \mathbb{M} 35'45	-1°00'04
minimum elong	13186 May 02 14:06	19° \mathbb{M} 45'27	1°37'49	minimum elong	13187 Apr 12 23:30	0° \mathbb{M} 10'47	0°59'38
max. Earth dist.	13186 May 06 11:53	25° \mathbb{M} 54'54	1.45582 AU	max. Earth dist.	13187 Apr 19 06:05	10° \mathbb{M} 19'18	1.44634 AU
	13186 May 09 02:35	0° \mathbb{M}		evening rise	13187 Apr 28 11:58	24° \mathbb{M} 45'44	
evening rise	13186 May 19 00:52	15° \mathbb{M} 21'56			13187 May 01 22:20	0° \mathbb{M}	
	13186 May 28 15:02	0° \mathbb{M}			13187 May 22 21:38	0° \mathbb{M}	
greatest brilliancy	13186 Jun 01 19:32	6° \mathbb{M} 14'32	-0.7m	evening max el	13187 May 27 13:16	5° \mathbb{M} 18'06	20°41'02
asc. node	13186 Jun 12 02:10	19° \mathbb{M} 59'56		asc. node	13187 May 29 23:17	7° \mathbb{M} 29'56	
evening max el	13186 Jun 13 12:16	21° \mathbb{M} 30'16	19°38'09	retrograde	13187 Jun 04 18:28	10° \mathbb{M} 03'24	
retrograde	13186 Jun 20 19:29	25° \mathbb{M} 37'36		evening set	13187 Jun 08 22:05	8° \mathbb{M} 25'41	
evening set	13186 Jun 24 13:08	24° \mathbb{M} 16'25		inferior conj	13187 Jun 14 04:16	2° \mathbb{M} 17'47	3°11'59
inferior conj	13186 Jun 29 21:30	18° \mathbb{M} 20'41	3°11'03	minimum elong	13187 Jun 14 03:52	2° \mathbb{M} 19'11	3°10'57
minimum elong	13186 Jun 29 22:08	18° \mathbb{M} 18'37	3°10'01	min. Earth dist.	13187 Jun 14 18:36	1° \mathbb{M} 28'19	0.68400 AU
min. Earth dist.	13186 Jul 01 01:41	16° \mathbb{M} 46'50	0.67473 AU		13187 Jun 15 20:37	30° \mathbb{R} \mathbb{M}	
morning rise	13186 Jul 05 06:41	11° \mathbb{M} 57'21		morning rise	13187 Jun 19 09:23	25° \mathbb{M} 58'04	
direct	13186 Jul 11 04:13	9° \mathbb{M} 22'03		direct	13187 Jun 24 19:01	23° \mathbb{M} 35'18	
desc. node	13186 Jul 15 06:10	10° \mathbb{M} 23'10		desc. node	13187 Jul 02 03:21	26° \mathbb{M} 51'53	
morning max el	13186 Jul 23 07:01	16° \mathbb{M} 37'48	25°18'36	morning max el	13187 Jul 05 17:14	0° \mathbb{M} 07'26	23°50'49
	13186 Aug 03 09:32	0° \mathbb{M}			13187 Jul 05 14:17	0° \mathbb{M}	
	13186 Aug 23 00:39	0° \mathbb{M}			13187 Jul 28 05:42	0° \mathbb{M}	
morning set	13186 Aug 28 05:42	9° \mathbb{M} 06'00		morning set	13187 Aug 09 22:32	20° \mathbb{M} 28'09	
max. Earth dist.	13186 Aug 31 20:12	15° \mathbb{M} 42'08	1.36380 AU	max. Earth dist.	13187 Aug 13 17:45	27° \mathbb{M} 03'32	1.38674 AU

	13187 Aug 15 09:26	0°♎		superior conj	13188 Aug 02 13:07	22°♎43'57	-1°17'53
				minimum elong	13188 Aug 02 18:53	23°♎09'44	1°17'45
superior conj	13187 Aug 21 05:02	10°♎42'18	-0°43'12		13188 Aug 06 13:23	0°♎	
minimum elong	13187 Aug 21 08:06	10°♎56'45	0°43'05	asc. node	13188 Aug 11 20:19	9°♎49'56	
asc. node	13187 Aug 25 23:42	19°♎52'58		evening rise	13188 Aug 12 19:27	11°♎38'16	
evening rise	13187 Aug 30 05:42	28°♎12'30			13188 Aug 23 04:30	0°♎	
	13187 Aug 31 03:41	0°♎		evening max el	13188 Aug 28 18:32	7°♎12'00	18°18'48
evening max el	13187 Sep 15 12:28	24°♎45'13	18°53'58	retrograde	13188 Sep 05 04:23	10°♎57'11	
retrograde	13187 Sep 24 03:18	29°♎04'32		evening set	13188 Sep 07 07:07	10°♎39'34	
evening set	13187 Sep 26 00:20	28°♎53'02		desc. node	13188 Sep 13 21:30	6°♎44'39	
desc. node	13187 Sep 28 00:00	28°♎17'32		inferior conj	13188 Sep 14 19:01	6°♎00'28	-0°16'48
inferior conj	13187 Oct 04 06:49	24°♎34'59	-1°59'14	minimum elong	13188 Sep 14 18:24	6°♎01'45	0°16'33
minimum elong	13187 Oct 04 01:46	24°♎43'55	1°56'56	min. Earth dist.	13188 Sep 18 02:27	3°♎16'47	0.58583 AU
min. Earth dist.	13187 Oct 07 06:25	22°♎28'35	0.56564 AU	morning rise	13188 Sep 22 02:13	0°♎33'44	
morning rise	13187 Oct 12 00:01	19°♎44'14			13188 Sep 23 05:05	30°♎	
direct	13187 Oct 17 16:45	18°♎26'47		direct	13188 Sep 28 09:08	28°♎48'46	
morning max el	13187 Oct 31 21:33	25°♎46'21	26°13'12		13188 Oct 03 17:00	0°♎	
	13187 Nov 04 21:14	0°♎		morning max el	13188 Oct 12 16:48	6°♎29'44	27°23'21
asc. node	13187 Nov 22 01:21	26°♎18'04			13188 Oct 30 06:14	0°♎	
	13187 Nov 23 23:22	0°♎		asc. node	13188 Nov 07 22:08	15°♎44'59	
morning set	13187 Nov 29 08:06	11°♎03'26		morning set	13188 Nov 12 16:10	25°♎29'30	
					13188 Nov 14 18:29	0°♎	
superior conj	13187 Dec 06 03:05	26°♎01'00	1°37'15	superior conj	13188 Nov 19 14:43	10°♎43'21	1°30'48
minimum elong	13187 Dec 06 02:27	25°♎57'24	1°38'14	minimum elong	13188 Nov 19 13:10	10°♎34'43	1°31'36
max. Earth dist.	13187 Dec 07 00:16	27°♎58'42	1.31542 AU	max. Earth dist.	13188 Nov 19 08:43	10°♎09'52	1.31224 AU
	13187 Dec 07 22:10	0°♎		evening rise	13188 Nov 26 08:43	25°♎35'54	
evening rise	13187 Dec 13 02:26	11°♎11'42			13188 Nov 28 10:47	0°♎	
	13187 Dec 22 18:38	0°♎		desc. node	13188 Dec 10 18:36	22°♎47'35	
desc. node	13187 Dec 24 21:38	3°♎42'07			13188 Dec 15 12:55	0°♎	
	13188 Jan 13 05:11	0°♎		evening max el	13188 Dec 25 22:21	12°♎22'40	26°37'47
evening max el	13188 Jan 13 20:35	0°♎37'04	27°22'37	retrograde	13189 Jan 08 21:18	19°♎30'25	
retrograde	13188 Jan 27 19:16	7°♎55'05		evening set	13189 Jan 15 11:11	17°♎43'35	
evening set	13188 Feb 03 16:34	5°♎45'07		min. Earth dist.	13189 Jan 19 12:15	15°♎06'26	0.59048 AU
min. Earth dist.	13188 Feb 07 11:05	2°♎55'37	0.61217 AU	inferior conj	13189 Jan 22 16:12	12°♎40'14	-3°46'51
inferior conj	13188 Feb 10 13:23	0°♎11'09	-2°24'07	minimum elong	13189 Jan 23 00:07	12°♎24'55	3°43'25
minimum elong	13188 Feb 10 18:29	29°♎59'50	2°21'32	morning rise	13189 Jan 30 16:02	8°♎04'49	
	13188 Feb 10 18:24	30°♎		direct	13189 Feb 01 17:09	7°♎49'53	
morning rise	13188 Feb 17 23:24	25°♎14'47		asc. node	13189 Feb 03 21:03	8°♎07'19	
asc. node	13188 Feb 17 23:41	25°♎14'34		morning max el	13189 Feb 09 14:25	11°♎43'57	18°18'03
direct	13188 Feb 20 02:35	24°♎55'37			13189 Feb 21 17:11	0°♎	
morning max el	13188 Feb 27 03:06	28°♎27'45	17°52'36	morning set	13189 Feb 25 08:04	6°♎47'44	
	13188 Feb 28 13:44	0°♎					
morning set	13188 Mar 13 18:10	22°♎51'05		superior conj	13189 Mar 06 17:11	24°♎21'23	0°16'47
	13188 Mar 17 17:11	0°♎		minimum elong	13189 Mar 06 18:25	24°♎27'00	0°16'46
desc. node	13188 Mar 21 23:13	7°♎32'54		desc. node	13189 Mar 08 19:44	28°♎09'17	
					13189 Mar 09 20:38	0°♎	
superior conj	13188 Mar 24 12:08	11°♎57'37	-0°19'52	max. Earth dist.	13189 Mar 14 06:57	7°♎41'33	1.41069 AU
minimum elong	13188 Mar 24 10:20	11°♎49'52	0°19'41	evening rise	13189 Mar 18 21:31	15°♎22'49	
max. Earth dist.	13188 Mar 31 20:36	24°♎18'22	1.43078 AU		13189 Mar 28 04:16	0°♎	
	13188 Apr 04 09:06	0°♎			13189 Apr 19 05:44	0°♎	
evening rise	13188 Apr 07 07:28	4°♎38'40		evening max el	13189 Apr 22 00:33	2°♎57'26	23°15'11
	13188 Apr 24 06:28	0°♎		retrograde	13189 May 02 12:09	9°♎07'51	
evening max el	13188 May 09 08:51	19°♎06'47	21°55'03	asc. node	13189 May 02 17:43	9°♎07'36	
asc. node	13188 May 15 20:27	23°♎57'56		evening set	13189 May 07 14:03	6°♎59'35	
retrograde	13188 May 18 16:28	24°♎35'01		inferior conj	13189 May 12 22:52	0°♎33'44	2°41'22
evening set	13188 May 23 06:54	22°♎41'21		minimum elong	13189 May 12 20:58	0°♎40'19	2°40'08
inferior conj	13188 May 28 13:22	16°♎23'15	3°01'49	min. Earth dist.	13189 May 12 11:16	1°♎13'47	0.68837 AU
minimum elong	13188 May 28 12:05	16°♎27'44	3°00'41		13189 May 13 08:40	30°♎	
min. Earth dist.	13188 May 28 14:31	16°♎19'14	0.68855 AU	morning rise	13189 May 18 03:49	24°♎26'55	
morning rise	13188 Jun 02 17:04	10°♎09'15		direct	13189 May 22 11:52	22°♎42'23	
direct	13188 Jun 07 13:57	8°♎04'13		morning max el	13189 May 30 21:37	27°♎31'33	20°58'53
morning max el	13188 Jun 17 04:56	13°♎44'08	22°21'34		13189 Jun 02 05:20	0°♎	
desc. node	13188 Jun 18 00:26	14°♎34'10		desc. node	13189 Jun 04 21:25	3°♎10'37	
	13188 Jun 30 06:58	0°♎			13189 Jun 23 19:26	0°♎	
	13188 Jul 20 03:54	0°♎		morning set	13189 Jun 30 07:16	9°♎59'12	
morning set	13188 Jul 20 15:08	0°♎45'25		max. Earth dist.	13189 Jul 07 23:15	22°♎11'09	1.43079 AU
max. Earth dist.	13188 Jul 25 17:11	9°♎09'20	1.41002 AU				

	13189 Jul 12 17:12	0°♎		max. Earth dist.	13190 Jun 20 11:49	5°♊58'44	1.44666 AU
superior conj	13189 Jul 14 23:48	3°♎49'15	-1°48'39	superior conj	13190 Jun 25 10:32	13°♊53'26	-2°09'08
minimum elong	13189 Jul 15 06:56	4°♎19'28	1°48'53	minimum elong	13190 Jun 25 15:05	14°♊11'48	2°09'57
evening rise	13189 Jul 26 19:11	24°♎25'42			13190 Jul 05 05:17	0°♎	
asc. node	13189 Jul 29 16:59	29°♎36'20		evening rise	13190 Jul 08 23:49	6°♎21'50	
	13189 Jul 29 22:20	0°♎		asc. node	13190 Jul 16 13:44	19°♎06'47	
evening max el	13189 Aug 12 06:39	20°♎11'37	18°03'42		13190 Jul 23 18:55	0°♎	
retrograde	13189 Aug 18 22:47	23°♎37'20		evening max el	13190 Jul 26 20:55	3°♎33'32	18°07'31
evening set	13189 Aug 21 09:14	23°♎09'53		retrograde	13190 Aug 02 05:51	6°♎54'03	
inferior conj	13189 Aug 28 03:37	18°♎10'26	1°05'00	evening set	13190 Aug 05 00:31	6°♎13'51	
minimum elong	13189 Aug 28 05:28	18°♎05'59	1°04'03	inferior conj	13190 Aug 11 04:43	0°♎56'26	2°04'06
min. Earth dist.	13189 Aug 31 07:11	15°♎10'09	0.60852 AU	minimum elong	13190 Aug 11 07:15	0°♎49'32	2°02'48
desc. node	13189 Aug 31 19:01	14°♎43'28			13190 Aug 12 01:21	30°♎♎	
morning rise	13189 Sep 03 22:52	12°♎15'24		min. Earth dist.	13190 Aug 13 21:38	28°♎00'48	0.63091 AU
direct	13189 Sep 10 13:30	10°♎04'51		morning rise	13190 Aug 17 12:01	24°♎43'22	
morning max el	13189 Sep 24 19:40	18°♎00'26	27°56'14	desc. node	13190 Aug 18 16:32	23°♎54'25	
	13189 Oct 04 20:54	0°♎		direct	13190 Aug 24 04:02	22°♎13'32	
	13189 Oct 23 00:12	0°♎			13190 Sep 06 21:44	0°♎	
asc. node	13189 Oct 25 18:53	5°♎29'41		morning max el	13190 Sep 07 03:57	0°♎15'28	27°50'28
morning set	13189 Oct 27 19:36	9°♎39'31			13190 Sep 28 22:30	0°♎	
max. Earth dist.	13189 Nov 02 16:11	22°♎15'22	1.31427 AU	morning set	13190 Oct 11 16:12	23°♎27'37	
				asc. node	13190 Oct 12 15:33	25°♎26'05	
superior conj	13189 Nov 04 01:30	25°♎19'42	1°18'39		13190 Oct 14 20:27	0°♎	
minimum elong	13189 Nov 03 23:22	25°♎07'53	1°19'08	max. Earth dist.	13190 Oct 16 18:36	4°♎04'31	1.32151 AU
	13189 Nov 06 03:56	0°♎					
evening rise	13189 Nov 10 18:23	10°♎07'10		superior conj	13190 Oct 19 09:30	9°♎44'29	1°00'51
	13189 Nov 20 18:51	0°♎		minimum elong	13190 Oct 19 07:15	9°♎32'12	1°01'03
desc. node	13189 Nov 27 15:42	11°♎07'41		evening rise	13190 Oct 26 05:30	24°♎40'04	
evening max el	13189 Dec 07 15:39	23°♎15'12	25°20'55		13190 Oct 28 17:53	0°♎	
	13189 Dec 19 04:01	0°♎		desc. node	13190 Nov 14 12:56	28°♎25'22	
retrograde	13189 Dec 21 11:55	0°♎12'39			13190 Nov 15 20:28	0°♎	
	13189 Dec 23 19:51	30°♎♎		evening max el	13190 Nov 19 02:16	3°♎26'46	23°43'18
evening set	13189 Dec 27 08:28	28°♎54'44		retrograde	13190 Dec 02 14:11	10°♎10'14	
min. Earth dist.	13190 Jan 01 03:46	26°♎14'44	0.57033 AU	evening set	13190 Dec 07 06:02	9°♎22'54	
inferior conj	13190 Jan 03 23:04	24°♎22'26	-5°02'12	min. Earth dist.	13190 Dec 13 12:53	6°♎20'50	0.55450 AU
minimum elong	13190 Jan 04 07:32	24°♎08'15	4°59'19	inferior conj	13190 Dec 15 09:29	5°♎14'39	-5°49'57
morning rise	13190 Jan 12 09:02	20°♎09'23		minimum elong	13190 Dec 15 13:16	5°♎09'02	5°48'39
direct	13190 Jan 14 13:49	19°♎55'05		morning rise	13190 Dec 23 22:19	1°♎20'26	
asc. node	13190 Jan 21 18:22	22°♎39'41		direct	13190 Dec 26 14:48	1°♎02'32	
morning max el	13190 Jan 23 16:44	24°♎20'31	19°04'52	morning max el	13191 Jan 06 06:22	6°♎07'54	20°14'37
	13190 Jan 28 09:49	0°♎		asc. node	13191 Jan 08 15:38	8°♎39'49	
morning set	13190 Feb 09 07:44	21°♎09'32			13191 Jan 21 17:09	0°♎	
	13190 Feb 13 18:55	0°♎		morning set	13191 Jan 24 13:52	5°♎46'56	
superior conj	13190 Feb 17 16:21	7°♎34'40	0°47'05	superior conj	13191 Feb 01 05:06	21°♎25'00	1°10'10
minimum elong	13190 Feb 17 18:57	7°♎47'10	0°47'08	minimum elong	13191 Feb 01 07:50	21°♎38'42	1°10'31
desc. node	13190 Feb 23 16:16	18°♎45'35			13191 Feb 05 13:34	0°♎	
max. Earth dist.	13190 Feb 24 13:50	20°♎22'39	1.38831 AU	max. Earth dist.	13191 Feb 06 20:45	2°♎29'06	1.36618 AU
evening rise	13190 Feb 28 08:45	27°♎01'47		evening rise	13191 Feb 10 15:31	9°♎30'33	
	13190 Mar 02 02:33	0°♎		desc. node	13191 Feb 10 12:52	9°♎18'28	
	13190 Mar 21 17:12	0°♎			13191 Feb 22 19:11	0°♎	
evening max el	13190 Apr 04 14:15	16°♎49'22	24°35'17		13191 Mar 17 11:13	0°♎	
retrograde	13190 Apr 16 04:17	23°♎35'47		evening max el	13191 Mar 18 03:40	0°♎40'52	25°48'20
asc. node	13190 Apr 19 15:03	22°♎43'14		retrograde	13191 Mar 30 16:01	7°♎52'35	
evening set	13190 Apr 21 17:56	21°♎15'21		evening set	13191 Apr 05 16:57	5°♎23'42	
min. Earth dist.	13190 Apr 26 06:45	16°♎05'42	0.68357 AU	asc. node	13191 Apr 06 12:28	4°♎40'16	
inferior conj	13190 Apr 27 06:52	14°♎45'11	2°10'49	min. Earth dist.	13191 Apr 09 22:55	0°♎49'20	0.67439 AU
minimum elong	13190 Apr 27 04:42	14°♎52'24	2°09'35		13191 Apr 10 14:36	30°♎♎	
morning rise	13190 May 02 15:40	8°♎46'39		inferior conj	13191 Apr 11 11:25	28°♎53'53	1°29'57
direct	13190 May 06 11:22	7°♎23'07		minimum elong	13191 Apr 11 09:31	28°♎59'55	1°28'54
morning max el	13190 May 13 21:32	11°♎30'51	19°48'10	morning rise	13191 Apr 17 02:42	23°♎04'53	
desc. node	13190 May 22 18:18	22°♎26'11		direct	13191 Apr 20 10:59	22°♎00'56	
greatest brilliancy	13190 May 26 21:40	28°♎21'17	-0.6m	morning max el	13191 Apr 27 04:57	25°♎39'48	18°52'34
	13190 May 28 00:36	0°♎			13191 May 01 00:49	0°♎	
morning set	13190 Jun 09 08:58	18°♎38'38		desc. node	13191 May 09 15:04	12°♎10'31	
	13190 Jun 16 16:44	0°♎		greatest brilliancy	13191 May 10 21:09	14°♎04'32	-0.8m

morning set	13191 May 19 17:13	27° ♄ 42'46		superior conj	13192 May 14 09:02	2° ♄ 15'41	-1°55'29
	13191 May 21 04:32	0° ♄		minimum elong	13192 May 14 00:27	1° ♄ 42'05	1°55'43
max. Earth dist.	13191 Jun 03 04:59	20° ♄ 16'55	1.45603 AU	max. Earth dist.	13192 May 16 00:35	4° ♄ 50'20	1.45806 AU
				evening rise	13192 May 30 10:08	27° ♄ 15'31	
superior conj	13191 Jun 05 01:17	23° ♄ 10'25	-2°12'25		13192 Jun 01 04:24	0° ♄	
minimum elong	13191 Jun 04 22:40	23° ♄ 00'11	2°13'21	greatest brilliancy	13192 Jun 10 16:16	14° ♄ 39'12	-0.7m
	13191 Jun 09 09:20	0° ♄		asc. node	13192 Jun 19 07:31	26° ♄ 54'30	
evening rise	13191 Jun 20 04:57	17° ♄ 17'38			13192 Jun 21 22:39	0° ♄	
	13191 Jun 28 02:15	0° ♄		evening max el	13192 Jun 22 19:58	0° ♄ 55'19	19°08'31
asc. node	13191 Jul 03 10:35	8° ♄ 15'28		retrograde	13192 Jun 29 17:32	4° ♄ 44'52	
evening max el	13191 Jul 10 10:12	17° ♄ 10'18	18°29'23	evening set	13192 Jul 03 05:46	3° ♄ 33'23	
retrograde	13191 Jul 16 21:14	20° ♄ 38'58			13192 Jul 06 21:55	30° ♄	
evening set	13191 Jul 20 00:27	19° ♄ 43'49		inferior conj	13192 Jul 08 16:41	27° ♄ 45'39	3°04'53
inferior conj	13191 Jul 25 18:15	14° ♄ 10'30	2°42'55	minimum elong	13192 Jul 08 17:54	27° ♄ 41'42	3°03'47
minimum elong	13191 Jul 25 20:23	14° ♄ 04'06	2°41'42	min. Earth dist.	13192 Jul 10 05:14	25° ♄ 47'50	0.66732 AU
min. Earth dist.	13191 Jul 27 21:27	11° ♄ 37'24	0.65097 AU	morning rise	13192 Jul 14 05:25	21° ♄ 21'44	
morning rise	13191 Jul 31 15:08	7° ♄ 48'41		direct	13192 Jul 20 09:12	18° ♄ 42'04	
desc. node	13191 Aug 05 13:59	5° ♄ 17'28		desc. node	13192 Jul 22 11:21	18° ♄ 58'05	
direct	13191 Aug 07 03:07	5° ♄ 08'52		morning max el	13192 Aug 02 01:40	26° ♄ 16'41	26°04'38
morning max el	13191 Aug 20 14:44	13° ♄ 04'50	27°10'34		13192 Aug 05 12:08	0° ♄	
	13191 Sep 03 05:48	0° ♄			13192 Aug 26 19:27	0° ♄	
	13191 Sep 21 13:18	0° ♄		morning set	13192 Sep 07 01:18	19° ♄ 29'39	
morning set	13191 Sep 25 03:14	6° ♄ 47'06		max. Earth dist.	13192 Sep 10 20:03	26° ♄ 38'43	1.35177 AU
max. Earth dist.	13191 Sep 29 12:24	15° ♄ 30'49	1.33411 AU		13192 Sep 12 13:20	0° ♄	
asc. node	13191 Sep 29 12:10	15° ♄ 29'38		asc. node	13192 Sep 15 08:45	5° ♄ 36'27	
superior conj	13191 Oct 03 12:36	23° ♄ 51'54	0°37'35	superior conj	13192 Sep 16 08:14	7° ♄ 35'38	0°09'16
minimum elong	13191 Oct 03 10:50	23° ♄ 42'32	0°37'34	minimum elong	13192 Sep 16 07:43	7° ♄ 32'57	0°09'11
	13191 Oct 06 09:34	0° ♄		behind sun begin	13192 Sep 16 02:42	7° ♄ 07'29	
evening rise	13191 Oct 10 16:14	9° ♄ 09'39		behind sun end	13192 Sep 16 12:43	7° ♄ 58'28	
	13191 Oct 21 10:57	0° ♄		evening rise	13192 Sep 24 00:33	23° ♄ 30'54	
evening max el	13191 Oct 31 14:03	13° ♄ 29'32	22°02'07		13192 Sep 27 04:47	0° ♄	
desc. node	13191 Nov 01 10:15	14° ♄ 17'28		evening max el	13192 Oct 12 12:11	23° ♄ 59'53	20°32'54
retrograde	13191 Nov 13 04:59	19° ♄ 45'10		desc. node	13192 Oct 18 07:38	28° ♄ 16'54	
evening set	13191 Nov 16 10:49	19° ♄ 21'46		retrograde	13192 Oct 23 15:47	29° ♄ 32'17	
inferior conj	13191 Nov 25 04:40	15° ♄ 26'36	-5°46'53	evening set	13192 Oct 25 21:03	29° ♄ 20'06	
minimum elong	13191 Nov 24 23:38	15° ♄ 33'40	5°45'25	inferior conj	13192 Nov 03 20:51	25° ♄ 25'05	-4°44'41
min. Earth dist.	13191 Nov 24 19:24	15° ♄ 39'35	0.54599 AU	minimum elong	13192 Nov 03 10:49	25° ♄ 39'36	4°41'18
morning rise	13191 Dec 03 13:32	11° ♄ 39'22		min. Earth dist.	13192 Nov 05 02:22	24° ♄ 42'21	0.54669 AU
direct	13191 Dec 07 01:30	11° ♄ 12'16		morning rise	13192 Nov 12 00:16	21° ♄ 26'15	
morning max el	13191 Dec 19 05:38	17° ♄ 01'25	21°46'17	direct	13192 Nov 16 10:22	20° ♄ 44'14	
asc. node	13191 Dec 26 12:49	25° ♄ 50'00		morning max el	13192 Nov 29 18:04	27° ♄ 13'23	23°32'50
	13191 Dec 29 05:28	0° ♄			13192 Dec 02 10:57	0° ♄	
morning set	13192 Jan 08 23:49	20° ♄ 31'34		asc. node	13192 Dec 12 09:52	13° ♄ 54'10	
	13192 Jan 13 11:04	0° ♄			13192 Dec 20 23:02	0° ♄	
				morning set	13192 Dec 23 11:32	5° ♄ 17'53	
superior conj	13192 Jan 16 03:32	5° ♄ 40'25	1°26'09	superior conj	13192 Dec 30 08:36	20° ♄ 12'23	1°35'23
minimum elong	13192 Jan 16 05:37	5° ♄ 51'20	1°26'50	minimum elong	13192 Dec 30 09:40	20° ♄ 18'10	1°36'19
max. Earth dist.	13192 Jan 20 08:38	14° ♄ 20'30	1.34654 AU	max. Earth dist.	13193 Jan 02 04:25	26° ♄ 15'31	1.33082 AU
evening rise	13192 Jan 24 14:18	22° ♄ 39'08			13193 Jan 03 23:14	0° ♄	
desc. node	13192 Jan 28 09:30	29° ♄ 43'12		evening rise	13193 Jan 07 01:37	6° ♄ 18'40	
	13192 Jan 28 13:13	0° ♄		desc. node	13193 Jan 14 06:13	19° ♄ 55'10	
	13192 Feb 16 12:33	0° ♄			13193 Jan 20 04:02	0° ♄	
evening max el	13192 Feb 28 17:23	14° ♄ 25'16	26°47'05	evening max el	13193 Feb 10 06:38	27° ♄ 52'35	27°24'02
retrograde	13192 Mar 12 22:13	21° ♄ 49'47			13193 Feb 12 15:03	0° ♄	
evening set	13192 Mar 19 09:11	19° ♄ 17'29		retrograde	13193 Feb 23 21:50	5° ♄ 19'07	
asc. node	13192 Mar 23 09:55	15° ♄ 16'12		evening set	13193 Mar 02 16:29	2° ♄ 49'33	
min. Earth dist.	13192 Mar 23 09:38	15° ♄ 17'03	0.66112 AU		13193 Mar 05 21:21	30° ♄	
inferior conj	13192 Mar 25 10:20	12° ♄ 54'05	0°38'15	min. Earth dist.	13193 Mar 06 12:43	29° ♄ 20'48	0.64426 AU
minimum elong	13192 Mar 25 09:20	12° ♄ 57'00	0°37'44	inferior conj	13193 Mar 09 01:04	26° ♄ 39'45	-0°24'36
morning rise	13192 Mar 31 10:44	7° ♄ 16'20		minimum elong	13193 Mar 09 01:49	26° ♄ 37'45	0°24'08
direct	13192 Apr 03 08:46	6° ♄ 29'19		asc. node	13193 Mar 10 07:24	25° ♄ 19'52	
morning max el	13192 Apr 09 18:21	9° ♄ 51'51	18°13'26	morning rise	13193 Mar 15 13:05	21° ♄ 15'43	
	13192 Apr 24 01:53	0° ♄		direct	13193 Mar 18 02:22	20° ♄ 42'17	
desc. node	13192 Apr 25 11:44	2° ♄ 15'11		morning max el	13193 Mar 24 11:18	24° ♄ 00'00	17°51'23
morning set	13192 Apr 29 01:42	7° ♄ 59'50			13193 Mar 29 09:16	0° ♄	
	13192 May 12 22:24	0° ♄					

morning set	13193 Apr 10 14:32	19° Υ 39'33		desc. node	13194 Mar 30 04:51	13° Υ 03'49	
desc. node	13193 Apr 12 08:18	22° Υ 34'25					
	13193 Apr 16 19:33	0° B		superior conj	13194 Apr 04 19:50	22° Υ 37'46	-0°42'51
				minimum elong	13194 Apr 04 15:38	22° Υ 20'10	0°42'30
superior conj	13193 Apr 24 03:19	11° B 54'40	-1°22'41		13194 Apr 09 07:00	0° B	
minimum elong	13193 Apr 23 19:03	11° B 21'31	1°22'18	max. Earth dist.	13194 Apr 11 13:50	3° B 41'58	1.44038 AU
max. Earth dist.	13193 Apr 28 20:24	19° B 23'59	1.45265 AU	evening rise	13194 Apr 19 12:31	16° B 13'17	
	13193 May 05 15:24	0° II			13194 Apr 28 14:45	0° II	
evening rise	13193 May 09 23:31	6° II 40'34		evening max el	13194 May 19 23:00	28° II 31'35	21°11'25
greatest brilliancy	13193 May 24 23:31	29° II 10'55	-0.6m		13194 May 21 12:11	0° B	
	13193 May 25 13:07	0° B		asc. node	13194 May 24 01:41	1° B 59'32	
evening max el	13193 Jun 06 00:25	14° B 43'03	20°03'23	retrograde	13194 May 28 14:52	3° B 34'42	
asc. node	13193 Jun 06 04:33	14° B 53'22		evening set	13194 Jun 01 23:05	1° B 49'49	
retrograde	13193 Jun 13 16:04	19° B 05'06			13194 Jun 03 20:06	30° R II	
evening set	13193 Jun 17 13:58	17° B 36'43		inferior conj	13194 Jun 07 05:06	25° II 37'12	3°08'57
inferior conj	13193 Jun 22 21:05	11° B 35'47	3°12'52	minimum elong	13194 Jun 07 04:17	25° II 40'00	3°07'54
minimum elong	13193 Jun 22 21:16	11° B 35'11	3°11'51	min. Earth dist.	13194 Jun 07 13:39	25° II 07'27	0.68649 AU
min. Earth dist.	13193 Jun 23 19:17	10° B 20'34	0.67926 AU	morning rise	13194 Jun 12 09:18	19° II 19'56	
morning rise	13193 Jun 28 04:14	5° B 13'58		direct	13194 Jun 17 13:30	17° II 04'30	
direct	13193 Jul 03 20:57	2° B 43'13		desc. node	13194 Jun 26 05:44	21° II 36'35	
desc. node	13193 Jul 09 08:36	4° B 33'22		morning max el	13194 Jun 27 22:32	23° II 14'36	23°12'40
morning max el	13193 Jul 15 11:52	9° B 41'08	24°42'05		13194 Jul 03 21:24	0° B	
	13193 Jul 31 13:32	0° Ω			13194 Jul 24 21:55	0° Ω	
	13193 Aug 19 10:51	0° II		morning set	13194 Aug 01 13:03	12° Ω 20'00	
morning set	13193 Aug 20 06:05	1° II 24'05		max. Earth dist.	13194 Aug 05 18:09	19° Ω 28'49	1.39678 AU
max. Earth dist.	13193 Aug 23 20:00	7° II 48'27	1.37338 AU		13194 Aug 11 16:35	0° II	
superior conj	13193 Aug 30 17:10	20° II 46'50	-0°23'15	superior conj	13194 Aug 13 11:34	3° II 16'50	-0°58'02
minimum elong	13193 Aug 30 18:43	20° II 54'22	0°23'14	minimum elong	13194 Aug 13 15:49	3° II 36'26	0°57'53
asc. node	13193 Sep 02 05:19	25° II 42'12		asc. node	13194 Aug 20 01:54	15° II 43'45	
	13193 Sep 04 09:03	0° Ω		evening rise	13194 Aug 22 23:56	21° II 20'31	
evening rise	13193 Sep 08 04:04	7° Ω 36'53			13194 Aug 27 13:27	0° Ω	
	13193 Sep 20 15:58	0° III		evening max el	13194 Sep 08 00:58	17° Ω 19'04	18°36'23
evening max el	13193 Sep 25 00:21	5° III 15'51	19°23'43	retrograde	13194 Sep 16 02:19	21° Ω 22'36	
retrograde	13193 Oct 04 12:00	10° III 00'27		evening set	13194 Sep 18 01:11	21° Ω 09'04	
desc. node	13193 Oct 05 05:05	9° III 58'57		desc. node	13194 Sep 22 02:33	19° Ω 24'55	
evening set	13193 Oct 06 08:39	9° III 50'18		inferior conj	13194 Sep 25 23:52	16° Ω 41'52	-1°13'48
inferior conj	13193 Oct 15 00:14	5° III 42'31	-3°02'55	minimum elong	13194 Sep 25 20:54	16° Ω 47'31	1°12'25
minimum elong	13193 Oct 14 16:24	5° III 55'15	2°59'34	min. Earth dist.	13194 Sep 29 04:19	14° Ω 17'32	0.57372 AU
min. Earth dist.	13193 Oct 17 12:24	4° III 04'58	0.55653 AU	morning rise	13194 Oct 03 13:09	11° Ω 34'59	
morning rise	13193 Oct 22 21:54	1° III 13'36		direct	13194 Oct 09 12:21	10° Ω 06'16	
direct	13193 Oct 28 04:15	0° III 11'04		morning max el	13194 Oct 23 19:23	17° Ω 35'48	26°47'12
morning max el	13193 Nov 11 04:09	7° III 13'32	25°19'23		13194 Nov 03 02:44	0° III	
	13193 Nov 27 19:29	0° X		asc. node	13194 Nov 16 03:40	21° III 52'21	
asc. node	13193 Nov 29 06:49	2° X 38'24			13194 Nov 20 05:03	0° X	
morning set	13193 Dec 07 23:13	20° X 00'22		morning set	13194 Nov 22 09:08	4° X 34'17	
	13193 Dec 12 12:49	0° B					
				superior conj	13194 Nov 29 05:09	19° X 37'11	1°35'14
superior conj	13193 Dec 14 17:50	4° B 53'19	1°38'18	minimum elong	13194 Nov 29 04:06	19° X 31'17	1°36'08
minimum elong	13193 Dec 14 17:47	4° B 53'06	1°39'19	max. Earth dist.	13194 Nov 29 14:51	20° X 31'17	1.31346 AU
max. Earth dist.	13193 Dec 16 07:25	8° B 20'11	1.31966 AU		13194 Dec 03 21:49	0° B	
evening rise	13193 Dec 21 22:17	20° B 20'44		evening rise	13194 Dec 06 01:43	4° B 38'44	
	13193 Dec 26 18:30	0° \approx		desc. node	13194 Dec 18 23:57	29° B 14'13	
desc. node	13194 Jan 01 03:02	9° \approx 48'12			13194 Dec 19 10:59	0° \approx	
	13194 Jan 14 06:49	0° X		evening max el	13195 Jan 05 22:58	23° \approx 03'58	27°07'40
evening max el	13194 Jan 23 17:23	10° X 49'52	27°32'32		13195 Jan 17 05:51	0° X	
retrograde	13194 Feb 06 14:02	18° X 11'48		retrograde	13195 Jan 19 21:54	0° X 18'06	
evening set	13194 Feb 13 12:17	15° X 52'11			13195 Jan 22 12:50	30° R \approx	
min. Earth dist.	13194 Feb 17 06:17	12° X 50'45	0.62446 AU	evening set	13195 Jan 26 17:17	28° \approx 16'41	
inferior conj	13194 Feb 20 04:38	10° X 03'25	-1°38'00	min. Earth dist.	13195 Jan 30 13:21	25° \approx 34'19	0.60291 AU
minimum elong	13194 Feb 20 07:58	9° X 55'27	1°36'13	inferior conj	13195 Feb 02 17:32	22° \approx 55'23	-2°59'14
asc. node	13194 Feb 25 04:50	5° X 55'28		minimum elong	13195 Feb 02 23:56	22° \approx 41'58	2°56'10
morning rise	13194 Feb 27 06:19	4° X 56'12		morning rise	13195 Feb 10 09:41	18° \approx 08'01	
direct	13194 Mar 01 12:36	4° X 32'48		direct	13195 Feb 12 11:28	17° \approx 51'06	
morning max el	13194 Mar 08 04:53	7° X 56'25	17°46'56	asc. node	13195 Feb 12 02:14	17° \approx 51'42	
	13194 Mar 22 17:43	0° Υ		morning max el	13195 Feb 19 19:40	21° \approx 31'04	18°01'01
morning set	13194 Mar 24 03:15	2° Υ 27'28			13195 Feb 26 06:51	0° X	

morning set	13195 Mar 07 09:31	16° X 03'45		morning max el	13196 Feb 03 03:49	4° \approx 33'06	18°35'13
	13195 Mar 15 00:15	0° Y		morning set	13196 Feb 19 04:06	0° X 13'00	
desc. node	13195 Mar 17 01:22	3° Y 38'50			13196 Feb 19 01:25	0° X	
superior conj	13195 Mar 17 12:29	4° Y 27'56	-0°03'41	superior conj	13196 Feb 28 01:54	17° X 15'05	0°30'28
minimum elong	13195 Mar 17 12:11	4° Y 26'35	0°03'37	minimum elong	13196 Feb 28 03:54	17° X 24'24	0°30'27
behind sun begin	13195 Mar 17 04:26	3° Y 52'23		desc. node	13196 Mar 02 21:55	24° X 16'08	
behind sun end	13195 Mar 17 19:56	5° Y 00'43			13196 Mar 06 03:38	0° Y	
max. Earth dist.	13195 Mar 25 02:32	17° Y 26'51	1.42259 AU	max. Earth dist.	13196 Mar 06 10:38	0° Y 30'27	1.40130 AU
evening rise	13195 Mar 30 15:07	26° Y 26'16		evening rise	13196 Mar 10 14:17	7° Y 34'49	
	13195 Apr 01 21:08	0° Z			13196 Mar 24 21:49	0° Z	
	13195 Apr 22 09:30	0° II		evening max el	13196 Apr 14 07:06	26° Z 11'37	23°49'38
evening max el	13195 May 02 16:31	12° II 20'20	22°28'42		13196 Apr 18 16:04	0° II	
asc. node	13195 May 10 22:55	17° II 56'30		retrograde	13196 Apr 25 06:35	2° II 38'53	
retrograde	13195 May 12 12:10	18° II 07'37		asc. node	13196 Apr 26 20:13	2° II 27'45	
evening set	13195 May 17 07:24	16° II 07'24		evening set	13196 Apr 30 13:21	0° II 25'18	
inferior conj	13195 May 22 14:36	9° II 45'22	2°54'22		13196 May 01 00:38	30° R 8	
minimum elong	13195 May 22 13:01	9° II 50'54	2°53'12	inferior conj	13196 May 05 23:43	23° Z 56'57	2°29'39
min. Earth dist.	13195 May 22 10:14	10° II 00'37	0.68899 AU	minimum elong	13196 May 05 21:39	24° Z 04'00	2°28'24
morning rise	13195 May 27 18:30	3° II 34'12		min. Earth dist.	13196 May 05 06:50	24° Z 54'37	0.68687 AU
direct	13195 Jun 01 09:46	1° II 37'53		morning rise	13196 May 11 05:57	17° Z 53'14	
morning max el	13195 Jun 10 12:06	6° II 56'04	21°45'15	direct	13196 May 15 08:38	16° Z 17'39	
desc. node	13195 Jun 13 02:47	9° II 44'01		morning max el	13196 May 23 07:36	20° Z 48'10	20°26'59
	13195 Jun 28 06:29	0° S		desc. node	13196 May 29 23:45	28° Z 38'36	
morning set	13195 Jul 12 18:51	22° S 09'07			13196 May 31 00:19	0° II	
	13195 Jul 17 15:23	0° Q			13196 Jun 20 10:42	0° S	
max. Earth dist.	13195 Jul 18 19:46	1° Q 56'56	1.41926 AU	morning set	13196 Jun 21 02:42	1° S 01'45	
				max. Earth dist.	13196 Jun 30 04:05	15° S 17'11	1.43823 AU
superior conj	13195 Jul 26 10:59	14° Q 55'02	-1°31'45				
minimum elong	13195 Jul 26 17:38	15° Q 24'06	1°31'43	superior conj	13196 Jul 06 11:31	25° S 33'57	-1°59'03
	13195 Aug 03 21:05	0° P		minimum elong	13196 Jul 06 18:11	26° S 01'34	1°59'31
evening rise	13195 Aug 06 08:18	4° P 31'23			13196 Jul 09 03:21	0° Q	
asc. node	13195 Aug 06 22:33	5° P 36'49		evening rise	13196 Jul 19 00:29	16° Q 57'49	
	13195 Aug 22 09:40	0° L		asc. node	13196 Jul 23 19:15	25° Q 16'51	
evening max el	13195 Aug 22 10:04	0° L 01'00	18°10'03		13196 Jul 26 13:58	0° P	
retrograde	13195 Aug 29 11:15	3° L 36'21		evening max el	13196 Aug 04 23:34	13° P 11'19	18°03'11
evening set	13195 Aug 31 17:00	3° L 15'07		retrograde	13196 Aug 11 11:23	16° P 32'52	
	13195 Sep 06 02:09	30° R 11		evening set	13196 Aug 14 01:20	16° P 00'18	
inferior conj	13195 Sep 07 21:10	28° P 27'24	0°20'38	inferior conj	13196 Aug 20 13:15	10° P 53'17	1°32'44
minimum elong	13195 Sep 07 21:51	28° P 25'53	0°20'16	minimum elong	13196 Aug 20 15:34	10° P 47'23	1°31'34
desc. node	13195 Sep 09 00:02	27° P 27'30		min. Earth dist.	13196 Aug 23 13:01	7° P 52'17	0.61819 AU
min. Earth dist.	13195 Sep 11 04:11	25° P 33'39	0.59528 AU	desc. node	13196 Aug 25 21:34	5° P 45'37	
morning rise	13195 Sep 14 23:21	22° P 47'07		morning rise	13196 Aug 27 03:19	4° P 49'31	
direct	13195 Sep 21 10:17	20° P 50'31		direct	13196 Sep 02 19:29	2° P 29'25	
morning max el	13195 Oct 05 18:09	28° P 39'38	27°42'08	morning max el	13196 Sep 16 23:24	10° P 29'07	27°58'21
	13195 Oct 07 01:53	0° L			13196 Oct 02 05:46	0° L	
	13195 Oct 27 23:14	0° M			13196 Oct 19 05:40	0° M	
asc. node	13195 Nov 03 00:27	11° M 28'00		asc. node	13196 Oct 19 21:09	1° M 18'17	
morning set	13195 Nov 06 15:32	18° M 54'59		morning set	13196 Oct 20 16:20	2° M 56'24	
	13195 Nov 11 18:13	0° X		max. Earth dist.	13196 Oct 26 04:52	14° M 40'14	1.31664 AU
max. Earth dist.	13195 Nov 12 23:15	2° X 41'15	1.31240 AU				
superior conj	13195 Nov 13 16:43	4° X 18'31	1°26'22	superior conj	13196 Oct 28 02:34	18° M 50'58	1°11'48
minimum elong	13195 Nov 13 14:52	4° X 08'16	1°27'02	minimum elong	13196 Oct 28 00:19	18° M 38'35	1°12'10
evening rise	13195 Nov 20 09:42	19° X 07'09			13196 Nov 02 03:46	0° X	
	13195 Nov 25 15:57	0° Z		evening rise	13196 Nov 03 20:12	3° X 39'53	
desc. node	13195 Dec 05 20:59	18° Z 02'50			13196 Nov 17 17:07	0° Z	
	13195 Dec 14 15:51	0° \approx		desc. node	13196 Nov 21 18:09	5° Z 59'04	
evening max el	13195 Dec 18 21:09	4° \approx 27'16	26°08'34	evening max el	13196 Nov 29 11:17	15° Z 00'49	24°41'10
retrograde	13196 Jan 01 19:48	11° \approx 31'39		retrograde	13196 Dec 13 05:19	21° Z 52'53	
evening set	13196 Jan 08 03:29	9° \approx 56'31		evening set	13196 Dec 18 14:41	20° Z 48'33	
min. Earth dist.	13196 Jan 12 10:24	7° \approx 20'10	0.58152 AU	min. Earth dist.	13196 Dec 23 23:04	18° Z 01'21	0.56290 AU
inferior conj	13196 Jan 15 12:14	5° \approx 06'19	-4°20'42	inferior conj	13196 Dec 26 10:18	16° Z 27'42	-5°27'13
minimum elong	13196 Jan 15 20:51	4° \approx 50'39	4°17'18	minimum elong	13196 Dec 26 17:31	16° Z 16'15	5°25'01
morning rise	13196 Jan 23 17:07	0° \approx 40'37		morning rise	13197 Jan 03 22:27	12° Z 23'03	
direct	13196 Jan 25 18:43	0° \approx 26'34		direct	13197 Jan 06 07:05	12° Z 07'48	
asc. node	13196 Jan 29 23:36	1° \approx 28'14		asc. node	13197 Jan 15 20:55	16° Z 39'49	
				morning max el	13197 Jan 16 01:06	16° Z 49'52	19°31'34

	13197 Jan 25 13:44	0°♊		morning max el	13197 Dec 29 08:24	28°♊13'09	20°51'04
morning set	13197 Feb 02 06:55	14°♊42'36			13197 Dec 31 02:11	0°♊	
	13197 Feb 09 22:06	0°♋		asc. node	13198 Jan 02 18:08	3°♊11'27	
				morning set	13198 Jan 17 14:56	29°♊23'52	
superior conj	13197 Feb 10 07:21	0°♋45'24	0°57'44		13198 Jan 17 21:55	0°♋	
minimum elong	13197 Feb 10 10:07	0°♋59'00	0°57'54				
max. Earth dist.	13197 Feb 16 16:59	12°♋55'06	1.37881 AU	superior conj	13198 Jan 25 00:35	14°♋47'11	1°17'47
desc. node	13197 Feb 17 18:29	14°♋51'27		minimum elong	13198 Jan 25 03:06	15°♋00'05	1°18'18
evening rise	13197 Feb 20 10:15	19°♋36'23		max. Earth dist.	13198 Jan 30 01:51	24°♋54'02	1.35751 AU
	13197 Feb 26 12:55	0°♌			13198 Feb 01 17:42	0°♋	
	13197 Mar 19 00:58	0°♌		evening rise	13198 Feb 03 00:14	2°♋22'50	
evening max el	13197 Mar 27 20:46	10°♌04'46	25°07'40	desc. node	13198 Feb 04 15:04	5°♋21'08	
retrograde	13197 Apr 08 20:54	17°♌02'51			13198 Feb 19 13:28	0°♌	
asc. node	13197 Apr 13 17:36	15°♌21'11		evening max el	13198 Mar 10 10:24	23°♌54'24	26°15'29
evening set	13197 Apr 14 15:22	14°♌38'36			13198 Mar 18 12:21	0°♌	
min. Earth dist.	13197 Apr 19 01:14	9°♌43'54	0.68023 AU	retrograde	13198 Mar 23 06:10	1°♌12'12	
inferior conj	13197 Apr 20 06:32	8°♌08'05	1°54'48		13198 Mar 27 14:24	30°♌♎	
minimum elong	13197 Apr 20 04:24	8°♌15'02	1°53'36	evening set	13198 Mar 29 11:43	28°♌41'12	
morning rise	13197 Apr 25 17:44	2°♌13'13		asc. node	13198 Mar 31 15:03	26°♌39'30	
direct	13197 Apr 29 08:32	0°♌58'04		min. Earth dist.	13198 Apr 02 15:14	24°♌21'38	0.66929 AU
morning max el	13197 May 06 10:43	4°♌51'46	19°22'28	inferior conj	13198 Apr 04 08:57	22°♌13'35	1°09'24
desc. node	13197 May 16 20:36	18°♌07'41		minimum elong	13198 Apr 04 07:20	22°♌18'33	1°08'31
greatest brilliancy	13197 May 19 04:05	21°♌30'40	-0.7m	morning rise	13198 Apr 10 03:48	16°♌29'15	
	13197 May 24 19:44	0°♍		direct	13198 Apr 13 07:40	15°♌32'45	
morning set	13197 May 31 04:25	9°♍44'03		morning max el	13198 Apr 19 20:55	19°♌02'44	18°33'52
max. Earth dist.	13197 Jun 12 19:07	29°♍20'48	1.45155 AU		13198 Apr 28 10:33	0°♍	
	13197 Jun 13 05:04	0°♎		desc. node	13198 May 03 17:19	8°♍01'21	
				morning set	13198 May 10 21:37	19°♍15'52	
superior conj	13197 Jun 16 12:49	5°♎15'39	-2°12'57		13198 May 17 17:51	0°♍	
minimum elong	13197 Jun 16 14:42	5°♎23'07	2°13'56				
evening rise	13197 Jun 30 19:31	28°♎29'02		superior conj	13198 May 26 22:24	14°♍21'31	-2°07'36
	13197 Jul 01 17:27	0°♏		minimum elong	13198 May 26 16:38	13°♍59'00	2°08'19
asc. node	13197 Jul 10 16:02	14°♏38'56		max. Earth dist.	13198 May 26 14:14	13°♍49'36	1.45785 AU
evening max el	13197 Jul 19 13:51	26°♏40'56	18°14'43		13198 Jun 05 21:48	0°♎	
	13197 Jul 25 04:39	0°♐		evening rise	13198 Jun 11 14:07	8°♎58'59	
retrograde	13197 Jul 25 22:24	0°♐02'58		greatest brilliancy	13198 Jun 19 18:25	21°♎55'46	-0.8m
	13197 Jul 26 16:07	30°♐♑			13198 Jun 25 00:53	0°♏	
evening set	13197 Jul 28 20:47	29°♏16'27		asc. node	13198 Jun 27 12:55	3°♏35'54	
inferior conj	13197 Aug 03 20:05	23°♏52'00	2°22'50	evening max el	13198 Jul 03 01:52	10°♏21'32	18°43'56
minimum elong	13197 Aug 03 22:32	23°♏45'01	2°21'33	retrograde	13198 Jul 09 16:19	13°♏57'36	
min. Earth dist.	13197 Aug 06 07:20	21°♏04'19	0.63983 AU	evening set	13198 Jul 12 23:21	12°♏55'28	
morning rise	13197 Aug 09 22:45	17°♏34'34		inferior conj	13198 Jul 18 13:47	7°♏15'34	2°54'06
desc. node	13197 Aug 12 19:04	15°♏48'59		minimum elong	13198 Jul 18 15:34	7°♏10'01	2°52'56
direct	13197 Aug 16 13:45	14°♏59'23		min. Earth dist.	13198 Jul 20 10:38	4°♏56'34	0.65844 AU
morning max el	13197 Aug 30 08:54	22°♏59'35	27°37'20	morning rise	13198 Jul 24 06:54	0°♏52'11	
	13197 Sep 05 14:05	0°♐			13198 Jul 25 09:43	30°♐♑	
	13197 Sep 25 12:44	0°♑		direct	13198 Jul 30 15:42	28°♑11'38	
morning set	13197 Oct 04 09:11	16°♑32'51		desc. node	13198 Jul 30 16:29	28°♑11'38	
asc. node	13197 Oct 06 17:47	21°♑18'10			13198 Aug 05 11:32	0°♒	
max. Earth dist.	13197 Oct 09 04:01	26°♑20'08	1.32624 AU	morning max el	13198 Aug 12 20:05	6°♒00'02	26°45'14
	13197 Oct 10 21:31	0°♓			13198 Aug 31 06:58	0°♐	
				morning set	13198 Sep 17 15:06	29°♐36'58	
superior conj	13197 Oct 12 08:45	3°♓09'02	0°51'39		13198 Sep 17 19:56	0°♑	
minimum elong	13197 Oct 12 06:37	2°♓57'32	0°51'45	max. Earth dist.	13198 Sep 21 17:44	7°♑37'53	1.34107 AU
evening rise	13197 Oct 19 07:23	18°♓12'06		asc. node	13198 Sep 23 14:23	11°♑23'02	
	13197 Oct 25 00:57	0°♊					
desc. node	13197 Nov 08 15:23	22°♊43'19		superior conj	13198 Sep 26 08:56	17°♑06'21	0°26'08
evening max el	13197 Nov 10 21:16	25°♊04'01	22°59'41	minimum elong	13198 Sep 26 07:36	16°♑59'20	0°26'05
	13197 Nov 17 13:42	0°♋			13198 Oct 02 11:19	0°♓	
retrograde	13197 Nov 24 01:39	1°♋36'58		evening rise	13198 Oct 03 17:19	2°♓38'18	
evening set	13197 Nov 28 03:13	1°♋01'02			13198 Oct 19 00:14	0°♊	
	13197 Nov 30 21:40	30°♓♊		evening max el	13198 Oct 23 12:16	5°♊13'11	21°21'59
min. Earth dist.	13197 Dec 05 06:22	27°♊44'13	0.54993 AU	desc. node	13198 Oct 26 12:42	7°♊50'24	
inferior conj	13197 Dec 06 13:06	27°♊00'13	-5°55'54	retrograde	13198 Nov 04 13:29	11°♊12'32	
minimum elong	13197 Dec 06 13:16	26°♊59'58	5°54'54	evening set	13198 Nov 07 07:07	10°♊55'15	
morning rise	13197 Dec 15 00:49	23°♊10'57		inferior conj	13198 Nov 16 05:04	7°♊01'27	-5°27'11
direct	13197 Dec 18 01:10	22°♊49'41		minimum elong	13198 Nov 15 20:59	7°♊12'47	5°24'54

min. Earth dist.	13198 Nov 16 12:22	6° ♊ 51'11	0.54507 AU	desc. node	13199 Oct 13 10:07	20° ♍ 52'56	
morning rise	13198 Nov 24 11:37	3° ♊ 12'11		retrograde	13199 Oct 16 03:02	21° ♍ 13'17	
direct	13198 Nov 28 08:52	2° ♊ 39'39		evening set	13199 Oct 18 02:31	21° ♍ 02'57	
morning max el	13198 Dec 11 02:16	8° ♊ 46'04	22°30'40	inferior conj	13199 Oct 27 00:23	17° ♍ 03'51	-4°04'25
asc. node	13198 Dec 20 15:15	20° ♊ 46'06		minimum elong	13199 Oct 26 14:36	17° ♍ 18'38	4°00'41
	13198 Dec 26 00:27	0° ♋		min. Earth dist.	13199 Oct 28 20:33	15° ♍ 57'08	0.54973 AU
morning set	13199 Jan 02 01:53	14° ♋ 10'12		morning rise	13199 Nov 04 01:27	12° ♍ 53'36	
				direct	13199 Nov 08 20:17	12° ♍ 03'38	
superior conj	13199 Jan 09 02:11	29° ♋ 10'58	1°30'51	morning max el	13199 Nov 22 12:42	18° ♍ 48'43	24°19'28
minimum elong	13199 Jan 09 03:52	29° ♋ 19'53	1°31'40		13199 Dec 01 19:21	0° ♊	
	13199 Jan 09 11:25	0° ♌		asc. node	13199 Dec 07 12:16	9° ♊ 08'15	
max. Earth dist.	13199 Jan 12 17:03	6° ♌ 46'01	1.33927 AU	morning set	13199 Dec 17 13:46	28° ♊ 55'02	
evening rise	13199 Jan 17 04:43	15° ♌ 45'35			13199 Dec 18 01:51	0° ♋	
desc. node	13199 Jan 22 11:43	25° ♌ 41'08					
	13199 Jan 24 22:07	0° ♌		superior conj	13199 Dec 24 09:17	13° ♋ 47'23	1°37'23
	13199 Feb 14 02:58	0° ♍		minimum elong	13199 Dec 24 09:53	13° ♋ 50'40	1°38'22
evening max el	13199 Feb 20 23:56	7° ♍ 32'47	27°05'47	max. Earth dist.	13199 Dec 26 15:49	18° ♋ 43'20	1.32535 AU
retrograde	13199 Mar 06 09:41	14° ♍ 59'31		evening rise	13199 Dec 31 20:19	29° ♋ 35'12	
evening set	13199 Mar 13 00:28	12° ♍ 27'10			13200 Jan 01 01:13	0° ♌	
min. Earth dist.	13199 Mar 16 22:49	8° ♍ 40'56	0.65440 AU	desc. node	13200 Jan 09 08:26	15° ♌ 45'30	
asc. node	13199 Mar 18 12:30	6° ♍ 54'50			13200 Jan 18 00:00	0° ♌	
inferior conj	13199 Mar 19 04:43	6° ♍ 08'42	0°12'59	evening max el	13200 Feb 03 12:10	20° ♌ 48'13	27°31'31
minimum elong	13199 Mar 19 04:22	6° ♍ 09'44	0°12'50	retrograde	13200 Feb 17 06:33	28° ♌ 14'28	
transit middle	13199 Mar 19 04:22	6° ♍ 09'44	0°12'50	evening set	13200 Feb 24 03:15	25° ♌ 47'58	
transit begin	13199 Mar 19 02:34	6° ♍ 14'50		min. Earth dist.	13200 Feb 27 22:04	22° ♌ 31'35	0.63610 AU
transit end	13199 Mar 19 06:09	6° ♍ 04'40		inferior conj	13200 Mar 01 15:05	19° ♌ 45'53	-0°54'32
morning rise	13199 Mar 25 09:49	0° ♍ 36'47		minimum elong	13200 Mar 01 16:50	19° ♌ 41'25	0°53'31
	13199 Mar 27 07:22	30° ♎		asc. node	13200 Mar 04 09:58	17° ♌ 04'13	
direct	13199 Mar 28 03:56	29° ♎ 56'02		morning rise	13200 Mar 08 08:45	14° ♌ 28'48	
	13199 Mar 29 00:33	0° ♍		direct	13200 Mar 10 18:40	14° ♌ 00'14	
morning max el	13199 Apr 03 12:17	3° ♍ 15'00	18°01'58	morning max el	13200 Mar 17 05:55	17° ♌ 19'26	17°47'17
desc. node	13199 Apr 20 13:56	28° ♍ 13'02			13200 Mar 26 10:50	0° ♍	
morning set	13199 Apr 21 18:23	0° ♎ 09'12		morning set	13200 Apr 02 18:08	12° ♍ 19'59	
	13199 Apr 21 16:08	0° ♎		desc. node	13200 Apr 06 10:29	18° ♍ 36'51	
					13200 Apr 13 05:44	0° ♎	
superior conj	13199 May 06 08:44	23° ♎ 36'34	-1°43'02				
minimum elong	13199 May 05 23:32	23° ♎ 00'20	1°42'55	superior conj	13200 Apr 15 11:43	3° ♎ 41'08	-1°06'09
max. Earth dist.	13199 May 09 10:18	28° ♎ 25'31	1.45666 AU	minimum elong	13200 Apr 15 04:59	3° ♎ 13'44	1°05'42
	13199 May 10 10:28	0° ♏		max. Earth dist.	13200 Apr 21 04:45	12° ♎ 51'58	1.44822 AU
evening rise	13199 May 22 11:07	18° ♏ 38'58		evening rise	13200 Apr 30 22:14	28° ♎ 01'39	
	13199 May 29 20:37	0° ♏			13200 May 02 05:11	0° ♏	
greatest brilliancy	13199 Jun 04 15:33	8° ♏ 43'07	-0.7m		13200 May 22 19:03	0° ♏	
asc. node	13199 Jun 14 09:53	21° ♏ 59'15		evening max el	13200 May 29 11:20	7° ♏ 55'44	20°30'55
evening max el	13199 Jun 16 09:26	24° ♏ 07'43	19°29'56	asc. node	13200 May 31 06:58	9° ♏ 37'24	
retrograde	13199 Jun 23 13:59	28° ♏ 10'13		retrograde	13200 Jun 06 12:53	12° ♏ 34'45	
evening set	13199 Jun 27 06:10	26° ♏ 51'38		evening set	13200 Jun 10 14:59	10° ♏ 59'30	
inferior conj	13199 Jul 02 15:06	20° ♏ 57'55	3°09'48	inferior conj	13200 Jun 15 21:21	4° ♏ 53'27	3°12'32
minimum elong	13199 Jul 02 15:53	20° ♏ 55'19	3°08'46	minimum elong	13200 Jun 15 21:05	4° ♏ 54'20	3°11'31
min. Earth dist.	13199 Jul 03 21:27	19° ♏ 17'35	0.67298 AU	min. Earth dist.	13200 Jun 16 13:44	3° ♏ 57'07	0.68293 AU
morning rise	13199 Jul 08 01:07	14° ♏ 34'12			13200 Jun 19 16:24	30° ♐	
direct	13199 Jul 14 00:19	11° ♏ 57'28		morning rise	13200 Jun 21 02:54	28° ♐ 33'06	
desc. node	13199 Jul 17 13:49	12° ♏ 44'05		direct	13200 Jun 26 14:25	26° ♐ 08'00	
morning max el	13199 Jul 26 06:56	19° ♏ 18'52	25°30'52	desc. node	13200 Jul 03 11:02	28° ♐ 59'43	
	13199 Aug 04 09:02	0° ♑			13200 Jul 04 17:15	0° ♏	
	13199 Aug 24 09:05	0° ♑		morning max el	13200 Jul 07 17:02	2° ♏ 47'09	24°04'10
morning set	13199 Aug 31 06:21	12° ♑ 00'13			13200 Jul 28 11:15	0° ♑	
max. Earth dist.	13199 Sep 03 21:32	18° ♑ 42'43	1.36058 AU	morning set	13200 Aug 12 02:27	23° ♑ 31'27	
	13199 Sep 09 17:05	0° ♒			13200 Aug 15 19:23	0° ♑	
				max. Earth dist.	13200 Aug 15 19:24	0° ♑ 00'07	1.38325 AU
superior conj	13199 Sep 10 00:24	0° ♒ 36'34	-0°04'09				
minimum elong	13199 Sep 10 00:39	0° ♒ 37'51	0°04'12	superior conj	13200 Aug 23 03:42	13° ♑ 31'42	-0°37'54
behind sun begin	13199 Sep 09 18:33	0° ♒ 07'22		minimum elong	13200 Aug 23 06:21	13° ♑ 44'19	0°37'49
behind sun end	13199 Sep 10 06:45	1° ♒ 08'23		asc. node	13200 Aug 27 07:31	21° ♑ 33'52	
asc. node	13199 Sep 10 10:57	1° ♒ 29'27			13200 Aug 31 14:16	0° ♒	
evening rise	13199 Sep 17 23:53	16° ♒ 53'19		evening rise	13200 Sep 01 00:34	0° ♒ 50'49	
	13199 Sep 24 16:02	0° ♓		evening max el	13200 Sep 17 10:13	27° ♒ 38'39	19°00'59
evening max el	13199 Oct 05 16:11	16° ♓ 01'03	20°00'47		13200 Sep 20 05:05	0° ♓	



























































































































retrograde	13200 Sep 26 06:07	2°♍03'59		evening max el	13201 Aug 31 15:02	9°♎59'36	18°22'42
evening set	13200 Sep 28 02:50	1°♍52'58		retrograde	13201 Sep 08 04:29	13°♎49'05	
desc. node	13200 Sep 29 07:36	1°♍34'50		evening set	13201 Sep 10 06:11	13°♎32'37	
	13200 Oct 02 19:54	30°♋♎		desc. node	13201 Sep 16 05:08	10°♎15'14	
inferior conj	13200 Oct 06 11:51	27°♎37'47	-2°15'52	inferior conj	13201 Sep 17 20:52	8°♎56'28	-0°31'11
minimum elong	13200 Oct 06 06:04	27°♎47'49	2°13'14	minimum elong	13201 Sep 17 19:41	8°♎58'51	0°30'39
min. Earth dist.	13200 Oct 09 09:03	25°♎38'28	0.56310 AU	min. Earth dist.	13201 Sep 21 03:52	6°♎17'19	0.58262 AU
morning rise	13200 Oct 14 06:19	22°♎52'52		morning rise	13201 Sep 25 05:43	3°♎34'45	
direct	13200 Oct 19 20:36	21°♎39'18		direct	13201 Oct 01 10:49	1°♎54'04	
morning max el	13200 Nov 03 00:14	28°♎54'32	26°00'01	morning max el	13201 Oct 15 18:25	9°♎31'57	27°15'06
	13200 Nov 04 02:46	0°♍			13201 Oct 31 10:33	0°♍	
asc. node	13200 Nov 23 09:10	28°♍06'08		asc. node	13201 Nov 10 05:59	17°♍29'48	
	13200 Nov 24 09:12	0°♌		morning set	13201 Nov 15 09:30	28°♍02'11	
morning set	13200 Dec 01 00:53	13°♌34'00			13201 Nov 16 07:31	0°♌	
superior conj	13200 Dec 07 19:39	28°♌30'10	1°37'43	superior conj	13201 Nov 22 07:17	13°♌12'54	1°32'10
minimum elong	13200 Dec 07 19:10	28°♌27'26	1°38'43	minimum elong	13201 Nov 22 05:51	13°♌04'56	1°32'59
	13200 Dec 08 11:50	0°♍		max. Earth dist.	13201 Nov 22 05:22	13°♌02'11	1.31243 AU
max. Earth dist.	13200 Dec 08 20:57	0°♍50'28	1.31636 AU	evening rise	13201 Nov 29 01:49	28°♌07'31	
evening rise	13200 Dec 14 20:11	13°♍44'48			13201 Nov 29 23:01	0°♍	
	13200 Dec 23 03:11	0°♎		desc. node	13201 Dec 13 02:17	24°♍38'57	
desc. node	13200 Dec 26 05:18	5°♎27'48			13201 Dec 16 12:40	0°♎	
	13201 Jan 12 11:53	0°♋		evening max el	13201 Dec 29 00:06	15°♎21'50	26°46'36
evening max el	13201 Jan 15 21:12	3°♋28'41	27°26'20	retrograde	13202 Jan 11 22:56	22°♎31'00	
retrograde	13201 Jan 29 19:29	10°♋47'37		evening set	13202 Jan 18 14:37	20°♎40'10	
evening set	13201 Feb 05 17:10	8°♋35'02		min. Earth dist.	13202 Jan 22 14:06	18°♎02'10	0.59365 AU
min. Earth dist.	13201 Feb 09 11:27	5°♋42'39	0.61537 AU	inferior conj	13202 Jan 25 18:24	15°♎32'15	-3°34'28
inferior conj	13201 Feb 12 12:51	2°♋57'02	-2°11'50	minimum elong	13202 Jan 26 01:58	15°♎17'18	3°31'05
minimum elong	13201 Feb 12 17:28	2°♋46'33	2°09'26	morning rise	13202 Feb 02 16:19	10°♎53'40	
	13201 Feb 16 01:12	30°♋♎		direct	13202 Feb 04 17:30	10°♎38'18	
asc. node	13201 Feb 19 07:24	28°♎09'00		asc. node	13202 Feb 06 04:48	10°♎46'32	
morning rise	13201 Feb 19 20:41	27°♎57'37		morning max el	13202 Feb 12 11:02	14°♎28'17	18°13'03
direct	13201 Feb 22 00:34	27°♎37'27			13202 Feb 23 01:43	0°♋	
	13201 Feb 27 16:54	0°♋		morning set	13202 Feb 28 03:10	9°♋22'25	
morning max el	13201 Feb 28 22:41	1°♋07'09	17°50'32				
morning set	13201 Mar 16 15:03	25°♋30'27		superior conj	13202 Mar 09 16:38	27°♋08'19	0°11'35
	13201 Mar 19 03:07	0°♌		minimum elong	13202 Mar 09 17:31	27°♋12'18	0°11'35
desc. node	13201 Mar 24 07:00	9°♌08'40		behind sun begin	13202 Mar 09 12:19	26°♋48'49	
				behind sun end	13202 Mar 09 22:43	27°♋35'46	
superior conj	13201 Mar 27 14:37	14°♌52'42	-0°25'49	desc. node	13202 Mar 11 03:33	29°♋44'51	
minimum elong	13201 Mar 27 12:13	14°♌42'27	0°25'36		13202 Mar 11 06:57	0°♌	
max. Earth dist.	13201 Apr 03 20:10	26°♌56'38	1.43344 AU	max. Earth dist.	13202 Mar 17 07:23	10°♌26'44	1.41384 AU
	13201 Apr 05 17:29	0°♍		evening rise	13202 Mar 22 02:41	18°♌24'30	
evening rise	13201 Apr 10 15:40	7°♍48'27			13202 Mar 29 10:54	0°♍	
	13201 Apr 25 10:22	0°♎			13202 Apr 19 22:59	0°♎	
evening max el	13201 May 12 07:43	21°♎44'35	21°43'32	evening max el	13202 Apr 24 23:51	5°♎34'57	23°03'03
asc. node	13201 May 18 04:09	26°♎16'07		retrograde	13202 May 05 07:16	11°♎39'27	
retrograde	13201 May 21 11:06	27°♎06'02		asc. node	13202 May 05 01:25	11°♎39'11	
evening set	13201 May 25 23:56	25°♎14'35		evening set	13202 May 10 07:28	9°♎33'06	
inferior conj	13201 May 31 06:14	18°♎57'55	3°04'00	inferior conj	13202 May 15 15:49	3°♎08'08	2°45'08
minimum elong	13201 May 31 05:04	19°♎01'59	3°02'55	minimum elong	13202 May 15 13:59	3°♎14'28	2°43'55
min. Earth dist.	13201 May 31 09:17	18°♎47'16	0.68819 AU	min. Earth dist.	13202 May 15 06:02	3°♎41'58	0.68869 AU
morning rise	13201 Jun 05 09:59	12°♎43'06			13202 May 18 00:05	30°♋♎	
direct	13201 Jun 10 08:49	10°♎35'14		morning rise	13202 May 20 20:24	27°♋00'15	
morning max el	13201 Jun 20 04:21	16°♎22'46	22°34'38	direct	13202 May 25 06:20	25°♋12'41	
desc. node	13201 Jun 20 08:10	16°♎32'24			13202 Jun 02 16:34	0°♎	
	13201 Jul 01 08:46	0°♏		morning max el	13202 Jun 02 20:12	0°♎09'00	21°10'35
	13201 Jul 21 11:50	0°♏		desc. node	13202 Jun 07 05:11	5°♎01'55	
morning set	13201 Jul 23 22:50	3°♏58'39			13202 Jun 25 01:33	0°♏	
max. Earth dist.	13201 Jul 28 18:30	11°♏59'27	1.40668 AU	morning set	13202 Jul 03 18:22	13°♏21'15	
				max. Earth dist.	13202 Jul 10 23:34	24°♏53'24	1.42799 AU
superior conj	13201 Aug 05 14:36	25°♏41'00	-1°12'44		13202 Jul 14 02:05	0°♏	
minimum elong	13201 Aug 05 20:00	26°♏05'19	1°12'36				
	13201 Aug 07 23:37	0°♐		superior conj	13202 Jul 18 04:43	6°♏55'01	-1°44'30
asc. node	13201 Aug 14 04:07	11°♐32'04		minimum elong	13202 Jul 18 11:50	7°♏25'24	1°44'37
evening rise	13201 Aug 15 16:02	14°♐21'29		evening rise	13202 Jul 29 18:12	27°♏15'29	
	13201 Aug 24 07:09	0°♑			13202 Jul 31 06:52	0°♐	

































































































































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evening max el	13202 Aug 15 02:28	22° \mathbb{M} 54'33	18°04'41	evening max el	13203 Jul 29 16:37	6° \mathbb{M} 13'43	18°05'47
retrograde	13202 Aug 21 20:39	26° \mathbb{M} 22'26		retrograde	13203 Aug 05 02:03	9° \mathbb{M} 34'09	
evening set	13202 Aug 24 05:50	25° \mathbb{M} 56'44		evening set	13203 Aug 07 19:27	8° \mathbb{M} 56'04	
inferior conj	13202 Aug 31 02:39	21° \mathbb{M} 00'09	0°54'04	inferior conj	13203 Aug 14 01:33	3° \mathbb{M} 41'20	1°56'30
minimum elong	13202 Aug 31 04:15	20° \mathbb{M} 56'21	0°53'14	minimum elong	13203 Aug 14 04:04	3° \mathbb{M} 34'36	1°55'13
desc. node	13202 Sep 03 02:39	18° \mathbb{M} 11'19		min. Earth dist.	13203 Aug 16 20:24	0° \mathbb{M} 43'34	0.62767 AU
min. Earth dist.	13202 Sep 03 07:18	18° \mathbb{M} 00'53	0.60510 AU		13203 Aug 17 13:44	30° \mathbb{R} δ	
morning rise	13202 Sep 06 23:42	15° \mathbb{M} 08'30		morning rise	13203 Aug 20 10:33	27° \mathbb{Q} 30'16	
direct	13202 Sep 13 13:31	13° \mathbb{M} 01'27		desc. node	13203 Aug 21 00:09	27° \mathbb{Q} 06'11	
morning max el	13202 Sep 27 20:22	20° \mathbb{M} 55'39	27°53'50	direct	13203 Aug 27 02:46	25° \mathbb{Q} 02'35	
	13202 Oct 05 17:15	0° \mathbb{L}			13203 Sep 06 19:44	0° \mathbb{M}	
	13202 Oct 24 10:24	0° \mathbb{M}		morning max el	13203 Sep 10 04:01	3° \mathbb{M} 04'38	27°53'39
asc. node	13202 Oct 28 02:44	7° \mathbb{M} 12'06			13203 Sep 30 04:43	0° \mathbb{L}	
morning set	13202 Oct 30 13:47	12° \mathbb{M} 15'00		morning set	13203 Oct 14 11:35	26° \mathbb{L} 07'08	
max. Earth dist.	13202 Nov 05 13:13	25° \mathbb{M} 09'05	1.31361 AU	asc. node	13203 Oct 14 23:24	27° \mathbb{L} 07'13	
					13203 Oct 16 08:58	0° \mathbb{M}	
superior conj	13202 Nov 06 18:19	27° \mathbb{M} 50'29	1°20'51	max. Earth dist.	13203 Oct 19 16:35	7° \mathbb{M} 01'12	1.32004 AU
minimum elong	13202 Nov 06 16:15	27° \mathbb{M} 39'00	1°21'24				
	13202 Nov 07 17:36	0° \mathbb{X}		superior conj	13203 Oct 22 02:54	12° \mathbb{M} 17'42	1°03'55
evening rise	13202 Nov 13 11:07	12° \mathbb{X} 37'55		minimum elong	13203 Oct 22 00:38	12° \mathbb{M} 05'17	1°04'10
	13202 Nov 22 02:19	0° \mathbb{Z}		evening rise	13203 Oct 28 22:08	27° \mathbb{M} 11'06	
desc. node	13202 Nov 29 23:22	13° \mathbb{Z} 06'58			13203 Oct 30 05:44	0° \mathbb{X}	
evening max el	13202 Dec 10 18:33	26° \mathbb{Z} 21'39	25°34'02		13203 Nov 16 09:31	0° \mathbb{Z}	
	13202 Dec 15 05:01	0° \mathbb{A}		desc. node	13203 Nov 16 20:34	0° \mathbb{Z} 35'40	
retrograde	13202 Dec 24 15:33	3° \mathbb{A} 21'12		evening max el	13203 Nov 22 05:53	6° \mathbb{Z} 38'20	23°58'35
evening set	13202 Dec 30 15:24	1° \mathbb{A} 58'36		retrograde	13203 Dec 05 19:55	13° \mathbb{Z} 24'33	
	13203 Jan 03 06:16	30° \mathbb{R} \mathbb{Z}		evening set	13203 Dec 10 16:29	12° \mathbb{Z} 33'00	
min. Earth dist.	13203 Jan 04 06:54	29° \mathbb{Z} 20'11	0.57307 AU	min. Earth dist.	13203 Dec 16 16:55	9° \mathbb{Z} 35'20	0.55645 AU
inferior conj	13203 Jan 07 04:22	27° \mathbb{Z} 21'49	-4°52'02	inferior conj	13203 Dec 18 17:46	8° \mathbb{Z} 21'43	-5°45'32
minimum elong	13203 Jan 07 13:02	27° \mathbb{Z} 07'00	4°48'58	minimum elong	13203 Dec 18 22:38	8° \mathbb{Z} 14'22	5°44'01
morning rise	13203 Jan 15 13:16	23° \mathbb{Z} 05'42		morning rise	13203 Dec 27 06:41	4° \mathbb{Z} 25'03	
direct	13203 Jan 17 16:59	22° \mathbb{Z} 51'37		direct	13203 Dec 29 20:45	4° \mathbb{Z} 08'03	
asc. node	13203 Jan 24 02:09	25° \mathbb{Z} 04'28		morning max el	13204 Jan 09 06:47	9° \mathbb{Z} 07'23	20°02'41
morning max el	13203 Jan 26 15:01	27° \mathbb{Z} 11'48	18°56'32	asc. node	13204 Jan 10 23:25	10° \mathbb{Z} 52'33	
	13203 Jan 29 04:05	0° \mathbb{A}			13204 Jan 23 03:22	0° \mathbb{A}	
morning set	13203 Feb 12 01:37	23° \mathbb{A} 41'03		morning set	13204 Jan 27 06:57	8° \mathbb{A} 16'28	
	13203 Feb 15 06:35	0° \mathbb{H}					
superior conj	13203 Feb 20 13:25	10° \mathbb{H} 15'08	0°42'54	superior conj	13204 Feb 04 00:23	24° \mathbb{A} 00'28	1°07'06
minimum elong	13203 Feb 20 15:54	10° \mathbb{H} 26'59	0°42'57	minimum elong	13204 Feb 04 03:09	24° \mathbb{A} 14'17	1°07'25
desc. node	13203 Feb 26 00:04	20° \mathbb{H} 21'17			13204 Feb 07 01:20	0° \mathbb{H}	
max. Earth dist.	13203 Feb 27 14:23	23° \mathbb{H} 12'55	1.39163 AU	max. Earth dist.	13204 Feb 09 20:48	5° \mathbb{H} 22'39	1.36939 AU
evening rise	13203 Mar 03 10:48	29° \mathbb{H} 55'22		desc. node	13204 Feb 12 20:37	10° \mathbb{H} 54'45	
	13203 Mar 03 11:53	0° \mathbb{Y}		evening rise	13204 Feb 13 14:52	12° \mathbb{H} 17'13	
	13203 Mar 22 19:46	0° \mathbb{B}			13204 Feb 24 02:07	0° \mathbb{Y}	
evening max el	13203 Apr 07 13:39	19° \mathbb{B} 26'21	24°23'36	evening max el	13204 Mar 16 23:15	0° \mathbb{B}	
retrograde	13203 Apr 19 00:05	26° \mathbb{B} 08'25		retrograde	13204 Mar 20 03:04	3° \mathbb{B} 17'56	25°38'13
asc. node	13203 Apr 21 22:47	25° \mathbb{B} 29'46		evening set	13204 Apr 01 12:33	10° \mathbb{B} 26'42	
evening set	13203 Apr 24 11:57	23° \mathbb{B} 49'34		asc. node	13204 Apr 07 11:46	7° \mathbb{B} 58'55	
min. Earth dist.	13203 Apr 29 01:53	18° \mathbb{B} 34'30	0.68455 AU	min. Earth dist.	13204 Apr 07 20:11	7° \mathbb{B} 40'44	
inferior conj	13203 Apr 30 00:09	17° \mathbb{B} 19'39	2°16'09	inferior conj	13204 Apr 11 18:43	3° \mathbb{B} 19'13	0.67602 AU
minimum elong	13203 Apr 29 22:00	17° \mathbb{B} 26'52	2°14'54	minimum elong	13204 Apr 13 05:20	1° \mathbb{B} 28'38	1°36'53
morning rise	13203 May 05 08:12	11° \mathbb{B} 19'44			13204 Apr 13 03:21	1° \mathbb{B} 34'59	1°35'46
direct	13203 May 09 05:39	9° \mathbb{B} 53'11		morning rise	13204 Apr 14 09:26	30° \mathbb{R} \mathbb{Y}	
morning max el	13203 May 16 19:00	14° \mathbb{B} 06'33	19°57'48	direct	13204 Apr 18 19:28	25° \mathbb{Y} 37'58	
desc. node	13203 May 25 02:04	24° \mathbb{B} 12'14		morning max el	13204 Apr 22 05:22	24° \mathbb{Y} 31'12	
	13203 May 29 04:36	0° \mathbb{I}			13204 Apr 29 01:16	28° \mathbb{Y} 13'39	18°59'46
morning set	13203 Jun 12 21:05	22° \mathbb{I} 02'31		desc. node	13204 Apr 30 17:43	0° \mathbb{B}	
	13203 Jun 18 00:24	0° \mathbb{G}		greatest brilliancy	13204 May 10 22:50	13° \mathbb{B} 52'22	
max. Earth dist.	13203 Jun 23 10:58	8° \mathbb{G} 33'52	1.44468 AU		13204 May 12 07:58	15° \mathbb{B} 56'42	-0.7m
					13204 May 21 11:47	0° \mathbb{I}	
superior conj	13203 Jun 28 19:01	17° \mathbb{G} 08'01	-2°07'00	morning set	13204 May 22 02:51	0° \mathbb{I} 58'20	
minimum elong	13203 Jun 29 00:18	17° \mathbb{G} 29'30	2°07'44	max. Earth dist.	13204 Jun 05 03:25	22° \mathbb{I} 47'39	1.45508 AU
	13203 Jul 06 13:55	0° \mathbb{Q}					
evening rise	13203 Jul 12 02:01	9° \mathbb{Q} 19'57		superior conj	13204 Jun 07 12:05	26° \mathbb{I} 30'03	-2°13'13
asc. node	13203 Jul 18 21:32	20° \mathbb{Q} 53'33		minimum elong	13204 Jun 07 10:41	26° \mathbb{I} 24'32	2°14'13
					13204 Jun 09 17:21	0° \mathbb{G}	

evening rise	13204 Jun 22 10:45	20°☿24'29		asc. node	13205 Jun 21 15:15	28°☿49'56	
	13204 Jun 28 08:24	0°♊			13205 Jun 22 13:18	0°♊	
asc. node	13204 Jul 04 18:20	10°♊05'51		evening max el	13205 Jun 25 16:42	3°♊32'59	19°01'38
evening max el	13204 Jul 12 06:15	19°♊48'49	18°25'03	retrograde	13205 Jul 02 12:06	7°♊18'32	
retrograde	13204 Jul 18 16:22	23°♊15'14		evening set	13205 Jul 05 23:01	6°♊09'25	
evening set	13204 Jul 21 18:19	22°♊22'24		inferior conj	13205 Jul 11 10:43	0°♊23'42	3°02'27
inferior conj	13204 Jul 27 13:26	16°♊51'27	2°38'09	minimum elong	13205 Jul 11 12:06	0°♊19'17	3°01'21
minimum elong	13204 Jul 27 15:40	16°♊44'49	2°36'55		13205 Jul 11 18:07	30°♋☿	
min. Earth dist.	13204 Jul 29 18:47	14°♊14'03	0.64819 AU	min. Earth dist.	13205 Jul 13 01:25	28°☿20'12	0.66516 AU
morning rise	13204 Aug 02 11:45	10°♊30'34		morning rise	13205 Jul 17 00:32	23°☿59'53	
desc. node	13204 Aug 06 21:37	8°♊07'42		direct	13205 Jul 23 05:44	21°☿19'43	
direct	13204 Aug 09 00:44	7°♊51'32		desc. node	13205 Jul 24 18:59	21°☿28'32	
morning max el	13204 Aug 22 14:26	15°♊49'06	27°18'23	morning max el	13205 Aug 05 01:23	28°☿58'02	26°15'46
	13204 Sep 03 06:40	0°♌			13205 Aug 06 01:21	0°♊	
	13204 Sep 21 23:14	0°♊			13205 Aug 28 02:14	0°♌	
morning set	13204 Sep 27 00:11	9°♊31'00		morning set	13205 Sep 10 00:22	22°♌19'12	
asc. node	13204 Sep 30 19:59	17°♊09'42		max. Earth dist.	13205 Sep 13 20:56	29°♌40'24	1.34890 AU
max. Earth dist.	13204 Oct 01 11:42	18°♊30'19	1.33189 AU		13205 Sep 14 00:57	0°♊	
				asc. node	13205 Sep 17 16:33	7°♊15'57	
superior conj	13204 Oct 05 06:51	26°♊27'59	0°41'28				
minimum elong	13204 Oct 05 04:57	26°♊17'55	0°41'29	superior conj	13205 Sep 19 03:44	10°♊15'22	0°13'52
	13204 Oct 06 22:29	0°♌		minimum elong	13205 Sep 19 02:58	10°♊11'25	0°13'47
evening rise	13204 Oct 12 09:00	11°♌41'18		behind sun begin	13205 Sep 18 23:52	9°♊55'30	
	13204 Oct 21 15:38	0°♌		behind sun end	13205 Sep 19 06:05	10°♊27'21	
evening max el	13204 Nov 02 16:55	16°♌39'58	22°16'47	evening rise	13205 Sep 26 17:48	26°♊03'55	
desc. node	13204 Nov 02 17:51	16°♌42'16			13205 Sep 28 15:34	0°♌	
retrograde	13204 Nov 15 11:49	23°♌00'26		evening max el	13205 Oct 15 12:59	27°♌03'37	20°44'57
evening set	13204 Nov 18 22:35	22°♌34'14			13205 Oct 19 00:36	0°♌	
min. Earth dist.	13204 Nov 26 23:36	18°♌59'11	0.54674 AU	desc. node	13205 Oct 20 15:13	1°♌00'04	
inferior conj	13204 Nov 27 14:34	18°♌38'09	-5°51'15	retrograde	13205 Oct 26 22:17	2°♌43'06	
minimum elong	13204 Nov 27 10:50	18°♌43'24	5°50'00	evening set	13205 Oct 29 06:19	2°♌29'53	
morning rise	13204 Dec 06 00:15	14°♌50'51			13205 Nov 04 17:43	30°♋♌	
direct	13204 Dec 09 09:05	14°♌25'24		inferior conj	13205 Nov 07 06:07	28°♌35'35	-4°57'19
morning max el	13204 Dec 21 08:01	20°♌08'04	21°31'20	minimum elong	13205 Nov 06 20:20	28°♌49'34	4°54'10
asc. node	13204 Dec 27 20:36	27°♌52'56		min. Earth dist.	13205 Nov 08 06:04	28°♌01'17	0.54602 AU
	13204 Dec 29 07:12	0°♎		morning rise	13205 Nov 15 10:21	24°♌39'59	
morning set	13205 Jan 10 16:27	23°♎00'11		direct	13205 Nov 19 17:16	24°♌00'34	
	13205 Jan 14 00:02	0°♏			13205 Dec 02 11:16	0°♌	
				morning max el	13205 Dec 02 21:30	0°♌23'46	23°16'36
superior conj	13205 Jan 17 21:33	8°♏12'20	1°24'09	asc. node	13205 Dec 14 17:39	15°♌49'22	
minimum elong	13205 Jan 17 23:45	8°♏23'51	1°24'48		13205 Dec 22 10:19	0°♎	
max. Earth dist.	13205 Jan 22 07:48	17°♏15'11	1.34930 AU	morning set	13205 Dec 26 04:02	7°♎46'21	
evening rise	13205 Jan 26 11:29	25°♏20'15					
	13205 Jan 28 23:31	0°♏		superior conj	13206 Jan 02 01:47	22°♎41'58	1°34'24
desc. node	13205 Jan 29 17:14	1°♏20'41		minimum elong	13206 Jan 02 03:01	22°♎48'37	1°35'18
	13205 Feb 16 13:55	0°♐		max. Earth dist.	13206 Jan 05 02:28	29°♎09'09	1.33288 AU
evening max el	13205 Mar 02 16:50	17°♐04'01	26°39'34		13206 Jan 05 12:10	0°♏	
retrograde	13205 Mar 15 19:30	24°♐26'58		evening rise	13206 Jan 09 21:06	8°♏55'18	
evening set	13205 Mar 22 05:07	21°♐54'56		desc. node	13206 Jan 16 13:55	21°♏34'35	
asc. node	13205 Mar 25 17:38	18°♐26'11			13206 Jan 21 11:00	0°♏	
min. Earth dist.	13205 Mar 26 06:22	17°♐49'31	0.66336 AU		13206 Feb 12 16:05	0°♐	
inferior conj	13205 Mar 28 05:14	15°♐30'15	0°46'50	evening max el	13206 Feb 13 06:15	0°♐34'27	27°20'10
minimum elong	13205 Mar 28 04:03	15°♐33'46	0°46'13	retrograde	13206 Feb 26 20:05	8°♐01'01	
morning rise	13205 Apr 03 04:05	9°♐50'37		evening set	13206 Mar 05 13:53	5°♐30'32	
direct	13205 Apr 06 03:37	9°♐01'12		min. Earth dist.	13206 Mar 09 10:37	1°♐57'26	0.64699 AU
morning max el	13205 Apr 12 13:52	12°♐25'16	18°18'10		13206 Mar 11 06:06	30°♋♏	
	13205 Apr 25 08:15	0°♑		inferior conj	13206 Mar 11 21:21	29°♏18'21	-0°14'21
desc. node	13205 Apr 27 19:30	3°♑54'13		minimum elong	13206 Mar 11 21:47	29°♏17'12	0°14'04
morning set	13205 May 02 07:09	11°♑03'03		transit middle	13206 Mar 11 21:47	29°♏17'12	0°14'04
	13205 May 14 06:28	0°♒		transit begin	13206 Mar 11 20:19	29°♏21'10	
				transit end	13206 Mar 11 23:14	29°♏13'14	
superior conj	13205 May 17 19:43	5°♒33'48	-1°59'15	asc. node	13206 Mar 12 15:06	28°♏30'28	
minimum elong	13205 May 17 11:40	5°♒02'17	1°59'36	morning rise	13206 Mar 18 07:30	23°♏52'13	
max. Earth dist.	13205 May 18 23:01	7°♒20'27	1.45823 AU	direct	13206 Mar 20 22:02	23°♏16'56	
	13205 Jun 02 11:32	0°☿		morning max el	13206 Mar 27 06:30	26°♏34'30	17°53'35
evening rise	13205 Jun 02 19:13	0°☿30'00			13206 Mar 30 06:54	0°♐	
greatest brilliancy	13205 Jun 13 07:33	16°☿50'34	-0.8m	morning set	13206 Apr 13 15:58	22°♐31'02	

desc. node	13206 Apr 14 16:05	24°♿11'23		superior conj	13207 Apr 08 00:27	25°♿38'14	-0°48'59
	13206 Apr 18 04:16	0°♿		minimum elong	13207 Apr 07 19:34	25°♿17'58	0°48'38
					13207 Apr 10 15:59	0°♿	
superior conj	13206 Apr 27 11:28	15°♿05'05	-1°28'19	max. Earth dist.	13207 Apr 14 13:00	6°♿16'28	1.44261 AU
minimum elong	13206 Apr 27 02:49	14°♿30'31	1°27'59	evening rise	13207 Apr 22 22:10	19°♿26'16	
max. Earth dist.	13206 May 01 19:13	21°♿55'49	1.45390 AU		13207 Apr 29 20:56	0°♿	
	13206 May 06 23:10	0°♿			13207 May 21 19:12	0°♿	
evening rise	13206 May 13 10:07	9°♿57'27		evening max el	13207 May 22 21:21	1°♿08'03	21°00'34
	13206 May 26 16:51	0°♿		asc. node	13207 May 26 09:25	4°♿10'15	
greatest brilliancy	13206 May 28 03:11	2°♿05'31	-0.6m	retrograde	13207 May 31 09:26	6°♿04'57	
asc. node	13206 Jun 08 12:17	16°♿55'28		evening set	13207 Jun 04 16:02	4°♿22'31	
evening max el	13206 Jun 08 21:59	17°♿20'10	19°54'16		13207 Jun 08 14:24	30°♿♿	
retrograde	13206 Jun 16 10:31	21°♿36'49		inferior conj	13207 Jun 09 22:03	28°♿11'27	3°10'15
evening set	13206 Jun 20 06:56	20°♿10'54		minimum elong	13207 Jun 09 21:23	28°♿13'46	3°09'12
inferior conj	13206 Jun 25 14:25	14°♿11'42	3°12'25	min. Earth dist.	13207 Jun 10 08:36	27°♿13'49	0.68572 AU
minimum elong	13206 Jun 25 14:45	14°♿10'34	3°11'24	morning rise	13207 Jun 15 02:31	21°♿53'14	
min. Earth dist.	13206 Jun 26 14:40	12°♿49'59	0.67776 AU	direct	13207 Jun 20 08:35	19°♿35'13	
morning rise	13206 Jun 30 22:14	7°♿49'20		desc. node	13207 Jun 28 13:29	23°♿39'11	
direct	13206 Jul 06 16:39	5°♿16'57		morning max el	13207 Jun 30 22:20	25°♿53'15	23°25'58
desc. node	13206 Jul 11 16:17	6°♿48'00			13207 Jul 04 16:34	0°♿	
morning max el	13206 Jul 18 11:50	12°♿21'18	24°55'04		13207 Jul 26 04:58	0°♿	
	13206 Aug 01 16:32	0°♿		morning set	13207 Aug 04 18:32	15°♿26'20	
	13206 Aug 20 20:13	0°♿		max. Earth dist.	13207 Aug 08 19:38	22°♿21'15	1.39326 AU
morning set	13206 Aug 23 08:02	4°♿21'20			13207 Aug 13 03:05	0°♿	
max. Earth dist.	13206 Aug 26 21:54	10°♿48'35	1.37000 AU				
				superior conj	13207 Aug 16 11:19	6°♿07'53	-0°52'45
superior conj	13206 Sep 02 14:29	23°♿31'38	-0°18'07	minimum elong	13207 Aug 16 15:08	6°♿25'40	0°52'36
minimum elong	13206 Sep 02 15:40	23°♿37'26	0°18'07	asc. node	13207 Aug 22 09:43	17°♿23'55	
asc. node	13206 Sep 04 13:07	27°♿21'52		evening rise	13207 Aug 25 19:26	23°♿59'35	
	13206 Sep 05 20:48	0°♿			13207 Aug 28 22:29	0°♿	
evening rise	13206 Sep 10 22:14	10°♿12'29		evening max el	13207 Sep 10 22:04	20°♿08'35	18°42'08
	13206 Sep 21 14:54	0°♿		retrograde	13207 Sep 19 04:00	24°♿17'29	
evening max el	13206 Sep 27 23:02	8°♿12'01	19°32'34	evening set	13207 Sep 21 02:04	24°♿04'47	
retrograde	13206 Oct 07 16:36	13°♿03'46		desc. node	13207 Sep 24 10:11	22°♿48'19	
desc. node	13206 Oct 07 12:40	13°♿03'41		inferior conj	13207 Sep 29 03:32	19°♿40'51	-1°29'46
evening set	13206 Oct 09 13:34	12°♿53'45		minimum elong	13207 Sep 28 23:51	19°♿47'41	1°28'02
inferior conj	13206 Oct 18 07:06	8°♿48'20	-3°19'33	min. Earth dist.	13207 Oct 02 06:35	17°♿22'25	0.57077 AU
minimum elong	13206 Oct 17 22:38	9°♿01'50	3°15'59	morning rise	13207 Oct 06 18:13	14°♿39'29	
min. Earth dist.	13206 Oct 20 15:29	7°♿18'40	0.55452 AU	direct	13207 Oct 12 15:14	13°♿14'43	
morning rise	13206 Oct 26 05:42	4°♿24'36		morning max el	13207 Oct 26 21:42	20°♿41'05	26°35'59
direct	13206 Oct 31 09:06	3°♿25'35			13207 Nov 03 23:11	0°♿	
morning max el	13206 Nov 14 07:28	10°♿23'42	25°04'23	asc. node	13207 Nov 18 11:29	23°♿38'00	
	13206 Nov 29 01:14	0°♿			13207 Nov 21 16:47	0°♿	
asc. node	13206 Dec 01 14:37	4°♿28'07		morning set	13207 Nov 25 02:08	7°♿05'12	
morning set	13206 Dec 10 15:51	22°♿29'53					
	13206 Dec 14 02:27	0°♿		superior conj	13207 Dec 01 21:43	22°♿05'57	1°36'04
				minimum elong	13207 Dec 01 20:48	22°♿00'51	1°37'01
superior conj	13206 Dec 17 10:34	7°♿22'11	1°38'15	max. Earth dist.	13207 Dec 02 11:24	23°♿22'15	1.31402 AU
minimum elong	13206 Dec 17 10:42	7°♿22'54	1°39'16		13207 Dec 05 11:18	0°♿	
max. Earth dist.	13206 Dec 19 04:32	11°♿12'24	1.32096 AU	evening rise	13207 Dec 08 19:10	7°♿10'23	
evening rise	13206 Dec 24 16:35	22°♿54'31			13207 Dec 20 17:07	0°♿	
	13206 Dec 28 05:28	0°♿		desc. node	13207 Dec 21 07:37	1°♿01'25	
desc. node	13207 Jan 03 10:42	11°♿30'52		evening max el	13208 Jan 08 23:56	25°♿57'51	27°13'37
	13207 Jan 15 05:16	0°♿			13208 Jan 13 22:36	0°♿	
evening max el	13207 Jan 26 17:25	13°♿36'52	27°33'17	retrograde	13208 Jan 22 22:55	3°♿13'38	
retrograde	13207 Feb 09 13:32	21°♿00'12		evening set	13208 Jan 29 19:05	1°♿09'03	
evening set	13207 Feb 16 11:38	18°♿38'25			13208 Jan 31 13:00	30°♿♿	
min. Earth dist.	13207 Feb 20 05:41	15°♿33'27	0.62755 AU	min. Earth dist.	13208 Feb 02 14:26	28°♿24'26	0.60613 AU
inferior conj	13207 Feb 23 02:49	12°♿46'00	-1°26'16	inferior conj	13208 Feb 05 18:08	25°♿43'07	-2°46'39
minimum elong	13207 Feb 23 05:43	12°♿38'58	1°24'41	minimum elong	13208 Feb 06 00:05	25°♿30'25	2°43'45
asc. node	13207 Feb 27 12:34	8°♿57'35		morning rise	13208 Feb 13 08:11	20°♿52'39	
morning rise	13207 Mar 02 02:24	7°♿36'15		asc. node	13208 Feb 14 10:00	20°♿39'15	
direct	13207 Mar 04 09:33	7°♿11'38		direct	13208 Feb 15 10:21	20°♿35'03	
morning max el	13207 Mar 11 00:16	10°♿33'41	17°46'29	morning max el	13208 Feb 22 15:43	24°♿12'07	17°57'41
	13207 Mar 24 02:26	0°♿			13208 Feb 27 08:31	0°♿	
morning set	13207 Mar 27 01:33	5°♿10'02		morning set	13208 Mar 09 05:36	18°♿40'02	
desc. node	13207 Apr 01 12:38	14°♿39'24			13208 Mar 15 10:46	0°♿	

desc. node	13208 Mar 18 09:09	5°♿13'32		asc. node	13209 Jan 31 07:22	3°♿59'53	
				morning max el	13209 Feb 05 01:02	7°♿19'03	18°28'45
superior conj	13208 Mar 19 13:39	7°♿18'39	-0°09'23		13209 Feb 19 12:08	0°♿	
minimum elong	13208 Mar 19 12:50	7°♿15'08	0°09'16	morning set	13209 Feb 20 22:36	2°♿44'49	
behind sun begin	13208 Mar 19 06:13	6°♿46'05					
behind sun end	13208 Mar 19 19:28	7°♿44'06		superior conj	13209 Mar 02 00:12	19°♿57'32	0°25'41
max. Earth dist.	13208 Mar 27 02:13	20°♿05'57	1.42555 AU	minimum elong	13209 Mar 02 01:57	20°♿05'39	0°25'41
evening rise	13208 Apr 01 22:07	29°♿31'49		desc. node	13209 Mar 05 05:40	25°♿50'15	
	13208 Apr 02 05:14	0°♿			13209 Mar 07 13:57	0°♿	
	13208 Apr 22 11:03	0°♿		max. Earth dist.	13209 Mar 09 11:00	3°♿16'01	1.40462 AU
evening max el	13208 May 04 15:34	14°♿56'43	22°16'49	evening rise	13209 Mar 13 18:04	10°♿31'42	
asc. node	13208 May 12 06:40	20°♿18'41			13209 Mar 26 03:33	0°♿	
retrograde	13208 May 14 07:04	20°♿37'28		evening max el	13209 Apr 17 06:32	28°♿47'52	23°37'39
evening set	13208 May 19 00:35	18°♿39'33			13209 Apr 18 12:29	0°♿	
inferior conj	13208 May 24 07:29	12°♿18'48	2°57'16	retrograde	13209 Apr 28 01:55	5°♿09'22	
minimum elong	13208 May 24 06:00	12°♿23'59	2°56'07	asc. node	13209 Apr 29 03:59	5°♿04'00	
min. Earth dist.	13208 May 24 05:03	12°♿27'18	0.68893 AU	evening set	13209 May 03 06:58	2°♿57'38	
morning rise	13208 May 29 11:15	6°♿06'33			13209 May 06 01:42	30°♿8	
direct	13208 Jun 03 04:29	4°♿07'08		min. Earth dist.	13209 May 08 01:45	27°♿21'39	0.68750 AU
morning max el	13208 Jun 12 11:12	9°♿32'58	21°57'45	inferior conj	13209 May 08 16:46	26°♿30'08	2°34'05
desc. node	13208 Jun 14 10:33	11°♿38'00		minimum elong	13209 May 08 14:45	26°♿37'03	2°32'50
	13208 Jun 28 11:02	0°♿		morning rise	13209 May 13 22:29	20°♿25'16	
morning set	13208 Jul 15 04:07	25°♿25'18		direct	13209 May 18 03:03	18°♿46'29	
	13208 Jul 18 00:05	0°♿		morning max el	13209 May 26 05:38	23°♿23'17	20°37'50
max. Earth dist.	13208 Jul 20 20:19	4°♿41'02	1.41607 AU		13209 May 31 23:18	0°♿	
				desc. node	13209 Jun 01 07:30	0°♿26'18	
superior conj	13208 Jul 28 13:52	17°♿54'33	-1°26'56		13209 Jun 21 17:59	0°♿	
minimum elong	13208 Jul 28 20:15	18°♿22'38	1°26'50	morning set	13209 Jun 24 14:35	4°♿24'25	
	13208 Aug 04 07:14	0°♿		max. Earth dist.	13209 Jul 03 03:52	17°♿55'03	1.43577 AU
evening rise	13208 Aug 08 05:48	7°♿15'56					
asc. node	13208 Aug 08 06:21	7°♿18'29		superior conj	13209 Jul 09 18:00	28°♿42'43	-1°55'36
	13208 Aug 21 19:44	0°♿		minimum elong	13209 Jul 10 00:56	29°♿11'39	1°55'59
evening max el	13208 Aug 24 06:15	2°♿45'42	18°12'46		13209 Jul 10 12:30	0°♿	
retrograde	13208 Aug 31 10:14	6°♿24'10		evening rise	13209 Jul 22 00:44	19°♿49'46	
evening set	13208 Sep 02 14:54	6°♿04'17		asc. node	13209 Jul 26 03:03	27°♿00'48	
inferior conj	13208 Sep 09 21:45	1°♿19'38	0°07'43		13209 Jul 27 20:31	0°♿	
minimum elong	13208 Sep 09 22:01	1°♿19'04	0°07'32	evening max el	13209 Aug 07 19:19	15°♿52'09	18°02'58
transit middle	13208 Sep 09 22:01	1°♿19'04	0°07'32	retrograde	13209 Aug 14 08:22	19°♿14'47	
transit begin	13208 Sep 09 18:59	1°♿25'38		evening set	13209 Aug 16 21:07	18°♿44'02	
transit end	13208 Sep 10 01:02	1°♿12'29		inferior conj	13209 Aug 23 11:14	13°♿39'36	1°23'18
desc. node	13208 Sep 10 07:44	0°♿57'57		minimum elong	13209 Aug 23 13:25	13°♿34'09	1°22'10
	13208 Sep 11 10:18	30°♿8		min. Earth dist.	13209 Aug 26 12:26	10°♿38'29	0.61484 AU
min. Earth dist.	13208 Sep 13 05:09	28°♿28'57	0.59192 AU	desc. node	13209 Aug 28 05:16	9°♿06'36	
morning rise	13208 Sep 17 01:42	25°♿43'57		morning rise	13209 Aug 30 03:06	7°♿38'46	
direct	13208 Sep 23 11:25	23°♿51'15		direct	13209 Sep 05 18:55	5°♿21'52	
	13208 Oct 06 01:31	0°♿		morning max el	13209 Sep 19 23:37	13°♿20'08	27°58'26
morning max el	13208 Oct 07 19:15	1°♿37'47	27°36'20		13209 Oct 03 07:54	0°♿	
	13208 Oct 28 06:55	0°♿			13209 Oct 20 17:20	0°♿	
asc. node	13208 Nov 04 08:15	13°♿10'39		asc. node	13209 Oct 22 04:57	2°♿58'45	
morning set	13208 Nov 08 09:10	21°♿28'00		morning set	13209 Oct 23 10:56	5°♿32'12	
	13208 Nov 12 07:54	0°♿		max. Earth dist.	13209 Oct 29 02:12	17°♿33'57	1.31569 AU
superior conj	13208 Nov 15 09:21	6°♿47'55	1°28'04	superior conj	13209 Oct 30 19:33	21°♿21'37	1°14'22
minimum elong	13208 Nov 15 07:37	6°♿38'12	1°28'48	minimum elong	13209 Oct 30 17:20	21°♿09'22	1°14'47
max. Earth dist.	13208 Nov 14 19:54	5°♿32'54	1.31224 AU		13209 Nov 03 17:10	0°♿	
evening rise	13208 Nov 22 02:37	21°♿37'34		evening rise	13209 Nov 06 12:50	6°♿09'42	
	13208 Nov 26 02:56	0°♿			13209 Nov 18 20:33	0°♿	
desc. node	13208 Dec 07 04:40	19°♿56'20		desc. node	13209 Nov 24 01:48	8°♿01'22	
	13208 Dec 14 06:08	0°♿		evening max el	13209 Dec 02 14:39	18°♿09'03	24°55'28
evening max el	13208 Dec 20 23:27	7°♿29'03	26°19'25	retrograde	13209 Dec 16 09:31	25°♿02'55	
retrograde	13209 Jan 03 22:20	14°♿34'34		evening set	13209 Dec 21 23:06	23°♿53'51	
evening set	13209 Jan 10 08:19	12°♿55'17		min. Earth dist.	13209 Dec 27 02:35	21°♿09'34	0.56539 AU
min. Earth dist.	13209 Jan 14 12:59	10°♿18'53	0.58462 AU	inferior conj	13209 Dec 29 16:52	19°♿29'16	-5°19'04
inferior conj	13209 Jan 17 15:44	8°♿00'26	-4°08'54	minimum elong	13209 Dec 30 00:40	19°♿16'40	5°16'36
minimum elong	13209 Jan 18 00:10	7°♿44'46	4°05'27	morning rise	13210 Jan 07 04:26	15°♿21'42	
morning rise	13209 Jan 25 18:57	3°♿31'13		direct	13210 Jan 09 11:35	15°♿06'52	
direct	13209 Jan 27 20:12	3°♿16'58		asc. node	13210 Jan 18 04:39	18°♿57'46	

morning max el	13210 Jan 19 00:08	19°  42'57	19°21'44	direct	13210 Dec 21 07:52	25°  57'35	
	13210 Jan 26 18:52	0° 			13210 Dec 31 00:19	0° 	
morning set	13210 Feb 05 00:22	17°  12'06		morning max el	13211 Jan 01 09:39	1°  14'37	20°37'55
	13210 Feb 11 10:13	0° 		asc. node	13211 Jan 05 01:52	5°  18'26	
					13211 Jan 19 09:55	0° 	
superior conj	13210 Feb 13 03:31	3°  22'13	0°54'03	morning set	13211 Jan 20 07:46	1°  52'16	
minimum elong	13210 Feb 13 06:15	3°  35'32	0°54'11				
max. Earth dist.	13210 Feb 19 17:33	15°  46'47	1.38212 AU	superior conj	13211 Jan 27 19:15	17°  20'19	1°15'12
desc. node	13210 Feb 20 02:12	16°  26'04		minimum elong	13211 Jan 27 21:51	17°  33'34	1°15'38
evening rise	13210 Feb 23 11:02	22°  25'42		max. Earth dist.	13211 Feb 02 01:42	27°  48'22	1.36046 AU
	13210 Feb 27 21:40	0° 			13211 Feb 03 05:09	0° 	
	13210 Mar 20 00:24	0° 		evening rise	13211 Feb 05 22:31	5°  06'06	
evening max el	13210 Mar 30 20:13	12°  41'00	24°56'31	desc. node	13211 Feb 06 22:45	6°  56'56	
retrograde	13210 Apr 11 16:51	19°  35'04			13211 Feb 20 18:45	0° 	
asc. node	13210 Apr 16 01:21	18°  12'43		evening max el	13211 Mar 13 09:43	26°  31'18	26°06'18
evening set	13210 Apr 17 09:40	17°  12'04			13211 Mar 17 08:32	0° 	
min. Earth dist.	13210 Apr 21 20:32	12°  12'11	0.68151 AU	retrograde	13211 Mar 26 02:57	3°  47'13	
inferior conj	13210 Apr 23 00:01	10°  41'38	2°00'47	evening set	13211 Apr 01 06:58	1°  16'45	
minimum elong	13210 Apr 22 21:52	10°  48'43	1°59'33	asc. node	13211 Apr 02 22:47	29°  44'14	
morning rise	13210 Apr 28 10:20	4°  45'30			13211 Apr 02 16:33	30°  47'00	
direct	13210 May 02 02:51	3°  27'24		min. Earth dist.	13211 Apr 05 11:17	26°  52'09	0.67118 AU
morning max el	13210 May 09 07:37	7°  25'37	19°31'10	inferior conj	13211 Apr 07 03:13	24°  48'15	1°16'59
desc. node	13210 May 19 04:19	19°  50'46		minimum elong	13211 Apr 07 01:29	24°  53'38	1°16'03
greatest brilliancy	13210 May 21 23:17	23°  53'31	-0.7m	morning rise	13211 Apr 12 20:46	19°  02'19	
	13210 May 26 01:45	0° 		direct	13211 Apr 16 02:09	18°  03'17	
morning set	13210 Jun 03 15:52	13°  04'47		morning max el	13211 Apr 22 16:53	21°  36'03	18°40'03
	13210 Jun 14 13:15	0° 			13211 Apr 29 12:43	0° 	
max. Earth dist.	13210 Jun 15 18:15	1°  54'11	1.45002 AU	desc. node	13211 May 06 01:01	9°  41'01	
				morning set	13211 May 14 05:34	22°  25'57	
superior conj	13210 Jun 19 22:30	8°  53'10	-2°11'58		13211 May 19 01:43	0° 	
minimum elong	13210 Jun 20 01:26	8°  43'51	2°12'56	max. Earth dist.	13211 May 29 12:44	16°  19'43	1.45737 AU
	13210 Jul 03 01:38	0° 					
evening rise	13210 Jul 03 23:15	1°  03'10		superior conj	13211 May 30 09:30	17°  14'05	-2°09'45
asc. node	13210 Jul 12 23:50	16°  02'11		minimum elong	13211 May 30 04:47	17°  22'25	2°10'33
evening max el	13210 Jul 22 09:38	29°  01'10	18°11'44		13211 Jun 07 05:48	0° 	
	13210 Jul 23 02:56	0° 		evening rise	13211 Jun 14 21:28	12°  09'02	
retrograde	13210 Jul 28 18:06	2°  40'22		greatest brilliancy	13211 Jun 22 03:05	23°  40'51	-0.9m
evening set	13210 Jul 31 15:10	1°  56'05			13211 Jun 26 04:17	0° 	
	13210 Aug 03 08:25	30°  47'00		asc. node	13211 Jun 29 20:43	5°  02'43	
inferior conj	13210 Aug 06 16:07	26°  03'57	2°16'30	evening max el	13211 Jul 05 22:08	12°  05'40	18°38'28
minimum elong	13210 Aug 06 18:37	26°  02'56	2°15'12	retrograde	13211 Jul 12 11:14	16°  03'59	
min. Earth dist.	13210 Aug 09 05:22	23°  04'12	0.63681 AU	evening set	13211 Jul 15 16:54	15°  03'20	
morning rise	13210 Aug 12 20:22	20°  01'52		inferior conj	13211 Jul 21 08:26	9°  05'40	2°50'21
desc. node	13210 Aug 15 02:44	18°  05'20		minimum elong	13211 Jul 21 10:21	9°  04'48	2°49'11
direct	13210 Aug 19 11:49	17°  04'42		min. Earth dist.	13211 Jul 23 07:31	7°  03'30	0.65590 AU
morning max el	13210 Sep 02 08:45	25°  45'18	27°42'35	morning rise	13211 Jul 27 02:50	3°  03'17	
	13210 Sep 06 06:43	0° 		desc. node	13211 Aug 02 00:08	0°  52'10	
	13210 Sep 26 21:06	0° 		direct	13211 Aug 02 12:46	0°  51'10	
morning set	13210 Oct 07 05:07	19°  12'31		morning max el	13211 Aug 15 19:55	8°  42'43	26°54'36
asc. node	13210 Oct 09 01:35	22°  15'15			13211 Sep 01 11:14	0° 	
max. Earth dist.	13210 Oct 12 02:34	29°  17'02	1.32447 AU		13211 Sep 19 06:53	0° 	
	13210 Oct 12 10:41	0° 		morning set	13211 Sep 20 12:54	2°  02'37	
				max. Earth dist.	13211 Sep 24 17:48	10°  38'14	1.33852 AU
superior conj	13210 Oct 15 02:23	5°  41'44	0°55'04	asc. node	13211 Sep 25 22:11	13°  02'05	
minimum elong	13210 Oct 15 00:12	5°  29'53	0°55'11				
evening rise	13210 Oct 21 24:00	20°  41'57		superior conj	13211 Sep 29 03:40	19°  43'07	0°30'21
	13210 Oct 26 11:06	0° 		minimum elong	13211 Sep 29 02:09	19°  43'51	0°30'18
desc. node	13210 Nov 10 23:02	24°  57'52			13211 Oct 03 23:55	0° 	
evening max el	13210 Nov 14 00:36	28°  14'01	23°14'56	evening rise	13211 Oct 06 10:16	5°  09'49	
	13210 Nov 15 23:32	0° 			13211 Oct 19 20:06	0° 	
retrograde	13210 Nov 27 07:52	4°  51'02		evening max el	13211 Oct 26 14:17	8°  20'31	21°35'43
evening set	13210 Dec 01 14:34	4°  11'16		desc. node	13211 Oct 28 20:21	10°  21'57	
min. Earth dist.	13210 Dec 08 10:16	1°  00'03	0.55132 AU	retrograde	13211 Nov 07 20:42	14°  26'02	
inferior conj	13210 Dec 09 22:09	0°  08'08	-5°55'01	evening set	13211 Nov 10 18:17	14°  06'53	
minimum elong	13210 Dec 09 23:40	0° 05'56	5°53'58	inferior conj	13211 Nov 19 14:59	10° 21'50	-5°35'26
	13210 Dec 10 03:46	30° 47'00		minimum elong	13211 Nov 19 07:52	10° 22'48	5°33'28
morning rise	13210 Dec 18 10:24	26° 17'33		min. Earth dist.	13211 Nov 19 16:27	10° 20'46	0.54517 AU

morning rise	13211 Nov 27 22:21	6°  24'42		minimum elong	13212 Oct 28 22:54	20°  28'02	4°15'45
direct	13211 Dec 01 16:15	5°  54'14		min. Earth dist.	13212 Oct 31 00:15	19°  14'42	0.54848 AU
morning max el	13211 Dec 14 05:21	11°  54'49	22°14'53	morning rise	13212 Nov 06 10:47	16°  07'10	
asc. node	13211 Dec 22 22:59	22°  44'47		direct	13212 Nov 11 02:38	15°  20'04	
	13211 Dec 27 08:02	0°  3		morning max el	13212 Nov 24 16:16	21°  59'53	24°03'15
morning set	13212 Jan 04 18:25	16°  38'20			13212 Dec 01 15:42	0°  7	
	13212 Jan 11 00:39	0°  ≈		asc. node	13212 Dec 08 20:00	11°  7'00'37	
					13212 Dec 18 14:36	0°  3	
superior conj	13212 Jan 11 19:49	1°  ≈41'37	1°29'18	morning set	13212 Dec 19 06:17	1°  323'38	
minimum elong	13212 Jan 11 21:39	1°  ≈51'18	1°30'04				
max. Earth dist.	13212 Jan 15 15:39	9°  ≈39'41	1.34171 AU	superior conj	13212 Dec 26 02:16	16°  36'34	1°36'47
evening rise	13212 Jan 20 01:07	18°  ≈24'18		minimum elong	13212 Dec 26 03:03	16°  320'46	1°37'45
desc. node	13212 Jan 24 19:25	27°  ≈18'55		max. Earth dist.	13212 Dec 28 13:20	21°  335'36	1.32717 AU
	13212 Jan 26 07:27	0°  ✕			13213 Jan 01 13:35	0°  ≈	
	13212 Feb 14 23:18	0°  Υ		evening rise	13213 Jan 02 15:18	2°  ≈10'33	
evening max el	13212 Feb 23 23:16	10°  Υ11'53	26°59'41	desc. node	13213 Jan 10 16:11	17°  ≈26'07	
retrograde	13212 Mar 08 07:29	17°  Υ38'16			13213 Jan 18 04:36	0°  ✕	
evening set	13212 Mar 14 20:59	15°  Υ05'45		evening max el	13213 Feb 05 11:58	23°  ✕31'54	27°29'32
min. Earth dist.	13212 Mar 18 20:00	11°  Υ14'36	0.65685 AU		13213 Feb 14 15:23	0°  Υ	
asc. node	13212 Mar 19 20:13	10°  Υ05'49		retrograde	13213 Feb 19 05:25	0°  Υ58'28	
inferior conj	13212 Mar 21 00:08	8°  Υ45'19	0°22'16		13213 Feb 23 13:06	30°  ✕✕	
minimum elong	13212 Mar 20 23:32	8°  Υ47'03	0°21'59	evening set	13213 Feb 26 01:26	28°  ✕30'50	
morning rise	13212 Mar 27 03:32	3°  Υ11'20		min. Earth dist.	13213 Mar 01 20:42	25°  ✕10'10	0.63899 AU
direct	13212 Mar 29 22:58	2°  Υ28'30		inferior conj	13213 Mar 04 12:07	22°  ✕25'49	-0°43'35
morning max el	13212 Apr 05 07:37	5°  Υ48'30	18°05'35	minimum elong	13213 Mar 04 13:29	22°  ✕22'15	0°42'47
desc. node	13212 Apr 21 21:39	29°  Υ50'15		asc. node	13213 Mar 06 17:40	20°  ✕11'58	
	13212 Apr 22 00:03	0°  8		morning rise	13213 Mar 11 03:46	17°  ✕06'11	
morning set	13212 Apr 23 21:59	3°  806'21		direct	13213 Mar 13 14:48	16°  ✕36'00	
				morning max el	13213 Mar 20 01:06	19°  ✕54'34	17°48'21
superior conj	13212 May 08 18:32	26°  851'25	-1°47'45		13213 Mar 27 15:53	0°  Υ	
minimum elong	13212 May 08 09:25	26°  815'35	1°47'45	morning set	13213 Apr 05 18:07	15°  Υ07'10	
	13212 May 10 18:37	0°  II		desc. node	13213 Apr 08 18:15	20°  Υ12'48	
max. Earth dist.	13212 May 11 08:29	0°  II54'12	1.45730 AU		13213 Apr 14 14:48	0°  8	
evening rise	13212 May 24 21:02	21°  II54'16					
	13212 May 30 02:58	0°  ☿		superior conj	13213 Apr 18 18:24	6°  847'10	-1°12'08
greatest brilliancy	13212 Jun 06 10:14	11°  ☿06'10	-0.7m	minimum elong	13213 Apr 18 11:04	6°  817'29	1°11'43
asc. node	13212 Jun 15 17:41	23°  ☿56'54		max. Earth dist.	13213 Apr 24 03:30	15°  823'54	1.44990 AU
evening max el	13212 Jun 18 06:28	26°  ☿44'24	19°22'10		13213 May 03 12:29	0°  II	
	13212 Jun 22 12:57	0°  Ω		evening rise	13213 May 04 08:42	1°  II17'30	
retrograde	13212 Jun 25 08:29	0°  Ω42'15			13213 May 23 19:06	0°  ☿	
	13212 Jun 28 01:12	30°  ☿☿		evening max el	13213 Jun 01 09:20	10°  ☿32'56	20°21'02
evening set	13212 Jun 28 23:15	29°  ☿26'12		asc. node	13213 Jun 02 14:44	11°  ☿43'08	
inferior conj	13212 Jul 04 08:49	23°  ☿34'34	3°08'15	retrograde	13213 Jun 09 07:17	15°  ☿05'43	
minimum elong	13212 Jul 04 09:46	23°  ☿31'28	3°07'13	evening set	13213 Jun 13 07:54	13°  ☿32'53	
min. Earth dist.	13212 Jul 05 17:21	21°  ☿47'55	0.67107 AU	inferior conj	13213 Jun 18 14:29	7°  ☿28'42	3°12'53
morning rise	13212 Jul 09 19:44	17°  ☿10'40		minimum elong	13213 Jun 18 14:23	7°  ☿29'03	3°11'51
direct	13212 Jul 15 20:34	14°  ☿32'40		min. Earth dist.	13213 Jun 19 08:55	6°  ☿25'38	0.68176 AU
desc. node	13212 Jul 18 21:28	15°  ☿06'35		morning rise	13213 Jun 23 20:33	1°  ☿07'46	
morning max el	13212 Jul 28 06:47	21°  ☿59'13	25°42'57		13213 Jun 25 07:15	30°  ☿☿II	
	13212 Aug 04 06:50	0°  Ω		direct	13213 Jun 29 09:57	28°  II40'31	
	13212 Aug 24 17:15	0°  ☿			13213 Jul 03 23:00	0°  ☿	
morning set	13212 Sep 02 06:37	14°  ☿52'53		desc. node	13213 Jul 05 18:43	1°  ☿08'41	
max. Earth dist.	13212 Sep 05 22:46	21°  ☿43'17	1.35741 AU	morning max el	13213 Jul 10 16:53	5°  ☿26'22	24°17'30
	13212 Sep 10 05:00	0°  ☿			13213 Jul 29 16:22	0°  Ω	
superior conj	13212 Sep 11 20:38	3°  ☿18'13	0°00'45	morning set	13213 Aug 15 05:52	26°  Ω32'36	
minimum elong	13212 Sep 11 20:36	3°  ☿18'02	0°00'41		13213 Aug 17 05:20	0°  ☿	
behind sun begin	13212 Sep 11 14:25	2°  ☿46'55		max. Earth dist.	13213 Aug 18 21:15	2°  ☿57'31	1.37979 AU
behind sun end	13212 Sep 12 02:47	3°  ☿49'12		superior conj	13213 Aug 26 02:02	16°  ☿19'28	-0°32'38
asc. node	13212 Sep 11 18:46	3°  ☿08'45		minimum elong	13213 Aug 26 04:16	16°  ☿30'14	0°32'33
evening rise	13212 Sep 19 17:31	19°  ☿27'10		asc. node	13213 Aug 29 15:22	23°  ☿14'04	
	13212 Sep 25 00:15	0°  ☿			13213 Sep 02 01:23	0°  ☿	
evening max el	13212 Oct 07 16:10	19°  ☿02'01	20°11'35	evening rise	13213 Sep 03 19:16	3°  ☿27'54	
desc. node	13212 Oct 14 17:47	23°  ☿14'51'17			13213 Sep 09 19:39	0°  ☿	
retrograde	13212 Oct 18 08:56	24°  ☿12'18		evening max el	13213 Sep 20 08:15	0°  ☿32'20	19°08'29
evening set	13212 Oct 20 10:05	24°  ☿10'30		retrograde	13213 Sep 29 09:24	5°  ☿04'04	
inferior conj	13212 Oct 29 08:55	20°  ☿13'09	-4°19'26	evening set	13213 Oct 01 05:58	4°  ☿53'26	

desc. node	13213 Oct 01 15:16	4° \mathbb{M} 48'37		inferior conj	13214 Sep 20 23:09	11° \mathbb{L} 52'49	-0°45'59
inferior conj	13213 Oct 09 17:26	0° \mathbb{M} 40'57	-2°32'38	minimum elong	13214 Sep 20 21:23	11° \mathbb{L} 56'21	0°45'10
minimum elong	13213 Oct 09 10:53	0° \mathbb{M} 52'01	2°29'42	min. Earth dist.	13214 Sep 24 05:29	9° \mathbb{L} 18'32	0.57943 AU
	13213 Oct 10 17:30	30° \mathbb{R} \mathbb{L}		morning rise	13214 Sep 28 09:36	6° \mathbb{L} 36'12	
min. Earth dist.	13213 Oct 12 11:47	28° \mathbb{L} 49'03	0.56070 AU	direct	13214 Oct 04 12:45	4° \mathbb{L} 59'46	
morning rise	13213 Oct 17 13:04	26° \mathbb{L} 01'48		morning max el	13214 Oct 18 20:15	12° \mathbb{L} 34'43	27°06'10
direct	13213 Oct 23 00:46	24° \mathbb{L} 52'07			13214 Nov 01 13:22	0° \mathbb{M}	
	13213 Nov 03 19:58	0° \mathbb{M}		asc. node	13214 Nov 12 13:48	19° \mathbb{M} 14'33	
morning max el	13213 Nov 06 03:07	2° \mathbb{M} 02'53	25°46'17		13214 Nov 17 20:18	0° \mathbb{X}	
asc. node	13213 Nov 25 16:57	29° \mathbb{M} 53'54		morning set	13214 Nov 18 02:47	0° \mathbb{X} 34'27	
	13213 Nov 25 18:16	0° \mathbb{X}					
morning set	13213 Dec 03 17:39	16° \mathbb{X} 03'51		superior conj	13214 Nov 24 23:51	15° \mathbb{X} 42'11	1°33'22
	13213 Dec 10 01:42	0° \mathbb{Z}		minimum elong	13214 Nov 24 22:33	15° \mathbb{X} 34'56	1°34'15
				max. Earth dist.	13214 Nov 25 02:02	15° \mathbb{X} 54'20	1.31266 AU
superior conj	13213 Dec 10 12:17	0° \mathbb{Z} 58'43	1°38'02		13214 Dec 01 11:42	0° \mathbb{Z}	
minimum elong	13213 Dec 10 11:58	0° \mathbb{Z} 56'53	1°39'03	evening rise	13214 Dec 01 19:01	0° \mathbb{Z} 39'05	
max. Earth dist.	13213 Dec 11 17:49	3° \mathbb{Z} 42'06	1.31743 AU	desc. node	13214 Dec 15 10:00	26° \mathbb{Z} 29'25	
evening rise	13213 Dec 17 14:07	16° \mathbb{Z} 17'38			13214 Dec 17 14:37	0° \mathbb{X}	
	13213 Dec 24 12:39	0° \mathbb{X}		evening max el	13215 Jan 01 01:38	18° \mathbb{X} 19'43	26°54'43
desc. node	13213 Dec 28 13:02	7° \mathbb{X} 12'22		retrograde	13215 Jan 15 00:27	25° \mathbb{X} 30'36	
	13214 Jan 13 01:19	0° \mathbb{X}		evening set	13215 Jan 21 17:41	23° \mathbb{X} 35'54	
evening max el	13214 Jan 18 21:43	6° \mathbb{X} 18'41	27°29'14	min. Earth dist.	13215 Jan 25 15:46	20° \mathbb{X} 56'44	0.59687 AU
retrograde	13214 Feb 01 19:29	13° \mathbb{X} 38'33		inferior conj	13215 Jan 28 20:14	18° \mathbb{X} 23'18	-3°21'56
evening set	13214 Feb 08 17:28	11° \mathbb{X} 23'27		minimum elong	13215 Jan 29 03:25	18° \mathbb{X} 08'49	3°18'39
min. Earth dist.	13214 Feb 12 11:36	8° \mathbb{X} 28'02	0.61855 AU	morning rise	13215 Feb 05 16:12	13° \mathbb{X} 41'39	
inferior conj	13214 Feb 15 12:00	5° \mathbb{X} 41'36	-1°59'35	direct	13215 Feb 07 17:31	13° \mathbb{X} 25'48	
minimum elong	13214 Feb 15 16:09	5° \mathbb{X} 32'01	1°57'25	asc. node	13215 Feb 08 12:32	13° \mathbb{X} 28'15	
asc. node	13214 Feb 21 15:07	1° \mathbb{X} 05'19		morning max el	13215 Feb 15 07:32	17° \mathbb{X} 11'58	18°08'25
morning rise	13214 Feb 22 17:39	0° \mathbb{X} 39'20			13215 Feb 24 09:07	0° \mathbb{X}	
direct	13214 Feb 24 22:21	0° \mathbb{X} 18'05		morning set	13215 Mar 02 22:29	11° \mathbb{X} 57'21	
morning max el	13214 Mar 03 18:13	3° \mathbb{X} 45'28	17°48'55				
morning set	13214 Mar 19 12:19	28° \mathbb{X} 10'18		superior conj	13215 Mar 12 16:31	29° \mathbb{X} 56'08	0°06'15
	13214 Mar 20 12:55	0° \mathbb{Y}		minimum elong	13215 Mar 12 17:00	29° \mathbb{X} 58'21	0°06'16
desc. node	13214 Mar 26 14:47	10° \mathbb{Y} 43'53		behind sun begin	13215 Mar 12 09:55	29° \mathbb{X} 26'37	
				behind sun end	13215 Mar 13 00:05	0° \mathbb{Y} 30'00	
superior conj	13214 Mar 30 17:41	17° \mathbb{Y} 48'52	-0°31'51		13215 Mar 12 17:22	0° \mathbb{Y}	
minimum elong	13214 Mar 30 14:39	17° \mathbb{Y} 36'02	0°31'35	desc. node	13215 Mar 13 11:18	1° \mathbb{Y} 19'54	
max. Earth dist.	13214 Apr 06 19:49	29° \mathbb{Y} 34'07	1.43597 AU	max. Earth dist.	13215 Mar 20 07:36	13° \mathbb{Y} 10'05	1.41698 AU
	13214 Apr 07 02:12	0° \mathbb{Z}		evening rise	13215 Mar 25 08:19	21° \mathbb{Y} 26'59	
evening rise	13214 Apr 14 00:21	10° \mathbb{Z} 58'59			13215 Mar 30 18:05	0° \mathbb{Z}	
	13214 Apr 26 15:08	0° \mathbb{Z}			13215 Apr 20 19:35	0° \mathbb{Z}	
evening max el	13214 May 15 06:30	24° \mathbb{Z} 21'52	21°32'06	evening max el	13215 Apr 27 23:03	8° \mathbb{Z} 11'42	22°50'54
asc. node	13214 May 20 11:55	28° \mathbb{Z} 32'12		asc. node	13215 May 07 09:10	14° \mathbb{Z} 07'57	
retrograde	13214 May 24 05:44	29° \mathbb{Z} 36'44		retrograde	13215 May 08 02:19	14° \mathbb{Z} 10'18	
evening set	13214 May 28 16:58	27° \mathbb{Z} 47'29		evening set	13215 May 13 00:48	12° \mathbb{Z} 05'58	
inferior conj	13214 Jun 02 23:07	21° \mathbb{Z} 32'14	3°06'01	inferior conj	13215 May 18 08:43	5° \mathbb{Z} 41'55	2°48'40
minimum elong	13214 Jun 02 22:05	21° \mathbb{Z} 35'51	3°04'55	minimum elong	13215 May 18 06:58	5° \mathbb{Z} 48'00	2°47'28
min. Earth dist.	13214 Jun 03 04:05	21° \mathbb{Z} 14'56	0.68772 AU	min. Earth dist.	13215 May 18 00:48	6° \mathbb{Z} 09'24	0.68893 AU
morning rise	13214 Jun 08 02:59	15° \mathbb{Z} 16'37			13215 May 23 00:38	30° \mathbb{R} \mathbb{Z}	
direct	13214 Jun 13 03:43	13° \mathbb{Z} 06'01		morning rise	13215 May 23 13:01	29° \mathbb{Z} 32'54	
desc. node	13214 Jun 22 15:52	18° \mathbb{Z} 31'26		direct	13215 May 28 00:46	27° \mathbb{Z} 42'20	
morning max el	13214 Jun 23 03:55	19° \mathbb{Z} 01'19	22°47'50		13215 Jun 02 15:27	0° \mathbb{Z}	
	13214 Jul 02 09:26	0° \mathbb{Z}		morning max el	13215 Jun 05 18:56	2° \mathbb{Z} 46'05	21°22'27
	13214 Jul 22 19:38	0° \mathbb{Z}		desc. node	13215 Jun 09 12:53	6° \mathbb{Z} 53'28	
morning set	13214 Jul 27 06:00	7° \mathbb{Z} 09'54			13215 Jun 26 07:23	0° \mathbb{Z}	
max. Earth dist.	13214 Jul 31 19:59	14° \mathbb{Z} 50'15	1.40329 AU	morning set	13215 Jul 07 05:00	16° \mathbb{Z} 41'34	
				max. Earth dist.	13215 Jul 13 23:50	27° \mathbb{Z} 35'26	1.42505 AU
superior conj	13214 Aug 08 15:38	28° \mathbb{Z} 36'10	-1°07'33		13215 Jul 15 10:58	0° \mathbb{Z}	
minimum elong	13214 Aug 08 20:38	28° \mathbb{Z} 58'53	1°07'23				
	13214 Aug 09 10:03	0° \mathbb{Z}		superior conj	13215 Jul 21 09:03	9° \mathbb{Z} 58'42	-1°40'07
asc. node	13214 Aug 16 11:58	13° \mathbb{Z} 13'37		minimum elong	13215 Jul 21 16:04	10° \mathbb{Z} 28'54	1°40'11
evening rise	13214 Aug 18 12:20	17° \mathbb{Z} 03'18		evening rise	13215 Aug 01 16:46	0° \mathbb{Z} 03'30	
	13214 Aug 25 12:27	0° \mathbb{Z}			13215 Aug 01 15:59	0° \mathbb{Z}	
evening max el	13214 Sep 03 11:39	12° \mathbb{Z} 47'09	18°27'04	asc. node	13215 Aug 03 08:37	3° \mathbb{Z} 03'42	
retrograde	13214 Sep 11 05:02	16° \mathbb{Z} 41'19		evening max el	13215 Aug 17 22:18	25° \mathbb{Z} 37'32	18°06'08
evening set	13214 Sep 13 05:41	16° \mathbb{Z} 25'57		retrograde	13215 Aug 24 18:46	29° \mathbb{Z} 07'50	
desc. node	13214 Sep 18 12:47	13° \mathbb{Z} 44'00		evening set	13215 Aug 27 02:40	28° \mathbb{Z} 43'49	

inferior conj	13215 Sep 03 02:01	23° \mathbb{M} 50'16	0°42'38	inferior conj	13216 Aug 15 22:37	6° \mathbb{M} 26'44	1°48'23
minimum elong	13215 Sep 03 03:20	23° \mathbb{M} 47'13	0°41'55	minimum elong	13216 Aug 16 01:05	6° \mathbb{M} 20'14	1°47'08
desc. node	13215 Sep 05 10:18	21° \mathbb{M} 40'06		min. Earth dist.	13216 Aug 18 19:18	3° \mathbb{M} 27'21	0.62440 AU
min. Earth dist.	13215 Sep 06 07:39	20° \mathbb{M} 52'25	0.60164 AU	morning rise	13216 Aug 22 09:22	0° \mathbb{M} 18'00	
morning rise	13215 Sep 10 00:51	18° \mathbb{M} 02'17		desc. node	13216 Aug 22 07:47	0° \mathbb{M} 20'53	
direct	13215 Sep 16 13:44	15° \mathbb{M} 58'47			13216 Aug 22 19:36	30° \mathbb{R} 0	
morning max el	13215 Sep 30 21:09	23° \mathbb{M} 51'33	27°50'37	direct	13216 Aug 29 01:43	27° \mathbb{J} 52'41	
	13215 Oct 06 10:21	0° \mathbb{L}			13216 Sep 04 20:40	0° \mathbb{M}	
	13215 Oct 25 19:59	0° \mathbb{M}		morning max el	13216 Sep 12 04:01	5° \mathbb{M} 54'20	27°56'01
asc. node	13215 Oct 30 10:32	8° \mathbb{M} 54'36			13216 Sep 30 09:56	0° \mathbb{L}	
morning set	13215 Nov 02 07:48	14° \mathbb{M} 50'05		morning set	13216 Oct 16 06:41	28° \mathbb{L} 45'42	
max. Earth dist.	13215 Nov 08 10:08	28° \mathbb{M} 02'28	1.31303 AU	asc. node	13216 Oct 16 07:11	28° \mathbb{L} 48'13	
					13216 Oct 16 21:13	0° \mathbb{M}	
superior conj	13215 Nov 09 11:04	0° \mathbb{J} 21'04	1°22'56	max. Earth dist.	13216 Oct 21 14:15	9° \mathbb{M} 56'50	1.31873 AU
minimum elong	13215 Nov 09 09:04	0° \mathbb{J} 09'59	1°23'33				
	13215 Nov 09 07:17	0° \mathbb{J}		superior conj	13216 Oct 23 20:07	14° \mathbb{M} 50'22	1°06'52
evening rise	13215 Nov 16 03:51	15° \mathbb{J} 08'42		minimum elong	13216 Oct 23 17:51	14° \mathbb{M} 37'54	1°07'09
	13215 Nov 23 10:56	0° \mathbb{Z}		evening rise	13216 Oct 30 14:42	29° \mathbb{M} 41'50	
desc. node	13215 Dec 02 07:04	15° \mathbb{Z} 05'12			13216 Oct 30 18:05	0° \mathbb{J}	
evening max el	13215 Dec 13 21:19	29° \mathbb{Z} 27'24	25°46'43		13216 Nov 16 04:19	0° \mathbb{Z}	
	13215 Dec 14 11:18	0° \mathbb{M}		desc. node	13216 Nov 18 04:15	2° \mathbb{Z} 44'08	
retrograde	13215 Dec 27 19:02	6° \mathbb{M} 28'54		evening max el	13216 Nov 24 09:27	9° \mathbb{Z} 49'19	24°13'43
evening set	13216 Jan 02 21:51	5° \mathbb{M} 01'47		retrograde	13216 Dec 08 01:11	16° \mathbb{Z} 37'49	
min. Earth dist.	13216 Jan 07 09:56	2° \mathbb{M} 24'31	0.57594 AU	evening set	13216 Dec 13 02:22	15° \mathbb{Z} 41'54	
inferior conj	13216 Jan 10 09:16	0° \mathbb{M} 20'19	-4°41'21	min. Earth dist.	13216 Dec 18 20:51	12° \mathbb{Z} 48'13	0.55856 AU
minimum elong	13216 Jan 10 18:01	0° \mathbb{M} 05'03	4°38'07	inferior conj	13216 Dec 21 01:34	11° \mathbb{Z} 27'28	-5°40'00
	13216 Jan 10 20:56	30° \mathbb{R} 0		minimum elong	13216 Dec 21 07:24	11° \mathbb{Z} 18'31	5°38'15
morning rise	13216 Jan 18 16:56	26° \mathbb{Z} 00'59		morning rise	13216 Dec 29 14:24	7° \mathbb{Z} 28'05	
direct	13216 Jan 20 19:41	25° \mathbb{Z} 47'01		direct	13217 Jan 01 02:18	7° \mathbb{Z} 11'51	
asc. node	13216 Jan 26 09:52	27° \mathbb{Z} 31'26		morning max el	13217 Jan 11 06:46	12° \mathbb{Z} 05'10	19°51'19
morning max el	13216 Jan 29 13:03	0° \mathbb{M} 02'14	18°48'36	asc. node	13217 Jan 12 07:07	13° \mathbb{Z} 06'34	
	13216 Jan 29 12:08	0° \mathbb{M}			13217 Jan 23 12:34	0° \mathbb{M}	
morning set	13216 Feb 14 19:37	26° \mathbb{M} 12'43		morning set	13217 Jan 29 00:05	10° \mathbb{M} 46'01	
	13216 Feb 16 18:03	0° \mathbb{H}					
superior conj	13216 Feb 23 10:46	12° \mathbb{H} 56'14	0°38'35	superior conj	13217 Feb 05 19:51	26° \mathbb{M} 36'18	1°03'54
minimum elong	13216 Feb 23 13:07	13° \mathbb{H} 07'18	0°38'36	minimum elong	13217 Feb 05 22:38	26° \mathbb{M} 50'08	1°04'09
desc. node	13216 Feb 28 07:48	21° \mathbb{H} 56'40			13217 Feb 07 13:12	0° \mathbb{H}	
max. Earth dist.	13216 Mar 01 14:49	26° \mathbb{H} 01'54	1.39502 AU	max. Earth dist.	13217 Feb 11 20:57	8° \mathbb{H} 15'44	1.37265 AU
	13216 Mar 03 21:29	0° \mathbb{Y}		desc. node	13217 Feb 14 04:21	12° \mathbb{H} 30'47	
evening rise	13216 Mar 05 13:17	2° \mathbb{Y} 49'55		evening rise	13217 Feb 15 14:32	15° \mathbb{H} 04'43	
	13216 Mar 22 23:24	0° \mathbb{B}			13217 Feb 24 09:34	0° \mathbb{Y}	
evening max el	13216 Apr 09 13:02	22° \mathbb{B} 02'55	24°11'47		13217 Mar 17 15:46	0° \mathbb{B}	
retrograde	13216 Apr 20 19:47	28° \mathbb{B} 40'13		evening max el	13217 Mar 23 02:28	5° \mathbb{B} 55'01	25°27'49
asc. node	13216 Apr 23 06:31	28° \mathbb{B} 13'20		retrograde	13217 Apr 04 08:53	13° \mathbb{B} 00'24	
evening set	13216 Apr 26 05:50	26° \mathbb{B} 23'06		evening set	13217 Apr 10 06:26	10° \mathbb{B} 33'50	
min. Earth dist.	13216 Apr 30 20:56	21° \mathbb{B} 02'34	0.68546 AU	asc. node	13217 Apr 10 03:54	10° \mathbb{B} 39'06	
inferior conj	13216 May 01 17:21	19° \mathbb{B} 53'34	2°21'13	min. Earth dist.	13217 Apr 14 14:23	5° \mathbb{B} 48'49	0.67757 AU
minimum elong	13216 May 01 15:13	20° \mathbb{B} 00'46	2°19'57	inferior conj	13217 Apr 15 23:07	4° \mathbb{B} 03'19	1°43'30
morning rise	13216 May 07 00:42	13° \mathbb{B} 52'17		minimum elong	13217 Apr 15 21:04	4° \mathbb{B} 09'55	1°42'22
direct	13216 May 10 23:56	12° \mathbb{B} 22'37			13217 Apr 19 08:52	30° \mathbb{R} Y	
morning max el	13216 May 18 16:33	16° \mathbb{B} 41'54	20°07'41	morning rise	13217 Apr 21 12:10	28° \mathbb{Y} 11'04	
desc. node	13216 May 26 09:45	25° \mathbb{B} 58'24		direct	13217 Apr 24 23:45	27° \mathbb{Y} 01'25	
	13216 May 29 07:38	0° \mathbb{I}			13217 May 01 01:23	0° \mathbb{B}	
morning set	13216 Jun 15 09:10	25° \mathbb{I} 26'09		morning max el	13217 May 01 21:41	0° \mathbb{B} 47'35	19°07'21
	13216 Jun 18 07:59	0° \mathbb{S}		desc. node	13217 May 13 06:31	15° \mathbb{B} 34'37	
max. Earth dist.	13216 Jun 25 10:07	11° \mathbb{S} 09'07	1.44254 AU	greatest brilliancy	13217 May 14 22:03	18° \mathbb{B} 01'38	-0.7m
					13217 May 22 18:40	0° \mathbb{I}	
superior conj	13216 Jul 01 02:57	20° \mathbb{S} 21'10	-2°04'28	morning set	13217 May 25 13:01	4° \mathbb{I} 15'47	
minimum elong	13216 Jul 01 08:51	20° \mathbb{S} 45'15	2°05'08	max. Earth dist.	13217 Jun 08 02:00	25° \mathbb{I} 19'16	1.45399 AU
	13216 Jul 06 22:41	0° \mathbb{J}					
evening rise	13216 Jul 14 03:40	12° \mathbb{J} 16'26		superior conj	13217 Jun 10 22:41	29° \mathbb{I} 49'29	-2°13'33
asc. node	13216 Jul 20 05:21	22° \mathbb{J} 39'55		minimum elong	13217 Jun 10 22:29	29° \mathbb{I} 48'41	2°14'34
	13216 Jul 24 17:25	0° \mathbb{M}			13217 Jun 11 01:21	0° \mathbb{S}	
evening max el	13216 Jul 31 12:18	8° \mathbb{M} 54'16	18°04'28	evening rise	13217 Jun 25 16:01	23° \mathbb{S} 30'16	
retrograde	13216 Aug 06 22:24	12° \mathbb{M} 14'48			13217 Jun 29 15:12	0° \mathbb{J}	
evening set	13216 Aug 09 14:32	11° \mathbb{M} 38'45		asc. node	13217 Jul 07 02:10	11° \mathbb{J} 55'59	
				evening max el	13217 Jul 15 02:15	22° \mathbb{J} 27'47	18°21'04

retrograde	13217 Jul 21 11:36	25° Ω 52'18		evening set	13218 Jul 08 16:21	8° Ω 46'14	
evening set	13217 Jul 24 12:18	25° Ω 01'42		inferior conj	13218 Jul 14 04:57	3° Ω 02'30	2°59'43
inferior conj	13217 Jul 30 08:49	19° Ω 33'03	2°32'59	minimum elong	13218 Jul 14 06:29	2° Ω 57'39	2°58'36
minimum elong	13217 Jul 30 11:08	19° Ω 26'15	2°31'43	min. Earth dist.	13218 Jul 15 21:47	0° Ω 53'28	0.66291 AU
min. Earth dist.	13217 Aug 01 16:16	16° Ω 51'46	0.64536 AU		13218 Jul 16 15:16	30° \mathbb{R} \mathfrak{E}	
morning rise	13217 Aug 05 08:37	13° Ω 13'17		morning rise	13218 Jul 19 19:53	26° \mathfrak{E} 38'47	
desc. node	13217 Aug 09 05:14	11° Ω 01'28		direct	13218 Jul 26 02:24	23° \mathfrak{E} 58'23	
direct	13217 Aug 11 22:27	10° Ω 35'22		desc. node	13218 Jul 27 02:37	24° \mathfrak{E} 02'06	
morning max el	13217 Aug 25 14:06	18° Ω 33'59	27°25'35		13218 Aug 06 07:58	0° Ω	
	13217 Sep 04 05:47	0° \mathfrak{M}		morning max el	13218 Aug 08 01:12	1° Ω 40'19	26°26'28
	13217 Sep 23 08:43	0° \mathfrak{A}			13218 Aug 29 08:19	0° \mathfrak{M}	
morning set	13217 Sep 29 20:50	12° \mathfrak{A} 14'07		morning set	13218 Sep 12 23:07	25° \mathfrak{M} 08'08	
asc. node	13217 Oct 03 03:48	18° \mathfrak{A} 49'57			13218 Sep 15 12:21	0° \mathfrak{A}	
max. Earth dist.	13217 Oct 04 10:48	21° \mathfrak{A} 29'35	1.32983 AU	max. Earth dist.	13218 Sep 16 21:42	2° \mathfrak{A} 42'36	1.34611 AU
				asc. node	13218 Sep 20 00:24	8° \mathfrak{A} 55'58	
superior conj	13217 Oct 08 00:54	29° \mathfrak{A} 03'35	0°45'15	superior conj	13218 Sep 21 23:03	12° \mathfrak{A} 54'45	0°18'22
minimum elong	13217 Oct 07 22:55	28° \mathfrak{A} 52'56	0°45'16	minimum elong	13218 Sep 21 22:03	12° \mathfrak{A} 49'38	0°18'17
	13217 Oct 08 11:26	0° \mathfrak{M}		evening rise	13218 Sep 29 11:00	28° \mathfrak{A} 37'06	
evening rise	13217 Oct 15 01:43	14° \mathfrak{M} 12'53			13218 Sep 30 02:55	0° \mathfrak{M}	
	13217 Oct 22 22:14	0° \mathfrak{J}			13218 Oct 18 10:35	0° \mathfrak{J}	
desc. node	13217 Nov 05 01:31	19° \mathfrak{J} 04'37		evening max el	13218 Oct 18 14:07	0° \mathfrak{J} 08'50	20°57'27
evening max el	13217 Nov 05 19:55	19° \mathfrak{J} 50'41	22°31'35	desc. node	13218 Oct 22 22:54	3° \mathfrak{J} 40'42	
retrograde	13217 Nov 18 18:22	26° \mathfrak{J} 15'40		retrograde	13218 Oct 30 05:05	5° \mathfrak{J} 55'25	
evening set	13217 Nov 22 10:17	25° \mathfrak{J} 46'19		evening set	13218 Nov 01 16:12	5° \mathfrak{J} 40'58	
min. Earth dist.	13217 Nov 30 03:40	22° \mathfrak{J} 17'59	0.54767 AU	inferior conj	13218 Nov 10 15:37	1° \mathfrak{J} 47'03	-5°08'59
inferior conj	13217 Dec 01 00:13	21° \mathfrak{J} 48'58	-5°54'11	minimum elong	13218 Nov 10 06:17	2° \mathfrak{J} 00'19	5°06'06
minimum elong	13217 Nov 30 21:51	21° \mathfrak{J} 52'19	5°53'06	min. Earth dist.	13218 Nov 11 09:50	1° \mathfrak{J} 21'12	0.54551 AU
morning rise	13217 Dec 09 10:40	18° \mathfrak{J} 01'18			13218 Nov 13 20:53	30° \mathfrak{R} \mathfrak{M}	
direct	13217 Dec 12 16:31	17° \mathfrak{J} 37'24		morning rise	13218 Nov 18 20:40	27° \mathfrak{M} 54'12	
morning max el	13217 Dec 24 10:03	23° \mathfrak{J} 13'28	21°16'55	direct	13218 Nov 23 00:17	27° \mathfrak{M} 17'18	
asc. node	13217 Dec 30 04:17	29° \mathfrak{J} 56'55			13218 Dec 01 12:14	0° \mathfrak{J}	
	13217 Dec 30 05:11	0° \mathfrak{Z}		morning max el	13218 Dec 06 00:54	3° \mathfrak{J} 34'37	23°00'28
morning set	13218 Jan 13 09:09	25° \mathfrak{Z} 29'14		asc. node	13218 Dec 17 01:23	17° \mathfrak{J} 45'53	
	13218 Jan 15 12:46	0° \approx			13218 Dec 23 20:41	0° \mathfrak{Z}	
superior conj	13218 Jan 20 15:43	10° \approx 44'58	1°22'01	morning set	13218 Dec 28 20:33	10° \mathfrak{Z} 15'39	
minimum elong	13218 Jan 20 18:03	10° \approx 57'03	1°22'36	superior conj	13219 Jan 04 19:06	25° \mathfrak{Z} 12'42	1°33'15
max. Earth dist.	13218 Jan 25 07:12	20° \approx 10'34	1.35208 AU	minimum elong	13219 Jan 04 20:30	25° \mathfrak{Z} 20'12	1°34'08
evening rise	13218 Jan 29 08:56	28° \approx 02'25			13219 Jan 07 01:07	0° \approx	
	13218 Jan 30 10:06	0° \mathfrak{H}		max. Earth dist.	13219 Jan 08 00:45	2° \approx 04'02	1.33500 AU
desc. node	13218 Feb 01 00:59	2° \mathfrak{H} 58'26		evening rise	13219 Jan 12 16:51	11° \approx 33'18	
	13218 Feb 17 16:26	0° \mathfrak{Y}		desc. node	13219 Jan 18 21:41	23° \approx 14'42	
evening max el	13218 Mar 05 16:18	19° \mathfrak{Y} 43'09	26°31'36		13219 Jan 22 18:32	0° \mathfrak{H}	
retrograde	13218 Mar 18 16:39	27° \mathfrak{Y} 04'21			13219 Feb 13 01:21	0° \mathfrak{Y}	
evening set	13218 Mar 25 00:53	24° \mathfrak{Y} 32'37		evening max el	13219 Feb 16 05:48	3° \mathfrak{Y} 16'37	27°15'42
asc. node	13218 Mar 28 01:20	21° \mathfrak{Y} 35'56		retrograde	13219 Mar 01 18:14	10° \mathfrak{Y} 43'20	
min. Earth dist.	13218 Mar 29 02:55	20° \mathfrak{Y} 22'18	0.66551 AU	evening set	13219 Mar 08 11:07	8° \mathfrak{Y} 12'01	
inferior conj	13218 Mar 30 23:59	18° \mathfrak{Y} 06'50	0°55'09	min. Earth dist.	13219 Mar 12 08:21	4° \mathfrak{Y} 34'29	0.64965 AU
minimum elong	13218 Mar 30 22:38	18° \mathfrak{Y} 10'54	0°54'27	inferior conj	13219 Mar 14 17:28	1° \mathfrak{Y} 57'33	-0°04'18
morning rise	13218 Apr 05 21:22	12° \mathfrak{Y} 25'28		minimum elong	13219 Mar 14 17:35	1° \mathfrak{Y} 57'13	0°04'11
direct	13218 Apr 08 22:26	11° \mathfrak{Y} 33'34		transit middle	13219 Mar 14 17:35	1° \mathfrak{Y} 57'13	0°04'11
morning max el	13218 Apr 15 09:31	14° \mathfrak{Y} 59'24	18°23'19	transit begin	13219 Mar 14 14:39	2° \mathfrak{Y} 05'19	
	13218 Apr 26 13:41	0° \mathfrak{B}		transit end	13219 Mar 14 20:31	1° \mathfrak{Y} 49'08	
desc. node	13218 Apr 30 03:13	5° \mathfrak{B} 33'51		asc. node	13219 Mar 14 22:48	1° \mathfrak{Y} 42'51	
morning set	13218 May 05 13:19	14° \mathfrak{B} 08'54			13219 Mar 16 13:21	30° \mathfrak{R} \mathfrak{H}	
	13218 May 15 14:23	0° \mathfrak{I}		morning rise	13219 Mar 21 01:47	26° \mathfrak{H} 29'23	
superior conj	13218 May 21 06:38	8° \mathfrak{I} 53'07	-2°02'37	direct	13219 Mar 23 17:34	25° \mathfrak{H} 52'15	
minimum elong	13218 May 20 23:16	8° \mathfrak{I} 24'20	2°03'06	morning max el	13219 Mar 30 01:47	29° \mathfrak{H} 09'57	17°56'11
max. Earth dist.	13218 May 21 21:39	9° \mathfrak{I} 51'45	1.45827 AU		13219 Mar 30 21:24	0° \mathfrak{Y}	
	13218 Jun 03 18:49	0° \mathfrak{E}		morning set	13219 Apr 16 18:00	25° \mathfrak{Y} 25'03	
evening rise	13218 Jun 06 03:56	3° \mathfrak{E} 44'08		desc. node	13219 Apr 16 23:50	25° \mathfrak{Y} 49'10	
greatest brilliancy	13218 Jun 15 21:30	18° \mathfrak{E} 57'16	-0.8m		13219 Apr 19 12:39	0° \mathfrak{B}	
	13218 Jun 23 09:42	0° Ω		superior conj	13219 Apr 30 20:11	18° \mathfrak{B} 17'54	-1°33'46
asc. node	13218 Jun 23 23:05	0° Ω 45'00		minimum elong	13219 Apr 30 11:14	17° \mathfrak{B} 42'18	1°33'30
evening max el	13218 Jun 28 13:20	6° Ω 11'03	18°55'06	max. Earth dist.	13219 May 04 17:58	24° \mathfrak{B} 28'01	1.45503 AU
retrograde	13218 Jul 05 06:47	9° Ω 52'57					

	13219 May 08 06:54	0°♂		max. Earth dist.	13220 Apr 16 11:55	8°♂50'24	1.44470 AU
evening rise	13219 May 16 20:41	13°♂15'09		evening rise	13220 Apr 25 08:04	22°♂40'47	
	13219 May 27 21:18	0°♂			13220 Apr 30 03:20	0°♂	
greatest brilliancy	13219 May 31 02:30	4°♂45'23	-0.6m		13220 May 21 10:09	0°♂	
asc. node	13219 Jun 10 20:06	18°♂57'04		evening max el	13220 May 24 19:38	3°♂45'23	20°49'57
evening max el	13219 Jun 11 19:25	19°♂57'47	19°45'27	asc. node	13220 May 27 17:12	6°♂20'17	
retrograde	13219 Jun 19 05:02	24°♂09'20		retrograde	13220 Jun 02 03:59	8°♂36'03	
evening set	13219 Jun 22 23:57	22°♂45'56		evening set	13220 Jun 06 08:59	6°♂56'08	
inferior conj	13219 Jun 28 07:53	16°♂48'33	3°11'43	inferior conj	13220 Jun 11 15:04	0°♂46'45	3°11'18
minimum elong	13219 Jun 28 08:23	16°♂46'53	3°10'42	minimum elong	13220 Jun 11 14:33	0°♂48'33	3°10'15
min. Earth dist.	13219 Jun 29 10:14	15°♂20'17	0.67618 AU	min. Earth dist.	13220 Jun 12 03:39	0°♂03'09	0.68484 AU
morning rise	13219 Jul 03 16:25	10°♂25'38			13220 Jun 12 04:34	30°♂♂	
direct	13219 Jul 09 12:30	7°♂51'40		morning rise	13220 Jun 16 19:51	24°♂♂27'39	
desc. node	13219 Jul 13 23:55	9°♂05'10		direct	13220 Jun 22 03:49	22°♂♂07'03	
morning max el	13219 Jul 21 11:52	15°♂02'20	25°07'49	desc. node	13220 Jun 29 21:08	25°♂♂43'53	
	13219 Aug 02 18:20	0°♂		morning max el	13220 Jul 02 22:10	28°♂♂32'49	23°39'19
	13219 Aug 22 05:09	0°♂			13220 Jul 04 07:35	0°♂	
morning set	13219 Aug 26 09:34	7°♂18'07			13220 Jul 26 11:24	0°♂	
max. Earth dist.	13219 Aug 29 23:38	13°♂49'30	1.36663 AU	morning set	13220 Aug 06 23:30	18°♂♂32'14	
				max. Earth dist.	13220 Aug 10 21:10	25°♂♂15'34	1.38972 AU
superior conj	13219 Sep 05 11:33	26°♂♂16'18	-0°13'04		13220 Aug 13 13:17	0°♂	
minimum elong	13219 Sep 05 12:23	26°♂♂20'25	0°13'03				
behind sun begin	13219 Sep 05 08:33	26°♂♂01'31		superior conj	13220 Aug 18 10:42	8°♂♂58'57	-0°47'27
behind sun end	13219 Sep 05 16:13	26°♂♂39'22		minimum elong	13220 Aug 18 14:06	9°♂♂14'55	0°47'19
asc. node	13219 Sep 06 21:01	29°♂♂02'26		asc. node	13220 Aug 23 17:37	19°♂♂05'15	
	13219 Sep 07 08:32	0°♂		evening rise	13220 Aug 27 14:44	26°♂♂38'58	
evening rise	13219 Sep 13 16:16	12°♂♂48'27			13220 Aug 29 08:09	0°♂	
	13219 Sep 22 17:27	0°♂		evening max el	13220 Sep 12 19:25	23°♂♂00'12	18°48'20
evening max el	13219 Sep 30 22:05	11°♂♂10'28	19°42'01	retrograde	13220 Sep 21 06:05	27°♂♂14'40	
desc. node	13219 Oct 09 20:19	16°♂♂06'15		evening set	13220 Sep 23 03:32	27°♂♂02'40	
retrograde	13219 Oct 10 21:44	16°♂♂09'29		desc. node	13220 Sep 25 17:49	26°♂♂10'26	
evening set	13219 Oct 12 19:15	15°♂♂59'29		inferior conj	13220 Oct 01 07:43	22°♂♂41'57	-1°46'00
inferior conj	13219 Oct 21 14:32	11°♂♂56'23	-3°35'56	minimum elong	13220 Oct 01 03:18	22°♂♂49'58	1°43'57
minimum elong	13219 Oct 21 05:30	12°♂♂10'30	3°32'14	min. Earth dist.	13220 Oct 04 09:04	20°♂♂29'51	0.56794 AU
min. Earth dist.	13219 Oct 23 18:51	10°♂♂34'43	0.55267 AU	morning rise	13220 Oct 08 23:45	17°♂♂46'17	
morning rise	13219 Oct 29 14:00	7°♂♂37'36		direct	13220 Oct 14 18:30	16°♂♂25'27	
direct	13219 Nov 03 14:24	6°♂♂41'54		morning max el	13220 Oct 29 00:10	23°♂♂48'17	26°23'59
morning max el	13219 Nov 17 11:00	13°♂♂35'37	24°48'54		13220 Nov 03 15:20	0°♂	
	13219 Nov 30 04:59	0°♂		asc. node	13220 Nov 19 19:17	25°♂♂25'03	
asc. node	13219 Dec 03 22:23	6°♂♂19'17			13220 Nov 22 03:45	0°♂	
morning set	13219 Dec 13 08:28	25°♂♂00'08		morning set	13220 Nov 26 19:05	9°♂♂36'46	
	13219 Dec 15 15:46	0°♂					
superior conj	13219 Dec 20 03:23	9°♂♂52'08	1°38'03	superior conj	13220 Dec 03 14:18	24°♂♂35'38	1°36'47
minimum elong	13219 Dec 20 03:41	9°♂♂53'46	1°39'04	minimum elong	13220 Dec 03 13:32	24°♂♂31'23	1°37'45
max. Earth dist.	13219 Dec 22 01:43	14°♂♂05'25	1.32241 AU	max. Earth dist.	13220 Dec 04 08:00	26°♂♂14'13	1.31474 AU
evening rise	13219 Dec 27 11:04	25°♂♂29'34			13220 Dec 06 00:46	0°♂	
	13219 Dec 29 16:45	0°♂		evening rise	13220 Dec 10 12:44	9°♂♂43'18	
desc. node	13220 Jan 05 18:30	13°♂♂14'11			13220 Dec 21 00:13	0°♂	
	13220 Jan 16 05:39	0°♂		desc. node	13220 Dec 22 15:23	2°♂♂48'56	
evening max el	13220 Jan 29 17:21	16°♂♂23'34	27°33'16	evening max el	13221 Jan 11 00:46	28°♂♂51'27	27°18'45
retrograde	13220 Feb 12 12:57	23°♂♂48'11			13221 Jan 12 06:41	0°♂	
evening set	13220 Feb 19 10:40	21°♂♂24'31		retrograde	13221 Jan 24 23:39	6°♂♂08'29	
min. Earth dist.	13220 Feb 23 04:53	18°♂♂15'45	0.63059 AU	evening set	13221 Jan 31 20:27	4°♂♂00'58	
inferior conj	13220 Feb 26 00:41	15°♂♂28'32	-1°14'41	min. Earth dist.	13221 Feb 04 15:18	1°♂♂13'46	0.60938 AU
minimum elong	13220 Feb 26 03:09	15°♂♂22'25	1°13'20		13221 Feb 06 01:39	30°♂♂	
asc. node	13220 Feb 29 20:14	12°♂♂02'09		inferior conj	13221 Feb 07 18:19	28°♂♂30'35	-2°34'09
morning rise	13220 Mar 03 22:11	10°♂♂16'15		minimum elong	13221 Feb 07 23:48	28°♂♂18'38	2°31'25
direct	13220 Mar 06 06:15	9°♂♂50'20		morning rise	13221 Feb 15 06:12	23°♂♂36'55	
morning max el	13220 Mar 12 19:36	13°♂♂11'09	17°46'24	asc. node	13221 Feb 15 17:39	23°♂♂29'38	
	13220 Mar 24 10:19	0°♂		direct	13221 Feb 17 08:51	23°♂♂18'32	
morning set	13220 Mar 29 00:15	7°♂♂54'20		morning max el	13221 Feb 24 11:34	26°♂♂52'55	17°54'46
desc. node	13220 Apr 02 20:26	16°♂♂15'49			13221 Feb 27 05:25	0°♂	
				morning set	13221 Mar 12 01:54	21°♂♂17'42	
superior conj	13220 Apr 10 05:36	28°♂♂40'50	-0°55'09		13221 Mar 16 21:01	0°♂	
minimum elong	13220 Apr 10 00:03	28°♂♂17'56	0°54'44	desc. node	13221 Mar 20 16:58	6°♂♂49'12	
	13220 Apr 11 00:51	0°♂					
				superior conj	13221 Mar 22 15:14	10°♂♂11'15	-0°15'10

minimum elong	13221 Mar 22 13:53	10° Υ 05'25	0°15'01	morning set	13222 Feb 23 17:14	5° H 18'05	
behind sun begin	13221 Mar 22 11:04	9° Υ 53'10					
behind sun end	13221 Mar 22 16:43	10° Υ 17'40		superior conj	13222 Mar 04 22:49	22° H 41'51	0°20'48
max. Earth dist.	13221 Mar 30 01:48	22° Υ 45'03	1.42838 AU	minimum elong	13222 Mar 05 00:18	22° H 48'38	0°20'46
	13221 Apr 03 13:19	0° B		desc. node	13222 Mar 07 13:27	27° H 25'33	
evening rise	13221 Apr 05 05:32	2° B 39'24			13222 Mar 09 00:10	0° Υ	
	13221 Apr 23 13:30	0° Π		max. Earth dist.	13222 Mar 12 11:22	6° Υ 01'58	1.40790 AU
evening max el	13221 May 07 14:35	17° Π 34'23	22°05'03	evening rise	13222 Mar 16 22:16	13° Υ 30'38	
asc. node	13221 May 14 14:22	22° Π 40'04			13222 Mar 27 09:32	0° B	
retrograde	13221 May 17 01:51	23° Π 08'24			13222 Apr 18 20:51	0° Π	
evening set	13221 May 21 17:41	21° Π 12'47		evening max el	13222 Apr 20 05:55	1° Π 25'06	23°25'35
inferior conj	13221 May 27 00:20	14° Π 53'27	2°59'54	retrograde	13222 Apr 30 21:06	7° Π 40'40	
minimum elong	13221 May 26 22:58	14° Π 58'14	2°58'46	asc. node	13222 May 01 11:39	7° Π 38'59	
min. Earth dist.	13221 May 26 23:50	14° Π 55'12	0.68877 AU	evening set	13222 May 06 00:29	5° Π 30'46	
morning rise	13221 Jun 01 04:03	8° Π 40'12			13222 May 10 17:30	30° R B	
direct	13221 Jun 05 23:15	6° Π 37'43		inferior conj	13222 May 11 09:44	29° B 04'11	2°38'15
morning max el	13221 Jun 15 10:24	12° Π 11'10	22°10'30	minimum elong	13222 May 11 07:46	29° B 10'55	2°37'01
desc. node	13221 Jun 16 18:14	13° Π 33'55		min. Earth dist.	13222 May 10 20:33	29° B 49'31	0.68802 AU
	13221 Jun 29 14:28	0° G		morning rise	13222 May 16 15:00	22° B 58'14	
morning set	13221 Jul 18 12:52	28° G 41'09		direct	13222 May 20 21:27	21° B 16'19	
	13221 Jul 19 08:22	0° Ω		morning max el	13222 May 29 03:49	25° B 59'38	20°49'02
max. Earth dist.	13221 Jul 23 21:08	7° Ω 27'48	1.41286 AU		13222 Jun 01 19:06	0° Π	
				desc. node	13222 Jun 03 15:11	2° Π 15'31	
superior conj	13221 Jul 31 16:16	20° Ω 53'48	-1°21'57		13222 Jun 23 00:41	0° G	
minimum elong	13221 Jul 31 22:20	21° Ω 20'42	1°21'51	morning set	13222 Jun 28 02:14	7° G 47'36	
	13221 Aug 05 17:21	0° H		max. Earth dist.	13222 Jul 06 03:52	20° G 35'10	1.43319 AU
asc. node	13221 Aug 10 14:14	9° H 01'05			13222 Jul 11 21:24	0° Ω	
evening rise	13221 Aug 11 02:58	10° H 00'25					
	13221 Aug 22 15:15	0° B		superior conj	13222 Jul 12 23:54	1° Ω 50'58	-1°51'52
evening max el	13221 Aug 27 02:29	5° B 31'38	18°15'49	minimum elong	13222 Jul 13 07:00	2° Ω 20'47	1°52'10
retrograde	13221 Sep 03 09:31	9° B 13'32		evening rise	13222 Jul 25 00:31	22° Ω 41'24	
evening set	13221 Sep 05 13:07	8° B 54'55		asc. node	13222 Jul 28 10:53	28° Ω 45'26	
inferior conj	13221 Sep 12 22:41	4° B 13'16	-0°05'44		13222 Jul 29 03:53	0° H	
minimum elong	13221 Sep 12 22:29	4° B 13'42	0°05'41	evening max el	13222 Aug 10 15:02	18° H 34'02	18°03'09
transit middle	13221 Sep 12 22:29	4° B 13'42	0°05'41	retrograde	13222 Aug 17 05:38	21° H 58'10	
transit begin	13221 Sep 12 19:14	4° B 20'33		evening set	13222 Aug 19 17:08	21° H 29'13	
transit end	13221 Sep 13 01:43	4° B 06'50		inferior conj	13222 Aug 26 09:31	16° H 27'23	1°13'18
desc. node	13221 Sep 12 15:19	4° B 28'49		minimum elong	13222 Aug 26 11:32	16° H 22'27	1°12'16
min. Earth dist.	13221 Sep 16 06:13	1° B 26'10	0.58863 AU	min. Earth dist.	13222 Aug 29 12:02	13° H 26'33	0.61148 AU
	13221 Sep 18 03:37	30° R H		desc. node	13222 Aug 30 12:49	12° H 30'37	
morning rise	13221 Sep 20 04:23	28° H 42'22		morning rise	13222 Sep 02 03:12	10° H 29'36	
direct	13221 Sep 26 12:43	26° H 53'45		direct	13222 Sep 08 18:28	8° H 16'02	
	13221 Oct 05 06:49	0° B		morning max el	13222 Sep 22 23:58	16° H 12'47	27°57'39
morning max el	13221 Oct 10 20:27	4° B 37'20	27°29'43		13222 Oct 04 08:09	0° B	
	13221 Oct 29 13:24	0° M			13222 Oct 22 04:24	0° M	
asc. node	13221 Nov 06 16:06	14° M 54'29		asc. node	13222 Oct 24 12:49	4° M 40'28	
morning set	13221 Nov 11 02:40	24° M 01'04		morning set	13222 Oct 26 05:20	8° M 08'06	
	13221 Nov 13 21:18	0° X		max. Earth dist.	13222 Oct 31 23:25	20° M 28'00	1.31482 AU
max. Earth dist.	13221 Nov 17 16:29	8° X 24'52	1.31219 AU				
				superior conj	13222 Nov 02 12:27	23° M 52'30	1°16'49
superior conj	13221 Nov 18 01:55	9° X 17'37	1°29'39	minimum elong	13222 Nov 02 10:16	23° M 40'28	1°17'17
minimum elong	13221 Nov 18 00:17	9° X 08'29	1°30'25		13222 Nov 05 06:39	0° X	
evening rise	13221 Nov 24 19:32	24° X 08'41		evening rise	13222 Nov 09 05:27	8° X 40'09	
	13221 Nov 27 14:22	0° Z			13222 Nov 20 01:41	0° Z	
desc. node	13221 Dec 09 12:21	21° Z 49'34		desc. node	13222 Nov 26 09:28	10° Z 03'04	
	13221 Dec 15 00:49	0° \approx		evening max el	13222 Dec 05 17:54	21° Z 17'21	25°09'29
evening max el	13221 Dec 24 01:32	10° \approx 30'27	26°29'37	retrograde	13222 Dec 19 13:34	28° Z 13'12	
retrograde	13222 Jan 07 00:29	17° \approx 37'07		evening set	13222 Dec 25 07:02	26° Z 59'22	
evening set	13222 Jan 13 12:38	15° \approx 53'47		min. Earth dist.	13222 Dec 30 05:54	24° Z 17'39	0.56796 AU
min. Earth dist.	13222 Jan 17 15:18	13° \approx 17'04	0.58774 AU	inferior conj	13223 Jan 01 23:03	22° Z 30'46	-5°10'06
inferior conj	13222 Jan 20 18:46	10° \approx 54'21	-3°56'51	minimum elong	13223 Jan 02 07:17	22° Z 17'13	5°07'23
minimum elong	13222 Jan 21 02:57	10° \approx 38'49	3°53'23	morning rise	13223 Jan 10 09:51	18° Z 20'19	
morning rise	13222 Jan 28 20:13	6° \approx 21'44		direct	13223 Jan 12 15:38	18° Z 05'49	
direct	13222 Jan 30 21:19	6° \approx 07'10		asc. node	13223 Jan 20 12:22	21° Z 18'42	
asc. node	13222 Feb 02 15:02	6° \approx 34'36		morning max el	13223 Jan 21 22:54	22° Z 36'06	19°12'24
morning max el	13222 Feb 07 21:59	10° \approx 04'52	18°22'45		13223 Jan 27 20:57	0° \approx	
	13222 Feb 20 22:02	0° H		morning set	13223 Feb 07 17:58	19° \approx 42'58	

	13223 Feb 12 22:05	0°♄		asc. node	13224 Jan 07 09:36	7°♄27'41	
					13224 Jan 20 21:19	0°♄	
superior conj	13223 Feb 15 23:59	6°♄00'56	0°50'12	morning set	13224 Jan 23 00:43	4°♄21'25	
minimum elong	13223 Feb 16 02:40	6°♄13'50	0°50'18				
desc. node	13223 Feb 22 09:58	18°♄01'46		superior conj	13224 Jan 30 14:10	19°♄54'42	1°12'25
max. Earth dist.	13223 Feb 22 18:13	18°♄39'00	1.38547 AU	minimum elong	13224 Jan 30 16:50	20°♄08'14	1°12'49
evening rise	13223 Feb 26 12:15	25°♄17'02			13224 Feb 04 16:44	0°♄	
	13223 Mar 01 06:33	0°♄		max. Earth dist.	13224 Feb 05 01:40	0°♄42'49	1.36352 AU
	13223 Mar 21 01:08	0°♄		evening rise	13224 Feb 08 21:14	7°♄50'57	
evening max el	13223 Apr 02 19:37	15°♄17'40	24°45'05	desc. node	13224 Feb 09 06:33	8°♄33'28	
retrograde	13223 Apr 14 12:42	22°♄07'36			13224 Feb 22 00:44	0°♄	
asc. node	13223 Apr 18 09:01	21°♄02'44		evening max el	13224 Mar 15 09:02	29°♄08'19	25°56'43
evening set	13223 Apr 20 03:50	19°♄45'54			13224 Mar 16 06:37	0°♄	
min. Earth dist.	13223 Apr 24 15:43	14°♄40'48	0.68272 AU	retrograde	13224 Mar 27 23:41	6°♄22'07	
inferior conj	13223 Apr 25 17:24	13°♄15'34	2°06'30	evening set	13224 Apr 03 02:04	3°♄52'23	
minimum elong	13223 Apr 25 15:15	13°♄22'44	2°05'16	asc. node	13224 Apr 04 06:26	2°♄47'59	
morning rise	13223 May 01 02:52	7°♄18'09			13224 Apr 06 19:02	30°♄	
direct	13223 May 04 21:07	5°♄57'08		min. Earth dist.	13224 Apr 07 07:15	29°♄22'34	0.67300 AU
morning max el	13223 May 12 04:41	10°♄00'15	19°40'07	inferior conj	13224 Apr 08 21:22	27°♄23'05	1°24'21
desc. node	13223 May 21 12:01	21°♄34'55		minimum elong	13224 Apr 08 19:31	27°♄28'52	1°23'21
greatest brilliancy	13223 May 24 21:27	26°♄27'36	-0.6m	morning rise	13224 Apr 14 13:40	21°♄35'30	
	13223 May 27 07:04	0°♄		direct	13224 Apr 17 20:35	20°♄33'52	
morning set	13223 Jun 07 03:30	16°♄26'40		morning max el	13224 Apr 24 13:00	24°♄09'46	18°46'34
	13223 Jun 15 21:12	0°♄			13224 Apr 29 12:26	0°♄	
max. Earth dist.	13223 Jun 18 17:21	4°♄28'17	1.44831 AU	desc. node	13224 May 07 08:47	11°♄21'40	
				morning set	13224 May 16 14:07	25°♄37'58	
superior conj	13223 Jun 23 07:42	11°♄47'55	-2°10'35		13224 May 19 09:21	0°♄	
minimum elong	13223 Jun 23 11:34	12°♄03'28	2°11'28	max. Earth dist.	13224 May 31 11:06	18°♄49'36	1.45672 AU
	13223 Jul 04 09:57	0°♄					
evening rise	13223 Jul 07 02:21	4°♄30'13		superior conj	13224 Jun 01 20:33	21°♄00'27	-2°11'24
asc. node	13223 Jul 15 07:38	18°♄13'32		minimum elong	13224 Jun 01 16:58	20°♄46'27	2°12'18
	13223 Jul 23 09:56	0°♄			13224 Jun 07 13:49	0°♄	
evening max el	13223 Jul 25 05:21	1°♄58'18	18°09'16	evening rise	13224 Jun 17 04:16	15°♄18'01	
retrograde	13223 Jul 31 13:58	5°♄19'00		greatest brilliancy	13224 Jun 23 02:14	24°♄47'49	-0.9m
evening set	13223 Aug 03 09:45	4°♄36'56			13224 Jun 26 08:56	0°♄	
	13223 Aug 08 20:48	30°♄		asc. node	13224 Jul 01 04:29	7°♄19'08	
inferior conj	13223 Aug 09 12:24	29°♄17'16	2°09'44	evening max el	13224 Jul 07 18:19	15°♄36'24	18°33'27
minimum elong	13223 Aug 09 14:56	29°♄10'17	2°08'26	retrograde	13224 Jul 14 06:15	19°♄07'09	
min. Earth dist.	13223 Aug 12 03:38	26°♄23'44	0.63367 AU	evening set	13224 Jul 17 10:34	18°♄09'58	
morning rise	13223 Aug 15 18:17	23°♄02'40		inferior conj	13224 Jul 23 03:18	12°♄34'38	2°46'19
desc. node	13223 Aug 17 10:18	21°♄55'44		minimum elong	13224 Jul 23 05:20	12°♄28'26	2°45'06
direct	13223 Aug 22 10:04	20°♄31'08		min. Earth dist.	13224 Jul 25 04:35	10°♄05'32	0.65325 AU
morning max el	13223 Sep 05 08:41	28°♄32'40	27°47'10	morning rise	13224 Jul 28 23:00	6°♄12'08	
	13223 Sep 06 18:31	0°♄		desc. node	13224 Aug 03 07:44	3°♄36'17	
	13223 Sep 28 04:37	0°♄		direct	13224 Aug 04 10:04	3°♄31'56	
morning set	13223 Oct 10 00:50	21°♄52'29		morning max el	13224 Aug 17 19:43	11°♄26'09	27°03'27
asc. node	13223 Oct 11 09:27	24°♄37'42			13224 Sep 01 14:21	0°♄	
	13223 Oct 13 23:33	0°♄			13224 Sep 19 17:26	0°♄	
max. Earth dist.	13223 Oct 15 00:56	2°♄14'24	1.32280 AU	morning set	13224 Sep 22 10:25	5°♄07'53	
				max. Earth dist.	13224 Sep 26 17:35	13°♄38'24	1.33610 AU
superior conj	13223 Oct 17 19:56	8°♄14'59	0°58'21	asc. node	13224 Sep 27 06:04	14°♄41'54	
minimum elong	13223 Oct 17 17:42	8°♄02'51	0°58'31				
evening rise	13223 Oct 24 16:38	23°♄12'37		superior conj	13224 Sep 30 22:14	22°♄19'48	0°34'26
	13223 Oct 27 21:57	0°♄		minimum elong	13224 Sep 30 20:34	22°♄11'01	0°34'25
desc. node	13223 Nov 13 06:41	27°♄11'12			13224 Oct 04 12:41	0°♄	
	13223 Nov 15 18:23	0°♄		evening rise	13224 Oct 08 03:11	7°♄41'32	
evening max el	13223 Nov 17 04:04	1°♄25'03	23°30'15		13224 Oct 19 20:18	0°♄	
retrograde	13223 Nov 30 13:59	8°♄05'43		evening max el	13224 Oct 28 16:38	11°♄28'58	21°49'46
evening set	13223 Dec 05 01:40	7°♄21'56		desc. node	13224 Oct 30 04:00	12°♄50'57	
min. Earth dist.	13223 Dec 11 14:15	4°♄15'50	0.55292 AU	retrograde	13224 Nov 10 03:46	17°♄40'04	
inferior conj	13223 Dec 13 06:58	3°♄16'11	-5°52'49	evening set	13224 Nov 13 05:42	17°♄18'43	
minimum elong	13223 Dec 13 09:46	3°♄12'04	5°51'39	inferior conj	13224 Nov 22 00:55	13°♄24'11	-5°42'22
	13223 Dec 19 18:12	30°♄		minimum elong	13224 Nov 21 18:53	13°♄32'38	5°40'41
morning rise	13223 Dec 21 19:38	29°♄23'49		min. Earth dist.	13224 Nov 21 20:39	13°♄30'10	0.54553 AU
direct	13223 Dec 24 14:18	29°♄05'03		morning rise	13224 Nov 30 09:06	9°♄36'40	
	13223 Dec 29 04:32	0°♄		direct	13224 Dec 03 23:45	9°♄08'05	
morning max el	13224 Jan 04 10:38	4°♄15'48	20°25'12	morning max el	13224 Dec 16 08:12	15°♄02'38	21°59'24

asc. node	13224 Dec 24 06:46	24° ♁ 44'50		direct	13225 Nov 14 09:16	18° ♁ 36'26	
	13224 Dec 27 13:55	0° ♁		morning max el	13225 Nov 27 19:49	25° ♁ 10'40	23°46'58
morning set	13225 Jan 06 11:00	19° ♁ 06'22			13225 Dec 02 07:09	0° ♁	
	13225 Jan 11 13:55	0° ♁		asc. node	13225 Dec 11 03:49	12° ♁ 54'01	
					13225 Dec 20 02:56	0° ♁	
superior conj	13225 Jan 13 13:36	4° ♁ 12'30	1°27'34	morning set	13225 Dec 21 22:49	3° ♁ 51'58	
minimum elong	13225 Jan 13 15:35	4° ♁ 22'53	1°28'18				
max. Earth dist.	13225 Jan 17 14:22	12° ♁ 33'03	1.34426 AU	superior conj	13225 Dec 28 19:20	18° ♁ 45'40	1°36'03
evening rise	13225 Jan 21 21:48	21° ♁ 03'40		minimum elong	13225 Dec 28 20:16	18° ♁ 50'46	1°37'00
desc. node	13225 Jan 26 03:13	28° ♁ 56'38		max. Earth dist.	13225 Dec 31 11:02	24° ♁ 28'14	1.32905 AU
	13225 Jan 26 17:16	0° ♁			13226 Jan 03 02:15	0° ♁	
	13225 Feb 14 21:58	0° ♁		evening rise	13226 Jan 05 10:27	4° ♁ 46'11	
evening max el	13225 Feb 25 22:40	12° ♁ 50'45	26°53'08	desc. node	13226 Jan 12 23:58	19° ♁ 06'25	
retrograde	13225 Mar 11 05:11	20° ♁ 16'21			13226 Jan 19 10:16	0° ♁	
evening set	13225 Mar 17 17:19	17° ♁ 43'55		evening max el	13226 Feb 08 11:46	26° ♁ 15'08	27°26'56
min. Earth dist.	13225 Mar 21 17:05	13° ♁ 47'48	0.65918 AU		13226 Feb 12 21:41	0° ♁	
asc. node	13225 Mar 22 03:54	13° ♁ 16'50		retrograde	13226 Feb 22 04:05	3° ♁ 41'49	
inferior conj	13225 Mar 23 19:24	11° ♁ 21'44	0°31'20	evening set	13226 Feb 28 23:22	1° ♁ 13'07	
minimum elong	13225 Mar 23 18:34	11° ♁ 24'09	0°30'54		13226 Mar 02 11:50	30° ♁	
morning rise	13225 Mar 29 21:09	5° ♁ 45'44		min. Earth dist.	13226 Mar 04 19:08	27° ♁ 48'09	0.64181 AU
direct	13225 Apr 01 17:59	5° ♁ 00'42		inferior conj	13226 Mar 07 08:56	25° ♁ 05'26	-0°32'51
morning max el	13225 Apr 08 03:03	8° ♁ 21'57	18°09'37	minimum elong	13226 Mar 07 09:56	25° ♁ 02'46	0°32'15
	13225 Apr 23 07:30	0° ♁		asc. node	13226 Mar 09 01:22	23° ♁ 21'16	
desc. node	13225 Apr 24 05:27	1° ♁ 28'18		morning rise	13226 Mar 13 22:35	19° ♁ 43'22	
morning set	13225 Apr 27 02:17	6° ♁ 05'47		direct	13226 Mar 16 10:49	19° ♁ 11'28	
				morning max el	13226 Mar 22 20:19	22° ♁ 29'30	17°49'50
superior conj	13225 May 12 04:45	0° ♁ 07'44	-1°52'09		13226 Mar 28 18:57	0° ♁	
minimum elong	13225 May 11 19:52	29° ♁ 32'53	1°52'17	morning set	13226 Apr 08 18:38	17° ♁ 55'59	
	13225 May 12 02:47	0° ♁		desc. node	13226 Apr 11 02:03	21° ♁ 49'16	
max. Earth dist.	13225 May 14 06:45	3° ♁ 23'22	1.45779 AU		13226 Apr 15 23:47	0° ♁	
evening rise	13225 May 28 06:46	25° ♁ 09'34					
	13225 May 31 09:42	0° ♁		superior conj	13226 Apr 22 01:39	9° ♁ 54'52	-1°18'03
greatest brilliancy	13225 Jun 09 03:42	13° ♁ 25'06	-0.7m	minimum elong	13226 Apr 21 17:46	9° ♁ 23'10	1°17'38
asc. node	13225 Jun 18 01:26	25° ♁ 53'42		max. Earth dist.	13226 Apr 27 02:23	17° ♁ 56'11	1.45147 AU
evening max el	13225 Jun 21 03:26	29° ♁ 21'33	19°14'41		13226 May 04 19:59	0° ♁	
	13225 Jun 21 19:21	0° ♁		evening rise	13226 May 07 19:19	4° ♁ 34'00	
retrograde	13225 Jun 28 03:00	3° ♁ 14'48			13226 May 24 20:56	0° ♁	
evening set	13225 Jul 01 16:24	2° ♁ 01'14		evening max el	13226 Jun 04 07:13	13° ♁ 10'04	20°11'21
	13225 Jul 03 23:19	30° ♁		asc. node	13226 Jun 04 22:29	13° ♁ 47'23	
inferior conj	13225 Jul 07 02:40	26° ♁ 11'44	3°06'27	retrograde	13226 Jun 12 01:41	17° ♁ 36'51	
minimum elong	13225 Jul 07 03:46	26° ♁ 08'09	3°05'23	evening set	13226 Jun 16 00:51	16° ♁ 06'25	
min. Earth dist.	13225 Jul 08 13:22	24° ♁ 18'56	0.66910 AU	inferior conj	13226 Jun 21 07:42	10° ♁ 03'58	3°12'55
morning rise	13225 Jul 12 14:32	19° ♁ 47'45		minimum elong	13226 Jun 21 07:45	10° ♁ 03'48	3°11'54
direct	13225 Jul 18 16:58	17° ♁ 08'46		min. Earth dist.	13226 Jun 22 04:09	8° ♁ 54'20	0.68052 AU
desc. node	13225 Jul 21 05:07	17° ♁ 31'51		morning rise	13226 Jun 26 14:20	3° ♁ 42'33	
morning max el	13225 Jul 31 06:36	24° ♁ 39'49	25°54'43	direct	13226 Jul 02 05:33	1° ♁ 13'22	
	13225 Aug 05 02:10	0° ♁		desc. node	13226 Jul 08 02:23	3° ♁ 19'26	
	13225 Aug 26 01:00	0° ♁		morning max el	13226 Jul 13 16:46	8° ♁ 05'42	24°30'41
morning set	13225 Sep 05 06:28	17° ♁ 44'22			13226 Jul 30 20:50	0° ♁	
max. Earth dist.	13225 Sep 08 23:55	24° ♁ 44'14	1.35434 AU	morning set	13226 Aug 18 08:43	29° ♁ 31'52	
	13225 Sep 11 16:50	0° ♁			13226 Aug 18 15:10	0° ♁	
asc. node	13225 Sep 14 02:38	4° ♁ 48'22		max. Earth dist.	13226 Aug 21 23:05	5° ♁ 55'26	1.37636 AU
superior conj	13225 Sep 14 16:38	5° ♁ 59'12	0°05'32	superior conj	13226 Aug 28 23:58	19° ♁ 05'42	-0°27'24
minimum elong	13225 Sep 14 16:19	5° ♁ 57'34	0°05'28	minimum elong	13226 Aug 29 01:49	19° ♁ 14'40	0°27'21
behind sun begin	13225 Sep 14 10:32	5° ♁ 28'17		asc. node	13226 Aug 31 23:13	24° ♁ 53'50	
behind sun end	13225 Sep 14 22:06	6° ♁ 26'55			13226 Sep 03 12:51	0° ♁	
evening rise	13225 Sep 22 11:00	22° ♁ 00'33		evening rise	13226 Sep 06 13:43	6° ♁ 03'59	
	13225 Sep 26 09:42	0° ♁			13226 Sep 20 06:37	0° ♁	
evening max el	13225 Oct 10 16:27	22° ♁ 03'57	20°22'51	evening max el	13226 Sep 23 06:27	3° ♁ 26'25	19°16'28
desc. node	13225 Oct 17 01:25	26° ♁ 34'14		retrograde	13226 Oct 02 13:09	8° ♁ 04'57	
retrograde	13225 Oct 21 15:02	27° ♁ 30'14		desc. node	13226 Oct 03 22:52	7° ♁ 58'59	
evening set	13225 Oct 23 18:17	27° ♁ 18'45		evening set	13226 Oct 04 09:42	7° ♁ 54'36	
inferior conj	13225 Nov 01 17:45	23° ♁ 22'49	-4°33'40	inferior conj	13226 Oct 12 23:26	3° ♁ 44'40	-2°49'22
minimum elong	13225 Nov 01 07:39	23° ♁ 37'36	4°30'07	minimum elong	13226 Oct 12 16:10	3° ♁ 56'42	2°46'10
min. Earth dist.	13225 Nov 03 03:57	22° ♁ 32'44	0.54744 AU	min. Earth dist.	13226 Oct 15 14:35	2° ♁ 00'26	0.55839 AU
morning rise	13225 Nov 09 20:25	19° ♁ 20'49			13226 Oct 19 01:05	30° ♁	

morning rise	13226 Oct 20 20:09	29° Ω 11'09		morning rise	13227 Oct 01 13:51	9° Ω 38'29	
direct	13226 Oct 26 05:06	28° Ω 05'18		direct	13227 Oct 07 14:54	8° Ω 06'12	
	13226 Nov 02 07:24	0° \mathbb{M}		morning max el	13227 Oct 21 22:15	15° Ω 38'17	26°56'23
morning max el	13226 Nov 09 06:08	5° \mathbb{M} 11'35	25°32'06		13227 Nov 02 14:16	0° \mathbb{M}	
	13226 Nov 27 02:16	0° \mathbb{A}		asc. node	13227 Nov 14 21:36	20° \mathbb{M} 59'35	
asc. node	13226 Nov 28 00:46	1° \mathbb{A} 42'21			13227 Nov 19 08:44	0° \mathbb{A}	
morning set	13226 Dec 06 10:20	18° \mathbb{A} 33'22		morning set	13227 Nov 20 19:55	3° \mathbb{A} 06'00	
	13226 Dec 11 15:33	0° \mathbb{B}					
				superior conj	13227 Nov 27 16:22	18° \mathbb{A} 10'59	1°34'28
superior conj	13226 Dec 13 04:55	3° \mathbb{B} 27'05	1°38'14	minimum elong	13227 Nov 27 15:12	18° \mathbb{A} 04'29	1°35'21
minimum elong	13226 Dec 13 04:45	3° \mathbb{B} 26'10	1°39'15	max. Earth dist.	13227 Nov 27 22:38	18° \mathbb{A} 45'58	1.31301 AU
max. Earth dist.	13226 Dec 14 14:46	6° \mathbb{B} 33'55	1.31855 AU		13227 Dec 03 00:46	0° \mathbb{B}	
evening rise	13226 Dec 20 08:08	18° \mathbb{B} 50'34		evening rise	13227 Dec 04 12:15	3° \mathbb{B} 10'19	
	13226 Dec 25 22:46	0° \approx		desc. node	13227 Dec 17 17:42	28° \mathbb{B} 18'29	
desc. node	13226 Dec 30 20:47	8° \approx 56'21			13227 Dec 18 18:28	0° \approx	
	13227 Jan 13 19:07	0° \mathbb{H}		evening max el	13228 Jan 04 02:53	21° \approx 15'38	27°02'02
evening max el	13227 Jan 21 22:04	9° \mathbb{H} 07'34	27°31'25	retrograde	13228 Jan 18 01:46	28° \approx 28'17	
retrograde	13227 Feb 04 19:15	16° \mathbb{H} 28'34		evening set	13228 Jan 24 20:14	26° \approx 29'51	
evening set	13227 Feb 11 17:26	14° \mathbb{H} 11'01		min. Earth dist.	13228 Jan 28 17:08	23° \approx 49'07	0.60012 AU
min. Earth dist.	13227 Feb 15 11:29	11° \mathbb{H} 12'26	0.62172 AU	inferior conj	13228 Jan 31 21:34	21° \approx 12'32	-3°09'22
inferior conj	13227 Feb 18 10:49	8° \mathbb{H} 25'22	-1°47'32	minimum elong	13228 Feb 01 04:20	20° \approx 58'37	3°06'11
minimum elong	13227 Feb 18 14:31	8° \mathbb{H} 16'41	1°45'33	morning rise	13228 Feb 08 15:30	16° \approx 27'48	
asc. node	13227 Feb 23 22:49	4° \mathbb{H} 03'52		direct	13228 Feb 10 17:02	16° \approx 11'24	
morning rise	13227 Feb 25 14:19	3° \mathbb{H} 20'25		asc. node	13228 Feb 10 20:13	16° \approx 11'29	
direct	13227 Feb 27 19:51	2° \mathbb{H} 58'02		morning max el	13228 Feb 18 03:49	19° \approx 54'05	18°04'14
morning max el	13227 Mar 06 13:41	6° \mathbb{H} 23'14	17°47'42		13228 Feb 25 15:01	0° \mathbb{H}	
	13227 Mar 21 22:26	0° \mathbb{Y}		morning set	13228 Mar 04 17:59	14° \mathbb{H} 31'57	
morning set	13227 Mar 22 09:55	0° \mathbb{Y} 50'53			13228 Mar 13 03:58	0° \mathbb{Y}	
desc. node	13227 Mar 28 22:35	12° \mathbb{Y} 19'16					
				superior conj	13228 Mar 14 16:46	2° \mathbb{Y} 44'14	0°00'47
superior conj	13227 Apr 02 21:16	20° \mathbb{Y} 46'21	-0°37'57	minimum elong	13228 Mar 14 16:50	2° \mathbb{Y} 44'30	0°00'49
minimum elong	13227 Apr 02 17:36	20° \mathbb{Y} 30'53	0°37'39	behind sun begin	13228 Mar 14 09:03	2° \mathbb{Y} 09'57	
	13227 Apr 08 11:06	0° \mathbb{B}		behind sun end	13228 Mar 15 00:36	3° \mathbb{Y} 18'58	
max. Earth dist.	13227 Apr 09 19:20	2° \mathbb{B} 10'36	1.43842 AU	desc. node	13228 Mar 14 19:07	2° \mathbb{Y} 54'40	
evening rise	13227 Apr 17 09:24	14° \mathbb{B} 10'19		max. Earth dist.	13228 Mar 22 07:33	15° \mathbb{Y} 51'03	1.42004 AU
	13227 Apr 27 20:32	0° \mathbb{I}		evening rise	13228 Mar 27 14:22	24° \mathbb{Y} 29'45	
evening max el	13227 May 18 05:07	26° \mathbb{I} 58'38	21°20'48		13228 Mar 31 01:48	0° \mathbb{B}	
	13227 May 21 15:58	0° \mathbb{B}			13228 Apr 20 18:38	0° \mathbb{I}	
asc. node	13227 May 22 19:38	0° \mathbb{B} 46'04		evening max el	13228 Apr 29 22:09	10° \mathbb{I} 47'38	22°38'53
retrograde	13227 May 27 00:19	2° \mathbb{B} 07'03		asc. node	13228 May 08 16:52	16° \mathbb{I} 33'43	
evening set	13227 May 31 09:57	0° \mathbb{B} 20'06		retrograde	13228 May 09 21:19	16° \mathbb{I} 40'12	
	13227 May 31 19:21	30° \mathbb{R} \mathbb{I}		evening set	13228 May 14 18:03	14° \mathbb{I} 38'01	
inferior conj	13227 Jun 05 16:00	24° \mathbb{I} 06'15	3°07'42	inferior conj	13228 May 20 01:33	8° \mathbb{I} 15'00	2°51'56
minimum elong	13227 Jun 05 15:06	24° \mathbb{I} 09'25	3°06'38	minimum elong	13228 May 19 23:54	8° \mathbb{I} 20'47	2°50'45
min. Earth dist.	13227 Jun 05 22:54	23° \mathbb{I} 42'15	0.68717 AU	min. Earth dist.	13228 May 19 19:32	8° \mathbb{I} 35'57	0.68902 AU
morning rise	13227 Jun 10 20:03	17° \mathbb{I} 49'43		morning rise	13228 May 25 05:37	2° \mathbb{I} 04'48	
direct	13227 Jun 15 22:38	15° \mathbb{I} 36'32		direct	13228 May 29 19:15	0° \mathbb{I} 11'10	
desc. node	13227 Jun 24 23:32	20° \mathbb{I} 31'22		morning max el	13228 May 07 17:48	5° \mathbb{I} 22'40	21°34'37
morning max el	13227 Jun 26 03:34	21° \mathbb{I} 39'41	23°01'06	desc. node	13228 Jun 10 20:34	8° \mathbb{I} 45'24	
	13227 Jul 03 08:33	0° \mathbb{B}			13228 Jun 26 12:55	0° \mathbb{B}	
	13227 Jul 24 03:13	0° \mathbb{Q}		morning set	13228 Jul 09 15:14	20° \mathbb{B} 00'22	
morning set	13227 Jul 30 12:34	10° \mathbb{Q} 19'10			13228 Jul 15 19:52	0° \mathbb{Q}	
max. Earth dist.	13227 Aug 03 21:27	17° \mathbb{Q} 41'19	1.39983 AU	max. Earth dist.	13228 Jul 16 00:13	0° \mathbb{Q} 17'55	1.42199 AU
	13227 Aug 10 20:35	0° \mathbb{M}					
				superior conj	13228 Jul 23 12:53	13° \mathbb{Q} 00'44	-1°35'34
superior conj	13227 Aug 11 16:12	1° \mathbb{M} 29'34	-1°02'17	minimum elong	13228 Jul 23 19:44	13° \mathbb{Q} 30'26	1°35'34
minimum elong	13227 Aug 11 20:47	1° \mathbb{M} 50'36	1°02'08		13228 Aug 02 01:37	0° \mathbb{M}	
asc. node	13227 Aug 18 19:49	14° \mathbb{M} 54'30		evening rise	13228 Aug 03 14:57	2° \mathbb{M} 50'08	
evening rise	13227 Aug 21 08:20	19° \mathbb{M} 43'55		asc. node	13228 Aug 04 16:26	4° \mathbb{M} 46'16	
	13227 Aug 26 19:33	0° \mathbb{Q}		evening max el	13228 Aug 19 18:14	28° \mathbb{M} 20'53	18°08'01
evening max el	13227 Sep 06 08:23	15° \mathbb{Q} 34'59	18°31'53		13228 Aug 21 15:52	0° \mathbb{Q}	
retrograde	13227 Sep 14 05:59	19° \mathbb{Q} 34'10		retrograde	13228 Aug 26 17:08	1° \mathbb{Q} 53'49	
evening set	13227 Sep 16 05:36	19° \mathbb{Q} 19'50		evening set	13228 Aug 28 23:51	1° \mathbb{Q} 31'21	
desc. node	13227 Sep 20 20:20	17° \mathbb{Q} 11'04			13228 Aug 31 23:56	30° \mathbb{R} \mathbb{M}	
inferior conj	13227 Sep 24 01:53	14° \mathbb{Q} 49'52	-1°01'16	inferior conj	13228 Sep 05 01:47	26° \mathbb{M} 40'56	0°30'36
minimum elong	13227 Sep 23 23:28	14° \mathbb{Q} 54'33	1°00'07	minimum elong	13228 Sep 05 02:46	26° \mathbb{M} 38'43	0°30'04
min. Earth dist.	13227 Sep 27 07:19	12° \mathbb{Q} 20'46	0.57629 AU	desc. node	13228 Sep 06 17:51	25° \mathbb{M} 09'57	

min. Earth dist.	13228 Sep 08 08:15	23° \mathbb{M} 45'03	0.59821 AU	minimum elong	13229 Aug 18 22:26	9° \mathbb{M} 05'57	1°38'35
morning rise	13228 Sep 12 02:24	20° \mathbb{M} 56'58		min. Earth dist.	13229 Aug 21 18:25	6° \mathbb{M} 11'43	0.62112 AU
direct	13228 Sep 18 14:18	18° \mathbb{M} 57'07		desc. node	13229 Aug 24 15:22	3° \mathbb{M} 38'00	
morning max el	13228 Oct 02 22:03	26° \mathbb{M} 48'07	27°46'28	morning rise	13229 Aug 25 08:34	3° \mathbb{M} 05'59	
	13228 Oct 05 22:58	0° \mathbb{L}		direct	13229 Sep 01 00:55	0° \mathbb{M} 43'21	
	13228 Oct 26 04:59	0° \mathbb{M}		morning max el	13229 Sep 15 04:05	8° \mathbb{M} 44'00	27°57'33
asc. node	13228 Oct 31 18:22	10° \mathbb{M} 37'04			13229 Oct 01 14:16	0° \mathbb{L}	
morning set	13228 Nov 04 01:41	17° \mathbb{M} 24'07			13229 Oct 18 09:23	0° \mathbb{M}	
	13228 Nov 09 21:02	0° \mathbb{M}		asc. node	13229 Oct 18 15:03	0° \mathbb{M} 28'51	
max. Earth dist.	13228 Nov 10 06:53	0° \mathbb{M} 54'44	1.31261 AU	morning set	13229 Oct 19 01:37	1° \mathbb{M} 22'46	
				max. Earth dist.	13229 Oct 24 11:47	12° \mathbb{M} 51'05	1.31756 AU
superior conj	13228 Nov 11 03:46	2° \mathbb{M} 50'55	1°24'54	superior conj	13229 Oct 26 13:17	17° \mathbb{M} 21'51	1°09'40
minimum elong	13228 Nov 11 01:51	2° \mathbb{M} 40'17	1°25'33	minimum elong	13229 Oct 26 11:01	17° \mathbb{M} 09'25	1°10'00
evening rise	13228 Nov 17 20:37	17° \mathbb{M} 38'57			13229 Nov 01 06:59	0° \mathbb{M}	
	13228 Nov 23 20:39	0° \mathbb{Z}		evening rise	13229 Nov 02 07:18	2° \mathbb{M} 11'46	
desc. node	13228 Dec 03 14:43	17° \mathbb{Z} 01'10			13229 Nov 17 03:21	0° \mathbb{Z}	
	13228 Dec 13 12:09	0° \mathbb{M}		desc. node	13229 Nov 20 11:52	4° \mathbb{Z} 49'34	
evening max el	13228 Dec 15 23:51	2° \mathbb{M} 31'13	25°58'45	evening max el	13229 Nov 27 13:00	12° \mathbb{Z} 58'57	24°28'36
retrograde	13228 Dec 29 22:08	9° \mathbb{M} 34'22		retrograde	13229 Dec 11 06:06	19° \mathbb{Z} 49'26	
evening set	13229 Jan 05 03:39	8° \mathbb{M} 02'53		evening set	13229 Dec 16 11:45	18° \mathbb{Z} 49'04	
min. Earth dist.	13229 Jan 09 12:49	5° \mathbb{M} 26'14	0.57891 AU	min. Earth dist.	13229 Dec 22 00:41	15° \mathbb{Z} 59'00	0.56081 AU
inferior conj	13229 Jan 12 13:37	3° \mathbb{M} 16'42	-4°30'08	inferior conj	13229 Dec 24 08:59	14° \mathbb{Z} 31'19	-5°33'26
minimum elong	13229 Jan 12 22:20	3° \mathbb{M} 01'08	4°26'48	minimum elong	13229 Dec 24 15:39	14° \mathbb{Z} 20'55	5°31'26
	13229 Jan 17 18:31	30° \mathbb{R} \mathbb{Z}		morning rise	13230 Jan 01 21:33	10° \mathbb{Z} 29'09	
morning rise	13229 Jan 20 19:52	28° \mathbb{Z} 53'57		direct	13230 Jan 04 07:34	10° \mathbb{Z} 13'30	
direct	13229 Jan 22 21:53	28° \mathbb{Z} 40'01		morning max el	13230 Jan 14 06:26	15° \mathbb{Z} 00'51	19°40'29
asc. node	13229 Jan 27 17:34	29° \mathbb{Z} 59'28		asc. node	13230 Jan 14 14:52	15° \mathbb{Z} 21'34	
	13229 Jan 27 17:58	0° \mathbb{M}			13230 Jan 24 20:38	0° \mathbb{M}	
morning max el	13229 Jan 31 10:45	2° \mathbb{M} 50'29	18°41'11	morning set	13230 Jan 31 17:21	13° \mathbb{M} 15'11	
morning set	13229 Feb 16 13:45	28° \mathbb{M} 43'46					
	13229 Feb 17 05:26	0° \mathbb{M}		superior conj	13230 Feb 08 15:34	29° \mathbb{M} 12'03	1°00'30
superior conj	13229 Feb 25 08:25	15° \mathbb{M} 37'09	0°34'07	minimum elong	13230 Feb 08 18:22	29° \mathbb{M} 25'48	1°00'43
minimum elong	13229 Feb 25 10:35	15° \mathbb{M} 47'17	0°34'07		13230 Feb 09 01:19	0° \mathbb{M}	
desc. node	13229 Mar 01 15:37	23° \mathbb{M} 31'26		max. Earth dist.	13230 Feb 14 21:17	11° \mathbb{M} 08'06	1.37593 AU
max. Earth dist.	13229 Mar 04 15:06	28° \mathbb{M} 48'37	1.39839 AU	desc. node	13230 Feb 16 12:09	14° \mathbb{M} 06'10	
	13229 Mar 05 07:29	0° \mathbb{Y}		evening rise	13230 Feb 18 14:37	17° \mathbb{M} 52'31	
evening rise	13229 Mar 08 16:10	5° \mathbb{Y} 44'39			13230 Feb 25 17:39	0° \mathbb{Y}	
	13229 Mar 24 04:04	0° \mathbb{B}			13230 Mar 18 11:39	0° \mathbb{B}	
evening max el	13229 Apr 12 12:25	24° \mathbb{B} 38'55	23°59'58	evening max el	13230 Mar 26 01:59	8° \mathbb{B} 31'39	25°17'08
	13229 Apr 19 08:14	0° \mathbb{I}		retrograde	13230 Apr 07 05:05	15° \mathbb{B} 33'14	
retrograde	13229 Apr 23 15:20	1° \mathbb{I} 11'04		asc. node	13230 Apr 12 11:35	13° \mathbb{B} 34'56	
asc. node	13229 Apr 25 14:11	0° \mathbb{I} 53'53		evening set	13230 Apr 13 00:59	13° \mathbb{B} 07'54	
	13229 Apr 27 13:02	30° \mathbb{R} \mathbb{B}		min. Earth dist.	13230 Apr 17 09:58	8° \mathbb{B} 17'41	0.67903 AU
evening set	13229 Apr 28 23:37	28° \mathbb{B} 55'48		inferior conj	13230 Apr 18 16:50	6° \mathbb{B} 37'20	1°49'58
min. Earth dist.	13229 May 03 15:58	23° \mathbb{B} 29'47	0.68623 AU	minimum elong	13230 Apr 18 14:45	6° \mathbb{B} 44'09	1°48'47
inferior conj	13229 May 04 10:29	22° \mathbb{B} 26'51	2°26'04	morning rise	13230 Apr 24 04:51	0° \mathbb{B} 43'38	
minimum elong	13229 May 04 08:23	22° \mathbb{B} 33'59	2°24'48		13230 Apr 25 12:10	30° \mathbb{R} \mathbb{Y}	
morning rise	13229 May 09 17:12	16° \mathbb{B} 24'13		direct	13230 Apr 27 18:10	29° \mathbb{Y} 31'01	
direct	13229 May 13 18:16	14° \mathbb{B} 51'22			13230 Apr 30 02:10	0° \mathbb{B}	
morning max el	13229 May 21 14:17	19° \mathbb{B} 16'42	20°17'58	morning max el	13230 May 04 18:18	3° \mathbb{B} 21'06	19°15'20
desc. node	13229 May 28 17:30	27° \mathbb{B} 44'51		desc. node	13230 May 15 14:19	17° \mathbb{B} 17'02	
	13229 May 30 09:33	0° \mathbb{I}		greatest brilliancy	13230 May 17 14:07	20° \mathbb{B} 13'12	-0.7m
morning set	13229 Jun 18 21:17	28° \mathbb{I} 49'24			13230 May 24 01:25	0° \mathbb{I}	
	13229 Jun 19 15:34	0° \mathbb{B}		morning set	13230 May 28 23:44	7° \mathbb{I} 34'10	
max. Earth dist.	13229 Jun 28 09:26	13° \mathbb{B} 44'46	1.44028 AU	max. Earth dist.	13230 Jun 11 00:50	27° \mathbb{I} 51'15	1.45275 AU
					13230 Jun 12 09:33	0° \mathbb{B}	
superior conj	13229 Jul 04 10:25	23° \mathbb{B} 32'34	-2°01'37	superior conj	13230 Jun 14 09:01	3° \mathbb{B} 07'35	-2°13'24
minimum elong	13229 Jul 04 16:48	23° \mathbb{B} 58'49	2°02'10	minimum elong	13230 Jun 14 09:59	3° \mathbb{B} 11'26	2°14'25
	13229 Jul 08 07:42	0° \mathbb{Q}		evening rise	13230 Jun 28 20:45	26° \mathbb{B} 33'58	
evening rise	13229 Jul 17 04:48	15° \mathbb{Q} 10'58			13230 Jun 30 22:43	0° \mathbb{Q}	
asc. node	13229 Jul 22 13:09	24° \mathbb{Q} 24'57		asc. node	13230 Jul 09 09:57	13° \mathbb{Q} 44'26	
	13229 Jul 25 21:19	0° \mathbb{M}		evening max el	13230 Jul 17 22:13	25° \mathbb{Q} 06'13	18°17'28
evening max el	13229 Aug 03 08:03	11° \mathbb{M} 34'41	18°03'33	retrograde	13230 Jul 24 07:01	28° \mathbb{Q} 29'14	
retrograde	13229 Aug 09 18:58	14° \mathbb{M} 55'36		evening set	13230 Jul 27 06:29	27° \mathbb{Q} 40'49	
evening set	13229 Aug 12 09:54	14° \mathbb{M} 21'29		inferior conj	13230 Aug 02 04:28	22° \mathbb{Q} 14'25	2°27'25
inferior conj	13229 Aug 18 20:02	9° \mathbb{M} 12'08	1°39'48				

minimum elong	13230 Aug 02 06:53	22°♎07'30	2°26'08	min. Earth dist.	13231 Jul 18 18:18	3°♎26'12	0.66054 AU
min. Earth dist.	13230 Aug 04 13:59	19°♎29'35	0.64245 AU		13231 Jul 21 20:30	30°♎	
morning rise	13230 Aug 08 05:49	15°♎55'51		morning rise	13231 Jul 22 15:25	29°♎17'03	
desc. node	13230 Aug 11 12:51	13°♎57'45		direct	13231 Jul 28 23:11	26°♎36'33	
direct	13230 Aug 14 20:19	13°♎19'20		desc. node	13231 Jul 29 10:17	26°♎37'20	
morning max el	13230 Aug 28 13:52	21°♎18'46	27°32'07		13231 Aug 06 03:11	0°♎	
	13230 Sep 05 03:05	0°♎		morning max el	13231 Aug 11 01:02	4°♎22'05	26°36'46
	13230 Sep 24 17:55	0°♎			13231 Aug 30 13:56	0°♎	
morning set	13230 Oct 02 17:16	14°♎55'42		morning set	13231 Sep 15 21:33	27°♎55'28	
asc. node	13230 Oct 05 11:41	20°♎29'39			13231 Sep 16 23:43	0°♎	
max. Earth dist.	13230 Oct 07 09:47	24°♎27'57	1.32786 AU	max. Earth dist.	13231 Sep 19 22:17	5°♎43'55	1.34335 AU
	13230 Oct 10 00:36	0°♎		asc. node	13231 Sep 22 08:17	10°♎35'13	
superior conj	13230 Oct 10 18:52	1°♎37'58	0°48'52	superior conj	13231 Sep 24 18:10	15°♎32'48	0°22'45
minimum elong	13230 Oct 10 16:48	1°♎26'48	0°48'57	minimum elong	13231 Sep 24 16:58	15°♎26'35	0°22'42
evening rise	13230 Oct 17 18:28	16°♎43'43			13231 Oct 01 14:55	0°♎	
	13230 Oct 24 06:32	0°♎		evening rise	13231 Oct 02 04:08	1°♎09'24	
desc. node	13230 Nov 07 09:08	21°♎23'42			13231 Oct 18 17:09	0°♎	
evening max el	13230 Nov 08 23:12	23°♎01'21	22°46'39	evening max el	13231 Oct 21 15:37	3°♎14'39	21°10'28
retrograde	13230 Nov 22 00:57	29°♎30'42		desc. node	13231 Oct 25 06:29	6°♎17'37	
evening set	13230 Nov 25 22:04	28°♎57'56		retrograde	13231 Nov 02 12:10	9°♎08'12	
min. Earth dist.	13230 Dec 03 07:44	25°♎35'59	0.54876 AU	evening set	13231 Nov 05 02:41	8°♎52'18	
inferior conj	13230 Dec 04 09:49	24°♎58'56	-5°55'49	inferior conj	13231 Nov 14 01:24	4°♎58'33	-5°19'32
minimum elong	13230 Dec 04 08:51	25°♎00'19	5°54'47	minimum elong	13231 Nov 13 16:40	5°♎10'51	5°16'59
morning rise	13230 Dec 12 21:00	21°♎10'36		min. Earth dist.	13231 Nov 14 13:46	4°♎41'07	0.54519 AU
direct	13230 Dec 15 23:51	20°♎48'09		morning rise	13231 Nov 22 07:15	1°♎07'52	
morning max el	13230 Dec 27 11:54	26°♎17'33	21°02'52	direct	13231 Nov 26 07:26	0°♎33'22	
	13230 Dec 30 21:52	0°♎		morning max el	13231 Dec 09 04:18	6°♎44'50	22°44'22
asc. node	13231 Jan 01 12:05	2°♎02'02		asc. node	13231 Dec 19 09:12	19°♎43'13	
morning set	13231 Jan 16 01:57	27°♎58'02			13231 Dec 25 06:14	0°♎	
	13231 Jan 17 01:21	0°♎		morning set	13231 Dec 31 13:07	12°♎44'25	
superior conj	13231 Jan 23 10:07	13°♎17'43	1°19'41	superior conj	13232 Jan 07 12:34	27°♎43'17	1°31'57
minimum elong	13231 Jan 23 12:34	13°♎30'16	1°20'14	minimum elong	13232 Jan 07 14:07	27°♎51'36	1°32'48
max. Earth dist.	13231 Jan 28 06:56	23°♎06'04	1.35495 AU		13232 Jan 08 14:16	0°♎	
	13231 Jan 31 21:09	0°♎		max. Earth dist.	13232 Jan 10 23:11	4°♎58'20	1.33725 AU
evening rise	13231 Feb 01 06:45	0°♎44'56		evening rise	13232 Jan 15 12:51	14°♎11'21	
desc. node	13231 Feb 03 08:45	4°♎35'14		desc. node	13232 Jan 21 05:25	24°♎53'27	
	13231 Feb 18 20:16	0°♎			13232 Jan 24 02:55	0°♎	
evening max el	13231 Mar 08 15:46	22°♎21'12	26°23'04		13232 Feb 13 16:14	0°♎	
retrograde	13231 Mar 21 13:40	29°♎40'33		evening max el	13232 Feb 19 05:14	5°♎57'08	27°10'34
evening set	13231 Mar 27 20:29	27°♎09'09		retrograde	13232 Mar 03 16:16	13°♎23'59	
asc. node	13231 Mar 30 09:01	24°♎43'45		evening set	13232 Mar 10 08:04	10°♎52'03	
min. Earth dist.	13231 Mar 31 23:19	22°♎53'54	0.66763 AU	min. Earth dist.	13232 Mar 14 05:53	7°♎09'55	0.65227 AU
inferior conj	13231 Apr 02 18:35	20°♎42'21	1°03'17	asc. node	13232 Mar 16 06:29	4°♎54'27	
minimum elong	13231 Apr 02 17:05	20°♎46'56	1°02'27	inferior conj	13232 Mar 16 13:18	4°♎35'21	0°05'28
morning rise	13231 Apr 08 14:34	14°♎59'21		minimum elong	13232 Mar 16 13:08	4°♎35'47	0°05'26
direct	13231 Apr 11 17:09	14°♎04'58		transit middle	13232 Mar 16 13:08	4°♎35'47	0°05'26
morning max el	13231 Apr 18 05:18	17°♎32'50	18°28'48	transit begin	13232 Mar 16 10:18	4°♎43'45	
	13231 Apr 27 18:19	0°♎		transit end	13232 Mar 16 15:59	4°♎27'51	
desc. node	13231 May 02 11:03	7°♎13'24			13232 Mar 21 07:09	30°♎	
morning set	13231 May 08 20:07	17°♎15'39		morning rise	13232 Mar 22 19:52	29°♎05'11	
	13231 May 16 22:27	0°♎		direct	13232 Mar 25 12:53	28°♎26'08	
superior conj	13231 May 24 17:39	12°♎11'50	-2°05'32		13232 Mar 29 19:39	0°♎	
minimum elong	13231 May 24 11:07	11°♎46'18	2°06'09	morning max el	13232 Mar 31 21:06	1°♎44'20	17°59'07
max. Earth dist.	13231 May 24 20:17	12°♎22'07	1.45815 AU	desc. node	13232 Apr 18 07:40	27°♎26'41	
	13231 Jun 05 02:33	0°♎		morning set	13232 Apr 18 20:33	28°♎19'34	
evening rise	13231 Jun 09 12:12	6°♎56'12			13232 Apr 19 21:01	0°♎	
greatest brilliancy	13231 Jun 18 10:12	20°♎58'11	-0.8m	superior conj	13232 May 03 05:19	21°♎31'04	-1°38'59
	13231 Jun 24 09:51	0°♎		minimum elong	13232 May 02 20:11	20°♎54'56	1°38'48
asc. node	13231 Jun 26 06:50	2°♎37'53		max. Earth dist.	13232 May 06 16:26	26°♎58'10	1.45599 AU
evening max el	13231 Jul 01 09:49	8°♎48'00	18°48'57		13232 May 08 14:56	0°♎	
retrograde	13231 Jul 08 01:34	12°♎26'37		evening rise	13232 May 19 07:05	16°♎31'40	
evening set	13231 Jul 11 09:47	11°♎22'22			13232 May 28 02:41	0°♎	
inferior conj	13231 Jul 16 23:19	5°♎40'38	2°56'39	greatest brilliancy	13232 Jun 01 23:50	7°♎17'47	-0.7m
minimum elong	13231 Jul 17 01:00	5°♎35'23	2°55'31	asc. node	13232 Jun 12 03:49	20°♎56'26	

evening max el	13232 Jun 13 16:41	22° ♄ 34'26	19°36'59	asc. node	13233 May 30 00:53	8° ♄ 28'21	
retrograde	13232 Jun 20 23:30	26° ♄ 41'05		retrograde	13233 Jun 04 22:27	11° ♄ 06'47	
evening set	13232 Jun 24 16:58	25° ♄ 20'16		evening set	13233 Jun 09 01:51	9° ♄ 29'24	
inferior conj	13232 Jun 30 01:24	19° ♄ 24'50	3°10'43	inferior conj	13233 Jun 14 08:04	3° ♄ 21'48	3°12'04
minimum elong	13232 Jun 30 02:03	19° ♄ 22'38	3°09'42	minimum elong	13233 Jun 14 07:42	3° ♄ 23'05	3°11'02
min. Earth dist.	13232 Jul 01 05:54	17° ♄ 50'00	0.67447 AU	min. Earth dist.	13233 Jun 14 22:42	2° ♄ 31'17	0.68387 AU
morning rise	13232 Jul 05 10:43	13° ♄ 01'25			13233 Jun 16 20:09	30° ♄ II	
direct	13232 Jul 11 08:26	10° ♄ 25'56		morning rise	13233 Jun 19 13:15	27° ♄ II01'57	
desc. node	13232 Jul 15 07:37	11° ♄ 23'44		direct	13233 Jun 24 23:08	24° ♄ II38'53	
morning max el	13232 Jul 23 11:49	17° ♄ 42'37	25°20'22	desc. node	13233 Jul 02 04:51	27° ♄ II49'56	
	13232 Aug 02 19:00	0° ♄			13233 Jul 04 16:35	0° ♄	
	13232 Aug 22 13:54	0° ♄		morning max el	13233 Jul 05 21:58	1° ♄ 12'01	23°52'40
morning set	13232 Aug 28 10:38	10° ♄ 12'57			13233 Jul 27 17:26	0° ♄	
max. Earth dist.	13232 Sep 01 01:11	16° ♄ 49'47	1.36330 AU	morning set	13233 Aug 10 03:51	21° ♄ II36'01	
				max. Earth dist.	13233 Aug 13 22:43	28° ♄ II10'22	1.38624 AU
					13233 Aug 14 23:25	0° ♄	
superior conj	13232 Sep 07 08:17	28° ♄ 59'17	-0°08'03	superior conj	13233 Aug 21 09:38	11° ♄ 48'22	-0°42'08
minimum elong	13232 Sep 07 08:47	29° ♄ 01'48	0°08'05	minimum elong	13233 Aug 21 12:37	12° ♄ 02'28	0°42'02
behind sun begin	13232 Sep 07 03:14	28° ♄ 34'13		asc. node	13233 Aug 26 01:23	20° ♄ 45'21	
behind sun end	13232 Sep 07 14:20	29° ♄ 29'26		evening rise	13233 Aug 30 09:45	29° ♄ 16'58	
	13232 Sep 07 20:28	0° ♄			13233 Aug 30 18:32	0° ♄	
asc. node	13232 Sep 08 04:50	0° ♄ 41'49		evening max el	13233 Sep 15 16:56	25° ♄ 51'56	18°54'58
evening rise	13232 Sep 15 10:07	15° ♄ 23'02			13233 Sep 22 11:08	0° ♄	
	13232 Sep 22 22:48	0° ♄		retrograde	13233 Sep 24 08:29	0° ♄ 12'08	
evening max el	13232 Oct 02 21:24	14° ♄ 09'07	19°51'57	evening set	13233 Sep 26 05:28	0° ♄ 00'43	
desc. node	13232 Oct 11 03:56	19° ♄ 04'23			13233 Sep 26 06:52	30° ♄ II	
retrograde	13232 Oct 13 03:07	19° ♄ 15'19		desc. node	13233 Sep 28 01:26	29° ♄ II28'54	
evening set	13232 Oct 15 01:33	19° ♄ 05'12		inferior conj	13233 Oct 04 12:18	25° ♄ 43'04	-2°02'28
inferior conj	13232 Oct 23 22:19	15° ♄ 04'20	-3°51'53	minimum elong	13233 Oct 04 07:08	25° ♄ 52'13	2°00'04
minimum elong	13232 Oct 23 12:49	15° ♄ 18'54	3°48'09	min. Earth dist.	13233 Oct 07 11:34	23° ♄ 37'42	0.56528 AU
min. Earth dist.	13232 Oct 25 22:21	13° ♄ 50'41	0.55101 AU	morning rise	13233 Oct 12 05:38	20° ♄ 53'12	
morning rise	13232 Oct 31 22:38	10° ♄ 50'15		direct	13233 Oct 17 22:05	19° ♄ 36'14	
direct	13232 Nov 05 20:02	9° ♄ 57'41		morning max el	13233 Nov 01 02:43	26° ♄ 55'09	26°11'23
morning max el	13232 Nov 19 14:32	16° ♄ 46'51	24°33'07		13233 Nov 04 02:07	0° ♄	
	13232 Nov 30 06:38	0° ♄		asc. node	13233 Nov 22 03:06	27° ♄ II12'00	
asc. node	13232 Dec 05 06:13	8° ♄ 10'41			13233 Nov 23 14:10	0° ♄	
morning set	13232 Dec 15 01:01	27° ♄ 29'13		morning set	13233 Nov 29 11:54	12° ♄ II07'06	
	13232 Dec 16 04:59	0° ♄					
superior conj	13232 Dec 21 20:13	12° ♄ 21'15	1°37'43	superior conj	13233 Dec 06 06:50	27° ♄ II04'23	1°37'21
minimum elong	13232 Dec 21 20:41	12° ♄ 23'48	1°38'43	minimum elong	13233 Dec 06 06:13	27° ♄ II00'59	1°38'20
max. Earth dist.	13232 Dec 23 22:57	16° ♄ 57'26	1.32397 AU	max. Earth dist.	13233 Dec 07 04:36	29° ♄ II05'21	1.31554 AU
evening rise	13232 Dec 29 05:40	28° ♄ 04'07			13233 Dec 07 14:28	0° ♄	
	13232 Dec 30 04:35	0° ♄		evening rise	13233 Dec 13 06:21	12° ♄ II15'42	
desc. node	13233 Jan 07 02:10	14° ♄ 55'39			13233 Dec 22 08:21	0° ♄	
	13233 Jan 16 07:58	0° ♄		desc. node	13233 Dec 24 23:02	4° ♄ 34'49	
evening max el	13233 Jan 31 17:10	19° ♄ 08'37	27°32'35		13234 Jan 12 07:32	0° ♄	
retrograde	13233 Feb 14 12:12	26° ♄ 34'15		evening max el	13234 Jan 14 01:29	1° ♄ 43'47	27°23'14
evening set	13233 Feb 21 09:22	24° ♄ 09'00		retrograde	13234 Jan 28 00:08	9° ♄ 01'57	
min. Earth dist.	13233 Feb 25 03:52	20° ♄ 56'12	0.63357 AU	evening set	13234 Feb 03 21:27	6° ♄ 51'42	
inferior conj	13233 Feb 27 22:14	18° ♄ 09'36	-1°03'24	min. Earth dist.	13234 Feb 07 15:57	4° ♄ 01'45	0.61258 AU
minimum elong	13233 Feb 28 00:17	18° ♄ 04'25	1°02'14	inferior conj	13234 Feb 10 18:09	1° ♄ 17'06	-2°21'44
asc. node	13233 Mar 03 03:57	15° ♄ 07'19		minimum elong	13234 Feb 10 23:09	1° ♄ 05'57	2°19'11
morning rise	13233 Mar 06 17:38	12° ♄ 54'45			13234 Feb 12 05:25	30° ♄ II	
direct	13233 Mar 09 02:40	12° ♄ 27'28		morning rise	13234 Feb 18 03:51	26° ♄ II20'19	
morning max el	13233 Mar 15 14:50	15° ♄ 47'20	17°46'42	asc. node	13234 Feb 18 01:23	26° ♄ II22'11	
	13233 Mar 25 17:25	0° ♄		direct	13234 Feb 20 07:06	26° ♄ II01'02	
morning set	13233 Mar 31 23:20	10° ♄ Y39'06		morning max el	13234 Feb 27 07:16	29° ♄ II32'49	17°52'18
desc. node	13233 Apr 05 04:12	17° ♄ Y51'45			13234 Feb 27 18:04	0° ♄	
	13233 Apr 12 09:51	0° ♄		morning set	13234 Mar 14 22:31	23° ♄ II56'07	
superior conj	13233 Apr 13 11:14	1° ♄ 44'13	-1°01'15		13234 Mar 18 07:08	0° ♄	
minimum elong	13233 Apr 13 05:01	1° ♄ 18'47	1°00'50	desc. node	13234 Mar 23 00:43	8° ♄ Y24'32	
max. Earth dist.	13233 Apr 19 10:40	11° ♄ 23'07	1.44664 AU				
evening rise	13233 Apr 28 18:10	25° ♄ 8'55'32		superior conj	13234 Mar 25 17:17	13° ♄ Y05'00	-0°21'03
	13233 May 01 10:10	0° ♄		minimum elong	13234 Mar 25 15:22	12° ♄ Y56'45	0°20'53
	13233 May 22 05:48	0° ♄		max. Earth dist.	13234 Apr 02 01:23	25° ♄ Y23'35	1.43114 AU
evening max el	13233 May 27 17:47	6° ♄ 22'27	20°39'35		13234 Apr 04 21:39	0° ♄	

evening rise	13234 Apr 08 13:25	5°♄48'07		max. Earth dist.	13235 Mar 15 11:52	8°♄47'54	1.41114 AU
	13234 Apr 24 16:59	0°♄		evening rise	13235 Mar 20 03:03	16°♄31'16	
evening max el	13234 May 10 13:31	20°♄11'54	21°53'21		13235 Mar 28 15:58	0°♄	
asc. node	13234 May 16 22:05	24°♄59'25			13235 Apr 19 11:36	0°♄	
retrograde	13234 May 19 20:31	25°♄39'06		evening max el	13235 Apr 23 05:17	4°♄02'27	23°13'24
evening set	13234 May 24 10:44	23°♄45'43		retrograde	13235 May 03 16:15	10°♄12'01	
inferior conj	13234 May 29 17:10	17°♄27'51	3°02'17	asc. node	13235 May 03 19:24	10°♄11'56	
minimum elong	13234 May 29 15:54	17°♄32'14	3°01'09	evening set	13235 May 08 17:56	8°♄03'59	
min. Earth dist.	13234 May 29 18:35	17°♄22'53	0.68855 AU	min. Earth dist.	13235 May 13 15:21	2°♄17'26	0.68848 AU
morning rise	13234 Jun 03 20:53	11°♄13'43		inferior conj	13235 May 14 02:41	1°♄38'16	2°42'12
direct	13234 Jun 08 18:02	9°♄08'17		minimum elong	13235 May 14 00:48	1°♄44'47	2°40'58
morning max el	13234 Jun 18 09:40	14°♄49'16	22°23'23		13235 May 15 07:26	30°♄	
desc. node	13234 Jun 19 01:56	15°♄30'52		morning rise	13235 May 19 07:34	25°♄31'17	
	13234 Jun 30 17:00	0°♄		direct	13235 May 23 15:54	23°♄46'19	
	13234 Jul 20 16:31	0°♄		morning max el	13235 Jun 01 02:13	28°♄36'27	21°00'28
morning set	13234 Jul 21 20:59	1°♄55'03			13235 Jun 02 10:26	0°♄	
max. Earth dist.	13234 Jul 26 22:08	10°♄15'41	1.40962 AU	desc. node	13235 Jun 05 22:55	4°♄05'46	
					13235 Jun 24 07:05	0°♄	
superior conj	13234 Aug 03 18:07	23°♄51'19	-1°16'53	morning set	13235 Jul 01 13:36	11°♄10'04	
minimum elong	13234 Aug 03 23:50	24°♄16'51	1°16'45	max. Earth dist.	13235 Jul 09 04:04	23°♄16'20	1.43047 AU
	13234 Aug 07 03:36	0°♄			13235 Jul 13 06:18	0°♄	
asc. node	13234 Aug 12 22:00	10°♄42'45					
evening rise	13234 Aug 13 23:46	12°♄43'37		superior conj	13235 Jul 16 05:17	4°♄57'47	-1°47'54
	13234 Aug 23 15:59	0°♄		minimum elong	13235 Jul 16 12:26	5°♄28'05	1°48'05
evening max el	13234 Aug 29 22:48	8°♄17'45	18°19'18	evening rise	13235 Jul 27 23:52	25°♄31'59	
retrograde	13234 Sep 06 09:09	12°♄03'32		asc. node	13235 Jul 30 18:41	0°♄29'39	
evening set	13234 Sep 08 11:43	11°♄46'06			13235 Jul 30 12:00	0°♄	
desc. node	13234 Sep 14 22:56	7°♄58'38		evening max el	13235 Aug 13 10:48	21°♄16'34	18°03'46
inferior conj	13234 Sep 16 00:01	7°♄07'22	-0°19'37	retrograde	13235 Aug 20 03:14	24°♄42'37	
minimum elong	13234 Sep 15 23:18	7°♄08'52	0°19'19	evening set	13235 Aug 22 13:28	24°♄15'27	
min. Earth dist.	13234 Sep 19 07:23	4°♄24'21	0.58539 AU	inferior conj	13235 Aug 29 08:13	19°♄16'22	1°02'48
morning rise	13234 Sep 23 07:25	1°♄41'23		minimum elong	13235 Aug 29 10:01	19°♄12'03	1°01'52
	13234 Sep 28 12:24	30°♄		min. Earth dist.	13235 Sep 01 11:55	16°♄16'12	0.60804 AU
direct	13234 Sep 29 14:09	29°♄56'58		desc. node	13235 Sep 01 20:26	15°♄57'00	
	13234 Sep 30 16:03	0°♄		morning rise	13235 Sep 05 03:41	13°♄21'49	
morning max el	13234 Oct 13 21:47	7°♄37'26	27°22'18	direct	13235 Sep 11 18:13	11°♄11'43	
	13234 Oct 30 18:43	0°♄		morning max el	13235 Sep 26 00:31	19°♄07'08	27°56'03
asc. node	13234 Nov 08 23:53	16°♄38'14			13235 Oct 05 06:07	0°♄	
morning set	13234 Nov 13 20:03	26°♄33'29			13235 Oct 23 14:54	0°♄	
	13234 Nov 15 10:33	0°♄		asc. node	13235 Oct 26 20:37	6°♄22'35	
				morning set	13235 Oct 28 23:38	10°♄44'07	
superior conj	13234 Nov 20 18:28	11°♄46'52	1°31'06	max. Earth dist.	13235 Nov 03 20:36	23°♄22'28	1.31408 AU
minimum elong	13234 Nov 20 16:57	11°♄38'22	1°31'55				
max. Earth dist.	13234 Nov 20 13:03	11°♄16'33	1.31221 AU	superior conj	13235 Nov 05 05:19	26°♄23'37	1°19'07
evening rise	13234 Nov 27 12:32	26°♄39'44		minimum elong	13235 Nov 05 03:12	26°♄11'52	1°19'39
	13234 Nov 29 02:22	0°♄			13235 Nov 06 20:14	0°♄	
desc. node	13234 Dec 11 20:01	23°♄41'31		evening rise	13235 Nov 11 22:10	11°♄11'06	
	13234 Dec 15 22:55	0°♄			13235 Nov 21 08:19	0°♄	
evening max el	13234 Dec 27 03:27	13°♄30'46	26°39'11	desc. node	13235 Nov 28 17:07	12°♄03'30	
retrograde	13235 Jan 10 02:24	20°♄38'47		evening max el	13235 Dec 08 20:58	24°♄24'49	25°22'58
evening set	13235 Jan 16 16:31	18°♄51'26			13235 Dec 16 17:32	0°♄	
min. Earth dist.	13235 Jan 20 17:22	16°♄14'10	0.59087 AU	retrograde	13235 Dec 22 17:22	1°♄22'39	
inferior conj	13235 Jan 23 21:23	13°♄47'25	-3°44'32	evening set	13235 Dec 28 14:24	0°♄04'04	
minimum elong	13235 Jan 24 05:15	13°♄32'10	3°41'07		13235 Dec 28 18:07	30°♄	
morning rise	13235 Jan 31 20:59	9°♄11'34		min. Earth dist.	13236 Jan 02 09:06	27°♄24'21	0.57065 AU
direct	13235 Feb 02 22:04	8°♄56'36		inferior conj	13236 Jan 05 04:45	25°♄31'10	-5°00'25
asc. node	13235 Feb 04 22:48	9°♄12'00		minimum elong	13236 Jan 05 13:16	25°♄16'51	4°57'30
morning max el	13235 Feb 10 18:47	12°♄50'04	18°17'19	morning rise	13236 Jan 13 14:37	21°♄17'42	
	13235 Feb 22 07:09	0°♄		direct	13236 Jan 15 19:11	21°♄03'29	
morning set	13235 Feb 26 12:10	7°♄52'22		asc. node	13236 Jan 22 20:07	23°♄41'48	
				morning max el	13236 Jan 24 21:25	25°♄28'13	19°03'39
					13236 Jan 28 18:51	0°♄	
superior conj	13235 Mar 07 21:55	25°♄27'48	0°15'42				
minimum elong	13235 Mar 07 23:05	25°♄33'05	0°15'42	morning set	13236 Feb 10 11:44	22°♄14'13	
behind sun begin	13235 Mar 07 21:49	25°♄27'19			13236 Feb 14 09:52	0°♄	
behind sun end	13235 Mar 08 00:21	25°♄38'51					
desc. node	13235 Mar 09 21:12	29°♄00'50		superior conj	13236 Feb 18 20:48	8°♄40'39	0°46'10
	13235 Mar 10 10:29	0°♄		minimum elong	13236 Feb 18 23:23	8°♄53'00	0°46'14

desc. node	13236 Feb 24 17:45	19° K 37'21			13237 Feb 05 04:26	0° K	
max. Earth dist.	13236 Feb 25 18:51	21° K 30'15	1.38881 AU	max. Earth dist.	13237 Feb 07 01:35	3° K 36'27	1.36663 AU
evening rise	13236 Feb 29 13:55	28° K 09'33		evening rise	13237 Feb 10 20:15	10° K 36'51	
	13236 Mar 01 15:46	0° Y		desc. node	13237 Feb 10 14:20	10° K 09'56	
	13236 Mar 21 03:06	0° B			13237 Feb 22 07:18	0° Y	
evening max el	13236 Apr 04 19:01	17° B 54'28	24°33'33		13237 Mar 16 14:45	0° B	
retrograde	13236 Apr 16 08:32	24° B 40'13		evening max el	13237 Mar 18 08:24	1° B 45'46	25°46'56
asc. node	13236 Apr 19 16:45	23° B 50'48		retrograde	13237 Mar 30 20:22	8° B 57'09	
evening set	13236 Apr 21 21:56	22° B 19'58		evening set	13237 Apr 05 21:05	6° B 28'24	
min. Earth dist.	13236 Apr 26 10:54	17° B 09'33	0.68379 AU	asc. node	13237 Apr 06 14:11	5° B 50'35	
inferior conj	13236 Apr 27 10:45	15° B 49'48	2°12'01	min. Earth dist.	13237 Apr 10 03:10	1° B 53'18	0.67465 AU
minimum elong	13236 Apr 27 08:36	15° B 57'01	2°10'45	inferior conj	13237 Apr 11 15:25	29° Y 58'28	1°31'30
morning rise	13236 May 02 19:26	9° B 51'03		minimum elong	13237 Apr 11 13:30	0° B 04'35	1°30'25
direct	13236 May 06 15:24	8° B 27'05			13237 Apr 11 14:56	30° R Y	
morning max el	13236 May 14 02:00	12° B 35'34	19°49'26	morning rise	13237 Apr 17 06:31	24° Y 09'14	
desc. node	13236 May 22 19:48	23° B 20'12		direct	13237 Apr 20 15:02	23° Y 04'53	
	13236 May 27 11:38	0° II		morning max el	13237 Apr 27 09:16	26° Y 44'12	18°53'30
greatest brilliancy	13236 May 27 05:19	29° B 36'56	-0.6m		13237 Apr 30 08:19	0° B	
morning set	13236 Jun 09 15:26	19° II 49'48		desc. node	13237 May 09 16:34	13° B 03'37	
	13236 Jun 16 04:58	0° B		greatest brilliancy	13237 May 10 23:42	15° B 01'23	-0.8m
max. Earth dist.	13236 Jun 20 16:30	7° B 03'05	1.44643 AU	morning set	13237 May 19 23:21	28° B 52'53	
					13237 May 20 16:38	0° II	
superior conj	13236 Jun 25 16:31	15° B 03'15	-2°08'46	max. Earth dist.	13237 Jun 03 09:33	21° II 20'42	1.45591 AU
minimum elong	13236 Jun 25 21:13	15° B 22'15	2°09'35				
	13236 Jul 04 18:25	0° Q		superior conj	13237 Jun 05 07:35	24° II 21'04	-2°12'36
evening rise	13236 Jul 09 04:59	7° Q 29'29		minimum elong	13237 Jun 05 05:11	24° II 11'41	2°13'34
asc. node	13236 Jul 16 15:26	20° Q 00'51			13237 Jun 08 21:43	0° B	
	13236 Jul 23 03:40	0° M		evening rise	13237 Jun 20 10:37	18° B 26'43	
evening max el	13236 Jul 27 01:05	4° M 38'21	18°07'13		13237 Jun 27 14:27	0° Q	
retrograde	13236 Aug 02 10:05	7° M 58'50		asc. node	13237 Jul 03 12:16	9° Q 10'35	
evening set	13236 Aug 05 04:32	7° M 18'57		evening max el	13237 Jul 10 14:28	18° Q 15'11	18°28'45
inferior conj	13236 Aug 11 09:01	2° M 01'55	2°02'29	retrograde	13237 Jul 17 01:21	21° Q 43'32	
minimum elong	13236 Aug 11 11:33	1° M 55'03	2°01'11	evening set	13237 Jul 20 04:22	20° Q 48'43	
	13236 Aug 13 05:49	30° R Q		inferior conj	13237 Jul 25 22:22	15° Q 15'45	2°41'49
min. Earth dist.	13236 Aug 14 02:12	29° Q 05'58	0.63045 AU	minimum elong	13237 Jul 26 00:31	15° Q 09'18	2°40'36
morning rise	13236 Aug 17 16:34	25° Q 49'06		min. Earth dist.	13237 Jul 28 01:52	12° Q 42'02	0.65058 AU
desc. node	13236 Aug 18 17:58	25° Q 05'09		morning rise	13237 Jul 31 19:28	8° Q 54'02	
direct	13236 Aug 24 08:37	23° Q 19'35		desc. node	13237 Aug 05 15:25	6° Q 24'24	
	13236 Sep 05 23:03	0° M		direct	13237 Aug 07 07:34	6° Q 14'21	
morning max el	13236 Sep 07 08:44	1° M 21'35	27°50'59	morning max el	13237 Aug 20 19:28	14° Q 10'32	27°11'41
	13236 Sep 28 11:15	0° A			13237 Sep 02 16:02	0° M	
morning set	13236 Oct 11 20:23	24° A 32'37			13237 Sep 21 03:31	0° A	
asc. node	13236 Oct 12 17:16	26° A 18'41		morning set	13237 Sep 25 07:36	7° A 52'42	
	13236 Oct 14 12:09	0° M		max. Earth dist.	13237 Sep 29 17:05	16° A 38'27	1.33381 AU
max. Earth dist.	13236 Oct 16 23:07	5° M 11'49	1.32127 AU	asc. node	13237 Sep 29 13:53	16° A 22'07	
superior conj	13236 Oct 19 13:23	10° M 48'35	1°01'31	superior conj	13237 Oct 03 16:36	24° A 56'25	0°38'25
minimum elong	13236 Oct 19 11:08	10° M 36'16	1°01'44	minimum elong	13237 Oct 03 14:48	24° A 46'53	0°38'24
evening rise	13236 Oct 26 09:16	25° M 43'49			13237 Oct 06 01:30	0° M	
	13236 Oct 28 09:26	0° A		evening rise	13237 Oct 10 20:00	10° M 13'27	
desc. node	13236 Nov 14 14:20	29° A 23'05			13237 Oct 20 23:28	0° A	
	13236 Nov 15 02:19	0° B		evening max el	13237 Oct 31 19:14	14° A 38'42	22°04'08
evening max el	13236 Nov 19 07:37	4° B 36'30	23°45'31	desc. node	13237 Nov 01 11:38	15° A 17'51	
retrograde	13236 Dec 02 19:51	11° B 20'20		retrograde	13237 Nov 13 10:41	20° A 54'55	
evening set	13236 Dec 07 12:24	10° B 32'24		evening set	13237 Nov 16 17:17	20° A 31'06	
min. Earth dist.	13236 Dec 13 18:18	7° B 30'59	0.55474 AU	inferior conj	13237 Nov 25 10:49	16° A 35'53	-5°47'52
inferior conj	13236 Dec 15 15:29	6° B 23'48	-5°49'23	minimum elong	13237 Nov 25 06:00	16° A 42'38	5°46'27
minimum elong	13236 Dec 15 19:28	6° B 17'51	5°48'02	min. Earth dist.	13237 Nov 25 00:49	16° A 49'53	0.54609 AU
morning rise	13236 Dec 24 04:23	2° B 29'14		morning rise	13237 Dec 03 19:48	12° A 48'37	
direct	13236 Dec 26 20:27	2° B 11'31		direct	13237 Dec 07 07:20	12° A 21'45	
morning max el	13237 Jan 06 11:18	7° B 16'08	20°12'55	morning max el	13237 Dec 19 10:47	18° A 10'06	21°44'12
asc. node	13237 Jan 08 17:23	9° B 38'55		asc. node	13237 Dec 26 14:32	26° A 46'44	
	13237 Jan 21 08:02	0° B			13237 Dec 28 17:21	0° B	
morning set	13237 Jan 24 17:44	6° B 50'51		morning set	13238 Jan 09 03:36	21° B 35'00	
					13238 Jan 13 02:57	0° B	
superior conj	13237 Feb 01 09:16	22° B 29'45	1°09'30				
minimum elong	13237 Feb 01 12:00	22° B 43'28	1°09'51	superior conj	13238 Jan 16 07:30	6° B 44'18	1°25'43

