

superior conj	11600 Oct 06 00:51	24° Ω 52'30	0°54'08	morning rise	11603 Mar 03 06:31	8° Υ 00'44	
minimum elong	11600 Oct 05 15:01	24° Ω 21'59	0°54'01	direct	11603 Mar 18 02:34	3° Υ 40'02	
max. Earth dist.	11600 Oct 08 07:15	27° Ω 41'18	1.72582 AU	greatest brilliancy	11603 Mar 28 22:38	5° Υ 50'06	-4.8m
	11600 Oct 10 03:58	0° \mathbb{M}			11603 May 01 05:14	0° Υ	
	11600 Nov 03 09:19	0° Υ		morning max el	11603 May 07 05:02	5° Υ 51'08	46°40'34
evening rise	11600 Nov 12 02:36	10° Υ 46'16			11603 May 29 22:21	0° Υ	
	11600 Nov 27 17:19	0° Υ		desc. node	11603 Jun 19 18:52	23° Υ 51'20	
	11600 Dec 22 05:07	0° \approx			11603 Jun 25 00:31	0° \mathbb{I}	
desc. node	11601 Jan 01 15:19	12° \approx 41'59			11603 Jul 20 02:22	0° Υ	
	11601 Jan 15 21:21	0° Υ			11603 Aug 13 17:26	0° Ω	
	11601 Feb 09 18:14	0° Υ			11603 Sep 07 04:06	0° \mathbb{M}	
	11601 Mar 06 20:58	0° Υ			11603 Oct 01 13:04	0° Ω	
	11601 Apr 01 10:52	0° \mathbb{I}		asc. node	11603 Oct 10 12:47	11° Ω 04'43	
asc. node	11601 Apr 24 13:26	26° \mathbb{I} 05'09			11603 Oct 25 21:03	0° \mathbb{M}	
	11601 Apr 28 03:47	0° Υ		morning set	11603 Nov 08 06:03	16° \mathbb{M} 30'26	
evening max el	11601 May 13 03:47	15° Υ 40'22	46°48'09		11603 Nov 19 04:18	0° Υ	
	11601 May 28 10:13	0° Ω			11603 Dec 13 11:26	0° Υ	
greatest brilliancy	11601 Jun 22 11:01	16° Ω 17'54	-4.9m				
retrograde	11601 Jul 02 09:59	18° Ω 09'10		superior conj	11603 Dec 15 01:07	1° Υ 56'15	1°22'52
evening set	11601 Jul 18 06:20	13° Ω 15'23		minimum elong	11603 Dec 15 06:10	2° Υ 11'49	1°23'34
inferior conj	11601 Jul 23 02:23	10° Ω 21'53	5°28'27	max. Earth dist.	11603 Dec 15 15:04	2° Υ 39'19	1.73192 AU
minimum elong	11601 Jul 23 12:58	10° Ω 05'38	5°25'02		11604 Jan 06 19:16	0° \approx	
min. Earth dist.	11601 Jul 23 07:33	10° Ω 13'57	0.27044 AU	evening rise	11604 Jan 21 07:21	17° \approx 51'44	
morning rise	11601 Jul 28 19:46	6° Ω 59'17		desc. node	11604 Jan 30 04:10	28° \approx 46'26	
direct	11601 Aug 12 20:08	2° Ω 36'03			11604 Jan 31 04:05	0° Υ	
desc. node	11601 Aug 14 14:25	2° Ω 39'43			11604 Feb 24 13:28	0° Υ	
greatest brilliancy	11601 Aug 22 18:29	4° Ω 26'13	-4.8m		11604 Mar 19 22:58	0° Υ	
	11601 Sep 27 08:31	0° \mathbb{M}			11604 Apr 13 09:20	0° \mathbb{I}	
morning max el	11601 Oct 01 13:56	4° \mathbb{M} 04'17	46°19'17		11604 May 07 23:31	0° Υ	
	11601 Oct 26 11:38	0° Ω		asc. node	11604 May 22 00:02	16° Υ 55'00	
	11601 Nov 22 04:40	0° \mathbb{M}			11604 Jun 01 23:22	0° Ω	
asc. node	11601 Dec 05 13:04	15° \mathbb{M} 29'42			11604 Jun 27 20:19	0° \mathbb{M}	
	11601 Dec 17 20:46	0° Υ		evening max el	11604 Jul 24 08:52	28° \mathbb{M} 28'47	46°40'10
	11602 Jan 11 22:24	0° Υ			11604 Jul 25 21:28	0° Ω	
	11602 Feb 05 14:55	0° \approx		greatest brilliancy	11604 Sep 01 14:38	28° Ω 39'41	-4.8m
	11602 Mar 02 01:30	0° Υ			11604 Sep 05 17:05	0° \mathbb{M}	
	11602 Mar 26 07:44	0° Υ		desc. node	11604 Sep 11 00:22	0° \mathbb{M} 52'06	
desc. node	11602 Mar 27 05:30	1° Υ 07'34		retrograde	11604 Sep 12 15:08	0° \mathbb{M} 55'13	
morning set	11602 Mar 29 23:32	4° Υ 32'34			11604 Sep 19 08:38	30° \mathbb{R} Ω	
	11602 Apr 19 10:13	0° Υ		evening set	11604 Sep 28 02:00	26° Ω 16'21	
max. Earth dist.	11602 May 06 02:45	20° Υ 52'13	1.71606 AU	min. Earth dist.	11604 Oct 03 00:57	23° Ω 19'36	0.28055 AU
				inferior conj	11604 Oct 03 21:11	22° Ω 48'18	-5°21'00
superior conj	11602 May 08 23:19	24° Υ 26'56	-1°21'18	minimum elong	11604 Oct 03 11:12	23° Ω 03'46	5°18'19
minimum elong	11602 May 08 15:05	24° Υ 01'08	1°21'43	morning rise	11604 Oct 08 20:53	19° Ω 48'21	
	11602 May 13 09:38	0° \mathbb{I}		direct	11604 Oct 24 22:39	14° Ω 51'09	
	11602 Jun 06 07:21	0° Υ		greatest brilliancy	11604 Nov 03 13:15	16° Ω 31'27	-4.8m
evening rise	11602 Jun 18 03:15	14° Υ 50'40			11604 Nov 26 02:17	0° \mathbb{M}	
	11602 Jun 30 05:20	0° Ω		morning max el	11604 Dec 12 18:33	14° \mathbb{M} 46'10	45°44'09
asc. node	11602 Jul 17 22:01	22° Ω 07'26			11604 Dec 27 21:34	0° Υ	
	11602 Jul 24 05:36	0° \mathbb{M}		asc. node	11605 Jan 02 00:55	5° Υ 26'23	
	11602 Aug 17 09:59	0° Ω			11605 Jan 24 05:35	0° Υ	
	11602 Sep 10 20:52	0° \mathbb{M}			11605 Feb 19 00:43	0° \approx	
	11602 Oct 05 18:24	0° Υ			11605 Mar 16 01:28	0° Υ	
	11602 Oct 31 10:14	0° Υ			11605 Apr 09 15:20	0° Υ	
desc. node	11602 Nov 06 18:18	7° Υ 12'19		desc. node	11605 Apr 23 19:08	17° Υ 27'40	
	11602 Nov 27 12:01	0° \approx			11605 May 03 21:53	0° Υ	
evening max el	11602 Dec 16 23:01	19° \approx 45'51	45°50'28		11605 May 27 23:17	0° \mathbb{I}	
	11602 Dec 28 03:48	0° Υ		morning set	11605 Jun 13 03:01	20° \mathbb{I} 14'19	
greatest brilliancy	11603 Jan 25 02:28	18° Υ 05'19	-4.8m		11605 Jun 20 21:42	0° Υ	
retrograde	11603 Feb 03 19:29	19° Υ 49'01			11605 Jul 14 19:18	0° Ω	
evening set	11603 Feb 18 18:08	15° Υ 29'53					
inferior conj	11603 Feb 24 23:03	11° Υ 47'58	-0°43'01	superior conj	11605 Jul 23 01:45	10° Ω 22'20	-0°51'13
minimum elong	11603 Feb 25 00:40	11° Υ 45'26	0°42'12	minimum elong	11605 Jul 23 12:41	10° Ω 56'35	0°51'23
min. Earth dist.	11603 Feb 25 10:06	11° Υ 30'43	0.28064 AU	max. Earth dist.	11605 Jul 24 20:40	12° Ω 36'49	1.71531 AU
asc. node	11603 Feb 27 19:49	10° Υ 01'20			11605 Aug 07 17:54	0° \mathbb{M}	

asc. node	11605 Aug 14 11:13	8° \mathbb{M} 24'09	direct	11608 Jan 04 19:26	23° \mathbb{A} 01'23	
evening rise	11605 Aug 31 15:25	29° \mathbb{M} 49'45	greatest brilliancy	11608 Jan 15 07:14	25° \mathbb{A} 02'06	-4.7m
	11605 Aug 31 18:42	0° \mathbb{L}		11608 Jan 25 06:12	0° \mathbb{Z}	
	11605 Sep 24 22:40	0° \mathbb{M}	asc. node	11608 Jan 30 11:34	3° \mathbb{Z} 28'21	
	11605 Oct 19 07:14	0° \mathbb{A}	morning max el	11608 Feb 23 01:45	23° \mathbb{Z} 52'06	45°55'14
	11605 Nov 12 22:42	0° \mathbb{Z}		11608 Feb 29 04:54	0° \mathbb{A}	
desc. node	11605 Dec 04 05:21	25° \mathbb{Z} 30'52		11608 Mar 27 21:07	0° \mathbb{H}	
	11605 Dec 08 00:02	0° \mathbb{A}		11608 Apr 22 16:26	0° \mathbb{Y}	
	11606 Jan 02 15:09	0° \mathbb{H}		11608 May 17 14:58	0° \mathbb{B}	
	11606 Jan 29 04:02	0° \mathbb{Y}	desc. node	11608 May 21 08:28	4° \mathbb{B} 32'43	
evening max el	11606 Feb 26 16:00	29° \mathbb{Y} 55'59		11608 Jun 11 01:51	0° \mathbb{I}	
	11606 Feb 26 17:38	0° \mathbb{B}		11608 Jul 05 06:13	0° \mathbb{G}	
asc. node	11606 Mar 27 05:36	23° \mathbb{B} 55'59		11608 Jul 29 07:45	0° \mathbb{O}	
greatest brilliancy	11606 Apr 07 13:59	29° \mathbb{B} 38'58	-4.8m	11608 Aug 22 09:00	0° \mathbb{M}	
	11606 Apr 08 15:09	0° \mathbb{I}		11608 Aug 26 03:07	4° \mathbb{M} 40'46	
retrograde	11606 Apr 17 09:18	1° \mathbb{I} 26'47	morning set	11608 Sep 11 00:49	24° \mathbb{M} 29'02	
	11606 Apr 25 18:55	30° \mathbb{R} \mathbb{B}	asc. node	11608 Sep 15 11:12	0° \mathbb{L}	
evening set	11606 May 04 08:10	25° \mathbb{B} 52'34				
inferior conj	11606 May 08 02:17	23° \mathbb{B} 35'34	8°28'01	superior conj	11608 Oct 03 16:33	22° \mathbb{L} 38'48
minimum elong	11606 May 07 18:07	23° \mathbb{B} 48'11	8°26'27	minimum elong	11608 Oct 03 06:54	22° \mathbb{L} 08'53
min. Earth dist.	11606 May 08 02:30	23° \mathbb{B} 35'15	0.27411 AU	max. Earth dist.	11608 Oct 06 00:45	25° \mathbb{L} 33'14
morning rise	11606 May 11 04:03	21° \mathbb{B} 42'46			11608 Oct 09 14:44	0° \mathbb{M}
direct	11606 May 28 22:25	15° \mathbb{B} 39'46			11608 Nov 02 20:03	0° \mathbb{A}
greatest brilliancy	11606 Jun 07 18:13	17° \mathbb{B} 29'52	-4.9m	evening rise	11608 Nov 09 19:26	8° \mathbb{A} 36'50
	11606 Jun 28 06:19	0° \mathbb{I}			11608 Nov 27 04:09	0° \mathbb{Z}
desc. node	11606 Jul 17 06:02	17° \mathbb{I} 19'44			11608 Dec 21 16:12	0° \mathbb{A}
morning max el	11606 Jul 18 11:51	18° \mathbb{I} 34'21	46°57'21	desc. node	11608 Dec 31 17:18	12° \mathbb{A} 13'55
	11606 Jul 29 12:02	0° \mathbb{G}			11609 Jan 15 08:51	0° \mathbb{H}
	11606 Aug 25 10:21	0° \mathbb{O}			11609 Feb 09 06:21	0° \mathbb{Y}
	11606 Sep 20 02:38	0° \mathbb{M}			11609 Mar 06 10:04	0° \mathbb{B}
	11606 Oct 15 06:13	0° \mathbb{L}			11609 Apr 01 01:42	0° \mathbb{I}
asc. node	11606 Nov 07 02:13	27° \mathbb{L} 33'06		asc. node	11609 Apr 23 15:29	25° \mathbb{I} 21'55
	11606 Nov 09 02:41	0° \mathbb{M}			11609 Apr 27 22:29	0° \mathbb{G}
	11606 Dec 03 17:57	0° \mathbb{A}		evening max el	11609 May 10 16:15	13° \mathbb{G} 14'07
	11606 Dec 28 05:17	0° \mathbb{Z}			11609 May 28 19:50	0° \mathbb{O}
morning set	11607 Jan 15 22:43	23° \mathbb{Z} 03'05		greatest brilliancy	11609 Jun 20 01:49	13° \mathbb{O} 54'38
	11607 Jan 21 14:01	0° \mathbb{A}		retrograde	11609 Jun 29 22:20	15° \mathbb{O} 44'07
	11607 Feb 14 21:02	0° \mathbb{H}		evening set	11609 Jul 15 22:37	10° \mathbb{O} 45'54
max. Earth dist.	11607 Feb 20 12:31	6° \mathbb{H} 58'51	1.72778 AU	inferior conj	11609 Jul 20 15:18	7° \mathbb{O} 57'17
				minimum elong	11609 Jul 21 02:09	7° \mathbb{O} 40'37
superior conj	11607 Feb 22 11:24	9° \mathbb{H} 23'52	0°10'19	min. Earth dist.	11609 Jul 20 21:35	7° \mathbb{O} 47'38
minimum elong	11607 Feb 22 13:51	9° \mathbb{H} 31'29	0°10'31	morning rise	11609 Jul 26 05:44	4° \mathbb{O} 38'18
behind sun begin	11607 Feb 21 19:36	8° \mathbb{H} 34'59		direct	11609 Aug 10 08:26	0° \mathbb{O} 11'09
behind sun end	11607 Feb 23 08:07	10° \mathbb{H} 27'59		desc. node	11609 Aug 13 16:22	0° \mathbb{O} 24'07
desc. node	11607 Feb 26 17:33	14° \mathbb{H} 40'02		greatest brilliancy	11609 Aug 20 08:08	2° \mathbb{O} 02'11
	11607 Mar 11 02:28	0° \mathbb{Y}			11609 Sep 27 09:08	0° \mathbb{M}
evening rise	11607 Apr 02 04:22	27° \mathbb{Y} 25'33		morning max el	11609 Sep 29 02:46	1° \mathbb{M} 41'18
	11607 Apr 04 06:01	0° \mathbb{B}			11609 Oct 26 04:14	0° \mathbb{L}
	11607 Apr 28 07:54	0° \mathbb{I}			11609 Nov 21 18:23	0° \mathbb{M}
	11607 May 22 09:32	0° \mathbb{G}		asc. node	11609 Dec 04 15:06	14° \mathbb{M} 57'53
	11607 Jun 15 13:23	0° \mathbb{O}			11609 Dec 17 09:05	0° \mathbb{A}
asc. node	11607 Jun 19 11:32	4° \mathbb{O} 50'53			11610 Jan 11 09:57	0° \mathbb{Z}
	11607 Jul 09 22:49	0° \mathbb{M}			11610 Feb 05 02:04	0° \mathbb{A}
	11607 Aug 03 18:33	0° \mathbb{L}			11610 Mar 01 12:28	0° \mathbb{H}
	11607 Aug 29 09:35	0° \mathbb{M}			11610 Mar 25 18:37	0° \mathbb{Y}
	11607 Sep 25 18:52	0° \mathbb{A}		desc. node	11610 Mar 26 07:20	0° \mathbb{Y} 39'27
evening max el	11607 Oct 04 12:54	8° \mathbb{A} 49'24	46°05'07	morning set	11610 Mar 27 12:43	2° \mathbb{Y} 10'40
desc. node	11607 Oct 09 10:08	13° \mathbb{A} 30'29			11610 Apr 18 21:04	0° \mathbb{B}
	11607 Oct 29 07:48	0° \mathbb{Z}		max. Earth dist.	11610 May 03 11:25	18° \mathbb{B} 15'09
greatest brilliancy	11607 Nov 12 13:41	7° \mathbb{Z} 39'03	-4.8m			1.71641 AU
retrograde	11607 Nov 22 19:57	9° \mathbb{Z} 33'16		superior conj	11610 May 06 11:18	22° \mathbb{B} 00'11
evening set	11607 Dec 11 00:56	3° \mathbb{Z} 19'14		minimum elong	11610 May 06 02:23	21° \mathbb{B} 32'16
inferior conj	11607 Dec 14 07:48	1° \mathbb{Z} 16'25	-8°26'20		11610 May 12 20:29	0° \mathbb{I}
minimum elong	11607 Dec 14 13:02	1° \mathbb{Z} 08'09	8°25'12		11610 Jun 05 18:14	0° \mathbb{G}
min. Earth dist.	11607 Dec 14 10:16	1° \mathbb{Z} 12'31	0.29029 AU	evening rise	11610 Jun 15 14:12	12° \mathbb{G} 20'15
	11607 Dec 16 08:34	30° \mathbb{R} \mathbb{A}			11610 Jun 29 16:19	0° \mathbb{O}
morning rise	11607 Dec 18 01:11	28° \mathbb{A} 57'55		asc. node	11610 Jul 16 23:53	21° \mathbb{O} 38'45

	11610 Jul 23 16:43	0°♍			11613 Apr 09 02:29	0°♍	
	11610 Aug 16 21:20	0°♌		desc. node	11613 Apr 22 21:08	16°♍59'48	
	11610 Sep 10 08:36	0°♍			11613 May 03 08:48	0°♌	
	11610 Oct 05 06:53	0°♎			11613 May 27 10:06	0°♍	
	11610 Oct 31 00:09	0°♏		morning set	11613 Jun 10 14:21	17°♍45'37	
desc. node	11610 Nov 05 20:22	6°♏37'28			11613 Jun 20 08:27	0°♏	
	11610 Nov 27 05:18	0°♏			11613 Jul 14 06:00	0°♎	
evening max el	11610 Dec 14 13:05	17°♏30'41 45°50'22					
	11610 Dec 28 09:36	0°♎		superior conj	11613 Jul 20 13:41	7°♎55'45 -0°54'18	
greatest brilliancy	11611 Jan 22 16:55	15°♎50'43 -4.8m		minimum elong	11613 Jul 21 00:57	8°♎31'05 0°54'30	
retrograde	11611 Feb 01 10:18	17°♎34'54		max. Earth dist.	11613 Jul 22 08:34	10°♎10'11 1.71506 AU	
evening set	11611 Feb 16 10:18	13°♎13'13			11613 Aug 07 04:33	0°♍	
inferior conj	11611 Feb 22 14:05	9°♎33'01 -1°04'37		asc. node	11613 Aug 13 13:00	7°♍56'27	
minimum elong	11611 Feb 22 16:31	9°♎29'14 1°03'32		evening rise	11613 Aug 29 05:22	27°♍30'36	
min. Earth dist.	11611 Feb 23 01:43	9°♎14'53 0.28106 AU			11613 Aug 31 05:21	0°♌	
asc. node	11611 Feb 26 21:41	6°♎54'17			11613 Sep 24 09:24	0°♍	
morning rise	11611 Feb 28 22:03	5°♎45'20			11613 Oct 18 18:11	0°♎	
direct	11611 Mar 15 17:46	1°♎24'19			11613 Nov 12 10:03	0°♏	
greatest brilliancy	11611 Mar 26 15:14	3°♎35'54 -4.8m		desc. node	11613 Dec 03 07:19	25°♏01'23	
	11611 May 01 05:16	0°♍			11613 Dec 07 12:05	0°♏	
morning max el	11611 May 04 20:22	3°♍34'33 46°39'10			11614 Jan 02 04:28	0°♎	
	11611 May 29 14:45	0°♌			11614 Jan 28 19:57	0°♍	
desc. node	11611 Jun 18 20:48	23°♌15'21		evening max el	11614 Feb 24 07:00	27°♍39'56 46°14'10	
	11611 Jun 24 14:21	0°♍			11614 Feb 26 16:43	0°♌	
	11611 Jul 19 14:57	0°♏		asc. node	11614 Mar 26 07:38	22°♌31'43	
	11611 Aug 13 05:18	0°♎		greatest brilliancy	11614 Apr 05 02:41	27°♌16'57 -4.8m	
	11611 Sep 06 15:28	0°♍		retrograde	11614 Apr 14 22:38	29°♌04'53	
	11611 Oct 01 00:04	0°♌		evening set	11614 May 01 17:18	23°♌37'16	
asc. node	11611 Oct 09 14:40	10°♌36'51		inferior conj	11614 May 05 15:46	21°♌13'34 8°18'16	
	11611 Oct 25 07:48	0°♍		minimum elong	11614 May 05 07:00	21°♌27'08 8°16'31	
morning set	11611 Nov 05 22:18	14°♍19'26		min. Earth dist.	11614 May 05 15:26	21°♌14'05 0.27422 AU	
	11611 Nov 18 14:55	0°♎		morning rise	11614 May 08 20:40	19°♌15'51	
				direct	11614 May 26 12:33	13°♌17'44	
superior conj	11611 Dec 12 18:15	29°♎48'25 1°23'42		greatest brilliancy	11614 Jun 05 07:39	15°♌07'08 -4.9m	
minimum elong	11611 Dec 12 22:39	0°♏02'02 1°24'25			11614 Jun 28 17:05	0°♍	
	11611 Dec 12 22:00	0°♏		morning max el	11614 Jul 16 01:21	16°♍11'38 46°57'36	
max. Earth dist.	11611 Dec 13 10:29	0°♏38'31 1.73186 AU		desc. node	11614 Jul 16 07:58	16°♍28'17	
	11612 Jan 06 05:51	0°♏			11614 Jul 29 06:44	0°♏	
evening rise	11612 Jan 18 23:36	15°♏41'21			11614 Aug 25 01:05	0°♎	
desc. node	11612 Jan 29 05:58	28°♏19'04			11614 Sep 19 15:33	0°♍	
	11612 Jan 30 14:47	0°♎			11614 Oct 14 18:07	0°♌	
	11612 Feb 24 00:23	0°♍		asc. node	11614 Nov 06 04:14	27°♌04'58	
	11612 Mar 19 10:13	0°♌			11614 Nov 08 13:55	0°♍	
	11612 Apr 12 21:05	0°♍			11614 Dec 03 04:46	0°♎	
	11612 May 07 12:00	0°♏			11614 Dec 27 15:51	0°♏	
asc. node	11612 May 21 02:01	16°♏21'49		morning set	11615 Jan 13 15:34	20°♏54'50	
	11612 Jun 01 13:05	0°♎			11615 Jan 21 00:28	0°♏	
	11612 Jun 27 12:29	0°♍			11615 Feb 14 07:30	0°♎	
evening max el	11612 Jul 21 23:58	26°♍11'09 46°41'17		max. Earth dist.	11615 Feb 18 03:39	4°♎44'53 1.72807 AU	
	11612 Jul 25 20:34	0°♌					
greatest brilliancy	11612 Aug 30 04:59	26°♌21'45 -4.8m		superior conj	11615 Feb 20 02:31	7°♎09'48 0°13'47	
retrograde	11612 Sep 10 06:43	28°♌38'23		minimum elong	11615 Feb 20 05:46	7°♎19'50 0°13'59	
desc. node	11612 Sep 10 02:18	28°♌38'20		behind sun begin	11615 Feb 19 18:01	6°♎43'30	
evening set	11612 Sep 25 14:18	24°♌02'54		behind sun end	11615 Feb 20 17:30	7°♎56'09	
min. Earth dist.	11612 Sep 30 15:19	21°♌03'28 0.28000 AU		desc. node	11615 Feb 25 19:25	14°♎13'21	
inferior conj	11612 Oct 01 11:42	20°♌31'59 -5°03'29			11615 Mar 10 13:00	0°♍	
minimum elong	11612 Oct 01 01:59	20°♌47'00 5°00'48		evening rise	11615 Mar 30 18:22	25°♍06'47	
morning rise	11612 Oct 06 14:14	17°♌28'32			11615 Apr 03 16:39	0°♌	
direct	11612 Oct 22 13:04	12°♌35'34			11615 Apr 27 18:41	0°♍	
greatest brilliancy	11612 Nov 01 03:01	14°♌15'52 -4.8m			11615 May 21 20:31	0°♏	
	11612 Nov 26 10:51	0°♍			11615 Jun 15 00:42	0°♎	
morning max el	11612 Dec 10 10:03	12°♍34'21 45°44'41		asc. node	11615 Jun 18 13:24	4°♎21'31	
	11612 Dec 27 15:14	0°♎			11615 Jul 09 10:40	0°♍	
asc. node	11613 Jan 01 02:46	4°♎46'33			11615 Aug 03 07:20	0°♌	
	11613 Jan 23 19:33	0°♏			11615 Aug 29 00:10	0°♍	
	11613 Feb 18 13:06	0°♏			11615 Sep 25 14:01	0°♎	
	11613 Mar 15 13:02	0°♎		evening max el	11615 Oct 02 03:46	6°♎35'22 46°06'11	

desc. node	11615 Oct 08 12:14	12° ♊ 39'13		desc. node	11618 Mar 25 09:14	0° ♊ 12'30	
	11615 Oct 30 06:43	0° ♊			11618 Mar 25 05:13	0° ♊	
greatest brilliancy	11615 Nov 10 05:25	5° ♊ 29'20	-4.8m		11618 Apr 18 07:40	0° ♊	
retrograde	11615 Nov 20 11:21	7° ♊ 23'35		max. Earth dist.	11618 Apr 30 22:58	15° ♊ 47'49	1.71678 AU
evening set	11615 Dec 08 18:23	1° ♊ 07'36					
	11615 Dec 10 14:03	30° ♊		superior conj	11618 May 03 23:20	19° ♊ 34'19	-1°18'07
inferior conj	11615 Dec 11 23:54	29° ♊ 06'44	-8°31'17	minimum elong	11618 May 03 13:48	19° ♊ 04'27	1°18'25
minimum elong	11615 Dec 12 04:26	28° ♊ 59'37	8°30'14		11618 May 12 07:06	0° ♊	
min. Earth dist.	11615 Dec 12 01:29	29° ♊ 04'16	0.29031 AU		11618 Jun 05 04:56	0° ♊	
morning rise	11615 Dec 15 14:31	26° ♊ 52'14		evening rise	11618 Jun 13 01:21	9° ♊ 51'06	
direct	11616 Jan 02 11:18	20° ♊ 52'02			11618 Jun 29 03:05	0° ♊	
greatest brilliancy	11616 Jan 12 22:21	22° ♊ 51'34	-4.7m	asc. node	11618 Jul 16 01:43	21° ♊ 10'40	
	11616 Jan 26 06:30	0° ♊			11618 Jul 23 03:37	0° ♊	
asc. node	11616 Jan 29 13:32	2° ♊ 19'46			11618 Aug 16 08:25	0° ♊	
morning max el	11616 Feb 20 15:52	21° ♊ 36'25	45°54'00		11618 Sep 09 20:05	0° ♊	
	11616 Feb 29 00:04	0° ♊			11618 Oct 04 19:08	0° ♊	
	11616 Mar 27 11:39	0° ♊			11618 Oct 30 13:57	0° ♊	
	11616 Apr 22 05:11	0° ♊		desc. node	11618 Nov 04 22:17	6° ♊ 02'39	
	11616 May 17 02:48	0° ♊			11618 Nov 26 22:46	0° ♊	
desc. node	11616 May 20 10:21	4° ♊ 02'37		evening max el	11618 Dec 12 04:06	15° ♊ 18'28	45°50'16
	11616 Jun 10 13:09	0° ♊			11618 Dec 28 17:32	0° ♊	
	11616 Jul 04 17:10	0° ♊		greatest brilliancy	11619 Jan 20 07:12	13° ♊ 36'38	-4.8m
	11616 Jul 28 18:29	0° ♊		retrograde	11619 Jan 30 01:38	15° ♊ 21'28	
	11616 Aug 21 19:35	0° ♊		evening set	11619 Feb 14 02:45	10° ♊ 57'12	
morning set	11616 Aug 23 17:16	2° ♊ 22'22		inferior conj	11619 Feb 20 05:12	7° ♊ 18'44	-1°26'04
asc. node	11616 Sep 10 02:45	24° ♊ 02'25		minimum elong	11619 Feb 20 08:25	7° ♊ 13'43	1°24'44
	11616 Sep 14 21:41	0° ♊		min. Earth dist.	11619 Feb 20 17:05	7° ♊ 00'13	0.28148 AU
				asc. node	11619 Feb 25 23:45	3° ♊ 49'58	
superior conj	11616 Oct 01 08:07	20° ♊ 25'48	0°48'36	morning rise	11619 Feb 26 13:29	3° ♊ 30'56	
minimum elong	11616 Sep 30 22:44	19° ♊ 56'40	0°48'23		11619 Mar 06 23:40	30° ♊	
max. Earth dist.	11616 Oct 03 15:49	23° ♊ 18'43	1.72508 AU	direct	11619 Mar 13 09:33	29° ♊ 09'29	
	11616 Oct 09 01:09	0° ♊			11619 Mar 20 00:22	0° ♊	
	11616 Nov 02 06:28	0° ♊		greatest brilliancy	11619 Mar 24 07:18	1° ♊ 21'48	-4.8m
evening rise	11616 Nov 07 12:02	6° ♊ 27'42			11619 May 01 04:02	0° ♊	
	11616 Nov 26 14:40	0° ♊		morning max el	11619 May 02 12:15	1° ♊ 20'02	46°37'40
	11616 Dec 21 02:58	0° ♊			11619 May 29 06:42	0° ♊	
desc. node	11616 Dec 30 19:05	11° ♊ 46'12		desc. node	11619 Jun 17 22:39	22° ♊ 39'41	
	11617 Jan 14 20:02	0° ♊			11619 Jun 24 03:56	0° ♊	
	11617 Feb 08 18:11	0° ♊			11619 Jul 19 03:23	0° ♊	
	11617 Mar 05 22:56	0° ♊			11619 Aug 12 17:01	0° ♊	
	11617 Mar 31 16:25	0° ♊			11619 Sep 06 02:42	0° ♊	
asc. node	11617 Apr 22 17:33	24° ♊ 39'04			11619 Sep 30 10:56	0° ♊	
	11617 Apr 27 17:20	0° ♊		asc. node	11619 Oct 08 16:37	10° ♊ 09'35	
evening max el	11617 May 08 04:20	10° ♊ 47'55	46°46'54		11619 Oct 24 18:25	0° ♊	
	11617 May 29 08:12	0° ♊		morning set	11619 Nov 03 14:53	12° ♊ 09'52	
greatest brilliancy	11617 Jun 17 16:25	11° ♊ 32'22	-4.9m		11619 Nov 18 01:25	0° ♊	
retrograde	11617 Jun 27 11:04	13° ♊ 20'47					
evening set	11617 Jul 13 15:03	8° ♊ 17'39		superior conj	11619 Dec 10 11:35	27° ♊ 41'29	1°24'25
inferior conj	11617 Jul 18 04:19	5° ♊ 34'10	6°06'10	minimum elong	11619 Dec 10 15:19	27° ♊ 53'00	1°25'08
minimum elong	11617 Jul 18 15:22	5° ♊ 17'14	6°02'49	max. Earth dist.	11619 Dec 11 07:21	28° ♊ 42'28	1.73182 AU
min. Earth dist.	11617 Jul 18 11:35	5° ♊ 23'02	0.27045 AU		11619 Dec 12 08:28	0° ♊	
morning rise	11617 Jul 23 15:39	2° ♊ 19'25			11620 Jan 05 16:24	0° ♊	
	11617 Jul 28 09:43	30° ♊		evening rise	11620 Jan 16 15:56	13° ♊ 31'17	
direct	11617 Aug 07 20:47	27° ♊ 47'36		desc. node	11620 Jan 28 07:52	27° ♊ 52'06	
desc. node	11617 Aug 12 18:18	28° ♊ 15'21			11620 Jan 30 01:29	0° ♊	
greatest brilliancy	11617 Aug 17 21:51	29° ♊ 39'49	-4.9m		11620 Feb 23 11:19	0° ♊	
	11617 Aug 18 19:38	0° ♊			11620 Mar 18 21:30	0° ♊	
morning max el	11617 Sep 26 16:14	29° ♊ 21'02	46°22'41		11620 Apr 12 08:53	0° ♊	
	11617 Sep 27 08:06	0° ♊			11620 May 07 00:35	0° ♊	
	11617 Oct 25 20:07	0° ♊		asc. node	11620 May 20 03:53	15° ♊ 48'04	
	11617 Nov 21 07:40	0° ♊			11620 Jun 01 02:58	0° ♊	
asc. node	11617 Dec 03 16:56	14° ♊ 26'26			11620 Jun 27 05:00	0° ♊	
	11617 Dec 16 21:03	0° ♊		evening max el	11620 Jul 19 15:46	23° ♊ 55'00	46°42'17
	11618 Jan 10 21:13	0° ♊			11620 Jul 25 20:51	0° ♊	
	11618 Feb 04 12:57	0° ♊		greatest brilliancy	11620 Aug 27 19:50	24° ♊ 04'14	-4.8m
	11618 Feb 28 23:09	0° ♊		retrograde	11620 Sep 07 22:23	26° ♊ 21'12	
morning set	11618 Mar 25 02:00	29° ♊ 50'03		desc. node	11620 Sep 09 04:25	26° ♊ 19'18	

evening set	11620 Sep 23 02:54	21° Ω 49'16		evening rise	11623 Mar 09 23:50	0° Υ	
min. Earth dist.	11620 Sep 28 05:44	18° Ω 47'13	0.27940 AU		11623 Mar 28 08:36	22° Υ 47'47	
inferior conj	11620 Sep 29 02:15	18° Ω 15'34	-4°45'22		11623 Apr 03 03:38	0° \mathcal{B}	
minimum elong	11620 Sep 28 16:52	18° Ω 30'03	4°42'43		11623 Apr 27 05:51	0° Π	
morning rise	11620 Oct 04 07:31	15° Ω 08'37			11623 May 21 07:56	0° \mathcal{E}	
direct	11620 Oct 20 03:45	10° Ω 20'10			11623 Jun 14 12:28	0° Ω	
greatest brilliancy	11620 Oct 29 16:21	11° Ω 59'45	-4.8m	asc. node	11623 Jun 17 15:17	3° Ω 50'51	
	11620 Nov 26 16:52	0° \mathcal{M}			11623 Jul 08 23:00	0° \mathcal{M}	
morning max el	11620 Dec 08 01:06	10° \mathcal{M} 21'34	45°45'15		11623 Aug 02 20:38	0° Ω	
	11620 Dec 27 08:28	0° \mathcal{A}			11623 Aug 28 15:23	0° \mathcal{M}	
asc. node	11620 Dec 31 04:45	4° \mathcal{A} 07'31			11623 Sep 25 10:16	0° \mathcal{A}	
	11621 Jan 23 09:23	0° \mathcal{B}		evening max el	11623 Sep 29 17:50	4° \mathcal{A} 17'54	46°07'16
	11621 Feb 18 01:31	0° \approx		desc. node	11623 Oct 07 14:10	11° \mathcal{A} 45'05	
	11621 Mar 15 00:43	0° \mathcal{H}			11623 Oct 31 15:55	0° \mathcal{B}	
	11621 Apr 08 13:46	0° Υ		greatest brilliancy	11623 Nov 07 21:06	3° \mathcal{B} 18'04	-4.8m
desc. node	11621 Apr 21 23:01	16° Υ 31'05		retrograde	11623 Nov 18 02:53	5° \mathcal{B} 12'42	
	11621 May 02 19:52	0° \mathcal{B}			11623 Dec 04 15:52	30° \mathcal{R} \mathcal{A}	
	11621 May 26 21:03	0° Π		evening set	11623 Dec 06 11:30	28° \mathcal{A} 55'01	
morning set	11621 Jun 08 01:37	15° Π 16'19		inferior conj	11623 Dec 09 15:59	26° \mathcal{A} 55'49	-8°35'28
	11621 Jun 19 19:20	0° \mathcal{E}		minimum elong	11623 Dec 09 19:47	26° \mathcal{A} 49'50	8°34'30
	11621 Jul 13 16:51	0° Ω		min. Earth dist.	11623 Dec 09 16:48	26° \mathcal{A} 54'32	0.29029 AU
				morning rise	11623 Dec 13 04:04	24° \mathcal{A} 45'05	
superior conj	11621 Jul 18 01:35	5° Ω 28'30	-0°57'18	direct	11623 Dec 31 02:45	18° \mathcal{A} 41'20	
minimum elong	11621 Jul 18 13:05	6° Ω 04'33	0°57'30	greatest brilliancy	11624 Jan 10 13:49	20° \mathcal{A} 40'21	-4.7m
max. Earth dist.	11621 Jul 19 20:30	7° Ω 43'06	1.71484 AU		11624 Jan 27 00:50	0° \mathcal{B}	
	11621 Aug 06 15:24	0° \mathcal{M}		asc. node	11624 Jan 28 15:33	1° \mathcal{B} 12'02	
asc. node	11621 Aug 12 14:58	7° \mathcal{M} 28'44		morning max el	11624 Feb 18 06:10	19° \mathcal{B} 20'13	45°53'00
evening rise	11621 Aug 26 19:13	25° \mathcal{M} 10'20			11624 Feb 28 19:04	0° \approx	
	11621 Aug 30 16:14	0° Ω			11624 Mar 27 02:22	0° \mathcal{H}	
	11621 Sep 23 20:22	0° \mathcal{M}			11624 Apr 21 18:13	0° Υ	
	11621 Oct 18 05:21	0° \mathcal{A}			11624 May 16 15:01	0° \mathcal{B}	
	11621 Nov 11 21:35	0° \mathcal{B}		desc. node	11624 May 19 12:10	3° \mathcal{B} 31'06	
desc. node	11621 Dec 02 09:12	24° \mathcal{B} 31'03			11624 Jun 10 00:53	0° Π	
	11621 Dec 07 00:20	0° \approx			11624 Jul 04 04:36	0° \mathcal{E}	
	11622 Jan 01 18:05	0° \mathcal{H}			11624 Jul 28 05:42	0° Ω	
	11622 Jan 28 12:24	0° Υ		morning set	11624 Aug 21 06:55	0° \mathcal{M} 00'51	
evening max el	11622 Feb 21 21:14	25° Υ 21'11	46°12'43		11624 Aug 21 06:39	0° \mathcal{M}	
	11622 Feb 26 17:16	0° \mathcal{B}		asc. node	11624 Sep 09 04:37	23° \mathcal{M} 34'08	
asc. node	11622 Mar 25 09:42	21° \mathcal{B} 03'21			11624 Sep 14 08:37	0° Ω	
greatest brilliancy	11622 Apr 02 16:03	24° \mathcal{B} 54'34	-4.8m				
retrograde	11622 Apr 12 11:29	26° \mathcal{B} 41'53		superior conj	11624 Sep 28 23:19	18° Ω 10'13	0°45'39
evening set	11622 Apr 29 02:23	21° \mathcal{B} 20'58		minimum elong	11624 Sep 28 14:14	17° Ω 42'00	0°45'26
inferior conj	11622 May 03 05:14	18° \mathcal{B} 50'35	8°07'31	max. Earth dist.	11624 Oct 01 05:33	20° Ω 58'36	1.72473 AU
minimum elong	11622 May 02 19:57	19° \mathcal{B} 05'01	8°05'36		11624 Oct 08 12:01	0° \mathcal{M}	
min. Earth dist.	11622 May 03 04:50	18° \mathcal{B} 51'14	0.27435 AU		11624 Nov 01 17:22	0° \mathcal{A}	
morning rise	11622 May 06 13:27	16° \mathcal{B} 47'41		evening rise	11624 Nov 05 04:32	4° \mathcal{A} 16'51	
direct	11622 May 24 02:05	10° \mathcal{B} 54'35			11624 Nov 26 01:41	0° \mathcal{B}	
greatest brilliancy	11622 Jun 02 21:44	12° \mathcal{B} 43'58	-4.9m		11624 Dec 20 14:13	0° \approx	
	11622 Jun 29 01:26	0° Π		desc. node	11624 Dec 29 21:04	11° \approx 17'41	
morning max el	11622 Jul 13 13:52	13° Π 45'21	46°57'53		11625 Jan 14 07:42	0° \mathcal{H}	
desc. node	11622 Jul 15 09:59	15° Π 36'58			11625 Feb 08 06:29	0° Υ	
	11622 Jul 29 01:18	0° \mathcal{E}			11625 Mar 05 12:16	0° \mathcal{B}	
	11622 Aug 24 15:56	0° Ω			11625 Mar 31 07:42	0° Π	
	11622 Sep 19 04:41	0° \mathcal{M}		asc. node	11625 Apr 21 19:23	23° Π 53'52	
	11622 Oct 14 06:16	0° Ω			11625 Apr 27 13:12	0° \mathcal{E}	
asc. node	11622 Nov 05 06:01	26° Ω 35'11		evening max el	11625 May 05 16:42	8° \mathcal{E} 21'21	46°46'08
	11622 Nov 08 01:27	0° \mathcal{M}			11625 May 30 01:42	0° Ω	
	11622 Dec 02 15:53	0° \mathcal{A}		greatest brilliancy	11625 Jun 15 06:09	9° Ω 07'18	-4.9m
	11622 Dec 27 02:43	0° \mathcal{B}		retrograde	11625 Jun 25 00:08	10° Ω 55'24	
morning set	11623 Jan 11 08:45	18° \mathcal{B} 46'44		evening set	11625 Jul 11 07:22	5° Ω 46'53	
	11623 Jan 20 11:12	0° \approx		inferior conj	11625 Jul 15 17:07	3° Ω 08'41	6°24'07
	11623 Feb 13 18:14	0° \mathcal{H}		minimum elong	11625 Jul 16 04:18	2° Ω 51'34	6°20'49
max. Earth dist.	11623 Feb 15 19:51	2° \mathcal{H} 33'21	1.72841 AU	min. Earth dist.	11625 Jul 16 01:02	2° Ω 56'34	0.27053 AU
				morning rise	11625 Jul 21 01:10	29° \mathcal{E} 58'43	
superior conj	11623 Feb 17 18:02	4° \mathcal{H} 56'08	0°17'12		11625 Jul 21 00:14	30° \mathcal{R} \mathcal{E}	
minimum elong	11623 Feb 17 22:01	5° \mathcal{H} 08'28	0°17'23	direct	11625 Aug 05 09:18	25° \mathcal{E} 21'38	
desc. node	11623 Feb 24 21:23	13° \mathcal{H} 46'05		desc. node	11625 Aug 11 20:23	26° \mathcal{E} 09'36	

greatest brilliancy	11625 Aug 15 11:00	27°☿14'43	-4.9m		11628 Feb 22 22:29	0°♊	
	11625 Aug 21 15:16	0°♊			11628 Mar 18 09:01	0°♋	
morning max el	11625 Sep 24 06:28	27°♊00'52	46°24'24		11628 Apr 11 20:53	0°♌	
	11625 Sep 27 06:47	0°♍			11628 May 06 13:20	0°♍	
	11625 Oct 25 12:15	0°♎		asc. node	11628 May 19 05:53	15°☿14'20	
	11625 Nov 20 21:17	0°♏			11628 May 31 17:00	0°♐	
asc. node	11625 Dec 02 18:52	13°♏54'07			11628 Jun 26 21:48	0°♑	
	11625 Dec 16 09:24	0°♒		evening max el	11628 Jul 17 07:22	21°♑38'22	46°43'06
	11626 Jan 10 08:52	0°♓			11628 Jul 25 22:20	0°♒	
	11626 Feb 04 00:13	0°♈		greatest brilliancy	11628 Aug 25 11:12	21°♒47'06	-4.8m
	11626 Feb 28 10:12	0°♉		retrograde	11628 Sep 05 13:34	24°♒03'26	
morning set	11626 Mar 22 15:49	27°♉30'03		desc. node	11628 Sep 08 06:19	23°♒54'37	
desc. node	11626 Mar 24 11:07	29°♉44'22		evening set	11628 Sep 20 15:39	19°♒35'02	
	11626 Mar 24 16:09	0°♊		min. Earth dist.	11628 Sep 25 20:26	16°♒30'04	0.27885 AU
	11626 Apr 17 18:34	0°♋		inferior conj	11628 Sep 26 16:44	15°♒58'42	-4°26'35
max. Earth dist.	11626 Apr 28 13:04	13°♋27'37	1.71712 AU	minimum elong	11628 Sep 26 07:46	16°♒12'34	4°24'02
				morning rise	11628 Oct 02 00:39	12°♒48'09	
superior conj	11626 May 01 11:44	17°♋08'41	-1°16'19	direct	11628 Oct 17 18:24	8°♒04'18	
minimum elong	11626 May 01 01:39	16°♋37'08	1°16'34	greatest brilliancy	11628 Oct 27 05:57	9°♒43'08	-4.8m
	11626 May 11 18:02	0°♌			11628 Nov 26 21:08	0°♍	
	11626 Jun 04 15:56	0°♍		morning max el	11628 Dec 05 15:19	8°♍06'08	45°45'45
evening rise	11626 Jun 10 12:45	7°☿21'45			11628 Dec 27 01:31	0°♎	
	11626 Jun 28 14:13	0°♎		asc. node	11628 Dec 30 06:47	3°♎28'32	
asc. node	11626 Jul 15 03:43	20°♎41'57			11629 Jan 22 23:13	0°♏	
	11626 Jul 22 14:53	0°♏			11629 Feb 17 13:55	0°♐	
	11626 Aug 15 19:57	0°♐			11629 Mar 14 12:24	0°♑	
	11626 Sep 09 08:03	0°♑			11629 Apr 08 01:03	0°♒	
	11626 Oct 04 07:55	0°♒		desc. node	11629 Apr 21 00:47	16°♒02'00	
	11626 Oct 30 04:23	0°♓			11629 May 02 06:56	0°♋	
desc. node	11626 Nov 04 00:12	5°♓26'15			11629 May 26 08:00	0°♌	
	11626 Nov 26 17:09	0°♈		morning set	11629 Jun 05 13:01	12°♌47'30	
evening max el	11626 Dec 09 19:45	13°♈06'36	45°50'14		11629 Jun 19 06:10	0°♍	
	11626 Dec 29 05:04	0°♉			11629 Jul 13 03:35	0°♎	
greatest brilliancy	11627 Jan 17 21:28	11°♉21'29	-4.8m				
retrograde	11627 Jan 27 16:51	13°♉06'39		superior conj	11629 Jul 15 13:49	3°♊02'40	-1°00'08
evening set	11627 Feb 11 19:20	8°♉39'57		minimum elong	11629 Jul 16 01:27	3°♊39'07	1°00'23
inferior conj	11627 Feb 17 20:13	5°♉03'14	-1°47'29	max. Earth dist.	11629 Jul 17 06:53	5°♊11'27	1.71456 AU
minimum elong	11627 Feb 18 00:13	4°♉57'01	1°45'52		11629 Aug 06 02:06	0°♋	
min. Earth dist.	11627 Feb 18 08:13	4°♉44'32	0.28185 AU	asc. node	11629 Aug 11 16:50	7°♋01'07	
morning rise	11627 Feb 24 04:36	1°♉15'28		evening rise	11629 Aug 24 09:15	22°♋51'03	
asc. node	11627 Feb 25 01:47	0°♉47'05			11629 Aug 30 02:58	0°♌	
	11627 Feb 26 15:12	30°♊			11629 Sep 23 07:13	0°♍	
direct	11627 Mar 11 01:30	26°♊53'40			11629 Oct 17 16:25	0°♎	
greatest brilliancy	11627 Mar 21 22:38	29°♊05'49	-4.8m		11629 Nov 11 09:05	0°♏	
	11627 Mar 24 02:40	0°♋		desc. node	11629 Dec 01 11:10	24°♏01'01	
morning max el	11627 Apr 30 04:03	29°♋04'42	46°36'17		11629 Dec 06 12:37	0°♐	
	11627 May 01 02:09	0°♌			11630 Jan 01 07:49	0°♑	
	11627 May 28 22:35	0°♍			11630 Jan 28 05:08	0°♒	
desc. node	11627 Jun 17 00:42	22°♍04'22		evening max el	11630 Feb 19 10:32	23°♒00'26	46°11'22
	11627 Jun 23 17:33	0°♎			11630 Feb 26 19:03	0°♋	
	11627 Jul 18 15:54	0°☿		asc. node	11630 Mar 24 11:34	19°♋31'46	
	11627 Aug 12 04:54	0°♊		greatest brilliancy	11630 Mar 31 05:44	22°♋32'50	-4.8m
	11627 Sep 05 14:09	0°♋		retrograde	11630 Apr 10 00:08	24°♋19'27	
	11627 Sep 29 22:04	0°♌		evening set	11630 Apr 26 11:28	19°♋04'54	
asc. node	11627 Oct 07 18:25	9°♌41'01		inferior conj	11630 Apr 30 18:44	16°♋28'08	7°55'52
	11627 Oct 24 05:19	0°♍		minimum elong	11630 Apr 30 08:57	16°♋43'18	7°53'48
morning set	11627 Nov 01 07:03	9°♍58'07		min. Earth dist.	11630 Apr 30 18:34	16°♋28'23	0.27447 AU
	11627 Nov 17 12:10	0°♎		morning rise	11630 May 04 06:20	14°♋19'57	
				direct	11630 May 21 15:09	8°♋31'39	
superior conj	11627 Dec 08 04:34	25°♎32'38	1°25'00	greatest brilliancy	11630 May 31 12:26	10°♋21'58	-4.9m
minimum elong	11627 Dec 08 07:35	25°♎41'57	1°25'44		11630 Jun 29 07:13	0°♌	
max. Earth dist.	11627 Dec 09 04:00	26°♎44'58	1.73173 AU	morning max el	11630 Jul 11 02:23	11°♌19'28	46°58'22
	11627 Dec 11 19:11	0°♏		desc. node	11630 Jul 14 11:58	14°♌47'00	
	11628 Jan 05 03:10	0°♐			11630 Jul 28 19:09	0°♍	
evening rise	11628 Jan 14 08:00	11°♐19'44			11630 Aug 24 06:18	0°♎	
desc. node	11628 Jan 27 09:49	27°♐24'37			11630 Sep 18 17:25	0°♏	
	11628 Jan 29 12:24	0°♑			11630 Oct 13 18:03	0°♐	

asc. node	11630 Nov 04 07:56	26° Ω 06'52		evening max el	11633 May 03 06:02	5° \mathfrak{S} 58'22	46°45'28
	11630 Nov 07 12:39	0° \mathfrak{M}			11633 May 31 00:41	0° Ω	
	11630 Dec 02 02:43	0° \mathfrak{A}		greatest brilliancy	11633 Jun 12 19:20	6° Ω 42'50	-4.9m
	11630 Dec 26 13:20	0° \mathfrak{S}		retrograde	11633 Jun 22 13:37	8° Ω 31'07	
morning set	11631 Jan 09 01:48	16° \mathfrak{S} 38'45		evening set	11633 Jul 08 23:44	3° Ω 17'09	
	11631 Jan 19 21:45	0° \approx		inferior conj	11633 Jul 13 05:52	0° Ω 44'11	6°41'16
	11631 Feb 13 04:47	0° \mathfrak{H}		minimum elong	11633 Jul 13 17:06	0° Ω 27'01	6°38'03
max. Earth dist.	11631 Feb 13 12:51	0° \mathfrak{H} 24'58	1.72873 AU	min. Earth dist.	11633 Jul 13 14:03	0° Ω 31'41	0.27060 AU
					11633 Jul 14 10:49	30° \mathfrak{R} \mathfrak{S}	
superior conj	11631 Feb 15 09:23	2° \mathfrak{H} 42'36	0°20'36	morning rise	11633 Jul 18 10:26	27° \mathfrak{S} 39'21	
minimum elong	11631 Feb 15 14:06	2° \mathfrak{H} 57'10	0°20'46	direct	11633 Aug 02 22:20	22° \mathfrak{S} 56'48	
desc. node	11631 Feb 23 23:11	13° \mathfrak{H} 18'56		desc. node	11633 Aug 10 22:21	24° \mathfrak{S} 09'51	
	11631 Mar 09 10:27	0° \mathfrak{Y}		greatest brilliancy	11633 Aug 12 23:31	24° \mathfrak{S} 50'01	-4.9m
evening rise	11631 Mar 25 22:43	20° \mathfrak{Y} 29'18			11633 Aug 23 08:06	0° Ω	
	11631 Apr 02 14:23	0° \mathfrak{B}		morning max el	11633 Sep 21 21:28	24° Ω 43'49	46°26'08
	11631 Apr 26 16:47	0° \mathfrak{I}			11633 Sep 27 04:06	0° \mathfrak{M}	
	11631 May 20 19:07	0° \mathfrak{S}			11633 Oct 25 03:39	0° \mathfrak{L}	
	11631 Jun 14 00:02	0° Ω			11633 Nov 20 10:17	0° \mathfrak{M}	
asc. node	11631 Jun 16 17:18	3° Ω 21'18		asc. node	11633 Dec 01 20:53	13° \mathfrak{M} 23'38	
	11631 Jul 08 11:07	0° \mathfrak{M}			11633 Dec 15 21:11	0° \mathfrak{A}	
	11631 Aug 02 09:41	0° \mathfrak{L}			11634 Jan 09 19:59	0° \mathfrak{S}	
	11631 Aug 28 06:22	0° \mathfrak{M}			11634 Feb 03 10:59	0° \approx	
	11631 Sep 25 06:36	0° \mathfrak{A}			11634 Feb 27 20:49	0° \mathfrak{H}	
evening max el	11631 Sep 27 07:53	2° \mathfrak{A} 01'55	46°08'32	morning set	11634 Mar 20 05:44	25° \mathfrak{H} 11'40	
desc. node	11631 Oct 06 16:08	10° \mathfrak{A} 51'27		desc. node	11634 Mar 23 12:58	29° \mathfrak{H} 17'20	
	11631 Nov 02 16:29	0° \mathfrak{S}			11634 Mar 24 02:43	0° \mathfrak{Y}	
greatest brilliancy	11631 Nov 05 12:18	1° \mathfrak{S} 07'57	-4.8m		11634 Apr 17 05:07	0° \mathfrak{B}	
retrograde	11631 Nov 15 18:56	3° \mathfrak{S} 03'49		max. Earth dist.	11634 Apr 26 01:01	11° \mathfrak{B} 01'46	1.71749 AU
	11631 Nov 28 06:32	30° \mathfrak{R} \mathfrak{A}					
evening set	11631 Dec 04 04:25	26° \mathfrak{A} 44'38		superior conj	11634 Apr 28 23:54	14° \mathfrak{B} 43'26	-1°14'21
inferior conj	11631 Dec 07 08:14	24° \mathfrak{A} 46'39	-8°38'44	minimum elong	11634 Apr 28 13:24	14° \mathfrak{B} 10'34	1°14'33
minimum elong	11631 Dec 07 11:16	24° \mathfrak{A} 41'52	8°37'52		11634 May 11 04:38	0° \mathfrak{I}	
min. Earth dist.	11631 Dec 07 08:06	24° \mathfrak{A} 46'52	0.29031 AU		11634 Jun 04 02:36	0° \mathfrak{S}	
morning rise	11631 Dec 10 18:08	22° \mathfrak{A} 39'19		evening rise	11634 Jun 07 23:48	4° \mathfrak{S} 52'22	
direct	11631 Dec 28 18:19	16° \mathfrak{A} 32'11			11634 Jun 28 00:59	0° Ω	
greatest brilliancy	11632 Jan 08 05:36	18° \mathfrak{A} 31'04	-4.7m	asc. node	11634 Jul 14 05:33	20° Ω 13'50	
asc. node	11632 Jan 27 17:31	0° \mathfrak{S} 07'10			11634 Jul 22 01:49	0° \mathfrak{M}	
	11632 Jan 27 13:49	0° \mathfrak{S}			11634 Aug 15 07:08	0° \mathfrak{L}	
morning max el	11632 Feb 15 21:31	17° \mathfrak{S} 07'40	45°51'56		11634 Sep 08 19:41	0° \mathfrak{M}	
	11632 Feb 28 13:13	0° \approx			11634 Oct 03 20:23	0° \mathfrak{A}	
	11632 Mar 26 16:36	0° \mathfrak{H}			11634 Oct 29 18:31	0° \mathfrak{S}	
	11632 Apr 21 06:51	0° \mathfrak{Y}		desc. node	11634 Nov 03 02:18	4° \mathfrak{S} 51'20	
	11632 May 16 02:50	0° \mathfrak{B}			11634 Nov 26 11:25	0° \approx	
desc. node	11632 May 18 14:13	3° \mathfrak{B} 01'26		evening max el	11634 Dec 07 11:53	10° \approx 57'29	45°50'17
	11632 Jun 09 12:14	0° \mathfrak{I}			11634 Dec 29 19:29	0° \mathfrak{H}	
	11632 Jul 03 15:39	0° \mathfrak{S}		greatest brilliancy	11635 Jan 15 12:20	9° \mathfrak{H} 09'17	-4.8m
	11632 Jul 27 16:33	0° Ω		retrograde	11635 Jan 25 08:00	10° \mathfrak{H} 54'09	
morning set	11632 Aug 18 20:36	27° Ω 40'27		evening set	11635 Feb 09 12:22	6° \mathfrak{H} 25'06	
	11632 Aug 20 17:20	0° \mathfrak{M}		inferior conj	11635 Feb 15 11:33	2° \mathfrak{H} 50'14	-2°08'21
asc. node	11632 Sep 08 06:26	23° \mathfrak{M} 06'53		minimum elong	11635 Feb 15 16:16	2° \mathfrak{H} 42'51	2°06'31
	11632 Sep 13 19:10	0° \mathfrak{L}		min. Earth dist.	11635 Feb 15 23:42	2° \mathfrak{H} 31'16	0.28225 AU
					11635 Feb 20 03:05	30° \mathfrak{R} \approx	
superior conj	11632 Sep 26 14:41	15° \mathfrak{L} 56'18	0°42'39	morning rise	11635 Feb 21 19:46	29° \approx 02'31	
minimum elong	11632 Sep 26 05:58	15° \mathfrak{L} 29'14	0°42'24	asc. node	11635 Feb 24 03:40	27° \approx 50'22	
max. Earth dist.	11632 Sep 28 19:41	18° \mathfrak{L} 40'56	1.72434 AU	direct	11635 Mar 08 17:42	24° \approx 40'26	
	11632 Oct 07 22:28	0° \mathfrak{M}		greatest brilliancy	11635 Mar 19 14:04	26° \approx 51'52	-4.8m
	11632 Nov 01 03:47	0° \mathfrak{A}			11635 Mar 26 04:15	0° \mathfrak{H}	
evening rise	11632 Nov 02 21:27	2° \mathfrak{A} 08'39		morning max el	11635 Apr 27 19:24	26° \mathfrak{H} 49'26	46°34'33
	11632 Nov 25 12:13	0° \mathfrak{S}			11635 Apr 30 23:01	0° \mathfrak{Y}	
	11632 Dec 20 01:02	0° \approx			11635 May 28 13:56	0° \mathfrak{B}	
desc. node	11632 Dec 28 23:03	10° \approx 50'32		desc. node	11635 Jun 16 02:39	21° \mathfrak{B} 29'40	
	11633 Jan 13 18:57	0° \mathfrak{H}			11635 Jun 23 06:51	0° \mathfrak{I}	
	11633 Feb 07 18:26	0° \mathfrak{Y}			11635 Jul 18 04:08	0° \mathfrak{S}	
	11633 Mar 05 01:21	0° \mathfrak{B}			11635 Aug 11 16:29	0° Ω	
	11633 Mar 30 22:51	0° \mathfrak{I}			11635 Sep 05 01:16	0° \mathfrak{M}	
asc. node	11633 Apr 20 21:27	23° \mathfrak{I} 09'38			11635 Sep 29 08:51	0° \mathfrak{L}	
	11633 Apr 27 09:19	0° \mathfrak{S}		asc. node	11635 Oct 06 20:19	9° \mathfrak{L} 13'48	

	11635 Oct 23 15:54	0°♌		minimum elong	11638 Apr 27 22:23	14°♊23'07	7°41'14
morning set	11635 Oct 29 23:15	7°♌47'24		min. Earth dist.	11638 Apr 28 08:32	14°♊07'22	0.27462 AU
	11635 Nov 16 22:38	0°♊		morning rise	11638 May 01 23:37	11°♊53'59	
				direct	11638 May 19 04:32	6°♊10'11	
superior conj	11635 Dec 05 21:50	23°♊25'40	1°25'28	greatest brilliancy	11638 May 29 03:34	8°♊01'47	-4.9m
minimum elong	11635 Dec 06 00:08	23°♊32'47	1°26'12		11638 Jun 29 10:49	0°♊	
max. Earth dist.	11635 Dec 06 23:34	24°♊45'05	1.73158 AU	morning max el	11638 Jul 08 15:49	8°♊56'19	46°58'29
	11635 Dec 11 05:36	0°♊		desc. node	11638 Jul 13 13:55	13°♊58'04	
	11636 Jan 04 13:36	0°♊			11638 Jul 28 12:34	0°♊	
evening rise	11636 Jan 12 00:26	9°♊10'22			11638 Aug 23 20:37	0°♊	
desc. node	11636 Jan 26 11:38	26°♊57'46			11638 Sep 18 06:13	0°♊	
	11636 Jan 28 22:58	0°♊			11638 Oct 13 05:58	0°♊	
	11636 Feb 22 09:18	0°♊		asc. node	11638 Nov 03 09:56	25°♊38'18	
	11636 Mar 17 20:13	0°♊			11638 Nov 06 23:59	0°♊	
	11636 Apr 11 08:39	0°♊			11638 Dec 01 13:39	0°♊	
	11636 May 06 01:56	0°♊			11638 Dec 26 00:02	0°♊	
asc. node	11636 May 18 07:52	14°♊40'52		morning set	11639 Jan 06 18:42	14°♊30'07	
	11636 May 31 07:02	0°♊			11639 Jan 19 08:22	0°♊	
	11636 Jun 26 14:53	0°♊		max. Earth dist.	11639 Feb 11 07:33	28°♊21'33	1.72902 AU
evening max el	11636 Jul 14 22:17	19°♊19'58	46°43'53		11639 Feb 12 15:25	0°♊	
	11636 Jul 26 01:17	0°♊					
greatest brilliancy	11636 Aug 23 03:06	19°♊30'25	-4.8m	superior conj	11639 Feb 13 00:50	0°♊29'07	0°23'57
retrograde	11636 Sep 03 04:09	21°♊45'21		minimum elong	11639 Feb 13 06:14	0°♊45'49	0°24'07
desc. node	11636 Sep 07 08:18	21°♊24'15		desc. node	11639 Feb 23 01:04	12°♊51'53	
evening set	11636 Sep 18 04:25	17°♊20'19			11639 Mar 08 21:10	0°♊	
min. Earth dist.	11636 Sep 23 11:24	14°♊12'11	0.27827 AU	evening rise	11639 Mar 23 13:12	18°♊11'50	
inferior conj	11636 Sep 24 07:05	13°♊41'45	-4°07'20		11639 Apr 02 01:12	0°♊	
minimum elong	11636 Sep 23 22:34	13°♊54'55	4°04'52		11639 Apr 26 03:46	0°♊	
morning rise	11636 Sep 29 17:28	10°♊27'34			11639 May 20 06:21	0°♊	
direct	11636 Oct 15 08:21	5°♊48'19			11639 Jun 13 11:39	0°♊	
greatest brilliancy	11636 Oct 24 19:49	7°♊26'47	-4.8m	asc. node	11639 Jun 15 19:10	2°♊51'07	
	11636 Nov 26 23:32	0°♊			11639 Jul 07 23:22	0°♊	
morning max el	11636 Dec 03 04:46	5°♊49'11	45°46'29		11639 Aug 01 23:00	0°♊	
	11636 Dec 26 18:00	0°♊			11639 Aug 27 21:52	0°♊	
asc. node	11636 Dec 29 08:40	2°♊50'03		evening max el	11639 Sep 24 22:39	29°♊46'29	46°09'44
	11637 Jan 22 12:41	0°♊			11639 Sep 25 04:09	0°♊	
	11637 Feb 17 02:01	0°♊		desc. node	11639 Oct 05 18:15	9°♊55'42	
	11637 Mar 13 23:47	0°♊		greatest brilliancy	11639 Nov 03 02:43	28°♊55'15	-4.8m
	11637 Apr 07 12:05	0°♊			11639 Nov 06 14:52	0°♊	
desc. node	11637 Apr 20 02:49	15°♊34'29		retrograde	11639 Nov 13 11:08	0°♊52'58	
	11637 May 01 17:47	0°♊			11639 Nov 20 02:24	30°♊♊	
	11637 May 25 18:46	0°♊		evening set	11639 Dec 01 20:41	24°♊32'44	
morning set	11637 Jun 03 00:18	10°♊18'45		inferior conj	11639 Dec 05 00:09	22°♊35'31	-8°41'21
	11637 Jun 18 16:53	0°♊		minimum elong	11639 Dec 05 02:24	22°♊31'58	8°40'32
	11637 Jul 12 14:17	0°♊		min. Earth dist.	11639 Dec 04 22:46	22°♊37'40	0.29027 AU
				morning rise	11639 Dec 08 08:08	20°♊31'21	
superior conj	11637 Jul 13 01:42	0°♊35'49	-1°02'53	direct	11639 Dec 26 09:55	14°♊21'12	
minimum elong	11637 Jul 13 13:23	1°♊12'27	1°03'11	greatest brilliancy	11640 Jan 05 20:36	16°♊19'41	-4.7m
max. Earth dist.	11637 Jul 14 13:18	2°♊27'29	1.71436 AU	asc. node	11640 Jan 26 19:29	29°♊02'54	
	11637 Aug 05 12:48	0°♊			11640 Jan 27 23:52	0°♊	
asc. node	11637 Aug 10 18:39	6°♊33'19		morning max el	11640 Feb 13 13:27	14°♊55'54	45°50'59
evening rise	11637 Aug 21 22:37	20°♊29'37			11640 Feb 28 07:11	0°♊	
	11637 Aug 29 13:43	0°♊			11640 Mar 26 06:54	0°♊	
	11637 Sep 22 18:04	0°♊			11640 Apr 20 19:36	0°♊	
	11637 Oct 17 03:30	0°♊			11640 May 15 14:47	0°♊	
	11637 Nov 10 20:36	0°♊		desc. node	11640 May 17 16:04	2°♊30'42	
desc. node	11637 Nov 30 13:09	23°♊31'01			11640 Jun 08 23:42	0°♊	
	11637 Dec 06 00:56	0°♊			11640 Jul 03 02:48	0°♊	
	11637 Dec 31 21:37	0°♊			11640 Jul 27 03:31	0°♊	
	11638 Jan 27 22:05	0°♊		morning set	11640 Aug 16 10:28	25°♊20'05	
evening max el	11638 Feb 16 23:48	20°♊40'21	46°10'17		11640 Aug 20 04:10	0°♊	
	11638 Feb 26 22:03	0°♊		asc. node	11640 Sep 07 08:23	22°♊39'27	
asc. node	11638 Mar 23 13:39	17°♊58'16			11640 Sep 13 05:55	0°♊	
greatest brilliancy	11638 Mar 28 19:23	20°♊12'18	-4.8m				
retrograde	11638 Apr 07 13:18	21°♊58'55		superior conj	11640 Sep 24 05:50	13°♊40'50	0°39'34
evening set	11638 Apr 23 20:58	16°♊50'06		minimum elong	11640 Sep 23 21:33	13°♊15'05	0°39'18
inferior conj	11638 Apr 28 08:34	14°♊07'19	7°43'28	max. Earth dist.	11640 Sep 26 10:53	16°♊25'43	1.72405 AU

	11640 Oct 07 09:11	0°♌	greatest brilliancy	11643 Mar 17 05:49	24°≈36'33	-4.8m
evening rise	11640 Oct 31 14:00	29°♌58'19		11643 Mar 27 13:56	0°♐	
	11640 Oct 31 14:33	0°♐	morning max el	11643 Apr 25 09:37	24°♐30'00	46°32'55
	11640 Nov 24 23:08	0°♑		11643 Apr 30 19:41	0°♑	
	11640 Dec 19 12:12	0°≈		11643 May 28 05:26	0°♒	
desc. node	11640 Dec 28 00:50	10°≈21'39	desc. node	11643 Jun 15 04:30	20°♒53'51	
	11641 Jan 13 06:35	0°♐		11643 Jun 22 20:22	0°♑	
	11641 Feb 07 06:46	0°♑		11643 Jul 17 16:39	0°♒	
	11641 Mar 04 14:52	0°♒		11643 Aug 11 04:22	0°♑	
	11641 Mar 30 14:33	0°♑		11643 Sep 04 12:41	0°♒	
asc. node	11641 Apr 19 23:29	22°♑23'47		11643 Sep 28 19:57	0°♑	
	11641 Apr 27 06:27	0°♒	asc. node	11643 Oct 05 22:15	8°♑45'43	
evening max el	11641 Apr 30 20:28	3°♒37'30 46°44'50		11643 Oct 23 02:47	0°♌	
	11641 Jun 01 09:05	0°♑	morning set	11643 Oct 27 15:38	5°♌36'17	
greatest brilliancy	11641 Jun 10 08:34	4°♑18'09 -4.9m		11643 Nov 16 09:24	0°♐	
retrograde	11641 Jun 20 03:20	6°♑06'27				
evening set	11641 Jul 06 16:20	0°♑47'16	superior conj	11643 Dec 03 15:12	21°♐17'58 1°25'48	
	11641 Jul 08 00:30	30°♐	minimum elong	11643 Dec 03 16:47	21°♐22'50 1°26'33	
inferior conj	11641 Jul 10 18:47	28°♒19'27 6°57'36	max. Earth dist.	11643 Dec 04 17:55	22°♐40'27 1.73148 AU	
minimum elong	11641 Jul 11 05:58	28°♒02'22 6°54'31		11643 Dec 10 16:21	0°♑	
min. Earth dist.	11641 Jul 11 02:56	28°♒07'00 0.27065 AU		11644 Jan 04 00:26	0°≈	
morning rise	11641 Jul 15 19:38	25°♒19'57	evening rise	11644 Jan 09 16:44	6°≈59'21	
direct	11641 Jul 31 11:52	20°♒32'02	desc. node	11644 Jan 25 13:34	26°≈29'58	
desc. node	11641 Aug 10 00:18	22°♒14'35		11644 Jan 28 09:58	0°♐	
greatest brilliancy	11641 Aug 10 11:38	22°♒24'33 -4.9m		11644 Feb 21 20:34	0°♑	
	11641 Aug 24 12:34	0°♑		11644 Mar 17 07:53	0°♒	
morning max el	11641 Sep 19 12:15	22°♑25'39 46°27'37		11644 Apr 10 20:51	0°♑	
	11641 Sep 27 00:52	0°♒		11644 May 05 14:59	0°♒	
	11641 Oct 24 19:05	0°♑	asc. node	11644 May 17 09:44	14°♒05'44	
	11641 Nov 19 23:33	0°♌		11644 May 30 21:36	0°♑	
asc. node	11641 Nov 30 22:41	12°♌51'28		11644 Jun 26 08:43	0°♒	
	11641 Dec 15 09:20	0°♐	evening max el	11644 Jul 12 12:16	16°♒58'06 46°44'38	
	11642 Jan 09 07:31	0°♑		11644 Jul 26 06:27	0°♑	
	11642 Feb 02 22:10	0°≈	greatest brilliancy	11644 Aug 20 19:18	17°♑12'53 -4.8m	
	11642 Feb 27 07:48	0°♐	retrograde	11644 Aug 31 18:29	19°♑26'20	
morning set	11642 Mar 17 19:32	22°♐51'52	desc. node	11644 Sep 06 10:25	18°♑47'27	
desc. node	11642 Mar 22 14:53	28°♐49'29	evening set	11644 Sep 15 17:21	15°♑04'09	
	11642 Mar 23 13:37	0°♑	min. Earth dist.	11644 Sep 21 02:44	11°♑52'49 0.27769 AU	
	11642 Apr 16 16:01	0°♒	inferior conj	11644 Sep 21 21:25	11°♑23'55 -3°47'33	
max. Earth dist.	11642 Apr 23 11:07	8°♒29'12 1.71784 AU	minimum elong	11644 Sep 21 13:26	11°♑36'16 3°45'11	
			morning rise	11644 Sep 27 10:12	8°♑06'14	
superior conj	11642 Apr 26 12:04	12°♒17'13 -1°12'15	direct	11644 Oct 12 21:42	3°♑31'14	
minimum elong	11642 Apr 26 01:14	11°♒43'18 1°12'24	greatest brilliancy	11644 Oct 22 10:18	5°♑10'09 -4.8m	
	11642 May 10 15:35	0°♑		11644 Nov 27 00:47	0°♌	
	11642 Jun 03 13:38	0°♒	morning max el	11644 Nov 30 17:57	3°♌30'49 45°47'19	
evening rise	11642 Jun 05 10:56	2°♒22'07		11644 Dec 26 10:26	0°♐	
	11642 Jun 27 12:07	0°♑	asc. node	11644 Dec 28 10:38	2°♐11'32	
asc. node	11642 Jul 13 07:24	19°♑44'42		11645 Jan 22 02:19	0°♑	
	11642 Jul 21 13:04	0°♒		11645 Feb 16 14:23	0°≈	
	11642 Aug 14 18:37	0°♑		11645 Mar 13 11:32	0°♐	
	11642 Sep 08 07:39	0°♌		11645 Apr 06 23:29	0°♑	
	11642 Oct 03 09:15	0°♐	desc. node	11645 Apr 19 04:41	15°♑05'19	
	11642 Oct 29 09:13	0°♑		11645 May 01 05:00	0°♒	
desc. node	11642 Nov 02 04:11	4°♑14'26		11645 May 25 05:50	0°♑	
	11642 Nov 26 06:46	0°≈	morning set	11645 May 31 11:16	7°♑48'03	
evening max el	11642 Dec 05 03:30	8°≈45'35 45°50'06		11645 Jun 18 03:53	0°♒	
	11642 Dec 30 16:05	0°♐				
greatest brilliancy	11643 Jan 13 03:42	6°♐55'48 -4.8m	superior conj	11645 Jul 10 13:28	28°♒07'47 -1°05'32	
retrograde	11643 Jan 22 22:29	8°♐39'41	minimum elong	11645 Jul 11 01:07	28°♒44'20 1°05'51	
evening set	11643 Feb 07 05:23	4°♐08'11	max. Earth dist.	11645 Jul 11 18:52	29°♒40'01 1.71418 AU	
inferior conj	11643 Feb 13 02:45	0°♐35'30 -2°29'02		11645 Jul 12 01:14	0°♑	
minimum elong	11643 Feb 13 08:11	0°♐27'01 2°26'59		11645 Aug 04 23:46	0°♒	
min. Earth dist.	11643 Feb 13 15:23	0°♐15'45 0.28263 AU	asc. node	11645 Aug 09 20:37	6°♒05'15	
	11643 Feb 14 01:27	30°♐≈	evening rise	11645 Aug 19 11:58	18°♒07'19	
morning rise	11643 Feb 19 10:33	26°≈47'54		11645 Aug 29 00:43	0°♑	
asc. node	11643 Feb 23 05:44	24°≈55'03		11645 Sep 22 05:11	0°♌	
direct	11643 Mar 06 09:20	22°≈25'27		11645 Oct 16 14:49	0°♐	

