

superior conj	13100 May 08 11:59	25° J 35'28	-1°11'27	minimum elong	13102 Oct 04 12:47	24° J 52'06	3°41'45
minimum elong	13100 May 08 01:10	25° J 01'46	1°11'54	morning rise	13102 Oct 10 09:48	21° J 23'37	
	13100 May 12 00:46	0° II		direct	13102 Oct 25 19:00	16° J 50'37	
	13100 Jun 05 00:34	0° G		greatest brilliancy	13102 Nov 04 07:12	18° J 30'19	-4.8m
evening rise	13100 Jun 17 03:33	15° G 11'11			13102 Nov 24 06:17	0° M	
	13100 Jun 28 23:25	0° Q		morning max el	13102 Dec 13 21:11	17° M 10'17	45°53'11
	13100 Jul 22 23:13	0° P			13102 Dec 26 16:20	0° J	
asc. node	13100 Jul 25 16:38	3° P 24'02		asc. node	13103 Jan 10 21:23	16° J 16'00	
	13100 Aug 16 01:57	0° J			13103 Jan 23 05:09	0° Z	
	13100 Sep 09 10:01	0° M			13103 Feb 18 03:48	0° \approx	
	13100 Oct 04 03:23	0° J			13103 Mar 15 07:43	0° H	
	13100 Oct 29 13:18	0° Z			13103 Apr 09 00:50	0° Y	
desc. node	13100 Nov 14 12:41	18° Z 10'57		desc. node	13103 May 02 16:47	29° Y 04'45	
	13100 Nov 25 06:50	0° \approx			13103 May 03 10:40	0° B	
evening max el	13100 Dec 17 08:58	22° \approx 41'17	45°55'00		13103 May 27 14:57	0° II	
	13100 Dec 25 05:28	0° H		morning set	13103 Jun 13 03:09	20° II 36'45	
greatest brilliancy	13101 Jan 25 11:33	21° H 03'56	-4.8m		13103 Jun 20 15:09	0° G	
retrograde	13101 Feb 04 08:23	22° H 50'38			13103 Jul 14 13:08	0° Q	
evening set	13101 Feb 19 16:54	18° H 15'59					
inferior conj	13101 Feb 25 14:39	14° H 42'55	-2°27'00	superior conj	13103 Jul 23 02:40	10° Q 44'52	-1°06'54
minimum elong	13101 Feb 25 20:01	14° H 34'32	2°25'02	minimum elong	13103 Jul 23 14:17	11° Q 21'21	1°07'22
min. Earth dist.	13101 Feb 26 01:08	14° H 26'33	0.28403 AU	max. Earth dist.	13103 Jul 23 11:37	11° Q 12'57	1.71420 AU
morning rise	13101 Mar 03 22:43	10° H 54'46			13103 Aug 07 10:53	0° P	
asc. node	13101 Mar 07 14:44	9° H 04'51		asc. node	13103 Aug 23 06:37	19° P 49'14	
direct	13101 Mar 18 20:40	6° H 31'15			13103 Aug 31 09:56	0° J	
greatest brilliancy	13101 Mar 29 18:30	8° H 42'56	-4.8m	evening rise	13103 Sep 01 03:48	0° J 55'49	
	13101 Apr 29 01:50	0° Y			13103 Sep 24 11:26	0° M	
morning max el	13101 May 07 16:51	8° Y 15'36	46°24'10		13103 Oct 18 16:53	0° J	
	13101 May 28 08:59	0° B			13103 Nov 12 04:47	0° Z	
	13101 Jun 23 16:35	0° II			13103 Dec 07 02:41	0° \approx	
desc. node	13101 Jun 27 16:07	4° II 40'53		desc. node	13103 Dec 12 23:46	6° \approx 58'55	
	13101 Jul 18 20:29	0° G			13104 Jan 01 15:19	0° H	
	13101 Aug 12 11:12	0° Q			13104 Jan 28 03:03	0° Y	
	13101 Sep 05 19:51	0° P			13104 Feb 25 15:00	0° B	
	13101 Sep 30 02:09	0° J		evening max el	13104 Feb 27 17:14	2° B 02'58	46°03'44
asc. node	13101 Oct 18 09:40	22° J 40'22		asc. node	13104 Apr 04 00:05	29° B 55'31	
	13101 Oct 24 07:37	0° M			13104 Apr 04 04:09	0° II	
morning set	13101 Nov 08 22:41	19° M 21'30		greatest brilliancy	13104 Apr 07 04:48	1° II 11'43	-4.8m
	13101 Nov 17 12:49	0° J		retrograde	13104 Apr 17 01:22	2° II 59'32	
	13101 Dec 11 18:18	0° Z			13104 Apr 29 07:03	30° R B	
				evening set	13104 May 03 04:38	27° B 56'11	
superior conj	13101 Dec 16 03:19	5° Z 24'47	1°25'49	inferior conj	13104 May 07 22:10	25° B 03'39	7°24'15
minimum elong	13101 Dec 16 04:59	5° Z 29'57	1°26'50	minimum elong	13104 May 07 11:42	25° B 19'58	7°21'33
max. Earth dist.	13101 Dec 17 18:25	7° Z 25'43	1.73007 AU	min. Earth dist.	13104 May 07 22:08	25° B 03'42	0.27719 AU
	13102 Jan 05 01:03	0° \approx		morning rise	13104 May 11 18:39	22° B 41'34	
evening rise	13102 Jan 22 07:35	21° \approx 16'43		direct	13104 May 28 21:51	17° B 02'02	
	13102 Jan 29 09:49	0° H		greatest brilliancy	13104 Jun 07 20:59	18° B 54'06	-4.9m
desc. node	13102 Feb 06 23:36	10° H 31'44			13104 Jun 26 13:09	0° II	
	13102 Feb 22 20:36	0° Y		morning max el	13104 Jul 18 08:25	19° II 46'33	46°57'04
	13102 Mar 19 08:49	0° B		desc. node	13104 Jul 25 02:45	26° II 43'26	
	13102 Apr 12 22:28	0° II			13104 Jul 28 05:18	0° G	
	13102 May 07 15:32	0° G			13104 Aug 24 03:40	0° Q	
asc. node	13102 May 30 17:51	27° G 40'08			13104 Sep 18 17:23	0° P	
	13102 Jun 01 17:07	0° Q			13104 Oct 13 17:48	0° J	
	13102 Jun 27 13:59	0° P			13104 Nov 07 11:34	0° M	
	13102 Jul 25 10:53	0° J		asc. node	13104 Nov 14 23:25	9° M 08'07	
evening max el	13102 Jul 25 12:55	0° J 05'07	46°45'41		13104 Dec 02 00:59	0° J	
	13102 Sep 01 21:46	0° M			13104 Dec 26 11:18	0° Z	
greatest brilliancy	13102 Sep 02 21:42	0° M 24'06	-4.9m	morning set	13105 Jan 17 02:43	26° Z 39'26	
retrograde	13102 Sep 13 21:07	2° M 38'11			13105 Jan 19 19:48	0° \approx	
desc. node	13102 Sep 19 19:30	1° M 54'58			13105 Feb 13 03:33	0° H	
	13102 Sep 25 07:08	30° R J		max. Earth dist.	13105 Feb 22 07:58	11° H 20'00	1.73045 AU
evening set	13102 Sep 28 16:30	28° J 18'40					
min. Earth dist.	13102 Oct 04 02:33	25° J 07'46	0.27527 AU	superior conj	13105 Feb 23 05:58	12° H 27'53	0°26'59
inferior conj	13102 Oct 04 20:47	24° J 39'51	-3°44'24	minimum elong	13105 Feb 23 11:55	12° H 46'14	0°27'06

desc. node	13105 Mar 06 13:55	26° Υ 27'12		desc. node	13107 Aug 22 12:21	3° Ω 22'44	
	13105 Mar 09 10:49	0° Υ			13107 Sep 26 19:48	0° \mathbb{M}	
evening rise	13105 Apr 02 12:33	29° Υ 45'58		morning max el	13107 Sep 29 20:23	2° \mathbb{M} 57'42	46°37'48
	13105 Apr 02 17:05	0° \mathcal{B}			13107 Oct 25 12:04	0° \mathcal{A}	
	13105 Apr 26 21:54	0° Π			13107 Nov 20 23:48	0° \mathbb{M}	
	13105 May 21 01:57	0° \mathcal{E}		asc. node	13107 Dec 13 11:58	26° \mathbb{M} 22'09	
	13105 Jun 14 07:10	0° Ω			13107 Dec 16 13:27	0° \mathcal{A}	
asc. node	13105 Jun 27 05:31	15° Ω 56'33			13108 Jan 10 14:28	0° \mathcal{B}	
	13105 Jul 08 16:36	0° \mathbb{M}			13108 Feb 04 07:30	0° \approx	
	13105 Aug 02 10:41	0° \mathcal{A}			13108 Feb 28 19:26	0° \mathcal{H}	
	13105 Aug 27 21:30	0° \mathbb{M}			13108 Mar 24 03:49	0° Υ	
	13105 Sep 23 21:17	0° \mathcal{A}		morning set	13108 Mar 27 17:20	4° Υ 24'10	
evening max el	13105 Oct 04 22:16	11° \mathcal{A} 18'55	46°19'42	desc. node	13108 Apr 03 04:27	12° Υ 23'58	
desc. node	13105 Oct 17 04:52	22° \mathcal{A} 49'40			13108 Apr 17 09:05	0° \mathcal{B}	
	13105 Oct 25 21:44	0° \mathcal{B}		max. Earth dist.	13108 May 02 20:58	19° \mathcal{B} 16'28	1.72077 AU
greatest brilliancy	13105 Nov 13 05:21	10° \mathcal{B} 45'57	-4.8m				
retrograde	13105 Nov 23 15:04	12° \mathcal{B} 44'50		superior conj	13108 May 06 01:11	23° \mathcal{B} 13'59	-1°09'14
evening set	13105 Dec 12 02:07	6° \mathcal{B} 22'57		minimum elong	13108 May 05 14:09	22° \mathcal{B} 39'36	1°09'38
inferior conj	13105 Dec 15 03:20	4° \mathcal{B} 29'03	-8°47'31		13108 May 11 11:21	0° Π	
minimum elong	13105 Dec 15 04:57	4° \mathcal{B} 26'32	8°46'29		13108 Jun 04 11:15	0° \mathcal{E}	
min. Earth dist.	13105 Dec 14 22:06	4° \mathcal{B} 37'18	0.28862 AU	evening rise	13108 Jun 14 15:30	12° \mathcal{E} 44'46	
morning rise	13105 Dec 18 07:51	2° \mathcal{B} 30'16			13108 Jun 28 10:13	0° Ω	
	13105 Dec 22 18:06	30° \mathcal{R} \mathcal{A}			13108 Jul 22 10:11	0° \mathbb{M}	
direct	13106 Jan 05 11:47	26° \mathcal{A} 19'07		asc. node	13108 Jul 24 18:30	2° \mathbb{M} 55'32	
greatest brilliancy	13106 Jan 15 16:50	28° \mathcal{A} 12'19	-4.7m		13108 Aug 15 13:10	0° \mathcal{A}	
	13106 Jan 20 00:22	0° \mathcal{B}			13108 Sep 08 21:39	0° \mathbb{M}	
asc. node	13106 Feb 07 07:23	12° \mathcal{B} 08'53			13108 Oct 03 15:42	0° \mathcal{A}	
morning max el	13106 Feb 23 11:40	26° \mathcal{B} 42'40	45°46'00		13108 Oct 29 02:57	0° \mathcal{B}	
	13106 Feb 26 19:51	0° \approx		desc. node	13108 Nov 13 14:37	17° \mathcal{B} 34'21	
	13106 Mar 26 23:20	0° \mathcal{H}			13108 Nov 24 23:29	0° \approx	
	13106 Apr 22 00:51	0° Υ		evening max el	13108 Dec 15 00:58	20° \approx 30'56	45°55'23
	13106 May 17 03:49	0° \mathcal{B}			13108 Dec 25 08:25	0° \mathcal{H}	
desc. node	13106 May 30 05:59	15° \mathcal{B} 54'44		greatest brilliancy	13109 Jan 23 02:13	18° \mathcal{H} 51'03	-4.7m
	13106 Jun 10 17:50	0° Π		retrograde	13109 Feb 01 23:58	20° \mathcal{H} 38'06	
	13106 Jul 04 23:49	0° \mathcal{E}		evening set	13109 Feb 17 10:16	16° \mathcal{H} 00'33	
	13106 Jul 29 01:23	0° Ω		inferior conj	13109 Feb 23 06:04	12° \mathcal{H} 29'52	-2°47'20
	13106 Aug 22 01:20	0° \mathbb{M}		minimum elong	13109 Feb 23 12:07	12° \mathcal{H} 20'26	2°45'10
morning set	13106 Aug 26 16:35	5° \mathbb{M} 47'49		min. Earth dist.	13109 Feb 23 16:30	12° \mathcal{H} 13'33	0.28432 AU
	13106 Sep 15 01:25	0° \mathcal{A}		morning rise	13109 Mar 01 13:37	8° \mathcal{H} 42'33	
asc. node	13106 Sep 19 21:08	6° \mathcal{A} 01'13		asc. node	13109 Mar 06 16:53	6° \mathcal{H} 15'50	
				direct	13109 Mar 16 12:57	4° \mathcal{H} 18'04	
superior conj	13106 Oct 04 19:18	24° \mathcal{A} 38'27	0°35'18	greatest brilliancy	13109 Mar 27 09:54	6° \mathcal{H} 29'21	-4.8m
minimum elong	13106 Oct 04 11:31	24° \mathcal{A} 14'12	0°35'16		13109 Apr 29 02:57	0° Υ	
max. Earth dist.	13106 Oct 06 22:28	27° \mathcal{A} 17'51	1.72120 AU	morning max el	13109 May 05 08:48	6° Υ 02'30	46°22'40
	13106 Oct 09 02:31	0° \mathbb{M}			13109 May 28 01:24	0° \mathcal{B}	
	13106 Nov 02 05:20	0° \mathcal{A}			13109 Jun 23 06:18	0° Π	
evening rise	13106 Nov 11 11:40	11° \mathcal{A} 29'10		desc. node	13109 Jun 26 18:04	4° Π 06'53	
	13106 Nov 26 11:01	0° \mathcal{B}			13109 Jul 18 08:58	0° \mathcal{E}	
	13106 Dec 20 21:07	0° \approx			13109 Aug 11 23:00	0° Ω	
desc. node	13107 Jan 09 12:01	23° \approx 53'51			13109 Sep 05 07:13	0° \mathbb{M}	
	13107 Jan 14 12:56	0° \mathcal{H}			13109 Sep 29 13:13	0° \mathcal{A}	
	13107 Feb 08 11:15	0° Υ		asc. node	13109 Oct 17 11:32	22° \mathcal{A} 12'24	
	13107 Mar 05 17:24	0° \mathcal{B}			13109 Oct 23 18:28	0° \mathbb{M}	
	13107 Mar 31 12:16	0° Π		morning set	13109 Nov 06 14:09	17° \mathbb{M} 07'29	
	13107 Apr 27 11:47	0° \mathcal{E}			13109 Nov 16 23:30	0° \mathcal{A}	
asc. node	13107 May 02 09:26	5° \mathcal{E} 11'00			13109 Dec 11 04:54	0° \mathcal{B}	
evening max el	13107 May 11 04:41	14° \mathcal{E} 10'17	46°34'46				
	13107 May 28 08:15	0° Ω		superior conj	13109 Dec 13 19:58	3° \mathcal{B} 15'02	1°26'03
greatest brilliancy	13107 Jun 20 17:54	14° Ω 39'12	-4.9m	minimum elong	13109 Dec 13 20:52	3° \mathcal{B} 17'51	1°27'03
retrograde	13107 Jun 30 06:59	16° Ω 22'41		max. Earth dist.	13109 Dec 15 14:44	5° \mathcal{B} 27'18	1.72986 AU
evening set	13107 Jul 17 02:02	10° Ω 56'50			13110 Jan 04 11:40	0° \approx	
inferior conj	13107 Jul 20 22:56	8° Ω 37'11	7°21'31	evening rise	13110 Jan 19 23:41	19° \approx 05'42	
minimum elong	13107 Jul 21 09:48	8° Ω 20'32	7°18'33		13110 Jan 28 20:33	0° \mathcal{H}	
min. Earth dist.	13107 Jul 21 11:37	8° Ω 17'45	0.27096 AU	desc. node	13110 Feb 06 01:32	10° \mathcal{H} 04'32	
morning rise	13107 Jul 25 17:24	5° Ω 45'58			13110 Feb 22 07:34	0° Υ	
direct	13107 Aug 10 15:54	0° Ω 47'29			13110 Mar 18 20:07	0° \mathcal{B}	
greatest brilliancy	13107 Aug 20 19:56	2° Ω 43'29	-4.9m		13110 Apr 12 10:13	0° Π	

	13110 May 07 03:58	0°☾			13112 Oct 13 05:59	0°♊	
asc. node	13110 May 29 19:45	27°☾05'48			13112 Nov 06 23:08	0°♋	
	13110 Jun 01 06:44	0°♌		asc. node	13112 Nov 14 01:11	8°♋38'37	
	13110 Jun 27 06:02	0°♍			13112 Dec 01 12:09	0°♎	
evening max el	13110 Jul 23 04:07	27°♍46'50 46°45'54			13112 Dec 25 22:13	0°♏	
	13110 Jul 25 09:37	0°♐		morning set	13113 Jan 14 19:43	24°♏30'31	
greatest brilliancy	13110 Aug 31 12:46	28°♐04'22 -4.9m			13113 Jan 19 06:36	0°♑	
	13110 Sep 07 15:11	0°♒			13113 Feb 12 14:20	0°♒	
retrograde	13110 Sep 11 11:22	0°♒17'17		max. Earth dist.	13113 Feb 20 01:19	9°♒12'14 1.73065 AU	
	13110 Sep 15 05:50	30°♒♐					
desc. node	13110 Sep 18 21:36	29°♐09'55		superior conj	13113 Feb 20 21:45	10°♒15'14 0°30'13	
evening set	13110 Sep 26 05:07	26°♐00'28		minimum elong	13113 Feb 21 04:18	10°♒35'28 0°30'21	
min. Earth dist.	13110 Oct 01 17:04	22°♐46'43 0.27477 AU		desc. node	13113 Mar 05 15:47	25°♒59'38	
inferior conj	13110 Oct 02 10:31	22°♐19'56 -3°23'22			13113 Mar 08 21:38	0°♓	
minimum elong	13110 Oct 02 03:09	22°♐31'14 3°20'53		evening rise	13113 Mar 31 03:21	27°♓29'30	
morning rise	13110 Oct 08 01:55	19°♐00'20			13113 Apr 02 04:00	0°♈	
direct	13110 Oct 23 08:48	14°♐31'30			13113 Apr 26 09:01	0°♉	
greatest brilliancy	13110 Nov 01 20:37	16°♐10'54 -4.8m			13113 May 20 13:19	0°♊	
	13110 Nov 24 18:30	0°♋			13113 Jun 13 18:54	0°♌	
morning max el	13110 Dec 11 10:50	14°♋52'23 45°54'11		asc. node	13113 Jun 26 07:27	15°♌25'42	
	13110 Dec 26 10:53	0°♍			13113 Jul 08 04:52	0°♍	
asc. node	13111 Jan 09 23:24	15°♍37'58			13113 Aug 01 23:47	0°♎	
	13111 Jan 22 19:35	0°♏			13113 Aug 27 12:15	0°♋	
	13111 Feb 17 16:29	0°♑			13113 Sep 23 16:07	0°♌	
	13111 Mar 14 19:32	0°♒		evening max el	13113 Oct 02 12:19	9°♌00'43 46°20'52	
	13111 Apr 08 12:12	0°♓		desc. node	13113 Oct 16 06:45	21°♌50'40	
desc. node	13111 May 01 18:31	28°♓35'45			13113 Oct 26 13:06	0°♏	
	13111 May 02 21:47	0°♈		greatest brilliancy	13113 Nov 10 20:07	8°♏32'43 -4.8m	
	13111 May 27 01:54	0°♉		retrograde	13113 Nov 21 06:49	10°♏33'03	
morning set	13111 Jun 10 14:50	18°♉09'11		evening set	13113 Dec 09 17:42	4°♏11'13	
	13111 Jun 20 02:00	0°♊		inferior conj	13113 Dec 12 19:09	2°♏17'14 -8°48'49	
	13111 Jul 13 23:56	0°♋		minimum elong	13113 Dec 12 19:57	2°♏15'59 8°47'48	
				min. Earth dist.	13113 Dec 12 12:58	2°♏26'56 0.28848 AU	
superior conj	13111 Jul 20 14:46	8°♋18'24 -1°09'20		morning rise	13113 Dec 15 22:15	0°♏20'45	
minimum elong	13111 Jul 21 02:12	8°♋54'16 1°09'49			13113 Dec 16 12:00	30°♋♌	
max. Earth dist.	13111 Jul 20 19:43	8°♋33'53 1.71410 AU		direct	13114 Jan 03 02:53	24°♌07'27	
	13111 Aug 06 21:41	0°♍		greatest brilliancy	13114 Jan 13 08:04	26°♌00'36 -4.7m	
asc. node	13111 Aug 22 08:33	19°♍21'27			13114 Jan 21 20:11	0°♏	
evening rise	13111 Aug 29 16:59	28°♍33'10		asc. node	13114 Feb 06 09:28	11°♏07'40	
	13111 Aug 30 20:46	0°♐		morning max el	13114 Feb 21 02:57	24°♏29'09 45°45'25	
	13111 Sep 23 22:23	0°♑			13114 Feb 26 16:29	0°♑	
	13111 Oct 18 04:02	0°♒			13114 Mar 26 14:35	0°♒	
	13111 Nov 11 16:18	0°♓			13114 Apr 21 14:05	0°♓	
	13111 Dec 06 14:52	0°♈			13114 May 16 16:04	0°♈	
desc. node	13111 Dec 12 01:36	6°♈27'44		desc. node	13114 May 29 07:52	15°♈24'00	
	13112 Jan 01 04:43	0°♉			13114 Jun 10 05:32	0°♉	
	13112 Jan 27 18:55	0°♊			13114 Jul 04 11:13	0°♊	
evening max el	13112 Feb 25 06:47	29°♊43'37 46°02'48			13114 Jul 28 12:36	0°♋	
	13112 Feb 25 13:32	0°♌			13114 Aug 21 12:23	0°♍	
asc. node	13112 Apr 03 02:02	28°♌13'44		morning set	13114 Aug 24 05:39	3°♍24'07	
greatest brilliancy	13112 Apr 04 18:50	28°♌52'03 -4.8m			13114 Sep 14 12:20	0°♎	
	13112 Apr 08 17:49	0°♏		asc. node	13114 Sep 18 22:56	5°♎32'52	
retrograde	13112 Apr 14 14:33	0°♏39'28					
	13112 Apr 20 07:41	30°♏♌		superior conj	13114 Oct 02 09:48	22°♎20'14 0°32'00	
evening set	13112 Apr 30 14:48	25°♌41'25		minimum elong	13114 Oct 02 02:35	21°♎57'46 0°31'57	
inferior conj	13112 May 05 12:15	22°♌43'23 7°10'17		max. Earth dist.	13114 Oct 04 11:30	24°♎55'11 1.72084 AU	
minimum elong	13112 May 05 01:35	23°♌00'03 7°07'26			13114 Oct 08 13:20	0°♏	
min. Earth dist.	13112 May 05 12:30	22°♌43'00 0.27734 AU			13114 Nov 01 16:07	0°♐	
morning rise	13112 May 09 12:09	20°♌16'05		evening rise	13114 Nov 09 03:59	9°♐17'37	
direct	13112 May 26 11:32	14°♌41'15			13114 Nov 25 21:54	0°♑	
greatest brilliancy	13112 Jun 05 12:32	16°♌34'32 -4.9m			13114 Dec 20 08:12	0°♑	
	13112 Jun 27 01:55	0°♒		desc. node	13115 Jan 08 14:00	23°♑25'28	
morning max el	13112 Jul 15 21:26	17°♒22'07 46°56'55			13115 Jan 14 00:23	0°♒	
desc. node	13112 Jul 24 04:45	25°♒56'13			13115 Feb 07 23:20	0°♓	
	13112 Jul 28 00:22	0°♓			13115 Mar 05 06:30	0°♈	
	13112 Aug 23 18:39	0°♋			13115 Mar 31 03:13	0°♉	
	13112 Sep 18 06:35	0°♌			13115 Apr 27 06:53	0°♊	

asc. node	13115 May 01 11:22	4°☿23'15	morning set	13117 Nov 04 05:38	14°♄53'15
evening max el	13115 May 08 18:24	11°☿48'00 46°33'52		13117 Nov 16 10:15	0°♂
	13115 May 28 20:21	0°♂		13117 Dec 10 15:34	0°♂
greatest brilliancy	13115 Jun 18 06:27	12°♂13'26 -4.9m			
retrograde	13115 Jun 27 20:18	13°♂57'25	superior conj	13117 Dec 11 12:51	1°♂05'52 1°26'09
evening set	13115 Jul 14 18:27	8°♂25'48	minimum elong	13117 Dec 11 12:59	1°♂06'17 1°27'09
inferior conj	13115 Jul 18 11:41	6°♂11'25 7°35'46	max. Earth dist.	13117 Dec 13 09:43	3°♂24'36 1.72960 AU
minimum elong	13115 Jul 18 22:17	5°♂55'12 7°32'56		13118 Jan 03 22:18	0°♂
min. Earth dist.	13115 Jul 19 00:15	5°♂52'12 0.27119 AU	evening rise	13118 Jan 17 16:03	16°♂55'29
morning rise	13115 Jul 23 02:00	3°♂26'17		13118 Jan 28 07:18	0°♂
	13115 Jul 30 06:25	30°♂☿	desc. node	13118 Feb 05 03:24	9°♂37'11
direct	13115 Aug 08 05:22	28°☿21'15		13118 Feb 21 18:31	0°♂
	13115 Aug 17 13:00	0°♂		13118 Mar 18 07:24	0°♂
greatest brilliancy	13115 Aug 18 08:22	0°♂17'01 -4.9m		13118 Apr 11 22:01	0°♂
desc. node	13115 Aug 21 14:24	1°♂37'20		13118 May 06 16:33	0°☿
	13115 Sep 26 19:46	0°♂	asc. node	13118 May 28 21:42	26°☿30'59
morning max el	13115 Sep 27 11:22	0°♂38'34 46°39'19		13118 May 31 20:39	0°♂
	13115 Oct 25 04:38	0°♂		13118 Jun 26 22:36	0°♂
	13115 Nov 20 13:36	0°♂	evening max el	13118 Jul 20 18:20	25°♂25'29 46°46'07
asc. node	13115 Dec 12 13:59	25°♂50'50		13118 Jul 25 09:37	0°♂
	13115 Dec 16 01:52	0°♂	greatest brilliancy	13118 Aug 29 04:15	25°♂44'32 -4.9m
	13116 Jan 10 02:07	0°♂	retrograde	13118 Sep 09 01:03	27°♂55'45
	13116 Feb 03 18:42	0°♂	desc. node	13118 Sep 17 23:27	26°♂18'58
	13116 Feb 28 06:24	0°♂	evening set	13118 Sep 23 17:50	23°♂41'20
	13116 Mar 23 14:42	0°♂	min. Earth dist.	13118 Sep 29 07:49	20°♂24'39 0.27426 AU
morning set	13116 Mar 25 08:07	2°♂07'56	inferior conj	13118 Sep 30 00:08	19°♂59'36 -3°01'49
desc. node	13116 Apr 02 06:13	11°♂55'45	minimum elong	13118 Sep 29 17:27	20°♂09'51 2°59'33
	13116 Apr 16 19:57	0°♂	morning rise	13118 Oct 05 17:46	16°♂36'44
max. Earth dist.	13116 Apr 30 10:25	16°♂54'55 1.72116 AU	direct	13118 Oct 20 21:58	12°♂11'52
			greatest brilliancy	13118 Oct 30 10:30	13°♂51'34 -4.8m
superior conj	13116 May 03 14:08	20°♂50'46 -1°06'53		13118 Nov 25 03:31	0°♂
minimum elong	13116 May 03 02:57	20°♂15'57 1°07'14	morning max el	13118 Dec 08 23:39	12°♂32'23 45°55'22
	13116 May 10 22:16	0°♂		13118 Dec 26 04:53	0°♂
	13116 Jun 03 22:13	0°☿	asc. node	13119 Jan 09 01:21	15°♂00'21
evening rise	13116 Jun 12 03:09	10°☿16'31		13119 Jan 22 09:43	0°♂
	13116 Jun 27 21:18	0°♂		13119 Feb 17 04:58	0°♂
	13116 Jul 21 21:25	0°♂		13119 Mar 14 07:10	0°♂
asc. node	13116 Jul 23 20:27	2°♂26'34		13119 Apr 07 23:23	0°♂
	13116 Aug 15 00:40	0°♂	desc. node	13119 Apr 30 20:24	28°♂07'44
	13116 Sep 08 09:34	0°♂		13119 May 02 08:44	0°♂
	13116 Oct 03 04:19	0°♂		13119 May 26 12:44	0°♂
	13116 Oct 28 16:54	0°♂	morning set	13119 Jun 08 02:21	15°♂41'21
desc. node	13116 Nov 12 16:34	16°♂57'03		13119 Jun 19 12:47	0°☿
	13116 Nov 24 16:34	0°♂		13119 Jul 13 10:43	0°♂
evening max el	13116 Dec 12 17:08	18°♂20'48 45°55'51			
	13116 Dec 25 13:07	0°♂	superior conj	13119 Jul 18 02:31	5°♂50'49 -1°11'38
greatest brilliancy	13117 Jan 20 17:24	16°♂39'07 -4.7m	minimum elong	13119 Jul 18 13:39	6°♂25'45 1°12'10
retrograde	13117 Jan 30 15:22	18°♂25'58	max. Earth dist.	13119 Jul 17 23:52	5°♂42'29 1.71410 AU
evening set	13117 Feb 15 04:00	13°♂45'36		13119 Aug 06 08:29	0°♂
inferior conj	13117 Feb 20 21:44	10°♂17'21 -3°07'14	asc. node	13119 Aug 21 10:18	18°♂53'09
minimum elong	13117 Feb 21 04:24	10°♂06'55 3°04'52	evening rise	13119 Aug 27 05:34	26°♂08'39
min. Earth dist.	13117 Feb 21 08:08	10°♂01'04 0.28463 AU		13119 Aug 30 07:36	0°♂
morning rise	13117 Feb 27 04:33	6°♂30'55		13119 Sep 23 09:16	0°♂
asc. node	13117 Mar 05 18:47	3°♂32'04		13119 Oct 17 15:06	0°♂
direct	13117 Mar 14 05:27	2°♂05'33		13119 Nov 11 03:43	0°♂
greatest brilliancy	13117 Mar 25 01:28	4°♂16'01 -4.8m		13119 Dec 06 02:57	0°♂
	13117 Apr 29 03:02	0°♂	desc. node	13119 Dec 11 03:37	5°♂57'25
morning max el	13117 May 03 00:02	3°♂47'05 46°20'53		13119 Dec 31 18:02	0°♂
	13117 May 27 17:47	0°♂		13120 Jan 27 10:47	0°♂
	13117 Jun 22 20:09	0°♂	evening max el	13120 Feb 22 20:16	27°♂25'16 46°02'07
desc. node	13117 Jun 25 20:04	3°♂32'27		13120 Feb 25 12:37	0°♂
	13117 Jul 17 21:37	0°☿	asc. node	13120 Apr 02 03:58	26°♂29'37
	13117 Aug 11 10:55	0°♂	greatest brilliancy	13120 Apr 02 08:42	26°♂33'48 -4.8m
	13117 Sep 04 18:41	0°♂	retrograde	13120 Apr 12 04:21	28°♂21'37
	13117 Sep 29 00:22	0°♂	evening set	13120 Apr 28 01:25	23°♂28'11
asc. node	13117 Oct 16 13:17	21°♂43'47	inferior conj	13120 May 03 02:38	20°♂25'04 6°55'36
	13117 Oct 23 05:24	0°♂	minimum elong	13120 May 02 15:50	20°♂41'55 6°52'39

min. Earth dist.	13120 May 03 02:58	20° ♁ 24'34	0.27754 AU			13122 Nov 01 02:37	0° ♁	
morning rise	13120 May 07 06:00	17° ♁ 52'43		evening rise		13122 Nov 06 19:51	7° ♁ 05'34	
direct	13120 May 24 01:37	12° ♁ 22'20				13122 Nov 25 08:29	0° ♁	
greatest brilliancy	13120 Jun 03 04:16	14° ♁ 17'00	-4.9m			13122 Dec 19 18:58	0° ♁	
	13120 Jun 27 10:52	0° ♁		desc. node		13123 Jan 07 15:50	22° ♁ 57'37	
morning max el	13120 Jul 13 11:16	15° ♁ 00'42	46°56'24			13123 Jan 13 11:31	0° ♁	
desc. node	13120 Jul 23 06:46	25° ♁ 10'29				13123 Feb 07 11:04	0° ♁	
	13120 Jul 27 18:41	0° ♁				13123 Mar 04 19:18	0° ♁	
	13120 Aug 23 09:18	0° ♁				13123 Mar 30 17:56	0° ♁	
	13120 Sep 17 19:34	0° ♁				13123 Apr 27 02:01	0° ♁	
	13120 Oct 12 18:01	0° ♁		asc. node		13123 Apr 30 13:28	3° ♁ 36'34	
	13120 Nov 06 10:30	0° ♁		evening max el		13123 May 06 08:51	9° ♁ 29'02	46°32'58
asc. node	13120 Nov 13 03:10	8° ♁ 10'22				13123 May 29 11:37	0° ♁	
	13120 Nov 30 23:04	0° ♁		greatest brilliancy		13123 Jun 15 19:11	9° ♁ 49'56	-4.9m
	13120 Dec 25 08:53	0° ♁		retrograde		13123 Jun 25 09:46	11° ♁ 34'07	
morning set	13121 Jan 12 12:40	22° ♁ 22'17		evening set		13123 Jul 12 11:01	5° ♁ 57'10	
	13121 Jan 18 17:07	0° ♁		inferior conj		13123 Jul 16 00:38	3° ♁ 47'49	7°48'58
	13121 Feb 12 00:49	0° ♁		minimum elong		13123 Jul 16 10:53	3° ♁ 32'06	7°46'18
max. Earth dist.	13121 Feb 17 20:14	7° ♁ 10'07	1.73081 AU	min. Earth dist.		13123 Jul 16 12:49	3° ♁ 29'07	0.27139 AU
				morning rise		13123 Jul 20 10:41	1° ♁ 08'46	
superior conj	13121 Feb 18 13:42	8° ♁ 04'02	0°33'24			13123 Jul 22 12:26	30° ♁	
minimum elong	13121 Feb 18 20:49	8° ♁ 26'01	0°33'32	direct		13123 Aug 05 19:07	25° ♁ 57'29	
desc. node	13121 Mar 04 17:33	25° ♁ 32'39		greatest brilliancy		13123 Aug 15 20:32	27° ♁ 52'13	-4.9m
	13121 Mar 08 08:09	0° ♁		desc. node		13123 Aug 20 16:15	29° ♁ 57'36	
evening rise	13121 Mar 28 18:34	25° ♁ 15'23				13123 Aug 20 18:11	0° ♁	
	13121 Apr 01 14:36	0° ♁		morning max el		13123 Sep 25 01:47	28° ♁ 19'34	46°40'32
	13121 Apr 25 19:46	0° ♁				13123 Sep 26 18:03	0° ♁	
	13121 May 20 00:20	0° ♁				13123 Oct 24 20:25	0° ♁	
	13121 Jun 13 06:18	0° ♁				13123 Nov 20 02:55	0° ♁	
asc. node	13121 Jun 25 09:25	14° ♁ 56'03		asc. node		13123 Dec 11 15:53	25° ♁ 20'18	
	13121 Jul 07 16:50	0° ♁				13123 Dec 15 13:55	0° ♁	
	13121 Aug 01 12:42	0° ♁				13124 Jan 09 13:26	0° ♁	
	13121 Aug 27 02:59	0° ♁				13124 Feb 03 05:34	0° ♁	
	13121 Sep 23 11:21	0° ♁				13124 Feb 27 17:00	0° ♁	
evening max el	13121 Sep 30 02:59	6° ♁ 44'28	46°22'04	morning set		13124 Mar 22 22:49	29° ♁ 52'41	
desc. node	13121 Oct 15 08:47	20° ♁ 50'53				13124 Mar 23 01:11	0° ♁	
	13121 Oct 27 09:42	0° ♁		desc. node		13124 Apr 01 08:01	11° ♁ 28'53	
greatest brilliancy	13121 Nov 08 10:18	6° ♁ 18'57	-4.8m			13124 Apr 16 06:26	0° ♁	
retrograde	13121 Nov 18 22:54	8° ♁ 21'16		max. Earth dist.		13124 Apr 27 22:11	14° ♁ 29'29	1.72154 AU
evening set	13121 Dec 07 08:41	2° ♁ 00'04						
inferior conj	13121 Dec 10 10:44	0° ♁ 05'24	-8°49'19	superior conj		13124 May 01 03:10	18° ♁ 29'08	-1°04'25
minimum elong	13121 Dec 10 10:42	0° ♁ 05'27	8°48'19	minimum elong		13124 Apr 30 15:55	17° ♁ 54'08	1°04'43
min. Earth dist.	13121 Dec 10 03:16	0° ♁ 17'05	0.28827 AU			13124 May 10 08:47	0° ♁	
	13121 Dec 10 14:11	30° ♁				13124 Jun 03 08:49	0° ♁	
morning rise	13121 Dec 13 12:47	28° ♁ 10'47		evening rise		13124 Jun 09 14:59	7° ♁ 50'01	
direct	13121 Dec 31 18:11	21° ♁ 56'01				13124 Jun 27 07:58	0° ♁	
greatest brilliancy	13122 Jan 10 22:33	23° ♁ 48'45	-4.7m			13124 Jul 21 08:14	0° ♁	
	13122 Jan 23 01:34	0° ♁		asc. node		13124 Jul 22 22:13	1° ♁ 58'20	
asc. node	13122 Feb 05 11:25	10° ♁ 08'32				13124 Aug 14 11:44	0° ♁	
morning max el	13122 Feb 18 18:45	22° ♁ 18'04	45°44'56			13124 Sep 07 21:03	0° ♁	
	13122 Feb 26 12:03	0° ♁				13124 Oct 02 16:32	0° ♁	
	13122 Mar 26 05:11	0° ♁				13124 Oct 28 06:35	0° ♁	
	13122 Apr 21 02:46	0° ♁		desc. node		13124 Nov 11 18:34	16° ♁ 20'33	
	13122 May 16 03:48	0° ♁				13124 Nov 24 09:42	0° ♁	
desc. node	13122 May 28 09:50	14° ♁ 54'58		evening max el		13124 Dec 10 08:31	16° ♁ 09'23	45°56'06
	13122 Jun 09 16:45	0° ♁				13124 Dec 25 19:41	0° ♁	
	13122 Jul 03 22:08	0° ♁		greatest brilliancy		13125 Jan 18 09:08	14° ♁ 28'07	-4.7m
	13122 Jul 27 23:19	0° ♁		retrograde		13125 Jan 28 06:14	16° ♁ 14'04	
	13122 Aug 20 22:59	0° ♁		evening set		13125 Feb 12 21:42	11° ♁ 30'45	
morning set	13122 Aug 21 18:51	1° ♁ 02'07		inferior conj		13125 Feb 18 13:16	8° ♁ 05'16	-3°26'52
	13122 Sep 13 22:51	0° ♁		minimum elong		13125 Feb 18 20:31	7° ♁ 53'53	3°24'19
asc. node	13122 Sep 18 00:44	5° ♁ 05'38		min. Earth dist.		13125 Feb 18 23:56	7° ♁ 48'31	0.28492 AU
				morning rise		13125 Feb 24 19:05	4° ♁ 19'49	
superior conj	13122 Sep 29 23:58	20° ♁ 02'01	0°28'37	asc. node		13125 Mar 04 20:44	0° ♁ 52'59	
minimum elong	13122 Sep 29 17:25	19° ♁ 41'32	0°28'33			13125 Mar 09 13:00	30° ♁	
max. Earth dist.	13122 Oct 02 01:42	22° ♁ 37'05	1.72056 AU	direct		13125 Mar 11 21:15	29° ♁ 53'25	
	13122 Oct 07 23:49	0° ♁				13125 Mar 14 06:04	0° ♁	

greatest brilliancy	13125 Mar 22 17:11	2° H 03'21	-4.8m		13127 Dec 05 15:02	0° \approx	
	13125 Apr 29 01:43	0° Y		desc. node	13127 Dec 10 05:30	5° \approx 26'49	
morning max el	13125 Apr 30 14:11	1° Y 29'46	46°19'14		13127 Dec 31 07:26	0° H	
	13125 May 27 09:32	0° B			13128 Jan 27 02:57	0° Y	
	13125 Jun 22 09:31	0° II		evening max el	13128 Feb 20 10:08	25° Y 07'39	46°01'16
desc. node	13125 Jun 24 21:56	2° II 58'51			13128 Feb 25 12:59	0° B	
	13125 Jul 17 09:49	0° G		greatest brilliancy	13128 Mar 30 21:50	24° B 13'50	-4.8m
	13125 Aug 10 22:28	0° Q		asc. node	13128 Apr 01 06:05	24° B 40'30	
	13125 Sep 04 05:47	0° M		retrograde	13128 Apr 09 18:25	26° B 02'35	
	13125 Sep 28 11:09	0° L		evening set	13128 Apr 25 11:53	21° B 13'27	
asc. node	13125 Oct 15 15:14	21° L 16'55		inferior conj	13128 Apr 30 16:44	18° B 05'23	6°40'01
	13125 Oct 22 15:57	0° M		minimum elong	13128 Apr 30 05:51	18° B 22'18	6°37'00
morning set	13125 Nov 01 21:16	12° M 40'29		min. Earth dist.	13128 Apr 30 16:56	18° B 05'05	0.27774 AU
	13125 Nov 15 20:41	0° J		morning rise	13128 May 04 23:35	15° B 28'09	
				direct	13128 May 21 15:51	10° B 02'07	
superior conj	13125 Dec 09 05:48	28° J 57'44	1°26'06	greatest brilliancy	13128 May 31 19:19	11° B 57'48	-4.9m
minimum elong	13125 Dec 09 05:10	28° J 55'45	1°27'07		13128 Jun 27 17:35	0° II	
	13125 Dec 10 01:56	0° Z		morning max el	13128 Jul 11 01:51	12° II 40'47	46°55'59
max. Earth dist.	13125 Dec 11 03:08	1° Z 17'56	1.72940 AU	desc. node	13128 Jul 22 08:41	24° II 24'40	
	13126 Jan 03 08:43	0° \approx			13128 Jul 27 12:42	0° G	
evening rise	13126 Jan 15 08:16	14° \approx 45'23			13128 Aug 22 23:51	0° Q	
	13126 Jan 27 17:51	0° H			13128 Sep 17 08:32	0° M	
desc. node	13126 Feb 04 05:09	9° H 10'00			13128 Oct 12 06:03	0° L	
	13126 Feb 21 05:19	0° Y			13128 Nov 05 21:55	0° M	
	13126 Mar 17 18:33	0° B		asc. node	13128 Nov 12 05:02	7° M 41'29	
	13126 Apr 11 09:41	0° II			13128 Nov 30 10:05	0° J	
	13126 May 06 05:01	0° G			13128 Dec 24 19:37	0° Z	
asc. node	13126 May 27 23:40	25° G 56'38		morning set	13129 Jan 10 05:51	20° Z 14'29	
	13126 May 31 10:30	0° Q			13129 Jan 18 03:44	0° \approx	
	13126 Jun 26 15:14	0° M			13129 Feb 11 11:25	0° H	
evening max el	13126 Jul 18 07:37	23° M 02'23	46°46'21	max. Earth dist.	13129 Feb 15 17:24	5° H 14'37	1.73099 AU
	13126 Jul 25 10:32	0° L					
greatest brilliancy	13126 Aug 26 19:56	23° L 25'28	-4.9m	superior conj	13129 Feb 16 05:47	5° H 52'52	0°36'30
retrograde	13126 Sep 06 14:36	25° L 35'07		minimum elong	13129 Feb 16 13:26	6° H 16'26	0°36'39
desc. node	13126 Sep 17 01:32	23° L 23'30		desc. node	13129 Mar 03 19:26	25° H 05'39	
evening set	13126 Sep 21 06:46	21° L 22'27			13129 Mar 07 18:49	0° Y	
min. Earth dist.	13126 Sep 26 22:49	18° L 03'07	0.27377 AU	evening rise	13129 Mar 26 09:46	23° Y 00'39	
inferior conj	13126 Sep 27 13:49	17° L 40'05	-2°39'54		13129 Apr 01 01:25	0° B	
minimum elong	13126 Sep 27 07:51	17° L 49'14	2°37'52		13129 Apr 25 06:48	0° II	
morning rise	13126 Oct 03 09:32	14° L 14'12			13129 May 19 11:39	0° G	
direct	13126 Oct 18 10:41	9° L 52'50			13129 Jun 12 18:01	0° Q	
greatest brilliancy	13126 Oct 28 00:48	11° L 33'30	-4.8m	asc. node	13129 Jun 24 11:12	14° Q 24'50	
	13126 Nov 25 09:36	0° M			13129 Jul 07 05:07	0° M	
morning max el	13126 Dec 06 12:27	10° M 12'59	45°56'37		13129 Aug 01 01:57	0° L	
	13126 Dec 25 22:10	0° J			13129 Aug 26 18:09	0° M	
asc. node	13127 Jan 08 03:16	14° J 23'32			13129 Sep 23 07:25	0° J	
	13127 Jan 21 23:31	0° Z		evening max el	13129 Sep 27 18:31	4° J 29'40	46°23'18
	13127 Feb 16 17:16	0° \approx		desc. node	13129 Oct 14 10:49	19° J 49'00	
	13127 Mar 13 18:43	0° H			13129 Oct 28 14:37	0° Z	
	13127 Apr 07 10:32	0° Y		greatest brilliancy	13129 Nov 06 00:21	4° Z 04'26	-4.8m
desc. node	13127 Apr 29 22:22	27° Y 40'03		retrograde	13129 Nov 16 15:14	6° Z 08'40	
	13127 May 01 19:39	0° B		evening set	13129 Dec 04 23:18	29° J 48'49	
	13127 May 25 23:30	0° II			13129 Dec 04 15:54	30° R 27	
morning set	13127 Jun 05 13:40	13° II 13'08		min. Earth dist.	13129 Dec 07 17:15	28° J 06'55	0.28801 AU
	13127 Jun 18 23:29	0° G		inferior conj	13129 Dec 08 02:18	27° J 52'47	-8°49'02
	13127 Jul 12 21:25	0° Q		minimum elong	13129 Dec 08 01:26	27° J 54'07	8°48'02
max. Earth dist.	13127 Jul 15 05:05	2° Q 54'41	1.71412 AU	morning rise	13129 Dec 11 03:41	25° J 59'26	
				direct	13129 Dec 29 09:58	19° J 44'01	
superior conj	13127 Jul 15 14:12	3° Q 23'19	-1°13'47	greatest brilliancy	13130 Jan 08 12:21	21° J 35'31	-4.7m
minimum elong	13127 Jul 16 00:58	3° Q 57'05	1°14'23		13130 Jan 23 23:01	0° Z	
	13127 Aug 05 19:12	0° M		asc. node	13130 Feb 04 13:21	9° Z 10'05	
asc. node	13127 Aug 20 12:09	18° M 25'20		morning max el	13130 Feb 16 10:42	20° Z 06'51	45°44'28
evening rise	13127 Aug 24 18:11	23° M 44'24			13130 Feb 26 07:15	0° \approx	
	13127 Aug 29 18:22	0° L			13130 Mar 25 19:51	0° H	
	13127 Sep 22 20:07	0° M			13130 Apr 20 15:40	0° Y	
	13127 Oct 17 02:07	0° J			13130 May 15 15:51	0° B	
	13127 Nov 10 15:06	0° Z		desc. node	13130 May 27 11:39	14° B 24'23	

	13130 Jun 09 04:21	0°♐			13132 Dec 26 05:23	0°♏	
	13130 Jul 03 09:28	0°♍		greatest brilliancy	13133 Jan 16 01:20	12°♏16'49	-4.7m
	13130 Jul 27 10:28	0°♌		retrograde	13133 Jan 25 21:03	14°♏01'49	
morning set	13130 Aug 19 07:42	28°♌37'51		evening set	13133 Feb 10 15:39	9°♏15'08	
	13130 Aug 20 09:58	0°♎		inferior conj	13133 Feb 16 05:01	5°♏52'46	-3°45'59
	13130 Sep 13 09:43	0°♍		minimum elong	13133 Feb 16 12:48	5°♏40'32	3°43'19
asc. node	13130 Sep 17 02:39	4°♍37'43		min. Earth dist.	13133 Feb 16 16:10	5°♏35'14	0.28521 AU
				morning rise	13133 Feb 22 09:37	2°♏08'33	
superior conj	13130 Sep 27 13:52	17°♍41'50	0°25'09		13133 Feb 26 18:03	30°♏	
minimum elong	13130 Sep 27 08:00	17°♍23'32	0°25'04	asc. node	13133 Mar 03 22:52	28°♏18'07	
max. Earth dist.	13130 Sep 29 17:45	20°♍23'40	1.72023 AU	direct	13133 Mar 09 12:45	27°♏40'38	
	13130 Oct 07 10:37	0°♎		greatest brilliancy	13133 Mar 20 09:35	29°♏50'46	-4.8m
	13130 Oct 31 13:27	0°♏			13133 Mar 20 19:07	0°♏	
evening rise	13130 Nov 04 11:43	4°♏52'23		morning max el	13133 Apr 28 04:11	29°♏11'12	46°17'45
	13130 Nov 24 19:24	0°♎			13133 Apr 28 23:51	0°♏	
	13130 Dec 19 06:06	0°♏			13133 May 27 01:20	0°♏	
desc. node	13131 Jan 06 17:39	22°♏28'37			13133 Jun 21 23:05	0°♐	
	13131 Jan 12 23:01	0°♏		desc. node	13133 Jun 23 23:52	2°♐24'40	
	13131 Feb 06 23:13	0°♏			13133 Jul 16 22:19	0°♍	
	13131 Mar 04 08:32	0°♏			13133 Aug 10 10:21	0°♌	
	13131 Mar 30 09:14	0°♐			13133 Sep 03 17:17	0°♎	
	13131 Apr 26 22:14	0°♍			13133 Sep 27 22:23	0°♍	
asc. node	13131 Apr 29 15:22	2°♍47'17		asc. node	13133 Oct 14 17:04	20°♍48'19	
evening max el	13131 May 03 22:56	7°♍07'52	46°31'43		13133 Oct 22 02:58	0°♎	
	13131 May 30 09:19	0°♌		morning set	13133 Oct 30 12:27	10°♎24'52	
greatest brilliancy	13131 Jun 13 08:11	7°♌24'49	-4.9m		13133 Nov 15 07:31	0°♏	
retrograde	13131 Jun 22 22:35	9°♌08'20					
evening set	13131 Jul 10 03:19	3°♌26'23		superior conj	13133 Dec 06 22:30	26°♏47'37	1°25'56
inferior conj	13131 Jul 13 13:22	1°♌21'55	8°01'20	minimum elong	13133 Dec 06 21:06	26°♏43'17	1°26'56
minimum elong	13131 Jul 13 23:09	1°♌06'53	7°58'52	max. Earth dist.	13133 Dec 08 18:43	29°♏04'26	1.72914 AU
min. Earth dist.	13131 Jul 14 01:24	1°♌03'25	0.27161 AU		13133 Dec 09 12:41	0°♎	
	13131 Jul 15 18:59	30°♎			13134 Jan 02 19:30	0°♏	
morning rise	13131 Jul 17 18:57	28°♍48'59		evening rise	13134 Jan 13 00:28	12°♏34'15	
direct	13131 Aug 03 08:23	23°♍31'23			13134 Jan 27 04:46	0°♏	
greatest brilliancy	13131 Aug 13 08:50	25°♍25'09	-4.9m	desc. node	13134 Feb 03 07:05	8°♏42'21	
desc. node	13131 Aug 19 18:20	28°♍19'33			13134 Feb 20 16:29	0°♏	
	13131 Aug 22 16:26	0°♌			13134 Mar 17 06:04	0°♏	
morning max el	13131 Sep 22 15:06	25°♌55'53	46°41'54		13134 Apr 10 21:42	0°♐	
	13131 Sep 26 16:10	0°♎			13134 May 05 17:50	0°♍	
	13131 Oct 24 12:28	0°♍		asc. node	13134 May 27 01:33	25°♍21'03	
	13131 Nov 19 16:32	0°♎			13134 May 31 00:44	0°♌	
asc. node	13131 Dec 10 17:43	24°♎48'29			13134 Jun 26 08:29	0°♎	
	13131 Dec 15 02:18	0°♏		evening max el	13134 Jul 15 20:18	20°♎37'07	46°46'28
	13132 Jan 09 01:05	0°♎			13134 Jul 25 13:11	0°♍	
	13132 Feb 02 16:47	0°♏		greatest brilliancy	13134 Aug 24 11:07	21°♍04'41	-4.9m
	13132 Feb 27 03:59	0°♏		retrograde	13134 Sep 04 04:14	23°♍13'27	
morning set	13132 Mar 20 13:59	27°♏37'46		desc. node	13134 Sep 16 03:34	20°♍22'01	
	13132 Mar 22 12:03	0°♏		evening set	13134 Sep 18 19:47	19°♍01'48	
desc. node	13132 Mar 31 09:59	11°♏01'22		min. Earth dist.	13134 Sep 24 13:43	15°♍40'12	0.27336 AU
	13132 Apr 15 17:17	0°♏		inferior conj	13134 Sep 25 03:24	15°♍19'14	-2°17'36
max. Earth dist.	13132 Apr 25 10:07	12°♏03'32	1.72195 AU	minimum elong	13134 Sep 24 22:13	15°♍27'12	2°15'49
				morning rise	13134 Oct 01 01:07	11°♍50'42	
superior conj	13132 Apr 28 16:41	16°♏08'00	-1°01'52	direct	13134 Oct 15 23:18	7°♍32'08	
minimum elong	13132 Apr 28 05:28	15°♏33'06	1°02'08	greatest brilliancy	13134 Oct 25 15:18	9°♍14'16	-4.8m
	13132 May 09 19:41	0°♐			13134 Nov 25 14:13	0°♎	
	13132 Jun 02 19:48	0°♍		morning max el	13134 Dec 04 02:06	7°♎54'21	45°57'57
evening rise	13132 Jun 07 03:04	5°♍23'07			13134 Dec 25 15:29	0°♏	
	13132 Jun 26 19:05	0°♌		asc. node	13135 Jan 07 05:16	13°♏46'15	
	13132 Jul 20 19:33	0°♎			13135 Jan 21 13:30	0°♎	
asc. node	13132 Jul 22 00:06	1°♎28'54			13135 Feb 16 05:45	0°♏	
	13132 Aug 13 23:20	0°♍			13135 Mar 13 06:27	0°♏	
	13132 Sep 07 09:05	0°♎			13135 Apr 06 21:51	0°♏	
	13132 Oct 02 05:20	0°♏		desc. node	13135 Apr 29 00:05	27°♏11'03	
	13132 Oct 27 20:54	0°♎			13135 May 01 06:44	0°♏	
desc. node	13132 Nov 10 20:29	15°♎42'06			13135 May 25 10:28	0°♐	
	13132 Nov 24 03:42	0°♏		morning set	13135 Jun 03 01:22	10°♐45'30	
evening max el	13132 Dec 07 23:00	13°♏54'34	45°56'34		13135 Jun 18 10:23	0°♍	

	13135 Jul 12 08:16	0°♌		min. Earth dist.	13137 Dec 05 07:19	25°♌57'26	0.28774 AU
max. Earth dist.	13135 Jul 12 13:13	0°♌15'32	1.71413 AU	morning rise	13137 Dec 08 19:00	23°♌48'04	
				direct	13137 Dec 27 01:58	17°♌32'55	
superior conj	13135 Jul 13 02:14	0°♌56'23	-1°15'47	greatest brilliancy	13138 Jan 06 01:48	19°♌22'25	-4.7m
minimum elong	13135 Jul 13 12:34	1°♌28'47	1°16'26		13138 Jan 24 14:36	0°♌	
	13135 Aug 05 06:04	0°♍		asc. node	13138 Feb 03 15:26	8°♌31'38	
asc. node	13135 Aug 19 14:05	17°♍57'25		morning max el	13138 Feb 14 02:24	17°♌55'24	45°43'55
evening rise	13135 Aug 22 07:04	21°♍20'38			13138 Feb 26 01:47	0°♍	
	13135 Aug 29 05:15	0°♎			13138 Mar 25 10:12	0°♍	
	13135 Sep 22 07:07	0°♎			13138 Apr 20 04:19	0°♍	
	13135 Oct 16 13:20	0°♎			13138 May 15 03:40	0°♎	
	13135 Nov 10 02:44	0°♏		desc. node	13138 May 26 13:34	13°♎54'51	
	13135 Dec 05 03:23	0°♏			13138 Jun 08 15:42	0°♏	
desc. node	13135 Dec 09 07:21	4°♏55'20			13138 Jul 02 20:33	0°♏	
	13135 Dec 30 21:10	0°♐			13138 Jul 26 21:23	0°♏	
	13136 Jan 26 19:37	0°♐		morning set	13138 Aug 16 20:36	26°♏14'17	
evening max el	13136 Feb 18 00:58	22°♐52'20	46°00'38		13138 Aug 19 20:45	0°♐	
	13136 Feb 25 14:44	0°♑			13138 Sep 12 20:23	0°♑	
greatest brilliancy	13136 Mar 28 10:51	21°♑54'04	-4.8m	asc. node	13138 Sep 16 04:26	4°♑10'01	
asc. node	13136 Mar 31 08:01	22°♑47'11					
retrograde	13136 Apr 07 09:03	23°♑43'55		superior conj	13138 Sep 25 03:50	15°♑22'25	0°21'39
evening set	13136 Apr 22 22:47	18°♑58'54		minimum elong	13138 Sep 24 22:42	15°♑06'27	0°21'34
inferior conj	13136 Apr 28 06:59	15°♑46'03	6°23'58	max. Earth dist.	13138 Sep 27 09:33	18°♑10'04	1.71986 AU
minimum elong	13136 Apr 27 20:08	16°♑02'56	6°20'52		13138 Oct 06 21:13	0°♒	
min. Earth dist.	13136 Apr 28 06:50	15°♑46'17	0.27792 AU		13138 Oct 31 00:03	0°♒	
morning rise	13136 May 02 17:16	13°♒04'00		evening rise	13138 Nov 02 03:40	2°♒40'11	
direct	13136 May 19 06:43	7°♒42'26			13138 Nov 24 06:04	0°♒	
greatest brilliancy	13136 May 29 10:02	9°♒38'26	-4.9m		13138 Dec 18 16:58	0°♒	
	13136 Jun 27 22:13	0°♓		desc. node	13139 Jan 05 19:41	22°♒00'57	
morning max el	13136 Jul 08 17:19	10°♓23'13	46°55'30		13139 Jan 12 10:18	0°♓	
desc. node	13136 Jul 21 10:42	23°♓39'43			13139 Feb 06 11:11	0°♓	
	13136 Jul 27 06:19	0°♔			13139 Mar 03 21:39	0°♓	
	13136 Aug 22 14:14	0°♑			13139 Mar 30 00:31	0°♓	
	13136 Sep 16 21:22	0°♒			13139 Apr 26 18:48	0°♔	
	13136 Oct 11 18:00	0°♑		asc. node	13139 Apr 28 17:19	1°♔58'09	
	13136 Nov 05 09:17	0°♒		evening max el	13139 May 01 12:26	4°♔46'10	46°30'35
asc. node	13136 Nov 11 06:48	7°♒12'30			13139 May 31 14:24	0°♑	
	13136 Nov 29 21:04	0°♒		greatest brilliancy	13139 Jun 10 21:55	5°♑01'55	-4.9m
	13136 Dec 24 06:23	0°♓		retrograde	13139 Jun 20 11:06	6°♑44'14	
morning set	13137 Jan 07 23:00	18°♓06'29		evening set	13139 Jul 07 19:45	0°♑57'30	
	13137 Jan 17 14:23	0°♒			13139 Jul 09 09:54	30°♒00	
	13137 Feb 10 22:02	0°♓		inferior conj	13139 Jul 11 02:21	28°♔57'52	8°12'45
				minimum elong	13139 Jul 11 11:36	28°♔43'38	8°10'28
superior conj	13137 Feb 13 21:51	3°♓41'34	0°39'33	min. Earth dist.	13139 Jul 11 14:28	28°♔39'13	0.27184 AU
minimum elong	13137 Feb 14 05:57	4°♓06'35	0°39'44	morning rise	13139 Jul 15 03:24	26°♔31'05	
max. Earth dist.	13137 Feb 13 14:19	3°♓18'19	1.73111 AU	direct	13139 Jul 31 21:19	21°♔06'56	
desc. node	13137 Mar 02 21:17	24°♓38'34		greatest brilliancy	13139 Aug 10 21:50	23°♔00'18	-4.9m
	13137 Mar 07 05:28	0°♐		desc. node	13139 Aug 18 20:24	26°♔46'22	
evening rise	13137 Mar 24 00:57	20°♐46'03			13139 Aug 23 23:11	0°♑	
	13137 Mar 31 12:11	0°♓		morning max el	13139 Sep 20 03:57	23°♑31'55	46°43'10
	13137 Apr 24 17:47	0°♓			13139 Sep 26 13:04	0°♒	
	13137 May 18 22:56	0°♔			13139 Oct 24 03:54	0°♑	
	13137 Jun 12 05:41	0°♑			13139 Nov 19 05:43	0°♒	
asc. node	13137 Jun 23 13:09	13°♑54'15		asc. node	13139 Dec 09 19:43	24°♒18'20	
	13137 Jul 06 17:23	0°♒			13139 Dec 14 14:15	0°♒	
	13137 Jul 31 15:13	0°♑			13140 Jan 08 12:20	0°♓	
	13137 Aug 26 09:23	0°♒			13140 Feb 02 03:37	0°♒	
	13137 Sep 23 03:57	0°♒			13140 Feb 26 14:36	0°♓	
evening max el	13137 Sep 25 10:38	2°♒16'48	46°24'30	morning set	13140 Mar 18 05:08	25°♓23'41	
desc. node	13137 Oct 13 12:43	18°♒45'54			13140 Mar 21 22:36	0°♐	
	13137 Oct 30 08:14	0°♓		desc. node	13140 Mar 30 11:43	10°♐34'10	
greatest brilliancy	13137 Nov 03 14:50	1°♓51'06	-4.8m		13140 Apr 15 03:51	0°♓	
retrograde	13137 Nov 14 07:36	3°♓56'35		max. Earth dist.	13140 Apr 22 21:48	9°♓37'47	1.72237 AU
	13137 Nov 28 11:03	30°♓00					
evening set	13137 Dec 02 13:40	27°♒38'55		superior conj	13140 Apr 26 06:05	13°♓47'28	-0°59'12
inferior conj	13137 Dec 05 17:56	25°♒40'51	-8°48'02	minimum elong	13140 Apr 25 18:58	13°♓12'53	0°59'24
minimum elong	13137 Dec 05 16:15	25°♒43'28	8°47'00		13140 May 09 06:17	0°♓	

	13140 Jun 02 06:27	0°☾	morning max el	13142 Dec 01 16:38	5°♊38'48	45°59'16
evening rise	13140 Jun 04 15:00	2°☾56'52		13142 Dec 25 08:05	0°♊	
	13140 Jun 26 05:52	0°♊	asc. node	13143 Jan 06 07:13	13°♊10'08	
	13140 Jul 20 06:31	0°♊		13143 Jan 21 03:01	0°♊	
asc. node	13140 Jul 21 02:02	1°♊00'45		13143 Feb 15 17:51	0°♊	
	13140 Aug 13 10:36	0°♊		13143 Mar 12 17:49	0°♊	
	13140 Sep 06 20:49	0°♊		13143 Apr 06 08:49	0°♊	
	13140 Oct 01 17:52	0°♊	desc. node	13143 Apr 28 02:00	26°♊43'47	
	13140 Oct 27 11:02	0°♊		13143 Apr 30 17:29	0°♊	
desc. node	13140 Nov 09 22:28	15°♊04'31		13143 May 24 21:06	0°♊	
	13140 Nov 23 21:45	0°♊	morning set	13143 May 31 13:04	8°♊18'57	
evening max el	13140 Dec 05 12:57	11°♊39'34 45°57'08		13143 Jun 17 20:59	0°♊	
	13140 Dec 26 17:49	0°♊	max. Earth dist.	13143 Jul 09 23:09	27°♊42'42	1.71421 AU
greatest brilliancy	13141 Jan 13 17:11	10°♊06'22 -4.7m				
retrograde	13141 Jan 23 12:00	11°♊51'03	superior conj	13143 Jul 10 13:55	28°♊29'04	-1°17'39
evening set	13141 Feb 08 09:39	7°♊00'31	minimum elong	13143 Jul 10 23:42	28°♊59'45	1°18'21
inferior conj	13141 Feb 13 20:45	3°♊41'36 -4°04'43		13143 Jul 11 18:54	0°♊	
minimum elong	13141 Feb 14 05:01	3°♊28'35 4°01'56		13143 Aug 04 16:42	0°♊	
min. Earth dist.	13141 Feb 14 08:23	3°♊23'19 0.28552 AU	asc. node	13143 Aug 18 15:50	17°♊29'34	
	13141 Feb 19 23:20	30°♊	evening rise	13143 Aug 19 19:25	18°♊55'53	
morning rise	13141 Feb 20 00:00	29°♊59'04		13143 Aug 28 15:56	0°♊	
asc. node	13141 Mar 03 00:46	25°♊49'36		13143 Sep 21 17:53	0°♊	
direct	13141 Mar 07 04:04	25°♊29'01		13143 Oct 16 00:20	0°♊	
greatest brilliancy	13141 Mar 18 02:15	27°♊39'55 -4.8m		13143 Nov 09 14:09	0°♊	
	13141 Mar 23 05:44	0°♊		13143 Dec 04 15:35	0°♊	
morning max el	13141 Apr 25 18:46	26°♊55'09 46°16'12	desc. node	13143 Dec 08 09:23	4°♊24'57	
	13141 Apr 28 20:45	0°♊		13143 Dec 30 10:47	0°♊	
	13141 May 26 16:35	0°♊		13144 Jan 26 12:21	0°♊	
	13141 Jun 21 12:15	0°♊	evening max el	13144 Feb 15 16:45	20°♊40'13	46°00'03
desc. node	13141 Jun 23 01:52	1°♊51'49		13144 Feb 25 17:39	0°♊	
	13141 Jul 16 10:25	0°♊	greatest brilliancy	13144 Mar 26 00:04	19°♊35'45	-4.8m
	13141 Aug 09 21:50	0°♊	asc. node	13144 Mar 30 09:58	20°♊50'32	
	13141 Sep 03 04:23	0°♊	retrograde	13144 Apr 04 23:40	21°♊26'15	
	13141 Sep 27 09:12	0°♊	evening set	13144 Apr 20 10:03	16°♊45'28	
asc. node	13141 Oct 13 18:49	20°♊20'41	inferior conj	13144 Apr 25 21:19	13°♊27'58	6°07'22
	13141 Oct 21 13:35	0°♊	minimum elong	13144 Apr 25 10:34	13°♊44'42	6°04'13
morning set	13141 Oct 28 03:29	8°♊09'48	min. Earth dist.	13144 Apr 25 20:48	13°♊28'47	0.27808 AU
	13141 Nov 14 18:00	0°♊	morning rise	13144 Apr 30 10:57	10°♊41'05	
			direct	13144 May 16 21:52	5°♊24'16	
superior conj	13141 Dec 04 15:12	24°♊38'29 1°25'39	greatest brilliancy	13144 May 27 00:25	7°♊19'51	-4.9m
minimum elong	13141 Dec 04 13:01	24°♊31'45 1°26'38		13144 Jun 28 00:44	0°♊	
max. Earth dist.	13141 Dec 06 09:29	26°♊49'21 1.72890 AU	morning max el	13144 Jul 06 08:28	8°♊05'47	46°54'44
	13141 Dec 08 23:06	0°♊	desc. node	13144 Jul 20 12:43	22°♊56'11	
	13142 Jan 02 05:56	0°♊		13144 Jul 26 23:19	0°♊	
evening rise	13142 Jan 10 16:49	10°♊24'42		13144 Aug 22 04:17	0°♊	
	13142 Jan 26 15:20	0°♊		13144 Sep 16 10:01	0°♊	
desc. node	13142 Feb 02 08:58	8°♊15'36		13144 Oct 11 05:47	0°♊	
	13142 Feb 20 03:16	0°♊		13144 Nov 04 20:29	0°♊	
	13142 Mar 16 17:13	0°♊	asc. node	13144 Nov 10 08:49	6°♊44'39	
	13142 Apr 10 09:24	0°♊		13144 Nov 29 07:54	0°♊	
	13142 May 05 06:24	0°♊		13144 Dec 23 17:00	0°♊	
asc. node	13142 May 26 03:32	24°♊46'21	morning set	13145 Jan 05 15:59	15°♊58'25	
	13142 May 30 14:51	0°♊		13145 Jan 17 00:53	0°♊	
	13142 Jun 26 01:50	0°♊		13145 Feb 10 08:31	0°♊	
evening max el	13142 Jul 13 09:34	18°♊14'07 46°46'43				
	13142 Jul 25 17:10	0°♊	superior conj	13145 Feb 11 13:54	1°♊30'39	0°42'33
greatest brilliancy	13142 Aug 22 01:44	18°♊43'49 -4.9m	minimum elong	13145 Feb 11 22:26	1°♊56'56	0°42'45
retrograde	13142 Sep 01 18:16	20°♊52'24	max. Earth dist.	13145 Feb 11 09:58	1°♊18'30	1.73121 AU
desc. node	13142 Sep 15 05:28	17°♊16'54	desc. node	13145 Mar 01 23:04	24°♊11'35	
evening set	13142 Sep 16 08:55	16°♊41'13		13145 Mar 06 16:01	0°♊	
min. Earth dist.	13142 Sep 22 04:13	13°♊18'04 0.27296 AU	evening rise	13145 Mar 21 16:10	18°♊31'55	
inferior conj	13142 Sep 22 16:51	12°♊58'46 -1°54'50		13145 Mar 30 22:51	0°♊	
minimum elong	13142 Sep 22 12:28	13°♊05'28 1°53'19		13145 Apr 24 04:38	0°♊	
morning rise	13142 Sep 28 16:29	9°♊28'01		13145 May 18 10:04	0°♊	
direct	13142 Oct 13 12:08	5°♊11'50		13145 Jun 11 17:13	0°♊	
greatest brilliancy	13142 Oct 23 05:15	6°♊55'12 -4.8m	asc. node	13145 Jun 22 15:07	13°♊24'10	
	13142 Nov 25 16:42	0°♊		13145 Jul 06 05:33	0°♊	

	13145 Jul 31 04:28	0°♄			13148 Jan 07 23:44	0°♄		
	13145 Aug 26 00:50	0°♍			13148 Feb 01 14:37	0°♍		
evening max el	13145 Sep 23 02:32	0°♁03'03	46°25'31		13148 Feb 26 01:24	0°♁		
	13145 Sep 23 01:18	0°♁		morning set	13148 Mar 15 20:14	23°♁08'59		
desc. node	13145 Oct 12 14:46	17°♁41'10			13148 Mar 21 09:19	0°♁		
greatest brilliancy	13145 Nov 01 05:54	29°♁37'50	-4.8m	desc. node	13148 Mar 29 13:34	10°♁06'45		
	13145 Nov 02 06:40	0°♄			13148 Apr 14 14:35	0°♄		
retrograde	13145 Nov 11 23:21	1°♄43'35		max. Earth dist.	13148 Apr 20 11:48	7°♄18'44	1.72282 AU	
	13145 Nov 21 05:45	30°♁♁						
evening set	13145 Nov 30 03:31	25°♁29'02		superior conj	13148 Apr 23 19:27	11°♄26'21	-0°56'26	
inferior conj	13145 Dec 03 09:24	23°♁28'21	-8°46'13	minimum elong	13148 Apr 23 08:29	10°♄52'16	0°56'35	
minimum elong	13145 Dec 03 06:55	23°♁32'14	8°45'09		13148 May 08 17:04	0°♄		
min. Earth dist.	13145 Dec 02 21:35	23°♁46'50	0.28742 AU		13148 Jun 01 17:20	0°♄		
morning rise	13145 Dec 06 10:29	21°♁35'25		evening rise	13148 Jun 02 03:08	0°♄30'36		
direct	13145 Dec 24 17:33	15°♁21'18			13148 Jun 25 16:52	0°♄		
greatest brilliancy	13146 Jan 03 15:14	17°♁08'49	-4.7m		13148 Jul 19 17:43	0°♁		
	13146 Jan 25 02:12	0°♄		asc. node	13148 Jul 20 03:48	0°♁31'24		
asc. node	13146 Feb 02 17:22	7°♄17'59			13148 Aug 12 22:04	0°♄		
morning max el	13146 Feb 11 17:01	15°♄41'16	45°43'25		13148 Sep 06 08:44	0°♍		
	13146 Feb 25 19:50	0°♍			13148 Oct 01 06:37	0°♁		
	13146 Mar 25 00:22	0°♁			13148 Oct 27 01:29	0°♄		
	13146 Apr 19 16:53	0°♁		desc. node	13148 Nov 09 00:28	14°♄26'04		
	13146 May 14 15:25	0°♄			13148 Nov 23 16:32	0°♍		
desc. node	13146 May 25 15:32	13°♄25'34		evening max el	13148 Dec 03 03:09	9°♍24'33	45°57'39	
	13146 Jun 08 03:01	0°♄			13148 Dec 27 11:05	0°♁		
	13146 Jul 02 07:35	0°♄		greatest brilliancy	13149 Jan 11 08:33	7°♁54'36	-4.7m	
	13146 Jul 26 08:13	0°♄		retrograde	13149 Jan 21 03:28	9°♁39'41		
morning set	13146 Aug 14 09:40	23°♄51'27		evening set	13149 Feb 06 03:47	4°♁44'54		
	13146 Aug 19 07:27	0°♁		inferior conj	13149 Feb 11 12:32	1°♁29'37	-4°23'03	
	13146 Sep 12 07:01	0°♄		minimum elong	13149 Feb 11 21:16	1°♁15'55	4°20'09	
asc. node	13146 Sep 15 06:15	3°♄42'30		min. Earth dist.	13149 Feb 12 00:26	1°♁10'56	0.28586 AU	
					13149 Feb 13 21:55	30°♁♍		
superior conj	13146 Sep 22 17:47	13°♄03'01	0°18'06	morning rise	13149 Feb 17 14:19	27°♍49'15		
minimum elong	13146 Sep 22 13:28	12°♄49'30	0°18'01	asc. node	13149 Mar 02 02:44	23°♍25'19		
max. Earth dist.	13146 Sep 25 00:02	15°♄52'17	1.71953 AU	direct	13149 Mar 04 19:36	23°♍16'32		
	13146 Oct 06 07:51	0°♍		greatest brilliancy	13149 Mar 15 18:56	25°♍28'26	-4.8m	
	13146 Oct 30 10:42	0°♁			13149 Mar 24 19:09	0°♁		
evening rise	13146 Oct 30 19:24	0°♁27'00		morning max el	13149 Apr 23 10:16	24°♁40'40	46°14'39	
	13146 Nov 23 16:49	0°♄			13149 Apr 28 17:15	0°♁		
	13146 Dec 18 03:57	0°♍			13149 May 26 07:53	0°♄		
desc. node	13147 Jan 04 21:29	21°♍32'21			13149 Jun 21 01:34	0°♄		
	13147 Jan 11 21:41	0°♁		desc. node	13149 Jun 22 03:44	1°♄17'54		
	13147 Feb 05 23:18	0°♁			13149 Jul 15 22:45	0°♄		
	13147 Mar 03 10:59	0°♄			13149 Aug 09 09:36	0°♄		
	13147 Mar 29 16:10	0°♄			13149 Sep 02 15:45	0°♁		
	13147 Apr 26 16:16	0°♄			13149 Sep 26 20:17	0°♄		
asc. node	13147 Apr 27 19:24	1°♄08'03		asc. node	13149 Oct 12 20:47	19°♄52'59		
evening max el	13147 Apr 29 01:11	2°♄22'12	46°29'29		13149 Oct 21 00:26	0°♍		
	13147 Jun 02 08:53	0°♄		morning set	13149 Oct 25 18:52	5°♍55'06		
greatest brilliancy	13147 Jun 08 12:04	2°♄39'18	-4.9m		13149 Nov 14 04:42	0°♁		
retrograde	13147 Jun 17 23:28	4°♄20'22						
	13147 Jul 02 20:23	30°♁♄		superior conj	13149 Dec 02 08:09	22°♁29'24	1°25'14	
evening set	13147 Jul 05 12:08	28°♄28'50		minimum elong	13149 Dec 02 05:13	22°♁20'18	1°26'12	
inferior conj	13147 Jul 08 15:28	26°♄34'02	8°23'13	max. Earth dist.	13149 Dec 04 02:43	24°♁41'10	1.72869 AU	
minimum elong	13147 Jul 09 00:06	26°♄20'42	8°21'06		13149 Dec 08 09:45	0°♄		
min. Earth dist.	13147 Jul 09 03:55	26°♄14'50	0.27204 AU		13150 Jan 01 16:39	0°♍		
morning rise	13147 Jul 12 11:59	24°♄13'34		evening rise	13150 Jan 08 09:23	8°♍14'58		
direct	13147 Jul 29 09:58	18°♄42'31			13150 Jan 26 02:12	0°♁		
greatest brilliancy	13147 Aug 08 11:26	20°♄36'18	-4.9m	desc. node	13150 Feb 01 10:44	7°♁47'33		
desc. node	13147 Aug 17 22:16	25°♄16'17			13150 Feb 19 14:24	0°♁		
	13147 Aug 24 21:19	0°♄			13150 Mar 16 04:43	0°♄		
morning max el	13147 Sep 17 16:40	21°♄07'30	46°44'30		13150 Apr 09 21:29	0°♄		
	13147 Sep 26 09:14	0°♁			13150 May 04 19:25	0°♄		
	13147 Oct 23 19:09	0°♄		asc. node	13150 May 25 05:29	24°♄10'14		
	13147 Nov 18 18:53	0°♍			13150 May 30 05:30	0°♄		
asc. node	13147 Dec 08 21:37	23°♍47'34			13150 Jun 25 20:01	0°♁		
	13147 Dec 14 02:19	0°♁		evening max el	13150 Jul 10 23:50	15°♁52'35	46°46'52	

	13150 Jul 25 23:43	0°♄		minimum elong	13153 Feb 09 15:14	29°♁47'40	0°45'39
greatest brilliancy	13150 Aug 19 15:57	16°♄21'13	-4.9m	max. Earth dist.	13153 Feb 09 05:03	29°♁16'15	1.73129 AU
retrograde	13150 Aug 30 08:43	18°♄29'54			13153 Feb 09 19:14	0°♄	
evening set	13150 Sep 13 22:14	14°♄19'04		desc. node	13153 Mar 01 00:58	23°♄44'14	
desc. node	13150 Sep 14 07:34	14°♄06'29			13153 Mar 06 02:48	0°♄	
inferior conj	13150 Sep 20 06:11	10°♄36'49	-1°31'40	evening rise	13153 Mar 19 07:38	16°♄17'50	
minimum elong	13150 Sep 20 02:39	10°♄42'12	1°30'28		13153 Mar 30 09:48	0°♄	
min. Earth dist.	13150 Sep 19 18:25	10°♄54'46	0.27254 AU		13153 Apr 23 15:49	0°♄	
morning rise	13150 Sep 26 07:35	7°♄04'13			13153 May 17 21:34	0°♄	
direct	13150 Oct 11 01:21	2°♄50'14			13153 Jun 11 05:08	0°♄	
greatest brilliancy	13150 Oct 20 18:34	4°♄34'13	-4.8m	asc. node	13153 Jun 21 16:54	12°♄52'21	
	13150 Nov 25 18:04	0°♄			13153 Jul 05 18:07	0°♄	
morning max el	13150 Nov 29 07:44	3°♄23'50	46°00'43		13153 Jul 30 18:11	0°♄	
	13150 Dec 25 00:37	0°♄			13153 Aug 25 16:53	0°♄	
asc. node	13151 Jan 05 09:08	12°♄33'26		evening max el	13153 Sep 20 17:35	27°♄46'04	46°26'31
	13151 Jan 20 16:40	0°♄			13153 Sep 22 23:54	0°♄	
	13151 Feb 15 06:12	0°♄		desc. node	13153 Oct 11 16:48	16°♄33'42	
	13151 Mar 12 05:30	0°♄		greatest brilliancy	13153 Oct 29 21:26	27°♄23'56	-4.8m
	13151 Apr 05 20:08	0°♄		retrograde	13153 Nov 09 14:30	29°♄29'31	
desc. node	13151 Apr 27 03:57	26°♄15'27		evening set	13153 Nov 27 16:57	23°♄18'45	
	13151 Apr 30 04:35	0°♄		min. Earth dist.	13153 Nov 30 12:12	21°♄34'42	0.28705 AU
	13151 May 24 08:05	0°♄		inferior conj	13153 Dec 01 00:49	21°♄14'58	-8°43'34
morning set	13151 May 29 00:43	5°♄51'14		minimum elong	13153 Nov 30 21:31	21°♄20'07	8°42'27
	13151 Jun 17 07:56	0°♄		morning rise	13153 Dec 04 02:16	19°♄21'21	
max. Earth dist.	13151 Jul 07 10:32	25°♄13'20	1.71428 AU	direct	13153 Dec 22 08:38	13°♄08'45	
				greatest brilliancy	13154 Jan 01 05:13	14°♄54'56	-4.7m
superior conj	13151 Jul 08 01:30	26°♄00'21	-1°19'22		13154 Jan 25 11:00	0°♄	
minimum elong	13151 Jul 08 10:38	26°♄29'00	1°20'07	asc. node	13154 Feb 01 19:20	6°♄22'58	
	13151 Jul 11 05:51	0°♄		morning max el	13154 Feb 09 06:56	13°♄24'48	45°43'12
	13151 Aug 04 03:42	0°♄			13154 Feb 25 13:36	0°♄	
evening rise	13151 Aug 17 07:42	16°♄29'40			13154 Mar 24 14:30	0°♄	
asc. node	13151 Aug 17 17:41	17°♄00'53			13154 Apr 19 05:31	0°♄	
	13151 Aug 28 03:00	0°♄			13154 May 14 03:18	0°♄	
	13151 Sep 21 05:03	0°♄		desc. node	13154 May 24 17:19	12°♄55'18	
	13151 Oct 15 11:43	0°♄			13154 Jun 07 14:30	0°♄	
	13151 Nov 09 01:56	0°♄			13154 Jul 01 18:50	0°♄	
	13151 Dec 04 04:07	0°♄			13154 Jul 25 19:18	0°♄	
desc. node	13151 Dec 07 11:16	3°♄53'09		morning set	13154 Aug 11 22:18	21°♄26'24	
	13151 Dec 30 00:49	0°♄			13154 Aug 18 18:24	0°♄	
	13152 Jan 26 05:44	0°♄			13154 Sep 11 17:53	0°♄	
evening max el	13152 Feb 13 08:39	18°♄27'33	45°59'17	asc. node	13154 Sep 14 08:10	3°♄14'36	
	13152 Feb 25 22:46	0°♄					
greatest brilliancy	13152 Mar 23 13:49	17°♄17'05	-4.8m	superior conj	13154 Sep 20 07:25	10°♄41'54	0°14'30
asc. node	13152 Mar 29 12:04	18°♄48'17		minimum elong	13154 Sep 20 03:55	10°♄30'58	0°14'25
retrograde	13152 Apr 02 13:50	19°♄07'29		behind sun begin	13154 Sep 19 16:45	9°♄56'07	
evening set	13152 Apr 17 21:34	14°♄30'53		behind sun end	13154 Sep 20 15:05	11°♄05'50	
inferior conj	13152 Apr 23 11:43	11°♄08'58	5°50'01	max. Earth dist.	13154 Sep 22 12:16	13°♄26'54	1.71919 AU
minimum elong	13152 Apr 23 01:09	11°♄25'26	5°46'52		13154 Oct 05 18:40	0°♄	
min. Earth dist.	13152 Apr 23 11:06	11°♄09'54	0.27824 AU	evening rise	13154 Oct 28 10:56	28°♄12'36	
morning rise	13152 Apr 28 04:36	8°♄17'09			13154 Oct 29 21:33	0°♄	
direct	13152 May 14 12:58	3°♄05'12			13154 Nov 23 03:46	0°♄	
greatest brilliancy	13152 May 24 15:09	5°♄00'25	-4.9m		13154 Dec 17 15:07	0°♄	
	13152 Jun 28 02:20	0°♄		desc. node	13155 Jan 03 23:20	21°♄03'17	
morning max el	13152 Jul 03 22:48	5°♄45'10	46°53'53		13155 Jan 11 09:17	0°♄	
desc. node	13152 Jul 19 14:37	22°♄11'47			13155 Feb 05 11:35	0°♄	
	13152 Jul 26 16:21	0°♄			13155 Mar 03 00:30	0°♄	
	13152 Aug 21 18:32	0°♄			13155 Mar 29 08:05	0°♄	
	13152 Sep 15 22:54	0°♄		evening max el	13155 Apr 26 13:20	29°♄56'51	46°28'18
	13152 Oct 10 17:50	0°♄		asc. node	13155 Apr 26 21:19	0°♄16'37	
	13152 Nov 04 08:00	0°♄			13155 Apr 26 14:36	0°♄	
asc. node	13152 Nov 09 10:38	6°♄15'13			13155 Jun 05 07:56	0°♄	
	13152 Nov 28 19:03	0°♄		greatest brilliancy	13155 Jun 06 01:38	0°♄15'39	-4.9m
	13152 Dec 23 03:54	0°♄		retrograde	13155 Jun 15 11:51	1°♄56'13	
morning set	13153 Jan 03 09:14	13°♄50'19			13155 Jun 25 06:50	30°♄	
	13153 Jan 16 11:39	0°♄		evening set	13155 Jul 03 04:11	25°♄59'41	
				inferior conj	13155 Jul 06 04:29	24°♄09'32	8°32'32
superior conj	13153 Feb 09 06:22	29°♄20'20	0°45'26	minimum elong	13155 Jul 06 12:28	23°♄57'14	8°30'37

min. Earth dist.	13155 Jul 06 17:11	23° \mathfrak{D} 49'57	0.27233 AU		13158 Jan 01 03:11	0° \approx	
morning rise	13155 Jul 09 20:38	21° \mathfrak{D} 55'27		evening rise	13158 Jan 06 01:32	6° \approx 04'27	
direct	13155 Jul 26 22:35	16° \mathfrak{D} 17'08			13158 Jan 25 12:54	0° \mathfrak{H}	
greatest brilliancy	13155 Aug 06 01:15	18° \mathfrak{D} 11'54	-4.9m	desc. node	13158 Jan 31 12:40	7° \mathfrak{H} 20'35	
desc. node	13155 Aug 17 00:21	23° \mathfrak{D} 48'56			13158 Feb 19 01:21	0° \mathfrak{Y}	
	13155 Aug 25 14:06	0° Ω			13158 Mar 15 16:03	0° \mathfrak{B}	
morning max el	13155 Sep 15 05:58	18° Ω 43'45	46°45'48		13158 Apr 09 09:22	0° Π	
	13155 Sep 26 05:04	0° \mathfrak{M}			13158 May 04 08:13	0° \mathfrak{D}	
	13155 Oct 23 10:22	0° $\underline{\mathfrak{L}}$		asc. node	13158 May 24 07:23	23° \mathfrak{D} 34'48	
	13155 Nov 18 08:05	0° \mathfrak{M}			13158 May 29 19:58	0° Ω	
asc. node	13155 Dec 07 23:27	23° \mathfrak{M} 16'29			13158 Jun 25 14:10	0° \mathfrak{M}	
	13155 Dec 13 14:24	0° \mathfrak{A}		evening max el	13158 Jul 08 14:46	13° \mathfrak{M} 34'05	46°46'59
	13156 Jan 07 11:08	0° \mathfrak{Z}			13158 Jul 26 08:03	0° $\underline{\mathfrak{L}}$	
	13156 Feb 01 01:38	0° \approx		greatest brilliancy	13158 Aug 17 06:02	13° $\underline{\mathfrak{L}}$ 59'52	-4.9m
	13156 Feb 25 12:12	0° \mathfrak{H}		retrograde	13158 Aug 27 23:06	16° $\underline{\mathfrak{L}}$ 08'23	
morning set	13156 Mar 13 11:37	20° \mathfrak{H} 55'13		evening set	13158 Sep 11 11:49	11° $\underline{\mathfrak{L}}$ 57'51	
	13156 Mar 20 20:02	0° \mathfrak{Y}		desc. node	13158 Sep 13 09:33	10° $\underline{\mathfrak{L}}$ 54'20	
desc. node	13156 Mar 28 15:29	9° \mathfrak{Y} 39'40		inferior conj	13158 Sep 17 19:31	8° $\underline{\mathfrak{L}}$ 15'51	-1°08'23
	13156 Apr 14 01:15	0° \mathfrak{B}		minimum elong	13158 Sep 17 16:51	8° $\underline{\mathfrak{L}}$ 19'54	1°07'29
max. Earth dist.	13156 Apr 18 04:30	5° \mathfrak{B} 08'16	1.72322 AU	min. Earth dist.	13158 Sep 17 08:30	8° $\underline{\mathfrak{L}}$ 32'39	0.27219 AU
				morning rise	13158 Sep 23 22:29	4° $\underline{\mathfrak{L}}$ 41'28	
superior conj	13156 Apr 21 09:09	9° \mathfrak{B} 06'30	-0°53'34	direct	13158 Oct 08 15:01	0° $\underline{\mathfrak{L}}$ 29'43	
minimum elong	13156 Apr 20 22:26	8° \mathfrak{B} 33'10	0°53'42	greatest brilliancy	13158 Oct 18 07:40	2° $\underline{\mathfrak{L}}$ 13'43	-4.8m
	13156 May 08 03:46	0° Π			13158 Nov 25 17:54	0° \mathfrak{M}	
evening rise	13156 May 30 15:41	28° Π 06'04		morning max el	13158 Nov 26 22:33	1° \mathfrak{M} 08'51	46°01'56
	13156 Jun 01 04:08	0° \mathfrak{D}			13158 Dec 24 16:36	0° \mathfrak{A}	
	13156 Jun 25 03:49	0° Ω		asc. node	13159 Jan 04 11:08	11° \mathfrak{A} 58'01	
asc. node	13156 Jul 19 05:43	0° \mathfrak{M} 02'35			13159 Jan 20 05:57	0° \mathfrak{Z}	
	13156 Jul 19 04:53	0° \mathfrak{M}			13159 Feb 14 18:13	0° \approx	
	13156 Aug 12 09:33	0° $\underline{\mathfrak{L}}$			13159 Mar 11 16:50	0° \mathfrak{H}	
	13156 Sep 05 20:43	0° \mathfrak{M}			13159 Apr 05 07:05	0° \mathfrak{Y}	
	13156 Sep 30 19:28	0° \mathfrak{A}		desc. node	13159 Apr 26 05:38	25° \mathfrak{Y} 47'24	
	13156 Oct 26 16:08	0° \mathfrak{Z}			13159 Apr 29 15:20	0° \mathfrak{B}	
desc. node	13156 Nov 08 02:23	13° \mathfrak{Z} 46'57			13159 May 23 18:44	0° Π	
	13156 Nov 23 11:52	0° \approx		morning set	13159 May 26 12:26	3° Π 24'52	
evening max el	13156 Nov 30 17:51	7° \approx 10'47	45°58'21		13159 Jun 16 18:31	0° \mathfrak{D}	
	13156 Dec 28 10:33	0° \mathfrak{H}		max. Earth dist.	13159 Jul 04 20:01	22° \mathfrak{D} 39'19	1.71429 AU
greatest brilliancy	13157 Jan 08 23:10	5° \mathfrak{H} 42'03	-4.7m				
retrograde	13157 Jan 18 19:12	7° \mathfrak{H} 28'08		superior conj	13159 Jul 05 13:23	23° \mathfrak{D} 33'48	-1°20'54
evening set	13157 Feb 03 21:53	2° \mathfrak{H} 28'59		minimum elong	13159 Jul 05 21:48	24° \mathfrak{D} 00'15	1°21'43
	13157 Feb 08 00:52	30° \mathfrak{R} \approx			13159 Jul 10 16:25	0° Ω	
inferior conj	13157 Feb 09 04:08	29° \approx 17'22	-4°40'59		13159 Aug 03 14:15	0° \mathfrak{M}	
minimum elong	13157 Feb 09 13:16	29° \approx 03'03	4°38'00	evening rise	13159 Aug 14 20:12	14° \mathfrak{M} 05'30	
min. Earth dist.	13157 Feb 09 15:58	28° \approx 58'49	0.28617 AU	asc. node	13159 Aug 16 19:36	16° \mathfrak{M} 33'49	
morning rise	13157 Feb 15 04:17	25° \approx 39'36			13159 Aug 27 13:35	0° $\underline{\mathfrak{L}}$	
asc. node	13157 Mar 01 04:52	21° \approx 05'52			13159 Sep 20 15:46	0° \mathfrak{M}	
direct	13157 Mar 02 11:27	21° \approx 03'55			13159 Oct 14 22:41	0° \mathfrak{A}	
greatest brilliancy	13157 Mar 13 11:01	23° \approx 16'25	-4.8m		13159 Nov 08 13:23	0° \mathfrak{Z}	
	13157 Mar 25 21:13	0° \mathfrak{H}			13159 Dec 03 16:23	0° \approx	
morning max el	13157 Apr 21 02:27	22° \mathfrak{H} 28'27	46°13'17	desc. node	13159 Dec 06 13:07	3° \approx 22'08	
	13157 Apr 28 12:55	0° \mathfrak{Y}			13159 Dec 29 14:40	0° \mathfrak{H}	
	13157 May 25 22:43	0° \mathfrak{B}			13160 Jan 25 23:10	0° \mathfrak{Y}	
	13157 Jun 20 14:31	0° Π		evening max el	13160 Feb 10 23:42	16° \mathfrak{Y} 13'43	45°58'34
desc. node	13157 Jun 21 05:39	0° Π 45'09			13160 Feb 26 05:37	0° \mathfrak{B}	
	13157 Jul 15 10:45	0° \mathfrak{D}		greatest brilliancy	13160 Mar 21 04:05	15° \mathfrak{B} 00'02	-4.8m
	13157 Aug 08 21:04	0° Ω		asc. node	13160 Mar 28 13:59	16° \mathfrak{B} 42'03	
	13157 Sep 02 02:53	0° \mathfrak{M}		retrograde	13160 Mar 31 03:29	16° \mathfrak{B} 49'42	
	13157 Sep 26 07:10	0° $\underline{\mathfrak{L}}$		evening set	13160 Apr 15 09:13	12° \mathfrak{B} 17'03	
asc. node	13157 Oct 11 22:35	19° $\underline{\mathfrak{L}}$ 25'14		inferior conj	13160 Apr 21 02:04	8° \mathfrak{B} 51'05	5°32'12
	13157 Oct 20 11:08	0° \mathfrak{M}		minimum elong	13160 Apr 20 15:44	9° \mathfrak{B} 07'14	5°29'04
morning set	13157 Oct 23 09:47	3° \mathfrak{M} 39'15		min. Earth dist.	13160 Apr 21 01:45	8° \mathfrak{B} 51'35	0.27840 AU
	13157 Nov 13 15:16	0° \mathfrak{A}		morning rise	13160 Apr 25 22:05	5° \mathfrak{B} 54'24	
				direct	13160 May 12 03:36	0° \mathfrak{B} 47'10	
superior conj	13157 Nov 30 00:31	20° \mathfrak{A} 18'52	1°24'40	greatest brilliancy	13160 May 22 06:24	2° \mathfrak{B} 42'35	-4.9m
minimum elong	13157 Nov 29 20:51	20° \mathfrak{A} 07'29	1°25'37		13160 Jun 28 02:13	0° Π	
max. Earth dist.	13157 Dec 01 20:55	22° \mathfrak{A} 36'21	1.72846 AU	morning max el	13160 Jul 01 12:09	3° Π 23'12	46°53'08
	13157 Dec 07 20:15	0° \mathfrak{Z}		desc. node	13160 Jul 18 16:37	21° Π 29'32	

	13160 Jul 26 08:38	0°☿			13163 Mar 02 13:55	0°♄		
	13160 Aug 21 08:10	0°♌			13163 Mar 29 00:06	0°♊		
	13160 Sep 15 11:12	0°♍	evening max el		13163 Apr 24 01:48	27°♊32'56	46°27'13	
	13160 Oct 10 05:20	0°♋	asc. node		13163 Apr 25 23:16	29°♊24'47		
	13160 Nov 03 18:59	0°♍			13163 Apr 26 13:43	0°☿		
asc. node	13160 Nov 08 12:26	5°♍47'23	greatest brilliancy		13163 Jun 03 14:26	27°☿51'39	-4.9m	
	13160 Nov 28 05:42	0°♊	retrograde		13163 Jun 13 00:42	29°☿32'36		
	13160 Dec 22 14:22	0°♊	evening set		13163 Jun 30 19:56	23°☿31'07		
morning set	13161 Jan 01 02:17	11°♊42'48	inferior conj		13163 Jul 03 17:25	21°☿45'18	8°40'56	
	13161 Jan 15 22:02	0°♊	minimum elong		13163 Jul 04 00:39	21°☿34'10	8°39'11	
			min. Earth dist.		13163 Jul 04 05:57	21°☿26'00	0.27262 AU	
superior conj	13161 Feb 06 22:39	27°♊10'34	morning rise		13163 Jul 07 05:16	19°☿37'42		
minimum elong	13161 Feb 07 07:49	27°♊38'50	direct		13163 Jul 24 11:29	13°☿52'03		
max. Earth dist.	13161 Feb 06 21:35	27°♊07'17	greatest brilliancy		13163 Aug 03 14:32	15°☿47'27	-4.9m	
	13161 Feb 09 05:36	0°♋	desc. node		13163 Aug 16 02:23	22°☿25'00		
desc. node	13161 Feb 28 02:48	23°♋17'43			13163 Aug 26 02:23	0°♌		
	13161 Mar 05 13:14	0°♍	morning max el		13163 Sep 12 20:11	16°♌22'51	46°47'07	
evening rise	13161 Mar 16 22:49	14°♍04'01			13163 Sep 26 00:04	0°♍		
	13161 Mar 29 20:23	0°♄			13163 Oct 23 01:08	0°♋		
	13161 Apr 23 02:39	0°♊			13163 Nov 17 20:56	0°♍		
	13161 May 17 08:43	0°☿	asc. node		13163 Dec 07 01:27	22°♍46'44		
	13161 Jun 10 16:43	0°♌			13163 Dec 13 02:09	0°♊		
asc. node	13161 Jun 20 18:52	12°♌22'06			13164 Jan 06 22:15	0°♊		
	13161 Jul 05 06:22	0°♍			13164 Jan 31 12:23	0°♊		
	13161 Jul 30 07:36	0°♋			13164 Feb 24 22:47	0°♋		
	13161 Aug 25 08:41	0°♍	morning set		13164 Mar 11 03:15	18°♋42'46		
evening max el	13161 Sep 18 07:50	25°♍28'37			13164 Mar 20 06:35	0°♍		
	13161 Sep 22 22:47	0°♊	desc. node		13164 Mar 27 17:14	9°♍12'26		
desc. node	13161 Oct 10 18:41	15°♊26'00			13164 Apr 13 11:50	0°♄		
greatest brilliancy	13161 Oct 27 13:03	25°♊11'59	max. Earth dist.		13164 Apr 15 21:27	2°♄58'51	1.72365 AU	
retrograde	13161 Nov 07 05:42	27°♊17'44						
evening set	13161 Nov 25 06:15	21°♊10'58	superior conj		13164 Apr 18 22:45	6°♄46'36	-0°50'37	
min. Earth dist.	13161 Nov 28 03:11	19°♊24'30	minimum elong		13164 Apr 18 12:21	6°♄14'18	0°50'43	
inferior conj	13161 Nov 28 16:27	19°♊03'42			13164 May 07 14:25	0°♊		
minimum elong	13161 Nov 28 12:21	19°♊10'08	evening rise		13164 May 28 04:01	25°♊41'03		
morning rise	13161 Dec 01 18:38	17°♊08'56			13164 May 31 14:53	0°☿		
direct	13161 Dec 19 23:32	10°♊58'07			13164 Jun 24 14:43	0°♌		
greatest brilliancy	13161 Dec 29 20:03	12°♊43'44	asc. node		13164 Jul 18 07:37	29°♌33'54		
	13162 Jan 25 16:39	0°♊			13164 Jul 18 16:01	0°♍		
asc. node	13162 Jan 31 21:24	5°♊30'42			13164 Aug 11 21:00	0°♋		
morning max el	13162 Feb 06 20:55	11°♊09'40			13164 Sep 05 08:40	0°♍		
	13162 Feb 25 06:34	0°♊			13164 Sep 30 08:20	0°♊		
	13162 Mar 24 04:10	0°♋			13164 Oct 26 06:54	0°♊		
	13162 Apr 18 17:47	0°♍	desc. node		13164 Nov 07 04:21	13°♊07'58		
	13162 May 13 14:51	0°♄			13164 Nov 23 07:38	0°♊		
desc. node	13162 May 23 19:15	12°♄26'30	evening max el		13164 Nov 28 09:37	5°♊00'09	45°59'12	
	13162 Jun 07 01:39	0°♊			13164 Dec 29 18:50	0°♋		
	13162 Jul 01 05:44	0°☿	greatest brilliancy		13165 Jan 06 13:44	3°♋30'39	-4.7m	
	13162 Jul 25 06:02	0°♌	retrograde		13165 Jan 16 11:22	5°♋17'49		
morning set	13162 Aug 09 10:47	19°♌01'48	evening set		13165 Feb 01 16:20	0°♋14'27		
	13162 Aug 18 05:02	0°♍			13165 Feb 02 02:21	30°♋		
	13162 Sep 11 04:25	0°♋	inferior conj		13165 Feb 06 20:00	27°♋06'23	-4°58'17	
asc. node	13162 Sep 13 09:56	2°♋47'12	minimum elong		13165 Feb 07 05:29	26°♋51'32	4°55'16	
			min. Earth dist.		13165 Feb 07 07:19	26°♋48'40	0.28646 AU	
superior conj	13162 Sep 17 21:05	8°♋21'56	morning rise		13165 Feb 12 18:22	23°♋31'27		
minimum elong	13162 Sep 17 18:27	8°♋13'41	direct		13165 Feb 28 04:02	18°♋52'50		
behind sun begin	13162 Sep 16 23:55	7°♋15'48	asc. node		13165 Feb 28 06:44	18°♋52'51		
behind sun end	13162 Sep 18 12:59	9°♋11'34	greatest brilliancy		13165 Mar 11 02:37	21°♋04'54	-4.8m	
max. Earth dist.	13162 Sep 19 22:37	10°♋56'35			13165 Mar 26 15:48	0°♋		
	13162 Oct 05 05:09	0°♍	morning max el		13165 Apr 18 18:54	20°♋17'21	46°11'36	
evening rise	13162 Oct 26 02:41	26°♍00'03			13165 Apr 28 07:55	0°♍		
	13162 Oct 29 08:01	0°♊			13165 May 25 13:25	0°♄		
	13162 Nov 22 14:19	0°♊	desc. node		13165 Jun 20 07:39	0°♊12'25		
	13162 Dec 17 01:55	0°♊			13165 Jun 20 03:30	0°♊		
desc. node	13163 Jan 03 01:19	20°♊35'43			13165 Jul 14 22:52	0°☿		
	13163 Jan 10 20:33	0°♋			13165 Aug 08 08:39	0°♌		
	13163 Feb 04 23:39	0°♍			13165 Sep 01 14:07	0°♍		