minimum elong	13238 Jan 16 09:36	6° \approx 55'20	1°26'23			13238 Dec 21 14:27	0° \mathfrak{Z}	
max. Earth dist.	13238 Jan 20 13:18	15° \approx 27'30	1.34690 AU	morning set		13238 Dec 24 15:18	6° \mathfrak{Z} 21'16	
evening rise	13238 Jan 24 18:43	23° \approx 44'22						
desc. node	13238 Jan 28 10:57	0° \mathfrak{H} 34'38		superior conj		13238 Dec 31 12:26	21° \mathfrak{Z} 15'54	1°35'10
	13238 Jan 28 03:20	0° \mathfrak{H}		minimum elong		13238 Dec 31 13:32	21° \mathfrak{Z} 21'53	1°36'06
	13238 Feb 15 22:16	0° \mathfrak{Y}		max. Earth dist.		13239 Jan 03 08:58	27° \mathfrak{Z} 22'36	1.33104 AU
evening max el	13238 Feb 28 22:08	15° \mathfrak{Y} 30'22	26°46'06			13239 Jan 04 14:56	0° \approx	
retrograde	13238 Mar 14 02:42	22° \mathfrak{Y} 54'44		evening rise		13239 Jan 08 05:47	7° \approx 23'18	
evening set	13238 Mar 20 13:28	20° \mathfrak{Y} 22'29		desc. node		13239 Jan 15 07:38	20° \approx 46'55	
asc. node	13238 Mar 24 11:38	16° \mathfrak{Y} 28'12				13239 Jan 20 16:35	0° \mathfrak{H}	
min. Earth dist.	13238 Mar 24 14:00	16° \mathfrak{Y} 21'24	0.66143 AU	evening max el		13239 Feb 11 11:26	28° \mathfrak{H} 58'26	27°23'36
inferior conj	13238 Mar 26 14:28	13° \mathfrak{Y} 58'51	0°40'07			13239 Feb 12 13:49	0° \mathfrak{Y}	
minimum elong	13238 Mar 26 13:26	14° \mathfrak{Y} 01'54	0°39'35	retrograde		13239 Feb 25 02:28	6° \mathfrak{Y} 25'05	
morning rise	13238 Apr 01 14:38	8° \mathfrak{Y} 20'51		evening set		13239 Mar 03 20:59	3° \mathfrak{Y} 55'24	
direct	13238 Apr 04 12:54	7° \mathfrak{Y} 33'28		min. Earth dist.		13239 Mar 07 17:16	0° \mathfrak{Y} 26'05	0.64463 AU
morning max el	13238 Apr 10 22:33	10° \mathfrak{Y} 56'10	18°14'04			13239 Mar 08 03:14	30° \mathfrak{R} \mathfrak{H}	
	13238 Apr 24 14:09	0° \mathfrak{B}		inferior conj		13239 Mar 10 05:25	27° \mathfrak{H} 45'13	-0°22'25
desc. node	13238 Apr 26 13:14	3° \mathfrak{B} 07'38		minimum elong		13239 Mar 10 06:06	27° \mathfrak{H} 43'24	0°21'59
morning set	13238 Apr 30 07:16	9° \mathfrak{B} 08'16		asc. node		13239 Mar 11 09:05	26° \mathfrak{H} 32'04	
	13238 May 13 10:43	0° \mathfrak{II}		morning rise		13239 Mar 16 17:09	22° \mathfrak{H} 20'54	
				direct		13239 Mar 19 06:37	21° \mathfrak{H} 47'11	
superior conj	13238 May 15 15:20	3° \mathfrak{II} 26'08	-1°56'14	morning max el		13239 Mar 25 15:28	25° \mathfrak{H} 04'50	17°51'42
minimum elong	13238 May 15 06:50	2° \mathfrak{II} 52'53	1°56'29			13239 Mar 29 18:51	0° \mathfrak{Y}	
max. Earth dist.	13238 May 17 05:13	5° \mathfrak{II} 54'15	1.45811 AU	morning set		13239 Apr 11 19:37	20° \mathfrak{Y} 46'49	
evening rise	13238 May 31 16:15	28° \mathfrak{II} 25'32		desc. node		13239 Apr 13 09:49	23° \mathfrak{Y} 26'36	
	13238 Jun 01 16:31	0° \mathfrak{E}				13239 Apr 17 08:28	0° \mathfrak{B}	
greatest brilliancy	13238 Jun 11 19:55	15° \mathfrak{E} 40'27	-0.7m					
asc. node	13238 Jun 20 09:12	27° \mathfrak{E} 50'34		superior conj		13239 Apr 25 09:22	13° \mathfrak{B} 04'36	-1°23'47
	13238 Jun 22 03:53	0° \mathfrak{O}		minimum elong		13239 Apr 25 01:01	12° \mathfrak{B} 31'11	1°23'26
evening max el	13238 Jun 24 00:19	1° \mathfrak{O} 59'51	19°07'29	max. Earth dist.		13239 Apr 30 01:11	20° \mathfrak{B} 28'40	1.45288 AU
retrograde	13238 Jun 30 21:32	5° \mathfrak{O} 48'45				13239 May 06 03:30	0° \mathfrak{II}	
evening set	13238 Jul 04 09:36	4° \mathfrak{O} 37'36		evening rise		13239 May 11 05:56	7° \mathfrak{II} 51'21	
	13238 Jul 08 22:45	30° \mathfrak{R} \mathfrak{E}				13239 May 25 23:53	0° \mathfrak{E}	
inferior conj	13238 Jul 09 20:37	28° \mathfrak{E} 50'09	3°04'15	greatest brilliancy		13239 May 26 04:56	0° \mathfrak{E} 18'20	-0.6m
minimum elong	13238 Jul 09 21:53	28° \mathfrak{E} 46'06	3°03'11	evening max el		13239 Jun 07 04:54	15° \mathfrak{E} 47'40	20°01'58
min. Earth dist.	13238 Jul 11 09:29	26° \mathfrak{E} 51'30	0.66707 AU	asc. node		13239 Jun 07 06:14	15° \mathfrak{E} 50'59	
morning rise	13238 Jul 15 09:32	22° \mathfrak{E} 26'12		retrograde		13239 Jun 14 20:05	20° \mathfrak{E} 08'49	
direct	13238 Jul 21 13:29	19° \mathfrak{E} 46'31		evening set		13239 Jun 18 17:46	18° \mathfrak{E} 40'46	
desc. node	13238 Jul 23 12:48	20° \mathfrak{E} 00'46		inferior conj		13239 Jun 24 00:56	12° \mathfrak{E} 40'04	3°12'42
morning max el	13238 Aug 03 06:23	27° \mathfrak{E} 21'34	26°06'07	minimum elong		13239 Jun 24 01:09	12° \mathfrak{E} 39'20	3°11'41
	13238 Aug 05 17:54	0° \mathfrak{O}		min. Earth dist.		13239 Jun 24 23:26	11° \mathfrak{E} 23'54	0.67913 AU
	13238 Aug 27 08:02	0° \mathfrak{N}		morning rise		13239 Jun 29 08:12	6° \mathfrak{E} 18'07	
morning set	13238 Sep 08 05:54	20° \mathfrak{N} 35'22		direct		13239 Jul 05 01:10	3° \mathfrak{E} 47'10	
max. Earth dist.	13238 Sep 12 00:52	27° \mathfrak{N} 45'57	1.35139 AU	desc. node		13239 Jul 10 10:05	5° \mathfrak{E} 32'56	
	13238 Sep 13 04:25	0° \mathfrak{A}		morning max el		13239 Jul 16 16:40	10° \mathfrak{E} 45'56	24°43'48
asc. node	13238 Sep 16 10:27	6° \mathfrak{A} 28'27				13239 Aug 01 00:16	0° \mathfrak{O}	
						13239 Aug 20 00:33	0° \mathfrak{N}	
superior conj	13238 Sep 17 12:22	8° \mathfrak{A} 40'05	0°10'13	morning set		13239 Aug 21 11:05	2° \mathfrak{N} 30'42	
minimum elong	13238 Sep 17 11:47	8° \mathfrak{A} 37'08	0°10'08	max. Earth dist.		13239 Aug 25 00:57	8° \mathfrak{N} 55'10	1.37294 AU
behind sun begin	13238 Sep 17 07:04	8° \mathfrak{A} 13'04						
behind sun end	13238 Sep 17 16:31	9° \mathfrak{A} 01'15		superior conj		13239 Aug 31 21:34	21° \mathfrak{N} 51'50	-0°22'13
evening rise	13238 Sep 25 04:21	24° \mathfrak{A} 34'20		minimum elong		13239 Aug 31 23:02	21° \mathfrak{N} 59'02	0°22'12
	13238 Sep 27 19:56	0° \mathfrak{M}		asc. node		13239 Sep 03 07:01	26° \mathfrak{N} 34'08	
evening max el	13238 Oct 13 17:01	25° \mathfrak{M} 07'35	20°34'32			13239 Sep 05 00:21	0° \mathfrak{A}	
desc. node	13238 Oct 19 09:01	29° \mathfrak{M} 20'41		evening rise		13239 Sep 09 08:00	8° \mathfrak{A} 40'32	
	13238 Oct 20 22:30	0° \mathfrak{J}				13239 Sep 21 02:02	0° \mathfrak{M}	
retrograde	13238 Oct 24 21:24	0° \mathfrak{J} 40'57		evening max el		13239 Sep 26 04:53	6° \mathfrak{M} 22'20	19°24'55
evening set	13238 Oct 27 03:05	0° \mathfrak{J} 28'37		retrograde		13239 Oct 05 17:23	11° \mathfrak{M} 07'57	
	13238 Oct 29 00:47	30° \mathfrak{R} \mathfrak{M}		desc. node		13239 Oct 06 06:29	11° \mathfrak{M} 07'04	
inferior conj	13238 Nov 05 02:50	26° \mathfrak{M} 33'44	-4°47'07	evening set		13239 Oct 07 14:03	10° \mathfrak{M} 57'49	
minimum elong	13238 Nov 04 16:50	26° \mathfrak{M} 48'10	4°43'45	inferior conj		13239 Oct 16 05:54	6° \mathfrak{M} 50'22	-3°06'07
min. Earth dist.	13238 Nov 06 07:38	25° \mathfrak{M} 52'07	0.54657 AU	minimum elong		13239 Oct 15 21:57	7° \mathfrak{M} 03'16	3°02'41
morning rise	13238 Nov 13 06:19	22° \mathfrak{M} 35'25		min. Earth dist.		13239 Oct 18 17:33	5° \mathfrak{M} 13'54	0.55622 AU
direct	13238 Nov 17 16:03	21° \mathfrak{M} 53'42		morning rise		13239 Oct 24 03:37	2° \mathfrak{M} 22'15	
morning max el	13238 Nov 30 23:18	28° \mathfrak{M} 22'07	23°30'41	direct		13239 Oct 29 09:38	1° \mathfrak{M} 20'08	
	13238 Dec 02 14:39	0° \mathfrak{J}		morning max el		13239 Nov 12 09:19	8° \mathfrak{M} 22'01	25°17'25
asc. node	13238 Dec 13 11:35	14° \mathfrak{J} 49'14				13239 Nov 28 08:44	0° \mathfrak{J}	

asc. node	13239 Nov 30 08:32	3°♊32'17			13240 Nov 19 20:36	0°♊	
morning set	13239 Dec 09 02:58	21°♊03'41		morning set	13240 Nov 22 12:58	5°♊37'48	
	13239 Dec 13 05:08	0°♊					
superior conj	13239 Dec 15 21:34	5°♊56'29	1°38'17	superior conj	13240 Nov 29 08:54	20°♊40'18	1°35'24
minimum elong	13239 Dec 15 21:34	5°♊56'28	1°39'19	minimum elong	13240 Nov 29 07:52	20°♊34'35	1°36'20
max. Earth dist.	13239 Dec 17 11:48	9°♊26'48	1.31979 AU	max. Earth dist.	13240 Nov 29 19:12	21°♊37'46	1.31350 AU
evening rise	13239 Dec 23 02:15	21°♊24'39		evening rise	13240 Dec 03 14:00	0°♊	
	13239 Dec 27 09:16	0°♊			13240 Dec 06 05:35	5°♊42'17	
desc. node	13240 Jan 02 04:26	10°♊40'14		desc. node	13240 Dec 18 23:41	0°♊	
	13240 Jan 14 15:51	0°♊			13240 Dec 19 01:21	0°♊06'59	
evening max el	13240 Jan 24 22:11	11°♊55'51	27°32'44	evening max el	13241 Jan 06 03:55	24°♊10'41	27°08'34
retrograde	13240 Feb 07 18:48	19°♊18'06		retrograde	13241 Jan 14 05:47	0°♊	
evening set	13240 Feb 14 17:00	16°♊58'13			13241 Jan 20 02:52	1°♊25'04	
min. Earth dist.	13240 Feb 18 11:00	13°♊56'19	0.62488 AU		13241 Jan 25 19:07	30°♊	
inferior conj	13240 Feb 21 09:13	11°♊08'52	-1°35'38	evening set	13241 Jan 26 22:20	29°♊23'14	
minimum elong	13240 Feb 21 12:28	11°♊01'06	1°33'53	min. Earth dist.	13241 Jan 30 18:19	26°♊40'32	0.60337 AU
asc. node	13240 Feb 26 06:32	7°♊04'49		inferior conj	13241 Feb 02 22:27	24°♊01'13	-2°56'48
morning rise	13240 Feb 28 10:36	6°♊01'20		minimum elong	13241 Feb 03 04:47	23°♊47'56	2°53'46
direct	13240 Mar 01 17:00	5°♊37'45		morning rise	13241 Feb 10 14:20	19°♊13'24	
morning max el	13240 Mar 08 09:03	9°♊01'06	17°46'52	asc. node	13241 Feb 12 03:57	18°♊57'26	
	13240 Mar 22 07:22	0°♊		direct	13241 Feb 12 16:08	18°♊56'24	
morning set	13240 Mar 24 07:49	3°♊32'46		morning max el	13241 Feb 19 23:55	22°♊35'56	18°00'30
desc. node	13240 Mar 30 06:19	13°♊55'06			13241 Feb 25 18:28	0°♊	
				morning set	13241 Mar 07 13:44	17°♊07'39	
superior conj	13240 Apr 05 01:19	23°♊45'38	-0°44'04		13241 Mar 14 14:26	0°♊	
minimum elong	13240 Apr 04 20:59	23°♊27'31	0°43'44	desc. node	13241 Mar 17 02:49	4°♊29'29	
	13240 Apr 08 19:56	0°♊					
max. Earth dist.	13240 Apr 11 18:33	4°♊46'09	1.44073 AU	superior conj	13241 Mar 17 17:26	5°♊33'57	-0°04'50
evening rise	13240 Apr 19 18:41	17°♊22'45		minimum elong	13241 Mar 17 17:01	5°♊32'10	0°04'45
	13240 Apr 28 02:17	0°♊		behind sun begin	13241 Mar 17 09:24	4°♊58'33	
evening max el	13240 May 20 03:34	29°♊35'46	21°09'49	behind sun end	13241 Mar 18 00:39	6°♊05'43	
	13240 May 20 13:21	0°♊		max. Earth dist.	13241 Mar 25 07:16	18°♊31'15	1.42302 AU
asc. node	13240 May 24 03:22	2°♊58'48		evening rise	13241 Mar 30 20:51	27°♊34'14	
retrograde	13240 May 28 18:53	4°♊37'57			13241 Apr 01 09:37	0°♊	
evening set	13240 Jun 02 02:54	2°♊53'23			13241 Apr 21 19:10	0°♊	
	13240 Jun 04 21:25	30°♊		evening max el	13241 May 02 21:12	13°♊24'24	22°27'01
inferior conj	13240 Jun 07 08:54	26°♊41'00	3°09'13	asc. node	13241 May 11 00:38	18°♊58'10	
minimum elong	13240 Jun 07 08:08	26°♊43'41	3°08'09	retrograde	13241 May 12 16:17	19°♊10'46	
min. Earth dist.	13240 Jun 07 17:45	26°♊10'13	0.68642 AU	evening set	13241 May 17 11:16	17°♊10'50	
morning rise	13240 Jun 12 13:09	20°♊23'32		inferior conj	13241 May 22 18:25	10°♊48'59	2°55'02
direct	13240 Jun 17 17:36	18°♊07'46		minimum elong	13241 May 22 16:51	10°♊54'26	2°53'51
desc. node	13240 Jun 26 07:15	22°♊33'33		min. Earth dist.	13241 May 22 14:19	11°♊03'16	0.68899 AU
morning max el	13240 Jun 28 03:18	24°♊18'59	23°14'29	morning rise	13241 May 27 22:18	4°♊37'39	
	13240 Jul 03 05:10	0°♊		direct	13241 Jun 01 13:51	2°♊40'53	
	13240 Jul 24 10:14	0°♊		morning max el	13241 Jun 10 16:48	8°♊00'11	21°47'00
morning set	13240 Aug 01 18:36	13°♊28'02		desc. node	13241 Jun 13 04:17	10°♊39'09	
max. Earth dist.	13240 Aug 05 23:05	20°♊34'40	1.39630 AU		13241 Jun 27 17:40	0°♊	
	13240 Aug 11 06:52	0°♊		morning set	13241 Jul 13 00:58	23°♊18'43	
					13241 Jul 17 04:25	0°♊	
superior conj	13240 Aug 13 16:21	4°♊22'49	-0°57'00	max. Earth dist.	13241 Jul 19 00:41	3°♊02'04	1.41884 AU
minimum elong	13240 Aug 13 20:31	4°♊42'05	0°56'51				
asc. node	13240 Aug 20 03:36	16°♊35'48		superior conj	13241 Jul 26 16:14	16°♊02'18	-1°30'50
evening rise	13240 Aug 23 04:06	22°♊24'47		minimum elong	13241 Jul 26 22:51	16°♊31'13	1°30'47
	13240 Aug 27 03:43	0°♊			13241 Aug 03 11:24	0°♊	
evening max el	13240 Sep 08 05:19	18°♊24'43	18°37'11	evening rise	13241 Aug 06 12:48	5°♊36'32	
retrograde	13240 Sep 16 07:19	22°♊29'05		asc. node	13241 Aug 07 00:15	6°♊29'07	
evening set	13240 Sep 18 06:04	22°♊15'41			13241 Aug 21 13:19	0°♊	
desc. node	13240 Sep 22 04:00	20°♊37'09		evening max el	13241 Aug 22 14:19	1°♊05'51	18°10'21
inferior conj	13240 Sep 26 05:09	17°♊48'57	-1°16'54	retrograde	13241 Aug 29 15:52	4°♊41'36	
minimum elong	13240 Sep 26 02:02	17°♊54'50	1°15'27	evening set	13241 Aug 31 21:27	4°♊20'35	
min. Earth dist.	13240 Sep 29 09:25	15°♊25'26	0.57327 AU		13241 Sep 07 13:51	30°♊	
morning rise	13240 Oct 03 18:34	12°♊42'54		inferior conj	13241 Sep 08 02:01	29°♊33'16	0°18'06
direct	13240 Oct 09 17:30	11°♊14'41		minimum elong	13241 Sep 08 02:37	29°♊31'56	0°17'44
morning max el	13240 Oct 24 00:28	18°♊43'47	26°45'44	desc. node	13241 Sep 09 01:32	28°♊41'01	
	13240 Nov 02 12:28	0°♊		min. Earth dist.	13241 Sep 11 09:04	26°♊39'58	0.59484 AU
asc. node	13240 Nov 16 05:23	22°♊45'27		morning rise	13241 Sep 15 04:25	23°♊53'39	
				direct	13241 Sep 21 15:15	21°♊57'31	

morning max el	13241 Oct 05 23:05	29° \mathbb{M} 46'13	27°41'22	morning max el	13242 Sep 18 04:13	11° \mathbb{M} 34'41	27°58'21
	13241 Oct 06 04:40	0° \mathbb{L}			13242 Oct 02 17:12	0° \mathbb{L}	
	13241 Oct 27 13:05	0° \mathbb{M}			13242 Oct 19 21:09	0° \mathbb{M}	
asc. node	13241 Nov 03 02:10	12° \mathbb{M} 19'58		asc. node	13242 Oct 20 22:52	2° \mathbb{M} 09'40	
morning set	13241 Nov 06 19:27	19° \mathbb{M} 58'09		morning set	13242 Oct 21 20:24	3° \mathbb{M} 59'44	
	13241 Nov 11 10:40	0° \mathbb{J}		max. Earth dist.	13242 Oct 27 09:15	15° \mathbb{M} 45'43	1.31649 AU
max. Earth dist.	13241 Nov 13 03:33	3° \mathbb{J} 46'52	1.31235 AU				
superior conj	13241 Nov 13 20:27	5° \mathbb{J} 21'06	1°26'43	superior conj	13242 Oct 29 06:23	19° \mathbb{M} 53'32	1°12'21
minimum elong	13241 Nov 13 18:38	5° \mathbb{J} 10'57	1°27'25	minimum elong	13242 Oct 29 04:09	19° \mathbb{M} 41'10	1°12'44
evening rise	13241 Nov 20 13:29	20° \mathbb{J} 09'50			13242 Nov 02 20:09	0° \mathbb{J}	
	13241 Nov 25 07:07	0° \mathbb{Z}		evening rise	13242 Nov 04 23:58	4° \mathbb{J} 42'16	
desc. node	13241 Dec 05 22:25	18° \mathbb{Z} 56'22			13242 Nov 18 05:12	0° \mathbb{Z}	
	13241 Dec 13 22:12	0° \mathbb{A}		desc. node	13242 Nov 22 19:34	6° \mathbb{Z} 54'04	
evening max el	13241 Dec 19 02:16	5° \mathbb{A} 34'32	26°10'11	evening max el	13242 Nov 30 16:33	16° \mathbb{Z} 08'43	24°43'13
retrograde	13242 Jan 02 00:59	12° \mathbb{A} 39'06		retrograde	13242 Dec 14 10:42	23° \mathbb{Z} 01'01	
evening set	13242 Jan 08 08:58	11° \mathbb{A} 03'26		evening set	13242 Dec 19 20:41	21° \mathbb{Z} 56'03	
min. Earth dist.	13242 Jan 12 15:35	8° \mathbb{A} 27'03	0.58190 AU	min. Earth dist.	13242 Dec 25 04:23	19° \mathbb{Z} 09'17	0.56317 AU
inferior conj	13242 Jan 15 17:33	6° \mathbb{A} 12'35	-4°18'36	inferior conj	13242 Dec 27 16:00	17° \mathbb{Z} 34'46	-5°25'58
minimum elong	13242 Jan 16 02:09	5° \mathbb{A} 56'54	4°15'11	minimum elong	13242 Dec 27 23:22	17° \mathbb{Z} 23'05	5°23'42
morning rise	13242 Jan 23 22:14	1° \mathbb{A} 46'24		morning rise	13243 Jan 05 04:08	13° \mathbb{Z} 29'45	
direct	13242 Jan 25 23:43	1° \mathbb{A} 32'21		direct	13243 Jan 07 12:30	13° \mathbb{Z} 14'35	
asc. node	13242 Jan 30 01:19	2° \mathbb{A} 30'15		asc. node	13243 Jan 16 22:37	17° \mathbb{Z} 38'51	
morning max el	13242 Feb 03 08:14	5° \mathbb{A} 38'17	18°34'17	morning max el	13243 Jan 17 05:48	17° \mathbb{Z} 55'57	19°30'12
	13242 Feb 18 16:19	0° \mathbb{H}			13243 Jan 26 02:54	0° \mathbb{A}	
morning set	13242 Feb 19 08:06	1° \mathbb{H} 16'06		morning set	13243 Feb 03 10:47	15° \mathbb{A} 45'26	
					13243 Feb 10 13:22	0° \mathbb{H}	
superior conj	13242 Feb 28 06:26	18° \mathbb{H} 19'45	0°29'28	superior conj	13243 Feb 11 11:36	1° \mathbb{H} 49'16	0°56'57
minimum elong	13242 Feb 28 08:23	18° \mathbb{H} 28'49	0°29'28	minimum elong	13243 Feb 11 14:22	2° \mathbb{H} 02'49	0°57'07
desc. node	13242 Mar 03 23:21	25° \mathbb{H} 06'22		max. Earth dist.	13243 Feb 17 21:54	14° \mathbb{H} 01'19	1.37924 AU
	13242 Mar 06 17:32	0° \mathbb{Y}		desc. node	13243 Feb 18 19:53	15° \mathbb{H} 41'37	
max. Earth dist.	13242 Mar 07 15:28	1° \mathbb{Y} 35'36	1.40174 AU	evening rise	13243 Feb 21 15:09	20° \mathbb{H} 42'00	
evening rise	13242 Mar 11 19:34	8° \mathbb{Y} 41'28			13243 Feb 27 02:01	0° \mathbb{Y}	
	13242 Mar 25 09:15	0° \mathbb{B}			13243 Mar 19 09:46	0° \mathbb{B}	
evening max el	13242 Apr 15 11:51	27° \mathbb{B} 15'46	23°47'59	evening max el	13243 Mar 29 01:30	11° \mathbb{B} 08'42	25°06'06
	13242 Apr 18 11:45	0° \mathbb{I}		retrograde	13243 Apr 10 01:09	18° \mathbb{B} 06'12	
retrograde	13242 Apr 26 10:46	3° \mathbb{I} 42'18		asc. node	13243 Apr 14 19:20	16° \mathbb{B} 28'47	
asc. node	13242 Apr 27 21:57	3° \mathbb{I} 32'34		evening set	13243 Apr 15 19:24	15° \mathbb{B} 42'05	
evening set	13242 May 01 17:19	1° \mathbb{I} 28'56		min. Earth dist.	13243 Apr 20 05:23	10° \mathbb{B} 46'42	0.68045 AU
	13242 May 03 05:43	30° \mathbb{R} \mathbb{B}		inferior conj	13243 Apr 21 10:26	9° \mathbb{B} 11'34	1°56'07
min. Earth dist.	13242 May 06 10:57	25° \mathbb{B} 57'31	0.68696 AU	minimum elong	13243 Apr 21 08:18	9° \mathbb{B} 18'33	1°54'55
inferior conj	13242 May 07 03:35	25° \mathbb{B} 00'43	2°30'40	morning rise	13243 Apr 26 21:31	3° \mathbb{B} 16'32	
minimum elong	13242 May 07 01:31	25° \mathbb{B} 07'45	2°29'24	direct	13243 Apr 30 12:34	2° \mathbb{B} 00'56	
morning rise	13242 May 12 09:43	18° \mathbb{B} 56'50		morning max el	13243 May 07 15:05	5° \mathbb{B} 55'13	19°23'38
direct	13242 May 16 12:41	17° \mathbb{B} 20'46		desc. node	13243 May 17 22:01	18° \mathbb{B} 59'58	
morning max el	13242 May 24 12:10	21° \mathbb{B} 52'11	20°28'32	greatest brilliancy	13243 May 20 08:02	22° \mathbb{B} 31'48	-0.7m
desc. node	13242 May 31 01:13	29° \mathbb{B} 32'23			13243 May 25 07:39	0° \mathbb{I}	
	13242 May 31 09:38	0° \mathbb{I}		morning set	13243 Jun 01 10:49	10° \mathbb{I} 53'58	
	13242 Jun 20 22:52	0° \mathbb{O}			13243 Jun 13 17:41	0° \mathbb{O}	
morning set	13242 Jun 22 09:16	2° \mathbb{O} 12'40		max. Earth dist.	13243 Jun 13 23:49	0° \mathbb{O} 24'07	1.45137 AU
max. Earth dist.	13242 Jul 01 08:57	16° \mathbb{O} 21'45	1.43793 AU				
superior conj	13242 Jul 07 17:20	26° \mathbb{O} 42'52	-1°58'25	superior conj	13243 Jun 17 18:58	6° \mathbb{O} 24'53	-2°12'48
minimum elong	13242 Jul 08 00:04	27° \mathbb{O} 10'48	1°58'52	minimum elong	13243 Jun 17 21:03	6° \mathbb{O} 33'10	2°13'48
	13242 Jul 09 16:41	0° \mathbb{Q}		evening rise	13243 Jul 02 00:54	29° \mathbb{O} 36'17	
evening rise	13242 Jul 20 05:27	18° \mathbb{Q} 04'23			13243 Jul 02 06:37	0° \mathbb{Q}	
asc. node	13242 Jul 24 20:59	26° \mathbb{Q} 09'55		asc. node	13243 Jul 11 17:47	15° \mathbb{Q} 32'31	
	13242 Jul 27 02:55	0° \mathbb{P}		evening max el	13243 Jul 20 18:04	27° \mathbb{Q} 44'45	18°14'16
evening max el	13242 Aug 06 03:48	14° \mathbb{P} 15'46	18°03'02		13243 Jul 23 13:09	0° \mathbb{P}	
retrograde	13242 Aug 12 15:45	17° \mathbb{P} 37'25		retrograde	13243 Jul 27 02:36	1° \mathbb{P} 06'39	
evening set	13242 Aug 15 05:31	17° \mathbb{P} 05'08		evening set	13243 Jul 30 00:47	0° \mathbb{P} 20'27	
inferior conj	13242 Aug 21 17:46	11° \mathbb{P} 58'24	1°30'44		13243 Jul 30 15:10	30° \mathbb{R} \mathbb{Q}	
minimum elong	13242 Aug 21 20:03	11° \mathbb{P} 52'36	1°29'35	inferior conj	13243 Aug 05 00:19	24° \mathbb{Q} 56'20	2°21'24
min. Earth dist.	13242 Aug 24 17:43	8° \mathbb{P} 57'25	0.61779 AU	minimum elong	13243 Aug 05 02:47	24° \mathbb{Q} 49'20	2°20'08
desc. node	13242 Aug 26 23:03	6° \mathbb{P} 57'41		min. Earth dist.	13243 Aug 07 11:51	22° \mathbb{Q} 08'12	0.63941 AU
morning rise	13242 Aug 28 08:05	5° \mathbb{P} 55'03		morning rise	13243 Aug 11 03:13	18° \mathbb{Q} 39'03	
direct	13242 Sep 04 00:14	3° \mathbb{P} 35'22		desc. node	13243 Aug 13 20:30	16° \mathbb{Q} 57'06	
				direct	13243 Aug 17 18:16	16° \mathbb{Q} 04'09	

morning max el	13243 Aug 31 13:41	24°Ω04'27	27°38'07	morning rise	13244 Jul 24 11:07	1°Ω55'51	
	13243 Sep 05 21:39	0°൬			13244 Jul 27 10:16	30°Ṛᄇ	
	13243 Sep 26 02:28	0°ᄇ		direct	13244 Jul 30 20:03	29°ᄇ15'21	
morning set	13243 Oct 05 13:28	17°ᄇ37'04		desc. node	13244 Jul 30 17:55	29°ᄇ15'22	
asc. node	13243 Oct 07 19:31	22°ᄇ09'32			13244 Aug 03 11:39	0°Ω	
max. Earth dist.	13243 Oct 10 08:38	27°ᄇ26'40	1.32596 AU	morning max el	13244 Aug 13 00:51	7°Ω04'18	26°46'37
	13243 Oct 11 13:38	0°ᄇ			13244 Aug 30 18:43	0°൬	
					13244 Sep 17 10:47	0°ᄇ	
superior conj	13243 Oct 13 12:42	4°ᄇ12'17	0°52'24	morning set	13244 Sep 17 19:37	0°ᄇ41'56	
minimum elong	13243 Oct 13 10:33	4°ᄇ00'41	0°52'30	max. Earth dist.	13244 Sep 21 22:34	8°ᄇ44'54	1.34068 AU
evening rise	13243 Oct 20 11:10	19°ᄇ14'53		asc. node	13244 Sep 23 16:05	12°ᄇ14'24	
	13243 Oct 25 15:54	0°ᄇ					
desc. node	13243 Nov 09 16:49	23°ᄇ41'09		superior conj	13244 Sep 26 13:01	18°ᄇ10'08	0°27'03
evening max el	13243 Nov 12 02:35	26°ᄇ12'40	23°01'53	minimum elong	13244 Sep 26 11:39	18°ᄇ02'55	0°26'59
	13243 Nov 16 18:54	0°ᄇ			13244 Oct 02 03:16	0°ᄇ	
retrograde	13243 Nov 25 07:23	2°ᄇ46'10		evening rise	13244 Oct 03 21:08	3°ᄇ41'18	
evening set	13243 Nov 29 09:44	2°ᄇ09'40			13244 Oct 18 09:10	0°ᄇ	
	13243 Dec 04 11:50	30°Ṛᄇ		evening max el	13244 Oct 23 17:23	6°ᄇ21'25	21°23'57
min. Earth dist.	13243 Dec 06 11:46	28°ᄇ53'41	0.55007 AU	desc. node	13244 Oct 26 14:10	8°ᄇ51'44	
inferior conj	13243 Dec 07 19:13	28°ᄇ08'36	-5°55'58	retrograde	13244 Nov 04 19:20	12°ᄇ21'36	
minimum elong	13243 Dec 07 19:38	28°ᄇ08'00	5°54'57	evening set	13244 Nov 07 13:35	12°ᄇ04'02	
morning rise	13243 Dec 16 07:03	24°ᄇ19'11		inferior conj	13244 Nov 16 11:18	8°ᄇ10'12	-5°28'52
direct	13243 Dec 19 06:56	23°ᄇ58'08		minimum elong	13244 Nov 16 03:23	8°ᄇ21'18	5°26'38
morning max el	13243 Dec 30 13:27	29°ᄇ20'47	20°49'13	min. Earth dist.	13244 Nov 16 17:48	8°ᄇ01'04	0.54510 AU
	13243 Dec 31 05:28	0°ᄇ		morning rise	13244 Nov 24 17:57	4°ᄇ21'04	
asc. node	13244 Jan 03 19:49	4°ᄇ08'25		direct	13244 Nov 28 14:44	3°ᄇ48'50	
morning set	13244 Jan 18 18:46	0°ᄇ26'53		morning max el	13244 Dec 11 07:34	9°ᄇ54'27	22°28'22
	13244 Jan 18 13:34	0°ᄇ		asc. node	13244 Dec 20 16:55	21°ᄇ41'05	
					13244 Dec 25 14:37	0°ᄇ	
superior conj	13244 Jan 26 04:40	15°ᄇ50'51	1°17'14	morning set	13245 Jan 02 05:38	15°ᄇ12'41	
minimum elong	13244 Jan 26 07:12	16°ᄇ03'49	1°17'42				
max. Earth dist.	13244 Jan 31 06:44	26°ᄇ01'02	1.35791 AU	superior conj	13245 Jan 09 06:05	0°ᄇ13'44	1°30'31
	13244 Feb 02 08:29	0°ᄇ		minimum elong	13245 Jan 09 07:48	0°ᄇ22'50	1°31'19
evening rise	13244 Feb 04 04:50	3°ᄇ27'59			13245 Jan 09 03:30	0°ᄇ	
desc. node	13244 Feb 05 16:30	6°ᄇ11'41		max. Earth dist.	13245 Jan 12 21:39	7°ᄇ51'57	1.33963 AU
	13244 Feb 20 01:02	0°ᄇ		evening rise	13245 Jan 17 09:02	16°ᄇ49'31	
evening max el	13244 Mar 10 15:07	24°ᄇ58'30	26°14'09	desc. node	13245 Jan 22 13:10	26°ᄇ31'41	
	13244 Mar 16 18:55	0°ᄇ			13245 Jan 24 11:58	0°ᄇ	
retrograde	13244 Mar 23 10:31	2°ᄇ16'02			13245 Feb 13 10:53	0°ᄇ	
	13244 Mar 29 08:25	30°Ṛᄇ		evening max el	13245 Feb 21 04:37	8°ᄇ36'39	27°04'57
evening set	13244 Mar 29 15:52	29°ᄇ45'04		retrograde	13245 Mar 06 14:12	16°ᄇ03'26	
asc. node	13244 Mar 31 16:44	27°ᄇ49'47		evening set	13245 Mar 13 04:47	13°ᄇ31'05	
min. Earth dist.	13244 Apr 02 19:29	25°ᄇ24'50	0.66963 AU	min. Earth dist.	13245 Mar 17 03:12	9°ᄇ44'12	0.65475 AU
inferior conj	13244 Apr 04 12:58	23°ᄇ17'18	1°11'03	asc. node	13245 Mar 18 14:10	8°ᄇ05'40	
minimum elong	13244 Apr 04 11:20	23°ᄇ22'21	1°10'10	inferior conj	13245 Mar 19 08:54	7°ᄇ12'17	0°14'59
morning rise	13244 Apr 10 07:38	17°ᄇ32'43		minimum elong	13245 Mar 19 08:29	7°ᄇ13'29	0°14'47
direct	13244 Apr 13 11:43	16°ᄇ35'51		transit middle	13245 Mar 19 08:29	7°ᄇ13'29	0°14'47
morning max el	13244 Apr 20 01:10	20°ᄇ06'08	18°34'39	transit begin	13245 Mar 19 07:20	7°ᄇ16'45	
	13244 Apr 27 21:34	0°ᄇ		transit end	13245 Mar 19 09:38	7°ᄇ10'13	
desc. node	13244 May 03 18:45	8°ᄇ52'49		morning rise	13245 Mar 25 13:43	1°ᄇ40'07	
morning set	13244 May 11 03:29	20°ᄇ24'03		direct	13245 Mar 28 08:02	0°ᄇ59'04	
	13244 May 17 06:23	0°ᄇ		morning max el	13245 Apr 03 16:25	4°ᄇ18'08	18°02'27
				desc. node	13245 Apr 20 15:23	29°ᄇ03'53	
superior conj	13244 May 27 04:42	15°ᄇ30'49	-2°08'03		13245 Apr 21 05:08	0°ᄇ	
minimum elong	13244 May 26 23:07	15°ᄇ09'02	2°08'46	morning set	13245 Apr 21 23:40	1°ᄇ15'35	
max. Earth dist.	13244 May 26 18:47	14°ᄇ52'06	1.45783 AU				
	13244 Jun 05 10:26	0°ᄇ		superior conj	13245 May 06 14:52	24°ᄇ45'26	-1°43'56
evening rise	13244 Jun 11 19:56	10°ᄇ07'06		minimum elong	13245 May 06 05:41	24°ᄇ09'15	1°43'52
greatest brilliancy	13244 Jun 19 21:12	22°ᄇ52'33	-0.8m	max. Earth dist.	13245 May 09 14:49	29°ᄇ27'54	1.45676 AU
	13244 Jun 24 12:13	0°Ω			13245 May 09 23:01	0°ᄇ	
asc. node	13244 Jun 27 14:38	4°Ω30'15		evening rise	13245 May 22 17:18	19°ᄇ47'56	
evening max el	13244 Jul 03 06:08	11°Ω24'54	18°43'10		13245 May 29 08:39	0°ᄇ	
retrograde	13244 Jul 09 20:24	15°Ω00'35		greatest brilliancy	13245 Jun 04 19:42	9°ᄇ45'06	-0.7m
evening set	13244 Jul 13 03:13	13°Ω58'49		asc. node	13245 Jun 14 11:35	22°ᄇ54'58	
inferior conj	13244 Jul 18 17:48	8°Ω19'13	2°53'13	evening max el	13245 Jun 16 13:49	25°ᄇ11'10	19°28'48
minimum elong	13244 Jul 18 19:37	8°Ω13'36	2°52'05	retrograde	13245 Jun 23 17:59	29°ᄇ12'58	
min. Earth dist.	13244 Jul 20 14:59	5°Ω59'28	0.65806 AU	evening set	13245 Jun 27 09:58	27°ᄇ54'44	

inferior conj	13245 Jul 02 18:59	22°☿01'20	3°09'25	inferior conj	13246 Jun 17 01:09	5°☿56'47	3°12'36
minimum elong	13245 Jul 02 19:48	21°☿58'38	3°08'23	minimum elong	13246 Jun 17 00:56	5°☿57'32	3°11'33
min. Earth dist.	13245 Jul 04 01:40	20°☿20'02	0.67270 AU	min. Earth dist.	13246 Jun 17 17:50	4°☿59'26	0.68282 AU
morning rise	13245 Jul 08 05:09	15°☿37'33			13246 Jun 21 20:36	30°☿II	
direct	13245 Jul 14 04:33	13°☿00'40		morning rise	13246 Jun 22 06:48	29°II36'17	
desc. node	13245 Jul 17 15:14	13°☿44'20		direct	13246 Jun 27 18:35	27°II10'54	
morning max el	13245 Jul 26 11:42	20°☿22'52	25°32'36	desc. node	13246 Jul 04 12:28	29°II57'14	
	13245 Aug 03 18:02	0°♊			13246 Jul 04 13:57	0°☿	
	13245 Aug 23 22:21	0°♊		morning max el	13246 Jul 08 21:48	3°☿50'59	24°05'59
morning set	13245 Aug 31 11:11	13°♊06'04			13246 Jul 28 23:00	0°♊	
max. Earth dist.	13245 Sep 04 02:30	19°♊49'39	1.36011 AU	morning set	13246 Aug 13 07:40	24°♊37'56	
	13245 Sep 09 08:27	0°♊			13246 Aug 16 09:31	0°♊	
				max. Earth dist.	13246 Aug 17 00:21	1°♊05'51	1.38281 AU
superior conj	13245 Sep 10 04:41	1°♊40'58	-0°03'09				
minimum elong	13245 Sep 10 04:52	1°♊41'55	0°03'11	superior conj	13246 Aug 24 08:14	14°♊36'25	-0°36'52
behind sun begin	13245 Sep 09 22:42	1°♊11'03		minimum elong	13246 Aug 24 10:49	14°♊48'39	0°36'46
behind sun end	13245 Sep 10 11:03	2°♊12'51		asc. node	13246 Aug 28 09:15	22°♊25'18	
asc. node	13245 Sep 10 12:39	2°♊20'57			13246 Sep 01 05:30	0°♊	
evening rise	13245 Sep 18 03:47	17°♊56'33		evening rise	13246 Sep 02 04:35	1°♊53'56	
	13245 Sep 24 06:11	0°♊		evening max el	13246 Sep 18 14:41	28°♊44'04	19°02'00
evening max el	13245 Oct 05 20:59	17°♊08'17	20°02'20		13246 Sep 19 23:31	0°♊	
desc. node	13245 Oct 13 11:34	21°♊58'31		retrograde	13246 Sep 27 11:18	3°♊10'19	
retrograde	13245 Oct 16 08:40	22°♊21'32		evening set	13246 Sep 29 07:59	2°♊59'21	
evening set	13245 Oct 18 08:26	22°♊11'07		desc. node	13246 Sep 30 09:02	2°♊44'05	
inferior conj	13245 Oct 27 06:25	18°♊12'17	-4°07'22		13246 Oct 05 20:39	30°☿♊	
minimum elong	13245 Oct 26 20:35	18°♊27'07	4°03'36	inferior conj	13246 Oct 07 17:22	28°♊44'34	-2°19'04
min. Earth dist.	13245 Oct 29 01:54	17°♊06'45	0.54956 AU	minimum elong	13246 Oct 07 11:25	28°♊54'48	2°16'21
morning rise	13245 Nov 04 07:32	14°♊02'40		min. Earth dist.	13246 Oct 10 14:10	26°♊46'17	0.56274 AU
direct	13245 Nov 09 02:01	13°♊13'04		morning rise	13246 Oct 15 11:55	24°♊00'34	
morning max el	13245 Nov 22 18:03	19°♊57'24	24°17'09	direct	13246 Oct 21 01:56	22°♊47'28	
	13245 Dec 01 05:27	0°♊		morning max el	13246 Nov 04 05:23	0°♊02'08	25°58'16
asc. node	13245 Dec 07 13:56	10°♊02'00			13246 Nov 04 04:29	0°♊	
morning set	13245 Dec 17 17:32	29°♊57'38		asc. node	13246 Nov 24 10:52	28°♊58'56	
	13245 Dec 17 17:58	0°♊			13246 Nov 24 23:51	0°♊	
				morning set	13246 Dec 02 04:42	14°♊36'55	
superior conj	13245 Dec 24 13:06	14°♊50'01	1°37'14				
minimum elong	13245 Dec 24 13:45	14°♊53'30	1°38'14	superior conj	13246 Dec 08 23:26	29°♊32'50	1°37'47
max. Earth dist.	13245 Dec 26 20:17	19°♊49'15	1.32563 AU	minimum elong	13246 Dec 08 22:59	29°♊30'18	1°38'48
	13245 Dec 31 16:48	0°♊			13246 Dec 09 04:20	0°♊	
evening rise	13246 Jan 01 00:26	0°♊38'44		max. Earth dist.	13246 Dec 10 01:21	1°♊56'33	1.31645 AU
desc. node	13246 Jan 09 09:55	16°♊36'36		evening rise	13246 Dec 16 00:09	14°♊48'09	
	13246 Jan 17 11:49	0°♊			13246 Dec 23 17:24	0°♊	
evening max el	13246 Feb 03 16:58	21°♊52'49	27°31'16	desc. node	13246 Dec 27 06:47	6°♊19'56	
retrograde	13246 Feb 17 11:14	29°♊19'08			13247 Jan 12 17:14	0°♊	
evening set	13246 Feb 24 07:48	26°♊52'32		evening max el	13247 Jan 17 02:09	4°♊34'53	27°26'53
min. Earth dist.	13246 Feb 28 02:42	23°♊35'31	0.63649 AU	retrograde	13247 Jan 31 00:24	11°♊54'02	
inferior conj	13246 Mar 02 19:30	20°♊49'57	-0°52'15	evening set	13247 Feb 06 22:06	9°♊41'10	
minimum elong	13246 Mar 02 21:10	20°♊45'41	0°51'18	min. Earth dist.	13247 Feb 10 16:22	6°♊48'21	0.61580 AU
asc. node	13246 Mar 05 11:38	18°♊13'59		inferior conj	13247 Feb 13 17:39	4°♊02'32	-2°09'20
morning rise	13246 Mar 09 12:51	15°♊32'31		minimum elong	13247 Feb 13 22:11	3°♊52'15	2°07'00
direct	13246 Mar 11 22:56	15°♊03'43			13247 Feb 18 21:38	30°☿♊	
morning max el	13246 Mar 18 10:03	18°♊22'48	17°47'25	asc. node	13247 Feb 20 09:05	29°♊16'53	
	13246 Mar 26 23:24	0°♊		morning rise	13247 Feb 21 01:10	29°♊02'44	
morning set	13246 Apr 03 22:55	13°♊25'00		direct	13247 Feb 23 05:10	28°♊42'25	
desc. node	13246 Apr 07 11:57	19°♊27'24			13247 Feb 27 09:16	0°♊	
	13246 Apr 13 18:59	0°♊		morning max el	13247 Mar 02 02:55	2°♊11'43	17°50'16
				morning set	13247 Mar 17 19:30	26°♊35'04	
superior conj	13246 Apr 16 17:27	4°♊48'54	-1°07'18		13247 Mar 19 17:12	0°♊	
minimum elong	13246 Apr 16 10:37	4°♊21'03	1°06'53	desc. node	13247 Mar 25 08:29	9°♊59'24	
max. Earth dist.	13246 Apr 22 09:25	13°♊55'09	1.44845 AU				
evening rise	13246 May 02 04:31	29°♊10'48		superior conj	13247 Mar 28 19:55	15°♊59'41	-0°27'02
	13246 May 02 17:22	0°♊		minimum elong	13247 Mar 28 17:24	15°♊48'55	0°26'49
	13246 May 23 04:31	0°☿		max. Earth dist.	13247 Apr 05 01:00	28°♊01'00	1.43383 AU
evening max el	13246 May 30 15:52	8°☿59'25	20°29'27		13247 Apr 06 06:22	0°♊	
asc. node	13246 Jun 01 08:41	10°☿34'59		evening rise	13247 Apr 11 21:45	8°♊57'21	
retrograde	13246 Jun 07 16:52	13°☿37'27			13247 Apr 25 21:28	0°♊	
evening set	13246 Jun 11 18:46	12°☿02'32		evening max el	13247 May 13 12:23	22°♊48'36	21°41'48

asc. node	13247 May 19 05:52	27° Π 16'11		retrograde	13248 May 05 11:23	12° Π 42'22	
retrograde	13247 May 22 15:09	28° Π 09'02		asc. node	13248 May 05 03:08	12° Π 41'49	
evening set	13247 May 27 03:47	26° Π 17'51		evening set	13248 May 10 11:22	10° Π 36'15	
inferior conj	13247 Jun 01 10:03	20° Π 01'25	3°04'27	inferior conj	13248 May 15 19:38	4° Π 11'24	2°45'54
minimum elong	13247 Jun 01 08:54	20° Π 05'23	3°03'19	minimum elong	13248 May 15 17:49	4° Π 17'41	2°44'41
min. Earth dist.	13247 Jun 01 13:23	19° Π 49'46	0.68820 AU	min. Earth dist.	13248 May 15 10:08	4° Π 44'20	0.68879 AU
morning rise	13247 Jun 06 13:50	13° Π 46'27			13248 May 19 01:00	30° \mathbb{R} 8	
direct	13247 Jun 11 12:55	11° Π 38'12		morning rise	13248 May 21 00:11	28° \mathbb{S} 03'21	
desc. node	13247 Jun 21 09:36	17° Π 28'04		direct	13248 May 25 10:22	26° \mathbb{S} 15'23	
morning max el	13247 Jun 21 09:05	17° Π 26'47	22°36'25		13248 Jun 01 18:14	0° Π	
	13247 Jul 01 18:40	0° \mathbb{S}		morning max el	13248 Jun 03 00:50	1° Π 12'43	21°12'09
	13247 Jul 22 00:37	0° Ω		desc. node	13248 Jun 07 06:36	5° Π 55'53	
morning set	13247 Jul 25 04:36	5° Ω 06'48			13248 Jun 24 13:20	0° \mathbb{S}	
max. Earth dist.	13247 Jul 29 23:26	13° Ω 04'32	1.40627 AU	morning set	13248 Jul 04 00:38	14° \mathbb{S} 30'52	
				max. Earth dist.	13248 Jul 11 04:23	25° \mathbb{S} 57'40	1.42759 AU
					13248 Jul 13 15:21	0° Ω	
superior conj	13247 Aug 06 19:33	26° Ω 46'57	-1°11'45				
minimum elong	13247 Aug 07 00:53	27° Ω 10'59	1°11'35	superior conj	13248 Jul 18 10:08	8° Ω 02'24	-1°43'41
	13247 Aug 08 14:06	0° \mathbb{P}		minimum elong	13248 Jul 18 17:15	8° Ω 32'49	1°43'48
asc. node	13247 Aug 15 05:52	12° \mathbb{P} 24'00		evening rise	13248 Jul 29 22:50	28° Ω 20'46	
evening rise	13247 Aug 16 20:19	15° \mathbb{P} 25'29			13248 Jul 30 20:54	0° \mathbb{P}	
	13247 Aug 24 20:00	0° \mathbb{S}		asc. node	13248 Aug 01 02:33	2° \mathbb{P} 13'01	
evening max el	13247 Sep 01 19:18	11° \mathbb{S} 04'09	18°23'15	evening max el	13248 Aug 15 06:39	23° \mathbb{P} 58'59	18°04'51
retrograde	13247 Sep 09 09:17	14° \mathbb{S} 54'19		retrograde	13248 Aug 22 01:10	27° \mathbb{P} 27'14	
evening set	13247 Sep 11 10:49	14° \mathbb{S} 38'01		evening set	13248 Aug 24 10:08	27° \mathbb{P} 01'48	
desc. node	13247 Sep 17 06:34	11° \mathbb{S} 27'37		inferior conj	13248 Aug 31 07:19	22° \mathbb{P} 05'38	0°51'43
inferior conj	13247 Sep 19 01:53	10° \mathbb{S} 02'15	-0°34'02	minimum elong	13248 Aug 31 08:52	22° \mathbb{P} 02'00	0°50'55
minimum elong	13247 Sep 19 00:36	10° \mathbb{S} 04'51	0°33'27	desc. node	13248 Sep 03 04:05	19° \mathbb{P} 24'36	
min. Earth dist.	13247 Sep 22 08:49	7° \mathbb{S} 23'45	0.58216 AU	min. Earth dist.	13248 Sep 03 12:06	19° \mathbb{P} 06'34	0.60459 AU
morning rise	13247 Sep 26 10:55	4° \mathbb{S} 41'17		morning rise	13248 Sep 07 04:35	16° \mathbb{P} 14'31	
direct	13247 Oct 02 15:48	3° \mathbb{S} 01'08		direct	13248 Sep 13 18:18	14° \mathbb{P} 07'57	
morning max el	13247 Oct 16 23:24	10° \mathbb{S} 38'36	27°14'03	morning max el	13248 Sep 28 01:15	22° \mathbb{P} 01'58	27°53'30
	13247 Oct 31 22:41	0° \mathbb{M}			13248 Oct 05 01:33	0° \mathbb{S}	
asc. node	13247 Nov 11 07:42	18° \mathbb{M} 22'05			13248 Oct 24 00:58	0° \mathbb{M}	
morning set	13247 Nov 16 13:23	29° \mathbb{M} 05'23		asc. node	13248 Oct 28 04:27	8° \mathbb{M} 04'17	
	13247 Nov 16 23:38	0° \mathbb{X}		morning set	13248 Oct 30 17:47	13° \mathbb{M} 18'50	
				max. Earth dist.	13248 Nov 05 17:37	26° \mathbb{M} 15'31	1.31348 AU
superior conj	13247 Nov 23 11:02	14° \mathbb{X} 15'37	1°32'25				
minimum elong	13247 Nov 23 09:38	14° \mathbb{X} 07'48	1°33'16	superior conj	13248 Nov 06 22:07	28° \mathbb{M} 53'38	1°21'19
max. Earth dist.	13247 Nov 23 09:43	14° \mathbb{X} 08'13	1.31237 AU	minimum elong	13248 Nov 06 20:04	28° \mathbb{M} 42'13	1°21'53
evening rise	13247 Nov 30 05:39	29° \mathbb{X} 10'37			13248 Nov 07 10:03	0° \mathbb{X}	
	13247 Nov 30 14:56	0° \mathbb{Z}		evening rise	13248 Nov 13 14:53	13° \mathbb{X} 41'05	
desc. node	13247 Dec 14 03:45	25° \mathbb{Z} 32'14			13248 Nov 21 16:28	0° \mathbb{Z}	
	13247 Dec 16 23:45	0° \approx		desc. node	13248 Nov 30 00:50	14° \mathbb{Z} 01'50	
evening max el	13247 Dec 30 05:12	16° \approx 29'14	26°47'55	evening max el	13248 Dec 10 23:49	27° \mathbb{Z} 30'06	25°35'56
retrograde	13248 Jan 13 04:05	23° \approx 38'44			13248 Dec 13 20:58	0° \approx	
evening set	13248 Jan 19 19:57	21° \approx 47'24		retrograde	13248 Dec 24 20:56	4° \approx 29'56	
min. Earth dist.	13248 Jan 23 19:13	19° \approx 09'17	0.59408 AU	evening set	13248 Dec 30 21:11	3° \approx 06'43	
inferior conj	13248 Jan 26 23:35	16° \approx 38'47	-3°32'06	min. Earth dist.	13249 Jan 04 12:11	0° \approx 28'28	0.57345 AU
minimum elong	13248 Jan 27 07:06	16° \approx 23'55	3°28'43		13249 Jan 05 05:10	30° \mathbb{R} 3	
morning rise	13248 Feb 03 21:16	11° \approx 59'47		inferior conj	13249 Jan 07 09:56	28° \mathbb{Z} 29'16	-4°50'11
direct	13248 Feb 05 22:26	11° \approx 44'22		minimum elong	13249 Jan 07 18:39	28° \mathbb{Z} 14'22	4°47'03
asc. node	13248 Feb 07 06:30	11° \approx 51'11		morning rise	13249 Jan 15 18:43	24° \mathbb{Z} 12'43	
morning max el	13248 Feb 13 15:26	15° \approx 33'47	18°12'19	direct	13249 Jan 17 22:13	23° \mathbb{Z} 58'41	
	13248 Feb 23 15:26	0° \mathbb{X}		asc. node	13249 Jan 24 03:49	26° \mathbb{Z} 05'50	
morning set	13248 Feb 29 07:20	10° \mathbb{X} 26'20		morning max el	13249 Jan 26 19:37	28° \mathbb{Z} 18'12	18°55'22
					13249 Jan 28 10:12	0° \approx	
superior conj	13248 Mar 09 21:27	28° \mathbb{X} 14'04	0°10'29	morning set	13249 Feb 12 05:36	24° \approx 44'33	
minimum elong	13248 Mar 09 22:16	28° \mathbb{X} 17'42	0°10'29		13249 Feb 14 21:42	0° \mathbb{X}	
behind sun begin	13248 Mar 09 16:32	27° \mathbb{X} 51'53					
behind sun end	13248 Mar 10 03:59	28° \mathbb{X} 43'27		superior conj	13249 Feb 20 17:53	11° \mathbb{X} 20'02	0°42'00
	13248 Mar 10 21:04	0° \mathbb{Y}		minimum elong	13249 Feb 20 20:20	11° \mathbb{X} 31'43	0°42'02
desc. node	13248 Mar 11 05:00	0° \mathbb{Y} 35'25		desc. node	13249 Feb 26 01:32	21° \mathbb{X} 12'01	
max. Earth dist.	13248 Mar 17 12:17	11° \mathbb{Y} 31'57	1.41434 AU	max. Earth dist.	13249 Feb 27 19:18	24° \mathbb{X} 19'00	1.39214 AU
evening rise	13248 Mar 22 08:17	19° \mathbb{Y} 32'08			13249 Mar 03 01:28	0° \mathbb{Y}	
	13248 Mar 28 23:04	0° \mathbb{S}		evening rise	13249 Mar 03 15:59	1° \mathbb{Y} 02'04	
	13248 Apr 19 06:41	0° Π			13249 Mar 22 06:23	0° \mathbb{S}	
evening max el	13248 Apr 25 04:34	6° Π 38'45	23°01'17				

evening max el	13249 Apr 07 18:22	20° ♁ 30'19	24°21'54	evening max el	13250 Mar 21 07:48	4° ♁ 22'33	25°36'47
retrograde	13249 Apr 19 04:18	27° ♁ 11'43		retrograde	13250 Apr 02 16:53	11° ♁ 30'55	
asc. node	13249 Apr 22 00:29	26° ♁ 35'45		evening set	13250 Apr 08 15:52	9° ♁ 03'19	
evening set	13249 Apr 24 15:56	24° ♁ 53'04		asc. node	13250 Apr 08 21:51	8° ♁ 50'30	
min. Earth dist.	13249 Apr 29 06:01	19° ♁ 37'14	0.68474 AU	min. Earth dist.	13250 Apr 12 22:56	4° ♁ 22'54	0.67625 AU
inferior conj	13249 Apr 30 04:02	18° ♁ 23'11	2°17'16	inferior conj	13250 Apr 14 09:19	2° ♁ 32'58	1°38'21
minimum elong	13249 Apr 30 01:53	18° ♁ 30'24	2°16'00	minimum elong	13250 Apr 14 07:19	2° ♁ 39'22	1°37'15
morning rise	13249 May 05 11:58	12° ♁ 23'04			13250 Apr 16 10:43	30° ♁	
direct	13249 May 09 09:40	10° ♁ 56'04		morning rise	13250 Apr 19 23:16	26° ♁ 42'06	
morning max el	13249 May 16 23:27	15° ♁ 10'14	19°59'05	direct	13250 Apr 23 09:26	25° ♁ 34'54	
desc. node	13249 May 25 03:30	25° ♁ 05'14		morning max el	13250 Apr 30 05:36	29° ♁ 17'49	19°00'49
	13249 May 28 15:30	0° ♁			13250 Apr 30 22:19	0° ♁	
morning set	13249 Jun 13 03:31	23° ♁ 12'43		desc. node	13250 May 12 00:17	14° ♁ 45'05	
	13249 Jun 17 12:48	0° ♁		greatest brilliancy	13250 May 13 11:17	16° ♁ 56'15	-0.7m
max. Earth dist.	13249 Jun 23 15:36	9° ♁ 37'18	1.44441 AU		13250 May 21 23:52	0° ♁	
				morning set	13250 May 23 09:08	2° ♁ 08'38	
superior conj	13249 Jun 29 00:54	18° ♁ 16'46	-2°06'34	max. Earth dist.	13250 Jun 06 08:04	23° ♁ 51'25	1.45498 AU
minimum elong	13249 Jun 29 06:19	18° ♁ 38'46	2°07'18				
	13249 Jul 06 03:15	0° ♁		superior conj	13250 Jun 08 18:25	27° ♁ 40'30	-2°13'20
evening rise	13249 Jul 12 07:05	10° ♁ 26'34		minimum elong	13250 Jun 08 17:14	27° ♁ 35'52	2°14'19
asc. node	13249 Jul 18 23:16	21° ♁ 46'59			13250 Jun 10 05:49	0° ♁	
	13249 Jul 24 02:58	0° ♁		evening rise	13250 Jun 23 16:23	21° ♁ 33'05	
evening max el	13249 Jul 29 20:48	7° ♁ 17'52	18°05'33		13250 Jun 28 20:59	0° ♁	
retrograde	13249 Aug 05 06:19	10° ♁ 38'19		asc. node	13250 Jul 05 20:05	11° ♁ 00'30	
evening set	13249 Aug 07 23:30	10° ♁ 00'33		evening max el	13250 Jul 13 10:30	20° ♁ 53'10	18°24'25
inferior conj	13249 Aug 14 05:53	4° ♁ 46'11	1°54'45	retrograde	13250 Jul 19 20:28	24° ♁ 19'15	
minimum elong	13249 Aug 14 08:24	4° ♁ 39'30	1°53'29	evening set	13250 Jul 22 22:14	23° ♁ 26'45	
min. Earth dist.	13249 Aug 17 00:59	1° ♁ 48'13	0.62722 AU	inferior conj	13250 Jul 28 17:34	17° ♁ 56'07	2°36'59
	13249 Aug 18 21:51	30° ♁		minimum elong	13250 Jul 28 19:49	17° ♁ 49'27	2°35'44
morning rise	13249 Aug 20 15:09	28° ♁ 35'26		min. Earth dist.	13250 Jul 30 23:13	15° ♁ 18'09	0.64784 AU
desc. node	13249 Aug 21 01:35	28° ♁ 16'50		morning rise	13250 Aug 03 16:07	11° ♁ 35'21	
direct	13249 Aug 27 07:23	26° ♁ 08'04		desc. node	13250 Aug 07 23:01	9° ♁ 14'40	
	13249 Sep 05 15:34	0° ♁		direct	13250 Aug 10 05:12	8° ♁ 56'30	
morning max el	13249 Sep 10 08:45	4° ♁ 10'03	27°54'00	morning max el	13250 Aug 23 19:09	16° ♁ 54'09	27°19'21
	13249 Sep 29 17:15	0° ♁			13250 Sep 03 16:28	0° ♁	
morning set	13249 Oct 14 15:41	27° ♁ 11'02			13250 Sep 22 13:26	0° ♁	
asc. node	13249 Oct 15 01:07	27° ♁ 59'02		morning set	13250 Sep 28 04:29	10° ♁ 35'39	
	13249 Oct 16 00:41	0° ♁		asc. node	13250 Oct 01 21:43	18° ♁ 01'40	
max. Earth dist.	13249 Oct 19 20:59	8° ♁ 07'16	1.31985 AU	max. Earth dist.	13250 Oct 02 16:18	19° ♁ 37'00	1.33160 AU
superior conj	13249 Oct 22 06:43	13° ♁ 20'46	1°04'34	superior conj	13250 Oct 06 10:47	27° ♁ 31'36	0°42'16
minimum elong	13249 Oct 22 04:27	13° ♁ 08'20	1°04'48	minimum elong	13250 Oct 06 08:52	27° ♁ 21'25	0°42'17
evening rise	13249 Oct 29 01:51	28° ♁ 13'50			13250 Oct 07 14:33	0° ♁	
	13249 Oct 29 21:39	0° ♁		evening rise	13250 Oct 13 12:44	12° ♁ 44'16	
	13249 Nov 15 18:04	0° ♁			13250 Oct 22 05:07	0° ♁	
desc. node	13249 Nov 16 22:01	1° ♁ 32'09		desc. node	13250 Nov 03 19:17	17° ♁ 41'37	
evening max el	13249 Nov 22 11:08	7° ♁ 46'44	24°00'43	evening max el	13250 Nov 03 22:05	17° ♁ 48'28	22°18'50
retrograde	13249 Dec 06 01:25	14° ♁ 33'15		retrograde	13250 Nov 16 17:28	24° ♁ 09'29	
evening set	13249 Dec 10 22:39	13° ♁ 41'06		evening set	13250 Nov 20 05:01	23° ♁ 42'49	
min. Earth dist.	13249 Dec 16 22:16	10° ♁ 43'58	0.55669 AU	min. Earth dist.	13250 Nov 28 04:56	20° ♁ 08'43	0.54682 AU
inferior conj	13249 Dec 18 23:35	9° ♁ 29'29	-5°44'44	inferior conj	13250 Nov 28 20:37	19° ♁ 46'39	-5°52'00
minimum elong	13249 Dec 19 04:39	9° ♁ 21'49	5°43'11	minimum elong	13250 Nov 28 17:07	19° ♁ 51'35	5°50'47
morning rise	13249 Dec 27 12:33	5° ♁ 32'27		morning rise	13250 Dec 07 06:25	15° ♁ 59'20	
direct	13249 Dec 30 02:15	5° ♁ 15'35		direct	13250 Dec 10 14:52	15° ♁ 34'06	
morning max el	13250 Jan 09 11:35	10° ♁ 14'15	20°01'09	morning max el	13250 Dec 22 13:04	21° ♁ 16'00	21°29'23
asc. node	13250 Jan 11 01:04	11° ♁ 50'47		asc. node	13250 Dec 28 22:15	28° ♁ 49'19	
	13250 Jan 22 18:01	0° ♁			13250 Dec 29 17:53	0° ♁	
morning set	13250 Jan 27 10:47	9° ♁ 19'34		morning set	13251 Jan 11 20:13	24° ♁ 03'21	
					13251 Jan 14 15:54	0° ♁	
superior conj	13250 Feb 04 04:33	25° ♁ 04'31	1°06'26	superior conj	13251 Jan 19 01:30	9° ♁ 16'01	1°23'41
minimum elong	13250 Feb 04 07:19	25° ♁ 18'20	1°06'42	minimum elong	13251 Jan 19 03:44	9° ♁ 27'39	1°24'19
	13250 Feb 06 16:23	0° ♁		max. Earth dist.	13251 Jan 23 12:31	18° ♁ 22'14	1.34963 AU
max. Earth dist.	13250 Feb 10 01:37	6° ♁ 29'08	1.36980 AU	evening rise	13251 Jan 27 15:54	26° ♁ 25'22	
desc. node	13250 Feb 12 22:06	11° ♁ 45'44			13251 Jan 29 13:50	0° ♁	
evening rise	13250 Feb 13 19:37	13° ♁ 22'59					
	13250 Feb 23 14:36	0° ♁		desc. node	13251 Jan 30 18:42	2° ♁ 12'07	
	13250 Mar 17 04:56	0° ♁			13251 Feb 17 00:12	0° ♁	

evening max el	13251 Mar 03 21:35	18° Υ 09'08	26°38'31	max. Earth dist.	13252 Jan 06 07:05	0° \approx 16'48	1.33315 AU
retrograde	13251 Mar 16 23:57	25° Υ 31'56		evening rise	13252 Jan 11 01:19	10° \approx 00'22	
evening set	13251 Mar 23 09:21	22° Υ 59'56		desc. node	13252 Jan 17 15:25	22° \approx 26'53	
asc. node	13251 Mar 26 19:17	19° Υ 38'15			13252 Jan 21 23:50	0° \mathbb{H}	
min. Earth dist.	13251 Mar 27 10:42	18° Υ 53'53	0.66367 AU		13252 Feb 12 18:47	0° Υ	
inferior conj	13251 Mar 29 09:20	16° Υ 35'05	0°48'40	evening max el	13252 Feb 14 11:01	1° Υ 40'15	27°19'35
minimum elong	13251 Mar 29 08:07	16° Υ 38'44	0°48'01	retrograde	13252 Feb 28 00:41	9° Υ 06'56	
morning rise	13251 Apr 04 07:58	10° Υ 55'12		evening set	13252 Mar 05 18:20	6° Υ 36'21	
direct	13251 Apr 07 07:44	10° Υ 05'25		min. Earth dist.	13252 Mar 09 15:08	3° Υ 02'38	0.64739 AU
morning max el	13251 Apr 13 18:05	13° Υ 29'41	18°18'53	inferior conj	13252 Mar 12 01:40	0° Υ 23'47	-0°12'11
	13251 Apr 25 20:14	0° \mathbb{B}		minimum elong	13252 Mar 12 02:01	0° Υ 22'48	0°11'56
desc. node	13251 Apr 28 20:57	4° \mathbb{B} 46'32		transit middle	13252 Mar 12 02:01	0° Υ 22'48	0°11'56
morning set	13251 May 03 12:52	12° \mathbb{B} 11'54		transit begin	13252 Mar 11 23:59	0° Υ 28'21	
	13251 May 14 18:48	0° \mathbb{II}		transit end	13252 Mar 12 04:03	0° Υ 17'15	
					13252 Mar 12 10:25	30° \mathbb{R} \mathbb{H}	
superior conj	13251 May 19 02:05	6° \mathbb{II} 44'23	-1°59'55	asc. node	13252 Mar 12 16:44	29° \mathbb{H} 42'59	
minimum elong	13251 May 18 18:09	6° \mathbb{II} 13'22	2°00'18	morning rise	13252 Mar 18 11:32	24° \mathbb{H} 57'22	
max. Earth dist.	13251 May 20 03:44	8° \mathbb{II} 24'33	1.45831 AU	direct	13252 Mar 21 02:16	24° \mathbb{H} 21'49	
	13251 Jun 02 23:46	0° \mathbb{E}		morning max el	13252 Mar 27 10:39	27° \mathbb{H} 39'19	17°53'55
evening rise	13251 Jun 04 01:18	1° \mathbb{E} 39'51			13252 Mar 29 14:09	0° Υ	
greatest brilliancy	13251 Jun 14 10:48	17° \mathbb{E} 50'06	-0.8m	morning set	13252 Apr 13 21:04	23° Υ 38'22	
asc. node	13251 Jun 22 16:59	29° \mathbb{E} 45'43		desc. node	13252 Apr 14 17:34	25° Υ 03'33	
	13251 Jun 22 21:23	0° Ω			13252 Apr 17 17:09	0° \mathbb{B}	
evening max el	13251 Jun 26 21:02	4° Ω 37'17	19°00'38				
retrograde	13251 Jul 03 16:07	8° Ω 22'13		superior conj	13252 Apr 27 17:32	16° \mathbb{B} 15'03	-1°29'23
evening set	13251 Jul 07 02:51	7° Ω 13'27		minimum elong	13252 Apr 27 08:49	15° \mathbb{B} 40'17	1°29'04
inferior conj	13251 Jul 12 14:41	1° Ω 27'59	3°01'48	max. Earth dist.	13252 May 01 23:53	23° \mathbb{B} 00'05	1.45412 AU
minimum elong	13251 Jul 12 16:06	1° Ω 23'29	3°00'42		13252 May 06 11:19	0° \mathbb{II}	
	13251 Jul 13 18:12	30° \mathbb{R} \mathbb{E}		evening rise	13252 May 13 16:28	11° \mathbb{II} 08'05	
min. Earth dist.	13251 Jul 14 05:42	29° \mathbb{E} 23'41	0.66490 AU		13252 May 26 03:57	0° \mathbb{E}	
morning rise	13251 Jul 18 04:41	25° \mathbb{E} 04'09		greatest brilliancy	13252 May 28 07:55	3° \mathbb{E} 10'34	-0.6m
direct	13251 Jul 24 10:03	22° \mathbb{E} 24'00		asc. node	13252 Jun 08 14:00	17° \mathbb{E} 52'56	
desc. node	13251 Jul 25 20:24	22° \mathbb{E} 31'30		evening max el	13252 Jun 09 02:26	18° \mathbb{E} 24'46	19°52'56
	13251 Aug 06 05:02	0° Ω		retrograde	13252 Jun 16 14:32	22° \mathbb{E} 40'37	
morning max el	13251 Aug 06 06:09	0° Ω 02'49	26°17'13	evening set	13252 Jun 20 10:44	21° \mathbb{E} 15'03	
	13251 Aug 28 14:37	0° \mathbb{H}		inferior conj	13252 Jun 25 18:17	15° \mathbb{E} 16'06	3°12'14
morning set	13251 Sep 11 04:58	23° \mathbb{H} 24'49		minimum elong	13252 Jun 25 18:40	15° \mathbb{E} 14'52	3°11'12
	13251 Sep 14 15:58	0° \mathbb{L}		min. Earth dist.	13252 Jun 26 18:51	13° \mathbb{E} 53'25	0.67760 AU
max. Earth dist.	13251 Sep 15 01:44	0° \mathbb{L} 47'32	1.34848 AU	morning rise	13252 Jul 01 02:14	8° \mathbb{E} 53'37	
asc. node	13251 Sep 18 18:19	8° \mathbb{L} 08'13		direct	13252 Jul 06 20:52	6° \mathbb{E} 21'03	
				desc. node	13252 Jul 11 17:42	7° \mathbb{E} 48'00	
superior conj	13251 Sep 20 07:52	11° \mathbb{L} 19'47	0°14'47	morning max el	13252 Jul 18 16:38	13° \mathbb{E} 26'15	24°56'47
minimum elong	13251 Sep 20 07:03	11° \mathbb{L} 15'35	0°14'44		13252 Aug 01 02:49	0° Ω	
behind sun begin	13251 Sep 20 04:38	11° \mathbb{L} 03'09			13252 Aug 20 09:43	0° \mathbb{H}	
behind sun end	13251 Sep 20 09:29	11° \mathbb{L} 28'02		morning set	13252 Aug 23 13:01	5° \mathbb{H} 28'15	
evening rise	13251 Sep 27 21:37	27° \mathbb{L} 07'25		max. Earth dist.	13252 Aug 27 02:52	11° \mathbb{H} 55'49	1.36954 AU
	13251 Sep 29 06:58	0° \mathbb{M}					
evening max el	13251 Oct 16 17:56	28° \mathbb{M} 11'56	20°46'45	superior conj	13252 Sep 02 18:53	24° \mathbb{H} 36'58	-0°17'06
	13251 Oct 18 17:30	0° \mathbb{J}		minimum elong	13252 Sep 02 20:00	24° \mathbb{H} 42'26	0°17'05
desc. node	13251 Oct 21 16:39	2° \mathbb{J} 03'41		asc. node	13252 Sep 04 14:54	28° \mathbb{H} 14'26	
retrograde	13251 Oct 28 04:03	3° \mathbb{J} 52'28			13252 Sep 05 12:04	0° \mathbb{L}	
evening set	13251 Oct 30 12:33	3° \mathbb{J} 39'04		evening rise	13252 Sep 11 02:11	11° \mathbb{L} 16'35	
	13251 Nov 08 01:38	30° \mathbb{R} \mathbb{M}			13252 Sep 21 02:32	0° \mathbb{M}	
inferior conj	13251 Nov 08 12:14	29° \mathbb{M} 44'52	-4°59'39	evening max el	13252 Sep 28 03:40	9° \mathbb{M} 19'19	19°33'53
minimum elong	13251 Nov 08 02:31	29° \mathbb{M} 58'45	4°56'32	retrograde	13252 Oct 07 22:06	14° \mathbb{M} 12'10	
min. Earth dist.	13251 Nov 09 11:24	29° \mathbb{M} 11'45	0.54589 AU	desc. node	13252 Oct 07 14:07	14° \mathbb{M} 11'50	
morning rise	13251 Nov 16 16:32	25° \mathbb{M} 49'44		evening set	13252 Oct 09 19:09	14° \mathbb{M} 02'09	
direct	13251 Nov 20 23:01	25° \mathbb{M} 10'40		inferior conj	13252 Oct 18 12:55	9° \mathbb{M} 57'05	-3°22'39
	13251 Dec 02 08:45	0° \mathbb{J}		minimum elong	13252 Oct 18 04:20	10° \mathbb{M} 10'43	3°19'04
morning max el	13251 Dec 04 02:47	1° \mathbb{J} 33'06	23°14'22	min. Earth dist.	13252 Oct 20 20:45	8° \mathbb{M} 28'31	0.55423 AU
asc. node	13251 Dec 15 19:20	16° \mathbb{J} 44'51		morning rise	13252 Oct 26 11:34	5° \mathbb{M} 34'06	
	13251 Dec 23 01:22	0° \mathbb{Z}		direct	13252 Oct 31 14:35	4° \mathbb{M} 35'31	
morning set	13251 Dec 27 07:48	8° \mathbb{Z} 50'08		morning max el	13252 Nov 14 12:45	11° \mathbb{M} 33'03	25°02'17
					13252 Nov 28 13:44	0° \mathbb{J}	
superior conj	13252 Jan 03 05:38	23° \mathbb{Z} 45'54	1°34'08	asc. node	13252 Dec 01 16:19	5° \mathbb{J} 22'35	
minimum elong	13252 Jan 03 06:55	23° \mathbb{Z} 52'44	1°35'02	morning set	13252 Dec 10 19:37	23° \mathbb{J} 33'38	
	13252 Jan 06 03:53	0° \approx			13252 Dec 13 18:39	0° \mathbb{Z}	

superior conj	13252 Dec 17 14:21	8° Z 25'48	1°38'12	minimum elong	13253 Dec 02 00:36	23° Z 04'37	1°37'11
minimum elong	13252 Dec 17 14:31	8° Z 26'43	1°39'13	max. Earth dist.	13253 Dec 02 15:44	24° Z 29'00	1.31409 AU
max. Earth dist.	13252 Dec 19 08:57	12° Z 19'26	1.32115 AU		13253 Dec 05 03:29	0° Z	
evening rise	13252 Dec 24 20:36	23° Z 58'53		evening rise	13253 Dec 08 23:04	8° Z 14'26	
	13252 Dec 27 20:24	0° \approx			13253 Dec 20 06:13	0° \approx	
desc. node	13253 Jan 03 12:13	12° \approx 23'34		desc. node	13253 Dec 21 09:07	1° \approx 54'47	
	13253 Jan 14 15:08	0° X		evening max el	13254 Jan 09 04:51	27° \approx 04'52	27°14'26
evening max el	13253 Jan 26 22:13	14° X 42'53	27°33'19		13254 Jan 12 14:22	0° X	
retrograde	13253 Feb 09 18:18	22° X 06'27		retrograde	13254 Jan 23 03:51	4° X 20'54	
evening set	13253 Feb 16 16:17	19° X 44'26		evening set	13254 Jan 30 00:05	2° X 15'57	
min. Earth dist.	13253 Feb 20 10:22	16° X 38'57	0.62797 AU		13254 Feb 02 05:03	30° R	
inferior conj	13253 Feb 23 07:21	13° X 51'27	-1°23'54	min. Earth dist.	13254 Feb 02 19:23	29° \approx 30'56	0.60656 AU
minimum elong	13253 Feb 23 10:10	13° X 44'36	1°22'23	inferior conj	13254 Feb 05 23:00	26° \approx 49'20	-2°44'16
asc. node	13253 Feb 27 14:12	10° X 07'32		minimum elong	13254 Feb 06 04:52	26° \approx 36'46	2°41'23
morning rise	13253 Mar 02 06:38	8° X 41'22		morning rise	13254 Feb 13 12:45	21° \approx 58'25	
direct	13253 Mar 04 13:54	8° X 16'35		asc. node	13254 Feb 14 11:39	21° \approx 46'02	
morning max el	13253 Mar 11 04:24	11° X 38'25	17°46'27	direct	13254 Feb 15 14:57	21° \approx 40'44	
	13253 Mar 23 15:47	0° Y		morning max el	13254 Feb 22 19:56	25° \approx 17'24	17°57'14
morning set	13253 Mar 27 06:08	6° Y 15'39			13254 Feb 26 18:24	0° X	
desc. node	13253 Apr 01 14:08	15° Y 31'11		morning set	13254 Mar 10 09:50	19° X 44'42	
					13254 Mar 16 00:48	0° Y	
superior conj	13253 Apr 08 05:58	26° Y 46'32	-0°50'12	desc. node	13254 Mar 19 10:39	6° Y 05'08	
minimum elong	13253 Apr 08 00:58	26° Y 25'46	0°49'50				
	13253 Apr 10 04:52	0° Z		superior conj	13254 Mar 20 18:38	8° Y 25'29	-0°10'32
max. Earth dist.	13253 Apr 14 17:40	7° Z 20'52	1.44289 AU	minimum elong	13254 Mar 20 17:43	8° Y 21'31	0°10'26
evening rise	13253 Apr 23 04:20	20° Z 36'14		behind sun begin	13254 Mar 20 11:32	7° Y 54'27	
	13253 Apr 29 08:29	0° II		behind sun end	13254 Mar 20 23:55	8° Y 48'31	
	13253 May 21 00:12	0° Z		max. Earth dist.	13254 Mar 28 06:56	21° Y 10'59	1.42592 AU
evening max el	13253 May 23 01:57	2° Z 13'03	20°59'02		13254 Apr 02 17:38	0° Z	
asc. node	13253 May 26 11:07	5° Z 09'58		evening rise	13254 Apr 03 03:53	0° Z 40'40	
retrograde	13253 May 31 13:29	7° Z 09'02			13254 Apr 22 20:57	0° II	
evening set	13253 Jun 04 19:52	5° Z 26'57		evening max el	13254 May 05 20:15	16° II 01'46	22°15'10
	13253 Jun 09 13:13	30° R II		asc. node	13254 May 13 08:20	21° II 20'55	
inferior conj	13253 Jun 10 01:52	29° II 16'09	3°10'27	retrograde	13254 May 15 11:09	21° II 41'36	
minimum elong	13253 Jun 10 01:15	29° II 18'20	3°09'24	evening set	13254 May 20 04:26	19° II 43'58	
min. Earth dist.	13253 Jun 10 12:44	28° II 38'29	0.68560 AU	inferior conj	13254 May 25 11:17	13° II 23'27	2°57'49
morning rise	13253 Jun 15 06:24	22° II 57'46		minimum elong	13254 May 25 09:50	13° II 28'32	2°56'41
direct	13253 Jun 20 12:43	20° II 39'24		min. Earth dist.	13254 May 25 09:08	13° II 30'57	0.68892 AU
desc. node	13253 Jun 28 14:54	24° II 37'06		morning rise	13254 May 30 15:03	7° II 11'02	
morning max el	13253 Jul 01 03:09	26° II 58'37	23°27'52	direct	13254 Jun 04 08:33	5° II 11'10	
	13253 Jul 03 22:40	0° Z		morning max el	13254 Jun 13 15:54	10° II 38'08	21°59'32
	13253 Jul 25 16:54	0° Ω		desc. node	13254 Jun 15 11:58	12° II 34'06	
morning set	13253 Aug 05 00:05	16° Ω 35'20			13254 Jun 28 21:38	0° Z	
max. Earth dist.	13253 Aug 09 00:43	23° Ω 28'39	1.39280 AU	morning set	13254 Jul 16 10:10	26° Z 35'41	
	13253 Aug 12 17:07	0° P			13254 Jul 18 12:48	0° Ω	
				max. Earth dist.	13254 Jul 22 01:15	5° Ω 47'18	1.41568 AU
superior conj	13253 Aug 16 16:06	7° P 14'51	-0°51'41				
minimum elong	13253 Aug 16 19:51	7° P 32'17	0°51'32	superior conj	13254 Jul 29 19:03	19° Ω 02'35	-1°25'57
asc. node	13253 Aug 22 11:30	18° P 17'10		minimum elong	13254 Jul 30 01:23	19° Ω 30'29	1°25'53
evening rise	13253 Aug 25 23:38	25° P 04'48			13254 Aug 04 21:23	0° P	
	13253 Aug 28 12:55	0° Ω		evening rise	13254 Aug 09 10:16	8° P 21'51	
evening max el	13253 Sep 11 02:29	21° Ω 15'13	18°42'54	asc. node	13254 Aug 09 08:07	8° P 11'57	
retrograde	13253 Sep 19 09:03	25° Ω 24'53			13254 Aug 22 03:52	0° Ω	
evening set	13253 Sep 21 07:02	25° Ω 12'18		evening max el	13254 Aug 25 10:29	3° Ω 51'23	18°13'05
desc. node	13253 Sep 24 11:35	24° Ω 00'52		retrograde	13254 Sep 01 14:53	7° Ω 30'17	
inferior conj	13253 Sep 29 08:54	20° Ω 48'49	-1°32'53	evening set	13254 Sep 03 19:22	7° Ω 10'37	
minimum elong	13253 Sep 29 05:04	20° Ω 55'53	1°31'06	inferior conj	13254 Sep 11 02:38	2° Ω 26'20	0°05'01
min. Earth dist.	13253 Oct 02 11:43	18° Ω 31'14	0.57040 AU	minimum elong	13254 Sep 11 02:48	2° Ω 25'58	0°04'54
morning rise	13253 Oct 06 23:43	15° Ω 48'16		transit middle	13254 Sep 11 02:48	2° Ω 25'58	0°04'54
direct	13253 Oct 12 20:30	14° Ω 23'58		transit begin	13254 Sep 10 23:32	2° Ω 33'01	
morning max el	13253 Oct 27 02:50	21° Ω 49'49	26°34'22	transit end	13254 Sep 11 06:04	2° Ω 18'54	
	13253 Nov 03 07:27	0° P		desc. node	13254 Sep 11 09:06	2° Ω 12'19	
asc. node	13253 Nov 18 13:14	24° P 31'47			13254 Sep 13 22:32	30° R P	
	13253 Nov 21 08:01	0° Z		min. Earth dist.	13254 Sep 14 10:03	29° P 36'09	0.59151 AU
morning set	13253 Nov 25 05:59	8° Z 09'09		morning rise	13254 Sep 18 06:48	26° P 51'21	
				direct	13254 Sep 24 16:23	24° P 59'09	
superior conj	13253 Dec 02 01:29	23° Z 09'32	1°36'13		13254 Oct 05 22:58	0° Ω	

morning max el	13254 Oct 09 00:11	2° Ω 45'09	27°35'29		13255 Oct 03 18:24	0° Ω	
	13254 Oct 28 20:11	0° \mathbb{M}			13255 Oct 21 08:21	0° \mathbb{M}	
asc. node	13254 Nov 05 10:02	14° \mathbb{M} 03'49		asc. node	13255 Oct 23 06:43	3° \mathbb{M} 51'43	
morning set	13254 Nov 09 13:05	22° \mathbb{M} 32'00		morning set	13255 Oct 24 14:58	6° \mathbb{M} 36'44	
	13254 Nov 13 00:08	0° \mathbb{A}		max. Earth dist.	13255 Oct 30 06:37	18° \mathbb{M} 40'57	1.31554 AU
max. Earth dist.	13254 Nov 16 00:11	6° \mathbb{A} 39'16	1.31217 AU				
				superior conj	13255 Oct 31 23:22	22° \mathbb{M} 25'25	1°14'54
superior conj	13254 Nov 16 13:07	7° \mathbb{A} 51'24	1°28'25	minimum elong	13255 Oct 31 21:09	22° \mathbb{M} 13'13	1°15'20
minimum elong	13254 Nov 16 11:24	7° \mathbb{A} 41'49	1°29'09		13255 Nov 04 09:24	0° \mathbb{A}	
evening rise	13254 Nov 23 06:24	22° \mathbb{A} 41'15		evening rise	13255 Nov 07 16:36	7° \mathbb{A} 13'26	
	13254 Nov 26 18:11	0° \mathbb{Z}			13255 Nov 19 09:05	0° \mathbb{Z}	
desc. node	13254 Dec 08 06:07	20° \mathbb{Z} 50'46		desc. node	13255 Nov 25 03:13	8° \mathbb{Z} 57'26	
	13254 Dec 14 14:02	0° \approx		evening max el	13255 Dec 03 19:59	19° \mathbb{Z} 18'25	24°57'32
evening max el	13254 Dec 22 04:35	8° \approx 37'30	26°21'01	retrograde	13255 Dec 17 14:57	26° \mathbb{Z} 12'32	
retrograde	13255 Jan 05 03:33	15° \approx 43'17		evening set	13255 Dec 23 05:05	25° \mathbb{Z} 02'48	
evening set	13255 Jan 11 13:48	14° \approx 03'30		min. Earth dist.	13255 Dec 28 07:53	22° \mathbb{Z} 18'56	0.56570 AU
min. Earth dist.	13255 Jan 15 18:10	11° \approx 27'06	0.58498 AU	inferior conj	13255 Dec 30 22:36	20° \mathbb{Z} 37'43	-5°17'34
inferior conj	13255 Jan 18 21:03	9° \approx 08'02	-4°06'43	minimum elong	13255 Dec 31 06:29	20° \mathbb{Z} 24'56	5°15'03
minimum elong	13255 Jan 19 05:27	8° \approx 52'22	4°03'15	morning rise	13256 Jan 08 10:06	16° \mathbb{Z} 29'46	
morning rise	13255 Jan 27 00:03	4° \approx 38'22		direct	13256 Jan 10 16:59	16° \mathbb{Z} 15'01	
direct	13255 Jan 29 01:13	4° \approx 24'05		asc. node	13256 Jan 19 06:21	19° \mathbb{Z} 58'34	
asc. node	13255 Feb 01 09:02	5° \approx 03'45		morning max el	13256 Jan 20 04:49	20° \mathbb{Z} 50'21	19°20'24
morning max el	13255 Feb 06 05:28	8° \approx 25'37	18°27'53		13256 Jan 27 06:43	0° \approx	
	13255 Feb 20 02:34	0° \mathbb{H}		morning set	13256 Feb 06 04:17	18° \approx 16'18	
morning set	13255 Feb 22 02:40	3° \mathbb{H} 49'30			13256 Feb 12 01:16	0° \mathbb{H}	
superior conj	13255 Mar 03 04:49	21° \mathbb{H} 03'48	0°24'41	superior conj	13256 Feb 14 07:51	4° \mathbb{H} 27'32	0°53'14
minimum elong	13255 Mar 03 06:31	21° \mathbb{H} 11'38	0°24'39	minimum elong	13256 Feb 14 10:34	4° \mathbb{H} 40'46	0°53'21
desc. node	13255 Mar 06 07:10	26° \mathbb{H} 42'06		max. Earth dist.	13256 Feb 20 22:32	16° \mathbb{H} 54'18	1.38261 AU
	13255 Mar 08 03:39	0° \mathbb{Y}		desc. node	13256 Feb 21 03:42	17° \mathbb{H} 17'44	
max. Earth dist.	13255 Mar 10 15:55	4° \mathbb{Y} 22'43	1.40509 AU	evening rise	13256 Feb 24 16:02	23° \mathbb{H} 32'45	
evening rise	13255 Mar 14 23:28	11° \mathbb{Y} 39'57			13256 Feb 28 10:41	0° \mathbb{Y}	
	13255 Mar 26 14:54	0° \mathbb{B}			13256 Mar 19 09:33	0° \mathbb{B}	
evening max el	13255 Apr 18 11:17	29° \mathbb{B} 53'02	23°35'54	evening max el	13256 Mar 31 00:56	13° \mathbb{B} 45'47	24°54'51
	13255 Apr 18 14:05	0° \mathbb{I}		retrograde	13256 Apr 11 21:03	20° \mathbb{B} 39'13	
retrograde	13255 Apr 29 06:03	6° \mathbb{I} 13'37		asc. node	13256 Apr 16 02:59	19° \mathbb{B} 20'49	
asc. node	13255 Apr 30 05:37	6° \mathbb{I} 09'14		evening set	13256 Apr 17 13:40	18° \mathbb{B} 16'21	
evening set	13255 May 04 10:53	4° \mathbb{I} 02'07		min. Earth dist.	13256 Apr 22 00:40	13° \mathbb{B} 15'45	0.68175 AU
	13255 May 08 01:44	30° \mathbb{R} \mathbb{B}		inferior conj	13256 Apr 23 03:54	11° \mathbb{B} 45'55	2°02'03
min. Earth dist.	13255 May 09 05:50	28° \mathbb{B} 25'23	0.68763 AU	minimum elong	13256 Apr 23 01:45	11° \mathbb{B} 53'01	2°00'49
inferior conj	13255 May 09 20:36	27° \mathbb{B} 34'45	2°35'00	morning rise	13256 Apr 28 14:05	5° \mathbb{B} 49'36	
minimum elong	13255 May 09 18:36	27° \mathbb{B} 41'38	2°33'45	direct	13256 May 02 06:51	4° \mathbb{B} 31'04	
morning rise	13255 May 15 02:15	21° \mathbb{B} 29'43		morning max el	13256 May 09 11:59	8° \mathbb{B} 29'54	19°32'19
direct	13255 May 19 07:06	19° \mathbb{B} 50'28		desc. node	13256 May 19 05:47	20° \mathbb{B} 44'10	
morning max el	13255 May 27 10:11	24° \mathbb{B} 28'08	20°39'21	greatest brilliancy	13256 May 22 03:44	24° \mathbb{B} 57'25	-0.7m
	13255 Jun 01 07:19	0° \mathbb{I}			13256 May 25 13:14	0° \mathbb{I}	
desc. node	13255 Jun 02 08:56	1° \mathbb{I} 20'59		morning set	13256 Jun 03 22:14	14° \mathbb{I} 15'27	
	13255 Jun 22 05:48	0° \mathbb{E}			13256 Jun 14 01:36	0° \mathbb{E}	
morning set	13255 Jun 25 21:00	5° \mathbb{E} 35'40		max. Earth dist.	13256 Jun 15 22:52	2° \mathbb{E} 58'10	1.44980 AU
max. Earth dist.	13255 Jul 04 08:39	19° \mathbb{E} 00'12	1.43545 AU				
				superior conj	13256 Jun 20 04:32	9° \mathbb{E} 41'54	-2°11'46
superior conj	13255 Jul 10 23:37	29° \mathbb{E} 51'51	-1°54'56	minimum elong	13256 Jun 20 07:38	9° \mathbb{E} 54'21	2°12'42
minimum elong	13255 Jul 11 06:37	0° \mathbb{O} 21'01	1°55'17		13256 Jul 02 14:38	0° \mathbb{O}	
	13255 Jul 11 01:35	0° \mathbb{O}		evening rise	13256 Jul 04 04:28	2° \mathbb{O} 37'55	
evening rise	13255 Jul 23 05:32	20° \mathbb{O} 56'37		asc. node	13256 Jul 13 01:31	17° \mathbb{O} 20'27	
asc. node	13255 Jul 27 04:47	27° \mathbb{O} 54'40			13256 Jul 22 04:19	0° \mathbb{P}	
	13255 Jul 28 09:40	0° \mathbb{P}		evening max el	13256 Jul 22 13:49	0° \mathbb{P} 23'59	18°11'25
evening max el	13255 Aug 08 23:30	16° \mathbb{P} 57'24	18°02'57	retrograde	13256 Jul 28 22:19	3° \mathbb{P} 45'09	
retrograde	13255 Aug 15 12:45	20° \mathbb{P} 20'14		evening set	13256 Jul 31 19:11	3° \mathbb{P} 01'12	
evening set	13255 Aug 18 01:19	19° \mathbb{P} 49'46			13256 Aug 04 16:00	30° \mathbb{R} \mathbb{O}	
inferior conj	13255 Aug 24 15:46	14° \mathbb{P} 45'40	1°21'11	inferior conj	13256 Aug 06 20:22	27° \mathbb{O} 39'25	2°15'02
minimum elong	13255 Aug 24 17:54	14° \mathbb{P} 40'20	1°20'06	minimum elong	13256 Aug 06 22:52	27° \mathbb{O} 32'24	2°13'44
min. Earth dist.	13255 Aug 27 17:08	11° \mathbb{P} 44'37	0.61438 AU	min. Earth dist.	13256 Aug 09 09:53	24° \mathbb{O} 48'17	0.63631 AU
desc. node	13255 Aug 29 06:37	10° \mathbb{P} 20'04		morning rise	13256 Aug 13 00:51	21° \mathbb{O} 23'32	
morning rise	13255 Aug 31 07:53	8° \mathbb{P} 45'16		desc. node	13256 Aug 15 04:06	20° \mathbb{O} 00'13	
direct	13255 Sep 06 23:37	6° \mathbb{P} 28'50		direct	13256 Aug 19 16:19	18° \mathbb{O} 50'24	
morning max el	13255 Sep 21 04:26	14° \mathbb{P} 26'49	27°58'22	morning max el	13256 Sep 02 13:31	26° \mathbb{O} 51'27	27°43'21

	13256 Sep 05 12:19	0°♍		desc. node	13257 Aug 02 01:32	1°♌57'18	
	13256 Sep 26 10:15	0°♊		direct	13257 Aug 02 17:07	1°♌55'46	
morning set	13256 Oct 07 09:21	20°♊18'00		morning max el	13257 Aug 16 00:38	9°♌47'44	26°55'53
asc. node	13256 Oct 09 03:20	23°♊50'15			13257 Aug 31 22:23	0°♍	
	13256 Oct 12 02:27	0°♍			13257 Sep 18 21:25	0°♊	
max. Earth dist.	13256 Oct 12 07:11	0°♍25'04	1.32421 AU	morning set	13257 Sep 20 17:20	3°♊28'02	
				max. Earth dist.	13257 Sep 24 22:32	11°♊45'41	1.33815 AU
superior conj	13256 Oct 15 06:18	6°♍46'17	0°55'47	asc. node	13257 Sep 25 23:56	13°♊54'23	
minimum elong	13256 Oct 15 04:06	6°♍34'21	0°55'55				
evening rise	13256 Oct 22 03:47	21°♍46'06		superior conj	13257 Sep 29 07:41	20°♊47'21	0°31'12
	13256 Oct 26 02:08	0°♌		minimum elong	13257 Sep 29 06:08	20°♊39'14	0°31'10
desc. node	13256 Nov 11 00:26	25°♌56'29			13257 Oct 03 15:48	0°♍	
evening max el	13256 Nov 14 05:57	29°♌24'00	23°17'08	evening rise	13257 Oct 06 14:02	6°♍13'19	
	13256 Nov 14 21:10	0°♎			13257 Oct 19 06:43	0°♌	
retrograde	13256 Nov 27 13:33	6°♎01'28		evening max el	13257 Oct 26 19:23	9°♌29'17	21°37'43
evening set	13256 Dec 01 21:03	5°♎21'03		desc. node	13257 Oct 28 21:45	11°♌23'08	
min. Earth dist.	13256 Dec 08 15:42	2°♎10'33	0.55157 AU	retrograde	13257 Nov 08 02:27	15°♌35'34	
inferior conj	13256 Dec 10 04:15	1°♎17'35	-5°54'49	evening set	13257 Nov 11 00:43	15°♌16'05	
minimum elong	13256 Dec 10 06:01	1°♎15'02	5°53'44	inferior conj	13257 Nov 19 21:09	11°♌22'00	-5°36'55
	13256 Dec 12 10:53	30°♏♌		minimum elong	13257 Nov 19 14:13	11°♌31'44	5°34'59
morning rise	13256 Dec 18 16:37	27°♌26'42		min. Earth dist.	13257 Nov 19 21:51	11°♌21'01	0.54521 AU
direct	13256 Dec 21 13:38	27°♌06'57		morning rise	13257 Nov 28 04:37	7°♌33'57	
	13256 Dec 29 17:56	0°♎		direct	13257 Dec 01 22:05	7°♌03'45	
morning max el	13257 Jan 01 14:39	2°♎23'06	20°36'03	morning max el	13257 Dec 14 10:34	13°♌03'35	22°12'43
asc. node	13257 Jan 05 03:34	6°♎16'46		asc. node	13257 Dec 23 00:42	23°♌40'53	
	13257 Jan 19 01:14	0°♏			13257 Dec 26 21:24	0°♎	
morning set	13257 Jan 20 11:35	2°♏55'59		morning set	13258 Jan 04 22:11	17°♎41'32	
					13258 Jan 10 16:37	0°♏	
superior conj	13257 Jan 27 23:21	18°♏24'46	1°14'35				
minimum elong	13257 Jan 28 01:58	18°♏38'04	1°15'02	superior conj	13258 Jan 11 23:45	2°♏45'13	1°28'55
max. Earth dist.	13257 Feb 02 06:30	28°♏55'33	1.36092 AU	minimum elong	13258 Jan 12 01:36	2°♏55'03	1°29'41
	13257 Feb 02 19:55	0°♐		max. Earth dist.	13258 Jan 15 20:15	10°♏46'24	1.34206 AU
evening rise	13257 Feb 06 03:11	6°♐12'02		evening rise	13258 Jan 20 05:28	19°♏29'08	
desc. node	13257 Feb 07 00:16	7°♐48'29		desc. node	13258 Jan 24 20:56	28°♏10'25	
	13257 Feb 20 06:29	0°♑			13258 Jan 25 21:20	0°♐	
evening max el	13257 Mar 13 14:24	27°♑35'54	26°04'56		13258 Feb 14 07:54	0°♑	
	13257 Mar 16 05:23	0°♒		evening max el	13258 Feb 24 04:01	11°♑16'48	26°58'50
retrograde	13257 Mar 26 07:18	4°♒51'35		retrograde	13258 Mar 09 12:02	18°♑43'11	
evening set	13257 Apr 01 11:05	2°♒21'12		evening set	13258 Mar 16 01:19	16°♑10'41	
asc. node	13257 Apr 03 00:24	0°♒54'57		min. Earth dist.	13258 Mar 20 00:25	12°♑18'53	0.65716 AU
	13257 Apr 03 21:07	30°♒♑		asc. node	13258 Mar 20 21:52	11°♑17'54	
min. Earth dist.	13257 Apr 05 15:31	27°♑55'53	0.67147 AU	inferior conj	13258 Mar 22 04:19	9°♑49'58	0°24'15
inferior conj	13257 Apr 07 07:12	25°♑52'32	1°18'37	minimum elong	13258 Mar 22 03:40	9°♑51'51	0°23'55
minimum elong	13257 Apr 07 05:27	25°♑58'01	1°17'39	morning rise	13258 Mar 28 07:28	4°♑15'43	
morning rise	13257 Apr 13 00:34	20°♑06'23		direct	13258 Mar 31 03:07	3°♑32'34	
direct	13257 Apr 16 06:10	19°♑06'59		morning max el	13258 Apr 06 11:49	6°♑52'44	18°06'09
morning max el	13257 Apr 22 21:08	22°♑40'07	18°40'55	desc. node	13258 Apr 22 23:11	0°♒42'30	
	13257 Apr 28 22:41	0°♒			13258 Apr 22 12:41	0°♒	
desc. node	13257 May 06 02:32	10°♒33'42		morning set	13258 Apr 25 03:26	4°♒14'20	
morning set	13257 May 14 11:32	23°♒35'13					
	13257 May 18 13:59	0°♓		superior conj	13258 May 10 00:50	28°♒01'49	-1°48'37
max. Earth dist.	13257 May 29 17:16	17°♓22'59	1.45731 AU	minimum elong	13258 May 09 15:45	27°♒26'08	1°48'39
					13258 May 11 06:58	0°♓	
superior conj	13257 May 30 15:48	18°♓51'04	-2°10'05	max. Earth dist.	13258 May 12 13:09	1°♓58'07	1.45739 AU
minimum elong	13257 May 30 11:18	18°♓33'26	2°10'55	evening rise	13258 May 26 03:19	23°♓04'36	
	13257 Jun 06 18:15	0°♈			13258 May 30 14:55	0°♈	
evening rise	13257 Jun 15 03:14	13°♈17'53		greatest brilliancy	13258 Jun 07 14:11	12°♈08'22	-0.7m
greatest brilliancy	13257 Jun 22 05:22	24°♈36'28	-0.9m	asc. node	13258 Jun 16 19:21	24°♈53'15	
	13257 Jun 25 15:56	0°♉		evening max el	13258 Jun 19 10:53	27°♈48'57	19°21'00
asc. node	13257 Jun 29 22:22	6°♉22'35			13258 Jun 21 23:06	0°♉	
evening max el	13257 Jul 06 02:21	14°♉02'52	18°37'44	retrograde	13258 Jun 26 12:30	1°♉46'01	
retrograde	13257 Jul 12 15:18	17°♉35'49		evening set	13258 Jun 30 03:05	0°♉30'20	
evening set	13257 Jul 15 20:46	16°♉36'31			13258 Jun 30 19:04	30°♒♈	
inferior conj	13257 Jul 21 12:28	10°♉59'11	2°49'29	inferior conj	13258 Jul 05 12:44	24°♈39'01	3°07'49
minimum elong	13257 Jul 21 14:24	10°♉53'14	2°48'17	minimum elong	13258 Jul 05 13:43	24°♈35'48	3°06'45
min. Earth dist.	13257 Jul 23 11:51	8°♉34'16	0.65552 AU	min. Earth dist.	13258 Jul 06 21:36	22°♈51'26	0.67085 AU
morning rise	13257 Jul 27 07:03	4°♉36'10		morning rise	13258 Jul 10 23:49	18°♈15'01	

direct	13258 Jul 17 00:53	15°☿36'55		min. Earth dist.	13259 Jun 20 13:04	7°☿28'31	0.68166 AU
desc. node	13258 Jul 19 22:54	16°☿08'15		morning rise	13259 Jun 25 00:30	2°☿11'31	
morning max el	13258 Jul 29 11:34	23°☿04'04	25°44'33		13259 Jun 28 17:00	30°☿II	
	13258 Aug 04 14:45	0°☿		direct	13259 Jun 30 14:08	29°☿II44'01	
	13258 Aug 25 06:14	0°☿			13259 Jul 02 13:24	0°☿	
morning set	13258 Sep 03 11:22	15°☿58'51		desc. node	13259 Jul 06 20:09	2°☿07'05	
max. Earth dist.	13258 Sep 07 03:38	22°☿50'16	1.35699 AU	morning max el	13259 Jul 11 21:40	6°☿30'43	24°19'16
	13258 Sep 10 20:14	0°☿			13259 Jul 30 03:43	0°☿	
asc. node	13258 Sep 12 20:30	4°☿00'46		morning set	13259 Aug 16 11:02	27°☿39'23	
					13259 Aug 17 19:17	0°☿	
superior conj	13258 Sep 13 00:53	4°☿22'50	0°01'44	max. Earth dist.	13259 Aug 20 02:10	4°☿03'40	1.37933 AU
minimum elong	13258 Sep 13 00:46	4°☿22'18	0°01'41				
behind sun begin	13258 Sep 12 18:37	3°☿51'18		superior conj	13259 Aug 27 06:32	17°☿24'33	-0°31'35
behind sun end	13258 Sep 13 06:56	4°☿53'21		minimum elong	13259 Aug 27 08:42	17°☿34'57	0°31'31
evening rise	13258 Sep 20 21:21	20°☿30'32		asc. node	13259 Aug 30 17:07	24°☿06'01	
	13258 Sep 25 14:51	0°☿			13259 Sep 02 16:39	0°☿	
evening max el	13258 Oct 08 20:57	20°☿09'28	20°13'10	evening rise	13259 Sep 04 23:16	4°☿31'29	
desc. node	13258 Oct 15 19:10	24°☿50'13			13259 Sep 20 00:14	0°☿	
retrograde	13258 Oct 19 14:32	25°☿29'43		evening max el	13259 Sep 21 12:44	1°☿38'26	19°09'34
evening set	13258 Oct 21 16:00	25°☿18'48		retrograde	13259 Sep 30 14:40	6°☿11'10	
inferior conj	13258 Oct 30 14:54	21°☿21'42	-4°22'09	evening set	13259 Oct 02 11:14	6°☿00'34	
minimum elong	13258 Oct 30 04:51	21°☿36'36	4°18'29	desc. node	13259 Oct 02 16:38	5°☿57'53	
min. Earth dist.	13258 Nov 01 05:33	20°☿24'24	0.54830 AU	inferior conj	13259 Oct 10 23:00	1°☿48'27	-2°35'49
morning rise	13258 Nov 07 16:49	17°☿16'22		minimum elong	13259 Oct 10 16:19	1°☿59'42	2°32'50
direct	13258 Nov 12 08:19	16°☿29'34		min. Earth dist.	13259 Oct 13 16:57	29°☿57'35	0.56033 AU
morning max el	13258 Nov 25 21:33	23°☿08'42	24°01'03		13259 Oct 13 15:28	30°☿☿	
	13258 Dec 02 00:03	0°☿		morning rise	13259 Oct 18 18:43	27°☿10'11	
asc. node	13258 Dec 09 21:45	11°☿55'22		direct	13259 Oct 24 06:06	26°☿00'58	
	13258 Dec 19 06:25	0°☿			13259 Nov 03 14:13	0°☿	
morning set	13258 Dec 20 10:03	2°☿26'53		morning max el	13259 Nov 07 08:17	3°☿11'08	25°44'29
					13259 Nov 26 08:22	0°☿	
superior conj	13258 Dec 27 06:06	17°☿19'52	1°36'37	asc. node	13259 Nov 26 18:42	0°☿47'38	
minimum elong	13258 Dec 27 06:54	17°☿24'16	1°37'35	morning set	13259 Dec 04 21:28	17°☿07'21	
max. Earth dist.	13258 Dec 29 17:50	22°☿42'26	1.32738 AU		13259 Dec 10 18:05	0°☿	
	13259 Jan 02 05:09	0°☿					
evening rise	13259 Jan 03 19:25	3°☿14'52		superior conj	13259 Dec 11 16:04	2°☿02'00	1°38'06
desc. node	13259 Jan 11 17:39	18°☿17'59		minimum elong	13259 Dec 11 15:47	2°☿00'22	1°39'06
	13259 Jan 18 16:38	0°☿		max. Earth dist.	13259 Dec 12 22:15	4°☿48'56	1.31751 AU
evening max el	13259 Feb 06 16:47	24°☿37'33	27°29'16	evening rise	13259 Dec 18 18:05	17°☿21'39	
	13259 Feb 13 14:42	0°☿			13259 Dec 25 03:01	0°☿	
retrograde	13259 Feb 20 10:07	2°☿04'14		desc. node	13259 Dec 29 14:30	8°☿04'56	
	13259 Feb 26 16:26	30°☿☿			13260 Jan 13 08:20	0°☿	
evening set	13259 Feb 27 06:00	29°☿36'29		evening max el	13260 Jan 20 02:39	7°☿25'17	27°29'39
min. Earth dist.	13259 Mar 03 01:21	26°☿15'13	0.63939 AU	retrograde	13260 Feb 03 00:21	14°☿45'22	
inferior conj	13259 Mar 05 16:34	23°☿31'00	-0°41'20	evening set	13260 Feb 09 22:20	12°☿29'58	
minimum elong	13259 Mar 05 17:51	23°☿27'38	0°40'34	min. Earth dist.	13260 Feb 13 16:27	9°☿34'07	0.61902 AU
asc. node	13259 Mar 07 19:22	21°☿23'19		inferior conj	13260 Feb 16 16:45	6°☿47'29	-1°57'08
morning rise	13259 Mar 12 07:54	18°☿11'02		minimum elong	13260 Feb 16 20:49	6°☿38'04	1°55'00
direct	13259 Mar 14 19:07	17°☿40'37		asc. node	13260 Feb 22 16:48	2°☿14'12	
morning max el	13259 Mar 21 05:17	20°☿59'00	17°48'30	morning rise	13260 Feb 23 22:06	1°☿44'50	
	13259 Mar 28 03:32	0°☿		direct	13260 Feb 26 02:54	1°☿23'25	
morning set	13259 Apr 06 23:00	16°☿13'21		morning max el	13260 Mar 03 22:27	4°☿50'24	17°48'40
desc. node	13259 Apr 09 19:45	21°☿04'24		morning set	13260 Mar 19 16:48	29°☿15'17	
	13259 Apr 15 03:52	0°☿			13260 Mar 20 02:50	0°☿	
				desc. node	13260 Mar 26 16:19	11°☿35'10	
superior conj	13259 Apr 20 00:14	7°☿55'59	-1°13'18				
minimum elong	13259 Apr 19 16:49	7°☿25'55	1°12'52	superior conj	13260 Mar 30 23:01	18°☿56'12	-0°33'04
max. Earth dist.	13259 Apr 25 08:12	16°☿27'51	1.45017 AU	minimum elong	13260 Mar 30 19:52	18°☿42'52	0°32'49
	13259 May 04 00:35	0°☿			13260 Apr 06 15:06	0°☿	
evening rise	13259 May 05 15:02	2°☿27'30		max. Earth dist.	13260 Apr 07 00:36	0°☿38'31	1.43639 AU
	13259 May 24 05:09	0°☿		evening rise	13260 Apr 14 06:27	12°☿08'05	
evening max el	13259 Jun 02 13:53	11°☿37'09	20°19'35		13260 Apr 26 02:25	0°☿	
asc. node	13259 Jun 03 16:26	12°☿40'52		evening max el	13260 May 15 11:08	25°☿25'51	21°30'26
retrograde	13259 Jun 10 11:18	16°☿09'00		asc. node	13260 May 20 13:36	29°☿31'48	
evening set	13259 Jun 14 11:43	14°☿36'29			13260 May 21 12:16	0°☿	
inferior conj	13259 Jun 19 18:20	8°☿32'33	3°12'48	retrograde	13260 May 24 09:46	0°☿39'41	
minimum elong	13259 Jun 19 18:16	8°☿32'47	3°11'48		13260 May 27 02:56	30°☿☿II	

evening set	13260 May 28 20:48	28° Π 50'43		evening set	13261 May 13 04:41	13° Π 09'09	
inferior conj	13260 Jun 03 02:56	22° Π 35'41	3°06'19	min. Earth dist.	13261 May 18 04:53	7° Π 11'48	0.68897 AU
minimum elong	13260 Jun 03 01:55	22° Π 39'12	3°05'14	inferior conj	13261 May 18 12:31	6° Π 45'16	2°49'23
min. Earth dist.	13260 Jun 03 08:10	22° Π 17'24	0.68771 AU	minimum elong	13261 May 18 10:47	6° Π 51'16	2°48'11
morning rise	13260 Jun 08 06:50	16° Π 19'52		morning rise	13261 May 23 16:47	0° Π 36'03	
direct	13260 Jun 13 07:49	14° Π 08'58			13261 May 24 11:48	30° \mathbb{R} 8	
desc. node	13260 Jun 22 17:19	19° Π 27'24		direct	13261 May 28 04:49	28° \mathbb{S} 45'03	
morning max el	13260 Jun 23 08:39	20° Π 05'20	22°49'37		13261 Jun 01 05:54	0° Π	
	13260 Jul 01 18:44	0° \mathbb{S}		morning max el	13261 Jun 05 23:36	3° Π 49'56	21°24'08
	13260 Jul 22 08:15	0° \mathbb{Q}		desc. node	13261 Jun 09 14:21	7° Π 47'51	
morning set	13260 Jul 27 11:41	8° \mathbb{Q} 17'59			13261 Jun 25 18:59	0° \mathbb{S}	
max. Earth dist.	13260 Aug 01 00:56	15° \mathbb{Q} 55'42	1.40282 AU	morning set	13261 Jul 07 11:15	17° \mathbb{S} 51'18	
				max. Earth dist.	13261 Jul 14 04:43	28° \mathbb{S} 40'05	1.42464 AU
					13261 Jul 15 00:10	0° \mathbb{Q}	
superior conj	13260 Aug 08 20:32	29° \mathbb{Q} 42'12	-1°06'31				
minimum elong	13260 Aug 09 01:28	0° \mathbb{P} 04'37	1°06'22	superior conj	13261 Jul 21 14:25	11° \mathbb{Q} 06'07	-1°39'16
	13260 Aug 09 00:27	0° \mathbb{P}		minimum elong	13261 Jul 21 21:26	11° \mathbb{Q} 36'16	1°39'19
asc. node	13260 Aug 16 13:43	14° \mathbb{P} 05'41			13261 Aug 01 06:10	0° \mathbb{P}	
evening rise	13260 Aug 18 16:35	18° \mathbb{P} 07'32		evening rise	13261 Aug 01 21:22	1° \mathbb{P} 08'49	
	13260 Aug 25 01:59	0° \mathbb{L}		asc. node	13261 Aug 03 10:21	3° \mathbb{P} 56'13	
evening max el	13260 Sep 03 15:57	13° \mathbb{L} 52'13	18°27'40	evening max el	13261 Aug 18 02:31	26° \mathbb{P} 42'09	18°06'21
retrograde	13260 Sep 11 09:55	17° \mathbb{L} 47'07			13261 Aug 23 07:03	0° \mathbb{L}	
evening set	13260 Sep 13 10:24	17° \mathbb{L} 31'55		retrograde	13261 Aug 24 23:19	0° \mathbb{L} 12'50	
desc. node	13260 Sep 18 14:09	14° \mathbb{L} 56'41			13261 Aug 26 16:05	30° \mathbb{R} 11	
inferior conj	13260 Sep 21 04:16	12° \mathbb{L} 59'12	-0°48'59	evening set	13261 Aug 27 07:02	29° \mathbb{P} 49'03	
minimum elong	13260 Sep 21 02:22	13° \mathbb{L} 02'57	0°48'05	inferior conj	13261 Sep 03 06:46	24° \mathbb{P} 55'55	0°40'09
min. Earth dist.	13260 Sep 24 10:28	10° \mathbb{L} 25'38	0.57897 AU	minimum elong	13261 Sep 03 08:01	24° \mathbb{P} 53'03	0°39'30
morning rise	13260 Sep 28 14:52	7° \mathbb{L} 43'21		desc. node	13261 Sep 05 11:39	22° \mathbb{P} 53'51	
direct	13260 Oct 04 17:47	6° \mathbb{L} 07'26		min. Earth dist.	13261 Sep 06 12:30	21° \mathbb{P} 58'23	0.60118 AU
morning max el	13260 Oct 19 01:16	13° \mathbb{L} 41'58	27°04'56	morning rise	13261 Sep 10 05:49	19° \mathbb{P} 08'31	
	13260 Nov 01 00:44	0° \mathbb{M}		direct	13261 Sep 16 18:37	17° \mathbb{P} 05'29	
asc. node	13260 Nov 12 15:32	20° \mathbb{M} 07'15		morning max el	13261 Oct 01 02:03	24° \mathbb{P} 57'57	27°50'04
	13260 Nov 17 12:13	0° \mathbb{X}			13261 Oct 05 17:10	0° \mathbb{L}	
morning set	13260 Nov 18 06:38	1° \mathbb{X} 37'41			13261 Oct 25 10:21	0° \mathbb{M}	
				asc. node	13261 Oct 30 12:17	9° \mathbb{M} 46'44	
superior conj	13260 Nov 25 03:35	16° \mathbb{X} 44'56	1°33'37	morning set	13261 Nov 02 11:45	15° \mathbb{M} 53'20	
minimum elong	13260 Nov 25 02:19	16° \mathbb{X} 37'50	1°34'29	max. Earth dist.	13261 Nov 08 14:27	29° \mathbb{M} 08'07	1.31296 AU
max. Earth dist.	13260 Nov 25 06:22	17° \mathbb{X} 00'27	1.31266 AU		13261 Nov 08 23:47	0° \mathbb{X}	
	13260 Dec 01 03:46	0° \mathbb{Z}					
evening rise	13260 Dec 01 22:51	1° \mathbb{Z} 42'12		superior conj	13261 Nov 09 14:50	1° \mathbb{X} 23'40	1°23'22
desc. node	13260 Dec 15 11:25	27° \mathbb{Z} 22'16		minimum elong	13261 Nov 09 12:51	1° \mathbb{X} 12'40	1°23'59
	13260 Dec 17 02:28	0° \mathbb{A}		evening rise	13261 Nov 16 07:36	16° \mathbb{X} 11'19	
evening max el	13261 Jan 01 06:37	19° \mathbb{A} 26'29	26°55'50		13261 Nov 23 01:36	0° \mathbb{Z}	
retrograde	13261 Jan 15 05:28	26° \mathbb{A} 37'39		desc. node	13261 Dec 02 08:27	15° \mathbb{Z} 58'54	
evening set	13261 Jan 21 22:51	24° \mathbb{A} 42'27			13261 Dec 13 12:03	0° \mathbb{A}	
min. Earth dist.	13261 Jan 25 20:46	22° \mathbb{A} 03'03	0.59730 AU	evening max el	13261 Dec 14 02:27	0° \mathbb{A} 34'44	25°48'27
inferior conj	13261 Jan 29 01:15	19° \mathbb{A} 29'09	-3°19'33	retrograde	13261 Dec 28 00:15	7° \mathbb{A} 36'29	
minimum elong	13261 Jan 29 08:22	19° \mathbb{A} 14'46	3°16'17	evening set	13262 Jan 03 03:26	6° \mathbb{A} 08'47	
morning rise	13261 Feb 05 20:57	14° \mathbb{A} 47'04		min. Earth dist.	13262 Jan 07 15:08	3° \mathbb{A} 31'34	0.57630 AU
direct	13261 Feb 07 22:16	14° \mathbb{A} 31'10		inferior conj	13262 Jan 10 14:40	1° \mathbb{A} 26'40	-4°39'22
asc. node	13261 Feb 08 14:12	14° \mathbb{A} 32'53		minimum elong	13262 Jan 10 23:25	1° \mathbb{A} 11'20	4°36'07
morning max el	13261 Feb 15 11:49	18° \mathbb{A} 16'48	18°07'49		13262 Jan 12 17:29	30° \mathbb{R} 3	
	13261 Feb 23 22:18	0° \mathbb{H}		morning rise	13262 Jan 18 22:10	27° \mathbb{Z} 06'52	
morning set	13261 Mar 03 02:38	13° \mathbb{H} 00'58		direct	13262 Jan 21 00:46	26° \mathbb{Z} 52'57	
	13261 Mar 12 07:34	0° \mathbb{Y}		asc. node	13262 Jan 26 11:33	28° \mathbb{Z} 32'26	
					13262 Jan 28 11:44	0° \mathbb{A}	
superior conj	13261 Mar 12 21:21	1° \mathbb{Y} 01'42	0°05'09	morning max el	13262 Jan 29 17:32	1° \mathbb{A} 07'33	18°47'35
minimum elong	13261 Mar 12 21:46	1° \mathbb{Y} 03'33	0°05'09	morning set	13262 Feb 14 23:34	27° \mathbb{A} 15'36	
behind sun begin	13261 Mar 12 14:27	0° \mathbb{Y} 30'52			13262 Feb 16 09:12	0° \mathbb{H}	
behind sun end	13261 Mar 13 05:04	1° \mathbb{Y} 36'09					
desc. node	13261 Mar 13 12:49	2° \mathbb{Y} 10'40		superior conj	13262 Feb 23 15:13	14° \mathbb{H} 00'35	0°37'39
max. Earth dist.	13261 Mar 20 12:26	14° \mathbb{Y} 14'46	1.41742 AU	minimum elong	13262 Feb 23 17:32	14° \mathbb{H} 11'27	0°37'40
evening rise	13261 Mar 25 13:57	22° \mathbb{Y} 34'29		desc. node	13262 Feb 28 09:18	22° \mathbb{H} 47'09	
	13261 Mar 30 06:26	0° \mathbb{B}		max. Earth dist.	13262 Mar 02 19:38	27° \mathbb{H} 07'03	1.39547 AU
	13261 Apr 20 04:14	0° \mathbb{I}			13262 Mar 04 11:16	0° \mathbb{Y}	
evening max el	13261 Apr 28 03:44	9° \mathbb{I} 15'29	22°49'12	evening rise	13262 Mar 06 18:27	3° \mathbb{Y} 56'09	
asc. node	13261 May 07 10:49	15° \mathbb{I} 10'09			13262 Mar 23 10:26	0° \mathbb{B}	
retrograde	13261 May 08 06:26	15° \mathbb{I} 13'13					

evening max el	13262 Apr 10 17:43	23° 8 06'41	24°10'07	evening max el	13263 Mar 24 07:15	6° 8 59'19	25°26'17
retrograde	13262 Apr 21 23:57	29° 8 43'18		retrograde	13263 Apr 05 13:11	14° 8 04'09	
asc. node	13262 Apr 24 08:08	29° 8 18'43		evening set	13263 Apr 11 10:31	11° 8 37'45	
evening set	13262 Apr 27 09:47	27° 8 26'25		asc. node	13263 Apr 11 05:32	11° 8 48'05	
min. Earth dist.	13262 May 02 01:03	22° 8 05'07	0.68560 AU	min. Earth dist.	13263 Apr 15 18:36	6° 8 52'02	0.67783 AU
inferior conj	13262 May 02 21:11	20° 8 56'57	2°22'20	inferior conj	13263 Apr 17 03:04	5° 8 07'12	1°45'00
minimum elong	13262 May 02 19:04	21° 8 04'08	2°21'03	minimum elong	13263 Apr 17 01:01	5° 8 13'51	1°43'50
morning rise	13262 May 08 04:27	14° 8 55'28			13263 Apr 21 16:03	30° 8 Y	
direct	13262 May 12 03:57	13° 8 25'20		morning rise	13263 Apr 22 15:57	29° Y 14'44	
morning max el	13262 May 19 21:02	17° 8 45'26	20°09'06	direct	13263 Apr 26 03:49	28° Y 04'37	
desc. node	13262 May 27 11:15	26° 8 51'38			13263 Apr 30 22:51	0° 8	
	13262 May 29 18:08	0° II		morning max el	13263 May 03 02:03	1° 8 51'18	19°08'26
morning set	13262 Jun 16 15:39	26° II 36'15		desc. node	13263 May 14 08:03	16° 8 27'14	
	13262 Jun 18 20:23	0° 8		greatest brilliancy	13263 May 16 01:46	19° 8 02'08	-0.7m
max. Earth dist.	13262 Jun 26 14:48	12° 8 12'30	1.44229 AU		13263 May 23 06:49	0° II	
				morning set	13263 May 26 19:22	5° II 25'37	
superior conj	13262 Jul 02 08:46	21° 8 29'28	-2°03'59	max. Earth dist.	13263 Jun 09 06:41	26° II 22'30	1.45390 AU
minimum elong	13262 Jul 02 14:47	21° 8 54'01	2°04'37		13263 Jun 11 13:59	0° 8	
	13262 Jul 07 12:06	0° 8					
evening rise	13262 Jul 15 08:38	13° 8 22'26		superior conj	13263 Jun 12 04:57	0° 8 59'02	-2°13'33
asc. node	13262 Jul 21 07:02	23° 8 32'31		minimum elong	13263 Jun 12 04:58	0° 8 59'07	2°14'35
	13262 Jul 25 05:22	0° 8		evening rise	13263 Jun 26 21:33	24° 8 37'47	
evening max el	13262 Aug 01 16:29	9° 8 57'57	18°04'17		13263 Jun 30 04:10	0° 8	
retrograde	13262 Aug 08 02:41	13° 8 18'31		asc. node	13263 Jul 08 03:49	12° 8 49'18	
evening set	13262 Aug 10 18:38	12° 8 42'46		evening max el	13263 Jul 16 06:28	23° 8 31'14	18°20'29
inferior conj	13262 Aug 17 03:01	7° 8 31'06	1°46'35	retrograde	13263 Jul 22 15:43	26° 8 55'28	
minimum elong	13262 Aug 17 05:28	7° 8 24'40	1°45'21	evening set	13263 Jul 25 16:14	26° 8 05'11	
min. Earth dist.	13262 Aug 19 23:57	4° 8 31'34	0.62398 AU	inferior conj	13263 Jul 31 12:58	20° 8 36'50	2°31'46
desc. node	13262 Aug 23 09:11	1° 8 31'35		minimum elong	13263 Jul 31 15:19	20° 8 30'00	2°30'29
morning rise	13262 Aug 23 14:01	1° 8 22'43		min. Earth dist.	13263 Aug 02 20:43	17° 8 55'02	0.64500 AU
	13262 Aug 25 20:56	30° 8 8		morning rise	13263 Aug 06 13:01	14° 8 17'11	
direct	13262 Aug 30 06:22	28° 8 57'45		desc. node	13263 Aug 10 06:40	12° 8 08'05	
	13262 Sep 03 22:17	0° 8		direct	13263 Aug 13 02:56	11° 8 39'30	
morning max el	13262 Sep 13 08:46	6° 8 59'12	27°56'15	morning max el	13263 Aug 26 18:50	19° 8 38'12	27°26'28
	13262 Sep 30 22:14	0° 8			13263 Sep 04 15:07	0° 8	
morning set	13262 Oct 17 10:46	29° 8 48'58			13263 Sep 23 22:54	0° 8	
asc. node	13262 Oct 17 08:57	29° 8 39'43		morning set	13263 Oct 01 01:07	13° 8 17'54	
	13262 Oct 17 12:56	0° 8		asc. node	13263 Oct 04 05:33	19° 8 41'10	
max. Earth dist.	13262 Oct 22 18:39	11° 8 02'17	1.31852 AU	max. Earth dist.	13263 Oct 05 15:23	22° 8 35'28	1.32952 AU
superior conj	13262 Oct 24 23:56	15° 8 52'50	1°07'27	superior conj	13263 Oct 09 04:51	0° 8 06'27	0°46'00
minimum elong	13262 Oct 24 21:40	15° 8 40'22	1°07'47	minimum elong	13263 Oct 09 02:50	29° 8 55'41	0°46'03
	13262 Oct 31 10:16	0° 8			13263 Oct 09 03:39	0° 8	
evening rise	13262 Oct 31 18:26	0° 8 44'04		evening rise	13263 Oct 16 05:29	15° 8 15'12	
	13262 Nov 16 14:36	0° 8			13263 Oct 23 12:30	0° 8	
desc. node	13262 Nov 19 05:37	3° 8 39'35		desc. node	13263 Nov 06 02:54	20° 8 02'52	
evening max el	13262 Nov 25 14:46	10° 8 57'30	24°15'55	evening max el	13263 Nov 07 01:13	20° 8 59'01	22°33'47
retrograde	13262 Dec 09 06:45	17° 8 46'17		retrograde	13263 Nov 20 00:08	27° 8 24'36	
evening set	13262 Dec 14 08:33	16° 8 49'45		evening set	13263 Nov 23 16:51	26° 8 54'44	
min. Earth dist.	13262 Dec 20 02:14	13° 8 56'37	0.55879 AU	min. Earth dist.	13263 Dec 01 09:05	23° 8 27'22	0.54777 AU
inferior conj	13262 Dec 22 07:25	12° 8 34'57	-5°39'02	inferior conj	13263 Dec 02 06:23	22° 8 57'15	-5°54'46
minimum elong	13262 Dec 22 13:26	12° 8 25'43	5°37'14	minimum elong	13263 Dec 02 04:16	23° 8 00'16	5°53'40
morning rise	13262 Dec 30 20:16	8° 8 35'12		morning rise	13263 Dec 10 16:58	19° 8 09'32	
direct	13263 Jan 02 07:50	8° 8 19'04		direct	13263 Dec 13 22:21	18° 8 45'51	
morning max el	13263 Jan 12 11:34	13° 8 11'43	19°49'49	morning max el	13263 Dec 25 15:09	24° 8 21'03	21°14'56
asc. node	13263 Jan 13 08:50	14° 8 05'05			13263 Dec 30 14:11	0° 8	
	13263 Jan 24 02:48	0° 8		asc. node	13263 Dec 31 06:03	0° 8 53'27	
morning set	13263 Jan 30 03:57	11° 8 48'57		morning set	13264 Jan 14 12:57	26° 8 31'56	
					13264 Jan 16 04:41	0° 8	
superior conj	13263 Feb 07 00:04	27° 8 40'14	1°03'09	superior conj	13264 Jan 21 19:45	11° 8 48'13	1°21'30
minimum elong	13263 Feb 07 02:51	27° 8 54'03	1°03'24	minimum elong	13264 Jan 21 22:06	12° 8 00'23	1°22'05
	13263 Feb 08 04:24	0° 8		max. Earth dist.	13264 Jan 26 12:02	21° 8 17'18	1.35247 AU
max. Earth dist.	13263 Feb 13 01:53	9° 8 22'19	1.37307 AU	evening rise	13264 Jan 30 13:27	29° 8 07'07	
desc. node	13263 Feb 15 05:50	13° 8 21'25			13264 Jan 31 00:44	0° 8	
evening rise	13263 Feb 16 19:23	16° 8 10'26					
	13263 Feb 24 22:22	0° 8		desc. node	13264 Feb 02 02:26	3° 8 48'55	
	13263 Mar 17 22:59	0° 8			13264 Feb 18 03:27	0° 8	

evening max el	13264 Mar 05 21:03	20° Υ 47'14	26°30'23	desc. node	13265 Jan 18 23:07	24° \approx 05'20	
retrograde	13264 Mar 18 21:04	28° Υ 08'12			13265 Jan 22 07:58	0° H	
evening set	13264 Mar 25 05:05	25° Υ 36'31			13265 Feb 12 06:56	0° Υ	
asc. node	13264 Mar 28 03:00	22° Υ 46'40		evening max el	13265 Feb 16 10:32	4° Υ 20'52	27°15'00
min. Earth dist.	13264 Mar 29 07:14	21° Υ 25'31	0.66585 AU	retrograde	13265 Mar 01 22:48	11° Υ 47'39	
inferior conj	13264 Mar 31 04:03	19° Υ 10'33	0°56'57	evening set	13265 Mar 08 15:30	9° Υ 16'15	
minimum elong	13264 Mar 31 02:40	19° Υ 14'44	0°56'12	min. Earth dist.	13265 Mar 12 12:49	5° Υ 38'06	0.65003 AU
morning rise	13264 Apr 06 01:13	13° Υ 28'57		inferior conj	13265 Mar 14 21:43	3° Υ 01'24	-0°02'15
direct	13264 Apr 09 02:31	12° Υ 36'41		minimum elong	13265 Mar 14 21:46	3° Υ 01'14	0°02'09
morning max el	13264 Apr 15 13:44	16° Υ 02'43	18°24'03	transit middle	13265 Mar 14 21:46	3° Υ 01'14	0°02'09
	13264 Apr 26 01:35	0° B		transit begin	13265 Mar 14 18:46	3° Υ 09'34	
desc. node	13264 Apr 30 04:45	6° B 25'35		transit end	13265 Mar 15 00:47	2° Υ 52'55	
morning set	13264 May 05 19:05	15° B 16'52		asc. node	13265 Mar 15 00:30	2° Υ 53'43	
	13264 May 15 02:58	0° II			13265 Mar 17 19:34	30° R H	
superior conj	13264 May 21 13:00	10° II 02'41	-2°03'12	morning rise	13265 Mar 21 05:46	27° H 32'59	
minimum elong	13264 May 21 05:46	9° II 34'28	2°03'43	direct	13265 Mar 23 21:44	26° H 55'34	
max. Earth dist.	13264 May 22 02:17	10° II 54'32	1.45830 AU	morning max el	13265 Mar 30 05:55	0° Υ 13'16	17°56'34
	13264 Jun 03 07:21	0° B			13265 Mar 30 00:24	0° Υ	
evening rise	13264 Jun 06 09:58	4° B 52'53		morning set	13265 Apr 16 23:08	26° Υ 31'07	
greatest brilliancy	13264 Jun 16 00:42	19° B 55'43	-0.8m	desc. node	13265 Apr 17 01:21	26° Υ 40'18	
	13264 Jun 22 19:36	0° Ω			13265 Apr 19 01:47	0° B	
asc. node	13264 Jun 24 00:44	1° Ω 39'27		superior conj	13265 May 01 02:15	19° B 26'38	-1°34'47
evening max el	13264 Jun 28 17:38	7° Ω 14'29	18°54'10	minimum elong	13265 Apr 30 17:16	18° B 50'55	1°34'32
retrograde	13264 Jul 05 10:50	10° Ω 55'51		max. Earth dist.	13265 May 04 22:35	25° B 30'50	1.45517 AU
evening set	13264 Jul 08 20:12	9° Ω 49'30			13265 May 07 19:24	0° II	
inferior conj	13264 Jul 14 08:56	4° Ω 06'02	2°58'59	evening rise	13265 May 17 02:58	14° II 24'27	
minimum elong	13264 Jul 14 10:29	4° Ω 01'06	2°57'52		13265 May 27 08:58	0° B	
min. Earth dist.	13264 Jul 16 02:04	1° Ω 56'13	0.66260 AU	greatest brilliancy	13265 May 31 07:10	5° B 49'19	-0.6m
	13264 Jul 17 17:08	30° R B		asc. node	13265 Jun 10 21:45	19° B 53'10	
morning rise	13264 Jul 20 00:03	27° B 42'19		evening max el	13265 Jun 11 23:51	21° B 01'25	19°44'12
direct	13264 Jul 26 06:43	25° B 01'56		retrograde	13265 Jun 19 09:02	25° B 12'13	
desc. node	13264 Jul 27 04:05	25° B 04'50		evening set	13265 Jun 23 03:46	23° B 49'11	
	13264 Aug 05 08:17	0° Ω		inferior conj	13265 Jun 28 11:45	17° B 52'06	3°11'26
morning max el	13264 Aug 08 05:57	2° Ω 44'22	26°27'56	minimum elong	13265 Jun 28 12:17	17° B 50'18	3°10'25
	13264 Aug 28 20:36	0° H		min. Earth dist.	13265 Jun 29 14:25	16° B 22'51	0.67595 AU
morning set	13264 Sep 13 03:43	26° H 13'03		morning rise	13265 Jul 03 20:25	11° B 29'02	
	13264 Sep 15 03:26	0° B		direct	13265 Jul 09 16:42	8° B 54'55	
max. Earth dist.	13264 Sep 17 02:33	3° B 49'17	1.34570 AU	desc. node	13265 Jul 14 01:25	10° B 04'50	
asc. node	13264 Sep 20 02:09	9° B 47'14		morning max el	13265 Jul 21 16:39	16° B 06'26	25°09'34
					13265 Aug 02 04:22	0° Ω	
superior conj	13264 Sep 22 03:11	13° B 58'27	0°19'17		13265 Aug 21 18:42	0° H	
minimum elong	13264 Sep 22 02:09	13° B 53'05	0°19'13	morning set	13265 Aug 26 14:30	8° H 24'00	
evening rise	13264 Sep 29 14:50	29° B 39'57		max. Earth dist.	13265 Aug 30 04:39	14° H 56'09	1.36620 AU
	13264 Sep 29 18:41	0° H					
	13264 Oct 17 13:44	0° H		superior conj	13265 Sep 05 15:54	27° H 20'35	-0°12'01
evening max el	13264 Oct 18 19:09	1° H 16'32	20°59'18	minimum elong	13265 Sep 05 16:40	27° H 24'23	0°12'02
desc. node	13264 Oct 23 00:17	4° H 42'48		behind sun begin	13265 Sep 05 12:20	27° H 03'00	
retrograde	13264 Oct 30 10:54	7° H 04'09		behind sun end	13265 Sep 05 21:00	27° H 45'48	
evening set	13264 Nov 01 22:33	6° H 49'29		asc. node	13265 Sep 06 22:42	29° H 53'36	
inferior conj	13264 Nov 10 21:49	2° H 55'39	-5°11'04		13265 Sep 06 23:59	0° B	
minimum elong	13264 Nov 10 12:34	3° H 08'45	5°08'15	evening rise	13265 Sep 13 20:12	13° B 51'27	
min. Earth dist.	13264 Nov 11 15:13	2° H 30'58	0.54544 AU		13265 Sep 22 06:29	0° H	
	13264 Nov 16 12:12	30° R H		evening max el	13265 Oct 01 02:43	12° H 16'36	19°43'19
morning rise	13264 Nov 19 02:56	29° H 03'09		desc. node	13265 Oct 09 21:45	17° H 12'15	
direct	13264 Nov 23 06:05	28° H 26'36		retrograde	13265 Oct 11 03:12	17° H 16'35	
	13264 Nov 29 16:22	0° H		evening set	13265 Oct 13 00:51	17° H 06'35	
morning max el	13264 Dec 06 06:14	4° H 43'08	22°58'11	inferior conj	13265 Oct 21 20:20	13° H 03'49	-3°38'55
asc. node	13264 Dec 17 03:09	18° H 40'56		minimum elong	13265 Oct 21 11:13	13° H 18'02	3°35'12
	13264 Dec 23 11:36	0° B		min. Earth dist.	13265 Oct 24 00:06	11° H 43'12	0.55245 AU
morning set	13264 Dec 29 00:21	11° B 18'22		morning rise	13265 Oct 29 19:52	8° H 45'43	
				direct	13265 Nov 03 19:56	7° H 50'24	
superior conj	13265 Jan 04 23:00	26° B 15'36	1°32'58	morning max el	13265 Nov 17 16:16	14° H 43'32	24°46'47
minimum elong	13265 Jan 05 00:26	26° B 23'17	1°33'50		13265 Nov 29 17:01	0° H	
	13265 Jan 06 17:08	0° \approx		asc. node	13265 Dec 04 00:09	7° H 12'45	
max. Earth dist.	13265 Jan 08 05:22	3° \approx 10'23	1.33532 AU	morning set	13265 Dec 13 12:14	26° H 02'31	
evening rise	13265 Jan 12 21:07	12° \approx 37'18			13265 Dec 15 08:07	0° B	

superior conj	13265 Dec 20 07:10	10° S 54'26	1°37'59	minimum elong	13266 Dec 04 17:18	25° S 33'55	1°37'53
minimum elong	13265 Dec 20 07:30	10° S 56'17	1°38'59	max. Earth dist.	13266 Dec 05 12:17	27° S 19'34	1.31480 AU
max. Earth dist.	13265 Dec 22 06:08	15° S 11'01	1.32257 AU		13266 Dec 06 17:13	0° S	
evening rise	13265 Dec 27 15:05	26° S 32'41		evening rise	13266 Dec 11 16:37	10° S 46'13	
	13265 Dec 29 08:07	0° \approx			13266 Dec 21 13:56	0° \approx	
desc. node	13266 Jan 05 19:54	14° \approx 05'10		desc. node	13266 Dec 23 16:47	3° \approx 40'52	
	13266 Jan 15 16:31	0° H		evening max el	13267 Jan 12 05:42	29° \approx 57'39	27°19'33
evening max el	13266 Jan 29 22:08	17° H 28'31	27°33'19		13267 Jan 12 06:41	0° H	
retrograde	13266 Feb 12 17:43	24° H 53'27		retrograde	13267 Jan 26 04:37	7° H 15'00	
evening set	13266 Feb 19 15:20	22° H 29'35		evening set	13267 Feb 02 01:26	5° H 07'12	
min. Earth dist.	13266 Feb 23 09:35	19° H 20'17	0.63097 AU	min. Earth dist.	13267 Feb 05 20:14	2° H 19'38	0.60977 AU
inferior conj	13266 Feb 26 05:13	16° H 33'03	-1°12'24	inferior conj	13267 Feb 08 23:10	29° \approx 36'10	-2°31'43
minimum elong	13266 Feb 26 07:36	16° H 27'08	1°11'04	minimum elong	13267 Feb 09 04:34	29° \approx 24'22	2°29'01
asc. node	13266 Mar 01 21:58	13° H 11'32			13267 Feb 08 12:21	30° R \approx	
morning rise	13266 Mar 05 02:24	11° H 20'27		morning rise	13267 Feb 16 10:45	24° \approx 42'06	
direct	13266 Mar 07 10:35	10° H 54'21		asc. node	13267 Feb 16 19:23	24° \approx 36'24	
morning max el	13266 Mar 13 23:45	14° H 15'00	17°46'25	direct	13267 Feb 18 13:28	24° \approx 23'36	
	13266 Mar 24 23:34	0° Y		morning max el	13267 Feb 25 15:48	27° \approx 57'36	17°54'24
morning set	13266 Mar 30 04:55	8° Y 59'19			13267 Feb 27 12:45	0° H	
desc. node	13266 Apr 03 21:54	17° Y 06'38		morning set	13267 Mar 13 06:14	22° H 22'02	
					13267 Mar 17 11:11	0° Y	
superior conj	13266 Apr 11 11:11	29° Y 48'33	-0°56'20	desc. node	13267 Mar 21 18:24	7° Y 39'52	
minimum elong	13266 Apr 11 05:31	29° Y 25'10	0°55'57				
	13266 Apr 11 13:58	0° S		superior conj	13267 Mar 23 20:20	11° Y 17'45	-0°16'21
max. Earth dist.	13266 Apr 17 16:36	9° S 54'03	1.44495 AU	minimum elong	13267 Mar 23 18:52	11° Y 11'28	0°16'12
evening rise	13266 Apr 26 14:17	23° S 50'06		max. Earth dist.	13267 Mar 31 06:35	23° Y 49'32	1.42879 AU
	13266 Apr 30 15:15	0° II			13267 Apr 04 02:01	0° S	
	13266 May 21 17:34	0° S		evening rise	13267 Apr 06 11:26	3° S 47'55	
evening max el	13266 May 26 00:13	4° S 49'36	20°48'26		13267 Apr 24 00:03	0° II	
asc. node	13266 May 28 18:53	7° S 18'49		evening max el	13267 May 08 19:15	18° II 38'29	22°03'21
retrograde	13266 Jun 03 08:02	9° S 39'20		asc. node	13267 May 15 16:05	23° II 40'54	
evening set	13266 Jun 07 12:48	7° S 59'45		retrograde	13267 May 18 05:54	24° II 11'28	
inferior conj	13266 Jun 12 18:53	1° S 50'39	3°11'25	evening set	13267 May 22 21:31	22° II 16'08	
minimum elong	13266 Jun 12 18:24	1° S 52'20	3°10'23	inferior conj	13267 May 28 04:08	15° II 57'01	3°00'24
min. Earth dist.	13266 Jun 13 07:47	1° S 06'02	0.68472 AU	minimum elong	13267 May 28 02:47	16° II 01'44	2°59'16
	13266 Jun 14 03:04	30° R II		min. Earth dist.	13267 May 28 03:55	15° II 57'46	0.68879 AU
morning rise	13266 Jun 17 23:45	25° II 31'25		morning rise	13267 Jun 02 07:51	9° II 43'37	
direct	13266 Jun 23 07:58	23° II 10'28		direct	13267 Jun 07 03:19	7° II 40'43	
desc. node	13266 Jun 30 22:36	26° II 41'25		morning max el	13267 Jun 16 15:05	13° II 15'12	22°12'14
morning max el	13266 Jul 04 02:58	29° II 37'20	23°41'11	desc. node	13267 Jun 17 19:41	14° II 29'18	
	13266 Jul 04 11:52	0° S			13267 Jun 30 01:01	0° S	
	13266 Jul 26 23:21	0° Q		morning set	13267 Jul 19 18:46	29° S 50'05	
morning set	13266 Aug 08 04:55	19° Q 39'52			13267 Jul 19 21:14	0° Q	
max. Earth dist.	13266 Aug 12 02:11	26° Q 21'52	1.38930 AU	max. Earth dist.	13267 Jul 25 02:00	8° Q 32'54	1.41242 AU
	13266 Aug 14 03:26	0° M					
superior conj	13266 Aug 19 15:23	10° M 04'35	-0°46'23	superior conj	13267 Aug 01 21:20	22° Q 00'33	-1°21'00
minimum elong	13266 Aug 19 18:42	10° M 20'11	0°46'15	minimum elong	13267 Aug 02 03:20	22° Q 27'13	1°20'51
asc. node	13266 Aug 24 19:17	19° M 56'56			13267 Aug 06 07:42	0° M	
evening rise	13266 Aug 28 18:52	27° M 42'54		asc. node	13267 Aug 11 15:55	9° M 53'19	
	13266 Aug 29 23:02	0° Q		evening rise	13267 Aug 12 07:19	11° M 05'09	
evening max el	13266 Sep 13 23:49	24° Q 05'41	18°49'09		13267 Aug 23 01:57	0° Q	
retrograde	13266 Sep 22 11:08	28° Q 20'54		evening max el	13267 Aug 28 06:44	6° Q 36'44	18°16'17
evening set	13266 Sep 24 08:30	28° Q 08'59		retrograde	13267 Sep 04 14:13	10° Q 19'12	
desc. node	13266 Sep 26 19:14	27° Q 20'58		evening set	13267 Sep 06 17:40	10° Q 00'46	
inferior conj	13266 Oct 02 13:05	23° Q 48'40	-1°49'10	desc. node	13267 Sep 13 16:43	5° Q 42'26	
minimum elong	13266 Oct 02 08:31	23° Q 56'54	1°47'02	inferior conj	13267 Sep 14 03:38	5° Q 19'31	-0°08'30
min. Earth dist.	13266 Oct 05 14:09	21° Q 37'29	0.56762 AU	minimum elong	13267 Sep 14 03:19	5° Q 20'09	0°08'24
morning rise	13266 Oct 10 05:15	18° Q 53'50		transit middle	13267 Sep 14 03:19	5° Q 20'09	0°08'24
direct	13266 Oct 15 23:46	17° Q 33'26		transit begin	13267 Sep 14 00:22	5° Q 26'24	
morning max el	13266 Oct 30 05:16	24° Q 55'40	26°22'19	transit end	13267 Sep 14 06:17	5° Q 13'54	
	13266 Nov 03 22:11	0° M		min. Earth dist.	13267 Sep 17 11:08	2° Q 33'00	0.58816 AU
asc. node	13266 Nov 20 21:01	26° M 17'40		morning rise	13267 Sep 21 09:32	29° M 49'22	
	13266 Nov 22 18:56	0° S			13267 Sep 21 02:05	30° R M	
morning set	13266 Nov 27 22:53	10° S 39'23		direct	13267 Sep 27 17:40	28° M 01'18	
					13267 Oct 04 15:38	0° Q	
superior conj	13266 Dec 04 18:02	25° S 38'00	1°36'54	morning max el	13267 Oct 12 01:23	5° Q 44'23	27°28'47
					13267 Oct 30 02:17	0° M	

asc. node	13267 Nov 07 17:47	15° \mathbb{M} 46'57		asc. node	13268 Oct 24 14:29	5° \mathbb{M} 32'49	
morning set	13267 Nov 12 06:34	25° \mathbb{M} 04'40		morning set	13268 Oct 26 09:21	9° \mathbb{M} 12'24	
	13267 Nov 14 13:31	0° \mathbb{X}		max. Earth dist.	13268 Nov 01 03:51	21° \mathbb{M} 35'01	1.31470 AU
superior conj	13267 Nov 19 05:41	10° \mathbb{X} 20'43	1°29'58	superior conj	13268 Nov 02 16:14	24° \mathbb{M} 56'04	1°17'19
minimum elong	13267 Nov 19 04:05	10° \mathbb{X} 11'44	1°30'45	minimum elong	13268 Nov 02 14:05	24° \mathbb{M} 44'05	1°17'49
max. Earth dist.	13267 Nov 18 20:49	9° \mathbb{X} 31'12	1.31215 AU		13268 Nov 04 22:59	0° \mathbb{X}	
evening rise	13267 Nov 25 23:22	25° \mathbb{X} 12'05		evening rise	13268 Nov 09 09:13	9° \mathbb{X} 43'41	
	13267 Nov 28 05:56	0° \mathbb{Z}			13268 Nov 19 14:56	0° \mathbb{Z}	
desc. node	13267 Dec 10 13:46	22° \mathbb{Z} 43'11		desc. node	13268 Nov 26 10:53	10° \mathbb{Z} 58'26	
	13267 Dec 15 10:16	0° \mathbb{Z}		evening max el	13268 Dec 05 23:09	22° \mathbb{Z} 26'02	25°11'24
evening max el	13267 Dec 25 06:41	11° \mathbb{Z} 38'18	26°31'04	retrograde	13268 Dec 19 18:52	29° \mathbb{Z} 22'04	
retrograde	13268 Jan 08 05:39	18° \mathbb{Z} 45'10		evening set	13268 Dec 25 12:52	28° \mathbb{Z} 07'33	
evening set	13268 Jan 14 18:02	17° \mathbb{Z} 01'18		min. Earth dist.	13268 Dec 30 11:11	25° \mathbb{Z} 26'05	0.56835 AU
min. Earth dist.	13268 Jan 18 20:27	14° \mathbb{Z} 24'31	0.58815 AU	inferior conj	13269 Jan 02 04:40	23° \mathbb{Z} 38'21	-5°08'26
inferior conj	13268 Jan 22 00:00	12° \mathbb{Z} 01'14	-3°54'31	minimum elong	13269 Jan 02 12:58	23° \mathbb{Z} 24'39	5°05'41
minimum elong	13268 Jan 22 08:09	11° \mathbb{Z} 45'44	3°51'04	morning rise	13269 Jan 10 15:24	19° \mathbb{Z} 27'27	
morning rise	13268 Jan 30 01:14	7° \mathbb{Z} 28'09		direct	13269 Jan 12 20:57	19° \mathbb{Z} 13'02	
direct	13268 Feb 01 02:16	7° \mathbb{Z} 13'33		asc. node	13269 Jan 20 14:03	22° \mathbb{Z} 19'10	
asc. node	13268 Feb 03 16:44	7° \mathbb{Z} 38'24		morning max el	13269 Jan 22 03:31	23° \mathbb{Z} 42'32	19°11'09
morning max el	13268 Feb 09 02:24	11° \mathbb{Z} 10'41	18°21'58		13269 Jan 27 07:31	0° \mathbb{Z}	
	13268 Feb 21 12:21	0° \mathbb{X}		morning set	13269 Feb 07 21:53	20° \mathbb{Z} 46'20	
morning set	13268 Feb 24 21:22	6° \mathbb{X} 22'15			13269 Feb 12 13:17	0° \mathbb{X}	
superior conj	13268 Mar 05 03:33	23° \mathbb{X} 47'44	0°19'44	superior conj	13269 Feb 16 04:21	7° \mathbb{X} 05'33	0°49'21
minimum elong	13268 Mar 05 04:58	23° \mathbb{X} 54'13	0°19'43	minimum elong	13269 Feb 16 07:00	7° \mathbb{X} 18'19	0°49'26
desc. node	13268 Mar 07 14:55	28° \mathbb{X} 16'29		desc. node	13269 Feb 22 11:27	18° \mathbb{X} 52'34	
	13268 Mar 08 14:08	0° \mathbb{Y}		max. Earth dist.	13269 Feb 22 23:05	19° \mathbb{X} 45'07	1.38594 AU
max. Earth dist.	13268 Mar 12 16:21	7° \mathbb{Y} 08'01	1.40839 AU	evening rise	13269 Feb 26 17:17	26° \mathbb{X} 23'24	
evening rise	13268 Mar 17 03:47	14° \mathbb{Y} 38'29			13269 Feb 28 19:54	0° \mathbb{Y}	
	13268 Mar 26 21:19	0° \mathbb{X}			13269 Mar 20 11:00	0° \mathbb{X}	
	13268 Apr 18 01:49	0° \mathbb{I}		evening max el	13269 Apr 03 00:20	16° \mathbb{X} 22'00	24°43'29
evening max el	13268 Apr 20 10:39	2° \mathbb{I} 29'25	23°23'47	retrograde	13269 Apr 14 16:56	23° \mathbb{X} 11'26	
retrograde	13268 May 01 01:13	8° \mathbb{I} 44'01		asc. node	13269 Apr 18 10:42	22° \mathbb{X} 10'03	
asc. node	13268 May 01 13:21	8° \mathbb{I} 42'51		evening set	13269 Apr 20 07:50	20° \mathbb{X} 49'55	
evening set	13268 May 06 04:23	6° \mathbb{I} 34'20		min. Earth dist.	13269 Apr 24 19:52	15° \mathbb{X} 44'06	0.68288 AU
min. Earth dist.	13268 May 11 00:38	0° \mathbb{I} 52'20	0.68816 AU	inferior conj	13269 Apr 25 21:18	14° \mathbb{X} 19'36	2°07'46
inferior conj	13268 May 11 13:33	0° \mathbb{I} 07'52	2°39'08	minimum elong	13269 Apr 25 19:08	14° \mathbb{X} 26'47	2°06'30
minimum elong	13268 May 11 11:36	0° \mathbb{I} 14'34	2°37'53	morning rise	13269 May 01 06:38	8° \mathbb{X} 22'02	
	13268 May 11 15:50	30° \mathbb{R} 8		direct	13269 May 05 01:08	7° \mathbb{X} 00'35	
morning rise	13268 May 16 18:46	24° \mathbb{X} 01'47		morning max el	13269 May 12 09:08	11° \mathbb{X} 04'27	19°41'25
direct	13268 May 21 01:30	22° \mathbb{X} 19'25		desc. node	13269 May 21 13:32	22° \mathbb{X} 28'23	
morning max el	13268 May 29 08:23	27° \mathbb{X} 03'39	20°50'33	greatest brilliancy	13269 May 25 02:35	27° \mathbb{X} 33'41	-0.6m
	13268 Jun 01 01:52	0° \mathbb{I}			13269 May 26 18:23	0° \mathbb{I}	
desc. node	13268 Jun 03 16:40	3° \mathbb{I} 09'38		morning set	13269 Jun 07 10:02	17° \mathbb{I} 37'42	
	13268 Jun 22 12:37	0° \mathbb{S}			13269 Jun 15 09:34	0° \mathbb{S}	
morning set	13268 Jun 28 08:35	8° \mathbb{S} 57'45		max. Earth dist.	13269 Jun 18 22:04	5° \mathbb{S} 32'25	1.44807 AU
max. Earth dist.	13268 Jul 06 08:39	21° \mathbb{S} 39'28	1.43282 AU				
	13268 Jul 11 10:39	0° \mathbb{Q}		superior conj	13269 Jun 23 13:46	12° \mathbb{S} 57'45	-2°10'16
superior conj	13268 Jul 13 05:26	2° \mathbb{Q} 58'58	-1°51'09	minimum elong	13269 Jun 23 17:49	13° \mathbb{S} 14'00	2°11'10
minimum elong	13268 Jul 13 12:34	3° \mathbb{Q} 28'57	1°51'25		13269 Jul 03 23:04	0° \mathbb{Q}	
evening rise	13268 Jul 25 05:13	23° \mathbb{Q} 47'15		evening rise	13269 Jul 07 07:36	5° \mathbb{Q} 37'56	
asc. node	13268 Jul 28 12:34	29° \mathbb{Q} 38'20		asc. node	13269 Jul 15 09:20	19° \mathbb{Q} 07'32	
	13268 Jul 28 17:30	0° \mathbb{P}			13269 Jul 22 17:01	0° \mathbb{P}	
evening max el	13268 Aug 10 19:13	19° \mathbb{P} 38'45	18°03'15	evening max el	13269 Jul 25 09:33	3° \mathbb{P} 02'59	18°08'57
retrograde	13268 Aug 17 10:05	23° \mathbb{P} 03'11		retrograde	13269 Jul 31 18:14	6° \mathbb{P} 23'41	
evening set	13268 Aug 19 21:23	22° \mathbb{P} 34'31		evening set	13269 Aug 03 13:47	5° \mathbb{P} 41'58	
inferior conj	13268 Aug 26 14:06	17° \mathbb{P} 33'04	1°11'09	inferior conj	13269 Aug 09 16:43	0° \mathbb{P} 22'39	2°08'09
minimum elong	13268 Aug 26 16:05	17° \mathbb{P} 28'16	1°10'08	minimum elong	13269 Aug 09 19:15	0° \mathbb{P} 15'42	2°06'52
min. Earth dist.	13268 Aug 29 16:46	14° \mathbb{P} 32'22	0.61094 AU		13269 Aug 10 00:56	30° \mathbb{R} 8	
desc. node	13268 Aug 30 14:15	13° \mathbb{P} 43'49		min. Earth dist.	13269 Aug 12 08:14	27° \mathbb{Q} 28'46	0.63320 AU
morning rise	13268 Sep 02 08:01	11° \mathbb{P} 35'47		morning rise	13269 Aug 15 22:51	24° \mathbb{Q} 08'18	
direct	13268 Sep 08 23:11	9° \mathbb{P} 22'43		desc. node	13269 Aug 17 11:46	23° \mathbb{Q} 06'00	
morning max el	13268 Sep 23 04:48	17° \mathbb{P} 19'19	27°57'33	direct	13269 Aug 22 14:38	21° \mathbb{Q} 37'04	
	13268 Oct 03 17:58	0° \mathbb{Q}		morning max el	13269 Sep 05 13:30	29° \mathbb{Q} 38'41	27°47'46
	13268 Oct 21 19:16	0° \mathbb{M}			13269 Sep 05 21:56	0° \mathbb{P}	
					13269 Sep 27 17:34	0° \mathbb{Q}	

morning set	13269 Oct 10 05:02	22°♄57'26			13270 Sep 20 07:51	0°♄	
asc. node	13269 Oct 11 11:09	25°♄30'02		morning set	13270 Sep 23 14:49	6°♄13'02	
	13269 Oct 13 15:19	0°♄		max. Earth dist.	13270 Sep 27 22:14	14°♄45'20	1.33575 AU
max. Earth dist.	13269 Oct 15 05:30	3°♄21'47	1.32256 AU	asc. node	13270 Sep 28 07:47	15°♄33'57	
superior conj	13269 Oct 17 23:49	9°♄18'58	0°59'02	superior conj	13270 Oct 02 02:14	23°♄23'50	0°35'17
minimum elong	13269 Oct 17 21:34	9°♄06'47	0°59'13	minimum elong	13270 Oct 02 00:32	23°♄14'54	0°35'15
evening rise	13269 Oct 24 20:23	24°♄16'13			13270 Oct 05 04:40	0°♄	
	13269 Oct 27 13:23	0°♄		evening rise	13270 Oct 09 06:56	8°♄44'50	
desc. node	13269 Nov 13 08:06	28°♄09'00			13270 Oct 20 08:15	0°♄	
	13269 Nov 14 22:08	0°♄		evening max el	13270 Oct 29 21:47	12°♄37'57	21°51'51
evening max el	13269 Nov 17 09:24	2°♄34'27	23°32'27	desc. node	13270 Oct 31 05:25	13°♄51'43	
retrograde	13269 Nov 30 19:37	9°♄15'32		retrograde	13270 Nov 11 09:36	18°♄49'49	
evening set	13269 Dec 05 08:04	8°♄31'07		evening set	13270 Nov 14 12:12	18°♄28'08	
min. Earth dist.	13269 Dec 11 19:40	5°♄25'42	0.55318 AU	inferior conj	13270 Nov 23 07:06	14°♄33'37	-5°43'35
inferior conj	13269 Dec 13 13:00	4°♄25'00	-5°52'24	minimum elong	13270 Nov 23 01:17	14°♄41'46	5°41'58
minimum elong	13269 Dec 13 16:01	4°♄20'33	5°51'12	min. Earth dist.	13270 Nov 23 02:03	14°♄40'41	0.54553 AU
morning rise	13269 Dec 22 01:45	0°♄32'19		morning rise	13270 Dec 01 15:23	10°♄46'12	
direct	13269 Dec 24 20:00	0°♄13'43		direct	13270 Dec 05 05:35	10°♄17'51	
morning max el	13270 Jan 04 15:34	5°♄23'40	20°23'24	morning max el	13270 Dec 17 13:24	16°♄11'44	21°57'18
asc. node	13270 Jan 07 11:19	8°♄25'57		asc. node	13270 Dec 25 08:28	25°♄41'34	
	13270 Jan 20 12:27	0°♄			13270 Dec 28 02:21	0°♄	
morning set	13270 Jan 23 04:31	5°♄24'41		morning set	13271 Jan 07 14:47	20°♄10'12	
					13271 Jan 12 05:45	0°♄	
superior conj	13270 Jan 30 18:15	20°♄58'46	1°11'48	superior conj	13271 Jan 14 17:34	5°♄16'47	1°27'10
minimum elong	13270 Jan 30 20:56	21°♄12'20	1°12'11	minimum elong	13271 Jan 14 19:34	5°♄27'19	1°27'52
	13270 Feb 04 07:39	0°♄		max. Earth dist.	13271 Jan 18 19:06	13°♄40'53	1.34460 AU
max. Earth dist.	13270 Feb 05 06:25	1°♄49'23	1.36396 AU	evening rise	13271 Jan 23 02:12	22°♄09'18	
evening rise	13270 Feb 09 01:52	8°♄56'33		desc. node	13271 Jan 27 04:39	29°♄48'24	
desc. node	13270 Feb 09 08:01	9°♄24'29			13271 Jan 27 07:13	0°♄	
	13270 Feb 21 12:48	0°♄			13271 Feb 15 07:11	0°♄	
	13270 Mar 16 08:30	0°♄		evening max el	13271 Feb 27 03:27	13°♄56'22	26°52'10
evening max el	13270 Mar 16 13:45	0°♄12'54	25°55'24	retrograde	13271 Mar 12 09:42	21°♄21'52	
retrograde	13270 Mar 29 04:04	7°♄26'28		evening set	13271 Mar 18 21:39	18°♄49'27	
evening set	13270 Apr 04 06:13	4°♄56'52		min. Earth dist.	13271 Mar 22 21:30	14°♄52'39	0.65953 AU
asc. node	13270 Apr 05 08:09	3°♄58'18		asc. node	13271 Mar 23 05:36	14°♄29'28	
min. Earth dist.	13270 Apr 08 11:30	0°♄26'21	0.67322 AU	inferior conj	13271 Mar 24 23:34	12°♄27'01	0°33'14
	13270 Apr 08 19:58	30°♄		minimum elong	13271 Mar 24 22:42	12°♄29'34	0°32'48
inferior conj	13270 Apr 10 01:22	28°♄27'28	1°25'56	morning rise	13271 Mar 31 01:05	6°♄50'42	
minimum elong	13270 Apr 09 23:30	28°♄33'18	1°24'54	direct	13271 Apr 02 22:08	6°♄05'19	
morning rise	13270 Apr 15 17:29	22°♄39'39		morning max el	13271 Apr 09 07:16	9°♄26'43	18°10'12
direct	13270 Apr 19 00:38	21°♄37'37			13271 Apr 23 19:51	0°♄	
morning max el	13270 Apr 25 17:18	25°♄14'00	18°47'32	desc. node	13271 Apr 25 06:56	2°♄20'52	
	13270 Apr 29 21:06	0°♄		morning set	13271 Apr 28 07:49	7°♄14'23	
desc. node	13270 May 08 10:16	12°♄14'31			13271 May 12 15:03	0°♄	
greatest brilliancy	13270 May 09 21:19	14°♄28'15	-0.8m	superior conj	13271 May 13 11:05	1°♄18'32	-1°52'58
morning set	13270 May 17 20:15	26°♄48'00		minimum elong	13271 May 13 02:16	0°♄43'59	1°53'07
	13270 May 19 21:33	0°♄		max. Earth dist.	13271 May 15 11:24	4°♄27'34	1.45789 AU
max. Earth dist.	13270 Jun 01 15:47	19°♄53'41	1.45664 AU	evening rise	13271 May 29 13:00	26°♄20'07	
superior conj	13270 Jun 03 02:56	22°♄11'14	-2°11'41		13271 May 31 21:42	0°♄	
minimum elong	13270 Jun 02 23:34	21°♄58'03	2°12'35	greatest brilliancy	13271 Jun 10 07:31	14°♄27'03	-0.7m
	13270 Jun 08 02:14	0°♄		asc. node	13271 Jun 19 03:10	26°♄50'15	
evening rise	13270 Jun 18 10:04	16°♄27'16			13271 Jun 21 21:29	0°♄	
	13270 Jun 26 20:58	0°♄		evening max el	13271 Jun 22 07:50	0°♄26'22	19°13'34
asc. node	13270 Jul 02 06:12	8°♄14'11		retrograde	13271 Jun 29 07:02	4°♄18'55	
evening max el	13270 Jul 08 22:35	16°♄40'58	18°32'42	evening set	13271 Jul 02 20:14	3°♄05'41	
retrograde	13270 Jul 15 10:21	20°♄11'18			13271 Jul 06 02:21	30°♄	
evening set	13270 Jul 18 14:29	19°♄14'28		inferior conj	13271 Jul 08 06:37	27°♄16'28	3°05'53
inferior conj	13270 Jul 24 07:23	13°♄39'27	2°45'16	minimum elong	13271 Jul 08 07:45	27°♄12'46	3°04'49
minimum elong	13270 Jul 24 09:27	13°♄33'13	2°44'04	min. Earth dist.	13271 Jul 09 17:38	25°♄22'49	0.66888 AU
min. Earth dist.	13270 Jul 26 09:00	11°♄09'40	0.65293 AU	morning rise	13271 Jul 13 18:39	20°♄52'26	
morning rise	13270 Jul 30 03:19	7°♄17'01		direct	13271 Jul 19 21:18	18°♄13'24	
desc. node	13270 Aug 04 09:13	4°♄42'17		desc. node	13271 Jul 22 06:35	18°♄34'21	
direct	13270 Aug 05 14:30	4°♄36'55		morning max el	13271 Aug 01 11:22	25°♄44'57	25°56'15
morning max el	13270 Aug 19 00:28	12°♄31'23	27°04'33		13271 Aug 05 08:49	0°♄	
	13270 Sep 02 01:03	0°♄					

	13271 Aug 26 13:41	0°♎		desc. node	13272 Jul 08 03:51	4°♊18'49	
morning set	13271 Sep 06 11:11	18°♎50'31		morning max el	13272 Jul 13 21:32	9°♊10'36	24°32'31
max. Earth dist.	13271 Sep 10 04:44	25°♎51'22	1.35394 AU		13272 Jul 30 07:40	0°♊	
	13271 Sep 12 07:57	0°♊			13272 Aug 18 04:48	0°♎	
asc. node	13271 Sep 15 04:22	5°♊40'38		morning set	13272 Aug 18 13:52	0°♎39'29	
				max. Earth dist.	13272 Aug 22 04:08	7°♎03'04	1.37588 AU
superior conj	13271 Sep 15 20:51	7°♊04'02	0°06'30				
minimum elong	13271 Sep 15 20:29	7°♊02'08	0°06'26	superior conj	13272 Aug 29 04:28	20°♎11'42	-0°26'21
behind sun begin	13271 Sep 15 14:51	6°♊33'36		minimum elong	13272 Aug 29 06:15	20°♎20'18	0°26'18
behind sun end	13271 Sep 16 02:07	7°♊30'44		asc. node	13272 Sep 01 00:56	25°♎46'30	
evening rise	13271 Sep 23 14:51	23°♊04'19			13272 Sep 03 04:00	0°♊	
	13271 Sep 27 00:38	0°♊		evening rise	13272 Sep 06 17:44	7°♊08'35	
evening max el	13271 Oct 11 21:17	23°♊11'56	20°24'27		13272 Sep 19 14:58	0°♊	
desc. node	13271 Oct 18 02:50	27°♊38'56		evening max el	13272 Sep 23 11:00	4°♊33'40	19°17'36
retrograde	13271 Oct 22 20:40	28°♊39'12		retrograde	13272 Oct 02 18:30	9°♊13'14	
evening set	13271 Oct 25 00:16	28°♊27'36		desc. node	13272 Oct 04 00:18	9°♊08'34	
inferior conj	13271 Nov 02 23:45	24°♊31'53	-4°36'17	evening set	13272 Oct 04 15:05	9°♊02'54	
minimum elong	13271 Nov 02 13:39	24°♊46'38	4°32'45	inferior conj	13272 Oct 13 05:06	4°♊53'20	-2°52'36
min. Earth dist.	13271 Nov 04 09:16	23°♊42'55	0.54726 AU	minimum elong	13272 Oct 12 21:42	5°♊05'32	2°49'20
morning rise	13271 Nov 11 02:28	20°♊30'30		min. Earth dist.	13272 Oct 15 19:47	3°♊10'09	0.55808 AU
direct	13271 Nov 15 14:56	19°♊46'27		morning rise	13272 Oct 21 01:54	0°♊20'38	
morning max el	13271 Nov 29 01:04	26°♊19'58	23°44'48		13272 Oct 22 00:32	30°♊♊	
	13271 Dec 02 12:54	0°♊		direct	13272 Oct 26 10:30	29°♊15'16	
asc. node	13271 Dec 12 05:32	13°♊49'24			13272 Oct 30 20:09	0°♊	
	13271 Dec 20 18:24	0°♊		morning max el	13272 Nov 09 11:22	6°♊20'55	25°30'08
morning set	13271 Dec 23 02:35	4°♊55'54			13272 Nov 26 15:43	0°♊	
				asc. node	13272 Nov 28 02:28	2°♊36'44	
superior conj	13271 Dec 29 23:10	19°♊49'41	1°35'51	morning set	13272 Dec 06 14:08	19°♊37'26	
minimum elong	13271 Dec 30 00:08	19°♊54'59	1°36'48		13272 Dec 11 07:48	0°♊	
max. Earth dist.	13272 Jan 01 15:35	25°♊35'54	1.32928 AU				
	13272 Jan 03 17:48	0°♊		superior conj	13272 Dec 13 08:42	4°♊30'55	1°38'14
evening rise	13272 Jan 06 14:36	5°♊51'15		minimum elong	13272 Dec 13 08:34	4°♊30'12	1°39'16
desc. node	13272 Jan 14 01:22	19°♊58'34		max. Earth dist.	13272 Dec 14 19:11	7°♊41'15	1.31869 AU
	13272 Jan 19 22:32	0°♊		evening rise	13272 Dec 20 12:06	19°♊55'07	
evening max el	13272 Feb 09 16:32	27°♊21'08	27°26'30		13272 Dec 25 13:17	0°♊	
	13272 Feb 12 16:12	0°♊		desc. node	13272 Dec 30 22:11	9°♊49'04	
retrograde	13272 Feb 23 08:42	4°♊47'50			13273 Jan 13 03:22	0°♊	
evening set	13272 Mar 01 03:51	2°♊19'03		evening max el	13273 Jan 22 02:54	10°♊14'10	27°31'39
	13272 Mar 03 20:57	30°♊♊		retrograde	13273 Feb 05 00:00	17°♊35'22	
min. Earth dist.	13272 Mar 04 23:41	28°♊53'29	0.64225 AU	evening set	13273 Feb 11 22:10	15°♊17'31	
inferior conj	13272 Mar 07 13:17	26°♊10'55	-0°30'40	min. Earth dist.	13273 Feb 15 16:13	12°♊18'30	0.62217 AU
minimum elong	13272 Mar 07 14:13	26°♊08'25	0°30'06	inferior conj	13273 Feb 18 15:26	9°♊31'18	-1°45'06
asc. node	13272 Mar 09 03:04	24°♊33'08		minimum elong	13273 Feb 18 19:02	9°♊22'48	1°43'12
morning rise	13272 Mar 14 02:39	20°♊48'32		asc. node	13273 Feb 24 00:30	5°♊13'17	
direct	13272 Mar 16 15:05	20°♊16'22		morning rise	13273 Feb 25 18:38	4°♊25'59	
morning max el	13272 Mar 23 00:26	23°♊34'14	17°50'00	direct	13273 Feb 28 00:17	4°♊03'26	
	13272 Mar 28 05:25	0°♊		morning max el	13273 Mar 06 17:50	7°♊28'18	17°47'31
morning set	13272 Apr 08 23:32	19°♊02'32			13273 Mar 21 12:05	0°♊	
desc. node	13272 Apr 11 03:30	22°♊41'07		morning set	13273 Mar 22 14:22	1°♊56'15	
	13272 Apr 15 12:45	0°♊		desc. node	13273 Mar 29 00:01	13°♊10'46	
superior conj	13272 Apr 22 07:29	11°♊03'59	-1°19'08	superior conj	13273 Apr 03 02:35	21°♊54'08	-0°39'09
minimum elong	13272 Apr 21 23:31	10°♊31'57	1°18'45	minimum elong	13273 Apr 02 22:48	21°♊38'10	0°38'51
max. Earth dist.	13272 Apr 27 06:58	19°♊00'02	1.45172 AU		13273 Apr 07 23:54	0°♊	
	13272 May 04 08:04	0°♊		max. Earth dist.	13273 Apr 10 00:02	3°♊15'12	1.43877 AU
evening rise	13272 May 08 01:34	5°♊44'06		evening rise	13273 Apr 17 15:25	15°♊19'45	
greatest brilliancy	13272 May 22 20:22	27°♊53'48	-0.6m		13273 Apr 27 07:50	0°♊	
	13272 May 24 07:25	0°♊		evening max el	13273 May 18 09:41	28°♊03'10	21°19'15
evening max el	13272 Jun 04 11:42	14°♊14'36	20°10'01		13273 May 20 11:52	0°♊	
asc. node	13272 Jun 05 00:12	14°♊45'18		asc. node	13273 May 22 21:19	1°♊46'01	
retrograde	13272 Jun 12 05:40	18°♊40'32		retrograde	13273 May 27 04:20	3°♊10'40	
evening set	13272 Jun 16 04:39	17°♊10'24		evening set	13273 May 31 13:45	1°♊24'01	
inferior conj	13272 Jun 21 11:32	11°♊08'15	3°12'50		13273 Jun 02 01:13	30°♊♊	
minimum elong	13272 Jun 21 11:37	11°♊07'57	3°11'48	inferior conj	13273 Jun 05 19:47	25°♊10'22	3°08'02
min. Earth dist.	13272 Jun 22 08:17	9°♊57'38	0.68034 AU	minimum elong	13273 Jun 05 18:54	25°♊13'25	3°06'57
morning rise	13272 Jun 26 18:16	4°♊46'42		min. Earth dist.	13273 Jun 06 02:57	24°♊45'24	0.68708 AU
direct	13272 Jul 02 09:42	2°♊17'19		morning rise	13273 Jun 10 23:52	18°♊53'41	

































































































































direct	13273 Jun 16 02:42	16° Π 40'10		direct	13274 May 30 23:18	1° Π 15'08	
desc. node	13273 Jun 25 01:00	21° Π 28'29		morning max el	13274 Jun 08 22:28	6° Π 27'42	21°36'18
morning max el	13273 Jun 26 08:18	22° Π 44'30	23°02'56	desc. node	13274 Jun 11 22:01	9° Π 41'05	
	13273 Jul 02 16:46	0° \mathfrak{S}			13274 Jun 27 00:00	0° \mathfrak{S}	
	13273 Jul 23 15:26	0° Ω		morning set	13274 Jul 10 21:21	21° \mathfrak{S} 10'45	
morning set	13273 Jul 30 18:09	11° Ω 28'00			13274 Jul 16 08:44	0° Ω	
max. Earth dist.	13273 Aug 04 02:29	18° Ω 48'08	1.39935 AU	max. Earth dist.	13274 Jul 17 05:02	1° Ω 23'25	1.42161 AU
	13273 Aug 10 10:43	0° \mathfrak{M}					
superior conj	13273 Aug 11 21:01	2° \mathfrak{M} 36'21	-1°01'16	superior conj	13274 Jul 24 18:08	14° Ω 08'42	-1°34'40
minimum elong	13273 Aug 12 01:32	2° \mathfrak{M} 57'04	1°01'06	minimum elong	13274 Jul 25 00:58	14° Ω 38'19	1°34'40
asc. node	13273 Aug 18 21:30	15° \mathfrak{M} 47'18			13274 Aug 02 15:42	0° \mathfrak{M}	
evening rise	13273 Aug 21 12:32	20° \mathfrak{M} 48'58		evening rise	13274 Aug 04 19:28	3° \mathfrak{M} 56'00	
	13273 Aug 26 09:23	0° \mathfrak{L}		asc. node	13274 Aug 05 18:09	5° \mathfrak{M} 39'30	
evening max el	13273 Sep 06 12:43	16° \mathfrak{L} 41'11	18°32'35	evening max el	13274 Aug 20 22:26	29° \mathfrak{M} 26'17	18°08'18
retrograde	13273 Sep 14 10:56	20° \mathfrak{L} 41'06			13274 Aug 21 12:34	0° \mathfrak{L}	
evening set	13273 Sep 16 10:25	20° \mathfrak{L} 26'55		retrograde	13274 Aug 27 21:43	2° \mathfrak{L} 59'37	
desc. node	13273 Sep 20 21:48	18° \mathfrak{L} 24'12		evening set	13274 Aug 30 04:15	2° \mathfrak{L} 37'23	
inferior conj	13273 Sep 24 07:06	15° \mathfrak{L} 57'21	-1°04'16		13274 Sep 03 16:39	30° \mathfrak{R} \mathfrak{M}	
minimum elong	13273 Sep 24 04:33	16° \mathfrak{L} 02'17	1°03'04	inferior conj	13274 Sep 06 06:35	27° \mathfrak{M} 47'21	0°28'06
min. Earth dist.	13273 Sep 27 12:21	13° \mathfrak{L} 29'05	0.57589 AU	minimum elong	13274 Sep 06 07:29	27° \mathfrak{M} 45'19	0°27'36
morning rise	13273 Oct 01 19:13	10° \mathfrak{L} 46'45		desc. node	13274 Sep 07 19:19	26° \mathfrak{M} 24'09	
direct	13273 Oct 07 20:03	9° \mathfrak{L} 14'58		min. Earth dist.	13274 Sep 09 13:07	24° \mathfrak{M} 51'51	0.59777 AU
morning max el	13273 Oct 22 03:19	16° \mathfrak{L} 46'35	26°54'57	morning rise	13274 Sep 13 07:25	22° \mathfrak{M} 04'01	
	13273 Nov 02 00:34	0° \mathfrak{M}		direct	13274 Sep 19 19:12	20° \mathfrak{M} 04'37	
asc. node	13273 Nov 14 23:18	21° \mathfrak{M} 52'48		morning max el	13274 Oct 04 02:56	27° \mathfrak{M} 55'13	27°45'48
	13273 Nov 19 00:20	0° \mathfrak{J}			13274 Oct 06 03:24	0° \mathfrak{L}	
morning set	13273 Nov 20 23:44	4° \mathfrak{J} 09'45			13274 Oct 26 18:52	0° \mathfrak{M}	
				asc. node	13274 Nov 01 20:03	11° \mathfrak{M} 29'40	
superior conj	13273 Nov 27 20:06	19° \mathfrak{J} 14'18	1°34'39	morning set	13274 Nov 05 05:36	18° \mathfrak{M} 28'04	
minimum elong	13273 Nov 27 18:58	19° \mathfrak{J} 07'58	1°35'35		13274 Nov 10 13:23	0° \mathfrak{J}	
max. Earth dist.	13273 Nov 28 02:55	19° \mathfrak{J} 52'22	1.31305 AU	max. Earth dist.	13274 Nov 11 11:11	2° \mathfrak{J} 01'02	1.31254 AU
	13273 Dec 02 16:50	0° \mathfrak{Z}					
evening rise	13273 Dec 04 16:06	4° \mathfrak{Z} 14'02		superior conj	13274 Nov 12 07:31	3° \mathfrak{J} 54'17	1°25'18
desc. node	13273 Dec 17 19:08	29° \mathfrak{Z} 11'51		minimum elong	13274 Nov 12 05:38	3° \mathfrak{J} 43'45	1°25'58
	13273 Dec 18 06:47	0° \approx		evening rise	13274 Nov 19 00:23	18° \mathfrak{J} 42'24	
evening max el	13274 Jan 04 07:50	22° \approx 22'51	27°03'04		13274 Nov 24 11:30	0° \mathfrak{Z}	
retrograde	13274 Jan 18 06:45	29° \approx 35'53		desc. node	13274 Dec 04 16:11	17° \mathfrak{Z} 55'49	
evening set	13274 Jan 25 01:20	27° \approx 37'02			13274 Dec 13 16:32	0° \approx	
min. Earth dist.	13274 Jan 28 22:07	24° \approx 56'02	0.60050 AU	evening max el	13274 Dec 17 05:01	3° \approx 39'32	26°00'28
inferior conj	13274 Feb 01 02:31	22° \approx 19'01	-3°06'58	retrograde	13274 Dec 31 03:24	10° \approx 42'55	
minimum elong	13274 Feb 01 09:12	22° \approx 05'13	3°03'50	evening set	13275 Jan 06 09:14	9° \approx 10'54	
morning rise	13274 Feb 08 20:11	17° \approx 33'55		min. Earth dist.	13275 Jan 10 18:02	6° \approx 34'18	0.57925 AU
direct	13274 Feb 10 21:43	17° \approx 17'28		inferior conj	13275 Jan 13 19:00	4° \approx 24'05	-4°28'08
asc. node	13274 Feb 10 21:54	17° \approx 17'28		minimum elong	13275 Jan 14 03:43	4° \approx 08'29	4°24'45
morning max el	13274 Feb 18 08:04	20° \approx 59'42	18°03'44	morning rise	13275 Jan 22 01:04	0° \approx 00'52	
	13274 Feb 25 03:08	0° \mathfrak{K}			13275 Jan 22 02:40	30° \mathfrak{R} \mathfrak{Z}	
morning set	13274 Mar 05 22:11	15° \mathfrak{K} 36'44		direct	13275 Jan 24 02:57	29° \mathfrak{Z} 46'57	
	13274 Mar 13 17:57	0° \mathfrak{Y}			13275 Jan 26 02:07	0° \approx	
				asc. node	13275 Jan 28 19:16	1° \approx 02'05	
superior conj	13274 Mar 15 21:40	3° \mathfrak{Y} 51'04	-0°00'23	morning max el	13275 Feb 01 15:14	3° \approx 56'53	18°40'15
minimum elong	13274 Mar 15 21:39	3° \mathfrak{Y} 50'59	0°00'20	morning set	13275 Feb 17 17:46	29° \approx 48'03	
behind sun begin	13274 Mar 15 13:51	3° \mathfrak{Y} 16'22			13275 Feb 17 20:14	0° \mathfrak{K}	
behind sun end	13274 Mar 16 05:26	4° \mathfrak{Y} 25'30		superior conj	13275 Feb 26 12:58	16° \mathfrak{K} 42'59	0°33'08
desc. node	13274 Mar 15 20:31	3° \mathfrak{Y} 46'00		minimum elong	13275 Feb 26 15:05	16° \mathfrak{K} 52'54	0°33'08
max. Earth dist.	13274 Mar 23 12:22	16° \mathfrak{Y} 56'46	1.42044 AU	desc. node	13275 Mar 02 17:03	24° \mathfrak{K} 22'44	
evening rise	13274 Mar 28 20:04	25° \mathfrak{Y} 38'38			13275 Mar 05 21:06	0° \mathfrak{Y}	
	13274 Mar 31 13:59	0° \mathfrak{B}		max. Earth dist.	13275 Mar 05 20:02	29° \mathfrak{K} 55'17	1.39884 AU
	13274 Apr 21 03:38	0° Π		evening rise	13275 Mar 09 21:28	6° \mathfrak{Y} 52'29	
evening max el	13274 May 01 02:49	11° Π 52'40	22°37'09		13275 Mar 24 15:05	0° \mathfrak{B}	
asc. node	13274 May 09 18:33	17° Π 36'44		evening max el	13275 Apr 13 17:09	25° \mathfrak{B} 43'55	23°58'12
retrograde	13274 May 11 01:24	17° Π 44'21			13275 Apr 18 17:44	0° Π	
evening set	13274 May 15 21:55	15° Π 42'27		retrograde	13275 Apr 24 19:31	2° Π 15'14	
inferior conj	13274 May 21 05:21	9° Π 19'36	2°52'38	asc. node	13275 Apr 26 15:53	1° Π 59'49	
minimum elong	13274 May 21 03:43	9° Π 25'19	2°51'26	evening set	13275 Apr 30 03:33	0° Π 00'13	
min. Earth dist.	13274 May 20 23:37	9° Π 39'35	0.68907 AU		13275 Apr 30 03:39	30° \mathfrak{R} \mathfrak{B}	
morning rise	13274 May 26 09:24	3° Π 09'12		min. Earth dist.	13275 May 04 20:05	24° \mathfrak{B} 33'27	0.68640 AU

inferior conj	13275 May 05 14:19	23°♄31'22	2°27'05	morning rise	13276 Apr 24 08:38	1°♄47'57	
minimum elong	13275 May 05 12:14	23°♄38'28	2°25'49	direct	13276 Apr 27 22:13	0°♄34'52	
morning rise	13275 May 10 20:57	17°♄28'32		morning max el	13276 May 04 22:40	4°♄25'30	19°16'27
direct	13275 May 14 22:19	15°♄55'12		desc. node	13276 May 15 15:45	18°♄10'09	
morning max el	13275 May 22 18:48	20°♄21'21	20°19'23	greatest brilliancy	13276 May 17 18:03	21°♄15'14	-0.7m
desc. node	13275 May 29 18:56	28°♄39'03			13276 May 23 13:13	0°♄	
	13275 May 30 19:09	0°♄		morning set	13276 May 29 06:06	8°♄44'50	
morning set	13275 Jun 20 03:44	0°♄00'20		max. Earth dist.	13276 Jun 11 05:30	28°♄55'11	1.45261 AU
	13275 Jun 20 03:39	0°♄			13276 Jun 11 21:58	0°♄	
max. Earth dist.	13275 Jun 29 14:07	14°♄49'04	1.44002 AU				
superior conj	13275 Jul 05 16:09	24°♄41'33	-2°01'02	superior conj	13276 Jun 14 15:14	4°♄17'46	-2°13'20
minimum elong	13275 Jul 05 22:37	25°♄08'10	2°01'35	minimum elong	13276 Jun 14 16:25	4°♄22'27	2°14'21
	13275 Jul 08 20:54	0°♄		evening rise	13276 Jun 29 02:12	27°♄42'06	
evening rise	13275 Jul 18 09:42	16°♄17'36			13276 Jun 30 11:37	0°♄	
asc. node	13275 Jul 23 14:53	25°♄18'34		asc. node	13276 Jul 09 11:41	14°♄38'47	
	13275 Jul 26 09:47	0°♄		evening max el	13276 Jul 18 02:25	26°♄10'34	18°16'57
evening max el	13275 Aug 04 12:12	12°♄39'19	18°03'27	retrograde	13276 Jul 24 11:10	29°♄33'22	
retrograde	13275 Aug 10 23:15	16°♄00'19		evening set	13276 Jul 27 10:25	28°♄45'18	
evening set	13275 Aug 13 14:01	15°♄26'29		inferior conj	13276 Aug 02 08:38	23°♄19'11	2°26'05
inferior conj	13275 Aug 20 00:27	10°♄17'30	1°37'54	minimum elong	13276 Aug 02 11:03	23°♄12'15	2°24'49
minimum elong	13275 Aug 20 02:50	10°♄11'23	1°36'43	min. Earth dist.	13276 Aug 04 18:26	20°♄33'53	0.64203 AU
min. Earth dist.	13275 Aug 22 23:04	7°♄16'59	0.62064 AU	morning rise	13276 Aug 08 10:13	17°♄00'47	
desc. node	13275 Aug 25 16:49	4°♄49'57		desc. node	13276 Aug 11 14:18	15°♄05'52	
morning rise	13275 Aug 26 13:14	4°♄11'45		direct	13276 Aug 15 00:47	14°♄24'31	
direct	13275 Sep 02 05:34	1°♄49'31		morning max el	13276 Aug 28 18:35	22°♄24'02	27°33'01
morning max el	13275 Sep 16 08:51	9°♄50'00	27°57'46		13276 Sep 04 11:10	0°♄	
	13275 Oct 02 01:48	0°♄		morning set	13276 Sep 24 07:38	0°♄	
	13275 Oct 19 00:43	0°♄		asc. node	13276 Oct 02 21:32	16°♄00'34	
asc. node	13275 Oct 19 16:46	1°♄21'16		max. Earth dist.	13276 Oct 05 13:24	21°♄21'44	
morning set	13275 Oct 20 05:43	2°♄27'23			13276 Oct 07 14:24	25°♄35'07	1.32756 AU
max. Earth dist.	13275 Oct 25 16:14	13°♄58'08	1.31734 AU		13276 Oct 09 16:34	0°♄	
superior conj	13275 Oct 27 17:08	18°♄25'44	1°10'16	superior conj	13276 Oct 10 22:48	2°♄41'52	0°49'38
minimum elong	13275 Oct 27 14:52	18°♄13'18	1°10'37	minimum elong	13276 Oct 10 20:42	2°♄30'36	0°49'42
	13275 Nov 01 23:05	0°♄		evening rise	13276 Oct 17 22:13	17°♄47'07	
evening rise	13275 Nov 03 11:05	3°♄15'27			13276 Oct 23 21:04	0°♄	
	13275 Nov 17 14:30	0°♄		desc. node	13276 Nov 07 10:37	22°♄22'45	
desc. node	13275 Nov 21 13:21	5°♄46'25		evening max el	13276 Nov 09 04:29	24°♄10'39	22°48'51
evening max el	13275 Nov 28 18:24	14°♄08'42	24°30'48		13276 Nov 18 01:54	0°♄	
retrograde	13275 Dec 12 11:39	20°♄59'24		retrograde	13276 Nov 22 06:39	0°♄40'34	
evening set	13275 Dec 17 17:57	19°♄58'21		evening set	13276 Nov 26 04:36	0°♄07'13	
min. Earth dist.	13275 Dec 23 06:06	17°♄08'48	0.56110 AU		13276 Nov 26 14:35	30°♄♂	
inferior conj	13275 Dec 25 14:52	15°♄40'11	-5°32'15	min. Earth dist.	13276 Dec 03 13:08	26°♄46'10	0.54893 AU
minimum elong	13275 Dec 25 21:40	15°♄29'32	5°30'12	inferior conj	13276 Dec 04 15:58	26°♄08'00	-5°56'01
morning rise	13276 Jan 03 03:25	11°♄37'35		minimum elong	13276 Dec 04 15:15	26°♄09'02	5°55'01
direct	13276 Jan 05 13:08	11°♄22'03		morning rise	13276 Dec 13 03:17	22°♄19'32	
morning max el	13276 Jan 15 11:14	16°♄08'36	19°39'00	direct	13276 Dec 16 05:41	21°♄57'19	
asc. node	13276 Jan 15 16:33	16°♄21'35		morning max el	13276 Dec 27 16:58	27°♄25'48	21°00'54
	13276 Jan 25 10:01	0°♄			13276 Dec 30 03:47	0°♄	
morning set	13276 Feb 01 21:16	14°♄19'18		asc. node	13277 Jan 01 13:47	2°♄59'17	
				morning set	13277 Jan 16 05:44	29°♄01'17	
superior conj	13276 Feb 09 19:52	0°♄17'11	0°59'45		13277 Jan 16 17:02	0°♄	
minimum elong	13276 Feb 09 22:39	0°♄30'53	0°59'56	superior conj	13277 Jan 23 14:09	14°♄21'30	1°19'10
	13276 Feb 09 16:23	0°♄		minimum elong	13277 Jan 23 16:37	14°♄34'09	1°19'40
max. Earth dist.	13276 Feb 16 02:17	12°♄15'41	1.37641 AU	max. Earth dist.	13277 Jan 28 11:42	24°♄12'53	1.35537 AU
desc. node	13276 Feb 17 13:37	14°♄57'35			13277 Jan 31 11:49	0°♄	
evening rise	13276 Feb 19 19:33	18°♄59'24		evening rise	13277 Feb 01 11:17	1°♄50'06	
	13276 Feb 26 06:26	0°♄		desc. node	13277 Feb 03 10:14	5°♄26'22	
	13276 Mar 17 19:39	0°♄			13277 Feb 18 07:33	0°♄	
evening max el	13276 Mar 26 06:45	9°♄36'38	25°15'32	evening max el	13277 Mar 08 20:30	23°♄25'40	26°21'52
retrograde	13276 Apr 07 09:21	16°♄37'37			13277 Mar 18 00:59	0°♄	
asc. node	13276 Apr 12 13:17	14°♄43'56		retrograde	13277 Mar 21 18:04	0°♄44'51	
evening set	13276 Apr 13 05:03	14°♄12'25			13277 Mar 25 05:10	30°♄♂	
min. Earth dist.	13276 Apr 17 14:09	9°♄21'28	0.67929 AU	evening set	13277 Mar 28 00:41	28°♄13'30	
inferior conj	13276 Apr 18 20:46	7°♄41'51	1°51'20	asc. node	13277 Mar 30 10:43	25°♄54'42	
minimum elong	13276 Apr 18 18:40	7°♄48'43	1°50'09	min. Earth dist.	13277 Apr 01 03:36	23°♄57'36	0.66790 AU

inferior conj	13277 Apr 02 22:38	21°♈46'32	1°04'58	asc. node	13278 Mar 17 08:10	6°♈05'59	
minimum elong	13277 Apr 02 21:06	21°♈51'13	1°04'08	inferior conj	13278 Mar 17 17:32	5°♈39'39	0°07'31
morning rise	13277 Apr 08 18:25	16°♈03'21		minimum elong	13278 Mar 17 17:19	5°♈40'15	0°07'25
direct	13277 Apr 11 21:13	15°♈08'35		transit middle	13278 Mar 17 17:19	5°♈40'15	0°07'25
morning max el	13277 Apr 18 09:31	18°♈36'45	18°29'36	transit begin	13278 Mar 17 14:39	5°♈47'45	
	13277 Apr 27 05:34	0°♈		transit end	13278 Mar 17 19:59	5°♈32'46	
desc. node	13277 May 02 12:28	8°♈05'30		morning rise	13278 Mar 23 23:49	0°♈09'13	
morning set	13277 May 09 01:58	18°♈24'39			13278 Mar 24 08:03	30°♈	
	13277 May 16 10:48	0°♈		direct	13278 Mar 26 17:02	29°♈29'53	
					13278 Mar 29 02:28	0°♈	
superior conj	13277 May 25 00:02	13°♈22'22	-2°06'03	morning max el	13278 Apr 02 01:15	2°♈48'09	17°59'33
minimum elong	13277 May 24 17:40	12°♈57'30	2°06'42	desc. node	13278 Apr 19 09:06	28°♈18'03	
max. Earth dist.	13277 May 25 00:56	13°♈25'52	1.45810 AU	morning set	13278 Apr 20 01:46	29°♈26'26	
	13277 Jun 04 14:55	0°♈			13278 Apr 20 09:57	0°♈	
evening rise	13277 Jun 09 18:11	8°♈05'50		superior conj	13278 May 04 11:27	22°♈40'33	-1°39'57
greatest brilliancy	13277 Jun 18 13:22	21°♈57'29	-0.8m	minimum elong	13278 May 04 02:18	22°♈04'23	1°39'48
	13277 Jun 23 20:28	0°♈		max. Earth dist.	13278 May 07 21:05	28°♈01'43	1.45609 AU
asc. node	13277 Jun 26 08:34	3°♈33'28			13278 May 09 03:19	0°♈	
evening max el	13277 Jul 01 14:08	9°♈52'32	18°48'03	evening rise	13278 May 20 13:21	17°♈41'34	
retrograde	13277 Jul 08 05:38	13°♈30'41			13278 May 28 14:25	0°♈	
evening set	13277 Jul 11 13:38	12°♈26'47		greatest brilliancy	13278 Jun 03 04:16	8°♈21'27	-0.7m
inferior conj	13277 Jul 17 03:20	6°♈45'22	2°55'50	asc. node	13278 Jun 13 05:33	21°♈53'07	
minimum elong	13277 Jul 17 05:02	6°♈40'02	2°54'42	evening max el	13278 Jun 14 21:06	23°♈38'41	19°35'46
min. Earth dist.	13277 Jul 18 22:38	4°♈30'08	0.66021 AU	retrograde	13278 Jun 22 03:32	27°♈44'36	
morning rise	13277 Jul 22 19:37	0°♈21'45		evening set	13278 Jun 25 20:47	26°♈24'09	
	13277 Jul 23 06:08	30°♈		inferior conj	13278 Jul 01 05:17	20°♈29'00	3°10'23
direct	13277 Jul 29 03:31	27°♈41'18		minimum elong	13278 Jul 01 05:59	20°♈26'41	3°09'20
desc. node	13277 Jul 29 11:41	27°♈41'43		min. Earth dist.	13278 Jul 02 10:06	18°♈53'14	0.67425 AU
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morning max el	13277 Aug 11 05:49	5°♈27'17	26°38'09	direct	13278 Jul 12 12:41	11°♈29'50	
	13277 Aug 30 01:40	0°♈		desc. node	13278 Jul 16 09:00	12°♈24'16	
morning set	13277 Sep 16 02:05	29°♈01'00		morning max el	13278 Jul 24 16:36	18°♈47'19	25°22'03
	13277 Sep 16 14:30	0°♈			13278 Aug 03 04:17	0°♈	
max. Earth dist.	13277 Sep 20 03:07	6°♈51'28	1.34299 AU		13278 Aug 23 03:11	0°♈	
asc. node	13277 Sep 22 10:00	11°♈27'16		morning set	13278 Aug 29 15:29	11°♈19'02	
				max. Earth dist.	13278 Sep 02 06:06	17°♈56'36	1.36290 AU
superior conj	13277 Sep 24 22:15	16°♈37'04	0°23'40		13278 Sep 08 11:48	0°♈	
minimum elong	13277 Sep 24 21:00	16°♈30'38	0°23'36	superior conj	13278 Sep 08 12:34	0°♈03'49	-0°07'04
	13277 Oct 01 06:41	0°♈		minimum elong	13278 Sep 08 13:01	0°♈06'01	0°07'04
evening rise	13277 Oct 02 07:56	2°♈12'48		behind sun begin	13278 Sep 08 07:16	29°♈37'24	
	13277 Oct 18 00:20	0°♈		behind sun end	13278 Sep 08 18:46	0°♈34'40	
evening max el	13277 Oct 21 20:37	4°♈22'49	21°12'19	asc. node	13278 Sep 09 06:35	1°♈33'43	
desc. node	13277 Oct 25 07:56	7°♈19'36		evening rise	13278 Sep 16 14:01	16°♈26'19	
retrograde	13277 Nov 02 17:56	10°♈17'16			13278 Sep 23 12:33	0°♈	
evening set	13277 Nov 05 09:01	10°♈01'08		evening max el	13278 Oct 04 02:04	15°♈15'48	19°53'19
inferior conj	13277 Nov 14 07:32	6°♈07'23	-5°21'25	desc. node	13278 Oct 12 05:20	20°♈10'03	
minimum elong	13277 Nov 13 22:57	6°♈19'29	5°18'54	retrograde	13278 Oct 14 08:36	20°♈22'56	
min. Earth dist.	13277 Nov 14 19:07	5°♈51'03	0.54517 AU	evening set	13278 Oct 16 07:13	20°♈12'47	
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morning set	13277 Dec 31 16:52	13°♈47'21		morning max el	13278 Nov 20 19:46	17°♈55'08	24°31'01
					13278 Nov 30 17:31	0°♈	
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evening rise	13278 Jan 15 17:06	15°♈15'39		minimum elong	13278 Dec 23 00:31	13°♈26'59	1°38'37
desc. node	13278 Jan 21 06:54	25°♈44'44		max. Earth dist.	13278 Dec 25 03:23	18°♈03'44	1.32413 AU
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retrograde	13278 Feb 19 09:58	7°♈01'46	27°09'52	desc. node	13279 Jan 08 03:39	15°♈47'28	
evening set	13278 Mar 04 20:49	14°♈28'42					
min. Earth dist.	13278 Mar 11 12:27	11°♈56'42					
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































































































































	13279 Jan 16 19:16	0°♄				13279 Dec 22 22:22	0°♁	
evening max el	13279 Feb 01 21:58	20°♄14'14	27°32'31	desc. node		13279 Dec 26 00:30	5°♁27'07	
retrograde	13279 Feb 15 16:57	27°♄40'08				13280 Jan 12 11:19	0°♄	
evening set	13279 Feb 22 14:01	25°♄14'43		evening max el		13280 Jan 15 06:25	2°♄50'00	27°23'50
min. Earth dist.	13279 Feb 26 08:33	22°♄01'22	0.63397 AU	retrograde		13280 Jan 29 05:02	10°♄08'21	
inferior conj	13279 Mar 01 02:44	19°♄14'47	-1°01'02	evening set		13280 Feb 05 02:21	7°♄57'47	
minimum elong	13279 Mar 01 04:42	19°♄09'48	0°59'56	min. Earth dist.		13280 Feb 08 20:50	5°♄07'26	0.61302 AU
asc. node	13279 Mar 04 05:36	16°♄18'01		inferior conj		13280 Feb 11 22:56	2°♄22'34	-2°19'16
morning rise	13279 Mar 07 21:50	13°♄59'35		minimum elong		13280 Feb 12 03:51	2°♄11'35	2°16'46
direct	13279 Mar 10 07:01	13°♄32'05				13280 Feb 14 18:09	30°♄	
morning max el	13279 Mar 16 19:00	16°♄51'47	17°46'46	morning rise		13280 Feb 19 08:19	27°♁25'20	
	13279 Mar 26 06:09	0°♄		asc. node		13280 Feb 19 03:01	27°♁29'29	
morning set	13279 Apr 02 04:06	11°♄44'50		direct		13280 Feb 21 11:40	27°♁05'55	
desc. node	13279 Apr 06 05:40	18°♄42'57				13280 Feb 27 19:35	0°♄	
	13279 Apr 12 22:58	0°♄		morning max el		13280 Feb 28 11:30	0°♄37'20	17°51'59
				morning set		13280 Mar 15 02:54	25°♄00'28	
superior conj	13279 Apr 14 16:57	2°♄52'35	-1°02'27			13280 Mar 17 21:18	0°♄	
minimum elong	13279 Apr 14 10:38	2°♄26'42	1°02'02	desc. node		13280 Mar 23 02:12	9°♄15'13	
max. Earth dist.	13279 Apr 20 15:20	12°♄26'48	1.44694 AU					
evening rise	13279 Apr 30 00:27	27°♄05'14		superior conj		13280 Mar 25 22:29	14°♄11'34	-0°22'15
	13279 May 01 22:10	0°♄		minimum elong		13280 Mar 25 20:27	14°♄02'50	0°22'04
	13279 May 22 14:34	0°♄		max. Earth dist.		13280 Apr 02 06:10	26°♄27'43	1.43157 AU
evening max el	13279 May 28 22:21	7°♄26'31	20°38'04			13280 Apr 04 10:31	0°♄	
asc. node	13279 May 31 02:36	9°♄26'31		evening rise		13280 Apr 08 19:23	6°♄56'32	
retrograde	13279 Jun 06 02:27	12°♄09'53				13280 Apr 24 03:57	0°♄	
evening set	13279 Jun 10 05:40	10°♄32'49		evening max el		13280 May 10 18:10	21°♄15'35	21°51'41
inferior conj	13279 Jun 15 11:54	4°♄25'31	3°12'09	asc. node		13280 May 16 23:46	25°♄59'23	
minimum elong	13279 Jun 15 11:34	4°♄26'40	3°11'06	retrograde		13280 May 20 00:33	26°♄41'44	
min. Earth dist.	13279 Jun 16 02:51	3°♄33'57	0.68377 AU	evening set		13280 May 24 14:34	24°♄48'37	
	13279 Jun 18 20:58	30°♄		inferior conj		13280 May 29 20:58	18°♄30'58	3°02'45
morning rise	13279 Jun 20 17:10	28°♄05'31		minimum elong		13280 May 29 19:44	18°♄35'16	3°01'37
direct	13279 Jun 26 03:18	25°♄42'08		min. Earth dist.		13280 May 29 22:40	18°♄25'01	0.68854 AU
desc. node	13279 Jul 03 06:14	28°♄47'28		morning rise		13280 Jun 04 00:42	12°♄16'42	
	13279 Jul 04 17:14	0°♄		direct		13280 Jun 08 22:08	10°♄10'52	
morning max el	13279 Jul 07 02:45	2°♄16'14	23°54'29	morning max el		13280 Jun 18 14:23	15°♄52'55	22°25'10
	13279 Jul 28 05:13	0°♄		desc. node		13280 Jun 19 03:22	16°♄26'00	
morning set	13279 Aug 11 09:10	22°♄43'15				13280 Jun 30 03:16	0°♄	
max. Earth dist.	13279 Aug 15 03:40	29°♄16'23	1.38577 AU			13280 Jul 20 05:22	0°♄	
	13279 Aug 15 13:31	0°♄		morning set		13280 Jul 22 02:51	3°♄03'28	
				max. Earth dist.		13280 Jul 27 03:05	11°♄20'48	1.40913 AU
superior conj	13279 Aug 22 14:15	12°♄53'45	-0°41'06					
minimum elong	13279 Aug 22 17:10	13°♄07'30	0°40'58	superior conj		13280 Aug 03 23:08	24°♄57'38	-1°15'54
asc. node	13279 Aug 27 03:09	21°♄37'26		minimum elong		13280 Aug 04 04:47	25°♄22'56	1°15'45
	13279 Aug 31 09:36	0°♄				13280 Aug 06 18:01	0°♄	
evening rise	13279 Aug 31 13:50	0°♄20'43		asc. node		13280 Aug 12 23:45	11°♄35'00	
evening max el	13279 Sep 16 21:22	26°♄57'45	18°55'55	evening rise		13280 Aug 14 04:06	13°♄48'01	
	13279 Sep 20 18:53	0°♄				13280 Aug 23 04:08	0°♄	
retrograde	13279 Sep 25 13:37	1°♄18'49		evening max el		13280 Aug 30 03:07	9°♄22'57	18°19'53
evening set	13279 Sep 27 10:33	1°♄07'27		retrograde		13280 Sep 06 13:59	13°♄09'25	
desc. node	13279 Sep 29 02:49	0°♄39'11		evening set		13280 Sep 08 16:23	12°♄52'10	
	13279 Sep 30 15:47	30°♄		desc. node		13280 Sep 15 00:20	9°♄12'17	
inferior conj	13279 Oct 05 17:46	26°♄50'12	-2°05'39	inferior conj		13280 Sep 16 05:06	8°♄13'51	-0°22'31
minimum elong	13279 Oct 05 12:26	26°♄59'34	2°03'11	minimum elong		13280 Sep 16 04:16	8°♄15'34	0°22'09
min. Earth dist.	13279 Oct 08 16:42	24°♄45'49	0.56491 AU	min. Earth dist.		13280 Sep 19 12:22	5°♄31'32	0.58489 AU
morning rise	13279 Oct 13 11:12	22°♄01'13		morning rise		13280 Sep 23 12:41	2°♄48'39	
direct	13279 Oct 19 03:23	20°♄44'43		direct		13280 Sep 29 19:11	1°♄04'49	
morning max el	13279 Nov 02 07:50	28°♄03'00	26°09'39	morning max el		13280 Oct 14 02:49	8°♄44'50	27°21'13
	13279 Nov 04 06:12	0°♄				13280 Oct 30 07:05	0°♄	
asc. node	13279 Nov 23 04:47	28°♄04'58		asc. node		13280 Nov 09 01:37	17°♄30'51	
	13279 Nov 24 04:57	0°♄		morning set		13280 Nov 13 23:57	27°♄37'00	
morning set	13279 Nov 30 15:42	13°♄10'08				13280 Nov 15 02:41	0°♄	
superior conj	13279 Dec 07 10:35	28°♄07'11	1°37'26	superior conj		13280 Nov 20 22:14	12°♄49'50	1°31'24
minimum elong	13279 Dec 07 10:00	28°♄03'58	1°38'27	minimum elong		13280 Nov 20 20:45	12°♄41'29	1°32'13
	13279 Dec 08 06:54	0°♄		max. Earth dist.		13280 Nov 20 17:26	12°♄23'02	1.31223 AU
max. Earth dist.	13279 Dec 08 08:57	0°♄11'26	1.31563 AU	evening rise		13280 Nov 27 16:23	27°♄43'02	
evening rise	13279 Dec 14 10:16	13°♄19'06				13280 Nov 28 18:11	0°♄	

desc. node	13280 Dec 11 21:29	24° ♄ 34'50	evening rise	13281 Nov 12 01:55	12° ♄ 13'34
	13280 Dec 15 09:32	0° ♄		13281 Nov 20 22:20	0° ♄
evening max el	13280 Dec 27 08:33	14° ♄ 37'53 26°40'26	desc. node	13281 Nov 28 18:35	12° ♄ 57'55
retrograde	13281 Jan 10 07:26	21° ♄ 46'02	evening max el	13281 Dec 09 02:12	25° ♄ 32'28 25°24'53
evening set	13281 Jan 16 21:49	19° ♄ 58'08		13281 Dec 14 19:20	0° ♄
min. Earth dist.	13281 Jan 20 22:29	17° ♄ 20'42 0.59134 AU	retrograde	13281 Dec 22 22:42	2° ♄ 30'37
inferior conj	13281 Jan 24 02:32	14° ♄ 53'26 -3°42'14	evening set	13281 Dec 28 20:12	1° ♄ 11'23
minimum elong	13281 Jan 24 10:21	14° ♄ 38'14 3°38'47		13281 Dec 31 04:56	30° ♄
morning rise	13281 Feb 01 01:53	10° ♄ 17'06	min. Earth dist.	13282 Jan 02 14:22	28° ♄ 31'53 0.57101 AU
direct	13281 Feb 03 02:58	10° ♄ 02'05	inferior conj	13282 Jan 05 10:19	26° ♄ 37'51 -4°58'39
asc. node	13281 Feb 05 00:26	10° ♄ 15'33	minimum elong	13282 Jan 05 18:53	26° ♄ 23'25 4°55'42
morning max el	13281 Feb 10 23:08	13° ♄ 54'56 18°16'34	morning rise	13282 Jan 13 20:05	22° ♄ 23'59
	13281 Feb 21 21:15	0° ♄	direct	13282 Jan 16 00:26	22° ♄ 09'49
morning set	13281 Feb 26 16:16	8° ♄ 55'38	asc. node	13282 Jan 22 21:47	24° ♄ 41'59
			morning max el	13282 Jan 25 01:59	26° ♄ 33'52 19°02'27
superior conj	13281 Mar 08 02:40	26° ♄ 32'51 0°14'39		13282 Jan 28 03:21	0° ♄
minimum elong	13281 Mar 08 03:45	26° ♄ 37'48 0°14'38	morning set	13282 Feb 10 15:39	23° ♄ 16'58
behind sun begin	13281 Mar 08 00:47	26° ♄ 24'19		13282 Feb 14 01:09	0° ♄
behind sun end	13281 Mar 08 06:43	26° ♄ 51'16			
desc. node	13281 Mar 09 22:43	29° ♄ 51'13	superior conj	13282 Feb 19 01:11	9° ♄ 44'45 0°45'18
	13281 Mar 10 00:41	0° ♄	minimum elong	13282 Feb 19 03:44	9° ♄ 56'57 0°45'21
max. Earth dist.	13281 Mar 15 16:44	9° ♄ 52'37 1.41161 AU	desc. node	13282 Feb 24 19:15	20° ♄ 27'43
evening rise	13281 Mar 20 08:34	17° ♄ 38'16	max. Earth dist.	13282 Feb 25 23:43	22° ♄ 35'42 1.38927 AU
	13281 Mar 28 04:07	0° ♄	evening rise	13282 Mar 01 19:00	29° ♄ 15'29
	13281 Apr 18 18:36	0° ♄		13282 Mar 02 05:24	0° ♄
evening max el	13281 Apr 23 09:59	5° ♄ 06'03 23°11'41		13282 Mar 21 13:35	0° ♄
retrograde	13281 May 03 20:22	11° ♄ 14'45	evening max el	13282 Apr 05 23:45	18° ♄ 58'17 24°31'54
asc. node	13281 May 03 21:03	11° ♄ 14'45	retrograde	13282 Apr 17 12:46	25° ♄ 43'30
evening set	13281 May 08 21:50	9° ♄ 06'56	asc. node	13282 Apr 20 18:25	24° ♄ 57'11
inferior conj	13281 May 14 06:30	2° ♄ 41'21 2°43'01	evening set	13282 Apr 23 01:56	23° ♄ 23'26
minimum elong	13281 May 14 04:38	2° ♄ 47'50 2°41'47	min. Earth dist.	13282 Apr 27 15:02	18° ♄ 12'16 0.68394 AU
min. Earth dist.	13281 May 13 19:25	3° ♄ 19'38 0.68856 AU	inferior conj	13282 Apr 28 14:38	16° ♄ 53'17 2°13'11
	13281 May 16 06:27	30° ♄	minimum elong	13282 Apr 28 12:29	17° ♄ 00'30 2°11'56
morning rise	13281 May 19 11:21	26° ♄ 34'13	morning rise	13282 May 03 23:12	10° ♄ 54'22
direct	13281 May 23 19:56	24° ♄ 48'49	direct	13282 May 07 19:25	9° ♄ 29'57
morning max el	13281 Jun 01 06:50	29° ♄ 39'57 21°02'04	morning max el	13282 May 15 06:28	13° ♄ 39'14 19°50'47
	13281 Jun 01 14:48	0° ♄	desc. node	13282 May 23 21:15	24° ♄ 13'02
desc. node	13281 Jun 06 00:22	4° ♄ 59'26		13282 May 27 22:49	0° ♄
	13281 Jun 23 19:01	0° ♄	morning set	13282 Jun 10 22:01	21° ♄ 00'21
morning set	13281 Jul 01 19:56	12° ♄ 19'38		13282 Jun 16 17:27	0° ♄
max. Earth dist.	13281 Jul 09 08:54	24° ♄ 20'22 1.43010 AU	max. Earth dist.	13282 Jun 21 21:16	8° ♄ 06'46 1.44620 AU
	13281 Jul 12 19:39	0° ♄			
superior conj	13281 Jul 16 10:46	6° ♄ 05'04 -1°47'07	superior conj	13282 Jun 26 22:34	16° ♄ 12'19 -2°08'23
minimum elong	13281 Jul 16 17:55	6° ♄ 35'27 1°47'19	minimum elong	13282 Jun 27 03:26	16° ♄ 31'56 2°09'11
evening rise	13281 Jul 28 04:33	26° ♄ 37'08		13282 Jul 05 07:47	0° ♄
	13281 Jul 30 02:00	0° ♄	evening rise	13282 Jul 10 10:11	8° ♄ 36'18
asc. node	13281 Jul 30 20:25	1° ♄ 22'01	asc. node	13282 Jul 17 17:11	20° ♄ 54'00
evening max el	13281 Aug 13 15:00	22° ♄ 20'37 18°03'53		13282 Jul 23 13:34	0° ♄
retrograde	13281 Aug 20 07:44	25° ♄ 47'00	evening max el	13282 Jul 28 05:17	5° ♄ 42'03 18°06'52
evening set	13281 Aug 22 17:45	25° ♄ 20'07	retrograde	13282 Aug 03 14:20	9° ♄ 02'29
inferior conj	13281 Aug 29 12:51	20° ♄ 21'24 1°00'31	evening set	13282 Aug 06 08:35	8° ♄ 22'56
minimum elong	13281 Aug 29 14:36	20° ♄ 17'13 0°59'38	inferior conj	13282 Aug 12 13:21	3° ♄ 06'15 2°00'49
min. Earth dist.	13281 Sep 01 16:42	17° ♄ 21'25 0.60756 AU	minimum elong	13282 Aug 12 15:52	2° ♄ 59'24 1°59'32
desc. node	13281 Sep 01 21:53	17° ♄ 09'44		13282 Aug 15 10:40	30° ♄
morning rise	13281 Sep 05 08:34	14° ♄ 27'21	min. Earth dist.	13282 Aug 15 06:49	0° ♄ 09'58 0.63005 AU
direct	13281 Sep 11 23:00	12° ♄ 17'43	morning rise	13282 Aug 18 21:09	26° ♄ 53'39
morning max el	13281 Sep 26 05:22	20° ♄ 12'54 27°55'46	desc. node	13282 Aug 19 19:22	26° ♄ 14'53
	13281 Oct 04 15:16	0° ♄	direct	13282 Aug 25 13:13	24° ♄ 24'26
	13281 Oct 23 05:43	0° ♄		13282 Sep 05 23:13	0° ♄
asc. node	13281 Oct 26 22:22	7° ♄ 14'18	morning max el	13282 Sep 08 13:31	2° ♄ 26'24 27°51'25
morning set	13281 Oct 29 03:38	11° ♄ 47'20		13282 Sep 29 00:11	0° ♄
max. Earth dist.	13281 Nov 04 00:58	24° ♄ 28'12 1.31396 AU	morning set	13282 Oct 13 00:32	25° ♄ 36'05
			asc. node	13282 Oct 13 19:02	27° ♄ 10'02
superior conj	13281 Nov 05 09:05	27° ♄ 26'07 1°19'37		13282 Oct 15 04:04	0° ♄
minimum elong	13281 Nov 05 06:59	27° ♄ 14'26 1°20'08	max. Earth dist.	13282 Oct 18 03:34	6° ♄ 17'24 1.32102 AU
	13281 Nov 06 12:46	0° ♄	superior conj	13282 Oct 20 17:15	11° ♄ 51'09 1°02'10

minimum elong	13282 Oct 20 14:59	11°  38'48	1°02'24	minimum elong	13283 Oct 04 18:47	25°  49'57	0°39'14
evening rise	13282 Oct 27 13:00	26°  46'01		evening rise	13283 Oct 06 17:41	0° 	
	13282 Oct 29 01:21	0° 			13283 Oct 11 23:46	11°  15'58	
	13282 Nov 15 09:38	0° 			13283 Oct 21 12:35	0° 	
desc. node	13282 Nov 15 15:47	0°  19'24		evening max el	13283 Nov 02 00:27	15°  47'05	22°06'17
evening max el	13282 Nov 20 12:56	5°  44'43	23°47'45	desc. node	13283 Nov 02 13:04	16°  17'21	
retrograde	13282 Dec 04 01:30	12°  28'58		retrograde	13283 Nov 14 16:29	22°  04'01	
evening set	13282 Dec 08 18:43	11°  40'26		evening set	13283 Nov 17 23:51	21°  39'46	
min. Earth dist.	13282 Dec 14 23:41	8°  39'40	0.55493 AU	inferior conj	13283 Nov 26 17:01	17°  44'34	-5°48'53
inferior conj	13282 Dec 16 21:27	7°  31'30	-5°48'45	minimum elong	13283 Nov 26 12:26	17°  51'00	5°47'30
minimum elong	13282 Dec 17 01:38	7°  25'14	5°47'22	min. Earth dist.	13283 Nov 26 06:16	17°  59'39	0.54612 AU
morning rise	13282 Dec 25 10:24	3°  36'37		morning rise	13283 Dec 05 02:08	13°  57'21	
direct	13282 Dec 28 02:03	3°  19'03		direct	13283 Dec 08 13:11	13°  30'45	
morning max el	13283 Jan 07 16:12	8°  22'59	20°11'16	morning max el	13283 Dec 20 15:58	19°  18'20	21°42'07
asc. node	13283 Jan 09 19:04	10°  36'41		asc. node	13283 Dec 27 16:13	27°  42'53	
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morning set	13283 Jan 25 21:33	7°  53'33		morning set	13284 Jan 10 07:24	22°  38'04	
					13284 Jan 13 18:55	0° 	
superior conj	13283 Feb 02 13:24	23°  33'21	1°08'50	superior conj	13284 Jan 17 11:28	7°  47'48	1°25'15
minimum elong	13283 Feb 02 16:09	23°  47'05	1°09'10	minimum elong	13284 Jan 17 13:37	7°  58'59	1°25'55
	13283 Feb 05 19:33	0° 		max. Earth dist.	13284 Jan 21 18:04	16°  34'34	1.34727 AU
max. Earth dist.	13283 Feb 08 06:27	4°  42'53	1.36706 AU	evening rise	13284 Jan 25 23:09	24°  49'16	
desc. node	13283 Feb 11 15:48	11°  00'29			13284 Jan 28 17:38	0° 	
evening rise	13283 Feb 12 00:58	11°  42'04		desc. node	13284 Jan 29 12:26	1°  25'44	
	13283 Feb 22 19:47	0° 			13284 Feb 16 08:25	0° 	
	13283 Mar 16 19:34	0° 		evening max el	13284 Mar 01 02:52	16°  34'47	26°45'00
evening max el	13283 Mar 19 13:07	2°  49'40	25°45'29	retrograde	13284 Mar 14 07:08	23°  05'57	
retrograde	13283 Apr 01 00:42	10°  00'41		evening set	13284 Mar 20 17:43	21°  06'45	
evening set	13283 Apr 07 01:10	7°  32'03		asc. node	13284 Mar 24 13:15	17°  09'38	
asc. node	13283 Apr 07 15:50	6°  59'51		min. Earth dist.	13284 Mar 24 18:22	17°  24'58	0.66182 AU
min. Earth dist.	13283 Apr 11 07:24	2°  56'13	0.67493 AU	inferior conj	13284 Mar 26 18:36	15°  02'52	0°42'01
inferior conj	13283 Apr 12 19:23	1°  02'01	1°33'01	minimum elong	13284 Mar 26 17:31	15°  06'03	0°41'26
minimum elong	13283 Apr 12 17:27	1°  08'12	1°31'56	morning rise	13284 Apr 01 18:31	9°  24'35	
	13283 Apr 13 15:04	30°  08'00		direct	13284 Apr 04 17:01	8°  36'51	
morning rise	13283 Apr 18 10:19	25°  09'12		morning max el	13284 Apr 11 02:43	11°  59'39	18°14'38
direct	13283 Apr 21 19:04	24°  07'46			13284 Apr 24 02:33	0° 	
morning max el	13283 Apr 28 13:33	27°  07'33	18°54'28	desc. node	13284 Apr 26 14:41	3°  59'00	
	13283 Apr 30 15:10	0° 		morning set	13284 Apr 30 12:48	10°  15'35	
desc. node	13283 May 10 18:00	13°  55'27			13284 May 12 23:18	0° 	
greatest brilliancy	13283 May 12 02:32	15°  58'22	-0.8m	superior conj	13284 May 15 21:34	4°  35'22	-1°56'56
morning set	13283 May 21 05:30	0°  01'55		minimum elong	13284 May 15 13:10	4°  02'30	1°57'14
	13283 May 21 05:01	0° 		max. Earth dist.	13284 May 17 09:44	6°  15'43	1.45820 AU
max. Earth dist.	13283 Jun 04 14:08	22°  23'26	1.45584 AU	evening rise	13284 May 31 22:18	29°  34'16	
superior conj	13283 Jun 06 13:53	25°  30'33	-2°12'47		13284 Jun 01 04:54	0° 	
minimum elong	13283 Jun 06 11:43	25°  22'03	2°13'45	greatest brilliancy	13284 Jun 11 23:30	16°  40'22	-0.8m
	13283 Jun 09 10:23	0° 		asc. node	13284 Jun 20 10:54	28°  45'33	
evening rise	13283 Jun 21 16:17	19°  34'29			13284 Jun 21 10:48	0° 	
	13283 Jun 28 03:04	0° 		evening max el	13284 Jun 24 04:38	3°  03'15	19°06'30
asc. node	13283 Jul 04 14:00	10°  04'27		retrograde	13284 Jul 01 01:32	6°  51'32	
evening max el	13283 Jul 11 18:42	19°  01'36	18°28'05	evening set	13284 Jul 04 13:25	5°  40'42	
retrograde	13283 Jul 18 05:26	22°  04'33			13284 Jul 09 22:33	30°  08'00	
evening set	13283 Jul 21 08:16	21°  05'20		inferior conj	13284 Jul 10 00:33	29°  53'34	3°03'41
inferior conj	13283 Jul 27 02:27	16°  01'27	2°40'44	minimum elong	13284 Jul 10 01:50	29°  49'24	3°02'35
minimum elong	13283 Jul 27 04:37	16°  01'25	2°39'31	min. Earth dist.	13284 Jul 11 13:44	27°  54'04	0.66677 AU
min. Earth dist.	13283 Jul 29 06:15	13°  04'50	0.65022 AU	morning rise	13284 Jul 15 13:37	23°  59'35	
morning rise	13283 Aug 01 23:46	9°  05'49		direct	13284 Jul 21 17:45	20°  49'52	
desc. node	13283 Aug 06 16:48	7°  02'55		desc. node	13284 Jul 23 14:10	21°  02'27	
direct	13283 Aug 08 12:01	7°  01'17		morning max el	13284 Aug 03 11:05	28°  25'26	26°07'41
morning max el	13283 Aug 22 00:12	15°  01'42	27°12'47		13284 Aug 04 23:16	0° 	
	13283 Sep 03 02:27	0° 			13284 Aug 26 20:42	0° 	
	13283 Sep 21 17:59	0° 		morning set	13284 Sep 08 10:33	21°  40'30	
morning set	13283 Sep 26 12:00	8°  56'57		max. Earth dist.	13284 Sep 12 05:45	28°  52'38	1.35097 AU
asc. node	13283 Sep 30 15:40	17°  13'33			13284 Sep 12 19:37	0° 	
max. Earth dist.	13283 Sep 30 21:42	17°  44'28	1.33345 AU	asc. node	13284 Sep 16 12:13	7°  20'01	
superior conj	13283 Oct 04 20:36	25°  59'37	0°39'14				




































































































































superior conj	13284 Sep 17 16:33	9° Ω 43'59	0°11'09	morning set	13285 Aug 21 16:08	3° Π 37'16	
minimum elong	13284 Sep 17 15:55	9° Ω 40'46	0°11'06	max. Earth dist.	13285 Aug 25 06:01	10° Π 02'19	1.37248 AU
behind sun begin	13284 Sep 17 11:31	9° Ω 18'20					
behind sun end	13284 Sep 17 20:18	10° Ω 03'13		superior conj	13285 Sep 01 02:00	22° Π 56'48	-0°21'11
evening rise	13284 Sep 25 08:12	25° Ω 37'13		minimum elong	13285 Sep 01 03:24	23° Π 03'39	0°21'09
	13284 Sep 27 11:19	0° Π		asc. node	13285 Sep 03 08:47	27° Π 26'10	
evening max el	13284 Oct 13 21:55	26° Π 14'55	20°36'14		13285 Sep 04 15:42	0° Ω	
	13284 Oct 18 16:40	0° \mathcal{A}		evening rise	13285 Sep 09 11:59	9° Ω 44'10	
desc. node	13284 Oct 19 10:26	0° \mathcal{A} 23'56			13285 Sep 20 12:53	0° Π	
retrograde	13284 Oct 25 03:05	1° \mathcal{A} 49'17		evening max el	13285 Sep 26 09:30	7° Π 28'49	19°26'07
evening set	13284 Oct 27 09:12	1° \mathcal{A} 36'46		retrograde	13285 Oct 05 22:47	12° Π 15'27	
	13284 Nov 01 02:50	30° $\mathcal{R}\Pi$		desc. node	13285 Oct 06 07:52	12° Π 15'01	
inferior conj	13284 Nov 05 08:54	27° Π 42'01	-4°49'33	evening set	13285 Oct 07 19:32	12° Π 05'19	
minimum elong	13284 Nov 04 22:56	27° Π 56'24	4°46'13	inferior conj	13285 Oct 16 11:38	7° Π 58'10	-3°09'14
min. Earth dist.	13284 Nov 06 12:57	27° Π 01'33	0.54646 AU	minimum elong	13285 Oct 16 03:34	8° Π 11'13	3°05'46
morning rise	13284 Nov 13 12:27	23° Π 44'12		min. Earth dist.	13285 Oct 18 22:45	6° Π 22'49	0.55597 AU
direct	13284 Nov 17 21:48	23° Π 02'50		morning rise	13285 Oct 24 09:26	3° Π 30'48	
morning max el	13284 Dec 01 04:35	29° Π 30'28	23°28'26	direct	13285 Oct 29 15:07	2° Π 29'06	
	13284 Dec 01 16:53	0° \mathcal{A}		morning max el	13285 Nov 12 14:35	9° Π 30'19	25°15'22
asc. node	13284 Dec 13 13:17	15° \mathcal{A} 43'40			13285 Nov 27 21:53	0° \mathcal{A}	
	13284 Dec 21 05:54	0° \mathcal{B}		asc. node	13285 Nov 30 10:16	4° \mathcal{A} 25'46	
morning set	13284 Dec 24 19:03	7° \mathcal{B} 23'57		morning set	13285 Dec 09 06:46	22° \mathcal{A} 06'29	
					13285 Dec 12 21:33	0° \mathcal{B}	
superior conj	13284 Dec 31 16:17	22° \mathcal{B} 18'40	1°34'56	superior conj	13285 Dec 16 01:22	6° \mathcal{B} 59'07	1°38'16
minimum elong	13284 Dec 31 17:25	22° \mathcal{B} 24'50	1°35'52	minimum elong	13285 Dec 16 01:24	6° \mathcal{B} 59'18	1°39'17
max. Earth dist.	13285 Jan 03 13:31	28° \mathcal{B} 28'53	1.33132 AU	max. Earth dist.	13285 Dec 17 16:12	10° \mathcal{B} 32'43	1.31996 AU
	13285 Jan 04 06:50	0° \approx		evening rise	13285 Dec 23 06:16	22° \mathcal{B} 28'04	
evening rise	13285 Jan 08 09:57	8° \approx 27'07			13285 Dec 27 00:17	0° \approx	
desc. node	13285 Jan 15 09:08	21° \approx 38'10		desc. node	13286 Jan 02 05:56	11° \approx 32'01	
	13285 Jan 20 05:30	0° \mathcal{H}			13286 Jan 14 01:27	0° \mathcal{H}	
evening max el	13285 Feb 11 16:12	0° \mathcal{Y} 03'02	27°23'06	evening max el	13286 Jan 25 03:01	13° \mathcal{H} 01'15	27°32'55
	13285 Feb 11 14:56	0° \mathcal{Y}		retrograde	13286 Feb 07 23:34	20° \mathcal{H} 23'48	
retrograde	13285 Feb 25 07:03	7° \mathcal{Y} 29'45		evening set	13286 Feb 14 21:42	18° \mathcal{H} 03'41	
evening set	13285 Mar 04 01:25	4° \mathcal{Y} 59'58		min. Earth dist.	13286 Feb 18 15:44	15° \mathcal{H} 01'17	0.62527 AU
min. Earth dist.	13285 Mar 07 21:46	1° \mathcal{Y} 30'04	0.64502 AU	inferior conj	13286 Feb 21 13:48	12° \mathcal{H} 13'46	-1°33'15
	13285 Mar 09 07:37	30° $\mathcal{R}\mathcal{H}$		minimum elong	13286 Feb 21 16:58	12° \mathcal{H} 06'11	1°31'33
inferior conj	13285 Mar 10 09:44	28° \mathcal{H} 49'24	-0°20'13	asc. node	13286 Feb 26 08:10	8° \mathcal{H} 13'50	
minimum elong	13285 Mar 10 10:20	28° \mathcal{H} 47'46	0°19'51	morning rise	13286 Feb 28 14:52	7° \mathcal{H} 05'54	
asc. node	13285 Mar 11 10:42	27° \mathcal{H} 43'06		direct	13286 Mar 02 21:24	6° \mathcal{H} 42'11	
morning rise	13285 Mar 16 21:11	23° \mathcal{H} 24'49		morning max el	13286 Mar 09 13:12	10° \mathcal{H} 05'16	17°46'49
direct	13285 Mar 19 10:50	22° \mathcal{H} 50'50			13286 Mar 22 21:02	0° \mathcal{Y}	
morning max el	13285 Mar 25 19:35	26° \mathcal{H} 08'24	17°51'58	morning set	13286 Mar 25 12:23	4° \mathcal{Y} 37'43	
	13285 Mar 29 03:59	0° \mathcal{Y}		desc. node	13286 Mar 31 07:51	14° \mathcal{Y} 46'19	
morning set	13285 Apr 12 00:35	21° \mathcal{Y} 52'38					
desc. node	13285 Apr 13 11:18	24° \mathcal{Y} 17'42		superior conj	13286 Apr 06 06:47	24° \mathcal{Y} 53'14	-0°45'17
	13285 Apr 16 21:38	0° \mathcal{B}		minimum elong	13286 Apr 06 02:20	24° \mathcal{Y} 34'36	0°44'57
superior conj	13285 Apr 25 15:16	14° \mathcal{B} 13'03	-1°24'53		13286 Apr 09 08:58	0° \mathcal{B}	
minimum elong	13285 Apr 25 06:52	13° \mathcal{B} 39'22	1°24'31	max. Earth dist.	13286 Apr 12 23:19	5° \mathcal{B} 50'17	1.44104 AU
max. Earth dist.	13285 Apr 30 05:49	21° \mathcal{B} 31'52	1.45307 AU	evening rise	13286 Apr 21 00:51	18° \mathcal{B} 32'01	
	13285 May 05 15:51	0° Π			13286 Apr 28 13:55	0° Π	
evening rise	13285 May 11 12:10	9° Π 00'41			13286 May 20 16:37	0° \mathcal{B}	
	13285 May 25 10:59	0° \mathcal{B}		evening max el	13286 May 21 08:09	0° \mathcal{B} 39'52	21°08'13
greatest brilliancy	13285 May 26 10:30	1° \mathcal{B} 25'32	-0.6m	asc. node	13286 May 25 05:02	3° \mathcal{B} 57'52	
asc. node	13285 Jun 07 07:54	16° \mathcal{B} 47'49		retrograde	13286 May 29 22:55	5° \mathcal{B} 41'07	
evening max el	13285 Jun 07 09:22	16° \mathcal{B} 51'29	20°00'40	evening set	13286 Jun 03 06:43	3° \mathcal{B} 56'53	
retrograde	13285 Jun 15 00:05	21° \mathcal{B} 11'49			13286 Jun 06 21:05	30° $\mathcal{R}\Pi$	
evening set	13285 Jun 18 21:34	19° \mathcal{B} 44'06		inferior conj	13286 Jun 08 12:42	27° Π 44'45	3°09'26
inferior conj	13285 Jun 24 04:47	13° \mathcal{B} 43'39	3°12'33	minimum elong	13286 Jun 08 11:58	27° Π 47'18	3°08'23
minimum elong	13285 Jun 24 05:02	13° \mathcal{B} 42'49	3°11'32	min. Earth dist.	13286 Jun 08 21:51	27° Π 12'56	0.68637 AU
min. Earth dist.	13285 Jun 25 03:34	12° \mathcal{B} 26'32	0.67893 AU	morning rise	13286 Jun 13 17:01	21° Π 27'05	
morning rise	13285 Jun 29 12:09	7° \mathcal{B} 21'36		direct	13286 Jun 18 21:42	19° Π 10'59	
direct	13285 Jul 05 05:20	4° \mathcal{B} 50'28		desc. node	13286 Jun 27 08:40	23° Π 30'19	
desc. node	13285 Jul 10 11:27	6° \mathcal{B} 31'51		morning max el	13286 Jun 29 08:05	25° Π 23'19	23°16'17
morning max el	13285 Jul 16 21:27	11° \mathcal{B} 50'11	24°45'37		13286 Jul 03 12:29	0° \mathcal{B}	
	13285 Jul 31 10:57	0° Ω			13286 Jul 24 22:30	0° Ω	
	13285 Aug 19 14:14	0° Π		morning set	13286 Aug 03 00:05	14° Ω 35'42	

max. Earth dist.	13286 Aug 07 04:01	21° Ω 40'21	1.39587 AU	morning set	13287 Jul 14 07:00	24° Θ 28'05	
	13286 Aug 11 21:08	0° \mathbb{M}			13287 Jul 17 17:23	0° Ω	
				max. Earth dist.	13287 Jul 20 05:28	4° Ω 06'49	1.41848 AU
superior conj	13286 Aug 14 21:04	5° \mathbb{M} 28'25	-0°55'58				
minimum elong	13286 Aug 15 01:10	5° \mathbb{M} 47'21	0°55'48	superior conj	13287 Jul 27 21:24	17° Ω 09'18	-1°29'55
asc. node	13286 Aug 21 05:22	17° \mathbb{M} 27'57		minimum elong	13287 Jul 28 03:58	17° Ω 38'05	1°29'52
evening rise	13286 Aug 24 08:14	23° \mathbb{M} 28'42			13287 Aug 04 01:42	0° \mathbb{M}	
	13286 Aug 27 18:09	0° $\underline{\Omega}$		evening rise	13287 Aug 07 17:14	6° \mathbb{M} 41'25	
evening max el	13286 Sep 09 09:39	19° $\underline{\Omega}$ 29'58	18°37'56	asc. node	13287 Aug 08 01:59	7° \mathbb{M} 21'41	
retrograde	13286 Sep 17 12:18	23° $\underline{\Omega}$ 35'06			13287 Aug 21 19:20	0° $\underline{\Omega}$	
evening set	13286 Sep 19 10:54	23° $\underline{\Omega}$ 21'50		evening max el	13287 Aug 23 18:31	2° $\underline{\Omega}$ 10'32	18°10'41
desc. node	13286 Sep 23 05:22	21° $\underline{\Omega}$ 48'51		retrograde	13287 Aug 30 20:27	5° $\underline{\Omega}$ 46'45	
inferior conj	13286 Sep 27 10:23	18° $\underline{\Omega}$ 55'32	-1°19'59	evening set	13287 Sep 02 01:51	5° $\underline{\Omega}$ 25'56	
minimum elong	13286 Sep 27 07:09	19° $\underline{\Omega}$ 01'39	1°18'27	inferior conj	13287 Sep 09 06:49	0° $\underline{\Omega}$ 39'02	0°15'28
min. Earth dist.	13286 Sep 30 14:28	16° $\underline{\Omega}$ 32'49	0.57287 AU	minimum elong	13287 Sep 09 07:20	0° $\underline{\Omega}$ 37'54	0°15'11
morning rise	13286 Oct 04 23:57	13° $\underline{\Omega}$ 50'18		transit middle	13287 Sep 09 07:20	0° $\underline{\Omega}$ 37'54	0°15'11
direct	13286 Oct 10 22:38	12° $\underline{\Omega}$ 22'32		transit begin	13287 Sep 09 06:10	0° $\underline{\Omega}$ 40'29	
morning max el	13286 Oct 25 05:32	19° $\underline{\Omega}$ 51'13	26°44'18	transit end	13287 Sep 09 08:31	0° $\underline{\Omega}$ 35'19	
	13286 Nov 02 21:53	0° \mathbb{M}		desc. node	13287 Sep 10 02:54	29° \mathbb{M} 54'36	
asc. node	13286 Nov 17 07:09	23° \mathbb{M} 38'25			13287 Sep 10 00:28	30° \mathbb{R} \mathbb{M}	
	13286 Nov 20 12:08	0° \mathbb{X}		min. Earth dist.	13287 Sep 12 13:57	27° \mathbb{M} 46'09	0.59437 AU
morning set	13286 Nov 23 16:49	6° \mathbb{X} 41'00		morning rise	13287 Sep 16 09:26	25° \mathbb{M} 00'06	
				direct	13287 Sep 22 20:08	23° \mathbb{M} 04'28	
superior conj	13286 Nov 30 12:40	21° \mathbb{X} 43'10	1°35'35		13287 Oct 06 05:55	0° $\underline{\Omega}$	
minimum elong	13286 Nov 30 11:40	21° \mathbb{X} 37'37	1°36'32	morning max el	13287 Oct 07 03:57	0° $\underline{\Omega}$ 52'50	27°40'41
max. Earth dist.	13286 Nov 30 23:30	22° \mathbb{X} 43'39	1.31351 AU		13287 Oct 28 02:41	0° \mathbb{M}	
	13286 Dec 04 06:17	0° \mathbb{Z}		asc. node	13287 Nov 04 03:56	13° \mathbb{M} 12'45	
evening rise	13286 Dec 07 09:28	6° \mathbb{Z} 45'36		morning set	13287 Nov 07 23:22	21° \mathbb{M} 01'51	
	13286 Dec 19 12:39	0° \approx			13287 Nov 12 03:00	0° \mathbb{X}	
desc. node	13286 Dec 20 02:50	0° \approx 59'50		max. Earth dist.	13287 Nov 14 07:53	4° \mathbb{X} 53'12	1.31225 AU
evening max el	13287 Jan 07 08:54	25° \approx 17'37	27°09'34				
	13287 Jan 13 08:52	0° \mathbb{X}		superior conj	13287 Nov 15 00:13	6° \mathbb{X} 24'15	1°27'06
retrograde	13287 Jan 21 07:56	2° \mathbb{X} 32'23		minimum elong	13287 Nov 14 22:25	6° \mathbb{X} 14'14	1°27'48
evening set	13287 Jan 28 03:27	0° \mathbb{X} 30'11		evening rise	13287 Nov 21 17:16	21° \mathbb{X} 13'11	
	13287 Jan 28 23:02	30° \mathbb{R} \approx			13287 Nov 25 22:17	0° \mathbb{Z}	
min. Earth dist.	13287 Jan 31 23:20	27° \approx 47'10	0.60374 AU	desc. node	13287 Dec 06 23:51	19° \mathbb{Z} 50'36	
inferior conj	13287 Feb 04 03:25	25° \approx 07'28	-2°54'23		13287 Dec 14 05:04	0° \approx	
minimum elong	13287 Feb 04 09:40	24° \approx 54'19	2°51'22	evening max el	13287 Dec 20 07:28	6° \approx 42'50	26°11'52
morning rise	13287 Feb 11 19:00	20° \approx 19'14		retrograde	13288 Jan 03 06:14	13° \approx 47'35	
asc. node	13287 Feb 13 05:37	20° \approx 03'47		evening set	13288 Jan 09 14:31	12° \approx 11'21	
direct	13287 Feb 13 20:50	20° \approx 02'10		min. Earth dist.	13288 Jan 13 20:49	9° \approx 34'59	0.58230 AU
morning max el	13287 Feb 21 04:14	23° \approx 41'20	18°00'04	inferior conj	13288 Jan 16 22:55	7° \approx 19'51	-4°16'27
	13287 Feb 26 05:27	0° \mathbb{X}		minimum elong	13288 Jan 17 07:30	7° \approx 04'10	4°13'00
morning set	13287 Mar 08 18:03	18° \mathbb{X} 12'26		morning rise	13288 Jan 25 03:24	2° \approx 53'09	
	13287 Mar 15 04:32	0° \mathbb{Y}		direct	13288 Jan 27 04:47	2° \approx 39'07	
desc. node	13287 Mar 18 04:23	5° \mathbb{Y} 21'03		asc. node	13288 Jan 31 03:01	3° \approx 33'17	
				morning max el	13288 Feb 04 12:42	6° \approx 44'28	18°33'21
superior conj	13287 Mar 18 22:29	6° \mathbb{Y} 40'53	-0°06'00		13288 Feb 19 07:01	0° \mathbb{X}	
minimum elong	13287 Mar 18 21:59	6° \mathbb{Y} 38'41	0°05'56	morning set	13288 Feb 20 12:09	2° \mathbb{X} 20'07	
behind sun begin	13287 Mar 18 14:32	6° \mathbb{Y} 05'54					
behind sun end	13287 Mar 19 05:26	7° \mathbb{Y} 11'24		superior conj	13288 Feb 29 11:02	19° \mathbb{X} 25'20	0°28'29
max. Earth dist.	13287 Mar 26 12:09	19° \mathbb{Y} 36'41	1.42344 AU	minimum elong	13288 Feb 29 12:56	19° \mathbb{X} 34'08	0°28'27
evening rise	13287 Apr 01 02:43	28° \mathbb{Y} 43'13		desc. node	13288 Mar 04 00:53	25° \mathbb{X} 57'43	
	13287 Apr 01 22:03	0° \mathbb{Z}			13288 Mar 06 07:21	0° \mathbb{Y}	
	13287 Apr 22 04:53	0° \mathbb{I}		max. Earth dist.	13288 Mar 07 20:23	2° \mathbb{Y} 41'44	1.40223 AU
evening max el	13287 May 04 01:54	14° \mathbb{I} 29'02	22°25'13	evening rise	13288 Mar 12 00:56	9° \mathbb{Y} 49'01	
asc. node	13287 May 12 02:15	20° \mathbb{I} 00'11			13288 Mar 24 20:39	0° \mathbb{Z}	
retrograde	13287 May 13 20:22	20° \mathbb{I} 14'22		evening max el	13288 Apr 15 16:36	28° \mathbb{Z} 20'20	23°46'15
evening set	13287 May 18 15:08	18° \mathbb{I} 14'45			13288 Apr 17 10:35	0° \mathbb{I}	
inferior conj	13287 May 23 22:14	11° \mathbb{I} 53'06	2°55'37	retrograde	13288 Apr 26 14:56	4° \mathbb{I} 46'01	
minimum elong	13287 May 23 20:42	11° \mathbb{I} 58'27	2°54'27	asc. node	13288 Apr 27 23:35	4° \mathbb{I} 37'38	
min. Earth dist.	13287 May 23 18:25	12° \mathbb{I} 06'23	0.68907 AU	evening set	13288 May 01 21:15	2° \mathbb{I} 32'52	
morning rise	13287 May 29 02:06	5° \mathbb{I} 41'34			13288 May 04 07:56	30° \mathbb{R} \mathbb{Z}	
direct	13287 Jun 02 17:56	3° \mathbb{I} 44'22		min. Earth dist.	13288 May 06 15:04	27° \mathbb{Z} 00'43	0.68711 AU
morning max el	13287 Jun 11 21:29	9° \mathbb{I} 04'41	21°48'39	inferior conj	13288 May 07 07:25	26° \mathbb{Z} 04'48	2°31'38
desc. node	13287 Jun 14 05:45	11° \mathbb{I} 34'32		minimum elong	13288 May 07 05:23	26° \mathbb{Z} 11'48	2°30'22
	13287 Jun 28 04:40	0° \mathbb{Z}		morning rise	13288 May 12 13:29	20° \mathbb{Z} 00'44	