	11645 Nov 10 08:20	0°☾			11648 Jul 02 14:00	0°☾		
desc. node	11645 Nov 29 15:01	22°☾59'59			11648 Jul 26 14:31	0°☾		
	11645 Dec 05 13:30	0°☾	morning set		11648 Aug 13 23:57	22°☾58'31		
	11645 Dec 31 11:46	0°☾			11648 Aug 19 15:00	0°☾		
	11646 Jan 27 15:42	0°☾	asc. node		11648 Sep 06 10:14	22°☾11'52		
evening max el	11646 Feb 14 13:08	18°☾19'42 46°09'01			11648 Sep 12 16:37	0°☾		
	11646 Feb 27 03:22	0°☾						
asc. node	11646 Mar 22 15:40	16°☾19'34	superior conj		11648 Sep 21 20:40	11°☾24'33 0°36'23		
greatest brilliancy	11646 Mar 26 08:12	17°☾49'17 -4.8m	minimum elong		11648 Sep 21 12:52	11°☾00'18 0°36'06		
retrograde	11646 Apr 05 02:36	19°☾36'37	max. Earth dist.		11648 Sep 24 04:15	14°☾17'21 1.72369 AU		
evening set	11646 Apr 21 06:13	14°☾33'08			11648 Oct 06 19:49	0°☾		
inferior conj	11646 Apr 25 22:04	11°☾44'32 7°30'08	evening rise		11648 Oct 29 06:33	27°☾48'16		
minimum elong	11646 Apr 25 11:34	12°☾00'48 7°27'44			11648 Oct 31 01:12	0°☾		
min. Earth dist.	11646 Apr 25 22:03	11°☾44'34 0.27479 AU			11648 Nov 24 09:55	0°☾		
morning rise	11646 Apr 29 16:44	9°☾26'02			11648 Dec 18 23:16	0°☾		
direct	11646 May 16 18:04	3°☾46'44	desc. node		11648 Dec 27 02:49	9°☾53'47		
greatest brilliancy	11646 May 26 18:15	5°☾39'38 -4.9m			11649 Jan 12 18:04	0°☾		
	11646 Jun 29 13:17	0°☾			11649 Feb 06 18:57	0°☾		
morning max el	11646 Jul 06 05:58	6°☾34'06 46°58'43			11649 Mar 04 04:15	0°☾		
desc. node	11646 Jul 12 15:56	13°☾09'13			11649 Mar 30 06:17	0°☾		
	11646 Jul 28 05:53	0°☾	asc. node		11649 Apr 19 01:21	21°☾37'25		
	11646 Aug 23 10:56	0°☾			11649 Apr 27 04:10	0°☾		
	11646 Sep 17 19:04	0°☾	evening max el		11649 Apr 28 10:57	1°☾17'14 46°43'50		
	11646 Oct 12 17:57	0°☾			11649 Jun 03 09:25	0°☾		
asc. node	11646 Nov 02 11:41	25°☾08'48	greatest brilliancy		11649 Jun 07 21:47	1°☾53'28 -4.9m		
	11646 Nov 06 11:23	0°☾	retrograde		11649 Jun 17 16:26	3°☾41'10		
	11646 Dec 01 00:40	0°☾			11649 Jul 01 06:00	30°☾		
	11646 Dec 25 10:49	0°☾	evening set		11649 Jul 04 08:46	28°☾16'59		
morning set	11647 Jan 04 11:56	12°☾22'14	inferior conj		11649 Jul 08 07:29	25°☾54'17 7°13'18		
	11647 Jan 18 19:03	0°☾	minimum elong		11649 Jul 08 18:31	25°☾37'23 7°10'21		
max. Earth dist.	11647 Feb 09 04:08	26°☾23'44 1.72932 AU	min. Earth dist.		11649 Jul 08 15:43	25°☾41'40 0.27073 AU		
			morning rise		11649 Jul 13 04:19	23°☾00'14		
superior conj	11647 Feb 10 16:30	28°☾16'08 0°27'14	direct		11649 Jul 29 01:10	18°☾06'51		
minimum elong	11647 Feb 10 22:34	28°☾34'50 0°27'25	greatest brilliancy		11649 Aug 07 23:46	19°☾58'30 -4.9m		
	11647 Feb 12 02:07	0°☾	desc. node		11649 Aug 09 02:23	20°☾23'28		
desc. node	11647 Feb 22 03:01	12°☾24'45			11649 Aug 25 09:26	0°☾		
	11647 Mar 08 07:58	0°☾	morning max el		11649 Sep 17 02:09	20°☾05'10 46°29'12		
evening rise	11647 Mar 21 03:46	15°☾54'21			11649 Sep 26 20:54	0°☾		
	11647 Apr 01 12:10	0°☾			11649 Oct 24 10:09	0°☾		
	11647 Apr 25 14:56	0°☾			11649 Nov 19 12:30	0°☾		
	11647 May 19 17:47	0°☾	asc. node		11649 Nov 30 00:39	12°☾20'38		
	11647 Jun 12 23:29	0°☾			11649 Dec 14 21:10	0°☾		
asc. node	11647 Jun 14 21:04	2°☾20'24			11650 Jan 08 18:44	0°☾		
	11647 Jul 07 11:49	0°☾			11650 Feb 02 09:03	0°☾		
	11647 Aug 01 12:32	0°☾			11650 Feb 26 18:29	0°☾		
	11647 Aug 27 13:39	0°☾	morning set		11650 Mar 15 09:48	20°☾34'31		
evening max el	11647 Sep 22 14:19	27°☾33'17 46°11'03	desc. node		11650 Mar 21 16:44	28°☾22'20		
	11647 Sep 25 02:33	0°☾			11650 Mar 23 00:13	0°☾		
desc. node	11647 Oct 04 20:09	8°☾58'20			11650 Apr 16 02:36	0°☾		
greatest brilliancy	11647 Oct 31 16:54	26°☾42'36 -4.8m	max. Earth dist.		11650 Apr 20 20:08	5°☾54'23 1.71821 AU		
retrograde	11647 Nov 11 03:44	28°☾42'22						
evening set	11647 Nov 29 12:46	22°☾21'38	superior conj		11650 Apr 24 00:47	9°☾53'50 -1°10'03		
inferior conj	11647 Dec 02 16:08	20°☾24'39 -8°43'17	minimum elong		11650 Apr 23 13:41	9°☾19'07 1°10'08		
minimum elong	11647 Dec 02 17:37	20°☾22'20 8°42'30			11650 May 10 02:13	0°☾		
min. Earth dist.	11647 Dec 02 13:13	20°☾29'13 0.29018 AU	evening rise		11650 Jun 02 22:24	29°☾53'52		
morning rise	11647 Dec 05 22:29	18°☾23'12			11650 Jun 03 00:21	0°☾		
direct	11647 Dec 24 02:06	12°☾10'44			11650 Jun 26 22:57	0°☾		
greatest brilliancy	11648 Jan 03 11:04	14°☾08'07 -4.7m	asc. node		11650 Jul 12 09:24	19°☾16'50		
asc. node	11648 Jan 25 21:31	28°☾00'42			11650 Jul 21 00:05	0°☾		
	11648 Jan 28 06:59	0°☾			11650 Aug 14 05:55	0°☾		
morning max el	11648 Feb 11 05:55	12°☾45'57 45°50'03			11650 Sep 07 19:27	0°☾		
	11648 Feb 28 00:36	0°☾			11650 Oct 02 21:57	0°☾		
	11648 Mar 25 20:55	0°☾			11650 Oct 28 23:48	0°☾		
	11648 Apr 20 08:12	0°☾	desc. node		11650 Nov 01 06:08	3°☾38'14		
	11648 May 15 02:39	0°☾			11650 Nov 26 02:16	0°☾		
desc. node	11648 May 16 17:55	2°☾00'07	evening max el		11650 Dec 02 18:13	6°☾32'37 45°50'08		
	11648 Jun 08 11:09	0°☾			11650 Dec 31 19:27	0°☾		

greatest brilliancy	11651 Jan 10 19:27	4° H 44'15	-4.7m	superior conj	11653 Jul 08 01:31	25° G 41'56	-1°08'02
retrograde	11651 Jan 20 12:47	6° H 27'08		minimum elong	11653 Jul 08 13:03	26° G 18'06	1°08'23
evening set	11651 Feb 04 22:41	1° H 52'44		max. Earth dist.	11653 Jul 09 01:31	26° G 57'13	1.71401 AU
	11651 Feb 08 03:30	30° R \approx			11653 Jul 11 11:46	0° Ω	
inferior conj	11651 Feb 10 18:10	28° \approx 22'37	-2°49'25		11653 Aug 04 10:17	0° M	
minimum elong	11651 Feb 11 00:15	28° \approx 13'05	2°47'10	asc. node	11653 Aug 08 22:27	5° M 38'11	
min. Earth dist.	11651 Feb 11 07:28	28° \approx 01'46	0.28301 AU	evening rise	11653 Aug 17 01:34	15° M 47'16	
morning rise	11651 Feb 17 01:19	24° \approx 35'24			11653 Aug 28 11:16	0° $\underline{\text{A}}$	
asc. node	11651 Feb 22 07:45	22° \approx 05'50			11653 Sep 21 15:51	0° M	
direct	11651 Mar 04 00:42	20° \approx 12'06			11653 Oct 16 01:45	0° J	
greatest brilliancy	11651 Mar 14 22:15	22° \approx 23'38	-4.8m		11653 Nov 09 19:45	0° Z	
	11651 Mar 28 13:09	0° H		desc. node	11653 Nov 28 17:00	22° Z 30'15	
morning max el	11651 Apr 22 23:32	22° H 11'10	46°31'28		11653 Dec 05 01:48	0° \approx	
	11651 Apr 30 15:09	0° Y			11653 Dec 31 01:44	0° H	
	11651 May 27 20:15	0° B			11654 Jan 27 09:19	0° Y	
desc. node	11651 Jun 14 06:32	20° B 20'16		evening max el	11654 Feb 12 03:22	16° Y 02'41	46°07'58
	11651 Jun 22 09:20	0° II			11654 Feb 27 10:17	0° B	
	11651 Jul 17 04:39	0° G		asc. node	11654 Mar 21 17:33	14° B 38'34	
	11651 Aug 10 15:47	0° Ω		greatest brilliancy	11654 Mar 23 20:37	15° B 27'32	-4.8m
	11651 Sep 03 23:43	0° M		retrograde	11654 Apr 02 16:29	17° B 16'03	
	11651 Sep 28 06:42	0° $\underline{\text{A}}$		evening set	11654 Apr 18 15:48	12° B 17'40	
asc. node	11651 Oct 05 00:02	8° $\underline{\text{A}}$ 18'13		inferior conj	11654 Apr 23 11:43	9° B 23'19	7°16'00
	11651 Oct 22 13:20	0° M		minimum elong	11654 Apr 23 00:59	9° B 39'56	7°13'29
morning set	11651 Oct 25 07:36	3° M 24'48		min. Earth dist.	11654 Apr 23 11:22	9° B 23'52	0.27496 AU
	11651 Nov 15 19:49	0° J		morning rise	11654 Apr 27 10:00	6° B 59'43	
				direct	11654 May 14 08:18	1° B 25'03	
superior conj	11651 Dec 01 08:18	19° J 10'36	1°26'01	greatest brilliancy	11654 May 24 08:32	3° B 18'33	-4.9m
minimum elong	11651 Dec 01 09:08	19° J 13'09	1°26'45		11654 Jun 29 13:53	0° II	
max. Earth dist.	11651 Dec 02 10:39	20° J 31'56	1.73133 AU	morning max el	11654 Jul 03 20:58	4° II 15'16	46°58'51
	11651 Dec 10 02:43	0° Z		desc. node	11654 Jul 11 17:53	12° II 22'11	
	11652 Jan 03 10:51	0° \approx			11654 Jul 27 22:26	0° G	
evening rise	11652 Jan 07 08:58	4° \approx 49'28			11654 Aug 23 00:42	0° Ω	
desc. node	11652 Jan 24 15:29	26° \approx 03'23			11654 Sep 17 07:28	0° M	
	11652 Jan 27 20:33	0° H			11654 Oct 12 05:30	0° $\underline{\text{A}}$	
	11652 Feb 21 07:27	0° Y		asc. node	11654 Nov 01 13:39	24° $\underline{\text{A}}$ 41'02	
	11652 Mar 16 19:09	0° B			11654 Nov 05 22:24	0° M	
	11652 Apr 10 08:41	0° II			11654 Nov 30 11:20	0° J	
	11652 May 05 03:39	0° G			11654 Dec 24 21:19	0° Z	
asc. node	11652 May 16 11:46	13° G 32'19		morning set	11655 Jan 02 05:08	10° Z 15'06	
	11652 May 30 11:49	0° Ω			11655 Jan 18 05:29	0° \approx	
	11652 Jun 26 02:23	0° M		max. Earth dist.	11655 Feb 07 00:07	24° \approx 24'52	1.72956 AU
evening max el	11652 Jul 10 01:37	14° M 36'17	46°45'20				
	11652 Jul 26 13:02	0° $\underline{\text{A}}$		superior conj	11655 Feb 08 08:07	26° \approx 03'44	0°30'30
greatest brilliancy	11652 Aug 18 11:01	14° $\underline{\text{A}}$ 56'06	-4.8m	minimum elong	11655 Feb 08 14:46	26° \approx 24'17	0°30'39
retrograde	11652 Aug 29 08:44	17° $\underline{\text{A}}$ 08'48			11655 Feb 11 12:34	0° H	
desc. node	11652 Sep 05 12:18	16° $\underline{\text{A}}$ 06'50		desc. node	11655 Feb 21 04:48	11° H 57'52	
evening set	11652 Sep 13 06:25	12° $\underline{\text{A}}$ 48'42			11655 Mar 07 18:30	0° Y	
inferior conj	11652 Sep 19 11:46	9° $\underline{\text{A}}$ 07'20	-3°27'11	evening rise	11655 Mar 18 18:15	13° Y 37'33	
minimum elong	11652 Sep 19 04:21	9° $\underline{\text{A}}$ 18'46	3°24'59		11655 Mar 31 22:50	0° B	
min. Earth dist.	11652 Sep 18 18:07	9° $\underline{\text{A}}$ 34'35	0.27719 AU		11655 Apr 25 01:49	0° II	
morning rise	11652 Sep 25 02:52	5° $\underline{\text{A}}$ 46'23			11655 May 19 04:58	0° G	
direct	11652 Oct 10 10:59	1° $\underline{\text{A}}$ 15'01			11655 Jun 12 11:06	0° Ω	
greatest brilliancy	11652 Oct 20 01:18	2° $\underline{\text{A}}$ 55'09	-4.8m	asc. node	11655 Jun 13 23:05	1° Ω 50'43	
	11652 Nov 27 00:24	0° M			11655 Jul 07 00:04	0° M	
morning max el	11652 Nov 28 07:47	1° M 14'55	45°48'13		11655 Aug 01 01:54	0° $\underline{\text{A}}$	
	11652 Dec 26 02:11	0° J			11655 Aug 27 05:23	0° M	
asc. node	11652 Dec 27 12:40	1° J 34'33		evening max el	11655 Sep 20 06:34	25° M 22'17	46°12'21
	11653 Jan 21 15:25	0° Z			11655 Sep 25 01:32	0° J	
	11653 Feb 16 02:16	0° \approx		desc. node	11655 Oct 03 22:07	8° J 00'47	
	11653 Mar 12 22:47	0° H		greatest brilliancy	11655 Oct 29 07:17	24° J 31'07	-4.8m
	11653 Apr 06 10:24	0° Y		retrograde	11655 Nov 08 20:16	26° J 32'26	
desc. node	11653 Apr 18 06:26	14° Y 37'16		evening set	11655 Nov 27 04:33	20° J 12'01	
	11653 Apr 30 15:45	0° B		inferior conj	11655 Nov 30 08:09	18° J 14'35	-8°44'22
	11653 May 24 16:29	0° II		minimum elong	11655 Nov 30 08:51	18° J 13'29	8°43'38
morning set	11653 May 28 22:27	5° II 19'20		min. Earth dist.	11655 Nov 30 03:36	18° J 21'43	0.29008 AU
	11653 Jun 17 14:27	0° G		morning rise	11655 Dec 03 13:13	16° J 15'09	
				direct	11655 Dec 21 18:37	10° J 01'13	

greatest brilliancy	11656 Jan 01 01:09	11°♌56'47	-4.7m	asc. node	11658 Jul 11 11:13	18°♏47'44	
asc. node	11656 Jan 24 23:28	27°♌00'21			11658 Jul 20 11:18	0°♍	
	11656 Jan 28 11:42	0°♌			11658 Aug 13 17:27	0°♎	
morning max el	11656 Feb 08 21:59	10°♌35'28	45°48'59		11658 Sep 07 07:31	0°♏	
	11656 Feb 27 17:33	0°♍			11658 Oct 02 11:00	0°♌	
	11656 Mar 25 10:43	0°♋			11658 Oct 28 14:51	0°♌	
	11656 Apr 19 20:38	0°♍		desc. node	11658 Oct 31 08:12	3°♌01'17	
	11656 May 14 14:21	0°♌			11658 Nov 25 22:42	0°♍	
desc. node	11656 May 15 19:57	1°♌30'38		evening max el	11658 Nov 30 08:08	4°♍16'58	45°50'15
	11656 Jun 07 22:26	0°♎			11659 Jan 02 11:25	0°♋	
	11656 Jul 02 01:02	0°♏		greatest brilliancy	11659 Jan 08 11:02	2°♋31'58	-4.7m
	11656 Jul 26 01:23	0°♏		retrograde	11659 Jan 18 03:17	4°♋14'23	
morning set	11656 Aug 11 13:23	20°♏37'01			11659 Feb 01 22:59	30°♋	
	11656 Aug 19 01:45	0°♍		evening set	11659 Feb 02 16:05	29°♍36'32	
asc. node	11656 Sep 05 12:02	21°♍44'19		inferior conj	11659 Feb 08 09:37	26°♍09'19	-3°09'21
	11656 Sep 12 03:15	0°♎		minimum elong	11659 Feb 08 16:19	25°♍58'48	3°06'55
				min. Earth dist.	11659 Feb 08 23:36	25°♍47'24	0.28343 AU
superior conj	11656 Sep 19 11:26	9°♎08'13	0°33'08	morning rise	11659 Feb 14 15:59	22°♍22'54	
minimum elong	11656 Sep 19 04:12	8°♎45'41	0°32'51	asc. node	11659 Feb 21 09:38	19°♍20'52	
max. Earth dist.	11656 Sep 21 22:12	12°♎10'59	1.72330 AU	direct	11659 Mar 01 15:55	17°♍58'09	
	11656 Oct 06 06:22	0°♏		greatest brilliancy	11659 Mar 12 15:03	20°♍10'44	-4.8m
evening rise	11656 Oct 26 23:06	25°♏38'23			11659 Mar 29 06:33	0°♋	
	11656 Oct 30 11:47	0°♌		morning max el	11659 Apr 20 13:40	19°♋52'01	46°29'52
	11656 Nov 23 20:39	0°♌			11659 Apr 30 10:27	0°♍	
	11656 Dec 18 10:17	0°♍			11659 May 27 11:17	0°♌	
desc. node	11656 Dec 26 04:47	9°♍25'56		desc. node	11659 Jun 13 08:27	19°♌45'16	
	11657 Jan 12 05:35	0°♋			11659 Jun 21 22:37	0°♎	
	11657 Feb 06 07:15	0°♍			11659 Jul 16 17:00	0°♏	
	11657 Mar 03 17:50	0°♌			11659 Aug 10 03:33	0°♏	
	11657 Mar 29 22:23	0°♎			11659 Sep 03 11:04	0°♍	
asc. node	11657 Apr 18 03:25	20°♎50'37			11659 Sep 27 17:46	0°♎	
evening max el	11657 Apr 26 00:42	28°♎54'52	46°42'53	asc. node	11659 Oct 04 01:58	7°♎50'14	
	11657 Apr 27 02:53	0°♏			11659 Oct 22 00:13	0°♏	
greatest brilliancy	11657 Jun 05 11:34	29°♏29'26	-4.9m	morning set	11659 Oct 22 23:24	1°♏11'42	
	11657 Jun 07 01:09	0°♏			11659 Nov 15 06:35	0°♌	
retrograde	11657 Jun 15 05:04	1°♏15'52					
	11657 Jun 23 02:00	30°♋		superior conj	11659 Nov 29 01:28	17°♌02'15	1°26'06
evening set	11657 Jul 02 01:18	25°♏46'49		minimum elong	11659 Nov 29 01:32	17°♌02'28	1°26'50
inferior conj	11657 Jul 05 20:17	23°♏29'16	7°28'05	max. Earth dist.	11659 Nov 30 02:57	18°♌20'58	1.73120 AU
minimum elong	11657 Jul 06 07:05	23°♏12'41	7°25'17		11659 Dec 09 13:28	0°♌	
min. Earth dist.	11657 Jul 06 04:47	23°♏16'13	0.27081 AU		11660 Jan 02 21:39	0°♍	
morning rise	11657 Jul 10 12:54	20°♏40'46		evening rise	11660 Jan 05 01:24	2°♍39'10	
direct	11657 Jul 26 14:04	15°♏41'46		desc. node	11660 Jan 23 17:17	25°♍35'21	
greatest brilliancy	11657 Aug 05 12:23	17°♏32'55	-4.9m		11660 Jan 27 07:31	0°♋	
desc. node	11657 Aug 08 04:19	18°♏36'31			11660 Feb 20 18:42	0°♍	
	11657 Aug 26 00:58	0°♏			11660 Mar 16 06:49	0°♌	
morning max el	11657 Sep 14 15:05	17°♏41'58	46°30'43		11660 Apr 09 20:56	0°♎	
	11657 Sep 26 16:22	0°♍			11660 May 04 16:51	0°♏	
	11657 Oct 24 01:05	0°♎		asc. node	11660 May 15 13:43	12°♏57'05	
	11657 Nov 19 01:26	0°♏			11660 May 30 02:43	0°♏	
asc. node	11657 Nov 29 02:38	11°♏49'45			11660 Jun 25 21:07	0°♍	
	11657 Dec 14 09:02	0°♌		evening max el	11660 Jul 07 15:08	12°♍13'10	46°46'07
	11658 Jan 08 06:01	0°♌			11660 Jul 26 23:05	0°♎	
	11658 Feb 01 20:00	0°♍		greatest brilliancy	11660 Aug 16 02:08	12°♎36'37	-4.8m
	11658 Feb 26 05:18	0°♋		retrograde	11660 Aug 26 23:14	14°♎49'23	
morning set	11658 Mar 13 00:02	18°♋16'32		desc. node	11660 Sep 04 14:18	13°♎18'57	
desc. node	11658 Mar 20 18:35	27°♋54'42		evening set	11660 Sep 10 19:31	10°♎30'49	
	11658 Mar 22 10:59	0°♍		min. Earth dist.	11660 Sep 16 09:01	7°♎14'36	0.27668 AU
	11658 Apr 15 13:24	0°♌		inferior conj	11660 Sep 17 01:55	6°♎48'36	-3°06'20
max. Earth dist.	11658 Apr 18 04:13	3°♌16'01	1.71862 AU	minimum elong	11660 Sep 16 19:08	6°♎59'02	3°04'18
				morning rise	11660 Sep 22 19:18	3°♎24'52	
superior conj	11658 Apr 21 13:18	7°♌29'12	-1°07'42		11660 Sep 30 17:38	30°♋	
minimum elong	11658 Apr 21 02:01	6°♌53'57	1°07'44	direct	11660 Oct 08 00:19	28°♍56'40	
	11658 May 09 13:05	0°♎			11660 Oct 15 13:46	0°♎	
evening rise	11658 May 31 09:31	27°♎23'55		greatest brilliancy	11660 Oct 17 15:48	0°♎37'58	-4.8m
	11658 Jun 02 11:17	0°♏		morning max el	11660 Nov 25 22:21	28°♎59'27	45°49'09
	11658 Jun 26 09:59	0°♏			11660 Nov 26 23:30	0°♏	

	11660 Dec 25 18:07	0°♊		11663 Jul 06 12:40	0°♎	
asc. node	11660 Dec 26 14:32	0°♊56'14		11663 Jul 31 15:43	0°♎	
	11661 Jan 21 04:51	0°♊		11663 Aug 26 21:49	0°♎	
	11661 Feb 15 14:31	0°♋	evening max el	11663 Sep 17 22:47	23°♎09'50	46°13'30
	11661 Mar 12 10:25	0°♌		11663 Sep 25 02:12	0°♊	
	11661 Apr 05 21:43	0°♍	desc. node	11663 Oct 03 00:14	7°♊00'54	
desc. node	11661 Apr 17 08:29	14°♍08'57	greatest brilliancy	11663 Oct 26 22:22	22°♊18'59	-4.8m
	11661 Apr 30 02:53	0°♎	retrograde	11663 Nov 06 12:24	24°♊20'58	
	11661 May 24 03:32	0°♏	evening set	11663 Nov 24 19:57	18°♊01'47	
morning set	11661 May 26 09:41	2°♏49'37	inferior conj	11663 Nov 28 00:08	16°♊03'16	-8°44'42
	11661 Jun 17 01:27	0°♐	minimum elong	11663 Nov 28 00:01	16°♊03'26	8°44'00
			min. Earth dist.	11663 Nov 27 18:07	16°♊12'42	0.28991 AU
superior conj	11661 Jul 05 13:14	23°♐13'30 -1°10'25	morning rise	11663 Dec 01 04:13	14°♊05'16	
minimum elong	11661 Jul 06 00:33	23°♐49'00 1°10'49	direct	11663 Dec 19 10:57	7°♊50'39	
max. Earth dist.	11661 Jul 06 09:42	24°♐17'43 1.71391 AU	greatest brilliancy	11663 Dec 29 15:08	9°♊44'09	-4.7m
	11661 Jul 10 22:46	0°♑	asc. node	11664 Jan 24 01:27	26°♊00'33	
	11661 Aug 03 21:17	0°♒		11664 Jan 28 15:02	0°♊	
asc. node	11661 Aug 08 00:17	5°♒09'28	morning max el	11664 Feb 06 13:01	8°♊21'37	45°47'59
evening rise	11661 Aug 14 14:39	13°♒23'59		11664 Feb 27 10:26	0°♋	
	11661 Aug 27 22:20	0°♌		11664 Mar 25 00:39	0°♌	
	11661 Sep 21 03:02	0°♍		11664 Apr 19 09:14	0°♍	
	11661 Oct 15 13:10	0°♎		11664 May 14 02:15	0°♎	
	11661 Nov 09 07:41	0°♏	desc. node	11664 May 14 21:47	0°♎59'50	
desc. node	11661 Nov 27 18:57	21°♏58'53		11664 Jun 07 09:55	0°♏	
	11661 Dec 04 14:40	0°♐		11664 Jul 01 12:14	0°♐	
	11661 Dec 30 16:21	0°♑		11664 Jul 25 12:24	0°♑	
	11662 Jan 27 03:55	0°♒	morning set	11664 Aug 09 03:06	18°♑15'55	
evening max el	11662 Feb 09 18:32	13°♒46'47 46°06'57		11664 Aug 18 12:37	0°♒	
	11662 Feb 27 20:29	0°♓	asc. node	11664 Sep 04 14:00	21°♒16'47	
asc. node	11662 Mar 20 19:39	12°♓52'57		11664 Sep 11 14:01	0°♓	
greatest brilliancy	11662 Mar 21 09:04	13°♓05'03 -4.8m				
retrograde	11662 Mar 31 06:38	14°♓54'34	superior conj	11664 Sep 17 02:20	6°♓51'44	0°29'51
evening set	11662 Apr 16 01:41	10°♓01'23	minimum elong	11664 Sep 16 19:43	6°♓31'07	0°29'32
inferior conj	11662 Apr 21 01:26	7°♓01'22 7°01'11	max. Earth dist.	11664 Sep 19 15:35	10°♓02'15	1.72294 AU
minimum elong	11662 Apr 20 14:32	7°♓18'13 6°58'33		11664 Oct 05 17:07	0°♔	
min. Earth dist.	11662 Apr 21 00:34	7°♓02'42 0.27510 AU	evening rise	11664 Oct 24 15:37	23°♔27'39	
morning rise	11662 Apr 25 03:17	4°♓32'38		11664 Oct 29 22:35	0°♊	
	11662 May 05 03:58	30°♒♑		11664 Nov 23 07:36	0°♓	
direct	11662 May 11 22:50	29°♑02'58		11664 Dec 17 21:31	0°♋	
	11662 May 18 22:43	0°♓	desc. node	11664 Dec 25 06:35	8°♋56'59	
greatest brilliancy	11662 May 21 22:16	0°♓56'07 -4.9m		11665 Jan 11 17:18	0°♌	
	11662 Jun 29 13:43	0°♏		11665 Feb 05 19:46	0°♍	
morning max el	11662 Jul 01 11:50	1°♏55'14 46°58'43		11665 Mar 03 07:43	0°♎	
desc. node	11662 Jul 10 19:51	11°♏34'52		11665 Mar 29 14:57	0°♏	
	11662 Jul 27 15:05	0°♐	asc. node	11665 Apr 17 05:27	20°♏02'35	
	11662 Aug 22 14:48	0°♑	evening max el	11665 Apr 23 13:37	26°♏29'59	46°41'53
	11662 Sep 16 20:15	0°♒		11665 Apr 27 02:47	0°♐	
	11662 Oct 11 17:29	0°♓				
asc. node	11662 Oct 31 15:37	24°♓12'00	greatest brilliancy	11665 Jun 03 01:56	27°♓05'56	-4.9m
	11662 Nov 05 09:50	0°♔	retrograde	11665 Jun 12 17:29	28°♓50'52	
	11662 Nov 29 22:25	0°♊	evening set	11665 Jun 29 17:55	23°♓16'55	
	11662 Dec 24 08:11	0°♋	inferior conj	11665 Jul 03 09:15	21°♓04'39	7°41'54
morning set	11662 Dec 30 22:13	8°♓06'33	minimum elong	11665 Jul 03 19:43	20°♓48'32	7°39'18
	11663 Jan 17 16:18	0°♌	min. Earth dist.	11665 Jul 03 18:15	20°♓50'49	0.27086 AU
max. Earth dist.	11663 Feb 04 18:59	22°♌21'27 1.72980 AU	morning rise	11665 Jul 07 21:31	18°♓22'00	
			direct	11665 Jul 24 02:38	13°♓16'54	
superior conj	11663 Feb 05 23:48	23°♌50'27 0°33'41	greatest brilliancy	11665 Aug 03 01:36	15°♓08'15	-4.9m
minimum elong	11663 Feb 06 07:00	24°♌12'41 0°33'52	desc. node	11665 Aug 07 06:17	16°♓53'57	
	11663 Feb 10 23:25	0°♌		11665 Aug 26 12:27	0°♑	
desc. node	11663 Feb 20 06:43	11°♌30'11	morning max el	11665 Sep 12 03:32	15°♑17'32	46°32'21
	11663 Mar 07 05:26	0°♍		11665 Sep 26 11:13	0°♒	
evening rise	11663 Mar 16 08:52	11°♍19'57		11665 Oct 23 15:46	0°♓	
	11663 Mar 31 09:54	0°♎	asc. node	11665 Nov 18 14:16	0°♔	
	11663 Apr 24 13:03	0°♏		11665 Nov 28 04:26	11°♔18'25	
	11663 May 18 16:29	0°♐		11665 Dec 13 20:54	0°♊	
	11663 Jun 11 23:02	0°♑		11666 Jan 07 17:20	0°♋	
asc. node	11663 Jun 13 00:56	1°♑19'40		11666 Feb 01 06:59	0°♌	
				11666 Feb 25 16:06	0°♍	

morning set	11666 Mar 10 14:22	15° H 58'57		desc. node	11668 Sep 03 16:26	10° A 26'30	
desc. node	11666 Mar 19 20:32	27° H 27'22		evening set	11668 Sep 08 08:45	8° A 13'06	
	11666 Mar 21 21:44	0° Y		min. Earth dist.	11668 Sep 13 23:35	4° A 55'16	0.27617 AU
	11666 Apr 15 00:10	0° B		inferior conj	11668 Sep 14 15:55	4° A 30'11	-2°45'01
max. Earth dist.	11666 Apr 15 15:31	0° B 47'53	1.71907 AU	minimum elong	11668 Sep 14 09:49	4° A 39'33	2°43'11
				morning rise	11668 Sep 20 11:30	1° A 04'00	
superior conj	11666 Apr 19 01:55	5° B 05'03	-1°05'13		11668 Sep 22 12:42	30° R H	
minimum elong	11666 Apr 18 14:32	4° B 29'32	1°05'13	direct	11668 Oct 05 13:57	26° H 38'46	
	11666 May 08 23:55	0° H		greatest brilliancy	11668 Oct 15 05:40	28° H 20'45	-4.8m
evening rise	11666 May 28 20:52	24° H 54'48			11668 Oct 19 09:42	0° A	
	11666 Jun 01 22:13	0° B		morning max el	11668 Nov 23 13:30	26° A 46'30	45°50'15
	11666 Jun 25 21:01	0° A			11668 Nov 26 21:11	0° H	
asc. node	11666 Jul 10 13:07	18° A 18'58			11668 Dec 25 09:21	0° H	
	11666 Jul 19 22:29	0° H		asc. node	11668 Dec 25 16:31	0° H 19'50	
	11666 Aug 13 04:55	0° A			11669 Jan 20 17:45	0° B	
	11666 Sep 06 19:30	0° H			11669 Feb 15 02:20	0° \approx	
	11666 Oct 01 23:58	0° H			11669 Mar 11 21:42	0° H	
	11666 Oct 28 05:56	0° B			11669 Apr 05 08:43	0° Y	
desc. node	11666 Oct 30 10:07	2° B 24'08		desc. node	11669 Apr 16 10:20	13° Y 40'55	
	11666 Nov 25 19:41	0° \approx			11669 Apr 29 13:43	0° B	
evening max el	11666 Nov 27 22:02	2° \approx 01'47	45°50'20	morning set	11669 May 23 20:50	0° H 20'37	
	11667 Jan 05 03:53	0° H			11669 May 23 14:15	0° H	
greatest brilliancy	11667 Jan 06 02:16	0° H 19'45	-4.7m		11669 Jun 16 12:07	0° B	
retrograde	11667 Jan 15 18:22	2° H 02'21					
	11667 Jan 25 21:51	30° R \approx		superior conj	11669 Jul 03 00:46	20° B 45'32	-1°12'40
evening set	11667 Jan 31 09:41	27° \approx 20'39		minimum elong	11669 Jul 03 11:47	21° B 20'06	1°13'06
inferior conj	11667 Feb 06 01:09	23° \approx 56'34	-3°28'50	max. Earth dist.	11669 Jul 03 20:14	21° B 46'40	1.71381 AU
minimum elong	11667 Feb 06 08:27	23° \approx 45'09	3°26'15		11669 Jul 10 09:25	0° A	
min. Earth dist.	11667 Feb 06 15:38	23° \approx 33'54	0.28387 AU		11669 Aug 03 07:58	0° H	
morning rise	11667 Feb 12 06:37	20° \approx 11'30		asc. node	11669 Aug 07 02:15	4° H 42'16	
asc. node	11667 Feb 20 11:44	16° \approx 41'16		evening rise	11669 Aug 12 03:37	11° H 01'18	
direct	11667 Feb 27 07:20	15° \approx 44'44			11669 Aug 27 09:04	0° A	
greatest brilliancy	11667 Mar 10 07:57	17° \approx 58'38	-4.8m		11669 Sep 20 13:53	0° H	
	11667 Mar 29 19:15	0° H			11669 Oct 15 00:16	0° H	
morning max el	11667 Apr 18 04:38	17° H 35'34	46°28'19		11669 Nov 08 19:16	0° B	
	11667 Apr 30 05:01	0° Y		desc. node	11669 Nov 26 20:52	21° B 28'34	
	11667 May 27 01:55	0° B			11669 Dec 04 03:10	0° \approx	
desc. node	11667 Jun 12 10:20	19° B 11'01			11669 Dec 30 06:39	0° H	
	11667 Jun 21 11:37	0° H			11670 Jan 26 22:27	0° Y	
	11667 Jul 16 05:06	0° B		evening max el	11670 Feb 07 09:55	11° Y 32'55	46°05'46
	11667 Aug 09 15:05	0° A			11670 Feb 28 09:28	0° B	
	11667 Sep 02 22:12	0° H		greatest brilliancy	11670 Mar 18 22:03	10° B 44'31	-4.8m
	11667 Sep 27 04:36	0° A		asc. node	11670 Mar 19 21:38	11° B 04'22	
asc. node	11667 Oct 03 03:52	7° A 22'52		retrograde	11670 Mar 28 20:31	12° B 34'10	
morning set	11667 Oct 20 15:29	29° A 00'12		evening set	11670 Apr 13 11:51	7° B 46'17	
	11667 Oct 21 10:50	0° H		inferior conj	11670 Apr 18 15:13	4° B 40'43	6°45'40
	11667 Nov 14 17:04	0° H		minimum elong	11670 Apr 18 04:15	4° B 57'42	6°42'56
				min. Earth dist.	11670 Apr 18 14:06	4° B 42'26	0.27525 AU
superior conj	11667 Nov 26 18:53	14° H 55'32	1°26'04	morning rise	11670 Apr 22 20:34	2° B 06'42	
minimum elong	11667 Nov 26 18:13	14° H 53'29	1°26'47		11670 Apr 26 18:06	30° R Y	
max. Earth dist.	11667 Nov 27 21:12	16° H 16'50	1.73108 AU	direct	11670 May 09 13:25	26° Y 42'15	
	11667 Dec 08 23:55	0° B		greatest brilliancy	11670 May 19 12:16	28° Y 34'55	-4.9m
	11668 Jan 02 08:12	0° \approx			11670 May 22 22:43	0° B	
evening rise	11668 Jan 02 18:07	0° \approx 30'31		morning max el	11670 Jun 29 02:00	29° B 34'24	46°58'29
desc. node	11668 Jan 22 19:16	25° \approx 08'33			11670 Jun 29 12:09	0° H	
	11668 Jan 26 18:16	0° H		desc. node	11670 Jul 09 21:52	10° H 49'28	
	11668 Feb 20 05:44	0° Y			11670 Jul 27 07:04	0° B	
	11668 Mar 15 18:16	0° B			11670 Aug 22 04:23	0° A	
	11668 Apr 09 08:59	0° H			11670 Sep 16 08:35	0° H	
	11668 May 04 05:52	0° B			11670 Oct 11 05:03	0° A	
asc. node	11668 May 14 15:37	12° B 22'17		asc. node	11670 Oct 30 17:22	23° A 43'28	
	11668 May 29 17:32	0° A			11670 Nov 04 20:52	0° H	
	11668 Jun 25 16:05	0° H			11670 Nov 29 09:06	0° H	
evening max el	11668 Jul 05 05:20	9° H 52'37	46°46'50		11670 Dec 23 18:41	0° B	
	11668 Jul 27 12:13	0° A		morning set	11670 Dec 28 15:35	5° B 59'56	
greatest brilliancy	11668 Aug 13 16:48	10° A 17'13	-4.8m		11671 Jan 17 02:42	0° \approx	
retrograde	11668 Aug 24 14:15	12° A 30'22		max. Earth dist.	11671 Feb 02 13:08	20° \approx 17'12	1.72999 AU

superior conj	11671 Feb 03 15:53	21° \approx 39'49	0°36'47	desc. node	11673 Aug 06 08:22	15° \approx 15'37	
minimum elong	11671 Feb 03 23:36	22° \approx 03'36	0°36'59		11673 Aug 26 20:50	0° Ω	
	11671 Feb 10 09:50	0° \mathbb{X}		morning max el	11673 Sep 09 16:29	12° Ω 54'20	46°33'57
desc. node	11671 Feb 19 08:40	11° \mathbb{X} 03'56			11673 Sep 26 05:29	0° \mathbb{M}	
	11671 Mar 06 15:57	0° Υ			11673 Oct 23 06:10	0° $\underline{\Omega}$	
evening rise	11671 Mar 13 23:45	9° Υ 04'31			11673 Nov 18 02:54	0° \mathbb{M}	
	11671 Mar 30 20:34	0° \mathcal{B}		asc. node	11673 Nov 27 06:26	10° \mathbb{M} 48'11	
	11671 Apr 23 23:58	0° \mathbb{I}			11673 Dec 13 08:35	0° \mathcal{X}	
	11671 May 18 03:43	0° \mathcal{E}			11674 Jan 07 04:27	0° \mathcal{Z}	
	11671 Jun 11 10:43	0° Ω			11674 Jan 31 17:48	0° \approx	
asc. node	11671 Jun 12 02:52	0° Ω 49'36			11674 Feb 25 02:45	0° \mathbb{X}	
	11671 Jul 06 01:04	0° \mathbb{M}		morning set	11674 Mar 08 04:54	13° \mathbb{X} 42'27	
	11671 Jul 31 05:22	0° $\underline{\Omega}$		desc. node	11674 Mar 18 22:21	27° \mathbb{X} 00'10	
	11671 Aug 26 14:15	0° \mathbb{M}			11674 Mar 21 08:19	0° Υ	
evening max el	11671 Sep 15 14:01	20° \mathbb{M} 55'32	46°14'37	max. Earth dist.	11674 Apr 13 05:42	28° Υ 29'19	1.71945 AU
	11671 Sep 25 03:49	0° \mathcal{X}			11674 Apr 14 10:45	0° \mathcal{B}	
desc. node	11671 Oct 02 02:08	5° \mathcal{X} 59'54					
greatest brilliancy	11671 Oct 24 13:58	20° \mathcal{X} 07'54	-4.8m	superior conj	11674 Apr 16 14:47	2° \mathcal{B} 42'23	-1°02'40
retrograde	11671 Nov 04 03:58	22° \mathcal{X} 09'54		minimum elong	11674 Apr 16 03:24	2° \mathcal{B} 06'49	1°02'36
evening set	11671 Nov 22 10:51	15° \mathcal{X} 52'36			11674 May 08 10:33	0° \mathbb{I}	
inferior conj	11671 Nov 25 15:58	13° \mathcal{X} 52'31	-8°44'25	evening rise	11674 May 26 08:37	22° \mathbb{I} 27'42	
minimum elong	11671 Nov 25 15:02	13° \mathcal{X} 53'59	8°43'42		11674 Jun 01 08:56	0° \mathcal{E}	
min. Earth dist.	11671 Nov 25 08:52	14° \mathcal{X} 03'40	0.28970 AU		11674 Jun 25 07:51	0° Ω	
morning rise	11671 Nov 28 19:20	11° \mathcal{X} 55'27		asc. node	11674 Jul 09 15:06	17° Ω 50'55	
direct	11671 Dec 17 02:41	5° \mathcal{X} 40'37			11674 Jul 19 09:33	0° \mathbb{M}	
greatest brilliancy	11671 Dec 27 05:22	7° \mathcal{X} 32'24	-4.7m		11674 Aug 12 16:20	0° $\underline{\Omega}$	
asc. node	11672 Jan 23 03:28	25° \mathcal{X} 03'10			11674 Sep 06 07:30	0° \mathbb{M}	
	11672 Jan 28 16:25	0° \mathcal{Z}			11674 Oct 01 13:02	0° \mathcal{X}	
morning max el	11672 Feb 04 03:13	6° \mathcal{Z} 06'42	45°47'16		11674 Oct 27 21:16	0° \mathcal{Z}	
	11672 Feb 27 02:35	0° \approx		desc. node	11674 Oct 29 12:04	1° \mathcal{Z} 46'41	
	11672 Mar 24 14:01	0° \mathbb{X}		evening max el	11674 Nov 25 12:24	29° \mathcal{Z} 47'46	45°50'38
	11672 Apr 18 21:22	0° Υ			11674 Nov 25 17:30	0° \approx	
desc. node	11672 May 13 23:39	0° \mathcal{B} 30'21		greatest brilliancy	11675 Jan 03 16:46	28° \approx 06'37	-4.7m
	11672 May 13 13:45	0° \mathcal{B}		retrograde	11675 Jan 13 09:45	29° \approx 49'58	
	11672 Jun 06 21:04	0° \mathbb{I}		evening set	11675 Jan 29 03:14	25° \approx 04'12	
	11672 Jun 30 23:11	0° \mathcal{E}		inferior conj	11675 Feb 03 16:29	21° \approx 43'19	-3°48'07
	11672 Jul 24 23:11	0° Ω		minimum elong	11675 Feb 04 00:20	21° \approx 31'03	3°45'25
morning set	11672 Aug 06 16:18	15° Ω 53'49		min. Earth dist.	11675 Feb 04 07:07	21° \approx 20'26	0.28429 AU
	11672 Aug 17 23:15	0° \mathbb{M}		morning rise	11675 Feb 09 20:52	18° \approx 00'00	
asc. node	11672 Sep 03 15:50	20° \mathbb{M} 49'37		asc. node	11675 Feb 19 13:43	14° \approx 06'12	
	11672 Sep 11 00:33	0° $\underline{\Omega}$		direct	11675 Feb 24 22:56	13° \approx 30'50	
				greatest brilliancy	11675 Mar 08 00:10	15° \approx 45'33	-4.8m
superior conj	11672 Sep 14 16:48	4° $\underline{\Omega}$ 34'40	0°26'27		11675 Mar 30 04:41	0° \mathbb{X}	
minimum elong	11672 Sep 14 10:50	4° $\underline{\Omega}$ 16'06	0°26'09	morning max el	11675 Apr 15 20:35	15° \mathbb{X} 21'41	46°26'56
max. Earth dist.	11672 Sep 17 06:47	7° $\underline{\Omega}$ 47'29	1.72255 AU		11675 Apr 29 23:05	0° Υ	
	11672 Oct 05 03:37	0° \mathbb{M}			11675 May 26 16:18	0° \mathcal{B}	
evening rise	11672 Oct 22 07:49	21° \mathbb{M} 16'44		desc. node	11675 Jun 11 12:22	18° \mathcal{B} 37'45	
	11672 Oct 29 09:09	0° \mathcal{X}			11675 Jun 21 00:24	0° \mathbb{I}	
	11672 Nov 22 18:20	0° \mathcal{Z}			11675 Jul 15 17:02	0° \mathcal{E}	
	11672 Dec 17 08:33	0° \approx			11675 Aug 09 02:29	0° Ω	
desc. node	11672 Dec 24 08:35	8° \approx 29'18			11675 Sep 02 09:16	0° \mathbb{M}	
	11673 Jan 11 04:48	0° \mathbb{X}			11675 Sep 26 15:26	0° $\underline{\Omega}$	
	11673 Feb 05 08:03	0° Υ		asc. node	11675 Oct 02 05:39	6° $\underline{\Omega}$ 55'04	
	11673 Mar 02 21:24	0° \mathcal{B}		morning set	11675 Oct 18 07:13	26° $\underline{\Omega}$ 47'22	
	11673 Mar 29 07:26	0° \mathbb{I}			11675 Oct 20 21:30	0° \mathbb{M}	
asc. node	11673 Apr 16 07:19	19° \mathbb{I} 14'31			11675 Nov 14 03:39	0° \mathcal{X}	
evening max el	11673 Apr 21 01:34	24° \mathbb{I} 03'55	46°40'50				
	11673 Apr 27 03:26	0° \mathcal{E}		superior conj	11675 Nov 24 11:49	12° \mathcal{X} 46'57	1°25'54
greatest brilliancy	11673 May 31 15:58	24° \mathcal{E} 42'43	-4.9m	minimum elong	11675 Nov 24 10:24	12° \mathcal{X} 42'34	1°26'36
retrograde	11673 Jun 10 05:48	26° \mathcal{E} 26'36		max. Earth dist.	11675 Nov 25 16:11	14° \mathcal{X} 14'37	1.73095 AU
evening set	11673 Jun 27 10:22	20° \mathcal{E} 47'19			11675 Dec 08 10:28	0° \mathcal{Z}	
inferior conj	11673 Jun 30 22:08	18° \mathcal{E} 40'22	7°54'52	evening rise	11675 Dec 31 10:26	28° \mathcal{Z} 20'20	
minimum elong	11673 Jul 01 08:12	18° \mathcal{E} 24'54	7°52'26		11676 Jan 01 18:50	0° \approx	
min. Earth dist.	11673 Jul 01 07:38	18° \mathcal{E} 25'46	0.27102 AU	desc. node	11676 Jan 21 21:09	24° \approx 41'10	
morning rise	11673 Jul 05 05:58	16° \mathcal{E} 03'55			11676 Jan 26 05:07	0° \mathbb{X}	
direct	11673 Jul 21 14:54	10° \mathcal{E} 52'02			11676 Feb 19 16:54	0° Υ	
greatest brilliancy	11673 Jul 31 15:05	12° \mathcal{E} 44'09	-4.9m		11676 Mar 15 05:51	0° \mathcal{B}	

	11676 Apr 08 21:11	0°♈			11678 Sep 15 21:05	0°♏		
	11676 May 03 19:03	0°♎			11678 Oct 10 16:46	0°♌		
asc. node	11676 May 13 17:38	11°♎47'34		asc. node	11678 Oct 29 19:21	23°♌15'05		
	11676 May 29 08:33	0°♏			11678 Nov 04 08:05	0°♍		
	11676 Jun 25 11:32	0°♏			11678 Nov 28 20:01	0°♏		
evening max el	11676 Jul 02 20:25	7°♏34'34	46°47'35		11678 Dec 23 05:28	0°♐		
	11676 Jul 28 05:43	0°♌		morning set	11678 Dec 26 08:50	3°♐52'09		
greatest brilliancy	11676 Aug 11 07:21	7°♌57'57	-4.9m		11679 Jan 16 13:27	0°♑		
retrograde	11676 Aug 22 05:28	10°♌11'22		max. Earth dist.	11679 Jan 31 05:23	18°♑06'03	1.73023 AU	
desc. node	11676 Sep 02 18:17	7°♌29'58						
evening set	11676 Sep 05 22:18	5°♌55'18		superior conj	11679 Feb 01 07:52	19°♑27'46	0°39'51	
min. Earth dist.	11676 Sep 11 14:00	2°♌36'12	0.27570 AU	minimum elong	11679 Feb 01 16:01	19°♑52'57	0°40'02	
inferior conj	11676 Sep 12 05:58	2°♌11'42	-2°23'19		11679 Feb 09 20:37	0°♒		
minimum elong	11676 Sep 12 00:36	2°♌19'56	2°21'43	desc. node	11679 Feb 18 10:25	10°♒35'58		
	11676 Sep 15 21:14	30°♒♏			11679 Mar 06 02:49	0°♑		
morning rise	11676 Sep 18 03:36	28°♏43'11		evening rise	11679 Mar 11 14:22	6°♑47'15		
direct	11676 Oct 03 04:09	24°♏20'54			11679 Mar 30 07:36	0°♒		
greatest brilliancy	11676 Oct 12 19:07	26°♏02'47	-4.8m		11679 Apr 23 11:15	0°♈		
	11676 Oct 21 11:16	0°♌			11679 May 17 15:21	0°♎		
morning max el	11676 Nov 21 04:46	24°♌33'18	45°51'07		11679 Jun 10 22:49	0°♏		
	11676 Nov 26 18:17	0°♍		asc. node	11679 Jun 11 04:52	0°♏18'32		
asc. node	11676 Dec 24 18:32	29°♍43'10			11679 Jul 05 13:53	0°♏		
	11676 Dec 25 00:35	0°♏			11679 Jul 30 19:30	0°♌		
	11677 Jan 20 06:48	0°♐			11679 Aug 26 07:18	0°♍		
	11677 Feb 14 14:20	0°♑		evening max el	11679 Sep 13 04:36	18°♍38'52	46°15'57	
	11677 Mar 11 09:09	0°♒			11679 Sep 25 07:12	0°♏		
	11677 Apr 04 19:53	0°♑		desc. node	11679 Oct 01 04:08	4°♏57'12		
desc. node	11677 Apr 15 12:07	13°♑12'11		greatest brilliancy	11679 Oct 22 05:55	17°♏56'54	-4.8m	
	11677 Apr 29 00:43	0°♒		retrograde	11679 Nov 01 19:34	19°♏58'59		
morning set	11677 May 21 07:58	27°♒51'04		evening set	11679 Nov 20 01:39	13°♒43'58		
	11677 May 23 01:09	0°♈		inferior conj	11679 Nov 23 08:04	11°♒41'54	-8°43'17	
	11677 Jun 15 22:58	0°♎		minimum elong	11679 Nov 23 06:20	11°♒44'37	8°42'32	
				min. Earth dist.	11679 Nov 23 00:08	11°♒54'21	0.28949 AU	
superior conj	11677 Jun 30 12:30	18°♎17'36	-1°14'47	morning rise	11679 Nov 26 11:07	9°♒45'11		
minimum elong	11677 Jun 30 23:05	18°♎50'52	1°15'14	direct	11679 Dec 14 18:10	3°♒30'31		
max. Earth dist.	11677 Jul 01 06:39	19°♎14'36	1.71365 AU	greatest brilliancy	11679 Dec 24 20:23	5°♒21'18	-4.7m	
	11677 Jul 09 20:13	0°♏		asc. node	11680 Jan 22 05:25	24°♒06'16		
	11677 Aug 02 18:47	0°♏			11680 Jan 28 16:50	0°♐		
asc. node	11677 Aug 06 04:05	4°♏14'11		morning max el	11680 Feb 01 17:20	3°♐50'42	45°46'24	
evening rise	11677 Aug 09 16:46	8°♏38'46			11680 Feb 26 18:50	0°♑		
	11677 Aug 26 19:55	0°♌			11680 Mar 24 03:42	0°♒		
	11677 Sep 20 00:52	0°♍			11680 Apr 18 09:52	0°♑		
	11677 Oct 14 11:33	0°♏		desc. node	11680 May 13 01:41	0°♒00'13		
	11677 Nov 08 07:07	0°♐			11680 May 13 01:37	0°♒		
desc. node	11677 Nov 25 22:50	20°♐57'33			11680 Jun 06 08:34	0°♈		
	11677 Dec 03 16:02	0°♑			11680 Jun 30 10:28	0°♎		
	11677 Dec 29 21:30	0°♒			11680 Jul 24 10:18	0°♏		
	11678 Jan 26 17:58	0°♑		morning set	11680 Aug 04 05:21	13°♏30'03		
evening max el	11678 Feb 05 00:53	9°♑16'58	46°04'37		11680 Aug 17 10:14	0°♏		
	11678 Mar 01 03:35	0°♒		asc. node	11680 Sep 02 17:39	20°♏21'13		
greatest brilliancy	11678 Mar 16 11:39	8°♒23'40	-4.8m		11680 Sep 10 11:26	0°♌		
asc. node	11678 Mar 18 23:32	9°♒10'20						
retrograde	11678 Mar 26 09:46	10°♒12'40		superior conj	11680 Sep 12 07:20	2°♌16'40	0°23'01	
evening set	11678 Apr 10 22:10	5°♒29'54		minimum elong	11680 Sep 12 02:04	2°♌00'15	0°22'43	
inferior conj	11678 Apr 16 04:58	2°♒19'10	6°29'29	max. Earth dist.	11680 Sep 14 19:21	5°♌23'27	1.72212 AU	
minimum elong	11678 Apr 15 18:01	2°♒36'10	6°26'40		11680 Oct 04 14:28	0°♍		
min. Earth dist.	11678 Apr 16 04:03	2°♒20'36	0.27540 AU	evening rise	11680 Oct 20 00:15	19°♍05'33		
	11678 Apr 19 24:00	30°♒♑			11680 Oct 28 20:01	0°♏		
morning rise	11678 Apr 20 13:45	29°♑39'49			11680 Nov 22 05:20	0°♐		
direct	11678 May 07 03:32	24°♑20'32			11680 Dec 16 19:50	0°♑		
greatest brilliancy	11678 May 17 02:44	26°♑13'10	-4.9m	desc. node	11680 Dec 23 10:32	8°♑00'33		
	11678 May 25 01:53	0°♒			11681 Jan 10 16:38	0°♒		
morning max el	11678 Jun 26 15:15	27°♒10'18	46°58'18		11681 Feb 04 20:47	0°♑		
	11678 Jun 29 10:05	0°♈			11681 Mar 02 11:40	0°♒		
desc. node	11678 Jul 08 23:49	10°♈03'40			11681 Mar 29 00:47	0°♈		
	11678 Jul 26 23:05	0°♎		asc. node	11681 Apr 15 09:24	18°♈24'44		
	11678 Aug 21 18:06	0°♏		evening max el	11681 Apr 18 13:43	21°♈36'58	46°39'51	

	11681 Apr 27 06:05	0°☿		superior conj	11683 Nov 22 04:48	10°♊38'00	1°25'36
greatest brilliancy	11681 May 29 05:31	22°☿17'29	-4.9m	minimum elong	11683 Nov 22 02:38	10°♊31'17	1°26'18
retrograde	11681 Jun 07 18:32	24°☿01'01		max. Earth dist.	11683 Nov 23 12:23	12°♊15'35	1.73077 AU
evening set	11681 Jun 25 02:39	18°☿16'12			11683 Dec 07 21:10	0°♊	
inferior conj	11681 Jun 28 10:57	16°☿14'35	8°06'54	evening rise	11683 Dec 29 02:59	26°♊10'30	
minimum elong	11681 Jun 28 20:32	15°☿59'51	8°04'39		11684 Jan 01 05:37	0°♊	
min. Earth dist.	11681 Jun 28 20:44	15°☿59'32	0.27117 AU	desc. node	11684 Jan 20 22:58	24°♊13'15	
morning rise	11681 Jul 02 14:19	13°☿44'40			11684 Jan 25 16:03	0°♊	
direct	11681 Jul 19 03:14	8°☿25'34			11684 Feb 19 04:07	0°♊	
greatest brilliancy	11681 Jul 29 04:16	10°☿18'31	-4.9m		11684 Mar 14 17:31	0°♊	
desc. node	11681 Aug 05 10:17	13°☿39'31			11684 Apr 08 09:30	0°♊	
	11681 Aug 27 03:18	0°♊			11684 May 03 08:28	0°☿	
morning max el	11681 Sep 07 06:23	10°♊32'20	46°35'35	asc. node	11684 May 12 19:36	11°☿11'59	
	11681 Sep 25 23:41	0°♊			11684 May 29 00:01	0°♊	
	11681 Oct 22 20:45	0°♊			11684 Jun 25 07:57	0°♊	
	11681 Nov 17 15:46	0°♊		evening max el	11684 Jun 30 11:55	5°♊16'30	46°48'05
asc. node	11681 Nov 26 08:23	10°♊17'02			11684 Jul 29 06:16	0°♊	
	11681 Dec 12 20:29	0°♊		greatest brilliancy	11684 Aug 08 22:15	5°♊37'44	-4.9m
	11682 Jan 06 15:48	0°♊		retrograde	11684 Aug 19 20:15	7°♊50'28	
	11682 Jan 31 04:50	0°♊		desc. node	11684 Sep 01 20:17	4°♊27'08	
	11682 Feb 24 13:39	0°♊		evening set	11684 Sep 03 11:49	3°♊35'48	
morning set	11682 Mar 05 19:43	11°♊26'06		min. Earth dist.	11684 Sep 09 04:21	0°♊15'17	0.27519 AU
desc. node	11682 Mar 18 00:13	26°♊32'11		inferior conj	11684 Sep 09 19:43	29°♊51'41	-2°01'06
	11682 Mar 20 19:12	0°♊		minimum elong	11684 Sep 09 15:08	29°♊58'43	1°59'46
max. Earth dist.	11682 Apr 10 20:38	26°♊12'06	1.71991 AU		11684 Sep 09 14:18	30°♊	
	11682 Apr 13 21:42	0°♊		morning rise	11684 Sep 15 19:14	26°♊20'52	
				direct	11684 Sep 30 18:06	22°♊01'46	
superior conj	11682 Apr 14 03:33	0°♊18'17	-0°59'58	greatest brilliancy	11684 Oct 10 08:08	23°♊43'08	-4.8m
minimum elong	11682 Apr 13 16:14	29°♊42'56	0°59'51		11684 Oct 22 20:43	0°♊	
	11682 May 07 21:33	0°♊		morning max el	11684 Nov 18 19:15	22°♊17'49	45°52'05
evening rise	11682 May 23 20:07	19°♊58'39			11684 Nov 26 14:45	0°♊	
	11682 May 31 20:01	0°☿		asc. node	11684 Dec 23 20:23	29°♊06'18	
	11682 Jun 24 19:05	0°♊			11684 Dec 24 15:38	0°♊	
asc. node	11682 Jul 08 16:55	17°♊21'14			11685 Jan 19 19:44	0°♊	
	11682 Jul 18 20:59	0°♊			11685 Feb 14 02:15	0°♊	
	11682 Aug 12 04:07	0°♊			11685 Mar 10 20:31	0°♊	
	11682 Sep 05 19:52	0°♊			11685 Apr 04 06:56	0°♊	
	11682 Oct 01 02:29	0°♊		desc. node	11685 Apr 14 14:08	12°♊44'28	
	11682 Oct 27 13:06	0°♊			11685 Apr 28 11:36	0°♊	
desc. node	11682 Oct 28 14:09	1°♊08'31		morning set	11685 May 18 19:25	25°♊22'50	
evening max el	11682 Nov 23 04:00	27°♊36'17	45°51'05		11685 May 22 11:58	0°♊	
	11682 Nov 25 16:27	0°♊			11685 Jun 15 09:45	0°☿	
greatest brilliancy	11683 Jan 01 07:16	25°♊53'51	-4.7m				
retrograde	11683 Jan 11 01:38	27°♊38'02		superior conj	11685 Jun 28 00:11	15°☿49'37	-1°16'44
evening set	11683 Jan 26 21:13	22°♊48'22		minimum elong	11685 Jun 28 10:15	16°☿21'15	1°17'14
inferior conj	11683 Feb 01 08:08	19°♊30'37	-4°06'49	max. Earth dist.	11685 Jun 28 15:15	16°☿36'56	1.71359 AU
minimum elong	11683 Feb 01 16:28	19°♊17'35	4°03'59		11685 Jul 09 07:03	0°♊	
min. Earth dist.	11683 Feb 01 22:32	19°♊08'05	0.28470 AU		11685 Aug 02 05:38	0°♊	
morning rise	11683 Feb 07 11:15	15°♊49'18		asc. node	11685 Aug 05 05:56	3°♊46'02	
asc. node	11683 Feb 18 15:36	11°♊37'09		evening rise	11685 Aug 07 05:21	6°♊14'12	
direct	11683 Feb 22 15:15	11°♊17'46			11685 Aug 26 06:50	0°♊	
greatest brilliancy	11683 Mar 05 15:55	13°♊32'22	-4.8m		11685 Sep 19 11:54	0°♊	
	11683 Mar 30 11:31	0°♊			11685 Oct 13 22:52	0°♊	
morning max el	11683 Apr 13 13:03	13°♊08'59	46°25'11		11685 Nov 07 19:00	0°♊	
	11683 Apr 29 16:55	0°♊		desc. node	11685 Nov 25 00:47	20°♊26'30	
	11683 May 26 06:46	0°♊			11685 Dec 03 04:57	0°♊	
desc. node	11683 Jun 10 14:14	18°♊03'18			11685 Dec 29 12:27	0°♊	
	11683 Jun 20 13:24	0°♊			11686 Jan 26 13:53	0°♊	
	11683 Jul 15 05:13	0°☿		evening max el	11686 Feb 02 15:17	7°♊00'14	46°03'34
	11683 Aug 08 14:09	0°♊			11686 Mar 02 03:36	0°♊	
	11683 Sep 01 20:34	0°♊		greatest brilliancy	11686 Mar 14 01:56	6°♊04'45	-4.8m
	11683 Sep 26 02:28	0°♊		asc. node	11686 Mar 18 01:39	7°♊13'15	
asc. node	11683 Oct 01 07:36	6°♊27'08		retrograde	11686 Mar 23 22:57	7°♊52'53	
morning set	11683 Oct 15 22:51	24°♊33'40		evening set	11686 Apr 08 08:56	3°♊14'47	
	11683 Oct 20 08:21	0°♊		inferior conj	11686 Apr 13 19:00	29°♊59'26	6°12'41
	11683 Nov 13 14:22	0°♊		minimum elong	11686 Apr 13 08:09	0°♊16'19	6°09'49
					11686 Apr 13 18:38	30°♊	

min. Earth dist.	11686 Apr 13 18:35	0°♄00'05	0.27553 AU		11688 Oct 28 06:34	0°♁	
morning rise	11686 Apr 18 07:10	27°♃14'51			11688 Nov 21 16:03	0°♄	
direct	11686 May 04 17:22	22°♃00'30			11688 Dec 16 06:52	0°♁	
greatest brilliancy	11686 May 14 18:01	23°♃53'51	-4.9m	desc. node	11688 Dec 22 12:19	7°♁32'16	
	11686 May 26 10:57	0°♄			11689 Jan 10 04:11	0°♁	
morning max el	11686 Jun 24 04:04	24°♄46'03	46°57'57		11689 Feb 04 09:15	0°♃	
	11686 Jun 29 06:51	0°♄			11689 Mar 02 01:42	0°♄	
desc. node	11686 Jul 08 01:45	9°♄19'21			11689 Mar 28 18:04	0°♄	
	11686 Jul 26 14:35	0°♄		asc. node	11689 Apr 14 11:23	17°♄35'05	
	11686 Aug 21 07:32	0°♄		evening max el	11689 Apr 16 02:49	19°♄13'52	46°38'55
	11686 Sep 15 09:23	0°♄			11689 Apr 27 09:49	0°♄	
	11686 Oct 10 04:21	0°♄		greatest brilliancy	11689 May 26 18:30	19°♄53'06	-4.9m
asc. node	11686 Oct 28 21:17	22°♄46'48		retrograde	11689 Jun 05 07:47	21°♄37'00	
	11686 Nov 03 19:11	0°♄		evening set	11689 Jun 22 18:54	15°♄46'42	
	11686 Nov 28 06:47	0°♁		inferior conj	11689 Jun 25 23:48	13°♄50'16	8°17'56
	11686 Dec 22 16:03	0°♄		minimum elong	11689 Jun 26 08:51	13°♄36'23	8°15'53
morning set	11686 Dec 24 01:50	1°♄44'05		min. Earth dist.	11689 Jun 26 09:29	13°♄35'24	0.27130 AU
	11687 Jan 15 23:59	0°♁		morning rise	11689 Jun 29 22:42	11°♄27'04	
max. Earth dist.	11687 Jan 28 21:59	15°♁56'41	1.73044 AU	direct	11689 Jul 16 16:13	6°♄00'46	
				greatest brilliancy	11689 Jul 26 16:56	7°♄53'59	-4.9m
superior conj	11687 Jan 29 23:52	17°♁16'34	0°42'51	desc. node	11689 Aug 04 12:16	12°♄08'40	
minimum elong	11687 Jan 30 08:26	17°♁42'58	0°43'03		11689 Aug 27 07:02	0°♄	
	11687 Feb 09 07:10	0°♁		morning max el	11689 Sep 04 21:05	8°♄14'02	46°37'12
desc. node	11687 Feb 17 12:21	10°♁09'12			11689 Sep 25 16:51	0°♄	
	11687 Mar 05 13:27	0°♃			11689 Oct 22 10:38	0°♄	
evening rise	11687 Mar 09 05:14	4°♃31'38			11689 Nov 17 04:06	0°♄	
	11687 Mar 29 18:24	0°♄		asc. node	11689 Nov 25 10:11	9°♄46'53	
	11687 Apr 22 22:15	0°♄			11689 Dec 12 07:57	0°♁	
	11687 May 17 02:39	0°♄			11690 Jan 06 02:46	0°♄	
asc. node	11687 Jun 10 06:43	29°♄48'13			11690 Jan 30 15:31	0°♁	
	11687 Jun 10 10:34	0°♄			11690 Feb 24 00:12	0°♁	
	11687 Jul 05 02:22	0°♄		morning set	11690 Mar 03 10:28	9°♁10'44	
	11687 Jul 30 09:25	0°♄		desc. node	11690 Mar 17 02:08	26°♁05'31	
	11687 Aug 26 00:27	0°♄			11690 Mar 20 05:42	0°♃	
evening max el	11687 Sep 10 18:42	16°♄21'29	46°17'04	max. Earth dist.	11690 Apr 08 11:32	23°♃56'07	1.72031 AU
	11687 Sep 25 12:16	0°♁					
desc. node	11687 Sep 30 06:13	3°♁53'22		superior conj	11690 Apr 11 16:14	27°♃55'13	-0°57'09
greatest brilliancy	11687 Oct 19 21:21	15°♁45'07	-4.8m	minimum elong	11690 Apr 11 05:05	27°♃20'25	0°57'01
retrograde	11687 Oct 30 11:06	17°♁47'54			11690 Apr 13 08:14	0°♄	
evening set	11687 Nov 17 15:45	11°♁35'34			11690 May 07 08:10	0°♄	
inferior conj	11687 Nov 20 23:54	9°♁31'02	-8°41'15	evening rise	11690 May 21 07:43	17°♄31'12	
minimum elong	11687 Nov 20 21:22	9°♁35'02	8°40'28		11690 May 31 06:43	0°♄	
min. Earth dist.	11687 Nov 20 15:15	9°♁44'39	0.28927 AU		11690 Jun 24 05:55	0°♄	
morning rise	11687 Nov 24 03:04	7°♁34'11		asc. node	11690 Jul 07 18:48	16°♄53'02	
direct	11687 Dec 12 09:06	1°♁20'02			11690 Jul 18 08:01	0°♄	
greatest brilliancy	11687 Dec 22 11:36	3°♁10'36	-4.7m		11690 Aug 11 15:29	0°♄	
asc. node	11688 Jan 21 07:23	23°♁11'14			11690 Sep 05 07:48	0°♄	
	11688 Jan 28 15:52	0°♄			11690 Sep 30 15:33	0°♁	
morning max el	11688 Jan 30 07:47	1°♄36'15	45°45'47		11690 Oct 27 04:42	0°♄	
	11688 Feb 26 10:29	0°♁		desc. node	11690 Oct 27 16:02	0°♄30'50	
	11688 Mar 23 16:53	0°♁		evening max el	11690 Nov 20 20:07	25°♄27'07	45°51'17
	11688 Apr 17 21:56	0°♃			11690 Nov 25 15:59	0°♁	
desc. node	11688 May 12 03:28	29°♃30'32		greatest brilliancy	11690 Dec 29 21:47	23°♁41'46	-4.7m
	11688 May 12 13:04	0°♄		retrograde	11691 Jan 08 17:05	25°♁26'19	
	11688 Jun 05 19:40	0°♄		evening set	11691 Jan 24 15:09	20°♁32'53	
	11688 Jun 29 21:19	0°♄		inferior conj	11691 Jan 29 23:35	17°♁18'15	-4°25'09
	11688 Jul 23 20:58	0°♄		minimum elong	11691 Jan 30 08:22	17°♁04'32	4°22'15
morning set	11688 Aug 01 18:41	11°♄08'29		min. Earth dist.	11691 Jan 30 13:45	16°♁56'06	0.28512 AU
	11688 Aug 16 20:46	0°♄		morning rise	11691 Feb 05 01:13	13°♁39'04	
asc. node	11688 Sep 01 19:37	19°♄54'37		asc. node	11691 Feb 17 17:42	9°♁13'18	
				direct	11691 Feb 20 07:41	9°♁05'12	
superior conj	11688 Sep 09 21:56	0°♄00'05	0°19'33	greatest brilliancy	11691 Mar 03 07:12	11°♁19'02	-4.8m
minimum elong	11688 Sep 09 17:24	29°♄45'58	0°19'15		11691 Mar 30 15:58	0°♁	
	11688 Sep 09 21:54	0°♄		morning max el	11691 Apr 11 04:53	10°♁55'33	46°23'31
max. Earth dist.	11688 Sep 12 07:39	2°♄59'47	1.72179 AU		11691 Apr 29 10:02	0°♃	
	11688 Oct 04 00:56	0°♄			11691 May 25 20:45	0°♄	
evening rise	11688 Oct 17 16:36	16°♄55'11		desc. node	11691 Jun 09 16:09	17°♄30'14	

	11691 Jun 20 01:58	0°♄			11694 Jan 26 10:23	0°♁	
	11691 Jul 14 17:00	0°♅		evening max el	11694 Jan 31 04:43	4°♁41'26	46°02'22
	11691 Aug 08 01:26	0°♆			11694 Mar 03 13:27	0°♂	
	11691 Sep 01 07:31	0°♇		greatest brilliancy	11694 Mar 11 15:55	3°♂45'12	-4.8m
	11691 Sep 25 13:09	0°♁		asc. node	11694 Mar 17 03:36	5°♂10'55	
asc. node	11691 Sep 30 09:28	6°♁00'04		retrograde	11694 Mar 21 11:56	5°♂32'48	
morning set	11691 Oct 13 14:44	22°♁21'49		evening set	11694 Apr 05 19:41	0°♂58'39	
	11691 Oct 19 18:49	0°♂			11694 Apr 07 12:38	30°♁♁	
	11691 Nov 13 00:44	0°♂		inferior conj	11694 Apr 11 08:55	27°♁39'08	5°55'07
				minimum elong	11694 Apr 10 22:12	27°♁55'49	5°52'13
superior conj	11691 Nov 19 22:00	8°♂30'49	1°25'11	min. Earth dist.	11694 Apr 11 09:11	27°♁38'43	0.27574 AU
minimum elong	11691 Nov 19 19:06	8°♂21'52	1°25'52	morning rise	11694 Apr 16 00:25	24°♁49'32	
max. Earth dist.	11691 Nov 21 09:24	10°♂20'12	1.73060 AU	direct	11694 May 02 06:57	19°♁39'31	
	11691 Dec 07 07:32	0°♂		greatest brilliancy	11694 May 12 09:50	21°♁34'30	-4.9m
evening rise	11691 Dec 26 19:38	24°♂01'51			11694 May 27 10:56	0°♂	
	11691 Dec 31 16:06	0°♁		morning max el	11694 Jun 21 17:05	22°♂21'38	46°57'43
desc. node	11692 Jan 20 00:56	23°♁46'36			11694 Jun 29 03:10	0°♄	
	11692 Jan 25 02:47	0°♂		desc. node	11694 Jul 07 03:48	8°♄35'27	
	11692 Feb 18 15:11	0°♁			11694 Jul 26 06:01	0°♅	
	11692 Mar 14 05:01	0°♂			11694 Aug 20 20:56	0°♆	
	11692 Apr 07 21:41	0°♄			11694 Sep 14 21:40	0°♇	
	11692 May 02 21:45	0°♅			11694 Oct 09 15:56	0°♁	
asc. node	11692 May 11 21:29	10°♅36'41		asc. node	11694 Oct 27 23:03	22°♁17'58	
	11692 May 28 15:27	0°♆			11694 Nov 03 06:17	0°♂	
	11692 Jun 25 04:45	0°♇			11694 Nov 27 17:36	0°♂	
evening max el	11692 Jun 28 02:57	2°♇58'01	46°48'33	morning set	11694 Dec 21 19:07	29°♂36'38	
	11692 Jul 30 16:09	0°♁			11694 Dec 22 02:42	0°♂	
greatest brilliancy	11692 Aug 06 13:50	3°♁19'05	-4.9m		11695 Jan 15 10:33	0°♁	
retrograde	11692 Aug 17 10:34	5°♁30'15		max. Earth dist.	11695 Jan 26 16:27	13°♁52'52	1.73065 AU
desc. node	11692 Aug 31 22:25	1°♁21'10					
evening set	11692 Sep 01 01:38	1°♁16'50		superior conj	11695 Jan 27 16:16	15°♁06'24	0°45'44
	11692 Sep 03 08:08	30°♁♁		minimum elong	11695 Jan 28 01:11	15°♁33'53	0°45'57
inferior conj	11692 Sep 07 09:33	27°♁32'32	-1°38'40		11695 Feb 08 17:46	0°♂	
minimum elong	11692 Sep 07 05:47	27°♁38'19	1°37'35	desc. node	11695 Feb 16 14:17	9°♂42'16	
min. Earth dist.	11692 Sep 06 19:09	27°♁54'40	0.27468 AU		11695 Mar 05 00:11	0°♁	
morning rise	11692 Sep 13 10:42	23°♁59'22		evening rise	11695 Mar 06 20:28	2°♁17'01	
direct	11692 Sep 28 07:49	19°♁43'27			11695 Mar 29 05:19	0°♂	
greatest brilliancy	11692 Oct 07 21:41	21°♁24'35	-4.8m		11695 Apr 22 09:27	0°♄	
	11692 Oct 23 20:11	0°♁			11695 May 16 14:13	0°♅	
morning max el	11692 Nov 16 08:54	20°♁00'58	45°53'11	asc. node	11695 Jun 09 08:39	29°♅17'14	
	11692 Nov 26 10:14	0°♂			11695 Jun 09 22:37	0°♆	
asc. node	11692 Dec 22 22:23	28°♂30'58			11695 Jul 04 15:13	0°♇	
	11692 Dec 24 06:10	0°♂			11695 Jul 29 23:45	0°♁	
	11693 Jan 19 08:20	0°♂			11695 Aug 25 18:14	0°♂	
	11693 Feb 13 13:56	0°♁		evening max el	11695 Sep 08 08:59	14°♂03'59	46°18'28
	11693 Mar 10 07:45	0°♂			11695 Sep 25 19:48	0°♂	
	11693 Apr 03 17:55	0°♁		desc. node	11695 Sep 29 08:07	2°♂47'02	
desc. node	11693 Apr 13 15:57	12°♁16'18		greatest brilliancy	11695 Oct 17 12:14	13°♂32'16	-4.8m
	11693 Apr 27 22:27	0°♂		retrograde	11695 Oct 28 03:08	15°♂36'38	
morning set	11693 May 16 06:31	22°♂53'44		evening set	11695 Nov 15 05:37	9°♂27'08	
	11693 May 21 22:43	0°♄		inferior conj	11695 Nov 18 15:49	7°♂19'47	-8°38'32
	11693 Jun 14 20:28	0°♅		minimum elong	11695 Nov 18 12:28	7°♂25'02	8°37'42
				min. Earth dist.	11695 Nov 18 06:09	7°♂34'57	0.28902 AU
superior conj	11693 Jun 25 11:42	13°♅21'30	-1°18'32	morning rise	11695 Nov 21 19:26	5°♂22'28	
minimum elong	11693 Jun 25 21:11	13°♅51'16	1°19'06		11695 Dec 03 11:31	30°♁♂	
max. Earth dist.	11693 Jun 25 21:28	13°♅52'07	1.71349 AU	direct	11695 Dec 10 00:16	29°♂09'03	
	11693 Jul 08 17:45	0°♆			11695 Dec 16 18:42	0°♂	
	11693 Aug 01 16:22	0°♇		greatest brilliancy	11695 Dec 20 02:46	0°♂59'34	-4.7m
asc. node	11693 Aug 04 07:53	3°♇18'33		asc. node	11696 Jan 20 09:25	22°♂17'06	
evening rise	11693 Aug 04 17:47	3°♇49'28		morning max el	11696 Jan 27 23:17	29°♂24'00	45°45'17
	11693 Aug 25 17:38	0°♁			11696 Jan 28 14:06	0°♂	
	11693 Sep 18 22:52	0°♂			11696 Feb 26 02:01	0°♁	
	11693 Oct 13 10:09	0°♂			11696 Mar 23 06:08	0°♂	
	11693 Nov 07 06:50	0°♂			11696 Apr 17 10:08	0°♁	
desc. node	11693 Nov 24 02:42	19°♂55'35		desc. node	11696 May 11 05:22	29°♁00'32	
	11693 Dec 02 17:51	0°♁			11696 May 12 00:44	0°♂	
	11693 Dec 29 03:29	0°♂			11696 Jun 05 07:02	0°♄	