	13165 Sep 25 18:08	0°♄		asc. node	13168 Mar 27 15:58	14°♄31'05	
asc. node	13165 Oct 11 00:21	18°♄57'09		retrograde	13168 Mar 28 17:15	14°♄32'23	
	13165 Oct 19 21:54	0°♄		evening set	13168 Apr 12 21:24	10°♄03'04	
morning set	13165 Oct 21 00:38	1°♄23'00		inferior conj	13168 Apr 18 16:46	6°♄33'39	5°14'03
	13165 Nov 13 01:54	0°♄		minimum elong	13168 Apr 18 06:44	6°♄49'20	5°10'55
				min. Earth dist.	13168 Apr 18 16:56	6°♄33'22	0.27856 AU
superior conj	13165 Nov 27 17:00	18°♄08'19	1°23'59	morning rise	13168 Apr 23 15:48	3°♄32'17	
minimum elong	13165 Nov 27 12:36	17°♄54'42	1°24'54		13168 May 01 03:03	30°♄	
max. Earth dist.	13165 Nov 29 16:08	20°♄34'19	1.72818 AU	direct	13168 May 09 18:03	28°♄29'26	
	13165 Dec 07 06:51	0°♄			13168 May 18 16:40	0°♄	
	13165 Dec 31 13:49	0°♄		greatest brilliancy	13168 May 19 22:22	0°♄25'40	-4.8m
evening rise	13166 Jan 03 17:58	3°♄54'30			13168 Jun 28 01:17	0°♄	
	13166 Jan 24 23:40	0°♄		morning max el	13168 Jun 29 01:04	0°♄59'29	46°52'12
desc. node	13166 Jan 30 14:30	6°♄53'06		desc. node	13168 Jul 17 18:37	20°♄46'55	
	13166 Feb 18 12:21	0°♄			13168 Jul 26 00:57	0°♄	
	13166 Mar 15 03:27	0°♄			13168 Aug 20 22:06	0°♄	
	13166 Apr 08 21:25	0°♄			13168 Sep 14 23:55	0°♄	
	13166 May 03 21:18	0°♄			13168 Oct 09 17:18	0°♄	
asc. node	13166 May 23 09:23	22°♄58'39			13168 Nov 03 06:27	0°♄	
	13166 May 29 10:53	0°♄		asc. node	13168 Nov 07 14:26	5°♄18'38	
	13166 Jun 25 09:13	0°♄			13168 Nov 27 16:49	0°♄	
evening max el	13166 Jul 06 05:49	11°♄14'43	46°46'53		13168 Dec 22 01:15	0°♄	
	13166 Jul 26 20:06	0°♄		morning set	13168 Dec 29 19:07	9°♄33'17	
greatest brilliancy	13166 Aug 14 20:33	11°♄37'35	-4.9m		13169 Jan 15 08:48	0°♄	
retrograde	13166 Aug 25 12:59	13°♄45'01					
evening set	13166 Sep 09 01:30	9°♄34'53		superior conj	13169 Feb 04 15:01	24°♄59'53	0°51'02
desc. node	13166 Sep 12 11:27	7°♄38'10		minimum elong	13169 Feb 05 00:27	25°♄28'58	0°51'19
inferior conj	13166 Sep 15 08:40	5°♄53'19	-0°44'46	max. Earth dist.	13169 Feb 04 14:04	24°♄56'55	1.73145 AU
minimum elong	13166 Sep 15 06:55	5°♄55'59	0°44'11		13169 Feb 08 16:21	0°♄	
min. Earth dist.	13166 Sep 14 22:35	6°♄08'41	0.27181 AU	desc. node	13169 Feb 27 04:34	22°♄49'48	
morning rise	13166 Sep 21 12:58	2°♄17'13			13169 Mar 05 00:04	0°♄	
	13166 Sep 26 12:10	30°♄		evening rise	13169 Mar 14 14:19	11°♄50'08	
direct	13166 Oct 06 04:33	28°♄07'48			13169 Mar 29 07:22	0°♄	
greatest brilliancy	13166 Oct 15 20:36	29°♄51'35	-4.8m		13169 Apr 22 13:51	0°♄	
	13166 Oct 16 06:15	0°♄			13169 May 16 20:11	0°♄	
morning max el	13166 Nov 24 12:18	28°♄50'21	46°03'16		13169 Jun 10 04:38	0°♄	
	13166 Nov 25 17:00	0°♄		asc. node	13169 Jun 19 20:49	11°♄50'50	
	13166 Dec 24 08:33	0°♄			13169 Jul 04 19:01	0°♄	
asc. node	13167 Jan 03 13:05	11°♄22'06			13169 Jul 29 21:33	0°♄	
	13167 Jan 19 19:20	0°♄			13169 Aug 25 01:20	0°♄	
	13167 Feb 14 06:22	0°♄		evening max el	13169 Sep 15 21:33	23°♄07'55	46°28'37
	13167 Mar 11 04:19	0°♄			13169 Sep 22 23:35	0°♄	
desc. node	13167 Apr 04 18:12	0°♄		desc. node	13169 Oct 09 20:46	14°♄14'37	
	13167 Apr 25 07:35	25°♄19'35		greatest brilliancy	13169 Oct 25 04:10	22°♄56'51	-4.8m
	13167 Apr 29 02:15	0°♄		retrograde	13169 Nov 04 20:56	25°♄03'21	
	13167 May 23 05:35	0°♄		evening set	13169 Nov 22 18:54	19°♄00'49	
morning set	13167 May 24 00:28	0°♄58'52		min. Earth dist.	13169 Nov 25 17:53	17°♄11'32	0.28634 AU
	13167 Jun 16 05:24	0°♄		inferior conj	13169 Nov 26 07:48	16°♄49'47	-8°35'53
max. Earth dist.	13167 Jul 02 02:22	19°♄54'32	1.71441 AU	minimum elong	13169 Nov 26 02:55	16°♄57'25	8°34'35
				morning rise	13169 Nov 29 11:04	14°♄53'27	
superior conj	13167 Jul 03 01:14	21°♄06'16	-1°22'18	direct	13169 Dec 17 13:55	8°♄44'42	
minimum elong	13167 Jul 03 08:53	21°♄30'15	1°23'09	greatest brilliancy	13169 Dec 27 10:53	10°♄30'24	-4.7m
	13167 Jul 10 03:19	0°♄			13170 Jan 25 21:04	0°♄	
	13167 Aug 03 01:12	0°♄		asc. node	13170 Jan 30 23:19	4°♄37'33	
evening rise	13167 Aug 12 08:08	11°♄38'16		morning max el	13170 Feb 04 11:06	8°♄53'30	45°42'45
asc. node	13167 Aug 15 21:21	16°♄04'55			13170 Feb 24 23:40	0°♄	
	13167 Aug 27 00:35	0°♄			13170 Mar 23 18:08	0°♄	
	13167 Sep 20 02:54	0°♄			13170 Apr 18 06:22	0°♄	
	13167 Oct 14 10:05	0°♄			13170 May 13 02:44	0°♄	
	13167 Nov 08 01:14	0°♄		desc. node	13170 May 22 21:10	11°♄56'39	
	13167 Dec 03 05:05	0°♄			13170 Jun 06 13:07	0°♄	
desc. node	13167 Dec 05 15:10	2°♄50'27			13170 Jun 30 16:56	0°♄	
	13167 Dec 29 05:01	0°♄			13170 Jul 24 17:03	0°♄	
	13168 Jan 25 17:23	0°♄		morning set	13170 Aug 06 23:35	16°♄37'14	
evening max el	13168 Feb 08 14:08	13°♄57'39	45°58'00		13170 Aug 17 15:57	0°♄	
	13168 Feb 26 15:27	0°♄			13170 Sep 10 15:18	0°♄	
greatest brilliancy	13168 Mar 18 18:58	12°♄43'28	-4.8m	asc. node	13170 Sep 12 11:46	2°♄18'58	

superior conj	13170 Sep 15 10:46	6° Ω 00'48	0°07'14	morning rise	13173 Feb 10 07:59	21° \approx 21'59	
minimum elong	13170 Sep 15 09:00	5° Ω 55'18	0°07'08	direct	13173 Feb 25 20:33	16° \approx 40'31	
behind sun begin	13170 Sep 14 10:40	4° Ω 45'30		asc. node	13173 Feb 27 08:45	16° \approx 43'13	
behind sun end	13170 Sep 16 07:20	7° Ω 05'05		greatest brilliancy	13173 Mar 08 17:39	18° \approx 51'29	-4.8m
max. Earth dist.	13170 Sep 17 09:23	8° Ω 26'26	1.71856 AU		13173 Mar 27 06:03	0° \mathcal{H}	
	13170 Oct 04 16:02	0° \mathcal{M}		morning max el	13173 Apr 16 10:36	18° \mathcal{H} 03'40	46°10'00
evening rise	13170 Oct 23 18:15	23° \mathcal{M} 45'32			13173 Apr 28 02:40	0° \mathcal{Y}	
	13170 Oct 28 18:56	0° \mathcal{X}			13173 May 25 04:06	0° \mathcal{B}	
	13170 Nov 22 01:22	0° \mathcal{Z}		desc. node	13173 Jun 19 09:31	29° \mathcal{B} 39'09	
	13170 Dec 16 13:14	0° \approx			13173 Jun 19 16:30	0° \mathcal{I}	
desc. node	13171 Jan 02 03:09	20° \approx 06'11			13173 Jul 14 11:00	0° \mathcal{C}	
	13171 Jan 10 08:20	0° \mathcal{H}			13173 Aug 07 20:16	0° Ω	
	13171 Feb 04 12:13	0° \mathcal{Y}			13173 Sep 01 01:23	0° \mathcal{M}	
	13171 Mar 02 03:51	0° \mathcal{B}			13173 Sep 25 05:07	0° Ω	
	13171 Mar 28 16:48	0° \mathcal{I}		asc. node	13173 Oct 10 02:20	18° Ω 29'36	
evening max el	13171 Apr 21 15:19	25° \mathcal{I} 10'53	46°26'15	morning set	13173 Oct 18 15:48	29° Ω 07'37	
asc. node	13171 Apr 25 01:22	28° \mathcal{I} 31'24			13173 Oct 19 08:40	0° \mathcal{M}	
	13171 Apr 26 14:19	0° \mathcal{C}			13173 Nov 12 12:32	0° \mathcal{X}	
greatest brilliancy	13171 Jun 01 02:58	25° \mathcal{C} 27'03	-4.9m				
retrograde	13171 Jun 10 14:18	27° \mathcal{C} 08'53		superior conj	13173 Nov 25 09:40	15° \mathcal{X} 58'21	1°23'11
evening set	13171 Jun 28 11:41	21° \mathcal{C} 02'49		minimum elong	13173 Nov 25 04:34	15° \mathcal{X} 42'34	1°24'04
inferior conj	13171 Jul 01 06:34	19° \mathcal{C} 20'58	8°48'25	max. Earth dist.	13173 Nov 27 11:58	18° \mathcal{X} 34'12	1.72792 AU
minimum elong	13171 Jul 01 13:02	19° \mathcal{C} 11'01	8°46'49		13173 Dec 06 17:27	0° \mathcal{Z}	
min. Earth dist.	13171 Jul 01 18:30	19° \mathcal{C} 02'36	0.27286 AU		13173 Dec 31 00:31	0° \approx	
morning rise	13171 Jul 04 14:18	17° \mathcal{C} 19'40		evening rise	13174 Jan 01 10:25	1° \approx 44'25	
direct	13171 Jul 22 01:07	11° \mathcal{C} 27'11			13174 Jan 24 10:31	0° \mathcal{H}	
greatest brilliancy	13171 Aug 01 03:17	13° \mathcal{C} 22'25	-4.9m	desc. node	13174 Jan 29 16:19	6° \mathcal{H} 25'15	
desc. node	13171 Aug 15 04:15	21° \mathcal{C} 03'28			13174 Feb 17 23:29	0° \mathcal{Y}	
	13171 Aug 26 11:35	0° Ω			13174 Mar 14 15:00	0° \mathcal{B}	
morning max el	13171 Sep 10 11:02	14° Ω 03'15	46°48'16		13174 Apr 08 09:36	0° \mathcal{I}	
	13171 Sep 25 18:44	0° \mathcal{M}			13174 May 03 10:32	0° \mathcal{C}	
	13171 Oct 22 15:56	0° Ω		asc. node	13174 May 22 11:20	22° \mathcal{C} 22'07	
	13171 Nov 17 09:57	0° \mathcal{M}			13174 May 29 02:01	0° Ω	
asc. node	13171 Dec 06 03:19	22° \mathcal{M} 15'46			13174 Jun 25 04:47	0° \mathcal{M}	
	13171 Dec 12 14:12	0° \mathcal{X}		evening max el	13174 Jul 03 20:05	8° \mathcal{M} 53'23	46°46'45
	13172 Jan 06 09:43	0° \mathcal{Z}			13174 Jul 27 12:08	0° Ω	
	13172 Jan 30 23:30	0° \approx		greatest brilliancy	13174 Aug 12 11:44	9° Ω 16'15	-4.9m
	13172 Feb 24 09:42	0° \mathcal{H}		retrograde	13174 Aug 23 02:27	11° Ω 21'50	
morning set	13172 Mar 08 18:48	16° \mathcal{H} 29'13		evening set	13174 Sep 06 15:26	7° Ω 11'54	
	13172 Mar 19 17:25	0° \mathcal{Y}		desc. node	13174 Sep 11 13:36	4° Ω 20'25	
desc. node	13172 Mar 26 19:06	8° \mathcal{Y} 44'44		inferior conj	13174 Sep 12 21:52	3° Ω 31'07	-0°20'55
	13172 Apr 12 22:41	0° \mathcal{B}		minimum elong	13174 Sep 12 21:03	3° Ω 32'23	0°20'42
max. Earth dist.	13172 Apr 13 14:16	0° \mathcal{B} 48'24	1.72403 AU	min. Earth dist.	13174 Sep 12 13:04	3° Ω 44'34	0.27143 AU
					13174 Sep 18 22:16	30° \mathcal{R} \mathcal{M}	
superior conj	13172 Apr 16 12:19	4° \mathcal{B} 25'54	-0°47'35	morning rise	13174 Sep 19 03:15	29° \mathcal{M} 53'22	
minimum elong	13172 Apr 16 02:18	3° \mathcal{B} 54'49	0°47'38	direct	13174 Oct 03 17:37	25° \mathcal{M} 46'12	
	13172 May 07 01:19	0° \mathcal{I}		greatest brilliancy	13174 Oct 13 09:58	27° \mathcal{M} 30'04	-4.8m
evening rise	13172 May 25 16:31	23° \mathcal{I} 15'49			13174 Oct 19 06:25	0° Ω	
	13172 May 31 01:52	0° \mathcal{C}		morning max el	13174 Nov 22 01:13	26° Ω 30'01	46°04'43
	13172 Jun 24 01:51	0° Ω			13174 Nov 25 14:59	0° \mathcal{M}	
asc. node	13172 Jul 17 09:24	29° Ω 04'12			13174 Dec 24 00:04	0° \mathcal{X}	
	13172 Jul 18 03:21	0° \mathcal{M}		asc. node	13175 Jan 02 14:59	10° \mathcal{X} 46'46	
	13172 Aug 11 08:38	0° Ω			13175 Jan 19 08:29	0° \mathcal{Z}	
	13172 Sep 04 20:48	0° \mathcal{M}			13175 Feb 13 18:22	0° \approx	
	13172 Sep 29 21:26	0° \mathcal{X}			13175 Mar 10 15:44	0° \mathcal{H}	
	13172 Oct 25 22:02	0° \mathcal{Z}			13175 Apr 04 05:17	0° \mathcal{Y}	
desc. node	13172 Nov 06 06:23	12° \mathcal{Z} 28'08		desc. node	13175 Apr 24 09:31	24° \mathcal{Y} 51'49	
	13172 Nov 23 04:23	0° \approx			13175 Apr 28 13:09	0° \mathcal{B}	
evening max el	13172 Nov 26 01:40	2° \approx 49'18	45°59'44	morning set	13175 May 21 12:12	28° \mathcal{B} 32'07	
	13172 Dec 31 20:44	0° \mathcal{H}			13175 May 22 16:23	0° \mathcal{I}	
greatest brilliancy	13173 Jan 04 04:34	1° \mathcal{H} 18'19	-4.7m		13175 Jun 15 16:09	0° \mathcal{C}	
retrograde	13173 Jan 14 03:10	3° \mathcal{H} 05'50		max. Earth dist.	13175 Jun 29 07:08	17° \mathcal{C} 05'13	1.71452 AU
	13173 Jan 26 15:23	30° \mathcal{R} \approx					
evening set	13173 Jan 30 10:44	27° \approx 58'31		superior conj	13175 Jun 30 12:58	18° \mathcal{C} 38'46	-1°23'32
inferior conj	13173 Feb 04 11:41	24° \approx 53'58	-5°15'18	minimum elong	13175 Jun 30 19:45	19° \mathcal{C} 00'03	1°24'25
minimum elong	13173 Feb 04 21:26	24° \approx 38'40	5°12'15		13175 Jul 09 14:05	0° Ω	
min. Earth dist.	13173 Feb 04 22:29	24° \approx 37'02	0.28675 AU		13175 Aug 02 11:59	0° \mathcal{M}	

evening rise	13175 Aug 09 19:58	9° \mathbb{M} 11'11		morning max el	13178 Feb 02 02:15	6° \mathcal{Z} 41'00	45°42'48
asc. node	13175 Aug 14 23:14	15° \mathbb{M} 36'55			13178 Feb 24 15:58	0° \approx	
	13175 Aug 26 11:26	0° $\underline{\mathcal{L}}$			13178 Mar 23 07:31	0° \mathcal{H}	
	13175 Sep 19 13:54	0° \mathbb{M}			13178 Apr 17 18:29	0° \mathcal{Y}	
	13175 Oct 13 21:20	0° \mathcal{Z}			13178 May 12 14:12	0° \mathcal{B}	
	13175 Nov 07 12:56	0° \mathcal{Z}		desc. node	13178 May 21 22:59	11° \mathcal{B} 27'34	
	13175 Dec 02 17:38	0° \approx			13178 Jun 06 00:14	0° \mathbb{I}	
desc. node	13175 Dec 04 17:03	2° \approx 18'56			13178 Jun 30 03:50	0° \mathcal{E}	
	13175 Dec 28 19:18	0° \mathcal{H}			13178 Jul 24 03:49	0° \mathcal{O}	
	13176 Jan 25 11:49	0° \mathcal{Y}		morning set	13178 Aug 04 11:55	14° \mathcal{O} 11'56	
evening max el	13176 Feb 06 03:42	11° \mathcal{Y} 40'11	45°57'18		13178 Aug 17 02:36	0° \mathbb{M}	
	13176 Feb 27 04:30	0° \mathcal{B}			13178 Sep 10 01:53	0° $\underline{\mathcal{L}}$	
greatest brilliancy	13176 Mar 16 09:28	10° \mathcal{B} 26'35	-4.8m	asc. node	13178 Sep 11 13:40	1° $\underline{\mathcal{L}}$ 51'53	
retrograde	13176 Mar 26 06:59	12° \mathcal{B} 15'11					
asc. node	13176 Mar 26 18:04	12° \mathcal{B} 14'55		superior conj	13178 Sep 12 23:59	3° $\underline{\mathcal{L}}$ 39'08	0°03'31
evening set	13176 Apr 10 09:32	7° \mathcal{B} 48'31		minimum elong	13178 Sep 12 23:08	3° $\underline{\mathcal{L}}$ 36'28	0°03'27
inferior conj	13176 Apr 16 07:16	4° \mathcal{B} 16'07	4°55'08	behind sun begin	13178 Sep 11 22:52	2° $\underline{\mathcal{L}}$ 20'38	
minimum elong	13176 Apr 15 21:36	4° \mathcal{B} 31'13	4°52'05	behind sun end	13178 Sep 13 23:24	4° $\underline{\mathcal{L}}$ 52'18	
min. Earth dist.	13176 Apr 16 08:05	4° \mathcal{B} 14'51	0.27877 AU	max. Earth dist.	13178 Sep 14 21:21	6° $\underline{\mathcal{L}}$ 00'54	1.71826 AU
morning rise	13176 Apr 21 09:19	1° \mathcal{B} 10'19			13178 Oct 04 02:34	0° \mathbb{M}	
	13176 Apr 23 12:23	30° \mathcal{R} \mathcal{Y}		evening rise	13178 Oct 21 09:42	21° \mathbb{M} 31'46	
direct	13176 May 07 08:07	26° \mathcal{Y} 11'19			13178 Oct 28 05:29	0° \mathcal{Z}	
greatest brilliancy	13176 May 17 14:36	28° \mathcal{Y} 09'06	-4.8m		13178 Nov 21 12:02	0° \approx	
	13176 May 21 21:55	0° \mathcal{B}			13178 Dec 16 00:10	0° \approx	
morning max el	13176 Jun 26 14:33	28° \mathcal{B} 37'27	46°51'24	desc. node	13179 Jan 01 05:01	19° \approx 37'56	
	13176 Jun 27 23:19	0° \mathbb{I}			13179 Jan 09 19:44	0° \mathcal{H}	
desc. node	13176 Jul 16 20:33	20° \mathbb{I} 05'08			13179 Feb 04 00:25	0° \mathcal{Y}	
	13176 Jul 25 16:48	0° \mathcal{E}			13179 Mar 01 17:27	0° \mathcal{B}	
	13176 Aug 20 11:38	0° \mathcal{O}			13179 Mar 28 09:18	0° \mathbb{I}	
	13176 Sep 14 12:15	0° \mathbb{M}		evening max el	13179 Apr 19 05:36	22° \mathbb{I} 52'11	46°25'07
	13176 Oct 09 04:55	0° $\underline{\mathcal{L}}$		asc. node	13179 Apr 24 03:16	27° \mathbb{I} 37'50	
	13176 Nov 02 17:35	0° \mathbb{M}			13179 Apr 26 15:38	0° \mathcal{E}	
asc. node	13176 Nov 06 16:15	4° \mathbb{M} 50'16		greatest brilliancy	13179 May 29 15:03	23° \mathcal{E} 03'08	-4.9m
	13176 Nov 27 03:37	0° \mathcal{Z}		retrograde	13179 Jun 08 03:48	24° \mathcal{E} 45'46	
	13176 Dec 21 11:50	0° \mathcal{Z}		evening set	13179 Jun 26 03:03	18° \mathcal{E} 35'44	
morning set	13176 Dec 27 12:09	7° \mathcal{Z} 25'12		inferior conj	13179 Jun 28 19:36	16° \mathcal{E} 57'12	8°54'51
	13177 Jan 14 19:15	0° \approx		minimum elong	13179 Jun 29 01:15	16° \mathcal{E} 48'29	8°53'24
				min. Earth dist.	13179 Jun 29 06:42	16° \mathcal{E} 40'07	0.27314 AU
superior conj	13177 Feb 02 07:39	22° \approx 50'58	0°53'41	morning rise	13179 Jul 01 23:25	15° \mathcal{E} 01'44	
minimum elong	13177 Feb 02 17:16	23° \approx 20'38	0°54'00	direct	13179 Jul 19 15:01	9° \mathcal{E} 03'03	
max. Earth dist.	13177 Feb 02 08:33	22° \approx 53'43	1.73153 AU	greatest brilliancy	13179 Jul 29 15:34	10° \mathcal{E} 57'16	-4.9m
	13177 Feb 08 02:47	0° \mathcal{H}		desc. node	13179 Aug 14 06:23	19° \mathcal{E} 45'33	
desc. node	13177 Feb 26 06:31	22° \mathcal{H} 23'22			13179 Aug 26 18:01	0° \mathcal{O}	
	13177 Mar 04 10:36	0° \mathcal{Y}		morning max el	13179 Sep 08 01:48	11° \mathcal{O} 43'58	46°49'20
evening rise	13177 Mar 12 06:01	9° \mathcal{Y} 37'55			13179 Sep 25 12:42	0° \mathbb{M}	
	13177 Mar 28 18:05	0° \mathcal{B}			13179 Oct 22 06:16	0° $\underline{\mathcal{L}}$	
	13177 Apr 22 00:48	0° \mathbb{I}			13179 Nov 16 22:33	0° \mathbb{M}	
	13177 May 16 07:28	0° \mathcal{E}		asc. node	13179 Dec 05 05:11	21° \mathbb{M} 45'59	
	13177 Jun 09 16:23	0° \mathcal{O}			13179 Dec 12 01:49	0° \mathcal{Z}	
asc. node	13177 Jun 18 22:37	11° \mathcal{O} 19'37			13180 Jan 05 20:44	0° \approx	
	13177 Jul 04 07:31	0° \mathbb{M}			13180 Jan 30 10:12	0° \approx	
	13177 Jul 29 11:22	0° $\underline{\mathcal{L}}$			13180 Feb 23 20:14	0° \mathcal{H}	
	13177 Aug 24 17:57	0° \mathbb{M}		morning set	13180 Mar 06 10:43	14° \mathcal{H} 18'00	
evening max el	13177 Sep 13 11:35	20° \mathbb{M} 49'07	46°29'47		13180 Mar 19 03:52	0° \mathcal{Y}	
	13177 Sep 23 01:13	0° \mathcal{Z}		desc. node	13180 Mar 25 21:00	8° \mathcal{Y} 18'18	
desc. node	13177 Oct 08 22:47	13° \mathcal{Z} 02'14		max. Earth dist.	13180 Apr 11 05:58	28° \mathcal{Y} 35'45	1.72438 AU
greatest brilliancy	13177 Oct 22 18:41	20° \mathcal{Z} 42'07	-4.8m		13180 Apr 12 09:07	0° \mathcal{B}	
retrograde	13177 Nov 02 12:37	22° \mathcal{Z} 50'10					
evening set	13177 Nov 20 07:16	16° \mathcal{Z} 51'58		superior conj	13180 Apr 14 02:18	2° \mathcal{B} 07'51	-0°44'29
inferior conj	13177 Nov 23 23:06	14° \mathcal{Z} 36'53	-8°30'44	minimum elong	13180 Apr 13 16:45	1° \mathcal{B} 38'12	0°44'32
minimum elong	13177 Nov 23 17:29	14° \mathcal{Z} 45'38	8°29'20		13180 May 06 11:48	0° \mathbb{I}	
min. Earth dist.	13177 Nov 23 08:16	15° \mathcal{Z} 00'00	0.28596 AU	evening rise	13180 May 23 05:22	20° \mathbb{I} 52'57	
morning rise	13177 Nov 27 03:52	12° \mathcal{Z} 38'36			13180 May 30 12:28	0° \mathcal{E}	
direct	13177 Dec 15 04:31	6° \mathcal{Z} 32'15			13180 Jun 23 12:39	0° \mathcal{O}	
greatest brilliancy	13177 Dec 25 01:21	8° \mathcal{Z} 17'55	-4.8m	asc. node	13180 Jul 16 11:20	28° \mathcal{O} 35'54	
	13178 Jan 25 23:15	0° \mathcal{Z}			13180 Jul 17 14:23	0° \mathbb{M}	
asc. node	13178 Jan 30 01:19	3° \mathcal{Z} 46'52			13180 Aug 10 20:01	0° $\underline{\mathcal{L}}$	

	13180 Sep 04 08:45	0°♌			13182 Dec 23 15:18	0°♏		
	13180 Sep 29 10:24	0°♏		asc. node	13183 Jan 01 16:59	10°♏12'11		
	13180 Oct 25 13:09	0°♐			13183 Jan 18 21:28	0°♐		
desc. node	13180 Nov 05 08:18	11°♐48'24			13183 Feb 13 06:14	0°♑		
	13180 Nov 23 01:31	0°♑			13183 Mar 10 02:58	0°♒		
evening max el	13180 Nov 23 17:26	0°♑38'37	46°00'28		13183 Apr 03 16:11	0°♓		
greatest brilliancy	13181 Jan 01 20:06	29°♑08'01	-4.7m	desc. node	13183 Apr 23 11:12	24°♓23'42		
	13181 Jan 04 17:31	0°♒			13183 Apr 27 23:54	0°♈		
retrograde	13181 Jan 11 18:40	0°♒55'09		morning set	13183 May 19 00:03	26°♈06'04		
	13181 Jan 18 13:43	30°♒			13183 May 22 03:05	0°♉		
evening set	13181 Jan 28 05:19	25°♒43'57			13183 Jun 15 02:50	0°♊		
inferior conj	13181 Feb 02 03:30	22°♒43'02	-5°31'45	max. Earth dist.	13183 Jun 26 12:21	14°♊17'36	1.71465 AU	
minimum elong	13181 Feb 02 13:28	22°♒27'22	5°28'41					
min. Earth dist.	13181 Feb 02 13:57	22°♒26'36	0.28699 AU	superior conj	13183 Jun 28 00:58	16°♊12'26	-1°24'35	
morning rise	13181 Feb 07 21:31	19°♒14'00		minimum elong	13183 Jun 28 06:51	16°♊30'54	1°25'31	
direct	13181 Feb 23 12:52	14°♒29'43			13183 Jul 09 00:45	0°♋		
asc. node	13181 Feb 26 10:52	14°♒39'41			13183 Aug 01 22:39	0°♌		
greatest brilliancy	13181 Mar 06 08:50	16°♒39'24	-4.8m	evening rise	13183 Aug 07 08:05	6°♌45'20		
	13181 Mar 27 16:05	0°♒		asc. node	13183 Aug 14 01:08	15°♌09'20		
morning max el	13181 Apr 14 01:37	15°♒49'22	46°08'30		13183 Aug 25 22:11	0°♍		
	13181 Apr 27 20:31	0°♓			13183 Sep 19 00:48	0°♎		
	13181 May 24 18:13	0°♈			13183 Oct 13 08:31	0°♏		
desc. node	13181 Jun 18 11:27	29°♈07'20			13183 Nov 07 00:38	0°♐		
	13181 Jun 19 05:02	0°♉			13183 Dec 02 06:15	0°♑		
	13181 Jul 13 22:44	0°♊		desc. node	13183 Dec 03 18:55	1°♑47'13		
	13181 Aug 07 07:33	0°♋			13183 Dec 28 09:46	0°♒		
	13181 Aug 31 12:21	0°♌			13184 Jan 25 06:49	0°♓		
asc. node	13181 Sep 24 15:52	0°♍		evening max el	13184 Feb 03 17:35	9°♓23'38	45°56'53	
morning set	13181 Oct 09 04:06	18°♍02'01			13184 Feb 27 21:59	0°♈		
	13181 Oct 16 06:37	26°♍51'42		greatest brilliancy	13184 Mar 13 23:43	8°♈09'48	-4.8m	
	13181 Oct 18 19:15	0°♎		retrograde	13184 Mar 23 21:20	9°♈58'45		
	13181 Nov 11 23:00	0°♏		asc. node	13184 Mar 25 19:58	9°♈54'12		
				evening set	13184 Apr 07 22:04	5°♈34'08		
superior conj	13181 Nov 23 02:03	13°♏48'00	1°22'14	inferior conj	13184 Apr 13 21:57	1°♈59'07	4°35'51	
minimum elong	13181 Nov 22 20:17	13°♏30'09	1°23'05	minimum elong	13184 Apr 13 12:42	2°♈13'33	4°32'53	
max. Earth dist.	13181 Nov 25 05:28	16°♏27'20	1.72761 AU	min. Earth dist.	13184 Apr 13 23:10	1°♈57'12	0.27899 AU	
	13181 Dec 06 03:53	0°♐			13184 Apr 17 02:59	30°♒♓		
evening rise	13181 Dec 30 02:38	29°♐34'14		morning rise	13184 Apr 19 02:55	28°♓49'16		
	13181 Dec 30 11:00	0°♑		direct	13184 May 04 22:39	23°♓53'41		
	13182 Jan 23 21:09	0°♒		greatest brilliancy	13184 May 15 06:48	25°♓53'02	-4.8m	
desc. node	13182 Jan 28 18:15	5°♒58'27			13184 May 23 18:16	0°♈		
	13182 Feb 17 10:24	0°♓		morning max el	13184 Jun 24 05:13	26°♈18'39	46°50'31	
	13182 Mar 14 02:21	0°♈			13184 Jun 27 20:30	0°♉		
	13182 Apr 07 21:38	0°♉		desc. node	13184 Jul 15 22:33	19°♉24'03		
	13182 May 02 23:37	0°♊			13184 Jul 25 08:24	0°♊		
asc. node	13182 May 21 13:15	21°♊46'03			13184 Aug 20 01:05	0°♋		
	13182 May 28 17:05	0°♌			13184 Sep 14 00:33	0°♌		
	13182 Jun 25 00:36	0°♍			13184 Oct 08 16:31	0°♍		
evening max el	13182 Jul 01 09:23	6°♍30'33	46°46'34		13184 Nov 02 04:44	0°♎		
	13182 Jul 28 09:08	0°♎		asc. node	13184 Nov 05 18:04	4°♎21'50		
greatest brilliancy	13182 Aug 10 03:17	6°♎56'15	-4.9m		13184 Nov 26 14:28	0°♏		
retrograde	13182 Aug 20 15:36	8°♎59'44			13184 Dec 20 22:30	0°♐		
evening set	13182 Sep 04 05:38	4°♎49'24		morning set	13184 Dec 25 05:07	5°♐16'38		
inferior conj	13182 Sep 10 11:10	1°♎09'55	0°02'51		13185 Jan 14 05:50	0°♑		
minimum elong	13182 Sep 10 11:17	1°♎09'45	0°02'43					
transit middle	13182 Sep 10 11:17	1°♎09'45	0°02'43	superior conj	13185 Jan 31 00:09	20°♑41'07	0°56'16	
transit begin	13182 Sep 10 07:16	1°♎15'54		minimum elong	13185 Jan 31 09:54	21°♑11'14	0°56'37	
transit end	13182 Sep 10 15:18	1°♎03'36		max. Earth dist.	13185 Jan 31 04:04	20°♑53'13	1.73160 AU	
min. Earth dist.	13182 Sep 10 03:57	1°♎20'58	0.27114 AU		13185 Feb 07 13:23	0°♒		
desc. node	13182 Sep 10 15:33	1°♎03'12		desc. node	13185 Feb 25 08:19	21°♒56'05		
	13182 Sep 12 09:04	30°♒♓			13185 Mar 03 21:17	0°♓		
morning rise	13182 Sep 16 17:25	27°♓30'38		evening rise	13185 Mar 09 21:35	7°♓24'52		
direct	13182 Oct 01 06:15	23°♓25'10			13185 Mar 28 04:56	0°♈		
greatest brilliancy	13182 Oct 11 00:05	25°♓09'50	-4.8m		13185 Apr 21 11:54	0°♉		
	13182 Oct 21 01:16	0°♈			13185 May 15 18:54	0°♊		
morning max el	13182 Nov 19 13:57	24°♈09'17	46°06'08		13185 Jun 09 04:21	0°♋		
	13182 Nov 25 12:03	0°♌		asc. node	13185 Jun 18 00:36	10°♋48'25		

	13185 Jul 03 20:17	0°♍			13188 Jan 29 21:15	0°♊	
	13185 Jul 29 01:32	0°♊			13188 Feb 23 07:08	0°♋	
	13185 Aug 24 11:07	0°♌		morning set	13188 Mar 04 02:41	12°♋05'46	
evening max el	13185 Sep 11 02:37	18°♌32'20	46°31'00		13188 Mar 18 14:44	0°♌	
	13185 Sep 23 04:35	0°♍		desc. node	13188 Mar 24 22:45	7°♌50'06	
desc. node	13185 Oct 08 00:41	11°♍47'04		max. Earth dist.	13188 Apr 08 19:26	26°♌14'54	1.72477 AU
greatest brilliancy	13185 Oct 20 08:50	18°♍26'32	-4.8m				
retrograde	13185 Oct 31 04:47	20°♍36'30		superior conj	13188 Apr 11 16:14	29°♌48'19	-0°41'19
evening set	13185 Nov 17 19:27	14°♍42'56		minimum elong	13188 Apr 11 07:13	29°♌20'19	0°41'20
min. Earth dist.	13185 Nov 20 22:21	12°♍48'22	0.28556 AU		13188 Apr 11 20:00	0°♎	
inferior conj	13185 Nov 21 14:24	12°♍23'24	-8°24'48		13188 May 05 22:45	0°♏	
minimum elong	13185 Nov 21 08:04	12°♍33'15	8°23'17	evening rise	13188 May 20 17:56	18°♏27'50	
morning rise	13185 Nov 24 20:53	10°♍22'50			13188 May 29 23:32	0°♐	
direct	13185 Dec 12 19:37	4°♍19'24			13188 Jun 22 23:53	0°♑	
greatest brilliancy	13185 Dec 22 15:11	6°♍04'22	-4.8m	asc. node	13188 Jul 15 13:14	28°♑06'13	
	13186 Jan 26 00:17	0°♎			13188 Jul 17 01:51	0°♒	
asc. node	13186 Jan 29 03:22	2°♎56'40			13188 Aug 10 07:50	0°♓	
morning max el	13186 Jan 30 18:07	4°♎29'40	45°42'42		13188 Sep 03 21:10	0°♌	
	13186 Feb 24 08:15	0°♊			13188 Sep 28 23:54	0°♍	
	13186 Mar 22 21:05	0°♋			13188 Oct 25 04:58	0°♎	
	13186 Apr 17 06:50	0°♌		desc. node	13188 Nov 04 10:17	11°♎07'06	
	13186 May 12 01:55	0°♍		evening max el	13188 Nov 21 08:34	28°♎24'55	46°01'10
desc. node	13186 May 21 00:56	10°♍58'09			13188 Nov 23 00:04	0°♏	
	13186 Jun 05 11:35	0°♏		greatest brilliancy	13188 Dec 30 12:06	26°♏57'04	-4.8m
	13186 Jun 29 14:57	0°♐		retrograde	13189 Jan 09 09:48	28°♏43'29	
	13186 Jul 23 14:48	0°♑		evening set	13189 Jan 25 23:57	23°♏28'21	
morning set	13186 Aug 02 00:16	11°♑45'56		inferior conj	13189 Jan 30 19:22	20°♏31'17	-5°47'32
	13186 Aug 16 13:31	0°♒		minimum elong	13189 Jan 31 05:29	20°♏15'21	5°44'30
	13186 Sep 09 12:45	0°♓		min. Earth dist.	13189 Jan 31 05:43	20°♏14'59	0.28722 AU
				morning rise	13189 Feb 05 10:54	17°♏05'21	
superior conj	13186 Sep 10 13:11	1°♓16'23	-0°00'14	direct	13189 Feb 21 04:39	12°♏18'00	
minimum elong	13186 Sep 10 13:14	1°♓16'35	0°00'19	asc. node	13189 Feb 25 12:43	12°♏39'41	
behind sun begin	13186 Sep 09 12:35	29°♒59'28		greatest brilliancy	13189 Mar 04 00:21	14°♏26'47	-4.8m
behind sun end	13186 Sep 11 13:54	2°♓33'41			13189 Mar 27 23:48	0°♋	
asc. node	13186 Sep 10 15:29	1°♓23'38		morning max el	13189 Apr 11 15:55	13°♋32'11	46°06'56
max. Earth dist.	13186 Sep 12 10:44	3°♓38'49	1.71797 AU		13189 Apr 27 14:23	0°♌	
	13186 Oct 03 13:23	0°♌			13189 May 24 08:38	0°♍	
evening rise	13186 Oct 19 01:11	19°♌17'09		desc. node	13189 Jun 17 13:26	28°♍34'22	
	13186 Oct 27 16:19	0°♍			13189 Jun 18 17:59	0°♎	
	13186 Nov 20 22:59	0°♎			13189 Jul 13 10:54	0°♏	
	13186 Dec 15 11:24	0°♏			13189 Aug 06 19:15	0°♑	
desc. node	13186 Dec 31 07:01	19°♏09'11			13189 Aug 30 23:43	0°♒	
	13187 Jan 09 07:30	0°♋			13189 Sep 24 02:59	0°♓	
	13187 Feb 03 13:03	0°♌		asc. node	13189 Oct 08 05:55	17°♓33'26	
	13187 Mar 01 07:36	0°♍		morning set	13189 Oct 13 21:13	24°♓33'54	
	13187 Mar 28 02:38	0°♏			13189 Oct 18 06:11	0°♌	
evening max el	13187 Apr 16 20:17	20°♏33'17	46°24'00		13189 Nov 11 09:51	0°♍	
asc. node	13187 Apr 23 05:14	26°♏42'02					
	13187 Apr 26 19:00	0°♐		superior conj	13189 Nov 20 18:21	11°♍36'15	1°21'10
greatest brilliancy	13187 May 27 03:37	20°♐38'46	-4.9m	minimum elong	13189 Nov 20 11:58	11°♍16'26	1°21'59
retrograde	13187 Jun 05 17:09	22°♐21'29		max. Earth dist.	13189 Nov 22 20:53	14°♍12'51	1.72731 AU
evening set	13187 Jun 23 18:06	16°♐08'28			13189 Dec 05 14:43	0°♎	
inferior conj	13187 Jun 26 08:43	14°♐32'36	9°00'15	evening rise	13189 Dec 27 18:53	27°♎22'56	
minimum elong	13187 Jun 26 13:30	14°♐25'13	8°58'56		13189 Dec 29 21:53	0°♏	
min. Earth dist.	13187 Jun 26 19:01	14°♐16'43	0.27338 AU		13190 Jan 23 08:10	0°♋	
morning rise	13187 Jun 29 08:52	12°♐42'23		desc. node	13190 Jan 27 20:04	5°♋30'09	
direct	13187 Jul 17 04:48	6°♐38'15			13190 Feb 16 21:41	0°♌	
greatest brilliancy	13187 Jul 27 03:54	8°♐31'11	-4.9m		13190 Mar 13 14:05	0°♍	
desc. node	13187 Aug 13 08:22	18°♐28'54			13190 Apr 07 10:03	0°♎	
	13187 Aug 26 22:50	0°♑			13190 May 02 13:12	0°♏	
morning max el	13187 Sep 05 15:52	9°♑21'53	46°50'12	asc. node	13190 May 20 15:14	21°♏08'40	
	13187 Sep 25 06:37	0°♒			13190 May 28 08:50	0°♑	
	13187 Oct 21 20:50	0°♓			13190 Jun 24 21:40	0°♒	
	13187 Nov 16 11:29	0°♌		evening max el	13190 Jun 28 21:58	4°♒04'21	46°46'19
asc. node	13187 Dec 04 07:10	21°♌15'25			13190 Jul 29 15:24	0°♓	
	13187 Dec 11 13:46	0°♍		greatest brilliancy	13190 Aug 07 18:35	4°♓33'50	-4.9m
	13188 Jan 05 08:07	0°♎		retrograde	13190 Aug 18 04:30	6°♓35'35	

evening set	13190 Sep 01 19:44	2°♏24'13		superior conj	13193 Jan 28 16:30	18°♏30'44	0°58'47
	13190 Sep 06 00:03	30°♏♏		minimum elong	13193 Jan 29 02:21	19°♏01'07	0°59'10
inferior conj	13190 Sep 08 00:14	28°♏46'36	0°26'47	max. Earth dist.	13193 Jan 29 01:05	18°♏57'12	1.73166 AU
minimum elong	13190 Sep 08 01:17	28°♏45'01	0°26'20		13193 Feb 07 00:01	0°♏	
min. Earth dist.	13190 Sep 07 18:42	28°♏55'04	0.27086 AU	desc. node	13193 Feb 24 10:05	21°♏28'31	
desc. node	13190 Sep 09 17:28	27°♏43'45			13193 Mar 03 08:01	0°♏	
morning rise	13190 Sep 14 07:09	25°♏06'13		evening rise	13193 Mar 07 13:09	5°♏11'44	
direct	13190 Sep 28 18:21	21°♏01'50			13193 Mar 27 15:50	0°♏	
greatest brilliancy	13190 Oct 08 14:12	22°♏47'58	-4.8m		13193 Apr 20 23:01	0°♏	
	13190 Oct 22 07:33	0°♏			13193 May 15 06:20	0°♏	
morning max el	13190 Nov 17 03:01	21°♏48'10	46°07'41		13193 Jun 08 16:16	0°♏	
	13190 Nov 25 08:47	0°♏		asc. node	13193 Jun 17 02:32	10°♏17'17	
	13190 Dec 23 06:38	0°♏			13193 Jul 03 09:01	0°♏	
asc. node	13190 Dec 31 18:56	9°♏36'44			13193 Jul 28 15:46	0°♏	
	13191 Jan 18 10:39	0°♏			13193 Aug 24 04:36	0°♏	
	13191 Feb 12 18:20	0°♏		evening max el	13193 Sep 08 18:31	16°♏17'42	46°32'00
	13191 Mar 09 14:28	0°♏			13193 Sep 23 09:49	0°♏	
	13191 Apr 03 03:20	0°♏		desc. node	13193 Oct 07 02:45	10°♏29'37	
desc. node	13191 Apr 22 13:10	23°♏55'42		greatest brilliancy	13193 Oct 17 23:01	16°♏10'36	-4.8m
	13191 Apr 27 10:53	0°♏		retrograde	13193 Oct 28 20:53	18°♏21'59	
morning set	13191 May 16 12:07	23°♏40'05		evening set	13193 Nov 15 07:20	12°♏33'36	
	13191 May 21 14:00	0°♏		min. Earth dist.	13193 Nov 18 12:13	10°♏36'09	0.28511 AU
	13191 Jun 14 13:44	0°♏		inferior conj	13193 Nov 19 05:30	10°♏09'18	-8°18'06
max. Earth dist.	13191 Jun 23 20:28	11°♏38'19	1.71487 AU	minimum elong	13193 Nov 18 22:31	10°♏20'09	8°16'26
				morning rise	13193 Nov 22 13:58	8°♏06'00	
superior conj	13191 Jun 25 12:51	13°♏44'59	-1°25'29	direct	13193 Dec 10 10:53	2°♏06'11	
minimum elong	13191 Jun 25 17:49	14°♏00'32	1°26'27	greatest brilliancy	13193 Dec 20 04:25	3°♏49'49	-4.8m
	13191 Jul 08 11:40	0°♏			13194 Jan 26 00:02	0°♏	
	13191 Aug 01 09:38	0°♏		asc. node	13194 Jan 28 05:16	2°♏07'14	
evening rise	13191 Aug 04 19:49	4°♏17'22		morning max el	13194 Jan 28 09:41	2°♏17'54	45°42'38
asc. node	13191 Aug 13 02:53	14°♏40'20			13194 Feb 24 00:07	0°♏	
	13191 Aug 25 09:14	0°♏			13194 Mar 22 10:24	0°♏	
	13191 Sep 18 12:01	0°♏			13194 Apr 16 18:59	0°♏	
	13191 Oct 12 20:00	0°♏			13194 May 11 13:27	0°♏	
	13191 Nov 06 12:36	0°♏		desc. node	13194 May 20 02:49	10°♏29'03	
	13191 Dec 01 19:12	0°♏			13194 Jun 04 22:44	0°♏	
desc. node	13191 Dec 02 20:57	1°♏15'08			13194 Jun 29 01:52	0°♏	
	13191 Dec 28 00:41	0°♏			13194 Jul 23 01:33	0°♏	
	13192 Jan 25 02:39	0°♏		morning set	13194 Jul 30 12:58	9°♏21'52	
evening max el	13192 Feb 01 08:23	7°♏08'50	45°56'32		13194 Aug 16 00:11	0°♏	
	13192 Feb 28 22:07	0°♏					
greatest brilliancy	13192 Mar 11 13:29	5°♏52'07	-4.8m	superior conj	13194 Sep 08 02:32	28°♏54'56	-0°03'58
retrograde	13192 Mar 21 12:07	7°♏41'55		minimum elong	13194 Sep 08 03:32	28°♏58'04	0°04'03
asc. node	13192 Mar 24 21:59	7°♏27'50		behind sun begin	13194 Sep 07 03:22	27°♏42'27	
evening set	13192 Apr 05 10:50	3°♏19'10		behind sun end	13194 Sep 09 03:43	0°♏13'40	
	13192 Apr 11 00:49	30°♏♏			13194 Sep 08 23:20	0°♏	
inferior conj	13192 Apr 11 12:34	29°♏41'41	4°16'13	asc. node	13194 Sep 09 17:17	0°♏56'05	
minimum elong	13192 Apr 11 03:48	29°♏55'22	4°13'20	max. Earth dist.	13194 Sep 10 01:59	1°♏23'18	1.71769 AU
min. Earth dist.	13192 Apr 11 13:56	29°♏39'34	0.27919 AU		13194 Oct 02 23:58	0°♏	
morning rise	13192 Apr 16 20:24	26°♏28'06		evening rise	13194 Oct 16 16:39	17°♏03'06	
direct	13192 May 02 13:38	21°♏35'53			13194 Oct 27 02:56	0°♏	
greatest brilliancy	13192 May 12 22:23	23°♏36'12	-4.8m		13194 Nov 20 09:45	0°♏	
	13192 May 25 00:27	0°♏			13194 Dec 14 22:28	0°♏	
morning max el	13192 Jun 21 20:38	24°♏01'43	46°49'32	desc. node	13194 Dec 30 08:47	18°♏40'23	
	13192 Jun 27 16:59	0°♏			13195 Jan 08 19:04	0°♏	
desc. node	13192 Jul 15 00:31	18°♏43'10			13195 Feb 03 01:30	0°♏	
	13192 Jul 24 23:50	0°♏			13195 Feb 28 21:38	0°♏	
	13192 Aug 19 14:30	0°♏			13195 Mar 27 20:03	0°♏	
	13192 Sep 13 12:56	0°♏		evening max el	13195 Apr 14 10:30	18°♏14'01	46°22'46
	13192 Oct 08 04:15	0°♏		asc. node	13195 Apr 22 07:20	25°♏46'07	
	13192 Nov 01 16:00	0°♏			13195 Apr 26 23:48	0°♏	
asc. node	13192 Nov 04 20:04	3°♏53'32		greatest brilliancy	13195 May 24 16:52	18°♏16'08	-4.9m
	13192 Nov 26 01:25	0°♏		retrograde	13195 Jun 03 05:59	19°♏58'12	
	13192 Dec 20 09:13	0°♏		evening set	13195 Jun 21 08:50	13°♏43'04	
morning set	13192 Dec 22 21:52	3°♏07'07		inferior conj	13195 Jun 23 21:54	12°♏09'18	9°04'45
	13193 Jan 13 16:27	0°♏		minimum elong	13195 Jun 24 01:45	12°♏03'20	9°03'32
				min. Earth dist.	13195 Jun 24 07:47	11°♏54'01	0.27359 AU

morning rise	13195 Jun 26 18:40	10°☿23'52		desc. node	13198 Jan 26 21:54	5°♄03'15	
direct	13195 Jul 14 18:14	4°☿14'42			13198 Feb 16 08:33	0°♄	
greatest brilliancy	13195 Jul 24 16:52	6°☿06'54	-4.9m		13198 Mar 13 01:26	0°♄	
desc. node	13195 Aug 12 10:14	17°☿15'31			13198 Apr 06 22:08	0°♄	
	13195 Aug 27 01:24	0°♄			13198 May 02 02:28	0°☿	
morning max el	13195 Sep 03 04:59	6°♄58'32	46°51'13	asc. node	13198 May 19 17:10	20°☿32'06	
	13195 Sep 24 23:40	0°♄			13198 May 28 00:22	0°♄	
	13195 Oct 21 10:45	0°♄			13198 Jun 24 19:00	0°♄	
	13195 Nov 15 23:52	0°♄		evening max el	13198 Jun 26 10:32	1°♄39'31	46°46'05
asc. node	13195 Dec 03 09:01	20°♄45'45			13198 Jul 31 10:34	0°♄	
	13195 Dec 11 01:18	0°♄		greatest brilliancy	13198 Aug 05 09:20	2°♄11'55	-4.9m
	13196 Jan 04 19:07	0°♄		retrograde	13198 Aug 15 17:43	4°♄12'46	
	13196 Jan 29 07:57	0°♄		evening set	13198 Aug 30 10:00	29°♄59'41	
	13196 Feb 22 17:40	0°♄			13198 Aug 30 09:46	30°♄	
morning set	13196 Mar 01 18:36	9°♄54'31		inferior conj	13198 Sep 05 13:15	26°♄24'16	0°50'52
	13196 Mar 18 01:12	0°♄		minimum elong	13198 Sep 05 15:14	26°♄21'15	0°50'04
desc. node	13196 Mar 24 00:37	7°♄23'29		min. Earth dist.	13198 Sep 05 09:16	26°♄30'22	0.27062 AU
max. Earth dist.	13196 Apr 06 08:51	23°♄55'12	1.72517 AU	desc. node	13198 Sep 08 19:36	24°♄26'05	
				morning rise	13198 Sep 11 20:42	22°♄43'20	
superior conj	13196 Apr 09 06:13	27°♄30'18	-0°38'06	direct	13198 Sep 26 06:39	18°♄39'17	
minimum elong	13196 Apr 08 21:46	27°♄04'06	0°38'05	greatest brilliancy	13198 Oct 06 04:14	20°♄27'04	-4.8m
	13196 Apr 11 06:29	0°♄			13198 Oct 23 04:53	0°♄	
	13196 May 05 09:19	0°♄		morning max el	13198 Nov 14 17:08	19°♄30'50	46°09'26
evening rise	13196 May 18 06:40	16°♄04'32			13198 Nov 25 04:20	0°♄	
	13196 May 29 10:15	0°☿			13198 Dec 22 21:14	0°♄	
	13196 Jun 22 10:46	0°♄		asc. node	13198 Dec 30 20:49	9°♄02'50	
asc. node	13196 Jul 14 15:00	27°♄37'19			13199 Jan 17 23:14	0°♄	
	13196 Jul 16 12:57	0°♄			13199 Feb 12 05:54	0°♄	
	13196 Aug 09 19:16	0°♄			13199 Mar 09 01:30	0°♄	
	13196 Sep 03 09:09	0°♄			13199 Apr 02 14:06	0°♄	
	13196 Sep 28 12:59	0°♄		desc. node	13199 Apr 21 15:03	23°♄28'32	
	13196 Oct 24 20:28	0°♄			13199 Apr 26 21:31	0°♄	
desc. node	13196 Nov 03 12:17	10°♄26'59		morning set	13199 May 14 00:14	21°♄15'19	
evening max el	13196 Nov 18 22:53	26°♄10'46	46°01'49		13199 May 21 00:35	0°♄	
	13196 Nov 22 22:55	0°♄			13199 Jun 14 00:18	0°☿	
greatest brilliancy	13196 Dec 28 04:12	24°♄47'39	-4.8m	max. Earth dist.	13199 Jun 21 07:03	9°☿07'47	1.71507 AU
retrograde	13197 Jan 07 00:52	26°♄33'38					
evening set	13197 Jan 23 18:41	21°♄14'09		superior conj	13199 Jun 23 00:39	11°☿18'16	-1°26'13
inferior conj	13197 Jan 28 11:21	18°♄21'12	-6°02'48	minimum elong	13199 Jun 23 04:37	11°☿30'44	1°27'11
minimum elong	13197 Jan 28 21:34	18°♄05'07	5°59'47		13199 Jul 07 22:15	0°♄	
min. Earth dist.	13197 Jan 28 21:50	18°♄04'42	0.28748 AU		13199 Jul 31 20:16	0°♄	
morning rise	13197 Feb 03 00:17	14°♄58'41		evening rise	13199 Aug 02 07:31	1°♄50'24	
direct	13197 Feb 18 20:16	10°♄07'42		asc. node	13199 Aug 12 04:46	14°♄12'47	
asc. node	13197 Feb 24 14:45	10°♄45'35			13199 Aug 24 19:59	0°♄	
greatest brilliancy	13197 Mar 01 16:38	12°♄16'31	-4.8m		13199 Sep 17 22:57	0°♄	
	13197 Mar 28 04:38	0°♄			13199 Oct 12 07:12	0°♄	
morning max el	13197 Apr 09 06:21	11°♄16'34	46°05'29		13199 Nov 06 00:19	0°♄	
	13197 Apr 27 07:21	0°♄			13199 Dec 01 07:52	0°♄	
	13197 May 23 22:25	0°♄		desc. node	13199 Dec 01 22:49	0°♄43'33	
desc. node	13197 Jun 16 15:17	28°♄02'30			13199 Dec 27 15:23	0°♄	
	13197 Jun 18 06:23	0°♄			13200 Jan 24 22:37	0°♄	
	13197 Jul 12 22:36	0°☿		evening max el	13200 Jan 29 23:59	4°♄57'24	45°56'10
	13197 Aug 06 06:30	0°♄			13200 Mar 01 07:04	0°♄	
	13197 Aug 30 10:39	0°♄		greatest brilliancy	13200 Mar 09 03:03	3°♄35'41	-4.8m
	13197 Sep 23 13:38	0°♄		retrograde	13200 Mar 19 03:06	5°♄26'18	
asc. node	13197 Oct 07 07:51	17°♄06'38		asc. node	13200 Mar 24 00:03	4°♄57'26	
morning set	13197 Oct 11 12:00	22°♄18'00		evening set	13200 Apr 02 23:58	1°♄05'19	
	13197 Oct 17 16:39	0°♄			13200 Apr 04 22:01	30°♄	
	13197 Nov 10 20:11	0°♄		inferior conj	13200 Apr 09 03:17	27°♄25'26	3°56'08
				minimum elong	13200 Apr 08 19:04	27°♄38'15	3°53'24
superior conj	13197 Nov 18 10:56	9°♄26'52	1°19'59	min. Earth dist.	13200 Apr 09 04:38	27°♄23'21	0.27942 AU
minimum elong	13197 Nov 18 03:56	9°♄05'10	1°20'45	morning rise	13200 Apr 14 13:51	24°♄08'10	
max. Earth dist.	13197 Nov 20 12:08	11°♄59'25	1.72700 AU	direct	13200 Apr 30 05:09	19°♄19'21	
	13197 Dec 05 01:02	0°♄		greatest brilliancy	13200 May 10 13:42	21°♄19'55	-4.8m
evening rise	13197 Dec 25 11:28	25°♄14'14			13200 May 25 21:49	0°♄	
	13197 Dec 29 08:16	0°♄		morning max el	13200 Jun 19 12:23	21°♄46'20	46°48'23
	13198 Jan 22 18:44	0°♄			13200 Jun 27 12:38	0°♄	

desc. node	13200 Jul 14 02:26	18° Π 03'05		desc. node	13202 Dec 29 10:42	18° \approx 11'25	
	13200 Jul 24 14:50	0° \ominus			13203 Jan 08 06:51	0° H	
	13200 Aug 19 03:37	0° Ω			13203 Feb 02 14:10	0° Υ	
	13200 Sep 13 01:02	0° P			13203 Feb 28 11:55	0° B	
	13200 Oct 07 15:44	0° $\underline{\text{A}}$			13203 Mar 27 13:55	0° Π	
	13200 Nov 01 03:04	0° M		evening max el	13203 Apr 11 23:50	15° Π 52'30	46°21'34
asc. node	13200 Nov 03 21:49	3° M 25'08		asc. node	13203 Apr 21 09:13	24° Π 48'27	
	13200 Nov 25 12:09	0° Z			13203 Apr 27 06:46	0° \ominus	
	13200 Dec 19 19:45	0° Z		greatest brilliancy	13203 May 22 06:21	15° \ominus 53'50	-4.9m
morning set	13200 Dec 20 14:48	0° Z 58'47		retrograde	13203 May 31 18:23	17° \ominus 35'11	
	13201 Jan 13 02:53	0° \approx		evening set	13203 Jun 18 23:09	11° \ominus 18'31	
				inferior conj	13203 Jun 21 11:15	9° \ominus 46'07	9°08'11
superior conj	13201 Jan 26 09:14	16° \approx 22'07	1°01'11	minimum elong	13203 Jun 21 14:10	9° \ominus 41'36	9°07'02
minimum elong	13201 Jan 26 19:07	16° \approx 52'34	1°01'36	min. Earth dist.	13203 Jun 21 20:55	9° \ominus 31'08	0.27385 AU
max. Earth dist.	13201 Jan 26 22:37	17° \approx 03'22	1.73163 AU	morning rise	13203 Jun 24 05:08	8° \ominus 04'48	
	13201 Feb 06 10:27	0° H		direct	13203 Jul 12 07:26	1° \ominus 50'58	
desc. node	13201 Feb 23 12:02	21° H 02'10		greatest brilliancy	13203 Jul 22 06:38	3° \ominus 43'14	-4.9m
	13201 Mar 02 18:33	0° Υ		desc. node	13203 Aug 11 12:22	16° \ominus 04'10	
evening rise	13201 Mar 05 05:05	3° Υ 00'25			13203 Aug 27 02:51	0° Ω	
	13201 Mar 27 02:33	0° B		morning max el	13203 Aug 31 17:39	4° Ω 33'02	46°52'03
	13201 Apr 20 09:59	0° Π			13203 Sep 24 16:42	0° P	
	13201 May 14 17:41	0° \ominus			13203 Oct 21 00:52	0° $\underline{\text{A}}$	
	13201 Jun 08 04:11	0° Ω			13203 Nov 15 12:30	0° M	
asc. node	13201 Jun 16 04:21	9° Ω 45'47		asc. node	13203 Dec 02 10:54	20° M 15'20	
	13201 Jul 02 21:49	0° P			13203 Dec 10 13:03	0° Z	
	13201 Jul 28 06:07	0° $\underline{\text{A}}$			13204 Jan 04 06:22	0° Z	
	13201 Aug 23 22:28	0° M			13204 Jan 28 18:54	0° \approx	
evening max el	13201 Sep 06 10:33	14° M 03'17	46°32'59		13204 Feb 22 04:29	0° H	
	13201 Sep 23 17:17	0° Z		morning set	13204 Feb 28 10:36	7° H 42'36	
desc. node	13201 Oct 06 04:45	9° Z 09'27			13204 Mar 17 11:56	0° Υ	
greatest brilliancy	13201 Oct 15 13:36	13° Z 54'59	-4.8m	desc. node	13204 Mar 23 02:31	6° Υ 56'07	
retrograde	13201 Oct 26 12:33	16° Z 06'58		max. Earth dist.	13204 Apr 03 23:32	21° Υ 38'41	1.72553 AU
evening set	13201 Nov 12 19:02	10° Z 24'14					
min. Earth dist.	13201 Nov 16 02:13	8° Z 23'19	0.28463 AU	superior conj	13204 Apr 06 20:31	25° Υ 12'32	-0°34'49
inferior conj	13201 Nov 16 20:31	7° Z 54'53	-8°10'34	minimum elong	13204 Apr 06 12:41	24° Υ 48'13	0°34'47
minimum elong	13201 Nov 16 12:56	8° Z 06'41	8°08'47		13204 Apr 10 17:13	0° B	
morning rise	13201 Nov 20 07:07	5° Z 48'24			13204 May 04 20:07	0° Π	
	13201 Dec 05 14:45	30° K M		evening rise	13204 May 15 19:54	13° Π 42'12	
direct	13201 Dec 08 02:06	29° M 52'45			13204 May 28 21:10	0° \ominus	
	13201 Dec 10 14:10	0° Z			13204 Jun 21 21:52	0° Ω	
greatest brilliancy	13201 Dec 17 17:32	1° Z 34'46	-4.8m	asc. node	13204 Jul 13 16:58	27° Ω 08'12	
	13202 Jan 25 22:44	0° Z			13204 Jul 16 00:19	0° P	
morning max el	13202 Jan 26 00:36	0° Z 04'31	45°42'44		13204 Aug 09 07:02	0° $\underline{\text{A}}$	
asc. node	13202 Jan 27 07:16	1° Z 18'54			13204 Sep 02 21:36	0° M	
	13202 Feb 23 15:40	0° \approx			13204 Sep 28 02:39	0° Z	
	13202 Mar 21 23:33	0° H			13204 Oct 24 12:47	0° Z	
	13202 Apr 16 07:01	0° Υ		desc. node	13204 Nov 02 14:12	9° Z 44'39	
	13202 May 11 00:54	0° B		evening max el	13204 Nov 16 12:39	23° Z 53'44	46°02'38
desc. node	13202 May 19 04:38	9° B 59'50			13204 Nov 22 23:32	0° \approx	
	13202 Jun 04 09:52	0° Π		greatest brilliancy	13204 Dec 25 19:37	22° \approx 35'48	-4.8m
	13202 Jun 28 12:50	0° \ominus		retrograde	13205 Jan 04 16:04	24° \approx 22'08	
	13202 Jul 22 12:25	0° Ω		evening set	13205 Jan 21 13:14	18° \approx 57'54	
morning set	13202 Jul 28 01:14	6° Ω 55'59		inferior conj	13205 Jan 26 03:09	16° \approx 09'15	-6°17'35
	13202 Aug 15 10:58	0° P		minimum elong	13205 Jan 26 13:25	15° \approx 53'07	6°14'37
				min. Earth dist.	13205 Jan 26 13:38	15° \approx 52'46	0.28773 AU
superior conj	13202 Sep 05 15:22	26° P 31'22	-0°07'43	morning rise	13205 Jan 31 13:21	12° \approx 50'37	
minimum elong	13202 Sep 05 17:19	26° P 37'27	0°07'47	direct	13205 Feb 16 11:38	7° \approx 55'24	
behind sun begin	13202 Sep 04 19:17	25° P 28'32		asc. node	13205 Feb 23 16:51	8° \approx 53'58	
behind sun end	13202 Sep 06 15:21	27° P 46'22		greatest brilliancy	13205 Feb 27 09:00	10° \approx 04'51	-4.8m
max. Earth dist.	13202 Sep 07 15:44	29° P 02'38	1.71738 AU		13205 Mar 28 08:16	0° H	
	13202 Sep 08 10:05	0° $\underline{\text{A}}$		morning max el	13205 Apr 06 21:19	9° H 01'04	46°04'16
asc. node	13202 Sep 08 19:11	0° $\underline{\text{A}}$ 28'28			13205 Apr 27 00:23	0° Υ	
	13202 Oct 02 10:41	0° M			13205 May 23 12:25	0° B	
evening rise	13202 Oct 14 07:38	14° M 47'02		desc. node	13205 Jun 15 17:15	27° B 30'09	
	13202 Oct 26 13:42	0° Z			13205 Jun 17 19:02	0° Π	
	13202 Nov 19 20:41	0° Z			13205 Jul 12 10:31	0° \ominus	
	13202 Dec 14 09:43	0° \approx			13205 Aug 05 18:00	0° Ω	

	13205 Aug 29 21:51	0°♍		greatest brilliancy	13208 Mar 06 16:58	1°♌18'12	-4.8m
	13205 Sep 23 00:39	0°♊		retrograde	13208 Mar 16 17:45	3°♌08'53	
asc. node	13205 Oct 06 09:37	16°♊38'08		asc. node	13208 Mar 23 01:57	2°♌20'05	
morning set	13205 Oct 09 02:29	19°♊59'50			13208 Mar 29 06:56	30°♌	
	13205 Oct 17 03:31	0°♌		evening set	13208 Mar 31 13:16	28°♌49'48	
	13205 Nov 10 07:00	0°♌		inferior conj	13208 Apr 06 17:54	25°♌07'41	3°35'38
				minimum elong	13208 Apr 06 10:16	25°♌19'35	3°33'05
superior conj	13205 Nov 16 03:04	7°♌14'38	1°18'38	min. Earth dist.	13208 Apr 06 19:18	25°♌05'29	0.27963 AU
minimum elong	13205 Nov 15 19:30	6°♌51'09	1°19'23	morning rise	13208 Apr 12 07:02	21°♌46'45	
max. Earth dist.	13205 Nov 18 02:34	9°♌41'55	1.72673 AU	direct	13208 Apr 27 20:40	17°♌01'31	
	13205 Dec 04 11:49	0°♊		greatest brilliancy	13208 May 08 04:43	19°♌01'52	-4.8m
evening rise	13205 Dec 23 03:41	23°♊02'58			13208 May 26 14:14	0°♌	
	13205 Dec 28 19:07	0°♋		morning max el	13208 Jun 17 03:16	19°♋27'44	46°47'12
	13206 Jan 22 05:46	0°♋			13208 Jun 27 08:06	0°♋	
desc. node	13206 Jan 25 23:51	4°♋35'21		desc. node	13208 Jul 13 04:29	17°♋22'43	
	13206 Feb 15 19:55	0°♌			13208 Jul 24 06:00	0°♋	
	13206 Mar 12 13:17	0°♌			13208 Aug 18 16:57	0°♌	
	13206 Apr 06 10:44	0°♋			13208 Sep 12 13:21	0°♍	
	13206 May 01 16:17	0°♋			13208 Oct 07 03:24	0°♊	
asc. node	13206 May 18 19:06	19°♋54'05			13208 Oct 31 14:18	0°♌	
	13206 May 27 16:32	0°♌		asc. node	13208 Nov 02 23:41	2°♌56'26	
evening max el	13206 Jun 23 24:00	29°♌16'19	46°46'03		13208 Nov 24 23:06	0°♌	
	13206 Jun 24 17:30	0°♍		morning set	13208 Dec 18 07:48	28°♌49'51	
greatest brilliancy	13206 Aug 02 23:31	29°♍49'04	-4.9m		13208 Dec 19 06:32	0°♊	
	13206 Aug 03 11:31	0°♊			13209 Jan 12 13:36	0°♋	
retrograde	13206 Aug 13 07:36	1°♊49'47					
	13206 Aug 22 19:16	30°♌		superior conj	13209 Jan 24 01:55	14°♋12'23	1°03'29
evening set	13206 Aug 28 00:41	27°♍34'37		minimum elong	13209 Jan 24 11:44	14°♋42'39	1°03'57
inferior conj	13206 Sep 03 02:27	24°♍01'30	1°14'44	max. Earth dist.	13209 Jan 24 18:04	15°♋02'10	1.73165 AU
minimum elong	13206 Sep 03 05:21	23°♍57'05	1°13'34		13209 Feb 05 21:13	0°♋	
min. Earth dist.	13206 Sep 02 23:34	24°♍05'54	0.27044 AU	desc. node	13209 Feb 22 13:51	20°♋34'24	
desc. node	13206 Sep 07 21:33	21°♍10'39			13209 Mar 02 05:25	0°♌	
morning rise	13206 Sep 09 10:14	20°♍20'29		evening rise	13209 Mar 02 20:41	0°♌47'00	
direct	13206 Sep 23 19:45	16°♍16'23			13209 Mar 26 13:36	0°♌	
greatest brilliancy	13206 Oct 03 17:57	18°♍05'15	-4.8m		13209 Apr 19 21:18	0°♋	
	13206 Oct 23 21:04	0°♊			13209 May 14 05:22	0°♋	
morning max el	13206 Nov 12 08:04	17°♊14'22	46°10'51		13209 Jun 07 16:26	0°♌	
	13206 Nov 24 23:46	0°♌		asc. node	13209 Jun 15 06:21	9°♌13'57	
	13206 Dec 22 12:09	0°♌			13209 Jul 02 10:59	0°♍	
asc. node	13206 Dec 29 22:50	8°♌28'03			13209 Jul 27 20:55	0°♊	
	13207 Jan 17 12:14	0°♊			13209 Aug 23 16:59	0°♌	
	13207 Feb 11 17:55	0°♋		evening max el	13209 Sep 04 02:07	11°♌47'06	46°34'03
	13207 Mar 08 12:58	0°♋			13209 Sep 24 03:39	0°♌	
	13207 Apr 02 01:17	0°♌		desc. node	13209 Oct 05 06:41	7°♌46'28	
desc. node	13207 Apr 20 16:46	22°♌59'36		greatest brilliancy	13209 Oct 13 05:00	11°♌40'16	-4.8m
	13207 Apr 26 08:34	0°♌		retrograde	13209 Oct 24 03:57	13°♌52'09	
morning set	13207 May 11 12:19	18°♌49'23		evening set	13209 Nov 10 06:52	8°♌15'24	
	13207 May 20 11:35	0°♋		min. Earth dist.	13209 Nov 13 16:45	6°♌10'28	0.28412 AU
	13207 Jun 13 11:16	0°♋		inferior conj	13209 Nov 14 11:44	5°♌40'55	-8°02'17
max. Earth dist.	13207 Jun 18 17:47	6°♋36'33	1.71522 AU	minimum elong	13209 Nov 14 03:35	5°♌53'36	8°00'22
				morning rise	13209 Nov 18 00:37	3°♌30'57	
superior conj	13207 Jun 20 12:32	8°♋50'35	-1°26'47		13209 Nov 24 19:35	30°♌	
minimum elong	13207 Jun 20 15:28	8°♋59'49	1°27'47	direct	13209 Dec 05 17:12	27°♌39'49	
	13207 Jul 07 09:12	0°♌		greatest brilliancy	13209 Dec 15 07:14	29°♌20'28	-4.8m
evening rise	13207 Jul 30 19:24	29°♌22'57			13209 Dec 17 02:46	0°♌	
	13207 Jul 31 07:14	0°♍		morning max el	13210 Jan 23 14:40	27°♌48'48	45°42'41
asc. node	13207 Aug 11 06:40	13°♍44'20			13210 Jan 25 20:35	0°♊	
	13207 Aug 24 07:02	0°♊		asc. node	13210 Jan 26 09:19	0°♊31'16	
	13207 Sep 17 10:09	0°♌			13210 Feb 23 07:09	0°♋	
	13207 Oct 11 18:44	0°♌			13210 Mar 21 12:49	0°♋	
	13207 Nov 05 12:24	0°♊			13210 Apr 15 19:14	0°♌	
	13207 Nov 30 21:03	0°♋			13210 May 10 12:32	0°♌	
desc. node	13207 Dec 01 00:44	0°♋10'41		desc. node	13210 May 18 06:36	9°♌30'30	
	13207 Dec 27 06:48	0°♋			13210 Jun 03 21:10	0°♋	
	13208 Jan 24 19:56	0°♌			13210 Jun 27 23:56	0°♋	
evening max el	13208 Jan 27 15:55	2°♌45'18	45°55'45		13210 Jul 21 23:24	0°♌	
	13208 Mar 03 10:29	0°♌		morning set	13210 Jul 25 13:17	4°♌29'00	

	13210 Aug 14 21:53	0°♍	evening set	13213 Jan 19 08:01	16°♊43'06	
			inferior conj	13213 Jan 23 19:09	13°♊58'45	-6°31'35
superior conj	13210 Sep 03 04:14	24°♍07'31 -0°11'27	minimum elong	13213 Jan 24 05:24	13°♊42'40	6°28'42
minimum elong	13210 Sep 03 07:07	24°♍16'32 0°11'31	min. Earth dist.	13213 Jan 24 05:12	13°♊42'58	0.28794 AU
behind sun begin	13210 Sep 02 13:24	23°♍21'08	morning rise	13213 Jan 29 02:34	10°♊44'25	
behind sun end	13210 Sep 04 00:50	25°♍11'57	direct	13213 Feb 14 03:27	5°♊44'43	
max. Earth dist.	13210 Sep 05 03:03	26°♍33'59 1.71707 AU	asc. node	13213 Feb 22 18:42	7°♊07'45	
asc. node	13210 Sep 07 20:56	29°♍59'59	greatest brilliancy	13213 Feb 25 01:06	7°♊54'32	-4.8m
	13210 Sep 07 20:56	0°♌		13213 Mar 28 09:48	0°♋	
	13210 Oct 01 21:30	0°♌	morning max el	13213 Apr 04 13:12	6°♋49'00	46°02'53
evening rise	13210 Oct 11 22:43	12°♌31'00		13213 Apr 26 16:46	0°♋	
	13210 Oct 26 00:32	0°♌		13213 May 23 02:03	0°♋	
	13210 Nov 19 07:39	0°♌	desc. node	13213 Jun 14 19:12	26°♋58'24	
	13210 Dec 13 20:59	0°♋		13213 Jun 17 07:28	0°♋	
desc. node	13210 Dec 28 12:43	17°♋42'48		13213 Jul 11 22:18	0°♋	
	13211 Jan 07 18:40	0°♋		13213 Aug 05 05:20	0°♋	
	13211 Feb 02 02:56	0°♋		13213 Aug 29 08:52	0°♋	
	13211 Feb 28 02:28	0°♋		13213 Sep 22 11:26	0°♋	
	13211 Mar 27 08:26	0°♋	asc. node	13213 Oct 05 11:26	16°♋10'28	
evening max el	13211 Apr 09 12:22	13°♋28'36 46°20'18	morning set	13213 Oct 06 16:47	17°♋41'44	
asc. node	13211 Apr 20 11:14	23°♋49'06		13213 Oct 16 14:10	0°♋	
	13211 Apr 27 16:41	0°♋		13213 Nov 09 17:33	0°♋	
greatest brilliancy	13211 May 19 19:50	13°♋30'54 -4.8m				
retrograde	13211 May 29 06:55	15°♋11'53	superior conj	13213 Nov 13 19:08	5°♋02'53	1°17'11
evening set	13211 Jun 16 12:49	8°♋54'21	minimum elong	13213 Nov 13 11:02	4°♋37'46	1°17'53
inferior conj	13211 Jun 19 00:34	7°♋22'32 9°10'27	max. Earth dist.	13213 Nov 15 18:38	7°♋30'15	1.72645 AU
minimum elong	13211 Jun 19 02:30	7°♋19'31 9°09'24		13213 Dec 03 22:21	0°♋	
min. Earth dist.	13211 Jun 19 10:05	7°♋07'46 0.27411 AU	evening rise	13213 Dec 20 20:06	20°♋53'10	
morning rise	13211 Jun 21 16:08	5°♋44'39		13213 Dec 28 05:41	0°♋	
	13211 Jul 04 15:09	30°♋♌		13214 Jan 21 16:29	0°♋	
direct	13211 Jul 09 20:18	29°♋26'42	desc. node	13214 Jan 25 01:39	4°♋08'00	
	13211 Jul 15 04:29	0°♋		13214 Feb 15 06:56	0°♋	
greatest brilliancy	13211 Jul 19 20:39	1°♋19'41 -4.9m		13214 Mar 12 00:48	0°♋	
desc. node	13211 Aug 10 14:21	14°♋54'20		13214 Apr 05 23:01	0°♋	
	13211 Aug 27 03:06	0°♋		13214 May 01 05:52	0°♋	
morning max el	13211 Aug 29 06:30	2°♋07'52 46°52'56	asc. node	13214 May 17 21:07	19°♋16'51	
	13211 Sep 24 09:23	0°♋		13214 May 27 08:43	0°♋	
	13211 Oct 20 14:48	0°♋	evening max el	13214 Jun 21 14:14	26°♋55'31	46°45'40
	13211 Nov 15 01:00	0°♋		13214 Jun 24 16:48	0°♋	
asc. node	13211 Dec 01 12:52	19°♋45'28	greatest brilliancy	13214 Jul 31 13:10	27°♋25'23	-4.9m
	13211 Dec 10 00:42	0°♋	retrograde	13214 Aug 10 21:25	29°♋25'58	
	13212 Jan 03 17:30	0°♋	evening set	13214 Aug 25 15:15	25°♋08'46	
	13212 Jan 28 05:43	0°♋	inferior conj	13214 Aug 31 15:15	21°♋37'58	1°38'40
	13212 Feb 21 15:08	0°♋	minimum elong	13214 Aug 31 19:04	21°♋32'10	1°37'12
morning set	13212 Feb 26 02:58	5°♋32'17	min. Earth dist.	13214 Aug 31 13:16	21°♋41'01	0.27027 AU
	13212 Mar 16 22:33	0°♋	morning rise	13214 Sep 06 23:10	17°♋57'12	
desc. node	13212 Mar 22 04:16	6°♋28'38	desc. node	13214 Sep 06 23:29	17°♋56'48	
max. Earth dist.	13212 Apr 01 16:30	19°♋29'31 1.72596 AU	direct	13214 Sep 21 08:58	13°♋53'00	
			greatest brilliancy	13214 Oct 01 06:45	15°♋42'11	-4.8m
superior conj	13212 Apr 04 10:54	22°♋55'17 -0°31'29		13214 Oct 24 09:00	0°♋	
minimum elong	13212 Apr 04 03:43	22°♋33'01 0°31'27	morning max el	13214 Nov 09 22:47	14°♋57'57	46°12'23
	13212 Apr 10 03:53	0°♋		13214 Nov 24 18:21	0°♋	
	13212 May 04 06:53	0°♋		13214 Dec 22 02:32	0°♋	
evening rise	13212 May 13 09:02	11°♋19'44	asc. node	13214 Dec 29 00:45	7°♋54'13	
	13212 May 28 08:05	0°♋		13215 Jan 17 00:46	0°♋	
	13212 Jun 21 08:58	0°♋		13215 Feb 11 05:30	0°♋	
asc. node	13212 Jul 12 18:51	26°♋38'58		13215 Mar 08 00:01	0°♋	
	13212 Jul 15 11:40	0°♋		13215 Apr 01 12:02	0°♋	
	13212 Aug 08 18:46	0°♋	desc. node	13215 Apr 19 18:44	22°♋32'46	
	13212 Sep 02 10:01	0°♋		13215 Apr 25 19:11	0°♋	
	13212 Sep 27 16:20	0°♋	morning set	13215 May 09 00:57	16°♋26'32	
	13212 Oct 24 05:12	0°♋		13215 May 19 22:08	0°♋	
desc. node	13212 Nov 01 16:14	9°♋02'33		13215 Jun 12 21:49	0°♋	
evening max el	13212 Nov 14 03:02	21°♋38'53 46°03'37	max. Earth dist.	13215 Jun 16 04:12	4°♋05'38	1.71545 AU
	13212 Nov 23 01:09	0°♋				
greatest brilliancy	13212 Dec 23 10:37	20°♋24'43 -4.8m	superior conj	13215 Jun 18 00:35	6°♋24'45	-1°27'10
retrograde	13213 Jan 02 08:05	22°♋12'12	minimum elong	13215 Jun 18 02:30	6°♋30'45	1°28'11

	13215 Jul 06 19:47	0°♈		greatest brilliancy	13217 Dec 12 21:22	27°♍06'30	-4.8m
evening rise	13215 Jul 28 07:00	26°♈55'30			13217 Dec 19 14:48	0°♈	
	13215 Jul 30 17:55	0°♍		morning max el	13218 Jan 21 03:49	25°♈31'21	45°42'54
asc. node	13215 Aug 10 08:25	13°♍16'17		asc. node	13218 Jan 25 11:13	29°♈44'36	
	13215 Aug 23 17:51	0°♊			13218 Jan 25 17:25	0°♊	
	13215 Sep 16 21:08	0°♍			13218 Feb 22 22:07	0°♋	
	13215 Oct 11 06:00	0°♈			13218 Mar 21 01:38	0°♈	
	13215 Nov 05 00:14	0°♊			13218 Apr 15 07:02	0°♍	
desc. node	13215 Nov 30 02:46	29°♊39'02			13218 May 09 23:47	0°♊	
	13215 Nov 30 09:59	0°♋		desc. node	13218 May 17 08:28	9°♊01'58	
	13215 Dec 26 22:03	0°♈			13218 Jun 03 08:05	0°♍	
	13216 Jan 24 17:32	0°♍			13218 Jun 27 10:39	0°♋	
evening max el	13216 Jan 25 07:45	0°♍34'18	45°55'24		13218 Jul 21 10:01	0°♈	
greatest brilliancy	13216 Mar 04 07:48	29°♍03'41	-4.8m	morning set	13218 Jul 23 01:43	2°♈04'23	
	13216 Mar 07 10:25	0°♊			13218 Aug 14 08:25	0°♍	
retrograde	13216 Mar 14 08:15	0°♊53'43					
	13216 Mar 21 00:21	30°♈♍		superior conj	13218 Aug 31 17:27	21°♍45'57	-0°15'08
asc. node	13216 Mar 22 04:00	29°♍39'48		minimum elong	13218 Aug 31 21:15	21°♍57'50	0°15'12
evening set	13216 Mar 29 03:05	26°♍36'24		behind sun begin	13218 Aug 31 12:32	21°♍30'35	
inferior conj	13216 Apr 04 08:48	22°♍52'24	3°15'02	behind sun end	13218 Sep 01 05:57	22°♍25'04	
minimum elong	13216 Apr 04 01:48	23°♍03'20	3°12'40	max. Earth dist.	13218 Sep 02 13:07	24°♍02'33	1.71680 AU
min. Earth dist.	13216 Apr 04 10:32	22°♍49'42	0.27979 AU	asc. node	13218 Sep 06 22:48	29°♍33'05	
morning rise	13216 Apr 10 00:18	19°♍27'54			13218 Sep 07 07:25	0°♊	
direct	13216 Apr 25 12:07	14°♍46'17			13218 Oct 01 07:59	0°♍	
greatest brilliancy	13216 May 05 20:08	16°♍46'24	-4.8m	evening rise	13218 Oct 09 13:53	10°♍16'09	
	13216 May 27 01:33	0°♊			13218 Oct 25 11:06	0°♈	
morning max el	13216 Jun 14 17:17	17°♊08'43	46°45'56		13218 Nov 18 18:25	0°♊	
	13216 Jun 27 02:24	0°♍			13218 Dec 13 08:05	0°♋	
desc. node	13216 Jul 12 06:25	16°♍44'02		desc. node	13218 Dec 27 14:29	17°♋13'54	
	13216 Jul 23 20:25	0°♋			13219 Jan 07 06:19	0°♈	
	13216 Aug 18 05:44	0°♈			13219 Feb 01 15:34	0°♍	
	13216 Sep 12 01:16	0°♍			13219 Feb 27 16:57	0°♊	
	13216 Oct 06 14:46	0°♊			13219 Mar 27 03:10	0°♍	
	13216 Oct 31 01:15	0°♍		evening max el	13219 Apr 07 00:49	11°♍05'26	46°19'14
asc. node	13216 Nov 02 01:40	2°♍28'55		asc. node	13219 Apr 19 13:17	22°♍49'13	
	13216 Nov 24 09:44	0°♈			13219 Apr 28 05:37	0°♋	
morning set	13216 Dec 16 00:27	26°♈40'48		greatest brilliancy	13219 May 17 08:55	11°♋08'29	-4.8m
	13216 Dec 18 16:58	0°♊		retrograde	13219 May 26 19:57	12°♋49'48	
	13217 Jan 11 23:59	0°♋		evening set	13219 Jun 14 01:57	6°♋31'56	
				inferior conj	13219 Jun 16 13:55	4°♋59'54	9°11'47
superior conj	13217 Jan 21 18:32	12°♋03'37	1°05'42	minimum elong	13219 Jun 16 14:53	4°♋58'25	9°10'45
minimum elong	13217 Jan 22 04:14	12°♋33'33	1°06'13	min. Earth dist.	13219 Jun 16 23:04	4°♋45'44	0.27435 AU
max. Earth dist.	13217 Jan 22 12:07	12°♋57'51	1.73161 AU	morning rise	13219 Jun 19 03:44	3°♋24'46	
	13217 Feb 05 07:37	0°♈			13219 Jun 25 08:19	30°♈♍	
desc. node	13217 Feb 21 15:37	20°♈07'41		direct	13219 Jul 07 09:22	27°♍03'19	
evening rise	13217 Feb 28 12:20	28°♈35'01		greatest brilliancy	13219 Jul 17 10:30	28°♍57'02	-4.9m
	13217 Mar 01 15:56	0°♍			13219 Jul 20 01:20	0°♋	
	13217 Mar 26 00:16	0°♊		desc. node	13219 Aug 09 16:14	13°♋47'09	
	13217 Apr 19 08:13	0°♍		morning max el	13219 Aug 26 20:14	29°♋45'51	46°53'55
	13217 May 13 16:39	0°♋			13219 Aug 27 01:52	0°♈	
	13217 Jun 07 04:17	0°♈			13219 Sep 24 01:24	0°♍	
asc. node	13217 Jun 14 08:16	8°♈43'12			13219 Oct 20 04:17	0°♊	
	13217 Jul 01 23:45	0°♍			13219 Nov 14 13:10	0°♍	
	13217 Jul 27 11:26	0°♊		asc. node	13219 Nov 30 14:43	19°♍15'54	
	13217 Aug 23 11:37	0°♍			13219 Dec 09 12:08	0°♈	
evening max el	13217 Sep 01 16:33	9°♍28'46	46°34'45		13220 Jan 03 04:29	0°♊	
	13217 Sep 24 17:22	0°♈			13220 Jan 27 16:27	0°♋	
desc. node	13217 Oct 04 08:46	6°♈21'01			13220 Feb 21 01:43	0°♈	
greatest brilliancy	13217 Oct 10 20:33	9°♈25'34	-4.8m	morning set	13220 Feb 23 19:05	3°♈21'24	
retrograde	13217 Oct 21 18:39	11°♈36'59			13220 Mar 16 09:04	0°♍	
evening set	13217 Nov 07 18:16	6°♈06'19		desc. node	13220 Mar 21 06:10	6°♍01'56	
min. Earth dist.	13217 Nov 11 07:24	3°♈56'38	0.28362 AU	max. Earth dist.	13220 Mar 30 11:21	17°♍26'30	1.72633 AU
inferior conj	13217 Nov 12 02:39	3°♈26'39	-7°53'07				
minimum elong	13217 Nov 11 17:58	3°♈40'10	7°51'03	superior conj	13220 Apr 02 01:01	20°♍37'33	-0°28'06
morning rise	13217 Nov 15 18:00	1°♈12'55		minimum elong	13220 Apr 01 18:32	20°♍17'29	0°28'03
	13217 Nov 17 20:49	30°♈♍			13220 Apr 09 14:26	0°♊	
direct	13217 Dec 03 07:34	25°♍26'25			13220 May 03 17:33	0°♍	

evening rise	13220 May 10 22:10	8° Π 57'44		asc. node	13222 Dec 28 02:39	7° \times 20'00	
	13220 May 27 18:54	0° Θ			13223 Jan 16 13:24	0° Σ	
	13220 Jun 20 19:58	0° Ω			13223 Feb 10 17:14	0° \approx	
asc. node	13220 Jul 11 20:37	26° Ω 09'40			13223 Mar 07 11:18	0° H	
	13220 Jul 14 22:55	0° Π			13223 Mar 31 23:06	0° Υ	
	13220 Aug 08 06:25	0° $\underline{\Omega}$		desc. node	13223 Apr 18 20:36	22° Υ 04'38	
	13220 Sep 01 22:20	0° \mathbb{M}			13223 Apr 25 06:08	0° B	
	13220 Sep 27 05:57	0° \times		morning set	13223 May 06 13:18	14° B 01'46	
	13220 Oct 23 21:48	0° Σ			13223 May 19 09:01	0° Π	
desc. node	13220 Oct 31 18:13	8° Σ 20'12			13223 Jun 12 08:41	0° Θ	
evening max el	13220 Nov 11 18:03	19° Σ 25'53	46°04'28	max. Earth dist.	13223 Jun 13 11:47	1° Θ 24'52	1.71565 AU
	13220 Nov 23 04:12	0° \approx					
greatest brilliancy	13220 Dec 21 01:01	18° \approx 12'49	-4.8m	superior conj	13223 Jun 15 12:25	3° Θ 57'15	-1°27'23
retrograde	13220 Dec 31 00:15	20° \approx 01'42		minimum elong	13223 Jun 15 13:16	3° Θ 59'57	1°28'24
evening set	13221 Jan 17 02:39	14° \approx 27'45			13223 Jul 06 06:41	0° Ω	
inferior conj	13221 Jan 21 10:58	11° \approx 47'36	-6°45'05	evening rise	13223 Jul 25 18:21	24° Ω 26'18	
minimum elong	13221 Jan 21 21:08	11° \approx 31'40	6°42'17		13223 Jul 30 04:53	0° Π	
min. Earth dist.	13221 Jan 21 20:15	11° \approx 33'02	0.28819 AU	asc. node	13223 Aug 09 10:19	12° Π 47'49	
morning rise	13221 Jan 26 15:28	8° \approx 37'47			13223 Aug 23 04:56	0° $\underline{\Omega}$	
direct	13221 Feb 11 19:38	3° \approx 33'25			13223 Sep 16 08:25	0° \mathbb{M}	
asc. node	13221 Feb 21 20:46	5° \approx 24'53			13223 Oct 10 17:36	0° \times	
greatest brilliancy	13221 Feb 22 16:33	5° \approx 42'58	-4.8m		13223 Nov 04 12:26	0° Σ	
	13221 Mar 28 10:13	0° H		desc. node	13223 Nov 29 04:37	29° Σ 05'47	
morning max el	13221 Apr 02 05:31	4° H 37'48	46°01'33		13223 Nov 29 23:20	0° \approx	
	13221 Apr 26 08:56	0° Υ			13223 Dec 26 13:51	0° H	
	13221 May 22 15:38	0° B		evening max el	13224 Jan 22 22:36	28° H 20'03	45°54'59
desc. node	13221 Jun 13 21:04	26° B 26'24			13224 Jan 24 16:24	0° Υ	
	13221 Jun 16 19:51	0° Π		greatest brilliancy	13224 Mar 01 22:59	26° Υ 48'29	-4.8m
	13221 Jul 11 10:02	0° Θ		retrograde	13224 Mar 11 22:16	28° Υ 37'25	
	13221 Aug 04 16:40	0° Ω		asc. node	13224 Mar 21 06:03	26° Υ 53'01	
	13221 Aug 28 19:55	0° Π		evening set	13224 Mar 26 17:00	24° Υ 21'21	
	13221 Sep 21 22:16	0° $\underline{\Omega}$		inferior conj	13224 Apr 01 23:40	20° Υ 35'56	2°54'07
morning set	13221 Oct 04 07:17	15° $\underline{\Omega}$ 24'08		minimum elong	13224 Apr 01 17:21	20° Υ 45'49	2°51'58
asc. node	13221 Oct 04 13:23	15° $\underline{\Omega}$ 43'05		min. Earth dist.	13224 Apr 02 02:05	20° Υ 32'08	0.28002 AU
	13221 Oct 16 00:50	0° \mathbb{M}		morning rise	13224 Apr 07 17:23	17° Υ 07'53	
	13221 Nov 09 04:08	0° \times		direct	13224 Apr 23 02:58	12° Υ 29'32	
				greatest brilliancy	13224 May 03 12:10	14° Υ 30'06	-4.8m
superior conj	13221 Nov 11 11:20	2° \times 51'24	1°15'37		13224 May 27 10:33	0° B	
minimum elong	13221 Nov 11 02:46	2° \times 24'49	1°16'16	morning max el	13224 Jun 12 06:40	14° B 46'26	46°44'40
max. Earth dist.	13221 Nov 13 13:01	5° \times 25'34	1.72616 AU		13224 Jun 26 20:49	0° Π	
	13221 Dec 03 08:54	0° Σ		desc. node	13224 Jul 11 08:21	16° Π 04'07	
evening rise	13221 Dec 18 12:41	18° Σ 43'39			13224 Jul 23 11:11	0° Θ	
	13221 Dec 27 16:20	0° \approx			13224 Aug 17 18:53	0° Ω	
	13222 Jan 21 03:22	0° H			13224 Sep 11 13:32	0° Π	
desc. node	13222 Jan 24 03:30	3° H 40'21			13224 Oct 06 02:27	0° $\underline{\Omega}$	
	13222 Feb 14 18:10	0° Υ			13224 Oct 30 12:31	0° \mathbb{M}	
	13222 Mar 11 12:34	0° B		asc. node	13224 Nov 01 03:25	1° \mathbb{M} 59'41	
	13222 Apr 05 11:35	0° Π			13224 Nov 23 20:44	0° \times	
	13222 Apr 30 19:48	0° Θ		morning set	13224 Dec 13 17:09	24° \times 30'41	
asc. node	13222 May 16 23:02	18° Θ 38'22			13224 Dec 18 03:47	0° Σ	
	13222 May 27 01:24	0° Ω			13225 Jan 11 10:43	0° \approx	
evening max el	13222 Jun 19 04:44	24° Ω 34'54	46°45'19				
	13222 Jun 24 17:27	0° Π		superior conj	13225 Jan 19 11:24	9° \approx 54'32	1°07'48
greatest brilliancy	13222 Jul 29 03:07	25° Π 01'37	-4.9m	minimum elong	13225 Jan 19 20:58	10° \approx 24'02	1°08'21
retrograde	13222 Aug 08 11:04	27° Π 01'24		max. Earth dist.	13225 Jan 20 05:05	10° \approx 49'05	1.73156 AU
evening set	13222 Aug 23 06:04	22° Π 42'13			13225 Feb 04 18:22	0° H	
inferior conj	13222 Aug 29 04:03	19° Π 13'47	2°02'32	desc. node	13225 Feb 20 17:33	19° H 40'21	
minimum elong	13222 Aug 29 08:45	19° Π 06'38	2°00'45	evening rise	13225 Feb 26 04:15	26° H 22'46	
min. Earth dist.	13222 Aug 29 02:56	19° Π 15'30	0.27009 AU		13225 Mar 01 02:48	0° Υ	
morning rise	13222 Sep 04 11:48	15° Π 33'22			13225 Mar 25 11:20	0° B	
desc. node	13222 Sep 06 01:38	14° Π 45'22			13225 Apr 18 19:35	0° Π	
direct	13222 Sep 18 22:18	11° Π 29'04			13225 May 13 04:27	0° Θ	
greatest brilliancy	13222 Sep 28 19:19	13° Π 17'59	-4.8m		13225 Jun 06 16:43	0° Ω	
	13222 Oct 24 18:03	0° $\underline{\Omega}$		asc. node	13225 Jun 13 10:05	8° Ω 10'18	
morning max el	13222 Nov 07 12:57	12° $\underline{\Omega}$ 39'33	46°13'59		13225 Jul 01 13:11	0° Π	
	13222 Nov 24 12:39	0° \mathbb{M}			13225 Jul 27 02:42	0° $\underline{\Omega}$	
	13222 Dec 21 16:54	0° \times			13225 Aug 23 07:21	0° \mathbb{M}	