direct	13288 May 16 16:43	18°  24'13		desc. node	13289 May 17 23:32	19°  53'24	
morning max el	13288 May 24 16:42	22°  56'31	20°30'00	greatest brilliancy	13289 May 20 11:45	23°  33'01	-0.7m
	13288 May 30 18:29	0°  II			13289 May 24 19:17	0°  II	
desc. node	13288 May 31 02:42	0°  II26'37		morning set	13289 Jun 01 17:14	12°  II04'51	
	13288 Jun 20 10:53	0°  ☿			13289 Jun 13 06:03	0°  ☿	
morning set	13288 Jun 22 15:44	3°  ☿23'32		max. Earth dist.	13289 Jun 14 04:32	1°  ☿28'26	1.45117 AU
max. Earth dist.	13288 Jul 01 13:42	17°  ☿26'16	1.43761 AU				
				superior conj	13289 Jun 18 01:08	7°  ☿35'08	-2°12'39
superior conj	13288 Jul 07 23:02	27°  ☿51'45	-1°57'47	minimum elong	13289 Jun 18 03:26	7°  ☿44'15	2°13'38
minimum elong	13288 Jul 08 05:50	28°  ☿19'58	1°58'13		13289 Jul 01 19:33	0°  ☿	
	13288 Jul 09 05:52	0°  ☿		evening rise	13289 Jul 02 06:17	0°  ☿44'34	
evening rise	13288 Jul 20 10:18	19°  ☿10'57		asc. node	13289 Jul 11 19:27	16°  ☿26'47	
asc. node	13288 Jul 24 22:41	27°  ☿03'17		evening max el	13289 Jul 20 22:16	28°  ☿49'26	18°13'46
	13288 Jul 26 15:53	0°  ☿			13289 Jul 22 05:20	0°  ☿	
evening max el	13288 Aug 06 07:58	15°  ☿20'35	18°02'59	retrograde	13289 Jul 27 06:46	2°  ☿11'12	
retrograde	13288 Aug 12 20:06	18°  ☿42'23		evening set	13289 Jul 30 04:44	1°  ☿25'21	
evening set	13288 Aug 15 09:39	18°  ☿10'24			13289 Aug 01 06:53	30°  ☿	
inferior conj	13288 Aug 21 22:14	13°  ☿04'01	1°28'45	inferior conj	13289 Aug 05 04:31	26°  ☿01'31	2°20'02
minimum elong	13288 Aug 22 00:29	12°  ☿58'18	1°27'36	minimum elong	13289 Aug 05 06:59	25°  ☿54'31	2°18'44
min. Earth dist.	13288 Aug 24 22:23	10°  ☿03'03	0.61731 AU	min. Earth dist.	13289 Aug 07 16:19	23°  ☿12'59	0.63902 AU
desc. node	13288 Aug 27 00:25	8°  ☿10'24		morning rise	13289 Aug 11 07:39	19°  ☿44'24	
morning rise	13288 Aug 28 12:48	7°  ☿01'06		desc. node	13289 Aug 13 21:54	18°  ☿06'13	
direct	13288 Sep 04 04:55	4°  ☿41'53		direct	13289 Aug 17 22:44	17°  ☿09'47	
morning max el	13288 Sep 18 09:00	12°  ☿41'00	27°58'26	morning max el	13289 Aug 31 18:24	25°  ☿10'06	27°38'50
	13288 Oct 02 04:08	0°  ☿			13289 Sep 05 04:22	0°  ☿	
	13288 Oct 19 12:18	0°  ☿			13289 Sep 25 15:53	0°  ☿	
asc. node	13288 Oct 21 00:38	3°  ☿02'28		morning set	13289 Oct 05 17:39	18°  ☿41'42	
morning set	13288 Oct 22 00:27	5°  ☿04'13		asc. node	13289 Oct 07 21:15	23°  ☿01'51	
max. Earth dist.	13288 Oct 27 13:40	16°  ☿52'44	1.31632 AU	max. Earth dist.	13289 Oct 10 13:10	28°  ☿33'33	1.32573 AU
					13289 Oct 11 05:32	0°  ☿	
superior conj	13288 Oct 29 10:11	20°  ☿57'17	1°12'54				
minimum elong	13288 Oct 29 07:57	20°  ☿44'57	1°13'19	superior conj	13289 Oct 13 16:34	5°  ☿15'55	0°53'06
	13288 Nov 02 12:20	0°  ☿		minimum elong	13289 Oct 13 14:24	5°  ☿04'15	0°53'14
evening rise	13288 Nov 05 03:42	5°  ☿45'54		evening rise	13289 Oct 20 14:53	20°  ☿18'05	
	13288 Nov 17 17:17	0°  ☿			13289 Oct 25 06:51	0°  ☿	
desc. node	13288 Nov 22 20:58	7°  ☿50'12		desc. node	13289 Nov 09 18:12	24°  ☿39'10	
evening max el	13288 Nov 30 21:53	17°  ☿18'04	24°45'20	evening max el	13289 Nov 12 07:47	27°  ☿21'26	23°03'59
retrograde	13288 Dec 14 16:07	24°  ☿10'34			13289 Nov 15 09:00	0°  ☿	
evening set	13288 Dec 20 02:44	23°  ☿04'55		retrograde	13289 Nov 25 12:59	3°  ☿55'29	
min. Earth dist.	13288 Dec 25 09:44	20°  ☿18'34	0.56352 AU	evening set	13289 Nov 29 16:05	3°  ☿18'26	
inferior conj	13288 Dec 27 21:47	18°  ☿43'09	-5°24'33	min. Earth dist.	13289 Dec 06 17:04	0°  ☿03'13	0.55023 AU
minimum elong	13288 Dec 28 05:15	18°  ☿31'14	5°22'15		13289 Dec 06 19:19	30°  ☿	
morning rise	13289 Jan 05 09:53	14°  ☿37'41		inferior conj	13289 Dec 08 01:12	29°  ☿17'07	-5°56'01
direct	13289 Jan 07 17:59	14°  ☿22'37		minimum elong	13289 Dec 08 01:51	29°  ☿16'10	5°54'59
asc. node	13289 Jan 17 00:20	18°  ☿39'04		morning rise	13289 Dec 16 13:09	25°  ☿27'34	
morning max el	13289 Jan 17 10:30	19°  ☿03'08	19°28'45	direct	13289 Dec 19 12:35	25°  ☿06'43	
	13289 Jan 25 15:30	0°  ☿			13289 Dec 30 06:08	0°  ☿	
morning set	13289 Feb 03 14:40	16°  ☿49'03		morning max el	13289 Dec 30 18:24	0°  ☿28'37	20°47'25
	13289 Feb 10 04:30	0°  ☿		asc. node	13290 Jan 03 21:32	5°  ☿06'06	
					13290 Jan 18 05:02	0°  ☿	
superior conj	13289 Feb 11 15:52	2°  ☿53'55	0°56'09	morning set	13290 Jan 18 22:32	1°  ☿30'16	
minimum elong	13289 Feb 11 18:37	3°  ☿07'23	0°56'19				
max. Earth dist.	13289 Feb 18 02:46	15°  ☿07'58	1.37974 AU	superior conj	13290 Jan 26 08:42	16°  ☿54'56	1°16'39
desc. node	13289 Feb 18 21:24	16°  ☿32'57		minimum elong	13290 Jan 26 11:15	17°  ☿07'58	1°17'07
evening rise	13289 Feb 21 20:03	21°  ☿48'23		max. Earth dist.	13290 Jan 31 11:30	27°  ☿08'10	1.35828 AU
	13289 Feb 26 15:04	0°  ☿			13290 Feb 01 23:11	0°  ☿	
	13289 Mar 18 18:38	0°  ☿		evening rise	13290 Feb 04 09:22	4°  ☿33'31	
evening max el	13289 Mar 29 06:13	12°  ☿13'14	25°04'33	desc. node	13290 Feb 05 17:58	7°  ☿03'09	
retrograde	13289 Apr 10 05:23	19°  ☿10'13			13290 Feb 19 12:32	0°  ☿	
asc. node	13289 Apr 14 20:59	17°  ☿37'04		evening max el	13290 Mar 11 19:50	26°  ☿03'29	26°12'57
evening set	13289 Apr 15 23:26	16°  ☿46'15			13290 Mar 16 09:31	0°  ☿	
min. Earth dist.	13289 Apr 20 09:33	11°  ☿50'09	0.68065 AU	retrograde	13290 Mar 24 14:55	3°  ☿20'53	
inferior conj	13289 Apr 21 14:20	10°  ☿15'44	1°57'28	evening set	13290 Mar 30 20:03	0°  ☿49'57	
minimum elong	13289 Apr 21 12:12	10°  ☿22'45	1°56'14		13290 Mar 31 18:43	30°  ☿	
morning rise	13289 Apr 27 01:16	4°  ☿20'32		asc. node	13290 Apr 01 18:24	29°  ☿01'07	
direct	13289 Apr 30 16:35	3°  ☿04'30		min. Earth dist.	13290 Apr 03 23:45	26°  ☿29'04	0.66987 AU
morning max el	13289 May 07 19:26	6°  ☿59'23	19°24'50	inferior conj	13290 Apr 05 17:00	24°  ☿22'02	1°12'45

minimum elong	13290 Apr 05 15:20	24° Υ 27'11	1°11'50	morning rise	13291 Mar 26 17:40	2° Υ 45'06	
morning rise	13290 Apr 11 11:27	18° Υ 37'16		direct	13291 Mar 29 12:11	2° Υ 03'45	
direct	13290 Apr 14 15:47	17° Υ 40'01		morning max el	13291 Apr 04 20:35	5° Υ 22'54	18°02'56
morning max el	13290 Apr 21 05:25	21° Υ 10'41	18°35'32	desc. node	13291 Apr 21 16:53	29° Υ 56'22	
	13290 Apr 28 07:58	0° B			13291 Apr 21 17:46	0° B	
desc. node	13290 May 04 20:15	9° B 45'51		morning set	13291 Apr 23 05:00	2° B 23'34	
morning set	13290 May 12 09:28	21° B 33'59					
	13290 May 17 18:34	0° II		superior conj	13291 May 07 21:03	25° B 55'46	-1°44'52
				minimum elong	13291 May 07 11:53	25° B 19'40	1°44'48
superior conj	13290 May 28 11:07	16° II 42'01	-2°08'28		13291 May 10 11:16	0° II	
minimum elong	13290 May 28 05:44	16° II 20'59	2°09'14	max. Earth dist.	13291 May 10 19:23	0° II 31'47	1.45689 AU
max. Earth dist.	13290 May 27 23:29	15° II 56'37	1.45777 AU	evening rise	13291 May 23 23:31	20° II 58'17	
	13290 Jun 05 22:42	0° B			13291 May 29 20:24	0° B	
evening rise	13290 Jun 13 01:53	11° B 17'12		greatest brilliancy	13291 Jun 05 23:46	10° B 48'03	-0.7m
greatest brilliancy	13290 Jun 21 00:05	23° B 51'12	-0.8m	asc. node	13291 Jun 15 13:16	23° B 51'45	
	13290 Jun 24 23:23	0° Ω		evening max el	13291 Jun 17 18:13	26° B 15'55	19°27'41
asc. node	13290 Jun 28 16:18	5° Ω 25'55			13291 Jun 23 03:36	0° Ω	
evening max el	13290 Jul 04 10:26	12° Ω 29'58	18°42'19	retrograde	13291 Jun 24 22:01	0° Ω 17'01	
retrograde	13290 Jul 11 00:29	16° Ω 05'12			13291 Jun 26 15:15	30° R B	
evening set	13290 Jul 14 07:07	15° Ω 03'49		evening set	13291 Jun 28 13:48	28° B 59'09	
inferior conj	13290 Jul 19 21:51	9° Ω 24'32	2°52'21	inferior conj	13291 Jul 03 22:55	23° B 06'03	3°09'00
minimum elong	13290 Jul 19 23:41	9° Ω 18'50	2°51'11	minimum elong	13291 Jul 03 23:46	23° B 03'14	3°07'58
min. Earth dist.	13290 Jul 21 19:20	7° Ω 04'02	0.65774 AU	min. Earth dist.	13291 Jul 05 05:55	21° B 23'49	0.67245 AU
morning rise	13290 Jul 25 15:22	3° Ω 01'09		morning rise	13291 Jul 09 09:13	16° B 42'11	
desc. node	13290 Jul 31 19:20	0° Ω 20'52		direct	13291 Jul 15 08:49	14° B 05'10	
direct	13290 Aug 01 00:26	0° Ω 20'42		desc. node	13291 Jul 18 16:41	14° B 45'56	
morning max el	13290 Aug 14 05:38	8° Ω 10'04	26°47'52	morning max el	13291 Jul 27 16:29	21° B 28'07	25°34'17
	13290 Aug 31 05:59	0° B			13291 Aug 04 02:22	0° Ω	
	13290 Sep 18 01:21	0° B			13291 Aug 24 11:16	0° B	
morning set	13290 Sep 19 00:05	1° B 47'40		morning set	13291 Sep 01 16:02	14° B 13'01	
max. Earth dist.	13290 Sep 23 03:19	9° B 52'29	1.34036 AU	max. Earth dist.	13291 Sep 05 07:25	20° B 57'27	1.35964 AU
asc. node	13290 Sep 24 17:50	13° B 06'53			13291 Sep 09 23:34	0° B	
superior conj	13290 Sep 27 17:05	19° B 14'39	0°27'55	superior conj	13291 Sep 11 08:59	2° B 46'28	-0°02'09
minimum elong	13290 Sep 27 15:39	19° B 07'14	0°27'53	minimum elong	13291 Sep 11 09:07	2° B 47'09	0°02'10
	13290 Oct 02 19:05	0° B		behind sun begin	13291 Sep 11 02:54	2° B 16'02	
evening rise	13290 Oct 05 00:55	4° B 44'58		behind sun end	13291 Sep 11 15:19	3° B 18'19	
	13290 Oct 18 18:42	0° B		asc. node	13291 Sep 11 14:24	3° B 13'42	
evening max el	13290 Oct 24 22:24	7° B 29'55	21°25'47	evening rise	13291 Sep 19 07:41	19° B 00'54	
desc. node	13290 Oct 27 15:32	9° B 53'12			13291 Sep 24 20:19	0° B	
retrograde	13290 Nov 06 01:04	13° B 30'53		evening max el	13291 Oct 07 01:47	18° B 16'36	20°03'51
evening set	13290 Nov 08 19:53	13° B 13'02		desc. node	13291 Oct 14 12:57	23° B 04'59	
inferior conj	13290 Nov 17 17:22	9° B 19'14	-5°30'30	retrograde	13291 Oct 17 14:18	23° B 30'52	
minimum elong	13290 Nov 17 09:36	9° B 30'07	5°28'19	evening set	13291 Oct 19 14:19	23° B 20'21	
min. Earth dist.	13290 Nov 17 23:07	9° B 11'09	0.54508 AU	inferior conj	13291 Oct 28 12:25	19° B 21'49	-4°10'12
morning rise	13290 Nov 26 00:07	5° B 30'17		minimum elong	13291 Oct 30 02:32	19° B 36'41	4°06'28
direct	13290 Nov 29 20:26	4° B 58'19		min. Earth dist.	13291 Oct 30 07:15	18° B 17'25	0.54936 AU
morning max el	13290 Dec 12 12:45	11° B 03'17	22°26'16	morning rise	13291 Nov 05 13:35	15° B 12'52	
asc. node	13290 Dec 21 18:39	22° B 37'17		direct	13291 Nov 10 07:42	14° B 23'36	
	13290 Dec 26 04:19	0° B		morning max el	13291 Nov 23 23:21	21° B 07'14	24°14'54
morning set	13291 Jan 03 09:23	16° B 16'16			13291 Dec 01 14:38	0° B	
	13291 Jan 09 19:22	0° \approx		asc. node	13291 Dec 08 15:40	10° B 57'22	
					13291 Dec 18 09:45	0° B	
superior conj	13291 Jan 10 09:58	1° \approx 17'40	1°30'10	morning set	13291 Dec 18 21:18	1° B 01'43	
minimum elong	13291 Jan 10 11:43	1° \approx 26'55	1°30'57				
max. Earth dist.	13291 Jan 14 02:15	8° \approx 59'16	1.33990 AU	superior conj	13291 Dec 25 16:56	15° B 54'08	1°37'06
evening rise	13291 Jan 18 13:18	17° \approx 54'40		minimum elong	13291 Dec 25 17:36	15° B 57'49	1°38'05
desc. node	13291 Jan 23 14:36	27° \approx 23'30		max. Earth dist.	13291 Dec 28 00:46	20° B 56'44	1.32586 AU
	13291 Jan 25 01:36	0° B			13292 Jan 01 08:09	0° \approx	
	13291 Feb 13 18:43	0° Υ		evening rise	13292 Jan 02 04:33	1° \approx 43'50	
evening max el	13291 Feb 22 09:19	9° Υ 42'10	27°04'10	desc. node	13292 Jan 10 11:22	17° \approx 29'06	
retrograde	13291 Mar 07 18:44	17° Υ 09'04			13292 Jan 17 23:24	0° B	
evening set	13291 Mar 14 09:08	14° Υ 36'42		evening max el	13292 Feb 04 21:46	22° B 59'09	27°31'01
min. Earth dist.	13291 Mar 18 07:38	10° Υ 49'09	0.65509 AU		13292 Feb 15 15:50	0° Υ	
asc. node	13291 Mar 19 15:51	9° Υ 18'15		retrograde	13292 Feb 18 15:57	0° Υ 25'35	
inferior conj	13291 Mar 20 13:06	8° Υ 17'34	0°16'59		13292 Feb 21 13:18	30° R B	
minimum elong	13291 Mar 20 12:38	8° Υ 18'54	0°16'45	evening set	13292 Feb 25 12:22	27° B 58'53	

min. Earth dist.	13292 Feb 29 07:20	24° H 41'17	0.63692 AU	retrograde	13293 Jan 31 05:12	13° H 00'47	
inferior conj	13292 Mar 02 23:56	21° H 55'49	-0°49'58	evening set	13293 Feb 07 02:54	10° H 47'38	
minimum elong	13292 Mar 03 01:32	21° H 51'44	0°49'04	min. Earth dist.	13293 Feb 10 21:12	7° H 54'20	0.61625 AU
asc. node	13292 Mar 05 13:18	19° H 25'41		inferior conj	13293 Feb 13 22:20	5° H 08'25	-2°06'56
morning rise	13292 Mar 09 17:00	16° H 38'01		minimum elong	13293 Feb 14 02:47	4° H 58'18	2°04'38
direct	13292 Mar 12 03:15	16° H 08'59		asc. node	13293 Feb 20 10:45	0° H 25'11	
morning max el	13292 Mar 18 14:12	19° H 27'55	17°47'31	morning rise	13293 Feb 21 05:33	0° H 08'12	
	13292 Mar 26 11:21	0° Y			13293 Feb 21 17:27	30° R \approx	
morning set	13292 Apr 04 03:44	14° Y 31'37		direct	13293 Feb 23 09:39	29° \approx 47'45	
desc. node	13292 Apr 07 13:28	20° Y 19'38			13293 Feb 25 01:22	0° H	
	13292 Apr 13 07:55	0° B		morning max el	13293 Mar 02 07:05	3° H 16'41	17°50'01
				morning set	13293 Mar 17 23:54	27° H 40'10	
superior conj	13292 Apr 16 23:13	5° B 58'07	-1°08'28		13293 Mar 19 07:06	0° Y	
minimum elong	13292 Apr 16 16:16	5° B 29'51	1°08'04	desc. node	13293 Mar 25 10:01	10° Y 51'09	
max. Earth dist.	13292 Apr 22 14:04	14° B 59'28	1.44875 AU				
evening rise	13292 May 02 10:47	0° II 21'11		superior conj	13293 Mar 29 01:09	17° Y 07'11	-0°28'13
	13292 May 02 05:15	0° II		minimum elong	13293 Mar 28 22:30	16° Y 55'55	0°28'01
	13292 May 22 13:59	0° E		max. Earth dist.	13293 Apr 05 05:46	29° Y 05'57	1.43419 AU
evening max el	13292 May 30 20:24	10° E 04'08	20°28'01		13293 Apr 05 19:05	0° B	
asc. node	13292 Jun 01 10:20	11° E 33'23		evening rise	13293 Apr 12 03:45	10° B 06'48	
retrograde	13292 Jun 07 20:52	14° E 41'10			13293 Apr 25 08:24	0° II	
evening set	13292 Jun 11 22:35	13° E 06'35		evening max el	13293 May 13 17:02	23° II 53'31	21°40'10
inferior conj	13292 Jun 17 04:59	7° E 01'06	3°12'35	asc. node	13293 May 19 07:31	28° II 17'02	
minimum elong	13292 Jun 17 04:48	7° E 01'44	3°11'34	retrograde	13293 May 22 19:12	29° II 12'59	
min. Earth dist.	13292 Jun 17 21:59	6° E 02'45	0.68268 AU	evening set	13293 May 27 07:37	27° II 22'04	
morning rise	13292 Jun 22 10:43	0° E 40'29		inferior conj	13293 Jun 01 13:50	21° II 05'51	3°04'50
	13292 Jun 23 06:11	30° R II		minimum elong	13293 Jun 01 12:44	21° II 09'43	3°03'44
direct	13292 Jun 27 22:45	28° II 14'49		min. Earth dist.	13293 Jun 01 17:27	20° II 53'14	0.68815 AU
	13292 Jul 03 04:53	0° E		morning rise	13293 Jun 06 17:39	14° II 50'45	
desc. node	13292 Jul 04 13:57	0° E 55'54		direct	13293 Jun 11 17:00	12° II 42'08	
morning max el	13292 Jul 09 02:34	4° E 55'50	24°07'49	desc. node	13293 Jun 21 11:06	18° II 24'56	
	13292 Jul 28 10:19	0° Q		morning max el	13293 Jun 21 13:51	18° II 31'49	22°38'17
morning set	13292 Aug 13 12:56	25° Q 45'51			13293 Jul 01 04:03	0° E	
	13292 Aug 15 23:19	0° M			13293 Jul 21 13:03	0° Q	
max. Earth dist.	13292 Aug 17 05:22	2° M 13'07	1.38229 AU	morning set	13293 Jul 25 10:25	6° Q 16'20	
				max. Earth dist.	13293 Jul 30 04:27	14° Q 11'10	1.40580 AU
superior conj	13292 Aug 24 12:49	15° M 42'40	-0°35'48				
minimum elong	13292 Aug 24 15:19	15° M 54'33	0°35'42	superior conj	13293 Aug 07 00:32	27° Q 54'20	-1°10'43
asc. node	13292 Aug 28 10:58	23° M 18'04		minimum elong	13293 Aug 07 05:48	28° Q 18'05	1°10'34
	13292 Aug 31 20:30	0° Q			13293 Aug 08 04:16	0° M	
evening rise	13292 Sep 02 08:38	2° Q 58'40		asc. node	13293 Aug 15 07:35	13° M 17'02	
	13292 Sep 18 22:41	0° M		evening rise	13293 Aug 17 00:38	16° M 30'58	
evening max el	13292 Sep 18 19:13	29° Q 51'24	19°03'06		13293 Aug 24 08:52	0° Q	
retrograde	13292 Sep 27 16:36	4° M 18'37		evening max el	13293 Sep 01 23:38	12° Q 10'22	18°23'50
evening set	13292 Sep 29 13:16	4° M 07'42		retrograde	13293 Sep 09 14:11	16° Q 01'13	
desc. node	13292 Sep 30 10:27	3° M 55'15		evening set	13293 Sep 11 15:32	15° Q 45'06	
inferior conj	13292 Oct 07 22:59	29° Q 53'18	-2°22'20	desc. node	13293 Sep 17 07:58	12° Q 41'50	
minimum elong	13292 Oct 07 16:54	0° M 03'45	2°19'33	inferior conj	13293 Sep 19 07:01	11° Q 09'43	-0°37'01
	13292 Oct 07 19:05	30° R Q		minimum elong	13293 Sep 19 05:37	11° Q 12'33	0°36'21
min. Earth dist.	13292 Oct 10 19:22	27° Q 56'07	0.56238 AU	min. Earth dist.	13293 Sep 22 13:49	8° Q 31'58	0.58170 AU
morning rise	13292 Oct 15 17:38	25° Q 10'11		morning rise	13293 Sep 26 16:14	5° Q 49'32	
direct	13292 Oct 21 07:22	23° Q 57'35		direct	13293 Oct 02 20:53	4° Q 09'56	
	13292 Nov 03 03:32	0° M		morning max el	13293 Oct 17 04:27	11° Q 46'55	27°12'52
morning max el	13292 Nov 04 10:35	1° M 11'34	25°56'20		13293 Oct 31 10:15	0° M	
asc. node	13292 Nov 24 12:37	29° M 53'20		asc. node	13293 Nov 11 09:28	19° M 15'41	
	13292 Nov 24 14:02	0° J		morning set	13293 Nov 16 17:17	0° J 09'35	
morning set	13292 Dec 02 08:30	15° J 41'00			13293 Nov 16 15:29	0° J	
	13292 Dec 08 20:36	0° B					
superior conj	13292 Dec 09 03:12	0° B 36'38	1°37'51	superior conj	13293 Nov 23 14:48	15° J 19'19	1°32'41
minimum elong	13292 Dec 09 02:47	0° B 34'19	1°38'51	minimum elong	13293 Nov 23 13:26	15° J 11'40	1°33'33
max. Earth dist.	13292 Dec 10 05:46	3° B 03'51	1.31662 AU	max. Earth dist.	13293 Nov 23 14:05	15° J 15'15	1.31239 AU
evening rise	13292 Dec 16 04:07	15° B 52'38		evening rise	13293 Nov 30 09:31	0° B 14'38	
	13292 Dec 23 07:32	0° \approx			13293 Nov 30 06:46	0° B	
desc. node	13292 Dec 27 08:13	7° \approx 12'48		desc. node	13293 Dec 14 05:09	26° B 25'55	
	13293 Jan 11 23:09	0° H			13293 Dec 16 10:59	0° \approx	
evening max el	13293 Jan 17 07:02	5° H 41'33	27°27'16	evening max el	13293 Dec 30 10:13	17° \approx 36'52	26°49'05
				retrograde	13294 Jan 13 09:05	24° \approx 46'36	

evening set	13294 Jan 20 01:10	22°  54'45			13294 Dec 13 16:44	0° 	
min. Earth dist.	13294 Jan 24 00:15	20°  16'26	0.59452 AU	retrograde	13294 Dec 26 02:20	5°  39'18	
inferior conj	13294 Jan 27 04:39	17°  45'26	-3°29'43	evening set	13295 Jan 01 03:00	4°  15'26	
minimum elong	13294 Jan 27 12:06	17°  30'39	3°26'22	min. Earth dist.	13295 Jan 05 17:29	1°  37'25	0.57378 AU
morning rise	13294 Feb 04 02:05	13°  06'00			13295 Jan 08 02:25	30°  R 	
direct	13294 Feb 06 03:15	12°  50'32		inferior conj	13295 Jan 08 15:31	29°  37'22	-4°48'15
asc. node	13294 Feb 07 08:12	12°  56'06		minimum elong	13295 Jan 09 00:15	29°  32'21	4°45'07
morning max el	13294 Feb 13 19:44	16°  39'23	18°11'38	morning rise	13295 Jan 17 00:10	25°  32'02	
	13294 Feb 23 04:50	0° 		direct	13295 Jan 19 03:27	25°  30'62	
morning set	13294 Mar 01 11:26	11°  30'33		asc. node	13295 Jan 25 05:33	27°  30'03	
				morning max el	13295 Jan 28 00:13	29°  32'51	18°54'13
superior conj	13294 Mar 11 02:13	29°  32'01	0°09'24		13295 Jan 28 14:04	0° 	
minimum elong	13294 Mar 11 02:57	29°  32'26	0°09'24	morning set	13295 Feb 13 09:34	25°  48'49	
behind sun begin	13294 Mar 10 20:47	28°  55'44			13295 Feb 15 12:39	0° 	
behind sun end	13294 Mar 11 09:06	29°  31'05					
	13294 Mar 11 11:05	0° 		superior conj	13295 Feb 21 22:20	12°  32'54	0°41'04
desc. node	13294 Mar 12 06:30	1°  26'49		minimum elong	13295 Feb 22 00:45	12°  37'11	0°41'06
max. Earth dist.	13294 Mar 18 17:05	12°  37'23	1.41477 AU	desc. node	13295 Feb 27 03:00	22°  30'30	
evening rise	13294 Mar 23 13:50	20°  40'13		max. Earth dist.	13295 Mar 01 00:16	25°  32'02	1.39263 AU
	13294 Mar 29 11:07	0° 			13295 Mar 03 14:55	0° 	
	13294 Apr 19 14:29	0° 		evening rise	13295 Mar 04 21:09	2°  09'35	
evening max el	13294 Apr 26 09:15	7°  43'26	22°59'33		13295 Mar 22 16:55	0° 	
asc. node	13294 May 06 04:47	13°  45'20		evening max el	13295 Apr 08 23:06	21°  35'07	24°20'09
retrograde	13294 May 06 15:28	13°  46'15		retrograde	13295 Apr 20 08:30	28°  15'49	
evening set	13294 May 11 15:14	11°  40'22		asc. node	13295 Apr 23 02:08	27°  42'29	
inferior conj	13294 May 16 23:25	5°  15'41	2°46'41	evening set	13295 Apr 25 19:53	25°  57'22	
minimum elong	13294 May 16 21:38	5°  21'54	2°45'27	min. Earth dist.	13295 Apr 30 10:08	20°  40'46	0.68494 AU
min. Earth dist.	13294 May 16 14:11	5°  47'42	0.68885 AU	inferior conj	13295 May 01 07:53	19°  32'31	2°18'25
	13294 May 21 04:47	30°  R 		minimum elong	13295 May 01 05:44	19°  34'44	2°17'08
morning rise	13294 May 22 03:56	29°  30'27		morning rise	13295 May 06 15:43	13°  32'11	
direct	13294 May 26 14:22	27°  19'03		direct	13295 May 10 13:41	11°  35'43	
	13294 Jun 01 16:30	0° 		morning max el	13295 May 18 03:55	16°  34'43	20°00'24
morning max el	13294 Jun 04 05:27	2°  17'27	21°13'49	desc. node	13295 May 26 05:00	25°  35'13	
desc. node	13294 Jun 08 08:07	6°  15'07			13295 May 29 02:04	0° 	
	13294 Jun 25 00:48	0° 		morning set	13295 Jun 14 09:59	24°  23'38	
morning set	13294 Jul 05 06:55	15°  34'12			13295 Jun 18 01:01	0° 	
max. Earth dist.	13294 Jul 12 09:15	27°  30'25	1.42725 AU	max. Earth dist.	13295 Jun 24 20:17	10°  34'12	1.44418 AU
	13294 Jul 14 04:23	0° 					
superior conj	13294 Jul 19 15:32	9°  10'34	-1°42'52	superior conj	13295 Jun 30 06:47	19°  34'03	-2°06'06
minimum elong	13294 Jul 19 22:39	9°  40'59	1°42'58	minimum elong	13295 Jun 30 12:20	19°  34'36	2°06'50
evening rise	13294 Jul 31 03:27	29°  12'42		evening rise	13295 Jul 06 16:27	0° 	
	13294 Jul 31 10:51	0° 		asc. node	13295 Jul 13 12:08	11°  33'34	
asc. node	13294 Aug 02 04:14	3°  06'02			13295 Jul 20 00:56	22°  34'02	
evening max el	13294 Aug 16 10:49	25°  03'48	18°04'59	evening max el	13295 Jul 24 14:05	0° 	
retrograde	13294 Aug 23 05:39	28°  32'24		retrograde	13295 Jul 31 00:57	8°  22'14	18°05'19
evening set	13294 Aug 25 14:24	28°  07'14		evening set	13295 Aug 06 10:33	11°  32'39	
inferior conj	13294 Sep 01 11:58	23°  11'27	0°49'24	inferior conj	13295 Aug 09 03:32	11°  32'05'11	
minimum elong	13294 Sep 01 13:28	23°  07'57	0°48'38	minimum elong	13295 Aug 15 10:13	5°  51'11	1°53'02
desc. node	13294 Sep 04 05:29	20°  38'12		min. Earth dist.	13295 Aug 15 12:43	5°  44'33	1°51'46
min. Earth dist.	13294 Sep 04 16:54	20°  38'12	0.60413 AU		13295 Aug 18 05:34	2°  52'58	0.62679 AU
morning rise	13294 Sep 08 09:28	17°  38'12		morning rise	13295 Aug 21 09:31	30°  R 	
direct	13294 Sep 14 23:04	15°  38'12		desc. node	13295 Aug 21 19:43	29°  40'44	
morning max el	13294 Sep 29 06:06	23°  08'32	27°53'09	direct	13295 Aug 22 03:00	29°  42'74	
	13294 Oct 05 09:14	0° 			13295 Aug 28 12:00	27°  42'13'41	
	13294 Oct 24 15:22	0° 		morning max el	13295 Sep 05 07:18	0° 	
asc. node	13294 Oct 29 06:13	8°  15'56'59			13295 Sep 11 13:30	5°  15'36	27°54'23
morning set	13294 Oct 31 21:46	14°  15'56'59		morning set	13295 Sep 30 05:37	0° 	
max. Earth dist.	13294 Nov 06 21:58	27°  15'56'59	1.31331 AU	asc. node	13295 Oct 15 19:48	28°  15'17	
					13295 Oct 16 02:51	28°  15'08	
superior conj	13294 Nov 08 01:54	29°  15'02	1°21'45	min. Earth dist.	13295 Oct 16 16:18	0° 	
minimum elong	13294 Nov 07 23:52	29°  15'02	1°22'21		13295 Oct 21 01:24	9°  13'38	1.31960 AU
	13294 Nov 08 02:26	0° 		superior conj	13295 Oct 23 10:34	14°  12'41	1°05'10
evening rise	13294 Nov 14 18:39	14°  12'41		minimum elong	13295 Oct 23 08:17	14°  11'45	1°05'28
	13294 Nov 22 06:42	0° 		evening rise	13295 Oct 30 05:35	29°  16'58	
desc. node	13294 Dec 01 02:13	14°  16'58			13295 Oct 30 13:35	0° 	
evening max el	13294 Dec 12 05:04	28°  16'58	25°37'55		13295 Nov 16 03:07	0° 	

desc. node	13295 Nov 17 23:24	2°♄28'57		desc. node	13296 Nov 03 20:40	18°♄41'02	
evening max el	13295 Nov 23 16:31	8°♄56'09	24°03'01	evening max el	13296 Nov 04 03:20	18°♄57'28	22°20'57
retrograde	13295 Dec 07 07:03	15°♄43'01		retrograde	13296 Nov 16 23:11	25°♄19'04	
evening set	13295 Dec 12 04:58	14°♄50'13		evening set	13296 Nov 20 11:33	24°♄51'55	
min. Earth dist.	13295 Dec 18 03:42	11°♄53'43	0.55691 AU	min. Earth dist.	13296 Nov 28 10:22	21°♄18'46	0.54693 AU
inferior conj	13295 Dec 20 05:34	10°♄38'15	-5°43'57	inferior conj	13296 Nov 29 02:48	20°♄55'39	-5°52'45
minimum elong	13295 Dec 20 10:49	10°♄30'17	5°42'20	minimum elong	13296 Nov 28 23:32	21°♄00'14	5°51'32
morning rise	13295 Dec 28 18:34	6°♄40'50		morning rise	13296 Dec 07 12:43	17°♄08'16	
direct	13295 Dec 31 07:52	6°♄24'08		direct	13296 Dec 10 20:44	16°♄43'15	
morning max el	13296 Jan 10 16:28	11°♄22'03	19°59'31	morning max el	13296 Dec 22 18:13	22°♄24'19	21°27'22
asc. node	13296 Jan 12 02:49	12°♄50'06		asc. node	13296 Dec 28 23:59	29°♄46'06	
	13296 Jan 23 08:23	0°♄			13296 Dec 29 03:55	0°♄	
morning set	13296 Jan 28 14:39	10°♄23'17		morning set	13297 Jan 12 00:02	25°♄06'34	
					13297 Jan 14 07:48	0°♄	
superior conj	13296 Feb 05 08:45	26°♄09'08	1°05'43	superior conj	13297 Jan 19 05:31	10°♄19'44	1°23'12
minimum elong	13296 Feb 05 11:31	26°♄22'57	1°05'59	minimum elong	13297 Jan 19 07:47	10°♄31'30	1°23'49
	13296 Feb 07 07:25	0°♄					
max. Earth dist.	13296 Feb 11 06:32	7°♄36'28	1.37028 AU	max. Earth dist.	13297 Jan 23 17:17	19°♄29'13	1.35002 AU
desc. node	13296 Feb 13 23:32	12°♄36'49		evening rise	13297 Jan 27 20:24	27°♄30'29	
evening rise	13296 Feb 15 00:25	14°♄29'15			13297 Jan 29 04:18	0°♄	
	13296 Feb 24 03:08	0°♄		desc. node	13297 Jan 30 20:08	3°♄03'01	
	13296 Mar 16 11:16	0°♄			13297 Feb 16 10:51	0°♄	
evening max el	13296 Mar 21 12:31	5°♄26'59	25°35'15	evening max el	13297 Mar 04 02:20	19°♄13'39	26°37'22
retrograde	13296 Apr 02 21:10	12°♄34'51		retrograde	13297 Mar 17 04:22	26°♄36'10	
evening set	13296 Apr 08 19:56	10°♄07'23		evening set	13297 Mar 23 13:35	24°♄04'13	
asc. node	13296 Apr 08 23:32	9°♄59'44		asc. node	13297 Mar 26 20:59	20°♄49'23	
min. Earth dist.	13296 Apr 13 03:09	5°♄26'13	0.67655 AU	min. Earth dist.	13297 Mar 27 15:02	19°♄57'30	0.66401 AU
inferior conj	13296 Apr 14 13:15	3°♄36'59	1°39'51	inferior conj	13297 Mar 29 13:26	17°♄39'09	0°50'29
minimum elong	13296 Apr 14 11:14	3°♄43'26	1°38'42	minimum elong	13297 Mar 29 12:10	17°♄42'55	0°49'48
	13296 Apr 17 13:28	30°♄		morning rise	13297 Apr 04 11:50	11°♄59'02	
morning rise	13296 Apr 20 03:03	27°♄45'52		direct	13297 Apr 07 11:50	11°♄08'52	
direct	13296 Apr 23 13:28	26°♄38'14		morning max el	13297 Apr 13 22:16	14°♄33'18	18°19'32
	13296 Apr 30 00:53	0°♄			13297 Apr 25 08:18	0°♄	
morning max el	13296 Apr 30 09:53	0°♄21'36	19°01'46	desc. node	13297 Apr 28 22:27	5°♄38'23	
desc. node	13296 May 12 01:46	15°♄37'46		morning set	13297 May 03 18:30	13°♄19'46	
greatest brilliancy	13296 May 13 14:37	17°♄55'39	-0.7m		13297 May 14 07:19	0°♄	
	13296 May 21 12:00	0°♄					
morning set	13296 May 23 15:17	3°♄18'10		superior conj	13297 May 19 08:22	7°♄54'00	-2°00'34
max. Earth dist.	13296 Jun 06 12:34	24°♄54'22	1.45487 AU	minimum elong	13297 May 19 00:33	7°♄23'27	2°00'58
				max. Earth dist.	13297 May 20 08:19	9°♄27'34	1.45835 AU
superior conj	13296 Jun 09 00:38	28°♄50'12	-2°13'24		13297 Jun 02 12:09	0°♄	
minimum elong	13296 Jun 08 23:40	28°♄46'26	2°14'25	evening rise	13297 Jun 04 07:19	2°♄48'50	
	13296 Jun 09 18:21	0°♄		greatest brilliancy	13297 Jun 14 14:15	18°♄49'52	-0.8m
evening rise	13296 Jun 23 21:55	22°♄41'03			13297 Jun 22 06:20	0°♄	
	13296 Jun 28 09:40	0°♄		asc. node	13297 Jun 22 18:39	0°♄40'43	
asc. node	13296 Jul 05 21:44	11°♄54'35		evening max el	13297 Jun 27 01:21	5°♄41'04	18°59'41
evening max el	13296 Jul 13 14:42	21°♄57'14	18°23'50	retrograde	13297 Jul 03 20:08	9°♄25'25	
retrograde	13296 Jul 20 00:34	25°♄23'03		evening set	13297 Jul 07 06:40	8°♄16'59	
evening set	13296 Jul 23 02:08	24°♄30'52		inferior conj	13297 Jul 12 18:39	2°♄31'49	3°01'07
inferior conj	13296 Jul 28 21:40	19°♄00'34	2°35'49	minimum elong	13297 Jul 12 20:05	2°♄27'13	3°00'01
minimum elong	13296 Jul 28 23:56	18°♄53'51	2°34'34	min. Earth dist.	13297 Jul 14 09:57	0°♄26'43	0.66460 AU
min. Earth dist.	13296 Jul 31 03:37	16°♄22'03	0.64744 AU		13297 Jul 14 18:32	30°♄	
morning rise	13296 Aug 03 20:26	12°♄39'56		morning rise	13297 Jul 18 08:48	26°♄07'56	
desc. node	13296 Aug 08 00:27	10°♄21'29		direct	13297 Jul 24 14:20	23°♄27'50	
direct	13296 Aug 10 09:37	10°♄01'17		desc. node	13297 Jul 25 21:52	23°♄34'09	
morning max el	13296 Aug 23 23:51	17°♄59'03	27°20'24		13297 Aug 05 07:40	0°♄	
	13296 Sep 03 02:00	0°♄		morning max el	13297 Aug 06 10:52	1°♄07'08	26°18'41
	13296 Sep 22 03:31	0°♄			13297 Aug 28 02:57	0°♄	
morning set	13296 Sep 28 08:49	11°♄40'33		morning set	13297 Sep 11 09:32	24°♄29'53	
asc. node	13296 Oct 01 23:26	18°♄53'33			13297 Sep 14 07:02	0°♄	
max. Earth dist.	13296 Oct 02 20:57	20°♄44'01	1.33129 AU	max. Earth dist.	13297 Sep 15 06:36	1°♄54'30	1.34812 AU
				asc. node	13297 Sep 18 20:00	8°♄59'32	
superior conj	13296 Oct 06 14:46	28°♄35'30	0°43'04				
minimum elong	13296 Oct 06 12:49	28°♄25'10	0°43'06	superior conj	13297 Sep 20 11:59	12°♄23'37	0°15'44
	13296 Oct 07 06:35	0°♄		minimum elong	13297 Sep 20 11:07	12°♄19'10	0°15'40
evening rise	13296 Oct 13 16:31	13°♄47'33		behind sun begin	13297 Sep 20 09:44	12°♄12'04	
	13296 Oct 21 18:50	0°♄		behind sun end	13297 Sep 20 12:30	12°♄26'16	

evening rise	13297 Sep 28 01:25	28° $\underline{\text{L}}$ 10'17		max. Earth dist.	13298 Aug 28 07:49	13° $\underline{\text{M}}$ 02'12	1.36912 AU
	13297 Sep 28 22:34	0° $\underline{\text{M}}$					
evening max el	13297 Oct 16 22:50	29° $\underline{\text{M}}$ 19'10	20°48'26	superior conj	13298 Sep 03 23:14	25° $\underline{\text{M}}$ 41'17	-0°16'04
	13297 Oct 17 15:48	0° $\underline{\text{J}}$		minimum elong	13298 Sep 04 00:17	25° $\underline{\text{M}}$ 46'25	0°16'04
desc. node	13297 Oct 21 18:04	3° $\underline{\text{J}}$ 06'04		behind sun begin	13298 Sep 03 23:38	25° $\underline{\text{M}}$ 43'17	
retrograde	13297 Oct 28 09:42	5° $\underline{\text{J}}$ 00'37		behind sun end	13298 Sep 04 00:55	25° $\underline{\text{M}}$ 49'34	
evening set	13297 Oct 30 18:41	4° $\underline{\text{J}}$ 47'01		asc. node	13298 Sep 05 16:35	29° $\underline{\text{M}}$ 05'41	
inferior conj	13297 Nov 08 18:16	0° $\underline{\text{J}}$ 52'52	-5°01'50		13298 Sep 06 03:29	0° $\underline{\text{L}}$	
minimum elong	13297 Nov 08 08:37	1° $\underline{\text{J}}$ 06'39	4°58'46	evening rise	13298 Sep 12 06:06	12° $\underline{\text{L}}$ 19'36	
min. Earth dist.	13297 Nov 09 16:40	0° $\underline{\text{J}}$ 20'52	0.54582 AU		13298 Sep 21 14:55	0° $\underline{\text{M}}$	
	13297 Nov 10 07:24	30° $\underline{\text{R}}$ $\underline{\text{M}}$		evening max el	13298 Sep 29 08:16	10° $\underline{\text{M}}$ 25'21	19°35'09
morning rise	13297 Nov 16 22:38	26° $\underline{\text{M}}$ 58'09		desc. node	13298 Oct 08 15:32	15° $\underline{\text{M}}$ 18'27	
direct	13297 Nov 21 04:44	26° $\underline{\text{M}}$ 19'23		retrograde	13298 Oct 09 03:33	15° $\underline{\text{M}}$ 19'11	
	13297 Dec 01 03:05	0° $\underline{\text{J}}$		evening set	13298 Oct 11 00:40	15° $\underline{\text{M}}$ 09'10	
morning max el	13297 Dec 04 08:01	2° $\underline{\text{J}}$ 41'04	23°12'13	inferior conj	13298 Oct 19 18:39	11° $\underline{\text{M}}$ 04'24	-3°25'44
asc. node	13297 Dec 15 21:03	17° $\underline{\text{J}}$ 39'22		minimum elong	13298 Oct 19 09:58	11° $\underline{\text{M}}$ 18'10	3°22'06
	13297 Dec 22 16:31	0° $\underline{\text{Z}}$		min. Earth dist.	13298 Oct 22 01:57	9° $\underline{\text{M}}$ 36'54	0.55398 AU
morning set	13297 Dec 27 11:34	9° $\underline{\text{Z}}$ 52'43		morning rise	13298 Oct 27 17:22	6° $\underline{\text{M}}$ 42'08	
				direct	13298 Nov 01 20:03	5° $\underline{\text{M}}$ 43'56	
superior conj	13298 Jan 03 09:31	24° $\underline{\text{Z}}$ 48'38	1°33'53	morning max el	13298 Nov 15 17:58	12° $\underline{\text{M}}$ 40'52	25°00'13
minimum elong	13298 Jan 03 10:49	24° $\underline{\text{Z}}$ 55'40	1°34'46		13298 Nov 29 02:16	0° $\underline{\text{J}}$	
	13298 Jan 05 19:53	0° \approx		asc. node	13298 Dec 02 18:03	6° $\underline{\text{J}}$ 15'49	
max. Earth dist.	13298 Jan 06 11:39	1° \approx 22'58	1.33339 AU	morning set	13298 Dec 11 23:23	24° $\underline{\text{J}}$ 36'05	
evening rise	13298 Jan 11 05:32	11° \approx 04'13			13298 Dec 14 11:02	0° $\underline{\text{Z}}$	
desc. node	13298 Jan 17 16:50	23° \approx 17'41					
	13298 Jan 21 13:04	0° $\underline{\text{H}}$		superior conj	13298 Dec 18 18:07	9° $\underline{\text{Z}}$ 28'10	1°38'09
	13298 Feb 11 22:56	0° $\underline{\text{Y}}$		minimum elong	13298 Dec 18 18:19	9° $\underline{\text{Z}}$ 29'18	1°39'11
evening max el	13298 Feb 14 15:47	2° $\underline{\text{Y}}$ 45'06	27°19'05	max. Earth dist.	13298 Dec 20 13:20	13° $\underline{\text{Z}}$ 25'02	1.32128 AU
retrograde	13298 Feb 28 05:17	10° $\underline{\text{Y}}$ 11'57		evening rise	13298 Dec 26 00:36	25° $\underline{\text{Z}}$ 02'02	
evening set	13298 Mar 06 22:48	7° $\underline{\text{Y}}$ 41'15			13298 Dec 28 11:39	0° \approx	
min. Earth dist.	13298 Mar 10 19:39	4° $\underline{\text{Y}}$ 06'59	0.64772 AU	desc. node	13299 Jan 04 13:38	13° \approx 14'45	
inferior conj	13298 Mar 13 05:59	1° $\underline{\text{Y}}$ 28'20	-0°10'04		13299 Jan 15 01:33	0° $\underline{\text{H}}$	
minimum elong	13298 Mar 13 06:16	1° $\underline{\text{Y}}$ 27'32	0°09'51	evening max el	13299 Jan 28 03:02	15° $\underline{\text{H}}$ 48'12	27°33'29
transit middle	13298 Mar 13 06:16	1° $\underline{\text{Y}}$ 27'32	0°09'51	retrograde	13299 Feb 10 23:07	23° $\underline{\text{H}}$ 12'09	
transit begin	13298 Mar 13 03:52	1° $\underline{\text{Y}}$ 34'07		evening set	13299 Feb 17 21:01	20° $\underline{\text{H}}$ 49'55	
transit end	13298 Mar 13 08:41	1° $\underline{\text{Y}}$ 20'58		min. Earth dist.	13299 Feb 21 15:06	17° $\underline{\text{H}}$ 43'56	0.62833 AU
asc. node	13298 Mar 13 18:27	0° $\underline{\text{Y}}$ 54'27		inferior conj	13299 Feb 24 11:56	14° $\underline{\text{H}}$ 56'22	-1°21'34
	13298 Mar 14 14:58	30° $\underline{\text{R}}$ $\underline{\text{H}}$		minimum elong	13299 Feb 24 14:39	14° $\underline{\text{H}}$ 49'42	1°20'04
morning rise	13298 Mar 19 15:34	26° $\underline{\text{H}}$ 01'40		asc. node	13299 Feb 28 15:56	11° $\underline{\text{H}}$ 16'57	
direct	13298 Mar 22 06:29	25° $\underline{\text{H}}$ 25'50		morning rise	13299 Mar 03 10:54	9° $\underline{\text{H}}$ 45'57	
morning max el	13298 Mar 28 14:50	28° $\underline{\text{H}}$ 43'19	17°54'19	direct	13299 Mar 05 18:18	9° $\underline{\text{H}}$ 20'59	
	13298 Mar 29 20:13	0° $\underline{\text{Y}}$		morning max el	13299 Mar 12 08:36	12° $\underline{\text{H}}$ 42'38	17°46'27
morning set	13298 Apr 15 02:14	24° $\underline{\text{Y}}$ 45'06			13299 Mar 24 05:14	0° $\underline{\text{Y}}$	
desc. node	13298 Apr 15 19:03	25° $\underline{\text{Y}}$ 54'59		morning set	13299 Mar 28 10:49	7° $\underline{\text{Y}}$ 20'50	
	13298 Apr 18 06:13	0° $\underline{\text{Z}}$		desc. node	13299 Apr 02 15:36	16° $\underline{\text{Y}}$ 21'59	
superior conj	13298 Apr 28 23:39	17° $\underline{\text{Z}}$ 24'27	-1°30'26	superior conj	13299 Apr 09 11:34	27° $\underline{\text{Y}}$ 54'23	-0°51'25
minimum elong	13298 Apr 28 14:52	16° $\underline{\text{Z}}$ 49'29	1°30'09	minimum elong	13299 Apr 09 06:26	27° $\underline{\text{Y}}$ 33'06	0°51'04
max. Earth dist.	13298 May 03 04:39	24° $\underline{\text{Z}}$ 04'00	1.45429 AU		13299 Apr 10 18:00	0° $\underline{\text{Z}}$	
	13298 May 06 23:41	0° $\underline{\text{II}}$		max. Earth dist.	13299 Apr 15 22:26	8° $\underline{\text{Z}}$ 24'47	1.44320 AU
evening rise	13298 May 14 22:50	12° $\underline{\text{II}}$ 18'08		evening rise	13299 Apr 24 10:36	21° $\underline{\text{Z}}$ 45'38	
	13298 May 26 15:20	0° $\underline{\text{E}}$			13299 Apr 29 20:21	0° $\underline{\text{II}}$	
greatest brilliancy	13298 May 29 12:36	4° $\underline{\text{E}}$ 14'51	-0.6m		13299 May 21 06:36	0° $\underline{\text{E}}$	
asc. node	13298 Jun 09 15:41	18° $\underline{\text{E}}$ 49'40		evening max el	13299 May 24 06:33	3° $\underline{\text{E}}$ 16'52	20°57'25
evening max el	13298 Jun 10 06:55	19° $\underline{\text{E}}$ 28'48	19°51'36	asc. node	13299 May 27 12:50	6° $\underline{\text{E}}$ 08'26	
retrograde	13298 Jun 17 18:33	23° $\underline{\text{E}}$ 43'50		retrograde	13299 Jun 01 17:32	8° $\underline{\text{E}}$ 11'52	
evening set	13298 Jun 21 14:34	22° $\underline{\text{E}}$ 18'37		evening set	13299 Jun 05 23:41	6° $\underline{\text{E}}$ 30'07	
inferior conj	13298 Jun 26 22:10	16° $\underline{\text{E}}$ 19'56	3°11'59	inferior conj	13299 Jun 11 05:42	0° $\underline{\text{E}}$ 19'34	3°10'37
minimum elong	13298 Jun 26 22:35	16° $\underline{\text{E}}$ 18'33	3°10'57	minimum elong	13299 Jun 11 05:06	0° $\underline{\text{E}}$ 21'38	3°09'34
min. Earth dist.	13298 Jun 27 23:02	14° $\underline{\text{E}}$ 56'16	0.67743 AU		13299 Jun 11 11:20	30° $\underline{\text{R}}$ $\underline{\text{II}}$	
morning rise	13298 Jul 02 06:14	9° $\underline{\text{E}}$ 57'17		min. Earth dist.	13299 Jun 11 16:52	29° $\underline{\text{II}}$ 40'51	0.68556 AU
direct	13298 Jul 08 01:05	7° $\underline{\text{E}}$ 24'33		morning rise	13299 Jun 16 10:17	24° $\underline{\text{II}}$ 00'59	
desc. node	13298 Jul 12 19:11	8° $\underline{\text{E}}$ 47'35		direct	13299 Jun 21 16:52	21° $\underline{\text{II}}$ 42'17	
morning max el	13298 Jul 19 21:26	14° $\underline{\text{E}}$ 30'35	24°58'30	desc. node	13299 Jun 29 16:22	25° $\underline{\text{II}}$ 33'54	
	13298 Aug 01 13:07	0° $\underline{\text{L}}$		morning max el	13299 Jul 02 07:56	28° $\underline{\text{II}}$ 02'32	23°29'38
	13298 Aug 20 23:20	0° $\underline{\text{M}}$			13299 Jul 04 04:31	0° $\underline{\text{E}}$	
morning set	13298 Aug 24 17:58	6° $\underline{\text{M}}$ 34'11			13299 Jul 26 05:06	0° $\underline{\text{L}}$	

morning set	13299 Aug 06 05:30	17° Ω 42'21		13300 Jun 29 08:31	0° \mathfrak{G}	
max. Earth dist.	13299 Aug 10 05:36	24° Ω 33'49	1.39235 AU	morning set	13300 Jul 17 16:10	27° \mathfrak{G} 44'23
	13299 Aug 13 07:25	0° \mathfrak{M}		13300 Jul 19 01:50	0° Ω	
				max. Earth dist.	13300 Jul 23 06:07	6° Ω 51'49 1.41526 AU
superior conj	13299 Aug 17 20:47	8° \mathfrak{M} 19'53	-0°50'39	superior conj	13300 Jul 31 00:12	20° Ω 09'02 -1°25'01
minimum elong	13299 Aug 18 00:27	8° \mathfrak{M} 36'59	0°50'30	minimum elong	13300 Jul 31 06:29	20° Ω 36'44 1°24'55
asc. node	13299 Aug 23 13:12	19° \mathfrak{M} 08'30			13300 Aug 05 11:50	0° \mathfrak{M}
evening rise	13299 Aug 27 03:44	26° \mathfrak{M} 08'10		asc. node	13300 Aug 10 09:50	9° \mathfrak{M} 03'45
	13299 Aug 29 03:44	0° \mathfrak{L}		evening rise	13300 Aug 10 14:40	9° \mathfrak{M} 26'12
evening max el	13299 Sep 12 06:50	22° \mathfrak{L} 20'18	18°43'46		13300 Aug 22 13:28	0° \mathfrak{L}
retrograde	13299 Sep 20 14:05	26° \mathfrak{L} 30'47		evening max el	13300 Aug 26 14:43	4° \mathfrak{L} 55'46 18°13'28
evening set	13299 Sep 22 11:57	26° \mathfrak{L} 18'18		retrograde	13300 Sep 02 19:32	8° \mathfrak{L} 35'09
desc. node	13299 Sep 25 13:02	25° \mathfrak{L} 11'40		evening set	13300 Sep 04 23:50	8° \mathfrak{L} 15'40
inferior conj	13299 Sep 30 14:13	21° \mathfrak{L} 55'18	-1°36'02	inferior conj	13300 Sep 12 07:30	3° \mathfrak{L} 31'48 0°02'22
minimum elong	13299 Sep 30 10:15	22° \mathfrak{L} 02'36	1°34'09	minimum elong	13300 Sep 12 07:34	3° \mathfrak{L} 31'38 0°02'17
min. Earth dist.	13299 Oct 03 16:49	19° \mathfrak{L} 38'36	0.56997 AU	transit middle	13300 Sep 12 07:34	3° \mathfrak{L} 31'38 0°02'17
morning rise	13299 Oct 08 05:10	16° \mathfrak{L} 55'37		transit begin	13300 Sep 12 04:10	3° \mathfrak{L} 38'57
direct	13299 Oct 14 01:41	15° \mathfrak{L} 31'49		transit end	13300 Sep 12 10:58	3° \mathfrak{L} 24'18
morning max el	13299 Oct 28 07:55	22° \mathfrak{L} 57'13	26°32'48	desc. node	13300 Sep 12 10:33	3° \mathfrak{L} 25'13
	13299 Nov 03 15:27	0° \mathfrak{M}		min. Earth dist.	13300 Sep 15 14:55	0° \mathfrak{L} 42'09 0.59105 AU
asc. node	13299 Nov 19 14:55	25° \mathfrak{M} 24'19			13300 Sep 16 12:03	30° \mathfrak{R} \mathfrak{M}
	13299 Nov 21 23:20	0° \mathfrak{J}		morning rise	13300 Sep 19 11:53	27° \mathfrak{M} 57'33
morning set	13299 Nov 26 09:48	9° \mathfrak{J} 12'05		direct	13300 Sep 25 21:19	26° \mathfrak{M} 05'52
					13300 Oct 05 17:53	0° \mathfrak{L}
superior conj	13299 Dec 03 05:13	24° \mathfrak{J} 12'09	1°36'22	morning max el	13300 Oct 10 05:04	3° \mathfrak{L} 51'26 27°34'39
minimum elong	13299 Dec 03 04:22	24° \mathfrak{J} 07'25	1°37'20		13300 Oct 29 09:30	0° \mathfrak{M}
max. Earth dist.	13299 Dec 03 20:05	25° \mathfrak{J} 34'56	1.31414 AU	asc. node	13300 Nov 06 11:42	14° \mathfrak{M} 55'32
	13299 Dec 05 19:53	0° \mathfrak{Z}		morning set	13300 Nov 10 16:58	23° \mathfrak{M} 34'53
evening rise	13299 Dec 10 02:57	9° \mathfrak{Z} 17'34			13300 Nov 13 16:30	0° \mathfrak{J}
	13299 Dec 20 19:41	0° \mathfrak{A}		max. Earth dist.	13300 Nov 17 04:29	7° \mathfrak{J} 44'50 1.31214 AU
desc. node	13299 Dec 22 10:32	2° \mathfrak{A} 47'01				
evening max el	13300 Jan 10 09:49	28° \mathfrak{A} 11'15	27°15'16	superior conj	13300 Nov 17 16:50	8° \mathfrak{J} 53'46 1°28'45
	13300 Jan 12 10:22	0° \mathfrak{H}		minimum elong	13300 Nov 17 15:09	8° \mathfrak{J} 44'18 1°29'31
retrograde	13300 Jan 24 08:50	5° \mathfrak{H} 27'31		evening rise	13300 Nov 24 10:10	23° \mathfrak{J} 43'49
evening set	13300 Jan 31 05:07	3° \mathfrak{H} 22'12			13300 Nov 27 09:44	0° \mathfrak{Z}
min. Earth dist.	13300 Feb 04 00:21	0° \mathfrak{H} 36'49	0.60699 AU	desc. node	13300 Dec 09 07:32	21° \mathfrak{Z} 43'51
	13300 Feb 04 17:57	30° \mathfrak{R} \mathfrak{A}			13300 Dec 14 22:54	0° \mathfrak{A}
inferior conj	13300 Feb 07 03:54	27° \mathfrak{A} 54'53	-2°41'47	evening max el	13300 Dec 23 09:40	9° \mathfrak{A} 44'21 26°22'30
minimum elong	13300 Feb 07 09:41	27° \mathfrak{A} 42'28	2°38'57	retrograde	13301 Jan 06 08:37	16° \mathfrak{A} 50'15
morning rise	13300 Feb 14 17:21	23° \mathfrak{A} 03'30		evening set	13301 Jan 12 19:10	15° \mathfrak{A} 09'57
asc. node	13300 Feb 15 13:21	22° \mathfrak{A} 52'14		min. Earth dist.	13301 Jan 16 23:18	12° \mathfrak{A} 33'26 0.58541 AU
direct	13300 Feb 16 19:35	22° \mathfrak{A} 45'43		inferior conj	13301 Jan 20 02:16	10° \mathfrak{A} 13'49 -4°04'29
morning max el	13300 Feb 24 00:12	26° \mathfrak{A} 22'00	17°56'48	minimum elong	13301 Jan 20 10:38	9° \mathfrak{A} 58'10 4°01'01
	13300 Feb 27 03:35	0° \mathfrak{H}		morning rise	13301 Jan 28 05:03	5° \mathfrak{A} 43'39
morning set	13300 Mar 11 14:08	20° \mathfrak{H} 48'41		direct	13301 Jan 30 06:10	5° \mathfrak{A} 29'21
	13300 Mar 16 15:03	0° \mathfrak{Y}		asc. node	13301 Feb 02 10:42	6° \mathfrak{A} 05'56
desc. node	13300 Mar 20 12:07	6° \mathfrak{Y} 55'35		morning max el	13301 Feb 07 09:49	9° \mathfrak{A} 30'15 18°27'01
					13301 Feb 20 17:15	0° \mathfrak{H}
superior conj	13300 Mar 21 23:42	9° \mathfrak{Y} 31'41	-0°11'43	morning set	13301 Feb 23 06:40	4° \mathfrak{H} 52'15
minimum elong	13300 Mar 21 22:42	9° \mathfrak{Y} 27'15	0°11'36			
behind sun begin	13300 Mar 21 17:04	9° \mathfrak{Y} 02'39		superior conj	13301 Mar 04 09:24	22° \mathfrak{H} 08'10 0°23'40
behind sun end	13300 Mar 22 04:19	9° \mathfrak{Y} 51'48		minimum elong	13301 Mar 04 11:03	22° \mathfrak{H} 15'44 0°23'38
max. Earth dist.	13300 Mar 29 11:45	22° \mathfrak{Y} 15'18	1.42635 AU	desc. node	13301 Mar 07 08:37	27° \mathfrak{H} 32'03
	13300 Apr 03 06:22	0° \mathfrak{B}			13301 Mar 08 17:48	0° \mathfrak{Y}
evening rise	13300 Apr 04 09:46	1° \mathfrak{B} 48'52		max. Earth dist.	13301 Mar 11 20:43	5° \mathfrak{Y} 27'12 1.40554 AU
	13300 Apr 23 07:22	0° \mathfrak{II}		evening rise	13301 Mar 16 04:48	12° \mathfrak{Y} 46'19
evening max el	13300 May 07 00:57	17° \mathfrak{II} 05'36	22°13'26		13301 Mar 27 02:47	0° \mathfrak{B}
asc. node	13300 May 14 10:03	22° \mathfrak{II} 21'45			13301 Apr 18 17:43	0° \mathfrak{II}
retrograde	13300 May 16 15:14	22° \mathfrak{II} 44'23		evening max el	13301 Apr 19 16:00	0° \mathfrak{II} 56'44 23°34'14
evening set	13300 May 21 08:18	20° \mathfrak{II} 47'02		retrograde	13301 Apr 30 10:11	7° \mathfrak{II} 16'32
inferior conj	13300 May 26 15:06	14° \mathfrak{II} 26'44	2°58'24	asc. node	13301 May 01 07:20	7° \mathfrak{II} 13'01
minimum elong	13300 May 26 13:40	14° \mathfrak{II} 31'44	2°57'14	evening set	13301 May 05 14:49	5° \mathfrak{II} 05'15
min. Earth dist.	13300 May 26 13:14	14° \mathfrak{II} 33'15	0.68896 AU		13301 May 10 00:29	30° \mathfrak{R} \mathfrak{B}
morning rise	13300 May 31 18:51	8° \mathfrak{II} 14'09		min. Earth dist.	13301 May 10 09:56	29° \mathfrak{B} 27'47 0.68769 AU
direct	13300 Jun 05 12:38	6° \mathfrak{II} 13'50		inferior conj	13301 May 11 00:25	28° \mathfrak{B} 38'03 2°35'57
morning max el	13300 Jun 14 20:36	11° \mathfrak{II} 41'52	22°01'16	minimum elong	13301 May 10 22:26	28° \mathfrak{B} 44'53 2°34'41
desc. node	13300 Jun 16 13:27	13° \mathfrak{II} 29'00				

morning rise	13301 May 16 06:00	22°♄32'51		morning max el	13302 May 11 16:23	9°♄33'15	19°33'36
direct	13301 May 20 11:07	20°♄53'09		desc. node	13302 May 21 07:13	21°♄36'35	
morning max el	13301 May 28 14:45	25°♄31'46	20°40'58	greatest brilliancy	13302 May 24 07:54	25°♄59'17	-0.6m
	13301 Jun 01 15:13	0°♄			13302 May 27 00:55	0°♄	
desc. node	13301 Jun 03 10:24	2°♄14'35		morning set	13302 Jun 06 04:43	15°♄25'39	
	13301 Jun 22 17:53	0°♄			13302 Jun 15 14:09	0°♄	
morning set	13301 Jun 27 03:32	6°♄46'14		max. Earth dist.	13302 Jun 18 03:39	4°♄01'51	1.44957 AU
max. Earth dist.	13301 Jul 05 13:32	20°♄04'40	1.43509 AU				
	13301 Jul 11 14:54	0°♄		superior conj	13302 Jun 22 10:39	10°♄51'09	-2°11'31
				minimum elong	13302 Jun 22 13:57	11°♄04'20	2°12'28
superior conj	13301 Jul 12 05:21	1°♄00'17	-1°54'13		13302 Jul 04 03:52	0°♄	
minimum elong	13301 Jul 12 12:23	1°♄29'41	1°54'34	evening rise	13302 Jul 06 09:47	3°♄45'08	
evening rise	13301 Jul 24 10:25	22°♄02'45		asc. node	13302 Jul 15 03:16	18°♄13'57	
asc. node	13301 Jul 28 06:31	28°♄47'28			13302 Jul 23 09:02	0°♄	
	13301 Jul 28 23:10	0°♄		evening max el	13302 Jul 24 18:02	1°♄27'55	18°11'01
evening max el	13301 Aug 10 03:42	18°♄01'45	18°02'53	retrograde	13302 Jul 31 02:32	4°♄48'59	
retrograde	13301 Aug 16 17:10	21°♄24'47		evening set	13302 Aug 02 23:12	4°♄05'23	
evening set	13301 Aug 19 05:31	20°♄54'36			13302 Aug 07 20:57	30°♄	
inferior conj	13301 Aug 25 20:19	15°♄50'49	1°19'05	inferior conj	13302 Aug 09 00:39	28°♄43'55	2°13'30
minimum elong	13301 Aug 25 22:25	15°♄45'35	1°18'00	minimum elong	13302 Aug 09 03:09	28°♄36'55	2°12'13
min. Earth dist.	13301 Aug 28 21:51	12°♄49'51	0.61394 AU	min. Earth dist.	13302 Aug 11 14:26	25°♄52'24	0.63591 AU
desc. node	13301 Aug 30 08:03	11°♄32'34		morning rise	13302 Aug 15 05:23	22°♄28'11	
morning rise	13301 Sep 01 12:41	9°♄50'52		desc. node	13302 Aug 17 05:32	21°♄09'09	
direct	13301 Sep 08 04:21	7°♄34'53		direct	13302 Aug 21 20:53	19°♄55'22	
morning max el	13301 Sep 22 09:15	15°♄32'31	27°58'15	morning max el	13302 Sep 04 18:19	27°♄56'28	27°43'58
	13301 Oct 04 04:56	0°♄			13302 Sep 06 17:36	0°♄	
	13301 Oct 21 23:32	0°♄			13302 Sep 27 23:37	0°♄	
asc. node	13301 Oct 24 08:25	4°♄43'07		morning set	13302 Oct 09 13:33	21°♄21'48	
morning set	13301 Oct 25 18:59	7°♄39'58		asc. node	13302 Oct 11 05:04	24°♄41'31	
max. Earth dist.	13301 Oct 31 10:59	19°♄46'35	1.31542 AU		13302 Oct 13 18:28	0°♄	
				max. Earth dist.	13302 Oct 14 11:44	1°♄31'06	1.32396 AU
superior conj	13301 Nov 02 03:09	23°♄27'52	1°15'25				
minimum elong	13301 Nov 02 00:57	23°♄15'43	1°15'53	superior conj	13302 Oct 17 10:12	7°♄49'08	0°56'29
	13301 Nov 05 01:52	0°♄		minimum elong	13302 Oct 17 07:59	7°♄37'08	0°56'38
evening rise	13301 Nov 08 20:19	8°♄15'48		evening rise	13302 Oct 24 07:31	22°♄48'32	
	13301 Nov 19 22:13	0°♄			13302 Oct 27 17:37	0°♄	
desc. node	13301 Nov 26 04:38	9°♄52'00		desc. node	13302 Nov 13 01:52	26°♄53'31	
evening max el	13301 Dec 05 01:12	20°♄26'01	24°59'30		13302 Nov 15 22:08	0°♄	
retrograde	13301 Dec 18 20:16	27°♄20'21		evening max el	13302 Nov 16 11:15	0°♄32'16	23°19'19
evening set	13301 Dec 24 10:57	26°♄09'59		retrograde	13302 Nov 29 19:14	7°♄10'14	
min. Earth dist.	13301 Dec 29 13:07	23°♄26'27	0.56604 AU	evening set	13302 Dec 04 03:27	6°♄29'16	
inferior conj	13302 Jan 01 04:13	21°♄44'23	-5°16'04	min. Earth dist.	13302 Dec 10 21:05	3°♄19'30	0.55173 AU
minimum elong	13302 Jan 01 12:12	21°♄31'25	5°13'30	inferior conj	13302 Dec 12 10:16	2°♄25'31	-5°54'37
morning rise	13302 Jan 09 15:41	17°♄36'03		minimum elong	13302 Dec 12 12:16	2°♄22'37	5°53'31
direct	13302 Jan 11 22:19	17°♄21'22			13302 Dec 16 22:02	30°♄	
asc. node	13302 Jan 20 08:01	20°♄57'46		morning rise	13302 Dec 20 22:44	28°♄34'26	
morning max el	13302 Jan 21 09:26	21°♄55'58	19°19'05	direct	13302 Dec 23 19:17	28°♄14'53	
	13302 Jan 27 18:26	0°♄			13302 Dec 30 04:22	0°♄	
morning set	13302 Feb 07 08:08	19°♄18'43		morning max el	13303 Jan 03 19:37	3°♄30'19	20°34'18
	13302 Feb 12 16:37	0°♄		asc. node	13303 Jan 07 05:14	7°♄13'59	
					13303 Jan 20 16:38	0°♄	
superior conj	13302 Feb 15 12:06	5°♄31'04	0°52'26	morning set	13303 Jan 22 15:25	3°♄58'52	
minimum elong	13302 Feb 15 14:48	5°♄44'12	0°52'32				
max. Earth dist.	13302 Feb 22 03:22	17°♄59'43	1.38305 AU	superior conj	13303 Jan 30 03:27	19°♄28'26	1°14'00
desc. node	13302 Feb 22 05:07	18°♄07'41		minimum elong	13303 Jan 30 06:05	19°♄41'48	1°14'24
evening rise	13302 Feb 25 20:55	24°♄38'00			13303 Feb 04 10:53	0°♄	
	13302 Mar 01 00:07	0°♄		max. Earth dist.	13303 Feb 04 11:22	0°♄02'22	1.36132 AU
	13302 Mar 20 19:19	0°♄		evening rise	13303 Feb 08 07:49	7°♄17'15	
evening max el	13302 Apr 02 05:38	14°♄49'21	24°53'19	desc. node	13303 Feb 09 01:43	8°♄39'05	
retrograde	13302 Apr 14 01:17	21°♄42'17			13303 Feb 21 18:30	0°♄	
asc. node	13302 Apr 18 04:41	20°♄27'39		evening max el	13303 Mar 15 19:08	28°♄40'05	26°03'35
evening set	13302 Apr 19 17:40	19°♄19'34			13303 Mar 17 04:57	0°♄	
min. Earth dist.	13302 Apr 24 04:47	14°♄18'17	0.68191 AU	retrograde	13303 Mar 28 11:40	5°♄55'34	
inferior conj	13302 Apr 25 07:47	12°♄49'08	2°03'20	evening set	13303 Apr 03 15:14	3°♄25'15	
minimum elong	13302 Apr 25 05:37	12°♄56'16	2°02'05	asc. node	13303 Apr 05 02:05	2°♄05'10	
morning rise	13302 Apr 30 17:50	6°♄52'41			13303 Apr 06 23:36	30°♄	
direct	13302 May 04 10:52	5°♄33'43		min. Earth dist.	13303 Apr 07 19:46	28°♄59'14	0.67177 AU

inferior conj	13303 Apr 09 11:13	26° Υ 56'27	1°20'15	minimum elong	13304 Mar 23 07:46	10° Υ 56'01	0°25'49
minimum elong	13303 Apr 09 09:26	27° Υ 02'00	1°19'15	morning rise	13304 Mar 29 11:22	5° Υ 19'27	
morning rise	13303 Apr 15 04:23	21° Υ 10'03		direct	13304 Apr 01 07:14	4° Υ 35'58	
direct	13303 Apr 18 10:14	20° Υ 10'16		morning max el	13304 Apr 07 15:58	7° Υ 56'15	18°06'40
morning max el	13303 Apr 25 01:25	23° Υ 43'48	18°41'47		13304 Apr 23 01:27	0° ♄	
	13303 Apr 30 08:22	0° ♄		desc. node	13304 Apr 24 00:38	1° ♄ 33'47	
desc. node	13303 May 08 03:58	11° ♄ 25'36		morning set	13304 Apr 26 08:49	5° ♄ 21'17	
morning set	13303 May 16 17:33	24° ♄ 44'08					
	13303 May 20 02:25	0° ♅		superior conj	13304 May 11 07:02	29° ♅ 11'00	-1°49'27
max. Earth dist.	13303 May 31 21:51	18° ♅ 25'55	1.45727 AU	minimum elong	13304 May 10 21:59	28° ♅ 35'31	1°49'31
					13304 May 11 19:31	0° ♅	
superior conj	13303 Jun 01 22:09	20° ♅ 00'52	-2°10'26	max. Earth dist.	13304 May 13 17:38	3° ♅ 00'36	1.45750 AU
minimum elong	13303 Jun 01 17:51	19° ♅ 44'03	2°11'17	evening rise	13304 May 27 09:27	24° ♅ 13'37	
	13303 Jun 08 06:50	0° ♆			13304 May 31 03:06	0° ♆	
evening rise	13303 Jun 17 09:02	14° ♆ 26'19		greatest brilliancy	13304 Jun 08 18:07	13° ♆ 09'44	-0.7m
greatest brilliancy	13303 Jun 24 07:24	25° ♆ 30'30	-0.9m	asc. node	13304 Jun 17 21:03	25° ♆ 48'51	
	13303 Jun 27 03:55	0° ♇		evening max el	13304 Jun 20 15:14	28° ♆ 52'33	19°19'57
asc. node	13303 Jul 02 00:06	7° ♇ 17'04			13304 Jun 21 19:55	0° ♇	
evening max el	13303 Jul 08 06:39	15° ♇ 06'41	18°37'01	retrograde	13304 Jun 27 16:31	2° ♇ 48'56	
retrograde	13303 Jul 14 19:25	18° ♇ 39'15		evening set	13304 Jul 01 06:54	1° ♇ 33'36	
evening set	13303 Jul 18 00:41	17° ♇ 40'20			13304 Jul 03 02:39	30° ♇	
inferior conj	13303 Jul 23 16:33	12° ♇ 03'18	2°48'29	inferior conj	13304 Jul 06 16:39	25° ♇ 42'37	3°07'21
minimum elong	13303 Jul 23 18:31	11° ♇ 57'17	2°47'18	minimum elong	13304 Jul 06 17:40	25° ♇ 39'18	3°06'17
min. Earth dist.	13303 Jul 25 16:16	9° ♇ 37'41	0.65516 AU	min. Earth dist.	13304 Jul 08 01:50	23° ♇ 54'06	0.67056 AU
morning rise	13303 Jul 29 11:21	5° ♇ 40'20		morning rise	13304 Jul 12 03:52	19° ♇ 18'35	
desc. node	13303 Aug 04 02:59	3° ♇ 02'10		direct	13304 Jul 18 05:08	16° ♇ 40'23	
direct	13303 Aug 04 21:33	3° ♇ 00'00		desc. node	13304 Jul 21 00:22	17° ♇ 09'17	
morning max el	13303 Aug 18 05:25	10° ♇ 52'22	26°57'07	morning max el	13304 Jul 30 16:19	24° ♇ 08'15	25°46'15
	13303 Sep 02 09:31	0° ♈			13304 Aug 04 22:25	0° ♈	
	13303 Sep 20 12:02	0° ♈			13304 Aug 25 19:10	0° ♈	
morning set	13303 Sep 22 21:49	4° ♈ 32'59		morning set	13304 Sep 04 16:11	17° ♈ 04'57	
max. Earth dist.	13303 Sep 27 03:17	12° ♈ 52'29	1.33779 AU	max. Earth dist.	13304 Sep 08 08:36	23° ♈ 57'35	1.35651 AU
asc. node	13303 Sep 28 01:40	14° ♈ 45'57			13304 Sep 11 11:27	0° ♈	
				asc. node	13304 Sep 13 22:15	4° ♈ 52'45	
superior conj	13303 Oct 01 11:45	21° ♈ 51'09	0°32'05				
minimum elong	13303 Oct 01 10:10	21° ♈ 42'51	0°32'03	superior conj	13304 Sep 14 05:10	5° ♈ 27'34	0°02'44
	13303 Oct 05 07:51	0° ♉		minimum elong	13304 Sep 14 05:00	5° ♈ 26'45	0°02'41
evening rise	13303 Oct 08 17:51	7° ♉ 16'22		behind sun begin	13304 Sep 13 22:54	4° ♈ 56'00	
	13303 Oct 20 18:04	0° ♊		behind sun end	13304 Sep 14 11:06	5° ♈ 57'34	
evening max el	13303 Oct 29 00:33	10° ♊ 37'43	21°39'43	evening rise	13304 Sep 22 01:16	21° ♈ 34'10	
desc. node	13303 Oct 30 23:12	12° ♊ 23'50			13304 Sep 26 05:37	0° ♉	
retrograde	13303 Nov 10 08:17	16° ♊ 44'46		evening max el	13304 Oct 10 01:51	21° ♉ 17'28	20°14'48
evening set	13303 Nov 13 07:13	16° ♊ 24'57		desc. node	13304 Oct 16 20:38	25° ♉ 55'33	
inferior conj	13303 Nov 22 03:22	12° ♊ 30'52	-5°38'19	retrograde	13304 Oct 20 20:14	26° ♉ 38'43	
minimum elong	13303 Nov 21 20:37	12° ♊ 40'20	5°36'27	evening set	13304 Oct 22 22:03	26° ♉ 27'41	
min. Earth dist.	13303 Nov 22 03:18	12° ♊ 30'57	0.54523 AU	inferior conj	13304 Oct 31 21:01	22° ♉ 30'50	-4°24'58
morning rise	13303 Nov 30 10:57	8° ♊ 42'54		minimum elong	13304 Oct 31 10:56	22° ♉ 45'44	4°21'17
direct	13303 Dec 04 03:56	8° ♊ 12'58		min. Earth dist.	13304 Nov 02 10:55	21° ♉ 34'43	0.54814 AU
morning max el	13303 Dec 16 15:49	14° ♊ 12'04	22°10'31	morning rise	13304 Nov 08 22:59	18° ♉ 26'06	
asc. node	13303 Dec 25 02:24	24° ♊ 36'31		direct	13304 Nov 13 14:08	17° ♉ 39'39	
	13303 Dec 28 10:34	0° ♋		morning max el	13304 Nov 27 02:55	24° ♉ 18'00	23°58'43
morning set	13304 Jan 07 01:58	18° ♋ 44'27			13304 Dec 02 07:33	0° ♊	
	13304 Jan 12 08:39	0° ♌		asc. node	13304 Dec 10 23:28	12° ♊ 50'00	
					13304 Dec 19 22:11	0° ♋	
superior conj	13304 Jan 14 03:41	3° ♌ 48'31	1°28'32	morning set	13304 Dec 21 13:50	3° ♋ 30'06	
minimum elong	13304 Jan 14 05:35	3° ♌ 58'30	1°29'16				
max. Earth dist.	13304 Jan 18 00:55	11° ♌ 52'57	1.34242 AU	superior conj	13304 Dec 28 09:57	18° ♋ 23'09	1°36'26
evening rise	13304 Jan 22 09:50	20° ♌ 33'43		minimum elong	13304 Dec 28 10:47	18° ♋ 27'45	1°37'25
desc. node	13304 Jan 26 22:22	29° ♌ 01'15		max. Earth dist.	13304 Dec 30 22:22	23° ♋ 49'11	1.32768 AU
	13304 Jan 27 11:24	0° ♍			13305 Jan 02 20:50	0° ♌	
	13304 Feb 15 17:00	0° ♎		evening rise	13305 Jan 04 23:35	4° ♌ 19'07	
evening max el	13304 Feb 26 08:44	12° ♎ 21'09	26°57'52	desc. node	13305 Jan 12 19:06	19° ♌ 09'24	
retrograde	13304 Mar 10 16:32	19° ♎ 47'28			13305 Jan 19 04:56	0° ♍	
evening set	13304 Mar 17 05:36	17° ♎ 15'01		evening max el	13305 Feb 07 21:34	25° ♍ 42'32	27°28'51
min. Earth dist.	13304 Mar 21 04:49	13° ♎ 22'32	0.65753 AU		13305 Feb 13 02:06	0° ♎	
asc. node	13304 Mar 21 23:32	12° ♎ 29'14		retrograde	13305 Feb 21 14:44	3° ♎ 09'12	
inferior conj	13304 Mar 23 08:29	10° ♎ 53'58	0°26'11	evening set	13305 Feb 28 10:29	0° ♏ 41'21	

	13305 Mar 01 08:05	30° RH		evening set	13306 Feb 11 03:09	13° $\text{H}\text{36}'04$	
min. Earth dist.	13305 Mar 04 05:55	27° $\text{H}\text{19}'28$	0.63981 AU	min. Earth dist.	13306 Feb 14 21:16	10° $\text{H}\text{39}'47$	0.61944 AU
inferior conj	13305 Mar 06 20:55	24° $\text{H}\text{35}'27$	-0°39'06	inferior conj	13306 Feb 17 21:26	7° $\text{H}\text{53}'00$	-1°54'42
minimum elong	13305 Mar 06 22:08	24° $\text{H}\text{32}'15$	0°38'24	minimum elong	13306 Feb 18 01:25	7° $\text{H}\text{43}'47$	1°52'37
asc. node	13305 Mar 08 21:02	22° $\text{H}\text{33}'53$		asc. node	13306 Feb 23 18:29	3° $\text{H}\text{22}'48$	
morning rise	13305 Mar 13 11:58	19° $\text{H}\text{15}'08$		morning rise	13306 Feb 25 02:28	2° $\text{H}\text{50}'00$	
direct	13305 Mar 15 23:21	18° $\text{H}\text{44}'27$		direct	13306 Feb 27 07:24	2° $\text{H}\text{28}'26$	
morning max el	13305 Mar 22 09:23	22° $\text{H}\text{02}'44$	17°48'40	morning max el	13306 Mar 06 02:37	5° $\text{H}\text{55}'03$	17°48'28
	13305 Mar 28 14:56	0° Y		morning set	13306 Mar 21 21:15	0° $\text{Y}\text{20}'15$	
morning set	13305 Apr 08 03:50	17° $\text{Y}\text{18}'54$			13306 Mar 21 16:42	0° Y	
desc. node	13305 Apr 10 21:13	21° $\text{Y}\text{55}'25$		desc. node	13306 Mar 28 17:44	12° $\text{Y}\text{26}'15$	
	13305 Apr 15 17:03	0° B					
superior conj	13305 Apr 21 06:01	9° $\text{B}\text{04}'11$	-1°14'25	superior conj	13306 Apr 02 04:20	20° $\text{Y}\text{03}'39$	-0°34'17
minimum elong	13305 Apr 20 22:29	8° $\text{B}\text{33}'45$	1°14'01	minimum elong	13306 Apr 02 01:03	19° $\text{Y}\text{49}'48$	0°34'01
max. Earth dist.	13305 Apr 26 12:50	17° $\text{B}\text{31}'10$	1.45041 AU	max. Earth dist.	13306 Apr 08 03:58	0° B	
	13305 May 04 12:47	0° II		evening rise	13306 Apr 09 05:22	1° $\text{B}\text{43}'07$	1.43673 AU
evening rise	13305 May 06 21:16	3° $\text{II}\text{36}'53$			13306 Apr 16 12:30	13° $\text{B}\text{17}'25$	
	13305 May 24 15:30	0° E		evening max el	13306 Apr 27 13:39	0° II	
evening max el	13305 Jun 03 18:22	12° $\text{E}\text{41}'04$	20°18'11		13306 May 17 15:45	26° $\text{II}\text{30}'25$	21°28'46
asc. node	13305 Jun 04 18:07	13° $\text{E}\text{38}'20$		asc. node	13306 May 21 18:30	0° E	
retrograde	13305 Jun 11 15:16	17° $\text{E}\text{12}'00$		retrograde	13306 May 22 15:17	0° $\text{E}\text{32}'02$	
evening set	13305 Jun 15 15:30	15° $\text{E}\text{39}'48$			13306 May 26 13:48	1° $\text{E}\text{43}'18$	
inferior conj	13305 Jun 20 22:08	9° $\text{E}\text{36}'08$	3°12'48	evening set	13306 May 30 21:59	30° RII	
minimum elong	13305 Jun 20 22:07	9° $\text{E}\text{36}'15$	3°11'46	inferior conj	13306 May 31 00:37	29° $\text{II}\text{54}'38$	
min. Earth dist.	13305 Jun 21 17:10	8° $\text{E}\text{31}'09$	0.68149 AU	minimum elong	13306 Jun 05 06:43	23° $\text{II}\text{39}'49$	3°06'41
morning rise	13305 Jun 26 04:24	3° $\text{E}\text{15}'00$		min. Earth dist.	13306 Jun 05 05:44	23° $\text{II}\text{43}'13$	3°05'35
direct	13305 Jul 01 18:17	0° $\text{E}\text{47}'16$		morning rise	13306 Jun 05 12:14	23° $\text{II}\text{20}'33$	0.68768 AU
desc. node	13305 Jul 07 21:37	3° $\text{E}\text{05}'29$		direct	13306 Jun 10 10:39	17° $\text{II}\text{23}'51$	
morning max el	13305 Jul 13 02:25	7° $\text{E}\text{34}'55$	24°21'06	desc. node	13306 Jun 15 11:53	15° $\text{II}\text{12}'36$	
	13305 Jul 30 14:56	0° Q		morning max el	13306 Jun 24 18:44	20° $\text{II}\text{24}'06$	
morning set	13305 Aug 17 16:11	28° $\text{Q}\text{46}'16$			13306 Jun 25 13:24	21° $\text{II}\text{10}'03$	22°51'26
	13305 Aug 18 09:08	0° P			13306 Jul 03 03:30	0° E	
max. Earth dist.	13305 Aug 21 07:11	5° $\text{P}\text{10}'19$	1.37886 AU	morning set	13306 Jul 23 20:38	0° Q	
				max. Earth dist.	13306 Jul 29 17:20	9° $\text{Q}\text{26}'37$	
superior conj	13305 Aug 28 11:02	18° $\text{P}\text{29}'46$	-0°30'33		13306 Aug 03 05:54	17° $\text{Q}\text{01}'47$	1.40241 AU
minimum elong	13305 Aug 28 13:08	18° $\text{P}\text{39}'49$	0°30'28		13306 Aug 10 14:41	0° P	
asc. node	13305 Aug 31 18:49	24° $\text{P}\text{57}'55$		superior conj	13306 Aug 11 01:23	0° $\text{P}\text{48}'37$	-1°05'30
	13305 Sep 03 07:52	0° A		minimum elong	13306 Aug 11 06:15	1° $\text{P}\text{10}'44$	1°05'20
evening rise	13305 Sep 06 03:16	5° $\text{A}\text{35}'13$		asc. node	13306 Aug 18 15:25	14° $\text{P}\text{58}'08$	
	13305 Sep 20 06:38	0° M		evening rise	13306 Aug 20 20:48	19° $\text{P}\text{12}'06$	
evening max el	13305 Sep 22 17:15	2° $\text{M}\text{44}'47$	19°10'41		13306 Aug 26 15:38	0° A	
retrograde	13305 Oct 01 19:59	7° $\text{M}\text{18}'30$		evening max el	13306 Sep 05 20:13	14° $\text{A}\text{57}'31$	18°28'17
evening set	13305 Oct 03 16:32	7° $\text{M}\text{07}'56$		retrograde	13306 Sep 13 14:46	18° $\text{A}\text{53}'09$	
desc. node	13305 Oct 03 18:07	7° $\text{M}\text{07}'11$		evening set	13306 Sep 15 15:05	18° $\text{A}\text{38}'07$	
inferior conj	13305 Oct 12 04:37	2° $\text{M}\text{56}'10$	-2°39'01	desc. node	13306 Sep 20 15:36	16° $\text{A}\text{09}'17$	
minimum elong	13305 Oct 11 21:48	3° $\text{M}\text{07}'38$	2°35'58	inferior conj	13306 Sep 23 09:22	14° $\text{A}\text{05}'48$	-0°51'54
min. Earth dist.	13305 Oct 14 22:06	1° $\text{M}\text{06}'25$	0.56000 AU	minimum elong	13306 Sep 23 07:21	14° $\text{A}\text{09}'47$	0°50'57
	13305 Oct 16 16:36	30° RA		min. Earth dist.	13306 Sep 26 15:27	11° $\text{A}\text{32}'56$	0.57855 AU
morning rise	13305 Oct 20 00:25	28° $\text{A}\text{18}'47$		morning rise	13306 Sep 30 20:08	8° $\text{A}\text{50}'42$	
direct	13305 Oct 25 11:30	27° $\text{A}\text{10}'02$		direct	13306 Oct 06 22:48	7° $\text{A}\text{15}'18$	
	13305 Nov 03 03:26	0° M		morning max el	13306 Oct 21 06:17	14° $\text{A}\text{49}'25$	27°03'41
morning max el	13305 Nov 08 13:29	4° $\text{M}\text{19}'33$	25°42'34		13306 Nov 02 11:43	0° M	
	13305 Nov 26 22:18	0° J		asc. node	13306 Nov 14 17:14	21° $\text{M}\text{00}'03$	
asc. node	13305 Nov 27 20:24	1° $\text{J}\text{41}'08$			13306 Nov 19 04:00	0° J	
morning set	13305 Dec 06 01:16	18° $\text{J}\text{10}'37$		morning set	13306 Nov 20 10:28	2° $\text{J}\text{41}'11$	
	13305 Dec 11 10:30	0° Z					
superior conj	13305 Dec 12 19:50	3° $\text{Z}\text{05}'01$	1°38'06	superior conj	13306 Nov 27 07:19	17° $\text{J}\text{48}'00$	1°33'50
minimum elong	13305 Dec 12 19:34	3° $\text{Z}\text{03}'35$	1°39'08	minimum elong	13306 Nov 27 06:05	17° $\text{J}\text{41}'04$	1°34'44
max. Earth dist.	13305 Dec 14 02:38	5° $\text{Z}\text{55}'22$	1.31764 AU	max. Earth dist.	13306 Nov 27 10:40	18° $\text{J}\text{06}'44$	1.31263 AU
evening rise	13305 Dec 19 22:03	18° $\text{Z}\text{25}'22$			13306 Dec 02 19:49	0° Z	
	13305 Dec 25 17:34	0° A		evening rise	13306 Dec 04 02:41	2° $\text{Z}\text{45}'40$	
desc. node	13305 Dec 30 15:57	8° $\text{A}\text{57}'13$		desc. node	13306 Dec 17 12:53	28° $\text{Z}\text{15}'48$	
	13306 Jan 13 16:02	0° H			13306 Dec 18 14:27	0° A	
evening max el	13306 Jan 21 07:31	8° $\text{H}\text{31}'26$	27°30'03	evening max el	13307 Jan 03 11:39	20° $\text{A}\text{34}'01$	26°57'03
retrograde	13306 Feb 04 05:10	15° $\text{H}\text{51}'46$		retrograde	13307 Jan 17 10:33	27° $\text{A}\text{45}'34$	
				evening set	13307 Jan 24 04:04	25° $\text{A}\text{49}'52$	

min. Earth dist.	13307 Jan 28 01:48	23° \approx 10'19	0.59770 AU			13307 Dec 14 13:56	0° \approx	
inferior conj	13307 Jan 31 06:20	20° \approx 35'53	-3°17'09	evening max el		13307 Dec 16 07:41	1° \approx 43'51	25°50'19
minimum elong	13307 Jan 31 13:22	20° \approx 21'36	3°13'54	retrograde		13307 Dec 30 05:37	8° \approx 45'55	
morning rise	13307 Feb 08 01:45	15° \approx 53'24		evening set		13308 Jan 05 09:10	7° \approx 17'37	
direct	13307 Feb 10 03:04	15° \approx 37'27		min. Earth dist.		13308 Jan 09 20:26	4° \approx 40'31	0.57667 AU
asc. node	13307 Feb 10 15:53	15° \approx 38'34		inferior conj		13308 Jan 12 20:11	2° \approx 34'50	-4°37'22
morning max el	13307 Feb 17 16:09	19° \approx 22'36	18°07'11	minimum elong		13308 Jan 13 04:57	2° \approx 19'26	4°34'05
	13307 Feb 25 10:59	0° \approx				13308 Jan 16 19:18	30° \approx	
morning set	13307 Mar 05 06:49	14° \approx 05'31		morning rise		13308 Jan 21 03:32	28° \approx	14'34
	13307 Mar 13 21:37	0° \approx		direct		13308 Jan 23 05:57	28° \approx	00'41
				asc. node		13308 Jan 28 13:12	29° \approx	35'10
superior conj	13307 Mar 15 02:13	2° \approx 08'16	0°04'01			13308 Jan 29 04:49	0° \approx	
minimum elong	13307 Mar 15 02:32	2° \approx 09'40	0°04'02	morning max el		13308 Jan 31 22:06	2° \approx 14'40	18°46'30
behind sun begin	13307 Mar 14 19:03	1° \approx 36'15		morning set		13308 Feb 17 03:35	28° \approx	20'06
behind sun end	13307 Mar 15 10:00	2° \approx 43'00				13308 Feb 18 00:03	0° \approx	
desc. node	13307 Mar 15 14:14	3° \approx 01'49						
max. Earth dist.	13307 Mar 22 17:18	15° \approx 20'30	1.41788 AU	superior conj		13308 Feb 25 19:46	15° \approx	06'33
evening rise	13307 Mar 27 19:36	23° \approx 42'57		minimum elong		13308 Feb 25 22:02	15° \approx	17'13
	13307 Mar 31 18:37	0° \approx		desc. node		13308 Mar 01 10:47	23° \approx	38'41
	13307 Apr 21 12:57	0° \approx		max. Earth dist.		13308 Mar 04 00:35	28° \approx	13'57
evening max el	13307 Apr 30 08:24	10° \approx 19'59	22°47'25			13308 Mar 05 00:50	0° \approx	
asc. node	13307 May 09 12:32	16° \approx 12'57		evening rise		13308 Mar 07 23:44	5° \approx	04'01
retrograde	13307 May 10 10:31	16° \approx 16'49				13308 Mar 23 21:18	0° \approx	
evening set	13307 May 15 08:32	14° \approx 13'00		evening max el		13308 Apr 11 22:27	24° \approx	11'26
inferior conj	13307 May 20 16:18	7° \approx 49'15	2°50'05			13308 Apr 19 16:34	0° \approx	
minimum elong	13307 May 20 14:35	7° \approx 55'11	2°48'52	retrograde		13308 Apr 23 04:08	0° \approx	47'17
min. Earth dist.	13307 May 20 08:56	8° \approx 14'52	0.68907 AU	asc. node		13308 Apr 25 09:50	0° \approx	24'49
morning rise	13307 May 25 20:33	1° \approx 39'51				13308 Apr 26 09:22	30° \approx	
	13307 May 28 21:15	30° \approx		evening set		13308 Apr 28 13:44	28° \approx	30'37
direct	13307 May 30 08:49	29° \approx	48'26	min. Earth dist.		13308 May 03 05:11	23° \approx	08'31
	13307 May 31 21:39	0° \approx		inferior conj		13308 May 04 01:02	22° \approx	01'14
morning max el	13307 Jun 08 04:13	4° \approx 54'23	21°25'44	minimum elong		13308 May 03 22:56	22° \approx	08'23
desc. node	13307 Jun 11 15:44	8° \approx 42'45		morning rise		13308 May 09 08:12	15° \approx	59'31
	13307 Jun 27 06:20	0° \approx		direct		13308 May 13 07:58	14° \approx	28'55
morning set	13307 Jul 09 17:24	19° \approx	01'15	morning max el		13308 May 21 01:31	18° \approx	49'50
max. Earth dist.	13307 Jul 16 09:30	29° \approx	44'57	desc. node		13308 May 28 12:40	27° \approx	45'27
	13307 Jul 16 13:10	0° \approx				13308 May 30 04:10	0° \approx	
				morning set		13308 Jun 17 22:04	27° \approx	47'04
superior conj	13307 Jul 23 19:43	12° \approx	13'46			13308 Jun 19 08:31	0° \approx	
minimum elong	13307 Jul 24 02:42	12° \approx	43'53	max. Earth dist.		13308 Jun 27 19:24	13° \approx	16'29
	13307 Aug 02 20:14	0° \approx						
evening rise	13307 Aug 04 01:53	2° \approx	14'22	superior conj		13308 Jul 03 14:34	22° \approx	38'35
asc. node	13307 Aug 05 12:05	4° \approx	49'19	minimum elong		13308 Jul 03 20:40	23° \approx	03'35
evening max el	13307 Aug 20 06:41	27° \approx	47'04			13308 Jul 08 01:17	0° \approx	
	13307 Aug 23 00:13	0° \approx		evening rise		13308 Jul 16 13:36	14° \approx	29'21
retrograde	13307 Aug 27 03:49	1° \approx	18'07	asc. node		13308 Jul 22 08:47	24° \approx	26'27
evening set	13307 Aug 29 11:20	0° \approx	54'35			13308 Jul 25 17:22	0° \approx	
	13307 Aug 31 10:45	30° \approx		evening max el		13308 Aug 02 20:38	11° \approx	02'45
inferior conj	13307 Sep 05 11:27	26° \approx	01'54	retrograde		13308 Aug 09 06:57	14° \approx	23'23
minimum elong	13307 Sep 05 12:38	25° \approx	59'12	evening set		13308 Aug 11 22:43	13° \approx	47'56
desc. node	13307 Sep 07 13:04	24° \approx	07'38	inferior conj		13308 Aug 18 07:24	8° \approx	36'37
min. Earth dist.	13307 Sep 08 17:18	23° \approx	04'38	minimum elong		13308 Aug 18 09:50	8° \approx	30'15
morning rise	13307 Sep 12 10:44	20° \approx	15'05	min. Earth dist.		13308 Aug 21 04:33	5° \approx	36'59
direct	13307 Sep 18 23:25	18° \approx	12'31	desc. node		13308 Aug 24 10:35	2° \approx	43'29
morning max el	13307 Oct 03 06:55	26° \approx	04'48	morning rise		13308 Aug 24 18:39	2° \approx	28'38
	13307 Oct 06 23:05	0° \approx		direct		13308 Aug 31 11:00	0° \approx	04'02
	13307 Oct 27 00:23	0° \approx		morning max el		13308 Sep 14 13:31	8° \approx	05'21
asc. node	13307 Nov 01 13:58	10° \approx	39'24			13308 Oct 01 10:00	0° \approx	
morning set	13307 Nov 04 15:43	16° \approx	57'40	asc. node		13308 Oct 18 10:39	0° \approx	32'15
	13307 Nov 10 16:06	0° \approx				13308 Oct 18 04:18	0° \approx	
max. Earth dist.	13307 Nov 10 18:48	0° \approx	14'58	morning set		13308 Oct 18 14:51	0° \approx	53'40
				max. Earth dist.		13308 Oct 23 23:05	12° \approx	09'17
superior conj	13307 Nov 11 18:37	2° \approx	27'23					
minimum elong	13307 Nov 11 16:39	2° \approx	16'29	superior conj		13308 Oct 26 03:46	16° \approx	56'45
evening rise	13307 Nov 18 11:23	17° \approx	15'06	minimum elong		13308 Oct 26 01:30	16° \approx	44'17
	13307 Nov 24 16:10	0° \approx				13308 Nov 01 02:16	0° \approx	
desc. node	13307 Dec 04 09:56	16° \approx	35'41	evening rise		13308 Nov 01 22:10	1° \approx	47'43

	13308 Nov 17 01:03	0°♄				13309 Oct 24 02:41	0°♄	
desc. node	13308 Nov 20 07:06	4°♄36'35			desc. node	13309 Nov 07 04:21	21°♄02'22	
evening max el	13308 Nov 26 20:05	12°♄06'52	24°18'02		evening max el	13309 Nov 08 06:28	22°♄08'22	22°35'52
retrograde	13308 Dec 10 12:13	18°♄55'52			retrograde	13309 Nov 21 05:48	28°♄34'27	
evening set	13308 Dec 15 14:41	17°♄58'43			evening set	13309 Nov 24 23:19	28°♄04'04	
min. Earth dist.	13308 Dec 21 07:36	15°♄06'04	0.55909 AU		min. Earth dist.	13309 Dec 02 14:26	24°♄37'34	0.54792 AU
inferior conj	13308 Dec 23 13:15	13°♄43'30	-5°37'58		inferior conj	13309 Dec 03 12:29	24°♄06'24	-5°55'11
minimum elong	13308 Dec 23 19:25	13°♄34'00	5°36'08		minimum elong	13309 Dec 03 10:36	24°♄09'03	5°54'07
morning rise	13309 Jan 01 02:07	9°♄43'20			morning rise	13309 Dec 11 23:11	20°♄18'35	
direct	13309 Jan 03 13:22	9°♄27'19			direct	13309 Dec 15 04:09	19°♄55'06	
morning max el	13309 Jan 13 16:21	14°♄19'14	19°48'19		morning max el	13309 Dec 26 20:12	25°♄29'28	21°12'59
asc. node	13309 Jan 14 10:29	15°♄04'28				13309 Dec 30 21:58	0°♄	
	13309 Jan 24 16:38	0°♄			asc. node	13310 Jan 01 07:42	1°♄50'36	
morning set	13309 Jan 31 07:50	12°♄52'45			morning set	13310 Jan 15 16:44	27°♄35'31	
						13310 Jan 16 20:23	0°♄	
superior conj	13309 Feb 08 04:18	28°♄44'59	1°02'27		superior conj	13310 Jan 22 23:45	12°♄52'21	1°21'00
minimum elong	13309 Feb 08 07:05	28°♄58'46	1°02'39		minimum elong	13310 Jan 23 02:07	13°♄04'38	1°21'33
	13309 Feb 08 19:29	0°♄			max. Earth dist.	13310 Jan 27 16:47	22°♄24'40	1.35284 AU
max. Earth dist.	13309 Feb 14 06:43	10°♄29'17	1.37353 AU		evening rise	13310 Jan 31 17:57	0°♄12'41	
desc. node	13309 Feb 16 07:21	14°♄12'57				13310 Jan 31 15:14	0°♄	
evening rise	13309 Feb 18 00:13	17°♄16'52			desc. node	13310 Feb 03 03:57	4°♄40'43	
	13309 Feb 25 11:03	0°♄				13310 Feb 18 14:21	0°♄	
	13309 Mar 18 06:24	0°♄			evening max el	13310 Mar 08 01:48	21°♄52'31	26°29'16
evening max el	13309 Mar 25 12:00	8°♄04'16	25°24'48		retrograde	13310 Mar 21 01:29	29°♄13'20	
retrograde	13309 Apr 06 17:30	15°♄08'36			evening set	13310 Mar 27 09:20	26°♄41'41	
asc. node	13309 Apr 12 07:12	12°♄57'33			asc. node	13310 Mar 30 04:40	23°♄58'43	
evening set	13309 Apr 12 14:35	12°♄42'21			min. Earth dist.	13310 Mar 31 11:34	22°♄30'03	0.66613 AU
min. Earth dist.	13309 Apr 16 22:48	7°♄55'56	0.67805 AU		inferior conj	13310 Apr 02 08:09	20°♄15'33	0°58'44
inferior conj	13309 Apr 18 07:02	6°♄11'47	1°46'25		minimum elong	13310 Apr 02 06:44	20°♄19'52	0°57'57
minimum elong	13309 Apr 18 04:58	6°♄18'29	1°45'14		morning rise	13310 Apr 08 05:06	14°♄33'45	
morning rise	13309 Apr 23 19:45	0°♄19'08			direct	13310 Apr 11 06:38	13°♄41'06	
	13309 Apr 24 08:03	30°♄			morning max el	13310 Apr 17 17:58	17°♄07'24	18°24'49
direct	13309 Apr 27 07:53	29°♄08'34				13310 Apr 27 13:00	0°♄	
	13309 Apr 30 11:04	0°♄			desc. node	13310 May 02 06:13	7°♄18'18	
morning max el	13309 May 04 06:24	2°♄55'45	19°09'32		morning set	13310 May 08 00:54	16°♄26'17	
desc. node	13309 May 15 09:30	17°♄20'24				13310 May 16 15:13	0°♄	
greatest brilliancy	13309 May 17 05:24	20°♄03'11	-0.7m		superior conj	13310 May 23 19:22	11°♄13'38	-2°03'46
	13309 May 23 18:40	0°♄			minimum elong	13310 May 23 12:18	10°♄46'01	2°04'19
morning set	13309 May 28 01:42	6°♄36'24			max. Earth dist.	13310 May 24 07:01	11°♄59'05	1.45832 AU
max. Earth dist.	13309 Jun 10 11:20	27°♄26'45	1.45374 AU			13310 Jun 04 19:34	0°♄	
	13309 Jun 12 02:20	0°♄			evening rise	13310 Jun 08 16:00	6°♄02'59	
superior conj	13309 Jun 13 11:12	2°♄09'40	-2°13'34		greatest brilliancy	13310 Jun 18 03:52	20°♄55'17	-0.8m
minimum elong	13309 Jun 13 11:27	2°♄10'37	2°14'35			13310 Jun 24 05:34	0°♄	
evening rise	13309 Jun 28 03:04	25°♄46'32			asc. node	13310 Jun 26 02:29	2°♄35'27	
	13309 Jun 30 16:51	0°♄			evening max el	13310 Jun 30 21:58	8°♄19'13	18°53'14
asc. node	13309 Jul 09 05:35	13°♄44'22			retrograde	13310 Jul 07 14:53	12°♄00'03	
evening max el	13309 Jul 17 10:43	24°♄36'14	18°19'57		evening set	13310 Jul 11 00:04	10°♄54'03	
retrograde	13309 Jul 23 19:52	28°♄00'14			inferior conj	13310 Jul 16 12:56	5°♄10'51	2°58'15
evening set	13309 Jul 26 20:12	27°♄10'17			minimum elong	13310 Jul 16 14:31	5°♄05'49	2°57'07
inferior conj	13309 Aug 01 17:09	21°♄42'14	2°30'28		min. Earth dist.	13310 Jul 18 06:22	3°♄00'16	0.66232 AU
minimum elong	13309 Aug 01 19:31	21°♄35'23	2°29'13			13310 Jul 20 21:20	30°♄	
min. Earth dist.	13309 Aug 04 01:12	18°♄59'57	0.64459 AU		morning rise	13310 Jul 22 04:14	28°♄47'04	
morning rise	13309 Aug 07 17:26	15°♄22'44			direct	13310 Jul 28 11:04	26°♄06'44	
desc. node	13309 Aug 11 08:04	13°♄16'30			desc. node	13310 Jul 29 05:29	26°♄08'54	
direct	13309 Aug 14 07:25	12°♄45'18				13310 Aug 06 05:39	0°♄	
morning max el	13309 Aug 27 23:35	20°♄44'04	27°27'24		morning max el	13310 Aug 10 10:43	3°♄49'38	26°29'17
	13309 Sep 04 23:37	0°♄				13310 Aug 30 08:28	0°♄	
	13309 Sep 24 12:37	0°♄			morning set	13310 Sep 15 08:14	27°♄18'44	
morning set	13309 Oct 02 05:25	14°♄23'16				13310 Sep 16 18:14	0°♄	
asc. node	13309 Oct 05 07:18	20°♄33'51			max. Earth dist.	13310 Sep 19 07:20	4°♄56'40	1.34531 AU
max. Earth dist.	13309 Oct 06 20:02	23°♄43'11	1.32925 AU		asc. node	13310 Sep 22 03:55	10°♄39'47	
	13309 Oct 09 19:33	0°♄			superior conj	13310 Sep 24 07:16	15°♄02'57	0°20'11
superior conj	13309 Oct 10 08:48	1°♄10'49	0°46'47		minimum elong	13310 Sep 24 06:11	14°♄57'21	0°20'08
minimum elong	13309 Oct 10 06:46	0°♄59'56	0°46'51			13310 Oct 01 10:18	0°♄	
evening rise	13309 Oct 17 09:14	16°♄19'00						

evening rise	13310 Oct 01 18:37	0° \mathbb{M} 43'34		superior conj	13311 Sep 07 20:13	28° \mathbb{M} 25'41	-0°11'02
	13310 Oct 18 18:26	0° \mathbb{M}		minimum elong	13311 Sep 07 20:55	28° \mathbb{M} 29'10	0°11'01
evening max el	13310 Oct 21 00:07	2° \mathbb{M} 25'03	21°01'09	behind sun begin	13311 Sep 07 16:10	28° \mathbb{M} 05'44	
desc. node	13310 Oct 25 01:42	5° \mathbb{M} 45'41		behind sun end	13311 Sep 08 01:39	28° \mathbb{M} 52'38	
retrograde	13310 Nov 01 16:40	8° \mathbb{M} 13'39			13311 Sep 08 15:13	0° \mathbb{M}	
evening set	13310 Nov 04 04:50	7° \mathbb{M} 58'46		asc. node	13311 Sep 09 00:29	0° \mathbb{M} 46'12	
inferior conj	13310 Nov 13 03:56	4° \mathbb{M} 04'59	-5°13'11	evening rise	13311 Sep 16 00:05	14° \mathbb{M} 55'19	
minimum elong	13310 Nov 12 18:47	4° \mathbb{M} 17'57	5°10'23		13311 Sep 23 19:36	0° \mathbb{M}	
min. Earth dist.	13310 Nov 13 20:33	3° \mathbb{M} 41'26	0.54535 AU	evening max el	13311 Oct 03 07:22	13° \mathbb{M} 23'56	19°44'43
morning rise	13310 Nov 21 09:07	0° \mathbb{M} 12'50		desc. node	13311 Oct 11 23:08	18° \mathbb{M} 19'22	
	13310 Nov 22 04:55	30° \mathbb{R} \mathbb{M}		retrograde	13311 Oct 13 08:42	18° \mathbb{M} 24'59	
direct	13310 Nov 25 11:49	29° \mathbb{M} 36'37		evening set	13311 Oct 15 06:29	18° \mathbb{M} 14'57	
	13310 Nov 28 17:05	0° \mathbb{M}		inferior conj	13311 Oct 24 02:09	14° \mathbb{M} 12'33	-3°41'58
morning max el	13310 Dec 08 11:29	5° \mathbb{M} 52'26	22°56'00	minimum elong	13311 Oct 23 16:56	14° \mathbb{M} 26'52	3°38'13
asc. node	13310 Dec 19 04:50	19° \mathbb{M} 36'44		min. Earth dist.	13311 Oct 26 05:21	12° \mathbb{M} 53'01	0.55216 AU
	13310 Dec 25 02:05	0° \mathbb{M}		morning rise	13311 Nov 01 01:43	9° \mathbb{M} 55'11	
morning set	13310 Dec 31 04:06	12° \mathbb{M} 22'16		direct	13311 Nov 06 01:25	9° \mathbb{M} 00'15	
				morning max el	13311 Nov 19 21:30	15° \mathbb{M} 52'52	24°44'41
superior conj	13311 Jan 07 02:53	27° \mathbb{M} 19'44	1°32'40		13311 Dec 01 04:19	0° \mathbb{M}	
minimum elong	13311 Jan 07 04:21	27° \mathbb{M} 27'35	1°33'32	asc. node	13311 Dec 06 01:51	8° \mathbb{M} 07'30	
	13311 Jan 08 08:56	0° \mathbb{M}		morning set	13311 Dec 15 15:59	27° \mathbb{M} 06'23	
max. Earth dist.	13311 Jan 10 09:59	4° \mathbb{M} 18'04	1.33558 AU		13311 Dec 17 00:08	0° \mathbb{M}	
evening rise	13311 Jan 15 01:22	13° \mathbb{M} 42'35					
desc. node	13311 Jan 21 00:38	24° \mathbb{M} 57'45		superior conj	13311 Dec 22 10:56	11° \mathbb{M} 58'15	1°37'53
	13311 Jan 23 21:11	0° \mathbb{M}		minimum elong	13311 Dec 22 11:18	12° \mathbb{M} 00'18	1°38'55
	13311 Feb 13 12:39	0° \mathbb{M}		max. Earth dist.	13311 Dec 24 10:33	16° \mathbb{M} 18'19	1.32275 AU
evening max el	13311 Feb 18 15:18	5° \mathbb{M} 26'49	27°14'21	evening rise	13311 Dec 29 19:07	27° \mathbb{M} 37'21	
retrograde	13311 Mar 04 03:23	12° \mathbb{M} 53'47			13311 Dec 30 23:16	0° \mathbb{M}	
evening set	13311 Mar 10 19:56	10° \mathbb{M} 22'19		desc. node	13312 Jan 07 21:23	14° \mathbb{M} 57'49	
min. Earth dist.	13311 Mar 14 17:18	6° \mathbb{M} 43'33	0.65040 AU		13312 Jan 17 03:17	0° \mathbb{M}	
inferior conj	13311 Mar 17 02:00	4° \mathbb{M} 07'05	-0°00'06	evening max el	13312 Feb 01 02:55	18° \mathbb{M} 34'44	27°33'15
minimum elong	13311 Mar 17 02:00	4° \mathbb{M} 07'05	0°00'04	retrograde	13312 Feb 14 22:27	25° \mathbb{M} 59'52	
transit middle	13311 Mar 17 02:00	4° \mathbb{M} 07'05	0°00'04	evening set	13312 Feb 21 19:57	23° \mathbb{M} 35'48	
transit begin	13311 Mar 16 22:58	4° \mathbb{M} 15'30		min. Earth dist.	13312 Feb 25 14:14	20° \mathbb{M} 25'56	0.63140 AU
transit end	13311 Mar 17 05:02	3° \mathbb{M} 58'41		inferior conj	13312 Feb 28 09:42	17° \mathbb{M} 38'43	-1°10'02
asc. node	13311 Mar 17 02:07	4° \mathbb{M} 06'45		minimum elong	13312 Feb 28 12:00	17° \mathbb{M} 32'59	1°08'46
	13311 Mar 21 06:08	30° \mathbb{R} \mathbb{M}		asc. node	13312 Mar 02 23:35	14° \mathbb{M} 22'17	
morning rise	13311 Mar 23 09:47	28° \mathbb{M} 38'25		morning rise	13312 Mar 06 06:34	12° \mathbb{M} 25'44	
direct	13311 Mar 26 01:57	28° \mathbb{M} 00'42		direct	13312 Mar 08 14:54	11° \mathbb{M} 59'26	
	13311 Mar 30 22:32	0° \mathbb{M}		morning max el	13312 Mar 15 03:53	15° \mathbb{M} 19'55	17°46'25
morning max el	13311 Apr 01 10:07	1° \mathbb{M} 18'25	17°56'58		13312 Mar 25 12:26	0° \mathbb{M}	
morning set	13311 Apr 19 04:22	27° \mathbb{M} 39'07		morning set	13312 Mar 31 09:35	10° \mathbb{M} 05'16	
desc. node	13311 Apr 19 02:51	27° \mathbb{M} 32'52		desc. node	13312 Apr 04 23:23	17° \mathbb{M} 58'30	
	13311 Apr 20 14:33	0° \mathbb{M}			13312 Apr 12 02:56	0° \mathbb{M}	
superior conj	13311 May 03 08:26	20° \mathbb{M} 37'15	-1°35'47	superior conj	13312 Apr 12 16:48	0° \mathbb{M} 57'10	-0°57'32
minimum elong	13311 May 02 23:25	20° \mathbb{M} 01'27	1°35'35	minimum elong	13312 Apr 12 11:00	0° \mathbb{M} 33'19	0°57'09
max. Earth dist.	13311 May 07 03:16	26° \mathbb{M} 35'25	1.45536 AU	max. Earth dist.	13312 Apr 18 21:14	10° \mathbb{M} 58'17	1.44526 AU
	13311 May 09 07:33	0° \mathbb{M}		evening rise	13312 Apr 27 20:30	25° \mathbb{M} 00'12	
evening rise	13311 May 19 09:21	15° \mathbb{M} 35'30			13312 May 01 03:00	0° \mathbb{M}	
	13311 May 28 20:21	0° \mathbb{M}			13312 May 22 01:23	0° \mathbb{M}	
greatest brilliancy	13311 Jun 02 11:36	6° \mathbb{M} 53'35	-0.6m	evening max el	13312 May 27 04:46	5° \mathbb{M} 54'18	20°46'55
asc. node	13311 Jun 12 23:28	20° \mathbb{M} 50'31		asc. node	13312 May 29 20:32	8° \mathbb{M} 17'48	
evening max el	13311 Jun 14 04:18	22° \mathbb{M} 06'13	19°42'53	retrograde	13312 Jun 04 12:03	10° \mathbb{M} 43'04	
retrograde	13311 Jun 21 13:03	26° \mathbb{M} 16'12		evening set	13312 Jun 08 16:36	9° \mathbb{M} 03'50	
evening set	13311 Jun 25 07:34	24° \mathbb{M} 53'32		inferior conj	13312 Jun 13 22:41	2° \mathbb{M} 55'01	3°11'33
inferior conj	13311 Jun 30 15:38	18° \mathbb{M} 56'43	3°11'10	minimum elong	13312 Jun 13 22:14	2° \mathbb{M} 56'34	3°10'30
minimum elong	13311 Jun 30 16:12	18° \mathbb{M} 54'49	3°10'07	min. Earth dist.	13312 Jun 14 11:53	2° \mathbb{M} 09'21	0.68462 AU
min. Earth dist.	13311 Jul 01 18:37	17° \mathbb{M} 26'29	0.67579 AU		13312 Jun 16 02:18	30° \mathbb{R} \mathbb{M}	
morning rise	13311 Jul 06 00:26	12° \mathbb{M} 33'30		morning rise	13312 Jun 19 03:37	26° \mathbb{M} 35'37	
direct	13311 Jul 11 20:56	9° \mathbb{M} 59'13		direct	13312 Jun 24 12:06	24° \mathbb{M} 14'21	
desc. node	13311 Jul 16 02:49	11° \mathbb{M} 05'30		desc. node	13312 Jul 02 00:01	27° \mathbb{M} 39'27	
morning max el	13311 Jul 23 21:26	17° \mathbb{M} 11'31	25°11'13		13312 Jul 04 14:43	0° \mathbb{M}	
	13311 Aug 03 13:55	0° \mathbb{M}		morning max el	13312 Jul 05 07:45	0° \mathbb{M} 42'17	23°43'03
	13311 Aug 23 07:57	0° \mathbb{M}			13312 Jul 27 11:04	0° \mathbb{M}	
morning set	13311 Aug 28 19:24	9° \mathbb{M} 30'40		morning set	13312 Aug 09 10:19	20° \mathbb{M} 48'09	
max. Earth dist.	13311 Sep 01 09:32	16° \mathbb{M} 03'10	1.36574 AU	max. Earth dist.	13312 Aug 13 07:09	27° \mathbb{M} 28'42	1.38882 AU


































































































































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				minimum elong	13313 Aug 03 08:22	23°♎34'25	1°19'52
superior conj	13312 Aug 20 20:03	11°♎10'57 -0°45'20			13313 Aug 06 21:55	0°♎	
minimum elong	13312 Aug 20 23:18	11°♎26'11 0°45'11		asc. node	13313 Aug 12 17:39	10°♎46'16	
asc. node	13312 Aug 25 21:03	20°♎49'48		evening rise	13313 Aug 13 11:42	12°♎10'31	
evening rise	13312 Aug 29 22:58	28°♎47'34			13313 Aug 23 13:10	0°♎	
	13312 Aug 30 13:49	0°♎		evening max el	13313 Aug 29 10:59	7°♎42'13	18°16'42
evening max el	13312 Sep 15 04:14	25°♎12'15 18°50'03		retrograde	13313 Sep 05 18:56	11°♎25'13	
retrograde	13312 Sep 23 16:14	29°♎28'17		evening set	13313 Sep 07 22:12	11°♎06'58	
evening set	13312 Sep 25 13:32	29°♎16'28		desc. node	13313 Sep 14 18:08	6°♎56'15	
desc. node	13312 Sep 27 20:37	28°♎32'37		inferior conj	13313 Sep 15 08:35	6°♎26'03	-0°11'16
inferior conj	13312 Oct 03 18:30	24°♎56'36 -1°52'19		minimum elong	13313 Sep 15 08:10	6°♎26'54	0°11'06
minimum elong	13312 Oct 03 13:47	25°♎05'04 1°50'07		transit middle	13313 Sep 15 08:10	6°♎26'54	0°11'06
min. Earth dist.	13312 Oct 06 19:16	22°♎46'21 0.56722 AU		transit begin	13313 Sep 15 05:39	6°♎32'12	
morning rise	13312 Oct 11 10:47	20°♎02'40		transit end	13313 Sep 15 10:41	6°♎21'36	
direct	13312 Oct 17 05:04	18°♎42'44		min. Earth dist.	13313 Sep 18 16:02	3°♎40'09	0.58776 AU
morning max el	13312 Oct 31 10:24	26°♎04'25 26°20'38		morning rise	13313 Sep 22 14:41	0°♎56'38	
	13312 Nov 04 03:46	0°♎			13313 Sep 24 14:22	30°♎	
asc. node	13312 Nov 21 22:45	27°♎11'37		direct	13313 Sep 28 22:40	29°♎09'04	
	13312 Nov 23 09:45	0°♎			13313 Oct 03 09:56	0°♎	
morning set	13312 Nov 29 02:41	11°♎43'19		morning max el	13313 Oct 13 06:19	6°♎51'33	27°27'46
					13313 Oct 30 14:58	0°♎	
superior conj	13312 Dec 05 21:46	26°♎41'36 1°37'01		asc. node	13313 Nov 08 19:33	16°♎39'45	
minimum elong	13312 Dec 05 21:04	26°♎37'43 1°38'00		morning set	13313 Nov 13 10:26	26°♎08'06	
max. Earth dist.	13312 Dec 06 16:38	28°♎26'33 1.31488 AU			13313 Nov 15 05:41	0°♎	
	13312 Dec 07 09:28	0°♎					
evening rise	13312 Dec 12 20:30	11°♎50'22		superior conj	13313 Nov 20 09:25	11°♎23'39	1°30'17
	13312 Dec 22 03:33	0°♎		minimum elong	13313 Nov 20 07:50	11°♎14'48	1°31'04
desc. node	13312 Dec 24 18:14	4°♎34'01		max. Earth dist.	13313 Nov 20 01:05	10°♎37'07	1.31212 AU
	13313 Jan 12 08:05	0°♎		evening rise	13313 Nov 27 03:08	26°♎15'16	
evening max el	13313 Jan 13 10:35	1°♎04'32 27°20'13			13313 Nov 28 21:35	0°♎	
retrograde	13313 Jan 27 09:29	8°♎22'03		desc. node	13313 Dec 11 15:13	23°♎36'53	
evening set	13313 Feb 03 06:21	6°♎13'54			13313 Dec 15 20:10	0°♎	
min. Earth dist.	13313 Feb 07 01:08	3°♎25'55 0.61023 AU		evening max el	13313 Dec 26 11:45	12°♎45'53	26°32'32
inferior conj	13313 Feb 10 03:58	0°♎42'12 -2°29'18		retrograde	13314 Jan 09 10:45	19°♎53'00	
minimum elong	13313 Feb 10 09:16	0°♎30'33 2°26'38		evening set	13314 Jan 15 23:23	18°♎08'39	
	13313 Feb 10 23:19	30°♎		min. Earth dist.	13314 Jan 20 01:33	15°♎31'48	0.58853 AU
morning rise	13313 Feb 17 15:14	25°♎47'40		inferior conj	13314 Jan 23 05:12	13°♎07'55	-3°52'18
asc. node	13313 Feb 17 21:01	25°♎43'44		minimum elong	13314 Jan 23 13:18	12°♎52'29	3°48'50
direct	13313 Feb 19 18:02	25°♎29'04		morning rise	13314 Jan 31 06:11	8°♎34'25	
morning max el	13313 Feb 26 19:59	29°♎02'38 17°53'59		direct	13314 Feb 02 07:12	8°♎19'46	
	13313 Feb 27 18:09	0°♎		asc. node	13314 Feb 04 18:24	8°♎42'10	
morning set	13313 Mar 14 10:29	23°♎26'35		morning max el	13314 Feb 10 06:45	12°♎16'20	18°21'12
	13313 Mar 18 01:14	0°♎			13314 Feb 22 02:30	0°♎	
desc. node	13313 Mar 22 19:53	8°♎31'15		morning set	13314 Feb 26 01:26	7°♎26'18	
superior conj	13313 Mar 25 01:22	12°♎24'31 -0°17'31		superior conj	13314 Mar 07 08:13	24°♎53'30	0°18'41
minimum elong	13313 Mar 24 23:48	12°♎17'44 0°17'23		minimum elong	13314 Mar 07 09:33	24°♎59'39	0°18'39
max. Earth dist.	13313 Apr 01 11:15	24°♎54'02 1.42919 AU		desc. node	13314 Mar 09 16:24	29°♎07'44	
	13313 Apr 04 14:38	0°♎			13314 Mar 10 04:06	0°♎	
evening rise	13313 Apr 07 17:15	4°♎56'37		max. Earth dist.	13314 Mar 14 21:14	8°♎13'56	1.40883 AU
	13313 Apr 24 10:35	0°♎		evening rise	13314 Mar 19 09:13	15°♎46'15	
evening max el	13313 May 09 23:53	19°♎43'04 22°01'43			13314 Mar 28 09:05	0°♎	
asc. node	13313 May 16 17:43	24°♎42'08			13314 Apr 19 07:27	0°♎	
retrograde	13313 May 19 09:56	25°♎15'06		evening max el	13314 Apr 22 15:23	3°♎34'10	23°22'03
evening set	13313 May 24 01:21	23°♎20'02		retrograde	13314 May 03 05:21	9°♎47'55	
inferior conj	13313 May 29 07:55	17°♎01'10 3°00'54		asc. node	13314 May 03 15:00	9°♎47'11	
minimum elong	13313 May 29 06:35	17°♎05'47 2°59'46		evening set	13314 May 08 08:18	7°♎38'28	
min. Earth dist.	13313 May 29 07:59	17°♎00'55 0.68877 AU		min. Earth dist.	13314 May 13 04:43	1°♎55'43	0.68825 AU
morning rise	13313 Jun 03 11:38	10°♎47'38		inferior conj	13314 May 13 17:22	1°♎12'08	2°39'59
direct	13313 Jun 08 07:22	8°♎44'18		minimum elong	13314 May 13 15:27	1°♎18'46	2°38'45
morning max el	13313 Jun 17 19:47	14°♎19'53 22°14'04			13314 May 14 14:26	30°♎	
desc. node	13313 Jun 18 21:07	15°♎25'19		morning rise	13314 May 18 22:32	25°♎05'53	
	13313 Jun 30 11:13	0°♎		direct	13314 May 23 05:32	23°♎23'05	
	13313 Jul 20 09:53	0°♎		morning max el	13314 May 31 12:59	28°♎08'16	20°52'09
morning set	13313 Jul 21 00:43	0°♎59'45			13314 Jun 02 07:33	0°♎	
max. Earth dist.	13313 Jul 26 06:58	9°♎38'59 1.41201 AU		desc. node	13314 Jun 05 18:05	4°♎04'13	

	13314 Jun 24 00:21	0°☿			13315 May 28 05:40	0°♊		
morning set	13314 Jun 30 15:01	10°☿08'48		morning set	13315 Jun 09 16:29	18°♊48'07		
max. Earth dist.	13314 Jul 08 13:33	22°☿44'52	1.43249 AU		13315 Jun 16 21:59	0°☿		
	13314 Jul 12 23:45	0°♎		max. Earth dist.	13315 Jun 21 02:43	6°☿35'59	1.44785 AU	
superior conj	13314 Jul 15 11:02	4°♎07'44	-1°50'24	superior conj	13315 Jun 25 19:46	14°☿06'55	-2°09'59	
minimum elong	13314 Jul 15 18:11	4°♎37'52	1°50'39	minimum elong	13315 Jun 25 23:59	14°☿23'51	2°10'50	
evening rise	13314 Jul 27 10:00	24°♎53'45			13315 Jul 05 12:17	0°♎		
	13314 Jul 30 07:07	0°♐		evening rise	13315 Jul 09 12:47	6°♎45'00		
asc. node	13314 Jul 30 14:18	0°♐31'45		asc. node	13315 Jul 17 11:03	20°♎01'11		
evening max el	13314 Aug 12 23:26	20°♐43'44	18°03'15		13315 Jul 24 01:27	0°♐		
retrograde	13314 Aug 19 14:32	24°♐08'27		evening max el	13315 Jul 27 13:44	4°♐07'13	18°08'40	
evening set	13314 Aug 22 01:38	23°♐40'03		retrograde	13315 Aug 02 22:29	7°♐27'53		
inferior conj	13314 Aug 28 18:43	18°♐38'55	1°08'54	evening set	13315 Aug 05 17:50	6°♐46'30		
minimum elong	13314 Aug 28 20:39	18°♐34'14	1°07'56	inferior conj	13315 Aug 11 21:02	1°♐27'34	2°06'34	
min. Earth dist.	13314 Aug 31 21:32	15°♐38'21	0.61052 AU	minimum elong	13315 Aug 11 23:33	1°♐20'38	2°05'17	
desc. node	13314 Sep 01 15:38	14°♐57'21			13315 Aug 13 04:46	30°♐♎		
morning rise	13314 Sep 04 12:53	12°♐42'03		min. Earth dist.	13315 Aug 14 12:48	28°♎33'21	0.63273 AU	
direct	13314 Sep 11 03:57	10°♐29'28		morning rise	13315 Aug 18 03:23	25°♎13'27		
morning max el	13314 Sep 25 09:40	18°♐25'44	27°57'18	desc. node	13315 Aug 19 13:08	24°♎16'00		
	13314 Oct 05 03:31	0°♑		direct	13315 Aug 24 19:13	22°♎42'30		
	13314 Oct 23 10:07	0°♒			13315 Sep 07 00:19	0°♐		
asc. node	13314 Oct 26 16:16	6°♒25'09		morning max el	13315 Sep 07 18:18	0°♐44'16	27°48'23	
morning set	13314 Oct 28 13:22	10°♒16'09			13315 Sep 29 06:29	0°♑		
max. Earth dist.	13314 Nov 03 08:14	22°♒41'09	1.31458 AU	morning set	13315 Oct 12 09:16	24°♑02'06		
				asc. node	13315 Oct 13 12:56	26°♑22'18		
superior conj	13314 Nov 04 20:03	25°♒59'05	1°17'49		13315 Oct 15 07:07	0°♒		
minimum elong	13314 Nov 04 17:54	25°♒47'11	1°18'19	max. Earth dist.	13315 Oct 17 10:05	4°♒28'46	1.32230 AU	
	13314 Nov 06 15:25	0°♓						
evening rise	13314 Nov 11 13:00	10°♓46'40		superior conj	13315 Oct 20 03:44	10°♒22'43	0°59'43	
	13314 Nov 21 04:33	0°♓		minimum elong	13315 Oct 20 01:29	10°♒10'29	0°59'56	
desc. node	13314 Nov 28 12:19	11°♓53'26		evening rise	13315 Oct 27 00:10	25°♒19'35		
evening max el	13314 Dec 08 04:25	23°♓34'22	25°13'22		13315 Oct 29 05:00	0°♓		
	13314 Dec 18 08:52	0°♐		desc. node	13315 Nov 15 09:32	29°♓06'29		
retrograde	13314 Dec 22 00:15	0°♐30'43			13315 Nov 16 03:21	0°♓		
	13314 Dec 25 15:57	30°♐♓		evening max el	13315 Nov 19 14:46	3°♓43'45	23°34'40	
evening set	13314 Dec 27 18:44	29°♓15'32		retrograde	13315 Dec 03 01:19	10°♓25'15		
min. Earth dist.	13315 Jan 01 16:27	26°♓34'23	0.56864 AU	evening set	13315 Dec 07 14:30	9°♓40'13		
inferior conj	13315 Jan 04 10:16	24°♓45'49	-5°06'47	min. Earth dist.	13315 Dec 14 01:08	6°♓35'27	0.55340 AU	
minimum elong	13315 Jan 04 18:39	24°♓31'58	5°04'00	inferior conj	13315 Dec 15 19:04	5°♓33'45	-5°51'56	
morning rise	13315 Jan 12 20:56	20°♓34'32		minimum elong	13315 Dec 15 22:19	5°♓28'57	5°50'42	
direct	13315 Jan 15 02:14	20°♓20'11		morning rise	13315 Dec 24 07:54	1°♓40'44		
asc. node	13315 Jan 22 15:45	23°♓19'45		direct	13315 Dec 27 01:43	1°♓22'20		
morning max el	13315 Jan 24 08:08	24°♓49'01	19°09'58	morning max el	13316 Jan 06 20:33	6°♓31'30	20°21'40	
	13315 Jan 28 17:18	0°♐		asc. node	13316 Jan 09 13:01	9°♓24'10		
morning set	13315 Feb 10 01:49	21°♐50'01			13316 Jan 22 03:31	0°♐		
	13315 Feb 14 04:27	0°♑		morning set	13316 Jan 25 08:23	6°♐28'07		
superior conj	13315 Feb 18 08:44	8°♑10'29	0°48'30	superior conj	13316 Feb 01 22:25	22°♐03'01	1°11'09	
minimum elong	13315 Feb 18 11:21	8°♑23'08	0°48'34	minimum elong	13316 Feb 02 01:07	22°♐16'37	1°11'31	
desc. node	13315 Feb 24 12:57	19°♑43'41			13316 Feb 05 22:39	0°♑		
max. Earth dist.	13315 Feb 25 04:05	20°♑52'05	1.38639 AU	max. Earth dist.	13316 Feb 07 11:16	2°♑56'18	1.36440 AU	
evening rise	13315 Feb 28 22:20	27°♑30'08		evening rise	13316 Feb 11 06:36	10°♑02'21		
	13315 Mar 02 09:17	0°♒		desc. node	13316 Feb 11 09:32	10°♑15'40		
	13315 Mar 21 21:01	0°♓			13316 Feb 23 01:03	0°♒		
evening max el	13315 Apr 05 05:03	17°♓26'25	24°41'48		13316 Mar 16 11:45	0°♓		
retrograde	13315 Apr 16 21:09	24°♓15'15		evening max el	13316 Mar 17 18:28	1°♓17'14	25°53'58	
asc. node	13315 Apr 20 12:21	23°♓17'16		retrograde	13316 Mar 30 08:25	8°♓30'29		
evening set	13315 Apr 22 11:50	21°♓53'52		evening set	13316 Apr 05 10:20	6°♓01'00		
min. Earth dist.	13315 Apr 26 24:00	16°♓47'18	0.68310 AU	asc. node	13316 Apr 06 09:47	5°♓08'24		
inferior conj	13315 Apr 28 01:11	15°♓23'34	2°08'57	min. Earth dist.	13316 Apr 09 15:44	1°♓29'45	0.67352 AU	
minimum elong	13315 Apr 27 23:01	15°♓30'45	2°07'42		13316 Apr 10 20:18	30°♓♒		
morning rise	13315 May 03 10:25	9°♓25'46		inferior conj	13316 Apr 11 05:21	29°♒31'26	1°27'32	
direct	13315 May 07 05:09	8°♓03'53		minimum elong	13316 Apr 11 03:28	29°♒37'22	1°26'28	
morning max el	13315 May 14 13:34	12°♓08'28	19°42'39	morning rise	13316 Apr 16 21:17	23°♒43'24		
desc. node	13315 May 23 14:59	23°♓21'28		direct	13316 Apr 20 04:41	22°♒40'58		
greatest brilliancy	13315 May 27 08:04	28°♓40'48	-0.6m	morning max el	13316 Apr 26 21:35	26°♒17'45	18°48'26	

	13316 Apr 30 05:12	0°♄		desc. node	13317 Apr 26 08:26	3°♄12'25	
desc. node	13316 May 09 11:46	13°♄06'46		morning set	13317 Apr 29 13:19	8°♄21'45	
greatest brilliancy	13316 May 10 22:31	15°♄19'10	-0.8m		13317 May 13 03:36	0°♄	
morning set	13316 May 19 02:19	27°♄57'07					
	13316 May 20 09:53	0°♄		superior conj	13317 May 14 17:22	2°♄28'08	-1°53'45
max. Earth dist.	13316 Jun 02 20:17	20°♄56'20	1.45658 AU	minimum elong	13317 May 14 08:37	1°♄53'50	1°53'56
				max. Earth dist.	13317 May 16 16:02	5°♄30'39	1.45794 AU
superior conj	13316 Jun 04 09:14	23°♄20'55	-2°11'55	evening rise	13317 May 30 19:09	27°♄29'27	
minimum elong	13316 Jun 04 06:05	23°♄08'36	2°12'51		13317 Jun 01 09:57	0°♄	
	13316 Jun 08 14:49	0°♄		greatest brilliancy	13317 Jun 11 11:14	15°♄27'49	-0.7m
evening rise	13316 Jun 19 15:45	17°♄35'19		asc. node	13317 Jun 20 04:49	27°♄45'41	
	13316 Jun 27 09:18	0°♄			13317 Jun 22 02:10	0°♄	
asc. node	13316 Jul 03 07:53	9°♄08'19		evening max el	13317 Jun 23 12:12	1°♄30'13	19°12'30
evening max el	13316 Jul 10 02:49	17°♄44'37	18°32'02	retrograde	13317 Jun 30 11:02	5°♄22'04	
retrograde	13316 Jul 16 14:25	21°♄14'36		evening set	13317 Jul 04 00:03	4°♄09'11	
evening set	13316 Jul 19 18:21	20°♄18'07			13317 Jul 08 03:17	30°♄	
inferior conj	13316 Jul 25 11:27	14°♄43'27	2°44'16	inferior conj	13317 Jul 09 10:31	28°♄20'16	3°05'21
minimum elong	13316 Jul 25 13:32	14°♄37'08	2°43'04	minimum elong	13317 Jul 09 11:42	28°♄16'29	3°04'16
min. Earth dist.	13316 Jul 27 13:23	12°♄12'57	0.65253 AU	min. Earth dist.	13317 Jul 10 21:52	26°♄25'46	0.66860 AU
morning rise	13316 Jul 31 07:35	8°♄21'05		morning rise	13317 Jul 14 22:44	21°♄56'12	
desc. node	13316 Aug 05 10:36	5°♄47'37		direct	13317 Jul 21 01:35	19°♄17'06	
direct	13316 Aug 06 18:54	5°♄41'05		desc. node	13317 Jul 23 07:58	19°♄36'00	
morning max el	13316 Aug 20 05:12	13°♄35'53	27°05'47	morning max el	13317 Aug 02 16:06	26°♄49'13	25°57'51
	13316 Sep 02 11:40	0°♄			13317 Aug 05 15:08	0°♄	
	13316 Sep 20 22:16	0°♄			13317 Aug 27 02:26	0°♄	
morning set	13316 Sep 24 19:14	7°♄17'58		morning set	13317 Sep 07 15:52	19°♄55'57	
max. Earth dist.	13316 Sep 29 02:58	15°♄52'25	1.33538 AU	max. Earth dist.	13317 Sep 11 09:37	26°♄58'13	1.35353 AU
asc. node	13316 Sep 29 09:32	16°♄25'49			13317 Sep 12 23:08	0°♄	
				asc. node	13317 Sep 16 06:06	6°♄32'18	
superior conj	13316 Oct 03 06:15	24°♄27'40	0°36'07				
minimum elong	13316 Oct 03 04:31	24°♄18'33	0°36'07	superior conj	13317 Sep 17 01:02	8°♄08'09	0°07'27
	13316 Oct 05 20:42	0°♄		minimum elong	13317 Sep 17 00:37	8°♄05'57	0°07'25
evening rise	13316 Oct 10 10:43	9°♄47'57		behind sun begin	13317 Sep 16 19:10	7°♄38'20	
	13316 Oct 20 20:42	0°♄		behind sun end	13317 Sep 17 06:03	8°♄33'38	
evening max el	13316 Oct 31 02:59	13°♄46'39	21°53'56	evening rise	13317 Sep 24 18:41	24°♄07'19	
desc. node	13316 Nov 01 06:51	14°♄52'00			13317 Sep 27 15:49	0°♄	
retrograde	13316 Nov 12 15:22	19°♄59'10		evening max el	13317 Oct 13 02:09	24°♄19'17	20°26'06
evening set	13316 Nov 15 18:44	19°♄37'06		desc. node	13317 Oct 19 04:12	28°♄42'46	
inferior conj	13316 Nov 24 13:20	15°♄42'32	-5°44'47	retrograde	13317 Oct 24 02:21	29°♄47'31	
minimum elong	13316 Nov 24 07:44	15°♄50'24	5°43'11	evening set	13317 Oct 26 06:20	29°♄35'46	
min. Earth dist.	13316 Nov 24 07:30	15°♄50'43	0.54562 AU	inferior conj	13317 Nov 04 05:49	25°♄40'13	-4°38'51
morning rise	13316 Dec 02 21:45	11°♄55'08		minimum elong	13317 Nov 03 19:43	25°♄54'55	4°35'20
direct	13316 Dec 06 11:31	11°♄27'02		min. Earth dist.	13317 Nov 05 14:34	24°♄52'27	0.54714 AU
morning max el	13316 Dec 18 18:38	17°♄20'05	21°55'05	morning rise	13317 Nov 12 08:36	21°♄39'23	
asc. node	13316 Dec 26 10:11	26°♄37'29		direct	13317 Nov 16 20:42	20°♄55'40	
	13316 Dec 28 14:38	0°♄		morning max el	13317 Nov 30 06:22	27°♄28'22	23°42'30
morning set	13317 Jan 08 18:33	21°♄12'49			13317 Dec 02 17:50	0°♄	
	13317 Jan 12 21:49	0°♄		asc. node	13317 Dec 13 07:15	14°♄43'45	
					13317 Dec 21 10:01	0°♄	
superior conj	13317 Jan 15 21:30	6°♄19'50	1°26'44	morning set	13317 Dec 24 06:19	5°♄58'26	
minimum elong	13317 Jan 15 23:32	6°♄30'29	1°27'27				
max. Earth dist.	13317 Jan 19 23:44	14°♄47'01	1.34499 AU	superior conj	13317 Dec 31 02:59	20°♄52'17	1°35'39
evening rise	13317 Jan 24 06:34	23°♄13'37		minimum elong	13317 Dec 31 04:00	20°♄57'46	1°36'35
	13317 Jan 27 21:31	0°♄		max. Earth dist.	13318 Jan 02 20:06	26°♄42'01	1.32956 AU
desc. node	13317 Jan 28 06:10	0°♄39'17			13318 Jan 04 09:41	0°♄	
	13317 Feb 15 17:05	0°♄		evening rise	13318 Jan 07 18:45	6°♄54'54	
evening max el	13317 Feb 28 08:11	15°♄00'28	26°51'13	desc. node	13318 Jan 15 02:51	20°♄49'41	
retrograde	13317 Mar 13 14:11	22°♄25'50			13318 Jan 20 11:18	0°♄	
evening set	13317 Mar 20 01:55	19°♄53'28		evening max el	13318 Feb 10 21:18	28°♄25'42	27°26'06
min. Earth dist.	13317 Mar 24 01:53	15°♄55'59	0.65985 AU		13318 Feb 12 14:23	0°♄	
asc. node	13317 Mar 24 07:14	15°♄40'38		retrograde	13318 Feb 24 13:18	5°♄52'27	
inferior conj	13317 Mar 26 03:42	13°♄30'47	0°35'10	evening set	13318 Mar 03 08:20	3°♄23'33	
minimum elong	13317 Mar 26 02:47	13°♄33'28	0°34'40	min. Earth dist.	13318 Mar 07 04:15	29°♄57'23	0.64263 AU
morning rise	13317 Apr 01 04:58	7°♄54'12			13318 Mar 07 03:14	30°♄	
direct	13317 Apr 04 02:13	7°♄08'28		inferior conj	13318 Mar 09 17:38	27°♄15'01	-0°28'28
morning max el	13317 Apr 10 11:25	10°♄30'03	18°10'48	minimum elong	13318 Mar 09 18:30	27°♄12'43	0°27'57
	13317 Apr 24 08:26	0°♄		asc. node	13318 Mar 11 04:43	25°♄43'48	

morning rise	13318 Mar 16 06:43	21° H 52'21	direct	13319 Mar 02 04:46	5° H 08'06	
direct	13318 Mar 18 19:19	21° H 19'55	morning max el	13319 Mar 08 22:02	8° H 32'39	17°47'22
morning max el	13318 Mar 25 04:33	24° H 37'40		13319 Mar 23 01:55	0° Y	
	13318 Mar 29 15:40	0° Y	morning set	13319 Mar 24 18:55	3° Y 00'59	
morning set	13318 Apr 11 04:27	20° Y 08'09	desc. node	13319 Mar 31 01:33	14° Y 01'47	
desc. node	13318 Apr 13 05:01	23° Y 32'11				
	13318 Apr 17 01:59	0° Z	superior conj	13319 Apr 05 08:01	23° Y 01'22	-0°40'22
			minimum elong	13319 Apr 05 04:06	22° Y 44'54	0°40'05
superior conj	13318 Apr 24 13:22	12° Z 12'17		13319 Apr 09 13:00	0° Z	
minimum elong	13318 Apr 24 05:19	11° Z 39'57	max. Earth dist.	13319 Apr 12 04:49	4° Z 19'09	1.43915 AU
max. Earth dist.	13318 Apr 29 11:38	20° Z 03'17	evening rise	13319 Apr 19 21:35	16° Z 28'41	
	13318 May 05 20:24	0° II		13319 Apr 28 19:28	0° II	
evening rise	13318 May 10 07:52	6° II 53'32	evening max el	13319 May 20 14:18	29° II 06'49	21°17'36
greatest brilliancy	13318 May 25 06:01	29° II 15'36		13319 May 21 12:08	0° S	
	13318 May 25 18:18	0° S	asc. node	13319 May 24 22:58	2° S 44'51	
evening max el	13318 Jun 06 16:11	15° S 18'20	retrograde	13319 May 29 08:22	4° S 13'19	
asc. node	13318 Jun 07 01:51	15° S 42'11	evening set	13319 Jun 02 17:34	2° S 26'58	
retrograde	13318 Jun 14 09:40	19° S 43'24		13319 Jun 05 03:13	30° R II	
evening set	13318 Jun 18 08:26	18° S 13'35	inferior conj	13319 Jun 07 23:34	26° II 13'33	3°08'17
inferior conj	13318 Jun 23 15:21	12° S 11'40	minimum elong	13319 Jun 07 22:44	26° II 16'29	3°07'13
minimum elong	13318 Jun 23 15:29	12° S 11'14	min. Earth dist.	13319 Jun 08 07:02	25° II 47'34	0.68705 AU
min. Earth dist.	13318 Jun 24 12:24	11° S 00'06	morning rise	13319 Jun 13 03:42	19° II 56'40	
morning rise	13318 Jun 28 22:12	5° S 50'00	direct	13319 Jun 18 06:47	17° II 42'49	
direct	13318 Jul 04 13:52	3° S 20'24	desc. node	13319 Jun 27 02:26	22° II 24'31	
desc. node	13318 Jul 10 05:15	5° S 17'15	morning max el	13319 Jun 28 13:04	23° II 48'16	23°04'43
morning max el	13318 Jul 16 02:17	10° S 14'31		13319 Jul 04 00:57	0° S	
	13318 Jul 31 18:40	0° Q		13319 Jul 25 03:55	0° Q	
	13318 Aug 19 18:39	0° P	morning set	13319 Aug 01 23:44	12° Q 35'23	
morning set	13318 Aug 20 18:54	1° P 45'28	max. Earth dist.	13319 Aug 06 07:25	19° Q 53'17	1.39891 AU
max. Earth dist.	13318 Aug 24 09:04	8° P 08'57		13319 Aug 12 01:07	0° P	
superior conj	13318 Aug 31 08:53	21° P 16'01	superior conj	13319 Aug 14 01:48	3° P 41'40	-1°00'14
minimum elong	13318 Aug 31 10:35	21° P 24'16	minimum elong	13319 Aug 14 06:15	4° P 02'03	1°00'04
asc. node	13318 Sep 03 02:40	26° P 37'53	asc. node	13319 Aug 20 23:14	16° P 38'51	
	13318 Sep 04 19:24	0° A	evening rise	13319 Aug 23 16:43	21° P 52'30	
evening rise	13318 Sep 08 21:41	8° A 11'28		13319 Aug 27 23:42	0° A	
	13318 Sep 21 00:45	0° M	evening max el	13319 Sep 08 17:00	17° A 45'46	18°33'16
evening max el	13318 Sep 25 15:30	5° M 39'10	retrograde	13319 Sep 16 15:49	21° A 46'26	
retrograde	13318 Oct 04 23:48	10° M 19'45	evening set	13319 Sep 18 15:10	21° A 32'24	
desc. node	13318 Oct 06 01:38	10° M 16'16	desc. node	13319 Sep 22 23:08	19° A 35'44	
evening set	13318 Oct 06 20:23	10° M 09'28	inferior conj	13319 Sep 26 12:15	17° A 03'17	-1°07'20
inferior conj	13318 Oct 15 10:41	6° M 00'14	minimum elong	13319 Sep 26 09:34	17° A 08'27	1°06'02
minimum elong	13318 Oct 15 03:10	6° M 12'37	min. Earth dist.	13319 Sep 29 17:21	14° A 35'44	0.57544 AU
min. Earth dist.	13318 Oct 18 00:55	4° M 18'06	morning rise	13319 Oct 04 00:30	11° A 53'27	
morning rise	13318 Oct 23 07:33	1° M 28'21	direct	13319 Oct 10 01:06	10° A 22'09	
direct	13318 Oct 28 15:48	0° M 23'27	morning max el	13319 Oct 24 08:21	17° A 53'25	26°53'39
morning max el	13318 Nov 11 16:31	7° M 28'33		13319 Nov 03 10:49	0° M	
	13318 Nov 28 05:16	0° J	asc. node	13319 Nov 17 01:03	22° M 45'19	
asc. node	13318 Nov 30 04:12	3° J 29'59		13319 Nov 20 16:03	0° J	
morning set	13318 Dec 08 17:55	20° J 40'11	morning set	13319 Nov 23 03:35	5° J 12'37	
	13318 Dec 13 00:15	0° B				
			superior conj	13319 Nov 29 23:50	20° J 16'45	1°34'52
superior conj	13318 Dec 15 12:27	5° B 33'30	minimum elong	13319 Nov 29 22:44	20° J 10'36	1°35'47
minimum elong	13318 Dec 15 12:22	5° B 32'59	max. Earth dist.	13319 Nov 30 07:15	20° J 58'09	1.31304 AU
max. Earth dist.	13318 Dec 16 23:36	8° B 47'17		13319 Dec 04 09:08	0° B	
evening rise	13318 Dec 22 16:05	20° B 58'27	evening rise	13319 Dec 06 19:57	5° B 16'56	
	13318 Dec 27 04:10	0° A	desc. node	13319 Dec 19 20:32	0° A 04'15	
desc. node	13319 Jan 01 23:38	10° A 40'52		13319 Dec 19 19:31	0° A	
	13319 Jan 14 12:21	0° H	evening max el	13320 Jan 06 12:48	23° A 29'23	27°04'07
evening max el	13319 Jan 24 07:47	11° H 19'57		13320 Jan 16 08:24	0° H	
retrograde	13319 Feb 07 04:50	18° H 41'26	retrograde	13320 Jan 20 11:47	0° H 42'45	
evening set	13319 Feb 14 02:58	16° H 23'18		13320 Jan 24 12:47	30° R A	
min. Earth dist.	13319 Feb 17 20:59	13° H 23'51	evening set	13320 Jan 27 06:28	28° A 43'28	
inferior conj	13319 Feb 20 20:06	10° H 36'29	min. Earth dist.	13320 Jan 31 03:07	26° A 02'11	0.60094 AU
minimum elong	13319 Feb 20 23:37	10° H 28'10	inferior conj	13320 Feb 03 07:31	23° A 24'44	-3°04'33
asc. node	13319 Feb 26 02:09	6° H 22'11	minimum elong	13320 Feb 03 14:07	23° A 11'04	3°01'25
morning rise	13319 Feb 27 22:59	5° H 30'49	morning rise	13320 Feb 11 00:54	18° A 39'12	

asc. node	13320 Feb 12 23:35	18° \approx 22'45		minimum elong	13321 Jan 15 09:06	5° \approx 14'57	4°22'38
direct	13320 Feb 13 02:26	18° \approx 22'41		morning rise	13321 Jan 23 06:16	1° \approx 06'53	
morning max el	13320 Feb 20 12:23	22° \approx 04'28	18°03'10	direct	13321 Jan 25 08:02	0° \approx 52'59	
	13320 Feb 26 15:05	0° H		asc. node	13321 Jan 29 20:58	2° \approx 03'53	
morning set	13320 Mar 07 02:25	16° H 40'22		morning max el	13321 Feb 02 19:43	5° \approx 02'18	18°39'15
	13320 Mar 14 08:16	0° Y			13321 Feb 18 11:13	0° H	
desc. node	13320 Mar 16 22:03	4° Y 36'35		morning set	13321 Feb 18 21:47	0° H 51'06	
superior conj	13320 Mar 17 02:37	4° Y 56'48	-0°01'31	superior conj	13321 Feb 27 17:30	17° H 47'31	0°32'10
minimum elong	13320 Mar 17 02:29	4° Y 56'13	0°01'29	minimum elong	13321 Feb 27 19:34	17° H 57'12	0°32'09
behind sun begin	13320 Mar 16 18:41	4° Y 21'37		desc. node	13321 Mar 03 18:34	25° H 13'10	
behind sun end	13320 Mar 17 10:17	5° Y 30'44			13321 Mar 06 11:05	0° Y	
max. Earth dist.	13320 Mar 24 17:10	18° Y 01'01	1.42092 AU	max. Earth dist.	13321 Mar 07 00:52	1° Y 00'16	1.39933 AU
evening rise	13320 Mar 30 01:47	26° Y 46'08		evening rise	13321 Mar 11 02:45	7° Y 58'56	
	13320 Apr 01 02:35	0° B			13321 Mar 25 02:35	0° B	
	13320 Apr 21 13:20	0° II		evening max el	13321 Apr 14 21:53	26° B 47'31	23°56'31
evening max el	13320 May 02 07:29	12° II 56'04	22°35'27		13321 Apr 18 11:47	0° II	
asc. node	13320 May 10 20:12	18° II 37'59		retrograde	13321 Apr 25 23:41	3° II 18'02	
retrograde	13320 May 12 05:30	18° II 46'51		asc. node	13321 Apr 27 17:32	3° II 04'19	
evening set	13320 May 17 01:47	16° II 45'13		evening set	13321 May 01 07:30	1° II 03'15	
inferior conj	13320 May 22 09:10	10° II 22'33	2°53'17		13321 May 02 10:14	30° R B	
minimum elong	13320 May 22 07:33	10° II 28'11	2°52'05	min. Earth dist.	13321 May 06 00:12	25° B 35'43	0.68655 AU
min. Earth dist.	13320 May 22 03:43	10° II 41'34	0.68911 AU	inferior conj	13321 May 06 18:11	24° B 34'30	2°28'07
morning rise	13320 May 27 13:11	4° II 11'58		minimum elong	13321 May 06 16:06	24° B 41'35	2°26'50
direct	13320 Jun 01 03:21	2° II 17'27		morning rise	13321 May 12 00:44	18° B 31'30	
morning max el	13320 Jun 10 03:08	7° II 31'09	21°37'58	direct	13321 May 16 02:21	16° B 57'42	
desc. node	13320 Jun 12 23:31	10° II 35'24		morning max el	13321 May 23 23:18	21° B 24'39	20°20'48
	13320 Jun 27 11:24	0° B		desc. node	13321 May 30 20:28	29° B 32'20	
morning set	13320 Jul 12 03:29	22° B 19'46			13321 May 31 04:49	0° II	
	13320 Jul 16 21:53	0° Q			13321 Jun 20 15:58	0° B	
max. Earth dist.	13320 Jul 18 09:50	2° Q 27'33	1.42117 AU	morning set	13321 Jun 21 10:10	1° B 10'08	
				max. Earth dist.	13321 Jun 30 18:50	15° B 52'28	1.43973 AU
superior conj	13320 Jul 25 23:24	15° Q 15'29	-1°33'47	superior conj	13321 Jul 06 21:54	25° B 49'32	-2°00'28
minimum elong	13320 Jul 26 06:12	15° Q 44'58	1°33'45	minimum elong	13321 Jul 07 04:26	26° B 16'31	2°00'59
	13320 Aug 03 06:02	0° P			13321 Jul 09 10:18	0° Q	
evening rise	13320 Aug 05 23:58	5° P 00'44		evening rise	13321 Jul 19 14:37	17° Q 23'21	
asc. node	13320 Aug 06 19:52	6° P 31'35		asc. node	13321 Jul 24 16:34	26° Q 11'02	
	13320 Aug 21 14:37	0° B			13321 Jul 26 22:41	0° P	
evening max el	13320 Aug 22 02:41	0° B 30'48	18°08'38	evening max el	13321 Aug 05 16:24	13° P 43'11	18°03'21
retrograde	13320 Aug 29 02:21	4° B 04'34		retrograde	13321 Aug 12 03:35	17° P 04'17	
evening set	13320 Aug 31 08:41	3° B 42'33		evening set	13321 Aug 14 18:09	16° P 30'43	
	13320 Sep 06 04:59	30° R P		inferior conj	13321 Aug 21 04:55	11° P 22'05	1°36'00
inferior conj	13320 Sep 07 11:23	28° P 52'58	0°25'31	minimum elong	13321 Aug 21 07:16	11° P 16'03	1°34'49
minimum elong	13320 Sep 07 12:13	28° P 51'06	0°25'05	min. Earth dist.	13321 Aug 24 03:44	8° P 21'31	0.62020 AU
desc. node	13320 Sep 08 20:41	27° P 37'47		desc. node	13321 Aug 26 18:14	6° P 01'19	
min. Earth dist.	13320 Sep 10 18:00	25° P 57'52	0.59728 AU	morning rise	13321 Aug 27 17:56	5° P 16'43	
morning rise	13320 Sep 14 12:27	23° P 10'17		direct	13321 Sep 07 10:15	2° P 54'55	
direct	13320 Sep 21 00:07	21° P 11'21		morning max el	13321 Sep 17 13:37	10° P 55'07	27°57'53
morning max el	13320 Oct 05 07:51	29° P 01'37	27°45'10		13321 Oct 02 13:22	0° B	
	13320 Oct 06 07:04	0° B			13321 Oct 19 16:11	0° P	
	13320 Oct 27 08:46	0° P		asc. node	13321 Oct 20 18:31	2° P 12'47	
asc. node	13320 Nov 02 21:50	12° P 21'54		morning set	13321 Oct 21 09:45	3° P 30'34	
morning set	13320 Nov 06 09:33	19° P 31'25		max. Earth dist.	13321 Oct 26 20:37	15° P 03'38	1.31719 AU
	13320 Nov 11 05:49	0° A		superior conj	13321 Oct 28 20:56	19° P 28'10	1°10'49
max. Earth dist.	13320 Nov 12 15:32	3° A 06'53	1.31247 AU	minimum elong	13321 Oct 28 18:40	19° P 15'45	1°11'12
superior conj	13320 Nov 13 11:18	4° A 57'01	1°25'41		13321 Nov 02 15:27	0° A	
minimum elong	13320 Nov 13 09:26	4° A 46'36	1°26'23	evening rise	13321 Nov 04 14:48	4° A 17'42	
evening rise	13320 Nov 20 04:11	19° A 45'15			13321 Nov 18 02:24	0° B	
	13320 Nov 25 02:37	0° B		desc. node	13321 Nov 22 14:43	6° B 41'22	
desc. node	13320 Dec 05 17:34	18° B 49'22		evening max el	13321 Nov 29 23:41	15° B 16'34	24°32'53
	13320 Dec 13 22:14	0° \approx		retrograde	13321 Dec 13 17:05	22° B 07'28	
evening max el	13320 Dec 18 10:11	4° \approx 47'04	26°02'09	evening set	13321 Dec 18 23:59	21° B 05'49	
retrograde	13321 Jan 01 08:38	11° \approx 50'39		min. Earth dist.	13321 Dec 24 11:24	18° B 16'43	0.56137 AU
evening set	13321 Jan 07 14:48	10° \approx 18'05		inferior conj	13321 Dec 26 20:36	16° B 47'13	-5°31'03
min. Earth dist.	13321 Jan 11 23:16	7° \approx 41'29	0.57965 AU	minimum elong	13321 Dec 27 03:33	16° B 36'19	5°28'57
inferior conj	13321 Jan 15 00:23	5° \approx 30'35	-4°26'00				

morning rise	13322 Jan 04 09:08	12°  44'14		inferior conj	13322 Dec 06 22:01	27°  16'02	-5°56'18
direct	13322 Jan 06 18:34	12°  28'47		minimum elong	13322 Dec 06 21:32	27°  16'43	5°55'16
morning max el	13322 Jan 16 15:56	17°  14'40	19°37'37	morning rise	13322 Dec 15 09:26	23°  27'26	
asc. node	13322 Jan 16 18:16	17°  20'20		direct	13322 Dec 18 11:23	23°  05'26	
	13322 Jan 25 23:22	0° 		morning max el	13322 Dec 29 21:58	28°  33'06	20°59'04
morning set	13322 Feb 03 01:09	15°  22'05			13322 Dec 31 08:24	0° 	
	13322 Feb 10 07:41	0° 		asc. node	13323 Jan 03 15:30	3°  56'09	
				morning set	13323 Jan 18 09:31	0° 	04'07
					13323 Jan 18 08:43	0° 	
superior conj	13322 Feb 11 00:06	1°  21'02	0°58'59				
minimum elong	13322 Feb 11 02:53	1°  34'41	0°59'10	superior conj	13323 Jan 25 18:10	15°  24'58	1°18'37
max. Earth dist.	13322 Feb 17 07:12	13°  21'59	1.37683 AU	minimum elong	13323 Jan 25 20:38	15°  37'42	1°19'07
desc. node	13322 Feb 18 15:06	15°  48'06		max. Earth dist.	13323 Jan 30 16:30	25°  19'44	1.35573 AU
evening rise	13322 Feb 21 00:26	20°  05'03			13323 Feb 02 02:36	0° 	
	13322 Feb 26 19:32	0° 			13323 Feb 03 15:48	2°  55'05	
	13322 Mar 19 04:15	0° 		evening rise	13323 Feb 03 15:48	2°  55'05	
evening max el	13322 Mar 28 11:31	10°  40'54	25°13'59	desc. node	13323 Feb 05 11:40	6°  17'04	
retrograde	13322 Apr 09 13:39	17°  41'21			13323 Feb 19 19:00	0° 	
asc. node	13322 Apr 14 14:56	15°  52'20		evening max el	13323 Mar 11 01:12	24°  30'07	26°20'38
evening set	13322 Apr 15 09:06	15°  16'18			13323 Mar 18 00:02	0° 	
min. Earth dist.	13322 Apr 19 18:20	10°  24'41	0.67951 AU	retrograde	13323 Mar 23 22:27	1°  49'09	
inferior conj	13322 Apr 21 00:42	8°  45'46	1°52'45		13323 Mar 29 06:35	30° 	
minimum elong	13322 Apr 20 22:36	8°  52'39	1°51'32	evening set	13323 Mar 30 04:51	29°  17'51	
morning rise	13322 Apr 26 12:26	2°  51'40		asc. node	13323 Apr 01 12:22	27°  05'38	
direct	13322 Apr 30 02:16	1°  38'08		min. Earth dist.	13323 Apr 03 07:52	25°  01'17	0.66821 AU
morning max el	13322 May 07 03:03	5°  29'20	19°17'37	inferior conj	13323 Apr 05 02:40	22°  50'43	1°06'42
desc. node	13322 May 17 17:17	19°  03'03		minimum elong	13323 Apr 05 01:06	22°  55'30	1°05'50
greatest brilliancy	13322 May 19 21:59	22°  16'40	-0.7m	morning rise	13323 Apr 10 22:14	17°  07'19	
	13322 May 25 01:08	0° 		direct	13323 Apr 14 01:17	16°  12'11	
morning set	13322 May 31 12:32	9°  55'08		morning max el	13323 Apr 20 13:45	19°  40'38	18°30'25
	13322 Jun 13 10:32	0° 			13323 Apr 28 16:36	0° 	
max. Earth dist.	13322 Jun 13 10:16	29°  58'59	1.45249 AU	desc. node	13323 May 04 13:59	8°  57'44	
				morning set	13323 May 11 07:51	19°  33'29	
					13323 May 17 23:14	0° 	
superior conj	13322 Jun 16 21:28	5°  27'30	-2°13'14				
minimum elong	13322 Jun 16 22:52	5°  33'03	2°14'16	superior conj	13323 May 27 06:25	14°  32'30	-2°06'33
evening rise	13322 Jul 01 07:40	28°  49'47		minimum elong	13323 May 27 00:14	14°  08'19	2°07'13
	13322 Jul 02 00:41	0° 		max. Earth dist.	13323 May 27 05:34	14°  29'11	1.45813 AU
asc. node	13322 Jul 11 13:21	15°  03'21			13323 Jun 06 03:23	0° 	
evening max el	13322 Jul 20 06:38	27°  14'22	18°16'25	evening rise	13323 Jun 12 00:08	9°  24'51	
	13322 Jul 24 00:14	0° 		greatest brilliancy	13323 Jun 20 16:16	22°  55'07	-0.8m
retrograde	13322 Jul 26 15:19	0°  36'57			13323 Jun 25 07:32	0° 	
	13322 Jul 29 05:45	30° 		asc. node	13323 Jun 28 10:14	4°  28'04	
evening set	13322 Jul 29 14:23	29°  49'13		evening max el	13323 Jul 03 18:24	10°  56'13	18°47'10
inferior conj	13322 Aug 04 12:50	24°  23'24	2°24'46	retrograde	13323 Jul 10 09:41	14°  33'54	
minimum elong	13322 Aug 04 15:16	24°  16'26	2°23'29	evening set	13323 Jul 13 17:29	13°  30'23	
min. Earth dist.	13322 Aug 06 22:54	21°  37'38	0.64167 AU	inferior conj	13323 Jul 19 07:19	7°  49'14	2°55'01
morning rise	13322 Aug 10 14:39	18°  05'07		minimum elong	13323 Jul 19 09:03	7°  43'50	2°53'53
desc. node	13322 Aug 13 15:44	16°  13'34		min. Earth dist.	13323 Jul 21 02:56	5°  33'14	0.65990 AU
direct	13322 Aug 17 05:17	15°  29'08		morning rise	13323 Jul 24 23:48	1°  25'37	
morning max el	13322 Aug 30 23:20	23°  28'42	27°33'48		13323 Jul 26 23:12	30° 	
	13322 Sep 05 19:02	0° 			13323 Jul 31 07:51	28°  45'12	
	13322 Sep 25 21:24	0° 		direct	13323 Jul 31 13:09	28°  45'23	
morning set	13322 Oct 05 01:46	17°  04'26		desc. node	13323 Aug 05 02:11	0° 	
asc. node	13322 Oct 07 15:09	22°  13'09			13323 Aug 13 10:33	6°  31'40	26°39'30
max. Earth dist.	13322 Oct 09 18:57	26°  41'08	1.32728 AU	morning max el	13323 Aug 31 13:25	0° 	
	13322 Oct 11 08:40	0° 		morning set	13323 Sep 18 06:35	0° 	05'59
					13323 Sep 18 05:20	0° 	
superior conj	13322 Oct 13 02:42	3°  44'48	0°50'21	max. Earth dist.	13323 Sep 22 07:52	7°  58'10	1.34258 AU
minimum elong	13322 Oct 13 00:36	3°  33'27	0°50'28	asc. node	13323 Sep 24 11:44	12°  18'50	
evening rise	13322 Oct 20 01:57	18°  49'33					
	13322 Oct 25 11:57	0° 		superior conj	13323 Sep 27 02:19	17°  40'51	0°24'33
desc. node	13322 Nov 09 11:59	23°  20'25		minimum elong	13323 Sep 27 01:02	17°  34'11	0°24'30
evening max el	13322 Nov 11 09:44	25°  18'52	22°51'00		13323 Oct 02 22:33	0° 	
	13322 Nov 17 14:57	0° 		evening rise	13323 Oct 04 11:43	3°  15'46	
retrograde	13322 Nov 24 12:19	1°  34'21			13323 Oct 19 08:37	0° 	
evening set	13322 Nov 28 11:02	1°  31'52		evening max el	13323 Oct 24 01:39	5°  30'59	21°14'16
	13322 Dec 01 19:26	30° 		desc. node	13323 Oct 27 09:19	8°  21'19	
min. Earth dist.	13322 Dec 05 18:29	27°  55'13	0.54905 AU				

retrograde	13323 Nov 04 23:45	11°♊26'27		13324 Sep 24 02:30	0°♍	
evening set	13323 Nov 07 15:25	11°♊10'03	evening max el	13324 Oct 05 06:47	16°♍22'58	19°54'46
inferior conj	13323 Nov 16 13:43	7°♊16'23 -5°23'16	desc. node	13324 Oct 13 06:45	21°♍16'07	
minimum elong	13323 Nov 16 05:16	7°♊28'18 5°20'49	retrograde	13324 Oct 15 14:09	21°♍31'06	
min. Earth dist.	13323 Nov 17 00:30	7°♊01'12 0.54510 AU	evening set	13324 Oct 17 12:58	21°♍20'54	
morning rise	13323 Nov 24 19:45	3°♊26'13	inferior conj	13324 Oct 26 10:03	17°♍20'40	-3°57'44
direct	13323 Nov 28 19:01	2°♊52'22	minimum elong	13324 Oct 26 00:25	17°♍35'22	3°53'58
morning max el	13323 Dec 11 14:51	9°♊02'23 22°39'55	min. Earth dist.	13324 Oct 28 08:53	16°♍09'12	0.55058 AU
asc. node	13323 Dec 21 12:36	21°♊34'08	morning rise	13324 Nov 03 10:28	13°♍07'56	
	13323 Dec 26 10:44	0°♊	direct	13324 Nov 08 07:13	12°♍16'05	
morning set	13324 Jan 02 20:37	14°♊50'35	morning max el	13324 Nov 22 01:03	19°♍04'01	24°28'47
				13324 Dec 01 03:50	0°♊	
superior conj	13324 Jan 09 20:19	29°♊49'58 1°31'19	asc. node	13324 Dec 07 09:37	9°♊58'48	
minimum elong	13324 Jan 09 21:56	29°♊58'37 1°32'08	morning set	13324 Dec 17 08:32	29°♊35'17	
	13324 Jan 09 22:12	0°♊		13324 Dec 17 13:08	0°♊	
max. Earth dist.	13324 Jan 13 08:23	7°♊11'51 1.33787 AU				
evening rise	13324 Jan 17 21:22	16°♊20'18	superior conj	13324 Dec 24 03:47	14°♊27'17	1°37'30
desc. node	13324 Jan 23 08:19	26°♊35'59	minimum elong	13324 Dec 24 04:20	14°♊30'15	1°38'29
	13324 Jan 25 06:09	0°♋	max. Earth dist.	13324 Dec 26 07:48	19°♊10'10	1.32435 AU
	13324 Feb 14 06:38	0°♋		13324 Dec 31 11:26	0°♊	
evening max el	13324 Feb 21 14:41	8°♋06'39 27°09'05	evening rise	13324 Dec 31 13:46	0°♊11'56	
retrograde	13324 Mar 06 01:21	15°♋33'40	desc. node	13325 Jan 09 05:04	16°♊39'05	
evening set	13324 Mar 12 16:47	13°♋01'36		13325 Jan 17 06:49	0°♋	
min. Earth dist.	13324 Mar 16 14:44	9°♋18'12 0.65298 AU	evening max el	13325 Feb 03 02:44	21°♋19'31	27°32'24
asc. node	13324 Mar 18 09:50	7°♋17'44	retrograde	13325 Feb 16 21:38	28°♋45'36	
inferior conj	13324 Mar 18 21:44	6°♋44'11 0°09'32	evening set	13325 Feb 23 18:34	26°♋20'03	
minimum elong	13324 Mar 18 21:28	6°♋44'57 0°09'25	min. Earth dist.	13325 Feb 27 13:11	23°♋06'05	0.63436 AU
transit middle	13324 Mar 18 21:28	6°♋44'57 0°09'25	inferior conj	13325 Mar 02 07:10	20°♋19'36	-0°58'47
transit begin	13324 Mar 18 19:01	6°♋51'48	minimum elong	13325 Mar 02 09:04	20°♋14'47	0°57'43
transit end	13324 Mar 18 23:54	6°♋38'07	asc. node	13325 Mar 05 07:17	17°♋28'11	
morning rise	13324 Mar 25 03:45	1°♋13'30	morning rise	13325 Mar 09 01:58	15°♋04'03	
direct	13324 Mar 27 21:10	0°♋33'51	direct	13325 Mar 11 11:17	14°♋36'20	
morning max el	13324 Apr 03 05:23	3°♋52'12 17°59'59	morning max el	13325 Mar 17 23:06	17°♋55'53	17°46'51
desc. node	13324 Apr 20 10:35	29°♋09'51		13325 Mar 26 18:40	0°♋	
	13324 Apr 20 22:49	0°♋	morning set	13325 Apr 03 08:48	12°♋50'21	
morning set	13324 Apr 21 06:59	0°♋33'30	desc. node	13325 Apr 07 07:09	19°♋34'20	
				13325 Apr 13 12:03	0°♋	
superior conj	13324 May 05 17:35	23°♋50'10 -1°40'55				
minimum elong	13324 May 05 08:26	23°♋14'00 1°40'46	superior conj	13325 Apr 15 22:35	4°♋00'52	-1°03'36
max. Earth dist.	13324 May 09 01:40	29°♋05'04 1.45624 AU	minimum elong	13325 Apr 15 16:09	3°♋34'31	1°03'13
	13324 May 09 15:42	0°♌	max. Earth dist.	13325 Apr 21 19:57	13°♋30'37	1.44717 AU
evening rise	13324 May 21 19:36	18°♌51'27	evening rise	13325 May 01 06:40	28°♋15'02	
	13324 May 29 02:11	0°♌		13325 May 02 10:05	0°♌	
greatest brilliancy	13324 Jun 04 08:30	9°♌24'22 -0.7m		13325 May 22 23:31	0°♌	
asc. node	13324 Jun 14 07:12	22°♌49'25	evening max el	13325 May 30 02:54	8°♌31'15	20°36'38
evening max el	13324 Jun 16 01:30	24°♌42'46 19°34'33	asc. node	13325 Jun 01 04:16	10°♌25'13	
retrograde	13324 Jun 23 07:32	28°♌47'55	retrograde	13325 Jun 07 06:29	13°♌13'42	
evening set	13324 Jun 27 00:34	27°♌27'50	evening set	13325 Jun 11 09:29	11°♌36'59	
inferior conj	13324 Jul 02 09:09	21°♌32'59 3°10'00	inferior conj	13325 Jun 16 15:43	5°♌29'58	3°12'11
minimum elong	13324 Jul 02 09:53	21°♌30'34 3°08'59	minimum elong	13325 Jun 16 15:25	5°♌31'00	3°11'10
min. Earth dist.	13324 Jul 03 14:17	19°♌56'15 0.67403 AU	min. Earth dist.	13325 Jun 17 06:58	4°♌37'23	0.68362 AU
morning rise	13324 Jul 07 18:45	15°♌09'21		13325 Jun 21 00:16	30°♌	
direct	13324 Jul 13 16:55	12°♌33'34	morning rise	13325 Jun 21 21:03	29°♌09'51	
desc. node	13324 Jul 17 10:28	13°♌24'52	direct	13325 Jun 27 07:27	26°♌46'09	
morning max el	13324 Jul 25 21:22	19°♌51'51 25°23'44	desc. node	13325 Jul 04 07:42	29°♌45'58	
	13324 Aug 03 13:17	0°♍		13325 Jul 04 14:53	0°♌	
	13324 Aug 23 16:21	0°♍	morning max el	13325 Jul 08 07:32	3°♌21'18	23°56'23
morning set	13324 Aug 30 20:20	12°♍25'15		13325 Jul 28 16:40	0°♍	
max. Earth dist.	13324 Sep 03 11:02	19°♍03'39 1.36246 AU	morning set	13325 Aug 12 14:31	23°♍51'27	
	13324 Sep 09 03:04	0°♍		13325 Aug 16 03:21	0°♍	
			max. Earth dist.	13325 Aug 16 08:43	0°♍23'43	1.38533 AU
superior conj	13324 Sep 09 16:52	1°♍08'33 -0°06'02				
minimum elong	13324 Sep 09 17:14	1°♍10'25 0°06'04	superior conj	13325 Aug 23 18:54	14°♍00'06	-0°40'01
behind sun begin	13324 Sep 09 11:20	0°♍40'59	minimum elong	13325 Aug 23 21:44	14°♍13'28	0°39'54
behind sun end	13324 Sep 09 23:09	1°♍39'55	asc. node	13325 Aug 28 04:51	22°♍29'54	
asc. node	13324 Sep 10 08:16	2°♍25'29		13325 Sep 01 00:33	0°♍	
evening rise	13324 Sep 17 17:54	17°♍29'49	evening rise	13325 Sep 01 17:56	1°♍25'25	




































































































































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	13325 Sep 20 06:35	0°♍			13326 Aug 24 16:30	0°♌	
retrograde	13325 Sep 26 18:47	2°♍26'13		evening max el	13326 Sep 01 07:23	10°♌28'42	18°20'22
evening set	13325 Sep 28 15:40	2°♍14'55		retrograde	13326 Sep 08 18:46	14°♌15'49	
desc. node	13325 Sep 30 04:14	1°♍50'01		evening set	13326 Sep 10 21:00	13°♌58'43	
	13325 Oct 03 22:06	30°♋♌		desc. node	13326 Sep 17 01:45	10°♌26'12	
inferior conj	13325 Oct 06 23:15	27°♌58'01	-2°08'51	inferior conj	13326 Sep 18 10:07	9°♌20'48	-0°25'23
minimum elong	13325 Oct 06 17:47	28°♌07'36	2°06'19	minimum elong	13326 Sep 18 09:11	9°♌22'44	0°24'57
min. Earth dist.	13325 Oct 09 21:50	25°♌54'38	0.56461 AU	min. Earth dist.	13326 Sep 21 17:20	6°♌39'07	0.58447 AU
morning rise	13325 Oct 14 16:48	23°♌09'55		morning rise	13326 Sep 25 17:54	3°♌56'20	
direct	13325 Oct 20 08:44	21°♌53'51		direct	13326 Oct 02 00:11	2°♌13'03	
morning max el	13325 Nov 03 12:58	29°♌11'25	26°07'50	morning max el	13326 Oct 16 07:48	9°♌52'35	27°20'09
	13325 Nov 04 08:48	0°♍			13326 Oct 31 19:07	0°♍	
asc. node	13325 Nov 24 06:31	28°♍58'29		asc. node	13326 Nov 11 03:21	18°♍23'59	
	13325 Nov 24 19:32	0°♎		morning set	13326 Nov 16 03:52	28°♍41'00	
morning set	13325 Dec 01 19:30	14°♎13'30			13326 Nov 16 18:40	0°♎	
superior conj	13325 Dec 08 14:20	29°♎10'18	1°37'32	superior conj	13326 Nov 23 02:01	13°♎53'21	1°31'40
minimum elong	13325 Dec 08 13:48	29°♎07'17	1°38'32	minimum elong	13326 Nov 23 00:33	13°♎45'09	1°32'31
	13325 Dec 08 23:17	0°♏		max. Earth dist.	13326 Nov 22 21:47	13°♎29'43	1.31220 AU
max. Earth dist.	13325 Dec 09 13:16	1°♏17'38	1.31575 AU	evening rise	13326 Nov 29 20:14	28°♎46'54	
evening rise	13325 Dec 15 14:12	14°♏22'49			13326 Nov 30 09:58	0°♏	
	13325 Dec 23 12:27	0°♐		desc. node	13326 Dec 13 22:54	25°♏28'39	
desc. node	13325 Dec 27 01:56	6°♐19'33			13326 Dec 16 20:17	0°♐	
	13326 Jan 12 16:00	0°♑		evening max el	13326 Dec 29 13:40	15°♐46'03	26°41'48
evening max el	13326 Jan 16 11:19	3°♑56'28	27°24'25	retrograde	13327 Jan 12 12:35	22°♐54'29	
retrograde	13326 Jan 30 09:55	11°♑15'01		evening set	13327 Jan 19 03:09	21°♐06'06	
evening set	13326 Feb 06 07:14	9°♑04'10		min. Earth dist.	13327 Jan 23 03:36	18°♐28'34	0.59173 AU
min. Earth dist.	13326 Feb 10 01:42	6°♑13'25	0.61343 AU	inferior conj	13327 Jan 26 07:44	16°♐00'45	-3°39'50
inferior conj	13326 Feb 13 03:41	3°♑28'20	-2°16'50	minimum elong	13327 Jan 26 15:29	15°♐45'38	3°36'26
minimum elong	13326 Feb 13 08:31	3°♑17'31	2°14'23	morning rise	13327 Feb 03 06:50	11°♐24'01	
	13326 Feb 17 11:18	30°♋♐		direct	13327 Feb 05 07:53	11°♐08'58	
asc. node	13326 Feb 20 04:44	28°♐37'10		asc. node	13327 Feb 07 02:09	11°♐20'38	
morning rise	13326 Feb 20 12:46	28°♐30'42		morning max el	13327 Feb 13 03:32	15°♐01'17	18°15'52
direct	13326 Feb 22 16:13	28°♐11'08			13327 Feb 23 10:53	0°♑	
	13326 Feb 27 15:45	0°♑		morning set	13327 Feb 28 20:26	10°♑00'35	
morning max el	13326 Mar 01 15:41	1°♑42'12	17°51'42	superior conj	13327 Mar 10 07:28	27°♑39'37	0°13'33
morning set	13326 Mar 17 07:15	26°♑05'16		minimum elong	13327 Mar 10 08:29	27°♑44'13	0°13'32
	13326 Mar 19 11:19	0°♒		behind sun begin	13327 Mar 10 04:31	27°♑26'15	
desc. node	13326 Mar 25 03:40	10°♒06'31		behind sun end	13327 Mar 10 12:27	28°♑02'10	
					13327 Mar 11 14:37	0°♒	
superior conj	13326 Mar 28 03:38	15°♒18'39	-0°23'26	desc. node	13327 Mar 12 00:11	0°♒42'53	
minimum elong	13326 Mar 28 01:29	15°♒09'25	0°23'16	max. Earth dist.	13327 Mar 17 21:44	10°♒59'21	1.41208 AU
max. Earth dist.	13326 Apr 04 10:55	27°♒32'29	1.43192 AU	evening rise	13327 Mar 22 14:09	18°♒46'59	
	13326 Apr 05 23:14	0°♓			13327 Mar 29 15:59	0°♓	
evening rise	13326 Apr 11 01:18	8°♓05'35			13327 Apr 20 01:39	0°♓	
	13326 Apr 25 14:46	0°♔		evening max el	13327 Apr 25 14:43	6°♔11'05	23°09'53
evening max el	13326 May 12 22:50	22°♔20'23	21°50'03	asc. node	13327 May 05 22:44	12°♔18'51	
asc. node	13326 May 19 01:28	27°♔00'29		retrograde	13327 May 06 00:29	12°♔18'52	
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evening set	13326 May 26 18:25	25°♔52'43		inferior conj	13327 May 16 10:19	3°♔45'48	2°43'51
inferior conj	13326 Jun 01 00:46	19°♔35'19	3°03'11	minimum elong	13327 May 16 08:28	3°♔52'13	2°42'36
minimum elong	13326 May 31 23:34	19°♔39'30	3°02'04	min. Earth dist.	13327 May 15 23:30	4°♔23'12	0.68867 AU
min. Earth dist.	13326 Jun 01 02:45	19°♔28'22	0.68850 AU		13327 May 19 07:07	30°♋♓	
morning rise	13326 Jun 06 04:31	13°♔20'53		morning rise	13327 May 21 15:07	27°♓38'30	
direct	13326 Jun 11 02:12	11°♔14'41		direct	13327 May 25 23:59	25°♓52'40	
morning max el	13326 Jun 20 19:06	16°♔57'48	22°27'00		13327 Jun 02 16:56	0°♔	
desc. node	13326 Jun 21 04:50	17°♔22'29		morning max el	13327 Jun 03 11:27	0°♔44'47	21°03'38
	13326 Jul 01 12:59	0°♕		desc. node	13327 Jun 08 01:51	5°♔54'32	
	13326 Jul 21 17:52	0°♎			13327 Jun 25 06:34	0°♕	
morning set	13326 Jul 24 08:42	4°♎13'02		morning set	13327 Jul 04 02:14	13°♕30'23	
max. Earth dist.	13326 Jul 29 08:05	12°♎27'14	1.40871 AU	max. Earth dist.	13327 Jul 11 13:43	25°♕25'36	1.42973 AU
					13327 Jul 14 08:40	0°♎	
superior conj	13326 Aug 06 04:10	26°♎05'00	-1°14'54	superior conj	13327 Jul 18 16:13	7°♎13'31	-1°46'21
minimum elong	13326 Aug 06 09:45	26°♎30'01	1°14'44	minimum elong	13327 Jul 18 23:23	7°♎43'59	1°46'30
	13326 Aug 08 08:12	0°♏					
asc. node	13326 Aug 15 01:27	12°♏27'52					

evening rise	13327 Jul 30 09:12	27° Ω 43'26		evening rise	13328 Jul 11 15:16	9° Ω 43'45	
	13327 Jul 31 15:45	0° \mathbb{M}		asc. node	13328 Jul 18 18:51	21° Ω 48'03	
asc. node	13327 Aug 01 22:07	2° \mathbb{M} 15'25			13328 Jul 23 23:44	0° \mathbb{M}	
evening max el	13327 Aug 15 19:11	23° \mathbb{M} 25'56	18°04'03	evening max el	13328 Jul 29 09:27	6° \mathbb{M} 47'00	18°06'40
retrograde	13327 Aug 22 12:14	26° \mathbb{M} 52'40		retrograde	13328 Aug 04 18:35	10° \mathbb{M} 07'28	
evening set	13327 Aug 24 22:02	26° \mathbb{M} 26'03		evening set	13328 Aug 07 12:38	9° \mathbb{M} 28'15	
inferior conj	13327 Aug 31 17:31	21° \mathbb{M} 27'44	0°58'15	inferior conj	13328 Aug 13 17:41	4° \mathbb{M} 11'56	1°59'09
minimum elong	13327 Aug 31 19:12	21° \mathbb{M} 23'42	0°57'23	minimum elong	13328 Aug 13 20:11	4° \mathbb{M} 05'09	1°57'53
desc. node	13327 Sep 03 23:18	18° \mathbb{M} 23'51		min. Earth dist.	13328 Aug 16 11:24	1° \mathbb{M} 15'23	0.62955 AU
min. Earth dist.	13327 Sep 03 21:29	18° \mathbb{M} 27'57	0.60704 AU		13328 Aug 17 17:34	30° \mathbb{R} Ω	
morning rise	13327 Sep 07 13:27	15° \mathbb{M} 34'11		morning rise	13328 Aug 20 01:42	27° Ω 59'40	
direct	13327 Sep 14 03:47	13° \mathbb{M} 25'03		desc. node	13328 Aug 20 20:49	27° Ω 26'05	
morning max el	13327 Sep 28 10:15	21° \mathbb{M} 20'04	27°55'31	direct	13328 Aug 26 17:47	25° Ω 30'45	
	13327 Oct 05 23:34	0° Ω			13328 Sep 05 20:22	0° \mathbb{M}	
	13327 Oct 24 20:08	0° \mathbb{M}		morning max el	13328 Sep 09 18:17	3° \mathbb{M} 32'47	27°51'58
asc. node	13327 Oct 29 00:05	8° \mathbb{M} 07'19			13328 Sep 29 12:31	0° Ω	
morning set	13327 Oct 31 07:38	12° \mathbb{M} 52'04		morning set	13328 Oct 14 04:42	26° Ω 41'30	
max. Earth dist.	13327 Nov 06 05:23	25° \mathbb{M} 35'33	1.31384 AU	asc. node	13328 Oct 14 20:44	28° Ω 02'56	
					13328 Oct 15 19:33	0° \mathbb{M}	
superior conj	13327 Nov 07 12:54	28° \mathbb{M} 30'09	1°20'04	max. Earth dist.	13328 Oct 19 08:06	7° \mathbb{M} 25'19	1.32078 AU
minimum elong	13327 Nov 07 10:48	28° \mathbb{M} 18'33	1°20'39				
	13327 Nov 08 05:03	0° \mathbb{M}		superior conj	13328 Oct 21 21:07	12° \mathbb{M} 55'40	1°02'49
evening rise	13327 Nov 14 05:42	13° \mathbb{M} 17'37		minimum elong	13328 Oct 21 18:51	12° \mathbb{M} 43'17	1°03'05
	13327 Nov 22 12:13	0° \mathbb{M}		evening rise	13328 Oct 28 16:45	27° \mathbb{M} 50'13	
desc. node	13327 Nov 30 19:59	13° \mathbb{M} 53'30			13328 Oct 29 16:59	0° \mathbb{M}	
evening max el	13327 Dec 11 07:27	26° \mathbb{M} 41'45	25°26'47		13328 Nov 15 17:14	0° \mathbb{M}	
	13327 Dec 15 06:28	0° \approx		desc. node	13328 Nov 16 17:10	1° \mathbb{M} 17'20	
retrograde	13327 Dec 25 04:04	3° \approx 40'12		evening max el	13328 Nov 21 18:17	6° \mathbb{M} 54'52	23°49'59
evening set	13327 Dec 31 02:01	2° \approx 20'18		retrograde	13328 Dec 05 07:08	13° \mathbb{M} 39'25	
	13328 Jan 04 07:57	30° \mathbb{R} \mathbb{M}		evening set	13328 Dec 10 01:05	12° \mathbb{M} 50'15	
min. Earth dist.	13328 Jan 04 19:41	29° \mathbb{M} 41'00	0.57139 AU	min. Earth dist.	13328 Dec 16 05:06	9° \mathbb{M} 50'07	0.55523 AU
inferior conj	13328 Jan 07 15:55	27° \mathbb{M} 46'08	-4°56'50	inferior conj	13328 Dec 18 03:27	8° \mathbb{M} 40'54	-5°48'05
minimum elong	13328 Jan 08 00:33	27° \mathbb{M} 31'34	4°53'50	minimum elong	13328 Dec 18 07:51	8° \mathbb{M} 34'19	5°46'38
morning rise	13328 Jan 16 01:36	23° \mathbb{M} 31'50		morning rise	13328 Dec 26 16:29	4° \mathbb{M} 45'37	
direct	13328 Jan 18 05:43	23° \mathbb{M} 17'44		direct	13328 Dec 29 07:44	4° \mathbb{M} 28'13	
asc. node	13328 Jan 24 23:31	25° \mathbb{M} 43'53		morning max el	13329 Jan 08 21:06	9° \mathbb{M} 31'21	20°09'30
morning max el	13328 Jan 27 06:37	27° \mathbb{M} 41'04	19°01'15	asc. node	13329 Jan 10 20:46	11° \mathbb{M} 36'00	
	13328 Jan 29 10:04	0° \approx			13329 Jan 22 13:33	0° \approx	
morning set	13328 Feb 12 19:37	24° \approx 21'12		morning set	13329 Jan 27 01:22	8° \approx 57'22	
	13328 Feb 15 16:10	0° \mathbb{M}					
superior conj	13328 Feb 21 05:37	10° \mathbb{M} 50'18	0°44'24	superior conj	13329 Feb 03 17:33	24° \approx 38'03	1°08'10
minimum elong	13328 Feb 21 08:08	11° \mathbb{M} 02'21	0°44'27	minimum elong	13329 Feb 03 20:17	24° \approx 51'47	1°08'29
desc. node	13328 Feb 26 20:42	21° \mathbb{M} 19'08			13329 Feb 06 10:31	0° \mathbb{M}	
max. Earth dist.	13328 Feb 28 04:37	23° \mathbb{M} 42'34	1.38976 AU	max. Earth dist.	13329 Feb 09 11:14	5° \mathbb{M} 49'55	1.36755 AU
	13328 Mar 02 18:48	0° \mathbb{M}		desc. node	13329 Feb 12 17:15	11° \mathbb{M} 51'52	
evening rise	13328 Mar 03 00:07	0° \mathbb{M} 22'49		evening rise	13329 Feb 13 05:42	12° \mathbb{M} 48'22	
	13328 Mar 21 23:54	0° \mathbb{M}			13329 Feb 23 08:09	0° \mathbb{M}	
evening max el	13328 Apr 07 04:27	20° \mathbb{M} 03'02	24°30'12		13329 Mar 17 00:50	0° \mathbb{M}	
retrograde	13328 Apr 18 16:59	26° \mathbb{M} 47'39		evening max el	13329 Mar 20 17:50	3° \mathbb{M} 54'28	25°44'03
asc. node	13328 Apr 21 20:06	26° \mathbb{M} 04'16		retrograde	13329 Apr 02 05:02	11° \mathbb{M} 05'04	
evening set	13328 Apr 24 05:55	24° \mathbb{M} 27'46		evening set	13329 Apr 08 05:15	8° \mathbb{M} 36'35	
min. Earth dist.	13328 Apr 28 19:09	19° \mathbb{M} 15'51	0.68414 AU	asc. node	13329 Apr 08 17:31	8° \mathbb{M} 09'49	
inferior conj	13328 Apr 29 18:30	17° \mathbb{M} 57'39	2°14'23	min. Earth dist.	13329 Apr 12 11:36	4° \mathbb{M} 00'02	0.67518 AU
minimum elong	13328 Apr 29 16:21	18° \mathbb{M} 04'53	2°13'05	inferior conj	13329 Apr 13 23:20	2° \mathbb{M} 06'30	1°34'31
morning rise	13328 May 05 02:58	11° \mathbb{M} 58'32		minimum elong	13329 Apr 13 21:22	2° \mathbb{M} 12'44	1°33'25
direct	13328 May 08 23:25	10° \mathbb{M} 33'41			13329 Apr 15 16:06	30° \mathbb{R} \mathbb{M}	
morning max el	13328 May 16 10:55	14° \mathbb{M} 43'43	19°52'04	morning rise	13329 Apr 19 14:05	26° \mathbb{M} 16'47	
desc. node	13328 May 24 22:44	25° \mathbb{M} 07'00		direct	13329 Apr 22 23:05	25° \mathbb{M} 11'35	
	13328 May 28 09:36	0° \mathbb{M}		morning max el	13329 Apr 29 17:49	28° \mathbb{M} 51'51	18°55'27
morning set	13328 Jun 12 04:28	22° \mathbb{M} 11'22			13329 Apr 30 20:21	0° \mathbb{M}	
	13328 Jun 17 05:39	0° \mathbb{M}		desc. node	13329 May 11 19:30	14° \mathbb{M} 48'37	
max. Earth dist.	13328 Jun 23 01:50	9° \mathbb{M} 10'44	1.44593 AU	greatest brilliancy	13329 May 13 05:13	16° \mathbb{M} 55'50	-0.8m
					13329 May 21 17:03	0° \mathbb{M}	
superior conj	13328 Jun 28 04:29	17° \mathbb{M} 21'55	-2°08'00	morning set	13329 May 22 11:40	1° \mathbb{M} 12'08	
minimum elong	13328 Jun 28 09:29	17° \mathbb{M} 42'08	2°08'48	max. Earth dist.	13329 Jun 05 18:44	23° \mathbb{M} 27'23	1.45573 AU
	13328 Jul 05 20:52	0° Ω					
				superior conj	13329 Jun 07 20:11	26° \mathbb{M} 41'12	-2°12'56

minimum elong	13329 Jun 07 18:14	26° Π 33'34	2°13'56	evening rise	13330 Jun 03 04:29	0° \mathfrak{G} 44'51	
	13329 Jun 09 22:44	0° \mathfrak{G}		greatest brilliancy	13330 Jun 14 03:03	17° \mathfrak{G} 41'31	-0.8m
evening rise	13329 Jun 22 21:56	20° \mathfrak{G} 43'27		asc. node	13330 Jun 22 12:36	29° \mathfrak{G} 41'55	
	13329 Jun 28 15:26	0° Ω			13330 Jun 22 18:17	0° Ω	
asc. node	13329 Jul 05 15:40	10° Ω 59'21		evening max el	13330 Jun 26 09:00	4° Ω 08'10	19°05'25
evening max el	13329 Jul 12 22:55	20° Ω 23'15	18°27'25	retrograde	13330 Jul 03 05:33	7° Ω 55'47	
retrograde	13329 Jul 19 09:30	23° Ω 50'49		evening set	13330 Jul 06 17:14	6° Ω 45'18	
evening set	13329 Jul 22 12:08	22° Ω 56'43		inferior conj	13330 Jul 12 04:30	0° Ω 58'24	3°03'02
inferior conj	13329 Jul 28 06:31	17° Ω 24'23	2°39'38	minimum elong	13330 Jul 12 05:49	0° Ω 54'09	3°01'57
minimum elong	13329 Jul 28 08:42	17° Ω 17'50	2°38'24		13330 Jul 12 22:37	30° \mathfrak{R} \mathfrak{G}	
min. Earth dist.	13329 Jul 30 10:37	14° Ω 49'26	0.64986 AU	min. Earth dist.	13330 Jul 13 17:59	28° \mathfrak{G} 58'06	0.66654 AU
morning rise	13329 Aug 03 04:03	11° Ω 02'51		morning rise	13330 Jul 17 17:45	24° \mathfrak{G} 34'24	
desc. node	13329 Aug 07 18:16	8° Ω 36'44		direct	13330 Jul 23 22:04	21° \mathfrak{G} 54'40	
direct	13329 Aug 09 16:26	8° Ω 23'28		desc. node	13330 Jul 25 15:38	22° \mathfrak{G} 05'42	
morning max el	13329 Aug 23 04:54	16° Ω 20'04	27°13'51	morning max el	13330 Aug 05 15:50	29° \mathfrak{G} 30'39	26°09'09
	13329 Sep 03 12:15	0° \mathfrak{M}			13330 Aug 06 03:18	0° Ω	
	13329 Sep 22 08:03	0° $\underline{\mathfrak{A}}$			13330 Aug 28 09:00	0° \mathfrak{M}	
morning set	13329 Sep 27 16:18	10° $\underline{\mathfrak{A}}$ 02'11		morning set	13330 Sep 10 15:10	22° \mathfrak{M} 46'23	
asc. node	13329 Oct 01 17:20	18° $\underline{\mathfrak{A}}$ 05'44			13330 Sep 14 10:34	0° $\underline{\mathfrak{A}}$	
max. Earth dist.	13329 Oct 02 02:19	18° $\underline{\mathfrak{A}}$ 51'42	1.33313 AU	max. Earth dist.	13330 Sep 14 10:32	29° \mathfrak{M} 59'49	1.35059 AU
				asc. node	13330 Sep 18 13:54	8° $\underline{\mathfrak{A}}$ 12'05	
superior conj	13329 Oct 06 00:33	27° $\underline{\mathfrak{A}}$ 03'48	0°40'03				
minimum elong	13329 Oct 05 22:41	26° $\underline{\mathfrak{A}}$ 53'59	0°40'03	superior conj	13330 Sep 19 20:41	10° $\underline{\mathfrak{A}}$ 48'34	0°12'07
	13329 Oct 07 09:36	0° \mathfrak{M}		minimum elong	13330 Sep 19 20:00	10° $\underline{\mathfrak{A}}$ 45'05	0°12'03
evening rise	13329 Oct 13 03:29	12° \mathfrak{M} 19'27		behind sun begin	13330 Sep 19 15:59	10° $\underline{\mathfrak{A}}$ 24'33	
	13329 Oct 22 01:46	0° \mathfrak{A}		behind sun end	13330 Sep 20 00:01	11° $\underline{\mathfrak{A}}$ 05'39	
evening max el	13329 Nov 03 05:37	16° \mathfrak{A} 56'15	22°08'22	evening rise	13330 Sep 27 12:00	26° $\underline{\mathfrak{A}}$ 40'46	
desc. node	13329 Nov 03 14:28	17° \mathfrak{A} 17'35			13330 Sep 29 02:38	0° \mathfrak{M}	
retrograde	13329 Nov 15 22:12	23° \mathfrak{A} 13'48		evening max el	13330 Oct 16 02:46	27° \mathfrak{M} 22'48	20°37'54
evening set	13329 Nov 19 06:18	22° \mathfrak{A} 49'08			13330 Oct 19 03:43	0° \mathfrak{A}	
inferior conj	13329 Nov 27 23:08	18° \mathfrak{A} 53'52	-5°49'48	desc. node	13330 Oct 21 11:51	1° \mathfrak{A} 27'38	
minimum elong	13329 Nov 27 18:47	18° \mathfrak{A} 59'59	5°48'27	retrograde	13330 Oct 27 08:42	2° \mathfrak{A} 58'09	
min. Earth dist.	13329 Nov 27 11:38	19° \mathfrak{A} 10'01	0.54619 AU	evening set	13330 Oct 29 15:16	2° \mathfrak{A} 45'29	
morning rise	13329 Dec 06 08:22	15° \mathfrak{A} 06'39			13330 Nov 05 14:06	30° \mathfrak{R} \mathfrak{M}	
direct	13329 Dec 09 18:59	14° \mathfrak{A} 40'17		inferior conj	13330 Nov 07 14:54	28° \mathfrak{M} 50'52	-4°51'56
morning max el	13329 Dec 21 21:05	20° \mathfrak{A} 27'06	21°40'04	minimum elong	13330 Nov 07 04:58	29° \mathfrak{M} 05'09	4°48'38
asc. node	13329 Dec 28 17:55	28° \mathfrak{A} 39'51		min. Earth dist.	13330 Nov 08 18:14	28° \mathfrak{M} 11'30	0.54631 AU
	13329 Dec 29 15:46	0° \mathfrak{Z}		morning rise	13330 Nov 15 18:31	24° \mathfrak{M} 53'33	
morning set	13330 Jan 11 11:09	23° \mathfrak{Z} 41'43		direct	13330 Nov 20 03:27	24° \mathfrak{M} 12'32	
	13330 Jan 14 10:43	0° \approx			13330 Dec 02 16:40	0° \mathfrak{A}	
				morning max el	13330 Dec 03 09:48	0° \mathfrak{A} 39'25	23°26'18
superior conj	13330 Jan 18 15:25	8° \approx 51'57	1°24'49	asc. node	13330 Dec 15 14:58	16° \mathfrak{A} 38'59	
minimum elong	13330 Jan 18 17:35	9° \approx 03'14	1°25'28		13330 Dec 22 21:01	0° \mathfrak{Z}	
max. Earth dist.	13330 Jan 22 22:47	17° \approx 42'05	1.34763 AU	morning set	13330 Dec 26 22:48	8° \mathfrak{Z} 27'37	
evening rise	13330 Jan 27 03:34	25° \approx 54'48					
	13330 Jan 29 07:52	0° \mathfrak{H}		superior conj	13331 Jan 02 20:06	23° \mathfrak{Z} 22'28	1°34'42
desc. node	13330 Jan 30 13:51	2° \mathfrak{H} 17'18		minimum elong	13331 Jan 02 21:17	23° \mathfrak{Z} 28'49	1°35'37
	13330 Feb 16 18:32	0° \mathfrak{Y}			13331 Jan 05 22:33	0° \approx	
evening max el	13330 Mar 03 07:37	17° \mathfrak{Y} 40'10	26°43'59	max. Earth dist.	13331 Jan 05 18:04	29° \mathfrak{Z} 36'19	1.33154 AU
retrograde	13330 Mar 16 11:35	25° \mathfrak{Y} 04'11		evening rise	13331 Jan 10 14:07	9° \approx 32'00	
evening set	13330 Mar 22 21:58	22° \mathfrak{Y} 32'02		desc. node	13331 Jan 17 10:32	22° \approx 30'06	
asc. node	13330 Mar 26 14:58	18° \mathfrak{Y} 51'52			13331 Jan 21 18:17	0° \mathfrak{H}	
min. Earth dist.	13330 Mar 26 22:44	18° \mathfrak{Y} 29'34	0.66214 AU		13331 Feb 12 16:58	0° \mathfrak{Y}	
inferior conj	13330 Mar 28 22:43	16° \mathfrak{Y} 07'57	0°43'51	evening max el	13331 Feb 13 20:57	1° \mathfrak{Y} 08'56	27°22'36
minimum elong	13330 Mar 28 21:36	16° \mathfrak{Y} 11'15	0°43'15	retrograde	13331 Feb 27 11:39	8° \mathfrak{Y} 35'45	
morning rise	13330 Apr 03 22:24	10° \mathfrak{Y} 29'25		evening set	13331 Mar 06 05:53	6° \mathfrak{Y} 05'52	
direct	13330 Apr 06 21:08	9° \mathfrak{Y} 41'19		min. Earth dist.	13331 Mar 10 02:18	2° \mathfrak{Y} 35'24	0.64542 AU
morning max el	13330 Apr 13 06:54	13° \mathfrak{Y} 04'18	18°15'19	inferior conj	13331 Mar 12 14:04	29° \mathfrak{H} 54'53	-0°18'04
	13330 Apr 25 14:34	0° \mathfrak{B}		minimum elong	13331 Mar 12 14:36	29° \mathfrak{H} 53'26	0°17'44
desc. node	13330 Apr 28 16:09	4° \mathfrak{B} 51'41			13331 Mar 12 12:10	30° \mathfrak{R} \mathfrak{H}	
morning set	13330 May 02 18:26	11° \mathfrak{B} 24'34		asc. node	13331 Mar 13 12:25	28° \mathfrak{H} 55'19	
	13330 May 14 11:34	0° Π		morning rise	13331 Mar 19 01:14	24° \mathfrak{H} 30'01	
				direct	13331 Mar 21 15:06	23° \mathfrak{H} 55'46	
superior conj	13330 May 18 03:56	5° Π 46'23	-1°57'40	morning max el	13331 Mar 27 23:45	27° \mathfrak{H} 13'13	17°52'14
minimum elong	13330 May 17 19:38	5° Π 13'55	1°57'59		13331 Mar 30 11:46	0° \mathfrak{Y}	
max. Earth dist.	13330 May 19 14:25	8° Π 01'08	1.45826 AU	morning set	13331 Apr 14 05:36	22° \mathfrak{Y} 59'40	
	13330 Jun 02 16:58	0° \mathfrak{G}		desc. node	13331 Apr 15 12:44	25° \mathfrak{Y} 09'36	

	13331 Apr 18 10:35	0°♄		superior conj	13332 Apr 07 12:16	26°♄01'21	-0°46'29
				minimum elong	13332 Apr 07 07:41	25°♄42'14	0°46'09
superior conj	13331 Apr 27 21:14	15°♄22'39	-1°25'57		13332 Apr 09 21:55	0°♄	
minimum elong	13331 Apr 27 12:46	14°♄48'43	1°25'38	max. Earth dist.	13332 Apr 14 04:02	6°♄54'43	1.44140 AU
max. Earth dist.	13331 May 02 10:30	22°♄36'04	1.45331 AU	evening rise	13332 Apr 22 07:00	19°♄41'40	
	13331 May 07 04:01	0°♄			13332 Apr 29 01:31	0°♄	
evening rise	13331 May 13 18:29	10°♄11'03			13332 May 20 21:16	0°♄	
	13331 May 26 22:00	0°♄		evening max el	13332 May 22 12:44	1°♄44'12	21°06'40
greatest brilliancy	13331 May 28 15:53	2°♄32'52	-0.6m	asc. node	13332 May 26 06:46	4°♄57'11	
asc. node	13331 Jun 09 09:38	17°♄45'23		retrograde	13332 May 31 02:58	6°♄44'32	
evening max el	13331 Jun 09 13:50	17°♄55'59	19°59'20	evening set	13332 Jun 04 10:32	5°♄00'36	
retrograde	13331 Jun 17 04:05	22°♄15'30			13332 Jun 08 19:53	30°♄	
evening set	13331 Jun 21 01:23	20°♄48'07		inferior conj	13332 Jun 09 16:31	28°♄48'40	3°09'41
inferior conj	13331 Jun 26 08:39	14°♄47'56	3°12'22	minimum elong	13332 Jun 09 15:49	28°♄51'07	3°08'36
minimum elong	13331 Jun 26 08:56	14°♄46'58	3°11'20	min. Earth dist.	13332 Jun 10 01:58	28°♄15'52	0.68630 AU
min. Earth dist.	13331 Jun 27 07:45	13°♄29'50	0.67876 AU	morning rise	13332 Jun 14 20:53	22°♄30'51	
morning rise	13331 Jul 01 16:08	8°♄25'43		direct	13332 Jun 20 01:49	20°♄14'24	
direct	13331 Jul 07 09:31	5°♄54'26		desc. node	13332 Jun 28 10:07	24°♄27'26	
desc. node	13331 Jul 12 12:55	7°♄31'37		morning max el	13332 Jun 30 12:52	26°♄27'54	23°18'05
morning max el	13331 Jul 19 02:14	12°♄55'02	24°47'22		13332 Jul 03 19:08	0°♄	
	13331 Aug 01 21:19	0°♄			13332 Jul 25 10:36	0°♄	
	13331 Aug 21 03:44	0°♄		morning set	13332 Aug 04 05:36	15°♄43'54	
morning set	13331 Aug 23 21:10	4°♄44'15		max. Earth dist.	13332 Aug 08 08:59	22°♄46'39	1.39539 AU
max. Earth dist.	13331 Aug 27 11:01	11°♄09'32	1.37201 AU		13332 Aug 12 11:16	0°♄	
superior conj	13331 Sep 03 06:25	24°♄02'12	-0°20'09	superior conj	13332 Aug 16 01:51	6°♄34'40	-0°54'56
minimum elong	13331 Sep 03 07:45	24°♄08'41	0°20'07	minimum elong	13332 Aug 16 05:52	6°♄53'15	0°54'45
asc. node	13331 Sep 05 10:29	28°♄18'23		asc. node	13332 Aug 22 07:05	18°♄20'20	
	13331 Sep 06 06:56	0°♄		evening rise	13332 Aug 25 12:25	24°♄33'16	
evening rise	13331 Sep 11 15:57	10°♄48'13			13332 Aug 28 08:37	0°♄	
	13331 Sep 22 00:13	0°♄		evening max el	13332 Sep 10 14:02	20°♄35'59	18°38'43
evening max el	13331 Sep 28 14:04	8°♄35'49	19°27'21	retrograde	13332 Sep 18 17:20	24°♄41'53	
retrograde	13331 Oct 08 04:12	13°♄23'30		evening set	13332 Sep 20 15:48	24°♄28'44	
desc. node	13331 Oct 08 09:19	13°♄23'22		desc. node	13332 Sep 24 06:50	23°♄01'06	
evening set	13331 Oct 10 01:00	13°♄13'23		inferior conj	13332 Sep 28 15:41	20°♄02'53	-1°23'04
inferior conj	13331 Oct 18 17:22	9°♄06'35	-3°12'25	minimum elong	13332 Sep 28 12:19	20°♄09'14	1°21'28
minimum elong	13331 Oct 18 09:10	9°♄19'47	3°08'53	min. Earth dist.	13332 Oct 01 19:33	17°♄41'01	0.57247 AU
min. Earth dist.	13331 Oct 21 03:58	7°♄32'18	0.55565 AU	morning rise	13332 Oct 06 05:23	14°♄58'28	
morning rise	13331 Oct 26 15:12	4°♄40'00		direct	13332 Oct 12 03:51	13°♄31'09	
direct	13331 Oct 31 20:32	3°♄38'45		morning max el	13332 Oct 26 10:37	20°♄59'20	26°42'46
morning max el	13331 Nov 14 19:50	10°♄39'27	25°13'23		13332 Nov 03 06:39	0°♄	
	13331 Nov 29 10:33	0°♄		asc. node	13332 Nov 18 08:50	24°♄31'23	
asc. node	13331 Dec 02 11:57	5°♄19'58			13332 Nov 21 03:29	0°♄	
morning set	13331 Dec 11 10:34	23°♄10'24		morning set	13332 Nov 24 20:38	7°♄44'29	
	13331 Dec 14 13:45	0°♄					
superior conj	13331 Dec 18 05:09	8°♄02'52	1°38'14	superior conj	13332 Dec 01 16:24	22°♄46'16	1°35'45
minimum elong	13331 Dec 18 05:13	8°♄03'17	1°39'16	minimum elong	13332 Dec 01 15:27	22°♄40'54	1°36'43
max. Earth dist.	13331 Dec 19 20:40	11°♄40'04	1.32008 AU	max. Earth dist.	13332 Dec 02 03:49	23°♄49'52	1.31358 AU
evening rise	13331 Dec 25 10:17	23°♄32'35		evening rise	13332 Dec 08 13:21	7°♄49'07	
	13331 Dec 28 15:10	0°♄			13332 Dec 20 01:46	0°♄	
desc. node	13332 Jan 04 07:22	12°♄24'38		desc. node	13332 Dec 21 04:17	1°♄52'44	
	13332 Jan 15 11:05	0°♄		evening max el	13333 Jan 08 13:49	26°♄24'13	27°10'26
evening max el	13332 Jan 27 07:52	14°♄07'49	27°33'04		13333 Jan 12 21:23	0°♄	
retrograde	13332 Feb 10 04:22	21°♄30'39		retrograde	13333 Jan 22 12:53	3°♄39'18	
evening set	13332 Feb 17 02:27	19°♄10'14		evening set	13333 Jan 29 08:28	1°♄36'44	
min. Earth dist.	13332 Feb 20 20:29	16°♄07'22	0.62572 AU		13333 Jan 31 18:07	30°♄	
inferior conj	13332 Feb 23 18:25	13°♄19'43	-1°30'50	min. Earth dist.	13333 Feb 02 04:17	28°♄53'21	0.60415 AU
minimum elong	13332 Feb 23 21:29	13°♄12'20	1°29'11	inferior conj	13333 Feb 05 08:18	26°♄13'18	-2°51'56
asc. node	13332 Feb 28 09:51	9°♄23'58		minimum elong	13333 Feb 05 14:28	26°♄00'17	2°48'58
morning rise	13332 Mar 01 19:11	8°♄11'30		morning rise	13333 Feb 12 23:35	21°♄24'41	
direct	13332 Mar 04 01:50	7°♄47'36		asc. node	13333 Feb 14 07:17	21°♄09'50	
morning max el	13332 Mar 10 17:24	11°♄10'24	17°46'42	direct	13333 Feb 15 01:28	21°♄07'31	
	13332 Mar 23 10:28	0°♄		morning max el	13333 Feb 22 08:28	24°♄46'16	17°59'37
morning set	13332 Mar 26 16:57	5°♄43'20			13333 Feb 26 15:48	0°♄	
desc. node	13332 Apr 01 09:17	15°♄37'44		morning set	13333 Mar 09 22:17	19°♄16'43	
					13333 Mar 15 18:43	0°♄	

desc. node	13333 Mar 19 05:50	6°♿11'58		asc. node	13334 Feb 01 04:40	4°♿35'32	
				morning max el	13334 Feb 05 17:05	7°♿49'45	18°32'30
superior conj	13333 Mar 20 03:28	7°♿47'20	-0°07'09		13334 Feb 19 21:43	0°♿	
minimum elong	13333 Mar 20 02:51	7°♿44'39	0°07'05	morning set	13334 Feb 21 16:10	3°♿23'32	
behind sun begin	13333 Mar 19 19:39	7°♿12'56					
behind sun end	13333 Mar 20 10:04	8°♿16'19		superior conj	13334 Mar 02 15:35	20°♿30'20	0°27'29
max. Earth dist.	13333 Mar 27 16:54	20°♿41'22	1.42384 AU	minimum elong	13334 Mar 02 17:26	20°♿38'53	0°27'27
evening rise	13333 Apr 02 08:29	29°♿51'36		desc. node	13334 Mar 06 02:20	26°♿48'20	
	13333 Apr 02 10:35	0°♿			13334 Mar 07 21:18	0°♿	
	13333 Apr 22 14:50	0°♿		max. Earth dist.	13334 Mar 10 01:15	3°♿47'17	1.40265 AU
evening max el	13333 May 05 06:35	15°♿33'29	22°23'32	evening rise	13334 Mar 14 06:14	10°♿56'01	
asc. node	13333 May 13 03:58	21°♿02'04			13334 Mar 26 08:13	0°♿	
retrograde	13333 May 15 00:28	21°♿17'53		evening max el	13334 Apr 17 21:19	29°♿24'38	23°44'32
evening set	13333 May 19 19:00	19°♿18'33			13334 Apr 18 11:45	0°♿	
inferior conj	13333 May 25 02:02	12°♿57'07	2°56'15	retrograde	13334 Apr 28 19:04	5°♿49'28	
minimum elong	13333 May 25 00:32	13°♿02'23	2°55'04	asc. node	13334 Apr 30 01:16	5°♿42'18	
min. Earth dist.	13333 May 24 22:31	13°♿09'24	0.68908 AU	evening set	13334 May 04 01:09	3°♿36'33	
morning rise	13333 May 30 05:54	6°♿45'23			13334 May 07 08:14	30°♿	
direct	13333 Jun 03 22:00	4°♿47'45		inferior conj	13334 May 09 11:14	27°♿08'37	2°32'36
morning max el	13333 Jun 13 02:11	10°♿09'10	21°50'25	minimum elong	13334 May 09 09:12	27°♿15'34	2°31'20
desc. node	13333 Jun 15 07:12	12°♿29'55		min. Earth dist.	13334 May 08 19:09	28°♿03'40	0.68723 AU
	13333 Jun 28 15:32	0°♿		morning rise	13334 May 14 17:14	21°♿04'22	
morning set	13333 Jul 15 13:06	25°♿37'56		direct	13334 May 18 20:45	19°♿27'22	
	13333 Jul 18 06:14	0°♿		morning max el	13334 May 26 21:13	24°♿00'31	20°31'30
max. Earth dist.	13333 Jul 21 10:21	5°♿12'10	1.41806 AU		13334 Jun 01 03:01	0°♿	
				desc. node	13334 Jun 02 04:08	1°♿20'25	
superior conj	13333 Jul 29 02:38	18°♿16'52	-1°28'59		13334 Jun 21 22:58	0°♿	
minimum elong	13333 Jul 29 09:10	18°♿45'29	1°28'55	morning set	13334 Jun 24 22:09	4°♿33'55	
	13333 Aug 04 15:55	0°♿		max. Earth dist.	13334 Jul 03 18:29	18°♿30'29	1.43734 AU
evening rise	13333 Aug 08 21:43	7°♿46'52					
asc. node	13333 Aug 09 03:44	8°♿14'34		superior conj	13334 Jul 10 04:42	29°♿00'00	-1°57'08
	13333 Aug 22 02:53	0°♿		minimum elong	13334 Jul 10 11:34	29°♿28'31	1°57'34
evening max el	13333 Aug 24 22:46	3°♿15'48	18°11'01		13334 Jul 10 19:08	0°♿	
retrograde	13333 Sep 01 01:07	6°♿52'28		evening rise	13334 Jul 22 15:07	20°♿16'51	
evening set	13333 Sep 03 06:20	6°♿31'52		asc. node	13334 Jul 27 00:25	27°♿56'14	
inferior conj	13333 Sep 10 11:42	1°♿45'21	0°12'51		13334 Jul 28 05:09	0°♿	
minimum elong	13333 Sep 10 12:08	1°♿44'24	0°12'36	evening max el	13334 Aug 08 12:07	16°♿24'39	18°02'55
transit middle	13333 Sep 10 12:08	1°♿44'24	0°12'36	retrograde	13334 Aug 15 00:25	19°♿46'36	
transit begin	13333 Sep 10 10:00	1°♿49'05		evening set	13334 Aug 17 13:48	19°♿14'53	
transit end	13333 Sep 10 14:16	1°♿39'43		inferior conj	13334 Aug 24 02:42	14°♿08'51	1°26'44
desc. node	13333 Sep 11 04:21	1°♿08'38		minimum elong	13334 Aug 24 04:56	14°♿03'14	1°25'37
	13333 Sep 12 11:30	30°♿		min. Earth dist.	13334 Aug 27 03:02	11°♿07'53	0.61686 AU
min. Earth dist.	13333 Sep 13 18:51	28°♿52'56	0.59394 AU	desc. node	13334 Aug 29 01:51	9°♿22'14	
morning rise	13333 Sep 17 14:32	26°♿07'06		morning rise	13334 Aug 30 17:31	8°♿06'20	
direct	13333 Sep 24 01:06	24°♿11'58		direct	13334 Sep 06 09:35	5°♿47'34	
	13333 Oct 06 05:13	0°♿		morning max el	13334 Sep 20 13:47	13°♿46'27	27°58'29
morning max el	13333 Oct 08 08:52	1°♿59'48	27°39'52		13334 Oct 03 15:03	0°♿	
	13333 Oct 28 16:08	0°♿			13334 Oct 21 03:31	0°♿	
asc. node	13333 Nov 05 05:38	14°♿04'59		asc. node	13334 Oct 23 02:21	3°♿54'12	
morning set	13333 Nov 09 03:16	22°♿05'17		morning set	13334 Oct 24 04:29	6°♿07'47	
	13333 Nov 12 19:20	0°♿		max. Earth dist.	13334 Oct 29 18:04	17°♿58'42	1.31614 AU
max. Earth dist.	13333 Nov 15 12:10	5°♿59'03	1.31223 AU				
				superior conj	13334 Oct 31 13:59	22°♿00'07	1°13'27
superior conj	13333 Nov 16 03:58	7°♿27'07	1°27'27	minimum elong	13334 Oct 31 11:45	21°♿47'49	1°13'53
minimum elong	13333 Nov 16 02:11	7°♿17'13	1°28'11		13334 Nov 04 04:42	0°♿	
evening rise	13333 Nov 22 21:03	22°♿16'11		evening rise	13334 Nov 07 07:26	6°♿48'37	
	13333 Nov 26 13:39	0°♿			13334 Nov 19 05:53	0°♿	
desc. node	13333 Dec 08 01:18	20°♿44'18		desc. node	13334 Nov 24 22:25	8°♿45'37	
	13333 Dec 14 12:52	0°♿		evening max el	13334 Dec 03 03:12	18°♿26'36	24°47'27
evening max el	13333 Dec 21 12:34	7°♿50'10	26°13'24	retrograde	13334 Dec 16 21:33	25°♿19'21	
retrograde	13334 Jan 04 11:23	14°♿55'04		evening set	13334 Dec 22 08:46	24°♿13'01	
evening set	13334 Jan 10 19:56	13°♿18'20		min. Earth dist.	13334 Dec 27 15:03	21°♿27'07	0.56380 AU
min. Earth dist.	13334 Jan 15 01:57	10°♿41'54	0.58267 AU	inferior conj	13334 Dec 30 03:32	19°♿50'48	-5°23'12
inferior conj	13334 Jan 18 04:10	8°♿26'11	-4°14'19	minimum elong	13334 Dec 31 11:07	19°♿38'41	5°20'50
minimum elong	13334 Jan 18 12:43	8°♿10'29	4°10'52	morning rise	13335 Jan 07 15:36	15°♿34'56	
morning rise	13334 Jan 26 08:27	3°♿58'59		direct	13335 Jan 09 23:25	15°♿29'57	
direct	13334 Jan 28 09:44	3°♿44'56		asc. node	13335 Jan 19 01:59	19°♿38'39	

morning max el	13335 Jan 19 15:12	20°  09'43	19°27'23	direct	13335 Dec 21 18:22	26°  15'11	
	13335 Jan 27 03:47	0° 			13335 Dec 31 03:35	0° 	
morning set	13335 Feb 05 18:33	17°  52'22		morning max el	13336 Jan 01 23:26	1°  36'14	20°45'31
	13335 Feb 11 19:44	0° 		asc. node	13336 Jan 05 23:12	6°  03'15	
					13336 Jan 19 20:33	0° 	
superior conj	13335 Feb 13 20:08	3°  58'20	0°55'22	morning set	13336 Jan 21 02:19	2°  33'02	
minimum elong	13335 Feb 13 22:53	4°  11'43	0°55'30				
max. Earth dist.	13335 Feb 20 07:44	16°  14'46	1.38018 AU	superior conj	13336 Jan 28 12:44	17°  58'21	1°16'05
desc. node	13335 Feb 20 22:51	17°  23'42		minimum elong	13336 Jan 28 15:18	18°  11'28	1°16'32
evening rise	13335 Feb 24 01:00	22°  54'36		max. Earth dist.	13336 Feb 02 16:17	28°  14'36	1.35872 AU
	13335 Feb 28 04:15	0° 			13336 Feb 03 14:08	0° 	
	13335 Mar 20 03:51	0° 		evening rise	13336 Feb 06 13:56	5°  38'23	
evening max el	13335 Mar 31 10:57	13°  17'35	25°02'55	desc. node	13336 Feb 07 19:26	7°  53'40	
retrograde	13335 Apr 12 09:37	20°  14'00			13336 Feb 21 00:27	0° 	
asc. node	13335 Apr 16 22:38	18°  45'01		evening max el	13336 Mar 13 00:31	27°  07'15	26°11'37
evening set	13335 Apr 18 03:26	17°  50'10			13336 Mar 16 05:21	0° 	
min. Earth dist.	13335 Apr 22 13:41	12°  53'21	0.68088 AU	retrograde	13336 Mar 25 19:15	4°  24'25	
inferior conj	13335 Apr 23 18:14	11°  19'39	1°58'47	evening set	13336 Apr 01 00:10	1°  53'33	
minimum elong	13335 Apr 23 16:05	11°  26'42	1°57'32	asc. node	13336 Apr 02 20:03	0°  11'01	
morning rise	13335 Apr 29 05:01	5°  24'16			13336 Apr 03 00:15	30°  R 	
direct	13335 May 02 20:35	4°  07'47		min. Earth dist.	13336 Apr 05 03:58	27°  07'31'58	0.67017 AU
morning max el	13335 May 09 23:49	8°  03'16	19°26'01	inferior conj	13336 Apr 06 21:00	25°  07'25'28	1°14'23
desc. node	13335 May 20 00:58	20°  46'10		minimum elong	13336 Apr 06 19:18	25°  07'30'42	1°13'27
greatest brilliancy	13335 May 22 15:59	24°  35'39	-0.7m	morning rise	13336 Apr 12 15:14	19°  07'40'29	
	13335 May 26 06:59	0° 		direct	13336 Apr 15 19:48	18°  07'42'51	
morning set	13335 Jun 03 23:39	13°  11'15'10		morning max el	13336 Apr 22 09:37	22°  07'13'52	18°36'22
	13335 Jun 14 18:33	0° 			13336 Apr 28 18:22	0° 	
max. Earth dist.	13335 Jun 16 09:13	2°  31'58	1.45102 AU	desc. node	13336 May 05 21:41	10°  07'37'25	
				morning set	13336 May 13 15:22	22°  07'34'21	
superior conj	13335 Jun 20 07:16	8°  44'34	-2°12'29		13336 May 18 07:04	0° 	
minimum elong	13335 Jun 20 09:45	8°  45'27	2°13'28	max. Earth dist.	13336 May 29 04:03	16°  07'59'19	1.45771 AU
	13335 Jul 03 08:41	0° 					
evening rise	13335 Jul 04 11:37	1°  05'15'51		superior conj	13336 May 29 17:26	17°  07'51'36	-2°08'53
asc. node	13335 Jul 13 21:10	17°  02'01'19		minimum elong	13336 May 29 12:15	17°  07'51'20	2°09'39
evening max el	13335 Jul 23 02:25	29°  02'53'07	18°13'19		13336 Jun 06 11:18	0° 	
	13335 Jul 23 05:14	0° 		evening rise	13336 Jun 14 07:44	12°  02'25'36	
retrograde	13335 Jul 29 10:55	3°  07'14'45		greatest brilliancy	13336 Jun 22 02:54	24°  02'48'18	-0.9m
evening set	13335 Aug 01 08:41	2°  07'29'14			13336 Jun 25 11:05	0° 	
	13335 Aug 04 15:22	30°  R 		asc. node	13336 Jun 29 18:01	6°  02'20'23	
inferior conj	13335 Aug 07 08:43	27°  02'05'42	2°18'35	evening max el	13336 Jul 05 14:41	13°  02'33'33	18°41'31
minimum elong	13335 Aug 07 11:11	26°  02'58'41	2°17'19	retrograde	13336 Jul 12 04:32	17°  02'08'21	
min. Earth dist.	13335 Aug 09 20:48	24°  02'16'44	0.63861 AU	evening set	13336 Jul 15 10:57	16°  02'07'20	
morning rise	13335 Aug 13 12:05	20°  02'48'44		inferior conj	13336 Jul 21 01:51	10°  02'28'23	2°51'27
desc. node	13335 Aug 15 23:20	19°  02'14'22		minimum elong	13336 Jul 21 03:43	10°  02'22'36	2°50'17
direct	13335 Aug 20 03:13	18°  02'14'23		min. Earth dist.	13336 Jul 22 23:40	8°  02'07'06	0.65738 AU
morning max el	13335 Sep 02 23:08	26°  02'14'46	27°39'35	morning rise	13336 Jul 26 19:34	4°  02'04'59	
	13335 Sep 06 10:50	0° 		desc. node	13336 Aug 01 20:45	1°  02'25'01	
	13335 Sep 27 05:23	0° 		direct	13336 Aug 02 04:46	1°  02'24'36	
morning set	13335 Oct 07 21:52	19°  02'45'41		morning max el	13336 Aug 15 10:22	9°  02'14'25	26°49'12
asc. node	13335 Oct 09 22:58	23°  02'53'19			13336 Aug 31 17:23	0° 	
max. Earth dist.	13335 Oct 12 17:43	29°  02'39'49	1.32543 AU		13336 Sep 18 16:03	0° 	
	13335 Oct 12 21:32	0° 		morning set	13336 Sep 20 04:34	2°  02'52'29	
				max. Earth dist.	13336 Sep 24 08:06	10°  02'59'17	1.33998 AU
superior conj	13335 Oct 15 20:27	6°  02'18'58	0°53'50	asc. node	13336 Sep 25 19:33	13°  02'58'20	
minimum elong	13335 Oct 15 18:16	6°  02'07'13	0°53'58				
evening rise	13335 Oct 22 18:36	21°  02'18'20'43		superior conj	13336 Sep 28 21:08	20°  02'18'16	0°28'48
	13335 Oct 26 22:05	0° 		minimum elong	13336 Sep 28 19:40	20°  02'10'39	0°28'46
desc. node	13335 Nov 11 19:39	25°  02'37'00			13336 Oct 03 11:05	0° 	
evening max el	13335 Nov 14 13:06	28°  02'30'08	23°06'14	evening rise	13336 Oct 06 04:42	5°  02'47'48	
	13335 Nov 16 04:24	0° 			13336 Oct 19 05:08	0° 	
retrograde	13335 Nov 27 18:41	5°  02'04'47		evening max el	13336 Oct 26 03:29	8°  02'37'57	21°27'45
evening set	13335 Dec 01 22:36	4°  02'27'08		desc. node	13336 Oct 28 16:58	10°  02'37'54'09	
min. Earth dist.	13335 Dec 08 22:28	1°  02'12'46	0.55040 AU	retrograde	13336 Nov 07 06:53	14°  02'39'46	
inferior conj	13335 Dec 10 07:18	0°  02'25'33	-5°55'58	evening set	13336 Nov 10 02:20	14°  02'21'38	
minimum elong	13335 Dec 10 08:13	0°  02'24'15	5°54'56	inferior conj	13336 Nov 18 23:34	10°  02'27'50	-5°32'08
	13335 Dec 11 01:08	30°  R 		minimum elong	13336 Nov 18 15:58	10°  02'38'28	5°30'00
morning rise	13335 Dec 18 19:23	26°  02'35'49		min. Earth dist.	13336 Nov 19 04:31	10°  02'20'52	0.54509 AU

morning rise	13336 Nov 27 06:25	6°♂39'03		minimum elong	13337 Oct 29 08:23	20°♂44'14	4°09'15
direct	13336 Dec 01 02:18	6°♂07'22		min. Earth dist.	13337 Oct 31 12:32	19°♂26'01	0.54920 AU
morning max el	13336 Dec 13 18:01	12°♂11'36	22°24'02	morning rise	13337 Nov 06 19:32	16°♂21'00	
asc. node	13336 Dec 22 20:20	23°♂32'27		direct	13337 Nov 11 13:20	15°♂32'03	
	13336 Dec 26 17:59	0°♂		morning max el	13337 Nov 25 04:36	22°♂15'01	24°12'45
morning set	13337 Jan 04 13:09	17°♂18'49			13337 Dec 01 23:44	0°♂	
	13337 Jan 10 11:29	0°♂		asc. node	13337 Dec 09 17:22	11°♂50'50	
					13337 Dec 19 01:47	0°♂	
superior conj	13337 Jan 11 13:53	2°♂20'33	1°29'48	morning set	13337 Dec 20 01:05	2°♂04'03	
minimum elong	13337 Jan 11 15:40	2°♂29'58	1°30'35				
max. Earth dist.	13337 Jan 15 06:53	10°♂05'29	1.34027 AU	superior conj	13337 Dec 26 20:45	16°♂56'31	1°36'56
evening rise	13337 Jan 19 17:37	18°♂58'44		minimum elong	13337 Dec 26 21:28	17°♂00'25	1°37'56
desc. node	13337 Jan 24 16:05	28°♂14'10		max. Earth dist.	13337 Dec 29 05:13	22°♂02'23	1.32605 AU
	13337 Jan 25 15:39	0°♂			13338 Jan 01 23:55	0°♂	
	13337 Feb 14 03:26	0°♂		evening rise	13338 Jan 03 08:39	2°♂47'10	
evening max el	13337 Feb 23 14:02	10°♂46'03	27°03'18	desc. node	13338 Jan 11 12:51	18°♂20'10	
retrograde	13337 Mar 08 23:14	18°♂12'55			13338 Jan 18 11:35	0°♂	
evening set	13337 Mar 15 13:26	15°♂40'32		evening max el	13338 Feb 06 02:34	24°♂04'00	27°30'51
min. Earth dist.	13337 Mar 19 12:02	11°♂52'18	0.65545 AU		13338 Feb 14 01:53	0°♂	
asc. node	13337 Mar 20 17:31	10°♂29'03		retrograde	13338 Feb 19 20:39	1°♂30'37	
inferior conj	13337 Mar 21 17:16	9°♂21'04	0°18'57		13338 Feb 25 05:56	30°♂	
minimum elong	13337 Mar 21 16:45	9°♂22'33	0°18'41	evening set	13338 Feb 26 16:58	29°♂03'48	
morning rise	13337 Mar 27 21:35	3°♂48'19		min. Earth dist.	13338 Mar 02 11:59	25°♂45'38	0.63729 AU
direct	13337 Mar 30 16:18	3°♂06'40		inferior conj	13338 Mar 05 04:24	23°♂00'16	-0°47'40
morning max el	13337 Apr 06 00:43	6°♂25'56	18°03'24	minimum elong	13338 Mar 05 05:55	22°♂56'22	0°46'49
	13337 Apr 22 06:44	0°♂		asc. node	13338 Mar 07 14:59	20°♂36'06	
desc. node	13337 Apr 22 18:20	0°♂47'12		morning rise	13338 Mar 11 21:09	17°♂42'08	
morning set	13337 Apr 24 10:16	3°♂29'52		direct	13338 Mar 14 07:35	17°♂12'52	
				morning max el	13338 Mar 20 18:22	20°♂31'39	17°47'40
superior conj	13337 May 09 03:12	27°♂04'35	-1°45'44		13338 Mar 27 23:22	0°♂	
minimum elong	13337 May 08 18:03	26°♂28'34	1°45'43	morning set	13338 Apr 06 08:34	15°♂37'00	
	13337 May 10 23:52	0°♂		desc. node	13338 Apr 09 14:55	21°♂10'20	
max. Earth dist.	13337 May 11 23:56	1°♂34'14	1.45696 AU		13338 Apr 14 21:11	0°♂	
evening rise	13337 May 25 05:43	22°♂07'17					
	13337 May 30 08:31	0°♂		superior conj	13338 Apr 19 05:00	7°♂06'09	-1°09'39
greatest brilliancy	13337 Jun 07 03:59	11°♂50'20	-0.7m	minimum elong	13338 Apr 18 21:57	6°♂37'28	1°09'15
asc. node	13337 Jun 16 14:59	24°♂47'30		max. Earth dist.	13338 Apr 24 18:44	16°♂02'43	1.44900 AU
evening max el	13337 Jun 18 22:36	27°♂19'31	19°26'34		13338 May 03 17:28	0°♂	
	13337 Jun 22 03:40	0°♂		evening rise	13338 May 04 17:05	1°♂30'33	
retrograde	13337 Jun 26 02:02	1°♂19'55			13338 May 23 23:59	0°♂	
evening set	13337 Jun 29 17:37	0°♂02'24		evening max el	13338 Jun 02 00:58	11°♂08'02	20°26'35
	13337 Jun 29 18:58	30°♂		asc. node	13338 Jun 03 12:03	12°♂31'00	
inferior conj	13337 Jul 05 02:48	24°♂09'37	3°08'36	retrograde	13338 Jun 10 00:54	15°♂44'08	
minimum elong	13337 Jul 05 03:42	24°♂06'41	3°07'33	evening set	13338 Jun 14 02:24	14°♂09'51	
min. Earth dist.	13337 Jul 06 10:07	22°♂26'28	0.67219 AU	inferior conj	13338 Jun 19 08:50	8°♂04'40	3°12'36
morning rise	13337 Jul 10 13:15	17°♂45'41		minimum elong	13338 Jun 19 08:41	8°♂05'11	3°11'34
direct	13337 Jul 16 13:05	15°♂08'31		min. Earth dist.	13338 Jun 20 02:08	7°♂05'19	0.68255 AU
desc. node	13337 Jul 19 18:06	15°♂46'30		morning rise	13338 Jun 24 14:39	1°♂43'55	
morning max el	13337 Jul 28 21:15	22°♂32'13	25°35'58		13338 Jun 27 02:54	30°♂	
	13337 Aug 04 10:42	0°♂		direct	13338 Jun 30 02:56	29°♂18'00	
	13337 Aug 25 00:24	0°♂			13338 Jul 03 08:28	0°♂	
morning set	13337 Sep 02 20:50	15°♂18'33		desc. node	13338 Jul 06 15:21	1°♂53'45	
max. Earth dist.	13337 Sep 06 12:21	22°♂03'57	1.35924 AU	morning max el	13338 Jul 11 07:21	5°♂59'55	24°09'39
	13337 Sep 10 14:54	0°♂			13338 Jul 29 21:47	0°♂	
superior conj	13337 Sep 12 13:15	3°♂50'33	-0°01'08	morning set	13338 Aug 15 18:11	26°♂52'42	
minimum elong	13337 Sep 12 13:19	3°♂50'53	0°01'10		13338 Aug 17 13:18	0°♂	
behind sun begin	13337 Sep 12 07:05	3°♂19'39		max. Earth dist.	13338 Aug 19 10:24	3°♂19'24	1.38185 AU
behind sun end	13337 Sep 12 19:33	4°♂22'10					
asc. node	13337 Sep 12 16:09	4°♂05'06		superior conj	13338 Aug 26 17:24	16°♂47'42	-0°34'45
evening rise	13337 Sep 20 11:34	20°♂03'44		minimum elong	13338 Aug 26 19:48	16°♂59'14	0°34'38
	13337 Sep 25 10:58	0°♂		asc. node	13338 Aug 30 12:43	24°♂09'44	
evening max el	13337 Oct 08 06:32	19°♂23'03	20°05'17		13338 Sep 02 11:46	0°♂	
desc. node	13337 Oct 15 14:23	24°♂09'26		evening rise	13338 Sep 04 12:41	4°♂02'06	
retrograde	13337 Oct 18 19:50	24°♂38'12			13338 Sep 20 01:56	0°♂	
evening set	13337 Oct 20 20:07	24°♂27'37		evening max el	13338 Sep 20 23:42	0°♂57'00	19°04'05
inferior conj	13337 Oct 29 18:19	20°♂29'20	-4°13'01	retrograde	13338 Sep 29 21:47	5°♂25'06	
				evening set	13338 Oct 01 18:27	5°♂14'14	

desc. node	13338 Oct 02 11:52	5° \mathbb{M} 04'21	evening set	13339 Sep 13 20:15	16° \mathbb{A} 51'00	
inferior conj	13338 Oct 10 04:30	1° \mathbb{M} 00'10 -2°25'29	desc. node	13339 Sep 19 09:22	13° \mathbb{A} 54'47	
minimum elong	13338 Oct 09 22:17	1° \mathbb{M} 10'49 2°22'39	inferior conj	13339 Sep 21 12:08	12° \mathbb{A} 16'04 -0°39'58	
	13338 Oct 11 15:25	30° \mathbb{R} \mathbb{A}	minimum elong	13339 Sep 21 10:36	12° \mathbb{A} 19'08 0°39'14	
min. Earth dist.	13338 Oct 13 00:30	29° \mathbb{A} 04'00 0.56206 AU	min. Earth dist.	13339 Sep 24 18:48	9° \mathbb{A} 39'03 0.58121 AU	
morning rise	13338 Oct 17 23:15	26° \mathbb{A} 17'54	morning rise	13339 Sep 28 21:30	6° \mathbb{A} 56'40	
direct	13338 Oct 23 12:42	25° \mathbb{A} 05'45	direct	13339 Oct 05 01:56	5° \mathbb{A} 17'38	
	13338 Nov 04 00:50	0° \mathbb{M}	morning max el	13339 Oct 19 09:29	12° \mathbb{A} 54'13 27°11'42	
morning max el	13338 Nov 06 15:44	2° \mathbb{M} 19'01 25°54'30		13339 Nov 01 21:46	0° \mathbb{M}	
	13338 Nov 26 04:24	0° \mathbb{A}	asc. node	13339 Nov 13 11:09	20° \mathbb{M} 08'08	
asc. node	13338 Nov 26 14:19	0° \mathbb{A} 45'56		13339 Nov 18 07:24	0° \mathbb{A}	
morning set	13338 Dec 04 12:18	16° \mathbb{A} 43'28	morning set	13339 Nov 18 21:09	1° \mathbb{A} 12'58	
	13338 Dec 10 13:09	0° \mathbb{B}				
superior conj	13338 Dec 11 06:58	1° \mathbb{B} 38'54 1°37'54	superior conj	13339 Nov 25 18:34	16° \mathbb{A} 22'12 1°32'56	
minimum elong	13338 Dec 11 06:35	1° \mathbb{B} 36'46 1°38'56	minimum elong	13339 Nov 25 17:13	16° \mathbb{A} 14'42 1°33'49	
max. Earth dist.	13338 Dec 12 10:06	4° \mathbb{B} 09'21 1.31671 AU	max. Earth dist.	13339 Nov 25 18:27	16° \mathbb{A} 21'37 1.31240 AU	
evening rise	13338 Dec 18 08:03	16° \mathbb{B} 55'34		13339 Dec 01 22:49	0° \mathbb{B}	
	13338 Dec 24 22:05	0° \mathbb{A}	evening rise	13339 Dec 02 13:22	1° \mathbb{B} 17'55	
desc. node	13338 Dec 29 09:42	8° \mathbb{A} 04'37	desc. node	13339 Dec 16 06:39	27° \mathbb{B} 19'10	
	13339 Jan 13 06:07	0° \mathbb{H}		13339 Dec 17 22:42	0° \mathbb{A}	
evening max el	13339 Jan 19 11:58	6° \mathbb{H} 47'23 27°27'49	evening max el	13340 Jan 01 15:17	18° \mathbb{A} 43'57 26°50'17	
retrograde	13339 Feb 02 10:05	14° \mathbb{H} 06'52	retrograde	13340 Jan 15 14:08	25° \mathbb{A} 53'57	
evening set	13339 Feb 09 07:48	11° \mathbb{H} 53'24	evening set	13340 Jan 22 06:24	24° \mathbb{A} 01'35	
min. Earth dist.	13339 Feb 13 02:03	8° \mathbb{H} 59'44 0.61666 AU	min. Earth dist.	13340 Jan 26 05:20	21° \mathbb{A} 23'04 0.59497 AU	
inferior conj	13339 Feb 16 03:06	6° \mathbb{H} 13'37 -2°04'29	inferior conj	13340 Jan 29 09:45	18° \mathbb{A} 51'34 -3°27'20	
minimum elong	13339 Feb 16 07:27	6° \mathbb{H} 03'41 2°02'14	minimum elong	13340 Jan 29 17:09	18° \mathbb{A} 36'52 3°23'59	
asc. node	13339 Feb 22 12:26	1° \mathbb{H} 33'00	morning rise	13340 Feb 06 06:56	14° \mathbb{A} 11'42	
morning rise	13339 Feb 23 10:00	1° \mathbb{H} 13'02	direct	13340 Feb 08 08:05	13° \mathbb{A} 56'11	
direct	13339 Feb 25 14:12	0° \mathbb{H} 52'25	asc. node	13340 Feb 09 09:50	14° \mathbb{A} 00'36	
morning max el	13339 Mar 04 11:19	4° \mathbb{H} 21'01 17°49'47	morning max el	13340 Feb 16 00:04	17° \mathbb{A} 44'28 18°10'59	
morning set	13339 Mar 20 04:21	28° \mathbb{H} 44'36		13340 Feb 24 18:09	0° \mathbb{H}	
	13339 Mar 20 21:12	0° \mathbb{Y}	morning set	13340 Mar 02 15:35	12° \mathbb{H} 34'16	
desc. node	13339 Mar 27 11:28	11° \mathbb{Y} 41'37				
superior conj	13339 Mar 31 06:26	18° \mathbb{Y} 13'55 -0°29'27	superior conj	13340 Mar 12 07:03	0° \mathbb{Y} 25'49 0°08'18	
minimum elong	13339 Mar 31 03:40	18° \mathbb{Y} 02'10 0°29'13	minimum elong	13340 Mar 12 07:42	0° \mathbb{Y} 28'43 0°08'17	
	13339 Apr 07 08:06	0° \mathbb{B}	behind sun begin	13340 Mar 12 01:11	29° \mathbb{H} 59'23	
max. Earth dist.	13339 Apr 07 10:38	0° \mathbb{B} 10'15 1.43460 AU	behind sun end	13340 Mar 12 14:13	0° \mathbb{Y} 57'59	
evening rise	13339 Apr 14 09:47	11° \mathbb{B} 15'21		13340 Mar 12 01:19	0° \mathbb{Y}	
	13339 Apr 26 19:44	0° \mathbb{I}	desc. node	13340 Mar 13 07:59	2° \mathbb{Y} 17'24	
evening max el	13339 May 15 21:41	24° \mathbb{I} 57'06 21°38'29	max. Earth dist.	13340 Mar 19 21:58	13° \mathbb{Y} 42'22 1.41525 AU	
asc. node	13339 May 21 09:13	29° \mathbb{I} 16'30	evening rise	13340 Mar 24 19:29	21° \mathbb{Y} 47'49	
	13339 May 23 04:15	0° \mathbb{B}		13340 Mar 29 23:27	0° \mathbb{B}	
retrograde	13339 May 24 23:13	0° \mathbb{B} 15'31	evening max el	13340 Apr 19 22:59	0° \mathbb{I}	
	13339 May 26 16:28	30° \mathbb{R} \mathbb{I}	asc. node	13340 Apr 27 13:56	8° \mathbb{I} 47'06 22°57'45	
evening set	13339 May 29 11:26	28° \mathbb{I} 24'53	retrograde	13340 May 07 06:28	14° \mathbb{I} 47'40	
inferior conj	13339 Jun 03 17:38	22° \mathbb{I} 08'52 3°05'13	evening set	13340 May 07 19:34	14° \mathbb{I} 49'01	
minimum elong	13339 Jun 03 16:34	22° \mathbb{I} 12'37 3°04'06	inferior conj	13340 May 12 19:06	12° \mathbb{I} 43'24	
min. Earth dist.	13339 Jun 03 21:32	21° \mathbb{I} 55'17 0.68815 AU	minimum elong	13340 May 18 03:13	6° \mathbb{I} 18'50 2°47'24	
morning rise	13339 Jun 08 21:29	15° \mathbb{I} 53'37		13340 May 18 01:27	6° \mathbb{I} 24'59 2°46'11	
direct	13339 Jun 13 21:05	13° \mathbb{I} 44'39	min. Earth dist.	13340 May 17 18:15	6° \mathbb{I} 49'56 0.68895 AU	
desc. node	13339 Jun 23 12:30	19° \mathbb{I} 20'14	morning rise	13340 May 23 07:42	0° \mathbb{I} 10'24	
morning max el	13339 Jun 23 18:35	19° \mathbb{I} 35'25 22°40'03		13340 May 23 12:52	30° \mathbb{R} \mathbb{B}	
	13339 Jul 02 13:35	0° \mathbb{B}	direct	13340 May 27 18:23	28° \mathbb{B} 21'35	
	13339 Jul 23 01:45	0° \mathbb{Q}		13340 Jun 01 10:15	0° \mathbb{I}	
morning set	13339 Jul 27 16:08	7° \mathbb{Q} 24'13	morning max el	13340 Jun 05 10:05	3° \mathbb{I} 21'01 21°15'24	
max. Earth dist.	13339 Aug 01 09:22	15° \mathbb{Q} 16'11 1.40532 AU	desc. node	13340 Jun 09 09:31	7° \mathbb{I} 45'00	
				13340 Jun 25 12:30	0° \mathbb{B}	
superior conj	13339 Aug 09 05:27	29° \mathbb{Q} 00'09 -1°09'43	morning set	13340 Jul 06 13:08	16° \mathbb{B} 50'44	
minimum elong	13339 Aug 09 10:38	29° \mathbb{Q} 23'37 1°09'33	max. Earth dist.	13340 Jul 13 13:58	28° \mathbb{B} 06'41 1.42685 AU	
	13339 Aug 09 18:40	0° \mathbb{M}		13340 Jul 14 17:37	0° \mathbb{Q}	
asc. node	13339 Aug 17 09:20	14° \mathbb{M} 09'01	superior conj	13340 Jul 20 20:53	10° \mathbb{Q} 17'32 -1°42'02	
evening rise	13339 Aug 19 04:52	17° \mathbb{M} 34'58	minimum elong	13340 Jul 21 04:00	10° \mathbb{Q} 47'58 1°42'08	
	13339 Aug 25 22:17	0° \mathbb{A}	evening rise	13340 Aug 01 08:01	0° \mathbb{M} 31'37	
evening max el	13339 Sep 04 03:55	13° \mathbb{A} 15'21 18°24'29		13340 Aug 01 01:00	0° \mathbb{M}	
retrograde	13339 Sep 11 19:04	17° \mathbb{A} 06'58	asc. node	13340 Aug 03 05:58	3° \mathbb{M} 58'26	
			evening max el	13340 Aug 17 14:59	26° \mathbb{M} 08'01 18°05'12	