	11696 Jun 29 08:30	0°☿	retrograde	11699 Jan 06 08:21	23°☿13'55	
	11696 Jul 23 08:00	0°♌	evening set	11699 Jan 22 09:22	18°☿16'50	
morning set	11696 Jul 30 07:30	8°♌44'03	inferior conj	11699 Jan 27 15:14	15°☿05'24	-4°42'57
	11696 Aug 16 07:40	0°♍	minimum elong	11699 Jan 28 00:23	14°☿51'04	4°40'00
asc. node	11696 Aug 31 21:26	19°♍26'27	min. Earth dist.	11699 Jan 28 05:13	14°☿43'30	0.28548 AU
			morning rise	11699 Feb 02 15:07	11°☿28'23	
superior conj	11696 Sep 07 11:59	27°♍40'38 0°16'01	asc. node	11699 Feb 16 19:40	6°☿53'55	
minimum elong	11696 Sep 07 08:14	27°♍28'58 0°15'43	direct	11699 Feb 18 00:04	6°☿52'14	
behind sun begin	11696 Sep 07 02:52	27°♍12'15	greatest brilliancy	11699 Feb 28 22:36	9°☿05'02	-4.8m
behind sun end	11696 Sep 07 13:36	27°♍45'41		11699 Mar 30 19:05	0°♈	
	11696 Sep 09 08:43	0°♊	morning max el	11699 Apr 08 20:04	8°♈39'33	46°21'54
max. Earth dist.	11696 Sep 09 20:45	0°♊37'29 1.72141 AU		11699 Apr 29 03:09	0°♈	
	11696 Oct 03 11:44	0°♋		11699 May 25 10:53	0°♉	
evening rise	11696 Oct 15 08:45	14°♋43'14	desc. node	11699 Jun 08 18:10	16°♉56'44	
	11696 Oct 27 17:25	0°♊		11699 Jun 19 14:44	0°♊	
	11696 Nov 21 03:04	0°♋		11699 Jul 14 05:02	0°☿	
	11696 Dec 15 18:13	0°☿		11699 Aug 07 13:00	0°♌	
desc. node	11696 Dec 21 14:22	7°☿03'45		11699 Aug 31 18:47	0°♍	
	11697 Jan 09 16:06	0°♈		11699 Sep 25 00:11	0°♎	
	11697 Feb 03 22:05	0°♈	asc. node	11699 Sep 29 11:16	5°♎31'34	
	11697 Mar 01 16:10	0°♉	morning set	11699 Oct 11 06:23	20°♎07'56	
	11697 Mar 28 12:02	0°♊		11699 Oct 19 05:42	0°♋	
evening max el	11697 Apr 13 16:48	16°♊52'22 46°37'51		11699 Nov 12 11:31	0°♌	
asc. node	11697 Apr 13 13:17	16°♊43'38				
	11697 Apr 27 15:49	0°☿	superior conj	11699 Nov 17 14:58	6°♌21'35	1°24'39
greatest brilliancy	11697 May 24 06:49	17°☿27'16 -4.9m	minimum elong	11699 Nov 17 11:22	6°♌10'27	1°25'17
retrograde	11697 Jun 02 21:12	19°☿11'54	max. Earth dist.	11699 Nov 19 04:16	8°♌16'53	1.73038 AU
evening set	11697 Jun 20 11:00	13°☿16'22		11699 Dec 06 18:18	0°♍	
inferior conj	11697 Jun 23 12:38	11°☿24'43 8°28'01	evening rise	11699 Dec 24 12:03	21°♍51'21	
minimum elong	11697 Jun 23 21:03	11°☿11'48 8°26'10		11699 Dec 31 02:58	0°☿	
min. Earth dist.	11697 Jun 23 21:49	11°☿10'38 0.27149 AU	desc. node	11700 Jan 19 02:50	23°☿18'38	
morning rise	11697 Jun 27 07:04	9°☿08'11		11700 Jan 24 13:51	0°♈	
direct	11697 Jul 14 05:47	3°☿34'53		11700 Feb 18 02:35	0°♈	
greatest brilliancy	11697 Jul 24 05:11	5°☿27'33 -4.9m		11700 Mar 14 16:53	0°♉	
desc. node	11697 Aug 03 14:21	10°☿39'47		11700 Apr 08 10:15	0°♊	
	11697 Aug 27 09:49	0°♌		11700 May 03 11:29	0°☿	
morning max el	11697 Sep 02 12:03	5°♌54'47 46°38'38	asc. node	11700 May 11 23:32	10°☿00'46	
	11697 Sep 25 10:15	0°♍		11700 May 29 07:25	0°♌	
	11697 Oct 22 00:52	0°♎		11700 Jun 26 02:34	0°♍	
	11697 Nov 16 16:47	0°♋	evening max el	11700 Jun 26 17:12	0°♍36'49	46°48'58
asc. node	11697 Nov 24 12:12	9°♋16'08		11700 Aug 02 20:04	0°♎	
	11697 Dec 11 19:46	0°♌	greatest brilliancy	11700 Aug 05 05:45	1°♎00'20	-4.9m
	11698 Jan 05 14:04	0°♋	retrograde	11700 Aug 16 00:28	3°♎09'40	
	11698 Jan 30 02:32	0°☿		11700 Aug 28 14:35	30°♋♍	
	11698 Feb 23 11:06	0°♈	evening set	11700 Aug 30 15:44	28°♍57'04	
morning set	11698 Mar 01 01:41	6°♈55'44	desc. node	11700 Sep 01 00:16	28°♍12'00	
desc. node	11698 Mar 16 03:58	25°♈37'29	inferior conj	11700 Sep 05 23:30	25°♍13'02	-1°16'06
	11698 Mar 19 16:34	0°♈	minimum elong	11700 Sep 05 20:34	25°♍17'32	1°15'18
max. Earth dist.	11698 Apr 06 00:59	21°♈34'36 1.72067 AU	min. Earth dist.	11700 Sep 05 10:21	25°♍33'15	0.27425 AU
			morning rise	11700 Sep 12 02:06	21°♍37'37	
superior conj	11698 Apr 09 05:28	25°♈32'55 -0°54'16	direct	11700 Sep 26 21:12	17°♍24'31	
minimum elong	11698 Apr 08 18:34	24°♈58'57 0°54'06	greatest brilliancy	11700 Oct 06 12:00	19°♍06'06	-4.8m
	11698 Apr 12 19:07	0°♉		11700 Oct 25 13:52	0°♎	
	11698 May 06 19:05	0°♊	morning max el	11700 Nov 14 22:04	17°♎41'47	45°54'14
evening rise	11698 May 18 19:48	15°♊04'17		11700 Nov 27 05:32	0°♋	
	11698 May 30 17:44	0°☿	asc. node	11700 Dec 23 00:22	27°♋54'45	
	11698 Jun 23 17:06	0°♌		11700 Dec 24 20:55	0°♌	
asc. node	11698 Jul 06 20:49	16°♌24'03		11701 Jan 19 21:13	0°♍	
	11698 Jul 17 19:28	0°♍		11701 Feb 14 01:54	0°☿	
	11698 Aug 11 03:19	0°♎		11701 Mar 10 19:12	0°♈	
	11698 Sep 04 20:17	0°♋		11701 Apr 04 05:06	0°♈	
	11698 Sep 30 05:15	0°♌	desc. node	11701 Apr 13 17:47	11°♈47'30	
desc. node	11698 Oct 26 18:02	29°♌51'36		11701 Apr 28 09:29	0°♉	
	11698 Oct 26 21:08	0°♋	morning set	11701 May 14 17:42	20°♉24'08	
evening max el	11698 Nov 18 12:07	23°♋16'16 45°51'40		11701 May 22 09:41	0°♊	
	11698 Nov 25 17:18	0°☿		11701 Jun 15 07:25	0°☿	
greatest brilliancy	11698 Dec 27 12:56	21°☿29'38 -4.7m				

superior conj	11701 Jun 23 23:27	10°☿53'21	-1°20'11	morning rise	11703 Nov 20 12:03	3°♂10'12	
minimum elong	11701 Jun 24 08:16	11°☿21'04	1°20'46		11703 Nov 26 06:43	30°♂♂	
max. Earth dist.	11701 Jun 24 01:16	10°☿59'05	1.71342 AU	direct	11703 Dec 08 15:54	26°♂♂58'10	
	11701 Jul 09 04:41	0°♂		greatest brilliancy	11703 Dec 18 17:21	28°♂♂48'09	-4.7m
	11701 Aug 02 03:17	0°♂			11703 Dec 21 18:38	0°♂	
evening rise	11701 Aug 03 06:22	1°♂24'37		asc. node	11704 Jan 20 11:21	21°♂♂24'00	
asc. node	11701 Aug 04 09:43	2°♂50'07		morning max el	11704 Jan 26 15:16	27°♂♂13'13	45°44'40
	11701 Aug 26 04:36	0°♂			11704 Jan 29 11:25	0°♂	
	11701 Sep 19 09:59	0°♂			11704 Feb 26 17:18	0°♂	
	11701 Oct 13 21:37	0°♂			11704 Mar 23 19:17	0°♂	
	11701 Nov 07 18:56	0°♂			11704 Apr 17 22:15	0°♂	
desc. node	11701 Nov 24 04:42	19°♂24'08		desc. node	11704 May 11 07:25	28°♂♂31'11	
	11701 Dec 03 07:05	0°♂			11704 May 12 12:18	0°♂	
	11701 Dec 29 19:00	0°♂			11704 Jun 05 18:17	0°♂	
	11702 Jan 27 07:54	0°♂			11704 Jun 29 19:31	0°♂	
evening max el	11702 Jan 29 18:11	2°♂22'17	46°01'26		11704 Jul 23 18:52	0°♂	
	11702 Mar 06 16:55	0°♂		morning set	11704 Jul 28 20:16	6°♂♂19'53	
greatest brilliancy	11702 Mar 10 05:37	1°♂25'12	-4.8m		11704 Aug 16 18:26	0°♂	
asc. node	11702 Mar 17 05:31	3°♂03'40		asc. node	11704 Aug 31 23:16	18°♂♂58'42	
retrograde	11702 Mar 20 01:27	3°♂13'06					
	11702 Apr 01 19:02	30°♂♂		superior conj	11704 Sep 06 01:59	25°♂♂21'17	0°12'25
evening set	11702 Apr 04 06:50	28°♂♂42'11		minimum elong	11704 Sep 05 23:03	25°♂♂12'09	0°12'08
inferior conj	11702 Apr 09 22:59	25°♂♂18'58	5°37'07	behind sun begin	11704 Sep 05 06:48	24°♂♂21'30	
minimum elong	11702 Apr 09 12:28	25°♂♂35'17	5°34'12	behind sun end	11704 Sep 06 15:18	26°♂♂02'48	
min. Earth dist.	11702 Apr 09 23:42	25°♂♂17'51	0.27594 AU	max. Earth dist.	11704 Sep 08 11:28	28°♂♂20'25	1.72106 AU
morning rise	11702 Apr 14 17:47	22°♂♂24'42			11704 Sep 09 19:26	0°♂	
direct	11702 Apr 30 20:52	17°♂♂18'40			11704 Oct 03 22:25	0°♂	
greatest brilliancy	11702 May 11 01:37	19°♂♂15'22	-4.9m	evening rise	11704 Oct 14 00:58	12°♂♂31'50	
	11702 May 29 04:38	0°♂			11704 Oct 28 04:08	0°♂	
morning max el	11702 Jun 20 07:03	19°♂♂59'35	46°57'22		11704 Nov 21 13:56	0°♂	
	11702 Jun 29 22:55	0°♂			11704 Dec 16 05:25	0°♂	
desc. node	11702 Jul 07 05:44	7°♂♂51'40		desc. node	11704 Dec 21 16:18	6°♂♂35'28	
	11702 Jul 26 21:17	0°♂			11705 Jan 10 03:54	0°♂	
	11702 Aug 21 10:18	0°♂			11705 Feb 04 10:52	0°♂	
	11702 Sep 15 09:57	0°♂			11705 Mar 02 06:42	0°♂	
	11702 Oct 10 03:30	0°♂			11705 Mar 29 06:21	0°♂	
asc. node	11702 Oct 28 01:03	21°♂♂49'45		evening max el	11705 Apr 12 07:15	14°♂♂32'21	46°36'46
	11702 Nov 03 17:24	0°♂		asc. node	11705 Apr 13 15:23	15°♂♂51'53	
	11702 Nov 28 04:27	0°♂			11705 Apr 29 00:05	0°♂	
morning set	11702 Dec 20 12:19	27°♂♂28'43		greatest brilliancy	11705 May 22 19:17	15°♂♂02'04	-4.9m
	11702 Dec 22 13:25	0°♂		retrograde	11705 Jun 01 10:31	16°♂♂46'57	
	11703 Jan 15 21:14	0°♂		evening set	11705 Jun 19 02:59	10°♂♂46'45	
max. Earth dist.	11703 Jan 25 11:47	11°♂♂51'24	1.73087 AU	inferior conj	11705 Jun 22 01:27	8°♂♂59'35	8°37'15
				minimum elong	11705 Jun 22 09:11	8°♂♂47'43	8°35'34
superior conj	11703 Jan 26 08:31	12°♂♂55'24	0°48'34	min. Earth dist.	11705 Jun 22 10:01	8°♂♂46'26	0.27163 AU
minimum elong	11703 Jan 26 17:44	13°♂♂23'50	0°48'48	morning rise	11705 Jun 25 15:23	6°♂♂49'36	
	11703 Feb 09 04:29	0°♂		direct	11705 Jul 12 19:22	1°♂♂09'45	
desc. node	11703 Feb 16 16:04	9°♂♂14'36		greatest brilliancy	11705 Jul 22 17:08	3°♂♂01'17	-4.9m
evening rise	11703 Mar 05 11:32	0°♂♂01'41		desc. node	11705 Aug 03 16:16	9°♂♂14'21	
	11703 Mar 05 10:59	0°♂			11705 Aug 28 10:52	0°♂	
	11703 Mar 29 16:18	0°♂		morning max el	11705 Sep 01 02:10	3°♂♂34'06	46°39'56
	11703 Apr 22 20:42	0°♂			11705 Sep 26 02:59	0°♂	
	11703 May 17 01:48	0°♂			11705 Oct 22 14:42	0°♂	
asc. node	11703 Jun 09 10:39	28°♂♂46'20			11705 Nov 17 05:10	0°♂	
	11703 Jun 10 10:43	0°♂		asc. node	11705 Nov 24 14:07	8°♂♂45'58	
	11703 Jul 05 04:10	0°♂			11705 Dec 12 07:17	0°♂	
	11703 Jul 30 14:17	0°♂			11706 Jan 06 01:05	0°♂	
	11703 Aug 26 12:28	0°♂			11706 Jan 30 13:16	0°♂	
evening max el	11703 Sep 07 00:06	11°♂♂48'33	46°19'54		11706 Feb 23 21:43	0°♂	
	11703 Sep 27 06:06	0°♂		morning set	11706 Feb 27 16:56	4°♂♂41'47	
desc. node	11703 Sep 29 10:09	1°♂♂39'15		desc. node	11706 Mar 16 05:51	25°♂♂10'26	
greatest brilliancy	11703 Oct 16 02:30	11°♂♂18'47	-4.8m		11706 Mar 20 03:11	0°♂	
retrograde	11703 Oct 26 19:31	13°♂♂25'18		max. Earth dist.	11706 Apr 04 12:30	19°♂♂07'55	1.72110 AU
evening set	11703 Nov 13 19:07	7°♂♂19'01					
inferior conj	11703 Nov 17 07:37	5°♂♂08'27	-8°35'03	superior conj	11706 Apr 07 18:34	23°♂♂11'01	-0°51'18
minimum elong	11703 Nov 17 03:32	5°♂♂14'51	8°34'08	minimum elong	11706 Apr 07 07:59	22°♂♂38'05	0°51'05
min. Earth dist.	11703 Nov 16 20:37	5°♂♂25'39	0.28875 AU		11706 Apr 13 05:46	0°♂	

	11706 May 07 05:49	0° Π	morning max el	11708 Nov 12 11:06	15° Ω 23'01	45°55'27
evening rise	11706 May 17 07:29	12° Π 36'44		11708 Nov 26 23:56	0° \mathbb{M}	
	11706 May 31 04:34	0° \mathfrak{S}	asc. node	11708 Dec 22 02:14	27° \mathbb{M} 19'32	
	11706 Jun 24 04:04	0° Ω		11708 Dec 24 11:07	0° \mathfrak{A}	
asc. node	11706 Jul 06 22:36	15° Ω 55'09		11709 Jan 19 09:40	0° \mathfrak{Z}	
	11706 Jul 18 06:40	0° \mathbb{M}		11709 Feb 13 13:28	0° \approx	
	11706 Aug 11 14:54	0° $\underline{\Omega}$		11709 Mar 10 06:17	0° \mathfrak{H}	
	11706 Sep 05 08:31	0° \mathbb{M}		11709 Apr 03 15:55	0° Υ	
	11706 Sep 30 18:46	0° \mathfrak{A}	desc. node	11709 Apr 12 19:47	11° Υ 20'23	
desc. node	11706 Oct 26 20:05	29° \mathfrak{A} 13'00		11709 Apr 27 20:08	0° \mathfrak{B}	
	11706 Oct 27 13:33	0° \mathfrak{Z}	morning set	11709 May 12 05:05	17° \mathfrak{B} 56'24	
evening max el	11706 Nov 17 03:17	21° \mathfrak{Z} 04'14 45°52'01		11709 May 21 20:17	0° Π	
	11706 Nov 26 19:37	0° \approx		11709 Jun 14 18:01	0° \mathfrak{S}	
greatest brilliancy	11706 Dec 26 04:39	19° \approx 19'08 -4.7m				
retrograde	11707 Jan 04 23:14	21° \approx 02'42	superior conj	11709 Jun 21 11:10	8° \mathfrak{S} 26'09 -1°21'41	
evening set	11707 Jan 21 03:38	16° \approx 01'51	minimum elong	11709 Jun 21 19:14	8° \mathfrak{S} 51'30 1°22'18	
inferior conj	11707 Jan 26 06:56	12° \approx 53'54 -5°00'18	max. Earth dist.	11709 Jun 21 06:10	8° \mathfrak{S} 10'29 1.71344 AU	
minimum elong	11707 Jan 26 16:23	12° \approx 39'02 4°57'18		11709 Jul 08 15:18	0° Ω	
min. Earth dist.	11707 Jan 26 20:57	12° \approx 31'52 0.28583 AU	evening rise	11709 Jul 31 18:38	28° Ω 59'38	
morning rise	11707 Feb 01 04:50	9° \approx 19'12		11709 Aug 01 13:56	0° \mathbb{M}	
direct	11707 Feb 16 15:56	4° \approx 40'34	asc. node	11709 Aug 03 11:34	2° \mathbb{M} 22'37	
asc. node	11707 Feb 16 21:35	4° \approx 40'38		11709 Aug 25 15:19	0° $\underline{\Omega}$	
greatest brilliancy	11707 Feb 27 14:20	6° \approx 52'42 -4.8m		11709 Sep 18 20:53	0° \mathbb{M}	
	11707 Mar 31 20:13	0° \mathfrak{H}		11709 Oct 13 08:51	0° \mathfrak{A}	
morning max el	11707 Apr 07 10:11	6° \mathfrak{H} 21'59 46°20'11		11709 Nov 07 06:47	0° \mathfrak{Z}	
	11707 Apr 29 19:33	0° Υ	desc. node	11709 Nov 23 06:38	18° \mathfrak{Z} 53'13	
	11707 May 26 00:35	0° \mathfrak{B}		11709 Dec 02 20:07	0° \approx	
desc. node	11707 Jun 08 20:02	16° \mathfrak{B} 23'44		11709 Dec 29 10:27	0° \mathfrak{H}	
	11707 Jun 20 03:11	0° Π		11710 Jan 27 05:54	0° Υ	
	11707 Jul 14 16:45	0° \mathfrak{S}	evening max el	11710 Jan 27 08:14	0° Υ 05'39 46°00'35	
	11707 Aug 08 00:17	0° Ω	greatest brilliancy	11710 Mar 07 18:55	29° Υ 05'49 -4.8m	
	11707 Sep 01 05:43	0° \mathbb{M}		11710 Mar 10 18:08	0° \mathfrak{B}	
	11707 Sep 25 10:53	0° $\underline{\Omega}$	asc. node	11710 Mar 16 07:40	0° \mathfrak{B} 52'23	
asc. node	11707 Sep 29 13:13	5° $\underline{\Omega}$ 04'35	retrograde	11710 Mar 17 15:37	0° \mathfrak{B} 54'30	
morning set	11707 Oct 09 21:46	17° $\underline{\Omega}$ 54'18		11710 Mar 24 08:06	30° \mathfrak{R} Υ	
	11707 Oct 19 16:13	0° \mathbb{M}	evening set	11710 Apr 01 18:13	26° Υ 26'30	
	11707 Nov 12 21:56	0° \mathfrak{A}	inferior conj	11710 Apr 07 13:02	22° Υ 59'46 5°18'28	
			minimum elong	11710 Apr 07 02:49	23° Υ 15'36 5°15'34	
superior conj	11707 Nov 16 07:52	4° \mathfrak{A} 13'13 1°23'58	min. Earth dist.	11710 Apr 07 13:56	22° Υ 58'22 0.27613 AU	
minimum elong	11707 Nov 16 03:33	3° \mathfrak{A} 59'53 1°24'35	morning rise	11710 Apr 12 11:06	20° Υ 01'07	
max. Earth dist.	11707 Nov 17 21:21	6° \mathfrak{A} 09'05 1.73016 AU	direct	11710 Apr 28 11:11	14° Υ 58'57	
	11707 Dec 07 04:45	0° \mathfrak{Z}	greatest brilliancy	11710 May 08 16:46	16° Υ 56'46 -4.9m	
evening rise	11707 Dec 23 04:31	19° \mathfrak{Z} 41'58		11710 May 29 17:16	0° \mathfrak{B}	
	11707 Dec 31 13:31	0° \approx	morning max el	11710 Jun 17 21:52	17° \mathfrak{B} 40'57 46°56'59	
desc. node	11708 Jan 19 04:38	22° \approx 51'26		11710 Jun 29 17:40	0° Π	
	11708 Jan 25 00:36	0° \mathfrak{H}	desc. node	11710 Jul 06 07:41	7° Π 09'32	
	11708 Feb 18 13:38	0° Υ		11710 Jul 26 12:00	0° \mathfrak{S}	
	11708 Mar 14 04:24	0° \mathfrak{B}		11710 Aug 20 23:15	0° Ω	
	11708 Apr 07 22:30	0° Π		11710 Sep 14 21:55	0° \mathbb{M}	
	11708 May 03 00:59	0° \mathfrak{S}		11710 Oct 09 14:50	0° $\underline{\Omega}$	
asc. node	11708 May 11 01:29	9° \mathfrak{S} 25'18	asc. node	11710 Oct 27 02:57	21° $\underline{\Omega}$ 21'51	
	11708 May 28 23:22	0° Ω		11710 Nov 03 04:19	0° \mathbb{M}	
evening max el	11708 Jun 24 06:17	28° Ω 13'12 46°49'15		11710 Nov 27 15:05	0° \mathfrak{A}	
	11708 Jun 26 01:04	0° \mathbb{M}	morning set	11710 Dec 18 05:23	25° \mathfrak{A} 21'08	
greatest brilliancy	11708 Aug 02 21:32	28° \mathbb{M} 41'15 -4.9m		11710 Dec 21 23:53	0° \mathfrak{Z}	
	11708 Aug 07 01:39	0° $\underline{\Omega}$		11711 Jan 15 07:39	0° \approx	
retrograde	11708 Aug 13 13:56	0° $\underline{\Omega}$ 48'56	max. Earth dist.	11711 Jan 23 08:37	9° \approx 55'22 1.73106 AU	
	11708 Aug 19 22:20	30° \mathfrak{R} \mathbb{M}				
evening set	11708 Aug 28 05:43	26° \mathbb{M} 36'32	superior conj	11711 Jan 24 00:41	10° \approx 44'56 0°51'20	
desc. node	11708 Aug 31 02:19	24° \mathbb{M} 59'15	minimum elong	11711 Jan 24 10:08	11° \approx 14'06 0°51'35	
min. Earth dist.	11708 Sep 03 01:28	23° \mathbb{M} 11'20 0.27382 AU		11711 Feb 08 14:57	0° \mathfrak{H}	
inferior conj	11708 Sep 03 13:09	22° \mathbb{M} 53'21 -0°53'01	desc. node	11711 Feb 15 17:59	8° \mathfrak{H} 48'01	
minimum elong	11708 Sep 03 11:06	22° \mathbb{M} 56'30 0°52'32	evening rise	11711 Mar 03 02:38	27° \mathfrak{H} 47'11	
morning rise	11708 Sep 09 17:04	19° \mathbb{M} 15'59		11711 Mar 04 21:36	0° Υ	
direct	11708 Sep 24 09:53	15° \mathbb{M} 05'12		11711 Mar 29 03:07	0° \mathfrak{B}	
greatest brilliancy	11708 Oct 04 02:26	16° \mathbb{M} 47'57 -4.8m		11711 Apr 22 07:45	0° Π	
	11708 Oct 26 02:44	0° $\underline{\Omega}$		11711 May 16 13:10	0° \mathfrak{S}	

asc. node	11711 Jun 08 12:31	28°☿15'48		11713 Sep 25 19:21	0°♍	
	11711 Jun 09 22:36	0°♌		11713 Oct 22 04:21	0°♍	
	11711 Jul 04 16:55	0°♍		11713 Nov 16 17:27	0°♍	
	11711 Jul 30 04:42	0°♍		11713 Nov 23 15:56	8°♍15'32	
	11711 Aug 26 06:55	0°♍		11713 Dec 11 18:48	0°♍	
evening max el	11711 Sep 04 16:03	9°♍35'43	46°21'09	11714 Jan 05 12:08	0°♍	
	11711 Sep 27 19:49	0°♍		11714 Jan 30 00:05	0°♍	
desc. node	11711 Sep 28 12:13	0°♍29'53		11714 Feb 23 08:25	0°♍	
greatest brilliancy	11711 Oct 13 16:44	9°♍05'29	-4.8m	11714 Feb 25 08:12	2°♍27'34	
retrograde	11711 Oct 24 12:03	11°♍13'51		11714 Mar 15 07:46	24°♍43'12	
evening set	11711 Nov 11 08:17	5°♍11'25		11714 Mar 19 13:53	0°♍	
inferior conj	11711 Nov 14 23:20	2°♍57'03	-8°30'41	max. Earth dist.	11714 Apr 01 23:57	16°♍40'53 1.72154 AU
minimum elong	11711 Nov 14 18:31	3°♍04'34	8°29'41			
min. Earth dist.	11711 Nov 14 10:48	3°♍16'37	0.28844 AU	superior conj	11714 Apr 05 07:43	20°♍49'07 -0°48'14
morning rise	11711 Nov 18 04:55	0°♍57'18		minimum elong	11714 Apr 04 21:32	20°♍17'26 0°48'00
	11711 Nov 19 19:42	30°♍			11714 Apr 12 16:31	0°♍
direct	11711 Dec 06 07:51	24°♍47'31			11714 May 06 16:39	0°♍
greatest brilliancy	11711 Dec 16 07:16	26°♍36'11	-4.7m	evening rise	11714 May 14 19:17	10°♍09'13
	11711 Dec 23 20:25	0°♍			11714 May 30 15:32	0°♍
asc. node	11712 Jan 19 13:20	20°♍32'25			11714 Jun 23 15:13	0°♌
morning max el	11712 Jan 24 07:13	25°♍02'48	45°44'04	asc. node	11714 Jul 06 00:32	15°♌26'10
	11712 Jan 29 07:48	0°♍			11714 Jul 17 18:04	0°♍
	11712 Feb 26 08:11	0°♍			11714 Aug 11 02:39	0°♌
	11712 Mar 23 08:10	0°♍			11714 Sep 04 20:56	0°♍
	11712 Apr 17 10:12	0°♍			11714 Sep 30 08:29	0°♍
desc. node	11712 May 10 09:10	28°♍01'20		desc. node	11714 Oct 25 21:58	28°♍33'20
	11712 May 11 23:44	0°♍			11714 Oct 27 06:22	0°♍
	11712 Jun 05 05:24	0°♍		evening max el	11714 Nov 14 17:39	18°♍49'59 45°52'21
	11712 Jun 29 06:25	0°♍			11714 Nov 26 23:43	0°♍
	11712 Jul 23 05:35	0°♌		greatest brilliancy	11714 Dec 23 20:36	17°♍08'36 -4.7m
morning set	11712 Jul 26 09:25	3°♌57'19		retrograde	11715 Jan 02 14:04	18°♍51'34
	11712 Aug 16 05:02	0°♍		evening set	11715 Jan 18 22:05	13°♍46'33
asc. node	11712 Aug 31 01:14	18°♍31'50		inferior conj	11715 Jan 23 22:47	10°♍42'20 -5°17'01
				minimum elong	11715 Jan 24 08:30	10°♍27'03 5°14'00
superior conj	11712 Sep 03 16:12	23°♍03'02	0°08'50	min. Earth dist.	11715 Jan 24 13:04	10°♍19'53 0.28622 AU
minimum elong	11712 Sep 03 14:06	22°♍56'31	0°08'34	morning rise	11715 Jan 29 18:34	7°♍10'14
behind sun begin	11712 Sep 02 17:09	21°♍51'11		direct	11715 Feb 14 07:37	2°♍28'35
behind sun end	11712 Sep 04 11:04	24°♍01'52		asc. node	11715 Feb 15 23:41	2°♍31'51
max. Earth dist.	11712 Sep 06 04:29	26°♍10'59	1.72071 AU	greatest brilliancy	11715 Feb 25 06:48	4°♍40'51 -4.8m
	11712 Sep 09 05:59	0°♌			11715 Mar 31 20:24	0°♍
	11712 Oct 03 08:58	0°♍		morning max el	11715 Apr 05 00:15	4°♍03'37 46°18'34
evening rise	11712 Oct 11 17:17	10°♍21'01			11715 Apr 29 11:54	0°♍
	11712 Oct 27 14:46	0°♍			11715 May 25 14:22	0°♍
	11712 Nov 21 00:45	0°♍		desc. node	11715 Jun 07 21:57	15°♍50'21
	11712 Dec 15 16:36	0°♍			11715 Jun 19 15:46	0°♍
desc. node	11712 Dec 20 18:05	6°♍06'51			11715 Jul 14 04:41	0°♍
	11713 Jan 09 15:42	0°♍			11715 Aug 07 11:48	0°♌
	11713 Feb 03 23:42	0°♍			11715 Aug 31 16:56	0°♍
	11713 Mar 01 21:24	0°♍			11715 Sep 24 21:50	0°♌
	11713 Mar 29 01:09	0°♍		asc. node	11715 Sep 28 15:05	4°♌36'30
evening max el	11713 Apr 09 21:24	12°♍11'33	46°35'31	morning set	11715 Oct 07 13:18	15°♌40'11
asc. node	11713 Apr 12 17:21	14°♍58'47			11715 Oct 19 02:58	0°♍
	11713 Apr 29 11:21	0°♍			11715 Nov 12 08:36	0°♍
greatest brilliancy	11713 May 20 08:19	12°♍37'30	-4.9m			
retrograde	11713 May 29 23:23	14°♍21'48		superior conj	11715 Nov 14 01:03	2°♍05'03 1°23'10
evening set	11713 Jun 16 18:46	8°♍17'34		minimum elong	11715 Nov 13 20:04	1°♍49'39 1°23'46
inferior conj	11713 Jun 19 14:17	6°♍34'32	8°45'27	max. Earth dist.	11715 Nov 15 13:41	3°♍58'19 1.72992 AU
minimum elong	11713 Jun 19 21:16	6°♍23'47	8°43'57		11715 Dec 06 15:25	0°♍
min. Earth dist.	11713 Jun 19 22:30	6°♍21'54	0.27175 AU	evening rise	11715 Dec 20 21:20	17°♍33'03
morning rise	11713 Jun 22 23:47	4°♍30'49			11715 Dec 31 00:19	0°♍
	11713 Jul 02 12:16	30°♍		desc. node	11716 Jan 18 06:38	22°♍24'02
direct	11713 Jul 10 08:35	28°♍44'39			11716 Jan 24 11:38	0°♍
	11713 Jul 18 10:42	0°♍			11716 Feb 18 01:01	0°♍
greatest brilliancy	11713 Jul 20 05:22	0°♍35'11	-4.9m		11716 Mar 13 16:18	0°♍
desc. node	11713 Aug 02 18:15	7°♍51'48			11716 Apr 07 11:11	0°♍
	11713 Aug 28 10:41	0°♌			11716 May 02 15:00	0°♍
morning max el	11713 Aug 29 15:19	1°♌10'55	46°41'25	asc. node	11716 May 10 03:23	8°♍48'19

	11716 May 28 15:59	0°♈				11719 Jan 14 18:26	0°♊	
evening max el	11716 Jun 21 18:53	25°♈47'18	46°49'33	max. Earth dist.		11719 Jan 21 05:32	7°♊58'30	1.73117 AU
	11716 Jun 26 01:00	0°♉						
greatest brilliancy	11716 Jul 31 12:52	26°♉20'16	-4.9m	superior conj		11719 Jan 21 17:08	8°♊34'17	0°54'00
retrograde	11716 Aug 11 03:38	28°♉27'00		minimum elong		11719 Jan 22 02:45	9°♊03'59	0°54'16
evening set	11716 Aug 25 19:47	24°♉14'06				11719 Feb 08 01:45	0°♋	
desc. node	11716 Aug 30 04:23	21°♉43'02		desc. node		11719 Feb 14 19:54	8°♋20'28	
min. Earth dist.	11716 Aug 31 16:24	20°♉48'00	0.27343 AU	evening rise		11719 Feb 28 18:02	25°♋32'40	
inferior conj	11716 Sep 01 02:43	20°♉32'09	-0°29'45			11719 Mar 04 08:31	0°♌	
minimum elong	11716 Sep 01 01:34	20°♉33'56	0°29'35			11719 Mar 28 14:15	0°♌	
morning rise	11716 Sep 07 07:48	16°♉53'20				11719 Apr 21 19:10	0°♍	
direct	11716 Sep 21 22:32	12°♉44'08				11719 May 16 00:58	0°♍	
greatest brilliancy	11716 Oct 01 16:50	14°♉28'24	-4.8m	asc. node		11719 Jun 07 14:28	27°♍44'07	
	11716 Oct 26 12:48	0°♊				11719 Jun 09 10:57	0°♊	
morning max el	11716 Nov 10 00:59	13°♊05'06	45°56'56			11719 Jul 04 06:12	0°♋	
	11716 Nov 26 18:14	0°♋				11719 Jul 29 19:47	0°♊	
asc. node	11716 Dec 21 04:14	26°♋43'59				11719 Aug 26 02:25	0°♋	
	11716 Dec 24 01:28	0°♌		evening max el		11719 Sep 02 08:05	7°♋21'40	46°22'27
	11717 Jan 18 22:20	0°♍		desc. node		11719 Sep 27 14:05	29°♋16'45	
	11717 Feb 13 01:18	0°♎				11719 Sep 28 15:09	0°♌	
	11717 Mar 09 17:41	0°♋		greatest brilliancy		11719 Oct 11 07:27	6°♌51'15	-4.8m
	11717 Apr 03 03:05	0°♌		retrograde		11719 Oct 22 04:18	9°♌00'34	
desc. node	11717 Apr 11 21:35	10°♌51'27		evening set		11719 Nov 08 21:07	3°♌02'40	
	11717 Apr 27 07:12	0°♍		min. Earth dist.		11719 Nov 12 00:57	1°♌05'50	0.28809 AU
morning set	11717 May 09 16:22	15°♍27'07		inferior conj		11719 Nov 12 14:53	0°♌44'03	-8°25'37
	11717 May 21 07:17	0°♍		minimum elong		11719 Nov 12 09:21	0°♌52'42	8°24'32
	11717 Jun 14 05:00	0°♎				11719 Nov 13 19:07	30°♌	
				morning rise		11719 Nov 15 21:49	28°♌42'18	
superior conj	11717 Jun 18 22:38	5°♎56'55	-1°23'00	direct		11719 Dec 03 23:41	22°♌35'24	
minimum elong	11717 Jun 19 05:54	6°♎19'44	1°23'40	greatest brilliancy		11719 Dec 13 20:42	24°♌22'12	-4.7m
max. Earth dist.	11717 Jun 18 13:25	5°♎27'57	1.71348 AU			11719 Dec 25 06:03	0°♌	
	11717 Jul 08 02:18	0°♏		asc. node		11720 Jan 18 15:21	19°♌40'46	
evening rise	11717 Jul 29 06:44	26°♏32'56		morning max el		11720 Jan 21 22:34	22°♌49'56	45°43'37
	11717 Aug 01 00:58	0°♉				11720 Jan 29 03:56	0°♍	
asc. node	11717 Aug 02 13:32	1°♉54'15				11720 Feb 25 23:10	0°♎	
	11717 Aug 25 02:28	0°♊				11720 Mar 22 21:13	0°♋	
	11717 Sep 18 08:13	0°♋				11720 Apr 16 22:19	0°♌	
	11717 Oct 12 20:32	0°♌		desc. node		11720 May 09 11:05	27°♌31'25	
	11717 Nov 06 19:07	0°♍				11720 May 11 11:22	0°♍	
desc. node	11717 Nov 22 08:32	18°♍20'58				11720 Jun 04 16:44	0°♍	
	11717 Dec 02 09:37	0°♎				11720 Jun 28 17:34	0°♎	
	11717 Dec 29 02:30	0°♋				11720 Jul 22 16:37	0°♏	
evening max el	11718 Jan 24 23:08	27°♋50'25	45°59'45	morning set		11720 Jul 23 22:05	1°♏32'14	
	11718 Jan 27 05:12	0°♌				11720 Aug 15 15:59	0°♉	
greatest brilliancy	11718 Mar 05 07:55	26°♌45'27	-4.8m	asc. node		11720 Aug 30 03:03	18°♉03'30	
retrograde	11718 Mar 15 06:05	28°♌34'58						
asc. node	11718 Mar 15 09:34	28°♌34'56		superior conj		11720 Sep 01 05:48	20°♉41'50	0°05'11
evening set	11718 Mar 30 05:55	24°♌09'45		minimum elong		11720 Sep 01 04:36	20°♉38'03	0°04'55
inferior conj	11718 Apr 05 03:07	20°♌39'34	4°59'15	behind sun begin		11720 Aug 31 05:05	19°♉24'41	
minimum elong	11718 Apr 04 17:16	20°♌54'49	4°56'26	behind sun end		11720 Sep 02 04:07	21°♉51'25	
min. Earth dist.	11718 Apr 05 04:00	20°♌38'12	0.27637 AU	max. Earth dist.		11720 Sep 03 20:33	23°♉57'31	1.72032 AU
morning rise	11718 Apr 10 04:21	17°♌36'37				11720 Sep 08 16:52	0°♊	
direct	11718 Apr 26 02:01	12°♌38'20				11720 Oct 02 19:50	0°♋	
greatest brilliancy	11718 May 06 07:33	14°♌36'32	-4.9m	evening rise		11720 Oct 09 09:02	8°♋07'28	
	11718 May 30 03:14	0°♍				11720 Oct 27 01:41	0°♌	
morning max el	11718 Jun 15 13:10	15°♍22'11	46°56'22			11720 Nov 20 11:52	0°♍	
	11718 Jun 29 12:30	0°♍				11720 Dec 15 04:06	0°♎	
desc. node	11718 Jul 05 09:42	6°♍26'35		desc. node		11720 Dec 19 20:07	5°♎38'00	
	11718 Jul 26 03:01	0°♎				11721 Jan 09 03:50	0°♋	
	11718 Aug 20 12:33	0°♏				11721 Feb 03 12:52	0°♌	
	11718 Sep 14 10:14	0°♉				11721 Mar 01 12:27	0°♍	
	11718 Oct 09 02:32	0°♊				11721 Mar 28 20:34	0°♍	
asc. node	11718 Oct 26 04:43	20°♊52'23		evening max el		11721 Apr 07 10:41	9°♍48'25	46°34'18
	11718 Nov 02 15:36	0°♋		asc. node		11721 Apr 11 19:16	14°♍04'19	
	11718 Nov 27 02:06	0°♌				11721 Apr 30 02:29	0°♎	
morning set	11718 Dec 15 22:33	23°♌12'38		greatest brilliancy		11721 May 17 21:51	10°♎13'34	-4.9m
	11718 Dec 21 10:44	0°♍		retrograde		11721 May 27 11:50	11°♎56'53	

evening set	11721 Jun 14 10:20	5°☿49'05			11723 Nov 11 19:07	0°♊	
inferior conj	11721 Jun 17 03:17	4°☿09'44	8°52'33	max. Earth dist.	11723 Nov 13 05:16	1°♊45'33	1.72973 AU
minimum elong	11721 Jun 17 09:26	4°☿00'14	8°51'14		11723 Dec 06 01:58	0°♊	
min. Earth dist.	11721 Jun 17 11:21	3°☿57'17	0.27191 AU	evening rise	11723 Dec 18 13:49	15°♊23'32	
morning rise	11721 Jun 20 08:32	2°☿11'59			11723 Dec 30 10:59	0°♊	
	11721 Jun 24 07:03	30°♋II		desc. node	11724 Jan 17 08:29	21°♊56'39	
direct	11721 Jul 07 21:26	26°♋19'33			11724 Jan 23 22:31	0°♋	
greatest brilliancy	11721 Jul 17 18:23	28°♋09'44	-4.9m		11724 Feb 17 12:15	0°♋	
	11721 Jul 22 02:50	0°☿			11724 Mar 13 04:04	0°♋	
desc. node	11721 Aug 01 20:19	6°☿31'41			11724 Apr 06 23:45	0°♋	
morning max el	11721 Aug 27 03:56	28°☿45'36	46°42'41		11724 May 02 04:54	0°☿	
	11721 Aug 28 09:43	0°♌		asc. node	11724 May 09 05:26	8°☿12'18	
	11721 Sep 25 11:41	0°♍			11724 May 28 08:35	0°♌	
	11721 Oct 21 18:07	0°♎		evening max el	11724 Jun 19 08:22	23°♌24'58	46°50'03
	11721 Nov 16 05:51	0°♏			11724 Jun 26 01:36	0°♍	
asc. node	11721 Nov 22 17:57	7°♏45'17		greatest brilliancy	11724 Jul 29 03:43	24°♍00'22	-4.9m
	11721 Dec 11 06:24	0°♊		retrograde	11724 Aug 08 18:03	26°♍06'59	
	11722 Jan 04 23:17	0°♋		evening set	11724 Aug 23 10:15	21°♍53'07	
	11722 Jan 29 10:59	0°♌		desc. node	11724 Aug 29 06:14	18°♍28'15	
morning set	11722 Feb 22 23:29	0°♋13'09		inferior conj	11724 Aug 29 16:27	18°♍12'36	-0°06'34
	11722 Feb 22 19:13	0°♋		minimum elong	11724 Aug 29 16:12	18°♍13'00	0°06'43
desc. node	11722 Mar 14 09:33	24°♋15'22		transit middle	11724 Aug 29 16:12	18°♍13'00	0°06'43
	11722 Mar 19 00:39	0°♋		transit begin	11724 Aug 29 12:28	18°♍18'43	
max. Earth dist.	11722 Mar 30 12:18	14°♋16'31	1.72194 AU	transit end	11724 Aug 29 19:55	18°♍07'18	
				min. Earth dist.	11724 Aug 29 07:08	18°♍26'54	0.27307 AU
superior conj	11722 Apr 02 21:09	18°♋28'03	-0°45'05	morning rise	11724 Sep 04 22:35	14°♍32'49	
minimum elong	11722 Apr 02 11:26	17°♋57'49	0°44'51	direct	11724 Sep 19 11:45	10°♍24'47	
	11722 Apr 12 03:17	0°♋		greatest brilliancy	11724 Sep 29 06:54	12°♍10'06	-4.8m
	11722 May 06 03:28	0°♋			11724 Oct 26 19:31	0°♎	
evening rise	11722 May 12 07:33	7°♋43'22		morning max el	11724 Nov 07 15:58	10°♎51'00	45°58'09
	11722 May 30 02:27	0°☿			11724 Nov 26 11:42	0°♏	
	11722 Jun 23 02:19	0°♌		asc. node	11724 Dec 20 06:12	26°♏09'26	
asc. node	11722 Jul 05 02:31	14°♌57'31			11724 Dec 23 15:22	0°♊	
	11722 Jul 17 05:25	0°♍			11725 Jan 18 10:40	0°♋	
	11722 Aug 10 14:26	0°♎			11725 Feb 12 12:50	0°♌	
	11722 Sep 04 09:26	0°♏			11725 Mar 09 04:46	0°♋	
	11722 Sep 29 22:25	0°♊			11725 Apr 02 13:55	0°♋	
desc. node	11722 Oct 24 23:59	27°♊53'13		desc. node	11725 Apr 10 23:25	10°♋23'39	
	11722 Oct 26 23:40	0°♋			11725 Apr 26 17:55	0°♋	
evening max el	11722 Nov 12 07:24	16°♋33'57	45°52'52	morning set	11725 May 07 03:39	12°♋58'57	
	11722 Nov 27 06:00	0°♌			11725 May 20 17:58	0°♋	
greatest brilliancy	11722 Dec 21 12:05	14°♌57'14	-4.7m		11725 Jun 13 15:40	0°☿	
retrograde	11722 Dec 31 05:04	16°♌40'13					
evening set	11723 Jan 16 16:25	11°♌30'38		superior conj	11725 Jun 16 10:07	3°☿28'46	-1°24'10
inferior conj	11723 Jan 21 14:30	8°♌30'23	-5°33'12	minimum elong	11725 Jun 16 16:32	3°☿48'54	1°24'52
minimum elong	11723 Jan 22 00:25	8°♌14'48	5°30'13	max. Earth dist.	11725 Jun 15 22:47	2°☿53'10	1.71349 AU
min. Earth dist.	11723 Jan 22 04:57	8°♌07'41	0.28660 AU		11725 Jul 07 12:56	0°♌	
morning rise	11723 Jan 27 08:01	5°♌01'22		evening rise	11725 Jul 26 18:57	24°♌07'49	
direct	11723 Feb 11 22:57	0°♌16'06			11725 Jul 31 11:36	0°♍	
asc. node	11723 Feb 15 01:38	0°♌27'20		asc. node	11725 Aug 01 15:20	1°♍26'39	
greatest brilliancy	11723 Feb 22 23:19	2°♌29'02	-4.8m		11725 Aug 24 13:09	0°♎	
	11723 Mar 31 19:28	0°♋			11725 Sep 17 19:06	0°♏	
morning max el	11723 Apr 02 15:03	1°♋47'14	46°17'06		11725 Oct 12 07:47	0°♊	
	11723 Apr 29 03:51	0°♋			11725 Nov 06 07:02	0°♋	
	11723 May 25 03:54	0°♋		desc. node	11725 Nov 21 10:33	17°♋50'06	
desc. node	11723 Jun 06 23:57	15°♋17'49			11725 Dec 01 22:50	0°♌	
	11723 Jun 19 04:06	0°♋			11725 Dec 28 18:28	0°♋	
	11723 Jul 13 16:21	0°☿		evening max el	11726 Jan 22 14:50	25°♋38'10	45°58'52
	11723 Aug 06 23:02	0°♌			11726 Jan 27 05:14	0°♋	
	11723 Aug 31 03:53	0°♍		greatest brilliancy	11726 Mar 02 21:10	24°♋26'27	-4.8m
	11723 Sep 24 08:35	0°♎		retrograde	11726 Mar 12 20:19	26°♋16'12	
asc. node	11723 Sep 27 16:53	4°♎08'51		asc. node	11726 Mar 14 11:31	26°♋13'00	
morning set	11723 Oct 05 04:37	13°♎25'52		evening set	11726 Mar 27 17:52	21°♋53'51	
	11723 Oct 18 13:34	0°♏		inferior conj	11726 Apr 02 17:09	18°♋20'25	4°39'39
				minimum elong	11726 Apr 02 07:44	18°♋35'00	4°36'53
superior conj	11723 Nov 11 17:52	29°♏56'06	1°22'15	min. Earth dist.	11726 Apr 02 18:05	18°♋18'57	0.27658 AU
minimum elong	11723 Nov 11 12:14	29°♏38'42	1°22'48	morning rise	11726 Apr 07 21:24	15°♋13'09	

direct	11726 Apr 23 16:58	10° Υ 18'59			11728 Oct 02 06:21	0° \mathbb{M}	
greatest brilliancy	11726 May 03 22:00	12° Υ 16'58	-4.9m	evening rise	11728 Oct 07 00:54	5° \mathbb{M} 55'13	
	11726 May 30 10:02	0° \mathcal{B}			11728 Oct 26 12:16	0° \mathcal{A}	
morning max el	11726 Jun 13 04:04	13° \mathcal{B} 03'40	46°55'41		11728 Nov 19 22:37	0° \mathcal{Z}	
	11726 Jun 29 06:25	0° \mathbb{I}			11728 Dec 14 15:13	0° \approx	
desc. node	11726 Jul 04 11:39	5° \mathbb{I} 45'08		desc. node	11728 Dec 18 22:03	5° \approx 10'05	
	11726 Jul 25 17:25	0° \mathcal{D}			11729 Jan 08 15:36	0° \mathcal{H}	
	11726 Aug 20 01:19	0° \mathcal{Q}			11729 Feb 03 01:45	0° Υ	
	11726 Sep 13 22:02	0° \mathbb{P}			11729 Mar 01 03:24	0° \mathcal{B}	
	11726 Oct 08 13:43	0° \mathcal{L}			11729 Mar 28 16:21	0° \mathbb{I}	
asc. node	11726 Oct 25 06:43	20° \mathcal{L} 25'13		evening max el	11729 Apr 04 23:15	7° \mathbb{I} 24'05	46°32'57
	11726 Nov 02 02:22	0° \mathbb{L}		asc. node	11729 Apr 10 21:22	13° \mathbb{I} 09'34	
	11726 Nov 26 12:37	0° \mathcal{A}			11729 Apr 30 22:39	0° \mathcal{D}	
morning set	11726 Dec 13 15:56	21° \mathcal{A} 06'19		greatest brilliancy	11729 May 15 11:39	7° \mathcal{D} 50'09	-4.9m
	11726 Dec 20 21:07	0° \mathcal{Z}		retrograde	11729 May 25 00:05	9° \mathcal{D} 32'26	
	11727 Jan 14 04:48	0° \approx		evening set	11729 Jun 12 01:28	3° \mathcal{D} 21'24	
				inferior conj	11729 Jun 14 16:14	1° \mathcal{D} 45'21	8°58'41
superior conj	11727 Jan 19 09:43	6° \approx 25'19	0°56'34	minimum elong	11729 Jun 14 21:30	1° \mathcal{D} 37'13	8°57'31
minimum elong	11727 Jan 19 19:27	6° \approx 55'23	0°56'52	min. Earth dist.	11729 Jun 15 00:26	1° \mathcal{D} 32'41	0.27206 AU
max. Earth dist.	11727 Jan 19 01:07	5° \approx 58'49	1.73132 AU	morning rise	11729 Jun 17 17:30	29° \mathbb{I} 53'23	
	11727 Feb 07 12:11	0° \mathcal{H}			11729 Jun 17 13:05	30° $\mathcal{R}\mathbb{I}$	
desc. node	11727 Feb 13 21:42	7° \mathcal{H} 53'44		direct	11729 Jul 05 09:50	23° \mathbb{I} 54'38	
evening rise	11727 Feb 26 09:17	23° \mathcal{H} 18'52		greatest brilliancy	11729 Jul 15 07:51	25° \mathbb{I} 45'20	-4.9m
	11727 Mar 03 19:06	0° Υ			11729 Jul 24 03:13	0° \mathcal{D}	
	11727 Mar 28 01:02	0° \mathcal{B}		desc. node	11729 Jul 31 22:14	5° \mathcal{D} 14'18	
	11727 Apr 21 06:13	0° \mathbb{I}		morning max el	11729 Aug 24 16:29	26° \mathcal{D} 20'39	46°44'04
	11727 May 15 12:24	0° \mathcal{D}			11729 Aug 28 07:33	0° \mathcal{Q}	
asc. node	11727 Jun 06 16:27	27° \mathcal{D} 13'39			11729 Sep 25 03:28	0° \mathbb{P}	
	11727 Jun 08 22:58	0° \mathcal{Q}			11729 Oct 21 07:29	0° \mathcal{L}	
	11727 Jul 03 19:12	0° \mathbb{P}			11729 Nov 15 17:55	0° \mathbb{L}	
	11727 Jul 29 10:39	0° \mathcal{L}		asc. node	11729 Nov 21 19:50	7° \mathbb{L} 15'29	
	11727 Aug 25 21:59	0° \mathbb{L}			11729 Dec 10 17:43	0° \mathcal{A}	
evening max el	11727 Aug 31 00:07	5° \mathbb{L} 08'50	46°23'48		11730 Jan 04 10:08	0° \mathcal{Z}	
desc. node	11727 Sep 26 16:10	28° \mathbb{L} 03'32			11730 Jan 28 21:36	0° \approx	
	11727 Sep 29 16:24	0° \mathcal{A}		morning set	11730 Feb 20 15:15	28° \approx 01'05	
greatest brilliancy	11727 Oct 08 23:06	4° \mathcal{A} 39'56	-4.8m		11730 Feb 22 05:45	0° \mathcal{H}	
retrograde	11727 Oct 19 20:20	6° \mathcal{A} 49'22		desc. node	11730 Mar 13 11:29	23° \mathcal{H} 48'43	
evening set	11727 Nov 06 10:05	0° \mathcal{A} 56'31			11730 Mar 18 11:12	0° Υ	
	11727 Nov 07 23:11	30° $\mathcal{R}\mathbb{L}$		max. Earth dist.	11730 Mar 28 03:26	12° Υ 01'27	1.72243 AU
min. Earth dist.	11727 Nov 09 15:43	28° \mathbb{L} 56'55	0.28768 AU				
inferior conj	11727 Nov 10 06:42	28° \mathbb{L} 33'26	-8°19'55	superior conj	11730 Mar 31 10:47	16° Υ 08'15	-0°41'54
minimum elong	11727 Nov 10 00:30	28° \mathbb{L} 43'08	8°18'43	minimum elong	11730 Mar 31 01:35	15° Υ 39'37	0°41'38
morning rise	11727 Nov 13 15:11	26° \mathbb{L} 29'16			11730 Apr 11 13:54	0° \mathcal{B}	
direct	11727 Dec 01 15:32	20° \mathbb{L} 25'47			11730 May 05 14:11	0° \mathbb{I}	
greatest brilliancy	11727 Dec 11 10:34	22° \mathbb{L} 10'44	-4.7m	evening rise	11730 May 09 19:47	5° \mathbb{I} 17'49	
	11727 Dec 26 04:50	0° \mathcal{A}			11730 May 29 13:19	0° \mathcal{D}	
asc. node	11728 Jan 17 17:17	18° \mathcal{A} 51'31			11730 Jun 22 13:22	0° \mathcal{Q}	
morning max el	11728 Jan 19 13:11	20° \mathcal{A} 36'54	45°43'03	asc. node	11730 Jul 04 04:18	14° \mathcal{Q} 28'27	
	11728 Jan 28 22:49	0° \mathcal{Z}			11730 Jul 16 16:44	0° \mathbb{P}	
	11728 Feb 25 13:30	0° \approx			11730 Aug 10 02:10	0° \mathcal{L}	
	11728 Mar 22 09:49	0° \mathcal{H}			11730 Sep 03 21:56	0° \mathbb{L}	
	11728 Apr 16 10:05	0° Υ			11730 Sep 29 12:25	0° \mathcal{A}	
desc. node	11728 May 08 13:07	27° Υ 02'47		desc. node	11730 Oct 24 02:02	27° \mathcal{A} 13'04	
	11728 May 10 22:40	0° \mathcal{B}			11730 Oct 26 17:15	0° \mathcal{Z}	
	11728 Jun 04 03:45	0° \mathbb{I}		evening max el	11730 Nov 09 21:43	14° \mathcal{Z} 19'46	45°53'33
	11728 Jun 28 04:23	0° \mathcal{D}			11730 Nov 27 14:30	0° \approx	
morning set	11728 Jul 21 10:37	29° \mathcal{D} 07'46		greatest brilliancy	11730 Dec 19 03:15	12° \approx 46'24	-4.7m
	11728 Jul 22 03:18	0° \mathcal{Q}		retrograde	11730 Dec 28 20:48	14° \approx 30'08	
	11728 Aug 15 02:35	0° \mathbb{P}		evening set	11731 Jan 14 10:59	9° \approx 15'46	
asc. node	11728 Aug 29 04:53	17° \mathbb{P} 36'17		inferior conj	11731 Jan 19 06:25	6° \approx 19'35	-5°48'48
				minimum elong	11731 Jan 19 16:29	6° \approx 03'47	5°45'51
superior conj	11728 Aug 29 19:26	18° \mathbb{P} 21'43	0°01'30	min. Earth dist.	11731 Jan 19 20:45	5° \approx 57'05	0.28696 AU
minimum elong	11728 Aug 29 19:08	18° \mathbb{P} 20'46	0°01'14	morning rise	11731 Jan 24 21:35	2° \approx 54'04	
behind sun begin	11728 Aug 28 18:41	17° \mathbb{P} 04'30			11731 Jan 30 20:43	30° $\mathcal{R}\mathcal{Z}$	
behind sun end	11728 Aug 30 19:35	19° \mathbb{P} 37'01		direct	11731 Feb 09 14:40	28° \mathcal{Z} 04'48	
max. Earth dist.	11728 Sep 01 10:41	21° \mathbb{P} 38'58	1.71992 AU	asc. node	11731 Feb 14 03:34	28° \mathcal{Z} 28'32	
	11728 Sep 08 03:24	0° \mathcal{L}			11731 Feb 19 19:59	0° \approx	

greatest brilliancy	11731 Feb 20 15:44	0°≈18'21	-4.8m			11733 Nov 05 19:24	0°☿	
morning max el	11731 Mar 31 06:49	29°≈34'04	46°15'34	desc. node		11733 Nov 20 12:29	17°☿17'43	
	11731 Mar 31 17:17	0°☿				11733 Dec 01 12:33	0°≈	
	11731 Apr 28 19:24	0°☿				11733 Dec 28 11:06	0°☿	
	11731 May 24 17:15	0°☿		evening max el		11734 Jan 20 06:37	23°☿25'16	45°58'03
desc. node	11731 Jun 06 01:50	14°☿45'03				11734 Jan 27 06:53	0°☿	
	11731 Jun 18 16:25	0°☿		greatest brilliancy		11734 Feb 28 11:17	22°☿08'08	-4.8m
	11731 Jul 13 04:05	0°☿		retrograde		11734 Mar 10 10:20	23°☿57'21	
	11731 Aug 06 10:23	0°☿		asc. node		11734 Mar 13 13:40	23°☿45'30	
	11731 Aug 30 14:55	0°☿		evening set		11734 Mar 25 06:20	19°☿37'47	
	11731 Sep 23 19:23	0°☿		inferior conj		11734 Mar 31 07:27	16°☿01'26	4°19'44
asc. node	11731 Sep 26 18:51	3°☿41'33		minimum elong		11734 Mar 30 22:33	16°☿15'17	4°17'05
morning set	11731 Oct 02 19:42	11°☿10'32		min. Earth dist.		11734 Mar 31 08:45	15°☿59'25	0.27674 AU
	11731 Oct 18 00:12	0°☿		morning rise		11734 Apr 05 14:31	12°☿49'53	
				direct		11734 Apr 21 07:54	7°☿59'55	
superior conj	11731 Nov 09 10:35	27°☿46'38	1°21'12	greatest brilliancy		11734 May 01 12:55	9°☿57'46	-4.9m
minimum elong	11731 Nov 09 04:20	27°☿27'16	1°21'43			11734 May 30 14:49	0°☿	
max. Earth dist.	11731 Nov 10 22:34	29°☿37'54	1.72952 AU	morning max el		11734 Jun 10 18:12	10°☿42'54	46°54'56
	11731 Nov 11 05:42	0°☿				11734 Jun 29 00:03	0°☿	
	11731 Dec 05 12:35	0°☿		desc. node		11734 Jul 03 13:36	5°☿03'42	
evening rise	11731 Dec 16 06:31	13°☿14'29				11734 Jul 25 07:51	0°☿	
	11731 Dec 29 21:43	0°≈				11734 Aug 19 14:15	0°☿	
desc. node	11732 Jan 16 10:20	21°≈29'06				11734 Sep 13 10:09	0°☿	
	11732 Jan 23 09:27	0°☿				11734 Oct 08 01:17	0°☿	
	11732 Feb 16 23:30	0°☿		asc. node		11734 Oct 24 08:36	19°☿56'22	
	11732 Mar 12 15:51	0°☿				11734 Nov 01 13:34	0°☿	
	11732 Apr 06 12:23	0°☿				11734 Nov 25 23:33	0°☿	
	11732 May 01 19:00	0°☿		morning set		11734 Dec 11 08:56	18°☿57'29	
asc. node	11732 May 08 07:22	7°☿35'25				11734 Dec 20 07:54	0°☿	
	11732 May 28 01:41	0°☿				11735 Jan 13 15:32	0°≈	
evening max el	11732 Jun 16 22:45	21°☿04'08	46°50'12					
	11732 Jun 26 03:55	0°☿		superior conj		11735 Jan 17 02:08	4°≈14'44	0°59'04
greatest brilliancy	11732 Jul 26 18:03	21°☿38'17	-4.9m	minimum elong		11735 Jan 17 11:56	4°≈44'57	0°59'23
retrograde	11732 Aug 06 08:32	23°☿44'49		max. Earth dist.		11735 Jan 16 19:06	3°≈53'03	1.73142 AU
evening set	11732 Aug 21 00:39	19°☿29'55				11735 Feb 06 23:00	0°☿	
inferior conj	11732 Aug 27 05:50	15°☿50'54	0°17'03	desc. node		11735 Feb 12 23:38	7°☿26'17	
minimum elong	11732 Aug 27 06:29	15°☿49'54	0°16'34	evening rise		11735 Feb 24 00:30	21°☿03'52	
min. Earth dist.	11732 Aug 26 21:21	16°☿03'52	0.27273 AU			11735 Mar 03 06:04	0°☿	
desc. node	11732 Aug 28 08:19	15°☿10'28				11735 Mar 27 12:11	0°☿	
morning rise	11732 Sep 02 12:50	12°☿10'27				11735 Apr 20 17:38	0°☿	
direct	11732 Sep 17 01:06	8°☿03'23				11735 May 15 00:10	0°☿	
greatest brilliancy	11732 Sep 26 20:11	9°☿49'11	-4.8m	asc. node		11735 Jun 05 18:18	26°☿41'50	
	11732 Oct 27 00:37	0°☿				11735 Jun 08 11:19	0°☿	
morning max el	11732 Nov 05 07:10	8°☿36'25	45°59'29			11735 Jul 03 08:34	0°☿	
	11732 Nov 26 05:06	0°☿				11735 Jul 29 02:02	0°☿	
asc. node	11732 Dec 19 08:05	25°☿34'14				11735 Aug 25 18:38	0°☿	
	11732 Dec 23 05:21	0°☿		evening max el		11735 Aug 28 15:12	2°☿52'13	46°24'49
	11733 Jan 17 23:08	0°☿		desc. node		11735 Sep 25 18:12	26°☿46'09	
	11733 Feb 12 00:30	0°≈				11735 Oct 01 05:54	0°☿	
	11733 Mar 08 16:00	0°☿				11735 Oct 06 14:52	2°☿26'35	-4.8m
	11733 Apr 02 00:54	0°☿		greatest brilliancy		11735 Oct 17 11:35	4°☿35'47	
desc. node	11733 Apr 10 01:26	9°☿56'01		retrograde		11735 Nov 01 20:58	30°☿☿	
	11733 Apr 26 04:46	0°☿				11735 Nov 03 22:32	28°☿48'16	
morning set	11733 May 04 15:32	10°☿32'22		evening set		11735 Nov 07 22:16	26°☿20'30	-8°13'16
	11733 May 20 04:47	0°☿		inferior conj		11735 Nov 07 15:26	26°☿31'12	8°11'57
	11733 Jun 13 02:30	0°☿		minimum elong		11735 Nov 07 06:41	26°☿44'54	0.28729 AU
				min. Earth dist.		11735 Nov 11 08:33	24°☿13'26	
superior conj	11733 Jun 13 21:52	1°☿00'52	-1°25'10	morning rise		11735 Nov 29 06:39	18°☿13'39	
minimum elong	11733 Jun 14 03:21	1°☿18'04	1°25'53	direct		11735 Dec 09 00:58	19°☿57'32	-4.7m
max. Earth dist.	11733 Jun 13 09:48	0°☿22'55	1.71357 AU	greatest brilliancy		11735 Dec 26 22:35	0°☿	
	11733 Jul 06 23:48	0°☿				11736 Jan 16 19:17	18°☿01'32	
evening rise	11733 Jul 24 07:01	21°☿41'11		asc. node		11736 Jan 17 03:00	18°☿20'09	45°42'41
	11733 Jul 30 22:32	0°☿		morning max el		11736 Jan 28 17:49	0°☿	
asc. node	11733 Jul 31 17:14	0°☿58'25				11736 Feb 25 04:10	0°≈	
	11733 Aug 24 00:13	0°☿				11736 Mar 21 22:45	0°☿	
	11733 Sep 17 06:23	0°☿				11736 Apr 15 22:10	0°☿	
	11733 Oct 11 19:27	0°☿		desc. node		11736 May 07 14:52	26°☿32'17	