evening max el	13225 Aug 30 06:08	7° \mathbb{M} 06'48	46°35'43		13228 Feb 20 12:32	0° \mathbb{H}	
	13225 Sep 25 12:38	0° \mathbb{A}		morning set	13228 Feb 21 11:28	1° \mathbb{H} 10'38	
desc. node	13225 Oct 03 10:43	4° \mathbb{A} 51'07			13228 Mar 15 19:51	0° \mathbb{Y}	
greatest brilliancy	13225 Oct 08 11:59	7° \mathbb{A} 09'20	-4.8m	desc. node	13228 Mar 20 08:00	5° \mathbb{Y} 34'18	
retrograde	13225 Oct 19 09:27	9° \mathbb{A} 20'43		max. Earth dist.	13228 Mar 28 06:28	15° \mathbb{Y} 23'37	1.72665 AU
evening set	13225 Nov 05 05:38	3° \mathbb{A} 55'48					
min. Earth dist.	13225 Nov 08 22:10	1° \mathbb{A} 41'24	0.28310 AU	superior conj	13228 Mar 30 15:31	18° \mathbb{Y} 20'18	-0°24'42
inferior conj	13225 Nov 09 17:35	1° \mathbb{A} 11'10	-7°43'14	minimum elong	13228 Mar 30 09:46	18° \mathbb{Y} 02'30	0°24'37
minimum elong	13225 Nov 09 08:26	1° \mathbb{A} 25'25	7°41'00		13228 Apr 09 01:14	0° \mathbb{B}	
	13225 Nov 11 15:33	30° $\mathbb{R}\mathbb{M}$			13228 May 03 04:26	0° \mathbb{I}	
morning rise	13225 Nov 13 11:32	28° \mathbb{M} 53'37		evening rise	13228 May 08 11:48	6° \mathbb{I} 36'43	
direct	13225 Nov 30 21:29	23° \mathbb{M} 11'37			13228 May 27 05:55	0° \mathbb{E}	
greatest brilliancy	13225 Dec 10 11:54	24° \mathbb{M} 51'47	-4.8m		13228 Jun 20 07:10	0° \mathbb{O}	
	13225 Dec 21 05:17	0° \mathbb{A}		asc. node	13228 Jul 10 22:36	25° \mathbb{O} 40'19	
morning max el	13226 Jan 18 17:27	23° \mathbb{A} 13'52	45°43'17		13228 Jul 14 10:25	0° \mathbb{M}	
asc. node	13226 Jan 24 13:14	28° \mathbb{A} 57'51			13228 Aug 07 18:23	0° \mathbb{L}	
	13226 Jan 25 13:57	0° \mathbb{B}			13228 Sep 01 11:03	0° \mathbb{M}	
	13226 Feb 22 13:15	0° \mathbb{A}			13228 Sep 26 20:04	0° \mathbb{A}	
	13226 Mar 20 14:44	0° \mathbb{H}			13228 Oct 23 15:05	0° \mathbb{B}	
	13226 Apr 14 19:09	0° \mathbb{Y}		desc. node	13228 Oct 30 20:08	7° \mathbb{B} 36'04	
	13226 May 09 11:23	0° \mathbb{B}		evening max el	13228 Nov 09 09:59	17° \mathbb{B} 14'11	46°05'31
desc. node	13226 May 16 10:16	8° \mathbb{B} 32'08			13228 Nov 23 09:25	0° \mathbb{A}	
	13226 Jun 02 19:24	0° \mathbb{I}		greatest brilliancy	13228 Dec 18 15:35	16° \mathbb{A} 00'41	-4.8m
	13226 Jun 26 21:50	0° \mathbb{E}		retrograde	13228 Dec 28 16:32	17° \mathbb{A} 50'39	
morning set	13226 Jul 20 13:38	29° \mathbb{E} 36'37		evening set	13229 Jan 14 21:25	12° \mathbb{A} 12'10	
	13226 Jul 20 21:06	0° \mathbb{O}		inferior conj	13229 Jan 19 02:52	9° \mathbb{A} 36'05	-6°58'02
	13226 Aug 13 19:26	0° \mathbb{M}		minimum elong	13229 Jan 19 12:53	9° \mathbb{A} 20'22	6°55'19
				min. Earth dist.	13229 Jan 19 11:07	9° \mathbb{A} 23'09	0.28837 AU
superior conj	13226 Aug 29 06:05	19° \mathbb{M} 21'01	-0°18'51	morning rise	13229 Jan 24 04:18	6° \mathbb{A} 30'54	
minimum elong	13226 Aug 29 10:48	19° \mathbb{M} 35'44	0°18'54	direct	13229 Feb 09 12:11	1° \mathbb{A} 22'06	
max. Earth dist.	13226 Aug 30 20:52	21° \mathbb{M} 22'24	1.71652 AU	greatest brilliancy	13229 Feb 20 07:20	3° \mathbb{A} 30'24	-4.8m
asc. node	13226 Sep 06 00:41	29° \mathbb{M} 04'44		asc. node	13229 Feb 20 22:50	3° \mathbb{A} 45'23	
	13226 Sep 06 18:22	0° \mathbb{L}			13229 Mar 28 09:37	0° \mathbb{H}	
	13226 Sep 30 18:54	0° \mathbb{M}		morning max el	13229 Mar 30 21:54	2° \mathbb{H} 26'32	46°00'11
evening rise	13226 Oct 07 04:38	7° \mathbb{M} 58'41			13229 Apr 26 00:56	0° \mathbb{Y}	
	13226 Oct 24 22:05	0° \mathbb{A}			13229 May 22 05:10	0° \mathbb{B}	
	13226 Nov 18 05:34	0° \mathbb{B}		desc. node	13229 Jun 12 22:59	25° \mathbb{B} 54'30	
	13226 Dec 12 19:35	0° \mathbb{A}			13229 Jun 16 08:14	0° \mathbb{I}	
desc. node	13226 Dec 26 16:23	16° \mathbb{A} 44'15			13229 Jul 10 21:46	0° \mathbb{E}	
	13227 Jan 06 18:24	0° \mathbb{H}			13229 Aug 04 04:00	0° \mathbb{O}	
	13227 Feb 01 04:40	0° \mathbb{Y}			13229 Aug 28 06:59	0° \mathbb{M}	
	13227 Feb 27 07:59	0° \mathbb{B}			13229 Sep 21 09:10	0° \mathbb{L}	
	13227 Mar 26 22:46	0° \mathbb{I}		morning set	13229 Oct 01 21:41	13° \mathbb{L} 05'52	
evening max el	13227 Apr 04 14:11	8° \mathbb{I} 44'01	46°18'12	asc. node	13229 Oct 03 15:07	15° \mathbb{L} 14'48	
asc. node	13227 Apr 18 15:11	21° \mathbb{I} 46'44			13229 Oct 15 11:37	0° \mathbb{M}	
	13227 Apr 28 23:24	0° \mathbb{E}			13229 Nov 08 14:49	0° \mathbb{A}	
greatest brilliancy	13227 May 14 21:16	8° \mathbb{E} 44'44	-4.8m				
retrograde	13227 May 24 09:31	10° \mathbb{E} 27'10		superior conj	13229 Nov 09 03:12	0° \mathbb{A} 38'26	1°13'55
evening set	13227 Jun 11 14:32	4° \mathbb{E} 09'41		minimum elong	13229 Nov 08 18:13	0° \mathbb{A} 10'31	1°14'30
inferior conj	13227 Jun 14 03:19	2° \mathbb{E} 36'29	9°12'05	max. Earth dist.	13229 Nov 11 07:00	3° \mathbb{A} 19'15	1.72585 AU
minimum elong	13227 Jun 14 03:19	2° \mathbb{E} 36'30	9°11'03		13229 Dec 02 19:34	0° \mathbb{B}	
min. Earth dist.	13227 Jun 14 11:43	2° \mathbb{E} 23'30	0.27465 AU	evening rise	13229 Dec 16 04:54	16° \mathbb{B} 32'38	
morning rise	13227 Jun 16 16:03	1° \mathbb{E} 03'09			13229 Dec 27 03:04	0° \mathbb{A}	
	13227 Jun 18 10:25	30° $\mathbb{R}\mathbb{I}$			13230 Jan 20 14:17	0° \mathbb{H}	
direct	13227 Jul 04 23:03	24° \mathbb{I} 39'11		desc. node	13230 Jan 23 05:26	3° \mathbb{H} 12'49	
greatest brilliancy	13227 Jul 14 23:55	26° \mathbb{I} 33'04	-4.9m		13230 Feb 14 05:26	0° \mathbb{Y}	
	13227 Jul 22 09:17	0° \mathbb{E}			13230 Mar 11 00:23	0° \mathbb{B}	
desc. node	13227 Aug 08 18:22	12° \mathbb{E} 41'02			13230 Apr 05 00:14	0° \mathbb{I}	
morning max el	13227 Aug 24 11:03	27° \mathbb{E} 25'17	46°54'38		13230 Apr 30 09:51	0° \mathbb{E}	
	13227 Aug 27 00:15	0° \mathbb{O}		asc. node	13230 May 16 00:59	17° \mathbb{E} 59'45	
	13227 Sep 23 17:39	0° \mathbb{M}			13230 May 26 18:21	0° \mathbb{O}	
	13227 Oct 19 18:06	0° \mathbb{L}		evening max el	13230 Jun 16 19:13	22° \mathbb{O} 14'36	46°44'55
	13227 Nov 14 01:42	0° \mathbb{M}			13230 Jun 24 19:12	0° \mathbb{M}	
asc. node	13227 Nov 29 16:36	18° \mathbb{M} 45'25		greatest brilliancy	13230 Jul 26 17:47	22° \mathbb{M} 39'37	-4.9m
	13227 Dec 08 23:52	0° \mathbb{A}		retrograde	13230 Aug 06 00:29	24° \mathbb{M} 37'46	
	13228 Jan 02 15:44	0° \mathbb{B}		evening set	13230 Aug 20 21:16	20° \mathbb{M} 16'37	
	13228 Jan 27 03:25	0° \mathbb{A}		inferior conj	13230 Aug 26 17:05	16° \mathbb{M} 50'48	2°26'03

minimum elong	13230 Aug 26 22:38	16° \cap 42'20	2°23'57	evening rise	13233 Feb 23 20:07	24° X 11'26	
min. Earth dist.	13230 Aug 26 17:03	16° \cap 50'51	0.26994 AU		13233 Feb 28 13:22	0° Υ	
morning rise	13230 Sep 02 00:20	13° \cap 10'47			13233 Mar 24 22:04	0° B	
desc. node	13230 Sep 05 03:31	11° \cap 39'35			13233 Apr 18 06:35	0° II	
direct	13230 Sep 16 11:32	9° \cap 06'22			13233 May 12 15:53	0° ☉	
greatest brilliancy	13230 Sep 26 08:20	10° \cap 55'02	-4.8m		13233 Jun 06 04:48	0° Ω	
	13230 Oct 25 00:20	0° $\underline{\text{A}}$		asc. node	13233 Jun 12 12:06	7° Ω 39'11	
morning max el	13230 Nov 05 02:23	10° $\underline{\text{A}}$ 19'36	46°15'24		13233 Jul 01 02:18	0° \cap	
	13230 Nov 24 06:23	0° M			13233 Jul 26 17:45	0° $\underline{\text{A}}$	
	13230 Dec 21 07:02	0° A			13233 Aug 23 03:13	0° M	
asc. node	13230 Dec 27 04:39	6° A 46'26		evening max el	13233 Aug 27 19:53	4° M 46'28	46°36'43
	13231 Jan 16 01:53	0° B			13233 Sep 26 14:02	0° A	
	13231 Feb 10 04:51	0° \approx		desc. node	13233 Oct 02 12:41	3° A 19'24	
	13231 Mar 06 22:25	0° X		greatest brilliancy	13233 Oct 06 03:04	4° A 53'52	-4.8m
	13231 Mar 31 09:58	0° Υ		retrograde	13233 Oct 17 00:40	7° A 05'57	
desc. node	13231 Apr 17 22:18	21° Υ 36'36		evening set	13233 Nov 02 17:00	1° A 46'30	
	13231 Apr 24 16:52	0° B			13233 Nov 05 15:56	30° R M	
morning set	13231 May 04 01:46	11° B 38'05		min. Earth dist.	13233 Nov 06 12:51	29° M 27'40	0.28258 AU
	13231 May 18 19:43	0° II		inferior conj	13233 Nov 07 08:33	28° M 57'04	-7°32'26
max. Earth dist.	13231 Jun 10 17:27	28° II 38'46	1.71588 AU	minimum elong	13233 Nov 06 22:59	29° M 11'56	7°30'05
	13231 Jun 11 19:23	0° ☉		morning rise	13233 Nov 11 05:15	26° M 35'39	
				direct	13233 Nov 28 11:21	20° M 58'05	
superior conj	13231 Jun 13 00:32	1° ☉ 31'19	-1°27'27	greatest brilliancy	13233 Dec 08 02:25	22° M 38'36	-4.8m
minimum elong	13231 Jun 13 00:19	1° ☉ 30'41	1°28'27		13233 Dec 22 07:19	0° A	
	13231 Jul 05 17:24	0° Ω		morning max el	13234 Jan 16 07:57	20° A 59'57	45°43'38
evening rise	13231 Jul 23 05:54	21° Ω 58'21		asc. node	13234 Jan 23 15:15	28° A 13'10	
	13231 Jul 29 15:39	0° \cap			13234 Jan 25 09:18	0° B	
asc. node	13231 Aug 08 12:11	12° \cap 20'00			13234 Feb 22 03:45	0° \approx	
	13231 Aug 22 15:47	0° $\underline{\text{A}}$			13234 Mar 20 03:22	0° X	
	13231 Sep 15 19:26	0° M			13234 Apr 14 06:52	0° Υ	
	13231 Oct 10 04:57	0° A			13234 May 08 22:35	0° B	
	13231 Nov 04 00:26	0° B		desc. node	13234 May 15 12:15	8° B 04'04	
desc. node	13231 Nov 28 06:32	28° B 33'15			13234 Jun 02 06:19	0° II	
	13231 Nov 29 12:34	0° \approx			13234 Jun 26 08:34	0° ☉	
	13231 Dec 26 05:44	0° X		morning set	13234 Jul 18 01:31	27° ☉ 10'02	
evening max el	13232 Jan 20 12:52	26° X 05'01	45°54'41		13234 Jul 20 07:45	0° Ω	
	13232 Jan 24 16:05	0° Υ			13234 Aug 13 06:01	0° \cap	
greatest brilliancy	13232 Feb 28 14:26	24° Υ 34'25	-4.8m				
retrograde	13232 Mar 09 12:21	26° Υ 22'27		superior conj	13234 Aug 26 18:39	16° \cap 57'01	-0°22'32
asc. node	13232 Mar 20 07:56	24° Υ 02'48		minimum elong	13234 Aug 27 00:14	17° \cap 14'30	0°22'35
evening set	13232 Mar 24 07:13	22° Υ 07'02		max. Earth dist.	13234 Aug 28 06:05	18° \cap 47'56	1.71631 AU
inferior conj	13232 Mar 30 14:40	18° Υ 20'46	2°32'58	asc. node	13234 Sep 05 02:26	28° \cap 37'12	
minimum elong	13232 Mar 30 09:03	18° Υ 29'34	2°31'03		13234 Sep 06 04:55	0° $\underline{\text{A}}$	
min. Earth dist.	13232 Mar 30 18:00	18° Υ 15'33	0.28025 AU		13234 Sep 30 05:27	0° M	
morning rise	13232 Apr 05 10:28	14° Υ 49'29		evening rise	13234 Oct 04 19:25	5° M 42'26	
direct	13232 Apr 20 17:34	10° Υ 13'54			13234 Oct 24 08:42	0° A	
greatest brilliancy	13232 May 01 04:47	12° Υ 15'46	-4.8m		13234 Nov 17 16:21	0° B	
	13232 May 27 16:33	0° B			13234 Dec 12 06:41	0° \approx	
morning max el	13232 Jun 09 20:10	12° B 25'35	46°43'24	desc. node	13234 Dec 25 18:24	16° \approx 16'07	
	13232 Jun 26 14:24	0° II			13235 Jan 06 06:06	0° X	
desc. node	13232 Jul 10 10:22	15° II 25'53			13235 Jan 31 17:26	0° Υ	
	13232 Jul 23 01:25	0° ☉			13235 Feb 26 22:50	0° B	
	13232 Aug 17 07:37	0° Ω			13235 Mar 26 18:38	0° II	
	13232 Sep 11 01:24	0° \cap		evening max el	13235 Apr 02 04:35	6° II 26'10	46°17'06
	13232 Oct 05 13:44	0° $\underline{\text{A}}$		asc. node	13235 Apr 17 17:12	20° II 43'42	
	13232 Oct 29 23:24	0° M			13235 Apr 29 23:04	0° ☉	
asc. node	13232 Oct 31 05:17	1° M 32'01		greatest brilliancy	13235 May 12 09:21	6° ☉ 21'36	-4.8m
	13232 Nov 23 07:20	0° A		retrograde	13235 May 21 23:19	8° ☉ 05'12	
morning set	13232 Dec 11 09:53	22° A 21'47		evening set	13235 Jun 09 02:30	1° ☉ 49'12	
	13232 Dec 17 14:14	0° B		inferior conj	13235 Jun 11 16:41	0° ☉ 13'53	9°11'22
	13233 Jan 10 21:08	0° \approx		minimum elong	13235 Jun 11 15:43	0° ☉ 15'22	9°10'20
				min. Earth dist.	13235 Jun 12 00:05	0° ☉ 02'27	0.27489 AU
superior conj	13233 Jan 17 04:19	7° \approx 46'32	1°09'48		13235 Jun 12 01:40	30° R II	
minimum elong	13233 Jan 17 13:39	8° \approx 15'21	1°10'23	morning rise	13235 Jun 14 04:54	28° II 41'22	
max. Earth dist.	13233 Jan 17 21:45	8° \approx 40'19	1.73156 AU	direct	13235 Jul 02 13:06	22° II 16'13	
	13233 Feb 04 04:49	0° X		greatest brilliancy	13235 Jul 12 12:45	24° II 09'29	-4.9m
desc. node	13233 Feb 19 19:22	19° X 13'36			13235 Jul 23 20:50	0° ☉	

desc. node	13235 Aug 07 20:19	11°☿37'25		13238 Feb 13 16:35	0°♊	
morning max el	13235 Aug 22 02:05	25°☿06'38	46°55'14	13238 Mar 10 12:03	0°♋	
	13235 Aug 26 21:17	0°♌		13238 Apr 04 12:45	0°♌	
	13235 Sep 23 09:10	0°♍		13238 Apr 29 23:53	0°☿	
	13235 Oct 19 07:22	0°♎		13238 May 15 03:00	17°☿21'19	
	13235 Nov 13 13:45	0°♏		13238 May 26 11:33	0°♌	
asc. node	13235 Nov 28 18:34	18°♏16'25		13238 Jun 14 08:46	19°♌51'58	46°44'16
	13235 Dec 08 11:12	0°♐		13238 Jun 24 22:32	0°♍	
	13236 Jan 02 02:37	0°♑		13238 Jul 24 08:50	20°♍17'25	-4.9m
	13236 Jan 26 14:01	0°♒		13238 Aug 03 13:12	22°♍13'21	
	13236 Feb 19 04:06	29°♒01'48		13238 Aug 18 12:26	17°♍49'54	
morning set	13236 Feb 19 22:59	0°♋		13238 Aug 24 05:56	14°♍27'08	2°49'25
	13236 Mar 15 06:16	0°♌		13238 Aug 24 12:18	14°♍17'25	2°47'03
	13236 Mar 19 09:47	5°♌07'32		13238 Aug 24 07:22	14°♍24'57	0.26981 AU
max. Earth dist.	13236 Mar 26 00:35	13°♌18'45	1.72700 AU	13238 Aug 30 12:24	10°♍47'42	
superior conj	13236 Mar 28 06:05	16°♌04'21	-0°21'15	13238 Sep 04 05:31	8°♍37'10	
	13236 Mar 28 01:06	15°♌48'58	0°21'11	13238 Sep 13 23:59	6°♍42'46	
	13236 Apr 08 11:44	0°♋		13238 Sep 23 21:47	8°♍31'52	-4.8m
	13236 May 02 15:03	0°♌		13238 Oct 25 04:40	0°♎	
	13236 May 06 01:17	4°♌16'05		13238 Nov 02 15:02	7°♎57'25	46°16'57
evening rise	13236 May 26 16:41	0°☿		13238 Nov 23 23:41	0°♏	
	13236 Jun 19 18:07	0°♌		13238 Dec 20 20:57	0°♐	
	13236 Jun 19 18:07	0°♌		13238 Dec 26 06:35	6°♐13'02	
asc. node	13236 Jul 10 00:27	25°♌11'22		13239 Jan 15 14:16	0°♑	
	13236 Jul 13 21:39	0°♍		13239 Feb 09 16:24	0°♒	
	13236 Aug 07 06:04	0°♎		13239 Mar 06 09:31	0°♋	
	13236 Aug 31 23:32	0°♏		13239 Mar 30 20:49	0°♌	
	13236 Sep 26 10:00	0°♐		13239 Apr 17 00:18	21°♌09'35	
desc. node	13236 Oct 23 08:27	0°♑		13239 Apr 24 03:35	0°♋	
	13236 Oct 29 22:10	6°♑52'27		13239 May 01 14:35	9°♋15'33	
	13236 Nov 07 02:09	15°♑03'42	46°06'26	13239 May 18 06:23	0°♌	
evening max el	13236 Nov 23 16:30	0°♒		13239 Jun 08 00:34	25°♌57'23	1.71617 AU
	13236 Dec 16 06:38	13°♒49'47	-4.8m	13239 Jun 10 12:52	29°♌06'12	-1°27'19
	13236 Dec 26 08:29	15°♒40'05		13239 Jun 10 11:37	29°♌02'16	1°28'20
retrograde	13237 Jan 12 16:08	9°♒57'25		13239 Jun 11 06:03	0°☿	
evening set	13237 Jan 16 18:41	7°♒25'19	-7°10'20	13239 Jul 05 04:08	0°♌	
inferior conj	13237 Jan 17 04:31	7°♒09'53	7°07'44	13239 Jul 20 17:22	19°♌30'02	
minimum elong	13237 Jan 17 02:01	7°♒13'49	0.28850 AU	13239 Jul 29 02:29	0°♍	
min. Earth dist.	13237 Jan 21 16:54	4°♒24'43		13239 Aug 07 13:57	11°♍51'33	
morning rise	13237 Jan 31 20:43	30°♋3		13239 Aug 22 02:46	0°♎	
direct	13237 Feb 07 04:34	29°♋11'40		13239 Sep 15 06:36	0°♏	
	13237 Feb 13 16:50	0°♒		13239 Oct 09 16:28	0°♐	
	13237 Feb 17 21:41	1°♒18'07	-4.8m	13239 Oct 09 16:28	0°♐	
greatest brilliancy	13237 Feb 20 00:41	2°♒09'53		13239 Nov 03 12:37	0°♑	
asc. node	13237 Mar 28 07:40	0°♋		13239 Nov 27 08:35	28°♑00'27	
morning max el	13237 Mar 28 13:27	0°♋14'12	45°58'50	13239 Nov 29 02:03	0°♒	
	13237 Apr 25 16:22	0°♌		13239 Dec 25 22:02	0°♋	
	13237 May 21 18:21	0°♋		13240 Jan 18 02:48	23°♋48'54	45°54'27
desc. node	13237 Jun 12 00:58	25°♋23'31		13240 Jan 24 17:08	0°♌	
	13237 Jun 15 20:22	0°♌		13240 Feb 26 05:27	22°♌19'26	-4.8m
	13237 Jul 10 09:19	0°☿		13240 Mar 07 02:38	24°♌07'17	
	13237 Aug 03 15:10	0°♌		13240 Mar 19 10:01	21°♌07'30	
	13237 Aug 27 17:53	0°♍		13240 Mar 21 21:34	19°♌51'53	
morning set	13237 Sep 20 19:53	0°♎		13240 Mar 28 05:37	16°♌05'12	2°11'32
	13237 Sep 29 11:50	10°♎47'27		13240 Mar 28 00:44	16°♌12'50	2°09'52
	13237 Oct 02 16:59	14°♎47'32		13240 Mar 28 09:47	15°♌58'40	0.28048 AU
asc. node	13237 Oct 14 22:11	0°♏		13240 Apr 03 03:24	12°♌31'07	
superior conj	13237 Nov 06 18:56	28°♏25'37	1°12'04	13240 Apr 18 08:12	7°♌57'43	
	13237 Nov 06 09:35	27°♏56'36	1°12'38	13240 Apr 28 21:28	10°♌01'18	-4.8m
	13237 Nov 08 01:19	0°♐		13240 May 27 20:40	0°♋	
	13237 Nov 09 00:55	1°♐13'16	1.72553 AU	13240 Jun 07 10:29	10°♋06'38	46°42'18
	13237 Dec 02 06:04	0°♑		13240 Jun 26 07:39	0°♌	
evening rise	13237 Dec 13 21:07	14°♑22'01		13240 Jul 09 12:18	14°♌47'36	
	13237 Dec 26 13:40	0°♒		13240 Jul 22 15:34	0°☿	
	13238 Jan 20 01:05	0°♋		13240 Aug 16 20:22	0°♌	
desc. node	13238 Jan 22 07:14	2°♋45'17		13240 Sep 10 13:23	0°♍	
				13240 Oct 05 01:12	0°♎	

	13240 Oct 29 10:29	0°♌			13243 May 01 09:02	0°♊	
asc. node	13240 Oct 30 07:15	1°♌03'58		greatest brilliancy	13243 May 09 21:37	3°♊57'50	-4.8m
	13240 Nov 22 18:09	0°♌		retrograde	13243 May 19 12:59	5°♊42'08	
morning set	13240 Dec 09 02:20	20°♌11'11			13243 Jun 05 17:05	30°♌	
	13240 Dec 17 00:54	0°♊		evening set	13243 Jun 06 13:58	29°♌28'44	
	13241 Jan 10 07:45	0°♊		inferior conj	13243 Jun 09 06:04	27°♌50'20	9°09'40
				minimum elong	13243 Jun 09 04:09	27°♌53'18	9°08'38
superior conj	13241 Jan 14 21:01	5°♊37'16	1°11'42	min. Earth dist.	13243 Jun 09 12:28	27°♌40'26	0.27510 AU
minimum elong	13241 Jan 15 06:06	6°♊05'17	1°12'20	morning rise	13243 Jun 11 18:19	26°♌17'42	
max. Earth dist.	13241 Jan 15 16:12	6°♊36'25	1.73154 AU	direct	13243 Jun 30 03:21	19°♌52'28	
	13241 Feb 03 15:30	0°♌		greatest brilliancy	13243 Jul 10 01:30	21°♌44'41	-4.9m
desc. node	13241 Feb 18 21:09	18°♌46'05			13243 Jul 24 22:33	0°♊	
evening rise	13241 Feb 21 11:59	21°♌59'25		desc. node	13243 Aug 06 22:13	10°♊34'15	
	13241 Feb 28 00:09	0°♌		morning max el	13243 Aug 19 16:41	22°♊45'51	46°55'55
	13241 Mar 24 09:05	0°♌			13243 Aug 26 17:58	0°♌	
	13241 Apr 17 17:53	0°♌			13243 Sep 23 00:43	0°♌	
	13241 May 12 03:36	0°♌			13243 Oct 18 20:47	0°♌	
	13241 Jun 05 17:08	0°♌			13243 Nov 13 02:02	0°♌	
asc. node	13241 Jun 11 14:00	7°♌07'01		asc. node	13243 Nov 27 20:24	17°♌46'14	
	13241 Jun 30 15:41	0°♌			13243 Dec 07 22:48	0°♌	
	13241 Jul 26 09:11	0°♌			13244 Jan 01 13:48	0°♊	
	13241 Aug 22 23:59	0°♌			13244 Jan 26 00:57	0°♊	
evening max el	13241 Aug 25 10:23	2°♌27'27	46°37'35	morning set	13244 Feb 16 20:44	26°♊51'54	
	13241 Sep 28 02:57	0°♌			13244 Feb 19 09:47	0°♌	
desc. node	13241 Oct 01 14:46	1°♌43'30			13244 Mar 14 17:03	0°♌	
greatest brilliancy	13241 Oct 03 17:27	2°♌36'26	-4.8m	desc. node	13244 Mar 18 11:42	4°♌40'08	
retrograde	13241 Oct 14 16:09	4°♌49'53		max. Earth dist.	13244 Mar 23 16:59	11°♌07'33	1.72732 AU
	13241 Oct 30 11:08	30°♌					
evening set	13241 Oct 31 04:14	29°♌35'40		superior conj	13244 Mar 25 20:40	13°♌47'29	-0°17'46
min. Earth dist.	13241 Nov 04 03:10	27°♌12'44	0.28209 AU	minimum elong	13244 Mar 25 16:30	13°♌34'34	0°17'43
inferior conj	13241 Nov 04 23:22	26°♌41'29	-7°20'48		13244 Apr 07 22:34	0°♌	
minimum elong	13241 Nov 04 13:26	26°♌56'51	7°18'18		13244 May 02 02:00	0°♌	
morning rise	13241 Nov 08 22:58	24°♌16'10		evening rise	13244 May 03 14:47	1°♌54'27	
direct	13241 Nov 26 01:38	18°♌43'02			13244 May 26 03:48	0°♌	
greatest brilliancy	13241 Dec 05 16:33	20°♌23'43	-4.8m		13244 Jun 19 05:27	0°♌	
	13241 Dec 23 02:54	0°♌		asc. node	13244 Jul 09 02:16	24°♌41'03	
morning max el	13242 Jan 13 23:16	18°♌46'58	45°44'02		13244 Jul 13 09:17	0°♌	
asc. node	13242 Jan 22 17:09	27°♌27'46			13244 Aug 06 18:11	0°♌	
	13242 Jan 25 04:30	0°♊			13244 Aug 31 12:25	0°♌	
	13242 Feb 21 18:24	0°♊			13244 Sep 26 00:23	0°♌	
	13242 Mar 19 16:13	0°♌			13244 Oct 23 02:29	0°♊	
	13242 Apr 13 18:49	0°♌		desc. node	13244 Oct 29 00:10	6°♊07'26	
	13242 May 08 10:04	0°♌		evening max el	13244 Nov 04 17:48	12°♊51'14	46°07'17
desc. node	13242 May 14 14:05	7°♌34'38			13244 Nov 24 02:37	0°♊	
	13242 Jun 01 17:31	0°♌		greatest brilliancy	13244 Dec 13 22:17	11°♊39'02	-4.8m
	13242 Jun 25 19:37	0°♊		retrograde	13244 Dec 24 00:02	13°♊29'07	
morning set	13242 Jul 15 13:41	24°♊43'28		evening set	13245 Jan 10 10:58	7°♊42'28	
	13242 Jul 19 18:41	0°♌		inferior conj	13245 Jan 14 10:44	5°♊14'18	-7°21'52
	13242 Aug 12 16:51	0°♌		minimum elong	13245 Jan 14 20:16	4°♊59'17	7°19'25
				min. Earth dist.	13245 Jan 14 17:23	5°♊03'50	0.28864 AU
superior conj	13242 Aug 24 07:28	14°♌32'58	-0°26'09	morning rise	13245 Jan 19 05:36	2°♊18'14	
minimum elong	13242 Aug 24 13:54	14°♌53'07	0°26'13		13245 Jan 23 13:49	30°♌	
max. Earth dist.	13242 Aug 25 18:40	16°♌23'13	1.71608 AU	direct	13245 Feb 04 20:50	27°♌00'54	
asc. node	13242 Sep 04 04:19	28°♌09'22		greatest brilliancy	13245 Feb 15 12:42	29°♌05'50	-4.8m
	13242 Sep 05 15:42	0°♌			13245 Feb 17 18:08	0°♊	
	13242 Sep 29 16:15	0°♌		asc. node	13245 Feb 19 02:46	0°♊37'09	
evening rise	13242 Oct 02 10:26	3°♌26'05		morning max el	13245 Mar 26 04:20	27°♊59'05	45°57'29
	13242 Oct 23 19:37	0°♌			13245 Mar 28 05:17	0°♌	
	13242 Nov 17 03:28	0°♊			13245 Apr 25 07:57	0°♌	
	13242 Dec 11 18:09	0°♊			13245 May 21 07:48	0°♌	
desc. node	13242 Dec 24 20:10	15°♊46'05		desc. node	13245 Jun 11 02:49	24°♌51'17	
	13243 Jan 05 18:12	0°♌			13245 Jun 15 08:47	0°♌	
	13243 Jan 31 06:41	0°♌			13245 Jul 09 21:09	0°♊	
	13243 Feb 26 14:19	0°♌			13245 Aug 03 02:38	0°♌	
	13243 Mar 26 15:38	0°♌			13245 Aug 27 05:06	0°♌	
evening max el	13243 Mar 30 19:35	4°♌08'53	46°15'59		13245 Sep 20 06:54	0°♌	
asc. node	13243 Apr 16 19:16	19°♌38'01		morning set	13245 Sep 27 02:06	8°♌28'17	

asc. node	13245 Oct 01 18:54	14°♌19'29		min. Earth dist.	13248 Mar 26 01:23	13°♍42'47	0.28076 AU
	13245 Oct 14 09:04	0°♌		morning rise	13248 Mar 31 20:23	10°♍13'38	
				direct	13248 Apr 15 23:27	5°♍42'01	
superior conj	13245 Nov 04 10:57	26°♌12'52	1°10'09	greatest brilliancy	13248 Apr 26 14:03	7°♍47'07	-4.8m
minimum elong	13245 Nov 04 01:18	25°♌42'56	1°10'39		13248 May 27 23:11	0°♌	
max. Earth dist.	13245 Nov 06 17:43	29°♌02'58	1.72516 AU	morning max el	13248 Jun 05 01:53	7°♌50'15	46°40'55
	13245 Nov 07 12:05	0°♌			13248 Jun 26 00:41	0°♌	
	13245 Dec 01 16:48	0°♌		desc. node	13248 Jul 08 14:14	14°♌09'15	
evening rise	13245 Dec 11 13:41	12°♌11'46			13248 Jul 22 05:43	0°♌	
	13245 Dec 26 00:29	0°♌			13248 Aug 16 09:10	0°♌	
	13246 Jan 19 12:09	0°♌			13248 Sep 10 01:23	0°♌	
desc. node	13246 Jan 21 09:08	2°♌17'14			13248 Oct 04 12:41	0°♌	
	13246 Feb 13 04:02	0°♌			13248 Oct 28 21:35	0°♌	
	13246 Mar 10 00:04	0°♌		asc. node	13248 Oct 29 09:00	0°♌35'08	
	13246 Apr 04 01:40	0°♌			13248 Nov 22 05:00	0°♌	
	13246 Apr 29 14:24	0°♌		morning set	13248 Dec 06 18:44	18°♌00'19	
asc. node	13246 May 14 04:55	16°♌41'15			13248 Dec 16 11:36	0°♌	
	13246 May 26 05:30	0°♌			13249 Jan 09 18:22	0°♌	
evening max el	13246 Jun 11 21:15	17°♌25'50	46°43'39				
	13246 Jun 25 04:05	0°♌		superior conj	13249 Jan 12 13:52	3°♌28'22	1°13'29
greatest brilliancy	13246 Jul 21 23:55	17°♌54'20	-4.9m	minimum elong	13249 Jan 12 22:39	3°♌55'29	1°14'10
retrograde	13246 Aug 01 01:37	19°♌48'14		max. Earth dist.	13249 Jan 13 11:58	4°♌36'34	1.73146 AU
evening set	13246 Aug 16 03:42	15°♌21'49			13249 Feb 03 02:07	0°♌	
inferior conj	13246 Aug 21 18:47	12°♌02'36	3°12'25	desc. node	13249 Feb 17 23:06	18°♌19'14	
minimum elong	13246 Aug 22 01:54	11°♌51'42	3°09'49	evening rise	13249 Feb 19 04:06	19°♌48'28	
min. Earth dist.	13246 Aug 21 21:53	11°♌57'52	0.26975 AU		13249 Feb 27 10:53	0°♌	
morning rise	13246 Aug 28 00:13	8°♌24'05			13249 Mar 23 19:59	0°♌	
desc. node	13246 Sep 03 07:39	5°♌38'40			13249 Apr 17 05:07	0°♌	
direct	13246 Sep 11 12:08	4°♌17'53			13249 May 11 15:19	0°♌	
greatest brilliancy	13246 Sep 21 11:48	6°♌08'18	-4.8m		13249 Jun 05 05:32	0°♌	
	13246 Oct 25 07:40	0°♌		asc. node	13249 Jun 10 15:50	6°♌34'24	
morning max el	13246 Oct 31 03:53	5°♌34'42	46°18'43		13249 Jun 30 05:14	0°♌	
	13246 Nov 23 16:51	0°♌			13249 Jul 26 00:57	0°♌	
	13246 Dec 20 10:55	0°♌			13249 Aug 22 21:37	0°♌	
asc. node	13246 Dec 25 08:27	5°♌39'07		evening max el	13249 Aug 23 01:34	0°♌09'56	46°38'31
	13247 Jan 15 02:42	0°♌		desc. node	13249 Sep 30 16:43	0°♌03'29	
	13247 Feb 09 04:03	0°♌			13249 Sep 30 13:18	0°♌	
	13247 Mar 05 20:45	0°♌		greatest brilliancy	13249 Oct 01 07:20	0°♌18'00	-4.8m
	13247 Mar 30 07:50	0°♌		retrograde	13249 Oct 12 07:44	2°♌32'56	
desc. node	13247 Apr 16 02:09	20°♌41'29			13249 Oct 23 13:42	30°♌	
	13247 Apr 23 14:30	0°♌		evening set	13249 Oct 28 15:18	27°♌23'59	
morning set	13247 Apr 29 03:19	6°♌52'05		min. Earth dist.	13249 Nov 01 17:01	24°♌57'16	0.28156 AU
	13247 May 17 17:15	0°♌		inferior conj	13249 Nov 02 13:54	24°♌25'01	-7°08'26
max. Earth dist.	13247 Jun 05 08:59	23°♌19'22	1.71648 AU	minimum elong	13249 Nov 02 03:41	24°♌40'48	7°05'47
				morning rise	13249 Nov 06 16:28	21°♌55'46	
superior conj	13247 Jun 08 00:58	26°♌39'40	-1°27'02	direct	13249 Nov 23 16:07	16°♌27'20	
minimum elong	13247 Jun 07 22:41	26°♌32'33	1°28'02	greatest brilliancy	13249 Dec 03 05:53	18°♌07'33	-4.8m
	13247 Jun 10 16:56	0°♌			13249 Dec 23 17:28	0°♌	
	13247 Jul 04 15:04	0°♌		morning max el	13250 Jan 11 14:47	16°♌34'40	45°44'32
evening rise	13247 Jul 18 04:38	17°♌00'34		asc. node	13250 Jan 21 19:11	26°♌43'37	
	13247 Jul 28 13:30	0°♌			13250 Jan 24 23:04	0°♌	
asc. node	13247 Aug 06 15:52	11°♌23'00			13250 Feb 21 08:44	0°♌	
	13247 Aug 21 13:54	0°♌			13250 Mar 19 04:48	0°♌	
	13247 Sep 14 17:58	0°♌			13250 Apr 13 06:31	0°♌	
	13247 Oct 09 04:12	0°♌			13250 May 07 21:17	0°♌	
	13247 Nov 03 01:02	0°♌		desc. node	13250 May 13 15:55	7°♌05'56	
desc. node	13247 Nov 26 10:26	27°♌26'36			13250 Jun 01 04:30	0°♌	
	13247 Nov 28 15:46	0°♌			13250 Jun 25 06:29	0°♌	
	13247 Dec 25 14:41	0°♌		morning set	13250 Jul 13 01:37	22°♌16'39	
evening max el	13248 Jan 15 17:10	21°♌34'05	45°54'25		13250 Jul 19 05:28	0°♌	
	13248 Jan 24 19:32	0°♌			13250 Aug 12 03:34	0°♌	
greatest brilliancy	13248 Feb 23 19:55	20°♌04'23	-4.8m				
retrograde	13248 Mar 04 17:35	21°♌52'51		superior conj	13250 Aug 21 19:46	12°♌07'33	-0°29'46
asc. node	13248 Mar 18 12:01	18°♌09'08		minimum elong	13250 Aug 22 03:01	12°♌30'15	0°29'50
evening set	13248 Mar 19 12:19	17°♌37'02		max. Earth dist.	13250 Aug 23 07:47	14°♌00'23	1.71587 AU
inferior conj	13248 Mar 25 20:43	13°♌50'04	1°50'08	asc. node	13250 Sep 03 06:12	27°♌41'49	
minimum elong	13248 Mar 25 16:36	13°♌56'30	1°48'43		13250 Sep 05 02:23	0°♌	

	13250 Sep 29 02:57	0°♌		greatest brilliancy	13253 Feb 13 04:01	26°♌54'29	-4.8m
evening rise	13250 Sep 30 00:52	1°♌08'16		asc. node	13253 Feb 18 04:50	29°♌08'07	
	13250 Oct 23 06:24	0°♌			13253 Feb 19 20:04	0°♌	
	13250 Nov 16 14:26	0°♌		morning max el	13253 Mar 23 18:30	25°♌43'08	45°56'15
	13250 Dec 11 05:29	0°♌			13253 Mar 28 01:46	0°♌	
desc. node	13250 Dec 23 22:07	15°♌16'58			13253 Apr 24 22:56	0°♌	
	13251 Jan 05 06:12	0°♌			13253 May 20 20:44	0°♌	
	13251 Jan 30 19:51	0°♌		desc. node	13253 Jun 10 04:45	24°♌20'42	
	13251 Feb 26 05:45	0°♌			13253 Jun 14 20:42	0°♌	
	13251 Mar 26 12:59	0°♌			13253 Jul 09 08:28	0°♌	
evening max el	13251 Mar 28 10:29	1°♌52'25	46°14'57		13253 Aug 02 13:35	0°♌	
asc. node	13251 Apr 15 21:10	18°♌31'35			13253 Aug 26 15:50	0°♌	
	13251 May 03 11:05	0°♌			13253 Sep 19 17:29	0°♌	
greatest brilliancy	13251 May 07 10:24	1°♌36'21	-4.8m	morning set	13253 Sep 24 16:16	6°♌10'04	
retrograde	13251 May 17 02:22	3°♌20'47		asc. node	13253 Sep 30 20:38	13°♌52'09	
	13251 May 30 00:11	30°♌			13253 Oct 13 19:32	0°♌	
evening set	13251 Jun 04 01:12	27°♌11'01					
inferior conj	13251 Jun 06 19:42	25°♌28'44	9°07'06	superior conj	13253 Nov 02 02:39	24°♌00'15	1°08'05
minimum elong	13251 Jun 06 16:50	25°♌33'10	9°05'59	minimum elong	13253 Nov 01 16:46	23°♌29'31	1°08'32
min. Earth dist.	13251 Jun 07 01:14	25°♌20'08	0.27531 AU	max. Earth dist.	13253 Nov 04 07:46	26°♌45'13	1.72484 AU
morning rise	13251 Jun 09 08:28	23°♌55'05			13253 Nov 06 22:29	0°♌	
direct	13251 Jun 27 17:32	17°♌30'43			13253 Dec 01 03:13	0°♌	
greatest brilliancy	13251 Jul 07 14:45	19°♌21'56	-4.9m	evening rise	13253 Dec 09 05:49	10°♌01'10	
	13251 Jul 25 16:49	0°♌			13253 Dec 25 11:00	0°♌	
desc. node	13251 Aug 06 00:22	9°♌34'12			13254 Jan 18 22:54	0°♌	
morning max el	13251 Aug 17 06:23	20°♌23'42	46°56'12	desc. node	13254 Jan 20 11:01	1°♌50'11	
	13251 Aug 26 13:40	0°♌			13254 Feb 12 15:10	0°♌	
	13251 Sep 22 15:50	0°♌			13254 Mar 09 11:48	0°♌	
	13251 Oct 18 09:55	0°♌			13254 Apr 03 14:20	0°♌	
	13251 Nov 12 14:04	0°♌			13254 Apr 29 04:43	0°♌	
asc. node	13251 Nov 26 22:19	17°♌17'01		asc. node	13254 May 13 06:52	16°♌02'05	
	13251 Dec 07 10:09	0°♌			13254 May 25 23:26	0°♌	
	13252 Jan 01 00:42	0°♌		evening max el	13254 Jun 09 09:31	15°♌00'31	46°43'13
	13252 Jan 25 11:35	0°♌			13254 Jun 25 11:12	0°♌	
morning set	13252 Feb 14 13:12	24°♌42'16		greatest brilliancy	13254 Jul 19 14:39	15°♌32'34	-4.9m
	13252 Feb 18 20:19	0°♌		retrograde	13254 Jul 29 14:21	17°♌25'18	
	13252 Mar 14 03:33	0°♌		evening set	13254 Aug 13 19:13	12°♌55'19	
desc. node	13252 Mar 17 13:31	4°♌13'20		inferior conj	13254 Aug 19 07:46	9°♌39'58	3°35'00
max. Earth dist.	13252 Mar 21 07:27	8°♌51'22	1.72760 AU	minimum elong	13254 Aug 19 15:36	9°♌28'00	3°32'10
				min. Earth dist.	13254 Aug 19 12:18	9°♌33'03	0.26970 AU
superior conj	13252 Mar 23 11:22	11°♌31'58	-0°14'17	morning rise	13254 Aug 25 11:58	6°♌03'00	
minimum elong	13252 Mar 23 08:01	11°♌21'35	0°14'13	desc. node	13254 Sep 02 09:32	2°♌47'57	
behind sun begin	13252 Mar 22 20:46	10°♌46'46		direct	13254 Sep 09 00:29	1°♌54'48	
behind sun end	13252 Mar 23 19:16	11°♌56'24		greatest brilliancy	13254 Sep 19 01:51	3°♌46'46	-4.8m
	13252 Apr 07 09:06	0°♌			13254 Oct 25 08:31	0°♌	
evening rise	13252 May 01 04:31	29°♌34'47		morning max el	13254 Oct 28 17:27	3°♌15'13	46°20'19
	13252 May 01 12:37	0°♌			13254 Nov 23 09:12	0°♌	
	13252 May 25 14:32	0°♌			13254 Dec 20 00:22	0°♌	
	13252 Jun 18 16:23	0°♌		asc. node	13254 Dec 24 10:28	5°♌06'51	
asc. node	13252 Jul 08 04:15	24°♌12'31			13255 Jan 14 14:46	0°♌	
	13252 Jul 12 20:33	0°♌			13255 Feb 08 15:22	0°♌	
	13252 Aug 06 05:58	0°♌			13255 Mar 05 07:40	0°♌	
	13252 Aug 31 01:03	0°♌			13255 Mar 29 18:31	0°♌	
	13252 Sep 25 14:39	0°♌		desc. node	13255 Apr 15 03:51	20°♌14'01	
	13252 Oct 22 20:44	0°♌			13255 Apr 23 01:05	0°♌	
desc. node	13252 Oct 28 02:05	5°♌22'08		morning set	13255 Apr 26 15:58	4°♌29'30	
evening max el	13252 Nov 02 08:27	10°♌36'39	46°08'11		13255 May 17 03:48	0°♌	
	13252 Nov 24 16:01	0°♌		max. Earth dist.	13255 Jun 02 19:46	20°♌49'46	1.71679 AU
greatest brilliancy	13252 Dec 11 14:02	9°♌28'38	-4.8m				
retrograde	13252 Dec 21 15:04	11°♌18'27		superior conj	13255 Jun 05 13:00	24°♌13'59	-1°26'35
evening set	13253 Jan 08 05:32	5°♌27'45		minimum elong	13255 Jun 05 09:42	24°♌03'41	1°27'33
inferior conj	13253 Jan 12 02:34	3°♌03'37	-7°32'53		13255 Jun 10 03:30	0°♌	
minimum elong	13253 Jan 12 11:46	2°♌49'08	7°30'33		13255 Jul 04 01:41	0°♌	
min. Earth dist.	13253 Jan 12 08:46	2°♌53'52	0.28875 AU	evening rise	13255 Jul 15 16:02	14°♌32'37	
morning rise	13253 Jan 16 18:00	0°♌12'18			13255 Jul 28 00:10	0°♌	
	13253 Jan 17 02:28	30°♌		asc. node	13255 Aug 05 17:43	10°♌55'21	
direct	13253 Feb 02 12:26	24°♌50'23			13255 Aug 21 00:40	0°♌	

	13255 Sep 14 04:55	0°♌			13258 Apr 12 18:12	0°♑	
	13255 Oct 08 15:33	0°♊			13258 May 07 08:33	0°♉	
	13255 Nov 02 13:06	0°♈		desc. node	13258 May 12 17:53	6°♉37'33	
desc. node	13255 Nov 25 12:22	26°♈53'51			13258 May 31 15:31	0°♊	
	13255 Nov 28 05:17	0°♏			13258 Jun 24 17:22	0°♎	
	13255 Dec 25 07:24	0°♎		morning set	13258 Jul 10 13:23	19°♎49'20	
evening max el	13256 Jan 13 08:22	19°♎21'58	45°54'18		13258 Jul 18 16:15	0°♏	
	13256 Jan 24 23:21	0°♑			13258 Aug 11 14:19	0°♐	
greatest brilliancy	13256 Feb 21 09:58	17°♑49'20	-4.8m				
retrograde	13256 Mar 02 08:47	19°♑38'34		superior conj	13258 Aug 19 08:00	9°♐41'52	-0°33'21
evening set	13256 Mar 17 03:10	15°♑22'17		minimum elong	13258 Aug 19 16:00	10°♐06'55	0°33'25
asc. node	13256 Mar 17 13:56	15°♑07'32		max. Earth dist.	13258 Aug 20 20:30	11°♐36'13	1.71564 AU
inferior conj	13256 Mar 23 11:40	11°♑35'06	1°28'26	asc. node	13258 Sep 02 07:56	27°♐13'40	
minimum elong	13256 Mar 23 08:20	11°♑40'17	1°27'17		13258 Sep 04 13:06	0°♑	
min. Earth dist.	13256 Mar 23 16:33	11°♑27'28	0.28104 AU	evening rise	13258 Sep 27 15:16	28°♑50'06	
morning rise	13256 Mar 29 13:05	7°♑56'34			13258 Sep 28 13:42	0°♌	
direct	13256 Apr 13 15:02	3°♑26'41			13258 Oct 22 17:13	0°♊	
greatest brilliancy	13256 Apr 24 05:56	5°♑32'33	-4.8m		13258 Nov 16 01:26	0°♈	
	13256 May 28 00:03	0°♉			13258 Dec 10 16:50	0°♏	
morning max el	13256 Jun 02 17:34	5°♉35'24	46°39'31	desc. node	13258 Dec 23 00:05	14°♏47'59	
	13256 Jun 25 17:08	0°♊			13259 Jan 04 18:13	0°♎	
desc. node	13256 Jul 07 16:16	13°♊32'16			13259 Jan 30 09:07	0°♑	
	13256 Jul 21 19:28	0°♎			13259 Feb 25 21:32	0°♉	
	13256 Aug 15 21:38	0°♏		evening max el	13259 Mar 26 00:28	29°♉33'09	46°13'38
	13256 Sep 09 13:05	0°♐			13259 Mar 26 11:26	0°♊	
	13256 Oct 03 23:51	0°♑		asc. node	13259 Apr 14 23:11	17°♊22'43	
asc. node	13256 Oct 28 10:53	0°♌07'44		greatest brilliancy	13259 May 04 23:44	29°♊14'28	-4.8m
	13256 Oct 28 08:23	0°♌			13259 May 07 11:23	0°♎	
	13256 Nov 21 15:32	0°♊		retrograde	13259 May 14 15:09	0°♎58'22	
morning set	13256 Dec 04 11:24	15°♊51'10			13259 May 21 13:21	30°♌♊	
	13256 Dec 15 22:01	0°♈		evening set	13259 Jun 01 11:48	24°♊53'05	
	13257 Jan 09 04:46	0°♏		inferior conj	13259 Jun 04 09:14	23°♊06'12	9°03'28
				minimum elong	13259 Jun 04 05:28	23°♊12'04	9°02'16
superior conj	13257 Jan 10 06:49	1°♏20'24	1°15'10	min. Earth dist.	13259 Jun 04 14:21	22°♊58'14	0.27552 AU
minimum elong	13257 Jan 10 15:14	1°♏46'21	1°15'53	morning rise	13259 Jun 06 23:05	21°♊30'42	
max. Earth dist.	13257 Jan 11 08:46	2°♏40'30	1.73143 AU	direct	13259 Jun 25 07:08	15°♊07'53	
	13257 Feb 02 12:35	0°♎		greatest brilliancy	13259 Jul 05 04:34	16°♊58'51	-4.9m
evening rise	13257 Feb 16 20:05	17°♎37'31			13259 Jul 26 06:48	0°♎	
desc. node	13257 Feb 17 00:52	17°♎52'14		desc. node	13259 Aug 05 02:16	8°♎34'17	
	13257 Feb 26 21:29	0°♑		morning max el	13259 Aug 14 18:57	17°♎57'51	46°56'37
	13257 Mar 23 06:49	0°♉			13259 Aug 26 09:01	0°♏	
	13257 Apr 16 16:17	0°♊			13259 Sep 22 06:56	0°♐	
	13257 May 11 02:58	0°♎			13259 Oct 17 23:08	0°♑	
	13257 Jun 04 17:54	0°♏			13259 Nov 12 02:13	0°♌	
asc. node	13257 Jun 09 17:52	6°♏02'34		asc. node	13259 Nov 26 00:14	16°♌47'25	
	13257 Jun 29 18:47	0°♐			13259 Dec 06 21:38	0°♊	
	13257 Jul 25 16:51	0°♑			13259 Dec 31 11:45	0°♈	
evening max el	13257 Aug 20 17:27	27°♑54'27	46°39'26		13260 Jan 24 22:21	0°♏	
	13257 Aug 22 19:57	0°♌		morning set	13260 Feb 12 06:04	22°♏33'30	
greatest brilliancy	13257 Sep 28 21:47	28°♌00'51	-4.8m		13260 Feb 18 06:58	0°♎	
desc. node	13257 Sep 29 18:41	28°♌20'29			13260 Mar 13 14:13	0°♑	
	13257 Oct 06 05:26	0°♊		desc. node	13260 Mar 16 15:17	3°♑45'50	
retrograde	13257 Oct 09 23:25	0°♊16'30		max. Earth dist.	13260 Mar 18 23:12	6°♑38'41	1.72796 AU
	13257 Oct 13 15:47	30°♌♌					
evening set	13257 Oct 26 02:39	25°♌13'04		superior conj	13260 Mar 21 02:27	9°♑17'10	-0°10'49
min. Earth dist.	13257 Oct 30 07:02	22°♌42'32	0.28096 AU	minimum elong	13260 Mar 20 23:54	9°♑09'18	0°10'45
inferior conj	13257 Oct 31 04:31	22°♌09'20	-6°55'20	behind sun begin	13260 Mar 20 05:52	8°♑13'31	
minimum elong	13257 Oct 30 18:07	22°♌25'24	6°52'34	behind sun end	13260 Mar 21 17:57	10°♑05'05	
morning rise	13257 Nov 04 10:05	19°♌35'59			13260 Apr 06 19:51	0°♉	
direct	13257 Nov 21 06:56	14°♌12'43		evening rise	13260 Apr 28 18:25	27°♉14'53	
greatest brilliancy	13257 Nov 30 18:56	15°♌51'50	-4.8m		13260 Apr 30 23:30	0°♊	
	13257 Dec 24 03:52	0°♊			13260 May 25 01:35	0°♎	
morning max el	13258 Jan 09 05:43	14°♊21'39	45°44'56		13260 Jun 18 03:41	0°♏	
asc. node	13258 Jan 20 21:10	26°♊00'35		asc. node	13260 Jul 07 06:05	23°♏42'20	
	13258 Jan 24 16:56	0°♈			13260 Jul 12 08:11	0°♐	
	13258 Feb 20 22:46	0°♏			13260 Aug 05 18:07	0°♑	
	13258 Mar 18 17:16	0°♎			13260 Aug 30 14:05	0°♌	

	13260 Sep 25 05:25	0°♊			13263 Mar 04 18:56	0°♋		
	13260 Oct 22 15:50	0°♌			13263 Mar 29 05:33	0°♍		
desc. node	13260 Oct 27 04:06	4°♌35'35		desc. node	13263 Apr 14 05:51	19°♍46'23		
evening max el	13260 Oct 30 22:22	8°♌19'21	46°09'11		13263 Apr 22 11:59	0°♎		
	13260 Nov 25 10:31	0°♏		morning set	13263 Apr 24 05:21	2°♎08'15		
greatest brilliancy	13260 Dec 09 05:52	7°♏17'40	-4.8m		13263 May 16 14:40	0°♐		
retrograde	13260 Dec 19 06:28	9°♏07'38		max. Earth dist.	13263 May 31 09:18	18°♐27'52	1.71712 AU	
evening set	13261 Jan 06 00:11	3°♏12'45						
inferior conj	13261 Jan 09 18:36	0°♏52'41	-7°43'09	superior conj	13263 Jun 03 01:32	21°♐48'51	-1°25'58	
minimum elong	13261 Jan 10 03:26	0°♏38'48	7°40'56	minimum elong	13263 Jun 02 21:15	21°♐35'28	1°26'55	
min. Earth dist.	13261 Jan 10 00:23	0°♏43'35	0.28883 AU		13263 Jun 09 14:23	0°♑		
	13261 Jan 11 04:08	30°♎♌			13263 Jul 03 12:39	0°♒		
morning rise	13261 Jan 14 06:37	28°♌06'20		evening rise	13263 Jul 13 03:40	12°♒04'11		
direct	13261 Jan 31 03:53	22°♌39'30			13263 Jul 27 11:16	0°♓		
greatest brilliancy	13261 Feb 10 19:50	24°♌43'28	-4.8m	asc. node	13263 Aug 04 19:30	10°♓26'06		
asc. node	13261 Feb 17 06:40	27°♌41'26			13263 Aug 20 11:55	0°♈		
	13261 Feb 21 05:08	0°♈			13263 Sep 13 16:24	0°♉		
morning max el	13261 Mar 21 08:59	23°♈27'28	45°55'10		13263 Oct 08 03:27	0°♊		
	13261 Mar 27 21:48	0°♋			13263 Nov 02 01:46	0°♌		
	13261 Apr 24 13:57	0°♍		desc. node	13263 Nov 24 14:23	26°♌19'39		
	13261 May 20 09:52	0°♎			13263 Nov 27 19:26	0°♍		
desc. node	13261 Jun 09 06:41	23°♎49'10			13263 Dec 25 00:59	0°♋		
	13261 Jun 14 08:56	0°♐		evening max el	13264 Jan 11 00:16	17°♋10'25	45°54'20	
	13261 Jul 08 20:12	0°♑			13264 Jan 25 05:40	0°♍		
	13261 Aug 02 01:00	0°♒		greatest brilliancy	13264 Feb 19 00:20	15°♍33'59	-4.8m	
	13261 Aug 26 03:01	0°♓		retrograde	13264 Feb 29 00:09	17°♍23'31		
	13261 Sep 19 04:30	0°♈		evening set	13264 Mar 14 18:25	13°♍06'54		
morning set	13261 Sep 22 06:03	3°♈49'16		asc. node	13264 Mar 16 16:01	12°♍02'30		
asc. node	13261 Sep 29 22:30	13°♈23'59		inferior conj	13264 Mar 21 02:45	9°♍19'33	1°06'39	
	13261 Oct 13 06:24	0°♉		minimum elong	13264 Mar 21 00:14	9°♍23'29	1°05'48	
				min. Earth dist.	13264 Mar 21 07:44	9°♍11'47	0.28127 AU	
superior conj	13261 Oct 30 18:10	21°♉45'44	1°05'54	morning rise	13264 Mar 27 05:43	5°♍39'05		
minimum elong	13261 Oct 30 08:05	21°♉14'23	1°06'19	direct	13264 Apr 11 06:57	1°♍11'03		
max. Earth dist.	13261 Nov 01 21:14	24°♉24'25	1.72451 AU	greatest brilliancy	13264 Apr 21 21:18	3°♍16'47	-4.8m	
	13261 Nov 06 09:17	0°♊			13264 May 27 23:59	0°♎		
	13261 Nov 30 14:02	0°♌		morning max el	13264 May 31 09:13	3°♎19'55	46°38'08	
evening rise	13261 Dec 06 22:04	7°♌49'43			13264 Jun 25 09:31	0°♐		
	13261 Dec 24 21:56	0°♍		desc. node	13264 Jul 06 18:09	12°♐54'33		
	13262 Jan 18 10:03	0°♋			13264 Jul 21 09:20	0°♑		
desc. node	13262 Jan 19 12:49	1°♋21'37			13264 Aug 15 10:18	0°♒		
	13262 Feb 12 02:41	0°♍			13264 Sep 09 01:04	0°♓		
	13262 Mar 08 23:53	0°♎			13264 Oct 03 11:22	0°♈		
	13262 Apr 03 03:23	0°♐		asc. node	13264 Oct 27 12:50	29°♈39'14		
	13262 Apr 28 19:33	0°♑			13264 Oct 27 19:34	0°♉		
asc. node	13262 May 12 08:54	15°♑21'36			13264 Nov 21 02:30	0°♊		
	13262 May 25 18:18	0°♒		morning set	13264 Dec 02 03:38	13°♊39'25		
evening max el	13262 Jun 06 22:03	12°♒34'41	46°42'29		13264 Dec 15 08:50	0°♌		
	13262 Jun 25 21:53	0°♓						
greatest brilliancy	13262 Jul 17 04:32	13°♓07'45	-4.9m	superior conj	13265 Jan 07 23:28	29°♌10'27	1°16'45	
retrograde	13262 Jul 27 03:24	15°♓00'02		minimum elong	13265 Jan 08 07:27	29°♌35'04	1°17'30	
evening set	13262 Aug 11 10:39	10°♓25'59			13265 Jan 08 15:31	0°♍		
inferior conj	13262 Aug 16 20:28	7°♓14'40	3°57'21	max. Earth dist.	13265 Jan 09 05:18	0°♍42'32	1.73131 AU	
minimum elong	13262 Aug 17 04:59	7°♓01'41	3°54'20		13265 Feb 01 23:22	0°♋		
min. Earth dist.	13262 Aug 17 02:09	7°♓06'00	0.26973 AU	evening rise	13265 Feb 14 11:56	15°♋25'12		
morning rise	13262 Aug 22 23:16	3°♓39'52		desc. node	13265 Feb 16 02:41	17°♋24'24		
desc. node	13262 Sep 01 11:31	0°♔00'12			13265 Feb 26 08:23	0°♍		
	13262 Sep 01 11:54	30°♎♒			13265 Mar 22 17:58	0°♎		
direct	13262 Sep 06 13:00	29°♒29'01			13265 Apr 16 03:45	0°♐		
	13262 Sep 11 17:15	0°♓			13265 May 10 14:52	0°♑		
greatest brilliancy	13262 Sep 16 15:17	1°♓22'12	-4.8m		13265 Jun 04 06:30	0°♒		
	13262 Oct 25 08:55	0°♈		asc. node	13265 Jun 08 19:45	5°♒29'41		
morning max el	13262 Oct 26 07:45	0°♈55'38	46°22'03		13265 Jun 29 08:35	0°♓		
	13262 Nov 23 01:47	0°♉			13265 Jul 25 09:10	0°♈		
	13262 Dec 19 14:10	0°♊		evening max el	13265 Aug 18 09:02	25°♈37'37	46°40'01	
asc. node	13262 Dec 23 12:22	4°♊33'09			13265 Aug 22 19:29	0°♉		
	13263 Jan 14 03:12	0°♌		greatest brilliancy	13265 Sep 26 12:40	25°♉43'10	-4.8m	
	13263 Feb 08 03:03	0°♍		desc. node	13265 Sep 28 20:45	26°♉32'39		

retrograde	13265 Oct 07 14:29	27° \mathbb{M} 58'37		minimum elong	13268 Mar 18 15:34	6° Υ 56'24	0°07'14
evening set	13265 Oct 23 13:57	23° \mathbb{M} 00'50		behind sun begin	13268 Mar 17 17:56	5° Υ 49'32	
min. Earth dist.	13265 Oct 27 21:15	20° \mathbb{M} 26'00	0.28041 AU	behind sun end	13268 Mar 19 13:11	8° Υ 03'17	
inferior conj	13265 Oct 28 19:01	19° \mathbb{M} 52'22	-6°41'20		13268 Apr 06 06:32	0° \mathcal{B}	
minimum elong	13265 Oct 28 08:29	20° \mathbb{M} 08'38	6°38'29	evening rise	13268 Apr 26 08:14	24° \mathcal{B} 55'11	
morning rise	13265 Nov 02 03:34	17° \mathbb{M} 14'41			13268 Apr 30 10:17	0° \mathbb{I}	
direct	13265 Nov 18 21:34	11° \mathbb{M} 56'47			13268 May 24 12:32	0° \mathcal{E}	
greatest brilliancy	13265 Nov 28 08:14	13° \mathbb{M} 34'50	-4.8m		13268 Jun 17 14:53	0° \mathcal{Q}	
	13265 Dec 24 11:59	0° \mathcal{A}		asc. node	13268 Jul 06 07:55	23° \mathcal{Q} 12'34	
morning max el	13266 Jan 06 19:41	12° \mathcal{A} 05'06	45°45'24		13268 Jul 11 19:44	0° \mathbb{M}	
asc. node	13266 Jan 19 23:04	25° \mathcal{A} 16'55			13268 Aug 05 06:10	0° \mathcal{E}	
	13266 Jan 24 10:46	0° \mathcal{B}			13268 Aug 30 03:01	0° \mathbb{M}	
	13266 Feb 20 12:56	0° \approx			13268 Sep 24 20:06	0° \mathcal{A}	
	13266 Mar 18 05:51	0° \mathcal{H}			13268 Oct 22 11:09	0° \mathcal{B}	
	13266 Apr 12 06:00	0° Υ		desc. node	13268 Oct 26 06:07	3° \mathcal{B} 49'09	
	13266 May 06 19:55	0° \mathcal{B}		evening max el	13268 Oct 28 12:10	6° \mathcal{B} 02'34	46°10'12
desc. node	13266 May 11 19:42	6° \mathcal{B} 08'21			13268 Nov 26 11:16	0° \approx	
	13266 May 31 02:39	0° \mathbb{I}		greatest brilliancy	13268 Dec 06 20:57	5° \approx 06'32	-4.8m
	13266 Jun 24 04:20	0° \mathcal{E}		retrograde	13268 Dec 16 22:13	6° \approx 57'32	
morning set	13266 Jul 08 01:27	17° \mathcal{E} 22'38		evening set	13269 Jan 03 18:39	0° \approx 58'18	
	13266 Jul 18 03:07	0° \mathcal{Q}			13269 Jan 05 08:49	30° \mathcal{R} \mathcal{B}	
	13266 Aug 11 01:05	0° \mathbb{M}		inferior conj	13269 Jan 07 10:35	28° \mathcal{B} 42'11	-7°52'35
				minimum elong	13269 Jan 07 18:58	28° \mathcal{B} 29'00	7°50'31
superior conj	13266 Aug 16 20:39	7° \mathbb{M} 17'19	-0°36'49	min. Earth dist.	13269 Jan 07 15:44	28° \mathcal{B} 34'05	0.28897 AU
minimum elong	13266 Aug 17 05:20	7° \mathbb{M} 44'32	0°36'54	morning rise	13269 Jan 11 19:14	26° \mathcal{B} 00'57	
max. Earth dist.	13266 Aug 18 07:49	9° \mathbb{M} 07'32	1.71540 AU	direct	13269 Jan 28 19:22	20° \mathcal{B} 28'54	
asc. node	13266 Sep 01 09:50	26° \mathbb{M} 45'59		greatest brilliancy	13269 Feb 08 11:43	22° \mathcal{B} 33'01	-4.8m
	13266 Sep 03 23:52	0° \mathcal{E}		asc. node	13269 Feb 16 08:48	26° \mathcal{B} 18'22	
evening rise	13266 Sep 25 05:50	26° \mathcal{E} 32'15			13269 Feb 22 04:29	0° \approx	
	13266 Sep 28 00:30	0° \mathbb{M}		morning max el	13269 Mar 19 00:18	21° \approx 14'09	45°54'06
	13266 Oct 22 04:07	0° \mathcal{A}			13269 Mar 27 17:07	0° \mathcal{H}	
	13266 Nov 15 12:33	0° \mathcal{B}			13269 Apr 24 04:39	0° Υ	
	13266 Dec 10 04:22	0° \approx			13269 May 19 22:45	0° \mathcal{B}	
desc. node	13266 Dec 22 01:51	14° \approx 17'47		desc. node	13269 Jun 08 08:33	23° \mathcal{B} 18'12	
	13267 Jan 04 06:29	0° \mathcal{H}			13269 Jun 13 20:53	0° \mathbb{I}	
	13267 Jan 29 22:42	0° Υ			13269 Jul 08 07:38	0° \mathcal{E}	
	13267 Feb 25 13:44	0° \mathcal{B}			13269 Aug 01 12:07	0° \mathcal{Q}	
evening max el	13267 Mar 23 13:34	27° \mathcal{B} 11'35	46°12'31		13269 Aug 25 13:55	0° \mathbb{M}	
	13267 Mar 26 10:58	0° \mathbb{I}			13269 Sep 18 15:13	0° \mathcal{E}	
asc. node	13267 Apr 14 01:14	16° \mathbb{I} 11'57		morning set	13269 Sep 19 19:56	1° \mathcal{E} 29'30	
greatest brilliancy	13267 May 02 13:22	26° \mathbb{I} 53'02	-4.8m	asc. node	13269 Sep 29 00:24	12° \mathcal{E} 56'44	
retrograde	13267 May 12 03:56	28° \mathbb{I} 36'30			13269 Oct 12 16:59	0° \mathbb{M}	
evening set	13267 May 29 22:07	22° \mathbb{I} 36'03					
inferior conj	13267 Jun 01 22:53	20° \mathbb{I} 44'07	8°58'52	superior conj	13269 Oct 28 09:48	19° \mathbb{M} 32'30	1°03'37
minimum elong	13267 Jun 01 18:14	20° \mathbb{I} 51'22	8°57'34	minimum elong	13269 Oct 27 23:35	19° \mathbb{M} 00'45	1°03'59
min. Earth dist.	13267 Jun 02 03:48	20° \mathbb{I} 36'28	0.27571 AU	max. Earth dist.	13269 Oct 30 11:30	22° \mathbb{M} 07'00	1.72417 AU
morning rise	13267 Jun 04 14:16	19° \mathbb{I} 06'08			13269 Nov 05 19:46	0° \mathcal{A}	
direct	13267 Jun 22 20:23	12° \mathbb{I} 45'16			13269 Nov 30 00:30	0° \mathcal{B}	
greatest brilliancy	13267 Jul 02 18:59	14° \mathbb{I} 36'48	-4.9m	evening rise	13269 Dec 04 14:36	5° \mathcal{B} 40'11	
	13267 Jul 26 17:06	0° \mathcal{E}			13269 Dec 24 08:32	0° \approx	
desc. node	13267 Aug 04 04:13	7° \mathcal{E} 36'09			13270 Jan 17 20:54	0° \mathcal{H}	
morning max el	13267 Aug 12 07:35	15° \mathcal{E} 32'24	46°57'09	desc. node	13270 Jan 18 14:44	0° \mathcal{H} 54'20	
	13267 Aug 26 03:43	0° \mathcal{Q}			13270 Feb 11 13:57	0° Υ	
	13267 Sep 21 21:41	0° \mathbb{M}			13270 Mar 08 11:47	0° \mathcal{B}	
	13267 Oct 17 12:05	0° \mathcal{E}			13270 Apr 02 16:19	0° \mathbb{I}	
	13267 Nov 11 14:10	0° \mathbb{M}			13270 Apr 28 10:21	0° \mathcal{E}	
asc. node	13267 Nov 25 02:05	16° \mathbb{M} 18'00		asc. node	13270 May 11 10:48	14° \mathcal{E} 41'10	
	13267 Dec 06 08:58	0° \mathcal{A}			13270 May 25 13:23	0° \mathcal{Q}	
	13267 Dec 30 22:42	0° \mathcal{B}		evening max el	13270 Jun 04 11:26	10° \mathcal{Q} 12'01	46°41'59
	13268 Jan 24 09:06	0° \approx			13270 Jun 26 11:39	0° \mathbb{M}	
morning set	13268 Feb 09 22:41	20° \approx 23'54		greatest brilliancy	13270 Jul 14 17:59	10° \mathbb{M} 43'43	-4.9m
	13268 Feb 17 17:37	0° \mathcal{H}		retrograde	13270 Jul 24 16:58	12° \mathbb{M} 35'56	
	13268 Mar 13 00:51	0° Υ		evening set	13270 Aug 09 02:18	7° \mathbb{M} 57'42	
desc. node	13268 Mar 15 17:13	3° Υ 18'56		inferior conj	13270 Aug 14 09:11	4° \mathbb{M} 50'26	4°19'11
max. Earth dist.	13268 Mar 16 16:05	4° Υ 29'36	1.72828 AU	minimum elong	13270 Aug 14 18:19	4° \mathbb{M} 36'32	4°16'01
				min. Earth dist.	13270 Aug 14 15:37	4° \mathbb{M} 40'39	0.26975 AU
superior conj	13268 Mar 18 17:17	7° Υ 01'43	-0°07'18	morning rise	13270 Aug 20 10:19	1° \mathbb{M} 18'11	

	13270 Aug 23 00:25	30° κ 8 Ω	evening rise	13273 Feb 12 04:04	13° H 14'57	
desc. node	13270 Aug 31 13:40	27° Ω 19'32	desc. node	13273 Feb 15 04:38	16° H 58'09	
direct	13270 Sep 04 02:03	27° Ω 04'28		13273 Feb 25 18:55	0° Υ	
greatest brilliancy	13270 Sep 14 04:06	28° Ω 58'06 -4.8m		13273 Mar 22 04:44	0° B	
	13270 Sep 16 18:29	0° M		13273 Apr 15 14:53	0° Π	
morning max el	13270 Oct 23 22:39	28° M 38'40 46°23'43		13273 May 10 02:31	0° G	
	13270 Oct 25 07:44	0° $\underline{\text{A}}$		13273 Jun 03 18:54	0° Ω	
	13270 Nov 22 17:37	0° M	asc. node	13273 Jun 07 21:36	4° Ω 57'20	
	13270 Dec 19 03:23	0° A		13273 Jun 28 22:19	0° M	
asc. node	13270 Dec 22 14:15	4° A 00'51		13273 Jul 25 01:35	0° $\underline{\text{A}}$	
	13271 Jan 13 15:08	0° Z	evening max el	13273 Aug 15 23:48	23° $\underline{\text{A}}$ 19'13 46°40'45	
	13271 Feb 07 14:18	0° \approx		13273 Aug 22 19:53	0° M	
	13271 Mar 04 05:48	0° H	greatest brilliancy	13273 Sep 24 04:16	23° M 26'57 -4.8m	
	13271 Mar 28 16:15	0° Υ	desc. node	13273 Sep 27 22:42	24° M 41'23	
desc. node	13271 Apr 13 07:40	19° Υ 19'08	retrograde	13273 Oct 05 05:08	25° M 41'28	
morning set	13271 Apr 21 18:31	29° Υ 47'21	evening set	13273 Oct 21 01:24	20° M 49'12	
	13271 Apr 21 22:36	0° B	min. Earth dist.	13273 Oct 25 11:53	18° M 09'47 0.27981 AU	
	13271 May 16 01:15	0° Π	inferior conj	13273 Oct 26 09:31	17° M 36'18 -6°26'48	
max. Earth dist.	13271 May 28 20:48	16° Π 00'29 1.71742 AU	minimum elong	13273 Oct 25 22:55	17° M 52'42 6°23'50	
			morning rise	13273 Oct 30 21:00	14° M 54'15	
superior conj	13271 May 31 13:39	19° Π 23'21 -1°25'10	direct	13273 Nov 16 11:40	9° M 41'43	
minimum elong	13271 May 31 08:27	19° Π 07'04 1°26'06	greatest brilliancy	13273 Nov 25 21:59	11° M 19'10 -4.8m	
	13271 Jun 09 01:00	0° G		13273 Dec 24 17:15	0° A	
	13271 Jul 02 23:19	0° Ω	morning max el	13274 Jan 04 09:00	9° A 47'55 45°46'00	
evening rise	13271 Jul 10 14:53	9° Ω 35'27	asc. node	13274 Jan 19 01:08	24° A 35'21	
	13271 Jul 26 22:00	0° M		13274 Jan 24 03:46	0° Z	
asc. node	13271 Aug 03 21:25	9° M 58'24		13274 Feb 20 02:35	0° \approx	
	13271 Aug 19 22:47	0° $\underline{\text{A}}$		13274 Mar 17 18:01	0° H	
	13271 Sep 13 03:31	0° M		13274 Apr 11 17:25	0° Υ	
	13271 Oct 07 15:00	0° A		13274 May 06 06:57	0° B	
	13271 Nov 01 14:06	0° Z	desc. node	13274 May 10 21:32	5° B 40'15	
desc. node	13271 Nov 23 16:15	25° Z 46'08		13274 May 30 13:29	0° Π	
	13271 Nov 27 09:17	0° \approx		13274 Jun 23 15:03	0° G	
	13271 Dec 24 18:27	0° H	morning set	13274 Jul 05 13:12	14° G 55'37	
evening max el	13272 Jan 08 16:17	15° H 00'36 45°54'19		13274 Jul 17 13:46	0° Ω	
	13272 Jan 25 13:43	0° Υ		13274 Aug 10 11:43	0° M	
greatest brilliancy	13272 Feb 16 15:11	13° Υ 20'46 -4.8m				
retrograde	13272 Feb 26 15:08	15° Υ 09'52	superior conj	13274 Aug 14 08:51	4° M 51'53 -0°40'15	
evening set	13272 Mar 12 09:55	10° Υ 52'53	minimum elong	13274 Aug 14 18:11	5° M 21'07 0°40'22	
asc. node	13272 Mar 15 18:01	8° Υ 56'51	max. Earth dist.	13274 Aug 15 15:05	6° M 26'39 1.71520 AU	
inferior conj	13272 Mar 18 17:53	7° Υ 05'33 0°44'56	asc. node	13274 Aug 31 11:42	26° M 18'35	
minimum elong	13272 Mar 18 16:11	7° Υ 08'13 0°44'23		13274 Sep 03 10:29	0° $\underline{\text{A}}$	
min. Earth dist.	13272 Mar 18 23:08	6° Υ 57'21 0.28154 AU	evening rise	13274 Sep 22 19:50	24° $\underline{\text{A}}$ 13'07	
morning rise	13272 Mar 24 22:11	3° Υ 23'06		13274 Sep 27 11:08	0° M	
	13272 Apr 01 18:29	30° κ H		13274 Oct 21 14:50	0° A	
direct	13272 Apr 08 22:52	28° H 56'58		13274 Nov 14 23:29	0° Z	
	13272 Apr 16 08:36	0° Υ		13274 Dec 09 15:42	0° \approx	
greatest brilliancy	13272 Apr 19 12:44	1° Υ 02'15 -4.8m	desc. node	13274 Dec 21 03:50	13° \approx 48'50	
	13272 May 27 22:33	0° B		13275 Jan 03 18:34	0° H	
morning max el	13272 May 29 00:08	1° B 03'29 46°36'32		13275 Jan 29 12:08	0° Υ	
	13272 Jun 25 01:22	0° Π		13275 Feb 25 05:57	0° B	
desc. node	13272 Jul 05 20:07	12° Π 18'05	evening max el	13275 Mar 21 02:34	24° B 50'53 46°11'33	
	13272 Jul 20 22:50	0° G		13275 Mar 26 11:13	0° Π	
	13272 Aug 14 22:38	0° Ω	asc. node	13275 Apr 13 03:09	15° Π 00'00	
	13272 Sep 08 12:40	0° M	greatest brilliancy	13275 Apr 30 02:50	24° Π 32'44 -4.8m	
	13272 Oct 02 22:29	0° $\underline{\text{A}}$	retrograde	13275 May 09 17:12	26° Π 16'25	
asc. node	13272 Oct 26 14:34	29° $\underline{\text{A}}$ 11'18	evening set	13275 May 27 08:16	20° Π 20'56	
	13272 Oct 27 06:20	0° M	inferior conj	13275 May 30 12:45	18° Π 23'33 8°53'17	
	13272 Nov 20 13:03	0° A	minimum elong	13275 May 30 07:14	18° Π 32'08 8°51'52	
morning set	13272 Nov 29 19:59	11° A 29'09	min. Earth dist.	13275 May 30 17:21	18° Π 16'23 0.27594 AU	
	13272 Dec 14 19:16	0° Z	morning rise	13275 Jun 02 06:07	16° Π 42'33	
			direct	13275 Jun 20 09:46	10° Π 23'59	
superior conj	13273 Jan 05 16:27	27° Z 02'40 1°18'12	greatest brilliancy	13275 Jun 30 09:39	12° Π 16'23 -4.9m	
minimum elong	13273 Jan 05 23:58	27° Z 25'52 1°19'00		13275 Jul 27 00:17	0° G	
max. Earth dist.	13273 Jan 07 00:30	28° Z 41'36 1.73117 AU	desc. node	13275 Aug 03 06:21	6° G 40'24	
	13273 Jan 08 01:54	0° \approx	morning max el	13275 Aug 09 21:13	13° G 09'57 46°57'26	
	13273 Feb 01 09:46	0° H		13275 Aug 25 21:48	0° Ω	

	13275 Sep 21 12:12	0°♍			13278 Mar 07 23:52	0°♎		
	13275 Oct 17 00:57	0°♏			13278 Apr 02 05:29	0°♐		
	13275 Nov 11 02:03	0°♑			13278 Apr 28 01:31	0°♒		
asc. node	13275 Nov 24 04:00	15°♑49'01		asc. node	13278 May 10 12:46	14°♒00'04		
	13275 Dec 05 20:13	0°♓			13278 May 25 09:13	0°♑		
	13275 Dec 30 09:32	0°♒		evening max el	13278 Jun 02 01:57	7°♑51'55	46°41'25	
	13276 Jan 23 19:42	0°♑			13278 Jun 27 06:17	0°♐		
morning set	13276 Feb 07 15:26	18°♑15'04		greatest brilliancy	13278 Jul 12 07:34	8°♐19'53	-4.9m	
	13276 Feb 17 04:08	0°♑		retrograde	13278 Jul 22 06:40	10°♐11'44		
	13276 Mar 12 11:23	0°♑		evening set	13278 Aug 06 18:15	5°♐29'31		
max. Earth dist.	13276 Mar 14 10:49	2°♑26'35	1.72858 AU	inferior conj	13278 Aug 11 22:03	2°♐26'16	4°40'26	
desc. node	13276 Mar 14 19:01	2°♑51'57		minimum elong	13278 Aug 12 07:43	2°♐11'33	4°37'09	
				min. Earth dist.	13278 Aug 12 05:00	2°♐15'42	0.26977 AU	
superior conj	13276 Mar 16 08:20	4°♑47'20	-0°03'48		13278 Aug 15 23:54	30°♑00		
minimum elong	13276 Mar 16 07:28	4°♑44'36	0°03'44	morning rise	13278 Aug 17 21:14	28°♑56'48		
behind sun begin	13276 Mar 15 08:02	3°♑32'11		desc. node	13278 Aug 30 15:32	24°♑45'07		
behind sun end	13276 Mar 17 06:53	5°♑57'03		direct	13278 Sep 01 15:33	24°♑40'15		
	13276 Apr 05 17:08	0°♎		greatest brilliancy	13278 Sep 11 16:32	26°♑33'26	-4.9m	
evening rise	13276 Apr 23 22:30	22°♎37'14			13278 Sep 19 03:06	0°♐		
	13276 Apr 29 20:58	0°♏		morning max el	13278 Oct 21 13:21	26°♐20'53	46°25'12	
	13276 May 23 23:23	0°♏			13278 Oct 25 05:43	0°♏		
	13276 Jun 17 01:58	0°♑			13278 Nov 22 09:22	0°♑		
asc. node	13276 Jul 05 09:54	22°♑43'36			13278 Dec 18 16:44	0°♓		
	13276 Jul 11 07:11	0°♐		asc. node	13278 Dec 21 16:16	3°♓28'21		
	13276 Aug 04 18:13	0°♏			13279 Jan 13 03:17	0°♒		
	13276 Aug 29 16:02	0°♑			13279 Feb 07 01:48	0°♑		
	13276 Sep 24 11:03	0°♓			13279 Mar 03 16:55	0°♑		
	13276 Oct 22 07:14	0°♒			13279 Mar 28 03:09	0°♑		
desc. node	13276 Oct 25 08:01	3°♒01'20		desc. node	13279 Apr 12 09:25	18°♑51'01		
evening max el	13276 Oct 26 02:52	3°♒47'37	46°11'19	morning set	13279 Apr 19 07:49	27°♑26'19		
	13276 Nov 27 22:45	0°♑			13279 Apr 21 09:24	0°♎		
greatest brilliancy	13276 Dec 04 11:31	2°♑54'24	-4.8m		13279 May 15 12:04	0°♏		
retrograde	13276 Dec 14 14:25	4°♑46'58		max. Earth dist.	13279 May 26 06:47	13°♏27'48	1.71774 AU	
	13276 Dec 30 08:29	30°♑00						
evening set	13277 Jan 01 12:55	28°♒43'32		superior conj	13279 May 29 01:56	16°♏57'45	-1°24'14	
inferior conj	13277 Jan 05 02:28	26°♒31'13	-8°01'26	minimum elong	13279 May 28 19:52	16°♏38'44	1°25'08	
minimum elong	13277 Jan 05 10:21	26°♒18'50	7°59'30		13279 Jun 08 11:52	0°♏		
min. Earth dist.	13277 Jan 05 06:36	26°♒24'43	0.28904 AU		13279 Jul 02 10:15	0°♑		
morning rise	13277 Jan 09 07:45	23°♒55'15		evening rise	13279 Jul 08 02:13	7°♑06'12		
direct	13277 Jan 26 11:05	18°♒17'58			13279 Jul 26 09:01	0°♐		
greatest brilliancy	13277 Feb 06 02:55	20°♒21'47	-4.7m	asc. node	13279 Aug 02 23:16	9°♐29'38		
asc. node	13277 Feb 15 10:47	24°♒57'44			13279 Aug 19 09:55	0°♏		
	13277 Feb 22 21:37	0°♑			13279 Sep 12 14:53	0°♑		
morning max el	13277 Mar 16 16:26	19°♑03'01	45°53'03		13279 Oct 07 02:49	0°♓		
	13277 Mar 27 11:52	0°♑			13279 Nov 01 02:45	0°♒		
	13277 Apr 23 19:09	0°♑		desc. node	13279 Nov 22 18:14	25°♒11'54		
	13277 May 19 11:33	0°♎			13279 Nov 26 23:35	0°♑		
desc. node	13277 Jun 07 10:29	22°♎47'29			13279 Dec 24 12:44	0°♑		
	13277 Jun 13 08:48	0°♏		evening max el	13280 Jan 06 08:01	12°♑48'55	45°54'12	
	13277 Jul 07 19:02	0°♏			13280 Jan 26 01:21	0°♑		
	13277 Jul 31 23:12	0°♑		greatest brilliancy	13280 Feb 14 06:45	11°♑07'20	-4.8m	
	13277 Aug 25 00:49	0°♐		retrograde	13280 Feb 24 05:43	12°♑55'22		
morning set	13277 Sep 17 09:55	29°♐09'57		evening set	13280 Mar 10 01:41	8°♑37'51		
	13277 Sep 18 01:58	0°♏		asc. node	13280 Mar 14 19:55	5°♑49'07		
asc. node	13277 Sep 28 02:08	12°♏28'46		inferior conj	13280 Mar 16 09:08	4°♑50'57	0°23'16	
	13277 Oct 12 03:38	0°♑		minimum elong	13280 Mar 16 08:15	4°♑52'20	0°23'00	
				min. Earth dist.	13280 Mar 16 15:00	4°♑41'46	0.28179 AU	
superior conj	13277 Oct 26 01:15	17°♑18'12	1°01'13	morning rise	13280 Mar 22 14:32	1°♑06'35		
minimum elong	13277 Oct 25 14:58	16°♑46'14	1°01'31		13280 Mar 24 17:34	30°♑00		
max. Earth dist.	13277 Oct 28 02:46	19°♑52'12	1.72389 AU	direct	13280 Apr 06 14:25	26°♑42'17		
	13277 Nov 05 06:23	0°♓		greatest brilliancy	13280 Apr 17 04:40	28°♑47'29	-4.8m	
	13277 Nov 29 11:09	0°♒			13280 Apr 20 01:55	0°♑		
evening rise	13277 Dec 02 06:55	3°♒29'24		morning max el	13280 May 26 14:10	28°♑44'00	46°34'55	
	13277 Dec 23 19:18	0°♑			13280 May 27 20:33	0°♎		
	13278 Jan 17 07:55	0°♑			13280 Jun 24 17:14	0°♏		
desc. node	13278 Jan 17 16:38	0°♑26'33		desc. node	13280 Jul 04 22:09	11°♏41'19		
	13278 Feb 11 01:22	0°♑			13280 Jul 20 12:30	0°♏		

	13280 Aug 14 11:12	0°♈		asc. node	13283 Apr 12 05:10	13°♊44'33	
	13280 Sep 08 00:33	0°♍		greatest brilliancy	13283 Apr 27 15:37	22°♊10'03	-4.8m
	13280 Oct 02 09:53	0°♌		retrograde	13283 May 07 06:44	23°♊54'37	
asc. node	13280 Oct 25 16:29	28°♌43'01		evening set	13283 May 24 17:57	18°♊04'16	
	13280 Oct 26 17:25	0°♍		inferior conj	13283 May 28 02:25	16°♊01'08	8°46'46
	13280 Nov 19 23:55	0°♎		minimum elong	13283 May 27 20:06	16°♊10'57	8°45'12
morning set	13280 Nov 27 12:26	9°♎18'16		min. Earth dist.	13283 May 28 06:32	15°♊54'46	0.27617 AU
	13280 Dec 14 06:00	0°♏		morning rise	13283 May 30 22:09	14°♊16'41	
				direct	13283 Jun 17 23:26	8°♊00'54	
superior conj	13281 Jan 03 09:33	24°♏54'14	1°19'32	greatest brilliancy	13283 Jun 27 23:56	9°♊54'06	-4.9m
minimum elong	13281 Jan 03 16:33	25°♏15'51	1°20'22		13283 Jul 27 05:48	0°♋	
max. Earth dist.	13281 Jan 04 18:16	26°♏35'15	1.73106 AU	desc. node	13283 Aug 02 08:14	5°♋44'08	
	13281 Jan 07 12:36	0°♌		morning max el	13283 Aug 07 11:36	10°♋48'23	46°57'43
	13281 Jan 31 20:33	0°♍			13283 Aug 25 15:49	0°♈	
evening rise	13281 Feb 09 20:08	11°♍03'19			13283 Sep 21 02:51	0°♍	
desc. node	13281 Feb 14 06:25	16°♍30'12			13283 Oct 16 14:00	0°♌	
	13281 Feb 25 05:51	0°♎			13283 Nov 10 14:10	0°♍	
	13281 Mar 21 15:55	0°♏		asc. node	13283 Nov 23 05:55	15°♍19'12	
	13281 Apr 15 02:25	0°♊			13283 Dec 05 07:44	0°♎	
	13281 May 09 14:33	0°♋			13283 Dec 29 20:39	0°♏	
	13281 Jun 03 07:45	0°♈			13284 Jan 23 06:35	0°♌	
asc. node	13281 Jun 06 23:38	4°♈24'17		morning set	13284 Feb 05 08:22	16°♌06'02	
	13281 Jun 28 12:34	0°♍			13284 Feb 16 14:55	0°♍	
	13281 Jul 24 18:46	0°♌			13284 Mar 11 22:09	0°♎	
evening max el	13281 Aug 13 13:41	20°♌57'12	46°41'20	max. Earth dist.	13284 Mar 12 07:17	0°♏28'11	1.72887 AU
	13281 Aug 22 22:11	0°♍					
greatest brilliancy	13281 Sep 21 20:03	21°♍09'13	-4.8m	superior conj	13284 Mar 13 23:30	2°♏32'30	-0°00'17
desc. node	13281 Sep 27 00:42	22°♍44'13		minimum elong	13284 Mar 13 23:28	2°♏32'22	0°00'12
retrograde	13281 Oct 02 19:27	23°♍22'43		behind sun begin	13284 Mar 12 23:44	1°♏19'01	
evening set	13281 Oct 18 12:47	18°♍35'35		behind sun end	13284 Mar 14 23:11	3°♏45'44	
min. Earth dist.	13281 Oct 23 02:46	15°♍51'22	0.27922 AU	desc. node	13284 Mar 13 20:47	2°♏24'06	
inferior conj	13281 Oct 23 23:53	15°♍18'42	-6°11'25		13284 Apr 05 03:58	0°♏	
minimum elong	13281 Oct 23 13:18	15°♍35'05	6°08'23	evening rise	13284 Apr 21 12:46	20°♏18'35	
morning rise	13281 Oct 28 14:20	12°♍32'18			13284 Apr 29 07:57	0°♊	
direct	13281 Nov 14 01:03	7°♍24'54			13284 May 23 10:33	0°♋	
greatest brilliancy	13281 Nov 23 12:12	9°♍02'33	-4.8m		13284 Jun 16 13:24	0°♈	
	13281 Dec 24 21:06	0°♎		asc. node	13284 Jul 04 11:43	22°♈13'03	
morning max el	13282 Jan 01 22:02	7°♎28'52	45°46'47		13284 Jul 10 19:00	0°♍	
asc. node	13282 Jan 18 03:06	23°♎53'04			13284 Aug 04 06:36	0°♌	
	13282 Jan 23 20:47	0°♏			13284 Aug 29 05:24	0°♍	
	13282 Feb 19 16:27	0°♌			13284 Sep 24 02:30	0°♎	
	13282 Mar 17 06:31	0°♍			13284 Oct 22 04:18	0°♏	
	13282 Apr 11 05:14	0°♎		evening max el	13284 Oct 23 18:21	1°♏33'51	46°12'26
	13282 May 05 18:23	0°♏		desc. node	13284 Oct 24 10:05	2°♏12'20	
desc. node	13282 May 09 23:31	5°♏11'20			13284 Nov 30 06:45	0°♌	
	13282 May 30 00:42	0°♊		greatest brilliancy	13284 Dec 02 01:45	0°♌41'06	-4.8m
	13282 Jun 23 02:07	0°♋		retrograde	13284 Dec 12 06:45	2°♌35'18	
morning set	13282 Jul 03 00:44	12°♋26'53			13284 Dec 23 16:14	30°♋♏	
	13282 Jul 17 00:45	0°♈		evening set	13284 Dec 30 07:01	26°♏27'59	
	13282 Aug 09 22:40	0°♍		inferior conj	13285 Jan 02 18:13	24°♏19'14	-8°09'40
				minimum elong	13285 Jan 03 01:35	24°♏07'42	8°07'51
superior conj	13282 Aug 11 20:57	2°♍25'07	-0°43'38	min. Earth dist.	13285 Jan 02 21:06	24°♏14'43	0.28907 AU
minimum elong	13282 Aug 12 06:52	2°♍56'11	0°43'45	morning rise	13285 Jan 06 20:10	21°♏48'30	
max. Earth dist.	13282 Aug 12 21:34	3°♍42'14	1.71505 AU	direct	13285 Jan 24 03:08	16°♏06'15	
asc. node	13282 Aug 30 13:26	25°♍49'41		greatest brilliancy	13285 Feb 03 17:21	18°♏09'01	-4.7m
	13282 Sep 02 21:27	0°♌		asc. node	13285 Feb 14 12:40	23°♏38'53	
evening rise	13282 Sep 20 09:47	21°♌52'42			13285 Feb 23 10:36	0°♌	
	13282 Sep 26 22:09	0°♍		morning max el	13285 Mar 14 08:51	16°♌52'18	45°52'06
	13282 Oct 21 01:57	0°♎			13285 Mar 27 06:16	0°♍	
	13282 Nov 14 10:47	0°♏			13285 Apr 23 09:36	0°♎	
	13282 Dec 09 03:25	0°♌			13285 May 19 00:23	0°♏	
desc. node	13282 Dec 20 05:48	13°♌18'50		desc. node	13285 Jun 06 12:25	22°♌16'26	
	13283 Jan 03 07:04	0°♍			13285 Jun 12 20:49	0°♊	
	13283 Jan 29 02:03	0°♎			13285 Jul 07 06:36	0°♋	
	13283 Feb 24 22:53	0°♏			13285 Jul 31 10:29	0°♈	
evening max el	13283 Mar 18 15:56	22°♏30'03	46°10'30		13285 Aug 24 11:53	0°♍	
	13283 Mar 26 13:21	0°♊		morning set	13285 Sep 14 23:34	26°♍48'49	