retrograde	13340 Aug 24 10:09	29° \cap 37'01		retrograde	13341 Aug 07 14:48	12° \cap 46'50	
evening set	13340 Aug 26 18:42	29° \cap 12'06		evening set	13341 Aug 10 07:36	12° \cap 09'41	
inferior conj	13340 Sep 02 16:38	24° \cap 16'45	0°47'01	inferior conj	13341 Aug 16 14:35	6° \cap 56'03	1°51'15
minimum elong	13340 Sep 02 18:04	24° \cap 13'25	0°46'18	minimum elong	13341 Aug 16 17:04	6° \cap 49'28	1°50'01
desc. node	13340 Sep 05 06:53	21° \cap 51'24		min. Earth dist.	13341 Aug 19 10:12	3° \cap 57'37	0.62635 AU
min. Earth dist.	13340 Sep 05 21:41	21° \cap 18'06	0.60361 AU	morning rise	13341 Aug 23 00:20	0° \cap 45'56	
morning rise	13340 Sep 09 14:22	18° \cap 26'43		desc. node	13341 Aug 23 04:22	0° \cap 38'37	
direct	13340 Sep 16 03:51	16° \cap 21'03			13341 Aug 24 03:38	30° κ 0	
morning max el	13340 Sep 30 10:57	24° \cap 14'42	27°52'48	direct	13341 Aug 29 16:37	28° \cap 19'13	
	13340 Oct 05 16:28	0° $\underline{\cap}$			13341 Sep 04 16:08	0° \cap	
	13340 Oct 25 05:43	0° \cap		morning max el	13341 Sep 12 18:16	6° \cap 21'02	27°54'43
asc. node	13340 Oct 30 07:54	9° \cap 49'02			13341 Sep 30 17:51	0° $\underline{\cap}$	
morning set	13340 Nov 02 01:43	15° \cap 26'31		morning set	13341 Oct 16 23:54	29° $\underline{\cap}$ 19'15	
max. Earth dist.	13340 Nov 08 02:20	28° \cap 28'17	1.31321 AU	asc. node	13341 Oct 17 04:35	29° $\underline{\cap}$ 43'04	
	13340 Nov 08 18:52	0° \times			13341 Oct 17 07:54	0° \cap	
				max. Earth dist.	13341 Oct 22 05:51	10° \cap 19'53	1.31938 AU
superior conj	13340 Nov 09 05:39	0° \times 59'56	1°22'13				
minimum elong	13340 Nov 09 03:38	0° \times 48'42	1°22'49	superior conj	13341 Oct 24 14:23	15° \cap 27'18	1°05'49
evening rise	13340 Nov 15 22:23	15° \times 47'27		minimum elong	13341 Oct 24 12:06	15° \cap 14'50	1°06'06
	13340 Nov 22 21:13	0° $\underline{\times}$		evening rise	13341 Oct 31 09:18	0° \times 19'45	
desc. node	13340 Dec 02 03:41	15° $\underline{\times}$ 51'21			13341 Oct 31 05:38	0° \times	
evening max el	13340 Dec 13 10:13	29° $\underline{\times}$ 46'50	25°39'42		13341 Nov 16 12:54	0° $\underline{\times}$	
	13340 Dec 13 15:49	0° \approx		desc. node	13341 Nov 19 00:50	3° $\underline{\times}$ 25'22	
retrograde	13340 Dec 27 07:35	6° \approx 47'18		evening max el	13341 Nov 24 21:49	10° $\underline{\times}$ 04'49	24°05'12
evening set	13341 Jan 02 08:39	5° \approx 22'50		retrograde	13341 Dec 08 12:36	16° $\underline{\times}$ 51'58	
min. Earth dist.	13341 Jan 06 22:41	2° \approx 44'54	0.57419 AU	evening set	13341 Dec 13 11:11	15° $\underline{\times}$ 58'32	
inferior conj	13341 Jan 09 20:59	0° \approx 44'03	-4°46'20	min. Earth dist.	13341 Dec 19 09:04	13° $\underline{\times}$ 02'37	0.55718 AU
minimum elong	13341 Jan 10 05:44	0° \approx 28'58	4°43'10	inferior conj	13341 Dec 21 11:27	11° $\underline{\times}$ 46'11	-5°43'02
	13341 Jan 10 22:45	30° κ 0		minimum elong	13341 Dec 21 16:53	11° $\underline{\times}$ 37'56	5°41'23
morning rise	13341 Jan 18 05:30	26° $\underline{\times}$ 26'36		morning rise	13341 Dec 30 00:29	7° $\underline{\times}$ 48'22	
direct	13341 Jan 20 08:36	26° $\underline{\times}$ 12'40		direct	13342 Jan 01 13:24	7° $\underline{\times}$ 31'48	
asc. node	13341 Jan 26 07:10	28° $\underline{\times}$ 08'52		morning max el	13342 Jan 11 21:16	12° $\underline{\times}$ 28'58	19°57'54
	13341 Jan 28 15:38	0° \approx		asc. node	13342 Jan 13 04:27	13° $\underline{\times}$ 48'29	
morning max el	13341 Jan 29 04:43	0° \approx 30'53	18°53'05		13342 Jan 23 22:41	0° \approx	
morning set	13341 Feb 14 13:29	26° \approx 51'39		morning set	13342 Jan 29 18:27	11° \approx 26'10	
	13341 Feb 16 03:50	0° \times					
superior conj	13341 Feb 23 02:45	13° \times 29'56	0°40'11	superior conj	13342 Feb 06 12:53	27° \approx 12'56	1°05'01
minimum elong	13341 Feb 23 05:08	13° \times 41'16	0°40'10	minimum elong	13342 Feb 06 15:39	27° \approx 26'44	1°05'16
desc. node	13341 Feb 28 04:30	22° \times 54'01			13342 Feb 07 22:36	0° \times	
max. Earth dist.	13341 Mar 02 05:02	26° \times 31'05	1.39310 AU	max. Earth dist.	13342 Feb 12 11:21	8° \times 42'47	1.37073 AU
	13341 Mar 04 04:43	0° γ		desc. node	13342 Feb 15 01:02	13° \times 27'42	
evening rise	13341 Mar 06 02:17	3° γ 15'41		evening rise	13342 Feb 16 05:09	15° \times 34'43	
	13341 Mar 23 03:53	0° \times			13342 Feb 24 15:54	0° γ	
evening max el	13341 Apr 10 03:48	22° \times 38'56	24°18'31	evening max el	13342 Mar 17 18:14	0° \times	
retrograde	13341 Apr 21 12:43	29° \times 19'01			13342 Mar 23 17:14	6° \times 31'10	25°33'49
asc. node	13341 Apr 24 03:46	28° \times 48'13		retrograde	13342 Apr 05 01:28	13° \times 38'36	
evening set	13341 Apr 26 23:51	27° \times 00'48		evening set	13342 Apr 11 00:00	11° \times 11'17	
min. Earth dist.	13341 May 01 14:14	21° \times 43'27	0.68506 AU	asc. node	13342 Apr 11 01:10	11° \times 08'51	
inferior conj	13341 May 02 11:43	20° \times 31'02	2°19'31	min. Earth dist.	13342 Apr 15 07:21	6° \times 29'24	0.67678 AU
minimum elong	13341 May 02 09:35	20° \times 38'13	2°18'14	inferior conj	13342 Apr 16 17:12	4° \times 40'50	1°41'18
morning rise	13341 May 07 19:27	14° \times 30'30		minimum elong	13342 Apr 16 15:10	4° \times 47'22	1°40'09
direct	13341 May 11 17:41	13° \times 02'35			13342 Apr 20 19:03	30° κ γ	
morning max el	13341 May 19 08:24	17° \times 18'26	20°01'50	morning rise	13342 Apr 22 06:49	28° γ 49'31	
desc. node	13341 May 27 06:26	26° \times 52'21		direct	13342 Apr 25 17:29	27° γ 41'26	
	13341 May 29 12:38	0° \cap			13342 May 01 00:09	0° \times	
morning set	13341 Jun 15 16:33	25° \cap 34'21		morning max el	13342 May 02 14:12	1° \times 25'20	19°02'50
	13341 Jun 18 13:20	0° $\underline{\cap}$		desc. node	13342 May 14 03:13	16° \times 30'14	
max. Earth dist.	13341 Jun 26 01:01	11° $\underline{\cap}$ 45'18	1.44391 AU	greatest brilliancy	13342 May 15 18:00	18° \times 55'09	-0.7m
					13342 May 23 00:07	0° \cap	
superior conj	13341 Jul 01 12:44	20° $\underline{\cap}$ 35'09	-2°05'39	morning set	13342 May 25 21:33	4° \cap 28'07	
minimum elong	13341 Jul 01 18:24	20° $\underline{\cap}$ 58'12	2°06'21	max. Earth dist.	13342 Jun 08 17:15	25° \cap 58'01	1.45476 AU
	13341 Jul 07 05:44	0° \cap					
evening rise	13341 Jul 14 17:13	12° \cap 40'22		superior conj	13342 Jun 11 06:55	0° $\underline{\cap}$ 00'15	-2°13'29
asc. node	13341 Jul 21 02:41	23° \cap 33'51		minimum elong	13342 Jun 11 06:11	29° \cap 57'23	2°14'30
	13341 Jul 25 01:41	0° \cap			13342 Jun 11 06:51	0° $\underline{\cap}$	
evening max el	13341 Aug 01 05:07	9° \cap 26'25	18°05'04	evening rise	13342 Jun 26 03:31	23° $\underline{\cap}$ 49'16	
					13342 Jun 29 22:25	0° \cap	

asc. node	13342 Jul 07 23:28	12° Ω 48'51		evening max el	13343 Jun 29 05:41	6° Ω 45'13	18°58'43
evening max el	13342 Jul 15 18:56	23° Ω 01'16	18°23'13	retrograde	13343 Jul 06 00:11	10° Ω 29'01	
retrograde	13342 Jul 22 04:40	26° Ω 26'46		evening set	13343 Jul 09 10:32	9° Ω 20'56	
evening set	13342 Jul 25 06:03	25° Ω 34'55		inferior conj	13343 Jul 14 22:37	3° Ω 36'02	3°00'27
inferior conj	13342 Jul 31 01:48	20° Ω 04'54	2°34'37	minimum elong	13343 Jul 15 00:06	3° Ω 31'20	2°59'20
minimum elong	13342 Jul 31 04:05	19° Ω 58'09	2°33'22	min. Earth dist.	13343 Jul 16 14:14	1° Ω 30'08	0.66432 AU
min. Earth dist.	13342 Aug 02 08:02	17° Ω 25'51	0.64710 AU		13343 Jul 17 19:54	30° \Re \Im	
morning rise	13342 Aug 06 00:48	13° Ω 44'24		morning rise	13343 Jul 20 12:58	27° \Im 12'07	
desc. node	13342 Aug 10 01:50	11° Ω 28'23		direct	13343 Jul 26 18:39	24° \Im 32'02	
direct	13342 Aug 12 14:06	11° Ω 05'56		desc. node	13343 Jul 27 23:15	24° \Im 37'14	
morning max el	13342 Aug 26 04:34	19° Ω 03'48	27°21'21		13343 Aug 06 08:40	0° Ω	
	13342 Sep 04 11:20	0° Π		morning max el	13343 Aug 08 15:37	2° Ω 11'48	26°20'08
	13342 Sep 23 17:35	0° \Im			13343 Aug 29 15:07	0° Π	
morning set	13342 Sep 30 13:08	12° \Im 44'57		morning set	13343 Sep 13 14:09	25° Π 35'23	
asc. node	13342 Oct 04 01:13	19° \Im 45'27			13343 Sep 15 21:59	0° \Im	
max. Earth dist.	13342 Oct 05 01:31	21° \Im 50'16	1.33097 AU	max. Earth dist.	13343 Sep 17 11:27	3° \Im 01'35	1.34772 AU
				asc. node	13343 Sep 20 21:48	9° \Im 51'42	
superior conj	13342 Oct 08 18:43	29° \Im 38'57	0°43'51	superior conj	13343 Sep 22 16:08	13° \Im 27'54	0°16'39
minimum elong	13342 Oct 08 16:45	29° \Im 28'29	0°43'54	minimum elong	13343 Sep 22 15:14	13° \Im 23'12	0°16'37
	13342 Oct 08 22:40	0° Π		evening rise	13343 Sep 30 05:16	29° \Im 13'41	
evening rise	13342 Oct 15 20:15	14° Π 50'23			13343 Sep 30 14:10	0° Π	
	13342 Oct 23 08:50	0° \Re			13343 Oct 18 17:01	0° \Re	
desc. node	13342 Nov 05 22:06	19° \Re 40'16		evening max el	13343 Oct 19 03:48	0° \Re 27'13	20°50'12
evening max el	13342 Nov 06 08:35	20° \Re 06'16	22°23'08	desc. node	13343 Oct 23 19:28	4° \Re 09'06	
retrograde	13342 Nov 19 04:57	26° \Re 28'33		retrograde	13343 Oct 30 15:27	6° \Re 09'44	
evening set	13342 Nov 22 18:05	26° \Re 00'55		evening set	13343 Nov 02 00:55	5° \Re 55'56	
min. Earth dist.	13342 Nov 30 15:47	22° \Re 28'48	0.54698 AU	inferior conj	13343 Nov 11 00:22	2° \Re 01'55	-5°04'06
inferior conj	13342 Dec 01 08:58	22° \Re 04'37	-5°53'27	minimum elong	13343 Nov 10 14:48	2° \Re 15'34	5°01'04
minimum elong	13342 Dec 01 05:57	22° \Re 08'52	5°52'17	min. Earth dist.	13343 Nov 11 22:01	1° \Re 31'03	0.54570 AU
morning rise	13342 Dec 09 19:01	18° \Re 17'15			13343 Nov 14 16:33	30° \Re Π	
direct	13342 Dec 13 02:33	17° \Re 52'29		morning rise	13343 Nov 19 04:49	28° Π 07'38	
morning max el	13342 Dec 24 23:20	23° \Re 32'46	21°25'22	direct	13343 Nov 23 10:29	27° Π 29'13	
	13342 Dec 30 13:11	0° \Re			13343 Dec 01 15:01	0° \Re	
asc. node	13342 Dec 31 01:39	0° \Re 42'57		morning max el	13343 Dec 06 13:19	3° \Re 50'12	23°10'01
morning set	13343 Jan 14 03:50	26° \Re 10'09		asc. node	13343 Dec 17 22:46	18° \Re 34'51	
	13343 Jan 15 23:35	0° \Im			13343 Dec 24 07:19	0° \Re	
superior conj	13343 Jan 21 09:32	11° \Im 23'49	1°22'43	morning set	13343 Dec 29 15:21	10° \Re 56'22	
minimum elong	13343 Jan 21 11:49	11° \Im 35'41	1°23'19	superior conj	13344 Jan 05 13:24	25° \Re 52'27	1°33'36
max. Earth dist.	13343 Jan 25 22:06	20° \Im 36'54	1.35039 AU	minimum elong	13344 Jan 05 14:44	25° \Re 59'40	1°34'30
evening rise	13343 Jan 30 00:53	28° \Im 36'02			13344 Jan 07 11:45	0° \Im	
	13343 Jan 30 18:45	0° \Re		max. Earth dist.	13344 Jan 08 16:17	2° \Im 30'27	1.33366 AU
desc. node	13343 Feb 01 21:39	3° \Re 54'43		evening rise	13344 Jan 13 09:46	12° \Im 09'08	
	13343 Feb 17 21:33	0° \Re		desc. node	13344 Jan 19 18:20	24° \Im 09'42	
evening max el	13343 Mar 06 07:06	20° \Re 18'45	26°36'13		13344 Jan 23 02:13	0° \Re	
retrograde	13343 Mar 19 08:49	27° \Re 41'03			13344 Feb 13 03:45	0° \Re	
evening set	13343 Mar 25 17:50	25° \Re 09'09		evening max el	13344 Feb 16 20:33	3° \Re 50'30	27°18'25
asc. node	13343 Mar 28 22:36	22° \Re 01'27		retrograde	13344 Mar 01 09:51	11° \Re 17'23	
min. Earth dist.	13343 Mar 29 19:23	21° \Re 01'46	0.66438 AU	evening set	13344 Mar 08 03:13	8° \Re 46'36	
inferior conj	13343 Mar 31 17:33	18° \Re 43'53	0°52'20	min. Earth dist.	13344 Mar 12 00:08	5° \Re 11'43	0.64814 AU
minimum elong	13343 Mar 31 16:15	18° \Re 47'46	0°51'36	inferior conj	13344 Mar 14 10:16	2° \Re 33'17	-0°07'54
morning rise	13343 Apr 06 15:44	13° \Re 03'31		minimum elong	13344 Mar 14 10:30	2° \Re 32'39	0°07'46
direct	13343 Apr 09 15:58	12° \Re 12'58		transit middle	13344 Mar 14 10:30	2° \Re 32'39	0°07'46
morning max el	13343 Apr 16 02:29	15° \Re 37'34	18°20'12	transit begin	13344 Mar 14 07:50	2° \Re 39'58	
	13343 Apr 26 20:06	0° \Re		transit end	13344 Mar 14 13:10	2° \Re 25'21	
desc. node	13343 Apr 30 23:56	6° \Re 30'39		asc. node	13344 Mar 14 20:04	2° \Re 06'34	
morning set	13343 May 06 00:11	14° \Re 28'19			13344 Mar 16 20:59	30° \Re \Re	
	13343 May 15 19:44	0° Π		morning rise	13344 Mar 20 19:35	27° \Re 06'21	
superior conj	13343 May 21 14:42	9° Π 04'15	-2°01'11	direct	13344 Mar 23 10:42	26° \Re 30'15	
minimum elong	13343 May 21 07:01	8° Π 34'13	2°01'39		13344 Mar 29 23:59	0° \Re	
max. Earth dist.	13343 May 22 12:56	10° Π 31'06	1.45842 AU	morning max el	13344 Mar 29 18:59	29° \Re 47'40	17°54'37
	13343 Jun 04 00:28	0° \Im		morning set	13344 Apr 16 07:17	25° \Re 51'49	
evening rise	13343 Jun 06 13:23	3° \Im 58'23		desc. node	13344 Apr 16 20:34	26° \Re 46'52	
greatest brilliancy	13343 Jun 16 17:39	19° \Im 49'46	-0.8m		13344 Apr 18 19:13	0° \Re	
	13343 Jun 23 15:45	0° Ω		superior conj	13344 Apr 30 05:38	18° \Re 33'42	-1°31'28
asc. node	13343 Jun 24 20:22	1° Ω 36'12					

minimum elong	13344 Apr 29 20:49	17°♄58'35	1°31'12	minimum elong	13345 Apr 10 11:49	28°♄40'47	0°52'16
max. Earth dist.	13344 May 04 09:16	25°♄07'37	1.45449 AU		13345 Apr 11 06:59	0°♄	
	13344 May 07 11:59	0°♄		max. Earth dist.	13345 Apr 17 03:03	9°♄28'51	1.44351 AU
evening rise	13344 May 16 05:05	13°♄28'00		evening rise	13345 Apr 25 16:44	22°♄55'18	
	13344 May 27 02:43	0°♄			13345 Apr 30 08:04	0°♄	
greatest brilliancy	13344 May 30 17:22	5°♄19'43	-0.6m		13345 May 21 13:31	0°♄	
asc. node	13344 Jun 10 17:21	19°♄46'37		evening max el	13345 May 25 11:04	4°♄21'19	20°55'55
evening max el	13344 Jun 11 11:21	20°♄33'02	19°50'21	asc. node	13345 May 28 14:27	7°♄07'27	
retrograde	13344 Jun 18 22:34	24°♄47'19		retrograde	13345 Jun 02 21:31	9°♄15'26	
evening set	13344 Jun 22 18:22	23°♄22'27		evening set	13345 Jun 07 03:29	7°♄34'00	
inferior conj	13344 Jun 28 02:02	17°♄24'02	3°11'46	inferior conj	13345 Jun 12 09:29	1°♄23'42	3°10'48
minimum elong	13344 Jun 28 02:29	17°♄22'32	3°10'44	minimum elong	13345 Jun 12 08:56	1°♄25'40	3°09'44
min. Earth dist.	13344 Jun 29 03:12	15°♄59'25	0.67720 AU	min. Earth dist.	13345 Jun 12 20:57	0°♄43'58	0.68546 AU
morning rise	13344 Jul 03 10:13	11°♄01'16			13345 Jun 13 09:42	30°♄	
direct	13344 Jul 09 05:17	8°♄28'22		morning rise	13345 Jun 17 14:08	25°♄04'58	
desc. node	13344 Jul 13 20:35	9°♄47'31		direct	13345 Jun 22 20:58	22°♄45'55	
morning max el	13344 Jul 21 02:14	15°♄35'23	25°00'17	desc. node	13345 Jun 30 17:48	26°♄31'32	
	13344 Aug 01 23:03	0°♄		morning max el	13345 Jul 03 12:41	29°♄07'16	23°31'28
	13344 Aug 21 12:40	0°♄			13345 Jul 04 09:08	0°♄	
morning set	13344 Aug 25 22:59	7°♄41'15			13345 Jul 26 16:57	0°♄	
max. Earth dist.	13344 Aug 29 12:52	14°♄09'52	1.36864 AU	morning set	13345 Aug 07 10:54	18°♄50'27	
				max. Earth dist.	13345 Aug 11 10:32	25°♄40'18	1.39189 AU
					13345 Aug 13 21:25	0°♄	
superior conj	13344 Sep 05 03:39	26°♄46'50	-0°15'03	superior conj	13345 Aug 19 01:27	9°♄26'02	-0°49'36
minimum elong	13344 Sep 05 04:38	26°♄51'37	0°15'01	minimum elong	13345 Aug 19 05:02	9°♄42'47	0°49'27
behind sun begin	13344 Sep 05 02:13	26°♄39'46		asc. node	13345 Aug 24 14:56	20°♄01'09	
behind sun end	13344 Sep 05 07:02	27°♄03'28		evening rise	13345 Aug 28 07:50	27°♄12'40	
asc. node	13344 Sep 06 18:22	29°♄58'20			13345 Aug 29 18:24	0°♄	
	13344 Sep 06 18:42	0°♄		evening max el	13345 Sep 13 11:13	23°♄26'26	18°44'36
evening rise	13344 Sep 13 10:05	13°♄23'52		retrograde	13345 Sep 21 19:07	27°♄37'43	
	13344 Sep 22 03:28	0°♄		evening set	13345 Sep 23 16:54	27°♄25'20	
evening max el	13344 Sep 30 12:56	11°♄32'48	19°36'27	desc. node	13345 Sep 26 14:25	26°♄23'24	
desc. node	13344 Oct 09 16:55	16°♄26'20		inferior conj	13345 Oct 01 19:33	23°♄02'44	-1°39'09
retrograde	13344 Oct 10 09:04	16°♄27'39		minimum elong	13345 Oct 01 15:27	23°♄10'16	1°37'12
evening set	13344 Oct 12 06:16	16°♄17'39		min. Earth dist.	13345 Oct 04 21:54	20°♄46'55	0.56961 AU
inferior conj	13344 Oct 21 00:29	12°♄13'13	-3°28'50	morning rise	13345 Oct 09 10:37	18°♄03'54	
minimum elong	13344 Oct 20 15:42	12°♄27'06	3°25'10	direct	13345 Oct 15 06:54	16°♄40'32	
min. Earth dist.	13344 Oct 23 07:13	10°♄46'50	0.55373 AU	morning max el	13345 Oct 29 13:00	24°♄05'22	26°31'12
morning rise	13344 Oct 28 23:15	7°♄51'41			13345 Nov 03 22:34	0°♄	
direct	13344 Nov 03 01:36	6°♄53'52		asc. node	13345 Nov 20 16:41	26°♄17'53	
morning max el	13344 Nov 16 23:16	13°♄50'13	24°58'06		13345 Nov 22 14:24	0°♄	
	13344 Nov 29 14:11	0°♄		morning set	13345 Nov 27 13:36	10°♄15'36	
asc. node	13344 Dec 03 19:48	7°♄10'23					
morning set	13344 Dec 13 03:11	25°♄39'50		superior conj	13345 Dec 04 08:57	25°♄15'21	1°36'31
	13344 Dec 15 03:11	0°♄		minimum elong	13345 Dec 04 08:08	25°♄10'49	1°37'29
superior conj	13344 Dec 19 21:55	10°♄31'48	1°38'05	max. Earth dist.	13345 Dec 05 00:21	26°♄41'07	1.31419 AU
minimum elong	13344 Dec 19 22:10	10°♄33'08	1°39'07		13345 Dec 06 12:10	0°♄	
max. Earth dist.	13344 Dec 21 17:46	14°♄32'01	1.32147 AU	evening rise	13345 Dec 11 06:49	10°♄21'17	
evening rise	13344 Dec 27 04:39	26°♄06'28			13345 Dec 21 09:09	0°♄	
	13344 Dec 29 02:47	0°♄		desc. node	13345 Dec 23 11:59	3°♄40'02	
desc. node	13345 Jan 05 15:06	14°♄07'11		evening max el	13346 Jan 11 14:45	29°♄18'18	27°16'08
	13345 Jan 15 12:01	0°♄			13346 Jan 12 08:43	0°♄	
evening max el	13345 Jan 29 07:49	16°♄54'11	27°33'30	retrograde	13346 Jan 25 13:50	6°♄34'53	
retrograde	13345 Feb 12 03:50	24°♄18'25		evening set	13346 Feb 01 10:07	4°♄29'16	
evening set	13345 Feb 19 01:40	21°♄55'57		min. Earth dist.	13346 Feb 05 05:17	1°♄43'32	0.60737 AU
min. Earth dist.	13345 Feb 22 19:47	18°♄49'26	0.62876 AU		13346 Feb 07 05:45	30°♄	
inferior conj	13345 Feb 25 16:27	16°♄01'50	-1°19'12	inferior conj	13346 Feb 08 08:46	29°♄01'17	-2°39'23
minimum elong	13345 Feb 25 19:05	15°♄55'22	1°17'46	minimum elong	13346 Feb 08 14:27	28°♄49'01	2°36'34
asc. node	13345 Mar 01 17:33	12°♄27'09		morning rise	13346 Feb 15 21:54	24°♄09'30	
morning rise	13345 Mar 04 15:06	10°♄51'06		asc. node	13346 Feb 16 15:00	23°♄59'29	
direct	13345 Mar 06 22:38	10°♄25'57		direct	13346 Feb 18 00:11	23°♄51'37	
morning max el	13345 Mar 13 12:44	13°♄47'22	17°46'25	morning max el	13346 Feb 25 04:26	27°♄27'33	17°56'26
	13345 Mar 24 18:24	0°♄			13346 Feb 27 11:17	0°♄	
morning set	13345 Mar 29 15:25	8°♄26'24		morning set	13346 Mar 12 18:26	21°♄53'54	
desc. node	13345 Apr 03 17:07	17°♄13'46			13346 Mar 17 05:03	0°♄	
				desc. node	13346 Mar 21 13:37	7°♄47'30	
superior conj	13345 Apr 10 17:05	29°♄02'33	-0°52'37				

superior conj	13346 Mar 23 04:47	10°♊39'08	-0°12'53			13347 Feb 21 07:30	0°♋	
minimum elong	13346 Mar 23 03:39	10°♊34'14	0°12'48	morning set		13347 Feb 24 10:44	5°♋56'52	
behind sun begin	13346 Mar 22 22:44	10°♊12'46						
behind sun end	13346 Mar 23 08:34	10°♊55'40		superior conj		13347 Mar 05 14:03	23°♋14'29	0°22'38
max. Earth dist.	13346 Mar 30 16:34	23°♊21'00	1.42674 AU	minimum elong		13347 Mar 05 15:38	23°♋21'45	0°22'36
	13346 Apr 03 18:49	0°♌		desc. node		13347 Mar 08 10:06	28°♋23'49	
evening rise	13346 Apr 05 15:39	2°♌58'24				13347 Mar 09 07:37	0°♍	
	13346 Apr 23 17:31	0°♍		max. Earth dist.		13347 Mar 13 01:41	6°♍34'04	1.40600 AU
evening max el	13346 May 08 05:37	18°♍10'48	22°11'40	evening rise		13347 Mar 17 10:14	13°♍54'41	
asc. node	13346 May 15 11:40	23°♍23'49				13347 Mar 27 14:19	0°♌	
retrograde	13346 May 17 19:17	23°♍48'32				13347 Apr 18 21:54	0°♍	
evening set	13346 May 22 12:07	21°♍51'30		evening max el		13347 Apr 20 20:44	2°♍01'52	23°32'26
inferior conj	13346 May 27 18:53	15°♍31'24	2°58'55	retrograde		13347 May 01 14:18	8°♍20'46	
minimum elong	13346 May 27 17:28	15°♍36'19	2°57'46	asc. node		13347 May 02 08:57	8°♍18'01	
min. Earth dist.	13346 May 27 17:18	15°♍36'56	0.68900 AU	evening set		13347 May 06 18:42	6°♍09'41	
morning rise	13346 Jun 01 22:39	9°♍18'39		min. Earth dist.		13347 May 11 14:00	0°♍31'29	0.68785 AU
direct	13346 Jun 06 16:43	7°♍17'55				13347 May 11 23:10	30°♌♌	
morning max el	13346 Jun 16 01:17	12°♍46'57	22°03'00	inferior conj		13347 May 12 04:14	29°♌42'37	2°36'50
desc. node	13346 Jun 17 14:53	14°♍25'15		minimum elong		13347 May 12 02:15	29°♌49'25	2°35'34
	13346 Jun 29 18:53	0°♎		morning rise		13347 May 17 09:45	23°♌37'16	
morning set	13346 Jul 18 22:06	28°♎54'08		direct		13347 May 21 15:08	21°♌57'06	
	13346 Jul 19 14:28	0°♏		morning max el		13347 May 29 19:17	26°♌36'36	20°42'28
max. Earth dist.	13346 Jul 24 10:59	7°♏57'36	1.41489 AU			13347 Jun 01 22:02	0°♍	
				desc. node		13347 Jun 04 11:51	3°♍09'23	
superior conj	13346 Aug 01 05:16	21°♏16'27	-1°24'03			13347 Jun 23 05:38	0°♎	
minimum elong	13346 Aug 01 11:30	21°♏43'58	1°23'57	morning set		13347 Jun 28 09:54	7°♎57'11	
	13346 Aug 06 02:00	0°♐		max. Earth dist.		13347 Jul 06 18:16	21°♎09'31	1.43480 AU
asc. node	13346 Aug 11 11:31	9°♐56'43				13347 Jul 12 03:57	0°♏	
evening rise	13346 Aug 11 19:01	10°♐31'31						
	13346 Aug 22 23:38	0°♑		superior conj		13347 Jul 13 10:55	2°♏09'02	-1°53'32
evening max el	13346 Aug 27 18:55	6°♑01'08	18°13'52	minimum elong		13347 Jul 13 17:59	2°♏38'37	1°53'51
retrograde	13346 Sep 04 00:09	9°♑41'01		evening rise		13347 Jul 25 15:09	23°♏09'12	
evening set	13346 Sep 06 04:18	9°♑21'43		asc. node		13347 Jul 29 08:11	29°♏40'56	
desc. node	13346 Sep 13 11:55	4°♑39'11				13347 Jul 29 12:33	0°♐	
inferior conj	13346 Sep 13 12:21	4°♑38'14	-0°00'20	evening max el		13347 Aug 11 07:50	19°♐06'38	18°02'53
minimum elong	13346 Sep 13 12:21	4°♑38'16	0°00'21	retrograde		13347 Aug 17 21:31	22°♐29'55	
transit middle	13346 Sep 13 12:21	4°♑38'16	0°00'21	evening set		13347 Aug 20 09:40	22°♐00'01	
transit begin	13346 Sep 13 08:54	4°♑45'38		inferior conj		13347 Aug 27 00:48	16°♐56'34	1°17'00
transit end	13346 Sep 13 15:47	4°♑30'53		minimum elong		13347 Aug 27 02:52	16°♐51'27	1°15'57
min. Earth dist.	13346 Sep 16 19:48	1°♑49'06	0.59061 AU	min. Earth dist.		13347 Aug 30 02:31	13°♐55'40	0.61346 AU
	13346 Sep 19 05:42	30°♌♐		desc. node		13347 Aug 31 09:25	12°♐45'40	
morning rise	13346 Sep 20 16:57	29°♐04'41		morning rise		13347 Sep 02 17:25	10°♐57'04	
direct	13346 Sep 27 02:15	27°♐13'31		direct		13347 Sep 09 09:01	8°♐41'33	
	13346 Oct 05 07:43	0°♒		morning max el		13347 Sep 23 14:02	16°♐38'59	27°58'15
morning max el	13346 Oct 11 09:57	4°♒58'36	27°33'47			13347 Oct 04 14:51	0°♑	
	13346 Oct 29 22:24	0°♓				13347 Oct 22 14:20	0°♓	
asc. node	13346 Nov 07 13:28	15°♓48'40		asc. node		13347 Oct 25 10:09	5°♓36'05	
morning set	13346 Nov 11 20:50	24°♓38'43		morning set		13347 Oct 26 23:00	8°♓44'35	
	13346 Nov 14 08:38	0°♈		max. Earth dist.		13347 Nov 01 15:23	20°♓53'45	1.31524 AU
superior conj	13346 Nov 18 20:34	9°♈57'06	1°29'05	superior conj		13347 Nov 03 06:56	24°♓31'48	1°15'57
minimum elong	13346 Nov 18 18:53	9°♈47'46	1°29'51	minimum elong		13347 Nov 03 04:45	24°♓19'41	1°16'25
max. Earth dist.	13346 Nov 18 08:46	8°♈51'17	1.31209 AU			13347 Nov 05 18:06	0°♈	
evening rise	13346 Nov 25 13:57	24°♈47'24		evening rise		13347 Nov 10 00:04	9°♈19'40	
	13346 Nov 28 01:12	0°♉				13347 Nov 20 11:14	0°♉	
desc. node	13346 Dec 10 08:58	22°♉38'06		desc. node		13347 Nov 27 06:03	10°♉48'13	
	13346 Dec 15 07:57	0°♊		evening max el		13347 Dec 06 06:30	21°♉35'39	25°01'36
evening max el	13346 Dec 24 14:48	10°♊52'41	26°24'05	retrograde		13347 Dec 20 01:41	28°♉30'17	
retrograde	13347 Jan 07 13:47	17°♊58'48		evening set		13347 Dec 25 16:56	27°♉19'13	
evening set	13347 Jan 14 00:36	16°♊17'58		min. Earth dist.		13347 Dec 30 18:27	24°♉36'03	0.56637 AU
min. Earth dist.	13347 Jan 18 04:28	13°♊41'26	0.58578 AU	inferior conj		13348 Jan 02 09:56	22°♉53'04	-5°14'28
inferior conj	13347 Jan 21 07:32	11°♊21'12	-4°02'16	minimum elong		13348 Jan 02 18:01	22°♉39'55	5°11'52
minimum elong	13347 Jan 21 15:51	11°♊05'36	3°58'48	morning rise		13348 Jan 10 21:21	18°♉44'19	
morning rise	13347 Jan 29 10:05	6°♊50'35		direct		13348 Jan 13 03:45	18°♉29'43	
direct	13347 Jan 31 11:08	6°♊36'16		asc. node		13348 Jan 21 09:43	21°♉58'56	
asc. node	13347 Feb 03 12:24	7°♊09'54		morning max el		13348 Jan 22 14:07	23°♉03'31	19°17'45
morning max el	13347 Feb 08 14:13	10°♊36'36	18°26'12			13348 Jan 28 05:08	0°♊	

morning set	13348 Feb 08 12:03	20° \approx 23'00		morning max el	13349 Jan 04 00:34	4° \approx 38'20	20°32'32
	13348 Feb 13 07:41	0° \approx		asc. node	13349 Jan 07 06:58	8° \approx 12'13	
					13349 Jan 20 07:48	0° \approx	
superior conj	13348 Feb 16 16:27	6° \approx 36'32	0°51'35	morning set	13349 Jan 22 19:13	5° \approx 02'22	
minimum elong	13348 Feb 16 19:08	6° \approx 49'33	0°51'41				
desc. node	13348 Feb 23 06:38	18° \approx 59'29		superior conj	13349 Jan 30 07:32	20° \approx 32'40	1°13'22
max. Earth dist.	13348 Feb 23 08:18	19° \approx 07'03	1.38354 AU	minimum elong	13349 Jan 30 10:10	20° \approx 46'05	1°13'47
evening rise	13348 Feb 27 01:57	25° \approx 45'14			13349 Feb 04 01:46	0° \approx	
	13348 Feb 29 13:18	0° \approx		max. Earth dist.	13349 Feb 04 16:08	1° \approx 09'19	1.36173 AU
	13348 Mar 20 04:53	0° \approx		evening rise	13349 Feb 08 12:25	8° \approx 22'56	
evening max el	13348 Apr 02 10:22	15° \approx 54'23	24°51'39	desc. node	13349 Feb 09 03:13	9° \approx 30'36	
retrograde	13348 Apr 14 05:31	22° \approx 46'45			13349 Feb 21 06:30	0° \approx	
asc. node	13348 Apr 18 06:19	21° \approx 35'54		evening max el	13349 Mar 15 23:50	29° \approx 44'54	26°02'19
evening set	13348 Apr 19 21:41	20° \approx 24'11			13349 Mar 16 06:03	0° \approx	
min. Earth dist.	13348 Apr 24 08:56	15° \approx 22'10	0.68212 AU	retrograde	13349 Mar 28 16:03	7° \approx 00'11	
inferior conj	13348 Apr 25 11:40	13° \approx 53'46	2°04'36	evening set	13349 Apr 03 19:24	4° \approx 29'57	
minimum elong	13348 Apr 25 09:31	14° \approx 00'54	2°03'20	asc. node	13349 Apr 05 03:45	3° \approx 16'00	
morning rise	13348 Apr 30 21:35	7° \approx 57'07		min. Earth dist.	13349 Apr 08 00:02	0° \approx 03'15	0.67200 AU
direct	13348 May 04 14:53	6° \approx 37'43			13349 Apr 08 01:05	30° \approx 00'00	
morning max el	13348 May 11 20:47	10° \approx 37'55	19°34'49	inferior conj	13349 Apr 09 15:14	28° \approx 01'02	1°21'53
desc. node	13348 May 21 08:43	22° \approx 30'26		minimum elong	13349 Apr 09 13:26	28° \approx 06'40	1°20'51
greatest brilliancy	13348 May 24 12:13	27° \approx 02'57	-0.6m	morning rise	13349 Apr 15 08:13	22° \approx 14'25	
	13348 May 26 12:11	0° \approx		direct	13349 Apr 18 14:17	21° \approx 14'14	
morning set	13348 Jun 06 11:11	16° \approx 36'56		morning max el	13349 Apr 25 05:42	24° \approx 48'15	18°42'43
	13348 Jun 15 02:24	0° \approx			13349 Apr 29 17:16	0° \approx	
max. Earth dist.	13348 Jun 18 08:19	5° \approx 06'16	1.44937 AU	desc. node	13349 May 08 05:29	12° \approx 18'39	
				morning set	13349 May 16 23:37	25° \approx 54'14	
superior conj	13348 Jun 22 16:45	12° \approx 01'24	-2°11'17		13349 May 19 14:34	0° \approx	
minimum elong	13348 Jun 22 20:14	12° \approx 15'21	2°12'12	max. Earth dist.	13349 Jun 01 02:32	19° \approx 30'19	1.45716 AU
	13348 Jul 03 16:51	0° \approx					
evening rise	13348 Jul 06 15:04	4° \approx 53'17		superior conj	13349 Jun 02 04:34	21° \approx 12'02	-2°10'45
asc. node	13348 Jul 15 04:56	19° \approx 08'14		minimum elong	13349 Jun 02 00:28	20° \approx 56'02	2°11'38
	13348 Jul 22 15:20	0° \approx			13349 Jun 07 19:08	0° \approx	
evening max el	13348 Jul 24 22:12	2° \approx 32'43	18°10'36	evening rise	13349 Jun 17 14:54	15° \approx 36'11	
retrograde	13348 Jul 31 06:43	5° \approx 53'43		greatest brilliancy	13349 Jun 24 09:27	26° \approx 25'46	-0.9m
evening set	13348 Aug 03 03:11	5° \approx 10'27			13349 Jun 26 15:42	0° \approx	
inferior conj	13348 Aug 09 04:53	29° \approx 04'19	2°12'01	asc. node	13349 Jul 02 01:47	8° \approx 12'38	
minimum elong	13348 Aug 09 07:23	29° \approx 04'19	2°10'44	evening max el	13349 Jul 08 10:57	16° \approx 11'52	18°36'15
	13348 Aug 09 01:02	30° \approx 00'00		retrograde	13349 Jul 14 23:32	19° \approx 04'00	
min. Earth dist.	13348 Aug 11 18:57	26° \approx 05'24	0.63548 AU	evening set	13349 Jul 18 04:36	18° \approx 04'52	
morning rise	13348 Aug 15 09:51	23° \approx 03'46		inferior conj	13349 Jul 23 20:39	13° \approx 08'47	2°47'30
desc. node	13348 Aug 17 06:56	22° \approx 01'06		minimum elong	13349 Jul 23 22:38	13° \approx 02'42	2°46'19
direct	13348 Aug 22 01:23	21° \approx 01'14		min. Earth dist.	13349 Jul 25 20:40	10° \approx 42'28	0.65481 AU
morning max el	13348 Sep 04 23:04	29° \approx 02'24	27°44'37	morning rise	13349 Jul 29 15:39	6° \approx 45'50	
	13348 Sep 05 21:35	0° \approx		desc. node	13349 Aug 04 04:23	4° \approx 08'32	
	13348 Sep 27 12:34	0° \approx		direct	13349 Aug 05 01:59	4° \approx 05'36	
morning set	13348 Oct 09 17:44	22° \approx 26'43		morning max el	13349 Aug 18 10:13	11° \approx 58'18	26°58'19
asc. node	13348 Oct 11 06:48	25° \approx 34'04			13349 Sep 01 20:08	0° \approx	
	13348 Oct 13 10:13	0° \approx			13349 Sep 20 02:21	0° \approx	
max. Earth dist.	13348 Oct 14 16:16	2° \approx 38'24	1.32371 AU	morning set	13349 Sep 23 02:15	5° \approx 38'43	
				max. Earth dist.	13349 Sep 27 08:01	14° \approx 00'09	1.33749 AU
superior conj	13348 Oct 17 14:04	8° \approx 53'05	0°57'10	asc. node	13349 Sep 28 03:24	15° \approx 38'31	
minimum elong	13348 Oct 17 11:50	8° \approx 41'02	0°57'21				
evening rise	13348 Oct 24 11:15	23° \approx 52'05		superior conj	13349 Oct 01 15:47	22° \approx 55'42	0°32'56
	13348 Oct 27 08:58	0° \approx		minimum elong	13349 Oct 01 14:10	22° \approx 47'12	0°32'56
desc. node	13348 Nov 13 03:16	27° \approx 51'32			13349 Oct 04 23:45	0° \approx	
	13348 Nov 15 00:41	0° \approx		evening rise	13349 Oct 08 21:38	8° \approx 20'05	
evening max el	13348 Nov 16 16:30	1° \approx 41'33	23°21'29		13349 Oct 20 05:43	0° \approx	
retrograde	13348 Nov 30 00:52	8° \approx 20'00		evening max el	13349 Oct 29 05:39	11° \approx 46'27	21°41'38
evening set	13348 Dec 04 09:49	7° \approx 38'26		desc. node	13349 Oct 31 00:35	13° \approx 24'43	
min. Earth dist.	13348 Dec 11 02:26	4° \approx 29'23	0.55193 AU	retrograde	13349 Nov 10 14:01	17° \approx 54'09	
inferior conj	13348 Dec 12 16:16	3° \approx 34'22	-5°54'21	evening set	13349 Nov 13 13:36	17° \approx 34'00	
minimum elong	13348 Dec 12 18:30	3° \approx 31'07	5°53'13	inferior conj	13349 Nov 22 09:29	13° \approx 39'54	-5°39'41
	13348 Dec 20 02:50	30° \approx 00'00		minimum elong	13349 Nov 22 02:55	13° \approx 49'06	5°37'51
morning rise	13348 Dec 21 04:51	29° \approx 43'02		min. Earth dist.	13349 Nov 22 08:41	13° \approx 41'01	0.54528 AU
direct	13348 Dec 24 00:57	29° \approx 23'40		morning rise	13349 Nov 30 17:10	9° \approx 52'00	
	13348 Dec 27 19:18	0° \approx		direct	13349 Dec 04 09:42	9° \approx 22'19	

morning max el	13349 Dec 16 21:00	15° ♁ 20'40	22°08'24	morning rise	13350 Nov 10 05:01	19° ♁ 35'34	
asc. node	13349 Dec 25 04:07	25° ♁ 32'47		direct	13350 Nov 14 19:49	18° ♁ 49'27	
	13349 Dec 27 23:18	0° ♁		morning max el	13350 Nov 28 08:10	25° ♁ 27'03	23°56'30
morning set	13350 Jan 07 05:43	19° ♁ 47'44			13350 Dec 02 14:08	0° ♁	
	13350 Jan 12 00:36	0° ♁		asc. node	13350 Dec 12 01:11	13° ♁ 45'00	
					13350 Dec 20 13:47	0° ♁	
superior conj	13350 Jan 14 07:36	4° ♁ 52'10	1°28'08	morning set	13350 Dec 22 17:36	4° ♁ 33'35	
minimum elong	13350 Jan 14 09:31	5° ♁ 02'18	1°28'52				
max. Earth dist.	13350 Jan 18 05:31	12° ♁ 59'49	1.34273 AU	superior conj	13350 Dec 29 13:46	19° ♁ 26'43	1°36'16
evening rise	13350 Jan 22 14:09	21° ♁ 38'38		minimum elong	13350 Dec 29 14:39	19° ♁ 31'31	1°37'14
desc. node	13350 Jan 26 23:51	29° ♁ 52'51		max. Earth dist.	13351 Jan 01 02:52	24° ♁ 56'09	1.32789 AU
	13350 Jan 27 01:26	0° ♁			13351 Jan 03 12:28	0° ♁	
	13350 Feb 15 02:12	0° ♁		evening rise	13351 Jan 06 03:43	5° ♁ 23'44	
evening max el	13350 Feb 26 13:27	13° ♁ 26'16	26°57'03	desc. node	13351 Jan 13 20:34	20° ♁ 01'28	
retrograde	13350 Mar 11 21:04	20° ♁ 52'37			13351 Jan 19 17:14	0° ♁	
evening set	13350 Mar 18 09:56	18° ♁ 20'11		evening max el	13351 Feb 09 02:22	26° ♁ 48'30	27°28'33
min. Earth dist.	13350 Mar 22 09:14	14° ♁ 27'01	0.65784 AU		13351 Feb 12 18:38	0° ♁	
asc. node	13350 Mar 23 01:13	13° ♁ 41'31		retrograde	13351 Feb 22 19:25	4° ♁ 15'15	
inferior conj	13350 Mar 24 12:40	11° ♁ 58'51	0°28'09	evening set	13351 Mar 01 15:02	1° ♁ 47'18	
minimum elong	13350 Mar 24 11:55	12° ♁ 01'01	0°27'44		13351 Mar 03 19:09	30° ♁	
morning rise	13350 Mar 30 15:19	6° ♁ 24'03		min. Earth dist.	13351 Mar 05 10:31	28° ♁ 24'50	0.64021 AU
direct	13350 Apr 02 11:23	5° ♁ 40'14		inferior conj	13351 Mar 08 01:20	25° ♁ 40'57	-0°36'51
morning max el	13350 Apr 08 20:09	9° ♁ 00'38	18°07'12	minimum elong	13351 Mar 08 02:28	25° ♁ 37'57	0°36'11
	13350 Apr 23 13:57	0° ♁		asc. node	13351 Mar 09 22:40	23° ♁ 45'45	
desc. node	13350 Apr 25 02:09	2° ♁ 26'10		morning rise	13351 Mar 14 16:05	20° ♁ 20'17	
morning set	13350 Apr 27 14:15	6° ♁ 29'20		direct	13351 Mar 17 03:39	19° ♁ 49'21	
	13350 May 12 07:50	0° ♁		morning max el	13351 Mar 23 13:32	23° ♁ 07'30	17°48'52
					13351 Mar 29 01:41	0° ♁	
superior conj	13350 May 12 13:16	0° ♁ 21'22	-1°50'18	morning set	13351 Apr 09 08:45	18° ♁ 25'32	
minimum elong	13350 May 12 04:17	29° ♁ 46'04	1°50'23	desc. node	13351 Apr 11 22:45	22° ♁ 47'31	
max. Earth dist.	13350 May 14 22:14	4° ♁ 04'27	1.45758 AU		13351 Apr 16 06:06	0° ♁	
evening rise	13350 May 28 15:39	25° ♁ 23'55					
	13350 May 31 15:03	0° ♁		superior conj	13351 Apr 22 11:53	10° ♁ 13'25	-1°15'33
greatest brilliancy	13350 Jun 09 22:07	14° ♁ 12'20	-0.7m	minimum elong	13351 Apr 22 04:16	9° ♁ 42'38	1°15'11
asc. node	13350 Jun 18 22:45	26° ♁ 45'23		max. Earth dist.	13351 Apr 27 17:32	18° ♁ 35'24	1.45068 AU
	13350 Jun 21 20:43	0° ♁			13351 May 05 00:53	0° ♁	
evening max el	13350 Jun 21 19:39	29° ♁ 57'22	19°18'52	evening rise	13351 May 08 03:36	4° ♁ 47'10	
retrograde	13350 Jun 28 20:33	3° ♁ 53'03			13351 May 25 01:54	0° ♁	
evening set	13350 Jul 02 10:45	2° ♁ 38'04		evening max el	13351 Jun 04 22:53	13° ♁ 45'28	20°16'46
	13350 Jul 05 06:39	30° ♁		asc. node	13351 Jun 05 19:46	14° ♁ 36'04	
inferior conj	13350 Jul 07 20:36	26° ♁ 47'22	3°06'50	retrograde	13351 Jun 12 19:16	18° ♁ 15'26	
minimum elong	13350 Jul 07 21:39	26° ♁ 43'57	3°05'46	evening set	13351 Jun 16 19:18	16° ♁ 43'34	
min. Earth dist.	13350 Jul 09 06:06	24° ♁ 57'59	0.67031 AU	inferior conj	13351 Jun 22 01:58	10° ♁ 40'09	3°12'42
morning rise	13350 Jul 13 07:59	20° ♁ 23'17		minimum elong	13351 Jun 22 01:59	10° ♁ 40'08	3°11'41
direct	13350 Jul 19 09:26	17° ♁ 45'00		min. Earth dist.	13351 Jun 22 21:18	9° ♁ 34'10	0.68136 AU
desc. node	13350 Jul 22 01:46	18° ♁ 11'29		morning rise	13351 Jun 27 08:20	4° ♁ 18'53	
morning max el	13350 Jul 31 21:05	25° ♁ 13'25	25°47'50	direct	13351 Jul 02 22:27	1° ♁ 50'55	
	13350 Aug 05 05:18	0° ♁		desc. node	13351 Jul 08 23:04	4° ♁ 04'15	
	13350 Aug 26 07:50	0° ♁		morning max el	13351 Jul 14 07:11	8° ♁ 39'28	24°22'54
morning set	13350 Sep 05 20:56	18° ♁ 11'20			13351 Jul 31 01:56	0° ♁	
max. Earth dist.	13350 Sep 09 13:29	25° ♁ 05'03	1.35611 AU	morning set	13351 Aug 18 21:20	29° ♁ 53'25	
	13350 Sep 12 02:30	0° ♁			13351 Aug 18 22:51	0° ♁	
asc. node	13350 Sep 14 24:00	5° ♁ 45'11		max. Earth dist.	13351 Aug 22 12:10	6° ♁ 17'13	1.37837 AU
superior conj	13350 Sep 15 09:23	6° ♁ 32'32	0°03'42	superior conj	13351 Aug 29 15:32	19° ♁ 35'17	-0°29'29
minimum elong	13350 Sep 15 09:10	6° ♁ 31'27	0°03'41	minimum elong	13351 Aug 29 17:33	19° ♁ 44'59	0°29'25
behind sun begin	13350 Sep 15 03:09	6° ♁ 01'04		asc. node	13351 Sep 01 20:33	25° ♁ 50'12	
behind sun end	13350 Sep 15 15:12	7° ♁ 01'54			13351 Sep 03 23:03	0° ♁	
evening rise	13350 Sep 23 05:08	22° ♁ 38'01		evening rise	13351 Sep 07 07:16	6° ♁ 39'16	
	13350 Sep 26 20:27	0° ♁			13351 Sep 20 14:24	0° ♁	
evening max el	13350 Oct 11 06:39	22° ♁ 25'17	20°16'20	evening max el	13351 Sep 23 21:47	3° ♁ 51'30	19°11'49
desc. node	13350 Oct 17 21:59	27° ♁ 00'30		retrograde	13351 Oct 03 01:17	8° ♁ 26'13	
retrograde	13350 Oct 22 01:50	27° ♁ 47'29		evening set	13351 Oct 04 21:50	8° ♁ 15'42	
evening set	13350 Oct 24 03:59	27° ♁ 36'20		desc. node	13351 Oct 04 19:27	8° ♁ 16'47	
inferior conj	13350 Nov 02 02:59	23° ♁ 39'42	-4°27'37	inferior conj	13351 Oct 13 10:14	4° ♁ 04'18	-2°42'16
minimum elong	13350 Nov 01 16:54	23° ♁ 54'35	4°23'58	minimum elong	13351 Oct 13 03:17	4° ♁ 15'57	2°39'08
min. Earth dist.	13350 Nov 03 16:14	22° ♁ 44'42	0.54799 AU	min. Earth dist.	13351 Oct 16 03:15	2° ♁ 15'39	0.55965 AU

	13351 Oct 20 01:09	30° κ $\underline{\mathfrak{A}}$		min. Earth dist.	13352 Sep 26 20:30	12° $\underline{\mathfrak{A}}$ 40'57	0.57807 AU
morning rise	13351 Oct 21 06:07	29° $\underline{\mathfrak{A}}$ 27'46		morning rise	13352 Oct 01 01:30	9° $\underline{\mathfrak{A}}$ 58'45	
direct	13351 Oct 26 16:52	28° $\underline{\mathfrak{A}}$ 19'32		direct	13352 Oct 07 03:55	8° $\underline{\mathfrak{A}}$ 23'52	
	13351 Nov 02 07:42	0° \mathfrak{M}		morning max el	13352 Oct 21 11:21	15° $\underline{\mathfrak{A}}$ 57'34	27°02'22
morning max el	13351 Nov 09 18:40	5° \mathfrak{M} 28'23	25°40'37		13352 Nov 01 22:16	0° \mathfrak{M}	
	13351 Nov 27 11:56	0° \mathfrak{A}		asc. node	13352 Nov 14 18:59	21° \mathfrak{M} 53'26	
asc. node	13351 Nov 28 22:08	2° \mathfrak{A} 35'13			13352 Nov 18 19:38	0° \mathfrak{A}	
morning set	13351 Dec 07 05:02	19° \mathfrak{A} 14'10		morning set	13352 Nov 20 14:20	3° \mathfrak{A} 45'00	
	13351 Dec 12 02:49	0° \mathfrak{B}					
superior conj	13351 Dec 13 23:35	4° \mathfrak{B} 08'19	1°38'08	superior conj	13352 Nov 27 11:04	18° \mathfrak{A} 51'19	1°34'04
minimum elong	13351 Dec 13 23:21	4° \mathfrak{B} 07'06	1°39'10	minimum elong	13352 Nov 27 09:51	18° \mathfrak{A} 44'34	1°34'58
max. Earth dist.	13351 Dec 15 07:02	7° \mathfrak{B} 02'15	1.31779 AU	max. Earth dist.	13352 Nov 27 15:02	19° \mathfrak{A} 13'29	1.31268 AU
evening rise	13351 Dec 21 02:00	19° \mathfrak{B} 29'24		evening rise	13352 Dec 02 11:54	0° \mathfrak{B}	
	13351 Dec 26 08:10	0° \approx		desc. node	13352 Dec 04 06:32	3° \mathfrak{B} 49'21	
desc. node	13351 Dec 31 17:21	9° \approx 49'29			13352 Dec 17 14:15	29° \mathfrak{B} 08'46	
	13352 Jan 14 00:12	0° \mathfrak{X}		evening max el	13352 Dec 18 02:43	0° \approx	
evening max el	13352 Jan 22 12:21	9° \mathfrak{X} 37'32	27°30'20	retrograde	13353 Jan 03 16:37	21° \approx 40'56	26°58'03
retrograde	13352 Feb 05 09:54	16° \mathfrak{X} 58'00		evening set	13353 Jan 17 15:31	28° \approx 52'43	
evening set	13352 Feb 12 07:53	14° \mathfrak{X} 42'01		min. Earth dist.	13353 Jan 24 09:11	26° \approx 56'33	
min. Earth dist.	13352 Feb 16 02:01	11° \mathfrak{X} 45'15	0.61990 AU	inferior conj	13353 Jan 28 06:47	24° \approx 16'42	0.59818 AU
inferior conj	13352 Feb 19 02:03	8° \mathfrak{X} 58'22	-1°52'19	minimum elong	13353 Jan 31 11:19	21° \approx 41'48	-3°14'44
minimum elong	13352 Feb 19 05:57	8° \mathfrak{X} 49'19	1°50'16	morning rise	13353 Jan 31 18:17	21° \approx 27'38	3°11'31
asc. node	13352 Feb 24 20:08	4° \mathfrak{X} 31'17		direct	13353 Feb 08 06:29	16° \approx 58'53	
morning rise	13352 Feb 26 06:47	3° \mathfrak{X} 54'59		asc. node	13353 Feb 10 07:48	16° \approx 42'52	
direct	13352 Feb 28 11:50	3° \mathfrak{X} 33'15		morning max el	13353 Feb 10 17:34	16° \approx 43'31	
morning max el	13352 Mar 06 06:45	6° \mathfrak{X} 59'30	17°48'18		13353 Feb 17 20:24	20° \approx 27'29	18°06'33
	13352 Mar 21 06:34	0° \mathfrak{Y}		morning set	13353 Feb 24 23:30	0° \mathfrak{X}	
morning set	13352 Mar 22 01:41	1° \mathfrak{Y} 25'00			13353 Mar 05 10:55	15° \mathfrak{X} 09'05	
desc. node	13352 Mar 28 19:16	13° \mathfrak{Y} 17'34			13353 Mar 13 11:51	0° \mathfrak{Y}	
superior conj	13352 Apr 02 09:38	21° \mathfrak{Y} 10'50	-0°35'28	superior conj	13353 Mar 15 07:01	3° \mathfrak{Y} 13'46	0°02'55
minimum elong	13352 Apr 02 06:14	20° \mathfrak{Y} 56'29	0°35'14	minimum elong	13353 Mar 15 07:15	3° \mathfrak{Y} 14'49	0°02'55
	13352 Apr 07 16:57	0° \mathfrak{B}		behind sun begin	13353 Mar 14 23:38	2° \mathfrak{Y} 40'52	
max. Earth dist.	13352 Apr 09 10:06	2° \mathfrak{B} 47'18	1.43710 AU	behind sun end	13353 Mar 15 14:51	3° \mathfrak{Y} 48'40	
evening rise	13352 Apr 16 18:32	14° \mathfrak{B} 26'22		desc. node	13353 Mar 15 15:44	3° \mathfrak{Y} 52'35	
	13352 Apr 27 01:03	0° \mathfrak{I}		max. Earth dist.	13353 Mar 22 22:00	16° \mathfrak{Y} 24'45	1.41832 AU
evening max el	13352 May 17 20:20	27° \mathfrak{I} 34'27	21°27'10	evening rise	13353 Mar 28 01:11	24° \mathfrak{Y} 50'23	
	13352 May 20 12:20	0° \mathfrak{E}			13353 Mar 31 07:04	0° \mathfrak{B}	
asc. node	13352 May 22 16:54	1° \mathfrak{E} 31'35		evening max el	13353 Apr 20 22:08	0° \mathfrak{I}	
retrograde	13352 May 26 17:48	2° \mathfrak{E} 46'23		asc. node	13353 Apr 30 13:03	11° \mathfrak{I} 23'49	22°45'44
evening set	13352 May 31 04:25	0° \mathfrak{E} 58'00		retrograde	13353 May 09 14:09	17° \mathfrak{I} 15'03	
	13352 Jun 01 05:44	30° κ \mathfrak{I}		evening set	13353 May 10 14:35	17° \mathfrak{I} 19'49	
inferior conj	13352 Jun 05 10:29	24° \mathfrak{I} 43'24	3°07'01	inferior conj	13353 May 15 12:23	15° \mathfrak{I} 16'16	
minimum elong	13352 Jun 05 09:32	24° \mathfrak{I} 46'41	3°05'55	minimum elong	13353 May 20 20:04	8° \mathfrak{I} 52'41	2°50'48
min. Earth dist.	13352 Jun 05 16:18	24° \mathfrak{I} 23'08	0.68761 AU	min. Earth dist.	13353 May 20 18:23	8° \mathfrak{I} 58'32	2°49'35
morning rise	13352 Jun 10 14:28	18° \mathfrak{I} 27'16		morning rise	13353 May 20 12:59	9° \mathfrak{I} 17'20	0.68908 AU
direct	13352 Jun 15 15:57	16° \mathfrak{I} 15'40		direct	13353 May 26 00:17	2° \mathfrak{I} 43'05	
desc. node	13352 Jun 24 20:14	21° \mathfrak{I} 20'32		morning max el	13353 May 30 12:50	0° \mathfrak{I} 51'14	
morning max el	13352 Jun 25 18:09	22° \mathfrak{I} 14'17	22°53'18	desc. node	13353 Jun 08 08:51	5° \mathfrak{I} 58'18	21°27'27
	13352 Jul 02 12:07	0° \mathfrak{E}			13353 Jun 11 17:16	9° \mathfrak{I} 37'31	
	13352 Jul 23 09:02	0° \mathfrak{Q}		morning set	13353 Jun 26 17:43	0° \mathfrak{E}	
morning set	13352 Jul 29 23:02	10° \mathfrak{Q} 35'07			13353 Jul 09 23:36	20° \mathfrak{E} 10'54	
max. Earth dist.	13352 Aug 03 10:51	18° \mathfrak{Q} 07'39	1.40190 AU	max. Earth dist.	13353 Jul 16 02:14	0° \mathfrak{Q}	
	13352 Aug 10 04:55	0° \mathfrak{M}			13353 Jul 16 14:20	0° \mathfrak{Q} 49'35	1.42387 AU
superior conj	13352 Aug 11 06:16	1° \mathfrak{M} 55'02	-1°04'28	superior conj	13353 Jul 24 01:01	13° \mathfrak{Q} 21'01	-1°37'33
minimum elong	13352 Aug 11 11:03	2° \mathfrak{M} 16'50	1°04'18	minimum elong	13353 Jul 24 07:59	13° \mathfrak{Q} 51'04	1°37'34
asc. node	13352 Aug 18 17:07	15° \mathfrak{M} 50'26		evening rise	13353 Aug 02 10:26	0° \mathfrak{M}	
evening rise	13352 Aug 21 01:02	20° \mathfrak{M} 16'44		asc. node	13353 Aug 04 06:26	3° \mathfrak{M} 19'28	
	13352 Aug 26 05:27	0° $\underline{\mathfrak{A}}$		evening max el	13353 Aug 05 13:44	5° \mathfrak{M} 41'30	
evening max el	13352 Sep 06 00:33	16° $\underline{\mathfrak{A}}$ 03'20	18°29'00		13353 Aug 20 10:52	28° \mathfrak{M} 51'29	18°06'48
retrograde	13352 Sep 13 19:44	19° $\underline{\mathfrak{A}}$ 59'45		retrograde	13353 Aug 21 16:57	0° $\underline{\mathfrak{A}}$	
evening set	13352 Sep 15 19:53	19° $\underline{\mathfrak{A}}$ 44'52		evening set	13353 Aug 27 08:21	2° $\underline{\mathfrak{A}}$ 22'55	
desc. node	13352 Sep 20 16:58	17° $\underline{\mathfrak{A}}$ 22'42			13353 Aug 29 15:41	1° $\underline{\mathfrak{A}}$ 59'38	
inferior conj	13352 Sep 23 14:34	15° $\underline{\mathfrak{A}}$ 13'01	-0°54'59	inferior conj	13353 Sep 02 06:35	30° κ \mathfrak{M}	
minimum elong	13352 Sep 23 12:25	15° $\underline{\mathfrak{A}}$ 17'14	0°53'57	minimum elong	13353 Sep 05 16:11	27° \mathfrak{M} 07'21	0°35'18
					13353 Sep 05 17:18	27° \mathfrak{M} 04'48	0°34'43

desc. node	13353 Sep 07 14:30	25° \mathbb{M} 20'54		inferior conj	13354 Aug 19 11:48	9° \mathbb{M} 41'14	1°42'55
min. Earth dist.	13353 Sep 08 22:08	24° \mathbb{M} 10'21	0.60023 AU	minimum elong	13354 Aug 19 14:13	9° \mathbb{M} 34'55	1°41'42
morning rise	13353 Sep 12 15:41	21° \mathbb{M} 21'06		min. Earth dist.	13354 Aug 22 09:11	6° \mathbb{M} 41'27	0.62309 AU
direct	13353 Sep 19 04:15	19° \mathbb{M} 18'59		morning rise	13354 Aug 25 23:18	3° \mathbb{M} 33'34	
morning max el	13353 Oct 03 11:47	27° \mathbb{M} 10'58	27°49'05	desc. node	13354 Aug 25 12:02	3° \mathbb{M} 54'27	
	13353 Oct 06 04:27	0° \mathbb{L}		direct	13354 Sep 01 15:41	1° \mathbb{M} 09'20	
	13353 Oct 26 14:29	0° \mathbb{M}		morning max el	13354 Sep 15 18:17	9° \mathbb{M} 10'25	27°56'45
asc. node	13353 Nov 01 15:43	11° \mathbb{M} 31'28			13354 Oct 01 21:54	0° \mathbb{L}	
morning set	13353 Nov 04 19:39	18° \mathbb{M} 00'55			13354 Oct 18 19:52	0° \mathbb{M}	
	13353 Nov 10 08:34	0° \mathbb{X}		morning set	13354 Oct 19 18:57	1° \mathbb{M} 57'04	
max. Earth dist.	13353 Nov 10 23:07	1° \mathbb{X} 20'40	1.31271 AU	asc. node	13354 Oct 19 12:24	1° \mathbb{M} 23'39	
				max. Earth dist.	13354 Oct 25 03:28	13° \mathbb{M} 14'46	1.31812 AU
superior conj	13353 Nov 11 22:21	3° \mathbb{X} 29'59	1°24'12				
minimum elong	13353 Nov 11 20:25	3° \mathbb{X} 19'11	1°24'52	superior conj	13354 Oct 27 07:37	17° \mathbb{M} 59'24	1°08'39
evening rise	13353 Nov 18 15:08	18° \mathbb{X} 17'46		minimum elong	13354 Oct 27 05:20	17° \mathbb{M} 46'56	1°09'01
	13353 Nov 24 07:06	0° \mathbb{Z}			13354 Nov 01 18:33	0° \mathbb{X}	
desc. node	13353 Dec 04 11:19	17° \mathbb{Z} 48'06		evening rise	13354 Nov 03 01:55	2° \mathbb{X} 50'07	
	13353 Dec 13 17:43	0° \mathbb{M}			13354 Nov 17 12:15	0° \mathbb{Z}	
evening max el	13353 Dec 16 12:52	2° \mathbb{M} 51'38	25°52'08	desc. node	13354 Nov 21 08:29	5° \mathbb{Z} 32'08	
retrograde	13353 Dec 30 10:55	9° \mathbb{M} 53'58		evening max el	13354 Nov 28 01:26	13° \mathbb{Z} 15'19	24°20'15
evening set	13354 Jan 05 14:48	8° \mathbb{M} 25'06		retrograde	13354 Dec 11 17:46	20° \mathbb{Z} 04'37	
min. Earth dist.	13354 Jan 10 01:40	5° \mathbb{M} 48'06	0.57703 AU	evening set	13354 Dec 16 20:53	19° \mathbb{Z} 06'50	
inferior conj	13354 Jan 13 01:37	3° \mathbb{M} 41'40	-4°35'20	min. Earth dist.	13354 Dec 22 13:00	16° \mathbb{Z} 14'44	0.55932 AU
minimum elong	13354 Jan 13 10:24	3° \mathbb{M} 26'12	4°32'02	inferior conj	13354 Dec 24 19:08	14° \mathbb{Z} 51'16	-5°36'57
	13354 Jan 19 06:57	30° \mathbb{K} \mathbb{Z}		minimum elong	13354 Dec 25 01:28	14° \mathbb{Z} 41'29	5°35'03
morning rise	13354 Jan 21 08:48	29° \mathbb{Z} 20'55		morning rise	13355 Jan 02 08:00	10° \mathbb{Z} 50'44	
direct	13354 Jan 23 11:03	29° \mathbb{Z} 07'04		direct	13355 Jan 04 18:55	10° \mathbb{Z} 34'51	
	13354 Jan 27 10:23	0° \mathbb{M}		morning max el	13355 Jan 14 21:09	15° \mathbb{Z} 26'02	19°46'48
asc. node	13354 Jan 28 14:56	0° \mathbb{M} 36'54		asc. node	13355 Jan 15 12:14	16° \mathbb{Z} 03'27	
morning max el	13354 Feb 01 02:36	3° \mathbb{M} 20'27	18°45'27		13355 Jan 25 06:21	0° \mathbb{M}	
morning set	13354 Feb 17 07:33	29° \mathbb{M} 23'22		morning set	13355 Feb 01 11:43	13° \mathbb{M} 55'52	
	13354 Feb 17 15:04	0° \mathbb{K}					
superior conj	13354 Feb 26 00:14	16° \mathbb{K} 11'18	0°35'45	superior conj	13355 Feb 09 08:32	29° \mathbb{M} 49'04	1°01'41
minimum elong	13354 Feb 26 02:28	16° \mathbb{K} 21'46	0°35'44	minimum elong	13355 Feb 09 11:18	0° \mathbb{K} 02'49	1°01'54
desc. node	13354 Mar 02 12:14	24° \mathbb{K} 29'16			13355 Feb 09 10:44	0° \mathbb{K}	
max. Earth dist.	13354 Mar 05 05:28	29° \mathbb{K} 19'39	1.39646 AU	max. Earth dist.	13355 Feb 15 11:40	11° \mathbb{K} 36'02	1.37399 AU
	13354 Mar 05 14:40	0° \mathbb{Y}		desc. node	13355 Feb 17 08:46	15° \mathbb{K} 03'23	
evening rise	13354 Mar 09 04:56	6° \mathbb{Y} 10'42		evening rise	13355 Feb 19 05:04	18° \mathbb{K} 22'43	
	13354 Mar 24 08:31	0° \mathbb{X}			13355 Feb 26 00:02	0° \mathbb{Y}	
evening max el	13354 Apr 13 03:11	25° \mathbb{X} 15'33	24°06'39	evening max el	13355 Mar 18 14:30	0° \mathbb{X}	
	13354 Apr 18 21:00	0° \mathbb{I}			13355 Mar 26 16:44	9° \mathbb{X} 08'18	25°23'13
retrograde	13354 Apr 24 08:19	1° \mathbb{I} 50'39		retrograde	13355 Apr 07 21:45	16° \mathbb{X} 12'03	
asc. node	13354 Apr 26 11:29	1° \mathbb{I} 30'15		asc. node	13355 Apr 13 08:54	14° \mathbb{X} 05'51	
	13354 Apr 29 05:04	30° \mathbb{K} \mathbb{X}		evening set	13355 Apr 13 18:39	13° \mathbb{X} 45'57	
evening set	13354 Apr 29 17:41	29° \mathbb{X} 34'13		min. Earth dist.	13355 Apr 18 03:00	8° \mathbb{X} 58'48	0.67834 AU
min. Earth dist.	13354 May 04 09:18	24° \mathbb{X} 11'21	0.68594 AU	inferior conj	13355 Apr 19 10:58	7° \mathbb{X} 15'22	1°47'50
inferior conj	13354 May 05 04:53	23° \mathbb{X} 04'54	2°24'27	minimum elong	13355 Apr 19 08:53	7° \mathbb{X} 22'07	1°46'38
minimum elong	13354 May 05 02:47	23° \mathbb{X} 12'03	2°23'09	morning rise	13355 Apr 24 23:33	1° \mathbb{X} 22'30	
morning rise	13354 May 10 11:57	17° \mathbb{X} 03'00		direct	13355 Apr 28 11:55	0° \mathbb{X} 11'29	
direct	13354 May 14 12:00	15° \mathbb{X} 31'55		morning max el	13355 May 05 10:43	3° \mathbb{X} 59'08	19°10'34
morning max el	13354 May 22 06:01	19° \mathbb{X} 53'41	20°11'51	desc. node	13355 May 16 10:59	18° \mathbb{X} 12'43	
desc. node	13354 May 29 14:10	28° \mathbb{X} 39'03		greatest brilliancy	13355 May 18 09:09	21° \mathbb{X} 03'39	-0.7m
	13354 May 30 14:09	0° \mathbb{I}			13355 May 24 06:47	0° \mathbb{I}	
morning set	13354 Jun 19 04:35	28° \mathbb{I} 57'36		morning set	13355 May 29 07:58	7° \mathbb{I} 45'46	
	13354 Jun 19 20:46	0° \mathbb{O}		max. Earth dist.	13355 Jun 11 15:55	28° \mathbb{I} 29'25	1.45363 AU
max. Earth dist.	13354 Jun 29 00:10	14° \mathbb{O} 20'27	1.44175 AU		13355 Jun 12 14:58	0° \mathbb{O}	
				superior conj	13355 Jun 14 17:24	3° \mathbb{O} 18'48	-2°13'32
superior conj	13354 Jul 04 20:26	23° \mathbb{O} 47'19	-2°02'56	minimum elong	13355 Jun 14 17:52	3° \mathbb{O} 20'37	2°14'35
minimum elong	13354 Jul 05 02:38	24° \mathbb{O} 12'45	2°03'32	evening rise	13355 Jun 29 08:32	26° \mathbb{O} 53'47	
	13354 Jul 08 14:35	0° \mathbb{Q}			13355 Jul 01 05:53	0° \mathbb{Q}	
evening rise	13354 Jul 17 18:36	15° \mathbb{Q} 35'44		asc. node	13355 Jul 10 07:15	14° \mathbb{Q} 37'41	
asc. node	13354 Jul 23 10:27	25° \mathbb{Q} 19'11		evening max el	13355 Jul 18 14:55	25° \mathbb{Q} 39'42	18°19'25
	13354 Jul 26 05:50	0° \mathbb{M}		retrograde	13355 Jul 24 03:59	29° \mathbb{Q} 03'29	
evening max el	13354 Aug 04 00:50	12° \mathbb{M} 06'43	18°03'57	evening set	13355 Jul 28 00:08	28° \mathbb{Q} 13'51	
retrograde	13354 Aug 10 11:14	15° \mathbb{M} 27'21		inferior conj	13355 Aug 02 21:18	22° \mathbb{Q} 46'06	2°29'13
evening set	13354 Aug 13 02:49	14° \mathbb{M} 52'12		minimum elong	13355 Aug 02 23:40	22° \mathbb{Q} 39'13	2°27'57

min. Earth dist.	13355 Aug 05 05:38	20°03'19"	0.64419 AU	minimum elong	13356 Jul 16 18:31	6°09'05"	2°56'22"
morning rise	13355 Aug 08 21:48	16°02'46"		min. Earth dist.	13356 Jul 18 10:39	4°02'50"	0.66198 AU
desc. node	13355 Aug 12 09:31	14°02'32"		morning rise	13356 Jul 22 08:23	29°50'24"	
direct	13355 Aug 15 11:52	13°04'33"			13356 Jul 22 03:59	30°08'00"	
morning max el	13355 Aug 29 04:18	21°04'24"	27°28'21"	direct	13356 Jul 28 15:21	27°01'08"	
	13355 Sep 05 08:11	0°00'00"		desc. node	13356 Jul 29 06:57	27°01'40"	
	13355 Sep 25 02:33	0°00'00"			13356 Aug 05 00:12	0°00'00"	
morning set	13355 Oct 03 09:44	15°02'27"		morning max el	13356 Aug 10 15:27	4°05'34"	26°30'44"
asc. node	13355 Oct 06 09:02	21°02'50"			13356 Aug 29 20:30	0°00'00"	
max. Earth dist.	13355 Oct 08 00:40	24°04'29"	1.32893 AU	morning set	13356 Sep 15 12:47	28°02'28"	
	13355 Oct 10 11:40	0°00'00"			13356 Sep 16 09:11	0°00'00"	
				max. Earth dist.	13356 Sep 19 12:11	6°03'25"	1.34492 AU
superior conj	13355 Oct 11 12:47	2°00'14"	0°47'33"	asc. node	13356 Sep 22 05:36	11°03'47"	
minimum elong	13355 Oct 11 10:43	2°00'03"	0°47'38"				
evening rise	13355 Oct 18 13:01	17°00'21"		superior conj	13356 Sep 24 11:22	16°06'28"	0°21'06"
	13355 Oct 24 17:19	0°00'00"		minimum elong	13356 Sep 24 10:14	16°00'38"	0°21'04"
desc. node	13355 Nov 08 05:46	22°00'00"			13356 Oct 01 02:10	0°00'00"	
evening max el	13355 Nov 09 11:46	23°00'16"	22°38'03"	evening rise	13356 Oct 01 22:26	1°00'46"	
retrograde	13355 Nov 22 11:34	29°00'43"			13356 Oct 18 01:02	0°00'00"	
evening set	13355 Nov 26 05:52	29°00'12"		evening max el	13356 Oct 21 05:06	3°03'22"	21°02'57"
min. Earth dist.	13355 Dec 03 19:52	25°00'47"	0.54802 AU	desc. node	13356 Oct 25 03:08	6°04'47"	
inferior conj	13355 Dec 04 18:39	25°00'14"	-5°55'39"	retrograde	13356 Nov 01 22:24	9°02'21"	
minimum elong	13355 Dec 04 17:02	25°00'17"	5°54'35"	evening set	13356 Nov 04 11:07	9°00'06"	
morning rise	13355 Dec 13 05:30	21°00'27"		inferior conj	13356 Nov 13 10:02	5°00'13"	-5°15'08"
direct	13355 Dec 16 10:00	21°00'03"		minimum elong	13356 Nov 13 01:00	5°00'25"	5°12'25"
morning max el	13355 Dec 28 01:20	26°00'37"	21°11'02"	min. Earth dist.	13356 Nov 14 01:52	4°00'50"	0.54531 AU
	13355 Dec 31 04:53	0°00'00"		morning rise	13356 Nov 21 15:20	1°00'21"	
asc. node	13356 Jan 02 09:26	2°00'47"		direct	13356 Nov 25 17:35	0°00'45"	
morning set	13356 Jan 16 20:34	28°00'38"		morning max el	13356 Dec 08 16:45	7°00'00"	22°53'48"
	13356 Jan 17 12:11	0°00'00"		asc. node	13356 Dec 19 06:33	20°00'31"	
					13356 Dec 24 16:42	0°00'00"	
superior conj	13356 Jan 24 03:48	13°00'55"	1°20'28"	morning set	13356 Dec 31 07:52	13°00'24"	
minimum elong	13356 Jan 24 06:12	14°00'08"	1°21'01"				
max. Earth dist.	13356 Jan 28 21:38	23°00'31"	1.35324 AU	superior conj	13357 Jan 07 06:45	28°00'22"	1°32'23"
	13356 Feb 01 06:00	0°00'00"		minimum elong	13357 Jan 07 08:15	28°00'30"	1°33'13"
evening rise	13356 Feb 01 22:30	1°00'00"			13357 Jan 08 01:03	0°00'00"	
desc. node	13356 Feb 04 05:23	5°00'00"		max. Earth dist.	13357 Jan 10 14:33	5°00'23"	1.33587 AU
	13356 Feb 19 01:41	0°00'00"		evening rise	13357 Jan 15 05:36	14°00'46"	
evening max el	13356 Mar 08 06:33	22°00'56"	26°28'01"	desc. node	13357 Jan 21 02:04	25°00'48"	
	13356 Mar 18 23:20	0°00'00"			13357 Jan 23 10:54	0°00'00"	
retrograde	13356 Mar 21 05:53	0°00'00"			13357 Feb 12 19:33	0°00'00"	
	13356 Mar 23 10:08	30°00'00"		evening max el	13357 Feb 18 20:01	6°00'30"	27°13'42"
evening set	13356 Mar 27 13:31	27°00'45"		retrograde	13357 Mar 04 07:56	13°00'58"	
asc. node	13356 Mar 30 06:21	25°00'09"		evening set	13357 Mar 11 00:19	11°00'26"	
min. Earth dist.	13356 Mar 31 15:51	23°00'33"	0.66650 AU	min. Earth dist.	13357 Mar 14 21:45	7°00'47"	0.65074 AU
inferior conj	13356 Apr 02 12:13	21°00'19"	1°00'29"	inferior conj	13357 Mar 17 06:14	5°00'10"	0°01'57"
minimum elong	13356 Apr 02 10:46	21°00'23"	0°59'41"	minimum elong	13357 Mar 17 06:11	5°00'11"	0°01'57"
morning rise	13356 Apr 08 08:58	15°00'37"		transit middle	13357 Mar 17 06:11	5°00'11"	0°01'57"
direct	13356 Apr 11 10:43	14°00'44"		transit begin	13357 Mar 17 03:10	5°00'19"	
morning max el	13356 Apr 17 22:11	18°00'10"	18°25'30"	transit end	13357 Mar 17 09:11	5°00'02"	
	13356 Apr 27 00:34	0°00'00"		asc. node	13357 Mar 17 03:48	5°00'17"	
desc. node	13356 May 02 07:41	8°00'09"			13357 Mar 22 23:46	30°00'00"	
morning set	13356 May 08 06:37	17°00'33"		morning rise	13357 Mar 23 13:45	29°00'42"	
	13356 May 16 03:49	0°00'00"		direct	13357 Mar 26 06:06	29°00'04"	
					13357 Mar 29 12:59	0°00'00"	
superior conj	13356 May 24 01:39	12°00'22"	-2°04'19"	morning max el	13357 Apr 01 14:15	2°00'21"	17°57'22"
minimum elong	13356 May 23 18:44	11°00'55"	2°04'53"	morning set	13357 Apr 19 09:31	28°00'45"	
max. Earth dist.	13356 May 24 11:35	13°00'01"	1.45835 AU	desc. node	13357 Apr 19 04:19	28°00'23"	
	13356 Jun 04 08:08	0°00'00"			13357 Apr 20 03:39	0°00'00"	
evening rise	13356 Jun 08 21:55	7°00'11"					
greatest brilliancy	13356 Jun 18 07:07	21°00'53"	-0.8m	superior conj	13357 May 03 14:31	21°00'46"	-1°36'47"
	13356 Jun 23 16:18	0°00'00"		minimum elong	13357 May 03 05:28	21°00'10"	1°36'36"
asc. node	13356 Jun 26 04:08	3°00'29"		max. Earth dist.	13357 May 07 07:53	27°00'38"	1.45550 AU
evening max el	13356 Jul 01 02:14	9°00'22"	18°52'21"		13357 May 08 20:04	0°00'00"	
retrograde	13356 Jul 07 18:55	13°00'02"		evening rise	13357 May 19 15:36	16°00'24"	
evening set	13356 Jul 11 03:54	11°00'57"			13357 May 28 08:08	0°00'00"	
inferior conj	13356 Jul 16 16:54	6°00'14"	2°57'29"	greatest brilliancy	13357 Jun 02 16:00	7°00'56"	-0.6m

asc. node	13357 Jun 13 01:08	21°☿46'35		evening max el	13358 May 28 09:19	6°☿58'03	20°45'22
evening max el	13357 Jun 14 08:42	23°☿09'47	19°41'39	asc. node	13358 May 30 22:14	9°☿15'49	
retrograde	13357 Jun 21 17:03	27°☿19'03		retrograde	13358 Jun 05 16:02	11°☿45'48	
evening set	13357 Jun 25 11:22	25°☿56'45		evening set	13358 Jun 09 20:23	10°☿06'56	
inferior conj	13357 Jun 30 19:30	20°☿00'12	3°10'50	inferior conj	13358 Jun 15 02:29	3°☿58'22	3°11'38
minimum elong	13357 Jun 30 20:06	19°☿58'11	3°09'48	minimum elong	13358 Jun 15 02:04	3°☿59'48	3°10'36
min. Earth dist.	13357 Jul 01 22:48	18°☿29'01	0.67557 AU	min. Earth dist.	13358 Jun 15 15:59	3°☿11'40	0.68455 AU
morning rise	13357 Jul 06 04:26	13°☿36'53			13358 Jun 18 02:18	30°☿II	
direct	13357 Jul 12 01:08	11°☿02'25		morning rise	13358 Jun 20 07:29	27°II38'48	
desc. node	13357 Jul 16 04:15	12°☿05'15		direct	13358 Jun 25 16:14	25°II17'14	
morning max el	13357 Jul 24 02:12	18°☿15'35	25°12'57	desc. node	13358 Jul 03 01:28	28°II36'34	
	13357 Aug 02 23:28	0°☿			13358 Jul 04 16:22	0°☿	
	13357 Aug 22 21:19	0°☿		morning max el	13358 Jul 06 12:29	1°☿46'07	23°44'49
morning set	13357 Aug 29 00:17	10°☿36'26			13358 Jul 27 22:58	0°☿	
max. Earth dist.	13357 Sep 01 14:28	17°☿09'41	1.36531 AU	morning set	13358 Aug 10 15:36	21°☿54'48	
				max. Earth dist.	13358 Aug 14 12:01	28°☿33'56	1.38838 AU
					13358 Aug 15 07:32	0°☿	
superior conj	13357 Sep 08 00:31	29°☿29'54	-0°10'00				
minimum elong	13357 Sep 08 01:09	29°☿33'03	0°10'00	superior conj	13358 Aug 22 00:38	12°☿15'42	-0°44'18
behind sun begin	13357 Sep 07 20:04	29°☿07'54		minimum elong	13358 Aug 22 03:48	12°☿30'36	0°44'09
behind sun end	13357 Sep 08 06:14	29°☿58'14		asc. node	13358 Aug 26 22:44	21°☿41'05	
	13357 Sep 08 06:35	0°☿		evening rise	13358 Aug 31 03:00	29°☿50'41	
asc. node	13357 Sep 09 02:10	1°☿37'23			13358 Aug 31 04:54	0°☿	
evening rise	13357 Sep 16 03:59	15°☿58'18		evening max el	13358 Sep 16 08:36	26°☿17'19	18°50'58
	13357 Sep 23 09:16	0°☿			13358 Sep 21 18:09	0°☿	
evening max el	13357 Oct 03 12:01	14°☿30'16	19°46'05	retrograde	13358 Sep 24 21:17	0°☿34'11	
desc. node	13357 Oct 12 00:33	19°☿25'14		evening set	13358 Sep 26 18:31	0°☿22'27	
retrograde	13357 Oct 13 14:12	19°☿32'17			13358 Sep 28 03:22	30°☿☿	
evening set	13357 Oct 15 12:08	19°☿22'14		desc. node	13358 Sep 28 22:01	29°☿42'32	
inferior conj	13357 Oct 24 07:59	15°☿20'06	-3°44'58	inferior conj	13358 Oct 04 23:51	26°☿03'02	-1°55'30
minimum elong	13357 Oct 23 22:41	15°☿34'31	3°41'11	minimum elong	13358 Oct 04 19:00	26°☿11'42	1°53'13
min. Earth dist.	13357 Oct 26 10:37	14°☿01'39	0.55196 AU	min. Earth dist.	13358 Oct 08 00:21	23°☿53'43	0.56683 AU
morning rise	13357 Nov 01 07:36	11°☿03'23		morning rise	13358 Oct 12 16:15	21°☿09'58	
direct	13357 Nov 06 06:58	10°☿08'49		direct	13358 Oct 18 10:17	19°☿50'30	
morning max el	13357 Nov 20 02:44	17°☿00'45	24°42'31	morning max el	13358 Nov 01 15:28	27°☿11'41	26°19'00
	13357 Nov 30 15:36	0°☿			13358 Nov 04 08:50	0°☿	
asc. node	13357 Dec 06 03:32	9°☿00'42		asc. node	13358 Nov 23 00:26	28°☿04'09	
morning set	13357 Dec 15 19:44	28°☿08'37			13358 Nov 24 00:39	0°☿	
	13357 Dec 16 16:24	0°☿		morning set	13358 Nov 30 06:28	12°☿46'05	
superior conj	13357 Dec 22 14:42	13°☿00'27	1°37'48	superior conj	13358 Dec 07 01:30	27°☿44'06	1°37'07
minimum elong	13357 Dec 22 15:07	13°☿02'42	1°38'49	minimum elong	13358 Dec 07 00:50	27°☿40'25	1°38'08
max. Earth dist.	13357 Dec 24 14:55	17°☿23'36	1.32294 AU	max. Earth dist.	13358 Dec 07 20:58	29°☿32'21	1.31494 AU
evening rise	13357 Dec 29 23:09	28°☿40'22			13358 Dec 08 01:56	0°☿	
	13357 Dec 30 14:48	0°☿		evening rise	13358 Dec 14 00:24	12°☿53'29	
desc. node	13358 Jan 07 22:49	15°☿48'45			13358 Dec 22 17:34	0°☿	
	13358 Jan 16 14:42	0°☿		desc. node	13358 Dec 25 19:39	5°☿26'06	
evening max el	13358 Feb 01 07:42	19°☿39'30	27°33'16		13359 Jan 12 11:10	0°☿	
retrograde	13358 Feb 15 03:12	27°☿04'56		evening max el	13359 Jan 14 15:33	2°☿10'54	27°20'58
evening set	13358 Feb 22 00:34	24°☿40'44		retrograde	13359 Jan 28 14:26	9°☿28'38	
min. Earth dist.	13358 Feb 25 18:53	21°☿30'19	0.63176 AU	evening set	13359 Feb 04 11:19	7°☿20'10	
inferior conj	13358 Feb 28 14:11	18°☿43'06	-1°07'44	min. Earth dist.	13359 Feb 08 06:05	4°☿31'47	0.61063 AU
minimum elong	13358 Feb 28 16:24	18°☿37'34	1°06'31	inferior conj	13359 Feb 11 08:48	1°☿47'49	-2°26'48
asc. node	13358 Mar 04 01:16	15°☿31'44		minimum elong	13359 Feb 11 14:01	1°☿36'20	2°24'12
morning rise	13358 Mar 07 10:44	13°☿29'48			13359 Feb 13 11:23	30°☿☿	
direct	13358 Mar 09 19:13	13°☿03'18		morning rise	13359 Feb 18 19:46	26°☿52'51	
morning max el	13358 Mar 16 08:01	16°☿23'39	17°46'30	asc. node	13359 Feb 18 22:42	26°☿50'46	
	13358 Mar 26 01:25	0°☿		direct	13359 Feb 20 22:37	26°☿34'07	
morning set	13358 Apr 01 14:16	11°☿10'19			13359 Feb 27 21:12	0°☿	
desc. node	13358 Apr 06 00:51	18°☿49'13		morning max el	13359 Feb 28 00:13	0°☿07'20	17°53'40
	13358 Apr 12 16:09	0°☿		morning set	13359 Mar 15 14:52	24°☿31'07	
					13359 Mar 18 15:25	0°☿	
superior conj	13358 Apr 13 22:26	2°☿04'57	-0°58'44	desc. node	13359 Mar 23 21:22	9°☿22'04	
minimum elong	13358 Apr 13 16:32	1°☿40'37	0°58'22				
max. Earth dist.	13358 Apr 20 01:56	12°☿01'49	1.44554 AU	superior conj	13359 Mar 26 06:34	13°☿31'21	-0°18'43
evening rise	13358 Apr 29 02:46	26°☿09'30		minimum elong	13359 Mar 26 04:53	13°☿24'06	0°18'35
	13358 May 01 15:03	0°☿		max. Earth dist.	13359 Apr 02 16:08	25°☿58'50	1.42960 AU
	13358 May 22 09:58	0°☿					

	13359 Apr 05 03:27	0°♄		max. Earth dist.	13360 Mar 15 02:05	9°♄18'57	1.40930 AU
evening rise	13359 Apr 08 23:15	6°♄05'29		evening rise	13360 Mar 19 14:41	16°♄53'23	
	13359 Apr 24 21:24	0°♄			13360 Mar 27 21:09	0°♄	
evening max el	13359 May 11 04:35	20°♄47'13	21°59'57		13360 Apr 18 14:01	0°♄	
asc. node	13359 May 17 19:25	25°♄42'47		evening max el	13360 Apr 22 20:06	4°♄38'09	23°20'21
retrograde	13359 May 20 13:59	26°♄18'10		retrograde	13360 May 03 09:29	10°♄51'06	
evening set	13359 May 25 05:11	24°♄23'23		asc. node	13360 May 03 16:42	10°♄50'41	
inferior conj	13359 May 30 11:42	18°♄04'45	3°01'25	evening set	13360 May 08 12:13	8°♄41'51	
minimum elong	13359 May 30 10:25	18°♄09'15	3°00'15	inferior conj	13360 May 13 21:12	2°♄15'40	2°40'53
min. Earth dist.	13359 May 30 12:03	18°♄03'31	0.68881 AU	minimum elong	13360 May 13 19:18	2°♄22'16	2°39'37
morning rise	13359 Jun 04 15:26	11°♄51'03		min. Earth dist.	13360 May 13 08:49	2°♄58'22	0.68832 AU
direct	13359 Jun 09 11:28	9°♄47'19			13360 May 15 13:19	30°♄	
morning max el	13359 Jun 19 00:29	15°♄23'55	22°15'48	morning rise	13360 May 19 02:18	26°♄09'17	
desc. node	13359 Jun 19 22:35	16°♄20'46		direct	13360 May 23 09:34	24°♄26'02	
	13359 Jun 30 21:30	0°♄		morning max el	13360 May 31 17:35	29°♄12'13	20°53'46
	13359 Jul 20 22:42	0°♄			13360 Jun 01 12:20	0°♄	
morning set	13359 Jul 22 06:35	2°♄08'14		desc. node	13360 Jun 05 19:34	4°♄58'21	
max. Earth dist.	13359 Jul 27 11:50	10°♄43'47	1.41161 AU		13360 Jun 23 12:11	0°♄	
				morning set	13360 Jun 30 21:27	11°♄19'14	
superior conj	13359 Aug 04 07:27	24°♄14'13	-1°19'02	max. Earth dist.	13360 Jul 08 18:25	23°♄49'29	1.43212 AU
minimum elong	13359 Aug 04 13:20	24°♄40'25	1°18'53		13360 Jul 12 12:56	0°♄	
	13359 Aug 07 12:18	0°♄					
asc. node	13359 Aug 13 19:21	11°♄38'08		superior conj	13360 Jul 15 16:38	5°♄15'58	-1°49'39
evening rise	13359 Aug 14 16:02	13°♄14'43		minimum elong	13360 Jul 15 23:48	5°♄46'14	1°49'53
	13359 Aug 24 01:09	0°♄		evening rise	13360 Jul 27 14:46	25°♄59'45	
evening max el	13359 Aug 30 15:13	8°♄46'42	18°17'09		13360 Jul 29 20:53	0°♄	
retrograde	13359 Sep 06 23:37	12°♄30'16		asc. node	13360 Jul 30 16:01	1°♄24'37	
evening set	13359 Sep 09 02:43	12°♄12'12		evening max el	13360 Aug 13 03:37	21°♄48'21	18°03'18
desc. node	13359 Sep 15 19:33	8°♄09'01		retrograde	13360 Aug 19 19:00	25°♄13'22	
inferior conj	13359 Sep 16 13:30	7°♄31'41	-0°14'01	evening set	13360 Aug 22 05:53	24°♄45'15	
minimum elong	13359 Sep 16 12:59	7°♄32'45	0°13'48	inferior conj	13360 Aug 28 23:19	19°♄44'30	1°06'43
transit middle	13359 Sep 16 12:59	7°♄32'45	0°13'48	minimum elong	13360 Aug 29 01:12	19°♄39'56	1°05'45
transit begin	13359 Sep 16 11:10	7°♄36'33		min. Earth dist.	13360 Sep 01 02:17	16°♄44'03	0.61004 AU
transit end	13359 Sep 16 14:48	7°♄28'57		desc. node	13360 Sep 01 17:05	16°♄10'31	
min. Earth dist.	13359 Sep 19 20:55	4°♄46'23	0.58729 AU	morning rise	13360 Sep 04 17:44	13°♄48'07	
morning rise	13359 Sep 23 19:48	2°♄03'01		direct	13360 Sep 11 08:42	11°♄35'59	
direct	13359 Sep 30 03:36	0°♄16'00		morning max el	13360 Sep 25 14:31	19°♄32'02	27°57'06
morning max el	13359 Oct 14 11:14	7°♄58'05	27°26'52		13360 Oct 04 12:44	0°♄	
	13359 Oct 31 03:32	0°♄			13360 Oct 23 00:51	0°♄	
asc. node	13359 Nov 09 21:14	17°♄31'55		asc. node	13360 Oct 26 17:58	7°♄17'13	
morning set	13359 Nov 14 14:19	27°♄11'19		morning set	13360 Oct 28 17:23	11°♄20'01	
	13359 Nov 15 21:51	0°♄		max. Earth dist.	13360 Nov 03 12:38	23°♄47'35	1.31445 AU
max. Earth dist.	13359 Nov 21 05:25	11°♄43'10	1.31207 AU				
				superior conj	13360 Nov 04 23:50	27°♄02'12	1°18'18
superior conj	13359 Nov 21 13:09	12°♄26'22	1°30'35	minimum elong	13360 Nov 04 21:42	26°♄50'21	1°18'50
minimum elong	13359 Nov 21 11:35	12°♄17'40	1°31'24		13360 Nov 06 07:51	0°♄	
evening rise	13359 Nov 28 06:56	27°♄18'17		evening rise	13360 Nov 11 16:45	11°♄49'46	
	13359 Nov 29 13:23	0°♄			13360 Nov 20 18:20	0°♄	
desc. node	13359 Dec 12 16:38	24°♄30'12		desc. node	13360 Nov 28 13:44	12°♄48'25	
	13359 Dec 16 06:33	0°♄		evening max el	13360 Dec 08 09:40	24°♄42'45	25°15'19
evening max el	13359 Dec 27 16:50	13°♄53'15	26°33'58		13360 Dec 15 15:27	0°♄	
retrograde	13360 Jan 10 15:50	21°♄00'33		retrograde	13360 Dec 22 05:37	1°♄39'22	
evening set	13360 Jan 17 04:44	19°♄15'41		evening set	13360 Dec 28 00:35	0°♄23'32	
min. Earth dist.	13360 Jan 21 06:41	16°♄38'43	0.58896 AU		13360 Dec 28 21:32	30°♄	
inferior conj	13360 Jan 24 10:24	14°♄14'16	-3°49'57	min. Earth dist.	13361 Jan 01 21:43	27°♄42'39	0.56901 AU
minimum elong	13360 Jan 24 18:27	13°♄58'53	3°46'31	inferior conj	13361 Jan 04 15:54	25°♄53'13	-5°05'06
morning rise	13360 Feb 01 11:09	9°♄40'18		minimum elong	13361 Jan 05 00:20	25°♄39'12	5°02'15
direct	13360 Feb 03 12:09	9°♄25'38		morning rise	13361 Jan 13 02:29	21°♄41'30	
asc. node	13360 Feb 05 20:06	9°♄45'41		direct	13361 Jan 15 07:33	21°♄27'14	
morning max el	13360 Feb 11 11:08	13°♄21'34	18°20'24	asc. node	13361 Jan 22 17:26	24°♄20'17	
	13360 Feb 22 16:38	0°♄		morning max el	13361 Jan 24 12:46	25°♄55'18	19°08'41
morning set	13360 Feb 27 05:31	8°♄29'48			13361 Jan 28 02:13	0°♄	
				morning set	13361 Feb 10 05:43	22°♄53'07	
superior conj	13360 Mar 07 12:54	25°♄58'41	0°17'38		13361 Feb 13 19:41	0°♄	
minimum elong	13360 Mar 07 14:11	26°♄04'31	0°17'36				
desc. node	13360 Mar 09 17:52	29°♄58'10		superior conj	13361 Feb 18 13:04	9°♄14'48	0°47'38
	13360 Mar 09 18:16	0°♄		minimum elong	13361 Feb 18 15:40	9°♄27'20	0°47'42

desc. node	13361 Feb 24 14:23	20° X 34'10			13362 Feb 05 13:41	0° X	
max. Earth dist.	13361 Feb 25 08:57	21° X 57'55	1.38687 AU	max. Earth dist.	13362 Feb 07 16:06	4° X 03'11	1.36479 AU
evening rise	13361 Mar 01 03:20	28° X 36'10		evening rise	13362 Feb 11 11:16	11° X 07'59	
	13361 Mar 01 22:51	0° Y		desc. node	13362 Feb 11 10:58	11° X 06'35	
	13361 Mar 21 07:20	0° B			13362 Feb 22 13:22	0° Y	
evening max el	13361 Apr 05 09:47	18° B 30'26	24°40'14		13362 Mar 16 15:53	0° B	
retrograde	13361 Apr 17 01:23	25° B 18'43		evening max el	13362 Mar 18 23:11	2° B 21'54	25°52'36
asc. node	13361 Apr 20 14:04	24° B 24'01		retrograde	13362 Mar 31 12:47	9° B 34'55	
evening set	13361 Apr 22 15:51	22° B 57'30		evening set	13362 Apr 06 14:28	7° B 05'32	
min. Earth dist.	13361 Apr 27 04:08	17° B 50'14	0.68325 AU	asc. node	13362 Apr 07 11:28	6° B 18'42	
inferior conj	13361 Apr 28 05:04	16° B 27'13	2°10'11	min. Earth dist.	13362 Apr 10 20:00	2° B 33'33	0.67377 AU
minimum elong	13361 Apr 28 02:55	16° B 34'25	2°08'54	inferior conj	13362 Apr 12 09:21	0° B 35'52	1°29'05
morning rise	13361 May 03 14:11	10° B 29'16		minimum elong	13362 Apr 12 07:27	0° B 41'52	1°28'01
direct	13361 May 07 09:10	9° B 06'57			13362 Apr 12 20:46	30° R Y	
morning max el	13361 May 14 18:00	13° B 12'18	19°43'57	morning rise	13362 Apr 18 01:06	24° Y 47'35	
desc. node	13361 May 23 16:27	24° B 14'36		direct	13362 Apr 21 08:44	23° Y 44'45	
greatest brilliancy	13361 May 27 12:46	29° B 45'04	-0.6m	morning max el	13362 Apr 28 01:53	27° Y 21'59	18°49'24
	13361 May 27 16:51	0° II			13362 Apr 30 12:15	0° B	
morning set	13361 Jun 09 22:59	19° II 58'52		desc. node	13362 May 10 13:13	13° B 59'27	
	13361 Jun 16 10:20	0° B		greatest brilliancy	13362 May 12 00:06	16° B 12'08	-0.8m
max. Earth dist.	13361 Jun 21 07:29	7° B 40'12	1.44758 AU	morning set	13362 May 20 08:28	29° B 07'06	
					13362 May 20 22:04	0° II	
superior conj	13361 Jun 26 01:50	15° B 16'32	-2°09'38	max. Earth dist.	13362 Jun 04 00:54	22° II 00'07	1.45649 AU
minimum elong	13361 Jun 26 06:12	15° B 34'08	2°10'30				
	13361 Jul 05 01:27	0° B		superior conj	13362 Jun 05 15:36	24° II 31'35	-2°12'09
evening rise	13361 Jul 09 18:02	7° B 52'33		minimum elong	13362 Jun 05 12:41	24° II 20'08	2°13'06
asc. node	13361 Jul 17 12:47	20° B 54'59			13362 Jun 09 03:14	0° B	
	13361 Jul 23 10:44	0° B		evening rise	13362 Jun 20 21:31	18° B 44'28	
evening max el	13361 Jul 27 17:57	5° B 11'44	18°08'18		13362 Jun 27 21:33	0° B	
retrograde	13361 Aug 03 02:44	8° B 32'21		asc. node	13362 Jul 04 09:37	10° B 03'21	
evening set	13361 Aug 05 21:53	7° B 51'19		evening max el	13362 Jul 11 07:06	18° B 49'14	18°31'20
inferior conj	13361 Aug 12 01:21	2° B 32'44	2°04'56	retrograde	13362 Jul 17 18:33	22° B 18'51	
minimum elong	13361 Aug 12 03:52	2° B 25'49	2°03'40	evening set	13362 Jul 20 22:17	21° B 22'44	
	13361 Aug 14 09:10	30° R B		inferior conj	13362 Jul 26 15:34	15° B 48'23	2°43'11
min. Earth dist.	13361 Aug 14 17:23	29° B 38'12	0.63232 AU	minimum elong	13362 Jul 26 17:40	15° B 42'01	2°41'59
morning rise	13361 Aug 18 07:57	26° B 18'49		min. Earth dist.	13362 Jul 28 17:48	13° B 17'16	0.65218 AU
desc. node	13361 Aug 19 14:36	25° B 26'13		morning rise	13362 Aug 01 11:55	9° B 26'06	
direct	13361 Aug 24 23:49	23° B 48'12		desc. node	13362 Aug 06 12:03	6° B 54'01	
	13361 Sep 06 01:09	0° B		direct	13362 Aug 07 23:21	6° B 46'13	
morning max el	13361 Sep 07 23:05	1° B 49'57	27°48'50	morning max el	13362 Aug 21 09:57	14° B 41'15	27°06'53
	13361 Sep 28 19:16	0° B			13362 Sep 02 21:53	0° B	
morning set	13361 Oct 12 13:24	25° B 06'13			13362 Sep 21 12:30	0° B	
asc. node	13361 Oct 13 14:38	27° B 14'01		morning set	13362 Sep 25 23:38	8° B 23'11	
	13361 Oct 14 22:53	0° B		asc. node	13362 Sep 30 11:14	17° B 17'50	
max. Earth dist.	13361 Oct 17 14:33	5° B 35'03	1.32210 AU	max. Earth dist.	13362 Sep 30 07:38	16° B 59'28	1.33507 AU
superior conj	13361 Oct 20 07:36	11° B 25'55	1°00'23	superior conj	13362 Oct 04 10:15	25° B 31'47	0°36'58
minimum elong	13361 Oct 20 05:20	11° B 13'38	1°00'36	minimum elong	13362 Oct 04 08:30	25° B 22'30	0°36'58
evening rise	13361 Oct 27 03:54	26° B 22'23			13362 Oct 06 12:42	0° B	
	13361 Oct 28 20:45	0° B		evening rise	13362 Oct 11 14:29	10° B 51'19	
desc. node	13361 Nov 15 10:57	0° B 03'25			13362 Oct 21 09:28	0° B	
	13361 Nov 15 09:51	0° B		evening max el	13362 Nov 01 08:07	14° B 55'16	21°55'54
evening max el	13361 Nov 19 20:02	4° B 52'13	23°36'48	desc. node	13362 Nov 02 08:16	15° B 52'15	
retrograde	13361 Dec 03 06:55	11° B 34'08		retrograde	13362 Nov 13 21:04	21° B 08'26	
evening set	13361 Dec 07 20:46	10° B 48'32		evening set	13362 Nov 17 01:09	20° B 45'59	
min. Earth dist.	13361 Dec 14 06:29	7° B 44'26	0.55359 AU	inferior conj	13362 Nov 25 19:26	16° B 51'25	-5°45'52
inferior conj	13361 Dec 16 00:58	6° B 41'47	-5°51'28	minimum elong	13362 Nov 25 14:03	16° B 58'59	5°44'20
minimum elong	13361 Dec 16 04:26	6° B 36'40	5°50'12	min. Earth dist.	13362 Nov 25 12:53	17° B 00'36	0.54567 AU
morning rise	13361 Dec 24 13:53	2° B 48'29		morning rise	13362 Dec 04 03:58	13° B 04'03	
direct	13361 Dec 27 07:15	2° B 30'16		direct	13362 Dec 07 17:17	12° B 36'12	
morning max el	13362 Jan 07 01:26	7° B 38'46	20°20'01	morning max el	13362 Dec 19 23:46	18° B 28'31	21°53'01
asc. node	13362 Jan 09 14:41	10° B 22'08		asc. node	13362 Dec 27 11:51	27° B 33'46	
	13362 Jan 21 18:27	0° B			13362 Dec 29 02:22	0° B	
morning set	13362 Jan 25 12:11	7° B 31'18		morning set	13363 Jan 09 22:18	22° B 16'10	
					13363 Jan 13 13:43	0° B	
superior conj	13362 Feb 02 02:32	23° B 07'04	1°10'31				
minimum elong	13362 Feb 02 05:14	23° B 20'41	1°10'51	superior conj	13363 Jan 17 01:26	7° B 23'38	1°26'19

minimum elong	13363 Jan 17 03:29	7° \approx 34'26	1°27'00			13363 Dec 22 01:16	0° \approx	
max. Earth dist.	13363 Jan 21 04:23	15° \approx 54'06	1.34532 AU	morning set		13363 Dec 25 10:04	7° \approx 02'20	
evening rise	13363 Jan 25 10:56	24° \approx 18'47						
	13363 Jan 28 11:43	0° \approx		superior conj		13364 Jan 01 06:49	21° \approx 56'15	1°35'25
desc. node	13363 Jan 29 07:34	1° \approx 30'38		minimum elong		13364 Jan 01 07:52	22° \approx 01'56	1°36'22
	13363 Feb 16 02:55	0° \approx		max. Earth dist.		13364 Jan 04 00:40	27° \approx 34'38	1.32985 AU
evening max el	13363 Mar 01 12:53	16° \approx 05'37	26°50'14			13364 Jan 05 01:21	0° \approx	
retrograde	13363 Mar 14 18:39	23° \approx 30'53		evening rise		13364 Jan 08 22:55	7° \approx 59'56	
evening set	13363 Mar 21 06:10	20° \approx 58'34		desc. node		13364 Jan 16 04:17	21° \approx 41'48	
asc. node	13363 Mar 25 08:55	16° \approx 52'45				13364 Jan 20 23:55	0° \approx	
min. Earth dist.	13363 Mar 25 06:14	17° \approx 00'25	0.66020 AU	evening max el		13364 Feb 12 02:04	29° \approx 31'27	27°25'35
inferior conj	13363 Mar 27 07:50	14° \approx 35'37	0°37'03			13364 Feb 12 14:07	0° \approx	
minimum elong	13363 Mar 27 06:52	14° \approx 38'27	0°36'31	retrograde		13364 Feb 25 17:52	6° \approx 58'12	
morning rise	13363 Apr 02 08:51	8° \approx 58'47		evening set		13364 Mar 03 12:46	4° \approx 29'12	
direct	13363 Apr 05 06:20	8° \approx 12'41		min. Earth dist.		13364 Mar 07 08:46	1° \approx 02'25	0.64306 AU
morning max el	13363 Apr 11 15:35	11° \approx 34'24	18°11'23			13364 Mar 08 08:37	30° \approx 11'48	
	13363 Apr 24 20:43	0° \approx		inferior conj		13364 Mar 09 21:57	28° \approx 10'17	-0°26'16
desc. node	13363 Apr 27 09:52	4° \approx 04'31		minimum elong		13364 Mar 09 22:45	28° \approx 18'09	0°25'48
morning set	13363 Apr 30 18:49	9° \approx 29'55		asc. node		13364 Mar 11 06:22	26° \approx 15'36	
	13363 May 13 15:58	0° \approx		morning rise		13364 Mar 16 10:44	22° \approx 15'17	
				direct		13364 Mar 18 23:32	22° \approx 14'35	
superior conj	13363 May 15 23:37	3° \approx 11'38	-1°54'30	morning max el		13364 Mar 25 08:39	25° \approx 14'13	17°50'29
minimum elong	13363 May 15 14:57	3° \approx 04'19	1°54'43			13364 Mar 29 00:52	0° \approx	
max. Earth dist.	13363 May 17 20:34	6° \approx 11'34	1.45805 AU	morning set		13364 Apr 11 09:22	21° \approx 14'47	
evening rise	13363 Jun 01 01:15	28° \approx 11'39		desc. node		13364 Apr 13 06:26	24° \approx 12'57	
	13363 Jun 01 22:04	0° \approx				13364 Apr 16 14:58	0° \approx	
greatest brilliancy	13363 Jun 12 14:53	16° \approx 28'51	-0.7m					
asc. node	13363 Jun 21 06:31	28° \approx 41'42		superior conj		13364 Apr 24 19:14	13° \approx 21'32	-1°21'21
	13363 Jun 22 08:12	0° \approx		minimum elong		13364 Apr 24 11:06	12° \approx 48'53	1°21'00
evening max el	13363 Jun 24 16:32	2° \approx 03'43	19°11'30	max. Earth dist.		13364 Apr 29 16:17	21° \approx 07'23	1.45216 AU
retrograde	13363 Jul 01 15:01	6° \approx 25'41				13364 May 05 08:32	0° \approx	
evening set	13363 Jul 05 03:52	5° \approx 13'09		evening rise		13364 May 10 14:07	8° \approx 11'43	
	13363 Jul 10 03:28	30° \approx 11'48				13364 May 25 05:06	0° \approx	
inferior conj	13363 Jul 10 14:27	29° \approx 24'33	3°04'47	greatest brilliancy		13364 May 25 12:59	0° \approx 28'37	-0.6m
minimum elong	13363 Jul 10 15:39	29° \approx 20'39	3°03'43	evening max el		13364 Jun 06 20:37	16° \approx 22'45	20°07'16
min. Earth dist.	13363 Jul 12 02:06	27° \approx 29'09	0.66831 AU	asc. node		13364 Jun 07 03:32	16° \approx 39'54	
morning rise	13363 Jul 16 02:49	23° \approx 00'26		retrograde		13364 Jun 14 13:38	20° \approx 46'57	
direct	13363 Jul 22 05:51	20° \approx 21'18		evening set		13364 Jun 18 12:12	19° \approx 17'27	
desc. node	13363 Jul 24 09:25	20° \approx 38'19		inferior conj		13364 Jun 23 19:10	13° \approx 15'47	3°12'36
morning max el	13363 Aug 03 20:50	27° \approx 54'01	25°59'28	minimum elong		13364 Jun 23 19:19	13° \approx 15'14	3°11'34
	13363 Aug 05 20:35	0° \approx		min. Earth dist.		13364 Jun 24 16:31	12° \approx 03'16	0.68002 AU
	13363 Aug 27 14:54	0° \approx		morning rise		13364 Jun 29 02:07	6° \approx 54'01	
morning set	13363 Sep 08 20:35	21° \approx 02'20		direct		13364 Jul 04 18:00	4° \approx 24'13	
max. Earth dist.	13363 Sep 12 14:32	28° \approx 06'01	1.35306 AU	desc. node		13364 Jul 10 06:42	6° \approx 16'36	
	13363 Sep 13 14:06	0° \approx		morning max el		13364 Jul 16 07:02	11° \approx 19'15	24°36'07
asc. node	13363 Sep 17 07:49	7° \approx 24'41				13364 Jul 31 05:15	0° \approx	
						13364 Aug 19 08:10	0° \approx	
superior conj	13363 Sep 18 05:15	9° \approx 13'16	0°08'26	morning set		13364 Aug 20 23:59	2° \approx 15'46	
minimum elong	13363 Sep 18 04:46	9° \approx 10'47	0°08'24	max. Earth dist.		13364 Aug 24 14:03	9° \approx 16'19	1.37495 AU
behind sun begin	13363 Sep 17 23:32	8° \approx 44'14						
behind sun end	13363 Sep 18 10:00	9° \approx 37'23		superior conj		13364 Aug 31 13:19	22° \approx 11'43	-0°24'17
evening rise	13363 Sep 25 22:32	25° \approx 11'22		minimum elong		13364 Aug 31 14:57	22° \approx 12'37	0°24'13
	13363 Sep 28 06:54	0° \approx		asc. node		13364 Sep 03 04:22	27° \approx 10'23	
evening max el	13363 Oct 14 07:04	25° \approx 12'54	20°27'49			13364 Sep 04 10:32	0° \approx	
desc. node	13363 Oct 20 05:39	29° \approx 14'47		evening rise		13364 Sep 09 01:39	9° \approx 15'48	
	13363 Oct 20 16:49	0° \approx				13364 Sep 20 10:57	0° \approx	
retrograde	13363 Oct 25 08:04	0° \approx 57'10		evening max el		13364 Sep 25 20:05	6° \approx 46'31	19°19'58
evening set	13363 Oct 27 12:28	0° \approx 45'17		retrograde		13364 Oct 05 05:13	11° \approx 12'10	
	13363 Oct 30 05:45	30° \approx 11'48		desc. node		13364 Oct 06 03:07	11° \approx 12'53	
inferior conj	13363 Nov 05 11:55	26° \approx 14'49	-4°41'27	evening set		13364 Oct 07 01:50	11° \approx 17'54	
minimum elong	13363 Nov 05 01:51	27° \approx 04'33	4°37'58	inferior conj		13364 Oct 15 16:25	7° \approx 10'00	-2°58'56
min. Earth dist.	13363 Nov 06 19:54	26° \approx 03'21	0.54700 AU	minimum elong		13364 Oct 15 08:46	7° \approx 21'33	2°55'34
morning rise	13363 Nov 13 14:47	22° \approx 14'40		min. Earth dist.		13364 Oct 18 06:07	5° \approx 12'02	0.55743 AU
direct	13363 Nov 18 02:30	22° \approx 10'18		morning rise		13364 Oct 23 13:21	2° \approx 13'58	
morning max el	13363 Dec 01 11:41	28° \approx 13'12	23°40'11	direct		13364 Oct 28 21:15	1° \approx 13'31	
	13363 Dec 02 20:51	0° \approx		morning max el		13364 Nov 11 21:46	8° \approx 13'57	25°26'11
asc. node	13363 Dec 14 08:54	15° \approx 13'10				13364 Nov 27 18:16	0° \approx	

asc. node	13364 Nov 30 05:52	4°♊24'12			13365 Nov 20 07:27	0°♊	
morning set	13364 Dec 08 21:41	21°♊44'01		morning set	13365 Nov 23 07:26	6°♊16'37	
	13364 Dec 12 16:29	0°♊					
superior conj	13364 Dec 15 16:13	6°♊37'07	1°38'14	superior conj	13365 Nov 30 03:35	21°♊20'20	1°35'03
minimum elong	13364 Dec 15 16:09	6°♊36'49	1°39'16	minimum elong	13365 Nov 30 02:31	21°♊14'21	1°36'00
max. Earth dist.	13364 Dec 17 04:00	9°♊54'23	1.31898 AU	max. Earth dist.	13365 Nov 30 11:34	22°♊04'54	1.31307 AU
evening rise	13364 Dec 22 20:04	22°♊02'48		evening rise	13365 Dec 04 01:17	0°♊	
	13364 Dec 26 18:57	0°♊			13365 Dec 06 23:48	6°♊20'54	
desc. node	13365 Jan 02 01:06	11°♊33'35		desc. node	13365 Dec 19 08:14	0°♊	
	13365 Jan 13 21:31	0°♊			13365 Dec 19 22:01	0°♊57'55	
evening max el	13365 Jan 24 12:35	12°♊26'07	27°32'08	evening max el	13366 Jan 06 17:47	24°♊36'46	27°05'07
retrograde	13365 Feb 07 09:35	19°♊47'51		retrograde	13366 Jan 13 22:54	0°♊	
evening set	13365 Feb 14 07:40	17°♊29'27		evening set	13366 Jan 20 16:48	1°♊50'27	
min. Earth dist.	13365 Feb 18 01:42	14°♊29'31	0.62304 AU		13366 Jan 27 11:34	29°♊50'44	
inferior conj	13365 Feb 21 00:41	11°♊42'03	-1°40'17	min. Earth dist.	13366 Jan 27 05:01	30°♊	
minimum elong	13365 Feb 21 04:06	11°♊33'55	1°38'28	inferior conj	13366 Jan 31 08:06	27°♊09'11	0.60136 AU
asc. node	13365 Feb 26 03:48	7°♊31'29		minimum elong	13366 Feb 03 12:28	24°♊31'18	-3°02'07
morning rise	13365 Feb 28 03:16	6°♊36'04		morning rise	13366 Feb 03 19:01	24°♊17'45	2°59'02
direct	13365 Mar 02 09:10	6°♊13'11		direct	13366 Feb 11 05:35	19°♊45'20	
morning max el	13365 Mar 09 02:09	9°♊37'26	17°47'15	asc. node	13366 Feb 13 07:08	19°♊28'46	
	13365 Mar 22 15:30	0°♊		morning max el	13366 Feb 13 01:14	19°♊29'00	
morning set	13365 Mar 24 23:23	4°♊06'18			13366 Feb 20 16:39	23°♊10'07	18°02'38
desc. node	13365 Mar 31 02:59	14°♊53'17		morning set	13366 Feb 26 02:15	0°♊	
					13366 Mar 08 06:36	17°♊45'02	
superior conj	13365 Apr 05 13:23	24°♊09'17	-0°41'35	desc. node	13366 Mar 14 22:20	0°♊	
minimum elong	13365 Apr 05 09:20	23°♊52'17	0°41'17		13366 Mar 17 23:30	5°♊28'04	
	13365 Apr 09 01:53	0°♊		superior conj	13366 Mar 18 07:31	6°♊03'30	-0°02'40
max. Earth dist.	13365 Apr 12 09:29	5°♊23'40	1.43946 AU	minimum elong	13366 Mar 18 07:18	6°♊02'32	0°02'38
evening rise	13365 Apr 20 03:39	17°♊38'23		behind sun begin	13366 Mar 17 23:31	5°♊28'08	
	13365 Apr 28 06:52	0°♊		behind sun end	13366 Mar 18 15:04	6°♊36'52	
	13365 May 20 14:14	0°♊		max. Earth dist.	13366 Mar 25 21:58	19°♊06'32	1.42133 AU
evening max el	13365 May 20 18:53	0°♊11'46	21°16'01	evening rise	13366 Mar 31 07:29	27°♊54'52	
asc. node	13365 May 25 00:40	3°♊45'05			13366 Apr 01 14:56	0°♊	
retrograde	13365 May 29 12:23	5°♊17'23			13366 Apr 21 22:50	0°♊	
evening set	13365 Jun 02 21:22	3°♊31'21		evening max el	13366 May 03 12:10	14°♊00'57	22°33'43
	13365 Jun 06 03:41	30°♊		asc. node	13366 May 11 21:55	19°♊40'38	
inferior conj	13365 Jun 08 03:22	27°♊18'10	3°08'35	retrograde	13366 May 13 09:36	19°♊50'48	
minimum elong	13365 Jun 08 02:33	27°♊20'59	3°07'30	evening set	13366 May 18 05:38	17°♊49'28	
min. Earth dist.	13365 Jun 08 11:07	26°♊51'10	0.68696 AU	inferior conj	13366 May 23 12:57	11°♊26'59	2°53'55
morning rise	13365 Jun 13 07:32	21°♊01'06		minimum elong	13366 May 23 11:22	11°♊32'31	2°52'44
direct	13365 Jun 18 10:52	18°♊46'55		min. Earth dist.	13366 May 23 07:46	11°♊45'02	0.68916 AU
desc. node	13365 Jun 27 03:51	23°♊22'02		morning rise	13366 May 28 16:57	5°♊16'13	
morning max el	13365 Jun 28 17:50	24°♊53'31	23°06'36	direct	13366 Jun 02 07:23	3°♊21'15	
	13365 Jul 03 08:12	0°♊		morning max el	13366 Jun 11 07:48	8°♊36'04	21°39'39
	13365 Jul 24 15:56	0°♊		desc. node	13366 Jun 14 00:55	11°♊30'59	
morning set	13365 Aug 02 05:21	13°♊44'31			13366 Jun 27 22:19	0°♊	
max. Earth dist.	13365 Aug 06 12:26	21°♊00'15	1.39846 AU	morning set	13366 Jul 13 09:36	23°♊30'00	
	13365 Aug 11 15:08	0°♊			13366 Jul 17 10:40	0°♊	
				max. Earth dist.	13366 Jul 19 14:41	3°♊33'05	1.42080 AU
superior conj	13365 Aug 14 06:38	4°♊48'39	-0°59'12				
minimum elong	13365 Aug 14 11:00	5°♊08'42	0°59'01	superior conj	13366 Jul 27 04:39	16°♊23'21	-1°32'53
asc. node	13365 Aug 21 00:58	17°♊31'55		minimum elong	13366 Jul 27 11:24	16°♊52'44	1°32'51
evening rise	13365 Aug 23 20:55	22°♊57'43			13366 Aug 03 20:08	0°♊	
	13365 Aug 27 13:50	0°♊		evening rise	13366 Aug 07 04:28	6°♊06'28	
evening max el	13365 Sep 08 21:20	18°♊52'03	18°33'58	asc. node	13366 Aug 07 21:37	7°♊24'55	
retrograde	13365 Sep 16 20:47	22°♊53'29			13366 Aug 21 19:16	0°♊	
evening set	13365 Sep 18 19:59	22°♊39'35		evening max el	13366 Aug 23 06:52	1°♊36'03	18°08'53
desc. node	13365 Sep 23 00:36	20°♊48'46		retrograde	13366 Aug 30 06:53	5°♊10'11	
inferior conj	13365 Sep 26 17:29	18°♊10'54	-1°10'21	evening set	13366 Sep 01 13:03	4°♊48'24	
minimum elong	13365 Sep 26 14:40	18°♊16'18	1°09'01	inferior conj	13366 Sep 08 16:09	29°♊59'14	0°23'00
min. Earth dist.	13365 Sep 29 22:26	15°♊44'07	0.57504 AU	minimum elong	13366 Sep 08 16:54	29°♊57'33	0°22'37
morning rise	13365 Oct 04 05:53	13°♊01'51			13366 Sep 08 15:48	30°♊	
direct	13365 Oct 10 06:14	11°♊31'02		desc. node	13366 Sep 09 22:07	28°♊51'47	
morning max el	13365 Oct 24 13:25	19°♊01'50	26°52'13	min. Earth dist.	13366 Sep 11 22:50	27°♊04'29	0.59682 AU
	13365 Nov 02 20:17	0°♊		morning rise	13366 Sep 15 17:26	24°♊17'11	
asc. node	13365 Nov 17 02:45	23°♊38'41		direct	13366 Sep 22 05:00	22°♊18'42	

	13366 Oct 06 09:11	0°♄		morning max el	13367 Sep 18 18:22	12°♄01'19	27°58'04
morning max el	13366 Oct 06 12:44	0°♄08'41	27°44'35		13367 Oct 03 00:25	0°♄	
	13366 Oct 27 22:20	0°♄			13367 Oct 20 07:20	0°♄	
asc. node	13366 Nov 03 23:33	13°♄14'47		asc. node	13367 Oct 21 20:14	3°♄05'26	
morning set	13366 Nov 07 13:31	20°♄35'43		morning set	13367 Oct 22 13:50	4°♄35'15	
	13366 Nov 11 22:04	0°♄		max. Earth dist.	13367 Oct 28 01:03	16°♄10'40	1.31698 AU
max. Earth dist.	13366 Nov 13 19:51	4°♄13'37	1.31235 AU				
				superior conj	13367 Oct 30 00:45	20°♄32'06	1°11'24
superior conj	13366 Nov 14 15:05	6°♄00'46	1°26'05	minimum elong	13367 Oct 29 22:30	20°♄19'41	1°11'48
minimum elong	13366 Nov 14 13:14	5°♄50'27	1°26'47		13367 Nov 03 07:36	0°♄	
evening rise	13366 Nov 21 07:59	20°♄49'07		evening rise	13367 Nov 05 18:33	5°♄21'28	
	13366 Nov 25 17:39	0°♄			13367 Nov 18 14:16	0°♄	
desc. node	13366 Dec 06 19:03	19°♄44'29		desc. node	13367 Nov 23 16:12	7°♄38'08	
	13366 Dec 14 04:23	0°♄		evening max el	13367 Dec 01 05:02	16°♄26'14	24°35'03
evening max el	13366 Dec 19 15:24	5°♄56'07	26°03'56	retrograde	13367 Dec 14 22:34	23°♄17'23	
retrograde	13367 Jan 02 13:57	12°♄59'59		evening set	13367 Dec 20 06:07	22°♄15'04	
evening set	13367 Jan 08 20:26	11°♄26'52		min. Earth dist.	13367 Dec 25 16:47	19°♄26'28	0.56166 AU
min. Earth dist.	13367 Jan 13 04:33	8°♄50'20	0.58000 AU	inferior conj	13367 Dec 28 02:26	17°♄56'03	-5°29'47
inferior conj	13367 Jan 16 05:50	6°♄38'44	-4°23'54	minimum elong	13367 Dec 28 09:31	17°♄44'54	5°27'38
minimum elong	13367 Jan 16 14:32	6°♄23'04	4°20'30	morning rise	13368 Jan 05 14:58	13°♄52'39	
morning rise	13367 Jan 24 11:32	2°♄14'33		direct	13368 Jan 08 00:07	13°♄37'18	
direct	13367 Jan 26 13:09	2°♄00'40		asc. node	13368 Jan 17 19:56	18°♄20'33	
asc. node	13367 Jan 30 22:37	3°♄07'20		morning max el	13368 Jan 17 20:42	18°♄22'24	19°36'08
morning max el	13367 Feb 04 00:15	6°♄09'23	18°38'15		13368 Jan 26 12:05	0°♄	
	13367 Feb 19 01:51	0°♄		morning set	13368 Feb 04 05:03	16°♄26'10	
morning set	13367 Feb 20 01:50	1°♄55'51			13368 Feb 10 22:48	0°♄	
				superior conj	13368 Feb 12 04:22	2°♄26'06	0°58'13
superior conj	13367 Feb 28 22:05	18°♄53'48	0°31'11	minimum elong	13368 Feb 12 07:08	2°♄39'41	0°58'22
minimum elong	13367 Mar 01 00:07	19°♄03'15	0°31'09	max. Earth dist.	13368 Feb 18 12:07	14°♄29'18	1.37732 AU
desc. node	13367 Mar 04 20:03	26°♄04'58		desc. node	13368 Feb 19 16:35	16°♄39'39	
	13367 Mar 07 00:47	0°♄		evening rise	13368 Feb 22 05:20	21°♄11'48	
max. Earth dist.	13367 Mar 08 05:49	2°♄07'21	1.39983 AU		13368 Feb 27 08:29	0°♄	
evening rise	13367 Mar 12 08:05	9°♄07'10			13368 Mar 18 12:55	0°♄	
	13367 Mar 25 13:46	0°♄		evening max el	13368 Mar 28 16:15	11°♄45'39	25°12'24
evening max el	13367 Apr 16 02:37	27°♄52'35	23°54'44	retrograde	13368 Apr 09 17:53	18°♄45'29	
	13367 Apr 18 09:08	0°♄		asc. node	13368 Apr 14 16:35	17°♄00'57	
retrograde	13367 Apr 27 03:50	4°♄22'14		evening set	13368 Apr 15 13:08	16°♄20'35	
asc. node	13367 Apr 28 19:13	4°♄10'06		min. Earth dist.	13368 Apr 19 22:29	11°♄28'15	0.67977 AU
evening set	13367 May 02 11:26	2°♄07'41		inferior conj	13368 Apr 21 04:37	9°♄50'01	1°54'05
	13367 May 04 13:39	30°♄		minimum elong	13368 Apr 21 02:30	9°♄56'56	1°52'51
min. Earth dist.	13367 May 07 04:19	26°♄39'22	0.68673 AU	morning rise	13368 Apr 26 16:12	3°♄55'46	
inferior conj	13367 May 07 22:01	25°♄39'03	2°29'06	direct	13368 Apr 30 06:18	2°♄41'47	
minimum elong	13367 May 07 19:57	25°♄46'06	2°27'50	morning max el	13368 May 07 07:23	6°♄33'30	19°18'41
morning rise	13367 May 13 04:29	19°♄35'49		desc. node	13368 May 17 18:43	19°♄56'06	
direct	13367 May 17 06:23	18°♄01'34		greatest brilliancy	13368 May 20 01:47	23°♄18'09	-0.7m
morning max el	13367 May 25 03:48	22°♄29'20	20°22'11		13368 May 24 12:50	0°♄	
desc. node	13367 May 31 21:52	0°♄26'35		morning set	13368 May 31 18:49	11°♄05'29	
	13367 May 31 13:45	0°♄			13368 Jun 12 22:54	0°♄	
morning set	13367 Jun 21 03:56	0°♄		max. Earth dist.	13368 Jun 13 14:52	1°♄02'47	1.45231 AU
max. Earth dist.	13367 Jun 22 16:35	2°♄21'08					
	13367 Jul 01 23:29	16°♄56'51	1.43945 AU	superior conj	13368 Jun 17 03:35	6°♄37'21	-2°13'09
superior conj	13367 Jul 08 03:37	26°♄58'38	-1°59'52	minimum elong	13368 Jun 17 05:11	6°♄43'44	2°14'10
minimum elong	13367 Jul 08 10:14	27°♄25'58	2°00'23	evening rise	13368 Jul 01 13:01	29°♄57'45	
	13367 Jul 09 23:23	0°♄			13368 Jul 01 13:34	0°♄	
evening rise	13367 Jul 20 19:29	18°♄30'10		asc. node	13368 Jul 11 15:04	16°♄26'44	
asc. node	13367 Jul 25 18:19	27°♄04'54		evening max el	13368 Jul 20 10:49	28°♄18'57	18°15'58
	13367 Jul 27 11:29	0°♄			13368 Jul 22 09:28	0°♄	
evening max el	13367 Aug 06 20:33	14°♄48'04	18°03'15	retrograde	13368 Jul 26 19:27	1°♄41'24	
retrograde	13367 Aug 13 07:53	18°♄09'17		evening set	13368 Jul 29 18:20	0°♄53'59	
evening set	13367 Aug 15 22:16	17°♄36'01			13368 Jul 31 03:59	30°♄	
inferior conj	13367 Aug 22 09:21	12°♄27'42	1°34'02	inferior conj	13368 Aug 04 17:00	25°♄28'29	2°23'23
minimum elong	13367 Aug 22 11:40	12°♄21'45	1°32'53	minimum elong	13368 Aug 04 19:26	25°♄21'31	2°22'08
min. Earth dist.	13367 Aug 25 08:22	9°♄27'06	0.61974 AU	min. Earth dist.	13368 Aug 07 03:21	22°♄42'17	0.64122 AU
desc. node	13367 Aug 27 19:38	7°♄13'46		morning rise	13368 Aug 10 19:03	19°♄10'22	
morning rise	13367 Aug 28 22:37	6°♄22'46		desc. node	13368 Aug 13 17:06	17°♄22'18	
direct	13367 Sep 04 14:54	4°♄01'21		direct	13368 Aug 17 09:43	16°♄34'40	

morning max el	13368 Aug 31 04:03	24°Ω34'21	27°34'40	morning rise	13369 Jul 25 03:58	2°Ω29'58	
	13368 Sep 05 02:02	0°ྐ			13369 Jul 29 20:20	30°᠕᠙᠐	
	13368 Sep 25 10:47	0°᠘		direct	13369 Jul 31 12:09	29°᠙᠘49'37	
morning set	13368 Oct 05 06:01	18°᠘09'35		desc. node	13369 Jul 31 14:32	29°᠙᠘49'39	
asc. node	13368 Oct 07 16:52	23°᠘05'42			13369 Aug 02 05:20	0°Ω	
max. Earth dist.	13368 Oct 09 23:34	27°᠘48'46	1.32701 AU	morning max el	13369 Aug 13 15:16	7°Ω36'33	26°40'49
	13368 Oct 11 00:30	0°᠓			13369 Aug 31 00:52	0°ྐ	
					13369 Sep 17 19:58	0°᠘	
superior conj	13368 Oct 13 06:37	4°᠓49'00	0°51'07	morning set	13369 Sep 18 11:02	1°᠘11'10	
minimum elong	13368 Oct 13 04:29	4°᠓37'32	0°51'14	max. Earth dist.	13369 Sep 22 12:36	9°᠘05'13	1.34223 AU
evening rise	13368 Oct 20 05:41	19°᠓53'17		asc. node	13369 Sep 24 13:27	13°᠘10'54	
	13368 Oct 25 02:46	0°᠗					
desc. node	13368 Nov 09 13:25	24°᠗19'20		superior conj	13369 Sep 27 06:20	18°᠘44'50	0°25'26
evening max el	13368 Nov 11 15:01	26°᠗28'19	22°53'09	minimum elong	13369 Sep 27 05:01	18°᠘37'58	0°25'24
	13368 Nov 15 21:54	0°᠊			13369 Oct 02 14:23	0°᠓	
retrograde	13368 Nov 24 17:59	2°᠊59'17		evening rise	13369 Oct 04 15:28	4°᠓18'57	
evening set	13368 Nov 28 17:31	2°᠊24'49			13369 Oct 18 17:45	0°᠗	
	13368 Dec 04 08:33	30°᠕᠗		evening max el	13369 Oct 24 06:38	6°᠗39'02	21°16'07
min. Earth dist.	13368 Dec 05 23:50	29°᠗05'25	0.54923 AU	desc. node	13369 Oct 27 10:44	9°᠗22'54	
inferior conj	13368 Dec 07 04:06	28°᠗25'09	-5°56'27	retrograde	13369 Nov 05 05:27	12°᠗35'22	
minimum elong	13368 Dec 07 03:52	28°᠗25'29	5°55'25	evening set	13369 Nov 07 21:41	12°᠗18'42	
morning rise	13368 Dec 15 15:39	24°᠗36'23		inferior conj	13369 Nov 16 19:47	8°᠗25'03	-5°25'05
direct	13368 Dec 18 17:09	24°᠗14'36		minimum elong	13369 Nov 16 11:28	8°᠗36'46	5°22'39
morning max el	13368 Dec 30 02:59	29°᠗41'24	20°57'09	min. Earth dist.	13369 Nov 17 05:48	8°᠗10'56	0.54507 AU
	13368 Dec 30 10:42	0°᠊		morning rise	13369 Nov 25 01:54	4°᠗35'05	
asc. node	13369 Jan 03 17:09	4°᠊53'37		direct	13369 Nov 29 00:42	4°᠗01'32	
	13369 Jan 18 00:14	0°᠗		morning max el	13369 Dec 11 20:02	10°᠗10'51	22°37'47
morning set	13369 Jan 18 13:18	1°᠗07'37		asc. node	13369 Dec 21 14:16	22°᠗29'32	
					13369 Dec 26 00:38	0°᠊	
superior conj	13369 Jan 25 22:12	16°᠗29'05	1°18'04	morning set	13370 Jan 03 00:22	15°᠊53'43	
minimum elong	13369 Jan 26 00:42	16°᠗41'53	1°18'33		13370 Jan 09 14:11	0°᠗	
max. Earth dist.	13369 Jan 30 21:17	26°᠗26'59	1.35614 AU				
	13369 Feb 01 17:21	0°᠗		superior conj	13370 Jan 10 00:12	0°᠗53'26	1°30'58
evening rise	13369 Feb 03 20:21	4°᠗00'37		minimum elong	13370 Jan 10 01:51	1°᠗02'15	1°31'48
desc. node	13369 Feb 05 13:10	7°᠗08'33		max. Earth dist.	13370 Jan 13 12:57	8°᠗18'35	1.33815 AU
	13369 Feb 19 06:31	0°᠗		evening rise	13370 Jan 18 01:37	17°᠗24'57	
evening max el	13369 Mar 11 05:54	25°᠗34'48	26°19'24	desc. node	13370 Jan 23 09:49	27°᠗27'36	
	13369 Mar 16 11:48	0°᠘			13370 Jan 24 19:53	0°᠗	
retrograde	13369 Mar 24 02:48	2°᠘53'37			13370 Feb 13 14:25	0°᠗	
evening set	13369 Mar 30 09:01	0°᠘22'21		evening max el	13370 Feb 21 19:24	9°᠗11'51	27°08'23
	13369 Mar 30 19:35	30°᠕᠗		retrograde	13370 Mar 07 05:56	16°᠗39'02	
asc. node	13369 Apr 01 14:01	28°᠗16'43		evening set	13370 Mar 13 21:10	14°᠗06'56	
min. Earth dist.	13369 Apr 03 12:07	26°᠗05'07	0.66851 AU	min. Earth dist.	13370 Mar 17 19:11	10°᠗22'54	0.65330 AU
inferior conj	13369 Apr 05 06:42	23°᠗55'03	1°08'24	asc. node	13370 Mar 19 11:27	8°᠗30'09	
minimum elong	13369 Apr 05 05:06	23°᠗59'56	1°07'30	inferior conj	13370 Mar 20 01:57	7°᠗49'10	0°11'36
morning rise	13369 Apr 11 02:03	18°᠗11'27		minimum elong	13370 Mar 20 01:38	7°᠗50'05	0°11'26
direct	13369 Apr 14 05:20	17°᠗15'57		transit middle	13370 Mar 20 01:38	7°᠗50'05	0°11'26
morning max el	13369 Apr 20 17:58	20°᠗44'41	18°31'12	transit begin	13370 Mar 19 23:31	7°᠗56'01	
	13369 Apr 28 03:18	0°᠘		transit end	13370 Mar 20 03:44	7°᠗44'09	
desc. node	13369 May 04 15:26	9°᠘50'05		morning rise	13370 Mar 26 07:43	2°᠗18'13	
morning set	13369 May 11 13:41	20°᠘42'24		direct	13370 Mar 29 01:20	1°᠗38'16	
	13369 May 17 11:34	0°᠒		morning max el	13370 Apr 04 09:33	4°᠗56'42	18°00'29
					13370 Apr 21 11:35	0°᠘	
superior conj	13369 May 27 12:43	15°᠒42'44	-2°07'01	desc. node	13370 Apr 21 12:04	0°᠘01'57	
minimum elong	13369 May 27 06:42	15°᠒19'15	2°07'43	morning set	13370 Apr 22 12:19	1°᠘41'18	
max. Earth dist.	13369 May 27 10:11	15°᠒32'51	1.45810 AU				
	13369 Jun 05 15:45	0°᠙		superior conj	13370 May 06 23:50	25°᠘00'32	-1°41'51
evening rise	13369 Jun 12 06:01	10°᠙24'03		minimum elong	13370 May 06 14:40	24°᠘24'21	1°41'46
greatest brilliancy	13369 Jun 20 19:14	23°᠙53'34	-0.8m		13370 May 10 04:00	0°᠒	
	13369 Jun 24 18:42	0°Ω		max. Earth dist.	13370 May 10 06:19	0°᠒09'04	1.45639 AU
asc. node	13369 Jun 28 11:55	5°Ω23'17		evening rise	13370 May 23 01:57	20°᠒01'58	
evening max el	13369 Jul 03 22:38	12°Ω00'24	18°46'19		13370 May 29 13:57	0°᠙	
retrograde	13369 Jul 10 13:43	15°Ω37'38		greatest brilliancy	13370 Jun 05 12:40	10°᠙27'21	-0.7m
evening set	13369 Jul 13 21:18	14°Ω34'29		asc. node	13370 Jun 15 08:53	23°᠙46'04	
inferior conj	13369 Jul 19 11:18	8°Ω53'37	2°54'13	evening max el	13370 Jun 17 05:54	25°᠙47'09	19°33'18
minimum elong	13369 Jul 19 13:03	8°Ω48'07	2°53'03	retrograde	13370 Jun 24 11:32	29°᠙51'31	
min. Earth dist.	13369 Jul 21 07:13	6°Ω36'52	0.65958 AU	evening set	13370 Jun 28 04:22	28°᠙31'48	

inferior conj	13370 Jul 03 13:02	22°☿37'15	3°09'39	inferior conj	13371 Jun 17 19:33	6°☿33'44	3°12'15
minimum elong	13370 Jul 03 13:48	22°☿34'43	3°08'36	minimum elong	13371 Jun 17 19:17	6°☿34'39	3°11'12
min. Earth dist.	13370 Jul 04 18:30	20°☿59'32	0.67385 AU	min. Earth dist.	13371 Jun 18 11:06	5°☿40'09	0.68353 AU
morning rise	13370 Jul 08 22:47	16°☿13'29		morning rise	13371 Jun 23 00:58	0°☿13'29	
direct	13370 Jul 14 21:10	13°☿37'32			13371 Jun 23 07:07	30°☿II	
desc. node	13370 Jul 18 11:53	14°☿25'41		direct	13371 Jun 28 11:38	27°II49'29	
morning max el	13370 Jul 27 02:08	20°☿56'30	25°25'21		13371 Jul 04 08:45	0°☿	
	13370 Aug 03 21:58	0°♊		desc. node	13371 Jul 05 09:07	0°☿43'45	
	13370 Aug 24 05:27	0°♊		morning max el	13371 Jul 09 12:19	4°☿25'35	23°58'11
morning set	13370 Sep 01 01:08	13°♊31'10			13371 Jul 29 04:14	0°♊	
max. Earth dist.	13370 Sep 04 15:54	20°♊10'15	1.36204 AU	morning set	13371 Aug 13 19:48	24°♊58'32	
	13370 Sep 09 18:19	0°♊			13371 Aug 16 17:19	0°♊	
				max. Earth dist.	13371 Aug 17 13:39	1°♊29'43	1.38486 AU
superior conj	13370 Sep 10 21:06	2°♊12'56	-0°05'04	superior conj	13371 Aug 24 23:29	15°♊05'23	-0°38'59
minimum elong	13370 Sep 10 21:25	2°♊14'30	0°05'04	minimum elong	13371 Aug 25 02:14	15°♊18'24	0°38'51
behind sun begin	13370 Sep 10 15:23	1°♊44'24		asc. node	13371 Aug 29 06:36	23°♊21'57	
behind sun end	13370 Sep 11 03:28	2°♊44'40			13371 Sep 01 15:41	0°♊	
asc. node	13370 Sep 11 10:01	3°♊17'28		evening rise	13371 Sep 02 21:59	2°♊29'05	
evening rise	13370 Sep 18 21:45	18°♊33'00		evening max el	13371 Sep 19 06:17	29°♊10'17	18°57'49
	13370 Sep 24 16:43	0°♊			13371 Sep 20 03:12	0°♊	
evening max el	13370 Oct 06 11:27	17°♊29'46	19°56'12	retrograde	13371 Sep 27 23:57	3°♊33'02	
desc. node	13370 Oct 14 08:09	22°♊21'38		evening set	13371 Sep 29 20:48	3°♊21'49	
retrograde	13370 Oct 16 19:38	22°♊38'54		desc. node	13371 Oct 01 05:38	3°♊00'09	
evening set	13370 Oct 18 18:41	22°♊28'38			13371 Oct 06 21:03	30°☿♊	
inferior conj	13370 Oct 27 15:54	18°♊28'43	-4°00'38	inferior conj	13371 Oct 08 04:43	29°♊05'20	-2°12'01
minimum elong	13370 Oct 27 06:12	18°♊43'29	3°56'51	minimum elong	13371 Oct 07 23:07	29°♊15'08	2°09'26
min. Earth dist.	13370 Oct 29 14:08	17°♊18'20	0.55036 AU	min. Earth dist.	13371 Oct 11 02:58	27°♊02'58	0.56421 AU
morning rise	13370 Nov 04 16:21	14°♊16'39		morning rise	13371 Oct 15 22:23	24°♊18'09	
direct	13370 Nov 09 12:46	13°♊25'08		direct	13371 Oct 21 14:04	23°♊02'35	
morning max el	13370 Nov 23 06:16	20°♊12'30	24°26'39		13371 Nov 04 09:52	0°♊	
	13370 Dec 01 13:42	0°♊		morning max el	13371 Nov 04 18:07	0°♊19'34	26°06'05
asc. node	13370 Dec 08 11:18	10°♊52'57		asc. node	13371 Nov 25 08:14	29°♊51'53	
	13370 Dec 18 05:06	0°♊			13371 Nov 25 09:58	0°♊	
morning set	13370 Dec 18 12:15	0°♊38'17		morning set	13371 Dec 02 23:19	15°♊16'52	
superior conj	13370 Dec 25 07:34	15°♊30'19	1°37'22	superior conj	13371 Dec 09 18:06	0°♊13'24	1°37'36
minimum elong	13370 Dec 25 08:08	15°♊33'30	1°38'23	minimum elong	13371 Dec 09 17:35	0°♊10'35	1°38'37
max. Earth dist.	13370 Dec 27 12:13	20°♊16'34	1.32453 AU		13371 Dec 09 15:41	0°♊	
	13371 Jan 01 02:57	0°♊		max. Earth dist.	13371 Dec 10 17:40	2°♊24'15	1.31584 AU
evening rise	13371 Jan 01 17:49	1°♊15'53		evening rise	13371 Dec 16 18:08	15°♊26'34	
desc. node	13371 Jan 10 06:32	17°♊30'57			13371 Dec 24 02:40	0°♊	
	13371 Jan 17 18:31	0°♊		desc. node	13371 Dec 28 03:24	7°♊12'11	
evening max el	13371 Feb 04 07:31	22°♊25'09	27°32'18		13372 Jan 12 21:36	0°♊	
retrograde	13371 Feb 18 02:21	29°♊51'25		evening max el	13372 Jan 17 16:14	5°♊02'55	27°24'59
evening set	13371 Feb 24 23:11	27°♊25'43		retrograde	13372 Jan 31 14:47	12°♊21'37	
min. Earth dist.	13371 Feb 28 17:50	24°♊11'11	0.63475 AU	evening set	13372 Feb 07 12:08	10°♊10'27	
inferior conj	13371 Mar 03 11:37	21°♊24'46	-0°56'28	min. Earth dist.	13372 Feb 11 06:36	7°♊19'15	0.61389 AU
minimum elong	13371 Mar 03 13:26	21°♊20'09	0°55'27	inferior conj	13372 Feb 14 08:28	4°♊33'58	-2°14'23
asc. node	13371 Mar 06 08:56	18°♊38'59		minimum elong	13372 Feb 14 13:13	4°♊23'20	2°11'58
morning rise	13371 Mar 10 06:07	16°♊08'51			13372 Feb 20 15:17	30°☿♊	
direct	13371 Mar 12 15:36	15°♊40'55		asc. node	13372 Feb 21 06:23	29°♊44'53	
morning max el	13371 Mar 19 03:15	19°♊00'21	17°46'57	morning rise	13372 Feb 21 17:15	29°♊35'54	
	13371 Mar 27 06:57	0°♊		direct	13372 Feb 23 20:48	29°♊16'12	
morning set	13371 Apr 04 13:35	13°♊56'15			13372 Feb 27 00:22	0°♊	
desc. node	13371 Apr 08 08:38	20°♊25'44		morning max el	13372 Mar 01 19:53	2°♊46'50	17°51'21
	13371 Apr 14 01:10	0°♊		morning set	13372 Mar 17 11:37	27°♊09'41	
superior conj	13371 Apr 17 04:20	5°♊09'26	-1°04'49		13372 Mar 19 01:25	0°♊	
minimum elong	13371 Apr 16 21:47	4°♊42'39	1°04'25	desc. node	13372 Mar 25 05:10	10°♊57'27	
max. Earth dist.	13371 Apr 23 00:39	14°♊34'37	1.44747 AU	superior conj	13372 Mar 28 08:49	16°♊25'21	-0°24'38
evening rise	13371 May 02 12:58	29°♊24'55		minimum elong	13372 Mar 28 06:33	16°♊15'38	0°24'27
	13371 May 02 22:07	0°♊		max. Earth dist.	13372 Apr 04 15:40	28°♊36'40	1.43233 AU
	13371 May 23 08:58	0°☿			13372 Apr 05 12:09	0°♊	
evening max el	13371 May 31 07:27	9°☿35'27	20°35'08	evening rise	13372 Apr 11 07:16	9°♊14'13	
asc. node	13371 Jun 02 05:58	11°☿23'19			13372 Apr 25 01:52	0°♊	
retrograde	13371 Jun 08 10:30	14°☿16'52		evening max el	13372 May 13 03:30	23°II24'26	21°48'23
evening set	13371 Jun 12 13:18	12°☿40'29					

asc. node	13372 May 19 03:09	28° Π 00'42		retrograde	13373 May 06 04:37	13° Π 21'58	
retrograde	13372 May 22 08:39	28° Π 48'36		asc. node	13373 May 06 00:24	13° Π 21'50	
evening set	13372 May 26 22:16	26° Π 56'01		evening set	13373 May 11 05:39	11° Π 14'36	
inferior conj	13372 Jun 01 04:34	20° Π 38'51	3°03'36	min. Earth dist.	13373 May 16 03:35	5° Π 25'47	0.68870 AU
minimum elong	13372 Jun 01 03:24	20° Π 42'56	3°02'29	inferior conj	13373 May 16 14:09	4° Π 49'17	2°44'37
min. Earth dist.	13372 Jun 01 06:51	20° Π 30'55	0.68849 AU	minimum elong	13373 May 16 12:18	4° Π 55'38	2°43'23
morning rise	13372 Jun 06 08:20	14° Π 24'17			13373 May 20 09:32	30° \mathbb{R} 8	
direct	13372 Jun 11 06:18	12° Π 17'41		morning rise	13373 May 21 18:53	28° \mathbb{B} 41'49	
morning max el	13372 Jun 20 23:50	18° Π 01'52	22°28'48	direct	13373 May 26 04:01	26° \mathbb{B} 55'34	
desc. node	13372 Jun 21 06:15	18° Π 18'06			13373 Jun 01 16:55	0° Π	
	13372 Jun 30 22:45	0° \mathbb{E}		morning max el	13373 Jun 03 16:05	1° Π 48'46	21°05'19
	13372 Jul 21 06:32	0° Ω		desc. node	13373 Jun 08 03:17	6° Π 48'38	
morning set	13372 Jul 24 14:33	5° Ω 21'42			13373 Jun 24 18:16	0° \mathbb{E}	
max. Earth dist.	13372 Jul 29 13:02	13° Ω 32'39	1.40826 AU	morning set	13373 Jul 04 08:40	14° \mathbb{E} 40'50	
				max. Earth dist.	13373 Jul 11 18:41	26° \mathbb{E} 30'39	1.42934 AU
					13373 Jul 13 21:49	0° Ω	
superior conj	13372 Aug 06 09:11	27° Ω 11'30	-1°13'53				
minimum elong	13372 Aug 06 14:42	27° Ω 36'16	1°13'44				
	13372 Aug 07 22:32	0° \mathbb{M}		superior conj	13373 Jul 18 21:46	8° Ω 21'40	-1°45'32
asc. node	13372 Aug 15 03:13	13° \mathbb{M} 20'10		minimum elong	13373 Jul 19 04:57	8° Ω 52'11	1°45'40
evening rise	13372 Aug 16 12:46	15° \mathbb{M} 57'57		evening rise	13373 Jul 30 13:57	28° Ω 49'22	
	13372 Aug 24 05:26	0° \mathbb{L}			13373 Jul 31 05:44	0° \mathbb{M}	
evening max el	13372 Sep 01 11:40	11° \mathbb{L} 33'42	18°20'51	asc. node	13373 Aug 01 23:53	3° \mathbb{M} 08'20	
retrograde	13372 Sep 08 23:34	15° \mathbb{L} 21'26		evening max el	13373 Aug 15 23:25	24° \mathbb{M} 30'34	18°04'06
evening set	13372 Sep 11 01:37	15° \mathbb{L} 04'31		retrograde	13373 Aug 22 16:44	27° \mathbb{M} 57'36	
desc. node	13372 Sep 17 03:09	11° \mathbb{L} 39'14		evening set	13373 Aug 25 02:20	27° \mathbb{M} 31'15	
inferior conj	13372 Sep 18 15:09	10° \mathbb{L} 26'57	-0°28'15	inferior conj	13373 Aug 31 22:11	22° \mathbb{M} 33'19	0°55'53
minimum elong	13372 Sep 18 14:06	10° \mathbb{L} 29'06	0°27'45	minimum elong	13373 Aug 31 23:49	22° \mathbb{M} 29'25	0°55'04
min. Earth dist.	13372 Sep 21 22:17	7° \mathbb{L} 45'56	0.58404 AU	min. Earth dist.	13373 Sep 04 02:17	19° \mathbb{M} 33'42	0.60661 AU
morning rise	13372 Sep 25 23:07	5° \mathbb{L} 03'14		desc. node	13373 Sep 04 00:40	19° \mathbb{M} 37'23	
direct	13372 Oct 02 05:11	3° \mathbb{L} 20'28		morning rise	13373 Sep 07 18:22	16° \mathbb{M} 40'14	
morning max el	13372 Oct 16 12:46	10° \mathbb{L} 59'29	27°19'03	direct	13373 Sep 14 08:36	14° \mathbb{M} 31'33	
	13372 Oct 31 07:06	0° \mathbb{M}		morning max el	13373 Sep 28 15:09	22° \mathbb{M} 26'17	27°55'08
asc. node	13372 Nov 11 05:05	19° \mathbb{M} 16'17			13373 Oct 05 07:45	0° \mathbb{L}	
morning set	13372 Nov 16 07:43	29° \mathbb{M} 44'00			13373 Oct 24 10:43	0° \mathbb{M}	
	13372 Nov 16 10:43	0° \mathbb{X}		asc. node	13373 Oct 29 01:50	8° \mathbb{M} 59'10	
				morning set	13373 Oct 31 11:37	13° \mathbb{M} 55'17	
superior conj	13372 Nov 23 05:45	14° \mathbb{X} 55'50	1°31'57	max. Earth dist.	13373 Nov 06 09:44	26° \mathbb{M} 41'09	1.31375 AU
minimum elong	13372 Nov 23 04:18	14° \mathbb{X} 47'47	1°32'48				
max. Earth dist.	13372 Nov 23 02:06	14° \mathbb{X} 35'27	1.31221 AU	superior conj	13373 Nov 07 16:40	29° \mathbb{M} 32'37	1°20'33
evening rise	13372 Nov 30 00:02	29° \mathbb{X} 49'42		minimum elong	13373 Nov 07 14:36	29° \mathbb{M} 21'06	1°21'07
	13372 Nov 30 01:58	0° \mathbb{Z}			13373 Nov 07 21:36	0° \mathbb{X}	
desc. node	13372 Dec 14 00:22	26° \mathbb{Z} 21'43		evening rise	13373 Nov 14 09:28	14° \mathbb{X} 20'04	
	13372 Dec 16 07:38	0° \approx			13373 Nov 22 02:37	0° \mathbb{Z}	
evening max el	13372 Dec 29 18:41	16° \approx 52'44	26°43'04	desc. node	13373 Nov 30 21:26	14° \mathbb{Z} 47'37	
retrograde	13373 Jan 12 17:37	24° \approx 01'24		evening max el	13373 Dec 11 12:38	27° \mathbb{Z} 49'08	25°28'38
evening set	13373 Jan 19 08:23	22° \approx 12'30			13373 Dec 14 00:12	0° \approx	
min. Earth dist.	13373 Jan 23 08:37	19° \approx 34'51	0.59215 AU	retrograde	13373 Dec 25 09:21	4° \approx 47'52	
inferior conj	13373 Jan 26 12:50	17° \approx 06'30	-3°37'32	evening set	13373 Dec 31 07:44	3° \approx 27'21	
minimum elong	13373 Jan 26 20:32	16° \approx 51'27	3°34'08	min. Earth dist.	13374 Jan 05 00:53	0° \approx 48'15	0.57172 AU
morning rise	13373 Feb 03 11:41	12° \approx 29'20			13374 Jan 06 05:48	30° \mathbb{R} 3	
direct	13373 Feb 05 12:43	12° \approx 14'14		inferior conj	13374 Jan 07 21:24	28° \mathbb{Z} 52'36	-4°55'02
asc. node	13373 Feb 07 03:47	12° \approx 24'14		minimum elong	13374 Jan 08 06:04	28° \mathbb{Z} 37'56	4°52'00
morning max el	13373 Feb 13 07:50	16° \approx 05'59	18°15'09	morning rise	13374 Jan 16 06:58	24° \mathbb{Z} 37'53	
	13373 Feb 23 00:37	0° \mathbb{H}		direct	13374 Jan 18 10:53	24° \mathbb{Z} 23'51	
morning set	13373 Mar 01 00:31	11° \mathbb{H} 03'47		asc. node	13374 Jan 25 01:09	26° \mathbb{Z} 44'08	
				morning max el	13374 Jan 27 11:09	28° \mathbb{Z} 46'32	19°00'08
					13374 Jan 28 15:36	0° \approx	
superior conj	13373 Mar 10 12:10	28° \mathbb{H} 44'38	0°12'30	morning set	13374 Feb 12 23:31	25° \approx 23'58	
minimum elong	13373 Mar 10 13:07	28° \mathbb{H} 48'53	0°12'27		13374 Feb 15 07:25	0° \mathbb{H}	
behind sun begin	13373 Mar 10 08:25	28° \mathbb{H} 27'37					
behind sun end	13373 Mar 10 17:48	29° \mathbb{H} 10'06					
	13373 Mar 11 04:52	0° \mathbb{Y}		superior conj	13374 Feb 21 09:59	11° \mathbb{H} 54'26	0°43'31
desc. node	13373 Mar 12 01:42	1° \mathbb{Y} 33'24		minimum elong	13374 Feb 21 12:29	12° \mathbb{H} 06'19	0°43'33
max. Earth dist.	13373 Mar 18 02:33	12° \mathbb{Y} 03'59	1.41251 AU	desc. node	13374 Feb 26 22:12	22° \mathbb{H} 09'37	
evening rise	13373 Mar 22 19:38	19° \mathbb{Y} 53'56		max. Earth dist.	13374 Feb 28 09:31	24° \mathbb{H} 48'12	1.39020 AU
	13373 Mar 29 04:14	0° \mathbb{B}			13374 Mar 03 08:33	0° \mathbb{Y}	
	13373 Apr 19 09:32	0° Π		evening rise	13374 Mar 04 05:11	1° \mathbb{Y} 28'45	
evening max el	13373 Apr 25 19:25	7° Π 14'59	23°08'12		13374 Mar 22 10:40	0° \mathbb{B}	

evening max el	13374 Apr 08 09:08	21°♄06'43	24°28'34	evening max el	13375 Mar 21 22:33	4°♄58'32	25°42'33
retrograde	13374 Apr 19 21:10	27°♄50'45		retrograde	13375 Apr 03 09:21	12°♄08'43	
asc. node	13374 Apr 22 21:44	27°♄10'16		evening set	13375 Apr 09 09:20	9°♄40'24	
evening set	13374 Apr 25 09:52	25°♄31'03		asc. node	13375 Apr 09 19:06	9°♄19'13	
min. Earth dist.	13374 Apr 29 23:16	20°♄18'23	0.68430 AU	min. Earth dist.	13375 Apr 13 15:48	5°♄03'06	0.67548 AU
inferior conj	13374 Apr 30 22:21	19°♄00'59	2°15'31	inferior conj	13375 Apr 15 03:17	3°♄10'12	1°36'04
minimum elong	13374 Apr 30 20:12	19°♄08'12	2°14'14	minimum elong	13375 Apr 15 01:19	3°♄16'30	1°34'55
morning rise	13374 May 06 06:42	13°♄01'38			13375 Apr 17 18:08	30°♄♂	
direct	13374 May 10 03:25	11°♄36'20		morning rise	13375 Apr 20 17:52	27°♂20'15	
morning max el	13374 May 17 15:21	15°♄47'12	19°53'24	direct	13375 Apr 24 03:07	26°♂14'37	
desc. node	13374 May 26 00:10	25°♄59'45		morning max el	13375 Apr 30 22:07	29°♂55'19	18°56'24
	13374 May 28 20:32	0°♂			13375 May 01 00:01	0°♄	
morning set	13374 Jun 13 10:56	23°♂21'30		desc. node	13375 May 12 20:58	15°♄40'43	
	13374 Jun 17 18:04	0°♄		greatest brilliancy	13375 May 14 08:26	17°♄54'19	-0.8m
max. Earth dist.	13374 Jun 24 06:31	10°♄14'05	1.44569 AU		13375 May 22 05:21	0°♂	
				morning set	13375 May 23 17:48	2°♂21'13	
superior conj	13374 Jun 29 10:26	18°♄30'35	-2°07'37	max. Earth dist.	13375 Jun 06 23:15	24°♂29'48	1.45567 AU
minimum elong	13374 Jun 29 15:34	18°♄51'24	2°08'22				
	13374 Jul 06 10:11	0°♂		superior conj	13375 Jun 09 02:26	27°♂50'30	-2°13'04
evening rise	13374 Jul 12 20:23	10°♂50'14		minimum elong	13375 Jun 09 00:43	27°♂43'45	2°14'05
asc. node	13374 Jul 19 20:34	22°♂41'09			13375 Jun 10 11:22	0°♄	
	13374 Jul 24 10:46	0°♂		evening rise	13375 Jun 24 03:30	21°♄50'57	
evening max el	13374 Jul 30 13:37	7°♂50'49	18°06'25		13375 Jun 29 04:11	0°♂	
retrograde	13374 Aug 05 22:50	11°♂11'17		asc. node	13375 Jul 06 17:21	11°♂52'58	
evening set	13374 Aug 08 16:41	10°♂32'24		evening max el	13375 Jul 14 03:07	21°♂26'36	18°26'49
inferior conj	13374 Aug 14 22:01	5°♂16'27	1°57'26	retrograde	13375 Jul 20 13:34	24°♂53'51	
minimum elong	13374 Aug 15 00:32	5°♂09'41	1°56'11	evening set	13375 Jul 23 16:02	24°♂00'04	
min. Earth dist.	13374 Aug 17 16:00	2°♂19'38	0.62910 AU	inferior conj	13375 Jul 29 10:36	18°♂28'05	2°38'32
	13374 Aug 20 02:34	30°♄♂		minimum elong	13375 Jul 29 12:49	18°♂21'29	2°37'18
morning rise	13374 Aug 21 06:18	29°♂04'27		min. Earth dist.	13375 Jul 31 15:02	15°♂52'30	0.64946 AU
desc. node	13374 Aug 21 22:10	28°♂36'21		morning rise	13375 Aug 04 08:22	12°♂06'40	
direct	13374 Aug 27 22:25	26°♂35'50		desc. node	13375 Aug 08 19:38	9°♂42'30	
	13374 Sep 05 14:58	0°♂		direct	13375 Aug 10 20:51	9°♂27'26	
morning max el	13374 Sep 10 23:04	4°♂37'51	27°52'24	morning max el	13375 Aug 24 09:36	17°♂24'14	27°14'57
	13374 Sep 30 01:05	0°♂			13375 Sep 03 22:07	0°♂	
morning set	13374 Oct 15 08:51	27°♂45'18			13375 Sep 22 22:16	0°♂	
asc. node	13374 Oct 15 22:30	28°♂54'39		morning set	13375 Sep 28 20:40	11°♂06'35	
	13374 Oct 16 11:17	0°♂		asc. node	13375 Oct 02 19:05	18°♂57'22	
max. Earth dist.	13374 Oct 20 12:34	8°♂31'15	1.32054 AU	max. Earth dist.	13375 Oct 03 06:59	19°♂58'15	1.33276 AU
superior conj	13374 Oct 23 00:59	13°♂58'35	1°03'28	superior conj	13375 Oct 07 04:32	28°♂07'13	0°40'51
minimum elong	13374 Oct 22 22:43	13°♂46'11	1°03'45	minimum elong	13375 Oct 07 02:39	27°♂57'14	0°40'54
evening rise	13374 Oct 29 20:30	28°♂52'47			13375 Oct 08 01:42	0°♂	
	13374 Oct 30 09:01	0°♂		evening rise	13375 Oct 14 07:15	13°♂22'13	
	13374 Nov 16 02:04	0°♂			13375 Oct 22 15:26	0°♂	
desc. node	13374 Nov 17 18:35	2°♂13'40		evening max el	13375 Nov 04 10:53	18°♂04'57	22°10'32
evening max el	13374 Nov 22 23:37	8°♂03'23	23°52'12	desc. node	13375 Nov 04 15:52	18°♂17'01	
retrograde	13374 Dec 06 12:45	14°♂48'18		retrograde	13375 Nov 17 04:00	24°♂23'08	
evening set	13374 Dec 11 07:24	13°♂58'31		evening set	13375 Nov 20 12:54	23°♂58'01	
min. Earth dist.	13374 Dec 17 10:32	10°♂58'59	0.55544 AU	min. Earth dist.	13375 Nov 28 17:04	20°♂19'57	0.54628 AU
inferior conj	13374 Dec 19 09:25	9°♂48'50	-5°47'21	inferior conj	13375 Nov 29 05:23	20°♂02'40	-5°50'43
minimum elong	13374 Dec 19 14:01	9°♂41'56	5°45'53	minimum elong	13375 Nov 29 01:16	20°♂08'27	5°49'23
morning rise	13374 Dec 27 22:30	5°♂53'12		morning rise	13375 Dec 07 14:44	16°♂15'27	
direct	13374 Dec 30 13:21	5°♂35'58		direct	13375 Dec 11 00:56	15°♂49'18	
morning max el	13375 Jan 10 01:59	10°♂38'22	20°07'52	morning max el	13375 Dec 23 02:16	21°♂35'15	21°37'55
asc. node	13375 Jan 11 22:25	12°♂34'02		asc. node	13375 Dec 29 19:37	29°♂36'02	
	13375 Jan 23 04:10	0°♂			13375 Dec 30 02:17	0°♂	
morning set	13375 Jan 28 05:13	10°♂00'20		morning set	13376 Jan 12 14:55	24°♂44'24	
					13376 Jan 15 02:43	0°♂	
superior conj	13375 Feb 04 21:43	25°♂41'54	1°07'29	superior conj	13376 Jan 19 19:24	9°♂55'06	1°24'20
minimum elong	13375 Feb 05 00:27	25°♂55'39	1°07'47	minimum elong	13376 Jan 19 21:35	10°♂06'31	1°24'59
	13375 Feb 07 01:42	0°♂		max. Earth dist.	13376 Jan 24 03:30	18°♂48'34	1.34805 AU
max. Earth dist.	13375 Feb 10 16:05	6°♂56'27	1.36798 AU	evening rise	13376 Jan 28 08:00	26°♂59'19	
desc. node	13375 Feb 13 18:45	12°♂42'43			13376 Jan 29 22:26	0°♂	
evening rise	13375 Feb 14 10:27	13°♂53'53					
	13375 Feb 23 20:49	0°♂		desc. node	13376 Jan 31 15:21	3°♂08'05	
	13375 Mar 17 07:01	0°♄			13376 Feb 17 05:15	0°♂	

evening max el	13376 Mar 03 12:21	18° Υ 44'08	26°42'52	max. Earth dist.	13377 Jan 05 22:40	0° \approx 42'47	1.33186 AU
retrograde	13376 Mar 16 16:00	26° Υ 07'54		evening rise	13377 Jan 10 18:20	10° \approx 36'00	
evening set	13376 Mar 23 02:11	23° Υ 35'47		desc. node	13377 Jan 17 12:02	23° \approx 21'09	
asc. node	13376 Mar 26 16:34	20° Υ 02'44			13377 Jan 21 07:31	0° \mathcal{H}	
min. Earth dist.	13376 Mar 27 03:03	19° Υ 32'39	0.66249 AU		13377 Feb 11 20:46	0° Υ	
inferior conj	13376 Mar 29 02:47	17° Υ 11'30	0°45'43	evening max el	13377 Feb 14 01:42	2° Υ 13'19	27°22'01
minimum elong	13376 Mar 29 01:38	17° Υ 14'57	0°45'04	retrograde	13377 Feb 27 16:12	9° Υ 40'09	
morning rise	13376 Apr 04 02:14	11° Υ 32'43		evening set	13377 Mar 06 10:19	7° Υ 10'10	
direct	13376 Apr 07 01:12	10° Υ 44'15		min. Earth dist.	13377 Mar 10 06:48	3° Υ 39'05	0.64582 AU
morning max el	13376 Apr 13 11:03	14° Υ 07'25	18°15'57	inferior conj	13377 Mar 12 18:22	0° Υ 58'48	-0°15'55
	13376 Apr 25 02:50	0° \mathcal{B}		minimum elong	13377 Mar 12 18:50	0° Υ 57'31	0°15'38
desc. node	13376 Apr 28 17:39	5° \mathcal{B} 43'08		transit middle	13377 Mar 12 18:50	0° Υ 57'31	0°15'38
morning set	13376 May 03 00:00	12° \mathcal{B} 31'52		transit begin	13377 Mar 12 18:11	0° Υ 59'15	
	13376 May 14 00:12	0° Π		transit end	13377 Mar 12 19:28	0° Υ 55'47	
				asc. node	13377 Mar 13 14:03	0° Υ 06'05	
superior conj	13376 May 18 10:13	6° Π 55'36	-1°58'21		13377 Mar 13 16:22	30° \mathcal{R} \mathcal{H}	
minimum elong	13376 May 18 02:01	6° Π 23'33	1°58'42	morning rise	13377 Mar 19 05:15	25° \mathcal{H} 33'39	
max. Earth dist.	13376 May 19 19:01	9° Π 03'47	1.45832 AU	direct	13377 Mar 21 19:18	24° \mathcal{H} 59'07	
	13376 Jun 02 05:24	0° \mathcal{E}		morning max el	13377 Mar 28 03:51	28° \mathcal{H} 16'29	17°52'31
evening rise	13376 Jun 03 10:32	1° \mathcal{E} 53'35			13377 Mar 29 18:42	0° Υ	
greatest brilliancy	13376 Jun 14 06:30	18° \mathcal{E} 40'56	-0.8m	morning set	13377 Apr 14 10:36	24° Υ 05'19	
	13376 Jun 22 02:58	0° Ω		desc. node	13377 Apr 15 14:16	26° Υ 00'43	
asc. node	13376 Jun 22 14:14	0° Ω 36'39			13377 Apr 17 23:49	0° \mathcal{B}	
evening max el	13376 Jun 26 13:19	5° Ω 11'33	19°04'26				
retrograde	13376 Jul 03 09:33	8° Ω 58'34		superior conj	13377 Apr 28 03:11	16° \mathcal{B} 30'59	-1°27'01
evening set	13376 Jul 06 21:03	7° Ω 48'25		minimum elong	13377 Apr 27 18:38	15° \mathcal{B} 56'49	1°26'42
inferior conj	13376 Jul 12 08:25	2° Ω 01'49	3°02'26	max. Earth dist.	13377 May 02 15:07	23° \mathcal{B} 38'59	1.45348 AU
minimum elong	13376 Jul 12 09:46	1° Ω 57'28	3°01'20		13377 May 06 16:29	0° Π	
	13376 Jul 13 22:25	30° \mathcal{R} \mathcal{E}		evening rise	13377 May 14 00:45	11° Π 20'18	
min. Earth dist.	13376 Jul 13 22:12	0° Ω 00'42	0.66623 AU		13377 May 26 09:23	0° \mathcal{E}	
morning rise	13376 Jul 17 21:51	25° \mathcal{E} 37'47		greatest brilliancy	13377 May 28 21:15	3° \mathcal{E} 39'10	-0.6m
direct	13376 Jul 24 02:20	22° \mathcal{E} 58'04		asc. node	13377 Jun 09 11:16	18° \mathcal{E} 41'48	
desc. node	13376 Jul 25 17:02	23° \mathcal{E} 07'37		evening max el	13377 Jun 09 18:17	18° \mathcal{E} 59'35	19°58'00
	13376 Aug 05 06:43	0° Ω		retrograde	13377 Jun 17 08:05	23° \mathcal{E} 18'18	
morning max el	13376 Aug 05 20:34	0° Ω 34'38	26°10'44	evening set	13377 Jun 21 05:10	21° \mathcal{E} 51'16	
	13376 Aug 27 21:26	0° \mathcal{M}		inferior conj	13377 Jun 26 12:28	15° \mathcal{E} 51'20	3°12'11
morning set	13376 Sep 10 19:49	23° \mathcal{M} 51'39		minimum elong	13377 Jun 26 12:48	15° \mathcal{E} 50'15	3°11'09
	13376 Sep 14 01:38	0° \mathcal{L}		min. Earth dist.	13377 Jun 27 11:53	14° \mathcal{E} 32'17	0.67858 AU
max. Earth dist.	13376 Sep 14 15:26	1° \mathcal{L} 06'43	1.35015 AU	morning rise	13377 Jul 01 20:05	9° \mathcal{E} 29'00	
asc. node	13376 Sep 18 15:39	9° \mathcal{L} 03'46		direct	13377 Jul 07 13:40	6° \mathcal{E} 57'32	
				desc. node	13377 Jul 12 14:22	8° \mathcal{E} 30'36	
superior conj	13376 Sep 20 00:51	11° \mathcal{L} 52'36	0°13'03	morning max el	13377 Jul 19 06:59	13° \mathcal{E} 59'00	24°49'09
minimum elong	13376 Sep 20 00:07	11° \mathcal{L} 48'51	0°13'01		13377 Aug 01 07:45	0° Ω	
behind sun begin	13376 Sep 19 20:33	11° \mathcal{L} 30'39			13377 Aug 20 17:22	0° \mathcal{M}	
behind sun end	13376 Sep 20 03:41	12° \mathcal{L} 07'05		morning set	13377 Aug 24 02:10	5° \mathcal{M} 50'13	
evening rise	13376 Sep 27 15:50	27° \mathcal{L} 43'50		max. Earth dist.	13377 Aug 27 15:59	12° \mathcal{M} 15'47	1.37158 AU
	13376 Sep 28 18:10	0° \mathcal{M}					
evening max el	13376 Oct 16 07:44	28° \mathcal{M} 30'37	20°39'41	superior conj	13377 Sep 03 10:48	25° \mathcal{M} 06'31	-0°19'07
	13376 Oct 17 22:25	0° \mathcal{J}		minimum elong	13377 Sep 03 12:04	25° \mathcal{M} 12'40	0°19'05
desc. node	13376 Oct 21 13:14	2° \mathcal{J} 30'56		asc. node	13377 Sep 05 12:13	29° \mathcal{M} 09'48	
retrograde	13376 Oct 27 14:29	4° \mathcal{J} 06'59			13377 Sep 05 22:20	0° \mathcal{L}	
evening set	13376 Oct 29 21:30	3° \mathcal{J} 54'08		evening rise	13377 Sep 11 19:53	11° \mathcal{L} 51'13	
inferior conj	13376 Nov 07 21:04	29° \mathcal{M} 59'37	-4°54'21		13377 Sep 21 12:21	0° \mathcal{M}	
minimum elong	13376 Nov 07 11:11	0° \mathcal{J} 13'49	4°51'05	evening max el	13377 Sep 28 18:38	9° \mathcal{M} 41'39	19°28'34
	13376 Nov 07 20:48	30° \mathcal{R} \mathcal{M}		retrograde	13377 Oct 08 09:36	14° \mathcal{M} 30'22	
min. Earth dist.	13376 Nov 08 23:35	29° \mathcal{M} 21'29	0.54621 AU	desc. node	13377 Oct 08 10:41	14° \mathcal{M} 30'22	
morning rise	13376 Nov 16 00:45	26° \mathcal{M} 02'49		evening set	13377 Oct 10 06:27	14° \mathcal{M} 20'17	
direct	13376 Nov 20 09:16	25° \mathcal{M} 22'07		inferior conj	13377 Oct 18 23:03	10° \mathcal{M} 13'49	-3°15'29
	13376 Dec 01 13:49	0° \mathcal{J}		minimum elong	13377 Oct 18 14:45	10° \mathcal{M} 27'09	3°11'56
morning max el	13376 Dec 03 15:08	1° \mathcal{J} 48'10	23°23'58	min. Earth dist.	13377 Oct 21 09:10	8° \mathcal{M} 40'34	0.55536 AU
asc. node	13376 Dec 15 16:43	17° \mathcal{J} 33'48		morning rise	13377 Oct 26 20:57	5° \mathcal{M} 47'59	
	13376 Dec 22 12:11	0° \mathcal{Z}		direct	13377 Nov 01 01:55	4° \mathcal{M} 47'09	
morning set	13376 Dec 27 02:35	9° \mathcal{Z} 30'26		morning max el	13377 Nov 15 01:03	11° \mathcal{M} 47'19	25°11'24
					13377 Nov 28 23:13	0° \mathcal{J}	
superior conj	13377 Jan 02 23:58	24° \mathcal{Z} 25'22	1°34'27	asc. node	13377 Dec 02 13:43	6° \mathcal{J} 13'27	
minimum elong	13377 Jan 03 01:11	24° \mathcal{Z} 31'55	1°35'22	morning set	13377 Dec 11 14:21	24° \mathcal{J} 13'09	
	13377 Jan 05 14:33	0° \approx			13377 Dec 14 06:09	0° \mathcal{Z}	

superior conj	13377 Dec 18 08:56	9° S 05'29	1°38'12	minimum elong	13378 Dec 02 19:13	23° S 43'41	1°36'53
minimum elong	13377 Dec 18 09:03	9° S 06'06	1°39'14	max. Earth dist.	13378 Dec 03 08:07	24° S 55'38	1.31357 AU
max. Earth dist.	13377 Dec 20 01:04	12° S 46'01	1.32020 AU		13378 Dec 05 14:57	0° S	
evening rise	13377 Dec 25 14:18	24° S 35'57		evening rise	13378 Dec 09 17:12	8° S 52'13	
	13377 Dec 28 06:23	0° \approx			13378 Dec 20 15:08	0° \approx	
desc. node	13378 Jan 04 08:49	13° \approx 16'15		desc. node	13378 Dec 22 05:43	2° \approx 45'15	
	13378 Jan 14 21:19	0° H		evening max el	13379 Jan 09 18:48	27° \approx 31'03	27°11'27
evening max el	13378 Jan 27 12:43	15° H 13'27	27°33'17		13379 Jan 12 14:58	0° H	
retrograde	13378 Feb 10 09:12	22° H 36'37		retrograde	13379 Jan 23 17:56	4° H 46'31	
evening set	13378 Feb 17 07:13	20° H 15'55		evening set	13379 Jan 30 13:35	2° H 43'33	
min. Earth dist.	13378 Feb 21 01:14	17° H 12'36	0.62612 AU		13379 Feb 03 09:14	30° R	
inferior conj	13378 Feb 23 23:03	14° H 24'51	-1°28'27	min. Earth dist.	13379 Feb 03 09:17	29° \approx 59'52	0.60455 AU
minimum elong	13378 Feb 24 02:02	14° H 17'39	1°26'50	inferior conj	13379 Feb 06 13:17	27° \approx 19'26	-2°49'30
asc. node	13378 Feb 28 11:32	10° H 33'26		minimum elong	13379 Feb 06 19:21	27° \approx 06'33	2°46'33
morning rise	13378 Mar 02 23:30	9° H 16'18		morning rise	13379 Feb 14 04:16	22° \approx 30'23	
direct	13378 Mar 05 06:16	8° H 52'14		asc. node	13379 Feb 15 09:00	22° \approx 16'18	
morning max el	13378 Mar 11 21:36	12° H 14'48	17°46'37	direct	13379 Feb 16 06:10	22° \approx 13'09	
	13378 Mar 23 23:58	0° Y		morning max el	13379 Feb 23 12:46	25° \approx 51'29	17°59'07
morning set	13378 Mar 27 21:34	6° Y 48'25			13379 Feb 27 01:19	0° H	
desc. node	13378 Apr 02 10:49	16° Y 28'56		morning set	13379 Mar 11 02:34	20° H 21'05	
					13379 Mar 16 08:55	0° Y	
superior conj	13378 Apr 08 17:47	27° Y 09'04	-0°47'42	desc. node	13379 Mar 20 07:19	7° Y 03'01	
minimum elong	13378 Apr 08 13:05	26° Y 49'26	0°47'23				
	13378 Apr 10 11:02	0° B		superior conj	13379 Mar 21 08:29	8° Y 53'48	-0°08'19
max. Earth dist.	13378 Apr 15 08:48	7° B 58'50	1.44172 AU	minimum elong	13379 Mar 21 07:46	8° Y 50'42	0°08'15
evening rise	13378 Apr 23 13:12	20° B 51'03		behind sun begin	13379 Mar 21 00:52	8° Y 20'20	
	13378 Apr 29 13:17	0° II		behind sun end	13379 Mar 21 14:41	9° Y 21'00	
	13378 May 21 03:08	0° S		max. Earth dist.	13379 Mar 28 21:44	21° Y 46'18	1.42430 AU
evening max el	13378 May 23 17:20	2° S 48'18	21°05'02		13379 Apr 02 23:13	0° B	
asc. node	13378 May 27 08:24	5° S 56'01		evening rise	13379 Apr 03 14:18	1° B 00'01	
retrograde	13378 Jun 01 07:00	7° S 47'39			13379 Apr 23 01:02	0° II	
evening set	13378 Jun 05 14:22	6° S 04'04		evening max el	13379 May 06 11:15	16° II 37'29	22°21'47
inferior conj	13378 Jun 10 20:20	29° II 52'23	3°09'52	asc. node	13379 May 14 05:38	22° II 03'20	
minimum elong	13378 Jun 10 19:40	29° II 54'43	3°08'48	retrograde	13379 May 16 04:32	22° II 20'54	
	13378 Jun 10 18:09	30° R II		evening set	13379 May 20 22:51	20° II 21'51	
min. Earth dist.	13378 Jun 11 06:04	29° II 18'33	0.68624 AU	inferior conj	13379 May 26 05:50	14° II 00'36	2°56'48
morning rise	13378 Jun 16 00:45	23° II 34'22		minimum elong	13379 May 26 04:21	14° II 05'48	2°55'38
direct	13378 Jun 21 05:56	21° II 17'36		min. Earth dist.	13379 May 26 02:36	14° II 11'54	0.68915 AU
desc. node	13378 Jun 29 11:34	25° II 24'21		morning rise	13379 May 31 09:41	7° II 48'42	
morning max el	13378 Jul 01 17:38	27° II 32'11	23°19'53	direct	13379 Jun 05 02:04	5° II 50'38	
	13378 Jul 04 01:13	0° S		morning max el	13379 Jun 14 06:51	11° II 13'07	21°52'04
	13378 Jul 25 22:44	0° Ω		desc. node	13379 Jun 16 08:39	13° II 24'55	
morning set	13378 Aug 05 11:06	16° Ω 51'29			13379 Jun 29 02:24	0° S	
max. Earth dist.	13378 Aug 09 13:57	23° Ω 52'24	1.39497 AU	morning set	13379 Jul 16 19:05	26° S 46'55	
	13378 Aug 13 01:28	0° M			13379 Jul 18 19:09	0° Ω	
				max. Earth dist.	13379 Jul 22 15:07	6° Ω 16'39	1.41765 AU
superior conj	13378 Aug 17 06:35	7° M 40'10	-0°53'53				
minimum elong	13378 Aug 17 10:31	7° M 58'25	0°53'43	superior conj	13379 Jul 30 07:46	19° Ω 23'39	-1°28'04
asc. node	13378 Aug 23 08:48	19° M 12'04		minimum elong	13379 Jul 30 14:15	19° Ω 52'05	1°27'58
evening rise	13378 Aug 26 16:34	25° M 37'01			13379 Aug 05 06:13	0° M	
	13378 Aug 28 23:18	0° Ω		evening rise	13379 Aug 10 02:08	8° M 51'37	
evening max el	13378 Sep 11 18:21	21° Ω 40'59	18°39'27	asc. node	13379 Aug 10 05:25	9° M 06'49	
retrograde	13378 Sep 19 22:16	25° Ω 47'36			13379 Aug 22 11:48	0° Ω	
evening set	13378 Sep 21 20:38	25° Ω 34'34		evening max el	13379 Aug 26 02:59	4° Ω 20'34	18°11'23
desc. node	13378 Sep 25 08:12	24° Ω 12'12		retrograde	13379 Sep 02 05:43	7° Ω 57'41	
inferior conj	13378 Sep 29 20:55	21° Ω 09'11	-1°26'09	evening set	13379 Sep 04 10:46	7° Ω 37'18	
minimum elong	13378 Sep 29 17:24	21° Ω 15'46	1°24'28	inferior conj	13379 Sep 11 16:31	2° Ω 51'12	0°10'12
min. Earth dist.	13378 Oct 03 00:36	18° Ω 48'06	0.57208 AU	minimum elong	13379 Sep 11 16:52	2° Ω 50'26	0°10'01
morning rise	13378 Oct 07 10:44	16° Ω 05'33		transit middle	13379 Sep 11 16:52	2° Ω 50'26	0°10'01
direct	13378 Oct 13 08:59	14° Ω 38'43		transit begin	13379 Sep 11 14:11	2° Ω 56'18	
morning max el	13378 Oct 27 15:40	22° Ω 06'29	26°41'19	transit end	13379 Sep 11 19:32	2° Ω 44'34	
	13378 Nov 03 15:08	0° M		desc. node	13379 Sep 12 05:43	2° Ω 22'13	
asc. node	13378 Nov 19 10:35	25° M 24'08			13379 Sep 14 23:21	30° R M	
	13378 Nov 21 18:50	0° S		min. Earth dist.	13379 Sep 14 23:42	29° M 59'16	0.59346 AU
morning set	13378 Nov 26 00:28	8° S 47'25		morning rise	13379 Sep 18 19:34	27° M 13'40	
				direct	13379 Sep 25 05:59	25° M 19'01	
superior conj	13378 Dec 02 20:09	23° S 48'52	1°35'56		13379 Oct 06 02:10	0° Ω	

morning max el	13379 Oct 09 13:45	3°♌06'27	27°39'09		13380 Oct 03 01:33	0°♌	
	13379 Oct 29 05:23	0°♌			13380 Oct 20 18:34	0°♌	
asc. node	13379 Nov 06 07:22	14°♌57'33		asc. node	13380 Oct 23 04:03	4°♌46'21	
morning set	13379 Nov 10 07:11	23°♌08'56		morning set	13380 Oct 24 08:29	7°♌11'39	
	13379 Nov 13 11:35	0°♌		max. Earth dist.	13380 Oct 29 22:26	19°♌05'06	1.31601 AU
max. Earth dist.	13379 Nov 16 16:29	7°♌05'17	1.31216 AU				
				superior conj	13380 Oct 31 17:45	23°♌03'15	1°13'59
superior conj	13379 Nov 17 07:43	8°♌30'16	1°27'49	minimum elong	13380 Oct 31 15:32	22°♌50'59	1°14'26
minimum elong	13379 Nov 17 05:58	8°♌20'29	1°28'34		13380 Nov 03 21:01	0°♌	
evening rise	13379 Nov 24 00:50	23°♌19'31		evening rise	13380 Nov 07 11:09	7°♌51'39	
	13379 Nov 27 05:02	0°♌			13380 Nov 18 18:43	0°♌	
desc. node	13379 Dec 09 02:42	21°♌38'17		desc. node	13380 Nov 24 23:48	9°♌40'58	
	13379 Dec 14 21:06	0°♌		evening max el	13380 Dec 03 08:25	19°♌34'58	24°49'26
evening max el	13379 Dec 22 17:44	8°♌58'19	26°15'03	retrograde	13380 Dec 17 02:52	26°♌27'54	
retrograde	13380 Jan 05 16:36	16°♌03'25		evening set	13380 Dec 22 14:39	25°♌20'55	
evening set	13380 Jan 12 01:26	14°♌26'10		min. Earth dist.	13380 Dec 27 20:18	22°♌35'23	0.56413 AU
min. Earth dist.	13380 Jan 16 07:10	11°♌49'43	0.58307 AU	inferior conj	13380 Dec 30 09:10	20°♌58'13	-5°21'46
inferior conj	13380 Jan 19 09:30	9°♌33'21	-4°12'05	minimum elong	13380 Dec 30 16:51	20°♌45'54	5°19'21
minimum elong	13380 Jan 19 18:02	9°♌17'40	4°08'38	morning rise	13381 Jan 07 21:11	16°♌51'57	
morning rise	13380 Jan 27 13:35	5°♌05'41		direct	13381 Jan 10 04:45	16°♌37'03	
direct	13380 Jan 29 14:48	4°♌51'37		asc. node	13381 Jan 19 03:39	20°♌38'19	
asc. node	13380 Feb 02 06:21	5°♌38'41		morning max el	13381 Jan 19 19:49	21°♌16'05	19°26'05
morning max el	13380 Feb 06 21:32	8°♌55'50	18°31'35		13381 Jan 26 15:35	0°♌	
	13380 Feb 20 12:17	0°♌		morning set	13381 Feb 05 22:25	18°♌55'37	
morning set	13380 Feb 22 20:13	4°♌27'32			13381 Feb 11 10:58	0°♌	
				superior conj	13381 Feb 14 00:24	5°♌02'43	0°54'34
superior conj	13380 Mar 02 20:13	21°♌35'55	0°26'28	minimum elong	13381 Feb 14 03:08	5°♌16'01	0°54'41
minimum elong	13380 Mar 02 22:00	21°♌44'12	0°26'26	max. Earth dist.	13381 Feb 20 12:36	17°♌21'15	1.38062 AU
desc. node	13380 Mar 06 03:50	27°♌39'28		desc. node	13381 Feb 21 00:21	18°♌14'43	
	13380 Mar 07 11:16	0°♌		evening rise	13381 Feb 24 05:54	24°♌00'45	
max. Earth dist.	13380 Mar 10 06:09	4°♌53'13	1.40316 AU		13381 Feb 27 17:30	0°♌	
evening rise	13380 Mar 14 11:38	12°♌03'34			13381 Mar 19 13:16	0°♌	
	13380 Mar 25 19:51	0°♌		evening max el	13381 Mar 31 15:41	14°♌22'08	25°01'22
	13380 Apr 17 14:33	0°♌		retrograde	13381 Apr 12 13:51	21°♌18'02	
evening max el	13380 Apr 18 02:03	0°♌28'56	23°42'46	asc. node	13381 Apr 17 00:16	19°♌53'09	
retrograde	13380 Apr 28 23:11	6°♌52'51		evening set	13381 Apr 18 07:27	18°♌54'20	
asc. node	13380 Apr 30 02:55	6°♌46'48		min. Earth dist.	13381 Apr 22 17:49	13°♌56'50	0.68106 AU
evening set	13380 May 04 05:04	4°♌40'10		inferior conj	13381 Apr 23 22:08	12°♌23'52	2°00'07
	13380 May 08 07:27	30°♌		minimum elong	13381 Apr 23 19:59	12°♌30'55	1°58'51
min. Earth dist.	13380 May 08 23:14	29°♌06'31	0.68738 AU	morning rise	13381 Apr 29 08:47	6°♌28'18	
inferior conj	13380 May 09 15:03	28°♌12'21	2°33'33	direct	13381 May 03 00:37	5°♌11'23	
minimum elong	13380 May 09 13:02	28°♌19'16	2°32'16	morning max el	13381 May 10 04:12	9°♌07'31	19°27'16
morning rise	13380 May 14 20:59	22°♌07'56		desc. node	13381 May 20 02:28	21°♌39'35	
direct	13380 May 19 00:46	20°♌30'28		greatest brilliancy	13381 May 22 20:11	25°♌38'31	-0.7m
morning max el	13380 May 27 01:44	25°♌04'26	20°32'56		13381 May 25 18:30	0°♌	
	13380 May 31 11:03	0°♌		morning set	13381 Jun 04 06:07	14°♌26'09	
desc. node	13380 Jun 02 05:37	2°♌14'22			13381 Jun 14 06:54	0°♌	
	13380 Jun 21 10:59	0°♌		max. Earth dist.	13381 Jun 16 13:58	3°♌36'24	1.45082 AU
morning set	13380 Jun 25 04:32	5°♌44'08					
max. Earth dist.	13380 Jul 03 23:10	19°♌34'27	1.43702 AU	superior conj	13381 Jun 20 13:26	9°♌54'43	-2°12'18
				minimum elong	13381 Jun 20 16:07	10°♌05'25	2°13'16
superior conj	13380 Jul 10 10:20	0°♌08'16	-1°56'30		13381 Jul 02 21:39	0°♌	
minimum elong	13380 Jul 10 17:15	0°♌37'03	1°56'54	evening rise	13381 Jul 04 16:58	2°♌59'56	
	13380 Jul 10 08:20	0°♌		asc. node	13381 Jul 13 22:50	18°♌14'25	
evening rise	13380 Jul 22 19:56	21°♌22'54			13381 Jul 22 08:27	0°♌	
asc. node	13380 Jul 27 02:05	28°♌49'10		evening max el	13381 Jul 23 06:37	0°♌57'43	18°12'52
	13380 Jul 27 18:28	0°♌		retrograde	13381 Jul 29 15:06	4°♌19'13	
evening max el	13380 Aug 08 16:16	17°♌29'06	18°02'52	evening set	13381 Aug 01 12:40	3°♌34'04	
retrograde	13380 Aug 15 04:45	20°♌51'15			13381 Aug 05 21:12	30°♌	
evening set	13380 Aug 17 17:56	20°♌19'48		inferior conj	13381 Aug 07 12:57	28°♌10'50	2°17'10
inferior conj	13380 Aug 24 07:10	15°♌14'06	1°24'44	minimum elong	13381 Aug 07 15:25	28°♌03'49	2°15'53
minimum elong	13380 Aug 24 09:22	15°♌08'35	1°23'37	min. Earth dist.	13381 Aug 10 01:17	25°♌21'29	0.63819 AU
min. Earth dist.	13380 Aug 27 07:41	12°♌13'11	0.61638 AU	morning rise	13381 Aug 13 16:33	21°♌54'02	
desc. node	13380 Aug 29 03:14	10°♌34'40		desc. node	13381 Aug 16 00:44	20°♌23'41	
morning rise	13380 Aug 30 22:14	9°♌12'02		direct	13381 Aug 20 07:44	19°♌19'59	
direct	13380 Sep 06 14:13	6°♌53'44		morning max el	13381 Sep 03 03:54	27°♌20'27	27°40'17
morning max el	13380 Sep 20 18:32	14°♌52'21	27°58'30				

	13381 Sep 05 16:17	0°♍		desc. node	13382 Aug 02 22:11	2°♊30'10	
	13381 Sep 26 18:34	0°♊		direct	13382 Aug 03 09:09	2°♊29'24	
morning set	13381 Oct 08 02:03	20°♊50'16		morning max el	13382 Aug 16 15:07	10°♊19'36	26°50'26
asc. node	13381 Oct 10 00:41	24°♊45'30			13382 Sep 01 04:25	0°♍	
	13381 Oct 12 13:22	0°♍			13382 Sep 19 06:31	0°♊	
max. Earth dist.	13381 Oct 12 22:15	0°♍46'45	1.32519 AU	morning set	13382 Sep 21 09:01	3°♊57'50	
				max. Earth dist.	13382 Sep 25 12:48	12°♊06'24	1.33961 AU
superior conj	13381 Oct 16 00:19	7°♍22'36	0°54'32	asc. node	13382 Sep 26 21:17	14°♊50'32	
minimum elong	13381 Oct 15 22:07	7°♍10'46	0°54'42				
evening rise	13381 Oct 22 22:19	22°♍23'54		superior conj	13382 Sep 30 01:09	21°♊22'26	0°29'39
	13381 Oct 26 13:19	0°♊		minimum elong	13382 Sep 29 23:40	21°♊14'38	0°29'39
desc. node	13381 Nov 11 21:01	26°♊34'49			13382 Oct 04 02:58	0°♍	
evening max el	13381 Nov 14 18:19	29°♊38'55	23°08'21	evening rise	13382 Oct 07 08:28	6°♍51'12	
	13381 Nov 15 03:08	0°♊			13382 Oct 19 15:58	0°♊	
retrograde	13381 Nov 28 00:17	6°♊14'02		evening max el	13382 Oct 27 08:34	9°♊46'43	21°29'45
evening set	13381 Dec 02 04:57	5°♊35'48		desc. node	13382 Oct 29 18:21	11°♊55'36	
min. Earth dist.	13381 Dec 09 03:47	2°♊22'09	0.55059 AU	retrograde	13382 Nov 08 12:41	15°♊49'26	
inferior conj	13381 Dec 10 13:16	1°♊33'56	-5°55'55	evening set	13382 Nov 11 08:46	15°♊31'00	
minimum elong	13381 Dec 10 14:25	1°♊32'18	5°54'51	inferior conj	13382 Nov 20 05:44	11°♊37'15	-5°33'43
	13381 Dec 13 08:28	30°♋♊		minimum elong	13382 Nov 19 22:19	11°♊47'40	5°31'38
morning rise	13381 Dec 19 01:27	27°♊43'58		min. Earth dist.	13382 Nov 20 09:55	11°♊31'23	0.54506 AU
direct	13381 Dec 21 23:59	27°♊23'33		morning rise	13382 Nov 28 12:41	7°♊48'39	
	13381 Dec 29 19:48	0°♊		direct	13382 Dec 02 08:05	7°♊17'15	
morning max el	13382 Jan 02 04:21	2°♊43'49	20°43'44	morning max el	13382 Dec 14 23:16	13°♊20'49	22°21'51
asc. node	13382 Jan 06 00:54	7°♊00'49		asc. node	13382 Dec 23 22:03	24°♊28'53	
	13382 Jan 19 11:54	0°♋			13382 Dec 27 07:07	0°♊	
morning set	13382 Jan 21 06:05	3°♋36'12		morning set	13383 Jan 05 16:54	18°♊22'32	
					13383 Jan 11 03:22	0°♋	
superior conj	13382 Jan 28 16:46	19°♋02'14	1°15'30				
minimum elong	13382 Jan 28 19:20	19°♋15'24	1°15'56	superior conj	13383 Jan 12 17:48	3°♋24'39	1°29'26
max. Earth dist.	13382 Feb 02 21:01	29°♋21'24	1.35909 AU	minimum elong	13383 Jan 12 19:36	3°♋34'13	1°30'12
	13382 Feb 03 05:00	0°♋		max. Earth dist.	13383 Jan 16 11:30	11°♋12'59	1.34058 AU
evening rise	13382 Feb 06 18:29	6°♋43'45		evening rise	13383 Jan 20 21:56	20°♋04'04	
desc. node	13382 Feb 07 20:53	8°♋44'53		desc. node	13383 Jan 25 17:32	29°♋06'03	
	13382 Feb 20 12:17	0°♌			13383 Jan 26 05:29	0°♋	
evening max el	13382 Mar 14 05:13	28°♌12'04	26°10'23		13383 Feb 14 12:03	0°♌	
	13382 Mar 16 03:33	0°♌		evening max el	13383 Feb 24 18:47	11°♌51'40	27°02'28
retrograde	13382 Mar 26 23:38	5°♌29'09		retrograde	13383 Mar 10 03:48	19°♌18'33	
evening set	13382 Apr 02 04:20	2°♌58'22		evening set	13383 Mar 16 17:47	16°♌46'10	
asc. node	13382 Apr 03 21:42	1°♌22'10		min. Earth dist.	13383 Mar 20 16:28	12°♌57'17	0.65581 AU
	13382 Apr 05 03:52	30°♌♌		asc. node	13383 Mar 21 19:10	11°♌41'46	
min. Earth dist.	13382 Apr 06 08:13	28°♌36'07	0.67042 AU	inferior conj	13383 Mar 22 21:28	10°♌26'22	0°20'57
inferior conj	13382 Apr 08 01:01	26°♌30'08	1°16'04	minimum elong	13383 Mar 22 20:54	10°♌28'01	0°20'39
minimum elong	13382 Apr 07 23:17	26°♌35'28	1°15'06	morning rise	13383 Mar 29 01:31	4°♌53'21	
morning rise	13382 Apr 13 19:03	20°♌44'58		direct	13383 Mar 31 20:26	4°♌11'21	
direct	13382 Apr 16 23:50	19°♌46'57		morning max el	13383 Apr 07 04:53	7°♌30'45	18°03'55
morning max el	13382 Apr 23 13:53	23°♌18'22	18°37'16		13383 Apr 22 19:17	0°♌	
	13382 Apr 29 04:03	0°♌		desc. node	13383 Apr 23 19:51	1°♌39'53	
desc. node	13382 May 06 23:12	11°♌30'23		morning set	13383 Apr 25 15:40	4°♌38'07	
morning set	13382 May 14 21:23	23°♌52'14					
	13382 May 18 19:17	0°♍		superior conj	13383 May 10 09:28	28°♌15'16	-1°46'38
				minimum elong	13383 May 10 00:21	27°♌39'22	1°46'39
superior conj	13382 May 30 23:50	19°♍02'32	-2°09'16		13383 May 11 12:08	0°♍	
minimum elong	13382 May 30 18:51	18°♍43'02	2°10'04	max. Earth dist.	13383 May 13 04:34	2°♍38'26	1.45711 AU
max. Earth dist.	13382 May 30 08:43	18°♍03'28	1.45769 AU	evening rise	13383 May 26 11:59	23°♍17'56	
	13382 Jun 06 23:37	0°♎			13383 May 30 20:21	0°♎	
evening rise	13382 Jun 15 13:37	13°♎35'14		greatest brilliancy	13383 Jun 08 08:00	12°♎53'02	-0.7m
greatest brilliancy	13382 Jun 23 05:20	25°♎44'52	-0.9m	asc. node	13383 Jun 17 16:39	25°♎44'10	
	13382 Jun 25 22:42	0°♏		evening max el	13383 Jun 20 03:01	28°♎24'16	19°25'23
asc. node	13382 Jun 30 19:41	7°♏15'34			13383 Jun 21 20:53	0°♏	
evening max el	13382 Jul 06 18:57	14°♏38'03	18°40'41	retrograde	13383 Jun 27 06:03	2°♏23'53	
retrograde	13382 Jul 13 08:37	18°♏12'26		evening set	13383 Jun 30 21:26	1°♏06'45	
evening set	13382 Jul 16 14:50	17°♏11'47			13383 Jul 02 05:47	30°♏♎	
inferior conj	13382 Jul 22 05:54	11°♏33'07	2°50'32	inferior conj	13383 Jul 06 06:43	25°♎14'15	3°08'08
minimum elong	13382 Jul 22 07:48	11°♏27'17	2°49'22	minimum elong	13383 Jul 06 07:39	25°♎11'13	3°07'05
min. Earth dist.	13382 Jul 24 04:02	9°♏11'06	0.65707 AU	min. Earth dist.	13383 Jul 07 14:21	23°♎30'10	0.67199 AU
morning rise	13382 Jul 27 23:49	5°♏09'44		morning rise	13383 Jul 11 17:19	18°♎50'14	

direct	13383 Jul 17 17:22	16°☿12'57		min. Earth dist.	13384 Jun 20 06:16	8°☿08'56	0.68238 AU
desc. node	13383 Jul 20 19:34	16°☿48'14		morning rise	13384 Jun 24 18:34	2°☿48'27	
morning max el	13383 Jul 30 02:01	23°☿37'17	25°37'34	direct	13384 Jun 30 07:06	0°☿22'15	
	13383 Aug 04 18:19	0°♌		desc. node	13384 Jul 06 16:51	2°☿52'57	
	13383 Aug 25 13:12	0°♍		morning max el	13384 Jul 11 12:08	7°☿05'10	24°11'33
morning set	13383 Sep 04 01:37	16°♍24'57			13384 Jul 29 08:47	0°♌	
max. Earth dist.	13383 Sep 07 17:12	23°♍11'09	1.35881 AU	morning set	13384 Aug 15 23:28	28°♌00'59	
	13383 Sep 11 06:00	0°♎			13384 Aug 17 02:55	0°♍	
				max. Earth dist.	13384 Aug 19 15:27	4°♍27'05	1.38137 AU
superior conj	13383 Sep 13 17:30	4°♎55'33	-0°00'08				
minimum elong	13383 Sep 13 17:31	4°♎55'35	0°00'10	superior conj	13384 Aug 26 22:00	17°♍54'15	-0°33'40
behind sun begin	13383 Sep 13 11:18	4°♎24'25		minimum elong	13384 Aug 27 00:20	18°♍05'25	0°33'34
behind sun end	13383 Sep 13 23:44	5°♎26'49		asc. node	13384 Aug 30 14:26	25°♍02'35	
asc. node	13383 Sep 13 17:52	4°♎57'19			13384 Sep 02 02:46	0°♎	
evening rise	13383 Sep 21 15:27	21°♎07'35		evening rise	13384 Sep 04 16:46	5°♎07'05	
	13383 Sep 26 01:33	0°♏			13384 Sep 19 06:57	0°♏	
evening max el	13383 Oct 09 11:19	20°♏30'57	20°06'50	evening max el	13384 Sep 21 04:13	2°♏04'13	19°05'06
desc. node	13383 Oct 16 15:47	25°♏15'10		retrograde	13384 Sep 30 03:03	6°♏33'14	
retrograde	13383 Oct 20 01:27	25°♏47'06		evening set	13384 Oct 01 23:41	6°♏22'25	
evening set	13383 Oct 22 02:00	25°♏36'26		desc. node	13384 Oct 02 13:16	6°♏15'01	
inferior conj	13383 Oct 31 00:17	21°♏38'27	-4°15'48	inferior conj	13384 Oct 10 10:04	2°♏08'42	-2°28'44
minimum elong	13383 Oct 30 14:19	21°♏53'22	4°12'03	minimum elong	13384 Oct 10 03:43	2°♏19'33	2°25'49
min. Earth dist.	13383 Nov 01 17:49	20°♏36'16	0.54898 AU	min. Earth dist.	13384 Oct 13 05:41	0°♏13'35	0.56174 AU
morning rise	13383 Nov 08 01:33	17°♏30'48			13384 Oct 13 13:57	30°♏♎	
direct	13383 Nov 12 19:00	16°♏42'12		morning rise	13384 Oct 18 04:56	27°♎27'19	
morning max el	13383 Nov 26 09:53	23°♏24'30	24°10'32	direct	13384 Oct 23 18:05	26°♎15'39	
	13383 Dec 02 07:39	0°♐			13384 Nov 02 17:44	0°♏	
asc. node	13383 Dec 10 19:07	12°♐46'07		morning max el	13384 Nov 06 20:55	3°♏28'12	25°52'37
	13383 Dec 19 17:26	0°♑			13384 Nov 25 18:16	0°♐	
morning set	13383 Dec 21 04:50	3°♑07'52		asc. node	13384 Nov 26 16:04	1°♐40'20	
				morning set	13384 Dec 04 16:06	17°♐47'30	
					13384 Dec 10 05:27	0°♑	
superior conj	13383 Dec 28 00:33	18°♑00'21	1°36'48				
minimum elong	13383 Dec 28 01:18	18°♑04'27	1°37'46	superior conj	13384 Dec 11 10:43	2°♑42'39	1°37'57
max. Earth dist.	13383 Dec 30 09:43	23°♑09'48	1.32629 AU	minimum elong	13384 Dec 11 10:22	2°♑40'44	1°38'58
	13384 Jan 02 15:26	0°♒		max. Earth dist.	13384 Dec 12 14:29	5°♑16'27	1.31684 AU
evening rise	13384 Jan 04 12:45	3°♒51'58		evening rise	13384 Dec 18 12:00	17°♑59'58	
desc. node	13384 Jan 12 14:15	19°♒12'19			13384 Dec 24 12:27	0°♒	
	13384 Jan 18 23:38	0°♓		desc. node	13384 Dec 29 11:05	8°♒57'19	
evening max el	13384 Feb 07 07:20	25°♓09'51	27°30'33		13385 Jan 12 13:19	0°♓	
	13384 Feb 13 07:56	0°♑		evening max el	13385 Jan 19 16:49	7°♓54'03	27°28'14
retrograde	13384 Feb 21 01:17	2°♑36'31		retrograde	13385 Feb 02 14:52	15°♓13'41	
evening set	13384 Feb 27 21:29	0°♑09'35		evening set	13385 Feb 09 12:35	12°♓59'56	
	13384 Feb 28 02:46	30°♓♓		min. Earth dist.	13385 Feb 13 06:50	10°♓05'50	0.61711 AU
min. Earth dist.	13384 Mar 02 16:35	26°♓50'47	0.63772 AU	inferior conj	13385 Feb 16 07:47	7°♓19'32	-2°02'04
inferior conj	13384 Mar 05 08:48	24°♓05'34	-0°45'27	minimum elong	13385 Feb 16 12:03	7°♓09'46	1°59'51
minimum elong	13384 Mar 05 10:14	24°♓01'52	0°44'38	asc. node	13385 Feb 22 14:08	2°♓41'34	
asc. node	13384 Mar 07 16:40	21°♓47'16		morning rise	13385 Feb 23 14:22	2°♓18'33	
morning rise	13384 Mar 12 01:15	18°♓47'05		direct	13385 Feb 25 18:42	1°♓57'47	
direct	13384 Mar 14 11:50	18°♓17'35		morning max el	13385 Mar 04 15:27	5°♓25'59	17°49'31
morning max el	13384 Mar 20 22:28	21°♓36'13	17°47'46	morning set	13385 Mar 20 08:43	29°♓49'35	
	13384 Mar 27 10:45	0°♑			13385 Mar 20 11:02	0°♑	
morning set	13384 Apr 06 13:20	16°♑43'10		desc. node	13385 Mar 27 12:56	12°♑33'13	
desc. node	13384 Apr 09 16:26	22°♑02'19					
	13384 Apr 14 10:13	0°♒		superior conj	13385 Mar 31 11:36	19°♑21'13	-0°30'37
superior conj	13384 Apr 19 10:43	8°♒15'01	-1°10'47	minimum elong	13385 Mar 31 08:43	19°♑08'58	0°30'25
minimum elong	13384 Apr 19 03:34	7°♒45'56	1°10'24		13385 Apr 06 20:55	0°♒	
max. Earth dist.	13384 Apr 24 23:19	17°♒06'44	1.44924 AU	max. Earth dist.	13385 Apr 07 15:18	1°♒14'48	1.43494 AU
	13384 May 03 05:27	0°♓		evening rise	13385 Apr 14 15:42	12°♒24'31	
evening rise	13384 May 04 23:19	2°♓40'45			13385 Apr 26 06:50	0°♓	
	13384 May 23 09:56	0°☿		evening max el	13385 May 16 02:17	26°♓01'56	21°36'54
evening max el	13384 Jun 02 05:29	12°☿12'57	20°25'10		13385 May 20 22:39	0°☿	
asc. node	13384 Jun 03 13:42	13°☿29'30		asc. node	13385 May 21 10:52	0°☿17'11	
retrograde	13384 Jun 10 04:54	16°☿48'09		retrograde	13385 May 25 03:15	1°☿19'25	
evening set	13384 Jun 14 06:13	15°☿14'11			13385 May 28 23:06	30°♓♓	
inferior conj	13384 Jun 19 12:40	9°☿09'17	3°12'35	evening set	13385 May 29 15:15	29°♓29'04	
minimum elong	13384 Jun 19 12:33	9°☿09'40	3°11'33	inferior conj	13385 Jun 03 21:25	23°♓13'17	3°05'36

minimum elong	13385 Jun 03 20:22	23° Π 16'56	3°04'29	minimum elong	13386 May 19 05:15	7° Π 29'26	2°46'57
min. Earth dist.	13385 Jun 04 01:35	22° Π 58'43	0.68807 AU	min. Earth dist.	13386 May 18 22:19	7° Π 53'32	0.68902 AU
morning rise	13385 Jun 09 01:17	16° Π 57'53		morning rise	13386 May 24 11:27	1° Π 14'44	
direct	13385 Jun 14 01:08	14° Π 48'34			13386 May 26 09:43	30° \mathbb{R} 8	
desc. node	13385 Jun 23 13:59	20° Π 17'18		direct	13386 May 28 22:24	29° \mathbb{B} 25'29	
morning max el	13385 Jun 23 23:18	20° Π 40'29	22°41'55		13386 May 31 14:48	0° Π	
	13385 Jul 01 22:24	0° \mathfrak{D}		morning max el	13386 Jun 06 14:42	4° Π 26'00	21°17'03
	13385 Jul 22 13:59	0° Ω		desc. node	13386 Jun 10 11:00	8° Π 40'30	
morning set	13385 Jul 27 21:54	8° Ω 33'49			13386 Jun 25 23:45	0° \mathfrak{D}	
max. Earth dist.	13385 Aug 01 14:26	16° Ω 23'14	1.40488 AU	morning set	13386 Jul 07 19:22	18° \mathfrak{D} 01'31	
				max. Earth dist.	13386 Jul 14 18:48	29° \mathfrak{D} 12'15	1.42648 AU
					13386 Jul 15 06:28	0° Ω	
superior conj	13385 Aug 09 10:23	0° \mathfrak{M} 07'33	-1°08'42				
minimum elong	13385 Aug 09 15:30	0° \mathfrak{M} 30'43	1°08'31				
	13385 Aug 09 08:43	0° \mathfrak{M}		superior conj	13386 Jul 22 02:15	11° Ω 25'56	-1°41'13
asc. node	13385 Aug 17 11:00	15° \mathfrak{M} 01'57		minimum elong	13386 Jul 22 09:21	11° Ω 56'21	1°41'16
evening rise	13385 Aug 19 09:10	18° \mathfrak{M} 40'28			13386 Aug 01 14:54	0° \mathfrak{M}	
	13385 Aug 25 11:38	0° $\underline{\Omega}$		evening rise	13386 Aug 02 12:36	1° \mathfrak{M} 37'52	
evening max el	13385 Sep 04 08:12	14° $\underline{\Omega}$ 21'23	18°25'01	asc. node	13386 Aug 04 07:38	4° \mathfrak{M} 51'43	
retrograde	13385 Sep 11 23:53	18° $\underline{\Omega}$ 13'40		evening max el	13386 Aug 18 19:10	27° \mathfrak{M} 13'27	18°05'24
evening set	13385 Sep 14 00:55	17° $\underline{\Omega}$ 57'52			13386 Aug 22 13:34	0° $\underline{\Omega}$	
desc. node	13385 Sep 19 10:47	15° $\underline{\Omega}$ 08'27		retrograde	13386 Aug 25 14:41	0° $\underline{\Omega}$ 42'48	
inferior conj	13385 Sep 21 17:13	13° $\underline{\Omega}$ 23'18	-0°42'54	evening set	13386 Aug 27 23:01	0° $\underline{\Omega}$ 18'09	
minimum elong	13385 Sep 21 15:34	13° $\underline{\Omega}$ 26'36	0°42'06		13386 Aug 28 17:22	30° \mathbb{R} \mathfrak{M}	
min. Earth dist.	13385 Sep 24 23:47	10° $\underline{\Omega}$ 46'58	0.58082 AU	inferior conj	13386 Sep 03 21:21	25° \mathfrak{M} 23'12	0°44'38
morning rise	13385 Sep 29 02:46	8° $\underline{\Omega}$ 04'38		minimum elong	13386 Sep 03 22:42	25° \mathfrak{M} 20'01	0°43'56
direct	13385 Oct 05 06:58	6° $\underline{\Omega}$ 26'06		desc. node	13386 Sep 06 08:19	23° \mathfrak{M} 05'43	
morning max el	13385 Oct 19 14:30	14° $\underline{\Omega}$ 02'12	27°10'27	min. Earth dist.	13386 Sep 07 02:30	22° \mathfrak{M} 24'49	0.60315 AU
	13385 Nov 01 08:49	0° \mathfrak{M}		morning rise	13386 Sep 10 19:18	19° \mathfrak{M} 33'42	
asc. node	13385 Nov 13 12:53	21° \mathfrak{M} 01'23		direct	13386 Sep 17 08:41	17° \mathfrak{M} 28'30	
	13385 Nov 17 23:09	0° \mathfrak{X}		morning max el	13386 Oct 01 15:50	25° \mathfrak{M} 21'53	27°52'19
morning set	13385 Nov 19 01:00	2° \mathfrak{X} 16'45			13386 Oct 05 22:46	0° $\underline{\Omega}$	
					13386 Oct 25 19:46	0° \mathfrak{M}	
superior conj	13385 Nov 25 22:17	17° \mathfrak{X} 25'29	1°33'11	asc. node	13386 Oct 31 09:36	10° \mathfrak{M} 41'48	
minimum elong	13385 Nov 25 20:59	17° \mathfrak{X} 18'09	1°34'04	morning set	13386 Nov 03 05:41	16° \mathfrak{M} 30'47	
max. Earth dist.	13385 Nov 25 22:45	17° \mathfrak{X} 28'02	1.31239 AU		13386 Nov 09 11:11	0° \mathfrak{X}	
	13385 Dec 01 14:49	0° \mathfrak{Z}		max. Earth dist.	13386 Nov 09 06:40	29° \mathfrak{M} 34'56	1.31311 AU
evening rise	13385 Dec 02 17:11	2° \mathfrak{Z} 21'34					
desc. node	13385 Dec 16 08:01	28° \mathfrak{Z} 12'37		superior conj	13386 Nov 10 09:25	2° \mathfrak{X} 03'32	1°22'38
	13385 Dec 17 10:31	0° \approx		minimum elong	13386 Nov 10 07:25	1° \mathfrak{X} 52'24	1°23'17
evening max el	13386 Jan 01 20:18	19° \approx 51'37	26°51'32	evening rise	13386 Nov 17 02:09	16° \mathfrak{X} 51'05	
retrograde	13386 Jan 15 19:11	27° \approx 01'58			13386 Nov 23 11:46	0° \mathfrak{Z}	
evening set	13386 Jan 22 11:37	25° \approx 09'07		desc. node	13386 Dec 03 05:05	16° \mathfrak{Z} 46'18	
min. Earth dist.	13386 Jan 26 10:21	22° \approx 30'28	0.59534 AU		13386 Dec 13 16:38	0° \approx	
inferior conj	13386 Jan 29 14:49	19° \approx 58'26	-3°24'56	evening max el	13386 Dec 14 15:26	0° \approx 55'34	25°41'33
minimum elong	13386 Jan 29 22:08	19° \approx 43'50	3°21'38	retrograde	13386 Dec 28 12:54	7° \approx 56'21	
morning rise	13386 Feb 06 11:43	15° \approx 18'11		evening set	13387 Jan 03 14:22	6° \approx 31'17	
direct	13386 Feb 08 12:51	15° \approx 02'38		min. Earth dist.	13387 Jan 08 03:58	3° \approx 53'29	0.57453 AU
asc. node	13386 Feb 09 11:32	15° \approx 06'04		inferior conj	13387 Jan 11 02:28	1° \approx 51'53	-4°44'25
morning max el	13386 Feb 16 04:23	18° \approx 50'25	18°10'22	minimum elong	13387 Jan 11 11:15	1° \approx 36'41	4°41'13
	13386 Feb 24 06:57	0° \mathfrak{H}			13387 Jan 13 21:55	30° \mathbb{R} \mathfrak{Z}	
morning set	13386 Mar 03 19:44	13° \mathfrak{H} 39'02		morning rise	13387 Jan 19 10:51	27° \mathfrak{Z} 33'59	
	13386 Mar 12 15:19	0° \mathfrak{Y}		direct	13387 Jan 21 13:46	27° \mathfrak{Z} 20'06	
				asc. node	13387 Jan 27 08:53	29° \mathfrak{Z} 11'06	
superior conj	13386 Mar 13 11:51	1° \mathfrak{Y} 32'30	0°07'11		13387 Jan 28 12:31	0° \approx	
minimum elong	13386 Mar 13 12:25	1° \mathfrak{Y} 35'01	0°07'11	morning max el	13387 Jan 30 09:16	1° \approx 37'42	18°52'01
behind sun begin	13386 Mar 13 05:35	1° \mathfrak{Y} 04'19		morning set	13387 Feb 15 17:27	27° \approx 55'54	
behind sun end	13386 Mar 13 19:15	2° \mathfrak{Y} 05'39			13387 Feb 16 18:45	0° \mathfrak{H}	
desc. node	13386 Mar 14 09:25	3° \mathfrak{Y} 08'58					
max. Earth dist.	13386 Mar 21 02:52	14° \mathfrak{Y} 48'38	1.41567 AU	superior conj	13387 Feb 24 07:13	14° \mathfrak{H} 35'37	0°39'14
evening rise	13386 Mar 26 01:03	22° \mathfrak{Y} 56'27		minimum elong	13387 Feb 24 09:34	14° \mathfrak{H} 46'45	0°39'14
	13386 Mar 30 11:32	0° \mathfrak{B}		desc. node	13387 Mar 01 05:55	23° \mathfrak{H} 45'20	
	13386 Apr 20 07:23	0° Π		max. Earth dist.	13387 Mar 03 09:57	27° \mathfrak{H} 37'56	1.39358 AU
evening max el	13386 Apr 28 18:37	9° Π 52'06	22°56'00		13387 Mar 04 18:18	0° \mathfrak{Y}	
asc. node	13386 May 08 08:07	15° Π 51'15		evening rise	13387 Mar 07 07:28	4° \mathfrak{Y} 23'15	
retrograde	13386 May 08 23:39	15° Π 53'10			13387 Mar 23 14:41	0° \mathfrak{B}	
evening set	13386 May 13 22:58	13° Π 47'47		evening max el	13387 Apr 11 08:30	23° \mathfrak{B} 43'41	24°16'46
inferior conj	13386 May 19 07:01	7° Π 23'21	2°48'11		13387 Apr 20 07:03	0° Π	

retrograde	13387 Apr 22 16:52	0° Π 23'04		evening max el	13388 Mar 23 21:59	7° \mathcal{B} 35'51	25°32'17
	13387 Apr 24 23:34	30° \mathcal{R} \mathcal{B}		retrograde	13388 Apr 05 05:45	14° \mathcal{B} 42'45	
asc. node	13387 Apr 25 05:27	29° \mathcal{B} 54'38		evening set	13388 Apr 11 04:04	12° \mathcal{B} 15'35	
evening set	13387 Apr 28 03:47	28° \mathcal{B} 05'04		asc. node	13388 Apr 11 02:52	12° \mathcal{B} 18'06	
min. Earth dist.	13387 May 02 18:20	22° \mathcal{B} 46'55	0.68527 AU	min. Earth dist.	13388 Apr 15 11:32	7° \mathcal{B} 32'58	0.67705 AU
inferior conj	13387 May 03 15:33	21° \mathcal{B} 35'19	2°20'38	inferior conj	13388 Apr 16 21:08	5° \mathcal{B} 45'05	1°42'45
minimum elong	13387 May 03 13:25	21° \mathcal{B} 42'31	2°19'20	minimum elong	13388 Apr 16 19:05	5° \mathcal{B} 51'40	1°41'35
morning rise	13387 May 08 23:11	15° \mathcal{B} 34'35		morning rise	13388 Apr 22 10:35	29° \mathcal{Y} 53'32	
direct	13387 May 12 21:41	14° \mathcal{B} 06'12			13388 Apr 22 06:45	30° \mathcal{R} \mathcal{Y}	
morning max el	13387 May 20 12:50	18° \mathcal{B} 22'49	20°03'08	direct	13388 Apr 25 21:31	28° \mathcal{Y} 45'01	
desc. node	13387 May 28 07:54	27° \mathcal{B} 46'19			13388 Apr 29 16:56	0° \mathcal{B}	
	13387 May 29 22:48	0° Π		morning max el	13388 May 02 18:30	2° \mathcal{B} 29'24	19°03'52
morning set	13387 Jun 16 22:57	26° Π 45'04		desc. node	13388 May 14 04:41	17° \mathcal{B} 23'10	
	13387 Jun 19 01:29	0° \mathcal{B}		greatest brilliancy	13388 May 15 21:26	19° \mathcal{B} 55'11	-0.7m
max. Earth dist.	13387 Jun 27 05:33	12° \mathcal{B} 48'59	1.44364 AU		13388 May 22 12:07	0° Π	
				morning set	13388 May 26 03:47	5° Π 38'10	
superior conj	13387 Jul 02 18:33	21° \mathcal{B} 44'14	-2°05'11	max. Earth dist.	13388 Jun 08 21:51	27° Π 01'31	1.45465 AU
minimum elong	13387 Jul 03 00:20	22° \mathcal{B} 07'49	2°05'52		13388 Jun 10 19:18	0° \mathcal{B}	
	13387 Jul 07 18:52	0° \mathcal{Q}					
evening rise	13387 Jul 15 22:11	13° \mathcal{Q} 47'14		superior conj	13388 Jun 11 13:10	1° \mathcal{B} 10'19	-2°13'32
asc. node	13387 Jul 22 04:20	24° \mathcal{Q} 27'27		minimum elong	13388 Jun 11 12:39	1° \mathcal{B} 08'18	2°14'34
	13387 Jul 25 13:29	0° \mathcal{M}		evening rise	13388 Jun 26 09:02	24° \mathcal{B} 57'28	
evening max el	13387 Aug 02 09:16	10° \mathcal{M} 31'05	18°04'55		13388 Jun 29 11:09	0° \mathcal{Q}	
retrograde	13387 Aug 08 19:04	13° \mathcal{M} 51'34		asc. node	13388 Jul 08 01:09	13° \mathcal{Q} 43'08	
evening set	13387 Aug 11 11:39	13° \mathcal{M} 14'44		evening max el	13388 Jul 15 23:08	24° \mathcal{Q} 05'30	18°22'38
inferior conj	13387 Aug 17 18:56	8° \mathcal{M} 01'29	1°49'30	retrograde	13388 Jul 22 08:45	27° \mathcal{Q} 30'41	
minimum elong	13387 Aug 17 21:24	7° \mathcal{M} 54'57	1°48'16	evening set	13388 Jul 25 09:57	26° \mathcal{Q} 39'11	
min. Earth dist.	13387 Aug 20 14:48	5° \mathcal{M} 02'51	0.62585 AU	inferior conj	13388 Jul 31 05:54	21° \mathcal{Q} 09'29	2°33'25
morning rise	13387 Aug 24 04:56	1° \mathcal{M} 51'44		minimum elong	13388 Jul 31 08:12	21° \mathcal{Q} 02'42	2°32'11
desc. node	13387 Aug 24 05:49	1° \mathcal{M} 50'07		min. Earth dist.	13388 Aug 02 12:26	18° \mathcal{Q} 29'53	0.64668 AU
	13387 Aug 27 14:36	30° \mathcal{R} \mathcal{Q}		morning rise	13388 Aug 06 05:08	14° \mathcal{Q} 49'06	
direct	13387 Aug 30 21:13	29° \mathcal{Q} 25'22		desc. node	13388 Aug 10 03:18	12° \mathcal{Q} 35'32	
	13387 Sep 03 07:33	0° \mathcal{M}		direct	13388 Aug 12 18:31	12° \mathcal{Q} 10'51	
morning max el	13387 Sep 13 23:01	7° \mathcal{M} 27'09	27°55'08	morning max el	13388 Aug 26 09:17	20° \mathcal{Q} 08'53	27°22'24
	13387 Oct 01 05:41	0° \mathcal{L}			13388 Sep 03 20:11	0° \mathcal{M}	
	13387 Oct 17 23:15	0° \mathcal{M}			13388 Sep 23 07:25	0° \mathcal{L}	
morning set	13387 Oct 18 04:02	0° \mathcal{M} 24'18		morning set	13388 Sep 30 17:27	13° \mathcal{L} 49'58	
asc. node	13387 Oct 18 06:16	0° \mathcal{M} 35'36		asc. node	13388 Oct 04 02:52	20° \mathcal{L} 37'19	
max. Earth dist.	13387 Oct 23 10:21	11° \mathcal{M} 27'24	1.31915 AU	max. Earth dist.	13388 Oct 05 06:10	22° \mathcal{L} 57'32	1.33064 AU
superior conj	13387 Oct 25 18:15	16° \mathcal{M} 31'32	1°06'26	superior conj	13388 Oct 08 22:40	0° \mathcal{M} 42'58	0°44'39
minimum elong	13387 Oct 25 15:58	16° \mathcal{M} 19'03	1°06'45	minimum elong	13388 Oct 08 20:41	0° \mathcal{M} 32'23	0°44'42
	13387 Oct 31 21:34	0° \mathcal{X}			13388 Oct 08 14:36	0° \mathcal{M}	
evening rise	13387 Nov 01 13:03	1° \mathcal{X} 23'43		evening rise	13388 Oct 15 23:59	15° \mathcal{M} 53'47	
	13387 Nov 16 22:57	0° \mathcal{B}			13388 Oct 22 22:58	0° \mathcal{X}	
desc. node	13387 Nov 20 02:15	4° \mathcal{B} 22'42		desc. node	13388 Nov 05 23:32	20° \mathcal{X} 39'51	
evening max el	13387 Nov 26 03:12	11° \mathcal{B} 14'47	24°07'25	evening max el	13388 Nov 06 13:50	21° \mathcal{X} 15'29	22°25'17
retrograde	13387 Dec 09 18:13	18° \mathcal{B} 02'10		retrograde	13388 Nov 19 10:40	27° \mathcal{X} 38'19	
evening set	13387 Dec 14 17:29	17° \mathcal{B} 08'06		evening set	13388 Nov 23 00:37	27° \mathcal{X} 10'12	
min. Earth dist.	13387 Dec 20 14:30	14° \mathcal{B} 12'44	0.55748 AU	min. Earth dist.	13388 Nov 30 21:10	23° \mathcal{X} 39'02	0.54712 AU
inferior conj	13387 Dec 22 17:25	12° \mathcal{B} 55'19	-5°42'07	inferior conj	13388 Dec 01 15:08	23° \mathcal{X} 13'44	-5°54'03
minimum elong	13387 Dec 22 23:01	12° \mathcal{B} 46'46	5°40'24	minimum elong	13388 Dec 01 12:22	23° \mathcal{X} 17'39	5°52'54
morning rise	13387 Dec 31 06:29	8° \mathcal{B} 57'04		morning rise	13388 Dec 10 01:19	19° \mathcal{X} 26'18	
direct	13388 Jan 02 19:04	8° \mathcal{B} 40'37		direct	13388 Dec 13 08:25	19° \mathcal{X} 01'45	
morning max el	13388 Jan 13 02:08	13° \mathcal{B} 37'01	19°56'16	morning max el	13388 Dec 25 04:27	24° \mathcal{X} 41'08	21°23'18
asc. node	13388 Jan 14 06:10	14° \mathcal{B} 48'05			13388 Dec 29 21:39	0° \mathcal{B}	
	13388 Jan 24 12:36	0° \approx		asc. node	13388 Dec 31 03:21	1° \mathcal{B} 39'51	
morning set	13388 Jan 30 22:19	12° \approx 30'01		morning set	13389 Jan 14 07:37	27° \mathcal{B} 13'20	
					13389 Jan 15 15:24	0° \approx	
superior conj	13388 Feb 07 17:06	28° \approx 17'44	1°04'18	superior conj	13389 Jan 21 13:31	12° \approx 27'29	1°22'14
minimum elong	13388 Feb 07 19:52	28° \approx 31'30	1°04'32	minimum elong	13389 Jan 21 15:49	12° \approx 39'27	1°22'48
	13388 Feb 08 13:43	0° \mathcal{H}			13389 Jan 26 02:50	21° \approx 43'48	1.35080 AU
max. Earth dist.	13388 Feb 13 16:13	9° \mathcal{H} 49'55	1.37122 AU	max. Earth dist.	13389 Jan 30 05:21	29° \approx 41'05	
desc. node	13388 Feb 16 02:28	14° \mathcal{H} 18'53		evening rise	13389 Jan 30 09:22	0° \mathcal{H}	
evening rise	13388 Feb 17 09:59	16° \mathcal{H} 41'11					
	13388 Feb 25 04:38	0° \mathcal{Y}		desc. node	13389 Feb 01 23:05	4° \mathcal{H} 45'41	
	13388 Mar 17 01:31	0° \mathcal{B}			13389 Feb 17 08:34	0° \mathcal{Y}	

evening max el	13389 Mar 06 11:50	21° Υ 23'20	26°35'07	desc. node	13390 Jan 19 19:46	25° \approx 00'54	
retrograde	13389 Mar 19 13:14	28° Υ 45'27			13390 Jan 22 15:38	0° H	
evening set	13389 Mar 25 22:04	26° Υ 13'35			13390 Feb 12 09:30	0° Υ	
asc. node	13389 Mar 29 00:19	23° Υ 12'39		evening max el	13390 Feb 17 01:18	4° Υ 55'28	27°17'51
min. Earth dist.	13389 Mar 29 23:43	22° Υ 05'32	0.66467 AU	retrograde	13390 Mar 02 14:26	12° Υ 22'29	
inferior conj	13389 Mar 31 21:38	19° Υ 48'09	0°54'06	evening set	13390 Mar 09 07:40	9° Υ 51'35	
minimum elong	13389 Mar 31 20:18	19° Υ 52'09	0°53'22	min. Earth dist.	13390 Mar 13 04:38	6° Υ 16'08	0.64851 AU
morning rise	13389 Apr 06 19:35	14° Υ 07'34		inferior conj	13390 Mar 15 14:34	3° Υ 37'53	-0°05'49
direct	13389 Apr 09 20:04	13° Υ 16'39		minimum elong	13390 Mar 15 14:45	3° Υ 37'26	0°05'42
morning max el	13389 Apr 16 06:41	16° Υ 41'27	18°20'56	transit middle	13390 Mar 15 14:45	3° Υ 37'26	0°05'42
	13389 Apr 26 07:48	0° B		transit begin	13390 Mar 15 11:54	3° Υ 45'15	
desc. node	13389 May 01 01:23	7° B 22'44		transit end	13390 Mar 15 17:36	3° Υ 29'37	
morning set	13389 May 06 05:55	15° B 36'54		asc. node	13390 Mar 15 21:48	3° Υ 18'08	
	13389 May 15 08:09	0° II			13390 Mar 19 05:33	30° R H	
superior conj	13389 May 21 21:04	10° II 14'39	-2°01'50	morning rise	13390 Mar 21 23:37	28° H 10'42	
minimum elong	13389 May 21 13:31	9° II 45'09	2°02'18	direct	13390 Mar 24 14:55	27° H 34'19	
max. Earth dist.	13389 May 22 17:37	11° II 34'54	1.45841 AU		13390 Mar 30 00:34	0° Υ	
	13389 Jun 03 12:45	0° B		morning max el	13390 Mar 30 23:08	0° Υ 51'43	17°54'57
evening rise	13389 Jun 06 19:29	5° B 08'13		morning set	13390 Apr 17 12:24	26° Υ 58'23	
greatest brilliancy	13389 Jun 16 21:02	20° B 49'46	-0.8m	desc. node	13390 Apr 17 22:00	27° Υ 38'11	
	13389 Jun 23 01:34	0° Ω			13390 Apr 19 08:15	0° B	
asc. node	13389 Jun 24 22:04	2° Ω 31'51		superior conj	13390 May 01 11:41	19° B 42'54	-1°32'30
evening max el	13389 Jun 29 10:01	7° Ω 49'40	18°57'44	minimum elong	13390 May 01 02:49	19° B 07'37	1°32'16
retrograde	13389 Jul 06 04:14	11° Ω 32'54		max. Earth dist.	13390 May 05 13:57	26° B 11'13	1.45466 AU
evening set	13389 Jul 09 14:23	10° Ω 25'10			13390 May 08 00:22	0° II	
inferior conj	13389 Jul 15 02:36	4° Ω 40'31	2°59'42	evening rise	13390 May 17 11:23	14° II 37'51	
minimum elong	13389 Jul 15 04:06	4° Ω 35'44	2°58'36		13390 May 27 14:15	0° B	
min. Earth dist.	13389 Jul 16 18:31	2° Ω 33'50	0.66402 AU	greatest brilliancy	13390 May 31 22:14	6° B 24'44	-0.6m
	13389 Jul 18 22:50	30° R B		asc. node	13390 Jun 11 19:05	20° B 43'24	
morning rise	13389 Jul 20 17:08	28° B 16'34		evening max el	13390 Jun 12 15:48	21° B 37'03	19°49'02
direct	13389 Jul 26 22:58	25° B 36'30		retrograde	13390 Jun 20 02:35	25° B 50'32	
desc. node	13389 Jul 28 00:42	25° B 40'43		evening set	13390 Jun 23 22:11	24° B 26'01	
	13389 Aug 05 07:30	0° Ω		inferior conj	13390 Jun 29 05:54	18° B 27'51	3°11'29
morning max el	13389 Aug 08 20:22	3° Ω 16'42	26°21'36	minimum elong	13390 Jun 29 06:23	18° B 26'15	3°10'27
	13389 Aug 29 03:06	0° H		min. Earth dist.	13390 Jun 30 07:23	17° B 02'16	0.67703 AU
morning set	13389 Sep 13 18:44	26° H 40'53		morning rise	13390 Jul 04 14:13	12° B 04'56	
	13389 Sep 15 12:51	0° B		direct	13390 Jul 10 09:28	9° B 31'52	
max. Earth dist.	13389 Sep 17 16:17	4° B 08'47	1.34734 AU	desc. node	13390 Jul 14 22:01	10° B 47'15	
asc. node	13389 Sep 20 23:29	10° B 43'22		morning max el	13390 Jul 22 07:01	16° B 39'44	25°01'59
					13390 Aug 02 08:53	0° Ω	
superior conj	13389 Sep 22 20:16	14° B 32'07	0°17'35		13390 Aug 22 02:04	0° H	
minimum elong	13389 Sep 22 19:18	14° B 27'10	0°17'32	morning set	13390 Aug 27 03:55	8° H 47'17	
evening rise	13389 Sep 30 09:04	0° H 16'56		max. Earth dist.	13390 Aug 30 17:48	15° H 16'21	1.36819 AU
	13389 Sep 30 05:49	0° H					
	13389 Oct 17 20:40	0° H		superior conj	13390 Sep 06 08:00	27° H 51'17	-0°14'02
evening max el	13389 Oct 19 08:43	1° H 35'01	20°51'57	minimum elong	13390 Sep 06 08:54	27° H 55'44	0°14'00
desc. node	13389 Oct 23 20:55	5° H 11'47		behind sun begin	13390 Sep 06 05:38	27° H 39'39	
retrograde	13389 Oct 30 21:09	7° H 18'31		behind sun end	13390 Sep 06 12:10	28° H 11'50	
evening set	13389 Nov 02 07:08	7° H 04'30			13390 Sep 07 10:03	0° B	
inferior conj	13389 Nov 11 06:28	3° H 10'33	-5°06'15	asc. node	13390 Sep 07 20:04	0° B 49'51	
minimum elong	13389 Nov 10 20:58	3° H 24'05	5°03'16	evening rise	13390 Sep 14 14:00	14° B 27'02	
min. Earth dist.	13389 Nov 12 03:20	2° H 40'49	0.54562 AU		13390 Sep 22 16:35	0° H	
	13389 Nov 17 09:51	30° R H		evening max el	13390 Oct 01 17:31	12° H 39'07	19°37'45
morning rise	13389 Nov 19 10:59	29° H 16'40		desc. node	13390 Oct 10 18:20	17° H 32'57	
direct	13389 Nov 23 16:12	28° H 38'35		retrograde	13390 Oct 11 14:30	17° H 35'01	
	13389 Nov 29 16:23	0° H		evening set	13390 Oct 13 11:48	17° H 24'59	
morning max el	13389 Dec 06 18:35	4° H 58'48	23°07'48	inferior conj	13390 Oct 22 06:14	13° H 20'55	-3°31'55
asc. node	13389 Dec 18 00:27	19° H 29'47		minimum elong	13390 Oct 21 21:21	13° H 34'56	3°28'12
	13389 Dec 23 22:04	0° B		min. Earth dist.	13390 Oct 24 12:26	11° H 55'35	0.55343 AU
morning set	13389 Dec 29 19:06	11° B 59'20		morning rise	13390 Oct 30 05:02	9° H 00'08	
				direct	13390 Nov 04 07:03	8° H 02'42	
superior conj	13390 Jan 05 17:15	26° B 55'35	1°33'20	morning max el	13390 Nov 18 04:30	14° H 58'34	24°56'05
minimum elong	13390 Jan 05 18:37	27° B 02'59	1°34'13		13390 Nov 30 01:56	0° H	
	13390 Jan 07 03:44	0° \approx		asc. node	13390 Dec 04 21:27	8° H 04'00	
max. Earth dist.	13390 Jan 08 20:51	3° \approx 37'03	1.33393 AU	morning set	13390 Dec 14 06:58	26° H 43'02	
evening rise	13390 Jan 13 13:58	13° \approx 13'21			13390 Dec 15 19:23	0° B	

superior conj	13390 Dec 21 01:42	11° ♄ 34'54	1°38'01	minimum elong	13391 Dec 05 11:54	26° ♄ 13'43	1°37'38
minimum elong	13390 Dec 21 01:59	11° ♄ 36'27	1°39'03	max. Earth dist.	13391 Dec 06 04:40	27° ♄ 47'03	1.31424 AU
max. Earth dist.	13390 Dec 22 22:13	15° ♄ 38'38	1.32160 AU		13391 Dec 07 04:35	0° ♄	
evening rise	13390 Dec 28 08:41	27° ♄ 10'24		evening rise	13391 Dec 12 10:41	11° ♄ 24'31	
	13390 Dec 29 18:04	0° \approx			13391 Dec 21 22:56	0° \approx	
desc. node	13391 Jan 06 16:33	14° \approx 59'06		desc. node	13391 Dec 24 13:24	4° \approx 32'21	
	13391 Jan 15 22:50	0° ♄			13392 Jan 12 09:24	0° ♄	
evening max el	13391 Jan 30 12:39	18° ♄ 00'06	27°33'35	evening max el	13392 Jan 12 19:39	0° ♄ 24'32	27°16'53
retrograde	13391 Feb 13 08:38	25° ♄ 24'37		retrograde	13392 Jan 26 18:44	7° ♄ 41'22	
evening set	13391 Feb 20 06:22	23° ♄ 01'56		evening set	13392 Feb 02 15:04	5° ♄ 35'24	
min. Earth dist.	13391 Feb 24 00:31	19° ♄ 54'54	0.62919 AU	min. Earth dist.	13392 Feb 06 10:12	2° ♄ 49'17	0.60782 AU
inferior conj	13391 Feb 26 21:02	17° ♄ 07'13	-1°16'47	inferior conj	13392 Feb 09 13:36	0° ♄ 06'44	-2°36'53
minimum elong	13391 Feb 26 23:35	17° ♄ 00'57	1°15'24	minimum elong	13392 Feb 09 19:12	29° \approx 54'37	2°34'08
asc. node	13391 Mar 02 19:13	13° ♄ 37'22			13392 Feb 09 16:42	30° $\text{R}\approx$	
morning rise	13391 Mar 05 19:23	11° ♄ 56'07		morning rise	13392 Feb 17 02:26	25° \approx 14'30	
direct	13391 Mar 08 03:02	11° ♄ 30'47		asc. node	13392 Feb 17 16:38	25° \approx 05'51	
morning max el	13391 Mar 14 16:55	14° ♄ 52'00	17°46'22	direct	13392 Feb 19 04:48	24° \approx 56'31	
	13391 Mar 25 07:31	0° ♄		morning max el	13392 Feb 26 08:39	28° \approx 32'02	17°56'01
morning set	13391 Mar 30 20:04	9° ♄ 31'47			13392 Feb 27 17:48	0° ♄	
desc. node	13391 Apr 04 18:34	18° ♄ 04'49		morning set	13392 Mar 12 22:43	22° ♄ 57'48	
					13392 Mar 16 19:20	0° ♄	
superior conj	13391 Apr 11 22:40	0° ♄ 10'32	-0°53'49	desc. node	13392 Mar 21 15:04	8° ♄ 37'56	
minimum elong	13391 Apr 11 17:18	29° ♄ 48'17	0°53'29				
	13391 Apr 11 20:07	0° ♄		superior conj	13392 Mar 23 09:49	11° ♄ 45'11	-0°14'04
max. Earth dist.	13391 Apr 18 07:46	10° ♄ 32'45	1.44387 AU	minimum elong	13392 Mar 23 08:36	11° ♄ 39'49	0°13'58
evening rise	13391 Apr 26 22:58	24° ♄ 04'45		behind sun begin	13392 Mar 23 04:36	11° ♄ 22'23	
	13391 Apr 30 19:59	0° ♄		behind sun end	13392 Mar 23 12:36	11° ♄ 57'14	
	13391 May 21 21:18	0° ♄		max. Earth dist.	13392 Mar 30 21:16	24° ♄ 24'49	1.42718 AU
evening max el	13391 May 26 15:38	5° ♄ 25'07	20°54'20		13392 Apr 03 07:40	0° ♄	
asc. node	13391 May 29 16:11	8° ♄ 05'48		evening rise	13392 Apr 05 21:28	4° ♄ 06'20	
retrograde	13391 Jun 04 01:33	10° ♄ 18'15			13392 Apr 23 04:13	0° ♄	
evening set	13391 Jun 08 07:17	8° ♄ 37'09		evening max el	13392 May 08 10:16	19° ♄ 14'24	22°10'00
inferior conj	13391 Jun 13 13:18	2° ♄ 27'07	3°10'57	asc. node	13392 May 15 13:20	24° ♄ 24'18	
minimum elong	13391 Jun 13 12:46	2° ♄ 28'56	3°09'53	retrograde	13392 May 17 23:19	24° ♄ 51'07	
min. Earth dist.	13391 Jun 14 01:04	1° ♄ 46'19	0.68540 AU	evening set	13392 May 22 15:57	22° ♄ 54'23	
	13391 Jun 15 08:19	30° RII		inferior conj	13392 May 27 22:40	16° ♄ 34'32	2°59'30
morning rise	13391 Jun 18 18:01	26° ♄ 08'11		minimum elong	13392 May 27 21:17	16° ♄ 39'20	2°58'19
direct	13391 Jun 24 01:06	23° ♄ 48'48		min. Earth dist.	13392 May 27 21:22	16° ♄ 39'02	0.68901 AU
desc. node	13391 Jul 01 19:14	27° ♄ 28'26		morning rise	13392 Jun 02 02:26	10° ♄ 21'35	
morning max el	13391 Jul 04 17:26	0° ♄ 11'14	23°33'15	direct	13392 Jun 06 20:46	8° ♄ 20'26	
	13391 Jul 04 12:58	0° ♄		morning max el	13392 Jun 16 05:58	13° ♄ 50'32	22°04'45
	13391 Jul 27 04:56	0° ♄		desc. node	13392 Jun 17 16:20	15° ♄ 20'07	
morning set	13391 Aug 08 16:18	19° ♄ 57'38			13392 Jun 29 05:29	0° ♄	
max. Earth dist.	13391 Aug 12 15:25	26° ♄ 45'41	1.39141 AU	morning set	13392 Jul 19 04:04	0° ♄ 02'52	
	13391 Aug 14 11:33	0° ♄			13392 Jul 19 03:21	0° ♄	
				max. Earth dist.	13392 Jul 24 15:50	9° ♄ 02'15	1.41443 AU
superior conj	13391 Aug 20 06:07	10° ♄ 31'18	-0°48'34				
minimum elong	13391 Aug 20 09:38	10° ♄ 47'42	0°48'24	superior conj	13392 Aug 01 10:23	22° ♄ 23'00	-1°23'07
asc. node	13391 Aug 25 16:39	20° ♄ 52'50		minimum elong	13392 Aug 01 16:33	22° ♄ 50'18	1°22'59
evening rise	13391 Aug 29 11:56	28° ♄ 16'17			13392 Aug 05 16:21	0° ♄	
	13391 Aug 30 09:19	0° ♄		evening rise	13392 Aug 11 23:25	11° ♄ 36'02	
evening max el	13391 Sep 14 15:35	24° ♄ 31'46	18°45'27	asc. node	13392 Aug 11 13:15	10° ♄ 48'52	
retrograde	13391 Sep 23 00:09	28° ♄ 43'50			13392 Aug 22 10:42	0° ♄	
evening set	13391 Sep 24 21:49	28° ♄ 31'33		evening max el	13392 Aug 27 23:10	7° ♄ 05'56	18°14'18
desc. node	13391 Sep 27 15:49	27° ♄ 34'09		retrograde	13392 Sep 04 04:51	10° ♄ 46'22	
inferior conj	13391 Oct 03 00:51	24° ♄ 09'24	-1°42'17	evening set	13392 Sep 06 08:50	10° ♄ 27'15	
minimum elong	13391 Oct 02 20:37	24° ♄ 17'09	1°40'16	inferior conj	13392 Sep 13 17:17	5° ♄ 44'11	-0°03'04
min. Earth dist.	13391 Oct 06 02:58	21° ♄ 54'29	0.56920 AU	minimum elong	13392 Sep 13 17:11	5° ♄ 44'25	0°03'02
morning rise	13391 Oct 10 16:03	19° ♄ 11'26		transit middle	13392 Sep 13 17:11	5° ♄ 44'25	0°03'02
direct	13391 Oct 16 12:06	17° ♄ 48'30		transit begin	13392 Sep 13 13:48	5° ♄ 51'38	
morning max el	13391 Oct 30 18:03	25° ♄ 12'51	26°29'39	transit end	13392 Sep 13 20:34	5° ♄ 37'10	
	13391 Nov 04 05:08	0° ♄		desc. node	13392 Sep 13 13:20	5° ♄ 52'36	
asc. node	13391 Nov 21 18:21	27° ♄ 10'29		min. Earth dist.	13392 Sep 17 00:43	2° ♄ 55'36	0.59013 AU
	13391 Nov 23 05:26	0° ♄		morning rise	13392 Sep 20 22:05	0° ♄ 11'22	
morning set	13391 Nov 28 17:24	11° ♄ 18'37			13392 Sep 21 06:16	30° RII	
				direct	13392 Sep 27 07:12	28° ♄ 20'44	
superior conj	13391 Dec 05 12:41	26° ♄ 18'04	1°36'38		13392 Oct 03 13:57	0° ♄	

morning max el	13392 Oct 11 14:53	6°♌05'18	27°32'53		13393 Oct 04 00:51	0°♌	
	13392 Oct 29 11:16	0°♌			13393 Oct 22 05:21	0°♌	
asc. node	13392 Nov 07 15:09	16°♌40'41		asc. node	13393 Oct 25 11:52	6°♌27'21	
morning set	13392 Nov 12 00:43	25°♌41'50		morning set	13393 Oct 27 02:59	9°♌47'31	
	13392 Nov 14 00:53	0°♌		max. Earth dist.	13393 Nov 01 19:44	21°♌59'06	1.31510 AU
max. Earth dist.	13392 Nov 18 13:05	9°♌57'05	1.31207 AU				
				superior conj	13393 Nov 03 10:42	25°♌34'00	1°16'27
superior conj	13392 Nov 19 00:18	10°♌59'40	1°29'24	minimum elong	13393 Nov 03 08:31	25°♌21'56	1°16'57
minimum elong	13392 Nov 18 22:39	10°♌50'28	1°30'12		13393 Nov 05 10:39	0°♌	
evening rise	13392 Nov 25 17:44	25°♌50'12		evening rise	13393 Nov 10 03:47	10°♌21'49	
	13392 Nov 27 16:55	0°♌			13393 Nov 20 00:52	0°♌	
desc. node	13392 Dec 10 10:23	23°♌31'14		desc. node	13393 Nov 27 07:30	11°♌42'41	
	13392 Dec 14 17:46	0°♌		evening max el	13393 Dec 06 11:45	22°♌43'19	25°03'37
evening max el	13392 Dec 24 19:53	11°♌59'42	26°25'31	retrograde	13393 Dec 20 07:02	29°♌38'14	
retrograde	13393 Jan 07 18:52	19°♌05'56		evening set	13393 Dec 25 22:50	28°♌26'29	
evening set	13393 Jan 14 05:57	17°♌24'35		min. Earth dist.	13393 Dec 30 23:44	25°♌43'40	0.56666 AU
min. Earth dist.	13393 Jan 18 09:34	14°♌47'57	0.58619 AU	inferior conj	13394 Jan 02 15:34	23°♌59'51	-5°12'58
inferior conj	13393 Jan 21 12:43	12°♌27'09	-4°00'02	minimum elong	13394 Jan 02 23:44	23°♌46'31	5°10'18
minimum elong	13393 Jan 21 21:01	12°♌11'34	3°56'33	morning rise	13394 Jan 11 02:55	19°♌50'42	
morning rise	13393 Jan 29 15:03	7°♌56'02		direct	13394 Jan 13 09:03	19°♌36'11	
direct	13393 Jan 31 16:03	7°♌41'42		asc. node	13394 Jan 21 11:22	22°♌58'24	
asc. node	13393 Feb 03 14:02	8°♌12'28		morning max el	13394 Jan 22 18:44	24°♌09'15	19°16'31
morning max el	13393 Feb 08 18:35	11°♌41'26	18°25'23		13394 Jan 27 15:31	0°♌	
	13393 Feb 20 21:55	0°♌		morning set	13394 Feb 08 15:58	21°♌25'51	
morning set	13393 Feb 24 14:46	6°♌59'56			13394 Feb 12 23:01	0°♌	
				superior conj	13394 Feb 16 20:46	7°♌40'37	0°50'45
superior conj	13393 Mar 05 18:40	24°♌19'11	0°21'36	minimum elong	13394 Feb 16 23:26	7°♌53'31	0°50'50
minimum elong	13393 Mar 05 20:11	24°♌26'10	0°21'34	desc. node	13394 Feb 23 08:05	19°♌49'46	
desc. node	13393 Mar 08 11:33	29°♌13'59		max. Earth dist.	13394 Feb 23 13:16	20°♌13'14	1.38396 AU
	13393 Mar 08 21:50	0°♌		evening rise	13394 Feb 27 06:57	26°♌51'10	
max. Earth dist.	13393 Mar 13 06:32	7°♌38'57	1.40646 AU		13394 Mar 01 02:50	0°♌	
evening rise	13393 Mar 17 15:37	15°♌01'20			13394 Mar 20 14:58	0°♌	
	13393 Mar 27 02:20	0°♌		evening max el	13394 Apr 03 15:07	16°♌58'27	24°50'01
evening max el	13393 Apr 18 03:31	0°♌		retrograde	13394 Apr 15 09:45	23°♌50'18	
retrograde	13393 Apr 21 01:26	3°♌05'31	23°30'43	asc. node	13394 Apr 19 07:59	22°♌43'06	
asc. node	13393 May 01 18:24	9°♌23'32		evening set	13394 Apr 21 01:42	21°♌27'53	
evening set	13393 May 02 10:37	9°♌21'28		min. Earth dist.	13394 Apr 25 13:04	16°♌25'09	0.68232 AU
inferior conj	13393 May 06 22:36	7°♌12'40		inferior conj	13394 Apr 26 15:34	14°♌57'29	2°05'51
minimum elong	13393 May 12 08:02	0°♌45'45	2°37'45	minimum elong	13394 Apr 26 13:24	15°♌04'38	2°04'35
min. Earth dist.	13393 May 12 06:04	0°♌52'30	2°36'29	morning rise	13394 Apr 26 13:24	15°♌04'38	2°04'35
	13393 May 11 18:04	1°♌33'45	0.68795 AU	direct	13394 May 02 01:22	9°♌00'38	
	13393 May 12 21:23	30°♌		morning max el	13394 May 05 18:54	7°♌40'49	
morning rise	13393 May 17 13:30	24°♌40'15		morning max el	13394 May 13 01:13	11°♌41'42	19°36'06
direct	13393 May 21 19:10	22°♌59'38		desc. node	13394 May 22 10:10	23°♌23'12	
morning max el	13393 May 29 23:51	27°♌40'03	20°44'01	greatest brilliancy	13394 May 25 16:58	28°♌07'09	-0.6m
	13393 Jun 01 04:32	0°♌			13394 May 26 23:38	0°♌	
desc. node	13393 Jun 04 13:18	4°♌02'53		morning set	13394 Jun 07 17:42	17°♌47'20	
	13393 Jun 22 17:40	0°♌			13394 Jun 15 14:54	0°♌	
morning set	13393 Jun 28 16:17	9°♌06'55		max. Earth dist.	13394 Jun 19 13:04	6°♌09'49	1.44920 AU
max. Earth dist.	13393 Jul 06 23:07	22°♌13'34	1.43448 AU				
	13393 Jul 11 17:15	0°♌		superior conj	13394 Jun 23 22:52	13°♌10'36	-2°11'00
superior conj	13393 Jul 13 16:29	3°♌16'35	-1°52'49	minimum elong	13394 Jun 24 02:31	13°♌25'15	2°11'55
minimum elong	13393 Jul 13 23:36	3°♌46'22	1°53'08		13394 Jul 04 06:06	0°♌	
evening rise	13393 Jul 25 19:54	24°♌14'31		evening rise	13394 Jul 07 20:22	6°♌00'16	
asc. node	13393 Jul 29 09:54	0°♌33'17		asc. node	13394 Jul 16 06:40	20°♌01'25	
	13393 Jul 29 02:19	0°♌			13394 Jul 22 23:24	0°♌	
evening max el	13393 Aug 11 12:00	20°♌10'28	18°02'54	evening max el	13394 Jul 26 02:23	3°♌36'14	18°10'11
retrograde	13393 Aug 18 01:55	23°♌33'58		retrograde	13394 Aug 01 10:56	6°♌57'09	
evening set	13393 Aug 20 13:52	23°♌04'20		evening set	13394 Aug 04 07:11	6°♌14'14	
inferior conj	13393 Aug 27 05:21	18°♌01'14	1°14'52	inferior conj	13394 Aug 10 09:09	0°♌53'24	2°10'28
minimum elong	13393 Aug 27 07:23	17°♌56'13	1°13'51	minimum elong	13394 Aug 10 11:39	0°♌46'26	2°09'12
min. Earth dist.	13393 Aug 30 07:13	15°♌00'26	0.61301 AU		13394 Aug 11 04:17	30°♌	
desc. node	13393 Aug 31 10:52	13°♌57'40		min. Earth dist.	13394 Aug 12 23:29	28°♌01'08	0.63509 AU
morning rise	13393 Sep 02 22:12	12°♌02'09		morning rise	13394 Aug 16 14:22	24°♌38'03	
direct	13393 Sep 09 13:44	9°♌47'07		desc. node	13394 Aug 18 08:23	23°♌27'50	
morning max el	13393 Sep 23 18:51	17°♌44'17	27°58'07	direct	13394 Aug 23 05:56	22°♌05'47	
				morning max el	13394 Sep 06 03:50	0°♌06'59	27°45'11