	11736 May 10 10:17	0°♄			11738 Oct 26 11:27	0°♄	
	11736 Jun 03 15:04	0°♄	evening max el		11738 Nov 07 12:46	12°♄06'51	45°54'09
	11736 Jun 27 15:30	0°♄			11738 Nov 28 02:28	0°♄	
morning set	11736 Jul 18 23:24	26°♄43'06	greatest brilliancy		11738 Dec 16 17:33	10°♄33'53	-4.7m
	11736 Jul 21 14:16	0°♄	retrograde		11738 Dec 26 12:43	12°♄18'57	
	11736 Aug 14 13:28	0°♄	evening set		11739 Jan 12 05:30	6°♄59'42	
			inferior conj		11739 Jan 16 22:12	4°♄07'34	-6°03'55
superior conj	11736 Aug 27 09:22	16°♄01'39 -0°02'13	minimum elong		11739 Jan 17 08:22	3°♄51'38	6°01'00
minimum elong	11736 Aug 27 09:58	16°♄03'32 0°02'26	min. Earth dist.		11739 Jan 17 12:05	3°♄45'48	0.28736 AU
behind sun begin	11736 Aug 26 09:36	14°♄47'27	morning rise		11739 Jan 22 10:53	0°♄45'51	
behind sun end	11736 Aug 28 10:21	17°♄19'35			11739 Jan 23 20:00	30°♄	
asc. node	11736 Aug 28 06:50	17°♄08'37	direct		11739 Feb 07 06:53	25°♄52'21	
max. Earth dist.	11736 Aug 29 23:45	19°♄16'16 1.71954 AU	asc. node		11739 Feb 13 05:41	26°♄32'56	
	11736 Sep 07 14:14	0°♄	greatest brilliancy		11739 Feb 18 07:41	28°♄06'03	-4.8m
	11736 Oct 01 17:12	0°♄			11739 Feb 22 14:20	0°♄	
evening rise	11736 Oct 04 16:54	3°♄42'22	morning max el		11739 Mar 28 23:14	27°♄21'36	46°14'00
	11736 Oct 25 23:12	0°♄			11739 Mar 31 14:43	0°♄	
	11736 Nov 19 09:48	0°♄			11739 Apr 28 11:01	0°♄	
	11736 Dec 14 02:49	0°♄			11739 May 24 06:44	0°♄	
desc. node	11736 Dec 17 23:52	4°♄40'22	desc. node		11739 Jun 05 03:46	14°♄12'03	
	11737 Jan 08 03:54	0°♄			11739 Jun 18 04:51	0°♄	
	11737 Feb 02 15:12	0°♄			11739 Jul 12 15:55	0°♄	
	11737 Feb 28 19:01	0°♄			11739 Aug 05 21:50	0°♄	
	11737 Mar 28 13:15	0°♄			11739 Aug 30 02:04	0°♄	
evening max el	11737 Apr 02 11:30	4°♄58'02 46°31'46			11739 Sep 23 06:17	0°♄	
asc. node	11737 Apr 09 23:19	12°♄12'11	asc. node		11739 Sep 25 20:41	3°♄13'27	
	11737 May 02 02:57	0°♄	morning set		11739 Sep 30 10:58	8°♄55'24	
greatest brilliancy	11737 May 13 01:02	5°♄25'21 -4.9m			11739 Oct 17 10:57	0°♄	
retrograde	11737 May 22 12:37	7°♄07'23					
evening set	11737 Jun 09 16:16	0°♄53'17	superior conj		11739 Nov 07 03:29	25°♄37'22	1°20'02
	11737 Jun 11 03:18	30°♄	minimum elong		11739 Nov 06 20:38	25°♄16'10	1°20'30
inferior conj	11737 Jun 12 05:13	29°♄20'06 9°03'49	max. Earth dist.		11739 Nov 08 18:10	27°♄37'03	1.72928 AU
minimum elong	11737 Jun 12 09:36	29°♄13'22 9°02'45			11739 Nov 10 16:22	0°♄	
min. Earth dist.	11737 Jun 12 13:26	29°♄07'25 0.27222 AU			11739 Dec 04 23:16	0°♄	
morning rise	11737 Jun 15 02:52	27°♄33'36	evening rise		11739 Dec 13 23:25	11°♄05'51	
direct	11737 Jul 02 22:18	21°♄28'42			11739 Dec 29 08:32	0°♄	
greatest brilliancy	11737 Jul 12 21:23	23°♄20'16 -4.9m	desc. node		11740 Jan 15 12:21	21°♄01'40	
	11737 Jul 25 12:08	0°♄			11740 Jan 22 20:31	0°♄	
desc. node	11737 Jul 31 00:15	3°♄58'41			11740 Feb 16 10:58	0°♄	
morning max el	11737 Aug 22 05:54	23°♄57'03 46°45'34			11740 Mar 12 03:53	0°♄	
	11737 Aug 28 04:51	0°♄			11740 Apr 06 01:18	0°♄	
	11737 Sep 24 19:13	0°♄			11740 May 01 09:25	0°♄	
	11737 Oct 20 20:57	0°♄	asc. node		11740 May 07 09:17	6°♄57'41	
	11737 Nov 15 06:12	0°♄			11740 May 27 19:17	0°♄	
asc. node	11737 Nov 20 21:41	6°♄44'48	evening max el		11740 Jun 14 13:42	18°♄44'34	46°50'27
	11737 Dec 10 05:18	0°♄			11740 Jun 26 07:55	0°♄	
	11738 Jan 03 21:20	0°♄	greatest brilliancy		11740 Jul 24 08:26	19°♄16'12	-4.9m
	11738 Jan 28 08:36	0°♄	retrograde		11740 Aug 03 22:53	21°♄22'15	
morning set	11738 Feb 18 06:48	25°♄47'10	evening set		11740 Aug 18 15:15	17°♄06'20	
	11738 Feb 21 16:40	0°♄	inferior conj		11740 Aug 24 19:10	13°♄28'54	0°40'44
desc. node	11738 Mar 12 13:24	23°♄20'56	minimum elong		11740 Aug 24 20:44	13°♄26'30	0°39'55
	11738 Mar 17 22:04	0°♄	min. Earth dist.		11740 Aug 24 11:28	13°♄40'40	0.27239 AU
max. Earth dist.	11738 Mar 25 20:03	9°♄50'01 1.72286 AU	desc. node		11740 Aug 27 10:23	11°♄53'08	
			morning rise		11740 Aug 31 02:46	9°♄47'55	
superior conj	11738 Mar 29 00:08	13°♄46'33 -0°38'37	direct		11740 Sep 14 14:46	5°♄41'52	
minimum elong	11738 Mar 28 15:30	13°♄19'43 0°38'20	greatest brilliancy		11740 Sep 24 09:08	7°♄27'34	-4.8m
	11738 Apr 11 00:49	0°♄			11740 Oct 27 03:54	0°♄	
	11738 May 05 01:11	0°♄	morning max el		11740 Nov 02 21:59	6°♄20'57	46°00'52
evening rise	11738 May 07 08:00	2°♄51'26			11740 Nov 25 22:03	0°♄	
	11738 May 29 00:27	0°♄	asc. node		11740 Dec 18 10:04	24°♄59'44	
	11738 Jun 22 00:42	0°♄			11740 Dec 22 19:07	0°♄	
asc. node	11738 Jul 03 06:15	13°♄58'58			11741 Jan 17 11:27	0°♄	
	11738 Jul 16 04:20	0°♄			11741 Feb 11 12:04	0°♄	
	11738 Aug 09 14:10	0°♄			11741 Mar 08 03:10	0°♄	
	11738 Sep 03 10:41	0°♄			11741 Apr 01 11:53	0°♄	
	11738 Sep 29 02:44	0°♄	desc. node		11741 Apr 09 03:12	9°♄27'31	
desc. node	11738 Oct 23 03:56	26°♄31'31			11741 Apr 25 15:41	0°♄	

morning set	11741 May 02 03:00	8°♄04'22		min. Earth dist.	11743 Nov 04 21:51	24°♍33'43	0.28687 AU
	11741 May 19 15:40	0°♈		inferior conj	11743 Nov 05 13:52	24°♍08'39	-8°05'52
max. Earth dist.	11741 Jun 10 17:47	27°♈43'15	1.71360 AU	minimum elong	11743 Nov 05 06:25	24°♍20'19	8°04'26
				morning rise	11743 Nov 09 02:09	21°♍58'33	
superior conj	11741 Jun 11 09:13	28°♈31'42	-1°26'00	direct	11743 Nov 26 21:19	16°♍02'27	
minimum elong	11741 Jun 11 13:42	28°♈45'45	1°26'44	greatest brilliancy	11743 Dec 06 15:58	17°♍46'06	-4.7m
	11741 Jun 12 13:20	0°♊			11743 Dec 27 11:12	0°♊	
	11741 Jul 06 10:38	0°♈		morning max el	11744 Jan 14 17:00	16°♊04'59	45°42'30
evening rise	11741 Jul 21 18:40	19°♈13'26		asc. node	11744 Jan 15 21:18	17°♊13'37	
	11741 Jul 30 09:25	0°♎			11744 Jan 28 11:50	0°♊	
asc. node	11741 Jul 30 19:11	0°♎30'31			11744 Feb 24 18:12	0°♋	
	11741 Aug 23 11:12	0°♊			11744 Mar 21 11:11	0°♋	
	11741 Sep 16 17:35	0°♌			11744 Apr 15 09:49	0°♋	
	11741 Oct 11 07:01	0°♊		desc. node	11744 May 06 16:48	26°♋03'38	
	11741 Nov 05 07:40	0°♊			11744 May 09 21:30	0°♋	
desc. node	11741 Nov 19 14:25	16°♊45'41			11744 Jun 03 02:01	0°♈	
	11741 Dec 01 02:11	0°♋			11744 Jun 27 02:18	0°♊	
	11741 Dec 28 03:48	0°♋		morning set	11744 Jul 16 11:42	24°♊17'40	
evening max el	11742 Jan 17 21:31	21°♋10'58	45°57'09		11744 Jul 21 00:58	0°♈	
	11742 Jan 27 09:43	0°♋			11744 Aug 14 00:06	0°♎	
greatest brilliancy	11742 Feb 26 01:43	19°♋50'48	-4.8m				
retrograde	11742 Mar 07 23:46	21°♋39'03		superior conj	11744 Aug 24 22:47	13°♎40'41	-0°05'54
asc. node	11742 Mar 12 15:32	21°♋13'01		minimum elong	11744 Aug 25 00:17	13°♎45'24	0°06'07
evening set	11742 Mar 22 18:58	17°♋21'51		behind sun begin	11744 Aug 24 01:15	12°♎33'28	
inferior conj	11742 Mar 28 21:44	13°♋43'01	3°59'17	behind sun end	11744 Aug 25 23:20	14°♎57'20	
minimum elong	11742 Mar 28 13:23	13°♋56'01	3°56'47	asc. node	11744 Aug 27 08:39	16°♎41'19	
min. Earth dist.	11742 Mar 28 23:44	13°♋39'55	0.27698 AU	max. Earth dist.	11744 Aug 27 10:04	16°♎45'42	1.71915 AU
morning rise	11742 Apr 03 07:31	10°♋27'13			11744 Sep 07 00:48	0°♊	
direct	11742 Apr 18 22:26	5°♋41'09			11744 Oct 01 03:44	0°♌	
greatest brilliancy	11742 Apr 29 04:34	7°♋39'34	-4.9m	evening rise	11744 Oct 02 08:30	1°♌29'11	
	11742 May 30 17:51	0°♋			11744 Oct 25 09:49	0°♊	
morning max el	11742 Jun 08 07:25	8°♋19'44	46°54'06		11744 Nov 18 20:38	0°♊	
	11742 Jun 28 17:18	0°♈			11744 Dec 13 14:04	0°♋	
desc. node	11742 Jul 02 15:36	4°♈22'55		desc. node	11744 Dec 17 01:55	4°♋12'26	
	11742 Jul 24 22:03	0°♊			11745 Jan 07 15:50	0°♋	
	11742 Aug 19 02:59	0°♈			11745 Feb 02 04:19	0°♋	
	11742 Sep 12 22:01	0°♎			11745 Feb 28 10:22	0°♋	
	11742 Oct 07 12:36	0°♊			11745 Mar 28 10:16	0°♈	
asc. node	11742 Oct 23 10:23	19°♊28'02		evening max el	11745 Mar 31 00:18	2°♈35'08	46°30'39
	11742 Nov 01 00:30	0°♌		asc. node	11745 Apr 09 01:16	11°♈15'09	
	11742 Nov 25 10:13	0°♊			11745 May 03 18:18	0°♊	
morning set	11742 Dec 09 02:04	16°♊49'52		greatest brilliancy	11745 May 10 13:40	3°♊01'35	-4.9m
	11742 Dec 19 18:25	0°♊		retrograde	11745 May 20 01:43	4°♊44'18	
	11743 Jan 13 02:00	0°♋			11745 Jun 04 15:12	30°♈♈	
				evening set	11745 Jun 07 06:36	28°♈27'40	
superior conj	11743 Jan 14 18:57	2°♋06'18	1°01'27	inferior conj	11745 Jun 09 18:18	26°♈56'29	9°07'42
minimum elong	11743 Jan 15 04:45	2°♋36'29	1°01'48	minimum elong	11745 Jun 09 21:45	26°♈51'11	9°06'46
max. Earth dist.	11743 Jan 14 11:57	1°♋44'41	1.73151 AU	min. Earth dist.	11745 Jun 10 02:06	26°♈44'28	0.27244 AU
	11743 Feb 06 09:31	0°♋		morning rise	11745 Jun 12 12:51	25°♈14'47	
desc. node	11743 Feb 12 01:32	6°♋59'37		direct	11745 Jun 30 11:26	19°♈04'23	
evening rise	11743 Feb 21 16:05	18°♋51'03		greatest brilliancy	11745 Jul 10 10:39	20°♈56'28	-4.9m
	11743 Mar 02 16:43	0°♋			11745 Jul 26 11:06	0°♊	
	11743 Mar 26 23:04	0°♋		desc. node	11745 Jul 30 02:17	2°♊46'31	
	11743 Apr 20 04:49	0°♈		morning max el	11745 Aug 19 20:18	21°♊36'54	46°46'48
	11743 May 14 11:47	0°♊			11745 Aug 28 01:05	0°♈	
asc. node	11743 Jun 04 20:17	26°♊10'46			11745 Sep 24 10:27	0°♎	
	11743 Jun 07 23:35	0°♈			11745 Oct 20 10:02	0°♊	
	11743 Jul 02 21:55	0°♎			11745 Nov 14 18:06	0°♌	
	11743 Jul 28 17:30	0°♊		asc. node	11745 Nov 19 23:42	6°♌15'45	
	11743 Aug 25 15:47	0°♌			11745 Dec 09 16:29	0°♊	
evening max el	11743 Aug 26 05:21	0°♌33'50	46°26'06		11746 Jan 03 08:07	0°♊	
desc. node	11743 Sep 24 20:05	25°♌26'57			11746 Jan 27 19:10	0°♋	
	11743 Oct 03 16:15	0°♊		morning set	11746 Feb 15 22:36	23°♋35'23	
greatest brilliancy	11743 Oct 04 06:38	0°♊14'00	-4.8m		11746 Feb 21 03:09	0°♋	
retrograde	11743 Oct 15 02:52	2°♊23'19		desc. node	11746 Mar 11 15:11	22°♋54'03	
	11743 Oct 26 01:58	30°♌♌			11746 Mar 17 08:32	0°♋	
evening set	11743 Nov 01 10:53	26°♌41'05		max. Earth dist.	11746 Mar 23 13:02	7°♋41'03	1.72325 AU

superior conj	11746 Mar 26 13:48	11° Υ 27'12	-0°35'17	direct	11748 Sep 12 04:30	3° Π 21'45	
minimum elong	11746 Mar 26 05:48	11° Υ 02'20	0°35'00	greatest brilliancy	11748 Sep 21 22:15	5° Π 07'07	-4.8m
	11746 Apr 10 11:19	0° \mathcal{B}			11748 Oct 27 05:16	0° \mathcal{B}	
	11746 May 04 11:46	0° Π		morning max el	11748 Oct 31 11:58	4° \mathcal{B} 04'07	46°02'06
evening rise	11746 May 04 20:41	0° Π 27'54			11748 Nov 25 14:26	0° \mathcal{M}	
	11746 May 28 11:11	0° \mathcal{E}		asc. node	11748 Dec 17 12:02	24° \mathcal{M} 25'57	
	11746 Jun 21 11:37	0° Ω			11748 Dec 22 08:35	0° \mathcal{X}	
asc. node	11746 Jul 02 08:14	13° Ω 30'52			11749 Jan 16 23:33	0° \mathcal{Z}	
	11746 Jul 15 15:32	0° Π			11749 Feb 10 23:26	0° \approx	
	11746 Aug 09 01:51	0° \mathcal{B}			11749 Mar 07 14:09	0° \mathcal{H}	
	11746 Sep 02 23:12	0° \mathcal{M}			11749 Mar 31 22:39	0° Υ	
	11746 Sep 28 16:56	0° \mathcal{X}		desc. node	11749 Apr 08 05:04	9° Υ 00'02	
desc. node	11746 Oct 22 05:57	25° \mathcal{X} 50'35			11749 Apr 25 02:23	0° \mathcal{B}	
	11746 Oct 26 05:49	0° \mathcal{Z}		morning set	11749 Apr 29 14:36	5° \mathcal{B} 37'27	
evening max el	11746 Nov 05 04:38	9° \mathcal{Z} 56'45	45°54'54		11749 May 19 02:20	0° Π	
	11746 Nov 28 18:01	0° \approx		max. Earth dist.	11749 Jun 07 22:49	24° Π 54'47	1.71367 AU
greatest brilliancy	11746 Dec 14 07:53	8° \approx 22'40	-4.7m				
retrograde	11746 Dec 24 04:48	10° \approx 08'54		superior conj	11749 Jun 08 20:48	26° Π 03'50	-1°26'39
evening set	11747 Jan 10 00:09	4° \approx 45'05		minimum elong	11749 Jun 09 00:16	26° Π 14'42	1°27'24
inferior conj	11747 Jan 14 14:03	1° \approx 56'49	-6°18'21		11749 Jun 12 00:01	0° \mathcal{E}	
minimum elong	11747 Jan 15 00:15	1° \approx 40'50	6°15'31		11749 Jul 05 21:19	0° Ω	
min. Earth dist.	11747 Jan 15 03:07	1° \approx 36'21	0.28769 AU	evening rise	11749 Jul 19 06:23	16° Ω 46'15	
	11747 Jan 17 17:20	30° \mathcal{R} \mathcal{Z}		asc. node	11749 Jul 29 20:59	0° Π 02'36	
morning rise	11747 Jan 20 00:06	28° \mathcal{Z} 39'06			11749 Jul 29 20:09	0° Π	
direct	11747 Feb 04 23:32	23° \mathcal{Z} 41'31			11749 Aug 22 22:03	0° \mathcal{B}	
asc. node	11747 Feb 12 07:36	24° \mathcal{Z} 42'46			11749 Sep 16 04:38	0° \mathcal{M}	
greatest brilliancy	11747 Feb 15 22:57	25° \mathcal{Z} 54'23	-4.8m		11749 Oct 10 18:28	0° \mathcal{X}	
	11747 Feb 24 05:49	0° \approx			11749 Nov 04 19:53	0° \mathcal{Z}	
morning max el	11747 Mar 26 15:41	25° \approx 10'40	46°12'22	desc. node	11749 Nov 18 16:25	16° \mathcal{Z} 13'56	
	11747 Mar 31 10:53	0° \mathcal{H}			11749 Nov 30 15:54	0° \approx	
	11747 Apr 28 01:58	0° Υ			11749 Dec 27 20:53	0° \mathcal{H}	
	11747 May 23 19:41	0° \mathcal{B}		evening max el	11750 Jan 15 11:41	18° \mathcal{H} 54'53	45°56'19
desc. node	11747 Jun 04 05:44	13° \mathcal{B} 40'29			11750 Jan 27 14:19	0° Υ	
	11747 Jun 17 16:50	0° Π		greatest brilliancy	11750 Feb 23 16:31	17° Υ 34'01	-4.8m
	11747 Jul 12 03:20	0° \mathcal{E}		retrograde	11750 Mar 05 13:11	19° Υ 21'20	
	11747 Aug 05 08:51	0° Ω		asc. node	11750 Mar 11 17:31	18° Υ 35'27	
	11747 Aug 29 12:50	0° Π		evening set	11750 Mar 20 07:53	15° Υ 05'52	
	11747 Sep 22 16:51	0° \mathcal{B}		inferior conj	11750 Mar 26 12:09	11° Υ 25'08	3°38'35
asc. node	11747 Sep 24 22:30	2° \mathcal{B} 46'22		minimum elong	11750 Mar 26 04:24	11° Υ 37'13	3°36'14
morning set	11747 Sep 28 02:11	6° \mathcal{B} 41'04		min. Earth dist.	11750 Mar 26 15:01	11° Υ 20'39	0.27721 AU
	11747 Oct 16 21:24	0° \mathcal{M}		morning rise	11750 Apr 01 00:30	8° Υ 05'23	
				direct	11750 Apr 16 12:37	3° Υ 22'45	
superior conj	11747 Nov 04 20:06	23° \mathcal{M} 28'01	1°18'43	greatest brilliancy	11750 Apr 26 20:43	5° Υ 22'27	-4.9m
minimum elong	11747 Nov 04 12:43	23° \mathcal{M} 05'10	1°19'10		11750 May 30 19:17	0° \mathcal{B}	
max. Earth dist.	11747 Nov 06 14:01	25° \mathcal{M} 37'43	1.72904 AU	morning max el	11750 Jun 05 20:22	5° \mathcal{B} 56'06	46°53'12
	11747 Nov 10 02:47	0° \mathcal{X}			11750 Jun 28 10:08	0° Π	
	11747 Dec 04 09:42	0° \mathcal{Z}		desc. node	11750 Jul 01 17:33	3° Π 42'33	
evening rise	11747 Dec 11 16:00	8° \mathcal{Z} 56'58			11750 Jul 24 12:05	0° \mathcal{E}	
	11747 Dec 28 19:04	0° \approx			11750 Aug 18 15:39	0° Ω	
desc. node	11748 Jan 14 14:10	20° \approx 34'32			11750 Sep 12 09:52	0° Π	
	11748 Jan 22 07:18	0° \mathcal{H}			11750 Oct 06 23:54	0° \mathcal{B}	
	11748 Feb 15 22:09	0° Υ		asc. node	11750 Oct 22 12:24	19° \mathcal{B} 00'24	
	11748 Mar 11 15:40	0° \mathcal{B}			11750 Oct 31 11:25	0° \mathcal{M}	
	11748 Apr 05 14:01	0° Π			11750 Nov 24 20:54	0° \mathcal{X}	
	11748 Apr 30 23:42	0° \mathcal{E}		morning set	11750 Dec 06 19:11	14° \mathcal{X} 41'59	
asc. node	11748 May 06 11:20	6° \mathcal{E} 20'53			11750 Dec 19 04:59	0° \mathcal{Z}	
	11748 May 27 12:57	0° Ω					
evening max el	11748 Jun 12 04:50	16° Ω 26'17	46°50'35	superior conj	11751 Jan 12 11:44	29° \mathcal{Z} 57'26	1°03'44
	11748 Jun 26 13:23	0° Π		minimum elong	11751 Jan 12 21:29	0° \approx 27'28	1°04'07
greatest brilliancy	11748 Jul 21 23:19	16° Π 55'55	-4.9m	max. Earth dist.	11751 Jan 12 04:51	29° \mathcal{Z} 36'12	1.73164 AU
retrograde	11748 Aug 01 12:57	19° Π 00'45			11751 Jan 12 12:34	0° \approx	
evening set	11748 Aug 16 06:11	14° Π 43'53			11751 Feb 05 20:11	0° \mathcal{H}	
inferior conj	11748 Aug 22 08:35	11° Π 08'11	1°04'11	desc. node	11751 Feb 11 03:20	6° \mathcal{H} 32'12	
minimum elong	11748 Aug 22 11:04	11° Π 04'24	1°03'04	evening rise	11751 Feb 19 07:33	16° \mathcal{H} 37'30	
min. Earth dist.	11748 Aug 22 01:49	11° Π 18'34	0.27206 AU		11751 Mar 02 03:32	0° Υ	
desc. node	11748 Aug 26 12:13	8° Π 39'02			11751 Mar 26 10:06	0° \mathcal{B}	
morning rise	11748 Aug 28 16:33	7° Π 26'44			11751 Apr 19 16:08	0° Π	

	11751 May 13 23:32	0°☿			11753 Aug 27 21:07	0°♈	
asc. node	11751 Jun 03 22:14	25°☿39'08			11753 Sep 24 01:50	0°♉	
	11751 Jun 07 12:01	0°♈			11753 Oct 19 23:23	0°♊	
	11751 Jul 02 11:31	0°♉			11753 Nov 14 06:19	0°♋	
	11751 Jul 28 09:23	0°♊		asc. node	11753 Nov 19 01:33	5°♌45'07	
evening max el	11751 Aug 23 19:19	28°♊14'23	46°27'24		11753 Dec 09 04:02	0°♍	
	11751 Aug 25 13:58	0°♋			11754 Jan 02 19:16	0°♎	
desc. node	11751 Sep 23 22:11	24°♋04'59			11754 Jan 27 06:07	0°♏	
greatest brilliancy	11751 Oct 01 21:55	28°♋00'04	-4.8m	morning set	11754 Feb 13 14:40	21°♐23'22	
	11751 Oct 09 19:04	0°♑			11754 Feb 20 14:00	0°♒	
retrograde	11751 Oct 12 18:22	0°♑10'19		desc. node	11754 Mar 10 17:06	22°♓26'25	
	11751 Oct 15 16:48	30°♒♌			11754 Mar 16 19:24	0°♑	
evening set	11751 Oct 29 23:03	24°♌33'12		max. Earth dist.	11754 Mar 21 05:44	5°♑30'03	1.72366 AU
min. Earth dist.	11751 Nov 02 12:50	22°♌22'02	0.28643 AU				
inferior conj	11751 Nov 03 05:24	21°♌56'08	-7°57'43	superior conj	11754 Mar 24 03:34	9°♑06'58	-0°31'54
minimum elong	11751 Nov 02 21:22	22°♌08'41	7°56'08	minimum elong	11754 Mar 23 20:16	8°♑44'15	0°31'36
morning rise	11751 Nov 06 19:54	19°♌42'52			11754 Apr 09 22:15	0°♒	
direct	11751 Nov 24 11:53	13°♌50'27		evening rise	11754 May 02 09:14	28°♓02'29	
greatest brilliancy	11751 Dec 04 07:01	15°♌34'19	-4.7m		11754 May 03 22:49	0°♑	
	11751 Dec 27 20:41	0°♑			11754 May 27 22:24	0°☿	
morning max el	11752 Jan 12 07:29	13°♑50'32	45°42'20		11754 Jun 20 23:02	0°♈	
asc. node	11752 Jan 14 23:13	16°♑25'47		asc. node	11754 Jul 01 10:00	13°♈00'36	
	11752 Jan 28 05:37	0°♒			11754 Jul 15 03:13	0°♉	
	11752 Feb 24 08:22	0°♓			11754 Aug 08 14:01	0°♊	
	11752 Mar 20 23:51	0°♑			11754 Sep 02 12:16	0°♋	
	11752 Apr 14 21:44	0°♑			11754 Sep 28 07:48	0°♌	
desc. node	11752 May 05 18:48	25°♑34'18		desc. node	11754 Oct 21 07:59	25°♌07'46	
	11752 May 09 08:59	0°♒			11754 Oct 26 01:16	0°♓	
	11752 Jun 02 13:14	0°♑		evening max el	11754 Nov 02 20:42	7°♓45'41	45°55'35
	11752 Jun 26 13:20	0°☿			11754 Nov 29 16:01	0°♓	
morning set	11752 Jul 13 23:51	21°☿50'55		greatest brilliancy	11754 Dec 11 22:43	6°♓10'40	-4.7m
	11752 Jul 20 11:55	0°♈		retrograde	11754 Dec 21 20:40	7°♓57'20	
	11752 Aug 13 10:59	0°♉		evening set	11755 Jan 07 18:49	2°♓29'15	
					11755 Jan 11 20:10	30°♒♓	
superior conj	11752 Aug 22 12:02	11°♉18'18	-0°09'36	inferior conj	11755 Jan 12 05:52	29°♓44'47	-6°32'16
minimum elong	11752 Aug 22 14:28	11°♉25'53	0°09'49	minimum elong	11755 Jan 12 16:01	29°♓28'51	6°29'31
behind sun begin	11752 Aug 21 18:34	10°♉23'46		min. Earth dist.	11755 Jan 12 18:06	29°♓25'35	0.28798 AU
behind sun end	11752 Aug 23 10:21	12°♉27'59		morning rise	11755 Jan 17 13:05	26°♓31'05	
max. Earth dist.	11752 Aug 24 20:31	14°♉14'41	1.71882 AU	direct	11755 Feb 02 16:10	21°♓29'36	
asc. node	11752 Aug 26 10:30	16°♉13'13		asc. node	11755 Feb 11 09:33	22°♓55'19	
	11752 Sep 06 11:39	0°♊		greatest brilliancy	11755 Feb 13 13:47	23°♓40'57	-4.8m
evening rise	11752 Sep 30 00:03	29°♊14'54			11755 Feb 25 09:45	0°♓	
	11752 Sep 30 14:35	0°♋		morning max el	11755 Mar 24 07:15	22°♓56'24	46°10'45
	11752 Oct 24 20:45	0°♌			11755 Mar 31 06:52	0°♑	
	11752 Nov 18 07:48	0°♓			11755 Apr 27 17:07	0°♑	
	11752 Dec 13 01:39	0°♓			11755 May 23 09:00	0°♒	
desc. node	11752 Dec 16 03:48	3°♓43'03		desc. node	11755 Jun 03 07:35	13°♓07'20	
	11753 Jan 07 04:09	0°♑			11755 Jun 17 05:14	0°♑	
	11753 Feb 01 17:54	0°♑			11755 Jul 11 15:13	0°☿	
	11753 Feb 28 02:25	0°♒			11755 Aug 04 20:22	0°♈	
	11753 Mar 28 08:42	0°♑			11755 Aug 29 00:03	0°♉	
evening max el	11753 Mar 28 13:56	0°♑12'58	46°29'25		11755 Sep 22 03:51	0°♊	
asc. node	11753 Apr 08 03:20	10°♑15'30		asc. node	11755 Sep 24 00:28	2°♊18'23	
	11753 May 06 11:35	0°☿		morning set	11755 Sep 25 17:06	4°♊24'27	
greatest brilliancy	11753 May 08 01:39	0°☿35'19	-4.9m		11755 Oct 16 08:16	0°♋	
retrograde	11753 May 17 15:02	2°☿19'08					
	11753 May 28 07:04	30°♒♑		superior conj	11755 Nov 02 12:33	21°♌16'51	1°17'19
evening set	11753 Jun 04 20:13	26°♑00'45		minimum elong	11755 Nov 02 04:40	20°♌52'28	1°17'41
inferior conj	11753 Jun 07 07:10	24°♑30'47	9°10'41	max. Earth dist.	11755 Nov 04 09:39	23°♌36'28	1.72878 AU
minimum elong	11753 Jun 07 09:39	24°♑26'58	9°09'50		11755 Nov 09 13:36	0°♌	
min. Earth dist.	11753 Jun 07 14:10	24°♑20'01	0.27261 AU		11755 Dec 03 20:34	0°♍	
morning rise	11753 Jun 09 23:02	22°♑53'15		evening rise	11755 Dec 09 08:34	6°♓46'38	
direct	11753 Jun 28 00:54	16°♑38'18			11755 Dec 28 06:04	0°♓	
greatest brilliancy	11753 Jul 07 23:03	18°♑30'05	-4.9m	desc. node	11756 Jan 13 16:02	20°♓06'05	
	11753 Jul 27 04:45	0°☿			11756 Jan 21 18:32	0°♑	
desc. node	11753 Jul 29 04:11	1°☿34'51			11756 Feb 15 09:46	0°♑	
morning max el	11753 Aug 17 10:53	19°☿16'00	46°47'59		11756 Mar 11 03:53	0°♒	

	11756 Apr 05 03:11	0°♊			11758 Nov 24 07:42	0°♊	
	11756 Apr 30 14:33	0°♋		morning set	11758 Dec 04 12:05	12°♊32'59	
asc. node	11756 May 05 13:17	5°♋42'18			11758 Dec 18 15:39	0°♋	
	11756 May 27 07:30	0°♌					
evening max el	11756 Jun 09 18:54	14°♌03'51	46°50'26	superior conj	11759 Jan 10 04:25	27°♋48'01	1°05'56
	11756 Jun 26 21:55	0°♍		minimum elong	11759 Jan 10 14:03	28°♋17'45	1°06'21
greatest brilliancy	11756 Jul 19 14:39	14°♍34'09	-4.9m	max. Earth dist.	11759 Jan 09 23:30	27°♋32'51	1.73175 AU
retrograde	11756 Jul 30 02:21	16°♍37'00			11759 Jan 11 23:13	0°♎	
evening set	11756 Aug 13 21:07	12°♍18'58			11759 Feb 05 06:54	0°♏	
inferior conj	11756 Aug 19 21:51	8°♍45'22	1°27'48	desc. node	11759 Feb 10 05:17	6°♏05'06	
minimum elong	11756 Aug 20 01:13	8°♍40'12	1°26'22	evening rise	11759 Feb 16 23:06	14°♏24'09	
min. Earth dist.	11756 Aug 19 16:21	8°♍53'48	0.27175 AU		11759 Mar 01 14:26	0°♐	
desc. node	11756 Aug 25 14:19	5°♍24'22			11759 Mar 25 21:12	0°♑	
morning rise	11756 Aug 26 05:52	5°♍03'31			11759 Apr 19 03:32	0°♒	
direct	11756 Sep 09 17:30	0°♍59'25			11759 May 13 11:21	0°♓	
greatest brilliancy	11756 Sep 19 11:44	2°♍44'57	-4.8m	asc. node	11759 Jun 03 00:07	25°♓07'15	
	11756 Oct 27 05:58	0°♎			11759 Jun 07 00:29	0°♌	
morning max el	11756 Oct 29 00:51	1°♎42'59	46°03'29		11759 Jul 02 01:07	0°♍	
	11756 Nov 25 06:57	0°♏			11759 Jul 28 01:22	0°♎	
asc. node	11756 Dec 16 13:55	23°♏51'05		evening max el	11759 Aug 21 09:46	25°♎56'36	46°28'38
	11756 Dec 21 22:17	0°♐			11759 Aug 25 12:56	0°♏	
	11757 Jan 16 11:56	0°♑		desc. node	11759 Sep 23 00:11	22°♏40'27	
	11757 Feb 10 11:07	0°♒		greatest brilliancy	11759 Sep 29 12:37	25°♏45'36	-4.8m
	11757 Mar 07 01:26	0°♓		retrograde	11759 Oct 10 10:22	27°♏57'29	
	11757 Mar 31 09:44	0°♔		evening set	11759 Oct 27 11:08	22°♏25'17	
desc. node	11757 Apr 07 07:03	8°♔31'58		min. Earth dist.	11759 Oct 31 03:32	20°♏10'38	0.28602 AU
	11757 Apr 24 13:21	0°♕		inferior conj	11759 Oct 31 20:55	19°♏43'33	-7°48'46
morning set	11757 Apr 27 02:33	3°♕10'50		minimum elong	11759 Oct 31 12:23	19°♏56'51	7°47'02
	11757 May 18 13:16	0°♖		morning rise	11759 Nov 04 13:52	17°♏27'00	
max. Earth dist.	11757 Jun 05 03:01	22°♖03'03	1.71379 AU	direct	11759 Nov 22 02:48	11°♏38'23	
				greatest brilliancy	11759 Dec 01 21:47	13°♏22'19	-4.7m
superior conj	11757 Jun 06 08:42	23°♖36'15	-1°27'08		11759 Dec 28 03:29	0°♐	
minimum elong	11757 Jun 06 11:08	23°♖43'52	1°27'53	morning max el	11760 Jan 09 22:55	11°♐38'36	45°42'13
	11757 Jun 11 10:56	0°♑		asc. node	11760 Jan 14 01:12	15°♐39'03	
	11757 Jul 05 08:16	0°♒			11760 Jan 27 22:57	0°♑	
evening rise	11757 Jul 16 18:05	14°♒18'08			11760 Feb 23 22:16	0°♒	
asc. node	11757 Jul 28 22:54	29°♒34'07			11760 Mar 20 12:19	0°♓	
	11757 Jul 29 07:10	0°♓			11760 Apr 14 09:28	0°♔	
	11757 Aug 22 09:13	0°♔		desc. node	11760 May 04 20:33	25°♔04'41	
	11757 Sep 15 16:01	0°♕			11760 May 08 20:18	0°♕	
	11757 Oct 10 06:16	0°♖			11760 Jun 02 00:18	0°♖	
	11757 Nov 04 08:28	0°♗			11760 Jun 26 00:14	0°♗	
desc. node	11757 Nov 17 18:20	15°♗40'54		morning set	11760 Jul 11 12:16	19°♗25'31	
	11757 Nov 30 06:04	0°♘			11760 Jul 19 22:41	0°♘	
	11757 Dec 27 14:39	0°♙			11760 Aug 12 21:39	0°♙	
evening max el	11758 Jan 13 01:07	16°♙36'30	45°55'34				
	11758 Jan 27 21:23	0°♚		superior conj	11760 Aug 20 01:32	8°♚57'19	-0°13'16
greatest brilliancy	11758 Feb 21 07:07	15°♚16'24	-4.8m	minimum elong	11760 Aug 20 04:52	9°♚07'44	0°13'27
retrograde	11758 Mar 03 02:53	17°♚03'19		behind sun begin	11760 Aug 19 14:56	8°♚24'12	
asc. node	11758 Mar 10 19:39	15°♚51'58		behind sun end	11760 Aug 20 18:47	9°♚51'15	
evening set	11758 Mar 17 21:00	12°♚48'53		max. Earth dist.	11760 Aug 22 09:36	11°♚52'28	1.71848 AU
inferior conj	11758 Mar 24 02:34	9°♚06'44	3°17'33	asc. node	11760 Aug 25 12:28	15°♚46'14	
minimum elong	11758 Mar 23 19:26	9°♚17'49	3°15'22		11760 Sep 05 22:15	0°♛	
min. Earth dist.	11758 Mar 24 06:21	9°♚00'50	0.27746 AU	evening rise	11760 Sep 27 15:54	27°♛02'19	
morning rise	11758 Mar 29 17:23	5°♚43'25			11760 Sep 30 01:12	0°♜	
direct	11758 Apr 14 02:40	1°♚03'40			11760 Oct 24 07:29	0°♝	
greatest brilliancy	11758 Apr 24 13:03	3°♚05'10	-4.9m		11760 Nov 17 18:47	0°♞	
	11758 May 30 19:36	0°♞			11760 Dec 12 13:05	0°♟	
morning max el	11758 Jun 03 10:01	3°♞33'59	46°52'31	desc. node	11760 Dec 15 05:39	3°♟14'07	
	11758 Jun 28 02:43	0°♟			11761 Jan 06 16:19	0°♠	
desc. node	11758 Jun 30 19:28	3°♟02'23			11761 Feb 01 07:22	0°♑	
	11758 Jul 24 02:01	0°♠			11761 Feb 27 18:28	0°♒	
	11758 Aug 18 04:19	0°♑		evening max el	11761 Mar 26 04:22	27°♒53'47	46°28'10
	11758 Sep 11 21:47	0°♒			11761 Mar 28 07:45	0°♓	
	11758 Oct 06 11:19	0°♓		asc. node	11761 Apr 07 05:17	9°♓15'02	
asc. node	11758 Oct 21 14:14	18°♓31'47		greatest brilliancy	11761 May 05 13:38	28°♓10'17	-4.9m
	11758 Oct 30 22:29	0°♔		retrograde	11761 May 15 04:34	29°♓54'57	

evening set	11761 Jun 02 09:27	23°II35'53		minimum elong	11763 Oct 30 20:54	18°III41'55	1°16'07
inferior conj	11761 Jun 04 20:08	22°II06'10	9°12'44	max. Earth dist.	11763 Nov 02 03:46	21°III31'46	1.72845 AU
minimum elong	11761 Jun 04 21:39	22°II03'51	9°11'56		11763 Nov 08 24:00	0°♂	
min. Earth dist.	11761 Jun 05 02:10	21°II56'53	0.27277 AU		11763 Dec 03 06:58	0°♂	
morning rise	11761 Jun 07 09:50	20°II31'55		evening rise	11763 Dec 07 01:26	4°♂38'39	
direct	11761 Jun 25 14:38	14°II13'34			11763 Dec 27 16:36	0°♂	
greatest brilliancy	11761 Jul 05 11:10	16°II04'14	-4.9m	desc. node	11764 Jan 12 18:03	19°♂39'35	
	11761 Jul 27 17:32	0°♂			11764 Jan 21 05:20	0°♂	
desc. node	11761 Jul 28 06:14	0°♂26'24			11764 Feb 14 21:00	0°♂	
morning max el	11761 Aug 15 01:27	16°♂56'00	46°49'13		11764 Mar 10 15:46	0°♂	
	11761 Aug 27 16:11	0°♂			11764 Apr 04 16:02	0°II	
	11761 Sep 23 16:36	0°♂			11764 Apr 30 05:10	0°♂	
	11761 Oct 19 12:13	0°♂		asc. node	11764 May 04 15:12	5°♂04'30	
	11761 Nov 13 18:05	0°III			11764 May 27 02:06	0°♂	
asc. node	11761 Nov 18 03:25	5°III15'48		evening max el	11764 Jun 07 07:53	11°♂39'51	46°50'20
	11761 Dec 08 15:11	0°♂			11764 Jun 27 08:49	0°♂	
	11762 Jan 02 06:05	0°♂		greatest brilliancy	11764 Jul 17 06:15	12°♂13'47	-4.9m
	11762 Jan 26 16:44	0°♂		retrograde	11764 Jul 27 15:22	14°♂14'30	
morning set	11762 Feb 11 06:51	19°♂12'43		evening set	11764 Aug 11 12:11	9°♂54'44	
	11762 Feb 20 00:32	0°♂		inferior conj	11764 Aug 17 11:07	6°♂23'44	1°51'21
desc. node	11762 Mar 09 19:01	21°♂59'46		minimum elong	11764 Aug 17 15:22	6°♂17'13	1°49'36
	11762 Mar 16 05:56	0°♂		min. Earth dist.	11764 Aug 17 07:09	6°♂29'50	0.27149 AU
max. Earth dist.	11762 Mar 18 20:48	3°♂15'05	1.72405 AU	morning rise	11764 Aug 23 18:58	2°♂41'44	
				desc. node	11764 Aug 24 16:23	2°♂13'59	
superior conj	11762 Mar 21 17:26	6°♂48'11	-0°28'29		11764 Aug 29 23:17	30°♂♂	
minimum elong	11762 Mar 21 10:52	6°♂27'45	0°28'10	direct	11764 Sep 07 06:02	28°♂37'55	
	11762 Apr 09 08:50	0°♂			11764 Sep 15 20:03	0°♂	
evening rise	11762 Apr 29 21:51	25°♂38'28		greatest brilliancy	11764 Sep 17 01:45	0°♂24'19	-4.8m
	11762 May 03 09:32	0°II		morning max el	11764 Oct 26 13:38	29°♂22'31	46°05'03
	11762 May 27 09:16	0°♂			11764 Oct 27 05:05	0°♂	
	11762 Jun 20 10:07	0°♂			11764 Nov 24 22:44	0°III	
asc. node	11762 Jun 30 12:00	12°♂32'00		asc. node	11764 Dec 15 15:55	23°III18'03	
	11762 Jul 14 14:37	0°♂			11764 Dec 21 11:25	0°♂	
	11762 Aug 08 01:53	0°♂			11765 Jan 15 23:47	0°♂	
	11762 Sep 02 01:01	0°III			11765 Feb 09 22:18	0°♂	
	11762 Sep 27 22:22	0°♂			11765 Mar 06 12:17	0°♂	
desc. node	11762 Oct 20 09:54	24°♂25'39			11765 Mar 30 20:26	0°♂	
	11762 Oct 25 20:41	0°♂		desc. node	11765 Apr 06 08:50	8°♂04'26	
evening max el	11762 Oct 31 12:27	5°♂35'16	45°56'15		11765 Apr 24 00:00	0°♂	
	11762 Nov 30 21:18	0°♂		morning set	11765 Apr 24 14:23	0°♂44'49	
greatest brilliancy	11762 Dec 09 14:12	4°♂01'10	-4.7m		11765 May 17 23:53	0°II	
retrograde	11762 Dec 19 12:14	5°♂47'39		max. Earth dist.	11765 Jun 02 07:45	19°II13'54	1.71395 AU
evening set	11763 Jan 05 13:40	0°♂15'27					
	11763 Jan 06 00:03	30°♂♂		superior conj	11765 Jun 03 20:18	21°II08'38	-1°27'27
inferior conj	11763 Jan 09 21:55	27°♂34'47	-6°45'33	minimum elong	11765 Jun 03 21:39	21°II12'52	1°28'12
minimum elong	11763 Jan 10 07:57	27°♂18'59	6°42'53		11765 Jun 10 21:33	0°♂	
min. Earth dist.	11763 Jan 10 09:30	27°♂16'33	0.28828 AU		11765 Jul 04 18:55	0°♂	
morning rise	11763 Jan 15 02:08	24°♂25'05		evening rise	11765 Jul 14 05:26	11°♂49'54	
direct	11763 Jan 31 08:38	19°♂19'40		asc. node	11765 Jul 28 00:49	29°♂06'39	
asc. node	11763 Feb 10 11:39	21°♂13'27			11765 Jul 28 17:54	0°♂	
greatest brilliancy	11763 Feb 11 05:02	21°♂29'31	-4.8m		11765 Aug 21 20:05	0°♂	
	11763 Feb 26 05:17	0°♂			11765 Sep 15 03:08	0°III	
morning max el	11763 Mar 21 22:11	20°♂41'46	46°09'07		11765 Oct 09 17:49	0°♂	
	11763 Mar 31 01:48	0°♂			11765 Nov 03 20:49	0°♂	
	11763 Apr 27 07:41	0°♂		desc. node	11765 Nov 16 20:18	15°♂08'48	
	11763 May 22 21:49	0°♂			11765 Nov 29 20:02	0°♂	
desc. node	11763 Jun 02 09:34	12°♂35'58			11765 Dec 27 08:24	0°♂	
	11763 Jun 16 17:11	0°II		evening max el	11766 Jan 10 15:00	14°♂20'35	45°55'02
	11763 Jul 11 02:38	0°♂			11766 Jan 28 06:25	0°♂	
	11763 Aug 04 07:26	0°♂		greatest brilliancy	11766 Feb 18 21:15	12°♂59'54	-4.8m
	11763 Aug 28 10:51	0°♂		retrograde	11766 Feb 28 17:10	14°♂47'09	
	11763 Sep 21 14:28	0°♂		asc. node	11766 Mar 09 21:31	13°♂05'27	
morning set	11763 Sep 23 08:05	2°♂09'10		evening set	11766 Mar 15 10:29	10°♂33'13	
asc. node	11763 Sep 23 02:17	1°♂51'09		inferior conj	11766 Mar 21 17:06	6°♂49'54	2°56'14
	11763 Oct 15 18:44	0°III		minimum elong	11766 Mar 21 10:40	6°♂59'55	2°54'17
				min. Earth dist.	11766 Mar 21 21:32	6°♂43'01	0.27776 AU
superior conj	11763 Oct 31 05:14	19°III07'44	1°15'46	morning rise	11766 Mar 27 10:19	3°♂23'26	

	11766 Apr 03 23:16	30° RH			11768 Oct 23 18:18	0° Z	
direct	11766 Apr 11 17:17	28° $\text{H}46'06$			11768 Nov 17 05:52	0° Z	
	11766 Apr 19 18:30	0° Y			11768 Dec 12 00:39	0° \approx	
greatest brilliancy	11766 Apr 22 05:16	0° $\text{Y}49'14$ -4.8m	desc. node		11768 Dec 14 07:42	2° $\approx45'20$	
	11766 May 30 18:31	0° B			11769 Jan 06 04:40	0° H	
morning max el	11766 Jun 01 00:50	1° $\text{B}15'42$ 46°51'34			11769 Jan 31 21:04	0° Y	
	11766 Jun 27 18:46	0° II			11769 Feb 27 10:53	0° B	
desc. node	11766 Jun 29 21:31	2° $\text{II}23'33$	evening max el		11769 Mar 23 19:04	25° $\text{B}35'20$ 46°27'01	
	11766 Jul 23 15:39	0° G			11769 Mar 28 07:53	0° II	
	11766 Aug 17 16:43	0° Q	asc. node		11769 Apr 06 07:16	8° $\text{II}13'22$	
	11766 Sep 11 09:27	0° M	greatest brilliancy		11769 May 03 02:13	25° $\text{II}46'30$ -4.9m	
	11766 Oct 05 22:29	0° L	retrograde		11769 May 12 17:57	27° $\text{II}31'16$	
asc. node	11766 Oct 20 16:03	18° $\text{L}03'52$	evening set		11769 May 30 22:18	21° $\text{II}12'48$	
	11766 Oct 30 09:18	0° M	inferior conj		11769 Jun 02 09:19	19° $\text{II}42'21$ 9°13'41	
	11766 Nov 23 18:18	0° Z	minimum elong		11769 Jun 02 09:51	19° $\text{II}41'30$ 9°12'55	
morning set	11766 Dec 02 04:56	10° $\text{Z}24'26$	min. Earth dist.		11769 Jun 02 14:32	19° $\text{II}34'18$ 0.27291 AU	
	11766 Dec 18 02:08	0° Z	morning rise		11769 Jun 04 21:26	18° $\text{II}10'17$	
			direct		11769 Jun 23 04:24	11° $\text{II}49'41$	
superior conj	11767 Jan 07 21:14	25° $\text{Z}39'34$ 1°08'02	greatest brilliancy		11769 Jul 02 23:37	13° $\text{II}39'08$ -4.9m	
minimum elong	11767 Jan 08 06:43	26° $\text{Z}08'48$ 1°08'28	desc. node		11769 Jul 27 08:16	29° $\text{II}19'55$	
max. Earth dist.	11767 Jan 07 19:26	25° $\text{Z}34'00$ 1.73181 AU			11769 Jul 28 02:57	0° G	
	11767 Jan 11 09:41	0° \approx	morning max el		11769 Aug 12 15:16	14° $\text{G}33'54$ 46°50'04	
	11767 Feb 04 17:26	0° H			11769 Aug 27 10:50	0° Q	
desc. node	11767 Feb 09 07:10	5° $\text{H}38'22$			11769 Sep 23 07:23	0° M	
evening rise	11767 Feb 14 14:55	12° $\text{H}12'20$			11769 Oct 19 01:12	0° L	
	11767 Mar 01 01:06	0° Y			11769 Nov 13 06:03	0° M	
	11767 Mar 25 08:05	0° B	asc. node		11769 Nov 17 05:26	4° $\text{M}46'19$	
	11767 Apr 18 14:44	0° II			11769 Dec 08 02:32	0° Z	
	11767 May 12 23:03	0° G			11770 Jan 01 17:04	0° Z	
asc. node	11767 Jun 02 02:06	24° $\text{G}35'55$			11770 Jan 26 03:33	0° \approx	
	11767 Jun 06 12:56	0° Q	morning set		11770 Feb 08 22:50	17° $\approx00'49$	
	11767 Jul 01 14:50	0° M			11770 Feb 19 11:16	0° H	
	11767 Jul 27 17:40	0° L	desc. node		11770 Mar 08 20:47	21° $\text{H}31'57$	
evening max el	11767 Aug 19 00:57	23° $\text{L}40'27$ 46°29'58			11770 Mar 15 16:40	0° Y	
	11767 Aug 25 13:01	0° M	max. Earth dist.		11770 Mar 16 09:42	0° $\text{Y}52'50$ 1.72442 AU	
desc. node	11767 Sep 22 02:05	21° $\text{M}12'37$					
greatest brilliancy	11767 Sep 27 02:55	23° $\text{M}30'15$ -4.8m	superior conj		11770 Mar 19 07:21	4° $\text{Y}28'57$ -0°25'00	
retrograde	11767 Oct 08 02:34	25° $\text{M}43'49$	minimum elong		11770 Mar 19 01:32	4° $\text{Y}10'54$ 0°24'43	
evening set	11767 Oct 24 22:57	20° $\text{M}16'41$			11770 Apr 08 19:38	0° B	
min. Earth dist.	11767 Oct 28 17:45	17° $\text{M}58'44$ 0.28557 AU	evening rise		11770 Apr 27 10:39	23° $\text{B}14'28$	
inferior conj	11767 Oct 29 12:09	17° $\text{M}30'07$ -7°38'57			11770 May 02 20:26	0° II	
minimum elong	11767 Oct 29 03:10	17° $\text{M}44'05$ 7°37'06			11770 May 26 20:18	0° G	
morning rise	11767 Nov 02 07:41	15° $\text{M}10'05$			11770 Jun 19 21:20	0° Q	
direct	11767 Nov 19 17:54	9° $\text{M}25'38$	asc. node		11770 Jun 29 13:57	12° $\text{Q}02'50$	
greatest brilliancy	11767 Nov 29 11:39	11° $\text{M}08'57$ -4.7m			11770 Jul 14 02:09	0° M	
	11767 Dec 28 08:12	0° Z			11770 Aug 07 13:59	0° L	
morning max el	11768 Jan 07 14:42	9° $\text{Z}27'34$ 45°42'11			11770 Sep 01 14:06	0° M	
asc. node	11768 Jan 13 03:14	14° $\text{Z}53'12$			11770 Sep 27 13:29	0° Z	
	11768 Jan 27 15:53	0° Z	desc. node		11770 Oct 19 11:56	23° $\text{Z}42'09$	
	11768 Feb 23 11:59	0° \approx			11770 Oct 25 17:14	0° Z	
	11768 Mar 20 00:39	0° H	evening max el		11770 Oct 29 03:17	3° $\text{Z}21'17$ 45°56'53	
	11768 Apr 13 21:04	0° Y			11770 Dec 02 17:42	0° \approx	
desc. node	11768 May 03 22:31	24° $\text{Y}36'07$	greatest brilliancy		11770 Dec 07 06:01	1° $\approx50'29$ -4.7m	
	11768 May 08 07:29	0° B	retrograde		11770 Dec 17 03:16	3° $\approx36'27$	
	11768 Jun 01 11:16	0° II			11770 Dec 30 17:50	30° RZ	
	11768 Jun 25 11:05	0° G	evening set		11771 Jan 03 08:20	28° $\text{Z}00'03$	
morning set	11768 Jul 09 00:27	16° $\text{G}59'25$	inferior conj		11771 Jan 07 13:48	25° $\text{Z}23'22$ -6°58'10	
	11768 Jul 19 09:28	0° Q	minimum elong		11771 Jan 07 23:41	25° $\text{Z}07'48$ 6°55'38	
	11768 Aug 12 08:22	0° M	min. Earth dist.		11771 Jan 08 01:03	25° $\text{Z}05'38$ 0.28855 AU	
			morning rise		11771 Jan 12 14:54	22° $\text{Z}17'48$	
superior conj	11768 Aug 17 14:30	6° $\text{M}34'21$ -0°16'58	direct		11771 Jan 29 00:25	17° $\text{Z}08'09$	
minimum elong	11768 Aug 17 18:44	6° $\text{M}47'35$ 0°17'08	greatest brilliancy		11771 Feb 08 20:30	19° $\text{Z}17'04$ -4.8m	
max. Earth dist.	11768 Aug 19 23:13	9° $\text{M}31'37$ 1.71816 AU	asc. node		11771 Feb 09 13:33	19° $\text{Z}33'40$	
asc. node	11768 Aug 24 14:16	15° $\text{M}18'25$			11771 Feb 26 20:19	0° \approx	
	11768 Sep 05 08:56	0° L	morning max el		11771 Mar 19 12:26	18° $\approx24'19$ 46°07'35	
evening rise	11768 Sep 25 07:12	24° $\text{L}47'39$			11771 Mar 30 20:37	0° H	
	11768 Sep 29 11:54	0° M			11771 Apr 26 22:24	0° Y	

	11771 May 22 10:52	0°♄			11773 Nov 29 10:30	0°♁	
desc. node	11771 Jun 01 11:31	12°♄03'46			11773 Dec 27 03:04	0°♁	
	11771 Jun 16 05:21	0°♂	evening max el		11774 Jan 08 05:52	12°♁06'01	45°54'24
	11771 Jul 10 14:15	0°♄			11774 Jan 28 19:28	0°♁	
	11771 Aug 03 18:41	0°♂	greatest brilliancy		11774 Feb 16 10:56	10°♁41'37	-4.8m
	11771 Aug 27 21:51	0°♂	retrograde		11774 Feb 26 07:51	12°♁29'30	
morning set	11771 Sep 20 23:08	29°♂53'19	asc. node		11774 Mar 08 23:32	10°♁12'35	
	11771 Sep 21 01:18	0°♂	evening set		11774 Mar 13 00:10	8°♁15'56	
asc. node	11771 Sep 22 04:06	1°♂23'14	inferior conj		11774 Mar 19 07:34	4°♁31'34	2°34'36
	11771 Oct 15 05:29	0°♂	minimum elong		11774 Mar 19 01:51	4°♁40'26	2°32'52
			min. Earth dist.		11774 Mar 19 12:23	4°♁24'05	0.27807 AU
superior conj	11771 Oct 28 21:50	16°♂57'22	1°14'07		11774 Mar 25 03:03	1°♁02'14	
minimum elong	11771 Oct 28 13:06	16°♂30'18	1°14'25		11774 Mar 27 01:41	30°♂♂	
max. Earth dist.	11771 Oct 30 19:39	19°♂19'12	1.72819 AU	direct	11774 Apr 09 08:16	26°♂27'13	
	11771 Nov 08 10:43	0°♂		greatest brilliancy	11774 Apr 19 20:53	28°♂31'20	-4.8m
	11771 Dec 02 17:44	0°♂			11774 Apr 23 08:16	0°♁	
evening rise	11771 Dec 04 18:03	2°♂28'49		morning max el	11774 May 29 16:24	28°♁58'16	46°50'32
	11771 Dec 27 03:30	0°♁			11774 May 30 16:56	0°♂	
desc. node	11772 Jan 11 19:52	19°♁11'13			11774 Jun 27 10:57	0°♂	
	11772 Jan 20 16:32	0°♁		desc. node	11774 Jun 28 23:26	1°♂43'40	
	11772 Feb 14 08:40	0°♁			11774 Jul 23 05:31	0°♄	
	11772 Mar 10 04:05	0°♂			11774 Aug 17 05:24	0°♂	
	11772 Apr 04 05:24	0°♂			11774 Sep 10 21:23	0°♂	
	11772 Apr 29 20:23	0°♄			11774 Oct 05 09:54	0°♂	
asc. node	11772 May 03 17:16	4°♄25'39		asc. node	11774 Oct 19 18:04	17°♂35'47	
	11772 May 26 21:38	0°♂			11774 Oct 29 20:21	0°♂	
evening max el	11772 Jun 04 20:30	9°♂13'59	46°50'23		11774 Nov 23 05:07	0°♂	
	11772 Jun 27 23:53	0°♂		morning set	11774 Nov 29 22:10	8°♂16'22	
greatest brilliancy	11772 Jul 14 21:49	9°♂52'44	-4.9m		11774 Dec 17 12:50	0°♂	
retrograde	11772 Jul 25 04:39	11°♂51'54					
evening set	11772 Aug 09 03:32	7°♂29'44		superior conj	11775 Jan 05 14:17	23°♂30'58	1°10'00
inferior conj	11772 Aug 15 00:32	4°♂01'49	2°14'30	minimum elong	11775 Jan 05 23:32	23°♂59'31	1°10'29
minimum elong	11772 Aug 15 05:38	3°♂53'59	2°12'29	max. Earth dist.	11775 Jan 05 17:06	23°♂39'41	1.73191 AU
min. Earth dist.	11772 Aug 14 22:03	4°♂05'38	0.27124 AU		11775 Jan 10 20:24	0°♁	
morning rise	11772 Aug 21 08:01	0°♂20'10			11775 Feb 04 04:16	0°♁	
	11772 Aug 21 23:26	30°♂♂		desc. node	11775 Feb 08 08:59	5°♁10'31	
desc. node	11772 Aug 23 18:13	29°♂07'39		evening rise	11775 Feb 12 06:44	9°♁59'32	
direct	11772 Sep 04 18:30	26°♂15'57			11775 Feb 28 12:06	0°♁	
greatest brilliancy	11772 Sep 14 15:58	28°♂03'40	-4.8m		11775 Mar 24 19:20	0°♂	
	11772 Sep 19 07:54	0°♂			11775 Apr 18 02:18	0°♂	
morning max el	11772 Oct 24 03:14	27°♂03'20	46°06'33		11775 May 12 11:07	0°♄	
	11772 Oct 27 03:28	0°♂		asc. node	11775 Jun 01 04:03	24°♄03'23	
	11772 Nov 24 14:33	0°♂			11775 Jun 06 01:46	0°♂	
asc. node	11772 Dec 14 17:51	22°♂44'02			11775 Jul 01 05:00	0°♂	
	11772 Dec 21 00:49	0°♂			11775 Jul 27 10:36	0°♂	
	11773 Jan 15 12:00	0°♂		evening max el	11775 Aug 16 17:08	21°♂25'55	46°31'17
	11773 Feb 09 09:53	0°♁			11775 Aug 25 14:41	0°♂	
	11773 Mar 05 23:32	0°♁		desc. node	11775 Sep 21 04:11	19°♂41'28	
	11773 Mar 30 07:31	0°♁		greatest brilliancy	11775 Sep 24 17:38	21°♂14'48	-4.8m
desc. node	11773 Apr 05 10:44	7°♁36'03		retrograde	11775 Oct 05 18:55	23°♂29'29	
morning set	11773 Apr 22 02:04	28°♁17'19		evening set	11775 Oct 22 10:55	18°♂07'48	
	11773 Apr 23 11:01	0°♂		min. Earth dist.	11775 Oct 26 08:02	15°♂46'31	0.28503 AU
	11773 May 17 10:53	0°♂		inferior conj	11775 Oct 27 03:27	15°♂16'19	-7°28'30
max. Earth dist.	11773 May 30 15:15	16°♂32'17	1.71414 AU	minimum elong	11775 Oct 26 18:05	15°♂30'53	7°26'31
				morning rise	11775 Oct 31 01:37	12°♂52'38	
superior conj	11773 Jun 01 07:46	18°♂39'28	-1°27'35	direct	11775 Nov 17 09:18	7°♂12'50	
minimum elong	11773 Jun 01 08:02	18°♂40'18	1°28'20	greatest brilliancy	11775 Nov 27 01:03	8°♂54'48	-4.7m
	11773 Jun 10 08:32	0°♄			11775 Dec 28 11:12	0°♂	
	11773 Jul 04 05:56	0°♂		morning max el	11776 Jan 05 06:16	7°♂15'53	45°42'07
evening rise	11773 Jul 11 16:50	9°♂20'44		asc. node	11776 Jan 12 05:07	14°♂07'31	
asc. node	11773 Jul 27 02:37	28°♂37'41			11776 Jan 27 08:34	0°♂	
	11773 Jul 28 04:59	0°♂			11776 Feb 23 01:44	0°♁	
	11773 Aug 21 07:16	0°♂			11776 Mar 19 13:07	0°♁	
	11773 Sep 14 14:32	0°♂			11776 Apr 13 08:53	0°♁	
	11773 Oct 09 05:39	0°♂		desc. node	11776 May 03 00:29	24°♁06'46	
	11773 Nov 03 09:32	0°♂			11776 May 07 18:56	0°♂	
desc. node	11773 Nov 15 22:18	14°♂35'48			11776 May 31 22:29	0°♂	

	11776 Jun 24 22:09	0°☿	evening set	11779 Jan 01 03:07	25°☿45'39	
morning set	11776 Jul 06 12:24	14°☿31'58	inferior conj	11779 Jan 05 05:54	23°☿13'04	-7°10'05
	11776 Jul 18 20:27	0°♌	minimum elong	11779 Jan 05 15:33	22°☿57'53	7°07'41
	11776 Aug 11 19:17	0°♍	min. Earth dist.	11779 Jan 05 16:57	22°☿55'40	0.28878 AU
			morning rise	11779 Jan 10 03:48	20°☿11'57	
superior conj	11776 Aug 15 03:19	4°♍10'18 -0°20'38	direct	11779 Jan 26 16:02	14°☿57'42	
minimum elong	11776 Aug 15 08:26	4°♍26'17 0°20'48	greatest brilliancy	11779 Feb 06 12:38	17°☿06'30	-4.8m
max. Earth dist.	11776 Aug 17 13:39	7°♍12'40 1.71782 AU	asc. node	11779 Feb 08 15:32	17°☿58'32	
asc. node	11776 Aug 23 16:08	14°♍50'16		11779 Feb 27 07:01	0°♊	
	11776 Sep 04 19:48	0°♊	morning max el	11779 Mar 17 02:56	16°♊08'28	46°06'12
evening rise	11776 Sep 22 22:28	22°♊32'12		11779 Mar 30 14:36	0°♋	
	11776 Sep 28 22:46	0°♋		11779 Apr 26 12:39	0°♌	
	11776 Oct 23 05:17	0°♌		11779 May 21 23:36	0°♍	
	11776 Nov 16 17:05	0°☿	desc. node	11779 May 31 13:22	11°♍31'59	
desc. node	11776 Dec 11 12:18	0°♎		11779 Jun 15 17:19	0°♏	
	11776 Dec 13 09:35	2°♎15'52		11779 Jul 10 01:45	0°☿	
	11777 Jan 05 17:06	0°♋		11779 Aug 03 05:52	0°♌	
	11777 Jan 31 10:56	0°♌		11779 Aug 27 08:47	0°♍	
	11777 Feb 27 03:44	0°♍	morning set	11779 Sep 18 13:42	27°♍36'05	
evening max el	11777 Mar 21 09:10	23°♍14'51 46°25'31		11779 Sep 20 12:02	0°♎	
	11777 Mar 28 09:32	0°♏	asc. node	11779 Sep 21 06:05	0°♎56'03	
asc. node	11777 Apr 05 09:20	7°♏09'38		11779 Oct 14 16:06	0°♏	
greatest brilliancy	11777 Apr 30 15:17	23°♏22'13 -4.9m				
retrograde	11777 May 10 06:32	25°♏06'21	superior conj	11779 Oct 26 14:07	14°♏46'27	1°12'20
evening set	11777 May 28 10:17	18°♏49'46	minimum elong	11779 Oct 26 05:01	14°♏18'17	1°12'35
inferior conj	11777 May 30 22:22	17°♏17'32 9°13'31	max. Earth dist.	11779 Oct 28 10:39	17°♏04'22	1.72790 AU
minimum elong	11777 May 30 21:54	17°♏18'15 9°12'47		11779 Nov 07 21:16	0°♐	
min. Earth dist.	11777 May 31 03:11	17°♏10'05 0.27306 AU	evening rise	11779 Dec 02 10:41	0°☿19'35	
morning rise	11777 Jun 02 09:31	15°♏46'40		11779 Dec 02 04:19	0°☿	
direct	11777 Jun 20 17:36	9°♏24'41		11779 Dec 26 14:14	0°♊	
greatest brilliancy	11777 Jun 30 12:40	11°♏13'39 -4.9m	desc. node	11780 Jan 10 21:44	18°♊43'38	
desc. node	11777 Jul 26 10:09	28°♏14'12		11780 Jan 20 03:32	0°♋	
	11777 Jul 28 10:05	0°☿		11780 Feb 13 20:04	0°♌	
morning max el	11777 Aug 10 04:00	12°☿08'19 46°51'03		11780 Mar 09 16:08	0°♍	
	11777 Aug 27 05:11	0°♌		11780 Apr 03 18:30	0°♏	
	11777 Sep 22 22:03	0°♍		11780 Apr 29 11:27	0°☿	
	11777 Oct 18 14:08	0°♎	asc. node	11780 May 02 19:12	3°☿47'08	
	11777 Nov 12 17:59	0°♏		11780 May 26 17:26	0°♌	
asc. node	11777 Nov 16 07:17	4°♏16'17	evening max el	11780 Jun 02 09:07	6°♌48'57	46°50'07
	11777 Dec 07 13:53	0°♐		11780 Jun 28 20:01	0°♍	
	11778 Jan 01 04:02	0°☿	greatest brilliancy	11780 Jul 12 12:30	7°♍30'25	-4.9m
	11778 Jan 25 14:18	0°♊	retrograde	11780 Jul 22 18:00	9°♍28'46	
morning set	11778 Feb 06 15:20	14°♊50'42	evening set	11780 Aug 06 18:42	5°♍03'39	
	11778 Feb 18 21:56	0°♋	inferior conj	11780 Aug 12 13:36	1°♍39'04	2°37'41
desc. node	11778 Mar 07 22:45	21°♋05'00	minimum elong	11780 Aug 12 19:31	1°♍30'00	2°35'24
max. Earth dist.	11778 Mar 14 00:03	28°♋35'23 1.72485 AU	min. Earth dist.	11780 Aug 12 12:28	1°♍40'47	0.27108 AU
	11778 Mar 15 03:20	0°♌		11780 Aug 15 06:53	30°♌♌	
			morning rise	11780 Aug 18 20:32	27°♌58'19	
superior conj	11778 Mar 16 21:44	2°♌11'33 -0°21'32	desc. node	11780 Aug 22 20:20	26°♌04'22	
minimum elong	11778 Mar 16 16:42	1°♌55'55 0°21'15	direct	11780 Sep 02 06:55	23°♌52'58	
	11778 Apr 08 06:23	0°♍	greatest brilliancy	11780 Sep 12 05:50	25°♌42'09	-4.8m
evening rise	11778 Apr 24 23:40	20°♍51'16		11780 Sep 21 07:23	0°♎	
	11778 May 02 07:20	0°♏	morning max el	11780 Oct 21 17:32	24°♎45'57	46°08'11
	11778 May 26 07:23	0°☿		11780 Oct 27 00:53	0°♎	
	11778 Jun 19 08:38	0°♌		11780 Nov 24 05:55	0°♏	
asc. node	11778 Jun 28 15:45	11°♌32'55	asc. node	11780 Dec 13 19:45	22°♏10'52	
	11778 Jul 13 13:47	0°♍		11780 Dec 20 13:49	0°♐	
	11778 Aug 07 02:11	0°♎		11781 Jan 14 23:51	0°☿	
	11778 Sep 01 03:19	0°♏		11781 Feb 08 21:06	0°♊	
	11778 Sep 27 04:47	0°♐		11781 Mar 05 10:25	0°♋	
desc. node	11778 Oct 18 13:57	22°♐58'14		11781 Mar 29 18:14	0°♌	
	11778 Oct 25 14:25	0°☿	desc. node	11781 Apr 04 12:40	7°♌09'01	
evening max el	11778 Oct 26 17:31	1°☿06'00 45°57'41	morning set	11781 Apr 19 14:27	25°♌53'20	
greatest brilliancy	11778 Dec 04 21:58	29°☿40'33 -4.7m		11781 Apr 22 21:37	0°♍	
	11778 Dec 05 21:38	0°♊		11781 May 16 21:26	0°♏	
retrograde	11778 Dec 14 18:33	1°♊26'26	max. Earth dist.	11781 May 28 02:30	14°♏03'47	1.71434 AU
	11778 Dec 23 07:27	30°♋☿				

superior conj	11781 May 29 19:45	16° Π 13'14	-1°27'32	direct	11783 Nov 15 00:40	5° Π 00'45	
minimum elong	11781 May 29 18:57	16° Π 10'46	1°28'18	greatest brilliancy	11783 Nov 24 14:36	6° Π 41'17	-4.7m
	11781 Jun 09 19:06	0° \mathfrak{S}			11783 Dec 28 12:26	0° \mathfrak{A}	
	11781 Jul 03 16:34	0° Ω		morning max el	11784 Jan 02 21:06	5° \mathfrak{A} 03'05	45°42'02
evening rise	11781 Jul 09 04:31	6° Ω 53'36		asc. node	11784 Jan 11 07:08	13° \mathfrak{A} 23'33	
asc. node	11781 Jul 26 04:33	28° Ω 10'11			11784 Jan 27 00:41	0° \mathfrak{Z}	
	11781 Jul 27 15:43	0° \mathfrak{M}			11784 Feb 22 15:04	0° \approx	
	11781 Aug 20 18:10	0° $\underline{\mathfrak{A}}$			11784 Mar 19 01:11	0° \mathfrak{H}	
	11781 Sep 14 01:41	0° \mathfrak{M}			11784 Apr 12 20:18	0° \mathfrak{Y}	
	11781 Oct 08 17:17	0° \mathfrak{A}		desc. node	11784 May 02 02:13	23° \mathfrak{Y} 37'49	
	11781 Nov 02 22:04	0° \mathfrak{Z}			11784 May 07 05:59	0° \mathfrak{B}	
desc. node	11781 Nov 15 00:12	14° \mathfrak{Z} 03'07			11784 May 31 09:19	0° Π	
	11781 Nov 29 00:52	0° \approx			11784 Jun 24 08:52	0° \mathfrak{S}	
	11781 Dec 26 21:54	0° \mathfrak{H}		morning set	11784 Jul 04 00:34	12° \mathfrak{S} 06'18	
evening max el	11782 Jan 05 21:26	9° \mathfrak{H} 54'17	45°53'55		11784 Jul 18 07:02	0° Ω	
	11782 Jan 29 12:17	0° \mathfrak{Y}			11784 Aug 11 05:47	0° \mathfrak{M}	
greatest brilliancy	11782 Feb 14 00:39	8° \mathfrak{Y} 24'49	-4.8m				
retrograde	11782 Feb 23 22:36	10° \mathfrak{Y} 13'07		superior conj	11784 Aug 12 16:27	1° \mathfrak{M} 48'28	-0°24'15
asc. node	11782 Mar 08 01:39	7° \mathfrak{Y} 16'36		minimum elong	11784 Aug 12 22:25	2° \mathfrak{M} 07'05	0°24'24
evening set	11782 Mar 10 14:10	5° \mathfrak{Y} 59'59		max. Earth dist.	11784 Aug 15 04:03	4° \mathfrak{M} 54'50	1.71745 AU
inferior conj	11782 Mar 16 22:04	2° \mathfrak{Y} 14'38	2°12'50	asc. node	11784 Aug 22 18:04	14° \mathfrak{M} 23'35	
minimum elong	11782 Mar 16 17:06	2° \mathfrak{Y} 22'20	2°11'21		11784 Sep 04 06:15	0° $\underline{\mathfrak{A}}$	
min. Earth dist.	11782 Mar 17 03:08	2° \mathfrak{Y} 06'44	0.27834 AU	evening rise	11784 Sep 20 13:52	20° $\underline{\mathfrak{A}}$ 18'25	
	11782 Mar 20 13:54	30° \mathfrak{R} \mathfrak{H}			11784 Sep 28 09:16	0° \mathfrak{M}	
morning rise	11782 Mar 22 19:38	28° \mathfrak{H} 42'34			11784 Oct 22 15:56	0° \mathfrak{A}	
direct	11782 Apr 06 23:39	24° \mathfrak{H} 09'59			11784 Nov 16 04:01	0° \mathfrak{Z}	
greatest brilliancy	11782 Apr 17 12:04	26° \mathfrak{H} 14'21	-4.8m		11784 Dec 10 23:44	0° \approx	
	11782 Apr 25 06:50	0° \mathfrak{Y}		desc. node	11784 Dec 12 11:26	1° \approx 47'01	
morning max el	11782 May 27 08:00	26° \mathfrak{Y} 42'37	46°49'34		11785 Jan 05 05:23	0° \mathfrak{H}	
	11782 May 30 13:55	0° \mathfrak{B}			11785 Jan 31 00:44	0° \mathfrak{Y}	
	11782 Jun 27 02:17	0° Π			11785 Feb 26 20:41	0° \mathfrak{B}	
desc. node	11782 Jun 28 01:22	1° Π 05'49		evening max el	11785 Mar 18 22:17	20° \mathfrak{B} 52'43	46°24'09
	11782 Jul 22 18:43	0° \mathfrak{S}			11785 Mar 28 12:21	0° Π	
	11782 Aug 16 17:31	0° Ω		asc. node	11785 Apr 04 11:16	6° Π 04'46	
	11782 Sep 10 08:52	0° \mathfrak{M}		greatest brilliancy	11785 Apr 28 04:39	20° Π 59'11	-4.9m
	11782 Oct 04 20:57	0° $\underline{\mathfrak{A}}$		retrograde	11785 May 07 18:48	22° Π 42'37	
asc. node	11782 Oct 18 19:52	17° $\underline{\mathfrak{A}}$ 08'01		evening set	11785 May 25 21:44	16° Π 28'38	
	11782 Oct 29 07:04	0° \mathfrak{M}		inferior conj	11785 May 28 11:29	14° Π 53'49	9°12'28
	11782 Nov 22 15:37	0° \mathfrak{A}		minimum elong	11785 May 28 10:01	14° Π 56'05	9°11'42
morning set	11782 Nov 27 14:55	6° \mathfrak{A} 07'43		min. Earth dist.	11785 May 28 16:10	14° Π 46'34	0.27321 AU
	11782 Dec 16 23:14	0° \mathfrak{Z}		morning rise	11785 May 30 22:15	13° Π 23'22	
				direct	11785 Jun 18 06:24	7° Π 00'32	
superior conj	11783 Jan 03 06:56	21° \mathfrak{Z} 22'13	1°11'53	greatest brilliancy	11785 Jun 28 02:23	8° Π 49'51	-4.9m
minimum elong	11783 Jan 03 15:54	21° \mathfrak{Z} 49'55	1°12'25	desc. node	11785 Jul 25 12:13	27° Π 11'27	
max. Earth dist.	11783 Jan 03 13:59	21° \mathfrak{Z} 43'58	1.73193 AU		11785 Jul 28 14:42	0° \mathfrak{S}	
	11783 Jan 10 06:48	0° \approx		morning max el	11785 Aug 07 16:29	9° \mathfrak{S} 42'54	46°52'09
	11783 Feb 03 14:45	0° \mathfrak{H}			11785 Aug 26 22:44	0° Ω	
desc. node	11783 Feb 07 10:55	4° \mathfrak{H} 44'04			11785 Sep 22 12:12	0° \mathfrak{M}	
evening rise	11783 Feb 09 22:17	7° \mathfrak{H} 47'05			11785 Oct 18 02:39	0° $\underline{\mathfrak{A}}$	
	11783 Feb 27 22:45	0° \mathfrak{Y}			11785 Nov 12 05:35	0° \mathfrak{M}	
	11783 Mar 24 06:13	0° \mathfrak{B}		asc. node	11785 Nov 15 09:09	3° \mathfrak{M} 47'19	
	11783 Apr 17 13:32	0° Π			11785 Dec 07 00:56	0° \mathfrak{A}	
	11783 May 11 22:49	0° \mathfrak{S}			11785 Dec 31 14:47	0° \mathfrak{Z}	
asc. node	11783 May 31 05:56	23° \mathfrak{S} 31'56			11786 Jan 25 00:53	0° \approx	
	11783 Jun 05 14:13	0° Ω		morning set	11786 Feb 04 07:34	12° \approx 40'07	
	11783 Jun 30 18:46	0° \mathfrak{M}			11786 Feb 18 08:28	0° \mathfrak{H}	
	11783 Jul 27 03:16	0° $\underline{\mathfrak{A}}$		desc. node	11786 Mar 07 00:37	20° \mathfrak{H} 38'04	
evening max el	11783 Aug 14 09:17	19° $\underline{\mathfrak{A}}$ 12'42	46°32'22	max. Earth dist.	11786 Mar 11 15:01	26° \mathfrak{H} 20'13	1.72526 AU
	11783 Aug 25 17:11	0° \mathfrak{M}					
desc. node	11783 Sep 20 06:10	18° \mathfrak{M} 08'05		superior conj	11786 Mar 14 11:51	29° \mathfrak{H} 53'40	-0°18'01
greatest brilliancy	11783 Sep 22 08:44	19° \mathfrak{M} 00'50	-4.8m	minimum elong	11786 Mar 14 07:38	29° \mathfrak{H} 40'35	0°17'44
retrograde	11783 Oct 03 10:43	21° \mathfrak{M} 15'46			11786 Mar 14 13:53	0° \mathfrak{Y}	
evening set	11783 Oct 19 22:50	15° \mathfrak{M} 59'42			11786 Apr 07 17:02	0° \mathfrak{B}	
min. Earth dist.	11783 Oct 23 22:32	13° \mathfrak{M} 34'34	0.28454 AU	evening rise	11786 Apr 22 12:33	18° \mathfrak{B} 28'16	
inferior conj	11783 Oct 24 18:39	13° \mathfrak{M} 03'15	-7°17'17		11786 May 01 18:07	0° Π	
minimum elong	11783 Oct 24 08:58	13° \mathfrak{M} 18'20	7°15'09		11786 May 25 18:19	0° \mathfrak{S}	
morning rise	11783 Oct 28 19:32	10° \mathfrak{M} 35'35			11786 Jun 18 19:48	0° Ω	

asc. node	11786 Jun 27 17:44	11°04'02"			11789 Jan 14 11:47	0°30'		
	11786 Jul 13 01:19	0°00'			11789 Feb 08 08:28	0°00'		
	11786 Aug 06 14:17	0°00'			11789 Mar 04 21:29	0°00'		
	11786 Aug 31 16:26	0°00'			11789 Mar 29 05:11	0°00'		
	11786 Sep 26 20:06	0°00'			11789 Apr 03 14:27	6°00'40"38		
desc. node	11786 Oct 17 15:52	22°00'14"05		desc. node	11789 Apr 17 02:42	23°00'28"02		
evening max el	11786 Oct 24 07:31	28°00'50"47	45°58'34"	morning set	11789 Apr 22 08:31	0°00'		
	11786 Oct 25 12:09	0°00'			11789 May 16 08:20	0°00'		
greatest brilliancy	11786 Dec 02 13:06	27°00'30"13	-4.7m	max. Earth dist.	11789 May 25 12:30	11°00'30"17	1.71453 AU	
retrograde	11786 Dec 12 10:06	29°00'31"59						
evening set	11786 Dec 29 21:47	23°00'31"30		superior conj	11789 May 27 07:17	13°00'44"30	-1°27'20"	
inferior conj	11787 Jan 02 21:59	21°00'30"00	-7°21'20"	minimum elong	11789 May 27 05:25	13°00'38"41	1°28'03"	
minimum elong	11787 Jan 03 07:20	20°00'48"17	7°19'04"		11789 Jun 09 06:01	0°00'		
min. Earth dist.	11787 Jan 03 08:36	20°00'46"16	0.28907 AU		11789 Jul 03 03:31	0°00'		
morning rise	11787 Jan 07 16:41	18°00'06"36		evening rise	11789 Jul 06 15:42	4°00'23"55		
direct	11787 Jan 24 07:43	12°00'34"71		asc. node	11789 Jul 25 06:28	27°00'41"42		
greatest brilliancy	11787 Feb 04 04:58	14°00'35"62	-4.8m		11789 Jul 27 02:45	0°00'		
asc. node	11787 Feb 07 17:37	16°00'32"51			11789 Aug 20 05:20	0°00'		
	11787 Feb 27 14:52	0°00'			11789 Sep 13 13:08	0°00'		
morning max el	11787 Mar 14 18:16	13°00'54"30	46°04'47"		11789 Oct 08 05:14	0°00'		
	11787 Mar 30 08:15	0°00'			11789 Nov 02 10:58	0°00'		
	11787 Apr 26 02:51	0°00'		desc. node	11789 Nov 14 02:10	13°00'32"94		
	11787 May 21 12:19	0°00'			11789 Nov 28 15:42	0°00'		
desc. node	11787 May 30 15:20	11°00'00"35			11789 Dec 26 17:34	0°00'		
	11787 Jun 15 05:14	0°00'		evening max el	11790 Jan 03 13:26	7°00'43"02	45°53'26"	
	11787 Jul 09 13:12	0°00'			11790 Jan 30 11:25	0°00'		
	11787 Aug 02 16:59	0°00'		greatest brilliancy	11790 Feb 11 14:47	6°00'08"20	-4.8m	
	11787 Aug 26 19:41	0°00'		retrograde	11790 Feb 21 13:07	7°00'56"28		
morning set	11787 Sep 16 04:16	25°00'18"45		asc. node	11790 Mar 07 03:29	4°00'16"52		
	11787 Sep 19 22:47	0°00'		evening set	11790 Mar 08 04:36	3°00'43"44		
asc. node	11787 Sep 20 07:51	0°00'28"12			11790 Mar 14 11:09	30°00'00"00		
	11787 Oct 14 02:43	0°00'		inferior conj	11790 Mar 14 12:44	29°00'57"33	1°51'01"	
				minimum elong	11790 Mar 14 08:34	0°00'04"02	1°49'48"	
superior conj	11787 Oct 24 06:29	12°00'35"43	1°10'27"	min. Earth dist.	11790 Mar 14 18:07	29°00'49"10	0.27864 AU	
minimum elong	11787 Oct 23 21:04	12°00'06"33	1°10'38"	morning rise	11790 Mar 20 12:10	26°00'22"46		
max. Earth dist.	11787 Oct 26 02:16	14°00'51"21	1.72759 AU	direct	11790 Apr 04 15:20	21°00'52"40		
	11787 Nov 07 07:50	0°00'		greatest brilliancy	11790 Apr 15 03:20	23°00'56"51	-4.8m	
evening rise	11787 Nov 30 03:34	28°00'11"08			11790 Apr 26 14:31	0°00'		
	11787 Dec 01 14:55	0°00'		morning max el	11790 May 24 22:51	24°00'23"52	46°48'15"	
	11787 Dec 26 01:00	0°00'			11790 May 30 10:39	0°00'		
desc. node	11788 Jan 09 23:45	18°00'56"24			11790 Jun 26 17:55	0°00'		
	11788 Jan 19 14:37	0°00'		desc. node	11790 Jun 27 03:24	0°00'27"08		
	11788 Feb 13 07:39	0°00'			11790 Jul 22 08:20	0°00'		
	11788 Mar 09 04:26	0°00'			11790 Aug 16 06:05	0°00'		
	11788 Apr 03 07:55	0°00'			11790 Sep 09 20:44	0°00'		
	11788 Apr 29 03:00	0°00'			11790 Oct 04 08:20	0°00'		
asc. node	11788 May 01 21:07	3°00'07"29		asc. node	11790 Oct 17 21:43	16°00'39"21		
	11788 May 26 14:09	0°00'			11790 Oct 28 18:07	0°00'		
evening max el	11788 May 30 22:37	4°00'25"39	46°50'04"		11790 Nov 22 02:28	0°00'		
	11788 Jun 29 23:57	0°00'		morning set	11790 Nov 25 07:46	3°00'58"18		
greatest brilliancy	11788 Jul 10 02:33	5°00'07"03	-4.9m		11790 Dec 16 10:00	0°00'		
retrograde	11788 Jul 20 07:48	7°00'05"14						
evening set	11788 Aug 04 10:05	2°00'36"53		superior conj	11790 Dec 31 23:57	19°00'31"33	1°13'40"	
	11788 Aug 08 21:36	30°00'00"00		minimum elong	11791 Jan 01 08:36	19°00'40"12	1°14'12"	
inferior conj	11788 Aug 10 02:38	29°00'15"43	3°00'40"	max. Earth dist.	11791 Jan 01 09:15	19°00'42"14	1.73192 AU	
minimum elong	11788 Aug 10 09:21	29°00'05"28	2°58'08"		11791 Jan 09 17:33	0°00'		
min. Earth dist.	11788 Aug 10 02:28	29°00'16"00	0.27092 AU		11791 Feb 03 01:35	0°00'		
morning rise	11788 Aug 16 08:49	25°00'36"22		desc. node	11791 Feb 06 12:47	4°00'16"25		
desc. node	11788 Aug 21 22:20	23°00'05"49		evening rise	11791 Feb 07 14:13	5°00'34"45		
direct	11788 Aug 30 19:56	21°00'29"31			11791 Feb 27 09:44	0°00'		
greatest brilliancy	11788 Sep 09 19:08	23°00'19"34	-4.8m		11791 Mar 23 17:27	0°00'		
	11788 Sep 22 15:35	0°00'			11791 Apr 17 01:09	0°00'		
morning max el	11788 Oct 19 08:35	22°00'29"59	46°09'47"		11791 May 11 10:59	0°00'		
	11788 Oct 26 21:41	0°00'		asc. node	11791 May 30 07:56	22°00'59"21		
	11788 Nov 23 21:11	0°00'			11791 Jun 05 03:14	0°00'		
asc. node	11788 Dec 12 21:43	21°00'37"41			11791 Jun 30 09:14	0°00'		
	11788 Dec 20 02:52	0°00'			11791 Jul 26 20:56	0°00'		