	13285 Sep 17 12:52	0°♄		asc. node	13288 Mar 13 22:02	2°♿40'34	
asc. node	13285 Sep 27 04:02	12°♄00'54		inferior conj	13288 Mar 14 00:21	2°♿36'56	0°01'27
	13285 Oct 11 14:24	0°♌		minimum elong	13288 Mar 14 00:17	2°♿37'01	0°01'30
				transit middle	13288 Mar 14 00:17	2°♿37'01	0°01'30
superior conj	13285 Oct 23 16:19	15°♌02'24	0°58'41	transit begin	13288 Mar 13 20:16	2°♿43'21	
minimum elong	13285 Oct 23 06:03	14°♌30'25	0°58'57	transit end	13288 Mar 14 04:19	2°♿30'42	
max. Earth dist.	13285 Oct 25 20:03	17°♌43'19	1.72357 AU	min. Earth dist.	13288 Mar 14 07:06	2°♿26'19	0.28204 AU
	13285 Nov 04 17:05	0°♊			13288 Mar 18 06:17	30°♋♋	
	13285 Nov 28 21:54	0°♊		morning rise	13288 Mar 20 06:39	28°♋50'52	
evening rise	13285 Nov 29 23:05	1°♊17'50		direct	13288 Apr 04 05:25	24°♋27'55	
	13285 Dec 23 06:11	0°♋		greatest brilliancy	13288 Apr 14 21:08	26°♋33'52	-4.8m
desc. node	13286 Jan 16 18:25	29°♋58'06			13288 Apr 22 01:55	0°♿	
	13286 Jan 16 19:03	0°♋		morning max el	13288 May 24 03:52	26°♿24'27	46°33'34
	13286 Feb 10 12:53	0°♿			13288 May 27 17:26	0°♋	
	13286 Mar 07 12:01	0°♋			13288 Jun 24 08:32	0°♌	
	13286 Apr 01 18:44	0°♌		desc. node	13288 Jul 03 24:00	11°♌05'16	
	13286 Apr 27 16:52	0°♍			13288 Jul 20 01:43	0°♍	
asc. node	13286 May 09 14:48	13°♍18'46			13288 Aug 13 23:20	0°♎	
	13286 May 25 05:42	0°♎			13288 Sep 07 12:04	0°♏	
evening max el	13286 May 30 16:22	5°♎31'26	46°40'34		13288 Oct 01 20:59	0°♄	
	13286 Jun 28 07:57	0°♏		asc. node	13288 Oct 24 18:23	28°♄15'26	
greatest brilliancy	13286 Jul 09 21:17	5°♏55'39	-4.9m		13288 Oct 26 04:14	0°♌	
retrograde	13286 Jul 19 19:44	7°♏46'24			13288 Nov 19 10:31	0°♊	
evening set	13286 Aug 04 10:08	3°♏00'16		morning set	13288 Nov 25 04:30	7°♊06'51	
inferior conj	13286 Aug 09 10:42	0°♏01'08	5°01'23		13288 Dec 13 16:28	0°♊	
minimum elong	13286 Aug 09 20:49	29°♎45'41	4°57'59				
	13286 Aug 09 11:27	30°♎♎		superior conj	13289 Jan 01 02:22	22°♊45'52	1°20'45
min. Earth dist.	13286 Aug 09 18:20	29°♎49'28	0.26982 AU	minimum elong	13289 Jan 01 08:48	23°♊05'44	1°21'37
morning rise	13286 Aug 15 07:35	26°♎34'33		max. Earth dist.	13289 Jan 02 10:51	24°♊26'08	1.73092 AU
desc. node	13286 Aug 29 17:33	22°♎15'21			13289 Jan 06 23:01	0°♋	
direct	13286 Aug 30 04:43	22°♎15'06			13289 Jan 31 07:00	0°♋	
greatest brilliancy	13286 Sep 09 04:59	24°♎07'45	-4.9m	evening rise	13289 Feb 07 12:03	8°♋52'19	
	13286 Sep 20 16:07	0°♏		desc. node	13289 Feb 13 08:13	16°♋03'17	
morning max el	13286 Oct 19 03:06	24°♏00'15	46°26'44		13289 Feb 24 16:29	0°♿	
	13286 Oct 25 03:01	0°♄			13289 Mar 21 02:49	0°♋	
	13286 Nov 22 00:54	0°♌			13289 Apr 14 13:41	0°♌	
	13286 Dec 18 05:57	0°♊			13289 May 09 02:19	0°♍	
asc. node	13286 Dec 20 18:10	2°♊55'47			13289 Jun 02 20:17	0°♎	
	13287 Jan 12 15:19	0°♊		asc. node	13289 Jun 06 01:30	3°♎51'47	
	13287 Feb 06 13:11	0°♋			13289 Jun 28 02:31	0°♏	
	13287 Mar 03 03:56	0°♋			13289 Jul 24 11:47	0°♄	
	13287 Mar 27 13:57	0°♿		evening max el	13289 Aug 11 03:06	18°♄35'35	46°41'57
desc. node	13287 Apr 11 11:23	18°♿23'53			13289 Aug 23 01:23	0°♌	
morning set	13287 Apr 16 21:23	25°♿06'27		greatest brilliancy	13289 Sep 19 11:19	18°♌52'12	-4.8m
	13287 Apr 20 20:06	0°♋		desc. node	13289 Sep 26 02:45	20°♌43'57	
	13287 May 14 22:44	0°♌		retrograde	13289 Sep 30 09:51	21°♌05'30	
max. Earth dist.	13287 May 23 15:17	10°♌51'04	1.71806 AU	evening set	13289 Oct 16 00:17	16°♌22'47	
				min. Earth dist.	13289 Oct 20 17:42	13°♌34'11	0.27869 AU
superior conj	13287 May 26 14:35	14°♌33'51	-1°23'09	inferior conj	13289 Oct 21 14:18	13°♌02'23	-5°55'15
minimum elong	13287 May 26 07:40	14°♌12'14	1°23'59	minimum elong	13289 Oct 21 03:47	13°♌18'38	5°52'11
	13287 Jun 07 22:33	0°♍		morning rise	13289 Oct 26 07:43	10°♌11'47	
	13287 Jul 01 21:00	0°♎		direct	13289 Nov 11 14:20	5°♌09'03	
evening rise	13287 Jul 05 13:41	4°♎37'55		greatest brilliancy	13289 Nov 21 02:52	6°♌47'34	-4.8m
	13287 Jul 25 19:53	0°♏			13289 Dec 24 22:52	0°♊	
asc. node	13287 Aug 02 01:03	9°♏01'06		morning max el	13289 Dec 30 11:52	5°♊12'48	45°47'35
	13287 Aug 18 20:57	0°♄		asc. node	13290 Jan 17 04:59	23°♊12'11	
	13287 Sep 12 02:12	0°♌			13290 Jan 23 13:03	0°♊	
	13287 Oct 06 14:36	0°♊			13290 Feb 19 05:47	0°♋	
	13287 Oct 31 15:22	0°♊			13290 Mar 16 18:32	0°♋	
desc. node	13287 Nov 21 20:13	24°♊37'55			13290 Apr 10 16:35	0°♿	
	13287 Nov 26 13:54	0°♋			13290 May 05 05:22	0°♋	
	13287 Dec 24 07:18	0°♋		desc. node	13290 May 09 01:17	4°♋43'03	
evening max el	13288 Jan 03 22:40	10°♋35'09	45°54'10		13290 May 29 11:29	0°♌	
	13288 Jan 26 16:42	0°♿			13290 Jun 22 12:47	0°♍	
greatest brilliancy	13288 Feb 11 22:30	8°♿54'36	-4.8m	morning set	13290 Jun 30 12:25	9°♍59'47	
retrograde	13288 Feb 21 19:57	10°♿41'30			13290 Jul 16 11:19	0°♎	
evening set	13288 Mar 07 17:32	6°♿22'55					

superior conj	13290 Aug 09 09:20	0° \mathbb{M} 00'30	-0°46'54	minimum elong	13292 Dec 31 16:59	21° \mathcal{Z} 58'30	8°15'23
minimum elong	13290 Aug 09 19:45	0° \mathbb{M} 33'11	0°47'02	min. Earth dist.	13292 Dec 31 11:40	22° \mathcal{Z} 06'50	0.28908 AU
	13290 Aug 09 09:10	0° \mathbb{M}		morning rise	13293 Jan 04 08:52	19° \mathcal{Z} 43'22	
max. Earth dist.	13290 Aug 10 05:47	1° \mathbb{M} 04'36	1.71487 AU	direct	13293 Jan 21 19:41	13° \mathcal{Z} 56'37	
asc. node	13290 Aug 29 15:21	25° \mathbb{M} 22'52		greatest brilliancy	13293 Feb 01 07:36	15° \mathcal{Z} 57'36	-4.7m
	13290 Sep 02 07:56	0° \mathcal{A}		asc. node	13293 Feb 13 14:47	22° \mathcal{Z} 24'15	
evening rise	13290 Sep 18 00:03	19° \mathcal{A} 34'49			13293 Feb 23 19:34	0° \approx	
	13290 Sep 26 08:39	0° \mathbb{M}		morning max el	13293 Mar 12 01:00	14° \approx 42'01	45°50'58
	13290 Oct 20 12:33	0° \mathcal{A}			13293 Mar 26 23:51	0° \mathcal{H}	
	13290 Nov 13 21:39	0° \mathcal{Z}			13293 Apr 22 23:34	0° \mathcal{Y}	
	13290 Dec 08 14:44	0° \approx			13293 May 18 12:50	0° \mathcal{B}	
desc. node	13290 Dec 19 07:33	12° \approx 49'25		desc. node	13293 Jun 05 14:16	21° \mathcal{B} 46'06	
	13291 Jan 02 19:11	0° \mathcal{H}			13293 Jun 12 08:29	0° \mathbb{I}	
	13291 Jan 28 15:41	0° \mathcal{Y}			13293 Jul 06 17:50	0° \mathcal{G}	
	13291 Feb 24 15:41	0° \mathcal{B}			13293 Jul 30 21:28	0° \mathcal{Q}	
evening max el	13291 Mar 16 06:14	20° \mathcal{B} 13'03	46°09'34		13293 Aug 23 22:41	0° \mathbb{M}	
	13291 Mar 26 16:27	0° \mathbb{I}		morning set	13293 Sep 12 13:12	24° \mathbb{M} 28'23	
asc. node	13291 Apr 11 07:12	12° \mathbb{I} 28'13			13293 Sep 16 23:31	0° \mathcal{A}	
greatest brilliancy	13291 Apr 25 03:51	19° \mathbb{I} 48'25	-4.8m	asc. node	13293 Sep 26 05:54	11° \mathcal{A} 33'39	
retrograde	13291 May 04 20:41	21° \mathbb{I} 34'24			13293 Oct 11 00:55	0° \mathbb{M}	
evening set	13291 May 22 03:32	15° \mathbb{I} 49'23					
inferior conj	13291 May 25 16:08	13° \mathbb{I} 40'10	8°39'15	superior conj	13293 Oct 21 07:28	12° \mathbb{M} 47'30	0°56'04
minimum elong	13291 May 25 09:05	13° \mathbb{I} 51'05	8°37'34	minimum elong	13293 Oct 20 21:16	12° \mathbb{M} 15'47	0°56'18
min. Earth dist.	13291 May 25 19:25	13° \mathbb{I} 35'03	0.27640 AU	max. Earth dist.	13293 Oct 23 13:37	15° \mathbb{M} 35'59	1.72320 AU
morning rise	13291 May 28 14:33	11° \mathbb{I} 51'48			13293 Nov 04 03:32	0° \mathcal{A}	
direct	13291 Jun 15 13:46	5° \mathbb{I} 39'26		evening rise	13293 Nov 27 15:25	29° \mathcal{A} 07'36	
greatest brilliancy	13291 Jun 25 13:44	7° \mathbb{I} 32'44	-4.9m		13293 Nov 28 08:22	0° \mathcal{Z}	
	13291 Jul 27 08:56	0° \mathcal{G}			13293 Dec 22 16:46	0° \approx	
desc. node	13291 Aug 01 10:11	4° \mathcal{G} 50'27		desc. node	13294 Jan 15 20:21	29° \approx 30'56	
morning max el	13291 Aug 05 02:48	8° \mathcal{G} 30'18	46°58'00		13294 Jan 16 05:54	0° \mathcal{H}	
	13291 Aug 25 08:58	0° \mathcal{Q}			13294 Feb 10 00:11	0° \mathcal{Y}	
	13291 Sep 20 16:51	0° \mathbb{M}			13294 Mar 07 00:03	0° \mathcal{B}	
	13291 Oct 16 02:28	0° \mathcal{A}			13294 Apr 01 07:58	0° \mathbb{I}	
	13291 Nov 10 01:44	0° \mathbb{M}			13294 Apr 27 08:21	0° \mathcal{G}	
asc. node	13291 Nov 22 07:44	14° \mathbb{M} 50'38		asc. node	13294 May 08 16:41	12° \mathcal{G} 36'55	
	13291 Dec 04 18:43	0° \mathcal{A}			13294 May 25 02:47	0° \mathcal{Q}	
	13291 Dec 29 07:17	0° \mathcal{Z}		evening max el	13294 May 28 06:05	3° \mathcal{Q} 09'37	46°39'42
	13292 Jan 22 17:03	0° \approx			13294 Jun 29 19:58	0° \mathbb{M}	
morning set	13292 Feb 03 01:21	13° \approx 58'25		greatest brilliancy	13294 Jul 07 11:32	3° \mathbb{M} 32'32	-4.9m
	13292 Feb 16 01:18	0° \mathcal{H}		retrograde	13294 Jul 17 08:16	5° \mathbb{M} 21'31	
max. Earth dist.	13292 Mar 10 03:11	28° \mathcal{H} 29'16	1.72912 AU	evening set	13294 Aug 02 02:11	0° \mathbb{M} 31'22	
	13292 Mar 11 08:33	0° \mathcal{Y}			13294 Aug 03 00:06	30° \mathcal{R} \mathcal{Q}	
				inferior conj	13294 Aug 06 23:25	27° \mathcal{Q} 36'37	5°21'36
superior conj	13292 Mar 11 14:39	0° \mathcal{Y} 18'52	0°03'16	minimum elong	13294 Aug 07 09:55	27° \mathcal{Q} 20'33	5°18'09
minimum elong	13292 Mar 11 15:25	0° \mathcal{Y} 21'14	0°03'19	min. Earth dist.	13294 Aug 07 08:00	27° \mathcal{Q} 23'28	0.26990 AU
behind sun begin	13292 Mar 10 15:58	29° \mathcal{H} 08'45		morning rise	13294 Aug 12 17:42	24° \mathcal{Q} 13'03	
behind sun end	13292 Mar 12 14:52	1° \mathcal{Y} 33'43		direct	13294 Aug 27 17:30	19° \mathcal{Q} 50'23	
desc. node	13292 Mar 12 22:44	1° \mathcal{Y} 57'59		desc. node	13294 Aug 28 19:39	19° \mathcal{Q} 51'48	
	13292 Apr 04 14:26	0° \mathcal{B}		greatest brilliancy	13294 Sep 06 18:02	21° \mathcal{Q} 43'01	-4.9m
evening rise	13292 Apr 19 03:01	18° \mathcal{B} 01'04			13294 Sep 21 18:04	0° \mathbb{M}	
	13292 Apr 28 18:32	0° \mathbb{I}		morning max el	13294 Oct 16 16:00	21° \mathbb{M} 37'34	46°28'18
	13292 May 22 21:20	0° \mathcal{G}			13294 Oct 24 23:28	0° \mathcal{A}	
	13292 Jun 16 00:29	0° \mathcal{Q}			13294 Nov 21 16:05	0° \mathbb{M}	
asc. node	13292 Jul 03 13:34	21° \mathcal{Q} 43'39			13294 Dec 17 18:56	0° \mathcal{A}	
	13292 Jul 10 06:29	0° \mathbb{M}		asc. node	13294 Dec 19 20:02	2° \mathcal{A} 23'40	
	13292 Aug 03 18:40	0° \mathcal{A}			13295 Jan 12 03:11	0° \mathcal{Z}	
	13292 Aug 28 18:30	0° \mathbb{M}			13295 Feb 06 00:24	0° \approx	
	13292 Sep 23 17:42	0° \mathcal{A}			13295 Mar 02 14:48	0° \mathcal{H}	
evening max el	13292 Oct 21 10:36	29° \mathcal{A} 23'21	46°13'36		13295 Mar 27 00:38	0° \mathcal{Y}	
	13292 Oct 22 01:34	0° \mathcal{Z}		desc. node	13295 Apr 10 13:11	17° \mathcal{Y} 56'25	
desc. node	13292 Oct 23 12:02	1° \mathcal{Z} 23'46		morning set	13295 Apr 14 11:04	22° \mathcal{Y} 47'05	
greatest brilliancy	13292 Nov 29 16:16	28° \mathcal{Z} 30'00	-4.8m		13295 Apr 20 06:45	0° \mathcal{B}	
	13292 Dec 05 05:49	0° \approx			13295 May 14 09:24	0° \mathbb{I}	
retrograde	13292 Dec 09 23:05	0° \approx 25'26		max. Earth dist.	13295 May 20 22:46	8° \mathbb{I} 11'10	1.71845 AU
	13292 Dec 14 13:35	30° \mathcal{R} \mathcal{Z}					
evening set	13292 Dec 28 01:09	24° \mathcal{Z} 14'45		superior conj	13295 May 24 03:10	12° \mathbb{I} 09'48	-1°21'53
inferior conj	13292 Dec 31 10:11	22° \mathcal{Z} 09'09	-8°17'04	minimum elong	13295 May 23 19:29	11° \mathbb{I} 45'48	1°22'42

	13295 Jun 07 09:17	0°☿			13297 Dec 24 23:48	0°♊	
	13295 Jul 01 07:48	0°♋		morning max el	13297 Dec 28 02:27	2°♊57'20	45°48'26
evening rise	13295 Jul 03 00:55	2°♋08'52		asc. node	13298 Jan 16 07:04	22°♊31'10	
	13295 Jul 25 06:46	0°♌			13298 Jan 23 05:25	0°♋	
asc. node	13295 Aug 01 02:58	8°♌32'54			13298 Feb 18 19:22	0°♌	
	13295 Aug 18 08:02	0°♍			13298 Mar 16 06:51	0°♌	
	13295 Sep 11 13:35	0°♎			13298 Apr 10 04:13	0°♍	
	13295 Oct 06 02:29	0°♏			13298 May 04 16:39	0°♎	
	13295 Oct 31 04:08	0°♐		desc. node	13298 May 08 03:09	4°♏14'09	
desc. node	13295 Nov 20 22:04	24°♐03'04			13298 May 28 22:33	0°♑	
	13295 Nov 26 04:28	0°♑			13298 Jun 21 23:44	0°♑	
	13295 Dec 24 02:26	0°♒		morning set	13298 Jun 28 00:10	7°♑31'56	
evening max el	13296 Jan 01 12:44	8°♒20'01	45°54'20		13298 Jul 15 22:14	0°♋	
	13296 Jan 27 13:17	0°♓					
greatest brilliancy	13296 Feb 09 14:11	6°♓42'15	-4.8m	superior conj	13298 Aug 06 21:22	27°♋33'28	-0°50'06
retrograde	13296 Feb 19 10:28	8°♓28'37		minimum elong	13298 Aug 07 08:14	28°♋07'31	0°50'17
evening set	13296 Mar 05 09:44	4°♓08'20		max. Earth dist.	13298 Aug 07 15:33	28°♋30'29	1.71478 AU
inferior conj	13296 Mar 11 15:47	0°♓23'41	-0°20'06		13298 Aug 08 20:06	0°♌	
minimum elong	13296 Mar 11 16:33	0°♓22'30	0°19'45	asc. node	13298 Aug 28 17:12	24°♌54'25	
min. Earth dist.	13296 Mar 11 23:25	0°♓11'43	0.28233 AU		13298 Sep 01 18:52	0°♍	
	13296 Mar 12 06:53	30°♌		evening rise	13298 Sep 15 13:47	17°♍13'46	
asc. node	13296 Mar 12 23:59	29°♌33'15			13298 Sep 25 19:38	0°♎	
morning rise	13296 Mar 17 22:51	26°♌36'20			13298 Oct 19 23:39	0°♏	
direct	13296 Apr 01 20:32	22°♌14'08			13298 Nov 13 08:59	0°♐	
greatest brilliancy	13296 Apr 12 14:12	24°♌21'30	-4.8m		13298 Dec 08 02:35	0°♑	
	13296 Apr 23 09:43	0°♓		desc. node	13298 Dec 18 09:33	12°♑19'12	
morning max el	13296 May 21 18:00	24°♓05'47	46°32'00		13299 Jan 02 07:54	0°♒	
	13296 May 27 13:44	0°♔			13299 Jan 28 05:58	0°♓	
	13296 Jun 23 23:49	0°♑			13299 Feb 24 09:23	0°♔	
desc. node	13296 Jul 03 01:59	10°♑29'15		evening max el	13299 Mar 13 21:24	17°♔57'04	46°08'44
	13296 Jul 19 15:03	0°♒			13299 Mar 26 21:53	0°♑	
	13296 Aug 13 11:40	0°♋		asc. node	13299 Apr 10 09:08	11°♑08'17	
	13296 Sep 06 23:47	0°♌		greatest brilliancy	13299 Apr 22 16:09	17°♑26'18	-4.8m
	13296 Oct 01 08:17	0°♍		retrograde	13299 May 02 10:55	19°♑13'31	
asc. node	13296 Oct 23 20:08	27°♍46'46		evening set	13299 May 19 13:13	13°♑34'19	
	13296 Oct 25 15:14	0°♎		inferior conj	13299 May 23 05:59	11°♑18'43	8°30'56
	13296 Nov 18 21:19	0°♏		minimum elong	13299 May 22 22:16	11°♑30'42	8°29'06
morning set	13296 Nov 22 20:21	4°♏54'03		min. Earth dist.	13299 May 23 08:14	11°♑15'14	0.27657 AU
	13296 Dec 13 03:09	0°♐		morning rise	13299 May 26 07:15	9°♑26'07	
				direct	13299 Jun 13 04:27	3°♑17'53	
superior conj	13296 Dec 29 19:15	20°♐36'52	1°21'51	greatest brilliancy	13299 Jun 23 03:08	5°♑10'24	-4.9m
minimum elong	13296 Dec 30 01:06	20°♐54'55	1°22'46		13299 Jul 27 10:54	0°♒	
max. Earth dist.	13296 Dec 31 03:07	22°♐15'17	1.73077 AU	desc. node	13299 Jul 31 12:19	3°♒57'24	
	13297 Jan 06 09:39	0°♑		morning max el	13299 Aug 02 17:47	6°♒10'49	46°57'55
	13297 Jan 30 17:42	0°♒			13299 Aug 25 02:09	0°♋	
evening rise	13297 Feb 05 04:13	6°♒41'27			13299 Sep 20 07:11	0°♌	
desc. node	13297 Feb 12 10:09	15°♒36'09			13299 Oct 15 15:23	0°♍	
	13297 Feb 24 03:20	0°♓			13299 Nov 09 13:47	0°♎	
	13297 Mar 20 13:54	0°♔		asc. node	13299 Nov 21 09:40	14°♎20'51	
	13297 Apr 14 01:08	0°♑			13299 Dec 04 06:11	0°♏	
	13297 May 08 14:20	0°♒			13299 Dec 28 18:24	0°♐	
	13297 Jun 02 09:12	0°♋			13300 Jan 22 03:57	0°♑	
asc. node	13297 Jun 05 03:23	3°♋18'21		morning set	13300 Jan 31 18:08	11°♑48'48	
	13297 Jun 27 17:01	0°♌			13300 Feb 15 12:08	0°♒	
	13297 Jul 24 05:40	0°♍		max. Earth dist.	13300 Mar 08 21:18	26°♒23'28	1.72935 AU
evening max el	13297 Aug 08 16:47	16°♍13'15	46°42'37				
	13297 Aug 23 07:06	0°♎		superior conj	13300 Mar 10 05:46	28°♒03'43	0°06'46
greatest brilliancy	13297 Sep 17 01:53	16°♎32'37	-4.8m	minimum elong	13300 Mar 10 07:21	28°♒08'38	0°06'49
desc. node	13297 Sep 25 04:41	18°♎37'03		behind sun begin	13300 Mar 09 09:35	27°♒01'24	
retrograde	13297 Sep 28 00:28	18°♎46'30		behind sun end	13300 Mar 11 05:07	29°♒15'52	
evening set	13297 Oct 13 11:43	14°♎07'43			13300 Mar 11 19:24	0°♓	
min. Earth dist.	13297 Oct 18 08:09	11°♎15'21	0.27815 AU	desc. node	13300 Mar 13 00:30	1°♓29'55	
inferior conj	13297 Oct 19 04:27	10°♎44'05	-5°38'22		13300 Apr 05 01:21	0°♔	
minimum elong	13297 Oct 18 18:04	11°♎00'05	5°35'15	evening rise	13300 Apr 17 17:21	15°♔42'28	
morning rise	13297 Oct 24 00:53	7°♎49'33			13300 Apr 29 05:34	0°♑	
direct	13297 Nov 09 03:42	2°♎51'10			13300 May 23 08:32	0°♒	
greatest brilliancy	13297 Nov 18 17:05	4°♎30'34	-4.8m		13300 Jun 16 11:56	0°♋	

asc. node	13300 Jul 03 15:34	21° Ω 13'46			13303 Jan 12 15:14	0° \mathcal{Z}		
	13300 Jul 10 18:19	0° \mathfrak{M}			13303 Feb 06 11:52	0° \approx		
	13300 Aug 04 07:08	0° $\underline{\mathfrak{L}}$			13303 Mar 03 01:55	0° \mathfrak{H}		
	13300 Aug 29 08:05	0° \mathfrak{M}			13303 Mar 27 11:34	0° \mathfrak{Y}		
	13300 Sep 24 09:40	0° \mathfrak{A}			13303 Apr 10 14:57	17° \mathfrak{Y} 28'12		
evening max el	13300 Oct 20 02:34	27° \mathfrak{A} 10'17	46°14'33		13303 Apr 13 00:35	20° \mathfrak{Y} 26'36		
	13300 Oct 23 00:25	0° \mathcal{Z}			13303 Apr 20 17:36	0° \mathcal{B}		
desc. node	13300 Oct 23 13:59	0° \mathcal{Z} 32'30			13303 May 14 20:16	0° \mathfrak{I}		
greatest brilliancy	13300 Nov 28 07:14	26° \mathcal{Z} 17'13	-4.8m		13303 May 19 08:44	5° \mathfrak{I} 38'31	1.71884 AU	
retrograde	13300 Dec 08 14:51	28° \mathcal{Z} 13'04						
evening set	13300 Dec 26 18:54	21° \mathcal{Z} 59'38			13303 May 22 15:38	9° \mathfrak{I} 44'54	-1°20'29	
inferior conj	13300 Dec 30 01:56	19° \mathcal{Z} 56'51	-8°23'45		13303 May 22 07:15	9° \mathfrak{I} 18'42	1°21'15	
minimum elong	13300 Dec 30 08:05	19° \mathcal{Z} 47'12	8°22'12		13303 Jun 07 20:11	0° \mathfrak{E}		
min. Earth dist.	13300 Dec 30 02:11	19° \mathcal{Z} 56'28	0.28905 AU		13303 Jul 01 12:14	29° \mathfrak{E} 39'32		
morning rise	13301 Jan 02 21:21	17° \mathcal{Z} 35'48			13303 Jul 01 18:46	0° Ω		
direct	13301 Jan 20 11:50	11° \mathcal{Z} 44'54			13303 Jul 25 17:49	0° \mathfrak{M}		
greatest brilliancy	13301 Jan 30 21:36	13° \mathcal{Z} 43'53	-4.7m		13303 Aug 01 04:49	8° \mathfrak{M} 04'02		
asc. node	13301 Feb 13 16:46	21° \mathcal{Z} 09'50			13303 Aug 18 19:13	0° $\underline{\mathfrak{L}}$		
	13301 Feb 25 02:42	0° \approx			13303 Sep 12 01:02	0° \mathfrak{M}		
morning max el	13301 Mar 10 16:00	12° \approx 27'24	45°49'55		13303 Oct 06 14:25	0° \mathfrak{A}		
	13301 Mar 27 17:33	0° \mathfrak{H}			13303 Oct 31 16:59	0° \mathcal{Z}		
	13301 Apr 23 13:50	0° \mathfrak{Y}			13303 Nov 21 00:05	23° \mathcal{Z} 28'24		
	13301 May 19 01:37	0° \mathcal{B}			13303 Nov 26 19:15	0° \approx		
desc. node	13301 Jun 05 16:12	21° \mathcal{B} 14'56			13303 Dec 24 22:16	0° \mathfrak{H}		
	13301 Jun 12 20:30	0° \mathfrak{I}			13303 Dec 31 02:47	6° \mathfrak{H} 04'32	45°54'22	
	13301 Jul 07 05:23	0° \mathfrak{E}			13304 Jan 29 18:06	0° \mathfrak{Y}		
	13301 Jul 31 08:44	0° Ω			13304 Feb 08 05:16	4° \mathfrak{Y} 28'35	-4.8m	
	13301 Aug 24 09:44	0° \mathfrak{M}			13304 Feb 18 01:20	6° \mathfrak{Y} 15'08		
morning set	13301 Sep 11 03:08	22° \mathfrak{M} 08'02			13304 Mar 04 01:58	1° \mathfrak{Y} 52'41		
	13301 Sep 17 10:24	0° $\underline{\mathfrak{L}}$			13304 Mar 07 07:47	30° \mathfrak{R} \mathfrak{H}		
asc. node	13301 Sep 26 07:38	11° $\underline{\mathfrak{L}}$ 05'10			13304 Mar 10 07:06	28° \mathfrak{H} 09'37	-0°41'37	
	13301 Oct 11 11:43	0° \mathfrak{M}			13304 Mar 10 08:40	28° \mathfrak{H} 07'09	0°40'59	
					13304 Mar 10 15:24	27° \mathfrak{H} 56'36	0.28266 AU	
superior conj	13301 Oct 19 22:40	10° \mathfrak{M} 31'50	0°53'22		13304 Mar 13 01:55	26° \mathfrak{H} 25'43		
minimum elong	13301 Oct 19 12:38	10° \mathfrak{M} 00'36	0°53'32		13304 Mar 16 14:49	24° \mathfrak{H} 21'30		
max. Earth dist.	13301 Oct 22 06:17	13° \mathfrak{M} 24'54	1.72288 AU		13304 Mar 31 11:43	19° \mathfrak{H} 59'30		
	13301 Nov 04 14:20	0° \mathfrak{A}			13304 Apr 11 07:05	22° \mathfrak{H} 08'29	-4.8m	
evening rise	13301 Nov 26 07:35	26° \mathfrak{A} 55'37			13304 Apr 25 08:45	0° \mathfrak{Y}		
	13301 Nov 28 19:13	0° \mathcal{Z}			13304 May 20 08:50	21° \mathfrak{Y} 48'37	46°30'31	
	13301 Dec 23 03:46	0° \approx			13304 May 28 09:31	0° \mathcal{B}		
desc. node	13302 Jan 15 22:15	29° \approx 02'28			13304 Jun 24 14:57	0° \mathfrak{I}		
	13302 Jan 16 17:10	0° \mathfrak{H}			13304 Jul 03 03:59	9° \mathfrak{I} 53'24		
	13302 Feb 10 11:54	0° \mathfrak{Y}			13304 Jul 20 04:19	0° \mathfrak{E}		
	13302 Mar 07 12:31	0° \mathcal{B}			13304 Aug 13 23:56	0° Ω		
	13302 Apr 01 21:41	0° \mathfrak{I}			13304 Sep 07 11:26	0° \mathfrak{M}		
	13302 Apr 28 00:27	0° \mathfrak{E}			13304 Oct 01 19:30	0° $\underline{\mathfrak{L}}$		
asc. node	13302 May 08 18:41	11° \mathfrak{E} 53'52			13304 Oct 23 22:03	27° $\underline{\mathfrak{L}}$ 18'56		
	13302 May 26 01:03	0° Ω			13304 Oct 26 02:08	0° \mathfrak{M}		
evening max el	13302 May 26 18:59	0° Ω 44'49	46°38'54		13304 Nov 19 08:00	0° \mathfrak{A}		
	13302 Jul 03 04:05	0° \mathfrak{M}			13304 Nov 21 12:34	2° \mathfrak{A} 42'42		
greatest brilliancy	13302 Jul 06 02:18	1° \mathfrak{M} 09'32	-4.9m		13304 Dec 13 13:41	0° \mathcal{Z}		
retrograde	13302 Jul 15 20:38	2° \mathfrak{M} 56'42						
	13302 Jul 28 00:04	30° \mathfrak{R} Ω			13304 Dec 28 12:26	18° \mathcal{Z} 29'09	1°22'49	
evening set	13302 Jul 31 18:28	28° Ω 02'14			13304 Dec 28 17:40	18° \mathcal{Z} 45'19	1°23'45	
inferior conj	13302 Aug 05 12:21	25° Ω 12'13	5°41'03		13304 Dec 29 21:32	20° \mathcal{Z} 11'25	1.73068 AU	
minimum elong	13302 Aug 05 23:09	24° Ω 55'41	5°37'36		13305 Jan 06 20:11	0° \approx		
min. Earth dist.	13302 Aug 05 22:01	24° Ω 57'24	0.26995 AU		13305 Jan 31 04:19	0° \mathfrak{H}		
morning rise	13302 Aug 11 03:47	21° Ω 52'04			13305 Feb 03 20:34	4° \mathfrak{H} 31'25		
direct	13302 Aug 26 05:58	17° Ω 25'40			13305 Feb 12 11:56	15° \mathfrak{H} 08'43		
desc. node	13302 Aug 28 21:31	17° Ω 33'55			13305 Feb 24 14:09	0° \mathfrak{Y}		
greatest brilliancy	13302 Sep 05 07:37	19° Ω 18'55	-4.9m		13305 Mar 21 01:00	0° \mathcal{B}		
	13302 Sep 23 13:09	0° \mathfrak{M}			13305 Apr 14 12:36	0° \mathfrak{I}		
morning max el	13302 Oct 15 04:34	19° \mathfrak{M} 13'42	46°29'51		13305 May 09 02:21	0° \mathfrak{E}		
	13302 Oct 25 19:19	0° $\underline{\mathfrak{L}}$			13305 Jun 02 22:08	0° Ω		
	13302 Nov 22 07:10	0° \mathfrak{M}			13305 Jun 05 05:25	2° Ω 45'22		
	13302 Dec 18 08:02	0° \mathfrak{A}			13305 Jun 28 07:35	0° \mathfrak{M}		
asc. node	13302 Dec 19 22:03	1° \mathfrak{A} 51'29			13305 Jul 24 23:52	0° $\underline{\mathfrak{L}}$		

evening max el	13305 Aug 07 07:18	13° Ω 53'31	46°43'19	superior conj	13308 Mar 07 21:28	25° Υ 51'53	0°10'10
	13305 Aug 24 14:55	0° \mathbb{M}		minimum elong	13308 Mar 07 23:51	25° Υ 59'13	0°10'15
greatest brilliancy	13305 Sep 15 16:10	14° \mathbb{M} 13'11	-4.8m	behind sun begin	13308 Mar 07 05:23	25° Υ 02'13	
desc. node	13305 Sep 25 06:42	16° \mathbb{M} 25'46		behind sun end	13308 Mar 08 18:19	26° Υ 56'14	
retrograde	13305 Sep 26 15:37	16° \mathbb{M} 28'02			13308 Mar 11 05:49	0° Υ	
evening set	13305 Oct 11 23:24	11° \mathbb{M} 52'57		desc. node	13308 Mar 12 02:20	1° Υ 03'23	
min. Earth dist.	13305 Oct 16 22:22	8° \mathbb{M} 57'21	0.27757 AU		13308 Apr 04 11:50	0° \mathcal{B}	
inferior conj	13305 Oct 17 18:37	8° \mathbb{M} 26'15	-5°20'53	evening rise	13308 Apr 15 08:02	13° \mathcal{B} 26'17	
minimum elong	13305 Oct 17 08:27	8° \mathbb{M} 41'52	5°17'45		13308 Apr 28 16:13	0° \mathbb{I}	
morning rise	13305 Oct 22 18:02	5° \mathbb{M} 28'01			13308 May 22 19:25	0° \mathcal{G}	
direct	13305 Nov 07 17:36	0° \mathbb{M} 33'59			13308 Jun 15 23:08	0° Ω	
greatest brilliancy	13305 Nov 17 06:45	2° \mathbb{M} 13'44	-4.8m	asc. node	13308 Jul 02 17:22	20° Ω 43'58	
	13305 Dec 25 23:08	0° \mathcal{A}			13308 Jul 10 05:56	0° \mathbb{M}	
morning max el	13305 Dec 26 17:34	0° \mathcal{A} 44'12	45°49'23		13308 Aug 03 19:23	0° Ω	
asc. node	13306 Jan 16 08:59	21° \mathcal{A} 51'10			13308 Aug 28 21:30	0° \mathbb{M}	
	13306 Jan 23 21:08	0° \mathcal{B}			13308 Sep 24 01:32	0° \mathcal{A}	
	13306 Feb 19 08:32	0° \approx		evening max el	13308 Oct 17 17:36	24° \mathcal{A} 55'53	46°15'34
	13306 Mar 16 18:52	0° Υ		desc. node	13308 Oct 22 16:02	29° \mathcal{A} 41'40	
	13306 Apr 10 15:39	0° Υ			13308 Oct 22 23:49	0° \mathcal{B}	
	13306 May 05 03:45	0° \mathcal{B}		greatest brilliancy	13308 Nov 25 22:55	24° \mathcal{B} 06'30	-4.8m
desc. node	13306 May 08 05:08	3° \mathcal{B} 46'06		retrograde	13308 Dec 06 06:18	26° \mathcal{B} 02'13	
	13306 May 29 09:28	0° \mathbb{I}		evening set	13308 Dec 24 12:34	19° \mathcal{B} 46'25	
	13306 Jun 22 10:32	0° \mathcal{G}		inferior conj	13308 Dec 27 17:48	17° \mathcal{B} 46'14	-8°29'51
morning set	13306 Jun 26 11:42	5° \mathcal{G} 04'02		minimum elong	13308 Dec 27 23:16	17° \mathcal{B} 37'38	8°28'25
	13306 Jul 16 08:58	0° Ω		min. Earth dist.	13308 Dec 27 17:08	17° \mathcal{B} 47'17	0.28896 AU
				morning rise	13308 Dec 31 10:03	15° \mathcal{B} 29'44	
superior conj	13306 Aug 05 09:11	25° Ω 06'23	-0°53'13	direct	13309 Jan 18 03:36	9° \mathcal{B} 34'49	
minimum elong	13306 Aug 05 20:24	25° Ω 41'36	0°53'26	greatest brilliancy	13309 Jan 28 12:07	11° \mathcal{B} 32'15	-4.7m
max. Earth dist.	13306 Aug 06 03:15	26° Ω 03'04	1.71467 AU	asc. node	13309 Feb 12 18:39	19° \mathcal{B} 58'54	
	13306 Aug 09 06:48	0° \mathbb{M}			13309 Feb 25 06:58	0° \approx	
asc. node	13306 Aug 28 18:56	24° \mathbb{M} 26'23		morning max el	13309 Mar 08 06:15	10° \approx 12'32	45°49'06
	13306 Sep 02 05:35	0° Ω			13309 Mar 27 10:16	0° Υ	
evening rise	13306 Sep 14 03:27	14° Ω 53'12			13309 Apr 23 03:25	0° Υ	
	13306 Sep 26 06:23	0° \mathbb{M}			13309 May 18 13:50	0° \mathcal{B}	
	13306 Oct 20 10:30	0° \mathcal{A}		desc. node	13309 Jun 04 18:08	20° \mathcal{B} 45'08	
	13306 Nov 13 20:04	0° \mathcal{B}			13309 Jun 12 08:03	0° \mathbb{I}	
	13306 Dec 08 14:07	0° \approx			13309 Jul 06 16:34	0° \mathcal{G}	
desc. node	13306 Dec 18 11:31	11° \approx 49'56			13309 Jul 30 19:41	0° Ω	
	13307 Jan 02 20:16	0° Υ			13309 Aug 23 20:30	0° \mathbb{M}	
	13307 Jan 28 19:58	0° Υ		morning set	13309 Sep 08 16:31	19° \mathbb{M} 46'46	
	13307 Feb 25 03:02	0° \mathcal{B}			13309 Sep 16 21:00	0° Ω	
evening max el	13307 Mar 12 12:41	15° \mathcal{B} 42'29	46°07'37	asc. node	13309 Sep 25 09:34	10° Ω 38'12	
	13307 Mar 28 05:07	0° \mathbb{I}			13309 Oct 10 22:13	0° \mathbb{M}	
asc. node	13307 Apr 10 11:09	9° \mathbb{I} 46'35					
greatest brilliancy	13307 Apr 21 04:55	15° \mathbb{I} 05'30	-4.8m	superior conj	13309 Oct 17 13:30	8° \mathbb{M} 15'59	0°50'32
retrograde	13307 May 01 00:46	16° \mathbb{I} 53'05		minimum elong	13309 Oct 17 03:41	7° \mathbb{M} 45'25	0°50'41
evening set	13307 May 17 22:50	11° \mathbb{I} 20'08		max. Earth dist.	13309 Oct 19 20:54	11° \mathbb{M} 08'27	1.72251 AU
inferior conj	13307 May 21 19:50	8° \mathbb{I} 57'57	8°21'44		13309 Nov 04 00:47	0° \mathcal{A}	
minimum elong	13307 May 21 11:29	9° \mathbb{I} 10'56	8°19'45	evening rise	13309 Nov 23 23:38	24° \mathcal{A} 44'20	
min. Earth dist.	13307 May 21 21:18	8° \mathbb{I} 55'39	0.27676 AU		13309 Nov 28 05:43	0° \mathcal{B}	
morning rise	13307 May 25 00:05	7° \mathbb{I} 00'41			13309 Dec 22 14:25	0° \approx	
direct	13307 Jun 11 19:04	0° \mathbb{I} 57'03		desc. node	13310 Jan 15 00:02	28° \approx 34'51	
greatest brilliancy	13307 Jun 21 16:45	2° \mathbb{I} 48'42	-4.9m		13310 Jan 16 04:03	0° Υ	
	13307 Jul 28 11:20	0° \mathcal{G}			13310 Feb 09 23:14	0° Υ	
desc. node	13307 Jul 31 14:11	3° \mathcal{G} 05'17			13310 Mar 07 00:34	0° \mathcal{B}	
morning max el	13307 Aug 01 07:51	3° \mathcal{G} 49'36	46°57'50		13310 Apr 01 11:00	0° \mathbb{I}	
	13307 Aug 25 18:45	0° Ω			13310 Apr 27 16:17	0° \mathcal{G}	
	13307 Sep 20 21:03	0° \mathbb{M}		asc. node	13310 May 07 20:43	11° \mathcal{G} 11'52	
	13307 Oct 16 03:51	0° Ω		evening max el	13310 May 24 06:52	28° \mathcal{G} 18'56	46°37'54
	13307 Nov 10 01:24	0° \mathbb{M}			13310 May 25 23:40	0° Ω	
asc. node	13307 Nov 21 11:35	13° \mathbb{M} 52'09		greatest brilliancy	13310 Jul 03 16:38	28° Ω 46'53	-4.9m
	13307 Dec 04 17:15	0° \mathcal{A}			13310 Jul 08 01:50	0° \mathbb{M}	
	13307 Dec 29 05:07	0° \mathcal{B}		retrograde	13310 Jul 13 08:55	0° \mathbb{M} 32'43	
	13308 Jan 22 14:28	0° \approx			13310 Jul 18 13:23	30° \mathbb{R} Ω	
morning set	13308 Jan 30 11:25	9° \approx 42'01		evening set	13310 Jul 29 10:40	25° Ω 33'16	
	13308 Feb 15 22:33	0° Υ		inferior conj	13310 Aug 03 01:10	22° Ω 48'14	5°59'55
max. Earth dist.	13308 Mar 06 15:08	24° Υ 18'11	1.72957 AU	minimum elong	13310 Aug 03 12:10	22° Ω 31'22	5°56'29

min. Earth dist.	13310 Aug 03 11:57	22°03'14.3	0.27012 AU		13313 Jan 30 14:51	0°08'	
morning rise	13310 Aug 08 13:32	19°03'32.03		evening rise	13313 Feb 01 12:36	2°08'20.42	
direct	13310 Aug 23 18:13	15°00'00.57		desc. node	13313 Feb 11 13:46	14°08'41.47	
desc. node	13310 Aug 27 23:35	15°02'21.44			13313 Feb 24 00:51	0°00'	
greatest brilliancy	13310 Sep 02 21:27	16°05'55.25	-4.9m		13313 Mar 20 11:59	0°08'	
	13310 Sep 24 03:14	0°00'			13313 Apr 13 23:59	0°02'	
morning max el	13310 Oct 12 17:38	16°05'51.18	46°31'30		13313 May 08 14:18	0°06'	
	13310 Oct 25 14:25	0°00'			13313 Jun 02 11:00	0°00'	
	13310 Nov 21 21:50	0°00'		asc. node	13313 Jun 04 07:16	2°02'12.13	
	13310 Dec 17 20:45	0°00'			13313 Jun 27 22:08	0°00'	
asc. node	13310 Dec 18 23:56	1°00'19.54			13313 Jul 24 18:17	0°00'	
	13311 Jan 12 02:55	0°00'		evening max el	13313 Aug 04 22:32	11°03'36.13	46°43'53
	13311 Feb 05 22:57	0°00'			13313 Aug 25 01:18	0°00'	
	13311 Mar 02 12:40	0°00'		greatest brilliancy	13313 Sep 13 06:15	11°03'53.51	-4.8m
	13311 Mar 26 22:08	0°00'		retrograde	13313 Sep 24 06:48	14°03'09.23	
desc. node	13311 Apr 09 16:56	17°00'01.45		desc. node	13313 Sep 24 08:45	14°03'09.22	
morning set	13311 Apr 10 14:38	18°00'08.55		evening set	13313 Oct 09 11:13	9°03'37.58	
	13311 Apr 20 04:05	0°00'		min. Earth dist.	13313 Oct 14 12:22	6°03'39.18	0.27706 AU
	13311 May 14 06:45	0°00'		inferior conj	13313 Oct 15 08:40	6°03'08.09	-5°02'37
max. Earth dist.	13311 May 16 22:26	3°02'18.43	1.71921 AU	minimum elong	13313 Oct 14 22:48	6°03'23.17	4°59'31
				morning rise	13313 Oct 20 11:01	3°03'06.13	
superior conj	13311 May 20 04:37	7°02'22.47	-1°18'57		13313 Oct 27 00:49	30°08'00	
minimum elong	13311 May 19 19:35	6°02'54.36	1°19'39	direct	13313 Nov 05 07:51	28°00'16.39	
	13311 Jun 07 06:42	0°00'		greatest brilliancy	13313 Nov 14 19:55	29°00'55.59	-4.8m
evening rise	13311 Jun 29 00:00	27°00'12.54			13313 Nov 15 00:42	0°00'	
	13311 Jul 01 05:21	0°00'		morning max el	13313 Dec 24 08:36	28°03'30.31	45°50'11
	13311 Jul 25 04:33	0°00'			13313 Dec 25 21:35	0°00'	
asc. node	13311 Jul 31 06:36	7°00'35.58		asc. node	13314 Jan 15 10:54	21°00'11.14	
	13311 Aug 18 06:11	0°00'			13314 Jan 23 12:43	0°00'	
	13311 Sep 11 12:20	0°00'			13314 Feb 18 21:42	0°00'	
	13311 Oct 06 02:14	0°00'			13314 Mar 16 06:53	0°00'	
	13311 Oct 31 05:46	0°00'			13314 Apr 10 03:04	0°00'	
desc. node	13311 Nov 20 02:04	22°00'53.49			13314 May 04 14:50	0°00'	
	13311 Nov 26 10:04	0°00'		desc. node	13314 May 07 06:54	3°00'17.28	
	13311 Dec 24 18:31	0°00'			13314 May 28 20:21	0°00'	
evening max el	13311 Dec 28 17:21	3°00'51.06	45°54'40		13314 Jun 21 21:19	0°00'	
	13312 Jan 31 11:20	0°00'		morning set	13314 Jun 23 23:22	2°00'36.37	
greatest brilliancy	13312 Feb 05 19:57	2°00'15.28	-4.8m		13314 Jul 15 19:41	0°00'	
retrograde	13312 Feb 15 16:51	4°00'02.40					
	13312 Mar 01 02:01	30°08'00		superior conj	13314 Aug 02 21:17	22°02'40.13	-0°56'14
evening set	13312 Mar 01 18:27	29°00'37.50		minimum elong	13314 Aug 03 08:46	23°02'16.14	0°56'28
inferior conj	13312 Mar 07 22:26	25°00'56.25	-1°03'05	max. Earth dist.	13314 Aug 03 15:03	23°02'35.58	1.71451 AU
minimum elong	13312 Mar 08 00:48	25°00'52.43	1°02'10		13314 Aug 08 17:29	0°00'	
min. Earth dist.	13312 Mar 08 07:05	25°00'42.54	0.28296 AU	asc. node	13314 Aug 27 20:52	23°00'59.01	
asc. node	13312 Mar 12 04:02	23°00'20.19			13314 Sep 01 16:16	0°00'	
morning rise	13312 Mar 14 06:39	22°00'07.58		evening rise	13314 Sep 11 17:18	12°00'33.15	
direct	13312 Mar 29 03:19	17°00'45.51			13314 Sep 25 17:06	0°00'	
greatest brilliancy	13312 Apr 08 23:26	19°00'55.51	-4.8m		13314 Oct 19 21:22	0°00'	
	13312 Apr 26 01:16	0°00'			13314 Nov 13 07:14	0°00'	
morning max el	13312 May 18 00:43	19°00'35.11	46°29'10		13314 Dec 08 01:49	0°00'	
	13312 May 28 04:22	0°00'		desc. node	13314 Dec 17 13:17	11°00'19.31	
	13312 Jun 24 05:31	0°00'			13315 Jan 02 08:55	0°00'	
desc. node	13312 Jul 02 05:51	9°02'18.23			13315 Jan 28 10:22	0°00'	
	13312 Jul 19 17:07	0°00'			13315 Feb 24 21:24	0°00'	
	13312 Aug 13 11:50	0°00'		evening max el	13315 Mar 10 03:27	13°00'26.03	46°06'38
	13312 Sep 06 22:47	0°00'			13315 Mar 28 15:23	0°00'	
	13312 Oct 01 06:31	0°00'		asc. node	13315 Apr 09 13:11	8°02'21.33	
asc. node	13312 Oct 22 23:56	26°00'51.22		greatest brilliancy	13315 Apr 18 18:22	12°02'45.06	-4.8m
	13312 Oct 25 12:55	0°00'		retrograde	13315 Apr 28 14:08	14°02'32.20	
	13312 Nov 18 18:36	0°00'		evening set	13315 May 15 08:31	9°02'05.45	
morning set	13312 Nov 19 04:21	0°00'30.11		inferior conj	13315 May 19 09:44	6°02'37.04	8°11'45
	13312 Dec 13 00:10	0°00'		minimum elong	13315 May 19 00:50	6°02'50.55	8°09'35
				min. Earth dist.	13315 May 19 10:48	6°02'35.24	0.27691 AU
superior conj	13312 Dec 26 05:09	16°00'30.08	1°23'41	morning rise	13315 May 22 17:06	4°02'34.49	
minimum elong	13312 Dec 26 09:43	16°00'34.15	1°24'38		13315 Jun 01 02:27	30°08'00	
max. Earth dist.	13312 Dec 27 16:40	18°00'09.53	1.73053 AU	direct	13315 Jun 09 09:15	28°00'36.01	
	13313 Jan 06 06:38	0°00'			13315 Jun 17 22:39	0°00'	

greatest brilliancy	13315 Jun 19 06:52	0° Π 27'13	-4.9m	desc. node	13318 Jan 14 01:59	28° \approx 06'38	
	13315 Jul 28 10:47	0° \ominus			13318 Jan 15 15:19	0° \mathcal{H}	
morning max el	13315 Jul 29 21:06	1° \ominus 25'54	46°57'46		13318 Feb 09 11:00	0° \mathcal{Y}	
desc. node	13315 Jul 30 16:11	2° \ominus 14'04			13318 Mar 06 13:10	0° \mathcal{B}	
	13315 Aug 25 11:09	0° Ω			13318 Apr 01 00:59	0° Π	
	13315 Sep 20 10:53	0° \mathcal{M}			13318 Apr 27 08:59	0° \ominus	
	13315 Oct 15 16:21	0° $\underline{\mathcal{L}}$		asc. node	13318 May 06 22:35	10° \ominus 27'14	
	13315 Nov 09 13:06	0° \mathcal{M}		evening max el	13318 May 21 18:55	25° \ominus 52'06	46°37'07
asc. node	13315 Nov 20 13:24	13° \mathcal{M} 22'50			13318 May 26 00:00	0° Ω	
	13315 Dec 04 04:27	0° \mathcal{A}		greatest brilliancy	13318 Jul 01 06:28	26° Ω 22'12	-4.9m
	13315 Dec 28 16:00	0° \mathcal{Z}		retrograde	13318 Jul 10 21:41	28° Ω 07'29	
	13316 Jan 22 01:13	0° \approx		evening set	13318 Jul 27 02:54	23° Ω 02'37	
morning set	13316 Jan 28 04:24	7° \approx 33'28		inferior conj	13318 Jul 31 13:56	20° Ω 22'45	6°18'05
	13316 Feb 15 09:15	0° \mathcal{H}		minimum elong	13318 Aug 01 01:05	20° Ω 05'41	6°14'40
max. Earth dist.	13316 Mar 04 06:59	22° \mathcal{H} 05'58	1.72980 AU	min. Earth dist.	13318 Aug 01 01:31	20° Ω 05'01	0.27029 AU
				morning rise	13318 Aug 05 23:05	17° Ω 11'06	
superior conj	13316 Mar 05 12:52	23° \mathcal{H} 38'14	0°13'37	direct	13318 Aug 21 06:39	12° Ω 34'45	
minimum elong	13316 Mar 05 16:01	23° \mathcal{H} 47'57	0°13'41	desc. node	13318 Aug 27 01:40	13° Ω 13'31	
behind sun begin	13316 Mar 05 03:37	23° \mathcal{H} 09'39		greatest brilliancy	13318 Aug 31 10:53	14° Ω 30'18	-4.9m
behind sun end	13316 Mar 06 04:26	24° \mathcal{H} 26'15			13318 Sep 24 14:14	0° \mathcal{M}	
	13316 Mar 10 16:31	0° \mathcal{Y}		morning max el	13318 Oct 10 07:36	14° \mathcal{M} 29'58	46°33'07
desc. node	13316 Mar 11 04:15	0° \mathcal{Y} 36'13			13318 Oct 25 09:25	0° $\underline{\mathcal{L}}$	
	13316 Apr 03 22:37	0° \mathcal{B}			13318 Nov 21 12:43	0° \mathcal{M}	
evening rise	13316 Apr 12 22:23	11° \mathcal{B} 08'19			13318 Dec 17 09:46	0° \mathcal{A}	
	13316 Apr 28 03:09	0° Π		asc. node	13318 Dec 18 01:49	0° \mathcal{A} 47'15	
	13316 May 22 06:35	0° \ominus			13319 Jan 11 14:55	0° \mathcal{Z}	
	13316 Jun 15 10:36	0° Ω			13319 Feb 05 10:22	0° \approx	
asc. node	13316 Jul 01 19:14	20° Ω 13'33			13319 Mar 01 23:45	0° \mathcal{H}	
	13316 Jul 09 17:50	0° \mathcal{M}			13319 Mar 26 09:05	0° \mathcal{Y}	
	13316 Aug 03 07:58	0° $\underline{\mathcal{L}}$		morning set	13319 Apr 08 04:40	15° \mathcal{Y} 49'58	
	13316 Aug 28 11:18	0° \mathcal{M}		desc. node	13319 Apr 08 18:42	16° \mathcal{Y} 33'23	
	13316 Sep 23 17:58	0° \mathcal{A}			13319 Apr 19 15:01	0° \mathcal{B}	
evening max el	13316 Oct 15 07:49	22° \mathcal{A} 38'39	46°16'40		13319 May 13 17:43	0° Π	
desc. node	13316 Oct 21 18:01	28° \mathcal{A} 48'59		max. Earth dist.	13319 May 14 12:43	0° Π 59'17	1.71962 AU
	13316 Oct 23 00:39	0° \mathcal{Z}					
greatest brilliancy	13316 Nov 23 14:39	21° \mathcal{Z} 55'06	-4.8m	superior conj	13319 May 17 17:12	4° Π 58'00	-1°17'14
retrograde	13316 Dec 03 21:34	23° \mathcal{Z} 50'52		minimum elong	13319 May 17 07:36	4° Π 28'01	1°17'54
evening set	13316 Dec 22 05:58	17° \mathcal{Z} 32'53			13319 Jun 06 17:43	0° \ominus	
inferior conj	13316 Dec 25 09:42	15° \mathcal{Z} 35'00	-8°35'04	evening rise	13319 Jun 26 11:22	24° \ominus 43'30	
minimum elong	13316 Dec 25 14:28	15° \mathcal{Z} 27'31	8°33'43		13319 Jun 30 16:26	0° Ω	
min. Earth dist.	13316 Dec 25 08:18	15° \mathcal{Z} 37'13	0.28890 AU		13319 Jul 24 15:45	0° \mathcal{M}	
morning rise	13316 Dec 28 23:01	13° \mathcal{Z} 22'47		asc. node	13319 Jul 30 08:32	7° \mathcal{M} 06'57	
direct	13317 Jan 15 19:00	7° \mathcal{Z} 23'54			13319 Aug 17 17:35	0° $\underline{\mathcal{L}}$	
greatest brilliancy	13317 Jan 26 03:12	9° \mathcal{Z} 20'29	-4.7m		13319 Sep 11 00:03	0° \mathcal{M}	
asc. node	13317 Feb 11 20:47	18° \mathcal{Z} 49'24			13319 Oct 05 14:30	0° \mathcal{A}	
	13317 Feb 25 09:58	0° \approx			13319 Oct 30 19:03	0° \mathcal{Z}	
morning max el	13317 Mar 05 20:20	7° \approx 56'00	45°48'12	desc. node	13319 Nov 19 03:55	22° \mathcal{Z} 17'28	
	13317 Mar 27 03:06	0° \mathcal{H}			13319 Nov 26 01:29	0° \approx	
	13317 Apr 22 17:19	0° \mathcal{Y}			13319 Dec 24 15:54	0° \mathcal{H}	
	13317 May 18 02:26	0° \mathcal{B}		evening max el	13319 Dec 26 08:57	1° \mathcal{H} 39'17	45°55'04
desc. node	13317 Jun 03 20:00	20° \mathcal{B} 13'58			13320 Feb 03 08:33	0° \mathcal{Y}	
	13317 Jun 11 19:56	0° Π		greatest brilliancy	13320 Feb 03 10:31	0° \mathcal{Y} 01'42	-4.8m
	13317 Jul 06 04:04	0° \ominus		retrograde	13320 Feb 13 08:36	1° \mathcal{Y} 49'30	
	13317 Jul 30 06:55	0° Ω			13320 Feb 22 21:19	30° \mathcal{R} \mathcal{H}	
	13317 Aug 23 07:33	0° \mathcal{M}		evening set	13320 Feb 28 11:14	27° \mathcal{H} 22'23	
morning set	13317 Sep 06 05:49	17° \mathcal{M} 24'06		inferior conj	13320 Mar 05 13:51	23° \mathcal{H} 42'37	-1°24'19
	13317 Sep 16 07:56	0° $\underline{\mathcal{L}}$		minimum elong	13320 Mar 05 17:00	23° \mathcal{H} 37'41	1°23'07
asc. node	13317 Sep 24 11:24	10° $\underline{\mathcal{L}}$ 09'53		min. Earth dist.	13320 Mar 05 22:33	23° \mathcal{H} 29'01	0.28327 AU
	13317 Oct 10 09:03	0° \mathcal{M}		asc. node	13320 Mar 11 05:58	20° \mathcal{H} 16'51	
				morning rise	13320 Mar 11 22:23	19° \mathcal{H} 54'02	
superior conj	13317 Oct 15 04:23	5° \mathcal{M} 59'12	0°47'37	direct	13320 Mar 26 19:25	15° \mathcal{H} 31'47	
minimum elong	13317 Oct 14 18:50	5° \mathcal{M} 29'29	0°47'44	greatest brilliancy	13320 Apr 06 15:11	17° \mathcal{H} 41'53	-4.8m
max. Earth dist.	13317 Oct 17 09:02	8° \mathcal{M} 43'07	1.72213 AU		13320 Apr 26 13:55	0° \mathcal{Y}	
	13317 Nov 03 11:35	0° \mathcal{A}		morning max el	13320 May 15 16:52	17° \mathcal{Y} 21'26	46°27'29
evening rise	13317 Nov 21 15:50	22° \mathcal{A} 32'31			13320 May 27 23:08	0° \mathcal{B}	
	13317 Nov 27 16:33	0° \mathcal{Z}			13320 Jun 23 20:22	0° Π	
	13317 Dec 22 01:22	0° \approx		desc. node	13320 Jul 01 07:49	8° Π 42'30	

	13320 Jul 19 06:19	0°☾			13323 Feb 24 16:14	0°♄	
	13320 Aug 13 00:09	0°♌		evening max el	13323 Mar 07 17:37	11°♄08'17	46°05'43
	13320 Sep 06 10:32	0°♍			13323 Mar 29 05:02	0°♊	
	13320 Sep 30 17:53	0°♋		asc. node	13323 Apr 08 15:07	6°♊53'49	
asc. node	13320 Oct 22 01:41	26°♋22'25		greatest brilliancy	13323 Apr 16 08:30	10°♊26'03	-4.8m
	13320 Oct 24 23:59	0°♌		retrograde	13323 Apr 26 03:26	12°♊12'42	
morning set	13320 Nov 16 20:06	28°♌16'42		evening set	13323 May 12 18:26	6°♊52'20	
	13320 Nov 18 05:28	0°♍		inferior conj	13323 May 16 23:53	4°♊17'21	8°00'53
	13320 Dec 12 10:56	0°♎		minimum elong	13323 May 16 14:30	4°♊32'00	7°58'34
				min. Earth dist.	13323 May 17 00:54	4°♊15'45	0.27707 AU
superior conj	13320 Dec 23 21:58	14°♎10'30	1°24'25	morning rise	13323 May 20 10:28	2°♊10'02	
minimum elong	13320 Dec 24 01:51	14°♎22'28	1°25'24		13323 May 24 06:41	30°♋♄	
max. Earth dist.	13320 Dec 25 12:37	16°♎09'58	1.73035 AU	direct	13323 Jun 06 23:07	26°♋16'00	
	13321 Jan 05 17:23	0°♏		greatest brilliancy	13323 Jun 16 21:47	28°♋07'33	-4.9m
evening rise	13321 Jan 30 04:49	0°♐09'41			13323 Jun 21 07:38	0°♊	
	13321 Jan 30 01:41	0°♐		morning max el	13323 Jul 27 09:58	29°♊01'34	46°57'32
desc. node	13321 Feb 10 15:41	14°♐14'17			13323 Jul 28 09:07	0°☾	
	13321 Feb 23 11:50	0°♑		desc. node	13323 Jul 29 18:15	1°☾24'15	
	13321 Mar 19 23:13	0°♒			13323 Aug 25 03:13	0°♌	
	13321 Apr 13 11:37	0°♊			13323 Sep 20 00:36	0°♍	
	13321 May 08 02:34	0°☾			13323 Oct 15 04:50	0°♋	
	13321 Jun 02 00:18	0°♌			13323 Nov 09 00:48	0°♌	
asc. node	13321 Jun 03 09:10	1°♌38'00		asc. node	13323 Nov 19 15:20	12°♌53'47	
	13321 Jun 27 13:18	0°♍			13323 Dec 03 15:38	0°♍	
	13321 Jul 24 13:44	0°♋			13323 Dec 28 02:51	0°♎	
evening max el	13321 Aug 02 14:00	9°♋18'01	46°44'20		13324 Jan 21 11:52	0°♏	
	13321 Aug 25 16:09	0°♌		morning set	13324 Jan 25 21:19	5°♏24'55	
greatest brilliancy	13321 Sep 10 20:55	9°♌33'38	-4.8m		13324 Feb 14 19:50	0°♐	
retrograde	13321 Sep 21 21:41	11°♌48'46		max. Earth dist.	13324 Mar 01 23:35	19°♐56'24	1.73003 AU
desc. node	13321 Sep 23 10:39	11°♌45'53					
evening set	13321 Oct 06 23:05	7°♌21'13		superior conj	13324 Mar 03 04:26	21°♐25'28	0°17'01
min. Earth dist.	13321 Oct 12 02:25	4°♌19'21	0.27647 AU	minimum elong	13324 Mar 03 08:20	21°♐37'29	0°17'04
inferior conj	13321 Oct 12 22:31	3°♌48'30	-4°43'43	desc. node	13324 Mar 10 05:59	0°♑08'53	
minimum elong	13321 Oct 12 13:02	4°♌03'04	4°40'41		13324 Mar 10 03:07	0°♑	
morning rise	13321 Oct 18 03:41	0°♌42'48			13324 Apr 03 09:18	0°♒	
	13321 Oct 19 11:20	30°♋♌		evening rise	13324 Apr 10 13:05	8°♒51'54	
direct	13321 Nov 02 21:51	25°♌58'01			13324 Apr 27 13:58	0°♊	
greatest brilliancy	13321 Nov 12 08:47	27°♌36'34	-4.8m		13324 May 21 17:36	0°☾	
	13321 Nov 18 02:55	0°♌			13324 Jun 14 21:54	0°♌	
morning max el	13321 Dec 21 22:48	26°♌14'09	45°51'03	asc. node	13324 Jun 30 21:14	19°♌44'08	
	13321 Dec 25 19:24	0°♍			13324 Jul 09 05:34	0°♍	
asc. node	13322 Jan 14 12:58	20°♍31'34			13324 Aug 02 20:24	0°♋	
	13322 Jan 23 04:13	0°♎			13324 Aug 28 01:02	0°♌	
	13322 Feb 18 10:53	0°♏			13324 Sep 23 10:34	0°♍	
	13322 Mar 15 18:58	0°♐		evening max el	13324 Oct 12 21:42	20°♍20'48	46°17'41
	13322 Apr 09 14:34	0°♑		desc. node	13324 Oct 20 19:56	27°♍55'17	
	13322 May 04 02:00	0°♒			13324 Oct 23 02:46	0°♎	
desc. node	13322 May 06 08:45	2°♒48'47		greatest brilliancy	13324 Nov 21 06:04	19°♎43'15	-4.8m
	13322 May 28 07:20	0°♊		retrograde	13324 Dec 01 13:05	21°♎39'39	
morning set	13322 Jun 21 11:07	0°☾09'07		evening set	13324 Dec 19 22:57	15°♎19'49	
	13322 Jun 21 08:12	0°☾		inferior conj	13324 Dec 23 01:32	13°♎23'51	-8°39'27
	13322 Jul 15 06:34	0°♌		minimum elong	13324 Dec 23 05:32	13°♎17'34	8°38'13
				min. Earth dist.	13324 Dec 22 23:23	13°♎27'13	0.28880 AU
superior conj	13322 Jul 31 09:12	20°♌12'56	-0°59'08	morning rise	13324 Dec 26 12:09	11°♎15'45	
minimum elong	13322 Jul 31 20:51	20°♌49'26	0°59'26	direct	13325 Jan 13 10:01	5°♎13'01	
max. Earth dist.	13322 Aug 01 00:15	21°♌00'08	1.71443 AU	greatest brilliancy	13325 Jan 23 18:27	7°♎09'23	-4.7m
	13322 Aug 08 04:22	0°♍		asc. node	13325 Feb 10 22:43	17°♎41'57	
asc. node	13322 Aug 26 22:42	23°♍30'42			13325 Feb 25 11:11	0°♏	
	13322 Sep 01 03:09	0°♋		morning max el	13325 Mar 03 11:01	5°♏41'42	45°47'29
evening rise	13322 Sep 09 06:34	10°♋10'45			13325 Mar 26 19:18	0°♐	
	13322 Sep 25 04:02	0°♌			13325 Apr 22 06:46	0°♑	
	13322 Oct 19 08:25	0°♍			13325 May 17 14:38	0°♒	
	13322 Nov 12 18:33	0°♎		desc. node	13325 Jun 02 21:55	19°♒44'02	
	13322 Dec 07 13:40	0°♏			13325 Jun 11 07:30	0°♊	
desc. node	13322 Dec 16 15:17	10°♏49'26			13325 Jul 05 15:14	0°☾	
	13323 Jan 01 21:43	0°♐			13325 Jul 29 17:50	0°♌	
	13323 Jan 28 00:58	0°♑			13325 Aug 22 18:16	0°♍	

morning set	13325 Sep 03 19:24	15° \cap 03'23		min. Earth dist.	13328 Mar 03 14:01	21° X 16'08	0.28356 AU
	13325 Sep 15 18:30	0° $\underline{\text{A}}$		morning rise	13328 Mar 09 13:51	17° X 41'13	
asc. node	13325 Sep 23 13:08	9° $\underline{\text{A}}$ 42'25		asc. node	13328 Mar 10 07:55	17° X 16'55	
	13325 Oct 09 19:34	0° \cap		direct	13328 Mar 24 11:39	13° X 18'58	
				greatest brilliancy	13328 Apr 04 06:35	15° X 28'33	-4.8m
superior conj	13325 Oct 12 19:19	3° \cap 43'32	0°44'38		13328 Apr 26 22:44	0° \cap	
minimum elong	13325 Oct 12 10:07	3° \cap 14'53	0°44'43	morning max el	13328 May 13 08:30	15° \cap 07'47	46°25'49
max. Earth dist.	13325 Oct 14 21:07	6° \cap 18'41	1.72183 AU		13328 May 27 16:57	0° B	
	13325 Nov 02 22:05	0° X			13328 Jun 23 10:33	0° \cap	
evening rise	13325 Nov 19 08:00	20° X 21'30		desc. node	13328 Jun 30 09:49	8° \cap 08'19	
	13325 Nov 27 03:06	0° B			13328 Jul 18 18:57	0° B	
	13325 Dec 21 12:04	0° \approx			13328 Aug 12 11:57	0° \cap	
desc. node	13326 Jan 13 03:51	27° \approx 39'01			13328 Sep 05 21:50	0° \cap	
	13326 Jan 15 02:17	0° X			13328 Sep 30 04:49	0° $\underline{\text{A}}$	
	13326 Feb 08 22:29	0° \cap		asc. node	13328 Oct 21 03:37	25° $\underline{\text{A}}$ 55'21	
	13326 Mar 06 01:29	0° B			13328 Oct 24 10:39	0° \cap	
	13326 Mar 31 14:44	0° \cap		morning set	13328 Nov 14 12:01	26° \cap 05'00	
	13326 Apr 27 01:36	0° B			13328 Nov 17 15:54	0° X	
asc. node	13326 May 06 00:37	9° B 43'32			13328 Dec 11 21:16	0° B	
evening max el	13326 May 19 08:05	23° B 29'22	46°36'18				
	13326 May 26 01:03	0° \cap		superior conj	13328 Dec 21 14:57	12° B 02'41	1°25'00
greatest brilliancy	13326 Jun 28 19:47	23° \cap 58'23	-4.9m	minimum elong	13328 Dec 21 18:07	12° B 12'28	1°26'01
retrograde	13326 Jul 08 11:01	25° \cap 43'43		max. Earth dist.	13328 Dec 23 09:02	14° B 12'46	1.73017 AU
evening set	13326 Jul 24 19:15	20° \cap 33'20			13329 Jan 05 03:43	0° \approx	
inferior conj	13326 Jul 29 02:44	17° \cap 58'39	6°35'23	evening rise	13329 Jan 27 21:04	27° \approx 59'54	
minimum elong	13326 Jul 29 13:57	17° \cap 41'30	6°32'04		13329 Jan 29 12:07	0° X	
min. Earth dist.	13326 Jul 29 14:44	17° \cap 40'18	0.27046 AU	desc. node	13329 Feb 09 17:27	13° X 47'27	
morning rise	13326 Aug 03 08:30	14° \cap 51'58			13329 Feb 22 22:29	0° \cap	
direct	13326 Aug 18 19:36	10° \cap 10'05			13329 Mar 19 10:09	0° B	
desc. node	13326 Aug 26 03:30	11° \cap 11'45			13329 Apr 12 22:58	0° \cap	
greatest brilliancy	13326 Aug 28 23:45	12° \cap 06'04	-4.9m		13329 May 07 14:32	0° B	
	13326 Sep 24 21:39	0° \cap			13329 Jun 01 13:18	0° \cap	
morning max el	13326 Oct 07 22:28	12° \cap 12'21	46°34'44	asc. node	13329 Jun 02 11:12	1° \cap 05'07	
	13326 Oct 25 03:21	0° $\underline{\text{A}}$			13329 Jun 27 04:16	0° \cap	
	13326 Nov 21 02:54	0° \cap			13329 Jul 24 09:19	0° $\underline{\text{A}}$	
	13326 Dec 16 22:15	0° X		evening max el	13329 Jul 31 05:00	6° $\underline{\text{A}}$ 59'42	46°44'40
asc. node	13326 Dec 17 03:49	0° X 16'26			13329 Aug 26 11:25	0° \cap	
	13327 Jan 11 02:28	0° B		greatest brilliancy	13329 Sep 08 12:14	7° \cap 15'07	-4.9m
	13327 Feb 04 21:22	0° \approx		retrograde	13329 Sep 19 11:59	9° \cap 28'57	
	13327 Mar 01 10:27	0° X		desc. node	13329 Sep 22 12:43	9° \cap 17'50	
	13327 Mar 25 19:38	0° \cap		evening set	13329 Oct 04 11:09	5° \cap 05'09	
morning set	13327 Apr 05 18:50	13° \cap 32'51		min. Earth dist.	13329 Oct 09 16:57	1° \cap 59'41	0.27591 AU
desc. node	13327 Apr 07 20:29	16° \cap 06'24		inferior conj	13329 Oct 10 12:21	1° \cap 29'51	-4°24'15
	13327 Apr 19 01:31	0° B		minimum elong	13329 Oct 10 03:19	1° \cap 43'45	4°21'18
max. Earth dist.	13327 May 12 03:17	28° B 42'17	1.72001 AU		13329 Oct 12 23:19	30° R $\underline{\text{A}}$	
	13327 May 13 04:13	0° \cap		morning rise	13329 Oct 15 20:13	28° $\underline{\text{A}}$ 20'18	
				direct	13329 Oct 31 11:33	23° $\underline{\text{A}}$ 40'17	
superior conj	13327 May 15 05:54	2° \cap 35'01	-1°15'24	greatest brilliancy	13329 Nov 09 22:10	25° $\underline{\text{A}}$ 18'28	-4.8m
minimum elong	13327 May 14 19:50	2° \cap 03'35	1°16'00		13329 Nov 19 22:10	0° \cap	
	13327 Jun 06 04:16	0° B		morning max el	13329 Dec 19 12:08	23° \cap 56'35	45°52'04
evening rise	13327 Jun 23 22:58	22° B 16'11			13329 Dec 25 15:58	0° X	
	13327 Jun 30 03:05	0° \cap		asc. node	13330 Jan 13 14:52	19° X 52'59	
	13327 Jul 24 02:32	0° \cap			13330 Jan 22 19:05	0° B	
asc. node	13327 Jul 29 10:21	6° \cap 38'52			13330 Feb 17 23:38	0° \approx	
	13327 Aug 17 04:34	0° $\underline{\text{A}}$			13330 Mar 15 06:43	0° X	
	13327 Sep 10 11:20	0° \cap			13330 Apr 09 01:47	0° \cap	
	13327 Oct 05 02:18	0° X			13330 May 03 12:56	0° B	
	13327 Oct 30 07:54	0° B		desc. node	13330 May 05 10:43	2° B 21'11	
desc. node	13327 Nov 18 05:57	21° B 42'48			13330 May 27 18:05	0° \cap	
	13327 Nov 25 16:38	0° \approx		morning set	13330 Jun 18 22:37	27° \cap 41'34	
evening max el	13327 Dec 24 01:12	29° \approx 30'17	45°55'16		13330 Jun 20 18:52	0° B	
	13327 Dec 24 13:35	0° X			13330 Jul 14 17:11	0° \cap	
greatest brilliancy	13328 Feb 01 01:20	27° X 49'21	-4.8m				
retrograde	13328 Feb 11 00:02	29° X 37'11		superior conj	13330 Jul 28 21:03	17° \cap 46'18	-1°01'55
evening set	13328 Feb 26 04:10	25° X 07'54		minimum elong	13330 Jul 29 08:46	18° \cap 23'03	1°02'16
inferior conj	13328 Mar 03 05:14	21° X 29'51	-1°45'23	max. Earth dist.	13330 Jul 29 07:36	18° \cap 19'22	1.71433 AU
minimum elong	13328 Mar 03 09:09	21° X 23'44	1°43'56		13330 Aug 07 14:59	0° \cap	

asc. node	13330 Aug 26 00:26	23° \cap 02'58			13333 Feb 25 11:16	0° \approx	
	13330 Aug 31 13:47	0° $\underline{\cap}$		morning max el	13333 Mar 01 02:34	3° \approx 29'19	45°46'56
evening rise	13330 Sep 06 19:44	7° $\underline{\cap}$ 48'39			13333 Mar 26 11:18	0° H	
	13330 Sep 24 14:44	0° \cap			13333 Apr 21 20:10	0° Y	
	13330 Oct 18 19:16	0° Z			13333 May 17 02:53	0° B	
	13330 Nov 12 05:43	0° Z		desc. node	13333 Jun 01 23:49	19° B 13'47	
	13330 Dec 07 01:21	0° \approx			13333 Jun 10 19:09	0° II	
desc. node	13330 Dec 15 17:13	10° \approx 19'43			13333 Jul 05 02:34	0° G	
	13331 Jan 01 10:22	0° H			13333 Jul 29 04:56	0° Ω	
	13331 Jan 27 15:32	0° Y			13333 Aug 22 05:12	0° \cap	
	13331 Feb 24 11:25	0° B		morning set	13333 Sep 01 08:32	12° \cap 40'23	
evening max el	13331 Mar 05 06:58	8° B 49'07	46°04'42		13333 Sep 15 05:18	0° $\underline{\cap}$	
	13331 Mar 29 23:16	0° II		asc. node	13333 Sep 22 15:04	9° $\underline{\cap}$ 14'51	
asc. node	13331 Apr 07 17:09	5° II 23'11			13333 Oct 09 06:17	0° \cap	
greatest brilliancy	13331 Apr 13 22:19	8° II 06'39	-4.8m				
retrograde	13331 Apr 23 16:35	9° II 53'06		superior conj	13333 Oct 10 09:44	1° \cap .25'34	0°41'32
evening set	13331 May 10 04:09	4° II 38'32		minimum elong	13333 Oct 10 00:56	0° \cap .58'09	0°41'34
inferior conj	13331 May 14 13:54	1° II 57'28	7°49'07	max. Earth dist.	13333 Oct 12 10:38	3° \cap .57'57	1.72151 AU
minimum elong	13331 May 14 04:04	2° II 12'49	7°46'39		13333 Nov 02 08:47	0° Z	
min. Earth dist.	13331 May 14 15:02	1° II 55'42	0.27726 AU	evening rise	13333 Nov 16 23:59	18° Z 09'15	
	13331 May 17 17:53	30° R B			13333 Nov 26 13:51	0° Z	
morning rise	13331 May 18 03:49	29° B 45'03			13333 Dec 20 22:59	0° \approx	
direct	13331 Jun 04 12:42	23° B 55'29		desc. node	13334 Jan 12 05:39	27° \approx 10'25	
greatest brilliancy	13331 Jun 14 13:09	25° B 48'15	-4.9m		13334 Jan 14 13:33	0° H	
	13331 Jun 23 05:43	0° II			13334 Feb 08 10:16	0° Y	
morning max el	13331 Jul 24 23:05	26° II 37'50	46°57'26		13334 Mar 05 14:07	0° B	
	13331 Jul 28 06:36	0° G			13334 Mar 31 04:49	0° II	
desc. node	13331 Jul 28 20:08	0° G 34'49			13334 Apr 26 18:45	0° G	
	13331 Aug 24 18:57	0° Ω		asc. node	13334 May 05 02:38	8° G 58'37	
	13331 Sep 19 14:05	0° \cap		evening max el	13334 May 16 22:01	21° G 08'08	46°35'23
	13331 Oct 14 17:07	0° $\underline{\cap}$			13334 May 26 03:48	0° Ω	
	13331 Nov 08 12:20	0° \cap		greatest brilliancy	13334 Jun 26 08:32	21° Ω 33'17	-4.9m
asc. node	13331 Nov 18 17:14	12° \cap .25'04		retrograde	13334 Jul 06 00:23	23° Ω 18'49	
	13331 Dec 03 02:42	0° Z		evening set	13334 Jul 22 11:36	18° Ω 02'59	
	13331 Dec 27 13:37	0° Z		inferior conj	13334 Jul 26 15:28	15° Ω 33'22	6°52'01
	13332 Jan 20 22:28	0° \approx		minimum elong	13334 Jul 27 02:39	15° Ω 16'16	6°48'48
morning set	13332 Jan 23 14:21	3° \approx 16'54		min. Earth dist.	13334 Jul 27 03:33	15° Ω 14'54	0.27067 AU
	13332 Feb 14 06:21	0° H		morning rise	13334 Jul 31 17:35	12° Ω 31'54	
max. Earth dist.	13332 Feb 28 18:08	17° H 53'06	1.73025 AU	direct	13334 Aug 16 09:04	7° Ω 44'22	
				desc. node	13334 Aug 25 05:35	9° Ω 13'45	
superior conj	13332 Feb 29 20:12	19° H 13'33	0°20'22	greatest brilliancy	13334 Aug 26 12:10	9° Ω 40'02	-4.9m
minimum elong	13332 Mar 01 00:49	19° H 27'47	0°20'26		13334 Sep 25 03:23	0° \cap	
desc. node	13332 Mar 09 07:50	29° H 42'04		morning max el	13334 Oct 05 13:26	9° \cap 53'42	46°36'11
	13332 Mar 09 13:38	0° Y			13334 Oct 24 21:19	0° $\underline{\cap}$	
	13332 Apr 02 19:56	0° B			13334 Nov 20 17:20	0° \cap	
evening rise	13332 Apr 08 03:59	6° B 36'22		asc. node	13334 Dec 16 05:41	29° \cap .44'19	
	13332 Apr 27 00:47	0° II			13334 Dec 16 11:00	0° Z	
	13332 May 21 04:40	0° G			13335 Jan 10 14:17	0° Z	
	13332 Jun 14 09:17	0° Ω			13335 Feb 04 08:40	0° \approx	
asc. node	13332 Jun 29 23:01	19° Ω 13'43			13335 Feb 28 21:28	0° H	
	13332 Jul 08 17:24	0° \cap			13335 Mar 25 06:31	0° Y	
	13332 Aug 02 08:59	0° $\underline{\cap}$		morning set	13335 Apr 03 09:15	11° Y 15'30	
	13332 Aug 27 15:00	0° \cap		desc. node	13335 Apr 06 22:27	15° Y 38'57	
	13332 Sep 23 03:36	0° Z			13335 Apr 18 12:21	0° B	
evening max el	13332 Oct 10 11:47	18° Z 03'13	46°18'52	max. Earth dist.	13335 May 09 15:56	26° B 18'20	1.72034 AU
desc. node	13332 Oct 19 22:00	27° Z 00'34					
	13332 Oct 23 06:36	0° Z		superior conj	13335 May 12 18:56	0° II 12'08	-1°13'26
greatest brilliancy	13332 Nov 18 20:44	17° Z 30'12	-4.8m	minimum elong	13335 May 12 08:29	29° B 39'31	1°13'59
retrograde	13332 Nov 29 04:54	19° Z 28'01			13335 May 12 15:03	0° II	
evening set	13332 Dec 17 15:31	13° Z 06'30			13335 Jun 05 15:08	0° G	
inferior conj	13332 Dec 20 17:14	11° Z 12'05	-8°43'09	evening rise	13335 Jun 21 10:49	19° G 48'46	
minimum elong	13332 Dec 20 20:27	11° Z 07'02	8°41'59		13335 Jun 29 14:02	0° Ω	
min. Earth dist.	13332 Dec 20 14:06	11° Z 16'59	0.28870 AU		13335 Jul 23 13:39	0° \cap	
morning rise	13332 Dec 24 01:26	9° Z 07'51		asc. node	13335 Jul 28 12:11	6° \cap 09'51	
direct	13333 Jan 11 01:05	3° Z 01'23			13335 Aug 16 15:54	0° $\underline{\cap}$	
greatest brilliancy	13333 Jan 21 09:27	4° Z 57'37	-4.7m		13335 Sep 09 23:01	0° \cap	
asc. node	13333 Feb 10 00:39	16° Z 35'50			13335 Oct 04 14:36	0° Z	

	13335 Oct 29 21:19	0° Z		desc. node	13338 May 04 12:29	1° S 52'01	
desc. node	13335 Nov 17 07:54	21° Z 06'18			13338 May 27 05:10	0° II	
	13335 Nov 25 08:30	0° \approx		morning set	13338 Jun 16 10:05	25° II 12'50	
evening max el	13335 Dec 21 17:10	27° \approx 19'17	45°55'34		13338 Jun 20 05:52	0° S	
	13335 Dec 24 12:46	0° H			13338 Jul 14 04:09	0° Ω	
greatest brilliancy	13336 Jan 29 16:41	25° H 36'35	-4.8m				
retrograde	13336 Feb 08 15:04	27° H 23'46		superior conj	13338 Jul 26 09:03	15° Ω 19'06	-1°04'35
evening set	13336 Feb 23 21:17	22° H 52'17		minimum elong	13338 Jul 26 20:46	15° Ω 55'50	1°04'59
inferior conj	13336 Feb 29 20:40	19° H 16'09	-2°06'12	max. Earth dist.	13338 Jul 26 12:54	15° Ω 31'09	1.71423 AU
minimum elong	13336 Mar 01 01:19	19° H 08'52	2°04'31		13338 Aug 07 01:55	0° H	
min. Earth dist.	13336 Mar 01 05:43	19° H 01'59	0.28384 AU	asc. node	13338 Aug 25 02:23	22° H 34'57	
morning rise	13336 Mar 07 05:06	15° H 27'29			13338 Aug 31 00:41	0° S	
asc. node	13336 Mar 09 10:02	14° H 18'52		evening rise	13338 Sep 04 09:04	5° S 26'12	
direct	13336 Mar 22 03:44	11° H 05'11			13338 Sep 24 01:41	0° M	
greatest brilliancy	13336 Apr 01 22:12	13° H 14'11	-4.8m		13338 Oct 18 06:23	0° S	
	13336 Apr 27 05:34	0° Y			13338 Nov 11 17:09	0° Z	
morning max el	13336 May 10 23:26	12° Y 51'06	46°24'15		13338 Dec 06 13:22	0° \approx	
	13336 May 27 10:47	0° S		desc. node	13338 Dec 14 19:01	9° \approx 48'33	
	13336 Jun 23 00:58	0° II			13338 Dec 31 23:25	0° H	
desc. node	13336 Jun 29 11:40	7° II 32'46			13339 Jan 27 06:37	0° Y	
	13336 Jul 18 07:51	0° S			13339 Feb 24 07:32	0° S	
	13336 Aug 12 00:03	0° Ω		evening max el	13339 Mar 02 20:28	6° S 29'38	46°03'52
	13336 Sep 05 09:26	0° H			13339 Mar 31 00:35	0° II	
	13336 Sep 29 16:05	0° S		asc. node	13339 Apr 06 19:09	3° II 48'34	
asc. node	13336 Oct 20 05:28	25° S 26'54		greatest brilliancy	13339 Apr 11 11:40	5° II 46'14	-4.8m
	13336 Oct 23 21:40	0° M		retrograde	13339 Apr 21 06:15	7° II 33'22	
morning set	13336 Nov 12 03:45	23° M 51'23		evening set	13339 May 07 14:06	2° II 24'00	
	13336 Nov 17 02:45	0° S			13339 May 11 13:22	30° R 8	
	13336 Dec 11 08:01	0° Z		inferior conj	13339 May 12 04:02	29° S 37'10	7°36'39
				minimum elong	13339 May 11 17:50	29° S 53'03	7°34'01
superior conj	13336 Dec 19 07:46	9° Z 53'06	1°25'30	min. Earth dist.	13339 May 12 05:02	29° S 35'35	0.27747 AU
minimum elong	13336 Dec 19 10:12	10° Z 00'36	1°26'30	morning rise	13339 May 15 21:22	27° S 19'45	
max. Earth dist.	13336 Dec 21 03:36	12° Z 08'34	1.72995 AU	direct	13339 Jun 02 02:38	21° S 34'31	
	13337 Jan 04 14:28	0° \approx		greatest brilliancy	13339 Jun 12 04:29	23° S 28'34	-4.9m
evening rise	13337 Jan 25 13:08	25° \approx 48'22			13339 Jun 24 13:11	0° II	
	13337 Jan 28 22:58	0° H		morning max el	13339 Jul 22 13:16	24° II 16'12	46°57'14
desc. node	13337 Feb 08 19:19	13° H 19'41		desc. node	13339 Jul 27 22:10	29° II 45'51	
	13337 Feb 22 09:31	0° Y			13339 Jul 28 03:36	0° S	
	13337 Mar 18 21:30	0° S			13339 Aug 24 10:42	0° Ω	
	13337 Apr 12 10:45	0° II			13339 Sep 19 03:41	0° H	
	13337 May 07 03:00	0° S			13339 Oct 14 05:31	0° S	
	13337 Jun 01 02:50	0° Ω			13339 Nov 07 24:00	0° M	
asc. node	13337 Jun 01 13:02	0° Ω 30'16		asc. node	13339 Nov 17 19:03	11° M 55'42	
	13337 Jun 26 19:49	0° H			13339 Dec 02 13:53	0° S	
	13337 Jul 24 05:52	0° S			13339 Dec 27 00:32	0° Z	
evening max el	13337 Jul 28 19:15	4° S 38'38	46°45'03		13340 Jan 20 09:13	0° \approx	
	13337 Aug 27 14:10	0° M		morning set	13340 Jan 21 07:33	1° \approx 08'50	
greatest brilliancy	13337 Sep 06 03:56	4° M 56'29	-4.9m		13340 Feb 13 17:03	0° H	
retrograde	13337 Sep 17 01:58	7° M 08'50		max. Earth dist.	13340 Feb 26 13:48	15° H 52'33	1.73047 AU
desc. node	13337 Sep 21 14:44	6° M 43'58					
evening set	13337 Oct 01 23:35	2° M 48'15		superior conj	13340 Feb 27 12:02	17° H 01'08	0°23'41
	13337 Oct 06 18:27	30° R 8		minimum elong	13340 Feb 27 17:20	17° H 17'30	0°23'46
min. Earth dist.	13337 Oct 07 07:59	29° S 39'13	0.27538 AU	desc. node	13340 Mar 08 09:46	29° H 14'55	
inferior conj	13337 Oct 08 02:24	29° S 10'53	-4°04'23		13340 Mar 09 00:22	0° Y	
minimum elong	13337 Oct 07 17:52	29° S 24'01	4°01'32		13340 Apr 02 06:46	0° S	
morning rise	13337 Oct 13 12:48	25° S 57'34		evening rise	13340 Apr 05 18:55	4° S 20'23	
direct	13337 Oct 29 00:54	21° S 22'01			13340 Apr 26 11:47	0° II	
greatest brilliancy	13337 Nov 07 12:26	23° S 00'31	-4.8m		13340 May 20 15:55	0° S	
	13337 Nov 21 04:10	0° M			13340 Jun 13 20:52	0° Ω	
morning max el	13337 Dec 17 01:13	21° M 37'15	45°53'03	asc. node	13340 Jun 29 00:55	18° Ω 43'01	
	13337 Dec 25 12:17	0° S			13340 Jul 08 05:28	0° H	
asc. node	13338 Jan 12 16:48	19° S 13'42			13340 Aug 01 21:51	0° S	
	13338 Jan 22 10:11	0° Z			13340 Aug 27 05:19	0° M	
	13338 Feb 17 12:42	0° \approx			13340 Sep 22 21:09	0° S	
	13338 Mar 14 18:47	0° H		evening max el	13340 Oct 08 02:59	15° S 48'11	46°20'12
	13338 Apr 08 13:19	0° Y		desc. node	13340 Oct 18 23:58	26° S 04'20	
	13338 May 03 00:10	0° S			13340 Oct 23 12:25	0° Z	

greatest brilliancy	13340 Nov 16 10:57	15° ♁ 16'51	-4.8m	minimum elong	13343 May 09 21:15	27° ♁ 16'27	1°11'50
retrograde	13340 Nov 26 21:17	17° ♁ 16'45			13343 May 12 01:43	0° ♁	
evening set	13340 Dec 15 07:56	10° ♁ 54'02			13343 Jun 05 01:52	0° ♁	
inferior conj	13340 Dec 18 09:05	9° ♁ 00'41	-8°46'04	evening rise	13343 Jun 18 22:24	17° ♁ 20'52	
minimum elong	13340 Dec 18 11:32	8° ♁ 56'51	8°44'57		13343 Jun 29 00:52	0° ♁	
min. Earth dist.	13340 Dec 18 04:35	9° ♁ 07'43	0.28857 AU		13343 Jul 23 00:38	0° ♁	
morning rise	13340 Dec 21 15:12	6° ♁ 59'52		asc. node	13343 Jul 27 14:06	5° ♁ 41'30	
direct	13341 Jan 08 16:52	0° ♁ 50'19			13343 Aug 16 03:07	0° ♁	
greatest brilliancy	13341 Jan 19 00:02	2° ♁ 45'51	-4.7m		13343 Sep 09 10:35	0° ♁	
asc. node	13341 Feb 09 02:46	15° ♁ 32'01			13343 Oct 04 02:47	0° ♁	
	13341 Feb 25 10:14	0° ♁			13343 Oct 29 10:41	0° ♁	
morning max el	13341 Feb 26 18:52	1° ♁ 18'53	45°46'12	desc. node	13343 Nov 16 09:47	20° ♁ 29'50	
	13341 Mar 26 03:04	0° ♁			13343 Nov 25 00:27	0° ♁	
	13341 Apr 21 09:34	0° ♁		evening max el	13343 Dec 19 08:28	25° ♁ 07'17	45°55'56
	13341 May 16 15:11	0° ♁			13343 Dec 24 12:41	0° ♁	
desc. node	13341 Jun 01 01:42	18° ♁ 43'18		greatest brilliancy	13344 Jan 27 08:41	23° ♁ 25'43	-4.8m
	13341 Jun 10 06:51	0° ♁		retrograde	13344 Feb 06 05:52	25° ♁ 11'55	
	13341 Jul 04 13:54	0° ♁		evening set	13344 Feb 21 14:41	20° ♁ 38'01	
	13341 Jul 28 16:02	0° ♁		inferior conj	13344 Feb 27 12:18	17° ♁ 04'11	-2°26'44
	13341 Aug 21 16:08	0° ♁		minimum elong	13344 Feb 27 17:39	16° ♁ 55'47	2°24'48
morning set	13341 Aug 29 21:35	10° ♁ 17'06		min. Earth dist.	13344 Feb 27 21:50	16° ♁ 49'13	0.28410 AU
	13341 Sep 14 16:09	0° ♁		morning rise	13344 Mar 04 20:19	13° ♁ 15'39	
asc. node	13341 Sep 21 16:53	8° ♁ 46'47		asc. node	13344 Mar 08 11:57	11° ♁ 26'33	
				direct	13344 Mar 19 19:28	8° ♁ 53'08	
superior conj	13341 Oct 08 00:07	29° ♁ 07'12	0°38'20	greatest brilliancy	13344 Mar 30 14:21	11° ♁ 02'01	-4.8m
minimum elong	13341 Oct 07 15:47	28° ♁ 41'13	0°38'22		13344 Apr 27 09:43	0° ♁	
	13341 Oct 08 17:03	0° ♁		morning max el	13344 May 08 13:26	10° ♁ 33'20	46°22'33
max. Earth dist.	13341 Oct 10 01:31	1° ♁ 41'13	1.72118 AU		13344 May 27 03:49	0° ♁	
	13341 Nov 01 19:30	0° ♁			13344 Jun 22 14:55	0° ♁	
evening rise	13341 Nov 14 16:08	15° ♁ 57'26		desc. node	13344 Jun 28 13:40	6° ♁ 58'49	
	13341 Nov 26 00:35	0° ♁			13344 Jul 17 20:26	0° ♁	
	13341 Dec 20 09:52	0° ♁			13344 Aug 11 11:52	0° ♁	
desc. node	13342 Jan 11 07:38	26° ♁ 42'36			13344 Sep 04 20:47	0° ♁	
	13342 Jan 14 00:44	0° ♁			13344 Sep 29 03:05	0° ♁	
	13342 Feb 07 22:00	0° ♁		asc. node	13344 Oct 19 07:13	24° ♁ 58'59	
	13342 Mar 05 02:45	0° ♁			13344 Oct 23 08:24	0° ♁	
	13342 Mar 30 19:02	0° ♁		morning set	13344 Nov 09 19:09	21° ♁ 37'34	
	13342 Apr 26 12:17	0° ♁			13344 Nov 16 13:19	0° ♁	
asc. node	13342 May 04 04:31	8° ♁ 12'40			13344 Dec 10 18:29	0° ♁	
evening max el	13342 May 14 12:34	18° ♁ 48'26	46°34'24				
	13342 May 26 08:13	0° ♁		superior conj	13344 Dec 17 00:32	7° ♁ 44'07	1°25'51
greatest brilliancy	13342 Jun 23 21:32	19° ♁ 08'44	-4.9m	minimum elong	13344 Dec 17 02:11	7° ♁ 49'15	1°26'52
retrograde	13342 Jul 03 13:34	20° ♁ 53'59		max. Earth dist.	13344 Dec 18 19:59	9° ♁ 58'30	1.72972 AU
evening set	13342 Jul 20 04:05	15° ♁ 32'58			13345 Jan 04 00:57	0° ♁	
inferior conj	13342 Jul 24 04:15	13° ♁ 08'21	7°07'52	evening rise	13345 Jan 23 05:16	23° ♁ 37'53	
minimum elong	13342 Jul 24 15:19	12° ♁ 51'24	7°04'45		13345 Jan 28 09:32	0° ♁	
min. Earth dist.	13342 Jul 24 16:19	12° ♁ 49'52	0.27087 AU	desc. node	13345 Feb 07 21:13	12° ♁ 53'00	
morning rise	13342 Jul 29 02:30	10° ♁ 12'13			13345 Feb 21 20:15	0° ♁	
direct	13342 Aug 13 22:41	5° ♁ 19'09			13345 Mar 18 08:29	0° ♁	
greatest brilliancy	13342 Aug 24 00:27	7° ♁ 13'59	-4.9m		13345 Apr 11 22:10	0° ♁	
desc. node	13342 Aug 24 07:40	7° ♁ 20'37			13345 May 06 15:06	0° ♁	
	13342 Sep 25 07:07	0° ♁		asc. node	13345 May 31 14:59	29° ♁ 56'39	
morning max el	13342 Oct 03 03:38	7° ♁ 33'17	46°37'31		13345 May 31 16:07	0° ♁	
	13342 Oct 24 14:46	0° ♁			13345 Jun 26 11:18	0° ♁	
	13342 Nov 20 07:29	0° ♁			13345 Jul 24 02:55	0° ♁	
asc. node	13342 Dec 15 07:35	29° ♁ 12'45		evening max el	13345 Jul 26 08:25	2° ♁ 15'19	46°45'14
	13342 Dec 15 23:32	0° ♁			13345 Aug 29 04:22	0° ♁	
	13343 Jan 10 01:55	0° ♁		greatest brilliancy	13345 Sep 03 19:21	2° ♁ 37'09	-4.9m
	13343 Feb 03 19:45	0° ♁		retrograde	13345 Sep 14 15:32	4° ♁ 48'17	
	13343 Feb 28 08:16	0° ♁		desc. node	13345 Sep 20 16:40	4° ♁ 03'58	
	13343 Mar 24 17:11	0° ♁		evening set	13345 Sep 29 11:48	0° ♁ 30'19	
morning set	13343 Mar 31 23:58	8° ♁ 59'45			13345 Sep 30 09:48	30° ♁	
desc. node	13343 Apr 06 00:13	15° ♁ 11'31		min. Earth dist.	13345 Oct 04 22:52	27° ♁ 17'54	0.27488 AU
	13343 Apr 17 23:00	0° ♁		inferior conj	13345 Oct 05 16:05	26° ♁ 51'27	-3°43'40
max. Earth dist.	13343 May 07 02:39	23° ♁ 48'57	1.72075 AU	minimum elong	13345 Oct 05 08:07	27° ♁ 03'42	3°40'59
				morning rise	13345 Oct 11 04:59	23° ♁ 34'34	
superior conj	13343 May 10 08:01	27° ♁ 50'00	-1°11'21	direct	13345 Oct 26 13:33	19° ♁ 03'00	