	13394 Sep 06 01:02	0°♎		morning max el	13395 Aug 19 14:58	13°♏02'32	26°59'32
	13394 Sep 28 01:45	0°♏			13395 Sep 02 06:58	0°♎	
morning set	13394 Oct 10 21:55	23°♏30'11			13395 Sep 20 16:52	0°♏	
asc. node	13394 Oct 12 08:31	26°♏25'11		morning set	13395 Sep 24 06:42	6°♏43'15	
	13394 Oct 14 02:10	0°♎		max. Earth dist.	13395 Sep 28 12:44	15°♏06'31	1.33711 AU
max. Earth dist.	13394 Oct 15 20:46	3°♎44'00	1.32345 AU	asc. node	13395 Sep 29 05:09	16°♏29'48	
superior conj	13394 Oct 18 17:56	9°♎55'38	0°57'52	superior conj	13395 Oct 02 19:50	23°♏59'06	0°33'48
minimum elong	13394 Oct 18 15:42	9°♎43'31	0°58'03	minimum elong	13395 Oct 02 18:11	23°♏50'26	0°33'47
evening rise	13394 Oct 25 14:59	24°♎54'15			13395 Oct 05 15:51	0°♎	
	13394 Oct 28 00:42	0°♎		evening rise	13395 Oct 10 01:25	9°♎22'44	
desc. node	13394 Nov 14 04:44	28°♎48'23			13395 Oct 20 18:02	0°♎	
	13394 Nov 15 05:16	0°♏		evening max el	13395 Oct 30 10:49	12°♎54'39	21°43'40
evening max el	13394 Nov 17 21:48	2°♏49'42	23°23'43	desc. node	13395 Nov 01 02:03	14°♎25'02	
retrograde	13394 Dec 01 06:32	9°♏28'41		retrograde	13395 Nov 11 19:52	19°♎03'09	
evening set	13394 Dec 05 16:14	8°♏46'32		evening set	13395 Nov 14 20:07	18°♎42'40	
min. Earth dist.	13394 Dec 12 07:49	5°♏38'14	0.55209 AU	inferior conj	13395 Nov 23 15:42	14°♎48'36	-5°41'02
inferior conj	13394 Dec 13 22:17	4°♏42'10	-5°54'04	minimum elong	13395 Nov 23 09:20	14°♎57'31	5°39'15
minimum elong	13394 Dec 14 00:45	4°♏38'35	5°52'55	min. Earth dist.	13395 Nov 23 14:07	14°♎50'49	0.54529 AU
morning rise	13394 Dec 22 10:57	0°♏50'36		morning rise	13395 Dec 01 23:30	11°♎00'50	
direct	13394 Dec 25 06:37	0°♏31'26		direct	13395 Dec 05 15:35	10°♎31'24	
morning max el	13395 Jan 05 05:32	5°♏45'23	20°30'47	morning max el	13395 Dec 18 02:15	16°♎29'03	22°06'13
asc. node	13395 Jan 08 08:38	9°♏09'26		asc. node	13395 Dec 26 05:48	26°♎28'25	
	13395 Jan 20 23:02	0°♏			13395 Dec 28 11:48	0°♏	
morning set	13395 Jan 23 23:01	6°♏05'03		morning set	13396 Jan 08 09:30	20°♏50'32	
					13396 Jan 12 16:40	0°♏	
superior conj	13395 Jan 31 11:37	21°♏36'08	1°12'46				
minimum elong	13395 Jan 31 14:16	21°♏49'35	1°13'09	superior conj	13396 Jan 15 11:32	5°♏55'21	1°27'44
	13395 Feb 04 16:53	0°♎		minimum elong	13396 Jan 15 13:29	6°♏05'38	1°28'27
max. Earth dist.	13395 Feb 05 20:57	2°♎15'42	1.36213 AU	max. Earth dist.	13396 Jan 19 10:12	14°♏06'25	1.34309 AU
evening rise	13395 Feb 09 17:03	9°♎27'56		evening rise	13396 Jan 23 18:31	22°♏43'04	
desc. node	13395 Feb 10 04:40	10°♎20'58			13396 Jan 27 15:43	0°♎	
	13395 Feb 21 18:50	0°♎		desc. node	13396 Jan 28 01:19	0°♎43'39	
	13395 Mar 16 08:54	0°♏			13396 Feb 15 11:56	0°♎	
evening max el	13395 Mar 17 04:33	0°♏48'53	26°00'57	evening max el	13396 Feb 27 18:10	14°♎30'28	26°56'07
retrograde	13395 Mar 29 20:26	8°♏03'55		retrograde	13396 Mar 12 01:32	21°♎56'42	
evening set	13395 Apr 04 23:32	5°♏33'47		evening set	13396 Mar 18 14:13	19°♎24'17	
asc. node	13395 Apr 06 05:26	4°♏25'49		min. Earth dist.	13396 Mar 22 13:37	15°♎30'25	0.65820 AU
min. Earth dist.	13395 Apr 09 04:16	1°♏06'22	0.67229 AU	asc. node	13396 Mar 23 02:53	14°♎52'39	
	13395 Apr 10 01:36	30°♎♎		inferior conj	13396 Mar 24 16:49	13°♎02'39	0°30'04
inferior conj	13395 Apr 10 19:14	29°♎04'43	1°23'27	minimum elong	13396 Mar 24 16:01	13°♎04'58	0°29'37
minimum elong	13395 Apr 10 17:24	29°♎10'26	1°22'26	morning rise	13396 Mar 30 19:12	7°♎27'34	
morning rise	13395 Apr 16 12:01	23°♎17'53		direct	13396 Apr 02 15:29	6°♎43'25	
direct	13395 Apr 19 18:19	22°♎17'18		morning max el	13396 Apr 09 00:17	10°♎03'57	18°07'44
morning max el	13395 Apr 26 09:58	25°♎51'43	18°43'37		13396 Apr 23 02:37	0°♏	
	13395 Apr 30 01:48	0°♏		desc. node	13396 Apr 25 03:34	3°♏17'15	
desc. node	13395 May 09 06:55	13°♏10'25		morning set	13396 Apr 27 19:39	7°♏36'16	
morning set	13395 May 18 05:41	27°♏03'09			13396 May 11 20:25	0°♎	
	13395 May 20 03:00	0°♎					
max. Earth dist.	13395 Jun 02 07:08	20°♎33'07	1.45712 AU	superior conj	13396 May 12 19:29	1°♎30'36	-1°51'07
				minimum elong	13396 May 12 10:33	0°♎55'31	1°51'14
superior conj	13395 Jun 03 10:56	22°♎21'47	-2°11'04	max. Earth dist.	13396 May 15 02:47	5°♎07'08	1.45766 AU
minimum elong	13395 Jun 03 07:03	22°♎06'37	2°11'57	evening rise	13396 May 28 21:49	26°♎33'03	
	13395 Jun 08 07:45	0°♏			13396 May 31 03:18	0°♏	
evening rise	13395 Jun 18 20:42	16°♏44'27		greatest brilliancy	13396 Jun 10 02:00	15°♏13'37	-0.7m
greatest brilliancy	13395 Jun 25 11:02	27°♏17'47	-0.9m	asc. node	13396 Jun 19 00:27	27°♏40'58	
	13395 Jun 27 03:59	0°♏			13396 Jun 21 00:34	0°♏	
asc. node	13395 Jul 03 03:31	9°♏06'48		evening max el	13396 Jun 22 00:01	1°♏01'03	19°17'47
evening max el	13395 Jul 09 15:12	17°♏15'19	18°35'28	retrograde	13396 Jun 29 00:33	4°♏56'03	
retrograde	13395 Jul 16 03:36	20°♏47'02		evening set	13396 Jul 02 14:33	3°♏41'24	
evening set	13395 Jul 19 08:27	19°♏48'52			13396 Jul 06 08:02	30°♎♎	
inferior conj	13395 Jul 25 00:41	14°♏12'32	2°46'31	inferior conj	13396 Jul 08 00:30	27°♏51'02	3°06'21
minimum elong	13395 Jul 25 02:42	14°♏06'22	2°45'20	minimum elong	13396 Jul 08 01:35	27°♏47'30	3°05'17
min. Earth dist.	13395 Jul 27 01:02	11°♏45'28	0.65446 AU	min. Earth dist.	13396 Jul 09 10:19	26°♏00'45	0.67004 AU
morning rise	13395 Jul 30 19:54	7°♏49'36		morning rise	13396 Jul 13 12:02	21°♏26'55	
desc. node	13395 Aug 05 05:49	5°♏13'15		direct	13396 Jul 19 13:42	18°♏48'32	
direct	13395 Aug 06 06:23	5°♏09'28		desc. node	13396 Jul 22 03:11	19°♏12'45	

morning max el	13396 Aug 01 01:50	26°☿17'35	25°49'29	direct	13397 Jul 03 02:37	2°☿54'35	
	13396 Aug 04 11:57	0°♊		desc. node	13397 Jul 09 00:26	5°☿03'00	
	13396 Aug 25 20:37	0°♊		morning max el	13397 Jul 14 11:57	9°☿44'04	24°24'47
morning set	13396 Sep 06 01:40	19°♊16'51			13397 Jul 30 12:48	0°♊	
max. Earth dist.	13396 Sep 09 18:23	26°♊11'46	1.35570 AU		13397 Aug 18 12:31	0°♊	
	13396 Sep 11 17:41	0°♊		morning set	13397 Aug 19 02:31	1°♊00'40	
asc. node	13396 Sep 15 01:42	6°♊36'37		max. Earth dist.	13397 Aug 22 17:16	7°♊24'33	1.37793 AU
superior conj	13396 Sep 15 13:37	7°♊36'44	0°04'42	superior conj	13397 Aug 29 20:03	20°♊40'47	-0°28'26
minimum elong	13396 Sep 15 13:20	7°♊35'19	0°04'40	minimum elong	13397 Aug 29 22:00	20°♊50'07	0°28'20
behind sun begin	13396 Sep 15 07:25	7°♊05'26		asc. node	13397 Sep 01 22:16	26°♊42'21	
behind sun end	13396 Sep 15 19:15	8°♊05'15			13397 Sep 03 14:15	0°♊	
evening rise	13396 Sep 23 08:59	23°♊41'03		evening rise	13397 Sep 07 11:17	7°♊43'15	
	13396 Sep 26 11:34	0°♊			13397 Sep 19 23:26	0°♊	
evening max el	13396 Oct 11 11:27	23°♊32'16	20°17'52	evening max el	13397 Sep 24 02:18	4°♊57'46	19°12'51
desc. node	13396 Oct 17 23:27	28°♊04'34		retrograde	13397 Oct 03 06:32	9°♊33'26	
retrograde	13396 Oct 22 07:26	28°♊55'24		desc. node	13397 Oct 04 20:53	9°♊25'39	
evening set	13396 Oct 24 09:55	28°♊44'08		evening set	13397 Oct 05 03:08	9°♊22'56	
inferior conj	13396 Nov 02 08:58	24°♊47'42	-4°30'15	inferior conj	13397 Oct 13 15:50	5°♊11'51	-2°45'24
minimum elong	13396 Nov 01 22:52	25°♊02'34	4°26'37	minimum elong	13397 Oct 13 08:45	5°♊23'41	2°42'14
min. Earth dist.	13396 Nov 03 21:31	23°♊53'50	0.54787 AU	min. Earth dist.	13397 Oct 16 08:24	3°♊24'15	0.55940 AU
morning rise	13396 Nov 10 11:04	20°♊44'10		morning rise	13397 Oct 21 11:49	0°♊36'06	
direct	13396 Nov 15 01:30	19°♊58'23			13397 Oct 23 05:40	30°♊♊	
morning max el	13396 Nov 28 13:25	26°♊35'11	23°54'16	direct	13397 Oct 26 22:15	29°♊28'20	
	13396 Dec 01 20:00	0°♊			13397 Oct 30 14:48	0°♊	
asc. node	13396 Dec 12 02:51	14°♊38'54		morning max el	13397 Nov 09 23:51	6°♊36'28	25°38'38
	13396 Dec 20 05:27	0°♊			13397 Nov 27 01:33	0°♊	
morning set	13396 Dec 22 21:20	5°♊36'02		asc. node	13397 Nov 28 23:48	3°♊28'12	
				morning set	13397 Dec 07 08:47	20°♊16'50	
superior conj	13396 Dec 29 17:34	20°♊29'13	1°36'04		13397 Dec 11 19:17	0°♊	
minimum elong	13396 Dec 29 18:29	20°♊34'12	1°37'02	superior conj	13397 Dec 14 03:19	5°♊10'47	1°38'09
max. Earth dist.	13397 Jan 01 07:19	26°♊01'58	1.32814 AU	minimum elong	13397 Dec 14 03:08	5°♊09'46	1°39'11
	13397 Jan 03 04:21	0°♊		max. Earth dist.	13397 Dec 15 11:22	8°♊07'55	1.31794 AU
evening rise	13397 Jan 06 07:49	6°♊27'12		evening rise	13397 Dec 21 05:57	20°♊32'34	
desc. node	13397 Jan 13 22:02	20°♊52'37			13397 Dec 25 23:02	0°♊	
	13397 Jan 19 05:57	0°♊		desc. node	13397 Dec 31 18:51	10°♊41'27	
evening max el	13397 Feb 09 07:07	27°♊53'08	27°28'15		13398 Jan 13 09:01	0°♊	
	13397 Feb 11 15:23	0°♊		evening max el	13398 Jan 22 17:12	10°♊43'10	27°30'43
retrograde	13397 Feb 23 00:02	5°♊19'59		retrograde	13398 Feb 05 14:42	18°♊03'55	
evening set	13397 Mar 01 19:31	2°♊51'56		evening set	13398 Feb 12 12:40	15°♊47'39	
	13397 Mar 05 02:39	30°♊♊		min. Earth dist.	13398 Feb 16 06:47	12°♊50'29	0.62028 AU
min. Earth dist.	13397 Mar 05 15:05	29°♊28'54	0.64058 AU	inferior conj	13398 Feb 19 06:42	10°♊03'26	-1°49'53
inferior conj	13397 Mar 08 05:41	26°♊45'10	-0°34'37	minimum elong	13398 Feb 19 10:30	9°♊54'34	1°47'54
minimum elong	13397 Mar 08 06:45	26°♊42'21	0°34'01	asc. node	13398 Feb 24 21:46	5°♊39'42	
asc. node	13397 Mar 10 00:20	24°♊56'18		morning rise	13398 Feb 26 11:07	4°♊59'43	
morning rise	13397 Mar 14 20:08	21°♊24'12		direct	13398 Feb 28 16:17	4°♊37'50	
direct	13397 Mar 17 07:54	20°♊53'00		morning max el	13398 Mar 07 10:55	8°♊03'47	17°48'09
morning max el	13397 Mar 23 17:38	24°♊11'02	17°49'04		13398 Mar 21 20:25	0°♊	
	13397 Mar 28 12:10	0°♊		morning set	13398 Mar 23 06:09	2°♊29'42	
morning set	13397 Apr 09 13:36	19°♊31'02		desc. node	13398 Mar 29 20:42	14°♊08'26	
desc. node	13397 Apr 12 00:10	23°♊38'19					
	13397 Apr 15 19:19	0°♊		superior conj	13398 Apr 03 14:57	22°♊17'59	-0°36'42
superior conj	13397 Apr 22 17:40	11°♊21'37	-1°16'41	minimum elong	13398 Apr 03 11:26	22°♊03'07	0°36'26
minimum elong	13397 Apr 22 09:57	10°♊50'28	1°16'19		13398 Apr 08 05:59	0°♊	
max. Earth dist.	13397 Apr 27 22:08	19°♊38'40	1.45087 AU	max. Earth dist.	13398 Apr 10 14:53	3°♊51'41	1.43744 AU
	13397 May 04 13:08	0°♊		evening rise	13398 Apr 18 00:34	15°♊35'17	
evening rise	13397 May 08 09:50	5°♊56'39			13398 Apr 27 12:31	0°♊	
	13397 May 24 12:33	0°♊		evening max el	13398 May 19 00:55	28°♊38'31	21°25'33
evening max el	13397 Jun 05 03:23	14°♊49'43	20°15'24		13398 May 20 11:00	0°♊	
asc. node	13397 Jun 05 21:29	15°♊33'44		asc. node	13398 May 23 18:36	2°♊31'10	
retrograde	13397 Jun 12 23:16	19°♊18'50		retrograde	13398 May 27 21:49	3°♊49'30	
evening set	13397 Jun 16 23:07	17°♊47'16		evening set	13398 Jun 01 08:13	2°♊01'25	
inferior conj	13397 Jun 22 05:48	11°♊44'08	3°12'39		13398 Jun 03 09:01	30°♊♊	
minimum elong	13397 Jun 22 05:51	11°♊44'00	3°11'37	inferior conj	13398 Jun 06 14:15	25°♊47'00	3°07'20
min. Earth dist.	13397 Jun 23 01:26	10°♊37'11	0.68117 AU	minimum elong	13398 Jun 06 13:20	25°♊50'11	3°06'14
morning rise	13397 Jun 27 12:16	5°♊22'46		min. Earth dist.	13398 Jun 06 20:21	25°♊25'47	0.68756 AU

morning rise	13398 Jun 11 18:16	19° Π 30'43		minimum elong	13399 May 21 22:12	10° Π 02'21	2°50'16
direct	13398 Jun 16 20:00	17° Π 18'47		min. Earth dist.	13399 May 21 17:03	10° Π 20'15	0.68917 AU
desc. node	13398 Jun 25 21:36	22° Π 16'46		morning rise	13399 May 27 04:03	3° Π 46'45	
morning max el	13398 Jun 26 22:53	23° Π 18'32	22°55'07	direct	13399 May 31 16:51	1° Π 54'28	
	13398 Jul 02 20:19	0° \mathfrak{C}		morning max el	13399 Jun 09 13:30	7° Π 02'35	21°29'05
	13398 Jul 23 21:20	0° Ω		desc. node	13399 Jun 12 18:40	10° Π 32'20	
morning set	13398 Jul 31 04:39	11° Ω 43'22			13399 Jun 27 04:58	0° \mathfrak{C}	
max. Earth dist.	13398 Aug 04 15:49	19° Ω 13'33	1.40143 AU	morning set	13399 Jul 11 05:44	21° \mathfrak{C} 20'37	
	13398 Aug 10 19:06	0° \mathfrak{M}			13399 Jul 16 15:11	0° Ω	
				max. Earth dist.	13399 Jul 17 19:02	1° Ω 53'58	1.42346 AU
superior conj	13398 Aug 12 11:05	3° \mathfrak{M} 01'13	-1°03'27	superior conj	13399 Jul 25 06:17	14° Ω 28'24	-1°36'41
minimum elong	13398 Aug 12 15:48	3° \mathfrak{M} 22'42	1°03'16	minimum elong	13399 Jul 25 13:14	14° Ω 58'24	1°36'41
asc. node	13398 Aug 19 18:52	16° \mathfrak{M} 42'56			13399 Aug 03 00:34	0° \mathfrak{M}	
evening rise	13398 Aug 22 05:13	21° \mathfrak{M} 21'08		evening rise	13399 Aug 05 10:55	4° \mathfrak{M} 24'47	
	13398 Aug 26 19:28	0° \mathfrak{L}		asc. node	13399 Aug 06 15:29	6° \mathfrak{M} 34'30	
evening max el	13398 Sep 07 04:50	17° \mathfrak{L} 08'49	18°29'41	evening max el	13399 Aug 21 15:03	29° \mathfrak{M} 56'28	18°07'07
retrograde	13398 Sep 15 00:39	21° \mathfrak{L} 06'00			13399 Aug 21 16:29	0° \mathfrak{L}	
evening set	13398 Sep 17 00:37	20° \mathfrak{L} 51'17		retrograde	13399 Aug 28 12:55	3° \mathfrak{L} 28'22	
desc. node	13398 Sep 21 18:21	18° \mathfrak{L} 35'31		evening set	13399 Aug 30 20:03	3° \mathfrak{L} 05'19	
inferior conj	13398 Sep 24 19:43	16° \mathfrak{L} 19'51	-0°57'59		13399 Sep 04 20:34	30° \mathfrak{R} \mathfrak{M}	
minimum elong	13398 Sep 24 17:27	16° \mathfrak{L} 24'18	0°56'53	inferior conj	13399 Sep 06 20:56	28° \mathfrak{M} 13'29	0°32'47
min. Earth dist.	13398 Sep 28 01:30	13° \mathfrak{L} 48'34	0.57763 AU	minimum elong	13399 Sep 06 21:58	28° \mathfrak{M} 11'06	0°32'16
morning rise	13398 Oct 02 06:48	11° \mathfrak{L} 06'23		desc. node	13399 Sep 08 15:53	26° \mathfrak{M} 35'02	
direct	13398 Oct 08 08:59	9° \mathfrak{L} 32'01		min. Earth dist.	13399 Sep 10 02:59	25° \mathfrak{M} 16'49	0.59969 AU
morning max el	13398 Oct 22 16:24	17° \mathfrak{L} 05'19	27°01'03	morning rise	13399 Sep 13 20:39	22° \mathfrak{M} 27'53	
	13398 Nov 02 08:31	0° \mathfrak{M}		direct	13399 Sep 20 09:05	20° \mathfrak{M} 26'14	
asc. node	13398 Nov 15 20:40	22° \mathfrak{M} 46'19		morning max el	13399 Oct 04 16:40	28° \mathfrak{M} 18'00	27°48'37
	13398 Nov 19 11:14	0° \mathfrak{X}			13399 Oct 06 08:34	0° \mathfrak{L}	
morning set	13398 Nov 21 18:11	4° \mathfrak{X} 48'37			13399 Oct 27 04:14	0° \mathfrak{M}	
superior conj	13398 Nov 28 14:49	19° \mathfrak{X} 54'31	1°34'17	asc. node	13399 Nov 02 17:26	12° \mathfrak{M} 24'25	
minimum elong	13398 Nov 28 13:38	19° \mathfrak{X} 47'56	1°35'13	morning set	13399 Nov 05 23:37	19° \mathfrak{M} 05'20	
max. Earth dist.	13398 Nov 28 19:22	20° \mathfrak{X} 19'56	1.31270 AU		13399 Nov 11 00:49	0° \mathfrak{X}	
	13398 Dec 03 04:04	0° \mathfrak{Z}		max. Earth dist.	13399 Nov 12 03:29	2° \mathfrak{X} 27'47	1.31261 AU
evening rise	13398 Dec 05 10:23	4° \mathfrak{Z} 52'58		superior conj	13399 Nov 13 02:08	4° \mathfrak{X} 33'46	1°24'38
desc. node	13398 Dec 18 15:45	0° \approx 02'15		minimum elong	13399 Nov 13 00:13	4° \mathfrak{X} 23'04	1°25'18
	13398 Dec 18 15:13	0° \approx		evening rise	13399 Nov 19 18:55	19° \mathfrak{X} 21'39	
evening max el	13399 Jan 04 21:37	22° \approx 48'12	26°59'08		13399 Nov 24 21:58	0° \mathfrak{Z}	
	13399 Jan 18 11:38	0° \mathfrak{X}		desc. node	13399 Dec 05 12:47	18° \mathfrak{Z} 43'10	
retrograde	13399 Jan 18 20:33	0° \mathfrak{X} 00'21			13399 Dec 13 22:22	0° \approx	
	13399 Jan 19 05:28	30° \mathfrak{R} \approx		evening max el	13399 Dec 17 18:04	4° \approx 00'20	25°53'52
evening set	13399 Jan 25 14:21	28° \approx 03'45		retrograde	13399 Dec 31 16:12	11° \approx 02'52	
min. Earth dist.	13399 Jan 29 11:49	25° \approx 23'38	0.59860 AU	evening set	13400 Jan 06 20:26	9° \approx 33'25	
inferior conj	13399 Feb 01 16:20	22° \approx 48'18	-3°12'19	min. Earth dist.	13400 Jan 11 06:55	6° \approx 56'27	0.57747 AU
minimum elong	13399 Feb 01 23:14	22° \approx 34'14	3°09'06	inferior conj	13400 Jan 14 07:05	4° \approx 49'16	-4°33'17
morning rise	13399 Feb 09 11:14	18° \approx 04'59		minimum elong	13400 Jan 14 15:52	4° \approx 33'45	4°29'56
direct	13399 Feb 11 12:33	17° \approx 48'54		morning rise	13400 Jan 22 14:06	0° \approx 28'01	
asc. node	13399 Feb 11 19:11	17° \approx 49'12		direct	13400 Jan 24 16:13	0° \approx 14'11	
morning max el	13399 Feb 19 00:44	21° \approx 33'03	18°06'00	asc. node	13400 Jan 29 16:34	1° \approx 39'16	
	13399 Feb 25 11:29	0° \mathfrak{X}		morning max el	13400 Feb 02 07:07	4° \approx 26'56	18°44'21
morning set	13399 Mar 06 15:09	16° \mathfrak{X} 13'37		morning set	13400 Feb 18 11:32	0° \mathfrak{X} 27'10	
	13399 Mar 14 02:00	0° \mathfrak{Y}			13400 Feb 18 05:57	0° \mathfrak{X}	
superior conj	13399 Mar 16 11:57	4° \mathfrak{Y} 20'22	0°01'46	superior conj	13400 Feb 27 04:45	17° \mathfrak{X} 16'34	0°34'48
minimum elong	13399 Mar 16 12:05	4° \mathfrak{Y} 21'00	0°01'46	minimum elong	13400 Feb 27 06:55	17° \mathfrak{X} 26'48	0°34'46
behind sun begin	13399 Mar 16 04:24	3° \mathfrak{Y} 46'43		desc. node	13400 Mar 03 13:45	25° \mathfrak{X} 20'31	
behind sun end	13399 Mar 16 19:47	4° \mathfrak{Y} 55'13			13400 Mar 06 04:29	0° \mathfrak{Y}	
desc. node	13399 Mar 16 17:17	4° \mathfrak{Y} 44'06		max. Earth dist.	13400 Mar 06 10:16	0° \mathfrak{Y} 25'23	1.39697 AU
max. Earth dist.	13399 Mar 24 02:53	17° \mathfrak{Y} 30'18	1.41878 AU	evening rise	13400 Mar 10 10:11	7° \mathfrak{Y} 17'49	
evening rise	13399 Mar 29 06:55	25° \mathfrak{Y} 58'57			13400 Mar 24 19:45	0° \mathfrak{Z}	
	13399 Mar 31 19:27	0° \mathfrak{Z}		evening max el	13400 Apr 14 07:54	26° \mathfrak{Z} 19'57	24°04'58
	13399 Apr 21 07:25	0° Π			13400 Apr 18 12:09	0° Π	
evening max el	13399 May 01 17:44	12° Π 28'11	22°43'56	retrograde	13400 Apr 25 12:31	2° Π 54'18	
asc. node	13399 May 10 15:49	18° Π 17'31		asc. node	13400 Apr 27 13:08	2° Π 35'53	
retrograde	13399 May 11 18:40	18° Π 23'16		evening set	13400 Apr 30 21:37	0° Π 38'07	
evening set	13399 May 16 16:14	16° Π 20'00			13400 May 01 14:17	30° \mathfrak{R} \mathfrak{Z}	
inferior conj	13399 May 21 23:52	9° Π 56'34	2°51'28				

min. Earth dist.	13400 May 05 13:24	25° ♁ 14'30	0.68608 AU	minimum elong	13401 Apr 20 12:49	8° ♁ 26'23	1°48'00
inferior conj	13400 May 06 08:44	24° ♁ 08'55	2°25'29	morning rise	13401 Apr 26 03:19	2° ♁ 26'32	
minimum elong	13400 May 06 06:38	24° ♁ 16'02	2°24'12	direct	13401 Apr 29 15:57	1° ♁ 15'05	
morning rise	13400 May 11 15:42	18° ♁ 06'49		morning max el	13401 May 06 15:03	5° ♁ 03'17	19°11'39
direct	13400 May 15 16:01	16° ♁ 35'16		desc. node	13401 May 17 12:27	19° ♁ 05'51	
morning max el	13400 May 23 10:31	20° ♁ 57'53	20°13'16	greatest brilliancy	13401 May 19 12:42	22° ♁ 04'12	-0.7m
desc. node	13400 May 30 15:37	29° ♁ 32'54			13401 May 24 18:35	0° ♁	
	13400 May 30 23:43	0° ♁		morning set	13401 May 30 14:17	8° ♁ 56'19	
morning set	13400 Jun 20 11:05	0° ♁ 08'31		max. Earth dist.	13401 Jun 12 20:37	29° ♁ 33'40	1.45348 AU
	13400 Jun 20 08:52	0° ♁			13401 Jun 13 03:20	0° ♁	
max. Earth dist.	13400 Jun 30 04:51	15° ♁ 24'39	1.44145 AU				
				superior conj	13401 Jun 15 23:38	4° ♁ 29'11	-2°13'31
superior conj	13400 Jul 06 02:15	24° ♁ 56'29	-2°02'23	minimum elong	13401 Jun 16 00:19	4° ♁ 31'52	2°14'33
minimum elong	13400 Jul 06 08:33	25° ♁ 22'20	2°02'59	evening rise	13401 Jun 30 14:02	28° ♁ 02'18	
	13400 Jul 09 03:44	0° ♁			13401 Jul 01 18:41	0° ♁	
evening rise	13400 Jul 18 23:34	16° ♁ 42'37		asc. node	13401 Jul 11 08:59	15° ♁ 32'19	
asc. node	13400 Jul 24 12:12	26° ♁ 13'00		evening max el	13401 Jul 19 19:08	26° ♁ 44'20	18°18'51
	13400 Jul 26 18:19	0° ♁			13401 Jul 24 23:19	0° ♁	
evening max el	13400 Aug 05 05:00	13° ♁ 11'34	18°03'49	retrograde	13401 Jul 26 04:07	0° ♁ 07'52	
retrograde	13400 Aug 11 15:32	16° ♁ 32'16			13401 Jul 27 08:45	30° ♁	
evening set	13400 Aug 14 06:55	15° ♁ 57'24		evening set	13401 Jul 29 04:04	29° ♁ 18'34	
inferior conj	13400 Aug 20 16:13	10° ♁ 46'50	1°41'01	inferior conj	13401 Aug 04 01:27	23° ♁ 51'06	2°27'56
minimum elong	13400 Aug 20 18:37	10° ♁ 40'35	1°39'50	minimum elong	13401 Aug 04 03:50	23° ♁ 44'12	2°26'40
min. Earth dist.	13400 Aug 23 13:50	7° ♁ 46'55	0.62259 AU	min. Earth dist.	13401 Aug 06 10:03	21° ♁ 07'51	0.64382 AU
desc. node	13400 Aug 26 13:25	5° ♁ 06'41		morning rise	13401 Aug 10 02:11	17° ♁ 31'54	
morning rise	13400 Aug 27 03:58	4° ♁ 39'33		desc. node	13401 Aug 13 10:54	15° ♁ 31'37	
direct	13400 Sep 02 20:20	2° ♁ 15'44		direct	13401 Aug 16 16:19	14° ♁ 54'55	
morning max el	13400 Sep 16 23:04	10° ♁ 16'42	27°57'03	morning max el	13401 Aug 30 09:00	22° ♁ 53'48	27°29'13
	13400 Oct 02 09:16	0° ♁			13401 Sep 05 16:00	0° ♁	
	13400 Oct 19 11:05	0° ♁			13401 Sep 25 16:08	0° ♁	
morning set	13400 Oct 20 23:03	3° ♁ 01'57		morning set	13401 Oct 04 13:59	16° ♁ 32'17	
asc. node	13400 Oct 20 14:09	2° ♁ 16'31		asc. node	13401 Oct 07 10:47	22° ♁ 17'29	
max. Earth dist.	13400 Oct 26 07:57	14° ♁ 22'10	1.31791 AU	max. Earth dist.	13401 Oct 09 05:13	25° ♁ 56'20	1.32863 AU
					13401 Oct 11 03:34	0° ♁	
superior conj	13400 Oct 28 11:27	19° ♁ 03'28	1°09'16				
minimum elong	13400 Oct 28 09:10	18° ♁ 51'00	1°09'38	superior conj	13401 Oct 12 16:41	3° ♁ 17'55	0°48'18
	13400 Nov 02 10:37	0° ♁		minimum elong	13401 Oct 12 14:36	3° ♁ 06'48	0°48'24
evening rise	13400 Nov 04 05:39	3° ♁ 53'57		evening rise	13401 Oct 19 16:44	18° ♁ 25'01	
	13400 Nov 17 23:32	0° ♁			13401 Oct 25 07:55	0° ♁	
desc. node	13400 Nov 22 09:55	6° ♁ 29'05		desc. node	13401 Nov 09 07:10	22° ♁ 59'49	
evening max el	13400 Nov 29 06:48	14° ♁ 25'04	24°22'26	evening max el	13401 Nov 10 16:59	24° ♁ 26'10	22°40'14
retrograde	13400 Dec 12 23:18	21° ♁ 14'33			13401 Nov 18 21:45	0° ♁	
evening set	13400 Dec 18 03:05	20° ♁ 16'06		retrograde	13401 Nov 23 17:14	0° ♁ 53'30	
min. Earth dist.	13400 Dec 23 18:23	17° ♁ 24'32	0.55965 AU	evening set	13401 Nov 27 12:21	0° ♁ 22'04	
inferior conj	13400 Dec 26 01:01	16° ♁ 00'06	-5°35'47		13401 Nov 28 17:11	30° ♁	
minimum elong	13400 Dec 26 07:30	15° ♁ 50'03	5°33'50	min. Earth dist.	13401 Dec 05 01:14	26° ♁ 57'27	0.54811 AU
morning rise	13401 Jan 03 13:54	11° ♁ 59'06		inferior conj	13401 Dec 06 00:45	26° ♁ 24'09	-5°56'03
direct	13401 Jan 06 00:30	11° ♁ 43'20		minimum elong	13401 Dec 05 23:22	26° ♁ 26'06	5°54'59
morning max el	13401 Jan 16 01:57	16° ♁ 33'41	19°45'12	morning rise	13401 Dec 14 11:43	22° ♁ 36'12	
asc. node	13401 Jan 16 13:53	17° ♁ 03'10		direct	13401 Dec 17 15:45	22° ♁ 13'12	
	13401 Jan 25 19:37	0° ♁		morning max el	13401 Dec 29 06:23	27° ♁ 45'57	21°09'07
morning set	13401 Feb 02 15:33	14° ♁ 59'30			13401 Dec 31 10:10	0° ♁	
	13401 Feb 10 01:54	0° ♁		asc. node	13402 Jan 03 11:06	3° ♁ 44'56	
				morning set	13402 Jan 18 00:21	29° ♁ 42'27	
superior conj	13401 Feb 10 12:44	0° ♁ 53'40	1°00'57		13402 Jan 18 03:44	0° ♁	
minimum elong	13401 Feb 10 15:30	1° ♁ 07'22	1°01'08				
max. Earth dist.	13401 Feb 16 16:32	12° ♁ 42'54	1.37449 AU	superior conj	13402 Jan 25 07:49	15° ♁ 00'24	1°19'56
desc. node	13401 Feb 18 10:18	15° ♁ 54'52		minimum elong	13402 Jan 25 10:14	15° ♁ 12'52	1°20'28
evening rise	13401 Feb 20 09:54	19° ♁ 28'59		max. Earth dist.	13402 Jan 30 02:26	24° ♁ 39'34	1.35361 AU
	13401 Feb 26 12:58	0° ♁			13402 Feb 01 20:35	0° ♁	
	13401 Mar 18 22:46	0° ♁		evening rise	13402 Feb 03 03:00	2° ♁ 23'38	
evening max el	13401 Mar 27 21:28	10° ♁ 12'53	25°21'43	desc. node	13402 Feb 05 06:53	6° ♁ 23'14	
retrograde	13401 Apr 09 02:02	17° ♁ 16'08			13402 Feb 19 12:52	0° ♁	
asc. node	13401 Apr 14 10:33	15° ♁ 14'46		evening max el	13402 Mar 10 11:18	24° ♁ 02'07	26°26'48
evening set	13401 Apr 14 22:42	14° ♁ 50'11			13402 Mar 18 07:06	0° ♁	
min. Earth dist.	13401 Apr 19 07:11	10° ♁ 02'19	0.67856 AU	retrograde	13402 Mar 23 10:18	1° ♁ 22'28	
inferior conj	13401 Apr 20 14:54	8° ♁ 19'36	1°49'13		13402 Mar 28 02:41	30° ♁	

evening set	13402 Mar 29 17:44	28° Υ 50'53		retrograde	13403 Mar 06 12:29	15° Υ 04'00	
asc. node	13402 Apr 01 07:59	26° Υ 21'27		evening set	13403 Mar 13 04:42	12° Υ 32'22	
min. Earth dist.	13402 Apr 02 20:10	24° Υ 37'56	0.66682 AU	min. Earth dist.	13403 Mar 17 02:12	8° Υ 52'23	0.65114 AU
inferior conj	13402 Apr 04 16:18	22° Υ 24'23	1°02'16	inferior conj	13403 Mar 19 10:29	6° Υ 16'24	0°04'03
minimum elong	13402 Apr 04 14:49	22° Υ 28'54	1°01'25	minimum elong	13403 Mar 19 10:22	6° Υ 16'44	0°04'00
morning rise	13402 Apr 10 12:50	16° Υ 42'09		transit middle	13403 Mar 19 10:22	6° Υ 16'44	0°04'00
direct	13402 Apr 13 14:50	15° Υ 48'45		transit begin	13403 Mar 19 07:26	6° Υ 24'54	
morning max el	13402 Apr 20 02:25	19° Υ 15'29	18°26'15	transit end	13403 Mar 19 13:18	6° Υ 08'35	
	13402 Apr 28 11:32	0° ♄		asc. node	13403 Mar 19 05:26	6° Υ 30'29	
desc. node	13402 May 04 09:10	9° ♄ 02'43		morning rise	13403 Mar 25 17:44	0° Υ 47'12	
morning set	13402 May 10 12:26	18° ♄ 43'30		direct	13403 Mar 28 10:16	0° Υ 08'56	
	13402 May 17 16:03	0° ♄		morning max el	13403 Apr 03 18:24	3° Υ 26'42	17°57'44
				desc. node	13403 Apr 21 05:47	29° Υ 16'11	
superior conj	13402 May 26 08:02	13° ♄ 33'50	-2°04'51	morning set	13403 Apr 21 14:41	29° Υ 52'51	
minimum elong	13402 May 26 01:17	13° ♄ 07'27	2°05'28		13403 Apr 21 16:25	0° ♄	
max. Earth dist.	13402 May 26 16:15	14° ♄ 05'54	1.45838 AU				
	13402 Jun 05 20:21	0° ♄		superior conj	13403 May 05 20:35	22° ♄ 56'04	-1°37'46
evening rise	13402 Jun 11 03:58	8° ♄ 21'26		minimum elong	13403 May 05 11:31	22° ♄ 20'06	1°37'36
greatest brilliancy	13402 Jun 20 10:22	22° ♄ 53'45	-0.8m	max. Earth dist.	13403 May 09 12:29	28° ♄ 42'19	1.45570 AU
	13402 Jun 25 02:55	0° ♄			13403 May 10 08:18	0° ♄	
asc. node	13402 Jun 28 05:51	4° ♄ 25'32		evening rise	13403 May 21 21:50	17° ♄ 55'04	
evening max el	13402 Jul 03 06:33	10° ♄ 27'10	18°51'23		13403 May 29 19:43	0° ♄	
retrograde	13402 Jul 09 22:58	14° ♄ 07'00		greatest brilliancy	13403 Jun 04 20:19	9° ♄ 00'14	-0.6m
evening set	13402 Jul 13 07:44	13° ♄ 01'43		asc. node	13403 Jun 15 02:48	22° ♄ 43'31	
inferior conj	13402 Jul 18 20:53	7° ♄ 19'04	2°56'43	evening max el	13403 Jun 16 13:05	24° ♄ 14'15	19°40'26
minimum elong	13402 Jul 18 22:32	7° ♄ 13'52	2°55'35	retrograde	13403 Jun 23 21:03	28° ♄ 22'46	
min. Earth dist.	13402 Jul 20 14:57	5° ♄ 06'54	0.66171 AU	evening set	13403 Jun 27 15:09	27° ♄ 00'51	
morning rise	13402 Jul 24 12:33	0° ♄ 55'13		inferior conj	13403 Jul 02 23:21	21° ♄ 04'35	3°10'32
	13402 Jul 25 16:51	30° ♄		minimum elong	13403 Jul 02 24:00	21° ♄ 02'27	3°09'29
direct	13402 Jul 30 19:40	28° ♄ 14'59		min. Earth dist.	13403 Jul 04 02:58	19° ♄ 32'26	0.67536 AU
desc. node	13402 Jul 31 08:19	28° ♄ 16'00		morning rise	13403 Jul 08 08:25	14° ♄ 41'09	
	13402 Aug 05 12:03	0° ♄		direct	13403 Jul 14 05:21	12° ♄ 06'31	
morning max el	13402 Aug 12 20:11	5° ♄ 58'51	26°32'05	desc. node	13403 Jul 18 05:39	13° ♄ 05'56	
	13402 Aug 31 08:04	0° ♄		morning max el	13403 Jul 26 06:59	19° ♄ 20'36	25°14'39
morning set	13402 Sep 17 17:18	29° ♄ 29'07			13403 Aug 04 08:29	0° ♄	
	13402 Sep 17 23:51	0° ♄			13403 Aug 24 10:22	0° ♄	
max. Earth dist.	13402 Sep 21 16:57	7° ♄ 10'43	1.34455 AU	morning set	13403 Aug 31 05:11	11° ♄ 43'21	
asc. node	13402 Sep 24 07:22	12° ♄ 23'14		max. Earth dist.	13403 Sep 03 19:24	18° ♄ 17'10	1.36484 AU
					13403 Sep 09 21:43	0° ♄	
superior conj	13402 Sep 26 15:27	17° ♄ 10'53	0°22'00				
minimum elong	13402 Sep 26 14:16	17° ♄ 04'50	0°21'58	superior conj	13403 Sep 10 04:51	0° ♄ 35'19	-0°09'00
	13402 Oct 02 17:53	0° ♄		minimum elong	13403 Sep 10 05:25	0° ♄ 38'08	0°08'59
evening rise	13402 Oct 04 02:13	2° ♄ 49'46		behind sun begin	13403 Sep 10 00:03	0° ♄ 11'33	
	13402 Oct 19 08:30	0° ♄		behind sun end	13403 Sep 10 10:47	1° ♄ 04'45	
evening max el	13402 Oct 23 10:02	4° ♄ 40'42	21°04'45	asc. node	13403 Sep 11 03:55	2° ♄ 30'05	
desc. node	13402 Oct 27 04:31	7° ♄ 49'40		evening rise	13403 Sep 18 07:54	17° ♄ 02'30	
retrograde	13402 Nov 04 04:07	10° ♄ 31'12			13403 Sep 24 22:55	0° ♄	
evening set	13402 Nov 06 17:20	10° ♄ 15'51		evening max el	13403 Oct 05 16:42	15° ♄ 38'00	19°47'29
inferior conj	13402 Nov 15 16:06	6° ♄ 22'12	-5°17'09	desc. node	13403 Oct 14 01:56	20° ♄ 32'22	
minimum elong	13402 Nov 15 07:10	6° ♄ 34'49	5°14'28	retrograde	13403 Oct 15 19:44	20° ♄ 41'03	
min. Earth dist.	13402 Nov 16 07:10	6° ♄ 00'52	0.54520 AU	evening set	13403 Oct 17 17:50	20° ♄ 30'57	
morning rise	13402 Nov 23 21:27	2° ♄ 30'42		inferior conj	13403 Oct 26 13:50	16° ♄ 29'11	-3°47'57
direct	13402 Nov 27 23:16	1° ♄ 55'06		minimum elong	13403 Oct 26 04:28	16° ♄ 43'41	3°44'10
morning max el	13402 Dec 10 21:59	8° ♄ 09'33	22°51'41	min. Earth dist.	13403 Oct 28 15:53	15° ♄ 11'50	0.55170 AU
asc. node	13402 Dec 21 08:14	21° ♄ 27'14		morning rise	13403 Nov 03 13:30	12° ♄ 13'11	
	13402 Dec 26 06:48	0° ♄		direct	13403 Nov 08 12:32	11° ♄ 18'58	
morning set	13403 Jan 02 11:37	14° ♄ 28'29		morning max el	13403 Nov 22 08:01	18° ♄ 10'21	24°40'23
					13403 Dec 02 02:01	0° ♄	
superior conj	13403 Jan 09 10:37	29° ♄ 26'25	1°32'03	asc. node	13403 Dec 08 05:14	9° ♄ 55'41	
minimum elong	13403 Jan 09 12:09	29° ♄ 34'37	1°32'54	morning set	13403 Dec 17 23:30	29° ♄ 12'43	
	13403 Jan 09 16:54	0° ♄			13403 Dec 18 08:18	0° ♄	
max. Earth dist.	13403 Jan 12 19:10	6° ♄ 31'46	1.33612 AU				
evening rise	13403 Jan 17 09:49	15° ♄ 51'31		superior conj	13403 Dec 24 18:30	14° ♄ 04'30	1°37'42
desc. node	13403 Jan 23 03:31	26° ♄ 40'29		minimum elong	13403 Dec 24 18:57	14° ♄ 06'58	1°38'43
	13403 Jan 25 00:20	0° ♄		max. Earth dist.	13403 Dec 26 19:22	18° ♄ 31'04	1.32312 AU
	13403 Feb 14 02:26	0° ♄		evening rise	13404 Jan 01 03:12	29° ♄ 45'17	
evening max el	13403 Feb 21 00:44	7° ♄ 36'47	27°13'00		13404 Jan 01 06:05	0° ♄	

desc. node	13404 Jan 10 00:16	16° \approx 41'31		evening rise	13404 Dec 15 04:17	13° \approx 57'23	
	13404 Jan 18 01:54	0° \approx			13404 Dec 23 07:33	0° \approx	
evening max el	13404 Feb 03 12:28	20° \approx 45'55	27°33'11	desc. node	13404 Dec 26 21:08	6° \approx 19'05	
retrograde	13404 Feb 17 07:55	28° \approx 11'35			13405 Jan 12 15:10	0° \approx	
evening set	13404 Feb 24 05:11	25° \approx 47'12		evening max el	13405 Jan 15 20:27	3° \approx 17'39	27°21'39
min. Earth dist.	13404 Feb 27 23:33	22° \approx 36'12	0.63219 AU	retrograde	13405 Jan 29 19:19	10° \approx 35'36	
inferior conj	13404 Mar 01 18:40	19° \approx 48'59	-1°05'23	evening set	13405 Feb 05 16:13	8° \approx 26'49	
minimum elong	13404 Mar 01 20:48	19° \approx 43'39	1°04'13	min. Earth dist.	13405 Feb 09 10:56	5° \approx 38'03	0.61103 AU
asc. node	13404 Mar 05 02:53	16° \approx 42'56		inferior conj	13405 Feb 12 13:34	2° \approx 53'52	-2°24'24
morning rise	13404 Mar 08 14:55	14° \approx 35'20		minimum elong	13405 Feb 12 18:42	2° \approx 42'33	2°21'49
direct	13404 Mar 10 23:32	14° \approx 08'38			13405 Feb 16 02:32	30° \approx	
morning max el	13404 Mar 17 12:09	17° \approx 28'47	17°46'30	morning rise	13405 Feb 20 00:13	27° \approx 58'28	
	13404 Mar 26 13:54	0° \approx		asc. node	13405 Feb 20 00:20	27° \approx 58'23	
morning set	13404 Apr 02 18:56	12° \approx 16'27		direct	13405 Feb 22 03:09	27° \approx 39'36	
desc. node	13404 Apr 07 02:20	19° \approx 41'15			13405 Feb 27 20:02	0° \approx	
	13404 Apr 13 05:08	0° \approx		morning max el	13405 Mar 01 04:24	1° \approx 12'29	17°53'22
				morning set	13405 Mar 16 19:12	25° \approx 36'11	
superior conj	13404 Apr 15 04:02	3° \approx 13'40	-0°59'55		13405 Mar 19 05:25	0° \approx	
minimum elong	13404 Apr 14 22:00	2° \approx 48'52	0°59'33	desc. node	13405 Mar 24 22:53	10° \approx 13'50	
max. Earth dist.	13404 Apr 21 06:30	13° \approx 05'58	1.44586 AU				
evening rise	13404 Apr 30 08:56	27° \approx 19'33		superior conj	13405 Mar 27 11:41	14° \approx 38'42	-0°19'54
	13404 May 02 02:52	0° \approx		minimum elong	13405 Mar 27 09:53	14° \approx 30'58	0°19'47
	13404 May 22 18:41	0° \approx		max. Earth dist.	13405 Apr 03 20:54	27° \approx 04'05	1.42996 AU
evening max el	13404 May 29 13:49	8° \approx 02'37	20°43'53		13405 Apr 05 16:07	0° \approx	
asc. node	13404 May 31 23:52	10° \approx 14'33		evening rise	13405 Apr 10 05:10	7° \approx 14'51	
retrograde	13404 Jun 06 20:01	12° \approx 49'25			13405 Apr 25 08:03	0° \approx	
evening set	13404 Jun 11 00:10	11° \approx 10'52		evening max el	13405 May 12 09:15	21° \approx 52'17	21°58'16
inferior conj	13404 Jun 16 06:17	5° \approx 02'35	3°11'44	asc. node	13405 May 18 21:02	26° \approx 14'15	
minimum elong	13404 Jun 16 05:54	5° \approx 03'54	3°10'41	retrograde	13405 May 21 18:01	27° \approx 22'11	
min. Earth dist.	13404 Jun 16 20:06	4° \approx 14'51	0.68445 AU	evening set	13405 May 26 09:01	25° \approx 12'42	
	13404 Jun 20 04:23	30° \approx 11'40		inferior conj	13405 May 31 15:30	19° \approx 09'17	3°01'52
morning rise	13404 Jun 21 11:22	28° \approx 11'42'52		minimum elong	13405 May 31 14:14	19° \approx 13'42	3°00'43
direct	13404 Jun 26 20:21	26° \approx 11'20'59		min. Earth dist.	13405 May 31 16:08	19° \approx 11'04	0.68880 AU
desc. node	13404 Jul 04 02:53	29° \approx 11'34'37		morning rise	13405 Jun 05 19:15	12° \approx 11'55'26	
	13404 Jul 04 15:23	0° \approx		direct	13405 Jun 10 15:33	10° \approx 11'51'18	
morning max el	13404 Jul 07 17:13	2° \approx 50'53	23°46'37	morning max el	13405 Jun 20 05:12	16° \approx 11'28'57	22°17'36
	13404 Jul 28 10:29	0° \approx		desc. node	13405 Jun 21 00:01	17° \approx 11'17'11	
morning set	13404 Aug 11 20:56	23° \approx 10'24'47			13405 Jul 01 07:18	0° \approx	
max. Earth dist.	13404 Aug 15 16:57	29° \approx 10'40'40	1.38790 AU		13405 Jul 21 11:11	0° \approx	
	13404 Aug 15 21:21	0° \approx		morning set	13405 Jul 23 12:28	3° \approx 17'55	
				max. Earth dist.	13405 Jul 28 16:49	11° \approx 10'50'08	1.41120 AU
superior conj	13404 Aug 23 05:15	13° \approx 11'21'54	-0°43'14				
minimum elong	13404 Aug 23 08:20	13° \approx 11'36'26	0°43'06	superior conj	13405 Aug 05 12:30	25° \approx 10'21'40	-1°18'02
asc. node	13404 Aug 28 00:28	22° \approx 11'33'49		minimum elong	13405 Aug 05 18:19	25° \approx 10'47'38	1°17'53
	13404 Aug 31 19:46	0° \approx			13405 Aug 08 02:25	0° \approx	
evening rise	13404 Sep 01 07:04	0° \approx 55'17		asc. node	13405 Aug 14 21:04	12° \approx 11'31'14	
evening max el	13404 Sep 17 13:02	27° \approx 10'23'57	18°51'54	evening rise	13405 Aug 15 20:23	14° \approx 11'20'09	
	13404 Sep 20 17:16	0° \approx			13405 Aug 24 13:17	0° \approx	
retrograde	13404 Sep 26 02:24	1° \approx 11'41'40		evening max el	13405 Aug 31 19:29	9° \approx 10'52'26	18°17'36
evening set	13404 Sep 27 23:34	1° \approx 11'29'59		retrograde	13405 Sep 08 04:22	13° \approx 10'36'35	
desc. node	13404 Sep 29 23:25	0° \approx 11'53'55		evening set	13405 Sep 10 07:18	13° \approx 10'18'41	
	13404 Oct 01 21:10	30° \approx 11'40		desc. node	13405 Sep 16 20:56	9° \approx 10'23'08	
inferior conj	13404 Oct 06 05:17	27° \approx 10'10'57	-1°58'38	inferior conj	13405 Sep 17 18:29	8° \approx 10'38'33	-0°16'51
minimum elong	13404 Oct 06 00:18	27° \approx 10'19'51	1°56'18	minimum elong	13405 Sep 17 17:52	8° \approx 10'39'50	0°16'33
min. Earth dist.	13404 Oct 09 05:28	25° \approx 10'02'37	0.56648 AU	min. Earth dist.	13405 Sep 21 01:51	5° \approx 10'53'52	0.58687 AU
morning rise	13404 Oct 13 21:48	22° \approx 10'18'47		morning rise	13405 Sep 25 00:59	3° \approx 10'10'36	
direct	13404 Oct 19 15:35	20° \approx 10'59'46		direct	13405 Oct 01 08:36	1° \approx 10'24'08	
morning max el	13404 Nov 02 20:34	28° \approx 10'20'16	26°17'15	morning max el	13405 Oct 15 16:12	9° \approx 10'05'41	27°25'49
	13404 Nov 04 12:21	0° \approx			13405 Oct 31 15:42	0° \approx	
asc. node	13404 Nov 24 02:09	28° \approx 11'57'56		asc. node	13405 Nov 10 22:59	18° \approx 11'25'02	
	13404 Nov 24 15:13	0° \approx		morning set	13405 Nov 15 18:11	28° \approx 11'15'03	
morning set	13404 Dec 01 10:15	13° \approx 11'49'41			13405 Nov 16 13:52	0° \approx	
superior conj	13404 Dec 08 05:14	28° \approx 11'47'27	1°37'14	superior conj	13405 Nov 22 16:53	13° \approx 11'29'35	1°30'53
minimum elong	13404 Dec 08 04:36	28° \approx 11'43'57	1°38'14	minimum elong	13405 Nov 22 15:21	13° \approx 11'21'01	1°31'43
	13404 Dec 08 18:16	0° \approx		max. Earth dist.	13405 Nov 22 09:43	12° \approx 11'49'33	1.31207 AU
max. Earth dist.	13404 Dec 09 01:15	0° \approx		evening rise	13405 Nov 29 10:45	28° \approx 11'21'49	

	13405 Nov 30 05:10	0°♄			13406 Nov 22 08:14	0°♄		
desc. node	13405 Dec 13 18:05	25°♄23'59		desc. node	13406 Nov 30 15:10	13°♄43'51		
	13405 Dec 16 17:12	0°♄		evening max el	13406 Dec 10 14:57	25°♄51'45	25°17'21	
evening max el	13405 Dec 28 21:55	15°♄00'55	26°35'20		13406 Dec 15 19:42	0°♄		
retrograde	13406 Jan 11 20:54	22°♄08'25		retrograde	13406 Dec 24 11:01	2°♄48'45		
evening set	13406 Jan 18 10:02	20°♄23'02		evening set	13406 Dec 30 06:30	1°♄32'15		
min. Earth dist.	13406 Jan 22 11:46	17°♄45'58	0.58934 AU		13407 Jan 02 06:48	30°♄		
inferior conj	13406 Jan 25 15:34	15°♄21'00	-3°47'42	min. Earth dist.	13407 Jan 04 03:02	28°♄51'40	0.56933 AU	
minimum elong	13406 Jan 25 23:33	15°♄05'39	3°44'15	inferior conj	13407 Jan 06 21:33	27°♄01'20	-5°03'21	
morning rise	13406 Feb 02 16:04	10°♄46'35		minimum elong	13407 Jan 07 06:04	26°♄47'11	5°00'29	
direct	13406 Feb 04 17:01	10°♄31'52		morning rise	13407 Jan 15 08:03	22°♄49'14		
asc. node	13406 Feb 06 21:46	10°♄49'45		direct	13407 Jan 17 12:54	22°♄35'02		
morning max el	13406 Feb 12 15:28	14°♄27'15	18°19'42	asc. node	13407 Jan 24 19:08	25°♄21'37		
	13406 Feb 23 06:28	0°♄		morning max el	13407 Jan 26 17:24	27°♄02'23	19°07'27	
morning set	13406 Feb 28 09:36	9°♄34'08			13407 Jan 29 09:46	0°♄		
				morning set	13407 Feb 12 09:40	23°♄57'12		
superior conj	13406 Mar 09 17:37	27°♄04'48	0°16'35		13407 Feb 15 10:46	0°♄		
minimum elong	13406 Mar 09 18:49	27°♄10'19	0°16'32					
	13406 Mar 11 08:18	0°♄		superior conj	13407 Feb 20 17:28	10°♄20'10	0°46'46	
desc. node	13406 Mar 11 19:23	0°♄49'44		minimum elong	13407 Feb 20 20:02	10°♄32'33	0°46'48	
max. Earth dist.	13406 Mar 17 07:02	10°♄25'17	1.40972 AU	desc. node	13407 Feb 26 15:54	21°♄25'46		
evening rise	13406 Mar 21 20:11	18°♄01'34		max. Earth dist.	13407 Feb 27 13:54	23°♄04'57	1.38734 AU	
	13406 Mar 29 09:03	0°♄		evening rise	13407 Mar 03 08:26	29°♄43'20		
	13406 Apr 19 20:50	0°♄			13407 Mar 03 12:18	0°♄		
evening max el	13406 Apr 25 00:50	5°♄43'06	23°18'34		13407 Mar 22 17:36	0°♄		
retrograde	13406 May 05 13:35	11°♄55'11		evening max el	13407 Apr 07 14:31	19°♄35'14	24°38'31	
asc. node	13406 May 05 18:20	11°♄55'00		retrograde	13407 Apr 19 05:37	26°♄22'56		
evening set	13406 May 10 16:06	9°♄46'09		asc. node	13407 Apr 22 15:41	25°♄31'31		
min. Earth dist.	13406 May 15 12:53	4°♄01'55	0.68843 AU	evening set	13407 Apr 24 19:50	24°♄01'53		
inferior conj	13406 May 16 01:01	3°♄20'07	2°41'41	min. Earth dist.	13407 Apr 29 08:16	18°♄53'52	0.68345 AU	
minimum elong	13406 May 15 23:07	3°♄26'38	2°40'26	inferior conj	13407 Apr 30 08:57	17°♄31'36	2°11'23	
	13406 May 18 13:27	30°♄		minimum elong	13407 Apr 30 06:47	17°♄38'48	2°10'06	
morning rise	13406 May 21 06:04	27°♄13'32		morning rise	13407 May 05 17:56	11°♄33'27		
direct	13406 May 25 13:36	25°♄29'52		direct	13407 May 09 13:11	10°♄10'42		
	13406 Jun 02 15:16	0°♄		morning max el	13407 May 16 22:26	14°♄16'47	19°45'14	
morning max el	13406 Jun 02 22:11	0°♄16'59	20°55'21	desc. node	13407 May 25 17:56	25°♄08'20		
desc. node	13406 Jun 07 21:02	5°♄53'12			13407 May 29 03:47	0°♄		
	13406 Jun 24 23:48	0°♄		greatest brilliancy	13407 May 29 18:17	0°♄52'44	-0.6m	
morning set	13406 Jul 03 03:48	12°♄29'57		morning set	13407 Jun 12 05:29	21°♄09'54		
max. Earth dist.	13406 Jul 10 23:14	24°♄54'28	1.43181 AU		13407 Jun 17 22:35	0°♄		
	13406 Jul 14 01:58	0°♄		max. Earth dist.	13407 Jun 23 12:09	8°♄44'14	1.44738 AU	
superior conj	13406 Jul 17 22:08	6°♄24'19	-1°48'54	superior conj	13407 Jun 28 07:51	16°♄26'11	-2°09'18	
minimum elong	13406 Jul 18 05:20	6°♄54'40	1°49'06	minimum elong	13407 Jun 28 12:23	16°♄44'26	2°10'08	
evening rise	13406 Jul 29 19:27	27°♄05'49			13407 Jul 06 14:34	0°♄		
	13406 Jul 31 10:39	0°♄		evening rise	13407 Jul 11 23:12	8°♄59'57		
asc. node	13406 Aug 01 17:44	2°♄17'49		asc. node	13407 Jul 19 14:27	21°♄48'41		
evening max el	13406 Aug 15 07:46	22°♄53'00	18°03'21		13407 Jul 24 20:44	0°♄		
retrograde	13406 Aug 21 23:25	26°♄18'18		evening max el	13407 Jul 29 22:06	6°♄16'00	18°07'58	
evening set	13406 Aug 24 10:05	25°♄50'28		retrograde	13407 Aug 05 06:56	9°♄36'34		
inferior conj	13406 Aug 31 03:53	20°♄50'03	1°04'29	evening set	13407 Aug 08 01:52	8°♄55'51		
minimum elong	13406 Aug 31 05:43	20°♄45'38	1°03'35	inferior conj	13407 Aug 14 05:37	3°♄37'37	2°03'21	
min. Earth dist.	13406 Sep 03 07:01	17°♄49'43	0.60958 AU	minimum elong	13407 Aug 14 08:08	3°♄30'44	2°02'04	
desc. node	13406 Sep 03 18:27	17°♄23'45		min. Earth dist.	13407 Aug 16 21:56	0°♄42'44	0.63189 AU	
morning rise	13406 Sep 06 22:32	14°♄54'08			13407 Aug 17 14:31	30°♄		
direct	13406 Sep 13 13:25	12°♄42'28		morning rise	13407 Aug 20 12:28	27°♄23'56		
morning max el	13406 Sep 27 19:21	20°♄38'19	27°56'57	desc. node	13407 Aug 21 15:58	26°♄36'19		
	13406 Oct 05 21:30	0°♄		direct	13407 Aug 27 04:21	24°♄53'35		
	13406 Oct 24 15:25	0°♄			13407 Sep 07 00:08	0°♄		
asc. node	13406 Oct 28 19:45	8°♄09'55		morning max el	13407 Sep 10 03:50	2°♄55'23	27°49'24	
morning set	13406 Oct 30 21:24	12°♄24'10			13407 Sep 30 07:53	0°♄		
max. Earth dist.	13406 Nov 05 17:01	24°♄54'12	1.31428 AU	morning set	13407 Oct 14 17:34	26°♄10'38		
				asc. node	13407 Oct 15 16:23	28°♄06'17		
superior conj	13406 Nov 07 03:38	28°♄05'39	1°18'48		13407 Oct 16 14:33	0°♄		
minimum elong	13406 Nov 07 01:30	27°♄53'52	1°19'21	max. Earth dist.	13407 Oct 19 19:02	6°♄41'47	1.32183 AU	
	13406 Nov 08 00:13	0°♄						
evening rise	13406 Nov 13 20:31	12°♄53'12		superior conj	13407 Oct 22 11:27	12°♄29'25	1°01'03	

minimum elong	13407 Oct 22 09:11	12°♍17'06	1°01'18	minimum elong	13408 Oct 05 12:28	26°♊26'18	0°37'49
evening rise	13407 Oct 29 07:37	27°♍25'32			13408 Oct 07 04:41	0°♍	
	13407 Oct 30 12:32	0°♌		evening rise	13408 Oct 12 18:15	11°♍54'33	
	13407 Nov 16 17:08	0°♋			13408 Oct 21 22:35	0°♌	
desc. node	13407 Nov 17 12:21	1°♋00'44		evening max el	13408 Nov 02 13:17	16°♌03'55	21°57'56
evening max el	13407 Nov 22 01:21	6°♋01'29	23°39'04	desc. node	13408 Nov 03 09:37	16°♌52'11	
retrograde	13407 Dec 05 12:36	12°♋43'51		retrograde	13408 Nov 15 02:48	22°♌17'42	
evening set	13407 Dec 10 03:10	11°♋57'38		evening set	13408 Nov 18 07:37	21°♌54'51	
min. Earth dist.	13407 Dec 16 11:53	8°♋54'14	0.55381 AU	inferior conj	13408 Nov 27 01:36	18°♌00'14	-5°46'59
inferior conj	13407 Dec 18 07:00	7°♋50'32	-5°50'56	minimum elong	13408 Nov 26 20:25	18°♌07'30	5°45'27
minimum elong	13407 Dec 18 10:41	7°♋45'04	5°49'37	min. Earth dist.	13408 Nov 26 18:17	18°♌10'29	0.54575 AU
morning rise	13407 Dec 26 20:00	3°♋56'54		morning rise	13408 Dec 05 10:15	14°♌12'53	
direct	13407 Dec 29 12:56	3°♋38'52		direct	13408 Dec 08 23:07	13°♌45'16	
morning max el	13408 Jan 09 06:23	8°♋46'37	20°18'14	morning max el	13408 Dec 21 04:56	19°♌36'47	21°50'54
asc. node	13408 Jan 11 16:24	11°♋20'39		asc. node	13408 Dec 28 13:34	28°♌29'59	
	13408 Jan 23 09:13	0°♋			13408 Dec 29 13:42	0°♋	
morning set	13408 Jan 27 16:00	8°♋34'34		morning set	13409 Jan 11 02:04	23°♋19'01	
					13409 Jan 14 05:43	0°♋	
superior conj	13408 Feb 04 06:38	24°♋11'08	1°09'51	superior conj	13409 Jan 18 05:22	8°♋26'54	1°25'53
minimum elong	13408 Feb 04 09:21	24°♋24'46	1°10'11	minimum elong	13409 Jan 18 07:27	8°♋37'50	1°26'34
	13408 Feb 07 04:46	0°♌		max. Earth dist.	13409 Jan 22 09:02	17°♋00'36	1.34570 AU
max. Earth dist.	13408 Feb 09 20:54	5°♌09'55	1.36526 AU	evening rise	13409 Jan 26 15:19	25°♋23'23	
evening rise	13408 Feb 13 15:56	12°♌13'34			13409 Jan 29 02:08	0°♌	
desc. node	13408 Feb 13 12:27	11°♌57'43		desc. node	13409 Jan 30 09:03	2°♌21'39	
	13408 Feb 24 01:51	0°♍			13409 Feb 16 13:14	0°♍	
	13408 Mar 16 21:00	0°♌		evening max el	13409 Mar 02 17:36	17°♍09'53	26°49'14
evening max el	13408 Mar 20 03:53	3°♌26'07	25°51'13	retrograde	13409 Mar 15 23:05	24°♍34'59	
retrograde	13408 Apr 01 17:07	10°♌38'48		evening set	13409 Mar 22 10:25	22°♍02'43	
evening set	13408 Apr 07 18:34	8°♌09'32		asc. node	13409 Mar 26 10:33	18°♍03'59	
asc. node	13408 Apr 08 13:06	7°♌28'28		min. Earth dist.	13409 Mar 26 10:35	18°♍03'53	0.66053 AU
min. Earth dist.	13408 Apr 12 00:13	3°♌36'50	0.67403 AU	inferior conj	13409 Mar 28 11:56	15°♍39'32	0°38'57
inferior conj	13408 Apr 13 13:19	1°♌39'46	1°30'39	minimum elong	13409 Mar 28 10:56	15°♍42'29	0°38'22
minimum elong	13408 Apr 13 11:24	1°♌45'50	1°29'32	morning rise	13409 Apr 03 12:43	10°♍02'25	
	13408 Apr 14 21:26	30°♌♍		direct	13409 Apr 06 10:26	9°♍15'58	
morning rise	13408 Apr 19 04:52	25°♍51'16		morning max el	13409 Apr 12 19:43	12°♍37'49	18°11'58
direct	13408 Apr 22 12:45	24°♍48'00			13409 Apr 25 09:05	0°♌	
morning max el	13408 Apr 29 06:08	28°♍25'43	18°50'20	desc. node	13409 Apr 28 11:22	4°♌56'16	
	13408 Apr 30 18:14	0°♌		morning set	13409 May 02 00:18	10°♌37'18	
desc. node	13408 May 11 14:42	14°♌52'00			13409 May 14 04:30	0°♌	
greatest brilliancy	13408 May 13 01:39	17°♌04'45	-0.8m	superior conj	13409 May 17 05:51	4°♌47'50	-1°55'16
	13408 May 21 10:18	0°♌		minimum elong	13409 May 16 21:15	4°♌14'10	1°55'31
morning set	13408 May 21 14:33	0°♌16'35		max. Earth dist.	13409 May 19 01:07	7°♌37'02	1.45808 AU
max. Earth dist.	13408 Jun 05 05:29	23°♌03'28	1.45637 AU	evening rise	13409 Jun 02 07:22	29°♌48'31	
superior conj	13408 Jun 06 21:56	25°♌41'48	-2°12'22		13409 Jun 02 10:19	0°♌	
minimum elong	13408 Jun 06 19:13	25°♌31'13	2°13'21	greatest brilliancy	13409 Jun 13 18:41	17°♌30'07	-0.7m
	13408 Jun 09 15:41	0°♌		asc. node	13409 Jun 22 08:10	29°♌37'11	
evening rise	13408 Jun 22 03:13	19°♌53'10			13409 Jun 22 15:28	0°♌	
	13408 Jun 28 09:56	0°♌		evening max el	13409 Jun 25 20:53	3°♌38'34	19°10'28
asc. node	13408 Jul 05 11:16	10°♌57'55		retrograde	13409 Jul 02 19:02	7°♌29'06	
evening max el	13408 Jul 12 11:20	19°♌53'36	18°30'39	evening set	13409 Jul 06 07:41	6°♌16'53	
retrograde	13408 Jul 18 22:38	23°♌22'50		inferior conj	13409 Jul 11 18:22	0°♌28'35	3°04'13
evening set	13408 Jul 22 02:10	22°♌27'04		minimum elong	13409 Jul 11 19:36	0°♌24'35	3°03'08
inferior conj	13408 Jul 27 19:38	16°♌53'03	2°42'08		13409 Jul 12 03:11	30°♌♍	
minimum elong	13408 Jul 27 21:45	16°♌46'39	2°40'55	min. Earth dist.	13409 Jul 13 06:20	28°♌32'22	0.66803 AU
min. Earth dist.	13408 Jul 29 22:11	14°♌21'18	0.65180 AU	morning rise	13409 Jul 17 06:55	24°♌04'27	
morning rise	13408 Aug 02 16:12	10°♌30'51		direct	13409 Jul 23 10:07	21°♌25'16	
desc. node	13408 Aug 07 13:25	8°♌00'18		desc. node	13409 Jul 25 10:49	21°♌40'27	
direct	13408 Aug 09 03:47	7°♌51'05		morning max el	13409 Aug 05 01:33	28°♌58'28	26°01'02
morning max el	13408 Aug 22 14:41	15°♌46'23	27°08'03		13409 Aug 06 01:20	0°♌	
	13408 Sep 03 07:54	0°♌			13409 Aug 28 03:22	0°♌	
	13408 Sep 22 02:40	0°♌		morning set	13409 Sep 10 01:14	22°♌07'48	
morning set	13408 Sep 27 04:00	9°♌28'16		max. Earth dist.	13409 Sep 13 19:24	29°♌12'58	1.35269 AU
max. Earth dist.	13408 Oct 01 12:18	18°♌06'32	1.33476 AU		13409 Sep 14 05:09	0°♌	
asc. node	13408 Oct 01 12:58	18°♌09'55		asc. node	13409 Sep 18 09:31	8°♌16'19	
superior conj	13408 Oct 05 14:15	26°♌35'45	0°37'47				

superior conj	13409 Sep 19 09:25	10° Ω 17'22	0°09'23	morning set	13410 Aug 23 05:03	3° η 59'09	
minimum elong	13409 Sep 19 08:53	10° Ω 14'38	0°09'22	max. Earth dist.	13410 Aug 26 19:04	10° η 22'55	1.37449 AU
behind sun begin	13409 Sep 19 03:54	9° Ω 49'21					
behind sun end	13409 Sep 19 13:51	10° Ω 39'58		superior conj	13410 Sep 02 17:46	23° η 26'27	-0°23'14
evening rise	13409 Sep 27 02:21	26° Ω 14'24		minimum elong	13410 Sep 02 19:19	23° η 34'00	0°23'10
	13409 Sep 28 22:17	0° \mathcal{M}		asc. node	13410 Sep 05 06:04	28° η 21'57	
evening max el	13409 Oct 15 11:52	26° \mathcal{M} 34'56	20°29'23		13410 Sep 06 01:52	0° Ω	
	13409 Oct 19 17:32	0° \mathcal{A}		evening rise	13410 Sep 11 05:36	10° Ω 19'08	
desc. node	13409 Oct 21 07:00	0° \mathcal{A} 51'02			13410 Sep 21 22:08	0° \mathcal{M}	
retrograde	13409 Oct 26 13:37	2° \mathcal{A} 05'08		evening max el	13410 Sep 28 00:37	7° \mathcal{M} 52'35	19°21'09
evening set	13409 Oct 28 18:26	1° \mathcal{A} 53'05		retrograde	13410 Oct 07 10:34	12° \mathcal{M} 35'14	
	13409 Nov 03 01:24	30° $\mathcal{R}\mathcal{M}$		desc. node	13410 Oct 08 04:28	12° \mathcal{M} 33'33	
inferior conj	13409 Nov 06 17:53	27° \mathcal{M} 57'51	-4°43'54	evening set	13410 Oct 09 07:14	12° \mathcal{M} 24'59	
minimum elong	13409 Nov 06 07:50	28° \mathcal{M} 12'27	4°40'26	inferior conj	13410 Oct 17 22:05	8° \mathcal{M} 16'24	-3°02'06
min. Earth dist.	13409 Nov 08 01:10	27° \mathcal{M} 12'23	0.54689 AU	minimum elong	13410 Oct 17 14:19	8° \mathcal{M} 29'08	2°58'41
morning rise	13409 Nov 14 20:49	23° \mathcal{M} 58'07		min. Earth dist.	13410 Oct 20 11:17	6° \mathcal{M} 36'31	0.55713 AU
direct	13409 Nov 19 08:10	23° \mathcal{M} 15'04		morning rise	13410 Oct 25 19:05	3° \mathcal{M} 46'09	
morning max el	13409 Dec 02 16:54	29° \mathcal{M} 46'12	23°38'01	direct	13410 Oct 31 02:40	2° \mathcal{M} 42'09	
	13409 Dec 02 22:42	0° \mathcal{A}		morning max el	13410 Nov 14 02:58	9° \mathcal{M} 45'58	25°24'12
asc. node	13409 Dec 15 10:38	16° \mathcal{A} 33'32			13410 Nov 29 07:18	0° \mathcal{A}	
	13409 Dec 22 16:39	0° \mathcal{B}		asc. node	13410 Dec 02 07:36	5° \mathcal{A} 17'37	
morning set	13409 Dec 26 13:49	8° \mathcal{B} 04'56		morning set	13410 Dec 11 01:27	22° \mathcal{A} 46'45	
					13410 Dec 14 08:54	0° \mathcal{B}	
superior conj	13410 Jan 02 10:38	22° \mathcal{B} 58'59	1°35'13	superior conj	13410 Dec 17 19:58	7° \mathcal{B} 39'40	1°38'14
minimum elong	13410 Jan 02 11:43	23° \mathcal{B} 04'52	1°36'09	minimum elong	13410 Dec 17 19:57	7° \mathcal{B} 39'34	1°39'16
max. Earth dist.	13410 Jan 05 05:10	28° \mathcal{B} 55'46	1.33007 AU	max. Earth dist.	13410 Dec 19 08:23	11° \mathcal{B} 00'23	1.31911 AU
	13410 Jan 05 17:18	0° \approx		evening rise	13410 Dec 25 00:02	23° \mathcal{B} 06'07	
evening rise	13410 Jan 10 03:04	9° \approx 03'45			13410 Dec 28 10:02	0° \approx	
desc. node	13410 Jan 17 05:44	22° \approx 32'57		desc. node	13411 Jan 04 02:30	12° \approx 25'04	
	13410 Jan 21 12:55	0° \mathcal{H}			13411 Jan 15 07:18	0° \mathcal{H}	
	13410 Feb 12 15:49	0° \mathcal{Y}		evening max el	13411 Jan 26 17:25	13° \mathcal{H} 31'41	27°32'24
evening max el	13410 Feb 13 06:51	0° \mathcal{Y} 36'33	27°25'13	retrograde	13411 Feb 09 14:21	20° \mathcal{H} 53'43	
retrograde	13410 Feb 26 22:30	8° \mathcal{Y} 03'26		evening set	13411 Feb 16 12:25	18° \mathcal{H} 35'02	
evening set	13410 Mar 05 17:16	5° \mathcal{Y} 34'19		min. Earth dist.	13411 Feb 20 06:28	15° \mathcal{H} 34'38	0.62345 AU
min. Earth dist.	13410 Mar 09 13:19	2° \mathcal{Y} 06'59	0.64343 AU	inferior conj	13411 Feb 23 05:18	12° \mathcal{H} 47'03	-1°37'54
	13410 Mar 11 13:14	30° $\mathcal{R}\mathcal{H}$		minimum elong	13411 Feb 23 08:38	12° \mathcal{H} 39'07	1°36'07
inferior conj	13410 Mar 12 02:18	29° \mathcal{H} 25'00	-0°24'04	asc. node	13411 Feb 28 05:30	8° \mathcal{H} 40'20	
minimum elong	13410 Mar 12 03:02	29° \mathcal{H} 23'03	0°23'38	morning rise	13411 Mar 02 07:34	7° \mathcal{H} 40'44	
asc. node	13410 Mar 13 08:01	28° \mathcal{H} 07'04		direct	13411 Mar 04 13:36	7° \mathcal{H} 17'41	
morning rise	13410 Mar 18 14:48	24° \mathcal{H} 01'43		morning max el	13411 Mar 11 06:20	10° \mathcal{H} 41'39	17°47'09
direct	13410 Mar 21 03:48	23° \mathcal{H} 28'44			13411 Mar 24 05:13	0° \mathcal{Y}	
morning max el	13410 Mar 27 12:49	26° \mathcal{H} 46'18	17°50'46	morning set	13411 Mar 27 03:57	5° \mathcal{Y} 11'06	
	13410 Mar 30 09:22	0° \mathcal{Y}		desc. node	13411 Apr 02 04:30	15° \mathcal{Y} 44'12	
morning set	13410 Apr 13 14:23	22° \mathcal{Y} 21'06					
desc. node	13410 Apr 15 07:58	25° \mathcal{Y} 15'31		superior conj	13411 Apr 07 18:51	25° \mathcal{Y} 16'36	-0°42'47
	13410 Apr 18 04:08	0° \mathcal{B}		minimum elong	13411 Apr 07 14:40	24° \mathcal{Y} 59'06	0°42'30
superior conj	13410 Apr 27 01:12	14° \mathcal{B} 30'29	-1°22'28		13411 Apr 10 15:03	0° \mathcal{B}	
minimum elong	13410 Apr 26 17:00	13° \mathcal{B} 57'33	1°22'08	max. Earth dist.	13411 Apr 14 14:16	6° \mathcal{B} 27'38	1.43982 AU
max. Earth dist.	13410 May 01 21:02	22° \mathcal{B} 11'12	1.45239 AU	evening rise	13411 Apr 22 09:49	18° \mathcal{B} 47'20	
	13410 May 06 20:51	0° \mathcal{I}			13411 Apr 29 18:37	0° \mathcal{I}	
evening rise	13410 May 12 20:28	9° \mathcal{I} 13'36			13411 May 21 18:33	0° \mathcal{E}	
	13410 May 26 16:11	0° \mathcal{E}		evening max el	13411 May 22 23:28	1° \mathcal{E} 15'19	21°14'23
greatest brilliancy	13410 May 27 19:45	1° \mathcal{E} 40'13	-0.6m	asc. node	13411 May 27 02:19	4° \mathcal{E} 43'42	
evening max el	13410 Jun 09 01:07	17° \mathcal{E} 26'43	20°05'52	retrograde	13411 May 31 16:25	6° \mathcal{E} 20'00	
asc. node	13410 Jun 09 05:10	17° \mathcal{E} 36'48		evening set	13411 Jun 05 01:11	4° \mathcal{E} 34'16	
retrograde	13410 Jun 16 17:38	21° \mathcal{E} 50'02			13411 Jun 09 02:32	30° $\mathcal{R}\mathcal{I}$	
evening set	13410 Jun 20 16:01	20° \mathcal{E} 20'52		inferior conj	13411 Jun 10 07:10	28° \mathcal{I} 21'18	3°08'49
inferior conj	13410 Jun 25 23:01	14° \mathcal{E} 19'27	3°12'26	minimum elong	13411 Jun 10 06:23	28° \mathcal{I} 24'00	3°07'45
minimum elong	13410 Jun 25 23:13	14° \mathcal{E} 18'46	3°11'25	min. Earth dist.	13411 Jun 10 15:13	27° \mathcal{I} 53'17	0.68692 AU
min. Earth dist.	13410 Jun 26 20:40	13° \mathcal{E} 05'57	0.67987 AU	morning rise	13411 Jun 15 11:23	22° \mathcal{I} 04'03	
morning rise	13410 Jul 01 06:05	7° \mathcal{E} 57'32		direct	13411 Jun 20 14:58	19° \mathcal{I} 49'32	
direct	13410 Jul 06 22:12	5° \mathcal{E} 27'33		desc. node	13411 Jun 29 05:21	24° \mathcal{I} 18'17	
desc. node	13410 Jul 12 08:09	7° \mathcal{E} 15'29		morning max el	13411 Jun 30 22:36	25° \mathcal{I} 57'16	23°08'24
morning max el	13410 Jul 18 11:50	12° \mathcal{E} 23'28	24°37'53		13411 Jul 04 15:26	0° \mathcal{E}	
	13410 Aug 01 15:53	0° \mathcal{Q}			13411 Jul 26 04:16	0° \mathcal{Q}	
	13410 Aug 20 21:49	0° \mathcal{M}		morning set	13411 Aug 04 10:55	14° \mathcal{Q} 51'59	

max. Earth dist.	13411 Aug 08 17:20	22°Ω05'20	1.39796 AU	morning set	13412 Jul 14 15:42	24°Ω38'56	
	13411 Aug 13 05:24	0°Π			13412 Jul 17 23:43	0°Ω	
				max. Earth dist.	13412 Jul 20 19:30	4°Ω37'15	1.42039 AU
superior conj	13411 Aug 16 11:25	5°Π54'06	-0°58'09				
minimum elong	13411 Aug 16 15:42	6°Π13'49	0°57'59	superior conj	13412 Jul 28 09:53	17°Ω30'00	-1°31'59
asc. node	13411 Aug 23 02:40	18°Π23'28		minimum elong	13412 Jul 28 16:36	17°Ω59'15	1°31'55
evening rise	13411 Aug 26 01:05	24°Π01'27			13412 Aug 04 10:30	0°Π	
	13411 Aug 29 04:20	0°Ω		evening rise	13412 Aug 08 08:57	7°Π11'00	
evening max el	13411 Sep 11 01:41	19°Ω57'19	18°34'46	asc. node	13412 Aug 08 23:18	8°Π16'40	
retrograde	13411 Sep 19 01:49	23°Ω59'34			13412 Aug 22 02:17	0°Ω	
evening set	13411 Sep 21 00:51	23°Ω45'49		evening max el	13412 Aug 24 11:05	2°Ω40'17	18°09'11
desc. node	13411 Sep 25 01:59	22°Ω00'54		retrograde	13412 Aug 31 11:28	6°Ω14'52	
inferior conj	13411 Sep 28 22:45	19°Ω17'37	-1°13'29	evening set	13412 Sep 02 17:27	5°Ω53'17	
minimum elong	13411 Sep 28 19:49	19°Ω23'15	1°12'03	inferior conj	13412 Sep 09 20:56	1°Ω04'33	0°20'27
min. Earth dist.	13411 Oct 02 03:31	16°Ω51'40	0.57456 AU	minimum elong	13412 Sep 09 21:37	1°Ω03'03	0°20'06
morning rise	13411 Oct 06 11:18	14°Ω09'25		desc. node	13412 Sep 10 23:32	0°Ω04'53	
direct	13411 Oct 12 11:24	12°Ω39'06			13412 Sep 11 01:43	30°RΠ	
morning max el	13411 Oct 26 18:31	20°Ω09'31	26°50'48	min. Earth dist.	13412 Sep 13 03:42	28°Π10'11	0.59635 AU
	13411 Nov 04 05:30	0°Π		morning rise	13412 Sep 16 22:26	25°Π23'10	
asc. node	13411 Nov 19 04:29	24°Π31'36		direct	13412 Sep 23 09:53	23°Π25'11	
	13411 Nov 21 22:53	0°♂			13412 Oct 06 10:09	0°Ω	
morning set	13411 Nov 25 11:17	7°♂19'56		morning max el	13412 Oct 07 17:37	1°Ω14'48	27°43'55
					13412 Oct 28 11:58	0°Π	
superior conj	13411 Dec 02 07:21	22°♂23'14	1°35'15	asc. node	13412 Nov 05 01:16	14°Π06'37	
minimum elong	13411 Dec 02 06:18	22°♂17'26	1°36'12	morning set	13412 Nov 08 17:25	21°Π38'43	
max. Earth dist.	13411 Dec 02 15:56	23°♂11'11	1.31311 AU		13412 Nov 12 14:29	0°♂	
	13411 Dec 05 17:36	0°Ω		max. Earth dist.	13412 Nov 15 00:10	5°♂19'11	1.31229 AU
evening rise	13411 Dec 09 03:41	7°Ω24'14					
	13411 Dec 20 21:21	0°≈		superior conj	13412 Nov 15 18:49	7°♂03'09	1°26'27
desc. node	13411 Dec 21 23:25	1°≈50'24		minimum elong	13412 Nov 15 17:00	6°♂52'57	1°27'11
evening max el	13412 Jan 08 22:45	25°≈43'20	27°06'03	evening rise	13412 Nov 22 11:44	21°♂51'37	
	13412 Jan 14 06:31	0°♂			13412 Nov 26 09:03	0°Ω	
retrograde	13412 Jan 22 21:49	2°♂57'17		desc. node	13412 Dec 07 20:27	20°Ω37'46	
evening set	13412 Jan 29 16:40	0°♂57'09			13412 Dec 14 11:50	0°≈	
	13412 Jan 31 04:53	30°R≈		evening max el	13412 Dec 20 20:32	7°≈03'15	26°05'35
min. Earth dist.	13412 Feb 02 13:06	28°≈15'15	0.60183 AU	retrograde	13413 Jan 03 19:08	14°≈07'17	
inferior conj	13412 Feb 05 17:27	25°≈36'57	-2°59'40	evening set	13413 Jan 10 01:56	12°≈33'37	
minimum elong	13412 Feb 05 23:54	25°≈23'31	2°56'36	min. Earth dist.	13413 Jan 14 09:44	9°≈57'04	0.58041 AU
morning rise	13412 Feb 13 10:16	20°≈50'33		inferior conj	13413 Jan 17 11:10	7°≈44'49	-4°21'45
direct	13412 Feb 15 11:51	20°≈33'53		minimum elong	13413 Jan 17 19:51	7°≈29'08	4°18'21
asc. node	13412 Feb 15 02:56	20°≈34'26		morning rise	13413 Jan 25 16:40	3°≈20'07	
morning max el	13412 Feb 22 20:56	24°≈14'46	18°02'05	direct	13413 Jan 27 18:10	3°≈06'14	
	13412 Feb 27 13:05	0°♂		asc. node	13413 Feb 01 00:19	4°≈08'59	
morning set	13412 Mar 09 10:49	18°♂48'38		morning max el	13413 Feb 05 04:40	7°≈14'21	18°37'17
	13412 Mar 15 12:41	0°♀			13413 Feb 19 16:45	0°♂	
desc. node	13412 Mar 19 01:00	6°♀18'31		morning set	13413 Feb 21 05:47	2°♂58'34	
superior conj	13412 Mar 19 12:27	7°♀09'12	-0°03'49	superior conj	13413 Mar 02 02:36	19°♂58'04	0°30'12
minimum elong	13412 Mar 19 12:08	7°♀07'48	0°03'47	minimum elong	13413 Mar 02 04:34	20°♂07'16	0°30'10
behind sun begin	13412 Mar 19 04:27	6°♀33'47		desc. node	13413 Mar 05 21:31	26°♂55'05	
behind sun end	13412 Mar 19 19:50	7°♀41'44			13413 Mar 07 14:54	0°♀	
max. Earth dist.	13412 Mar 27 02:43	20°♀10'34	1.42178 AU	max. Earth dist.	13413 Mar 09 10:39	3°♀12'11	1.40029 AU
evening rise	13412 Apr 01 13:14	29°♀02'30		evening rise	13413 Mar 13 13:20	10°♀13'22	
	13412 Apr 02 03:39	0°♂			13413 Mar 26 01:29	0°♂	
	13412 Apr 22 08:54	0°Π		evening max el	13413 Apr 17 07:20	28°♂56'16	23°53'04
evening max el	13412 May 04 16:51	15°Π04'33	22°32'00		13413 Apr 18 09:43	0°Π	
asc. node	13412 May 12 23:34	20°Π41'52		retrograde	13413 Apr 28 08:00	5°Π25'09	
retrograde	13412 May 14 13:41	20°Π53'28		asc. node	13413 Apr 29 20:53	5°Π14'30	
evening set	13412 May 19 09:30	18°Π52'25		evening set	13413 May 03 15:22	3°Π10'50	
inferior conj	13412 May 24 16:45	12°Π30'07	2°54'33		13413 May 06 14:26	30°R♂	
minimum elong	13412 May 24 15:11	12°Π35'34	2°53'21	min. Earth dist.	13413 May 08 08:25	27°♂41'47	0.68683 AU
min. Earth dist.	13412 May 24 11:51	12°Π47'11	0.68920 AU	inferior conj	13413 May 09 01:51	26°♂42'20	2°30'07
morning rise	13412 May 29 20:44	6°Π19'09		minimum elong	13413 May 08 23:47	26°♂49'21	2°28'50
direct	13412 Jun 03 11:27	4°Π23'46		morning rise	13413 May 14 08:14	20°♂38'56	
morning max el	13412 Jun 12 12:28	9°Π39'38	21°41'20	direct	13413 May 18 10:24	19°♂04'11	
desc. node	13412 Jun 15 02:25	12°Π25'35		morning max el	13413 May 26 08:20	23°♂32'52	20°23'43
	13412 Jun 28 09:29	0°Ω			13413 May 31 22:39	0°Π	

desc. node	13413 Jun 01 23:22	1° Π 20'03		morning set	13414 Jun 03 01:11	12° Π 15'18	
	13413 Jun 21 16:07	0° \mathfrak{C}			13414 Jun 14 11:28	0° \mathfrak{C}	
morning set	13413 Jun 23 23:08	3° \mathfrak{C} 31'35		max. Earth dist.	13414 Jun 15 19:33	2° \mathfrak{C} 06'00	1.45216 AU
max. Earth dist.	13413 Jul 03 04:19	18° \mathfrak{C} 00'58	1.43915 AU				
				superior conj	13414 Jun 19 09:44	7° \mathfrak{C} 46'36	-2°13'01
superior conj	13413 Jul 09 09:26	28° \mathfrak{C} 07'10	-1°59'16	minimum elong	13414 Jun 19 11:33	7° \mathfrak{C} 53'48	2°14'02
minimum elong	13413 Jul 09 16:08	28° \mathfrak{C} 34'51	1°59'45		13414 Jul 03 02:41	0° \mathcal{O}	
	13413 Jul 10 12:41	0° \mathcal{O}		evening rise	13414 Jul 03 18:25	1° \mathcal{O} 05'00	
evening rise	13413 Jul 22 00:27	19° \mathcal{O} 36'20		asc. node	13414 Jul 13 16:45	17° \mathcal{O} 20'02	
asc. node	13413 Jul 26 20:00	27° \mathcal{O} 57'30		evening max el	13414 Jul 22 15:00	29° \mathcal{O} 22'31	18°15'28
	13413 Jul 28 00:40	0° \mathfrak{M}			13414 Jul 23 06:48	0° \mathfrak{M}	
evening max el	13413 Aug 08 00:44	15° \mathfrak{M} 52'04	18°03'05	retrograde	13414 Jul 28 23:36	2° \mathfrak{M} 44'49	
retrograde	13413 Aug 14 12:12	19° \mathfrak{M} 13'21		evening set	13414 Jul 31 22:16	1° \mathfrak{M} 57'45	
evening set	13413 Aug 17 02:23	18° \mathfrak{M} 40'22			13414 Aug 03 14:36	30° \mathcal{R} \mathcal{O}	
inferior conj	13413 Aug 23 13:47	13° \mathfrak{M} 32'23	1°32'06	inferior conj	13414 Aug 06 21:11	26° \mathcal{O} 32'32	2°22'01
minimum elong	13413 Aug 23 16:05	13° \mathfrak{M} 26'31	1°30'57	minimum elong	13414 Aug 06 23:38	26° \mathcal{O} 25'33	2°20'45
min. Earth dist.	13413 Aug 26 13:01	10° \mathfrak{M} 31'45	0.61932 AU	min. Earth dist.	13414 Aug 09 07:49	23° \mathcal{O} 45'53	0.64083 AU
desc. node	13413 Aug 28 21:03	8° \mathfrak{M} 25'20		morning rise	13414 Aug 12 23:28	20° \mathcal{O} 14'34	
morning rise	13413 Aug 30 03:19	7° \mathfrak{M} 27'49		desc. node	13414 Aug 15 18:32	18° \mathcal{O} 30'03	
direct	13413 Sep 05 19:36	5° \mathfrak{M} 06'50		direct	13414 Aug 19 14:11	17° \mathcal{O} 39'07	
morning max el	13413 Sep 19 23:09	13° \mathfrak{M} 06'31	27°58'08	morning max el	13414 Sep 02 08:47	25° \mathcal{O} 38'53	27°35'28
	13413 Oct 03 11:32	0° \mathfrak{L}			13414 Sep 06 08:53	0° \mathfrak{M}	
	13413 Oct 20 22:39	0° \mathfrak{M}			13414 Sep 27 00:21	0° \mathfrak{L}	
asc. node	13413 Oct 22 21:58	3° \mathfrak{M} 56'45		morning set	13414 Oct 07 10:16	19° \mathfrak{L} 13'31	
morning set	13413 Oct 23 17:53	5° \mathfrak{M} 38'25		asc. node	13414 Oct 09 18:35	23° \mathfrak{L} 56'57	
max. Earth dist.	13413 Oct 29 05:24	17° \mathfrak{M} 16'04	1.31682 AU	max. Earth dist.	13414 Oct 12 04:08	28° \mathfrak{L} 54'51	1.32671 AU
					13414 Oct 12 16:32	0° \mathfrak{M}	
superior conj	13413 Oct 31 04:33	21° \mathfrak{M} 34'31	1°11'57				
minimum elong	13413 Oct 31 02:18	21° \mathfrak{M} 22'08	1°12'22	superior conj	13414 Oct 15 10:32	5° \mathfrak{M} 51'56	0°51'50
	13413 Nov 04 00:01	0° \mathfrak{X}		minimum elong	13414 Oct 15 08:23	5° \mathfrak{M} 40'23	0°51'59
evening rise	13413 Nov 06 22:16	6° \mathfrak{X} 23'41		evening rise	13414 Oct 22 09:25	20° \mathfrak{M} 55'46	
	13413 Nov 19 02:49	0° \mathfrak{Z}			13414 Oct 26 17:58	0° \mathfrak{X}	
desc. node	13413 Nov 24 17:34	8° \mathfrak{Z} 32'59		desc. node	13414 Nov 11 14:48	25° \mathfrak{X} 17'00	
evening max el	13413 Dec 02 10:18	17° \mathfrak{Z} 34'06	24°37'08	evening max el	13414 Nov 13 20:17	27° \mathfrak{X} 36'45	22°55'21
retrograde	13413 Dec 16 03:56	24° \mathfrak{Z} 25'29			13414 Nov 16 13:32	0° \mathfrak{Z}	
evening set	13413 Dec 21 12:07	23° \mathfrak{Z} 22'32		retrograde	13414 Nov 26 23:42	4° \mathfrak{Z} 08'22	
min. Earth dist.	13413 Dec 26 22:05	20° \mathfrak{Z} 34'23	0.56194 AU	evening set	13414 Dec 01 00:00	3° \mathfrak{Z} 33'22	
inferior conj	13413 Dec 29 08:09	19° \mathfrak{Z} 03'05	-5°28'31	min. Earth dist.	13414 Dec 08 05:13	0° \mathfrak{Z} 14'51	0.54934 AU
minimum elong	13413 Dec 29 15:22	18° \mathfrak{Z} 51'43	5°26'19		13414 Dec 08 15:39	30° \mathcal{R} \mathfrak{X}	
morning rise	13414 Jan 06 20:41	14° \mathfrak{Z} 59'19		inferior conj	13414 Dec 09 10:11	29° \mathfrak{X} 33'30	-5°56'37
direct	13414 Jan 09 05:33	14° \mathfrak{Z} 44'04		minimum elong	13414 Dec 09 10:13	29° \mathfrak{X} 33'28	5°55'35
asc. node	13414 Jan 18 21:38	19° \mathfrak{Z} 19'25		morning rise	13414 Dec 17 21:53	25° \mathfrak{X} 44'39	
morning max el	13414 Jan 19 01:23	19° \mathfrak{Z} 28'24	19°34'44	direct	13414 Dec 20 22:54	25° \mathfrak{X} 23'05	
	13414 Jan 27 00:43	0° \approx			13414 Dec 31 10:36	0° \mathfrak{Z}	
morning set	13414 Feb 05 08:53	17° \approx 28'47		morning max el	13415 Jan 01 08:02	0° \mathfrak{Z} 49'07	20°55'17
	13414 Feb 11 14:10	0° \mathfrak{X}		asc. node	13415 Jan 05 18:51	5° \mathfrak{Z} 50'41	
					13415 Jan 19 15:47	0° \approx	
superior conj	13414 Feb 13 08:34	3° \mathfrak{X} 29'43	0°57'26	morning set	13415 Jan 20 17:06	2° \approx 10'41	
minimum elong	13414 Feb 13 11:20	3° \mathfrak{X} 43'14	0°57'35				
max. Earth dist.	13414 Feb 19 16:58	15° \mathfrak{X} 35'16	1.37776 AU	superior conj	13415 Jan 28 02:15	17° \approx 32'47	1°17'30
desc. node	13414 Feb 20 18:01	17° \mathfrak{X} 29'50		minimum elong	13415 Jan 28 04:45	17° \approx 45'40	1°17'58
evening rise	13414 Feb 23 10:10	22° \mathfrak{X} 17'10		max. Earth dist.	13415 Feb 02 02:08	27° \approx 34'03	1.35653 AU
	13414 Feb 27 21:48	0° \mathfrak{Y}			13415 Feb 03 08:15	0° \mathfrak{X}	
	13414 Mar 19 22:09	0° \mathfrak{B}		evening rise	13415 Feb 06 00:54	5° \mathfrak{X} 05'47	
evening max el	13414 Mar 30 20:57	12° \mathfrak{B} 49'26	25°10'52	desc. node	13415 Feb 07 14:36	7° \mathfrak{X} 59'17	
retrograde	13414 Apr 11 22:06	19° \mathfrak{B} 48'45			13415 Feb 20 18:18	0° \mathfrak{Y}	
asc. node	13414 Apr 16 18:15	18° \mathfrak{B} 08'34		evening max el	13415 Mar 13 10:37	26° \mathfrak{Y} 39'07	26°18'06
evening set	13414 Apr 17 17:09	17° \mathfrak{B} 23'59			13415 Mar 17 05:37	0° \mathfrak{B}	
min. Earth dist.	13414 Apr 22 02:38	12° \mathfrak{B} 30'57	0.67999 AU	retrograde	13415 Mar 26 07:10	3° \mathfrak{B} 57'41	
inferior conj	13414 Apr 23 08:31	10° \mathfrak{B} 53'25	1°55'26	evening set	13415 Apr 01 13:10	1° \mathfrak{B} 26'27	
minimum elong	13414 Apr 23 06:23	11° \mathfrak{B} 00'23	1°54'11		13415 Apr 03 02:59	30° \mathcal{R} \mathfrak{Y}	
morning rise	13414 Apr 28 19:57	4° \mathfrak{B} 58'59		asc. node	13415 Apr 03 15:40	29° \mathfrak{Y} 27'17	
direct	13414 May 02 10:19	3° \mathfrak{B} 44'34		min. Earth dist.	13415 Apr 05 16:22	27° \mathfrak{Y} 08'33	0.66885 AU
morning max el	13414 May 09 11:43	7° \mathfrak{B} 36'51	19°19'51	inferior conj	13415 Apr 07 10:43	24° \mathfrak{Y} 58'58	1°10'07
desc. node	13414 May 19 20:11	20° \mathfrak{B} 48'32		minimum elong	13415 Apr 07 09:06	25° \mathfrak{Y} 03'57	1°09'11
greatest brilliancy	13414 May 22 05:39	24° \mathfrak{B} 19'01	-0.7m	morning rise	13415 Apr 13 05:53	19° \mathfrak{Y} 15'09	
	13414 May 26 00:41	0° \mathfrak{I}		direct	13415 Apr 16 09:23	18° \mathfrak{Y} 19'16	

morning max el	13415 Apr 22 22:11	21° Υ 48'18	18°31'58	morning rise	13416 Mar 27 11:38	3° Υ 21'59	
	13415 Apr 29 13:50	0° \mathcal{B}		direct	13416 Mar 30 05:27	2° Υ 41'45	
desc. node	13415 May 06 16:54	10° \mathcal{B} 41'58		morning max el	13416 Apr 05 13:41	6° Υ 00'15	18°00'55
morning set	13415 May 13 19:30	21° \mathcal{B} 50'42			13416 Apr 22 00:31	0° \mathcal{B}	
	13415 May 19 00:03	0° Π		desc. node	13416 Apr 22 13:33	0° \mathcal{B} 53'18	
				morning set	13416 Apr 23 17:32	2° \mathcal{B} 47'50	
superior conj	13415 May 29 19:00	16° Π 52'14	-2°07'28	superior conj	13416 May 08 05:55	26° \mathcal{B} 09'32	-1°42'47
minimum elong	13415 May 29 13:10	16° Π 29'27	2°08'12	minimum elong	13416 May 07 20:46	25° \mathcal{B} 33'24	1°42'43
max. Earth dist.	13415 May 29 14:46	16° Π 35'42	1.45812 AU		13416 May 10 16:31	0° Π	
	13415 Jun 07 04:18	0° \mathcal{E}		max. Earth dist.	13416 May 11 10:49	1° Π 11'44	1.45651 AU
evening rise	13415 Jun 14 11:52	11° \mathcal{E} 32'27		evening rise	13416 May 24 08:07	21° Π 11'11	
greatest brilliancy	13415 Jun 22 22:10	24° \mathcal{E} 51'08	-0.8m		13416 May 30 01:55	0° \mathcal{E}	
	13415 Jun 26 06:15	0° Ω		greatest brilliancy	13416 Jun 06 16:53	11° \mathcal{E} 29'53	-0.7m
asc. node	13415 Jun 30 13:35	6° Ω 17'37		asc. node	13416 Jun 16 10:33	24° \mathcal{E} 42'00	
evening max el	13415 Jul 06 02:54	13° Ω 03'51	18°45'30	evening max el	13416 Jun 18 10:16	26° \mathcal{E} 50'52	19°32'10
retrograde	13415 Jul 12 17:45	16° Ω 40'38			13416 Jun 22 10:07	0° Ω	
evening set	13415 Jul 16 01:09	15° Ω 37'51		retrograde	13416 Jun 25 15:32	0° Ω 54'34	
inferior conj	13415 Jul 21 15:18	9° Ω 57'17	2°53'20		13416 Jun 28 17:04	30° \mathcal{R} \mathcal{E}	
minimum elong	13415 Jul 21 17:05	9° Ω 51'43	2°52'12	evening set	13416 Jun 29 08:10	29° \mathcal{E} 35'13	
min. Earth dist.	13415 Jul 23 11:32	7° Ω 39'46	0.65924 AU	inferior conj	13416 Jul 04 16:55	23° \mathcal{E} 40'58	3°09'15
morning rise	13415 Jul 27 08:09	3° Ω 33'37		minimum elong	13416 Jul 04 17:43	23° \mathcal{E} 38'18	3°08'13
direct	13415 Aug 02 16:28	0° Ω 53'20		min. Earth dist.	13416 Jul 05 22:42	22° \mathcal{E} 02'18	0.67359 AU
desc. node	13415 Aug 02 15:58	0° Ω 53'20		morning rise	13416 Jul 10 02:47	17° \mathcal{E} 17'07	
morning max el	13415 Aug 15 20:00	8° Ω 40'46	26°42'10	direct	13416 Jul 16 01:23	14° \mathcal{E} 41'01	
	13415 Sep 01 12:20	0° \mathcal{N}		desc. node	13416 Jul 19 13:20	15° \mathcal{E} 26'13	
	13415 Sep 19 10:40	0° $\underline{\mathcal{A}}$		morning max el	13416 Jul 28 06:53	22° \mathcal{E} 00'49	25°27'05
morning set	13415 Sep 20 15:31	2° $\underline{\mathcal{A}}$ 15'58			13416 Aug 04 06:22	0° Ω	
max. Earth dist.	13415 Sep 24 17:22	10° $\underline{\mathcal{A}}$ 11'54	1.34184 AU		13416 Aug 24 18:28	0° \mathcal{N}	
asc. node	13415 Sep 26 15:09	14° $\underline{\mathcal{A}}$ 02'13		morning set	13416 Sep 02 05:59	14° \mathcal{N} 37'25	
				max. Earth dist.	13416 Sep 05 20:51	21° \mathcal{N} 17'22	1.36157 AU
superior conj	13415 Sep 29 10:24	19° $\underline{\mathcal{A}}$ 48'28	0°26'19		13416 Sep 10 09:31	0° $\underline{\mathcal{A}}$	
minimum elong	13415 Sep 29 09:02	19° $\underline{\mathcal{A}}$ 41'23	0°26'18	superior conj	13416 Sep 12 01:25	3° $\underline{\mathcal{A}}$ 17'45	-0°04'03
	13415 Oct 04 06:22	0° \mathcal{M}		minimum elong	13416 Sep 12 01:40	3° $\underline{\mathcal{A}}$ 18'59	0°04'03
evening rise	13415 Oct 06 19:15	5° \mathcal{M} 21'47		behind sun begin	13416 Sep 11 19:31	2° $\underline{\mathcal{A}}$ 48'21	
	13415 Oct 20 03:46	0° \mathcal{J}		behind sun end	13416 Sep 12 07:48	3° $\underline{\mathcal{A}}$ 49'40	
evening max el	13415 Oct 26 11:41	7° \mathcal{J} 47'01	21°18'02	asc. node	13416 Sep 12 11:43	4° $\underline{\mathcal{A}}$ 09'13	
desc. node	13415 Oct 29 12:08	10° \mathcal{J} 24'10		evening rise	13416 Sep 20 01:40	19° $\underline{\mathcal{A}}$ 36'37	
retrograde	13415 Nov 07 11:17	13° \mathcal{J} 44'15			13416 Sep 25 07:05	0° \mathcal{M}	
evening set	13415 Nov 10 04:04	13° \mathcal{J} 27'19		evening max el	13416 Oct 07 16:13	18° \mathcal{M} 37'12	19°57'41
inferior conj	13415 Nov 19 01:57	9° \mathcal{J} 33'43	-5°26'49	desc. node	13416 Oct 15 09:34	23° \mathcal{M} 27'34	
minimum elong	13415 Nov 18 17:46	9° \mathcal{J} 45'13	5°24'27	retrograde	13416 Oct 18 01:14	23° \mathcal{M} 47'18	
min. Earth dist.	13415 Nov 19 11:10	9° \mathcal{J} 20'43	0.54504 AU	evening set	13416 Oct 20 00:31	23° \mathcal{M} 36'57	
morning rise	13415 Nov 27 08:09	5° \mathcal{J} 43'58		inferior conj	13416 Oct 28 21:51	19° \mathcal{M} 37'20	-4°03'34
direct	13415 Dec 01 06:29	5° \mathcal{J} 10'43		minimum elong	13416 Oct 28 12:06	19° \mathcal{M} 52'09	3°59'46
morning max el	13415 Dec 14 01:18	11° \mathcal{J} 19'21	22°35'34	min. Earth dist.	13416 Oct 30 19:28	18° \mathcal{M} 28'03	0.55018 AU
asc. node	13415 Dec 23 15:58	23° \mathcal{J} 24'52		morning rise	13416 Nov 05 22:22	15° \mathcal{M} 25'54	
	13415 Dec 27 14:23	0° \mathcal{Z}		direct	13416 Nov 10 18:26	14° \mathcal{M} 34'44	
morning set	13416 Jan 05 04:07	16° \mathcal{Z} 56'36		morning max el	13416 Nov 24 11:34	21° \mathcal{M} 21'22	24°24'24
	13416 Jan 11 06:15	0° \approx			13416 Dec 01 22:58	0° \mathcal{J}	
superior conj	13416 Jan 12 04:05	1° \approx 56'36	1°30'39	asc. node	13416 Dec 09 13:01	11° \mathcal{J} 47'11	
minimum elong	13416 Jan 12 05:47	2° \approx 05'35	1°31'26		13416 Dec 18 21:02	0° \mathcal{Z}	
max. Earth dist.	13416 Jan 15 17:34	9° \approx 25'12	1.33847 AU	morning set	13416 Dec 19 16:02	1° \mathcal{Z} 41'20	
evening rise	13416 Jan 20 05:55	18° \approx 29'18		superior conj	13416 Dec 26 11:23	16° \mathcal{Z} 33'23	1°37'14
desc. node	13416 Jan 25 11:14	28° \approx 18'28		minimum elong	13416 Dec 26 12:00	16° \mathcal{Z} 36'46	1°38'14
	13416 Jan 26 09:50	0° \mathcal{H}		max. Earth dist.	13416 Dec 28 16:39	21° \mathcal{Z} 22'48	1.32477 AU
	13416 Feb 14 22:50	0° Υ			13417 Jan 01 18:35	0° \approx	
evening max el	13416 Feb 24 00:06	10° Υ 16'12	27°07'34	evening rise	13417 Jan 02 21:55	2° \approx 19'51	
retrograde	13416 Mar 08 10:26	17° Υ 43'27		desc. node	13417 Jan 11 07:58	18° \approx 22'21	
evening set	13416 Mar 15 01:29	15° Υ 11'20			13417 Jan 18 06:32	0° \mathcal{H}	
min. Earth dist.	13416 Mar 18 23:35	11° Υ 26'38	0.65367 AU	evening max el	13417 Feb 05 12:18	23° \mathcal{H} 30'21	27°32'07
asc. node	13416 Mar 20 13:07	9° Υ 41'25			13417 Feb 14 18:00	0° Υ	
inferior conj	13416 Mar 21 06:08	8° Υ 53'12	0°13'36	retrograde	13417 Feb 19 07:03	0° Υ 56'45	
minimum elong	13416 Mar 21 05:46	8° Υ 54'17	0°13'24		13417 Feb 23 14:11	30° \mathcal{R} \mathcal{H}	
transit middle	13416 Mar 21 05:46	8° Υ 54'17	0°13'24	evening set	13417 Feb 26 03:44	28° \mathcal{H} 30'57	
transit begin	13416 Mar 21 04:07	8° Υ 58'55					
transit end	13416 Mar 21 07:24	8° Υ 49'38					

min. Earth dist.	13417 Mar 01 22:28	25° X 15'49	0.63515 AU	retrograde	13418 Feb 01 19:41	13° X 28'25	
inferior conj	13417 Mar 04 16:03	22° X 29'29	-0°54'11	evening set	13418 Feb 08 17:03	11° X 16'57	
minimum elong	13417 Mar 04 17:47	22° X 25'04	0°53'13	min. Earth dist.	13418 Feb 12 11:30	8° X 25'22	0.61428 AU
asc. node	13417 Mar 07 10:37	19° X 49'17		inferior conj	13418 Feb 15 13:15	5° X 39'55	-2°11'55
morning rise	13417 Mar 11 10:14	17° X 13'14		minimum elong	13418 Feb 15 17:54	5° X 29'26	2°09'33
direct	13417 Mar 13 19:53	16° X 45'04		asc. node	13418 Feb 22 08:06	0° X 53'01	
morning max el	13417 Mar 20 07:23	20° X 04'22	17°47'03	morning rise	13418 Feb 22 21:42	0° X 41'27	
	13417 Mar 27 19:01	0° Y		direct	13418 Feb 25 01:21	0° X 21'36	
morning set	13417 Apr 05 18:20	15° Y 01'47		morning max el	13418 Mar 04 00:06	3° X 51'53	17°51'07
desc. node	13417 Apr 09 10:07	21° Y 16'57		morning set	13418 Mar 19 16:03	28° X 14'55	
	13417 Apr 14 14:22	0° Z			13418 Mar 20 15:24	0° Y	
				desc. node	13418 Mar 27 06:38	11° Y 48'50	
superior conj	13417 Apr 18 10:01	6° Z 17'38	-1°05'58				
minimum elong	13417 Apr 18 03:21	5° Z 50'24	1°05'36	superior conj	13418 Mar 30 14:04	17° Y 32'57	-0°25'51
max. Earth dist.	13417 Apr 24 05:17	15° Z 38'11	1.44772 AU	minimum elong	13418 Mar 30 11:41	17° Y 22'44	0°25'40
	13417 May 03 10:12	0° II		max. Earth dist.	13418 Apr 06 20:34	29° Y 42'05	1.43270 AU
evening rise	13417 May 03 19:12	0° II 34'31			13418 Apr 07 00:57	0° Z	
	13417 May 23 18:40	0° E		evening rise	13418 Apr 13 13:19	10° Z 23'50	
evening max el	13417 Jun 01 11:58	10° E 39'37	20°33'40		13418 Apr 26 12:51	0° II	
asc. node	13417 Jun 03 07:38	12° E 21'21		evening max el	13418 May 15 08:10	24° II 29'17	21°46'39
retrograde	13417 Jun 09 14:29	15° E 20'03		asc. node	13418 May 21 04:49	29° II 01'35	
evening set	13417 Jun 13 17:05	13° E 44'00		retrograde	13418 May 24 12:41	29° II 52'23	
inferior conj	13417 Jun 18 23:21	7° E 37'33	3°12'17	evening set	13418 May 29 02:05	28° II 00'05	
minimum elong	13417 Jun 18 23:07	7° E 38'20	3°11'14	inferior conj	13418 Jun 03 08:22	21° II 43'07	3°04'03
min. Earth dist.	13417 Jun 19 15:12	6° E 42'58	0.68341 AU	minimum elong	13418 Jun 03 07:13	21° II 47'06	3°02'54
morning rise	13417 Jun 24 04:52	1° E 17'09		min. Earth dist.	13418 Jun 03 10:55	21° II 34'14	0.68851 AU
	13417 Jun 25 21:42	30° K II		morning rise	13418 Jun 08 12:10	15° II 28'25	
direct	13417 Jun 29 15:46	28° II 52'54		direct	13418 Jun 13 10:23	13° II 21'26	
	13417 Jul 03 18:32	0° E		morning max el	13418 Jun 23 04:34	19° II 06'40	22°30'34
desc. node	13417 Jul 06 10:36	1° E 41'50		desc. node	13418 Jun 23 07:44	19° II 14'38	
morning max el	13417 Jul 10 17:03	5° E 29'55	24°00'00		13418 Jul 02 08:05	0° E	
	13417 Jul 29 15:38	0° Q			13418 Jul 22 19:00	0° Q	
morning set	13417 Aug 15 01:02	26° Q 05'42		morning set	13418 Jul 26 20:20	6° Q 30'35	
	13417 Aug 17 07:11	0° P		max. Earth dist.	13418 Jul 31 17:57	14° Q 38'24	1.40787 AU
max. Earth dist.	13417 Aug 18 18:38	2° P 36'07	1.38442 AU				
				superior conj	13418 Aug 08 14:08	28° Q 18'09	-1°12'54
superior conj	13417 Aug 26 04:03	16° P 10'45	-0°37'56	minimum elong	13418 Aug 08 19:34	28° Q 42'38	1°12'43
minimum elong	13417 Aug 26 06:43	16° P 23'24	0°37'48		13418 Aug 09 12:44	0° P	
asc. node	13417 Aug 30 08:17	24° P 13'46		asc. node	13418 Aug 17 04:53	14° P 12'31	
	13417 Sep 02 06:48	0° A		evening rise	13418 Aug 18 17:02	17° P 02'37	
evening rise	13417 Sep 04 02:00	3° A 32'51			13418 Aug 25 18:32	0° A	
	13417 Sep 20 04:20	0° M		evening max el	13418 Sep 03 15:54	12° A 38'50	18°21'23
evening max el	13417 Sep 20 10:43	0° M 16'11	18°58'47	retrograde	13418 Sep 11 04:19	16° A 27'12	
retrograde	13417 Sep 29 05:05	4° M 39'49		evening set	13418 Sep 13 06:12	16° A 10'29	
evening set	13417 Oct 01 01:54	4° M 28'39		desc. node	13418 Sep 19 04:36	12° A 52'14	
desc. node	13417 Oct 02 07:04	4° M 10'01		inferior conj	13418 Sep 20 20:08	11° A 33'17	-0°31'04
inferior conj	13417 Oct 09 10:11	0° M 12'33	-2°15'13	minimum elong	13418 Sep 20 18:58	11° A 35'40	0°30'31
minimum elong	13417 Oct 09 04:26	0° M 22'34	2°12'32	min. Earth dist.	13418 Sep 24 03:11	8° A 52'56	0.58359 AU
	13417 Oct 09 17:21	30° K A		morning rise	13418 Sep 28 04:17	6° A 10'20	
min. Earth dist.	13417 Oct 12 08:04	28° A 11'11	0.56387 AU	direct	13418 Oct 04 10:09	4° A 28'06	
morning rise	13417 Oct 17 03:57	25° A 26'14		morning max el	13418 Oct 18 17:43	12° A 06'40	27°18'00
direct	13417 Oct 22 19:22	24° A 11'08			13418 Nov 01 18:42	0° M	
	13417 Nov 04 08:59	0° M		asc. node	13418 Nov 13 06:46	20° M 09'06	
morning max el	13417 Nov 05 23:14	1° M 27'30	26°04'20	morning set	13418 Nov 18 11:34	0° X 47'37	
asc. node	13417 Nov 26 09:57	0° X 45'08			13418 Nov 18 02:36	0° X	
	13417 Nov 26 00:16	0° X					
morning set	13417 Dec 04 03:07	16° X 20'01		superior conj	13418 Nov 25 09:28	15° X 58'58	1°32'13
	13417 Dec 10 08:08	0° Z		minimum elong	13418 Nov 25 08:03	15° X 51'05	1°33'05
				max. Earth dist.	13418 Nov 25 06:24	15° X 41'52	1.31216 AU
superior conj	13417 Dec 10 21:51	1° Z 16'18	1°37'40		13418 Dec 01 17:55	0° Z	
minimum elong	13417 Dec 10 21:23	1° Z 13'41	1°38'42	evening rise	13418 Dec 02 03:50	0° Z 53'12	
max. Earth dist.	13417 Dec 11 22:00	3° Z 30'25	1.31592 AU	desc. node	13418 Dec 16 01:47	27° Z 15'20	
evening rise	13417 Dec 17 22:03	16° Z 30'08			13418 Dec 17 19:03	0° A	
	13417 Dec 24 17:03	0° A		evening max el	13418 Dec 31 23:46	18° A 00'35	26°44'26
desc. node	13417 Dec 29 04:49	8° A 04'26		retrograde	13419 Jan 14 22:42	25° A 09'35	
	13418 Jan 13 03:57	0° X		evening set	13419 Jan 21 13:42	23° A 20'10	
evening max el	13418 Jan 18 21:10	6° X 09'29	27°25'37	min. Earth dist.	13419 Jan 25 13:43	20° A 42'24	0.59255 AU

inferior conj	13419 Jan 28 17:59	18° \approx 13'28	-3°35'09	evening set	13420 Jan 02 13:32	4° \approx 36'10	
minimum elong	13419 Jan 29 01:38	17° \approx 58'30	3°31'46	min. Earth dist.	13420 Jan 07 06:09	1° \approx 57'17	0.57209 AU
morning rise	13419 Feb 05 16:36	13° \approx 35'54		inferior conj	13420 Jan 10 02:58	0° \approx 00'45	-4°53'11
direct	13419 Feb 07 17:37	13° \approx 20'46		minimum elong	13420 Jan 10 11:41	29° \approx 45'58	4°50'06
asc. node	13419 Feb 09 05:31	13° \approx 29'13			13420 Jan 10 03:25	30° \approx 3	
morning max el	13419 Feb 15 12:12	17° \approx 11'56	18°14'26	morning rise	13420 Jan 18 12:26	25° \approx 45'35	
	13419 Feb 24 13:53	0° \approx		direct	13420 Jan 20 16:08	25° \approx 31'37	
morning set	13419 Mar 03 04:38	12° \approx 08'16		asc. node	13420 Jan 27 02:50	27° \approx 46'05	
				morning max el	13420 Jan 29 15:44	29° \approx 53'36	18°58'55
superior conj	13419 Mar 12 16:56	29° \approx 50'57	0°11'23		13420 Jan 29 18:21	0° \approx	
minimum elong	13419 Mar 12 17:48	29° \approx 54'51	0°11'22	morning set	13420 Feb 15 03:27	26° \approx 28'01	
behind sun begin	13419 Mar 12 12:31	29° \approx 30'56			13420 Feb 16 22:26	0° \approx	
behind sun end	13419 Mar 12 23:05	0° \approx 18'43					
	13419 Mar 12 18:56	0° \approx		superior conj	13420 Feb 23 14:24	12° \approx 59'48	0°42'37
desc. node	13419 Mar 14 03:07	2° \approx 24'34		minimum elong	13420 Feb 23 16:51	13° \approx 11'32	0°42'38
max. Earth dist.	13419 Mar 20 07:27	13° \approx 10'02	1.41297 AU	desc. node	13420 Feb 28 23:38	23° \approx 00'49	
evening rise	13419 Mar 25 01:12	21° \approx 02'15		max. Earth dist.	13420 Mar 01 14:23	25° \approx 54'49	1.39071 AU
	13419 Mar 30 16:20	0° \approx			13420 Mar 03 22:07	0° \approx	
	13419 Apr 20 17:32	0° \approx		evening rise	13420 Mar 05 10:17	2° \approx 35'54	
evening max el	13419 Apr 28 00:07	8° \approx 19'40	23°06'24		13420 Mar 22 21:19	0° \approx	
retrograde	13419 May 08 08:43	14° \approx 25'49		evening max el	13420 Apr 09 13:51	22° \approx 11'22	24°26'54
asc. node	13419 May 08 02:06	14° \approx 25'28		retrograde	13420 Apr 21 01:22	28° \approx 54'47	
evening set	13419 May 13 09:32	12° \approx 18'41		asc. node	13420 Apr 23 23:26	28° \approx 17'00	
inferior conj	13419 May 18 17:57	5° \approx 53'29	2°45'25	evening set	13420 Apr 26 13:50	26° \approx 35'16	
minimum elong	13419 May 18 16:07	5° \approx 59'47	2°44'10	min. Earth dist.	13420 May 01 03:22	21° \approx 21'51	0.68447 AU
min. Earth dist.	13419 May 18 07:39	6° \approx 29'05	0.68881 AU	inferior conj	13420 May 02 02:12	20° \approx 05'14	2°16'39
morning rise	13419 May 23 22:39	29° \approx 45'51		minimum elong	13420 May 02 00:03	20° \approx 12'27	2°15'22
	13419 May 23 15:56	30° \approx 8		morning rise	13420 May 07 10:26	14° \approx 05'42	
direct	13419 May 28 08:01	27° \approx 59'11		direct	13420 May 11 07:24	12° \approx 39'57	
	13419 Jun 02 12:28	0° \approx		morning max el	13420 May 18 19:47	16° \approx 51'38	19°54'43
morning max el	13419 Jun 05 20:41	2° \approx 53'23	21°06'54	desc. node	13420 May 27 01:37	26° \approx 53'36	
desc. node	13419 Jun 10 04:44	7° \approx 43'36			13420 May 29 07:00	0° \approx	
	13419 Jun 26 05:42	0° \approx		morning set	13420 Jun 14 17:25	24° \approx 12'42	
morning set	13419 Jul 06 14:57	15° \approx 51'22			13420 Jun 18 06:12	0° \approx	
max. Earth dist.	13419 Jul 13 23:27	27° \approx 35'33	1.42898 AU	max. Earth dist.	13420 Jun 25 11:12	11° \approx 18'32	1.44541 AU
	13419 Jul 15 10:47	0° \approx					
superior conj	13419 Jul 21 03:12	9° \approx 29'54	-1°44'44	superior conj	13420 Jun 30 16:23	19° \approx 40'25	-2°07'11
minimum elong	13419 Jul 21 10:23	10° \approx 00'27	1°44'51	minimum elong	13420 Jun 30 21:40	20° \approx 01'49	2°07'57
evening rise	13419 Aug 01 18:34	29° \approx 55'25			13420 Jul 06 23:14	0° \approx	
	13419 Aug 01 19:36	0° \approx		evening rise	13420 Jul 14 01:30	11° \approx 57'55	
asc. node	13419 Aug 04 01:33	4° \approx 01'28		asc. node	13420 Jul 20 22:16	23° \approx 35'16	
evening max el	13419 Aug 18 03:33	25° \approx 35'31	18°04'14		13420 Jul 24 21:55	0° \approx	
retrograde	13419 Aug 24 21:11	29° \approx 02'55		evening max el	13420 Jul 31 17:47	8° \approx 55'47	18°06'08
evening set	13419 Aug 27 06:34	28° \approx 36'50		retrograde	13420 Aug 07 03:04	12° \approx 16'14	
inferior conj	13419 Sep 03 02:47	23° \approx 39'18	0°53'37	evening set	13420 Aug 09 20:42	11° \approx 37'40	
minimum elong	13419 Sep 03 04:22	23° \approx 35'32	0°52'49	inferior conj	13420 Aug 16 02:20	6° \approx 22'06	1°55'44
desc. node	13419 Sep 06 02:06	20° \approx 51'01		minimum elong	13420 Aug 16 04:49	6° \approx 15'23	1°54'29
min. Earth dist.	13419 Sep 06 07:03	20° \approx 39'50	0.60612 AU	min. Earth dist.	13420 Aug 18 20:34	3° \approx 25'02	0.62866 AU
morning rise	13419 Sep 09 23:12	17° \approx 46'43		morning rise	13420 Aug 22 10:51	0° \approx 10'23	
direct	13419 Sep 16 13:19	15° \approx 38'30		desc. node	13420 Aug 22 23:36	29° \approx 47'37	
morning max el	13419 Sep 30 19:59	23° \approx 33'04	27°54'52		13420 Aug 22 16:33	30° \approx 8	
	13419 Oct 06 15:07	0° \approx		direct	13420 Aug 29 03:00	27° \approx 42'05	
	13419 Oct 26 00:56	0° \approx			13420 Sep 05 03:54	0° \approx	
asc. node	13419 Oct 31 03:30	9° \approx 51'49		morning max el	13420 Sep 12 03:49	5° \approx 44'04	27°52'48
morning set	13419 Nov 02 15:35	14° \approx 59'42			13420 Sep 30 13:10	0° \approx	
max. Earth dist.	13419 Nov 08 14:06	27° \approx 48'11	1.31360 AU	morning set	13420 Oct 16 12:57	28° \approx 49'59	
				asc. node	13420 Oct 17 00:09	29° \approx 46'53	
superior conj	13419 Nov 09 20:26	0° \approx 36'20	1°21'00		13420 Oct 17 02:43	0° \approx	
minimum elong	13419 Nov 09 18:22	0° \approx 24'53	1°21'36	max. Earth dist.	13420 Oct 21 17:00	9° \approx 38'09	1.32035 AU
	13419 Nov 09 13:53	0° \approx					
evening rise	13419 Nov 16 13:12	15° \approx 23'49		superior conj	13420 Oct 24 04:48	15° \approx 02'24	1°04'07
	13419 Nov 23 16:53	0° \approx		minimum elong	13420 Oct 24 02:32	14° \approx 49'57	1°04'24
desc. node	13419 Dec 02 22:51	15° \approx 43'07		evening rise	13420 Oct 31 00:12	29° \approx 56'13	
evening max el	13419 Dec 13 17:52	28° \approx 58'17	25°30'35		13420 Oct 31 00:54	0° \approx	
	13419 Dec 14 20:46	0° \approx			13420 Nov 16 11:19	0° \approx	
retrograde	13419 Dec 27 14:43	5° \approx 57'19		desc. node	13420 Nov 18 20:01	3° \approx 10'52	
				evening max el	13420 Nov 24 04:52	9° \approx 12'28	23°54'19

retrograde	13420 Dec 07 18:15	15°♄57'40		retrograde	13421 Nov 18 09:38	25°♄32'44	
evening set	13420 Dec 12 13:34	15°♄07'18		evening set	13421 Nov 21 19:18	25°♄07'10	
min. Earth dist.	13420 Dec 18 15:52	12°♄08'20	0.55569 AU	inferior conj	13421 Nov 30 11:27	21°♄11'45	-5°51'29
inferior conj	13420 Dec 20 15:15	10°♄57'16	-5°46'37	minimum elong	13421 Nov 30 07:34	21°♄17'13	5°50'12
minimum elong	13420 Dec 20 20:03	10°♄50'04	5°45'06	min. Earth dist.	13421 Nov 29 22:26	21°♄30'02	0.54639 AU
morning rise	13420 Dec 29 04:24	7°♄01'15		morning rise	13421 Dec 08 20:56	17°♄24'29	
direct	13420 Dec 31 18:51	6°♄44'10		direct	13421 Dec 12 06:43	16°♄58'33	
morning max el	13421 Jan 11 06:48	11°♄45'53	20°06'16	morning max el	13421 Dec 24 07:21	22°♄43'43	21°35'55
asc. node	13421 Jan 13 00:04	13°♄32'49			13421 Dec 30 11:57	0°♄	
	13421 Jan 23 18:27	0°♄		asc. node	13421 Dec 30 21:15	0°♄32'45	
morning set	13421 Jan 29 09:01	11°♄03'53		morning set	13422 Jan 13 18:40	25°♄47'53	
					13422 Jan 15 18:31	0°♄	
superior conj	13421 Feb 06 01:50	26°♄46'20	1°06'49	superior conj	13422 Jan 20 23:20	10°♄59'04	1°23'54
minimum elong	13421 Feb 06 04:35	27°♄00'05	1°07'05	minimum elong	13422 Jan 21 01:33	11°♄10'37	1°24'30
	13421 Feb 07 16:47	0°♄		max. Earth dist.	13422 Jan 25 08:10	19°♄55'44	1.34838 AU
max. Earth dist.	13421 Feb 11 20:52	8°♄03'23	1.36840 AU	evening rise	13422 Jan 29 12:24	28°♄04'41	
desc. node	13421 Feb 14 20:11	13°♄34'00			13422 Jan 30 12:51	0°♄	
evening rise	13421 Feb 15 15:08	14°♄59'56		desc. node	13422 Feb 01 16:47	3°♄59'42	
	13421 Feb 24 09:24	0°♄			13422 Feb 17 15:48	0°♄	
	13421 Mar 17 13:29	0°♄		evening max el	13422 Mar 05 17:05	19°♄49'32	26°41'52
evening max el	13421 Mar 23 03:15	6°♄03'26	25°41'11	retrograde	13422 Mar 18 20:27	27°♄13'09	
retrograde	13421 Apr 04 13:40	13°♄13'16		evening set	13422 Mar 25 06:26	24°♄41'06	
evening set	13421 Apr 10 13:25	10°♄45'06		asc. node	13422 Mar 28 18:15	21°♄15'00	
asc. node	13421 Apr 10 20:48	10°♄29'13		min. Earth dist.	13422 Mar 29 07:23	20°♄37'19	0.66279 AU
min. Earth dist.	13421 Apr 14 20:01	6°♄07'04	0.67569 AU	inferior conj	13422 Mar 31 06:54	18°♄16'36	0°47'33
inferior conj	13421 Apr 16 07:15	4°♄14'50	1°37'33	minimum elong	13422 Mar 31 05:42	18°♄20'10	0°46'53
minimum elong	13421 Apr 16 05:15	4°♄21'12	1°36'24	morning rise	13422 Apr 06 06:07	12°♄37'35	
	13421 Apr 19 22:51	30°♄		direct	13422 Apr 09 05:19	11°♄48'44	
morning rise	13421 Apr 21 21:39	28°♄24'40		morning max el	13422 Apr 15 15:15	15°♄12'04	18°16'38
direct	13421 Apr 25 07:09	27°♄18'36			13422 Apr 26 14:37	0°♄	
	13421 May 01 00:29	0°♄		desc. node	13422 Apr 30 19:05	6°♄35'40	
morning max el	13421 May 02 02:25	0°♄59'48	18°57'27	morning set	13422 May 05 05:39	13°♄40'49	
desc. node	13421 May 13 22:24	16°♄33'52			13422 May 15 12:29	0°♄	
greatest brilliancy	13421 May 15 11:24	18°♄53'02	-0.8m				
	13421 May 22 17:18	0°♄		superior conj	13422 May 20 16:31	8°♄06'21	-1°59'02
morning set	13421 May 25 00:03	3°♄31'55		minimum elong	13422 May 20 08:26	7°♄34'46	1°59'25
max. Earth dist.	13421 Jun 08 03:52	25°♄34'08	1.45552 AU	max. Earth dist.	13422 May 21 23:40	10°♄08'01	1.45838 AU
					13422 Jun 03 17:31	0°♄	
superior conj	13421 Jun 10 08:47	29°♄01'38	-2°13'13	evening rise	13422 Jun 05 16:37	3°♄03'44	
minimum elong	13421 Jun 10 07:17	28°♄55'45	2°14'13	greatest brilliancy	13422 Jun 16 09:58	19°♄41'41	-0.8m
	13421 Jun 10 23:38	0°♄			13422 Jun 23 11:54	0°♄	
evening rise	13421 Jun 25 09:11	23°♄00'25		asc. node	13422 Jun 24 15:59	1°♄32'56	
	13421 Jun 29 16:35	0°♄		evening max el	13422 Jun 28 17:40	6°♄16'23	19°03'28
asc. node	13421 Jul 07 19:04	12°♄48'24		retrograde	13422 Jul 05 13:35	10°♄02'47	
evening max el	13421 Jul 15 07:23	22°♄31'53	18°26'10	evening set	13422 Jul 09 00:54	8°♄52'59	
retrograde	13421 Jul 21 17:42	25°♄58'50		inferior conj	13422 Jul 14 12:23	3°♄06'40	3°01'46
evening set	13421 Jul 24 19:58	25°♄05'23		minimum elong	13422 Jul 14 13:47	3°♄02'12	3°00'41
inferior conj	13421 Jul 30 14:45	19°♄33'43	2°37'19	min. Earth dist.	13422 Jul 16 02:29	1°♄04'43	0.66594 AU
minimum elong	13421 Jul 30 16:58	19°♄27'05	2°36'07		13422 Jul 16 23:24	30°♄	
min. Earth dist.	13421 Aug 01 19:28	16°♄57'35	0.64909 AU	morning rise	13422 Jul 20 02:00	26°♄42'35	
morning rise	13421 Aug 05 12:44	13°♄12'26		direct	13422 Jul 26 06:39	24°♄02'52	
desc. node	13421 Aug 09 21:04	10°♄50'22		desc. node	13422 Jul 27 18:28	24°♄11'04	
direct	13421 Aug 12 01:20	10°♄33'22			13422 Aug 06 08:16	0°♄	
morning max el	13421 Aug 25 14:21	18°♄30'16	27°15'59	morning max el	13422 Aug 08 01:20	1°♄39'58	26°12'15
	13421 Sep 04 07:13	0°♄			13422 Aug 29 09:27	0°♄	
	13421 Sep 23 12:06	0°♄		morning set	13422 Sep 13 00:28	24°♄58'01	
morning set	13421 Sep 30 01:00	12°♄12'12			13422 Sep 15 16:24	0°♄	
asc. node	13421 Oct 03 20:46	19°♄49'48		max. Earth dist.	13422 Sep 16 20:20	2°♄14'47	1.34973 AU
max. Earth dist.	13421 Oct 04 11:38	21°♄05'54	1.33250 AU	asc. node	13422 Sep 20 17:22	9°♄56'20	
				superior conj	13422 Sep 22 05:01	12°♄57'44	0°14'00
superior conj	13421 Oct 08 08:30	29°♄11'44	0°41'40	minimum elong	13422 Sep 22 04:14	12°♄53'43	0°13'58
minimum elong	13421 Oct 08 06:36	29°♄01'37	0°41'43	behind sun begin	13422 Sep 22 01:14	12°♄38'22	
	13421 Oct 08 17:34	0°♄		behind sun end	13422 Sep 22 07:14	13°♄09'05	
evening rise	13421 Oct 15 11:01	14°♄26'03		evening rise	13422 Sep 29 19:40	28°♄47'59	
	13421 Oct 23 05:09	0°♄			13422 Sep 30 09:34	0°♄	
evening max el	13421 Nov 05 16:03	19°♄14'01	22°12'32				
desc. node	13421 Nov 05 17:18	19°♄17'05					

evening max el	13422 Oct 18 12:41	29° \mathbb{M} 39'24	20°41'26	superior conj	13423 Sep 05 15:13	26° \mathbb{M} 12'09	-0°18'06
	13422 Oct 18 21:06	0° \mathbb{A}		minimum elong	13423 Sep 05 16:24	26° \mathbb{M} 17'57	0°18'02
desc. node	13422 Oct 23 14:41	3° \mathbb{A} 35'12		asc. node	13423 Sep 07 13:57	0° \mathbb{A} 02'25	
retrograde	13422 Oct 29 20:14	5° \mathbb{A} 16'48			13423 Sep 07 13:28	0° \mathbb{A}	
evening set	13422 Nov 01 03:43	5° \mathbb{A} 03'46		evening rise	13423 Sep 13 23:51	12° \mathbb{A} 55'33	
inferior conj	13422 Nov 10 03:12	1° \mathbb{A} 09'22	-4°56'44		13423 Sep 23 00:36	0° \mathbb{M}	
minimum elong	13422 Nov 09 17:22	1° \mathbb{A} 23'28	4°53'30	evening max el	13423 Sep 30 23:16	10° \mathbb{M} 49'18	19°29'54
min. Earth dist.	13422 Nov 11 04:55	0° \mathbb{A} 32'26	0.54610 AU	retrograde	13423 Oct 10 15:08	15° \mathbb{M} 39'07	
	13422 Nov 12 03:48	30° \mathbb{R} \mathbb{M}		desc. node	13423 Oct 10 12:08	15° \mathbb{M} 39'04	
morning rise	13422 Nov 18 06:58	27° \mathbb{M} 13'03		evening set	13423 Oct 12 12:02	15° \mathbb{M} 29'02	
direct	13422 Nov 22 15:04	26° \mathbb{M} 32'42		inferior conj	13423 Oct 21 04:52	11° \mathbb{M} 22'56	-3°18'41
	13422 Dec 02 06:17	0° \mathbb{A}		minimum elong	13423 Oct 20 20:27	11° \mathbb{M} 36'25	3°15'05
morning max el	13422 Dec 05 20:26	2° \mathbb{A} 57'58	23°21'42	min. Earth dist.	13423 Oct 23 14:25	9° \mathbb{M} 50'50	0.55504 AU
asc. node	13422 Dec 17 18:22	18° \mathbb{A} 29'28		morning rise	13423 Oct 29 02:50	6° \mathbb{M} 57'54	
	13422 Dec 24 02:57	0° \mathbb{B}		direct	13423 Nov 03 07:26	5° \mathbb{M} 57'30	
morning set	13422 Dec 29 06:21	10° \mathbb{B} 34'30		morning max el	13423 Nov 17 06:20	12° \mathbb{M} 57'05	25°09'17
					13423 Nov 30 11:12	0° \mathbb{A}	
superior conj	13423 Jan 05 03:50	25° \mathbb{B} 29'34	1°34'12	asc. node	13423 Dec 04 15:22	7° \mathbb{A} 08'03	
minimum elong	13423 Jan 05 05:05	25° \mathbb{B} 36'19	1°35'06	morning set	13423 Dec 13 18:08	25° \mathbb{A} 17'17	
	13423 Jan 07 06:20	0° \mathbb{A}			13423 Dec 15 22:14	0° \mathbb{B}	
max. Earth dist.	13423 Jan 08 03:16	1° \mathbb{A} 50'40	1.33213 AU				
evening rise	13423 Jan 12 22:33	11° \mathbb{A} 41'19		superior conj	13423 Dec 20 12:43	10° \mathbb{B} 09'27	1°38'09
desc. node	13423 Jan 19 13:30	24° \mathbb{A} 13'32		minimum elong	13423 Dec 20 12:52	10° \mathbb{B} 10'16	1°39'12
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evening max el	13423 Feb 16 06:29	3° \mathbb{Y} 19'24	27°21'27		13423 Dec 29 21:26	0° \mathbb{A}	
retrograde	13423 Mar 01 20:48	10° \mathbb{Y} 46'19		desc. node	13424 Jan 06 10:17	14° \mathbb{A} 08'59	
evening set	13423 Mar 08 14:46	8° \mathbb{Y} 16'14			13424 Jan 16 07:36	0° \mathbb{H}	
min. Earth dist.	13423 Mar 12 11:19	4° \mathbb{Y} 44'32	0.64622 AU	evening max el	13424 Jan 29 17:30	16° \mathbb{H} 19'37	27°33'18
inferior conj	13423 Mar 14 22:41	2° \mathbb{Y} 04'28	-0°13'44	retrograde	13424 Feb 12 13:55	23° \mathbb{H} 43'00	
minimum elong	13423 Mar 14 23:05	2° \mathbb{Y} 03'22	0°13'31	evening set	13424 Feb 19 11:52	21° \mathbb{H} 22'05	
transit middle	13423 Mar 14 23:05	2° \mathbb{Y} 03'22	0°13'31	min. Earth dist.	13424 Feb 23 05:55	18° \mathbb{H} 18'12	0.62658 AU
transit begin	13423 Mar 14 21:27	2° \mathbb{Y} 07'49		inferior conj	13424 Feb 26 03:34	15° \mathbb{H} 30'23	-1°26'03
transit end	13423 Mar 15 00:44	1° \mathbb{Y} 58'56		minimum elong	13424 Feb 26 06:28	15° \mathbb{H} 23'22	1°24'31
asc. node	13423 Mar 15 15:42	1° \mathbb{Y} 18'44		asc. node	13424 Mar 01 13:10	11° \mathbb{H} 43'20	
	13423 Mar 16 22:13	30° \mathbb{R} \mathbb{H}		morning rise	13424 Mar 04 03:43	10° \mathbb{H} 21'30	
morning rise	13423 Mar 21 09:17	26° \mathbb{H} 39'03		direct	13424 Mar 06 10:37	9° \mathbb{H} 57'15	
direct	13423 Mar 23 23:32	26° \mathbb{H} 04'14		morning max el	13424 Mar 13 01:43	13° \mathbb{H} 19'33	17°46'33
morning max el	13423 Mar 30 08:01	29° \mathbb{H} 21'32	17°52'51		13424 Mar 24 13:14	0° \mathbb{Y}	
	13423 Mar 30 23:14	0° \mathbb{Y}		morning set	13424 Mar 29 02:06	7° \mathbb{Y} 53'51	
morning set	13423 Apr 16 15:40	25° \mathbb{Y} 12'45		desc. node	13424 Apr 03 12:16	17° \mathbb{Y} 20'27	
desc. node	13423 Apr 17 15:43	26° \mathbb{Y} 52'57					
	13423 Apr 19 12:43	0° \mathbb{B}		superior conj	13424 Apr 09 23:15	28° \mathbb{Y} 17'07	-0°48'54
				minimum elong	13424 Apr 09 18:25	27° \mathbb{Y} 56'59	0°48'35
superior conj	13423 Apr 30 09:13	17° \mathbb{B} 41'01	-1°28'05		13424 Apr 11 00:03	0° \mathbb{B}	
minimum elong	13423 Apr 30 00:36	17° \mathbb{B} 06'38	1°27'48	max. Earth dist.	13424 Apr 16 13:24	9° \mathbb{B} 02'54	1.44203 AU
max. Earth dist.	13423 May 04 19:50	24° \mathbb{B} 43'34	1.45372 AU	evening rise	13424 Apr 24 19:20	22° \mathbb{B} 00'43	
	13423 May 08 04:39	0° \mathbb{II}			13424 Apr 30 00:58	0° \mathbb{II}	
evening rise	13423 May 16 07:06	12° \mathbb{II} 31'01			13424 May 21 09:38	0° \mathbb{B}	
	13423 May 27 20:34	0° \mathbb{B}		evening max el	13424 May 24 21:54	3° \mathbb{B} 52'55	21°03'30
greatest brilliancy	13423 May 31 02:08	4° \mathbb{B} 44'54	-0.6m	asc. node	13424 May 28 10:06	6° \mathbb{B} 55'29	
asc. node	13423 Jun 11 12:59	19° \mathbb{B} 39'26		retrograde	13424 Jun 02 11:01	8° \mathbb{B} 51'22	
evening max el	13423 Jun 11 22:44	20° \mathbb{B} 04'15	19°56'39	evening set	13424 Jun 06 18:09	7° \mathbb{B} 08'06	
retrograde	13423 Jun 19 12:05	24° \mathbb{B} 22'09		inferior conj	13424 Jun 12 00:07	0° \mathbb{B} 56'41	3°10'06
evening set	13423 Jun 23 08:59	22° \mathbb{B} 55'26		minimum elong	13424 Jun 11 23:29	0° \mathbb{B} 58'54	3°09'01
inferior conj	13423 Jun 28 16:20	16° \mathbb{B} 55'44	3°11'59	min. Earth dist.	13424 Jun 12 10:10	0° \mathbb{B} 21'48	0.68613 AU
minimum elong	13423 Jun 28 16:42	16° \mathbb{B} 54'32	3°10'57		13424 Jun 12 16:27	30° \mathbb{R} \mathbb{II}	
min. Earth dist.	13423 Jun 29 16:02	15° \mathbb{B} 35'44	0.67841 AU	morning rise	13424 Jun 17 04:35	24° \mathbb{II} 38'29	
morning rise	13423 Jul 04 00:04	10° \mathbb{B} 33'16		direct	13424 Jun 22 10:02	22° \mathbb{II} 21'22	
direct	13423 Jul 09 17:52	8° \mathbb{B} 01'37		desc. node	13424 Jun 30 13:00	26° \mathbb{II} 21'57	
desc. node	13423 Jul 14 15:48	9° \mathbb{B} 30'36		morning max el	13424 Jul 02 22:24	28° \mathbb{II} 37'06	23°21'46
morning max el	13423 Jul 21 11:47	15° \mathbb{B} 03'59	24°50'54		13424 Jul 04 06:15	0° \mathbb{B}	
	13423 Aug 02 17:43	0° \mathbb{O}			13424 Jul 26 10:34	0° \mathbb{O}	
	13423 Aug 22 06:40	0° \mathbb{M}		morning set	13424 Aug 06 16:39	18° \mathbb{O} 00'12	
morning set	13423 Aug 26 07:11	6° \mathbb{M} 57'24		max. Earth dist.	13424 Aug 10 18:56	24° \mathbb{O} 59'07	1.39447 AU
max. Earth dist.	13423 Aug 29 20:57	13° \mathbb{M} 23'08	1.37108 AU		13424 Aug 13 15:25	0° \mathbb{M}	

































































































































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minimum elong	13424 Aug 18 15:13	9° \mathbb{M} 04'45	0°52'39	minimum elong	13425 Jul 31 19:22	20° Ω 59'21	1°27'01
asc. node	13424 Aug 24 10:33	20° \mathbb{M} 04'59			13425 Aug 05 20:23	0° \mathbb{M}	
evening rise	13424 Aug 27 20:44	26° \mathbb{M} 41'59		evening rise	13425 Aug 11 06:33	9° \mathbb{M} 56'55	
	13424 Aug 29 13:51	0° $\underline{\Omega}$		asc. node	13425 Aug 11 07:09	9° \mathbb{M} 59'41	
evening max el	13424 Sep 12 22:44	22° $\underline{\Omega}$ 47'28	18°40'15		13425 Aug 22 21:35	0° $\underline{\Omega}$	
retrograde	13424 Sep 21 03:19	26° $\underline{\Omega}$ 54'54		evening max el	13425 Aug 27 07:11	5° $\underline{\Omega}$ 25'39	18°11'43
evening set	13424 Sep 23 01:33	26° $\underline{\Omega}$ 41'59		retrograde	13425 Sep 03 10:18	9° $\underline{\Omega}$ 03'12	
desc. node	13424 Sep 26 09:37	25° $\underline{\Omega}$ 24'46		evening set	13425 Sep 05 15:11	8° $\underline{\Omega}$ 43'00	
inferior conj	13424 Oct 01 02:15	22° $\underline{\Omega}$ 17'04	-1°29'17	inferior conj	13425 Sep 12 21:20	3° $\underline{\Omega}$ 57'17	0°07'35
minimum elong	13424 Sep 30 22:36	22° $\underline{\Omega}$ 23'53	1°27'32	minimum elong	13425 Sep 12 21:36	3° $\underline{\Omega}$ 56'44	0°07'27
min. Earth dist.	13424 Oct 04 05:43	19° $\underline{\Omega}$ 56'50	0.57165 AU	transit middle	13425 Sep 12 21:36	3° $\underline{\Omega}$ 56'44	0°07'27
morning rise	13424 Oct 08 16:12	17° $\underline{\Omega}$ 14'18		transit begin	13425 Sep 12 18:34	4° $\underline{\Omega}$ 03'20	
direct	13424 Oct 14 14:12	15° $\underline{\Omega}$ 47'57		transit end	13425 Sep 13 00:38	3° $\underline{\Omega}$ 50'06	
morning max el	13424 Oct 28 20:48	23° $\underline{\Omega}$ 15'14	26°39'46	desc. node	13425 Sep 13 07:08	3° $\underline{\Omega}$ 35'51	
	13424 Nov 03 22:34	0° \mathbb{M}		min. Earth dist.	13425 Sep 16 04:34	1° $\underline{\Omega}$ 05'49	0.59303 AU
asc. node	13424 Nov 20 12:17	26° \mathbb{M} 17'47			13425 Sep 17 13:39	30° \mathbb{R} \mathbb{M}	
	13424 Nov 22 09:51	0° \mathbb{M}		morning rise	13425 Sep 20 00:36	28° \mathbb{M} 20'26	
morning set	13424 Nov 27 04:18	9° \mathbb{M} 51'31		direct	13425 Sep 26 10:55	26° \mathbb{M} 26'16	
					13425 Oct 05 19:41	0° $\underline{\Omega}$	
superior conj	13424 Dec 03 23:53	24° \mathbb{M} 52'33	1°36'04	morning max el	13425 Oct 10 18:38	4° $\underline{\Omega}$ 13'16	27°38'23
minimum elong	13424 Dec 03 23:00	24° \mathbb{M} 47'34	1°37'03		13425 Oct 29 18:27	0° \mathbb{M}	
max. Earth dist.	13424 Dec 04 12:28	26° \mathbb{M} 02'39	1.31364 AU	asc. node	13425 Nov 07 09:04	15° \mathbb{M} 50'04	
	13424 Dec 06 07:11	0° \mathbb{M}		morning set	13425 Nov 11 11:05	24° \mathbb{M} 12'34	
evening rise	13424 Dec 10 21:05	9° \mathbb{M} 56'22			13425 Nov 14 03:48	0° \mathbb{M}	
	13424 Dec 21 04:29	0° \approx					
desc. node	13424 Dec 23 07:09	3° \approx 38'34		superior conj	13425 Nov 18 11:27	9° \mathbb{M} 33'21	1°28'10
evening max el	13425 Jan 10 23:44	28° \approx 38'09	27°12'16	minimum elong	13425 Nov 18 09:44	9° \mathbb{M} 23'42	1°28'56
	13425 Jan 12 11:44	0° \mathbb{M}		max. Earth dist.	13425 Nov 17 20:46	8° \mathbb{M} 11'22	1.31206 AU
retrograde	13425 Jan 24 22:52	5° \mathbb{M} 53'48		evening rise	13425 Nov 25 04:36	24° \mathbb{M} 22'47	
evening set	13425 Jan 31 18:34	3° \mathbb{M} 50'27			13425 Nov 27 20:31	0° \mathbb{M}	
min. Earth dist.	13425 Feb 04 14:13	1° \mathbb{M} 06'24	0.60502 AU	desc. node	13425 Dec 10 04:09	22° \mathbb{M} 32'28	
	13425 Feb 05 22:02	30° \mathbb{R} \approx			13425 Dec 15 05:54	0° \approx	
inferior conj	13425 Feb 07 18:09	28° \approx 25'36	-2°47'02	evening max el	13425 Dec 23 22:52	10° \approx 06'30	26°16'43
minimum elong	13425 Feb 08 00:09	28° \approx 12'53	2°44'08	retrograde	13426 Jan 06 21:48	17° \approx 11'52	
morning rise	13425 Feb 15 08:51	23° \approx 36'05		evening set	13426 Jan 13 06:56	15° \approx 34'04	
asc. node	13425 Feb 16 10:37	23° \approx 22'53		min. Earth dist.	13426 Jan 17 12:22	12° \approx 57'38	0.58344 AU
direct	13425 Feb 17 10:47	23° \approx 18'46		inferior conj	13426 Jan 20 14:50	10° \approx 40'38	-4°09'54
morning max el	13425 Feb 24 16:59	26° \approx 56'41	17°58'37	minimum elong	13426 Jan 20 23:20	10° \approx 24'56	4°06'26
	13425 Feb 27 09:43	0° \mathbb{M}		morning rise	13426 Jan 28 18:42	6° \approx 12'29	
morning set	13425 Mar 12 06:45	21° \mathbb{M} 25'24		direct	13426 Jan 30 19:49	5° \approx 58'25	
	13425 Mar 16 23:05	0° \mathbb{Y}		asc. node	13426 Feb 03 08:00	6° \approx 42'04	
desc. node	13425 Mar 21 08:46	7° \mathbb{Y} 54'08		morning max el	13426 Feb 08 01:58	10° \approx 02'01	18°30'40
					13426 Feb 21 02:40	0° \mathbb{M}	
superior conj	13425 Mar 22 13:25	10° \mathbb{Y} 00'14	-0°09'28	morning set	13426 Feb 24 00:14	5° \mathbb{M} 31'43	
minimum elong	13425 Mar 22 12:36	9° \mathbb{Y} 56'41	0°09'24				
behind sun begin	13425 Mar 22 06:03	9° \mathbb{Y} 27'57		superior conj	13426 Mar 05 00:48	22° \mathbb{M} 41'41	0°25'27
behind sun end	13425 Mar 22 19:09	10° \mathbb{Y} 25'21		minimum elong	13426 Mar 05 02:32	22° \mathbb{M} 49'41	0°25'24
max. Earth dist.	13425 Mar 30 02:25	22° \mathbb{Y} 50'53	1.42471 AU	desc. node	13426 Mar 08 05:16	28° \mathbb{M} 30'39	
	13425 Apr 03 11:49	0° \mathbb{M}			13426 Mar 09 01:12	0° \mathbb{Y}	
evening rise	13425 Apr 04 20:01	2° \mathbb{M} 08'23		max. Earth dist.	13426 Mar 12 11:04	5° \mathbb{Y} 59'34	1.40364 AU
	13425 Apr 23 11:16	0° \mathbb{M}		evening rise	13426 Mar 16 16:59	13° \mathbb{Y} 11'20	
evening max el	13425 May 07 15:53	17° \mathbb{M} 41'56	22°20'07		13426 Mar 27 07:29	0° \mathbb{M}	
asc. node	13425 May 15 07:18	23° \mathbb{M} 05'01			13426 Apr 18 18:25	0° \mathbb{M}	
retrograde	13425 May 17 08:35	23° \mathbb{M} 24'24		evening max el	13426 Apr 20 06:46	1° \mathbb{M} 33'37	23°41'00
evening set	13425 May 22 02:40	21° \mathbb{M} 25'38		retrograde	13426 May 01 03:18	7° \mathbb{M} 56'38	
inferior conj	13425 May 27 09:36	15° \mathbb{M} 04'37	2°57'24	asc. node	13426 May 02 04:34	7° \mathbb{M} 51'37	
minimum elong	13425 May 27 08:08	15° \mathbb{M} 09'43	2°56'13	evening set	13426 May 06 08:58	5° \mathbb{M} 44'10	
min. Earth dist.	13425 May 27 06:39	15° \mathbb{M} 14'56	0.68915 AU	min. Earth dist.	13426 May 11 03:19	0° \mathbb{M} 09'46	0.68754 AU
morning rise	13425 Jun 01 13:26	8° \mathbb{M} 52'32			13426 May 11 06:10	30° \mathbb{R} \mathbb{M}	
direct	13425 Jun 06 06:05	6° \mathbb{M} 54'01		inferior conj	13426 May 11 18:52	29° \mathbb{M} 16'29	2°34'29
morning max el	13425 Jun 15 11:30	12° \mathbb{M} 17'38	21°53'50	minimum elong	13426 May 11 16:52	29° \mathbb{M} 23'22	2°33'12
desc. node	13425 Jun 17 10:04	14° \mathbb{M} 20'29		morning rise	13426 May 17 00:44	23° \mathbb{M} 11'53	
	13425 Jun 29 12:57	0° \mathbb{M}		direct	13426 May 21 04:47	21° \mathbb{M} 33'58	
morning set	13425 Jul 18 01:07	27° \mathbb{M} 56'41		morning max el	13426 May 29 06:15	26° \mathbb{M} 08'46	20°34'25
	13425 Jul 19 07:51	0° Ω			13426 Jun 01 18:21	0° \mathbb{M}	
max. Earth dist.	13425 Jul 23 20:01	7° Ω 22'14	1.41725 AU	desc. node	13426 Jun 04 07:01	3° \mathbb{M} 08'29	

	13426 Jun 22 22:52	0°☿			13427 Jun 15 19:22	0°☿	
morning set	13426 Jun 27 10:56	6°☿54'46		max. Earth dist.	13427 Jun 18 18:35	4°☿39'39	1.45065 AU
max. Earth dist.	13426 Jul 06 03:54	20°☿38'51	1.43673 AU				
	13426 Jul 11 21:27	0°♊		superior conj	13427 Jun 22 19:29	11°☿03'49	-2°12'06
				minimum elong	13427 Jun 22 22:21	11°☿15'16	2°13'04
superior conj	13426 Jul 12 15:58	1°♊16'48	-1°55'50		13427 Jul 04 10:47	0°♊	
minimum elong	13426 Jul 12 22:56	1°♊45'50	1°56'13	evening rise	13427 Jul 06 22:14	4°♊07'03	
evening rise	13426 Jul 25 00:44	22°♊29'08		asc. node	13427 Jul 16 00:33	19°♊08'03	
asc. node	13426 Jul 29 03:48	29°♊42'23			13427 Jul 23 14:11	0°♋	
	13426 Jul 29 07:52	0°♋		evening max el	13427 Jul 25 10:47	2°♋01'35	18°12'29
evening max el	13426 Aug 10 20:25	18°♋33'31	18°02'49	retrograde	13427 Jul 31 19:16	5°♋23'00	
retrograde	13426 Aug 17 09:05	21°♋55'51		evening set	13427 Aug 03 16:37	4°♋38'11	
evening set	13426 Aug 19 22:05	21°♋24'40			13427 Aug 09 01:08	30°♌♊	
inferior conj	13426 Aug 26 11:38	16°♋19'17	1°22'40	inferior conj	13427 Aug 09 17:09	29°♊15'16	2°15'42
minimum elong	13426 Aug 26 13:48	16°♋13'51	1°21'36	minimum elong	13427 Aug 09 19:38	29°♊08'16	2°14'26
min. Earth dist.	13426 Aug 29 12:20	13°♋18'23	0.61595 AU	min. Earth dist.	13427 Aug 12 05:46	26°♊25'30	0.63774 AU
desc. node	13426 Aug 31 04:39	11°♋47'00		morning rise	13427 Aug 15 20:59	22°♊58'39	
morning rise	13426 Sep 02 02:57	10°♋17'37		desc. node	13427 Aug 18 02:08	21°♊32'22	
direct	13426 Sep 08 18:54	7°♋59'44		direct	13427 Aug 22 12:12	20°♊24'53	
morning max el	13426 Sep 22 23:17	15°♋58'02	27°58'30	morning max el	13427 Sep 05 08:38	28°♊25'30	27°41'02
	13426 Oct 04 11:51	0°♌			13427 Sep 06 21:06	0°♋	
	13426 Oct 22 09:34	0°♌			13427 Sep 28 07:43	0°♌	
asc. node	13426 Oct 25 05:46	5°♌38'18		morning set	13427 Oct 10 06:17	21°♌54'42	
morning set	13426 Oct 26 12:30	8°♌15'24		asc. node	13427 Oct 12 02:24	25°♌37'19	
max. Earth dist.	13426 Nov 01 02:48	20°♌11'09	1.31582 AU		13427 Oct 14 05:14	0°♌	
				max. Earth dist.	13427 Oct 15 02:51	1°♌53'35	1.32491 AU
superior conj	13426 Nov 02 21:33	24°♌06'17	1°14'32				
minimum elong	13426 Nov 02 19:20	23°♌54'03	1°14'59	superior conj	13427 Oct 18 04:13	8°♌26'06	0°55'16
	13426 Nov 05 13:24	0°♍		minimum elong	13427 Oct 18 02:01	8°♌14'12	0°55'26
evening rise	13426 Nov 09 14:53	8°♍54'36		evening rise	13427 Oct 25 02:05	23°♌26'59	
	13426 Nov 20 07:48	0°♎			13427 Oct 28 04:44	0°♍	
desc. node	13426 Nov 27 01:15	10°♎36'37		desc. node	13427 Nov 13 22:29	27°♍32'46	
evening max el	13426 Dec 05 13:44	20°♎43'48	24°51'35		13427 Nov 16 04:22	0°♎	
retrograde	13426 Dec 19 08:20	27°♎37'04		evening max el	13427 Nov 16 23:39	0°♎47'57	23°10'34
evening set	13426 Dec 24 20:42	26°♎29'25		retrograde	13427 Nov 30 06:00	7°♎23'35	
min. Earth dist.	13426 Dec 30 01:37	23°♎44'21	0.56440 AU	evening set	13427 Dec 04 11:26	6°♎44'46	
inferior conj	13427 Jan 01 14:55	22°♎06'15	-5°20'20	min. Earth dist.	13427 Dec 11 09:11	3°♎31'53	0.55076 AU
minimum elong	13427 Jan 01 22:43	21°♎53'44	5°17'52	inferior conj	13427 Dec 12 19:22	2°♎42'37	-5°55'47
morning rise	13427 Jan 10 02:54	17°♎59'37		minimum elong	13427 Dec 12 20:45	2°♎40'37	5°54'43
direct	13427 Jan 12 10:12	17°♎44'48			13427 Dec 17 23:03	30°♏♍	
asc. node	13427 Jan 21 05:19	21°♎38'30		morning rise	13427 Dec 21 07:39	28°♏52'25	
morning max el	13427 Jan 22 00:31	22°♎23'06	19°24'44	direct	13427 Dec 24 05:44	28°♏32'13	
	13427 Jan 28 02:45	0°♏			13427 Dec 30 02:33	0°♎	
morning set	13427 Feb 08 02:19	19°♏59'22		morning max el	13428 Jan 04 09:23	3°♎51'40	20°41'55
	13427 Feb 13 02:11	0°♐		asc. node	13428 Jan 08 02:33	7°♎58'17	
					13428 Jan 21 03:13	0°♏	
superior conj	13427 Feb 16 04:43	6°♐07'33	0°53'45	morning set	13428 Jan 23 09:56	4°♏39'29	
minimum elong	13427 Feb 16 07:26	6°♐20'47	0°53'51				
max. Earth dist.	13427 Feb 22 17:36	18°♐28'25	1.38110 AU	superior conj	13428 Jan 30 20:53	20°♏06'13	1°14'54
desc. node	13427 Feb 23 01:48	19°♐05'44		minimum elong	13428 Jan 30 23:28	20°♏19'27	1°15'19
evening rise	13427 Feb 26 10:52	25°♐07'21			13428 Feb 04 20:01	0°♐	
	13427 Mar 01 06:48	0°♑		max. Earth dist.	13428 Feb 05 01:53	0°♐28'27	1.35952 AU
	13427 Mar 20 22:54	0°♑		evening rise	13428 Feb 08 23:08	7°♐49'13	
evening max el	13427 Apr 02 20:24	15°♑26'30	24°59'41	desc. node	13428 Feb 09 22:23	9°♐35'52	
retrograde	13427 Apr 14 18:04	22°♑21'46			13428 Feb 22 00:23	0°♑	
asc. node	13427 Apr 19 01:55	21°♑00'50		evening max el	13428 Mar 15 09:55	29°♑16'16	26°09'01
evening set	13427 Apr 20 11:27	19°♑58'12			13428 Mar 16 04:09	0°♑	
min. Earth dist.	13427 Apr 24 21:57	14°♑59'59	0.68134 AU	retrograde	13428 Mar 28 03:59	6°♑33'05	
inferior conj	13427 Apr 26 02:01	13°♑27'42	2°01'22	evening set	13428 Apr 03 08:28	4°♑02'22	
minimum elong	13427 Apr 25 23:52	13°♑34'47	2°00'07	asc. node	13428 Apr 04 23:21	2°♑32'27	
morning rise	13427 May 01 12:32	7°♑31'58			13428 Apr 07 05:40	30°♒♑	
direct	13427 May 05 04:38	6°♑14'37		min. Earth dist.	13428 Apr 07 12:28	29°♑39'24	0.67074 AU
morning max el	13427 May 12 08:34	10°♑11'19	19°28'23	inferior conj	13428 Apr 09 05:01	27°♑33'58	1°17'42
desc. node	13427 May 22 03:53	22°♑32'17		minimum elong	13428 Apr 09 03:17	27°♑39'23	1°16'42
greatest brilliancy	13427 May 25 00:25	26°♑41'04	-0.7m	morning rise	13428 Apr 14 22:52	21°♑48'33	
	13427 May 27 06:04	0°♒		direct	13428 Apr 18 03:53	20°♑50'10	
morning set	13427 Jun 06 12:27	15°♒36'07		morning max el	13428 Apr 24 18:08	24°♑21'56	18°38'05

	13428 Apr 29 13:29	0°♄		desc. node	13429 Apr 24 21:18	2°♄31'14	
desc. node	13428 May 08 00:38	12°♄22'13		morning set	13429 Apr 26 21:04	5°♄45'22	
morning set	13428 May 16 03:18	25°♄00'45					
	13428 May 19 07:44	0°♄		superior conj	13429 May 11 15:44	29°♄24'57	-1°47'31
max. Earth dist.	13428 May 31 13:16	19°♄06'11	1.45766 AU	minimum elong	13429 May 11 06:38	28°♄49'11	1°47'34
					13429 May 12 00:39	0°♄	
superior conj	13428 Jun 01 06:08	20°♄12'04	-2°09'38	max. Earth dist.	13429 May 14 09:11	3°♄41'38	1.45720 AU
minimum elong	13428 Jun 01 01:21	19°♄53'21	2°10'28	evening rise	13429 May 27 18:16	24°♄27'39	
	13428 Jun 07 12:12	0°♄			13429 May 31 08:28	0°♄	
evening rise	13428 Jun 16 19:25	14°♄43'29		greatest brilliancy	13429 Jun 09 12:00	13°♄54'54	-0.7m
greatest brilliancy	13428 Jun 24 07:53	26°♄40'55	-0.9m	asc. node	13429 Jun 18 18:21	26°♄40'05	
	13428 Jun 26 10:42	0°♄		evening max el	13429 Jun 21 07:25	29°♄28'11	19°24'13
asc. node	13428 Jul 01 21:23	8°♄09'56			13429 Jun 21 20:28	0°♄	
evening max el	13428 Jul 07 23:11	15°♄41'33	18°39'56	retrograde	13429 Jun 28 10:04	3°♄27'03	
retrograde	13428 Jul 14 12:40	19°♄15'33		evening set	13429 Jul 02 01:15	2°♄10'16	
evening set	13428 Jul 17 18:41	18°♄15'16			13429 Jul 04 10:39	30°♄♄	
inferior conj	13428 Jul 23 09:55	12°♄36'55	2°49'38	inferior conj	13429 Jul 07 10:38	26°♄18'06	3°07'42
minimum elong	13428 Jul 23 11:50	12°♄31'00	2°48'28	minimum elong	13429 Jul 07 11:35	26°♄14'57	3°06'38
min. Earth dist.	13428 Jul 25 08:22	10°♄14'10	0.65671 AU	min. Earth dist.	13429 Jul 08 18:36	24°♄33'04	0.67176 AU
morning rise	13428 Jul 29 04:02	6°♄13'33		morning rise	13429 Jul 12 21:24	19°♄54'00	
desc. node	13428 Aug 03 23:35	3°♄34'30		direct	13429 Jul 18 21:39	17°♄16'36	
direct	13428 Aug 04 13:30	3°♄33'17		desc. node	13429 Jul 21 20:57	17°♄49'13	
morning max el	13428 Aug 17 19:51	11°♄23'55	26°51'43	morning max el	13429 Jul 31 06:47	24°♄41'33	25°39'10
	13428 Sep 01 15:27	0°♄			13429 Aug 05 01:45	0°♄	
	13428 Sep 19 21:03	0°♄			13429 Aug 26 02:06	0°♄	
morning set	13428 Sep 22 13:27	5°♄02'31		morning set	13429 Sep 05 06:23	17°♄30'24	
max. Earth dist.	13428 Sep 26 17:32	13°♄13'02	1.33925 AU	max. Earth dist.	13429 Sep 08 22:06	24°♄17'40	1.35840 AU
asc. node	13428 Sep 27 23:00	15°♄42'00			13429 Sep 11 21:13	0°♄	
superior conj	13428 Oct 01 05:11	22°♄25'56	0°30'32	superior conj	13429 Sep 14 21:44	5°♄59'31	0°00'51
minimum elong	13428 Oct 01 03:39	22°♄17'56	0°30'31	minimum elong	13429 Sep 14 21:41	5°♄59'17	0°00'51
	13428 Oct 04 19:00	0°♄		behind sun begin	13429 Sep 14 15:28	5°♄28'07	
evening rise	13428 Oct 08 12:14	7°♄53'55		behind sun end	13429 Sep 15 03:53	6°♄30'32	
	13428 Oct 20 03:34	0°♄		asc. node	13429 Sep 14 19:35	5°♄48'46	
evening max el	13428 Oct 28 13:37	10°♄54'31	21°31'40	evening rise	13429 Sep 22 19:17	22°♄10'23	
desc. node	13428 Oct 30 19:49	12°♄56'09			13429 Sep 26 16:29	0°♄	
retrograde	13428 Nov 09 18:25	16°♄57'59		evening max el	13429 Oct 10 16:04	21°♄37'35	20°08'20
evening set	13428 Nov 12 15:08	16°♄39'14		desc. node	13429 Oct 17 17:12	26°♄19'31	
inferior conj	13428 Nov 21 11:51	12°♄45'28	-5°35'14	retrograde	13429 Oct 21 06:59	26°♄54'40	
minimum elong	13428 Nov 21 04:36	12°♄55'38	5°33'11	evening set	13429 Oct 23 07:51	26°♄43'54	
min. Earth dist.	13428 Nov 21 15:18	12°♄40'38	0.54509 AU	inferior conj	13429 Nov 01 06:13	22°♄46'09	-4°18'33
morning rise	13428 Nov 29 18:55	8°♄56'57		minimum elong	13429 Oct 31 20:12	23°♄01'06	4°14'48
direct	13428 Dec 03 13:51	8°♄25'49		min. Earth dist.	13429 Nov 02 23:06	21°♄45'05	0.54883 AU
morning max el	13428 Dec 16 04:28	14°♄28'39	22°19'43	morning rise	13429 Nov 09 07:32	18°♄39'06	
asc. node	13428 Dec 24 23:43	25°♄23'51		direct	13429 Nov 14 00:40	17°♄50'50	
	13428 Dec 27 20:14	0°♄		morning max el	13429 Nov 27 15:07	24°♄32'24	24°08'19
morning set	13429 Jan 06 20:40	19°♄24'57			13429 Dec 02 15:14	0°♄	
	13429 Jan 11 19:31	0°♄		asc. node	13429 Dec 11 20:47	13°♄39'42	
					13429 Dec 20 09:18	0°♄	
superior conj	13429 Jan 13 21:42	4°♄27'25	1°29'03	morning set	13429 Dec 22 08:33	4°♄10'03	
minimum elong	13429 Jan 13 23:33	4°♄37'08	1°29'49				
max. Earth dist.	13429 Jan 17 16:05	12°♄18'48	1.34088 AU	superior conj	13429 Dec 29 04:20	19°♄02'36	1°36'37
evening rise	13429 Jan 22 02:15	21°♄08'03		minimum elong	13429 Dec 29 05:07	19°♄06'53	1°37'37
desc. node	13429 Jan 26 19:03	29°♄56'52		max. Earth dist.	13429 Dec 31 14:08	24°♄15'19	1.32651 AU
	13429 Jan 26 19:44	0°♄			13430 Jan 03 07:18	0°♄	
	13429 Feb 14 21:23	0°♄		evening rise	13430 Jan 05 16:49	4°♄55'10	
evening max el	13429 Feb 25 23:30	12°♄55'57	27°01'41	desc. node	13430 Jan 13 15:46	20°♄03'28	
retrograde	13429 Mar 11 08:21	20°♄22'55			13430 Jan 19 12:11	0°♄	
evening set	13429 Mar 17 22:08	17°♄50'33		evening max el	13430 Feb 08 12:08	26°♄14'38	27°30'23
min. Earth dist.	13429 Mar 21 20:53	14°♄01'01	0.65610 AU		13430 Feb 12 22:33	0°♄	
asc. node	13429 Mar 22 20:49	12°♄53'17		retrograde	13430 Feb 22 05:59	3°♄41'27	
inferior conj	13429 Mar 24 01:40	11°♄30'27	0°22'57	evening set	13430 Mar 01 02:03	1°♄14'24	
minimum elong	13429 Mar 24 01:02	11°♄32'14	0°22'36		13430 Mar 02 15:45	30°♄♄	
morning rise	13429 Mar 30 05:27	5°♄57'10		min. Earth dist.	13430 Mar 04 21:12	27°♄55'03	0.63807 AU
direct	13429 Apr 02 00:35	5°♄14'51		inferior conj	13430 Mar 07 13:13	25°♄09'57	-0°43'10
morning max el	13429 Apr 08 09:04	8°♄34'23	18°04'28	minimum elong	13430 Mar 07 14:34	25°♄06'26	0°42'25
	13429 Apr 23 08:03	0°♄		asc. node	13430 Mar 09 18:19	22°♄57'46	

morning rise	13430 Mar 14 05:21	19° X 51'07		morning rise	13431 Feb 25 18:46	3° X 23'20	
direct	13430 Mar 16 16:07	19° X 21'22		direct	13431 Feb 27 23:13	3° X 02'24	
morning max el	13430 Mar 23 02:36	22° X 39'54	17°47'58	morning max el	13431 Mar 06 19:38	6° X 30'13	17°49'17
	13430 Mar 28 22:00	0° Y			13431 Mar 22 01:04	0° Y	
morning set	13430 Apr 08 18:12	17° Y 48'44		morning set	13431 Mar 22 13:09	0° Y 54'00	
desc. node	13430 Apr 11 17:53	22° Y 53'11		desc. node	13431 Mar 29 14:26	13° Y 23'59	
	13430 Apr 15 23:30	0° Z					
superior conj	13430 Apr 21 16:32	9° Z 23'17	-1°11'57	superior conj	13431 Apr 02 16:54	20° Y 28'04	-0°31'50
minimum elong	13430 Apr 21 09:16	8° Z 53'48	1°11'34	minimum elong	13431 Apr 02 13:54	20° Y 15'18	0°31'38
max. Earth dist.	13430 Apr 27 04:05	18° Z 10'26	1.44949 AU	max. Earth dist.	13431 Apr 08 10:01	0° Z	
	13430 May 04 17:43	0° II		evening rise	13431 Apr 09 20:05	2° Z 18'54	1.43533 AU
evening rise	13430 May 07 05:39	3° II 50'19			13431 Apr 16 21:47	13° Z 33'15	
	13430 May 24 20:23	0° S		evening max el	13431 Apr 27 18:18	0° II	
evening max el	13430 Jun 04 10:01	13° S 16'41	20°23'40		13431 May 18 06:55	27° II 05'43	21°35'12
asc. node	13430 Jun 05 15:25	14° S 26'52		asc. node	13431 May 21 13:32	0° S	
retrograde	13430 Jun 12 08:53	17° S 50'54		retrograde	13431 May 23 12:32	1° S 16'41	
evening set	13430 Jun 16 10:00	16° S 17'16		evening set	13431 May 27 07:16	2° S 22'12	
inferior conj	13430 Jun 21 16:29	10° S 12'37	3°12'32		13431 May 31 19:04	0° S 32'07	
minimum elong	13430 Jun 21 16:24	10° S 12'53	3°11'30	inferior conj	13431 Jun 01 09:39	30° R II	
min. Earth dist.	13430 Jun 22 10:22	9° S 11'18	0.68230 AU	minimum elong	13431 Jun 06 01:12	24° II 16'33	3°05'57
morning rise	13430 Jun 26 22:29	3° S 51'39		minimum elong	13431 Jun 06 00:11	24° II 20'05	3°04'50
direct	13430 Jul 02 11:16	1° S 25'12		min. Earth dist.	13431 Jun 06 05:39	24° II 01'00	0.68806 AU
desc. node	13430 Jul 08 18:13	3° S 50'42		morning rise	13431 Jun 11 05:06	18° II 00'59	
morning max el	13430 Jul 13 16:53	8° S 08'59	24°13'18	direct	13431 Jun 16 05:13	15° II 51'19	
	13430 Jul 30 20:04	0° Q		desc. node	13431 Jun 25 15:22	21° II 12'55	
morning set	13430 Aug 18 04:37	29° Q 07'07		morning max el	13431 Jun 26 04:02	21° II 44'18	22°43'43
	13430 Aug 18 16:50	0° P			13431 Jul 03 07:18	0° S	
max. Earth dist.	13430 Aug 21 20:21	5° P 32'35	1.38093 AU	morning set	13431 Jul 24 02:32	0° Q	
				max. Earth dist.	13431 Jul 30 03:38	9° Q 41'45	
superior conj	13430 Aug 29 02:29	18° P 58'41	-0°32'39		13431 Aug 03 19:21	17° Q 28'15	1.40444 AU
minimum elong	13430 Aug 29 04:45	19° P 09'29	0°32'31		13431 Aug 10 23:04	0° P	
asc. node	13430 Sep 01 16:11	25° P 54'03		superior conj	13431 Aug 11 15:18	1° P 13'20	-1°07'40
	13430 Sep 03 18:05	0° A		minimum elong	13431 Aug 11 20:21	1° P 36'13	1°07'29
evening rise	13430 Sep 06 20:44	6° A 09'58		asc. node	13431 Aug 19 12:46	15° P 53'50	
	13430 Sep 20 14:16	0° M		evening rise	13431 Aug 21 13:24	19° P 44'22	
evening max el	13430 Sep 23 08:39	3° M 09'32	19°06'09		13431 Aug 27 01:31	0° A	
retrograde	13430 Oct 02 08:15	7° M 39'30		evening max el	13431 Sep 06 12:27	15° A 25'58	18°25'36
evening set	13430 Oct 04 04:52	7° M 28'44		retrograde	13431 Sep 14 04:43	19° A 18'59	
desc. node	13430 Oct 04 14:39	7° M 23'37		evening set	13431 Sep 16 05:33	19° A 03'22	
inferior conj	13430 Oct 12 15:34	3° M 15'24	-2°31'53	desc. node	13431 Sep 21 12:08	16° A 20'43	
minimum elong	13430 Oct 12 09:05	3° M 26'27	2°28'55	inferior conj	13431 Sep 23 22:16	14° A 29'13	-0°45'50
min. Earth dist.	13430 Oct 15 10:46	1° M 21'20	0.56137 AU	minimum elong	13431 Sep 23 20:30	14° A 32'44	0°44'58
	13430 Oct 17 14:55	30° R A		min. Earth dist.	13431 Sep 27 04:44	11° A 53'34	0.58036 AU
morning rise	13430 Oct 20 10:31	28° A 34'55		morning rise	13431 Sep 27 07:59	9° A 11'19	
direct	13430 Oct 25 23:22	27° A 23'43		direct	13431 Oct 01 07:59	7° A 33'19	
	13430 Nov 03 06:06	0° M		morning max el	13431 Oct 07 11:56	15° A 09'01	27°09'16
morning max el	13430 Nov 09 02:02	4° M 35'42	25°50'49		13431 Oct 21 19:28	0° M	
	13430 Nov 27 08:12	0° J		asc. node	13431 Nov 02 19:49	0° M	
asc. node	13430 Nov 28 17:45	2° J 33'11			13431 Nov 15 14:35	21° M 53'43	
morning set	13430 Dec 06 19:53	18° J 50'12			13431 Nov 19 14:57	0° J	
	13430 Dec 11 21:56	0° Z		morning set	13431 Nov 21 04:50	3° J 19'43	
superior conj	13430 Dec 13 14:27	3° Z 45'07	1°37'59	superior conj	13431 Nov 28 02:00	18° J 27'57	1°33'26
minimum elong	13430 Dec 13 14:08	3° Z 43'24	1°39'02	minimum elong	13431 Nov 28 00:43	18° J 20'48	1°34'19
max. Earth dist.	13430 Dec 14 18:51	6° Z 22'26	1.31693 AU	max. Earth dist.	13431 Nov 28 03:04	18° J 33'53	1.31239 AU
evening rise	13430 Dec 20 15:55	19° Z 03'09			13431 Dec 03 07:01	0° Z	
	13430 Dec 26 03:11	0° A		evening rise	13431 Dec 04 20:59	3° Z 24'24	
desc. node	13430 Dec 31 12:34	9° A 49'26		desc. node	13431 Dec 18 09:28	29° Z 05'28	
	13431 Jan 13 21:22	0° X			13431 Dec 18 22:48	0° A	
evening max el	13431 Jan 21 21:42	8° X 59'55	27°28'42	evening max el	13432 Jan 04 01:17	20° A 58'10	26°52'41
retrograde	13431 Feb 04 19:42	16° X 19'46		retrograde	13432 Jan 18 00:11	28° A 08'47	
evening set	13431 Feb 11 17:26	14° X 05'43		evening set	13432 Jan 24 16:47	26° A 15'26	
min. Earth dist.	13431 Feb 15 11:41	11° X 11'11	0.61755 AU	min. Earth dist.	13432 Jan 28 15:20	23° A 36'34	0.59580 AU
inferior conj	13431 Feb 18 12:30	8° X 24'42	-1°59'36	inferior conj	13432 Jan 31 19:51	21° A 04'02	-3°22'33
minimum elong	13431 Feb 18 16:40	8° X 15'07	1°57'27	minimum elong	13432 Feb 01 03:06	20° A 49'31	3°19'15
asc. node	13431 Feb 24 15:44	3° X 49'37		morning rise	13432 Feb 08 16:30	16° A 23'20	
				direct	13432 Feb 10 17:38	16° A 07'44	

asc. node	13432 Feb 11 13:09	16° \approx 10'17			13433 Jan 17 01:57	30° \approx 30'	
morning max el	13432 Feb 18 08:40	19° \approx 54'57	18°09'41	morning rise	13433 Jan 20 16:09	28° \approx 40'00	
	13432 Feb 25 19:45	0° \approx		direct	13433 Jan 22 18:53	28° \approx 26'10	
morning set	13432 Mar 04 23:50	14° \approx 42'09		asc. node	13433 Jan 28 10:31	0° \approx 12'00	
	13432 Mar 13 05:42	0° \approx			13433 Jan 28 02:40	0° \approx	
				morning max el	13433 Jan 31 13:46	2° \approx 43'07	18°50'55
superior conj	13432 Mar 14 16:38	2° \approx 37'33	0°06'06	morning set	13433 Feb 16 21:22	28° \approx 58'37	
minimum elong	13432 Mar 14 17:06	2° \approx 39'40	0°06'04		13433 Feb 17 09:54	0° \approx	
behind sun begin	13432 Mar 14 10:01	2° \approx 07'52					
behind sun end	13432 Mar 15 00:11	3° \approx 11'24		superior conj	13433 Feb 25 11:37	15° \approx 39'44	0°38'19
desc. node	13432 Mar 15 10:56	3° \approx 59'23		minimum elong	13433 Feb 25 13:56	15° \approx 50'41	0°38'18
max. Earth dist.	13432 Mar 22 07:38	15° \approx 52'45	1.41612 AU	desc. node	13433 Mar 02 07:26	24° \approx 35'47	
evening rise	13432 Mar 27 06:36	24° \approx 03'22		max. Earth dist.	13433 Mar 04 14:45	28° \approx 42'58	1.39405 AU
	13432 Mar 31 00:06	0° \approx			13433 Mar 05 08:16	0° \approx	
	13432 Apr 20 16:33	0° \approx		evening rise	13433 Mar 08 12:34	5° \approx 29'10	
evening max el	13432 Apr 29 23:17	10° \approx 55'38	22°54'20		13433 Mar 24 01:58	0° \approx	
asc. node	13432 May 09 09:45	16° \approx 53'18		evening max el	13433 Apr 12 13:11	24° \approx 47'12	24°15'09
retrograde	13432 May 10 03:45	16° \approx 55'53			13433 Apr 19 01:51	0° \approx	
evening set	13432 May 15 02:51	14° \approx 50'45		retrograde	13433 Apr 23 21:03	1° \approx 25'58	
inferior conj	13432 May 20 10:48	8° \approx 26'29	2°48'54	asc. node	13433 Apr 26 07:04	0° \approx 59'53	
minimum elong	13432 May 20 09:04	8° \approx 32'30	2°47'40		13433 Apr 28 04:50	30° \approx 30'	
min. Earth dist.	13432 May 20 02:22	8° \approx 55'44	0.68903 AU	evening set	13433 Apr 29 07:44	29° \approx 08'10	
morning rise	13432 May 25 15:12	2° \approx 17'42		min. Earth dist.	13433 May 03 22:27	23° \approx 49'15	0.68538 AU
direct	13432 May 30 02:25	0° \approx 28'01		inferior conj	13433 May 04 19:24	22° \approx 38'30	2°21'43
morning max el	13432 Jun 07 19:21	5° \approx 29'41	21°18'46	minimum elong	13433 May 04 17:17	22° \approx 45'40	2°20'25
desc. node	13432 Jun 11 12:25	9° \approx 34'35		morning rise	13433 May 10 02:56	16° \approx 37'33	
	13432 Jun 26 11:15	0° \approx		direct	13433 May 14 01:41	15° \approx 08'43	
morning set	13432 Jul 09 01:42	19° \approx 11'28		morning max el	13433 May 21 17:18	19° \approx 26'12	20°04'32
	13432 Jul 15 19:33	0° \approx		desc. node	13433 May 29 09:21	28° \approx 39'18	
max. Earth dist.	13432 Jul 15 23:42	0° \approx 16'56	1.42605 AU		13433 May 30 09:01	0° \approx	
				morning set	13433 Jun 18 05:28	27° \approx 55'21	
superior conj	13432 Jul 23 07:42	12° \approx 33'35	-1°40'21		13433 Jun 19 13:48	0° \approx	
minimum elong	13432 Jul 23 14:47	13° \approx 03'58	1°40'24	max. Earth dist.	13433 Jun 28 10:16	13° \approx 52'38	1.44334 AU
	13432 Aug 02 05:02	0° \approx					
evening rise	13432 Aug 03 17:15	2° \approx 43'21		superior conj	13433 Jul 04 00:26	22° \approx 52'57	-2°04'42
asc. node	13432 Aug 05 09:23	5° \approx 44'23		minimum elong	13433 Jul 04 06:20	23° \approx 17'00	2°05'21
evening max el	13432 Aug 19 23:23	28° \approx 18'03	18°05'34		13433 Jul 08 08:09	0° \approx	
	13432 Aug 21 22:39	0° \approx		evening rise	13433 Jul 17 03:14	14° \approx 53'45	
retrograde	13432 Aug 26 19:13	1° \approx 47'46		asc. node	13433 Jul 23 06:04	25° \approx 20'34	
evening set	13432 Aug 29 03:21	1° \approx 23'22			13433 Jul 26 01:44	0° \approx	
	13432 Aug 31 20:15	30° \approx 30'		evening max el	13433 Aug 03 13:29	11° \approx 35'18	18°04'45
inferior conj	13432 Sep 05 02:04	26° \approx 28'52	0°42'10	retrograde	13433 Aug 09 23:22	14° \approx 55'48	
minimum elong	13432 Sep 05 03:22	26° \approx 25'50	0°41'32	evening set	13433 Aug 12 15:46	14° \approx 19'17	
desc. node	13432 Sep 07 09:39	24° \approx 19'28		inferior conj	13433 Aug 18 23:21	9° \approx 06'23	1°47'40
min. Earth dist.	13432 Sep 08 07:20	23° \approx 30'44	0.60268 AU	minimum elong	13433 Aug 19 01:48	8° \approx 59'54	1°46'27
morning rise	13432 Sep 12 00:15	20° \approx 39'54		min. Earth dist.	13433 Aug 21 19:27	6° \approx 07'37	0.62542 AU
direct	13432 Sep 18 13:32	18° \approx 35'11		morning rise	13433 Aug 25 09:36	2° \approx 56'59	
morning max el	13432 Oct 02 20:45	26° \approx 28'18	27°51'50	desc. node	13433 Aug 25 07:11	3° \approx 01'23	
	13432 Oct 06 04:37	0° \approx		direct	13433 Sep 01 01:54	0° \approx 30'57	
	13432 Oct 26 09:54	0° \approx		morning max el	13433 Sep 15 03:49	8° \approx 32'33	27°55'24
asc. node	13432 Nov 01 11:21	11° \approx 33'54			13433 Oct 01 17:35	0° \approx	
morning set	13432 Nov 04 09:38	17° \approx 34'07			13433 Oct 18 14:46	0° \approx	
	13432 Nov 10 03:39	0° \approx		morning set	13433 Oct 19 08:08	1° \approx 27'58	
max. Earth dist.	13432 Nov 10 11:00	0° \approx 40'45	1.31304 AU	asc. node	13433 Oct 19 08:02	1° \approx 27'25	
				max. Earth dist.	13433 Oct 24 14:46	12° \approx 33'12	1.31897 AU
superior conj	13432 Nov 11 13:10	3° \approx 06'10	1°23'05				
minimum elong	13432 Nov 11 11:11	2° \approx 55'07	1°23'43	superior conj	13433 Oct 26 22:05	17° \approx 34'22	1°07'03
evening rise	13432 Nov 18 05:55	17° \approx 53'44		minimum elong	13433 Oct 26 19:48	17° \approx 21'53	1°07'23
	13432 Nov 24 02:40	0° \approx			13433 Nov 01 13:48	0° \approx	
desc. node	13432 Dec 04 06:30	17° \approx 40'17		evening rise	13433 Nov 02 16:48	2° \approx 26'17	
	13432 Dec 13 19:33	0° \approx			13433 Nov 17 09:53	0° \approx	
evening max el	13432 Dec 15 20:35	2° \approx 03'02	25°43'19	desc. node	13433 Nov 21 03:40	5° \approx 18'31	
retrograde	13432 Dec 29 18:10	9° \approx 04'04		evening max el	13433 Nov 27 08:31	12° \approx 23'06	24°09'34
evening set	13433 Jan 04 20:00	7° \approx 38'25		retrograde	13433 Dec 10 23:44	19° \approx 10'46	
min. Earth dist.	13433 Jan 09 09:10	5° \approx 00'43	0.57491 AU	evening set	13433 Dec 15 23:40	18° \approx 16'06	
inferior conj	13433 Jan 12 07:55	2° \approx 58'21	-4°42'27	min. Earth dist.	13433 Dec 21 19:53	15° \approx 21'16	0.55772 AU
minimum elong	13433 Jan 12 16:42	2° \approx 43'06	4°39'13	inferior conj	13433 Dec 23 23:16	14° \approx 02'58	-5°41'09

minimum elong	13433 Dec 24 05:03	13°  54'08	5°39'24	minimum elong	13434 Dec 03 18:46	24°  26'05	5°53'31
morning rise	13434 Jan 01 12:22	10°  04'21		morning rise	13434 Dec 12 07:37	20°  35'02	
direct	13434 Jan 04 00:37	9°  48'03		direct	13434 Dec 15 14:16	20°  10'44	
morning max el	13434 Jan 14 06:57	14°  43'45	19°54'44	morning max el	13434 Dec 27 09:34	25°  49'17	21°21'18
asc. node	13434 Jan 15 07:49	15°  46'32			13434 Dec 31 05:11	0°  3	
	13434 Jan 25 02:28	0°  ≈		asc. node	13435 Jan 02 05:04	2°  36'38	
morning set	13434 Feb 01 02:11	13°  ≈33'03		morning set	13435 Jan 16 11:24	28°  316'28	
					13435 Jan 17 07:11	0°  ≈	
superior conj	13434 Feb 08 21:18	29°  ≈21'44	1°03'34	superior conj	13435 Jan 23 17:31	13°  ≈31'10	1°21'43
minimum elong	13434 Feb 09 00:04	29°  ≈35'30	1°03'48	minimum elong	13435 Jan 23 19:51	13°  ≈43'15	1°22'18
	13434 Feb 09 05:00	0°  ✕		max. Earth dist.	13435 Jan 28 07:38	22°  ≈50'57	1.35119 AU
max. Earth dist.	13434 Feb 14 21:05	10°  ✕56'29	1.37165 AU	evening rise	13435 Feb 01 09:51	0°  ✕46'12	
desc. node	13434 Feb 17 03:59	15°  ✕09'50			13435 Feb 01 00:04	0°  ✕	
evening rise	13434 Feb 18 14:47	17°  ✕46'56		desc. node	13435 Feb 04 00:34	5°  ✕36'49	
	13434 Feb 25 17:34	0°  Υ			13435 Feb 18 19:45	0°  Υ	
	13434 Mar 18 09:20	0°  8		evening max el	13435 Mar 08 16:34	22°  Υ27'56	26°33'55
evening max el	13434 Mar 26 02:44	8°  840'15	25°30'46	retrograde	13435 Mar 21 17:38	29°  Υ49'48	
retrograde	13434 Apr 07 10:04	15°  846'39		evening set	13435 Mar 28 02:16	27°  Υ17'58	
evening set	13434 Apr 13 08:09	13°  819'39		asc. node	13435 Mar 31 01:55	24°  Υ24'00	
asc. node	13434 Apr 13 04:28	13°  827'20		min. Earth dist.	13435 Apr 01 04:01	23°  Υ09'16	0.66503 AU
min. Earth dist.	13434 Apr 17 15:45	8°  836'19	0.67731 AU	inferior conj	13435 Apr 03 01:42	20°  Υ52'22	0°55'55
inferior conj	13434 Apr 19 01:05	6°  849'07	1°44'14	minimum elong	13435 Apr 03 00:20	20°  Υ56'28	0°55'08
minimum elong	13434 Apr 18 23:02	6°  855'44	1°43'02	morning rise	13435 Apr 08 23:26	15°  Υ11'33	
morning rise	13434 Apr 24 14:23	0°  857'20		direct	13435 Apr 12 00:09	14°  Υ20'15	
	13434 Apr 26 15:16	30°  8Υ		morning max el	13435 Apr 18 10:53	17°  Υ45'16	18°21'38
direct	13434 Apr 28 01:35	29°  Υ48'22			13435 Apr 27 19:22	0°  8	
	13434 Apr 29 12:38	0°  8		desc. node	13435 May 03 02:54	8°  814'48	
morning max el	13434 May 04 22:50	3°  833'13	19°04'55	morning set	13435 May 08 11:37	16°  845'06	
desc. node	13434 May 16 06:11	18°  815'48			13435 May 16 20:39	0°  II	
greatest brilliancy	13434 May 18 01:03	20°  855'31	-0.7m	superior conj	13435 May 24 03:23	11°  II24'27	-2°02'25
	13434 May 24 00:11	0°  II		minimum elong	13435 May 23 19:58	10°  II55'30	2°02'56
morning set	13434 May 28 10:05	6°  II48'03		max. Earth dist.	13435 May 24 22:14	12°  II38'04	1.45847 AU
max. Earth dist.	13434 Jun 11 02:29	28°  II04'49	1.45454 AU		13435 Jun 05 01:09	0°  ☿	
	13434 Jun 12 07:49	0°  ☿		evening rise	13435 Jun 09 01:29	6°  ☿17'14	
superior conj	13434 Jun 13 19:26	2°  ☿20'07	-2°13'34	greatest brilliancy	13435 Jun 19 00:16	21°  ☿48'43	-0.8m
minimum elong	13434 Jun 13 19:09	2°  ☿19'00	2°14'36		13435 Jun 24 11:56	0°  Ω	
evening rise	13434 Jun 28 14:35	26°  ☿05'22		asc. node	13435 Jun 26 23:44	3°  Ω26'43	
	13434 Jul 01 00:01	0°  Ω		evening max el	13435 Jul 01 14:19	8°  Ω53'22	18°56'49
asc. node	13434 Jul 10 02:51	14°  Ω37'02		retrograde	13435 Jul 08 08:15	12°  Ω36'04	
evening max el	13434 Jul 18 03:23	25°  Ω09'29	18°22'05	evening set	13435 Jul 11 18:12	11°  Ω28'41	
retrograde	13434 Jul 24 12:53	28°  Ω34'23		inferior conj	13435 Jul 17 06:33	5°  Ω44'19	2°59'02
evening set	13434 Jul 27 13:55	27°  Ω43'12		minimum elong	13435 Jul 17 08:05	5°  Ω39'26	2°57'55
inferior conj	13434 Aug 02 10:04	22°  Ω13'49	2°32'12	min. Earth dist.	13435 Jul 18 22:46	3°  Ω36'49	0.66370 AU
minimum elong	13434 Aug 02 12:23	22°  Ω07'00	2°30'57		13435 Jul 22 03:54	30°  ☿	
min. Earth dist.	13434 Aug 04 16:54	19°  Ω33'41	0.64629 AU	morning rise	13435 Jul 22 21:16	29°  ☿20'21	
morning rise	13434 Aug 08 09:31	15°  Ω53'35		direct	13435 Jul 29 03:16	26°  ☿40'18	
desc. node	13434 Aug 12 04:41	13°  Ω42'40		desc. node	13435 Jul 30 02:07	26°  ☿43'38	
direct	13434 Aug 14 23:00	13°  Ω15'33			13435 Aug 06 03:44	0°  Ω	
morning max el	13434 Aug 28 14:01	21°  Ω13'39	27°23'22	morning max el	13435 Aug 11 01:08	4°  Ω21'07	26°23'08
	13434 Sep 05 04:50	0°  ☿			13435 Aug 30 15:02	0°  ☿	
	13434 Sep 24 21:16	0°  ☿		morning set	13435 Sep 15 23:22	27°  ☿46'30	
morning set	13434 Oct 02 21:46	14°  ☿54'32			13435 Sep 17 03:40	0°  ☿	
asc. node	13434 Oct 06 04:39	21°  ☿29'15		max. Earth dist.	13435 Sep 19 21:09	5°  ☿16'05	1.34688 AU
max. Earth dist.	13434 Oct 07 10:49	24°  ☿04'17	1.33033 AU	asc. node	13435 Sep 23 01:15	11°  ☿35'28	
	13434 Oct 10 06:38	0°  ☿		superior conj	13435 Sep 25 00:25	15°  ☿36'31	0°18'30
superior conj	13434 Oct 11 02:38	1°  ☿46'33	0°45'25	minimum elong	13435 Sep 24 23:24	15°  ☿31'20	0°18'29
minimum elong	13434 Oct 11 00:38	1°  ☿35'50	0°45'31		13435 Oct 01 21:30	0°  ☿	
evening rise	13434 Oct 18 03:46	16°  ☿56'48		evening rise	13435 Oct 02 12:54	1°  ☿20'27	
	13434 Oct 24 13:26	0°  ☿			13435 Oct 19 01:55	0°  ☿	
desc. node	13434 Nov 08 00:56	21°  ☿38'44		evening max el	13435 Oct 21 13:45	2°  ☿43'36	20°53'50
evening max el	13434 Nov 08 19:07	22°  ☿24'18	22°27'25	desc. node	13435 Oct 25 22:18	6°  ☿14'54	
retrograde	13434 Nov 21 16:25	28°  ☿47'43		retrograde	13435 Nov 02 03:01	8°  ☿28'09	
evening set	13434 Nov 25 07:10	28°  ☿19'06		evening set	13435 Nov 04 13:30	8°  ☿13'56	
min. Earth dist.	13434 Dec 03 02:35	24°  ☿48'54	0.54722 AU	inferior conj	13435 Nov 13 12:41	4°  ☿20'04	-5°08'28
inferior conj	13434 Dec 03 21:18	24°  ☿22'31	-5°54'40				

minimum elong	13435 Nov 13 03:16	4°♊33'27	5°05'31	evening rise	13436 Sep 15 17:54	15°♊30'41	
min. Earth dist.	13435 Nov 14 08:43	3°♊51'33	0.54552 AU		13436 Sep 23 05:54	0°♊	
morning rise	13435 Nov 21 17:18	0°♊26'36		evening max el	13436 Oct 02 22:09	13°♊46'05	19°39'06
	13435 Nov 23 15:54	30°♊		desc. node	13436 Oct 11 19:44	18°♊40'04	
direct	13435 Nov 25 22:02	29°♊48'52		retrograde	13436 Oct 12 19:59	18°♊43'02	
	13435 Nov 28 03:27	0°♊		evening set	13436 Oct 14 17:25	18°♊33'00	
morning max el	13435 Dec 08 23:55	6°♊08'18	23°05'29	inferior conj	13436 Oct 23 12:02	14°♊29'17	-3°34'56
asc. node	13435 Dec 20 02:11	20°♊25'33		minimum elong	13436 Oct 23 03:04	14°♊43'24	3°31'13
	13435 Dec 25 12:31	0°♊		min. Earth dist.	13436 Oct 25 17:41	13°♊05'02	0.55316 AU
morning set	13435 Dec 31 22:53	13°♊02'55		morning rise	13436 Oct 31 10:54	10°♊09'12	
				direct	13436 Nov 05 12:32	9°♊12'11	
superior conj	13436 Jan 07 21:07	27°♊59'20	1°33'02	morning max el	13436 Nov 19 09:46	16°♊07'29	24°53'57
minimum elong	13436 Jan 07 22:32	28°♊06'54	1°33'55		13436 Nov 30 13:13	0°♊	
	13436 Jan 08 19:40	0°♊		asc. node	13436 Dec 05 23:11	8°♊58'18	
max. Earth dist.	13436 Jan 11 01:28	4°♊44'25	1.33426 AU	morning set	13436 Dec 15 10:43	27°♊46'19	
evening rise	13436 Jan 15 18:13	14°♊18'12			13436 Dec 16 11:30	0°♊	
desc. node	13436 Jan 21 21:14	25°♊52'32					
	13436 Jan 24 05:06	0°♊		superior conj	13436 Dec 22 05:28	12°♊38'07	1°37'57
	13436 Feb 13 15:50	0°♊		minimum elong	13436 Dec 22 05:47	12°♊39'52	1°38'58
evening max el	13436 Feb 19 06:01	6°♊00'26	27°17'07	max. Earth dist.	13436 Dec 24 02:36	16°♊45'09	1.32177 AU
retrograde	13436 Mar 03 18:58	13°♊27'30		evening rise	13436 Dec 29 12:41	28°♊14'23	
evening set	13436 Mar 10 12:02	10°♊56'32			13436 Dec 30 09:25	0°♊	
min. Earth dist.	13436 Mar 14 09:05	7°♊20'27	0.64893 AU	desc. node	13437 Jan 07 18:00	15°♊51'09	
inferior conj	13436 Mar 16 18:49	4°♊42'26	-0°03'42		13437 Jan 16 09:54	0°♊	
minimum elong	13436 Mar 16 18:55	4°♊42'09	0°03'38	evening max el	13437 Jan 31 17:26	19°♊05'50	27°33'37
transit middle	13436 Mar 16 18:55	4°♊42'09	0°03'38	retrograde	13437 Feb 14 13:24	26°♊30'38	
transit begin	13436 Mar 16 15:57	4°♊50'19		evening set	13437 Feb 21 11:01	24°♊07'44	
transit end	13436 Mar 16 21:53	4°♊34'00		min. Earth dist.	13437 Feb 25 05:11	21°♊00'11	0.62960 AU
asc. node	13436 Mar 16 23:25	4°♊29'49		inferior conj	13437 Feb 28 01:32	18°♊12'28	-1°14'27
	13436 Mar 21 19:33	30°♊		minimum elong	13437 Feb 28 04:00	18°♊06'23	1°13'07
morning rise	13436 Mar 23 03:35	29°♊15'00		asc. node	13437 Mar 03 20:53	14°♊47'28	
direct	13436 Mar 25 19:04	28°♊38'20		morning rise	13437 Mar 06 23:34	13°♊01'02	
	13436 Mar 29 19:02	0°♊		direct	13437 Mar 09 07:22	12°♊35'31	
morning max el	13436 Apr 01 03:15	1°♊55'41	17°55'16	morning max el	13437 Mar 15 21:03	15°♊56'32	17°46'20
morning set	13436 Apr 18 17:27	28°♊04'54			13437 Mar 25 20:25	0°♊	
desc. node	13436 Apr 18 23:30	28°♊29'54		morning set	13437 Apr 01 00:40	10°♊37'15	
	13436 Apr 19 21:16	0°♊		desc. node	13437 Apr 05 20:03	18°♊56'23	
					13437 Apr 12 09:11	0°♊	
superior conj	13436 May 02 17:41	20°♊52'02	-1°33'32				
minimum elong	13436 May 02 08:46	20°♊16'37	1°33'18	superior conj	13437 Apr 13 04:12	1°♊18'42	-0°55'01
max. Earth dist.	13436 May 06 18:30	27°♊14'27	1.45484 AU	minimum elong	13437 Apr 12 22:42	0°♊55'58	0°54'41
	13436 May 08 12:45	0°♊		max. Earth dist.	13437 Apr 19 12:25	11°♊36'54	1.44415 AU
evening rise	13436 May 18 17:38	15°♊47'35		evening rise	13437 Apr 28 05:08	25°♊14'32	
	13436 May 28 01:49	0°♊			13437 May 01 07:48	0°♊	
greatest brilliancy	13436 Jun 02 02:52	7°♊29'01	-0.6m		13437 May 22 05:21	0°♊	
asc. node	13436 Jun 12 20:43	21°♊39'56		evening max el	13437 May 27 20:11	6°♊29'47	20°52'48
evening max el	13436 Jun 13 20:11	22°♊41'00	19°47'46	asc. node	13437 May 30 17:48	9°♊04'50	
retrograde	13436 Jun 21 06:33	26°♊53'45		retrograde	13437 Jun 05 05:33	11°♊21'57	
evening set	13436 Jun 25 01:57	25°♊29'35		evening set	13437 Jun 09 11:04	9°♊41'13	
inferior conj	13436 Jun 30 09:43	19°♊31'43	3°11'14	inferior conj	13437 Jun 14 17:05	3°♊31'27	3°11'03
minimum elong	13436 Jun 30 10:14	19°♊29'58	3°10'12	minimum elong	13437 Jun 14 16:35	3°♊33'09	3°10'00
min. Earth dist.	13436 Jul 01 11:31	18°♊05'08	0.67682 AU	min. Earth dist.	13437 Jun 15 05:09	2°♊49'38	0.68530 AU
morning rise	13436 Jul 05 18:09	13°♊08'39			13437 Jun 17 08:03	30°♊	
direct	13436 Jul 11 13:37	10°♊35'25		morning rise	13437 Jun 19 21:52	27°♊12'22	
desc. node	13436 Jul 15 23:27	11°♊47'08		direct	13437 Jun 25 05:12	24°♊52'39	
morning max el	13436 Jul 23 11:45	17°♊44'10	25°03'45	desc. node	13437 Jul 02 20:39	28°♊26'20	
	13436 Aug 02 18:26	0°♊			13437 Jul 04 14:58	0°♊	
	13436 Aug 22 15:19	0°♊		morning max el	13437 Jul 05 22:12	1°♊16'11	23°35'06
morning set	13436 Aug 28 08:51	9°♊53'46			13437 Jul 27 16:34	0°♊	
max. Earth dist.	13436 Aug 31 22:45	16°♊23'20	1.36772 AU	morning set	13437 Aug 09 21:42	21°♊05'49	
				max. Earth dist.	13437 Aug 13 20:24	27°♊52'25	1.39098 AU
					13437 Aug 15 01:25	0°♊	
superior conj	13436 Sep 07 12:20	28°♊56'11	-0°13'00				
minimum elong	13436 Sep 07 13:10	29°♊00'18	0°12'58				
behind sun begin	13436 Sep 07 09:16	28°♊41'07		superior conj	13437 Aug 21 10:47	11°♊37'29	-0°47'30
behind sun end	13436 Sep 07 17:04	29°♊19'30		minimum elong	13437 Aug 21 14:13	11°♊53'31	0°47'21
	13436 Sep 08 01:16	0°♊		asc. node	13437 Aug 26 18:21	21°♊45'16	
asc. node	13436 Sep 08 21:47	1°♊41'51		evening rise	13437 Aug 30 16:02	29°♊20'45	



























































































































	13437 Aug 31 00:07	0°♄		asc. node	13438 Aug 13 14:57	11°♎41'40	
evening max el	13437 Sep 15 19:57	25°♄37'48	18°46'16	evening rise	13438 Aug 14 03:46	12°♎41'12	
retrograde	13437 Sep 24 05:09	29°♄50'37			13438 Aug 23 22:09	0°♄	
evening set	13437 Sep 26 02:45	29°♄38'25		evening max el	13438 Aug 30 03:22	8°♄11'15	18°14'43
desc. node	13437 Sep 28 17:12	28°♄45'28		retrograde	13438 Sep 06 09:29	11°♄52'12	
inferior conj	13437 Oct 04 06:10	25°♄16'42	-1°45'24	evening set	13438 Sep 08 13:18	11°♄33'17	
minimum elong	13437 Oct 04 01:48	25°♄24'41	1°43'19	inferior conj	13438 Sep 15 22:09	6°♄50'35	-0°05'49
min. Earth dist.	13437 Oct 07 08:02	23°♄02'40	0.56884 AU	minimum elong	13438 Sep 15 21:57	6°♄51'01	0°05'42
morning rise	13437 Oct 11 21:30	20°♄19'34		transit middle	13438 Sep 15 21:57	6°♄51'01	0°05'42
direct	13437 Oct 17 17:20	18°♄57'06		transit begin	13438 Sep 15 18:43	6°♄57'54	
morning max el	13437 Oct 31 23:08	26°♄20'54	26°28'02	transit end	13438 Sep 16 01:10	6°♄44'08	
	13437 Nov 04 10:40	0°♄		desc. node	13438 Sep 15 14:41	7°♄06'26	
asc. node	13437 Nov 22 20:04	28°♄03'54		min. Earth dist.	13438 Sep 19 05:34	4°♄02'33	0.58968 AU
	13437 Nov 23 20:15	0°♄		morning rise	13438 Sep 23 03:09	1°♄18'31	
morning set	13437 Nov 29 21:12	12°♄22'05			13438 Sep 26 02:19	30°♄	
				direct	13438 Sep 29 12:07	29°♄28'23	
superior conj	13437 Dec 06 16:25	27°♄21'14	1°36'47		13438 Oct 02 23:54	0°♄	
minimum elong	13437 Dec 06 15:40	27°♄17'05	1°37'46	morning max el	13438 Oct 13 19:46	7°♄12'30	27°32'03
max. Earth dist.	13437 Dec 07 08:57	28°♄53'21	1.31429 AU		13438 Oct 30 23:45	0°♄	
	13437 Dec 07 20:56	0°♄		asc. node	13438 Nov 09 16:52	17°♄33'48	
evening rise	13437 Dec 13 14:33	12°♄28'13		morning set	13438 Nov 14 04:37	26°♄45'57	
	13437 Dec 22 12:44	0°♄			13438 Nov 15 16:55	0°♄	
desc. node	13437 Dec 25 14:51	5°♄25'17		max. Earth dist.	13438 Nov 20 17:24	11°♄03'49	1.31199 AU
	13438 Jan 12 11:24	0°♄					
evening max el	13438 Jan 14 00:35	1°♄31'35	27°17'44	superior conj	13438 Nov 21 04:03	12°♄03'19	1°29'45
retrograde	13438 Jan 27 23:42	8°♄48'42		minimum elong	13438 Nov 21 02:26	11°♄54'15	1°30'33
evening set	13438 Feb 03 20:05	6°♄42'25		evening rise	13438 Nov 27 21:33	26°♄54'08	
min. Earth dist.	13438 Feb 07 15:09	3°♄55'56	0.60821 AU		13438 Nov 29 08:32	0°♄	
inferior conj	13438 Feb 10 18:28	1°♄13'05	-2°34'27	desc. node	13438 Dec 12 11:48	24°♄25'38	
minimum elong	13438 Feb 10 23:59	1°♄01'07	2°31'44		13438 Dec 16 03:38	0°♄	
	13438 Feb 12 04:44	30°♄		evening max el	13438 Dec 27 01:03	13°♄08'24	26°27'05
morning rise	13438 Feb 18 06:59	26°♄20'26		retrograde	13439 Jan 10 00:05	20°♄14'54	
asc. node	13438 Feb 18 18:19	26°♄13'17		evening set	13439 Jan 16 11:24	18°♄33'02	
direct	13438 Feb 20 09:24	26°♄02'20		min. Earth dist.	13439 Jan 20 14:45	15°♄56'23	0.58657 AU
morning max el	13438 Feb 27 12:52	29°♄37'29	17°55'37	inferior conj	13439 Jan 23 18:01	13°♄34'57	-3°57'42
	13438 Feb 27 21:51	0°♄		minimum elong	13439 Jan 24 02:16	13°♄19'24	3°54'15
morning set	13438 Mar 15 03:00	24°♄02'48		morning rise	13439 Jan 31 20:07	9°♄03'23	
	13438 Mar 18 09:24	0°♄		direct	13439 Feb 02 21:05	8°♄49'00	
desc. node	13438 Mar 23 16:33	9°♄29'34		asc. node	13439 Feb 05 15:43	9°♄16'59	
				morning max el	13439 Feb 10 23:01	12°♄48'10	18°24'34
superior conj	13438 Mar 25 14:53	12°♄52'23	-0°15'14		13439 Feb 22 11:54	0°♄	
minimum elong	13438 Mar 25 13:33	12°♄46'33	0°15'09	morning set	13439 Feb 26 18:53	8°♄04'55	
behind sun begin	13438 Mar 25 10:56	12°♄35'09					
behind sun end	13438 Mar 25 16:10	12°♄57'56		superior conj	13439 Mar 07 23:23	25°♄25'50	0°20'33
max. Earth dist.	13438 Apr 02 02:04	25°♄30'13	1.42760 AU	minimum elong	13439 Mar 08 00:51	25°♄32'30	0°20'30
	13438 Apr 04 20:17	0°♄			13439 Mar 10 11:46	0°♄	
evening rise	13438 Apr 08 03:20	5°♄15'33		desc. node	13439 Mar 10 13:05	0°♄05'57	
	13438 Apr 24 14:44	0°♄		max. Earth dist.	13439 Mar 15 11:31	8°♄45'50	1.40696 AU
evening max el	13438 May 10 14:55	20°♄19'10	22°08'15	evening rise	13439 Mar 19 21:07	16°♄09'58	
asc. node	13438 May 17 14:59	25°♄25'50			13439 Mar 28 14:04	0°♄	
retrograde	13438 May 20 03:21	25°♄54'52			13439 Apr 19 09:24	0°♄	
evening set	13438 May 24 19:46	23°♄58'24		evening max el	13439 Apr 23 06:11	4°♄10'37	23°28'54
inferior conj	13438 May 30 02:26	17°♄38'47	2°59'57	retrograde	13439 May 03 22:31	10°♄27'41	
minimum elong	13438 May 30 01:05	17°♄43'30	2°58'48	asc. node	13439 May 04 12:15	10°♄26'11	
min. Earth dist.	13438 May 30 01:26	17°♄42'18	0.68906 AU	evening set	13439 May 09 02:30	8°♄17'02	
morning rise	13438 Jun 04 06:12	11°♄25'40		inferior conj	13439 May 14 11:51	1°♄50'15	2°38'38
direct	13438 Jun 09 00:49	9°♄24'07		minimum elong	13439 May 14 09:55	1°♄56'55	2°37'21
morning max el	13438 Jun 18 10:38	14°♄55'14	22°06'27	min. Earth dist.	13439 May 13 22:09	2°♄37'21	0.68811 AU
desc. node	13438 Jun 19 17:46	16°♄16'06			13439 May 15 20:21	30°♄	
	13438 Jun 30 15:36	0°♄		morning rise	13439 May 19 17:16	25°♄44'33	
	13438 Jul 20 15:56	0°♄		direct	13439 May 23 23:12	24°♄03'30	
morning set	13438 Jul 21 09:57	1°♄12'16		morning max el	13439 Jun 01 04:24	28°♄44'47	20°45'29
max. Earth dist.	13438 Jul 26 20:38	10°♄07'39	1.41404 AU		13439 Jun 02 09:32	0°♄	
				desc. node	13439 Jun 06 14:47	4°♄57'42	
superior conj	13438 Aug 03 15:26	23°♄30'13	-1°22'09		13439 Jun 24 05:21	0°♄	
minimum elong	13438 Aug 03 21:33	23°♄57'18	1°22'01	morning set	13439 Jun 30 22:38	10°♄17'39	
	13438 Aug 07 06:29	0°♄		max. Earth dist.	13439 Jul 09 03:51	23°♄18'21	1.43416 AU

	13439 Jul 13 06:16	0°♎		max. Earth dist.	13440 Jun 20 17:45	7°♎14'19	1.44897 AU
superior conj	13439 Jul 15 22:02	4°♎25'11	-1°52'08	superior conj	13440 Jun 25 04:55	14°♎20'43	-2°10'43
minimum elong	13439 Jul 16 05:11	4°♎55'08	1°52'24	minimum elong	13440 Jun 25 08:45	14°♎36'06	2°11'38
evening rise	13439 Jul 28 00:37	25°♎20'53			13440 Jul 04 19:04	0°♎	
	13439 Jul 30 15:52	0°♎		evening rise	13440 Jul 09 01:36	7°♎08'19	
asc. node	13439 Jul 31 11:35	1°♎26'41		asc. node	13440 Jul 17 08:20	20°♎55'43	
evening max el	13439 Aug 13 16:09	21°♎15'26	18°02'56		13440 Jul 23 08:04	0°♎	
retrograde	13439 Aug 20 06:19	24°♎39'14		evening max el	13440 Jul 27 06:34	4°♎41'14	18°09'51
evening set	13439 Aug 22 18:04	24°♎09'52		retrograde	13440 Aug 02 15:10	8°♎02'06	
inferior conj	13439 Aug 29 09:52	19°♎07'07	1°12'44	evening set	13440 Aug 05 11:11	7°♎19'32	
minimum elong	13439 Aug 29 11:52	19°♎02'13	1°11'45	inferior conj	13440 Aug 11 13:25	1°♎59'04	2°08'56
min. Earth dist.	13439 Sep 01 11:54	16°♎06'23	0.61252 AU	minimum elong	13440 Aug 11 15:56	1°♎52'06	2°07'39
desc. node	13439 Sep 02 12:15	15°♎11'05			13440 Aug 13 08:16	30°♎	
morning rise	13439 Sep 05 02:58	13°♎08'30		min. Earth dist.	13440 Aug 14 04:02	29°♎06'26	0.63464 AU
direct	13439 Sep 11 18:24	10°♎53'55		morning rise	13440 Aug 17 18:52	25°♎43'56	
morning max el	13439 Sep 25 23:39	18°♎50'55	27°58'03	desc. node	13440 Aug 19 09:46	24°♎38'20	
	13439 Oct 05 10:06	0°♎		direct	13440 Aug 24 10:29	23°♎11'58	
	13439 Oct 23 19:58	0°♎			13440 Sep 06 02:31	0°♎	
asc. node	13439 Oct 27 13:35	7°♎20'16		morning max el	13440 Sep 07 08:37	1°♎13'16	27°45'49
morning set	13439 Oct 29 07:00	10°♎52'06			13440 Sep 28 14:22	0°♎	
max. Earth dist.	13439 Nov 04 00:09	23°♎06'18	1.31494 AU	morning set	13440 Oct 12 02:06	24°♎35'23	
				asc. node	13440 Oct 13 10:15	27°♎18'02	
superior conj	13439 Nov 05 14:29	26°♎37'51	1°16'58		13440 Oct 14 17:45	0°♎	
minimum elong	13439 Nov 05 12:19	26°♎25'51	1°17'29	max. Earth dist.	13440 Oct 17 01:18	4°♎51'36	1.32322 AU
	13439 Nov 07 02:55	0°♎					
evening rise	13439 Nov 12 07:32	11°♎25'39		superior conj	13440 Oct 19 21:49	10°♎59'53	0°58'32
	13439 Nov 21 14:23	0°♎		minimum elong	13440 Oct 19 19:34	10°♎47'43	0°58'46
desc. node	13439 Nov 29 08:54	12°♎38'32		evening rise	13440 Oct 26 18:43	25°♎58'06	
evening max el	13439 Dec 08 17:02	23°♎52'37	25°05'38		13440 Oct 28 16:14	0°♎	
	13439 Dec 17 23:02	0°♎		desc. node	13440 Nov 15 06:06	29°♎46'21	
retrograde	13439 Dec 22 12:25	0°♎47'49			13440 Nov 15 10:38	0°♎	
	13439 Dec 27 02:34	30°♎		evening max el	13440 Nov 19 03:06	3°♎59'16	23°25'53
evening set	13439 Dec 28 04:45	29°♎35'23		retrograde	13440 Dec 02 12:10	10°♎38'40	
min. Earth dist.	13440 Jan 02 05:01	26°♎52'54	0.56700 AU	evening set	13440 Dec 06 22:36	9°♎55'54	
inferior conj	13440 Jan 04 21:14	25°♎08'11	-5°11'19	min. Earth dist.	13440 Dec 13 13:12	6°♎48'15	0.55233 AU
minimum elong	13440 Jan 05 05:29	24°♎54'42	5°08'37	inferior conj	13440 Dec 15 04:17	5°♎51'12	-5°53'44
morning rise	13440 Jan 13 08:31	20°♎58'38		minimum elong	13440 Dec 15 06:58	5°♎47'16	5°52'32
direct	13440 Jan 15 14:24	20°♎44'11		morning rise	13440 Dec 23 17:03	1°♎59'19	
asc. node	13440 Jan 23 13:04	23°♎59'31		direct	13440 Dec 26 12:17	1°♎40'21	
morning max el	13440 Jan 24 23:23	25°♎16'31	19°15'15	morning max el	13441 Jan 06 10:28	6°♎53'29	20°29'01
	13440 Jan 29 00:43	0°♎		asc. node	13441 Jan 09 10:21	10°♎07'56	
morning set	13440 Feb 10 19:54	22°♎30'00			13441 Jan 21 13:56	0°♎	
	13440 Feb 14 14:08	0°♎		morning set	13441 Jan 25 02:49	7°♎08'41	
superior conj	13440 Feb 19 01:08	8°♎45'57	0°49'54	superior conj	13441 Feb 01 15:42	22°♎40'33	1°12'08
minimum elong	13440 Feb 19 03:47	8°♎58'45	0°49'58	minimum elong	13441 Feb 01 18:22	22°♎54'03	1°12'31
desc. node	13440 Feb 25 09:36	20°♎41'26			13441 Feb 05 07:52	0°♎	
max. Earth dist.	13440 Feb 25 18:12	21°♎20'25	1.38444 AU	max. Earth dist.	13441 Feb 07 01:43	3°♎22'45	1.36254 AU
evening rise	13440 Feb 29 11:58	27°♎58'13		evening rise	13441 Feb 10 21:41	10°♎33'52	
	13440 Mar 01 16:12	0°♎		desc. node	13441 Feb 11 06:09	11°♎12'32	
	13440 Mar 21 00:57	0°♎			13441 Feb 22 07:02	0°♎	
evening max el	13440 Apr 04 19:50	18°♎03'22	24°48'24		13441 Mar 16 12:28	0°♎	
retrograde	13440 Apr 16 14:00	24°♎54'40		evening max el	13441 Mar 18 09:16	1°♎53'52	25°59'38
asc. node	13440 Apr 20 09:38	23°♎51'05		retrograde	13441 Mar 31 00:48	9°♎08'42	
evening set	13440 Apr 22 05:43	22°♎32'23		evening set	13441 Apr 06 03:41	6°♎38'40	
min. Earth dist.	13440 Apr 26 17:13	17°♎28'57	0.68251 AU	asc. node	13441 Apr 07 07:05	5°♎36'44	
inferior conj	13440 Apr 27 19:28	16°♎02'00	2°07'08	min. Earth dist.	13441 Apr 10 08:31	2°♎10'33	0.67252 AU
minimum elong	13440 Apr 27 17:18	16°♎09'10	2°05'50	inferior conj	13441 Apr 11 23:14	0°♎09'28	1°25'06
morning rise	13440 May 03 05:08	10°♎05'00		minimum elong	13441 Apr 11 21:23	0°♎15'15	1°24'01
direct	13440 May 06 22:56	8°♎44'44			13441 Apr 12 02:15	30°♎	
morning max el	13440 May 14 05:39	12°♎46'20	19°37'20	morning rise	13441 Apr 17 15:49	24°♎22'25	
desc. node	13440 May 23 11:41	24°♎17'08		direct	13441 Apr 20 22:22	23°♎21'26	
greatest brilliancy	13440 May 26 21:39	29°♎12'07	-0.6m	morning max el	13441 Apr 27 14:14	26°♎56'17	18°44'33
	13440 May 27 10:43	0°♎			13441 Apr 30 09:10	0°♎	
morning set	13440 Jun 09 00:09	18°♎58'32		desc. node	13441 May 10 08:27	14°♎03'43	
	13440 Jun 16 03:06	0°♎		morning set	13441 May 19 11:45	28°♎13'18	

	13441 May 20 15:06	0° Π		superior conj	13442 May 15 01:51	2° Π 41'46	-1°51'57
max. Earth dist.	13441 Jun 03 11:45	21° Π 37'14	1.45705 AU	minimum elong	13442 May 14 16:58	2° Π 06'56	1°52'06
				max. Earth dist.	13442 May 17 07:29	6° Π 11'44	1.45777 AU
superior conj	13441 Jun 04 17:18	23° Π 32'46	-2°11'20	evening rise	13442 May 31 04:06	27° Π 43'59	
minimum elong	13441 Jun 04 13:38	23° Π 18'26	2°12'16		13442 Jun 01 15:14	0° \mathfrak{D}	
	13441 Jun 08 20:02	0° \mathfrak{D}		greatest brilliancy	13442 Jun 12 05:46	16° \mathfrak{D} 15'38	-0.7m
evening rise	13441 Jun 20 02:29	17° \mathfrak{D} 53'58		asc. node	13442 Jun 21 02:06	28° \mathfrak{D} 37'28	
greatest brilliancy	13441 Jun 26 12:06	28° \mathfrak{D} 09'00	-0.9m		13442 Jun 22 05:46	0° Ω	
	13441 Jun 27 16:02	0° Ω		evening max el	13442 Jun 24 04:24	2° Ω 05'58	19°16'36
asc. node	13441 Jul 04 05:10	10° Ω 01'57		retrograde	13442 Jul 01 04:33	6° Ω 00'10	
evening max el	13441 Jul 10 19:26	18° Ω 20'02	18°34'42	evening set	13442 Jul 04 18:21	4° Ω 45'53	
retrograde	13441 Jul 17 07:40	21° Ω 51'20			13442 Jul 09 08:34	30° $\mathfrak{R}\mathfrak{D}$	
evening set	13441 Jul 20 12:19	20° Ω 53'32		inferior conj	13442 Jul 10 04:25	28° \mathfrak{D} 55'48	3°05'48
inferior conj	13441 Jul 26 04:44	15° Ω 17'30	2°45'31	minimum elong	13442 Jul 10 05:32	28° \mathfrak{D} 52'09	3°04'44
minimum elong	13441 Jul 26 06:47	15° Ω 11'18	2°44'19	min. Earth dist.	13442 Jul 11 14:32	27° \mathfrak{D} 04'38	0.66984 AU
min. Earth dist.	13441 Jul 28 05:24	12° Ω 49'46	0.65415 AU	morning rise	13442 Jul 15 16:07	22° \mathfrak{D} 31'36	
morning rise	13441 Aug 01 00:10	8° Ω 54'38		direct	13442 Jul 21 18:00	19° \mathfrak{D} 53'09	
desc. node	13441 Aug 06 07:15	6° Ω 19'20		desc. node	13442 Jul 24 04:38	20° \mathfrak{D} 15'12	
direct	13441 Aug 07 10:47	6° Ω 14'34		morning max el	13442 Aug 03 06:34	27° \mathfrak{D} 22'42	25°51'00
morning max el	13441 Aug 20 19:40	14° Ω 07'54	27°00'39		13442 Aug 05 17:39	0° Ω	
	13441 Sep 02 17:14	0° \mathfrak{N}			13442 Aug 27 09:06	0° \mathfrak{N}	
	13441 Sep 21 07:03	0° \mathfrak{D}		morning set	13442 Sep 08 06:21	20° \mathfrak{N} 22'52	
morning set	13441 Sep 25 11:04	7° \mathfrak{D} 48'30		max. Earth dist.	13442 Sep 11 23:11	27° \mathfrak{N} 18'47	1.35530 AU
max. Earth dist.	13441 Sep 29 17:22	16° \mathfrak{D} 13'38	1.33678 AU		13442 Sep 13 08:39	0° \mathfrak{D}	
asc. node	13441 Sep 30 06:51	17° \mathfrak{D} 22'07		asc. node	13442 Sep 17 03:24	7° \mathfrak{D} 28'47	
superior conj	13441 Oct 03 23:47	25° \mathfrak{D} 03'13	0°34'37	superior conj	13442 Sep 17 17:47	8° \mathfrak{D} 41'22	0°05'39
minimum elong	13441 Oct 03 22:07	24° \mathfrak{D} 54'23	0°34'38	minimum elong	13442 Sep 17 17:27	8° \mathfrak{D} 39'41	0°05'38
	13441 Oct 06 07:45	0° \mathfrak{L}		behind sun begin	13442 Sep 17 11:40	8° \mathfrak{D} 10'27	
evening rise	13441 Oct 11 05:09	10° \mathfrak{L} 26'07		behind sun end	13442 Sep 17 23:15	9° \mathfrak{D} 08'59	
	13441 Oct 21 06:32	0° \mathfrak{J}		evening rise	13442 Sep 25 12:48	24° \mathfrak{D} 44'33	
evening max el	13441 Oct 31 15:53	14° \mathfrak{J} 03'24	21°45'41		13442 Sep 28 02:40	0° \mathfrak{L}	
desc. node	13441 Nov 02 03:24	15° \mathfrak{J} 25'42		evening max el	13442 Oct 13 16:14	24° \mathfrak{L} 39'55	20°19'26
retrograde	13441 Nov 13 01:34	20° \mathfrak{J} 12'37		desc. node	13442 Oct 20 00:48	29° \mathfrak{L} 09'05	
evening set	13441 Nov 16 02:30	19° \mathfrak{J} 51'48			13442 Oct 23 07:26	0° \mathfrak{J}	
inferior conj	13441 Nov 24 21:48	15° \mathfrak{J} 57'45	-5°42'20	retrograde	13442 Oct 24 13:00	0° \mathfrak{J} 04'00	
minimum elong	13441 Nov 24 15:38	16° \mathfrak{J} 06'24	5°40'35		13442 Oct 25 18:59	30° $\mathfrak{R}\mathfrak{L}$	
min. Earth dist.	13441 Nov 24 19:28	16° \mathfrak{J} 01'02	0.54531 AU	evening set	13442 Oct 26 15:50	29° \mathfrak{L} 52'38	
morning rise	13441 Dec 03 05:43	12° \mathfrak{J} 10'04		inferior conj	13442 Nov 04 14:53	25° \mathfrak{L} 56'26	-4°32'51
direct	13441 Dec 06 21:22	11° \mathfrak{J} 40'54		minimum elong	13442 Nov 04 04:47	26° \mathfrak{L} 11'16	4°29'14
morning max el	13441 Dec 19 07:24	17° \mathfrak{J} 37'52	22°04'08	min. Earth dist.	13442 Nov 06 02:46	25° \mathfrak{L} 03'41	0.54768 AU
asc. node	13441 Dec 27 07:31	27° \mathfrak{J} 25'01		morning rise	13442 Nov 12 17:03	21° \mathfrak{L} 53'31	
	13441 Dec 28 23:42	0° \mathfrak{Z}		direct	13442 Nov 17 07:07	21° \mathfrak{L} 08'04	
morning set	13442 Jan 09 13:14	21° \mathfrak{Z} 54'05		morning max el	13442 Nov 30 18:38	27° \mathfrak{L} 44'11	23°52'05
	13442 Jan 13 08:33	0° \approx			13442 Dec 03 00:18	0° \mathfrak{J}	
				asc. node	13442 Dec 14 04:34	15° \mathfrak{J} 34'10	
superior conj	13442 Jan 16 15:26	6° \approx 59'22	1°27'20		13442 Dec 21 20:47	0° \mathfrak{Z}	
minimum elong	13442 Jan 16 17:25	7° \approx 09'47	1°28'03	morning set	13442 Dec 25 01:03	6° \mathfrak{Z} 39'36	
max. Earth dist.	13442 Jan 20 14:49	15° \approx 13'44	1.34340 AU				
evening rise	13442 Jan 24 22:51	23° \approx 48'25		superior conj	13442 Dec 31 21:20	21° \mathfrak{Z} 32'50	1°35'53
	13442 Jan 28 05:51	0° \mathfrak{H}		minimum elong	13442 Dec 31 22:17	21° \mathfrak{Z} 38'01	1°36'50
desc. node	13442 Jan 29 02:45	1° \mathfrak{H} 35'25		max. Earth dist.	13443 Jan 03 11:48	27° \mathfrak{Z} 09'16	1.32836 AU
	13442 Feb 15 21:35	0° \mathfrak{Y}			13443 Jan 04 20:03	0° \approx	
evening max el	13442 Feb 28 22:55	15° \mathfrak{Y} 36'08	26°55'14	evening rise	13443 Jan 08 11:54	7° \approx 31'52	
retrograde	13442 Mar 14 06:04	23° \mathfrak{Y} 02'21		desc. node	13443 Jan 15 23:25	21° \approx 44'32	
evening set	13442 Mar 20 18:32	20° \mathfrak{Y} 29'57			13443 Jan 20 18:32	0° \mathfrak{H}	
min. Earth dist.	13442 Mar 24 18:01	16° \mathfrak{Y} 35'25	0.65852 AU	evening max el	13443 Feb 11 11:52	28° \mathfrak{H} 58'58	27°27'54
asc. node	13442 Mar 25 04:32	16° \mathfrak{Y} 05'29			13443 Feb 12 14:03	0° \mathfrak{Y}	
inferior conj	13442 Mar 26 20:59	14° \mathfrak{Y} 08'03	0°32'01	retrograde	13443 Feb 25 04:37	6° \mathfrak{Y} 25'53	
minimum elong	13442 Mar 26 20:08	14° \mathfrak{Y} 10'31	0°31'32	evening set	13443 Mar 04 00:00	3° \mathfrak{Y} 57'44	
morning rise	13442 Apr 01 23:06	8° \mathfrak{Y} 32'41		min. Earth dist.	13443 Mar 07 19:38	0° \mathfrak{Y} 34'05	0.64099 AU
direct	13442 Apr 04 19:36	7° \mathfrak{Y} 48'10			13443 Mar 08 08:54	30° $\mathfrak{R}\mathfrak{H}$	
morning max el	13442 Apr 11 04:29	11° \mathfrak{Y} 08'53	18°08'21	inferior conj	13443 Mar 10 10:02	27° \mathfrak{H} 50'31	-0°32'26
	13442 Apr 24 14:52	0° \mathfrak{B}		minimum elong	13443 Mar 10 11:02	27° \mathfrak{H} 47'53	0°31'51
desc. node	13442 Apr 27 05:06	4° \mathfrak{B} 10'14		asc. node	13443 Mar 12 02:00	26° \mathfrak{H} 07'59	
morning set	13442 Apr 30 01:11	8° \mathfrak{B} 45'09		morning rise	13443 Mar 17 00:11	22° \mathfrak{H} 29'14	
	13442 May 13 08:39	0° Π		direct	13443 Mar 19 12:08	21° \mathfrak{H} 57'46	

morning max el	13443 Mar 25 21:44	25° Υ 15'39	17°49'16	morning set	13444 Mar 24 10:34	3° Υ 34'39	
	13443 Mar 29 21:43	0° Υ		desc. node	13444 Mar 30 22:09	14° Υ 59'45	
morning set	13443 Apr 11 18:29	20° Υ 37'38					
desc. node	13443 Apr 14 01:39	24° Υ 30'20		superior conj	13444 Apr 04 20:13	23° Υ 25'20	-0°37'53
	13443 Apr 17 08:21	0° \mathcal{B}		minimum elong	13444 Apr 04 16:35	23° Υ 09'59	0°37'38
					13444 Apr 08 18:58	0° \mathcal{B}	
superior conj	13443 Apr 24 23:31	12° \mathcal{B} 30'52	-1°17'49	max. Earth dist.	13444 Apr 11 19:33	4° \mathcal{B} 55'53	1.43779 AU
minimum elong	13443 Apr 24 15:43	11° \mathcal{B} 59'23	1°17'28	evening rise	13444 Apr 19 06:35	16° \mathcal{B} 44'24	
max. Earth dist.	13443 Apr 30 02:47	20° \mathcal{B} 42'49	1.45112 AU		13444 Apr 27 23:59	0° Π	
	13443 May 06 01:14	0° Π		evening max el	13444 May 20 05:31	29° Π 42'58	21°23'59
evening rise	13443 May 10 16:08	7° Π 07'02			13444 May 20 12:22	0° \mathcal{E}	
	13443 May 25 23:12	0° \mathcal{E}		asc. node	13444 May 24 20:15	3° \mathcal{E} 31'01	
evening max el	13443 Jun 07 07:53	15° \mathcal{E} 54'22	20°14'00	retrograde	13444 May 29 01:51	4° \mathcal{E} 53'02	
asc. node	13443 Jun 07 23:07	16° \mathcal{E} 31'38		evening set	13444 Jun 02 12:02	3° \mathcal{E} 05'14	
retrograde	13443 Jun 15 03:15	20° \mathcal{E} 22'35			13444 Jun 05 09:58	30° \mathcal{R} Π	
evening set	13443 Jun 19 02:54	18° \mathcal{E} 51'20		inferior conj	13444 Jun 07 18:03	26° Π 51'03	3°07'39
inferior conj	13443 Jun 24 09:38	12° \mathcal{E} 48'28	3°12'33	minimum elong	13444 Jun 07 17:10	26° Π 54'07	3°06'33
minimum elong	13443 Jun 24 09:42	12° \mathcal{E} 48'12	3°11'31	min. Earth dist.	13444 Jun 08 00:25	26° Π 28'50	0.68747 AU
min. Earth dist.	13443 Jun 25 05:33	11° \mathcal{E} 40'32	0.68102 AU	morning rise	13444 Jun 12 22:06	20° Π 34'36	
morning rise	13443 Jun 29 16:12	6° \mathcal{E} 26'59		direct	13444 Jun 18 00:05	18° Π 22'19	
direct	13443 Jul 05 06:46	3° \mathcal{E} 58'35		desc. node	13444 Jun 26 23:05	23° Π 13'46	
desc. node	13443 Jul 11 01:55	6° \mathcal{E} 02'22		morning max el	13444 Jun 28 03:38	24° Π 23'15	22°57'00
morning max el	13443 Jul 16 16:43	10° \mathcal{E} 48'57	24°26'37		13444 Jul 03 03:58	0° \mathcal{E}	
	13443 Jul 31 23:26	0° \mathcal{Q}			13444 Jul 24 09:28	0° \mathcal{Q}	
	13443 Aug 20 02:02	0° \mathcal{M}		morning set	13444 Aug 01 10:21	12° \mathcal{Q} 52'20	
morning set	13443 Aug 21 07:40	2° \mathcal{M} 08'07		max. Earth dist.	13444 Aug 05 20:53	20° \mathcal{Q} 20'20	1.40097 AU
max. Earth dist.	13443 Aug 24 22:15	8° \mathcal{M} 31'41	1.37746 AU		13444 Aug 11 09:10	0° \mathcal{M}	
superior conj	13443 Sep 01 00:33	21° \mathcal{M} 46'32	-0°27'22	superior conj	13444 Aug 13 15:58	4° \mathcal{M} 08'02	-1°02'24
minimum elong	13443 Sep 01 02:25	21° \mathcal{M} 55'31	0°27'18	minimum elong	13444 Aug 13 20:36	4° \mathcal{M} 29'12	1°02'13
asc. node	13443 Sep 03 23:57	27° \mathcal{M} 34'38		asc. node	13444 Aug 20 20:32	17° \mathcal{M} 35'19	
	13443 Sep 05 05:23	0° \mathcal{L}		evening rise	13444 Aug 23 09:29	22° \mathcal{M} 26'09	
evening rise	13443 Sep 09 15:17	8° \mathcal{L} 47'31			13444 Aug 27 09:34	0° \mathcal{L}	
	13443 Sep 21 09:14	0° \mathcal{M}		evening max el	13444 Sep 08 09:10	18° \mathcal{L} 14'40	18°30'19
evening max el	13443 Sep 26 06:48	6° \mathcal{M} 04'37	19°13'58	retrograde	13444 Sep 16 05:33	22° \mathcal{L} 12'34	
retrograde	13443 Oct 05 11:51	10° \mathcal{M} 41'17		evening set	13444 Sep 18 05:24	21° \mathcal{L} 57'59	
desc. node	13443 Oct 06 22:16	10° \mathcal{M} 35'01		desc. node	13444 Sep 22 19:48	19° \mathcal{L} 48'25	
evening set	13443 Oct 07 08:26	10° \mathcal{M} 30'50		inferior conj	13444 Sep 26 00:54	17° \mathcal{L} 26'58	-1°01'00
inferior conj	13443 Oct 15 21:27	6° \mathcal{M} 20'05	-2°48'37	minimum elong	13444 Sep 25 22:30	17° \mathcal{L} 31'39	0°59'50
minimum elong	13443 Oct 15 14:14	6° \mathcal{M} 32'06	2°45'22	min. Earth dist.	13444 Sep 29 06:32	14° \mathcal{L} 56'25	0.57724 AU
min. Earth dist.	13443 Oct 18 13:34	4° \mathcal{M} 33'33	0.55905 AU	morning rise	13444 Oct 03 12:09	12° \mathcal{L} 14'14	
morning rise	13443 Oct 23 17:30	1° \mathcal{M} 45'12		direct	13444 Oct 09 14:06	10° \mathcal{L} 40'22	
direct	13443 Oct 29 03:37	0° \mathcal{M} 37'54		morning max el	13444 Oct 23 21:27	18° \mathcal{L} 13'11	26°59'39
morning max el	13443 Nov 12 05:02	7° \mathcal{M} 45'25	25°36'42		13444 Nov 02 18:24	0° \mathcal{M}	
	13443 Nov 28 14:43	0° \mathcal{J}		asc. node	13444 Nov 16 22:22	23° \mathcal{M} 39'08	
asc. node	13443 Dec 01 01:31	4° \mathcal{J} 22'27			13444 Nov 20 02:46	0° \mathcal{J}	
morning set	13443 Dec 09 12:34	21° \mathcal{J} 20'37		morning set	13444 Nov 22 22:00	5° \mathcal{J} 51'53	
	13443 Dec 13 11:33	0° \mathcal{Z}					
				superior conj	13444 Nov 29 18:32	20° \mathcal{J} 57'18	1°34'29
superior conj	13443 Dec 16 07:03	6° \mathcal{Z} 14'19	1°38'10	minimum elong	13444 Nov 29 17:23	20° \mathcal{J} 50'54	1°35'25
minimum elong	13443 Dec 16 06:55	6° \mathcal{Z} 13'30	1°39'12	max. Earth dist.	13444 Nov 29 23:39	21° \mathcal{J} 25'52	1.31274 AU
max. Earth dist.	13443 Dec 17 15:46	9° \mathcal{Z} 14'59	1.31807 AU		13444 Dec 03 20:20	0° \mathcal{Z}	
evening rise	13443 Dec 23 09:53	21° \mathcal{Z} 36'48		evening rise	13444 Dec 06 14:13	5° \mathcal{Z} 56'08	
	13443 Dec 27 13:48	0° \approx			13444 Dec 19 04:00	0° \approx	
desc. node	13444 Jan 02 20:13	11° \approx 33'52		desc. node	13444 Dec 19 17:09	0° \approx 55'00	
	13444 Jan 14 17:58	0° \mathcal{X}		evening max el	13445 Jan 06 02:34	23° \approx 54'51	27°00'12
evening max el	13444 Jan 24 22:02	11° \mathcal{X} 49'33	27°31'00		13445 Jan 14 19:48	0° \mathcal{X}	
retrograde	13444 Feb 07 19:28	19° \mathcal{X} 10'30		retrograde	13445 Jan 20 01:33	1° \mathcal{X} 07'21	
evening set	13444 Feb 14 17:25	16° \mathcal{X} 53'55			13445 Jan 25 03:54	30° \mathcal{R} \approx	
min. Earth dist.	13444 Feb 18 11:31	13° \mathcal{X} 56'19	0.62075 AU	evening set	13445 Jan 26 19:27	29° \approx 10'18	
inferior conj	13444 Feb 21 11:20	11° \mathcal{X} 09'06	-1°47'29	min. Earth dist.	13445 Jan 30 16:47	26° \approx 29'57	0.59899 AU
minimum elong	13444 Feb 21 15:02	11° \mathcal{X} 00'25	1°45'32	inferior conj	13445 Feb 02 21:18	23° \approx 54'10	-3°09'54
asc. node	13444 Feb 26 23:28	6° \mathcal{X} 48'43		minimum elong	13445 Feb 03 04:07	23° \approx 40'14	3°06'44
morning rise	13444 Feb 28 15:27	6° \mathcal{X} 05'01		morning rise	13445 Feb 10 15:55	19° \approx 10'27	
direct	13444 Mar 01 20:44	5° \mathcal{X} 42'58		direct	13445 Feb 12 17:14	18° \approx 54'19	
morning max el	13444 Mar 08 15:03	9° \mathcal{X} 08'34	17°47'56	asc. node	13445 Feb 12 20:53	18° \approx 54'25	
	13444 Mar 22 10:07	0° Υ		morning max el	13445 Feb 20 04:59	22° \approx 38'01	18°05'27