evening max el	11791 Aug 12 00:44	16° Ω 55'51	46°33'31	max. Earth dist.	11794 Mar 09 08:09	24° Υ 10'56	1.72566 AU
	11791 Aug 25 22:10	0° \mathbb{M}					
desc. node	11791 Sep 19 08:04	16° \mathbb{M} 29'35		superior conj	11794 Mar 12 02:13	27° Υ 35'45	-0°14'29
greatest brilliancy	11791 Sep 20 00:29	16° \mathbb{M} 45'52	-4.8m	minimum elong	11794 Mar 11 22:49	27° Υ 25'13	0°14'12
retrograde	11791 Oct 01 01:59	19° \mathbb{M} 00'19		behind sun begin	11794 Mar 11 11:21	26° Υ 49'41	
evening set	11791 Oct 17 10:47	13° \mathbb{M} 49'58		behind sun end	11794 Mar 12 10:17	28° Υ 00'45	
min. Earth dist.	11791 Oct 21 13:24	11° \mathbb{M} 20'33	0.28398 AU		11794 Mar 14 00:44	0° Υ	
inferior conj	11791 Oct 22 09:50	10° \mathbb{M} 48'43	-7°05'22		11794 Apr 07 03:57	0° \mathcal{B}	
minimum elong	11791 Oct 21 23:53	11° \mathbb{M} 04'14	7°03'06	evening rise	11794 Apr 20 01:55	16° \mathcal{B} 06'01	
morning rise	11791 Oct 26 13:26	8° \mathbb{M} 16'56			11794 May 01 05:08	0° \mathbb{I}	
direct	11791 Nov 12 15:38	2° \mathbb{M} 47'16			11794 May 25 05:29	0° \mathcal{C}	
greatest brilliancy	11791 Nov 22 04:39	4° \mathbb{M} 26'49	-4.8m		11794 Jun 18 07:11	0° Ω	
	11791 Dec 28 12:53	0° \mathcal{A}		asc. node	11794 Jun 26 19:40	10° Ω 34'23	
morning max el	11791 Dec 31 11:01	2° \mathcal{A} 46'50	45°42'04		11794 Jul 12 13:04	0° \mathbb{M}	
asc. node	11792 Jan 10 09:09	12° \mathcal{A} 39'07			11794 Aug 06 02:40	0° Ω	
	11792 Jan 26 16:54	0° \mathcal{B}			11794 Aug 31 05:57	0° \mathbb{M}	
	11792 Feb 22 04:38	0° \approx			11794 Sep 26 12:01	0° \mathcal{A}	
	11792 Mar 18 13:33	0° Υ		desc. node	11794 Oct 16 17:55	21° \mathcal{A} 28'34	
	11792 Apr 12 08:01	0° Υ		evening max el	11794 Oct 21 22:07	26° \mathcal{A} 35'57	45°59'29
desc. node	11792 May 01 04:13	23° Υ 08'43			11794 Oct 25 11:16	0° \mathcal{B}	
	11792 May 06 17:21	0° \mathcal{B}		greatest brilliancy	11794 Nov 30 03:44	25° \mathcal{B} 18'18	-4.7m
	11792 May 30 20:30	0° \mathbb{I}		retrograde	11794 Dec 10 02:13	27° \mathcal{B} 06'33	
	11792 Jun 23 19:57	0° \mathcal{C}		evening set	11794 Dec 27 16:23	21° \mathcal{B} 16'23	
morning set	11792 Jul 01 12:33	9° \mathcal{C} 38'43		inferior conj	11794 Dec 31 14:00	18° \mathcal{B} 51'55	-7°31'57
	11792 Jul 17 18:04	0° Ω		minimum elong	11794 Dec 31 23:02	18° \mathcal{B} 37'44	7°29'48
				min. Earth dist.	11794 Dec 31 23:51	18° \mathcal{B} 36'27	0.28931 AU
superior conj	11792 Aug 10 05:13	29° Ω 23'56	-0°27'52	morning rise	11795 Jan 05 05:31	16° \mathcal{B} 00'29	
minimum elong	11792 Aug 10 11:58	29° Ω 45'04	0°28'00	direct	11795 Jan 21 23:41	10° \mathcal{B} 35'56	
	11792 Aug 10 16:45	0° \mathbb{M}		greatest brilliancy	11795 Feb 01 20:50	12° \mathcal{B} 45'09	-4.8m
max. Earth dist.	11792 Aug 12 15:06	2° \mathbb{M} 24'59	1.71711 AU	asc. node	11795 Feb 06 19:31	14° \mathcal{B} 57'27	
asc. node	11792 Aug 21 19:53	13° \mathbb{M} 54'58			11795 Feb 27 20:37	0° \approx	
	11792 Sep 03 17:12	0° Ω		morning max el	11795 Mar 12 10:19	11° \approx 42'01	46°03'23
evening rise	11792 Sep 18 04:43	18° Ω 01'20			11795 Mar 30 01:41	0° Υ	
	11792 Sep 27 20:15	0° \mathbb{M}			11795 Apr 25 17:02	0° Υ	
	11792 Oct 22 03:02	0° \mathcal{A}			11795 May 21 01:06	0° \mathcal{B}	
	11792 Nov 15 15:24	0° \mathcal{B}		desc. node	11795 May 29 17:17	10° \mathcal{B} 28'49	
	11792 Dec 10 11:36	0° \approx			11795 Jun 14 17:14	0° \mathbb{I}	
desc. node	11792 Dec 11 13:29	1° \approx 17'30			11795 Jul 09 00:43	0° \mathcal{C}	
	11793 Jan 04 18:08	0° Υ			11795 Aug 02 04:11	0° Ω	
	11793 Jan 30 15:05	0° Υ			11795 Aug 26 06:39	0° \mathbb{M}	
	11793 Feb 26 14:24	0° \mathcal{B}		morning set	11795 Sep 13 19:02	23° \mathbb{M} 01'49	
evening max el	11793 Mar 16 10:56	18° \mathcal{B} 28'45	46°22'55	asc. node	11795 Sep 19 09:44	0° Ω 00'26	
	11793 Mar 28 17:13	0° \mathbb{I}			11795 Sep 19 09:35	0° Ω	
asc. node	11793 Apr 03 13:16	4° \mathbb{I} 57'42			11795 Oct 13 13:26	0° \mathbb{M}	
greatest brilliancy	11793 Apr 25 18:02	18° \mathbb{I} 35'56	-4.9m				
retrograde	11793 May 05 07:30	20° \mathbb{I} 19'11		superior conj	11795 Oct 21 22:48	10° \mathbb{M} 24'22	1°08'26
evening set	11793 May 23 08:51	14° \mathbb{I} 08'22		minimum elong	11795 Oct 21 13:07	9° \mathbb{M} 54'24	1°08'35
inferior conj	11793 May 26 00:52	12° \mathbb{I} 30'12	9°10'18	max. Earth dist.	11795 Oct 23 19:27	12° \mathbb{M} 42'47	1.72735 AU
minimum elong	11793 May 25 22:26	12° \mathbb{I} 33'59	9°09'29		11795 Nov 06 18:31	0° \mathcal{A}	
min. Earth dist.	11793 May 26 05:24	12° \mathbb{I} 23'11	0.27337 AU	evening rise	11795 Nov 27 20:21	26° \mathcal{A} 01'57	
morning rise	11793 May 28 11:58	10° \mathbb{I} 59'15			11795 Dec 01 01:39	0° \mathcal{B}	
direct	11793 Jun 15 19:18	4° \mathbb{I} 36'18			11795 Dec 25 11:54	0° \approx	
greatest brilliancy	11793 Jun 25 16:35	6° \mathbb{I} 26'31	-4.9m	desc. node	11796 Jan 09 01:34	17° \approx 48'11	
desc. node	11793 Jul 24 14:13	26° \mathbb{I} 09'29			11796 Jan 19 01:49	0° Υ	
	11793 Jul 28 17:52	0° \mathcal{C}			11796 Feb 12 19:19	0° Υ	
morning max el	11793 Aug 05 05:28	7° \mathcal{C} 17'48	46°53'01		11796 Mar 08 16:49	0° \mathcal{B}	
	11793 Aug 26 16:16	0° Ω			11796 Apr 02 21:29	0° \mathbb{I}	
	11793 Sep 22 02:37	0° \mathbb{M}			11796 Apr 28 18:47	0° \mathcal{C}	
	11793 Oct 17 15:32	0° Ω		asc. node	11796 Apr 30 23:12	2° \mathcal{C} 27'56	
	11793 Nov 11 17:34	0° \mathbb{M}			11796 May 26 11:36	0° Ω	
asc. node	11793 Nov 14 11:10	3° \mathbb{M} 17'37		evening max el	11796 May 28 13:09	2° Ω 05'03	46°49'56
	11793 Dec 06 12:21	0° \mathcal{A}			11796 Jul 01 15:53	0° \mathbb{M}	
	11793 Dec 31 01:51	0° \mathcal{B}		greatest brilliancy	11796 Jul 07 16:29	2° \mathbb{M} 43'58	-4.9m
	11794 Jan 24 11:45	0° \approx		retrograde	11796 Jul 17 21:55	4° \mathbb{M} 42'03	
morning set	11794 Feb 01 23:55	10° \approx 29'02		evening set	11796 Aug 02 01:47	0° \mathbb{M} 10'32	
	11794 Feb 17 19:16	0° Υ			11796 Aug 02 09:24	30° \mathcal{R} Ω	
desc. node	11794 Mar 06 02:25	20° Υ 10'03		inferior conj	11796 Aug 07 15:47	26° Ω 52'48	3°23'16

minimum elong	11796 Aug 07 23:15	26°041'25	3°20'29		11799 Jan 09 04:02	0°≈	
min. Earth dist.	11796 Aug 07 16:15	26°052'06	0.27076 AU		11799 Feb 02 12:10	0°✕	
morning rise	11796 Aug 13 20:58	23°015'09		evening rise	11799 Feb 05 06:04	3°✕22'59	
desc. node	11796 Aug 21 00:13	20°013'19		desc. node	11799 Feb 05 14:38	3°✕49'23	
direct	11796 Aug 28 09:30	19°006'49			11799 Feb 26 20:30	0°☿	
greatest brilliancy	11796 Sep 07 07:55	20°056'50	-4.8m		11799 Mar 23 04:28	0°♄	
	11796 Sep 23 14:27	0°♍			11799 Apr 16 12:32	0°♂	
morning max el	11796 Oct 16 23:36	20°014'18	46°11'15		11799 May 10 22:54	0°♁	
	11796 Oct 26 17:39	0°♊		asc. node	11799 May 29 09:52	22°♁27'25	
	11796 Nov 23 12:08	0°♋			11799 Jun 04 15:59	0°♌	
asc. node	11796 Dec 11 23:40	21°004'42			11799 Jun 29 23:31	0°♍	
	11796 Dec 19 15:47	0°♎			11799 Jul 26 14:39	0°♏	
	11797 Jan 13 23:40	0°♐		evening max el	11799 Aug 09 15:11	14°♏37'15	46°34'34
	11797 Feb 07 19:47	0°♑			11799 Aug 26 04:52	0°♒	
	11797 Mar 04 08:30	0°♒		greatest brilliancy	11799 Sep 17 16:27	14°♒31'43	-4.8m
	11797 Mar 28 16:02	0°♓		desc. node	11799 Sep 18 10:13	14°♒48'24	
desc. node	11797 Apr 02 16:23	6°013'02		retrograde	11799 Sep 28 16:53	16°♒45'35	
morning set	11797 Apr 14 15:02	21°003'32		evening set	11799 Oct 14 22:39	11°♒40'44	
	11797 Apr 21 19:18	0°♈		min. Earth dist.	11799 Oct 19 04:31	9°♒06'46	0.28342 AU
	11797 May 15 19:05	0°♉		inferior conj	11799 Oct 20 00:56	8°♒34'57	-6°52'35
max. Earth dist.	11797 May 22 21:19	8°053'35	1.71474 AU	minimum elong	11799 Oct 19 14:46	8°♒50'48	6°50'13
				morning rise	11799 Oct 24 07:19	5°♒58'59	
superior conj	11797 May 24 18:55	11°016'35	-1°26'57	direct	11799 Nov 10 05:58	0°♒34'23	
minimum elong	11797 May 24 16:00	11°007'27	1°27'39	greatest brilliancy	11799 Nov 19 19:10	2°♒13'40	-4.8m
	11797 Jun 08 16:48	0°♐			11799 Dec 28 11:45	0°♑	
	11797 Jul 02 14:22	0°♑		morning max el	11799 Dec 29 00:19	0°♑30'08	45°42'17
evening rise	11797 Jul 04 02:56	1°054'38		asc. node	11800 Jan 09 11:02	11°♑56'07	
asc. node	11797 Jul 24 08:16	27°013'15			11800 Jan 26 08:26	0°♒	
	11797 Jul 26 13:41	0°♍			11800 Feb 21 17:44	0°≈	
	11797 Aug 19 16:23	0°♊			11800 Mar 19 01:32	0°♈	
	11797 Sep 13 00:26	0°♋			11800 Apr 12 19:25	0°☿	
	11797 Oct 07 17:02	0°♎		desc. node	11800 May 01 06:10	22°☿40'16	
	11797 Nov 01 23:46	0°♐			11800 May 07 04:26	0°♄	
desc. node	11797 Nov 13 04:12	12°056'47			11800 May 31 07:23	0°♂	
	11797 Nov 28 06:33	0°≈			11800 Jun 24 06:42	0°♁	
	11797 Dec 26 13:44	0°♈		morning set	11800 Jun 30 00:12	7°♁11'09	
evening max el	11798 Jan 01 04:58	5°030'56	45°52'48		11800 Jul 18 04:43	0°♌	
	11798 Jan 31 19:34	0°☿					
greatest brilliancy	11798 Feb 09 05:35	3°015'21	-4.8m	superior conj	11800 Aug 08 17:51	27°000'12	-0°31'25
retrograde	11798 Feb 19 03:13	5°040'04		minimum elong	11800 Aug 09 01:23	27°023'45	0°31'34
evening set	11798 Mar 05 19:13	1°027'38		max. Earth dist.	11800 Aug 11 00:24	29°050'50	1.71678 AU
asc. node	11798 Mar 06 05:32	1°013'31			11800 Aug 11 03:20	0°♍	
	11798 Mar 08 08:46	30°008'00		asc. node	11800 Aug 21 21:45	13°♍27'43	
inferior conj	11798 Mar 12 03:24	27°040'58	1°28'57		11800 Sep 04 03:47	0°♊	
minimum elong	11798 Mar 12 00:03	27°046'13	1°28'01	evening rise	11800 Sep 16 19:34	15°♊45'19	
min. Earth dist.	11798 Mar 12 09:25	27°031'35	0.27892 AU		11800 Sep 28 06:53	0°♋	
morning rise	11798 Mar 18 04:31	24°003'33			11800 Oct 22 13:49	0°♎	
direct	11798 Apr 02 06:31	19°035'55			11800 Nov 16 02:26	0°♐	
greatest brilliancy	11798 Apr 12 18:53	21°040'07	-4.8m		11800 Dec 10 23:07	0°≈	
	11798 Apr 27 12:58	0°☿		desc. node	11800 Dec 11 15:22	0°≈48'34	
morning max el	11798 May 22 12:37	22°003'07	46°46'59		11801 Jan 05 06:33	0°♈	
	11798 May 30 06:26	0°♄			11801 Jan 31 05:10	0°☿	
desc. node	11798 Jun 26 05:19	29°049'21			11801 Feb 27 08:08	0°♄	
	11798 Jun 26 09:01	0°♂		evening max el	11801 Mar 14 23:32	16°♄05'46	46°21'33
	11798 Jul 21 21:33	0°♁			11801 Mar 29 23:53	0°♂	
	11798 Aug 15 18:17	0°♌		asc. node	11801 Apr 03 15:19	3°♂49'31	
	11798 Sep 09 08:18	0°♍		greatest brilliancy	11801 Apr 24 06:42	16°♂12'12	-4.9m
	11798 Oct 03 19:25	0°♊		retrograde	11801 May 03 20:24	17°♂56'03	
asc. node	11798 Oct 16 23:43	16°011'58		evening set	11801 May 21 19:07	11°♂48'58	
	11798 Oct 28 04:52	0°♋		inferior conj	11801 May 24 14:02	10°♂06'37	9°07'00
	11798 Nov 21 13:00	0°♎		minimum elong	11801 May 24 10:38	10°♂11'52	9°06'08
morning set	11798 Nov 23 00:45	1°050'13		min. Earth dist.	11801 May 24 18:11	10°♂00'12	0.27355 AU
	11798 Dec 15 20:27	0°♐		morning rise	11801 May 27 02:06	8°♂34'19	
				direct	11801 Jun 14 08:16	2°♂12'05	
superior conj	11798 Dec 29 17:08	17°006'15	1°15'19	greatest brilliancy	11801 Jun 24 06:19	4°♂03'07	-4.9m
minimum elong	11798 Dec 30 01:22	17°031'41	1°15'54	desc. node	11801 Jul 24 16:08	25°♂09'30	
max. Earth dist.	11798 Dec 30 03:15	17°037'28	1.73195 AU		11801 Jul 29 19:14	0°♁	

morning max el	11801 Aug 03 19:07	4°☿55'12	46°53'58		11804 Mar 09 05:01	0°♄	
	11801 Aug 27 09:04	0°♌			11804 Apr 03 10:54	0°♊	
	11801 Sep 22 16:29	0°♍			11804 Apr 29 10:34	0°♉	
	11801 Oct 18 03:56	0°♋		asc. node	11804 May 01 01:07	1°☿48'18	
	11801 Nov 12 05:07	0°♌		evening max el	11804 May 27 03:43	29°☿45'11	46°49'33
asc. node	11801 Nov 14 12:59	2°♌48'25			11804 May 27 09:39	0°♌	
	11801 Dec 06 23:23	0°♊			11804 Jul 05 08:18	0°♍	
	11801 Dec 31 12:33	0°♄		greatest brilliancy	11804 Jul 06 06:30	0°♍21'05	-4.9m
	11802 Jan 24 22:16	0°♌		retrograde	11804 Jul 16 11:36	2°♍18'20	
morning set	11802 Jan 31 16:33	8°♌20'00			11804 Jul 27 03:03	30°♋♌	
	11802 Feb 18 05:43	0°♋		evening set	11804 Jul 31 17:29	27°♌43'44	
desc. node	11802 Mar 06 04:22	19°♋43'42		inferior conj	11804 Aug 06 04:43	24°♌29'27	3°45'35
max. Earth dist.	11802 Mar 08 03:37	22°♋10'04	1.72605 AU	minimum elong	11804 Aug 06 12:52	24°♌17'01	3°42'38
				min. Earth dist.	11804 Aug 06 05:53	24°♌27'42	0.27063 AU
superior conj	11802 Mar 10 16:44	25°♋19'29	-0°10'57	morning rise	11804 Aug 12 08:35	20°♌53'38	
minimum elong	11802 Mar 10 14:11	25°♋11'33	0°10'41	desc. node	11804 Aug 21 02:21	17°♌25'28	
behind sun begin	11802 Mar 09 19:52	24°♋14'47		direct	11804 Aug 26 22:59	16°♌43'45	
behind sun end	11802 Mar 11 08:29	26°♋08'19		greatest brilliancy	11804 Sep 05 20:29	18°♌33'20	-4.8m
	11802 Mar 14 11:13	0°♍			11804 Sep 25 07:27	0°♍	
	11802 Apr 07 14:33	0°♄		morning max el	11804 Oct 15 13:43	17°♍56'15	46°12'45
evening rise	11802 Apr 18 15:20	13°♄45'03			11804 Oct 27 12:58	0°♋	
	11802 May 01 15:52	0°♊			11804 Nov 24 02:48	0°♌	
	11802 May 25 16:23	0°☿		asc. node	11804 Dec 12 01:34	20°♌32'06	
asc. node	11802 Jun 18 18:22	0°♌			11804 Dec 20 04:29	0°♊	
	11802 Jun 26 21:29	10°♌05'01			11805 Jan 14 11:22	0°♄	
	11802 Jul 13 00:37	0°♍			11805 Feb 08 06:58	0°♌	
	11802 Aug 06 14:51	0°♋			11805 Mar 04 19:24	0°♋	
	11802 Aug 31 19:17	0°♌			11805 Mar 29 02:47	0°♍	
	11802 Sep 27 03:52	0°♊		desc. node	11805 Apr 02 18:18	5°♍45'41	
desc. node	11802 Oct 16 19:55	20°♊43'07		morning set	11805 Apr 13 03:40	18°♍40'16	
evening max el	11802 Oct 20 13:26	24°♊23'46	46°00'29		11805 Apr 22 05:58	0°♄	
	11802 Oct 26 11:04	0°♄			11805 May 16 05:44	0°♊	
greatest brilliancy	11802 Nov 28 17:57	23°♄06'50	-4.7m	max. Earth dist.	11805 May 21 04:29	6°♊12'09	1.71494 AU
retrograde	11802 Dec 08 18:32	24°♄56'44					
evening set	11802 Dec 26 10:51	19°♄02'08		superior conj	11805 May 23 06:54	8°♊50'13	-1°26'24
inferior conj	11802 Dec 30 05:55	16°♄41'29	-7°41'53	minimum elong	11805 May 23 02:59	8°♊37'56	1°27'05
minimum elong	11802 Dec 30 14:34	16°♄27'54	7°39'53		11805 Jun 09 03:28	0°☿	
min. Earth dist.	11802 Dec 30 14:38	16°♄27'49	0.28952 AU	evening rise	11805 Jul 02 14:17	29°☿26'03	
morning rise	11803 Jan 03 18:12	13°♄55'06			11805 Jul 03 01:06	0°♌	
direct	11803 Jan 20 16:03	8°♄25'29		asc. node	11805 Jul 24 10:13	26°♌45'31	
greatest brilliancy	11803 Jan 31 11:57	10°♄34'00	-4.8m		11805 Jul 27 00:32	0°♍	
asc. node	11803 Feb 06 21:32	13°♄32'01			11805 Aug 20 03:25	0°♋	
	11803 Mar 01 00:01	0°♌			11805 Sep 13 11:45	0°♌	
morning max el	11803 Mar 11 02:39	9°♌31'23	46°02'05		11805 Oct 08 04:54	0°♊	
	11803 Mar 30 18:22	0°♋			11805 Nov 02 12:41	0°♄	
	11803 Apr 26 06:44	0°♍		desc. node	11805 Nov 13 06:05	12°♄23'15	
	11803 May 21 13:29	0°♄			11805 Nov 28 21:38	0°♌	
desc. node	11803 May 29 19:08	9°♄57'44			11805 Dec 27 10:35	0°♋	
	11803 Jun 15 04:56	0°♊		evening max el	11805 Dec 30 19:30	3°♋16'33	45°52'17
	11803 Jul 09 12:00	0°☿			11806 Feb 03 19:30	0°♍	
	11803 Aug 02 15:10	0°♌		greatest brilliancy	11806 Feb 07 20:54	1°♍38'11	-4.8m
	11803 Aug 26 17:26	0°♍		retrograde	11806 Feb 17 17:02	3°♍24'07	
morning set	11803 Sep 12 09:26	20°♍44'13			11806 Mar 02 20:41	30°♋♋	
asc. node	11803 Sep 19 11:41	29°♍33'33		evening set	11806 Mar 04 10:03	29°♋11'25	
	11803 Sep 19 20:12	0°♋		asc. node	11806 Mar 06 07:38	28°♋07'21	
	11803 Oct 13 23:55	0°♌		inferior conj	11806 Mar 10 18:10	25°♋24'48	1°06'55
				minimum elong	11806 Mar 10 15:38	25°♋28'46	1°06'16
superior conj	11803 Oct 20 14:44	8°♌12'32	1°06'18	min. Earth dist.	11806 Mar 11 01:08	25°♋13'55	0.27922 AU
minimum elong	11803 Oct 20 04:53	7°♌41'59	1°06'25	morning rise	11806 Mar 16 20:44	21°♋44'52	
max. Earth dist.	11803 Oct 22 14:16	10°♌39'51	1.72705 AU	direct	11806 Mar 31 21:14	17°♋19'16	
	11803 Nov 07 04:58	0°♊		greatest brilliancy	11806 Apr 11 11:04	19°♋24'12	-4.8m
evening rise	11803 Nov 26 13:02	23°♊53'02			11806 Apr 29 05:32	0°♍	
	11803 Dec 01 12:10	0°♄		morning max el	11806 May 21 01:56	19°♍41'09	46°45'53
	11803 Dec 25 22:37	0°♌			11806 May 31 01:39	0°♄	
desc. node	11804 Jan 09 03:27	17°♌20'46		desc. node	11806 Jun 26 07:15	29°♄11'57	
	11804 Jan 19 12:51	0°♋			11806 Jun 26 23:54	0°♊	
	11804 Feb 13 06:49	0°♍			11806 Jul 22 10:38	0°☿	

	11806 Aug 16 06:24	0°♈	evening max el	11809 Mar 12 12:59	13°♌44'18	46°20'21
	11806 Sep 09 19:49	0°♍		11809 Mar 30 09:32	0°♊	
	11806 Oct 04 06:32	0°♊	asc. node	11809 Apr 02 17:14	2°♊38'18	
asc. node	11806 Oct 17 01:30	15°♊43'46	greatest brilliancy	11809 Apr 21 18:50	13°♊47'21	-4.8m
	11806 Oct 28 15:42	0°♋	retrograde	11809 May 01 09:53	15°♊32'22	
morning set	11806 Nov 21 17:30	29°♋41'00	evening set	11809 May 19 05:00	9°♊29'30	
	11806 Nov 21 23:40	0°♌	inferior conj	11809 May 22 03:14	7°♊42'17	9°02'44
	11806 Dec 16 07:02	0°♍	minimum elong	11809 May 21 22:54	7°♊48'57	9°01'47
			min. Earth dist.	11809 May 22 06:38	7°♊37'01	0.27375 AU
superior conj	11806 Dec 28 10:11	14°♍58'18	morning rise	11809 May 24 16:47	6°♊07'53	
minimum elong	11806 Dec 28 18:01	15°♍22'26		11809 Jun 08 16:25	30°♋	
max. Earth dist.	11806 Dec 28 19:55	15°♍28'19	direct	11809 Jun 11 21:49	29°♋47'10	
	11807 Jan 09 14:37	0°♎		11809 Jun 15 04:30	0°♊	
	11807 Feb 02 22:51	0°♋	greatest brilliancy	11809 Jun 21 19:33	1°♊38'22	-4.9m
evening rise	11807 Feb 03 21:53	1°♋10'57	desc. node	11809 Jul 23 18:13	24°♊10'18	
desc. node	11807 Feb 05 16:34	3°♋22'24		11809 Jul 29 19:45	0°♌	
	11807 Feb 27 07:21	0°♍	morning max el	11809 Aug 01 09:51	2°♌34'24	46°54'53
	11807 Mar 23 15:38	0°♎		11809 Aug 27 01:52	0°♈	
	11807 Apr 17 00:05	0°♊		11809 Sep 22 06:32	0°♍	
	11807 May 11 11:01	0°♌		11809 Oct 17 16:33	0°♊	
asc. node	11807 May 29 11:46	21°♌54'48		11809 Nov 11 16:54	0°♋	
	11807 Jun 05 04:57	0°♈	asc. node	11809 Nov 13 14:53	2°♋18'47	
	11807 Jun 30 14:04	0°♍		11809 Dec 06 10:39	0°♌	
	11807 Jul 27 08:51	0°♊		11809 Dec 30 23:30	0°♍	
evening max el	11807 Aug 08 04:53	12°♊16'37		11810 Jan 24 09:05	0°♎	
	11807 Aug 27 14:13	0°♋	morning set	11810 Jan 29 09:17	6°♎10'17	
greatest brilliancy	11807 Sep 16 08:13	12°♋17'04		11810 Feb 17 16:30	0°♋	
desc. node	11807 Sep 18 12:09	13°♋03'06	desc. node	11810 Mar 05 06:15	19°♋15'59	
retrograde	11807 Sep 27 07:57	14°♋30'54	max. Earth dist.	11810 Mar 05 22:26	20°♋06'09	1.72641 AU
evening set	11807 Oct 13 10:40	9°♋30'58				
min. Earth dist.	11807 Oct 17 19:46	6°♋52'41	superior conj	11810 Mar 08 07:15	23°♋02'08	-0°07'24
inferior conj	11807 Oct 18 16:07	6°♋21'01	minimum elong	11810 Mar 08 05:32	22°♋56'49	0°07'08
minimum elong	11807 Oct 18 05:47	6°♋37'05	behind sun begin	11810 Mar 07 07:39	21°♋49'00	
morning rise	11807 Oct 23 01:19	3°♋40'58	behind sun end	11810 Mar 09 03:25	24°♋04'40	
	11807 Oct 30 16:35	30°♌		11810 Mar 13 22:03	0°♍	
direct	11807 Nov 08 20:06	28°♌21'03		11810 Apr 07 01:28	0°♎	
	11807 Nov 18 09:21	0°♋	evening rise	11810 Apr 16 04:44	11°♌23'01	
greatest brilliancy	11807 Nov 18 10:13	0°♋00'43		11810 May 01 02:55	0°♊	
morning max el	11807 Dec 27 14:17	28°♋14'22		11810 May 25 03:39	0°♌	
	11807 Dec 29 09:56	0°♌		11810 Jun 18 05:54	0°♈	
asc. node	11808 Jan 09 13:04	11°♌13'24	asc. node	11810 Jun 25 23:29	9°♈35'09	
	11808 Jan 26 23:58	0°♍		11810 Jul 12 12:36	0°♍	
	11808 Feb 22 06:57	0°♎		11810 Aug 06 03:29	0°♊	
	11808 Mar 18 13:40	0°♋		11810 Aug 31 09:07	0°♋	
	11808 Apr 12 06:59	0°♍		11810 Sep 26 20:21	0°♌	
desc. node	11808 Apr 30 07:55	22°♍10'41	desc. node	11810 Oct 15 21:51	19°♌55'56	
	11808 May 06 15:41	0°♎	evening max el	11810 Oct 18 05:33	22°♌12'44	46°01'35
	11808 May 30 18:29	0°♊		11810 Oct 26 12:24	0°♍	
	11808 Jun 23 17:41	0°♌	greatest brilliancy	11810 Nov 26 08:28	20°♍55'23	-4.7m
morning set	11808 Jun 27 11:52	4°♌42'49	retrograde	11810 Dec 06 11:00	22°♍46'33	
	11808 Jul 17 15:36	0°♈	evening set	11810 Dec 24 05:25	16°♍47'57	
			inferior conj	11810 Dec 27 22:02	14°♍30'47	-7°51'07
superior conj	11808 Aug 06 06:39	24°♈36'12	minimum elong	11810 Dec 28 06:14	14°♍17'54	7°49'15
minimum elong	11808 Aug 06 14:55	25°♈02'04	min. Earth dist.	11810 Dec 28 05:20	14°♍19'20	0.28969 AU
max. Earth dist.	11808 Aug 08 08:50	27°♈13'16	morning rise	11811 Jan 01 07:03	11°♍49'21	
	11808 Aug 10 14:08	0°♍	direct	11811 Jan 18 08:51	6°♍15'02	
asc. node	11808 Aug 20 23:42	13°♍00'05	greatest brilliancy	11811 Jan 29 02:35	8°♍21'51	-4.8m
	11808 Sep 03 14:33	0°♊	asc. node	11811 Feb 05 23:36	12°♍08'51	
evening rise	11808 Sep 14 10:39	13°♊29'29		11811 Mar 01 02:13	0°♎	
	11808 Sep 27 17:42	0°♋	morning max el	11811 Mar 08 18:59	7°♎19'50	46°00'35
	11808 Oct 22 00:47	0°♌		11811 Mar 30 11:08	0°♋	
	11808 Nov 15 13:42	0°♍		11811 Apr 25 20:42	0°♍	
	11808 Dec 10 10:57	0°♎		11811 May 21 02:11	0°♎	
desc. node	11808 Dec 10 17:15	0°♎18'48	desc. node	11811 May 28 21:07	9°♎26'02	
	11809 Jan 04 19:20	0°♋		11811 Jun 14 16:56	0°♊	
	11809 Jan 30 19:45	0°♍		11811 Jul 08 23:34	0°♌	
	11809 Feb 27 02:40	0°♎		11811 Aug 02 02:29	0°♈	

	11811 Aug 26 04:33	0°♍	evening set	11814 Mar 02 01:13	26°♋55'03	
morning set	11811 Sep 09 23:45	18°♍25'16	asc. node	11814 Mar 05 09:28	24°♋59'38	
asc. node	11811 Sep 18 13:27	29°♍04'55	inferior conj	11814 Mar 08 09:07	23°♋08'59	0°45'00
	11811 Sep 19 07:10	0°♌	minimum elong	11814 Mar 08 07:24	23°♋11'40	0°44'37
	11811 Oct 13 10:47	0°♌	min. Earth dist.	11814 Mar 08 17:05	22°♋56'32	0.27954 AU
			morning rise	11814 Mar 14 12:59	19°♋26'56	
superior conj	11811 Oct 18 06:41	5°♌59'31 1°04'04	direct	11814 Mar 29 11:50	15°♋02'48	
minimum elong	11811 Oct 17 20:42	5°♌28'34 1°04'07	greatest brilliancy	11814 Apr 09 03:46	17°♋09'10	-4.8m
max. Earth dist.	11811 Oct 20 09:03	8°♌35'41 1.72670 AU		11814 Apr 29 17:54	0°♍	
	11811 Nov 06 15:45	0°♌	morning max el	11814 May 18 15:37	17°♍19'49	46°44'34
evening rise	11811 Nov 24 05:49	21°♌43'26		11814 May 30 20:28	0°♌	
	11811 Nov 30 23:00	0°♌	desc. node	11814 Jun 25 09:15	28°♌34'27	
	11811 Dec 25 09:37	0°♌		11814 Jun 26 14:48	0°♌	
desc. node	11812 Jan 08 05:28	16°♌52'55		11814 Jul 21 23:52	0°♌	
	11812 Jan 19 00:11	0°♋		11814 Aug 15 18:43	0°♌	
	11812 Feb 12 18:39	0°♍		11814 Sep 09 07:31	0°♍	
	11812 Mar 08 17:39	0°♌		11814 Oct 03 17:47	0°♌	
	11812 Apr 03 00:50	0°♌	asc. node	11814 Oct 16 03:22	15°♌15'18	
	11812 Apr 29 03:05	0°♌		11814 Oct 28 02:39	0°♌	
asc. node	11812 Apr 30 03:04	1°♌07'01	morning set	11814 Nov 19 09:55	27°♌30'15	
evening max el	11812 May 24 17:53	27°♌22'58 46°49'06		11814 Nov 21 10:27	0°♌	
	11812 May 27 09:09	0°♌		11814 Dec 15 17:44	0°♌	
greatest brilliancy	11812 Jul 03 21:03	27°♌57'37 -4.9m				
retrograde	11812 Jul 14 00:48	29°♌53'13	superior conj	11814 Dec 26 03:10	12°♌49'40 1°18'18	
evening set	11812 Jul 29 09:17	25°♌15'33	minimum elong	11814 Dec 26 10:32	13°♌12'23 1°18'56	
inferior conj	11812 Aug 03 17:38	22°♌04'55 4°07'31	max. Earth dist.	11814 Dec 26 12:40	13°♌18'58 1.73193 AU	
minimum elong	11812 Aug 04 02:24	21°♌51'30 4°04'25		11815 Jan 09 01:19	0°♌	
min. Earth dist.	11812 Aug 03 19:42	22°♌01'46 0.27052 AU	evening rise	11815 Feb 01 13:50	28°♌59'05	
morning rise	11812 Aug 09 19:50	18°♌31'01		11815 Feb 02 09:37	0°♋	
desc. node	11812 Aug 20 04:20	14°♌41'59	desc. node	11815 Feb 04 18:24	2°♋54'50	
direct	11812 Aug 24 12:00	14°♌19'29		11815 Feb 26 18:17	0°♍	
greatest brilliancy	11812 Sep 03 09:18	16°♌08'43 -4.8m		11815 Mar 23 02:49	0°♌	
	11812 Sep 25 20:39	0°♍		11815 Apr 16 11:41	0°♌	
morning max el	11812 Oct 13 02:57	15°♍34'47 46°14'18		11815 May 10 23:11	0°♌	
	11812 Oct 27 08:08	0°♌	asc. node	11815 May 28 13:46	21°♌22'20	
	11812 Nov 23 17:37	0°♌		11815 Jun 04 18:03	0°♌	
asc. node	11812 Dec 11 03:32	19°♌58'56		11815 Jun 30 04:54	0°♍	
	11812 Dec 19 17:23	0°♌		11815 Jul 27 03:43	0°♌	
	11813 Jan 13 23:17	0°♌	evening max el	11815 Aug 05 18:38	9°♌55'32 46°36'47	
	11813 Feb 07 18:20	0°♌		11815 Aug 28 03:16	0°♌	
	11813 Mar 04 06:30	0°♋	greatest brilliancy	11815 Sep 13 23:19	10°♌00'32 -4.8m	
	11813 Mar 28 13:45	0°♍	desc. node	11815 Sep 17 14:04	11°♌12'40	
desc. node	11813 Apr 01 20:04	5°♍17'10	retrograde	11815 Sep 24 23:10	12°♌15'02	
morning set	11813 Apr 10 16:22	16°♍16'32	evening set	11815 Oct 10 22:27	7°♌19'37	
	11813 Apr 21 16:53	0°♌	min. Earth dist.	11815 Oct 15 10:35	4°♌37'27 0.28237 AU	
	11813 May 15 16:40	0°♌	inferior conj	11815 Oct 16 06:59	4°♌05'48 -6°24'59	
max. Earth dist.	11813 May 18 09:37	3°♌23'30 1.71521 AU	minimum elong	11815 Oct 15 20:35	4°♌21'57 6°22'24	
			morning rise	11815 Oct 20 19:07	1°♌21'47	
superior conj	11813 May 20 18:47	6°♌22'42 -1°25'41		11815 Oct 23 06:19	30°♌♌	
minimum elong	11813 May 20 13:54	6°♌07'24 1°26'20	direct	11815 Nov 06 09:59	26°♌06'23	
	11813 Jun 08 14:27	0°♌	greatest brilliancy	11815 Nov 16 00:51	27°♌46'39 -4.8m	
evening rise	11813 Jun 30 01:16	26°♌55'24		11815 Nov 21 10:48	0°♌	
	11813 Jul 02 12:09	0°♌	morning max el	11815 Dec 25 04:52	25°♌59'59 45°42'53	
asc. node	11813 Jul 23 12:07	26°♌16'45		11815 Dec 29 07:19	0°♌	
	11813 Jul 26 11:40	0°♍	asc. node	11816 Jan 08 15:04	10°♌31'03	
	11813 Aug 19 14:42	0°♌		11816 Jan 26 15:15	0°♌	
	11813 Sep 12 23:22	0°♌		11816 Feb 21 20:01	0°♌	
	11813 Oct 07 17:07	0°♌		11816 Mar 18 01:39	0°♋	
	11813 Nov 02 01:59	0°♌		11816 Apr 11 18:24	0°♍	
desc. node	11813 Nov 12 08:04	11°♌49'00	desc. node	11816 Apr 29 09:53	21°♍42'15	
	11813 Nov 28 13:12	0°♌		11816 May 06 02:47	0°♌	
	11813 Dec 27 08:26	0°♋		11816 May 30 05:25	0°♌	
evening max el	11813 Dec 28 09:31	1°♋00'26 45°51'58		11816 Jun 23 04:30	0°♌	
greatest brilliancy	11814 Feb 05 12:16	29°♋23'33 -4.8m	morning set	11816 Jun 24 23:38	2°♌15'15	
	11814 Feb 07 10:46	0°♍		11816 Jul 17 02:20	0°♌	
retrograde	11814 Feb 15 07:02	1°♍08'39				
	11814 Feb 22 20:51	30°♋♋	superior conj	11816 Aug 03 19:10	22°♌11'30 -0°38'23	

minimum elong	11816 Aug 04 04:06	22°039'30	0°38'30	min. Earth dist.	11818 Dec 25 20:08	12°310'52	0.28983 AU
max. Earth dist.	11816 Aug 05 17:57	24°038'01	1.71620 AU	morning rise	11818 Dec 29 19:42	9°343'49	
	11816 Aug 10 00:51	0°00		direct	11819 Jan 16 01:19	4°305'06	
asc. node	11816 Aug 20 01:28	12°032'09		greatest brilliancy	11819 Jan 26 16:56	6°309'52	-4.8m
	11816 Sep 03 01:17	0°00		asc. node	11819 Feb 05 01:28	10°348'37	
evening rise	11816 Sep 12 01:14	11°012'15			11819 Mar 01 02:43	0°00	
	11816 Sep 27 04:29	0°00		morning max el	11819 Mar 06 10:21	5°006'51	45°59'07
	11816 Oct 21 11:42	0°00			11819 Mar 30 03:13	0°00	
	11816 Nov 15 00:55	0°00			11819 Apr 25 10:10	0°00	
desc. node	11816 Dec 09 19:17	29°0349'41			11819 May 20 14:26	0°00	
	11816 Dec 09 22:44	0°00		desc. node	11819 May 27 23:01	8°055'17	
	11817 Jan 04 08:08	0°00			11819 Jun 14 04:30	0°00	
	11817 Jan 30 10:24	0°00			11819 Jul 08 10:42	0°00	
	11817 Feb 26 21:32	0°00			11819 Aug 01 13:19	0°00	
evening max el	11817 Mar 10 03:35	11°026'24	46°19'15		11819 Aug 25 15:10	0°00	
	11817 Mar 30 22:07	0°00		morning set	11819 Sep 07 14:26	16°008'56	
asc. node	11817 Apr 01 19:16	1°025'58		asc. node	11819 Sep 17 15:20	28°038'11	
greatest brilliancy	11817 Apr 19 06:54	11°023'39	-4.8m		11819 Sep 18 17:39	0°00	
retrograde	11817 Apr 28 23:47	13°009'51			11819 Oct 12 21:10	0°00	
evening set	11817 May 16 14:44	7°011'55					
inferior conj	11817 May 19 16:33	5°019'18	8°57'38	superior conj	11819 Oct 15 22:46	3°048'20	1°01'44
minimum elong	11817 May 19 11:21	5°027'18	8°56'33	minimum elong	11819 Oct 15 12:44	3°017'11	1°01'45
min. Earth dist.	11817 May 19 19:01	5°015'29	0.27388 AU	max. Earth dist.	11819 Oct 18 03:38	6°032'18	1.72640 AU
morning rise	11817 May 22 07:57	3°042'10			11819 Nov 06 02:08	0°00	
	11817 May 29 05:05	30°008		evening rise	11819 Nov 21 22:31	19°034'45	
direct	11817 Jun 09 11:50	27°024'01			11819 Nov 30 09:28	0°00	
greatest brilliancy	11817 Jun 19 08:20	29°014'34	-4.9m		11819 Dec 24 20:17	0°00	
	11817 Jun 21 07:13	0°00		desc. node	11820 Jan 07 07:15	16°025'25	
desc. node	11817 Jul 22 20:09	23°013'19			11820 Jan 18 11:11	0°00	
	11817 Jul 29 18:40	0°00			11820 Feb 12 06:11	0°00	
morning max el	11817 Jul 30 00:43	0°015'10	46°55'30		11820 Mar 08 05:59	0°00	
	11817 Aug 26 18:01	0°00			11820 Apr 02 14:33	0°00	
	11817 Sep 21 20:10	0°00			11820 Apr 28 19:31	0°00	
	11817 Oct 17 04:54	0°00		asc. node	11820 Apr 29 05:07	0°026'42	
	11817 Nov 11 04:28	0°00		evening max el	11820 May 22 07:15	24°059'49	46°48'37
asc. node	11817 Nov 12 16:52	1°050'01			11820 May 27 09:18	0°00	
	11817 Dec 05 21:41	0°00		greatest brilliancy	11820 Jul 01 12:17	25°036'16	-4.9m
	11817 Dec 30 10:14	0°00		retrograde	11820 Jul 11 13:40	27°029'43	
	11818 Jan 23 19:39	0°00		evening set	11820 Jul 27 01:18	22°048'43	
morning set	11818 Jan 27 01:48	4°000'48		inferior conj	11820 Aug 01 06:40	19°042'12	4°29'02
	11818 Feb 17 03:02	0°00		minimum elong	11820 Aug 01 16:00	19°027'54	4°25'47
max. Earth dist.	11818 Mar 03 15:43	17°058'19	1.72675 AU	min. Earth dist.	11820 Aug 01 09:56	19°037'11	0.27038 AU
desc. node	11818 Mar 04 08:01	18°048'47		morning rise	11820 Aug 07 06:55	16°010'28	
				desc. node	11820 Aug 19 06:12	12°006'00	
superior conj	11818 Mar 05 21:41	20°045'28	-0°03'50	direct	11820 Aug 22 00:29	11°056'51	
minimum elong	11818 Mar 05 20:51	20°042'50	0°03'35	greatest brilliancy	11820 Aug 31 22:38	13°046'23	-4.8m
behind sun begin	11818 Mar 04 21:12	19°029'37			11820 Sep 26 05:39	0°00	
behind sun end	11818 Mar 06 20:29	21°056'04		morning max el	11820 Oct 10 15:44	13°013'45	46°15'56
	11818 Mar 13 08:38	0°00			11820 Oct 27 02:07	0°00	
	11818 Apr 06 12:08	0°00			11820 Nov 23 07:41	0°00	
evening rise	11818 Apr 13 18:12	9°002'03		asc. node	11820 Dec 10 05:27	19°027'12	
	11818 Apr 30 13:42	0°00			11820 Dec 19 05:44	0°00	
	11818 May 24 14:34	0°00			11821 Jan 13 10:45	0°00	
	11818 Jun 17 17:04	0°00			11821 Feb 07 05:21	0°00	
asc. node	11818 Jun 25 01:24	9°006'15			11821 Mar 03 17:15	0°00	
	11818 Jul 12 00:09	0°00			11821 Mar 28 00:21	0°00	
	11818 Aug 05 15:44	0°00		desc. node	11821 Mar 31 22:01	4°050'20	
	11818 Aug 30 22:39	0°00		morning set	11821 Apr 08 04:58	13°053'32	
	11818 Sep 26 12:46	0°00			11821 Apr 21 03:27	0°00	
desc. node	11818 Oct 14 23:53	19°009'03			11821 May 15 03:14	0°00	
evening max el	11818 Oct 15 21:43	20°002'25	46°02'27	max. Earth dist.	11821 May 15 15:54	0°039'41	1.71552 AU
	11818 Oct 26 14:51	0°00					
greatest brilliancy	11818 Nov 23 23:32	18°0344'56	-4.7m	superior conj	11821 May 18 06:35	3°056'06	-1°24'48
retrograde	11818 Dec 04 03:00	20°036'28		minimum elong	11821 May 18 00:46	3°037'50	1°25'24
evening set	11818 Dec 21 23:46	14°034'23			11821 Jun 08 01:05	0°00	
inferior conj	11818 Dec 25 14:01	12°0320'30	-7°59'44	evening rise	11821 Jun 27 12:15	24°025'51	
minimum elong	11818 Dec 25 21:43	12°0308'23	7°58'00		11821 Jul 01 22:51	0°00	

asc. node	11821 Jul 22 13:55	25° Ω 48'49			11824 Jan 26 06:04	0° \mathcal{Z}	
	11821 Jul 25 22:26	0° \mathfrak{M}			11824 Feb 21 08:47	0° \approx	
	11821 Aug 19 01:37	0° $\underline{\mathfrak{L}}$			11824 Mar 17 13:29	0° \mathfrak{H}	
	11821 Sep 12 10:34	0° \mathfrak{M}			11824 Apr 11 05:45	0° \mathfrak{Y}	
	11821 Oct 07 04:53	0° \mathfrak{A}		desc. node	11824 Apr 28 11:50	21° \mathfrak{Y} 13'45	
	11821 Nov 01 14:53	0° \mathcal{Z}			11824 May 05 13:54	0° \mathcal{B}	
desc. node	11821 Nov 11 10:05	11° \mathcal{Z} 16'02			11824 May 29 16:21	0° \mathfrak{I}	
	11821 Nov 28 04:32	0° \approx		morning set	11824 Jun 22 11:09	29° \mathfrak{I} 46'54	
evening max el	11821 Dec 25 23:25	28° \approx 45'17	45°51'31		11824 Jun 22 15:20	0° \mathfrak{G}	
	11821 Dec 27 06:42	0° \mathfrak{H}			11824 Jul 16 13:05	0° Ω	
greatest brilliancy	11822 Feb 03 03:10	27° \mathfrak{H} 09'13	-4.8m				
retrograde	11822 Feb 12 21:20	28° \mathfrak{H} 54'11		superior conj	11824 Aug 01 07:25	19° Ω 45'56	-0°41'47
evening set	11822 Feb 27 16:31	24° \mathfrak{H} 39'06		minimum elong	11824 Aug 01 16:58	20° Ω 15'52	0°41'55
asc. node	11822 Mar 04 11:32	21° \mathfrak{H} 50'37		max. Earth dist.	11824 Aug 03 05:35	22° Ω 10'33	1.71594 AU
inferior conj	11822 Mar 06 00:01	20° \mathfrak{H} 53'54	0°22'53		11824 Aug 09 11:34	0° \mathfrak{M}	
minimum elong	11822 Mar 05 23:08	20° \mathfrak{H} 55'17	0°22'49	asc. node	11824 Aug 19 03:23	12° \mathfrak{M} 04'38	
min. Earth dist.	11822 Mar 06 08:55	20° \mathfrak{H} 40'00	0.27992 AU		11824 Sep 02 12:00	0° $\underline{\mathfrak{L}}$	
morning rise	11822 Mar 12 05:06	17° \mathfrak{H} 10'11		evening rise	11824 Sep 09 15:46	8° $\underline{\mathfrak{L}}$ 54'48	
direct	11822 Mar 27 02:34	12° \mathfrak{H} 46'55			11824 Sep 26 15:17	0° \mathfrak{M}	
greatest brilliancy	11822 Apr 06 20:31	14° \mathfrak{H} 55'03	-4.8m		11824 Oct 20 22:39	0° \mathfrak{A}	
	11822 Apr 30 02:42	0° \mathfrak{Y}			11824 Nov 14 12:10	0° \mathcal{Z}	
morning max el	11822 May 16 06:12	15° \mathfrak{Y} 01'40	46°43'19	desc. node	11824 Dec 08 21:08	29° \mathcal{Z} 20'06	
	11822 May 30 14:31	0° \mathcal{B}			11824 Dec 09 10:32	0° \approx	
desc. node	11822 Jun 24 11:11	27° \mathcal{B} 57'50			11825 Jan 03 20:57	0° \mathfrak{H}	
	11822 Jun 26 05:14	0° \mathfrak{I}			11825 Jan 30 01:11	0° \mathfrak{Y}	
	11822 Jul 21 12:43	0° \mathfrak{G}			11825 Feb 26 16:55	0° \mathcal{B}	
	11822 Aug 15 06:40	0° Ω		evening max el	11825 Mar 07 18:43	9° \mathcal{B} 09'53	46°17'52
	11822 Sep 08 18:53	0° \mathfrak{M}		asc. node	11825 Mar 31 21:19	0° \mathfrak{I} 11'06	
	11822 Oct 03 04:44	0° $\underline{\mathfrak{L}}$			11825 Mar 31 15:11	0° \mathfrak{I}	
asc. node	11822 Oct 15 05:21	14° $\underline{\mathfrak{L}}$ 48'13		greatest brilliancy	11825 Apr 16 19:05	8° \mathfrak{I} 59'46	-4.8m
	11822 Oct 27 13:18	0° \mathfrak{M}		retrograde	11825 Apr 26 13:15	10° \mathfrak{I} 46'31	
morning set	11822 Nov 17 02:43	25° \mathfrak{M} 21'39		evening set	11825 May 14 00:06	4° \mathfrak{I} 54'20	
	11822 Nov 20 20:54	0° \mathfrak{A}		inferior conj	11825 May 17 05:48	2° \mathfrak{I} 55'40	8°51'24
	11822 Dec 15 04:06	0° \mathcal{Z}		minimum elong	11825 May 16 23:48	3° \mathfrak{I} 04'56	8°50'12
				min. Earth dist.	11825 May 17 07:29	2° \mathfrak{I} 53'04	0.27404 AU
superior conj	11822 Dec 23 20:30	10° \mathcal{Z} 43'09	1°19'36	morning rise	11825 May 19 23:29	1° \mathfrak{I} 15'00	
minimum elong	11822 Dec 24 03:22	11° \mathcal{Z} 04'17	1°20'16		11825 May 22 02:31	30° \mathfrak{R} \mathcal{B}	
max. Earth dist.	11822 Dec 24 08:11	11° \mathcal{Z} 19'09	1.73194 AU	direct	11825 Jun 07 01:55	25° \mathcal{B} 00'14	
	11823 Jan 08 11:43	0° \approx		greatest brilliancy	11825 Jun 16 21:13	26° \mathcal{B} 49'53	-4.9m
evening rise	11823 Jan 30 06:05	26° \approx 49'02			11825 Jun 23 19:33	0° \mathfrak{I}	
	11823 Feb 01 20:08	0° \mathfrak{H}		desc. node	11825 Jul 21 22:06	22° \mathfrak{I} 16'43	
desc. node	11823 Feb 03 20:17	2° \mathfrak{H} 28'08		morning max el	11825 Jul 27 14:58	27° \mathfrak{I} 53'33	46°56'04
	11823 Feb 26 05:02	0° \mathfrak{Y}			11825 Jul 29 16:59	0° \mathfrak{G}	
	11823 Mar 22 13:53	0° \mathcal{B}			11825 Aug 26 10:08	0° Ω	
	11823 Apr 15 23:10	0° \mathfrak{I}			11825 Sep 21 09:52	0° \mathfrak{M}	
	11823 May 10 11:15	0° \mathfrak{G}			11825 Oct 16 17:20	0° $\underline{\mathfrak{L}}$	
asc. node	11823 May 27 15:41	20° \mathfrak{G} 49'51			11825 Nov 10 16:07	0° \mathfrak{M}	
	11823 Jun 04 07:05	0° Ω		asc. node	11825 Nov 11 18:41	1° \mathfrak{M} 20'22	
	11823 Jun 29 19:46	0° \mathfrak{M}			11825 Dec 05 08:50	0° \mathfrak{A}	
	11823 Jul 26 22:58	0° $\underline{\mathfrak{L}}$			11825 Dec 29 21:05	0° \mathcal{Z}	
evening max el	11823 Aug 03 09:23	7° $\underline{\mathfrak{L}}$ 37'28	46°37'56		11826 Jan 23 06:20	0° \approx	
	11823 Aug 28 20:31	0° \mathfrak{M}		morning set	11826 Jan 24 18:50	1° \approx 52'27	
greatest brilliancy	11823 Sep 11 14:03	7° \mathfrak{M} 44'04	-4.8m		11826 Feb 16 13:41	0° \mathfrak{H}	
desc. node	11823 Sep 16 16:13	9° \mathfrak{M} 18'41		max. Earth dist.	11826 Mar 01 08:17	15° \mathfrak{H} 48'05	1.72707 AU
retrograde	11823 Sep 22 14:55	9° \mathfrak{M} 59'43		desc. node	11826 Mar 03 10:01	18° \mathfrak{H} 21'58	
evening set	11823 Oct 08 10:24	5° \mathfrak{M} 08'34					
min. Earth dist.	11823 Oct 13 01:13	2° \mathfrak{M} 23'00	0.28181 AU	superior conj	11826 Mar 03 12:46	18° \mathfrak{H} 30'30	-0°00'17
inferior conj	11823 Oct 13 21:52	1° \mathfrak{M} 51'01	-6°10'00	minimum elong	11826 Mar 03 12:45	18° \mathfrak{H} 30'26	0°00'03
minimum elong	11823 Oct 13 11:27	2° \mathfrak{M} 07'09	6°07'22	behind sun begin	11826 Mar 02 13:49	17° \mathfrak{H} 19'27	
	11823 Oct 16 22:20	30° \mathfrak{R} $\underline{\mathfrak{L}}$		behind sun end	11826 Mar 04 11:40	19° \mathfrak{H} 41'26	
morning rise	11823 Oct 18 12:57	29° $\underline{\mathfrak{L}}$ 03'14			11826 Mar 12 19:19	0° \mathfrak{Y}	
direct	11823 Nov 04 00:20	23° $\underline{\mathfrak{L}}$ 52'16			11826 Apr 05 22:56	0° \mathcal{B}	
greatest brilliancy	11823 Nov 13 15:01	25° $\underline{\mathfrak{L}}$ 32'43	-4.8m	evening rise	11826 Apr 11 08:05	6° \mathcal{B} 41'58	
	11823 Nov 23 05:39	0° \mathfrak{M}			11826 Apr 30 00:40	0° \mathfrak{I}	
morning max el	11823 Dec 22 20:24	23° \mathfrak{M} 48'40	45°43'22		11826 May 24 01:46	0° \mathfrak{G}	
	11823 Dec 29 03:39	0° \mathfrak{A}			11826 Jun 17 04:35	0° Ω	
asc. node	11824 Jan 07 16:57	9° \mathfrak{A} 49'39		asc. node	11826 Jun 24 03:13	8° Ω 35'58	

	11826 Jul 11 12:07	0°♎			11829 Mar 27 11:21	0°♑	
	11826 Aug 05 04:24	0°♊		desc. node	11829 Mar 30 23:55	4°♑22'08	
	11826 Aug 30 12:40	0°♌		morning set	11829 Apr 05 17:59	11°♑30'45	
	11826 Sep 26 05:54	0°♈			11829 Apr 20 14:22	0°♉	
evening max el	11826 Oct 13 13:13	17°♈49'24	46°03'25	max. Earth dist.	11829 May 13 01:35	28°♉05'26	1.71581 AU
desc. node	11826 Oct 14 01:53	18°♈20'16			11829 May 14 14:09	0°♊	
	11826 Oct 26 19:26	0°♉					
greatest brilliancy	11826 Nov 21 15:11	16°♉34'19	-4.8m	superior conj	11829 May 15 18:52	1°♊29'58	-1°23'45
retrograde	11826 Dec 01 18:29	18°♉25'45		minimum elong	11829 May 15 12:09	1°♊08'57	1°24'19
evening set	11826 Dec 19 18:05	12°♉20'26			11829 Jun 07 12:02	0°♋	
inferior conj	11826 Dec 23 06:05	10°♉09'45	-8°07'38	evening rise	11829 Jun 24 23:43	21°♋56'50	
minimum elong	11826 Dec 23 13:15	9°♉58'28	8°06'03		11829 Jul 01 09:52	0°♌	
min. Earth dist.	11826 Dec 23 11:22	10°♉01'27	0.28992 AU	asc. node	11829 Jul 21 15:54	25°♌20'19	
morning rise	11826 Dec 27 08:28	7°♉37'43			11829 Jul 25 09:34	0°♍	
direct	11827 Jan 13 17:29	1°♉54'39			11829 Aug 18 12:59	0°♊	
greatest brilliancy	11827 Jan 24 07:47	3°♉57'47	-4.8m		11829 Sep 11 22:18	0°♌	
asc. node	11827 Feb 04 03:31	9°♉30'25			11829 Oct 06 17:16	0°♈	
	11827 Mar 01 02:19	0°♏			11829 Nov 01 04:27	0°♉	
morning max el	11827 Mar 04 01:00	2°♏51'29	45°57'53	desc. node	11829 Nov 10 11:59	10°♉40'50	
	11827 Mar 29 19:15	0°♏			11829 Nov 27 20:42	0°♏	
	11827 Apr 24 23:44	0°♑		evening max el	11829 Dec 23 13:44	26°♏29'50	45°51'21
	11827 May 20 02:52	0°♉			11829 Dec 27 06:38	0°♏	
desc. node	11827 May 27 00:53	8°♉23'47		greatest brilliancy	11830 Jan 31 17:29	24°♏53'06	-4.8m
	11827 Jun 13 16:20	0°♊		retrograde	11830 Feb 10 12:08	26°♏38'32	
	11827 Jul 07 22:11	0°♋		evening set	11830 Feb 25 08:01	22°♏21'42	
	11827 Aug 01 00:34	0°♌		inferior conj	11830 Mar 03 14:53	18°♏37'29	0°00'48
	11827 Aug 25 02:15	0°♎		minimum elong	11830 Mar 03 14:51	18°♏37'33	0°01'02
morning set	11827 Sep 05 04:33	13°♎49'21		transit middle	11830 Mar 03 14:51	18°♏37'33	0°01'02
asc. node	11827 Sep 16 17:18	28°♎10'20		transit begin	11830 Mar 03 10:48	18°♏43'51	
	11827 Sep 18 04:34	0°♊		transit end	11830 Mar 03 18:53	18°♏31'15	
	11827 Oct 12 07:58	0°♌		asc. node	11830 Mar 03 13:36	18°♏39'29	
				min. Earth dist.	11830 Mar 04 00:24	18°♏22'39	0.28028 AU
superior conj	11827 Oct 13 14:26	1°♌34'32	0°59'16	morning rise	11830 Mar 09 21:02	14°♏52'34	
minimum elong	11827 Oct 13 04:24	1°♌03'23	0°59'15	direct	11830 Mar 24 17:45	10°♏29'47	
max. Earth dist.	11827 Oct 15 20:12	4°♌21'18	1.72604 AU	greatest brilliancy	11830 Apr 04 12:54	12°♏39'24	-4.8m
	11827 Nov 05 12:54	0°♈			11830 Apr 30 09:30	0°♑	
evening rise	11827 Nov 19 15:03	17°♈24'16		morning max el	11830 May 13 21:47	12°♑45'03	46°42'10
	11827 Nov 29 20:20	0°♉			11830 May 30 08:31	0°♉	
	11827 Dec 24 07:22	0°♏		desc. node	11830 Jun 23 13:07	27°♉20'39	
desc. node	11828 Jan 06 09:11	15°♏57'06			11830 Jun 25 19:47	0°♊	
	11828 Jan 17 22:36	0°♏			11830 Jul 21 01:44	0°♋	
	11828 Feb 11 18:06	0°♑			11830 Aug 14 18:49	0°♌	
	11828 Mar 07 18:43	0°♉			11830 Sep 08 06:29	0°♎	
	11828 Apr 02 04:40	0°♊			11830 Oct 02 15:58	0°♊	
asc. node	11828 Apr 28 07:03	29°♊44'51		asc. node	11830 Oct 14 07:07	14°♊19'23	
	11828 Apr 28 12:32	0°♋			11830 Oct 27 00:18	0°♌	
evening max el	11828 May 19 19:40	22°♋33'37	46°48'00	morning set	11830 Nov 14 19:11	23°♌10'44	
	11828 May 27 11:02	0°♌			11830 Nov 20 07:46	0°♈	
greatest brilliancy	11828 Jun 29 03:22	23°♌13'33	-4.9m		11830 Dec 14 14:53	0°♉	
retrograde	11828 Jul 09 02:13	25°♌05'09					
evening set	11828 Jul 24 17:23	20°♌20'08		superior conj	11830 Dec 21 13:27	8°♉34'04	1°20'48
inferior conj	11828 Jul 29 19:42	17°♌18'06	4°49'55	minimum elong	11830 Dec 21 19:45	8°♉53'30	1°21'30
minimum elong	11828 Jul 30 05:32	17°♌03'01	4°46'35	max. Earth dist.	11830 Dec 22 04:13	9°♉19'37	1.73192 AU
min. Earth dist.	11828 Jul 30 00:22	17°♌10'57	0.27037 AU		11831 Jan 07 22:30	0°♏	
morning rise	11828 Aug 04 17:46	13°♌48'55		evening rise	11831 Jan 27 22:01	24°♏36'50	
desc. node	11828 Aug 18 08:22	9°♌34'03			11831 Feb 01 07:02	0°♏	
direct	11828 Aug 19 12:49	9°♌32'22		desc. node	11831 Feb 02 22:13	2°♏00'34	
greatest brilliancy	11828 Aug 29 12:37	11°♌23'04	-4.8m		11831 Feb 25 16:09	0°♑	
	11828 Sep 26 12:52	0°♎			11831 Mar 22 01:18	0°♉	
morning max el	11828 Oct 08 04:49	10°♎51'28	46°17'35		11831 Apr 15 11:00	0°♊	
	11828 Oct 26 20:18	0°♊			11831 May 09 23:41	0°♋	
	11828 Nov 22 22:09	0°♌		asc. node	11831 May 26 17:36	20°♋16'22	
asc. node	11828 Dec 09 07:22	18°♌54'03			11831 Jun 03 20:29	0°♌	
	11828 Dec 18 18:31	0°♈			11831 Jun 29 11:02	0°♎	
	11829 Jan 12 22:39	0°♉			11831 Jul 26 18:58	0°♊	
	11829 Feb 06 16:45	0°♏		evening max el	11831 Aug 01 00:56	5°♊21'02	46°39'04
	11829 Mar 03 04:23	0°♏			11831 Aug 29 20:12	0°♌	

greatest brilliancy	11831 Sep 09 04:30	5° \mathbb{M} 26'49	-4.8m		11834 Feb 16 00:23	0° \mathbb{H}	
desc. node	11831 Sep 15 18:08	7° \mathbb{M} 19'35		max. Earth dist.	11834 Feb 26 22:29	13° \mathbb{H} 30'25	1.72742 AU
retrograde	11831 Sep 20 06:51	7° \mathbb{M} 43'37					
evening set	11831 Oct 05 22:31	2° \mathbb{M} 56'41		superior conj	11834 Mar 01 03:37	16° \mathbb{H} 14'48	0°03'17
min. Earth dist.	11831 Oct 10 15:38	0° \mathbb{M} 07'59	0.28129 AU	minimum elong	11834 Mar 01 04:26	16° \mathbb{H} 17'19	0°03'31
	11831 Oct 10 20:48	30° \mathbb{R} $\underline{\mathbb{A}}$		behind sun begin	11834 Feb 28 04:54	15° \mathbb{H} 04'30	
inferior conj	11831 Oct 11 12:42	29° $\underline{\mathbb{A}}$ 35'24	-5°54'23	behind sun end	11834 Mar 02 03:58	17° \mathbb{H} 30'08	
minimum elong	11831 Oct 11 02:21	29° $\underline{\mathbb{A}}$ 51'25	5°51'41	desc. node	11834 Mar 02 11:51	17° \mathbb{H} 54'33	
morning rise	11831 Oct 16 06:43	26° $\underline{\mathbb{A}}$ 43'47			11834 Mar 12 06:04	0° \mathbb{Y}	
direct	11831 Nov 01 15:10	21° $\underline{\mathbb{A}}$ 37'24			11834 Apr 05 09:46	0° \mathbb{B}	
greatest brilliancy	11831 Nov 11 04:47	23° $\underline{\mathbb{A}}$ 17'25	-4.8m	evening rise	11834 Apr 08 21:38	4° \mathbb{B} 20'56	
	11831 Nov 24 11:24	0° \mathbb{M}			11834 Apr 29 11:37	0° \mathbb{II}	
morning max el	11831 Dec 20 12:09	21° \mathbb{M} 36'56	45°43'39		11834 May 23 12:56	0° \mathbb{G}	
	11831 Dec 28 23:42	0° \mathbb{A}			11834 Jun 16 16:03	0° \mathbb{Q}	
asc. node	11832 Jan 06 18:58	9° \mathbb{A} 08'03		asc. node	11834 Jun 23 05:15	8° \mathbb{Q} 06'27	
	11832 Jan 25 21:02	0° \mathbb{B}			11834 Jul 11 00:03	0° \mathbb{M}	
	11832 Feb 20 21:47	0° \approx			11834 Aug 04 17:04	0° $\underline{\mathbb{A}}$	
	11832 Mar 17 01:32	0° \mathbb{H}			11834 Aug 30 02:44	0° \mathbb{M}	
	11832 Apr 10 17:18	0° \mathbb{Y}			11834 Sep 25 23:14	0° \mathbb{A}	
desc. node	11832 Apr 27 13:35	20° \mathbb{Y} 44'07		evening max el	11834 Oct 11 03:54	15° \mathbb{A} 34'48	46°04'28
	11832 May 05 01:10	0° \mathbb{B}		desc. node	11834 Oct 13 03:51	17° \mathbb{A} 31'05	
	11832 May 29 03:28	0° \mathbb{II}			11834 Oct 27 01:46	0° \mathbb{B}	
morning set	11832 Jun 19 22:41	27° \mathbb{II} 18'04		greatest brilliancy	11834 Nov 19 06:57	14° \mathbb{B} 24'34	-4.8m
	11832 Jun 22 02:19	0° \mathbb{G}		retrograde	11834 Nov 29 09:50	16° \mathbb{B} 16'04	
	11832 Jul 15 23:59	0° \mathbb{Q}		evening set	11834 Dec 17 12:13	10° \mathbb{B} 07'43	
				inferior conj	11834 Dec 20 22:16	7° \mathbb{B} 59'59	-8°14'41
superior conj	11832 Jul 29 19:47	17° \mathbb{Q} 20'14	-0°45'06	minimum elong	11834 Dec 21 04:50	7° \mathbb{B} 49'39	8°13'15
minimum elong	11832 Jul 30 05:54	17° \mathbb{Q} 51'55	0°45'15	min. Earth dist.	11834 Dec 21 02:50	7° \mathbb{B} 52'48	0.29002 AU
max. Earth dist.	11832 Jul 31 18:57	19° \mathbb{Q} 48'03	1.71563 AU	morning rise	11834 Dec 24 21:26	5° \mathbb{B} 32'32	
	11832 Aug 08 22:24	0° \mathbb{M}			11835 Jan 07 20:07	30° \mathbb{R} \mathbb{A}	
asc. node	11832 Aug 18 05:18	11° \mathbb{M} 36'53		direct	11835 Jan 11 09:19	29° \mathbb{A} 45'02	
	11832 Sep 01 22:50	0° $\underline{\mathbb{A}}$			11835 Jan 14 23:58	0° \mathbb{B}	
evening rise	11832 Sep 07 06:27	6° $\underline{\mathbb{A}}$ 37'27		greatest brilliancy	11835 Jan 21 23:17	1° \mathbb{B} 47'16	-4.7m
	11832 Sep 26 02:09	0° \mathbb{M}		asc. node	11835 Feb 03 05:33	8° \mathbb{B} 15'09	
	11832 Oct 20 09:40	0° \mathbb{A}			11835 Mar 01 00:45	0° \approx	
	11832 Nov 13 23:32	0° \mathbb{B}		morning max el	11835 Mar 01 15:21	0° \approx 35'43	45°56'31
desc. node	11832 Dec 07 23:04	28° \mathbb{B} 50'05			11835 Mar 29 10:56	0° \mathbb{H}	
	11832 Dec 08 22:32	0° \approx			11835 Apr 24 13:08	0° \mathbb{Y}	
	11833 Jan 03 10:04	0° \mathbb{H}			11835 May 19 15:09	0° \mathbb{B}	
	11833 Jan 29 16:25	0° \mathbb{Y}		desc. node	11835 May 26 02:53	7° \mathbb{B} 53'01	
	11833 Feb 26 13:10	0° \mathbb{B}			11835 Jun 13 03:59	0° \mathbb{II}	
evening max el	11833 Mar 05 09:24	6° \mathbb{B} 51'46	46°16'33		11835 Jul 07 09:28	0° \mathbb{G}	
asc. node	11833 Mar 30 23:13	28° \mathbb{B} 53'06			11835 Jul 31 11:35	0° \mathbb{Q}	
	11833 Apr 01 14:34	0° \mathbb{II}			11835 Aug 24 13:05	0° \mathbb{M}	
greatest brilliancy	11833 Apr 14 07:51	6° \mathbb{II} 36'17	-4.8m	morning set	11835 Sep 02 18:35	11° \mathbb{M} 30'07	
retrograde	11833 Apr 24 02:15	8° \mathbb{II} 22'53		asc. node	11835 Sep 15 19:03	27° \mathbb{M} 42'34	
evening set	11833 May 11 09:20	2° \mathbb{II} 37'00			11835 Sep 17 15:14	0° $\underline{\mathbb{A}}$	
inferior conj	11833 May 14 19:07	0° \mathbb{II} 31'59	8°44'17				
minimum elong	11833 May 14 12:20	0° \mathbb{II} 42'30	8°42'58	superior conj	11835 Oct 11 06:13	29° $\underline{\mathbb{A}}$ 21'45	0°56'44
min. Earth dist.	11833 May 14 20:17	0° \mathbb{II} 30'11	0.27415 AU	minimum elong	11835 Oct 10 20:14	28° $\underline{\mathbb{A}}$ 50'48	0°56'40
	11833 May 15 15:47	30° \mathbb{R} \mathbb{B}			11835 Oct 11 18:32	0° \mathbb{M}	
morning rise	11833 May 17 15:18	28° \mathbb{B} 47'18		max. Earth dist.	11835 Oct 13 10:50	2° \mathbb{M} 05'03	1.72567 AU
direct	11833 Jun 04 15:41	22° \mathbb{B} 36'28			11835 Nov 04 23:27	0° \mathbb{A}	
greatest brilliancy	11833 Jun 14 10:35	24° \mathbb{B} 25'34	-4.9m	evening rise	11835 Nov 17 07:49	15° \mathbb{A} 15'22	
	11833 Jun 25 09:52	0° \mathbb{II}			11835 Nov 29 06:57	0° \mathbb{B}	
desc. node	11833 Jul 21 00:11	21° \mathbb{II} 21'29			11835 Dec 23 18:10	0° \approx	
morning max el	11833 Jul 25 04:17	25° \mathbb{II} 29'28	46°56'37	desc. node	11836 Jan 05 11:12	15° \approx 29'57	
	11833 Jul 29 14:28	0° \mathbb{G}			11836 Jan 17 09:44	0° \mathbb{H}	
	11833 Aug 26 01:58	0° \mathbb{Q}			11836 Feb 11 05:48	0° \mathbb{Y}	
	11833 Sep 20 23:25	0° \mathbb{M}			11836 Mar 07 07:18	0° \mathbb{B}	
	11833 Oct 16 05:38	0° $\underline{\mathbb{A}}$			11836 Apr 01 18:48	0° \mathbb{II}	
	11833 Nov 10 03:39	0° \mathbb{M}		asc. node	11836 Apr 27 09:00	29° \mathbb{II} 02'48	
asc. node	11833 Nov 10 20:36	0° \mathbb{M} 51'16			11836 Apr 28 05:49	0° \mathbb{G}	
	11833 Dec 04 19:55	0° \mathbb{A}		evening max el	11836 May 17 07:55	20° \mathbb{G} 07'19	46°47'29
	11833 Dec 29 07:53	0° \mathbb{B}			11836 May 27 14:10	0° \mathbb{Q}	
morning set	11834 Jan 22 11:42	29° \mathbb{B} 43'32		greatest brilliancy	11836 Jun 26 17:52	20° \mathbb{Q} 50'27	-4.9m
	11834 Jan 22 17:02	0° \approx		retrograde	11836 Jul 06 14:58	22° \mathbb{Q} 41'05	