greatest brilliancy	13345 Nov 05 02:51	20° Ω 42'39	-4.8m			13348 May 20 02:51	0° \mathfrak{C}		
	13345 Nov 22 01:45	0° \mathfrak{M}				13348 Jun 13 08:05	0° Ω		
morning max el	13345 Dec 14 14:12	19° \mathfrak{M} 18'10	45°54'12	asc. node		13348 Jun 28 02:54	18° Ω 13'46		
	13345 Dec 25 07:40	0° \mathfrak{A}				13348 Jul 07 17:10	0° \mathfrak{M}		
asc. node	13346 Jan 11 18:52	18° \mathfrak{A} 36'03				13348 Aug 01 10:22	0° Ω		
	13346 Jan 22 00:45	0° \mathfrak{B}				13348 Aug 26 19:22	0° \mathfrak{M}		
	13346 Feb 17 01:21	0° \approx				13348 Sep 22 14:45	0° \mathfrak{A}		
	13346 Mar 14 06:27	0° \mathfrak{H}		evening max el		13348 Oct 05 18:48	13° \mathfrak{A} 35'18	46°21'12	
	13346 Apr 08 00:27	0° Υ		desc. node		13348 Oct 18 01:55	25° \mathfrak{A} 07'20		
	13346 May 02 10:58	0° \mathfrak{B}				13348 Oct 23 20:24	0° \mathfrak{B}		
desc. node	13346 May 03 14:21	1° \mathfrak{B} 24'27		greatest brilliancy		13348 Nov 14 00:54	13° \mathfrak{B} 03'14	-4.8m	
	13346 May 26 15:48	0° Π		retrograde		13348 Nov 24 13:31	15° \mathfrak{B} 04'57		
morning set	13346 Jun 13 21:48	22° Π 46'14		evening set		13348 Dec 12 23:40	8° \mathfrak{B} 41'51		
	13346 Jun 19 16:27	0° \mathfrak{C}		inferior conj		13348 Dec 16 00:37	6° \mathfrak{B} 48'49	-8°48'08	
	13346 Jul 13 14:43	0° Ω		minimum elong		13348 Dec 16 02:17	6° \mathfrak{B} 46'13	8°47'04	
				min. Earth dist.		13348 Dec 15 18:34	6° \mathfrak{B} 58'17	0.28841 AU	
superior conj	13346 Jul 23 21:03	12° Ω 53'02	-1°07'08	morning rise		13348 Dec 19 04:59	4° \mathfrak{B} 50'52		
minimum elong	13346 Jul 24 08:39	13° Ω 29'25	1°07'34			13348 Dec 29 03:57	30° \mathfrak{R} \mathfrak{A}		
max. Earth dist.	13346 Jul 23 19:14	12° Ω 47'18	1.71425 AU	direct		13349 Jan 06 08:49	28° \mathfrak{A} 39'03		
	13346 Aug 06 12:29	0° \mathfrak{M}				13349 Jan 14 21:40	0° \mathfrak{B}		
asc. node	13346 Aug 24 04:11	22° \mathfrak{M} 07'26		greatest brilliancy		13349 Jan 16 13:48	0° \mathfrak{B} 33'08	-4.7m	
	13346 Aug 30 11:18	0° Ω		asc. node		13349 Feb 08 04:41	14° \mathfrak{B} 29'38		
evening rise	13346 Sep 01 22:04	3° Ω 03'38		morning max el		13349 Feb 24 10:48	29° \mathfrak{B} 08'07	45°45'32	
	13346 Sep 23 12:22	0° \mathfrak{M}				13349 Feb 25 08:06	0° \approx		
	13346 Oct 17 17:14	0° \mathfrak{A}				13349 Mar 25 18:23	0° \mathfrak{H}		
	13346 Nov 11 04:20	0° \mathfrak{B}				13349 Apr 20 22:37	0° Υ		
	13346 Dec 06 01:08	0° \approx				13349 May 16 03:10	0° \mathfrak{B}		
desc. node	13346 Dec 13 21:02	9° \approx 18'52		desc. node		13349 May 31 03:37	18° \mathfrak{B} 13'46		
	13346 Dec 31 12:15	0° \mathfrak{H}				13349 Jun 09 18:16	0° Π		
	13347 Jan 26 21:36	0° Υ				13349 Jul 04 00:58	0° \mathfrak{C}		
	13347 Feb 24 03:57	0° \mathfrak{B}				13349 Jul 28 02:50	0° Ω		
evening max el	13347 Feb 28 10:39	4° \mathfrak{B} 13'03	46°03'12			13349 Aug 21 02:46	0° \mathfrak{M}		
	13347 Apr 01 11:26	0° Π		morning set		13349 Aug 27 11:05	7° \mathfrak{M} 56'10		
asc. node	13347 Apr 05 21:06	2° Π 11'44				13349 Sep 14 02:40	0° Ω		
greatest brilliancy	13347 Apr 09 00:41	3° Π 26'52	-4.8m	asc. node		13349 Sep 20 18:38	8° Ω 19'32		
retrograde	13347 Apr 18 20:34	5° Π 15'12							
evening set	13347 May 05 00:16	0° Π 10'51		superior conj		13349 Oct 05 14:41	26° Ω 50'20	0°35'06	
	13347 May 05 07:47	30° \mathfrak{R} \mathfrak{B}		minimum elong		13349 Oct 05 06:53	26° Ω 26'03	0°35'07	
inferior conj	13347 May 09 18:13	27° \mathfrak{B} 18'22	7°23'22	max. Earth dist.		13349 Oct 07 18:52	29° Ω 33'03	1.72087 AU	
minimum elong	13347 May 09 07:45	27° \mathfrak{B} 34'39	7°20'37			13349 Oct 08 03:31	0° \mathfrak{M}		
min. Earth dist.	13347 May 09 18:47	27° \mathfrak{B} 17'29	0.27762 AU			13349 Nov 01 05:58	0° \mathfrak{A}		
morning rise	13347 May 13 15:02	24° \mathfrak{B} 56'02		evening rise		13349 Nov 12 08:16	13° \mathfrak{A} 46'15		
direct	13347 May 30 17:07	19° \mathfrak{B} 15'19				13349 Nov 25 11:08	0° \mathfrak{B}		
greatest brilliancy	13347 Jun 09 19:14	21° \mathfrak{B} 10'04	-4.9m			13349 Dec 19 20:36	0° \approx		
	13347 Jun 25 10:56	0° Π		desc. node		13350 Jan 10 09:28	26° \approx 14'40		
morning max el	13347 Jul 20 04:11	21° Π 58'07	46°56'55			13350 Jan 13 11:49	0° \mathfrak{H}		
desc. node	13347 Jul 27 00:13	28° Π 59'21				13350 Feb 07 09:40	0° Υ		
	13347 Jul 27 23:19	0° \mathfrak{C}				13350 Mar 04 15:21	0° \mathfrak{B}		
	13347 Aug 24 01:42	0° Ω				13350 Mar 30 09:17	0° Π		
	13347 Sep 18 16:45	0° \mathfrak{M}				13350 Apr 26 06:06	0° \mathfrak{C}		
	13347 Oct 13 17:32	0° Ω		asc. node		13350 May 03 06:32	7° \mathfrak{C} 26'43		
	13347 Nov 07 11:22	0° \mathfrak{M}		evening max el		13350 May 12 02:35	16° \mathfrak{C} 27'45	46°33'22	
asc. node	13347 Nov 16 20:59	11° \mathfrak{M} 27'31				13350 May 26 14:33	0° Ω		
	13347 Dec 02 00:49	0° \mathfrak{A}		greatest brilliancy		13350 Jun 21 11:04	16° Ω 45'15	-4.9m	
	13347 Dec 26 11:10	0° \mathfrak{B}		retrograde		13350 Jul 01 02:22	18° Ω 29'30		
morning set	13348 Jan 19 00:26	29° \mathfrak{B} 00'38		evening set		13350 Jul 17 20:37	13° Ω 03'31		
	13348 Jan 19 19:41	0° \approx		inferior conj		13350 Jul 21 17:04	10° Ω 43'56	7°22'52	
	13348 Feb 13 03:27	0° \mathfrak{H}		minimum elong		13350 Jul 22 03:56	10° Ω 27'16	7°19'54	
max. Earth dist.	13348 Feb 24 10:16	13° \mathfrak{H} 55'23	1.73065 AU	min. Earth dist.		13350 Jul 22 05:19	10° Ω 25'08	0.27103 AU	
				morning rise		13350 Jul 26 11:12	7° Ω 53'15		
superior conj	13348 Feb 25 03:36	14° \mathfrak{H} 48'52	0°26'59	direct		13350 Aug 11 11:51	2° Ω 54'35		
minimum elong	13348 Feb 25 09:33	15° \mathfrak{H} 07'14	0°27'04	greatest brilliancy		13350 Aug 21 12:57	4° Ω 48'40	-4.9m	
desc. node	13348 Mar 07 11:29	28° \mathfrak{H} 48'00		desc. node		13350 Aug 23 09:30	5° Ω 32'12		
	13348 Mar 08 10:49	0° Υ				13350 Sep 25 08:58	0° \mathfrak{M}		
	13348 Apr 01 17:19	0° \mathfrak{B}		morning max el		13350 Sep 30 16:47	5° \mathfrak{M} 10'51	46°38'58	
evening rise	13348 Apr 03 09:46	2° \mathfrak{B} 05'07				13350 Oct 24 07:35	0° Ω		
	13348 Apr 25 22:31	0° Π				13350 Nov 19 21:15	0° \mathfrak{M}		

asc. node	13350 Dec 14 09:34	28° \mathbb{M} 42'09		13353 Jul 24 01:06	0° \mathbb{L}	
	13350 Dec 15 11:50	0° \mathbb{X}		13353 Aug 31 17:50	0° \mathbb{M}	
	13351 Jan 09 13:24	0° \mathbb{Z}	greatest brilliancy	13353 Sep 01 10:18	0° \mathbb{M} 16'18	-4.9m
	13351 Feb 03 06:47	0° \approx	retrograde	13353 Sep 12 05:21	2° \mathbb{M} 27'01	
	13351 Feb 27 19:03	0° \mathbb{X}	desc. node	13353 Sep 19 18:42	1° \mathbb{M} 17'39	
	13351 Mar 24 03:51	0° \mathbb{Y}		13353 Sep 23 06:47	30° \mathbb{R} \mathbb{L}	
morning set	13351 Mar 29 14:25	6° \mathbb{Y} 43'13	evening set	13353 Sep 27 00:10	28° \mathbb{L} 10'57	
desc. node	13351 Apr 05 02:01	14° \mathbb{Y} 44'15	min. Earth dist.	13353 Oct 02 13:35	24° \mathbb{L} 55'45	0.27439 AU
	13351 Apr 17 09:38	0° \mathbb{X}	inferior conj	13353 Oct 03 05:43	24° \mathbb{L} 31'00	-3°22'30
max. Earth dist.	13351 May 04 12:50	21° \mathbb{X} 18'06	1.72117 AU	minimum elong	13353 Oct 02 22:22	24° \mathbb{L} 42'17
				morning rise	13353 Oct 08 21:02	21° \mathbb{L} 11'00
superior conj	13351 May 07 20:55	25° \mathbb{X} 27'29	-1°09'07	direct	13353 Oct 24 02:17	16° \mathbb{L} 42'49
minimum elong	13351 May 07 09:55	24° \mathbb{X} 53'14	1°09'34	greatest brilliancy	13353 Nov 02 17:10	18° \mathbb{L} 23'53
	13351 May 11 12:22	0° \mathbb{I}			13353 Nov 22 18:03	0° \mathbb{M}
	13351 Jun 04 12:36	0° \mathbb{G}		morning max el	13353 Dec 12 04:01	17° \mathbb{M} 00'29
evening rise	13351 Jun 16 09:56	14° \mathbb{G} 52'50			13353 Dec 25 02:43	0° \mathbb{X}
	13351 Jun 28 11:43	0° \mathbb{Q}		asc. node	13354 Jan 10 20:44	17° \mathbb{X} 57'40
	13351 Jul 22 11:39	0° \mathbb{P}			13354 Jan 21 15:20	0° \mathbb{Z}
asc. node	13351 Jul 26 15:54	5° \mathbb{P} 12'40			13354 Feb 16 14:06	0° \approx
	13351 Aug 15 14:21	0° \mathbb{L}			13354 Mar 13 18:19	0° \mathbb{X}
	13351 Sep 08 22:09	0° \mathbb{M}			13354 Apr 07 11:50	0° \mathbb{Y}
	13351 Oct 03 14:56	0° \mathbb{X}			13354 May 01 22:07	0° \mathbb{X}
	13351 Oct 29 00:03	0° \mathbb{Z}		desc. node	13354 May 02 16:18	0° \mathbb{X} 56'06
desc. node	13351 Nov 15 11:49	19° \mathbb{Z} 53'45			13354 May 26 02:50	0° \mathbb{I}
	13351 Nov 24 16:36	0° \approx		morning set	13354 Jun 11 09:15	20° \mathbb{I} 17'36
evening max el	13351 Dec 16 22:47	22° \approx 52'59	45°56'10		13354 Jun 19 03:25	0° \mathbb{G}
	13351 Dec 24 13:51	0° \mathbb{X}			13354 Jul 13 01:39	0° \mathbb{Q}
greatest brilliancy	13352 Jan 25 00:40	21° \mathbb{X} 14'31	-4.8m			
retrograde	13352 Feb 03 20:30	22° \mathbb{X} 59'54		superior conj	13354 Jul 21 08:44	10° \mathbb{Q} 24'48
evening set	13352 Feb 19 08:10	18° \mathbb{X} 23'00		minimum elong	13354 Jul 21 20:09	11° \mathbb{Q} 00'36
inferior conj	13352 Feb 25 03:56	14° \mathbb{X} 51'51	-2°46'57	max. Earth dist.	13354 Jul 21 03:35	10° \mathbb{Q} 08'37
minimum elong	13352 Feb 25 09:57	14° \mathbb{X} 42'24	2°44'48		13354 Aug 05 23:25	0° \mathbb{P}
min. Earth dist.	13352 Feb 25 14:08	14° \mathbb{X} 35'49	0.28442 AU	asc. node	13354 Aug 23 05:57	21° \mathbb{P} 38'41
morning rise	13352 Mar 02 11:21	11° \mathbb{X} 03'46			13354 Aug 29 22:15	0° \mathbb{L}
asc. node	13352 Mar 07 13:55	8° \mathbb{X} 37'47		evening rise	13354 Aug 30 10:54	0° \mathbb{L} 39'32
direct	13352 Mar 17 10:50	6° \mathbb{X} 40'24			13354 Sep 22 23:25	0° \mathbb{M}
greatest brilliancy	13352 Mar 28 07:03	8° \mathbb{X} 49'58	-4.8m		13354 Oct 17 04:29	0° \mathbb{X}
	13352 Apr 27 12:26	0° \mathbb{Y}			13354 Nov 10 15:53	0° \mathbb{Z}
morning max el	13352 May 06 03:20	8° \mathbb{Y} 14'40	46°20'58		13354 Dec 05 13:15	0° \approx
	13352 May 26 20:41	0° \mathbb{X}		desc. node	13354 Dec 12 22:56	8° \approx 47'46
	13352 Jun 22 04:52	0° \mathbb{I}			13354 Dec 31 01:28	0° \mathbb{X}
desc. node	13352 Jun 27 15:39	6° \mathbb{I} 24'31			13355 Jan 26 13:04	0° \mathbb{Y}
	13352 Jul 17 09:04	0° \mathbb{G}			13355 Feb 24 01:25	0° \mathbb{X}
	13352 Aug 10 23:48	0° \mathbb{Q}		evening max el	13355 Feb 26 01:40	1° \mathbb{X} 57'54
	13352 Sep 04 08:15	0° \mathbb{P}			13355 Apr 03 17:54	0° \mathbb{I}
	13352 Sep 28 14:12	0° \mathbb{L}		asc. node	13355 Apr 04 23:08	0° \mathbb{I} 30'25
asc. node	13352 Oct 18 09:10	24° \mathbb{L} 31'19		greatest brilliancy	13355 Apr 06 13:22	1° \mathbb{I} 06'20
	13352 Oct 22 19:15	0° \mathbb{M}		retrograde	13355 Apr 16 11:05	2° \mathbb{I} 55'54
morning set	13352 Nov 07 10:50	19° \mathbb{M} 24'13			13355 Apr 28 12:28	30° \mathbb{R} \mathbb{X}
	13352 Nov 15 23:58	0° \mathbb{X}		evening set	13355 May 02 10:36	27° \mathbb{X} 56'29
	13352 Dec 10 05:03	0° \mathbb{Z}		inferior conj	13355 May 07 08:24	24° \mathbb{X} 58'20
				minimum elong	13355 May 06 21:43	25° \mathbb{X} 14'55
superior conj	13352 Dec 14 17:40	5° \mathbb{Z} 36'02	1°26'04	min. Earth dist.	13355 May 07 08:19	24° \mathbb{X} 58'27
minimum elong	13352 Dec 14 18:34	5° \mathbb{Z} 38'51	1°27'06	morning rise	13355 May 11 08:43	22° \mathbb{X} 30'59
max. Earth dist.	13352 Dec 16 12:17	7° \mathbb{Z} 47'52	1.72950 AU	direct	13355 May 28 08:04	16° \mathbb{X} 54'59
	13353 Jan 03 11:32	0° \approx		greatest brilliancy	13355 Jun 07 09:35	18° \mathbb{X} 49'38
evening rise	13353 Jan 20 21:44	21° \approx 28'11			13355 Jun 26 03:45	0° \mathbb{I}
	13353 Jan 27 20:14	0° \mathbb{X}		morning max el	13355 Jul 17 19:26	19° \mathbb{I} 39'22
desc. node	13353 Feb 06 22:59	12° \mathbb{X} 25'20		desc. node	13355 Jul 26 02:04	28° \mathbb{I} 11'25
	13353 Feb 21 07:10	0° \mathbb{Y}			13355 Jul 27 19:03	0° \mathbb{G}
	13353 Mar 17 19:44	0° \mathbb{X}			13355 Aug 23 17:02	0° \mathbb{Q}
	13353 Apr 11 09:55	0° \mathbb{I}			13355 Sep 18 06:11	0° \mathbb{P}
	13353 May 06 03:35	0° \mathbb{G}			13355 Oct 13 05:55	0° \mathbb{L}
asc. node	13353 May 30 16:59	29° \mathbb{G} 22'04			13355 Nov 06 23:05	0° \mathbb{M}
	13353 May 31 05:49	0° \mathbb{Q}		asc. node	13355 Nov 15 22:52	10° \mathbb{M} 58'03
	13353 Jun 26 03:21	0° \mathbb{P}			13355 Dec 01 12:06	0° \mathbb{X}
evening max el	13353 Jul 23 21:19	29° \mathbb{P} 50'31	46°45'30		13355 Dec 25 22:10	0° \mathbb{Z}

morning set	13356 Jan 16 17:38	26° ♁ 52'20		evening set	13358 Jul 15 13:11	10° ♁ 33'47	
	13356 Jan 19 06:31	0° \approx		inferior conj	13358 Jul 19 06:02	8° ♁ 19'15	7°36'49
	13356 Feb 12 14:12	0° ♁		minimum elong	13358 Jul 19 16:35	8° ♁ 03'01	7°34'01
				min. Earth dist.	13358 Jul 19 18:40	7° ♁ 59'49	0.27127 AU
superior conj	13356 Feb 22 19:38	12° ♁ 37'02	0°30'12	morning rise	13358 Jul 23 19:55	5° ♁ 34'08	
minimum elong	13356 Feb 23 02:11	12° ♁ 57'15	0°30'17	direct	13358 Aug 09 00:41	0° ♁ 29'22	
max. Earth dist.	13356 Feb 22 07:07	11° ♁ 58'26	1.73077 AU	greatest brilliancy	13358 Aug 19 02:15	2° ♁ 23'25	-4.9m
desc. node	13356 Mar 06 13:21	28° ♁ 20'30		desc. node	13358 Aug 22 11:36	3° ♁ 47'24	
	13356 Mar 07 21:35	0° ♁			13358 Sep 25 09:59	0° ♁	
evening rise	13356 Apr 01 01:01	29° ♁ 50'07		morning max el	13358 Sep 28 05:23	2° ♁ 45'36	46°40'18
	13356 Apr 01 04:13	0° ♁			13358 Oct 24 00:31	0° ♁	
	13356 Apr 25 09:36	0° ♁			13358 Nov 19 11:18	0° ♁	
	13356 May 19 14:12	0° ♁		asc. node	13358 Dec 13 11:26	28° ♁ 10'15	
	13356 Jun 12 19:48	0° ♁			13358 Dec 15 00:24	0° ♁	
asc. node	13356 Jun 27 04:41	17° ♁ 42'14			13359 Jan 09 01:07	0° ♁	
	13356 Jul 07 05:26	0° ♁			13359 Feb 02 18:01	0° \approx	
	13356 Jul 31 23:31	0° ♁			13359 Feb 27 06:02	0° ♁	
	13356 Aug 26 10:08	0° ♁			13359 Mar 23 14:42	0° ♁	
	13356 Sep 22 09:21	0° ♁		morning set	13359 Mar 27 05:10	4° ♁ 27'00	
evening max el	13356 Oct 03 10:43	11° ♁ 21'09	46°22'21	desc. node	13359 Apr 04 03:57	14° ♁ 16'48	
desc. node	13356 Oct 17 03:58	24° ♁ 07'58			13359 Apr 16 20:25	0° ♁	
	13356 Oct 24 08:02	0° ♁		max. Earth dist.	13359 May 02 00:52	18° ♁ 52'34	1.72155 AU
greatest brilliancy	13356 Nov 11 15:28	10° ♁ 49'06	-4.8m				
retrograde	13356 Nov 22 05:36	12° ♁ 51'45		superior conj	13359 May 05 10:21	23° ♁ 06'14	-1°06'47
evening set	13356 Dec 10 15:08	6° ♁ 29'07		minimum elong	13359 May 04 23:12	22° ♁ 31'32	1°07'11
inferior conj	13356 Dec 13 16:11	4° ♁ 35'48	-8°49'33		13359 May 10 23:09	0° ♁	
minimum elong	13356 Dec 13 17:01	4° ♁ 34'30	8°48'31		13359 Jun 03 23:25	0° ♁	
min. Earth dist.	13356 Dec 13 08:37	4° ♁ 47'38	0.28817 AU	evening rise	13359 Jun 13 22:05	12° ♁ 26'36	
morning rise	13356 Dec 16 19:02	2° ♁ 40'10			13359 Jun 27 22:40	0° ♁	
	13356 Dec 21 13:25	30° ♁			13359 Jul 21 22:46	0° ♁	
direct	13357 Jan 04 00:47	26° ♁ 26'50		asc. node	13359 Jul 25 17:45	4° ♁ 43'43	
greatest brilliancy	13357 Jan 14 03:16	28° ♁ 18'55	-4.7m		13359 Aug 15 01:43	0° ♁	
	13357 Jan 18 05:29	0° ♁			13359 Sep 08 09:55	0° ♁	
asc. node	13357 Feb 07 06:38	13° ♁ 27'52			13359 Oct 03 03:24	0° ♁	
morning max el	13357 Feb 22 02:09	26° ♁ 54'54	45°45'00		13359 Oct 28 13:50	0° ♁	
	13357 Feb 25 05:30	0° \approx		desc. node	13359 Nov 14 13:46	19° ♁ 16'17	
	13357 Mar 25 09:46	0° ♁			13359 Nov 24 09:22	0° \approx	
	13357 Apr 20 11:51	0° ♁		evening max el	13359 Dec 14 12:28	20° \approx 36'28	45°56'39
	13357 May 15 15:24	0° ♁			13359 Dec 24 16:47	0° ♁	
desc. node	13357 May 30 05:30	17° ♁ 43'20		greatest brilliancy	13360 Jan 22 16:19	19° ♁ 02'26	-4.7m
	13357 Jun 09 05:58	0° ♁		retrograde	13360 Feb 01 11:27	20° ♁ 47'38	
	13357 Jul 03 12:21	0° ♁		evening set	13360 Feb 17 01:41	16° ♁ 07'15	
	13357 Jul 27 14:02	0° ♁		inferior conj	13360 Feb 22 19:31	12° ♁ 39'06	-3°06'50
	13357 Aug 20 13:50	0° ♁		minimum elong	13360 Feb 23 02:10	12° ♁ 28'40	3°04'30
morning set	13357 Aug 25 00:06	5° ♁ 32'17		min. Earth dist.	13360 Feb 23 06:18	12° ♁ 22'11	0.28473 AU
	13357 Sep 13 13:38	0° ♁		morning rise	13360 Feb 29 02:12	8° ♁ 51'58	
asc. node	13357 Sep 19 20:35	7° ♁ 51'29		asc. node	13360 Mar 06 16:02	5° ♁ 52'59	
				direct	13360 Mar 15 02:02	4° ♁ 27'10	
superior conj	13357 Oct 03 04:42	24° ♁ 30'23	0°31'46	greatest brilliancy	13360 Mar 25 23:52	6° ♁ 37'55	-4.8m
minimum elong	13357 Oct 02 21:31	24° ♁ 07'59	0°31'45		13360 Apr 27 13:46	0° ♁	
max. Earth dist.	13357 Oct 05 10:50	27° ♁ 19'10	1.72051 AU	morning max el	13360 May 03 18:03	5° ♁ 58'01	46°19'33
	13357 Oct 07 14:24	0° ♁			13360 May 26 13:14	0° ♁	
	13357 Oct 31 16:50	0° ♁			13360 Jun 21 18:39	0° ♁	
evening rise	13357 Nov 09 24:00	11° ♁ 32'29		desc. node	13360 Jun 26 17:27	5° ♁ 50'06	
	13357 Nov 24 22:03	0° ♁			13360 Jul 16 21:34	0° ♁	
	13357 Dec 19 07:43	0° \approx			13360 Aug 10 11:35	0° ♁	
desc. node	13358 Jan 09 11:16	25° \approx 45'32			13360 Sep 03 19:36	0° ♁	
	13358 Jan 12 23:17	0° ♁			13360 Sep 28 01:15	0° ♁	
	13358 Feb 06 21:42	0° ♁		asc. node	13360 Oct 17 10:59	24° ♁ 03'19	
	13358 Mar 04 04:19	0° ♁			13360 Oct 22 06:05	0° ♁	
	13358 Mar 29 23:57	0° ♁		morning set	13360 Nov 05 02:07	17° ♁ 09'28	
	13358 Apr 26 00:32	0° ♁			13360 Nov 15 10:39	0° ♁	
asc. node	13358 May 02 08:34	6° ♁ 39'39			13360 Dec 09 15:40	0° ♁	
evening max el	13358 May 09 15:38	14° ♁ 04'14	46°32'15				
	13358 May 26 23:33	0° ♁		superior conj	13360 Dec 12 10:18	3° ♁ 26'13	1°26'10
greatest brilliancy	13358 Jun 19 01:01	14° ♁ 21'55	-4.9m	minimum elong	13360 Dec 12 10:27	3° ♁ 26'40	1°27'12
retrograde	13358 Jun 28 14:44	16° ♁ 04'46		max. Earth dist.	13360 Dec 14 03:42	5° ♁ 34'17	1.72929 AU

	13361 Jan 02 22:09	0°♊		greatest brilliancy	13363 Jun 04 23:34	16°♌29'40	-4.9m
evening rise	13361 Jan 18 13:47	19°♊17'07			13363 Jun 26 15:50	0°♊	
	13361 Jan 27 06:57	0°♋		morning max el	13363 Jul 15 10:14	17°♊20'37	46°55'52
desc. node	13361 Feb 06 00:51	11°♋57'59		desc. node	13363 Jul 25 04:07	27°♊25'54	
	13361 Feb 20 18:04	0°♌			13363 Jul 27 13:48	0°♌	
	13361 Mar 17 06:58	0°♍			13363 Aug 23 07:45	0°♍	
	13361 Apr 10 21:38	0°♎			13363 Sep 17 19:06	0°♎	
	13361 May 05 16:03	0°♏			13363 Oct 12 17:49	0°♏	
asc. node	13361 May 29 18:49	28°♏47'13			13363 Nov 06 10:20	0°♐	
	13361 May 30 19:30	0°♑		asc. node	13363 Nov 15 00:41	10°♐29'48	
	13361 Jun 25 19:26	0°♒			13363 Nov 30 22:56	0°♑	
evening max el	13361 Jul 21 10:57	27°♒28'34	46°45'55		13363 Dec 25 08:44	0°♒	
	13361 Jul 23 23:51	0°♓		morning set	13364 Jan 14 10:50	24°♒45'16	
greatest brilliancy	13361 Aug 30 00:43	27°♓55'57	-4.9m		13364 Jan 18 16:57	0°♓	
	13361 Sep 07 09:44	0°♐			13364 Feb 12 00:37	0°♋	
retrograde	13361 Sep 09 19:49	0°♐07'00					
	13361 Sep 12 05:20	30°♑♌		superior conj	13364 Feb 20 11:34	10°♋25'56	0°33'22
desc. node	13361 Sep 18 20:43	28°♑27'31		minimum elong	13364 Feb 20 18:41	10°♋47'52	0°33'29
evening set	13361 Sep 24 12:55	25°♑52'22		max. Earth dist.	13364 Feb 20 02:03	9°♋56'35	1.73092 AU
min. Earth dist.	13361 Sep 30 04:01	22°♑35'06	0.27395 AU	desc. node	13364 Mar 05 15:16	27°♋54'06	
inferior conj	13361 Sep 30 19:26	22°♑11'31	-3°01'01		13364 Mar 07 08:03	0°♌	
minimum elong	13361 Sep 30 12:46	22°♑21'44	2°58'42	evening rise	13364 Mar 29 15:57	27°♌35'05	
morning rise	13361 Oct 06 13:07	18°♑48'47			13364 Mar 31 14:49	0°♍	
direct	13361 Oct 21 15:34	14°♑23'38			13364 Apr 24 20:22	0°♎	
greatest brilliancy	13361 Oct 31 07:06	16°♑05'37	-4.8m		13364 May 19 01:12	0°♏	
	13361 Nov 23 05:51	0°♐			13364 Jun 12 07:10	0°♑	
morning max el	13361 Dec 09 18:52	14°♐45'47	45°56'43	asc. node	13364 Jun 26 06:36	17°♑12'19	
	13361 Dec 24 21:05	0°♑			13364 Jul 06 17:21	0°♒	
asc. node	13362 Jan 09 22:40	17°♑20'16			13364 Jul 31 12:20	0°♓	
	13362 Jan 21 05:37	0°♒			13364 Aug 26 00:39	0°♐	
	13362 Feb 16 02:40	0°♓			13364 Sep 22 03:56	0°♑	
	13362 Mar 13 06:00	0°♋		evening max el	13364 Oct 01 02:23	9°♑07'36	46°23'30
	13362 Apr 06 23:01	0°♌		desc. node	13364 Oct 16 05:56	23°♑08'35	
	13362 May 01 09:02	0°♍			13364 Oct 24 22:45	0°♒	
desc. node	13362 May 01 18:02	0°♍27'48		greatest brilliancy	13364 Nov 09 06:47	8°♒37'23	-4.8m
	13362 May 25 13:37	0°♎		retrograde	13364 Nov 19 21:21	10°♒40'13	
morning set	13362 Jun 08 20:45	17°♎50'00		evening set	13364 Dec 08 06:22	4°♒18'54	
	13362 Jun 18 14:08	0°♏		inferior conj	13364 Dec 11 07:53	2°♒24'42	-8°50'12
	13362 Jul 12 12:20	0°♑		minimum elong	13364 Dec 11 07:53	2°♒24'41	8°49'10
				min. Earth dist.	13364 Dec 10 23:05	2°♒38'29	0.28792 AU
superior conj	13362 Jul 18 20:32	7°♑57'41	-1°11'50	morning rise	13364 Dec 14 09:34	0°♒30'42	
minimum elong	13362 Jul 19 07:40	8°♑32'39	1°12'23		13364 Dec 15 06:04	30°♑♑	
max. Earth dist.	13362 Jul 18 13:55	7°♑36'57	1.71424 AU	direct	13365 Jan 01 16:33	24°♑16'35	
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asc. node	13362 Aug 22 07:53	21°♒11'26			13365 Jan 20 01:48	0°♒	
evening rise	13362 Aug 27 23:55	28°♒16'54		asc. node	13365 Feb 06 08:45	12°♒29'27	
	13362 Aug 29 08:54	0°♓		morning max el	13365 Feb 19 16:38	24°♒40'55	45°44'20
	13362 Sep 22 10:08	0°♐			13365 Feb 25 01:38	0°♓	
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	13362 Nov 10 03:08	0°♒			13365 Apr 20 00:41	0°♌	
	13362 Dec 05 01:09	0°♓			13365 May 15 03:17	0°♍	
desc. node	13362 Dec 12 00:45	8°♓17'08		desc. node	13365 May 29 07:23	17°♍13'54	
	13362 Dec 30 14:32	0°♋			13365 Jun 08 17:19	0°♎	
	13363 Jan 26 04:35	0°♌			13365 Jul 02 23:21	0°♏	
evening max el	13363 Feb 23 17:17	29°♌44'51	46°01'43		13365 Jul 27 00:49	0°♑	
	13363 Feb 23 23:32	0°♍			13365 Aug 20 00:29	0°♒	
greatest brilliancy	13363 Apr 04 02:23	28°♍46'57	-4.8m	morning set	13365 Aug 22 13:00	3°♒09'16	
asc. node	13363 Apr 04 01:08	28°♍45'50			13365 Sep 13 00:12	0°♓	
	13363 Apr 08 09:18	0°♎		asc. node	13365 Sep 18 22:22	7°♓24'08	
retrograde	13363 Apr 14 01:28	0°♎37'03					
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evening set	13363 Apr 29 21:05	25°♍42'48		minimum elong	13365 Sep 30 12:14	21°♓51'25	0°28'20
inferior conj	13363 May 04 22:31	22°♍39'05	6°54'36	max. Earth dist.	13365 Oct 03 00:33	24°♓59'31	1.72015 AU
minimum elong	13363 May 04 11:43	22°♍55'53	6°51'36		13365 Oct 07 00:54	0°♐	
min. Earth dist.	13363 May 04 21:54	22°♍40'03	0.27798 AU		13365 Oct 31 03:18	0°♑	
morning rise	13363 May 09 02:16	20°♍06'37		evening rise	13365 Nov 07 15:50	9°♑20'14	
direct	13363 May 25 22:58	14°♍35'42			13365 Nov 24 08:34	0°♒	



































































































































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desc. node	13366 Jan 08 13:15	25°♊18'13			13368 Jul 16 09:57	0°♊	
	13366 Jan 12 10:21	0°♊			13368 Aug 09 23:19	0°♊	
	13366 Feb 06 09:23	0°♊			13368 Sep 03 06:54	0°♊	
	13366 Mar 03 17:01	0°♊			13368 Sep 27 12:13	0°♊	
	13366 Mar 29 14:29	0°♊		asc. node	13368 Oct 16 12:46	23°♊35'30	
	13366 Apr 25 19:15	0°♊			13368 Oct 21 16:47	0°♊	
asc. node	13366 May 01 10:26	5°♊52'01		morning set	13368 Nov 02 17:17	14°♊54'41	
evening max el	13366 May 07 03:56	11°♊39'24	46°31'07		13368 Nov 14 21:12	0°♊	
	13366 May 27 11:30	0°♊			13368 Dec 09 02:09	0°♊	
greatest brilliancy	13366 Jun 16 15:07	11°♊59'03	-4.9m				
retrograde	13366 Jun 26 02:54	13°♊40'37		superior conj	13368 Dec 10 02:59	1°♊16'54	1°26'08
evening set	13366 Jul 13 05:36	8°♊04'22		minimum elong	13368 Dec 10 02:21	1°♊14'55	1°27'09
inferior conj	13366 Jul 16 18:54	5°♊55'04	7°50'02	max. Earth dist.	13368 Dec 11 20:54	3°♊26'36	1.72909 AU
minimum elong	13366 Jul 17 05:03	5°♊39'26	7°47'24		13369 Jan 02 08:40	0°♊	
min. Earth dist.	13366 Jul 17 08:04	5°♊34'47	0.27149 AU	evening rise	13369 Jan 16 06:08	17°♊07'20	
morning rise	13366 Jul 21 04:24	3°♊15'57			13369 Jan 26 17:33	0°♊	
	13366 Jul 27 19:09	30°♊		desc. node	13369 Feb 05 02:45	11°♊31'04	
direct	13366 Aug 06 13:01	28°♊04'31			13369 Feb 20 04:52	0°♊	
greatest brilliancy	13366 Aug 16 15:46	29°♊59'14	-4.9m		13369 Mar 16 18:05	0°♊	
	13366 Aug 16 16:37	0°♊			13369 Apr 10 09:15	0°♊	
desc. node	13366 Aug 21 13:38	2°♊07'19			13369 May 05 04:28	0°♊	
	13366 Sep 25 09:24	0°♊		asc. node	13369 May 28 20:48	28°♊12'46	
morning max el	13366 Sep 25 18:02	0°♊21'26	46°41'44		13369 May 30 09:16	0°♊	
	13366 Oct 23 16:42	0°♊			13369 Jun 25 11:52	0°♊	
	13366 Nov 19 00:47	0°♊		evening max el	13369 Jul 19 01:30	25°♊08'30	46°46'06
asc. node	13366 Dec 12 13:20	27°♊39'45			13369 Jul 23 23:50	0°♊	
	13366 Dec 14 12:30	0°♊		greatest brilliancy	13369 Aug 27 14:52	25°♊34'16	-4.9m
	13367 Jan 08 12:26	0°♊		retrograde	13369 Sep 07 10:29	27°♊45'30	
	13367 Feb 02 04:53	0°♊		desc. node	13369 Sep 17 22:40	25°♊31'02	
	13367 Feb 26 16:39	0°♊		evening set	13369 Sep 22 01:39	23°♊32'15	
	13367 Mar 23 01:13	0°♊		inferior conj	13369 Sep 28 08:53	19°♊50'37	-2°38'51
morning set	13367 Mar 24 20:09	2°♊12'33		minimum elong	13369 Sep 28 02:56	19°♊59'42	2°36'46
desc. node	13367 Apr 03 05:43	13°♊49'47		min. Earth dist.	13369 Sep 27 18:05	20°♊13'12	0.27349 AU
	13367 Apr 16 06:56	0°♊		morning rise	13369 Oct 04 04:48	16°♊25'21	
max. Earth dist.	13367 Apr 29 15:08	16°♊34'50	1.72202 AU	direct	13369 Oct 19 05:00	12°♊03'14	
				greatest brilliancy	13369 Oct 28 20:15	13°♊45'30	-4.8m
superior conj	13367 May 02 23:39	20°♊45'25	-1°04'20		13369 Nov 23 14:43	0°♊	
minimum elong	13367 May 02 12:26	20°♊10'30	1°04'40	morning max el	13369 Dec 07 09:48	12°♊31'07	45°57'59
	13367 May 10 09:43	0°♊			13369 Dec 24 15:01	0°♊	
	13367 Jun 03 10:05	0°♊		asc. node	13370 Jan 09 00:46	16°♊43'35	
evening rise	13367 Jun 11 09:56	10°♊00'03			13370 Jan 20 19:45	0°♊	
	13367 Jun 27 09:26	0°♊			13370 Feb 15 15:09	0°♊	
	13367 Jul 21 09:42	0°♊			13370 Mar 12 17:38	0°♊	
asc. node	13367 Jul 24 19:40	4°♊15'30			13370 Apr 06 10:11	0°♊	
	13367 Aug 14 12:53	0°♊		desc. node	13370 Apr 30 19:56	29°♊59'59	
	13367 Sep 07 21:28	0°♊			13370 Apr 30 19:56	0°♊	
	13367 Oct 02 15:39	0°♊			13370 May 25 00:24	0°♊	
	13367 Oct 28 03:29	0°♊		morning set	13370 Jun 06 08:43	15°♊23'57	
desc. node	13367 Nov 13 15:39	18°♊39'14			13370 Jun 18 00:52	0°♊	
	13367 Nov 24 02:10	0°♊			13370 Jul 11 23:04	0°♊	
evening max el	13367 Dec 12 02:48	18°♊22'28	45°57'15				
	13367 Dec 24 21:02	0°♊		superior conj	13370 Jul 16 08:27	5°♊30'42	-1°13'58
greatest brilliancy	13368 Jan 20 07:34	16°♊51'06	-4.7m	minimum elong	13370 Jul 16 19:12	6°♊04'26	1°14'34
retrograde	13368 Jan 30 03:03	18°♊36'49		max. Earth dist.	13370 Jul 16 01:13	5°♊08'02	1.71429 AU
evening set	13368 Feb 14 19:27	13°♊52'39			13370 Aug 04 20:49	0°♊	
inferior conj	13368 Feb 20 11:14	10°♊27'38	-3°26'21	asc. node	13370 Aug 21 09:41	20°♊43'13	
minimum elong	13368 Feb 20 18:28	10°♊16'18	3°23'51	evening rise	13370 Aug 25 12:37	25°♊52'42	
min. Earth dist.	13368 Feb 20 22:17	10°♊10'18	0.28504 AU		13370 Aug 28 19:43	0°♊	
morning rise	13368 Feb 26 17:01	6°♊41'57			13370 Sep 21 21:05	0°♊	
asc. node	13368 Mar 05 17:55	3°♊14'42			13370 Oct 16 02:30	0°♊	
direct	13368 Mar 12 17:38	2°♊15'16			13370 Nov 09 14:36	0°♊	
greatest brilliancy	13368 Mar 23 16:26	4°♊26'59	-4.8m		13370 Dec 04 13:15	0°♊	
	13368 Apr 27 13:27	0°♊		desc. node	13370 Dec 11 02:47	7°♊46'35	
morning max el	13368 May 01 09:40	3°♊44'37	46°17'59		13370 Dec 30 03:53	0°♊	
	13368 May 26 05:14	0°♊			13371 Jan 25 20:31	0°♊	
	13368 Jun 21 08:10	0°♊		evening max el	13371 Feb 21 08:58	27°♊31'43	46°00'59

	13371 Feb 23 22:44	0°♄			13373 Sep 12 11:02	0°♄	
greatest brilliancy	13371 Apr 01 16:20	26°♄28'48	-4.8m	asc. node	13373 Sep 18 00:08	6°♄55'53	
asc. node	13371 Apr 03 03:05	26°♄57'24					
retrograde	13371 Apr 11 15:35	28°♄18'35		superior conj	13373 Sep 28 09:04	19°♄53'01	0°24'56
evening set	13371 Apr 27 08:04	23°♄29'28		minimum elong	13373 Sep 28 03:14	19°♄34'49	0°24'54
inferior conj	13371 May 02 12:55	20°♄20'31	6°39'19	max. Earth dist.	13373 Sep 30 13:02	22°♄35'10	1.71982 AU
minimum elong	13371 May 02 02:06	20°♄37'25	6°36'14		13373 Oct 06 11:41	0°♄	
min. Earth dist.	13371 May 02 12:09	20°♄21'43	0.27810 AU		13373 Oct 30 14:05	0°♄	
morning rise	13371 May 06 20:02	17°♄42'51		evening rise	13373 Nov 05 07:48	7°♄07'20	
direct	13371 May 23 13:53	12°♄17'08			13373 Nov 23 19:28	0°♄	
greatest brilliancy	13371 Jun 02 14:10	14°♄10'38	-4.9m		13373 Dec 18 05:31	0°♄	
	13371 Jun 27 00:43	0°♄		desc. node	13374 Jan 07 15:06	24°♄49'15	
morning max el	13371 Jul 13 00:14	14°♄59'45	46°55'12		13374 Jan 11 21:50	0°♄	
desc. node	13371 Jul 24 06:09	26°♄40'50			13374 Feb 05 21:30	0°♄	
	13371 Jul 27 08:08	0°♄			13374 Mar 03 06:10	0°♄	
	13371 Aug 22 22:24	0°♄			13374 Mar 29 05:34	0°♄	
	13371 Sep 17 08:08	0°♄			13374 Apr 25 14:51	0°♄	
	13371 Oct 12 05:56	0°♄		asc. node	13374 Apr 30 12:29	5°♄03'14	
	13371 Nov 05 21:53	0°♄		evening max el	13374 May 04 16:06	9°♄13'34	46°30'04
asc. node	13371 Nov 14 02:37	10°♄01'00			13374 May 28 04:01	0°♄	
	13371 Nov 30 10:04	0°♄		greatest brilliancy	13374 Jun 14 04:54	9°♄35'10	-4.9m
	13371 Dec 24 19:35	0°♄		retrograde	13374 Jun 23 15:32	11°♄16'11	
morning set	13372 Jan 12 03:54	22°♄36'53		evening set	13374 Jul 10 22:03	5°♄34'22	
	13372 Jan 18 03:38	0°♄		inferior conj	13374 Jul 14 07:55	3°♄30'17	8°02'14
	13372 Feb 11 11:15	0°♄		minimum elong	13374 Jul 14 17:37	3°♄15'21	7°59'47
				min. Earth dist.	13374 Jul 14 21:29	3°♄09'24	0.27174 AU
superior conj	13372 Feb 18 03:37	8°♄14'31	0°36'29	morning rise	13374 Jul 18 13:02	0°♄57'30	
minimum elong	13372 Feb 18 11:14	8°♄38'02	0°36'37		13374 Jul 20 05:45	30°♄	
max. Earth dist.	13372 Feb 17 19:54	7°♄50'44	1.73103 AU	direct	13374 Aug 04 01:33	25°♄38'53	
desc. node	13372 Mar 04 16:59	27°♄26'22		greatest brilliancy	13374 Aug 14 05:25	27°♄34'33	-4.9m
	13372 Mar 06 18:46	0°♄			13374 Aug 19 16:48	0°♄	
evening rise	13372 Mar 27 07:05	25°♄20'04		desc. node	13374 Aug 20 15:30	0°♄30'02	
	13372 Mar 31 01:39	0°♄		morning max el	13374 Sep 23 07:47	27°♄59'02	46°43'14
	13372 Apr 24 07:24	0°♄			13374 Sep 25 08:09	0°♄	
	13372 May 18 12:28	0°♄			13374 Oct 23 08:54	0°♄	
	13372 Jun 11 18:47	0°♄			13374 Nov 18 14:27	0°♄	
asc. node	13372 Jun 25 08:35	16°♄41'48		asc. node	13374 Dec 11 15:19	27°♄08'38	
	13372 Jul 06 05:31	0°♄			13374 Dec 14 00:53	0°♄	
	13372 Jul 31 01:28	0°♄			13375 Jan 08 00:05	0°♄	
	13372 Aug 25 15:36	0°♄			13375 Feb 01 16:07	0°♄	
	13372 Sep 21 23:25	0°♄			13375 Feb 26 03:39	0°♄	
evening max el	13372 Sep 28 17:10	6°♄50'39	46°24'22	morning set	13375 Mar 22 11:10	29°♄57'05	
desc. node	13372 Oct 15 07:53	22°♄06'32			13375 Mar 22 12:07	0°♄	
	13372 Oct 25 19:32	0°♄		desc. node	13375 Apr 02 07:34	13°♄21'54	
greatest brilliancy	13372 Nov 06 22:29	6°♄24'25	-4.8m		13375 Apr 15 17:47	0°♄	
retrograde	13372 Nov 17 12:33	8°♄27'02		max. Earth dist.	13375 Apr 27 07:26	14°♄22'25	1.72243 AU
evening set	13372 Dec 05 21:03	2°♄07'42					
inferior conj	13372 Dec 08 23:29	0°♄12'02	-8°49'58	superior conj	13375 Apr 30 12:56	18°♄23'30	-1°01'46
minimum elong	13372 Dec 08 22:39	0°♄13'20	8°48'56	minimum elong	13375 Apr 30 01:43	17°♄48'36	1°02'03
min. Earth dist.	13372 Dec 08 13:54	0°♄27'04	0.28765 AU		13375 May 09 20:35	0°♄	
	13372 Dec 09 07:09	30°♄			13375 Jun 02 21:03	0°♄	
morning rise	13372 Dec 12 00:23	28°♄19'04		evening rise	13375 Jun 08 21:59	7°♄33'14	
direct	13372 Dec 30 07:41	22°♄04'37			13375 Jun 26 20:33	0°♄	
greatest brilliancy	13373 Jan 09 07:19	23°♄53'25	-4.7m		13375 Jul 20 21:00	0°♄	
	13373 Jan 21 08:35	0°♄		asc. node	13375 Jul 23 21:28	3°♄45'50	
asc. node	13373 Feb 05 10:38	11°♄30'39			13375 Aug 14 00:25	0°♄	
morning max el	13373 Feb 17 06:32	22°♄24'17	45°43'54		13375 Sep 07 09:24	0°♄	
	13373 Feb 24 21:34	0°♄			13375 Oct 02 04:19	0°♄	
	13373 Mar 24 15:29	0°♄			13375 Oct 27 17:35	0°♄	
	13373 Apr 19 13:43	0°♄		desc. node	13375 Nov 12 17:44	18°♄01'31	
	13373 May 14 15:24	0°♄			13375 Nov 23 19:40	0°♄	
desc. node	13373 May 28 09:18	16°♄43'49		evening max el	13375 Dec 09 17:58	16°♄09'39	45°57'47
	13373 Jun 08 04:55	0°♄			13375 Dec 25 03:49	0°♄	
	13373 Jul 02 10:38	0°♄		greatest brilliancy	13376 Jan 17 22:11	14°♄38'05	-4.7m
	13373 Jul 26 11:54	0°♄		retrograde	13376 Jan 27 18:55	16°♄24'42	
	13373 Aug 19 11:25	0°♄		evening set	13376 Feb 12 13:19	11°♄36'42	
morning set	13373 Aug 20 02:09	0°♄46'06		inferior conj	13376 Feb 18 02:52	8°♄14'50	-3°45'36

minimum elong	13376 Feb 18 10:39	8° H 02'38	3°42'56	evening rise	13378 Aug 23 01:01	23° M 27'15	
min. Earth dist.	13376 Feb 18 13:53	7° H 57'34	0.28537 AU		13378 Aug 28 06:38	0° L	
morning rise	13376 Feb 24 07:37	4° H 30'56			13378 Sep 21 08:07	0° M	
asc. node	13376 Mar 04 19:55	0° H 40'02			13378 Oct 15 13:45	0° J	
direct	13376 Mar 10 09:40	0° H 02'08			13378 Nov 09 02:12	0° Z	
greatest brilliancy	13376 Mar 21 08:30	2° H 14'15	-4.8m		13378 Dec 04 01:31	0° \approx	
	13376 Apr 27 12:34	0° Y		desc. node	13378 Dec 10 04:41	7° \approx 15'16	
morning max el	13376 Apr 29 02:06	1° Y 32'11	46°16'27		13378 Dec 29 17:24	0° H	
	13376 May 25 21:19	0° B			13379 Jan 25 12:45	0° Y	
	13376 Jun 20 21:52	0° II		evening max el	13379 Feb 18 23:48	25° Y 16'29	46°00'12
desc. node	13376 Jun 24 21:27	4° II 42'52			13379 Feb 23 23:04	0° B	
	13376 Jul 15 22:30	0° E		greatest brilliancy	13379 Mar 30 06:33	24° B 10'49	-4.8m
	13376 Aug 09 11:15	0° O		asc. node	13379 Apr 02 05:07	25° B 04'34	
	13376 Sep 02 18:25	0° M		retrograde	13379 Apr 09 05:03	25° B 59'57	
	13376 Sep 26 23:25	0° L		evening set	13379 Apr 24 19:06	21° B 15'37	
asc. node	13376 Oct 15 14:43	23° L 07'22		inferior conj	13379 Apr 30 03:16	18° B 01'48	6°23'16
	13376 Oct 21 03:44	0° M		minimum elong	13379 Apr 29 16:28	18° B 18'41	6°20'08
morning set	13376 Oct 31 08:35	12° M 39'28		min. Earth dist.	13379 Apr 30 02:43	18° B 02'40	0.27827 AU
	13376 Nov 14 08:00	0° J		morning rise	13379 May 04 13:41	15° B 18'56	
				direct	13379 May 21 04:19	9° B 58'12	
superior conj	13376 Dec 07 19:47	29° J 07'05	1°25'58	greatest brilliancy	13379 May 31 05:30	11° B 52'02	-4.9m
minimum elong	13376 Dec 07 18:22	29° J 02'41	1°26'59		13379 Jun 27 07:17	0° II	
	13376 Dec 08 12:53	0° Z		morning max el	13379 Jul 10 13:24	12° II 36'21	46°54'30
max. Earth dist.	13376 Dec 09 16:16	1° Z 24'48	1.72885 AU	desc. node	13379 Jul 23 08:00	25° II 55'38	
	13377 Jan 01 19:24	0° \approx			13379 Jul 27 02:09	0° E	
evening rise	13377 Jan 13 22:36	14° \approx 57'09			13379 Aug 22 12:57	0° O	
	13377 Jan 26 04:24	0° H			13379 Sep 16 21:04	0° M	
desc. node	13377 Feb 04 04:32	11° H 03'01			13379 Oct 11 17:58	0° L	
	13377 Feb 19 15:57	0° Y			13379 Nov 05 09:19	0° M	
	13377 Mar 16 05:32	0° B		asc. node	13379 Nov 13 04:29	9° M 32'12	
	13377 Apr 09 21:14	0° II			13379 Nov 29 21:07	0° J	
	13377 May 04 17:15	0° E			13379 Dec 24 06:22	0° Z	
asc. node	13377 May 27 22:47	27° E 37'24		morning set	13380 Jan 09 20:54	20° Z 28'25	
	13377 May 29 23:25	0° O			13380 Jan 17 14:16	0° \approx	
	13377 Jun 25 04:51	0° M			13380 Feb 10 21:50	0° H	
evening max el	13377 Jul 16 16:37	22° M 49'20	46°46'15				
	13377 Jul 24 01:18	0° L		superior conj	13380 Feb 15 19:50	6° H 03'54	0°39'32
greatest brilliancy	13377 Aug 25 05:06	23° L 12'02	-4.9m	minimum elong	13380 Feb 16 03:55	6° H 28'49	0°39'40
retrograde	13377 Sep 05 00:53	25° L 22'52		max. Earth dist.	13380 Feb 15 12:41	5° H 41'50	1.73112 AU
desc. node	13377 Sep 17 00:43	22° L 28'47		desc. node	13380 Mar 03 18:52	26° H 59'27	
evening set	13377 Sep 19 14:34	21° L 11'02			13380 Mar 06 05:23	0° Y	
inferior conj	13377 Sep 25 22:11	17° L 28'41	-2°16'14	evening rise	13380 Mar 24 22:24	23° Y 06'01	
minimum elong	13377 Sep 25 17:02	17° L 36'34	2°14'25		13380 Mar 30 12:23	0° B	
min. Earth dist.	13377 Sep 25 08:05	17° L 50'14	0.27305 AU		13380 Apr 23 18:18	0° II	
morning rise	13377 Oct 01 20:10	14° L 00'55			13380 May 17 23:39	0° E	
direct	13377 Oct 16 18:36	9° L 41'56			13380 Jun 11 06:23	0° O	
greatest brilliancy	13377 Oct 26 09:07	11° L 23'57	-4.8m	asc. node	13380 Jun 24 10:21	16° O 10'45	
	13377 Nov 23 21:24	0° M			13380 Jul 05 17:44	0° M	
morning max el	13377 Dec 05 00:21	10° M 14'46	45°59'17		13380 Jul 30 14:40	0° L	
	13377 Dec 24 08:45	0° J			13380 Aug 25 06:43	0° M	
asc. node	13378 Jan 08 02:35	16° J 06'01			13380 Sep 21 19:24	0° J	
	13378 Jan 20 09:53	0° Z		evening max el	13380 Sep 26 07:02	4° J 31'32	46°25'27
	13378 Feb 15 03:41	0° \approx		desc. node	13380 Oct 14 09:57	21° J 03'26	
	13378 Mar 12 05:21	0° H			13380 Oct 27 00:00	0° Z	
	13378 Apr 05 21:29	0° Y		greatest brilliancy	13380 Nov 04 13:55	4° Z 11'14	-4.8m
desc. node	13378 Apr 29 21:52	29° Y 31'45		retrograde	13380 Nov 15 03:37	6° Z 14'06	
	13378 Apr 30 07:01	0° B		evening set	13380 Dec 03 11:10	29° J 57'09	
	13378 May 24 11:23	0° II			13380 Dec 03 09:17	30° R J	
morning set	13378 Jun 03 20:20	12° II 56'14		min. Earth dist.	13380 Dec 06 04:45	28° J 15'32	0.28737 AU
	13378 Jun 17 11:47	0° E		inferior conj	13380 Dec 06 14:58	27° J 59'32	-8°48'55
	13378 Jul 11 09:56	0° O		minimum elong	13380 Dec 06 13:17	28° J 02'10	8°47'51
				morning rise	13380 Dec 09 15:30	26° J 07'05	
superior conj	13378 Jul 13 20:05	3° O 02'27	-1°15'58	direct	13380 Dec 27 22:19	19° J 52'34	
minimum elong	13378 Jul 14 06:20	3° O 34'38	1°16'38	greatest brilliancy	13381 Jan 06 22:06	21° J 41'00	-4.7m
max. Earth dist.	13378 Jul 13 10:37	2° O 32'46	1.71429 AU		13381 Jan 22 06:31	0° Z	
	13378 Aug 04 07:41	0° M		asc. node	13381 Feb 04 12:37	10° Z 33'52	
asc. node	13378 Aug 20 11:28	20° M 14'39		morning max el	13381 Feb 14 20:35	20° Z 08'27	45°43'39

	13381 Feb 24 16:42	0°♊			13383 Oct 01 16:41	0°♊	
	13381 Mar 24 06:00	0°♋			13383 Oct 27 07:29	0°♋	
	13381 Apr 19 02:25	0°♌	desc. node		13383 Nov 11 19:37	17°♋23'56	
	13381 May 14 03:12	0°♍			13383 Nov 23 13:13	0°♊	
desc. node	13381 May 27 11:11	16°♌14'25	evening max el		13383 Dec 07 09:52	13°♊59'35	45°58'26
	13381 Jun 07 16:13	0°♎			13383 Dec 25 12:42	0°♋	
	13381 Jul 01 21:40	0°♏	greatest brilliancy		13384 Jan 15 12:47	12°♋26'17	-4.7m
	13381 Jul 25 22:46	0°♐	retrograde		13384 Jan 25 10:46	14°♋13'36	
morning set	13381 Aug 17 14:53	28°♐22'02	evening set		13384 Feb 10 07:18	9°♋21'54	
	13381 Aug 18 22:11	0°♑	inferior conj		13384 Feb 15 18:29	6°♋03'09	-4°04'23
	13381 Sep 11 21:42	0°♒	minimum elong		13384 Feb 16 02:47	5°♋50'09	4°01'36
asc. node	13381 Sep 17 02:06	6°♒28'45	min. Earth dist.		13384 Feb 16 05:13	5°♋46'20	0.28568 AU
			morning rise		13384 Feb 21 21:59	2°♋21'12	
superior conj	13381 Sep 25 22:52	17°♒33'15	0°21'24		13384 Feb 26 17:59	30°♋	
minimum elong	13381 Sep 25 17:48	17°♒17'24	0°21'22	asc. node	13384 Mar 03 22:01	28°♋11'30	
max. Earth dist.	13381 Sep 27 23:25	20°♒04'45	1.71949 AU	direct	13384 Mar 08 02:04	27°♋50'19	
	13381 Oct 05 22:16	0°♓			13384 Mar 18 21:51	0°♋	
	13381 Oct 30 00:39	0°♊	greatest brilliancy		13384 Mar 18 23:58	0°♋02'01	-4.8m
evening rise	13381 Nov 02 23:25	4°♊54'04	morning max el		13384 Apr 26 18:25	29°♋20'46	46°14'50
	13381 Nov 23 06:07	0°♋			13384 Apr 27 10:16	0°♌	
	13381 Dec 17 16:24	0°♌			13384 May 25 12:43	0°♍	
desc. node	13382 Jan 06 16:55	24°♌20'53			13384 Jun 20 11:01	0°♎	
	13382 Jan 11 09:06	0°♋	desc. node		13384 Jun 23 23:15	4°♎09'47	
	13382 Feb 05 09:24	0°♌			13384 Jul 15 10:35	0°♏	
	13382 Mar 02 19:07	0°♍			13384 Aug 08 22:41	0°♐	
	13382 Mar 28 20:31	0°♎			13384 Sep 02 05:25	0°♑	
	13382 Apr 25 10:37	0°♏			13384 Sep 26 10:08	0°♒	
asc. node	13382 Apr 29 14:30	4°♏14'42	asc. node		13384 Oct 14 16:30	22°♒40'08	
evening max el	13382 May 02 04:51	6°♏50'32	46°29'09		13384 Oct 20 14:16	0°♓	
	13382 May 29 01:31	0°♐	morning set		13384 Oct 28 23:53	10°♓25'34	
greatest brilliancy	13382 Jun 11 17:53	7°♐11'49	-4.9m		13384 Nov 13 18:24	0°♊	
retrograde	13382 Jun 21 04:39	8°♐53'10					
evening set	13382 Jul 08 14:23	3°♐05'42		superior conj	13384 Dec 05 12:25	26°♊57'52	1°25'40
inferior conj	13382 Jul 11 20:56	1°♐06'40	8°13'22	minimum elong	13384 Dec 05 10:14	26°♊51'08	1°26'41
minimum elong	13382 Jul 12 06:07	0°♐52'33	8°11'06	max. Earth dist.	13384 Dec 07 11:59	29°♊25'10	1.72862 AU
min. Earth dist.	13382 Jul 12 10:29	0°♐45'50	0.27203 AU		13384 Dec 07 23:14	0°♋	
	13382 Jul 13 16:26	30°♑			13385 Jan 01 05:46	0°♌	
morning rise	13382 Jul 15 21:42	28°♑40'21		evening rise	13385 Jan 11 14:48	12°♌47'16	
direct	13382 Aug 01 14:41	23°♑14'25			13385 Jan 25 14:53	0°♋	
greatest brilliancy	13382 Aug 11 18:43	25°♑10'40	-4.9m	desc. node	13385 Feb 03 06:24	10°♋36'21	
desc. node	13382 Aug 19 17:37	28°♑57'44			13385 Feb 19 02:39	0°♌	
	13382 Aug 21 11:21	0°♐			13385 Mar 15 16:37	0°♍	
morning max el	13382 Sep 20 22:25	25°♐39'42	46°44'31		13385 Apr 09 08:53	0°♎	
	13382 Sep 25 05:40	0°♑			13385 May 04 05:45	0°♏	
	13382 Oct 23 00:32	0°♒	asc. node		13385 May 27 00:37	27°♏02'27	
	13382 Nov 18 03:43	0°♓			13385 May 29 13:20	0°♐	
asc. node	13382 Dec 10 17:10	26°♓38'07			13385 Jun 24 21:45	0°♑	
	13382 Dec 13 12:53	0°♊	evening max el		13385 Jul 14 07:51	20°♑31'39	46°46'23
	13383 Jan 07 11:22	0°♋			13385 Jul 24 03:35	0°♒	
	13383 Feb 01 02:59	0°♌		greatest brilliancy	13385 Aug 22 20:00	20°♒52'18	-4.9m
	13383 Feb 25 14:17	0°♋	retrograde		13385 Sep 02 15:01	23°♒01'58	
morning set	13383 Mar 20 02:14	27°♋42'53	desc. node		13385 Sep 16 02:42	19°♒24'30	
	13383 Mar 21 22:39	0°♌	evening set		13385 Sep 17 03:54	18°♒51'31	
desc. node	13383 Apr 01 09:28	12°♌55'15	inferior conj		13385 Sep 23 11:41	15°♒08'44	-1°53'34
	13383 Apr 15 04:16	0°♍	minimum elong		13385 Sep 23 07:21	15°♒15'22	1°52'01
max. Earth dist.	13383 Apr 24 23:38	12°♍10'51	1.72280 AU	min. Earth dist.	13385 Sep 22 22:30	15°♒28'53	0.27260 AU
			morning rise		13385 Sep 29 11:29	11°♒38'28	
superior conj	13383 Apr 28 02:18	16°♍03'02	-0°59'05	direct	13385 Oct 14 08:16	7°♒22'41	
minimum elong	13383 Apr 27 15:11	15°♍28'27	0°59'20	greatest brilliancy	13385 Oct 23 22:20	9°♒04'25	-4.8m
	13383 May 09 07:06	0°♎			13385 Nov 24 01:20	0°♓	
	13383 Jun 02 07:38	0°♏	morning max el		13385 Dec 02 14:10	7°♓57'55	46°00'27
evening rise	13383 Jun 06 10:19	5°♏08'35			13385 Dec 24 01:38	0°♊	
	13383 Jun 26 07:15	0°♐	asc. node		13386 Jan 07 04:33	15°♊30'19	
	13383 Jul 20 07:52	0°♑			13386 Jan 19 23:30	0°♋	
asc. node	13383 Jul 22 23:20	3°♑17'41			13386 Feb 14 15:50	0°♌	
	13383 Aug 13 11:33	0°♒			13386 Mar 11 16:44	0°♍	
	13383 Sep 06 20:59	0°♓			13386 Apr 05 08:26	0°♌	

desc. node	13386 Apr 28 23:37	29° Υ 03'56		retrograde	13388 Nov 12 19:10	4° \mathfrak{C} 01'46	
	13386 Apr 29 17:46	0° \mathfrak{C}			13388 Nov 27 04:15	30° \mathfrak{R} \mathfrak{A}	
	13386 May 23 22:01	0° Π		evening set	13388 Dec 01 01:01	27° \mathfrak{A} 47'28	
morning set	13386 Jun 01 07:54	10° Π 29'25		inferior conj	13388 Dec 04 06:33	25° \mathfrak{A} 47'30	-8°47'07
	13386 Jun 16 22:24	0° \mathfrak{C}		minimum elong	13388 Dec 04 04:01	25° \mathfrak{A} 51'27	8°46'00
max. Earth dist.	13386 Jul 10 16:44	29° \mathfrak{C} 48'06	1.71432 AU	min. Earth dist.	13388 Dec 03 19:30	26° \mathfrak{A} 04'47	0.28704 AU
	13386 Jul 10 20:31	0° Ω		morning rise	13388 Dec 07 07:07	23° \mathfrak{A} 55'09	
				direct	13388 Dec 25 13:00	17° \mathfrak{A} 40'58	
superior conj	13386 Jul 11 07:51	0° Ω 35'33	-1°17'49	greatest brilliancy	13389 Jan 04 12:59	19° \mathfrak{A} 29'21	-4.7m
minimum elong	13386 Jul 11 17:33	1° Ω 05'59	1°18'32		13389 Jan 22 22:25	0° \mathfrak{C}	
	13386 Aug 03 18:16	0° \mathfrak{M}		asc. node	13389 Feb 03 14:43	9° \mathfrak{C} 38'58	
asc. node	13386 Aug 19 13:24	19° \mathfrak{M} 47'28		morning max el	13389 Feb 12 11:22	17° \mathfrak{C} 54'48	45°43'23
evening rise	13386 Aug 20 13:28	21° \mathfrak{M} 02'47			13389 Feb 24 11:12	0° \approx	
	13386 Aug 27 17:16	0° \mathfrak{L}			13389 Mar 23 20:21	0° \mathfrak{H}	
	13386 Sep 20 18:50	0° \mathfrak{M}			13389 Apr 18 15:07	0° Υ	
	13386 Oct 15 00:38	0° \mathfrak{A}			13389 May 13 15:04	0° \mathfrak{C}	
	13386 Nov 08 13:28	0° \mathfrak{C}		desc. node	13389 May 26 13:03	15° \mathfrak{C} 44'42	
	13386 Dec 03 13:29	0° \approx			13389 Jun 07 03:37	0° Π	
desc. node	13386 Dec 09 06:30	6° \approx 44'36			13389 Jul 01 08:47	0° \mathfrak{C}	
	13386 Dec 29 06:46	0° \mathfrak{H}			13389 Jul 25 09:43	0° Ω	
	13387 Jan 25 05:02	0° Υ		morning set	13389 Aug 15 03:28	25° Ω 57'11	
evening max el	13387 Feb 16 13:57	23° Υ 00'20	45°59'28		13389 Aug 18 09:02	0° \mathfrak{M}	
	13387 Feb 24 00:24	0° \mathfrak{C}		asc. node	13389 Sep 11 08:29	0° \mathfrak{L}	
greatest brilliancy	13387 Mar 27 21:06	21° \mathfrak{C} 54'03	-4.8m		13389 Sep 16 03:51	6° \mathfrak{L} 00'34	
asc. node	13387 Apr 01 07:07	23° \mathfrak{C} 08'12					
retrograde	13387 Apr 06 18:37	23° \mathfrak{C} 42'37		superior conj	13389 Sep 23 12:32	15° \mathfrak{L} 12'29	0°17'50
evening set	13387 Apr 22 06:27	19° \mathfrak{C} 02'26		minimum elong	13389 Sep 23 08:15	14° \mathfrak{L} 59'06	0°17'47
inferior conj	13387 Apr 27 17:47	15° \mathfrak{C} 44'16	6°06'40	max. Earth dist.	13389 Sep 25 10:17	17° \mathfrak{L} 35'19	1.71920 AU
minimum elong	13387 Apr 27 07:04	16° \mathfrak{C} 01'02	6°03'29		13389 Oct 05 09:00	0° \mathfrak{M}	
min. Earth dist.	13387 Apr 27 17:37	15° \mathfrak{C} 44'32	0.27845 AU		13389 Oct 29 11:23	0° \mathfrak{A}	
morning rise	13387 May 02 07:28	12° \mathfrak{C} 56'25		evening rise	13389 Oct 31 15:04	2° \mathfrak{A} 40'25	
direct	13387 May 18 18:30	7° \mathfrak{C} 40'15			13389 Nov 22 16:55	0° \mathfrak{C}	
greatest brilliancy	13387 May 28 21:28	9° \mathfrak{C} 35'10	-4.9m		13389 Dec 17 03:25	0° \approx	
	13387 Jun 27 11:28	0° Π		desc. node	13390 Jan 05 18:54	23° \approx 52'43	
morning max el	13387 Jul 08 02:30	10° Π 13'25	46°53'44		13390 Jan 10 20:30	0° \mathfrak{H}	
desc. node	13387 Jul 22 10:05	25° Π 12'16			13390 Feb 04 21:27	0° Υ	
	13387 Jul 26 19:30	0° \mathfrak{C}			13390 Mar 02 08:19	0° \mathfrak{C}	
	13387 Aug 22 03:09	0° Ω			13390 Mar 28 11:55	0° Π	
	13387 Sep 16 09:46	0° \mathfrak{M}			13390 Apr 25 07:25	0° \mathfrak{C}	
	13387 Oct 11 05:48	0° \mathfrak{L}		asc. node	13390 Apr 28 16:22	3° \mathfrak{C} 24'01	
	13387 Nov 04 20:34	0° \mathfrak{M}		evening max el	13390 Apr 29 18:35	4° \mathfrak{C} 29'12	46°28'05
asc. node	13387 Nov 12 06:19	9° \mathfrak{M} 03'52			13390 May 30 08:08	0° Ω	
	13387 Nov 29 07:56	0° \mathfrak{A}		greatest brilliancy	13390 Jun 09 06:13	4° Ω 46'40	-4.9m
	13387 Dec 23 16:56	0° \mathfrak{C}		retrograde	13390 Jun 18 17:59	6° Ω 28'47	
morning set	13388 Jan 07 14:06	18° \mathfrak{C} 21'06		evening set	13390 Jul 06 06:30	0° Ω 35'54	
	13388 Jan 17 00:43	0° \approx			13390 Jul 07 06:30	30° \mathfrak{R} \mathfrak{C}	
	13388 Feb 10 08:17	0° \mathfrak{H}		inferior conj	13390 Jul 09 09:50	28° \mathfrak{C} 41'39	8°23'39
max. Earth dist.	13388 Feb 13 05:52	3° \mathfrak{H} 34'35	1.73126 AU	minimum elong	13390 Jul 09 18:24	28° \mathfrak{C} 28'28	8°21'34
				min. Earth dist.	13390 Jul 09 22:55	28° \mathfrak{C} 21'32	0.27232 AU
superior conj	13388 Feb 13 12:11	3° \mathfrak{H} 54'05	0°42'29	morning rise	13390 Jul 13 06:13	26° \mathfrak{C} 21'54	
minimum elong	13388 Feb 13 20:41	4° \mathfrak{H} 20'17	0°42'40	direct	13390 Jul 30 04:17	20° \mathfrak{C} 48'51	
desc. node	13388 Mar 02 20:45	26° \mathfrak{H} 32'47		greatest brilliancy	13390 Aug 09 07:15	22° \mathfrak{C} 44'49	-4.9m
	13388 Mar 05 15:55	0° Υ		desc. node	13390 Aug 18 19:37	27° \mathfrak{C} 27'33	
evening rise	13388 Mar 22 13:44	20° Υ 52'21			13390 Aug 22 17:11	0° Ω	
	13388 Mar 29 23:03	0° \mathfrak{C}		morning max el	13390 Sep 18 13:16	23° Ω 20'00	46°45'42
	13388 Apr 23 05:10	0° Π			13390 Sep 25 02:45	0° \mathfrak{M}	
	13388 May 17 10:48	0° \mathfrak{C}			13390 Oct 22 16:13	0° \mathfrak{L}	
	13388 Jun 10 17:57	0° Ω		asc. node	13390 Nov 17 17:09	0° \mathfrak{M}	
asc. node	13388 Jun 23 12:18	15° Ω 40'20			13390 Dec 09 19:04	26° \mathfrak{M} 06'58	
	13388 Jul 05 05:58	0° \mathfrak{M}			13390 Dec 13 01:07	0° \mathfrak{A}	
	13388 Jul 30 03:58	0° \mathfrak{L}			13391 Jan 06 22:54	0° \mathfrak{C}	
	13388 Aug 24 22:02	0° \mathfrak{M}			13391 Jan 31 14:05	0° \approx	
	13388 Sep 21 16:03	0° \mathfrak{A}			13391 Feb 25 01:10	0° \mathfrak{H}	
evening max el	13388 Sep 23 21:01	2° \mathfrak{A} 12'44	46°26'38	morning set	13391 Mar 17 17:46	25° \mathfrak{H} 29'32	
desc. node	13388 Oct 13 11:53	19° \mathfrak{A} 58'36			13391 Mar 21 09:25	0° Υ	
	13388 Oct 28 17:11	0° \mathfrak{C}		desc. node	13391 Mar 31 11:12	12° Υ 27'20	
greatest brilliancy	13388 Nov 02 04:55	1° \mathfrak{C} 57'43	-4.8m		13391 Apr 14 15:02	0° \mathfrak{C}	

max. Earth dist.	13391 Apr 22 15:35	9°  57'44	1.72321 AU	minimum elong	13393 Sep 20 21:28	12°  51'36	1°29'07
				morning rise	13393 Sep 27 02:22	9°  13'33	
superior conj	13391 Apr 25 15:56	13°  42'33	-0°56'20	direct	13393 Oct 11 21:13	5°  00'48	
minimum elong	13391 Apr 25 05:00	13°  08'34	0°56'32	greatest brilliancy	13393 Oct 21 12:00	6°  42'53	-4.8m
	13391 May 08 17:56	0°  II			13393 Nov 24 04:23	0°  III	
	13391 Jun 01 18:35	0°  ☿		morning max el	13393 Nov 30 02:47	5°  III36'14	46°01'45
evening rise	13391 Jun 03 22:39	2°  ☿42'46			13393 Dec 23 18:43	0°  ♊	
	13391 Jun 25 18:21	0°  ♋		asc. node	13394 Jan 06 06:37	14°  ♊53'41	
	13391 Jul 19 19:08	0°  ♌			13394 Jan 19 13:28	0°  ♋	
asc. node	13391 Jul 22 01:15	2°  ♌48'27			13394 Feb 14 04:22	0°  ♌	
	13391 Aug 12 23:06	0°  ♍			13394 Mar 11 04:30	0°  ♌	
	13391 Sep 06 09:00	0°  ♍			13394 Apr 04 19:47	0°  ♍	
	13391 Oct 01 05:33	0°  ♎		desc. node	13394 Apr 28 01:30	28°  ♍35'23	
	13391 Oct 26 21:59	0°  ♏			13394 Apr 29 04:53	0°  ♏	
desc. node	13391 Nov 10 21:32	16°  ♏44'45			13394 May 23 09:01	0°  ♏	
	13391 Nov 23 07:42	0°  ♐		morning set	13394 May 29 19:52	8°  ♏02'44	
evening max el	13391 Dec 05 02:03	11°  ♐48'53	45°59'04		13394 Jun 16 09:19	0°  ☿	
	13391 Dec 26 01:28	0°  ♑		max. Earth dist.	13394 Jul 07 21:51	26°  ☿59'22	1.71440 AU
greatest brilliancy	13392 Jan 13 03:54	10°  ♑14'04	-4.7m				
retrograde	13392 Jan 23 02:24	12°  ♑01'25		superior conj	13394 Jul 08 19:57	28°  ☿08'41	-1°19'30
evening set	13392 Feb 08 01:29	7°  ♑06'16		minimum elong	13394 Jul 09 05:00	28°  ☿37'07	1°20'16
inferior conj	13392 Feb 13 10:10	3°  ♑50'39	-4°22'46		13394 Jul 10 07:26	0°  ♋	
minimum elong	13392 Feb 13 18:54	3°  ♑36'57	4°19'54		13394 Aug 03 05:13	0°  ♌	
min. Earth dist.	13392 Feb 13 20:38	3°  ♑34'15	0.28592 AU	evening rise	13394 Aug 18 01:50	18°  ♌36'49	
morning rise	13392 Feb 19 12:09	0°  ♑10'47		asc. node	13394 Aug 18 15:11	19°  ♌18'37	
	13392 Feb 19 19:59	30°  ♑			13394 Aug 27 04:18	0°  ♍	
asc. node	13392 Mar 02 23:54	25°  ♑47'17			13394 Sep 20 05:59	0°  ♍	
direct	13392 Mar 05 18:34	25°  ♑37'58			13394 Oct 14 12:01	0°  ♎	
greatest brilliancy	13392 Mar 16 15:08	27°  ♑48'37	-4.8m		13394 Nov 08 01:14	0°  ♏	
	13392 Mar 21 11:59	0°  ♑			13394 Dec 03 02:01	0°  ♐	
morning max el	13392 Apr 24 09:48	27°  ♑06'15	46°13'13	desc. node	13394 Dec 08 08:32	6°  ♐13'06	
	13392 Apr 27 07:29	0°  ♒			13394 Dec 28 20:44	0°  ♑	
	13392 May 25 04:14	0°  ♓			13395 Jan 24 22:10	0°  ♒	
	13392 Jun 20 00:28	0°  ♊		evening max el	13395 Feb 14 03:25	20°  ♒41'21	45°58'51
desc. node	13392 Jun 23 01:18	3°  ♊36'22			13395 Feb 24 03:49	0°  ♓	
	13392 Jul 14 23:02	0°  ☿		greatest brilliancy	13395 Mar 25 11:22	19°  ♓35'41	-4.8m
	13392 Aug 08 10:35	0°  ♋		asc. node	13395 Mar 31 09:05	21°  ♓05'55	
	13392 Sep 01 16:55	0°  ♌		retrograde	13395 Apr 04 08:26	21°  ♓24'17	
	13392 Sep 25 21:20	0°  ♍		evening set	13395 Apr 19 17:53	16°  ♓47'39	
asc. node	13392 Oct 13 18:18	22°  ♍11'24		inferior conj	13395 Apr 25 08:14	13°  ♓25'37	5°49'29
	13392 Oct 20 01:15	0°  ♍		minimum elong	13395 Apr 24 21:41	13°  ♓42'06	5°46'16
morning set	13392 Oct 26 14:49	8°  ♍09'00		min. Earth dist.	13395 Apr 25 08:28	13°  ♓25'15	0.27861 AU
	13392 Nov 13 05:16	0°  ♎		morning rise	13395 Apr 30 01:09	10°  ♓33'03	
				direct	13395 May 16 08:32	5°  ♓21'04	
superior conj	13392 Dec 03 04:49	24°  ♎46'32	1°25'15	greatest brilliancy	13395 May 26 13:28	7°  ♓17'33	-4.9m
minimum elong	13392 Dec 03 01:53	24°  ♎37'26	1°26'14		13395 Jun 27 14:16	0°  ♊	
max. Earth dist.	13392 Dec 05 06:54	27°  ♎21'39	1.72836 AU	morning max el	13395 Jul 05 16:06	7°  ♊51'10	46°53'10
	13392 Dec 07 10:03	0°  ♏		desc. node	13395 Jul 21 12:03	24°  ♊28'35	
	13392 Dec 31 16:37	0°  ♐			13395 Jul 26 12:42	0°  ☿	
evening rise	13393 Jan 09 06:54	10°  ♐35'34			13395 Aug 21 17:23	0°  ♋	
	13393 Jan 25 01:50	0°  ♑			13395 Sep 15 22:37	0°  ♌	
desc. node	13393 Feb 02 08:17	10°  ♑08'18			13395 Oct 10 17:50	0°  ♍	
	13393 Feb 18 13:50	0°  ♒			13395 Nov 04 08:04	0°  ♍	
	13393 Mar 15 04:09	0°  ♓		asc. node	13395 Nov 11 08:15	8°  ♍34'56	
	13393 Apr 08 20:57	0°  ♊			13395 Nov 28 19:05	0°  ♎	
	13393 May 03 18:41	0°  ☿			13395 Dec 23 03:50	0°  ♏	
asc. node	13393 May 26 02:38	26°  ☿26'39		morning set	13396 Jan 05 06:54	16°  ♏11'30	
	13393 May 29 03:49	0°  ♋			13396 Jan 16 11:28	0°  ♐	
	13393 Jun 24 15:32	0°  ♌			13396 Feb 09 19:01	0°  ♑	
evening max el	13393 Jul 11 22:01	18°  ♌09'38	46°46'13				
	13393 Jul 24 08:18	0°  ♍		superior conj	13396 Feb 11 04:16	1°  ♑42'31	0°45'25
greatest brilliancy	13393 Aug 20 11:16	18°  ♍30'40	-4.9m	minimum elong	13396 Feb 11 13:08	2°  ♑09'53	0°45'37
retrograde	13393 Aug 31 04:22	20°  ♍38'25		max. Earth dist.	13396 Feb 11 00:25	1°  ♑30'41	1.73138 AU
evening set	13393 Sep 14 17:11	16°  ♍29'05		desc. node	13396 Mar 01 22:28	26°  ♑04'46	
desc. node	13393 Sep 15 04:38	16°  ♍13'35			13396 Mar 05 02:43	0°  ♒	
min. Earth dist.	13393 Sep 20 13:06	13°  ♍04'24	0.27220 AU	evening rise	13396 Mar 20 05:00	18°  ♒37'46	
inferior conj	13393 Sep 21 00:56	12°  ♍46'17	-1°30'22		13396 Mar 29 10:00	0°  ♓	

	13396 Apr 22 16:18	0°II			13398 Aug 23 14:39	0°Ω	
	13396 May 16 22:12	0°☾		morning max el	13398 Sep 16 03:49	21°Ω00'07	46°47'00
	13396 Jun 10 05:45	0°Ω			13398 Sep 24 22:54	0°♐	
asc. node	13396 Jun 22 14:16	15°Ω09'26			13398 Oct 22 07:24	0°♊	
	13396 Jul 04 18:22	0°♐			13398 Nov 17 06:12	0°♋	
	13396 Jul 29 17:25	0°♌		asc. node	13398 Dec 08 21:03	25°♋36'57	
	13396 Aug 24 13:38	0°♍			13398 Dec 12 13:02	0°♎	
evening max el	13396 Sep 21 11:25	29°♍54'44	46°27'41		13399 Jan 06 10:10	0°♏	
	13396 Sep 21 13:32	0°♐			13399 Jan 31 01:01	0°♑	
desc. node	13396 Oct 12 13:51	18°♐51'38			13399 Feb 24 11:53	0°♒	
greatest brilliancy	13396 Oct 30 19:09	29°♐42'36	-4.8m	morning set	13399 Mar 15 09:15	23°♒16'24	
	13396 Oct 31 14:18	0°♑			13399 Mar 20 20:02	0°♓	
retrograde	13396 Nov 10 11:02	1°♑48'29		desc. node	13399 Mar 30 13:05	12°♓00'17	
	13396 Nov 19 22:48	30°♒♐			13399 Apr 14 01:38	0°♈	
evening set	13396 Nov 28 14:20	25°♐37'11		max. Earth dist.	13399 Apr 20 05:32	7°♈38'57	1.72359 AU
inferior conj	13396 Dec 01 21:58	23°♐34'19	-8°44'24				
minimum elong	13396 Dec 01 18:38	23°♐39'31	8°43'13	superior conj	13399 Apr 23 05:26	11°♈22'19	-0°53'28
min. Earth dist.	13396 Dec 01 09:48	23°♐53'17	0.28676 AU	minimum elong	13399 Apr 22 18:46	10°♈49'08	0°53'38
morning rise	13396 Dec 04 23:03	21°♐41'29			13399 May 08 04:35	0°♐	
direct	13396 Dec 23 03:58	15°♐28'10		evening rise	13399 Jun 01 10:52	0°☾17'14	
greatest brilliancy	13397 Jan 02 03:29	17°♐16'23	-4.7m		13399 Jun 01 05:21	0°☾	
	13397 Jan 23 10:36	0°♑			13399 Jun 25 05:15	0°Ω	
asc. node	13397 Feb 02 16:35	8°♑43'59			13399 Jul 19 06:14	0°♐	
morning max el	13397 Feb 10 02:53	15°♑42'15	45°43'10	asc. node	13399 Jul 21 03:02	2°♐19'26	
	13397 Feb 24 05:29	0°♒			13399 Aug 12 10:28	0°♌	
	13397 Mar 23 10:42	0°♈			13399 Sep 05 20:49	0°♍	
	13397 Apr 18 03:51	0°♑			13399 Sep 30 18:10	0°♎	
	13397 May 13 02:59	0°♈			13399 Oct 26 12:15	0°♏	
desc. node	13397 May 25 14:59	15°♈14'58		desc. node	13399 Nov 09 23:37	16°♏06'54	
	13397 Jun 06 15:04	0°♐			13399 Nov 23 02:10	0°♑	
	13397 Jun 30 19:57	0°☾		evening max el	13399 Dec 02 17:41	9°♑38'02	45°59'36
	13397 Jul 24 20:41	0°Ω			13399 Dec 26 17:47	0°♈	
morning set	13397 Aug 12 16:22	23°Ω33'21		greatest brilliancy	13400 Jan 10 19:36	8°♈03'54	-4.7m
	13397 Aug 17 19:51	0°♐		retrograde	13400 Jan 20 17:42	9°♈50'42	
	13397 Sep 10 19:12	0°♌		evening set	13400 Feb 05 19:53	4°♈52'00	
asc. node	13397 Sep 15 05:38	5°♌32'45		inferior conj	13400 Feb 11 02:00	1°♈39'40	-4°40'42
				minimum elong	13400 Feb 11 11:08	1°♈25'19	4°37'44
superior conj	13397 Sep 21 02:27	12°♌52'42	0°14'15	min. Earth dist.	13400 Feb 11 12:23	1°♈23'21	0.28621 AU
minimum elong	13397 Sep 20 22:59	12°♌41'52	0°14'12		13400 Feb 13 17:57	30°♒♑	
behind sun begin	13397 Sep 20 11:09	12°♌04'56		morning rise	13400 Feb 17 02:15	28°♑01'54	
behind sun end	13397 Sep 21 10:48	13°♌18'48		asc. node	13400 Mar 03 01:56	23°♑29'15	
max. Earth dist.	13397 Sep 23 00:27	15°♌16'22	1.71890 AU	direct	13400 Mar 04 10:50	23°♑27'00	
	13397 Oct 04 19:39	0°♍		greatest brilliancy	13400 Mar 15 06:46	25°♑36'43	-4.8m
	13397 Oct 28 22:03	0°♐			13400 Mar 24 01:59	0°♈	
evening rise	13397 Oct 29 07:01	0°♐27'53		morning max el	13400 Apr 23 00:29	24°♈50'42	46°11'35
	13397 Nov 22 03:42	0°♑			13400 Apr 28 03:43	0°♑	
	13397 Dec 16 14:27	0°♒			13400 May 25 19:15	0°♈	
desc. node	13398 Jan 04 20:43	23°♒23'59			13400 Jun 20 13:32	0°♐	
	13398 Jan 10 07:57	0°♈		desc. node	13400 Jun 23 03:13	3°♐03'38	
	13398 Feb 04 09:36	0°♑			13400 Jul 15 11:08	0°☾	
	13398 Mar 01 21:39	0°♈			13400 Aug 08 22:06	0°Ω	
	13398 Mar 28 03:34	0°♐			13400 Sep 02 04:03	0°♐	
	13398 Apr 25 04:57	0°☾			13400 Sep 26 08:11	0°♌	
evening max el	13398 Apr 27 08:52	2°☾09'22	46°27'00	asc. node	13400 Oct 13 20:14	21°♌44'11	
asc. node	13398 Apr 27 18:25	2°☾32'59			13400 Oct 20 11:53	0°♍	
	13398 Jun 01 04:58	0°Ω		morning set	13400 Oct 25 05:53	5°♍53'57	
greatest brilliancy	13398 Jun 06 18:30	2°Ω21'50	-4.9m		13400 Nov 13 15:45	0°♐	
retrograde	13398 Jun 16 07:22	4°Ω04'28					
	13398 Jun 30 14:46	30°♒☾		superior conj	13400 Dec 01 21:35	22°♐37'36	1°24'41
evening set	13398 Jul 03 22:33	28°☾06'39		minimum elong	13400 Dec 01 17:53	22°♐26'10	1°25'40
inferior conj	13398 Jul 06 22:43	26°☾16'51	8°33'07	max. Earth dist.	13400 Dec 04 00:45	25°♐16'05	1.72804 AU
minimum elong	13398 Jul 07 06:39	26°☾04'40	8°31'12		13400 Dec 07 20:26	0°♑	
min. Earth dist.	13398 Jul 07 11:11	25°☾57'43	0.27256 AU		13401 Jan 01 03:00	0°♒	
morning rise	13398 Jul 10 14:41	24°☾03'36		evening rise	13401 Jan 07 23:25	8°♒26'28	
direct	13398 Jul 27 18:03	18°☾23'49			13401 Jan 25 12:22	0°♈	
greatest brilliancy	13398 Aug 06 19:22	20°☾18'44	-4.9m	desc. node	13401 Feb 02 10:05	9°♈41'19	
desc. node	13398 Aug 17 21:30	26°☾00'40			13401 Feb 19 00:38	0°♑	

	13401 Mar 15 15:21	0°♄		asc. node	13403 Nov 11 10:06	8°♍06'47	
	13401 Apr 09 08:45	0°♊			13403 Nov 29 05:51	0°♊	
	13401 May 04 07:23	0°♊			13403 Dec 23 14:22	0°♊	
asc. node	13401 May 26 04:36	25°♊51'26		morning set	13404 Jan 03 23:55	14°♊03'35	
	13401 May 29 18:07	0°♋			13404 Jan 16 21:53	0°♋	
	13401 Jun 25 09:20	0°♌					
evening max el	13401 Jul 10 11:05	15°♌45'54	46°46'07	superior conj	13404 Feb 09 20:45	29°♋33'18	0°48'15
	13401 Jul 25 14:35	0°♌		minimum elong	13404 Feb 10 05:56	0°♋01'38	0°48'28
greatest brilliancy	13401 Aug 19 02:45	16°♌10'19	-4.9m	max. Earth dist.	13404 Feb 09 20:47	29°♋33'26	1.73144 AU
retrograde	13401 Aug 29 17:26	18°♌16'10			13404 Feb 10 05:24	0°♋	
evening set	13401 Sep 13 06:41	14°♌07'18		desc. node	13404 Mar 02 00:23	25°♋38'35	
desc. node	13401 Sep 15 06:44	13°♌00'27			13404 Mar 05 13:09	0°♌	
min. Earth dist.	13401 Sep 19 03:57	10°♌40'45	0.27181 AU	evening rise	13404 Mar 18 20:47	16°♌26'02	
inferior conj	13401 Sep 19 14:13	10°♌25'02	-1°06'51		13404 Mar 29 20:33	0°♌	
minimum elong	13401 Sep 19 11:38	10°♌29'00	1°05'57		13404 Apr 23 03:04	0°♊	
morning rise	13401 Sep 25 17:05	6°♌50'05			13404 May 17 09:17	0°♊	
direct	13401 Oct 10 09:42	2°♌39'50			13404 Jun 10 17:18	0°♋	
greatest brilliancy	13401 Oct 20 02:11	4°♌22'59	-4.8m	asc. node	13404 Jun 22 16:03	14°♋38'43	
	13401 Nov 25 05:25	0°♍			13404 Jul 05 06:37	0°♌	
morning max el	13401 Nov 28 15:27	3°♍15'46	46°03'18		13404 Jul 30 06:49	0°♌	
	13401 Dec 24 10:57	0°♊			13404 Aug 25 05:21	0°♍	
asc. node	13402 Jan 06 08:26	14°♊18'05		evening max el	13404 Sep 20 02:37	27°♍39'07	46°28'52
	13402 Jan 20 02:46	0°♊			13404 Sep 22 11:43	0°♊	
	13402 Feb 14 16:18	0°♋		desc. node	13404 Oct 12 15:56	17°♊43'23	
	13402 Mar 11 15:44	0°♋		greatest brilliancy	13404 Oct 29 09:07	27°♊27'31	-4.8m
	13402 Apr 05 06:40	0°♌		retrograde	13404 Nov 09 03:10	29°♊35'21	
desc. node	13402 Apr 28 03:26	28°♌08'12		evening set	13404 Nov 27 03:15	23°♊27'35	
	13402 Apr 29 15:36	0°♌		min. Earth dist.	13404 Nov 29 23:42	21°♊42'24	0.28640 AU
	13402 May 23 19:40	0°♊		inferior conj	13404 Nov 30 13:15	21°♊21'18	-8°40'53
morning set	13402 May 28 07:36	5°♊36'27		minimum elong	13404 Nov 30 09:08	21°♊27'42	8°39'39
	13402 Jun 16 19:55	0°♊		morning rise	13404 Dec 03 15:11	19°♊27'29	
max. Earth dist.	13402 Jul 06 02:57	24°♊11'35	1.71452 AU	direct	13404 Dec 21 19:18	13°♊15'47	
				greatest brilliancy	13404 Dec 31 17:12	15°♊03'05	-4.7m
superior conj	13402 Jul 07 07:42	25°♊41'46	-1°21'02		13405 Jan 24 19:14	0°♊	
minimum elong	13402 Jul 07 16:02	26°♊07'55	1°21'51	asc. node	13405 Feb 02 18:36	7°♊51'12	
	13402 Jul 10 18:01	0°♋		morning max el	13405 Feb 08 18:44	13°♊31'25	45°43'04
	13402 Aug 03 15:50	0°♌			13405 Feb 24 23:00	0°♋	
evening rise	13402 Aug 16 13:51	16°♌10'55			13405 Mar 24 00:35	0°♋	
asc. node	13402 Aug 18 16:58	18°♌50'54			13405 Apr 18 16:11	0°♌	
	13402 Aug 27 14:59	0°♌			13405 May 13 14:32	0°♌	
	13402 Sep 20 16:47	0°♍		desc. node	13405 May 25 16:51	14°♌46'01	
	13402 Oct 14 23:02	0°♊			13405 Jun 07 02:11	0°♊	
	13402 Nov 08 12:39	0°♊			13405 Jul 01 06:51	0°♊	
	13402 Dec 03 14:11	0°♋			13405 Jul 25 07:28	0°♋	
desc. node	13402 Dec 08 10:26	5°♋42'17		morning set	13405 Aug 11 04:59	21°♋09'04	
	13402 Dec 29 10:21	0°♋			13405 Aug 18 06:34	0°♌	
	13403 Jan 25 15:05	0°♌			13405 Sep 11 05:50	0°♌	
evening max el	13403 Feb 12 17:25	18°♌25'34	45°58'22	asc. node	13405 Sep 15 07:36	5°♌05'37	
	13403 Feb 25 08:13	0°♌					
greatest brilliancy	13403 Mar 24 01:08	17°♌18'51	-4.8m	superior conj	13405 Sep 19 15:46	10°♌31'11	0°10'35
asc. node	13403 Mar 31 11:07	19°♌00'56		minimum elong	13405 Sep 19 13:10	10°♌23'04	0°10'32
retrograde	13403 Apr 02 22:52	19°♌08'14		behind sun begin	13405 Sep 18 18:16	9°♌24'01	
evening set	13403 Apr 18 05:45	14°♌34'33		behind sun end	13405 Sep 20 08:04	11°♌22'08	
inferior conj	13403 Apr 23 22:52	11°♌08'54	5°31'41	max. Earth dist.	13405 Sep 21 14:40	12°♌57'41	1.71861 AU
minimum elong	13403 Apr 23 12:32	11°♌25'00	5°28'30		13405 Oct 05 06:14	0°♍	
min. Earth dist.	13403 Apr 23 23:12	11°♌08'23	0.27884 AU	evening rise	13405 Oct 27 22:25	28°♍13'45	
morning rise	13403 Apr 28 19:01	8°♌11'53			13405 Oct 29 08:38	0°♊	
direct	13403 May 14 23:13	3°♌03'46			13405 Nov 22 14:25	0°♊	
greatest brilliancy	13403 May 25 05:20	5°♌01'31	-4.8m		13405 Dec 17 01:23	0°♋	
	13403 Jun 28 15:12	0°♊		desc. node	13406 Jan 04 22:34	22°♋55'38	
morning max el	13403 Jul 04 06:55	5°♊33'01	46°52'19		13406 Jan 10 19:19	0°♋	
desc. node	13403 Jul 21 13:56	23°♊46'00			13406 Feb 04 21:40	0°♌	
	13403 Jul 27 05:17	0°♊			13406 Mar 02 10:56	0°♌	
	13403 Aug 22 07:13	0°♋			13406 Mar 28 19:15	0°♊	
	13403 Sep 16 11:07	0°♌		evening max el	13406 Apr 25 23:23	29°♊51'04	46°25'58
	13403 Oct 11 05:32	0°♌			13406 Apr 26 03:00	0°♊	
	13403 Nov 04 19:13	0°♍		asc. node	13406 Apr 27 20:26	1°♊41'44	