	13445 Feb 25 23:04	0°♄		asc. node	13446 Jan 30 18:16	2°♊41'01	
morning set	13445 Mar 07 19:18	17°♄17'33		morning max el	13446 Feb 03 11:35	5°♊32'32	18°43'24
	13445 Mar 14 16:15	0°♄			13446 Feb 18 20:52	0°♄	
				morning set	13446 Feb 19 15:31	1°♄30'35	
superior conj	13445 Mar 17 16:47	5°♄26'21	0°00'38				
minimum elong	13445 Mar 17 16:50	5°♄26'33	0°00'39	superior conj	13446 Feb 28 09:14	18°♄21'29	0°33'50
behind sun begin	13445 Mar 17 09:06	4°♄52'06		minimum elong	13446 Feb 28 11:23	18°♄31'30	0°33'49
behind sun end	13445 Mar 18 00:34	6°♄00'55		desc. node	13446 Mar 04 15:11	26°♄11'08	
desc. node	13445 Mar 17 18:41	5°♄34'48			13446 Mar 06 18:25	0°♄	
max. Earth dist.	13445 Mar 25 07:41	18°♄35'15	1.41918 AU	max. Earth dist.	13446 Mar 07 15:09	1°♄31'11	1.39740 AU
evening rise	13445 Mar 30 12:32	27°♄06'50		evening rise	13446 Mar 11 15:24	8°♄24'41	
	13445 Apr 01 07:56	0°♄			13446 Mar 25 07:09	0°♄	
	13445 Apr 21 16:57	0°♄		evening max el	13446 Apr 15 12:37	27°♄24'09	24°03'15
evening max el	13445 May 02 22:24	13°♄32'33	22°42'16		13446 Apr 18 08:27	0°♄	
asc. node	13445 May 11 17:30	19°♄19'58		retrograde	13446 Apr 26 16:40	3°♄57'43	
retrograde	13445 May 12 22:46	19°♄26'48		asc. node	13446 Apr 28 14:49	3°♄41'08	
evening set	13445 May 17 20:07	17°♄23'47		evening set	13446 May 02 01:33	1°♄41'47	
inferior conj	13445 May 23 03:40	11°♄00'32	2°52'10		13446 May 03 18:41	30°♄	
minimum elong	13445 May 23 02:01	11°♄06'14	2°50'57	min. Earth dist.	13446 May 06 17:30	26°♄17'23	0.68624 AU
min. Earth dist.	13445 May 22 21:08	11°♄23'15	0.68918 AU	inferior conj	13446 May 07 12:34	25°♄12'40	2°26'32
morning rise	13445 May 28 07:49	4°♄50'32		minimum elong	13446 May 07 10:28	25°♄19'46	2°25'14
direct	13445 Jun 01 20:54	2°♄57'48		morning rise	13446 May 12 19:27	19°♄10'21	
morning max el	13445 Jun 10 18:10	8°♄07'05	21°30'49	direct	13446 May 16 20:02	17°♄38'20	
desc. node	13445 Jun 13 20:09	11°♄27'32		morning max el	13446 May 24 15:00	22°♄01'45	20°14'40
	13445 Jun 27 16:02	0°♄			13446 May 31 09:05	0°♄	
morning set	13445 Jul 12 11:58	22°♄31'00		desc. node	13446 May 31 17:05	0°♄26'30	
	13445 Jul 17 04:02	0°♄			13446 Jun 20 21:03	0°♄	
max. Earth dist.	13445 Jul 18 23:57	2°♄59'29	1.42305 AU	morning set	13446 Jun 21 17:32	1°♄18'51	
				max. Earth dist.	13446 Jul 01 09:29	16°♄28'11	1.44117 AU
superior conj	13445 Jul 26 11:39	15°♄36'27	-1°35'48				
minimum elong	13445 Jul 26 18:34	16°♄06'20	1°35'46	superior conj	13446 Jul 07 08:01	26°♄05'00	-2°01'50
	13445 Aug 03 14:39	0°♄		minimum elong	13446 Jul 07 14:25	26°♄31'16	2°02'24
evening rise	13445 Aug 06 15:31	5°♄30'42			13446 Jul 09 16:57	0°♄	
asc. node	13445 Aug 07 17:10	7°♄27'21		evening rise	13446 Jul 20 04:29	17°♄48'50	
	13445 Aug 21 19:47	0°♄			13446 Jul 25 13:52	27°♄05'57	
evening max el	13445 Aug 22 19:18	1°♄01'45	18°07'21	asc. node	13446 Jul 27 07:08	0°♄	
retrograde	13445 Aug 29 17:32	4°♄34'01		evening max el	13446 Aug 06 09:11	14°♄15'49	18°03'43
evening set	13445 Sep 01 00:28	4°♄11'12		retrograde	13446 Aug 12 19:50	17°♄36'38	
	13445 Sep 07 07:52	30°♄			13446 Aug 15 11:02	17°♄02'03	
inferior conj	13445 Sep 08 01:44	29°♄19'46	0°30'17	evening set	13446 Aug 21 20:39	11°♄51'49	1°39'09
minimum elong	13445 Sep 08 02:42	29°♄17'33	0°29'47	minimum elong	13446 Aug 21 23:01	11°♄45'40	1°37'58
desc. node	13445 Sep 09 17:20	27°♄49'15		min. Earth dist.	13446 Aug 24 18:30	8°♄51'49	0.62211 AU
min. Earth dist.	13445 Sep 11 07:52	26°♄23'27	0.59926 AU	desc. node	13446 Aug 27 14:51	6°♄18'18	
morning rise	13445 Sep 15 01:41	23°♄34'46		morning rise	13446 Aug 28 08:38	5°♄44'58	
direct	13445 Sep 21 14:02	21°♄33'33		direct	13446 Sep 04 01:00	3°♄21'31	
morning max el	13445 Oct 05 21:35	29°♄24'54	27°47'57	morning max el	13446 Sep 18 03:51	11°♄22'19	27°57'19
	13445 Oct 06 11:40	0°♄			13446 Oct 02 20:34	0°♄	
	13445 Oct 27 17:58	0°♄			13446 Oct 20 02:21	0°♄	
asc. node	13445 Nov 03 19:08	13°♄16'34		asc. node	13446 Oct 21 15:51	3°♄08'26	
morning set	13445 Nov 07 03:34	20°♄08'51		morning set	13446 Oct 22 03:11	4°♄06'11	
	13445 Nov 11 17:12	0°♄			13446 Oct 27 12:26	15°♄28'50	1.31770 AU
max. Earth dist.	13445 Nov 13 07:48	3°♄33'34	1.31257 AU				
				superior conj	13446 Oct 29 15:18	20°♄06'55	1°09'51
superior conj	13445 Nov 14 05:55	5°♄36'40	1°25'01	minimum elong	13446 Oct 29 13:02	19°♄54'28	1°10'15
minimum elong	13445 Nov 14 04:01	5°♄26'04	1°25'43		13446 Nov 03 02:52	0°♄	
evening rise	13445 Nov 20 22:42	20°♄24'35		evening rise	13446 Nov 05 09:26	4°♄57'11	
	13445 Nov 25 13:09	0°♄			13446 Nov 18 11:22	0°♄	
desc. node	13445 Dec 06 14:12	19°♄37'01		desc. node	13446 Nov 23 11:20	7°♄25'11	
	13445 Dec 14 04:22	0°♄		evening max el	13446 Nov 30 12:11	15°♄34'12	24°24'37
evening max el	13445 Dec 18 23:13	5°♄07'52	25°55'33	retrograde	13446 Dec 14 04:51	22°♄23'53	
retrograde	13446 Jan 01 21:25	12°♄10'38		evening set	13446 Dec 19 09:17	21°♄24'47	
evening set	13446 Jan 08 01:59	10°♄40'39		min. Earth dist.	13446 Dec 24 23:48	18°♄33'44	0.55994 AU
min. Earth dist.	13446 Jan 12 12:08	8°♄03'42	0.57781 AU	inferior conj	13446 Dec 27 06:55	17°♄08'20	-5°34'38
inferior conj	13446 Jan 15 12:26	5°♄55'52	-4°31'14	minimum elong	13446 Dec 27 13:33	16°♄58'02	5°32'38
minimum elong	13446 Jan 15 21:13	5°♄40'18	4°27'54	morning rise	13447 Jan 04 19:49	13°♄06'56	
morning rise	13446 Jan 23 19:18	1°♄34'09		direct	13447 Jan 07 06:05	12°♄51'15	
direct	13446 Jan 25 21:15	1°♄20'21		morning max el	13447 Jan 17 06:45	17°♄40'50	19°43'40

asc. node	13447 Jan 17 15:35	18°  02'30		direct	13447 Dec 18 21:37	23°  22'07	
	13447 Jan 26 08:40	0° 		morning max el	13447 Dec 30 11:29	28°  53'55	21°07'04
morning set	13447 Feb 03 19:26	16°  02'50			13447 Dec 31 14:02	0° 	
	13447 Feb 10 17:11	0° 		asc. node	13448 Jan 04 12:48	4°  41'49	
					13448 Jan 18 19:25	0° 	
superior conj	13447 Feb 11 16:58	1°  57'59	1°00'11	morning set	13448 Jan 19 04:08	0°  45'12	
minimum elong	13447 Feb 11 19:44	2°  11'38	1°00'22				
max. Earth dist.	13447 Feb 17 21:27	13°  49'38	1.37497 AU	superior conj	13448 Jan 26 11:49	16°  03'40	1°19'25
desc. node	13447 Feb 19 11:44	16°  45'31		minimum elong	13448 Jan 26 14:15	16°  16'13	1°19'55
evening rise	13447 Feb 21 14:46	20°  35'01		max. Earth dist.	13448 Jan 31 07:12	25°  46'03	1.35406 AU
	13447 Feb 27 02:06	0° 			13448 Feb 02 11:31	0° 	
	13447 Mar 19 07:29	0° 		evening rise	13448 Feb 04 07:30	3°  28'18	
evening max el	13447 Mar 29 02:13	11°  17'08	25°20'07	desc. node	13448 Feb 06 08:18	7°  13'37	
retrograde	13447 Apr 10 06:17	18°  19'46			13448 Feb 20 00:35	0° 	
asc. node	13447 Apr 15 12:13	16°  23'05		evening max el	13448 Mar 10 15:59	25°  05'50	26°25'35
evening set	13447 Apr 16 02:43	15°  53'57			13448 Mar 16 15:24	0° 	
min. Earth dist.	13447 Apr 20 11:20	11°  05'23	0.67883 AU	retrograde	13448 Mar 23 14:39	2°  25'57	
inferior conj	13447 Apr 21 18:48	9°  23'22	1°50'37	evening set	13448 Mar 29 21:53	29°  54'25	
minimum elong	13447 Apr 21 16:42	9°  30'11	1°49'23		13448 Mar 29 19:07	30°  R 	
morning rise	13447 Apr 27 07:04	3°  30'05		asc. node	13448 Apr 01 09:39	27°  53'13	
direct	13447 Apr 30 19:58	2°  18'11		min. Earth dist.	13448 Apr 03 00:25	25°  54'47	0.66713 AU
morning max el	13447 May 07 19:22	6°  06'54	19°12'44	inferior conj	13448 Apr 04 20:19	23°  52'44	1°03'58
desc. node	13447 May 18 13:54	19°  58'22		minimum elong	13448 Apr 04 18:47	23°  32'22	1°03'06
greatest brilliancy	13447 May 20 16:32	23°  05'13	-0.7m	morning rise	13448 Apr 10 16:37	17°  51'19	
	13447 May 25 06:31	0° 		direct	13448 Apr 13 18:51	16°  51'33	
morning set	13447 May 31 20:34	10°  06'01		morning max el	13448 Apr 20 06:35	20°  18'32	18°27'00
	13447 Jun 13 15:53	0° 			13448 Apr 27 22:39	0° 	
max. Earth dist.	13447 Jun 14 01:15	0°  36'44	1.45336 AU	desc. node	13448 May 04 10:37	9°  54'11	
				morning set	13448 May 10 18:11	19°  51'23	
					13448 May 17 04:37	0° 	
superior conj	13447 Jun 17 05:48	5°  38'27	-2°13'28				
minimum elong	13447 Jun 17 06:42	5°  41'59	2°14'30	superior conj	13448 May 26 14:20	14°  43'17	-2°05'23
evening rise	13447 Jul 01 19:27	29°  09'34		minimum elong	13448 May 26 07:44	14°  17'32	2°06'01
	13447 Jul 02 07:43	0° 		max. Earth dist.	13448 May 26 20:50	15°  08'39	1.45835 AU
asc. node	13447 Jul 12 10:39	16°  02'54			13448 Jun 05 08:52	0° 	
evening max el	13447 Jul 20 23:18	27°  04'51	18°18'21	evening rise	13448 Jun 11 09:54	9°  30'04	
	13447 Jul 23 16:06	0° 		greatest brilliancy	13448 Jun 20 13:32	23°  52'18	-0.8m
retrograde	13447 Jul 27 08:13	1°  11'09			13448 Jun 24 14:06	0° 	
evening set	13447 Jul 30 07:58	0° 		asc. node	13448 Jun 28 07:31	5°  02'09	
	13447 Jul 30 22:59	30°  R 		evening max el	13448 Jul 03 10:48	11°  03'44	18°50'30
inferior conj	13447 Aug 05 05:35	24°  05'52	2°26'37	retrograde	13448 Jul 10 02:59	15°  01'06	
minimum elong	13447 Aug 05 07:59	24°  08'06	2°25'23	evening set	13448 Jul 13 11:33	14°  05'11	
min. Earth dist.	13447 Aug 07 14:28	22°  11'17	0.64339 AU	inferior conj	13448 Jul 19 00:50	8°  02'49	2°55'54
morning rise	13447 Aug 11 06:32	18°  35'58		minimum elong	13448 Jul 19 02:31	8°  01'32	2°54'47
desc. node	13447 Aug 14 12:21	16°  38'47		min. Earth dist.	13448 Jul 20 19:13	6°  09'52	0.66136 AU
direct	13447 Aug 17 20:45	15°  59'15		morning rise	13448 Jul 24 16:42	1°  58'57	
morning max el	13447 Aug 31 13:43	23°  05'18	27°30'11		13448 Jul 27 18:01	30°  R 	
	13447 Sep 05 23:39	0° 		direct	13448 Jul 30 23:57	29°  51'44	
	13447 Sep 26 05:46	0° 		desc. node	13448 Jul 31 09:45	29°  51'21	
morning set	13447 Oct 05 18:16	17°  36'40			13448 Aug 03 11:18	0° 	
asc. node	13447 Oct 08 12:27	23°  08'55		morning max el	13448 Aug 13 00:55	7°  03'07	26°33'32
max. Earth dist.	13447 Oct 10 09:51	27°  03'05	1.32829 AU		13448 Aug 30 19:44	0° 	
	13447 Oct 11 19:33	0° 		morning set	13448 Sep 17 21:50	0°  34'08	
					13448 Sep 17 14:35	0° 	
superior conj	13447 Oct 13 20:36	4°  12'21	0°49'04	max. Earth dist.	13448 Sep 21 21:46	8°  17'36	1.34415 AU
minimum elong	13447 Oct 13 18:31	4°  10'08	0°49'11	asc. node	13448 Sep 24 09:02	13°  14'33	
evening rise	13447 Oct 20 20:28	19°  12'56					
	13447 Oct 25 22:48	0° 		superior conj	13448 Sep 26 19:31	18°  14'39	0°22'55
desc. node	13447 Nov 10 08:36	23°  58'25		minimum elong	13448 Sep 26 18:19	18°  08'22	0°22'53
evening max el	13447 Nov 11 22:18	25°  35'11	22°42'29		13448 Oct 02 09:46	0° 	
	13447 Nov 17 15:51	0° 		evening rise	13448 Oct 04 06:00	3°  15'24	
retrograde	13447 Nov 24 23:00	2°  03'06			13448 Oct 18 17:10	0° 	
evening set	13447 Nov 28 18:56	1°  31'06		evening max el	13448 Oct 23 15:03	5°  48'35	21°06'39
	13447 Dec 02 17:55	30° R		desc. node	13448 Oct 27 05:55	8° 51'27	
min. Earth dist.	13447 Dec 06 06:39	28° 57'25	0.54827 AU	retrograde	13448 Nov 04 09:55	11° 40'04	
inferior conj	13447 Dec 07 06:57	27° 32'58	-5°56'22	evening set	13448 Nov 06 23:42	11° 42'29	
minimum elong	13447 Dec 07 05:49	27° 34'34	5°55'19	inferior conj	13448 Nov 15 22:16	7° 30'52	-5°19'05
morning rise	13447 Dec 15 18:03	23° 54'54					

minimum elong	13448 Nov 15 13:28	7° ♁ 43'18	5°16'27	retrograde	13449 Oct 16 01:11	21° ♁ 48'00	
min. Earth dist.	13448 Nov 16 12:33	7° ♁ 10'41	0.54516 AU	evening set	13449 Oct 17 23:26	21° ♁ 37'53	
morning rise	13448 Nov 24 03:43	3° ♁ 39'38		inferior conj	13449 Oct 26 19:37	17° ♁ 36'27	-3°50'55
direct	13448 Nov 28 05:03	3° ♁ 04'22		minimum elong	13449 Oct 26 10:10	17° ♁ 51'03	3°47'06
morning max el	13448 Dec 11 03:16	9° ♁ 18'03	22°49'24	min. Earth dist.	13449 Oct 28 21:06	16° ♁ 20'10	0.55146 AU
asc. node	13448 Dec 21 09:54	22° ♁ 22'09		morning rise	13449 Nov 03 19:20	13° ♁ 21'09	
	13448 Dec 25 20:55	0° ♁		direct	13449 Nov 08 18:03	12° ♁ 27'18	
morning set	13449 Jan 02 15:22	15° ♁ 31'07		morning max el	13449 Nov 22 13:14	19° ♁ 18'10	24°38'19
	13449 Jan 09 09:01	0° ♁			13449 Dec 01 12:23	0° ♁	
				asc. node	13449 Dec 08 06:55	10° ♁ 48'59	
superior conj	13449 Jan 09 14:29	0° ♁ 29'17	1°31'45	morning set	13449 Dec 18 03:16	0° ♁ 15'17	
minimum elong	13449 Jan 09 16:03	0° ♁ 37'39	1°32'34		13449 Dec 18 00:25	0° ♁	
max. Earth dist.	13449 Jan 12 23:45	7° ♁ 38'00	1.33645 AU				
evening rise	13449 Jan 17 14:04	16° ♁ 55'29		superior conj	13449 Dec 24 22:17	15° ♁ 07'04	1°37'36
desc. node	13449 Jan 23 04:57	27° ♁ 31'06		minimum elong	13449 Dec 24 22:46	15° ♁ 09'44	1°38'37
	13449 Jan 24 14:14	0° ♁		max. Earth dist.	13449 Dec 26 23:48	19° ♁ 37'00	1.32327 AU
	13449 Feb 13 10:21	0° ♁			13449 Dec 31 21:43	0° ♁	
evening max el	13449 Feb 21 05:27	8° ♁ 40'54	27°12'15	evening rise	13450 Jan 01 07:15	0° ♁ 48'44	
retrograde	13449 Mar 06 17:01	16° ♁ 08'10		desc. node	13450 Jan 10 01:42	17° ♁ 32'43	
evening set	13449 Mar 13 09:03	13° ♁ 36'27			13450 Jan 17 13:40	0° ♁	
min. Earth dist.	13449 Mar 17 06:37	9° ♁ 55'51	0.65152 AU	evening max el	13450 Feb 03 17:17	21° ♁ 51'13	27°33'11
asc. node	13449 Mar 19 07:07	7° ♁ 41'18		retrograde	13450 Feb 17 12:41	29° ♁ 17'08	
inferior conj	13449 Mar 19 14:42	7° ♁ 20'07	0°06'05	evening set	13450 Feb 24 09:51	26° ♁ 52'35	
minimum elong	13449 Mar 19 14:31	7° ♁ 20'36	0°05'59	min. Earth dist.	13450 Feb 28 04:15	23° ♁ 41'02	0.63259 AU
transit middle	13449 Mar 19 14:31	7° ♁ 20'36	0°05'59	inferior conj	13450 Mar 02 23:11	20° ♁ 53'50	-1°03'01
transit begin	13449 Mar 19 11:43	7° ♁ 28'26		minimum elong	13450 Mar 03 01:14	20° ♁ 48'41	1°01'55
transit end	13449 Mar 19 17:19	7° ♁ 12'48		asc. node	13450 Mar 06 04:34	17° ♁ 53'08	
morning rise	13449 Mar 25 21:41	1° ♁ 50'39		morning rise	13450 Mar 09 19:08	15° ♁ 39'49	
direct	13449 Mar 28 14:25	1° ♁ 12'06		direct	13450 Mar 12 03:53	15° ♁ 12'56	
morning max el	13449 Apr 03 22:31	4° ♁ 29'54	17°58'07	morning max el	13450 Mar 18 16:19	18° ♁ 32'54	17°46'33
desc. node	13449 Apr 21 07:14	0° ♁ 07'02			13450 Mar 27 02:26	0° ♁	
	13449 Apr 21 05:31	0° ♁		morning set	13450 Apr 03 23:41	13° ♁ 21'46	
morning set	13449 Apr 21 19:50	0° ♁ 58'53		desc. node	13450 Apr 08 03:48	20° ♁ 32'03	
					13450 Apr 13 18:25	0° ♁	
superior conj	13449 May 06 02:39	24° ♁ 04'42	-1°38'44	superior conj	13450 Apr 16 09:44	4° ♁ 21'38	-1°01'07
minimum elong	13449 May 05 17:33	23° ♁ 28'42	1°38'36	minimum elong	13450 Apr 16 03:35	3° ♁ 56'22	1°00'46
max. Earth dist.	13449 May 09 17:03	29° ♁ 45'00	1.45582 AU	max. Earth dist.	13450 Apr 22 11:13	14° ♁ 09'33	1.44617 AU
	13449 May 09 20:53	0° ♁		evening rise	13450 May 01 15:13	28° ♁ 28'56	
evening rise	13449 May 22 04:04	19° ♁ 04'12			13450 May 02 15:00	0° ♁	
	13449 May 29 07:38	0° ♁			13450 May 23 04:04	0° ♁	
greatest brilliancy	13449 Jun 05 00:51	10° ♁ 03'41	-0.6m	evening max el	13450 May 30 18:23	9° ♁ 06'20	20°42'21
asc. node	13449 Jun 15 04:29	23° ♁ 39'28		asc. node	13450 Jun 02 01:34	11° ♁ 12'23	
evening max el	13449 Jun 16 17:29	25° ♁ 17'44	19°39'12	retrograde	13450 Jun 08 00:02	13° ♁ 52'09	
retrograde	13449 Jun 24 01:02	29° ♁ 25'31		evening set	13450 Jun 12 03:58	12° ♁ 13'56	
evening set	13449 Jun 27 18:56	28° ♁ 03'57		inferior conj	13450 Jun 17 10:06	6° ♁ 05'55	3°11'49
inferior conj	13449 Jul 03 03:12	22° ♁ 07'59	3°10'11	minimum elong	13450 Jun 17 09:45	6° ♁ 07'06	3°10'45
minimum elong	13449 Jul 03 03:53	22° ♁ 05'43	3°09'09	min. Earth dist.	13450 Jun 18 00:13	5° ♁ 17'09	0.68437 AU
min. Earth dist.	13449 Jul 04 07:08	20° ♁ 34'53	0.67515 AU		13450 Jun 22 09:10	30° ♁	
morning rise	13449 Jul 08 12:24	15° ♁ 44'25		morning rise	13450 Jun 22 15:15	29° ♁ 46'03	
direct	13449 Jul 14 09:32	13° ♁ 09'38		direct	13450 Jun 28 00:31	27° ♁ 23'50	
desc. node	13449 Jul 18 07:05	14° ♁ 05'46			13450 Jul 04 11:31	0° ♁	
morning max el	13449 Jul 26 11:43	20° ♁ 24'31	25°16'21	desc. node	13450 Jul 05 04:20	0° ♁ 31'51	
	13449 Aug 03 17:30	0° ♁		morning max el	13450 Jul 08 21:59	3° ♁ 54'44	23°48'25
	13449 Aug 23 23:36	0° ♁			13450 Jul 28 22:11	0° ♁	
morning set	13449 Aug 31 10:01	12° ♁ 48'49		morning set	13450 Aug 13 02:14	24° ♁ 09'31	
max. Earth dist.	13449 Sep 04 00:19	19° ♁ 23'20	1.36442 AU		13450 Aug 16 11:23	0° ♁	
	13449 Sep 09 13:03	0° ♁		max. Earth dist.	13450 Aug 16 21:52	0° ♁ 46'05	1.38746 AU
superior conj	13449 Sep 10 09:07	1° ♁ 39'13	-0°08'00	superior conj	13450 Aug 24 09:52	14° ♁ 26'46	-0°42'12
minimum elong	13449 Sep 10 09:38	1° ♁ 41'43	0°07'59	minimum elong	13450 Aug 24 12:52	14° ♁ 40'56	0°42'02
behind sun begin	13449 Sep 10 04:01	1° ♁ 13'57		asc. node	13450 Aug 29 02:10	23° ♁ 25'08	
behind sun end	13449 Sep 10 15:14	2° ♁ 09'33			13450 Sep 01 10:56	0° ♁	
asc. node	13449 Sep 11 05:36	3° ♁ 21'07		evening rise	13450 Sep 02 11:07	1° ♁ 58'30	
evening rise	13449 Sep 18 11:46	18° ♁ 05'08		evening max el	13450 Sep 18 17:26	28° ♁ 29'03	18°52'48
	13449 Sep 24 13:08	0° ♁			13450 Sep 20 09:36	0° ♁	
evening max el	13449 Oct 05 21:20	16° ♁ 44'00	19°48'50	retrograde	13450 Sep 27 07:29	2° ♁ 47'35	
desc. node	13449 Oct 14 03:20	21° ♁ 37'36					

evening set	13450 Sep 29 04:35	2°♄35'59		retrograde	13451 Sep 09 09:07	14°♄41'58	
desc. node	13450 Oct 01 00:50	2°♄03'33		evening set	13451 Sep 11 11:54	14°♄24'15	
	13450 Oct 04 22:45	30°♄		desc. node	13451 Sep 17 22:22	10°♄36'10	
inferior conj	13450 Oct 07 10:39	28°♄17'20	-2°01'48	inferior conj	13451 Sep 18 23:28	9°♄44'31	-0°19'39
minimum elong	13450 Oct 07 05:31	28°♄26'28	1°59'22	minimum elong	13451 Sep 18 22:45	9°♄46'01	0°19'19
min. Earth dist.	13450 Oct 10 10:33	26°♄09'56	0.56611 AU	min. Earth dist.	13451 Sep 22 06:47	7°♄00'28	0.58638 AU
morning rise	13450 Oct 15 03:16	23°♄26'03		morning rise	13451 Sep 26 06:10	4°♄17'20	
direct	13450 Oct 20 20:49	22°♄07'28		direct	13451 Oct 02 13:34	2°♄31'25	
morning max el	13450 Nov 04 01:38	29°♄27'24	26°15'37	morning max el	13451 Oct 16 21:09	10°♄12'31	27°24'50
	13450 Nov 04 15:01	0°♄			13451 Nov 01 03:48	0°♄	
asc. node	13450 Nov 25 03:50	29°♄50'23		asc. node	13451 Nov 12 00:39	19°♄17'09	
	13450 Nov 25 05:52	0°♄		morning set	13451 Nov 16 22:04	29°♄18'19	
morning set	13450 Dec 02 14:04	14°♄52'24			13451 Nov 17 05:54	0°♄	
superior conj	13450 Dec 09 08:59	29°♄49'55	1°37'19	superior conj	13451 Nov 23 20:38	14°♄32'20	1°31'10
minimum elong	13450 Dec 09 08:23	29°♄46'37	1°38'21	minimum elong	13451 Nov 23 19:08	14°♄23'56	1°32'02
	13450 Dec 09 10:47	0°♄		max. Earth dist.	13451 Nov 23 14:05	13°♄55'41	1.31205 AU
max. Earth dist.	13450 Dec 10 05:35	1°♄44'28	1.31508 AU	evening rise	13451 Nov 30 14:34	29°♄24'54	
evening rise	13450 Dec 16 08:11	15°♄00'28			13451 Nov 30 21:08	0°♄	
	13450 Dec 23 21:50	0°♄		desc. node	13451 Dec 14 19:32	26°♄17'14	
desc. node	13450 Dec 27 22:33	7°♄11'05			13451 Dec 17 04:20	0°♄	
	13451 Jan 12 20:23	0°♄		evening max el	13451 Dec 30 03:02	16°♄08'13	26°36'42
evening max el	13451 Jan 17 01:23	4°♄23'55	27°22'21	retrograde	13452 Jan 13 02:00	23°♄15'55	
retrograde	13451 Jan 31 00:16	11°♄42'07		evening set	13452 Jan 19 15:22	21°♄30'00	
evening set	13451 Feb 06 21:11	9°♄33'02		min. Earth dist.	13452 Jan 23 16:53	18°♄52'50	0.58977 AU
min. Earth dist.	13451 Feb 10 15:52	6°♄43'53	0.61146 AU	inferior conj	13452 Jan 26 20:45	16°♄27'18	-3°45'20
inferior conj	13451 Feb 13 18:25	3°♄59'26	-2°21'53	minimum elong	13452 Jan 27 04:42	16°♄12'01	3°41'54
minimum elong	13451 Feb 13 23:27	3°♄48'17	2°19'22	morning rise	13452 Feb 03 21:01	11°♄52'26	
	13451 Feb 19 00:08	30°♄		direct	13452 Feb 05 21:57	11°♄37'41	
morning rise	13451 Feb 21 04:45	29°♄03'36		asc. node	13452 Feb 07 23:25	11°♄53'27	
asc. node	13451 Feb 21 02:01	29°♄05'39		morning max el	13452 Feb 13 19:50	15°♄32'27	18°18'56
direct	13451 Feb 23 07:46	28°♄44'37			13452 Feb 23 20:16	0°♄	
	13451 Feb 27 11:40	0°♄		morning set	13452 Feb 29 13:42	10°♄37'42	
morning max el	13451 Mar 02 08:39	2°♄17'06	17°53'01	superior conj	13452 Mar 09 22:20	28°♄10'07	0°15'30
morning set	13451 Mar 17 23:35	26°♄40'29		minimum elong	13452 Mar 09 23:29	28°♄15'18	0°15'28
	13451 Mar 19 19:38	0°♄		behind sun begin	13452 Mar 09 21:41	28°♄07'07	
desc. node	13451 Mar 26 00:19	11°♄04'16		behind sun end	13452 Mar 10 01:16	28°♄23'28	
					13452 Mar 10 22:34	0°♄	
superior conj	13451 Mar 28 16:51	15°♄45'11	-0°21'07	desc. node	13452 Mar 11 20:50	1°♄40'07	
minimum elong	13451 Mar 28 14:57	15°♄36'58	0°20'58	max. Earth dist.	13452 Mar 17 11:57	11°♄30'30	1.41021 AU
max. Earth dist.	13451 Apr 05 01:42	28°♄08'16	1.43041 AU	evening rise	13452 Mar 22 01:41	19°♄08'48	
	13451 Apr 06 05:06	0°♄			13452 Mar 28 21:17	0°♄	
evening rise	13451 Apr 11 11:07	8°♄23'12			13452 Apr 19 04:32	0°♄	
	13451 Apr 25 19:11	0°♄		evening max el	13452 Apr 25 05:32	6°♄46'51	23°16'49
evening max el	13451 May 13 13:55	22°♄55'54	21°56'34	retrograde	13452 May 05 17:42	12°♄58'02	
asc. node	13451 May 19 22:45	27°♄44'15		asc. node	13452 May 05 20:02	12°♄58'00	
retrograde	13451 May 22 22:03	28°♄24'45		evening set	13452 May 10 20:00	10°♄49'13	
evening set	13451 May 27 12:52	26°♄30'32		min. Earth dist.	13452 May 15 16:58	5°♄04'14	0.68854 AU
inferior conj	13451 Jun 01 19:18	20°♄12'20	3°02'21	inferior conj	13452 May 16 04:50	4°♄23'17	2°42'32
minimum elong	13451 Jun 01 18:04	20°♄16'39	3°01'11	minimum elong	13452 May 16 02:57	4°♄29'46	2°41'16
min. Earth dist.	13451 Jun 01 20:13	20°♄09'08	0.68883 AU		13452 May 19 14:54	30°♄	
morning rise	13451 Jun 06 23:04	13°♄58'20		morning rise	13452 May 21 09:50	28°♄16'34	
direct	13451 Jun 11 19:38	11°♄53'49		direct	13452 May 25 17:38	26°♄32'28	
morning max el	13451 Jun 21 09:54	17°♄32'28	22°19'19		13452 Jun 01 16:32	0°♄	
desc. node	13451 Jun 22 01:28	18°♄12'15		morning max el	13452 Jun 03 02:46	1°♄20'34	20°56'53
	13451 Jul 01 17:18	0°♄		desc. node	13452 Jun 07 22:29	6°♄46'57	
	13451 Jul 21 23:57	0°♄			13452 Jun 24 11:37	0°♄	
morning set	13451 Jul 24 18:19	4°♄26'07		morning set	13452 Jul 03 10:07	13°♄39'32	
max. Earth dist.	13451 Jul 29 21:40	12°♄54'45	1.41075 AU	max. Earth dist.	13452 Jul 11 04:03	25°♄58'32	1.43145 AU
					13452 Jul 13 15:11	0°♄	
superior conj	13451 Aug 06 17:30	26°♄27'46	-1°17'04	superior conj	13452 Jul 18 03:37	7°♄31'43	-1°48'08
minimum elong	13451 Aug 06 23:16	26°♄53'29	1°16'54	minimum elong	13452 Jul 18 10:50	8°♄02'11	1°48'20
	13451 Aug 08 16:47	0°♄		evening rise	13452 Jul 30 00:08	28°♄11'05	
asc. node	13451 Aug 15 22:47	13°♄23'03			13452 Jul 31 00:37	0°♄	
evening rise	13451 Aug 17 00:42	15°♄24'18		asc. node	13452 Aug 01 19:27	3°♄10'15	
	13451 Aug 25 02:03	0°♄					
evening max el	13451 Sep 01 23:45	10°♄57'10	18°18'08				



























































































































evening max el	13452 Aug 15 11:56	23° \mathbb{M} 57'07	18°03'26		13453 Jul 24 07:23	0° \mathbb{M}	
retrograde	13452 Aug 22 03:52	27° \mathbb{M} 22'43		evening max el	13453 Jul 30 02:16	7° \mathbb{M} 20'04	18°07'37
evening set	13452 Aug 24 14:20	26° \mathbb{M} 55'09		retrograde	13453 Aug 05 11:09	10° \mathbb{M} 40'36	
inferior conj	13452 Aug 31 08:29	21° \mathbb{M} 55'07	1°02'16	evening set	13453 Aug 08 05:53	10° \mathbb{M} 00'14	
minimum elong	13452 Aug 31 10:16	21° \mathbb{M} 50'50	1°01'23	inferior conj	13453 Aug 14 09:55	4° \mathbb{M} 42'20	2°01'41
min. Earth dist.	13452 Sep 03 11:44	18° \mathbb{M} 54'57	0.60909 AU	minimum elong	13453 Aug 14 12:25	4° \mathbb{M} 35'29	2°00'26
desc. node	13452 Sep 03 19:55	18° \mathbb{M} 36'22		min. Earth dist.	13453 Aug 17 02:30	1° \mathbb{M} 47'08	0.63148 AU
morning rise	13452 Sep 07 03:21	15° \mathbb{M} 59'41			13453 Aug 18 21:44	30° \mathbb{R} δ	
direct	13452 Sep 13 18:09	13° \mathbb{M} 48'29		morning rise	13453 Aug 20 17:00	28° \mathbb{Q} 28'54	
morning max el	13452 Sep 28 00:10	21° \mathbb{M} 44'08	27°56'42	desc. node	13453 Aug 21 17:24	27° \mathbb{Q} 46'20	
	13452 Oct 05 05:59	0° \mathbb{L}		direct	13453 Aug 27 08:55	25° \mathbb{Q} 58'50	
	13452 Oct 24 06:00	0° \mathbb{M}			13453 Sep 05 20:37	0° \mathbb{M}	
asc. node	13452 Oct 28 21:24	9° \mathbb{M} 01'27		morning max el	13453 Sep 10 08:35	4° \mathbb{M} 00'36	27°49'52
morning set	13452 Oct 31 01:21	13° \mathbb{M} 27'25			13453 Sep 29 20:25	0° \mathbb{L}	
max. Earth dist.	13452 Nov 05 21:22	25° \mathbb{M} 59'59	1.31418 AU	morning set	13453 Oct 14 21:41	27° \mathbb{L} 14'30	
				asc. node	13453 Oct 15 18:04	28° \mathbb{L} 57'50	
superior conj	13452 Nov 07 07:22	29° \mathbb{M} 08'10	1°19'17		13453 Oct 16 06:14	0° \mathbb{M}	
minimum elong	13452 Nov 07 05:16	28° \mathbb{M} 56'27	1°19'50	max. Earth dist.	13453 Oct 19 23:29	7° \mathbb{M} 47'49	1.32160 AU
	13452 Nov 07 16:42	0° \mathbb{X}					
evening rise	13452 Nov 14 00:14	13° \mathbb{X} 55'42		superior conj	13453 Oct 22 15:16	13° \mathbb{M} 32'21	1°01'43
	13452 Nov 21 22:30	0° \mathbb{Z}		minimum elong	13453 Oct 22 13:00	13° \mathbb{M} 20'00	1°01'58
desc. node	13452 Nov 30 16:37	14° \mathbb{Z} 38'19		evening rise	13453 Oct 29 11:19	28° \mathbb{M} 28'06	
evening max el	13452 Dec 10 20:07	26° \mathbb{Z} 59'20	25°19'14		13453 Oct 30 04:28	0° \mathbb{X}	
	13452 Dec 14 09:29	0° \mathbb{A}			13453 Nov 16 01:26	0° \mathbb{Z}	
retrograde	13452 Dec 24 16:18	3° \mathbb{A} 56'37		desc. node	13453 Nov 17 13:48	1° \mathbb{Z} 57'28	
evening set	13452 Dec 30 12:15	2° \mathbb{A} 39'29		evening max el	13453 Nov 22 06:36	7° \mathbb{Z} 09'49	23°41'14
	13453 Jan 04 07:42	30° \mathbb{R} \mathbb{Z}		retrograde	13453 Dec 05 18:09	13° \mathbb{Z} 52'34	
min. Earth dist.	13453 Jan 04 08:15	29° \mathbb{Z} 59'07	0.56967 AU	evening set	13453 Dec 10 09:25	13° \mathbb{Z} 05'46	
inferior conj	13453 Jan 07 03:04	28° \mathbb{Z} 08'00	-5°01'39	min. Earth dist.	13453 Dec 16 17:12	10° \mathbb{Z} 02'59	0.55402 AU
minimum elong	13453 Jan 07 11:38	27° \mathbb{Z} 53'43	4°58'44	inferior conj	13453 Dec 18 12:54	8° \mathbb{Z} 58'19	-5°50'22
morning rise	13453 Jan 15 13:28	23° \mathbb{Z} 55'29		minimum elong	13453 Dec 18 16:47	8° \mathbb{Z} 52'32	5°49'02
direct	13453 Jan 17 18:05	23° \mathbb{Z} 41'21		morning rise	13453 Dec 27 01:58	5° \mathbb{Z} 04'22	
asc. node	13453 Jan 24 20:46	26° \mathbb{Z} 21'41		direct	13453 Dec 29 18:29	4° \mathbb{Z} 46'30	
morning max el	13453 Jan 26 21:57	28° \mathbb{Z} 08'02	19°06'17	morning max el	13454 Jan 09 11:13	9° \mathbb{Z} 53'33	20°16'35
	13453 Jan 28 16:13	0° \mathbb{A}		asc. node	13454 Jan 11 18:02	12° \mathbb{Z} 18'24	
morning set	13453 Feb 12 13:34	25° \mathbb{A} 00'06			13454 Jan 22 23:54	0° \mathbb{A}	
	13453 Feb 15 02:03	0° \mathbb{H}		morning set	13454 Jan 27 19:46	9° \mathbb{A} 37'23	
superior conj	13453 Feb 20 21:49	11° \mathbb{H} 24'25	0°45'54	superior conj	13454 Feb 04 10:43	25° \mathbb{A} 14'49	1°09'13
minimum elong	13453 Feb 21 00:22	11° \mathbb{H} 36'39	0°45'55	minimum elong	13454 Feb 04 13:26	25° \mathbb{A} 28'29	1°09'31
desc. node	13453 Feb 26 17:21	22° \mathbb{H} 16'10			13454 Feb 06 19:56	0° \mathbb{H}	
max. Earth dist.	13453 Feb 27 18:46	24° \mathbb{H} 10'45	1.38777 AU	max. Earth dist.	13454 Feb 10 01:39	6° \mathbb{H} 16'16	1.36565 AU
	13453 Mar 03 02:01	0° \mathbb{Y}		evening rise	13454 Feb 13 20:34	13° \mathbb{H} 18'52	
evening rise	13453 Mar 03 13:28	0° \mathbb{Y} 49'25		desc. node	13454 Feb 13 13:53	12° \mathbb{H} 48'25	
	13453 Mar 22 04:14	0° \mathbb{B}			13454 Feb 23 14:26	0° \mathbb{Y}	
evening max el	13453 Apr 07 19:13	20° \mathbb{B} 39'20	24°36'53		13454 Mar 17 02:45	0° \mathbb{B}	
retrograde	13453 Apr 19 09:50	27° \mathbb{B} 26'33		evening max el	13454 Mar 21 08:35	4° \mathbb{B} 30'32	25°49'51
asc. node	13453 Apr 22 17:22	26° \mathbb{B} 38'14		retrograde	13454 Apr 02 21:28	11° \mathbb{B} 42'56	
evening set	13453 Apr 24 23:50	25° \mathbb{B} 05'41		evening set	13454 Apr 08 22:39	9° \mathbb{B} 13'48	
min. Earth dist.	13453 Apr 29 12:23	19° \mathbb{B} 56'55	0.68361 AU	asc. node	13454 Apr 09 14:46	8° \mathbb{B} 38'21	
inferior conj	13453 Apr 30 12:49	18° \mathbb{B} 35'27	2°12'35	min. Earth dist.	13454 Apr 13 04:24	4° \mathbb{B} 40'24	0.67427 AU
minimum elong	13453 Apr 30 10:39	18° \mathbb{B} 42'39	2°11'17	inferior conj	13454 Apr 14 17:16	2° \mathbb{B} 43'57	1°32'10
morning rise	13453 May 05 21:41	12° \mathbb{B} 37'05		minimum elong	13454 Apr 14 15:20	2° \mathbb{B} 50'05	1°31'03
direct	13453 May 09 17:11	11° \mathbb{B} 13'54			13454 Apr 16 23:11	30° \mathbb{R} \mathbb{Y}	
morning max el	13453 May 17 02:54	15° \mathbb{B} 20'47	19°46'35	morning rise	13454 Apr 20 08:38	26° \mathbb{Y} 55'13	
desc. node	13453 May 25 19:21	26° \mathbb{B} 01'27		direct	13454 Apr 23 16:46	25° \mathbb{Y} 51'31	
	13453 May 28 14:42	0° \mathbb{I}		morning max el	13454 Apr 30 10:24	29° \mathbb{Y} 29'44	18°51'19
greatest brilliancy	13453 May 30 00:25	2° \mathbb{I} 02'16	-0.6m		13454 Apr 30 22:31	0° \mathbb{B}	
morning set	13453 Jun 12 12:02	22° \mathbb{I} 20'43		desc. node	13454 May 12 16:06	15° \mathbb{B} 44'25	
	13453 Jun 17 10:55	0° \mathbb{D}		greatest brilliancy	13454 May 14 03:57	18° \mathbb{B} 00'18	-0.8m
max. Earth dist.	13453 Jun 23 16:52	9° \mathbb{D} 48'07	1.44716 AU		13454 May 21 22:29	0° \mathbb{I}	
superior conj	13453 Jun 28 13:54	17° \mathbb{D} 35'37	-2°08'56	morning set	13454 May 22 20:44	1° \mathbb{I} 26'26	
minimum elong	13453 Jun 28 18:35	17° \mathbb{D} 54'30	2°09'46	max. Earth dist.	13454 Jun 06 10:06	24° \mathbb{I} 07'02	1.45632 AU
	13453 Jul 06 03:45	0° \mathbb{Q}					
evening rise	13453 Jul 12 04:25	10° \mathbb{Q} 07'09		superior conj	13454 Jun 08 04:17	26° \mathbb{I} 52'09	-2°12'35
asc. node	13453 Jul 19 16:11	22° \mathbb{Q} 42'14		minimum elong	13454 Jun 08 01:48	26° \mathbb{I} 42'27	2°13'33
					13454 Jun 10 04:08	0° \mathbb{D}	

evening rise	13454 Jun 23 08:56	21°☿01'47			13455 Jun 22 23:30	0°♊	
	13454 Jun 28 22:25	0°♊		asc. node	13455 Jun 23 09:53	0°♊33'11	
asc. node	13454 Jul 06 12:59	11°♊52'27		evening max el	13455 Jun 27 01:14	4°♊42'55	19°09'25
evening max el	13454 Jul 13 15:33	20°♊57'34	18°29'55	retrograde	13455 Jul 03 23:02	8°♊32'47	
retrograde	13454 Jul 20 02:41	24°♊26'23		evening set	13455 Jul 07 11:30	7°♊20'55	
evening set	13454 Jul 23 06:02	23°♊31'00		inferior conj	13455 Jul 12 22:18	1°♊32'54	3°03'37
inferior conj	13454 Jul 28 23:41	17°♊57'19	2°41'01	minimum elong	13455 Jul 12 23:34	1°♊28'47	3°02'32
minimum elong	13454 Jul 29 01:50	17°♊50'50	2°39'49		13455 Jul 14 03:01	30°☿☿	
min. Earth dist.	13454 Jul 31 02:34	15°♊24'53	0.65147 AU	min. Earth dist.	13455 Jul 14 10:34	29°☿35'50	0.66777 AU
morning rise	13454 Aug 03 20:29	11°♊35'11		morning rise	13455 Jul 18 11:01	25°☿08'44	
desc. node	13454 Aug 08 14:50	9°♊06'15		direct	13455 Jul 24 14:24	22°☿29'31	
direct	13454 Aug 10 08:12	8°♊55'32		desc. node	13455 Jul 26 12:13	22°☿42'58	
morning max el	13454 Aug 23 19:24	16°♊51'04	27°09'09		13455 Aug 06 05:01	0°♊	
	13454 Sep 03 17:46	0°♎		morning max el	13455 Aug 06 06:17	0°♊03'14	26°02'35
	13454 Sep 22 16:48	0°♊			13455 Aug 28 15:39	0°♎	
morning set	13454 Sep 28 08:22	10°♊32'58		morning set	13455 Sep 11 05:55	23°♎13'41	
max. Earth dist.	13454 Oct 02 16:55	19°♊13'03	1.33439 AU		13455 Sep 14 20:04	0°♊	
asc. node	13454 Oct 02 14:41	19°♊01'40		max. Earth dist.	13455 Sep 15 00:14	0°♊20'08	1.35227 AU
				asc. node	13455 Sep 19 11:15	9°♊08'26	
superior conj	13454 Oct 06 18:13	27°♊39'23	0°38'36				
minimum elong	13454 Oct 06 16:24	27°♊29'48	0°38'39	superior conj	13455 Sep 20 13:36	11°♊22'00	0°10'21
	13454 Oct 07 20:42	0°♎		minimum elong	13455 Sep 20 13:00	11°♊18'59	0°10'20
evening rise	13454 Oct 13 21:59	12°♎57'28		behind sun begin	13455 Sep 20 08:19	10°♊55'08	
	13454 Oct 22 12:01	0°♎		behind sun end	13455 Sep 20 17:42	11°♊42'51	
evening max el	13454 Nov 03 18:28	17°♎12'44	22°00'04	evening rise	13455 Sep 28 06:12	27°♊17'59	
desc. node	13454 Nov 04 11:04	17°♎52'21			13455 Sep 29 13:39	0°♎	
retrograde	13454 Nov 16 08:37	23°♎27'14		evening max el	13455 Oct 16 16:45	27°♎42'57	20°31'04
evening set	13454 Nov 19 14:09	23°♎03'59			13455 Oct 19 07:00	0°♎	
inferior conj	13454 Nov 28 07:47	19°♎09'23	-5°48'01	desc. node	13455 Oct 22 08:27	1°♎55'11	
minimum elong	13454 Nov 28 02:50	19°♎16'20	5°46'33	retrograde	13455 Oct 27 19:19	3°♎14'10	
min. Earth dist.	13454 Nov 27 23:41	19°♎20'44	0.54577 AU	evening set	13455 Oct 30 00:32	3°♎01'58	
morning rise	13454 Dec 06 16:33	15°♎22'06			13455 Nov 06 10:57	30°☿♎	
direct	13454 Dec 10 04:58	14°♎54'44		inferior conj	13455 Nov 07 23:57	29°♎06'54	-4°46'25
morning max el	13454 Dec 22 10:06	20°♎45'31	21°48'46	minimum elong	13455 Nov 07 13:55	29°♎21'26	4°42'58
asc. node	13454 Dec 29 15:13	29°♎26'26		min. Earth dist.	13455 Nov 09 06:30	28°♎22'36	0.54675 AU
	13454 Dec 30 00:23	0°♎		morning rise	13455 Nov 16 02:57	25°♎07'43	
morning set	13455 Jan 12 05:49	24°♎22'27		direct	13455 Nov 20 13:53	24°♎25'02	
	13455 Jan 14 21:35	0°♎			13455 Dec 02 21:54	0°♎	
				morning max el	13455 Dec 03 22:11	0°♎55'23	23°35'46
superior conj	13455 Jan 19 09:18	9°♎30'46	1°25'27	asc. node	13455 Dec 16 12:17	17°♎28'34	
minimum elong	13455 Jan 19 11:24	9°♎41'50	1°26'06		13455 Dec 23 07:44	0°♎	
max. Earth dist.	13455 Jan 23 13:45	18°♎08'03	1.34606 AU	morning set	13455 Dec 27 17:34	9°♎08'25	
evening rise	13455 Jan 27 19:42	26°♎28'37					
	13455 Jan 29 16:31	0°♎		superior conj	13456 Jan 03 14:27	24°♎02'32	1°34'59
desc. node	13455 Jan 31 10:30	3°♎13'11		minimum elong	13456 Jan 03 15:35	24°♎08'36	1°35'55
	13455 Feb 16 23:35	0°♎			13456 Jan 06 09:09	0°♎	
evening max el	13455 Mar 03 22:20	18°♎14'56	26°48'13	max. Earth dist.	13456 Jan 06 09:42	0°♎02'54	1.33035 AU
retrograde	13455 Mar 17 03:32	25°♎39'53		evening rise	13456 Jan 11 07:13	10°♎08'20	
evening set	13455 Mar 23 14:40	23°♎07'39		desc. node	13456 Jan 18 07:13	23°♎24'55	
min. Earth dist.	13455 Mar 27 14:57	19°♎08'07	0.66089 AU		13456 Jan 22 01:55	0°♎	
asc. node	13455 Mar 27 12:11	19°♎16'03			13456 Feb 12 18:42	0°♎	
inferior conj	13455 Mar 29 16:03	16°♎44'14	0°40'49	evening max el	13456 Feb 14 11:35	1°♎41'50	27°24'43
minimum elong	13455 Mar 29 15:00	16°♎47'19	0°40'13	retrograde	13456 Feb 28 03:05	9°♎08'44	
morning rise	13455 Apr 04 16:35	11°♎06'51		evening set	13456 Mar 05 21:42	6°♎39'31	
direct	13455 Apr 07 14:31	10°♎20'02		min. Earth dist.	13456 Mar 09 17:50	3°♎11'36	0.64384 AU
morning max el	13455 Apr 13 23:53	13°♎42'01	18°12'34	inferior conj	13456 Mar 12 06:37	0°♎29'48	-0°21'52
	13455 Apr 25 21:11	0°♎		minimum elong	13456 Mar 12 07:16	0°♎28'02	0°21'31
desc. node	13455 Apr 29 12:47	5°♎48'17			13456 Mar 12 17:49	30°☿♎	
morning set	13455 May 03 05:50	11°♎45'31		asc. node	13456 Mar 13 09:39	29°♎18'35	
	13455 May 14 16:54	0°♎		morning rise	13456 Mar 18 18:50	25°♎06'14	
				direct	13456 Mar 21 08:00	24°♎32'59	
superior conj	13455 May 18 12:08	5°♎58'08	-1°56'00	morning max el	13456 Mar 27 16:55	27°♎50'26	17°51'00
minimum elong	13455 May 18 03:38	5°♎24'50	1°56'17		13456 Mar 29 16:37	0°♎	
max. Earth dist.	13455 May 20 05:43	8°♎40'42	1.45817 AU	morning set	13456 Apr 13 19:18	23°♎27'24	
	13455 Jun 02 22:29	0°♎		desc. node	13456 Apr 15 09:24	26°♎07'04	
evening rise	13455 Jun 03 13:31	0°☿58'27			13456 Apr 17 17:13	0°♎	
greatest brilliancy	13455 Jun 14 22:15	18°☿30'52	-0.7m				

superior conj	13456 Apr 27 07:03	15°♄39'27	-1°23'33			13457 Apr 10 04:03	0°♄	
minimum elong	13456 Apr 26 22:47	15°♄06'14	1°23'14	max. Earth dist.		13457 Apr 14 18:58	7°♄32'08	1.44013 AU
max. Earth dist.	13456 May 02 01:37	23°♄14'54	1.45257 AU	evening rise		13457 Apr 22 15:52	19°♄56'50	
	13456 May 06 09:05	0°♄				13457 Apr 29 06:11	0°♄	
evening rise	13456 May 13 02:43	10°♄23'39				13457 May 20 23:40	0°♄	
	13456 May 26 03:12	0°♄		evening max el		13457 May 23 04:02	2°♄20'02	21°12'51
greatest brilliancy	13456 May 28 02:36	2°♄52'51	-0.6m	asc. node		13457 May 27 04:00	5°♄43'30	
evening max el	13456 Jun 09 05:36	18°♄31'27	20°04'33	retrograde		13457 May 31 20:27	7°♄23'49	
asc. node	13456 Jun 09 06:53	18°♄34'38		evening set		13457 Jun 05 05:00	5°♄38'24	
retrograde	13456 Jun 16 21:39	22°♄53'58		inferior conj		13457 Jun 10 10:58	29°♄25'40	3°09'06
evening set	13456 Jun 20 19:49	21°♄25'07		minimum elong		13457 Jun 10 10:13	29°♄28'16	3°08'00
inferior conj	13456 Jun 26 02:51	15°♄23'59	3°12'19			13457 Jun 10 01:05	30°♄	
minimum elong	13456 Jun 26 03:06	15°♄23'11	3°11'16	min. Earth dist.		13457 Jun 10 19:18	28°♄56'40	0.68682 AU
min. Earth dist.	13456 Jun 27 00:49	14°♄09'31	0.67964 AU	morning rise		13457 Jun 15 15:13	23°♄08'16	
morning rise	13456 Jul 01 10:02	9°♄01'58		direct		13457 Jun 20 19:03	20°♄53'23	
direct	13456 Jul 07 02:21	6°♄31'48		desc. node		13457 Jun 29 06:45	25°♄15'41	
desc. node	13456 Jul 12 09:32	8°♄15'18		morning max el		13457 Jul 01 03:23	27°♄02'20	23°10'16
morning max el	13456 Jul 18 16:37	13°♄28'42	24°39'46			13457 Jul 03 21:34	0°♄	
	13456 Aug 01 02:02	0°♄				13457 Jul 25 16:09	0°♄	
	13456 Aug 20 11:08	0°♄		morning set		13457 Aug 04 16:30	16°♄00'57	
morning set	13456 Aug 23 10:11	5°♄06'58		max. Earth dist.		13457 Aug 08 22:22	23°♄12'22	1.39750 AU
max. Earth dist.	13456 Aug 27 00:13	11°♄31'08	1.37403 AU			13457 Aug 12 19:20	0°♄	
superior conj	13456 Sep 02 22:16	24°♄32'36	-0°22'11	superior conj		13457 Aug 16 16:13	7°♄00'58	-0°57'07
minimum elong	13456 Sep 02 23:45	24°♄39'47	0°22'06	minimum elong		13457 Aug 16 20:25	7°♄20'22	0°56'55
asc. node	13456 Sep 05 07:50	29°♄14'50		asc. node		13457 Aug 23 04:25	19°♄16'32	
	13456 Sep 05 16:58	0°♄		evening rise		13457 Aug 26 05:17	25°♄06'35	
evening rise	13456 Sep 11 09:38	11°♄23'52				13457 Aug 28 18:41	0°♄	
	13456 Sep 21 09:38	0°♄		evening max el		13457 Sep 11 06:02	21°♄03'37	18°35'29
evening max el	13456 Sep 28 05:13	8°♄59'56	19°22'17	retrograde		13457 Sep 19 06:47	25°♄06'35	
retrograde	13456 Oct 07 15:58	13°♄43'35		evening set		13457 Sep 21 05:42	24°♄52'58	
desc. node	13456 Oct 08 05:54	13°♄42'34		desc. node		13457 Sep 25 03:24	23°♄13'45	
evening set	13456 Oct 09 12:40	13°♄33'21		inferior conj		13457 Sep 29 04:00	20°♄25'13	-1°16'33
inferior conj	13456 Oct 18 03:49	9°♄25'06	-3°05'16	minimum elong		13457 Sep 29 00:56	20°♄31'05	1°15'03
minimum elong	13456 Oct 17 19:55	9°♄37'59	3°01'48	min. Earth dist.		13457 Oct 02 08:34	18°♄00'05	0.57418 AU
min. Earth dist.	13456 Oct 20 16:30	7°♄46'17	0.55687 AU	morning rise		13457 Oct 06 16:42	15°♄17'49	
morning rise	13456 Oct 26 00:53	4°♄55'36		direct		13457 Oct 12 16:35	13°♄47'58	
direct	13456 Oct 31 08:08	3°♄52'03		morning max el		13457 Oct 26 23:37	21°♄17'55	26°49'20
morning max el	13456 Nov 14 08:15	10°♄55'13	25°22'09			13457 Nov 03 14:01	0°♄	
	13456 Nov 28 19:52	0°♄		asc. node		13457 Nov 19 06:12	25°♄25'01	
asc. node	13456 Dec 02 09:17	6°♄11'41				13457 Nov 21 14:06	0°♄	
morning set	13456 Dec 11 05:15	23°♄50'26		morning set		13457 Nov 25 15:08	8°♄23'51	
	13456 Dec 14 01:09	0°♄						
superior conj	13456 Dec 17 23:45	8°♄43'09	1°38'12	superior conj		13457 Dec 02 11:06	23°♄26'47	1°35'26
minimum elong	13456 Dec 17 23:46	8°♄43'15	1°39'15	minimum elong		13457 Dec 02 10:06	23°♄21'09	1°36'24
max. Earth dist.	13456 Dec 19 12:48	12°♄07'11	1.31927 AU	max. Earth dist.		13457 Dec 02 20:14	24°♄17'46	1.31314 AU
evening rise	13456 Dec 25 04:02	24°♄10'19		evening rise		13457 Dec 05 09:50	0°♄	
	13456 Dec 28 01:05	0°♄				13457 Dec 09 07:34	8°♄28'12	
desc. node	13457 Jan 04 04:00	13°♄17'40		desc. node		13457 Dec 20 10:28	0°♄	
	13457 Jan 14 17:12	0°♄		evening max el		13458 Jan 09 03:44	26°♄50'50	27°07'04
evening max el	13457 Jan 26 22:14	14°♄37'51	27°32'36			13458 Jan 12 20:47	0°♄	
retrograde	13457 Feb 09 19:07	22°♄00'08		retrograde		13458 Jan 23 02:51	4°♄05'11	
evening set	13457 Feb 16 17:08	19°♄41'11		evening set		13458 Jan 29 21:47	2°♄04'41	
min. Earth dist.	13457 Feb 20 11:11	16°♄40'19	0.62387 AU			13458 Feb 01 22:59	30°♄	
inferior conj	13457 Feb 23 09:53	13°♄52'38	-1°35'29	min. Earth dist.		13458 Feb 02 18:06	29°♄22'29	0.60220 AU
minimum elong	13457 Feb 23 13:09	13°♄44'52	1°33'46	inferior conj		13458 Feb 05 22:25	26°♄43'47	-2°57'14
asc. node	13457 Feb 28 07:07	9°♄49'54		minimum elong		13458 Feb 06 04:47	26°♄30'29	2°54'12
morning rise	13457 Mar 02 11:51	8°♄45'58		morning rise		13458 Feb 13 14:57	21°♄56'59	
direct	13457 Mar 04 18:00	8°♄22'46		asc. node		13458 Feb 15 04:34	21°♄41'15	
morning max el	13457 Mar 11 10:29	11°♄46'26	17°47'03	direct		13458 Feb 15 16:33	21°♄40'16	
	13457 Mar 23 18:41	0°♄		morning max el		13458 Feb 23 01:13	25°♄20'44	18°01'36
morning set	13457 Mar 27 08:27	6°♄16'24				13458 Feb 26 22:47	0°♄	
desc. node	13457 Apr 02 05:58	16°♄35'45		morning set		13458 Mar 10 15:04	19°♄53'52	
						13458 Mar 16 02:45	0°♄	
superior conj	13457 Apr 08 00:13	26°♄24'25	-0°44'00	desc. node		13458 Mar 20 02:30	7°♄10'25	
minimum elong	13457 Apr 07 19:56	26°♄06'26	0°43'42					

superior conj	13458 Mar 20 17:27	8° Υ 16'33	-0°04'58	superior conj	13459 Mar 03 07:09	21° X 04'08	0°29'13
minimum elong	13458 Mar 20 17:02	8° Υ 14'43	0°04'57	minimum elong	13459 Mar 03 09:05	21° X 13'05	0°29'10
behind sun begin	13458 Mar 20 09:28	7° Υ 41'20		desc. node	13459 Mar 06 22:59	27° X 46'46	
behind sun end	13458 Mar 21 00:35	8° Υ 48'02			13459 Mar 08 04:44	0° Υ	
max. Earth dist.	13458 Mar 28 07:34	21° Υ 16'34	1.42220 AU	max. Earth dist.	13459 Mar 10 15:33	4° Υ 18'52	1.40079 AU
evening rise	13458 Apr 02 19:01	0° Z 11'50		evening rise	13459 Mar 14 18:40	11° Υ 21'24	
	13458 Apr 02 16:03	0° Z			13459 Mar 26 12:55	0° Z	
	13458 Apr 22 18:42	0° Π			13459 Apr 18 11:33	0° Π	
evening max el	13458 May 05 21:31	16° Π 09'39	22°30'13	evening max el	13459 Apr 18 12:04	0° Π 01'16	23°51'17
asc. node	13458 May 14 01:13	21° Π 44'30		retrograde	13459 Apr 29 12:08	6° Π 29'15	
retrograde	13458 May 15 17:45	21° Π 57'35		asc. node	13459 Apr 30 22:31	6° Π 20'00	
evening set	13458 May 20 13:21	19° Π 56'50		evening set	13459 May 04 19:16	4° Π 15'10	
inferior conj	13458 May 25 20:33	13° Π 34'43	2°55'11		13459 May 08 14:16	30° R Z	
minimum elong	13458 May 25 19:00	13° Π 40'06	2°53'58	min. Earth dist.	13459 May 09 12:29	28° Z 45'21	0.68700 AU
min. Earth dist.	13458 May 25 15:56	13° Π 50'47	0.68927 AU	inferior conj	13459 May 10 05:39	27° Z 46'47	2°31'04
morning rise	13458 May 31 00:31	7° Π 23'32		minimum elong	13459 May 10 03:37	27° Z 53'46	2°29'47
direct	13458 Jun 04 15:30	5° Π 27'43		morning rise	13459 May 15 11:58	21° Z 43'12	
morning max el	13458 Jun 13 17:07	10° Π 44'39	21°43'01	direct	13459 May 19 14:25	20° Z 07'59	
desc. node	13458 Jun 16 03:50	13° Π 21'22		morning max el	13459 May 27 12:49	24° Z 37'29	20°25'08
	13458 Jun 28 20:09	0° Z			13459 Jun 01 06:43	0° Π	
morning set	13458 Jul 15 21:46	25° Z 49'05		desc. node	13459 Jun 03 00:47	2° Π 14'25	
	13458 Jul 18 12:23	0° Ω			13459 Jun 22 03:59	0° Z	
max. Earth dist.	13458 Jul 22 00:15	5° Ω 42'32	1.42000 AU	morning set	13459 Jun 25 05:31	4° Z 42'32	
				max. Earth dist.	13459 Jul 04 08:58	19° Z 05'25	1.43885 AU
superior conj	13458 Jul 29 15:05	18° Ω 37'50	-1°31'03	superior conj	13459 Jul 10 15:06	29° Z 16'11	-1°58'39
minimum elong	13458 Jul 29 21:46	19° Ω 06'57	1°31'00	minimum elong	13459 Jul 10 21:52	29° Z 44'10	1°59'07
	13458 Aug 05 00:32	0° P			13459 Jul 11 01:42	0° Ω	
evening rise	13458 Aug 09 13:23	8° P 16'43		evening rise	13459 Jul 23 05:16	20° Ω 43'03	
asc. node	13458 Aug 10 01:01	9° P 10'01		asc. node	13459 Jul 27 21:42	28° Ω 51'17	
	13458 Aug 22 10:18	0° Z			13459 Jul 28 13:43	0° P	
evening max el	13458 Aug 25 15:17	3° Z 45'51	18°09'33	evening max el	13459 Aug 09 04:52	16° P 57'04	18°03'02
retrograde	13458 Sep 01 16:04	7° Z 20'53		retrograde	13459 Aug 15 16:30	20° P 18'29	
evening set	13458 Sep 03 21:52	6° Z 59'32		evening set	13459 Aug 18 06:30	19° P 45'47	
inferior conj	13458 Sep 11 01:45	2° Z 11'12	0°17'51	inferior conj	13459 Aug 24 18:13	14° P 38'10	1°30'07
minimum elong	13458 Sep 11 02:20	2° Z 09'53	0°17'34	minimum elong	13459 Aug 24 20:29	14° P 32'24	1°29'00
desc. node	13458 Sep 12 00:55	1° Z 19'23		min. Earth dist.	13459 Aug 27 17:38	11° P 37'30	0.61881 AU
	13458 Sep 13 12:41	30° R P		desc. node	13459 Aug 29 22:26	9° P 38'07	
min. Earth dist.	13458 Sep 14 08:35	29° P 17'15	0.59586 AU	morning rise	13459 Aug 31 07:59	8° P 34'03	
morning rise	13458 Sep 18 03:28	26° P 30'31		direct	13459 Sep 07 00:13	6° P 13'30	
direct	13458 Sep 24 14:46	24° P 33'00		morning max el	13459 Sep 21 03:54	14° P 13'03	27°58'20
	13458 Oct 06 08:32	0° Z			13459 Oct 03 21:58	0° Z	
morning max el	13458 Oct 08 22:30	2° Z 22'14	27°43'15		13459 Oct 21 13:31	0° P	
	13458 Oct 29 01:07	0° P		asc. node	13459 Oct 23 23:40	4° P 49'49	
asc. node	13458 Nov 06 02:59	14° P 59'51		morning set	13459 Oct 24 21:56	6° P 43'28	
morning set	13458 Nov 09 21:21	22° P 43'11		max. Earth dist.	13459 Oct 30 09:51	18° P 23'45	1.31662 AU
	13458 Nov 13 06:36	0° Z					
max. Earth dist.	13458 Nov 16 04:29	6° Z 26'15	1.31220 AU	superior conj	13459 Nov 01 08:21	22° P 38'50	1°12'32
superior conj	13458 Nov 16 22:35	8° Z 07'04	1°26'50	minimum elong	13459 Nov 01 06:07	22° P 26'28	1°12'57
minimum elong	13458 Nov 16 20:46	7° Z 56'59	1°27'34		13459 Nov 04 16:08	0° Z	
evening rise	13458 Nov 23 15:31	22° Z 55'41		evening rise	13459 Nov 08 02:00	7° Z 27'52	
	13458 Nov 27 00:16	0° Z			13459 Nov 19 15:13	0° Z	
desc. node	13458 Dec 08 21:54	21° Z 32'49		desc. node	13459 Nov 25 19:00	9° Z 29'56	
	13458 Dec 14 19:28	0° \approx		evening max el	13459 Dec 03 15:39	18° Z 44'12	24°39'19
evening max el	13458 Dec 22 01:43	8° \approx 12'12	26°07'17	retrograde	13459 Dec 17 09:25	25° Z 35'47	
retrograde	13459 Jan 05 00:25	15° \approx 16'26		evening set	13459 Dec 22 18:14	24° Z 32'07	
evening set	13459 Jan 11 07:30	13° \approx 42'13		min. Earth dist.	13459 Dec 28 03:27	21° Z 44'26	0.56229 AU
min. Earth dist.	13459 Jan 15 14:58	11° \approx 05'42	0.58081 AU	inferior conj	13459 Dec 30 13:59	20° Z 12'11	-5°27'08
inferior conj	13459 Jan 18 16:34	8° \approx 52'44	-4°19'37	minimum elong	13459 Dec 30 21:20	20° Z 00'35	5°24'53
minimum elong	13459 Jan 19 01:14	8° \approx 37'03	4°16'11	morning rise	13460 Jan 08 02:30	16° Z 07'58	
morning rise	13459 Jan 26 21:52	4° \approx 27'32		direct	13460 Jan 10 11:04	15° Z 52'49	
direct	13459 Jan 28 23:15	4° \approx 13'40		asc. node	13460 Jan 19 23:17	20° Z 19'59	
asc. node	13459 Feb 02 01:59	5° \approx 12'27		morning max el	13460 Jan 20 06:07	20° Z 36'17	19°33'13
morning max el	13459 Feb 06 09:09	8° \approx 21'11	18°36'18		13460 Jan 27 12:31	0° \approx	
	13459 Feb 20 07:14	0° X		morning set	13460 Feb 06 12:44	18° \approx 32'52	
morning set	13459 Feb 22 09:49	4° X 03'06			13460 Feb 12 05:17	0° X	

superior conj	13460 Feb 14 12:50	4° H 34'51	0°56'39	morning set	13461 Jan 20 20:53	3° \approx 14'16	
minimum elong	13460 Feb 14 15:35	4° H 48'18	0°56'47				
max. Earth dist.	13460 Feb 20 21:52	16° H 42'34	1.37828 AU	superior conj	13461 Jan 28 06:16	18° \approx 37'01	1°16'56
desc. node	13460 Feb 21 19:31	18° H 21'30		minimum elong	13461 Jan 28 08:47	18° \approx 49'58	1°17'24
evening rise	13460 Feb 24 15:04	23° H 24'01		max. Earth dist.	13461 Feb 02 06:53	28° \approx 41'17	1.35694 AU
	13460 Feb 28 10:55	0° Y			13461 Feb 02 23:05	0° H	
	13460 Mar 19 07:21	0° B		evening rise	13461 Feb 06 05:26	6° H 11'27	
evening max el	13460 Mar 31 01:40	13° B 54'11	25°09'15	desc. node	13461 Feb 07 16:05	8° H 50'56	
retrograde	13460 Apr 12 02:19	20° B 52'55			13461 Feb 20 06:03	0° Y	
asc. node	13460 Apr 16 19:54	19° B 17'01		evening max el	13461 Mar 13 15:19	27° Y 44'04	26°16'52
evening set	13460 Apr 17 21:08	18° B 28'17			13461 Mar 16 02:36	0° B	
min. Earth dist.	13460 Apr 22 06:46	13° B 34'32	0.68022 AU	retrograde	13461 Mar 26 11:33	5° B 02'29	
inferior conj	13460 Apr 23 12:23	11° B 57'45	1°56'44	evening set	13461 Apr 01 17:20	2° B 31'18	
minimum elong	13460 Apr 23 10:15	12° B 04'43	1°55'29	asc. node	13461 Apr 03 17:18	0° B 38'39	
morning rise	13460 Apr 28 23:41	6° B 03'07			13461 Apr 04 07:39	30° R Y	
direct	13460 May 02 14:18	4° B 48'16		min. Earth dist.	13461 Apr 05 20:38	28° Y 12'44	0.66912 AU
morning max el	13460 May 09 16:02	8° B 41'07	19°21'00	inferior conj	13461 Apr 07 14:45	26° Y 03'39	1°11'48
desc. node	13460 May 19 21:37	21° B 41'51		minimum elong	13461 Apr 07 13:06	26° Y 08'44	1°10'51
greatest brilliancy	13460 May 22 09:28	25° B 20'46	-0.7m	morning rise	13461 Apr 13 09:42	20° Y 19'39	
	13460 May 25 12:13	0° II		direct	13461 Apr 16 13:27	19° Y 23'23	
morning set	13460 Jun 03 07:32	13° II 26'02		morning max el	13461 Apr 23 02:26	22° Y 52'46	18°32'48
	13460 Jun 13 23:45	0° B			13461 Apr 28 23:43	0° B	
max. Earth dist.	13460 Jun 16 00:11	3° B 10'09	1.45198 AU	desc. node	13461 May 06 18:21	11° B 34'43	
				morning set	13461 May 14 01:25	23° B 00'22	
superior conj	13460 Jun 19 15:53	8° B 56'47	-2°12'54		13461 May 18 12:16	0° II	
minimum elong	13460 Jun 19 17:54	9° B 04'48	2°13'54				
	13460 Jul 02 15:33	0° B		superior conj	13461 May 30 01:24	18° II 03'15	-2°07'55
evening rise	13460 Jul 03 23:47	2° B 13'14		minimum elong	13461 May 29 19:45	17° II 41'13	2°08'40
asc. node	13460 Jul 13 18:27	18° B 14'30		max. Earth dist.	13461 May 29 19:26	17° II 39'57	1.45806 AU
	13460 Jul 22 08:27	0° B			13461 Jun 06 16:33	0° B	
evening max el	13460 Jul 22 19:09	0° B 27'08	18°14'58	evening rise	13461 Jun 14 17:50	12° B 42'27	
retrograde	13460 Jul 29 03:43	3° B 49'17		greatest brilliancy	13461 Jun 23 01:12	25° B 50'14	-0.8m
evening set	13460 Aug 01 02:11	3° B 02'33			13461 Jun 25 17:40	0° B	
	13460 Aug 04 21:20	30° R B		asc. node	13461 Jun 30 15:18	7° B 13'19	
inferior conj	13460 Aug 07 01:20	27° B 37'37	2°20'39	evening max el	13461 Jul 06 07:11	14° B 08'43	18°44'37
minimum elong	13460 Aug 07 03:47	27° B 30'37	2°19'23	retrograde	13461 Jul 12 21:49	17° B 45'03	
min. Earth dist.	13460 Aug 09 12:14	24° B 50'32	0.64041 AU	evening set	13461 Jul 16 05:00	16° B 42'38	
morning rise	13460 Aug 13 03:50	21° B 19'49		inferior conj	13461 Jul 21 19:19	11° B 02'23	2°52'29
desc. node	13460 Aug 15 19:55	19° B 38'56		minimum elong	13461 Jul 21 21:08	10° B 56'44	2°51'19
direct	13460 Aug 19 18:38	18° B 44'37		min. Earth dist.	13461 Jul 23 15:52	8° B 44'06	0.65892 AU
morning max el	13460 Sep 02 13:28	26° B 44'28	27°36'18	morning rise	13461 Jul 27 12:22	4° B 38'41	
	13460 Sep 05 14:41	0° B		direct	13461 Aug 02 20:49	1° B 58'26	
	13460 Sep 26 13:30	0° B		desc. node	13461 Aug 02 17:21	1° B 58'31	
morning set	13460 Oct 07 14:28	20° B 18'27		morning max el	13461 Aug 16 00:46	9° B 46'17	26°43'28
asc. node	13460 Oct 09 20:18	24° B 49'23			13461 Aug 31 23:22	0° B	
	13460 Oct 12 08:17	0° B			13461 Sep 19 01:05	0° B	
max. Earth dist.	13460 Oct 12 08:41	0° B 02'05	1.32644 AU	morning set	13461 Sep 20 20:00	3° B 21'34	
				max. Earth dist.	13461 Sep 24 22:08	11° B 19'22	1.34150 AU
superior conj	13460 Oct 15 14:24	6° B 55'54	0°52'35	asc. node	13461 Sep 26 16:53	14° B 54'36	
minimum elong	13460 Oct 15 12:14	6° B 44'16	0°52'43				
evening rise	13460 Oct 22 13:07	21° B 59'16		superior conj	13461 Sep 29 14:27	20° B 52'49	0°27'12
	13460 Oct 26 09:03	0° B		minimum elong	13461 Sep 29 13:03	20° B 45'32	0°27'12
desc. node	13460 Nov 11 16:13	26° B 15'41			13461 Oct 03 22:12	0° B	
evening max el	13460 Nov 14 01:30	28° B 46'00	22°57'31	evening rise	13461 Oct 06 23:01	6° B 25'17	
	13460 Nov 15 09:29	0° B			13461 Oct 19 14:15	0° B	
retrograde	13460 Nov 27 05:20	5° B 18'11		evening max el	13461 Oct 26 16:40	8° B 55'21	21°19'53
evening set	13460 Dec 01 06:25	4° B 42'36		desc. node	13461 Oct 29 13:33	11° B 25'46	
min. Earth dist.	13460 Dec 08 10:33	1° B 24'54	0.54950 AU	retrograde	13461 Nov 07 17:00	14° B 53'26	
inferior conj	13460 Dec 09 16:13	0° B 42'30	-5°56'40	evening set	13461 Nov 10 10:22	14° B 36'14	
minimum elong	13460 Dec 09 16:30	0° B 42'07	5°55'39	inferior conj	13461 Nov 19 08:01	10° B 42'40	-5°28'33
	13460 Dec 10 22:10	30° R B		minimum elong	13461 Nov 18 24:00	10° B 53'57	5°26'13
morning rise	13460 Dec 18 04:02	26° B 53'30		min. Earth dist.	13461 Nov 19 16:30	10° B 30'44	0.54500 AU
direct	13460 Dec 21 04:36	26° B 32'10		morning rise	13461 Nov 27 14:19	6° B 53'08	
	13460 Dec 30 06:26	0° B		direct	13461 Dec 01 12:13	6° B 20'10	
morning max el	13461 Jan 01 13:01	1° B 57'23	20°53'25	morning max el	13461 Dec 14 06:31	12° B 28'09	22°33'26
asc. node	13461 Jan 05 20:30	6° B 48'24		asc. node	13461 Dec 23 17:39	24° B 20'41	
	13461 Jan 19 07:07	0° \approx			13461 Dec 27 03:43	0° B	

morning set	13462 Jan 05 07:52	18°  00'01		morning rise	13462 Nov 07 04:18	16°  35'13	
	13462 Jan 10 22:12	0° 		direct	13462 Nov 12 00:02	15°  44'23	
				morning max el	13462 Nov 25 16:50	22°  30'25	24°22'17
superior conj	13462 Jan 12 07:58	3°  00'20	1°30'17		13462 Dec 02 07:29	0° 	
minimum elong	13462 Jan 12 09:41	3°  09'29	1°31'05	asc. node	13462 Dec 10 14:42	12°  41'49	
max. Earth dist.	13462 Jan 15 22:10	10°  32'20	1.33875 AU		13462 Dec 19 12:47	0° 	
evening rise	13462 Jan 20 10:10	19°  34'12		morning set	13462 Dec 20 19:49	2°  45'02	
desc. node	13462 Jan 25 12:43	29°  10'21					
	13462 Jan 25 23:44	0° 		superior conj	13462 Dec 27 15:12	17°  37'06	1°37'06
	13462 Feb 14 07:21	0° 		minimum elong	13462 Dec 27 15:51	17°  34'04	1°38'06
evening max el	13462 Feb 24 04:49	11°  07'21'35	27°06'49	max. Earth dist.	13462 Dec 29 21:08	22°  30'00	1.32495 AU
retrograde	13462 Mar 09 14:59	18°  07'48'55			13463 Jan 02 10:09	0° 	
evening set	13462 Mar 16 05:51	16°  07'16'45		evening rise	13463 Jan 04 02:01	3°  24'31	
min. Earth dist.	13462 Mar 20 04:02	12°  07'31'25	0.65403 AU	desc. node	13463 Jan 12 09:28	19°  14'50	
asc. node	13462 Mar 21 14:46	10°  07'53'56			13463 Jan 18 18:31	0° 	
inferior conj	13462 Mar 22 10:22	9°  07'58'17	0°15'39	evening max el	13463 Feb 06 17:07	24°  36'30	27°31'56
minimum elong	13462 Mar 22 09:56	9°  07'59'31	0°15'24		13463 Feb 13 16:12	0° 	
transit middle	13462 Mar 22 09:56	9°  07'59'31	0°15'24	retrograde	13463 Feb 20 11:47	2°  03'04	
transit begin	13462 Mar 22 09:07	10°  07'01'51			13463 Feb 26 18:55	30° 	
transit end	13462 Mar 22 10:45	9°  07'57'11		evening set	13463 Feb 27 08:21	29°  37'08	
morning rise	13462 Mar 28 15:37	4°  07'26'47		min. Earth dist.	13463 Mar 03 03:08	26°  31'25	0.63558 AU
direct	13462 Mar 31 09:37	3°  07'46'15		inferior conj	13463 Mar 05 20:32	23°  35'09	-0°51'50
morning max el	13462 Apr 06 17:52	7°  07'04'50	18°01'22	minimum elong	13463 Mar 05 22:11	23°  30'55	0°50'56
	13462 Apr 22 13:13	0° 		asc. node	13463 Mar 08 12:13	21°  30'05	
desc. node	13462 Apr 23 15:01	1°  08'45'25		morning rise	13463 Mar 12 14:25	18°  31'8'32	
morning set	13462 Apr 24 22:49	3°  08'55'27		direct	13463 Mar 15 00:14	17°  31'50'08	
				morning max el	13463 Mar 21 11:33	21°  31'09'14	17°47'07
superior conj	13462 May 09 12:05	27°  08'19'34	-1°43'42		13463 Mar 28 06:36	0° 	
minimum elong	13462 May 09 02:56	26°  08'43'29	1°43'39	morning set	13463 Apr 06 23:07	16°  07'07'58	
	13462 May 11 04:51	0° 		desc. node	13463 Apr 10 11:37	22°  07'08'48	
max. Earth dist.	13462 May 12 15:27	2°  08'15'37	1.45667 AU		13463 Apr 15 03:29	0° 	
evening rise	13462 May 25 14:21	22°  08'21'20					
	13462 May 30 13:46	0° 		superior conj	13463 Apr 19 15:46	7°  08'26'24	-1°07'09
greatest brilliancy	13462 Jun 07 21:01	12°  08'32'45	-0.7m	minimum elong	13463 Apr 19 08:59	6°  08'58'45	1°06'46
asc. node	13462 Jun 17 12:15	25°  08'38'34		max. Earth dist.	13463 Apr 25 09:55	16°  08'42'08	1.44805 AU
evening max el	13462 Jun 19 14:40	27°  08'55'14	19°31'00		13463 May 03 22:15	0° 	
	13462 Jun 21 23:07	0° 		evening rise	13463 May 05 01:29	1°  08'44'32	
retrograde	13462 Jun 26 19:33	1°  08'58'10			13463 May 24 04:36	0° 	
evening set	13462 Jun 30 11:59	0°  08'39'11		evening max el	13463 Jun 02 16:31	11°  08'43'52	20°32'12
	13462 Jul 01 07:50	30° 		asc. node	13463 Jun 04 09:18	13°  08'19'23	
inferior conj	13462 Jul 05 20:49	24°  08'45'14	3°08'51	retrograde	13463 Jun 10 18:28	16°  08'23'20	
minimum elong	13462 Jul 05 21:39	24°  08'42'27	3°07'48	evening set	13463 Jun 14 20:53	14°  08'47'35	
min. Earth dist.	13462 Jul 07 02:55	23°  08'05'38	0.67338 AU	inferior conj	13463 Jun 20 03:11	8°  08'41'24	3°12'17
morning rise	13462 Jul 11 06:50	18°  08'21'17		minimum elong	13463 Jun 20 02:59	8°  08'42'04	3°11'14
direct	13462 Jul 17 05:39	15°  08'45'02		min. Earth dist.	13463 Jun 20 19:21	7°  08'45'48	0.68331 AU
desc. node	13462 Jul 20 14:43	16°  08'27'14		morning rise	13463 Jun 25 08:47	2°  08'20'52	
morning max el	13462 Jul 29 11:39	23°  08'05'35	25°28'42		13463 Jun 29 22:16	30° 	
	13462 Aug 04 14:18	0° 		direct	13463 Jun 30 19:56	29°  08'11'56'20	
	13462 Aug 25 07:19	0° 			13463 Jul 01 18:05	0° 	
morning set	13462 Sep 03 10:48	15°  08'43'39		desc. node	13463 Jul 07 12:00	2°  08'39'52	
max. Earth dist.	13462 Sep 07 01:42	22°  08'44'14	1.36113 AU	morning max el	13463 Jul 11 21:48	6°  08'34'15	24°01'47
	13462 Sep 11 00:38	0° 			13463 Jul 30 02:54	0° 	
				morning set	13463 Aug 16 06:17	27°  08'12'58	
superior conj	13462 Sep 13 05:41	4°  08'22'32	-0°03'04		13463 Aug 17 20:58	0° 	
minimum elong	13462 Sep 13 05:52	4°  08'23'27	0°03'02	max. Earth dist.	13463 Aug 19 23:33	3°  08'42'24	1.38393 AU
behind sun begin	13462 Sep 12 23:40	3°  08'52'28					
behind sun end	13462 Sep 13 12:05	4°  08'54'31		superior conj	13463 Aug 27 08:38	17°  08'16'19	-0°36'53
asc. node	13462 Sep 13 13:29	5°  08'01'31		minimum elong	13463 Aug 27 11:13	17°  08'28'37	0°36'44
evening rise	13462 Sep 21 05:32	20°  08'40'13		asc. node	13463 Aug 31 10:03	25°  08'40'07	
	13462 Sep 25 21:37	0° 			13463 Sep 02 21:54	0° 	
evening max el	13462 Oct 08 20:57	19°  08'44'36	19°59'09	evening rise	13463 Sep 05 06:03	4°  08'36'52	
desc. node	13462 Oct 16 10:57	24°  08'33'20			13463 Sep 20 08:17	0° 	
retrograde	13462 Oct 19 06:48	24°  08'55'40		evening max el	13463 Sep 21 15:12	1°  08'22'32	18°59'48
evening set	13462 Oct 21 06:18	24°  08'45'17		retrograde	13463 Sep 30 10:16	5°  08'47'06	
inferior conj	13462 Oct 30 03:45	20° 08'45'57	-4°06'25	evening set	13463 Oct 02 07:04	5° 08'35'59	
minimum elong	13462 Oct 29 17:56	21° 08'00'49	4°02'37	desc. node	13463 Oct 03 08:26	5° 08'20'19	
min. Earth dist.	13462 Nov 01 00:45	19° 08'37'47	0.54994 AU	inferior conj	13463 Oct 10 15:41	1° 08'20'16	-2°18'24

minimum elong	13463 Oct 10 09:48	1°♄30'29	2°15'40	inferior conj	13464 Sep 21 01:12	12°♂39'57	-0°34'02
	13463 Oct 12 13:42	30°♄		minimum elong	13464 Sep 20 23:56	12°♂42'33	0°33'23
min. Earth dist.	13463 Oct 13 13:13	29°♂19'54	0.56350 AU	min. Earth dist.	13464 Sep 24 08:09	10°♂00'18	0.58314 AU
morning rise	13463 Oct 18 09:33	26°♂34'50		morning rise	13464 Sep 28 09:32	7°♂17'44	
direct	13463 Oct 24 00:41	25°♂20'12		direct	13464 Oct 04 15:11	5°♂36'03	
	13463 Nov 04 05:11	0°♄		morning max el	13464 Oct 18 22:44	13°♂14'09	27°16'50
morning max el	13463 Nov 07 04:22	2°♄35'54	26°02'32		13464 Nov 01 06:02	0°♄	
	13463 Nov 26 14:20	0°♂		asc. node	13464 Nov 13 08:31	21°♄01'58	
asc. node	13463 Nov 27 11:40	1°♂38'45			13464 Nov 17 18:26	0°♂	
morning set	13463 Dec 05 06:54	17°♂23'28		morning set	13464 Nov 18 15:25	1°♂50'59	
	13463 Dec 11 00:31	0°♂					
				superior conj	13464 Nov 25 13:12	17°♂01'47	1°32'29
superior conj	13463 Dec 12 01:36	2°♂19'29	1°37'45	minimum elong	13464 Nov 25 11:49	16°♂54'04	1°33'22
minimum elong	13463 Dec 12 01:09	2°♂17'04	1°38'46	max. Earth dist.	13464 Nov 25 10:43	16°♂48'00	1.31218 AU
max. Earth dist.	13463 Dec 13 02:22	4°♂36'58	1.31604 AU		13464 Dec 01 10:00	0°♂	
evening rise	13463 Dec 19 01:59	17°♂33'57		evening rise	13464 Dec 02 07:39	1°♂56'21	
	13463 Dec 25 07:30	0°♄		desc. node	13464 Dec 16 03:12	28°♂08'24	
desc. node	13463 Dec 30 06:18	8°♄57'03			13464 Dec 17 06:54	0°♄	
	13464 Jan 13 10:59	0°♂		evening max el	13465 Jan 01 04:45	19°♄07'26	26°45'39
evening max el	13464 Jan 20 02:03	7°♂15'50	27°26'06	retrograde	13465 Jan 15 03:40	26°♄16'39	
retrograde	13464 Feb 03 00:30	14°♂34'54		evening set	13465 Jan 21 18:53	24°♄26'43	
evening set	13464 Feb 09 21:53	12°♂23'08		min. Earth dist.	13465 Jan 25 18:44	21°♄48'47	0.59297 AU
min. Earth dist.	13464 Feb 13 16:19	9°♂31'07	0.61473 AU	inferior conj	13465 Jan 28 23:02	19°♄19'21	-3°32'49
inferior conj	13464 Feb 16 17:58	6°♂45'27	-2°09'29	minimum elong	13465 Jan 29 06:37	19°♄04'27	3°29'27
minimum elong	13464 Feb 16 22:31	6°♂35'10	2°07'09	morning rise	13465 Feb 05 21:23	14°♄41'21	
asc. node	13464 Feb 23 09:41	2°♂00'55		direct	13465 Feb 07 22:23	14°♄26'10	
morning rise	13464 Feb 24 02:06	1°♂46'34		asc. node	13465 Feb 09 07:08	14°♄33'13	
direct	13464 Feb 26 05:51	1°♂26'35		morning max el	13465 Feb 15 16:28	18°♄16'45	18°13'47
morning max el	13464 Mar 04 04:16	4°♂56'30	17°50'51		13465 Feb 24 03:03	0°♂	
morning set	13464 Mar 19 20:25	29°♂19'31		morning set	13465 Mar 03 08:43	13°♂11'48	
	13464 Mar 20 05:25	0°♂			13465 Mar 12 09:13	0°♂	
desc. node	13464 Mar 27 08:10	12°♂40'08					
				superior conj	13465 Mar 12 21:40	0°♂56'21	0°10'20
superior conj	13464 Mar 30 19:16	18°♂39'52	-0°27'02	minimum elong	13465 Mar 12 22:27	0°♂59'54	0°10'17
minimum elong	13464 Mar 30 16:46	18°♂29'09	0°26'52	behind sun begin	13465 Mar 12 16:40	0°♂33'47	
	13464 Apr 06 13:55	0°♂		behind sun end	13465 Mar 13 04:13	1°♂25'57	
max. Earth dist.	13464 Apr 07 01:19	0°♂46'30	1.43309 AU	desc. node	13465 Mar 14 04:38	3°♂15'29	
evening rise	13464 Apr 13 19:16	11°♂32'37		max. Earth dist.	13465 Mar 20 12:17	14°♂15'03	1.41339 AU
	13464 Apr 26 00:04	0°♄		evening rise	13465 Mar 25 06:42	22°♂09'37	
evening max el	13464 May 15 12:48	25°♄33'29	21°45'00		13465 Mar 30 04:40	0°♂	
asc. node	13464 May 21 06:26	0°♄01'44			13465 Apr 20 02:04	0°♄	
	13464 May 21 05:03	0°♄		evening max el	13465 Apr 28 04:47	9°♄23'41	23°04'41
retrograde	13464 May 24 16:42	0°♄55'35		asc. node	13465 May 08 03:41	15°♄28'21	
	13464 May 27 22:06	30°♄		retrograde	13465 May 08 12:47	15°♄29'01	
evening set	13464 May 29 05:54	29°♄03'33		evening set	13465 May 13 13:23	13°♄22'06	
inferior conj	13464 Jun 03 12:09	22°♄46'49	3°04'26	inferior conj	13465 May 18 21:43	6°♄57'04	2°46'11
minimum elong	13464 Jun 03 11:02	22°♄50'41	3°03'18	minimum elong	13465 May 18 19:55	7°♄03'18	2°44'57
min. Earth dist.	13464 Jun 03 14:58	22°♄36'57	0.68848 AU	min. Earth dist.	13465 May 18 11:42	7°♄31'45	0.68888 AU
morning rise	13464 Jun 08 15:58	16°♄31'57		morning rise	13465 May 24 02:23	0°♄49'14	
direct	13464 Jun 13 14:28	14°♄24'37			13465 May 25 06:02	30°♄	
desc. node	13464 Jun 23 09:10	20°♄10'36		direct	13465 May 28 12:00	29°♄02'09	
morning max el	13464 Jun 23 09:18	20°♄10'56	22°32'24		13465 Jun 01 00:02	0°♄	
	13464 Jul 01 17:18	0°♄		morning max el	13465 Jun 06 01:17	3°♄57'23	21°08'33
	13464 Jul 22 07:28	0°♄		desc. node	13465 Jun 10 06:11	8°♄38'01	
morning set	13464 Jul 27 02:08	7°♄39'25			13465 Jun 25 17:15	0°♄	
max. Earth dist.	13464 Jul 31 22:57	15°♄44'18	1.40741 AU	morning set	13465 Jul 06 21:13	17°♄01'15	
				max. Earth dist.	13465 Jul 14 04:16	28°♄40'02	1.42864 AU
					13465 Jul 14 23:51	0°♄	
superior conj	13464 Aug 08 19:07	29°♄24'51	-1°11'53				
minimum elong	13464 Aug 09 00:30	29°♄49'04	1°11'42				
	13464 Aug 09 02:55	0°♄		superior conj	13465 Jul 21 08:36	10°♄37'21	-1°43'55
asc. node	13464 Aug 17 06:38	15°♄05'05		minimum elong	13465 Jul 21 15:47	11°♄07'56	1°44'02
evening rise	13464 Aug 18 21:21	18°♄07'24			13465 Aug 01 09:39	0°♄	
	13464 Aug 25 07:55	0°♄		evening rise	13465 Aug 01 23:11	1°♄00'40	
evening max el	13464 Sep 03 20:12	13°♄44'16	18°21'56	asc. node	13465 Aug 04 03:15	4°♄53'56	
retrograde	13464 Sep 11 09:09	17°♄33'18		evening max el	13465 Aug 18 07:42	26°♄39'39	18°04'21
evening set	13464 Sep 13 10:52	17°♄16'44			13465 Aug 23 19:32	0°♄	
desc. node	13464 Sep 19 05:56	14°♄05'48		retrograde	13465 Aug 25 01:38	0°♄07'22	

	13465 Aug 26 07:59	30° \mathbb{R} \mathbb{M}		retrograde	13466 Aug 08 07:16	13° \mathbb{M} 19'55	
evening set	13465 Aug 27 10:50	29° \mathbb{M} 41'33		evening set	13466 Aug 11 00:43	12° \mathbb{M} 41'40	
inferior conj	13465 Sep 03 07:25	24° \mathbb{M} 44'24	0°51'17	inferior conj	13466 Aug 17 06:39	7° \mathbb{M} 26'26	1°54'02
minimum elong	13465 Sep 03 08:56	24° \mathbb{M} 40'47	0°50'32	minimum elong	13466 Aug 17 09:08	7° \mathbb{M} 19'46	1°52'47
desc. node	13465 Sep 06 03:28	22° \mathbb{M} 03'59		min. Earth dist.	13466 Aug 20 01:10	4° \mathbb{M} 29'06	0.62826 AU
min. Earth dist.	13465 Sep 06 11:48	21° \mathbb{M} 45'07	0.60567 AU	morning rise	13466 Aug 23 15:25	1° \mathbb{M} 15'01	
morning rise	13465 Sep 10 04:03	18° \mathbb{M} 52'19		desc. node	13466 Aug 24 00:59	0° \mathbb{M} 57'50	
direct	13465 Sep 16 18:05	16° \mathbb{M} 44'33			13466 Aug 25 14:45	30° \mathbb{R} \mathbb{L}	
morning max el	13465 Oct 01 00:49	24° \mathbb{M} 38'52	27°54'30	direct	13466 Aug 30 07:35	28° \mathbb{L} 47'02	
	13465 Oct 05 22:14	0° \mathbb{L}			13466 Sep 04 08:18	0° \mathbb{M}	
	13465 Oct 25 15:16	0° \mathbb{M}		morning max el	13466 Sep 13 08:33	6° \mathbb{M} 48'55	27°53'10
asc. node	13465 Oct 31 05:16	10° \mathbb{M} 43'52			13466 Oct 01 01:24	0° \mathbb{L}	
morning set	13465 Nov 02 19:32	16° \mathbb{M} 02'55		morning set	13466 Oct 17 17:03	29° \mathbb{L} 53'29	
max. Earth dist.	13465 Nov 08 18:25	28° \mathbb{M} 53'46	1.31345 AU		13466 Oct 17 18:20	0° \mathbb{M}	
	13465 Nov 09 06:22	0° \mathbb{X}		asc. node	13466 Oct 18 01:55	0° \mathbb{M} 38'29	
				max. Earth dist.	13466 Oct 22 21:25	10° \mathbb{M} 43'49	1.32010 AU
superior conj	13465 Nov 10 00:10	1° \mathbb{X} 38'51	1°21'27				
minimum elong	13465 Nov 09 22:08	1° \mathbb{X} 27'29	1°22'04	superior conj	13466 Oct 25 08:38	16° \mathbb{M} 05'03	1°04'44
evening rise	13465 Nov 16 16:55	16° \mathbb{X} 26'20		minimum elong	13466 Oct 25 06:21	15° \mathbb{M} 52'35	1°05'03
	13465 Nov 23 07:33	0° \mathbb{Z}			13466 Oct 31 17:03	0° \mathbb{X}	
desc. node	13465 Dec 03 00:14	16° \mathbb{Z} 37'20		evening rise	13466 Nov 01 03:54	0° \mathbb{X} 58'35	
	13465 Dec 13 20:29	0° \mathbb{Z}			13466 Nov 16 21:23	0° \mathbb{Z}	
evening max el	13465 Dec 13 23:04	0° \mathbb{Z} 06'09	25°32'32	desc. node	13466 Nov 19 21:24	4° \mathbb{Z} 07'00	
retrograde	13465 Dec 27 20:03	7° \mathbb{Z} 05'35		evening max el	13466 Nov 25 10:12	10° \mathbb{Z} 21'03	23°56'36
evening set	13466 Jan 02 19:17	5° \mathbb{Z} 43'48		retrograde	13466 Dec 08 23:54	17° \mathbb{Z} 06'38	
min. Earth dist.	13466 Jan 07 11:23	3° \mathbb{Z} 05'07	0.57240 AU	evening set	13466 Dec 13 19:53	16° \mathbb{Z} 15'38	
inferior conj	13466 Jan 10 08:30	1° \mathbb{Z} 07'45	-4°51'19	min. Earth dist.	13466 Dec 19 21:16	13° \mathbb{Z} 17'19	0.55590 AU
minimum elong	13466 Jan 10 17:15	0° \mathbb{Z} 52'52	4°48'13	inferior conj	13466 Dec 21 21:13	12° \mathbb{Z} 05'16	-5°45'51
	13466 Jan 12 01:00	30° \mathbb{R} \mathbb{Z}		minimum elong	13466 Dec 22 02:13	11° \mathbb{Z} 57'45	5°44'17
morning rise	13466 Jan 18 17:50	26° \mathbb{Z} 52'11		morning rise	13466 Dec 30 10:25	8° \mathbb{Z} 08'53	
direct	13466 Jan 20 21:20	26° \mathbb{Z} 38'16		direct	13467 Jan 02 00:27	7° \mathbb{Z} 51'58	
asc. node	13466 Jan 27 04:30	28° \mathbb{Z} 47'06		morning max el	13467 Jan 12 11:40	12° \mathbb{Z} 52'56	20°04'37
	13466 Jan 28 18:14	0° \mathbb{Z}		asc. node	13467 Jan 14 01:48	14° \mathbb{Z} 31'14	
morning max el	13466 Jan 29 20:17	0° \mathbb{Z} 59'37	18°57'47		13467 Jan 24 08:40	0° \mathbb{Z}	
morning set	13466 Feb 15 07:23	27° \mathbb{Z} 31'20		morning set	13467 Jan 30 12:51	12° \mathbb{Z} 06'45	
	13466 Feb 16 13:33	0° \mathbb{X}					
superior conj	13466 Feb 23 18:48	14° \mathbb{X} 04'32	0°41'43	superior conj	13467 Feb 07 05:59	27° \mathbb{Z} 50'07	1°06'06
minimum elong	13466 Feb 23 21:14	14° \mathbb{X} 16'06	0°41'43	minimum elong	13467 Feb 07 08:44	28° \mathbb{Z} 03'52	1°06'22
desc. node	13466 Mar 01 01:07	23° \mathbb{X} 51'45			13467 Feb 08 08:04	0° \mathbb{X}	
max. Earth dist.	13466 Mar 02 19:17	27° \mathbb{X} 00'55	1.39115 AU	max. Earth dist.	13467 Feb 13 01:45	9° \mathbb{X} 09'54	1.36886 AU
	13466 Mar 04 11:54	0° \mathbb{Y}		desc. node	13467 Feb 15 21:39	14° \mathbb{X} 24'37	
evening rise	13466 Mar 06 15:24	3° \mathbb{Y} 42'31		evening rise	13467 Feb 16 19:53	16° \mathbb{X} 05'22	
	13466 Mar 23 08:15	0° \mathbb{Z}			13467 Feb 24 22:18	0° \mathbb{Y}	
evening max el	13466 Apr 10 18:34	23° \mathbb{Z} 15'40	24°25'11	evening max el	13467 Mar 17 20:47	0° \mathbb{Z}	
retrograde	13466 Apr 22 05:35	29° \mathbb{Z} 58'27		retrograde	13467 Mar 24 07:59	7° \mathbb{Z} 07'22	25°39'42
asc. node	13466 Apr 25 01:01	29° \mathbb{Z} 23'26		evening set	13467 Apr 05 17:58	14° \mathbb{Z} 16'44	
evening set	13466 Apr 27 17:48	27° \mathbb{Z} 39'08		asc. node	13467 Apr 11 17:30	11° \mathbb{Z} 48'42	
min. Earth dist.	13466 May 02 07:29	22° \mathbb{Z} 24'57	0.68465 AU	min. Earth dist.	13467 Apr 11 22:26	11° \mathbb{Z} 38'09	
inferior conj	13466 May 03 06:03	21° \mathbb{Z} 09'08	2°17'49	inferior conj	13467 Apr 16 00:14	7° \mathbb{Z} 09'55	0.67596 AU
minimum elong	13466 May 03 03:55	21° \mathbb{Z} 16'20	2°16'30	minimum elong	13467 Apr 17 11:11	5° \mathbb{Z} 18'22	1°39'03
morning rise	13466 May 08 14:10	15° \mathbb{Z} 09'23			13467 Apr 17 09:11	5° \mathbb{Z} 24'48	1°37'52
direct	13466 May 12 11:25	13° \mathbb{Z} 43'11		morning rise	13467 Apr 22 07:31	30° \mathbb{R} \mathbb{Y}	
morning max el	13466 May 20 00:15	17° \mathbb{Z} 55'39	19°56'04	direct	13467 Apr 23 01:25	29° \mathbb{Y} 27'58	
desc. node	13466 May 28 03:05	27° \mathbb{Z} 47'02			13467 Apr 26 11:10	28° \mathbb{Y} 21'27	
	13466 May 29 17:26	0° \mathbb{I}			13467 Apr 30 20:36	0° \mathbb{Z}	
morning set	13466 Jun 15 23:56	25° \mathbb{I} 43'18		morning max el	13467 May 03 06:41	2° \mathbb{Z} 03'09	18°58'26
	13466 Jun 18 18:29	0° \mathbb{Z}		desc. node	13467 May 14 23:53	17° \mathbb{Z} 26'05	
max. Earth dist.	13466 Jun 26 15:54	12° \mathbb{Z} 22'13	1.44521 AU	greatest brilliancy	13467 May 16 14:28	19° \mathbb{Z} 50'59	-0.7m
					13467 May 23 05:32	0° \mathbb{I}	
superior conj	13466 Jul 01 22:20	20° \mathbb{Z} 49'23	-2°06'45	morning set	13467 May 26 06:14	4° \mathbb{I} 41'12	
minimum elong	13466 Jul 02 03:44	21° \mathbb{Z} 11'20	2°07'29	max. Earth dist.	13467 Jun 09 08:28	26° \mathbb{I} 37'01	1.45542 AU
	13466 Jul 07 12:28	0° \mathbb{L}					
evening rise	13466 Jul 15 06:35	13° \mathbb{L} 04'31		superior conj	13467 Jun 11 15:05	0° \mathbb{Z} 11'13	-2°13'19
asc. node	13466 Jul 21 23:56	24° \mathbb{L} 28'11		minimum elong	13467 Jun 11 13:49	0° \mathbb{Z} 06'14	2°14'21
	13466 Jul 25 09:43	0° \mathbb{M}			13467 Jun 11 12:13	0° \mathbb{Z}	
evening max el	13466 Aug 01 21:56	9° \mathbb{M} 59'31	18°05'51	evening rise	13467 Jun 26 14:48	24° \mathbb{Z} 08'16	
					13467 Jun 30 05:23	0° \mathbb{L}	

asc. node	13467 Jul 08 20:43	13°Ω42'04		evening max el	13468 Jun 28 22:00	7°Ω20'00	19°02'30
evening max el	13467 Jul 16 11:36	23°Ω35'33	18°25'32	retrograde	13468 Jul 05 17:37	11°Ω05'51	
retrograde	13467 Jul 22 21:47	27°Ω02'08		evening set	13468 Jul 09 04:44	9°Ω56'23	
evening set	13467 Jul 25 23:51	26°Ω09'03		inferior conj	13468 Jul 14 16:21	4°Ω10'21	3°01'07
inferior conj	13467 Jul 31 18:50	20°Ω37'41	2°36'12	minimum elong	13468 Jul 14 17:46	4°Ω05'48	3°00'01
minimum elong	13467 Jul 31 21:05	20°Ω31'01	2°34'58	min. Earth dist.	13468 Jul 16 06:45	2°Ω07'37	0.66562 AU
min. Earth dist.	13467 Aug 02 23:51	18°Ω00'59	0.64871 AU		13468 Jul 18 01:08	30°℞☿	
morning rise	13467 Aug 06 17:03	14°Ω16'31		morning rise	13468 Jul 20 06:07	27°☿46'16	
desc. node	13467 Aug 10 22:28	11°Ω56'39		direct	13468 Jul 26 10:56	25°☿06'34	
direct	13467 Aug 13 05:46	11°Ω37'38		desc. node	13468 Jul 27 19:54	25°☿13'30	
morning max el	13467 Aug 26 19:04	19°Ω34'43	27°17'03		13468 Aug 05 08:31	0°Ω	
	13467 Sep 04 16:27	0°℞		morning max el	13468 Aug 08 06:04	2°Ω44'09	26°13'48
	13467 Sep 24 02:07	0°♄			13468 Aug 28 21:37	0°℞	
morning set	13467 Oct 01 05:22	13°♄16'36		morning set	13468 Sep 13 05:06	26°℞03'11	
asc. node	13467 Oct 04 22:31	20°♄41'18			13468 Sep 15 07:22	0°♄	
max. Earth dist.	13467 Oct 05 16:17	22°♄12'17	1.33217 AU	max. Earth dist.	13468 Sep 17 01:15	3°♄21'46	1.34936 AU
	13467 Oct 09 09:39	0°♄		asc. node	13468 Sep 20 19:05	10°♄47'36	
superior conj	13467 Oct 09 12:30	0°♄15'08	0°42'28	superior conj	13468 Sep 22 09:11	14°♄01'35	0°14'57
minimum elong	13467 Oct 09 10:34	0°♄04'52	0°42'32	minimum elong	13468 Sep 22 08:21	13°♄57'19	0°14'56
evening rise	13467 Oct 16 14:47	15°♄28'47		behind sun begin	13468 Sep 22 06:05	13°♄45'44	
	13467 Oct 23 19:21	0°♄		behind sun end	13468 Sep 22 10:36	14°♄08'54	
desc. node	13467 Nov 06 18:41	20°♄16'06		evening rise	13468 Sep 29 23:30	29°♄50'50	
evening max el	13467 Nov 06 21:18	20°♄22'31	22°14'39		13468 Sep 30 01:16	0°♄	
retrograde	13467 Nov 19 15:24	26°♄41'51			13468 Oct 17 23:27	0°♄	
evening set	13467 Nov 23 01:51	26°♄15'50		evening max el	13468 Oct 18 17:34	0°♄46'27	20°43'04
min. Earth dist.	13467 Dec 01 03:52	22°♄39'43	0.54647 AU	desc. node	13468 Oct 23 16:04	4°♄37'32	
inferior conj	13467 Dec 01 17:39	22°♄20'21	-5°52'19	retrograde	13468 Oct 30 01:52	6°♄24'46	
minimum elong	13467 Dec 01 14:00	22°♄25'29	5°51'02	evening set	13468 Nov 01 09:50	6°♄11'33	
morning rise	13467 Dec 10 03:16	18°♄33'05		inferior conj	13468 Nov 10 09:14	2°♄17'15	-4°58'57
direct	13467 Dec 13 12:34	18°♄07'24		minimum elong	13468 Nov 09 23:28	2°♄31'15	4°55'46
morning max el	13467 Dec 25 12:31	23°♄51'44	21°33'51	min. Earth dist.	13468 Nov 11 10:13	1°♄41'24	0.54604 AU
	13467 Dec 30 21:05	0°♄			13468 Nov 14 12:45	30°℞♄	
asc. node	13467 Dec 31 23:00	1°♄29'06		morning rise	13468 Nov 18 13:05	28°♄21'20	
morning set	13468 Jan 14 22:28	26°♄50'41		direct	13468 Nov 22 20:48	27°♄41'19	
	13468 Jan 16 10:28	0°♄			13468 Nov 30 17:24	0°♄	
superior conj	13468 Jan 22 03:20	12°♄02'19	1°23'24	morning max el	13468 Dec 06 01:42	4°♄05'49	23°19'29
minimum elong	13468 Jan 22 05:34	12°♄13'58	1°24'01	asc. node	13468 Dec 17 20:06	19°♄23'45	
max. Earth dist.	13468 Jan 26 12:55	21°♄02'21	1.34878 AU	morning set	13468 Dec 23 17:55	0°♄	
evening rise	13468 Jan 30 16:52	29°♄09'18			13468 Dec 29 10:07	11°♄36'45	
	13468 Jan 31 03:35	0°♄		superior conj	13469 Jan 05 07:41	26°♄31'58	1°33'57
desc. node	13468 Feb 02 18:16	4°♄50'20		minimum elong	13469 Jan 05 08:58	26°♄38'53	1°34'50
	13468 Feb 18 02:55	0°♄			13469 Jan 06 22:29	0°♄	
evening max el	13468 Mar 05 21:48	20°♄53'31	26°40'45	max. Earth dist.	13469 Jan 08 07:47	2°♄56'23	1.33238 AU
retrograde	13468 Mar 19 00:52	28°♄16'53		evening rise	13469 Jan 13 02:44	12°♄44'46	
evening set	13468 Mar 25 10:40	25°♄44'52		desc. node	13469 Jan 19 14:57	25°♄04'12	
asc. node	13468 Mar 28 19:54	22°♄25'44			13469 Jan 22 10:06	0°♄	
min. Earth dist.	13468 Mar 29 11:43	21°♄40'24	0.66314 AU		13469 Feb 12 06:31	0°♄	
inferior conj	13468 Mar 31 11:00	19°♄20'10	0°49'23	evening max el	13469 Feb 16 11:15	4°♄23'50	27°20'58
minimum elong	13468 Mar 31 09:46	19°♄23'51	0°48'40	retrograde	13469 Mar 02 01:24	11°♄50'53	
morning rise	13468 Apr 06 09:59	13°♄40'53		evening set	13469 Mar 08 19:13	9°♄20'41	
direct	13468 Apr 09 09:25	12°♄51'40		min. Earth dist.	13469 Mar 12 15:50	5°♄48'26	0.64657 AU
morning max el	13468 Apr 15 19:25	16°♄15'09	18°17'16	inferior conj	13469 Mar 15 03:00	3°♄08'34	-0°11'36
	13468 Apr 26 02:38	0°♄		minimum elong	13469 Mar 15 03:20	3°♄07'38	0°11'25
desc. node	13468 Apr 30 20:35	7°♄27'06		transit middle	13469 Mar 15 03:20	3°♄07'38	0°11'25
morning set	13468 May 05 11:14	14°♄48'07		transit begin	13469 Mar 15 01:11	3°♄13'28	
	13468 May 15 01:08	0°♄		transit end	13469 Mar 15 05:29	3°♄01'48	
superior conj	13468 May 20 22:47	9°♄15'34	-1°59'42	asc. node	13469 Mar 15 17:22	2°♄29'47	
minimum elong	13468 May 20 14:49	8°♄44'25	2°00'07		13469 Mar 18 05:28	30°℞♄	
max. Earth dist.	13468 May 22 04:13	11°♄10'30	1.45839 AU	morning rise	13469 Mar 21 13:19	27°♄42'53	
	13468 Jun 03 05:58	0°♄		direct	13469 Mar 24 03:45	27°♄07'48	
evening rise	13468 Jun 05 22:40	4°♄12'31			13469 Mar 30 01:35	0°♄	
greatest brilliancy	13468 Jun 16 13:35	20°♄41'48	-0.8m	morning max el	13469 Mar 30 12:10	0°♄25'03	17°53'10
	13468 Jun 22 21:40	0°♄		morning set	13469 Apr 16 20:44	26°♄18'46	
asc. node	13468 Jun 24 17:37	2°♄27'43		desc. node	13469 Apr 17 17:13	27°♄44'05	
					13469 Apr 19 01:55	0°♄	

superior conj	13469 Apr 30 15:12	18°♄49'40	-1°29'09			13470 Apr 11 13:17	0°♄	
minimum elong	13469 Apr 30 06:32	18°♄15'05	1°28'53	max. Earth dist.		13470 Apr 17 18:09	10°♄06'48	1.44236 AU
max. Earth dist.	13469 May 05 00:32	25°♄46'53	1.45387 AU	evening rise		13470 Apr 26 01:31	23°♄09'52	
	13469 May 07 17:08	0°♄				13470 Apr 30 12:53	0°♄	
evening rise	13469 May 16 13:23	13°♄40'29				13470 May 21 17:09	0°♄	
	13469 May 27 08:05	0°♄		evening max el		13470 May 26 02:27	4°♄56'34	21°01'53
greatest brilliancy	13469 May 31 07:18	5°♄50'40	-0.6m	asc. node		13470 May 29 11:44	7°♄53'48	
asc. node	13469 Jun 11 14:38	20°♄35'56		retrograde		13470 Jun 03 15:01	9°♄54'04	
evening max el	13469 Jun 12 03:13	21°♄08'07	19°55'22	evening set		13470 Jun 07 21:57	8°♄11'08	
retrograde	13469 Jun 19 16:07	25°♄25'13		inferior conj		13470 Jun 13 03:55	1°♄59'57	3°10'15
evening set	13469 Jun 23 12:48	23°♄58'52		minimum elong		13470 Jun 13 03:18	2°♄02'03	3°09'11
inferior conj	13469 Jun 28 20:12	17°♄59'25	3°11'45	min. Earth dist.		13470 Jun 13 14:15	1°♄24'01	0.68609 AU
minimum elong	13469 Jun 28 20:36	17°♄58'06	3°10'43			13470 Jun 14 14:45	30°♄	
min. Earth dist.	13469 Jun 29 20:12	16°♄38'27	0.67819 AU	morning rise		13470 Jun 18 08:26	25°♄41'33	
morning rise	13469 Jul 04 04:03	11°♄36'49		direct		13470 Jun 23 14:07	23°♄24'05	
direct	13469 Jul 09 22:04	9°♄05'00		desc. node		13470 Jul 01 14:26	27°♄18'34	
desc. node	13469 Jul 14 17:13	10°♄29'58		morning max el		13470 Jul 04 03:09	29°♄40'55	23°23'33
morning max el	13469 Jul 21 16:36	16°♄08'19	24°52'42			13470 Jul 04 10:39	0°♄	
	13469 Aug 02 03:41	0°♄				13470 Jul 26 22:35	0°♄	
	13469 Aug 21 20:04	0°♄		morning set		13470 Aug 07 22:05	19°♄07'24	
morning set	13469 Aug 26 12:12	8°♄03'46		max. Earth dist.		13470 Aug 11 23:47	26°♄04'12	1.39398 AU
max. Earth dist.	13469 Aug 30 02:01	14°♄30'09	1.37063 AU			13470 Aug 14 05:32	0°♄	
superior conj	13469 Sep 05 19:37	27°♄16'52	-0°17'03	superior conj		13470 Aug 19 16:02	9°♄52'06	-0°51'48
minimum elong	13469 Sep 05 20:44	27°♄22'20	0°17'00	minimum elong		13470 Aug 19 19:49	10°♄09'39	0°51'37
	13469 Sep 07 04:46	0°♄		asc. node		13470 Aug 25 12:14	20°♄56'33	
asc. node	13469 Sep 07 15:39	0°♄53'54		evening rise		13470 Aug 29 00:49	27°♄45'33	
evening rise	13469 Sep 14 03:48	13°♄58'56				13470 Aug 30 04:40	0°♄	
	13469 Sep 22 13:31	0°♄		evening max el		13470 Sep 14 03:05	23°♄52'49	18°41'08
evening max el	13469 Oct 01 03:52	11°♄55'33	19°31'08	retrograde		13470 Sep 22 08:21	28°♄01'06	
retrograde	13469 Oct 10 20:33	16°♄46'20		evening set		13470 Sep 24 06:28	27°♄48'18	
desc. node	13469 Oct 10 13:30	16°♄46'05		desc. node		13470 Sep 27 10:59	26°♄36'11	
evening set	13469 Oct 12 17:32	16°♄36'16		inferior conj		13470 Oct 02 07:33	23°♄23'51	-1°32'28
inferior conj	13469 Oct 21 10:37	12°♄30'27	-3°21'45	minimum elong		13470 Oct 02 03:46	23°♄30'54	1°30'37
minimum elong	13469 Oct 21 02:06	12°♄44'05	3°18'07	min. Earth dist.		13470 Oct 05 10:48	21°♄04'31	0.57120 AU
min. Earth dist.	13469 Oct 23 19:38	10°♄59'27	0.55481 AU	morning rise		13470 Oct 09 21:38	18°♄21'58	
morning rise	13469 Oct 29 08:39	8°♄06'09		direct		13470 Oct 15 19:23	16°♄56'06	
direct	13469 Nov 03 12:55	7°♄06'09		morning max el		13470 Oct 30 01:52	24°♄22'56	26°38'14
morning max el	13469 Nov 17 11:34	14°♄05'05	25°07'10			13470 Nov 04 05:37	0°♄	
	13469 Nov 29 23:16	0°♄		asc. node		13470 Nov 21 13:59	27°♄10'42	
asc. node	13469 Dec 04 17:06	8°♄01'18				13470 Nov 23 00:54	0°♄	
morning set	13469 Dec 13 21:53	26°♄19'40		morning set		13470 Nov 28 08:07	10°♄54'48	
	13469 Dec 15 14:34	0°♄						
superior conj	13469 Dec 20 16:29	11°♄11'44	1°38'07	superior conj		13470 Dec 05 03:38	25°♄55'31	1°36'14
minimum elong	13469 Dec 20 16:40	11°♄12'45	1°39'09	minimum elong		13470 Dec 05 02:46	25°♄50'42	1°37'13
max. Earth dist.	13469 Dec 22 09:53	14°♄59'00	1.32057 AU	max. Earth dist.		13470 Dec 05 16:48	27°♄08'54	1.31370 AU
evening rise	13469 Dec 27 22:19	26°♄43'44		evening rise		13470 Dec 06 23:34	0°♄	
	13469 Dec 29 12:52	0°♄				13470 Dec 12 00:58	10°♄59'49	
desc. node	13470 Jan 06 11:43	15°♄00'11		desc. node		13470 Dec 21 18:10	0°♄	
	13470 Jan 15 18:31	0°♄		evening max el		13470 Dec 24 08:34	4°♄31'06	
evening max el	13470 Jan 29 22:18	17°♄24'46	27°33'29			13471 Jan 12 04:42	29°♄44'50	27°13'07
retrograde	13470 Feb 12 18:42	24°♄48'32		retrograde		13471 Jan 12 11:09	0°♄	
evening set	13470 Feb 19 16:35	22°♄27'23		evening set		13471 Jan 26 03:52	7°♄00'45	
min. Earth dist.	13470 Feb 23 10:38	19°♄23'02	0.62695 AU	min. Earth dist.		13471 Feb 01 23:37	4°♄57'03	
inferior conj	13470 Feb 26 08:09	16°♄35'08	-1°23'42			13471 Feb 05 19:12	2°♄12'38	0.60547 AU
minimum elong	13470 Feb 26 10:57	16°♄28'19	1°22'12	inferior conj		13471 Feb 08 09:46	30°♄	
asc. node	13470 Mar 02 14:52	12°♄52'33		minimum elong		13471 Feb 08 23:04	29°♄31'29	-2°44'33
morning rise	13470 Mar 05 07:59	11°♄25'56		morning rise		13471 Feb 09 04:58	29°♄18'54	2°41'41
direct	13470 Mar 07 15:00	11°♄01'31		asc. node		13471 Feb 16 13:27	24°♄41'31	
morning max el	13470 Mar 14 05:53	14°♄23'37	17°46'31	direct		13471 Feb 17 12:17	24°♄29'18	
	13470 Mar 25 02:33	0°♄		morning max el		13471 Feb 18 15:26	24°♄24'06	
morning set	13470 Mar 30 06:43	8°♄58'47				13471 Feb 25 21:14	28°♄01'36	17°58'09
desc. node	13470 Apr 04 13:46	18°♄11'22		morning set		13471 Feb 27 16:53	0°♄	
						13471 Mar 13 11:02	22°♄29'38	
superior conj	13470 Apr 11 04:46	29°♄24'41	-0°50'07	desc. node		13471 Mar 17 13:21	0°♄	
minimum elong	13470 Apr 10 23:49	29°♄04'03	0°49'48			13471 Mar 22 10:16	8°♄45'04	

superior conj	13471 Mar 23 18:28	11° Υ 06'39	-0°10'38		13472 Feb 21 17:06	0° H	
minimum elong	13471 Mar 23 17:33	11° Υ 02'39	0°10'35	morning set	13472 Feb 25 04:14	6° H 35'01	
behind sun begin	13471 Mar 23 11:28	10° Υ 35'59					
behind sun end	13471 Mar 23 23:38	11° Υ 29'16		superior conj	13472 Mar 05 05:23	23° H 46'36	0°24'27
max. Earth dist.	13471 Mar 31 07:12	23° Υ 55'26	1.42516 AU	minimum elong	13472 Mar 05 07:03	23° H 54'19	0°24'23
	13471 Apr 04 00:37	0° B		desc. node	13472 Mar 08 06:45	29° H 21'17	
evening rise	13471 Apr 06 01:53	3° B 16'50			13472 Mar 08 15:22	0° Υ	
	13471 Apr 23 21:48	0° II		max. Earth dist.	13472 Mar 12 15:53	7° Υ 04'41	1.40414 AU
evening max el	13471 May 08 20:34	18° II 45'55	22°18'20	evening rise	13472 Mar 16 22:20	14° Υ 18'12	
asc. node	13471 May 16 08:56	24° II 06'02			13472 Mar 26 19:24	0° B	
retrograde	13471 May 18 12:38	24° II 27'19			13472 Apr 17 23:31	0° II	
evening set	13471 May 23 06:29	22° II 28'52		evening max el	13472 Apr 20 11:28	2° II 37'34	23°39'18
inferior conj	13471 May 28 13:22	16° II 08'03	2°57'57	retrograde	13472 May 01 07:25	8° II 59'47	
minimum elong	13471 May 28 11:56	16° II 13'04	2°56'46	asc. node	13472 May 02 06:13	8° II 55'42	
min. Earth dist.	13471 May 28 10:42	16° II 17'21	0.68921 AU	evening set	13472 May 06 12:52	6° II 47'32	
morning rise	13471 Jun 02 17:13	9° II 55'47		inferior conj	13472 May 11 22:40	0° II 20'01	2°35'26
direct	13471 Jun 07 10:09	7° II 56'50		minimum elong	13472 May 11 20:41	0° II 26'51	2°34'08
morning max el	13471 Jun 16 16:10	13° II 21'27	21°55'31	min. Earth dist.	13472 May 11 07:23	1° II 12'24	0.68763 AU
desc. node	13471 Jun 18 11:33	15° II 15'32			13472 May 12 04:31	30° R B	
	13471 Jun 29 23:35	0° B		morning rise	13472 May 17 04:28	24° B 15'16	
morning set	13471 Jul 19 07:06	29° B 05'28		direct	13472 May 21 08:48	22° B 36'53	
	13471 Jul 19 20:43	0° Ω		morning max el	13472 May 29 10:47	27° B 12'39	20°35'59
max. Earth dist.	13471 Jul 25 00:47	8° Ω 26'31	1.41683 AU		13472 Jun 01 01:05	0° II	
				desc. node	13472 Jun 04 08:31	4° II 02'28	
superior conj	13471 Aug 01 18:03	21° Ω 37'37	-1°26'11		13472 Jun 22 10:48	0° B	
minimum elong	13471 Aug 02 00:27	22° Ω 05'42	1°26'04	morning set	13472 Jun 27 17:25	8° B 05'25	
	13471 Aug 06 10:41	0° H		max. Earth dist.	13472 Jul 06 08:44	21° B 43'24	1.43639 AU
evening rise	13471 Aug 12 10:56	11° H 01'21			13472 Jul 11 10:35	0° Ω	
asc. node	13471 Aug 12 08:49	10° H 51'38					
	13471 Aug 23 08:17	0° B		superior conj	13472 Jul 12 21:40	2° Ω 25'24	-1°55'10
evening max el	13471 Aug 28 11:22	6° B 30'13	18°12'07	minimum elong	13472 Jul 13 04:42	2° Ω 54'41	1°55'31
retrograde	13471 Sep 04 14:55	10° B 08'16		evening rise	13472 Jul 25 05:34	23° Ω 35'26	
evening set	13471 Sep 06 19:37	9° B 48'16			13472 Jul 28 21:22	0° H	
inferior conj	13471 Sep 14 02:10	5° B 03'01	0°04'55	asc. node	13472 Jul 29 05:29	0° H 35'20	
minimum elong	13471 Sep 14 02:20	5° B 02'39	0°04'50	evening max el	13472 Aug 11 00:36	19° H 38'05	18°02'46
transit middle	13471 Sep 14 02:20	5° B 02'39	0°04'50	retrograde	13472 Aug 17 13:28	23° H 00'36	
transit begin	13471 Sep 13 23:04	5° B 09'44		evening set	13472 Aug 20 02:15	22° H 29'43	
transit end	13471 Sep 14 05:36	4° B 55'32		inferior conj	13472 Aug 26 16:09	17° H 24'39	1°20'36
desc. node	13471 Sep 14 08:31	4° B 49'11		minimum elong	13472 Aug 26 18:16	17° H 19'21	1°19'33
min. Earth dist.	13471 Sep 17 09:25	2° B 12'01	0.59251 AU	min. Earth dist.	13472 Aug 29 17:01	14° H 23'49	0.61547 AU
	13471 Sep 20 08:09	30° R H		desc. node	13472 Aug 31 06:03	12° H 59'42	
morning rise	13471 Sep 21 05:38	29° H 26'53		morning rise	13472 Sep 02 07:42	11° H 23'26	
direct	13471 Sep 27 15:48	27° H 33'15		direct	13472 Sep 08 23:36	9° H 06'01	
	13471 Oct 05 08:04	0° B		morning max el	13472 Sep 23 04:05	17° H 04'04	27°58'31
morning max el	13471 Oct 11 23:31	5° B 19'53	27°37'40		13472 Oct 03 21:47	0° B	
	13471 Oct 30 07:21	0° H			13472 Oct 22 00:25	0° H	
asc. node	13471 Nov 08 10:46	16° H 42'30		asc. node	13472 Oct 25 07:29	6° H 30'28	
morning set	13471 Nov 12 14:58	25° H 16'10		morning set	13472 Oct 26 16:32	9° H 19'23	
	13471 Nov 14 19:57	0° A		max. Earth dist.	13472 Nov 01 07:12	21° H 17'37	1.31566 AU
max. Earth dist.	13471 Nov 19 01:06	9° A 17'49	1.31200 AU				
				superior conj	13472 Nov 03 01:20	25° H 09'31	1°15'03
superior conj	13471 Nov 19 15:11	10° A 36'24	1°28'31	minimum elong	13472 Nov 02 23:07	24° H 57'19	1°15'33
minimum elong	13471 Nov 19 13:29	10° A 26'52	1°29'18		13472 Nov 05 05:46	0° A	
evening rise	13471 Nov 26 08:22	25° A 26'03		evening rise	13472 Nov 09 18:36	9° A 57'43	
	13471 Nov 28 12:07	0° B			13472 Nov 19 21:07	0° B	
desc. node	13471 Dec 11 05:32	23° B 26'09		desc. node	13472 Nov 27 02:38	11° B 31'56	
	13471 Dec 15 15:16	0° \approx		evening max el	13472 Dec 05 19:01	21° B 52'29	24°53'39
evening max el	13471 Dec 25 04:00	11° \approx 14'16	26°18'16	retrograde	13472 Dec 19 13:41	28° B 45'59	
retrograde	13472 Jan 08 02:56	18° \approx 19'44		evening set	13472 Dec 25 02:40	27° B 37'39	
evening set	13472 Jan 14 12:22	16° \approx 41'24		min. Earth dist.	13472 Dec 30 06:55	24° B 52'58	0.56474 AU
min. Earth dist.	13472 Jan 18 17:32	14° \approx 04'54	0.58389 AU	inferior conj	13473 Jan 01 20:37	23° B 13'58	-5°18'50
inferior conj	13472 Jan 21 20:07	11° \approx 47'16	-4°07'37	minimum elong	13473 Jan 02 04:31	23° B 01'15	5°16'19
minimum elong	13472 Jan 22 04:35	11° \approx 31'35	4°04'10	morning rise	13473 Jan 10 08:34	19° B 06'56	
morning rise	13472 Jan 29 23:46	7° \approx 18'36		direct	13473 Jan 12 15:37	18° B 52'12	
direct	13472 Feb 01 00:49	7° \approx 04'30		asc. node	13473 Jan 21 07:01	22° B 38'32	
asc. node	13472 Feb 04 09:40	7° \approx 44'54		morning max el	13473 Jan 22 05:11	23° B 29'41	19°23'21
morning max el	13472 Feb 09 06:22	11° \approx 07'28	18°29'44		13473 Jan 27 13:21	0° \approx	

morning set	13473 Feb 08 06:11	21° \approx 02'33		morning max el	13474 Jan 04 14:22	4° \approx 59'40	20°40'09
	13473 Feb 12 17:27	0° \approx		asc. node	13474 Jan 08 04:16	8° \approx 56'15	
					13474 Jan 20 18:21	0° \approx	
superior conj	13473 Feb 16 08:58	7° \approx 11'50	0°52'56	morning set	13474 Jan 23 13:45	5° \approx 43'06	
minimum elong	13473 Feb 16 11:40	7° \approx 24'58	0°53'02				
max. Earth dist.	13473 Feb 22 22:27	19° \approx 34'40	1.38158 AU	superior conj	13474 Jan 31 00:57	21° \approx 10'36	1°14'18
desc. node	13473 Feb 23 03:15	19° \approx 56'30		minimum elong	13474 Jan 31 03:34	21° \approx 23'53	1°14'42
evening rise	13473 Feb 26 15:47	26° \approx 13'21			13474 Feb 04 10:58	0° \approx	
	13473 Feb 28 20:15	0° \approx		max. Earth dist.	13474 Feb 05 06:45	1° \approx 36'03	1.35990 AU
	13473 Mar 20 08:49	0° \approx		evening rise	13474 Feb 09 03:44	8° \approx 55'08	
evening max el	13473 Apr 03 01:07	16° \approx 30'41	24°58'07	desc. node	13474 Feb 09 23:49	10° \approx 27'11	
retrograde	13473 Apr 14 22:18	23° \approx 25'26			13474 Feb 21 12:26	0° \approx	
asc. node	13473 Apr 19 03:35	22° \approx 08'24			13474 Mar 16 05:59	0° \approx	
evening set	13473 Apr 20 15:28	21° \approx 02'01		evening max el	13474 Mar 16 14:40	0° \approx 21'21	26°07'41
min. Earth dist.	13473 Apr 25 02:05	16° \approx 03'06	0.68152 AU	retrograde	13474 Mar 29 08:23	7° \approx 37'58	
inferior conj	13473 Apr 26 05:54	14° \approx 31'32	2°02'41	evening set	13474 Apr 04 12:39	5° \approx 07'18	
minimum elong	13473 Apr 26 03:45	14° \approx 38'38	2°01'24	asc. node	13474 Apr 06 01:01	3° \approx 43'38	
morning rise	13473 May 01 16:18	8° \approx 35'39		min. Earth dist.	13474 Apr 08 16:45	0° \approx 43'39	0.67104 AU
direct	13473 May 05 08:38	7° \approx 17'52			13474 Apr 09 06:57	30° \approx 00'	
morning max el	13473 May 12 12:57	11° \approx 15'14	19°29'36	inferior conj	13474 Apr 10 09:04	28° \approx 00'38'45	1°19'22
desc. node	13473 May 22 05:23	23° \approx 25'28		minimum elong	13474 Apr 10 07:18	28° \approx 00'44'15	1°18'21
greatest brilliancy	13473 May 25 04:28	27° \approx 43'08	-0.7m	morning rise	13474 Apr 16 02:43	22° \approx 00'53'07	
	13473 May 26 17:29	0° \approx		direct	13474 Apr 19 07:58	21° \approx 00'54'20	
morning set	13473 Jun 06 18:54	16° \approx 46'44		morning max el	13474 Apr 25 22:25	25° \approx 00'26'29	18°38'56
	13473 Jun 15 07:43	0° \approx			13474 Apr 29 22:04	0° \approx	
max. Earth dist.	13473 Jun 18 23:18	5° \approx 43'42	1.45045 AU	desc. node	13474 May 09 02:08	13° \approx 00'15'07	
				morning set	13474 May 17 09:18	26° \approx 00'10'27	
superior conj	13473 Jun 23 01:36	12° \approx 13'36	-2°11'52		13474 May 19 19:58	0° \approx	
minimum elong	13473 Jun 23 04:40	12° \approx 25'49	2°12'51	max. Earth dist.	13474 Jun 01 17:55	20° \approx 00'10'07	1.45765 AU
	13473 Jul 03 23:50	0° \approx					
evening rise	13473 Jul 07 03:34	5° \approx 00'14'49		superior conj	13474 Jun 02 12:31	21° \approx 00'22'46	-2°09'59
asc. node	13473 Jul 16 02:13	20° \approx 00'01'50		minimum elong	13474 Jun 02 07:56	21° \approx 00'04'50	2°10'51
	13473 Jul 22 21:24	0° \approx			13474 Jun 08 00:34	0° \approx	
evening max el	13473 Jul 25 14:59	3° \approx 00'05'53	18°12'02	evening rise	13474 Jun 18 01:17	15° \approx 00'52'51	
retrograde	13473 Jul 31 23:28	6° \approx 00'27'13		greatest brilliancy	13474 Jun 25 10:23	27° \approx 00'37'28	-0.9m
evening set	13473 Aug 03 20:37	5° \approx 00'42'44			13474 Jun 26 22:38	0° \approx	
inferior conj	13473 Aug 09 21:24	0° \approx 00'20'08	2°14'13	asc. node	13474 Jul 02 23:04	9° \approx 00'04'54	
minimum elong	13473 Aug 09 23:53	0° \approx 00'13'08	2°12'57	evening max el	13474 Jul 09 03:29	16° \approx 00'45'57	18°39'07
	13473 Aug 10 04:32	30° \approx 00'00'00		retrograde	13474 Jul 15 16:45	20° \approx 00'19'29	
min. Earth dist.	13473 Aug 12 10:17	27° \approx 00'29'58	0.63736 AU	evening set	13474 Jul 18 22:34	19° \approx 00'19'35	
morning rise	13473 Aug 16 01:28	24° \approx 00'03'40		inferior conj	13474 Jul 24 13:58	13° \approx 00'41'34	2°48'40
desc. node	13473 Aug 18 03:34	22° \approx 00'41'33		minimum elong	13474 Jul 24 15:55	13° \approx 00'35'35	2°47'30
direct	13473 Aug 22 16:43	21° \approx 00'30'11		min. Earth dist.	13474 Jul 26 12:44	11° \approx 00'18'05	0.65640 AU
morning max el	13473 Sep 05 13:23	29° \approx 00'30'49	27°41'41	morning rise	13474 Jul 30 08:17	7° \approx 00'18'12	
	13473 Sep 06 00:54	0° \approx		desc. node	13474 Aug 05 01:03	4° \approx 00'39'48	
	13473 Sep 27 20:45	0° \approx		direct	13474 Aug 05 17:54	4° \approx 00'38'00	
morning set	13473 Oct 10 10:28	22° \approx 00'58'57		morning max el	13474 Aug 19 00:37	12° \approx 00'29'02	26°52'54
asc. node	13473 Oct 12 04:07	26° \approx 00'29'06			13474 Sep 02 02:08	0° \approx	
	13473 Oct 13 21:02	0° \approx			13474 Sep 20 11:24	0° \approx	
max. Earth dist.	13473 Oct 15 07:21	2° \approx 00'59'59	1.32465 AU	morning set	13474 Sep 23 17:54	6° \approx 00'07'42	
				max. Earth dist.	13474 Sep 27 22:14	14° \approx 00'19'55	1.33890 AU
superior conj	13473 Oct 18 08:06	9° \approx 00'29'23	0°55'57	asc. node	13474 Sep 29 00:43	16° \approx 00'33'54	
minimum elong	13473 Oct 18 05:53	9° \approx 00'17'25	0°56'09				
evening rise	13473 Oct 25 05:48	24° \approx 00'29'53		superior conj	13474 Oct 02 09:13	23° \approx 00'29'59	0°31'23
	13473 Oct 27 20:16	0° \approx		minimum elong	13474 Oct 02 07:39	23° \approx 00'21'48	0°31'24
desc. node	13473 Nov 13 23:51	28° \approx 00'30'21			13474 Oct 05 10:58	0° \approx	
	13473 Nov 15 07:33	0° \approx		evening rise	13474 Oct 09 16:01	8° \approx 00'57'12	
evening max el	13473 Nov 17 04:55	1° \approx 00'56'48	23°12'48		13474 Oct 20 15:29	0° \approx	
retrograde	13473 Nov 30 11:42	8° \approx 00'33'01		evening max el	13474 Oct 29 18:42	12° \approx 00'03'02	21°33'37
evening set	13473 Dec 04 17:51	7° \approx 00'53'39		desc. node	13474 Oct 31 21:12	13° \approx 00'00'57'06	
min. Earth dist.	13473 Dec 11 14:33	4° \approx 00'41'34	0.55089 AU	retrograde	13474 Nov 11 00:12	18° \approx 00'00'07'18	
inferior conj	13473 Dec 13 01:24	3° \approx 00'51'15	-5°55'42	evening set	13474 Nov 13 21:32	17° \approx 00'00'48'15	
minimum elong	13473 Dec 13 03:02	3° \approx 00'48'54	5°54'36	inferior conj	13474 Nov 22 17:59	13° \approx 00'00'54'33	-5°36'43
morning rise	13473 Dec 21 13:48	0° \approx 00'00'54		minimum elong	13474 Nov 22 10:54	14° \approx 00'00'42'28	5°34'44
	13473 Dec 21 15:25	30° \approx 00'00'00		min. Earth dist.	13474 Nov 22 20:40	13° \approx 00'00'50'46	0.54505 AU
direct	13473 Dec 24 11:24	29° \approx 00'00'40'55		morning rise	13474 Dec 01 01:07	10° \approx 00'00'06'11	
	13473 Dec 27 05:28	0° \approx		direct	13474 Dec 04 19:36	9° \approx 00'00'35'20	

morning max el	13474 Dec 17 09:40	15° ♊ 37'32	22°17'37	morning rise	13475 Nov 10 13:35	19° ♋ 49'00	
asc. node	13474 Dec 26 01:26	26° ♊ 20'10		direct	13475 Nov 15 06:21	19° ♋ 01'05	
	13474 Dec 28 08:46	0° ♋		morning max el	13475 Nov 28 20:25	25° ♋ 41'55	24°06'04
morning set	13475 Jan 08 00:26	20° ♋ 28'36			13475 Dec 02 21:26	0° ♌	
	13475 Jan 12 11:27	0° ♌		asc. node	13475 Dec 12 22:30	14° ♌ 34'52	
					13475 Dec 21 00:47	0° ♍	
superior conj	13475 Jan 15 01:38	5° ♌ 31'27	1°28'41	morning set	13475 Dec 23 12:19	5° ♍ 13'50	
minimum elong	13475 Jan 15 03:29	5° ♌ 41'19	1°29'25				
max. Earth dist.	13475 Jan 18 20:45	13° ♌ 26'20	1.34119 AU	superior conj	13475 Dec 30 08:09	20° ♍ 06'26	1°36'28
evening rise	13475 Jan 23 06:34	22° ♌ 13'22		minimum elong	13475 Dec 30 08:58	20° ♍ 10'55	1°37'26
	13475 Jan 27 09:48	0° ♎		max. Earth dist.	13476 Jan 01 18:37	25° ♍ 22'33	1.32675 AU
desc. node	13475 Jan 27 20:27	0° ♎ 48'25			13476 Jan 03 22:58	0° ♏	
	13475 Feb 15 06:41	0° ♏		evening rise	13476 Jan 06 20:56	5° ♏ 59'59	
evening max el	13475 Feb 27 04:13	14° ♏ 01'16	27°00'48	desc. node	13476 Jan 14 17:09	20° ♏ 55'27	
retrograde	13475 Mar 12 12:51	21° ♏ 28'15			13476 Jan 20 00:34	0° ♐	
evening set	13475 Mar 19 02:26	18° ♏ 55'53		evening max el	13476 Feb 09 16:54	27° ♐ 20'33	27°30'05
min. Earth dist.	13475 Mar 23 01:17	15° ♏ 05'39	0.65649 AU		13476 Feb 12 17:00	0° ♑	
asc. node	13475 Mar 23 22:29	14° ♏ 05'37		retrograde	13476 Feb 23 10:37	4° ♑ 47'25	
inferior conj	13475 Mar 25 05:50	12° ♏ 35'26	0°24'54	evening set	13476 Mar 01 06:33	2° ♑ 20'15	
minimum elong	13475 Mar 25 05:10	12° ♏ 37'22	0°24'32		13476 Mar 04 01:18	30° ♒	
morning rise	13475 Mar 31 09:23	7° ♑ 01'52		min. Earth dist.	13476 Mar 05 01:46	29° ♒ 00'18	0.63849 AU
direct	13475 Apr 03 04:43	6° ♑ 19'14		inferior conj	13476 Mar 07 17:35	26° ♒ 15'21	-0°40'56
morning max el	13475 Apr 09 13:14	9° ♑ 38'51	18°04'56	minimum elong	13476 Mar 07 18:52	26° ♒ 12'00	0°40'13
	13475 Apr 23 20:35	0° ♒		asc. node	13476 Mar 09 19:58	24° ♒ 09'13	
desc. node	13475 Apr 25 22:47	3° ♒ 23'28		morning rise	13476 Mar 14 09:25	20° ♒ 56'10	
morning set	13475 Apr 28 02:25	6° ♒ 53'05		direct	13476 Mar 16 20:22	20° ♒ 26'10	
				morning max el	13476 Mar 23 06:42	23° ♒ 44'33	17°48'07
superior conj	13475 May 12 21:55	0° ♓ 34'57	-1°48'23		13476 Mar 28 08:28	0° ♑	
minimum elong	13475 May 12 12:51	29° ♓ 59'20	1°48'27	morning set	13476 Apr 08 23:00	18° ♑ 55'05	
	13475 May 12 13:01	0° ♓		desc. node	13476 Apr 11 19:21	23° ♑ 45'03	
max. Earth dist.	13475 May 15 13:42	4° ♓ 45'00	1.45734 AU		13476 Apr 15 12:34	0° ♒	
evening rise	13475 May 29 00:26	25° ♓ 37'34					
	13475 May 31 20:26	0° ♈		superior conj	13476 Apr 21 22:17	10° ♒ 32'14	-1°13'05
greatest brilliancy	13475 Jun 10 15:57	14° ♈ 57'06	-0.7m	minimum elong	13476 Apr 21 14:55	10° ♒ 02'22	1°12'44
asc. node	13475 Jun 19 20:00	27° ♈ 36'19		max. Earth dist.	13476 Apr 27 08:41	19° ♒ 14'30	1.44975 AU
	13475 Jun 21 23:03	0° ♉			13476 May 04 05:46	0° ♓	
evening max el	13475 Jun 22 11:46	0° ♉ 32'30	19°23'07	evening rise	13476 May 07 11:53	5° ♓ 00'27	
retrograde	13475 Jun 29 14:03	4° ♉ 30'40			13476 May 24 06:44	0° ♈	
evening set	13475 Jul 03 05:03	3° ♉ 14'15		evening max el	13476 Jun 04 14:30	14° ♈ 21'18	20°22'17
	13475 Jul 06 12:53	30° ♊		asc. node	13476 Jun 05 17:03	15° ♈ 25'00	
inferior conj	13475 Jul 08 14:31	27° ♈ 22'23	3°07'12	retrograde	13476 Jun 12 12:51	18° ♈ 54'34	
minimum elong	13475 Jul 08 15:31	27° ♈ 19'07	3°06'10	evening set	13476 Jun 16 13:46	17° ♈ 21'15	
min. Earth dist.	13475 Jul 09 22:49	25° ♈ 36'26	0.67151 AU	inferior conj	13476 Jun 21 20:16	11° ♈ 16'53	3°12'30
morning rise	13475 Jul 14 01:26	20° ♈ 58'14		minimum elong	13476 Jun 21 20:14	11° ♈ 17'01	3°11'28
direct	13475 Jul 20 01:54	18° ♈ 20'44		min. Earth dist.	13476 Jun 22 14:28	10° ♈ 14'35	0.68214 AU
desc. node	13475 Jul 22 22:26	18° ♈ 50'54		morning rise	13476 Jun 27 02:23	4° ♈ 55'48	
morning max el	13475 Aug 01 11:31	25° ♈ 46'22	25°40'50	direct	13476 Jul 02 15:24	2° ♈ 29'07	
	13475 Aug 05 08:27	0° ♉		desc. node	13476 Jul 08 19:42	4° ♈ 49'45	
	13475 Aug 26 14:42	0° ♊		morning max el	13476 Jul 13 21:37	9° ♈ 13'49	24°15'08
morning set	13475 Sep 06 11:10	18° ♊ 36'58			13476 Jul 30 06:51	0° ♉	
max. Earth dist.	13475 Sep 10 02:59	25° ♊ 25'10	1.35795 AU	morning set	13476 Aug 18 09:46	0° ♊ 14'42	
	13475 Sep 12 12:11	0° ♋			13476 Aug 18 06:22	0° ♊	
asc. node	13475 Sep 15 21:17	6° ♋ 41'02		max. Earth dist.	13476 Aug 22 01:22	6° ♊ 39'57	1.38048 AU
superior conj	13475 Sep 16 02:00	7° ♋ 04'46	0°01'52	superior conj	13476 Aug 29 06:59	20° ♊ 04'35	-0°31'35
minimum elong	13475 Sep 16 01:53	7° ♋ 04'11	0°01'51	minimum elong	13476 Aug 29 09:10	20° ♊ 15'01	0°31'29
behind sun begin	13475 Sep 15 19:43	6° ♋ 33'09		asc. node	13476 Sep 01 17:50	26° ♊ 46'23	
behind sun end	13475 Sep 16 08:04	7° ♋ 35'18			13476 Sep 03 09:08	0° ♌	
evening rise	13475 Sep 23 23:11	23° ♋ 14'27		evening rise	13476 Sep 07 00:44	7° ♋ 14'21	
	13475 Sep 27 07:20	0° ♌			13476 Sep 19 22:27	0° ♌	
evening max el	13475 Oct 11 20:52	22° ♌ 45'42	20°09'53	evening max el	13476 Sep 23 13:08	4° ♌ 16'20	19°07'12
desc. node	13475 Oct 18 18:37	27° ♌ 25'11		retrograde	13476 Oct 02 13:28	8° ♌ 47'14	
retrograde	13475 Oct 22 12:35	28° ♌ 03'46		evening set	13476 Oct 04 10:05	8° ♌ 36'31	
evening set	13475 Oct 24 13:46	27° ♌ 52'54		desc. node	13476 Oct 04 16:05	8° ♌ 33'29	
inferior conj	13475 Nov 02 12:12	23° ♌ 55'25	-4°21'19	inferior conj	13476 Oct 12 21:07	4° ♌ 23'31	-2°35'04
minimum elong	13475 Nov 02 02:10	24° ♌ 10'22	4°17'35	minimum elong	13476 Oct 12 14:30	4° ♌ 34'46	2°32'02
min. Earth dist.	13475 Nov 04 04:26	22° ♌ 55'29	0.54866 AU	min. Earth dist.	13476 Oct 15 15:53	2° ♌ 30'30	0.56108 AU

	13476 Oct 20 01:21	30° \mathbb{R} $\underline{\mathbf{a}}$		min. Earth dist.	13477 Sep 27 09:41	13° $\underline{\mathbf{a}}$ 01'23	0.57996 AU
morning rise	13476 Oct 20 16:10	29° $\underline{\mathbf{a}}$ 43'51		morning rise	13477 Oct 01 13:14	10° $\underline{\mathbf{a}}$ 19'10	
direct	13476 Oct 26 04:44	28° $\underline{\mathbf{a}}$ 33'09		direct	13477 Oct 07 16:58	8° $\underline{\mathbf{a}}$ 41'40	
	13476 Nov 01 07:50	0° \mathbb{M}		morning max el	13477 Oct 22 00:28	16° $\underline{\mathbf{a}}$ 16'53	27°08'00
morning max el	13476 Nov 09 07:11	5° \mathbb{M} 44'26	25°48'53		13477 Nov 02 06:12	0° \mathbb{M}	
	13476 Nov 26 21:44	0° \mathbb{Z}		asc. node	13477 Nov 15 16:16	22° \mathbb{M} 46'49	
asc. node	13476 Nov 28 19:26	3° \mathbb{Z} 27'01			13477 Nov 19 06:31	0° \mathbb{Z}	
morning set	13476 Dec 06 23:37	19° \mathbb{Z} 53'36		morning set	13477 Nov 21 08:39	4° \mathbb{Z} 23'25	
	13476 Dec 11 14:16	0° \mathbb{S}					
superior conj	13476 Dec 13 18:10	4° \mathbb{S} 48'17	1°38'02	superior conj	13477 Nov 28 05:42	19° \mathbb{Z} 31'13	1°33'39
minimum elong	13476 Dec 13 17:53	4° \mathbb{S} 46'45	1°39'04	minimum elong	13477 Nov 28 04:27	19° \mathbb{Z} 24'13	1°34'34
max. Earth dist.	13476 Dec 14 23:10	7° \mathbb{S} 28'53	1.31707 AU	max. Earth dist.	13477 Nov 28 07:20	19° \mathbb{Z} 40'17	1.31240 AU
evening rise	13476 Dec 20 19:50	20° \mathbb{S} 07'00		evening rise	13477 Dec 02 23:07	0° \mathbb{S}	
	13476 Dec 25 17:52	0° \approx		desc. node	13477 Dec 05 00:47	4° \mathbb{S} 28'01	
desc. node	13476 Dec 31 13:58	10° \approx 41'51			13477 Dec 18 10:54	29° \mathbb{S} 58'59	
	13477 Jan 13 05:43	0° \mathbb{X}			13477 Dec 18 11:08	0° \approx	
evening max el	13477 Jan 22 02:32	10° \mathbb{X} 06'19	27°29'09	evening max el	13478 Jan 04 06:15	22° \approx 05'36	26°53'52
retrograde	13477 Feb 05 00:29	17° \mathbb{X} 26'25		retrograde	13478 Jan 18 05:12	29° \approx 16'35	
evening set	13477 Feb 11 22:13	15° \mathbb{X} 12'04		evening set	13478 Jan 24 21:57	27° \approx 22'46	
min. Earth dist.	13477 Feb 15 16:27	12° \mathbb{X} 17'07	0.61793 AU	min. Earth dist.	13478 Jan 28 20:20	24° \approx 43'43	0.59618 AU
inferior conj	13477 Feb 18 17:08	9° \mathbb{X} 30'30	-1°57'11	inferior conj	13478 Feb 01 00:53	22° \approx 10'41	-3°20'10
minimum elong	13477 Feb 18 21:14	9° \mathbb{X} 21'05	1°55'05	minimum elong	13478 Feb 01 08:04	21° \approx 56'16	3°16'54
asc. node	13477 Feb 24 17:25	4° \mathbb{X} 58'18		morning rise	13478 Feb 08 21:15	17° \approx 29'37	
morning rise	13477 Feb 25 23:06	4° \mathbb{X} 28'46		direct	13478 Feb 10 22:23	17° \approx 13'57	
direct	13477 Feb 28 03:39	4° \mathbb{X} 07'42		asc. node	13478 Feb 11 14:51	17° \approx 15'46	
morning max el	13477 Mar 06 23:46	7° \mathbb{X} 35'11	17°49'07	morning max el	13478 Feb 18 12:57	21° \approx 00'41	18°09'06
	13477 Mar 21 14:48	0° \mathbb{Y}			13478 Feb 25 07:52	0° \mathbb{X}	
morning set	13477 Mar 22 17:34	1° \mathbb{Y} 59'24		morning set	13478 Mar 06 03:58	15° \mathbb{X} 46'49	
desc. node	13477 Mar 29 15:51	14° \mathbb{Y} 15'36			13478 Mar 13 19:47	0° \mathbb{Y}	
superior conj	13477 Apr 02 22:10	21° \mathbb{Y} 35'55	-0°33'03	superior conj	13478 Mar 15 21:26	3° \mathbb{Y} 44'10	0°04'59
minimum elong	13477 Apr 02 19:02	21° \mathbb{Y} 22'39	0°32'50	minimum elong	13478 Mar 15 21:50	3° \mathbb{Y} 45'56	0°04'58
	13477 Apr 07 22:51	0° \mathbb{B}		behind sun begin	13478 Mar 15 14:32	3° \mathbb{Y} 13'14	
max. Earth dist.	13477 Apr 10 00:53	3° \mathbb{B} 24'13	1.43565 AU	behind sun end	13478 Mar 16 05:07	4° \mathbb{Y} 18'34	
evening rise	13477 Apr 17 03:48	14° \mathbb{B} 43'03		desc. node	13478 Mar 16 12:21	4° \mathbb{Y} 50'47	
	13477 Apr 27 05:28	0° \mathbb{I}		max. Earth dist.	13478 Mar 23 12:29	16° \mathbb{Y} 58'44	1.41653 AU
evening max el	13477 May 18 11:32	28° \mathbb{I} 10'50	21°33'33	evening rise	13478 Mar 28 12:12	25° \mathbb{Y} 12'02	
	13477 May 20 10:03	0° \mathbb{D}			13478 Mar 31 12:20	0° \mathbb{B}	
asc. node	13477 May 23 14:12	2° \mathbb{D} 17'29			13478 Apr 21 01:30	0° \mathbb{I}	
retrograde	13477 May 27 11:17	3° \mathbb{D} 26'22		evening max el	13478 May 01 03:58	12° \mathbb{I} 00'41	22°52'34
evening set	13477 May 31 22:52	1° \mathbb{D} 36'33		asc. node	13478 May 10 11:27	17° \mathbb{I} 56'46	
	13477 Jun 02 14:43	30° \mathbb{R} \mathbb{I}		retrograde	13478 May 11 07:51	18° \mathbb{I} 00'04	
inferior conj	13477 Jun 06 04:58	25° \mathbb{I} 21'12	3°06'19	evening set	13478 May 16 06:42	15° \mathbb{I} 55'12	
minimum elong	13477 Jun 06 03:59	25° \mathbb{I} 24'38	3°05'11	inferior conj	13478 May 21 14:35	9° \mathbb{I} 31'04	2°49'38
min. Earth dist.	13477 Jun 06 09:42	25° \mathbb{I} 04'41	0.68802 AU	minimum elong	13478 May 21 12:52	9° \mathbb{I} 37'01	2°48'23
morning rise	13477 Jun 11 08:54	19° \mathbb{I} 05'29		min. Earth dist.	13478 May 21 06:26	9° \mathbb{I} 59'23	0.68911 AU
direct	13477 Jun 16 09:16	16° \mathbb{I} 55'27		morning rise	13478 May 26 18:57	3° \mathbb{I} 22'04	
desc. node	13477 Jun 25 16:50	22° \mathbb{I} 10'12		direct	13478 May 31 06:25	1° \mathbb{I} 31'59	
morning max el	13477 Jun 26 08:46	22° \mathbb{I} 49'33	22°45'33	morning max el	13478 Jun 08 23:58	6° \mathbb{I} 34'41	21°20'25
	13477 Jul 02 15:25	0° \mathbb{D}		desc. node	13478 Jun 12 13:51	10° \mathbb{I} 30'07	
	13477 Jul 23 14:38	0° \mathbb{Q}			13478 Jun 26 22:20	0° \mathbb{D}	
morning set	13477 Jul 30 09:19	10° \mathbb{Q} 50'59		morning set	13478 Jul 10 07:54	20° \mathbb{D} 22'05	
max. Earth dist.	13477 Aug 04 00:19	18° \mathbb{Q} 34'55	1.40402 AU		13478 Jul 16 08:20	0° \mathbb{Q}	
	13477 Aug 10 13:03	0° \mathbb{P}		max. Earth dist.	13478 Jul 17 04:29	1° \mathbb{Q} 22'16	1.42569 AU
superior conj	13477 Aug 11 20:10	2° \mathbb{P} 20'21	-1°06'40	superior conj	13478 Jul 24 13:02	13° \mathbb{Q} 41'48	-1°39'30
minimum elong	13477 Aug 12 01:08	2° \mathbb{P} 42'55	1°06'27	minimum elong	13478 Jul 24 20:06	14° \mathbb{Q} 12'09	1°39'32
asc. node	13477 Aug 19 14:25	16° \mathbb{P} 46'37			13478 Aug 02 18:58	0° \mathbb{P}	
evening rise	13477 Aug 21 17:37	20° \mathbb{P} 49'30		evening rise	13478 Aug 04 21:48	3° \mathbb{P} 49'23	
	13477 Aug 26 15:17	0° $\underline{\mathbf{a}}$		asc. node	13478 Aug 06 11:04	6° \mathbb{P} 37'40	
evening max el	13477 Sep 06 16:43	16° $\underline{\mathbf{a}}$ 31'49	18°26'12	evening max el	13478 Aug 21 03:32	29° \mathbb{P} 23'14	18°05'45
retrograde	13477 Sep 14 09:34	20° $\underline{\mathbf{a}}$ 25'31			13478 Aug 21 19:01	0° $\underline{\mathbf{a}}$	
evening set	13477 Sep 16 10:14	20° $\underline{\mathbf{a}}$ 10'04		retrograde	13478 Aug 27 23:42	2° $\underline{\mathbf{a}}$ 53'19	
desc. node	13477 Sep 21 13:35	17° $\underline{\mathbf{a}}$ 33'57		evening set	13478 Aug 30 07:38	2° $\underline{\mathbf{a}}$ 29'11	
inferior conj	13477 Sep 24 03:21	15° $\underline{\mathbf{a}}$ 36'18	-0°48'46		13478 Sep 03 12:32	30° \mathbb{R} \mathbb{P}	
minimum elong	13477 Sep 24 01:28	15° $\underline{\mathbf{a}}$ 40'03	0°47'50	inferior conj	13478 Sep 06 06:44	27° \mathbb{P} 35'05	0°39'47
				minimum elong	13478 Sep 06 07:58	27° \mathbb{P} 32'14	0°39'11





































































































































desc. node	13478 Sep 08 11:05	25° \cap 33'28		inferior conj	13479 Aug 20 03:43	10° \cap 12'03	1°45'51
min. Earth dist.	13478 Sep 09 12:08	24° \cap 37'11	0.60220 AU	minimum elong	13479 Aug 20 06:09	10° \cap 05'38	1°44'39
morning rise	13478 Sep 13 05:08	21° \cap 46'42		min. Earth dist.	13479 Aug 23 00:03	7° \cap 13'06	0.62496 AU
direct	13478 Sep 19 18:19	19° \cap 42'25		desc. node	13479 Aug 26 08:38	4° \cap 13'16	
morning max el	13478 Oct 04 01:36	27° \cap 35'20	27°51'25	morning rise	13479 Aug 26 14:12	4° \cap 02'59	
	13478 Oct 06 09:20	0° $\underline{\cap}$		direct	13479 Sep 02 06:33	1° \cap 37'18	
	13478 Oct 26 23:40	0° \cap		morning max el	13479 Sep 16 08:34	9° \cap 38'47	27°55'44
asc. node	13478 Nov 02 13:01	12° \cap 26'43			13479 Oct 02 05:02	0° $\underline{\cap}$	
morning set	13478 Nov 05 13:36	18° \cap 38'39			13479 Oct 19 05:59	0° \cap	
	13478 Nov 10 19:52	0° \nearrow		asc. node	13479 Oct 20 09:42	2° \cap 19'50	
max. Earth dist.	13478 Nov 11 15:21	1° \nearrow 47'49	1.31290 AU	morning set	13479 Oct 20 12:15	2° \cap 32'47	
				max. Earth dist.	13479 Oct 25 19:12	13° \cap 40'18	1.31876 AU
superior conj	13478 Nov 12 16:57	4° \nearrow 10'03	1°23'30	superior conj	13479 Oct 28 01:55	18° \cap 38'22	1°07'40
minimum elong	13478 Nov 12 14:59	3° \nearrow 59'06	1°24'10	minimum elong	13479 Oct 27 23:39	18° \cap 25'53	1°08'01
evening rise	13478 Nov 19 09:41	18° \nearrow 57'41			13479 Nov 02 05:51	0° \nearrow	
	13478 Nov 24 17:27	0° \searrow		evening rise	13479 Nov 03 20:32	3° \nearrow 29'58	
desc. node	13478 Dec 05 07:56	18° \searrow 35'41			13479 Nov 17 20:56	0° \searrow	
	13478 Dec 13 23:16	0° \approx		desc. node	13479 Nov 22 05:07	6° \searrow 15'37	
evening max el	13478 Dec 17 01:49	3° \approx 12'17	25°45'12	evening max el	13479 Nov 28 13:50	13° \searrow 32'39	24°11'45
retrograde	13478 Dec 30 23:32	10° \approx 13'36		retrograde	13479 Dec 12 05:16	20° \searrow 20'34	
evening set	13479 Jan 06 01:44	8° \approx 47'21		evening set	13479 Dec 17 05:52	19° \searrow 25'16	
min. Earth dist.	13479 Jan 10 14:27	6° \approx 09'47	0.57528 AU	min. Earth dist.	13479 Dec 23 01:17	16° \searrow 30'59	0.55800 AU
inferior conj	13479 Jan 13 13:26	4° \approx 06'37	-4°40'27	inferior conj	13479 Dec 25 05:10	15° \searrow 11'45	-5°40'09
minimum elong	13479 Jan 13 22:15	3° \approx 51'17	4°37'11	minimum elong	13479 Dec 25 11:07	15° \searrow 02'38	5°38'21
	13479 Jan 21 02:11	30° κ \searrow		morning rise	13480 Jan 02 18:18	11° \searrow 12'44	
morning rise	13479 Jan 21 21:32	29° \searrow 47'46		direct	13480 Jan 05 06:11	10° \searrow 56'33	
direct	13479 Jan 24 00:05	29° \searrow 34'00		morning max el	13480 Jan 15 11:46	15° \searrow 51'28	19°53'08
	13479 Jan 26 19:39	0° \approx		asc. node	13480 Jan 16 09:30	16° \searrow 46'02	
asc. node	13479 Jan 29 12:12	1° \approx 14'45			13480 Jan 25 15:53	0° \approx	
morning max el	13479 Feb 01 18:20	3° \approx 50'18	18°49'48	morning set	13480 Feb 02 06:01	14° \approx 36'44	
morning set	13479 Feb 18 01:21	0° \searrow 03'03			13480 Feb 09 20:11	0° \searrow	
	13479 Feb 18 00:44	0° \searrow					
superior conj	13479 Feb 26 16:07	16° \searrow 45'37	0°37'22	superior conj	13480 Feb 10 01:29	0° \searrow 26'19	1°02'51
minimum elong	13479 Feb 26 18:23	16° \searrow 56'22	0°37'21	minimum elong	13480 Feb 10 04:15	0° \searrow 40'03	1°03'03
desc. node	13479 Mar 03 08:53	25° \searrow 27'18		max. Earth dist.	13480 Feb 16 01:55	12° \searrow 03'22	1.37213 AU
	13479 Mar 05 21:58	0° Υ		desc. node	13480 Feb 18 05:26	16° \searrow 01'04	
max. Earth dist.	13479 Mar 05 19:40	29° \searrow 49'51	1.39455 AU	evening rise	13480 Feb 19 19:34	18° \searrow 53'08	
evening rise	13479 Mar 09 17:48	6° Υ 36'55			13480 Feb 26 06:30	0° Υ	
	13479 Mar 24 13:01	0° \searrow			13480 Mar 17 17:25	0° \searrow	
evening max el	13479 Apr 13 17:55	25° \searrow 52'13	24°13'26	evening max el	13480 Mar 26 07:27	9° \searrow 44'52	25°29'20
	13479 Apr 18 13:24	0° \cap		retrograde	13480 Apr 07 14:21	16° \searrow 50'48	
retrograde	13479 Apr 25 01:15	2° \cap 30'14		asc. node	13480 Apr 13 06:10	14° \searrow 36'27	
asc. node	13479 Apr 27 08:47	2° \cap 06'21		evening set	13480 Apr 13 12:13	14° \searrow 23'57	
evening set	13479 Apr 30 11:41	0° \cap 12'40		min. Earth dist.	13480 Apr 17 19:57	9° \searrow 39'53	0.67753 AU
	13479 Apr 30 17:27	30° κ \searrow		inferior conj	13480 Apr 19 05:02	7° \searrow 53'24	1°45'39
min. Earth dist.	13479 May 05 02:34	24° \searrow 52'58	0.68555 AU	minimum elong	13480 Apr 19 02:58	8° \searrow 00'04	1°44'26
inferior conj	13479 May 05 23:15	23° \searrow 43'04	2°22'48	morning rise	13480 Apr 24 18:10	2° \searrow 01'25	
minimum elong	13479 May 05 21:08	23° \searrow 50'13	2°21'29	direct	13480 Apr 28 05:37	0° \searrow 52'01	
morning rise	13479 May 11 06:41	17° \searrow 41'55		morning max el	13480 May 05 03:08	4° \searrow 37'22	19°05'58
direct	13479 May 15 05:42	16° \searrow 12'35		desc. node	13480 May 16 07:37	19° \searrow 08'49	
morning max el	13479 May 22 21:47	20° \searrow 30'55	20°05'55	greatest brilliancy	13480 May 18 04:22	21° \searrow 55'16	-0.7m
desc. node	13479 May 30 10:47	29° \searrow 33'30			13480 May 23 12:02	0° \cap	
	13479 May 30 18:38	0° \cap		morning set	13480 May 28 16:21	7° \cap 58'32	
morning set	13479 Jun 19 11:57	29° \cap 06'43		max. Earth dist.	13480 Jun 11 07:05	29° \cap 08'49	1.45436 AU
	13479 Jun 20 01:48	0° \searrow			13480 Jun 11 20:08	0° \searrow	
max. Earth dist.	13479 Jun 29 14:57	14° \searrow 57'10	1.44307 AU				
superior conj	13479 Jul 05 06:19	24° \searrow 02'39	-2°04'11	superior conj	13480 Jun 14 01:42	3° \searrow 30'43	-2°13'36
minimum elong	13479 Jul 05 12:19	24° \searrow 27'12	2°04'50	minimum elong	13480 Jun 14 01:38	3° \searrow 30'28	2°14'38
	13479 Jul 08 21:10	0° \searrow		evening rise	13480 Jun 28 20:09	27° \searrow 14'15	
evening rise	13479 Jul 18 08:16	16° \searrow 01'09			13480 Jun 30 12:41	0° \searrow	
asc. node	13479 Jul 24 07:46	26° \searrow 14'34		asc. node	13480 Jul 10 04:34	15° \searrow 32'03	
	13479 Jul 26 14:00	0° \cap		evening max el	13480 Jul 18 07:38	26° \searrow 14'35	18°21'32
evening max el	13479 Aug 04 17:38	12° \cap 40'17	18°04'32	retrograde	13480 Jul 24 17:02	29° \searrow 39'16	
retrograde	13479 Aug 11 03:38	16° \cap 00'47		evening set	13480 Jul 27 17:52	28° \searrow 48'24	
evening set	13479 Aug 13 19:50	15° \cap 24'34		inferior conj	13480 Aug 02 14:14	23° \searrow 19'20	2°30'55
				minimum elong	13480 Aug 02 16:34	23° \searrow 12'29	2°29'41

min. Earth dist.	13480 Aug 04 21:21	20° Ω 38'42	0.64587 AU	minimum elong	13481 Jul 17 12:06	6° Ω 43'57	2°57'10
morning rise	13480 Aug 08 13:55	16° Ω 59'15		min. Earth dist.	13481 Jul 19 03:03	4° Ω 40'39	0.66338 AU
desc. node	13480 Aug 12 06:07	14° Ω 51'06		morning rise	13481 Jul 23 01:25	0° Ω 24'55	
direct	13480 Aug 15 03:29	14° Ω 21'25			13481 Jul 23 13:24	30° \mathcal{R} \mathfrak{S}	
morning max el	13480 Aug 28 18:45	22° Ω 19'36	27°24'22	direct	13481 Jul 29 07:34	27° \mathfrak{S} 44'55	
	13480 Sep 04 12:43	0° \mathfrak{M}		desc. node	13481 Jul 30 03:32	27° \mathfrak{S} 47'28	
	13480 Sep 24 10:47	0° $\underline{\mathfrak{A}}$			13481 Aug 04 19:04	0° Ω	
morning set	13480 Oct 03 02:06	16° $\underline{\mathfrak{A}}$ 00'05		morning max el	13481 Aug 11 05:52	5° Ω 26'13	26°24'35
asc. node	13480 Oct 06 06:20	22° $\underline{\mathfrak{A}}$ 21'40			13481 Aug 30 02:41	0° \mathfrak{M}	
max. Earth dist.	13480 Oct 07 15:30	25° $\underline{\mathfrak{A}}$ 12'08	1.33006 AU	morning set	13481 Sep 16 03:55	28° \mathfrak{M} 52'15	
	13480 Oct 09 22:27	0° \mathfrak{M}			13481 Sep 16 18:19	0° $\underline{\mathfrak{A}}$	
				max. Earth dist.	13481 Sep 20 02:00	6° $\underline{\mathfrak{A}}$ 23'44	1.34650 AU
superior conj	13480 Oct 11 06:36	2° \mathfrak{M} 51'03	0°46'13	asc. node	13481 Sep 23 02:56	12° $\underline{\mathfrak{A}}$ 27'32	
minimum elong	13480 Oct 11 04:35	2° \mathfrak{M} 40'13	0°46'19				
evening rise	13480 Oct 18 07:32	18° \mathfrak{M} 00'41		superior conj	13481 Sep 25 04:30	16° $\underline{\mathfrak{A}}$ 41'01	0°19'26
	13480 Oct 24 03:54	0° \mathfrak{X}		minimum elong	13481 Sep 25 03:27	16° $\underline{\mathfrak{A}}$ 35'35	0°19'25
desc. node	13480 Nov 08 02:22	22° \mathfrak{X} 38'16			13481 Oct 01 13:11	0° \mathfrak{M}	
evening max el	13480 Nov 09 00:21	23° \mathfrak{X} 33'37	22°29'29	evening rise	13481 Oct 02 16:42	2° \mathfrak{M} 24'02	
retrograde	13480 Nov 21 22:05	29° \mathfrak{X} 57'32			13481 Oct 18 08:38	0° \mathfrak{X}	
evening set	13480 Nov 25 13:38	29° \mathfrak{X} 28'25		evening max el	13481 Oct 21 18:41	3° \mathfrak{X} 51'47	20°55'37
min. Earth dist.	13480 Dec 03 07:58	25° \mathfrak{X} 59'06	0.54737 AU	desc. node	13481 Oct 25 23:42	7° \mathfrak{X} 17'38	
inferior conj	13480 Dec 04 03:25	25° \mathfrak{X} 31'41	-5°55'09	retrograde	13481 Nov 02 08:44	9° \mathfrak{X} 37'16	
minimum elong	13480 Dec 04 01:08	25° \mathfrak{X} 34'54	5°54'02	evening set	13481 Nov 04 19:43	9° \mathfrak{X} 22'51	
morning rise	13480 Dec 12 13:52	21° \mathfrak{X} 44'06		inferior conj	13481 Nov 13 18:46	5° \mathfrak{X} 29'02	-5°10'35
direct	13480 Dec 15 20:06	21° \mathfrak{X} 20'01		minimum elong	13481 Nov 13 09:27	5° \mathfrak{X} 42'16	5°07'41
morning max el	13480 Dec 27 14:39	26° \mathfrak{X} 57'41	21°19'17	min. Earth dist.	13481 Nov 14 14:01	5° \mathfrak{X} 01'39	0.54545 AU
	13480 Dec 30 11:28	0° \mathfrak{Z}		morning rise	13481 Nov 21 23:27	1° \mathfrak{X} 35'55	
asc. node	13481 Jan 02 06:43	3° \mathfrak{Z} 33'36		direct	13481 Nov 26 03:46	0° \mathfrak{X} 58'30	
morning set	13481 Jan 16 15:10	29° \mathfrak{Z} 19'50		morning max el	13481 Dec 09 05:10	7° \mathfrak{X} 17'12	23°03'16
	13481 Jan 16 22:52	0° \approx		asc. node	13481 Dec 20 03:49	21° \mathfrak{X} 20'45	
					13481 Dec 25 02:49	0° \mathfrak{Z}	
superior conj	13481 Jan 23 21:30	14° \approx 35'03	1°21'13	morning set	13482 Jan 01 02:37	14° \mathfrak{Z} 06'15	
minimum elong	13481 Jan 23 23:51	14° \approx 47'13	1°21'46				
max. Earth dist.	13481 Jan 28 12:21	23° \approx 57'59	1.35157 AU	superior conj	13482 Jan 08 00:58	29° \mathfrak{Z} 02'53	1°32'45
	13481 Jan 31 14:47	0° \mathfrak{X}		minimum elong	13482 Jan 08 02:25	29° \mathfrak{Z} 10'38	1°33'37
evening rise	13481 Feb 01 14:18	1° \mathfrak{X} 51'28			13482 Jan 08 11:38	0° \approx	
desc. node	13481 Feb 04 02:02	6° \mathfrak{X} 28'08		max. Earth dist.	13482 Jan 11 06:03	5° \approx 51'28	1.33453 AU
	13481 Feb 18 07:02	0° \mathfrak{Y}		evening rise	13482 Jan 15 22:26	15° \approx 22'53	
evening max el	13481 Mar 08 21:18	23° \mathfrak{Y} 32'46	26°32'48	desc. node	13482 Jan 21 22:41	26° \approx 44'12	
	13481 Mar 17 18:37	0° \mathfrak{B}			13482 Jan 23 18:41	0° \mathfrak{X}	
retrograde	13481 Mar 21 22:02	0° \mathfrak{B} 54'25			13482 Feb 12 22:39	0° \mathfrak{Y}	
	13481 Mar 25 18:18	30° \mathfrak{R} \mathfrak{Y}		evening max el	13482 Feb 19 10:46	7° \mathfrak{Y} 05'51	27°16'30
evening set	13481 Mar 28 06:29	28° \mathfrak{Y} 22'37		retrograde	13482 Mar 04 23:32	14° \mathfrak{Y} 33'05	
asc. node	13481 Mar 31 03:36	25° \mathfrak{Y} 35'25		evening set	13482 Mar 11 16:27	12° \mathfrak{Y} 02'02	
min. Earth dist.	13481 Apr 01 08:19	24° \mathfrak{Y} 13'16	0.66533 AU	min. Earth dist.	13482 Mar 15 13:33	8° \mathfrak{Y} 25'21	0.64929 AU
inferior conj	13481 Apr 03 05:47	21° \mathfrak{Y} 56'49	0°57'41	inferior conj	13482 Mar 17 23:05	5° \mathfrak{Y} 47'34	-0°01'35
minimum elong	13481 Apr 03 04:23	22° \mathfrak{Y} 01'03	0°56'52	minimum elong	13482 Mar 17 23:08	5° \mathfrak{Y} 47'26	0°01'33
morning rise	13481 Apr 09 03:18	16° \mathfrak{Y} 15'48		transit middle	13482 Mar 17 23:08	5° \mathfrak{Y} 47'26	0°01'33
direct	13481 Apr 12 04:15	15° \mathfrak{Y} 24'08		transit begin	13482 Mar 17 20:06	5° \mathfrak{Y} 55'47	
morning max el	13481 Apr 18 15:05	18° \mathfrak{Y} 49'21	18°22'20	transit end	13482 Mar 18 02:09	5° \mathfrak{Y} 39'06	
	13481 Apr 27 06:38	0° \mathfrak{B}		asc. node	13482 Mar 18 01:03	5° \mathfrak{Y} 42'09	
desc. node	13481 May 03 04:20	9° \mathfrak{B} 07'01		morning rise	13482 Mar 24 07:35	0° \mathfrak{Y} 19'51	
morning set	13481 May 08 17:19	17° \mathfrak{B} 53'43			13482 Mar 25 04:04	30° \mathfrak{R} \mathfrak{X}	
	13481 May 16 09:01	0° \mathfrak{I}		direct	13482 Mar 26 23:16	29° \mathfrak{X} 42'54	
					13482 Mar 28 18:36	0° \mathfrak{Y}	
superior conj	13481 May 24 09:40	12° \mathfrak{I} 34'44	-2°03'01	morning max el	13482 Apr 02 07:24	3° \mathfrak{Y} 00'16	17°55'41
minimum elong	13481 May 24 02:24	12° \mathfrak{I} 06'21	2°03'33	morning set	13482 Apr 19 22:38	29° \mathfrak{Y} 12'12	
max. Earth dist.	13481 May 25 02:52	13° \mathfrak{I} 41'53	1.45847 AU	desc. node	13482 Apr 20 00:57	29° \mathfrak{Y} 21'49	
	13481 Jun 04 13:25	0° \mathfrak{S}			13482 Apr 20 10:11	0° \mathfrak{B}	
evening rise	13481 Jun 09 07:29	7° \mathfrak{S} 26'51					
greatest brilliancy	13481 Jun 19 03:42	22° \mathfrak{S} 49'02	-0.8m	superior conj	13482 May 03 23:48	22° \mathfrak{B} 01'56	-1°34'32
	13481 Jun 23 22:27	0° Ω		minimum elong	13482 May 03 14:51	21° \mathfrak{B} 26'23	1°34'21
asc. node	13481 Jun 27 01:27	4° Ω 22'24		max. Earth dist.	13482 May 07 23:11	28° \mathfrak{B} 18'32	1.45505 AU
evening max el	13481 Jul 01 18:38	9° Ω 57'52	18°55'53		13482 May 09 01:04	0° \mathfrak{I}	
retrograde	13481 Jul 08 12:18	13° Ω 40'03		evening rise	13482 May 19 23:58	16° \mathfrak{I} 57'56	
evening set	13481 Jul 11 22:03	12° Ω 33'01			13482 May 28 13:24	0° \mathfrak{S}	
inferior conj	13481 Jul 17 10:32	6° Ω 48'56	2°58'17	greatest brilliancy	13482 Jun 03 07:20	8° \mathfrak{S} 32'53	-0.6m

asc. node	13482 Jun 13 22:24	22°☿36'44		evening max el	13483 May 29 00:43	7°☿33'42	20°51'16
evening max el	13482 Jun 15 00:36	23°☿45'11	19°46'27	asc. node	13483 May 31 19:29	10°☿03'10	
retrograde	13482 Jun 22 10:33	27°☿57'08		retrograde	13483 Jun 06 09:32	12°☿24'54	
evening set	13482 Jun 26 05:44	26°☿33'20		evening set	13483 Jun 10 14:50	10°☿44'30	
inferior conj	13482 Jul 01 13:34	20°☿35'43	3°10'57	inferior conj	13483 Jun 15 20:52	4°☿34'59	3°11'13
minimum elong	13482 Jul 01 14:08	20°☿33'51	3°09'54	minimum elong	13483 Jun 15 20:24	4°☿36'35	3°10'09
min. Earth dist.	13482 Jul 02 15:41	19°☿08'10	0.67664 AU	min. Earth dist.	13483 Jun 16 09:14	3°☿52'08	0.68521 AU
morning rise	13482 Jul 06 22:08	14°☿12'31			13483 Jun 19 09:01	30°☿II	
direct	13482 Jul 12 17:49	11°☿39'05		morning rise	13483 Jun 21 01:43	28°II15'45	
desc. node	13482 Jul 17 00:52	12°☿47'12		direct	13483 Jun 26 09:19	25°II55'42	
morning max el	13482 Jul 24 16:32	18°☿48'43	25°05'28	desc. node	13483 Jul 03 22:05	29°II23'33	
	13482 Aug 03 03:44	0°☿			13483 Jul 04 15:23	0°☿	
	13482 Aug 23 04:29	0°☿		morning max el	13483 Jul 07 02:56	2°☿20'16	23°36'55
morning set	13482 Aug 29 13:46	11°☿00'08			13483 Jul 28 04:19	0°☿	
max. Earth dist.	13482 Sep 02 03:38	17°☿30'00	1.36724 AU	morning set	13483 Aug 11 03:07	22°☿13'19	
				max. Earth dist.	13483 Aug 15 01:18	28°☿58'11	1.39048 AU
					13483 Aug 15 15:23	0°☿	
superior conj	13482 Sep 08 16:39	0°☿00'58	-0°12'00	superior conj	13483 Aug 22 15:27	12°☿43'04	-0°46'28
minimum elong	13482 Sep 08 17:25	0°☿04'45	0°11'57	minimum elong	13483 Aug 22 18:48	12°☿58'46	0°46'17
behind sun begin	13482 Sep 08 13:02	29°☿43'06		asc. node	13483 Aug 27 20:04	22°☿37'17	
behind sun end	13482 Sep 08 21:49	0°☿26'26		evening rise	13483 Aug 31 20:07	0°☿24'40	
	13482 Sep 08 16:27	0°☿			13483 Aug 31 15:03	0°☿	
asc. node	13482 Sep 09 23:29	2°☿33'47		evening max el	13483 Sep 17 00:21	26°☿43'45	18°47'12
evening rise	13482 Sep 16 21:47	16°☿34'12			13483 Sep 21 09:54	0°☿	
	13482 Sep 23 19:32	0°☿		retrograde	13483 Sep 25 10:15	0°☿57'26	
evening max el	13482 Oct 04 02:46	14°☿53'04	19°40'30	evening set	13483 Sep 27 07:46	0°☿45'21	
desc. node	13482 Oct 12 21:08	19°☿47'02		desc. node	13483 Sep 29 18:37	29°☿56'41	
retrograde	13482 Oct 14 01:29	19°☿51'05			13483 Sep 29 15:36	30°☿☿	
evening set	13482 Oct 15 23:01	19°☿41'02		inferior conj	13483 Oct 05 11:34	26°☿24'06	-1°48'35
inferior conj	13482 Oct 24 17:51	15°☿37'40	-3°38'03	minimum elong	13483 Oct 05 07:03	26°☿32'18	1°46'25
minimum elong	13482 Oct 24 08:47	15°☿51'54	3°34'17	min. Earth dist.	13483 Oct 08 13:11	24°☿11'00	0.56840 AU
min. Earth dist.	13482 Oct 26 22:56	14°☿14'31	0.55287 AU	morning rise	13483 Oct 13 03:01	21°☿27'53	
morning rise	13482 Nov 01 16:45	11°☿18'20		direct	13483 Oct 18 22:35	20°☿05'54	
direct	13482 Nov 06 18:02	10°☿21'42		morning max el	13483 Nov 02 04:15	27°☿29'12	26°26'24
morning max el	13482 Nov 20 15:00	17°☿16'25	24°51'50		13483 Nov 04 15:10	0°☿	
	13482 Dec 01 00:03	0°☿		asc. node	13483 Nov 23 21:45	28°☿57'09	
asc. node	13482 Dec 07 00:50	9°☿52'24			13483 Nov 24 10:55	0°☿	
morning set	13482 Dec 16 14:28	28°☿49'45		morning set	13483 Dec 01 01:01	13°☿25'41	
	13482 Dec 17 03:31	0°☿					
superior conj	13482 Dec 23 09:14	13°☿41'29	1°37'51	superior conj	13483 Dec 07 20:09	28°☿24'30	1°36'53
minimum elong	13482 Dec 23 09:35	13°☿43'26	1°38'54	minimum elong	13483 Dec 07 19:26	28°☿20'32	1°37'54
max. Earth dist.	13482 Dec 25 07:01	17°☿51'57	1.32195 AU	max. Earth dist.	13483 Dec 08 13:19	0°☿00'06	1.31437 AU
evening rise	13482 Dec 30 16:43	29°☿18'34			13483 Dec 08 13:18	0°☿	
	13482 Dec 31 00:49	0°☿		evening rise	13483 Dec 14 18:27	13°☿32'02	
desc. node	13483 Jan 08 19:25	16°☿43'09			13483 Dec 23 02:43	0°☿	
	13483 Jan 16 21:11	0°☿		desc. node	13483 Dec 26 16:16	6°☿17'59	
evening max el	13483 Feb 01 22:12	20°☿11'32	27°33'35		13484 Jan 12 14:50	0°☿	
retrograde	13483 Feb 15 18:07	27°☿36'34		evening max el	13484 Jan 15 05:31	2°☿38'13	27°18'26
evening set	13483 Feb 22 15:38	25°☿13'29		retrograde	13484 Jan 29 04:36	9°☿55'28	
min. Earth dist.	13483 Feb 26 09:50	22°☿05'21	0.63004 AU	evening set	13484 Feb 05 01:02	7°☿48'48	
inferior conj	13483 Mar 01 06:02	19°☿17'37	-1°12'05	min. Earth dist.	13484 Feb 08 20:05	5°☿01'54	0.60870 AU
minimum elong	13483 Mar 01 08:25	19°☿11'44	1°10'48	inferior conj	13484 Feb 11 23:18	2°☿18'47	-2°31'58
asc. node	13483 Mar 04 22:31	15°☿57'34		minimum elong	13484 Feb 12 04:43	2°☿06'58	2°29'17
morning rise	13483 Mar 08 03:45	14°☿05'50			13484 Feb 14 18:24	30°☿☿	
direct	13483 Mar 10 11:41	13°☿40'06		morning rise	13484 Feb 19 11:31	27°☿25'38	
morning max el	13483 Mar 17 01:10	17°☿00'56	17°46'20	asc. node	13484 Feb 19 19:58	27°☿20'06	
	13483 Mar 26 09:13	0°☿		direct	13484 Feb 21 14:00	27°☿07'25	
morning set	13483 Apr 02 05:18	11°☿42'35			13484 Feb 27 23:02	0°☿	
desc. node	13483 Apr 06 21:29	19°☿47'28		morning max el	13484 Feb 28 17:04	0°☿42'07	17°55'09
	13483 Apr 12 22:23	0°☿		morning set	13484 Mar 15 07:16	25°☿06'46	
superior conj	13483 Apr 14 09:46	2°☿26'40	-0°56'13		13484 Mar 17 23:39	0°☿	
minimum elong	13483 Apr 14 04:09	2°☿03'27	0°55'53	desc. node	13484 Mar 23 17:59	10°☿20'06	
max. Earth dist.	13483 Apr 20 17:01	12°☿40'29	1.44448 AU				
evening rise	13483 Apr 29 11:20	26°☿23'57		superior conj	13484 Mar 25 19:55	13°☿58'30	-0°16'25
	13483 May 01 19:46	0°☿		minimum elong	13484 Mar 25 18:28	13°☿52'12	0°16'19
	13483 May 22 14:03	0°☿		max. Earth dist.	13484 Apr 02 06:46	26°☿34'11	1.42803 AU

	13484 Apr 04 09:12	0°♄		max. Earth dist.	13485 Mar 15 16:24	9°♄51'01	1.40741 AU
evening rise	13484 Apr 08 09:10	6°♄23'36		evening rise	13485 Mar 20 02:32	17°♄16'59	
	13484 Apr 24 01:38	0°♄			13485 Mar 28 02:11	0°♄	
evening max el	13484 May 10 19:34	21°♄22'57	22°06'36		13485 Apr 18 16:16	0°♄	
asc. node	13484 May 17 16:40	26°♄26'20		evening max el	13485 Apr 23 10:54	5°♄14'36	23°27'10
retrograde	13484 May 20 07:23	26°♄57'39		retrograde	13485 May 04 02:39	11°♄30'49	
evening set	13484 May 24 23:35	25°♄01'28		asc. node	13485 May 04 13:57	11°♄29'49	
inferior conj	13484 May 30 06:13	18°♄42'04	3°00'30	evening set	13485 May 09 06:25	9°♄20'23	
minimum elong	13484 May 30 04:53	18°♄46'42	2°59'19	min. Earth dist.	13485 May 14 02:14	3°♄39'58	0.68821 AU
min. Earth dist.	13484 May 30 05:29	18°♄44'37	0.68905 AU	inferior conj	13485 May 14 15:41	2°♄53'44	2°39'30
morning rise	13484 Jun 04 09:59	12°♄28'49		minimum elong	13485 May 14 13:45	3°♄00'22	2°38'13
direct	13484 Jun 09 04:52	10°♄26'50			13485 May 16 19:47	30°♄	
morning max el	13484 Jun 18 15:18	15°♄59'02	22°08'14	morning rise	13485 May 19 21:01	26°♄47'54	
desc. node	13484 Jun 19 19:12	17°♄11'15		direct	13485 May 24 03:14	25°♄06'24	
	13484 Jun 30 01:49	0°♄		morning max el	13485 Jun 01 08:59	29°♄48'37	20°47'05
	13484 Jul 20 04:40	0°♄			13485 Jun 01 13:32	0°♄	
morning set	13484 Jul 21 15:53	2°♄21'04		desc. node	13485 Jun 06 16:11	5°♄51'27	
max. Earth dist.	13484 Jul 27 01:34	11°♄12'44	1.41362 AU		13485 Jun 23 17:12	0°♄	
				morning set	13485 Jul 01 05:04	11°♄27'56	
superior conj	13484 Aug 03 20:31	24°♄36'48	-1°21'10	max. Earth dist.	13485 Jul 09 08:43	24°♄22'49	1.43384 AU
minimum elong	13484 Aug 04 02:35	25°♄03'40	1°21'02		13485 Jul 12 19:26	0°♄	
	13484 Aug 06 20:47	0°♄					
asc. node	13484 Aug 13 16:40	12°♄33'47		superior conj	13485 Jul 16 03:40	5°♄33'16	-1°51'22
evening rise	13484 Aug 14 08:08	13°♄45'44		minimum elong	13485 Jul 16 10:50	6°♄03'23	1°51'39
	13484 Aug 23 10:17	0°♄		evening rise	13485 Jul 28 05:25	26°♄26'43	
evening max el	13484 Aug 30 07:37	9°♄15'57	18°15'08		13485 Jul 30 05:41	0°♄	
retrograde	13484 Sep 06 14:10	12°♄57'25		asc. node	13485 Jul 31 13:21	2°♄19'26	
evening set	13484 Sep 08 17:49	12°♄38'41		evening max el	13485 Aug 13 20:21	22°♄19'35	18°02'54
desc. node	13484 Sep 15 16:09	8°♄19'27		retrograde	13485 Aug 20 10:44	25°♄43'37	
inferior conj	13484 Sep 16 03:04	7°♄56'22	-0°08'31	evening set	13485 Aug 22 22:16	25°♄14'32	
minimum elong	13484 Sep 16 02:46	7°♄57'01	0°08'22	inferior conj	13485 Aug 29 14:26	20°♄12'06	1°10'33
transit middle	13484 Sep 16 02:46	7°♄57'01	0°08'22	minimum elong	13485 Aug 29 16:23	20°♄07'19	1°09'36
transit begin	13484 Sep 15 23:48	8°♄03'17		min. Earth dist.	13485 Sep 01 16:38	17°♄11'28	0.61209 AU
transit end	13484 Sep 16 05:43	7°♄50'44		desc. node	13485 Sep 02 13:40	16°♄23'34	
min. Earth dist.	13484 Sep 19 10:27	5°♄08'55	0.58924 AU	morning rise	13485 Sep 05 07:46	14°♄13'54	
morning rise	13484 Sep 23 08:16	2°♄25'00		direct	13485 Sep 11 23:08	11°♄59'46	
direct	13484 Sep 29 17:05	0°♄35'25		morning max el	13485 Sep 26 04:28	19°♄56'26	27°57'54
morning max el	13484 Oct 14 00:42	8°♄19'02	27°31'08		13485 Oct 04 19:21	0°♄	
	13484 Oct 30 12:14	0°♄			13485 Oct 23 10:46	0°♄	
asc. node	13484 Nov 09 18:34	18°♄25'45		asc. node	13485 Oct 27 15:18	8°♄11'39	
morning set	13484 Nov 14 08:30	27°♄48'57		morning set	13485 Oct 29 11:01	11°♄55'14	
	13484 Nov 15 09:04	0°♄		max. Earth dist.	13485 Nov 04 04:31	24°♄11'46	1.31480 AU
superior conj	13484 Nov 21 07:47	13°♄05'46	1°30'03	superior conj	13485 Nov 05 18:17	27°♄40'15	1°17'29
minimum elong	13484 Nov 21 06:11	12°♄56'51	1°30'52	minimum elong	13485 Nov 05 16:07	27°♄28'18	1°18'00
max. Earth dist.	13484 Nov 20 21:42	12°♄09'25	1.31195 AU		13485 Nov 06 19:28	0°♄	
evening rise	13484 Nov 28 01:19	27°♄56'50		evening rise	13485 Nov 12 11:18	12°♄28'00	
	13484 Nov 29 00:26	0°♄			13485 Nov 21 04:26	0°♄	
desc. node	13484 Dec 12 13:16	25°♄18'56		desc. node	13485 Nov 29 10:22	13°♄33'09	
	13484 Dec 15 14:16	0°♄		evening max el	13485 Dec 08 22:17	25°♄00'25	25°07'39
evening max el	13484 Dec 27 06:09	14°♄15'32	26°28'35		13485 Dec 15 14:30	0°♄	
retrograde	13485 Jan 10 05:10	21°♄22'15		retrograde	13485 Dec 22 17:48	1°♄55'57	
evening set	13485 Jan 16 16:47	19°♄39'52		evening set	13485 Dec 28 10:38	0°♄42'53	
min. Earth dist.	13485 Jan 20 19:52	17°♄03'08	0.58697 AU		13485 Dec 29 23:55	30°♄	
inferior conj	13485 Jan 23 23:15	14°♄41'08	-3°55'27	min. Earth dist.	13486 Jan 02 10:16	28°♄00'44	0.56729 AU
minimum elong	13485 Jan 24 07:27	14°♄25'37	3°51'59	inferior conj	13486 Jan 05 02:52	26°♄15'09	-5°09'43
morning rise	13485 Feb 01 01:07	10°♄09'06		minimum elong	13486 Jan 05 11:11	26°♄01'30	5°06'58
direct	13485 Feb 03 02:02	9°♄54'42		morning rise	13486 Jan 13 14:05	22°♄05'13	
asc. node	13485 Feb 05 17:21	10°♄20'03		direct	13486 Jan 15 19:43	21°♄50'52	
morning max el	13485 Feb 11 03:23	13°♄53'15	18°23'45	asc. node	13486 Jan 23 14:43	24°♄59'23	
	13485 Feb 22 01:59	0°♄		morning max el	13486 Jan 25 04:01	26°♄22'30	19°14'01
morning set	13485 Feb 26 22:56	9°♄08'15			13486 Jan 28 09:13	0°♄	
				morning set	13486 Feb 10 23:48	23°♄33'01	
superior conj	13485 Mar 08 04:02	26°♄30'51	0°19'31		13486 Feb 14 05:27	0°♄	
minimum elong	13485 Mar 08 05:25	26°♄37'12	0°19'27				
	13485 Mar 10 02:01	0°♄		superior conj	13486 Feb 19 05:28	9°♄50'12	0°49'04
desc. node	13485 Mar 10 14:31	0°♄56'18		minimum elong	13486 Feb 19 08:06	10°♄02'52	0°49'06

desc. node	13486 Feb 25 11:03	21° K 31'50			13487 Feb 05 23:03	0° K	
max. Earth dist.	13486 Feb 25 23:10	22° K 26'41	1.38488 AU	max. Earth dist.	13487 Feb 08 06:36	4° K 29'39	1.36297 AU
evening rise	13486 Mar 01 16:59	29° K 04'15		evening rise	13487 Feb 12 02:22	11° K 39'17	
	13486 Mar 02 05:52	0° Y		desc. node	13487 Feb 12 07:38	12° K 03'20	
	13486 Mar 21 11:24	0° B			13487 Feb 22 19:34	0° Y	
evening max el	13486 Apr 06 00:34	19° B 07'16	24°46'44		13487 Mar 16 17:17	0° B	
retrograde	13486 Apr 17 18:13	25° B 57'58		evening max el	13487 Mar 19 13:58	2° B 57'54	25°58'12
asc. node	13486 Apr 21 11:18	24° B 57'49		retrograde	13487 Apr 01 05:08	10° B 12'26	
evening set	13486 Apr 23 09:42	23° B 35'50		evening set	13487 Apr 07 07:47	7° B 42'30	
min. Earth dist.	13486 Apr 27 21:20	18° B 31'41	0.68274 AU	asc. node	13487 Apr 08 08:42	6° B 46'33	
inferior conj	13486 Apr 28 23:20	17° B 05'27	2°08'19	min. Earth dist.	13487 Apr 11 12:45	3° B 13'38	0.67285 AU
minimum elong	13486 Apr 28 21:11	17° B 12'37	2°07'02	inferior conj	13487 Apr 13 03:13	1° B 13'09	1°26'40
morning rise	13486 May 04 08:54	11° B 08'15		minimum elong	13487 Apr 13 01:21	1° B 19'01	1°25'35
direct	13486 May 08 02:57	9° B 47'33			13487 Apr 14 02:47	30° R Y	
morning max el	13486 May 15 10:04	13° B 49'50	19°38'33	morning rise	13487 Apr 18 19:37	25° Y 25'51	
desc. node	13486 May 24 13:05	25° B 09'33		direct	13487 Apr 22 02:24	24° Y 24'28	
	13486 May 27 22:00	0° II		morning max el	13487 Apr 28 18:30	27° Y 59'43	18°45'24
greatest brilliancy	13486 May 28 02:27	0° II 16'19	-0.6m		13487 Apr 30 15:50	0° B	
morning set	13486 Jun 10 06:34	20° II 08'23		desc. node	13487 May 11 09:51	14° B 55'24	
	13486 Jun 16 15:35	0° B		morning set	13487 May 20 17:45	29° B 21'54	
max. Earth dist.	13486 Jun 21 22:25	8° B 17'25	1.44879 AU		13487 May 21 03:32	0° II	
				max. Earth dist.	13487 Jun 04 16:15	22° II 39'35	1.45702 AU
superior conj	13486 Jun 26 10:56	15° B 29'23	-2°10'26	superior conj	13487 Jun 05 23:34	24° II 42'03	-2°11'37
minimum elong	13486 Jun 26 14:56	15° B 45'27	2°11'19	minimum elong	13487 Jun 05 20:07	24° II 28'34	2°12'33
	13486 Jul 05 08:20	0° Q			13487 Jun 09 08:39	0° B	
evening rise	13486 Jul 10 06:49	8° Q 14'52		evening rise	13487 Jun 21 08:11	19° B 01'42	
asc. node	13486 Jul 18 10:04	21° Q 48'51		greatest brilliancy	13487 Jun 27 12:28	28° B 55'58	-0.9m
	13486 Jul 23 17:57	0° P			13487 Jun 28 04:32	0° Q	
evening max el	13486 Jul 28 10:44	5° P 44'41	18°09'30	asc. node	13487 Jul 05 06:52	10° Q 55'51	
retrograde	13486 Aug 03 19:21	9° P 05'29		evening max el	13487 Jul 11 23:39	19° Q 23'13	18°34'01
evening set	13486 Aug 06 15:11	8° P 23'15		retrograde	13487 Jul 18 11:43	22° Q 54'09	
inferior conj	13486 Aug 12 17:41	3° P 03'08	2°07'20	evening set	13487 Jul 21 16:10	21° Q 56'43	
minimum elong	13486 Aug 12 20:11	2° P 56'11	2°06'06	inferior conj	13487 Jul 27 08:46	16° Q 21'00	2°44'30
min. Earth dist.	13486 Aug 15 08:34	0° P 10'08	0.63420 AU	minimum elong	13487 Jul 27 10:50	16° Q 14'44	2°43'19
	13486 Aug 15 12:23	30° R Q		min. Earth dist.	13487 Jul 29 09:45	13° Q 52'34	0.65377 AU
morning rise	13486 Aug 18 23:22	26° Q 48'12		morning rise	13487 Aug 02 04:24	9° Q 58'12	
desc. node	13486 Aug 20 11:10	25° Q 47'18		desc. node	13487 Aug 07 08:37	7° Q 24'04	
direct	13486 Aug 25 15:00	24° Q 16'31		direct	13487 Aug 08 15:09	7° Q 18'12	
	13486 Sep 06 03:01	0° P		morning max el	13487 Aug 22 00:22	15° Q 11'54	27°01'52
morning max el	13486 Sep 08 13:22	2° P 17'57	27°46'26		13487 Sep 03 03:38	0° P	
	13486 Sep 29 03:13	0° A			13487 Sep 21 21:22	0° A	
morning set	13486 Oct 13 06:18	25° A 39'11		morning set	13487 Sep 26 15:27	8° A 52'54	
asc. node	13486 Oct 14 11:59	28° A 09'20		max. Earth dist.	13487 Sep 30 22:03	17° A 19'58	1.33641 AU
	13486 Oct 15 09:34	0° M		asc. node	13487 Oct 01 08:34	18° A 13'26	
max. Earth dist.	13486 Oct 18 05:50	5° M 57'36	1.32294 AU				
superior conj	13486 Oct 21 01:42	12° M 02'46	0°59'14	superior conj	13487 Oct 05 03:47	26° A 06'31	0°35'28
minimum elong	13486 Oct 20 23:27	11° M 50'33	0°59'28	minimum elong	13487 Oct 05 02:05	25° A 57'30	0°35'30
evening rise	13486 Oct 27 22:28	27° M 00'36			13487 Oct 06 23:50	0° M	
	13486 Oct 29 08:07	0° J		evening rise	13487 Oct 12 08:54	11° M 28'41	
	13486 Nov 15 17:30	0° B			13487 Oct 21 19:36	0° J	
desc. node	13486 Nov 16 07:34	0° B 43'24		evening max el	13487 Nov 01 21:02	15° J 11'30	21°47'43
evening max el	13486 Nov 20 08:26	5° B 07'51	23°28'08	desc. node	13487 Nov 03 04:51	16° J 25'42	
retrograde	13486 Dec 03 17:53	11° B 47'46		retrograde	13487 Nov 14 07:20	21° J 21'26	
evening set	13486 Dec 08 05:02	11° B 04'25		evening set	13487 Nov 17 08:59	21° J 00'14	
min. Earth dist.	13486 Dec 14 18:37	7° B 57'30	0.55249 AU	inferior conj	13487 Nov 26 03:59	17° J 06'11	-5°43'34
inferior conj	13486 Dec 16 10:20	6° B 59'25	-5°53'19	minimum elong	13487 Nov 25 22:01	17° J 14'32	5°41'52
minimum elong	13486 Dec 16 13:15	6° B 55'09	5°52'07	min. Earth dist.	13487 Nov 26 00:53	17° J 10'31	0.54535 AU
morning rise	13486 Dec 24 23:11	3° B 07'16		morning rise	13487 Dec 04 12:01	13° J 18'33	
direct	13486 Dec 27 17:56	2° B 48'31		direct	13487 Dec 08 03:12	12° J 49'39	
morning max el	13487 Jan 07 15:27	8° B 00'56	20°27'16	morning max el	13487 Dec 20 12:36	18° J 45'50	22°01'57
asc. node	13487 Jan 10 11:59	11° B 05'30		asc. node	13487 Dec 28 09:09	28° J 20'22	
	13487 Jan 22 04:52	0° A			13487 Dec 29 11:25	0° B	
morning set	13487 Jan 26 06:40	8° A 11'45		morning set	13488 Jan 10 16:59	22° B 56'32	
					13488 Jan 14 00:39	0° A	
superior conj	13487 Feb 02 19:50	23° A 44'26	1°11'30	superior conj	13488 Jan 17 19:22	8° A 02'13	1°26'55
minimum elong	13487 Feb 02 22:30	23° A 57'57	1°11'51				

minimum elong	13488 Jan 17 21:22	8°  12'47	1°27'37			13488 Dec 21 12:15	0° 	
max. Earth dist.	13488 Jan 21 19:26	16°  19'44	1.34377 AU	morning set		13488 Dec 25 04:47	7°  41'59	
evening rise	13488 Jan 26 03:11	24°  52'33						
	13488 Jan 28 20:22	0° 		superior conj		13489 Jan 01 01:08	22°  35'18	1°35'40
desc. node	13488 Jan 30 04:15	2°  26'11		minimum elong		13489 Jan 01 02:08	22°  40'41	1°36'38
	13488 Feb 16 07:54	0° 		max. Earth dist.		13489 Jan 03 16:17	28°  15'08	1.32863 AU
evening max el	13488 Mar 01 03:37	16°  40'07	26°54'17			13489 Jan 04 12:03	0° 	
retrograde	13488 Mar 14 10:32	24°  06'14		evening rise		13489 Jan 08 16:02	8°  35'22	
evening set	13488 Mar 20 22:48	21°  33'54		desc. node		13489 Jan 16 00:56	22°  35'41	
min. Earth dist.	13488 Mar 24 22:23	17°  38'42	0.65886 AU			13489 Jan 20 07:36	0° 	
asc. node	13488 Mar 25 06:08	17°  16'36		evening max el		13489 Feb 11 16:38	0°  03'34	27°27'33
inferior conj	13488 Mar 27 01:06	15°  11'44	0°33'57			13489 Feb 11 15:09	0° 	
minimum elong	13488 Mar 27 00:12	15°  14'20	0°33'26	retrograde		13489 Feb 25 09:14	7°  30'33	
morning rise	13488 Apr 02 02:59	9°  36'06		evening set		13489 Mar 04 04:29	5°  02'17	
direct	13488 Apr 04 23:42	8°  51'15		min. Earth dist.		13489 Mar 08 00:11	1°  38'03	0.64136 AU
morning max el	13488 Apr 11 08:36	12°  12'05	18°08'54			13489 Mar 09 13:44	30°  R 	
	13488 Apr 24 03:24	0° 		inferior conj		13489 Mar 10 14:22	28°  45'41	-0°30'11
desc. node	13488 Apr 27 06:32	5°  01'23		minimum elong		13489 Mar 10 15:18	28°  52'14	0°29'41
morning set	13488 Apr 30 06:36	9°  52'08		asc. node		13489 Mar 12 03:37	27°  41'84	
	13488 May 12 21:16	0° 		morning rise		13489 Mar 17 04:14	23°  43'05	
				direct		13489 Mar 19 16:21	23°  40'12	
superior conj	13488 May 15 08:03	3°  15'58	-1°52'44	morning max el		13489 Mar 26 01:51	26°  41'10	17°49'31
minimum elong	13488 May 14 23:14	3°  16'24	1°52'56			13489 Mar 29 06:46	0° 	
max. Earth dist.	13488 May 17 12:01	7°  14'20	1.45785 AU	morning set		13489 Apr 11 23:23	21°  43'19	
evening rise	13488 May 31 10:14	28°  15'30		desc. node		13489 Apr 14 03:07	25°  41'20	
	13488 Jun 01 03:31	0° 				13489 Apr 16 21:38	0° 	
greatest brilliancy	13488 Jun 12 09:33	17°  16'26	-0.7m					
asc. node	13488 Jun 21 03:46	29°  32'48		superior conj		13489 Apr 25 05:23	13°  39'17	-1°18'56
	13488 Jun 21 12:39	0° 		minimum elong		13489 Apr 24 21:29	13°  40'27	1°18'36
evening max el	13488 Jun 24 08:44	3°  09'32	19°15'33	max. Earth dist.		13489 Apr 30 07:30	21°  46'23	1.45133 AU
retrograde	13488 Jul 01 08:31	7°  03'02				13489 May 05 13:35	0° 	
evening set	13488 Jul 04 22:08	5°  04'07		evening rise		13489 May 10 22:27	8°  16'37	
inferior conj	13488 Jul 10 08:18	29°  59'20	3°05'17			13489 May 25 10:13	0° 	
minimum elong	13488 Jul 10 09:27	29°  55'36	3°04'12	evening max el		13489 Jun 07 12:21	16°  58'11	20°12'34
	13488 Jul 10 08:06	30°  R 		asc. node		13489 Jun 08 00:47	17°  58'42	
min. Earth dist.	13488 Jul 11 18:45	28°  50'17	0.66956 AU	retrograde		13489 Jun 15 07:13	21°  52'29	
morning rise	13488 Jul 15 20:11	23°  53'06		evening set		13489 Jun 19 06:40	19°  54'33	
direct	13488 Jul 21 22:15	20°  56'35		inferior conj		13489 Jun 24 13:26	13°  51'56	3°12'27
desc. node	13488 Jul 24 06:00	21°  56'32		minimum elong		13489 Jun 24 13:33	13°  51'33	3°11'25
morning max el	13488 Aug 03 11:17	28°  52'43	25°52'38	min. Earth dist.		13489 Jun 25 09:39	12°  54'04	0.68089 AU
	13488 Aug 04 22:58	0° 		morning rise		13489 Jun 29 20:06	7°  53'20	
	13488 Aug 26 21:40	0° 		direct		13489 Jul 05 10:55	5°  50'14	
morning set	13488 Sep 08 11:02	21°  48'15		desc. node		13489 Jul 11 03:17	7°  50'47	
max. Earth dist.	13488 Sep 12 04:05	28°  48'38	1.35488 AU	morning max el		13489 Jul 16 21:28	11°  52'57	24°28'24
	13488 Sep 12 23:43	0° 				13489 Jul 31 10:09	0° 	
asc. node	13488 Sep 17 05:08	8°  42'25				13489 Aug 19 15:42	0° 	
				morning set		13489 Aug 21 12:43	3°  48'15	
superior conj	13488 Sep 17 21:58	9°  45'24	0°06'37	max. Earth dist.		13489 Aug 25 03:11	9°  48'40	1.37704 AU
minimum elong	13488 Sep 17 21:35	9°  43'27	0°06'37					
behind sun begin	13488 Sep 17 15:58	9°  45'00		superior conj		13489 Sep 01 04:58	22°  48'59	-0°26'21
behind sun end	13488 Sep 18 03:13	10°  41'57		minimum elong		13489 Sep 01 06:46	22°  48'36	0°26'15
evening rise	13488 Sep 25 16:37	25°  47'30		asc. node		13489 Sep 04 01:42	28°  48'14	
	13488 Sep 27 17:59	0° 				13489 Sep 04 20:41	0° 	
evening max el	13488 Oct 13 21:04	25°  47'06	20°21'04	evening rise		13489 Sep 09 19:13	9°  45'31	
	13488 Oct 19 14:37	0° 				13489 Sep 20 20:07	0° 	
desc. node	13488 Oct 20 02:12	0°  41'30		evening max el		13489 Sep 26 11:16	7°  41'10	19°15'05
retrograde	13488 Oct 24 18:37	1°  41'20		retrograde		13489 Oct 05 17:07	11°  41'50	
evening set	13488 Oct 26 21:50	1°  40'39		desc. node		13489 Oct 06 23:39	11°  42'55	
	13488 Oct 30 06:55	30°  R 		evening set		13489 Oct 07 13:43	11°  43'25	
inferior conj	13488 Nov 04 20:55	27°  44'36	-4°35'29	inferior conj		13489 Oct 16 03:00	7°  41'01	-2°51'44
minimum elong	13488 Nov 04 10:49	27°  41'25	4°31'52	minimum elong		13489 Oct 15 19:40	7°  41'33	2°48'27
min. Earth dist.	13488 Nov 06 08:03	26°  41'30	0.54757 AU	min. Earth dist.		13489 Oct 18 18:40	5°  41'33	0.55873 AU
morning rise	13488 Nov 12 23:09	23°  41'02		morning rise		13489 Oct 23 23:08	2°  41'52	
direct	13488 Nov 17 12:51	22°  41'17		direct		13489 Oct 29 08:56	1°  41'46	
morning max el	13488 Nov 30 23:54	28°  41'52	23°49'48	morning max el		13489 Nov 12 10:11	8°  41'53	25°34'49
	13488 Dec 02 03:29	0° 				13489 Nov 28 03:54	0° 	
asc. node	13488 Dec 14 06:14	16°  41'28		asc. node		13489 Dec 01 03:13	5°  41'15	

morning set	13489 Dec 09 16:20	22° ♄ 23'21		morning set	13490 Nov 24 01:50	6° ♄ 55'05	
	13489 Dec 13 03:59	0° ♄					
superior conj	13489 Dec 16 10:48	7° ♄ 16'52	1°38'10	superior conj	13490 Nov 30 22:15	22° ♄ 00'05	1°34'42
minimum elong	13489 Dec 16 10:42	7° ♄ 16'15	1°39'13	minimum elong	13490 Nov 30 21:08	21° ♄ 53'51	1°35'39
max. Earth dist.	13489 Dec 17 20:08	10° ♄ 20'57	1.31817 AU	max. Earth dist.	13490 Dec 01 03:58	22° ♄ 31'57	1.31271 AU
evening rise	13489 Dec 23 13:51	22° ♄ 40'06			13490 Dec 04 12:38	0° ♄	
	13489 Dec 27 04:52	0° ♄		evening rise	13490 Dec 07 18:02	6° ♄ 59'20	
desc. node	13490 Jan 02 21:42	12° ♄ 25'53			13490 Dec 19 16:58	0° ♄	
	13490 Jan 14 03:32	0° ♄		desc. node	13490 Dec 20 18:37	1° ♄ 48'03	
evening max el	13490 Jan 25 02:54	12° ♄ 55'25	27°31'23	evening max el	13491 Jan 07 07:34	25° ♄ 01'55	27°01'20
retrograde	13490 Feb 08 00:17	20° ♄ 16'41			13491 Jan 13 18:39	0° ♄	
evening set	13490 Feb 14 22:14	17° ♄ 59'50		retrograde	13491 Jan 21 06:37	2° ♄ 14'46	
min. Earth dist.	13490 Feb 18 16:19	15° ♄ 01'47	0.62114 AU	evening set	13491 Jan 28 00:37	0° ♄ 17'15	
inferior conj	13490 Feb 21 16:00	12° ♄ 14'25	-1°45'02		13491 Jan 28 12:25	30° ♄	
minimum elong	13490 Feb 21 19:37	12° ♄ 05'56	1°43'09	min. Earth dist.	13491 Jan 31 21:48	27° ♄ 36'41	0.59942 AU
asc. node	13490 Feb 27 01:05	7° ♄ 57'41		inferior conj	13491 Feb 04 02:20	25° ♄ 00'24	-3°07'29
morning rise	13490 Feb 28 19:48	7° ♄ 10'01		minimum elong	13491 Feb 04 09:05	24° ♄ 46'35	3°04'20
direct	13490 Mar 03 01:13	6° ♄ 47'48		morning rise	13491 Feb 11 20:41	20° ♄ 16'16	
morning max el	13490 Mar 09 19:15	10° ♄ 13'05	17°47'49	direct	13491 Feb 13 22:00	20° ♄ 00'04	
	13490 Mar 22 23:51	0° ♄		asc. node	13491 Feb 13 22:32	20° ♄ 00'05	
morning set	13490 Mar 25 15:06	4° ♄ 39'44		morning max el	13491 Feb 21 09:18	23° ♄ 43'17	18°04'51
desc. node	13490 Mar 31 23:40	15° ♄ 50'59			13491 Feb 26 10:05	0° ♄	
				morning set	13491 Mar 08 23:30	18° ♄ 21'38	
superior conj	13490 Apr 06 01:39	24° ♄ 33'00	-0°39'07		13491 Mar 15 06:32	0° ♄	
minimum elong	13490 Apr 05 21:53	24° ♄ 17'08	0°38'52	superior conj	13491 Mar 18 21:41	6° ♄ 32'24	-0°00'30
	13490 Apr 09 08:04	0° ♄		minimum elong	13491 Mar 18 21:38	6° ♄ 32'14	0°00'31
max. Earth dist.	13490 Apr 13 00:22	6° ♄ 00'29	1.43814 AU	behind sun begin	13491 Mar 18 13:53	5° ♄ 57'45	
evening rise	13490 Apr 20 12:45	17° ♄ 53'54		behind sun end	13491 Mar 19 05:24	7° ♄ 06'39	
	13490 Apr 28 11:35	0° ♄		desc. node	13491 Mar 18 20:10	6° ♄ 25'42	
	13490 May 20 15:46	0° ♄		max. Earth dist.	13491 Mar 26 12:30	19° ♄ 40'11	1.41963 AU
evening max el	13490 May 21 10:09	0° ♄ 47'15	21°22'16	evening rise	13491 Mar 31 18:13	28° ♄ 14'52	
asc. node	13490 May 25 21:55	4° ♄ 30'33			13491 Apr 01 20:32	0° ♄	
retrograde	13490 May 30 05:53	5° ♄ 56'21			13491 Apr 22 02:45	0° ♄	
evening set	13490 Jun 03 15:51	4° ♄ 08'51		evening max el	13491 May 04 03:06	14° ♄ 36'44	22°40'32
	13490 Jun 07 09:24	30° ♄		asc. node	13491 May 12 19:09	20° ♄ 22'04	
inferior conj	13490 Jun 08 21:51	27° ♄ 54'53	3°07'56	retrograde	13491 May 14 02:53	20° ♄ 30'05	
minimum elong	13490 Jun 08 21:00	27° ♄ 57'51	3°06'50	evening set	13491 May 18 24:00	18° ♄ 27'22	
min. Earth dist.	13490 Jun 09 04:31	27° ♄ 31'39	0.68746 AU	inferior conj	13491 May 24 07:29	12° ♄ 04'17	2°52'49
morning rise	13490 Jun 14 01:56	21° ♄ 38'15		minimum elong	13491 May 24 05:52	12° ♄ 09'55	2°51'36
direct	13490 Jun 19 04:10	19° ♄ 25'38		min. Earth dist.	13491 May 24 01:13	12° ♄ 26'03	0.68923 AU
desc. node	13490 Jun 28 00:30	24° ♄ 10'17		morning rise	13491 May 29 11:37	5° ♄ 54'06	
morning max el	13490 Jun 29 08:24	25° ♄ 27'39	22°58'47	direct	13491 Jun 03 00:57	4° ♄ 00'56	
	13490 Jul 03 11:16	0° ♄		morning max el	13491 Jun 11 22:50	9° ♄ 11'21	21°32'29
	13490 Jul 24 21:41	0° ♄		desc. node	13491 Jun 14 21:34	12° ♄ 22'25	
morning set	13490 Aug 02 15:58	14° ♄ 00'18			13491 Jun 28 03:05	0° ♄	
max. Earth dist.	13490 Aug 07 01:49	21° ♄ 25'46	1.40055 AU	morning set	13491 Jul 13 18:10	23° ♄ 40'57	
	13490 Aug 11 23:21	0° ♄			13491 Jul 17 16:54	0° ♄	
superior conj	13490 Aug 14 20:48	5° ♄ 13'51	-1°01'22	max. Earth dist.	13491 Jul 20 04:48	4° ♄ 04'28	1.42265 AU
minimum elong	13490 Aug 15 01:21	5° ♄ 34'41	1°01'11	superior conj	13491 Jul 27 16:58	16° ♄ 44'06	-1°34'53
asc. node	13490 Aug 21 22:17	18° ♄ 27'24		minimum elong	13491 Jul 27 23:52	17° ♄ 13'54	1°34'52
evening rise	13490 Aug 24 13:40	23° ♄ 30'07			13491 Aug 04 04:47	0° ♄	
	13490 Aug 27 23:57	0° ♄		evening rise	13491 Aug 07 20:04	6° ♄ 36'12	
evening max el	13490 Sep 09 13:26	19° ♄ 19'32	18°30'57	asc. node	13491 Aug 08 18:54	8° ♄ 20'12	
retrograde	13490 Sep 17 10:26	23° ♄ 18'09			13491 Aug 22 01:35	0° ♄	
evening set	13490 Sep 19 10:06	23° ♄ 03'44		evening max el	13491 Aug 23 23:30	2° ♄ 06'43	18°07'36
desc. node	13490 Sep 23 21:10	21° ♄ 00'17		retrograde	13491 Aug 30 22:05	5° ♄ 39'22	
inferior conj	13490 Sep 27 06:01	18° ♄ 33'10	-1°04'00	evening set	13491 Sep 02 04:50	5° ♄ 16'47	
minimum elong	13490 Sep 27 03:30	18° ♄ 38'04	1°02'45	inferior conj	13491 Sep 09 06:29	0° ♄ 25'48	0°27'44
min. Earth dist.	13490 Sep 30 11:32	16° ♄ 03'19	0.57680 AU	minimum elong	13491 Sep 09 07:23	0° ♄ 23'46	0°27'18
morning rise	13490 Oct 04 17:25	13° ♄ 21'12			13491 Sep 09 17:50	30° ♄	
direct	13490 Oct 10 19:07	11° ♄ 47'49		desc. node	13491 Sep 10 18:42	29° ♄ 03'16	
morning max el	13490 Oct 25 02:28	19° ♄ 20'16	26°58'23	min. Earth dist.	13491 Sep 12 12:43	27° ♄ 29'50	0.59879 AU
	13490 Nov 03 04:00	0° ♄		morning rise	13491 Sep 16 06:40	24° ♄ 41'25	
asc. node	13490 Nov 18 00:05	24° ♄ 31'52		direct	13491 Sep 22 18:55	22° ♄ 40'42	
	13490 Nov 20 18:15	0° ♄			13491 Oct 06 13:24	0° ♄	

morning max el	13491 Oct 07 02:29	0°♄31'45	27°47'23		13492 Oct 02 07:33	0°♄	
	13491 Oct 28 07:30	0°♄			13492 Oct 19 17:29	0°♄	
asc. node	13491 Nov 04 20:52	14°♄09'12		asc. node	13492 Oct 21 17:34	4°♄00'41	
morning set	13491 Nov 08 07:30	21°♄12'43		morning set	13492 Oct 22 07:13	5°♄10'16	
	13491 Nov 12 09:29	0°♄		max. Earth dist.	13492 Oct 27 16:48	16°♄35'10	1.31757 AU
max. Earth dist.	13491 Nov 14 12:07	4°♄39'57	1.31248 AU				
				superior conj	13492 Oct 29 19:06	21°♄10'12	1°10'26
superior conj	13491 Nov 15 09:40	6°♄39'54	1°25'26	minimum elong	13492 Oct 29 16:50	20°♄57'46	1°10'50
minimum elong	13491 Nov 15 07:47	6°♄29'25	1°26'08		13492 Nov 02 19:07	0°♄	
evening rise	13491 Nov 22 02:28	21°♄27'54		evening rise	13492 Nov 05 13:09	6°♄00'14	
	13491 Nov 26 04:22	0°♄			13492 Nov 17 23:34	0°♄	
desc. node	13491 Dec 07 15:38	20°♄31'28		desc. node	13492 Nov 23 12:46	8°♄21'05	
	13491 Dec 14 11:01	0°♄		evening max el	13492 Nov 30 17:25	16°♄42'39	24°26'39
evening max el	13491 Dec 20 04:23	6°♄16'07	25°57'19	retrograde	13492 Dec 14 10:14	23°♄32'32	
retrograde	13492 Jan 03 02:41	13°♄19'07		evening set	13492 Dec 19 15:17	22°♄32'50	
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inferior conj	13492 Jan 16 17:52	7°♄03'07	-4°29'09	minimum elong	13492 Dec 27 19:24	18°♄05'27	5°31'24
minimum elong	13492 Jan 17 02:38	6°♄47'31	4°25'47	morning rise	13493 Jan 05 01:32	14°♄14'13	
morning rise	13492 Jan 25 00:33	2°♄40'54		direct	13493 Jan 07 11:31	13°♄58'38	
direct	13492 Jan 27 02:22	2°♄27'08		morning max el	13493 Jan 17 11:27	18°♄47'31	19°42'15
asc. node	13492 Jan 31 19:55	3°♄43'20		asc. node	13493 Jan 17 17:13	19°♄01'37	
morning max el	13492 Feb 04 16:04	6°♄38'40	18°42'20		13493 Jan 25 21:20	0°♄	
	13492 Feb 19 11:40	0°♄		morning set	13493 Feb 03 23:16	17°♄06'07	
morning set	13492 Feb 20 19:29	2°♄34'10			13493 Feb 10 08:27	0°♄	
				superior conj	13493 Feb 11 21:10	3°♄02'17	0°59'26
superior conj	13492 Feb 29 13:44	19°♄26'31	0°32'53	minimum elong	13493 Feb 11 23:55	3°♄15'54	0°59'36
minimum elong	13492 Feb 29 15:49	19°♄36'18	0°32'50	max. Earth dist.	13493 Feb 18 02:17	14°♄56'16	1.37539 AU
desc. node	13492 Mar 04 16:42	27°♄02'11		desc. node	13493 Feb 19 13:14	17°♄36'48	
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max. Earth dist.	13492 Mar 07 19:59	2°♄36'52	1.39791 AU		13493 Feb 26 15:13	0°♄	
evening rise	13492 Mar 11 20:37	9°♄31'34			13493 Mar 18 16:21	0°♄	
	13492 Mar 24 18:40	0°♄		evening max el	13493 Mar 29 06:56	12°♄21'51	25°18'38
evening max el	13492 Apr 15 17:19	28°♄28'18	24°01'36	retrograde	13493 Apr 10 10:32	19°♄23'59	
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asc. node	13492 Apr 28 16:28	4°♄46'17		min. Earth dist.	13493 Apr 20 15:30	12°♄09'03	0.67904 AU
evening set	13492 May 02 05:30	2°♄45'23		inferior conj	13493 Apr 21 22:43	10°♄27'43	1°52'00
	13492 May 04 20:26	30°♄		minimum elong	13493 Apr 21 20:37	10°♄34'35	1°50'46
min. Earth dist.	13492 May 06 21:37	27°♄20'13	0.68637 AU	morning rise	13493 Apr 27 10:50	4°♄34'16	
inferior conj	13492 May 07 16:24	26°♄16'22	2°27'32	direct	13493 Apr 30 24:00	3°♄21'55	
minimum elong	13492 May 07 14:19	26°♄23'27	2°26'14	morning max el	13493 May 07 23:42	7°♄11'10	19°13'53
morning rise	13492 May 12 23:12	20°♄13'52		desc. node	13493 May 18 15:22	20°♄51'37	
direct	13492 May 17 00:03	18°♄41'24		greatest brilliancy	13493 May 20 20:14	24°♄06'25	-0.7m
morning max el	13492 May 24 19:29	23°♄05'40	20°16'05		13493 May 24 18:13	0°♄	
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desc. node	13492 May 31 18:32	1°♄20'11			13493 Jun 13 04:12	0°♄	
	13492 Jun 20 09:06	0°♄		max. Earth dist.	13493 Jun 14 05:56	1°♄41'01	1.45319 AU
morning set	13492 Jun 21 24:00	2°♄29'34					
max. Earth dist.	13492 Jul 01 14:12	17°♄32'23	1.44085 AU	superior conj	13493 Jun 17 12:03	6°♄48'57	-2°13'24
				minimum elong	13493 Jun 17 13:10	6°♄53'22	2°14'26
superior conj	13492 Jul 07 13:49	27°♄14'04	-2°01'17		13493 Jul 01 20:31	0°♄	
minimum elong	13492 Jul 07 20:19	27°♄40'43	2°01'49	evening rise	13493 Jul 02 00:56	0°♄18'10	
	13492 Jul 09 06:03	0°♄		asc. node	13493 Jul 12 12:20	17°♄20'18	
evening rise	13492 Jul 20 09:27	18°♄55'42		evening max el	13493 Jul 21 03:32	28°♄52'44	18°17'49
asc. node	13492 Jul 25 15:35	27°♄59'29			13493 Jul 22 08:59	0°♄	
	13492 Jul 26 20:01	0°♄		retrograde	13493 Jul 27 12:22	2°♄15'51	
evening max el	13492 Aug 06 13:22	15°♄20'38	18°03'34	evening set	13493 Jul 30 11:56	1°♄27'13	
retrograde	13492 Aug 13 00:09	18°♄41'31			13493 Aug 01 13:40	30°♄	
evening set	13492 Aug 15 15:09	18°♄07'14		inferior conj	13493 Aug 05 09:47	26°♄00'22	2°25'18
inferior conj	13492 Aug 22 01:04	12°♄57'21	1°37'14	minimum elong	13493 Aug 05 12:11	25°♄53'25	2°24'03
minimum elong	13492 Aug 22 03:25	12°♄51'16	1°36'04	min. Earth dist.	13493 Aug 07 18:56	23°♄16'09	0.64298 AU
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desc. node	13492 Aug 27 16:13	7°♄30'39		desc. node	13493 Aug 14 13:43	17°♄47'37	
morning rise	13492 Aug 28 13:19	6°♄50'53		direct	13493 Aug 18 01:14	17°♄05'00	
direct	13492 Sep 04 05:40	4°♄27'51		morning max el	13493 Aug 31 18:28	25°♄04'07	27°31'03
morning max el	13492 Sep 18 08:36	12°♄28'22	27°57'27				



























































































