evening set	11836 Jul 22 09:25	17°Ω51'32			11839 Jan 07 08:54	0°≈	
inferior conj	11836 Jul 27 08:37	14°Ω54'15	5°10'18	evening rise	11839 Jan 25 14:14	22°≈26'46	
minimum elong	11836 Jul 27 18:52	14°Ω38'33	5°06'54		11839 Jan 31 17:32	0°✕	
min. Earth dist.	11836 Jul 27 14:25	14°Ω45'21	0.27034 AU	desc. node	11839 Feb 02 00:03	1°✕33'53	
morning rise	11836 Aug 02 04:18	11°Ω28'18			11839 Feb 25 02:50	0°Υ	
direct	11836 Aug 17 01:06	7°Ω08'06			11839 Mar 21 12:18	0°♄	
desc. node	11836 Aug 17 10:18	7°Ω08'17			11839 Apr 14 22:25	0°Π	
greatest brilliancy	11836 Aug 27 02:20	9°Ω00'10	-4.8m		11839 May 09 11:45	0°☾	
	11836 Sep 26 17:32	0°♍		asc. node	11839 May 25 19:38	19°☾44'11	
morning max el	11836 Oct 05 18:36	8°♍31'49	46°19'19		11839 Jun 03 09:39	0°Ω	
	11836 Oct 26 13:40	0°♎			11839 Jun 29 02:18	0°♍	
	11836 Nov 22 12:04	0°♌			11839 Jul 26 15:27	0°♎	
asc. node	11836 Dec 08 09:20	18°♌22'22		evening max el	11839 Jul 29 16:55	3°♎06'00	46°40'01
	11836 Dec 18 06:50	0°♊			11839 Aug 31 05:20	0°♌	
	11837 Jan 12 10:06	0°♋		greatest brilliancy	11839 Sep 06 19:19	3°♌10'01	-4.8m
	11837 Feb 06 03:44	0°≈		desc. node	11839 Sep 14 20:05	5°♌15'48	
	11837 Mar 02 15:07	0°✕		retrograde	11839 Sep 17 22:24	5°♌27'05	
	11837 Mar 26 21:58	0°Υ		evening set	11839 Oct 03 10:36	0°♌44'36	
desc. node	11837 Mar 30 01:42	3°Υ54'43			11839 Oct 04 17:46	30°♋♎	
morning set	11837 Apr 03 07:05	9°Υ09'22		min. Earth dist.	11839 Oct 08 05:57	27°♎52'41	0.28069 AU
	11837 Apr 20 00:59	0°♄		inferior conj	11839 Oct 09 03:17	27°♎19'42	-5°38'07
max. Earth dist.	11837 May 10 12:35	25°♄36'09	1.71617 AU	minimum elong	11839 Oct 08 17:04	27°♎35'30	5°35'23
				morning rise	11839 Oct 14 00:11	24°♎24'13	
superior conj	11837 May 13 06:46	29°♄03'27	-1°22'32	direct	11839 Oct 30 05:56	19°♎22'45	
minimum elong	11837 May 12 23:14	28°♄39'53	1°23'03	greatest brilliancy	11839 Nov 08 18:04	21°♎01'52	-4.8m
	11837 May 14 00:49	0°Π			11839 Nov 25 08:32	0°♌	
	11837 Jun 06 22:45	0°☾		morning max el	11839 Dec 18 02:59	19°♌23'58	45°44'04
evening rise	11837 Jun 22 10:39	19°☾26'57			11839 Dec 28 18:44	0°♊	
	11837 Jun 30 20:38	0°Ω		asc. node	11840 Jan 05 20:58	8°♊27'57	
asc. node	11837 Jul 20 17:46	24°Ω52'18			11840 Jan 25 11:24	0°♋	
	11837 Jul 24 20:27	0°♍			11840 Feb 20 10:18	0°≈	
	11837 Aug 18 00:02	0°♎			11840 Mar 16 13:09	0°✕	
	11837 Sep 11 09:43	0°♌			11840 Apr 10 04:26	0°Υ	
	11837 Oct 06 05:19	0°♊		desc. node	11840 Apr 26 15:35	20°Υ16'32	
	11837 Oct 31 17:44	0°♋			11840 May 04 12:02	0°♄	
desc. node	11837 Nov 09 13:59	10°♋06'55			11840 May 28 14:10	0°Π	
	11837 Nov 27 12:40	0°≈		morning set	11840 Jun 17 10:23	24°Π51'01	
evening max el	11837 Dec 21 05:08	24°≈18'33	45°51'17		11840 Jun 21 12:56	0°☾	
	11837 Dec 27 07:05	0°✕			11840 Jul 15 10:34	0°Ω	
greatest brilliancy	11838 Jan 29 07:34	22°✕38'47	-4.8m				
retrograde	11838 Feb 08 03:25	24°✕24'59		superior conj	11840 Jul 27 08:03	14°Ω55'02	-0°48'20
evening set	11838 Feb 22 23:56	20°✕06'23		minimum elong	11840 Jul 27 18:38	15°Ω28'12	0°48'31
inferior conj	11838 Mar 01 05:56	16°✕23'09	-0°21'00	max. Earth dist.	11840 Jul 29 07:19	17°Ω23'12	1.71540 AU
minimum elong	11838 Mar 01 06:43	16°✕21'56	0°20'29		11840 Aug 08 08:59	0°♍	
min. Earth dist.	11838 Mar 01 15:40	16°✕08'00	0.28065 AU	asc. node	11840 Aug 17 07:06	11°♍09'25	
asc. node	11838 Mar 02 15:27	15°✕31'03			11840 Sep 01 09:26	0°♎	
morning rise	11838 Mar 07 12:58	12°✕37'19		evening rise	11840 Sep 04 20:37	4°♎19'07	
direct	11838 Mar 22 09:36	8°✕15'02			11840 Sep 25 12:49	0°♌	
greatest brilliancy	11838 Apr 02 04:46	10°✕25'10	-4.8m		11840 Oct 19 20:30	0°♊	
	11838 Apr 30 13:33	0°Υ			11840 Nov 13 10:42	0°♋	
morning max el	11838 May 11 13:42	10°Υ30'50	46°40'39	desc. node	11840 Dec 07 01:05	28°♋21'06	
	11838 May 30 01:41	0°♄			11840 Dec 08 10:20	0°≈	
desc. node	11838 Jun 22 15:08	26°♄44'56			11841 Jan 02 23:00	0°✕	
	11838 Jun 25 09:52	0°Π			11841 Jan 29 07:32	0°Υ	
	11838 Jul 20 14:24	0°☾			11841 Feb 26 09:41	0°♄	
	11838 Aug 14 06:40	0°Ω		evening max el	11841 Mar 02 23:27	4°♄33'08	46°15'17
	11838 Sep 07 17:46	0°♍		asc. node	11841 Mar 30 01:17	27°♄34'13	
	11838 Oct 02 02:52	0°♎			11841 Apr 02 22:10	0°Π	
asc. node	11838 Oct 13 09:01	13°♎52'06		greatest brilliancy	11841 Apr 11 21:25	4°Π15'16	-4.8m
	11838 Oct 26 10:56	0°♌		retrograde	11841 Apr 21 15:06	6°Π01'17	
morning set	11838 Nov 12 11:36	21°♌00'56		evening set	11841 May 08 18:43	0°Π21'52	
	11838 Nov 19 18:13	0°♊			11841 May 09 09:22	30°♋♄	
	11838 Dec 14 01:16	0°♋		inferior conj	11841 May 12 08:44	28°♄10'26	8°36'20
				minimum elong	11841 May 12 01:12	28°♄22'06	8°34'51
superior conj	11838 Dec 19 06:34	6°♋26'41	1°21'53	min. Earth dist.	11841 May 12 09:42	28°♄08'55	0.27426 AU
minimum elong	11838 Dec 19 12:17	6°♋44'20	1°22'36	morning rise	11841 May 15 07:39	26°♄21'24	
max. Earth dist.	11838 Dec 20 01:05	7°♋23'52	1.73186 AU	direct	11841 Jun 02 05:13	20°♄14'41	

greatest brilliancy	11841 Jun 12 00:44	22°♄03'53	-4.9m	evening rise	11843 Nov 15 00:34	13°♄06'14	
	11841 Jun 26 11:55	0°♄			11843 Nov 28 17:38	0°♄	
desc. node	11841 Jul 20 02:07	20°♄28'12			11843 Dec 23 05:04	0°♄	
morning max el	11841 Jul 22 16:46	23°♄04'20	46°57'01	desc. node	11844 Jan 04 12:58	15°♄01'43	
	11841 Jul 29 10:47	0°♄			11844 Jan 16 20:59	0°♄	
	11841 Aug 25 17:15	0°♄			11844 Feb 10 17:37	0°♄	
	11841 Sep 20 12:39	0°♄			11844 Mar 06 20:03	0°♄	
	11841 Oct 15 17:45	0°♄			11844 Apr 01 09:10	0°♄	
asc. node	11841 Nov 09 22:35	0°♄22'49		asc. node	11844 Apr 26 11:04	28°♄20'21	
	11841 Nov 09 15:03	0°♄			11844 Apr 27 23:34	0°♄	
	11841 Dec 04 06:50	0°♄		evening max el	11844 May 14 20:39	17°♄42'13	46°46'58
	11841 Dec 28 18:32	0°♄			11844 May 27 19:10	0°♄	
morning set	11842 Jan 20 04:27	27°♄34'54		greatest brilliancy	11844 Jun 24 07:44	18°♄26'22	-4.9m
	11842 Jan 22 03:33	0°♄		retrograde	11844 Jul 04 04:17	20°♄16'47	
	11842 Feb 15 10:52	0°♄		evening set	11844 Jul 20 01:34	15°♄22'19	
max. Earth dist.	11842 Feb 24 14:03	11°♄17'37	1.72777 AU	inferior conj	11844 Jul 24 21:28	12°♄29'55	5°30'10
				minimum elong	11844 Jul 25 08:06	12°♄13'41	5°26'45
superior conj	11842 Feb 26 18:36	14°♄00'10	0°06'47	min. Earth dist.	11844 Jul 25 04:03	12°♄19'52	0.27034 AU
minimum elong	11842 Feb 26 20:15	14°♄05'15	0°07'01	morning rise	11844 Jul 30 14:35	9°♄07'46	
behind sun begin	11842 Feb 25 22:30	12°♄57'57		direct	11844 Aug 14 13:48	4°♄43'22	
behind sun end	11842 Feb 27 18:00	15°♄12'34		desc. node	11844 Aug 16 12:13	4°♄47'48	
desc. node	11842 Mar 01 13:38	17°♄27'33		greatest brilliancy	11844 Aug 24 15:29	6°♄36'19	-4.8m
	11842 Mar 11 16:37	0°♄			11844 Sep 26 20:32	0°♄	
	11842 Apr 04 20:25	0°♄		morning max el	11844 Oct 03 09:09	6°♄13'44	46°21'05
evening rise	11842 Apr 06 11:30	2°♄01'32			11844 Oct 26 06:44	0°♄	
	11842 Apr 28 22:25	0°♄			11844 Nov 22 01:58	0°♄	
	11842 May 22 23:56	0°♄		asc. node	11844 Dec 07 11:14	17°♄50'12	
	11842 Jun 16 03:22	0°♄			11844 Dec 17 19:15	0°♄	
asc. node	11842 Jun 22 07:08	7°♄37'07			11845 Jan 11 21:45	0°♄	
	11842 Jul 10 11:49	0°♄			11845 Feb 05 14:56	0°♄	
	11842 Aug 04 05:37	0°♄			11845 Mar 02 02:05	0°♄	
	11842 Aug 29 16:47	0°♄			11845 Mar 26 08:48	0°♄	
	11842 Sep 25 16:53	0°♄		desc. node	11845 Mar 29 03:39	3°♄27'12	
evening max el	11842 Oct 08 17:53	13°♄18'28	46°05'24	morning set	11845 Mar 31 20:17	6°♄47'42	
desc. node	11842 Oct 12 05:53	16°♄41'14			11845 Apr 19 11:47	0°♄	
	11842 Oct 27 10:42	0°♄		max. Earth dist.	11845 May 08 01:02	23°♄10'59	1.71650 AU
greatest brilliancy	11842 Nov 16 22:28	12°♄14'07	-4.8m				
retrograde	11842 Nov 27 01:22	14°♄06'12		superior conj	11845 May 10 18:41	26°♄36'31	-1°21'10
evening set	11842 Dec 15 06:04	7°♄54'50		minimum elong	11845 May 10 10:25	26°♄10'37	1°21'38
inferior conj	11842 Dec 18 14:22	5°♄49'56	-8°21'06		11845 May 13 11:39	0°♄	
minimum elong	11842 Dec 18 20:17	5°♄40'37	8°19'46		11845 Jun 06 09:39	0°♄	
min. Earth dist.	11842 Dec 18 18:15	5°♄43'49	0.29009 AU	evening rise	11845 Jun 19 21:46	16°♄56'58	
morning rise	11842 Dec 22 10:27	3°♄27'05			11845 Jun 30 07:37	0°♄	
	11842 Dec 28 23:53	30°♄♄		asc. node	11845 Jul 19 19:35	24°♄23'22	
direct	11843 Jan 09 00:48	27°♄35'01			11845 Jul 24 07:33	0°♄	
greatest brilliancy	11843 Jan 19 15:08	29°♄37'07	-4.7m		11845 Aug 17 11:21	0°♄	
	11843 Jan 20 15:05	0°♄			11845 Sep 10 21:23	0°♄	
asc. node	11843 Feb 02 07:26	7°♄01'45			11845 Oct 05 17:39	0°♄	
morning max el	11843 Feb 27 05:56	28°♄20'43	45°55'22		11845 Oct 31 07:21	0°♄	
	11843 Feb 28 22:14	0°♄		desc. node	11845 Nov 08 15:59	9°♄32'01	
	11843 Mar 29 02:17	0°♄			11845 Nov 27 05:14	0°♄	
	11843 Apr 24 02:18	0°♄		evening max el	11845 Dec 18 20:59	22°♄07'27	45°51'02
	11843 May 19 03:17	0°♄			11845 Dec 27 09:19	0°♄	
desc. node	11843 May 25 04:45	7°♄22'15		greatest brilliancy	11846 Jan 26 21:48	20°♄23'32	-4.8m
	11843 Jun 12 15:33	0°♄		retrograde	11846 Feb 05 18:27	22°♄09'52	
	11843 Jul 06 20:40	0°♄		evening set	11846 Feb 20 15:58	17°♄49'39	
	11843 Jul 30 22:33	0°♄		inferior conj	11846 Feb 26 20:53	14°♄07'26	-0°42'52
	11843 Aug 23 23:50	0°♄		minimum elong	11846 Feb 26 22:30	14°♄04'55	0°42'05
morning set	11843 Aug 31 08:51	9°♄11'39		min. Earth dist.	11846 Feb 27 06:47	13°♄52'00	0.28102 AU
asc. node	11843 Sep 14 20:57	27°♄15'24		asc. node	11846 Mar 01 17:32	12°♄21'20	
	11843 Sep 17 01:51	0°♄		morning rise	11846 Mar 05 04:35	10°♄20'47	
				direct	11846 Mar 20 01:33	5°♄59'03	
superior conj	11843 Oct 08 22:02	27°♄09'07	0°54'06	greatest brilliancy	11846 Mar 30 20:07	8°♄08'59	-4.8m
minimum elong	11843 Oct 08 12:10	26°♄38'30	0°53'59		11846 Apr 30 16:26	0°♄	
max. Earth dist.	11843 Oct 11 01:18	29°♄48'14	1.72536 AU	morning max el	11846 May 09 05:10	8°♄14'27	46°39'09
	11843 Oct 11 05:05	0°♄			11846 May 29 18:51	0°♄	
	11843 Nov 04 10:01	0°♄		desc. node	11846 Jun 21 17:01	26°♄08'12	

	11846 Jun 25 00:07	0°♄			11849 Jan 28 23:17	0°♅	
	11846 Jul 20 03:17	0°♅			11849 Feb 26 07:26	0°♄	
	11846 Aug 13 18:46	0°♄	evening max el		11849 Feb 28 12:23	2°♄10'41	46°13'54
	11846 Sep 07 05:22	0°♅	asc. node		11849 Mar 29 03:17	26°♄11'01	
	11846 Oct 01 14:06	0°♄			11849 Apr 04 22:37	0°♄	
asc. node	11846 Oct 12 10:58	13°♄23'56	greatest brilliancy		11849 Apr 09 10:48	1°♄52'19	-4.8m
	11846 Oct 25 21:54	0°♄	retrograde		11849 Apr 19 03:41	3°♄37'57	
morning set	11846 Nov 10 04:09	18°♄50'25			11849 May 02 16:33	30°♄	
	11846 Nov 19 05:01	0°♄	evening set		11849 May 06 03:42	28°♄04'52	
	11846 Dec 13 11:59	0°♄	inferior conj		11849 May 09 22:08	25°♄46'56	8°27'19
			minimum elong		11849 May 09 13:57	25°♄59'39	8°25'40
superior conj	11846 Dec 16 23:47	4°♄18'37 1°22'51	min. Earth dist.		11849 May 09 23:10	25°♄45'20	0.27442 AU
minimum elong	11846 Dec 17 04:52	4°♄34'19 1°23'35	morning rise		11849 May 13 00:06	23°♄53'14	
max. Earth dist.	11846 Dec 17 22:00	5°♄27'10 1.73179 AU	direct		11849 May 30 18:12	17°♄50'39	
	11847 Jan 06 19:39	0°♄	greatest brilliancy		11849 Jun 09 15:17	19°♄40'45	-4.9m
evening rise	11847 Jan 23 06:25	20°♄15'28			11849 Jun 27 07:54	0°♄	
	11847 Jan 31 04:26	0°♄	desc. node		11849 Jul 19 04:03	19°♄34'18	
desc. node	11847 Feb 01 01:56	1°♄06'07	morning max el		11849 Jul 20 05:14	20°♄37'25	46°57'31
	11847 Feb 24 13:59	0°♄			11849 Jul 29 07:03	0°♄	
	11847 Mar 20 23:46	0°♄			11849 Aug 25 08:48	0°♄	
	11847 Apr 14 10:20	0°♄			11849 Sep 20 02:11	0°♄	
	11847 May 09 00:20	0°♄			11849 Oct 15 06:09	0°♄	
asc. node	11847 May 24 21:31	19°♄10'07	asc. node		11849 Nov 09 00:22	29°♄52'47	
	11847 Jun 02 23:21	0°♄			11849 Nov 09 02:45	0°♄	
	11847 Jun 28 18:12	0°♄			11849 Dec 03 18:05	0°♄	
	11847 Jul 26 13:08	0°♄			11849 Dec 28 05:30	0°♄	
evening max el	11847 Jul 27 08:24	0°♄48'25 46°40'53	morning set		11850 Jan 17 21:21	25°♄25'33	
	11847 Sep 02 08:42	0°♄			11850 Jan 21 14:24	0°♄	
greatest brilliancy	11847 Sep 04 10:42	0°♄52'32 -4.8m			11850 Feb 14 21:41	0°♄	
desc. node	11847 Sep 13 22:12	3°♄05'48	max. Earth dist.		11850 Feb 22 07:54	9°♄10'57 1.72809 AU	
retrograde	11847 Sep 15 13:26	3°♄08'58					
	11847 Sep 28 02:38	30°♄	superior conj		11850 Feb 24 09:49	11°♄45'19 0°10'16	
evening set	11847 Sep 30 22:48	28°♄30'54	minimum elong		11850 Feb 24 12:16	11°♄52'54 0°10'28	
min. Earth dist.	11847 Oct 05 20:35	25°♄35'24 0.28009 AU	behind sun begin		11850 Feb 23 17:58	10°♄56'17	
inferior conj	11847 Oct 06 17:48	25°♄02'33 -5°21'06	behind sun end		11850 Feb 25 06:34	12°♄49'31	
minimum elong	11847 Oct 06 07:49	25°♄18'02 5°18'21	desc. node		11850 Feb 28 15:37	17°♄00'14	
morning rise	11847 Oct 11 17:31	22°♄03'04			11850 Mar 11 03:28	0°♄	
direct	11847 Oct 27 20:30	17°♄06'41	evening rise		11850 Apr 04 01:38	29°♄42'11	
greatest brilliancy	11847 Nov 06 07:35	18°♄44'59 -4.8m			11850 Apr 04 07:22	0°♄	
	11847 Nov 26 00:47	0°♄			11850 Apr 28 09:33	0°♄	
morning max el	11847 Dec 15 16:51	17°♄07'22 45°44'37			11850 May 22 11:19	0°♄	
	11847 Dec 28 13:40	0°♄			11850 Jun 15 15:04	0°♄	
asc. node	11848 Jan 04 22:50	7°♄46'48	asc. node		11850 Jun 21 08:58	7°♄06'19	
	11848 Jan 25 01:58	0°♄			11850 Jul 10 00:00	0°♄	
	11848 Feb 19 23:08	0°♄			11850 Aug 03 18:36	0°♄	
	11848 Mar 16 01:08	0°♄			11850 Aug 29 07:21	0°♄	
	11848 Apr 09 16:00	0°♄			11850 Sep 25 11:21	0°♄	
desc. node	11848 Apr 25 17:28	19°♄47'11	evening max el		11850 Oct 06 07:51	11°♄01'10 46°06'34	
	11848 May 03 23:21	0°♄	desc. node		11850 Oct 11 07:51	15°♄49'21	
	11848 May 28 01:20	0°♄			11850 Oct 27 23:21	0°♄	
morning set	11848 Jun 14 21:43	22°♄21'17	greatest brilliancy		11850 Nov 14 13:17	10°♄01'59 -4.8m	
	11848 Jun 20 24:00	0°♄	retrograde		11850 Nov 24 17:18	11°♄55'27	
	11848 Jul 14 21:34	0°♄	evening set		11850 Dec 12 23:38	5°♄41'08	
			inferior conj		11850 Dec 16 06:22	3°♄38'48 -8°26'47	
superior conj	11848 Jul 24 20:06	12°♄27'57 -0°51'31	minimum elong		11850 Dec 16 11:38	3°♄30'32 8°25'34	
minimum elong	11848 Jul 25 07:03	13°♄02'19 0°51'41	min. Earth dist.		11850 Dec 16 09:20	3°♄34'09 0.29016 AU	
max. Earth dist.	11848 Jul 26 17:42	14°♄50'54 1.71512 AU	morning rise		11850 Dec 19 23:35	1°♄20'28	
	11848 Aug 07 19:58	0°♄			11850 Dec 22 06:53	30°♄	
asc. node	11848 Aug 16 09:00	10°♄41'07	direct		11851 Jan 06 16:20	25°♄23'50	
	11848 Aug 31 20:26	0°♄	greatest brilliancy		11851 Jan 17 06:46	27°♄25'57 -4.7m	
evening rise	11848 Sep 02 10:36	1°♄58'54			11851 Jan 23 00:46	0°♄	
	11848 Sep 24 23:54	0°♄	asc. node		11851 Feb 01 09:30	5°♄49'55	
	11848 Oct 19 07:45	0°♄	morning max el		11851 Feb 24 21:21	26°♄07'08 45°54'23	
	11848 Nov 12 22:18	0°♄			11851 Feb 28 19:14	0°♄	
desc. node	11848 Dec 06 02:55	27°♄50'14			11851 Mar 28 17:37	0°♄	
	11848 Dec 07 22:35	0°♄			11851 Apr 23 15:33	0°♄	
	11849 Jan 02 12:26	0°♄			11851 May 18 15:32	0°♄	

desc. node	11851 May 24 06:37	6°♄51'04		greatest brilliancy	11854 Jan 24 12:45	18°♄09'57	-4.8m
	11851 Jun 12 03:15	0°♄		retrograde	11854 Feb 03 09:13	19°♄55'39	
	11851 Jul 06 08:03	0°♄		evening set	11854 Feb 18 08:18	15°♄33'49	
	11851 Jul 30 09:44	0°♄		inferior conj	11854 Feb 24 11:57	11°♄52'49	-1°04'35
	11851 Aug 23 10:50	0°♄		minimum elong	11854 Feb 24 14:23	11°♄49'02	1°03'29
morning set	11851 Aug 28 22:40	6°♄51'00		min. Earth dist.	11854 Feb 24 22:13	11°♄36'48	0.28138 AU
asc. node	11851 Sep 13 22:54	26°♄47'43		asc. node	11854 Feb 28 19:35	9°♄14'12	
	11851 Sep 16 12:42	0°♄		morning rise	11854 Mar 02 20:04	8°♄05'21	
				direct	11854 Mar 17 17:25	3°♄44'13	
superior conj	11851 Oct 06 13:23	24°♄54'22	0°51'19	greatest brilliancy	11854 Mar 28 11:36	5°♄53'43	-4.8m
minimum elong	11851 Oct 06 03:42	24°♄24'17	0°51'12		11854 Apr 30 17:36	0°♄	
max. Earth dist.	11851 Oct 08 16:10	27°♄32'05	1.72502 AU	morning max el	11854 May 06 19:57	5°♄57'04	46°37'40
	11851 Oct 10 15:50	0°♄			11854 May 29 11:26	0°♄	
	11851 Nov 03 20:45	0°♄		desc. node	11854 Jun 20 18:57	25°♄32'41	
evening rise	11851 Nov 12 17:07	10°♄56'02			11854 Jun 24 13:56	0°♄	
	11851 Nov 28 04:28	0°♄			11854 Jul 19 15:46	0°♄	
	11851 Dec 22 16:07	0°♄			11854 Aug 13 06:29	0°♄	
desc. node	11852 Jan 03 14:54	14°♄33'27			11854 Sep 06 16:35	0°♄	
	11852 Jan 16 08:25	0°♄			11854 Oct 01 00:59	0°♄	
	11852 Feb 10 05:37	0°♄		asc. node	11854 Oct 11 12:44	12°♄56'10	
	11852 Mar 06 08:59	0°♄			11854 Oct 25 08:33	0°♄	
	11852 Mar 31 23:45	0°♄		morning set	11854 Nov 07 20:36	16°♄40'29	
asc. node	11852 Apr 25 13:00	27°♄37'00			11854 Nov 18 15:31	0°♄	
	11852 Apr 27 17:45	0°♄			11854 Dec 12 22:25	0°♄	
evening max el	11852 May 12 10:14	15°♄19'27	46°46'24				
	11852 May 28 02:18	0°♄		superior conj	11854 Dec 14 16:55	2°♄11'12	1°23'41
greatest brilliancy	11852 Jun 21 20:59	16°♄01'44	-4.9m	minimum elong	11854 Dec 14 21:21	2°♄24'51	1°24'26
retrograde	11852 Jul 01 17:54	17°♄52'17		max. Earth dist.	11854 Dec 15 16:45	3°♄24'44	1.73169 AU
evening set	11852 Jul 17 17:49	12°♄52'50			11855 Jan 06 06:06	0°♄	
inferior conj	11852 Jul 22 10:18	10°♄05'17	5°49'26	evening rise	11855 Jan 20 22:28	18°♄04'41	
minimum elong	11852 Jul 22 21:13	9°♄48'37	5°45'59		11855 Jan 30 15:01	0°♄	
min. Earth dist.	11852 Jul 22 17:15	9°♄54'40	0.27039 AU	desc. node	11855 Jan 31 03:52	0°♄39'30	
morning rise	11852 Jul 28 00:37	6°♄47'17			11855 Feb 24 00:48	0°♄	
direct	11852 Aug 12 03:04	2°♄18'30			11855 Mar 20 10:56	0°♄	
desc. node	11852 Aug 15 14:21	2°♄32'44			11855 Apr 13 21:57	0°♄	
greatest brilliancy	11852 Aug 22 04:04	4°♄11'31	-4.8m		11855 May 08 12:38	0°♄	
	11852 Sep 26 22:11	0°♄		asc. node	11855 May 23 23:26	18°♄37'00	
morning max el	11852 Oct 01 00:05	3°♄56'14	46°22'42		11855 Jun 02 12:48	0°♄	
	11852 Oct 25 23:33	0°♄			11855 Jun 28 09:56	0°♄	
	11852 Nov 21 15:46	0°♄		evening max el	11855 Jul 24 23:07	28°♄30'14	46°41'49
asc. node	11852 Dec 06 13:10	17°♄18'12			11855 Jul 26 11:06	0°♄	
	11852 Dec 17 07:36	0°♄		greatest brilliancy	11855 Sep 02 02:48	28°♄37'36	-4.8m
	11853 Jan 11 09:18	0°♄			11855 Sep 06 09:01	0°♄	
	11853 Feb 05 02:04	0°♄		retrograde	11855 Sep 13 04:16	0°♄52'52	
	11853 Mar 01 12:58	0°♄		desc. node	11855 Sep 13 00:07	0°♄52'50	
	11853 Mar 25 19:35	0°♄			11855 Sep 19 18:44	30°♄	
desc. node	11853 Mar 28 05:30	2°♄59'33		evening set	11855 Sep 28 11:23	26°♄18'56	
morning set	11853 Mar 29 09:43	4°♄27'05		min. Earth dist.	11855 Oct 03 11:46	23°♄19'44	0.27951 AU
	11853 Apr 18 22:32	0°♄		inferior conj	11855 Oct 04 08:33	22°♄47'32	-5°03'37
max. Earth dist.	11853 May 05 12:26	20°♄42'48	1.71678 AU	minimum elong	11855 Oct 03 22:50	23°♄02'36	5°00'54
				morning rise	11855 Oct 09 10:58	19°♄44'06	
superior conj	11853 May 08 06:56	24°♄10'57	-1°19'39	direct	11855 Oct 25 10:44	14°♄52'36	
minimum elong	11853 May 07 21:59	23°♄42'55	1°20'04	greatest brilliancy	11855 Nov 03 21:55	16°♄30'37	-4.8m
	11853 May 12 22:24	0°♄			11855 Nov 26 12:07	0°♄	
	11853 Jun 05 20:25	0°♄		morning max el	11855 Dec 13 06:15	14°♄50'54	45°45'06
evening rise	11853 Jun 17 09:11	14°♄28'25			11855 Dec 28 07:37	0°♄	
	11853 Jun 29 18:27	0°♄		asc. node	11856 Jan 04 00:53	7°♄07'53	
asc. node	11853 Jul 18 21:34	23°♄55'28			11856 Jan 24 15:57	0°♄	
	11853 Jul 23 18:30	0°♄			11856 Feb 19 11:29	0°♄	
	11853 Aug 16 22:32	0°♄			11856 Mar 15 12:41	0°♄	
	11853 Sep 10 08:58	0°♄			11856 Apr 09 03:07	0°♄	
	11853 Oct 05 05:55	0°♄		desc. node	11856 Apr 24 19:14	19°♄18'53	
	11853 Oct 30 20:59	0°♄			11856 May 03 10:14	0°♄	
desc. node	11853 Nov 07 17:52	8°♄56'53			11856 May 27 12:04	0°♄	
	11853 Nov 26 21:59	0°♄		morning set	11856 Jun 12 08:58	19°♄52'36	
evening max el	11853 Dec 16 12:48	19°♄56'46	45°50'53		11856 Jun 20 10:39	0°♄	
	11853 Dec 27 12:56	0°♄			11856 Jul 14 08:10	0°♄	

superior conj	11856 Jul 22 08:17	10°02'33	-0°54'34	minimum elong	11858 Dec 14 03:05	1°32'21"14	8°30'31
minimum elong	11856 Jul 22 19:33	10°03'51	0°54'47	min. Earth dist.	11858 Dec 14 00:08	1°32'26"52	0.29019 AU
max. Earth dist.	11856 Jul 24 00:37	12°09'00	1.71484 AU		11858 Dec 16 07:48	30°R	
	11856 Aug 07 06:32	0°		morning rise	11858 Dec 17 13:05	29°15'20	
asc. node	11856 Aug 15 10:55	10°14'10		direct	11859 Jan 04 08:24	23°14'35	
evening rise	11856 Aug 31 00:41	29°40'25		greatest brilliancy	11859 Jan 14 21:51	25°16'02	-4.7m
	11856 Aug 31 06:59	0°			11859 Jan 24 12:20	0°	
	11856 Sep 24 10:29	0°		asc. node	11859 Jan 31 11:31	4°41'36	
	11856 Oct 18 18:31	0°		morning max el	11859 Feb 22 13:40	23°57'15	45°53'13
	11856 Nov 12 09:27	0°			11859 Feb 28 15:01	0°	
desc. node	11856 Dec 05 04:53	27°21'04			11859 Mar 28 08:22	0°	
	11856 Dec 07 10:26	0°			11859 Apr 23 04:25	0°	
	11857 Jan 02 01:31	0°			11859 May 18 03:28	0°	
	11857 Jan 28 14:51	0°		desc. node	11859 May 23 08:37	6°21'10	
evening max el	11857 Feb 26 01:16	29°49'34	46°12'42		11859 Jun 11 14:39	0°	
	11857 Feb 26 05:32	0°			11859 Jul 05 19:08	0°	
asc. node	11857 Mar 28 05:13	24°46'26			11859 Jul 29 20:35	0°	
greatest brilliancy	11857 Apr 07 00:02	29°30'49	-4.8m		11859 Aug 22 21:31	0°	
	11857 Apr 08 11:53	0°		morning set	11859 Aug 26 12:23	4°30'50	
retrograde	11857 Apr 16 16:45	1°16'41		asc. node	11859 Sep 13 00:38	26°20'11	
	11857 Apr 24 15:09	30°R			11859 Sep 15 23:16	0°	
evening set	11857 May 03 12:46	25°49'37					
inferior conj	11857 May 07 11:43	23°25'18	8°17'19	superior conj	11859 Oct 04 04:38	22°39'56	0°48'28
minimum elong	11857 May 07 02:54	23°38'57	8°15'31	minimum elong	11859 Oct 03 19:12	22°10'38	0°48'19
min. Earth dist.	11857 May 07 12:41	23°23'48	0.27460 AU	max. Earth dist.	11859 Oct 06 08:08	25°19'56	1.72469 AU
morning rise	11857 May 10 16:55	21°26'45			11859 Oct 10 02:20	0°	
direct	11857 May 28 07:21	15°28'19			11859 Nov 03 07:16	0°	
greatest brilliancy	11857 Jun 07 05:58	17°19'37	-4.9m	evening rise	11859 Nov 10 09:48	8°46'56	
	11857 Jun 27 22:04	0°			11859 Nov 27 15:03	0°	
morning max el	11857 Jul 17 18:48	18°14'40	46°57'57		11859 Dec 22 02:54	0°	
desc. node	11857 Jul 18 06:09	18°43'16		desc. node	11860 Jan 02 16:55	14°06'21	
	11857 Jul 29 02:13	0°			11860 Jan 15 19:34	0°	
	11857 Aug 24 23:41	0°			11860 Feb 09 17:24	0°	
	11857 Sep 19 15:09	0°			11860 Mar 05 21:47	0°	
	11857 Oct 14 18:01	0°			11860 Mar 31 14:20	0°	
asc. node	11857 Nov 08 02:19	29°24'46		asc. node	11860 Apr 24 14:58	26°53'36	
	11857 Nov 08 13:55	0°			11860 Apr 27 12:16	0°	
	11857 Dec 03 04:49	0°		evening max el	11860 May 10 00:43	12°59'15	46°45'43
	11857 Dec 27 16:00	0°			11860 May 28 11:59	0°	
morning set	11858 Jan 15 14:29	23°18'19		greatest brilliancy	11860 Jun 19 10:19	13°37'30	-4.9m
	11858 Jan 21 00:48	0°		retrograde	11860 Jun 29 07:28	15°27'48	
	11858 Feb 14 08:06	0°		evening set	11860 Jul 15 10:10	10°23'36	
max. Earth dist.	11858 Feb 20 03:03	7°09'29	1.72844 AU	inferior conj	11860 Jul 19 23:05	7°40'48	6°07'57
				minimum elong	11860 Jul 20 10:12	7°23'49	6°04'34
superior conj	11858 Feb 22 01:08	9°31'58	0°13'44	min. Earth dist.	11860 Jul 20 06:13	7°29'55	0.27042 AU
minimum elong	11858 Feb 22 04:22	9°41'58	0°13'55	morning rise	11860 Jul 25 10:19	4°27'09	
behind sun begin	11858 Feb 21 16:26	9°05'04			11860 Aug 07 11:32	30°R	
behind sun end	11858 Feb 22 16:17	10°18'51		direct	11860 Aug 09 16:29	29°54'05	
desc. node	11858 Feb 27 17:27	16°33'39			11860 Aug 11 21:58	0°	
	11858 Mar 10 13:56	0°		desc. node	11860 Aug 14 16:17	0°23'16	
evening rise	11858 Apr 01 15:49	27°24'13		greatest brilliancy	11860 Aug 19 16:09	1°46'19	-4.9m
	11858 Apr 03 17:57	0°			11860 Sep 26 22:24	0°	
	11858 Apr 27 20:18	0°		morning max el	11860 Sep 28 14:36	1°38'02	46°24'12
	11858 May 21 22:19	0°			11860 Oct 25 15:54	0°	
	11858 Jun 15 02:25	0°			11860 Nov 21 05:20	0°	
asc. node	11858 Jun 20 11:01	6°37'16		asc. node	11860 Dec 05 15:07	16°46'47	
	11858 Jul 09 11:52	0°			11860 Dec 16 19:47	0°	
	11858 Aug 03 07:19	0°			11861 Jan 10 20:43	0°	
	11858 Aug 28 21:44	0°			11861 Feb 04 13:02	0°	
	11858 Sep 25 05:53	0°			11861 Feb 28 23:42	0°	
evening max el	11858 Oct 03 22:53	8°47'43	46°07'53		11861 Mar 25 06:14	0°	
desc. node	11858 Oct 10 09:50	14°57'48		morning set	11861 Mar 26 23:29	2°07'53	
	11858 Oct 28 15:31	0°		desc. node	11861 Mar 27 07:19	2°32'09	
greatest brilliancy	11858 Nov 12 03:45	7°51'03	-4.8m		11861 Apr 18 09:12	0°	
retrograde	11858 Nov 22 09:53	9°46'29		max. Earth dist.	11861 May 02 21:42	18°08'14	1.71713 AU
evening set	11858 Dec 10 17:05	3°29'36					
inferior conj	11858 Dec 13 22:31	1°29'24	-8°31'37	superior conj	11861 May 05 19:13	21°45'39	-1°17'59

minimum elong	11861 May 05 09:40	21°♄15'49	1°18'21	morning max el	11863 Dec 10 19:28	12°♄32'37	45°45'47
	11861 May 12 09:07	0°♄			11863 Dec 28 01:32	0°♄	
	11861 Jun 05 07:12	0°♄		asc. node	11864 Jan 03 02:52	6°♄28'09	
evening rise	11861 Jun 14 20:13	11°♄58'30			11864 Jan 24 06:08	0°♄	
	11861 Jun 29 05:18	0°♄			11864 Feb 19 00:06	0°♄	
asc. node	11861 Jul 17 23:25	23°♄26'59			11864 Mar 15 00:31	0°♄	
	11861 Jul 23 05:30	0°♄			11864 Apr 08 14:31	0°♄	
	11861 Aug 16 09:47	0°♄		desc. node	11864 Apr 23 21:15	18°♄50'30	
	11861 Sep 09 20:38	0°♄			11864 May 02 21:22	0°♄	
	11861 Oct 04 18:20	0°♄			11864 May 26 23:02	0°♄	
	11861 Oct 30 10:50	0°♄		morning set	11864 Jun 09 20:28	17°♄23'56	
desc. node	11861 Nov 06 19:54	8°♄21'39			11864 Jun 19 21:32	0°♄	
	11861 Nov 26 15:10	0°♄			11864 Jul 13 19:02	0°♄	
evening max el	11861 Dec 14 04:10	17°♄44'45	45°50'47				
	11861 Dec 27 18:30	0°♄		superior conj	11864 Jul 19 20:31	7°♄36'21	-0°57'30
greatest brilliancy	11862 Jan 22 04:19	15°♄57'13	-4.8m	minimum elong	11864 Jul 20 08:01	8°♄12'25	0°57'46
retrograde	11862 Jan 31 23:40	17°♄41'47		max. Earth dist.	11864 Jul 21 06:36	9°♄23'15	1.71467 AU
evening set	11862 Feb 16 00:53	13°♄18'08			11864 Aug 06 17:25	0°♄	
inferior conj	11862 Feb 22 03:10	9°♄38'45	-1°25'56	asc. node	11864 Aug 14 12:42	9°♄45'45	
minimum elong	11862 Feb 22 06:23	9°♄33'44	1°24'35	evening rise	11864 Aug 28 14:32	27°♄19'56	
min. Earth dist.	11862 Feb 22 14:03	9°♄21'43	0.28171 AU		11864 Aug 30 17:54	0°♄	
asc. node	11862 Feb 27 21:26	6°♄09'59			11864 Sep 23 21:30	0°♄	
morning rise	11862 Feb 28 11:26	5°♄50'36			11864 Oct 18 05:44	0°♄	
direct	11862 Mar 15 08:49	1°♄29'54			11864 Nov 11 21:04	0°♄	
greatest brilliancy	11862 Mar 26 03:29	3°♄39'15	-4.8m	desc. node	11864 Dec 04 06:53	26°♄50'37	
	11862 Apr 30 17:29	0°♄			11864 Dec 06 22:47	0°♄	
morning max el	11862 May 04 09:54	3°♄37'38	46°36'06		11865 Jan 01 15:11	0°♄	
	11862 May 29 03:45	0°♄			11865 Jan 28 07:09	0°♄	
desc. node	11862 Jun 19 20:59	24°♄57'21		evening max el	11865 Feb 23 14:52	27°♄29'11	46°11'36
	11862 Jun 24 03:44	0°♄			11865 Feb 26 05:08	0°♄	
	11862 Jul 19 04:22	0°♄		asc. node	11865 Mar 27 07:17	23°♄18'01	
	11862 Aug 12 18:22	0°♄		greatest brilliancy	11865 Apr 04 12:49	27°♄07'49	-4.8m
	11862 Sep 06 03:59	0°♄		retrograde	11865 Apr 14 06:22	28°♄54'35	
	11862 Sep 30 12:03	0°♄		evening set	11865 Apr 30 21:54	23°♄33'17	
asc. node	11862 Oct 10 14:39	12°♄28'23		inferior conj	11865 May 05 01:18	21°♄02'42	8°06'33
	11862 Oct 24 19:23	0°♄		minimum elong	11865 May 04 15:56	21°♄17'11	8°04'34
morning set	11862 Nov 05 12:45	14°♄29'00		min. Earth dist.	11865 May 05 01:57	21°♄01'42	0.27473 AU
	11862 Nov 18 02:11	0°♄		morning rise	11865 May 08 09:51	18°♄59'21	
				direct	11865 May 25 21:02	13°♄05'12	
superior conj	11862 Dec 12 10:01	0°♄03'01	1°24'24	greatest brilliancy	11865 Jun 04 20:12	14°♄57'21	-4.9m
minimum elong	11862 Dec 12 13:46	0°♄14'35	1°25'11		11865 Jun 28 08:55	0°♄	
	11862 Dec 12 09:02	0°♄		morning max el	11865 Jul 15 09:16	15°♄53'39	46°58'20
max. Earth dist.	11862 Dec 13 09:49	1°♄16'27	1.73159 AU	desc. node	11865 Jul 17 08:03	17°♄52'01	
	11863 Jan 05 16:47	0°♄			11865 Jul 28 21:07	0°♄	
evening rise	11863 Jan 18 14:35	15°♄53'31			11865 Aug 24 14:39	0°♄	
desc. node	11863 Jan 30 05:41	0°♄11'52			11865 Sep 19 04:22	0°♄	
	11863 Jan 30 01:50	0°♄			11865 Oct 14 06:14	0°♄	
	11863 Feb 23 11:50	0°♄		asc. node	11865 Nov 07 04:17	28°♄55'33	
	11863 Mar 19 22:16	0°♄			11865 Nov 08 01:30	0°♄	
	11863 Apr 13 09:45	0°♄			11865 Dec 02 16:00	0°♄	
	11863 May 08 01:09	0°♄			11865 Dec 27 02:57	0°♄	
asc. node	11863 May 23 01:28	18°♄03'32		morning set	11866 Jan 13 07:21	21°♄08'59	
	11863 Jun 02 02:36	0°♄			11866 Jan 20 11:38	0°♄	
	11863 Jun 28 02:15	0°♄			11866 Feb 13 18:55	0°♄	
evening max el	11863 Jul 22 12:55	26°♄08'29	46°42'33	max. Earth dist.	11866 Feb 17 23:14	5°♄10'01	1.72874 AU
	11863 Jul 26 10:30	0°♄					
greatest brilliancy	11863 Aug 30 18:50	26°♄20'35	-4.8m	superior conj	11866 Feb 19 16:14	7°♄16'44	0°17'10
retrograde	11863 Sep 10 18:38	28°♄34'41		minimum elong	11866 Feb 19 20:13	7°♄29'04	0°17'21
desc. node	11863 Sep 12 02:06	28°♄32'37		desc. node	11866 Feb 26 19:16	16°♄05'40	
evening set	11863 Sep 25 23:46	24°♄04'20			11866 Mar 10 00:49	0°♄	
min. Earth dist.	11863 Oct 01 03:00	21°♄01'26	0.27895 AU	evening rise	11866 Mar 30 05:58	25°♄04'54	
inferior conj	11863 Oct 01 23:01	20°♄30'26	-4°45'25		11866 Apr 03 04:58	0°♄	
minimum elong	11863 Oct 01 13:38	20°♄44'59	4°42'44		11866 Apr 27 07:29	0°♄	
morning rise	11863 Oct 07 04:05	17°♄23'06			11866 May 21 09:43	0°♄	
direct	11863 Oct 23 00:09	12°♄36'10			11866 Jun 14 14:08	0°♄	
greatest brilliancy	11863 Nov 01 12:30	14°♄14'42	-4.8m	asc. node	11866 Jun 19 12:52	6°♄06'37	
	11863 Nov 26 21:02	0°♄			11866 Jul 09 00:04	0°♄	

	11866 Aug 02 20:24	0°♄			11869 Jan 10 08:18	0°♄		
	11866 Aug 28 12:37	0°♍			11869 Feb 04 00:14	0°♍		
	11866 Sep 25 01:22	0°♎			11869 Feb 28 10:41	0°♎		
evening max el	11866 Oct 01 14:46	6°♎35'08	46°08'58	morning set	11869 Mar 24 13:09	29°♎47'38		
desc. node	11866 Oct 09 11:53	14°♎04'11			11869 Mar 24 17:08	0°♏		
	11866 Oct 29 14:28	0°♏		desc. node	11869 Mar 26 09:18	2°♏04'31		
greatest brilliancy	11866 Nov 09 17:58	5°♏38'15	-4.8m		11869 Apr 17 20:05	0°♐		
retrograde	11866 Nov 20 02:25	7°♏35'26		max. Earth dist.	11869 Apr 30 05:22	15°♐28'08	1.71750 AU	
evening set	11866 Dec 08 10:05	1°♏16'36						
	11866 Dec 10 11:40	30°♑♎		superior conj	11869 May 03 07:24	19°♑19'34	-1°16'10	
inferior conj	11866 Dec 11 14:29	29°♎18'00	-8°35'46	minimum elong	11869 May 02 21:22	18°♑48'10	1°16'28	
minimum elong	11866 Dec 11 18:19	29°♎11'59	8°34'46		11869 May 11 20:02	0°♒		
min. Earth dist.	11866 Dec 11 14:33	29°♎17'53	0.29021 AU		11869 Jun 04 18:10	0°♓		
morning rise	11866 Dec 15 02:35	27°♎07'51		evening rise	11869 Jun 12 07:12	9°♓27'46		
direct	11867 Jan 02 00:45	21°♎03'30			11869 Jun 28 16:23	0°♑		
greatest brilliancy	11867 Jan 12 12:14	23°♎03'36	-4.7m	asc. node	11869 Jul 17 01:16	22°♑57'47		
	11867 Jan 25 14:12	0°♒			11869 Jul 22 16:45	0°♒		
asc. node	11867 Jan 30 13:23	3°♒33'19			11869 Aug 15 21:15	0°♓		
morning max el	11867 Feb 20 06:02	21°♒46'07	45°52'06		11869 Sep 09 08:28	0°♍		
	11867 Feb 28 10:45	0°♓			11869 Oct 04 06:52	0°♎		
	11867 Mar 27 23:21	0°♏			11869 Oct 30 00:51	0°♏		
	11867 Apr 22 17:34	0°♏		desc. node	11869 Nov 05 21:54	7°♏46'04		
	11867 May 17 15:42	0°♐			11869 Nov 26 08:46	0°♓		
desc. node	11867 May 22 10:30	5°♐49'54		evening max el	11869 Dec 11 18:40	15°♓30'35	45°50'35	
	11867 Jun 11 02:24	0°♒			11869 Dec 28 02:27	0°♏		
	11867 Jul 05 06:33	0°♓		greatest brilliancy	11870 Jan 19 20:04	13°♏44'33	-4.8m	
	11867 Jul 29 07:45	0°♑		retrograde	11870 Jan 29 13:54	15°♏28'04		
	11867 Aug 22 08:28	0°♒		evening set	11870 Feb 13 17:39	11°♏02'00		
morning set	11867 Aug 24 02:29	2°♒11'00		inferior conj	11870 Feb 19 18:30	7°♏24'42	-1°47'03	
asc. node	11867 Sep 12 02:34	25°♒52'28		minimum elong	11870 Feb 19 22:28	7°♏18'29	1°45'28	
	11867 Sep 15 10:05	0°♓		min. Earth dist.	11870 Feb 20 06:16	7°♏06'15	0.28211 AU	
				morning rise	11870 Feb 26 02:44	3°♏36'05		
superior conj	11867 Oct 01 20:07	20°♓25'26	0°45'34	asc. node	11870 Feb 26 23:33	3°♏08'09		
minimum elong	11867 Oct 01 11:00	19°♓57'06	0°45'22		11870 Mar 06 22:12	30°♑♓		
max. Earth dist.	11867 Oct 04 02:41	23°♓14'59	1.72436 AU	direct	11870 Mar 12 23:59	29°♓15'16		
	11867 Oct 09 13:06	0°♍			11870 Mar 19 05:53	0°♏		
	11867 Nov 02 18:03	0°♎		greatest brilliancy	11870 Mar 23 20:11	1°♏25'26	-4.8m	
evening rise	11867 Nov 08 02:38	6°♎37'22			11870 Apr 30 16:32	0°♏		
	11867 Nov 27 01:58	0°♏		morning max el	11870 May 01 23:45	1°♏17'27	46°34'35	
	11867 Dec 21 14:03	0°♓			11870 May 28 19:55	0°♐		
desc. node	11868 Jan 01 18:42	13°♓37'21		desc. node	11870 Jun 18 22:52	24°♐21'37		
	11868 Jan 15 07:07	0°♏			11870 Jun 23 17:30	0°♒		
	11868 Feb 09 05:36	0°♏			11870 Jul 18 16:57	0°♓		
	11868 Mar 05 11:02	0°♐			11870 Aug 12 06:15	0°♑		
	11868 Mar 31 05:29	0°♒			11870 Sep 05 15:25	0°♒		
asc. node	11868 Apr 23 17:01	26°♒08'50			11870 Sep 29 23:09	0°♓		
	11868 Apr 27 07:41	0°♓		asc. node	11870 Oct 09 16:35	12°♓00'32		
evening max el	11868 May 07 15:06	10°♓37'46	46°44'56		11870 Oct 24 06:13	0°♍		
	11868 May 29 01:35	0°♑		morning set	11870 Nov 03 05:07	12°♍18'07		
greatest brilliancy	11868 Jun 17 00:12	11°♑13'00	-4.9m		11870 Nov 17 12:50	0°♎		
retrograde	11868 Jun 26 20:44	13°♑02'11						
evening set	11868 Jul 13 02:36	7°♑53'26		superior conj	11870 Dec 10 03:29	27°♎56'12	1°24'59	
inferior conj	11868 Jul 17 11:54	5°♑15'30	6°25'53	minimum elong	11870 Dec 10 06:33	28°♎05'38	1°25'46	
minimum elong	11868 Jul 17 23:06	4°♑58'20	6°22'34	max. Earth dist.	11870 Dec 11 03:10	29°♎09'16	1.73147 AU	
min. Earth dist.	11868 Jul 17 19:24	5°♑04'00	0.27041 AU		11870 Dec 11 19:36	0°♏		
morning rise	11868 Jul 22 19:41	2°♑06'19			11871 Jan 05 03:23	0°♓		
	11868 Jul 27 00:55	30°♑♓		evening rise	11871 Jan 16 07:06	13°♓43'52		
direct	11868 Aug 07 05:38	27°♓28'54		desc. node	11871 Jan 29 07:36	29°♓44'37		
desc. node	11868 Aug 13 18:14	28°♓18'09			11871 Jan 29 12:36	0°♏		
greatest brilliancy	11868 Aug 17 04:27	29°♓20'24	-4.9m		11871 Feb 22 22:52	0°♏		
	11868 Aug 18 21:42	0°♑			11871 Mar 19 09:39	0°♐		
morning max el	11868 Sep 26 04:18	29°♑17'08	46°25'52		11871 Apr 12 21:37	0°♒		
	11868 Sep 26 21:43	0°♒			11871 May 07 13:48	0°♓		
	11868 Oct 25 08:06	0°♓		asc. node	11871 May 22 03:22	17°♓29'21		
	11868 Nov 20 18:54	0°♍			11871 Jun 01 16:33	0°♑		
asc. node	11868 Dec 04 17:01	16°♍14'56			11871 Jun 27 18:53	0°♒		
	11868 Dec 16 08:04	0°♎		evening max el	11871 Jul 20 02:17	23°♒45'42	46°43'22	

	11871 Jul 26 11:00	0°♄		superior conj	11874 Feb 17 07:48	5°♄04'08	0°20'32
greatest brilliancy	11871 Aug 28 10:24	24°♄02'48	-4.8m	minimum elong	11874 Feb 17 12:31	5°♄18'41	0°20'43
retrograde	11871 Sep 08 09:07	26°♄16'31		desc. node	11874 Feb 25 21:14	15°♄39'24	
desc. node	11871 Sep 11 04:13	26°♄07'05			11874 Mar 09 11:19	0°♃	
evening set	11871 Sep 23 12:14	21°♄49'06		evening rise	11874 Mar 27 20:33	22°♃48'15	
min. Earth dist.	11871 Sep 28 18:09	18°♄42'54	0.27839 AU		11874 Apr 02 15:35	0°♄	
inferior conj	11871 Sep 29 13:23	18°♄13'11	-4°26'35		11874 Apr 26 18:18	0°♂	
minimum elong	11871 Sep 29 04:24	18°♄27'05	4°23'57		11874 May 20 20:49	0°♄	
morning rise	11871 Oct 04 21:06	15°♄02'16			11874 Jun 14 01:37	0°♄	
direct	11871 Oct 20 13:21	10°♄19'23		asc. node	11874 Jun 18 14:45	5°♄36'41	
greatest brilliancy	11871 Oct 30 03:12	11°♄58'58	-4.8m		11874 Jul 08 12:06	0°♄	
	11871 Nov 27 03:17	0°♄			11874 Aug 02 09:23	0°♄	
morning max el	11871 Dec 08 09:35	10°♄16'57	45°46'44		11874 Aug 28 03:30	0°♄	
	11871 Dec 27 18:49	0°♄			11874 Sep 24 21:11	0°♄	
asc. node	11872 Jan 02 04:43	5°♄49'07		evening max el	11874 Sep 29 07:03	4°♄24'10	46°10'11
	11872 Jan 23 19:57	0°♄		desc. node	11874 Oct 08 13:51	13°♄10'03	
	11872 Feb 18 12:25	0°♄			11874 Oct 30 21:59	0°♄	
	11872 Mar 14 12:06	0°♄		greatest brilliancy	11874 Nov 07 08:32	3°♄26'41	-4.8m
	11872 Apr 08 01:44	0°♃		retrograde	11874 Nov 17 18:42	5°♄25'01	
desc. node	11872 Apr 22 23:07	18°♃22'03			11874 Dec 04 14:04	30°♄	
	11872 May 02 08:22	0°♄		evening set	11874 Dec 06 02:51	29°♄04'56	
	11872 May 26 09:56	0°♂		inferior conj	11874 Dec 09 06:24	27°♄07'29	-8°39'20
morning set	11872 Jun 07 07:35	14°♂54'15		minimum elong	11874 Dec 09 09:29	27°♄02'37	8°38'23
	11872 Jun 19 08:21	0°♄		min. Earth dist.	11874 Dec 09 04:57	27°♄09'45	0.29014 AU
	11872 Jul 13 05:49	0°♄		morning rise	11874 Dec 12 16:12	25°♄00'49	
				direct	11874 Dec 30 17:10	18°♄53'32	
superior conj	11872 Jul 17 08:19	5°♄09'04	-1°00'23	greatest brilliancy	11875 Jan 10 02:12	20°♄51'38	-4.7m
minimum elong	11872 Jul 17 19:58	5°♄45'38	1°00'39		11875 Jan 26 08:31	0°♄	
max. Earth dist.	11872 Jul 18 13:54	6°♄41'50	1.71449 AU	asc. node	11875 Jan 29 15:29	2°♄28'25	
	11872 Aug 06 04:10	0°♄		morning max el	11875 Feb 17 21:56	19°♄35'09	45°51'07
asc. node	11872 Aug 13 14:37	9°♄18'09			11875 Feb 28 05:24	0°♄	
evening rise	11872 Aug 26 04:06	24°♄59'07			11875 Mar 27 13:39	0°♄	
	11872 Aug 30 04:40	0°♄			11875 Apr 22 06:08	0°♃	
	11872 Sep 23 08:21	0°♄			11875 May 17 03:26	0°♄	
	11872 Oct 17 16:47	0°♄		desc. node	11875 May 21 12:21	5°♄20'06	
	11872 Nov 11 08:31	0°♄			11875 Jun 10 13:40	0°♂	
desc. node	11872 Dec 03 08:44	26°♄20'22			11875 Jul 04 17:33	0°♄	
	11872 Dec 06 10:55	0°♄			11875 Jul 28 18:33	0°♄	
	11873 Jan 01 04:38	0°♄		morning set	11875 Aug 21 16:08	29°♄50'38	
	11873 Jan 27 23:20	0°♃			11875 Aug 21 19:08	0°♄	
evening max el	11873 Feb 21 05:24	25°♃12'27	46°10'28	asc. node	11875 Sep 11 04:29	25°♄25'31	
	11873 Feb 26 05:21	0°♄			11875 Sep 14 20:38	0°♄	
asc. node	11873 Mar 26 09:17	21°♄47'31		superior conj	11875 Sep 29 11:01	18°♄09'51	0°42'31
greatest brilliancy	11873 Apr 02 01:00	24°♄45'25	-4.8m	minimum elong	11875 Sep 29 02:17	17°♄42'42	0°42'18
retrograde	11873 Apr 11 20:17	26°♄33'29		max. Earth dist.	11875 Oct 01 20:19	21°♄07'58	1.72399 AU
evening set	11873 Apr 28 07:08	21°♄17'52			11875 Oct 08 23:35	0°♄	
inferior conj	11873 May 02 14:54	18°♄40'57	7°54'53		11875 Nov 02 04:33	0°♄	
minimum elong	11873 May 02 05:05	18°♄56'07	7°52'44	evening rise	11875 Nov 05 18:57	4°♄27'04	
min. Earth dist.	11873 May 02 14:58	18°♄40'50	0.27493 AU		11875 Nov 26 12:33	0°♄	
morning rise	11873 May 06 02:56	16°♄32'35			11875 Dec 21 00:52	0°♄	
direct	11873 May 23 11:19	10°♄43'02		desc. node	11875 Dec 31 20:39	13°♄09'52	
greatest brilliancy	11873 Jun 02 10:06	12°♄35'21	-4.9m		11876 Jan 14 18:21	0°♄	
	11873 Jun 28 16:42	0°♂			11876 Feb 08 17:28	0°♃	
morning max el	11873 Jul 13 00:27	13°♂34'51	46°58'29		11876 Mar 04 23:58	0°♄	
desc. node	11873 Jul 16 10:01	17°♂02'14			11876 Mar 30 20:20	0°♂	
	11873 Jul 28 15:24	0°♄		asc. node	11876 Apr 22 18:57	25°♂24'45	
	11873 Aug 24 05:17	0°♄			11876 Apr 27 03:05	0°♄	
	11873 Sep 18 17:16	0°♄		evening max el	11876 May 05 04:45	8°♄16'04	46°44'06
asc. node	11873 Oct 13 18:09	0°♄			11876 May 29 18:49	0°♄	
	11873 Nov 06 06:03	28°♄26'40		greatest brilliancy	11876 Jun 14 14:26	8°♄50'38	-4.9m
	11873 Nov 07 12:47	0°♄		retrograde	11876 Jun 24 09:21	10°♄38'14	
	11873 Dec 02 02:52	0°♄		evening set	11876 Jul 10 19:10	5°♄24'51	
morning set	11874 Jan 11 00:32	19°♄01'39		inferior conj	11876 Jul 15 00:49	2°♄51'54	6°42'59
	11874 Jan 19 22:08	0°♄		minimum elong	11876 Jul 15 12:02	2°♄34'41	6°39'45
	11874 Feb 13 05:23	0°♄		min. Earth dist.	11876 Jul 15 08:56	2°♄39'27	0.27050 AU
max. Earth dist.	11874 Feb 15 19:20	3°♄11'25	1.72898 AU		11876 Jul 19 19:55	30°♄	

morning rise	11876 Jul 20 04:58	29° Ω 47'19	evening rise	11879 Jan 13 23:12	11° \approx 33'22
direct	11876 Aug 04 18:30	25° Ω 05'08	desc. node	11879 Jan 28 09:30	29° \approx 17'48
desc. node	11876 Aug 12 20:21	26° Ω 19'28		11879 Jan 28 23:15	0° \mathcal{H}
greatest brilliancy	11876 Aug 14 17:30	26° Ω 56'27 -4.9m		11879 Feb 22 09:45	0° \mathcal{Y}
	11876 Aug 21 11:13	0° Ω		11879 Mar 18 20:53	0° \mathcal{B}
morning max el	11876 Sep 23 17:14	26° Ω 54'50 46°27'20		11879 Apr 12 09:23	0° Π
	11876 Sep 26 19:47	0° \mathcal{M}		11879 May 07 02:21	0° Ω
	11876 Oct 24 23:49	0° $\underline{\Omega}$	asc. node	11879 May 21 05:17	16° Ω 55'39
	11876 Nov 20 08:09	0° \mathcal{M}		11879 Jun 01 06:28	0° Ω
asc. node	11876 Dec 03 18:56	15° \mathcal{M} 43'56		11879 Jun 27 11:36	0° \mathcal{M}
	11876 Dec 15 20:03	0° \mathcal{X}	evening max el	11879 Jul 17 16:13	21° \mathcal{M} 25'13 46°44'21
	11877 Jan 09 19:33	0° \mathcal{Z}		11879 Jul 26 12:24	0° $\underline{\Omega}$
	11877 Feb 03 11:04	0° \approx	greatest brilliancy	11879 Aug 26 01:21	21° $\underline{\Omega}$ 45'19 -4.8m
	11877 Feb 27 21:19	0° \mathcal{H}	retrograde	11879 Sep 06 00:07	23° $\underline{\Omega}$ 59'31
morning set	11877 Mar 22 02:53	27° \mathcal{H} 28'43	desc. node	11879 Sep 10 06:05	23° $\underline{\Omega}$ 37'31
	11877 Mar 24 03:42	0° \mathcal{Y}	evening set	11879 Sep 21 00:59	19° $\underline{\Omega}$ 34'28
desc. node	11877 Mar 25 11:06	1° \mathcal{Y} 37'22	min. Earth dist.	11879 Sep 26 09:04	16° $\underline{\Omega}$ 25'42 0.27787 AU
	11877 Apr 17 06:38	0° \mathcal{B}	inferior conj	11879 Sep 27 03:49	15° $\underline{\Omega}$ 56'47 -4°07'12
max. Earth dist.	11877 Apr 27 13:26	12° \mathcal{B} 50'27 1.71784 AU	minimum elong	11879 Sep 26 19:17	16° $\underline{\Omega}$ 09'57 4°04'41
			morning rise	11879 Oct 02 14:07	12° $\underline{\Omega}$ 42'38
superior conj	11877 Apr 30 19:57	16° \mathcal{B} 55'48 -1°14'13	direct	11879 Oct 18 03:04	8° $\underline{\Omega}$ 03'24
minimum elong	11877 Apr 30 09:27	16° \mathcal{B} 23'01 1°14'28	greatest brilliancy	11879 Oct 27 17:44	9° $\underline{\Omega}$ 43'54 -4.8m
	11877 May 11 06:35	0° Π		11879 Nov 27 07:15	0° \mathcal{M}
	11877 Jun 04 04:45	0° Ω	morning max el	11879 Dec 06 00:36	8° \mathcal{M} 03'52 45°47'27
evening rise	11877 Jun 09 18:38	6° Ω 59'51		11879 Dec 27 11:39	0° \mathcal{X}
	11877 Jun 28 03:03	0° Ω	asc. node	11880 Jan 01 06:46	5° \mathcal{X} 11'11
asc. node	11877 Jul 16 03:15	22° Ω 30'19		11880 Jan 23 09:36	0° \mathcal{Z}
	11877 Jul 22 03:34	0° \mathcal{M}		11880 Feb 18 00:42	0° \approx
	11877 Aug 15 08:21	0° $\underline{\Omega}$		11880 Mar 13 23:40	0° \mathcal{H}
	11877 Sep 08 20:02	0° \mathcal{M}		11880 Apr 07 12:54	0° \mathcal{Y}
	11877 Oct 03 19:14	0° \mathcal{X}	desc. node	11880 Apr 22 00:54	17° \mathcal{Y} 53'31
	11877 Oct 29 14:50	0° \mathcal{Z}		11880 May 01 19:19	0° \mathcal{B}
desc. node	11877 Nov 04 23:46	7° \mathcal{Z} 10'21		11880 May 25 20:45	0° Π
	11877 Nov 26 02:37	0° \approx	morning set	11880 Jun 04 18:40	12° Π 24'42
evening max el	11877 Dec 09 08:28	13° \approx 15'13 45°50'36		11880 Jun 18 19:08	0° Ω
	11877 Dec 28 13:05	0° \mathcal{H}		11880 Jul 12 16:33	0° Ω
greatest brilliancy	11878 Jan 17 11:26	11° \mathcal{H} 31'55 -4.8m			
retrograde	11878 Jan 27 04:13	13° \mathcal{H} 15'03	superior conj	11880 Jul 14 20:09	2° Ω 41'56 -1°03'08
evening set	11878 Feb 11 10:26	8° \mathcal{H} 46'01	minimum elong	11880 Jul 15 07:52	3° Ω 18'42 1°03'26
inferior conj	11878 Feb 17 09:43	5° \mathcal{H} 11'09 -2°08'04	max. Earth dist.	11880 Jul 15 23:16	4° Ω 06'59 1.71430 AU
minimum elong	11878 Feb 17 14:25	5° \mathcal{H} 03'47 2°06'13		11880 Aug 05 14:53	0° \mathcal{M}
min. Earth dist.	11878 Feb 17 22:21	4° \mathcal{H} 51'21 0.28250 AU	asc. node	11880 Aug 12 16:31	8° \mathcal{M} 50'35
morning rise	11878 Feb 23 17:47	1° \mathcal{H} 22'34	evening rise	11880 Aug 23 17:48	22° \mathcal{M} 38'52
asc. node	11878 Feb 26 01:32	0° \mathcal{H} 10'15		11880 Aug 29 15:22	0° $\underline{\Omega}$
	11878 Feb 26 10:05	30° \mathcal{R} \approx		11880 Sep 22 19:08	0° \mathcal{M}
direct	11878 Mar 10 14:58	27° \approx 00'59		11880 Oct 17 03:47	0° \mathcal{X}
greatest brilliancy	11878 Mar 21 13:05	29° \approx 12'39 -4.8m		11880 Nov 10 19:58	0° \mathcal{Z}
	11878 Mar 23 11:05	0° \mathcal{H}	desc. node	11880 Dec 02 10:42	25° \mathcal{Z} 50'18
morning max el	11878 Apr 29 14:04	28° \mathcal{H} 59'18 46°33'11		11880 Dec 05 23:10	0° \approx
	11878 Apr 30 14:20	0° \mathcal{Y}		11880 Dec 31 18:20	0° \mathcal{H}
	11878 May 28 11:30	0° \mathcal{B}		11881 Jan 27 16:02	0° \mathcal{Y}
desc. node	11878 Jun 18 00:47	23° \mathcal{B} 47'10	evening max el	11881 Feb 18 20:34	22° \mathcal{Y} 56'49 46°09'20
	11878 Jun 23 06:49	0° Π		11881 Feb 26 07:08	0° \mathcal{B}
	11878 Jul 18 05:07	0° Ω	asc. node	11881 Mar 25 11:12	20° \mathcal{B} 12'59
	11878 Aug 11 17:45	0° Ω	greatest brilliancy	11881 Mar 30 13:15	22° \mathcal{B} 22'37 -4.8m
	11878 Sep 05 02:29	0° \mathcal{M}	retrograde	11881 Apr 09 10:09	24° \mathcal{B} 11'33
	11878 Sep 29 09:56	0° $\underline{\Omega}$	evening set	11881 Apr 25 16:26	19° \mathcal{B} 01'54
asc. node	11878 Oct 08 18:20	11° $\underline{\Omega}$ 32'57	inferior conj	11881 Apr 30 04:25	16° \mathcal{B} 18'37 7°42'20
	11878 Oct 23 16:47	0° \mathcal{M}	minimum elong	11881 Apr 29 18:15	16° \mathcal{B} 34'22 7°40'03
morning set	11878 Oct 31 21:11	10° \mathcal{M} 06'53	min. Earth dist.	11881 Apr 30 03:53	16° \mathcal{B} 19'27 0.27507 AU
	11878 Nov 16 23:17	0° \mathcal{X}	morning rise	11881 May 03 19:59	14° \mathcal{B} 05'01
			direct	11881 May 21 01:43	8° \mathcal{B} 20'34
superior conj	11878 Dec 07 20:33	25° \mathcal{X} 48'30 1°25'27	greatest brilliancy	11881 May 30 23:35	10° \mathcal{B} 12'24 -4.9m
minimum elong	11878 Dec 07 22:52	25° \mathcal{X} 55'40 1°26'14		11881 Jun 28 22:21	0° Π
max. Earth dist.	11878 Dec 08 19:47	27° \mathcal{X} 00'15 1.73139 AU	morning max el	11881 Jul 10 15:07	11° Π 14'31 46°58'31
	11878 Dec 11 06:02	0° \mathcal{Z}	desc. node	11881 Jul 15 12:06	16° Π 13'20
	11879 Jan 04 13:53	0° \approx		11881 Jul 28 09:21	0° Ω