	13406 Jun 05 08:18	0°♈		morning set	13408 Oct 22 20:53	3°♎38'06	
greatest brilliancy	13406 Jun 05 07:26	29°♊59'16	-4.9m		13408 Nov 13 02:26	0°♊	
retrograde	13406 Jun 14 20:41	1°♈41'42					
	13406 Jun 23 23:19	30°♋		superior conj	13408 Nov 29 14:07	20°♊27'08	1°24'00
evening set	13406 Jul 02 14:40	25°♊39'36		minimum elong	13408 Nov 29 09:42	20°♊13'28	1°24'57
inferior conj	13406 Jul 05 11:57	23°♊53'47	8°41'24	max. Earth dist.	13408 Dec 01 15:44	23°♊00'50	1.72778 AU
minimum elong	13406 Jul 05 19:10	23°♊42'41	8°39'38		13408 Dec 07 07:05	0°♊	
min. Earth dist.	13406 Jul 05 23:49	23°♊35'30	0.27283 AU		13408 Dec 31 13:42	0°♋	
morning rise	13406 Jul 08 23:38	21°♊46'35		evening rise	13409 Jan 05 15:32	6°♋15'17	
direct	13406 Jul 26 07:54	16°♊00'30			13409 Jan 24 23:12	0°♋	
greatest brilliancy	13406 Aug 05 07:58	17°♊54'12	-4.9m	desc. node	13409 Feb 01 11:59	9°♋13'46	
desc. node	13406 Aug 17 23:37	24°♊37'52			13409 Feb 18 11:44	0°♋	
	13406 Aug 25 06:14	0°♈			13409 Mar 15 02:52	0°♋	
morning max el	13406 Sep 14 17:38	18°♈38'30	46°47'53		13409 Apr 08 20:51	0°♈	
	13406 Sep 25 18:23	0°♈			13409 May 03 20:26	0°♈	
	13406 Oct 22 22:25	0°♈		asc. node	13409 May 25 06:26	25°♈14'51	
	13406 Nov 17 19:15	0°♈			13409 May 29 08:51	0°♈	
asc. node	13406 Dec 08 22:53	25°♈06'13			13409 Jun 25 03:51	0°♈	
	13406 Dec 13 01:00	0°♈		evening max el	13409 Jul 07 23:42	13°♈20'34	46°46'10
	13407 Jan 06 21:29	0°♈			13409 Jul 25 23:33	0°♈	
	13407 Jan 31 11:56	0°♈		greatest brilliancy	13409 Aug 16 18:05	13°♈49'29	-4.9m
	13407 Feb 24 22:36	0°♈		retrograde	13409 Aug 27 06:49	15°♈54'04	
morning set	13407 Mar 14 00:45	21°♈03'24		evening set	13409 Sep 10 20:30	11°♈44'55	
	13407 Mar 21 06:39	0°♈		desc. node	13409 Sep 14 08:43	9°♈45'14	
desc. node	13407 Mar 30 14:58	11°♈33'16		inferior conj	13409 Sep 17 03:39	8°♈03'42	-0°43'23
	13407 Apr 14 12:15	0°♈		minimum elong	13409 Sep 17 01:57	8°♈06'17	0°42'48
max. Earth dist.	13407 Apr 18 18:05	5°♈15'56	1.72394 AU	min. Earth dist.	13409 Sep 16 18:53	8°♈17'06	0.27148 AU
				morning rise	13409 Sep 23 07:48	4°♈26'58	
superior conj	13407 Apr 21 19:15	9°♈03'07	-0°50'31	direct	13409 Oct 07 22:10	0°♈18'30	
minimum elong	13407 Apr 21 08:54	8°♈30'57	0°50'40	greatest brilliancy	13409 Oct 17 16:34	2°♈03'07	-4.8m
	13407 May 08 15:15	0°♈			13409 Nov 25 05:28	0°♈	
evening rise	13407 May 30 23:29	27°♈53'07		morning max el	13409 Nov 26 04:55	0°♈56'31	46°04'40
	13407 Jun 01 16:05	0°♈			13409 Dec 24 03:13	0°♈	
	13407 Jun 25 16:07	0°♈		asc. node	13410 Jan 05 10:26	13°♈42'13	
	13407 Jul 19 17:17	0°♈			13410 Jan 19 16:20	0°♈	
asc. node	13407 Jul 21 04:56	1°♈50'53			13410 Feb 14 04:36	0°♈	
	13407 Aug 12 21:51	0°♈			13410 Mar 11 03:21	0°♈	
	13407 Sep 06 08:44	0°♈			13410 Apr 04 17:55	0°♈	
	13407 Oct 01 07:02	0°♈		desc. node	13410 Apr 27 05:11	27°♈39'27	
	13407 Oct 27 02:57	0°♈			13410 Apr 29 02:39	0°♈	
desc. node	13407 Nov 10 01:31	15°♈27'19			13410 May 23 06:36	0°♈	
	13407 Nov 23 21:31	0°♈		morning set	13410 May 25 19:15	3°♈08'57	
evening max el	13407 Dec 01 08:20	7°♈23'47	46°00'10		13410 Jun 16 06:50	0°♈	
	13407 Dec 28 16:40	0°♈		max. Earth dist.	13410 Jul 03 10:48	21°♈31'24	1.71465 AU
greatest brilliancy	13408 Jan 09 11:41	5°♈53'04	-4.8m				
retrograde	13408 Jan 19 08:36	7°♈38'58		superior conj	13410 Jul 04 19:27	23°♈13'49	-1°22'24
evening set	13408 Feb 04 14:11	2°♈36'29		minimum elong	13410 Jul 05 03:01	23°♈37'33	1°23'17
	13408 Feb 08 21:14	30°♈			13410 Jul 10 04:56	0°♈	
inferior conj	13408 Feb 09 17:44	29°♈27'47	-4°58'10		13410 Aug 03 02:46	0°♈	
minimum elong	13408 Feb 10 03:11	29°♈12'53	4°55'09	evening rise	13410 Aug 14 02:00	13°♈44'29	
min. Earth dist.	13408 Feb 10 04:18	29°♈11'08	0.28645 AU	asc. node	13410 Aug 17 18:56	18°♈22'43	
morning rise	13408 Feb 15 16:00	25°♈52'21			13410 Aug 27 01:58	0°♈	
direct	13408 Mar 02 02:23	21°♈15'01			13410 Sep 20 03:53	0°♈	
asc. node	13408 Mar 02 04:00	21°♈15'01			13410 Oct 14 10:20	0°♈	
greatest brilliancy	13408 Mar 12 22:38	23°♈24'23	-4.8m		13410 Nov 08 00:24	0°♈	
	13408 Mar 25 04:48	0°♈			13410 Dec 03 02:46	0°♈	
morning max el	13408 Apr 20 14:33	22°♈33'03	46°10'06	desc. node	13410 Dec 07 12:17	5°♈10'14	
	13408 Apr 27 23:29	0°♈			13410 Dec 29 00:34	0°♈	
	13408 May 25 10:13	0°♈			13411 Jan 25 08:56	0°♈	
	13408 Jun 20 02:38	0°♈		evening max el	13411 Feb 10 08:18	16°♈10'30	45°57'51
desc. node	13408 Jun 22 05:03	2°♈30'25			13411 Feb 25 15:33	0°♈	
	13408 Jul 14 23:16	0°♈		greatest brilliancy	13411 Mar 21 14:32	14°♈59'56	-4.8m
	13408 Aug 08 09:39	0°♈		asc. node	13411 Mar 30 13:06	16°♈49'02	
	13408 Sep 01 15:13	0°♈		retrograde	13411 Mar 31 13:39	16°♈50'17	
	13408 Sep 25 19:06	0°♈		evening set	13411 Apr 15 17:41	12°♈19'27	
asc. node	13408 Oct 12 22:01	21°♈16'08		inferior conj	13411 Apr 21 13:19	8°♈50'18	5°13'18
	13408 Oct 19 22:40	0°♈		minimum elong	13411 Apr 21 03:17	9°♈05'56	5°10'09

min. Earth dist.	13411 Apr 21 13:32	8°♄49'58	0.27903 AU	evening rise	13413 Oct 25 13:51	25°♄58'42	
morning rise	13411 Apr 26 12:37	5°♄49'02			13413 Oct 28 19:33	0°♄	
direct	13411 May 12 14:09	0°♄44'51			13413 Nov 22 01:26	0°♄	
greatest brilliancy	13411 May 22 20:27	2°♄43'11	-4.8m		13413 Dec 16 12:38	0°♄	
	13411 Jun 28 15:26	0°♄		desc. node	13414 Jan 04 00:34	22°♄26'52	
morning max el	13411 Jul 01 22:20	3°♄15'23	46°51'25		13414 Jan 10 06:58	0°♄	
desc. node	13411 Jul 20 16:02	23°♄03'26			13414 Feb 04 10:03	0°♄	
	13411 Jul 26 21:56	0°♄			13414 Mar 02 00:39	0°♄	
	13411 Aug 21 21:17	0°♄			13414 Mar 28 11:36	0°♄	
	13411 Sep 15 23:53	0°♄		evening max el	13414 Apr 23 13:10	27°♄29'33	46°24'40
	13411 Oct 10 17:31	0°♄			13414 Apr 26 02:36	0°♄	
	13411 Nov 04 06:40	0°♄		asc. node	13414 Apr 26 22:18	0°♄47'39	
asc. node	13411 Nov 10 11:56	7°♄37'38		greatest brilliancy	13414 Jun 02 20:49	27°♄35'20	-4.9m
	13411 Nov 28 16:55	0°♄		retrograde	13414 Jun 12 09:15	29°♄16'50	
	13411 Dec 23 01:12	0°♄		evening set	13414 Jun 30 06:18	23°♄11'04	
morning set	13412 Jan 01 17:02	11°♄55'00		inferior conj	13414 Jul 03 00:59	21°♄28'55	8°48'45
	13412 Jan 16 08:38	0°♄		minimum elong	13414 Jul 03 07:23	21°♄19'02	8°47'10
				min. Earth dist.	13414 Jul 03 12:37	21°♄10'58	0.27307 AU
superior conj	13412 Feb 07 13:08	27°♄22'33	0°51'00	morning rise	13414 Jul 06 08:27	19°♄27'36	
minimum elong	13412 Feb 07 22:34	27°♄51'40	0°51'16	direct	13414 Jul 23 21:00	13°♄35'18	
max. Earth dist.	13412 Feb 07 17:57	27°♄37'25	1.73154 AU	greatest brilliancy	13414 Aug 02 20:52	15°♄28'24	-4.9m
	13412 Feb 09 16:10	0°♄		desc. node	13414 Aug 17 01:36	23°♄16'08	
desc. node	13412 Mar 01 02:16	25°♄10'58			13414 Aug 25 18:26	0°♄	
	13412 Mar 05 00:01	0°♄		morning max el	13414 Sep 12 06:24	16°♄13'07	46°48'56
evening rise	13412 Mar 16 12:14	14°♄11'55			13414 Sep 25 13:37	0°♄	
	13412 Mar 29 07:33	0°♄			13414 Oct 22 13:27	0°♄	
	13412 Apr 22 14:17	0°♄			13414 Nov 17 08:23	0°♄	
	13412 May 16 20:49	0°♄		asc. node	13414 Dec 08 00:48	24°♄35'20	
	13412 Jun 10 05:17	0°♄			13414 Dec 12 13:06	0°♄	
asc. node	13412 Jun 21 18:01	14°♄07'15			13415 Jan 06 08:57	0°♄	
	13412 Jul 04 19:19	0°♄			13415 Jan 30 23:01	0°♄	
	13412 Jul 29 20:44	0°♄			13415 Feb 24 09:27	0°♄	
	13412 Aug 24 21:43	0°♄		morning set	13415 Mar 11 16:35	18°♄50'53	
evening max el	13412 Sep 17 18:38	25°♄24'18	46°30'00		13415 Mar 20 17:25	0°♄	
	13412 Sep 22 11:19	0°♄		desc. node	13415 Mar 29 16:43	11°♄05'22	
desc. node	13412 Oct 11 17:52	16°♄31'50			13415 Apr 13 23:01	0°♄	
greatest brilliancy	13412 Oct 26 23:25	25°♄11'49	-4.8m	max. Earth dist.	13415 Apr 16 07:41	2°♄55'45	1.72438 AU
retrograde	13412 Nov 06 19:22	27°♄20'58					
evening set	13412 Nov 24 15:54	21°♄17'32		superior conj	13415 Apr 19 09:13	6°♄44'00	-0°47'31
min. Earth dist.	13412 Nov 27 13:30	19°♄30'38	0.28599 AU	minimum elong	13415 Apr 18 23:16	6°♄13'05	0°47'38
inferior conj	13412 Nov 28 04:31	19°♄07'16	-8°36'36		13415 May 08 02:06	0°♄	
minimum elong	13412 Nov 27 23:38	19°♄14'52	8°35'17	evening rise	13415 May 28 12:01	25°♄28'07	
morning rise	13412 Dec 01 07:34	17°♄11'53			13415 Jun 01 03:04	0°♄	
direct	13412 Dec 19 10:48	11°♄02'42			13415 Jun 25 03:15	0°♄	
greatest brilliancy	13412 Dec 29 06:15	12°♄48'12	-4.8m		13415 Jul 19 04:37	0°♄	
	13413 Jan 25 01:44	0°♄		asc. node	13415 Jul 20 06:50	1°♄21'32	
asc. node	13413 Feb 01 20:40	6°♄58'43			13415 Aug 12 09:30	0°♄	
morning max el	13413 Feb 06 10:11	11°♄18'49	45°42'50		13415 Sep 05 20:54	0°♄	
	13413 Feb 24 16:29	0°♄			13415 Sep 30 20:07	0°♄	
	13413 Mar 23 14:42	0°♄			13415 Oct 26 17:55	0°♄	
	13413 Apr 18 04:53	0°♄		desc. node	13415 Nov 09 03:27	14°♄47'09	
	13413 May 13 02:29	0°♄			13415 Nov 23 17:31	0°♄	
desc. node	13413 May 24 18:44	14°♄15'48		evening max el	13415 Nov 28 22:26	5°♄08'01	46°00'53
	13413 Jun 06 13:44	0°♄			13415 Dec 30 00:31	0°♄	
	13413 Jun 30 18:08	0°♄		greatest brilliancy	13416 Jan 07 03:48	3°♄42'22	-4.8m
	13413 Jul 24 18:35	0°♄		retrograde	13416 Jan 16 23:41	5°♄27'51	
morning set	13413 Aug 08 17:27	18°♄43'19		evening set	13416 Feb 02 08:41	0°♄21'11	
	13413 Aug 17 17:34	0°♄			13416 Feb 02 23:14	30°♄	
	13413 Sep 10 16:45	0°♄		inferior conj	13416 Feb 07 09:37	27°♄16'26	-5°15'02
asc. node	13413 Sep 14 09:20	4°♄36'55		minimum elong	13416 Feb 07 19:22	27°♄01'06	5°12'00
				min. Earth dist.	13416 Feb 07 20:29	26°♄59'21	0.28670 AU
superior conj	13413 Sep 17 05:02	8°♄08'31	0°06'54	morning rise	13416 Feb 13 05:47	23°♄43'43	
minimum elong	13413 Sep 17 03:20	8°♄03'12	0°06'51	direct	13416 Feb 28 17:47	19°♄03'24	
behind sun begin	13413 Sep 16 04:44	6°♄52'35		asc. node	13416 Mar 01 05:54	19°♄06'03	
behind sun end	13413 Sep 18 01:55	9°♄13'49		greatest brilliancy	13416 Mar 10 15:03	21°♄13'09	-4.8m
max. Earth dist.	13413 Sep 19 05:30	10°♄39'58	1.71830 AU		13416 Mar 26 00:09	0°♄	
	13413 Oct 04 17:07	0°♄		morning max el	13416 Apr 18 04:59	20°♄16'37	46°08'41

	13416 Apr 27 18:35	0°♿			13418 Dec 02 15:10	0°♿	
	13416 May 25 00:57	0°♿	desc. node		13418 Dec 06 14:19	4°♿39'17	
	13416 Jun 19 15:39	0°♿			13418 Dec 28 14:37	0°♿	
desc. node	13416 Jun 21 07:06	1°♿57'52			13419 Jan 25 02:49	0°♿	
	13416 Jul 14 11:25	0°♿	evening max el		13419 Feb 08 00:04	13°♿58'50	45°57'27
	13416 Aug 07 21:16	0°♿			13419 Feb 26 00:58	0°♿	
	13416 Sep 01 02:30	0°♿	greatest brilliancy		13419 Mar 19 04:09	12°♿42'51	-4.8m
	13416 Sep 25 06:07	0°♿	retrograde		13419 Mar 29 04:34	14°♿33'48	
asc. node	13416 Oct 11 23:50	20°♿48'01	asc. node		13419 Mar 29 15:04	14°♿33'34	
	13416 Oct 19 09:28	0°♿	evening set		13419 Apr 13 06:04	10°♿05'52	
morning set	13416 Oct 20 11:33	1°♿21'03	inferior conj		13419 Apr 19 03:55	6°♿33'21	4°54'34
	13416 Nov 12 13:06	0°♿	minimum elong		13419 Apr 18 18:15	6°♿48'25	4°51'28
			min. Earth dist.		13419 Apr 19 03:59	6°♿33'15	0.27919 AU
superior conj	13416 Nov 27 06:31	18°♿16'23	morning rise		13419 Apr 24 06:15	3°♿27'52	
minimum elong	13416 Nov 27 01:25	18°♿00'34			13419 May 01 13:53	30°♿	
max. Earth dist.	13416 Nov 29 06:14	20°♿44'13	direct		13419 May 10 05:32	28°♿27'46	
	13416 Dec 06 17:41	0°♿			13419 May 19 05:27	0°♿	
	13416 Dec 31 00:20	0°♿	greatest brilliancy		13419 May 20 11:21	0°♿26'01	-4.8m
evening rise	13417 Jan 03 07:49	4°♿04'50			13419 Jun 28 14:01	0°♿	
	13417 Jan 24 09:58	0°♿	morning max el		13419 Jun 29 13:49	0°♿59'26	46°50'31
desc. node	13417 Jan 31 13:50	8°♿46'18	desc. node		13419 Jul 19 17:57	22°♿22'13	
	13417 Feb 17 22:45	0°♿			13419 Jul 26 13:46	0°♿	
	13417 Mar 14 14:16	0°♿			13419 Aug 21 10:44	0°♿	
	13417 Apr 08 08:51	0°♿			13419 Sep 15 12:10	0°♿	
	13417 May 03 09:24	0°♿			13419 Oct 10 05:05	0°♿	
asc. node	13417 May 24 08:29	24°♿39'03			13419 Nov 03 17:45	0°♿	
	13417 May 28 23:38	0°♿	asc. node		13419 Nov 09 13:51	7°♿09'47	
	13417 Jun 24 22:46	0°♿			13419 Nov 28 03:40	0°♿	
evening max el	13417 Jul 05 12:31	10°♿55'55			13419 Dec 22 11:43	0°♿	
	13417 Jul 26 11:49	0°♿	morning set		13419 Dec 30 09:56	9°♿46'47	
greatest brilliancy	13417 Aug 14 08:37	11°♿26'58			13420 Jan 15 19:02	0°♿	
retrograde	13417 Aug 24 20:18	13°♿30'57					
evening set	13417 Sep 08 10:09	9°♿20'59	superior conj		13420 Feb 05 05:26	25°♿12'45	0°53'40
desc. node	13417 Sep 13 10:39	6°♿26'53	minimum elong		13420 Feb 05 15:04	25°♿42'29	0°53'58
inferior conj	13417 Sep 14 16:42	5°♿41'06	max. Earth dist.		13420 Feb 05 14:50	25°♿41'46	1.73156 AU
minimum elong	13417 Sep 14 15:56	5°♿42'16			13420 Feb 09 02:33	0°♿	
min. Earth dist.	13417 Sep 14 09:20	5°♿52'21	desc. node		13420 Feb 29 03:58	24°♿44'03	
morning rise	13417 Sep 20 22:02	2°♿03'05			13420 Mar 04 10:28	0°♿	
	13417 Sep 25 06:37	30°♿	evening rise		13420 Mar 14 03:42	11°♿59'08	
direct	13417 Oct 05 10:36	27°♿55'51			13420 Mar 28 18:09	0°♿	
greatest brilliancy	13417 Oct 15 06:28	29°♿41'59			13420 Apr 22 01:06	0°♿	
	13417 Oct 16 02:37	0°♿			13420 May 16 07:58	0°♿	
morning max el	13417 Nov 23 19:07	28°♿39'02			13420 Jun 09 16:53	0°♿	
	13417 Nov 25 04:25	0°♿	asc. node		13420 Jun 20 19:58	13°♿36'59	
	13417 Dec 23 19:02	0°♿			13420 Jul 04 07:36	0°♿	
asc. node	13418 Jan 04 12:28	13°♿07'11			13420 Jul 29 10:14	0°♿	
	13418 Jan 19 05:34	0°♿			13420 Aug 24 13:49	0°♿	
	13418 Feb 13 16:36	0°♿	evening max el		13420 Sep 15 10:34	23°♿10'42	46°30'54
	13418 Mar 10 14:42	0°♿			13420 Sep 22 11:24	0°♿	
	13418 Apr 04 04:55	0°♿	desc. node		13420 Oct 10 19:50	15°♿19'34	
desc. node	13418 Apr 26 07:04	27°♿11'53	greatest brilliancy		13420 Oct 24 14:17	22°♿57'56	-4.8m
	13418 Apr 28 13:26	0°♿	retrograde		13420 Nov 04 11:08	25°♿07'27	
	13418 May 22 17:16	0°♿	evening set		13420 Nov 22 04:19	19°♿09'02	
morning set	13418 May 23 07:26	0°♿44'07	min. Earth dist.		13420 Nov 25 03:40	17°♿19'24	0.28558 AU
	13418 Jun 15 17:26	0°♿	inferior conj		13420 Nov 25 19:45	16°♿54'20	-8°31'34
max. Earth dist.	13418 Jun 30 22:22	19°♿03'46	minimum elong		13420 Nov 25 14:08	17°♿03'06	8°30'07
			morning rise		13420 Nov 29 00:12	14°♿56'49	
superior conj	13418 Jul 02 07:32	20°♿47'48	direct		13420 Dec 17 02:12	8°♿50'45	
minimum elong	13418 Jul 02 14:16	21°♿08'56	greatest brilliancy		13420 Dec 26 19:32	10°♿34'26	-4.8m
	13418 Jul 09 15:33	0°♿			13421 Jan 25 05:42	0°♿	
	13418 Aug 02 13:27	0°♿	asc. node		13421 Jan 31 22:31	6°♿07'47	
evening rise	13418 Aug 11 14:14	11°♿19'02	morning max el		13421 Feb 04 00:57	9°♿05'36	45°42'41
asc. node	13418 Aug 16 20:42	17°♿54'44			13421 Feb 24 09:09	0°♿	
	13418 Aug 26 12:44	0°♿			13421 Mar 23 04:13	0°♿	
	13418 Sep 19 14:47	0°♿			13421 Apr 17 17:01	0°♿	
	13418 Oct 13 21:28	0°♿			13421 May 12 13:55	0°♿	
	13418 Nov 07 11:58	0°♿	desc. node		13421 May 23 20:38	13°♿47'10	

	13421 Jun 06 00:46	0°♄			13423 Dec 31 23:17	0°♄	
	13421 Jun 30 04:57	0°♄		greatest brilliancy	13424 Jan 04 19:12	1°♄31'50	-4.8m
	13421 Jul 24 05:16	0°♄		retrograde	13424 Jan 14 15:06	3°♄17'46	
morning set	13421 Aug 06 06:10	16°♄19'42			13424 Jan 27 14:31	30°♄	
	13421 Aug 17 04:07	0°♄		evening set	13424 Jan 31 03:11	28°♄06'27	
	13421 Sep 10 03:12	0°♄		inferior conj	13424 Feb 05 01:30	25°♄05'47	-5°31'26
asc. node	13421 Sep 13 11:09	4°♄09'56		minimum elong	13424 Feb 05 11:27	24°♄50'07	5°28'23
				min. Earth dist.	13424 Feb 05 12:26	24°♄48'35	0.28699 AU
superior conj	13421 Sep 14 18:36	5°♄48'16	0°03'14	morning rise	13424 Feb 10 19:27	21°♄36'16	
minimum elong	13421 Sep 14 17:48	5°♄45'46	0°03'11	direct	13424 Feb 26 09:17	16°♄52'20	
behind sun begin	13421 Sep 13 17:27	4°♄29'39		asc. node	13424 Feb 29 07:56	17°♄02'23	
behind sun end	13421 Sep 15 18:09	7°♄01'54		greatest brilliancy	13424 Mar 08 07:35	19°♄02'49	-4.8m
max. Earth dist.	13421 Sep 16 19:50	8°♄22'09	1.71797 AU		13424 Mar 26 14:13	0°♄	
	13421 Oct 04 03:31	0°♄		morning max el	13424 Apr 15 20:24	18°♄03'06	46°07'16
evening rise	13421 Oct 23 05:28	23°♄45'37			13424 Apr 27 13:01	0°♄	
	13421 Oct 28 06:00	0°♄			13424 May 24 15:21	0°♄	
	13421 Nov 21 12:01	0°♄			13424 Jun 19 04:24	0°♄	
	13421 Dec 15 23:28	0°♄		desc. node	13424 Jun 20 08:59	1°♄25'33	
desc. node	13422 Jan 03 02:22	21°♄58'42			13424 Jul 13 23:18	0°♄	
	13422 Jan 09 18:16	0°♄			13424 Aug 07 08:39	0°♄	
	13422 Feb 03 22:06	0°♄			13424 Aug 31 13:33	0°♄	
	13422 Mar 01 14:05	0°♄			13424 Sep 24 16:57	0°♄	
	13422 Mar 28 03:49	0°♄		asc. node	13424 Oct 11 01:45	20°♄20'44	
evening max el	13422 Apr 21 02:02	25°♄07'10	46°23'27	morning set	13424 Oct 18 02:08	29°♄04'05	
asc. node	13422 Apr 26 00:23	29°♄54'21			13424 Oct 18 20:08	0°♄	
	13422 Apr 26 02:46	0°♄			13424 Nov 11 23:38	0°♄	
greatest brilliancy	13422 May 31 10:35	25°♄13'21	-4.9m				
retrograde	13422 Jun 09 21:34	26°♄53'52		superior conj	13424 Nov 24 22:55	16°♄05'57	1°22'15
evening set	13422 Jun 27 21:42	20°♄44'40		minimum elong	13424 Nov 24 17:08	15°♄47'58	1°23'07
inferior conj	13422 Jun 30 14:10	19°♄05'49	8°55'08	max. Earth dist.	13424 Nov 26 21:38	18°♄30'44	1.72721 AU
minimum elong	13422 Jun 30 19:42	18°♄57'15	8°53'41		13424 Dec 06 04:09	0°♄	
min. Earth dist.	13422 Jul 01 01:49	18°♄47'46	0.27333 AU		13424 Dec 30 10:49	0°♄	
morning rise	13422 Jul 03 17:39	17°♄10'11		evening rise	13425 Jan 01 00:15	1°♄55'17	
direct	13422 Jul 21 09:50	11°♄11'32			13425 Jan 23 20:37	0°♄	
greatest brilliancy	13422 Jul 31 10:35	13°♄04'57	-4.9m	desc. node	13425 Jan 30 15:38	8°♄19'01	
desc. node	13422 Aug 16 03:30	21°♄58'04			13425 Feb 17 09:42	0°♄	
	13422 Aug 26 02:54	0°♄			13425 Mar 14 01:40	0°♄	
morning max el	13422 Sep 09 19:08	13°♄48'44	46°50'06		13425 Apr 07 20:53	0°♄	
	13422 Sep 25 07:51	0°♄			13425 May 02 22:28	0°♄	
	13422 Oct 22 03:50	0°♄		asc. node	13425 May 23 10:25	24°♄02'32	
	13422 Nov 16 20:59	0°♄			13425 May 28 14:38	0°♄	
asc. node	13422 Dec 07 02:46	24°♄05'55			13425 Jun 24 18:14	0°♄	
	13422 Dec 12 00:43	0°♄		evening max el	13425 Jul 03 02:15	8°♄33'45	46°45'53
	13423 Jan 05 20:00	0°♄			13425 Jul 27 04:13	0°♄	
	13423 Jan 30 09:44	0°♄		greatest brilliancy	13425 Aug 11 22:35	9°♄03'57	-4.9m
morning set	13423 Feb 23 19:59	0°♄		retrograde	13425 Aug 22 10:13	11°♄07'52	
	13423 Mar 09 08:18	16°♄39'01		evening set	13425 Sep 06 00:03	6°♄56'48	
desc. node	13423 Mar 20 03:51	0°♄		inferior conj	13425 Sep 12 05:42	3°♄18'20	0°04'33
	13423 Mar 28 18:36	10°♄38'52		minimum elong	13425 Sep 12 05:53	3°♄18'04	0°04'27
	13423 Apr 13 09:28	0°♄		transit middle	13425 Sep 12 05:53	3°♄18'04	0°04'27
max. Earth dist.	13423 Apr 13 22:29	0°♄40'21	1.72478 AU	transit begin	13425 Sep 12 01:57	3°♄24'03	
				transit end	13425 Sep 12 09:49	3°♄12'05	
superior conj	13423 Apr 16 23:06	4°♄25'40	-0°44'26	min. Earth dist.	13425 Sep 11 23:23	3°♄27'58	0.27094 AU
minimum elong	13423 Apr 16 13:36	3°♄56'08	0°44'30	desc. node	13425 Sep 12 12:43	3°♄07'39	
	13423 May 07 12:38	0°♄			13425 Sep 17 20:45	30°♄	
evening rise	13423 May 26 00:40	23°♄04'38		morning rise	13425 Sep 18 12:03	29°♄39'25	
	13423 May 31 13:42	0°♄		direct	13425 Oct 02 23:34	25°♄33'07	
	13423 Jun 24 14:02	0°♄		greatest brilliancy	13425 Oct 12 19:48	27°♄20'07	-4.8m
	13423 Jul 18 15:39	0°♄			13425 Oct 18 23:25	0°♄	
asc. node	13423 Jul 19 08:38	0°♄52'46		morning max el	13425 Nov 21 10:07	26°♄23'25	46°07'48
	13423 Aug 11 20:52	0°♄			13425 Nov 25 02:27	0°♄	
	13423 Sep 05 08:49	0°♄			13425 Dec 23 10:37	0°♄	
	13423 Sep 30 08:58	0°♄		asc. node	13426 Jan 03 14:16	12°♄31'41	
	13423 Oct 26 08:44	0°♄			13426 Jan 18 18:43	0°♄	
desc. node	13423 Nov 08 05:31	14°♄07'55			13426 Feb 13 04:34	0°♄	
	13423 Nov 23 13:46	0°♄			13426 Mar 10 02:03	0°♄	
evening max el	13423 Nov 26 12:22	2°♄52'55	46°01'39		13426 Apr 03 15:56	0°♄	

desc. node	13426 Apr 25 08:59	26° Υ 44'11		greatest brilliancy	13428 Oct 22 05:39	20° X 42'56	-4.8m
	13426 Apr 28 00:19	0° B		retrograde	13428 Nov 02 02:12	22° X 52'14	
morning set	13426 May 20 19:26	28° B 18'21		evening set	13428 Nov 19 16:26	16° X 59'15	
	13426 May 22 04:04	0° II		inferior conj	13428 Nov 23 10:55	14° X 39'54	-8°25'41
	13426 Jun 15 04:13	0° C		minimum elong	13428 Nov 23 04:36	14° X 49'45	8°24'07
max. Earth dist.	13426 Jun 28 09:16	16° C 33'32	1.71496 AU	min. Earth dist.	13428 Nov 22 18:08	15° X 06'06	0.28513 AU
				morning rise	13428 Nov 26 17:02	12° X 39'45	
superior conj	13426 Jun 29 19:13	18° C 20'00	-1°24'40	direct	13428 Dec 14 17:08	6° X 37'14	
minimum elong	13426 Jun 30 01:03	18° C 38'17	1°25'36	greatest brilliancy	13428 Dec 24 09:18	8° X 19'38	-4.8m
	13426 Jul 09 02:20	0° Q			13429 Jan 25 08:32	0° C	
	13426 Aug 02 00:17	0° M		asc. node	13429 Jan 31 00:35	5° C 16'59	
evening rise	13426 Aug 09 02:02	8° M 51'46		morning max el	13429 Feb 01 14:49	6° C 48'49	45°42'36
asc. node	13426 Aug 15 22:30	17° M 26'27			13429 Feb 24 01:57	0° \approx	
	13426 Aug 25 23:38	0° L			13429 Mar 22 18:02	0° H	
	13426 Sep 19 01:49	0° M			13429 Apr 17 05:29	0° Υ	
	13426 Oct 13 08:47	0° X			13429 May 12 01:41	0° B	
	13426 Nov 06 23:47	0° C		desc. node	13429 May 22 22:29	13° B 17'20	
	13426 Dec 02 03:52	0° \approx			13429 Jun 05 12:09	0° II	
desc. node	13426 Dec 05 16:10	4° \approx 07'03			13429 Jun 29 16:08	0° C	
	13426 Dec 28 05:03	0° H			13429 Jul 23 16:20	0° Q	
	13427 Jan 24 21:23	0° Υ		morning set	13429 Aug 03 18:37	13° Q 53'53	
evening max el	13427 Feb 05 16:07	11° Υ 47'27	45°57'02		13429 Aug 16 15:06	0° M	
	13427 Feb 26 13:59	0° B			13429 Sep 09 14:07	0° L	
greatest brilliancy	13427 Mar 16 18:05	10° B 25'53	-4.8m				
retrograde	13427 Mar 26 19:04	12° B 16'50		superior conj	13429 Sep 12 07:44	3° L 25'10	-0°00'33
asc. node	13427 Mar 28 17:06	12° B 12'26		minimum elong	13429 Sep 12 07:53	3° L 25'37	0°00'35
evening set	13427 Apr 10 18:44	7° B 51'45		behind sun begin	13429 Sep 11 07:13	2° L 08'30	
inferior conj	13427 Apr 16 18:33	4° B 16'05	4°35'24	behind sun end	13429 Sep 13 08:32	4° L 42'44	
minimum elong	13427 Apr 16 09:20	4° B 30'29	4°32'22	asc. node	13429 Sep 12 13:06	3° L 41'59	
min. Earth dist.	13427 Apr 16 18:37	4° B 16'00	0.27937 AU	max. Earth dist.	13429 Sep 14 06:47	5° L 52'16	1.71766 AU
morning rise	13427 Apr 21 23:46	1° B 06'20			13429 Oct 03 14:25	0° M	
	13427 Apr 24 00:16	30° K Υ		evening rise	13429 Oct 20 20:33	21° M 29'24	
direct	13427 May 07 20:59	26° Υ 10'27			13429 Oct 27 16:55	0° X	
greatest brilliancy	13427 May 18 02:18	28° Υ 08'19	-4.8m		13429 Nov 20 23:03	0° C	
	13427 May 22 10:05	0° B			13429 Dec 15 10:46	0° \approx	
morning max el	13427 Jun 27 04:33	28° B 40'39	46°49'21	desc. node	13430 Jan 02 04:13	21° \approx 29'12	
	13427 Jun 28 12:05	0° II			13430 Jan 09 06:03	0° H	
desc. node	13427 Jul 18 19:51	21° II 40'21			13430 Feb 03 10:43	0° Υ	
	13427 Jul 26 05:45	0° C			13430 Mar 01 04:09	0° B	
	13427 Aug 21 00:28	0° Q			13430 Mar 27 20:50	0° II	
	13427 Sep 15 00:44	0° M		evening max el	13430 Apr 18 14:29	22° II 42'42	46°22'24
	13427 Oct 09 16:55	0° L		asc. node	13430 Apr 25 02:23	28° II 58'31	
	13427 Nov 03 05:05	0° M			13430 Apr 26 04:43	0° C	
asc. node	13427 Nov 08 15:43	6° M 40'55		greatest brilliancy	13430 May 29 00:08	22° C 50'23	-4.9m
	13427 Nov 27 14:40	0° X		retrograde	13430 Jun 07 10:10	24° C 30'35	
	13427 Dec 21 22:32	0° C		evening set	13430 Jun 25 12:50	18° C 18'12	
morning set	13427 Dec 28 02:46	7° C 37'23		inferior conj	13430 Jun 28 03:29	16° C 42'10	9°00'26
	13428 Jan 15 05:45	0° \approx		minimum elong	13430 Jun 28 08:09	16° C 34'57	8°59'06
				min. Earth dist.	13430 Jun 28 15:07	16° C 24'10	0.27361 AU
superior conj	13428 Feb 02 21:54	23° \approx 02'32	0°56'16	morning rise	13430 Jul 01 03:23	14° C 51'53	
minimum elong	13428 Feb 03 07:40	23° \approx 32'39	0°56'36	direct	13430 Jul 18 22:44	8° C 47'05	
max. Earth dist.	13428 Feb 03 09:53	23° \approx 39'30	1.73155 AU	greatest brilliancy	13430 Jul 29 00:38	10° C 41'20	-4.9m
	13428 Feb 08 13:16	0° H		desc. node	13430 Aug 15 05:37	20° C 41'58	
desc. node	13428 Feb 28 05:54	24° H 16'54			13430 Aug 26 09:22	0° Q	
	13428 Mar 03 21:14	0° Υ		morning max el	13430 Sep 07 08:22	11° Q 24'26	46°51'05
evening rise	13428 Mar 11 19:20	9° Υ 45'58			13430 Sep 25 02:06	0° M	
	13428 Mar 28 05:03	0° B			13430 Oct 21 18:32	0° L	
	13428 Apr 21 12:15	0° II			13430 Nov 16 10:00	0° M	
	13428 May 15 19:28	0° C		asc. node	13430 Dec 06 04:35	23° M 34'45	
	13428 Jun 09 04:54	0° Q			13430 Dec 11 12:46	0° X	
asc. node	13428 Jun 19 21:45	13° Q 04'56			13431 Jan 05 07:28	0° C	
	13428 Jul 03 20:23	0° M			13431 Jan 29 20:49	0° \approx	
	13428 Jul 29 00:22	0° L			13431 Feb 23 06:53	0° H	
	13428 Aug 24 06:46	0° M		morning set	13431 Mar 07 00:03	14° H 26'02	
evening max el	13428 Sep 13 01:47	20° M 53'38	46°31'54		13431 Mar 19 14:42	0° Υ	
	13428 Sep 22 13:27	0° X		desc. node	13431 Mar 27 20:28	10° Υ 11'04	
desc. node	13428 Oct 09 21:54	14° X 03'39		max. Earth dist.	13431 Apr 11 14:59	28° Υ 28'56	1.72518 AU

	13431 Apr 12 20:21	0°♄			13433 Sep 11 07:31	30°♄♄	
			desc. node		13433 Sep 11 14:42	29°♄49'10	
superior conj	13431 Apr 14 13:05	2°♄06'22 -0°41'15	morning rise		13433 Sep 16 01:57	27°♄16'04	
minimum elong	13431 Apr 14 04:04	1°♄38'23 0°41'18	direct		13433 Sep 30 13:03	23°♄10'44	
	13431 May 06 23:34	0°♄	greatest brilliancy		13433 Oct 10 08:46	24°♄57'51	-4.8m
evening rise	13431 May 23 13:38	20°♄41'01			13433 Oct 20 17:09	0°♄	
	13431 May 31 00:43	0°♄	morning max el		13433 Nov 19 01:01	24°♄07'33	46°09'13
	13431 Jun 24 01:11	0°♄			13433 Nov 24 23:37	0°♄	
asc. node	13431 Jul 18 10:32	0°♄23'24			13433 Dec 23 01:59	0°♄	
	13431 Jul 18 03:00	0°♄	asc. node		13434 Jan 02 16:17	11°♄56'50	
	13431 Aug 11 08:35	0°♄			13434 Jan 18 07:51	0°♄	
	13431 Sep 04 21:06	0°♄			13434 Feb 12 16:35	0°♄	
	13431 Sep 29 22:17	0°♄			13434 Mar 09 13:29	0°♄	
	13431 Oct 26 00:12	0°♄			13434 Apr 03 03:03	0°♄	
desc. node	13431 Nov 07 07:24	13°♄26'24	desc. node		13434 Apr 24 10:44	26°♄15'49	
	13431 Nov 23 11:16	0°♄			13434 Apr 27 11:14	0°♄	
evening max el	13431 Nov 24 03:03	0°♄38'21 46°02'30	morning set		13434 May 18 07:32	25°♄52'51	
greatest brilliancy	13432 Jan 02 10:03	29°♄19'34 -4.8m			13434 May 21 14:54	0°♄	
	13432 Jan 04 13:49	0°♄			13434 Jun 14 15:02	0°♄	
retrograde	13432 Jan 12 07:04	1°♄06'35	max. Earth dist.		13434 Jun 25 18:19	13°♄57'23	1.71512 AU
	13432 Jan 19 17:53	30°♄					
evening set	13432 Jan 28 21:46	25°♄50'30	superior conj		13434 Jun 27 07:01	15°♄52'27	-1°25'33
inferior conj	13432 Feb 02 17:22	22°♄53'58 -5°47'17	minimum elong		13434 Jun 27 11:52	16°♄07'42	1°26'32
minimum elong	13432 Feb 03 03:31	22°♄38'03 5°44'14			13434 Jul 08 13:11	0°♄	
min. Earth dist.	13432 Feb 03 04:03	22°♄37'12 0.28726 AU			13434 Aug 01 11:10	0°♄	
morning rise	13432 Feb 08 08:59	19°♄28'03	evening rise		13434 Aug 06 13:50	6°♄24'17	
direct	13432 Feb 24 01:11	14°♄40'13	asc. node		13434 Aug 15 00:26	16°♄58'25	
asc. node	13432 Feb 28 09:59	15°♄02'14			13434 Aug 25 10:35	0°♄	
greatest brilliancy	13432 Mar 05 23:43	16°♄51'10 -4.8m			13434 Sep 18 12:53	0°♄	
	13432 Mar 27 01:03	0°♄			13434 Oct 12 20:04	0°♄	
morning max el	13432 Apr 13 12:33	15°♄50'36 46°05'49			13434 Nov 06 11:33	0°♄	
	13432 Apr 27 07:20	0°♄			13434 Dec 01 16:33	0°♄	
	13432 May 24 05:55	0°♄	desc. node		13434 Dec 04 18:05	3°♄35'05	
	13432 Jun 18 17:22	0°♄			13434 Dec 27 19:35	0°♄	
desc. node	13432 Jun 19 10:49	0°♄52'19			13435 Jan 24 16:26	0°♄	
	13432 Jul 13 11:25	0°♄	evening max el		13435 Feb 03 07:45	9°♄35'04	45°56'29
	13432 Aug 06 20:15	0°♄			13435 Feb 27 07:25	0°♄	
	13432 Aug 31 00:48	0°♄	greatest brilliancy		13435 Mar 14 08:49	8°♄10'03	-4.8m
	13432 Sep 24 03:58	0°♄	retrograde		13435 Mar 24 09:14	10°♄00'17	
asc. node	13432 Oct 10 03:31	19°♄52'22	asc. node		13435 Mar 27 19:05	9°♄46'21	
morning set	13432 Oct 15 16:58	26°♄47'13	evening set		13435 Apr 08 07:44	5°♄37'52	
	13432 Oct 18 06:59	0°♄	inferior conj		13435 Apr 14 09:20	1°♄59'27	4°15'45
	13432 Nov 11 10:22	0°♄	minimum elong		13435 Apr 14 00:37	2°♄13'06	4°12'52
			min. Earth dist.		13435 Apr 14 09:45	1°♄58'48	0.27954 AU
superior conj	13432 Nov 22 15:20	13°♄54'43 1°21'10			13435 Apr 17 14:33	30°♄	
minimum elong	13432 Nov 22 08:53	13°♄34'43 1°22'01	morning rise		13435 Apr 19 17:17	28°♄45'28	
max. Earth dist.	13432 Nov 24 14:46	16°♄21'50 1.72697 AU	direct		13435 May 05 12:10	23°♄53'45	
	13432 Dec 05 14:51	0°♄	greatest brilliancy		13435 May 15 17:50	25°♄51'39	-4.8m
evening rise	13432 Dec 29 16:39	29°♄44'47			13435 May 24 06:16	0°♄	
	13432 Dec 29 21:35	0°♄	morning max el		13435 Jun 24 18:15	26°♄19'39	46°48'08
	13433 Jan 23 07:33	0°♄			13435 Jun 28 09:12	0°♄	
desc. node	13433 Jan 29 17:33	7°♄51'20	desc. node		13435 Jul 17 21:57	20°♄59'51	
	13433 Feb 16 20:55	0°♄			13435 Jul 25 21:21	0°♄	
	13433 Mar 13 13:18	0°♄			13435 Aug 20 13:57	0°♄	
	13433 Apr 07 09:12	0°♄			13435 Sep 14 13:07	0°♄	
	13433 May 02 11:52	0°♄			13435 Oct 09 04:36	0°♄	
asc. node	13433 May 22 12:17	23°♄24'55			13435 Nov 02 16:15	0°♄	
	13433 May 28 06:04	0°♄	asc. node		13435 Nov 07 17:32	6°♄12'26	
	13433 Jun 24 14:33	0°♄			13435 Nov 27 01:29	0°♄	
evening max el	13433 Jun 30 17:01	6°♄13'43 46°45'47			13435 Dec 21 09:08	0°♄	
	13433 Jul 28 02:32	0°♄	morning set		13435 Dec 25 19:53	5°♄29'30	
greatest brilliancy	13433 Aug 09 12:38	6°♄41'00 -4.9m			13436 Jan 14 16:16	0°♄	
retrograde	13433 Aug 20 00:26	8°♄44'41					
evening set	13433 Sep 03 14:22	4°♄32'37	superior conj		13436 Jan 31 14:44	20°♄54'05	0°58'45
inferior conj	13433 Sep 09 18:51	0°♄53'38 0°28'32	minimum elong		13436 Feb 01 00:34	21°♄24'23	0°59'07
minimum elong	13433 Sep 09 19:57	0°♄53'56 0°28'04	max. Earth dist.		13436 Feb 01 03:50	21°♄34'28	1.73157 AU
min. Earth dist.	13433 Sep 09 13:23	1°♄03'57 0.27066 AU			13436 Feb 07 23:47	0°♄	

desc. node	13436 Feb 27 07:46	23° H 50'06			13438 Aug 26 13:26	0° Ω	
	13436 Mar 03 07:50	0° Υ		morning max el	13438 Sep 04 22:26	9° Ω 03'08	46°52'03
evening rise	13436 Mar 09 11:07	7° Υ 33'49			13438 Sep 24 19:33	0° M	
	13436 Mar 27 15:49	0° B			13438 Oct 21 08:41	0° Ω	
	13436 Apr 20 23:15	0° Π			13438 Nov 15 22:34	0° M	
	13436 May 15 06:49	0° E		asc. node	13438 Dec 05 06:32	23° M 05'06	
	13436 Jun 08 16:46	0° Ω			13438 Dec 11 00:26	0° X	
asc. node	13436 Jun 18 23:45	12° Ω 34'02			13439 Jan 04 18:33	0° Z	
	13436 Jul 03 09:02	0° M			13439 Jan 29 07:32	0° \approx	
	13436 Jul 28 14:25	0° Ω			13439 Feb 22 17:24	0° H	
	13436 Aug 23 23:52	0° M		morning set	13439 Mar 04 16:16	12° H 15'44	
evening max el	13436 Sep 10 16:10	18° M 34'50	46°32'48		13439 Mar 19 01:09	0° Υ	
	13436 Sep 22 16:48	0° X		desc. node	13439 Mar 26 22:14	9° Υ 44'18	
desc. node	13436 Oct 08 23:51	12° X 45'46		max. Earth dist.	13439 Apr 09 09:59	26° Υ 26'34	1.72556 AU
greatest brilliancy	13436 Oct 19 21:18	18° X 28'41	-4.8m				
retrograde	13436 Oct 30 17:06	20° X 37'47		superior conj	13439 Apr 12 03:23	29° Υ 49'23	-0°38'02
evening set	13436 Nov 17 04:20	14° X 50'27		minimum elong	13439 Apr 11 18:56	29° Υ 23'09	0°38'05
min. Earth dist.	13436 Nov 20 08:54	12° X 53'09	0.28464 AU		13439 Apr 12 06:49	0° B	
inferior conj	13436 Nov 21 02:06	12° X 26'19	-8°18'56		13439 May 06 10:06	0° Π	
minimum elong	13436 Nov 20 19:06	12° X 37'13	8°17'15	evening rise	13439 May 21 02:49	18° Π 19'22	
morning rise	13436 Nov 24 10:06	10° X 23'15			13439 May 30 11:23	0° E	
direct	13436 Dec 12 07:32	4° X 24'29			13439 Jun 23 12:01	0° Ω	
greatest brilliancy	13436 Dec 21 23:38	6° X 06'21	-4.8m	asc. node	13439 Jul 17 12:26	29° Ω 54'51	
	13437 Jan 25 09:27	0° Z			13439 Jul 17 14:06	0° M	
morning max el	13437 Jan 30 04:19	4° Z 32'13	45°42'45		13439 Aug 10 20:03	0° Ω	
asc. node	13437 Jan 30 02:36	4° Z 28'04			13439 Sep 04 09:10	0° M	
	13437 Feb 23 18:00	0° \approx			13439 Sep 29 11:24	0° X	
	13437 Mar 22 07:22	0° H			13439 Oct 25 15:36	0° Z	
	13437 Apr 16 17:36	0° Υ		desc. node	13439 Nov 06 09:23	12° Z 45'31	
	13437 May 11 13:10	0° B		evening max el	13439 Nov 21 18:26	28° Z 26'22	46°03'22
desc. node	13437 May 22 00:23	12° B 48'25			13439 Nov 23 09:16	0° \approx	
	13437 Jun 04 23:18	0° Π		greatest brilliancy	13439 Dec 31 00:28	27° \approx 07'39	-4.8m
	13437 Jun 29 03:04	0° E		retrograde	13440 Jan 09 23:10	28° \approx 55'57	
	13437 Jul 23 03:07	0° Ω		evening set	13440 Jan 26 16:19	23° \approx 35'13	
morning set	13437 Aug 01 06:50	11° Ω 28'11		inferior conj	13440 Jan 31 09:05	20° \approx 42'46	-6°02'39
	13437 Aug 16 01:46	0° M		minimum elong	13440 Jan 31 19:21	20° \approx 26'42	5°59'39
	13437 Sep 09 00:44	0° Ω		min. Earth dist.	13440 Jan 31 19:08	20° \approx 27'01	0.28748 AU
				morning rise	13440 Feb 05 22:12	17° \approx 20'46	
superior conj	13437 Sep 09 20:45	1° Ω 02'38	-0°04'19	direct	13440 Feb 21 17:26	12° \approx 29'00	
minimum elong	13437 Sep 09 21:50	1° Ω 06'02	0°04'21	asc. node	13440 Feb 27 11:53	13° \approx 07'13	
behind sun begin	13437 Sep 08 21:46	29° M 50'45		greatest brilliancy	13440 Mar 03 15:02	14° \approx 39'36	-4.8m
behind sun end	13437 Sep 10 21:55	2° Ω 21'18			13440 Mar 27 08:27	0° H	
max. Earth dist.	13437 Sep 11 16:18	3° Ω 18'47	1.71738 AU	morning max el	13440 Apr 11 04:53	13° H 39'58	46°04'31
asc. node	13437 Sep 11 14:49	3° Ω 14'08			13440 Apr 27 00:43	0° Υ	
	13437 Oct 03 01:01	0° M			13440 May 23 19:50	0° B	
evening rise	13437 Oct 18 11:40	19° M 14'05			13440 Jun 18 05:50	0° Π	
	13437 Oct 27 03:35	0° X		desc. node	13440 Jun 18 12:53	0° Π 21'11	
	13437 Nov 20 09:49	0° Z			13440 Jul 12 23:08	0° E	
	13437 Dec 14 21:46	0° \approx			13440 Aug 06 07:31	0° Ω	
desc. node	13438 Jan 01 06:14	21° \approx 01'14			13440 Aug 30 11:47	0° M	
	13438 Jan 08 17:30	0° H			13440 Sep 23 14:43	0° Ω	
	13438 Feb 02 22:59	0° Υ		asc. node	13440 Oct 09 05:22	19° Ω 25'06	
	13438 Feb 28 17:55	0° B		morning set	13440 Oct 13 07:23	24° Ω 29'51	
	13438 Mar 27 13:47	0° Π			13440 Oct 17 17:33	0° M	
evening max el	13438 Apr 16 03:10	20° Π 20'03	46°21'13		13440 Nov 10 20:49	0° X	
asc. node	13438 Apr 24 04:16	28° Π 02'14					
	13438 Apr 26 07:45	0° E		superior conj	13440 Nov 20 07:20	11° X 43'03	1°19'57
greatest brilliancy	13438 May 26 13:01	20° E 27'30	-4.9m	minimum elong	13440 Nov 20 00:17	11° X 21'11	1°20'46
retrograde	13438 Jun 04 23:13	22° E 08'14		max. Earth dist.	13440 Nov 22 09:22	14° X 18'15	1.72669 AU
evening set	13438 Jun 23 03:27	15° E 53'05			13440 Dec 05 01:16	0° Z	
inferior conj	13438 Jun 25 16:47	14° E 19'10	9°04'36	evening rise	13440 Dec 27 08:50	27° Z 34'26	
minimum elong	13438 Jun 25 20:32	14° E 13'22	9°03'23		13440 Dec 29 08:05	0° \approx	
min. Earth dist.	13438 Jun 26 04:03	14° E 01'45	0.27391 AU		13441 Jan 22 18:13	0° H	
morning rise	13438 Jun 28 13:32	12° E 33'44		desc. node	13441 Jan 28 19:24	7° H 24'13	
direct	13438 Jul 16 11:55	6° E 23'17			13441 Feb 16 07:51	0° Υ	
greatest brilliancy	13438 Jul 26 14:20	8° E 18'12	-4.9m		13441 Mar 13 00:39	0° B	
desc. node	13438 Aug 14 07:36	19° E 28'39			13441 Apr 06 21:11	0° Π	

	13441 May 02 00:58	0°☾		13443 Oct 08 16:04	0°♌	
asc. node	13441 May 21 14:20	22°☾48'46		13443 Nov 02 03:18	0°♍	
	13441 May 27 21:18	0°♌	asc. node	13443 Nov 06 19:29	5°♍44'38	
	13441 Jun 24 11:08	0°♍		13443 Nov 26 12:15	0°♎	
evening max el	13441 Jun 28 07:47	3°♍54'45 46°45'24		13443 Dec 20 19:44	0°♏	
	13441 Jul 29 09:04	0°♌	morning set	13443 Dec 23 12:35	3°♏20'11	
greatest brilliancy	13441 Aug 07 02:47	4°♌18'38 -4.9m		13444 Jan 14 02:47	0°♐	
retrograde	13441 Aug 17 14:04	6°♌21'19				
evening set	13441 Sep 01 04:42	2°♌08'14	superior conj	13444 Jan 29 07:13	18°♐44'31 1°01'09	
	13441 Sep 04 22:15	30°♌♍	minimum elong	13444 Jan 29 17:04	19°♐14'54 1°01'34	
inferior conj	13441 Sep 07 07:46	28°♍32'50 0°52'37	max. Earth dist.	13444 Jan 29 20:09	19°♐24'25 1.73157 AU	
minimum elong	13441 Sep 07 09:49	28°♍29'42 0°51'49		13444 Feb 07 10:18	0°♑	
min. Earth dist.	13441 Sep 07 03:19	28°♍39'37 0.27044 AU	desc. node	13444 Feb 26 09:29	23°♑22'47	
desc. node	13441 Sep 10 16:40	26°♍31'20		13444 Mar 02 18:26	0°♒	
morning rise	13441 Sep 13 15:23	24°♍52'37	evening rise	13444 Mar 07 02:36	5°♒20'51	
direct	13441 Sep 28 02:31	20°♍48'17		13444 Mar 27 02:36	0°♓	
greatest brilliancy	13441 Oct 07 21:37	22°♍35'14 -4.8m		13444 Apr 20 10:18	0°♈	
	13441 Oct 21 21:57	0°♌		13444 May 14 18:14	0°♉	
morning max el	13441 Nov 16 14:50	21°♌49'14 46°10'38		13444 Jun 08 04:40	0°♊	
	13441 Nov 24 19:56	0°♍	asc. node	13444 Jun 18 01:39	12°♊02'47	
	13441 Dec 22 16:57	0°♎		13444 Jul 02 21:43	0°♋	
asc. node	13442 Jan 01 18:19	11°♎22'47		13444 Jul 28 04:32	0°♌	
	13442 Jan 17 20:40	0°♏		13444 Aug 23 17:12	0°♍	
	13442 Feb 12 04:21	0°♐	evening max el	13444 Sep 08 05:44	16°♍14'21 46°33'42	
	13442 Mar 09 00:41	0°♑		13444 Sep 22 21:49	0°♎	
	13442 Apr 02 13:55	0°♒	desc. node	13444 Oct 08 01:50	11°♎25'45	
desc. node	13442 Apr 23 12:38	25°♒48'38	greatest brilliancy	13444 Oct 17 12:30	16°♎13'56 -4.8m	
	13442 Apr 26 21:55	0°♓	retrograde	13444 Oct 28 08:05	18°♎23'28	
morning set	13442 May 15 19:56	23°♓29'06	evening set	13444 Nov 14 16:02	12°♎41'36	
	13442 May 21 01:29	0°♈	min. Earth dist.	13444 Nov 17 23:40	10°♎40'00 0.28422 AU	
	13442 Jun 14 01:35	0°♉	inferior conj	13444 Nov 18 17:16	10°♎12'35 -8°11'23	
max. Earth dist.	13442 Jun 23 02:02	11°♉18'06 1.71528 AU	minimum elong	13444 Nov 18 09:38	10°♎24'30 8°09'33	
			morning rise	13444 Nov 22 03:26	8°♎06'21	
superior conj	13442 Jun 24 19:13	13°♉27'10 -1°26'15	direct	13444 Dec 09 21:44	2°♎11'16	
minimum elong	13442 Jun 24 23:06	13°♉39'21 1°27'16	greatest brilliancy	13444 Dec 19 14:28	3°♎53'19 -4.8m	
	13442 Jul 07 23:45	0°♊		13445 Jan 25 09:20	0°♏	
	13442 Jul 31 21:48	0°♋	morning max el	13445 Jan 27 18:18	2°♏16'14 45°42'52	
evening rise	13442 Aug 04 01:46	3°♋58'01	asc. node	13445 Jan 29 04:29	3°♏39'10	
asc. node	13442 Aug 14 02:12	16°♋30'33		13445 Feb 23 09:58	0°♐	
	13442 Aug 24 21:19	0°♌		13445 Mar 21 20:45	0°♑	
	13442 Sep 17 23:46	0°♍		13445 Apr 16 05:47	0°♒	
	13442 Oct 12 07:16	0°♎		13445 May 11 00:44	0°♓	
	13442 Nov 05 23:16	0°♏	desc. node	13445 May 21 02:18	12°♓19'17	
	13442 Dec 01 05:15	0°♐		13445 Jun 04 10:32	0°♈	
desc. node	13442 Dec 03 20:06	3°♐03'32		13445 Jun 28 14:06	0°♉	
	13442 Dec 27 10:14	0°♑		13445 Jul 22 14:00	0°♊	
	13443 Jan 24 11:57	0°♒	morning set	13445 Jul 29 19:06	9°♊02'13	
evening max el	13443 Jan 31 22:14	7°♒20'12 45°56'01		13445 Aug 15 12:32	0°♋	
	13443 Feb 28 07:00	0°♓				
greatest brilliancy	13443 Mar 11 23:54	5°♓54'46 -4.8m	superior conj	13445 Sep 07 10:01	28°♓40'33 -0°08'01	
retrograde	13443 Mar 21 23:04	7°♓44'00	minimum elong	13445 Sep 07 12:02	28°♓46'52 0°08'03	
asc. node	13443 Mar 26 21:05	7°♓15'00	behind sun begin	13445 Sep 06 14:12	27°♓38'35	
evening set	13443 Apr 05 20:51	3°♓23'43	behind sun end	13445 Sep 08 09:52	29°♓55'09	
	13443 Apr 11 13:15	30°♓♍		13445 Sep 08 11:25	0°♌	
inferior conj	13443 Apr 12 00:04	29°♍43'04 3°55'46	max. Earth dist.	13445 Sep 09 02:07	0°♌45'58 1.71708 AU	
minimum elong	13443 Apr 11 15:52	29°♍55'54 3°53'01	asc. node	13445 Sep 10 16:39	2°♌46'29	
min. Earth dist.	13443 Apr 12 01:09	29°♍41'21 0.27970 AU		13445 Oct 02 11:41	0°♍	
morning rise	13443 Apr 17 10:36	26°♍25'02	evening rise	13445 Oct 16 03:06	16°♍59'41	
direct	13443 May 03 02:45	21°♍37'06		13445 Oct 26 14:17	0°♎	
greatest brilliancy	13443 May 13 09:53	23°♍35'46 -4.8m		13445 Nov 19 20:41	0°♏	
	13443 May 25 12:10	0°♓		13445 Dec 14 08:55	0°♐	
morning max el	13443 Jun 22 07:17	23°♓57'23 46°47'11	desc. node	13445 Dec 31 08:01	20°♐31'58	
	13443 Jun 28 05:26	0°♈		13446 Jan 08 05:11	0°♑	
desc. node	13443 Jul 16 23:52	20°♈19'50		13446 Feb 02 11:35	0°♒	
	13443 Jul 25 12:30	0°♉		13446 Feb 28 08:08	0°♓	
	13443 Aug 20 03:07	0°♊		13446 Mar 27 07:26	0°♈	
	13443 Sep 14 01:14	0°♋	evening max el	13446 Apr 13 16:29	17°♈58'19 46°20'12	

asc. node	13446 Apr 23 06:21	27° Π 04'19		superior conj	13448 Nov 17 23:32	9° \times 30'55	1°18'38
	13446 Apr 26 12:59	0° \ominus		minimum elong	13448 Nov 17 15:56	9° \times 07'19	1°19'24
greatest brilliancy	13446 May 24 01:14	18° \ominus 03'09	-4.8m	max. Earth dist.	13448 Nov 20 04:12	12° \times 14'20	1.72635 AU
retrograde	13446 Jun 02 12:42	19° \ominus 44'56			13448 Dec 04 12:01	0° \ominus	
evening set	13446 Jun 20 17:30	13° \ominus 27'35		evening rise	13448 Dec 25 01:19	25° \ominus 24'03	
inferior conj	13446 Jun 23 05:57	11° \ominus 55'05	9°07'54		13448 Dec 28 18:52	0° \approx	
minimum elong	13446 Jun 23 08:45	11° \ominus 50'44	9°06'45		13449 Jan 22 05:10	0° \times	
min. Earth dist.	13446 Jun 23 16:27	11° \ominus 38'52	0.27419 AU	desc. node	13449 Jan 27 21:12	6° \times 56'05	
morning rise	13446 Jun 25 23:56	10° \ominus 13'56			13449 Feb 15 19:07	0° Υ	
direct	13446 Jul 14 01:33	3° \ominus 58'31			13449 Mar 12 12:24	0° \times	
greatest brilliancy	13446 Jul 24 03:19	5° \ominus 53'24	-4.9m		13449 Apr 06 09:40	0° Π	
desc. node	13446 Aug 13 09:31	18° \ominus 16'32			13449 May 01 14:41	0° \ominus	
	13446 Aug 26 16:11	0° Ω		asc. node	13449 May 20 16:15	22° \ominus 10'22	
morning max el	13446 Sep 02 13:17	6° Ω 43'05	46°53'05		13449 May 27 13:21	0° Ω	
	13446 Sep 24 12:51	0° \cap			13449 Jun 24 09:06	0° \cap	
	13446 Oct 20 22:52	0° $\underline{\Omega}$		evening max el	13449 Jun 25 21:57	1° \cap 32'41	46°45'00
	13446 Nov 15 11:13	0° \cap			13449 Jul 31 07:19	0° $\underline{\Omega}$	
asc. node	13446 Dec 04 08:28	22° \cap 35'06		greatest brilliancy	13449 Aug 04 17:31	1° $\underline{\Omega}$ 55'30	-4.9m
	13446 Dec 10 12:11	0° \times		retrograde	13449 Aug 15 03:12	3° $\underline{\Omega}$ 56'23	
	13447 Jan 04 05:46	0° \ominus			13449 Aug 29 05:50	30° \cap	
	13447 Jan 28 18:28	0° \approx		evening set	13449 Aug 29 19:13	29° \cap 42'11	
	13447 Feb 22 04:12	0° \times		inferior conj	13449 Sep 04 20:39	26° \cap 08'39	1°16'41
morning set	13447 Mar 02 08:26	10° \times 04'22		minimum elong	13449 Sep 04 23:38	26° \cap 04'06	1°15'33
	13447 Mar 18 11:55	0° Υ		min. Earth dist.	13449 Sep 04 17:28	26° \cap 13'31	0.27021 AU
desc. node	13447 Mar 26 00:07	9° Υ 16'54		desc. node	13449 Sep 09 18:44	23° \cap 13'45	
max. Earth dist.	13447 Apr 07 03:58	24° Υ 20'07	1.72593 AU	morning rise	13449 Sep 11 04:29	22° \cap 27'53	
				direct	13449 Sep 25 15:29	18° \cap 24'26	
superior conj	13447 Apr 09 17:26	27° Υ 30'37	-0°34'45	greatest brilliancy	13449 Oct 05 10:45	20° \cap 11'23	-4.8m
minimum elong	13447 Apr 09 09:36	27° Υ 06'21	0°34'46		13449 Oct 22 19:32	0° $\underline{\Omega}$	
	13447 Apr 11 17:36	0° \times		morning max el	13449 Nov 14 03:51	19° $\underline{\Omega}$ 27'31	46°12'12
	13447 May 05 20:58	0° Π			13449 Nov 24 16:02	0° \cap	
evening rise	13447 May 18 15:46	15° Π 55'59			13449 Dec 22 08:04	0° \times	
	13447 May 29 22:22	0° \ominus		asc. node	13449 Dec 31 20:05	10° \times 47'16	
	13447 Jun 22 23:12	0° Ω			13450 Jan 17 09:44	0° \ominus	
asc. node	13447 Jul 16 14:13	29° Ω 24'50			13450 Feb 11 16:22	0° \approx	
	13447 Jul 17 01:33	0° \cap			13450 Mar 08 12:08	0° \times	
	13447 Aug 10 07:53	0° $\underline{\Omega}$			13450 Apr 02 01:04	0° Υ	
	13447 Sep 03 21:36	0° \cap		desc. node	13450 Apr 22 14:32	25° Υ 20'27	
	13447 Sep 29 00:55	0° \times			13450 Apr 26 08:55	0° \times	
	13447 Oct 25 07:29	0° \ominus		morning set	13450 May 13 08:14	21° \times 03'56	
desc. node	13447 Nov 05 11:27	12° \ominus 03'46			13450 May 20 12:27	0° Π	
evening max el	13447 Nov 19 10:27	26° \ominus 15'22	46°04'19		13450 Jun 13 12:33	0° \ominus	
	13447 Nov 23 08:26	0° \approx		max. Earth dist.	13450 Jun 20 06:51	8° \ominus 28'22	1.71550 AU
greatest brilliancy	13447 Dec 28 15:10	24° \approx 56'00	-4.8m				
retrograde	13448 Jan 07 15:21	26° \approx 45'07		superior conj	13450 Jun 22 07:09	10° \ominus 59'44	-1°26'49
evening set	13448 Jan 24 11:06	21° \approx 20'01		minimum elong	13450 Jun 22 10:01	11° \ominus 08'44	1°27'50
inferior conj	13448 Jan 29 01:01	18° \approx 31'26	-6°17'22		13450 Jul 07 10:45	0° Ω	
minimum elong	13448 Jan 29 11:19	18° \approx 15'18	6°14'25		13450 Jul 31 08:51	0° \cap	
min. Earth dist.	13448 Jan 29 10:11	18° \approx 17'05	0.28771 AU	evening rise	13450 Aug 01 13:12	1° \cap 28'49	
morning rise	13448 Feb 03 11:27	15° \approx 13'24		asc. node	13450 Aug 13 04:02	16° \cap 01'39	
direct	13448 Feb 19 10:09	10° \approx 17'49			13450 Aug 24 08:26	0° $\underline{\Omega}$	
asc. node	13448 Feb 26 13:56	11° \approx 16'07			13450 Sep 17 11:03	0° \cap	
greatest brilliancy	13448 Mar 01 06:01	12° \approx 27'08	-4.8m		13450 Oct 11 18:51	0° \times	
	13448 Mar 27 14:00	0° \times			13450 Nov 05 11:24	0° \ominus	
morning max el	13448 Apr 08 21:04	11° \times 27'54	46°02'57		13450 Nov 30 18:22	0° \approx	
	13448 Apr 26 18:11	0° Υ		desc. node	13450 Dec 02 21:57	2° \approx 30'18	
	13448 May 23 10:05	0° \times			13450 Dec 27 01:22	0° \times	
desc. node	13448 Jun 17 14:45	29° \times 48'15			13451 Jan 24 08:20	0° Υ	
	13448 Jun 17 18:39	0° Π		evening max el	13451 Jan 29 12:15	5° Υ 03'46	45°55'46
	13448 Jul 12 11:11	0° \ominus			13451 Mar 01 16:07	0° \times	
	13448 Aug 05 19:07	0° Ω		greatest brilliancy	13451 Mar 09 15:03	3° \times 39'38	-4.8m
	13448 Aug 29 23:06	0° \cap		retrograde	13451 Mar 19 13:14	5° \times 28'21	
	13448 Sep 23 01:50	0° $\underline{\Omega}$		asc. node	13451 Mar 25 23:06	4° \times 38'55	
asc. node	13448 Oct 08 07:16	18° $\underline{\Omega}$ 56'54		evening set	13451 Apr 03 10:26	1° \times 09'28	
morning set	13448 Oct 10 21:52	22° $\underline{\Omega}$ 11'33			13451 Apr 05 11:21	30° \cap	
	13448 Oct 17 04:29	0° \cap		inferior conj	13451 Apr 09 15:05	27° Υ 27'06	3°35'36
	13448 Nov 10 07:38	0° \times		minimum elong	13451 Apr 09 07:28	27° Υ 39'02	3°33'00

min. Earth dist.	13451 Apr 09 16:53	27° Υ 24'17	0.27992 AU		13453 Sep 07 22:12	0° Ω	
morning rise	13451 Apr 15 04:07	24° Υ 05'20		asc. node	13453 Sep 09 18:35	2° Ω 18'50	
direct	13451 Apr 30 17:19	19° Υ 20'39			13453 Oct 01 22:29	0° \mathbb{M}	
greatest brilliancy	13451 May 11 02:30	21° Υ 20'41	-4.8m	evening rise	13453 Oct 13 18:01	14° \mathbb{M} 43'14	
	13451 May 26 09:52	0° \mathcal{B}			13453 Oct 26 01:07	0° \mathcal{A}	
morning max el	13451 Jun 19 20:55	21° \mathcal{B} 35'52	46°45'56		13453 Nov 19 07:37	0° \mathcal{Z}	
	13451 Jun 28 01:21	0° \mathbb{I}			13453 Dec 13 20:09	0° \approx	
desc. node	13451 Jul 16 01:45	19° \mathbb{I} 39'11		desc. node	13453 Dec 30 09:54	20° \approx 02'46	
	13451 Jul 25 03:50	0° \mathcal{E}			13454 Jan 07 16:56	0° \mathcal{H}	
	13451 Aug 19 16:35	0° Ω			13454 Feb 02 00:15	0° Υ	
	13451 Sep 13 13:41	0° \mathbb{M}			13454 Feb 27 22:28	0° \mathcal{B}	
	13451 Oct 08 03:51	0° Ω			13454 Mar 27 01:23	0° \mathbb{I}	
	13451 Nov 01 14:38	0° \mathbb{M}		evening max el	13454 Apr 11 07:02	15° \mathbb{I} 40'17	46°19'17
asc. node	13451 Nov 05 21:18	5° \mathbb{M} 15'36		asc. node	13454 Apr 22 08:20	26° \mathbb{I} 05'27	
	13451 Nov 25 23:17	0° \mathcal{A}			13454 Apr 26 20:06	0° \mathcal{E}	
	13451 Dec 20 06:35	0° \mathcal{Z}		greatest brilliancy	13454 May 21 13:28	15° \mathcal{E} 40'06	-4.8m
morning set	13451 Dec 21 05:11	1° \mathcal{Z} 09'49		retrograde	13454 May 31 02:37	17° \mathcal{E} 22'58	
	13452 Jan 13 13:32	0° \approx		evening set	13454 Jun 18 07:20	11° \mathcal{E} 04'28	
				inferior conj	13454 Jun 20 19:23	9° \mathcal{E} 32'27	9°10'11
superior conj	13452 Jan 26 23:54	16° \approx 34'53	1°03'28	minimum elong	13454 Jun 20 21:16	9° \mathcal{E} 29'33	9°09'06
minimum elong	13452 Jan 27 09:44	17° \approx 05'13	1°03'55	min. Earth dist.	13454 Jun 21 04:48	9° \mathcal{E} 17'54	0.27446 AU
max. Earth dist.	13452 Jan 27 13:11	17° \approx 15'53	1.73155 AU	morning rise	13454 Jun 23 11:09	7° \mathcal{E} 54'42	
	13452 Feb 06 21:01	0° \mathcal{H}		direct	13454 Jul 11 15:47	1° \mathcal{E} 35'34	
desc. node	13452 Feb 25 11:25	22° \mathcal{H} 55'37		greatest brilliancy	13454 Jul 21 15:56	3° \mathcal{E} 29'27	-4.9m
	13452 Mar 02 05:13	0° Υ		desc. node	13454 Aug 12 11:37	17° \mathcal{E} 07'47	
evening rise	13452 Mar 04 18:29	3° Υ 08'41			13454 Aug 26 17:11	0° Ω	
	13452 Mar 26 13:32	0° \mathcal{B}		morning max el	13454 Aug 31 04:15	4° Ω 24'05	46°53'43
	13452 Apr 19 21:30	0° \mathbb{I}			13454 Sep 24 05:39	0° \mathbb{M}	
	13452 May 14 05:47	0° \mathcal{E}			13454 Oct 20 12:51	0° Ω	
	13452 Jun 07 16:46	0° Ω			13454 Nov 14 23:47	0° \mathbb{M}	
asc. node	13452 Jun 17 03:28	11° Ω 30'32		asc. node	13454 Dec 03 10:17	22° \mathbb{M} 04'53	
	13452 Jul 02 10:43	0° \mathbb{M}			13454 Dec 09 23:53	0° \mathcal{A}	
	13452 Jul 27 19:08	0° Ω			13455 Jan 03 16:55	0° \mathcal{Z}	
	13452 Aug 23 11:22	0° \mathbb{M}			13455 Jan 28 05:17	0° \approx	
evening max el	13452 Sep 05 19:30	13° \mathbb{M} 53'15	46°34'41		13455 Feb 21 14:50	0° \mathcal{H}	
	13452 Sep 23 05:38	0° \mathcal{A}		morning set	13455 Feb 28 00:33	7° \mathcal{H} 53'28	
desc. node	13452 Oct 07 03:53	10° \mathcal{A} 01'57			13455 Mar 17 22:30	0° Υ	
greatest brilliancy	13452 Oct 15 03:05	13° \mathcal{A} 57'01	-4.8m	desc. node	13455 Mar 25 01:57	8° Υ 49'53	
retrograde	13452 Oct 25 23:22	16° \mathcal{A} 07'45		max. Earth dist.	13455 Apr 04 20:47	22° Υ 10'43	1.72626 AU
evening set	13452 Nov 12 03:25	10° \mathcal{A} 31'13					
min. Earth dist.	13452 Nov 15 14:00	8° \mathcal{A} 25'39	0.28375 AU	superior conj	13455 Apr 07 07:36	25° Υ 12'57	-0°31'25
inferior conj	13452 Nov 16 08:11	7° \mathcal{A} 57'23	-8°03'00	minimum elong	13455 Apr 07 00:27	24° Υ 50'45	0°31'25
minimum elong	13452 Nov 15 23:58	8° \mathcal{A} 10'09	8°01'01		13455 Apr 11 04:13	0° \mathcal{B}	
morning rise	13452 Nov 19 20:45	5° \mathcal{A} 47'51			13455 May 05 07:38	0° \mathbb{I}	
	13452 Dec 05 18:56	30° \mathcal{R} \mathbb{M}		evening rise	13455 May 16 05:00	13° \mathbb{I} 34'11	
direct	13452 Dec 07 11:48	29° \mathbb{M} 56'36			13455 May 29 09:08	0° \mathcal{E}	
	13452 Dec 09 05:03	0° \mathcal{A}			13455 Jun 22 10:07	0° Ω	
greatest brilliancy	13452 Dec 17 04:47	1° \mathcal{A} 38'52	-4.8m	asc. node	13455 Jul 15 16:09	28° Ω 56'14	
	13453 Jan 25 08:19	0° \mathcal{Z}			13455 Jul 16 12:42	0° \mathbb{M}	
morning max el	13453 Jan 25 08:59	0° \mathcal{Z} 01'35	45°43'11		13455 Aug 09 19:26	0° Ω	
asc. node	13453 Jan 28 06:33	2° \mathcal{Z} 51'12			13455 Sep 03 09:47	0° \mathbb{M}	
	13453 Feb 23 01:45	0° \approx			13455 Sep 28 14:17	0° \mathcal{A}	
	13453 Mar 21 10:02	0° \mathcal{H}			13455 Oct 24 23:27	0° \mathcal{Z}	
	13453 Apr 15 17:55	0° Υ		desc. node	13455 Nov 04 13:18	11° \mathcal{Z} 21'21	
	13453 May 10 12:16	0° \mathcal{B}		evening max el	13455 Nov 17 02:24	24° \mathcal{Z} 04'20	46°05'03
desc. node	13453 May 20 04:07	11° \mathcal{B} 50'00			13455 Nov 23 08:35	0° \approx	
	13453 Jun 03 21:43	0° \mathbb{I}		greatest brilliancy	13455 Dec 26 06:28	22° \approx 44'58	-4.8m
	13453 Jun 28 01:06	0° \mathcal{E}		retrograde	13456 Jan 05 07:03	24° \approx 34'01	
	13453 Jul 22 00:52	0° Ω		evening set	13456 Jan 22 05:48	19° \approx 04'48	
morning set	13453 Jul 27 07:23	6° Ω 36'16		inferior conj	13456 Jan 26 16:47	16° \approx 20'11	-6°31'39
	13453 Aug 14 23:21	0° \mathbb{M}		minimum elong	13456 Jan 27 03:04	16° \approx 04'03	6°28'45
				min. Earth dist.	13456 Jan 27 01:17	16° \approx 06'50	0.28789 AU
superior conj	13453 Sep 04 22:52	26° \mathbb{M} 16'48	-0°11'45	morning rise	13456 Feb 01 00:19	13° \approx 06'09	
minimum elong	13453 Sep 05 01:49	26° \mathbb{M} 26'03	0°11'46	direct	13456 Feb 17 02:28	8° \approx 06'52	
behind sun begin	13453 Sep 04 08:29	25° \mathbb{M} 31'49		asc. node	13456 Feb 25 15:58	9° \approx 29'16	
behind sun end	13453 Sep 05 19:09	27° \mathbb{M} 20'17		greatest brilliancy	13456 Feb 27 20:42	10° \approx 14'36	-4.8m
max. Earth dist.	13453 Sep 06 12:14	28° \mathbb{M} 13'46	1.71687 AU		13456 Mar 27 17:21	0° \mathcal{H}	

morning max el	13456 Apr 06 12:12	9° H 14'01	46°01'29		13458 Nov 04 23:05	0° Z	
	13456 Apr 26 10:57	0° Y			13458 Nov 30 07:05	0° \approx	
	13456 May 22 23:49	0° B		desc. node	13458 Dec 01 23:52	1° \approx 58'35	
desc. node	13456 Jun 16 16:36	29° B 16'33			13458 Dec 26 16:16	0° H	
	13456 Jun 17 07:02	0° II			13459 Jan 24 05:02	0° Y	
	13456 Jul 11 22:50	0° G		evening max el	13459 Jan 27 02:08	2° Y 48'02	45°55'23
	13456 Aug 05 06:19	0° Ω			13459 Mar 03 17:35	0° B	
	13456 Aug 29 09:59	0° M		greatest brilliancy	13459 Mar 07 05:42	1° B 24'23	-4.8m
	13456 Sep 22 12:29	0° $\underline{\text{A}}$		retrograde	13459 Mar 17 03:35	3° B 13'09	
asc. node	13456 Oct 07 09:02	18° $\underline{\text{A}}$ 29'33		asc. node	13459 Mar 25 01:04	1° B 57'57	
morning set	13456 Oct 08 12:31	19° $\underline{\text{A}}$ 55'06			13459 Mar 29 21:40	30° R Y	
	13456 Oct 16 15:00	0° M		evening set	13459 Mar 31 23:59	28° Y 55'09	
	13456 Nov 09 18:03	0° A		inferior conj	13459 Apr 07 05:53	25° Y 11'27	3°14'51
				minimum elong	13459 Apr 06 22:54	25° Y 22'23	3°12'27
superior conj	13456 Nov 15 15:41	7° A 19'44	1°17'10	min. Earth dist.	13459 Apr 07 08:20	25° Y 07'36	0.28016 AU
minimum elong	13456 Nov 15 07:34	6° A 54'31	1°17'54	morning rise	13459 Apr 12 21:21	21° Y 46'20	
max. Earth dist.	13456 Nov 17 21:48	10° A 07'41	1.72606 AU	direct	13459 Apr 28 07:50	17° Y 04'25	
	13456 Dec 03 22:26	0° Z		greatest brilliancy	13459 May 08 18:57	19° Y 06'07	-4.8m
evening rise	13456 Dec 22 17:30	23° Z 13'38			13459 May 27 01:33	0° B	
	13456 Dec 28 05:22	0° \approx		morning max el	13459 Jun 17 11:20	19° B 17'26	46°44'48
	13457 Jan 21 15:51	0° H			13459 Jun 27 20:18	0° II	
desc. node	13457 Jan 26 23:07	6° H 29'07		desc. node	13459 Jul 15 03:52	19° II 00'45	
	13457 Feb 15 06:06	0° Y			13459 Jul 24 18:34	0° G	
	13457 Mar 11 23:50	0° B			13459 Aug 19 05:32	0° Ω	
	13457 Apr 05 21:52	0° II			13459 Sep 13 01:40	0° M	
	13457 May 01 04:08	0° G			13459 Oct 07 15:13	0° $\underline{\text{A}}$	
asc. node	13457 May 19 18:08	21° G 32'43			13459 Nov 01 01:33	0° M	
	13457 May 27 05:14	0° Ω		asc. node	13459 Nov 04 23:08	4° M 47'51	
evening max el	13457 Jun 23 11:14	29° Ω 09'38	46°44'36		13459 Nov 25 09:53	0° A	
	13457 Jun 24 07:26	0° M		morning set	13459 Dec 18 22:00	29° A 01'19	
greatest brilliancy	13457 Aug 02 08:54	29° M 34'34	-4.9m		13459 Dec 19 17:00	0° Z	
	13457 Aug 03 14:01	0° $\underline{\text{A}}$			13460 Jan 12 23:52	0° \approx	
retrograde	13457 Aug 12 16:06	1° $\underline{\text{A}}$ 33'13					
	13457 Aug 21 10:24	30° R M		superior conj	13460 Jan 24 16:43	14° \approx 26'48	1°05'41
evening set	13457 Aug 27 10:00	27° M 17'29		minimum elong	13460 Jan 25 02:27	14° \approx 56'50	1°06'10
inferior conj	13457 Sep 02 09:41	23° M 46'20	1°40'36	max. Earth dist.	13460 Jan 25 08:33	15° \approx 15'39	1.73158 AU
minimum elong	13457 Sep 02 13:33	23° M 40'25	1°39'07		13460 Feb 06 07:23	0° H	
min. Earth dist.	13457 Sep 02 08:03	23° M 48'50	0.26999 AU	desc. node	13460 Feb 24 13:15	22° H 29'02	
morning rise	13457 Sep 08 17:27	20° M 05'14			13460 Mar 01 15:42	0° Y	
desc. node	13457 Sep 08 20:42	20° M 00'57		evening rise	13460 Mar 02 10:24	0° Y 57'34	
direct	13457 Sep 23 03:52	16° M 02'16			13460 Mar 26 00:13	0° B	
greatest brilliancy	13457 Oct 03 00:27	17° M 49'52	-4.8m		13460 Apr 19 08:28	0° II	
	13457 Oct 23 10:43	0° $\underline{\text{A}}$			13460 May 13 17:08	0° G	
morning max el	13457 Nov 11 16:23	17° $\underline{\text{A}}$ 06'10	46°13'44		13460 Jun 07 04:40	0° Ω	
	13457 Nov 24 10:53	0° M		asc. node	13460 Jun 16 05:28	10° Ω 59'33	
	13457 Dec 21 22:28	0° A			13460 Jul 01 23:30	0° M	
asc. node	13457 Dec 30 22:08	10° A 14'10			13460 Jul 27 09:35	0° $\underline{\text{A}}$	
	13458 Jan 16 22:16	0° Z			13460 Aug 23 05:38	0° M	
	13458 Feb 11 03:58	0° \approx		evening max el	13460 Sep 03 10:12	11° M 35'27	46°35'42
	13458 Mar 07 23:13	0° H			13460 Sep 23 15:50	0° A	
	13458 Apr 01 11:51	0° Y		desc. node	13460 Oct 06 05:49	8° A 36'12	
desc. node	13458 Apr 21 16:17	24° Y 53'00		greatest brilliancy	13460 Oct 12 17:18	11° A 40'33	-4.8m
	13458 Apr 25 19:32	0° B		retrograde	13460 Oct 23 15:08	13° A 52'53	
morning set	13458 May 10 20:25	18° B 39'38		evening set	13460 Nov 09 14:43	8° A 21'44	
	13458 May 19 22:59	0° II		min. Earth dist.	13460 Nov 13 04:03	6° A 12'25	0.28325 AU
	13458 Jun 12 23:06	0° G		inferior conj	13460 Nov 13 23:05	5° A 42'56	-7°53'42
max. Earth dist.	13458 Jun 17 13:02	5° G 44'19	1.71576 AU	minimum elong	13460 Nov 13 14:21	5° A 56'29	7°51'35
				morning rise	13460 Nov 17 14:14	3° A 29'56	
superior conj	13458 Jun 19 19:04	8° G 33'37	-1°27'11		13460 Nov 24 08:46	30° R M	
minimum elong	13458 Jun 19 20:53	8° G 39'19	1°28'13	direct	13460 Dec 05 02:18	27° M 42'49	
	13458 Jul 06 21:21	0° Ω		greatest brilliancy	13460 Dec 14 18:30	29° M 24'47	-4.8m
evening rise	13458 Jul 30 00:40	29° Ω 01'03			13460 Dec 16 09:34	0° A	
	13458 Jul 30 19:29	0° M		morning max el	13461 Jan 23 00:26	27° A 49'57	45°43'30
asc. node	13458 Aug 12 05:57	15° M 34'15			13461 Jan 25 05:56	0° Z	
	13458 Aug 23 19:09	0° $\underline{\text{A}}$		asc. node	13461 Jan 27 08:33	2° Z 04'55	
	13458 Sep 16 21:54	0° M			13461 Feb 22 16:55	0° \approx	
	13458 Oct 11 05:59	0° A			13461 Mar 20 22:57	0° H	

	13461 Apr 15 05:49	0°♿			13463 Sep 28 03:56	0°♿	
	13461 May 09 23:38	0°♿			13463 Oct 24 15:51	0°♿	
desc. node	13461 May 19 06:01	11°♿21'24		desc. node	13463 Nov 03 15:18	10°♿38'30	
	13461 Jun 03 08:48	0°♿		evening max el	13463 Nov 14 17:43	21°♿51'23	46°05'55
	13461 Jun 27 11:58	0°♿			13463 Nov 23 10:07	0°♿	
morning set	13461 Jul 21 11:37	0°♿		greatest brilliancy	13463 Dec 23 22:25	20°♿34'36	-4.8m
	13461 Jul 24 19:27	4°♿10'05		retrograde	13464 Jan 02 22:25	22°♿23'06	
	13461 Aug 14 10:00	0°♿		evening set	13464 Jan 20 00:38	16°♿49'48	
				inferior conj	13464 Jan 24 08:45	14°♿09'13	-6°45'13
superior conj	13461 Sep 02 11:30	23°♿52'52	-0°15'29	minimum elong	13464 Jan 24 18:56	13°♿53'11	6°42'25
minimum elong	13461 Sep 02 15:23	24°♿05'02	0°15'30	min. Earth dist.	13464 Jan 24 16:51	13°♿56'28	0.28804 AU
behind sun begin	13461 Sep 02 08:05	23°♿42'12		morning rise	13464 Jan 29 13:12	10°♿59'14	
behind sun end	13461 Sep 02 22:40	24°♿27'51		direct	13464 Feb 14 18:26	5°♿56'06	
max. Earth dist.	13461 Sep 04 01:05	25°♿50'32	1.71664 AU	asc. node	13464 Feb 24 17:52	7°♿46'10	
	13461 Sep 07 08:49	0°♿		greatest brilliancy	13464 Feb 25 11:52	8°♿02'33	-4.8m
asc. node	13461 Sep 08 20:17	1°♿50'58			13464 Mar 27 19:13	0°♿	
	13461 Oct 01 09:06	0°♿		morning max el	13464 Apr 04 02:46	6°♿58'33	46°00'11
evening rise	13461 Oct 11 08:56	12°♿27'16			13464 Apr 26 03:27	0°♿	
	13461 Oct 25 11:47	0°♿			13464 May 22 13:32	0°♿	
	13461 Nov 18 18:26	0°♿		desc. node	13464 Jun 15 18:38	28°♿45'07	
	13461 Dec 13 07:15	0°♿			13464 Jun 16 19:30	0°♿	
desc. node	13461 Dec 29 11:53	19°♿34'23			13464 Jul 11 10:38	0°♿	
	13462 Jan 07 04:34	0°♿			13464 Aug 04 17:45	0°♿	
	13462 Feb 01 12:50	0°♿			13464 Aug 28 21:11	0°♿	
	13462 Feb 27 12:48	0°♿			13464 Sep 21 23:29	0°♿	
	13462 Mar 26 19:41	0°♿		morning set	13464 Oct 06 02:43	17°♿36'08	
evening max el	13462 Apr 08 21:52	13°♿23'08	46°18'02	asc. node	13464 Oct 06 10:53	18°♿01'31	
asc. node	13462 Apr 21 10:14	25°♿04'56			13464 Oct 16 01:48	0°♿	
	13462 Apr 27 06:01	0°♿			13464 Nov 09 04:44	0°♿	
greatest brilliancy	13462 May 19 01:45	13°♿16'40	-4.8m				
retrograde	13462 May 28 16:02	14°♿59'56		superior conj	13464 Nov 13 07:35	5°♿06'54	1°15'34
evening set	13462 Jun 15 20:22	8°♿41'30		minimum elong	13464 Nov 12 22:59	4°♿40'14	1°16'16
inferior conj	13462 Jun 18 08:36	7°♿08'58	9°11'26	max. Earth dist.	13464 Nov 15 13:35	7°♿54'30	1.72571 AU
minimum elong	13462 Jun 18 09:31	7°♿07'33	9°10'23		13464 Dec 03 09:07	0°♿	
min. Earth dist.	13462 Jun 18 17:06	6°♿55'48	0.27471 AU	evening rise	13464 Dec 20 09:41	21°♿02'24	
morning rise	13462 Jun 20 22:39	5°♿33'39			13464 Dec 27 16:08	0°♿	
	13462 Jul 02 23:59	30°♿♿			13465 Jan 21 02:49	0°♿	
direct	13462 Jul 09 05:46	29°♿11'52		desc. node	13465 Jan 26 00:57	6°♿01'06	
	13462 Jul 15 15:37	0°♿			13465 Feb 14 17:22	0°♿	
greatest brilliancy	13462 Jul 19 04:27	1°♿04'31	-4.9m		13465 Mar 11 11:34	0°♿	
desc. node	13462 Aug 11 13:34	16°♿00'08			13465 Apr 05 10:21	0°♿	
	13462 Aug 26 17:09	0°♿			13465 Apr 30 17:55	0°♿	
morning max el	13462 Aug 28 18:28	2°♿02'47	46°54'25	asc. node	13465 May 18 20:13	20°♿54'45	
	13462 Sep 23 22:10	0°♿			13465 May 26 21:38	0°♿	
	13462 Oct 20 02:40	0°♿		evening max el	13465 Jun 20 23:42	26°♿43'50	46°44'01
	13462 Nov 14 12:13	0°♿			13465 Jun 24 07:04	0°♿	
asc. node	13462 Dec 02 12:14	21°♿13'51'18		greatest brilliancy	13465 Jul 31 00:04	27°♿12'06	-4.9m
	13462 Dec 09 11:29	0°♿		retrograde	13465 Aug 10 04:41	29°♿08'49	
	13463 Jan 03 04:00	0°♿		evening set	13465 Aug 25 00:49	24°♿50'48	
	13463 Jan 27 16:03	0°♿		inferior conj	13465 Aug 30 22:37	21°♿22'33	2°04'21
	13463 Feb 21 01:27	0°♿		minimum elong	13465 Aug 31 03:23	21°♿15'16	2°02'34
morning set	13463 Feb 25 17:05	5°♿43'53		min. Earth dist.	13465 Aug 30 22:45	21°♿22'22	0.26988 AU
	13463 Mar 17 09:04	0°♿		morning rise	13465 Sep 06 06:07	17°♿41'28	
desc. node	13463 Mar 24 03:43	8°♿22'39		desc. node	13465 Sep 07 22:40	16°♿50'02	
max. Earth dist.	13463 Apr 02 12:42	19°♿58'38	1.72660 AU	direct	13465 Sep 20 16:02	13°♿38'09	
				greatest brilliancy	13465 Sep 30 14:37	15°♿27'13	-4.8m
superior conj	13463 Apr 04 22:13	22°♿56'43	-0°28'03		13465 Oct 23 22:44	0°♿	
minimum elong	13463 Apr 04 15:45	22°♿36'42	0°28'03	morning max el	13465 Nov 09 05:25	14°♿44'17	46°15'25
	13463 Apr 10 14:49	0°♿			13465 Nov 24 05:45	0°♿	
	13463 May 04 18:21	0°♿			13465 Dec 21 13:08	0°♿	
evening rise	13463 May 13 18:26	11°♿12'52		asc. node	13465 Dec 30 00:07	9°♿39'53	
	13463 May 28 19:59	0°♿			13466 Jan 16 11:06	0°♿	
	13463 Jun 21 21:11	0°♿			13466 Feb 10 15:51	0°♿	
asc. node	13463 Jul 14 18:02	28°♿26'50			13466 Mar 07 10:35	0°♿	
	13463 Jul 16 00:04	0°♿			13466 Mar 31 22:56	0°♿	
	13463 Aug 09 07:12	0°♿		desc. node	13466 Apr 20 18:11	24°♿25'03	
	13463 Sep 02 22:12	0°♿			13466 Apr 25 06:28	0°♿	

morning set	13466 May 08 09:06	16°♄15'57		evening set	13468 Nov 07 02:01	6°♄11'21	
	13466 May 19 09:51	0°♄		min. Earth dist.	13468 Nov 10 18:00	3°♄58'19	0.28276 AU
	13466 Jun 12 09:57	0°♄		inferior conj	13468 Nov 11 13:58	3°♄27'25	-7°43'40
max. Earth dist.	13466 Jun 14 22:47	3°♄10'30	1.71601 AU	minimum elong	13468 Nov 11 04:46	3°♄41'41	7°41'24
				morning rise	13468 Nov 15 07:50	1°♄10'42	
superior conj	13466 Jun 17 07:29	6°♄08'08	-1°27'23		13468 Nov 17 09:24	30°♄	
minimum elong	13466 Jun 17 08:16	6°♄10'34	1°28'26	direct	13468 Dec 02 17:16	25°♄28'05	
	13466 Jul 06 08:13	0°♄		greatest brilliancy	13468 Dec 12 07:52	27°♄09'07	-4.8m
evening rise	13466 Jul 27 12:32	26°♄33'37			13468 Dec 18 23:22	0°♄	
	13466 Jul 30 06:26	0°♄		morning max el	13469 Jan 20 16:07	25°♄37'41	45°43'45
asc. node	13466 Aug 11 07:43	15°♄05'22			13469 Jan 25 03:13	0°♄	
	13466 Aug 23 06:12	0°♄		asc. node	13469 Jan 26 10:24	1°♄17'52	
	13466 Sep 16 09:10	0°♄			13469 Feb 22 08:16	0°♄	
	13466 Oct 10 17:36	0°♄			13469 Mar 20 12:09	0°♄	
	13466 Nov 04 11:17	0°♄			13469 Apr 14 17:58	0°♄	
	13466 Nov 29 20:23	0°♄			13469 May 09 11:14	0°♄	
desc. node	13466 Dec 01 01:54	1°♄25'37		desc. node	13469 May 18 07:57	10°♄52'06	
	13466 Dec 26 07:51	0°♄			13469 Jun 02 20:06	0°♄	
	13467 Jan 24 02:59	0°♄			13469 Jun 26 23:06	0°♄	
evening max el	13467 Jan 24 16:46	0°♄33'14	45°55'16		13469 Jul 20 22:37	0°♄	
greatest brilliancy	13467 Mar 04 19:57	29°♄08'06	-4.8m	morning set	13469 Jul 22 07:38	1°♄43'26	
	13467 Mar 07 15:36	0°♄			13469 Aug 13 20:55	0°♄	
retrograde	13467 Mar 14 18:34	0°♄57'34					
	13467 Mar 21 15:56	30°♄		superior conj	13469 Aug 31 00:17	21°♄28'35	-0°19'10
asc. node	13467 Mar 24 03:04	29°♄11'46		minimum elong	13469 Aug 31 05:05	21°♄43'35	0°19'12
evening set	13467 Mar 29 13:57	26°♄40'03		max. Earth dist.	13469 Sep 01 15:07	23°♄30'09	1.71637 AU
inferior conj	13467 Apr 04 20:50	22°♄55'11	2°53'56		13469 Sep 06 19:41	0°♄	
minimum elong	13467 Apr 04 14:31	23°♄05'03	2°51'45	asc. node	13469 Sep 07 22:10	1°♄22'52	
min. Earth dist.	13467 Apr 04 23:40	22°♄50'47	0.28039 AU		13469 Sep 30 19:56	0°♄	
morning rise	13467 Apr 10 14:38	19°♄27'06		evening rise	13469 Oct 09 00:01	10°♄11'01	
direct	13467 Apr 25 23:04	14°♄47'38			13469 Oct 24 22:40	0°♄	
greatest brilliancy	13467 May 06 11:10	16°♄50'38	-4.8m		13469 Nov 18 05:28	0°♄	
	13467 May 27 13:36	0°♄			13469 Dec 12 18:37	0°♄	
morning max el	13467 Jun 15 02:57	17°♄01'11	46°43'42	desc. node	13469 Dec 28 13:42	19°♄04'34	
	13467 Jun 27 15:05	0°♄			13470 Jan 06 16:32	0°♄	
desc. node	13467 Jul 14 05:43	18°♄21'04			13470 Feb 01 01:48	0°♄	
	13467 Jul 24 09:24	0°♄			13470 Feb 27 03:38	0°♄	
	13467 Aug 18 18:42	0°♄			13470 Mar 26 14:46	0°♄	
	13467 Sep 12 13:53	0°♄		evening max el	13470 Apr 06 12:26	11°♄04'42	46°16'55
	13467 Oct 07 02:51	0°♄		asc. node	13470 Apr 20 12:19	24°♄02'56	
	13467 Oct 31 12:49	0°♄			13470 Apr 27 19:37	0°♄	
asc. node	13467 Nov 04 01:04	4°♄19'18		greatest brilliancy	13470 May 16 14:48	10°♄54'05	-4.8m
	13467 Nov 24 20:54	0°♄		retrograde	13470 May 26 05:09	12°♄37'03	
morning set	13467 Dec 16 14:36	26°♄50'47		evening set	13470 Jun 13 09:05	6°♄19'51	
	13467 Dec 19 03:51	0°♄		inferior conj	13470 Jun 15 22:05	4°♄45'55	9°11'42
	13468 Jan 12 10:37	0°♄		minimum elong	13470 Jun 15 22:02	4°♄46'00	9°10'40
				min. Earth dist.	13470 Jun 16 05:56	4°♄33'45	0.27494 AU
superior conj	13468 Jan 22 09:20	12°♄16'49	1°07'47	morning rise	13470 Jun 18 10:58	3°♄12'07	
minimum elong	13468 Jan 22 18:56	12°♄46'25	1°08'20		13470 Jun 24 05:10	30°♄	
max. Earth dist.	13468 Jan 23 04:57	13°♄17'20	1.73154 AU	direct	13470 Jul 06 19:39	26°♄48'32	
	13468 Feb 05 18:08	0°♄		greatest brilliancy	13470 Jul 16 17:45	28°♄40'24	-4.9m
desc. node	13468 Feb 23 15:00	22°♄01'04			13470 Jul 19 23:30	0°♄	
evening rise	13468 Feb 29 02:14	28°♄45'10		desc. node	13470 Aug 10 15:32	14°♄54'06	
	13468 Mar 01 02:33	0°♄		morning max el	13470 Aug 26 07:58	29°♄39'15	46°55'00
	13468 Mar 25 11:16	0°♄			13470 Aug 26 16:13	0°♄	
	13468 Apr 18 19:48	0°♄			13470 Sep 23 14:32	0°♄	
	13468 May 13 04:52	0°♄			13470 Oct 19 16:30	0°♄	
	13468 Jun 06 16:57	0°♄			13470 Nov 14 00:42	0°♄	
asc. node	13468 Jun 15 07:22	10°♄27'10		asc. node	13470 Dec 01 14:10	21°♄05'22	
	13468 Jul 01 12:43	0°♄			13470 Dec 08 23:10	0°♄	
	13468 Jul 27 00:32	0°♄			13471 Jan 02 15:11	0°♄	
	13468 Aug 23 00:40	0°♄			13471 Jan 27 02:58	0°♄	
evening max el	13468 Sep 01 01:48	9°♄19'13	46°36'39		13471 Feb 20 12:14	0°♄	
	13468 Sep 24 06:00	0°♄		morning set	13471 Feb 23 09:32	3°♄33'28	
desc. node	13468 Oct 05 07:50	7°♄06'53			13471 Mar 16 19:50	0°♄	
greatest brilliancy	13468 Oct 10 07:23	9°♄23'10	-4.8m	desc. node	13471 Mar 23 05:39	7°♄55'24	
retrograde	13468 Oct 21 07:05	11°♄36'56		max. Earth dist.	13471 Mar 31 02:39	17°♄39'58	1.72693 AU

superior conj	13471 Apr 02 12:45	20° Υ 39'46	-0°24'39			13473 Oct 24 07:23	0° Ω	
minimum elong	13471 Apr 02 07:02	20° Υ 22'04	0°24'38	morning max el		13473 Nov 06 19:20	12° Ω 25'05	46°17'04
	13471 Apr 10 01:36	0° \mathcal{B}				13473 Nov 23 23:56	0° \mathcal{M}	
	13471 May 04 05:11	0° Π				13473 Dec 21 03:25	0° \mathcal{A}	
evening rise	13471 May 11 07:46	8° Π 50'58		asc. node		13473 Dec 29 01:55	9° \mathcal{A} 05'54	
	13471 May 28 06:57	0° \mathcal{E}				13474 Jan 15 23:40	0° \mathcal{Z}	
	13471 Jun 21 08:21	0° Ω				13474 Feb 10 03:30	0° \approx	
asc. node	13471 Jul 13 19:50	27° Ω 56'54				13474 Mar 06 21:43	0° \mathcal{H}	
	13471 Jul 15 11:32	0° \mathcal{M}				13474 Mar 31 09:46	0° Υ	
	13471 Aug 08 19:06	0° Ω		desc. node		13474 Apr 19 20:05	23° Υ 57'43	
	13471 Sep 02 10:48	0° \mathcal{M}				13474 Apr 24 17:11	0° \mathcal{B}	
	13471 Sep 27 17:49	0° \mathcal{A}		morning set		13474 May 05 21:43	13° \mathcal{B} 52'44	
	13471 Oct 24 08:40	0° \mathcal{Z}				13474 May 18 20:32	0° Π	
desc. node	13471 Nov 02 17:23	9° \mathcal{Z} 55'09				13474 Jun 11 20:39	0° \mathcal{E}	
evening max el	13471 Nov 12 08:08	19° \mathcal{Z} 35'58	46°06'47	max. Earth dist.		13474 Jun 12 09:37	0° \mathcal{E} 40'35	1.71630 AU
	13471 Nov 23 13:13	0° \approx						
greatest brilliancy	13471 Dec 21 14:23	18° \approx 24'08	-4.8m	superior conj		13474 Jun 14 19:29	3° \mathcal{E} 41'50	-1°27'25
retrograde	13471 Dec 31 13:32	20° \approx 12'18		minimum elong		13474 Jun 14 19:13	3° \mathcal{E} 41'01	1°28'28
evening set	13472 Jan 17 19:25	14° \approx 34'43				13474 Jul 05 18:57	0° Ω	
inferior conj	13472 Jan 22 00:42	11° \approx 58'21	-6°58'06	evening rise		13474 Jul 24 23:54	24° Ω 05'12	
minimum elong	13472 Jan 22 10:44	11° \approx 42'33	6°55'24			13474 Jul 29 17:12	0° \mathcal{M}	
min. Earth dist.	13472 Jan 22 08:37	11° \approx 45'53	0.28821 AU	asc. node		13474 Aug 10 09:34	14° \mathcal{M} 37'18	
morning rise	13472 Jan 27 01:59	8° \approx 52'38				13474 Aug 22 17:04	0° Ω	
direct	13472 Feb 12 10:01	3° \approx 45'13				13474 Sep 15 20:14	0° \mathcal{M}	
greatest brilliancy	13472 Feb 23 03:36	5° \approx 51'11	-4.8m			13474 Oct 10 05:00	0° \mathcal{A}	
asc. node	13472 Feb 23 19:56	6° \approx 06'52				13474 Nov 03 23:17	0° \mathcal{Z}	
	13472 Mar 27 19:50	0° \mathcal{H}				13474 Nov 29 09:31	0° \approx	
morning max el	13472 Apr 01 17:09	4° \mathcal{H} 42'23	45°58'52	desc. node		13474 Nov 30 03:44	0° \approx 52'44	
	13472 Apr 25 19:46	0° Υ				13474 Dec 25 23:24	0° \mathcal{H}	
	13472 May 22 03:12	0° \mathcal{B}		evening max el		13475 Jan 22 08:19	28° \mathcal{H} 21'37	45°55'13
desc. node	13472 Jun 14 20:30	28° \mathcal{B} 13'07				13475 Jan 24 01:29	0° Υ	
	13472 Jun 16 07:56	0° Π		greatest brilliancy		13475 Mar 02 09:51	26° Υ 52'38	-4.8m
	13472 Jul 10 22:25	0° \mathcal{E}		retrograde		13475 Mar 12 09:48	28° Υ 42'55	
	13472 Aug 04 05:07	0° Ω		asc. node		13475 Mar 23 05:06	26° Υ 21'58	
	13472 Aug 28 08:17	0° \mathcal{M}		evening set		13475 Mar 27 04:11	24° Υ 25'57	
	13472 Sep 21 10:23	0° Ω		inferior conj		13475 Apr 02 11:46	20° Υ 39'57	2°32'52
morning set	13472 Oct 03 16:50	15° Ω 16'58		minimum elong		13475 Apr 02 06:08	20° Υ 48'43	2°30'53
asc. node	13472 Oct 05 12:47	17° Ω 33'50		min. Earth dist.		13475 Apr 02 14:40	20° Υ 35'26	0.28062 AU
	13472 Oct 15 12:33	0° \mathcal{M}		morning rise		13475 Apr 08 07:45	17° Υ 09'06	
	13472 Nov 08 15:24	0° \mathcal{A}		direct		13475 Apr 23 14:41	12° Υ 32'11	
				greatest brilliancy		13475 May 04 02:43	14° Υ 35'35	-4.8m
superior conj	13472 Nov 10 23:31	2° \mathcal{A} 54'18	1°13'52			13475 May 27 22:01	0° \mathcal{B}	
minimum elong	13472 Nov 10 14:31	2° \mathcal{A} 26'20	1°14'30	morning max el		13475 Jun 12 18:47	14° \mathcal{B} 46'37	46°42'18
max. Earth dist.	13472 Nov 13 03:24	5° \mathcal{A} 35'25	1.72537 AU			13475 Jun 27 09:05	0° Π	
	13472 Dec 02 19:44	0° \mathcal{Z}		desc. node		13475 Jul 13 07:41	17° Π 42'52	
evening rise	13472 Dec 18 02:02	18° \mathcal{Z} 51'53				13475 Jul 23 23:49	0° \mathcal{E}	
	13472 Dec 27 02:49	0° \approx				13475 Aug 18 07:31	0° Ω	
	13473 Jan 20 13:40	0° \mathcal{H}				13475 Sep 12 01:49	0° \mathcal{M}	
desc. node	13473 Jan 25 02:48	5° \mathcal{H} 33'23				13475 Oct 06 14:12	0° Ω	
	13473 Feb 14 04:32	0° Υ				13475 Oct 30 23:45	0° \mathcal{M}	
	13473 Mar 10 23:16	0° \mathcal{B}		asc. node		13475 Nov 03 02:53	3° \mathcal{M} .51'21	
	13473 Apr 04 22:51	0° Π				13475 Nov 24 07:35	0° \mathcal{A}	
	13473 Apr 30 07:49	0° \mathcal{E}		morning set		13475 Dec 14 07:04	24° \mathcal{A} 40'54	
asc. node	13473 May 17 22:06	20° \mathcal{E} 15'59				13475 Dec 18 14:21	0° \mathcal{Z}	
	13473 May 26 14:20	0° Ω				13476 Jan 11 21:03	0° \approx	
evening max el	13473 Jun 18 12:04	24° Ω 18'03	46°43'37					
	13473 Jun 24 07:48	0° \mathcal{M}		superior conj		13476 Jan 20 01:58	10° \approx 07'47	1°09'48
greatest brilliancy	13473 Jul 28 14:40	24° \mathcal{M} 49'12	-4.9m	minimum elong		13476 Jan 20 11:21	10° \approx 36'46	1°10'24
retrograde	13473 Aug 07 17:34	26° \mathcal{M} 44'54		max. Earth dist.		13476 Jan 21 01:47	11° \approx 21'17	1.73149 AU
evening set	13473 Aug 22 15:45	22° \mathcal{M} 23'57				13476 Feb 05 04:34	0° \mathcal{H}	
inferior conj	13473 Aug 28 11:31	18° \mathcal{M} 58'56	2°27'52	desc. node		13476 Feb 22 16:56	21° \mathcal{H} 34'41	
minimum elong	13473 Aug 28 17:07	18° \mathcal{M} 50'22	2°25'48	evening rise		13476 Feb 26 18:07	26° \mathcal{H} 33'52	
min. Earth dist.	13473 Aug 28 13:08	18° \mathcal{M} 56'27	0.26979 AU			13476 Feb 29 13:05	0° Υ	
morning rise	13473 Sep 03 18:33	15° \mathcal{M} 18'29				13476 Mar 24 21:59	0° \mathcal{B}	
desc. node	13473 Sep 07 00:45	13° \mathcal{M} 43'27				13476 Apr 18 06:47	0° Π	
direct	13473 Sep 18 04:18	11° \mathcal{M} 14'07				13476 May 12 16:13	0° \mathcal{E}	
greatest brilliancy	13473 Sep 28 04:36	13° \mathcal{M} 04'49	-4.8m			13476 Jun 06 04:55	0° Ω	