	13493 Sep 05 06:23	0°♍	direct	13494 Aug 01 04:16	0°♌23'16	
	13493 Sep 25 19:05	0°♌	desc. node	13494 Aug 01 11:08	0°♌23'34	
morning set	13493 Oct 05 22:31	18°♌41'45	morning max el	13494 Aug 14 05:40	8°♌08'12	26°34'57
asc. node	13493 Oct 08 14:12	24°♌01'24		13494 Aug 31 07:01	0°♍	
max. Earth dist.	13493 Oct 10 14:28	28°♌10'33	1.32805 AU	13494 Sep 18 05:04	0°♌	
	13493 Oct 11 11:21	0°♍	morning set	13494 Sep 19 02:22	1°♌40'01	
			max. Earth dist.	13494 Sep 23 02:33	9°♌25'16	1.34372 AU
superior conj	13493 Oct 14 00:31	5°♍25'26	0°49'49	asc. node	13494 Sep 25 10:47	14°♌07'07
minimum elong	13493 Oct 13 22:25	5°♍14'06	0°49'57			
evening rise	13493 Oct 21 00:13	20°♍31'29		superior conj	13494 Sep 27 23:36	19°♌19'20 0°23'48
	13493 Oct 25 13:43	0°♍	minimum elong	13494 Sep 27 22:21	19°♌12'50	0°23'49
desc. node	13493 Nov 10 09:59	24°♍57'06		13494 Oct 03 01:29	0°♍	
evening max el	13493 Nov 12 03:31	26°♍44'12	22°44'33	evening rise	13494 Oct 05 09:47	4°♍56'33
	13493 Nov 16 01:11	0°♎		13494 Oct 19 02:22	0°♍	
retrograde	13493 Nov 25 04:37	3°♎12'36		evening max el	13494 Oct 24 20:05	6°♍57'41 21°08'36
evening set	13493 Nov 29 01:20	2°♎40'05		desc. node	13494 Oct 28 07:18	9°♍54'13
	13493 Dec 05 05:15	30°♎♌		retrograde	13494 Nov 05 15:46	12°♍50'12
min. Earth dist.	13493 Dec 06 11:57	29°♍17'13	0.54843 AU	evening set	13494 Nov 08 06:06	12°♍34'21
inferior conj	13493 Dec 07 12:58	28°♍41'44	-5°56'39	inferior conj	13494 Nov 17 04:29	8°♍40'48 -5°21'03
minimum elong	13493 Dec 07 12:06	28°♍42'59	5°55'35	minimum elong	13494 Nov 16 19:47	8°♍53'04 5°18'27
morning rise	13493 Dec 16 00:13	24°♍53'32		min. Earth dist.	13494 Nov 17 17:56	8°♍21'48 0.54509 AU
direct	13493 Dec 19 03:20	24°♍30'59		morning rise	13494 Nov 25 10:01	4°♍49'53
morning max el	13493 Dec 30 16:28	0°♎01'57	21°05'11	direct	13494 Nov 29 10:51	4°♍14'57
	13493 Dec 30 15:39	0°♎		morning max el	13494 Dec 12 08:34	10°♍27'54 22°47'06
asc. node	13494 Jan 04 14:27	5°♎39'03		asc. node	13494 Dec 22 11:36	23°♍18'31
	13494 Jan 18 10:55	0°♏		13494 Dec 26 10:31	0°♎	
morning set	13494 Jan 19 07:52	1°♏48'33		morning set	13495 Jan 03 19:07	16°♎35'09
				13495 Jan 10 00:52	0°♏	
superior conj	13494 Jan 26 15:48	17°♏07'38	1°18'52			
minimum elong	13494 Jan 26 18:15	17°♏20'16	1°19'23	superior conj	13495 Jan 10 18:21	1°♏33'34 1°31'25
max. Earth dist.	13494 Jan 31 11:57	26°♏53'15	1.35442 AU	minimum elong	13495 Jan 10 19:57	1°♏42'07 1°32'14
	13494 Feb 02 02:19	0°♐		max. Earth dist.	13495 Jan 14 04:22	8°♏45'49 1.33678 AU
evening rise	13494 Feb 04 11:58	4°♐33'42		evening rise	13495 Jan 18 18:20	18°♏00'56
desc. node	13494 Feb 06 09:47	8°♐05'11		desc. node	13495 Jan 24 06:25	28°♏23'23
	13494 Feb 19 12:09	0°♑		13495 Jan 25 03:56	0°♐	
evening max el	13494 Mar 11 20:40	26°♑10'51	26°24'24	13495 Feb 13 18:13	0°♑	
	13494 Mar 16 06:35	0°♒		evening max el	13495 Feb 22 10:09	9°♑46'28 27°11'28
retrograde	13494 Mar 24 19:00	3°♒30'50		retrograde	13495 Mar 07 21:32	17°♑13'49
evening set	13494 Mar 31 02:03	0°♒59'19		evening set	13495 Mar 14 13:24	14°♑42'03
	13494 Apr 01 04:56	30°♒♑		min. Earth dist.	13495 Mar 18 11:03	11°♑00'47 0.65191 AU
asc. node	13494 Apr 02 11:15	28°♑43'08		asc. node	13495 Mar 20 08:43	8°♑53'52
min. Earth dist.	13494 Apr 04 04:40	26°♑45'03	0.66743 AU	inferior conj	13495 Mar 20 18:54	8°♑25'20 0°08'09
inferior conj	13494 Apr 06 00:20	24°♑32'30	1°05'43	minimum elong	13495 Mar 20 18:40	8°♑25'59 0°08'01
minimum elong	13494 Apr 05 22:47	24°♑37'13	1°04'49	transit middle	13495 Mar 20 18:40	8°♑25'59 0°08'01
morning rise	13494 Apr 11 20:26	18°♑49'51		transit begin	13495 Mar 20 16:03	8°♑33'18
direct	13494 Apr 14 22:54	17°♑55'43		transit end	13495 Mar 20 21:17	8°♑18'41
morning max el	13494 Apr 21 10:47	21°♑22'59	18°27'48	morning rise	13495 Mar 27 01:37	2°♑55'36
	13494 Apr 28 09:07	0°♒		direct	13495 Mar 29 18:33	2°♑16'45
desc. node	13494 May 05 12:05	10°♒46'55		morning max el	13495 Apr 05 02:39	5°♑34'36 17°58'32
morning set	13494 May 11 23:59	21°♒00'37		13495 Apr 21 18:15	0°♒	
	13494 May 17 16:54	0°♓		desc. node	13495 Apr 22 08:43	0°♒59'28
				morning set	13495 Apr 23 01:01	2°♒06'27
superior conj	13494 May 27 20:39	15°♓53'51	-2°05'53			
minimum elong	13494 May 27 14:14	15°♓28'45	2°06'34	superior conj	13495 May 07 08:45	25°♒14'49 -1°39'42
max. Earth dist.	13494 May 28 01:28	16°♓12'39	1.45838 AU	minimum elong	13495 May 06 23:38	24°♒38'46 1°39'35
	13494 Jun 05 21:08	0°♔		13495 May 10 09:09	0°♓	
evening rise	13494 Jun 12 15:49	10°♔39'36		max. Earth dist.	13495 May 10 21:36	0°♓48'50 1.45599 AU
greatest brilliancy	13494 Jun 21 16:30	24°♔50'54	-0.8m	evening rise	13495 May 23 10:19	20°♓14'36
	13494 Jun 25 01:16	0°♕		13495 May 29 19:18	0°♔	
asc. node	13494 Jun 29 09:11	6°♕15'28		greatest brilliancy	13495 Jun 06 05:07	11°♔07'14 -0.7m
evening max el	13494 Jul 04 15:04	12°♕35'03	18°49'38	asc. node	13495 Jun 16 06:08	24°♔36'17
retrograde	13494 Jul 11 07:01	16°♕13'57		evening max el	13495 Jun 17 21:52	26°♔22'15 19°37'59
evening set	13494 Jul 14 15:23	15°♕09'24		13495 Jun 22 20:48	0°♕	
inferior conj	13494 Jul 20 04:49	9°♕27'18	2°55'08	retrograde	13495 Jun 25 05:01	0°♕29'17
minimum elong	13494 Jul 20 06:31	9°♕21'57	2°53'59	13495 Jun 27 11:03	30°♒♔	
min. Earth dist.	13494 Jul 21 23:30	7°♕13'35	0.66104 AU	evening set	13495 Jun 28 22:43	29°♔08'04
morning rise	13494 Jul 25 20:52	3°♕03'25		inferior conj	13495 Jul 04 07:04	23°♔12'23 3°09'50

minimum elong	13495 Jul 04 07:46	23°☿10'01	3°08'48	evening set	13496 Jun 12 07:45	13°☿18'14	
min. Earth dist.	13495 Jul 05 11:19	21°☿38'18	0.67493 AU	inferior conj	13496 Jun 17 13:54	7°☿10'31	3°11'52
morning rise	13495 Jul 09 16:23	16°☿48'42		minimum elong	13496 Jun 17 13:35	7°☿11'35	3°10'49
direct	13495 Jul 15 13:44	14°☿13'45		min. Earth dist.	13496 Jun 18 04:19	6°☿20'44	0.68423 AU
desc. node	13495 Jul 19 08:30	15°☿06'39		morning rise	13496 Jun 22 19:08	0°☿50'31	
morning max el	13495 Jul 27 16:28	21°☿29'26	25°18'03		13496 Jun 23 20:06	30°☿II	
	13495 Aug 04 01:54	0°♊		direct	13496 Jun 28 04:39	28°II27'59	
	13495 Aug 24 12:28	0°♊			13496 Jul 03 00:58	0°☿	
morning set	13495 Sep 01 14:54	13°♊55'40		desc. node	13496 Jul 05 05:45	1°☿30'25	
max. Earth dist.	13495 Sep 05 05:13	20°♊30'46	1.36393 AU	morning max el	13496 Jul 09 02:45	4°☿59'57	23°50'19
	13495 Sep 10 04:05	0°♊			13496 Jul 28 09:24	0°♊	
				morning set	13496 Aug 13 07:37	25°♊18'02	
superior conj	13495 Sep 11 13:26	2°♊44'37	-0°06'59		13496 Aug 16 01:01	0°♊	
minimum elong	13495 Sep 11 13:52	2°♊46'46	0°06'58	max. Earth dist.	13496 Aug 17 02:54	1°♊53'31	1.38699 AU
behind sun begin	13495 Sep 11 08:04	2°♊17'59					
behind sun end	13495 Sep 11 19:40	3°♊15'36		superior conj	13496 Aug 24 14:31	15°♊33'25	-0°41'07
asc. node	13495 Sep 12 07:20	4°♊13'44		minimum elong	13496 Aug 24 17:27	15°♊47'13	0°40'58
evening rise	13495 Sep 19 15:39	19°♊09'19		asc. node	13496 Aug 29 03:55	24°♊18'09	
	13495 Sep 25 03:14	0°♊			13496 Sep 01 01:49	0°♊	
evening max el	13495 Oct 07 02:03	17°♊52'03	19°50'20	evening rise	13496 Sep 02 15:14	3°♊03'29	
desc. node	13495 Oct 15 04:44	22°♊44'45		evening max el	13496 Sep 18 21:53	29°♊36'01	18°53'43
retrograde	13495 Oct 17 06:46	22°♊57'07			13496 Sep 19 07:43	0°♊	
evening set	13495 Oct 19 05:13	22°♊46'57		retrograde	13496 Sep 27 12:37	3°♊55'21	
inferior conj	13495 Oct 28 01:34	18°♊45'53	-3°53'53	evening set	13496 Sep 29 09:41	3°♊43'50	
minimum elong	13495 Oct 27 16:02	19°♊00'33	3°50'05	desc. node	13496 Oct 01 02:12	3°♊15'01	
min. Earth dist.	13495 Oct 30 02:25	17°♊30'44	0.55120 AU		13496 Oct 06 20:35	30°☿♊	
morning rise	13495 Nov 05 01:20	14°♊31'18		inferior conj	13496 Oct 07 16:06	29°♊25'36	-2°05'00
direct	13495 Nov 09 23:40	13°♊37'50		minimum elong	13496 Oct 10 10:51	29°♊34'56	2°02'30
morning max el	13495 Nov 23 18:33	20°♊28'06	24°36'05	min. Earth dist.	13496 Oct 10 15:41	27°♊19'10	0.56575 AU
	13495 Dec 01 21:45	0°♊		morning rise	13496 Oct 15 08:51	24°♊35'11	
asc. node	13495 Dec 09 08:38	11°♊44'14		direct	13496 Oct 21 02:09	23°♊17'05	
	13495 Dec 18 16:11	0°♊			13496 Nov 03 15:21	0°♊	
morning set	13495 Dec 19 07:02	1°♊19'21		morning max el	13496 Nov 04 06:47	0°♊36'22	26°13'53
					13496 Nov 24 20:04	0°♊	
superior conj	13495 Dec 26 02:05	16°♊11'07	1°37'29	asc. node	13496 Nov 25 05:35	0°♊44'36	
minimum elong	13495 Dec 26 02:36	16°♊13'59	1°38'30	morning set	13496 Dec 02 17:53	15°♊56'28	
max. Earth dist.	13495 Dec 28 04:15	20°♊44'32	1.32351 AU		13496 Dec 09 03:06	0°♊	
	13496 Jan 01 13:09	0°♊					
evening rise	13496 Jan 02 11:19	1°♊53'38		superior conj	13496 Dec 09 12:44	0°♊53'41	1°37'25
desc. node	13496 Jan 11 03:09	18°♊25'19		minimum elong	13496 Dec 09 12:11	0°♊50'35	1°38'26
	13496 Jan 18 01:21	0°♊		max. Earth dist.	13496 Dec 10 09:56	2°♊51'32	1.31519 AU
evening max el	13496 Feb 04 22:04	22°♊57'17	27°33'00	evening rise	13496 Dec 16 12:07	16°♊04'50	
	13496 Feb 15 20:08	0°♊			13496 Dec 23 12:02	0°♊	
retrograde	13496 Feb 18 17:23	0°♊23'19		desc. node	13496 Dec 27 24:00	8°♊04'12	
	13496 Feb 21 12:13	30°☿♊			13497 Jan 12 02:06	0°♊	
evening set	13496 Feb 25 14:25	27°♊58'37		evening max el	13497 Jan 17 06:17	5°♊30'58	27°22'58
min. Earth dist.	13496 Feb 29 08:54	24°♊46'28	0.63304 AU	retrograde	13497 Jan 31 05:08	12°♊49'21	
inferior conj	13496 Mar 03 03:38	21°♊59'20	-1°00'43	evening set	13497 Feb 07 02:05	10°♊39'57	
minimum elong	13496 Mar 03 05:36	21°♊54'22	0°59'39	min. Earth dist.	13497 Feb 10 20:46	7°♊50'23	0.61190 AU
asc. node	13496 Mar 06 06:12	19°♊04'01		inferior conj	13497 Feb 13 23:11	5°♊05'43	-2°19'27
morning rise	13496 Mar 09 23:16	16°♊44'56		minimum elong	13497 Feb 14 04:08	4°♊54'43	2°16'58
direct	13496 Mar 12 08:11	16°♊17'50		morning rise	13497 Feb 21 09:13	0°♊09'28	
morning max el	13496 Mar 18 20:26	19°♊37'38	17°46'34	asc. node	13497 Feb 21 03:40	0°♊13'45	
	13496 Mar 26 14:30	0°♊			13497 Feb 22 00:09	30°☿♊	
morning set	13496 Apr 04 04:20	14°♊27'39		direct	13497 Feb 23 12:20	29°♊50'20	
desc. node	13496 Apr 08 05:18	21°♊24'03			13497 Feb 25 00:06	0°♊	
	13496 Apr 13 07:29	0°♊		morning max el	13497 Mar 02 12:50	3°♊22'25	17°52'39
				morning set	13497 Mar 18 03:54	27°♊45'31	
superior conj	13496 Apr 16 15:20	5°♊30'11	-1°02'17		13497 Mar 19 09:37	0°♊	
minimum elong	13496 Apr 16 09:04	5°♊04'29	1°01'56	desc. node	13497 Mar 26 01:50	11°♊56'06	
max. Earth dist.	13496 Apr 22 15:48	15°♊13'36	1.44644 AU				
evening rise	13496 May 01 21:25	29°♊38'58		superior conj	13497 Mar 28 21:58	16°♊52'27	-0°22'17
	13496 May 02 02:54	0°♊		minimum elong	13497 Mar 28 19:56	16°♊43'45	0°22'10
	13496 May 22 13:23	0°♊		max. Earth dist.	13497 Apr 05 06:26	29°♊13'17	1.43080 AU
evening max el	13496 May 30 22:55	10°♊11'15	20°40'53		13497 Apr 05 17:52	0°♊	
asc. node	13496 Jun 02 03:12	12°♊11'17		evening rise	13497 Apr 11 17:00	9°♊32'26	
retrograde	13496 Jun 08 04:02	14°♊56'07			13497 Apr 25 06:04	0°♊	

evening max el	13497 May 13 18:33	24° Π 00'47	21°54'54	evening max el	13498 Apr 26 10:16	7° Π 52'00	23°14'59
asc. node	13497 May 20 00:23	28° Π 45'25		retrograde	13498 May 06 21:48	14° Π 02'14	
retrograde	13497 May 23 02:05	29° Π 28'37		asc. node	13498 May 06 21:38	14° Π 02'14	
evening set	13497 May 27 16:41	27° Π 34'40		evening set	13498 May 11 23:53	11° Π 53'39	
inferior conj	13497 Jun 01 23:04	21° Π 16'44	3°02'46	inferior conj	13498 May 17 08:38	5° Π 27'50	2°43'21
minimum elong	13497 Jun 01 21:52	21° Π 20'56	3°01'37	minimum elong	13498 May 17 06:46	5° Π 34'15	2°42'04
min. Earth dist.	13497 Jun 02 00:16	21° Π 12'32	0.68882 AU	min. Earth dist.	13498 May 16 21:02	6° Π 07'54	0.68868 AU
morning rise	13497 Jun 07 02:51	15° Π 02'34			13498 May 21 19:47	30° \mathbb{R} 8	
direct	13497 Jun 11 23:41	12° Π 57'40		morning rise	13498 May 22 13:36	29° \mathbb{B} 20'56	
morning max el	13497 Jun 21 14:35	18° Π 37'23	22°21'07	direct	13498 May 26 21:39	27° \mathbb{B} 36'25	
desc. node	13497 Jun 22 02:55	19° Π 08'47			13498 Jun 01 13:51	0° Π	
	13497 Jul 01 02:41	0° \mathbb{E}		morning max el	13498 Jun 04 07:21	2° Π 25'26	20°58'25
	13497 Jul 21 12:18	0° Ω		desc. node	13498 Jun 08 23:57	7° Π 42'06	
morning set	13497 Jul 25 00:10	5° Ω 35'40			13498 Jun 24 23:03	0° \mathbb{E}	
max. Earth dist.	13497 Jul 30 02:36	14° Ω 00'55	1.41034 AU	morning set	13498 Jul 04 16:24	14° \mathbb{E} 50'12	
				max. Earth dist.	13498 Jul 12 08:49	27° \mathbb{E} 03'35	1.43113 AU
					13498 Jul 14 04:05	0° Ω	
superior conj	13497 Aug 06 22:31	27° Ω 35'06	-1°16'04				
minimum elong	13497 Aug 07 04:13	28° Ω 00'34	1°15'54	superior conj	13498 Jul 19 09:04	8° Ω 40'05	-1°47'22
	13497 Aug 08 06:50	0° \mathbb{M}		minimum elong	13498 Jul 19 16:17	9° Ω 10'38	1°47'32
asc. node	13497 Aug 16 00:29	14° \mathbb{M} 16'01		evening rise	13498 Jul 31 04:47	29° Ω 17'15	
evening rise	13497 Aug 17 05:01	16° \mathbb{M} 29'38			13498 Jul 31 14:23	0° \mathbb{M}	
	13497 Aug 24 14:53	0° \mathbb{A}		asc. node	13498 Aug 02 21:07	4° \mathbb{M} 03'27	
evening max el	13497 Sep 02 03:59	12° \mathbb{A} 02'46	18°18'35	evening max el	13498 Aug 16 16:05	25° \mathbb{M} 02'01	18°03'31
retrograde	13497 Sep 09 13:50	15° \mathbb{A} 48'09		retrograde	13498 Aug 23 08:17	28° \mathbb{M} 27'55	
evening set	13497 Sep 11 16:27	15° \mathbb{A} 30'36		evening set	13498 Aug 25 18:32	28° \mathbb{M} 00'38	
desc. node	13497 Sep 17 23:44	11° \mathbb{A} 49'56		inferior conj	13498 Sep 01 13:03	23° \mathbb{M} 00'58	1°00'02
inferior conj	13497 Sep 19 04:25	10° \mathbb{A} 51'13	-0°22'30	minimum elong	13498 Sep 01 14:47	22° \mathbb{M} 56'48	0°59'11
minimum elong	13497 Sep 19 03:36	10° \mathbb{A} 52'56	0°22'04	min. Earth dist.	13498 Sep 04 16:27	20° \mathbb{M} 00'55	0.60862 AU
min. Earth dist.	13497 Sep 22 11:41	8° \mathbb{A} 07'46	0.58595 AU	desc. node	13498 Sep 04 21:16	19° \mathbb{M} 49'57	
morning rise	13497 Sep 26 11:18	5° \mathbb{A} 24'46		morning rise	13498 Sep 08 08:09	17° \mathbb{M} 05'59	
direct	13497 Oct 02 18:31	3° \mathbb{A} 39'21		direct	13498 Sep 14 22:51	14° \mathbb{M} 55'14	
morning max el	13497 Oct 17 02:05	11° \mathbb{A} 19'57	27°23'52	morning max el	13498 Sep 29 04:59	22° \mathbb{M} 50'42	27°56'30
	13497 Oct 31 15:28	0° \mathbb{M}			13498 Oct 05 13:45	0° \mathbb{A}	
asc. node	13497 Nov 12 02:26	20° \mathbb{M} 10'29			13498 Oct 24 20:17	0° \mathbb{M}	
	13497 Nov 16 21:45	0° \mathbb{X}		asc. node	13498 Oct 29 23:08	9° \mathbb{M} 54'15	
morning set	13497 Nov 17 01:58	0° \mathbb{X} 22'22		morning set	13498 Nov 01 05:20	14° \mathbb{M} 31'40	
				max. Earth dist.	13498 Nov 07 01:43	27° \mathbb{M} 06'44	1.31401 AU
superior conj	13497 Nov 24 00:24	15° \mathbb{X} 35'54	1°31'28				
minimum elong	13497 Nov 23 22:55	15° \mathbb{X} 27'38	1°32'20	superior conj	13498 Nov 08 11:08	0° \mathbb{X} 11'43	1°19'45
max. Earth dist.	13497 Nov 23 18:24	15° \mathbb{X} 02'21	1.31198 AU	minimum elong	13498 Nov 08 09:02	0° \mathbb{X} 00'04	1°20'20
evening rise	13497 Nov 30 18:23	0° \mathbb{Z} 28'46			13498 Nov 08 09:02	0° \mathbb{X}	
	13497 Nov 30 13:01	0° \mathbb{Z}		evening rise	13498 Nov 15 03:58	14° \mathbb{X} 59'15	
desc. node	13497 Dec 14 20:56	27° \mathbb{Z} 11'16			13498 Nov 22 12:44	0° \mathbb{Z}	
	13497 Dec 16 15:30	0° \approx		desc. node	13498 Dec 01 18:00	15° \mathbb{Z} 33'42	
evening max el	13497 Dec 30 08:09	17° \approx 16'40	26°38'10	evening max el	13498 Dec 12 01:23	28° \mathbb{Z} 08'31	25°21'16
retrograde	13498 Jan 13 07:10	24° \approx 24'41			13498 Dec 14 03:28	0° \approx	
evening set	13498 Jan 19 20:45	22° \approx 38'15		retrograde	13498 Dec 25 21:42	5° \approx 06'09	
min. Earth dist.	13498 Jan 23 22:00	20° \approx 01'02	0.59015 AU	evening set	13498 Dec 31 18:07	3° \approx 48'21	
inferior conj	13498 Jan 27 01:59	17° \approx 34'53	-3°42'58	min. Earth dist.	13499 Jan 05 13:32	1° \approx 08'16	0.56998 AU
minimum elong	13498 Jan 27 09:52	17° \approx 19'40	3°39'33		13499 Jan 07 06:42	30° \mathbb{R} 3	
morning rise	13498 Feb 04 01:59	12° \approx 59'37		inferior conj	13499 Jan 08 08:41	29° \mathbb{Z} 16'16	-4°59'51
direct	13498 Feb 06 02:53	12° \approx 44'49		minimum elong	13499 Jan 08 17:19	29° \mathbb{Z} 01'51	4°56'54
asc. node	13498 Feb 08 01:06	12° \approx 58'37		morning rise	13499 Jan 16 19:00	25° \mathbb{Z} 03'21	
morning max el	13498 Feb 14 00:14	16° \approx 39'02	18°18'11	direct	13499 Jan 18 23:22	24° \mathbb{Z} 49'17	
	13498 Feb 23 09:33	0° \mathbb{X}		asc. node	13499 Jan 25 22:28	27° \mathbb{Z} 23'28	
morning set	13498 Mar 01 17:50	11° \mathbb{X} 42'43		morning max el	13499 Jan 28 02:34	29° \mathbb{Z} 15'16	19°05'05
					13499 Jan 28 20:18	0° \approx	
superior conj	13498 Mar 11 03:06	29° \mathbb{X} 16'55	0°14'26	morning set	13499 Feb 13 17:31	26° \approx 04'23	
minimum elong	13498 Mar 11 04:09	29° \mathbb{X} 21'45	0°14'22		13499 Feb 15 17:05	0° \mathbb{X}	
behind sun begin	13498 Mar 11 00:56	29° \mathbb{X} 07'05					
behind sun end	13498 Mar 11 07:23	29° \mathbb{X} 36'24					
	13498 Mar 11 12:35	0° \mathbb{Y}		superior conj	13499 Feb 22 02:13	12° \mathbb{X} 29'59	0°45'00
desc. node	13498 Mar 12 22:20	2° \mathbb{Y} 32'07		minimum elong	13499 Feb 22 04:44	12° \mathbb{X} 42'05	0°45'01
max. Earth dist.	13498 Mar 18 16:55	12° \mathbb{Y} 37'22	1.41068 AU	desc. node	13499 Feb 27 18:50	23° \mathbb{X} 07'47	
evening rise	13498 Mar 23 07:14	20° \mathbb{Y} 17'34		max. Earth dist.	13499 Feb 28 23:44	25° \mathbb{X} 18'02	1.38826 AU
	13498 Mar 29 09:15	0° \mathbb{B}			13499 Mar 03 15:35	0° \mathbb{Y}	
	13498 Apr 19 12:11	0° Π		evening rise	13499 Mar 04 18:34	1° \mathbb{Y} 56'47	




































































































































	13499 Mar 22 14:48	0°♄			13500 Feb 24 03:03	0°♄		
evening max el	13499 Apr 08 23:55	21°♄44'02	24°35'10		13500 Mar 17 09:04	0°♄		
retrograde	13499 Apr 20 14:01	28°♄30'37		evening max el	13500 Mar 22 13:17	5°♄35'09	25°48'24	
asc. node	13499 Apr 23 18:59	27°♄45'20		retrograde	13500 Apr 04 01:47	12°♄47'09		
evening set	13499 Apr 26 03:47	26°♄09'55		evening set	13500 Apr 10 02:44	10°♄18'10		
min. Earth dist.	13499 Apr 30 16:30	21°♄00'23	0.68384 AU	asc. node	13500 Apr 10 16:24	9°♄48'19		
inferior conj	13499 May 01 16:40	19°♄39'41	2°13'46	min. Earth dist.	13500 Apr 14 08:37	5°♄44'01	0.67455 AU	
minimum elong	13499 May 01 14:30	19°♄46'53	2°12'27	inferior conj	13500 Apr 15 21:13	3°♄48'11	1°33'44	
morning rise	13499 May 07 01:25	13°♄41'07		minimum elong	13500 Apr 15 19:16	3°♄54'23	1°32'35	
direct	13499 May 10 21:10	12°♄17'30			13500 Apr 19 02:49	30°♄		
morning max el	13499 May 18 07:18	16°♄25'07	19°47'48	morning rise	13500 Apr 21 12:25	27°♄59'14		
desc. node	13499 May 26 20:51	26°♄55'14		direct	13500 Apr 24 20:47	26°♄55'07		
	13499 May 29 01:20	0°♄			13500 May 01 00:24	0°♄		
greatest brilliancy	13499 May 31 07:22	3°♄15'08	-0.6m	morning max el	13500 May 01 14:40	0°♄33'45	18°52'16	
morning set	13499 Jun 13 18:25	23°♄31'21		desc. node	13500 May 13 17:37	16°♄37'20		
	13499 Jun 17 23:06	0°♄		greatest brilliancy	13500 May 15 06:27	18°♄56'43	-0.8m	
max. Earth dist.	13499 Jun 24 21:27	10°♄51'53	1.44693 AU		13500 May 22 10:37	0°♄		
				morning set	13500 May 24 02:50	2°♄36'07		
superior conj	13499 Jun 29 19:48	18°♄44'55	-2°08'34	max. Earth dist.	13500 Jun 07 14:38	25°♄10'17	1.45624 AU	
minimum elong	13499 Jun 30 00:38	19°♄04'25	2°09'23					
	13499 Jul 06 16:49	0°♄		superior conj	13500 Jun 09 10:33	28°♄02'19	-2°12'45	
evening rise	13499 Jul 13 09:30	11°♄14'18		minimum elong	13500 Jun 09 08:18	27°♄53'28	2°13'45	
asc. node	13499 Jul 20 17:49	23°♄35'51			13500 Jun 10 16:32	0°♄		
	13499 Jul 24 18:23	0°♄		evening rise	13500 Jun 24 14:34	22°♄10'17		
evening max el	13499 Jul 31 06:24	8°♄24'31	18°07'21		13500 Jun 29 10:55	0°♄		
retrograde	13499 Aug 06 15:21	11°♄45'03		asc. node	13500 Jul 07 14:36	12°♄46'46		
evening set	13499 Aug 09 09:52	11°♄05'01		evening max el	13500 Jul 14 19:45	22°♄01'42	18°29'15	
inferior conj	13499 Aug 15 14:11	5°♄47'29	2°00'04	retrograde	13500 Jul 21 06:44	25°♄30'09		
minimum elong	13499 Aug 15 16:41	5°♄40'40	1°58'49	evening set	13500 Jul 24 09:53	24°♄35'06		
min. Earth dist.	13499 Aug 18 07:02	2°♄51'59	0.63101 AU	inferior conj	13500 Jul 30 03:44	19°♄01'44	2°39'58	
	13499 Aug 21 08:20	30°♄		minimum elong	13500 Jul 30 05:54	18°♄55'14	2°38'45	
morning rise	13499 Aug 21 21:30	29°♄34'19		min. Earth dist.	13500 Aug 01 06:55	16°♄28'41	0.65111 AU	
desc. node	13499 Aug 22 18:47	28°♄56'55		morning rise	13500 Aug 05 00:44	12°♄39'43		
direct	13499 Aug 28 13:27	27°♄04'33		desc. node	13500 Aug 09 16:16	10°♄12'30		
	13499 Sep 05 13:01	0°♄		direct	13500 Aug 11 12:35	10°♄00'12		
morning max el	13499 Sep 11 13:19	5°♄06'24	27°50'25	morning max el	13500 Aug 25 00:04	17°♄55'54	27°10'14	
	13499 Sep 30 08:37	0°♄			13500 Sep 04 03:17	0°♄		
morning set	13499 Oct 16 01:49	28°♄19'17			13500 Sep 23 06:47	0°♄		
asc. node	13499 Oct 16 19:47	29°♄50'19		morning set	13500 Sep 29 12:41	11°♄37'44		
	13499 Oct 16 21:41	0°♄		asc. node	13500 Oct 03 16:22	19°♄53'28		
max. Earth dist.	13499 Oct 21 03:58	8°♄54'56	1.32135 AU	max. Earth dist.	13500 Oct 03 21:32	20°♄19'53	1.33408 AU	
superior conj	13499 Oct 23 19:07	14°♄36'16	1°02'21	superior conj	13500 Oct 07 22:09	28°♄43'05	0°39'25	
minimum elong	13499 Oct 23 16:51	14°♄23'52	1°02'39	minimum elong	13500 Oct 07 20:19	28°♄33'20	0°39'28	
evening rise	13499 Oct 30 15:02	29°♄31'40			13500 Oct 08 12:39	0°♄		
	13499 Oct 30 20:19	0°♄		evening rise	13500 Oct 15 01:41	14°♄00'28		
	13499 Nov 16 10:12	0°♄			13500 Oct 23 01:44	0°♄		
desc. node	13499 Nov 18 15:09	2°♄54'51		evening max el	13500 Nov 04 23:35	18°♄21'07	22°02'05	
evening max el	13499 Nov 23 11:55	8°♄19'20	23°43'28	desc. node	13500 Nov 05 12:26	18°♄51'58		
retrograde	13499 Dec 06 23:46	15°♄02'27		retrograde	13500 Nov 17 14:15	24°♄36'12		
evening set	13499 Dec 11 15:46	14°♄15'02		evening set	13500 Nov 20 20:32	24°♄12'33		
min. Earth dist.	13499 Dec 17 22:37	11°♄12'52	0.55426 AU	min. Earth dist.	13500 Nov 29 05:01	20°♄30'17	0.54585 AU	
inferior conj	13499 Dec 19 18:52	10°♄07'13	-5°49'46	inferior conj	13500 Nov 29 13:52	20°♄17'54	-5°49'01	
minimum elong	13499 Dec 19 22:59	10°♄01'06	5°48'23	minimum elong	13500 Nov 29 09:07	20°♄24'32	5°47'34	
morning rise	13499 Dec 28 08:01	6°♄12'54		morning rise	13500 Dec 07 22:45	16°♄30'36		
direct	13499 Dec 31 00:08	5°♄55'12		direct	13500 Dec 11 10:46	16°♄03'28		
morning max el	13500 Jan 10 16:07	11°♄01'28	20°14'53	morning max el	13500 Dec 23 15:12	21°♄53'28	21°46'44	
asc. node	13500 Jan 12 19:44	13°♄17'14			13500 Dec 30 10:36	0°♄		
	13500 Jan 23 14:16	0°♄		asc. node	13500 Dec 30 16:55	0°♄22'38		
morning set	13500 Jan 28 23:36	10°♄41'00		morning set	13501 Jan 13 09:33	25°♄25'18		
					13501 Jan 15 13:31	0°♄		
superior conj	13500 Feb 05 14:51	26°♄19'18	1°08'32					
minimum elong	13500 Feb 05 17:35	26°♄32'59	1°08'50	superior conj	13501 Jan 20 13:13	10°♄34'07	1°25'00	
	13500 Feb 07 11:04	0°♄		minimum elong	13501 Jan 20 15:22	10°♄45'18	1°25'39	
max. Earth dist.	13500 Feb 11 06:28	7°♄23'17	1.36610 AU	max. Earth dist.	13501 Jan 24 18:23	19°♄14'34	1.34639 AU	
desc. node	13500 Feb 14 15:21	13°♄39'45		evening rise	13501 Jan 29 00:04	27°♄33'19		
evening rise	13500 Feb 15 01:18	14°♄24'57			13501 Jan 30 07:05	0°♄		

desc. node	13501 Feb 01 11:57	4° X 04'13		minimum elong	13502 Jan 04 19:24	25° Z 11'35	1°35'41
	13501 Feb 17 10:15	0° Y			13502 Jan 07 01:09	0° \approx	
evening max el	13501 Mar 05 03:05	19° Y 19'49	26°47'17	max. Earth dist.	13502 Jan 07 14:12	1° \approx 09'14	1.33058 AU
retrograde	13501 Mar 18 08:01	26° Y 44'40		evening rise	13502 Jan 12 11:20	11° \approx 12'13	
evening set	13501 Mar 24 18:57	24° Y 12'28		desc. node	13502 Jan 19 08:37	24° \approx 16'03	
asc. node	13501 Mar 28 13:51	20° Y 27'55			13502 Jan 22 15:10	0° X	
min. Earth dist.	13501 Mar 28 19:19	20° Y 12'17	0.66117 AU		13502 Feb 12 22:45	0° Y	
inferior conj	13501 Mar 30 20:11	17° Y 48'50	0°42'43	evening max el	13502 Feb 15 16:21	2° Y 46'57	27°24'20
minimum elong	13501 Mar 30 19:05	17° Y 52'04	0°42'05	retrograde	13502 Mar 01 07:41	10° Y 14'00	
morning rise	13501 Apr 05 20:28	12° Y 11'11		evening set	13502 Mar 08 02:12	7° Y 44'41	
direct	13501 Apr 08 18:38	11° Y 24'00		min. Earth dist.	13502 Mar 11 22:22	4° Y 16'11	0.64419 AU
morning max el	13501 Apr 15 04:04	14° Y 46'12	18°13'16	inferior conj	13502 Mar 14 10:57	1° Y 34'34	-0°19'43
	13501 Apr 26 09:12	0° B		minimum elong	13502 Mar 14 11:33	1° Y 32'58	0°19'23
desc. node	13501 Apr 30 14:18	6° B 40'40		asc. node	13502 Mar 15 11:21	0° Y 30'02	
morning set	13501 May 04 11:28	12° B 54'05			13502 Mar 15 23:03	30° R X	
	13501 May 15 05:19	0° II		morning rise	13502 Mar 20 22:53	26° X 10'43	
				direct	13502 Mar 23 12:15	25° X 37'12	
superior conj	13501 May 19 18:32	7° II 08'47	-1°56'45	morning max el	13502 Mar 29 21:03	28° X 54'33	17°51'19
minimum elong	13501 May 19 10:07	6° II 35'52	1°57'03		13502 Mar 30 22:20	0° Y	
max. Earth dist.	13501 May 21 10:27	9° II 44'49	1.45823 AU	morning set	13502 Apr 16 00:20	24° Y 33'56	
	13501 Jun 03 10:39	0° E		desc. node	13502 Apr 17 10:53	26° Y 58'37	
evening rise	13501 Jun 04 19:44	2° E 08'42			13502 Apr 19 06:20	0° B	
greatest brilliancy	13501 Jun 16 01:47	19° E 31'30	-0.7m				
	13501 Jun 23 08:12	0° Ω		superior conj	13502 Apr 29 13:03	16° B 48'40	-1°24'39
asc. node	13501 Jun 24 11:31	1° Ω 28'56		minimum elong	13502 Apr 29 04:42	16° B 15'11	1°24'21
evening max el	13501 Jun 28 05:36	5° Ω 47'21	19°08'18	max. Earth dist.	13502 May 04 06:22	24° B 18'57	1.45278 AU
retrograde	13501 Jul 05 03:03	9° Ω 36'31			13502 May 07 21:24	0° II	
evening set	13501 Jul 08 15:19	8° Ω 25'00		evening rise	13502 May 15 09:06	11° II 33'49	
inferior conj	13501 Jul 14 02:14	2° Ω 37'15	3°03'00		13502 May 27 14:27	0° E	
minimum elong	13501 Jul 14 03:32	2° Ω 33'02	3°01'55	greatest brilliancy	13502 May 30 08:31	4° E 01'38	-0.6m
min. Earth dist.	13501 Jul 15 14:49	0° Ω 39'22	0.66754 AU	asc. node	13502 Jun 11 08:34	19° E 31'44	
	13501 Jul 16 03:19	30° R E		evening max el	13502 Jun 11 10:06	19° E 35'37	20°03'09
morning rise	13501 Jul 19 15:08	26° E 13'02		retrograde	13502 Jun 19 01:40	23° E 57'16	
direct	13501 Jul 25 18:43	23° E 33'48		evening set	13502 Jun 22 23:38	22° E 28'45	
desc. node	13501 Jul 27 13:41	23° E 45'38		inferior conj	13502 Jun 28 06:43	16° E 27'51	3°12'06
	13501 Aug 06 07:30	0° Ω		minimum elong	13502 Jun 28 06:59	16° E 26'56	3°11'05
morning max el	13501 Aug 07 11:03	1° Ω 07'58	26°04'05	min. Earth dist.	13502 Jun 29 04:58	15° E 12'26	0.67951 AU
	13501 Aug 29 03:53	0° P		morning rise	13502 Jul 03 14:01	10° E 05'41	
morning set	13501 Sep 12 10:32	24° P 19'03		direct	13502 Jul 09 06:33	7° E 35'20	
	13501 Sep 15 10:59	0° E		desc. node	13502 Jul 14 10:59	9° E 14'34	
max. Earth dist.	13501 Sep 16 05:04	1° E 26'54	1.35190 AU	morning max el	13502 Jul 20 21:25	14° E 33'04	24°41'31
asc. node	13501 Sep 20 12:56	10° E 00'00			13502 Aug 02 12:17	0° Ω	
					13502 Aug 22 00:37	0° P	
superior conj	13501 Sep 21 17:44	12° E 26'02	0°11'18	morning set	13502 Aug 25 15:14	6° P 13'19	
minimum elong	13501 Sep 21 17:05	12° E 22'45	0°11'17	max. Earth dist.	13502 Aug 29 05:09	12° P 37'28	1.37358 AU
behind sun begin	13501 Sep 21 12:44	12° E 00'36					
behind sun end	13501 Sep 21 21:26	12° E 44'56		superior conj	13502 Sep 05 02:41	25° P 37'17	-0°21'08
evening rise	13501 Sep 29 09:59	28° E 20'57		minimum elong	13502 Sep 05 04:05	25° P 44'08	0°21'04
	13501 Sep 30 05:10	0° M		asc. node	13502 Sep 07 09:31	0° E 06'19	
evening max el	13501 Oct 17 21:35	28° M 50'10	20°32'42		13502 Sep 07 08:15	0° E	
	13501 Oct 19 03:17	0° X		evening rise	13502 Sep 13 13:35	12° E 27'11	
desc. node	13501 Oct 23 09:50	2° X 58'21			13502 Sep 22 21:54	0° M	
retrograde	13501 Oct 29 00:56	4° X 22'20		evening max el	13502 Sep 30 09:45	10° M 06'04	19°23'29
evening set	13501 Oct 31 06:34	4° X 09'58		retrograde	13502 Oct 09 21:21	14° M 50'46	
inferior conj	13501 Nov 09 05:56	0° X 15'02	-4°48'48	desc. node	13502 Oct 10 07:17	14° M 50'15	
minimum elong	13501 Nov 08 19:56	0° X 29'30	4°45'24	evening set	13502 Oct 11 18:05	14° M 40'34	
	13501 Nov 09 16:18	30° R M		inferior conj	13502 Oct 20 09:29	10° M 32'40	-3°08'25
min. Earth dist.	13501 Nov 10 11:45	29° M 31'52	0.54663 AU	minimum elong	13502 Oct 20 01:28	10° M 45'43	3°04'54
morning rise	13501 Nov 17 09:00	26° M 16'23		min. Earth dist.	13502 Oct 22 21:42	8° M 54'55	0.55654 AU
direct	13501 Nov 21 19:33	25° M 34'02		morning rise	13502 Oct 28 06:38	6° M 03'59	
	13501 Dec 02 18:28	0° X		direct	13502 Nov 02 13:30	5° M 00'53	
morning max el	13501 Dec 05 03:24	2° X 03'36	23°33'34	morning max el	13502 Nov 16 13:27	12° M 03'30	25°20'10
asc. node	13501 Dec 17 14:01	18° X 23'14			13502 Nov 30 08:18	0° X	
	13501 Dec 23 22:48	0° Z		asc. node	13502 Dec 04 11:00	7° X 05'21	
morning set	13501 Dec 28 21:17	10° Z 11'07		morning set	13502 Dec 13 09:02	24° X 53'35	
					13502 Dec 15 17:25	0° Z	
superior conj	13502 Jan 04 18:15	25° Z 05'20	1°34'46				

superior conj	13502 Dec 20 03:31	9°  46'07	1°38'11	minimum elong	13503 Dec 04 13:51	24°  23'52	1°36'34
minimum elong	13502 Dec 20 03:34	9°  46'26	1°39'13	max. Earth dist.	13503 Dec 05 00:33	25°  23'33	1.31320 AU
max. Earth dist.	13502 Dec 21 17:13	13°  13'42	1.31940 AU		13503 Dec 07 02:15	0°  3	
evening rise	13502 Dec 27 08:01	25°  14'03		evening rise	13503 Dec 11 11:24	9°  31'09	
	13502 Dec 29 16:17	0°  ≈			13503 Dec 21 24:00	0°  ≈	
desc. node	13503 Jan 06 05:25	14°  ≈09'32		desc. node	13503 Dec 24 02:18	3°  ≈36'12	
	13503 Jan 16 03:31	0°  ✕		evening max el	13504 Jan 11 08:38	27°  ≈56'58	27°07'59
evening max el	13503 Jan 29 03:05	15°  ✕43'43	27°32'49		13504 Jan 13 16:05	0°  ✕	
retrograde	13503 Feb 11 23:55	23°  ✕06'17		retrograde	13504 Jan 25 07:47	5°  ✕11'36	
evening set	13503 Feb 18 21:54	20°  ✕47'02		evening set	13504 Feb 01 02:48	3°  ✕10'42	
min. Earth dist.	13503 Feb 22 15:56	17°  ✕45'41	0.62431 AU	min. Earth dist.	13504 Feb 04 23:03	0°  ✕28'10	0.60265 AU
inferior conj	13503 Feb 25 14:31	14°  ✕57'52	-1°33'04		13504 Feb 05 12:55	30°  R≈	
minimum elong	13503 Feb 25 17:41	14°  ✕50'18	1°31'24	inferior conj	13504 Feb 08 03:19	27°  ≈49'05	-2°54'46
asc. node	13503 Mar 02 08:49	10°  ✕59'12		minimum elong	13504 Feb 08 09:36	27°  ≈35'55	2°51'47
morning rise	13503 Mar 04 16:10	9°  ✕50'51		morning rise	13504 Feb 15 19:34	23°  ≈01'51	
direct	13503 Mar 06 22:26	9°  ✕27'28		asc. node	13504 Feb 17 06:14	22°  ≈46'36	
morning max el	13503 Mar 13 14:40	12°  ✕50'51	17°46'55	direct	13504 Feb 17 21:11	22°  ≈45'03	
	13503 Mar 25 08:10	0°  Υ		morning max el	13504 Feb 25 05:27	26°  ≈25'05	18°01'05
morning set	13503 Mar 29 12:59	7°  Υ21'17			13504 Feb 28 07:58	0°  ✕	
desc. node	13503 Apr 04 07:27	17°  Υ26'43		morning set	13504 Mar 11 19:15	20°  ✕57'15	
					13504 Mar 16 17:09	0°  Υ	
superior conj	13503 Apr 10 05:40	27°  Υ31'52	-0°45'12	desc. node	13504 Mar 21 03:57	8°  Υ00'46	
minimum elong	13503 Apr 10 01:15	27°  Υ13'22	0°44'55				
	13503 Apr 11 17:15	0°  8		superior conj	13504 Mar 21 22:20	9°  Υ21'59	-0°06'06
max. Earth dist.	13503 Apr 16 23:41	8°  836'03	1.44047 AU	minimum elong	13504 Mar 21 21:49	9°  Υ19'44	0°06'05
evening rise	13503 Apr 24 22:02	21°  805'58		behind sun begin	13504 Mar 21 14:27	8°  Υ47'11	
	13503 Apr 30 18:00	0°  II		behind sun end	13504 Mar 22 05:12	9°  Υ52'13	
	13503 May 22 06:03	0°  ☾		max. Earth dist.	13504 Mar 29 12:15	22°  Υ20'24	1.42262 AU
evening max el	13503 May 25 08:39	3°  ☾24'02	21°11'15		13504 Apr 03 04:53	0°  8	
asc. node	13503 May 29 05:41	6°  ☾42'27		evening rise	13504 Apr 04 00:41	1°  819'13	
retrograde	13503 Jun 03 00:30	8°  ☾26'52			13504 Apr 23 05:05	0°  II	
evening set	13503 Jun 07 08:50	6°  ☾41'46		evening max el	13504 May 07 02:10	17°  II13'20	22°28'35
inferior conj	13503 Jun 12 14:47	0°  ☾29'16	3°09'18	asc. node	13504 May 15 02:53	22°  II45'42	
minimum elong	13503 Jun 12 14:04	0°  ☾31'44	3°08'13	retrograde	13504 May 16 21:50	23°  II00'24	
	13503 Jun 12 23:11	30°  RII		evening set	13504 May 21 17:12	20°  II59'55	
min. Earth dist.	13503 Jun 12 23:24	29°  II59'14	0.68675 AU	inferior conj	13504 May 27 00:20	14°  II38'02	2°55'48
morning rise	13503 Jun 17 19:05	24°  II11'40		minimum elong	13504 May 26 22:49	14°  II43'19	2°54'36
direct	13503 Jun 22 23:09	21°  II56'27		min. Earth dist.	13504 May 26 20:01	14°  II53'05	0.68924 AU
desc. node	13503 Jul 01 08:12	26°  II12'25		morning rise	13504 Jun 01 04:17	8°  II26'40	
morning max el	13503 Jul 03 08:09	28°  II06'33	23°12'07	direct	13504 Jun 05 19:32	6°  II30'23	
	13503 Jul 05 03:17	0°  ☾		morning max el	13504 Jun 14 21:48	11°  II48'30	21°44'49
	13503 Jul 27 04:14	0°  Ω		desc. node	13504 Jun 17 05:18	14°  II16'13	
morning set	13503 Aug 06 22:06	17°  Ω08'55			13504 Jun 29 06:58	0°  ☾	
max. Earth dist.	13503 Aug 11 03:22	24°  Ω18'13	1.39703 AU	morning set	13504 Jul 17 03:57	26°  ☾58'50	
	13503 Aug 14 09:27	0°  ൬			13504 Jul 19 01:13	0°  Ω	
				max. Earth dist.	13504 Jul 23 05:10	6°  Ω47'39	1.41954 AU
superior conj	13503 Aug 18 21:02	8°  ൬06'52	-0°56'03				
minimum elong	13503 Aug 19 01:10	8°  ൬25'55	0°55'52	superior conj	13504 Jul 30 20:23	19°  Ω45'17	-1°30'08
asc. node	13503 Aug 25 06:06	20°  ൬08'18		minimum elong	13504 Jul 31 03:01	20°  Ω14'16	1°30'02
evening rise	13503 Aug 28 09:29	26°  ൬10'43			13504 Aug 05 14:45	0°  ൬	
	13503 Aug 30 09:21	0°  ♎		evening rise	13504 Aug 10 17:55	9°  ൬22'03	
evening max el	13503 Sep 13 10:23	22°  ♎08'55	18°36'11	asc. node	13504 Aug 11 02:43	10°  ൬02'24	
retrograde	13503 Sep 21 11:44	26°  ♎12'38			13504 Aug 22 19:39	0°  ♎	
evening set	13503 Sep 23 10:31	25°  ♎59'09		evening max el	13504 Aug 26 19:32	4°  ♎50'53	18°09'51
desc. node	13503 Sep 27 04:48	24°  ♎25'27		retrograde	13504 Sep 02 20:42	8°  ♎26'20	
inferior conj	13503 Oct 01 09:14	21°  ♎31'51	-1°19'38	evening set	13504 Sep 05 02:19	8°  ♎05'12	
minimum elong	13503 Oct 01 06:01	21°  ♎37'57	1°18'04	inferior conj	13504 Sep 12 06:36	3°  ♎17'17	0°15'13
min. Earth dist.	13503 Oct 04 13:37	19°  ♎07'31	0.57378 AU	minimum elong	13504 Sep 12 07:07	3°  ♎16'09	0°14'58
morning rise	13503 Oct 08 22:04	16°  ♎25'15		transit middle	13504 Sep 12 07:07	3°  ♎16'09	0°14'58
direct	13503 Oct 14 21:44	14°  ♎55'53		transit begin	13504 Sep 12 05:49	3°  ♎19'00	
morning max el	13503 Oct 29 04:41	22°  ♎25'24	26°47'51	transit end	13504 Sep 12 08:24	3°  ♎13'18	
	13503 Nov 04 22:14	0°  ♏		desc. node	13504 Sep 13 02:19	2°  ♎33'21	
asc. node	13503 Nov 21 07:53	26°  ♏17'32		min. Earth dist.	13504 Sep 15 13:28	0°  ♎23'48	0.59542 AU
	13503 Nov 23 05:21	0° ♏			13504 Sep 16 00:56	30° R൬	
morning set	13503 Nov 27 18:56	9° ♏26'48		morning rise	13504 Sep 19 08:33	27° ൬37'16	
				direct	13504 Sep 25 19:45	25° ൬40'14	
superior conj	13503 Dec 04 14:49	24° ♏29'18	1°35'36		13504 Oct 06 04:35	0° ♎	

morning max el	13504 Oct 10 03:25	3°♄28'58	27°42'28		13505 Oct 04 08:31	0°♄	
	13504 Oct 29 14:21	0°♄			13505 Oct 22 04:37	0°♄	
asc. node	13504 Nov 07 04:40	15°♄51'46		asc. node	13505 Oct 25 01:22	5°♄41'18	
morning set	13504 Nov 11 01:15	23°♄46'19		morning set	13505 Oct 26 01:59	7°♄46'57	
	13504 Nov 13 22:55	0°♄		max. Earth dist.	13505 Oct 31 14:16	19°♄29'41	1.31645 AU
max. Earth dist.	13504 Nov 17 08:47	7°♄31'46	1.31219 AU				
				superior conj	13505 Nov 02 12:09	23°♄41'32	1°13'04
superior conj	13504 Nov 18 02:20	9°♄09'36	1°27'12	minimum elong	13505 Nov 02 09:55	23°♄29'13	1°13'32
minimum elong	13504 Nov 18 00:32	8°♄59'39	1°27'57		13505 Nov 05 08:34	0°♄	
evening rise	13504 Nov 24 19:18	23°♄58'20		evening rise	13505 Nov 09 05:44	8°♄30'26	
	13504 Nov 27 15:52	0°♄			13505 Nov 20 04:18	0°♄	
desc. node	13504 Dec 09 23:17	22°♄25'57		desc. node	13505 Nov 26 20:24	10°♄24'58	
	13504 Dec 15 04:12	0°♄		evening max el	13505 Dec 04 20:58	19°♄52'28	24°41'25
evening max el	13504 Dec 23 06:48	9°♄19'09	26°08'50	retrograde	13505 Dec 18 14:51	26°♄44'16	
retrograde	13505 Jan 06 05:33	16°♄23'32		evening set	13505 Dec 24 00:16	25°♄39'56	
evening set	13505 Jan 12 12:55	14°♄48'49		min. Earth dist.	13505 Dec 29 08:46	22°♄52'43	0.56259 AU
min. Earth dist.	13505 Jan 16 20:06	12°♄12'14	0.58120 AU	inferior conj	13505 Dec 31 19:45	21°♄19'33	-5°25'48
inferior conj	13505 Jan 19 21:49	9°♄58'41	-4°17'27	minimum elong	13506 Jan 01 03:13	21°♄07'44	5°23'29
minimum elong	13505 Jan 20 06:28	9°♄42'59	4°14'01	morning rise	13506 Jan 09 08:14	17°♄14'56	
morning rise	13505 Jan 28 02:57	5°♄33'00		direct	13506 Jan 11 16:31	16°♄59'53	
direct	13505 Jan 30 04:14	5°♄19'08		asc. node	13506 Jan 21 00:57	21°♄19'13	
asc. node	13505 Feb 03 03:38	6°♄14'12		morning max el	13506 Jan 21 10:49	21°♄42'36	19°31'49
morning max el	13505 Feb 07 13:32	9°♄26'04	18°35'23		13506 Jan 28 00:09	0°♄	
	13505 Feb 20 21:57	0°♄		morning set	13506 Feb 07 16:36	19°♄35'50	
morning set	13505 Feb 23 13:46	5°♄05'55			13506 Feb 12 20:40	0°♄	
superior conj	13505 Mar 04 11:39	22°♄08'28	0°28'14	superior conj	13506 Feb 15 17:05	5°♄38'54	0°55'51
minimum elong	13505 Mar 04 13:32	22°♄17'10	0°28'10	minimum elong	13506 Feb 15 19:49	5°♄52'16	0°55'58
desc. node	13505 Mar 08 00:26	28°♄36'54		max. Earth dist.	13506 Feb 22 02:49	17°♄49'02	1.37873 AU
	13505 Mar 08 18:56	0°♄		desc. node	13506 Feb 22 20:56	19°♄11'53	
max. Earth dist.	13505 Mar 11 20:20	5°♄23'40	1.40124 AU	evening rise	13506 Feb 25 19:59	24°♄29'51	
evening rise	13505 Mar 15 23:54	12°♄27'41			13506 Mar 01 00:21	0°♄	
	13505 Mar 27 00:48	0°♄			13506 Mar 20 17:01	0°♄	
	13505 Apr 18 15:17	0°♄		evening max el	13506 Apr 02 06:24	14°♄58'19	25°07'38
evening max el	13505 Apr 19 16:45	1°♄04'52	23°49'37	retrograde	13506 Apr 14 06:33	21°♄56'28	
retrograde	13505 Apr 30 16:14	7°♄32'02		asc. node	13506 Apr 18 21:32	20°♄24'48	
asc. node	13505 May 02 00:10	7°♄24'04		evening set	13506 Apr 20 01:09	19°♄31'58	
evening set	13505 May 05 23:09	5°♄18'11		min. Earth dist.	13506 Apr 24 10:54	14°♄37'31	0.68047 AU
min. Earth dist.	13505 May 10 16:34	29°♄47'38	0.68711 AU	inferior conj	13506 Apr 25 16:17	13°♄01'25	1°58'06
	13505 May 10 12:55	30°♄47'38		minimum elong	13506 Apr 25 14:08	13°♄08'26	1°56'49
inferior conj	13505 May 11 09:27	28°♄49'56	2°32'05	morning rise	13506 May 01 03:26	7°♄06'37	
minimum elong	13505 May 11 07:25	28°♄56'53	2°30'46	direct	13506 May 04 18:19	5°♄51'19	
morning rise	13505 May 16 15:41	22°♄46'10		morning max el	13506 May 11 20:24	9°♄44'44	19°22'09
direct	13505 May 20 18:25	21°♄10'29		desc. node	13506 May 21 23:05	22°♄34'30	
morning max el	13505 May 28 17:18	25°♄40'49	20°26'38	greatest brilliancy	13506 May 24 13:38	26°♄22'54	-0.7m
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	13505 Jun 22 16:05	0°♄			13506 Jun 15 12:17	0°♄	
morning set	13505 Jun 26 11:58	5°♄52'33		max. Earth dist.	13506 Jun 18 04:52	4°♄13'24	1.45184 AU
max. Earth dist.	13505 Jul 05 13:43	20°♄09'07	1.43853 AU				
				superior conj	13506 Jun 21 22:01	10°♄05'56	-2°12'44
superior conj	13505 Jul 11 20:48	0°♄24'15	-1°58'02	minimum elong	13506 Jun 22 00:14	10°♄14'46	2°13'45
minimum elong	13505 Jul 12 03:38	0°♄52'33	1°58'28		13506 Jul 04 04:41	0°♄	
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evening rise	13505 Jul 24 10:07	21°♄48'50		asc. node	13506 Jul 15 20:06	19°♄07'37	
asc. node	13505 Jul 28 23:22	29°♄43'48			13506 Jul 23 13:21	0°♄	
	13505 Jul 29 03:07	0°♄		evening max el	13506 Jul 24 23:20	1°♄30'37	18°14'32
evening max el	13505 Aug 10 09:03	18°♄01'07	18°02'59	retrograde	13506 Jul 31 07:53	4°♄52'37	
retrograde	13505 Aug 16 20:51	21°♄22'43		evening set	13506 Aug 03 06:09	4°♄06'14	
evening set	13505 Aug 19 10:39	20°♄50'16			13506 Aug 08 01:32	30°♄40	
inferior conj	13505 Aug 25 22:42	15°♄43'00	1°28'08	inferior conj	13506 Aug 09 05:32	28°♄41'35	2°19'15
minimum elong	13505 Aug 26 00:56	15°♄37'19	1°27'01	minimum elong	13506 Aug 09 07:59	28°♄34'35	2°17'59
min. Earth dist.	13505 Aug 28 22:19	12°♄42'20	0.61834 AU	min. Earth dist.	13506 Aug 11 16:42	25°♄54'04	0.63999 AU
desc. node	13505 Aug 30 23:51	10°♄50'01		morning rise	13506 Aug 15 08:16	22°♄23'57	
morning rise	13505 Sep 01 12:42	9°♄39'17		desc. node	13506 Aug 17 21:22	20°♄46'49	
direct	13505 Sep 08 04:54	7°♄19'11		direct	13506 Aug 21 23:07	19°♄49'02	
morning max el	13505 Sep 22 08:41	15°♄18'27	27°58'25	morning max el	13506 Sep 04 18:13	27°♄49'00	27°37'06


































































































































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	13506 Sep 28 02:48	0°♌		direct	13507 Aug 05 01:08	3°♌02'05	
morning set	13506 Oct 09 18:42	21°♌22'27		morning max el	13507 Aug 18 05:30	10°♌50'27	26°44'51
asc. node	13506 Oct 11 21:59	25°♌40'38			13507 Sep 02 10:31	0°♍	
	13506 Oct 14 00:12	0°♍			13507 Sep 20 15:38	0°♌	
max. Earth dist.	13506 Oct 14 13:16	1°♍08'25	1.32612 AU	morning set	13507 Sep 23 00:31	4°♌26'32	
				max. Earth dist.	13507 Sep 27 02:56	12°♌26'10	1.34108 AU
superior conj	13506 Oct 17 18:18	7°♍58'59	0°53'18	asc. node	13507 Sep 28 18:35	15°♌45'54	
minimum elong	13506 Oct 17 16:08	7°♍47'16	0°53'28				
evening rise	13506 Oct 24 16:52	23°♍01'55		superior conj	13507 Oct 01 18:31	21°♌56'35	0°28'06
	13506 Oct 28 00:29	0°♎		minimum elong	13507 Oct 01 17:05	21°♌49'06	0°28'06
desc. node	13506 Nov 13 17:38	27°♎13'28			13507 Oct 05 14:11	0°♍	
	13506 Nov 16 08:59	0°♎		evening rise	13507 Oct 09 02:49	7°♍28'16	
evening max el	13506 Nov 16 06:50	29°♎54'49	22°59'48		13507 Oct 21 01:27	0°♎	
retrograde	13506 Nov 29 11:05	6°♎27'34		evening max el	13507 Oct 28 21:47	10°♎03'43	21°21'54
evening set	13506 Dec 03 12:58	5°♎51'25		desc. node	13507 Oct 31 14:58	12°♎27'06	
min. Earth dist.	13506 Dec 10 15:58	2°♎34'35	0.54966 AU	retrograde	13507 Nov 09 22:51	16°♎02'44	
inferior conj	13506 Dec 11 22:23	1°♎51'04	-5°56'44	evening set	13507 Nov 12 16:51	15°♎45'15	
minimum elong	13506 Dec 11 22:54	1°♎50'19	5°55'41	inferior conj	13507 Nov 21 14:16	11°♎51'44	-5°30'14
	13506 Dec 15 07:12	30°♏♎		minimum elong	13507 Nov 21 06:24	12°♎02'47	5°27'59
morning rise	13506 Dec 20 10:19	28°♎01'53		min. Earth dist.	13507 Nov 21 21:57	11°♎40'56	0.54497 AU
direct	13506 Dec 23 10:24	27°♎40'47		morning rise	13507 Nov 29 20:40	8°♎02'24	
	13506 Dec 30 20:38	0°♎		direct	13507 Dec 03 18:05	7°♎29'45	
morning max el	13507 Jan 03 18:04	3°♎05'08	20°51'28	morning max el	13507 Dec 16 11:50	13°♎37'00	22°31'10
asc. node	13507 Jan 07 22:12	7°♎45'36		asc. node	13507 Dec 25 19:21	25°♎16'15	
	13507 Jan 20 22:32	0°♏			13507 Dec 28 16:53	0°♎	
morning set	13507 Jan 23 00:40	4°♏17'07		morning set	13508 Jan 07 11:39	19°♎03'01	
					13508 Jan 12 14:18	0°♏	
superior conj	13507 Jan 30 10:19	19°♏40'31	1°16'22				
minimum elong	13507 Jan 30 12:51	19°♏53'32	1°16'48	superior conj	13508 Jan 14 11:53	4°♏03'39	1°29'56
max. Earth dist.	13507 Feb 04 11:42	29°♏47'58	1.35738 AU	minimum elong	13508 Jan 14 13:38	4°♏12'57	1°30'42
	13507 Feb 04 14:10	0°♐		max. Earth dist.	13508 Jan 18 02:49	11°♏39'01	1.33911 AU
evening rise	13507 Feb 08 10:00	7°♐16'25		evening rise	13508 Jan 22 14:30	20°♏38'41	
desc. node	13507 Feb 09 17:30	9°♐41'18		desc. node	13508 Jan 27 14:09	0°♐01'04	
	13507 Feb 21 18:12	0°♑			13508 Jan 27 13:54	0°♐	
evening max el	13507 Mar 15 20:00	28°♑47'51	26°15'31		13508 Feb 15 16:31	0°♑	
	13507 Mar 17 02:30	0°♒		evening max el	13508 Feb 26 09:32	12°♑25'50	27°05'57
retrograde	13507 Mar 28 15:53	6°♒06'03		retrograde	13508 Mar 10 19:31	19°♑53'08	
evening set	13507 Apr 03 21:28	3°♒34'57		evening set	13508 Mar 17 10:10	17°♑20'56	
asc. node	13507 Apr 05 18:59	1°♒48'34		min. Earth dist.	13508 Mar 21 08:26	13°♑34'56	0.65442 AU
	13507 Apr 07 09:59	30°♒♑		asc. node	13508 Mar 22 16:28	12°♑04'58	
min. Earth dist.	13507 Apr 08 00:52	29°♑15'40	0.66945 AU	inferior conj	13508 Mar 23 14:33	11°♑02'07	0°17'36
inferior conj	13507 Apr 09 18:45	27°♑07'07	1°13'27	minimum elong	13508 Mar 23 14:04	11°♑03'30	0°17'20
minimum elong	13507 Apr 09 17:04	27°♑12'18	1°12'29	morning rise	13508 Mar 29 19:32	5°♑30'20	
morning rise	13507 Apr 15 13:30	21°♑22'54		direct	13508 Apr 01 13:44	4°♑49'29	
direct	13507 Apr 18 17:28	20°♑26'17		morning max el	13508 Apr 07 21:59	8°♑08'10	18°01'47
morning max el	13507 Apr 25 06:38	23°♑55'58	18°33'36		13508 Apr 23 02:07	0°♒	
	13507 Apr 30 09:30	0°♒		desc. node	13508 Apr 24 16:28	2°♒36'29	
desc. node	13507 May 08 19:49	12°♒26'21		morning set	13508 Apr 26 04:04	5°♒01'51	
morning set	13507 May 16 07:17	24°♒08'35					
	13507 May 20 00:48	0°♓		superior conj	13508 May 10 18:12	28°♒28'28	-1°44'36
				minimum elong	13508 May 10 09:04	27°♒52'27	1°44'35
superior conj	13507 Jun 01 07:43	19°♓12'43	-2°08'21		13508 May 11 17:27	0°♓	
minimum elong	13507 Jun 01 02:16	18°♓51'24	2°09'07	max. Earth dist.	13508 May 13 19:58	3°♓18'09	1.45678 AU
max. Earth dist.	13507 May 31 23:59	18°♓42'29	1.45805 AU	evening rise	13508 May 26 20:33	23°♓30'27	
	13507 Jun 08 05:08	0°♑			13508 May 31 01:52	0°♑	
evening rise	13507 Jun 16 23:42	13°♑50'46		greatest brilliancy	13508 Jun 09 01:17	13°♑35'20	-0.7m
greatest brilliancy	13507 Jun 25 04:03	26°♑47'22	-0.8m	asc. node	13508 Jun 18 13:56	26°♑34'21	
	13507 Jun 27 05:35	0°♒		evening max el	13508 Jun 20 19:03	28°♑58'52	19°29'51
asc. node	13507 Jul 02 16:58	8°♒07'31			13508 Jun 21 20:48	0°♒	
evening max el	13507 Jul 08 11:26	15°♒12'04	18°43'48	retrograde	13508 Jun 27 23:33	3°♒01'04	
retrograde	13507 Jul 15 01:51	18°♒47'59		evening set	13508 Jul 01 15:46	1°♒42'28	
evening set	13507 Jul 18 08:50	17°♒45'57			13508 Jul 03 14:15	30°♒♑	
inferior conj	13507 Jul 23 23:18	12°♒06'00	2°51'36	inferior conj	13508 Jul 07 00:41	25°♒48'50	3°08'26
minimum elong	13507 Jul 24 01:08	12°♒00'17	2°50'27	minimum elong	13508 Jul 07 01:33	25°♒45'57	3°07'23
min. Earth dist.	13507 Jul 25 20:11	9°♒46'56	0.65857 AU	min. Earth dist.	13508 Jul 08 07:06	24°♒08'17	0.67313 AU
morning rise	13507 Jul 29 16:33	5°♒42'18		morning rise	13508 Jul 12 10:51	19°♒24'48	

direct	13508 Jul 18 09:52	16°  48'25		min. Earth dist.	13509 Jun 21 23:27	8°  48'35	0.68320 AU
desc. node	13508 Jul 21 16:11	17°  27'51		morning rise	13509 Jun 26 12:40	3°  24'32	
morning max el	13508 Jul 30 16:24	24°  09'43	25°30'24	direct	13509 Jul 02 00:04	0°  59'43	
	13508 Aug 04 21:58	0°  ♁		desc. node	13509 Jul 08 13:26	3°  58'01	
	13508 Aug 25 20:13	0°  ♊		morning max el	13509 Jul 13 02:33	7°  58'35	24°03'36
morning set	13508 Sep 04 15:37	16°  ♊49'22			13509 Jul 30 14:03	0°  ♁	
max. Earth dist.	13508 Sep 08 06:37	23°  ♊30'53	1.36070 AU	morning set	13509 Aug 17 11:31	28°  ♁20'01	
	13508 Sep 11 15:48	0°  ♋			13509 Aug 18 10:43	0°  ♊	
				max. Earth dist.	13509 Aug 21 04:31	4°  ♊48'41	1.38351 AU
superior conj	13508 Sep 14 09:57	5°  ♋26'45	-0°02'03	superior conj	13509 Aug 28 13:10	18°  ♊21'35	-0°35'50
minimum elong	13508 Sep 14 10:05	5°  ♋27'23	0°02'03	minimum elong	13509 Aug 28 15:41	18°  ♊33'31	0°35'41
behind sun begin	13508 Sep 14 03:50	4°  ♋56'10		asc. node	13509 Sep 01 11:43	25°  ♊57'48	
behind sun end	13508 Sep 14 16:20	5°  ♋58'40			13509 Sep 03 13:03	0°  ♋	
asc. node	13508 Sep 14 15:09	5°  ♋52'49		evening rise	13509 Sep 06 10:04	5°  ♋40'31	
evening rise	13508 Sep 22 09:25	21°  ♋43'14			13509 Sep 20 14:28	0°  ♌	
	13508 Sep 26 12:26	0°  ♌		evening max el	13509 Sep 22 19:37	2°  ♌28'14	19°00'45
evening max el	13508 Oct 10 01:40	20°  ♌51'17	20°00'36	retrograde	13509 Oct 01 15:24	6°  ♌53'37	
desc. node	13508 Oct 17 12:24	25°  ♌38'15		evening set	13509 Oct 03 12:10	6°  ♌42'34	
retrograde	13508 Oct 20 12:19	26°  ♌03'17		desc. node	13509 Oct 04 09:52	6°  ♌29'37	
evening set	13508 Oct 22 12:04	25°  ♌52'49		inferior conj	13509 Oct 11 21:07	2°  ♌27'11	-2°21'33
inferior conj	13508 Oct 31 09:38	21°  ♌53'48	-4°09'15	minimum elong	13509 Oct 11 15:06	2°  ♌37'36	2°18'44
minimum elong	13508 Oct 30 23:47	22°  ♌08'42	4°05'27	min. Earth dist.	13509 Oct 14 18:18	0°  ♌27'49	0.56318 AU
min. Earth dist.	13508 Nov 02 06:01	20°  ♌46'43	0.54975 AU		13509 Oct 15 11:11	30°  ♌  ♋	
morning rise	13508 Nov 08 10:15	17°  ♌43'42		morning rise	13509 Oct 19 15:05	27°  ♋42'37	
direct	13508 Nov 13 05:40	16°  ♌53'13		direct	13509 Oct 25 05:57	26°  ♋28'26	
morning max el	13508 Nov 26 22:06	23°  ♌38'36	24°20'07		13509 Nov 03 21:58	0°  ♌	
	13508 Dec 02 15:34	0°  ♍		morning max el	13509 Nov 08 09:27	3°  ♌43'27	26°00'47
asc. node	13508 Dec 11 16:24	13°  ♍35'36			13509 Nov 27 04:20	0°  ♍	
	13508 Dec 20 04:38	0°  ♍		asc. node	13509 Nov 28 13:19	2°  ♍31'33	
morning set	13508 Dec 21 23:34	3°  ♍47'40		morning set	13509 Dec 06 10:40	18°  ♍26'16	
					13509 Dec 11 16:59	0°  ♍	
superior conj	13508 Dec 28 19:00	18°  ♍39'46	1°36'58	superior conj	13509 Dec 13 05:19	3°  ♍22'05	1°37'48
minimum elong	13508 Dec 28 19:41	18°  ♍43'33	1°37'57	minimum elong	13509 Dec 13 04:55	3°  ♍19'51	1°38'51
max. Earth dist.	13508 Dec 31 01:35	23°  ♍36'00	1.32515 AU	max. Earth dist.	13509 Dec 14 06:40	5°  ♍42'45	1.31611 AU
	13509 Jan 03 01:58	0°  ♎		evening rise	13509 Dec 20 05:53	18°  ♍37'13	
evening rise	13509 Jan 05 06:05	4°  ♎28'06			13509 Dec 25 22:10	0°  ♎	
desc. node	13509 Jan 13 10:54	20°  ♎05'59		desc. node	13509 Dec 31 07:44	9°  ♎49'11	
	13509 Jan 19 06:56	0°  ♏			13510 Jan 13 18:39	0°  ♏	
evening max el	13509 Feb 07 21:54	25°  ♏41'38	27°31'49	evening max el	13510 Jan 21 06:57	8°  ♏22'07	27°26'43
	13509 Feb 13 03:11	0°  ♏		retrograde	13510 Feb 04 05:24	15°  ♏41'27	
retrograde	13509 Feb 21 16:29	3°  ♏08'23		evening set	13510 Feb 11 02:46	13°  ♏29'24	
evening set	13509 Feb 28 12:56	0°  ♏42'20		min. Earth dist.	13510 Feb 14 21:10	10°  ♏37'01	0.61512 AU
	13509 Mar 01 11:26	30°  ♏  ♏		inferior conj	13510 Feb 17 22:43	7°  ♏51'08	-2°07'00
min. Earth dist.	13509 Mar 04 07:46	27°  ♏26'03	0.63596 AU	minimum elong	13510 Feb 18 03:11	7°  ♏41'01	2°04'44
inferior conj	13509 Mar 07 00:59	24°  ♏39'52	-0°49'34	asc. node	13510 Feb 24 11:23	3°  ♏09'03	
minimum elong	13509 Mar 07 02:34	24°  ♏35'49	0°48'42	morning rise	13510 Feb 25 06:33	2°  ♏51'52	
asc. node	13509 Mar 09 13:56	22°  ♏11'21		direct	13510 Feb 27 10:24	2°  ♏31'44	
morning rise	13509 Mar 13 18:33	19°  ♏22'54		morning max el	13510 Mar 06 08:28	6°  ♏01'17	17°50'35
direct	13509 Mar 16 04:32	18°  ♏54'17			13510 Mar 21 19:24	0°  ♏	
morning max el	13509 Mar 22 15:41	22°  ♏13'14	17°47'13	morning set	13510 Mar 22 00:49	0°  ♏24'20	
	13509 Mar 28 18:00	0°  ♏		desc. node	13510 Mar 29 09:34	13°  ♏31'00	
morning set	13509 Apr 08 03:53	17°  ♏13'29					
desc. node	13509 Apr 11 13:02	22°  ♏59'43		superior conj	13510 Apr 02 00:29	19°  ♏46'59	-0°28'15
	13509 Apr 15 16:45	0°  ♐		minimum elong	13510 Apr 01 21:52	19°  ♏35'46	0°28'04
superior conj	13509 Apr 20 21:28	8°  ♐34'34	-1°08'18		13510 Apr 08 02:54	0°  ♐	
minimum elong	13509 Apr 20 14:34	8°  ♐06'29	1°07'57	max. Earth dist.	13510 Apr 09 06:07	1°  ♐51'15	1.43349 AU
max. Earth dist.	13509 Apr 26 14:35	17°  ♐45'46	1.44831 AU	evening rise	13510 Apr 16 01:15	12°  ♐41'37	
	13509 May 04 10:26	0°  ♐			13510 Apr 27 11:20	0°  ♐	
evening rise	13509 May 06 07:44	2°  ♐54'06		evening max el	13510 May 17 17:25	26°  ♐37'38	21°43'17
	13509 May 24 14:49	0°  ♑			13510 May 21 15:18	0°  ♑	
evening max el	13509 Jun 03 21:02	12°  ♑47'58	20°30'44	asc. node	13510 May 23 08:09	1°  ♑01'53	
asc. node	13509 Jun 05 11:00	14°  ♑17'18		retrograde	13510 May 26 20:42	1°  ♑58'42	
retrograde	13509 Jun 11 22:28	17°  ♑26'30		evening set	13510 May 31 09:42	0°  ♑06'57	
evening set	13509 Jun 16 00:40	15°  ♑51'05			13510 May 31 13:00	30°  ♑  ♐	
inferior conj	13509 Jun 21 06:59	9°  ♑45'10	3°12'17	inferior conj	13510 Jun 05 15:55	23°  ♐50'24	3°04'49
minimum elong	13509 Jun 21 06:49	9°  ♑45'44	3°11'14				

minimum elong	13510 Jun 05 14:50	23° Π 54'11	3°03'41	inferior conj	13511 May 21 01:30	8° Π 00'56	2°46'57
min. Earth dist.	13510 Jun 05 19:01	23° Π 39'34	0.68850 AU	minimum elong	13511 May 20 23:44	8° Π 07'06	2°45'42
morning rise	13510 Jun 10 19:46	17° Π 35'24		morning rise	13511 May 26 06:08	1° Π 52'55	
direct	13510 Jun 15 18:31	15° Π 27'42		direct	13511 May 30 16:01	0° Π 05'24	
desc. node	13510 Jun 25 10:34	21° Π 06'32		morning max el	13511 Jun 08 05:53	5° Π 01'40	21°10'07
morning max el	13510 Jun 25 13:59	21° Π 15'04	22°34'08	desc. node	13511 Jun 12 07:36	9° Π 32'37	
	13510 Jul 03 02:14	0° \mathfrak{D}			13511 Jun 27 04:39	0° \mathfrak{D}	
	13510 Jul 23 19:52	0° Ω		morning set	13511 Jul 09 03:25	18° \mathfrak{D} 11'12	
morning set	13510 Jul 29 07:50	8° Ω 47'47		max. Earth dist.	13511 Jul 16 09:00	29° \mathfrak{D} 44'31	1.42827 AU
max. Earth dist.	13510 Aug 03 03:50	16° Ω 49'39	1.40697 AU		13511 Jul 16 12:48	0° Ω	
	13510 Aug 10 17:05	0° \mathfrak{M}		superior conj	13511 Jul 23 13:58	11° Ω 45'02	-1°43'06
superior conj	13510 Aug 11 00:00	0° \mathfrak{M} 31'08	-1°10'54	minimum elong	13511 Jul 23 21:09	12° Ω 15'39	1°43'12
minimum elong	13510 Aug 11 05:19	0° \mathfrak{M} 55'03	1°10'41		13511 Aug 02 23:37	0° \mathfrak{M}	
asc. node	13510 Aug 19 08:19	15° \mathfrak{M} 57'19		evening rise	13511 Aug 04 03:45	2° \mathfrak{M} 06'15	
evening rise	13510 Aug 21 01:34	19° \mathfrak{M} 11'49		asc. node	13511 Aug 06 04:57	5° \mathfrak{M} 46'54	
	13510 Aug 26 21:31	0° \mathfrak{L}		evening max el	13511 Aug 20 11:51	27° \mathfrak{M} 44'23	18°04'32
evening max el	13510 Sep 06 00:26	14° \mathfrak{L} 49'24	18°22'30		13511 Aug 23 07:21	0° \mathfrak{L}	
retrograde	13510 Sep 13 13:55	18° \mathfrak{L} 39'10		retrograde	13511 Aug 27 06:06	1° \mathfrak{L} 12'28	
evening set	13510 Sep 15 15:29	18° \mathfrak{L} 22'47		evening set	13511 Aug 29 15:05	0° \mathfrak{L} 46'56	
desc. node	13510 Sep 21 07:22	15° \mathfrak{L} 18'46			13511 Aug 31 07:27	30° \mathfrak{R} \mathfrak{M}	
inferior conj	13510 Sep 23 06:13	13° \mathfrak{L} 46'24	-0°36'54	inferior conj	13511 Sep 05 12:02	25° \mathfrak{M} 50'12	0°48'57
minimum elong	13510 Sep 23 04:49	13° \mathfrak{L} 49'14	0°36'12	minimum elong	13511 Sep 05 13:30	25° \mathfrak{M} 46'44	0°48'14
min. Earth dist.	13510 Sep 26 13:04	11° \mathfrak{L} 07'24	0.58267 AU	desc. node	13511 Sep 08 04:53	23° \mathfrak{M} 17'32	
morning rise	13510 Sep 30 14:42	8° \mathfrak{L} 24'57		min. Earth dist.	13511 Sep 08 16:33	22° \mathfrak{M} 51'09	0.60516 AU
direct	13510 Oct 06 20:07	6° \mathfrak{L} 43'48		morning rise	13511 Sep 12 08:54	19° \mathfrak{M} 58'40	
morning max el	13510 Oct 21 03:41	14° \mathfrak{L} 21'30	27°15'45	direct	13511 Sep 18 22:50	17° \mathfrak{M} 51'22	
	13510 Nov 02 17:02	0° \mathfrak{M}		morning max el	13511 Oct 03 05:39	25° \mathfrak{M} 45'32	27°54'11
asc. node	13510 Nov 15 10:09	21° \mathfrak{M} 54'34			13511 Oct 07 04:23	0° \mathfrak{L}	
	13510 Nov 19 10:09	0° \mathfrak{X}			13511 Oct 27 05:15	0° \mathfrak{M}	
morning set	13510 Nov 20 19:17	2° \mathfrak{X} 54'43		asc. node	13511 Nov 02 06:54	11° \mathfrak{M} 36'14	
				morning set	13511 Nov 04 23:28	17° \mathfrak{M} 07'00	
superior conj	13510 Nov 27 16:55	18° \mathfrak{X} 05'02	1°32'44		13511 Nov 10 22:40	0° \mathfrak{X}	
minimum elong	13510 Nov 27 15:34	17° \mathfrak{X} 57'28	1°33'39	max. Earth dist.	13511 Nov 10 22:45	0° \mathfrak{X} 00'26	1.31335 AU
max. Earth dist.	13510 Nov 27 15:03	17° \mathfrak{X} 54'36	1.31215 AU				
	13510 Dec 03 02:03	0° \mathfrak{Z}		superior conj	13511 Nov 12 03:55	2° \mathfrak{X} 42'15	1°21'54
evening rise	13510 Dec 04 11:28	2° \mathfrak{Z} 59'59		minimum elong	13511 Nov 12 01:53	2° \mathfrak{X} 30'58	1°22'32
desc. node	13510 Dec 18 04:39	29° \mathfrak{Z} 02'10		evening rise	13511 Nov 18 20:39	17° \mathfrak{X} 29'45	
	13510 Dec 18 18:53	0° \mathfrak{A}			13511 Nov 24 22:13	0° \mathfrak{Z}	
evening max el	13511 Jan 03 09:50	20° \mathfrak{A} 15'16	26°46'57	desc. node	13511 Dec 05 01:41	17° \mathfrak{Z} 32'26	
retrograde	13511 Jan 17 08:45	27° \mathfrak{A} 24'47			13511 Dec 14 21:56	0° \mathfrak{A}	
evening set	13511 Jan 24 00:10	25° \mathfrak{A} 34'20		evening max el	13511 Dec 16 04:13	1° \mathfrak{A} 14'31	25°34'21
min. Earth dist.	13511 Jan 27 23:48	22° \mathfrak{A} 56'15	0.59339 AU	retrograde	13511 Dec 30 01:19	8° \mathfrak{A} 14'13	
inferior conj	13511 Jan 31 04:10	20° \mathfrak{A} 26'17	-3°30'23	evening set	13512 Jan 05 00:57	6° \mathfrak{A} 51'50	
minimum elong	13511 Jan 31 11:41	20° \mathfrak{A} 11'28	3°27'02	min. Earth dist.	13512 Jan 09 16:37	4° \mathfrak{A} 13'15	0.57278 AU
morning rise	13511 Feb 08 02:15	15° \mathfrak{A} 47'51		inferior conj	13512 Jan 12 13:58	2° \mathfrak{A} 15'08	-4°49'26
direct	13511 Feb 10 03:14	15° \mathfrak{A} 32'37		minimum elong	13512 Jan 12 22:45	2° \mathfrak{A} 00'08	4°46'18
asc. node	13511 Feb 11 08:46	15° \mathfrak{A} 38'22			13512 Jan 16 01:57	30° \mathfrak{R} \mathfrak{Z}	
morning max el	13511 Feb 17 20:49	19° \mathfrak{A} 22'39	18°13'07	morning rise	13512 Jan 20 23:11	27° \mathfrak{Z} 59'06	
	13511 Feb 25 15:46	0° \mathfrak{H}		direct	13512 Jan 23 02:29	27° \mathfrak{Z} 45'14	
morning set	13511 Mar 05 12:52	14° \mathfrak{H} 16'19		asc. node	13512 Jan 29 06:07	29° \mathfrak{Z} 48'29	
	13511 Mar 13 23:23	0° \mathfrak{Y}			13512 Jan 29 12:48	0° \mathfrak{A}	
superior conj	13511 Mar 15 02:29	2° \mathfrak{Y} 02'46	0°09'13	morning max el	13512 Feb 01 00:48	2° \mathfrak{A} 05'56	18°56'41
minimum elong	13511 Mar 15 03:11	2° \mathfrak{Y} 05'56	0°09'10	morning set	13512 Feb 17 11:19	28° \mathfrak{A} 34'58	
behind sun begin	13511 Mar 14 20:59	1° \mathfrak{Y} 37'57			13512 Feb 18 04:36	0° \mathfrak{H}	
behind sun end	13511 Mar 15 09:23	2° \mathfrak{Y} 33'51		superior conj	13512 Feb 25 23:13	15° \mathfrak{H} 09'34	0°40'49
desc. node	13511 Mar 16 06:05	4° \mathfrak{Y} 06'40		minimum elong	13512 Feb 26 01:36	15° \mathfrak{H} 20'57	0°40'47
max. Earth dist.	13511 Mar 22 17:13	15° \mathfrak{Y} 21'05	1.41388 AU	desc. node	13512 Mar 02 02:35	24° \mathfrak{H} 42'51	
evening rise	13511 Mar 27 12:18	23° \mathfrak{Y} 17'57		max. Earth dist.	13512 Mar 04 00:05	28° \mathfrak{H} 06'56	1.39161 AU
	13511 Mar 31 16:57	0° \mathfrak{B}			13512 Mar 05 01:41	0° \mathfrak{Y}	
	13511 Apr 21 10:47	0° Π		evening rise	13512 Mar 07 20:30	4° \mathfrak{Y} 49'22	
evening max el	13511 Apr 30 09:28	10° Π 28'07	23°02'52		13512 Mar 23 19:14	0° \mathfrak{B}	
asc. node	13511 May 10 05:23	16° Π 31'29		evening max el	13512 Apr 11 23:15	24° \mathfrak{B} 20'10	24°23'33
retrograde	13511 May 10 16:52	16° Π 32'31			13512 Apr 19 08:09	0° Π	
evening set	13511 May 15 17:14	14° Π 25'51		retrograde	13512 Apr 23 09:46	1° Π 02'23	
min. Earth dist.	13511 May 20 15:45	8° Π 34'43	0.68899 AU	asc. node	13512 Apr 26 02:41	0° Π 29'56	

	13512 Apr 27 03:02	30°♄		evening set	13513 Apr 12 21:35	12°♄53'24	
evening set	13512 Apr 28 21:45	28°♄43'17		asc. node	13513 Apr 13 00:06	12°♄48'04	
min. Earth dist.	13512 May 03 11:36	23°♄28'19	0.68478 AU	min. Earth dist.	13513 Apr 17 04:26	8°♄13'55	0.67618 AU
inferior conj	13512 May 04 09:54	22°♄13'20	2°18'56	inferior conj	13513 Apr 18 15:09	6°♄23'01	1°40'31
minimum elong	13512 May 04 07:46	22°♄20'32	2°17'38	minimum elong	13513 Apr 18 13:07	6°♄29'30	1°39'20
morning rise	13512 May 09 17:55	16°♄13'23		morning rise	13513 Apr 24 05:11	0°♄32'24	
direct	13512 May 13 15:24	14°♄46'44			13513 Apr 25 04:15	30°♄	
morning max el	13512 May 21 04:43	19°♄00'02	19°57'27	direct	13513 Apr 27 15:12	29°♄25'27	
desc. node	13512 May 29 04:32	28°♄40'50			13513 Apr 30 04:16	0°♄	
	13512 May 30 03:33	0°♄		morning max el	13513 May 04 11:00	3°♄07'40	18°59'30
morning set	13512 Jun 17 06:27	26°♄54'32		desc. node	13513 May 16 01:19	18°♄19'17	
	13512 Jun 19 06:35	0°♄		greatest brilliancy	13513 May 17 17:39	20°♄50'26	-0.7m
max. Earth dist.	13512 Jun 27 20:33	13°♄26'27	1.44493 AU		13513 May 23 17:26	0°♄	
				morning set	13513 May 27 12:30	5°♄51'54	
superior conj	13512 Jul 03 04:16	21°♄59'05	-2°06'18	max. Earth dist.	13513 Jun 10 13:10	27°♄41'27	1.45531 AU
minimum elong	13512 Jul 03 09:48	22°♄21'34	2°07'02		13513 Jun 12 00:30	0°♄	
	13512 Jul 08 01:30	0°♄					
evening rise	13512 Jul 16 11:40	14°♄11'58		superior conj	13513 Jun 12 21:24	1°♄22'07	-2°13'25
asc. node	13512 Jul 23 01:39	25°♄22'17		minimum elong	13513 Jun 12 20:22	1°♄18'01	2°14'27
	13512 Jul 25 21:34	0°♄		evening rise	13513 Jun 27 20:26	25°♄17'20	
evening max el	13512 Aug 03 02:06	11°♄04'25	18°05'37		13513 Jun 30 17:58	0°♄	
retrograde	13512 Aug 09 11:32	14°♄24'50		asc. node	13513 Jul 09 22:27	14°♄37'06	
evening set	13512 Aug 12 04:47	13°♄46'54		evening max el	13513 Jul 17 15:51	24°♄40'19	18°24'53
inferior conj	13512 Aug 18 11:00	8°♄32'03	1°52'15	retrograde	13513 Jul 24 01:53	28°♄06'32	
minimum elong	13512 Aug 18 13:28	8°♄25'26	1°51'02	evening set	13513 Jul 27 03:46	27°♄13'48	
min. Earth dist.	13512 Aug 21 05:46	5°♄34'29	0.62780 AU	inferior conj	13513 Aug 01 22:58	21°♄42'45	2°34'59
morning rise	13512 Aug 24 20:01	2°♄20'58		minimum elong	13513 Aug 02 01:13	21°♄36'02	2°33'46
desc. node	13512 Aug 25 02:24	2°♄09'25		min. Earth dist.	13513 Aug 04 04:17	19°♄05'28	0.64837 AU
	13512 Aug 30 01:26	30°♄		morning rise	13513 Aug 07 21:24	15°♄21'41	
direct	13512 Aug 31 12:12	29°♄53'18		desc. node	13513 Aug 11 23:53	13°♄04'08	
	13512 Sep 01 23:43	0°♄		direct	13513 Aug 14 10:14	12°♄42'59	
morning max el	13512 Sep 14 13:19	7°♄55'06	27°53'33	morning max el	13513 Aug 27 23:47	20°♄40'08	27°18'01
	13512 Oct 01 13:08	0°♄			13513 Sep 05 01:04	0°♄	
	13512 Oct 18 09:38	0°♄			13513 Sep 24 15:50	0°♄	
morning set	13512 Oct 18 21:09	0°♄58'15		morning set	13513 Oct 02 09:40	14°♄21'38	
asc. node	13512 Oct 19 03:36	1°♄30'58		asc. node	13513 Oct 06 00:14	21°♄33'37	
max. Earth dist.	13512 Oct 24 01:52	11°♄50'58	1.31990 AU	max. Earth dist.	13513 Oct 06 20:52	23°♄19'18	1.33186 AU
					13513 Oct 10 01:31	0°♄	
superior conj	13512 Oct 26 12:27	17°♄08'56	1°05'22				
minimum elong	13512 Oct 26 10:10	16°♄56'27	1°05'42	superior conj	13513 Oct 10 16:26	1°♄19'10	0°43'16
	13512 Nov 01 09:02	0°♄		minimum elong	13513 Oct 10 14:28	1°♄08'47	0°43'20
evening rise	13512 Nov 02 07:37	2°♄02'09		evening rise	13513 Oct 17 18:30	16°♄32'11	
	13512 Nov 17 07:43	0°♄			13513 Oct 24 09:33	0°♄	
desc. node	13512 Nov 20 22:51	5°♄04'11		desc. node	13513 Nov 07 20:07	21°♄16'01	
evening max el	13512 Nov 26 15:30	11°♄30'19	23°58'45	evening max el	13513 Nov 08 02:31	21°♄31'47	22°16'48
retrograde	13512 Dec 10 05:26	18°♄16'09		retrograde	13513 Nov 20 21:09	27°♄51'46	
evening set	13512 Dec 15 02:06	17°♄24'34		evening set	13513 Nov 24 08:22	27°♄25'18	
min. Earth dist.	13512 Dec 21 02:37	14°♄26'48	0.55618 AU	inferior conj	13513 Dec 02 23:48	23°♄29'46	-5°53'03
inferior conj	13512 Dec 23 03:06	13°♄13'47	-5°45'00	minimum elong	13513 Dec 02 20:23	23°♄34'33	5°51'49
minimum elong	13512 Dec 23 08:17	13°♄05'58	5°43'24	min. Earth dist.	13513 Dec 02 09:15	23°♄50'12	0.54654 AU
morning rise	13512 Dec 31 16:20	9°♄17'01		morning rise	13513 Dec 11 09:33	19°♄42'29	
direct	13513 Jan 03 06:02	9°♄00'13		direct	13513 Dec 14 18:23	19°♄17'04	
morning max el	13513 Jan 13 16:29	14°♄00'27	20°02'59	morning max el	13513 Dec 26 17:37	25°♄00'35	21°31'49
asc. node	13513 Jan 15 03:25	15°♄30'04			13513 Dec 31 05:02	0°♄	
	13513 Jan 24 22:31	0°♄		asc. node	13514 Jan 02 00:38	2°♄26'15	
morning set	13513 Jan 31 16:38	13°♄10'10		morning set	13514 Jan 16 02:14	27°♄54'31	
					13514 Jan 17 02:08	0°♄	
superior conj	13513 Feb 08 10:06	28°♄54'27	1°05'25				
minimum elong	13513 Feb 08 12:51	29°♄08'11	1°05'40	superior conj	13514 Jan 23 07:18	13°♄06'40	1°22'56
	13513 Feb 08 23:15	0°♄		minimum elong	13514 Jan 23 09:33	13°♄18'26	1°23'31
max. Earth dist.	13513 Feb 14 06:30	10°♄16'36	1.36929 AU	max. Earth dist.	13514 Jan 27 17:41	22°♄10'14	1.34914 AU
desc. node	13513 Feb 16 23:07	15°♄15'57		evening rise	13514 Jan 31 21:18	0°♄15'05	
evening rise	13513 Feb 18 00:36	17°♄11'21			13514 Jan 31 18:07	0°♄	
	13513 Feb 25 11:06	0°♄		desc. node	13514 Feb 03 19:44	5°♄42'18	
	13513 Mar 18 04:14	0°♄			13514 Feb 18 13:48	0°♄	
evening max el	13513 Mar 25 12:42	8°♄12'18	25°38'19	evening max el	13514 Mar 08 02:34	21°♄59'10	26°39'40
retrograde	13513 Apr 06 22:18	15°♄21'17		retrograde	13514 Mar 21 05:19	29°♄22'22	

evening set	13514 Mar 27 14:55	26° Υ 50'23		desc. node	13515 Jan 21 16:24	25° \approx 56'30	
asc. node	13514 Mar 30 21:32	23° Υ 38'19			13515 Jan 23 23:24	0° H	
min. Earth dist.	13514 Mar 31 16:05	22° Υ 45'15	0.66347 AU		13515 Feb 13 12:18	0° Υ	
inferior conj	13514 Apr 02 15:07	20° Υ 25'29	0°51'13	evening max el	13515 Feb 18 15:58	5° Υ 29'36	27°20'21
minimum elong	13514 Apr 02 13:50	20° Υ 29'18	0°50'29	retrograde	13515 Mar 04 05:57	12° Υ 56'43	
morning rise	13514 Apr 08 13:52	14° Υ 45'58		evening set	13515 Mar 10 23:38	10° Υ 26'24	
direct	13514 Apr 11 13:32	13° Υ 56'22		min. Earth dist.	13515 Mar 14 20:18	6° Υ 53'34	0.64700 AU
morning max el	13514 Apr 17 23:38	17° Υ 20'02	18°17'58	inferior conj	13515 Mar 17 07:16	4° Υ 13'52	-0°09'27
	13514 Apr 27 14:04	0° B		minimum elong	13515 Mar 17 07:33	4° Υ 13'07	0°09'19
desc. node	13514 May 02 22:02	8° B 19'57		transit middle	13515 Mar 17 07:33	4° Υ 13'07	0°09'19
morning set	13514 May 07 16:56	15° B 57'30		transit begin	13515 Mar 17 05:03	4° Υ 19'54	
	13514 May 16 13:23	0° II		transit end	13515 Mar 17 10:02	4° Υ 06'21	
				asc. node	13515 Mar 17 19:01	3° Υ 42'06	
superior conj	13514 May 23 05:11	10° II 26'49	-2°00'22		13515 Mar 21 17:16	30° R H	
minimum elong	13514 May 22 21:21	9° II 56'10	2°00'49	morning rise	13515 Mar 23 17:19	28° H 47'56	
max. Earth dist.	13514 May 24 08:55	12° II 15'05	1.45846 AU	direct	13515 Mar 26 07:57	28° H 12'34	
	13514 Jun 04 18:04	0° E			13515 Mar 30 22:45	0° Υ	
evening rise	13514 Jun 08 04:50	5° E 23'11		morning max el	13515 Apr 01 16:17	1° Υ 29'44	17°53'27
greatest brilliancy	13514 Jun 18 17:00	21° E 42'31	-0.8m	morning set	13515 Apr 19 01:45	27° Υ 25'47	
	13514 Jun 24 07:30	0° Ω		desc. node	13515 Apr 19 18:39	28° Υ 36'07	
asc. node	13514 Jun 26 19:21	3° Ω 24'02			13515 Apr 20 14:50	0° B	
evening max el	13514 Jul 01 02:21	8° Ω 24'56	19°01'27				
retrograde	13514 Jul 07 21:39	12° Ω 10'10		superior conj	13515 May 02 21:10	19° B 59'19	-1°30'11
evening set	13514 Jul 11 08:35	11° Ω 01'03		minimum elong	13515 May 02 12:27	19° B 24'33	1°29'57
inferior conj	13514 Jul 16 20:18	5° Ω 15'16	3°00'26	max. Earth dist.	13515 May 07 05:07	26° B 50'52	1.45406 AU
minimum elong	13514 Jul 16 21:46	5° Ω 10'37	2°59'20		13515 May 09 05:21	0° II	
min. Earth dist.	13514 Jul 18 11:01	3° Ω 11'43	0.66537 AU	evening rise	13515 May 18 19:39	14° II 50'56	
	13514 Jul 21 05:15	30° R E			13515 May 28 19:24	0° E	
morning rise	13514 Jul 22 10:16	28° E 51'08		greatest brilliancy	13515 Jun 02 12:29	6° E 57'34	-0.6m
direct	13514 Jul 28 15:15	26° E 11'25		asc. node	13515 Jun 13 16:20	21° E 33'35	
desc. node	13514 Jul 29 21:18	26° E 17'12		evening max el	13515 Jun 14 07:39	22° E 12'56	19°54'05
	13514 Aug 06 05:50	0° Ω		retrograde	13515 Jun 21 20:07	26° E 29'16	
morning max el	13514 Aug 10 10:49	3° Ω 49'26	26°15'15	evening set	13515 Jun 25 16:36	25° E 03'16	
	13514 Aug 30 09:24	0° H		inferior conj	13515 Jul 01 00:03	19° E 04'07	3°11'33
morning set	13514 Sep 15 09:43	27° H 09'10		minimum elong	13515 Jul 01 00:29	19° E 02'39	3°10'30
	13514 Sep 16 22:03	0° A		min. Earth dist.	13515 Jul 02 00:22	17° E 42'08	0.67797 AU
max. Earth dist.	13514 Sep 19 06:02	4° A 29'07	1.34896 AU	morning rise	13515 Jul 06 08:00	12° E 41'21	
asc. node	13514 Sep 22 20:50	11° A 40'04		direct	13515 Jul 12 02:14	10° E 09'22	
				desc. node	13515 Jul 16 18:38	11° E 30'25	
superior conj	13514 Sep 24 13:19	15° A 06'19	0°15'53	morning max el	13515 Jul 23 21:23	17° E 13'39	24°54'32
minimum elong	13514 Sep 24 12:26	15° A 01'48	0°15'52		13515 Aug 03 13:07	0° Ω	
behind sun begin	13514 Sep 24 11:25	14° A 56'35			13515 Aug 23 09:08	0° H	
behind sun end	13514 Sep 24 13:27	15° A 07'01		morning set	13515 Aug 28 17:16	9° H 11'26	
	13514 Oct 01 16:50	0° M		max. Earth dist.	13515 Sep 01 07:04	15° H 38'16	1.37015 AU
evening rise	13514 Oct 02 03:19	0° M 54'36					
	13514 Oct 19 03:28	0° J		superior conj	13515 Sep 08 00:03	28° H 22'54	-0°16'01
evening max el	13514 Oct 20 22:28	1° J 54'48	20°44'49	minimum elong	13515 Sep 08 01:06	28° H 28'01	0°15'57
desc. node	13514 Oct 25 17:29	5° J 41'06		behind sun begin	13515 Sep 08 00:04	28° H 22'57	
retrograde	13514 Nov 01 07:35	7° J 34'10		behind sun end	13515 Sep 08 02:08	28° H 33'05	
evening set	13514 Nov 03 16:00	7° J 20'46			13515 Sep 08 19:49	0° A	
inferior conj	13514 Nov 12 15:18	3° J 26'36	-5°01'17	asc. node	13515 Sep 09 17:23	1° A 46'48	
minimum elong	13514 Nov 12 05:36	3° J 40'30	4°58'07	evening rise	13515 Sep 16 07:47	15° A 03'37	
min. Earth dist.	13514 Nov 13 15:32	2° J 51'54	0.54590 AU		13515 Sep 24 02:30	0° M	
	13514 Nov 19 09:24	30° R M		evening max el	13515 Oct 03 08:29	13° M 03'13	19°32'23
morning rise	13514 Nov 20 19:14	29° M 31'11		desc. node	13515 Oct 12 14:56	17° M 54'25	
direct	13514 Nov 25 02:28	28° M 51'32		retrograde	13515 Oct 13 02:00	17° M 55'03	
	13514 Nov 30 14:46	0° J		evening set	13515 Oct 14 23:04	17° M 44'58	
morning max el	13514 Dec 08 06:58	5° J 15'19	23°17'17	inferior conj	13515 Oct 23 16:24	13° M 39'31	-3°24'53
asc. node	13514 Dec 19 21:46	20° J 19'30		minimum elong	13515 Oct 23 07:46	13° M 53'17	3°21'12
	13514 Dec 25 08:22	0° B		min. Earth dist.	13515 Oct 26 00:52	12° M 09'36	0.55453 AU
morning set	13514 Dec 31 13:51	12° B 40'45		morning rise	13515 Oct 31 14:29	9° M 15'58	
				direct	13515 Nov 05 18:24	8° M 16'23	
superior conj	13515 Jan 07 11:31	27° B 36'06	1°33'40	morning max el	13515 Nov 19 16:51	15° M 14'45	25°05'04
minimum elong	13515 Jan 07 12:50	27° B 43'12	1°34'34		13515 Dec 01 10:36	0° J	
	13515 Jan 08 14:19	0° \approx		asc. node	13515 Dec 06 18:46	8° J 55'58	
max. Earth dist.	13515 Jan 10 12:22	4° \approx 04'14	1.33265 AU	morning set	13515 Dec 16 01:39	27° J 23'45	
evening rise	13515 Jan 15 06:55	13° \approx 50'00			13515 Dec 17 06:34	0° B	

superior conj	13515 Dec 22 20:15	12°  15'40	1°38'02	minimum elong	13516 Dec 06 06:31	26°  54'11	1°37'22
minimum elong	13515 Dec 22 20:28	12°  16'54	1°39'05	max. Earth dist.	13516 Dec 06 21:03	28°  15'10	1.31377 AU
max. Earth dist.	13515 Dec 24 14:18	16°  06'24	1.32073 AU		13516 Dec 07 15:53	0°  3	
evening rise	13515 Dec 30 02:19	27°  48'26		evening rise	13516 Dec 13 04:49	12°  03'35	
	13515 Dec 31 04:05	0°  ≈			13516 Dec 22 07:55	0°  ≈	
desc. node	13516 Jan 08 13:09	15°  ≈52'57		desc. node	13516 Dec 25 10:02	5°  ≈24'18	
	13516 Jan 17 05:17	0°  ✕			13517 Jan 12 12:13	0°  ✕	
evening max el	13516 Feb 01 03:04	18°  ✕31'06	27°33'32	evening max el	13517 Jan 13 09:36	0°  ✕51'47	27°13'59
retrograde	13516 Feb 14 23:25	25°  ✕55'06		retrograde	13517 Jan 27 08:48	8°  ✕08'02	
evening set	13516 Feb 21 21:14	23°  ✕33'42		evening set	13517 Feb 03 04:36	6°  ✕04'00	
min. Earth dist.	13516 Feb 25 15:19	20°  ✕28'49	0.62740 AU	min. Earth dist.	13517 Feb 07 00:07	3°  ✕19'14	0.60585 AU
inferior conj	13516 Feb 28 12:40	17°  ✕40'52	-1°21'18	inferior conj	13517 Feb 10 03:55	0°  ✕37'46	-2°42'07
minimum elong	13516 Feb 28 15:23	17°  ✕34'14	1°19'52	minimum elong	13517 Feb 10 09:44	0°  ✕25'20	2°39'18
asc. node	13516 Mar 03 16:28	14°  ✕02'53			13517 Feb 10 21:41	30°  R≈	
morning rise	13516 Mar 06 12:12	12°  ✕31'18		morning rise	13517 Feb 17 18:00	25°  ≈47'24	
direct	13516 Mar 08 19:20	12°  ✕06'43		asc. node	13517 Feb 18 13:54	25°  ≈36'19	
morning max el	13516 Mar 15 10:00	15°  ✕28'33	17°46'25	direct	13517 Feb 19 20:02	25°  ≈29'53	
	13516 Mar 25 15:30	0°  Υ		morning max el	13517 Feb 27 01:27	29°  ≈07'01	17°57'44
morning set	13516 Mar 31 11:14	10°  Υ04'15			13517 Feb 27 22:00	0°  ✕	
desc. node	13516 Apr 05 15:12	19°  Υ02'59		morning set	13517 Mar 14 15:16	23°  ✕34'34	
					13517 Mar 18 03:27	0°  Υ	
superior conj	13516 Apr 12 10:11	0°  832'42	-0°51'19	desc. node	13517 Mar 23 11:43	9°  Υ36'37	
minimum elong	13516 Apr 12 05:06	0°  811'35	0°50'59				
	13516 Apr 12 02:19	0°  8		superior conj	13517 Mar 24 23:27	12°  Υ13'44	-0°11'48
max. Earth dist.	13516 Apr 18 22:44	11°  810'54	1.44268 AU	minimum elong	13517 Mar 24 22:26	12°  Υ09'17	0°11'45
evening rise	13516 Apr 27 07:35	24°  819'24		behind sun begin	13517 Mar 24 16:55	11°  Υ45'08	
	13516 May 01 00:38	0°  II		behind sun end	13517 Mar 25 03:57	12°  Υ33'24	
	13516 May 22 00:54	0°  ☿		max. Earth dist.	13517 Apr 01 11:57	25°  Υ00'47	1.42556 AU
evening max el	13516 May 27 06:59	6°  ☿01'10	21°00'25		13517 Apr 04 13:13	0°  8	
asc. node	13516 May 30 13:24	8°  ☿53'06		evening rise	13517 Apr 07 07:40	4°  825'56	
retrograde	13516 Jun 04 19:01	10°  ☿57'47			13517 Apr 24 08:11	0°  II	
evening set	13516 Jun 09 01:44	9°  ☿15'11		evening max el	13517 May 10 01:13	19°  II50'51	22°16'38
inferior conj	13516 Jun 14 07:41	3°  ☿04'15	3°10'28	asc. node	13517 May 17 10:34	25°  II07'59	
minimum elong	13516 Jun 14 07:07	3°  ☿06'14	3°09'23	retrograde	13517 May 19 16:39	25°  II31'15	
min. Earth dist.	13516 Jun 14 18:19	2°  ☿27'19	0.68595 AU	evening set	13517 May 24 10:19	23°  II33'06	
	13516 Jun 16 14:01	30°  RII		inferior conj	13517 May 29 17:09	17°  II12'30	2°58'30
morning rise	13516 Jun 19 12:15	26°  II45'43		minimum elong	13517 May 29 15:44	17°  II17'26	2°57'19
direct	13516 Jun 24 18:12	24°  II27'54		min. Earth dist.	13517 May 29 14:46	17°  II20'47	0.68923 AU
desc. node	13516 Jul 02 15:51	28°  II16'20		morning rise	13517 Jun 03 20:59	11°  II00'03	
	13516 Jul 04 13:20	0°  ☿		direct	13517 Jun 08 14:11	9°  II00'40	
morning max el	13516 Jul 05 07:54	0°  ☿45'55	23°25'27	morning max el	13517 Jun 17 20:49	14°  II26'21	21°57'16
	13516 Jul 27 10:11	0°  Ω		desc. node	13517 Jun 19 12:56	16°  II11'28	
morning set	13516 Aug 09 03:34	20°  Ω16'12			13517 Jun 30 09:45	0°  ☿	
max. Earth dist.	13516 Aug 13 04:47	27°  Ω11'22	1.39350 AU		13517 Jul 20 09:13	0°  Ω	
	13516 Aug 14 19:18	0°  ♍		morning set	13517 Jul 20 13:05	0°  Ω15'28	
				max. Earth dist.	13517 Jul 26 05:37	9°  Ω32'16	1.41642 AU
superior conj	13516 Aug 20 20:46	10°  ♍58'53	-0°50'44				
minimum elong	13516 Aug 21 00:28	11°  ♍16'05	0°50'33	superior conj	13517 Aug 02 23:11	22°  Ω45'21	-1°25'13
asc. node	13516 Aug 26 13:56	21°  ♍49'30		minimum elong	13517 Aug 03 05:31	23°  Ω13'15	1°25'06
evening rise	13516 Aug 30 04:58	28°  ♍50'39			13517 Aug 07 00:43	0°  ♍	
	13516 Aug 30 19:18	0°  ♎		asc. node	13517 Aug 13 10:32	11°  ♍44'51	
evening max el	13516 Sep 15 07:28	24°  ♎59'25	18°41'56	evening rise	13517 Aug 13 15:19	12°  ♍07'00	
retrograde	13516 Sep 23 13:22	29°  ♎08'25			13517 Aug 23 19:20	0°  ♎	
evening set	13516 Sep 25 11:23	28°  ♎55'44		evening max el	13517 Aug 29 15:37	7°  ♎35'57	18°12'32
desc. node	13516 Sep 28 12:25	27°  ♎48'27		retrograde	13517 Sep 05 19:34	11°  ♎14'31	
inferior conj	13516 Oct 03 12:52	24°  ♎31'42	-1°35'33	evening set	13517 Sep 08 00:07	10°  ♎54'42	
minimum elong	13516 Oct 03 08:57	24°  ♎38'59	1°33'39	inferior conj	13517 Sep 15 07:04	6°  ♎09'49	0°02'13
min. Earth dist.	13516 Oct 06 15:53	22°  ♎13'15	0.57085 AU	minimum elong	13517 Sep 15 07:08	6°  ♎09'39	0°02'12
morning rise	13516 Oct 11 03:06	19°  ♎30'39		transit middle	13517 Sep 15 07:08	6°  ♎09'39	0°02'12
direct	13516 Oct 17 00:38	18°  ♎05'12		transit begin	13517 Sep 15 03:45	6°  ♎16'59	
morning max el	13516 Oct 31 06:57	25°  ♎31'28	26°36'36	transit end	13517 Sep 15 10:32	6°  ♎02'17	
	13516 Nov 04 11:39	0°  ♏		desc. node	13517 Sep 15 09:55	6°  ♎03'36	
asc. node	13516 Nov 22 15:40	28°  ♏04'06		min. Earth dist.	13517 Sep 18 14:20	3°  ♎19'21	0.59206 AU
	13516 Nov 23 15:43	0°  ♏		morning rise	13517 Sep 22 10:45	0°  ♎34'24	
morning set	13516 Nov 29 11:54	11°  ♏58'26			13517 Sep 23 12:30	30°  R♏	
				direct	13517 Sep 28 20:46	28°  ♏41'16	
superior conj	13516 Dec 06 07:21	26°  ♏58'49	1°36'22		13517 Oct 04 10:01	0°  ♎	

morning max el	13517 Oct 13 04:25	6°♄27'22	27°36'48		13518 Oct 05 07:19	0°♄	
	13517 Oct 30 19:54	0°♄			13518 Oct 23 15:05	0°♄	
asc. node	13517 Nov 09 12:28	17°♄35'23		asc. node	13518 Oct 27 09:12	7°♄23'07	
morning set	13517 Nov 13 18:52	26°♄20'08		morning set	13518 Oct 28 20:35	10°♄23'59	
	13517 Nov 15 12:00	0°♄		max. Earth dist.	13518 Nov 03 11:39	22°♄24'50	1.31546 AU
max. Earth dist.	13517 Nov 20 05:24	10°♄24'21	1.31198 AU				
				superior conj	13518 Nov 05 05:09	26°♄13'23	1°15'36
superior conj	13517 Nov 20 18:56	11°♄39'51	1°28'51	minimum elong	13518 Nov 05 02:57	26°♄01'14	1°16'06
minimum elong	13517 Nov 20 17:15	11°♄30'27	1°29'39		13518 Nov 06 22:03	0°♄	
evening rise	13517 Nov 27 12:10	26°♄29'42		evening rise	13518 Nov 11 22:22	11°♄01'31	
	13517 Nov 29 03:45	0°♄			13518 Nov 21 10:33	0°♄	
desc. node	13517 Dec 12 07:01	24°♄20'29		desc. node	13518 Nov 29 04:06	12°♄28'12	
	13517 Dec 16 01:01	0°♄		evening max el	13518 Dec 08 00:22	23°♄02'08	24°55'47
evening max el	13517 Dec 26 09:08	12°♄22'26	26°19'49	retrograde	13518 Dec 21 19:09	29°♄55'54	
retrograde	13518 Jan 09 08:06	19°♄28'03		evening set	13518 Dec 27 08:43	28°♄46'51	
evening set	13518 Jan 15 17:48	17°♄49'12		min. Earth dist.	13519 Jan 01 12:17	26°♄02'34	0.56508 AU
min. Earth dist.	13518 Jan 19 22:41	15°♄12'40	0.58427 AU	inferior conj	13519 Jan 04 02:25	24°♄22'38	-5°17'15
inferior conj	13518 Jan 23 01:23	12°♄54'25	-4°05'26	minimum elong	13519 Jan 04 10:25	24°♄09'44	5°14'42
minimum elong	13518 Jan 23 09:49	12°♄38'46	4°01'57	morning rise	13519 Jan 12 14:19	20°♄15'10	
morning rise	13518 Jan 31 04:48	8°♄25'16		direct	13519 Jan 14 21:05	20°♄00'32	
direct	13518 Feb 02 05:47	8°♄11'10		asc. node	13519 Jan 23 08:39	23°♄39'18	
asc. node	13518 Feb 05 11:18	8°♄48'24		morning max el	13519 Jan 24 09:54	24°♄37'09	19°21'57
morning max el	13518 Feb 10 10:45	12°♄13'34	18°28'54		13519 Jan 28 23:00	0°♄	
	13518 Feb 22 07:15	0°♄		morning set	13519 Feb 10 10:06	22°♄06'36	
morning set	13518 Feb 26 08:17	7°♄39'20			13519 Feb 14 08:39	0°♄	
superior conj	13518 Mar 07 10:00	24°♄52'33	0°23'25	superior conj	13519 Feb 18 13:19	8°♄17'01	0°52'07
minimum elong	13518 Mar 07 11:36	24°♄59'59	0°23'21	minimum elong	13519 Feb 18 16:00	8°♄30'03	0°52'11
desc. node	13518 Mar 10 08:13	0°♄12'41		max. Earth dist.	13519 Feb 25 03:26	20°♄41'54	1.38208 AU
	13518 Mar 10 05:24	0°♄		desc. node	13519 Feb 25 04:46	20°♄47'57	
max. Earth dist.	13518 Mar 14 20:50	8°♄11'11	1.40459 AU	evening rise	13519 Feb 28 20:48	27°♄20'17	
evening rise	13518 Mar 19 03:43	15°♄26'11			13519 Mar 02 09:41	0°♄	
	13518 Mar 28 07:11	0°♄			13519 Mar 21 18:50	0°♄	
	13518 Apr 19 05:07	0°♄		evening max el	13519 Apr 05 05:51	17°♄35'17	24°56'26
evening max el	13518 Apr 22 16:12	3°♄42'26	23°37'30	retrograde	13519 Apr 17 02:31	24°♄29'27	
retrograde	13518 May 03 11:32	10°♄03'43		asc. node	13519 Apr 21 05:14	23°♄16'12	
asc. node	13518 May 04 07:52	10°♄00'28		evening set	13519 Apr 22 19:28	22°♄06'10	
evening set	13518 May 08 16:45	7°♄51'41		min. Earth dist.	13519 Apr 27 06:14	17°♄06'31	0.68176 AU
min. Earth dist.	13518 May 13 11:27	2°♄15'49	0.68780 AU	inferior conj	13519 Apr 28 09:47	15°♄35'41	2°03'56
inferior conj	13518 May 14 02:28	1°♄24'17	2°36'18	minimum elong	13519 Apr 28 07:38	15°♄42'48	2°02'38
minimum elong	13518 May 14 00:30	1°♄31'04	2°35'01	morning rise	13519 May 03 20:03	9°♄39'36	
	13518 May 15 03:15	30°♄		direct	13519 May 07 12:39	8°♄21'24	
morning rise	13518 May 19 08:12	25°♄19'22		morning max el	13519 May 14 17:20	12°♄19'23	19°30'48
direct	13518 May 23 12:49	23°♄40'31		desc. node	13519 May 24 06:48	24°♄18'36	
morning max el	13518 May 31 15:19	28°♄17'07	20°37'27	greatest brilliancy	13519 May 27 08:50	28°♄46'29	-0.7m
	13518 Jun 02 06:40	0°♄			13519 May 28 04:47	0°♄	
desc. node	13518 Jun 06 09:55	4°♄56'46		morning set	13519 Jun 09 01:19	17°♄57'19	
	13518 Jun 23 22:33	0°♄			13519 Jun 16 20:03	0°♄	
morning set	13518 Jun 29 23:47	9°♄15'58		max. Earth dist.	13519 Jun 21 03:57	6°♄47'25	1.45028 AU
max. Earth dist.	13518 Jul 08 13:27	22°♄47'48	1.43610 AU				
	13518 Jul 12 23:37	0°♄		superior conj	13519 Jun 25 07:42	13°♄23'12	-2°11'39
				minimum elong	13519 Jun 25 10:56	13°♄36'11	2°12'36
superior conj	13518 Jul 15 03:15	3°♄33'50	-1°54'29		13519 Jul 05 12:53	0°♄	
minimum elong	13518 Jul 15 10:19	4°♄03'19	1°54'49	evening rise	13519 Jul 09 08:51	6°♄22'18	
evening rise	13518 Jul 27 10:19	24°♄41'33		asc. node	13519 Jul 18 03:57	20°♄55'42	
	13518 Jul 30 10:53	0°♄			13519 Jul 24 05:48	0°♄	
asc. node	13518 Jul 31 07:12	1°♄28'40		evening max el	13519 Jul 27 19:08	4°♄09'58	18°11'37
evening max el	13518 Aug 13 04:44	20°♄42'42	18°02'46	retrograde	13519 Aug 03 03:37	7°♄31'12	
retrograde	13518 Aug 19 17:48	24°♄05'26		evening set	13519 Aug 06 00:34	6°♄47'04	
evening set	13518 Aug 22 06:24	23°♄34'50		inferior conj	13519 Aug 12 01:35	1°♄24'47	2°12'44
inferior conj	13518 Aug 28 20:38	18°♄30'08	1°18'30	minimum elong	13519 Aug 12 04:05	1°♄17'47	2°11'29
minimum elong	13518 Aug 28 22:43	18°♄24'56	1°17'30		13519 Aug 13 07:42	30°♄	
min. Earth dist.	13518 Aug 31 21:41	15°♄29'19	0.61496 AU	min. Earth dist.	13519 Aug 14 14:46	28°♄34'12	0.63692 AU
desc. node	13518 Sep 02 07:26	14°♄12'30		morning rise	13519 Aug 18 05:54	25°♄08'31	
morning rise	13518 Sep 04 12:25	12°♄29'22		desc. node	13519 Aug 20 04:57	23°♄50'41	
direct	13518 Sep 11 04:15	10°♄12'24		direct	13519 Aug 24 21:12	22°♄35'17	
morning max el	13518 Sep 25 08:53	18°♄10'20	27°58'36		13519 Sep 07 03:33	0°♄	

morning max el	13519 Sep 07 18:07	0° \mathbb{M} 36'03	27°42'27	morning max el	13520 Aug 20 05:21	13° Ω 34'00	26°54'10
	13519 Sep 29 09:35	0° $\underline{\mathbf{A}}$			13520 Sep 02 12:38	0° \mathbb{M}	
morning set	13519 Oct 12 14:41	24° $\underline{\mathbf{A}}$ 03'36			13520 Sep 21 01:41	0° $\underline{\mathbf{A}}$	
asc. node	13519 Oct 14 05:51	27° $\underline{\mathbf{A}}$ 21'16		morning set	13520 Sep 24 22:20	7° $\underline{\mathbf{A}}$ 12'49	
	13519 Oct 15 12:44	0° \mathbb{M}		max. Earth dist.	13520 Sep 29 02:58	15° $\underline{\mathbf{A}}$ 27'00	1.33856 AU
max. Earth dist.	13519 Oct 17 11:55	4° \mathbb{M} 06'59	1.32435 AU	asc. node	13520 Sep 30 02:28	17° $\underline{\mathbf{A}}$ 25'54	
superior conj	13519 Oct 20 11:59	10° \mathbb{M} 33'04	0°56'40	superior conj	13520 Oct 03 13:15	24° $\underline{\mathbf{A}}$ 33'54	0°32'14
minimum elong	13519 Oct 20 09:46	10° \mathbb{M} 21'02	0°56'52	minimum elong	13520 Oct 03 11:39	24° $\underline{\mathbf{A}}$ 25'31	0°32'16
evening rise	13519 Oct 27 09:32	25° \mathbb{M} 33'09			13520 Oct 06 02:56	0° \mathbb{M}	
	13519 Oct 29 11:51	0° \mathbb{A}		evening rise	13520 Oct 10 19:47	10° \mathbb{M} 00'17	
desc. node	13519 Nov 16 01:19	29° \mathbb{A} 28'26			13520 Oct 21 03:52	0° \mathbb{A}	
	13519 Nov 16 12:07	0° \mathbb{B}		evening max el	13520 Oct 30 23:48	13° \mathbb{A} 11'19	21°35'35
evening max el	13519 Nov 19 10:14	3° \mathbb{B} 06'06	23°15'03	desc. node	13520 Nov 01 22:36	14° \mathbb{A} 57'45	
retrograde	13519 Dec 02 17:24	9° \mathbb{B} 42'52		retrograde	13520 Nov 12 05:59	19° \mathbb{A} 16'20	
evening set	13519 Dec 07 00:20	9° \mathbb{B} 02'54		evening set	13520 Nov 15 03:57	18° \mathbb{A} 56'59	
min. Earth dist.	13519 Dec 13 19:58	5° \mathbb{B} 51'35	0.55108 AU	inferior conj	13520 Nov 24 00:08	15° \mathbb{A} 03'17	-5°38'11
inferior conj	13519 Dec 15 07:30	5° \mathbb{B} 00'11	-5°55'27	minimum elong	13520 Nov 23 17:15	15° \mathbb{A} 12'56	5°36'14
minimum elong	13519 Dec 15 09:22	4° \mathbb{B} 57'28	5°54'21	min. Earth dist.	13520 Nov 24 02:03	15° \mathbb{A} 00'35	0.54507 AU
morning rise	13519 Dec 23 20:01	1° \mathbb{B} 09'36		morning rise	13520 Dec 02 07:24	11° \mathbb{A} 15'03	
direct	13519 Dec 26 17:10	0° \mathbb{B} 49'49		direct	13520 Dec 06 01:26	10° \mathbb{A} 44'27	
morning max el	13520 Jan 06 19:24	6° \mathbb{B} 07'45	20°38'16	morning max el	13520 Dec 18 14:53	16° \mathbb{A} 45'56	22°15'26
asc. node	13520 Jan 10 05:56	9° \mathbb{B} 54'06		asc. node	13520 Dec 27 03:06	27° \mathbb{A} 15'46	
	13520 Jan 22 09:24	0° \approx			13520 Dec 28 21:04	0° \mathbb{B}	
morning set	13520 Jan 25 17:33	6° \approx 46'20		morning set	13521 Jan 09 04:11	21° \mathbb{B} 31'26	
					13521 Jan 13 03:30	0° \approx	
superior conj	13520 Feb 02 05:02	22° \approx 14'32	1°13'41	superior conj	13521 Jan 16 05:32	6° \approx 34'39	1°28'17
minimum elong	13520 Feb 02 07:39	22° \approx 27'52	1°14'05	minimum elong	13521 Jan 16 07:25	6° \approx 44'40	1°29'02
	13520 Feb 06 02:04	0° \mathbb{H}		max. Earth dist.	13521 Jan 20 01:22	14° \approx 32'49	1.34153 AU
max. Earth dist.	13520 Feb 07 11:31	2° \mathbb{H} 42'44	1.36035 AU	evening rise	13521 Jan 24 10:53	23° \approx 17'47	
evening rise	13520 Feb 11 08:21	10° \mathbb{H} 00'29			13521 Jan 28 00:09	0° \mathbb{H}	
desc. node	13520 Feb 12 01:20	11° \mathbb{H} 18'21		desc. node	13521 Jan 28 21:57	1° \mathbb{H} 39'40	
	13520 Feb 23 00:47	0° \mathbb{Y}			13521 Feb 15 16:31	0° \mathbb{Y}	
	13520 Mar 16 09:21	0° \mathbb{B}		evening max el	13521 Feb 28 08:56	15° \mathbb{Y} 05'47	26°59'57
evening max el	13520 Mar 17 19:22	1° \mathbb{B} 25'35	26°06'23	retrograde	13521 Mar 13 17:22	22° \mathbb{Y} 32'44	
retrograde	13520 Mar 30 12:45	8° \mathbb{B} 41'57		evening set	13521 Mar 20 06:46	20° \mathbb{Y} 00'23	
evening set	13520 Apr 05 16:48	6° \mathbb{B} 11'22		min. Earth dist.	13521 Mar 24 05:42	16° \mathbb{Y} 09'28	0.65683 AU
asc. node	13520 Apr 07 02:39	4° \mathbb{B} 53'53		asc. node	13521 Mar 25 00:07	15° \mathbb{Y} 17'19	
min. Earth dist.	13520 Apr 09 21:00	1° \mathbb{B} 47'01	0.67131 AU	inferior conj	13521 Mar 26 10:01	13° \mathbb{Y} 39'37	0°26'54
	13520 Apr 11 07:30	30° \mathbb{R} \mathbb{Y}		minimum elong	13521 Mar 26 09:18	13° \mathbb{Y} 41'42	0°26'28
inferior conj	13520 Apr 11 13:04	29° \mathbb{Y} 42'39	1°20'59	morning rise	13521 Apr 01 13:18	8° \mathbb{Y} 05'46	
minimum elong	13520 Apr 11 11:16	29° \mathbb{Y} 48'14	1°19'56	direct	13521 Apr 04 08:50	7° \mathbb{Y} 22'48	
morning rise	13520 Apr 17 06:32	23° \mathbb{Y} 56'49		morning max el	13521 Apr 10 17:23	10° \mathbb{Y} 42'33	18°05'26
direct	13520 Apr 20 12:00	22° \mathbb{Y} 57'39			13521 Apr 24 09:12	0° \mathbb{B}	
morning max el	13520 Apr 27 02:40	26° \mathbb{Y} 30'11	18°39'47	desc. node	13521 Apr 27 00:15	4° \mathbb{B} 15'01	
	13520 Apr 30 06:05	0° \mathbb{B}		morning set	13521 Apr 29 07:46	8° \mathbb{B} 00'13	
desc. node	13520 May 10 03:35	14° \mathbb{B} 07'15			13521 May 13 01:33	0° \mathbb{I}	
morning set	13520 May 18 15:16	27° \mathbb{B} 19'31					
	13520 May 20 08:18	0° \mathbb{I}		superior conj	13521 May 14 04:06	1° \mathbb{I} 44'26	-1°49'13
max. Earth dist.	13520 Jun 02 22:30	21° \mathbb{I} 13'26	1.45756 AU	minimum elong	13521 May 13 19:05	1° \mathbb{I} 08'59	1°49'19
superior conj	13520 Jun 03 18:52	22° \mathbb{I} 32'57	-2°10'20	max. Earth dist.	13521 May 16 18:17	5° \mathbb{I} 48'10	1.45744 AU
minimum elong	13520 Jun 03 14:29	22° \mathbb{I} 15'50	2°11'13	evening rise	13521 May 30 06:37	26° \mathbb{I} 47'04	
	13520 Jun 08 13:00	0° \mathbb{E}			13521 Jun 01 08:35	0° \mathbb{E}	
evening rise	13520 Jun 19 07:07	17° \mathbb{E} 01'49		greatest brilliancy	13521 Jun 11 19:58	15° \mathbb{E} 59'00	-0.7m
greatest brilliancy	13520 Jun 26 12:54	28° \mathbb{E} 33'53	-0.9m	asc. node	13521 Jun 20 21:42	28° \mathbb{E} 32'06	
	13520 Jun 27 10:44	0° Ω			13521 Jun 22 03:52	0° Ω	
asc. node	13520 Jul 04 00:47	9° Ω 59'48		evening max el	13521 Jun 23 16:08	1° Ω 36'22	19°21'59
evening max el	13520 Jul 10 07:44	17° Ω 50'10	18°38'20	retrograde	13521 Jun 30 18:03	5° Ω 33'47	
retrograde	13520 Jul 16 20:49	21° Ω 23'18		evening set	13521 Jul 04 08:51	4° Ω 17'44	
evening set	13520 Jul 20 02:25	20° Ω 23'46			13521 Jul 08 13:25	30° \mathbb{R} \mathbb{E}	
inferior conj	13520 Jul 25 18:00	14° Ω 46'04	2°47'42	inferior conj	13521 Jul 09 18:25	28° \mathbb{E} 26'10	3°06'44
minimum elong	13520 Jul 25 19:58	14° Ω 40'02	2°46'32	minimum elong	13521 Jul 09 19:26	28° \mathbb{E} 22'47	3°05'40
min. Earth dist.	13520 Jul 27 17:05	12° Ω 21'52	0.65604 AU	min. Earth dist.	13521 Jul 11 03:00	26° \mathbb{E} 39'20	0.67129 AU
morning rise	13520 Jul 31 12:31	8° Ω 22'43		morning rise	13521 Jul 15 05:29	22° \mathbb{E} 01'56	
desc. node	13520 Aug 06 02:23	5° Ω 45'06		direct	13521 Jul 21 06:09	19° \mathbb{E} 24'19	
direct	13520 Aug 06 22:17	5° Ω 42'36		desc. node	13521 Jul 23 23:46	19° \mathbb{E} 52'01	

morning max el	13521 Aug 02 16:14	26°☿50'34	25°42'24	direct	13522 Jul 04 19:32	3°☿32'08	
	13521 Aug 05 14:46	0°♊		desc. node	13522 Jul 10 21:05	5°☿47'44	
	13521 Aug 27 03:23	0°♊		morning max el	13522 Jul 16 02:21	10°☿17'39	24°16'54
morning set	13521 Sep 07 15:53	19°♊42'17			13522 Jul 31 17:49	0°♊	
max. Earth dist.	13521 Sep 11 07:47	26°♊31'22	1.35755 AU		13522 Aug 19 20:06	0°♊	
	13521 Sep 13 03:18	0°♊		morning set	13522 Aug 20 14:54	1°♊21'02	
asc. node	13521 Sep 16 23:02	7°♊32'41		max. Earth dist.	13522 Aug 24 06:17	7°♊45'45	1.38002 AU
superior conj	13521 Sep 17 06:11	8°♊08'40	0°02'49	superior conj	13522 Aug 31 11:28	21°♊09'12	-0°30'33
minimum elong	13521 Sep 17 06:01	8°♊07'49	0°02'50	minimum elong	13522 Aug 31 13:34	21°♊19'18	0°30'25
behind sun begin	13521 Sep 16 23:54	7°♊37'02		asc. node	13522 Sep 03 19:34	27°♊38'00	
behind sun end	13521 Sep 17 12:08	8°♊38'40			13522 Sep 05 00:25	0°♊	
evening rise	13521 Sep 25 03:00	24°♊17'13		evening rise	13522 Sep 09 04:43	8°♊17'28	
	13521 Sep 27 22:30	0°♊			13522 Sep 21 08:03	0°♊	
evening max el	13521 Oct 13 01:36	23°♊52'22	20°11'23	evening max el	13522 Sep 25 17:35	5°♊21'51	19°08'15
desc. node	13521 Oct 19 19:58	28°♊29'12		retrograde	13522 Oct 04 18:39	9°♊53'44	
retrograde	13521 Oct 23 18:07	29°♊11'22		evening set	13522 Oct 06 15:17	9°♊43'02	
evening set	13521 Oct 25 19:35	29°♊00'24		desc. node	13522 Oct 06 17:25	9°♊42'00	
inferior conj	13521 Nov 03 18:05	25°♊03'10	-4°24'01	inferior conj	13522 Oct 15 02:37	5°♊30'24	-2°38'13
minimum elong	13521 Nov 03 08:01	25°♊18'07	4°20'17	minimum elong	13522 Oct 14 19:52	5°♊41'50	2°35'08
min. Earth dist.	13521 Nov 05 09:40	24°♊04'19	0.54847 AU	min. Earth dist.	13522 Oct 17 20:59	3°♊38'24	0.56072 AU
morning rise	13521 Nov 11 19:31	20°♊57'24		morning rise	13522 Oct 22 21:45	0°♊51'35	
direct	13521 Nov 16 11:55	20°♊09'48			13522 Oct 25 14:26	30°♊♊	
morning max el	13521 Nov 30 01:37	26°♊49'58	24°03'57	direct	13522 Oct 28 10:00	29°♊41'21	
	13521 Dec 03 02:59	0°♊			13522 Oct 31 05:38	0°♊	
asc. node	13521 Dec 14 00:10	15°♊28'55		morning max el	13522 Nov 11 12:18	6°♊52'02	25°47'05
	13521 Dec 21 16:21	0°♊			13522 Nov 28 11:15	0°♊	
morning set	13521 Dec 24 16:04	6°♊16'39		asc. node	13522 Nov 30 21:08	4°♊20'07	
				morning set	13522 Dec 09 03:23	20°♊56'24	
superior conj	13521 Dec 31 11:57	21°♊09'19	1°36'17		13522 Dec 13 06:42	0°♊	
minimum elong	13521 Dec 31 12:48	21°♊14'01	1°37'16	superior conj	13522 Dec 15 21:54	5°♊50'50	1°38'04
max. Earth dist.	13522 Jan 02 23:05	26°♊28'54	1.32694 AU	minimum elong	13522 Dec 15 21:39	5°♊49'31	1°39'06
	13522 Jan 04 14:50	0°♊		max. Earth dist.	13522 Dec 17 03:32	8°♊34'56	1.31716 AU
evening rise	13522 Jan 08 01:02	7°♊03'54		evening rise	13522 Dec 22 23:45	21°♊10'17	
desc. node	13522 Jan 15 18:39	21°♊47'07			13522 Dec 27 08:48	0°♊	
	13522 Jan 20 13:18	0°♊		desc. node	13523 Jan 02 15:25	11°♊33'47	
evening max el	13522 Feb 10 21:41	28°♊25'58	27°29'50		13523 Jan 14 14:41	0°♊	
	13522 Feb 12 14:42	0°♊		evening max el	13523 Jan 24 07:24	11°♊12'10	27°29'34
retrograde	13522 Feb 24 15:18	5°♊52'58		retrograde	13523 Feb 07 05:17	18°♊32'29	
evening set	13522 Mar 03 11:07	3°♊25'42		evening set	13523 Feb 14 03:01	16°♊17'50	
	13522 Mar 07 08:27	30°♊♊		min. Earth dist.	13523 Feb 17 21:13	13°♊22'27	0.61837 AU
min. Earth dist.	13522 Mar 07 06:23	0°♊05'11	0.63889 AU	inferior conj	13523 Feb 20 21:49	10°♊35'40	-1°54'45
inferior conj	13522 Mar 09 22:00	27°♊20'20	-0°38'37	minimum elong	13523 Feb 21 01:49	10°♊26'26	1°52'41
minimum elong	13522 Mar 09 23:13	27°♊17'11	0°37'58	asc. node	13523 Feb 26 19:01	6°♊06'35	
asc. node	13522 Mar 11 21:34	25°♊20'38		morning rise	13523 Feb 28 03:28	5°♊33'33	
morning rise	13522 Mar 16 13:33	22°♊00'49		direct	13523 Mar 02 08:08	5°♊12'20	
direct	13522 Mar 19 00:40	21°♊30'33		morning max el	13523 Mar 09 03:56	8°♊39'27	17°48'55
morning max el	13522 Mar 25 10:51	24°♊48'47	17°48'16		13523 Mar 23 04:44	0°♊	
	13522 Mar 29 18:30	0°♊		morning set	13523 Mar 24 22:01	3°♊03'51	
morning set	13522 Apr 11 03:53	20°♊01'05		desc. node	13523 Mar 31 17:23	15°♊06'29	
desc. node	13522 Apr 13 20:51	24°♊36'29					
	13522 Apr 17 01:48	0°♊		superior conj	13523 Apr 05 03:28	22°♊42'44	-0°34'15
superior conj	13522 Apr 24 04:07	11°♊40'50	-1°14'14	minimum elong	13523 Apr 05 00:13	22°♊28'58	0°34'03
minimum elong	13522 Apr 23 20:40	11°♊10'36	1°13'54		13523 Apr 09 12:03	0°♊	
max. Earth dist.	13522 Apr 29 13:22	20°♊18'09	1.45004 AU	max. Earth dist.	13523 Apr 12 05:39	4°♊28'11	1.43605 AU
	13522 May 05 18:03	0°♊		evening rise	13523 Apr 19 09:50	15°♊51'36	
evening rise	13522 May 09 18:13	6°♊10'13			13523 Apr 28 17:06	0°♊	
	13522 May 25 17:30	0°♊		evening max el	13523 May 20 16:08	29°♊14'24	21°31'55
evening max el	13522 Jun 06 19:00	15°♊25'05	20°20'48		13523 May 21 10:46	0°♊	
asc. node	13522 Jun 07 18:42	16°♊22'11		asc. node	13523 May 25 15:49	3°♊16'33	
retrograde	13522 Jun 14 16:49	19°♊57'23		retrograde	13523 May 29 15:18	4°♊28'56	
evening set	13522 Jun 18 17:33	18°♊24'22		evening set	13523 Jun 03 02:41	2°♊39'25	
inferior conj	13522 Jun 24 00:05	12°♊20'16	3°12'26		13523 Jun 05 16:07	30°♊♊	
minimum elong	13522 Jun 24 00:05	12°♊20'17	3°11'23	inferior conj	13523 Jun 08 08:45	26°♊24'15	3°06'38
min. Earth dist.	13522 Jun 24 18:35	11°♊16'59	0.68204 AU	minimum elong	13523 Jun 08 07:48	26°♊27'34	3°05'31
morning rise	13522 Jun 29 06:18	5°♊59'02		min. Earth dist.	13523 Jun 08 13:46	26°♊06'46	0.68799 AU

morning rise	13523 Jun 13 12:43	20° Π 08'23		minimum elong	13524 May 22 16:41	10° Π 39'58	2°49'06
direct	13523 Jun 18 13:21	17° Π 58'01		min. Earth dist.	13524 May 22 10:29	11° Π 01'28	0.68916 AU
desc. node	13523 Jun 27 18:16	23° Π 05'55		morning rise	13524 May 27 22:43	4° Π 24'54	
morning max el	13523 Jun 28 13:30	23° Π 53'14	22°47'22	direct	13524 Jun 01 10:26	2° Π 34'23	
	13523 Jul 03 23:37	0° \mathfrak{C}		morning max el	13524 Jun 10 04:36	7° Π 38'10	21°22'03
	13523 Jul 25 03:02	0° Ω		desc. node	13524 Jun 13 15:20	11° Π 24'18	
morning set	13523 Aug 01 15:00	11° Ω 58'49			13524 Jun 27 09:44	0° \mathfrak{C}	
max. Earth dist.	13523 Aug 06 05:17	19° Ω 40'10	1.40354 AU	morning set	13524 Jul 11 14:05	21° \mathfrak{C} 31'14	
	13523 Aug 12 03:17	0° \mathfrak{M}			13524 Jul 16 21:24	0° Ω	
				max. Earth dist.	13524 Jul 18 09:17	2° Ω 26'16	1.42531 AU
superior conj	13523 Aug 14 01:02	3° \mathfrak{M} 26'07	-1°05'37	superior conj	13524 Jul 25 18:21	14° Ω 48'36	-1°38'38
minimum elong	13523 Aug 14 05:56	3° \mathfrak{M} 48'23	1°05'26	minimum elong	13524 Jul 26 01:24	15° Ω 18'54	1°38'40
asc. node	13523 Aug 21 16:08	17° \mathfrak{M} 38'27			13524 Aug 03 09:13	0° \mathfrak{M}	
evening rise	13523 Aug 23 21:51	21° \mathfrak{M} 53'28		evening rise	13524 Aug 06 02:21	4° \mathfrak{M} 54'04	
	13523 Aug 28 05:27	0° \mathfrak{L}		asc. node	13524 Aug 07 12:45	7° \mathfrak{M} 29'37	
evening max el	13523 Sep 08 21:01	17° \mathfrak{L} 36'47	18°26'51		13524 Aug 21 21:01	0° \mathfrak{L}	
retrograde	13523 Sep 16 14:27	21° \mathfrak{L} 31'13		evening max el	13524 Aug 22 07:43	0° \mathfrak{L} 27'14	18°05'58
evening set	13523 Sep 18 14:57	21° \mathfrak{L} 15'56		retrograde	13524 Aug 29 04:14	3° \mathfrak{L} 57'42	
desc. node	13523 Sep 23 14:56	18° \mathfrak{L} 46'33		evening set	13524 Aug 31 11:58	3° \mathfrak{L} 33'49	
inferior conj	13523 Sep 26 08:29	16° \mathfrak{L} 42'36	-0°51'47		13524 Sep 06 00:03	30° \mathfrak{R} \mathfrak{M}	
minimum elong	13523 Sep 26 06:29	16° \mathfrak{L} 46'35	0°50'46	inferior conj	13524 Sep 07 11:26	28° \mathfrak{M} 40'07	0°37'21
min. Earth dist.	13523 Sep 29 14:41	14° \mathfrak{L} 08'26	0.57949 AU	minimum elong	13524 Sep 07 12:36	28° \mathfrak{M} 37'25	0°36'47
morning rise	13523 Oct 03 18:32	11° \mathfrak{L} 26'15		desc. node	13524 Sep 09 12:29	26° \mathfrak{M} 46'26	
direct	13523 Oct 09 22:02	9° \mathfrak{L} 49'17		min. Earth dist.	13524 Sep 10 16:56	25° \mathfrak{M} 42'30	0.60174 AU
morning max el	13523 Oct 24 05:30	17° \mathfrak{L} 24'05	27°06'44	morning rise	13524 Sep 14 10:04	22° \mathfrak{M} 52'18	
	13523 Nov 03 16:28	0° \mathfrak{M}		direct	13524 Sep 20 23:08	20° \mathfrak{M} 48'27	
asc. node	13523 Nov 17 18:00	23° \mathfrak{M} 39'24		morning max el	13524 Oct 05 06:27	28° \mathfrak{M} 41'03	27°50'54
	13523 Nov 20 22:09	0° \mathfrak{X}			13524 Oct 06 13:33	0° \mathfrak{L}	
morning set	13523 Nov 23 12:29	5° \mathfrak{X} 26'25			13524 Oct 27 13:37	0° \mathfrak{M}	
superior conj	13523 Nov 30 09:26	20° \mathfrak{X} 33'44	1°33'53	asc. node	13524 Nov 03 14:46	13° \mathfrak{M} 18'26	
minimum elong	13523 Nov 30 08:12	20° \mathfrak{X} 26'54	1°34'49	morning set	13524 Nov 06 17:30	19° \mathfrak{M} 41'24	
max. Earth dist.	13523 Nov 30 11:39	20° \mathfrak{X} 46'10	1.31242 AU		13524 Nov 11 12:21	0° \mathfrak{X}	
	13523 Dec 04 15:26	0° \mathfrak{Z}		max. Earth dist.	13524 Nov 12 19:38	2° \mathfrak{X} 52'58	1.31281 AU
evening rise	13523 Dec 07 04:36	5° \mathfrak{Z} 30'55		superior conj	13524 Nov 13 20:40	5° \mathfrak{X} 12'09	1°23'56
	13523 Dec 19 23:55	0° \approx		minimum elong	13524 Nov 13 18:43	5° \mathfrak{X} 01'18	1°24'36
desc. node	13523 Dec 20 12:19	0° \approx 51'35		evening rise	13524 Nov 20 13:24	19° \mathfrak{X} 59'49	
evening max el	13524 Jan 06 11:13	23° \approx 12'02	26°54'58		13524 Nov 25 08:41	0° \mathfrak{Z}	
	13524 Jan 17 08:41	0° \mathfrak{X}		desc. node	13524 Dec 06 09:21	19° \mathfrak{Z} 29'10	
retrograde	13524 Jan 20 10:11	0° \mathfrak{X} 23'20			13524 Dec 14 04:47	0° \approx	
	13524 Jan 23 10:32	30° \mathfrak{R} \approx		evening max el	13524 Dec 18 06:57	4° \approx 19'19	25°46'59
evening set	13524 Jan 27 03:06	28° \approx 29'02		retrograde	13525 Jan 01 04:47	11° \approx 20'55	
min. Earth dist.	13524 Jan 31 01:20	25° \approx 49'44	0.59662 AU	evening set	13525 Jan 07 07:20	9° \approx 54'07	
inferior conj	13524 Feb 03 05:53	23° \approx 16'13	-3°17'47	min. Earth dist.	13525 Jan 11 19:38	7° \approx 16'38	0.57562 AU
minimum elong	13524 Feb 03 13:00	23° \approx 01'55	3°14'32	inferior conj	13525 Jan 14 18:50	5° \approx 12'44	-4°38'28
morning rise	13524 Feb 11 02:00	18° \approx 34'44		minimum elong	13525 Jan 15 03:40	4° \approx 57'20	4°35'12
direct	13524 Feb 13 03:07	18° \approx 19'01		morning rise	13525 Jan 23 02:46	0° \approx 53'26	
asc. node	13524 Feb 13 16:28	18° \approx 20'13		direct	13525 Jan 25 05:09	0° \approx 39'41	
morning max el	13524 Feb 20 17:13	22° \approx 05'14	18°08'29	asc. node	13525 Jan 30 13:52	2° \approx 15'37	
	13524 Feb 26 19:50	0° \mathfrak{X}		morning max el	13525 Feb 02 22:48	4° \approx 55'26	18°48'47
morning set	13524 Mar 07 08:06	16° \mathfrak{X} 50'07			13525 Feb 18 15:49	0° \mathfrak{X}	
	13524 Mar 14 10:12	0° \mathfrak{Y}		morning set	13525 Feb 19 05:18	1° \mathfrak{X} 05'49	
superior conj	13524 Mar 17 02:15	4° \mathfrak{Y} 49'29	0°03'53	superior conj	13525 Feb 27 20:33	17° \mathfrak{X} 49'52	0°36'26
minimum elong	13524 Mar 17 02:33	4° \mathfrak{Y} 50'49	0°03'51	minimum elong	13525 Feb 27 22:48	18° \mathfrak{X} 00'25	0°36'24
behind sun begin	13524 Mar 16 19:06	4° \mathfrak{Y} 17'25		desc. node	13525 Mar 04 10:23	26° \mathfrak{X} 17'45	
behind sun end	13524 Mar 17 10:01	5° \mathfrak{Y} 24'09			13525 Mar 06 12:02	0° \mathfrak{Y}	
desc. node	13524 Mar 17 13:52	5° \mathfrak{Y} 41'20		max. Earth dist.	13525 Mar 07 00:30	0° \mathfrak{Y} 55'05	1.39497 AU
max. Earth dist.	13524 Mar 24 17:16	18° \mathfrak{Y} 03'03	1.41698 AU	evening rise	13525 Mar 10 22:58	7° \mathfrak{Y} 43'07	
evening rise	13524 Mar 29 17:48	26° \mathfrak{Y} 19'14			13525 Mar 25 00:30	0° \mathfrak{X}	
	13524 Apr 01 01:00	0° \mathfrak{X}		evening max el	13525 Apr 14 22:39	26° \mathfrak{X} 56'12	24°11'45
	13524 Apr 21 11:09	0° Π			13525 Apr 18 08:07	0° Π	
evening max el	13524 May 02 08:37	13° Π 04'08	22°50'51	retrograde	13525 Apr 26 05:28	3° Π 33'32	
asc. node	13524 May 11 13:03	18° Π 58'32		asc. node	13525 Apr 28 10:23	3° Π 11'50	
retrograde	13524 May 12 11:55	19° Π 02'41		evening set	13525 May 01 15:39	1° Π 16'11	
evening set	13524 May 17 10:34	16° Π 58'04			13525 May 02 23:22	30° \mathfrak{R} \mathfrak{X}	
inferior conj	13524 May 22 18:22	10° Π 34'05	2°50'20				

min. Earth dist.	13525 May 06 06:41	25°♄55'44	0.68569 AU	minimum elong	13526 Apr 21 06:52	9°♄03'46	1°45'51
inferior conj	13525 May 07 03:06	24°♄46'41	2°23'52	morning rise	13526 Apr 26 21:55	3°♄04'52	
minimum elong	13525 May 07 00:59	24°♄53'49	2°22'34	direct	13526 Apr 30 09:37	1°♄55'01	
morning rise	13525 May 12 10:26	18°♄45'20		morning max el	13526 May 07 07:27	5°♄40'53	19°07'03
direct	13525 May 16 09:43	17°♄15'32		desc. node	13526 May 18 09:05	20°♄01'16	
morning max el	13525 May 24 02:17	21°♄34'43	20°07'21	greatest brilliancy	13526 May 20 07:55	22°♄55'09	-0.7m
	13525 May 31 04:13	0°♄			13526 May 25 00:03	0°♄	
desc. node	13525 May 31 12:16	0°♄26'56		morning set	13526 May 30 22:39	9°♄08'18	
morning set	13525 Jun 20 18:31	0°♄17'19			13526 Jun 13 08:41	0°♄	
	13525 Jun 20 14:01	0°♄		max. Earth dist.	13526 Jun 13 11:45	0°♄12'03	1.45426 AU
max. Earth dist.	13525 Jun 30 19:43	16°♄01'01	1.44283 AU				
				superior conj	13526 Jun 16 07:58	4°♄40'22	-2°13'36
superior conj	13525 Jul 06 12:14	25°♄11'29	-2°03'40	minimum elong	13526 Jun 16 08:08	4°♄41'01	2°14'39
minimum elong	13525 Jul 06 18:21	25°♄36'29	2°04'17	evening rise	13526 Jul 01 01:41	28°♄21'58	
	13525 Jul 09 10:24	0°♄			13526 Jul 02 01:39	0°♄	
evening rise	13525 Jul 19 13:19	17°♄07'36		asc. node	13526 Jul 12 06:14	16°♄25'35	
asc. node	13525 Jul 25 09:28	27°♄07'21		evening max el	13526 Jul 20 11:50	27°♄18'11	18°20'56
	13525 Jul 27 02:45	0°♄			13526 Jul 24 01:32	0°♄	
evening max el	13525 Aug 05 21:49	13°♄44'09	18°04'18	retrograde	13526 Jul 26 21:08	0°♄42'34	
retrograde	13525 Aug 12 07:54	17°♄04'39		evening set	13526 Jul 29 21:46	29°♄52'03	
evening set	13525 Aug 14 23:54	16°♄28'44			13526 Jul 29 15:45	30°♄	
inferior conj	13525 Aug 21 08:06	11°♄16'33	1°44'02	inferior conj	13526 Aug 04 18:21	24°♄23'16	2°29'41
minimum elong	13525 Aug 21 10:31	11°♄10'12	1°42'50	minimum elong	13526 Aug 04 20:42	24°♄16'24	2°28'26
min. Earth dist.	13525 Aug 24 04:41	8°♄17'26	0.62456 AU	min. Earth dist.	13526 Aug 07 01:46	21°♄42'08	0.64550 AU
desc. node	13525 Aug 27 10:01	5°♄24'12		morning rise	13526 Aug 10 18:16	18°♄03'19	
morning rise	13525 Aug 27 18:51	5°♄07'49		desc. node	13526 Aug 14 07:30	15°♄58'03	
direct	13525 Sep 03 11:12	2°♄42'30		direct	13526 Aug 17 07:55	15°♄25'44	
morning max el	13525 Sep 17 13:20	10°♄43'47	27°55'58	morning max el	13526 Aug 30 23:29	23°♄24'00	27°25'20
	13525 Oct 02 16:37	0°♄			13526 Sep 05 20:39	0°♄	
	13525 Oct 19 21:24	0°♄			13526 Sep 26 00:30	0°♄	
asc. node	13525 Oct 21 11:28	3°♄11'19		morning set	13526 Oct 05 06:24	17°♄04'14	
morning set	13525 Oct 21 16:20	3°♄36'04		asc. node	13526 Oct 08 08:06	23°♄13'09	
max. Earth dist.	13525 Oct 26 23:36	14°♄45'46	1.31856 AU	max. Earth dist.	13526 Oct 09 20:05	26°♄18'15	1.32973 AU
					13526 Oct 11 14:28	0°♄	
superior conj	13525 Oct 29 05:44	19°♄40'51	1°08'15				
minimum elong	13525 Oct 29 03:28	19°♄28'21	1°08'38	superior conj	13526 Oct 13 10:33	3°♄54'13	0°46'58
	13525 Nov 02 22:13	0°♄		minimum elong	13526 Oct 13 08:30	3°♄43'16	0°47'06
evening rise	13525 Nov 05 00:15	4°♄32'10		evening rise	13526 Oct 20 11:17	19°♄03'16	
	13525 Nov 18 08:45	0°♄			13526 Oct 25 18:46	0°♄	
desc. node	13525 Nov 23 06:30	7°♄11'00		desc. node	13526 Nov 10 03:45	23°♄36'43	
evening max el	13525 Nov 29 19:08	14°♄40'45	24°13'55	evening max el	13526 Nov 11 05:36	24°♄42'09	22°31'41
retrograde	13525 Dec 13 10:47	21°♄28'54			13526 Nov 18 19:07	0°♄	
evening set	13525 Dec 18 12:01	20°♄32'59		retrograde	13526 Nov 24 03:49	1°♄06'45	
min. Earth dist.	13525 Dec 24 06:37	17°♄39'15	0.55825 AU	evening set	13526 Nov 27 20:10	0°♄37'06	
inferior conj	13525 Dec 26 10:59	16°♄19'06	-5°39'08		13526 Nov 29 18:26	30°♄	
minimum elong	13525 Dec 26 17:07	16°♄09'42	5°37'18	min. Earth dist.	13526 Dec 05 13:22	27°♄08'48	0.54745 AU
morning rise	13526 Jan 04 00:09	12°♄19'41		inferior conj	13526 Dec 06 09:34	26°♄40'17	-5°55'41
direct	13526 Jan 06 11:41	12°♄03'38		minimum elong	13526 Dec 06 07:33	26°♄43'09	5°54'34
morning max el	13526 Jan 16 16:31	16°♄57'49	19°51'37	morning rise	13526 Dec 14 20:10	22°♄52'40	
asc. node	13526 Jan 17 11:12	17°♄44'28		direct	13526 Dec 18 01:54	22°♄28'51	
	13526 Jan 26 05:14	0°♄		morning max el	13526 Dec 29 19:45	28°♄05'41	21°17'17
morning set	13526 Feb 03 09:51	15°♄39'22			13526 Dec 31 16:28	0°♄	
	13526 Feb 10 11:35	0°♄		asc. node	13527 Jan 04 08:25	4°♄30'25	
				morning set	13527 Jan 18 18:57	0°♄22'51	
superior conj	13526 Feb 11 05:38	1°♄29'54	1°02'07		13527 Jan 18 14:34	0°♄	
minimum elong	13526 Feb 11 08:24	1°♄43'37	1°02'19				
max. Earth dist.	13526 Feb 17 06:47	13°♄09'37	1.37255 AU	superior conj	13527 Jan 26 01:30	15°♄38'33	1°20'42
desc. node	13526 Feb 19 06:54	16°♄51'31		minimum elong	13527 Jan 26 03:52	15°♄50'50	1°21'14
evening rise	13526 Feb 21 00:20	19°♄58'27		max. Earth dist.	13527 Jan 30 17:08	25°♄04'58	1.35197 AU
	13526 Feb 26 19:42	0°♄			13527 Feb 02 05:39	0°♄	
	13526 Mar 19 02:04	0°♄		evening rise	13527 Feb 03 18:46	2°♄56'24	
evening max el	13526 Mar 28 12:10	10°♄48'52	25°27'50	desc. node	13527 Feb 06 03:29	7°♄19'03	
retrograde	13526 Apr 09 18:37	17°♄54'20			13527 Feb 19 18:36	0°♄	
asc. node	13526 Apr 15 07:48	15°♄44'58		evening max el	13527 Mar 11 02:00	24°♄37'00	26°31'37
evening set	13526 Apr 15 16:16	15°♄27'37			13527 Mar 17 20:21	0°♄	
min. Earth dist.	13526 Apr 20 00:08	10°♄42'51	0.67778 AU	retrograde	13527 Mar 24 02:25	1°♄58'26	
inferior conj	13526 Apr 21 08:57	8°♄57'04	1°47'05		13527 Mar 29 17:12	30°♄	

evening set	13527 Mar 30 10:40	29°♄26'40		retrograde	13528 Mar 06 04:03	15°♄37'40	
asc. node	13527 Apr 02 05:14	26°♄46'16		evening set	13528 Mar 12 20:49	13°♄06'31	
min. Earth dist.	13527 Apr 03 12:36	25°♄16'39	0.66568 AU	min. Earth dist.	13528 Mar 16 17:59	9°♄29'14	0.64966 AU
inferior conj	13527 Apr 05 09:50	23°♄00'40	0°59'28	inferior conj	13528 Mar 19 03:18	6°♄51'41	0°00'30
minimum elong	13527 Apr 05 08:23	23°♄05'01	0°58'37	minimum elong	13528 Mar 19 03:17	6°♄51'44	0°00'29
morning rise	13527 Apr 11 07:07	17°♄19'27		transit middle	13528 Mar 19 03:17	6°♄51'44	0°00'29
direct	13527 Apr 14 08:18	16°♄27'23		transit begin	13528 Mar 19 00:15	7°♄00'07	
morning max el	13527 Apr 20 19:15	19°♄52'49	18°23'02	transit end	13528 Mar 19 06:20	6°♄43'21	
	13527 Apr 28 17:49	0°♄		asc. node	13528 Mar 19 02:41	6°♄53'25	
desc. node	13527 May 05 05:48	9°♄58'49		morning rise	13528 Mar 25 11:32	1°♄23'43	
morning set	13527 May 10 22:59	19°♄01'42		direct	13528 Mar 28 03:24	0°♄46'30	
	13527 May 17 21:33	0°♄		morning max el	13528 Apr 03 11:30	4°♄03'51	17°56'02
					13528 Apr 20 23:14	0°♄	
superior conj	13527 May 26 15:58	13°♄44'22	-2°03'35	morning set	13528 Apr 21 03:42	0°♄18'27	
minimum elong	13527 May 26 08:50	13°♄16'33	2°04'09	desc. node	13528 Apr 21 02:26	0°♄13'15	
max. Earth dist.	13527 May 27 07:26	14°♄44'48	1.45849 AU				
	13527 Jun 06 01:51	0°♄		superior conj	13528 May 05 05:47	23°♄10'47	-1°35'33
evening rise	13527 Jun 11 13:28	8°♄35'47		minimum elong	13528 May 04 20:48	22°♄35'09	1°35'22
greatest brilliancy	13527 Jun 21 07:01	23°♄48'22	-0.8m	max. Earth dist.	13528 May 09 03:45	29°♄21'39	1.45517 AU
	13527 Jun 25 09:24	0°♄			13528 May 09 13:32	0°♄	
asc. node	13527 Jun 29 03:05	5°♄17'11		evening rise	13528 May 21 06:10	18°♄07'26	
evening max el	13527 Jul 03 22:55	11°♄01'38	18°54'58		13528 May 29 01:06	0°♄	
retrograde	13527 Jul 10 16:19	14°♄43'19		greatest brilliancy	13528 Jun 04 12:02	9°♄37'27	-0.6m
evening set	13527 Jul 14 01:52	13°♄36'38		asc. node	13528 Jun 15 00:02	23°♄33'18	
inferior conj	13527 Jul 19 14:29	7°♄52'50	2°57'32	evening max el	13528 Jun 16 05:01	24°♄49'20	19°45'16
minimum elong	13527 Jul 19 16:04	7°♄47'46	2°56'25	retrograde	13528 Jun 23 14:34	29°♄00'35	
min. Earth dist.	13527 Jul 21 07:19	5°♄43'45	0.66306 AU	evening set	13528 Jun 27 09:32	27°♄37'09	
morning rise	13527 Jul 25 05:33	1°♄28'48		inferior conj	13528 Jul 02 17:26	21°♄39'49	3°10'38
	13527 Jul 27 06:43	30°♄		minimum elong	13528 Jul 02 18:01	21°♄37'51	3°09'37
direct	13527 Jul 31 11:50	28°♄48'50		min. Earth dist.	13528 Jul 03 19:51	20°♄11'19	0.67638 AU
desc. node	13527 Aug 01 04:56	28°♄50'42		morning rise	13528 Jul 08 02:07	15°♄16'31	
	13527 Aug 05 02:17	0°♄		direct	13528 Jul 13 22:00	12°♄42'55	
morning max el	13527 Aug 13 10:36	6°♄30'39	26°26'04	desc. node	13528 Jul 18 02:16	13°♄47'30	
	13527 Aug 31 14:20	0°♄		morning max el	13528 Jul 25 21:19	19°♄53'32	25°07'17
morning set	13527 Sep 18 08:29	29°♄57'33			13528 Aug 03 12:39	0°♄	
	13527 Sep 18 09:01	0°♄			13528 Aug 23 17:29	0°♄	
max. Earth dist.	13527 Sep 22 06:52	7°♄30'57	1.34611 AU	morning set	13528 Aug 30 18:43	12°♄07'02	
asc. node	13527 Sep 25 04:38	13°♄19'09		max. Earth dist.	13528 Sep 03 08:42	18°♄37'47	1.36679 AU
					13528 Sep 09 07:34	0°♄	
superior conj	13527 Sep 27 08:37	17°♄45'03	0°20'21				
minimum elong	13527 Sep 27 07:31	17°♄39'23	0°20'21	superior conj	13528 Sep 09 21:01	1°♄06'17	-0°10'57
	13527 Oct 03 04:59	0°♄		minimum elong	13528 Sep 09 21:43	1°♄09'44	0°10'54
evening rise	13527 Oct 04 20:30	3°♄27'11		behind sun begin	13528 Sep 09 16:55	0°♄46'01	
	13527 Oct 19 16:39	0°♄		behind sun end	13528 Sep 10 02:32	1°♄33'29	
evening max el	13527 Oct 23 23:39	4°♄59'34	20°57'23	asc. node	13528 Sep 11 01:11	3°♄25'55	
desc. node	13527 Oct 28 01:05	8°♄19'47		evening rise	13528 Sep 18 01:43	17°♄38'14	
retrograde	13527 Nov 04 14:28	10°♄46'02			13528 Sep 24 09:22	0°♄	
evening set	13527 Nov 07 01:58	10°♄31'24		evening max el	13528 Oct 05 07:27	16°♄00'19	19°41'49
inferior conj	13527 Nov 16 00:52	6°♄37'39	-5°12'37	desc. node	13528 Oct 13 22:30	20°♄53'58	
minimum elong	13527 Nov 15 15:39	6°♄50'44	5°09'46	retrograde	13528 Oct 15 07:00	20°♄59'16	
min. Earth dist.	13527 Nov 16 19:21	6°♄11'25	0.54540 AU	evening set	13528 Oct 17 04:40	20°♄49'12	
morning rise	13527 Nov 24 05:40	2°♄44'53		inferior conj	13528 Oct 25 23:42	16°♄46'07	-3°41'03
direct	13527 Nov 28 09:31	2°♄07'49		minimum elong	13528 Oct 25 14:32	17°♄00'27	3°37'16
morning max el	13527 Dec 11 10:27	8°♄25'46	23°01'01	min. Earth dist.	13528 Oct 28 04:12	15°♄24'06	0.55269 AU
asc. node	13527 Dec 22 05:32	22°♄15'49		morning rise	13528 Nov 02 22:40	12°♄27'28	
	13527 Dec 26 17:00	0°♄		direct	13528 Nov 07 23:38	11°♄31'12	
morning set	13528 Jan 03 06:21	15°♄09'03		morning max el	13528 Nov 21 20:17	18°♄25'15	24°49'37
					13528 Dec 01 10:33	0°♄	
superior conj	13528 Jan 10 04:49	0°♄05'51	1°32'28	asc. node	13528 Dec 08 02:32	10°♄46'22	
minimum elong	13528 Jan 10 06:18	0°♄13'47	1°33'18	morning set	13528 Dec 17 18:13	29°♄52'42	
	13528 Jan 10 03:44	0°♄			13528 Dec 17 19:34	0°♄	
max. Earth dist.	13528 Jan 13 10:36	6°♄57'53	1.33483 AU				
evening rise	13528 Jan 18 02:38	16°♄26'56		superior conj	13528 Dec 24 13:00	14°♄44'22	1°37'47
desc. node	13528 Jan 24 00:08	27°♄35'18		minimum elong	13528 Dec 24 13:24	14°♄46'31	1°38'48
	13528 Jan 25 08:30	0°♄		max. Earth dist.	13528 Dec 26 11:23	18°♄57'58	1.32217 AU
	13528 Feb 14 06:13	0°♄		evening rise	13528 Dec 31 20:44	0°♄22'16	
evening max el	13528 Feb 21 15:27	8°♄10'21	27°15'51		13528 Dec 31 16:24	0°♄	

















































































































desc. node	13529 Jan 09 20:52	17° \approx 34'47		evening rise	13529 Dec 15 22:22	14° \approx 35'59	
	13529 Jan 17 08:49	0° \approx			13529 Dec 23 16:49	0° \approx	
evening max el	13529 Feb 03 02:58	21° \approx 16'50	27°33'36	desc. node	13529 Dec 27 17:42	7° \approx 10'46	
retrograde	13529 Feb 16 22:50	28° \approx 42'10			13530 Jan 12 19:14	0° \approx	
evening set	13529 Feb 23 20:15	26° \approx 18'55		evening max el	13530 Jan 16 10:29	3° \approx 45'17	27°19'11
min. Earth dist.	13529 Feb 27 14:30	23° \approx 10'13	0.63041 AU	retrograde	13530 Jan 30 09:34	11° \approx 02'46	
inferior conj	13529 Mar 02 10:30	20° \approx 22'30	-1°09'46	evening set	13530 Feb 06 06:01	8° \approx 55'48	
minimum elong	13529 Mar 02 12:48	20° \approx 16'48	1°08'32	min. Earth dist.	13530 Feb 10 01:01	6° \approx 08'31	0.60911 AU
asc. node	13529 Mar 06 00:09	17° \approx 07'30		inferior conj	13530 Feb 13 04:09	3° \approx 25'08	-2°29'29
morning rise	13529 Mar 09 07:56	15° \approx 10'23		minimum elong	13530 Feb 13 09:29	3° \approx 13'28	2°26'50
direct	13529 Mar 11 16:00	14° \approx 44'29			13530 Feb 17 12:52	30° \approx	
morning max el	13529 Mar 18 05:18	18° \approx 05'08	17°46'22	morning rise	13530 Feb 20 16:04	28° \approx 31'32	
	13529 Mar 26 21:49	0° \approx		asc. node	13530 Feb 20 21:38	28° \approx 27'46	
morning set	13529 Apr 03 09:56	12° \approx 47'57		direct	13530 Feb 22 18:37	28° \approx 13'13	
desc. node	13529 Apr 07 23:00	20° \approx 38'55			13530 Feb 27 18:28	0° \approx	
	13529 Apr 13 11:34	0° \approx		morning max el	13530 Mar 01 21:19	1° \approx 47'34	17°54'49
				morning set	13530 Mar 17 11:38	26° \approx 11'58	
superior conj	13529 Apr 15 15:20	3° \approx 34'41	-0°57'24		13530 Mar 19 13:44	0° \approx	
minimum elong	13529 Apr 15 09:36	3° \approx 10'59	0°57'05	desc. node	13530 Mar 25 19:31	11° \approx 11'50	
max. Earth dist.	13529 Apr 21 21:40	13° \approx 44'19	1.44476 AU				
evening rise	13529 Apr 30 17:31	27° \approx 33'29		superior conj	13530 Mar 28 01:05	15° \approx 05'58	-0°17'36
	13529 May 02 07:45	0° \approx		minimum elong	13530 Mar 27 23:31	14° \approx 59'11	0°17'31
	13529 May 22 23:02	0° \approx		max. Earth dist.	13530 Apr 04 11:38	27° \approx 39'41	1.42844 AU
evening max el	13529 May 30 05:15	8° \approx 37'55	20°49'45		13530 Apr 05 21:57	0° \approx	
asc. node	13529 Jun 01 21:06	11° \approx 01'38		evening rise	13530 Apr 10 15:08	7° \approx 33'05	
retrograde	13529 Jun 07 13:31	13° \approx 28'10			13530 Apr 25 12:24	0° \approx	
evening set	13529 Jun 11 18:37	11° \approx 48'07		evening max el	13530 May 13 00:15	22° \approx 12'48	22°04'49
inferior conj	13529 Jun 17 00:39	5° \approx 38'53	3°11'18	asc. node	13530 May 19 18:17	27° \approx 12'39	
minimum elong	13529 Jun 17 00:13	5° \approx 40'21	3°10'15	retrograde	13530 May 22 11:25	28° \approx 10'22	
min. Earth dist.	13529 Jun 17 13:20	4° \approx 54'58	0.68511 AU	evening set	13530 May 27 03:25	26° \approx 10'30	
	13529 Jun 21 12:30	30° \approx 11'21		inferior conj	13530 Jun 01 10:00	19° \approx 12'46'18	3°00'58
morning rise	13529 Jun 22 05:34	29° \approx 11'28		minimum elong	13530 Jun 01 08:42	19° \approx 12'50'50	2°59'48
direct	13529 Jun 27 13:25	26° \approx 11'59'06		min. Earth dist.	13530 Jun 01 09:33	19° \approx 12'47'51	0.68910 AU
desc. node	13529 Jul 04 23:32	0° \approx 21'13		morning rise	13530 Jun 06 13:47	13° \approx 12'32'53	
	13529 Jul 04 12:49	0° \approx		direct	13530 Jun 11 08:57	11° \approx 12'30'29	
morning max el	13529 Jul 08 07:41	3° \approx 24'43	23°38'46	morning max el	13530 Jun 20 20:00	17° \approx 12'03'41	22°09'57
	13529 Jul 28 15:51	0° \approx		desc. node	13530 Jun 21 20:41	18° \approx 12'07'23	
morning set	13529 Aug 12 08:28	23° \approx 12'21'03			13530 Jul 01 11:38	0° \approx	
	13529 Aug 16 05:12	0° \approx			13530 Jul 21 17:12	0° \approx	
max. Earth dist.	13529 Aug 16 06:12	0° \approx 04'21	1.39001 AU	morning set	13530 Jul 23 21:47	3° \approx 12'30'17	
				max. Earth dist.	13530 Jul 29 06:24	12° \approx 12'18'03	1.41321 AU
superior conj	13529 Aug 23 20:05	13° \approx 11'48'55	-0°45'24				
minimum elong	13529 Aug 23 23:21	14° \approx 11'04'15	0°45'14	superior conj	13530 Aug 06 01:34	25° \approx 12'43'47	-1°20'13
asc. node	13529 Aug 28 21:44	23° \approx 11'29'28		minimum elong	13530 Aug 06 07:34	26° \approx 12'10'25	1°20'03
	13529 Sep 01 05:58	0° \approx			13530 Aug 08 10:54	0° \approx	
evening rise	13529 Sep 02 00:11	1° \approx 28'51		asc. node	13530 Aug 15 18:20	13° \approx 12'26'18	
evening max el	13529 Sep 18 04:44	27° \approx 12'49'52	18°48'07	evening rise	13530 Aug 16 12:27	14° \approx 12'50'40	
	13529 Sep 20 17:41	0° \approx			13530 Aug 24 22:38	0° \approx	
retrograde	13529 Sep 26 15:20	2° \approx 11'04'23		evening max el	13530 Sep 01 11:50	10° \approx 12'21'15	18°15'36
evening set	13529 Sep 28 12:46	1° \approx 11'52'23		retrograde	13530 Sep 08 18:51	14° \approx 12'03'18	
desc. node	13529 Sep 30 19:59	1° \approx 11'07'55		evening set	13530 Sep 10 22:20	13° \approx 12'44'46	
	13529 Oct 03 00:48	30° \approx 11'31'34	-1°51'47	desc. node	13530 Sep 17 17:32	9° \approx 12'33'16	
inferior conj	13529 Oct 06 16:57	27° \approx 12'31'34	-1°51'47	inferior conj	13530 Sep 18 07:59	9° \approx 12'02'51	-0°11'17
minimum elong	13529 Oct 06 12:17	27° \approx 12'40'00	1°49'32	minimum elong	13530 Sep 18 07:35	9° \approx 12'03'43	0°11'04
min. Earth dist.	13529 Oct 09 18:17	25° \approx 12'19'24	0.56801 AU	transit middle	13530 Sep 18 07:35	9° \approx 12'03'43	0°11'04
morning rise	13529 Oct 14 08:31	22° \approx 12'36'15		transit begin	13530 Sep 18 05:03	9° \approx 12'09'03	
direct	13529 Oct 20 03:50	21° \approx 12'14'44		transit end	13530 Sep 18 10:06	8° \approx 12'58'22	
morning max el	13529 Nov 03 09:21	28° \approx 12'37'28	26°24'44	min. Earth dist.	13530 Sep 21 15:21	6° \approx 12'15'58	0.58873 AU
	13529 Nov 04 18:28	0° \approx		morning rise	13530 Sep 25 13:23	3° \approx 12'32'15	
asc. node	13529 Nov 24 23:28	29° \approx 11'50'41		direct	13530 Oct 01 22:01	1° \approx 12'43'13	
	13529 Nov 25 01:26	0° \approx		morning max el	13530 Oct 16 05:37	9° \approx 12'26'27	27°30'17
morning set	13529 Dec 02 04:50	14° \approx 12'29'19			13530 Nov 01 00:15	0° \approx	
				asc. node	13530 Nov 11 20:17	19° \approx 11'19'01	
superior conj	13529 Dec 08 23:55	29° \approx 12'27'52	1°37'01	morning set	13530 Nov 16 12:24	28° \approx 11'53'10	
minimum elong	13529 Dec 08 23:14	29° \approx 12'24'06	1°38'02		13530 Nov 17 00:58	0° \approx	
	13529 Dec 09 05:41	0° \approx					
max. Earth dist.	13529 Dec 09 17:39	1° \approx 12'30'6'38	1.31445 AU	superior conj	13530 Nov 23 11:32	14° \approx 12'09'28	1°30'22

minimum elong	13530 Nov 23 09:58	14° ♁ 00'42	1°31'12	minimum elong	13531 Nov 07 19:55	28° ♁ 32'22	1°18'32
max. Earth dist.	13530 Nov 23 02:04	13° ♁ 16'35	1.31189 AU		13531 Nov 08 11:43	0° ♁	
evening rise	13530 Nov 30 05:08	29° ♁ 00'51		evening rise	13531 Nov 14 15:02	13° ♁ 31'58	
	13530 Nov 30 16:11	0° ♁			13531 Nov 22 18:19	0° ♁	
desc. node	13530 Dec 14 14:39	26° ♁ 13'05		desc. node	13531 Dec 01 11:44	14° ♁ 29'00	
	13530 Dec 17 00:56	0° ♁		evening max el	13531 Dec 11 03:34	26° ♁ 09'58	25°09'41
evening max el	13530 Dec 29 11:18	15° ♁ 24'04	26°30'04		13531 Dec 15 21:10	0° ♁	
retrograde	13531 Jan 12 10:19	22° ♁ 30'57		retrograde	13531 Dec 24 23:11	3° ♁ 05'48	
evening set	13531 Jan 18 22:12	20° ♁ 48'01		evening set	13531 Dec 30 16:34	1° ♁ 52'03	
min. Earth dist.	13531 Jan 23 01:03	18° ♁ 11'13	0.58742 AU		13532 Jan 03 07:29	30° ♁	
inferior conj	13531 Jan 26 04:31	15° ♁ 48'36	-3°53'05	min. Earth dist.	13532 Jan 04 15:35	29° ♁ 10'13	0.56766 AU
minimum elong	13531 Jan 26 12:41	15° ♁ 33'08	3°49'38	inferior conj	13532 Jan 07 08:33	27° ♁ 23'43	-5°08'00
morning rise	13531 Feb 03 06:10	11° ♁ 16'06		minimum elong	13532 Jan 07 16:58	27° ♁ 09'54	5°05'13
direct	13531 Feb 05 07:02	11° ♁ 01'40		morning rise	13532 Jan 15 19:43	23° ♁ 13'22	
asc. node	13531 Feb 07 19:04	11° ♁ 24'31		direct	13532 Jan 18 01:06	22° ♁ 59'05	
morning max el	13531 Feb 13 07:47	14° ♁ 59'33	18°22'53	asc. node	13532 Jan 25 16:26	26° ♁ 00'53	
	13531 Feb 23 15:42	0° ♁		morning max el	13532 Jan 27 08:40	27° ♁ 29'54	19°12'39
morning set	13531 Mar 01 03:00	10° ♁ 12'38			13532 Jan 29 16:03	0° ♁	
				morning set	13532 Feb 13 03:42	24° ♁ 37'03	
superior conj	13531 Mar 10 08:42	27° ♁ 36'54	0°18'27		13532 Feb 15 20:33	0° ♁	
minimum elong	13531 Mar 10 10:02	27° ♁ 42'56	0°18'24				
	13531 Mar 11 16:08	0° ♁		superior conj	13532 Feb 21 09:48	10° ♁ 55'25	0°48'11
desc. node	13531 Mar 12 16:00	1° ♁ 47'41		minimum elong	13532 Feb 21 12:24	11° ♁ 07'58	0°48'14
max. Earth dist.	13531 Mar 17 21:17	10° ♁ 57'06	1.40792 AU	desc. node	13532 Feb 27 12:30	22° ♁ 23'12	
evening rise	13531 Mar 22 07:59	18° ♁ 24'57		max. Earth dist.	13532 Feb 28 04:02	23° ♁ 33'29	1.38541 AU
	13531 Mar 29 14:12	0° ♁		evening rise	13532 Mar 02 21:59	0° ♁ 11'12	
	13531 Apr 19 23:25	0° ♁			13532 Mar 02 19:24	0° ♁	
evening max el	13531 Apr 25 15:37	6° ♁ 19'13	23°25'25		13532 Mar 21 21:47	0° ♁	
retrograde	13531 May 06 06:45	12° ♁ 34'35		evening max el	13532 Apr 07 05:16	20° ♁ 11'52	24°45'05
asc. node	13531 May 06 15:36	12° ♁ 33'58		retrograde	13532 Apr 18 22:25	27° ♁ 02'00	
evening set	13531 May 11 10:18	10° ♁ 24'22		asc. node	13532 Apr 22 12:58	26° ♁ 05'11	
inferior conj	13531 May 16 19:29	3° ♁ 57'51	2°40'22	evening set	13532 Apr 24 13:41	24° ♁ 40'02	
minimum elong	13531 May 16 17:34	4° ♁ 04'27	2°39'04	min. Earth dist.	13532 Apr 29 01:27	19° ♁ 35'08	0.68293 AU
min. Earth dist.	13531 May 16 06:19	4° ♁ 43'12	0.68832 AU	inferior conj	13532 Apr 30 03:12	18° ♁ 09'38	2°09'33
	13531 May 19 20:49	30° ♁		minimum elong	13532 Apr 30 01:03	18° ♁ 16'49	2°08'14
morning rise	13531 May 22 00:46	27° ♁ 51'52		morning rise	13532 May 05 12:38	12° ♁ 12'16	
direct	13531 May 26 07:15	26° ♁ 09'56		direct	13532 May 09 06:56	10° ♁ 51'09	
	13531 Jun 02 15:23	0° ♁		morning max el	13532 May 16 14:27	14° ♁ 54'09	19°39'47
morning max el	13531 Jun 03 13:32	0° ♁ 53'06	20°48'37	desc. node	13532 May 25 14:34	26° ♁ 03'20	
desc. node	13531 Jun 08 17:41	6° ♁ 46'13			13532 May 28 08:52	0° ♁	
	13531 Jun 25 04:47	0° ♁		greatest brilliancy	13532 May 29 06:55	1° ♁ 20'15	-0.6m
morning set	13531 Jul 03 11:26	12° ♁ 38'43		morning set	13532 Jun 11 13:00	21° ♁ 19'21	
max. Earth dist.	13531 Jul 11 13:30	25° ♁ 27'40	1.43348 AU		13532 Jun 17 03:45	0° ♁	
	13531 Jul 14 08:22	0° ♁		max. Earth dist.	13532 Jun 23 03:05	9° ♁ 21'42	1.44855 AU
superior conj	13531 Jul 18 09:13	6° ♁ 41'52	-1°50'39	superior conj	13532 Jun 27 16:58	16° ♁ 39'20	-2°10'07
minimum elong	13531 Jul 18 16:25	7° ♁ 12'08	1°50'53	minimum elong	13532 Jun 27 21:08	16° ♁ 56'06	2°11'00
evening rise	13531 Jul 30 10:09	27° ♁ 33'05			13532 Jul 05 21:18	0° ♁	
	13531 Jul 31 19:21	0° ♁		evening rise	13532 Jul 11 12:02	9° ♁ 22'46	
asc. node	13531 Aug 02 15:00	3° ♁ 12'39		asc. node	13532 Jul 19 11:43	22° ♁ 42'54	
evening max el	13531 Aug 16 00:30	23° ♁ 24'36	18°02'57		13532 Jul 24 04:06	0° ♁	
retrograde	13531 Aug 22 15:09	26° ♁ 48'55		evening max el	13532 Jul 29 14:53	6° ♁ 49'25	18°09'07
evening set	13531 Aug 25 02:28	26° ♁ 20'07		retrograde	13532 Aug 04 23:32	10° ♁ 10'10	
inferior conj	13531 Aug 31 18:58	21° ♁ 18'03	1°08'24	evening set	13532 Aug 07 19:09	9° ♁ 28'17	
minimum elong	13531 Aug 31 20:53	21° ♁ 13'23	1°07'28	inferior conj	13532 Aug 13 21:55	4° ♁ 08'30	2°05'48
min. Earth dist.	13531 Sep 03 21:20	18° ♁ 17'31	0.61158 AU	minimum elong	13532 Aug 14 00:25	4° ♁ 01'35	2°04'32
desc. node	13531 Sep 04 15:05	17° ♁ 37'03		min. Earth dist.	13532 Aug 16 13:05	1° ♁ 15'08	0.63379 AU
morning rise	13531 Sep 07 12:32	15° ♁ 20'20			13532 Aug 17 18:24	30° ♁	
direct	13531 Sep 14 03:50	13° ♁ 06'40		morning rise	13532 Aug 20 03:50	27° ♁ 53'46	
morning max el	13531 Sep 28 09:17	21° ♁ 03'11	27°57'50	desc. node	13532 Aug 21 12:36	26° ♁ 57'33	
	13531 Oct 06 03:47	0° ♁		direct	13532 Aug 26 19:30	25° ♁ 22'21	
	13531 Oct 25 01:07	0° ♁			13532 Sep 06 00:47	0° ♁	
asc. node	13531 Oct 29 17:01	9° ♁ 04'38		morning max el	13532 Sep 09 18:05	3° ♁ 23'49	27°47'00
morning set	13531 Oct 31 15:02	13° ♁ 00'00			13532 Sep 29 15:37	0° ♁	
max. Earth dist.	13531 Nov 06 08:56	25° ♁ 19'10	1.31463 AU	morning set	13532 Oct 14 10:26	26° ♁ 43'52	
				asc. node	13532 Oct 15 13:40	29° ♁ 01'37	
superior conj	13531 Nov 07 22:04	28° ♁ 44'15	1°17'58		13532 Oct 16 01:05	0° ♁	

max. Earth dist.	13532 Oct 19 10:17	7°♍04'31	1.32270 AU	asc. node	13533 Oct 02 10:15	19°♊05'36	
superior conj	13532 Oct 22 05:32	13°♍06'30	0°59'53	superior conj	13533 Oct 06 07:46	27°♊10'44	0°36'18
minimum elong	13532 Oct 22 03:16	12°♍54'14	1°00'09	minimum elong	13533 Oct 06 06:01	27°♊01'33	0°36'20
evening rise	13532 Oct 29 02:09	28°♍03'56			13533 Oct 07 15:43	0°♍	
	13532 Oct 29 23:51	0°♊		evening rise	13533 Oct 13 12:38	12°♍32'07	
	13532 Nov 16 01:00	0°♊			13533 Oct 22 08:46	0°♊	
desc. node	13532 Nov 17 08:56	1°♊40'55		evening max el	13533 Nov 03 02:06	16°♊20'12	21°49'42
evening max el	13532 Nov 21 13:40	6°♊17'00	23°30'19	desc. node	13533 Nov 04 06:13	17°♊26'09	
retrograde	13532 Dec 04 23:29	12°♊57'22		retrograde	13533 Nov 15 13:01	22°♊30'48	
evening set	13532 Dec 09 11:20	12°♊13'28		evening set	13533 Nov 18 15:20	22°♊09'16	
min. Earth dist.	13532 Dec 15 23:56	9°♊07'15	0.55267 AU	inferior conj	13533 Nov 27 10:02	18°♊15'13	-5°44'45
inferior conj	13532 Dec 17 16:16	8°♊08'10	-5°52'56	minimum elong	13533 Nov 27 04:16	18°♊23'18	5°43'06
minimum elong	13532 Dec 17 19:24	8°♊03'33	5°51'41	min. Earth dist.	13533 Nov 27 06:13	18°♊20'34	0.54536 AU
morning rise	13532 Dec 26 05:13	4°♊15'45		morning rise	13533 Dec 05 18:10	14°♊27'40	
direct	13532 Dec 28 23:31	3°♊57'11		direct	13533 Dec 09 08:55	13°♊59'00	
morning max el	13533 Jan 08 20:20	9°♊08'55	20°25'34	morning max el	13533 Dec 21 17:43	19°♊54'31	21°59'56
asc. node	13533 Jan 11 13:40	12°♊04'07		asc. node	13533 Dec 29 10:50	29°♊17'00	
	13533 Jan 22 19:27	0°♊			13533 Dec 29 22:22	0°♊	
morning set	13533 Jan 27 10:27	9°♊15'29		morning set	13534 Jan 11 20:43	24°♊00'14	
					13534 Jan 14 16:29	0°♊	
superior conj	13533 Feb 03 23:54	24°♊49'00	1°10'51	superior conj	13534 Jan 18 23:16	9°♊06'20	1°26'30
minimum elong	13533 Feb 04 02:35	25°♊02'33	1°11'12	minimum elong	13534 Jan 19 01:18	9°♊17'02	1°27'11
	13533 Feb 06 14:05	0°♊		max. Earth dist.	13534 Jan 23 00:05	17°♊27'17	1.34406 AU
max. Earth dist.	13533 Feb 09 11:24	5°♊37'06	1.36337 AU	evening rise	13534 Jan 27 07:31	25°♊58'01	
evening rise	13533 Feb 13 06:59	12°♊45'25			13534 Jan 29 10:39	0°♊	
desc. node	13533 Feb 13 09:03	12°♊54'49		desc. node	13534 Jan 31 05:38	3°♊17'54	
	13533 Feb 23 07:57	0°♊			13534 Feb 16 18:01	0°♊	
	13533 Mar 16 22:28	0°♊		evening max el	13534 Mar 03 08:19	17°♊45'43	26°53'22
evening max el	13533 Mar 20 18:40	4°♊03'06	25°56'51	retrograde	13534 Mar 16 15:00	25°♊11'46	
retrograde	13533 Apr 02 09:30	11°♊17'22		evening set	13534 Mar 23 03:04	22°♊39'28	
evening set	13533 Apr 08 11:55	8°♊47'32		min. Earth dist.	13534 Mar 27 02:45	18°♊43'36	0.65920 AU
asc. node	13533 Apr 09 10:22	7°♊57'24		asc. node	13534 Mar 27 07:49	18°♊29'12	
min. Earth dist.	13533 Apr 12 16:59	4°♊17'58	0.67311 AU	inferior conj	13534 Mar 29 05:14	16°♊17'02	0°35'51
inferior conj	13533 Apr 14 07:12	2°♊18'04	1°28'15	minimum elong	13534 Mar 29 04:18	16°♊19'46	0°35'19
minimum elong	13533 Apr 14 05:19	2°♊24'01	1°27'08	morning rise	13534 Apr 04 06:52	10°♊41'07	
	13533 Apr 16 04:29	30°♊		direct	13534 Apr 07 03:49	9°♊55'55	
morning rise	13533 Apr 19 23:25	26°♊30'32		morning max el	13534 Apr 13 12:46	13°♊16'53	18°09'28
direct	13533 Apr 23 06:26	25°♊28'45			13534 Apr 25 15:30	0°♊	
morning max el	13533 Apr 29 22:46	29°♊04'28	18°46'20	desc. node	13534 Apr 29 07:59	5°♊54'01	
	13533 Apr 30 20:35	0°♊		morning set	13534 May 02 12:04	11°♊00'37	
desc. node	13533 May 12 11:20	15°♊48'43			13534 May 14 09:34	0°♊	
morning set	13533 May 21 23:51	0°♊32'14					
	13533 May 21 15:34	0°♊		superior conj	13534 May 17 14:18	5°♊01'32	-1°53'31
max. Earth dist.	13533 Jun 05 20:52	23°♊43'52	1.45695 AU	minimum elong	13534 May 17 05:33	4°♊27'15	1°53'44
superior conj	13533 Jun 07 05:56	25°♊53'10	-2°11'52	max. Earth dist.	13534 May 19 16:34	8°♊18'14	1.45798 AU
minimum elong	13533 Jun 07 02:42	25°♊40'31	2°12'49	evening rise	13534 Jun 02 16:22	0°♊03'13	
	13533 Jun 09 20:54	0°♊			13534 Jun 02 15:32	0°♊	
evening rise	13533 Jun 22 13:58	20°♊11'19		greatest brilliancy	13534 Jun 14 13:13	18°♊17'54	-0.7m
greatest brilliancy	13533 Jun 28 11:33	29°♊39'19	-0.9m		13534 Jun 22 20:10	0°♊	
	13533 Jun 28 16:43	0°♊		asc. node	13534 Jun 23 05:26	0°♊29'02	
asc. node	13533 Jul 06 08:32	11°♊51'06		evening max el	13534 Jun 26 13:04	4°♊14'05	19°14'29
evening max el	13533 Jul 13 03:54	20°♊28'06	18°33'15	retrograde	13534 Jul 03 12:30	8°♊06'55	
retrograde	13533 Jul 19 15:47	23°♊58'37		evening set	13534 Jul 07 01:56	6°♊53'19	
evening set	13533 Jul 22 20:03	23°♊01'33		inferior conj	13534 Jul 12 12:13	1°♊03'51	3°04'42
inferior conj	13533 Jul 28 12:49	17°♊26'10	2°43'27	minimum elong	13534 Jul 12 13:24	0°♊59'59	3°03'38
minimum elong	13533 Jul 28 14:54	17°♊19'50	2°42'15		13534 Jul 13 07:48	30°♊	
min. Earth dist.	13533 Jul 30 14:07	14°♊57'04	0.65345 AU	min. Earth dist.	13534 Jul 13 22:58	29°♊10'55	0.66932 AU
morning rise	13533 Aug 03 08:40	11°♊03'25		morning rise	13534 Jul 18 00:15	24°♊39'34	
desc. node	13533 Aug 08 10:04	8°♊30'35		direct	13534 Jul 24 02:31	22°♊01'00	
direct	13533 Aug 09 19:34	8°♊23'31		desc. node	13534 Jul 26 07:27	22°♊19'00	
morning max el	13533 Aug 23 05:05	16°♊17'27	27°02'59	morning max el	13534 Aug 05 16:00	29°♊31'40	25°54'11
	13533 Sep 03 13:23	0°♊			13534 Aug 06 03:04	0°♊	
	13533 Sep 22 11:22	0°♊			13534 Aug 28 09:54	0°♊	
morning set	13533 Sep 27 19:49	9°♊58'15		morning set	13534 Sep 10 15:44	22°♊34'32	
max. Earth dist.	13533 Oct 02 02:39	18°♊27'01	1.33610 AU	max. Earth dist.	13534 Sep 14 08:55	29°♊33'04	1.35444 AU

	13534 Sep 14 14:32	0°♄			13535 Aug 01 20:28	0°♄	
asc. node	13534 Sep 19 06:49	9°♄12'40			13535 Aug 21 05:04	0°♄	
				morning set	13535 Aug 23 17:48	4°♄21'33	
superior conj	13534 Sep 20 02:10	10°♄50'25	0°07'36	max. Earth dist.	13535 Aug 27 08:12	10°♄45'02	1.37656 AU
minimum elong	13534 Sep 20 01:43	10°♄48'09	0°07'35				
behind sun begin	13534 Sep 19 20:17	10°♄20'38		superior conj	13535 Sep 03 09:26	23°♄56'41	-0°25'18
behind sun end	13534 Sep 20 07:09	11°♄15'43		minimum elong	13535 Sep 03 11:09	24°♄04'58	0°25'12
evening rise	13534 Sep 27 20:27	26°♄51'24		asc. node	13535 Sep 06 03:22	29°♄18'33	
	13534 Sep 29 09:12	0°♄			13535 Sep 06 11:46	0°♄	
evening max el	13534 Oct 16 01:53	26°♄55'19	20°22'42	evening rise	13535 Sep 11 23:12	10°♄54'50	
	13534 Oct 19 19:02	0°♄			13535 Sep 22 07:19	0°♄	
desc. node	13534 Oct 22 03:37	1°♄17'50		evening max el	13535 Sep 28 15:50	8°♄17'17	19°16'15
retrograde	13534 Oct 27 00:14	2°♄21'24		retrograde	13535 Oct 07 22:28	12°♄55'57	
evening set	13534 Oct 29 03:51	2°♄09'44		desc. node	13535 Oct 09 01:05	12°♄52'13	
	13534 Nov 03 23:36	30°♄		evening set	13535 Oct 09 19:05	12°♄45'34	
inferior conj	13534 Nov 07 02:55	28°♄13'55	-4°38'04	inferior conj	13535 Oct 18 08:40	8°♄35'30	-2°54'56
minimum elong	13534 Nov 06 16:50	28°♄28'42	4°34'29	minimum elong	13535 Oct 18 01:12	8°♄47'52	2°51'35
min. Earth dist.	13534 Nov 08 13:22	27°♄23'29	0.54739 AU	min. Earth dist.	13535 Oct 20 23:50	6°♄51'08	0.55842 AU
morning rise	13534 Nov 15 05:13	24°♄12'09		morning rise	13535 Oct 26 04:53	4°♄02'15	
direct	13534 Nov 19 18:33	23°♄27'24		direct	13535 Oct 31 14:21	2°♄55'52	
morning max el	13534 Dec 03 05:10	0°♄01'58	23°47'36	morning max el	13535 Nov 14 15:24	10°♄02'10	25°32'49
	13534 Dec 03 04:20	0°♄			13535 Nov 29 16:35	0°♄	
asc. node	13534 Dec 16 07:54	17°♄23'33		asc. node	13535 Dec 03 04:53	6°♄09'37	
	13534 Dec 23 03:18	0°♄		morning set	13535 Dec 11 20:06	23°♄27'01	
morning set	13534 Dec 27 08:32	8°♄45'59			13535 Dec 14 20:12	0°♄	
superior conj	13535 Jan 03 04:58	23°♄39'23	1°35'29	superior conj	13535 Dec 18 14:33	8°♄20'17	1°38'10
minimum elong	13535 Jan 03 05:59	23°♄44'58	1°36'25	minimum elong	13535 Dec 18 14:28	8°♄19'53	1°39'13
max. Earth dist.	13535 Jan 05 20:49	29°♄22'48	1.32886 AU	max. Earth dist.	13535 Dec 20 00:31	11°♄27'50	1.31833 AU
	13535 Jan 06 03:49	0°♄		evening rise	13535 Dec 25 17:48	23°♄44'15	
evening rise	13535 Jan 10 20:10	9°♄40'31			13535 Dec 28 19:52	0°♄	
desc. node	13535 Jan 18 02:20	23°♄27'59		desc. node	13536 Jan 04 23:08	13°♄18'20	
	13535 Jan 21 20:25	0°♄			13536 Jan 15 13:16	0°♄	
	13535 Feb 12 17:03	0°♄		evening max el	13536 Jan 27 07:42	14°♄01'38	27°31'39
evening max el	13535 Feb 13 21:25	1°♄09'48	27°27'08	retrograde	13536 Feb 10 05:01	21°♄23'09	
retrograde	13535 Feb 27 13:51	8°♄36'50		evening set	13536 Feb 17 02:57	19°♄06'00	
evening set	13535 Mar 06 08:58	6°♄08'26		min. Earth dist.	13536 Feb 20 21:03	16°♄07'30	0.62156 AU
min. Earth dist.	13535 Mar 10 04:44	2°♄43'38	0.64178 AU	inferior conj	13536 Feb 23 20:36	13°♄20'01	-1°42'37
inferior conj	13535 Mar 12 18:44	0°♄00'25	-0°27'58	minimum elong	13536 Feb 24 00:08	13°♄11'43	1°40'48
minimum elong	13535 Mar 12 19:35	29°♄58'09	0°27'30	asc. node	13536 Feb 29 02:44	9°♄06'52	
	13535 Mar 12 18:53	30°♄		morning rise	13536 Mar 02 00:05	8°♄15'16	
asc. node	13535 Mar 14 05:16	28°♄30'59		direct	13536 Mar 04 05:37	7°♄52'54	
morning rise	13535 Mar 19 08:18	24°♄38'30		morning max el	13536 Mar 10 23:22	11°♄17'52	17°47'42
direct	13535 Mar 21 20:37	24°♄06'30			13536 Mar 23 13:23	0°♄	
morning max el	13535 Mar 28 05:58	27°♄24'10	17°49'43	morning set	13536 Mar 26 19:35	5°♄45'04	
	13535 Mar 30 14:20	0°♄		desc. node	13536 Apr 02 01:08	16°♄42'34	
morning set	13535 Apr 14 04:18	22°♄50'15					
desc. node	13535 Apr 16 04:35	26°♄13'31		superior conj	13536 Apr 07 07:01	25°♄40'52	-0°40'19
	13535 Apr 18 10:38	0°♄		minimum elong	13536 Apr 07 03:07	25°♄24'29	0°40'05
					13536 Apr 09 21:05	0°♄	
superior conj	13535 Apr 27 11:15	14°♄48'47	-1°20'03	max. Earth dist.	13536 Apr 14 05:07	7°♄05'14	1.43846 AU
minimum elong	13535 Apr 27 03:16	14°♄16'38	1°19'44	evening rise	13536 Apr 21 18:50	19°♄03'34	
max. Earth dist.	13535 May 02 12:10	22°♄50'48	1.45160 AU		13536 Apr 28 23:05	0°♄	
	13535 May 07 01:43	0°♄			13536 May 20 20:20	0°♄	
evening rise	13535 May 13 04:44	9°♄27'05		evening max el	13536 May 22 14:45	1°♄52'03	21°20'40
	13535 May 26 21:06	0°♄		asc. node	13536 May 26 23:35	5°♄30'37	
evening max el	13535 Jun 09 16:50	18°♄02'48	20°11'11	retrograde	13536 May 31 09:54	7°♄00'14	
asc. node	13535 Jun 10 02:27	18°♄26'32		evening set	13536 Jun 04 19:40	5°♄13'02	
retrograde	13535 Jun 17 11:12	22°♄29'12			13536 Jun 09 08:08	30°♄	
evening set	13535 Jun 21 10:27	20°♄58'35		inferior conj	13536 Jun 10 01:38	28°♄59'18	3°08'13
inferior conj	13535 Jun 26 17:16	14°♄56'13	3°12'19	minimum elong	13536 Jun 10 00:49	29°♄02'09	3°07'07
minimum elong	13535 Jun 26 17:25	14°♄55'42	3°11'17	min. Earth dist.	13536 Jun 10 08:35	28°♄35'04	0.68738 AU
min. Earth dist.	13535 Jun 27 13:46	13°♄46'23	0.68074 AU	morning rise	13536 Jun 15 05:46	22°♄42'29	
morning rise	13535 Jul 02 00:03	8°♄34'29		direct	13536 Jun 20 08:15	20°♄29'31	
direct	13535 Jul 07 15:05	6°♄05'41		desc. node	13536 Jun 29 01:58	25°♄07'40	
desc. node	13535 Jul 13 04:46	8°♄00'14		morning max el	13536 Jun 30 13:10	26°♄32'43	23°00'40
morning max el	13535 Jul 19 02:14	12°♄57'48	24°30'10		13536 Jul 03 17:45	0°♄	

	13536 Jul 25 09:37	0°♎		desc. node	13537 Jun 15 23:02	13°♊17'57	
morning set	13536 Aug 03 21:37	15°♎09'19			13537 Jun 28 13:54	0°♊	
max. Earth dist.	13536 Aug 08 06:49	22°♎32'28	1.40010 AU	morning set	13537 Jul 15 00:19	24°♊51'06	
	13536 Aug 12 13:17	0°♎			13537 Jul 18 05:38	0°♎	
				max. Earth dist.	13537 Jul 21 09:39	5°♎09'44	1.42229 AU
superior conj	13536 Aug 16 01:39	6°♎20'43	-1°00'20				
minimum elong	13536 Aug 16 06:07	6°♎41'14	1°00'07	superior conj	13537 Jul 28 22:15	17°♎51'48	-1°34'00
asc. node	13536 Aug 22 23:58	19°♎20'07		minimum elong	13537 Jul 29 05:06	18°♎21'30	1°33'57
evening rise	13536 Aug 25 17:54	24°♎35'12			13537 Aug 04 18:52	0°♎	
	13536 Aug 28 14:15	0°♎		evening rise	13537 Aug 09 00:34	7°♎41'42	
evening max el	13536 Sep 10 17:46	20°♎25'38	18°31'38	asc. node	13537 Aug 09 20:36	9°♎12'58	
retrograde	13536 Sep 18 15:23	24°♎24'59			13537 Aug 22 09:05	0°♎	
evening set	13536 Sep 20 14:54	24°♎10'43		evening max el	13537 Aug 25 03:41	3°♎11'33	18°07'49
desc. node	13536 Sep 24 22:36	22°♎13'18		retrograde	13537 Sep 01 02:36	6°♎44'35	
inferior conj	13536 Sep 28 11:14	19°♎40'34	-1°07'03	evening set	13537 Sep 03 09:10	6°♎22'13	
minimum elong	13536 Sep 28 08:35	19°♎45'43	1°05'44	inferior conj	13537 Sep 10 11:13	1°♎31'38	0°25'15
min. Earth dist.	13536 Oct 01 16:34	17°♎11'30	0.57640 AU	minimum elong	13537 Sep 10 12:02	1°♎29'47	0°24'51
morning rise	13536 Oct 05 22:47	14°♎29'24		desc. node	13537 Sep 11 20:08	0°♎16'51	
direct	13536 Oct 12 00:16	12°♎56'30			13537 Sep 12 03:34	30°♎	
morning max el	13536 Oct 26 07:32	20°♎28'28	26°56'57	min. Earth dist.	13537 Sep 13 17:33	28°♎35'59	0.59835 AU
	13536 Nov 03 12:54	0°♎		morning rise	13537 Sep 17 11:37	25°♎47'53	
asc. node	13536 Nov 19 01:47	25°♎25'01		direct	13537 Sep 23 23:46	23°♎47'37	
	13536 Nov 21 09:31	0°♎			13537 Oct 06 13:33	0°♎	
morning set	13536 Nov 25 05:40	7°♎58'45		morning max el	13537 Oct 08 07:21	1°♎38'21	27°46'47
					13537 Oct 28 20:54	0°♎	
superior conj	13536 Dec 02 01:59	23°♎03'18	1°34'53	asc. node	13537 Nov 05 22:35	15°♎01'34	
minimum elong	13536 Dec 02 00:54	22°♎57'15	1°35'51	morning set	13537 Nov 09 11:26	22°♎16'26	
max. Earth dist.	13536 Dec 02 08:15	23°♎38'17	1.31277 AU		13537 Nov 13 01:44	0°♎	
	13536 Dec 05 04:54	0°♎		max. Earth dist.	13537 Nov 15 16:25	5°♎46'07	1.31237 AU
evening rise	13536 Dec 08 21:53	8°♎02'54					
	13536 Dec 20 06:07	0°♎		superior conj	13537 Nov 16 13:25	7°♎43'01	1°25'48
desc. node	13536 Dec 21 20:02	2°♎41'07		minimum elong	13537 Nov 16 11:33	7°♎32'39	1°26'32
evening max el	13537 Jan 08 12:29	26°♎08'47	27°02'20	evening rise	13537 Nov 23 06:14	22°♎31'08	
	13537 Jan 13 05:08	0°♎			13537 Nov 26 19:41	0°♎	
retrograde	13537 Jan 22 11:35	3°♎21'57		desc. node	13537 Dec 08 17:03	21°♎25'48	
evening set	13537 Jan 29 05:42	1°♎24'01			13537 Dec 14 18:24	0°♎	
	13537 Jan 31 09:54	30°♎		evening max el	13537 Dec 21 09:34	7°♎24'29	25°59'07
min. Earth dist.	13537 Feb 02 02:45	28°♎43'09	0.59982 AU	retrograde	13538 Jan 04 07:59	14°♎27'44	
inferior conj	13537 Feb 05 07:16	26°♎06'26	-3°05'03	evening set	13538 Jan 10 13:13	12°♎56'37	
minimum elong	13537 Feb 05 13:56	25°♎52'44	3°01'57	min. Earth dist.	13538 Jan 14 22:36	10°♎19'48	0.57856 AU
morning rise	13537 Feb 13 01:19	21°♎21'54		inferior conj	13538 Jan 17 23:18	8°♎10'31	-4°27'03
direct	13537 Feb 15 02:40	21°♎05'38		minimum elong	13538 Jan 18 08:04	7°♎54'53	4°23'40
asc. node	13537 Feb 15 00:12	21°♎05'40		morning rise	13538 Jan 26 05:48	3°♎47'49	
morning max el	13537 Feb 22 13:32	24°♎48'25	18°04'20	direct	13538 Jan 28 07:27	3°♎34'05	
	13537 Feb 26 20:22	0°♎		asc. node	13538 Feb 01 21:36	4°♎46'00	
morning set	13537 Mar 10 03:39	19°♎25'53		morning max el	13538 Feb 05 20:34	7°♎45'01	18°41'20
	13537 Mar 15 20:46	0°♎			13538 Feb 20 02:20	0°♎	
desc. node	13537 Mar 19 21:37	7°♎16'50		morning set	13538 Feb 21 23:29	3°♎38'07	
superior conj	13537 Mar 20 02:33	7°♎38'47	-0°01'39	superior conj	13538 Mar 02 18:15	20°♎32'00	0°31'54
minimum elong	13537 Mar 20 02:25	7°♎38'09	0°01'39	minimum elong	13538 Mar 02 20:17	20°♎41'33	0°31'51
behind sun begin	13537 Mar 19 18:39	7°♎03'41		desc. node	13538 Mar 06 18:07	27°♎53'15	
behind sun end	13537 Mar 20 10:10	8°♎12'32			13538 Mar 07 22:21	0°♎	
max. Earth dist.	13537 Mar 27 17:16	20°♎45'18	1.42001 AU	max. Earth dist.	13538 Mar 10 00:53	3°♎43'18	1.39837 AU
evening rise	13537 Apr 01 23:53	29°♎23'12		evening rise	13538 Mar 14 01:53	10°♎39'01	
	13537 Apr 02 09:04	0°♎			13538 Mar 26 06:10	0°♎	
	13537 Apr 22 12:34	0°♎		evening max el	13538 Apr 17 22:04	29°♎33'03	23°59'51
evening max el	13537 May 05 07:46	15°♎41'26	22°38'49		13538 Apr 18 09:02	0°♎	
asc. node	13537 May 13 20:50	21°♎24'38		retrograde	13538 Apr 29 01:00	6°♎05'04	
retrograde	13537 May 15 06:58	21°♎33'54		asc. node	13538 Apr 30 18:08	5°♎51'53	
evening set	13537 May 20 03:51	19°♎31'28		evening set	13538 May 04 09:25	3°♎49'33	
inferior conj	13537 May 25 11:15	13°♎08'34	2°53'30		13538 May 07 20:44	30°♎	
minimum elong	13537 May 25 09:40	13°♎14'06	2°52'16	min. Earth dist.	13538 May 09 01:43	28°♎23'38	0.68653 AU
min. Earth dist.	13537 May 25 05:17	13°♎29'22	0.68926 AU	inferior conj	13538 May 09 20:14	27°♎20'40	2°28'34
morning rise	13537 May 30 15:22	6°♎58'10		minimum elong	13538 May 09 18:10	27°♎27'43	2°27'15
direct	13537 Jun 04 04:58	5°♎04'34		morning rise	13538 May 15 02:56	21°♎17'57	
morning max el	13537 Jun 13 03:29	10°♎16'04	21°34'12	direct	13538 May 19 04:04	19°♎44'59	

morning max el	13538 May 26 23:58	24°  10'07	20°17'32	greatest brilliancy	13539 May 22 23:46	25°  06'25	-0.7m
	13538 Jun 01 02:26	0°  II			13539 May 26 05:59	0°  II	
desc. node	13538 Jun 02 19:58	2°  II14'17		morning set	13539 Jun 03 09:14	12°  II26'42	
	13538 Jun 21 21:03	0°  ☿			13539 Jun 14 16:38	0°  ☿	
morning set	13538 Jun 24 06:29	3°  ☿40'35		max. Earth dist.	13539 Jun 16 10:31	2°  ☿44'17	1.45300 AU
max. Earth dist.	13538 Jul 03 18:56	18°  ☿36'48	1.44060 AU				
				superior conj	13539 Jun 19 18:12	7°  ☿58'33	-2°13'19
superior conj	13538 Jul 09 19:37	28°  ☿23'09	-2°00'41	minimum elong	13539 Jun 19 19:32	8°  ☿03'47	2°14'22
minimum elong	13538 Jul 10 02:11	28°  ☿50'11	2°01'13		13539 Jul 03 09:28	0°  ♁	
	13538 Jul 10 19:07	0°  ♁		evening rise	13539 Jul 04 06:21	1°  ♁25'55	
evening rise	13538 Jul 22 14:23	20°  ♁02'22		asc. node	13539 Jul 14 14:01	18°  ♁14'15	
asc. node	13538 Jul 27 17:16	28°  ♁52'45			13539 Jul 23 08:59	0°  ♁	
	13538 Jul 28 09:04	0°  ♁		evening max el	13539 Jul 23 07:43	29°  ♁56'55	18°17'20
evening max el	13538 Aug 08 17:30	16°  ♁25'01	18°03'24	retrograde	13539 Jul 29 16:30	3°  ♁19'52	
retrograde	13538 Aug 15 04:25	19°  ♁45'57		evening set	13539 Aug 01 15:52	2°  ♁31'34	
evening set	13538 Aug 17 19:13	19°  ♁11'57			13539 Aug 04 21:38	30°  ♁♁	
inferior conj	13538 Aug 24 05:28	14°  ♁02'24	1°35'19	inferior conj	13539 Aug 07 13:56	27°  ♁05'01	2°23'56
minimum elong	13538 Aug 24 07:47	13°  ♁56'24	1°34'10	minimum elong	13539 Aug 07 16:20	26°  ♁58'03	2°22'42
min. Earth dist.	13538 Aug 27 03:43	11°  ♁02'16	0.62124 AU	min. Earth dist.	13539 Aug 09 23:22	24°  ♁20'21	0.64255 AU
desc. node	13538 Aug 29 17:39	8°  ♁42'22		morning rise	13539 Aug 13 15:21	20°  ♁46'16	
morning rise	13538 Aug 30 17:57	7°  ♁56'18		desc. node	13539 Aug 16 15:07	18°  ♁55'47	
direct	13538 Sep 06 10:19	5°  ♁33'40		direct	13539 Aug 20 05:41	18°  ♁10'03	
morning max el	13538 Sep 20 13:20	13°  ♁33'56	27°57'38	morning max el	13539 Sep 02 23:10	26°  ♁09'15	27°31'57
	13538 Oct 03 18:23	0°  ♁			13539 Sep 06 12:43	0°  ♁	
	13538 Oct 21 08:36	0°  ♁			13539 Sep 27 08:22	0°  ♁	
asc. node	13538 Oct 23 19:15	4°  ♁52'30		morning set	13539 Oct 08 02:47	19°  ♁46'26	
morning set	13538 Oct 24 11:16	6°  ♁14'08		asc. node	13539 Oct 10 15:52	24°  ♁53'06	
max. Earth dist.	13538 Oct 29 21:10	17°  ♁41'17	1.31736 AU	max. Earth dist.	13539 Oct 12 19:06	29°  ♁17'37	1.32777 AU
					13539 Oct 13 03:12	0°  ♁	
superior conj	13538 Oct 31 22:54	22°  ♁13'20	1°11'00				
minimum elong	13538 Oct 31 20:38	22°  ♁00'55	1°11'26	superior conj	13539 Oct 16 04:27	6°  ♁29'06	0°50'35
	13538 Nov 04 11:25	0°  ♁♁		minimum elong	13539 Oct 16 02:19	6°  ♁17'41	0°50'43
evening rise	13538 Nov 07 16:51	7°  ♁03'10		evening rise	13539 Oct 23 03:58	21°  ♁34'40	
	13538 Nov 19 12:04	0°  ♁			13539 Oct 27 04:52	0°  ♁♁	
desc. node	13538 Nov 25 14:11	9°  ♁17'04		desc. node	13539 Nov 12 11:24	25°  ♁55'29	
evening max el	13538 Dec 02 22:44	17°  ♁51'37	24°28'51	evening max el	13539 Nov 14 08:47	27°  ♁53'00	22°46'40
retrograde	13538 Dec 16 15:42	24°  ♁41'47			13539 Nov 16 17:51	0°  ♁	
evening set	13538 Dec 21 21:25	23°  ♁41'25		retrograde	13539 Nov 27 10:18	4°  ♁21'57	
min. Earth dist.	13538 Dec 27 10:27	20°  ♁51'21	0.56050 AU	evening set	13539 Dec 01 07:49	3°  ♁48'54	
inferior conj	13538 Dec 29 18:28	19°  ♁24'10	-5°32'15	min. Earth dist.	13539 Dec 08 17:20	0°  ♁26'53	0.54859 AU
minimum elong	13538 Dec 30 01:24	19°  ♁13'22	5°30'09	inferior conj	13539 Dec 09 19:04	29°  ♁50'19	-5°56'51
morning rise	13539 Jan 07 07:23	15°  ♁22'00		minimum elong	13539 Dec 09 18:27	29°  ♁51'13	5°55'48
direct	13539 Jan 09 17:03	15°  ♁06'33			13539 Dec 09 12:16	30°  ♁♁♁	
morning max el	13539 Jan 19 16:12	19°  ♁54'37	19°40'43	morning rise	13539 Dec 18 06:27	26°  ♁02'00	
asc. node	13539 Jan 19 18:54	20°  ♁01'11		direct	13539 Dec 21 09:08	25°  ♁39'40	
	13539 Jan 27 09:35	0°  ♁			13539 Dec 31 14:32	0°  ♁	
morning set	13539 Feb 06 03:06	18°  ♁09'25		morning max el	13540 Jan 01 21:32	1°  ♁09'47	21°03'14
	13539 Feb 11 23:46	0°  ♁♁		asc. node	13540 Jan 06 16:07	6°  ♁35'56	
					13540 Jan 20 02:27	0°  ♁	
superior conj	13539 Feb 14 01:22	4°  ♁06'31	0°58'40	morning set	13540 Jan 21 11:39	2°  ♁51'26	
minimum elong	13539 Feb 14 04:07	4°  ♁20'05	0°58'49				
max. Earth dist.	13539 Feb 20 07:09	16°  ♁02'54	1.37588 AU	superior conj	13540 Jan 28 19:49	18°  ♁11'06	1°18'20
desc. node	13539 Feb 21 14:38	18°  ♁27'25		minimum elong	13540 Jan 28 22:17	18°  ♁23'49	1°18'48
evening rise	13539 Feb 24 00:24	22°  ♁46'59		max. Earth dist.	13540 Feb 02 16:43	27°  ♁59'51	1.35485 AU
	13539 Feb 28 04:31	0°  ♁♁			13540 Feb 03 17:21	0°  ♁♁	
	13539 Mar 20 01:38	0°  ♁		evening rise	13540 Feb 06 16:30	5°  ♁38'34	
evening max el	13539 Mar 31 11:38	13°  ♁25'53	25°17'05	desc. node	13540 Feb 08 11:13	8°  ♁55'46	
retrograde	13539 Apr 12 14:45	20°  ♁27'27			13540 Feb 21 00:06	0°  ♁♁	
asc. node	13539 Apr 17 15:30	18°  ♁39'56		evening max el	13540 Mar 13 01:21	27°  ♁14'47	26°23'10
evening set	13539 Apr 18 10:46	18° ♁01'55			13540 Mar 16 02:40	0° ♁	
min. Earth dist.	13539 Apr 22 19:39	13° ♁11'55	0.67928 AU	retrograde	13540 Mar 25 23:21	4° ♁34'31	
inferior conj	13539 Apr 24 02:36	11° ♁31'18	1°53'21	evening set	13540 Apr 01 06:12	2° ♁03'01	
minimum elong	13539 Apr 24 00:29	11° ♁38'12	1°52'06		13540 Apr 03 10:24	30° ♁♁♁	
morning rise	13539 Apr 29 14:34	5° ♁37'40		asc. node	13540 Apr 03 12:55	29° ♁53'18	
direct	13539 May 03 03:59	4° ♁24'52		min. Earth dist.	13540 Apr 05 08:55	27° ♁48'05	0.66774 AU
morning max el	13539 May 10 04:00	8° ♁14'38	19°14'59	inferior conj	13540 Apr 07 04:21	25° ♁36'01	1°07'24
desc. node	13539 May 20 16:47	21° ♁44'07		minimum elong	13540 Apr 07 02:46	25° ♁40'50	1°06'29

morning rise	13540 Apr 13 00:15	19° Υ 53'10		transit begin	13541 Mar 21 20:29	9° Υ 36'51	
direct	13540 Apr 16 02:56	18° Υ 58'39		transit end	13541 Mar 22 01:11	9° Υ 23'40	
morning max el	13540 Apr 22 14:58	22° Υ 26'11	18°28'33	morning rise	13541 Mar 28 05:34	3° Υ 59'27	
	13540 Apr 28 19:33	0° B		direct	13541 Mar 30 22:42	3° Υ 20'19	
desc. node	13540 May 06 13:31	11° B 38'27		morning max el	13541 Apr 06 06:48	6° Υ 38'14	17°59'00
morning set	13540 May 13 05:44	22° B 08'34			13541 Apr 22 07:14	0° B	
	13540 May 18 05:26	0° II		desc. node	13541 Apr 23 10:10	1° B 50'37	
				morning set	13541 Apr 24 06:16	3° B 13'10	
superior conj	13540 May 29 02:55	17° II 03'15	-2°06'23	superior conj	13541 May 08 14:54	26° B 24'04	-1°40'39
minimum elong	13540 May 28 20:40	16° II 38'50	2°07'05	minimum elong	13541 May 08 05:47	25° B 48'01	1°40'35
max. Earth dist.	13540 May 29 06:02	17° II 15'26	1.45832 AU		13541 May 10 21:42	0° II	
	13540 Jun 06 09:38	0° B		max. Earth dist.	13541 May 12 02:14	1° II 51'59	1.45613 AU
evening rise	13540 Jun 13 21:42	11° B 48'11		evening rise	13541 May 24 16:36	21° II 24'08	
greatest brilliancy	13540 Jun 22 19:46	25° B 49'55	-0.8m		13541 May 30 07:16	0° B	
	13540 Jun 25 12:48	0° Ω		greatest brilliancy	13541 Jun 07 09:23	12° B 09'53	-0.7m
asc. node	13540 Jun 30 10:52	7° Ω 10'12		asc. node	13541 Jun 17 07:49	25° B 32'18	
evening max el	13540 Jul 05 19:20	13° Ω 38'52	18°48'49	evening max el	13541 Jun 19 02:16	27° B 25'56	19°36'46
retrograde	13540 Jul 12 11:04	17° Ω 17'19			13541 Jun 22 02:46	0° Ω	
evening set	13540 Jul 15 19:14	16° Ω 13'08		retrograde	13541 Jun 26 09:02	1° Ω 32'14	
inferior conj	13540 Jul 21 08:48	10° Ω 31'21	2°54'18	evening set	13541 Jun 30 02:31	0° Ω 11'23	
minimum elong	13540 Jul 21 10:32	10° Ω 25'55	2°53'10		13541 Jun 30 08:37	30° R B	
min. Earth dist.	13540 Jul 23 03:47	8° Ω 16'52	0.66067 AU	inferior conj	13541 Jul 05 10:56	24° B 16'00	3°09'29
morning rise	13540 Jul 27 01:02	4° Ω 07'26		minimum elong	13541 Jul 05 11:41	24° B 13'30	3°08'26
direct	13540 Aug 02 08:34	1° Ω 27'20		min. Earth dist.	13541 Jul 06 15:31	22° B 40'56	0.67471 AU
desc. node	13540 Aug 02 12:34	1° Ω 27'26		morning rise	13541 Jul 10 20:25	17° B 52'12	
morning max el	13540 Aug 15 10:24	9° Ω 12'48	26°36'23	direct	13541 Jul 16 17:58	15° B 17'03	
	13540 Aug 31 18:18	0° B		desc. node	13541 Jul 20 09:56	16° B 06'50	
	13540 Sep 18 19:37	0° B		morning max el	13541 Jul 28 21:14	22° B 33'34	25°19'45
morning set	13540 Sep 20 06:53	2° B 45'09			13541 Aug 04 10:13	0° Ω	
max. Earth dist.	13540 Sep 24 07:24	10° B 32'31	1.34337 AU		13541 Aug 25 01:29	0° B	
asc. node	13540 Sep 26 12:26	14° B 58'29		morning set	13541 Sep 02 19:45	15° B 01'27	
				max. Earth dist.	13541 Sep 06 10:07	21° B 37'11	1.36347 AU
superior conj	13540 Sep 29 03:40	20° B 23'12	0°24'43		13541 Sep 10 19:18	0° B	
minimum elong	13540 Sep 29 02:22	20° B 16'29	0°24'43	superior conj	13541 Sep 12 17:43	3° B 48'50	-0°05'59
	13540 Oct 03 17:24	0° B		minimum elong	13541 Sep 12 18:05	3° B 50'41	0°05'57
evening rise	13540 Oct 06 13:34	5° B 59'33		behind sun begin	13541 Sep 12 12:08	3° B 21'04	
	13540 Oct 19 12:39	0° B		behind sun end	13541 Sep 13 00:03	4° B 20'20	
evening max el	13540 Oct 26 01:03	8° B 05'17	21°10'23	asc. node	13541 Sep 13 09:01	5° B 05'04	
desc. node	13540 Oct 29 08:44	10° B 55'31		evening rise	13541 Sep 20 19:32	20° B 12'19	
retrograde	13540 Nov 06 21:28	13° B 58'36			13541 Sep 25 17:47	0° B	
evening set	13540 Nov 09 12:21	13° B 42'30		evening max el	13541 Oct 08 06:44	18° B 58'39	19°51'46
inferior conj	13540 Nov 18 10:33	9° B 48'57	-5°22'51	desc. node	13541 Oct 16 06:10	23° B 50'16	
minimum elong	13540 Nov 18 02:00	10° B 01'01	5°20'19	retrograde	13541 Oct 18 12:18	24° B 04'42	
min. Earth dist.	13540 Nov 18 23:15	9° B 31'02	0.54510 AU	evening set	13541 Oct 20 10:57	23° B 54'29	
morning rise	13540 Nov 26 16:11	5° B 58'15		inferior conj	13541 Oct 29 07:26	19° B 53'42	-3°56'52
direct	13540 Nov 30 16:35	5° B 23'36		minimum elong	13541 Oct 28 21:50	20° B 08'26	3°53'01
morning max el	13540 Dec 13 13:47	11° B 35'49	22°44'55	min. Earth dist.	13541 Oct 31 07:42	18° B 39'39	0.55098 AU
asc. node	13540 Dec 23 13:14	24° B 13'05		morning rise	13541 Nov 06 07:15	15° B 39'47	
	13540 Dec 27 00:13	0° B		direct	13541 Nov 11 05:15	14° B 46'40	
morning set	13541 Jan 04 22:51	17° B 37'31		morning max el	13541 Nov 24 23:48	21° B 36'16	24°33'53
	13541 Jan 10 17:04	0° \approx			13541 Dec 02 06:59	0° B	
superior conj	13541 Jan 11 22:13	2° \approx 36'13	1°31'06	asc. node	13541 Dec 10 10:17	12° B 37'39	
minimum elong	13541 Jan 11 23:51	2° \approx 44'56	1°31'54	morning set	13541 Dec 19 08:09	0° B	
max. Earth dist.	13541 Jan 15 08:55	9° \approx 51'40	1.33707 AU		13541 Dec 20 10:46	2° B 21'50	
evening rise	13541 Jan 19 22:35	19° \approx 04'44		superior conj	13541 Dec 27 05:51	17° B 13'36	1°37'22
desc. node	13541 Jan 25 07:53	29° \approx 14'01		minimum elong	13541 Dec 27 06:25	17° B 16'40	1°38'23
	13541 Jan 25 18:04	0° B		max. Earth dist.	13541 Dec 29 08:39	21° B 50'14	1.32371 AU
	13541 Feb 14 02:54	0° Υ			13542 Jan 02 04:56	0° \approx	
evening max el	13541 Feb 23 14:51	10° Υ 50'47	27°10'47	evening rise	13542 Jan 03 15:22	2° \approx 57'00	
retrograde	13541 Mar 09 02:05	18° Υ 18'19		desc. node	13542 Jan 12 04:37	19° \approx 16'31	
evening set	13541 Mar 15 17:46	15° Υ 46'31			13542 Jan 18 13:34	0° B	
min. Earth dist.	13541 Mar 19 15:29	12° Υ 04'37	0.65223 AU	evening max el	13542 Feb 06 02:51	24° B 02'16	27°32'55
asc. node	13541 Mar 21 10:22	10° Υ 05'16			13542 Feb 14 04:11	0° Υ	
inferior conj	13541 Mar 21 23:07	9° Υ 29'27	0°10'12	retrograde	13542 Feb 19 22:07	1° Υ 28'31	
minimum elong	13541 Mar 21 22:50	9° Υ 30'15	0°10'01				
transit middle	13541 Mar 21 22:50	9° Υ 30'15	0°10'01				

	13542 Feb 25 07:09	30° RH			13543 Jan 13 08:50	0° H	
evening set	13542 Feb 26 19:02	29° $\text{H}03'41$		evening max el	13543 Jan 19 11:14	6° $\text{H}37'20$	27°23'33
min. Earth dist.	13542 Mar 02 13:33	25° $\text{H}50'58$	0.63343 AU	retrograde	13543 Feb 02 10:01	13° $\text{H}55'50$	
inferior conj	13542 Mar 05 08:06	23° $\text{H}03'52$	-0°58'24	evening set	13543 Feb 09 07:01	11° $\text{H}46'06$	
minimum elong	13542 Mar 05 10:00	22° $\text{H}59'06$	0°57'23	min. Earth dist.	13543 Feb 13 01:41	8° $\text{H}56'05$	0.61240 AU
asc. node	13542 Mar 08 07:52	20° $\text{H}14'03$		inferior conj	13543 Feb 16 04:00	6° $\text{H}11'12$	-2°16'55
morning rise	13542 Mar 12 03:26	17° $\text{H}49'08$		minimum elong	13543 Feb 16 08:52	6° $\text{H}00'23$	2°14'30
direct	13542 Mar 14 12:30	17° $\text{H}21'49$		asc. node	13543 Feb 23 05:19	1° $\text{H}21'11$	
morning max el	13542 Mar 21 00:35	20° $\text{H}41'28$	17°46'39	morning rise	13543 Feb 23 13:43	1° $\text{H}14'29$	
	13542 Mar 28 02:31	0° Y		direct	13543 Feb 25 16:56	0° $\text{H}55'14$	
morning set	13542 Apr 06 09:05	15° $\text{Y}32'51$		morning max el	13543 Mar 04 17:02	4° $\text{H}26'52$	17°52'17
desc. node	13542 Apr 10 06:44	22° $\text{Y}14'40$		morning set	13543 Mar 20 08:14	28° $\text{H}49'37$	
	13542 Apr 14 20:50	0° B			13543 Mar 20 23:49	0° Y	
				desc. node	13543 Mar 28 03:17	12° $\text{Y}46'30$	
superior conj	13542 Apr 18 21:01	6° $\text{B}38'02$	-1°03'28				
minimum elong	13542 Apr 18 14:38	6° $\text{B}11'52$	1°03'08	superior conj	13543 Mar 31 03:07	17° $\text{Y}58'49$	-0°23'29
max. Earth dist.	13542 Apr 24 20:29	16° $\text{B}17'00$	1.44674 AU	minimum elong	13543 Mar 31 00:59	17° $\text{Y}49'37$	0°23'21
	13542 May 03 15:07	0° II			13543 Apr 07 06:59	0° B	
evening rise	13542 May 04 03:41	0° $\text{II}48'13$		max. Earth dist.	13543 Apr 07 11:12	0° $\text{B}17'17$	1.43124 AU
	13542 May 23 23:21	0° B		evening rise	13543 Apr 13 22:57	10° $\text{B}40'44$	
evening max el	13542 Jun 02 03:28	11° $\text{B}14'46$	20°39'22		13543 Apr 26 17:24	0° II	
asc. node	13542 Jun 04 04:55	13° $\text{B}08'53$		evening max el	13543 May 15 23:12	25° $\text{II}04'22$	21°53'11
retrograde	13542 Jun 10 08:01	15° $\text{B}58'37$		asc. node	13543 May 22 02:05	29° $\text{II}45'16$	
evening set	13542 Jun 14 11:33	14° $\text{B}21'05$			13543 May 22 15:59	0° B	
inferior conj	13542 Jun 19 17:42	8° $\text{B}13'37$	3°11'56	retrograde	13543 May 25 06:06	0° $\text{B}31'11$	
minimum elong	13542 Jun 19 17:25	8° $\text{B}14'34$	3°10'52		13543 May 27 16:38	30° RII	
min. Earth dist.	13542 Jun 20 08:26	7° $\text{B}22'49$	0.68415 AU	evening set	13543 May 29 20:30	28° $\text{II}37'30$	
morning rise	13542 Jun 24 23:01	1° $\text{B}53'28$		inferior conj	13543 Jun 04 02:51	22° $\text{II}19'46$	3°03'12
	13542 Jun 27 20:51	30° RII		minimum elong	13543 Jun 04 01:40	22° $\text{II}23'53$	3°02'03
direct	13542 Jun 30 08:47	29° $\text{II}30'39$		min. Earth dist.	13543 Jun 04 04:20	22° $\text{II}14'36$	0.68883 AU
	13542 Jul 03 00:33	0° B		morning rise	13543 Jun 09 06:39	16° $\text{II}05'28$	
desc. node	13542 Jul 07 07:11	2° $\text{B}27'32$		direct	13543 Jun 14 03:45	14° $\text{II}00'10$	
morning max el	13542 Jul 11 07:30	6° $\text{B}03'32$	23°52'05	morning max el	13543 Jun 23 19:17	19° $\text{II}40'57$	22°22'53
	13542 Jul 29 20:55	0° Q		desc. node	13543 Jun 24 04:19	20° $\text{II}03'53$	
morning set	13542 Aug 15 12:54	26° $\text{Q}24'38$			13543 Jul 02 12:13	0° B	
	13542 Aug 17 14:57	0° M			13543 Jul 23 00:57	0° Q	
max. Earth dist.	13542 Aug 19 07:47	2° $\text{M}58'47$	1.38649 AU	morning set	13543 Jul 27 05:59	6° $\text{Q}43'46$	
				max. Earth dist.	13543 Aug 01 07:29	15° $\text{Q}05'34$	1.40990 AU
superior conj	13542 Aug 26 19:06	16° $\text{M}38'14$	-0°40'05				
minimum elong	13542 Aug 26 21:57	16° $\text{M}51'41$	0°39'55	superior conj	13543 Aug 09 03:31	28° $\text{Q}41'05$	-1°15'05
asc. node	13542 Aug 31 05:37	25° $\text{M}09'35$		minimum elong	13543 Aug 09 09:09	29° $\text{Q}06'17$	1°14'53
	13542 Sep 02 17:00	0° A			13543 Aug 09 21:08	0° M	
evening rise	13542 Sep 04 19:15	4° $\text{A}06'41$		asc. node	13543 Aug 18 02:13	15° $\text{M}07'51$	
	13542 Sep 20 10:15	0° M		evening rise	13543 Aug 19 09:20	17° $\text{M}33'38$	
evening max el	13542 Sep 21 02:19	0° $\text{M}41'37$	18°54'45		13543 Aug 26 04:16	0° A	
retrograde	13542 Sep 29 17:47	5° $\text{M}01'53$		evening max el	13543 Sep 04 08:13	13° $\text{A}07'16$	18°19'05
evening set	13542 Oct 01 14:48	4° $\text{M}50'26$		retrograde	13543 Sep 11 18:35	16° $\text{A}53'17$	
desc. node	13542 Oct 03 03:39	4° $\text{M}25'00$		evening set	13543 Sep 13 21:01	16° $\text{A}35'55$	
inferior conj	13542 Oct 09 21:35	0° $\text{M}32'39$	-2°08'12	desc. node	13543 Sep 20 01:09	13° $\text{A}02'31$	
minimum elong	13542 Oct 09 16:10	0° $\text{M}42'12$	2°05'38	inferior conj	13543 Sep 21 09:23	11° $\text{A}56'56$	-0°25'18
	13542 Oct 10 15:57	30° RA		minimum elong	13543 Sep 21 08:27	11° $\text{A}58'52$	0°24'49
min. Earth dist.	13542 Oct 12 20:50	28° $\text{A}27'14$	0.56531 AU	min. Earth dist.	13543 Sep 24 16:35	9° $\text{A}14'08$	0.58547 AU
morning rise	13542 Oct 17 14:25	25° $\text{A}43'10$		morning rise	13543 Sep 28 16:27	6° $\text{A}31'15$	
direct	13542 Oct 23 07:27	24° $\text{A}25'34$		direct	13543 Oct 04 23:28	4° $\text{A}46'23$	
	13542 Nov 04 13:57	0° M		morning max el	13543 Oct 19 07:01	12° $\text{A}26'34$	27°22'54
morning max el	13542 Nov 06 11:56	1° $\text{M}44'19$	26°12'10		13543 Nov 02 03:05	0° M	
	13542 Nov 26 10:17	0° A		asc. node	13543 Nov 14 04:04	21° $\text{M}02'28$	
asc. node	13542 Nov 27 07:14	1° $\text{A}37'28$			13543 Nov 18 13:41	0° A	
morning set	13542 Dec 04 21:42	16° $\text{A}59'42$		morning set	13543 Nov 19 05:49	1° $\text{A}25'25$	
	13542 Dec 10 19:33	0° B					
superior conj	13542 Dec 11 16:30	1° $\text{B}56'39$	1°37'30	superior conj	13543 Nov 26 04:07	16° $\text{A}38'25$	1°31'45
minimum elong	13542 Dec 11 15:58	1° $\text{B}53'45$	1°38'32	minimum elong	13543 Nov 26 02:40	16° $\text{A}30'19$	1°32'37
max. Earth dist.	13542 Dec 12 14:21	3° $\text{B}58'05$	1.31528 AU	max. Earth dist.	13543 Nov 25 22:43	16° $\text{A}08'15$	1.31196 AU
evening rise	13542 Dec 18 16:03	17° $\text{B}08'26$			13543 Dec 02 05:08	0° B	
	13542 Dec 25 02:32	0° A		evening rise	13543 Dec 02 22:10	1° $\text{B}31'36$	
desc. node	13542 Dec 30 01:28	8° $\text{A}56'35$		desc. node	13543 Dec 16 22:24	28° $\text{B}04'25$	
					13543 Dec 18 03:16	0° A	

evening max el	13544 Jan 01 13:11	18° \approx 23'30	26°39'30	desc. node	13544 Dec 02 19:26	16° \approx 28'09	
retrograde	13544 Jan 15 12:10	25° \approx 31'44		evening max el	13544 Dec 13 06:34	29° \approx 16'14	25°23'12
evening set	13544 Jan 22 02:01	23° \approx 44'47			13544 Dec 14 01:26	0° \approx	
min. Earth dist.	13544 Jan 26 03:03	21° \approx 07'26	0.59060 AU	retrograde	13544 Dec 27 03:01	6° \approx 14'11	
inferior conj	13544 Jan 29 07:06	18° \approx 40'43	-3°40'37	evening set	13545 Jan 01 23:52	4° \approx 55'45	
minimum elong	13544 Jan 29 14:56	18° \approx 25'34	3°37'12	min. Earth dist.	13545 Jan 06 18:44	2° \approx 15'54	0.57032 AU
morning rise	13544 Feb 06 06:53	14° \approx 05'00		inferior conj	13545 Jan 09 14:13	0° \approx 23'03	-4°58'05
direct	13544 Feb 08 07:46	13° \approx 50'10		minimum elong	13545 Jan 09 22:53	0° \approx 08'31	4°55'05
asc. node	13544 Feb 10 02:43	14° \approx 02'07			13545 Jan 10 04:00	30° \approx 8'3	
morning max el	13544 Feb 16 04:33	17° \approx 43'45	18°17'25	morning rise	13545 Jan 18 00:26	26° \approx 30'43	
	13544 Feb 24 22:57	0° \approx		direct	13545 Jan 20 04:35	25° \approx 35'43	
morning set	13544 Mar 02 21:53	12° \approx 45'46		asc. node	13545 Jan 27 00:04	28° \approx 23'47	
					13545 Jan 28 22:18	0° \approx	
superior conj	13544 Mar 12 07:46	0° \approx 21'44	0°13'22	morning max el	13545 Jan 29 07:07	0° \approx 21'02	19°03'53
minimum elong	13544 Mar 12 08:45	0° \approx 26'13	0°13'18	morning set	13545 Feb 14 21:24	27° \approx 07'13	
behind sun begin	13544 Mar 12 04:38	0° \approx 07'32			13545 Feb 16 08:19	0° \approx	
behind sun end	13544 Mar 12 12:52	0° \approx 44'53					
	13544 Mar 12 02:59	0° \approx		superior conj	13545 Feb 23 06:33	13° \approx 34'08	0°44'08
desc. node	13544 Mar 13 23:47	3° \approx 22'16		minimum elong	13545 Feb 23 09:03	13° \approx 46'05	0°44'07
max. Earth dist.	13544 Mar 19 21:43	13° \approx 41'50	1.41115 AU	desc. node	13545 Feb 28 20:17	23° \approx 58'10	
evening rise	13544 Mar 24 12:41	21° \approx 24'19		max. Earth dist.	13545 Mar 02 04:35	26° \approx 23'40	1.38872 AU
	13544 Mar 29 21:42	0° \approx			13545 Mar 04 05:27	0° \approx	
	13544 Apr 19 20:43	0° \approx		evening rise	13545 Mar 05 23:34	3° \approx 02'41	
evening max el	13544 Apr 27 14:56	8° \approx 55'31	23°13'17		13545 Mar 23 01:47	0° \approx	
asc. node	13544 May 07 23:19	15° \approx 04'54		evening max el	13545 Apr 10 04:36	22° \approx 47'47	24°33'32
retrograde	13544 May 08 01:54	15° \approx 04'58		retrograde	13545 Apr 21 18:13	29° \approx 33'47	
evening set	13544 May 13 03:45	12° \approx 56'36		asc. node	13545 Apr 24 20:37	28° \approx 51'26	
min. Earth dist.	13544 May 18 01:05	7° \approx 10'06	0.68874 AU	evening set	13545 Apr 27 07:44	27° \approx 13'16	
inferior conj	13544 May 18 12:25	6° \approx 30'57	2°44'08	min. Earth dist.	13545 May 01 20:35	22° \approx 03'00	0.68401 AU
minimum elong	13544 May 18 10:34	6° \approx 37'17	2°42'52	inferior conj	13545 May 02 20:30	20° \approx 43'04	2°14'54
morning rise	13544 May 23 17:20	0° \approx 23'53		minimum elong	13545 May 02 18:21	20° \approx 50'16	2°13'36
	13544 May 24 05:49	30° \approx 8'8		morning rise	13545 May 08 05:09	14° \approx 44'18	
direct	13544 May 28 01:39	28° \approx 38'56		direct	13545 May 12 01:09	13° \approx 20'14	
	13544 Jun 01 05:43	0° \approx		morning max el	13545 May 19 11:44	17° \approx 28'39	19°49'06
morning max el	13544 Jun 05 11:56	3° \approx 29'00	21°00'04	desc. node	13545 May 27 22:14	27° \approx 47'58	
desc. node	13544 Jun 10 01:21	8° \approx 35'50			13545 May 29 12:00	0° \approx	
	13544 Jun 25 10:42	0° \approx		greatest brilliancy	13545 Jun 01 15:19	4° \approx 30'55	-0.6m
morning set	13544 Jul 05 22:46	16° \approx 00'14		morning set	13545 Jun 15 00:52	24° \approx 41'29	
max. Earth dist.	13544 Jul 13 13:40	28° \approx 07'57	1.43075 AU		13545 Jun 18 11:26	0° \approx	
	13544 Jul 14 17:11	0° \approx		max. Earth dist.	13545 Jun 26 02:08	11° \approx 55'23	1.44671 AU
superior conj	13544 Jul 20 14:36	9° \approx 47'52	-1°46'34	superior conj	13545 Jul 01 01:45	19° \approx 53'42	-2°08'11
minimum elong	13544 Jul 20 21:50	10° \approx 18'30	1°46'43	minimum elong	13545 Jul 01 06:44	20° \approx 13'49	2°08'59
evening rise	13544 Aug 01 09:30	0° \approx 22'50			13545 Jul 07 06:02	0° \approx	
	13544 Aug 01 04:23	0° \approx		evening rise	13545 Jul 14 14:37	12° \approx 02'55	
asc. node	13544 Aug 03 22:52	4° \approx 56'10		asc. node	13545 Jul 21 19:33	24° \approx 02'50	
evening max el	13544 Aug 17 20:15	26° \approx 06'16	18°03'34		13545 Jul 25 05:58	0° \approx	
retrograde	13544 Aug 24 12:44	29° \approx 32'29		evening max el	13545 Aug 01 10:34	9° \approx 28'17	18°07'03
evening set	13544 Aug 26 22:47	29° \approx 05'29		retrograde	13545 Aug 07 19:34	12° \approx 04'46	
inferior conj	13544 Sep 02 17:39	24° \approx 06'11	0°57'43	evening set	13545 Aug 10 13:53	12° \approx 09'03	
minimum elong	13544 Sep 02 19:20	24° \approx 02'09	0°56'55	inferior conj	13545 Aug 16 18:29	6° \approx 51'54	1°58'22
desc. node	13544 Sep 05 22:40	21° \approx 02'57		minimum elong	13545 Aug 16 20:59	6° \approx 45'07	1°57'08
min. Earth dist.	13544 Sep 05 21:12	21° \approx 06'16	0.60816 AU	min. Earth dist.	13545 Aug 19 11:36	3° \approx 56'06	0.63060 AU
morning rise	13544 Sep 09 12:59	18° \approx 11'40		morning rise	13545 Aug 23 02:03	0° \approx 38'59	
direct	13544 Sep 16 03:36	16° \approx 01'23		desc. node	13545 Aug 23 20:10	0° \approx 06'52	
morning max el	13544 Sep 30 09:50	23° \approx 56'35	27°56'14		13545 Aug 24 00:21	30° \approx 8'0	
	13544 Oct 05 21:13	0° \approx		direct	13545 Aug 29 18:02	28° \approx 09'30	
	13544 Oct 25 10:38	0° \approx			13545 Sep 04 23:40	0° \approx	
asc. node	13544 Oct 31 00:50	10° \approx 45'54		morning max el	13545 Sep 12 18:04	6° \approx 11'22	27°50'51
morning set	13544 Nov 02 09:18	15° \approx 34'59			13545 Sep 30 20:54	0° \approx	
max. Earth dist.	13544 Nov 08 06:04	28° \approx 12'30	1.31388 AU	morning set	13545 Oct 17 05:57	29° \approx 02'58	
	13544 Nov 09 01:30	0° \approx		asc. node	13545 Oct 17 21:30	0° \approx 41'48	
					13545 Oct 17 13:16	0° \approx	
superior conj	13544 Nov 09 14:54	1° \approx 14'16	1°20'13	max. Earth dist.	13545 Oct 22 08:23	10° \approx 00'42	1.32110 AU
minimum elong	13544 Nov 09 12:49	1° \approx 02'42	1°20'49				
evening rise	13544 Nov 16 07:42	16° \approx 01'47		superior conj	13545 Oct 24 22:57	15° \approx 39'04	1°03'01
	13544 Nov 23 03:21	0° \approx		minimum elong	13545 Oct 24 20:41	15° \approx 26'39	1°03'19

evening rise	13545 Oct 31 18:45	0°♊34'06			13546 Oct 09 04:40	0°♊	
	13545 Oct 31 12:25	0°♊		evening rise	13546 Oct 16 05:27	15°♊03'18	
	13545 Nov 16 19:52	0°♊			13546 Oct 23 15:45	0°♊	
desc. node	13545 Nov 19 16:36	3°♊51'27		evening max el	13546 Nov 06 04:48	19°♊29'43	22°04'12
evening max el	13545 Nov 24 17:14	9°♊27'54	23°45'44	desc. node	13546 Nov 06 13:53	19°♊51'39	
retrograde	13545 Dec 08 05:24	16°♊11'28		retrograde	13546 Nov 18 20:00	25°♊45'29	
evening set	13545 Dec 12 22:05	15°♊23'27		evening set	13546 Nov 22 03:03	25°♊21'25	
min. Earth dist.	13545 Dec 19 04:01	12°♊21'57	0.55443 AU	inferior conj	13546 Nov 30 20:02	21°♊26'45	-5°49'59
inferior conj	13545 Dec 21 00:50	11°♊15'20	-5°49'07	minimum elong	13546 Nov 30 15:32	21°♊33'04	5°48'34
minimum elong	13545 Dec 21 05:09	11°♊08'55	5°47'42	min. Earth dist.	13546 Nov 30 10:27	21°♊40'12	0.54589 AU
morning rise	13545 Dec 29 14:02	7°♊20'42		morning rise	13546 Dec 09 05:03	17°♊39'30	
direct	13546 Jan 01 05:42	7°♊03'11		direct	13546 Dec 12 16:36	17°♊12'36	
morning max el	13546 Jan 11 21:00	12°♊08'47	20°13'14	morning max el	13546 Dec 24 20:22	23°♊01'51	21°44'40
asc. node	13546 Jan 13 21:21	14°♊15'20			13546 Dec 30 20:06	0°♊	
	13546 Jan 24 04:33	0°♊		asc. node	13546 Dec 31 18:34	1°♊18'54	
morning set	13546 Jan 30 03:26	11°♊44'16		morning set	13547 Jan 14 13:20	26°♊28'31	
					13547 Jan 16 05:25	0°♊	
superior conj	13546 Feb 06 19:00	27°♊23'27	1°07'52	superior conj	13547 Jan 21 17:12	11°♊37'48	1°24'33
minimum elong	13546 Feb 06 21:43	27°♊37'08	1°08'08	minimum elong	13547 Jan 21 19:21	11°♊49'07	1°25'11
	13546 Feb 08 02:19	0°♊		max. Earth dist.	13547 Jan 25 23:07	20°♊21'41	1.34676 AU
max. Earth dist.	13546 Feb 12 11:21	8°♊30'20	1.36652 AU	evening rise	13547 Jan 30 04:30	28°♊38'23	
desc. node	13546 Feb 15 16:50	14°♊30'50			13547 Jan 30 21:42	0°♊	
evening rise	13546 Feb 16 06:01	15°♊30'45		desc. node	13547 Feb 02 13:26	4°♊55'33	
	13546 Feb 24 15:51	0°♊			13547 Feb 17 21:07	0°♊	
	13546 Mar 17 15:58	0°♊		evening max el	13547 Mar 06 07:48	20°♊24'31	26°46'12
evening max el	13546 Mar 23 18:00	6°♊39'37	25°46'56	retrograde	13547 Mar 19 12:27	27°♊49'08	
retrograde	13546 Apr 05 06:06	13°♊51'15		evening set	13547 Mar 25 23:11	25°♊16'59	
evening set	13546 Apr 11 06:50	11°♊22'25		asc. node	13547 Mar 29 15:27	21°♊39'35	
asc. node	13546 Apr 11 18:00	10°♊58'10		min. Earth dist.	13547 Mar 29 23:40	21°♊16'08	0.66154 AU
min. Earth dist.	13546 Apr 15 12:51	6°♊47'30	0.67485 AU	inferior conj	13547 Apr 01 00:17	18°♊53'08	0°44'35
inferior conj	13546 Apr 17 01:11	4°♊52'20	1°35'15	minimum elong	13547 Mar 31 23:09	18°♊56'28	0°43'55
minimum elong	13546 Apr 16 23:13	4°♊58'35	1°34'05	morning rise	13547 Apr 07 00:20	13°♊15'13	
	13546 Apr 21 09:52	30°♊		direct	13547 Apr 09 22:44	12°♊27'40	
morning rise	13546 Apr 22 16:12	29°♊03'07		morning max el	13547 Apr 16 08:14	15°♊50'00	18°13'52
direct	13546 Apr 26 00:49	27°♊58'35			13547 Apr 26 21:11	0°♊	
	13546 Apr 30 22:28	0°♊		desc. node	13547 May 01 15:45	7°♊32'28	
morning max el	13546 May 02 18:57	1°♊37'39	18°53'12	morning set	13547 May 05 17:00	14°♊01'50	
desc. node	13546 May 14 19:03	17°♊29'40			13547 May 15 17:50	0°♊	
greatest brilliancy	13546 May 16 09:22	19°♊54'31	-0.8m	superior conj	13547 May 21 00:47	8°♊18'28	-1°57'26
	13546 May 22 22:48	0°♊		minimum elong	13547 May 20 16:28	7°♊45'57	1°57'48
morning set	13546 May 25 08:57	3°♊45'33		max. Earth dist.	13547 May 22 15:00	10°♊47'50	1.45832 AU
max. Earth dist.	13546 Jun 08 19:10	26°♊13'17	1.45619 AU		13547 Jun 03 22:56	0°♊	
superior conj	13546 Jun 10 16:50	29°♊12'07	-2°12'55	evening rise	13547 Jun 06 01:48	3°♊17'56	
minimum elong	13546 Jun 10 14:48	29°♊04'09	2°13'55	greatest brilliancy	13547 Jun 17 05:20	20°♊31'47	-0.7m
	13546 Jun 11 05:02	0°♊			13547 Jun 23 17:36	0°♊	
evening rise	13546 Jun 25 20:12	23°♊18'22		asc. node	13547 Jun 25 13:12	2°♊24'18	
	13546 Jun 29 23:35	0°♊		evening max el	13547 Jun 29 09:55	6°♊51'13	19°07'19
asc. node	13546 Jul 08 16:19	13°♊40'55		retrograde	13547 Jul 06 07:02	10°♊39'45	
evening max el	13546 Jul 15 23:58	23°♊05'24	18°28'36	evening set	13547 Jul 09 19:07	9°♊28'35	
retrograde	13546 Jul 22 10:48	26°♊33'30		inferior conj	13547 Jul 15 06:09	3°♊41'08	3°02'25
evening set	13546 Jul 25 13:46	25°♊38'47		minimum elong	13547 Jul 15 07:29	3°♊36'49	3°01'19
inferior conj	13546 Jul 31 07:49	20°♊05'44	2°38'50	min. Earth dist.	13547 Jul 16 19:03	1°♊42'24	0.66724 AU
minimum elong	13546 Jul 31 10:00	19°♊59'11	2°37'38		13547 Jul 18 04:22	30°♊	
min. Earth dist.	13546 Aug 02 11:18	17°♊32'05	0.65076 AU	morning rise	13547 Jul 20 19:13	27°♊16'53	
morning rise	13546 Aug 06 05:03	13°♊43'49		direct	13547 Jul 26 22:58	24°♊37'39	
desc. node	13546 Aug 10 17:39	11°♊18'29		desc. node	13547 Jul 28 15:04	24°♊47'58	
direct	13546 Aug 12 17:01	11°♊04'27			13547 Aug 06 08:34	0°♊	
morning max el	13546 Aug 26 04:46	19°♊00'20	27°11'18	morning max el	13547 Aug 08 15:46	2°♊12'24	26°05'40
	13546 Sep 04 12:38	0°♊			13547 Aug 29 15:58	0°♊	
	13546 Sep 23 20:47	0°♊		morning set	13547 Sep 13 15:12	25°♊24'51	
morning set	13546 Sep 30 17:02	12°♊42'14			13547 Sep 16 01:49	0°♊	
asc. node	13546 Oct 04 18:06	20°♊45'09		max. Earth dist.	13547 Sep 17 09:59	2°♊34'21	1.35147 AU
max. Earth dist.	13546 Oct 05 02:09	21°♊26'14	1.33374 AU	asc. node	13547 Sep 21 14:41	10°♊52'08	
superior conj	13546 Oct 09 02:08	29°♊46'34	0°40'14	superior conj	13547 Sep 22 21:55	13°♊30'36	0°12'15
minimum elong	13546 Oct 09 00:16	29°♊36'40	0°40'18				

































































































































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behind sun begin	13547 Sep 22 17:17	13°♌06'55					
behind sun end	13547 Sep 23 01:11	13°♌47'13		superior conj	13548 Sep 05 07:04	26°♍42'21	-0°20'07
evening rise	13547 Sep 30 13:50	29°♌24'31		minimum elong	13548 Sep 05 08:25	26°♍48'51	0°20'02
	13547 Sep 30 20:42	0°♍			13548 Sep 06 23:25	0°♌	
evening max el	13547 Oct 19 02:30	29°♍58'16	20°34'24	asc. node	13548 Sep 07 11:15	0°♌58'27	
	13547 Oct 19 03:12	0°♍		evening rise	13548 Sep 13 17:31	13°♌30'54	
desc. node	13547 Oct 24 11:15	4°♍02'14			13548 Sep 22 10:29	0°♍	
retrograde	13547 Oct 30 06:39	5°♍31'27		evening max el	13548 Sep 30 14:17	11°♍12'35	19°24'41
evening set	13547 Nov 01 12:43	5°♍18'55		retrograde	13548 Oct 10 02:44	15°♍58'18	
inferior conj	13547 Nov 10 12:02	1°♍24'07	-4°51'16	desc. node	13548 Oct 10 08:42	15°♍58'07	
minimum elong	13547 Nov 10 02:05	1°♍38'30	4°47'53	evening set	13548 Oct 11 23:29	15°♍48'07	
min. Earth dist.	13547 Nov 11 17:04	0°♍42'08	0.54652 AU	inferior conj	13548 Oct 20 15:09	11°♍40'33	-3°11'29
	13547 Nov 12 22:47	30°♍		minimum elong	13548 Oct 20 07:01	11°♍53'45	3°07'57
morning rise	13547 Nov 18 15:11	27°♍25'59		min. Earth dist.	13548 Oct 23 02:52	10°♍03'52	0.55627 AU
direct	13547 Nov 23 01:20	26°♍43'58		morning rise	13548 Oct 28 12:22	7°♍12'38	
	13547 Dec 02 10:19	0°♍		direct	13548 Nov 02 18:54	6°♍09'57	
morning max el	13547 Dec 06 08:43	3°♍12'45	23°31'17	morning max el	13548 Nov 16 18:39	13°♍11'59	25°18'09
asc. node	13547 Dec 18 15:42	19°♍18'15			13548 Nov 29 20:23	0°♍	
	13547 Dec 24 13:38	0°♍		asc. node	13548 Dec 04 12:42	7°♍59'10	
morning set	13547 Dec 30 01:04	11°♍14'27		morning set	13548 Dec 13 12:47	25°♍56'44	
					13548 Dec 15 09:39	0°♍	
superior conj	13548 Jan 05 22:06	26°♍08'45	1°34'30	superior conj	13548 Dec 20 07:15	10°♍49'07	1°38'09
minimum elong	13548 Jan 05 23:18	26°♍15'12	1°35'26	minimum elong	13548 Dec 20 07:21	10°♍49'38	1°39'12
	13548 Jan 07 17:08	0°♍		max. Earth dist.	13548 Dec 21 21:34	14°♍19'56	1.31954 AU
max. Earth dist.	13548 Jan 08 18:46	2°♍16'13	1.33087 AU	evening rise	13548 Dec 27 11:59	26°♍17'46	
evening rise	13548 Jan 13 15:32	12°♍16'42			13548 Dec 29 07:34	0°♍	
desc. node	13548 Jan 20 10:07	25°♍07'47		desc. node	13549 Jan 06 06:54	15°♍01'48	
	13548 Jan 23 04:30	0°♍			13549 Jan 15 14:06	0°♍	
	13548 Feb 13 03:40	0°♍		evening max el	13549 Jan 29 07:53	16°♍49'41	27°33'04
evening max el	13548 Feb 16 21:06	3°♍52'07	27°23'48	retrograde	13549 Feb 12 04:42	24°♍12'38	
retrograde	13548 Mar 01 12:15	11°♍19'13		evening set	13549 Feb 19 02:38	21°♍53'08	
evening set	13548 Mar 08 06:38	8°♍49'47		min. Earth dist.	13549 Feb 22 20:39	18°♍51'20	0.62468 AU
min. Earth dist.	13548 Mar 12 02:53	5°♍20'41	0.64459 AU	inferior conj	13549 Feb 25 19:06	16°♍03'24	-1°30'41
inferior conj	13548 Mar 14 15:15	2°♍39'16	-0°17'31	minimum elong	13549 Feb 25 22:11	15°♍56'01	1°29'04
minimum elong	13548 Mar 14 15:47	2°♍37'52	0°17'15	asc. node	13549 Mar 02 10:27	12°♍08'59	
asc. node	13548 Mar 15 12:57	1°♍41'39		morning rise	13549 Mar 04 20:26	10°♍56'05	
	13548 Mar 17 05:44	30°♍		direct	13549 Mar 07 02:50	10°♍32'32	
morning rise	13548 Mar 21 02:53	27°♍15'09		morning max el	13549 Mar 13 18:49	13°♍55'40	17°46'51
direct	13548 Mar 23 16:27	26°♍41'21			13549 Mar 24 21:24	0°♍	
morning max el	13548 Mar 30 01:10	29°♍58'37	17°51'35	morning set	13549 Mar 29 17:33	8°♍26'55	
	13548 Mar 30 01:44	0°♍		desc. node	13549 Apr 04 08:55	18°♍18'24	
morning set	13548 Apr 16 05:18	25°♍40'17					
desc. node	13548 Apr 17 12:22	27°♍50'13		superior conj	13549 Apr 10 11:08	28°♍40'09	-0°46'26
	13548 Apr 18 19:27	0°♍		minimum elong	13549 Apr 10 06:35	28°♍21'09	0°46'08
superior conj	13548 Apr 29 18:58	17°♍57'39	-1°25'44		13549 Apr 11 06:17	0°♍	
minimum elong	13548 Apr 29 10:33	17°♍23'55	1°25'27	max. Earth dist.	13549 Apr 17 04:26	9°♍40'54	1.44077 AU
max. Earth dist.	13548 May 04 11:02	25°♍22'41	1.45298 AU	evening rise	13549 Apr 25 04:12	22°♍16'02	
	13548 May 07 09:44	0°♍			13549 Apr 30 05:38	0°♍	
evening rise	13548 May 15 15:22	12°♍43'43			13549 May 21 12:50	0°♍	
	13548 May 27 01:45	0°♍		evening max el	13549 May 25 13:14	4°♍28'56	21°09'36
greatest brilliancy	13548 May 30 14:06	5°♍09'21	-0.6m	asc. node	13549 May 29 07:20	7°♍42'12	
asc. node	13548 Jun 11 10:13	20°♍28'52		retrograde	13549 Jun 03 04:30	9°♍30'49	
evening max el	13548 Jun 11 14:32	20°♍39'47	20°01'49	evening set	13549 Jun 07 12:38	7°♍46'03	
retrograde	13548 Jun 19 05:38	25°♍00'37		inferior conj	13549 Jun 12 18:34	1°♍33'47	3°09'31
evening set	13548 Jun 23 03:24	23°♍32'27		minimum elong	13549 Jun 12 17:53	1°♍36'09	3°08'26
inferior conj	13548 Jun 28 10:32	17°♍31'48	3°11'58	min. Earth dist.	13549 Jun 13 03:29	1°♍02'43	0.68669 AU
minimum elong	13548 Jun 28 10:50	17°♍30'45	3°10'55		13549 Jun 13 21:39	30°♍	
min. Earth dist.	13548 Jun 29 09:05	16°♍15'26	0.67933 AU	morning rise	13549 Jun 17 22:55	25°♍15'59	
morning rise	13548 Jul 03 17:57	11°♍09'31		direct	13549 Jun 23 03:14	23°♍00'26	
direct	13548 Jul 09 10:42	8°♍38'58		desc. node	13549 Jul 01 09:36	27°♍09'59	
desc. node	13548 Jul 14 12:24	10°♍14'01		morning max el	13549 Jul 03 12:55	29°♍11'37	23°13'56
morning max el	13548 Jul 21 02:10	15°♍37'38	24°43'19		13549 Jul 04 07:44	0°♍	
	13548 Aug 01 22:14	0°♍			13549 Jul 26 15:59	0°♍	
	13548 Aug 21 13:55	0°♍		morning set	13549 Aug 07 03:36	18°♍17'21	
morning set	13548 Aug 25 20:14	7°♍20'01		max. Earth dist.	13549 Aug 11 08:17	25°♍24'33	1.39661 AU