	11881 Aug 23 19:50	0°♈				11884 Mar 30 11:56	0°♊		
	11881 Sep 18 06:12	0°♍			asc. node	11884 Apr 21 20:55	24°♊38'25		
	11881 Oct 13 06:06	0°♌				11884 Apr 26 23:46	0°♋		
asc. node	11881 Nov 05 08:01	27°♌58'07			evening max el	11884 May 02 17:20	5°♋49'53	46°43'05	
	11881 Nov 07 00:06	0°♍				11884 May 30 19:32	0°♈		
	11881 Dec 01 13:48	0°♊			greatest brilliancy	11884 Jun 12 04:49	6°♈26'11	-4.9m	
	11881 Dec 26 00:19	0°♋			retrograde	11884 Jun 21 21:28	8°♈12'09		
morning set	11882 Jan 08 17:44	16°♋53'57			evening set	11884 Jul 08 11:34	2°♈53'51		
	11882 Jan 19 08:48	0°♌			inferior conj	11884 Jul 12 13:34	0°♈26'12	6°59'20	
	11882 Feb 12 16:04	0°♍			minimum elong	11884 Jul 13 00:43	0°♈09'05	6°56'13	
max. Earth dist.	11882 Feb 13 13:08	1°♍05'04	1.72926 AU		min. Earth dist.	11884 Jul 12 22:31	0°♈12'28	0.27056 AU	
						11884 Jul 13 06:38	30°♌♋		
superior conj	11882 Feb 14 23:16	2°♍50'33	0°23'54		morning rise	11884 Jul 17 13:50	27°♋26'40		
minimum elong	11882 Feb 15 04:39	3°♍07'11	0°24'04		direct	11884 Aug 02 06:45	22°♋39'06		
desc. node	11882 Feb 24 23:03	15°♍11'47			desc. node	11884 Aug 11 22:15	24°♋23'29		
	11882 Mar 08 22:05	0°♎			greatest brilliancy	11884 Aug 12 06:48	24°♋31'01	-4.9m	
evening rise	11882 Mar 25 10:48	20°♎29'41				11884 Aug 23 03:00	0°♈		
	11882 Apr 02 02:30	0°♏			morning max el	11884 Sep 21 05:44	24°♈30'03	46°28'59	
	11882 Apr 26 05:25	0°♊				11884 Sep 26 17:30	0°♍		
	11882 May 20 08:11	0°♋				11884 Oct 24 15:40	0°♌		
	11882 Jun 13 13:20	0°♈				11884 Nov 19 21:39	0°♍		
asc. node	11882 Jun 17 16:46	5°♈06'28			asc. node	11884 Dec 02 20:54	15°♍12'09		
	11882 Jul 08 00:24	0°♍				11884 Dec 15 08:19	0°♊		
	11882 Aug 01 22:42	0°♌				11885 Jan 09 07:07	0°♋		
	11882 Aug 27 18:50	0°♍				11885 Feb 02 22:14	0°♌		
	11882 Sep 24 17:56	0°♊				11885 Feb 27 08:18	0°♍		
evening max el	11882 Sep 26 23:06	2°♊11'49	46°11'24		morning set	11885 Mar 19 17:00	25°♍09'51		
desc. node	11882 Oct 07 15:49	12°♊14'15				11885 Mar 23 14:37	0°♎		
	11882 Nov 01 21:36	0°♋			desc. node	11885 Mar 24 12:55	1°♎09'11		
greatest brilliancy	11882 Nov 04 23:48	1°♋15'28	-4.8m			11885 Apr 16 17:34	0°♏		
retrograde	11882 Nov 15 10:40	3°♋14'15			max. Earth dist.	11885 Apr 25 00:09	10°♏19'47	1.71829 AU	
	11882 Nov 28 05:57	30°♌♊							
evening set	11882 Dec 03 19:25	26°♊53'41			superior conj	11885 Apr 28 08:30	14°♏30'48	-1°12'07	
inferior conj	11882 Dec 06 22:27	24°♊56'49	-8°42'01		minimum elong	11885 Apr 27 21:39	13°♏56'54	1°12'20	
minimum elong	11882 Dec 07 00:46	24°♊53'10	8°41'09			11885 May 10 17:34	0°♊		
min. Earth dist.	11882 Dec 06 19:40	25°♊01'12	0.29003 AU			11885 Jun 03 15:49	0°♋		
morning rise	11882 Dec 10 06:14	22°♊53'03			evening rise	11885 Jun 07 05:49	4°♋29'38		
direct	11882 Dec 28 09:28	16°♊43'31				11885 Jun 27 14:14	0°♈		
greatest brilliancy	11883 Jan 07 16:21	18°♊39'31	-4.7m		asc. node	11885 Jul 15 05:05	22°♈00'47		
	11883 Jan 26 22:18	0°♋				11885 Jul 21 14:55	0°♍		
asc. node	11883 Jan 28 17:27	1°♋24'29				11885 Aug 14 19:57	0°♌		
morning max el	11883 Feb 15 12:53	17°♋21'12	45°49'57			11885 Sep 08 08:04	0°♍		
	11883 Feb 27 23:52	0°♌				11885 Oct 03 08:06	0°♊		
	11883 Mar 27 04:09	0°♍				11885 Oct 29 05:23	0°♋		
	11883 Apr 21 19:03	0°♎			desc. node	11885 Nov 04 01:49	6°♋33'45		
	11883 May 16 15:32	0°♏				11885 Nov 25 21:21	0°♌		
desc. node	11883 May 20 14:21	4°♏49'30			evening max el	11885 Dec 06 22:38	10°♌59'52	45°50'46	
	11883 Jun 10 01:19	0°♊				11885 Dec 29 03:54	0°♍		
	11883 Jul 04 04:54	0°♋			greatest brilliancy	11886 Jan 15 02:27	9°♍18'29	-4.8m	
	11883 Jul 28 05:40	0°♈			retrograde	11886 Jan 24 19:21	11°♍02'01		
morning set	11883 Aug 19 05:40	27°♈28'52			evening set	11886 Feb 09 03:35	6°♍29'37		
	11883 Aug 21 06:06	0°♍			inferior conj	11886 Feb 15 01:09	2°♍57'20	-2°28'38	
asc. node	11883 Sep 10 06:13	24°♍57'02			minimum elong	11886 Feb 15 06:34	2°♍48'53	2°26'34	
	11883 Sep 14 07:30	0°♌			min. Earth dist.	11886 Feb 15 14:18	2°♍36'48	0.28290 AU	
						11886 Feb 19 21:11	30°♌♎		
superior conj	11883 Sep 27 01:56	15°♌53'22	0°39'24		morning rise	11886 Feb 21 08:55	29°♌09'22		
minimum elong	11883 Sep 26 17:39	15°♌27'37	0°39'11		asc. node	11886 Feb 25 03:25	27°♌16'35		
max. Earth dist.	11883 Sep 29 12:59	18°♌56'55	1.72361 AU		direct	11886 Mar 08 06:24	24°♌46'31		
	11883 Oct 08 10:24	0°♍			greatest brilliancy	11886 Mar 19 05:52	26°♌59'33	-4.8m	
	11883 Nov 01 15:22	0°♊				11886 Mar 25 14:33	0°♍		
evening rise	11883 Nov 03 11:24	2°♊16'07			morning max el	11886 Apr 27 05:20	26°♍42'54	46°31'40	
	11883 Nov 25 23:28	0°♋				11886 Apr 30 11:37	0°♎		
	11883 Dec 20 12:01	0°♌				11886 May 28 03:12	0°♏		
desc. node	11883 Dec 30 22:37	12°♌41'32			desc. node	11886 Jun 17 02:48	23°♏12'00		
	11884 Jan 14 05:55	0°♍				11886 Jun 22 20:26	0°♊		
	11884 Feb 08 05:46	0°♎				11886 Jul 17 17:42	0°♋		
	11884 Mar 04 13:25	0°♏				11886 Aug 11 05:43	0°♈		

	11886 Sep 04 14:01	0°♍	retrograde	11889 Apr 06 23:49	21°♌50'01	
	11886 Sep 28 21:08	0°♌	evening set	11889 Apr 23 02:05	16°♌46'29	
asc. node	11886 Oct 07 20:17	11°♌04'43	inferior conj	11889 Apr 27 18:09	13°♌56'58	7°29'04
	11886 Oct 23 03:44	0°♍	minimum elong	11889 Apr 27 07:40	14°♌13'13	7°26'38
morning set	11886 Oct 29 13:05	7°♍53'58	min. Earth dist.	11889 Apr 27 17:15	13°♌58'22	0.27517 AU
	11886 Nov 16 10:05	0°♎	morning rise	11889 May 01 13:11	11°♌38'02	
			direct	11889 May 18 16:09	5°♌58'56	
superior conj	11886 Dec 05 13:38	23°♎39'48 1°25'47	greatest brilliancy	11889 May 28 13:23	7°♌50'12	-4.9m
minimum elong	11886 Dec 05 15:13	23°♎44'42 1°26'35		11889 Jun 29 01:57	0°♍	
max. Earth dist.	11886 Dec 06 14:24	24°♎56'16 1.73129 AU	morning max el	11889 Jul 08 04:52	8°♍52'12	46°58'33
	11886 Dec 10 16:47	0°♏	desc. node	11889 Jul 14 13:58	15°♍25'01	
	11887 Jan 04 00:42	0°♐		11889 Jul 28 02:47	0°♑	
evening rise	11887 Jan 11 15:36	9°♐22'47		11889 Aug 23 10:08	0°♒	
desc. node	11887 Jan 27 11:20	28°♐49'42		11889 Sep 17 18:59	0°♓	
	11887 Jan 28 10:13	0°♑		11889 Oct 12 18:00	0°♌	
	11887 Feb 21 20:57	0°♒	asc. node	11889 Nov 04 09:57	27°♌29'22	
	11887 Mar 18 08:26	0°♓		11889 Nov 06 11:26	0°♍	
	11887 Apr 11 21:26	0°♌		11889 Dec 01 00:47	0°♎	
	11887 May 06 15:14	0°♍		11889 Dec 25 11:04	0°♏	
asc. node	11887 May 20 07:20	16°♍21'23	morning set	11890 Jan 06 10:50	14°♍45'58	
	11887 May 31 20:50	0°♎		11890 Jan 18 19:26	0°♏	
	11887 Jun 27 05:04	0°♏	max. Earth dist.	11890 Feb 11 05:59	28°♏56'07	1.72951 AU
evening max el	11887 Jul 15 06:58	19°♏05'30 46°45'03		11890 Feb 12 02:41	0°♑	
	11887 Jul 26 15:56	0°♐				
greatest brilliancy	11887 Aug 23 15:48	19°♐25'16 -4.8m	superior conj	11890 Feb 12 14:52	0°♑37'40	0°27'12
retrograde	11887 Sep 03 15:18	21°♐40'11	minimum elong	11890 Feb 12 20:54	0°♑56'16	0°27'22
desc. node	11887 Sep 09 08:05	21°♐00'20	desc. node	11890 Feb 24 00:52	14°♑44'29	
evening set	11887 Sep 18 13:41	17°♐17'25		11890 Mar 08 08:47	0°♒	
min. Earth dist.	11887 Sep 23 23:30	14°♐06'28 0.27733 AU	evening rise	11890 Mar 23 01:16	18°♒12'09	
inferior conj	11887 Sep 24 17:57	13°♐38'05 -3°47'11		11890 Apr 01 13:20	0°♓	
minimum elong	11887 Sep 24 09:57	13°♐50'24 3°44'48		11890 Apr 25 16:27	0°♌	
morning rise	11887 Sep 30 06:49	10°♐20'57		11890 May 19 19:28	0°♍	
direct	11887 Oct 15 17:01	5°♐45'20		11890 Jun 13 00:58	0°♎	
greatest brilliancy	11887 Oct 25 07:30	7°♐26'15 -4.8m	asc. node	11890 Jun 16 18:38	4°♐36'11	
	11887 Nov 27 10:03	0°♑		11890 Jul 07 12:35	0°♏	
morning max el	11887 Dec 03 15:50	5°♑50'19 45°48'18		11890 Aug 01 11:55	0°♐	
	11887 Dec 27 04:26	0°♒		11890 Aug 27 10:11	0°♑	
asc. node	11887 Dec 31 08:44	4°♒32'39	evening max el	11890 Sep 24 14:12	29°♑57'24	46°12'24
	11888 Jan 22 23:21	0°♓		11890 Sep 24 15:15	0°♒	
	11888 Feb 17 13:06	0°♌	desc. node	11890 Oct 06 17:52	11°♒17'49	
	11888 Mar 13 11:23	0°♍	greatest brilliancy	11890 Nov 02 15:31	29°♒04'47	-4.8m
	11888 Apr 07 00:12	0°♎		11890 Nov 05 12:51	0°♓	
desc. node	11888 Apr 21 02:54	17°♒25'09	retrograde	11890 Nov 13 02:09	1°♓03'34	
	11888 May 01 06:23	0°♏		11890 Nov 20 09:20	30°♒♎	
	11888 May 25 07:42	0°♐	evening set	11890 Dec 01 11:32	24°♒43'12	
morning set	11888 Jun 02 06:15	9°♐56'25	inferior conj	11890 Dec 04 14:28	22°♒46'23	-8°43'55
	11888 Jun 18 06:01	0°♑	minimum elong	11890 Dec 04 15:59	22°♒43'59	8°43'07
			min. Earth dist.	11890 Dec 04 10:43	22°♒52'17	0.28992 AU
superior conj	11888 Jul 12 08:10	0°♒14'52 -1°05'44	morning rise	11890 Dec 07 20:31	20°♒45'04	
minimum elong	11888 Jul 12 19:50	0°♒51'30 1°06'05	direct	11890 Dec 26 01:19	14°♒33'36	
	11888 Jul 12 03:25	0°♓	greatest brilliancy	11891 Jan 05 07:08	16°♒28'13	-4.7m
max. Earth dist.	11888 Jul 13 11:02	1°♓39'11 1.71418 AU		11891 Jan 27 08:21	0°♓	
	11888 Aug 05 01:45	0°♏	asc. node	11891 Jan 27 19:20	0°♓22'16	
asc. node	11888 Aug 11 18:19	8°♏22'11	morning max el	11891 Feb 13 02:59	15°♓05'28	45°49'00
evening rise	11888 Aug 21 07:20	20°♏17'21		11891 Feb 27 17:41	0°♌	
	11888 Aug 29 02:17	0°♐		11891 Mar 26 18:16	0°♍	
	11888 Sep 22 06:09	0°♑		11891 Apr 21 07:38	0°♎	
	11888 Oct 16 15:03	0°♒		11891 May 16 03:21	0°♏	
	11888 Nov 10 07:39	0°♓	desc. node	11891 May 19 16:12	4°♏19'20	
desc. node	11888 Dec 01 12:42	25°♓19'48		11891 Jun 09 12:42	0°♐	
	11888 Dec 05 11:39	0°♌		11891 Jul 03 15:59	0°♑	
	11888 Dec 31 08:16	0°♍		11891 Jul 27 16:32	0°♒	
	11889 Jan 27 09:10	0°♎	morning set	11891 Aug 16 19:24	25°♓08'30	
evening max el	11889 Feb 16 11:52	20°♒41'25 46°08'10		11891 Aug 20 16:47	0°♏	
	11889 Feb 26 10:30	0°♏	asc. node	11891 Sep 09 08:10	24°♏30'06	
asc. node	11889 Mar 24 13:18	18°♏35'20		11891 Sep 13 18:04	0°♐	
greatest brilliancy	11889 Mar 28 02:17	20°♏01'01 -4.8m				

superior conj	11891 Sep 24 17:06	13°♌38'34	0°36'16	morning rise	11894 Feb 18 23:45	26°♏57'13	
minimum elong	11891 Sep 24 09:19	13°♌14'22	0°36'00	asc. node	11894 Feb 24 05:32	24°♏27'36	
max. Earth dist.	11891 Sep 27 04:37	16°♌43'37	1.72323 AU	direct	11894 Mar 05 22:12	22°♏32'49	
	11891 Oct 07 20:55	0°♍		greatest brilliancy	11894 Mar 16 22:05	24°♏46'38	-4.8m
evening rise	11891 Nov 01 04:02	0°♌06'35			11894 Mar 26 23:50	0°♏	
	11891 Nov 01 01:55	0°♌		morning max el	11894 Apr 24 21:19	24°♏29'19	46°30'10
	11891 Nov 25 10:08	0°♌			11894 Apr 30 07:50	0°♏	
	11891 Dec 19 22:56	0°♏			11894 May 27 18:17	0°♏	
desc. node	11891 Dec 30 00:25	12°♏13'21		desc. node	11894 Jun 16 04:41	22°♏37'52	
	11892 Jan 13 17:17	0°♏			11894 Jun 22 09:32	0°♏	
	11892 Feb 07 17:50	0°♏			11894 Jul 17 05:47	0°♏	
	11892 Mar 04 02:41	0°♏			11894 Aug 10 17:12	0°♏	
	11892 Mar 30 03:24	0°♏			11894 Sep 04 01:07	0°♏	
asc. node	11892 Apr 20 22:58	23°♏52'49			11894 Sep 28 07:55	0°♏	
	11892 Apr 26 20:43	0°♏		asc. node	11894 Oct 06 22:11	10°♏37'33	
evening max el	11892 Apr 30 05:14	3°♏23'12	46°42'10		11894 Oct 22 14:18	0°♏	
	11892 Jun 01 05:12	0°♏		morning set	11894 Oct 27 05:04	5°♏42'28	
greatest brilliancy	11892 Jun 09 19:04	4°♏02'56	-4.9m		11894 Nov 15 20:30	0°♏	
retrograde	11892 Jun 19 09:56	5°♏47'51					
evening set	11892 Jul 06 04:05	0°♏24'11		superior conj	11894 Dec 03 06:50	21°♏32'39	1°26'00
	11892 Jul 06 20:36	30°♏		minimum elong	11894 Dec 03 07:42	21°♏35'18	1°26'48
inferior conj	11892 Jul 10 02:28	28°♏01'59	7°14'46	max. Earth dist.	11894 Dec 04 10:42	22°♏58'44	1.73115 AU
minimum elong	11892 Jul 10 13:27	27°♏45'06	7°11'49		11894 Dec 10 03:09	0°♏	
min. Earth dist.	11892 Jul 10 12:09	27°♏47'06	0.27067 AU		11895 Jan 03 11:07	0°♏	
morning rise	11892 Jul 14 22:44	25°♏07'59		evening rise	11895 Jan 09 08:08	7°♏13'55	
direct	11892 Jul 30 19:02	20°♏14'19		desc. node	11895 Jan 26 13:15	28°♏23'06	
greatest brilliancy	11892 Aug 09 20:24	22°♏07'17	-4.9m		11895 Jan 27 20:49	0°♏	
desc. node	11892 Aug 11 00:14	22°♏33'29			11895 Feb 21 07:49	0°♏	
	11892 Aug 24 06:08	0°♏			11895 Mar 17 19:40	0°♏	
morning max el	11892 Sep 18 18:56	22°♏08'05	46°30'46		11895 Apr 11 09:14	0°♏	
	11892 Sep 26 13:57	0°♏			11895 May 06 03:55	0°♏	
	11892 Oct 24 06:48	0°♏		asc. node	11895 May 19 09:12	15°♏47'16	
	11892 Nov 19 10:35	0°♏			11895 May 31 11:01	0°♏	
asc. node	11892 Dec 01 22:47	14°♏41'30			11895 Jun 26 22:32	0°♏	
	11892 Dec 14 20:07	0°♏		evening max el	11895 Jul 12 22:15	16°♏48'14	46°45'51
	11893 Jan 08 18:18	0°♏			11895 Jul 26 20:46	0°♏	
	11893 Feb 02 09:04	0°♏		greatest brilliancy	11895 Aug 21 06:18	17°♏06'25	-4.8m
	11893 Feb 26 18:58	0°♏		retrograde	11895 Sep 01 06:30	19°♏21'34	
morning set	11893 Mar 17 07:08	22°♏52'07		desc. node	11895 Sep 08 10:12	18°♏18'42	
	11893 Mar 23 01:12	0°♏		evening set	11895 Sep 16 02:36	15°♏01'04	
desc. node	11893 Mar 23 14:55	0°♏42'31		min. Earth dist.	11895 Sep 21 13:45	11°♏48'10	0.27680 AU
	11893 Apr 16 04:08	0°♏		inferior conj	11895 Sep 22 08:01	11°♏20'06	-3°26'41
max. Earth dist.	11893 Apr 22 13:45	7°♏59'19	1.71869 AU	minimum elong	11895 Sep 22 00:35	11°♏31'30	3°24'26
				morning rise	11895 Sep 27 23:18	8°♏00'03	
superior conj	11893 Apr 25 20:58	12°♏06'46	-1°09'54	direct	11895 Oct 13 07:16	3°♏28'09	
minimum elong	11893 Apr 25 09:52	11°♏32'04	1°10'03	greatest brilliancy	11895 Oct 22 20:46	5°♏08'44	-4.8m
	11893 May 10 04:10	0°♏			11895 Nov 27 10:59	0°♏	
	11893 Jun 03 02:30	0°♏		morning max el	11895 Dec 01 06:53	3°♏37'19	45°49'11
evening rise	11893 Jun 04 17:08	2°♏01'08			11895 Dec 26 20:31	0°♏	
	11893 Jun 27 01:02	0°♏		asc. node	11895 Dec 30 10:36	3°♏55'15	
asc. node	11893 Jul 14 06:56	21°♏32'29			11896 Jan 22 12:37	0°♏	
	11893 Jul 21 01:54	0°♏			11896 Feb 17 01:05	0°♏	
	11893 Aug 14 07:12	0°♏			11896 Mar 12 22:44	0°♏	
	11893 Sep 07 19:45	0°♏			11896 Apr 06 11:13	0°♏	
	11893 Oct 02 20:37	0°♏		desc. node	11896 Apr 20 04:45	16°♏57'11	
	11893 Oct 28 19:39	0°♏			11896 Apr 30 17:13	0°♏	
desc. node	11893 Nov 03 03:49	5°♏58'02			11896 May 24 18:26	0°♏	
	11893 Nov 25 16:06	0°♏		morning set	11896 May 30 17:26	7°♏27'32	
evening max el	11893 Dec 04 13:18	8°♏47'08	45°50'54		11896 Jun 17 16:42	0°♏	
	11893 Dec 29 23:10	0°♏					
greatest brilliancy	11894 Jan 12 16:49	7°♏05'29	-4.7m	superior conj	11896 Jul 09 19:45	27°♏47'10	-1°08'15
retrograde	11894 Jan 22 10:49	8°♏49'48		minimum elong	11896 Jul 10 07:17	28°♏23'22	1°08'38
evening set	11894 Feb 06 20:46	4°♏13'56		max. Earth dist.	11896 Jul 10 21:50	29°♏09'02	1.71401 AU
inferior conj	11894 Feb 12 16:28	0°♏44'14	-2°48'56		11896 Jul 11 14:04	0°♏	
minimum elong	11894 Feb 12 22:33	0°♏34'44	2°46'42		11896 Aug 04 12:23	0°♏	
min. Earth dist.	11894 Feb 13 05:47	0°♏23'26	0.28334 AU	asc. node	11896 Aug 10 20:14	7°♏54'56	
	11894 Feb 13 20:49	30°♏		evening rise	11896 Aug 18 20:27	17°♏55'19	




















































































































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	11896 Sep 21 16:56	0°♍		desc. node	11899 May 18 18:06	3°♄49'17		
	11896 Oct 16 02:05	0°♊			11899 Jun 09 00:03	0°♈		
	11896 Nov 09 19:09	0°♋			11899 Jul 03 03:05	0°♎		
desc. node	11896 Nov 30 14:33	24°♋49'26			11899 Jul 27 03:27	0°♏		
	11896 Dec 04 23:57	0°♌		morning set	11899 Aug 14 08:43	22°♏46'21		
	11896 Dec 30 22:06	0°♍			11899 Aug 20 03:35	0°♐		
	11897 Jan 27 02:22	0°♎		asc. node	11899 Sep 08 10:04	24°♐02'33		
evening max el	11897 Feb 14 02:27	18°♎25'08	46°06'57		11899 Sep 13 04:47	0°♑		
	11897 Feb 26 15:17	0°♏						
asc. node	11897 Mar 23 15:16	16°♏54'34		superior conj	11899 Sep 22 07:48	11°♑21'48	0°33'00	
greatest brilliancy	11897 Mar 25 15:48	17°♏40'48	-4.8m	minimum elong	11899 Sep 22 00:34	10°♑59'18	0°32'44	
retrograde	11897 Apr 04 12:57	19°♏29'15		max. Earth dist.	11899 Sep 24 17:14	14°♑20'24	1.72284 AU	
evening set	11897 Apr 20 11:52	14°♏31'37			11899 Oct 07 07:35	0°♒		
inferior conj	11897 Apr 25 07:54	11°♏36'08	7°15'06	evening rise	11899 Oct 29 20:19	27°♒55'34		
minimum elong	11897 Apr 24 21:11	11°♏52'46	7°12'31		11899 Oct 31 12:35	0°♊		
min. Earth dist.	11897 Apr 25 07:01	11°♏37'30	0.27532 AU		11899 Nov 24 20:55	0°♋		
morning rise	11897 Apr 29 06:25	9°♏11'45			11899 Dec 19 10:00	0°♌		
direct	11897 May 16 06:07	3°♏37'54		desc. node	11899 Dec 29 02:23	11°♌45'15		
greatest brilliancy	11897 May 26 03:50	5°♏29'08	-4.9m		11900 Jan 13 04:50	0°♍		
	11897 Jun 29 03:56	0°♈			11900 Feb 07 06:09	0°♎		
morning max el	11897 Jul 05 17:50	6°♈27'55	46°58'27		11900 Mar 04 16:13	0°♏		
desc. node	11897 Jul 13 15:59	14°♈38'00			11900 Mar 30 19:15	0°♈		
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	11897 Aug 23 00:13	0°♏			11900 Apr 27 18:34	0°♎		
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	11897 Nov 05 22:37	0°♒		retrograde	11900 Jun 17 22:58	3°♏23'44		
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	11898 Jan 18 05:58	0°♌		minimum elong	11900 Jul 09 02:10	25°♎21'07	7°26'33	
max. Earth dist.	11898 Feb 08 22:07	26°♌45'14	1.72973 AU	min. Earth dist.	11900 Jul 09 01:27	25°♎22'13	0.27082 AU	
				morning rise	11900 Jul 13 07:36	22°♎49'34		
superior conj	11898 Feb 10 06:45	28°♌26'01	0°30'25	direct	11900 Jul 29 07:43	17°♎49'17		
minimum elong	11898 Feb 10 13:23	28°♌46'28	0°30'36	greatest brilliancy	11900 Aug 08 09:39	19°♎43'00	-4.9m	
	11898 Feb 11 13:11	0°♍		desc. node	11900 Aug 11 02:21	20°♎47'41		
desc. node	11898 Feb 23 02:52	14°♍17'59			11900 Aug 26 02:10	0°♏		
	11898 Mar 07 19:22	0°♎		morning max el	11900 Sep 17 09:10	19°♏47'55	46°32'21	
evening rise	11898 Mar 20 16:00	15°♎55'55			11900 Sep 27 10:01	0°♐		
	11898 Apr 01 00:04	0°♏			11900 Oct 24 22:01	0°♑		
	11898 Apr 25 03:24	0°♈			11900 Nov 19 23:43	0°♒		
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	11898 Aug 27 01:51	0°♒		morning set	11901 Mar 15 21:24	20°♍34'13		
evening max el	11898 Sep 22 04:20	27°♒40'19	46°13'37	desc. node	11901 Mar 23 16:42	0°♎14'30		
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desc. node	11898 Oct 05 19:50	10°♊19'45			11901 Apr 16 14:57	0°♏		
greatest brilliancy	11898 Oct 31 07:11	26°♊53'47	-4.8m	max. Earth dist.	11901 Apr 21 04:17	5°♏41'01	1.71907 AU	
retrograde	11898 Nov 10 17:35	28°♊52'51						
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inferior conj	11898 Dec 02 06:27	20°♊35'46	-8°45'11	minimum elong	11901 Apr 23 22:18	9°♏07'09	1°07'38	
minimum elong	11898 Dec 02 07:09	20°♊34'40	8°44'23		11901 May 10 15:00	0°♈		
min. Earth dist.	11898 Dec 02 01:51	20°♊42'59	0.28979 AU	evening rise	11901 Jun 03 04:45	29°♈32'56		
morning rise	11898 Dec 05 11:05	18°♊36'32			11901 Jun 03 13:23	0°♎		
direct	11898 Dec 23 16:40	12°♊23'21			11901 Jun 27 12:03	0°♏		
greatest brilliancy	11899 Jan 02 22:19	14°♊17'17	-4.7m	asc. node	11901 Jul 14 08:56	21°♏04'03		
asc. node	11899 Jan 26 21:28	29°♊21'57			11901 Jul 21 13:05	0°♐		
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morning max el	11899 Feb 10 17:07	12°♋49'41	45°48'13		11901 Sep 08 07:44	0°♒		
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	11899 Mar 26 08:15	0°♍			11901 Oct 29 10:27	0°♋		
	11899 Apr 20 20:09	0°♎		desc. node	11901 Nov 03 05:42	5°♋20'42		

	11901 Nov 26 11:50	0°≈		morning set	11904 May 29 04:33	4°Ⅱ57'35	
evening max el	11901 Dec 03 04:59	6°≈35'51 45°51'09			11904 Jun 18 03:42	0°☾	
	11902 Jan 01 02:15	0°✕					
greatest brilliancy	11902 Jan 11 07:14	4°✕51'56 -4.7m		superior conj	11904 Jul 08 07:26	25°☾18'41 -1°10'38	
retrograde	11902 Jan 21 02:25	6°✕36'50		minimum elong	11904 Jul 08 18:43	25°☾54'06 1°11'03	
evening set	11902 Feb 05 14:13	1°✕57'39		max. Earth dist.	11904 Jul 09 05:47	26°☾28'52 1.71385 AU	
	11902 Feb 08 22:10	30°≈			11904 Jul 12 01:04	0°♊	
inferior conj	11902 Feb 11 07:51	28°≈30'31 -3°08'55			11904 Aug 04 23:21	0°♎	
minimum elong	11902 Feb 11 14:34	28°≈20'02 3°06'30		asc. node	11904 Aug 10 22:08	7°♎26'30	
min. Earth dist.	11902 Feb 11 21:04	28°≈09'53 0.28374 AU		evening rise	11904 Aug 17 09:33	15°♎32'03	
morning rise	11902 Feb 17 14:28	24°≈44'40			11904 Aug 28 23:56	0°♊	
asc. node	11902 Feb 24 07:30	21°≈42'51			11904 Sep 22 04:02	0°♌	
direct	11902 Mar 04 14:27	20°≈18'46			11904 Oct 16 13:25	0°♈	
greatest brilliancy	11902 Mar 15 13:42	22°≈32'24 -4.8m			11904 Nov 10 06:57	0°♊	
	11902 Mar 28 23:51	0°✕		desc. node	11904 Nov 30 16:33	24°♊18'39	
morning max el	11902 Apr 23 13:29	22°✕15'28 46°28'32			11904 Dec 05 12:36	0°≈	
	11902 May 01 03:44	0°♑			11904 Dec 31 12:24	0°✕	
	11902 May 28 09:29	0°♄			11905 Jan 27 20:21	0°♑	
desc. node	11902 Jun 16 06:38	22°♄03'11		evening max el	11905 Feb 12 16:23	16°♑06'17 46°05'45	
	11902 Jun 22 22:50	0°♊			11905 Feb 27 22:43	0°♄	
	11902 Jul 17 18:06	0°☾		asc. node	11905 Mar 23 17:12	15°♄09'01	
	11902 Aug 11 04:56	0°♊		greatest brilliancy	11905 Mar 24 05:54	15°♄20'24 -4.8m	
	11902 Sep 04 12:26	0°♎		retrograde	11905 Apr 03 02:00	17°♄08'02	
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asc. node	11902 Oct 06 23:57	10°♊09'06		inferior conj	11905 Apr 23 21:48	9°♄14'52 7°00'20	
	11902 Oct 23 01:07	0°♌		minimum elong	11905 Apr 23 10:57	9°♄31'46 6°57'38	
morning set	11902 Oct 25 21:10	3°♌30'25		min. Earth dist.	11905 Apr 23 21:18	9°♄15'39 0.27547 AU	
	11902 Nov 16 07:13	0°♈		morning rise	11905 Apr 27 23:48	6°♄45'06	
				direct	11905 May 14 19:41	1°♄16'14	
superior conj	11902 Dec 02 00:00	19°♈24'18 1°26'06		greatest brilliancy	11905 May 24 19:02	3°♄08'19 -4.9m	
minimum elong	11902 Dec 02 00:06	19°♈24'36 1°26'53			11905 Jun 30 04:53	0°♊	
max. Earth dist.	11902 Dec 03 07:00	21°♈00'04 1.73102 AU		morning max el	11905 Jul 04 06:28	4°♊02'00 46°58'16	
	11902 Dec 10 13:51	0°♊		desc. node	11905 Jul 13 18:02	13°♊51'02	
	11903 Jan 03 21:54	0°≈			11905 Jul 28 12:47	0°☾	
evening rise	11903 Jan 08 00:32	5°≈03'27			11905 Aug 23 14:26	0°♊	
desc. node	11903 Jan 26 15:10	27°≈55'28			11905 Sep 17 20:24	0°♎	
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	11903 Feb 21 19:01	0°♑		asc. node	11905 Nov 03 13:42	26°♊31'45	
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inferior conj	11903 Sep 20 22:10	9°♊01'39 -3°05'49			11906 Apr 01 11:05	0°♄	
minimum elong	11903 Sep 20 15:24	9°♊12'03 3°03'45			11906 Apr 25 14:37	0°♊	
morning rise	11903 Sep 26 15:43	5°♊38'38			11906 May 19 18:11	0°☾	
direct	11903 Oct 11 21:37	1°♊10'40			11906 Jun 13 00:30	0°♊	
greatest brilliancy	11903 Oct 21 10:06	2°♊50'36 -4.8m		asc. node	11906 Jun 15 22:32	3°♊35'20	
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morning max el	11903 Nov 29 21:13	1°♌21'42 45°49'59			11906 Aug 01 15:05	0°♊	
	11903 Dec 27 12:40	0°♈			11906 Aug 27 18:04	0°♌	
asc. node	11903 Dec 30 12:39	3°♈17'45		evening max el	11906 Sep 20 18:19	25°♌22'04 46°14'54	
	11904 Jan 23 02:09	0°♊			11906 Sep 25 13:01	0°♈	
	11904 Feb 17 13:24	0°≈		desc. node	11906 Oct 05 21:49	9°♈19'38	
	11904 Mar 13 10:24	0°✕		greatest brilliancy	11906 Oct 29 22:34	24°♈41'44 -4.8m	
	11904 Apr 06 22:31	0°♑		retrograde	11906 Nov 09 09:26	26°♈41'47	
desc. node	11904 Apr 20 06:34	16°♑28'06		evening set	11906 Nov 27 18:38	20°♈22'41	
	11904 May 01 04:20	0°♄		inferior conj	11906 Nov 30 22:26	18°♈24'46 -8°45'34	
	11904 May 25 05:28	0°♊		minimum elong	11906 Nov 30 22:20	18°♈24'56 8°44'48	

min. Earth dist.	11906 Nov 30 16:58	18° ♊ 33'23	0.28962 AU	evening rise	11909 May 31 16:18	27° ♊ 04'38	
morning rise	11906 Dec 04 02:05	16° ♊ 27'09			11909 Jun 03 00:15	0° ♋	
direct	11906 Dec 22 07:46	10° ♊ 12'41			11909 Jun 26 23:03	0° ♌	
greatest brilliancy	11907 Jan 01 13:35	12° ♊ 06'21	-4.7m	asc. node	11909 Jul 13 10:45	20° ♌ 35'06	
asc. node	11907 Jan 26 23:23	28° ♊ 22'28			11909 Jul 21 00:17	0° ♍	
	11907 Jan 28 20:50	0° ♎			11909 Aug 14 06:09	0° ♏	
morning max el	11907 Feb 09 07:57	10° ♎ 35'31	45°47'28		11909 Sep 07 19:42	0° ♐	
	11907 Feb 28 04:14	0° ♑			11909 Oct 02 22:26	0° ♊	
	11907 Mar 26 22:12	0° ♋			11909 Oct 29 01:23	0° ♌	
	11907 Apr 21 08:46	0° ♍		desc. node	11909 Nov 02 07:45	4° ♎ 43'41	
	11907 May 16 03:04	0° ♏			11909 Nov 26 08:08	0° ♐	
desc. node	11907 May 18 20:04	3° ♏ 19'01		evening max el	11909 Nov 30 21:08	4° ♑ 25'58	45°51'24
	11907 Jun 09 11:34	0° ♊			11910 Jan 02 16:52	0° ♋	
	11907 Jul 03 14:18	0° ♌		greatest brilliancy	11910 Jan 08 22:05	2° ♋ 39'22	-4.7m
	11907 Jul 27 14:29	0° ♍		retrograde	11910 Jan 18 17:49	4° ♋ 24'14	
morning set	11907 Aug 12 21:51	20° ♍ 23'12			11910 Feb 02 18:49	30° ♌	
	11907 Aug 20 14:30	0° ♍		evening set	11910 Feb 03 07:50	29° ♌ 41'55	
asc. node	11907 Sep 08 11:49	23° ♍ 34'11		inferior conj	11910 Feb 08 23:16	26° ♌ 17'27	-3°28'37
	11907 Sep 13 15:37	0° ♎		minimum elong	11910 Feb 09 06:34	26° ♌ 06'02	3°26'01
				min. Earth dist.	11910 Feb 09 12:24	25° ♌ 56'55	0.28409 AU
superior conj	11907 Sep 20 22:20	9° ♎ 04'05	0°29'39	morning rise	11910 Feb 15 04:56	22° ♌ 32'51	
minimum elong	11907 Sep 20 15:43	8° ♎ 43'27	0°29'24	asc. node	11910 Feb 23 09:24	19° ♌ 03'29	
max. Earth dist.	11907 Sep 23 05:29	11° ♎ 55'40	1.72249 AU	direct	11910 Mar 02 06:42	18° ♌ 05'36	
	11907 Oct 07 18:23	0° ♏		greatest brilliancy	11910 Mar 13 04:50	20° ♌ 18'21	-4.8m
evening rise	11907 Oct 28 12:38	25° ♏ 44'13			11910 Mar 29 17:05	0° ♊	
	11907 Oct 31 23:23	0° ♊		morning max el	11910 Apr 21 05:01	20° ♊ 01'01	46°26'54
	11907 Nov 25 07:50	0° ♋			11910 Apr 30 22:42	0° ♍	
	11907 Dec 19 21:10	0° ♌			11910 May 28 00:10	0° ♏	
desc. node	11907 Dec 29 04:22	11° ♌ 17'01		desc. node	11910 Jun 15 08:37	21° ♏ 29'31	
	11908 Jan 13 16:27	0° ♊			11910 Jun 22 11:48	0° ♊	
	11908 Feb 07 18:31	0° ♍			11910 Jul 17 06:11	0° ♌	
	11908 Mar 04 05:52	0° ♏			11910 Aug 10 16:29	0° ♍	
	11908 Mar 30 11:26	0° ♊			11910 Sep 03 23:36	0° ♍	
asc. node	11908 Apr 20 02:53	22° ♊ 17'59			11910 Sep 28 05:48	0° ♎	
evening max el	11908 Apr 26 06:44	28° ♊ 33'48	46°40'25	asc. node	11910 Oct 06 01:55	9° ♎ 41'48	
	11908 Apr 27 17:29	0° ♋			11910 Oct 22 11:46	0° ♏	
greatest brilliancy	11908 Jun 05 21:32	29° ♋ 13'21	-4.9m	morning set	11910 Oct 23 12:51	1° ♏ 17'35	
	11908 Jun 08 09:58	0° ♌			11910 Nov 15 17:44	0° ♊	
retrograde	11908 Jun 15 12:16	0° ♌ 58'28					
	11908 Jun 22 09:29	30° ♌		superior conj	11910 Nov 29 16:51	17° ♊ 15'38	1°26'04
evening set	11908 Jul 02 12:59	25° ♋ 23'22		minimum elong	11910 Nov 29 16:11	17° ♊ 13'34	1°26'51
inferior conj	11908 Jul 06 04:08	23° ♋ 11'59	7°43'07	max. Earth dist.	11910 Dec 01 02:49	19° ♊ 00'32	1.73085 AU
minimum elong	11908 Jul 06 14:35	22° ♋ 55'59	7°40'29		11910 Dec 10 00:22	0° ♎	
min. Earth dist.	11908 Jul 06 14:09	22° ♋ 56'39	0.27098 AU		11911 Jan 03 08:29	0° ♏	
morning rise	11908 Jul 10 16:06	20° ♋ 30'14		evening rise	11911 Jan 05 16:43	2° ♏ 53'01	
direct	11908 Jul 26 20:40	15° ♋ 23'14		desc. node	11911 Jan 25 16:58	27° ♏ 28'05	
greatest brilliancy	11908 Aug 05 22:05	17° ♋ 17'02	-4.9m		11911 Jan 27 18:29	0° ♊	
desc. node	11908 Aug 10 04:13	19° ♋ 04'54			11911 Feb 21 06:00	0° ♍	
	11908 Aug 26 17:19	0° ♌			11911 Mar 17 18:37	0° ♏	
morning max el	11908 Sep 14 23:56	17° ♌ 28'51	46°33'55		11911 Apr 11 09:21	0° ♊	
	11908 Sep 27 05:33	0° ♍			11911 May 06 05:54	0° ♋	
	11908 Oct 24 13:02	0° ♎		asc. node	11911 May 18 13:12	14° ♋ 38'15	
	11908 Nov 19 12:45	0° ♏			11911 May 31 16:18	0° ♍	
asc. node	11908 Dec 01 02:39	13° ♏ 39'09			11911 Jun 27 11:12	0° ♍	
	11908 Dec 14 20:04	0° ♊		evening max el	11911 Jul 09 04:41	12° ♍ 11'52	46°46'56
	11909 Jan 08 16:59	0° ♎			11911 Jul 28 14:04	0° ♎	
	11909 Feb 02 07:03	0° ♏		greatest brilliancy	11911 Aug 17 13:11	12° ♎ 29'27	-4.9m
	11909 Feb 26 16:36	0° ♊		retrograde	11911 Aug 28 11:46	14° ♎ 42'16	
morning set	11909 Mar 13 12:06	18° ♋ 18'03		desc. node	11911 Sep 07 14:06	12° ♎ 38'34	
desc. node	11909 Mar 22 18:33	29° ♋ 47'02		evening set	11911 Sep 12 05:04	10° ♎ 26'20	
	11909 Mar 22 22:43	0° ♍		min. Earth dist.	11911 Sep 17 19:09	7° ♎ 08'53	0.27574 AU
	11909 Apr 16 01:39	0° ♏		inferior conj	11911 Sep 18 12:03	6° ♎ 42'52	-2°44'17
max. Earth dist.	11909 Apr 18 18:44	3° ♏ 22'56	1.71948 AU	minimum elong	11911 Sep 18 05:59	6° ♎ 52'13	2°42'27
				morning rise	11911 Sep 24 07:41	3° ♎ 16'53	
superior conj	11909 Apr 21 22:23	7° ♏ 18'58	-1°05'06		11911 Oct 01 22:50	30° ♏	
minimum elong	11909 Apr 21 11:00	6° ♏ 43'27	1°05'08	direct	11911 Oct 09 11:14	28° ♏ 52'47	
	11909 May 10 01:46	0° ♊			11911 Oct 17 05:32	0° ♌	

greatest brilliancy	11911 Oct 18 23:44	0° Ω 32'30	-4.8m		11914 May 19 05:22	0° \mathfrak{D}	
morning max el	11911 Nov 27 10:28	29° Ω 03'51	45°50'54		11914 Jun 12 12:04	0° Ω	
	11911 Nov 28 09:45	0° \mathbb{L}		asc. node	11914 Jun 15 00:23	3° Ω 05'17	
	11911 Dec 27 04:16	0° \mathfrak{A}			11914 Jul 07 01:40	0° \mathbb{P}	
asc. node	11911 Dec 29 14:36	2° \mathfrak{A} 41'01			11914 Aug 01 04:28	0° Ω	
	11912 Jan 22 15:15	0° \mathfrak{Z}			11914 Aug 27 10:01	0° \mathbb{L}	
	11912 Feb 17 01:21	0° \approx		evening max el	11914 Sep 18 08:53	23° \mathbb{L} 06'43	46°16'09
	11912 Mar 12 21:43	0° \mathfrak{H}			11914 Sep 25 13:02	0° \mathfrak{A}	
	11912 Apr 06 09:29	0° \mathbb{Y}		desc. node	11914 Oct 04 23:51	8° \mathfrak{A} 19'34	
desc. node	11912 Apr 19 08:32	16° \mathbb{Y} 00'37		greatest brilliancy	11914 Oct 27 13:12	22° \mathfrak{A} 29'58	-4.8m
	11912 Apr 30 15:05	0° \mathfrak{B}		retrograde	11914 Nov 07 01:36	24° \mathfrak{A} 31'47	
	11912 May 24 16:06	0° \mathbb{I}		evening set	11914 Nov 25 09:32	18° \mathfrak{A} 13'55	
morning set	11912 May 26 16:01	2° \mathbb{I} 29'56		inferior conj	11914 Nov 28 14:24	16° \mathfrak{A} 14'38	-8°45'04
	11912 Jun 17 14:17	0° \mathfrak{D}		minimum elong	11914 Nov 28 13:29	16° \mathfrak{A} 16'04	8°44'18
				min. Earth dist.	11914 Nov 28 07:47	16° \mathfrak{A} 25'00	0.28948 AU
superior conj	11912 Jul 05 19:28	22° \mathfrak{D} 52'42	-1°12'50	morning rise	11914 Dec 01 17:29	14° \mathfrak{A} 18'04	
minimum elong	11912 Jul 06 06:24	23° \mathfrak{D} 27'03	1°13'19	direct	11914 Dec 19 23:12	8° \mathfrak{A} 02'45	
max. Earth dist.	11912 Jul 06 12:31	23° \mathfrak{D} 46'13	1.71374 AU	greatest brilliancy	11914 Dec 30 04:44	9° \mathfrak{A} 56'12	-4.7m
	11912 Jul 11 11:36	0° Ω		asc. node	11915 Jan 26 01:18	27° \mathfrak{A} 25'05	
	11912 Aug 04 09:54	0° \mathbb{P}			11915 Jan 28 23:48	0° \mathfrak{Z}	
asc. node	11912 Aug 09 23:56	6° \mathbb{P} 59'03		morning max el	11915 Feb 06 23:42	8° \mathfrak{Z} 24'26	45°46'42
evening rise	11912 Aug 14 22:37	13° \mathbb{P} 09'53			11915 Feb 27 20:44	0° \approx	
	11912 Aug 28 10:34	0° Ω			11915 Mar 26 11:45	0° \mathfrak{H}	
	11912 Sep 21 14:48	0° \mathbb{L}			11915 Apr 20 21:02	0° \mathbb{Y}	
	11912 Oct 16 00:28	0° \mathfrak{A}			11915 May 15 14:39	0° \mathfrak{B}	
	11912 Nov 09 18:28	0° \mathfrak{Z}		desc. node	11915 May 17 21:55	2° \mathfrak{B} 49'18	
desc. node	11912 Nov 29 18:30	23° \mathfrak{Z} 48'28			11915 Jun 08 22:45	0° \mathbb{I}	
	11912 Dec 05 01:00	0° \approx			11915 Jul 03 01:14	0° \mathfrak{D}	
	11912 Dec 31 02:32	0° \mathfrak{H}			11915 Jul 27 01:13	0° Ω	
	11913 Jan 27 14:27	0° \mathbb{Y}		morning set	11915 Aug 10 11:15	18° Ω 01'48	
evening max el	11913 Feb 10 05:40	13° \mathbb{Y} 46'56	46°04'40		11915 Aug 20 01:05	0° \mathbb{P}	
	11913 Feb 28 08:27	0° \mathfrak{B}		asc. node	11915 Sep 07 13:46	23° \mathbb{P} 07'36	
greatest brilliancy	11913 Mar 21 19:47	13° \mathfrak{B} 00'38	-4.8m		11915 Sep 13 02:05	0° Ω	
asc. node	11913 Mar 22 19:17	13° \mathfrak{B} 20'19					
retrograde	11913 Mar 31 15:05	14° \mathfrak{B} 47'58		superior conj	11915 Sep 18 13:09	6° Ω 48'14	0°26'18
evening set	11913 Apr 16 08:01	10° \mathfrak{B} 00'35		minimum elong	11915 Sep 18 07:10	6° Ω 29'38	0°26'02
inferior conj	11913 Apr 21 11:38	6° \mathfrak{B} 54'37	6°44'45	max. Earth dist.	11915 Sep 20 20:16	9° Ω 39'50	1.72213 AU
minimum elong	11913 Apr 21 00:41	7° \mathfrak{B} 11'38	6°41'59		11915 Oct 07 04:47	0° \mathbb{L}	
min. Earth dist.	11913 Apr 21 11:37	6° \mathfrak{B} 54'39	0.27561 AU	evening rise	11915 Oct 26 05:19	23° \mathbb{L} 35'06	
morning rise	11913 Apr 25 17:07	4° \mathfrak{B} 19'38			11915 Oct 31 09:50	0° \mathfrak{A}	
	11913 May 05 02:54	30° \mathfrak{R} \mathbb{Y}			11915 Nov 24 18:26	0° \mathfrak{Z}	
direct	11913 May 12 09:02	28° \mathbb{Y} 55'21			11915 Dec 19 08:05	0° \approx	
	11913 May 19 21:19	0° \mathfrak{B}		desc. node	11915 Dec 28 06:08	10° \approx 48'54	
greatest brilliancy	11913 May 22 10:27	0° \mathfrak{B} 48'58	-4.9m		11916 Jan 13 03:53	0° \mathfrak{H}	
	11913 Jun 30 04:07	0° \mathbb{I}			11916 Feb 07 06:46	0° \mathbb{Y}	
morning max el	11913 Jul 01 19:39	1° \mathbb{I} 38'53	46°58'20		11916 Mar 03 19:29	0° \mathfrak{B}	
desc. node	11913 Jul 12 19:53	13° \mathbb{I} 05'39			11916 Mar 30 03:43	0° \mathbb{I}	
	11913 Jul 28 04:53	0° \mathfrak{D}		asc. node	11916 Apr 19 04:56	21° \mathbb{I} 29'57	
	11913 Aug 23 03:58	0° Ω		evening max el	11916 Apr 23 20:48	26° \mathbb{I} 12'50	46°39'26
	11913 Sep 17 08:39	0° \mathbb{P}			11916 Apr 27 17:14	0° \mathfrak{D}	
	11913 Oct 12 05:11	0° Ω					
asc. node	11913 Nov 02 15:37	26° Ω 03'51		greatest brilliancy	11916 Jun 03 10:08	26° \mathfrak{D} 48'04	-4.9m
	11913 Nov 05 21:01	0° \mathbb{L}		retrograde	11916 Jun 13 01:37	28° \mathfrak{D} 33'28	
	11913 Nov 30 09:20	0° \mathfrak{A}		evening set	11916 Jun 30 05:17	22° \mathfrak{D} 52'51	
	11913 Dec 24 19:00	0° \mathfrak{Z}		inferior conj	11916 Jul 03 16:47	20° \mathfrak{D} 46'43	7°56'02
morning set	11913 Dec 31 14:15	8° \mathfrak{Z} 22'48		minimum elong	11916 Jul 04 02:50	20° \mathfrak{D} 31'19	7°53'35
	11914 Jan 18 03:05	0° \approx		min. Earth dist.	11916 Jul 04 02:34	20° \mathfrak{D} 31'44	0.27111 AU
max. Earth dist.	11914 Feb 05 09:56	22° \approx 34'07	1.73026 AU	morning rise	11916 Jul 08 00:22	18° \mathfrak{D} 11'22	
				direct	11916 Jul 24 10:01	12° \mathfrak{D} 57'43	
superior conj	11914 Feb 06 14:28	24° \approx 02'12	0°36'44	greatest brilliancy	11916 Aug 03 10:05	14° \mathfrak{D} 50'52	-4.9m
minimum elong	11914 Feb 06 22:09	24° \approx 25'56	0°36'55	desc. node	11916 Aug 09 06:14	17° \mathfrak{D} 26'31	
	11914 Feb 11 10:21	0° \mathfrak{H}			11916 Aug 27 04:24	0° Ω	
desc. node	11914 Feb 22 06:29	13° \mathfrak{H} 23'26		morning max el	11916 Sep 12 14:43	15° Ω 10'25	46°35'36
	11914 Mar 07 16:45	0° \mathbb{Y}			11916 Sep 27 00:15	0° \mathbb{P}	
evening rise	11914 Mar 16 21:21	11° \mathbb{Y} 22'51			11916 Oct 24 03:34	0° Ω	
	11914 Mar 31 21:47	0° \mathfrak{B}		asc. node	11916 Nov 19 01:24	0° \mathbb{L}	
	11914 Apr 25 01:31	0° \mathbb{I}			11916 Nov 30 04:32	13° \mathbb{L} 08'45	
					11916 Dec 14 07:42	0° \mathfrak{A}	

	11917 Jan 08 04:04	0°♁			11919 Jul 29 03:50	0°♁	
	11917 Feb 01 17:51	0°♁		greatest brilliancy	11919 Aug 15 05:09	10°♁10'39	-4.9m
	11917 Feb 26 03:17	0°♁		retrograde	11919 Aug 26 01:38	12°♁21'40	
morning set	11917 Mar 11 02:46	16°♁02'02		desc. node	11919 Sep 06 16:11	9°♁39'52	
desc. node	11917 Mar 21 20:31	29°♁20'10		evening set	11919 Sep 09 18:27	8°♁07'24	
	11917 Mar 22 09:21	0°♁		min. Earth dist.	11919 Sep 15 10:19	4°♁47'31	0.27522 AU
	11917 Apr 15 12:18	0°♁		inferior conj	11919 Sep 16 01:57	4°♁23'25	-2°22'31
max. Earth dist.	11917 Apr 16 06:38	0°♁57'11	1.71987 AU	minimum elong	11919 Sep 15 20:38	4°♁31'38	2°20'54
				morning rise	11919 Sep 21 23:30	0°♁54'32	
superior conj	11917 Apr 19 11:02	4°♁55'25	-1°02'30		11919 Sep 23 17:30	30°♁	
minimum elong	11917 Apr 18 23:40	4°♁19'59	1°02'30	direct	11919 Oct 07 00:19	26°♁33'55	
	11917 May 09 12:28	0°♁		greatest brilliancy	11919 Oct 16 14:02	28°♁14'12	-4.8m
evening rise	11917 May 29 03:42	24°♁36'07			11919 Oct 20 23:47	0°♁	
	11917 Jun 02 11:03	0°♁		morning max el	11919 Nov 24 23:36	26°♁44'51	45°52'03
	11917 Jun 26 10:00	0°♁			11919 Nov 28 07:52	0°♁	
asc. node	11917 Jul 12 12:37	20°♁06'28			11919 Dec 26 19:50	0°♁	
	11917 Jul 20 11:26	0°♁		asc. node	11919 Dec 28 16:28	2°♁03'47	
	11917 Aug 13 17:36	0°♁			11920 Jan 22 04:27	0°♁	
	11917 Sep 07 07:38	0°♁			11920 Feb 16 13:24	0°♁	
	11917 Oct 02 11:20	0°♁			11920 Mar 12 09:11	0°♁	
	11917 Oct 28 16:22	0°♁			11920 Apr 05 20:39	0°♁	
desc. node	11917 Nov 01 09:44	4°♁06'38		desc. node	11920 Apr 18 10:23	15°♁31'54	
	11917 Nov 26 04:53	0°♁			11920 Apr 30 02:08	0°♁	
evening max el	11917 Nov 28 12:58	2°♁15'52	45°51'38	morning set	11920 May 24 03:10	0°♁00'10	
	11918 Jan 05 06:03	0°♁			11920 May 24 03:06	0°♁	
greatest brilliancy	11918 Jan 06 13:30	0°♁28'14	-4.7m		11920 Jun 17 01:15	0°♁	
retrograde	11918 Jan 16 08:51	2°♁12'28					
	11918 Jan 26 21:57	30°♁		superior conj	11920 Jul 03 07:04	20°♁24'06	-1°14'56
evening set	11918 Feb 01 01:44	27°♁26'56		minimum elong	11920 Jul 03 17:36	20°♁57'10	1°15'27
inferior conj	11918 Feb 06 14:54	24°♁05'16	-3°47'43	max. Earth dist.	11920 Jul 03 16:44	20°♁54'28	1.71365 AU
minimum elong	11918 Feb 06 22:43	23°♁52'59	3°44'59		11920 Jul 10 22:33	0°♁	
min. Earth dist.	11918 Feb 07 04:09	23°♁44'29	0.28449 AU		11920 Aug 03 20:51	0°♁	
morning rise	11918 Feb 12 19:22	20°♁21'54		asc. node	11920 Aug 09 01:53	6°♁30'55	
asc. node	11918 Feb 22 11:32	16°♁29'32		evening rise	11920 Aug 12 11:13	10°♁45'04	
direct	11918 Feb 27 22:55	15°♁53'11			11920 Aug 27 21:34	0°♁	
greatest brilliancy	11918 Mar 10 20:34	18°♁05'10	-4.8m		11920 Sep 21 01:58	0°♁	
	11918 Mar 30 05:53	0°♁			11920 Oct 15 11:54	0°♁	
morning max el	11918 Apr 18 19:54	17°♁44'36	46°25'08		11920 Nov 09 06:24	0°♁	
	11918 Apr 30 17:17	0°♁		desc. node	11920 Nov 28 20:21	23°♁16'53	
	11918 May 27 14:48	0°♁			11920 Dec 04 13:51	0°♁	
desc. node	11918 Jun 14 10:29	20°♁55'18			11920 Dec 30 17:10	0°♁	
	11918 Jun 22 00:47	0°♁			11921 Jan 27 09:18	0°♁	
	11918 Jul 16 18:18	0°♁		evening max el	11921 Feb 07 19:14	11°♁27'55	46°03'44
	11918 Aug 10 04:04	0°♁			11921 Feb 28 21:50	0°♁	
	11918 Sep 03 10:49	0°♁		greatest brilliancy	11921 Mar 19 09:08	10°♁40'06	-4.8m
	11918 Sep 27 16:45	0°♁		asc. node	11921 Mar 21 21:14	11°♁26'55	
asc. node	11918 Oct 05 03:47	9°♁13'55		retrograde	11921 Mar 29 04:43	12°♁28'03	
morning set	11918 Oct 21 04:40	29°♁04'50		evening set	11921 Apr 13 18:30	7°♁44'46	
	11918 Oct 21 22:29	0°♁		inferior conj	11921 Apr 19 01:40	4°♁34'07	6°28'35
	11918 Nov 15 04:20	0°♁		minimum elong	11921 Apr 18 14:42	4°♁51'07	6°25'43
				min. Earth dist.	11921 Apr 19 01:49	4°♁33'52	0.27583 AU
superior conj	11918 Nov 27 10:04	15°♁07'54	1°25'54	morning rise	11921 Apr 23 10:38	1°♁54'11	
minimum elong	11918 Nov 27 08:40	15°♁03'33	1°26'40		11921 Apr 26 22:05	30°♁	
max. Earth dist.	11918 Nov 28 21:39	16°♁57'49	1.73062 AU	direct	11921 May 09 23:03	26°♁34'07	
	11918 Dec 09 10:56	0°♁		greatest brilliancy	11921 May 20 01:55	28°♁29'13	-4.9m
	11919 Jan 02 19:08	0°♁			11921 May 23 17:05	0°♁	
evening rise	11919 Jan 03 09:21	0°♁43'44		morning max el	11921 Jun 29 10:02	29°♁17'32	46°58'03
desc. node	11919 Jan 24 18:54	27°♁00'59			11921 Jun 30 02:53	0°♁	
	11919 Jan 27 05:18	0°♁		desc. node	11921 Jul 11 21:55	12°♁19'52	
	11919 Feb 20 17:06	0°♁			11921 Jul 27 21:15	0°♁	
	11919 Mar 17 06:11	0°♁			11921 Aug 22 17:56	0°♁	
	11919 Apr 10 21:35	0°♁			11921 Sep 16 21:21	0°♁	
	11919 May 05 19:08	0°♁			11921 Oct 11 17:06	0°♁	
asc. node	11919 May 17 15:03	14°♁02'39		asc. node	11921 Nov 01 17:25	25°♁34'21	
	11919 May 31 07:21	0°♁			11921 Nov 05 08:26	0°♁	
	11919 Jun 27 06:24	0°♁			11921 Nov 29 20:25	0°♁	
evening max el	11919 Jul 06 18:32	9°♁49'39	46°47'25		11921 Dec 24 05:52	0°♁	

morning set	11921 Dec 29 07:22	6°  14'12		min. Earth dist.	11924 Jul 01 15:11	18°  07'28	0.27125 AU
	11922 Jan 17 13:52	0° 		morning rise	11924 Jul 05 08:52	15°  52'51	
max. Earth dist.	11922 Feb 03 06:03	20°  34'44	1.73045 AU	direct	11924 Jul 21 23:43	10°  32'51	
				greatest brilliancy	11924 Jul 31 22:18	12°  24'54	-4.9m
superior conj	11922 Feb 04 06:34	21°  50'25	0°39'47	desc. node	11924 Aug 08 08:20	15°  51'44	
minimum elong	11922 Feb 04 14:43	22°  15'36	0°39'59		11924 Aug 27 12:44	0° 	
	11922 Feb 10 21:09	0° 		morning max el	11924 Sep 10 04:53	12°  09'39	46°36'52
desc. node	11922 Feb 21 08:28	12°  56'09			11924 Sep 26 18:48	0° 	
	11922 Mar 07 03:37	0° 			11924 Oct 23 18:18	0° 	
evening rise	11922 Mar 14 12:33	9°  07'33			11924 Nov 18 14:21	0° 	
	11922 Mar 31 08:48	0° 		asc. node	11924 Nov 29 06:28	12°  03'25	
	11922 Apr 24 12:46	0° 			11924 Dec 13 19:41	0° 	
	11922 May 18 16:55	0° 			11925 Jan 07 15:28	0° 	
	11922 Jun 12 00:06	0° 			11925 Feb 01 04:56	0° 	
asc. node	11922 Jun 14 02:18	2°  03'04			11925 Feb 25 14:13	0° 	
	11922 Jul 06 14:27	0° 		morning set	11925 Mar 08 17:27	13°  45'25	
	11922 Jul 31 18:34	0° 		desc. node	11925 Mar 20 22:17	28°  51'56	
	11922 Aug 27 02:55	0° 			11925 Mar 21 20:14	0° 	
evening max el	11922 Sep 16 00:17	20°  05'13	46°17'31	max. Earth dist.	11925 Apr 13 16:31	28°  07'30	1.72025 AU
	11922 Sep 25 15:09	0° 			11925 Apr 14 23:10	0° 	
desc. node	11922 Oct 04 01:48	7°  15'53					
greatest brilliancy	11922 Oct 25 03:17	20°  15'43	-4.8m	superior conj	11925 Apr 16 23:57	2°  32'05	-0°59'49
retrograde	11922 Nov 04 18:00	22°  19'39		minimum elong	11925 Apr 16 12:42	1°  56'58	0°59'46
evening set	11922 Nov 22 23:56	16°  03'34			11925 May 08 23:22	0° 	
inferior conj	11922 Nov 26 06:10	14°  02'23	-8°43'56	evening rise	11925 May 26 15:27	22°  08'05	
minimum elong	11922 Nov 26 04:26	14°  05'07	8°43'08		11925 Jun 01 22:02	0° 	
min. Earth dist.	11922 Nov 25 22:04	14°  15'04	0.28928 AU		11925 Jun 25 21:06	0° 	
morning rise	11922 Nov 29 09:00	12°  06'28		asc. node	11925 Jul 11 14:36	19°  03'51	
direct	11922 Dec 17 14:58	5°  50'57			11925 Jul 19 22:42	0° 	
greatest brilliancy	11922 Dec 27 19:05	7°  43'34	-4.7m		11925 Aug 13 05:11	0° 	
asc. node	11923 Jan 25 03:25	26°  27'59			11925 Sep 06 19:48	0° 	
	11923 Jan 29 01:50	0° 			11925 Oct 02 00:35	0° 	
morning max el	11923 Feb 04 15:59	6°  13'32	45°46'04		11925 Oct 28 07:54	0° 	
	11923 Feb 27 13:21	0° 		desc. node	11925 Oct 31 11:38	3°  28'03	
	11923 Mar 26 01:33	0° 		evening max el	11925 Nov 26 03:59	0° 	45°51'49
	11923 Apr 20 09:33	0° 			11925 Nov 26 02:54	0° 	
	11923 May 15 02:31	0° 		greatest brilliancy	11926 Jan 04 05:14	28°  16'18	-4.7m
desc. node	11923 May 16 23:48	2°  18'51		retrograde	11926 Jan 13 23:22	29°  59'40	
	11923 Jun 08 10:13	0° 		evening set	11926 Jan 29 19:36	25°  10'42	
	11923 Jul 02 12:28	0° 		inferior conj	11926 Feb 04 06:25	21°  52'11	-4°06'28
	11923 Jul 26 12:19	0° 		minimum elong	11926 Feb 04 14:43	21°  39'08	4°03'39
morning set	11923 Aug 08 00:23	15°  03'17		min. Earth dist.	11926 Feb 04 20:03	21°  30'47	0.28485 AU
	11923 Aug 19 12:05	0° 		morning rise	11926 Feb 10 09:29	18°  10'18	
asc. node	11923 Sep 06 15:40	22°  03'22		asc. node	11926 Feb 21 13:28	13°  59'30	
	11923 Sep 12 13:01	0° 		direct	11926 Feb 25 14:30	13°  39'48	
				greatest brilliancy	11926 Mar 08 12:39	15°  51'41	-4.8m
superior conj	11923 Sep 16 03:20	4°  28'53	0°22'50		11926 Mar 30 15:36	0° 	
minimum elong	11923 Sep 15 22:04	4°  12'30	0°22'33	morning max el	11926 Apr 16 09:52	15°  45'29	46°23'31
max. Earth dist.	11923 Sep 18 11:34	7°  24'03	1.72179 AU		11926 Apr 30 11:32	0° 	
	11923 Oct 06 15:41	0° 			11926 May 27 05:21	0° 	
evening rise	11923 Oct 23 21:24	21°  02'24		desc. node	11926 Jun 13 12:27	20°  02'12	
	11923 Oct 30 20:44	0° 			11926 Jun 21 13:44	0° 	
	11923 Nov 24 05:29	0° 			11926 Jul 16 06:24	0° 	
	11923 Dec 18 19:27	0° 			11926 Aug 09 15:38	0° 	
desc. node	11923 Dec 27 08:08	10°  20'09			11926 Sep 02 21:59	0° 	
	11924 Jan 12 15:46	0° 			11926 Sep 27 03:38	0° 	
	11924 Feb 06 19:28	0° 		asc. node	11926 Oct 04 05:33	8°  45'51	
	11924 Mar 03 09:34	0° 		morning set	11926 Oct 18 20:30	26°  52'08	
	11924 Mar 29 20:37	0° 			11926 Oct 21 09:12	0° 	
asc. node	11924 Apr 18 06:52	20° 04'08			11926 Nov 14 14:59	0°	
evening max el	11924 Apr 21 11:30	23° 03'00	46°38'31				
	11924 Apr 27 18:23	0°		superior conj	11926 Nov 25 03:12	12° 59'44	1°25'37
greatest brilliancy	11924 May 31 23:05	24° 02'27	-4.9m	minimum elong	11926 Nov 25 01:04	12° 53'05	1°26'21
retrograde	11924 Jun 10 15:00	26° 08'44		max. Earth dist.	11926 Nov 26 14:17	14° 48'05	1.73046 AU
evening set	11924 Jun 27 21:49	20° 23'05			11926 Dec 08 21:35	0°	
inferior conj	11924 Jul 01 05:47	18° 02'13	8°07'56	evening rise	11927 Jan 01 01:43	28° 33'28	
minimum elong	11924 Jul 01 15:20	18° 07'13	8°05'40		11927 Jan 02 05:51	0°	

desc. node	11927 Jan 23 20:49	26° \approx 33'33			11929 Jun 30 00:26	0° Π		
	11927 Jan 26 16:11	0° H		desc. node	11929 Jul 10 23:59	11° Π 35'45		
	11927 Feb 20 04:17	0° Υ			11929 Jul 27 12:59	0° Θ		
	11927 Mar 16 17:48	0° B			11929 Aug 22 07:24	0° Ω		
	11927 Apr 10 09:50	0° Π			11929 Sep 16 09:38	0° M		
	11927 May 05 08:25	0° Θ			11929 Oct 11 04:38	0° $\underline{\Omega}$		
asc. node	11927 May 16 17:02	13° Θ 27'18		asc. node	11929 Oct 31 19:22	25° $\underline{\Omega}$ 06'28		
	11927 May 30 22:31	0° Ω			11929 Nov 04 19:28	0° M		
	11927 Jun 27 02:03	0° M			11929 Nov 29 07:06	0° X		
evening max el	11927 Jul 04 07:50	7° M 26'22	46°47'59		11929 Dec 23 16:22	0° Z		
	11927 Jul 29 21:56	0° $\underline{\Omega}$		morning set	11929 Dec 27 00:44	4° Z 07'33		
greatest brilliancy	11927 Aug 12 21:03	7° $\underline{\Omega}$ 52'21	-4.9m		11930 Jan 17 00:18	0° \approx		
retrograde	11927 Aug 23 15:35	10° $\underline{\Omega}$ 02'07		max. Earth dist.	11930 Feb 01 02:54	18° \approx 38'38	1.73068 AU	
desc. node	11927 Sep 05 18:04	6° $\underline{\Omega}$ 38'03						
evening set	11927 Sep 07 08:08	5° $\underline{\Omega}$ 48'49		superior conj	11930 Feb 01 22:45	19° \approx 39'52	0°42'45	
min. Earth dist.	11927 Sep 13 01:41	2° $\underline{\Omega}$ 26'57	0.27474 AU	minimum elong	11930 Feb 02 07:18	20° \approx 06'19	0°42'58	
inferior conj	11927 Sep 13 16:00	2° $\underline{\Omega}$ 04'54	-2°00'28		11930 Feb 10 07:37	0° H		
minimum elong	11927 Sep 13 11:27	2° $\underline{\Omega}$ 11'55	1°59'05	desc. node	11930 Feb 20 10:16	12° H 29'12		
	11927 Sep 17 02:19	30° R M			11930 Mar 06 14:14	0° Υ		
morning rise	11927 Sep 19 15:20	28° M 33'29		evening rise	11930 Mar 12 03:34	6° Υ 52'31		
direct	11927 Oct 04 13:17	24° M 15'47			11930 Mar 30 19:34	0° B		
greatest brilliancy	11927 Oct 14 04:48	25° M 57'20	-4.8m		11930 Apr 23 23:45	0° Π		
	11927 Oct 23 00:22	0° $\underline{\Omega}$			11930 May 18 04:12	0° Θ		
morning max el	11927 Nov 22 13:06	24° $\underline{\Omega}$ 27'20	45°53'07		11930 Jun 11 11:51	0° Ω		
	11927 Nov 28 04:52	0° M		asc. node	11930 Jun 13 04:19	2° Ω 04'06		
	11927 Dec 26 11:00	0° X			11930 Jul 06 02:57	0° M		
asc. node	11927 Dec 27 18:32	1° X 27'48			11930 Jul 31 08:26	0° $\underline{\Omega}$		
	11928 Jan 21 17:27	0° Z			11930 Aug 26 19:44	0° M		
	11928 Feb 16 01:21	0° \approx		evening max el	11930 Sep 13 16:26	18° M 39'28	46°18'51	
	11928 Mar 11 20:33	0° H			11930 Sep 25 18:14	0° X		
	11928 Apr 05 07:42	0° Υ		desc. node	11930 Oct 03 03:49	6° X 11'58		
desc. node	11928 Apr 17 12:13	15° Υ 03'38		greatest brilliancy	11930 Oct 22 17:40	18° X 03'10	-4.8m	
	11928 Apr 29 13:01	0° B		retrograde	11930 Nov 02 10:34	20° X 08'48		
morning set	11928 May 21 14:11	27° B 30'38		evening set	11930 Nov 20 14:08	13° X 55'16		
	11928 May 23 13:55	0° Π		inferior conj	11930 Nov 23 21:59	11° X 51'36	-8°42'02	
	11928 Jun 16 12:01	0° Θ		minimum elong	11930 Nov 23 19:28	11° X 55'32	8°41'12	
				min. Earth dist.	11930 Nov 23 12:18	12° X 06'46	0.28902 AU	
superior conj	11928 Jun 30 18:38	17° Θ 55'57	-1°16'53	morning rise	11930 Nov 27 00:56	9° X 55'41		
minimum elong	11928 Jul 01 04:40	18° Θ 27'27	1°17'26	direct	11930 Dec 15 07:06	3° X 40'54		
max. Earth dist.	11928 Jun 30 22:01	18° Θ 06'37	1.71361 AU	greatest brilliancy	11930 Dec 25 08:52	5° X 31'53	-4.7m	
	11928 Jul 10 09:17	0° Ω		asc. node	11931 Jan 24 05:19	25° X 33'10		
	11928 Aug 03 07:36	0° M			11931 Jan 29 01:54	0° Z		
asc. node	11928 Aug 08 03:44	6° M 03'06		morning max el	11931 Feb 02 07:58	4° Z 03'27	45°45'21	
evening rise	11928 Aug 09 23:52	8° M 21'00			11931 Feb 27 05:10	0° \approx		
	11928 Aug 27 08:21	0° $\underline{\Omega}$			11931 Mar 25 14:50	0° H		
	11928 Sep 20 12:52	0° M			11931 Apr 19 21:42	0° Υ		
	11928 Oct 14 23:03	0° X			11931 May 14 14:03	0° B		
	11928 Nov 08 18:04	0° Z		desc. node	11931 May 16 01:48	1° B 49'38		
desc. node	11928 Nov 27 22:24	22° Z 46'32			11931 Jun 07 21:24	0° Π		
	11928 Dec 04 02:29	0° \approx			11931 Jul 01 23:23	0° Θ		
	11928 Dec 30 07:45	0° H			11931 Jul 25 23:04	0° Ω		
	11929 Jan 27 04:32	0° Υ		morning set	11931 Aug 05 13:21	13° Ω 15'21		
evening max el	11929 Feb 05 09:31	9° Υ 11'11	46°02'44		11931 Aug 18 22:42	0° M		
	11929 Mar 01 15:42	0° B		asc. node	11931 Sep 05 17:24	22° M 11'56		
greatest brilliancy	11929 Mar 16 21:57	8° B 19'13	-4.8m		11931 Sep 11 23:34	0° $\underline{\Omega}$		
asc. node	11929 Mar 20 23:12	9° B 29'02						
retrograde	11929 Mar 26 18:45	10° B 08'11		superior conj	11931 Sep 13 17:26	2° $\underline{\Omega}$ 10'28	0°19'19	
evening set	11929 Apr 11 05:02	5° B 28'50		minimum elong	11931 Sep 13 12:55	1° $\underline{\Omega}$ 56'25	0°19'03	
inferior conj	11929 Apr 16 15:31	2° B 13'40	6°11'42	max. Earth dist.	11931 Sep 16 04:42	5° $\underline{\Omega}$ 15'09	1.72143 AU	
minimum elong	11929 Apr 16 04:38	2° B 30'31	6°08'46		11931 Oct 06 02:11	0° M		
min. Earth dist.	11929 Apr 16 15:37	2° B 13'30	0.27602 AU	evening rise	11931 Oct 21 13:36	19° M 11'41		
	11929 Apr 20 06:52	30° R Υ			11931 Oct 30 07:16	0° X		
morning rise	11929 Apr 21 03:59	29° Υ 28'57			11931 Nov 23 16:10	0° Z		
direct	11929 May 07 13:23	24° Υ 13'13			11931 Dec 18 06:25	0° \approx		
greatest brilliancy	11929 May 17 16:42	26° Υ 09'13	-4.9m	desc. node	11931 Dec 26 10:06	9° \approx 52'34		
	11929 May 25 18:08	0° B			11932 Jan 12 03:14	0° H		
morning max el	11929 Jun 27 00:54	26° B 58'22	46°57'45		11932 Feb 06 07:47	0° Υ		