asc. node	13476 Jun 14 09:12	9°♌55'34		asc. node	13478 Nov 30 15:59	20°♍36'00	
	13476 Jul 01 01:42	0°♍			13478 Dec 08 10:32	0°♌	
	13476 Jul 26 15:24	0°♍			13479 Jan 02 02:04	0°♌	
	13476 Aug 22 20:02	0°♍			13479 Jan 26 13:34	0°♍	
evening max el	13476 Aug 29 17:51	7°♍04'32	46°37'29		13479 Feb 19 22:43	0°♌	
	13476 Sep 25 00:47	0°♌		morning set	13479 Feb 21 01:52	1°♌23'40	
desc. node	13476 Oct 04 09:52	5°♌34'51			13479 Mar 16 06:16	0°♍	
greatest brilliancy	13476 Oct 07 21:49	7°♌06'29	-4.8m	desc. node	13479 Mar 22 07:26	7°♍28'37	
retrograde	13476 Oct 18 22:37	9°♌20'51		max. Earth dist.	13479 Mar 28 17:41	15°♍25'39	1.72729 AU
evening set	13476 Nov 04 13:11	4°♌01'13					
min. Earth dist.	13476 Nov 08 07:53	1°♌44'11	0.28222 AU	superior conj	13479 Mar 31 03:17	18°♍23'51	-0°21'13
inferior conj	13476 Nov 09 04:38	1°♌12'04	-7°32'53	minimum elong	13479 Mar 30 22:19	18°♍08'31	0°21'11
minimum elong	13476 Nov 08 19:02	1°♌26'56	7°30'28		13479 Apr 09 12:05	0°♌	
	13476 Nov 11 03:27	30°♌			13479 May 03 15:45	0°♌	
morning rise	13476 Nov 13 01:16	28°♌51'23		evening rise	13479 May 08 21:16	6°♌30'30	
direct	13476 Nov 30 08:08	23°♌13'47			13479 May 27 17:40	0°♌	
greatest brilliancy	13476 Dec 09 20:48	24°♌53'28	-4.8m		13479 Jun 20 19:16	0°♌	
	13476 Dec 20 13:36	0°♌		asc. node	13479 Jul 12 21:47	27°♌28'23	
morning max el	13477 Jan 18 06:55	23°♌24'17	45°44'01		13479 Jul 14 22:43	0°♍	
	13477 Jan 24 23:21	0°♌			13479 Aug 08 06:41	0°♍	
asc. node	13477 Jan 25 12:31	0°♌33'13			13479 Sep 01 23:05	0°♍	
	13477 Feb 21 23:01	0°♍			13479 Sep 27 07:30	0°♌	
	13477 Mar 20 00:52	0°♌			13479 Oct 24 01:31	0°♌	
	13477 Apr 14 05:42	0°♍		desc. node	13479 Nov 01 19:13	9°♌11'18	
	13477 May 08 22:27	0°♌		evening max el	13479 Nov 09 22:05	17°♌20'01	46°07'37
desc. node	13477 May 17 09:45	10°♌23'40			13479 Nov 23 17:48	0°♍	
	13477 Jun 02 07:00	0°♌		greatest brilliancy	13479 Dec 19 06:01	16°♍13'45	-4.8m
	13477 Jun 26 09:48	0°♌		retrograde	13479 Dec 29 04:50	18°♍02'12	
morning set	13477 Jul 19 19:52	29°♌18'11		evening set	13480 Jan 15 14:07	12°♍20'02	
	13477 Jul 20 09:13	0°♌		inferior conj	13480 Jan 19 16:40	9°♍47'59	-7°10'22
	13477 Aug 13 07:28	0°♍		minimum elong	13480 Jan 20 02:28	9°♍32'33	7°07'47
				min. Earth dist.	13480 Jan 20 00:21	9°♍35'54	0.28837 AU
superior conj	13477 Aug 28 12:55	19°♍04'47	-0°22'51	morning rise	13480 Jan 24 14:43	6°♍46'56	
minimum elong	13477 Aug 28 18:35	19°♍22'32	0°22'53	direct	13480 Feb 10 01:27	1°♍34'44	
max. Earth dist.	13477 Aug 30 03:56	21°♍07'00	1.71615 AU	greatest brilliancy	13480 Feb 20 19:45	3°♍40'58	-4.8m
	13477 Sep 06 06:13	0°♍		asc. node	13480 Feb 22 21:57	4°♍31'39	
asc. node	13477 Sep 07 00:05	0°♍55'52			13480 Mar 27 19:01	0°♌	
	13477 Sep 30 06:29	0°♍		morning max el	13480 Mar 30 07:53	2°♌27'45	45°57'38
evening rise	13477 Oct 06 14:39	7°♍54'15			13480 Apr 25 11:31	0°♍	
	13477 Oct 24 09:16	0°♌			13480 May 21 16:31	0°♌	
	13477 Nov 17 16:13	0°♌		desc. node	13480 Jun 13 22:21	27°♌41'51	
	13477 Dec 12 05:42	0°♍			13480 Jun 15 20:06	0°♌	
desc. node	13477 Dec 27 15:35	18°♍35'57			13480 Jul 10 09:57	0°♌	
	13478 Jan 06 04:12	0°♌			13480 Aug 03 16:17	0°♌	
	13478 Jan 31 14:31	0°♍			13480 Aug 27 19:09	0°♍	
	13478 Feb 26 18:18	0°♌			13480 Sep 20 21:02	0°♍	
	13478 Mar 26 10:01	0°♌		morning set	13480 Oct 01 07:13	12°♌59'20	
evening max el	13478 Apr 04 02:17	8°♌45'31	46°15'49	asc. node	13480 Oct 04 14:31	17°♌06'20	
asc. node	13478 Apr 19 14:18	23°♌00'12			13480 Oct 14 23:03	0°♍	
	13478 Apr 28 13:13	0°♌			13480 Nov 08 01:50	0°♌	
greatest brilliancy	13478 May 14 04:26	8°♌33'26	-4.8m				
retrograde	13478 May 23 17:54	10°♌15'49		superior conj	13480 Nov 08 15:37	0°♌42'49	1°12'04
evening set	13478 Jun 10 21:21	4°♌00'44		minimum elong	13480 Nov 08 06:14	0°♌13'40	1°12'38
inferior conj	13478 Jun 13 11:43	2°♌24'35	9°11'03	max. Earth dist.	13480 Nov 10 17:32	3°♌17'53	1.72508 AU
minimum elong	13478 Jun 13 10:41	2°♌26'12	9°09'59		13480 Dec 02 06:11	0°♌	
min. Earth dist.	13478 Jun 13 19:10	2°♌13'01	0.27514 AU	evening rise	13480 Dec 15 18:29	16°♌42'12	
morning rise	13478 Jun 15 23:59	0°♌51'31			13480 Dec 26 13:23	0°♍	
	13478 Jun 17 10:19	30°♌			13481 Jan 20 00:25	0°♌	
direct	13478 Jul 04 09:10	24°♌26'51		desc. node	13481 Jan 24 04:42	5°♌06'15	
greatest brilliancy	13478 Jul 14 07:39	26°♌18'37	-4.9m		13481 Feb 13 15:36	0°♍	
	13478 Jul 22 03:16	0°♌			13481 Mar 10 10:52	0°♌	
desc. node	13478 Aug 09 17:37	13°♌51'31			13481 Apr 04 11:20	0°♌	
morning max el	13478 Aug 23 20:39	27°♌14'56	46°55'32		13481 Apr 29 21:47	0°♌	
	13478 Aug 26 13:50	0°♌		asc. node	13481 May 16 24:00	19°♌37'07	
	13478 Sep 23 06:13	0°♍			13481 May 26 07:18	0°♌	
	13478 Oct 19 05:51	0°♍		evening max el	13481 Jun 16 01:07	21°♌54'13	46°43'11
	13478 Nov 13 12:49	0°♍			13481 Jun 24 09:49	0°♍	

greatest brilliancy	13481 Jul 26 04:44	22° $\mathring{\text{M}}$ 25'50	-4.9m	minimum elong	13484 Jan 18 04:04	8° \approx 27'27	1°12'20
retrograde	13481 Aug 05 06:59	24° $\mathring{\text{M}}$ 21'10		max. Earth dist.	13484 Jan 18 22:42	9° \approx 24'56	1.73140 AU
evening set	13481 Aug 20 06:52	19° $\mathring{\text{M}}$ 56'58			13484 Feb 04 15:13	0° H	
inferior conj	13481 Aug 26 00:22	16° $\mathring{\text{M}}$ 35'19	2°51'14	desc. node	13484 Feb 21 18:45	21° H 07'14	
minimum elong	13481 Aug 26 06:47	16° $\mathring{\text{M}}$ 25'32	2°48'53	evening rise	13484 Feb 24 10:12	24° H 22'29	
min. Earth dist.	13481 Aug 26 03:11	16° $\mathring{\text{M}}$ 31'01	0.26970 AU		13484 Feb 28 23:52	0° Y	
morning rise	13481 Sep 01 06:44	12° $\mathring{\text{M}}$ 56'04			13484 Mar 24 08:59	0° B	
desc. node	13481 Sep 06 02:42	10° $\mathring{\text{M}}$ 42'01			13484 Apr 17 18:05	0° II	
direct	13481 Sep 15 17:01	8° $\mathring{\text{M}}$ 50'11			13484 May 12 03:57	0° E	
greatest brilliancy	13481 Sep 25 18:03	10° $\mathring{\text{M}}$ 42'04	-4.8m		13484 Jun 05 17:17	0° Ω	
	13481 Oct 24 13:25	0° $\underline{\text{E}}$		asc. node	13484 Jun 13 11:12	9° Ω 23'21	
morning max el	13481 Nov 04 09:57	10° $\underline{\text{E}}$ 07'56	46°18'47		13484 Jun 30 15:07	0° $\mathring{\text{M}}$	
	13481 Nov 23 17:30	0° $\mathring{\text{M}}$			13484 Jul 26 06:50	0° $\underline{\text{E}}$	
	13481 Dec 20 17:26	0° J			13484 Aug 22 16:27	0° $\mathring{\text{M}}$	
asc. node	13481 Dec 28 03:58	8° J 33'05		evening max el	13484 Aug 27 09:17	4° $\mathring{\text{M}}$ 47'06	46°38'12
	13482 Jan 15 12:05	0° B			13484 Sep 26 03:18	0° J	
	13482 Feb 09 15:05	0° \approx		desc. node	13484 Oct 03 11:47	3° J 58'04	
	13482 Mar 06 08:50	0° H		greatest brilliancy	13484 Oct 05 12:53	4° J 49'11	-4.8m
	13482 Mar 30 20:38	0° Y		retrograde	13484 Oct 16 13:36	7° J 03'15	
desc. node	13482 Apr 18 21:50	23° Y 29'51		evening set	13484 Nov 02 00:19	1° J 49'45	
	13482 Apr 24 03:55	0° B			13484 Nov 05 01:29	30° $\mathring{\text{M}}$	
morning set	13482 May 03 10:24	11° B 29'49		min. Earth dist.	13484 Nov 05 22:08	29° $\mathring{\text{M}}$ 28'08	0.28163 AU
	13482 May 18 07:15	0° II		inferior conj	13484 Nov 06 19:14	28° $\mathring{\text{M}}$ 55'27	-7°21'15
max. Earth dist.	13482 Jun 09 21:37	28° II 14'15	1.71660 AU	minimum elong	13484 Nov 06 09:18	29° $\mathring{\text{M}}$ 10'51	7°18'42
	13482 Jun 11 07:23	0° E		morning rise	13484 Nov 10 18:42	26° $\mathring{\text{M}}$ 30'32	
				direct	13484 Nov 27 22:42	20° $\mathring{\text{M}}$ 58'15	
superior conj	13482 Jun 12 07:27	1° E 15'21	-1°27'18	greatest brilliancy	13484 Dec 07 10:05	22° $\mathring{\text{M}}$ 36'47	-4.8m
minimum elong	13482 Jun 12 06:08	1° E 11'14	1°28'20		13484 Dec 21 16:51	0° J	
	13482 Jul 05 05:44	0° Ω		morning max el	13485 Jan 15 20:45	21° J 07'34	45°44'30
evening rise	13482 Jul 22 11:19	21° Ω 36'36		asc. node	13485 Jan 24 14:28	29° J 48'01	
	13482 Jul 29 04:04	0° $\mathring{\text{M}}$			13485 Jan 24 19:10	0° B	
asc. node	13482 Aug 09 11:29	14° $\mathring{\text{M}}$ 09'06			13485 Feb 21 13:51	0° \approx	
	13482 Aug 22 04:03	0° $\underline{\text{E}}$			13485 Mar 19 13:47	0° H	
	13482 Sep 15 07:24	0° $\mathring{\text{M}}$			13485 Apr 13 17:43	0° Y	
	13482 Oct 09 16:30	0° J			13485 May 08 09:59	0° B	
	13482 Nov 03 11:23	0° B		desc. node	13485 May 16 11:40	9° B 54'25	
	13482 Nov 28 22:47	0° \approx			13485 Jun 01 18:16	0° II	
desc. node	13482 Nov 29 05:41	0° \approx 19'57			13485 Jun 25 20:55	0° E	
	13482 Dec 25 15:15	0° H		morning set	13485 Jul 17 07:46	26° E 50'36	
evening max el	13483 Jan 20 00:26	26° H 11'12	45°55'00		13485 Jul 19 20:13	0° Ω	
	13483 Jan 24 01:06	0° Y			13485 Aug 12 18:26	0° $\mathring{\text{M}}$	
greatest brilliancy	13483 Feb 28 00:09	24° Y 37'28	-4.8m				
retrograde	13483 Mar 10 00:56	26° Y 27'55		superior conj	13485 Aug 26 01:19	16° $\mathring{\text{M}}$ 39'06	-0°26'31
asc. node	13483 Mar 22 07:03	23° Y 27'49		minimum elong	13485 Aug 26 07:49	16° $\mathring{\text{M}}$ 59'27	0°26'32
evening set	13483 Mar 24 18:46	22° Y 11'32		max. Earth dist.	13485 Aug 27 14:55	18° $\mathring{\text{M}}$ 36'52	1.71591 AU
inferior conj	13483 Mar 31 02:47	18° Y 24'31	2°11'31		13485 Sep 05 17:09	0° $\underline{\text{E}}$	
minimum elong	13483 Mar 30 21:55	18° Y 32'08	2°09'48	asc. node	13485 Sep 06 01:47	0° $\underline{\text{E}}$ 27'00	
min. Earth dist.	13483 Mar 31 05:47	18° Y 19'50	0.28085 AU		13485 Sep 29 17:26	0° $\mathring{\text{M}}$	
morning rise	13483 Apr 06 00:48	14° Y 50'56		evening rise	13485 Oct 04 05:05	5° $\mathring{\text{M}}$ 35'33	
direct	13483 Apr 21 06:38	10° Y 16'40			13485 Oct 23 20:17	0° J	
greatest brilliancy	13483 May 01 18:08	12° Y 19'55	-4.8m		13485 Nov 17 03:25	0° B	
	13483 May 28 04:14	0° B			13485 Dec 11 17:13	0° \approx	
morning max el	13483 Jun 10 10:05	12° B 30'16	46°40'49	desc. node	13485 Dec 26 17:34	18° \approx 06'22	
	13483 Jun 27 02:51	0° II			13486 Jan 05 16:19	0° H	
desc. node	13483 Jul 12 09:46	17° II 04'50			13486 Jan 31 03:42	0° Y	
	13483 Jul 23 14:15	0° E			13486 Feb 26 09:31	0° B	
	13483 Aug 17 20:27	0° Ω			13486 Mar 26 06:16	0° II	
	13483 Sep 11 13:55	0° $\mathring{\text{M}}$		evening max el	13486 Apr 01 15:04	6° II 22'46	46°14'36
	13483 Oct 06 01:45	0° $\underline{\text{E}}$		asc. node	13486 Apr 18 16:12	21° II 54'31	
	13483 Oct 30 10:56	0° $\mathring{\text{M}}$			13486 Apr 29 13:59	0° E	
asc. node	13483 Nov 02 04:43	3° $\mathring{\text{M}}$ 22'46		greatest brilliancy	13486 May 11 17:51	6° E 11'09	-4.8m
	13483 Nov 23 18:28	0° J		retrograde	13486 May 21 06:35	7° E 53'16	
morning set	13483 Dec 11 23:51	22° J 31'18		evening set	13486 Jun 08 08:53	1° E 40'52	
	13483 Dec 18 01:03	0° B		inferior conj	13486 Jun 11 01:17	0° E 01'40	9°09'16
	13484 Jan 11 07:39	0° \approx		minimum elong	13486 Jun 10 23:18	0° E 04'46	9°08'10
					13486 Jun 11 02:21	30° $\mathring{\text{R}}$ II	
superior conj	13484 Jan 17 18:57	7° \approx 59'19	1°11'42	min. Earth dist.	13486 Jun 11 08:30	29° II 50'26	0.27542 AU

morning rise	13486 Jun 13 13:39	28°II28'22		evening rise	13488 Dec 13 10:36	14°330'26	
direct	13486 Jul 01 22:21	22°II03'15			13488 Dec 26 00:17	0°≈	
greatest brilliancy	13486 Jul 11 22:02	23°II55'42	-4.9m		13489 Jan 19 11:31	0°H	
	13486 Jul 23 14:19	0°☾		desc. node	13489 Jan 23 06:31	4°H37'43	
desc. node	13486 Aug 08 19:32	12°☾48'25			13489 Feb 13 03:03	0°Y	
morning max el	13486 Aug 21 09:26	24°☾49'01	46°56'05		13489 Mar 09 22:51	0°8	
	13486 Aug 26 11:19	0°Ω			13489 Apr 04 00:09	0°II	
	13486 Sep 22 22:11	0°൬			13489 Apr 29 12:06	0°☾	
	13486 Oct 18 19:35	0°♌		asc. node	13489 May 16 02:06	18°☾58'01	
	13486 Nov 13 01:20	0°♍			13489 May 26 00:46	0°Ω	
asc. node	13486 Nov 29 17:57	20°♍05'49		evening max el	13489 Jun 13 14:55	19°Ω32'07	46°42'41
	13486 Dec 07 22:17	0°♊			13489 Jun 24 13:33	0°൬	
	13487 Jan 01 13:22	0°3		greatest brilliancy	13489 Jul 23 18:07	20°൬01'19	-4.9m
	13487 Jan 26 00:35	0°≈		retrograde	13489 Aug 02 20:36	21°൬56'37	
morning set	13487 Feb 18 18:27	29°≈13'21		evening set	13489 Aug 17 22:08	17°൬29'03	
	13487 Feb 19 09:35	0°H		inferior conj	13489 Aug 23 13:08	14°൬10'44	3°14'18
	13487 Mar 15 17:05	0°Y		minimum elong	13489 Aug 23 20:20	13°൬59'46	3°11'41
desc. node	13487 Mar 21 09:13	7°Y00'42		min. Earth dist.	13489 Aug 23 16:46	14°൬05'12	0.26969 AU
max. Earth dist.	13487 Mar 26 11:20	13°Y18'20	1.72762 AU	morning rise	13489 Aug 29 18:37	10°൬33'00	
				desc. node	13489 Sep 05 04:41	7°൬44'48	
superior conj	13487 Mar 28 18:09	16°Y07'56	-0°17'46	direct	13489 Sep 13 06:17	6°൬25'24	
minimum elong	13487 Mar 28 13:59	15°Y55'00	0°17'45	greatest brilliancy	13489 Sep 23 06:56	8°൬17'38	-4.8m
	13487 Apr 08 22:55	0°8			13489 Oct 24 17:53	0°♌	
	13487 May 03 02:41	0°II		morning max el	13489 Nov 02 00:47	7°♌50'19	46°20'19
evening rise	13487 May 06 11:10	4°II10'20			13489 Nov 23 11:03	0°♍	
	13487 May 27 04:46	0°☾			13489 Dec 20 07:37	0°♊	
	13487 Jun 20 06:36	0°Ω		asc. node	13489 Dec 27 05:56	7°♊59'24	
asc. node	13487 Jul 11 23:39	26°Ω58'11			13490 Jan 15 00:41	0°3	
	13487 Jul 14 10:22	0°൬			13490 Feb 09 02:50	0°≈	
	13487 Aug 07 18:47	0°♌			13490 Mar 05 20:06	0°H	
	13487 Sep 01 11:57	0°♍			13490 Mar 30 07:38	0°Y	
	13487 Sep 26 21:50	0°♊		desc. node	13490 Apr 17 23:43	23°Y01'57	
	13487 Oct 23 19:18	0°3			13490 Apr 23 14:47	0°8	
desc. node	13487 Oct 31 21:15	8°325'54		morning set	13490 Apr 30 23:20	9°807'18	
evening max el	13487 Nov 07 12:00	15°302'33	46°08'38		13490 May 17 18:04	0°II	
	13487 Nov 24 01:16	0°≈		max. Earth dist.	13490 Jun 07 08:54	25°II45'35	1.71682 AU
greatest brilliancy	13487 Dec 16 20:54	14°≈00'59	-4.8m				
retrograde	13487 Dec 26 20:33	15°≈50'33		superior conj	13490 Jun 09 19:48	28°II49'54	-1°27'00
evening set	13488 Jan 13 08:41	10°≈03'35		minimum elong	13490 Jun 09 17:27	28°II42'33	1°28'01
inferior conj	13488 Jan 17 08:27	7°≈35'54	-7°22'05		13490 Jun 10 18:11	0°☾	
minimum elong	13488 Jan 17 18:01	7°≈20'53	7°19'37		13490 Jul 04 16:32	0°Ω	
min. Earth dist.	13488 Jan 17 15:38	7°≈24'38	0.28852 AU	evening rise	13490 Jul 19 23:03	19°Ω09'00	
morning rise	13488 Jan 22 03:15	4°≈39'51			13490 Jul 28 14:55	0°൬	
	13488 Feb 02 02:56	30°K3		asc. node	13490 Aug 08 13:14	13°൬40'26	
direct	13488 Feb 07 16:53	29°322'30			13490 Aug 21 15:03	0°♌	
	13488 Feb 13 10:50	0°≈			13490 Sep 14 18:37	0°♍	
greatest brilliancy	13488 Feb 18 11:33	1°≈29'04	-4.8m		13490 Oct 09 04:06	0°♊	
asc. node	13488 Feb 21 23:52	2°≈58'16			13490 Nov 02 23:38	0°3	
	13488 Mar 27 17:39	0°H		desc. node	13490 Nov 28 07:41	29°346'44	
morning max el	13488 Mar 27 23:26	0°H14'09	45°56'39		13490 Nov 28 12:18	0°≈	
	13488 Apr 25 03:21	0°Y			13490 Dec 25 07:33	0°H	
	13488 May 21 05:59	0°8		evening max el	13491 Jan 17 16:13	23°H59'36	45°54'51
desc. node	13488 Jun 13 00:24	27°810'27			13491 Jan 24 02:04	0°Y	
	13488 Jun 15 08:29	0°II		greatest brilliancy	13491 Feb 25 14:56	22°Y22'33	-4.8m
	13488 Jul 09 21:45	0°☾		retrograde	13491 Mar 07 15:31	24°Y12'25	
	13488 Aug 03 03:45	0°Ω		asc. node	13491 Mar 21 09:04	20°Y29'00	
	13488 Aug 27 06:23	0°൬		evening set	13491 Mar 22 09:27	19°Y56'34	
	13488 Sep 20 08:05	0°♌		inferior conj	13491 Mar 28 17:42	16°Y08'48	1°49'56
morning set	13488 Sep 28 21:05	10°♌38'45		minimum elong	13491 Mar 28 13:36	16°Y15'13	1°48'29
asc. node	13488 Oct 03 16:24	16°♌38'01		min. Earth dist.	13491 Mar 28 21:03	16°Y03'33	0.28106 AU
	13488 Oct 14 09:57	0°♍		morning rise	13491 Apr 03 17:31	12°Y32'29	
				direct	13491 Apr 18 22:14	8°Y00'55	
superior conj	13488 Nov 06 07:07	28°♍28'16	1°10'05	greatest brilliancy	13491 Apr 29 09:33	10°Y03'54	-4.8m
minimum elong	13488 Nov 05 21:25	27°♍58'06	1°10'38		13491 May 28 08:29	0°8	
	13488 Nov 07 12:38	0°♊		morning max el	13491 Jun 08 00:28	10°811'39	46°39'29
max. Earth dist.	13488 Nov 08 08:23	1°♊01'21	1.72478 AU		13491 Jun 26 20:10	0°II	
	13488 Dec 01 17:00	0°3		desc. node	13491 Jul 11 11:35	16°II26'40	

	13491 Jul 23 04:23	0°☿			13494 Feb 26 00:38	0°♄	
	13491 Aug 17 09:08	0°♁			13494 Mar 26 02:52	0°♂	
	13491 Sep 11 01:45	0°♂	evening max el		13494 Mar 30 03:40	4°♂00'36	46°13'32
	13491 Oct 05 13:05	0°♂	asc. node		13494 Apr 17 18:18	20°♂48'23	
	13491 Oct 29 21:55	0°♂			13494 May 01 00:07	0°☿	
asc. node	13491 Nov 01 06:38	2°♂54'54	greatest brilliancy		13494 May 09 06:55	3°☿49'27	-4.8m
	13491 Nov 23 05:13	0°♂	retrograde		13494 May 18 19:40	5°☿31'58	
morning set	13491 Dec 09 16:17	20°♂20'58			13494 Jun 04 18:50	30°♂♂	
	13491 Dec 17 11:38	0°♂	evening set		13494 Jun 05 19:49	29°♂22'48	
	13492 Jan 10 18:10	0°♂	inferior conj		13494 Jun 08 14:49	27°♂39'48	9°06'25
			minimum elong		13494 Jun 08 11:53	27°♂44'22	9°05'17
superior conj	13492 Jan 15 11:38	5°♂50'11 1°13'30	min. Earth dist.		13494 Jun 08 21:39	27°♂29'12	0.27568 AU
minimum elong	13492 Jan 15 20:25	6°♂17'16 1°14'10	morning rise		13494 Jun 11 03:53	26°♂05'30	
max. Earth dist.	13492 Jan 16 17:01	7°♂20'51 1.73131 AU	direct		13494 Jun 29 11:33	19°♂40'38	
	13492 Feb 04 01:46	0°♂	greatest brilliancy		13494 Jul 09 12:19	21°♂33'56	-4.9m
desc. node	13492 Feb 20 20:29	20°♂39'49			13494 Jul 24 14:40	0°☿	
evening rise	13492 Feb 22 01:52	22°♂10'15	desc. node		13494 Aug 07 21:31	11°☿48'07	
	13492 Feb 28 10:32	0°♂	morning max el		13494 Aug 18 23:04	22°☿26'27	46°56'41
	13492 Mar 23 19:53	0°♂			13494 Aug 26 07:37	0°♁	
	13492 Apr 17 05:16	0°♂			13494 Sep 22 13:28	0°♂	
	13492 May 11 15:33	0°☿			13494 Oct 18 08:44	0°♂	
	13492 Jun 05 05:32	0°♁			13494 Nov 12 13:17	0°♂	
asc. node	13492 Jun 12 13:05	8°♁51'13	asc. node		13494 Nov 28 19:50	19°♂36'57	
	13492 Jun 30 04:26	0°♂			13494 Dec 07 09:30	0°♂	
	13492 Jul 25 22:12	0°♂			13495 Jan 01 00:08	0°♂	
	13492 Aug 22 13:04	0°♂			13495 Jan 25 11:07	0°♂	
evening max el	13492 Aug 24 23:50	2°♂28'30 46°39'00	morning set		13495 Feb 16 11:10	27°♂04'48	
	13492 Sep 27 15:57	0°♂			13495 Feb 18 20:01	0°♂	
desc. node	13492 Oct 02 13:49	2°♂19'22			13495 Mar 15 03:31	0°♂	
greatest brilliancy	13492 Oct 03 04:29	2°♂33'53 -4.8m	desc. node		13495 Mar 20 11:09	6°♂34'24	
retrograde	13492 Oct 14 04:18	4°♂47'17	max. Earth dist.		13495 Mar 24 06:10	11°♂15'47 1.72797 AU	
	13492 Oct 29 21:27	30°♂♂					
evening set	13492 Oct 30 11:42	29°♂39'44	superior conj		13495 Mar 26 08:57	13°♂52'53 -0°14'17	
min. Earth dist.	13492 Nov 03 12:52	27°♂13'17 0.28108 AU	minimum elong		13495 Mar 26 05:35	13°♂42'28 0°14'15	
inferior conj	13492 Nov 04 10:01	26°♂40'29 -7°08'53	behind sun begin		13495 Mar 25 18:29	13°♂08'08	
minimum elong	13492 Nov 03 23:48	26°♂56'19 7°06'12	behind sun end		13495 Mar 26 16:41	14°♂16'48	
morning rise	13492 Nov 08 12:21	24°♂11'16			13495 Apr 08 09:23	0°♂	
direct	13492 Nov 25 13:00	18°♂44'12			13495 May 02 13:15	0°♂	
greatest brilliancy	13492 Dec 05 00:12	20°♂22'14 -4.8m	evening rise		13495 May 04 00:58	1°♂51'01	
	13492 Dec 22 12:06	0°♂			13495 May 26 15:30	0°☿	
morning max el	13493 Jan 13 09:58	18°♂50'07 45°44'52			13495 Jun 19 17:33	0°♁	
asc. node	13493 Jan 23 16:21	29°♂04'04	asc. node		13495 Jul 11 01:27	26°♁29'00	
	13493 Jan 24 14:05	0°♂			13495 Jul 13 21:38	0°♂	
	13493 Feb 21 04:15	0°♂			13495 Aug 07 06:32	0°♂	
	13493 Mar 19 02:24	0°♂			13495 Sep 01 00:30	0°♂	
	13493 Apr 13 05:27	0°♂			13495 Sep 26 11:53	0°♂	
	13493 May 07 21:14	0°♂			13495 Oct 23 12:57	0°♂	
desc. node	13493 May 15 13:33	9°♂26'00	desc. node		13495 Oct 30 23:18	7°♂41'28	
	13493 Jun 01 05:14	0°♂	evening max el		13495 Nov 05 02:56	12°♂49'16 46°09'50	
	13493 Jun 25 07:42	0°☿			13495 Nov 24 10:31	0°♂	
morning set	13493 Jul 14 19:35	24°☿23'39	greatest brilliancy		13495 Dec 14 11:29	11°♂50'09 -4.8m	
	13493 Jul 19 06:55	0°♁	retrograde		13495 Dec 24 13:01	13°♂41'20	
	13493 Aug 12 05:03	0°♂	evening set		13496 Jan 11 03:25	7°♂49'42	
			inferior conj		13496 Jan 15 00:30	5°♂26'10 -7°32'56	
superior conj	13493 Aug 23 13:54	14°♂15'03 -0°30'06	minimum elong		13496 Jan 15 09:45	5°♂11'40 7°30'35	
minimum elong	13493 Aug 23 21:12	14°♂37'54 0°30'08	min. Earth dist.		13496 Jan 15 06:40	5°♂16'29 0.28865 AU	
max. Earth dist.	13493 Aug 24 22:55	15°♂58'28 1.71564 AU	morning rise		13496 Jan 19 16:01	2°♂35'14	
asc. node	13493 Sep 05 03:39	29°♂59'48			13496 Jan 24 13:35	30°♂♂	
	13493 Sep 05 03:43	0°♂	direct		13496 Feb 05 09:01	27°♂12'47	
	13493 Sep 29 03:58	0°♂	greatest brilliancy		13496 Feb 16 02:55	29°♂18'57 -4.8m	
evening rise	13493 Oct 01 19:44	3°♂18'47			13496 Feb 17 20:13	0°♂	
	13493 Oct 23 06:52	0°♂	asc. node		13496 Feb 21 01:56	1°♂30'22	
	13493 Nov 16 14:10	0°♂	morning max el		13496 Mar 25 15:50	28°♂04'20 45°55'24	
	13493 Dec 11 04:21	0°♂			13496 Mar 27 14:46	0°♂	
desc. node	13493 Dec 25 19:22	17°♂37'24			13496 Apr 24 18:29	0°♂	
	13494 Jan 05 04:07	0°♂			13496 May 20 19:00	0°♂	
	13494 Jan 30 16:37	0°♂	desc. node		13496 Jun 12 02:12	26°♂39'25	

	13496 Jun 14 20:29	0°♄		greatest brilliancy	13499 Feb 23 06:36	20°♄10'00	-4.8m
	13496 Jul 09 09:11	0°♅		retrograde	13499 Mar 05 06:04	21°♄58'46	
	13496 Aug 02 14:50	0°♆		evening set	13499 Mar 20 00:39	17°♄43'07	
	13496 Aug 26 17:13	0°♇		asc. node	13499 Mar 20 11:05	17°♄28'47	
	13496 Sep 19 18:43	0°♈		inferior conj	13499 Mar 26 08:59	13°♄55'02	1°28'32
morning set	13496 Sep 26 10:55	8°♈19'14		minimum elong	13499 Mar 26 05:39	14°♄00'14	1°27'21
asc. node	13496 Oct 02 18:17	16°♈10'53		min. Earth dist.	13499 Mar 26 12:57	13°♄48'49	0.28127 AU
	13496 Oct 13 20:28	0°♉		morning rise	13499 Apr 01 10:22	10°♄16'07	
				direct	13499 Apr 16 13:35	5°♄47'04	
superior conj	13496 Nov 03 22:38	26°♉14'50	1°08'01	greatest brilliancy	13499 Apr 27 01:35	7°♄50'07	-4.8m
minimum elong	13496 Nov 03 12:41	25°♉43'53	1°08'30		13499 May 28 10:39	0°♅	
max. Earth dist.	13496 Nov 06 00:38	28°♉50'13	1.72446 AU	morning max el	13499 Jun 05 14:13	7°♅52'11	46°37'56
	13496 Nov 06 23:05	0°♆			13499 Jun 26 12:56	0°♄	
	13496 Dec 01 03:26	0°♅		desc. node	13499 Jul 10 13:34	15°♄49'36	
evening rise	13496 Dec 11 02:58	12°♅20'36			13499 Jul 22 18:19	0°♅	
	13496 Dec 25 10:46	0°♆			13499 Aug 16 21:45	0°♆	
	13497 Jan 18 22:11	0°♇			13499 Sep 10 13:37	0°♇	
desc. node	13497 Jan 22 08:22	4°♇10'43			13499 Oct 05 00:26	0°♈	
	13497 Feb 12 14:04	0°♄			13499 Oct 29 08:54	0°♉	
	13497 Mar 09 10:27	0°♅		asc. node	13499 Oct 31 08:27	2°♉26'41	
	13497 Apr 03 12:42	0°♄			13499 Nov 22 15:56	0°♆	
	13497 Apr 29 02:17	0°♅		morning set	13499 Dec 07 08:34	18°♆10'07	
asc. node	13497 May 15 03:57	18°♅18'35			13499 Dec 16 22:12	0°♅	
	13497 May 25 18:24	0°♆			13500 Jan 10 04:41	0°♆	
evening max el	13497 Jun 11 05:23	17°♆12'13	46°42'04				
	13497 Jun 24 18:57	0°♇		superior conj	13500 Jan 13 04:28	3°♆41'34	1°15'11
greatest brilliancy	13497 Jul 21 07:43	17°♇37'34	-4.9m	minimum elong	13500 Jan 13 12:53	4°♆07'32	1°15'55
retrograde	13497 Jul 31 10:06	19°♇32'16		max. Earth dist.	13500 Jan 14 09:47	5°♆12'01	1.73119 AU
evening set	13497 Aug 15 13:31	15°♇01'31			13500 Feb 03 12:19	0°♇	
inferior conj	13497 Aug 21 01:49	11°♇46'33	3°36'59	evening rise	13500 Feb 19 17:52	19°♇59'06	
minimum elong	13497 Aug 21 09:44	11°♇34'29	3°34'10	desc. node	13500 Feb 19 22:28	20°♇13'13	
min. Earth dist.	13497 Aug 21 06:08	11°♇39'58	0.26965 AU		13500 Feb 27 21:13	0°♄	
morning rise	13497 Aug 27 06:06	8°♇10'32			13500 Mar 24 06:44	0°♅	
desc. node	13497 Sep 04 06:45	4°♇53'22			13500 Apr 17 16:24	0°♄	
direct	13497 Sep 10 19:36	4°♇01'18			13500 May 12 03:08	0°♅	
greatest brilliancy	13497 Sep 20 19:20	5°♇53'09	-4.8m		13500 Jun 05 17:48	0°♆	
	13497 Oct 24 20:18	0°♈		asc. node	13500 Jun 12 14:57	8°♆19'02	
morning max el	13497 Oct 30 15:06	5°♈32'10	46°21'51		13500 Jun 30 17:54	0°♇	
	13497 Nov 23 03:53	0°♉			13500 Jul 26 13:57	0°♈	
	13497 Dec 19 21:18	0°♆			13500 Aug 23 10:47	0°♉	
asc. node	13497 Dec 26 07:43	7°♆26'21		evening max el	13500 Aug 23 13:32	0°♉06'53	46°39'35
	13498 Jan 14 12:52	0°♅			13500 Oct 01 03:00	0°♆	
	13498 Feb 08 14:12	0°♆		greatest brilliancy	13500 Oct 01 20:01	0°♆16'54	-4.8m
	13498 Mar 05 07:00	0°♇		desc. node	13500 Oct 02 15:51	0°♆35'28	
	13498 Mar 29 18:18	0°♄		retrograde	13500 Oct 12 18:43	2°♆29'46	
desc. node	13498 Apr 17 01:36	22°♄35'00			13500 Oct 23 23:15	30°♆♄	
	13498 Apr 23 01:22	0°♅		evening set	13500 Oct 28 22:48	27°♄27'49	
morning set	13498 Apr 28 12:35	6°♅46'45		min. Earth dist.	13500 Nov 02 03:37	24°♄56'23	0.28052 AU
	13498 May 17 04:38	0°♄		inferior conj	13500 Nov 03 00:33	24°♄23'57	-6°55'43
max. Earth dist.	13498 Jun 04 17:37	23°♄09'31	1.71714 AU	minimum elong	13500 Nov 02 14:06	24°♄40'08	6°52'54
				morning rise	13500 Nov 07 05:50	21°♄50'25	
superior conj	13498 Jun 07 08:08	26°♄25'04	-1°26'32	direct	13500 Nov 24 02:32	16°♄28'23	
minimum elong	13498 Jun 07 04:47	26°♄14'37	1°27'33	greatest brilliancy	13500 Dec 03 14:32	18°♄06'39	-4.8m
	13498 Jun 10 04:48	0°♅			13500 Dec 24 02:47	0°♆	
	13498 Jul 04 03:13	0°♆		morning max el	13501 Jan 11 23:08	16°♆31'47	45°45'29
evening rise	13498 Jul 17 10:19	16°♆40'17		asc. node	13501 Jan 23 18:28	28°♆20'49	
	13498 Jul 28 01:40	0°♇			13501 Jan 25 08:42	0°♅	
asc. node	13498 Aug 07 15:07	13°♇12'30			13501 Feb 21 18:38	0°♆	
	13498 Aug 21 01:56	0°♈			13501 Mar 19 15:03	0°♇	
	13498 Sep 14 05:44	0°♉			13501 Apr 13 17:15	0°♄	
	13498 Oct 08 15:34	0°♆			13501 May 08 08:33	0°♅	
	13498 Nov 02 11:47	0°♅		desc. node	13501 May 15 15:23	8°♅57'07	
desc. node	13498 Nov 27 09:32	29°♅13'20			13501 Jun 01 16:15	0°♄	
	13498 Nov 28 01:46	0°♆			13501 Jun 25 18:34	0°♅	
	13498 Dec 24 23:57	0°♇		morning set	13501 Jul 13 07:41	21°♅57'18	
evening max el	13499 Jan 15 07:36	21°♇47'45	45°54'48		13501 Jul 19 17:43	0°♆	
	13499 Jan 24 04:04	0°♄			13501 Aug 12 15:50	0°♇	

superior conj	13501 Aug 22 02:28	11° \cap 50'19	-0°33'38	minimum elong	13504 Jan 14 01:06	3° \approx 00'03	7°41'03
minimum elong	13501 Aug 22 10:31	12° \cap 15'33	0°33'41	min. Earth dist.	13504 Jan 13 21:13	3° \approx 06'08	0.28875 AU
max. Earth dist.	13501 Aug 23 05:53	13° \cap 16'13	1.71549 AU	morning rise	13504 Jan 18 04:22	0° \approx 28'13	
asc. node	13501 Sep 05 05:34	29° \cap 32'02			13504 Jan 18 23:52	30° \cap 3	
	13501 Sep 05 14:31	0° $\underline{\cap}$		direct	13504 Feb 04 01:16	25° \cap 00'48	
	13501 Sep 29 14:47	0° \cap		greatest brilliancy	13504 Feb 14 17:23	27° \cap 05'46	-4.8m
evening rise	13501 Sep 30 10:04	1° \cap 00'06		asc. node	13504 Feb 21 03:56	0° \approx 03'18	
	13501 Oct 23 17:46	0° \nearrow			13504 Feb 21 01:29	0° \approx	
	13501 Nov 17 01:16	0° \cap		morning max el	13504 Mar 24 08:04	25° \approx 52'36	45°54'16
	13501 Dec 11 15:50	0° \approx			13504 Mar 28 11:44	0° \cap	
desc. node	13501 Dec 25 21:17	17° \approx 07'48			13504 Apr 25 09:51	0° \cap	
	13502 Jan 05 16:16	0° \cap			13504 May 21 08:18	0° \cap	
	13502 Jan 31 05:56	0° \cap		desc. node	13504 Jun 12 04:07	26° \cap 07'42	
	13502 Feb 26 16:16	0° \cap			13504 Jun 15 08:47	0° \cap	
	13502 Mar 27 00:29	0° \cap			13504 Jul 09 20:57	0° \cap	
evening max el	13502 Mar 28 17:17	1° \cap 40'35	46°12'39		13504 Aug 03 02:13	0° \cap	
asc. node	13502 Apr 17 20:15	19° \cap 39'38			13504 Aug 27 04:21	0° \cap	
	13502 May 04 04:13	0° \cap			13504 Sep 20 05:39	0° $\underline{\cap}$	
greatest brilliancy	13502 May 07 19:42	1° \cap 27'27	-4.8m	morning set	13504 Sep 25 01:10	6° $\underline{\cap}$ 00'03	
retrograde	13502 May 17 09:32	3° \cap 11'03		asc. node	13504 Oct 02 20:02	15° $\underline{\cap}$ 42'28	
	13502 May 29 23:53	30° \cap II			13504 Oct 14 07:16	0° \cap	
evening set	13502 Jun 04 06:37	27° \cap 05'34					
inferior conj	13502 Jun 07 04:37	25° \cap 18'13	9°02'44	superior conj	13504 Nov 02 14:21	24° \cap 00'56	1°05'50
minimum elong	13502 Jun 07 00:46	25° \cap 24'12	9°01'30	minimum elong	13504 Nov 02 04:12	23° \cap 29'25	1°06'16
min. Earth dist.	13502 Jun 07 10:41	25° \cap 08'49	0.27590 AU	max. Earth dist.	13504 Nov 04 18:48	26° \cap 44'01	1.72417 AU
morning rise	13502 Jun 09 18:50	23° \cap 42'17			13504 Nov 07 09:50	0° \nearrow	
direct	13502 Jun 28 01:27	17° \cap 18'28			13504 Dec 01 14:13	0° \cap	
greatest brilliancy	13502 Jul 08 02:11	19° \cap 12'05	-4.9m	evening rise	13504 Dec 09 19:21	10° \cap 09'34	
	13502 Jul 26 08:34	0° \cap			13504 Dec 25 21:40	0° \approx	
desc. node	13502 Aug 07 23:36	10° \cap 49'23			13505 Jan 19 09:19	0° \cap	
morning max el	13502 Aug 17 13:48	20° \cap 06'33	46°57'05	desc. node	13505 Jan 22 10:18	3° \cap 42'33	
	13502 Aug 27 03:23	0° \cap			13505 Feb 13 01:35	0° \cap	
	13502 Sep 23 04:43	0° \cap			13505 Mar 09 22:34	0° \cap	
	13502 Oct 18 22:03	0° $\underline{\cap}$			13505 Apr 04 01:47	0° \cap	
	13502 Nov 13 01:31	0° \cap			13505 Apr 29 17:03	0° \cap	
asc. node	13502 Nov 28 21:40	19° \cap 06'49		asc. node	13505 May 15 05:53	17° \cap 37'44	
	13502 Dec 07 21:05	0° \nearrow			13505 May 26 12:54	0° \cap	
	13503 Jan 01 11:18	0° \cap		evening max el	13505 Jun 09 19:44	14° \cap 50'56	46°41'26
	13503 Jan 25 22:02	0° \approx			13505 Jun 26 03:06	0° \cap	
morning set	13503 Feb 15 03:42	24° \approx 54'38		greatest brilliancy	13505 Jul 19 22:02	15° \cap 13'50	-4.9m
	13503 Feb 19 06:48	0° \cap		retrograde	13505 Jul 29 23:19	17° \cap 07'01	
	13503 Mar 15 14:16	0° \cap		evening set	13505 Aug 14 05:12	12° \cap 33'09	
desc. node	13503 Mar 20 12:56	6° \cap 06'39		inferior conj	13505 Aug 19 14:37	9° \cap 21'44	3°59'17
max. Earth dist.	13503 Mar 23 02:11	9° \cap 15'58	1.72827 AU	minimum elong	13505 Aug 19 23:12	9° \cap 08'39	3°56'17
				min. Earth dist.	13505 Aug 19 19:52	9° \cap 13'44	0.26960 AU
superior conj	13503 Mar 24 23:39	11° \cap 36'32	-0°10'47	morning rise	13505 Aug 25 17:21	5° \cap 47'32	
minimum elong	13503 Mar 24 21:06	11° \cap 28'40	0°10'45	desc. node	13505 Sep 04 08:43	2° \cap 06'56	
behind sun begin	13503 Mar 24 03:04	10° \cap 32'53		direct	13505 Sep 09 08:44	1° \cap 36'37	
behind sun end	13503 Mar 25 15:08	12° \cap 24'27		greatest brilliancy	13505 Sep 19 08:02	3° \cap 28'05	-4.8m
	13503 Apr 08 20:11	0° \cap			13505 Oct 25 21:37	0° $\underline{\cap}$	
evening rise	13503 May 02 14:53	29° \cap 31'10		morning max el	13505 Oct 29 04:33	3° $\underline{\cap}$ 11'01	46°23'25
	13503 May 03 00:10	0° \cap			13505 Nov 23 20:38	0° \cap	
	13503 May 27 02:34	0° \cap			13505 Dec 20 11:09	0° \nearrow	
	13503 Jun 20 04:50	0° \cap		asc. node	13505 Dec 26 09:48	6° \nearrow 53'24	
asc. node	13503 Jul 11 03:25	25° \cap 59'27			13506 Jan 15 01:20	0° \cap	
	13503 Jul 14 09:12	0° \cap			13506 Feb 09 01:55	0° \approx	
	13503 Aug 07 18:34	0° $\underline{\cap}$			13506 Mar 05 18:18	0° \cap	
	13503 Sep 01 13:22	0° \cap			13506 Mar 30 05:23	0° \cap	
	13503 Sep 27 02:25	0° \nearrow		desc. node	13506 Apr 17 03:23	22° \cap 06'29	
	13503 Oct 24 07:32	0° \cap			13506 Apr 23 12:20	0° \cap	
desc. node	13503 Oct 31 01:09	6° \cap 54'28		morning set	13506 Apr 27 01:36	4° \cap 24'18	
evening max el	13503 Nov 03 18:40	10° \cap 36'26	46°10'44		13506 May 17 15:34	0° \cap	
	13503 Nov 26 00:07	0° \approx		max. Earth dist.	13506 Jun 03 01:07	20° \cap 28'44	1.71745 AU
greatest brilliancy	13503 Dec 13 01:47	9° \approx 36'57	-4.8m				
retrograde	13503 Dec 23 05:14	11° \approx 29'30		superior conj	13506 Jun 05 20:21	23° \cap 58'57	-1°25'55
evening set	13504 Jan 09 21:50	5° \approx 33'32		minimum elong	13506 Jun 05 16:03	23° \cap 45'30	1°26'53
inferior conj	13504 Jan 13 16:14	3° \approx 13'57	-7°43'16		13506 Jun 10 15:44	0° \cap	

	13506 Jul 04 14:11	0°♌		morning max el	13509 Jan 09 13:14	14°♊15'36	45°46'17
evening rise	13506 Jul 15 21:32	14°♌10'24		asc. node	13509 Jan 22 20:22	27°♊37'32	
	13506 Jul 28 12:45	0°♍			13509 Jan 25 02:49	0°♊	
asc. node	13506 Aug 07 17:01	12°♍43'40			13509 Feb 21 08:50	0°♋	
	13506 Aug 21 13:09	0°♎			13509 Mar 19 03:39	0°♋	
	13506 Sep 14 17:10	0°♏			13509 Apr 13 05:03	0°♌	
	13506 Oct 09 03:22	0°♐			13509 May 07 19:55	0°♌	
desc. node	13506 Nov 03 00:15	0°♑		desc. node	13509 May 14 17:18	8°♌28'13	
	13506 Nov 27 11:32	28°♑39'32			13509 Jun 01 03:24	0°♍	
	13506 Nov 28 15:37	0°♒			13509 Jun 25 05:34	0°♍	
	13506 Dec 25 16:58	0°♓		morning set	13509 Jul 10 19:17	19°♍29'01	
evening max el	13507 Jan 13 21:59	19°♓32'34	45°54'34		13509 Jul 19 04:37	0°♎	
	13507 Jan 25 08:09	0°♑			13509 Aug 12 02:40	0°♎	
greatest brilliancy	13507 Feb 21 22:16	17°♑56'00	-4.8m				
retrograde	13507 Mar 03 20:15	19°♑43'41		superior conj	13509 Aug 19 14:36	9°♎24'05	-0°37'09
evening set	13507 Mar 18 15:50	15°♑27'38		minimum elong	13509 Aug 19 23:22	9°♎51'33	0°37'12
asc. node	13507 Mar 20 13:03	14°♑23'48		max. Earth dist.	13509 Aug 20 14:37	10°♎39'19	1.71531 AU
inferior conj	13507 Mar 25 00:07	11°♑39'47	1°06'51	asc. node	13509 Sep 04 07:16	29°♎03'33	
minimum elong	13507 Mar 24 21:36	11°♑43'44	1°05'57		13509 Sep 05 01:18	0°♏	
min. Earth dist.	13507 Mar 25 05:03	11°♑32'02	0.28153 AU	evening rise	13509 Sep 28 00:16	28°♏41'06	
morning rise	13507 Mar 31 02:57	7°♑58'28			13509 Sep 29 01:35	0°♐	
direct	13507 Apr 15 04:23	3°♑31'23			13509 Oct 23 04:39	0°♑	
greatest brilliancy	13507 Apr 25 18:14	5°♑35'30	-4.8m		13509 Nov 16 12:21	0°♑	
	13507 May 29 11:59	0°♒			13509 Dec 11 03:17	0°♒	
morning max el	13507 Jun 04 03:45	5°♒30'57	46°36'33	desc. node	13509 Dec 24 23:15	16°♒38'32	
	13507 Jun 27 05:44	0°♓			13510 Jan 05 04:22	0°♒	
desc. node	13507 Jul 10 15:39	15°♓12'11			13510 Jan 30 19:14	0°♑	
	13507 Jul 23 08:22	0°♏			13510 Feb 26 08:00	0°♒	
	13507 Aug 17 10:30	0°♌		evening max el	13510 Mar 26 07:42	29°♒23'00	46°11'37
	13507 Sep 11 01:38	0°♍			13510 Mar 26 22:50	0°♓	
	13507 Oct 05 11:58	0°♎		asc. node	13510 Apr 16 22:10	18°♓28'58	
	13507 Oct 29 20:04	0°♏		greatest brilliancy	13510 May 05 07:47	29°♓04'43	-4.8m
asc. node	13507 Oct 31 10:17	1°♏57'58			13510 May 08 10:10	0°♏	
	13507 Nov 23 02:50	0°♐		retrograde	13510 May 14 23:29	0°♏49'40	
morning set	13507 Dec 06 01:00	15°♐59'10			13510 May 21 07:55	30°♒♓	
	13507 Dec 17 08:55	0°♑		evening set	13510 Jun 01 16:51	24°♓48'30	
	13508 Jan 10 15:21	0°♒		inferior conj	13510 Jun 04 18:12	22°♓56'05	8°58'03
				minimum elong	13510 Jun 04 13:30	23°♓03'23	8°56'42
superior conj	13508 Jan 11 21:33	1°♒33'15	1°16'45	min. Earth dist.	13510 Jun 04 23:18	22°♓48'10	0.27616 AU
minimum elong	13508 Jan 12 05:33	1°♒57'57	1°17'30	morning rise	13510 Jun 07 10:05	21°♓17'44	
max. Earth dist.	13508 Jan 13 02:43	3°♒03'18	1.73110 AU	direct	13510 Jun 25 15:44	14°♓55'52	
	13508 Feb 03 23:02	0°♓		greatest brilliancy	13510 Jul 05 15:35	16°♓49'11	-4.9m
evening rise	13508 Feb 18 10:01	17°♓47'55			13510 Jul 26 22:06	0°♏	
desc. node	13508 Feb 20 00:15	19°♓45'32		desc. node	13510 Aug 07 01:30	9°♏51'11	
	13508 Feb 28 08:04	0°♑		morning max el	13510 Aug 15 05:04	17°♏47'47	46°57'25
	13508 Mar 23 17:49	0°♒			13510 Aug 26 22:39	0°♌	
	13508 Apr 17 03:49	0°♓			13510 Sep 22 19:44	0°♍	
	13508 May 11 15:00	0°♏			13510 Oct 18 11:09	0°♎	
	13508 Jun 05 06:24	0°♏			13510 Nov 12 13:33	0°♏	
asc. node	13508 Jun 11 16:57	7°♏46'26		asc. node	13510 Nov 27 23:38	18°♏37'40	
	13508 Jun 30 07:41	0°♍			13510 Dec 07 08:27	0°♐	
	13508 Jul 26 06:07	0°♎			13510 Dec 31 22:15	0°♑	
evening max el	13508 Aug 21 02:52	27°♎44'01	46°40'20		13511 Jan 25 08:44	0°♒	
	13508 Aug 23 09:31	0°♏		morning set	13511 Feb 12 20:39	22°♒46'23	
greatest brilliancy	13508 Sep 29 11:06	27°♏58'54	-4.8m		13511 Feb 18 17:23	0°♓	
desc. node	13508 Oct 01 17:47	28°♏47'05			13511 Mar 15 00:47	0°♑	
	13508 Oct 07 04:54	0°♐		desc. node	13511 Mar 19 14:43	5°♑39'37	
retrograde	13508 Oct 10 09:23	0°♐11'57		max. Earth dist.	13511 Mar 20 21:58	7°♑16'10	1.72853 AU
	13508 Oct 13 12:52	30°♒♏					
evening set	13508 Oct 26 09:56	25°♏15'04		superior conj	13511 Mar 22 14:47	9°♑22'20	-0°07'18
min. Earth dist.	13508 Oct 30 18:16	22°♏39'01	0.27997 AU	minimum elong	13511 Mar 22 13:03	9°♑17'00	0°07'16
inferior conj	13508 Oct 31 15:00	22°♏06'57	-6°41'43	behind sun begin	13511 Mar 21 15:27	8°♑10'14	
minimum elong	13508 Oct 31 04:26	22°♏23'19	6°38'47	behind sun end	13511 Mar 23 10:39	10°♑23'47	
morning rise	13508 Nov 04 23:19	19°♏29'13			13511 Apr 08 06:44	0°♒	
direct	13508 Nov 21 15:50	14°♏11'55		evening rise	13511 Apr 30 05:09	27°♒13'09	
greatest brilliancy	13508 Dec 01 04:56	15°♏50'52	-4.8m		13511 May 02 10:50	0°♓	
	13508 Dec 24 13:46	0°♐			13511 May 26 13:26	0°♏	

	13511 Jun 19 15:57	0°♎		13513 Nov 23 12:48	0°♍	
asc. node	13511 Jul 10 05:16	25°♎29'57		13513 Dec 20 00:34	0°♊	
	13511 Jul 13 20:40	0°♎	asc. node	13513 Dec 25 11:43	6°♊21'04	
	13511 Aug 07 06:33	0°♎		13514 Jan 14 13:22	0°♊	
	13511 Sep 01 02:14	0°♍		13514 Feb 08 13:11	0°♋	
	13511 Sep 26 16:59	0°♊		13514 Mar 05 05:08	0°♈	
	13511 Oct 24 02:22	0°♊		13514 Mar 29 16:00	0°♑	
desc. node	13511 Oct 30 03:12	6°♊07'54	desc. node	13514 Apr 16 05:16	21°♑39'40	
evening max el	13511 Nov 01 10:49	8°♊25'15 46°11'49		13514 Apr 22 22:52	0°♋	
	13511 Nov 26 17:50	0°♋	morning set	13514 Apr 24 14:51	2°♋03'55	
greatest brilliancy	13511 Dec 10 16:35	7°♋25'25 -4.8m		13514 May 17 02:04	0°♌	
retrograde	13511 Dec 20 21:22	9°♋18'43	max. Earth dist.	13514 May 31 08:56	17°♌50'21 1.71776 AU	
evening set	13512 Jan 07 16:20	3°♋18'48				
inferior conj	13512 Jan 11 08:05	1°♋02'59 -7°53'00	superior conj	13514 Jun 03 08:57	21°♌35'30 -1°25'08	
minimum elong	13512 Jan 11 16:31	0°♋49'45 7°50'55	minimum elong	13514 Jun 03 03:43	21°♌19'07 1°26'04	
min. Earth dist.	13512 Jan 11 11:52	0°♋57'03 0.28880 AU		13514 Jun 10 02:13	0°♍	
	13512 Jan 13 00:23	30°♋♊		13514 Jul 04 00:43	0°♎	
morning rise	13512 Jan 15 16:46	28°♊22'21	evening rise	13514 Jul 13 09:08	11°♎43'12	
direct	13512 Feb 01 17:40	22°♊50'18		13514 Jul 27 23:22	0°♎	
greatest brilliancy	13512 Feb 12 07:32	24°♊53'21 -4.8m	asc. node	13514 Aug 06 18:45	12°♎15'49	
asc. node	13512 Feb 20 05:51	28°♊40'07		13514 Aug 20 23:56	0°♎	
	13512 Feb 22 11:22	0°♋		13514 Sep 14 04:11	0°♍	
morning max el	13512 Mar 21 23:57	23°♋41'17 45°53'11		13514 Oct 08 14:48	0°♊	
	13512 Mar 28 07:32	0°♈		13514 Nov 02 12:25	0°♊	
	13512 Apr 25 00:33	0°♑	desc. node	13514 Nov 26 13:30	28°♊06'23	
	13512 May 20 21:05	0°♋		13514 Nov 28 05:15	0°♋	
desc. node	13512 Jun 11 06:07	25°♋37'29		13514 Dec 25 09:58	0°♈	
	13512 Jun 14 20:39	0°♌	evening max el	13515 Jan 11 12:00	17°♈17'44 45°54'38	
	13512 Jul 09 08:19	0°♍		13515 Jan 25 13:37	0°♑	
	13512 Aug 02 13:18	0°♎	greatest brilliancy	13515 Feb 19 13:42	15°♑43'19 -4.8m	
	13512 Aug 26 15:12	0°♎	retrograde	13515 Mar 01 10:45	17°♑30'39	
	13512 Sep 19 16:20	0°♎	evening set	13515 Mar 16 07:19	13°♑13'34	
morning set	13512 Sep 22 14:58	3°♎40'13	asc. node	13515 Mar 19 15:03	11°♑18'25	
asc. node	13512 Oct 01 21:55	15°♎15'14	inferior conj	13515 Mar 22 15:23	9°♑26'22 0°45'09	
	13512 Oct 13 17:50	0°♍	minimum elong	13515 Mar 22 13:41	9°♑29'02 0°44'34	
			min. Earth dist.	13515 Mar 22 21:12	9°♑17'15 0.28179 AU	
superior conj	13512 Oct 31 05:36	21°♍46'28 1°03'31	morning rise	13515 Mar 28 19:32	5°♑43'06	
minimum elong	13512 Oct 30 19:21	21°♍14'34 1°03'55	direct	13515 Apr 12 19:19	1°♑17'22	
max. Earth dist.	13512 Nov 02 12:06	24°♍35'58 1.72381 AU	greatest brilliancy	13515 Apr 23 11:14	3°♑23'08 -4.8m	
	13512 Nov 06 20:20	0°♊		13515 May 29 11:29	0°♋	
	13512 Dec 01 00:42	0°♊	morning max el	13515 Jun 01 18:09	3°♋13'25 46°35'12	
evening rise	13512 Dec 07 11:28	7°♊58'38		13515 Jun 26 21:43	0°♌	
	13512 Dec 25 08:14	0°♋	desc. node	13515 Jul 09 17:26	14°♌35'37	
	13513 Jan 18 20:05	0°♈		13515 Jul 22 21:49	0°♍	
desc. node	13513 Jan 21 12:06	3°♈15'05		13515 Aug 16 22:43	0°♎	
	13513 Feb 12 12:44	0°♑		13515 Sep 10 13:08	0°♎	
	13513 Mar 09 10:20	0°♋		13515 Oct 04 23:01	0°♎	
	13513 Apr 03 14:30	0°♌		13515 Oct 29 06:49	0°♍	
	13513 Apr 29 07:31	0°♍	asc. node	13515 Oct 30 12:12	1°♍30'46	
asc. node	13513 May 14 07:59	16°♍58'22		13515 Nov 22 13:21	0°♊	
	13513 May 26 07:18	0°♎	morning set	13515 Dec 03 17:13	13°♊48'30	
evening max el	13513 Jun 07 09:18	12°♎29'13 46°40'38		13515 Dec 16 19:18	0°♊	
	13513 Jun 26 13:25	0°♎				
greatest brilliancy	13513 Jul 17 12:40	12°♎51'53 -4.9m	superior conj	13516 Jan 09 14:23	29°♊25'06 1°18'12	
retrograde	13513 Jul 27 11:55	14°♎43'05	minimum elong	13516 Jan 09 21:55	29°♊48'20 1°19'00	
evening set	13513 Aug 11 20:59	10°♎05'49		13516 Jan 10 01:42	0°♋	
inferior conj	13513 Aug 17 03:28	6°♎58'16 4°21'05	max. Earth dist.	13516 Jan 10 19:37	0°♋55'22 1.73100 AU	
minimum elong	13513 Aug 17 12:37	6°♎44'16 4°17'56		13516 Feb 03 09:25	0°♈	
min. Earth dist.	13513 Aug 17 09:56	6°♎48'23 0.26964 AU	evening rise	13516 Feb 16 01:59	15°♈37'18	
morning rise	13513 Aug 23 04:21	3°♎26'00	desc. node	13516 Feb 19 02:01	19°♈18'48	
	13513 Aug 31 15:43	30°♎♌		13516 Feb 27 18:35	0°♑	
desc. node	13513 Sep 03 10:41	29°♎27'16		13516 Mar 23 04:34	0°♋	
direct	13513 Sep 06 21:24	29°♎12'57		13516 Apr 16 14:53	0°♌	
	13513 Sep 13 07:05	0°♎		13516 May 11 02:34	0°♍	
greatest brilliancy	13513 Sep 16 21:24	1°♎04'38 -4.9m		13516 Jun 04 18:43	0°♎	
	13513 Oct 25 21:23	0°♎	asc. node	13516 Jun 10 18:49	7°♎14'15	
morning max el	13513 Oct 26 17:25	0°♎48'56 46°24'57		13516 Jun 29 21:16	0°♎	

	13516 Jul 25 22:12	0°♄				13519 Mar 14 11:21	0°♑	
evening max el	13516 Aug 18 16:59	25°♄24'21	46°41'09	max. Earth dist.		13519 Mar 18 15:21	5°♑08'49	1.72880 AU
	13516 Aug 23 08:45	0°♌		desc. node		13519 Mar 18 16:39	5°♑12'52	
greatest brilliancy	13516 Sep 27 01:35	25°♌41'26	-4.8m					
desc. node	13516 Sep 30 19:49	26°♌55'53		superior conj		13519 Mar 20 05:49	7°♑07'40	-0°03'47
retrograde	13516 Oct 08 00:29	27°♌55'28		minimum elong		13519 Mar 20 04:55	7°♑04'54	0°03'46
evening set	13516 Oct 23 21:13	23°♌03'12		behind sun begin		13519 Mar 19 05:32	5°♑52'38	
min. Earth dist.	13516 Oct 28 08:42	20°♌23'08	0.27944 AU	behind sun end		13519 Mar 21 04:18	8°♑17'10	
inferior conj	13516 Oct 29 05:30	19°♌51'05	-6°26'57			13519 Apr 07 17:23	0°♄	
minimum elong	13516 Oct 28 18:50	20°♌07'31	6°23'56	evening rise		13519 Apr 27 19:09	24°♄54'07	
morning rise	13516 Nov 02 16:52	17°♌09'17				13519 May 01 21:37	0°♐	
direct	13516 Nov 19 05:39	11°♌56'30				13519 May 26 00:23	0°♄	
greatest brilliancy	13516 Nov 28 19:06	13°♌35'59	-4.8m			13519 Jun 19 03:08	0°♏	
	13516 Dec 24 21:19	0°♈		asc. node		13519 Jul 09 07:05	25°♏00'05	
morning max el	13517 Jan 07 04:16	12°♈02'39	45°46'57			13519 Jul 13 08:12	0°♐	
asc. node	13517 Jan 21 22:17	26°♈55'34				13519 Aug 06 18:39	0°♄	
	13517 Jan 24 20:14	0°♄				13519 Aug 31 15:16	0°♌	
	13517 Feb 20 22:40	0°♌				13519 Sep 26 07:52	0°♈	
	13517 Mar 18 15:57	0°♈				13519 Oct 23 21:54	0°♄	
	13517 Apr 12 16:34	0°♑		desc. node		13519 Oct 29 05:14	5°♄20'06	
	13517 May 07 07:00	0°♄		evening max el		13519 Oct 30 02:36	6°♄12'41	46°12'52
desc. node	13517 May 13 19:11	8°♄00'10				13519 Nov 27 18:13	0°♌	
	13517 May 31 14:14	0°♐		greatest brilliancy		13519 Dec 08 07:56	5°♌14'11	-4.8m
	13517 Jun 24 16:17	0°♄		retrograde		13519 Dec 18 13:02	7°♌07'32	
morning set	13517 Jul 08 06:59	17°♄01'52		evening set		13520 Jan 05 10:43	1°♌04'07	
	13517 Jul 18 15:17	0°♏				13520 Jan 07 04:28	30°♈♄	
	13517 Aug 11 13:18	0°♐		inferior conj		13520 Jan 08 23:56	28°♄51'53	-8°01'55
superior conj	13517 Aug 17 02:50	6°♐58'41	-0°40'35	minimum elong		13520 Jan 09 07:53	28°♄39'23	7°59'58
minimum elong	13517 Aug 17 12:14	7°♐28'11	0°40'39	min. Earth dist.		13520 Jan 09 02:45	28°♄47'28	0.28881 AU
max. Earth dist.	13517 Aug 18 01:15	8°♐08'59	1.71515 AU	morning rise		13520 Jan 13 05:08	26°♄16'09	
asc. node	13517 Sep 03 09:10	28°♐36'22		direct		13520 Jan 30 09:47	20°♄39'40	
	13517 Sep 04 11:54	0°♄		greatest brilliancy		13520 Feb 09 21:51	22°♄40'50	-4.7m
evening rise	13517 Sep 25 14:36	26°♄23'07		asc. node		13520 Feb 19 07:55	27°♄19'27	
	13517 Sep 28 12:10	0°♌				13520 Feb 23 11:28	0°♌	
	13517 Oct 22 15:19	0°♈		morning max el		13520 Mar 19 14:51	21°♌27'05	45°52'00
	13517 Oct 22 15:19	0°♈				13520 Mar 28 02:55	0°♈	
	13517 Nov 15 23:14	0°♄				13520 Apr 24 15:19	0°♑	
	13517 Dec 10 14:35	0°♌				13520 May 20 10:05	0°♄	
desc. node	13517 Dec 24 01:03	16°♌09'09		desc. node		13520 Jun 10 07:56	25°♄05'56	
	13518 Jan 04 16:23	0°♈				13520 Jun 14 08:46	0°♐	
	13518 Jan 30 08:33	0°♑				13520 Jul 08 19:55	0°♄	
	13518 Feb 25 23:56	0°♄				13520 Aug 02 00:34	0°♏	
evening max el	13518 Mar 23 22:57	27°♄07'50	46°10'41			13520 Aug 26 02:14	0°♐	
	13518 Mar 26 22:05	0°♐				13520 Sep 19 03:13	0°♄	
asc. node	13518 Apr 16 00:17	17°♐16'51		morning set		13520 Sep 20 04:36	1°♄19'10	
greatest brilliancy	13518 May 02 20:05	26°♐42'55	-4.8m	asc. node		13520 Sep 30 23:46	14°♄47'13	
retrograde	13518 May 12 13:28	28°♐28'50				13520 Oct 13 04:38	0°♌	
evening set	13518 May 30 02:56	22°♐32'44						
inferior conj	13518 Jun 02 07:55	20°♐34'41	8°52'24	superior conj		13520 Oct 28 20:47	19°♌30'56	1°01'06
minimum elong	13518 Jun 02 02:24	20°♐43'15	8°50'57	minimum elong		13520 Oct 28 10:29	18°♌58'53	1°01'27
min. Earth dist.	13518 Jun 02 11:58	20°♐28'24	0.27638 AU	max. Earth dist.		13520 Oct 31 03:48	22°♌22'03	1.72346 AU
morning rise	13518 Jun 05 01:49	18°♐53'13				13520 Nov 06 07:05	0°♈	
direct	13518 Jun 23 06:20	12°♐34'17				13520 Nov 30 11:26	0°♄	
greatest brilliancy	13518 Jul 03 04:47	14°♐26'40	-4.9m	evening rise		13520 Dec 05 03:32	5°♄46'40	
	13518 Jul 27 07:56	0°♄				13520 Dec 24 19:04	0°♌	
desc. node	13518 Aug 06 03:31	8°♄54'53				13521 Jan 18 07:09	0°♈	
morning max el	13518 Aug 12 19:54	15°♄28'22	46°57'31	desc. node		13521 Jan 20 13:57	2°♈46'58	
	13518 Aug 26 17:16	0°♏				13521 Feb 12 00:12	0°♑	
	13518 Sep 22 10:29	0°♐				13521 Mar 08 22:26	0°♄	
	13518 Oct 18 00:07	0°♄				13521 Apr 03 03:40	0°♐	
	13518 Nov 12 01:29	0°♌				13521 Apr 28 22:35	0°♄	
asc. node	13518 Nov 27 01:30	18°♌08'24		asc. node		13521 May 13 09:49	16°♄16'30	
	13518 Dec 06 19:44	0°♈				13521 May 26 02:45	0°♏	
	13518 Dec 31 09:08	0°♄		evening max el		13521 Jun 04 21:52	10°♏03'32	46°39'48
	13519 Jan 24 19:25	0°♌				13521 Jun 27 04:12	0°♐	
morning set	13519 Feb 10 13:34	20°♌38'03		greatest brilliancy		13521 Jul 15 03:27	10°♐28'22	-4.9m
	13519 Feb 18 03:57	0°♈		retrograde		13521 Jul 25 00:06	12°♐17'37	

evening set	13521 Aug 09 12:45	7° \cap 36'27		superior conj	13524 Jan 07 07:06	27° Z 15'07	1°19'33
inferior conj	13521 Aug 14 16:12	4° \cap 33'14	4°42'22	minimum elong	13524 Jan 07 14:07	27° Z 36'49	1°20'24
minimum elong	13521 Aug 15 01:53	4° \cap 18'24	4°39'05	max. Earth dist.	13524 Jan 08 14:18	28° Z 51'30	1.73090 AU
min. Earth dist.	13521 Aug 15 00:05	4° \cap 21'10	0.26968 AU		13524 Jan 09 12:29	0° \approx	
morning rise	13521 Aug 20 14:59	1° \cap 03'18			13524 Feb 02 20:16	0° X	
	13521 Aug 22 16:19	30° R Ω		evening rise	13524 Feb 13 18:00	13° X 25'27	
desc. node	13521 Sep 02 12:45	26° Ω 51'39		desc. node	13524 Feb 18 03:58	18° X 51'15	
direct	13521 Sep 04 09:34	26° Ω 47'29			13524 Feb 27 05:35	0° Υ	
greatest brilliancy	13521 Sep 14 11:08	28° Ω 40'11	-4.9m		13524 Mar 22 15:45	0° B	
	13521 Sep 17 17:38	0° \cap			13524 Apr 16 02:23	0° Π	
morning max el	13521 Oct 24 06:02	28° \cap 25'01	46°26'32		13524 May 10 14:33	0° D	
	13521 Oct 25 20:33	0° $\underline{\text{D}}$			13524 Jun 04 07:29	0° Ω	
	13521 Nov 23 05:03	0° M		asc. node	13524 Jun 09 20:42	6° Ω 40'51	
	13521 Dec 19 14:13	0° Z			13524 Jun 29 11:23	0° \cap	
asc. node	13521 Dec 24 13:32	5° Z 47'29			13524 Jul 25 15:05	0° $\underline{\text{D}}$	
	13522 Jan 14 01:42	0° Z		evening max el	13524 Aug 16 07:57	23° $\underline{\text{D}}$ 05'13	46°41'48
	13522 Feb 08 00:47	0° \approx			13524 Aug 23 09:49	0° M	
	13522 Mar 04 16:20	0° X		greatest brilliancy	13524 Sep 24 15:33	23° M 21'13	-4.8m
	13522 Mar 29 02:59	0° Υ		desc. node	13524 Sep 29 21:49	24° M 57'59	
desc. node	13522 Apr 15 07:07	21° Υ 11'39		retrograde	13524 Oct 05 15:44	25° M 36'27	
morning set	13522 Apr 22 04:16	29° Υ 42'58		evening set	13524 Oct 21 08:24	20° M 48'46	
	13522 Apr 22 09:46	0° B		min. Earth dist.	13524 Oct 25 22:38	18° M 05'04	0.27888 AU
	13522 May 16 12:58	0° Π		inferior conj	13524 Oct 26 19:42	17° M 32'40	-6°11'24
max. Earth dist.	13522 May 28 18:46	15° Π 16'59	1.71816 AU	minimum elong	13524 Oct 26 09:03	17° M 49'04	6°08'18
				morning rise	13524 Oct 31 10:10	14° M 46'55	
superior conj	13522 May 31 21:28	19° Π 10'28	-1°24'10	direct	13524 Nov 16 19:44	9° M 38'50	
minimum elong	13522 May 31 15:21	18° Π 51'20	1°25'06	greatest brilliancy	13524 Nov 26 08:28	11° M 18'15	-4.8m
	13522 Jun 09 13:09	0° D			13524 Dec 25 03:16	0° Z	
	13522 Jul 03 11:43	0° Ω		morning max el	13525 Jan 04 19:30	9° Z 48'49	45°47'39
evening rise	13522 Jul 10 20:25	9° Ω 13'37		asc. node	13525 Jan 21 00:23	26° Z 13'22	
	13522 Jul 27 10:28	0° \cap			13525 Jan 24 13:43	0° Z	
asc. node	13522 Aug 05 20:39	11° \cap 46'56			13525 Feb 20 12:45	0° \approx	
	13522 Aug 20 11:11	0° $\underline{\text{D}}$			13525 Mar 18 04:34	0° X	
	13522 Sep 13 15:41	0° M			13525 Apr 12 04:25	0° Υ	
	13522 Oct 08 02:43	0° Z			13525 May 06 18:25	0° B	
	13522 Nov 02 01:08	0° Z		desc. node	13525 May 12 20:58	7° B 30'42	
desc. node	13522 Nov 25 15:20	27° Z 31'15			13525 May 31 01:23	0° Π	
	13522 Nov 27 19:31	0° \approx			13525 Jun 24 03:17	0° D	
	13522 Dec 25 03:55	0° X		morning set	13525 Jul 05 19:01	14° D 34'58	
evening max el	13523 Jan 09 02:17	15° X 02'15	45°54'48		13525 Jul 18 02:13	0° Ω	
	13523 Jan 25 22:07	0° Υ			13525 Aug 11 00:12	0° \cap	
greatest brilliancy	13523 Feb 17 04:35	13° Υ 28'49	-4.8m				
retrograde	13523 Feb 27 01:44	15° Υ 16'33		superior conj	13525 Aug 14 15:08	4° \cap 32'35	-0°43'56
evening set	13523 Mar 13 22:59	10° Υ 58'01		minimum elong	13525 Aug 15 01:07	5° \cap 03'54	0°44'02
asc. node	13523 Mar 18 17:05	8° Υ 10'12		max. Earth dist.	13525 Aug 15 14:18	5° \cap 45'13	1.71502 AU
inferior conj	13523 Mar 20 06:38	7° Υ 11'39	0°23'28	asc. node	13525 Sep 02 11:03	28° \cap 08'12	
minimum elong	13523 Mar 20 05:45	7° Υ 13'03	0°23'10		13525 Sep 03 22:47	0° $\underline{\text{D}}$	
min. Earth dist.	13523 Mar 20 13:03	7° Υ 01'38	0.28205 AU	evening rise	13525 Sep 23 04:43	24° $\underline{\text{D}}$ 03'24	
morning rise	13523 Mar 26 11:59	3° Υ 26'58			13525 Sep 27 23:05	0° M	
	13523 Apr 03 13:31	30° R X			13525 Oct 22 02:21	0° Z	
direct	13523 Apr 10 10:31	29° X 02'09			13525 Nov 15 10:29	0° Z	
	13523 Apr 17 13:27	0° Υ			13525 Dec 10 02:15	0° \approx	
greatest brilliancy	13523 Apr 21 03:53	1° Υ 09'25	-4.8m	desc. node	13525 Dec 23 02:58	15° \approx 39'03	
	13523 May 29 10:24	0° B			13526 Jan 04 04:46	0° X	
morning max el	13523 May 30 09:20	0° B 56'48	46°33'46		13526 Jan 29 22:17	0° Υ	
	13523 Jun 26 13:52	0° Π			13526 Feb 25 16:29	0° B	
desc. node	13523 Jul 08 19:26	13° Π 58'33		evening max el	13526 Mar 21 14:09	24° B 51'42	46°09'39
	13523 Jul 22 11:38	0° D			13526 Mar 26 22:50	0° Π	
	13523 Aug 16 11:23	0° Ω		asc. node	13526 Apr 15 02:12	16° Π 01'17	
	13523 Sep 10 01:09	0° \cap		greatest brilliancy	13526 Apr 30 08:57	24° Π 21'09	-4.8m
	13523 Oct 04 10:35	0° $\underline{\text{D}}$		retrograde	13526 May 10 03:05	26° Π 07'16	
	13523 Oct 28 18:01	0° M		evening set	13526 May 27 12:51	20° Π 17'00	
asc. node	13523 Oct 29 14:00	1° M 01'43		inferior conj	13526 May 30 21:41	18° Π 12'55	8°45'52
	13523 Nov 22 00:19	0° Z		minimum elong	13526 May 30 15:22	18° Π 22'44	8°44'18
morning set	13523 Dec 01 09:10	11° Z 35'36		min. Earth dist.	13526 May 31 00:56	18° Π 07'52	0.27654 AU
	13523 Dec 16 06:08	0° Z		morning rise	13526 Jun 02 17:51	16° Π 27'48	
				direct	13526 Jun 20 20:43	10° Π 12'28	

greatest brilliancy	13526 Jun 30 18:12	12°II03'55	-4.9m	evening rise	13528 Dec 02 19:55	3°Z36'10	
	13526 Jul 27 15:14	0°G			13528 Dec 24 05:45	0°A	
desc. node	13526 Aug 05 05:32	7°G59'26			13529 Jan 17 18:05	0°H	
morning max el	13526 Aug 10 09:42	13°G06'02	46°57'40	desc. node	13529 Jan 19 15:54	2°H19'30	
	13526 Aug 26 11:31	0°Q			13529 Feb 11 11:33	0°Y	
	13526 Sep 22 01:08	0°P			13529 Mar 08 10:27	0°B	
	13526 Oct 17 13:06	0°L			13529 Apr 02 16:45	0°II	
	13526 Nov 11 13:31	0°M			13529 Apr 28 13:40	0°G	
asc. node	13526 Nov 26 03:19	17°M38'29		asc. node	13529 May 12 11:47	15°G35'02	
	13526 Dec 06 07:11	0°J			13529 May 25 22:34	0°Q	
	13526 Dec 30 20:13	0°Z		evening max el	13529 Jun 02 09:52	7°Q37'06	46°38'57
	13527 Jan 24 06:15	0°A			13529 Jun 27 23:39	0°P	
morning set	13527 Feb 08 06:23	18°A28'56		greatest brilliancy	13529 Jul 12 17:57	8°P05'10	-4.9m
	13527 Feb 17 14:39	0°H		retrograde	13529 Jul 22 12:30	9°P53'08	
	13527 Mar 13 22:02	0°Y		evening set	13529 Aug 07 04:39	5°P07'27	
max. Earth dist.	13527 Mar 16 07:37	2°Y57'48	1.72906 AU	inferior conj	13529 Aug 12 04:59	2°P08'54	5°03'04
				minimum elong	13529 Aug 12 15:07	1°P53'23	4°59'43
superior conj	13527 Mar 17 20:53	4°Y52'53	-0°00'15	min. Earth dist.	13529 Aug 12 14:13	1°P54'47	0.26976 AU
minimum elong	13527 Mar 17 20:50	4°Y52'44	0°00'14		13529 Aug 15 18:23	30°RQ	
behind sun begin	13527 Mar 16 21:08	3°Y39'33		morning rise	13529 Aug 18 01:27	28°Q41'57	
behind sun end	13527 Mar 18 20:32	6°Y05'57		direct	13529 Sep 01 21:47	24°Q22'30	
desc. node	13527 Mar 17 18:24	4°Y45'12		desc. node	13529 Sep 01 14:43	24°Q22'36	
	13527 Apr 07 04:08	0°B		greatest brilliancy	13529 Sep 12 01:03	26°Q16'44	-4.9m
evening rise	13527 Apr 25 09:18	22°B35'13			13529 Sep 19 22:54	0°P	
	13527 May 01 08:31	0°II		morning max el	13529 Oct 21 19:21	26°P03'32	46°28'22
	13527 May 25 11:28	0°G			13529 Oct 25 18:25	0°L	
	13527 Jun 18 14:26	0°Q			13529 Nov 22 20:39	0°M	
asc. node	13527 Jul 08 09:03	24°Q30'28			13529 Dec 19 03:22	0°J	
	13527 Jul 12 19:49	0°P		asc. node	13529 Dec 23 15:36	5°J15'54	
	13527 Aug 06 06:47	0°L			13530 Jan 13 13:38	0°Z	
	13527 Aug 31 04:22	0°M			13530 Feb 07 12:02	0°A	
	13527 Sep 25 22:53	0°J			13530 Mar 04 03:14	0°H	
	13527 Oct 23 18:01	0°Z			13530 Mar 28 13:42	0°Y	
evening max el	13527 Oct 27 17:35	3°Z58'03	46°13'45	desc. node	13530 Apr 14 08:54	20°Y44'18	
desc. node	13527 Oct 28 07:04	4°Z31'05		morning set	13530 Apr 19 17:49	27°Y23'19	
	13527 Nov 29 04:43	0°A			13530 Apr 21 20:24	0°B	
greatest brilliancy	13527 Dec 05 23:44	3°A03'17	-4.8m		13530 May 15 23:33	0°II	
retrograde	13527 Dec 16 04:18	4°A56'25		max. Earth dist.	13530 May 26 07:38	12°II54'07	1.71854 AU
	13528 Jan 01 05:20	30°RZ					
evening set	13528 Jan 03 05:00	28°Z49'44		superior conj	13530 May 29 09:59	16°II46'24	-1°23'04
inferior conj	13528 Jan 06 15:54	26°Z40'56	-8°10'05	minimum elong	13530 May 29 03:02	16°II24'42	1°23'57
minimum elong	13528 Jan 06 23:17	26°Z29'18	8°08'17		13530 Jun 08 23:46	0°G	
min. Earth dist.	13528 Jan 06 18:00	26°Z37'37	0.28882 AU		13530 Jul 02 22:25	0°Q	
morning rise	13528 Jan 10 17:38	24°Z10'06		evening rise	13530 Jul 08 07:49	6°Q45'24	
direct	13528 Jan 28 01:33	18°Z29'05			13530 Jul 26 21:18	0°P	
greatest brilliancy	13528 Feb 07 12:53	20°Z29'06	-4.7m	asc. node	13530 Aug 04 22:32	11°P18'53	
asc. node	13528 Feb 18 09:54	26°Z01'05			13530 Aug 19 22:10	0°L	
	13528 Feb 24 05:07	0°A			13530 Sep 13 02:54	0°M	
morning max el	13528 Mar 17 05:04	19°A11'09	45°50'57		13530 Oct 07 14:20	0°J	
	13528 Mar 27 21:44	0°H			13530 Nov 01 13:31	0°Z	
	13528 Apr 24 05:51	0°Y		desc. node	13530 Nov 24 17:22	26°Z57'44	
	13528 May 19 22:54	0°B			13530 Nov 27 09:29	0°A	
desc. node	13528 Jun 09 09:51	24°B35'04			13530 Dec 24 21:46	0°H	
	13528 Jun 13 20:45	0°II		evening max el	13531 Jan 06 17:17	12°H50'04	45°54'57
	13528 Jul 08 07:25	0°G			13531 Jan 26 08:54	0°Y	
	13528 Aug 01 11:44	0°Q		greatest brilliancy	13531 Feb 14 19:01	11°Y15'23	-4.8m
	13528 Aug 25 13:09	0°P		retrograde	13531 Feb 24 17:15	13°Y03'53	
morning set	13528 Sep 17 18:32	28°P59'24		evening set	13531 Mar 11 14:56	8°Y43'45	
	13528 Sep 18 13:58	0°L		inferior conj	13531 Mar 17 21:57	4°Y58'15	0°01'49
asc. node	13528 Sep 30 01:31	14°L19'24		minimum elong	13531 Mar 17 21:52	4°Y58'22	0°01'49
	13528 Oct 12 15:15	0°M		transit middle	13531 Mar 17 21:52	4°Y58'22	0°01'49
				transit begin	13531 Mar 17 17:51	5°Y04'39	
superior conj	13528 Oct 26 12:17	17°M17'01	0°58'36	transit end	13531 Mar 18 01:54	4°Y52'04	
minimum elong	13528 Oct 26 02:00	16°M45'02	0°58'54	asc. node	13531 Mar 17 19:01	5°Y02'49	
max. Earth dist.	13528 Oct 28 18:36	20°M05'59	1.72310 AU	min. Earth dist.	13531 Mar 18 04:38	4°Y47'48	0.28236 AU
	13528 Nov 05 17:38	0°J		morning rise	13531 Mar 24 04:21	1°Y12'28	
	13528 Nov 29 22:00	0°Z			13531 Mar 26 12:01	30°R	

direct	13531 Apr 08 02:20	26° H 48'20		13533 Nov 14 21:28	0° Z	
greatest brilliancy	13531 Apr 18 20:13	28° H 56'33	-4.8m	13533 Dec 09 13:38	0° \approx	
	13531 Apr 21 09:19	0° Y		desc. node	13533 Dec 22 04:57	15° \approx 10'00
morning max el	13531 May 28 01:14	28° Y 43'10	46°32'16		13534 Jan 03 16:53	0° H
	13531 May 29 08:01	0° B			13534 Jan 29 11:46	0° Y
	13531 Jun 26 05:22	0° II			13534 Feb 25 08:53	0° B
desc. node	13531 Jul 07 21:30	13° II 23'01		evening max el	13534 Mar 19 04:32	22° B 34'57 46°08'36
	13531 Jul 22 00:56	0° G			13534 Mar 27 00:18	0° II
	13531 Aug 15 23:36	0° O		asc. node	13534 Apr 14 04:10	14° II 44'51
	13531 Sep 09 12:44	0° M		greatest brilliancy	13534 Apr 27 22:25	22° II 01'33 -4.8m
	13531 Oct 03 21:43	0° A		retrograde	13534 May 07 16:18	23° II 47'20
	13531 Oct 28 04:50	0° M		evening set	13534 May 24 22:47	18° II 03'07
asc. node	13531 Oct 28 15:52	0° M 34'05		inferior conj	13534 May 28 11:37	15° II 52'47 8°38'32
	13531 Nov 21 10:52	0° J		minimum elong	13534 May 28 04:34	16° II 03'47 8°36'48
morning set	13531 Nov 29 01:18	9° J 24'29		min. Earth dist.	13534 May 28 14:24	15° II 48'28 0.27673 AU
	13531 Dec 15 16:32	0° Z		morning rise	13534 May 31 10:18	14° II 03'37
				direct	13534 Jun 18 10:49	7° II 52'06
superior conj	13532 Jan 05 00:05	25° Z 07'20	1°20'46	greatest brilliancy	13534 Jun 28 08:26	9° II 43'14 -4.9m
minimum elong	13532 Jan 05 06:34	25° Z 27'22	1°21'39		13534 Jul 27 20:01	0° G
max. Earth dist.	13532 Jan 06 10:51	26° Z 54'43	1.73075 AU	desc. node	13534 Aug 04 07:29	7° G 05'35
	13532 Jan 08 22:50	0° \approx		morning max el	13534 Aug 07 22:43	10° G 42'16 46°57'39
	13532 Feb 02 06:40	0° H			13534 Aug 26 05:06	0° O
evening rise	13532 Feb 11 10:20	11° H 15'58			13534 Sep 21 15:24	0° M
desc. node	13532 Feb 17 05:45	18° H 24'35			13534 Oct 17 01:46	0° A
	13532 Feb 26 16:07	0° Y			13534 Nov 11 01:16	0° M
	13532 Mar 22 02:32	0° B		asc. node	13534 Nov 25 05:19	17° M 09'58
	13532 Apr 15 13:32	0° II			13534 Dec 05 18:21	0° J
	13532 May 10 02:14	0° G			13534 Dec 30 07:01	0° Z
	13532 Jun 03 19:58	0° O			13535 Jan 23 16:50	0° \approx
asc. node	13532 Jun 08 22:42	6° O 08'44		morning set	13535 Feb 05 23:16	16° \approx 20'42
	13532 Jun 29 01:17	0° M			13535 Feb 17 01:07	0° H
	13532 Jul 25 07:52	0° A			13535 Mar 13 08:29	0° Y
evening max el	13532 Aug 13 23:22	20° A 48'23	46°42'24	max. Earth dist.	13535 Mar 13 23:21	0° Y 45'52 1.72928 AU
	13532 Aug 23 11:45	0° M				
greatest brilliancy	13532 Sep 22 05:40	21° M 02'14	-4.8m	superior conj	13535 Mar 15 12:18	2° Y 40'01 0°03'15
desc. node	13532 Sep 28 23:46	22° M 56'22		minimum elong	13535 Mar 15 13:04	2° Y 42'23 0°03'17
retrograde	13532 Oct 03 06:58	23° M 18'04		behind sun begin	13535 Mar 14 13:39	1° Y 30'02
evening set	13532 Oct 18 19:42	18° M 35'03		behind sun end	13535 Mar 16 12:30	3° Y 54'43
min. Earth dist.	13532 Oct 23 12:31	15° M 47'43	0.27832 AU	desc. node	13535 Mar 16 20:13	4° Y 18'36
inferior conj	13532 Oct 24 09:48	15° M 15'00	-5°55'08		13535 Apr 06 14:38	0° B
minimum elong	13532 Oct 23 23:14	15° M 31'14	5°51'59	evening rise	13535 Apr 22 23:48	20° B 18'27
morning rise	13532 Oct 29 03:20	12° M 25'11			13535 Apr 30 19:08	0° II
direct	13532 Nov 14 10:01	7° M 22'04			13535 May 24 22:16	0° G
greatest brilliancy	13532 Nov 23 21:28	9° M 00'49	-4.8m		13535 Jun 18 01:31	0° O
	13532 Dec 25 06:46	0° J		asc. node	13535 Jul 07 10:54	24° O 01'02
morning max el	13533 Jan 02 10:23	7° J 35'18	45°48'29		13535 Jul 12 07:17	0° M
asc. node	13533 Jan 20 02:17	25° J 32'22			13535 Aug 05 18:52	0° A
	13533 Jan 24 06:22	0° Z			13535 Aug 30 17:29	0° M
	13533 Feb 20 02:14	0° \approx			13535 Sep 25 14:04	0° J
	13533 Mar 17 16:39	0° H			13535 Oct 23 14:46	0° Z
	13533 Apr 11 15:47	0° Y		evening max el	13535 Oct 25 07:25	1° Z 40'33 46°14'45
	13533 May 06 05:24	0° B		desc. node	13535 Oct 27 09:10	3° Z 41'56
desc. node	13533 May 11 22:55	7° B 03'01			13535 Dec 01 09:50	0° \approx
	13533 May 30 12:10	0° II		greatest brilliancy	13535 Dec 03 15:18	0° \approx 51'58 -4.8m
	13533 Jun 23 13:59	0° G		retrograde	13535 Dec 13 19:26	2° \approx 45'15
morning set	13533 Jul 03 06:45	12° G 08'04			13535 Dec 25 15:22	30° R Z
	13533 Jul 17 12:51	0° O		evening set	13535 Dec 31 22:57	26° Z 35'12
	13533 Aug 10 10:47	0° M		inferior conj	13536 Jan 04 07:40	24° Z 29'45 -8°17'40
				minimum elong	13536 Jan 04 14:27	24° Z 19'05 8°15'58
superior conj	13533 Aug 12 03:04	2° M 06'20	-0°47'13	min. Earth dist.	13536 Jan 04 09:12	24° Z 27'21 0.28881 AU
minimum elong	13533 Aug 12 13:33	2° M 39'12	0°47'21	morning rise	13536 Jan 08 06:00	22° Z 03'54
max. Earth dist.	13533 Aug 13 02:20	3° M 19'15	1.71487 AU	direct	13536 Jan 25 16:46	16° Z 18'04
asc. node	13533 Sep 01 12:45	27° M 40'29		greatest brilliancy	13536 Feb 05 04:12	18° Z 17'39 -4.7m
	13533 Sep 03 09:21	0° A		asc. node	13536 Feb 17 11:52	24° Z 45'01
evening rise	13533 Sep 20 18:29	21° A 43'30			13536 Feb 24 18:11	0° \approx
	13533 Sep 27 09:42	0° M		morning max el	13536 Mar 14 19:18	16° \approx 55'27 45°50'10
	13533 Oct 21 13:05	0° J			13536 Mar 27 15:56	0° H