	13549 Aug 13 23:20	0°♎			13550 Jul 19 13:48	0°♏	
			max. Earth dist.		13550 Jul 24 09:58	7°♏53'02	1.41916 AU
superior conj	13549 Aug 19 01:46	9°♎13'10 -0°55'01		superior conj	13550 Aug 01 01:33	20°♏53'01 -1°29'12	
minimum elong	13549 Aug 19 05:49	9°♎31'52 0°54'49		minimum elong	13550 Aug 01 08:09	21°♏21'50 1°29'06	
asc. node	13549 Aug 25 07:49	21°♎00'54			13550 Aug 06 04:47	0°♎	
evening rise	13549 Aug 28 13:37	27°♎15'13		evening rise	13550 Aug 11 22:21	10°♎27'38	
	13549 Aug 29 23:56	0°♏		asc. node	13550 Aug 12 04:26	10°♎55'35	
evening max el	13549 Sep 13 14:40	23°♏14'34 18°36'54			13550 Aug 23 05:43	0°♏	
retrograde	13549 Sep 21 16:39	27°♏19'02		evening max el	13550 Aug 27 23:42	5°♏56'13 18°10'09	
evening set	13549 Sep 23 15:18	27°♏05'40		retrograde	13550 Sep 04 01:15	9°♏32'05	
desc. node	13549 Sep 27 06:11	25°♏37'20		evening set	13550 Sep 06 06:41	9°♏11'09	
inferior conj	13549 Oct 01 14:25	22°♏38'49 -1°22'40		inferior conj	13550 Sep 13 11:22	4°♏23'39 0°12'36	
minimum elong	13549 Oct 01 11:05	22°♏45'09 1°21'01		minimum elong	13550 Sep 13 11:47	4°♏22'43 0°12'25	
min. Earth dist.	13549 Oct 04 18:39	20°♏15'14 0.57338 AU		transit middle	13550 Sep 13 11:47	4°♏22'43 0°12'25	
morning rise	13549 Oct 09 03:24	17°♏33'01		transit begin	13550 Sep 13 09:37	4°♏27'32	
direct	13549 Oct 15 02:50	16°♏04'07		transit end	13550 Sep 13 13:58	4°♏17'54	
morning max el	13549 Oct 29 09:42	23°♏33'11 26°46'25		desc. node	13550 Sep 14 03:40	3°♏47'27	
	13549 Nov 04 05:41	0°♌		min. Earth dist.	13550 Sep 16 18:17	1°♏30'35 0.59495 AU	
asc. node	13549 Nov 21 09:35	27°♌10'47			13550 Sep 18 16:07	30°♌	
	13549 Nov 22 20:22	0°♌		morning rise	13550 Sep 20 13:31	28°♌44'19	
morning set	13549 Nov 27 22:44	10°♌30'17		direct	13550 Sep 27 00:37	26°♌47'47	
					13550 Oct 05 20:29	0°♏	
superior conj	13549 Dec 04 18:31	25°♌32'26 1°35'46		morning max el	13550 Oct 11 08:17	4°♏36'10 27°41'48	
minimum elong	13549 Dec 04 17:35	25°♌27'11 1°36'45			13550 Oct 30 03:10	0°♌	
max. Earth dist.	13549 Dec 05 04:49	26°♌29'50 1.31321 AU		asc. node	13550 Nov 08 06:22	16°♌44'51	
	13549 Dec 06 18:34	0°♏		morning set	13550 Nov 12 05:09	24°♌50'36	
evening rise	13549 Dec 11 15:13	10°♏34'44			13550 Nov 14 14:58	0°♌	
	13549 Dec 21 13:31	0°♏		max. Earth dist.	13550 Nov 18 13:05	8°♌38'38 1.31210 AU	
desc. node	13549 Dec 24 03:46	4°♏29'31					
evening max el	13550 Jan 11 13:36	29°♏04'15 27°09'00		superior conj	13550 Nov 19 06:03	10°♌13'21 1°27'35	
	13550 Jan 12 13:47	0°♌		minimum elong	13550 Nov 19 04:18	10°♌03'30 1°28'20	
retrograde	13550 Jan 25 12:49	6°♌19'14		evening rise	13550 Nov 25 23:03	25°♌02'14	
evening set	13550 Feb 01 07:53	4°♌17'56			13550 Nov 28 07:18	0°♏	
min. Earth dist.	13550 Feb 05 04:01	1°♌35'07 0.60304 AU		desc. node	13550 Dec 11 00:44	23°♏20'52	
	13550 Feb 07 01:50	30°♌			13550 Dec 15 13:01	0°♏	
inferior conj	13550 Feb 08 08:15	28°♏55'37 -2°52'21		evening max el	13550 Dec 24 11:58	10°♏28'03 26°10'33	
minimum elong	13550 Feb 08 14:28	28°♏42'36 2°49'23		retrograde	13551 Jan 07 10:46	17°♏32'40	
morning rise	13550 Feb 16 00:12	24°♏07'58		evening set	13551 Jan 13 18:28	15°♏57'24	
asc. node	13550 Feb 17 07:54	23°♏53'20		min. Earth dist.	13551 Jan 18 01:20	13°♏20'51 0.58160 AU	
direct	13550 Feb 18 01:51	23°♏51'06		inferior conj	13551 Jan 21 03:12	11°♏06'36 -4°15'15	
morning max el	13550 Feb 25 09:42	27°♏30'44 18°00'35		minimum elong	13551 Jan 21 11:49	10°♏50'54 4°11'48	
	13550 Feb 27 15:36	0°♌		morning rise	13551 Jan 29 08:07	6°♏40'26	
morning set	13550 Mar 12 23:28	22°♌02'04		direct	13551 Jan 31 09:19	6°♏26'33	
	13550 Mar 17 07:17	0°♑		asc. node	13551 Feb 04 05:16	7°♏17'53	
desc. node	13550 Mar 22 05:25	8°♑52'20		morning max el	13551 Feb 08 17:59	10°♏32'51 18°34'25	
					13551 Feb 21 12:15	0°♌	
superior conj	13550 Mar 23 03:17	10°♑28'58 -0°07'16		morning set	13551 Feb 24 17:48	6°♌10'27	
minimum elong	13550 Mar 23 02:40	10°♑26'15 0°07'14					
behind sun begin	13550 Mar 22 19:32	9°♑54'48		superior conj	13551 Mar 05 16:14	23°♌14'32 0°27'14	
behind sun end	13550 Mar 23 09:48	10°♑57'38		minimum elong	13551 Mar 05 18:03	23°♌22'58 0°27'09	
max. Earth dist.	13550 Mar 30 17:04	23°♑26'01 1.42304 AU		desc. node	13551 Mar 09 01:56	29°♌28'40	
	13550 Apr 03 17:27	0°♌			13551 Mar 09 08:53	0°♑	
evening rise	13550 Apr 05 06:27	2°♌28'12		max. Earth dist.	13551 Mar 13 01:13	6°♑30'12 1.40175 AU	
	13550 Apr 23 15:15	0°♌		evening rise	13551 Mar 17 05:14	13°♑35'42	
evening max el	13550 May 08 06:51	18°♌18'14 22°26'49			13551 Mar 27 12:26	0°♌	
asc. node	13550 May 16 04:32	23°♌47'57			13551 Apr 18 19:37	0°♌	
retrograde	13550 May 18 01:54	24°♌04'19		evening max el	13551 Apr 20 21:28	2°♌09'46 23°47'52	
evening set	13550 May 22 21:02	22°♌04'09		retrograde	13551 May 01 20:22	8°♌36'05	
inferior conj	13550 May 28 04:06	15°♌42'26 2°56'21		asc. node	13551 May 03 01:48	8°♌29'18	
minimum elong	13550 May 28 02:37	15°♌47'38 2°55'10		evening set	13551 May 07 03:04	6°♌22'26	
min. Earth dist.	13550 May 28 00:04	15°♌56'31 0.68930 AU		min. Earth dist.	13551 May 11 20:39	0°♌51'07 0.68726 AU	
morning rise	13550 Jun 02 08:02	9°♌30'53			13551 May 12 11:37	30°♌	
direct	13550 Jun 06 23:34	7°♌34'09		inferior conj	13551 May 12 13:16	29°♌54'20 2°32'59	
morning max el	13550 Jun 16 02:27	12°♌53'22 21°46'30		minimum elong	13551 May 12 11:15	0°♌01'14 2°31'42	
desc. node	13550 Jun 18 06:40	15°♌11'54		morning rise	13551 May 17 19:25	23°♌50'23	
	13550 Jun 29 17:23	0°♏		direct	13551 May 21 22:25	22°♌14'14	
morning set	13550 Jul 18 09:59	28°♏08'51					

morning max el	13551 May 29 21:48	26° ♁ 45'26	20°28'05	greatest brilliancy	13552 May 24 17:32	27° ♁ 25'02	-0.7m
	13551 Jun 01 21:26	0° ♁			13552 May 26 11:15	0° ♁	
desc. node	13551 Jun 05 03:39	4° ♁ 02'12		morning set	13552 Jun 05 20:20	15° ♁ 47'11	
	13551 Jun 23 03:50	0° ♁			13552 Jun 15 00:28	0° ♁	
morning set	13551 Jun 27 18:24	7° ♁ 03'44		max. Earth dist.	13552 Jun 18 09:35	5° ♁ 18'04	1.45161 AU
max. Earth dist.	13551 Jul 06 18:25	21° ♁ 13'52	1.43821 AU				
	13551 Jul 12 03:51	0° ♁		superior conj	13552 Jun 22 04:11	11° ♁ 16'33	-2°12'36
				minimum elong	13552 Jun 22 06:37	11° ♁ 26'12	2°13'35
superior conj	13551 Jul 13 02:30	1° ♁ 33'33	-1°57'24		13552 Jul 03 17:29	0° ♁	
minimum elong	13551 Jul 13 09:24	2° ♁ 02'08	1°57'48	evening rise	13552 Jul 06 10:31	4° ♁ 28'59	
evening rise	13551 Jul 25 14:58	22° ♁ 55'52		asc. node	13552 Jul 15 21:48	20° ♁ 02'29	
	13551 Jul 29 16:21	0° ♁			13552 Jul 22 19:31	0° ♁	
asc. node	13551 Jul 30 01:04	0° ♁ 37'42		evening max el	13552 Jul 25 03:33	2° ♁ 35'59	18°14'06
evening max el	13551 Aug 11 13:12	19° ♁ 06'21	18°02'54	retrograde	13552 Jul 31 12:05	5° ♁ 57'52	
retrograde	13551 Aug 18 01:10	22° ♁ 28'06		evening set	13552 Aug 03 10:09	5° ♁ 11'50	
evening set	13551 Aug 20 14:47	21° ♁ 55'57		inferior conj	13552 Aug 09 09:46	29° ♁ 47'31	2°17'48
inferior conj	13551 Aug 27 03:08	16° ♁ 49'00	1°26'06	minimum elong	13552 Aug 09 12:14	29° ♁ 40'31	2°16'33
minimum elong	13551 Aug 27 05:21	16° ♁ 43'25	1°25'01		13552 Aug 09 05:22	30° ♁	
min. Earth dist.	13551 Aug 30 02:57	13° ♁ 48'21	0.61787 AU	min. Earth dist.	13552 Aug 11 21:13	26° ♁ 59'35	0.63954 AU
desc. node	13551 Sep 01 01:12	12° ♁ 03'14		morning rise	13552 Aug 15 12:44	23° ♁ 30'02	
morning rise	13551 Sep 02 17:24	10° ♁ 45'44		desc. node	13552 Aug 17 22:43	21° ♁ 56'56	
direct	13551 Sep 09 09:33	8° ♁ 26'04		direct	13552 Aug 22 03:37	20° ♁ 55'25	
morning max el	13551 Sep 23 13:26	16° ♁ 25'02	27°58'30	morning max el	13552 Sep 04 23:00	28° ♁ 55'29	27°37'53
	13551 Oct 04 18:24	0° ♁			13552 Sep 06 00:08	0° ♁	
	13551 Oct 22 19:20	0° ♁			13552 Sep 27 15:35	0° ♁	
asc. node	13551 Oct 26 03:04	6° ♁ 34'07		morning set	13552 Oct 09 22:56	22° ♁ 27'58	
morning set	13551 Oct 27 06:00	8° ♁ 51'38		asc. node	13552 Oct 11 23:43	26° ♁ 33'35	
max. Earth dist.	13551 Nov 01 18:40	20° ♁ 36'48	1.31631 AU		13552 Oct 13 15:48	0° ♁	
				max. Earth dist.	13552 Oct 14 17:53	2° ♁ 16'26	1.32589 AU
superior conj	13551 Nov 03 15:56	24° ♁ 45'27	1°13'38				
minimum elong	13551 Nov 03 13:43	24° ♁ 33'09	1°14'06	superior conj	13552 Oct 17 22:13	9° ♁ 03'29	0°54'02
	13551 Nov 06 00:47	0° ♁		minimum elong	13552 Oct 17 20:01	8° ♁ 51'41	0°54'13
evening rise	13551 Nov 10 09:27	9° ♁ 34'12		evening rise	13552 Oct 24 20:37	24° ♁ 05'56	
	13551 Nov 20 17:21	0° ♁			13552 Oct 27 15:47	0° ♁	
desc. node	13551 Nov 27 21:50	11° ♁ 21'16		desc. node	13552 Nov 13 19:02	28° ♁ 12'06	
evening max el	13551 Dec 06 02:13	21° ♁ 01'37	24°43'26		13552 Nov 15 10:30	0° ♁	
retrograde	13551 Dec 19 20:13	27° ♁ 53'38		evening max el	13552 Nov 16 12:06	1° ♁ 04'18	23°01'53
evening set	13551 Dec 25 06:13	26° ♁ 48'40		retrograde	13552 Nov 29 16:43	7° ♁ 37'30	
min. Earth dist.	13551 Dec 30 14:02	24° ♁ 01'51	0.56291 AU	evening set	13552 Dec 03 19:22	7° ♁ 00'46	
inferior conj	13552 Jan 02 01:26	22° ♁ 27'48	-5°24'22	min. Earth dist.	13552 Dec 10 21:18	3° ♁ 44'39	0.54986 AU
minimum elong	13552 Jan 02 09:01	22° ♁ 15'46	5°22'01	inferior conj	13552 Dec 12 04:24	3° ♁ 00'07	-5°56'42
morning rise	13552 Jan 10 13:55	18° ♁ 22'48		minimum elong	13552 Dec 12 05:10	2° ♁ 59'01	5°55'38
direct	13552 Jan 12 21:56	18° ♁ 07'49			13552 Dec 18 01:45	30° ♁	
asc. node	13552 Jan 22 02:35	22° ♁ 19'23		morning rise	13552 Dec 20 16:28	29° ♁ 10'43	
morning max el	13552 Jan 22 15:29	22° ♁ 49'47	19°30'26	direct	13552 Dec 23 16:06	28° ♁ 49'49	
	13552 Jan 28 10:56	0° ♁			13552 Dec 28 22:51	0° ♁	
morning set	13552 Feb 08 20:28	20° ♁ 39'40		morning max el	13553 Jan 03 23:03	4° ♁ 13'19	20°49'38
	13552 Feb 13 11:52	0° ♁		asc. node	13553 Jan 07 23:51	8° ♁ 43'23	
					13553 Jan 20 13:41	0° ♁	
superior conj	13552 Feb 16 21:20	6° ♁ 43'47	0°55'04	morning set	13553 Jan 23 04:26	5° ♁ 20'41	
minimum elong	13552 Feb 17 00:03	6° ♁ 57'05	0°55'10				
max. Earth dist.	13552 Feb 23 07:41	18° ♁ 56'00	1.37919 AU	superior conj	13553 Jan 30 14:20	20° ♁ 44'45	1°15'47
desc. node	13552 Feb 23 22:28	20° ♁ 03'34		minimum elong	13553 Jan 30 16:54	20° ♁ 57'50	1°16'13
evening rise	13552 Feb 27 00:52	25° ♁ 36'26			13553 Feb 04 05:08	0° ♁	
	13552 Feb 29 13:40	0° ♁		max. Earth dist.	13553 Feb 04 16:27	0° ♁ 55'10	1.35776 AU
	13552 Mar 20 02:40	0° ♁		evening rise	13553 Feb 08 14:32	8° ♁ 22'06	
evening max el	13552 Apr 02 11:07	16° ♁ 03'11	25°06'06	desc. node	13553 Feb 09 19:01	10° ♁ 33'07	
retrograde	13552 Apr 14 10:47	23° ♁ 00'48			13553 Feb 21 06:13	0° ♁	
asc. node	13552 Apr 18 23:08	21° ♁ 33'20		evening max el	13553 Mar 16 00:43	29° ♁ 52'58	26°14'18
evening set	13552 Apr 20 05:10	20° ♁ 36'26			13553 Mar 16 03:36	0° ♁	
min. Earth dist.	13552 Apr 24 15:03	15° ♁ 41'18	0.68066 AU	retrograde	13553 Mar 28 20:16	7° ♁ 11'03	
inferior conj	13552 Apr 25 20:11	14° ♁ 05'54	1°59'25	evening set	13553 Apr 04 01:39	4° ♁ 39'59	
minimum elong	13552 Apr 25 18:02	14° ♁ 12'56	1°58'08	asc. node	13553 Apr 05 20:35	3° ♁ 00'07	
morning rise	13552 May 01 07:12	8° ♁ 10'57		min. Earth dist.	13553 Apr 08 05:08	0° ♁ 20'04	0.66971 AU
direct	13552 May 04 22:20	6° ♁ 55'12			13553 Apr 08 11:44	30° ♁	
morning max el	13552 May 12 00:46	10° ♁ 49'15	19°23'21	inferior conj	13553 Apr 09 22:46	28° ♁ 12'01	1°15'09
desc. node	13552 May 22 00:33	23° ♁ 28'05		minimum elong	13553 Apr 09 21:04	28° ♁ 17'17	1°14'08

morning rise	13553 Apr 15 17:20	22° Υ 27'35		direct	13554 Apr 02 17:53	5° Υ 54'19	
direct	13553 Apr 18 21:31	21° Υ 30'35		morning max el	13554 Apr 09 02:09	9° Υ 13'05	18°02'17
morning max el	13553 Apr 25 10:53	25° Υ 00'39	18°34'28		13554 Apr 23 14:37	0° \mathcal{B}	
	13553 Apr 29 18:20	0° \mathcal{B}		desc. node	13554 Apr 25 18:00	3° \mathcal{B} 29'16	
desc. node	13553 May 08 21:19	13° \mathcal{B} 19'26		morning set	13554 Apr 27 09:25	6° \mathcal{B} 10'06	
morning set	13553 May 16 13:13	25° \mathcal{B} 18'21					
	13553 May 19 12:59	0° Π		superior conj	13554 May 12 00:27	29° \mathcal{B} 39'10	-1°45'31
max. Earth dist.	13553 Jun 01 04:38	19° Π 46'46	1.45802 AU	minimum elong	13554 May 11 15:19	29° \mathcal{B} 03'14	1°45'31
					13554 May 12 05:44	0° Π	
superior conj	13553 Jun 01 14:04	20° Π 23'38	-2°08'45	max. Earth dist.	13554 May 15 00:35	4° Π 22'21	1.45694 AU
minimum elong	13553 Jun 01 08:49	20° Π 03'05	2°09'34	evening rise	13554 May 28 02:51	24° Π 41'12	
	13553 Jun 07 17:23	0° \mathcal{E}			13554 May 31 13:42	0° \mathcal{E}	
evening rise	13553 Jun 17 05:35	15° \mathcal{E} 00'31		greatest brilliancy	13554 Jun 10 05:21	14° \mathcal{E} 38'15	-0.7m
greatest brilliancy	13553 Jun 25 06:46	27° \mathcal{E} 45'16	-0.8m	asc. node	13554 Jun 19 15:35	27° \mathcal{E} 30'58	
	13553 Jun 26 17:18	0° Ω			13554 Jun 21 22:03	0° Ω	
asc. node	13553 Jul 02 18:38	9° Ω 02'59		evening max el	13554 Jun 21 23:27	0° Ω 03'31	19°28'37
evening max el	13553 Jul 08 15:42	16° Ω 16'48	18°42'59	retrograde	13554 Jun 29 03:32	4° Ω 04'55	
retrograde	13553 Jul 15 05:56	19° Ω 52'17		evening set	13554 Jul 02 19:33	2° Ω 46'41	
evening set	13553 Jul 18 12:43	18° Ω 50'38			13554 Jul 05 17:27	30° \mathcal{R} \mathcal{E}	
inferior conj	13553 Jul 24 03:20	13° Ω 10'59	2°50'43	inferior conj	13554 Jul 08 04:34	26° \mathcal{E} 53'20	3°08'00
minimum elong	13553 Jul 24 05:12	13° Ω 05'11	2°49'33	minimum elong	13554 Jul 08 05:29	26° \mathcal{E} 50'21	3°06'57
min. Earth dist.	13553 Jul 26 00:31	10° Ω 51'10	0.65824 AU	min. Earth dist.	13554 Jul 09 11:19	25° \mathcal{E} 11'49	0.67294 AU
morning rise	13553 Jul 29 20:47	6° Ω 47'16		morning rise	13554 Jul 13 14:53	20° \mathcal{E} 29'12	
desc. node	13553 Aug 04 20:11	4° Ω 07'40		direct	13554 Jul 19 14:07	17° \mathcal{E} 52'40	
direct	13553 Aug 05 05:31	4° Ω 07'07		desc. node	13554 Jul 22 17:35	18° \mathcal{E} 29'20	
morning max el	13553 Aug 18 10:16	11° Ω 55'56	26°46'08	morning max el	13554 Jul 31 21:08	25° \mathcal{E} 14'38	25°32'00
	13553 Sep 01 21:09	0° \mathcal{M}			13554 Aug 05 04:55	0° Ω	
	13553 Sep 20 05:51	0° \mathcal{E}			13554 Aug 26 08:51	0° \mathcal{M}	
morning set	13553 Sep 23 04:59	5° \mathcal{E} 32'20		morning set	13554 Sep 05 20:25	17° \mathcal{M} 55'47	
max. Earth dist.	13553 Sep 27 07:39	13° \mathcal{E} 33'46	1.34069 AU	max. Earth dist.	13554 Sep 09 11:27	24° \mathcal{M} 37'56	1.36024 AU
asc. node	13553 Sep 28 20:20	16° \mathcal{E} 38'35			13554 Sep 12 06:47	0° \mathcal{E}	
superior conj	13553 Oct 01 22:34	23° \mathcal{E} 01'11	0°28'57	superior conj	13554 Sep 15 14:13	6° \mathcal{E} 31'47	-0°01'04
minimum elong	13553 Oct 01 21:05	22° \mathcal{E} 53'30	0°28'59	minimum elong	13554 Sep 15 14:16	6° \mathcal{E} 32'04	0°01'02
	13553 Oct 05 06:00	0° \mathcal{M}		behind sun begin	13554 Sep 15 08:01	6° \mathcal{E} 00'46	
evening rise	13553 Oct 09 06:35	8° \mathcal{M} 32'05		behind sun end	13554 Sep 15 20:32	7° \mathcal{E} 03'27	
	13553 Oct 20 12:57	0° \mathcal{X}		asc. node	13554 Sep 15 16:55	6° \mathcal{E} 45'19	
evening max el	13553 Oct 29 02:51	11° \mathcal{X} 12'48	21°23'53	evening rise	13554 Sep 23 13:16	22° \mathcal{E} 47'02	
desc. node	13553 Oct 31 16:21	13° \mathcal{X} 29'00			13554 Sep 27 03:13	0° \mathcal{M}	
retrograde	13553 Nov 10 04:40	17° \mathcal{X} 12'42		evening max el	13554 Oct 11 06:25	21° \mathcal{M} 59'09	20°02'08
evening set	13553 Nov 12 23:17	16° \mathcal{X} 54'56		desc. node	13554 Oct 18 13:45	26° \mathcal{M} 44'10	
inferior conj	13553 Nov 21 20:27	13° \mathcal{X} 01'27	-5°31'56	retrograde	13554 Oct 21 17:54	27° \mathcal{M} 12'11	
minimum elong	13553 Nov 21 12:45	13° \mathcal{X} 12'17	5°29'42	evening set	13554 Oct 23 17:55	27° \mathcal{M} 01'39	
min. Earth dist.	13553 Nov 22 03:21	12° \mathcal{X} 51'46	0.54494 AU	inferior conj	13554 Nov 01 15:35	23° \mathcal{M} 02'58	-4°12'06
morning rise	13553 Nov 30 02:57	9° \mathcal{X} 12'18		minimum elong	13554 Nov 01 05:40	23° \mathcal{M} 17'54	4°08'18
direct	13553 Dec 03 23:52	8° \mathcal{X} 39'56		min. Earth dist.	13554 Nov 03 11:19	21° \mathcal{M} 57'01	0.54950 AU
morning max el	13553 Dec 16 17:05	14° \mathcal{X} 46'29	22°28'57	morning rise	13554 Nov 09 16:14	18° \mathcal{M} 53'34	
asc. node	13553 Dec 25 21:02	26° \mathcal{X} 12'42		direct	13554 Nov 14 11:17	18° \mathcal{M} 03'27	
	13553 Dec 28 05:30	0° \mathcal{Z}		morning max el	13554 Nov 28 03:22	24° \mathcal{M} 48'13	24°17'54
morning set	13554 Jan 07 15:24	20° \mathcal{Z} 06'55			13554 Dec 02 22:25	0° \mathcal{X}	
	13554 Jan 12 06:12	0° \approx		asc. node	13554 Dec 12 18:07	14° \mathcal{X} 30'54	
					13554 Dec 20 20:07	0° \mathcal{Z}	
superior conj	13554 Jan 14 15:47	5° \approx 07'54	1°29'34	morning set	13554 Dec 23 03:19	4° \mathcal{Z} 51'36	
minimum elong	13554 Jan 14 17:34	5° \approx 17'22	1°30'20				
max. Earth dist.	13554 Jan 18 07:25	12° \approx 46'36	1.33943 AU	superior conj	13554 Dec 29 22:47	19° \mathcal{Z} 43'42	1°36'48
evening rise	13554 Jan 22 18:48	21° \approx 44'10		minimum elong	13554 Dec 29 23:31	19° \mathcal{Z} 47'41	1°37'48
	13554 Jan 27 03:56	0° \mathcal{H}		max. Earth dist.	13555 Jan 01 06:04	24° \mathcal{Z} 43'34	1.32538 AU
desc. node	13554 Jan 27 15:39	0° \mathcal{H} 53'19			13555 Jan 03 17:36	0° \approx	
	13554 Feb 15 01:37	0° Υ		evening rise	13555 Jan 06 10:10	5° \approx 33'00	
evening max el	13554 Feb 26 14:16	13° Υ 31'32	27°05'07	desc. node	13555 Jan 14 12:20	20° \approx 58'21	
retrograde	13554 Mar 12 00:04	20° Υ 58'54			13555 Jan 19 19:15	0° \mathcal{H}	
evening set	13554 Mar 18 14:32	18° Υ 26'42		evening max el	13555 Feb 09 02:40	26° \mathcal{H} 47'38	27°31'32
min. Earth dist.	13554 Mar 22 12:52	14° Υ 40'01	0.65477 AU		13555 Feb 12 19:33	0° Υ	
asc. node	13554 Mar 23 18:03	13° Υ 17'57		retrograde	13555 Feb 22 21:07	4° Υ 14'24	
inferior conj	13554 Mar 24 18:45	12° Υ 07'32	0°19'40	evening set	13555 Mar 01 17:28	1° Υ 48'12	
minimum elong	13554 Mar 24 18:13	12° Υ 09'04	0°19'20		13555 Mar 03 22:56	30° \mathcal{R} \mathcal{H}	
morning rise	13554 Mar 30 23:28	6° Υ 35'28		min. Earth dist.	13555 Mar 05 12:23	28° \mathcal{H} 31'17	0.63642 AU

inferior conj	13555 Mar 08 05:23	25° K 45'14	-0°47'17	inferior conj	13556 Feb 19 03:25	8° K 56'50	-2°04'35
minimum elong	13555 Mar 08 06:53	25° K 41'22	0°46'28	minimum elong	13556 Feb 19 07:47	8° K 46'54	2°02'20
asc. node	13555 Mar 10 15:33	23° K 22'39		asc. node	13556 Feb 25 13:01	4° K 17'19	
morning rise	13555 Mar 14 22:39	20° K 27'53		morning rise	13556 Feb 26 10:56	3° K 57'10	
direct	13555 Mar 17 08:47	19° K 59'01		direct	13556 Feb 28 14:55	3° K 36'53	
morning max el	13555 Mar 23 19:47	23° K 17'49	17°47'18	morning max el	13556 Mar 06 12:36	7° K 05'59	17°50'16
	13555 Mar 29 04:45	0° Y			13556 Mar 21 09:19	0° Y	
morning set	13555 Apr 09 08:38	18° Y 19'29		morning set	13556 Mar 22 05:08	1° Y 28'53	
desc. node	13555 Apr 12 14:33	23° Y 51'39		desc. node	13556 Mar 29 11:03	14° Y 22'20	
	13555 Apr 16 05:54	0° B					
superior conj	13555 Apr 22 03:09	9° B 43'13	-1°09'28	superior conj	13556 Apr 02 05:37	20° Y 53'47	-0°29'25
minimum elong	13555 Apr 21 20:10	9° B 14'44	1°09'07	minimum elong	13556 Apr 02 02:53	20° Y 42'05	0°29'16
max. Earth dist.	13555 Apr 27 19:10	18° B 49'38	1.44858 AU	max. Earth dist.	13556 Apr 07 15:55	0° B	
	13555 May 04 22:31	0° II			13556 Apr 09 10:46	2° B 55'22	1.43388 AU
evening rise	13555 May 07 13:58	4° II 04'03		evening rise	13556 Apr 16 07:08	13° B 50'15	
	13555 May 25 01:05	0° E			13556 Apr 26 22:40	0° II	
evening max el	13555 Jun 05 01:32	13° E 52'29	20°29'17	evening max el	13556 May 17 22:00	27° II 41'46	21°41'41
asc. node	13555 Jun 06 12:37	15° E 15'25			13556 May 20 10:13	0° E	
retrograde	13555 Jun 13 02:26	18° E 30'03		asc. node	13556 May 23 09:45	2° E 01'53	
evening set	13555 Jun 17 04:27	16° E 54'58		retrograde	13556 May 27 00:41	3° E 01'53	
inferior conj	13555 Jun 22 10:47	10° E 49'20	3°12'16	evening set	13556 May 31 13:29	1° E 10'24	
minimum elong	13555 Jun 22 10:39	10° E 49'46	3°11'14		13556 Jun 01 19:28	30° R II	
min. Earth dist.	13555 Jun 23 03:32	9° E 51'45	0.68305 AU	inferior conj	13556 Jun 05 19:39	24° II 54'05	3°05'11
morning rise	13555 Jun 27 16:33	4° E 28'35		minimum elong	13556 Jun 05 18:36	24° II 57'45	3°04'04
direct	13555 Jul 03 04:13	2° E 03'29		min. Earth dist.	13556 Jun 05 23:03	24° II 42'16	0.68844 AU
desc. node	13555 Jul 09 14:52	4° E 36'38		morning rise	13556 Jun 10 23:32	18° II 38'56	
morning max el	13555 Jul 14 07:18	8° E 43'20	24°05'28	direct	13556 Jun 15 22:32	16° II 30'53	
	13555 Jul 31 00:57	0° O		desc. node	13556 Jun 25 12:01	22° II 02'48	
morning set	13555 Aug 18 16:47	29° O 27'47		morning max el	13556 Jun 25 18:39	22° II 19'20	22°35'58
	13555 Aug 19 00:16	0° np			13556 Jul 02 10:46	0° E	
max. Earth dist.	13555 Aug 22 09:30	5° np 55'40	1.38303 AU		13556 Jul 23 08:09	0° O	
				morning set	13556 Jul 29 13:35	9° O 56'34	
superior conj	13555 Aug 29 17:45	19° np 27'36	-0°34'46	max. Earth dist.	13556 Aug 03 08:48	17° O 55'38	1.40653 AU
minimum elong	13555 Aug 29 20:11	19° np 39'10	0°34'37		13556 Aug 10 07:09	0° np	
asc. node	13555 Sep 02 13:27	26° np 50'22		superior conj	13556 Aug 11 04:56	1° np 37'45	-1°09'52
	13555 Sep 04 04:05	0° A		minimum elong	13556 Aug 11 10:10	2° np 01'23	1°09'40
evening rise	13555 Sep 07 14:07	6° A 44'56		asc. node	13556 Aug 19 10:00	16° np 49'40	
	13555 Sep 20 21:55	0° M		evening rise	13556 Aug 21 05:50	20° np 16'32	
evening max el	13555 Sep 24 00:06	3° M 34'58	19°01'46		13556 Aug 26 11:17	0° A	
retrograde	13555 Oct 02 20:37	8° M 01'17		evening max el	13556 Sep 06 04:40	15° A 54'38	18°23'02
evening set	13555 Oct 04 17:21	7° M 50'17		retrograde	13556 Sep 13 18:42	19° A 45'03	
desc. node	13555 Oct 05 11:13	7° M 40'00		evening set	13556 Sep 15 20:05	19° A 28'49	
inferior conj	13555 Oct 13 02:38	3° M 35'18	-2°24'45	desc. node	13556 Sep 21 08:44	16° A 31'43	
minimum elong	13555 Oct 12 20:29	3° M 45'55	2°21'53	inferior conj	13556 Sep 23 11:14	14° A 52'49	-0°39'48
min. Earth dist.	13555 Oct 15 23:25	1° M 36'58	0.56281 AU	minimum elong	13556 Sep 23 09:43	14° A 55'52	0°39'02
	13555 Oct 18 13:51	30° R A		min. Earth dist.	13556 Sep 26 18:00	12° A 14'29	0.58226 AU
morning rise	13555 Oct 20 20:43	28° A 51'38		morning rise	13556 Sep 30 19:54	9° A 32'05	
direct	13555 Oct 26 11:18	27° A 37'56		direct	13556 Oct 07 01:06	7° A 51'27	
	13555 Nov 03 08:05	0° M		morning max el	13556 Oct 21 08:38	15° A 28'39	27°14'35
morning max el	13555 Nov 09 14:36	4° M 52'20	25°58'57		13556 Nov 02 03:48	0° M	
	13555 Nov 27 17:55	0° X		asc. node	13556 Nov 15 11:54	22° M 47'21	
asc. node	13555 Nov 29 15:04	3° X 25'46			13556 Nov 19 01:50	0° X	
morning set	13555 Dec 07 14:27	19° X 30'06		morning set	13556 Nov 20 23:06	3° X 57'54	
	13555 Dec 12 09:17	0° Z					
superior conj	13555 Dec 14 09:03	4° Z 25'36	1°37'52	superior conj	13556 Nov 27 20:38	19° X 07'44	1°33'00
minimum elong	13555 Dec 14 08:41	4° Z 23'35	1°38'54	minimum elong	13556 Nov 27 19:18	19° X 00'20	1°33'54
max. Earth dist.	13555 Dec 15 11:03	6° Z 49'47	1.31623 AU	max. Earth dist.	13556 Nov 27 19:19	19° X 00'26	1.31213 AU
evening rise	13555 Dec 21 09:48	19° Z 41'23			13556 Dec 02 18:15	0° Z	
	13555 Dec 26 12:47	0° \approx		evening rise	13556 Dec 04 15:15	4° Z 03'01	
desc. node	13556 Jan 01 09:07	10° \approx 41'49		desc. node	13556 Dec 18 06:03	29° Z 55'12	
	13556 Jan 14 02:41	0° K			13556 Dec 18 07:13	0° \approx	
evening max el	13556 Jan 22 11:48	9° K 28'38	27°27'10	evening max el	13557 Jan 03 14:50	21° \approx 22'23	26°48'14
retrograde	13556 Feb 05 10:10	16° K 48'07		retrograde	13557 Jan 17 13:48	28° \approx 32'16	
evening set	13556 Feb 12 07:35	14° K 35'45		evening set	13557 Jan 24 05:23	26° \approx 41'19	
				min. Earth dist.	13557 Jan 28 04:48	24° \approx 03'07	0.59377 AU
min. Earth dist.	13556 Feb 16 01:58	11° K 42'55	0.61560 AU	inferior conj	13557 Jan 31 09:14	21° \approx 32'35	-3°28'02

minimum elong	13557 Jan 31 16:41	21°  17'52	3°24'42	min. Earth dist.	13558 Jan 09 21:51	5°  21'12	0.57309 AU
morning rise	13557 Feb 08 07:04	16°  53'46		inferior conj	13558 Jan 12 19:28	3°  22'17	-4°47'31
direct	13557 Feb 10 08:02	16°  38'29		minimum elong	13558 Jan 13 04:17	3°  07'12	4°44'21
asc. node	13557 Feb 11 10:26	16°  43'05			13558 Jan 18 11:20	30° 	
morning max el	13557 Feb 18 01:07	20°  28'00	18°12'27	morning rise	13558 Jan 21 04:33	29°  05'50	
	13557 Feb 25 04:12	0° 		direct	13558 Jan 23 07:39	28°  52'02	
morning set	13557 Mar 05 16:58	15°  20'21			13558 Jan 27 21:24	0° 	
	13557 Mar 13 13:38	0° 		asc. node	13558 Jan 29 07:49	0°  49'56	
				morning max el	13558 Feb 01 05:21	3°  12'07	18°55'36
superior conj	13557 Mar 15 07:14	3°  08'41	0°08'07	morning set	13558 Feb 17 15:16	29°  38'32	
minimum elong	13557 Mar 15 07:51	3°  11'29	0°08'04		13558 Feb 17 19:38	0° 	
behind sun begin	13557 Mar 15 01:18	2°  41'57					
behind sun end	13557 Mar 15 14:24	3°  40'57		superior conj	13558 Feb 26 03:39	16°  14'33	0°39'53
desc. node	13557 Mar 16 07:33	4°  57'48		minimum elong	13558 Feb 26 06:01	16°  25'45	0°39'52
max. Earth dist.	13557 Mar 22 22:05	16°  26'37	1.41430 AU	desc. node	13558 Mar 03 04:03	25°  13'45	
evening rise	13557 Mar 27 17:50	24°  25'50		max. Earth dist.	13558 Mar 05 05:02	29°  13'21	1.39208 AU
	13557 Mar 31 05:19	0° 			13558 Mar 05 15:35	0° 	
	13557 Apr 20 19:47	0° 		evening rise	13558 Mar 09 01:40	5°  56'13	
evening max el	13557 Apr 30 14:09	11°  32'31	23°01'08		13558 Mar 24 06:25	0° 	
asc. node	13557 May 10 06:59	17°  34'30		evening max el	13558 Apr 13 03:57	25°  24'20	24°21'48
retrograde	13557 May 10 20:57	17°  36'02			13558 Apr 18 15:48	0° 	
evening set	13557 May 15 21:06	15°  29'37		retrograde	13558 Apr 24 13:57	2°  05'51	
inferior conj	13557 May 21 05:17	9°  04'49	2°47'42	asc. node	13558 Apr 27 04:19	1°  35'53	
minimum elong	13557 May 21 03:32	9°  10'54	2°46'27		13558 Apr 29 19:29	30° 	
min. Earth dist.	13557 May 20 19:47	9°  37'42	0.68906 AU	evening set	13558 Apr 30 01:42	29°  46'57	
morning rise	13557 May 26 09:52	2°  56'37		min. Earth dist.	13558 May 04 15:42	24°  31'13	0.68500 AU
direct	13557 May 30 20:02	1°  08'41		inferior conj	13558 May 05 13:44	23°  17'03	2°20'03
morning max el	13557 Jun 08 10:29	6°  05'59	21°11'44	minimum elong	13558 May 05 11:37	23°  24'13	2°18'44
desc. node	13557 Jun 12 09:04	10°  27'26		morning rise	13558 May 10 21:39	17°  16'51	
	13557 Jun 26 15:57	0° 		direct	13558 May 14 19:24	15°  49'45	
morning set	13557 Jul 09 09:41	19°  21'21		morning max el	13558 May 22 09:09	20°  03'50	19°58'44
	13557 Jul 16 01:42	0° 		desc. node	13558 May 30 06:00	29°  34'10	
max. Earth dist.	13557 Jul 16 13:51	0°  49'26	1.42791 AU		13558 May 30 13:34	0° 	
				morning set	13558 Jun 18 12:51	28°  04'35	
superior conj	13557 Jul 23 19:21	12°  02'50	-1°42'17		13558 Jun 19 18:50	0° 	
minimum elong	13557 Jul 24 02:32	13°  02'23	1°42'21	max. Earth dist.	13558 Jun 29 01:08	14°  29'35	1.44470 AU
	13557 Aug 02 13:37	0° 					
evening rise	13557 Aug 04 08:21	3°  11'52		superior conj	13558 Jul 04 10:06	23°  20'33	-2°05'51
asc. node	13557 Aug 06 06:36	6°  19'30		minimum elong	13558 Jul 04 15:46	23°  30'34	2°06'33
evening max el	13557 Aug 20 16:01	28°  48'58	18°04'40		13558 Jul 08 14:43	0° 	
	13557 Aug 21 23:22	0° 		evening rise	13558 Jul 17 16:40	15°  01'12	
retrograde	13557 Aug 27 10:35	2°  17'23		asc. node	13558 Jul 24 03:18	26°  01'50	
evening set	13557 Aug 29 19:22	1°  52'06			13558 Jul 26 09:55	0° 	
	13557 Sep 02 03:23	30° 		evening max el	13558 Aug 04 06:14	12°  08'12	18°05'26
inferior conj	13557 Sep 05 16:41	26°  55'45	0°46'36	retrograde	13558 Aug 10 15:46	15°  08'38	
minimum elong	13557 Sep 05 18:06	26°  52'26	0°45'55	evening set	13558 Aug 13 08:49	14°  01'01	
desc. node	13557 Sep 08 06:16	24°  31'00		inferior conj	13558 Aug 19 15:19	9°  16'32	1°50'32
min. Earth dist.	13557 Sep 08 21:19	23°  56'54	0.60472 AU	minimum elong	13558 Aug 19 17:47	9°  29'58	1°49'19
morning rise	13557 Sep 12 13:47	21°  04'43		min. Earth dist.	13558 Aug 22 10:20	6°  38'45	0.62734 AU
direct	13557 Sep 19 03:37	18°  07'50		morning rise	13558 Aug 26 00:35	3°  25'46	
morning max el	13557 Oct 03 10:30	26°  51'45	27°53'46	desc. node	13558 Aug 26 03:48	3°  19'55	
	13557 Oct 06 09:58	0° 		direct	13558 Sep 01 16:48	0°  58'25	
	13557 Oct 26 19:16	0° 		morning max el	13558 Sep 15 18:03	9°  00'12	27°53'59
asc. node	13557 Nov 02 08:38	12°  08'28			13558 Oct 02 00:55	0° 	
morning set	13557 Nov 05 03:26	18°  10'24			13558 Oct 19 01:02	0° 	
	13557 Nov 10 15:05	0° 		morning set	13558 Oct 20 01:17	2°  02'14	
max. Earth dist.	13557 Nov 11 03:04	1°  06'11	1.31324 AU	asc. node	13558 Oct 20 05:19	2°  22'42	
				max. Earth dist.	13558 Oct 25 06:20	12°  57'09	1.31966 AU
superior conj	13557 Nov 12 07:40	3°  44'59	1°22'21				
minimum elong	13557 Nov 12 05:39	3°  33'48	1°23'00	superior conj	13558 Oct 27 16:19	18°  12'06	1°06'00
evening rise	13557 Nov 19 00:24	18°  32'30		minimum elong	13558 Oct 27 14:02	17°  59'37	1°06'21
	13557 Nov 24 13:10	0° 			13558 Nov 02 01:15	0° 	
desc. node	13557 Dec 05 03:05	18°  26'39		evening rise	13558 Nov 03 11:22	3°  05'01	
	13557 Dec 14 01:08	0° 			13558 Nov 17 18:43	0° 	
evening max el	13557 Dec 16 09:25	2°  22'33	25°36'16	desc. node	13558 Nov 22 00:15	6°  00'32	
retrograde	13557 Dec 30 06:39	9°  22'35		evening max el	13558 Nov 27 20:51	12°  39'13	24°00'59
evening set	13558 Jan 05 06:41	7°  59'36		retrograde	13558 Dec 11 11:02	19°  25'23	

evening set	13558 Dec 16 08:23	18° ♁ 33'10		inferior conj	13559 Dec 04 05:56	24° ♁ 38'05	-5°53'45
min. Earth dist.	13558 Dec 22 08:03	15° ♁ 35'59	0.55642 AU	minimum elong	13559 Dec 04 02:46	24° ♁ 42'33	5°52'32
inferior conj	13558 Dec 24 09:03	14° ♁ 22'02	-5°44'08	morning rise	13559 Dec 12 15:50	20° ♁ 50'46	
minimum elong	13558 Dec 24 14:25	14° ♁ 13'54	5°42'29	direct	13559 Dec 16 00:14	20° ♁ 25'33	
morning rise	13559 Jan 01 22:20	10° ♁ 24'53		morning max el	13559 Dec 27 22:44	26° ♁ 08'13	21°29'45
direct	13559 Jan 04 11:39	10° ♁ 08'14			13559 Dec 31 12:22	0° ♁	
morning max el	13559 Jan 14 21:21	15° ♁ 07'44	20°01'23	asc. node	13560 Jan 03 02:21	3° ♁ 22'24	
asc. node	13559 Jan 16 05:07	16° ♁ 28'49		morning set	13560 Jan 17 06:00	28° ♁ 56'58	
	13559 Jan 25 12:13	0° ♁			13560 Jan 17 18:02	0° ♁	
morning set	13559 Feb 01 20:31	14° ♁ 13'27					
				superior conj	13560 Jan 24 11:16	14° ♁ 09'35	1°22'27
superior conj	13559 Feb 09 14:19	29° ♁ 58'39	1°04'42	minimum elong	13560 Jan 24 13:32	14° ♁ 21'27	1°23'01
minimum elong	13559 Feb 09 17:04	0° ♁ 12'23	1°04'56	max. Earth dist.	13560 Jan 28 22:23	23° ♁ 16'22	1.34952 AU
	13559 Feb 09 14:35	0° ♁			13560 Feb 01 09:02	0° ♁	
max. Earth dist.	13559 Feb 15 11:23	11° ♁ 23'18	1.36975 AU	evening rise	13560 Feb 02 01:44	1° ♁ 19'22	
desc. node	13559 Feb 18 00:36	16° ♁ 06'48		desc. node	13560 Feb 04 21:12	6° ♁ 32'46	
evening rise	13559 Feb 19 05:24	18° ♁ 17'13			13560 Feb 19 01:17	0° ♁	
	13559 Feb 26 00:09	0° ♁		evening max el	13560 Mar 08 07:18	23° ♁ 03'12	26°38'37
	13559 Mar 18 12:18	0° ♁			13560 Mar 18 13:21	0° ♁	
evening max el	13559 Mar 26 17:26	9° ♁ 16'27	25°36'47	retrograde	13560 Mar 21 09:44	0° ♁ 26'14	
retrograde	13559 Apr 08 02:35	16° ♁ 24'55			13560 Mar 24 02:39	30° ♁	
evening set	13559 Apr 14 01:39	13° ♁ 57'12		evening set	13560 Mar 27 19:09	27° ♁ 54'16	
asc. node	13559 Apr 14 01:44	13° ♁ 57'01		asc. node	13560 Mar 30 23:12	24° ♁ 49'07	
min. Earth dist.	13559 Apr 18 08:38	9° ♁ 16'58	0.67647 AU	min. Earth dist.	13560 Mar 31 20:24	23° ♁ 48'30	0.66377 AU
inferior conj	13559 Apr 19 19:05	7° ♁ 26'45	1°42'01	inferior conj	13560 Apr 02 19:12	21° ♁ 29'13	0°53'03
minimum elong	13559 Apr 19 17:03	7° ♁ 33'17	1°40'48	minimum elong	13560 Apr 02 17:53	21° ♁ 33'08	0°52'16
morning rise	13559 Apr 25 08:58	1° ♁ 35'54		morning rise	13560 Apr 08 17:43	15° ♁ 49'28	
direct	13559 Apr 28 19:15	0° ♁ 28'30		direct	13560 Apr 11 17:37	14° ♁ 59'30	
morning max el	13559 May 05 15:18	4° ♁ 11'09	19°00'29	morning max el	13560 Apr 18 03:49	18° ♁ 23'23	18°18'40
desc. node	13559 May 17 02:50	19° ♁ 11'41			13560 Apr 27 01:40	0° ♁	
greatest brilliancy	13559 May 18 21:03	21° ♁ 49'45	-0.7m	desc. node	13560 May 02 23:32	9° ♁ 11'39	
	13559 May 24 05:35	0° ♁		morning set	13560 May 07 22:36	17° ♁ 05'22	
morning set	13559 May 28 18:41	7° ♁ 01'09			13560 May 16 01:58	0° ♁	
max. Earth dist.	13559 Jun 11 17:42	28° ♁ 44'04	1.45523 AU				
	13559 Jun 12 13:04	0° ♁		superior conj	13560 May 23 11:31	11° ♁ 36'32	-2°01'01
				minimum elong	13560 May 23 03:48	11° ♁ 06'23	2°01'29
superior conj	13559 Jun 14 03:38	2° ♁ 31'26	-2°13'29	max. Earth dist.	13560 May 24 13:35	13° ♁ 18'19	1.45848 AU
minimum elong	13559 Jun 14 02:49	2° ♁ 28'14	2°14'32		13560 Jun 04 06:28	0° ♁	
evening rise	13559 Jun 29 01:58	26° ♁ 24'49		evening rise	13560 Jun 08 10:55	6° ♁ 32'21	
	13559 Jul 01 06:51	0° ♁		greatest brilliancy	13560 Jun 18 20:22	22° ♁ 41'54	-0.8m
asc. node	13559 Jul 11 00:05	15° ♁ 30'33			13560 Jun 23 18:00	0° ♁	
evening max el	13559 Jul 18 20:02	25° ♁ 43'46	18°24'18	asc. node	13560 Jun 26 20:59	4° ♁ 18'54	
retrograde	13559 Jul 25 05:57	29° ♁ 09'41		evening max el	13560 Jul 01 06:40	9° ♁ 28'41	19°00'28
evening set	13559 Jul 28 07:39	28° ♁ 17'15		retrograde	13560 Jul 08 01:40	13° ♁ 13'19	
inferior conj	13559 Aug 03 03:03	22° ♁ 46'32	2°33'50	evening set	13560 Jul 11 12:23	12° ♁ 04'34	
minimum elong	13559 Aug 03 05:20	22° ♁ 39'47	2°32'36	inferior conj	13560 Jul 17 00:15	6° ♁ 19'03	2°59'43
min. Earth dist.	13559 Aug 05 08:40	20° ♁ 08'41	0.64796 AU	minimum elong	13560 Jul 17 01:44	6° ♁ 14'18	2°58'38
morning rise	13559 Aug 09 01:42	16° ♁ 25'36		min. Earth dist.	13560 Jul 18 15:15	4° ♁ 14'42	0.66507 AU
desc. node	13559 Aug 13 01:18	14° ♁ 10'26		morning rise	13560 Jul 22 14:23	29° ♁ 54'53	
direct	13559 Aug 15 14:38	13° ♁ 47'05			13560 Jul 22 12:03	30° ♁	
morning max el	13559 Aug 29 04:28	21° ♁ 44'23	27°19'05	direct	13560 Jul 28 19:33	27° ♁ 15'12	
	13559 Sep 05 09:37	0° ♁		desc. node	13560 Jul 29 22:44	27° ♁ 19'55	
	13559 Sep 25 05:38	0° ♁			13560 Aug 05 00:05	0° ♁	
morning set	13559 Oct 03 13:59	15° ♁ 25'57		morning max el	13560 Aug 10 15:33	4° ♁ 53'42	26°16'45
asc. node	13559 Oct 07 01:55	22° ♁ 24'57			13560 Aug 29 21:18	0° ♁	
max. Earth dist.	13559 Oct 08 01:31	24° ♁ 25'53	1.33153 AU	morning set	13560 Sep 15 14:17	28° ♁ 14'08	
	13559 Oct 10 17:31	0° ♁			13560 Sep 16 12:52	0° ♁	
				max. Earth dist.	13560 Sep 19 10:53	5° ♁ 35'50	1.34858 AU
superior conj	13559 Oct 11 20:22	2° ♁ 22'28	0°44'03	asc. node	13560 Sep 22 22:31	12° ♁ 31'19	
minimum elong	13559 Oct 11 18:24	2° ♁ 11'57	0°44'09				
evening rise	13559 Oct 18 22:14	17° ♁ 34'52		superior conj	13560 Sep 24 17:25	16° ♁ 10'00	0°16'48
	13559 Oct 25 00:08	0° ♁		minimum elong	13560 Sep 24 16:30	16° ♁ 05'14	0°16'49
desc. node	13559 Nov 08 21:31	22° ♁ 14'50			13560 Oct 01 08:37	0° ♁	
evening max el	13559 Nov 09 07:44	22° ♁ 40'09	22°18'55	evening rise	13560 Oct 02 07:06	1° ♁ 57'20	
retrograde	13559 Nov 22 02:50	29° ♁ 00'42			13560 Oct 18 09:33	0° ♁	
evening set	13559 Nov 25 14:51	28° ♁ 33'45		evening max el	13560 Oct 21 03:23	3° ♁ 02'02	20°46'33
min. Earth dist.	13559 Dec 03 14:37	24° ♁ 59'37	0.54666 AU	desc. node	13560 Oct 25 18:52	6° ♁ 43'18	

retrograde	13560 Nov 01 13:17	8°♄42'22		asc. node	13561 Sep 09 19:04	2°♄37'51	
evening set	13560 Nov 03 22:10	8°♄28'46		evening rise	13561 Sep 16 11:39	16°♄06'15	
inferior conj	13560 Nov 12 21:22	4°♄34'40	-5°03'27		13561 Sep 23 16:09	0°♄	
minimum elong	13560 Nov 12 11:44	4°♄48'26	5°00'21	evening max el	13561 Oct 03 13:01	14°♄08'54	19°33'39
min. Earth dist.	13560 Nov 13 20:49	4°♄01'07	0.54583 AU	desc. node	13561 Oct 12 16:16	19°♄00'36	
morning rise	13560 Nov 21 01:23	0°♄39'39		retrograde	13561 Oct 13 07:23	19°♄01'46	
direct	13560 Nov 25 08:12	0°♄00'20		evening set	13561 Oct 15 04:32	18°♄51'42	
morning max el	13560 Dec 08 12:12	6°♄23'17	23°15'01	inferior conj	13561 Oct 23 22:05	14°♄46'37	-3°27'57
asc. node	13560 Dec 19 23:28	21°♄13'54		minimum elong	13561 Oct 23 13:21	15°♄00'30	3°24'14
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morning set	13560 Dec 31 17:34	13°♄42'57		morning rise	13561 Oct 31 20:13	10°♄23'48	
				direct	13561 Nov 05 23:46	9°♄24'38	
superior conj	13561 Jan 07 15:19	28°♄38'26	1°33'25	morning max el	13561 Nov 19 22:02	16°♄22'31	25°03'04
minimum elong	13561 Jan 07 16:40	28°♄45'43	1°34'17		13561 Nov 30 21:56	0°♄	
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max. Earth dist.	13561 Jan 10 16:52	5°♄09'58	1.33294 AU	morning set	13561 Dec 16 05:24	28°♄26'21	
evening rise	13561 Jan 15 11:04	14°♄53'24			13561 Dec 16 22:46	0°♄	
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evening max el	13561 Feb 18 20:41	6°♄33'50	27°19'50	max. Earth dist.	13561 Dec 24 18:41	17°♄12'19	1.32086 AU
retrograde	13561 Mar 04 10:31	14°♄01'08		evening rise	13561 Dec 30 06:18	28°♄51'44	
evening set	13561 Mar 11 04:03	11°♄30'43			13561 Dec 30 19:37	0°♄	
min. Earth dist.	13561 Mar 15 00:46	7°♄57'18	0.64733 AU	desc. node	13562 Jan 08 14:34	16°♄44'18	
inferior conj	13561 Mar 17 11:32	5°♄17'49	-0°07'22		13562 Jan 16 16:38	0°♄	
minimum elong	13561 Mar 17 11:45	5°♄17'14	0°07'15	evening max el	13562 Feb 01 07:53	19°♄36'30	27°33'40
transit middle	13561 Mar 17 11:45	5°♄17'14	0°07'15	retrograde	13562 Feb 15 04:13	27°♄00'50	
transit begin	13561 Mar 17 09:02	5°♄24'40		evening set	13562 Feb 22 01:56	24°♄39'11	
transit end	13561 Mar 17 14:29	5°♄09'48		min. Earth dist.	13562 Feb 25 20:01	21°♄33'48	0.62781 AU
asc. node	13561 Mar 17 20:41	4°♄52'59		inferior conj	13562 Feb 28 17:13	18°♄45'45	-1°18'56
morning rise	13561 Mar 23 21:18	29°♄51'38		minimum elong	13562 Feb 28 19:52	18°♄39'19	1°17'32
	13561 Mar 23 14:13	30°♄		asc. node	13562 Mar 04 18:08	15°♄12'27	
direct	13561 Mar 26 12:07	29°♄16'00		morning rise	13562 Mar 07 16:26	13°♄35'51	
	13561 Mar 29 10:14	0°♄		direct	13562 Mar 09 23:43	13°♄11'04	
morning max el	13561 Apr 01 20:23	2°♄33'08	17°53'49	morning max el	13562 Mar 16 14:09	16°♄32'42	17°46'23
morning set	13561 Apr 19 06:49	28°♄31'54			13562 Mar 26 04:30	0°♄	
desc. node	13561 Apr 19 20:08	29°♄27'15		morning set	13562 Apr 01 15:51	11°♄09'17	
	13561 Apr 20 04:01	0°♄		desc. node	13562 Apr 06 16:41	19°♄53'56	
					13562 Apr 12 15:37	0°♄	
superior conj	13561 May 03 03:11	21°♄08'09	-1°31'15				
minimum elong	13561 May 02 18:25	20°♄33'12	1°31'01	superior conj	13562 Apr 13 15:45	1°♄40'25	-0°52'30
max. Earth dist.	13561 May 07 09:48	27°♄54'13	1.45423 AU	minimum elong	13562 Apr 13 10:32	1°♄18'48	0°52'13
	13561 May 08 17:51	0°♄		max. Earth dist.	13562 Apr 20 03:28	12°♄14'44	1.44300 AU
evening rise	13561 May 19 02:00	16°♄00'35		evening rise	13562 Apr 28 13:49	25°♄28'46	
	13561 May 28 07:04	0°♄			13562 May 01 12:39	0°♄	
greatest brilliancy	13561 Jun 02 17:27	8°♄02'37	-0.6m		13562 May 22 09:25	0°♄	
asc. node	13561 Jun 13 17:59	22°♄29'53		evening max el	13562 May 28 11:34	7°♄05'04	20°58'48
evening max el	13561 Jun 14 12:05	23°♄16'35	19°52'42	asc. node	13562 May 31 15:03	9°♄51'28	
retrograde	13561 Jun 22 00:06	27°♄32'07		retrograde	13562 Jun 05 23:03	12°♄00'41	
evening set	13561 Jun 25 20:22	26°♄06'28		evening set	13562 Jun 10 05:32	10°♄18'25	
inferior conj	13561 Jul 01 03:53	20°♄07'34	3°11'15	inferior conj	13562 Jun 15 11:28	4°♄07'45	3°10'35
minimum elong	13561 Jul 01 04:21	20°♄06'00	3°10'14	minimum elong	13562 Jun 15 10:56	4°♄09'36	3°09'31
min. Earth dist.	13561 Jul 02 04:30	18°♄44'38	0.67782 AU	min. Earth dist.	13562 Jun 15 22:25	3°♄29'46	0.68590 AU
morning rise	13561 Jul 06 11:58	13°♄44'41			13562 Jun 18 14:15	30°♄	
direct	13561 Jul 12 06:24	11°♄12'30		morning rise	13562 Jun 20 16:07	27°♄49'01	
desc. node	13561 Jul 16 20:03	12°♄29'45		direct	13562 Jun 25 22:19	25°♄30'52	
morning max el	13561 Jul 24 02:08	18°♄17'36	24°56'14	desc. node	13562 Jul 03 17:17	29°♄13'18	
	13561 Aug 02 22:42	0°♄			13562 Jul 04 14:43	0°♄	
	13561 Aug 22 22:27	0°♄		morning max el	13562 Jul 06 12:40	1°♄49'59	23°27'16
morning set	13561 Aug 28 22:10	10°♄17'01			13562 Jul 27 22:01	0°♄	
max. Earth dist.	13561 Sep 01 11:57	16°♄44'04	1.36973 AU	morning set	13562 Aug 10 09:01	21°♄23'30	
				max. Earth dist.	13562 Aug 14 09:43	28°♄16'49	1.39306 AU
superior conj	13561 Sep 08 04:22	29°♄26'51	-0°14'59		13562 Aug 15 09:19	0°♄	
minimum elong	13561 Sep 08 05:21	29°♄31'38	0°14'55				
behind sun begin	13561 Sep 08 02:50	29°♄19'17		superior conj	13562 Aug 22 01:28	12°♄04'09	-0°49'41
behind sun end	13561 Sep 08 07:52	29°♄43'59		minimum elong	13562 Aug 22 05:05	12°♄21'00	0°49'29
	13561 Sep 08 11:07	0°♄		asc. node	13562 Aug 27 15:37	22°♄40'55	


































































































































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	13562 Aug 31 10:17	0° $\underline{\Omega}$		minimum elong	13563 Aug 04 10:39	24° Ω 20'03	1°24'07
evening max el	13562 Sep 16 11:47	26° $\underline{\Omega}$ 04'22	18°42'42		13563 Aug 07 14:56	0° \mathbb{M}	
	13562 Sep 22 18:43	0° \mathbb{M}		evening rise	13563 Aug 14 19:46	13° \mathbb{M} 11'56	
retrograde	13562 Sep 24 18:19	0° \mathbb{M} 14'08		asc. node	13563 Aug 14 12:12	12° \mathbb{M} 36'59	
evening set	13562 Sep 26 16:15	0° \mathbb{M} 01'33			13563 Aug 24 07:08	0° $\underline{\Omega}$	
	13562 Sep 26 19:03	30° \mathbb{R} $\underline{\Omega}$		evening max el	13563 Aug 30 19:52	8° $\underline{\Omega}$ 40'58	18°12'55
desc. node	13562 Sep 29 13:46	28° $\underline{\Omega}$ 58'58		retrograde	13563 Sep 07 00:15	12° $\underline{\Omega}$ 20'02	
inferior conj	13562 Oct 04 18:07	25° $\underline{\Omega}$ 37'59	-1°38'41	evening set	13563 Sep 09 04:37	12° $\underline{\Omega}$ 00'25	
minimum elong	13562 Oct 04 14:03	25° $\underline{\Omega}$ 45'30	1°36'42	inferior conj	13563 Sep 16 11:58	7° $\underline{\Omega}$ 15'56	-0°00'30
min. Earth dist.	13562 Oct 07 20:55	23° $\underline{\Omega}$ 20'22	0.57045 AU	minimum elong	13563 Sep 16 11:57	7° $\underline{\Omega}$ 15'58	0°00'29
morning rise	13562 Oct 12 08:28	20° $\underline{\Omega}$ 37'47		transit middle	13563 Sep 16 11:57	7° $\underline{\Omega}$ 15'58	0°00'29
direct	13562 Oct 18 05:47	19° $\underline{\Omega}$ 12'48		transit begin	13563 Sep 16 08:31	7° $\underline{\Omega}$ 23'21	
morning max el	13562 Nov 01 12:00	26° $\underline{\Omega}$ 38'37	26°35'06	transit end	13563 Sep 16 15:23	7° $\underline{\Omega}$ 08'33	
	13562 Nov 04 17:12	0° \mathbb{M}		desc. node	13563 Sep 16 11:19	7° $\underline{\Omega}$ 17'19	
asc. node	13562 Nov 23 17:21	28° \mathbb{M} 56'40		min. Earth dist.	13563 Sep 19 19:14	4° $\underline{\Omega}$ 26'01	0.59160 AU
	13562 Nov 24 06:34	0° \mathbb{X}		morning rise	13563 Sep 23 15:52	1° $\underline{\Omega}$ 41'16	
morning set	13562 Nov 30 15:42	13° \mathbb{X} 01'16			13563 Sep 28 00:51	30° \mathbb{R} \mathbb{M}	
				direct	13563 Sep 30 01:45	29° \mathbb{M} 48'39	
superior conj	13562 Dec 07 11:03	28° \mathbb{X} 01'18	1°36'31		13563 Oct 02 03:24	0° $\underline{\Omega}$	
minimum elong	13562 Dec 07 10:16	27° \mathbb{X} 56'52	1°37'31	morning max el	13563 Oct 14 09:21	7° $\underline{\Omega}$ 34'14	27°35'55
max. Earth dist.	13562 Dec 08 01:21	29° \mathbb{X} 20'56	1.31380 AU		13563 Oct 31 08:26	0° \mathbb{M}	
	13562 Dec 08 08:22	0° \mathbb{Z}		asc. node	13563 Nov 10 14:09	18° \mathbb{M} 27'35	
evening rise	13562 Dec 14 08:39	13° \mathbb{Z} 06'35		morning set	13563 Nov 14 22:45	27° \mathbb{M} 23'27	
	13562 Dec 22 21:58	0° \approx			13563 Nov 16 04:07	0° \mathbb{X}	
desc. node	13562 Dec 26 11:24	6° \approx 16'21					
	13563 Jan 12 15:03	0° \mathbb{X}		superior conj	13563 Nov 21 22:40	12° \mathbb{X} 42'37	1°29'11
evening max el	13563 Jan 14 14:30	1° \mathbb{X} 58'03	27°14'50	minimum elong	13563 Nov 21 21:01	12° \mathbb{X} 33'22	1°30'00
retrograde	13563 Jan 28 13:44	9° \mathbb{X} 14'33		max. Earth dist.	13563 Nov 21 09:43	11° \mathbb{X} 30'17	1.31196 AU
evening set	13563 Feb 04 09:36	7° \mathbb{X} 10'10		evening rise	13563 Nov 28 15:57	27° \mathbb{X} 32'41	
min. Earth dist.	13563 Feb 08 05:03	4° \mathbb{X} 25'02	0.60630 AU		13563 Nov 29 19:36	0° \mathbb{Z}	
inferior conj	13563 Feb 11 08:47	1° \mathbb{X} 43'13	-2°39'38	desc. node	13563 Dec 13 08:23	25° \mathbb{Z} 13'41	
minimum elong	13563 Feb 11 14:31	1° \mathbb{X} 30'56	2°36'51		13563 Dec 16 11:23	0° \approx	
	13563 Feb 13 10:26	30° \mathbb{R} \approx		evening max el	13563 Dec 27 14:14	13° \approx 29'44	26°21'18
morning rise	13563 Feb 18 22:34	26° \approx 52'24		retrograde	13564 Jan 10 13:14	20° \approx 35'30	
asc. node	13563 Feb 19 15:34	26° \approx 42'33		evening set	13564 Jan 16 23:12	18° \approx 56'09	
direct	13563 Feb 21 00:39	26° \approx 34'47		min. Earth dist.	13564 Jan 21 03:49	16° \approx 19'33	0.58469 AU
morning max el	13563 Feb 28 05:40	0° \mathbb{X} 11'28	17°57'16	inferior conj	13564 Jan 24 06:38	14° \approx 00'42	-4°03'08
	13563 Feb 28 00:55	0° \mathbb{X}		minimum elong	13564 Jan 24 15:02	13° \approx 45'04	3°59'41
morning set	13563 Mar 15 19:31	24° \mathbb{X} 38'16		morning rise	13564 Feb 01 09:50	9° \approx 31'04	
	13563 Mar 18 17:48	0° \mathbb{Y}		direct	13564 Feb 03 10:47	9° \approx 16'56	
desc. node	13563 Mar 24 13:11	10° \mathbb{Y} 27'02		asc. node	13564 Feb 06 12:59	9° \approx 51'11	
				morning max el	13564 Feb 11 15:08	13° \approx 18'44	18°28'02
superior conj	13563 Mar 26 04:27	13° \mathbb{Y} 19'33	-0°12'58		13564 Feb 22 21:28	0° \mathbb{X}	
minimum elong	13563 Mar 26 03:20	13° \mathbb{Y} 14'37	0°12'55	morning set	13564 Feb 27 12:18	8° \mathbb{X} 42'31	
behind sun begin	13563 Mar 25 22:31	12° \mathbb{Y} 53'37					
behind sun end	13563 Mar 26 08:08	13° \mathbb{Y} 35'36		superior conj	13564 Mar 07 14:35	25° \mathbb{X} 57'19	0°22'24
max. Earth dist.	13563 Apr 02 16:39	26° \mathbb{Y} 04'36	1.42600 AU	minimum elong	13564 Mar 07 16:08	26° \mathbb{X} 04'28	0°22'20
	13563 Apr 05 02:12	0° \mathbb{B}			13564 Mar 09 19:42	0° \mathbb{Y}	
evening rise	13563 Apr 08 13:26	5° \mathbb{B} 33'38		desc. node	13564 Mar 10 09:40	1° \mathbb{Y} 03'01	
	13563 Apr 24 19:05	0° \mathbb{I}		max. Earth dist.	13564 Mar 15 01:39	9° \mathbb{Y} 16'07	1.40507 AU
evening max el	13563 May 11 05:52	20° \mathbb{I} 54'29	22°14'59	evening rise	13564 Mar 19 09:03	16° \mathbb{Y} 32'51	
asc. node	13563 May 18 12:14	26° \mathbb{I} 08'34			13564 Mar 27 19:20	0° \mathbb{B}	
retrograde	13563 May 20 20:43	26° \mathbb{I} 33'55			13564 Apr 18 11:46	0° \mathbb{I}	
evening set	13563 May 25 14:09	24° \mathbb{I} 36'03		evening max el	13564 Apr 22 20:54	4° \mathbb{I} 46'07	23°35'50
inferior conj	13563 May 30 20:56	18° \mathbb{I} 15'41	2°59'03	retrograde	13564 May 03 15:38	11° \mathbb{I} 06'33	
minimum elong	13563 May 30 19:33	18° \mathbb{I} 20'31	2°57'52	asc. node	13564 May 04 09:31	11° \mathbb{I} 04'02	
min. Earth dist.	13563 May 30 18:51	18° \mathbb{I} 22'58	0.68922 AU	evening set	13564 May 08 20:39	8° \mathbb{I} 54'43	
morning rise	13563 Jun 05 00:46	12° \mathbb{I} 03'05		min. Earth dist.	13564 May 13 15:32	3° \mathbb{I} 18'07	0.68789 AU
direct	13563 Jun 09 18:14	10° \mathbb{I} 03'17		inferior conj	13564 May 14 06:17	2° \mathbb{I} 27'28	2°37'15
morning max el	13563 Jun 19 01:30	15° \mathbb{I} 30'04	21°59'03	minimum elong	13564 May 14 04:20	2° \mathbb{I} 34'13	2°35'56
desc. node	13563 Jun 20 14:25	17° \mathbb{I} 06'31			13564 May 16 02:17	30° \mathbb{R} \mathbb{B}	
	13563 Jun 30 20:05	0° \mathbb{B}		morning rise	13564 May 19 11:57	26° \mathbb{B} 22'24	
	13563 Jul 20 21:57	0° Ω		direct	13564 May 23 16:50	24° \mathbb{B} 43'06	
morning set	13563 Jul 21 19:08	1° Ω 24'40		morning max el	13564 May 31 19:51	29° \mathbb{B} 20'36	20°38'59
max. Earth dist.	13563 Jul 27 10:30	10° Ω 37'13	1.41597 AU		13564 Jun 01 11:23	0° \mathbb{I}	
				desc. node	13564 Jun 06 11:25	5° \mathbb{I} 50'29	

	13564 Jun 23 10:27	0°☿			13565 May 27 16:01	0°♊		
morning set	13564 Jun 30 06:11	10°☿26'04		morning set	13565 Jun 09 07:47	19°♊07'56		
max. Earth dist.	13564 Jul 08 18:16	23°☿52'01	1.43574 AU		13565 Jun 16 08:24	0°☿		
	13564 Jul 12 12:45	0°♎		max. Earth dist.	13565 Jun 21 08:42	7°☿51'22	1.45009 AU	
superior conj	13564 Jul 15 08:53	4°♎41'56	-1°53'47	superior conj	13565 Jun 25 13:49	14°☿32'48	-2°11'24	
minimum elong	13564 Jul 15 16:00	5°♎11'39	1°54'06	minimum elong	13565 Jun 25 17:15	14°☿46'32	2°12'21	
evening rise	13564 Jul 27 15:08	25°♎47'29			13565 Jul 05 01:58	0°♎		
	13564 Jul 30 00:35	0°♏		evening rise	13565 Jul 09 14:10	7°♎29'48		
asc. node	13564 Jul 31 08:52	2°♏21'17		asc. node	13565 Jul 18 05:37	21°♎49'13		
evening max el	13564 Aug 13 08:56	21°♏47'11	18°02'47		13565 Jul 23 15:07	0°♏		
retrograde	13564 Aug 19 22:14	25°♏10'11		evening max el	13565 Jul 27 23:19	5°♏14'07	18°11'12	
evening set	13564 Aug 22 10:37	24°♏39'51		retrograde	13565 Aug 03 07:50	8°♏35'15		
inferior conj	13564 Aug 29 01:11	19°♏35'30	1°16'25	evening set	13565 Aug 06 04:34	7°♏51'29		
minimum elong	13564 Aug 29 03:14	19°♏30'24	1°15'24	inferior conj	13565 Aug 12 05:51	2°♏29'31	2°11'13	
min. Earth dist.	13564 Sep 01 02:24	16°♏34'46	0.61450 AU	minimum elong	13565 Aug 12 08:21	2°♏22'32	2°09'58	
desc. node	13564 Sep 02 08:53	15°♏25'15			13565 Aug 14 11:23	30°♏♎		
morning rise	13564 Sep 04 17:13	13°♏35'09		min. Earth dist.	13565 Aug 14 19:18	29°♎38'32	0.63650 AU	
direct	13564 Sep 11 08:58	11°♏18'40		morning rise	13565 Aug 18 10:24	26°♎13'25		
morning max el	13564 Sep 25 13:42	19°♏16'18	27°58'29	desc. node	13565 Aug 20 06:24	24°♎59'57		
	13564 Oct 04 16:38	0°♐		direct	13565 Aug 25 01:44	23°♎40'29		
	13564 Oct 23 05:48	0°♑			13565 Sep 06 04:47	0°♏		
asc. node	13564 Oct 27 10:52	8°♑14'47		morning max el	13565 Sep 07 22:54	1°♏41'21	27°43'06	
morning set	13564 Oct 29 00:35	11°♑27'32			13565 Sep 28 22:20	0°♐		
max. Earth dist.	13564 Nov 03 16:03	23°♑30'54	1.31536 AU	morning set	13565 Oct 12 18:53	25°♐07'56		
				asc. node	13565 Oct 14 07:32	28°♐12'55		
superior conj	13564 Nov 05 08:56	27°♑16'10	1°16'06		13565 Oct 15 04:26	0°♑		
minimum elong	13564 Nov 05 06:45	27°♑04'04	1°16'38	max. Earth dist.	13565 Oct 17 16:27	5°♑13'35	1.32409 AU	
	13564 Nov 06 14:30	0°♒						
evening rise	13564 Nov 12 02:07	12°♒04'14		superior conj	13565 Oct 20 15:52	11°♑36'27	0°57'22	
	13564 Nov 21 00:26	0°♓		minimum elong	13565 Oct 20 13:38	11°♑24'21	0°57'35	
desc. node	13564 Nov 29 05:30	13°♓22'58		evening rise	13565 Oct 27 13:16	26°♑36'06		
evening max el	13564 Dec 08 05:37	24°♓10'06	24°57'45		13565 Oct 29 03:35	0°♒		
	13564 Dec 16 17:29	0°♔			13565 Nov 15 18:06	0°♓		
retrograde	13564 Dec 22 00:30	1°♔04'06		desc. node	13565 Nov 16 02:43	0°♓25'53		
	13564 Dec 27 08:56	30°♒♓		evening max el	13565 Nov 19 15:31	4°♓14'53	23°17'14	
evening set	13564 Dec 27 14:36	29°♓54'25		retrograde	13565 Dec 02 23:03	10°♓52'10		
min. Earth dist.	13565 Jan 01 17:32	27°♓10'28	0.56539 AU	evening set	13565 Dec 07 06:44	10°♓11'36		
inferior conj	13565 Jan 04 08:02	25°♓29'42	-5°15'44	min. Earth dist.	13565 Dec 14 01:20	7°♓01'02	0.55127 AU	
minimum elong	13565 Jan 04 16:08	25°♓16'36	5°13'08	inferior conj	13565 Dec 15 13:31	6°♓08'37	-5°55'14	
morning rise	13565 Jan 12 19:54	21°♓21'50		minimum elong	13565 Dec 15 15:37	6°♓05'33	5°54'06	
direct	13565 Jan 15 02:24	21°♓07'17		morning rise	13565 Dec 24 02:09	2°♓17'46		
asc. node	13565 Jan 23 10:20	24°♓39'00		direct	13565 Dec 26 22:49	1°♓58'13		
morning max el	13565 Jan 24 14:31	25°♓43'11	19°20'41	morning max el	13566 Jan 07 00:20	7°♓15'21	20°36'28	
	13565 Jan 28 08:02	0°♔		asc. node	13566 Jan 10 07:37	10°♓51'50		
morning set	13565 Feb 10 13:59	23°♔09'38			13566 Jan 22 00:21	0°♕		
	13565 Feb 13 23:59	0°♖		morning set	13566 Jan 25 21:19	7°♕49'27		
superior conj	13565 Feb 18 17:37	9°♖21'15	0°51'17	superior conj	13566 Feb 02 09:05	23°♕18'25	1°13'05	
minimum elong	13565 Feb 18 20:16	9°♖34'10	0°51'21	minimum elong	13566 Feb 02 11:43	23°♕31'48	1°13'27	
desc. node	13565 Feb 25 06:12	21°♖38'27			13566 Feb 05 17:13	0°♖		
max. Earth dist.	13565 Feb 25 08:21	21°♖48'16	1.38251 AU	max. Earth dist.	13566 Feb 07 16:18	3°♖49'33	1.36076 AU	
evening rise	13565 Mar 01 01:45	28°♖26'19		evening rise	13566 Feb 11 12:56	11°♖05'53		
	13565 Mar 01 23:20	0°♗		desc. node	13566 Feb 12 02:44	12°♖09'06		
	13565 Mar 21 05:07	0°♘			13566 Feb 22 13:12	0°♗		
evening max el	13565 Apr 05 10:34	18°♘39'37	24°54'51		13566 Mar 16 13:37	0°♘		
retrograde	13565 Apr 17 06:45	25°♘33'16		evening max el	13566 Mar 19 00:02	2°♘30'00	26°05'02	
asc. node	13565 Apr 21 06:53	24°♘23'43		retrograde	13566 Mar 31 17:06	9°♘46'11		
evening set	13565 Apr 22 23:29	23°♘10'07		evening set	13566 Apr 06 20:54	7°♘15'42		
min. Earth dist.	13565 Apr 27 10:22	18°♘09'46	0.68196 AU	asc. node	13566 Apr 08 04:20	6°♘04'11		
inferior conj	13565 Apr 28 13:40	16°♘39'39	2°05'14	min. Earth dist.	13566 Apr 11 01:12	2°♘50'38	0.67160 AU	
minimum elong	13565 Apr 28 11:31	16°♘46'47	2°03'55	inferior conj	13566 Apr 12 17:02	0°♘46'50	1°22'35	
morning rise	13565 May 03 23:49	10°♘43'24		minimum elong	13566 Apr 12 15:13	0°♘52'30	1°21'31	
direct	13565 May 07 16:40	9°♘24'45			13566 Apr 13 08:10	30°♒♗		
morning max el	13565 May 14 21:45	13°♘23'25	19°32'03	morning rise	13566 Apr 18 10:18	25°♗00'46		
desc. node	13565 May 24 08:18	25°♘11'47		direct	13566 Apr 21 16:00	24°♗01'13		
greatest brilliancy	13565 May 27 13:20	29°♘50'10	-0.7m	morning max el	13566 Apr 28 06:54	27°♗34'09	18°40'40	

	13566 Apr 30 13:02	0°♄		desc. node	13567 Apr 28 01:40	5°♄06'50	
desc. node	13566 May 11 05:02	14°♄59'38		morning set	13567 Apr 30 13:05	9°♄07'40	
morning set	13566 May 19 21:16	28°♄28'48			13567 May 13 13:59	0°♄	
	13566 May 20 20:36	0°♄					
max. Earth dist.	13566 Jun 04 03:03	22°♄16'35	1.45754 AU	superior conj	13567 May 15 10:16	2°♄54'12	-1°50'04
				minimum elong	13567 May 15 01:17	2°♄18'57	1°50'11
superior conj	13566 Jun 05 01:12	23°♄43'07	-2°10'40	max. Earth dist.	13567 May 17 22:48	6°♄51'23	1.45756 AU
minimum elong	13566 Jun 04 21:01	23°♄26'49	2°11'33	evening rise	13567 May 31 12:46	27°♄56'45	
	13566 Jun 09 01:26	0°♄			13567 Jun 01 20:39	0°♄	
evening rise	13566 Jun 20 12:55	18°♄10'32		greatest brilliancy	13567 Jun 12 23:51	17°♄00'52	-0.7m
greatest brilliancy	13566 Jun 27 14:58	29°♄28'27	-0.9m	asc. node	13567 Jun 21 23:22	29°♄28'10	
	13566 Jun 27 22:57	0°♄			13567 Jun 22 09:58	0°♄	
asc. node	13566 Jul 05 02:27	10°♄54'20		evening max el	13567 Jun 24 20:28	2°♄40'31	19°20'53
evening max el	13566 Jul 11 11:57	18°♄54'00	18°37'34	retrograde	13567 Jul 01 22:01	6°♄37'13	
retrograde	13566 Jul 18 00:51	22°♄26'44		evening set	13567 Jul 05 12:37	5°♄21'31	
evening set	13566 Jul 21 06:15	21°♄27'34		inferior conj	13567 Jul 10 22:16	29°♄30'15	3°06'13
inferior conj	13566 Jul 26 22:01	15°♄50'11	2°46'43	minimum elong	13567 Jul 10 23:20	29°♄26'46	3°05'10
minimum elong	13566 Jul 27 00:00	15°♄44'05	2°45'34		13567 Jul 10 13:10	30°♄	
min. Earth dist.	13566 Jul 28 21:25	13°♄25'14	0.65570 AU	min. Earth dist.	13567 Jul 12 07:11	27°♄42'31	0.67103 AU
morning rise	13566 Aug 01 16:44	9°♄26'53		morning rise	13567 Jul 16 09:30	23°♄05'58	
desc. node	13566 Aug 07 03:51	6°♄50'05		direct	13567 Jul 22 10:23	20°♄28'15	
direct	13566 Aug 08 02:37	6°♄46'48		desc. node	13567 Jul 25 01:13	20°♄53'40	
morning max el	13566 Aug 21 10:04	14°♄38'38	26°55'27	morning max el	13567 Aug 03 20:56	27°♄55'09	25°44'03
	13566 Sep 02 22:58	0°♄			13567 Aug 05 20:15	0°♄	
	13566 Sep 21 15:53	0°♄			13567 Aug 27 15:49	0°♄	
morning set	13566 Sep 26 02:48	8°♄18'04		morning set	13567 Sep 08 20:37	20°♄48'26	
max. Earth dist.	13566 Sep 30 07:40	16°♄34'02	1.33814 AU	max. Earth dist.	13567 Sep 12 12:40	27°♄38'38	1.35710 AU
asc. node	13566 Oct 01 04:08	18°♄17'39			13567 Sep 13 18:12	0°♄	
superior conj	13566 Oct 04 17:16	25°♄38'00	0°33'07	superior conj	13567 Sep 18 10:24	9°♄13'26	0°03'49
minimum elong	13566 Oct 04 15:39	25°♄29'26	0°33'09	minimum elong	13567 Sep 18 10:10	9°♄12'19	0°03'49
	13566 Oct 06 18:51	0°♄		behind sun begin	13567 Sep 18 04:08	8°♄41'55	
evening rise	13566 Oct 11 23:32	11°♄03'38		behind sun end	13567 Sep 18 16:13	9°♄42'46	
	13566 Oct 21 16:32	0°♄		asc. node	13567 Sep 18 00:41	8°♄24'35	
evening max el	13566 Nov 01 04:56	14°♄20'22	21°37'40	evening rise	13567 Sep 26 06:50	25°♄20'52	
desc. node	13566 Nov 03 00:01	15°♄58'59			13567 Sep 28 13:37	0°♄	
retrograde	13566 Nov 13 11:50	20°♄26'15		evening max el	13567 Oct 14 06:23	25°♄00'12	20°12'58
evening set	13566 Nov 16 10:28	20°♄06'34		desc. node	13567 Oct 20 21:25	29°♄34'19	
inferior conj	13566 Nov 25 06:23	16°♄12'56	-5°39'36		13567 Oct 22 06:13	0°♄	
minimum elong	13566 Nov 24 23:41	16°♄22'19	5°37'42	retrograde	13567 Oct 24 23:44	0°♄20'11	
min. Earth dist.	13566 Nov 25 07:29	16°♄11'22	0.54505 AU	evening set	13567 Oct 27 01:31	0°♄09'07	
morning rise	13566 Dec 03 13:45	12°♄24'51			13567 Oct 27 19:23	30°♄	
direct	13566 Dec 07 07:19	11°♄54'33		inferior conj	13567 Nov 05 00:04	26°♄12'08	-4°26'43
morning max el	13566 Dec 19 20:10	17°♄55'20	22°13'12	minimum elong	13567 Nov 04 13:59	26°♄27'04	4°23'00
asc. node	13566 Dec 28 04:47	28°♄12'16		min. Earth dist.	13567 Nov 06 14:57	25°♄14'27	0.54829 AU
	13566 Dec 29 08:45	0°♄		morning rise	13567 Nov 13 01:35	22°♄07'00	
morning set	13567 Jan 10 07:56	22°♄35'06		direct	13567 Nov 17 17:37	21°♄19'46	
	13567 Jan 13 19:25	0°♄		morning max el	13567 Dec 01 06:53	27°♄59'12	24°01'41
					13567 Dec 03 06:57	0°♄	
superior conj	13567 Jan 17 09:26	7°♄38'41	1°27'54	asc. node	13567 Dec 15 01:50	16°♄23'45	
minimum elong	13567 Jan 17 11:22	7°♄48'51	1°28'36		13567 Dec 22 07:40	0°♄	
max. Earth dist.	13567 Jan 21 06:01	15°♄40'18	1.34190 AU	morning set	13567 Dec 25 19:48	7°♄20'06	
evening rise	13567 Jan 25 15:13	24°♄23'05					
	13567 Jan 28 14:25	0°♄		superior conj	13568 Jan 01 15:44	22°♄12'47	1°36'06
desc. node	13567 Jan 29 23:21	2°♄31'06		minimum elong	13568 Jan 01 16:38	22°♄17'40	1°37'04
	13567 Feb 16 02:26	0°♄		max. Earth dist.	13568 Jan 04 03:34	27°♄35'54	1.32719 AU
evening max el	13567 Mar 01 13:38	16°♄10'48	26°58'59		13568 Jan 05 06:39	0°♄	
retrograde	13567 Mar 14 21:51	23°♄37'37		evening rise	13568 Jan 09 05:07	8°♄08'21	
evening set	13567 Mar 21 11:02	21°♄05'16		desc. node	13568 Jan 16 20:03	22°♄38'57	
min. Earth dist.	13567 Mar 25 10:05	17°♄13'40	0.65722 AU		13568 Jan 21 02:05	0°♄	
asc. node	13567 Mar 26 01:47	16°♄29'09		evening max el	13568 Feb 12 02:26	29°♄31'28	27°29'31
inferior conj	13567 Mar 27 14:09	14°♄44'13	0°28'48		13568 Feb 12 14:30	0°♄	
minimum elong	13567 Mar 27 13:23	14°♄46'26	0°28'22	retrograde	13568 Feb 25 19:54	6°♄58'32	
morning rise	13567 Apr 02 17:11	9°♄10'03		evening set	13568 Mar 03 15:36	4°♄31'10	
direct	13567 Apr 05 12:56	8°♄26'46		min. Earth dist.	13568 Mar 07 10:57	1°♄10'03	0.63931 AU
morning max el	13567 Apr 11 21:30	11°♄46'37	18°05'55		13568 Mar 08 14:14	30°♄	
	13567 Apr 24 21:37	0°♄		inferior conj	13568 Mar 10 02:22	28°♄25'21	-0°36'23

minimum elong	13568 Mar 10 03:30	28° H 22'24	0°35'47	morning rise	13569 Feb 28 07:49	6° H 39'06	
asc. node	13568 Mar 11 23:14	26° H 31'51		direct	13569 Mar 02 12:37	6° H 17'42	
morning rise	13568 Mar 16 17:36	23° H 05'31		morning max el	13569 Mar 09 08:06	9° H 44'30	17°48'43
direct	13568 Mar 19 04:54	22° H 35'00			13569 Mar 22 18:24	0° Y	
morning max el	13568 Mar 25 14:56	25° H 53'05	17°48'25	morning set	13569 Mar 25 02:26	4° Y 09'11	
	13568 Mar 29 03:42	0° Y		desc. node	13569 Mar 31 18:48	15° Y 57'59	
morning set	13568 Apr 11 08:40	21° Y 07'07					
desc. node	13568 Apr 13 22:16	25° Y 27'59		superior conj	13569 Apr 05 08:44	23° Y 50'29	-0°35'28
	13568 Apr 16 14:56	0° Z		minimum elong	13569 Apr 05 05:22	23° Y 36'12	0°35'15
					13569 Apr 09 01:01	0° Z	
superior conj	13568 Apr 24 09:51	12° Z 49'32	-1°15'21	max. Earth dist.	13569 Apr 12 10:25	5° Z 33'12	1.43640 AU
minimum elong	13568 Apr 24 02:17	12° Z 18'56	1°15'02	evening rise	13569 Apr 19 15:51	17° Z 01'11	
max. Earth dist.	13568 Apr 29 17:57	21° Z 22'00	1.45027 AU		13569 Apr 28 04:28	0° II	
	13568 May 05 06:11	0° II			13569 May 20 13:10	0° G	
evening rise	13568 May 10 00:25	7° II 20'13		evening max el	13569 May 20 20:43	0° G 19'10	21°30'16
	13568 May 25 04:10	0° G		asc. node	13569 May 25 17:31	4° G 16'54	
evening max el	13568 Jun 06 23:29	16° G 29'45	20°19'25	retrograde	13569 May 29 19:18	5° G 32'43	
asc. node	13568 Jun 07 20:23	17° G 20'21		evening set	13569 Jun 03 06:28	3° G 43'30	
retrograde	13568 Jun 14 20:47	21° G 01'10			13569 Jun 06 16:09	30° R II	
evening set	13568 Jun 18 21:19	19° G 28'28		inferior conj	13569 Jun 08 12:31	27° II 28'33	3°06'58
inferior conj	13568 Jun 24 03:53	13° G 24'39	3°12'22	minimum elong	13569 Jun 08 11:36	27° II 31'45	3°05'50
minimum elong	13568 Jun 24 03:55	13° G 24'33	3°11'19	min. Earth dist.	13569 Jun 08 17:49	27° II 10'05	0.68796 AU
min. Earth dist.	13568 Jun 24 22:40	12° G 20'24	0.68187 AU	morning rise	13569 Jun 13 16:31	21° II 12'30	
morning rise	13568 Jun 29 10:11	7° G 03'20		direct	13569 Jun 18 17:24	19° II 01'49	
direct	13568 Jul 04 23:40	4° G 36'11		desc. node	13569 Jun 27 19:41	24° II 02'54	
desc. node	13568 Jul 10 22:29	6° G 46'58		morning max el	13569 Jun 28 18:13	24° II 58'07	22°49'09
morning max el	13568 Jul 16 07:05	11° G 22'38	24°18'46		13569 Jul 03 06:57	0° G	
	13568 Jul 31 04:18	0° O			13569 Jul 24 15:03	0° O	
	13568 Aug 19 09:28	0° O		morning set	13569 Aug 01 20:38	13° O 07'40	
morning set	13568 Aug 20 20:04	2° O 28'45		max. Earth dist.	13569 Aug 06 10:14	20° O 46'32	1.40311 AU
max. Earth dist.	13568 Aug 24 11:18	8° O 53'14	1.37957 AU		13569 Aug 11 17:14	0° O	
superior conj	13568 Aug 31 15:59	22° O 15'13	-0°29'30	superior conj	13569 Aug 14 05:52	4° O 32'51	-1°04'37
minimum elong	13568 Aug 31 18:00	22° O 24'56	0°29'22	minimum elong	13569 Aug 14 10:42	4° O 54'48	1°04'24
asc. node	13568 Sep 03 21:15	28° O 30'31		asc. node	13569 Aug 21 17:50	18° O 31'14	
	13568 Sep 04 15:26	0° A		evening rise	13569 Aug 24 02:03	22° O 58'22	
evening rise	13568 Sep 09 08:43	9° A 21'57			13569 Aug 27 19:32	0° A	
	13568 Sep 20 18:10	0° A		evening max el	13569 Sep 09 01:16	18° A 42'30	18°27'28
evening max el	13568 Sep 25 22:04	6° A 28'40	19°09'18	retrograde	13569 Sep 16 19:17	22° A 37'39	
retrograde	13568 Oct 04 23:54	11° A 01'28		evening set	13569 Sep 18 19:38	22° A 22'31	
evening set	13568 Oct 06 20:32	10° A 50'49		desc. node	13569 Sep 23 16:21	19° A 59'31	
desc. node	13568 Oct 06 18:51	10° A 51'36		inferior conj	13569 Sep 26 13:34	17° A 49'37	-0°54'43
inferior conj	13568 Oct 15 08:11	6° A 38'30	-2°41'24	minimum elong	13569 Sep 26 11:26	17° A 53'49	0°53'39
minimum elong	13568 Oct 15 01:17	6° A 50'07	2°38'14	min. Earth dist.	13569 Sep 29 19:39	15° A 16'08	0.57906 AU
min. Earth dist.	13568 Oct 18 02:07	4° A 47'33	0.56043 AU	morning rise	13569 Oct 03 23:46	12° A 34'00	
morning rise	13568 Oct 23 03:24	2° A 00'30		direct	13569 Oct 10 03:02	10° A 57'32	
direct	13568 Oct 28 15:20	0° A 50'43		morning max el	13569 Oct 24 10:30	18° A 31'58	27°05'32
morning max el	13568 Nov 11 17:27	8° A 00'43	25°45'11		13569 Nov 03 02:07	0° A	
	13568 Nov 28 00:20	0° J		asc. node	13569 Nov 17 19:40	24° A 32'31	
asc. node	13568 Nov 30 22:47	5° J 13'49			13569 Nov 20 13:31	0° J	
morning set	13568 Dec 09 07:10	21° J 59'58		morning set	13569 Nov 23 16:21	6° J 30'28	
	13568 Dec 12 23:00	0° Z					
				superior conj	13569 Nov 30 13:11	21° J 37'20	1°34'06
superior conj	13568 Dec 16 01:38	6° Z 54'11	1°38'05	minimum elong	13569 Nov 30 11:59	21° J 30'40	1°35'03
minimum elong	13568 Dec 16 01:26	6° Z 53'04	1°39'08	max. Earth dist.	13569 Nov 30 15:59	21° J 52'59	1.31239 AU
max. Earth dist.	13568 Dec 17 07:53	9° Z 41'33	1.31729 AU		13569 Dec 04 07:36	0° Z	
evening rise	13568 Dec 23 03:42	22° Z 14'19		evening rise	13569 Dec 07 08:27	6° Z 34'56	
	13568 Dec 26 23:42	0° \approx			13569 Dec 19 12:38	0° \approx	
desc. node	13569 Jan 02 16:52	12° \approx 26'25		desc. node	13569 Dec 20 13:46	1° \approx 45'30	
	13569 Jan 13 23:52	0° H		evening max el	13570 Jan 06 16:16	24° \approx 20'06	26°56'11
evening max el	13569 Jan 24 12:15	12° H 18'40	27°29'58		13570 Jan 14 11:27	0° H	
retrograde	13569 Feb 07 10:05	19° H 39'14		retrograde	13570 Jan 20 15:17	1° H 31'48	
evening set	13569 Feb 14 07:48	17° H 24'17			13570 Jan 26 15:00	30° R \approx	
min. Earth dist.	13569 Feb 18 02:00	14° H 28'31	0.61878 AU	evening set	13570 Jan 27 08:19	29° \approx 37'01	
inferior conj	13569 Feb 21 02:29	11° H 41'32	-1°52'17	min. Earth dist.	13570 Jan 31 06:23	26° \approx 57'33	0.59700 AU
minimum elong	13569 Feb 21 06:23	11° H 32'30	1°50'17	inferior conj	13570 Feb 03 10:58	24° \approx 23'32	-3°15'18
asc. node	13569 Feb 26 20:41	7° H 15'40		minimum elong	13570 Feb 03 18:00	24° \approx 09'20	3°12'06

morning rise	13570 Feb 11 06:48	19° \approx 41'38		inferior conj	13571 Jan 16 00:18	6° \approx 20'43	-4°36'28
direct	13570 Feb 13 07:55	19° \approx 25'52		minimum elong	13571 Jan 16 09:08	6° \approx 05'15	4°33'09
asc. node	13570 Feb 13 18:07	19° \approx 26'34		morning rise	13571 Jan 24 08:05	2° \approx 00'58	
morning max el	13570 Feb 20 21:34	23° \approx 11'36	18°07'55	direct	13571 Jan 26 10:18	1° \approx 47'15	
	13570 Feb 26 06:53	0° H		asc. node	13571 Jan 31 15:31	3° \approx 18'19	
morning set	13570 Mar 08 12:19	17° H 55'23		morning max el	13571 Feb 04 03:20	6° \approx 02'22	18°47'43
	13570 Mar 15 00:19	0° Y			13571 Feb 19 06:33	0° H	
				morning set	13571 Feb 20 09:17	2° H 10'11	
superior conj	13570 Mar 18 07:10	5° Y 56'44	0°02'44	superior conj	13571 Mar 01 01:03	18° H 55'40	0°35'30
minimum elong	13570 Mar 18 07:23	5° Y 57'42	0°02'42	minimum elong	13571 Mar 01 03:15	19° H 06'00	0°35'26
behind sun begin	13570 Mar 17 23:48	5° Y 23'48		desc. node	13571 Mar 05 11:51	27° H 09'17	
behind sun end	13570 Mar 18 14:58	6° Y 31'32			13571 Mar 07 01:53	0° Y	
desc. node	13570 Mar 18 15:20	6° Y 33'12		max. Earth dist.	13571 Mar 08 05:22	2° Y 01'41	1.39547 AU
max. Earth dist.	13570 Mar 25 22:13	19° Y 09'36	1.41744 AU	evening rise	13571 Mar 12 04:10	8° Y 50'46	
evening rise	13570 Mar 30 23:31	27° Y 28'27			13571 Mar 25 11:47	0° B	
	13570 Apr 01 13:20	0° B		evening max el	13571 Apr 16 03:21	28° B 01'01	24°10'02
	13570 Apr 21 20:32	0° II			13571 Apr 18 06:03	0° II	
evening max el	13570 May 03 13:19	14° II 09'15	22°49'02	retrograde	13571 Apr 27 09:38	4° II 37'36	
asc. node	13570 May 12 14:44	20° II 01'48		asc. node	13571 Apr 29 12:03	4° II 17'54	
retrograde	13570 May 13 16:01	20° II 06'52		evening set	13571 May 02 19:35	2° II 20'30	
evening set	13570 May 18 14:25	18° II 02'31			13571 May 05 02:18	30° R B	
inferior conj	13570 May 23 22:10	11° II 38'41	2°51'03	min. Earth dist.	13571 May 07 10:48	26° B 59'16	0.68586 AU
minimum elong	13570 May 23 20:30	11° II 44'29	2°49'47	inferior conj	13571 May 08 06:56	25° B 51'04	2°24'56
min. Earth dist.	13570 May 23 14:34	12° II 05'07	0.68927 AU	minimum elong	13571 May 08 04:50	25° B 58'11	2°23'36
morning rise	13570 May 29 02:29	5° II 29'17		morning rise	13571 May 13 14:10	19° B 49'31	
direct	13570 Jun 02 14:29	3° II 38'20		direct	13571 May 17 13:44	18° B 19'16	
morning max el	13570 Jun 11 09:15	8° II 43'11	21°23'39	morning max el	13571 May 25 06:45	22° B 39'14	20°08'42
desc. node	13570 Jun 14 16:46	12° II 19'50			13571 May 31 13:13	0° II	
	13570 Jun 27 20:39	0° B		desc. node	13571 Jun 01 13:43	1° II 21'06	
morning set	13570 Jul 12 20:14	22° B 41'32			13571 Jun 21 01:58	0° B	
	13570 Jul 17 10:06	0° Ω		morning set	13571 Jun 22 00:56	1° B 28'18	
max. Earth dist.	13570 Jul 19 14:02	3° Ω 31'23	1.42495 AU	max. Earth dist.	13571 Jul 02 00:18	17° B 05'08	1.44255 AU
superior conj	13570 Jul 26 23:39	15° Ω 56'34	-1°37'47	superior conj	13571 Jul 07 18:01	26° B 20'48	-2°03'08
minimum elong	13570 Jul 27 06:41	16° Ω 26'49	1°37'47	minimum elong	13571 Jul 08 00:14	26° B 46'14	2°03'45
	13570 Aug 03 23:10	0° H			13571 Jul 09 23:22	0° Ω	
evening rise	13570 Aug 07 06:52	5° H 59'55		evening rise	13571 Jul 20 18:15	18° Ω 14'39	
asc. node	13570 Aug 08 14:28	8° H 22'54		asc. node	13571 Jul 26 11:09	28° Ω 01'16	
	13570 Aug 22 01:32	0° B			13571 Jul 27 15:24	0° H	
evening max el	13570 Aug 23 11:53	1° B 32'26	18°06'12	evening max el	13571 Aug 07 01:58	14° H 49'06	18°04'10
retrograde	13570 Aug 30 08:44	5° B 03'16		retrograde	13571 Aug 13 12:09	18° H 09'41	
evening set	13570 Sep 01 16:17	4° B 39'38		evening set	13571 Aug 16 03:58	17° H 34'03	
	13570 Sep 08 10:11	30° R H		inferior conj	13571 Aug 22 12:28	12° H 22'14	1°42'10
inferior conj	13570 Sep 08 16:07	29° H 46'21	0°34'55	minimum elong	13571 Aug 22 14:52	12° H 15'57	1°41'01
minimum elong	13570 Sep 08 17:13	29° H 43'50	0°34'24	min. Earth dist.	13571 Aug 25 09:17	9° H 22'59	0.62407 AU
desc. node	13570 Sep 10 13:54	28° H 00'29		desc. node	13571 Aug 28 11:26	6° H 36'21	
min. Earth dist.	13570 Sep 11 21:44	26° H 49'01	0.60126 AU	morning rise	13571 Aug 28 23:27	6° H 13'54	
morning rise	13570 Sep 15 14:59	23° H 59'08		direct	13571 Sep 04 15:48	3° H 48'57	
direct	13570 Sep 22 03:57	21° H 55'44		morning max el	13571 Sep 18 18:04	11° H 50'05	27°56'16
morning max el	13570 Oct 06 11:18	29° H 48'06	27°50'27		13571 Oct 03 03:34	0° B	
	13570 Oct 06 16:06	0° B			13571 Oct 20 12:24	0° H	
	13570 Oct 28 03:05	0° H		morning set	13571 Oct 22 20:24	4° H 40'59	
asc. node	13570 Nov 04 16:26	14° H 11'15		asc. node	13571 Oct 22 13:08	4° H 04'00	
morning set	13570 Nov 07 21:27	20° H 45'48		max. Earth dist.	13571 Oct 28 04:02	15° H 53'09	1.31836 AU
	13570 Nov 12 04:32	0° H		superior conj	13571 Oct 30 09:33	20° H 44'57	1°08'51
max. Earth dist.	13570 Nov 13 23:57	3° H 59'49	1.31269 AU	minimum elong	13571 Oct 30 07:16	20° H 32'28	1°09'15
superior conj	13570 Nov 15 00:26	6° H 15'55	1°24'20		13571 Nov 03 14:18	0° H	
minimum elong	13570 Nov 14 22:30	6° H 05'10	1°25'02	evening rise	13571 Nov 06 03:58	5° H 36'02	
evening rise	13570 Nov 21 17:10	21° H 03'39			13571 Nov 18 20:32	0° B	
	13570 Nov 25 23:45	0° B		desc. node	13571 Nov 24 07:56	8° B 08'04	
desc. node	13570 Dec 07 10:48	20° B 24'24		evening max el	13571 Dec 01 00:27	15° B 50'23	24°16'04
	13570 Dec 14 10:39	0° \approx		retrograde	13571 Dec 14 16:17	22° B 38'43	
evening max el	13570 Dec 19 12:08	5° \approx 28'14	25°48'49	evening set	13571 Dec 19 18:10	21° B 42'10	
retrograde	13571 Jan 02 10:04	12° \approx 30'09		min. Earth dist.	13571 Dec 25 11:58	18° B 48'56	0.55855 AU
evening set	13571 Jan 08 12:59	11° \approx 02'46		inferior conj	13571 Dec 27 16:50	17° B 27'50	-5°38'04
min. Earth dist.	13571 Jan 13 00:54	8° \approx 25'22	0.57599 AU				

minimum elong	13571 Dec 27 23:07	17°  18'11	5°36'10	min. Earth dist.	13572 Dec 05 18:40	28°  18'39	0.54758 AU
morning rise	13572 Jan 05 06:01	13°  27'59		inferior conj	13572 Dec 06 15:36	27°  49'06	-5°56'06
direct	13572 Jan 07 17:15	13°  12'02		minimum elong	13572 Dec 06 13:49	27°  51'37	5°55'00
morning max el	13572 Jan 17 21:18	18°  05'27	19°50'03	morning rise	13572 Dec 15 02:20	24°  01'24	
asc. node	13572 Jan 18 12:50	18°  44'03		direct	13572 Dec 18 07:37	23°  37'48	
	13572 Jan 26 17:58	0°  ≈		morning max el	13572 Dec 30 00:45	29°  13'48	21°15'21
morning set	13572 Feb 04 13:40	16°  ≈43'04			13572 Dec 30 19:35	0°  	
	13572 Feb 11 02:48	0°  ✕		asc. node	13573 Jan 04 10:03	5°  327'27	
					13573 Jan 18 06:05	0°  ≈	
superior conj	13572 Feb 12 09:49	2°  ✕34'35	1°01'24	morning set	13573 Jan 18 22:40	1°  ≈26'11	
minimum elong	13572 Feb 12 12:34	2°  ✕48'15	1°01'34				
max. Earth dist.	13572 Feb 18 11:36	14°  ✕16'35	1.37302 AU	superior conj	13573 Jan 26 05:26	16°  ≈42'26	1°20'11
desc. node	13572 Feb 20 08:22	17°  ✕42'56		minimum elong	13573 Jan 26 07:50	16°  ≈54'48	1°20'43
evening rise	13572 Feb 22 05:07	21°  ✕04'49		max. Earth dist.	13573 Jan 30 21:50	26°  ≈12'07	1.35233 AU
	13572 Feb 27 08:46	0°  Υ			13573 Feb 01 20:28	0°  ✕	
	13572 Mar 18 10:45	0°  8		evening rise	13573 Feb 03 23:12	4°  ✕01'43	
evening max el	13572 Mar 28 16:53	11°  853'43	25°26'21	desc. node	13573 Feb 06 04:56	8°  ✕10'30	
retrograde	13572 Apr 09 22:53	18°  858'39			13573 Feb 19 06:08	0°  Υ	
asc. node	13572 Apr 15 09:27	16°  854'07		evening max el	13573 Mar 11 06:42	25°  Υ42'07	26°30'31
evening set	13572 Apr 15 20:18	16°  832'05			13573 Mar 16 08:38	0°  8	
min. Earth dist.	13572 Apr 20 04:18	11°  846'36	0.67801 AU	retrograde	13573 Mar 24 06:48	3°  803'27	
inferior conj	13572 Apr 21 12:52	10°  801'30	1°48'28	evening set	13573 Mar 30 14:51	0°  831'43	
minimum elong	13572 Apr 21 10:46	10°  808'15	1°47'14		13573 Mar 31 05:49	30°  RΥ	
morning rise	13572 Apr 27 01:40	4°  809'06		asc. node	13573 Apr 02 06:53	27°  Υ58'03	
direct	13572 Apr 30 13:38	2°  858'48		min. Earth dist.	13573 Apr 03 16:53	26°  Υ21'02	0.66595 AU
morning max el	13572 May 07 11:45	6°  845'12	19°08'08	inferior conj	13573 Apr 05 13:53	24°  Υ05'33	1°01'12
desc. node	13572 May 18 10:32	20°  854'30		minimum elong	13573 Apr 05 12:24	24°  Υ10'00	1°00'21
greatest brilliancy	13572 May 20 11:20	23°  855'30	-0.7m	morning rise	13573 Apr 11 10:57	18°  Υ24'07	
	13572 May 24 11:46	0°  II		direct	13573 Apr 14 12:22	17°  Υ31'41	
morning set	13572 May 31 04:55	10°  II18'54		morning max el	13573 Apr 20 23:26	20°  Υ57'22	18°23'50
	13572 Jun 12 20:57	0°  ☾			13573 Apr 28 04:26	0°  8	
max. Earth dist.	13572 Jun 13 16:25	1°  ☾16'19	1.45412 AU	desc. node	13573 May 05 07:14	10°  851'31	
				morning set	13573 May 11 04:48	20°  811'12	
					13573 May 17 09:49	0°  II	
superior conj	13572 Jun 16 14:12	5°  ☾50'52	-2°13'36				
minimum elong	13572 Jun 16 14:35	5°  ☾52'22	2°14'38	superior conj	13573 May 26 22:22	14°  II55'32	-2°04'09
evening rise	13572 Jul 01 07:11	29°  ☾30'36		minimum elong	13573 May 26 15:24	14°  II28'20	2°04'45
	13572 Jul 01 14:22	0°  Ω		max. Earth dist.	13573 May 27 12:09	15°  II49'19	1.45850 AU
asc. node	13572 Jul 12 07:55	17°  Ω20'16			13573 Jun 05 14:01	0°  ☾	
evening max el	13572 Jul 20 16:01	28°  Ω22'51	18°20'20	evening rise	13573 Jun 11 19:33	9°  ☾46'09	
	13572 Jul 22 12:27	0°  ൬		greatest brilliancy	13573 Jun 21 10:13	24°  ☾48'10	-0.8m
retrograde	13572 Jul 27 01:13	1°  ൬46'57			13573 Jun 24 20:20	0°  Ω	
evening set	13572 Jul 30 01:39	0°  ൬56'47		asc. node	13573 Jun 29 04:47	6°  Ω13'04	
	13572 Jul 31 11:50	30°  RΩ		evening max el	13573 Jul 04 03:12	12°  Ω06'21	18°53'58
inferior conj	13572 Aug 04 22:27	25°  Ω28'17	2°28'24	retrograde	13573 Jul 10 20:20	15°  Ω47'29	
minimum elong	13572 Aug 05 00:49	25°  Ω21'24	2°27'10	evening set	13573 Jul 14 05:41	14°  Ω41'10	
min. Earth dist.	13572 Aug 07 06:09	22°  Ω46'40	0.64513 AU	inferior conj	13573 Jul 19 18:26	8°  Ω57'37	2°56'46
morning rise	13572 Aug 10 22:36	19°  Ω08'28		minimum elong	13573 Jul 19 20:04	8°  Ω52'28	2°55'38
desc. node	13572 Aug 14 08:55	17°  Ω06'08		min. Earth dist.	13573 Jul 21 11:35	6°  Ω47'45	0.66280 AU
direct	13572 Aug 17 12:21	16°  Ω31'07		morning rise	13573 Jul 25 09:42	2°  Ω33'32	
morning max el	13572 Aug 31 04:09	24°  Ω29'28	27°26'14		13573 Jul 30 09:03	30°  R☾	
	13572 Sep 05 03:43	0°  ൬		direct	13573 Jul 31 16:09	29°  ☾53'35	
	13572 Sep 25 13:50	0°  ☾		desc. node	13573 Aug 01 06:20	29°  ☾54'53	
morning set	13572 Oct 05 10:37	18°  ☾09'05			13573 Aug 02 00:05	0°  Ω	
asc. node	13572 Oct 08 09:46	24°  ☾05'19		morning max el	13573 Aug 13 15:19	7°  Ω35'49	26°27'26
max. Earth dist.	13572 Oct 10 00:38	27°  ☾25'19	1.32946 AU		13573 Aug 31 01:41	0°  ൬	
	13572 Oct 11 06:15	0°  ൬			13573 Sep 17 23:32	0°  ☾	
superior conj	13572 Oct 13 14:25	4°  ൬58'05	0°47'45	morning set	13573 Sep 18 13:00	1°  ☾03'00	
minimum elong	13572 Oct 13 12:21	4°  ൬47'02	0°47'52	max. Earth dist.	13573 Sep 22 11:37	8°  ☾37'59	1.34575 AU
evening rise	13572 Oct 20 14:58	20°  ൬06'34		asc. node	13573 Sep 25 06:20	14°  ☾11'12	
	13572 Oct 25 09:37	0°  ✕					
desc. node	13572 Nov 10 05:10	24°  ✕35'49		superior conj	13573 Sep 27 12:40	18°  ☾49'13	0°21'16
evening max el	13572 Nov 11 10:47	25°  ✕51'05	22°33'47	minimum elong	13573 Sep 27 11:32	18°  ☾43'20	0°21'16
	13572 Nov 16 17:33	0°  ☾			13573 Oct 02 20:45	0°  ൬	
retrograde	13572 Nov 24 09:26	2°  ☾16'13		evening rise	13573 Oct 05 00:15	4°  ൬30'27	
evening set	13572 Nov 28 02:34	1°  ☾46'05			13573 Oct 19 01:32	0°  ✕	
	13572 Dec 02 15:09	30°  R✕		evening max el	13573 Oct 24 04:31	6°  ✕07'25	20°59'10

desc. node	13573 Oct 28 02:30	9°♄22'01		behind sun end	13574 Sep 11 07:08	2°♄39'59	
retrograde	13573 Nov 04 20:07	11°♄54'52		asc. node	13574 Sep 12 02:55	4°♄18'10	
evening set	13573 Nov 07 08:08	11°♄40'00		evening rise	13574 Sep 19 05:38	18°♄42'05	
inferior conj	13573 Nov 16 06:53	7°♄46'21	-5°14'40		13574 Sep 24 23:26	0°♄	
minimum elong	13573 Nov 15 21:46	7°♄59'17	5°11'51	evening max el	13574 Oct 06 12:05	17°♄07'33	19°43'11
min. Earth dist.	13573 Nov 17 00:37	7°♄21'11	0.54530 AU	desc. node	13574 Oct 14 23:55	22°♄00'49	
morning rise	13573 Nov 24 11:45	3°♄53'56		retrograde	13574 Oct 16 12:29	22°♄07'31	
direct	13573 Nov 28 15:09	3°♄17'12		evening set	13574 Oct 18 10:18	21°♄57'25	
morning max el	13573 Dec 11 15:38	9°♄34'28	22°58'51	inferior conj	13574 Oct 27 05:32	17°♄54'44	-3°44'05
asc. node	13573 Dec 22 07:10	23°♄11'10		minimum elong	13574 Oct 26 20:16	18°♄09'10	3°40'16
	13573 Dec 26 06:51	0°♄		min. Earth dist.	13574 Oct 29 09:27	16°♄33'48	0.55241 AU
morning set	13574 Jan 03 10:03	16°♄12'21		morning rise	13574 Nov 04 04:33	13°♄36'49	
	13574 Jan 09 19:42	0°♄		direct	13574 Nov 09 05:10	12°♄40'56	
				morning max el	13574 Nov 23 01:34	19°♄34'28	24°47'29
superior conj	13574 Jan 10 08:37	1°♄09'22	1°32'09		13574 Dec 01 20:25	0°♄	
minimum elong	13574 Jan 10 10:08	1°♄17'28	1°33'00	asc. node	13574 Dec 09 04:12	11°♄40'43	
max. Earth dist.	13574 Jan 13 15:08	8°♄04'53	1.33508 AU		13574 Dec 18 11:26	0°♄	
evening rise	13574 Jan 18 06:48	17°♄31'33		morning set	13574 Dec 18 21:58	0°♄56'23	
desc. node	13574 Jan 24 01:34	28°♄27'00					
	13574 Jan 24 22:16	0°♄		superior conj	13574 Dec 25 16:47	15°♄47'59	1°37'41
	13574 Feb 13 14:00	0°♄		minimum elong	13574 Dec 25 17:13	15°♄50'21	1°38'43
evening max el	13574 Feb 21 20:09	9°♄15'38	27°15'14	max. Earth dist.	13574 Dec 27 15:50	20°♄05'07	1.32234 AU
retrograde	13574 Mar 07 08:35	16°♄43'05			13575 Jan 01 07:54	0°♄	
evening set	13574 Mar 14 01:11	14°♄11'50		evening rise	13575 Jan 02 00:46	1°♄26'43	
min. Earth dist.	13574 Mar 17 22:24	10°♄33'57	0.65002 AU	desc. node	13575 Jan 10 22:20	18°♄27'11	
inferior conj	13574 Mar 20 07:32	7°♄56'37	0°02'34		13575 Jan 17 20:29	0°♄	
minimum elong	13574 Mar 20 07:28	7°♄56'49	0°02'31	evening max el	13575 Feb 04 07:44	22°♄22'51	27°33'33
transit middle	13574 Mar 20 07:28	7°♄56'49	0°02'31	retrograde	13575 Feb 18 03:33	29°♄48'23	
transit begin	13574 Mar 20 04:28	8°♄05'07		evening set	13575 Feb 25 00:53	27°♄24'55	
transit end	13574 Mar 20 10:28	7°♄48'32		min. Earth dist.	13575 Feb 28 19:10	24°♄15'39	0.63087 AU
asc. node	13574 Mar 20 04:20	8°♄05'29		inferior conj	13575 Mar 03 15:00	21°♄27'55	-1°07'23
morning rise	13574 Mar 26 15:29	2°♄28'23		minimum elong	13575 Mar 03 17:14	21°♄22'25	1°06'13
direct	13574 Mar 29 07:33	1°♄50'52		asc. node	13575 Mar 07 01:47	18°♄18'07	
morning max el	13574 Apr 04 15:38	5°♄08'16	17°56'25	morning rise	13575 Mar 10 12:07	16°♄15'26	
	13574 Apr 21 12:06	0°♄		direct	13575 Mar 12 20:20	15°♄49'20	
morning set	13574 Apr 22 08:50	1°♄25'37		morning max el	13575 Mar 19 09:25	19°♄09'45	17°46'20
desc. node	13574 Apr 22 03:51	1°♄05'01			13575 Mar 27 10:06	0°♄	
				morning set	13575 Apr 04 14:34	13°♄53'23	
superior conj	13574 May 06 11:50	24°♄20'33	-1°36'32	desc. node	13575 Apr 09 00:25	21°♄30'09	
minimum elong	13574 May 06 02:50	23°♄44'48	1°36'23		13575 Apr 14 00:46	0°♄	
	13574 May 10 01:52	0°♄					
max. Earth dist.	13574 May 10 08:22	0°♄25'31	1.45533 AU	superior conj	13575 Apr 16 20:53	4°♄42'41	-0°58'36
evening rise	13574 May 22 12:27	19°♄17'42		minimum elong	13575 Apr 16 15:01	4°♄18'32	0°58'16
	13574 May 29 12:45	0°♄		max. Earth dist.	13575 Apr 23 02:14	14°♄47'58	1.44508 AU
greatest brilliancy	13574 Jun 05 16:37	10°♄41'55	-0.6m	evening rise	13575 May 01 23:40	28°♄42'55	
asc. node	13574 Jun 16 01:45	24°♄30'18			13575 May 02 19:45	0°♄	
evening max el	13574 Jun 17 09:26	25°♄53'46	19°44'00		13575 May 23 08:21	0°♄	
	13574 Jun 23 21:28	0°♄		evening max el	13575 May 31 09:47	9°♄42'09	20°48'17
retrograde	13574 Jun 24 18:34	0°♄04'14		asc. node	13575 Jun 02 22:48	12°♄00'10	
	13574 Jun 25 15:19	30°♄		retrograde	13575 Jun 08 17:33	14°♄31'29	
evening set	13574 Jun 28 13:19	28°♄41'10		evening set	13575 Jun 12 22:26	12°♄51'45	
inferior conj	13574 Jul 03 21:17	22°♄44'08	3°10'21	inferior conj	13575 Jun 18 04:27	6°♄42'47	3°11'25
minimum elong	13574 Jul 03 21:55	22°♄42'02	3°09'18	minimum elong	13575 Jun 18 04:04	6°♄44'08	3°10'21
min. Earth dist.	13574 Jul 05 00:02	21°♄14'38	0.67617 AU	min. Earth dist.	13575 Jun 18 17:26	5°♄57'51	0.68498 AU
morning rise	13574 Jul 09 06:06	16°♄20'41		morning rise	13575 Jun 23 09:26	0°♄23'14	
direct	13574 Jul 15 02:12	13°♄46'55			13575 Jun 23 20:17	30°♄	
desc. node	13574 Jul 19 03:40	14°♄48'01		direct	13575 Jun 28 17:33	28°♄02'31	
morning max el	13574 Jul 27 02:06	20°♄58'23	25°09'01		13575 Jul 04 05:40	0°♄	
	13574 Aug 03 21:16	0°♄		desc. node	13575 Jul 06 00:55	1°♄18'51	
	13574 Aug 24 06:25	0°♄		morning max el	13575 Jul 09 12:27	4°♄29'15	23°40'38
morning set	13574 Aug 31 23:39	13°♄13'45			13575 Jul 29 03:16	0°♄	
max. Earth dist.	13574 Sep 04 13:39	19°♄45'00	1.36633 AU	morning set	13575 Aug 13 13:54	24°♄29'04	
	13574 Sep 09 22:38	0°♄			13575 Aug 16 18:57	0°♄	
				max. Earth dist.	13575 Aug 17 11:12	1°♄11'00	1.38951 AU
superior conj	13574 Sep 11 01:22	2°♄11'26	-0°09'56				
minimum elong	13574 Sep 11 02:00	2°♄14'32	0°09'53	superior conj	13575 Aug 25 00:47	14°♄55'04	-0°44'21
behind sun begin	13574 Sep 10 20:51	1°♄49'08		minimum elong	13575 Aug 25 03:58	15°♄10'02	0°44'09


































































































































asc. node	13575 Aug 29 23:29	24° \cap 21'55		minimum elong	13576 Aug 06 12:38	27° Ω 17'28	1°19'02
	13575 Sep 01 20:54	0° $\underline{\cap}$			13576 Aug 08 01:01	0° \cap	
evening rise	13575 Sep 03 04:19	2° $\underline{\cap}$ 33'21		asc. node	13576 Aug 15 20:06	14° \cap 19'09	
evening max el	13575 Sep 19 09:11	28° $\underline{\cap}$ 56'13	18°49'00	evening rise	13576 Aug 16 16:52	15° \cap 55'55	
	13575 Sep 20 12:28	0° \cap			13576 Aug 24 11:21	0° $\underline{\cap}$	
retrograde	13575 Sep 27 20:27	3° \cap 11'31		evening max el	13576 Sep 01 16:08	11° $\underline{\cap}$ 26'50	18°16'04
evening set	13575 Sep 29 17:49	2° \cap 59'36		retrograde	13576 Sep 08 23:37	15° $\underline{\cap}$ 09'28	
desc. node	13575 Oct 01 21:25	2° \cap 19'08		evening set	13576 Sep 11 02:56	14° $\underline{\cap}$ 51'06	
	13575 Oct 06 00:26	30° \cap $\underline{\cap}$		desc. node	13576 Sep 17 18:56	10° $\underline{\cap}$ 47'22	
inferior conj	13575 Oct 07 22:22	28° $\underline{\cap}$ 39'11	-1°54'55	inferior conj	13576 Sep 18 12:59	10° $\underline{\cap}$ 09'34	-0°14'07
minimum elong	13575 Oct 07 17:34	28° $\underline{\cap}$ 47'50	1°52'37	minimum elong	13576 Sep 18 12:29	10° $\underline{\cap}$ 10'38	0°13'50
min. Earth dist.	13575 Oct 10 23:24	26° $\underline{\cap}$ 27'59	0.56766 AU	transit middle	13576 Sep 18 12:29	10° $\underline{\cap}$ 10'38	0°13'50
morning rise	13575 Oct 15 14:03	23° $\underline{\cap}$ 44'44		transit begin	13576 Sep 18 10:41	10° $\underline{\cap}$ 14'25	
direct	13575 Oct 21 09:08	22° $\underline{\cap}$ 23'40		transit end	13576 Sep 18 14:16	10° $\underline{\cap}$ 06'51	
morning max el	13575 Nov 04 14:28	29° $\underline{\cap}$ 45'44	26°23'00	min. Earth dist.	13576 Sep 21 20:19	7° $\underline{\cap}$ 23'18	0.58829 AU
	13575 Nov 04 20:22	0° \cap		morning rise	13576 Sep 25 18:35	4° $\underline{\cap}$ 39'41	
	13575 Nov 25 15:50	0° \nearrow		direct	13576 Oct 02 03:02	2° $\underline{\cap}$ 51'11	
asc. node	13575 Nov 26 01:08	0° \nearrow 43'43		morning max el	13576 Oct 16 10:36	10° $\underline{\cap}$ 33'50	27°29'16
morning set	13575 Dec 03 08:37	15° \nearrow 32'33			13576 Oct 31 12:08	0° \cap	
	13575 Dec 09 22:07	0° \searrow		asc. node	13576 Nov 11 21:59	20° \cap 11'28	
				morning set	13576 Nov 16 16:17	29° \cap 56'38	
					13576 Nov 16 16:55	0° \nearrow	
superior conj	13575 Dec 10 03:39	0° \searrow 30'48	1°37'07	superior conj	13576 Nov 23 15:17	15° \nearrow 12'23	1°30'40
minimum elong	13575 Dec 10 03:00	0° \searrow 27'14	1°38'08	minimum elong	13576 Nov 23 13:45	15° \nearrow 03'46	1°31'31
max. Earth dist.	13575 Dec 10 21:57	2° \searrow 12'40	1.31456 AU	max. Earth dist.	13576 Nov 23 06:24	14° \nearrow 22'42	1.31191 AU
evening rise	13575 Dec 17 02:16	15° \searrow 39'26		evening rise	13576 Nov 30 08:57	0° \searrow 04'01	
	13575 Dec 24 07:09	0° \approx			13576 Nov 30 08:12	0° \searrow	
desc. node	13575 Dec 28 19:11	8° \approx 03'23		desc. node	13576 Dec 14 16:08	27° \searrow 06'32	
	13576 Jan 13 00:46	0° \searrow			13576 Dec 16 12:14	0° \approx	
evening max el	13576 Jan 17 15:22	4° \searrow 51'29	27°19'51	evening max el	13576 Dec 29 16:22	16° \approx 31'11	26°31'24
retrograde	13576 Jan 31 14:27	12° \searrow 09'10		retrograde	13577 Jan 12 15:22	23° \approx 38'11	
evening set	13576 Feb 07 10:55	10° \searrow 01'54		evening set	13577 Jan 19 03:29	21° \approx 54'44	
min. Earth dist.	13576 Feb 11 05:54	7° \searrow 14'13	0.60954 AU	min. Earth dist.	13577 Jan 23 06:07	19° \approx 17'50	0.58783 AU
inferior conj	13576 Feb 14 08:56	4° \searrow 30'35	-2°27'01	inferior conj	13577 Jan 26 09:40	16° \approx 54'40	-3°50'48
minimum elong	13576 Feb 14 14:11	4° \searrow 19'05	2°24'26	minimum elong	13577 Jan 26 17:47	16° \approx 39'15	3°47'21
	13576 Feb 20 18:12	30° \approx		morning rise	13577 Feb 03 11:04	12° \approx 21'43	
morning rise	13576 Feb 21 20:32	29° \approx 36'34		direct	13577 Feb 05 11:54	12° \approx 07'14	
asc. node	13576 Feb 21 23:13	29° \approx 34'41		asc. node	13577 Feb 07 20:40	12° \approx 27'43	
direct	13576 Feb 23 23:10	29° \approx 18'07		morning max el	13577 Feb 13 12:07	16° \approx 04'33	18°22'08
	13576 Feb 27 02:03	0° \searrow			13577 Feb 23 05:24	0° \searrow	
morning max el	13576 Mar 02 01:30	2° \searrow 52'05	17°54'26	morning set	13577 Mar 01 07:03	11° \searrow 16'05	
morning set	13576 Mar 17 15:54	27° \searrow 16'08					
	13576 Mar 19 03:56	0° Υ		superior conj	13577 Mar 10 13:21	28° \searrow 42'05	0°17'25
desc. node	13576 Mar 25 20:59	12° Υ 02'42		minimum elong	13577 Mar 10 14:36	28° \searrow 47'48	0°17'20
					13577 Mar 11 06:26	0° Υ	
superior conj	13576 Mar 28 06:08	16° Υ 12'19	-0°18'47	desc. node	13577 Mar 12 17:30	2° Υ 38'25	
minimum elong	13576 Mar 28 04:27	16° Υ 05'03	0°18'41	max. Earth dist.	13577 Mar 18 02:11	12° Υ 02'32	1.40835 AU
max. Earth dist.	13576 Apr 04 16:19	28° Υ 43'51	1.42883 AU	evening rise	13577 Mar 22 13:24	19° Υ 32'08	
	13576 Apr 05 10:55	0° \searrow			13577 Mar 29 02:26	0° \searrow	
evening rise	13576 Apr 10 20:57	8° \searrow 41'23			13577 Apr 19 07:12	0° \cap	
	13576 Apr 24 23:26	0° \cap		evening max el	13577 Apr 25 20:18	7° \cap 23'18	23°23'40
evening max el	13576 May 13 04:54	23° \cap 31'58	22°03'11	retrograde	13577 May 06 10:50	13° \cap 37'46	
asc. node	13576 May 19 19:57	28° \cap 28'22		asc. node	13577 May 06 17:13	13° \cap 37'27	
retrograde	13576 May 22 15:27	29° \cap 04'32		evening set	13577 May 11 14:10	11° \cap 27'45	
evening set	13576 May 27 07:15	27° \cap 08'56		inferior conj	13577 May 16 23:16	5° \cap 01'23	2°41'11
inferior conj	13576 Jun 01 13:46	20° \cap 50'00	3°01'28	minimum elong	13577 May 16 21:22	5° \cap 07'55	2°39'55
minimum elong	13576 Jun 01 12:30	20° \cap 54'25	3°00'18	min. Earth dist.	13577 May 16 10:21	5° \cap 45'51	0.68843 AU
min. Earth dist.	13576 Jun 01 13:37	20° \cap 50'32	0.68907 AU		13577 May 20 24:00	30° \cap \searrow	
morning rise	13576 Jun 06 17:34	14° \cap 36'25		morning rise	13577 May 22 04:30	28° \searrow 55'14	
direct	13576 Jun 11 13:00	12° \cap 33'36		direct	13577 May 26 11:15	27° \searrow 12'51	
morning max el	13576 Jun 21 00:41	18° \cap 07'53	22°11'48		13577 Jun 01 14:42	0° \cap	
desc. node	13576 Jun 21 22:04	19° \cap 02'53		morning max el	13577 Jun 03 18:06	1° \cap 56'57	20°50'11
	13576 Jun 30 21:20	0° \searrow		desc. node	13577 Jun 08 19:06	7° \cap 40'06	
morning set	13576 Jul 24 03:46	4° \searrow 39'45			13577 Jun 24 16:30	0° \searrow	
max. Earth dist.	13576 Jul 29 11:22	13° \searrow 23'49	1.41274 AU	morning set	13577 Jul 03 17:46	13° \searrow 48'40	
				max. Earth dist.	13577 Jul 11 18:18	26° \searrow 31'52	1.43316 AU
superior conj	13576 Aug 06 06:41	26° \searrow 51'04	-1°19'13				

	13577 Jul 13 21:28	0°♎		max. Earth dist.	13578 Jun 24 07:42	10°♊24'49	1.44837 AU
superior conj	13577 Jul 18 14:44	7°♎49'33	-1°49'54	superior conj	13578 Jun 28 22:57	17°♊48'08	-2°09'48
minimum elong	13577 Jul 18 21:57	8°♎19'57	1°50'08	minimum elong	13578 Jun 29 03:17	18°♊05'34	2°10'40
evening rise	13577 Jul 30 14:50	28°♎38'31			13578 Jul 06 10:31	0°♎	
	13577 Jul 31 09:14	0°♎		evening rise	13578 Jul 12 17:12	10°♎29'20	
asc. node	13577 Aug 02 16:43	4°♎05'22		asc. node	13578 Jul 20 13:25	23°♎35'58	
evening max el	13577 Aug 16 04:39	24°♎28'44	18°03'02		13578 Jul 24 15:05	0°♎	
retrograde	13577 Aug 22 19:33	27°♎53'19		evening max el	13578 Jul 30 19:00	7°♎52'49	18°08'46
evening set	13577 Aug 25 06:41	27°♎24'49		retrograde	13578 Aug 06 03:42	11°♎13'31	
inferior conj	13577 Aug 31 23:32	22°♎23'06	1°06'11	evening set	13578 Aug 08 23:06	10°♎31'58	
minimum elong	13577 Sep 01 01:23	22°♎18'34	1°05'18	inferior conj	13578 Aug 15 02:09	5°♎12'32	2°04'12
min. Earth dist.	13577 Sep 04 02:02	19°♎22'40	0.61108 AU	minimum elong	13578 Aug 15 04:39	5°♎05'38	2°02'58
desc. node	13577 Sep 04 16:27	18°♎49'46		min. Earth dist.	13578 Aug 17 17:35	2°♎18'47	0.63334 AU
morning rise	13577 Sep 07 17:20	16°♎25'50			13578 Aug 20 02:12	30°♎	
direct	13577 Sep 14 08:32	14°♎12'38		morning rise	13578 Aug 21 08:18	28°♎58'01	
morning max el	13577 Sep 28 14:07	22°♎09'00	27°57'45	desc. node	13578 Aug 22 13:57	28°♎06'42	
	13577 Oct 05 12:04	0°♎		direct	13578 Aug 27 23:59	26°♎26'52	
	13577 Oct 24 15:35	0°♎			13578 Sep 05 20:11	0°♎	
asc. node	13577 Oct 29 18:45	9°♎56'40		morning max el	13578 Sep 10 22:48	4°♎28'25	27°47'38
morning set	13577 Oct 31 19:03	14°♎03'44			13578 Sep 30 04:07	0°♎	
max. Earth dist.	13577 Nov 06 13:20	26°♎25'29	1.31445 AU	morning set	13578 Oct 15 14:35	27°♎47'46	
				asc. node	13578 Oct 16 15:23	29°♎53'14	
superior conj	13577 Nov 08 01:51	29°♎47'16	1°18'28		13578 Oct 16 16:43	0°♎	
minimum elong	13577 Nov 07 23:43	29°♎35'26	1°19'02	max. Earth dist.	13578 Oct 20 14:47	8°♎10'41	1.32238 AU
	13577 Nov 08 04:09	0°♎					
evening rise	13577 Nov 14 18:47	14°♎34'57		superior conj	13578 Oct 23 09:23	14°♎09'29	1°00'34
	13577 Nov 22 08:37	0°♎		minimum elong	13578 Oct 23 07:07	13°♎57'10	1°00'51
desc. node	13577 Dec 01 13:11	15°♎24'06		evening rise	13578 Oct 30 05:52	29°♎06'34	
evening max el	13577 Dec 11 08:52	27°♎18'33	25°11'45		13578 Oct 30 15:49	0°♎	
	13577 Dec 14 12:01	0°♎			13578 Nov 16 09:28	0°♎	
retrograde	13577 Dec 25 04:36	4°♎14'42		desc. node	13578 Nov 18 10:21	2°♎38'05	
evening set	13577 Dec 30 22:30	3°♎00'16		evening max el	13578 Nov 22 19:00	7°♎25'59	23°32'40
min. Earth dist.	13578 Jan 04 20:54	0°♎18'46	0.56800 AU	retrograde	13578 Dec 06 05:12	14°♎06'53	
	13578 Jan 05 08:32	30°♎		evening set	13578 Dec 10 17:48	13°♎22'21	
inferior conj	13578 Jan 07 14:14	28°♎31'21	-5°06'17	min. Earth dist.	13578 Dec 17 05:22	10°♎16'54	0.55287 AU
minimum elong	13578 Jan 07 22:43	28°♎17'23	5°03'27	inferior conj	13578 Dec 18 22:21	9°♎16'44	-5°52'26
morning rise	13578 Jan 16 01:19	24°♎20'35		minimum elong	13578 Dec 19 01:43	9°♎11'46	5°51'10
direct	13578 Jan 18 06:28	24°♎06'23		morning rise	13578 Dec 27 11:23	5°♎24'01	
asc. node	13578 Jan 25 18:02	27°♎01'25		direct	13578 Dec 30 05:15	5°♎05'38	
morning max el	13578 Jan 27 13:19	28°♎36'26	19°11'21	morning max el	13579 Jan 10 01:19	10°♎16'35	20°23'44
	13578 Jan 28 21:31	0°♎		asc. node	13579 Jan 12 15:19	13°♎02'06	
morning set	13578 Feb 13 07:36	25°♎40'25			13579 Jan 23 10:03	0°♎	
	13578 Feb 15 11:47	0°♎		morning set	13579 Jan 28 14:15	10°♎18'25	
superior conj	13578 Feb 21 14:09	12°♎00'02	0°47'20	superior conj	13579 Feb 05 04:00	25°♎52'44	1°10'12
minimum elong	13578 Feb 21 16:44	12°♎12'27	0°47'21	minimum elong	13579 Feb 05 06:42	26°♎06'18	1°10'32
desc. node	13578 Feb 27 14:00	23°♎14'06			13579 Feb 07 05:22	0°♎	
max. Earth dist.	13578 Feb 28 08:58	24°♎39'54	1.38589 AU	max. Earth dist.	13579 Feb 10 16:13	6°♎43'36	1.36385 AU
	13578 Mar 03 09:10	0°♎		evening rise	13579 Feb 14 11:39	13°♎50'40	
evening rise	13578 Mar 04 03:02	1°♎17'36		desc. node	13579 Feb 14 10:32	13°♎45'32	
	13578 Mar 22 08:30	0°♎			13579 Feb 23 20:45	0°♎	
evening max el	13578 Apr 08 09:57	21°♎15'53	24°43'22		13579 Mar 17 04:48	0°♎	
retrograde	13578 Apr 20 02:36	28°♎05'28		evening max el	13579 Mar 21 23:21	5°♎06'46	25°55'24
asc. node	13578 Apr 23 14:34	27°♎11'58		retrograde	13579 Apr 03 13:49	12°♎20'40	
evening set	13578 Apr 25 17:39	25°♎43'40		evening set	13579 Apr 09 15:59	9°♎50'57	
min. Earth dist.	13578 Apr 30 05:34	20°♎38'01	0.68316 AU	asc. node	13579 Apr 10 11:58	9°♎06'36	
inferior conj	13578 May 01 07:03	19°♎13'17	2°10'45	min. Earth dist.	13579 Apr 13 21:10	5°♎20'38	0.67342 AU
minimum elong	13578 May 01 04:54	19°♎20'28	2°09'26	inferior conj	13579 Apr 15 11:09	3°♎21'21	1°29'48
morning rise	13578 May 06 16:22	13°♎15'42		minimum elong	13579 Apr 15 09:14	3°♎27'22	1°28'40
direct	13578 May 10 10:54	11°♎54'10			13579 Apr 18 07:03	30°♎	
morning max el	13578 May 17 18:51	15°♎57'52	19°41'01	morning rise	13579 Apr 21 03:10	27°♎33'35	
desc. node	13578 May 26 15:59	26°♎56'10		direct	13579 Apr 24 10:25	26°♎31'23	
	13578 May 28 19:47	0°♎			13579 Apr 30 23:53	0°♎	
greatest brilliancy	13578 May 30 12:10	2°♎26'24	-0.6m	morning max el	13579 May 01 02:59	0°♎07'32	18°47'13
morning set	13578 Jun 12 19:25	22°♎29'29		desc. node	13579 May 13 12:46	16°♎40'25	
	13578 Jun 17 16:07	0°♎		greatest brilliancy	13579 May 15 06:07	19°♎18'03	-0.8m

	13579 May 22 03:58	0°♂		superior conj	13580 May 17 20:29	6°♂10'26	-1°54'16
morning set	13579 May 23 05:50	1°♂40'45		minimum elong	13580 May 17 11:49	5°♂36'26	1°54'32
max. Earth dist.	13579 Jun 07 01:23	24°♂46'17	1.45687 AU	max. Earth dist.	13580 May 19 21:06	9°♂20'38	1.45805 AU
					13580 Jun 02 03:54	0°♂	
superior conj	13579 Jun 08 12:12	27°♂02'29	-2°12'06	evening rise	13580 Jun 02 22:28	1°♂11'59	
minimum elong	13579 Jun 08 09:11	26°♂50'42	2°13'04	greatest brilliancy	13580 Jun 14 17:01	19°♂18'33	-0.7m
	13579 Jun 10 09:29	0°♂			13580 Jun 22 04:49	0°♂	
evening rise	13579 Jun 23 19:39	21°♂19'11		asc. node	13580 Jun 23 07:06	1°♂24'03	
	13579 Jun 29 05:19	0°♂		evening max el	13580 Jun 26 17:24	5°♂17'28	19°13'25
asc. node	13579 Jul 07 10:12	12°♂45'01		retrograde	13580 Jul 03 16:29	9°♂09'38	
evening max el	13579 Jul 14 08:06	21°♂31'32	18°32'33	evening set	13580 Jul 07 05:43	7°♂56'23	
retrograde	13579 Jul 20 19:49	25°♂01'39		inferior conj	13580 Jul 12 16:06	2°♂07'12	3°04'10
evening set	13579 Jul 23 23:52	24°♂04'56		minimum elong	13580 Jul 12 17:19	2°♂03'14	3°03'05
inferior conj	13579 Jul 29 16:50	18°♂29'53	2°42'25	min. Earth dist.	13580 Jul 14 03:09	0°♂13'27	0.66906 AU
minimum elong	13579 Jul 29 18:57	18°♂23'30	2°41'13		13580 Jul 14 07:22	30°♂	
min. Earth dist.	13579 Jul 31 18:27	16°♂00'06	0.65307 AU	morning rise	13580 Jul 18 04:18	25°♂42'53	
morning rise	13579 Aug 04 12:53	12°♂07'13		direct	13580 Jul 24 06:45	23°♂04'16	
desc. node	13579 Aug 09 11:24	9°♂35'49		desc. node	13580 Jul 26 08:49	23°♂20'23	
direct	13579 Aug 10 23:56	9°♂27'25			13580 Aug 05 06:30	0°♂	
morning max el	13579 Aug 24 09:47	17°♂21'40	27°04'12	morning max el	13580 Aug 05 20:41	0°♂35'29	25°55'46
	13579 Sep 03 23:12	0°♂			13580 Aug 27 22:18	0°♂	
	13579 Sep 23 01:28	0°♂		morning set	13580 Sep 10 20:23	23°♂39'27	
morning set	13579 Sep 29 00:13	11°♂02'47			13580 Sep 14 05:33	0°♂	
asc. node	13579 Oct 03 11:59	19°♂57'09		max. Earth dist.	13580 Sep 14 13:45	0°♂39'14	1.35407 AU
max. Earth dist.	13579 Oct 03 07:20	19°♂33'31	1.33573 AU	asc. node	13580 Sep 19 08:32	10°♂03'55	
superior conj	13579 Oct 07 11:45	28°♂14'10	0°37'08	superior conj	13580 Sep 20 06:19	11°♂53'59	0°08'32
minimum elong	13579 Oct 07 09:59	28°♂04'49	0°37'12	minimum elong	13580 Sep 20 05:50	11°♂51'28	0°08'33
	13579 Oct 08 07:45	0°♂		behind sun begin	13580 Sep 20 00:37	11°♂25'03	
evening rise	13579 Oct 14 16:23	13°♂34'50		behind sun end	13580 Sep 20 11:02	12°♂17'56	
	13579 Oct 22 22:25	0°♂		evening rise	13580 Sep 28 00:16	27°♂53'54	
evening max el	13579 Nov 04 07:17	17°♂28'36	21°51'47		13580 Sep 29 00:46	0°♂	
desc. node	13579 Nov 05 07:37	18°♂26'01		evening max el	13580 Oct 16 06:40	28°♂01'50	20°24'15
retrograde	13579 Nov 16 18:50	23°♂39'54			13580 Oct 18 11:20	0°♂	
evening set	13579 Nov 19 21:52	23°♂17'59		desc. node	13580 Oct 22 05:00	2°♂20'47	
inferior conj	13579 Nov 28 16:15	19°♂23'55	-5°45'57	retrograde	13580 Oct 27 05:48	3°♂28'50	
minimum elong	13579 Nov 28 10:42	19°♂31'41	5°44'20	evening set	13580 Oct 29 09:46	3°♂17'03	
min. Earth dist.	13579 Nov 28 11:38	19°♂30'23	0.54540 AU		13580 Nov 06 06:16	30°♂	
morning rise	13579 Dec 07 00:30	15°♂36'26		inferior conj	13580 Nov 07 08:51	29°♂21'24	-4°40'34
direct	13579 Dec 10 14:48	15°♂08'00		minimum elong	13580 Nov 06 22:45	29°♂36'08	4°37'01
morning max el	13579 Dec 22 22:55	21°♂02'45	21°57'46	min. Earth dist.	13580 Nov 08 18:37	28°♂32'03	0.54725 AU
	13579 Dec 30 09:00	0°♂		morning rise	13580 Nov 15 11:12	25°♂20'11	
asc. node	13579 Dec 30 12:31	0°♂12'49		direct	13580 Nov 20 00:09	24°♂35'45	
morning set	13580 Jan 13 00:29	25°♂02'56			13580 Dec 02 03:36	0°♂	
	13580 Jan 15 08:31	0°♂		morning max el	13580 Dec 03 10:22	1°♂09'36	23°45'29
				asc. node	13580 Dec 16 09:36	18°♂17'26	
superior conj	13580 Jan 20 03:12	10°♂09'28	1°26'03		13580 Dec 22 18:32	0°♂	
minimum elong	13580 Jan 20 05:16	10°♂20'18	1°26'44	morning set	13580 Dec 27 12:18	9°♂48'22	
max. Earth dist.	13580 Jan 24 04:47	18°♂33'49	1.34445 AU				
evening rise	13580 Jan 28 11:54	27°♂02'27		superior conj	13581 Jan 03 08:47	24°♂41'52	1°35'15
	13580 Jan 30 01:19	0°♂		minimum elong	13581 Jan 03 09:51	24°♂47'39	1°36'12
desc. node	13580 Feb 01 07:08	4°♂08'46			13581 Jan 05 19:55	0°♂	
	13580 Feb 17 04:46	0°♂		max. Earth dist.	13581 Jan 06 01:18	0°♂28'42	1.32906 AU
evening max el	13580 Mar 03 13:03	18°♂49'44	26°52'21	evening rise	13581 Jan 11 00:18	10°♂44'03	
retrograde	13580 Mar 16 19:27	26°♂15'36		desc. node	13581 Jan 18 03:49	24°♂19'06	
evening set	13580 Mar 23 07:19	23°♂43'19			13581 Jan 21 09:44	0°♂	
asc. node	13580 Mar 27 09:25	19°♂40'12			13581 Feb 11 20:42	0°♂	
min. Earth dist.	13580 Mar 27 07:07	19°♂46'45	0.65958 AU	evening max el	13581 Feb 14 02:12	2°♂14'42	27°26'48
inferior conj	13580 Mar 29 09:21	17°♂20'37	0°37'46	retrograde	13581 Feb 27 18:30	9°♂41'52	
minimum elong	13580 Mar 29 08:22	17°♂23'29	0°37'11	evening set	13581 Mar 06 13:30	7°♂13'22	
morning rise	13580 Apr 04 10:45	11°♂44'25		min. Earth dist.	13581 Mar 10 09:18	3°♂48'01	0.64215 AU
direct	13580 Apr 07 07:55	10°♂58'52		inferior conj	13581 Mar 12 23:07	1°♂04'57	-0°25'43
morning max el	13580 Apr 13 16:54	14°♂19'56	18°10'00	minimum elong	13581 Mar 12 23:54	1°♂02'52	0°25'19
	13580 Apr 25 03:52	0°♂			13581 Mar 13 23:57	30°♂	
desc. node	13580 Apr 29 09:27	6°♂45'09		asc. node	13581 Mar 14 06:54	29°♂42'16	
morning set	13580 May 02 17:28	12°♂07'22		morning rise	13581 Mar 19 12:23	25°♂42'44	
	13580 May 13 22:15	0°♂		direct	13581 Mar 22 00:54	25°♂10'28	

morning max el	13581 Mar 28 10:08	28° X 28'00	17°49'58			13582 Mar 24 02:59	0° Y	
	13581 Mar 29 20:54	0° Y		morning set		13582 Mar 28 00:07	6° Y 49'56	
morning set	13581 Apr 14 09:16	23° Y 56'14		desc. node		13582 Apr 03 02:38	17° Y 33'32	
desc. node	13581 Apr 16 06:04	27° Y 04'42						
	13581 Apr 17 23:54	0° Z		superior conj		13582 Apr 08 12:26	26° Y 48'13	-0°41'32
				minimum elong		13582 Apr 08 08:25	26° Y 31'20	0°41'18
superior conj	13581 Apr 27 17:10	15° Z 57'23	-1°21'10			13582 Apr 10 10:19	0° Z	
minimum elong	13581 Apr 27 09:06	15° Z 24'57	1°20'52	max. Earth dist.		13582 Apr 15 09:57	8° Z 09'34	1.43883 AU
max. Earth dist.	13581 May 02 16:54	23° Z 54'22	1.45184 AU	evening rise		13582 Apr 23 00:58	20° Z 12'35	
	13581 May 06 14:08	0° II				13582 Apr 29 10:53	0° II	
evening rise	13581 May 13 11:04	10° II 36'45				13582 May 21 02:21	0° III	
	13581 May 26 08:22	0° III		evening max el		13582 May 23 19:20	2° III 55'45	21°19'01
greatest brilliancy	13581 May 28 02:35	2° III 34'02	-0.6m	asc. node		13582 May 28 01:14	6° III 29'25	
evening max el	13581 Jun 09 21:20	19° III 06'34	20°09'46	retrograde		13582 Jun 01 13:56	8° III 02'56	
asc. node	13581 Jun 10 04:06	19° III 23'21		evening set		13582 Jun 05 23:28	6° III 16'04	
retrograde	13581 Jun 17 15:11	23° III 32'04		inferior conj		13582 Jun 11 05:26	0° III 02'31	3°08'27
evening set	13581 Jun 21 14:15	22° III 01'47		minimum elong		13582 Jun 11 04:39	0° III 05'15	3°07'21
inferior conj	13581 Jun 26 21:06	15° III 59'39	3°12'11			13582 Jun 11 06:09	30° R II	
minimum elong	13581 Jun 26 21:17	15° III 59'01	3°11'09	min. Earth dist.		13582 Jun 11 12:40	29° II 37'18	0.68736 AU
min. Earth dist.	13581 Jun 27 17:55	14° III 48'51	0.68061 AU	morning rise		13582 Jun 16 09:37	23° II 45'31	
morning rise	13581 Jul 02 03:59	9° III 37'47		direct		13582 Jun 21 12:20	21° II 32'14	
direct	13581 Jul 07 19:15	7° III 08'48		desc. node		13582 Jun 30 03:22	26° II 03'47	
desc. node	13581 Jul 13 06:09	8° III 58'48		morning max el		13582 Jul 01 17:56	27° II 36'32	23°02'24
morning max el	13581 Jul 19 06:59	14° III 01'46	24°31'55			13582 Jul 03 23:57	0° III	
	13581 Aug 01 06:52	0° II				13582 Jul 25 21:46	0° II	
	13581 Aug 20 18:36	0° III		morning set		13582 Aug 05 03:09	16° II 16'45	
morning set	13581 Aug 23 22:52	5° III 27'39		max. Earth dist.		13582 Aug 09 11:42	23° II 37'33	1.39963 AU
max. Earth dist.	13581 Aug 27 13:11	11° III 51'13	1.37613 AU			13582 Aug 13 03:24	0° III	
superior conj	13581 Sep 03 13:52	25° III 01'07	-0°24'16	superior conj		13582 Aug 17 06:25	7° III 26'08	-0°59'18
minimum elong	13581 Sep 03 15:30	25° III 09'02	0°24'09	minimum elong		13582 Aug 17 10:49	7° III 46'20	0°59'05
asc. node	13581 Sep 06 05:06	0° IV 10'00		asc. node		13582 Aug 24 01:41	20° III 11'51	
	13581 Sep 06 03:04	0° IV		evening rise		13582 Aug 26 22:03	25° III 38'54	
evening rise	13581 Sep 12 03:09	11° IV 57'50				13582 Aug 29 04:51	0° IV	
	13581 Sep 21 19:24	0° V		evening max el		13582 Sep 11 22:04	21° IV 30'37	18°32'22
evening max el	13581 Sep 28 20:19	9° V 22'45	19°17'21	retrograde		13582 Sep 19 20:18	25° IV 30'44	
retrograde	13581 Oct 08 03:44	14° V 02'25		evening set		13582 Sep 21 19:41	25° IV 16'36	
desc. node	13581 Oct 09 02:27	13° V 59'42		desc. node		13582 Sep 25 23:57	23° IV 25'11	
evening set	13581 Oct 10 00:23	13° V 52'03		inferior conj		13582 Sep 29 16:24	20° IV 46'56	-1°10'06
inferior conj	13581 Oct 18 14:14	9° V 42'19	-2°58'01	minimum elong		13582 Sep 29 13:37	20° IV 52'19	1°08'42
minimum elong	13581 Oct 18 06:39	9° V 54'51	2°54'38	min. Earth dist.		13582 Oct 02 21:35	18° IV 18'39	0.57595 AU
min. Earth dist.	13581 Oct 21 04:58	7° V 58'57	0.55812 AU	morning rise		13582 Oct 07 04:06	15° IV 36'35	
morning rise	13581 Oct 26 10:31	5° V 09'50		direct		13582 Oct 13 05:21	14° IV 04'10	
direct	13581 Oct 31 19:39	4° V 03'54		morning max el		13582 Oct 27 12:34	21° IV 35'47	26°55'37
morning max el	13581 Nov 14 20:33	11° V 09'37	25°30'56			13582 Nov 03 21:30	0° V	
	13581 Nov 29 05:18	0° VI		asc. node		13582 Nov 20 03:29	26° V 17'42	
asc. node	13581 Dec 03 06:36	7° VI 02'36				13582 Nov 22 00:47	0° VI	
morning set	13581 Dec 11 23:52	24° VI 29'31		morning set		13582 Nov 26 09:29	9° VI 01'55	
	13581 Dec 14 12:37	0° VII						
				superior conj		13582 Dec 03 05:43	24° VI 06'04	1°35'06
superior conj	13581 Dec 18 18:17	9° VII 22'36	1°38'10	minimum elong		13582 Dec 03 04:40	24° VI 00'11	1°36'03
minimum elong	13581 Dec 18 18:15	9° VII 22'24	1°39'13	max. Earth dist.		13582 Dec 03 12:34	24° VI 44'20	1.31278 AU
max. Earth dist.	13581 Dec 20 04:53	12° VII 33'31	1.31841 AU			13582 Dec 05 21:17	0° VII	
evening rise	13581 Dec 25 21:45	24° VII 47'19		evening rise		13582 Dec 10 01:43	9° VII 06'06	
	13581 Dec 28 11:10	0° VIII				13582 Dec 20 19:30	0° VIII	
desc. node	13582 Jan 05 00:36	14° VIII 10'03		desc. node		13582 Dec 22 21:29	3° VIII 33'58	
	13582 Jan 14 23:34	0° IX		evening max el		13583 Jan 09 17:28	27° VIII 15'36	27°03'23
evening max el	13582 Jan 27 12:34	15° IX 07'22	27°32'01			13583 Jan 12 21:35	0° IX	
retrograde	13582 Feb 10 09:51	22° IX 29'14		retrograde		13583 Jan 23 16:37	4° IX 29'09	
evening set	13582 Feb 17 07:45	20° IX 11'47		evening set		13583 Jan 30 10:49	2° IX 30'47	
min. Earth dist.	13582 Feb 21 01:49	17° IX 12'52	0.62195 AU			13583 Feb 03 02:29	30° R III	
inferior conj	13582 Feb 24 01:16	14° IX 25'14	-1°40'12	min. Earth dist.		13583 Feb 03 07:46	29° III 49'37	0.60024 AU
minimum elong	13582 Feb 24 04:42	14° IX 17'07	1°38'24	inferior conj		13583 Feb 06 12:15	27° III 12'28	-3°02'37
asc. node	13582 Mar 01 04:23	10° IX 15'55		minimum elong		13583 Feb 06 18:51	26° III 58'53	2°59'31
morning rise	13582 Mar 03 04:26	9° IX 20'08		morning rise		13583 Feb 14 06:02	22° III 27'30	
direct	13582 Mar 05 10:05	8° IX 57'36		direct		13583 Feb 16 07:23	22° III 11'10	
morning max el	13582 Mar 12 03:35	12° IX 22'17	17°47'34	asc. node		13583 Feb 16 01:49	22° III 11'23	

morning max el	13583 Feb 23 17:49	25° \approx 53'29	18°03'48	direct	13584 Jan 29 12:27	4° \approx 39'57	
	13583 Feb 27 05:52	0° H		asc. node	13584 Feb 02 23:13	5° \approx 47'44	
morning set	13583 Mar 11 07:52	20° H 29'58		morning max el	13584 Feb 07 00:58	8° \approx 50'19	18°40'23
	13583 Mar 16 11:07	0° Y			13584 Feb 20 17:03	0° H	
desc. node	13583 Mar 20 23:09	8° Y 07'53		morning set	13584 Feb 23 03:26	4° H 41'15	
superior conj	13583 Mar 21 07:29	8° Y 44'54	-0°02'47	superior conj	13584 Mar 02 22:43	21° H 36'40	0°30'57
minimum elong	13583 Mar 21 07:15	8° Y 43'53	0°02'49	minimum elong	13584 Mar 03 00:43	21° H 45'59	0°30'52
behind sun begin	13583 Mar 20 23:33	8° Y 09'38		desc. node	13584 Mar 06 19:39	28° H 44'06	
behind sun end	13583 Mar 21 14:58	9° Y 18'02			13584 Mar 07 12:30	0° Y	
max. Earth dist.	13583 Mar 28 22:04	21° Y 50'05	1.42047 AU	max. Earth dist.	13584 Mar 10 05:41	4° Y 48'34	1.39881 AU
	13583 Apr 02 21:49	0° B		evening rise	13584 Mar 14 07:06	11° Y 45'40	
evening rise	13583 Apr 03 05:37	0° B 31'18			13584 Mar 25 17:55	0° B	
	13583 Apr 22 22:46	0° II			13584 Apr 17 11:58	0° II	
evening max el	13583 May 06 12:26	16° II 45'19	22°37'02	evening max el	13584 Apr 18 02:46	0° II 37'17	23°58'11
asc. node	13583 May 14 22:27	22° II 26'13		retrograde	13584 Apr 29 05:10	7° II 08'32	
retrograde	13583 May 16 11:02	22° II 36'51		asc. node	13584 Apr 30 19:44	6° II 56'57	
evening set	13583 May 21 07:42	20° II 34'42		evening set	13584 May 04 13:20	4° II 53'16	
inferior conj	13583 May 26 15:03	14° II 11'58	2°54'06		13584 May 08 19:54	30° R B	
minimum elong	13583 May 26 13:28	14° II 17'26	2°52'53	min. Earth dist.	13584 May 09 05:48	29° B 26'36	0.68663 AU
min. Earth dist.	13583 May 26 09:21	14° II 31'46	0.68933 AU	inferior conj	13584 May 10 00:02	28° B 24'30	2°29'35
morning rise	13583 May 31 19:08	8° II 01'22		minimum elong	13584 May 09 21:59	28° B 31'31	2°28'15
direct	13583 Jun 05 09:00	6° II 07'19		morning rise	13584 May 15 06:40	22° B 21'37	
morning max el	13583 Jun 14 08:08	11° II 19'53	21°35'50	direct	13584 May 19 08:04	20° B 48'10	
desc. node	13583 Jun 17 00:28	14° II 12'36		morning max el	13584 May 27 04:28	25° B 14'10	20°19'02
	13583 Jun 29 00:49	0° E			13584 May 31 10:25	0° II	
morning set	13583 Jul 16 06:24	26° E 00'12		desc. node	13584 Jun 02 21:26	3° II 08'11	
	13583 Jul 18 18:30	0° O			13584 Jun 21 09:02	0° E	
max. Earth dist.	13583 Jul 22 14:22	6° O 13'47	1.42189 AU	morning set	13584 Jun 24 13:01	4° E 51'32	
				max. Earth dist.	13584 Jul 03 23:43	19° E 41'15	1.44030 AU
superior conj	13583 Jul 30 03:28	18° O 58'38	-1°33'06	superior conj	13584 Jul 10 01:26	29° E 32'12	-2°00'06
minimum elong	13583 Jul 30 10:17	19° O 28'13	1°33'02	minimum elong	13584 Jul 10 08:05	29° E 59'36	2°00'35
	13583 Aug 05 09:05	0° np			13584 Jul 10 08:11	0° O	
evening rise	13583 Aug 10 05:02	8° np 46'27		evening rise	13584 Jul 22 19:20	21° O 09'03	
asc. node	13583 Aug 10 22:18	10° np 05'11		asc. node	13584 Jul 27 18:57	29° O 46'01	
	13583 Aug 22 17:59	0° u			13584 Jul 27 22:14	0° np	
evening max el	13583 Aug 26 07:51	4° u 15'58	18°08'07	evening max el	13584 Aug 08 21:40	17° np 29'32	18°03'15
retrograde	13583 Sep 02 07:08	7° u 49'26		retrograde	13584 Aug 15 08:42	20° np 50'32	
evening set	13583 Sep 04 13:31	7° u 27'18		evening set	13584 Aug 17 23:19	20° np 16'49	
inferior conj	13583 Sep 11 15:57	2° u 37'08	0°22'42	inferior conj	13584 Aug 24 09:53	15° np 07'37	1°33'22
minimum elong	13583 Sep 11 16:42	2° u 35'28	0°22'22	minimum elong	13584 Aug 24 12:11	15° np 01'42	1°32'15
desc. node	13583 Sep 12 21:29	1° u 30'14		min. Earth dist.	13584 Aug 27 08:21	12° np 07'26	0.62081 AU
	13583 Sep 14 13:57	30° R np		desc. node	13584 Aug 29 19:00	9° np 54'33	
min. Earth dist.	13583 Sep 14 22:22	29° np 41'51	0.59787 AU	morning rise	13584 Aug 30 22:38	9° np 01'55	
morning rise	13583 Sep 18 16:34	26° np 54'03		direct	13584 Sep 06 14:59	6° np 39'42	
direct	13583 Sep 25 04:35	24° np 54'15		morning max el	13584 Sep 20 18:06	14° np 39'42	27°57'45
	13583 Oct 06 11:39	0° u			13584 Oct 03 04:56	0° u	
morning max el	13583 Oct 09 12:11	2° u 44'38	27°46'10		13584 Oct 20 23:35	0° ml	
	13583 Oct 29 10:10	0° ml		asc. node	13584 Oct 23 20:59	5° ml 44'38	
asc. node	13583 Nov 07 00:16	15° ml 53'44		morning set	13584 Oct 24 15:17	7° ml 17'58	
morning set	13583 Nov 10 15:18	23° ml 19'43		max. Earth dist.	13584 Oct 30 01:33	18° ml 47'31	1.31720 AU
	13583 Nov 13 17:59	0° x		superior conj	13584 Nov 01 02:40	23° ml 16'23	1°11'34
max. Earth dist.	13583 Nov 16 20:42	6° x 51'57	1.31231 AU	minimum elong	13584 Nov 01 00:24	23° ml 03'59	1°12'01
superior conj	13583 Nov 17 17:07	8° x 45'42	1°26'12		13584 Nov 04 03:44	0° x	
minimum elong	13583 Nov 17 15:17	8° x 35'26	1°26'56	evening rise	13584 Nov 07 20:33	8° x 06'01	
evening rise	13583 Nov 24 09:57	23° x 33'55			13584 Nov 19 00:54	0° Z	
	13583 Nov 27 11:11	0° Z		desc. node	13584 Nov 25 15:33	10° Z 12'38	
desc. node	13583 Dec 09 18:28	22° Z 19'35		evening max el	13584 Dec 03 03:59	19° Z 00'03	24°30'56
	13583 Dec 15 02:39	0° \approx		retrograde	13584 Dec 16 21:05	25° Z 50'23	
evening max el	13583 Dec 22 14:40	8° \approx 31'51	26°00'45	evening set	13584 Dec 22 03:25	24° Z 49'23	
retrograde	13584 Jan 05 13:09	15° \approx 35'16		min. Earth dist.	13584 Dec 27 15:43	21° Z 59'46	0.56080 AU
evening set	13584 Jan 11 18:41	14° \approx 03'39		inferior conj	13584 Dec 30 00:11	20° Z 31'42	-5°30'58
min. Earth dist.	13584 Jan 16 03:45	11° \approx 26'49	0.57895 AU	minimum elong	13584 Dec 30 07:15	20° Z 20'40	5°28'50
inferior conj	13584 Jan 19 04:35	9° \approx 16'53	-4°24'56	morning rise	13585 Jan 07 13:05	16° Z 29'07	
minimum elong	13584 Jan 19 13:21	9° \approx 01'13	4°21'33	direct	13585 Jan 09 22:27	16° Z 13'46	
morning rise	13584 Jan 27 10:55	4° \approx 53'41					

asc. node	13585 Jan 19 20:33	21°  00'18		morning rise	13585 Dec 18 12:41	27°  10'50	
morning max el	13585 Jan 19 20:52	21°  01'03	19°39'17	direct	13585 Dec 21 14:52	26°  48'45	
	13585 Jan 26 21:24	0°  ≈			13585 Dec 30 09:00	0°  	
morning set	13585 Feb 06 06:54	19°  ≈12'22		morning max el	13586 Jan 02 02:33	2°  18'04	21°01'19
	13585 Feb 11 15:06	0°  ✕		asc. node	13586 Jan 06 17:48	7°  33'32	
					13586 Jan 19 17:45	0°  ≈	
superior conj	13585 Feb 14 05:31	5°  ✕10'29	0°57'55	morning set	13586 Jan 21 15:25	3°  ≈55'00	
minimum elong	13585 Feb 14 08:16	5°  ✕23'59	0°58'03				
max. Earth dist.	13585 Feb 20 11:59	17°  ✕09'14	1.37630 AU	superior conj	13586 Jan 28 23:49	19°  ≈15'16	1°17'46
desc. node	13585 Feb 21 16:07	19°  ✕18'23		minimum elong	13586 Jan 29 02:18	19°  ≈28'03	1°18'14
evening rise	13585 Feb 24 05:11	23°  ✕52'42		max. Earth dist.	13586 Feb 02 21:30	29°  ≈07'22	1.35523 AU
	13585 Feb 27 17:52	0°  Υ			13586 Feb 03 08:16	0°  ✕	
	13585 Mar 19 11:06	0°  ✕		evening rise	13586 Feb 06 21:00	6°  ✕44'12	
evening max el	13585 Mar 31 16:20	14°  ✕30'21	25°15'36	desc. node	13586 Feb 08 12:41	9°  ✕47'20	
retrograde	13585 Apr 12 18:59	21°  ✕31'28			13586 Feb 20 11:58	0°  Υ	
asc. node	13585 Apr 17 17:06	19°  ✕48'28		evening max el	13586 Mar 14 06:04	28°  Υ19'47	26°21'55
evening set	13585 Apr 18 14:48	19°  ✕06'03			13586 Mar 16 01:02	0°  ✕	
min. Earth dist.	13585 Apr 22 23:48	14°  ✕15'24	0.67947 AU	retrograde	13586 Mar 27 03:44	5°  ✕39'20	
inferior conj	13585 Apr 24 06:30	12°  ✕35'29	1°54'44	evening set	13586 Apr 02 10:23	3°  ✕07'54	
minimum elong	13585 Apr 24 04:22	12°  ✕42'25	1°53'27	asc. node	13586 Apr 04 14:32	1°  ✕04'49	
morning rise	13585 Apr 29 18:18	6°  ✕41'40			13586 Apr 05 14:03	30°  RΥ	
direct	13585 May 03 07:59	5°  ✕28'26		min. Earth dist.	13586 Apr 06 13:10	28°  Υ52'17	0.66806 AU
morning max el	13585 May 10 08:20	9°  ✕18'47	19°16'11	inferior conj	13586 Apr 08 08:23	26°  Υ40'42	1°09'09
desc. node	13585 May 20 18:16	22°  ✕37'21		minimum elong	13586 Apr 08 06:46	26°  Υ45'38	1°08'11
greatest brilliancy	13585 May 23 03:31	26°  ✕07'42	-0.7m	morning rise	13586 Apr 14 04:04	20°  Υ57'40	
	13585 May 25 17:34	0°  Π		direct	13586 Apr 17 07:00	20°  Υ02'46	
morning set	13585 Jun 03 15:38	13°  Π37'31		morning max el	13586 Apr 23 19:11	23°  Υ30'36	18°29'20
	13585 Jun 14 04:57	0°  ☿			13586 Apr 29 05:15	0°  ✕	
max. Earth dist.	13585 Jun 16 15:16	3°  ☿48'34	1.45286 AU	desc. node	13586 May 07 15:00	12°  ✕31'14	
				morning set	13586 May 14 11:35	23°  ✕17'54	
					13586 May 18 17:43	0°  Π	
superior conj	13585 Jun 20 00:27	9°  ☿08'53	-2°13'14				
minimum elong	13585 Jun 20 01:59	9°  ☿14'59	2°14'15				
	13585 Jul 02 22:20	0°  Ω		superior conj	13586 May 30 09:17	18°  Π14'00	-2°06'52
evening rise	13585 Jul 04 11:49	2°  Ω34'12		minimum elong	13586 May 30 03:13	17°  Π50'16	2°07'36
asc. node	13585 Jul 14 15:41	19°  Ω08'20		max. Earth dist.	13586 May 30 10:40	18°  Π19'23	1.45833 AU
	13585 Jul 22 12:26	0°  ♍			13586 Jun 06 21:55	0°  ☿	
evening max el	13585 Jul 23 11:54	1°  ♍01'14	18°16'47	evening rise	13586 Jun 15 03:41	12°  ☿57'58	
retrograde	13585 Jul 29 20:38	4°  ♍23'58		greatest brilliancy	13586 Jun 23 22:50	26°  ☿49'00	-0.8m
evening set	13585 Aug 01 19:48	3°  ♍36'01			13586 Jun 26 00:18	0°  Ω	
	13585 Aug 06 02:43	30°  RΩ		asc. node	13586 Jul 01 12:31	8°  Ω05'31	
inferior conj	13585 Aug 07 18:06	28°  Ω09'43	2°22'36	evening max el	13586 Jul 06 23:38	14°  Ω43'25	18°47'55
minimum elong	13585 Aug 07 20:31	28°  Ω02'45	2°21'21	retrograde	13586 Jul 13 15:07	18°  Ω21'23	
min. Earth dist.	13585 Aug 10 03:48	25°  Ω24'37	0.64219 AU	evening set	13586 Jul 16 23:05	17°  Ω17'35	
morning rise	13585 Aug 13 19:45	21°  Ω51'08		inferior conj	13586 Jul 22 12:48	11°  Ω36'05	2°53'28
desc. node	13585 Aug 16 16:30	20°  Ω04'11		minimum elong	13586 Jul 22 14:34	11°  Ω30'33	2°52'19
direct	13585 Aug 20 10:09	19°  Ω15'10		min. Earth dist.	13586 Jul 24 08:07	9°  Ω20'48	0.66036 AU
morning max el	13585 Sep 03 03:54	27°  Ω14'24	27°32'46	morning rise	13586 Jul 28 05:13	5°  Ω12'07	
	13585 Sep 05 18:23	0°  ♍		direct	13586 Aug 03 12:54	2°  Ω32'04	
	13585 Sep 26 21:34	0°  ♌		desc. node	13586 Aug 03 13:58	2°  Ω32'05	
morning set	13585 Oct 08 07:00	20°  ♌50'51		morning max el	13586 Aug 16 15:09	10°  Ω17'59	26°37'43
asc. node	13585 Oct 10 17:36	25°  ♌45'09			13586 Sep 01 05:16	0°  ♍	
	13585 Oct 12 19:00	0°  ♌			13586 Sep 19 10:00	0°  ♌	
max. Earth dist.	13585 Oct 12 23:37	0°  ♌24'05	1.32748 AU	morning set	13586 Sep 21 11:24	3°  ♌50'46	
				max. Earth dist.	13586 Sep 25 12:12	11°  ♌39'55	1.34299 AU
superior conj	13585 Oct 16 08:20	7°  ♌32'33	0°51'18	asc. node	13586 Sep 27 14:11	15°  ♌50'44	
minimum elong	13585 Oct 16 06:11	7°  ♌21'02	0°51'29				
evening rise	13585 Oct 23 07:40	22°  ♌37'37		superior conj	13586 Sep 30 07:45	21°  ♌27'36	0°25'36
	13585 Oct 26 20:08	0°  ♌		minimum elong	13586 Sep 30 06:25	21°  ♌20'39	0°25'38
desc. node	13585 Nov 12 12:46	26°  ♌53'47			13586 Oct 04 09:14	0°  ♌	
evening max el	13585 Nov 14 14:01	29°  ♌01'57	22°48'53	evening rise	13586 Oct 07 17:22	7°  ♌03'07	
	13585 Nov 15 14:49	0°  ♌			13586 Oct 19 23:23	0°  ♌	
retrograde	13585 Nov 27 16:00	5°  ♌31'34		evening max el	13586 Oct 27 06:04	9°  ♌13'49	21°12'15
evening set	13585 Dec 01 14:18	4°  ♌57'58		desc. node	13586 Oct 30 10:06	11°  ♌57'29	
min. Earth dist.	13585 Dec 08 22:41	1°  ♌36'52	0.54869 AU	retrograde	13586 Nov 08 03:15	15°  ♌08'05	
inferior conj	13585 Dec 10 01:10	0°  ♌59'14	-5°57'06	evening set	13586 Nov 10 18:42	14°  ♌51'44	
minimum elong	13585 Dec 10 00:47	0°  ♌59'46	5°56'02	inferior conj	13586 Nov 19 16:41	10°  ♌58'16	-5°24'42
	13585 Dec 11 19:19	30°  R♌		minimum elong	13586 Nov 19 08:16	11°  ♌10'09	5°22'12

min. Earth dist.	13586 Nov 20 04:36	10° ♁ 41'28	0.54503 AU	desc. node	13587 Oct 17 07:32	24° ♁ 57'05	
morning rise	13586 Nov 27 22:25	7° ♁ 07'51		retrograde	13587 Oct 19 17:53	25° ♁ 13'48	
direct	13586 Dec 01 22:21	6° ♁ 33'32		evening set	13587 Oct 21 16:44	25° ♁ 03'32	
morning max el	13586 Dec 14 19:04	12° ♁ 45'06	22°42'43	inferior conj	13587 Oct 30 13:22	21° ♁ 03'03	-3°59'46
asc. node	13586 Dec 24 14:57	25° ♁ 09'14		minimum elong	13587 Oct 30 03:43	21° ♁ 17'51	3°55'56
	13586 Dec 27 13:23	0° ♁		min. Earth dist.	13587 Nov 01 13:01	19° ♁ 50'08	0.55081 AU
morning set	13587 Jan 06 02:36	18° ♁ 41'11		morning rise	13587 Nov 07 13:15	16° ♁ 49'48	
	13587 Jan 11 09:01	0° ♁		direct	13587 Nov 12 10:55	15° ♁ 57'01	
				morning max el	13587 Nov 26 05:07	22° ♁ 45'55	24°31'38
superior conj	13587 Jan 13 02:06	3° ♁ 40'10	1°30'45		13587 Dec 02 15:12	0° ♁	
minimum elong	13587 Jan 13 03:46	3° ♁ 49'02	1°31'33	asc. node	13587 Dec 11 12:01	13° ♁ 32'41	
max. Earth dist.	13587 Jan 16 13:32	10° ♁ 59'10	1.33738 AU		13587 Dec 19 23:49	0° ♁	
evening rise	13587 Jan 21 02:50	20° ♁ 09'49		morning set	13587 Dec 21 14:32	3° ♁ 25'36	
desc. node	13587 Jan 26 09:19	0° ♁ 05'50					
	13587 Jan 26 08:02	0° ♁		superior conj	13587 Dec 28 09:40	18° ♁ 17'20	1°37'14
	13587 Feb 14 11:39	0° ♁		minimum elong	13587 Dec 28 10:15	18° ♁ 20'36	1°38'15
evening max el	13587 Feb 24 19:33	11° ♁ 55'58	27°10'00	max. Earth dist.	13587 Dec 30 13:04	22° ♁ 57'10	1.32395 AU
retrograde	13587 Mar 10 06:36	19° ♁ 23'32			13588 Jan 02 20:35	0° ♁	
evening set	13587 Mar 16 22:06	16° ♁ 51'40		evening rise	13588 Jan 04 19:26	4° ♁ 01'37	
min. Earth dist.	13587 Mar 20 19:54	13° ♁ 09'07	0.65263 AU	desc. node	13588 Jan 13 06:02	20° ♁ 08'38	
asc. node	13587 Mar 22 12:00	11° ♁ 17'22			13588 Jan 19 01:43	0° ♁	
inferior conj	13587 Mar 23 03:19	10° ♁ 34'14	0°12'14	evening max el	13588 Feb 07 07:35	25° ♁ 08'04	27°32'46
minimum elong	13587 Mar 23 02:59	10° ♁ 35'12	0°12'01		13588 Feb 13 09:40	0° ♁	
transit middle	13587 Mar 23 02:59	10° ♁ 35'12	0°12'01	retrograde	13588 Feb 21 02:47	2° ♁ 34'29	
transit begin	13587 Mar 23 00:59	10° ♁ 40'48		evening set	13588 Feb 27 23:35	0° ♁ 09'31	
transit end	13587 Mar 23 04:58	10° ♁ 29'37			13588 Feb 28 04:56	30° ♁	
morning rise	13587 Mar 29 09:31	5° ♁ 03'58		min. Earth dist.	13588 Mar 02 18:10	26° ♁ 56'13	0.63385 AU
direct	13587 Apr 01 02:49	4° ♁ 24'32		inferior conj	13588 Mar 05 12:31	24° ♁ 09'11	-0°56'07
morning max el	13587 Apr 07 10:56	7° ♁ 42'31	17°59'23	minimum elong	13588 Mar 05 14:20	24° ♁ 04'35	0°55'09
	13587 Apr 22 19:59	0° ♁		asc. node	13588 Mar 08 09:30	21° ♁ 24'55	
desc. node	13587 Apr 24 11:41	2° ♁ 42'48		morning rise	13588 Mar 12 07:33	18° ♁ 54'06	
morning set	13587 Apr 25 11:26	4° ♁ 20'17		direct	13588 Mar 14 16:47	18° ♁ 26'34	
				morning max el	13588 Mar 21 04:41	21° ♁ 46'02	17°46'42
superior conj	13587 May 09 20:58	27° ♁ 33'43	-1°41'36		13588 Mar 27 13:56	0° ♁	
minimum elong	13587 May 09 11:51	26° ♁ 57'41	1°41'32	morning set	13588 Apr 06 13:45	16° ♁ 38'40	
	13587 May 11 10:04	0° ♁		desc. node	13588 Apr 10 08:15	23° ♁ 06'36	
max. Earth dist.	13587 May 13 06:45	2° ♁ 55'27	1.45625 AU		13588 Apr 14 09:59	0° ♁	
evening rise	13587 May 25 22:47	22° ♁ 34'09					
	13587 May 30 19:04	0° ♁		superior conj	13588 Apr 19 02:36	7° ♁ 46'25	-1°04'37
greatest brilliancy	13587 Jun 08 13:48	13° ♁ 13'58	-0.7m	minimum elong	13588 Apr 18 20:06	7° ♁ 19'49	1°04'18
asc. node	13587 Jun 18 09:27	26° ♁ 29'05		max. Earth dist.	13588 Apr 25 01:01	17° ♁ 20'45	1.44702 AU
evening max el	13587 Jun 20 06:40	28° ♁ 30'37	19°35'38		13588 May 03 03:08	0° ♁	
	13587 Jun 21 21:20	0° ♁		evening rise	13588 May 04 09:49	1° ♁ 57'58	
retrograde	13587 Jun 27 13:03	2° ♁ 36'13			13588 May 23 09:14	0° ♁	
evening set	13587 Jul 01 06:20	1° ♁ 15'45		evening max el	13588 Jun 02 07:57	12° ♁ 19'20	20°37'57
	13587 Jul 02 17:51	30° ♁		asc. node	13588 Jun 04 06:31	14° ♁ 07'18	
inferior conj	13587 Jul 06 14:49	25° ♁ 20'41	3°09'06	retrograde	13588 Jun 10 11:59	17° ♁ 02'15	
minimum elong	13587 Jul 06 15:36	25° ♁ 18'04	3°08'04	evening set	13588 Jun 14 15:19	15° ♁ 25'02	
min. Earth dist.	13587 Jul 07 19:43	23° ♁ 44'39	0.67443 AU	inferior conj	13588 Jun 19 21:29	9° ♁ 17'53	3°11'58
morning rise	13587 Jul 12 00:25	18° ♁ 56'48		minimum elong	13588 Jun 19 21:14	9° ♁ 18'43	3°10'55
direct	13587 Jul 17 22:12	16° ♁ 21'30		min. Earth dist.	13588 Jun 20 12:31	8° ♁ 26'03	0.68400 AU
desc. node	13587 Jul 21 11:21	17° ♁ 08'13		morning rise	13588 Jun 25 02:52	2° ♁ 57'37	
morning max el	13587 Jul 30 02:02	23° ♁ 38'55	25°21'33	direct	13588 Jun 30 12:53	0° ♁ 34'29	
	13587 Aug 04 17:45	0° ♁		desc. node	13588 Jul 07 08:39	3° ♁ 26'06	
	13587 Aug 25 14:06	0° ♁		morning max el	13588 Jul 11 12:13	7° ♁ 08'23	23°53'58
morning set	13587 Sep 04 00:42	16° ♁ 08'52			13588 Jul 29 07:55	0° ♁	
max. Earth dist.	13587 Sep 07 15:09	22° ♁ 45'28	1.36301 AU	morning set	13588 Aug 15 18:12	27° ♁ 32'47	
	13587 Sep 11 10:12	0° ♁			13588 Aug 17 04:29	0° ♁	
				max. Earth dist.	13588 Aug 19 12:45	4° ♁ 05'59	1.38601 AU
superior conj	13587 Sep 13 22:05	4° ♁ 54'42	-0°04'57				
minimum elong	13587 Sep 13 22:23	4° ♁ 56'15	0°04'55	superior conj	13588 Aug 26 23:42	17° ♁ 44'35	-0°39'01
behind sun begin	13587 Sep 13 16:18	4° ♁ 25'58		minimum elong	13588 Aug 27 02:28	17° ♁ 57'40	0°38'51
behind sun end	13587 Sep 14 04:29	5° ♁ 26'35		asc. node	13588 Aug 31 07:17	26° ♁ 02'11	
asc. node	13587 Sep 14 10:45	5° ♁ 57'52			13588 Sep 02 07:54	0° ♁	
evening rise	13587 Sep 21 23:29	21° ♁ 16'58		evening rise	13588 Sep 04 23:18	5° ♁ 11'25	
	13587 Sep 26 08:14	0° ♁			13588 Sep 19 14:54	0° ♁	
evening max el	13587 Oct 09 11:30	20° ♁ 06'50	19°53'10	evening max el	13588 Sep 21 06:46	1° ♁ 48'26	18°55'42




































































































































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evening set	13588 Oct 01 19:54	5°♄58'10		retrograde	13589 Sep 11 23:19	17°♄59'45	
desc. node	13588 Oct 03 05:02	5°♄36'01		evening set	13589 Sep 14 01:35	17°♄42'33	
inferior conj	13588 Oct 10 03:02	1°♄40'45	-2°11'24	desc. node	13589 Sep 20 02:33	14°♄16'26	
minimum elong	13588 Oct 09 21:29	1°♄50'31	2°08'45	inferior conj	13589 Sep 21 14:22	13°♄03'58	-0°28'09
	13588 Oct 12 12:09	30°♄		minimum elong	13589 Sep 21 13:20	13°♄06'07	0°27'37
min. Earth dist.	13588 Oct 13 01:57	29°♄36'20	0.56499 AU	min. Earth dist.	13589 Sep 24 21:30	10°♄21'49	0.58500 AU
morning rise	13588 Oct 17 20:00	26°♄52'08		morning rise	13589 Sep 28 21:37	7°♄39'01	
direct	13588 Oct 23 12:46	25°♄35'00		direct	13589 Oct 05 04:26	5°♄54'43	
	13588 Nov 03 09:17	0°♄		morning max el	13589 Oct 19 11:59	13°♄34'27	27°21'51
morning max el	13588 Nov 06 17:03	2°♄53'03	26°10'22		13589 Nov 01 14:06	0°♄	
	13588 Nov 26 00:10	0°♄		asc. node	13589 Nov 14 05:47	21°♄55'56	
asc. node	13588 Nov 27 08:58	2°♄31'27			13589 Nov 18 05:18	0°♄	
morning set	13588 Dec 05 01:28	18°♄03'22		morning set	13589 Nov 19 09:40	2°♄29'36	
	13588 Dec 10 11:53	0°♄					
superior conj	13588 Dec 11 20:14	3°♄00'04	1°37'35	superior conj	13589 Nov 26 07:50	17°♄42'06	1°32'01
minimum elong	13588 Dec 11 19:44	2°♄57'21	1°38'37	minimum elong	13589 Nov 26 06:24	17°♄34'08	1°32'55
max. Earth dist.	13588 Dec 12 18:39	5°♄04'38	1.31538 AU	max. Earth dist.	13589 Nov 26 03:02	17°♄15'17	1.31193 AU
evening rise	13588 Dec 18 19:57	18°♄12'27			13589 Dec 01 21:05	0°♄	
	13588 Dec 24 17:02	0°♄		evening rise	13589 Dec 03 01:58	2°♄35'38	
desc. node	13588 Dec 30 02:52	9°♄49'18		desc. node	13589 Dec 16 23:47	28°♄58'25	
	13589 Jan 12 16:00	0°♄			13589 Dec 17 15:01	0°♄	
evening max el	13589 Jan 19 16:08	7°♄44'13	27°24'11	evening max el	13590 Jan 01 18:15	19°♄31'46	26°40'52
retrograde	13589 Feb 02 14:54	15°♄02'55		retrograde	13590 Jan 15 17:14	26°♄40'17	
evening set	13589 Feb 09 11:54	12°♄52'54		evening set	13590 Jan 22 07:19	24°♄52'47	
min. Earth dist.	13589 Feb 13 06:31	10°♄02'31	0.61278 AU	min. Earth dist.	13590 Jan 26 08:08	22°♄15'19	0.59101 AU
inferior conj	13589 Feb 16 08:45	7°♄17'24	-2°14'30	inferior conj	13590 Jan 29 12:16	19°♄48'02	-3°38'14
minimum elong	13589 Feb 16 13:31	7°♄06'46	2°12'06	minimum elong	13590 Jan 29 20:02	19°♄32'58	3°34'51
asc. node	13589 Feb 23 06:59	2°♄29'27		morning rise	13590 Feb 06 11:47	15°♄11'53	
morning rise	13589 Feb 23 18:09	2°♄20'17		direct	13590 Feb 08 12:39	14°♄57'01	
direct	13589 Feb 25 21:27	2°♄00'54		asc. node	13590 Feb 10 04:25	15°♄07'17	
morning max el	13589 Mar 04 21:13	5°♄32'12	17°52'01	morning max el	13590 Feb 16 08:53	18°♄49'58	18°16'41
morning set	13589 Mar 20 12:36	29°♄55'01			13590 Feb 24 11:44	0°♄	
	13589 Mar 20 13:42	0°♄		morning set	13590 Mar 04 01:58	13°♄50'27	
desc. node	13589 Mar 28 04:46	13°♄38'27			13590 Mar 12 17:06	0°♄	
superior conj	13589 Mar 31 08:17	19°♄06'32	-0°24'40	superior conj	13590 Mar 13 12:29	1°♄28'14	0°12'17
minimum elong	13589 Mar 31 06:02	18°♄56'50	0°24'33	minimum elong	13590 Mar 13 13:24	1°♄32'23	0°12'13
	13589 Apr 06 19:47	0°♄		behind sun begin	13590 Mar 13 08:36	1°♄10'34	
max. Earth dist.	13589 Apr 07 16:02	1°♄22'55	1.43161 AU	behind sun end	13590 Mar 13 18:12	1°♄54'09	
evening rise	13589 Apr 14 04:54	11°♄50'27		desc. node	13590 Mar 15 01:14	4°♄13'54	
	13589 Apr 26 04:23	0°♄		max. Earth dist.	13590 Mar 21 02:37	14°♄48'14	1.41162 AU
evening max el	13589 May 16 03:50	26°♄09'30	21°51'28	evening rise	13590 Mar 25 18:11	22°♄32'48	
	13589 May 20 18:14	0°♄			13590 Mar 30 09:51	0°♄	
asc. node	13589 May 22 03:41	0°♄46'26		evening max el	13590 Apr 28 19:36	10°♄00'24	23°11'29
retrograde	13589 May 25 10:06	1°♄35'14		retrograde	13590 May 09 05:57	16°♄08'59	
	13589 May 29 15:13	30°♄		asc. node	13590 May 09 00:57	16°♄08'47	
evening set	13589 May 30 00:17	29°♄41'50		evening set	13590 May 14 07:36	14°♄00'50	
inferior conj	13589 Jun 04 06:36	23°♄24'19	3°03'37	min. Earth dist.	13590 May 19 05:06	8°♄13'34	0.68887 AU
minimum elong	13589 Jun 04 05:27	23°♄28'20	3°02'28	inferior conj	13590 May 19 16:11	7°♄35'19	2°44'56
min. Earth dist.	13589 Jun 04 08:22	23°♄18'11	0.68884 AU	minimum elong	13590 May 19 14:21	7°♄41'36	2°43'39
morning rise	13589 Jun 09 10:26	17°♄09'52		morning rise	13590 May 24 21:03	1°♄28'04	
direct	13589 Jun 14 07:48	15°♄04'11			13590 May 27 10:39	30°♄	
morning max el	13589 Jun 23 23:58	20°♄46'01	22°24'39	direct	13590 May 29 05:37	29°♄42'42	
desc. node	13589 Jun 24 05:48	21°♄00'45			13590 May 31 02:24	0°♄	
	13589 Jul 01 21:02	0°♄		morning max el	13590 Jun 06 16:29	4°♄33'44	21°01'37
	13589 Jul 22 13:09	0°♄		desc. node	13590 Jun 11 02:48	9°♄31'01	
morning set	13589 Jul 27 11:46	7°♄53'12			13590 Jun 25 22:00	0°♄	
max. Earth dist.	13589 Aug 01 12:23	16°♄11'47	1.40948 AU	morning set	13590 Jul 07 05:01	17°♄10'47	
				max. Earth dist.	13590 Jul 14 18:23	29°♄12'47	1.43041 AU
superior conj	13589 Aug 09 08:28	29°♄48'19	-1°14'05		13590 Jul 15 05:59	0°♄	
minimum elong	13589 Aug 09 14:02	0°♄13'14	1°13'53	superior conj	13590 Jul 21 20:00	10°♄56'07	-1°45'48
	13589 Aug 09 11:05	0°♄		minimum elong	13590 Jul 22 03:14	11°♄26'48	1°45'55
asc. node	13589 Aug 18 03:51	16°♄00'38			13590 Aug 01 18:10	0°♄	
evening rise	13589 Aug 19 13:35	18°♄38'53		evening rise	13590 Aug 02 14:06	1°♄28'54	
	13589 Aug 25 17:33	0°♄					

asc. node	13590 Aug 05 00:30	5° \mathbb{M} 49'17		minimum elong	13591 Jul 02 12:49	21° \mathbb{Q} 24'02	2°08'34
evening max el	13590 Aug 19 00:21	27° \mathbb{M} 11'12	18°03'41		13591 Jul 07 19:01	0° \mathbb{Q}	
	13590 Aug 22 21:19	0° \mathbb{Q}		evening rise	13591 Jul 15 19:43	13° \mathbb{Q} 28'22	
retrograde	13590 Aug 25 17:09	0° \mathbb{Q} 37'46		asc. node	13591 Jul 22 21:12	25° \mathbb{Q} 22'55	
evening set	13590 Aug 28 02:58	0° \mathbb{Q} 11'03			13591 Jul 25 17:38	0° \mathbb{M}	
	13590 Aug 28 14:07	30° \mathbb{R} \mathbb{M}		evening max el	13591 Aug 02 14:41	10° \mathbb{M} 32'56	18°06'46
inferior conj	13590 Sep 03 22:12	25° \mathbb{M} 12'08	0°55'29	retrograde	13591 Aug 08 23:45	13° \mathbb{M} 53'23	
minimum elong	13590 Sep 03 23:50	25° \mathbb{M} 08'15	0°54'42	evening set	13591 Aug 11 17:52	13° \mathbb{M} 14'00	
min. Earth dist.	13590 Sep 07 01:55	22° \mathbb{M} 12'22	0.60765 AU	inferior conj	13591 Aug 17 22:45	7° \mathbb{M} 57'12	1°56'43
desc. node	13590 Sep 07 00:03	22° \mathbb{M} 16'36		minimum elong	13591 Aug 18 01:14	7° \mathbb{M} 50'28	1°55'29
morning rise	13590 Sep 10 17:46	19° \mathbb{M} 18'09		min. Earth dist.	13591 Aug 20 16:08	5° \mathbb{M} 01'06	0.63014 AU
direct	13590 Sep 17 08:17	17° \mathbb{M} 08'18		morning rise	13591 Aug 24 06:33	1° \mathbb{M} 44'34	
morning max el	13590 Oct 01 14:38	25° \mathbb{M} 03'23	27°56'04	desc. node	13591 Aug 24 21:35	1° \mathbb{M} 17'43	
	13590 Oct 06 03:43	0° \mathbb{Q}			13591 Aug 27 06:23	30° \mathbb{R} \mathbb{Q}	
	13590 Oct 26 00:34	0° \mathbb{M}		direct	13591 Aug 30 22:33	29° \mathbb{Q} 15'23	
asc. node	13590 Nov 01 02:30	11° \mathbb{M} 38'53			13591 Sep 03 19:41	0° \mathbb{M}	
morning set	13590 Nov 03 13:17	16° \mathbb{M} 39'43		morning max el	13591 Sep 13 22:47	7° \mathbb{M} 17'15	27°51'22
max. Earth dist.	13590 Nov 09 10:26	29° \mathbb{M} 19'50	1.31371 AU		13591 Oct 01 08:43	0° \mathbb{Q}	
	13590 Nov 09 17:42	0° \mathbb{X}		morning set	13591 Oct 18 10:04	0° \mathbb{M} 27'45	
					13591 Oct 18 04:34	0° \mathbb{M}	
superior conj	13590 Nov 10 18:39	2° \mathbb{X} 18'18	1°20'41	asc. node	13591 Oct 18 23:10	1° \mathbb{M} 34'08	
minimum elong	13590 Nov 10 16:35	2° \mathbb{X} 06'48	1°21'19	max. Earth dist.	13591 Oct 23 12:51	11° \mathbb{M} 07'48	1.32086 AU
evening rise	13590 Nov 17 11:26	17° \mathbb{X} 05'50					
	13590 Nov 23 17:49	0° \mathbb{Z}		superior conj	13591 Oct 26 02:47	16° \mathbb{M} 42'56	1°03'39
desc. node	13590 Dec 03 20:49	17° \mathbb{Z} 23'55		minimum elong	13591 Oct 26 00:30	16° \mathbb{M} 30'30	1°03'58
	13590 Dec 14 01:06	0° \approx			13591 Nov 01 04:22	0° \mathbb{X}	
evening max el	13590 Dec 14 11:50	0° \approx 25'49	25°25'12	evening rise	13591 Nov 01 22:27	1° \mathbb{X} 37'38	
retrograde	13590 Dec 28 08:24	7° \approx 24'06			13591 Nov 17 05:51	0° \mathbb{Z}	
evening set	13591 Jan 03 05:43	6° \approx 05'02		desc. node	13591 Nov 20 17:59	4° \mathbb{Z} 48'47	
min. Earth dist.	13591 Jan 08 00:02	3° \approx 25'25	0.57069 AU	evening max el	13591 Nov 25 22:31	10° \mathbb{Z} 37'20	23°47'56
inferior conj	13591 Jan 10 19:51	1° \approx 31'39	-4°56'12	retrograde	13591 Dec 09 11:00	17° \mathbb{Z} 21'13	
minimum elong	13591 Jan 11 04:34	1° \approx 16'59	4°53'10	evening set	13591 Dec 14 04:21	16° \mathbb{Z} 32'36	
	13591 Jan 13 03:58	30° \mathbb{R} \mathbb{Z}		min. Earth dist.	13591 Dec 20 09:22	13° \mathbb{Z} 31'45	0.55468 AU
morning rise	13591 Jan 19 05:57	27° \mathbb{Z} 17'53		inferior conj	13591 Dec 22 06:46	12° \mathbb{Z} 24'08	-5°48'26
direct	13591 Jan 21 09:54	27° \mathbb{Z} 03'57		minimum elong	13591 Dec 22 11:17	12° \mathbb{Z} 17'23	5°46'58
asc. node	13591 Jan 28 01:46	29° \mathbb{Z} 26'00		morning rise	13591 Dec 30 20:02	8° \mathbb{Z} 29'08	
	13591 Jan 28 19:44	0° \approx		direct	13592 Jan 02 11:18	8° \mathbb{Z} 11'47	
morning max el	13591 Jan 30 11:44	1° \approx 28'31	19°02'38	morning max el	13592 Jan 13 01:53	13° \mathbb{Z} 16'38	20°11'34
morning set	13591 Feb 16 01:19	28° \approx 11'32		asc. node	13592 Jan 14 23:02	15° \mathbb{Z} 14'18	
	13591 Feb 16 23:16	0° \mathbb{X}			13592 Jan 24 18:30	0° \approx	
				morning set	13592 Jan 31 07:14	12° \approx 47'51	
superior conj	13591 Feb 24 10:57	14° \mathbb{X} 39'47	0°43'13				
minimum elong	13591 Feb 24 13:25	14° \mathbb{X} 51'33	0°43'13	superior conj	13592 Feb 07 23:07	28° \approx 27'54	1°07'11
desc. node	13591 Mar 01 21:44	24° \mathbb{X} 49'43		minimum elong	13592 Feb 08 01:51	28° \approx 41'35	1°07'27
max. Earth dist.	13591 Mar 03 09:27	27° \mathbb{X} 30'34	1.38924 AU		13592 Feb 08 17:31	0° \mathbb{X}	
	13591 Mar 04 19:09	0° \mathbb{Y}		max. Earth dist.	13592 Feb 13 16:08	9° \mathbb{X} 37'19	1.36697 AU
evening rise	13591 Mar 07 04:41	4° \mathbb{Y} 10'05		desc. node	13592 Feb 16 18:17	15° \mathbb{X} 22'07	
	13591 Mar 23 12:37	0° \mathbb{X}		evening rise	13592 Feb 17 10:42	16° \mathbb{X} 36'47	
evening max el	13591 Apr 11 09:17	23° \mathbb{X} 52'29	24°31'49		13592 Feb 25 04:39	0° \mathbb{Y}	
	13591 Apr 19 18:56	0° \mathbb{I}			13592 Mar 16 23:14	0° \mathbb{X}	
retrograde	13591 Apr 22 22:24	0° \mathbb{I} 37'50		evening max el	13592 Mar 23 22:43	7° \mathbb{X} 44'22	25°45'34
asc. node	13591 Apr 25 22:17	29° \mathbb{X} 58'16		retrograde	13592 Apr 05 10:25	14° \mathbb{X} 55'38	
	13591 Apr 25 20:44	30° \mathbb{R} \mathbb{X}		evening set	13592 Apr 11 10:56	12° \mathbb{X} 26'55	
evening set	13591 Apr 28 11:41	28° \mathbb{X} 17'30		asc. node	13592 Apr 11 19:41	12° \mathbb{X} 08'03	
min. Earth dist.	13591 May 03 00:41	23° \mathbb{X} 06'28	0.68421 AU	min. Earth dist.	13592 Apr 15 17:04	7° \mathbb{X} 51'17	0.67509 AU
inferior conj	13591 May 04 00:20	21° \mathbb{X} 47'19	2°16'04	inferior conj	13592 Apr 17 05:09	5° \mathbb{X} 56'46	1°36'46
minimum elong	13591 May 03 22:11	21° \mathbb{X} 54'30	2°14'44	minimum elong	13592 Apr 17 03:10	6° \mathbb{X} 03'05	1°35'35
morning rise	13591 May 09 08:52	15° \mathbb{X} 48'21		morning rise	13592 Apr 22 20:00	0° \mathbb{X} 07'19	
direct	13591 May 13 05:07	14° \mathbb{X} 23'50			13592 Apr 23 00:41	30° \mathbb{R} \mathbb{Y}	
morning max el	13591 May 20 16:08	18° \mathbb{X} 33'01	19°50'23	direct	13592 Apr 26 04:51	29° \mathbb{Y} 02'21	
desc. node	13591 May 28 23:43	28° \mathbb{X} 41'54			13592 Apr 29 12:20	0° \mathbb{X}	
	13591 May 29 22:13	0° \mathbb{I}		morning max el	13592 May 02 23:15	2° \mathbb{X} 41'55	18°54'12
morning set	13591 Jun 16 07:17	25° \mathbb{I} 52'26		desc. node	13592 May 14 20:31	18° \mathbb{X} 22'43	
	13591 Jun 18 23:31	0° \mathbb{Q}		greatest brilliancy	13592 May 16 12:05	20° \mathbb{X} 52'01	-0.8m
max. Earth dist.	13591 Jun 27 06:45	12° \mathbb{Q} 59'25	1.44646 AU		13592 May 22 10:48	0° \mathbb{I}	
				morning set	13592 May 25 15:07	4° \mathbb{I} 55'45	
superior conj	13591 Jul 02 07:41	21° \mathbb{Q} 03'19	-2°07'47	max. Earth dist.	13592 Jun 08 23:48	27° \mathbb{I} 17'17	1.45607 AU

superior conj	13592 Jun 10 23:09	0°☿22'50	-2°13'04			13593 Jun 03 11:08	0°☿	
minimum elong	13592 Jun 10 21:21	0°☿15'45	2°14'05	evening rise		13593 Jun 06 07:55	4°☿27'47	
	13592 Jun 10 17:20	0°☿		greatest brilliancy		13593 Jun 17 08:56	21°☿32'37	-0.8m
evening rise	13592 Jun 26 01:53	24°☿27'29				13593 Jun 23 03:21	0°♊	
	13592 Jun 29 12:05	0°♊		asc. node		13593 Jun 25 14:54	3°♊20'03	
asc. node	13592 Jul 08 18:00	14°♊35'52		evening max el		13593 Jun 29 14:16	7°♊55'33	19°06'17
evening max el	13592 Jul 16 04:13	24°♊10'15	18°27'56	retrograde		13593 Jul 06 11:03	11°♊43'28	
retrograde	13592 Jul 22 14:54	27°♊37'59		evening set		13593 Jul 09 22:57	10°♊32'37	
evening set	13592 Jul 25 17:40	26°♊43'38		inferior conj		13593 Jul 15 10:06	4°♊45'26	3°01'43
inferior conj	13592 Jul 31 11:55	21°♊10'54	2°37'41	minimum elong		13593 Jul 15 11:28	4°♊41'01	3°00'39
minimum elong	13592 Jul 31 14:07	21°♊04'18	2°36'29	min. Earth dist.		13593 Jul 16 23:18	2°♊45'53	0.66699 AU
min. Earth dist.	13592 Aug 02 15:42	18°♊36'39	0.65039 AU			13593 Jul 19 07:07	30°♋☿	
morning rise	13592 Aug 06 09:22	14°♋49'05		morning rise		13593 Jul 20 23:20	28°☿21'09	
desc. node	13592 Aug 10 19:04	12°♋25'45		direct		13593 Jul 27 03:16	25°☿41'53	
direct	13592 Aug 12 21:28	12°♋09'51		desc. node		13593 Jul 28 16:30	25°☿50'48	
morning max el	13592 Aug 26 09:29	20°♋05'53	27°12'23			13593 Aug 05 07:27	0°♌	
	13592 Sep 03 21:22	0°♌		morning max el		13593 Aug 08 20:29	3°♌17'04	26°07'09
	13592 Sep 23 10:29	0°♍				13593 Aug 29 03:54	0°♌	
morning set	13592 Sep 30 21:22	13°♍47'29		morning set		13593 Sep 13 19:49	26°♌30'25	
asc. node	13592 Oct 04 19:47	21°♍37'15				13593 Sep 15 16:34	0°♍	
max. Earth dist.	13592 Oct 05 06:47	22°♍33'25	1.33345 AU	max. Earth dist.		13593 Sep 17 14:48	3°♍41'20	1.35107 AU
	13592 Oct 08 20:32	0°♎		asc. node		13593 Sep 21 16:23	11°♍43'54	
superior conj	13592 Oct 09 06:06	0°♎50'44	0°41'02	superior conj		13593 Sep 23 02:04	14°♍34'54	0°13'12
minimum elong	13592 Oct 09 04:13	0°♎40'41	0°41'08	minimum elong		13593 Sep 23 01:19	14°♍31'05	0°13'12
evening rise	13592 Oct 16 09:12	16°♎06'45		behind sun begin		13593 Sep 22 21:50	14°♍13'20	
	13592 Oct 23 05:52	0°♏		behind sun end		13593 Sep 23 04:48	14°♍48'51	
evening max el	13592 Nov 06 09:57	20°♏38'32	22°06'13	evening rise		13593 Sep 30 17:39	0°♎27'49	
desc. node	13592 Nov 06 15:16	20°♏51'27				13593 Sep 30 12:17	0°♎	
retrograde	13592 Nov 19 01:41	26°♏54'53				13593 Oct 18 05:59	0°♏	
evening set	13592 Nov 22 09:29	26°♏30'23		evening max el		13593 Oct 19 07:21	1°♏05'56	20°36'05
min. Earth dist.	13592 Nov 30 15:49	22°♏50'08	0.54597 AU	desc. node		13593 Oct 24 12:38	5°♏05'35	
inferior conj	13592 Dec 01 02:08	22°♏35'40	-5°50'51	retrograde		13593 Oct 30 12:17	6°♏40'08	
minimum elong	13592 Nov 30 21:51	22°♏41'41	5°49'29	evening set		13593 Nov 01 18:48	6°♏27'26	
morning rise	13592 Dec 09 11:16	18°♏48'24		inferior conj		13593 Nov 10 18:03	2°♏32'47	-4°53'38
direct	13592 Dec 12 22:23	18°♏21'46		minimum elong		13593 Nov 10 08:08	2°♏47'05	4°50'17
morning max el	13592 Dec 25 01:28	24°♏10'12	21°42'37	min. Earth dist.		13593 Nov 11 22:21	1°♏51'55	0.54638 AU
	13592 Dec 30 04:46	0°♐				13593 Nov 15 09:12	30°♎♌	
asc. node	13592 Dec 31 20:15	2°♐15'30		morning rise		13593 Nov 18 21:16	28°♎35'09	
morning set	13593 Jan 14 17:05	27°♐31'46		direct		13593 Nov 23 07:01	27°♎53'30	
	13593 Jan 15 21:14	0°♑				13593 Nov 30 19:13	0°♏	
superior conj	13593 Jan 21 21:08	12°♑41'30	1°24'06	morning max el		13593 Dec 06 13:58	4°♏21'34	23°29'07
minimum elong	13593 Jan 21 23:19	12°♑52'56	1°24'42	asc. node		13593 Dec 18 17:22	20°♏13'17	
max. Earth dist.	13593 Jan 26 03:47	21°♑28'39	1.34710 AU	morning set		13593 Dec 24 04:17	0°♐	
evening rise	13593 Jan 30 08:53	29°♑43'27				13593 Dec 30 04:49	12°♐17'53	
	13593 Jan 30 12:21	0°♒		superior conj		13594 Jan 06 01:57	27°♐12'20	1°34'17
desc. node	13593 Feb 02 14:52	5°♒46'51		minimum elong		13594 Jan 06 03:10	27°♐18'58	1°35'11
	13593 Feb 17 08:06	0°♓				13594 Jan 07 09:06	0°♑	
evening max el	13593 Mar 06 12:32	21°♓29'33	26°45'13	max. Earth dist.		13594 Jan 08 23:20	3°♑23'26	1.33109 AU
retrograde	13593 Mar 19 16:55	28°♓54'03		evening rise		13594 Jan 13 19:42	13°♑21'23	
evening set	13593 Mar 26 03:28	26°♓21'56		desc. node		13594 Jan 20 11:33	25°♑59'33	
asc. node	13593 Mar 29 17:09	22°♓51'30				13594 Jan 22 17:53	0°♒	
min. Earth dist.	13593 Mar 30 04:01	22°♓20'26	0.66185 AU			13594 Feb 12 09:11	0°♓	
inferior conj	13593 Apr 01 04:25	19°♓57'51	0°46'26	evening max el		13594 Feb 17 01:53	4°♓57'52	27°23'19
minimum elong	13593 Apr 01 03:15	20°♓01'20	0°45'45	retrograde		13594 Mar 02 16:52	12°♓25'03	
morning rise	13593 Apr 07 04:14	14°♓19'42		evening set		13594 Mar 09 11:07	9°♓55'29	
direct	13593 Apr 10 02:52	13°♓31'47		min. Earth dist.		13594 Mar 13 07:25	6°♓25'50	0.64499 AU
morning max el	13593 Apr 16 12:25	16°♓54'15	18°14'30	inferior conj		13594 Mar 15 19:36	3°♓44'35	-0°15'20
	13593 Apr 26 08:53	0°♔		minimum elong		13594 Mar 15 20:03	3°♓43'21	0°15'06
desc. node	13593 May 01 17:13	8°♔24'47		transit middle		13594 Mar 15 20:03	3°♓43'21	0°15'06
morning set	13593 May 05 22:35	15°♔10'12		transit begin		13594 Mar 15 19:03	3°♓46'04	
	13593 May 15 06:15	0°♕		transit end		13594 Mar 15 21:04	3°♓40'38	
superior conj	13593 May 21 07:04	9°♕28'45	-1°58'10	asc. node		13594 Mar 16 14:36	2°♓53'54	
minimum elong	13593 May 20 22:51	8°♕56'38	1°58'32			13594 Mar 19 15:45	30°♒♋	
max. Earth dist.	13593 May 22 19:37	11°♕51'37	1.45839 AU	morning rise		13594 Mar 22 06:57	28°♒20'10	
				direct		13594 Mar 24 20:43	27°♒46'05	

	13594 Mar 30 01:15	0°♿				13595 Mar 25 10:37	0°♿	
morning max el	13594 Mar 31 05:19	1°♿03'16	17°51'52	morning set		13595 Mar 30 22:04	9°♿31'49	
morning set	13594 Apr 17 10:21	26°♿47'10		desc. node		13595 Apr 05 10:23	19°♿09'28	
desc. node	13594 Apr 18 13:51	28°♿42'09						
	13594 Apr 19 08:31	0°♿		superior conj		13595 Apr 11 16:34	29°♿47'38	-0°47'37
				minimum elong		13595 Apr 11 11:53	29°♿28'07	0°47'21
superior conj	13594 May 01 00:57	19°♿07'08	-1°26'48			13595 Apr 11 19:32	0°♿	
minimum elong	13594 Apr 30 16:28	18°♿33'10	1°26'33	max. Earth dist.		13595 Apr 18 09:05	10°♿44'38	1.44112 AU
max. Earth dist.	13594 May 05 15:45	26°♿26'51	1.45323 AU	evening rise		13595 Apr 26 10:18	23°♿25'06	
	13594 May 07 22:04	0°♿				13595 Apr 30 17:32	0°♿	
evening rise	13594 May 16 21:42	13°♿53'58				13595 May 21 20:33	0°♿	
	13594 May 27 13:08	0°♿		evening max el		13595 May 26 17:47	5°♿32'46	21°08'02
greatest brilliancy	13594 May 31 19:31	6°♿16'27	-0.6m	asc. node		13595 May 30 08:58	8°♿40'53	
asc. node	13594 Jun 12 11:53	21°♿25'53		retrograde		13595 Jun 04 08:30	10°♿33'44	
evening max el	13594 Jun 12 19:00	21°♿43'56	20°00'26	evening set		13595 Jun 08 16:24	8°♿49'18	
retrograde	13594 Jun 20 09:38	26°♿03'53		inferior conj		13595 Jun 13 22:20	2°♿37'16	3°09'45
evening set	13594 Jun 24 07:12	24°♿36'04		minimum elong		13595 Jun 13 21:41	2°♿39'30	3°08'39
inferior conj	13594 Jun 29 14:22	18°♿35'38	3°11'44	min. Earth dist.		13595 Jun 14 07:33	2°♿05'10	0.68661 AU
minimum elong	13594 Jun 29 14:43	18°♿34'28	3°10'42			13595 Jun 15 20:19	30°♿♿	
min. Earth dist.	13594 Jun 30 13:13	17°♿18'18	0.67918 AU	morning rise		13595 Jun 19 02:44	26°♿19'17	
morning rise	13594 Jul 04 21:54	12°♿13'12		direct		13595 Jun 24 07:19	24°♿03'24	
direct	13594 Jul 10 14:53	9°♿42'29		desc. node		13595 Jul 02 11:04	28°♿06'52	
desc. node	13594 Jul 15 13:51	11°♿13'26				13595 Jul 04 11:23	0°♿	
morning max el	13594 Jul 22 06:56	16°♿42'01	24°45'02	morning max el		13595 Jul 04 17:40	0°♿15'44	23°15'47
	13594 Aug 02 08:02	0°♿				13595 Jul 27 03:52	0°♿	
	13594 Aug 22 03:12	0°♿		morning set		13595 Aug 08 09:08	19°♿25'13	
morning set	13594 Aug 27 01:15	8°♿26'26		max. Earth dist.		13595 Aug 12 13:12	26°♿30'15	1.39611 AU
max. Earth dist.	13594 Aug 30 15:05	14°♿51'04	1.37266 AU			13595 Aug 14 13:17	0°♿	
superior conj	13594 Sep 06 11:28	27°♿47'11	-0°19'05	superior conj		13595 Aug 20 06:31	10°♿19'00	-0°53'58
minimum elong	13594 Sep 06 12:44	27°♿53'21	0°19'00	minimum elong		13595 Aug 20 10:29	10°♿37'21	0°53'45
	13594 Sep 07 14:36	0°♿		asc. node		13595 Aug 26 09:30	21°♿52'47	
asc. node	13594 Sep 08 12:56	1°♿50'10		evening rise		13595 Aug 29 17:45	28°♿19'20	
evening rise	13594 Sep 14 21:27	14°♿34'24				13595 Aug 30 14:41	0°♿	
	13594 Sep 22 23:29	0°♿		evening max el		13595 Sep 14 19:00	24°♿20'10	18°37'42
evening max el	13594 Oct 01 18:51	12°♿19'04	19°25'55	retrograde		13595 Sep 22 21:39	28°♿25'26	
retrograde	13594 Oct 11 08:07	17°♿05'49		evening set		13595 Sep 24 20:10	28°♿12'12	
desc. node	13594 Oct 11 10:06	17°♿05'48		desc. node		13595 Sep 28 07:35	26°♿49'09	
evening set	13594 Oct 13 04:55	16°♿55'39		inferior conj		13595 Oct 02 19:41	23°♿45'48	-1°25'48
inferior conj	13594 Oct 21 20:50	12°♿48'26	-3°14'40	minimum elong		13595 Oct 02 16:13	23°♿52'21	1°24'04
minimum elong	13594 Oct 21 12:35	13°♿01'47	3°11'03	min. Earth dist.		13595 Oct 05 23:43	21°♿23'04	0.57296 AU
min. Earth dist.	13594 Oct 24 08:02	11°♿12'50	0.55595 AU	morning rise		13595 Oct 10 08:48	18°♿40'50	
morning rise	13594 Oct 29 18:06	8°♿21'18		direct		13595 Oct 16 07:59	17°♿12'24	
direct	13594 Nov 04 00:18	7°♿19'03		morning max el		13595 Oct 30 14:46	24°♿40'59	26°44'54
morning max el	13594 Nov 17 23:51	14°♿20'32	25°16'09			13595 Nov 04 12:29	0°♿	
	13594 Nov 30 08:07	0°♿		asc. node		13595 Nov 22 11:16	28°♿03'37	
asc. node	13594 Dec 05 14:22	8°♿52'54				13595 Nov 23 11:20	0°♿	
morning set	13594 Dec 14 16:32	26°♿59'58		morning set		13595 Nov 29 02:31	11°♿33'29	
	13594 Dec 16 01:48	0°♿						
				superior conj		13595 Dec 05 22:14	26°♿35'13	1°35'55
superior conj	13594 Dec 21 11:00	11°♿52'11	1°38'07	minimum elong		13595 Dec 05 21:19	26°♿30'09	1°36'56
minimum elong	13594 Dec 21 11:08	11°♿52'54	1°39'09	max. Earth dist.		13595 Dec 06 09:06	27°♿35'49	1.31327 AU
max. Earth dist.	13594 Dec 23 01:57	15°♿26'31	1.31969 AU			13595 Dec 07 10:59	0°♿	
evening rise	13594 Dec 28 15:57	27°♿21'36		evening rise		13595 Dec 12 19:03	11°♿37'57	
	13594 Dec 29 22:55	0°♿				13595 Dec 22 03:20	0°♿	
desc. node	13595 Jan 07 08:17	15°♿53'40		desc. node		13595 Dec 25 05:08	5°♿21'51	
	13595 Jan 16 00:58	0°♿				13596 Jan 12 14:05	0°♿	
evening max el	13595 Jan 30 12:39	17°♿55'23	27°33'12	evening max el		13596 Jan 12 18:29	0°♿10'30	27°09'53
retrograde	13595 Feb 13 09:25	25°♿18'37		retrograde		13596 Jan 26 17:44	7°♿25'44	
evening set	13595 Feb 20 07:18	22°♿58'51		evening set		13596 Feb 02 12:52	5°♿24'03	
min. Earth dist.	13595 Feb 24 01:21	19°♿56'32	0.62513 AU	min. Earth dist.		13596 Feb 06 08:55	2°♿40'53	0.60348 AU
inferior conj	13595 Feb 26 23:38	17°♿08'31	-1°28'17	inferior conj		13596 Feb 09 13:07	0°♿01'01	-2°49'53
minimum elong	13595 Feb 27 02:38	17°♿01'20	1°26'43	minimum elong		13596 Feb 09 19:14	29°♿48'07	2°46'58
asc. node	13595 Mar 03 12:05	13°♿18'20				13596 Feb 09 13:35	30°♿♿	
morning rise	13595 Mar 06 00:40	12°♿00'51		morning rise		13596 Feb 17 04:46	25°♿12'55	
direct	13595 Mar 08 07:11	11°♿37'08		asc. node		13596 Feb 18 09:32	24°♿59'00	
morning max el	13595 Mar 14 22:56	14°♿59'59	17°46'46	direct		13596 Feb 19 06:27	24°♿55'57	

morning max el	13596 Feb 26 13:54	28° \approx 35'10	18°00'06	inferior conj	13597 Jan 21 08:29	12° \approx 12'48	-4°13'04
	13596 Feb 27 21:59	0° H		minimum elong	13597 Jan 21 17:05	11° \approx 57'06	4°09'37
morning set	13596 Mar 13 03:38	23° H 05'43		morning rise	13597 Jan 29 13:11	7° \approx 46'09	
	13596 Mar 16 21:40	0° Y		direct	13597 Jan 31 14:17	7° \approx 32'16	
desc. node	13596 Mar 22 06:51	9° Y 42'48		asc. node	13597 Feb 04 06:56	8° \approx 20'08	
				morning max el	13597 Feb 08 22:22	11° \approx 37'59	18°33'31
superior conj	13596 Mar 23 08:12	11° Y 34'42	-0°08'24		13597 Feb 21 02:41	0° H	
minimum elong	13596 Mar 23 07:29	11° Y 31'34	0°08'23	morning set	13597 Feb 24 21:46	7° H 13'36	
behind sun begin	13596 Mar 23 00:39	11° Y 01'28					
behind sun end	13596 Mar 23 14:19	12° Y 01'36		superior conj	13597 Mar 05 20:46	24° H 19'18	0°26'14
max. Earth dist.	13596 Mar 30 21:45	24° Y 30'03	1.42345 AU	minimum elong	13597 Mar 05 22:31	24° H 27'28	0°26'09
	13596 Apr 03 06:20	0° B			13597 Mar 08 23:08	0° Y	
evening rise	13596 Apr 05 12:08	3° B 35'55		desc. node	13597 Mar 09 03:20	0° Y 18'57	
	13596 Apr 23 01:52	0° II		max. Earth dist.	13597 Mar 13 06:06	7° Y 35'42	1.40219 AU
evening max el	13596 May 08 11:28	19° II 22'03	22°25'08	evening rise	13597 Mar 17 10:32	14° Y 42'30	
asc. node	13596 May 16 06:10	24° II 49'02			13597 Mar 27 00:25	0° B	
retrograde	13596 May 18 05:56	25° II 07'10			13597 Apr 18 01:06	0° II	
evening set	13596 May 23 00:51	23° II 07'17		evening max el	13597 Apr 21 02:11	3° II 13'56	23°46'09
inferior conj	13596 May 28 07:51	16° II 45'47	2°56'59	retrograde	13597 May 02 00:30	9° II 39'26	
minimum elong	13596 May 28 06:23	16° II 50'54	2°55'46	asc. node	13597 May 03 03:28	9° II 33'45	
min. Earth dist.	13596 May 28 04:06	16° II 58'52	0.68931 AU	evening set	13597 May 07 06:58	7° II 26'00	
morning rise	13596 Jun 02 11:47	10° II 34'04		min. Earth dist.	13597 May 12 00:44	1° II 53'57	0.68738 AU
direct	13596 Jun 07 03:35	8° II 36'54		inferior conj	13597 May 12 17:05	0° II 58'02	2°33'58
morning max el	13596 Jun 16 07:05	13° II 57'11	21°48'14	minimum elong	13597 May 12 15:04	1° II 04'54	2°32'39
desc. node	13596 Jun 18 08:09	16° II 06'57			13597 May 13 10:08	30° R B	
	13596 Jun 29 03:56	0° E		morning rise	13597 May 17 23:09	24° B 53'55	
morning set	13596 Jul 18 16:01	29° E 17'56		direct	13597 May 22 02:26	23° B 17'17	
	13596 Jul 19 02:34	0° O		morning max el	13597 May 30 02:19	27° B 49'23	20°29'37
max. Earth dist.	13596 Jul 24 14:48	8° O 57'42	1.41877 AU		13597 Jun 01 03:40	0° II	
				desc. node	13597 Jun 05 05:06	4° II 56'00	
superior conj	13596 Aug 01 06:43	21° O 59'45	-1°28'16		13597 Jun 22 15:46	0° E	
minimum elong	13596 Aug 01 13:16	22° O 28'24	1°28'09	morning set	13597 Jun 28 00:53	8° E 14'14	
	13596 Aug 05 19:01	0° np		max. Earth dist.	13597 Jul 06 23:14	22° E 18'10	1.43795 AU
evening rise	13596 Aug 12 02:46	11° np 32'14			13597 Jul 11 16:59	0° O	
asc. node	13596 Aug 12 06:05	11° np 47'29					
	13596 Aug 22 16:45	0° O		superior conj	13597 Jul 13 08:14	2° O 41'56	-1°56'43
evening max el	13596 Aug 28 03:53	7° O 00'34	18°10'28	minimum elong	13597 Jul 13 15:11	3° O 10'49	1°57'08
retrograde	13596 Sep 04 05:49	10° O 36'52		evening rise	13597 Jul 25 19:51	24° O 01'52	
evening set	13596 Sep 06 11:05	10° O 16'08			13597 Jul 29 05:56	0° np	
inferior conj	13596 Sep 13 16:10	5° O 29'02	0°10'02	asc. node	13597 Jul 30 02:45	1° np 30'16	
minimum elong	13596 Sep 13 16:30	5° O 28'17	0°09'53	evening max el	13597 Aug 11 17:22	20° np 10'16	18°02'47
transit middle	13596 Sep 13 16:30	5° O 28'17	0°09'53	retrograde	13597 Aug 18 05:29	23° np 32'08	
transit begin	13596 Sep 13 13:48	5° O 34'13		evening set	13597 Aug 20 18:54	23° np 00'16	
transit end	13596 Sep 13 19:12	5° O 22'21		inferior conj	13597 Aug 27 07:36	17° np 53'37	1°24'05
desc. node	13596 Sep 14 05:08	5° O 00'22		minimum elong	13597 Aug 27 09:46	17° np 48'08	1°23'01
min. Earth dist.	13596 Sep 16 23:08	2° O 36'24	0.59452 AU	min. Earth dist.	13597 Aug 30 07:35	14° np 52'59	0.61746 AU
morning rise	13596 Sep 20 18:32	29° np 50'22		desc. node	13597 Sep 01 02:39	13° np 14'54	
	13596 Sep 20 12:08	30° R np		morning rise	13597 Sep 02 22:06	11° np 50'45	
direct	13596 Sep 27 05:31	27° np 54'19		direct	13597 Sep 09 14:14	9° np 31'30	
	13596 Oct 04 06:55	0° O		morning max el	13597 Sep 23 18:12	17° np 30'10	27°58'30
morning max el	13596 Oct 11 13:09	5° O 42'15	27°41'03		13597 Oct 04 04:25	0° O	
	13596 Oct 29 16:06	0° ml			13597 Oct 22 10:17	0° ml	
asc. node	13596 Nov 08 08:03	17° ml 36'32		asc. node	13597 Oct 26 04:45	7° ml 25'17	
morning set	13596 Nov 12 09:01	25° ml 53'24		morning set	13597 Oct 27 10:01	9° ml 54'41	
	13596 Nov 14 07:12	0° x		max. Earth dist.	13597 Nov 01 23:00	21° ml 42'05	1.31613 AU
max. Earth dist.	13596 Nov 18 17:20	9° x 43'57	1.31203 AU				
				superior conj	13597 Nov 03 19:43	25° ml 47'47	1°14'10
superior conj	13596 Nov 19 09:46	11° x 15'34	1°27'55	minimum elong	13597 Nov 03 17:30	25° ml 35'31	1°14'39
minimum elong	13596 Nov 19 08:01	11° x 05'51	1°28'42		13597 Nov 05 17:18	0° x	
evening rise	13596 Nov 26 02:47	26° x 04'38		evening rise	13597 Nov 10 13:10	10° x 36'24	
	13596 Nov 27 23:06	0° Z			13597 Nov 20 06:59	0° Z	
desc. node	13596 Dec 11 02:08	24° Z 14'04		desc. node	13597 Nov 27 23:15	12° Z 16'07	
	13596 Dec 14 22:46	0° \approx		evening max el	13597 Dec 06 07:30	22° Z 09'40	24°45'35
evening max el	13596 Dec 24 17:05	11° \approx 35'14	26°12'12	retrograde	13597 Dec 20 01:37	29° Z 01'59	
retrograde	13597 Jan 07 15:56	18° \approx 40'02		evening set	13597 Dec 25 12:15	27° Z 56'22	
evening set	13597 Jan 13 23:55	17° \approx 04'14		min. Earth dist.	13597 Dec 30 19:21	25° Z 10'00	0.56318 AU
min. Earth dist.	13597 Jan 18 06:29	14° \approx 27'41	0.58196 AU	inferior conj	13598 Jan 02 07:11	23° Z 35'03	-5°23'01

minimum elong	13598 Jan 02 14:52	23°  22'48	5°20'36	inferior conj	13598 Dec 13 10:30	4°  08'25	-5°56'38
morning rise	13598 Jan 10 19:37	19°  29'40		minimum elong	13598 Dec 13 11:30	4°  06'58	5°55'35
direct	13598 Jan 13 03:22	19°  14'48		morning rise	13598 Dec 21 22:42	0°  18'52	
asc. node	13598 Jan 22 04:16	23°  18'46			13598 Dec 24 01:03	30°  R 	
morning max el	13598 Jan 22 20:11	23°  55'59	19°29'04	direct	13598 Dec 24 21:51	29°  7'58'11	
	13598 Jan 27 21:19	0° 			13598 Dec 25 18:29	0° 	
morning set	13598 Feb 09 00:20	21°  42'33		morning max el	13599 Jan 05 04:06	5°  20'56	20°47'46
	13598 Feb 13 03:16	0° 		asc. node	13599 Jan 09 01:31	9°  240'28	
					13599 Jan 21 04:55	0° 	
superior conj	13598 Feb 17 01:35	7°  47'43	0°54'16	morning set	13599 Jan 24 08:16	6°  23'34	
minimum elong	13598 Feb 17 04:18	8°  00'56	0°54'21				
max. Earth dist.	13598 Feb 23 12:36	20°  02'17	1.37964 AU	superior conj	13599 Jan 31 18:25	21°  48'19	1°15'12
desc. node	13598 Feb 23 23:52	20°  53'42		minimum elong	13599 Jan 31 20:59	22°  01'28	1°15'36
evening rise	13598 Feb 27 05:46	26°  42'08			13599 Feb 04 20:21	0° 	
	13598 Mar 01 03:18	0° 		max. Earth dist.	13599 Feb 05 21:17	2°  41'52	1.35818 AU
	13598 Mar 20 12:48	0° 		evening rise	13599 Feb 09 19:08	9°  47'05	
evening max el	13598 Apr 03 15:49	17°  07'01	25°04'30	desc. node	13599 Feb 10 20:27	11°  423'30	
retrograde	13598 Apr 15 15:01	24°  04'05			13599 Feb 21 18:38	0° 	
asc. node	13598 Apr 20 00:50	22°  40'33			13599 Mar 16 06:35	0° 	
evening set	13598 Apr 21 09:11	21°  039'51		evening max el	13599 Mar 17 05:25	0°  56'49	26°12'59
min. Earth dist.	13598 Apr 25 19:11	16°  43'59	0.68089 AU	retrograde	13599 Mar 30 00:37	8°  14'37	
inferior conj	13598 Apr 27 00:04	15°  09'18	2°00'42	evening set	13599 Apr 05 05:47	5°  43'35	
minimum elong	13598 Apr 26 21:55	15°  16'21	1°59'25	asc. node	13599 Apr 06 22:16	4°  09'54	
morning rise	13598 May 02 10:57	9°  14'10		min. Earth dist.	13599 Apr 09 09:22	1°  22'58	0.67003 AU
direct	13598 May 06 02:21	7°  58'00			13599 Apr 10 12:23	30°  R 	
morning max el	13598 May 13 05:07	11°  52'38	19°24'31	inferior conj	13599 Apr 11 02:47	29°  15'27	1°16'46
desc. node	13598 May 23 01:58	24°  020'25		minimum elong	13599 Apr 11 01:03	29°  120'48	1°15'45
greatest brilliancy	13598 May 25 21:27	28°  026'08	-0.7m	morning rise	13599 Apr 16 21:08	23°  030'47	
	13598 May 26 22:48	0° 		direct	13599 Apr 20 01:33	22°  033'25	
morning set	13598 Jun 07 02:43	16°  157'02		morning max el	13599 Apr 26 15:06	26°  034'48	18°35'15
	13598 Jun 15 12:57	0° 			13599 Apr 30 02:53	0° 	
max. Earth dist.	13598 Jun 19 14:14	6°  21'11	1.45144 AU	desc. node	13599 May 09 22:44	14°  10'50	
				morning set	13599 May 17 19:04	26°  026'27	
					13599 May 20 01:31	0° 	
superior conj	13598 Jun 23 10:20	12°  25'43	-2°12'25				
minimum elong	13598 Jun 23 12:57	12°  236'09	2°13'24	superior conj	13599 Jun 02 20:21	21°  1132'55	-2°09'09
	13598 Jul 04 06:37	0° 		minimum elong	13599 Jun 02 15:17	21°  113'07	2°09'58
evening rise	13598 Jul 07 15:52	5°  036'09		max. Earth dist.	13599 Jun 02 09:10	20°  1149'14	1.45797 AU
asc. node	13598 Jul 16 23:30	20°  055'48			13599 Jun 08 05:58	0° 	
	13598 Jul 23 03:33	0° 		evening rise	13599 Jun 18 11:24	16°  08'41	
evening max el	13598 Jul 26 07:44	3°  039'36	18°13'38	greatest brilliancy	13599 Jun 26 09:41	28°  042'39	-0.8m
retrograde	13598 Aug 01 16:15	7°  01'23			13599 Jun 27 05:26	0° 	
evening set	13598 Aug 04 14:06	6°  015'41		asc. node	13599 Jul 03 20:20	9°  057'17	
inferior conj	13598 Aug 10 13:58	0°  051'41	2°16'20	evening max el	13599 Jul 09 19:58	17°  020'20	18°42'13
minimum elong	13598 Aug 10 16:26	0°  044'41	2°15'06	retrograde	13599 Jul 16 10:00	20°  055'25	
	13598 Aug 11 08:08	30°  R 		evening set	13599 Jul 19 16:34	19°  054'07	
min. Earth dist.	13598 Aug 13 01:42	28°  003'18	0.63912 AU	inferior conj	13599 Jul 25 07:21	14°  014'49	2°49'47
morning rise	13598 Aug 16 17:10	24°  034'22		minimum elong	13599 Jul 25 09:15	14°  008'56	2°48'38
desc. node	13598 Aug 19 00:09	23°  005'13		min. Earth dist.	13599 Jul 27 04:51	11°  054'15	0.65786 AU
direct	13598 Aug 23 08:06	22°  000'00		morning rise	13599 Jul 31 00:59	7°  051'07	
morning max el	13598 Sep 06 03:45	0°  00'10	27°38'40	desc. node	13599 Aug 05 21:37	5°  011'58	
	13598 Sep 06 03:41	0° 		direct	13599 Aug 06 09:51	5°  011'01	
	13598 Sep 28 04:37	0° 		morning max el	13599 Aug 19 15:01	13°  000'22	26°47'30
morning set	13598 Oct 11 03:12	23°  032'02			13599 Sep 02 07:52	0° 	
asc. node	13598 Oct 13 01:24	27°  024'45			13599 Sep 20 20:13	0° 	
	13598 Oct 14 07:38	0° 		morning set	13599 Sep 24 09:29	6°  037'15	
max. Earth dist.	13598 Oct 15 22:29	3°  022'46	1.32561 AU	max. Earth dist.	13599 Sep 28 12:28	14°  040'45	1.34034 AU
				asc. node	13599 Sep 29 22:00	17°  029'46	
superior conj	13598 Oct 19 02:08	10°  006'34	0°54'46				
minimum elong	13598 Oct 18 23:56	9°  054'41	0°54'57	superior conj	13599 Oct 03 02:37	24°  004'53	0°29'51
evening rise	13598 Oct 26 00:23	25°  008'35		minimum elong	13599 Oct 03 01:07	23°  0057'00	0°29'53
	13598 Oct 28 07:28	0° 			13599 Oct 05 22:00	0° 	
desc. node	13598 Nov 14 20:29	29°  009'38		evening rise	13599 Oct 10 10:23	9°  034'57	
	13598 Nov 15 14:17	0° 			13599 Oct 21 01:11	0° 	
evening max el	13598 Nov 17 17:24	2°  012'49	23°04'05	evening max el	13599 Oct 30 07:55	12°  020'37	21°25'45
retrograde	13598 Nov 30 22:26	8°  0346'36		desc. node	13599 Nov 01 17:49	14°  029'42	
evening set	13598 Dec 05 01:51	8°  0309'19		retrograde	13599 Nov 11 10:26	18°  021'16	
min. Earth dist.	13598 Dec 12 02:42	4°  0354'02	0.55001 AU				

evening set	13599 Nov 14 05:39	18° ♂ 03'12		desc. node	13600 Oct 18 15:12	27° ♄ 49'09	
inferior conj	13599 Nov 23 02:35	14° ♂ 09'43	-5°33'27	retrograde	13600 Oct 21 23:27	28° ♄ 20'13	
minimum elong	13599 Nov 22 19:03	14° ♂ 20'18	5°31'18	evening set	13600 Oct 23 23:45	28° ♄ 09'35	
min. Earth dist.	13599 Nov 23 08:43	14° ♂ 01'06	0.54498 AU	inferior conj	13600 Nov 01 21:32	24° ♄ 11'08	-4°14'56
morning rise	13599 Dec 01 09:12	10° ♂ 20'42		minimum elong	13600 Nov 01 11:35	24° ♄ 26'06	4°11'07
direct	13599 Dec 05 05:40	9° ♂ 48'37		min. Earth dist.	13600 Nov 03 16:37	23° ♄ 06'19	0.54937 AU
morning max el	13599 Dec 17 22:19	15° ♂ 54'25	22°26'45	morning rise	13600 Nov 09 22:15	20° ♄ 02'21	
asc. node	13599 Dec 26 22:41	27° ♂ 07'29		direct	13600 Nov 14 16:58	19° ♄ 12'34	
	13599 Dec 28 18:09	0° ♂		morning max el	13600 Nov 28 08:38	25° ♄ 56'32	24°15'36
morning set	13600 Jan 08 19:09	21° ♂ 09'11			13600 Dec 02 04:44	0° ♂	
	13600 Jan 12 22:23	0° ♄		asc. node	13600 Dec 12 19:44	15° ♂ 24'28	
					13600 Dec 20 11:47	0° ♂	
superior conj	13600 Jan 15 19:41	6° ♄ 10'29	1°29'12	morning set	13600 Dec 23 07:02	5° ♂ 53'57	
minimum elong	13600 Jan 15 21:29	6° ♄ 20'06	1°29'57				
max. Earth dist.	13600 Jan 19 11:59	13° ♄ 52'18	1.33975 AU	superior conj	13600 Dec 30 02:33	20° ♂ 46'06	1°36'39
evening rise	13600 Jan 23 23:04	22° ♄ 47'55		minimum elong	13600 Dec 30 03:19	20° ♂ 50'18	1°37'38
	13600 Jan 27 18:24	0° ♂		max. Earth dist.	13601 Jan 01 10:27	25° ♂ 49'06	1.32564 AU
desc. node	13600 Jan 28 17:06	1° ♂ 43'49			13601 Jan 03 09:34	0° ♄	
	13600 Feb 15 11:28	0° ♂		evening rise	13601 Jan 06 14:14	6° ♄ 36'21	
evening max el	13600 Feb 27 18:57	14° ♂ 35'31	27°04'22	desc. node	13601 Jan 14 13:48	21° ♄ 49'28	
retrograde	13600 Mar 12 04:34	22° ♂ 02'59			13601 Jan 19 08:05	0° ♂	
evening set	13600 Mar 18 18:51	19° ♂ 30'47		evening max el	13601 Feb 09 07:26	27° ♂ 52'20	27°31'21
min. Earth dist.	13600 Mar 22 17:17	15° ♂ 43'26	0.65510 AU		13601 Feb 11 16:09	0° ♂	
asc. node	13600 Mar 23 19:43	14° ♂ 29'02		retrograde	13601 Feb 23 01:47	5° ♂ 19'15	
inferior conj	13600 Mar 24 22:56	13° ♂ 11'17	0°21'38	evening set	13601 Mar 01 22:00	2° ♂ 52'57	
minimum elong	13600 Mar 24 22:20	13° ♂ 12'58	0°21'16		13601 Mar 05 06:58	30° ♂	
morning rise	13600 Mar 31 03:23	7° ♂ 38'57		min. Earth dist.	13601 Mar 05 16:58	29° ♂ 35'29	0.63678 AU
direct	13600 Apr 02 22:00	6° ♂ 57'29		inferior conj	13601 Mar 08 09:46	26° ♂ 49'32	-0°45'00
morning max el	13600 Apr 09 06:17	10° ♂ 16'22	18°02'46	minimum elong	13601 Mar 08 11:12	26° ♂ 45'52	0°44'15
	13600 Apr 23 03:25	0° ♂		asc. node	13601 Mar 10 17:11	24° ♂ 32'56	
desc. node	13600 Apr 25 19:24	4° ♂ 20'13		morning rise	13601 Mar 15 02:44	21° ♂ 31'51	
morning set	13600 Apr 27 14:42	7° ♂ 16'43		direct	13601 Mar 17 13:02	21° ♂ 02'46	
	13600 May 11 18:21	0° ♄		morning max el	13601 Mar 23 23:53	24° ♂ 21'27	17°47'28
					13601 Mar 28 15:12	0° ♂	
superior conj	13600 May 12 06:35	0° ♄ 48'12	-1°46'23	morning set	13601 Apr 09 13:25	19° ♂ 24'54	
minimum elong	13600 May 11 21:29	0° ♄ 12'22	1°46'27	desc. node	13601 Apr 12 15:59	24° ♂ 42'26	
max. Earth dist.	13600 May 15 05:07	5° ♄ 24'59	1.45702 AU		13601 Apr 15 19:14	0° ♂	
evening rise	13600 May 28 09:02	25° ♄ 50'23					
	13600 May 31 01:51	0° ♄		superior conj	13601 Apr 22 08:54	10° ♂ 51'19	-1°10'37
greatest brilliancy	13600 Jun 10 09:28	15° ♄ 40'22	-0.7m	minimum elong	13601 Apr 22 01:48	10° ♂ 22'26	1°10'17
asc. node	13600 Jun 19 17:16	28° ♄ 26'47		max. Earth dist.	13601 Apr 27 23:52	19° ♂ 53'12	1.44883 AU
	13600 Jun 21 02:04	0° ♄			13601 May 04 10:48	0° ♄	
evening max el	13600 Jun 22 03:49	1° ♄ 07'15	19°27'31	evening rise	13601 May 07 20:14	5° ♄ 13'31	
retrograde	13600 Jun 29 07:32	5° ♄ 07'58			13601 May 24 11:42	0° ♄	
evening set	13600 Jul 02 23:21	3° ♄ 50'05		evening max el	13601 Jun 05 06:02	14° ♄ 56'16	20°27'48
	13600 Jul 06 18:24	30° ♄		asc. node	13601 Jun 06 14:18	16° ♄ 12'55	
inferior conj	13600 Jul 08 08:27	27° ♄ 57'03	3°07'34	retrograde	13601 Jun 13 06:23	19° ♄ 32'49	
minimum elong	13600 Jul 08 09:24	27° ♄ 53'57	3°06'30	evening set	13601 Jun 17 08:12	17° ♄ 58'04	
min. Earth dist.	13600 Jul 09 15:31	26° ♄ 14'37	0.67266 AU	inferior conj	13601 Jun 22 14:33	11° ♄ 52'42	3°12'15
morning rise	13600 Jul 13 18:55	21° ♄ 32'52		minimum elong	13601 Jun 22 14:28	11° ♄ 53'01	3°11'12
direct	13600 Jul 19 18:21	18° ♄ 56'12		min. Earth dist.	13601 Jun 23 07:37	10° ♄ 54'07	0.68295 AU
desc. node	13600 Jul 22 18:59	19° ♄ 30'12		morning rise	13601 Jun 27 20:26	5° ♄ 31'48	
morning max el	13600 Aug 01 01:53	26° ♄ 18'54	25°33'43	direct	13601 Jul 03 08:20	3° ♄ 06'28	
	13600 Aug 04 11:32	0° ♄		desc. node	13601 Jul 09 16:15	5° ♄ 34'27	
	13600 Aug 25 21:30	0° ♄		morning max el	13601 Jul 14 12:01	9° ♄ 47'10	24°07'15
morning set	13600 Sep 06 01:13	19° ♄ 01'44			13601 Jul 30 11:57	0° ♄	
max. Earth dist.	13600 Sep 09 16:23	25° ♄ 44'57	1.35980 AU	morning set	13601 Aug 18 21:57	0° ♄ 34'19	
	13600 Sep 11 21:48	0° ♄			13601 Aug 18 13:57	0° ♄	
				max. Earth dist.	13601 Aug 22 14:24	7° ♄ 01'27	1.38255 AU
superior conj	13600 Sep 15 18:28	7° ♄ 36'14	-0°00'03				
minimum elong	13600 Sep 15 18:28	7° ♄ 36'14	0°00'01	superior conj	13601 Aug 29 22:14	20° ♄ 32'24	-0°33'44
behind sun begin	13600 Sep 15 13:07	7° ♄ 09'27		minimum elong	13601 Aug 30 00:36	20° ♄ 43'37	0°33'34
behind sun end	13600 Sep 15 23:49	8° ♄ 03'04		asc. node	13601 Sep 02 15:08	27° ♄ 41'58	
asc. node	13600 Sep 15 18:34	7° ♄ 36'46			13601 Sep 03 19:17	0° ♄	
evening rise	13600 Sep 23 17:08	23° ♄ 50'19		evening rise	13601 Sep 07 18:04	7° ♄ 48'12	
	13600 Sep 26 18:15	0° ♄			13601 Sep 20 06:51	0° ♄	
evening max el	13600 Oct 11 11:10	23° ♄ 06'14	20°03'38	evening max el	13601 Sep 24 04:31	4° ♄ 40'44	19°02'50

retrograde	13601 Oct 03 01:48	9°♄08'01	
evening set	13601 Oct 04 22:31	8°♄57'04	
desc. node	13601 Oct 05 12:37	8°♄49'16	
inferior conj	13601 Oct 13 08:08	4°♄42'30	-2°27'57
minimum elong	13601 Oct 13 01:50	4°♄53'20	2°25'01
min. Earth dist.	13601 Oct 16 04:31	2°♄45'13	0.56243 AU
morning rise	13601 Oct 21 02:18	29°♄59'44	
	13601 Oct 21 02:03	30°♄	
direct	13601 Oct 26 16:35	28°♄46'33	
	13601 Nov 01 07:19	0°♄	
morning max el	13601 Nov 09 19:44	6°♄00'22	25°57'08
	13601 Nov 27 07:27	0°♄	
asc. node	13601 Nov 29 16:41	4°♄18'50	
morning set	13601 Dec 07 18:14	20°♄33'17	
	13601 Dec 12 01:41	0°♄	
superior conj	13601 Dec 14 12:47	5°♄28'32	1°37'54
minimum elong	13601 Dec 14 12:28	5°♄26'44	1°38'58
max. Earth dist.	13601 Dec 15 15:26	7°♄56'18	1.31634 AU
evening rise	13601 Dec 21 13:44	20°♄45'03	
	13601 Dec 26 03:38	0°♄	
desc. node	13602 Jan 01 10:35	11°♄34'14	
	13602 Jan 13 11:21	0°♄	