	13536 Apr 23 20:04	0°♿		desc. node	13538 Nov 23 19:19	26°♿22'56	
	13536 May 19 11:29	0°♿			13538 Nov 26 23:55	0°♿	
desc. node	13536 Jun 08 11:51	24°♿05'05			13538 Dec 24 16:27	0°♿	
	13536 Jun 13 08:30	0°♿		evening max el	13539 Jan 04 09:00	10°♿38'42	45°55'09
	13536 Jul 07 18:43	0°♿			13539 Jan 27 00:07	0°♿	
	13536 Jul 31 22:44	0°♿		greatest brilliancy	13539 Feb 12 09:22	9°♿00'54	-4.8m
	13536 Aug 24 24:00	0°♿		retrograde	13539 Feb 22 08:42	10°♿49'53	
morning set	13536 Sep 15 08:02	26°♿38'15		evening set	13539 Mar 09 06:59	6°♿28'16	
	13536 Sep 18 00:41	0°♿		inferior conj	13539 Mar 15 13:06	2°♿43'39	-0°19'54
asc. node	13536 Sep 29 03:26	13°♿52'06		minimum elong	13539 Mar 15 13:52	2°♿42'28	0°19'36
	13536 Oct 12 01:53	0°♿		min. Earth dist.	13539 Mar 15 19:51	2°♿33'06	0.28264 AU
				asc. node	13539 Mar 16 21:03	1°♿53'49	
superior conj	13536 Oct 24 03:16	15°♿01'22	0°55'58		13539 Mar 20 00:01	30°♿	
minimum elong	13536 Oct 23 17:04	14°♿29'36	0°56'13	morning rise	13539 Mar 21 20:23	28°♿56'55	
max. Earth dist.	13536 Oct 26 06:54	17°♿42'00	1.72276 AU	direct	13539 Apr 05 18:19	24°♿33'33	
	13536 Nov 05 04:12	0°♿		greatest brilliancy	13539 Apr 16 11:45	26°♿41'46	-4.8m
	13536 Nov 29 08:35	0°♿			13539 Apr 23 10:48	0°♿	
evening rise	13536 Nov 30 11:53	1°♿24'24		morning max el	13539 May 25 17:06	26°♿28'41	46°30'44
	13536 Dec 23 16:27	0°♿			13539 May 29 05:10	0°♿	
	13537 Jan 17 05:04	0°♿			13539 Jun 25 20:55	0°♿	
desc. node	13537 Jan 18 17:41	1°♿51'28		desc. node	13539 Jul 06 23:17	12°♿46'16	
	13537 Feb 10 22:59	0°♿			13539 Jul 21 14:21	0°♿	
	13537 Mar 07 22:33	0°♿			13539 Aug 15 11:57	0°♿	
	13537 Apr 02 05:57	0°♿			13539 Sep 09 00:26	0°♿	
	13537 Apr 28 04:55	0°♿			13539 Oct 03 08:59	0°♿	
asc. node	13537 May 11 13:53	14°♿53'41		asc. node	13539 Oct 27 17:46	0°♿06'05	
	13537 May 25 18:54	0°♿			13539 Oct 27 15:48	0°♿	
evening max el	13537 May 30 22:14	5°♿12'11	46°38'20		13539 Nov 20 21:39	0°♿	
	13537 Jun 29 01:52	0°♿		morning set	13539 Nov 26 17:28	7°♿12'43	
greatest brilliancy	13537 Jul 10 07:45	5°♿41'54	-4.9m		13539 Dec 15 03:13	0°♿	
retrograde	13537 Jul 20 01:31	7°♿29'33					
evening set	13537 Aug 04 20:45	2°♿38'53		superior conj	13540 Jan 02 16:56	22°♿58'05	1°21'52
	13537 Aug 09 08:05	30°♿		minimum elong	13540 Jan 02 22:49	23°♿16'15	1°22'46
inferior conj	13537 Aug 09 17:53	29°♿45'02	5°23'08	max. Earth dist.	13540 Jan 04 06:56	24°♿55'31	1.73062 AU
minimum elong	13537 Aug 10 04:24	29°♿28'59	5°19'43		13540 Jan 08 09:31	0°♿	
min. Earth dist.	13537 Aug 10 03:58	29°♿29'38	0.26991 AU		13540 Feb 01 17:25	0°♿	
morning rise	13537 Aug 15 11:53	26°♿21'39		evening rise	13540 Feb 09 02:19	9°♿04'21	
direct	13537 Aug 30 10:31	21°♿57'58		desc. node	13540 Feb 16 07:33	17°♿56'53	
desc. node	13537 Aug 31 16:42	21°♿59'51			13540 Feb 26 03:00	0°♿	
greatest brilliancy	13537 Sep 09 14:36	23°♿53'16	-4.9m		13540 Mar 21 13:40	0°♿	
	13537 Sep 21 09:43	0°♿			13540 Apr 15 01:03	0°♿	
morning max el	13537 Oct 19 09:42	23°♿44'22	46°29'53		13540 May 09 14:18	0°♿	
	13537 Oct 25 15:34	0°♿			13540 Jun 03 08:54	0°♿	
	13537 Nov 22 12:10	0°♿		asc. node	13540 Jun 08 00:33	5°♿34'54	
	13537 Dec 18 16:35	0°♿			13540 Jun 28 15:39	0°♿	
asc. node	13537 Dec 22 17:29	4°♿43'23			13540 Jul 25 01:20	0°♿	
	13538 Jan 13 01:40	0°♿		evening max el	13540 Aug 11 14:59	18°♿31'15	46°43'04
	13538 Feb 06 23:25	0°♿			13540 Aug 23 15:31	0°♿	
	13538 Mar 03 14:15	0°♿		greatest brilliancy	13540 Sep 19 20:34	18°♿43'53	-4.8m
	13538 Mar 28 00:32	0°♿		desc. node	13540 Sep 28 01:49	20°♿49'53	
desc. node	13538 Apr 13 10:48	20°♿16'51		retrograde	13540 Sep 30 22:01	20°♿59'24	
morning set	13538 Apr 17 07:23	25°♿03'20		evening set	13540 Oct 16 07:26	16°♿21'06	
	13538 Apr 21 07:09	0°♿		min. Earth dist.	13540 Oct 21 02:48	13°♿30'01	0.27773 AU
	13538 May 15 10:17	0°♿		inferior conj	13540 Oct 22 00:04	12°♿57'17	-5°38'17
max. Earth dist.	13538 May 23 21:22	10°♿33'30	1.71887 AU	minimum elong	13540 Oct 21 13:41	13°♿13'17	5°35'07
				morning rise	13540 Oct 26 20:35	10°♿03'20	
superior conj	13538 May 26 22:33	14°♿22'08	-1°21'49	direct	13540 Nov 12 00:30	5°♿05'23	
minimum elong	13538 May 26 14:50	13°♿58'01	1°22'38	greatest brilliancy	13540 Nov 21 10:40	6°♿43'15	-4.8m
	13538 Jun 08 10:30	0°♿			13540 Dec 25 08:57	0°♿	
	13538 Jul 02 09:12	0°♿		morning max el	13540 Dec 31 00:29	5°♿19'05	45°49'08
evening rise	13538 Jul 05 19:30	4°♿17'50		asc. node	13541 Jan 19 04:12	24°♿51'00	
	13538 Jul 26 08:10	0°♿			13541 Jan 23 23:02	0°♿	
asc. node	13538 Aug 04 00:17	10°♿50'17			13541 Feb 19 15:59	0°♿	
	13538 Aug 19 09:13	0°♿			13541 Mar 17 05:05	0°♿	
	13538 Sep 12 14:13	0°♿			13541 Apr 11 03:31	0°♿	
	13538 Oct 07 02:08	0°♿			13541 May 05 16:45	0°♿	
	13538 Nov 01 02:11	0°♿		desc. node	13541 May 11 00:48	6°♿34'01	

	13541 May 29 23:19	0°♄			13543 Dec 05 23:58	0°♊	
	13541 Jun 23 01:01	0°♅		retrograde	13543 Dec 11 11:12	0°♊34'05	
morning set	13541 Jun 30 18:15	9°♅39'23			13543 Dec 16 19:22	30°♊	
	13541 Jul 16 23:51	0°♄		evening set	13543 Dec 29 16:51	24°♊20'48	
				inferior conj	13544 Jan 01 23:38	22°♊18'31	-8°24'22
superior conj	13541 Aug 09 15:02	29°♄39'01	-0°50'26	minimum elong	13544 Jan 02 05:48	22°♊08'50	8°22'48
minimum elong	13541 Aug 10 01:56	0°♄13'11	0°50'35	min. Earth dist.	13544 Jan 02 00:25	22°♊17'17	0.28878 AU
	13541 Aug 09 21:44	0°♄		morning rise	13544 Jan 05 18:46	19°♊57'35	
max. Earth dist.	13541 Aug 10 11:10	0°♄42'08	1.71469 AU	direct	13544 Jan 23 08:00	14°♊07'00	
asc. node	13541 Aug 31 14:41	27°♄12'20		greatest brilliancy	13544 Feb 02 19:40	16°♊06'29	-4.7m
	13541 Sep 02 20:16	0°♄		asc. node	13544 Feb 16 13:54	23°♊31'12	
evening rise	13541 Sep 18 08:16	19°♄22'35			13544 Feb 25 03:54	0°♊	
	13541 Sep 26 20:38	0°♄		morning max el	13544 Mar 12 10:17	14°♊41'14	45°49'17
	13541 Oct 21 00:06	0°♄			13544 Mar 27 09:53	0°♄	
	13541 Nov 14 08:43	0°♄			13544 Apr 23 10:23	0°♄	
	13541 Dec 09 01:19	0°♊			13544 May 19 00:19	0°♄	
desc. node	13541 Dec 21 06:45	14°♊39'29		desc. node	13544 Jun 07 13:38	23°♄33'31	
	13542 Jan 03 05:23	0°♄			13544 Jun 12 20:35	0°♄	
	13542 Jan 29 01:47	0°♄			13544 Jul 07 06:19	0°♅	
	13542 Feb 25 02:07	0°♄			13544 Jul 31 10:03	0°♄	
evening max el	13542 Mar 16 18:09	20°♄15'00	46°07'32		13544 Aug 24 11:06	0°♄	
	13542 Mar 27 03:57	0°♄		morning set	13544 Sep 12 21:21	24°♄15'40	
asc. node	13542 Apr 13 06:15	13°♄24'39			13544 Sep 17 11:39	0°♄	
greatest brilliancy	13542 Apr 25 12:16	19°♄40'51	-4.8m	asc. node	13544 Sep 28 05:16	13°♄23'51	
retrograde	13542 May 05 05:19	21°♄26'08			13544 Oct 11 12:45	0°♄	
evening set	13542 May 22 08:30	15°♄48'00					
inferior conj	13542 May 26 01:32	13°♄31'23	8°30'11	superior conj	13544 Oct 21 18:12	12°♄44'42	0°53'13
minimum elong	13542 May 25 17:48	13°♄43'27	8°28'18	minimum elong	13544 Oct 21 08:07	12°♄13'20	0°53'27
min. Earth dist.	13542 May 26 04:10	13°♄27'16	0.27693 AU	max. Earth dist.	13544 Oct 23 19:19	15°♄17'38	1.72244 AU
morning rise	13542 May 29 03:01	11°♄37'47			13544 Nov 04 15:01	0°♄	
direct	13542 Jun 16 00:25	5°♄30'15		evening rise	13544 Nov 28 04:04	29°♄12'35	
greatest brilliancy	13542 Jun 25 23:12	7°♄21'53	-4.9m		13544 Nov 28 19:24	0°♄	
	13542 Jul 27 23:32	0°♅			13544 Dec 23 03:22	0°♊	
desc. node	13542 Aug 03 09:30	6°♅11'46			13545 Jan 16 16:13	0°♄	
morning max el	13542 Aug 05 11:20	8°♅16'15	46°57'40	desc. node	13545 Jan 17 19:34	1°♄23'14	
	13542 Aug 25 22:42	0°♄			13545 Feb 10 10:33	0°♄	
	13542 Sep 21 05:52	0°♄			13545 Mar 07 10:49	0°♄	
	13542 Oct 16 14:42	0°♄			13545 Apr 01 19:24	0°♄	
	13542 Nov 10 13:17	0°♄			13545 Apr 27 20:39	0°♅	
asc. node	13542 Nov 24 07:09	16°♄40'07		asc. node	13545 May 10 15:43	14°♅10'13	
	13542 Dec 05 05:47	0°♄			13545 May 25 16:22	0°♄	
	13542 Dec 29 18:04	0°♄		evening max el	13545 May 28 11:28	2°♄48'33	46°37'28
	13543 Jan 23 03:40	0°♊			13545 Jun 30 16:16	0°♄	
morning set	13543 Feb 03 16:24	14°♊12'22		greatest brilliancy	13545 Jul 07 20:57	3°♄16'34	-4.9m
	13543 Feb 16 11:52	0°♄		retrograde	13545 Jul 17 14:53	5°♄04'13	
max. Earth dist.	13543 Mar 11 16:20	28°♄36'51	1.72958 AU	evening set	13545 Aug 02 12:46	0°♄08'28	
	13543 Mar 12 19:16	0°♄			13545 Aug 02 18:45	30°♄	
				inferior conj	13545 Aug 07 06:31	27°♄19'24	5°42'39
superior conj	13543 Mar 13 03:49	0°♄26'25	0°06'43	minimum elong	13545 Aug 07 17:21	27°♄02'53	5°39'13
minimum elong	13543 Mar 13 05:23	0°♄31'16	0°06'44	min. Earth dist.	13545 Aug 07 17:10	27°♄03'10	0.27006 AU
behind sun begin	13543 Mar 12 07:36	29°♄23'58		morning rise	13545 Aug 12 21:49	24°♄00'00	
behind sun end	13543 Mar 14 03:10	1°♄38'33		direct	13545 Aug 27 23:29	19°♄31'51	
desc. node	13543 Mar 15 22:10	3°♄51'18		desc. node	13545 Aug 30 18:46	19°♄41'10	
	13543 Apr 06 01:31	0°♄		greatest brilliancy	13545 Sep 07 03:18	21°♄27'30	-4.9m
evening rise	13543 Apr 20 14:14	18°♄00'21			13545 Sep 22 11:05	0°♄	
	13543 Apr 30 06:09	0°♄		morning max el	13545 Oct 17 00:28	21°♄25'29	46°31'29
	13543 May 24 09:28	0°♅			13545 Oct 25 12:13	0°♄	
	13543 Jun 17 12:58	0°♄			13545 Nov 22 03:35	0°♄	
asc. node	13543 Jul 06 12:43	23°♄30'17			13545 Dec 18 05:49	0°♄	
	13543 Jul 11 19:09	0°♄		asc. node	13545 Dec 21 19:19	4°♄10'34	
	13543 Aug 05 07:22	0°♄			13546 Jan 12 13:44	0°♄	
	13543 Aug 30 07:04	0°♄			13546 Feb 06 10:50	0°♊	
	13543 Sep 25 05:50	0°♄			13546 Mar 03 01:17	0°♄	
evening max el	13543 Oct 22 21:12	29°♄22'05	46°15'56		13546 Mar 27 11:23	0°♄	
	13543 Oct 23 12:39	0°♄		desc. node	13546 Apr 12 12:39	19°♄49'18	
desc. node	13543 Oct 26 11:10	2°♄50'47		morning set	13546 Apr 14 21:31	22°♄45'14	
greatest brilliancy	13543 Dec 01 06:39	28°♄39'55	-4.8m		13546 Apr 20 17:54	0°♄	

	13546 May 14 21:02	0°♄		inferior conj	13548 Oct 19 13:59	10°♄38'38	-5°20'32
max. Earth dist.	13546 May 21 11:15	8°♄13'23	1.71926 AU	minimum elong	13548 Oct 19 03:50	10°♄54'16	5°17'23
				morning rise	13548 Oct 24 13:24	7°♄40'28	
superior conj	13546 May 24 11:19	11°♄58'24	-1°20'24	direct	13548 Nov 09 14:07	2°♄47'42	
minimum elong	13546 May 24 02:54	11°♄32'06	1°21'11	greatest brilliancy	13548 Nov 19 00:06	4°♄25'09	-4.8m
	13546 Jun 07 21:19	0°♄			13548 Dec 25 09:41	0°♄	
	13546 Jul 01 20:07	0°♄		morning max el	13548 Dec 28 13:28	3°♄00'19	45°50'01
evening rise	13546 Jul 03 07:00	1°♄49'16		asc. node	13549 Jan 18 06:19	24°♄11'09	
	13546 Jul 25 19:13	0°♄			13549 Jan 23 15:10	0°♄	
asc. node	13546 Aug 03 02:12	10°♄21'39			13549 Feb 19 05:21	0°♄	
	13546 Aug 18 20:26	0°♄			13549 Mar 16 17:09	0°♄	
	13546 Sep 12 01:41	0°♄			13549 Apr 10 14:53	0°♄	
	13546 Oct 06 14:04	0°♄			13549 May 05 03:44	0°♄	
	13546 Oct 31 15:01	0°♄		desc. node	13549 May 10 02:34	6°♄05'45	
desc. node	13546 Nov 22 21:10	25°♄47'31			13549 May 29 10:05	0°♄	
	13546 Nov 26 14:33	0°♄			13549 Jun 22 11:40	0°♄	
	13546 Dec 24 11:39	0°♄		morning set	13549 Jun 28 06:15	7°♄13'29	
evening max el	13547 Jan 02 01:16	8°♄28'47	45°55'26		13549 Jul 16 10:25	0°♄	
	13547 Jan 27 20:20	0°♄					
greatest brilliancy	13547 Feb 10 00:31	6°♄48'11	-4.8m	superior conj	13549 Aug 07 03:23	27°♄14'09	-0°53'30
retrograde	13547 Feb 20 00:11	8°♄36'53		minimum elong	13549 Aug 07 14:36	27°♄49'19	0°53'42
evening set	13547 Mar 06 23:31	4°♄13'57		max. Earth dist.	13549 Aug 07 18:49	28°♄02'33	1.71460 AU
inferior conj	13547 Mar 13 04:33	0°♄30'22	-0°41'24		13549 Aug 09 08:17	0°♄	
minimum elong	13547 Mar 13 06:07	0°♄27'55	0°40'49	asc. node	13549 Aug 30 16:32	26°♄45'03	
min. Earth dist.	13547 Mar 13 11:26	0°♄19'37	0.28286 AU		13549 Sep 02 06:50	0°♄	
	13547 Mar 13 23:58	30°♄		evening rise	13549 Sep 15 21:59	17°♄02'22	
asc. node	13547 Mar 15 23:05	28°♄47'08			13549 Sep 26 07:17	0°♄	
morning rise	13547 Mar 19 12:27	26°♄42'46			13549 Oct 20 10:54	0°♄	
direct	13547 Apr 03 10:31	22°♄20'21			13549 Nov 13 19:45	0°♄	
greatest brilliancy	13547 Apr 14 03:08	24°♄27'55	-4.8m		13549 Dec 08 12:48	0°♄	
	13547 Apr 24 18:56	0°♄		desc. node	13549 Dec 20 08:41	14°♄09'59	
morning max el	13547 May 23 08:25	24°♄13'44	46°29'04		13550 Jan 02 17:40	0°♄	
	13547 May 29 01:17	0°♄			13550 Jan 28 15:37	0°♄	
	13547 Jun 25 12:00	0°♄			13550 Feb 24 19:22	0°♄	
desc. node	13547 Jul 06 01:19	12°♄10'58		evening max el	13550 Mar 14 07:23	17°♄55'19	46°06'39
	13547 Jul 21 03:33	0°♄			13550 Mar 27 08:56	0°♄	
	13547 Aug 15 00:12	0°♄		asc. node	13550 Apr 12 08:11	12°♄02'54	
	13547 Sep 08 12:07	0°♄		greatest brilliancy	13550 Apr 23 02:03	17°♄21'33	-4.8m
	13547 Oct 02 20:15	0°♄		retrograde	13550 May 02 18:43	19°♄06'52	
asc. node	13547 Oct 26 19:33	29°♄37'49		evening set	13550 May 19 18:15	13°♄34'35	
	13547 Oct 27 02:44	0°♄		inferior conj	13550 May 23 15:35	11°♄11'47	8°20'57
	13547 Nov 20 08:21	0°♄		minimum elong	13550 May 23 07:13	11°♄24'50	8°18'55
morning set	13547 Nov 24 09:16	5°♄00'02		min. Earth dist.	13550 May 23 18:05	11°♄07'53	0.27709 AU
	13547 Dec 14 13:47	0°♄		morning rise	13550 May 26 20:04	9°♄13'38	
				direct	13550 Jun 13 13:54	3°♄10'05	
superior conj	13547 Dec 31 09:39	20°♄48'50	1°22'51	greatest brilliancy	13550 Jun 23 14:14	5°♄02'44	-4.9m
minimum elong	13547 Dec 31 14:53	21°♄05'01	1°23'48		13550 Jul 28 00:49	0°♄	
max. Earth dist.	13548 Jan 02 02:24	22°♄54'46	1.73043 AU	desc. node	13550 Aug 02 11:31	5°♄20'43	
	13548 Jan 07 20:04	0°♄		morning max el	13550 Aug 03 00:46	5°♄53'58	46°57'45
	13548 Feb 01 04:01	0°♄			13550 Aug 25 15:20	0°♄	
evening rise	13548 Feb 06 18:19	6°♄53'15			13550 Sep 20 19:39	0°♄	
desc. node	13548 Feb 15 09:29	17°♄30'05			13550 Oct 16 03:06	0°♄	
	13548 Feb 25 13:44	0°♄			13550 Nov 10 00:53	0°♄	
	13548 Mar 21 00:37	0°♄		asc. node	13550 Nov 23 09:00	16°♄11'27	
	13548 Apr 14 12:20	0°♄			13550 Dec 04 16:52	0°♄	
	13548 May 09 02:08	0°♄			13550 Dec 29 04:49	0°♄	
	13548 Jun 02 21:36	0°♄			13551 Jan 22 14:11	0°♄	
asc. node	13548 Jun 07 02:29	5°♄02'01		morning set	13551 Feb 01 09:08	12°♄03'48	
	13548 Jun 28 05:56	0°♄			13551 Feb 15 22:17	0°♄	
	13548 Jul 24 19:00	0°♄		max. Earth dist.	13551 Mar 09 11:10	26°♄34'40	1.72983 AU
evening max el	13548 Aug 09 05:44	16°♄12'03	46°43'17				
	13548 Aug 23 21:10	0°♄		superior conj	13551 Mar 10 19:02	28°♄13'05	0°10'11
greatest brilliancy	13548 Sep 17 11:52	16°♄25'14	-4.8m	minimum elong	13551 Mar 10 21:24	28°♄20'23	0°10'12
desc. node	13548 Sep 27 03:49	18°♄37'24		behind sun begin	13551 Mar 10 02:54	27°♄23'13	
retrograde	13548 Sep 28 12:12	18°♄39'33		behind sun end	13551 Mar 11 15:55	29°♄17'33	
evening set	13548 Oct 13 18:55	14°♄05'55			13551 Mar 12 05:40	0°♄	
min. Earth dist.	13548 Oct 18 17:13	11°♄10'36	0.27716 AU	desc. node	13551 Mar 14 23:53	3°♄24'28	

	13551 Apr 05 12:01	0°♄		morning max el	13553 Oct 14 15:10	19°♍07'29	46°33'06
evening rise	13551 Apr 18 04:41	15°♄43'39			13553 Oct 25 07:47	0°♌	
	13551 Apr 29 16:47	0°♍			13553 Nov 21 18:22	0°♍	
	13551 May 23 20:17	0°♎			13553 Dec 17 18:33	0°♎	
	13551 Jun 17 00:02	0°♏		asc. node	13553 Dec 20 21:23	3°♎39'43	
asc. node	13551 Jul 05 14:42	23°♏01'20			13554 Jan 12 01:24	0°♏	
	13551 Jul 11 06:36	0°♐			13554 Feb 05 21:56	0°♐	
	13551 Aug 04 19:26	0°♑			13554 Mar 02 12:05	0°♑	
	13551 Aug 29 20:14	0°♒			13554 Mar 26 22:01	0°♒	
	13551 Sep 24 21:17	0°♓		desc. node	13554 Apr 11 14:25	19°♒22'05	
evening max el	13551 Oct 20 11:35	27°♓06'25	46°16'57	morning set	13554 Apr 12 11:25	20°♒27'01	
	13551 Oct 23 10:51	0°♈			13554 Apr 20 04:29	0°♈	
desc. node	13551 Oct 25 13:01	1°♈59'43			13554 May 14 07:35	0°♉	
greatest brilliancy	13551 Nov 28 21:08	26°♈27'39	-4.8m	max. Earth dist.	13554 May 18 22:51	5°♉46'51	1.71961 AU
retrograde	13551 Dec 09 03:12	28°♈23'24					
evening set	13551 Dec 27 10:16	22°♈07'04		superior conj	13554 May 21 23:52	9°♉34'42	-1°18'50
inferior conj	13551 Dec 30 15:22	20°♈07'34	-8°30'16	minimum elong	13554 May 21 14:51	9°♉06'31	1°19'35
minimum elong	13551 Dec 30 20:52	19°♈58'58	8°28'49		13554 Jun 07 07:55	0°♊	
min. Earth dist.	13551 Dec 30 15:08	20°♈07'57	0.28877 AU	evening rise	13554 Jun 30 18:20	29°♊20'58	
morning rise	13552 Jan 03 07:28	17°♈51'27			13554 Jul 01 06:48	0°♋	
direct	13552 Jan 20 23:23	11°♈56'10			13554 Jul 25 06:03	0°♌	
greatest brilliancy	13552 Jan 31 10:44	13°♈55'26	-4.7m	asc. node	13554 Aug 02 04:03	9°♌53'28	
asc. node	13552 Feb 15 15:52	22°♈20'00			13554 Aug 18 07:26	0°♍	
	13552 Feb 25 10:37	0°♎			13554 Sep 11 12:58	0°♍	
morning max el	13552 Mar 10 02:03	12°♎29'51	45°48'31		13554 Oct 06 01:49	0°♎	
	13552 Mar 27 03:06	0°♏			13554 Oct 31 03:41	0°♏	
	13552 Apr 23 00:12	0°♐		desc. node	13554 Nov 21 23:12	25°♏13'09	
	13552 May 18 12:41	0°♑			13554 Nov 26 05:07	0°♐	
desc. node	13552 Jun 06 15:35	23°♑03'46			13554 Dec 24 07:09	0°♑	
	13552 Jun 12 08:11	0°♒		evening max el	13554 Dec 30 16:59	6°♒18'13	45°55'34
	13552 Jul 06 17:29	0°♓			13555 Jan 28 23:51	0°♒	
	13552 Jul 30 20:55	0°♈		greatest brilliancy	13555 Feb 07 16:01	4°♒36'14	-4.8m
	13552 Aug 23 21:47	0°♉		retrograde	13555 Feb 17 14:58	6°♒24'01	
morning set	13552 Sep 10 11:00	21°♉55'25		evening set	13555 Mar 04 16:06	1°♒59'32	
	13552 Sep 16 22:11	0°♊			13555 Mar 08 01:53	30°♒	
asc. node	13552 Sep 27 07:01	12°♊56'40		inferior conj	13555 Mar 10 19:56	28°♒17'16	-1°02'47
	13552 Oct 10 23:10	0°♋		minimum elong	13555 Mar 10 22:17	28°♒13'34	1°01'54
				min. Earth dist.	13555 Mar 11 03:16	28°♒05'45	0.28315 AU
superior conj	13552 Oct 19 09:17	10°♋29'52	0°50'25	asc. node	13555 Mar 15 01:00	25°♒41'48	
minimum elong	13552 Oct 18 23:25	9°♋59'10	0°50'36	morning rise	13555 Mar 17 04:12	24°♒28'46	
max. Earth dist.	13552 Oct 21 10:13	13°♋02'16	1.72213 AU	direct	13555 Apr 01 02:21	20°♒07'08	
	13552 Nov 04 01:22	0°♌		greatest brilliancy	13555 Apr 11 18:57	22°♒14'21	-4.8m
evening rise	13552 Nov 25 20:25	27°♌02'30			13555 Apr 25 17:57	0°♓	
	13552 Nov 28 05:48	0°♈		morning max el	13555 May 20 22:52	21°♓56'24	46°27'25
	13552 Dec 22 13:56	0°♉			13555 May 28 20:50	0°♈	
	13553 Jan 16 03:05	0°♊			13555 Jun 25 02:55	0°♉	
desc. node	13553 Jan 16 21:29	0°♊55'59		desc. node	13555 Jul 05 03:19	11°♉35'51	
	13553 Feb 09 21:53	0°♋			13555 Jul 20 16:37	0°♊	
	13553 Mar 06 22:52	0°♌			13555 Aug 14 12:19	0°♋	
	13553 Apr 01 08:41	0°♍			13555 Sep 07 23:39	0°♌	
	13553 Apr 27 12:18	0°♎			13555 Oct 02 07:23	0°♍	
asc. node	13553 May 09 17:42	13°♎27'38		asc. node	13555 Oct 25 21:24	29°♍09'58	
	13553 May 25 14:15	0°♏			13555 Oct 26 13:34	0°♎	
evening max el	13553 May 26 01:33	0°♏28'10	46°36'40		13555 Nov 19 18:59	0°♏	
	13553 Jul 03 03:46	0°♐		morning set	13555 Nov 22 01:10	2°♏47'46	
greatest brilliancy	13553 Jul 05 10:00	0°♐52'18	-4.9m		13555 Dec 14 00:19	0°♑	
retrograde	13553 Jul 15 04:15	2°♐39'48					
	13553 Jul 26 15:19	30°♑		superior conj	13555 Dec 29 02:38	18°♑40'38	1°23'42
evening set	13553 Jul 31 04:55	27°♑39'05		minimum elong	13555 Dec 29 07:13	18°♑54'48	1°24'41
inferior conj	13553 Aug 04 19:10	24°♑54'46	6°01'31	max. Earth dist.	13555 Dec 30 20:39	20°♑50'27	1.73022 AU
minimum elong	13553 Aug 05 06:13	24°♑37'53	5°58'06		13556 Jan 07 06:33	0°♒	
min. Earth dist.	13553 Aug 05 06:06	24°♑38'03	0.27019 AU		13556 Jan 31 14:34	0°♑	
morning rise	13553 Aug 10 07:27	21°♑39'35		evening rise	13556 Feb 04 10:33	4°♑42'59	
direct	13553 Aug 25 12:50	17°♑06'55		desc. node	13556 Feb 14 11:15	17°♑02'48	
desc. node	13553 Aug 29 20:43	17°♑29'01			13556 Feb 25 00:27	0°♒	
greatest brilliancy	13553 Sep 04 15:33	19°♑02'08	-4.9m		13556 Mar 20 11:37	0°♈	
	13553 Sep 23 05:13	0°♓			13556 Apr 13 23:46	0°♉	

	13556 May 08 14:10	0°☿		13558 Dec 28 15:50	0°♄	
	13556 Jun 02 10:34	0°♌		13559 Jan 22 01:00	0°♊	
asc. node	13556 Jun 06 04:27	4°♌28'38	morning set	13559 Jan 30 02:07	9°♊54'56	
	13556 Jun 27 20:31	0°♍		13559 Feb 15 09:00	0°♋	
	13556 Jul 24 13:14	0°♎	max. Earth dist.	13559 Mar 07 07:26	24°♋35'54	1.73003 AU
evening max el	13556 Aug 06 19:28	13°♎49'58 46°43'43				
	13556 Aug 24 05:14	0°♏	superior conj	13559 Mar 08 10:39	25°♋59'55 0°13'35	
greatest brilliancy	13556 Sep 15 03:32	14°♏06'49 -4.8m	minimum elong	13559 Mar 08 13:47	26°♋09'36 0°13'37	
retrograde	13556 Sep 26 02:09	16°♏19'44	behind sun begin	13559 Mar 08 01:15	25°♋30'53	
desc. node	13556 Sep 26 05:44	16°♏19'42	behind sun end	13559 Mar 09 02:20	26°♋48'20	
evening set	13556 Oct 11 06:38	11°♏50'10		13559 Mar 11 16:24	0°♌	
min. Earth dist.	13556 Oct 16 08:05	8°♏50'36 0.27659 AU	desc. node	13559 Mar 14 01:43	2°♌56'58	
inferior conj	13556 Oct 17 03:58	8°♏19'57 -5°02'19		13559 Apr 04 22:49	0°♍	
minimum elong	13556 Oct 16 18:07	8°♏35'09 4°59'10	evening rise	13559 Apr 15 19:37	13°♍27'34	
morning rise	13556 Oct 22 06:12	5°♏17'38		13559 Apr 29 03:44	0°♎	
direct	13556 Nov 07 03:13	0°♏29'43		13559 May 23 07:26	0°☿	
greatest brilliancy	13556 Nov 16 14:15	2°♏07'32 -4.8m		13559 Jun 16 11:30	0°♌	
	13556 Dec 25 09:19	0°♐	asc. node	13559 Jul 04 16:31	22°♌30'35	
morning max el	13556 Dec 26 02:25	0°♐41'04 45°51'05		13559 Jul 10 18:31	0°♍	
asc. node	13557 Jan 17 08:10	23°♐30'54		13559 Aug 04 08:03	0°♎	
	13557 Jan 23 07:07	0°♑		13559 Aug 29 10:02	0°♏	
	13557 Feb 18 18:40	0°♒		13559 Sep 24 13:34	0°♐	
	13557 Mar 16 05:15	0°♋	evening max el	13559 Oct 18 02:54	24°♐51'34 46°18'12	
	13557 Apr 10 02:22	0°♌		13559 Oct 23 10:40	0°♑	
	13557 May 04 14:53	0°♍	desc. node	13559 Oct 24 15:06	1°♑06'45	
desc. node	13557 May 09 04:31	5°♍37'32	greatest brilliancy	13559 Nov 26 11:17	24°♑13'46 -4.8m	
	13557 May 28 21:05	0°♎	retrograde	13559 Dec 06 19:31	26°♑11'24	
	13557 Jun 21 22:36	0°☿	evening set	13559 Dec 25 03:32	19°♑52'24	
morning set	13557 Jun 25 17:44	4°☿45'05	inferior conj	13559 Dec 28 07:07	17°♑55'19 -8°35'34	
	13557 Jul 15 21:18	0°♌	minimum elong	13559 Dec 28 11:53	17°♑47'50 8°34'13	
			min. Earth dist.	13559 Dec 28 05:28	17°♑57'53 0.28870 AU	
superior conj	13557 Aug 04 15:16	24°♌46'56 -0°56'30	morning rise	13559 Dec 31 20:19	15°♑43'50	
minimum elong	13557 Aug 05 02:45	25°♌22'57 0°56'45	direct	13560 Jan 18 15:14	9°♑44'14	
max. Earth dist.	13557 Aug 05 00:15	25°♌15'06 1.71449 AU	greatest brilliancy	13560 Jan 29 01:05	11°♑42'33 -4.7m	
	13557 Aug 08 19:06	0°♍	asc. node	13560 Feb 14 17:50	21°♑09'45	
asc. node	13557 Aug 29 18:15	26°♍16'31		13560 Feb 25 15:40	0°♎	
	13557 Sep 01 17:40	0°♎	morning max el	13560 Mar 07 18:32	10°♎19'14 45°47'47	
evening rise	13557 Sep 13 11:20	14°♎40'17		13560 Mar 26 20:19	0°♋	
	13557 Sep 25 18:10	0°♏		13560 Apr 22 14:14	0°♌	
	13557 Oct 19 21:55	0°♐		13560 May 18 01:19	0°♍	
	13557 Nov 13 07:01	0°♑	desc. node	13560 Jun 05 17:32	22°♍33'10	
	13557 Dec 08 00:32	0°♒		13560 Jun 11 20:04	0°♎	
desc. node	13557 Dec 19 10:38	13°♒39'45		13560 Jul 06 04:57	0°☿	
	13558 Jan 02 06:16	0°♋		13560 Jul 30 08:10	0°♌	
	13558 Jan 28 05:50	0°♌		13560 Aug 23 08:52	0°♍	
	13558 Feb 24 13:14	0°♍	morning set	13560 Sep 08 00:23	19°♍32'54	
evening max el	13558 Mar 11 20:52	15°♍36'01 46°05'49		13560 Sep 16 09:10	0°♎	
	13558 Mar 27 16:22	0°♏	asc. node	13560 Sep 26 08:56	12°♎28'33	
asc. node	13558 Apr 11 10:09	10°♏37'58		13560 Oct 10 10:04	0°♏	
greatest brilliancy	13558 Apr 20 15:09	15°♏00'58 -4.8m				
retrograde	13558 Apr 30 08:28	16°♏47'10	superior conj	13560 Oct 16 23:51	8°♏11'48 0°47'28	
evening set	13558 May 17 03:56	11°♏20'22	minimum elong	13560 Oct 16 14:16	7°♏41'57 0°47'37	
inferior conj	13558 May 21 05:38	8°♏51'23 8°10'51	max. Earth dist.	13560 Oct 19 01:48	10°♏47'25 1.72181 AU	
minimum elong	13558 May 20 20:42	9°♏05'19 8°08'39		13560 Nov 03 12:13	0°♐	
min. Earth dist.	13558 May 21 07:47	8°♏48'04 0.27734 AU	evening rise	13560 Nov 23 12:21	24°♐49'41	
morning rise	13558 May 24 13:18	6°♏48'34		13560 Nov 27 16:40	0°♑	
direct	13558 Jun 11 03:53	0°♏48'56		13560 Dec 22 00:56	0°♒	
greatest brilliancy	13558 Jun 21 05:11	2°♏42'37 -4.9m	desc. node	13561 Jan 15 23:16	0°♋27'02	
	13558 Jul 28 01:23	0°☿		13561 Jan 15 14:22	0°♋	
morning max el	13558 Jul 31 15:17	3°☿33'09 46°57'38		13561 Feb 09 09:39	0°♌	
desc. node	13558 Aug 01 13:25	4°☿28'57		13561 Mar 06 11:24	0°♍	
	13558 Aug 25 08:09	0°♌		13561 Mar 31 22:28	0°♎	
	13558 Sep 20 09:46	0°♍		13561 Apr 27 04:36	0°☿	
	13558 Oct 15 15:51	0°♎	asc. node	13561 May 08 19:47	12°☿43'52	
	13558 Nov 09 12:48	0°♏	evening max el	13561 May 23 16:11	28°☿08'22 46°35'50	
asc. node	13558 Nov 22 10:58	15°♏42'13		13561 May 25 13:23	0°♌	
	13558 Dec 04 04:15	0°♐	greatest brilliancy	13561 Jul 02 23:26	28°♌28'15 -4.9m	

	13561 Jul 09 03:37	0°♍		13563 Dec 13 11:01	0°♊	
retrograde	13561 Jul 12 17:30	0°♍15'06				
	13561 Jul 16 05:51	30°♋♌	superior conj	13563 Dec 26 19:35	16°♊31'41	1°24'27
evening set	13561 Jul 28 21:23	25°♌09'39	minimum elong	13563 Dec 26 23:28	16°♊43'43	1°25'26
inferior conj	13561 Aug 02 08:03	22°♌29'59 6°19'31	max. Earth dist.	13563 Dec 28 12:49	18°♊39'07	1.73004 AU
minimum elong	13561 Aug 02 19:14	22°♌12'54 6°16'09		13564 Jan 06 17:14	0°♋	
min. Earth dist.	13561 Aug 02 19:16	22°♌12'51 0.27035 AU		13564 Jan 31 01:18	0°♋	
morning rise	13561 Aug 07 17:04	19°♌19'07	evening rise	13564 Feb 02 02:37	2°♋31'41	
direct	13561 Aug 23 02:24	14°♌41'59	desc. node	13564 Feb 13 13:04	16°♋35'10	
desc. node	13561 Aug 28 22:42	15°♌21'51		13564 Feb 24 11:20	0°♌	
greatest brilliancy	13561 Sep 02 04:03	16°♌36'23 -4.9m		13564 Mar 19 22:47	0°♌	
	13561 Sep 23 19:08	0°♍		13564 Apr 13 11:21	0°♍	
morning max el	13561 Oct 12 05:19	16°♍46'56 46°34'25		13564 May 08 02:21	0°♎	
	13561 Oct 25 03:13	0°♎		13564 Jun 01 23:42	0°♎	
	13561 Nov 21 09:25	0°♏	asc. node	13564 Jun 05 06:18	3°♎54'27	
	13561 Dec 17 07:39	0°♏		13564 Jun 27 11:22	0°♏	
asc. node	13561 Dec 19 23:14	3°♏07'02		13564 Jul 24 07:59	0°♎	
	13562 Jan 11 13:28	0°♊	evening max el	13564 Aug 04 08:52	11°♎26'55	46°44'11
	13562 Feb 05 09:23	0°♋		13564 Aug 24 16:13	0°♏	
	13562 Mar 01 23:12	0°♋	greatest brilliancy	13564 Sep 12 19:00	11°♏48'08	-4.9m
	13562 Mar 26 08:58	0°♌	retrograde	13564 Sep 23 16:13	14°♏00'20	
morning set	13562 Apr 10 01:32	18°♌08'34	desc. node	13564 Sep 25 07:49	13°♏57'03	
desc. node	13562 Apr 10 16:19	18°♌54'17	evening set	13564 Oct 08 18:36	9°♏34'10	
	13562 Apr 19 15:21	0°♌	min. Earth dist.	13564 Oct 13 23:06	6°♏30'46	0.27605 AU
	13562 May 13 18:27	0°♍	inferior conj	13564 Oct 14 18:04	6°♏01'35	-4°43'29
max. Earth dist.	13562 May 16 08:08	3°♍12'14 1.71996 AU	minimum elong	13564 Oct 14 08:34	6°♏16'12	4°40'23
			morning rise	13564 Oct 19 23:04	2°♏55'23	
superior conj	13562 May 19 12:49	7°♍11'22 -1°17'09		13564 Oct 26 03:04	30°♋♌	
minimum elong	13562 May 19 03:15	6°♍41'32 1°17'50	direct	13564 Nov 04 16:11	28°♌11'48	
	13562 Jun 06 18:49	0°♎	greatest brilliancy	13564 Nov 14 04:49	29°♌50'40	-4.8m
evening rise	13562 Jun 28 06:04	26°♎53'00		13564 Nov 14 15:49	0°♏	
	13562 Jun 30 17:47	0°♏	morning max el	13564 Dec 23 15:55	28°♏23'11	45°52'05
	13562 Jul 24 17:08	0°♏		13564 Dec 25 07:53	0°♏	
asc. node	13562 Aug 01 05:50	9°♏24'17	asc. node	13565 Jan 16 10:07	22°♏51'19	
	13562 Aug 17 18:41	0°♎		13565 Jan 22 22:48	0°♊	
	13562 Sep 11 00:32	0°♏		13565 Feb 18 07:56	0°♋	
	13562 Oct 05 13:56	0°♏		13565 Mar 15 17:21	0°♋	
	13562 Oct 30 16:48	0°♊		13565 Apr 09 13:50	0°♌	
desc. node	13562 Nov 21 01:08	24°♊37'10		13565 May 04 02:01	0°♌	
	13562 Nov 25 20:17	0°♋	desc. node	13565 May 08 06:23	5°♌09'07	
	13562 Dec 24 03:45	0°♋		13565 May 28 08:02	0°♍	
evening max el	13562 Dec 28 08:05	4°♋04'57 45°55'47		13565 Jun 21 09:28	0°♎	
	13563 Jan 30 16:25	0°♌	morning set	13565 Jun 23 05:12	2°♎16'48	
greatest brilliancy	13563 Feb 05 08:00	2°♌23'59 -4.8m		13565 Jul 15 08:06	0°♏	
retrograde	13563 Feb 15 05:33	4°♌10'41				
	13563 Mar 01 21:26	30°♋♋	superior conj	13565 Aug 02 03:10	22°♏19'49	-0°59'24
evening set	13563 Mar 02 08:56	29°♋44'19	minimum elong	13565 Aug 02 14:49	22°♏56'23	0°59'41
inferior conj	13563 Mar 08 11:26	26°♋03'49 -1°23'56	max. Earth dist.	13565 Aug 02 07:03	22°♏32'00	1.71445 AU
minimum elong	13563 Mar 08 14:34	25°♋58'53 1°22'48		13565 Aug 08 05:53	0°♏	
min. Earth dist.	13563 Mar 08 19:29	25°♋51'10 0.28341 AU	asc. node	13565 Aug 28 20:10	25°♏48'46	
asc. node	13563 Mar 14 03:03	22°♋38'03		13565 Sep 01 04:28	0°♎	
morning rise	13563 Mar 14 19:53	22°♋14'39	evening rise	13565 Sep 11 00:42	12°♎18'26	
direct	13563 Mar 29 17:46	17°♋53'29		13565 Sep 25 05:00	0°♏	
greatest brilliancy	13563 Apr 09 11:21	20°♋01'00 -4.8m		13565 Oct 19 08:51	0°♏	
	13563 Apr 26 11:08	0°♌		13565 Nov 12 18:12	0°♊	
morning max el	13563 May 18 12:48	19°♌37'16 46°25'48		13565 Dec 07 12:12	0°♋	
	13563 May 28 16:01	0°♌	desc. node	13565 Dec 18 12:28	13°♋09'27	
	13563 Jun 24 17:50	0°♍		13566 Jan 01 18:50	0°♋	
desc. node	13563 Jul 04 05:06	10°♍59'52		13566 Jan 27 20:10	0°♌	
	13563 Jul 20 05:46	0°♎		13566 Feb 24 07:32	0°♌	
	13563 Aug 14 00:34	0°♏	evening max el	13566 Mar 09 11:20	13°♌19'17	46°05'01
	13563 Sep 07 11:19	0°♏		13566 Mar 28 02:35	0°♍	
	13563 Oct 01 18:38	0°♎	asc. node	13566 Apr 10 12:15	9°♍10'24	
asc. node	13563 Oct 24 23:18	28°♎41'56	greatest brilliancy	13566 Apr 18 03:46	12°♍40'04	-4.8m
	13563 Oct 26 00:32	0°♏	retrograde	13566 Apr 27 22:40	14°♍27'38	
	13563 Nov 19 05:46	0°♏	evening set	13566 May 14 13:41	9°♍06'18	
morning set	13563 Nov 19 17:04	0°♏34'59	inferior conj	13566 May 18 19:40	6°♍31'11	7°59'56

minimum elong	13566 May 18 10:14	6°II45'50	7°57'34			13568 Nov 02 22:43	0°♊	
min. Earth dist.	13566 May 18 21:09	6°II28'53	0.27753 AU	evening rise		13568 Nov 21 04:20	22°♊37'52	
morning rise	13566 May 22 06:39	4°II23'36				13568 Nov 27 03:13	0°♋	
	13566 May 31 03:52	30°R♄				13568 Dec 21 11:38	0°♌	
direct	13566 Jun 08 18:25	28°♄28'20		desc. node		13569 Jan 15 01:11	29°♌59'31	
	13566 Jun 17 17:32	0°II				13569 Jan 15 01:20	0°♍	
greatest brilliancy	13566 Jun 18 19:33	0°II22'25	-4.9m			13569 Feb 08 21:05	0°♎	
	13566 Jul 28 00:35	0°♏				13569 Mar 05 23:35	0°♐	
morning max el	13566 Jul 29 06:23	1°♏14'34	46°57'24			13569 Mar 31 12:01	0°II	
desc. node	13566 Jul 31 15:28	3°♏39'12				13569 Apr 26 20:52	0°♑	
	13566 Aug 25 00:24	0°♒		asc. node		13569 May 07 21:36	11°♑59'39	
	13566 Sep 19 23:31	0°♓		evening max el		13569 May 21 06:03	25°♑47'18	46°34'45
	13566 Oct 15 04:19	0°♈				13569 May 25 13:21	0°♒	
	13566 Nov 09 00:28	0°♉		greatest brilliancy		13569 Jun 30 13:20	26°♒05'01	-4.9m
asc. node	13566 Nov 21 12:47	15°♉13'10		retrograde		13569 Jul 10 06:05	27°♒50'25	
	13566 Dec 03 15:23	0°♊		evening set		13569 Jul 26 13:46	22°♒40'17	
	13566 Dec 28 02:36	0°♋		inferior conj		13569 Jul 30 20:49	20°♒05'31	6°36'57
	13567 Jan 21 11:34	0°♌		minimum elong		13569 Jul 31 08:01	19°♒48'20	6°33'39
morning set	13567 Jan 27 19:18	7°♌47'26		min. Earth dist.		13569 Jul 31 08:34	19°♒47'29	0.27051 AU
	13567 Feb 14 19:31	0°♍		morning rise		13569 Aug 05 02:14	16°♒59'09	
max. Earth dist.	13567 Mar 05 04:05	22°♍38'57	1.73026 AU	direct		13569 Aug 20 15:20	12°♒17'17	
				desc. node		13569 Aug 28 00:46	13°♒20'09	
superior conj	13567 Mar 06 02:16	23°♍47'25	0°16'59	greatest brilliancy		13569 Aug 30 16:53	14°♒11'22	-4.9m
minimum elong	13567 Mar 06 06:09	23°♍59'25	0°17'01			13569 Sep 24 05:10	0°♓	
	13567 Mar 11 02:57	0°♎		morning max el		13569 Oct 09 18:14	14°♓24'02	46°35'49
desc. node	13567 Mar 13 03:39	2°♎30'22				13569 Oct 24 21:42	0°♈	
	13567 Apr 04 09:28	0°♏				13569 Nov 20 23:52	0°♉	
evening rise	13567 Apr 13 10:22	11°♏11'28				13569 Dec 16 20:16	0°♊	
	13567 Apr 28 14:31	0°II		asc. node		13569 Dec 19 01:06	2°♊35'41	
	13567 May 22 18:25	0°♏				13570 Jan 11 01:06	0°♋	
	13567 Jun 15 22:46	0°♒				13570 Feb 04 20:28	0°♌	
asc. node	13567 Jul 03 18:23	22°♒00'37				13570 Mar 01 09:57	0°♍	
	13567 Jul 10 06:13	0°♓				13570 Mar 25 19:32	0°♎	
	13567 Aug 03 20:28	0°♈		morning set		13570 Apr 07 15:55	15°♎52'05	
	13567 Aug 28 23:41	0°♉		desc. node		13570 Apr 09 18:09	18°♎27'27	
	13567 Sep 24 05:51	0°♊				13570 Apr 19 01:51	0°♏	
evening max el	13567 Oct 15 18:58	22°♊39'11	46°19'20			13570 May 13 04:58	0°II	
	13567 Oct 23 11:20	0°♋		max. Earth dist.		13570 May 13 17:49	0°II40'04	1.72037 AU
desc. node	13567 Oct 23 17:06	0°♌13'18						
greatest brilliancy	13567 Nov 24 01:33	22°♌00'46	-4.8m	superior conj		13570 May 17 01:53	4°II49'37	-1°15'19
retrograde	13567 Dec 04 11:48	23°♌59'52		minimum elong		13570 May 16 15:50	4°II18'17	1°15'57
evening set	13567 Dec 22 20:29	17°♌38'56				13570 Jun 06 05:24	0°♏	
inferior conj	13567 Dec 25 22:46	15°♌43'46	-8°40'06	evening rise		13570 Jun 25 17:38	24°♏25'27	
minimum elong	13567 Dec 26 02:50	15°♌37'25	8°38'50			13570 Jun 30 04:28	0°♒	
min. Earth dist.	13567 Dec 25 19:38	15°♌48'40	0.28858 AU			13570 Jul 24 03:57	0°♓	
morning rise	13567 Dec 29 09:16	13°♌36'28		asc. node		13570 Jul 31 07:45	8°♓56'21	
direct	13568 Jan 16 07:19	7°♌33'17				13570 Aug 17 05:41	0°♈	
greatest brilliancy	13568 Jan 26 14:49	9°♌29'52	-4.7m			13570 Sep 10 11:50	0°♉	
asc. node	13568 Feb 13 19:53	20°♌02'40				13570 Oct 05 01:47	0°♊	
	13568 Feb 25 18:27	0°♌				13570 Oct 30 05:40	0°♋	
morning max el	13568 Mar 05 10:30	8°♌08'30	45°47'00	desc. node		13570 Nov 20 03:00	24°♌01'43	
	13568 Mar 26 12:51	0°♍				13570 Nov 25 11:18	0°♌	
	13568 Apr 22 03:50	0°♎				13570 Dec 24 00:42	0°♍	
	13568 May 17 13:37	0°♏		evening max el		13570 Dec 25 22:12	1°♍50'17	45°56'02
desc. node	13568 Jun 04 19:20	22°♏02'52				13571 Feb 02 09:40	0°♎	
	13568 Jun 11 07:42	0°II		greatest brilliancy		13571 Feb 02 23:54	0°♎12'35	-4.8m
	13568 Jul 05 16:11	0°♏		retrograde		13571 Feb 12 20:07	1°♎58'34	
	13568 Jul 29 19:07	0°♒				13571 Feb 22 19:50	30°R♍	
	13568 Aug 22 19:38	0°♓		evening set		13571 Feb 28 01:50	27°♍29'44	
morning set	13568 Sep 05 13:38	17°♓11'02		inferior conj		13571 Mar 06 02:55	23°♍51'26	-1°45'01
	13568 Sep 15 19:48	0°♈		minimum elong		13571 Mar 06 06:49	23°♍45'19	1°43'36
asc. node	13568 Sep 25 10:45	12°♈01'11		min. Earth dist.		13571 Mar 06 11:48	23°♍37'30	0.28368 AU
	13568 Oct 09 20:36	0°♉		morning rise		13571 Mar 12 11:21	20°♍01'59	
				asc. node		13571 Mar 13 05:03	19°♍38'04	
superior conj	13568 Oct 14 14:19	5°♉54'27	0°44'26	direct		13571 Mar 27 08:52	15°♍40'42	
minimum elong	13568 Oct 14 05:06	5°♉25'42	0°44'33	greatest brilliancy		13571 Apr 07 04:08	17°♍49'19	-4.8m
max. Earth dist.	13568 Oct 16 18:40	8°♉37'35	1.72149 AU			13571 Apr 26 23:21	0°♎	

morning max el	13571 May 16 02:48	17° Υ 19'25	46°24'20		13573 Dec 06 23:50	0° \approx	
	13571 May 28 10:16	0° \mathcal{B}		desc. node	13573 Dec 17 14:25	12° \approx 39'37	
	13571 Jun 24 08:10	0° Π			13574 Jan 01 07:25	0° \mathcal{H}	
desc. node	13571 Jul 03 07:10	10° Π 25'58			13574 Jan 27 10:34	0° Υ	
	13571 Jul 19 18:31	0° \mathcal{E}			13574 Feb 24 02:13	0° \mathcal{B}	
	13571 Aug 13 12:28	0° Ω		evening max el	13574 Mar 07 02:32	11° \mathcal{B} 04'49	46°04'14
	13571 Sep 06 22:41	0° \mathcal{M}			13574 Mar 28 16:11	0° Π	
	13571 Oct 01 05:38	0° \mathcal{A}		asc. node	13574 Apr 09 14:08	7° Π 39'49	
asc. node	13571 Oct 24 01:05	28° \mathcal{A} 14'15		greatest brilliancy	13574 Apr 15 16:18	10° Π 19'36	-4.8m
	13571 Oct 25 11:15	0° \mathcal{M}		retrograde	13574 Apr 25 13:05	12° Π 08'23	
morning set	13571 Nov 17 08:35	28° \mathcal{M} 21'43		evening set	13574 May 11 23:35	6° Π 52'40	
	13571 Nov 18 16:18	0° \mathcal{A}		inferior conj	13574 May 16 09:43	4° Π 11'19	7°48'10
	13571 Dec 12 21:26	0° \mathcal{B}		minimum elong	13574 May 15 23:53	4° Π 26'35	7°45'39
				min. Earth dist.	13574 May 16 10:23	4° Π 10'16	0.27770 AU
superior conj	13571 Dec 24 12:21	14° \mathcal{B} 23'02	1°25'03	morning rise	13574 May 20 00:04	1° Π 58'47	
minimum elong	13571 Dec 24 15:31	14° \mathcal{B} 32'49	1°26'04		13574 May 23 12:15	30° \mathcal{R} \mathcal{B}	
max. Earth dist.	13571 Dec 26 04:50	16° \mathcal{B} 28'12	1.72985 AU	direct	13574 Jun 06 09:17	26° \mathcal{B} 08'18	
	13572 Jan 06 03:38	0° \approx		greatest brilliancy	13574 Jun 16 09:28	28° \mathcal{B} 01'57	-4.9m
	13572 Jan 30 11:47	0° \mathcal{H}			13574 Jun 20 23:34	0° Π	
evening rise	13572 Jan 30 18:43	0° \mathcal{H} 21'21		morning max el	13574 Jul 26 21:34	28° Π 56'37	46°57'12
desc. node	13572 Feb 12 15:00	16° \mathcal{H} 08'37			13574 Jul 27 22:42	0° \mathcal{E}	
	13572 Feb 23 22:00	0° Υ		desc. node	13574 Jul 30 17:28	2° \mathcal{E} 50'30	
	13572 Mar 19 09:43	0° \mathcal{B}			13574 Aug 24 16:16	0° Ω	
	13572 Apr 12 22:41	0° Π			13574 Sep 19 13:01	0° \mathcal{M}	
	13572 May 07 14:16	0° \mathcal{E}			13574 Oct 14 16:37	0° \mathcal{A}	
	13572 Jun 01 12:35	0° Ω			13574 Nov 08 12:03	0° \mathcal{M}	
asc. node	13572 Jun 04 08:15	3° Ω 21'21		asc. node	13574 Nov 20 14:39	14° \mathcal{M} 44'27	
	13572 Jun 27 02:05	0° \mathcal{M}			13574 Dec 03 02:29	0° \mathcal{A}	
	13572 Jul 24 02:59	0° \mathcal{A}			13574 Dec 27 13:24	0° \mathcal{B}	
evening max el	13572 Aug 01 22:12	9° \mathcal{A} 04'26	46°44'29		13575 Jan 20 22:10	0° \approx	
	13572 Aug 25 06:48	0° \mathcal{M}		morning set	13575 Jan 25 12:24	5° \approx 39'39	
greatest brilliancy	13572 Sep 10 09:41	9° \mathcal{M} 28'28	-4.9m		13575 Feb 14 06:03	0° \mathcal{H}	
retrograde	13572 Sep 21 06:22	11° \mathcal{M} 40'43		max. Earth dist.	13575 Mar 03 00:02	20° \mathcal{H} 39'51	1.73042 AU
desc. node	13572 Sep 24 09:47	11° \mathcal{M} 28'44					
evening set	13572 Oct 06 06:29	7° \mathcal{M} 17'22		superior conj	13575 Mar 03 17:52	21° \mathcal{H} 34'52	0°20'22
min. Earth dist.	13572 Oct 11 13:42	4° \mathcal{M} 10'40	0.27555 AU	minimum elong	13575 Mar 03 22:28	21° \mathcal{H} 49'04	0°20'23
inferior conj	13572 Oct 12 07:53	3° \mathcal{M} 42'45	-4°23'48		13575 Mar 10 13:31	0° Υ	
minimum elong	13572 Oct 11 22:50	3° \mathcal{M} 56'39	4°20'49	desc. node	13575 Mar 12 05:22	2° Υ 03'03	
morning rise	13572 Oct 17 15:39	0° \mathcal{M} 32'58			13575 Apr 03 20:08	0° \mathcal{B}	
	13572 Oct 18 15:54	30° \mathcal{R} \mathcal{A}		evening rise	13575 Apr 11 01:08	8° \mathcal{B} 55'24	
direct	13572 Nov 02 05:10	25° \mathcal{A} 53'16			13575 Apr 28 01:20	0° Π	
greatest brilliancy	13572 Nov 11 19:07	27° \mathcal{A} 33'21	-4.8m		13575 May 22 05:28	0° \mathcal{E}	
	13572 Nov 17 15:37	0° \mathcal{M}			13575 Jun 15 10:08	0° Ω	
morning max el	13572 Dec 21 06:08	26° \mathcal{M} 07'21	45°53'13	asc. node	13575 Jul 02 20:20	21° Ω 30'42	
	13572 Dec 25 05:25	0° \mathcal{A}			13575 Jul 09 18:02	0° \mathcal{M}	
asc. node	13573 Jan 15 12:13	22° \mathcal{A} 13'05			13575 Aug 03 08:59	0° \mathcal{A}	
	13573 Jan 22 14:03	0° \mathcal{B}			13575 Aug 28 13:28	0° \mathcal{M}	
	13573 Feb 17 20:52	0° \approx			13575 Sep 23 22:26	0° \mathcal{A}	
	13573 Mar 15 05:11	0° \mathcal{H}		evening max el	13575 Oct 13 11:03	20° \mathcal{A} 26'47	46°20'20
	13573 Apr 09 01:06	0° Υ		desc. node	13575 Oct 22 18:58	29° \mathcal{A} 18'31	
	13573 May 03 12:59	0° \mathcal{B}			13575 Oct 23 13:20	0° \mathcal{B}	
desc. node	13573 May 07 08:09	4° \mathcal{B} 40'56		greatest brilliancy	13575 Nov 21 16:19	19° \mathcal{B} 48'17	-4.8m
	13573 May 27 18:49	0° Π		retrograde	13575 Dec 02 03:46	21° \mathcal{B} 48'06	
morning set	13573 Jun 20 16:59	29° Π 50'10		evening set	13575 Dec 20 13:11	15° \mathcal{B} 26'01	
	13573 Jun 20 20:08	0° \mathcal{E}		inferior conj	13575 Dec 23 14:31	13° \mathcal{B} 32'08	-8°43'48
	13573 Jul 14 18:42	0° Ω		minimum elong	13575 Dec 23 17:49	13° \mathcal{B} 26'59	8°42'37
				min. Earth dist.	13575 Dec 23 10:01	13° \mathcal{B} 39'11	0.28844 AU
superior conj	13573 Jul 30 15:16	19° Ω 53'59	-1°02'10	morning rise	13575 Dec 26 22:33	11° \mathcal{B} 28'31	
minimum elong	13573 Jul 31 03:00	20° Ω 30'48	1°02'30	direct	13576 Jan 13 23:31	5° \mathcal{B} 22'21	
max. Earth dist.	13573 Jul 30 17:19	20° Ω 00'25	1.71442 AU	greatest brilliancy	13576 Jan 24 04:39	7° \mathcal{B} 16'55	-4.7m
	13573 Aug 07 16:28	0° \mathcal{M}		asc. node	13576 Feb 12 21:50	18° \mathcal{B} 56'49	
asc. node	13573 Aug 27 22:01	25° \mathcal{M} 21'17			13576 Feb 25 19:57	0° \approx	
	13573 Aug 31 15:05	0° \mathcal{A}		morning max el	13576 Mar 03 01:44	5° \approx 55'28	45°46'13
evening rise	13573 Sep 08 14:11	9° \mathcal{A} 57'25			13576 Mar 26 05:13	0° \mathcal{H}	
	13573 Sep 24 15:42	0° \mathcal{M}			13576 Apr 21 17:26	0° Υ	
	13573 Oct 18 19:43	0° \mathcal{A}			13576 May 17 01:59	0° \mathcal{B}	
	13573 Nov 12 05:20	0° \mathcal{B}		desc. node	13576 Jun 03 21:19	21° \mathcal{B} 32'49	

	13576 Jun 10 19:25	0°♊	retrograde	13579 Feb 10 11:11	29°♎46'21	
	13576 Jul 05 03:31	0°♋	evening set	13579 Feb 25 19:02	25°♎14'30	
	13576 Jul 29 06:13	0°♌	inferior conj	13579 Mar 03 18:34	21°♎38'39	-2°05'43
	13576 Aug 22 06:35	0°♍	minimum elong	13579 Mar 03 23:12	21°♎31'23	2°04'03
morning set	13576 Sep 03 03:01	14°♍48'59	min. Earth dist.	13579 Mar 04 04:03	21°♎23'47	0.28400 AU
	13576 Sep 15 06:36	0°♎	morning rise	13579 Mar 10 02:53	17°♎49'24	
asc. node	13576 Sep 24 12:30	11°♎33'04	asc. node	13579 Mar 12 06:59	16°♎41'27	
	13576 Oct 09 07:18	0°♏	direct	13579 Mar 25 00:19	13°♎27'22	
			greatest brilliancy	13579 Apr 04 21:14	15°♎37'25	-4.8m
superior conj	13576 Oct 12 05:01	3°♏37'22 0°41'20		13579 Apr 27 08:48	0°♏	
minimum elong	13576 Oct 11 20:14	3°♏09'57 0°41'26	morning max el	13579 May 13 17:45	15°♏02'54	46°22'47
max. Earth dist.	13576 Oct 14 11:17	6°♏26'31 1.72112 AU		13579 May 28 04:30	0°♐	
	13576 Nov 02 09:22	0°♑		13579 Jun 23 22:47	0°♊	
evening rise	13576 Nov 18 20:33	20°♑26'19	desc. node	13579 Jul 02 09:08	9°♊50'49	
	13576 Nov 26 13:55	0°♒		13579 Jul 19 07:35	0°♋	
	13576 Dec 20 22:31	0°♓		13579 Aug 13 00:42	0°♌	
desc. node	13577 Jan 14 03:06	29°♓31'21		13579 Sep 06 10:24	0°♍	
	13577 Jan 14 12:32	0°♈		13579 Sep 30 16:58	0°♎	
	13577 Feb 08 08:47	0°♏	asc. node	13579 Oct 23 02:57	27°♎45'36	
	13577 Mar 05 12:06	0°♐		13579 Oct 24 22:21	0°♏	
	13577 Mar 31 01:57	0°♊	morning set	13579 Nov 15 00:02	26°♏06'58	
	13577 Apr 26 13:44	0°♋		13579 Nov 18 03:13	0°♑	
asc. node	13577 May 06 23:37	11°♋14'36		13579 Dec 12 08:14	0°♒	
evening max el	13577 May 18 18:49	23°♋22'48 46°33'41				
	13577 May 25 14:52	0°♌	superior conj	13579 Dec 22 05:14	12°♒13'32	1°25'31
greatest brilliancy	13577 Jun 28 03:33	23°♌41'23 -4.9m	minimum elong	13579 Dec 22 07:40	12°♒21'04	1°26'33
retrograde	13577 Jul 07 18:10	25°♌25'08	max. Earth dist.	13579 Dec 23 21:33	14°♒18'13	1.72963 AU
evening set	13577 Jul 24 06:11	20°♌10'01		13580 Jan 05 14:24	0°♓	
inferior conj	13577 Jul 28 09:37	17°♌40'21 6°53'29	evening rise	13580 Jan 28 11:06	28°♓10'52	
minimum elong	13577 Jul 28 20:46	17°♌23'13 6°50'17		13580 Jan 29 22:35	0°♈	
min. Earth dist.	13577 Jul 28 22:09	17°♌21'05 0.27070 AU	desc. node	13580 Feb 11 16:46	15°♈40'32	
morning rise	13577 Aug 02 11:15	14°♌38'47		13580 Feb 23 08:59	0°♏	
direct	13577 Aug 18 03:53	9°♌51'34		13580 Mar 18 21:00	0°♐	
desc. node	13577 Aug 27 02:43	11°♌22'18		13580 Apr 12 10:25	0°♊	
greatest brilliancy	13577 Aug 28 06:18	11°♌46'03 -4.9m		13580 May 07 02:40	0°♋	
	13577 Sep 24 12:53	0°♍		13580 Jun 01 02:02	0°♌	
morning max el	13577 Oct 07 06:43	11°♍58'54 46°37'25	asc. node	13580 Jun 03 10:14	2°♌46'52	
	13577 Oct 24 16:03	0°♎		13580 Jun 26 17:29	0°♍	
	13577 Nov 20 14:24	0°♏		13580 Jul 23 23:06	0°♎	
	13577 Dec 16 09:03	0°♑	evening max el	13580 Jul 30 12:04	6°♎41'58 46°44'53	
asc. node	13577 Dec 18 03:09	2°♑04'18		13580 Aug 26 03:18	0°♏	
	13578 Jan 10 12:56	0°♒	greatest brilliancy	13580 Sep 07 23:45	7°♏06'29 -4.9m	
	13578 Feb 04 07:46	0°♓	retrograde	13580 Sep 18 20:51	9°♏19'20	
	13578 Feb 28 20:59	0°♈	desc. node	13580 Sep 23 11:44	8°♏53'12	
	13578 Mar 25 06:26	0°♏	evening set	13580 Oct 03 18:25	4°♏58'24	
morning set	13578 Apr 05 06:18	13°♏34'37	min. Earth dist.	13580 Oct 09 03:48	1°♏48'59 0.27507 AU	
desc. node	13578 Apr 08 19:57	17°♏59'27	inferior conj	13580 Oct 09 21:29	1°♏21'54 -4°03'34	
	13578 Apr 18 12:41	0°♐	minimum elong	13580 Oct 09 12:56	1°♏35'00 4°00'41	
max. Earth dist.	13578 May 11 05:29	28°♐13'05 1.72079 AU		13580 Oct 12 03:19	30°♐♊	
	13578 May 12 15:48	0°♊	morning rise	13580 Oct 15 07:59	28°♊08'52	
			direct	13580 Oct 30 18:30	23°♊32'48	
superior conj	13578 May 14 14:53	2°♊26'45 -1°13'20	greatest brilliancy	13580 Nov 09 08:45	25°♊13'39 -4.8m	
minimum elong	13578 May 14 04:27	1°♊54'11 1°13'56		13580 Nov 19 11:24	0°♋	
	13578 Jun 05 16:18	0°♋	morning max el	13580 Dec 18 20:57	23°♋51'44 45°54'27	
evening rise	13578 Jun 23 05:13	21°♋57'05		13580 Dec 25 02:38	0°♌	
	13578 Jun 29 15:29	0°♌	asc. node	13581 Jan 14 14:03	21°♌33'25	
	13578 Jul 23 15:07	0°♍		13581 Jan 22 05:27	0°♎	
asc. node	13578 Jul 30 09:35	8°♍27'01		13581 Feb 17 10:02	0°♏	
	13578 Aug 16 17:04	0°♎		13581 Mar 14 17:16	0°♐	
	13578 Sep 09 23:34	0°♏		13581 Apr 08 12:37	0°♑	
	13578 Oct 04 14:05	0°♑		13581 May 03 00:12	0°♒	
	13578 Oct 29 19:01	0°♒	desc. node	13581 May 06 10:06	4°♒12'28	
desc. node	13578 Nov 19 05:04	23°♒25'38		13581 May 27 05:54	0°♊	
	13578 Nov 25 02:53	0°♓	morning set	13581 Jun 18 04:38	27°♊22'06	
evening max el	13578 Dec 23 12:06	29°♓34'24 45°56'27		13581 Jun 20 07:08	0°♋	
	13578 Dec 23 22:45	0°♈		13581 Jul 14 05:39	0°♌	
greatest brilliancy	13579 Jan 31 15:22	28°♈00'15 -4.8m				

superior conj	13581 Jul 28 03:00	17°Ω25'47	-1°04'50	morning rise	13583 Dec 24 11:50	9°♄19'13	
minimum elong	13581 Jul 28 14:43	18°Ω02'33	1°05'13	direct	13584 Jan 11 15:03	3°♄10'29	
max. Earth dist.	13581 Jul 28 04:01	17°Ω28'59	1.71440 AU	greatest brilliancy	13584 Jan 21 18:36	5°♄03'19	-4.7m
	13581 Aug 07 03:26	0°♍		asc. node	13584 Feb 11 23:49	17°♄52'18	
asc. node	13581 Aug 26 23:44	24°♍52'20			13584 Feb 25 20:19	0°♍	
	13581 Aug 31 02:03	0°♌		morning max el	13584 Feb 29 15:56	3°♍39'32	45°45'35
evening rise	13581 Sep 06 03:14	7°♌33'54			13584 Mar 25 21:22	0°♋	
	13581 Sep 24 02:45	0°♍			13584 Apr 21 06:57	0°♍	
	13581 Oct 18 06:54	0°♌			13584 May 16 14:16	0°♌	
	13581 Nov 11 16:49	0°♄		desc. node	13584 Jun 02 23:13	21°♌02'47	
	13581 Dec 06 11:51	0°♍			13584 Jun 10 07:01	0°♍	
desc. node	13581 Dec 16 16:21	12°♍08'42			13584 Jul 04 14:44	0°♄	
	13581 Dec 31 20:25	0°♋			13584 Jul 28 17:13	0°Ω	
	13582 Jan 27 01:28	0°♍			13584 Aug 21 17:27	0°♍	
	13582 Feb 23 21:42	0°♌		morning set	13584 Aug 31 16:16	12°♍26'38	
evening max el	13582 Mar 04 18:03	8°♌50'41	46°03'32		13584 Sep 14 17:22	0°♌	
	13582 Mar 29 10:42	0°♍		asc. node	13584 Sep 23 14:25	11°♌05'33	
asc. node	13582 Apr 08 16:08	6°♍05'52			13584 Oct 08 17:59	0°♍	
greatest brilliancy	13582 Apr 13 05:19	7°♍59'39	-4.8m				
retrograde	13582 Apr 23 03:23	9°♍48'57		superior conj	13584 Oct 09 19:22	1°♍19'09	0°38'09
evening set	13582 May 09 09:47	4°♍39'03		minimum elong	13584 Oct 09 11:04	0°♍53'16	0°38'13
inferior conj	13582 May 13 23:54	1°♍51'30	7°35'42	max. Earth dist.	13584 Oct 12 00:55	4°♍06'05	1.72079 AU
minimum elong	13582 May 13 13:44	2°♍07'20	7°33'03		13584 Nov 01 20:01	0°♌	
min. Earth dist.	13582 May 13 23:51	1°♍51'35	0.27787 AU	evening rise	13584 Nov 16 12:15	18°♌13'07	
	13582 May 17 00:11	30°♌♄			13584 Nov 26 00:38	0°♄	
morning rise	13582 May 17 17:39	29°♌33'49			13584 Dec 20 09:23	0°♍	
direct	13582 Jun 04 00:15	23°♌48'28		desc. node	13585 Jan 13 04:52	29°♍02'49	
greatest brilliancy	13582 Jun 13 23:27	25°♌41'18	-4.9m		13585 Jan 13 23:43	0°♋	
	13582 Jun 22 20:42	0°♍			13585 Feb 07 20:28	0°♍	
morning max el	13582 Jul 24 12:04	26°♍36'13	46°56'38		13585 Mar 05 00:38	0°♌	
	13582 Jul 27 20:16	0°♄			13585 Mar 30 15:58	0°♍	
desc. node	13582 Jul 29 19:22	2°♄01'37			13585 Apr 26 06:49	0°♄	
	13582 Aug 24 08:11	0°Ω		asc. node	13585 May 06 01:41	10°♄29'37	
	13582 Sep 19 02:45	0°♍		evening max el	13585 May 16 06:56	20°♄57'23	46°32'48
	13582 Oct 14 05:10	0°♌			13585 May 25 17:32	0°Ω	
	13582 Nov 07 23:51	0°♍		greatest brilliancy	13585 Jun 25 17:47	21°Ω19'02	-4.9m
asc. node	13582 Nov 19 16:37	14°♍15'19		retrograde	13585 Jul 05 06:35	23°Ω01'40	
	13582 Dec 02 13:47	0°♌		evening set	13585 Jul 21 22:46	17°Ω41'14	
	13582 Dec 27 00:22	0°♄		inferior conj	13585 Jul 25 22:38	15°Ω16'48	7°09'01
	13583 Jan 20 08:58	0°♍		minimum elong	13585 Jul 26 09:39	14°Ω59'53	7°05'58
morning set	13583 Jan 23 05:20	3°♍30'40		min. Earth dist.	13585 Jul 26 11:52	14°Ω56'28	0.27092 AU
	13583 Feb 13 16:47	0°♋		morning rise	13585 Jul 30 20:23	12°Ω20'30	
max. Earth dist.	13583 Feb 28 17:55	18°♋33'51	1.73054 AU	direct	13585 Aug 15 16:22	7°Ω27'19	
				greatest brilliancy	13585 Aug 25 20:04	9°Ω22'40	-4.9m
superior conj	13583 Mar 01 09:34	19°♋22'09	0°23'41	desc. node	13585 Aug 26 04:41	9°Ω30'37	
minimum elong	13583 Mar 01 14:51	19°♋38'26	0°23'44		13585 Sep 24 17:53	0°♍	
	13583 Mar 10 00:15	0°♍		morning max el	13585 Oct 04 19:44	9°♍35'52	46°38'48
desc. node	13583 Mar 11 07:13	1°♍35'35			13585 Oct 24 09:40	0°♌	
	13583 Apr 03 06:55	0°♌			13585 Nov 20 04:34	0°♍	
evening rise	13583 Apr 08 16:04	6°♌39'32			13585 Dec 15 21:36	0°♌	
	13583 Apr 27 12:15	0°♍		asc. node	13585 Dec 17 04:58	1°♌32'47	
	13583 May 21 16:35	0°♄			13586 Jan 10 00:35	0°♄	
	13583 Jun 14 21:35	0°Ω			13586 Feb 03 18:53	0°♍	
asc. node	13583 Jul 01 22:10	21°Ω00'03			13586 Feb 28 07:47	0°♋	
	13583 Jul 09 06:00	0°♍			13586 Mar 24 17:04	0°♍	
	13583 Aug 02 21:43	0°♌		morning set	13586 Apr 02 20:34	11°♍17'32	
	13583 Aug 28 03:35	0°♍		desc. node	13586 Apr 07 21:49	17°♍32'23	
	13583 Sep 23 15:36	0°♌			13586 Apr 17 23:16	0°♌	
evening max el	13583 Oct 11 02:12	18°♌11'08	46°21'21	max. Earth dist.	13586 May 08 19:08	25°♌53'02	1.72119 AU
desc. node	13583 Oct 21 21:05	28°♌22'21					
	13583 Oct 23 17:17	0°♄		superior conj	13586 May 12 03:52	0°♍04'31	-1°11'14
greatest brilliancy	13583 Nov 19 07:35	17°♄35'20	-4.8m	minimum elong	13586 May 11 17:06	29°♌31'00	1°11'47
retrograde	13583 Nov 29 19:07	19°♄35'11			13586 May 12 02:25	0°♍	
evening set	13583 Dec 18 05:24	13°♄12'37			13586 Jun 05 02:58	0°♄	
inferior conj	13583 Dec 21 06:04	11°♄19'35	-8°46'49	evening rise	13586 Jun 20 17:03	19°♄30'26	
minimum elong	13583 Dec 21 08:33	11°♄15'41	8°45'41		13586 Jun 29 02:13	0°Ω	
min. Earth dist.	13583 Dec 21 00:28	11°♄28'22	0.28825 AU		13586 Jul 23 01:56	0°♍	

asc. node	13586 Jul 29 11:22	7°♎58'41		13589 Feb 16 22:39	0°♐	
	13586 Aug 16 04:04	0°♊		13589 Mar 14 04:54	0°♈	
	13586 Sep 09 10:54	0°♌		13589 Apr 07 23:44	0°♍	
	13586 Oct 04 02:02	0°♎		13589 May 02 11:03	0°♋	
	13586 Oct 29 08:06	0°♏		13589 May 05 11:57	3°♊44'49	
desc. node	13586 Nov 18 06:57	22°♏49'41		13589 May 26 16:35	0°♌	
	13586 Nov 24 18:24	0°♐		13589 Jun 15 16:09	24°♌54'59	
evening max el	13586 Dec 21 02:33	27°♐20'37	45°56'52	13589 Jun 19 17:44	0°♍	
	13586 Dec 23 21:27	0°♈		13589 Jul 13 16:13	0°♎	
greatest brilliancy	13587 Jan 29 06:13	25°♈47'45	-4.8m			
retrograde	13587 Feb 08 02:44	27°♈34'29		superior conj	13589 Jul 25 14:40	14°♎58'35 -1°07'23
evening set	13587 Feb 23 12:12	22°♈59'24		minimum elong	13589 Jul 26 02:17	15°♎35'01 1°07'49
inferior conj	13587 Mar 01 10:02	19°♈26'06	-2°26'13	max. Earth dist.	13589 Jul 25 14:28	14°♎57'56 1.71437 AU
minimum elong	13587 Mar 01 15:22	19°♈17'44	2°24'20		13589 Aug 06 14:00	0°♎
min. Earth dist.	13587 Mar 01 19:48	19°♈10'49	0.28432 AU	asc. node	13589 Aug 26 01:40	24°♎25'13
morning rise	13587 Mar 07 18:05	15°♈37'33			13589 Aug 30 12:39	0°♊
asc. node	13587 Mar 11 09:02	13°♈48'40		evening rise	13589 Sep 03 16:12	5°♊11'20
direct	13587 Mar 22 15:53	11°♈14'23			13589 Sep 23 13:23	0°♌
greatest brilliancy	13587 Apr 02 13:39	13°♈25'27	-4.8m		13589 Oct 17 17:39	0°♎
	13587 Apr 27 15:15	0°♍			13589 Nov 11 03:49	0°♏
morning max el	13587 May 11 09:27	12°♍49'18	46°21'15		13589 Dec 05 23:24	0°♐
	13587 May 27 21:57	0°♋		desc. node	13589 Dec 15 18:10	11°♐38'53
	13587 Jun 23 12:52	0°♌			13589 Dec 31 09:00	0°♈
desc. node	13587 Jul 01 10:55	9°♌16'26			13590 Jan 26 16:06	0°♍
	13587 Jul 18 20:11	0°♍			13590 Feb 23 17:22	0°♋
	13587 Aug 12 12:28	0°♎		evening max el	13590 Mar 02 09:21	6°♋37'00 46°02'35
	13587 Sep 05 21:37	0°♎			13590 Mar 30 11:25	0°♌
	13587 Sep 30 03:49	0°♊		asc. node	13590 Apr 07 18:12	4°♌29'17
asc. node	13587 Oct 22 04:50	27°♊18'32		greatest brilliancy	13590 Apr 10 19:05	5°♌41'20 -4.8m
	13587 Oct 24 08:56	0°♌		retrograde	13590 Apr 20 17:08	7°♌30'15
morning set	13587 Nov 12 15:42	23°♌54'19		evening set	13590 May 06 20:04	2°♌26'13
	13587 Nov 17 13:39	0°♎			13590 May 10 20:37	30°♋♋
	13587 Dec 11 18:35	0°♏		inferior conj	13590 May 11 14:07	29°♋32'41 7°22'30
				minimum elong	13590 May 11 03:40	29°♋48'59 7°19'42
superior conj	13587 Dec 19 22:04	10°♏05'07	1°25'52	min. Earth dist.	13590 May 11 13:47	29°♋33'13 0.27802 AU
minimum elong	13587 Dec 19 23:46	10°♏10'22	1°26'55	morning rise	13590 May 15 11:12	27°♋09'43
max. Earth dist.	13587 Dec 21 15:41	12°♏13'52	1.72948 AU	direct	13590 Jun 01 14:51	21°♋29'37
	13588 Jan 05 00:45	0°♐		greatest brilliancy	13590 Jun 11 13:53	23°♋21'59 -4.9m
evening rise	13588 Jan 26 03:17	26°♐00'55			13590 Jun 24 02:51	0°♌
	13588 Jan 29 09:02	0°♈		morning max el	13590 Jul 22 01:32	24°♌14'09 46°56'05
desc. node	13588 Feb 10 18:35	15°♈13'46			13590 Jul 27 16:42	0°♍
	13588 Feb 22 19:37	0°♍		desc. node	13590 Jul 28 21:25	1°♍14'54
	13588 Mar 18 07:57	0°♋			13590 Aug 23 23:30	0°♎
	13588 Apr 11 21:49	0°♌			13590 Sep 18 16:00	0°♎
	13588 May 06 14:45	0°♍			13590 Oct 13 17:18	0°♊
	13588 May 31 15:12	0°♎			13590 Nov 07 11:16	0°♌
asc. node	13588 Jun 02 12:04	2°♎12'54		asc. node	13590 Nov 18 18:24	13°♌46'43
	13588 Jun 26 08:43	0°♎			13590 Dec 02 00:41	0°♎
	13588 Jul 23 19:22	0°♊			13590 Dec 26 10:57	0°♏
evening max el	13588 Jul 28 03:03	4°♊23'42	46°45'20		13591 Jan 19 19:22	0°♐
	13588 Aug 27 06:18	0°♌		morning set	13591 Jan 20 22:39	1°♐24'05
greatest brilliancy	13588 Sep 05 13:54	4°♌46'25	-4.9m		13591 Feb 13 03:09	0°♈
retrograde	13588 Sep 16 11:48	6°♌59'42		max. Earth dist.	13591 Feb 26 11:21	16°♈27'34 1.73072 AU
desc. node	13588 Sep 22 13:48	6°♌14'12				
evening set	13588 Oct 01 06:47	2°♌41'14		superior conj	13591 Feb 27 01:39	17°♈11'43 0°26'56
	13588 Oct 05 21:48	30°♋♊		minimum elong	13591 Feb 27 07:35	17°♈29'59 0°27'00
min. Earth dist.	13588 Oct 06 17:49	29°♊29'31	0.27453 AU		13591 Mar 09 10:40	0°♍
inferior conj	13588 Oct 07 11:12	29°♊02'56	-3°42'58	desc. node	13591 Mar 10 09:08	1°♍09'20
minimum elong	13588 Oct 07 03:13	29°♊15'08	3°40'13		13591 Apr 02 17:27	0°♋
morning rise	13588 Oct 13 00:18	25°♊46'50		evening rise	13591 Apr 06 07:07	4°♋24'53
direct	13588 Oct 28 08:20	21°♊14'34			13591 Apr 26 22:58	0°♌
greatest brilliancy	13588 Nov 06 21:47	22°♊55'18	-4.8m		13591 May 21 03:33	0°♍
	13588 Nov 20 16:13	0°♌			13591 Jun 14 08:53	0°♎
morning max el	13588 Dec 16 11:53	21°♌38'13	45°55'31	asc. node	13591 Jul 01 00:02	20°♌30'04
	13588 Dec 24 22:25	0°♎			13591 Jul 08 17:48	0°♎
asc. node	13589 Jan 13 16:01	20°♎56'08			13591 Aug 02 10:19	0°♊
	13589 Jan 21 20:03	0°♏			13591 Aug 27 17:37	0°♌

	13591 Sep 23 08:54	0°♊				13594 Apr 17 09:54	0°♋	
evening max el	13591 Oct 08 16:38	15°♊54'16	46°22'24	max. Earth dist.		13594 May 06 11:51	23°♋42'23	1.72162 AU
desc. node	13591 Oct 20 23:01	27°♊25'19						
	13591 Oct 23 22:49	0°♋		superior conj		13594 May 09 17:16	27°♋43'29	-1°09'02
greatest brilliancy	13591 Nov 16 23:27	15°♋23'52	-4.8m	minimum elong		13594 May 09 06:16	27°♋09'13	1°09'31
retrograde	13591 Nov 27 10:24	17°♋23'34				13594 May 11 13:05	0°♌	
evening set	13591 Dec 15 21:25	11°♋01'01				13594 Jun 04 13:45	0°♍	
inferior conj	13591 Dec 18 21:49	9°♋08'23	-8°49'06	evening rise		13594 Jun 18 05:08	17°♍04'11	
minimum elong	13591 Dec 18 23:29	9°♋05'47	8°48'00			13594 Jun 28 13:07	0°♎	
min. Earth dist.	13591 Dec 18 15:25	9°♋18'26	0.28802 AU			13594 Jul 22 13:00	0°♏	
morning rise	13591 Dec 22 01:39	7°♋10'50		asc. node		13594 Jul 28 13:19	7°♏30'02	
direct	13592 Jan 09 06:14	0°♋59'54				13594 Aug 15 15:22	0°♐	
greatest brilliancy	13592 Jan 19 09:11	2°♋51'40	-4.7m			13594 Sep 08 22:35	0°♑	
asc. node	13592 Feb 11 01:52	16°♋50'41				13594 Oct 03 14:20	0°♒	
	13592 Feb 25 19:08	0°♑				13594 Oct 28 21:35	0°♓	
morning max el	13592 Feb 27 05:47	1°♑23'46	45°45'03	desc. node		13594 Nov 17 08:51	22°♓12'39	
	13592 Mar 25 12:55	0°♒				13594 Nov 24 10:28	0°♑	
	13592 Apr 20 20:06	0°♓		evening max el		13594 Dec 18 17:55	25°♑08'24	45°57'26
	13592 May 16 02:20	0°♋				13594 Dec 23 21:31	0°♒	
desc. node	13592 Jun 02 01:01	20°♋32'48		greatest brilliancy		13595 Jan 26 20:59	23°♒34'51	-4.8m
	13592 Jun 09 18:31	0°♌		retrograde		13595 Feb 05 18:40	25°♒22'17	
	13592 Jul 04 01:54	0°♍		evening set		13595 Feb 21 05:41	20°♒44'02	
	13592 Jul 28 04:11	0°♎		inferior conj		13595 Feb 27 01:36	17°♒13'17	-2°46'32
	13592 Aug 21 04:15	0°♏		minimum elong		13595 Feb 27 07:37	17°♒03'52	2°44'26
morning set	13592 Aug 29 05:13	10°♏03'26		min. Earth dist.		13595 Feb 27 11:22	16°♒58'01	0.28459 AU
	13592 Sep 14 04:03	0°♐		morning rise		13595 Mar 05 09:12	13°♒25'42	
asc. node	13592 Sep 22 16:14	10°♐37'54		asc. node		13595 Mar 10 11:03	11°♒00'06	
				direct		13595 Mar 20 07:57	9°♒01'21	
superior conj	13592 Oct 07 09:34	29°♐00'43	0°34'53	greatest brilliancy		13595 Mar 31 05:28	11°♒12'36	-4.8m
minimum elong	13592 Oct 07 01:48	28°♐36'30	0°34'55			13595 Apr 27 19:46	0°♓	
	13592 Oct 08 04:35	0°♑		morning max el		13595 May 09 01:46	10°♓37'00	46°19'46
max. Earth dist.	13592 Oct 09 12:30	1°♑39'30	1.72044 AU			13595 May 27 15:09	0°♋	
	13592 Nov 01 06:37	0°♊				13595 Jun 23 02:57	0°♌	
evening rise	13592 Nov 14 04:02	16°♊00'22		desc. node		13595 Jun 30 12:59	8°♌42'33	
	13592 Nov 25 11:17	0°♋				13595 Jul 18 08:55	0°♍	
	13592 Dec 19 20:12	0°♑				13595 Aug 12 00:28	0°♎	
desc. node	13593 Jan 12 06:47	28°♑35'02				13595 Sep 05 09:10	0°♏	
	13593 Jan 13 10:49	0°♒				13595 Sep 29 15:03	0°♐	
	13593 Feb 07 08:04	0°♓		asc. node		13595 Oct 21 06:37	26°♐49'53	
	13593 Mar 04 13:07	0°♋				13595 Oct 23 19:56	0°♑	
	13593 Mar 30 06:01	0°♌		morning set		13595 Nov 10 06:58	21°♑39'09	
	13593 Apr 26 00:14	0°♍				13595 Nov 17 00:29	0°♊	
asc. node	13593 May 05 03:30	9°♍43'15				13595 Dec 11 05:18	0°♋	
evening max el	13593 May 13 18:57	18°♍31'42	46°31'41					
	13593 May 25 22:04	0°♎		superior conj		13595 Dec 17 14:38	7°♋54'39	1°26'06
greatest brilliancy	13593 Jun 23 07:25	18°♎55'07	-4.9m	minimum elong		13595 Dec 17 15:32	7°♋57'28	1°27'09
retrograde	13593 Jul 02 19:13	20°♎37'15		max. Earth dist.		13595 Dec 19 11:16	10°♋12'46	1.72927 AU
evening set	13593 Jul 19 15:08	15°♎11'05				13596 Jan 04 11:27	0°♑	
inferior conj	13593 Jul 23 11:27	12°♎52'01	7°23'52	evening rise		13596 Jan 23 19:25	23°♑49'43	
minimum elong	13593 Jul 23 22:15	12°♎35'26	7°20'56			13596 Jan 28 19:51	0°♒	
min. Earth dist.	13593 Jul 24 01:14	12°♎30'51	0.27118 AU	desc. node		13596 Feb 09 20:32	14°♒46'15	
morning rise	13593 Jul 28 05:10	10°♎01'28				13596 Feb 22 06:38	0°♓	
direct	13593 Aug 13 04:50	5°♎01'39				13596 Mar 17 19:16	0°♋	
greatest brilliancy	13593 Aug 23 09:34	6°♎58'01	-4.9m			13596 Apr 11 09:34	0°♌	
desc. node	13593 Aug 25 06:46	7°♎42'20				13596 May 06 03:08	0°♍	
	13593 Sep 24 21:22	0°♏				13596 May 31 04:42	0°♎	
morning max el	13593 Oct 02 09:29	7°♏14'01	46°40'19	asc. node		13596 Jun 01 14:03	1°♎38'35	
	13593 Oct 24 03:02	0°♐				13596 Jun 26 00:25	0°♏	
	13593 Nov 19 18:41	0°♑				13596 Jul 23 16:43	0°♐	
	13593 Dec 15 10:09	0°♊		evening max el		13596 Jul 25 18:20	2°♐05'16	46°45'25
asc. node	13593 Dec 16 06:52	1°♊01'23				13596 Aug 28 22:17	0°♑	
	13594 Jan 09 12:16	0°♋		greatest brilliancy		13596 Sep 03 04:19	2°♑25'02	-4.9m
	13594 Feb 03 06:03	0°♑		retrograde		13596 Sep 14 02:21	4°♑37'50	
	13594 Feb 27 18:39	0°♒		desc. node		13596 Sep 21 15:46	3°♑27'42	
	13594 Mar 24 03:46	0°♓		evening set		13596 Sep 28 19:13	0°♒21'51	
morning set	13594 Mar 31 11:31	9°♓02'26				13596 Sep 29 11:10	30°♒♐	
desc. node	13594 Apr 06 23:38	17°♓05'01		min. Earth dist.		13596 Oct 04 07:53	27°♐07'37	0.27406 AU

inferior conj	13596 Oct 05 00:44	26° Ω 41'51	-3°21'36	desc. node	13599 Mar 09 10:51	0° Υ 41'16	
minimum elong	13596 Oct 04 17:24	26° Ω 53'04	3°19'03		13599 Apr 02 04:22	0° \mathcal{B}	
morning rise	13596 Oct 10 16:17	23° Ω 22'34		evening rise	13599 Apr 03 22:01	2° \mathcal{B} 08'44	
direct	13596 Oct 25 22:09	18° Ω 54'14			13599 Apr 26 10:03	0° Π	
greatest brilliancy	13596 Nov 04 10:42	20° Ω 34'29	-4.8m		13599 May 20 14:52	0° \mathcal{E}	
	13596 Nov 21 14:05	0° \mathcal{M}			13599 Jun 13 20:34	0° Ω	
morning max el	13596 Dec 14 02:10	19° \mathcal{M} 21'19	45°56'37	asc. node	13599 Jun 30 02:00	19° Ω 59'24	
	13596 Dec 24 18:14	0° \mathcal{A}			13599 Jul 08 05:58	0° \mathcal{M}	
asc. node	13597 Jan 12 18:06	20° \mathcal{A} 17'58			13599 Aug 01 23:16	0° Ω	
	13597 Jan 21 11:00	0° \mathcal{B}			13599 Aug 27 08:03	0° \mathcal{M}	
	13597 Feb 16 11:37	0° \approx			13599 Sep 23 02:49	0° \mathcal{A}	
	13597 Mar 13 16:55	0° \mathcal{H}		evening max el	13599 Oct 06 06:26	13° \mathcal{A} 35'07	46°23'25
	13597 Apr 07 11:14	0° Υ		desc. node	13599 Oct 20 00:56	26° \mathcal{A} 26'12	
	13597 May 01 22:15	0° \mathcal{B}			13599 Oct 24 07:02	0° \mathcal{B}	
desc. node	13597 May 04 13:43	3° \mathcal{B} 15'46		greatest brilliancy	13599 Nov 14 14:49	13° \mathcal{B} 10'47	-4.8m
	13597 May 26 03:37	0° Π		retrograde	13599 Nov 25 01:42	15° \mathcal{B} 11'00	
morning set	13597 Jun 13 04:07	22° Π 28'14		evening set	13599 Dec 13 12:53	8° \mathcal{B} 48'50	
	13597 Jun 19 04:39	0° \mathcal{E}		inferior conj	13599 Dec 16 13:30	6° \mathcal{B} 56'01	-8°50'24
	13597 Jul 13 03:06	0° Ω		minimum elong	13599 Dec 16 14:20	6° \mathcal{B} 54'43	8°49'21
				min. Earth dist.	13599 Dec 16 06:23	7° \mathcal{B} 07'10	0.28784 AU
superior conj	13597 Jul 23 02:50	12° Ω 32'01	-1°09'46	morning rise	13599 Dec 19 15:51	5° \mathcal{B} 00'43	
minimum elong	13597 Jul 23 14:13	13° Ω 07'44	1°10'15		13599 Dec 30 02:08	30° \mathcal{R} \mathcal{A}	
max. Earth dist.	13597 Jul 23 00:31	12° Ω 24'45	1.71434 AU	direct	13600 Jan 06 21:06	28° \mathcal{A} 47'51	
	13597 Aug 06 00:52	0° \mathcal{M}			13600 Jan 14 23:10	0° \mathcal{B}	
asc. node	13597 Aug 25 03:30	23° \mathcal{M} 56'47		greatest brilliancy	13600 Jan 17 00:14	0° \mathcal{B} 39'18	-4.7m
	13597 Aug 29 23:35	0° Ω		asc. node	13600 Feb 10 03:47	15° \mathcal{B} 49'03	
evening rise	13597 Sep 01 05:20	2° Ω 48'08		morning max el	13600 Feb 24 20:11	29° \mathcal{B} 08'01	45°44'36
	13597 Sep 23 00:25	0° \mathcal{M}			13600 Feb 25 17:31	0° \approx	
	13597 Oct 17 04:51	0° \mathcal{A}			13600 Mar 25 04:39	0° \mathcal{H}	
	13597 Nov 10 15:22	0° \mathcal{B}			13600 Apr 20 09:31	0° Υ	
	13597 Dec 05 11:33	0° \approx			13600 May 15 14:39	0° \mathcal{B}	
desc. node	13597 Dec 14 20:08	11° \approx 07'50		desc. node	13600 Jun 01 03:01	20° \mathcal{B} 02'36	
	13597 Dec 30 22:14	0° \mathcal{H}			13600 Jun 09 06:14	0° Π	
	13598 Jan 26 07:30	0° Υ			13600 Jul 03 13:17	0° \mathcal{E}	
	13598 Feb 23 14:16	0° \mathcal{B}			13600 Jul 27 15:21	0° Ω	
evening max el	13598 Feb 27 23:46	4° \mathcal{B} 19'48	46°01'47		13600 Aug 20 15:16	0° \mathcal{M}	
	13598 Mar 31 23:19	0° Π		morning set	13600 Aug 26 18:14	7° \mathcal{M} 39'44	
asc. node	13598 Apr 06 20:06	2° Π 47'38			13600 Sep 13 14:55	0° Ω	
greatest brilliancy	13598 Apr 08 09:22	3° Π 22'26	-4.8m	asc. node	13600 Sep 21 18:00	10° Ω 09'33	
retrograde	13598 Apr 18 06:33	5° Π 10'39					
evening set	13598 May 04 06:32	0° Π 12'08		superior conj	13600 Oct 04 23:58	26° Ω 42'17	0°31'33
	13598 May 04 14:57	30° \mathcal{R} \mathcal{B}		minimum elong	13600 Oct 04 16:47	26° Ω 19'55	0°31'36
inferior conj	13598 May 09 04:23	27° \mathcal{B} 13'01	7°08'34	max. Earth dist.	13600 Oct 06 23:43	29° Ω 11'15	1.72010 AU
minimum elong	13598 May 08 17:46	27° \mathcal{B} 29'38	7°05'39		13600 Oct 07 15:21	0° \mathcal{M}	
min. Earth dist.	13598 May 09 04:12	27° \mathcal{B} 13'18	0.27815 AU		13600 Oct 31 17:21	0° \mathcal{A}	
morning rise	13598 May 13 04:51	24° \mathcal{B} 44'45		evening rise	13600 Nov 11 20:09	13° \mathcal{A} 48'10	
direct	13598 May 30 04:57	19° \mathcal{B} 09'41			13600 Nov 24 22:06	0° \mathcal{B}	
greatest brilliancy	13598 Jun 09 05:03	21° \mathcal{B} 02'27	-4.9m		13600 Dec 19 07:12	0° \approx	
	13598 Jun 25 01:07	0° Π		desc. node	13601 Jan 11 08:43	28° \approx 06'34	
morning max el	13598 Jul 19 14:34	21° Π 50'01	46°55'44		13601 Jan 12 22:10	0° \mathcal{H}	
desc. node	13598 Jul 27 23:24	0° \mathcal{E} 27'48			13601 Feb 06 19:59	0° Υ	
	13598 Jul 27 12:51	0° \mathcal{E}			13601 Mar 04 01:57	0° \mathcal{B}	
	13598 Aug 23 14:52	0° Ω			13601 Mar 29 20:32	0° Π	
	13598 Sep 18 05:25	0° \mathcal{M}			13601 Apr 25 18:22	0° \mathcal{E}	
	13598 Oct 13 05:39	0° Ω		asc. node	13601 May 04 05:33	8° \mathcal{E} 56'03	
	13598 Nov 06 22:57	0° \mathcal{M}		evening max el	13601 May 11 07:51	16° \mathcal{E} 07'50	46°30'48
asc. node	13598 Nov 17 20:18	13° \mathcal{M} 17'25			13601 May 26 04:57	0° Ω	
	13598 Dec 01 11:57	0° \mathcal{A}		greatest brilliancy	13601 Jun 20 20:25	16° Ω 30'15	-4.9m
	13598 Dec 25 21:57	0° \mathcal{B}		retrograde	13601 Jun 30 08:23	18° Ω 12'38	
morning set	13599 Jan 18 15:36	29° \mathcal{B} 14'55		evening set	13601 Jul 17 07:34	12° Ω 40'34	
	13599 Jan 19 06:13	0° \approx		inferior conj	13601 Jul 21 00:18	10° Ω 26'50	7°37'50
	13599 Feb 12 13:57	0° \mathcal{H}		minimum elong	13601 Jul 21 10:49	10° Ω 10'42	7°35'03
max. Earth dist.	13599 Feb 24 03:59	14° \mathcal{H} 17'36	1.73086 AU	min. Earth dist.	13601 Jul 21 14:13	10° Ω 05'29	0.27144 AU
				morning rise	13601 Jul 25 13:53	7° Ω 42'22	
superior conj	13599 Feb 24 17:28	14° \mathcal{H} 59'11	0°30'10	direct	13601 Aug 10 17:52	2° Ω 35'43	
minimum elong	13599 Feb 24 24:00	15° \mathcal{H} 19'19	0°30'14	greatest brilliancy	13601 Aug 20 22:33	4° Ω 32'32	-4.9m
	13599 Mar 08 21:29	0° Υ		desc. node	13601 Aug 24 08:43	5° Ω 57'50	

	13601 Sep 24 23:24	0° \cap	
morning max el	13601 Sep 30 00:20	4° \cap 54'36	46°41'49
	13601 Oct 23 20:06	0° $\underline{\cap}$	
	13601 Nov 19 08:41	0° \cap	
	13601 Dec 14 22:39	0° \nearrow	
asc. node	13601 Dec 15 08:54	0° \nearrow 30'26	
	13602 Jan 08 23:55	0° \searrow	