	11932 Mar 02 23:22	0°♄	morning set	11934 Oct 16 11:55	24°♄38'29	
	11932 Mar 29 13:30	0°♂		11934 Oct 20 19:46	0°♂	
asc. node	11932 Apr 17 08:52	19°♂50'23		11934 Nov 14 01:27	0°♄	
evening max el	11932 Apr 19 01:25	21°♂31'54 46°37'15				
	11932 Apr 27 20:39	0°♄	superior conj	11934 Nov 22 20:10	10°♄51'33 1°25'12	
greatest brilliancy	11932 May 29 12:25	21°♄59'23 -4.9m	minimum elong	11934 Nov 22 17:16	10°♄42'35 1°25'55	
retrograde	11932 Jun 08 03:37	23°♄43'45	max. Earth dist.	11934 Nov 24 06:25	12°♄37'25 1.73026 AU	
evening set	11932 Jun 25 14:04	17°♄53'24		11934 Dec 08 08:02	0°♄	
inferior conj	11932 Jun 28 18:34	15°♄57'05 8°19'03	evening rise	11934 Dec 29 18:11	26°♄24'10	
minimum elong	11932 Jun 29 03:33	15°♄43'15 8°16'58		11935 Jan 01 16:23	0°♄	
min. Earth dist.	11932 Jun 29 03:53	15°♄42'43 0.27138 AU	desc. node	11935 Jan 22 22:38	26°♄06'21	
morning rise	11932 Jul 02 17:02	13°♄34'24		11935 Jan 26 02:54	0°♄	
direct	11932 Jul 19 12:44	8°♄07'56		11935 Feb 19 15:17	0°♄	
greatest brilliancy	11932 Jul 29 10:45	9°♄59'16 -4.9m		11935 Mar 16 05:14	0°♄	
desc. node	11932 Aug 07 10:13	14°♄20'15		11935 Apr 09 21:56	0°♂	
	11932 Aug 27 18:26	0°♂		11935 May 04 21:34	0°♄	
morning max el	11932 Sep 07 17:49	10°♂26'22 46°38'18	asc. node	11935 May 15 19:05	12°♄52'37	
	11932 Sep 26 12:32	0°♄		11935 May 30 13:41	0°♂	
	11932 Oct 23 08:28	0°♄		11935 Jun 26 22:11	0°♄	
	11932 Nov 18 02:49	0°♂	evening max el	11935 Jul 01 20:54	5°♄02'53 46°48'18	
asc. node	11932 Nov 28 08:25	12°♂07'24		11935 Jul 30 22:42	0°♄	
	11932 Dec 13 07:13	0°♄	greatest brilliancy	11935 Aug 10 12:07	5°♄32'28 -4.9m	
	11933 Jan 07 02:27	0°♄	retrograde	11935 Aug 21 05:30	7°♄41'46	
	11933 Jan 31 15:37	0°♄	evening set	11935 Sep 04 21:42	3°♄28'49	
	11933 Feb 25 00:44	0°♄	desc. node	11935 Sep 04 20:07	3°♄30'56	
morning set	11933 Mar 06 08:38	11°♄31'30	min. Earth dist.	11935 Sep 10 16:35	0°♄05'26 0.27433 AU	
desc. node	11933 Mar 20 00:10	28°♄25'18		11935 Sep 10 20:08	30°♄	
	11933 Mar 21 06:42	0°♄	inferior conj	11935 Sep 11 05:44	29°♄45'15 -1°37'48	
max. Earth dist.	11933 Apr 11 03:26	25°♄56'17 1.72070 AU	minimum elong	11935 Sep 11 01:59	29°♄51'00 1°36'43	
	11933 Apr 14 09:40	0°♄	morning rise	11935 Sep 17 06:47	26°♄11'45	
			direct	11935 Oct 02 02:12	21°♄56'19	
superior conj	11933 Apr 14 13:13	0°♄11'04 -0°57'03	greatest brilliancy	11935 Oct 11 19:17	23°♄39'20 -4.8m	
minimum elong	11933 Apr 14 02:07	29°♄36'28 0°56'57		11935 Oct 24 09:13	0°♄	
	11933 May 08 09:58	0°♂	morning max el	11935 Nov 20 03:18	22°♄11'07 45°54'24	
evening rise	11933 May 24 03:13	19°♂41'03		11935 Nov 28 01:15	0°♂	
	11933 Jun 01 08:46	0°♄		11935 Dec 26 01:57	0°♄	
	11933 Jun 25 07:59	0°♂	asc. node	11935 Dec 26 20:27	0°♄51'42	
asc. node	11933 Jul 10 16:25	19°♂09'15		11936 Jan 21 06:17	0°♄	
	11933 Jul 19 09:48	0°♄		11936 Feb 15 13:09	0°♄	
	11933 Aug 12 16:36	0°♄		11936 Mar 11 07:49	0°♄	
	11933 Sep 06 07:47	0°♂		11936 Apr 04 18:41	0°♄	
	11933 Oct 01 13:41	0°♄	desc. node	11936 Apr 16 14:11	14°♄36'01	
	11933 Oct 27 23:22	0°♄		11936 Apr 28 23:50	0°♄	
desc. node	11933 Oct 30 13:42	2°♄50'27	morning set	11936 May 19 01:43	25°♄02'58	
evening max el	11933 Nov 23 18:08	27°♄48'15 45°52'09		11936 May 23 00:39	0°♂	
	11933 Nov 26 01:23	0°♄		11936 Jun 15 22:42	0°♄	
greatest brilliancy	11934 Jan 01 21:09	26°♄05'54 -4.7m				
retrograde	11934 Jan 11 14:08	27°♄48'43	superior conj	11936 Jun 28 06:33	15°♄29'08 -1°18'39	
evening set	11934 Jan 27 13:42	22°♄55'50	minimum elong	11936 Jun 28 15:59	15°♄58'47 1°19'15	
inferior conj	11934 Feb 01 22:09	19°♄40'49 -4°24'46	max. Earth dist.	11936 Jun 28 06:58	15°♄30'28 1.71360 AU	
minimum elong	11934 Feb 02 06:54	19°♄27'05 4°21'51		11936 Jul 09 19:57	0°♂	
min. Earth dist.	11934 Feb 02 12:14	19°♄18'42 0.28521 AU		11936 Aug 02 18:19	0°♄	
morning rise	11934 Feb 07 23:38	16°♄00'50	asc. node	11936 Aug 07 05:34	5°♄35'19	
asc. node	11934 Feb 20 15:23	11°♄36'08	evening rise	11936 Aug 07 12:41	5°♄57'35	
direct	11934 Feb 23 05:57	11°♄28'00		11936 Aug 26 19:11	0°♄	
greatest brilliancy	11934 Mar 06 05:17	13°♄40'28 -4.8m		11936 Sep 19 23:52	0°♂	
	11934 Mar 30 22:03	0°♄		11936 Oct 14 10:21	0°♄	
morning max el	11934 Apr 14 00:01	13°♄08'05 46°21'59		11936 Nov 08 05:53	0°♄	
	11934 Apr 30 04:54	0°♄	desc. node	11936 Nov 27 00:20	22°♄15'25	
	11934 May 26 19:23	0°♄		11936 Dec 03 15:19	0°♄	
desc. node	11934 Jun 12 14:25	19°♄48'29		11936 Dec 29 22:37	0°♄	
	11934 Jun 21 02:21	0°♂		11937 Jan 27 00:24	0°♄	
	11934 Jul 15 18:16	0°♄	evening max el	11937 Feb 03 00:41	6°♄56'47 46°01'53	
	11934 Aug 09 03:01	0°♂		11937 Mar 02 15:54	0°♄	
	11934 Sep 02 09:02	0°♄	greatest brilliancy	11937 Mar 14 10:48	5°♄58'53 -4.8m	
	11934 Sep 26 14:24	0°♄	asc. node	11937 Mar 20 01:17	7°♄26'52	
asc. node	11934 Oct 03 07:32	8°♄18'49	retrograde	11937 Mar 24 09:09	7°♄48'45	

evening set	11937 Apr 08 16:03	3°♄13'15		behind sun begin	11939 Sep 10 21:30	29°♎19'55	
inferior conj	11937 Apr 14 05:32	29°♊53'38	5°54'12	behind sun end	11939 Sep 11 10:33	0°♊00'37	
minimum elong	11937 Apr 13 18:49	0°♄10'14	5°51'15		11939 Sep 11 10:21	0°♊	
min. Earth dist.	11937 Apr 14 05:23	29°♊53'51	0.27619 AU	max. Earth dist.	11939 Sep 13 21:46	3°♊05'10	1.72103 AU
	11937 Apr 14 01:25	30°♋♊			11939 Oct 05 12:56	0°♎	
morning rise	11937 Apr 18 21:24	27°♊04'11		evening rise	11939 Oct 19 05:55	17°♎00'10	
direct	11937 May 05 04:13	21°♊52'56			11939 Oct 29 18:05	0°♊	
greatest brilliancy	11937 May 15 07:06	23°♊48'59	-4.9m		11939 Nov 23 03:10	0°♊	
	11937 May 27 02:41	0°♄			11939 Dec 17 17:46	0°♋	
morning max el	11937 Jun 24 16:05	24°♄40'06	46°57'24	desc. node	11939 Dec 25 11:53	9°♋23'17	
	11937 Jun 29 21:13	0°♎			11940 Jan 11 15:08	0°♋	
desc. node	11937 Jul 10 01:48	10°♎51'31			11940 Feb 05 20:34	0°♊	
	11937 Jul 27 04:28	0°♄			11940 Mar 02 13:43	0°♄	
	11937 Aug 21 20:48	0°♎			11940 Mar 29 07:09	0°♎	
	11937 Sep 15 21:56	0°♎		asc. node	11940 Apr 16 10:54	18°♎58'45	
	11937 Oct 10 16:16	0°♊		evening max el	11940 Apr 16 14:15	19°♎07'07	46°36'04
asc. node	11937 Oct 30 21:16	24°♊37'56			11940 Apr 28 01:00	0°♄	
	11937 Nov 04 06:39	0°♎		greatest brilliancy	11940 May 27 02:12	19°♄34'59	-4.9m
	11937 Nov 28 17:59	0°♊		retrograde	11940 Jun 05 15:50	21°♄18'07	
	11937 Dec 23 03:04	0°♊		evening set	11940 Jun 23 06:13	15°♄23'08	
morning set	11937 Dec 24 17:54	1°♊59'36		inferior conj	11940 Jun 26 07:26	13°♄31'33	8°29'04
	11938 Jan 16 10:56	0°♋		minimum elong	11940 Jun 26 15:47	13°♄18'41	8°27'11
max. Earth dist.	11938 Jan 29 23:06	16°♋40'00	1.73083 AU	min. Earth dist.	11940 Jun 26 16:56	13°♄16'55	0.27153 AU
				morning rise	11940 Jun 30 01:18	11°♄15'15	
superior conj	11938 Jan 30 14:48	17°♋28'25	0°45'41	direct	11940 Jul 17 01:22	5°♄42'01	
minimum elong	11938 Jan 30 23:42	17°♋55'54	0°45'54	greatest brilliancy	11940 Jul 26 23:51	7°♄33'22	-4.9m
	11938 Feb 09 18:17	0°♋		desc. node	11940 Aug 06 12:15	12°♄51'08	
desc. node	11938 Feb 19 12:07	12°♋01'58			11940 Aug 27 22:40	0°♎	
	11938 Mar 06 01:00	0°♊		morning max el	11940 Sep 05 06:11	8°♎00'23	46°39'50
evening rise	11938 Mar 09 18:32	4°♊36'55			11940 Sep 26 06:15	0°♎	
	11938 Mar 30 06:31	0°♄			11940 Oct 22 22:49	0°♊	
	11938 Apr 23 10:56	0°♎			11940 Nov 17 15:33	0°♎	
	11938 May 17 15:43	0°♄		asc. node	11940 Nov 27 10:17	11°♎36'16	
	11938 Jun 10 23:51	0°♎			11940 Dec 12 19:02	0°♊	
asc. node	11938 Jun 12 06:08	1°♎32'51			11941 Jan 06 13:47	0°♊	
	11938 Jul 05 15:42	0°♎			11941 Jan 31 02:42	0°♋	
	11938 Jul 30 22:35	0°♊			11941 Feb 24 11:42	0°♋	
	11938 Aug 26 13:04	0°♎		morning set	11941 Mar 03 23:35	9°♋15'34	
evening max el	11938 Sep 11 08:35	16°♎26'42	46°20'00	desc. node	11941 Mar 19 02:08	27°♋57'36	
	11938 Sep 25 23:24	0°♊			11941 Mar 20 17:37	0°♊	
desc. node	11938 Oct 02 05:51	5°♊05'40		max. Earth dist.	11941 Apr 08 15:47	23°♊31'18	1.72113 AU
greatest brilliancy	11938 Oct 20 08:29	15°♊50'17	-4.8m				
retrograde	11938 Oct 31 02:44	17°♊56'46		superior conj	11941 Apr 12 02:15	27°♊48'08	-0°54'09
evening set	11938 Nov 18 03:57	11°♊46'35		minimum elong	11941 Apr 11 15:24	27°♊14'18	0°54'02
min. Earth dist.	11938 Nov 21 02:40	9°♊57'10	0.28875 AU		11941 Apr 13 20:35	0°♄	
inferior conj	11938 Nov 21 13:45	9°♊39'48	-8°39'18		11941 May 07 20:56	0°♎	
minimum elong	11938 Nov 21 10:28	9°♊44'57	8°38'25	evening rise	11941 May 21 14:55	17°♎12'49	
morning rise	11938 Nov 24 17:09	7°♊43'11			11941 May 31 19:51	0°♄	
direct	11938 Dec 12 23:15	1°♊29'55			11941 Jun 24 19:14	0°♎	
greatest brilliancy	11938 Dec 22 22:39	3°♊18'57	-4.7m	asc. node	11941 Jul 09 18:18	18°♎39'43	
asc. node	11939 Jan 23 07:15	24°♊38'23			11941 Jul 18 21:16	0°♎	
	11939 Jan 29 01:19	0°♊			11941 Aug 12 04:25	0°♊	
morning max el	11939 Jan 30 23:08	1°♊50'16	45°44'40		11941 Sep 05 20:13	0°♎	
	11939 Feb 26 21:05	0°♋			11941 Oct 01 03:16	0°♊	
	11939 Mar 25 04:18	0°♋			11941 Oct 27 15:29	0°♊	
	11939 Apr 19 10:02	0°♊		desc. node	11941 Oct 29 15:39	2°♊11'04	
	11939 May 14 01:47	0°♄		evening max el	11941 Nov 21 07:47	25°♊31'44	45°52'35
desc. node	11939 May 15 03:38	1°♄19'20			11941 Nov 26 01:21	0°♋	
	11939 Jun 07 08:46	0°♎		greatest brilliancy	11941 Dec 30 12:28	23°♋53'48	-4.7m
	11939 Jul 01 10:32	0°♄		retrograde	11942 Jan 09 05:15	25°♋36'49	
	11939 Jul 25 10:04	0°♎		evening set	11942 Jan 25 07:49	20°♋39'33	
morning set	11939 Aug 03 02:28	10°♎52'01		inferior conj	11942 Jan 30 13:50	17°♋28'13	-4°42'32
	11939 Aug 18 09:36	0°♎		minimum elong	11942 Jan 30 22:58	17°♋13'54	4°39'33
asc. node	11939 Sep 04 19:23	21°♎44'25		min. Earth dist.	11942 Jan 31 04:13	17°♋05'39	0.28563 AU
				morning rise	11942 Feb 05 13:38	13°♋50'35	
superior conj	11939 Sep 11 07:44	29°♎51'51	0°15'47	asc. node	11942 Feb 19 17:30	9°♋16'23	
minimum elong	11939 Sep 11 04:01	29°♎40'16	0°15'32	direct	11942 Feb 20 21:23	9°♋14'46	

greatest brilliancy	11942 Mar 03 22:04	11° \approx 28'15	-4.8m		11944 Sep 19 11:02	0° \mathbb{M}	
	11942 Mar 31 03:02	0° \mathbb{H}			11944 Oct 13 21:49	0° \mathbb{A}	
morning max el	11942 Apr 11 14:58	10° \mathbb{H} 51'15	46°20'25		11944 Nov 07 17:56	0° \mathbb{Z}	
	11942 Apr 29 22:25	0° \mathbb{Y}		desc. node	11944 Nov 26 02:11	21° \mathbb{Z} 43'25	
	11942 May 26 09:44	0° \mathbb{B}			11944 Dec 03 04:26	0° \approx	
desc. node	11942 Jun 11 16:17	19° \mathbb{B} 14'13			11944 Dec 29 13:52	0° \mathbb{H}	
	11942 Jun 20 15:17	0° \mathbb{II}			11945 Jan 26 21:04	0° \mathbb{Y}	
	11942 Jul 15 06:26	0° \mathbb{E}		evening max el	11945 Jan 31 16:14	4° \mathbb{Y} 43'07	46°01'01
	11942 Aug 08 14:42	0° \mathbb{O}			11945 Mar 04 02:02	0° \mathbb{B}	
	11942 Sep 01 20:21	0° \mathbb{M}		greatest brilliancy	11945 Mar 12 00:02	3° \mathbb{B} 38'58	-4.8m
	11942 Sep 26 01:29	0° \mathbb{L}		asc. node	11945 Mar 19 03:13	5° \mathbb{B} 19'35	
asc. node	11942 Oct 02 09:22	7° \mathbb{L} 50'23		retrograde	11945 Mar 21 23:20	5° \mathbb{B} 29'01	
morning set	11942 Oct 14 03:18	22° \mathbb{L} 23'31		evening set	11945 Apr 06 03:20	0° \mathbb{B} 57'27	
	11942 Oct 20 06:41	0° \mathbb{M}			11945 Apr 07 19:30	30° \mathbb{R} \mathbb{Y}	
	11942 Nov 13 12:15	0° \mathbb{A}		inferior conj	11945 Apr 11 19:33	27° \mathbb{Y} 33'35	5°36'09
				minimum elong	11945 Apr 11 09:05	27° \mathbb{Y} 49'50	5°33'13
superior conj	11942 Nov 20 13:09	8° \mathbb{A} 42'23	1°24'38	min. Earth dist.	11945 Apr 11 19:17	27° \mathbb{Y} 34'00	0.27636 AU
minimum elong	11942 Nov 20 09:32	8° \mathbb{A} 31'11	1°25'21	morning rise	11945 Apr 16 14:41	24° \mathbb{Y} 39'20	
max. Earth dist.	11942 Nov 21 22:58	10° \mathbb{A} 26'54	1.73005 AU	direct	11945 May 02 19:05	19° \mathbb{Y} 32'47	
	11942 Dec 07 18:49	0° \mathbb{Z}		greatest brilliancy	11945 May 12 21:21	21° \mathbb{Y} 28'22	-4.9m
evening rise	11942 Dec 27 10:49	24° \mathbb{Z} 14'23			11945 May 28 02:05	0° \mathbb{B}	
	11943 Jan 01 03:13	0° \approx		morning max el	11945 Jun 22 06:38	22° \mathbb{B} 19'55	46°56'46
desc. node	11943 Jan 22 00:34	25° \approx 38'35			11945 Jun 29 17:28	0° \mathbb{II}	
	11943 Jan 25 13:56	0° \mathbb{H}		desc. node	11945 Jul 09 03:51	10° \mathbb{II} 08'00	
	11943 Feb 19 02:39	0° \mathbb{Y}			11945 Jul 26 19:55	0° \mathbb{E}	
	11943 Mar 15 17:05	0° \mathbb{B}			11945 Aug 21 10:15	0° \mathbb{O}	
	11943 Apr 09 10:29	0° \mathbb{II}			11945 Sep 15 10:17	0° \mathbb{M}	
	11943 May 04 11:15	0° \mathbb{E}			11945 Oct 10 03:56	0° \mathbb{L}	
asc. node	11943 May 14 20:55	12° \mathbb{E} 15'46		asc. node	11945 Oct 29 23:04	24° \mathbb{L} 09'03	
	11943 May 30 05:31	0° \mathbb{O}			11945 Nov 03 17:50	0° \mathbb{M}	
	11943 Jun 26 19:26	0° \mathbb{M}			11945 Nov 28 04:51	0° \mathbb{A}	
evening max el	11943 Jun 29 10:31	2° \mathbb{M} 39'44	46°48'49	morning set	11945 Dec 22 10:58	29° \mathbb{A} 51'25	
	11943 Aug 01 10:25	0° \mathbb{L}			11945 Dec 22 13:45	0° \mathbb{Z}	
greatest brilliancy	11943 Aug 08 02:37	3° \mathbb{L} 10'53	-4.9m		11946 Jan 15 21:34	0° \approx	
retrograde	11943 Aug 18 19:58	5° \mathbb{L} 20'20		max. Earth dist.	11946 Jan 27 17:30	14° \approx 35'50	1.73096 AU
evening set	11943 Sep 02 11:25	1° \mathbb{L} 07'19					
desc. node	11943 Sep 03 22:10	0° \mathbb{L} 19'20		superior conj	11946 Jan 28 07:00	15° \approx 17'27	0°48'31
	11943 Sep 04 11:42	30° \mathbb{R} \mathbb{M}		minimum elong	11946 Jan 28 16:11	15° \approx 45'50	0°48'46
inferior conj	11943 Sep 08 19:20	27° \mathbb{M} 24'17	-1°14'56		11946 Feb 09 04:57	0° \mathbb{H}	
minimum elong	11943 Sep 08 16:27	27° \mathbb{M} 28'43	1°14'08	desc. node	11946 Feb 18 14:04	11° \mathbb{H} 35'00	
min. Earth dist.	11943 Sep 08 07:02	27° \mathbb{M} 43'08	0.27392 AU		11946 Mar 05 11:45	0° \mathbb{Y}	
morning rise	11943 Sep 14 21:59	23° \mathbb{M} 49'07		evening rise	11946 Mar 07 09:38	2° \mathbb{Y} 21'52	
direct	11943 Sep 29 15:26	19° \mathbb{M} 35'38			11946 Mar 29 17:25	0° \mathbb{B}	
greatest brilliancy	11943 Oct 09 09:05	21° \mathbb{M} 19'34	-4.8m		11946 Apr 22 22:03	0° \mathbb{II}	
	11943 Oct 25 09:12	0° \mathbb{L}			11946 May 17 03:11	0° \mathbb{E}	
morning max el	11943 Nov 17 18:15	19° \mathbb{L} 55'58	45°55'39		11946 Jun 10 11:50	0° \mathbb{O}	
	11943 Nov 27 21:16	0° \mathbb{M}		asc. node	11946 Jun 11 08:05	1° \mathbb{O} 02'00	
asc. node	11943 Dec 25 22:20	0° \mathbb{A} 15'05			11946 Jul 05 04:32	0° \mathbb{M}	
	11943 Dec 25 16:57	0° \mathbb{A}			11946 Jul 30 12:55	0° \mathbb{L}	
	11944 Jan 20 19:15	0° \mathbb{Z}			11946 Aug 26 06:49	0° \mathbb{M}	
	11944 Feb 15 01:07	0° \approx		evening max el	11946 Sep 09 00:08	14° \mathbb{M} 12'08	46°21'15
	11944 Mar 10 19:15	0° \mathbb{H}			11946 Sep 26 06:50	0° \mathbb{A}	
	11944 Apr 04 05:51	0° \mathbb{Y}		desc. node	11946 Oct 01 07:47	3° \mathbb{A} 57'23	
desc. node	11944 Apr 15 15:59	14° \mathbb{Y} 07'14		greatest brilliancy	11946 Oct 17 23:59	13° \mathbb{A} 38'03	-4.8m
	11944 Apr 28 10:53	0° \mathbb{B}		retrograde	11946 Oct 28 18:24	15° \mathbb{A} 44'36	
morning set	11944 May 16 13:00	22° \mathbb{B} 33'46		evening set	11946 Nov 15 17:26	9° \mathbb{A} 38'28	
	11944 May 22 11:38	0° \mathbb{II}		min. Earth dist.	11946 Nov 18 17:16	7° \mathbb{A} 47'17	0.28842 AU
	11944 Jun 15 09:39	0° \mathbb{E}		inferior conj	11946 Nov 19 05:28	7° \mathbb{A} 28'08	-8°35'51
				minimum elong	11946 Nov 19 01:25	7° \mathbb{A} 34'30	8°34'54
superior conj	11944 Jun 25 17:59	12° \mathbb{E} 59'51	-1°20'17	morning rise	11946 Nov 22 09:34	5° \mathbb{A} 30'20	
minimum elong	11944 Jun 26 02:45	13° \mathbb{E} 27'24	1°20'56		11946 Dec 04 18:09	30° \mathbb{R} \mathbb{M}	
max. Earth dist.	11944 Jun 25 16:25	12° \mathbb{E} 54'57	1.71359 AU	direct	11946 Dec 10 14:56	29° \mathbb{M} 19'09	
	11944 Jul 09 06:54	0° \mathbb{O}			11946 Dec 16 15:25	0° \mathbb{A}	
	11944 Aug 02 05:16	0° \mathbb{M}		greatest brilliancy	11946 Dec 20 12:36	1° \mathbb{A} 06'26	-4.7m
evening rise	11944 Aug 05 00:59	3° \mathbb{M} 31'46		asc. node	11947 Jan 22 09:23	23° \mathbb{A} 45'32	
asc. node	11944 Aug 06 07:30	5° \mathbb{M} 07'09		morning max el	11947 Jan 28 13:24	29° \mathbb{A} 35'19	45°44'02
	11944 Aug 26 06:12	0° \mathbb{L}			11947 Jan 28 23:34	0° \mathbb{Z}	

	11947 Feb 26 12:35	0°♊			11949 Sep 30 16:30	0°♊	
	11947 Mar 24 17:29	0°♋			11949 Oct 27 07:25	0°♋	
	11947 Apr 18 22:08	0°♌		desc. node	11949 Oct 28 17:34	1°♋32'24	
	11947 May 13 13:16	0°♍		evening max el	11949 Nov 18 22:17	23°♋18'31	45°53'05
desc. node	11947 May 14 05:30	0°♌49'50			11949 Nov 26 01:59	0°♊	
	11947 Jun 06 19:54	0°♎		greatest brilliancy	11949 Dec 28 03:21	21°♊42'37	-4.7m
	11947 Jun 30 21:27	0°♏		retrograde	11950 Jan 06 20:58	23°♊26'27	
	11947 Jul 24 20:51	0°♐		evening set	11950 Jan 23 02:05	18°♊24'39	
morning set	11947 Jul 31 15:28	8°♐28'54		inferior conj	11950 Jan 28 05:36	15°♊17'04	-4°59'42
	11947 Aug 17 20:17	0°♑		minimum elong	11950 Jan 28 15:03	15°♊02'14	4°56'42
asc. node	11947 Sep 03 21:14	21°♑17'04		min. Earth dist.	11950 Jan 28 19:56	14°♊54'36	0.28603 AU
				morning rise	11950 Feb 03 03:35	11°♊42'13	
superior conj	11947 Sep 08 21:46	27°♑32'53	0°12'13	direct	11950 Feb 18 13:12	7°♊03'06	
minimum elong	11947 Sep 08 18:53	27°♑23'54	0°11'57	asc. node	11950 Feb 18 19:25	7°♊03'11	
behind sun begin	11947 Sep 08 02:18	26°♑32'10		greatest brilliancy	11950 Mar 01 14:29	9°♊17'16	-4.8m
behind sun end	11947 Sep 09 11:29	28°♑15'37			11950 Mar 31 05:36	0°♋	
	11947 Sep 10 20:58	0°♌		morning max el	11950 Apr 09 06:50	8°♋38'21	46°18'49
max. Earth dist.	11947 Sep 11 11:52	0°♌46'27	1.72064 AU		11950 Apr 29 15:04	0°♌	
	11947 Oct 04 23:30	0°♍			11950 May 25 23:28	0°♍	
evening rise	11947 Oct 16 21:50	14°♍47'57		desc. node	11950 Jun 10 18:14	18°♍41'42	
	11947 Oct 29 04:42	0°♎			11950 Jun 20 03:43	0°♎	
	11947 Nov 22 13:57	0°♏			11950 Jul 14 18:07	0°♏	
	11947 Dec 17 04:53	0°♐			11950 Aug 08 01:53	0°♐	
desc. node	11947 Dec 24 13:53	8°♐55'19			11950 Sep 01 07:11	0°♑	
	11948 Jan 11 02:49	0°♋			11950 Sep 25 12:03	0°♌	
	11948 Feb 05 09:11	0°♌		asc. node	11950 Oct 01 11:09	7°♌23'17	
	11948 Mar 02 03:58	0°♍		morning set	11950 Oct 11 18:55	20°♌10'49	
	11948 Mar 29 00:53	0°♎			11950 Oct 19 17:06	0°♍	
evening max el	11948 Apr 14 02:35	16°♎42'08	46°35'00		11950 Nov 12 22:36	0°♎	
asc. node	11948 Apr 15 12:51	18°♎06'56					
	11948 Apr 28 06:50	0°♏		superior conj	11950 Nov 18 06:12	6°♎34'45	1°23'59
greatest brilliancy	11948 May 24 16:07	17°♏12'10	-4.9m	minimum elong	11950 Nov 18 01:53	6°♎21'25	1°24'39
retrograde	11948 Jun 03 04:16	18°♏54'25		max. Earth dist.	11950 Nov 19 17:07	8°♎22'45	1.72988 AU
evening set	11948 Jun 20 22:17	12°♏54'54			11950 Dec 07 05:09	0°♏	
inferior conj	11948 Jun 23 20:29	11°♏07'51	8°38'01	evening rise	11950 Dec 25 03:28	22°♏05'58	
minimum elong	11948 Jun 24 04:06	10°♏56'06	8°36'20		11950 Dec 31 13:39	0°♊	
min. Earth dist.	11948 Jun 24 06:10	10°♏52'54	0.27169 AU	desc. node	11951 Jan 21 02:28	25°♊11'57	
morning rise	11948 Jun 27 09:53	8°♏57'59			11951 Jan 25 00:34	0°♋	
direct	11948 Jul 14 13:50	3°♏17'46			11951 Feb 18 13:37	0°♌	
greatest brilliancy	11948 Jul 24 13:21	5°♏09'40	-4.9m		11951 Mar 15 04:33	0°♍	
desc. node	11948 Aug 05 14:18	11°♏26'36			11951 Apr 08 22:41	0°♎	
	11948 Aug 28 00:40	0°♐			11951 May 04 00:38	0°♏	
morning max el	11948 Sep 02 19:01	5°♐36'44	46°41'15	asc. node	11951 May 13 22:55	11°♏40'21	
	11948 Sep 25 23:09	0°♑			11951 May 29 21:10	0°♐	
	11948 Oct 22 12:40	0°♌			11951 Jun 26 17:01	0°♑	
asc. node	11948 Nov 17 03:53	0°♍		evening max el	11951 Jun 27 01:16	0°♑20'42	46°49'16
	11948 Nov 26 12:13	11°♍06'21			11951 Aug 03 16:01	0°♌	
	11948 Dec 12 06:31	0°♎		greatest brilliancy	11951 Aug 05 17:08	0°♌50'42	-4.9m
	11949 Jan 06 00:46	0°♏		retrograde	11951 Aug 16 10:50	3°♌00'09	
	11949 Jan 30 13:23	0°♊			11951 Aug 28 15:50	30°♌00'09	
	11949 Feb 23 22:15	0°♋		evening set	11951 Aug 31 01:27	28°♌47'07	
morning set	11949 Mar 01 14:39	7°♋01'11		desc. node	11951 Sep 03 00:03	27°♌07'07	
desc. node	11949 Mar 18 03:52	27°♋30'24		inferior conj	11951 Sep 06 08:58	25°♌04'42	-0°51'55
	11949 Mar 20 04:08	0°♌		minimum elong	11951 Sep 06 06:57	25°♌07'47	0°51'24
max. Earth dist.	11949 Apr 06 06:20	21°♌14'21	1.72158 AU	min. Earth dist.	11951 Sep 05 21:19	25°♌22'30	0.27348 AU
				morning rise	11951 Sep 12 13:03	21°♌28'08	
superior conj	11949 Apr 09 15:24	25°♌26'43	-0°51'11	direct	11951 Sep 27 05:08	17°♌16'35	
minimum elong	11949 Apr 09 04:51	24°♌53'53	0°51'01	greatest brilliancy	11951 Oct 06 22:17	19°♌00'40	-4.8m
	11949 Apr 13 07:08	0°♍			11951 Oct 26 02:04	0°♌	
	11949 May 07 07:34	0°♎		morning max el	11951 Nov 15 09:23	17°♌42'50	45°56'52
evening rise	11949 May 19 02:55	14°♎46'45			11951 Nov 27 16:05	0°♍	
	11949 May 31 06:35	0°♏		asc. node	11951 Dec 25 00:23	29°♍40'40	
	11949 Jun 24 06:04	0°♐			11951 Dec 25 07:15	0°♎	
asc. node	11949 Jul 08 20:18	18°♐11'53			11952 Jan 20 07:43	0°♏	
	11949 Jul 18 08:17	0°♑			11952 Feb 14 12:40	0°♊	
	11949 Aug 11 15:47	0°♌			11952 Mar 10 06:19	0°♋	
	11949 Sep 05 08:14	0°♍			11952 Apr 03 16:40	0°♌	

desc. node	11952 Apr 14 17:51	13°♄39'48	greatest brilliancy	11954 Oct 15 15:59	11°♁26'05	-4.8m
	11952 Apr 27 21:35	0°♄	retrograde	11954 Oct 26 09:48	13°♁32'25	
morning set	11952 May 14 00:21	20°♄06'03	evening set	11954 Nov 13 06:39	7°♁30'40	
	11952 May 21 22:16	0°♄	inferior conj	11954 Nov 16 21:11	5°♁16'32	-8°31'41
	11952 Jun 14 20:15	0°♄	minimum elong	11954 Nov 16 16:22	5°♁24'05	8°30'38
			min. Earth dist.	11954 Nov 16 08:17	5°♁36'46	0.28805 AU
superior conj	11952 Jun 23 05:24	10°♄31'37 -1°21'47	morning rise	11954 Nov 20 02:16	3°♁17'06	
minimum elong	11952 Jun 23 13:26	10°♄56'50 1°22'28		11954 Nov 26 03:42	30°♁	
max. Earth dist.	11952 Jun 23 02:06	10°♄21'15 1.71360 AU	direct	11954 Dec 08 06:01	27°♁08'17	
	11952 Jul 08 17:31	0°♄	greatest brilliancy	11954 Dec 18 03:06	28°♁54'31	-4.7m
	11952 Aug 01 15:56	0°♄		11954 Dec 20 22:59	0°♁	
evening rise	11952 Aug 02 13:11	1°♄06'29	asc. node	11955 Jan 21 11:15	22°♁53'23	
asc. node	11952 Aug 05 09:21	4°♄39'35	morning max el	11955 Jan 26 03:13	27°♁19'25	45°43'39
	11952 Aug 25 16:56	0°♄		11955 Jan 28 20:52	0°♄	
	11952 Sep 18 21:54	0°♄		11955 Feb 26 03:47	0°♄	
	11952 Oct 13 08:57	0°♁		11955 Mar 24 06:33	0°♁	
	11952 Nov 07 05:38	0°♄		11955 Apr 18 10:12	0°♄	
desc. node	11952 Nov 25 04:14	21°♄12'59	desc. node	11955 May 13 07:30	0°♄20'33	
	11952 Dec 02 17:15	0°♄		11955 May 13 00:48	0°♄	
	11952 Dec 29 04:58	0°♁		11955 Jun 06 07:08	0°♄	
	11953 Jan 26 18:09	0°♄		11955 Jun 30 08:30	0°♄	
evening max el	11953 Jan 29 07:41	2°♄30'06 46°00'00		11955 Jul 24 07:46	0°♄	
	11953 Mar 06 05:12	0°♄	morning set	11955 Jul 29 04:04	6°♄04'08	
greatest brilliancy	11953 Mar 09 14:02	1°♄20'49 -4.8m		11955 Aug 17 07:05	0°♄	
asc. node	11953 Mar 18 05:11	3°♄08'07	asc. node	11955 Sep 02 23:00	20°♄49'05	
retrograde	11953 Mar 19 13:03	3°♄10'11				
	11953 Apr 01 03:22	30°♄	superior conj	11955 Sep 06 11:32	25°♄12'42	0°08'35
evening set	11953 Apr 03 14:56	28°♄42'25	minimum elong	11955 Sep 06 09:30	25°♄06'23	0°08'20
inferior conj	11953 Apr 09 09:42	25°♄14'40 5°17'38	behind sun begin	11955 Sep 05 12:19	24°♄00'19	
minimum elong	11953 Apr 08 23:32	25°♄30'29 5°14'43	behind sun end	11955 Sep 07 06:41	26°♄12'27	
min. Earth dist.	11953 Apr 09 09:44	25°♄14'37 0.27654 AU	max. Earth dist.	11955 Sep 08 23:57	28°♄21'03	1.72027 AU
morning rise	11953 Apr 14 07:58	22°♄15'35		11955 Sep 10 07:42	0°♄	
direct	11953 Apr 30 09:44	17°♄13'45		11955 Oct 04 10:13	0°♄	
greatest brilliancy	11953 May 10 12:12	19°♄09'15 -4.9m	evening rise	11955 Oct 14 13:38	12°♄34'54	
	11953 May 28 18:58	0°♄		11955 Oct 28 15:30	0°♁	
morning max el	11953 Jun 19 20:14	19°♄58'02 46°56'04		11955 Nov 22 00:56	0°♄	
	11953 Jun 29 12:50	0°♄		11955 Dec 16 16:11	0°♄	
desc. node	11953 Jul 08 05:53	9°♄25'42	desc. node	11955 Dec 23 15:50	8°♄26'41	
	11953 Jul 26 10:54	0°♄		11956 Jan 10 14:40	0°♁	
	11953 Aug 20 23:23	0°♄		11956 Feb 04 21:58	0°♄	
	11953 Sep 14 22:24	0°♄		11956 Mar 01 18:29	0°♄	
	11953 Oct 09 15:23	0°♄		11956 Mar 28 19:14	0°♄	
asc. node	11953 Oct 29 01:03	23°♄41'17	evening max el	11956 Apr 11 14:44	14°♄16'16	46°33'46
	11953 Nov 03 04:49	0°♄	asc. node	11956 Apr 14 14:51	17°♄13'38	
	11953 Nov 27 15:31	0°♁		11956 Apr 28 15:27	0°♄	
morning set	11953 Dec 20 04:22	27°♁44'50	greatest brilliancy	11956 May 22 05:26	14°♄47'30	-4.9m
	11953 Dec 22 00:14	0°♄	retrograde	11956 May 31 16:54	16°♄29'31	
	11954 Jan 15 08:00	0°♄	evening set	11956 Jun 18 13:56	10°♄25'25	
			inferior conj	11956 Jun 21 09:22	8°♄42'40	8°46'03
superior conj	11954 Jan 25 23:36	13°♄08'24 0°51'15	minimum elong	11956 Jun 21 16:14	8°♄32'06	8°44'32
minimum elong	11954 Jan 26 09:02	13°♄37'30 0°51'32	min. Earth dist.	11956 Jun 21 19:07	8°♄27'38	0.27189 AU
max. Earth dist.	11954 Jan 25 11:18	12°♄30'28 1.73111 AU	morning rise	11956 Jun 24 18:27	6°♄39'15	
	11954 Feb 08 15:26	0°♁	direct	11956 Jul 12 02:14	0°♄51'49	
desc. node	11954 Feb 17 15:51	11°♁08'03	greatest brilliancy	11956 Jul 22 02:43	2°♄44'32	-4.9m
	11954 Mar 04 22:23	0°♄	desc. node	11956 Aug 04 16:11	10°♄03'25	
evening rise	11954 Mar 05 00:57	0°♄07'57		11956 Aug 28 01:46	0°♄	
	11954 Mar 29 04:14	0°♄	morning max el	11956 Aug 31 08:40	3°♄13'57	46°42'43
	11954 Apr 22 09:08	0°♄		11956 Sep 25 16:03	0°♄	
	11954 May 16 14:37	0°♄		11956 Oct 22 02:39	0°♄	
	11954 Jun 09 23:49	0°♄		11956 Nov 16 16:25	0°♄	
asc. node	11954 Jun 10 10:05	0°♄31'25	asc. node	11956 Nov 25 14:09	10°♄35'46	
	11954 Jul 04 17:23	0°♄		11956 Dec 11 18:14	0°♁	
	11954 Jul 30 03:21	0°♄		11957 Jan 05 12:00	0°♄	
	11954 Aug 26 01:00	0°♄		11957 Jan 30 00:21	0°♄	
evening max el	11954 Sep 06 14:49	11°♄55'17 46°22'24		11957 Feb 23 09:03	0°♁	
	11954 Sep 26 17:03	0°♁	morning set	11957 Feb 27 06:09	4°♁47'25	
desc. node	11954 Sep 30 09:48	2°♁47'17	desc. node	11957 Mar 17 05:46	27°♁02'58	

	11957 Mar 19 14:53	0°♄		minimum elong	11959 Sep 03 21:22	22°♎44'53	0°28'20
max. Earth dist.	11957 Apr 03 23:23	19°♄04'25	1.72200 AU	min. Earth dist.	11959 Sep 03 11:35	22°♎59'51	0.27310 AU
				morning rise	11959 Sep 10 03:47	19°♎05'13	
superior conj	11957 Apr 07 04:53	23°♄05'37	-0°48'08	direct	11959 Sep 24 18:59	14°♎55'40	
minimum elong	11957 Apr 06 18:43	22°♄33'59	0°47'57	greatest brilliancy	11959 Oct 04 11:20	16°♎39'26	-4.8m
	11957 Apr 12 17:56	0°♄			11959 Oct 26 15:28	0°♎	
	11957 May 06 18:28	0°♄		morning max el	11959 Nov 13 00:00	15°♎26'36	45°58'02
evening rise	11957 May 16 15:12	12°♄20'42			11959 Nov 27 11:01	0°♎	
	11957 May 30 17:37	0°♄		asc. node	11959 Dec 24 02:17	29°♎04'30	
	11957 Jun 23 17:16	0°♄			11959 Dec 24 21:55	0°♄	
asc. node	11957 Jul 07 22:05	17°♄42'07			11960 Jan 19 20:35	0°♄	
	11957 Jul 17 19:44	0°♄			11960 Feb 14 00:37	0°♄	
	11957 Aug 11 03:38	0°♎			11960 Mar 09 17:48	0°♄	
	11957 Sep 04 20:46	0°♎			11960 Apr 03 03:54	0°♄	
	11957 Sep 30 06:19	0°♄		desc. node	11960 Apr 13 19:49	13°♄11'20	
	11957 Oct 27 00:09	0°♄			11960 Apr 27 08:40	0°♄	
desc. node	11957 Oct 27 19:38	0°♄52'24		morning set	11960 May 11 12:00	17°♄38'08	
evening max el	11957 Nov 16 13:30	21°♄05'43	45°53'39		11960 May 21 09:15	0°♄	
	11957 Nov 26 04:39	0°♄			11960 Jun 14 07:11	0°♄	
greatest brilliancy	11957 Dec 25 17:46	19°♄29'31	-4.7m				
retrograde	11958 Jan 04 12:50	21°♄14'24		superior conj	11960 Jun 20 17:16	8°♄03'48	-1°23'05
evening set	11958 Jan 20 20:20	16°♄08'05		minimum elong	11960 Jun 21 00:28	8°♄26'24	1°23'48
inferior conj	11958 Jan 25 21:12	13°♄04'15	-5°16'37	max. Earth dist.	11960 Jun 20 11:11	7°♄44'43	1.71357 AU
minimum elong	11958 Jan 26 06:56	12°♄49'00	5°13'36		11960 Jul 08 04:26	0°♄	
min. Earth dist.	11958 Jan 26 11:11	12°♄42'22	0.28639 AU	evening rise	11960 Jul 31 01:36	28°♄40'51	
morning rise	11958 Jan 31 17:11	9°♄32'31			11960 Aug 01 02:54	0°♄	
direct	11958 Feb 16 05:19	4°♄49'57		asc. node	11960 Aug 04 11:11	4°♄11'01	
asc. node	11958 Feb 17 21:23	4°♄53'15			11960 Aug 25 04:01	0°♎	
greatest brilliancy	11958 Feb 27 06:05	7°♄04'02	-4.8m		11960 Sep 18 09:10	0°♎	
	11958 Mar 31 07:13	0°♄			11960 Oct 12 20:33	0°♄	
morning max el	11958 Apr 06 23:17	6°♄25'57	46°17'22		11960 Nov 06 17:52	0°♄	
	11958 Apr 29 07:44	0°♄		desc. node	11960 Nov 24 06:09	20°♄40'37	
	11958 May 25 13:25	0°♄			11960 Dec 02 06:40	0°♄	
desc. node	11958 Jun 09 20:13	18°♄08'28			11960 Dec 28 20:49	0°♄	
	11958 Jun 19 16:25	0°♄			11961 Jan 26 16:38	0°♄	
	11958 Jul 14 06:08	0°♄		evening max el	11961 Jan 26 22:16	0°♄13'39	45°59'02
	11958 Aug 07 13:28	0°♄		greatest brilliancy	11961 Mar 07 04:26	29°♄01'50	-4.8m
	11958 Aug 31 18:28	0°♄			11961 Mar 10 10:27	0°♄	
	11958 Sep 24 23:06	0°♎		retrograde	11961 Mar 17 02:18	0°♄50'12	
asc. node	11958 Sep 30 13:08	6°♎55'22		asc. node	11961 Mar 17 07:17	0°♄50'09	
morning set	11958 Oct 09 10:05	17°♎55'13			11961 Mar 23 13:08	30°♄	
	11958 Oct 19 04:00	0°♎		evening set	11961 Apr 01 02:41	26°♄25'46	
	11958 Nov 12 09:24	0°♄		inferior conj	11961 Apr 06 23:50	22°♄54'39	4°58'33
				minimum elong	11961 Apr 06 14:02	23°♄09'55	4°55'41
superior conj	11958 Nov 15 22:50	4°♄24'20	1°23'11	min. Earth dist.	11961 Apr 07 00:34	22°♄53'31	0.27671 AU
minimum elong	11958 Nov 15 17:50	4°♄08'51	1°23'49	morning rise	11961 Apr 12 01:07	19°♄50'50	
max. Earth dist.	11958 Nov 17 12:50	6°♄21'54	1.72968 AU	direct	11961 Apr 27 23:49	14°♄53'24	
	11958 Dec 06 15:57	0°♄		greatest brilliancy	11961 May 08 03:42	16°♄49'38	-4.9m
evening rise	11958 Dec 22 19:55	19°♄55'30			11961 May 29 08:03	0°♄	
	11958 Dec 31 00:33	0°♄		morning max el	11961 Jun 17 09:16	17°♄33'41	46°55'36
desc. node	11959 Jan 20 04:17	24°♄43'32			11961 Jun 29 07:58	0°♄	
	11959 Jan 24 11:41	0°♄		desc. node	11961 Jul 07 07:43	8°♄42'36	
	11959 Feb 18 01:05	0°♄			11961 Jul 26 01:55	0°♄	
	11959 Mar 14 16:29	0°♄			11961 Aug 20 12:37	0°♄	
	11959 Apr 08 11:19	0°♄			11961 Sep 14 10:39	0°♄	
	11959 May 03 14:28	0°♄			11961 Oct 09 03:00	0°♎	
asc. node	11959 May 13 00:58	11°♄03'51		asc. node	11961 Oct 28 02:55	23°♎12'30	
	11959 May 29 13:25	0°♄			11961 Nov 02 16:02	0°♎	
evening max el	11959 Jun 24 16:31	28°♄01'56	46°49'29		11961 Nov 27 02:27	0°♄	
	11959 Jun 26 15:54	0°♄		morning set	11961 Dec 17 21:27	25°♄36'17	
greatest brilliancy	11959 Aug 03 07:43	28°♄29'10	-4.9m		11961 Dec 21 11:02	0°♄	
	11959 Aug 08 08:18	0°♎			11962 Jan 14 18:45	0°♄	
retrograde	11959 Aug 14 01:20	0°♎37'58		max. Earth dist.	11962 Jan 23 04:02	10°♄20'53	1.73125 AU
	11959 Aug 19 14:41	30°♄					
evening set	11959 Aug 28 15:38	26°♄24'56		superior conj	11962 Jan 23 15:58	10°♄57'42	0°53'55
desc. node	11959 Sep 02 02:08	23°♄50'52		minimum elong	11962 Jan 24 01:35	11°♄27'20	0°54'13
inferior conj	11959 Sep 03 22:29	22°♄43'10	-0°28'30		11962 Feb 08 02:14	0°♄	

desc. node	11962 Feb 16 17:45	10° H 40'28		direct	11964 Jul 09 15:17	28° II 25'58	
evening rise	11962 Mar 02 16:04	27° H 52'39			11964 Jul 18 17:34	0° G	
	11962 Mar 04 09:18	0° Y		greatest brilliancy	11964 Jul 19 15:38	0° G 19'04	-4.9m
	11962 Mar 28 15:20	0° B		desc. node	11964 Aug 03 18:16	8° G 43'25	
	11962 Apr 21 20:29	0° II			11964 Aug 28 01:36	0° Q	
	11962 May 16 02:21	0° G		morning max el	11964 Aug 28 23:19	0° Q 53'52	46°44'12
asc. node	11962 Jun 09 11:55	29° G 59'32			11964 Sep 25 08:29	0° M	
	11962 Jun 09 12:04	0° Q			11964 Oct 21 16:21	0° G	
	11962 Jul 04 06:29	0° M			11964 Nov 16 04:42	0° M	
	11962 Jul 29 18:04	0° G		asc. node	11964 Nov 24 16:01	10° M 05'36	
	11962 Aug 25 19:41	0° M			11964 Dec 11 05:44	0° H	
evening max el	11962 Sep 04 04:57	9° M 36'54	46°23'38		11965 Jan 04 23:02	0° B	
	11962 Sep 27 06:51	0° H			11965 Jan 29 11:08	0° \approx	
desc. node	11962 Sep 29 11:51	1° H 35'16			11965 Feb 22 19:44	0° H	
greatest brilliancy	11962 Oct 13 07:38	9° H 13'38	-4.8m	morning set	11965 Feb 24 21:46	2° H 34'25	
retrograde	11962 Oct 24 01:18	11° H 20'25		desc. node	11965 Mar 16 07:44	26° H 36'00	
evening set	11962 Nov 10 19:40	5° H 23'06			11965 Mar 19 01:33	0° Y	
min. Earth dist.	11962 Nov 13 23:32	3° H 26'03	0.28773 AU	max. Earth dist.	11965 Apr 01 15:35	16° Y 52'16	1.72242 AU
inferior conj	11962 Nov 14 13:00	3° H 04'55	-8°26'37				
minimum elong	11962 Nov 14 07:29	3° H 13'35	8°25'28	superior conj	11965 Apr 04 18:13	20° Y 44'26	-0°45'00
morning rise	11962 Nov 17 19:28	1° H 03'26		minimum elong	11965 Apr 04 08:31	20° Y 14'13	0°44'47
	11962 Nov 19 14:28	30° R M			11965 Apr 12 04:38	0° B	
direct	11962 Dec 05 20:55	24° M 57'09			11965 May 06 05:16	0° II	
greatest brilliancy	11962 Dec 15 18:20	26° M 43'11	-4.7m	evening rise	11965 May 14 03:20	9° II 54'38	
	11962 Dec 23 03:03	0° H			11965 May 30 04:31	0° G	
asc. node	11963 Jan 20 13:12	22° H 01'54			11965 Jun 23 04:20	0° Q	
morning max el	11963 Jan 23 17:32	25° H 04'12	45°43'14	asc. node	11965 Jul 07 00:01	17° Q 13'16	
	11963 Jan 28 17:39	0° B			11965 Jul 17 07:04	0° M	
	11963 Feb 25 18:58	0° \approx			11965 Aug 10 15:22	0° G	
	11963 Mar 23 19:42	0° H			11965 Sep 04 09:11	0° M	
	11963 Apr 17 22:22	0° Y			11965 Sep 29 20:02	0° H	
desc. node	11963 May 12 09:20	29° Y 50'29		desc. node	11965 Oct 26 21:36	0° B 12'36	
	11963 May 12 12:25	0° B			11965 Oct 26 16:54	0° B	
	11963 Jun 05 18:26	0° II		evening max el	11965 Nov 14 05:37	18° B 56'11	45°54'20
	11963 Jun 29 19:37	0° G			11965 Nov 26 08:24	0° \approx	
	11963 Jul 23 18:44	0° Q		greatest brilliancy	11965 Dec 23 08:22	17° \approx 18'24	-4.7m
morning set	11963 Jul 26 16:40	3° Q 39'01		retrograde	11966 Jan 02 04:51	19° \approx 04'05	
	11963 Aug 16 17:56	0° M		evening set	11966 Jan 18 14:55	13° \approx 53'29	
asc. node	11963 Sep 02 00:59	20° M 21'41		inferior conj	11966 Jan 23 13:04	10° \approx 53'17	-5°32'50
				minimum elong	11966 Jan 23 23:02	10° \approx 37'42	5°29'48
superior conj	11963 Sep 04 01:30	22° M 53'02	0°04'57	min. Earth dist.	11966 Jan 24 02:27	10° \approx 32'20	0.28676 AU
minimum elong	11963 Sep 04 00:20	22° M 49'25	0°04'43	morning rise	11966 Jan 29 06:52	7° \approx 24'44	
behind sun begin	11963 Sep 03 00:42	21° M 35'40		direct	11966 Feb 13 22:03	2° \approx 38'51	
behind sun end	11963 Sep 04 23:58	24° M 03'09		asc. node	11966 Feb 16 23:29	2° \approx 49'52	
max. Earth dist.	11963 Sep 06 10:59	25° M 52'22	1.71987 AU	greatest brilliancy	11966 Feb 24 21:27	4° \approx 52'01	-4.8m
	11963 Sep 09 18:26	0° G			11966 Mar 31 07:10	0° H	
	11963 Oct 03 20:55	0° M		morning max el	11966 Apr 04 15:40	4° H 14'18	46°15'36
evening rise	11963 Oct 12 05:48	10° M 23'04			11966 Apr 28 23:53	0° Y	
	11963 Oct 28 02:15	0° H			11966 May 25 03:02	0° B	
	11963 Nov 21 11:53	0° B		desc. node	11966 Jun 08 22:05	17° B 35'39	
	11963 Dec 16 03:29	0° \approx			11966 Jun 19 04:51	0° II	
desc. node	11963 Dec 22 17:40	7° \approx 57'40			11966 Jul 13 17:53	0° G	
	11964 Jan 10 02:35	0° H			11966 Aug 07 00:45	0° Q	
	11964 Feb 04 10:53	0° Y			11966 Aug 31 05:26	0° M	
	11964 Mar 01 09:16	0° B			11966 Sep 24 09:52	0° G	
	11964 Mar 28 14:09	0° II		asc. node	11966 Sep 29 14:57	6° G 27'50	
evening max el	11964 Apr 09 03:39	11° II 52'29	46°32'40	morning set	11966 Oct 07 01:19	15° G 40'40	
asc. node	11964 Apr 13 16:53	16° II 19'18			11966 Oct 18 14:36	0° M	
	11964 Apr 29 03:09	0° G			11966 Nov 11 19:53	0° H	
greatest brilliancy	11964 May 19 18:05	12° G 22'14	-4.9m				
retrograde	11964 May 29 05:59	14° G 04'48		superior conj	11966 Nov 13 15:39	2° H 15'26	1°22'15
evening set	11964 Jun 16 05:20	7° G 56'20		minimum elong	11966 Nov 13 10:00	1° H 57'55	1°22'51
inferior conj	11964 Jun 18 22:15	6° G 17'28	8°53'04	max. Earth dist.	11966 Nov 15 08:54	4° H 23'01	1.72941 AU
minimum elong	11964 Jun 19 04:18	6° G 08'09	8°51'42		11966 Dec 06 02:24	0° B	
min. Earth dist.	11964 Jun 19 07:42	6° G 02'55	0.27210 AU	evening rise	11966 Dec 20 12:40	17° B 47'00	
morning rise	11964 Jun 22 03:14	4° G 20'19			11966 Dec 30 11:05	0° \approx	
	11964 Jun 30 21:54	30° R II		desc. node	11967 Jan 19 06:16	24° \approx 16'51	

	11967 Jan 23 22:26	0° H			11969 Jul 25 16:26	0° G	
	11967 Feb 17 12:10	0° Y			11969 Aug 20 01:30	0° Q	
	11967 Mar 14 04:06	0° B			11969 Sep 13 22:36	0° P	
	11967 Apr 07 23:43	0° II			11969 Oct 08 14:20	0° A	
	11967 May 03 04:11	0° G		asc. node	11969 Oct 27 04:44	22° A 44'32	
asc. node	11967 May 12 02:48	10° G 27'10			11969 Nov 02 02:55	0° M	
	11967 May 29 05:45	0° Q			11969 Nov 26 13:03	0° J	
evening max el	11967 Jun 22 07:28	25° Q 42'52	46°49'39	morning set	11969 Dec 15 14:23	23° J 28'16	
	11967 Jun 26 15:34	0° P			11969 Dec 20 21:29	0° Z	
greatest brilliancy	11967 Jul 31 22:51	26° P 08'50	-4.9m		11970 Jan 14 05:10	0° X	
retrograde	11967 Aug 11 15:18	28° P 16'05					
evening set	11967 Aug 26 05:55	24° P 03'02		superior conj	11970 Jan 21 08:29	8° X 48'30	0°56'30
inferior conj	11967 Sep 01 11:53	20° P 22'13	-0°04'58	minimum elong	11970 Jan 21 18:13	9° X 18'31	0°56'49
minimum elong	11967 Sep 01 11:41	20° P 22'31	0°05'08	max. Earth dist.	11970 Jan 20 21:13	8° X 13'45	1.73137 AU
transit middle	11967 Sep 01 11:41	20° P 22'31	0°05'08		11970 Feb 07 12:41	0° H	
transit begin	11967 Sep 01 07:48	20° P 28'28		desc. node	11970 Feb 15 19:41	10° H 14'08	
transit end	11967 Sep 01 15:33	20° P 16'35		evening rise	11970 Feb 28 07:33	25° H 39'44	
min. Earth dist.	11967 Sep 01 02:03	20° P 37'17	0.27270 AU		11970 Mar 03 19:50	0° Y	
desc. node	11967 Sep 01 04:10	20° P 34'02			11970 Mar 28 02:02	0° B	
morning rise	11967 Sep 07 18:07	16° P 42'54			11970 Apr 21 07:27	0° II	
direct	11967 Sep 22 08:27	12° P 35'22			11970 May 15 13:42	0° G	
greatest brilliancy	11967 Oct 02 00:35	14° P 18'57	-4.8m	asc. node	11970 Jun 08 13:53	29° G 29'06	
	11967 Oct 27 01:00	0° A			11970 Jun 09 00:01	0° Q	
morning max el	11967 Nov 10 13:43	13° A 09'04	45°59'18		11970 Jul 03 19:23	0° P	
	11967 Nov 27 05:02	0° M			11970 Jul 29 08:46	0° A	
asc. node	11967 Dec 23 04:11	28° M 29'50			11970 Aug 25 14:46	0° M	
	11967 Dec 24 11:59	0° J		evening max el	11970 Sep 01 19:03	7° M 18'40	46°24'53
	11968 Jan 19 08:55	0° Z			11970 Sep 28 01:25	0° J	
	11968 Feb 13 12:05	0° X		desc. node	11970 Sep 28 13:47	0° J 20'59	
	11968 Mar 09 04:48	0° H		greatest brilliancy	11970 Oct 10 22:31	7° J 00'01	-4.8m
	11968 Apr 02 14:40	0° Y		retrograde	11970 Oct 21 16:53	9° J 08'06	
desc. node	11968 Apr 12 21:37	12° Y 43'48		evening set	11970 Nov 08 08:07	3° J 15'20	
	11968 Apr 26 19:20	0° B		min. Earth dist.	11970 Nov 11 14:18	1° J 15'11	0.28736 AU
morning set	11968 May 08 23:33	15° B 11'05		inferior conj	11970 Nov 12 04:32	0° J 52'55	-8°20'42
	11968 May 20 19:53	0° II		minimum elong	11970 Nov 11 22:18	1° J 02'41	8°19'27
	11968 Jun 13 17:49	0° G			11970 Nov 13 14:25	30° R M	
max. Earth dist.	11968 Jun 17 16:00	4° G 55'41	1.71362 AU	morning rise	11970 Nov 15 12:36	28° M 49'10	
				direct	11970 Dec 03 11:32	22° M 45'35	
superior conj	11968 Jun 18 04:48	5° G 35'54	-1°24'14	greatest brilliancy	11970 Dec 13 09:14	24° M 31'42	-4.7m
minimum elong	11968 Jun 18 11:06	5° G 55'41	1°24'59		11970 Dec 24 12:55	0° J	
	11968 Jul 07 15:06	0° Q		asc. node	11971 Jan 19 15:20	21° J 12'29	
evening rise	11968 Jul 28 13:21	26° Q 14'00		morning max el	11971 Jan 21 08:28	22° J 51'14	45°43'00
	11968 Jul 31 13:36	0° P			11971 Jan 28 13:28	0° Z	
asc. node	11968 Aug 03 13:08	3° P 43'40			11971 Feb 25 09:39	0° X	
	11968 Aug 24 14:47	0° A			11971 Mar 23 08:26	0° H	
	11968 Sep 17 20:06	0° M			11971 Apr 17 10:08	0° Y	
	11968 Oct 12 07:50	0° J		desc. node	11971 May 11 11:13	29° Y 21'42	
	11968 Nov 06 05:47	0° Z			11971 May 11 23:40	0° B	
desc. node	11968 Nov 23 08:02	20° Z 09'09			11971 Jun 05 05:22	0° II	
	11968 Dec 01 19:47	0° X			11971 Jun 29 06:22	0° G	
	11968 Dec 28 12:28	0° H			11971 Jul 23 05:23	0° Q	
evening max el	11969 Jan 24 12:14	27° H 57'24	45°58'17	morning set	11971 Jul 24 05:23	1° Q 15'10	
	11969 Jan 26 15:24	0° Y			11971 Aug 16 04:31	0° P	
greatest brilliancy	11969 Mar 04 19:06	26° Y 45'23	-4.8m	asc. node	11971 Sep 01 02:49	19° P 54'24	
retrograde	11969 Mar 14 15:48	28° Y 33'06					
asc. node	11969 Mar 16 09:12	28° Y 29'33		superior conj	11971 Sep 01 15:12	20° P 33'05	0°01'17
evening set	11969 Mar 29 14:58	24° Y 11'14		minimum elong	11971 Sep 01 14:55	20° P 32'13	0°01'02
inferior conj	11969 Apr 04 14:17	20° Y 37'22	4°39'06	behind sun begin	11971 Aug 31 14:26	19° P 15'45	
minimum elong	11969 Apr 04 04:55	20° Y 51'57	4°36'20	behind sun end	11971 Sep 02 15:25	21° P 48'39	
min. Earth dist.	11969 Apr 04 15:47	20° Y 35'01	0.27693 AU	max. Earth dist.	11971 Sep 03 22:21	23° P 25'10	1.71957 AU
morning rise	11969 Apr 09 18:30	17° Y 29'06			11971 Sep 09 04:58	0° A	
direct	11969 Apr 25 13:56	12° Y 35'32			11971 Oct 03 07:28	0° M	
greatest brilliancy	11969 May 05 19:58	14° Y 33'14	-4.9m	evening rise	11971 Oct 09 21:32	8° M 10'20	
	11969 May 29 16:58	0° B			11971 Oct 27 12:54	0° J	
morning max el	11969 Jun 14 22:30	15° B 11'14	46°54'48		11971 Nov 20 22:43	0° Z	
	11969 Jun 29 02:09	0° II			11971 Dec 15 14:40	0° X	
desc. node	11969 Jul 06 09:47	8° II 01'50		desc. node	11971 Dec 21 19:39	7° X 29'32	

	11972 Jan 09 14:23	0° H			11974 Aug 06 12:03	0° Ω		
	11972 Feb 03 23:45	0° Y			11974 Aug 30 16:26	0° M		
	11972 Mar 01 00:03	0° B			11974 Sep 23 20:38	0° Ω		
	11972 Mar 28 09:21	0° II		asc. node	11974 Sep 28 16:45	6° Ω 00'06		
evening max el	11972 Apr 06 17:46	9° II 32'31	46°31'42	morning set	11974 Oct 04 16:47	13° Ω 26'43		
asc. node	11972 Apr 12 18:49	15° II 24'28			11974 Oct 18 01:14	0° M		
	11972 Apr 29 18:19	0° E						
greatest brilliancy	11972 May 17 06:20	9° E 57'57	-4.9m	superior conj	11974 Nov 11 08:31	0° A 06'22	1°21'12	
retrograde	11972 May 26 19:35	11° E 41'32		minimum elong	11974 Nov 11 02:16	29° M 47'00	1°21'46	
evening set	11972 Jun 13 20:33	5° E 29'19			11974 Nov 11 06:28	0° A		
inferior conj	11972 Jun 16 11:19	3° E 53'41	8°58'58	max. Earth dist.	11974 Nov 13 04:22	2° A 22'03	1.72920 AU	
minimum elong	11972 Jun 16 16:32	3° E 45'41	8°57'46		11974 Dec 05 13:01	0° B		
min. Earth dist.	11972 Jun 16 20:00	3° E 40'21	0.27227 AU	evening rise	11974 Dec 18 05:13	15° B 37'18		
morning rise	11972 Jun 19 12:29	2° E 02'23			11974 Dec 29 21:49	0° \approx		
	11972 Jun 23 02:55	30° K II		desc. node	11975 Jan 18 08:08	23° \approx 49'06		
direct	11972 Jul 07 05:02	26° II 01'53			11975 Jan 23 09:25	0° H		
greatest brilliancy	11972 Jul 17 04:00	27° II 54'24	-4.9m		11975 Feb 16 23:31	0° Y		
	11972 Jul 22 00:37	0° E			11975 Mar 13 15:58	0° B		
desc. node	11972 Aug 02 20:17	7° E 27'05			11975 Apr 07 12:24	0° II		
morning max el	11972 Aug 26 14:16	28° E 35'30	46°45'21		11975 May 02 18:15	0° E		
	11972 Aug 28 00:02	0° Ω		asc. node	11975 May 11 04:49	9° E 50'09		
	11972 Sep 25 00:26	0° M			11975 May 28 22:37	0° Ω		
	11972 Oct 21 05:49	0° Ω		evening max el	11975 Jun 19 21:34	23° Ω 21'01	46°49'46	
	11972 Nov 15 16:55	0° M			11975 Jun 26 16:40	0° M		
asc. node	11972 Nov 23 17:58	9° M 35'50		greatest brilliancy	11975 Jul 29 14:33	23° M 48'37	-4.9m	
	11972 Dec 10 17:12	0° A		retrograde	11975 Aug 09 04:48	25° M 53'48		
	11973 Jan 04 10:03	0° B		evening set	11975 Aug 23 20:28	21° M 40'25		
	11973 Jan 28 21:53	0° \approx		min. Earth dist.	11975 Aug 29 16:54	18° M 14'00	0.27231 AU	
	11973 Feb 22 06:21	0° H		inferior conj	11975 Aug 30 01:22	18° M 01'01	0°18'31	
morning set	11973 Feb 22 13:13	0° H 21'10		minimum elong	11975 Aug 30 02:05	17° M 59'56	0°18'02	
desc. node	11973 Mar 15 09:27	26° H 08'25		desc. node	11975 Aug 31 06:03	17° M 17'05		
	11973 Mar 18 12:09	0° Y		morning rise	11975 Sep 05 08:18	14° M 20'27		
max. Earth dist.	11973 Mar 30 06:23	14° Y 36'01	1.72280 AU	direct	11975 Sep 19 21:28	10° M 14'42		
				greatest brilliancy	11975 Sep 29 14:23	11° M 58'39	-4.8m	
superior conj	11973 Apr 02 07:31	18° Y 23'23	-0°41'46		11975 Oct 27 08:00	0° Ω		
minimum elong	11973 Apr 01 22:21	17° Y 54'52	0°41'33	morning max el	11975 Nov 08 02:36	10° Ω 48'58	46°00'38	
	11973 Apr 11 15:18	0° B			11975 Nov 26 22:45	0° M		
	11973 May 05 16:00	0° II		asc. node	11975 Dec 22 06:14	27° M 55'17		
evening rise	11973 May 11 15:36	7° II 29'08			11975 Dec 24 02:05	0° A		
	11973 May 29 15:21	0° E			11976 Jan 18 21:27	0° B		
	11973 Jun 22 15:19	0° Ω			11976 Feb 12 23:51	0° \approx		
asc. node	11973 Jul 06 01:59	16° Ω 44'46			11976 Mar 08 16:09	0° H		
	11973 Jul 16 18:17	0° M			11976 Apr 02 01:47	0° Y		
	11973 Aug 10 03:00	0° Ω		desc. node	11976 Apr 11 23:30	12° Y 15'23		
	11973 Sep 03 21:34	0° M			11976 Apr 26 06:19	0° B		
desc. node	11973 Sep 29 09:51	0° A		morning set	11976 May 06 10:54	12° B 42'27		
	11973 Oct 25 23:31	29° A 32'01			11976 May 20 06:48	0° II		
	11973 Oct 26 10:03	0° B			11976 Jun 13 04:44	0° E		
evening max el	11973 Nov 11 21:45	16° B 46'10	45°54'46	max. Earth dist.	11976 Jun 14 19:36	2° E 02'04	1.71369 AU	
	11973 Nov 26 14:24	0° \approx						
greatest brilliancy	11973 Dec 20 23:17	15° \approx 06'48	-4.7m	superior conj	11976 Jun 15 16:19	3° E 07'04	-1°25'13	
retrograde	11973 Dec 30 20:18	16° \approx 52'33		minimum elong	11976 Jun 15 21:41	3° E 23'55	1°26'00	
evening set	11974 Jan 16 09:23	11° \approx 37'53			11976 Jul 07 02:02	0° Ω		
inferior conj	11974 Jan 21 04:45	8° \approx 41'19	-5°48'32	evening rise	11976 Jul 26 01:08	23° Ω 46'13		
minimum elong	11974 Jan 21 14:51	8° \approx 25'29	5°45'33		11976 Jul 31 00:36	0° M		
min. Earth dist.	11974 Jan 21 17:37	8° \approx 21'08	0.28709 AU	asc. node	11976 Aug 02 14:57	3° M 14'57		
morning rise	11974 Jan 26 20:07	5° \approx 16'03			11976 Aug 24 01:52	0° Ω		
direct	11974 Feb 11 14:32	0° \approx 26'55			11976 Sep 17 07:20	0° M		
asc. node	11974 Feb 16 01:23	0° \approx 50'00			11976 Oct 11 19:24	0° A		
greatest brilliancy	11974 Feb 22 12:28	2° \approx 38'46	-4.8m		11976 Nov 05 18:01	0° B		
	11974 Mar 31 06:15	0° H		desc. node	11976 Nov 22 10:06	19° B 37'18		
morning max el	11974 Apr 02 06:55	1° H 59'30	46°13'56		11976 Dec 01 09:19	0° \approx		
	11974 Apr 28 15:51	0° Y			11976 Dec 28 04:46	0° H		
	11974 May 24 16:37	0° B		evening max el	11977 Jan 22 01:43	25° H 38'47	45°57'21	
desc. node	11974 Jun 08 00:03	17° B 03'08			11977 Jan 26 15:50	0° Y		
	11974 Jun 18 17:16	0° II		greatest brilliancy	11977 Mar 02 09:12	24° Y 26'27	-4.8m	
	11974 Jul 13 05:37	0° E		retrograde	11977 Mar 12 05:22	26° Y 14'08		

asc. node	11977 Mar 15 11:12	26° Υ 01'30		minimum elong	11979 Aug 30 05:12	18° \mathfrak{M} 12'52	0°02'42
evening set	11977 Mar 27 03:12	21° Υ 54'12		behind sun begin	11979 Aug 29 04:49	16° \mathfrak{M} 56'42	
inferior conj	11977 Apr 02 04:31	18° Υ 17'57	4°19'04	behind sun end	11979 Aug 31 05:36	19° \mathfrak{M} 29'01	
minimum elong	11977 Apr 01 19:38	18° Υ 31'47	4°16'23	asc. node	11979 Aug 31 04:36	19° \mathfrak{M} 25'54	
min. Earth dist.	11977 Apr 02 06:45	18° Υ 14'29	0.27718 AU	max. Earth dist.	11979 Sep 01 12:13	21° \mathfrak{M} 04'37	1.71922 AU
morning rise	11977 Apr 07 11:37	15° Υ 05'38			11979 Sep 08 15:52	0° Ω	
direct	11977 Apr 23 03:58	10° Υ 15'25			11979 Oct 02 18:22	0° \mathfrak{M}	
greatest brilliancy	11977 May 03 12:07	12° Υ 14'59	-4.9m	evening rise	11979 Oct 07 13:16	5° \mathfrak{M} 56'31	
	11977 May 30 00:04	0° \mathcal{B}			11979 Oct 26 23:53	0° \mathcal{X}	
morning max el	11977 Jun 12 12:13	12° \mathcal{B} 48'41	46°54'09		11979 Nov 20 09:53	0° \mathcal{Z}	
	11977 Jun 28 20:22	0° \mathfrak{I}			11979 Dec 15 02:11	0° \approx	
desc. node	11977 Jul 05 11:46	7° \mathfrak{I} 20'03		desc. node	11979 Dec 20 21:34	7° \approx 00'12	
	11977 Jul 25 07:10	0° \mathfrak{E}			11980 Jan 09 02:31	0° \mathcal{H}	
	11977 Aug 19 14:39	0° Ω			11980 Feb 03 12:58	0° Υ	
	11977 Sep 13 10:51	0° \mathfrak{M}			11980 Feb 29 15:21	0° \mathcal{B}	
	11977 Oct 08 01:58	0° Ω			11980 Mar 28 05:33	0° \mathfrak{I}	
asc. node	11977 Oct 26 06:42	22° Ω 15'58		evening max el	11980 Apr 04 08:09	7° \mathfrak{I} 12'13	46°30'21
	11977 Nov 01 14:07	0° \mathfrak{M}		asc. node	11980 Apr 11 20:50	14° \mathfrak{I} 27'26	
	11977 Nov 25 23:58	0° \mathcal{X}			11980 Apr 30 15:40	0° \mathfrak{E}	
morning set	11977 Dec 13 07:36	21° \mathcal{X} 20'01		greatest brilliancy	11980 May 14 18:21	7° \mathfrak{E} 31'45	-4.9m
	11977 Dec 20 08:15	0° \mathcal{Z}		retrograde	11980 May 24 08:51	9° \mathfrak{E} 15'55	
	11978 Jan 13 15:54	0° \approx		evening set	11980 Jun 11 11:07	3° \mathfrak{E} 00'53	
max. Earth dist.	11978 Jan 18 16:50	6° \approx 13'03	1.73153 AU	inferior conj	11980 Jun 14 00:07	1° \mathfrak{E} 27'44	9°03'57
				minimum elong	11980 Jun 14 04:26	1° \mathfrak{E} 21'06	9°02'52
superior conj	11978 Jan 19 01:12	6° \approx 38'53	0°58'58	min. Earth dist.	11980 Jun 14 07:59	1° \mathfrak{E} 15'39	0.27247 AU
minimum elong	11978 Jan 19 11:01	7° \approx 09'08	0°59'20		11980 Jun 16 09:31	30° \mathcal{R} \mathfrak{I}	
	11978 Feb 06 23:30	0° \mathcal{H}		morning rise	11980 Jun 16 21:43	29° \mathfrak{I} 41'41	
desc. node	11978 Feb 14 21:28	9° \mathcal{H} 46'07		direct	11980 Jul 04 18:40	23° \mathfrak{I} 35'46	
evening rise	11978 Feb 25 23:05	23° \mathcal{H} 25'50		greatest brilliancy	11980 Jul 14 16:03	25° \mathfrak{I} 27'11	-4.9m
	11978 Mar 03 06:47	0° Υ			11980 Jul 23 23:22	0° \mathfrak{E}	
	11978 Mar 27 13:12	0° \mathcal{B}		desc. node	11980 Aug 01 22:09	6° \mathfrak{E} 11'05	
	11978 Apr 20 18:55	0° \mathfrak{I}		morning max el	11980 Aug 24 04:28	26° \mathfrak{E} 13'36	46°46'35
	11978 May 15 01:35	0° \mathfrak{E}			11980 Aug 27 22:10	0° Ω	
asc. node	11978 Jun 07 15:52	28° \mathfrak{E} 57'11			11980 Sep 24 16:31	0° \mathfrak{M}	
	11978 Jun 08 12:28	0° Ω			11980 Oct 20 19:30	0° Ω	
	11978 Jul 03 08:48	0° \mathfrak{M}			11980 Nov 15 05:19	0° \mathfrak{M}	
	11978 Jul 29 00:04	0° Ω		asc. node	11980 Nov 22 19:53	9° \mathfrak{M} 05'21	
	11978 Aug 25 10:51	0° \mathfrak{M}			11980 Dec 10 04:51	0° \mathcal{X}	
evening max el	11978 Aug 30 09:47	5° \mathfrak{M} 00'58	46°26'15		11981 Jan 03 21:15	0° \mathcal{Z}	
desc. node	11978 Sep 27 15:48	29° \mathfrak{M} 03'36			11981 Jan 28 08:49	0° \approx	
	11978 Sep 29 03:30	0° \mathcal{X}		morning set	11981 Feb 20 05:12	28° \approx 09'03	
greatest brilliancy	11978 Oct 08 13:00	4° \mathcal{X} 44'55	-4.8m		11981 Feb 21 17:09	0° \mathcal{H}	
retrograde	11978 Oct 19 09:01	6° \mathcal{X} 54'52		desc. node	11981 Mar 14 11:23	25° \mathcal{H} 41'01	
evening set	11978 Nov 05 20:30	1° \mathcal{X} 06'42			11981 Mar 17 22:56	0° Υ	
	11978 Nov 07 16:31	30° \mathcal{R} \mathfrak{M}		max. Earth dist.	11981 Mar 27 20:33	12° Υ 17'21	1.72320 AU
min. Earth dist.	11978 Nov 09 04:47	29° \mathfrak{M} 03'45	0.28696 AU				
inferior conj	11978 Nov 09 20:04	28° \mathfrak{M} 39'53	-8°14'06	superior conj	11981 Mar 30 21:23	16° Υ 03'41	-0°38'32
minimum elong	11978 Nov 09 13:11	28° \mathfrak{M} 50'39	8°12'43	minimum elong	11981 Mar 30 12:48	15° Υ 37'00	0°38'17
morning rise	11978 Nov 13 06:03	26° \mathfrak{M} 33'36			11981 Apr 11 02:08	0° \mathcal{B}	
direct	11978 Dec 01 02:39	20° \mathfrak{M} 33'05			11981 May 05 02:57	0° \mathfrak{I}	
greatest brilliancy	11978 Dec 10 23:43	22° \mathfrak{M} 19'00	-4.7m	evening rise	11981 May 09 04:10	5° \mathfrak{I} 04'00	
	11978 Dec 25 13:21	0° \mathcal{X}			11981 May 29 02:26	0° \mathfrak{E}	
asc. node	11979 Jan 18 17:10	20° \mathcal{X} 22'30			11981 Jun 22 02:36	0° Ω	
morning max el	11979 Jan 19 00:07	20° \mathcal{X} 39'17	45°42'48	asc. node	11981 Jul 05 03:48	16° Ω 14'51	
	11979 Jan 28 08:59	0° \mathcal{Z}			11981 Jul 16 05:51	0° \mathfrak{M}	
	11979 Feb 25 00:27	0° \approx			11981 Aug 09 15:00	0° Ω	
	11979 Mar 22 21:25	0° \mathcal{H}			11981 Sep 03 10:18	0° \mathfrak{M}	
	11979 Apr 16 22:16	0° Υ			11981 Sep 29 00:03	0° \mathcal{X}	
desc. node	11979 May 10 13:11	28° Υ 51'50		desc. node	11981 Oct 25 01:35	28° \mathcal{X} 50'54	
	11979 May 11 11:20	0° \mathcal{B}			11981 Oct 26 03:48	0° \mathcal{Z}	
	11979 Jun 04 16:47	0° \mathfrak{I}		evening max el	11981 Nov 09 13:09	14° \mathcal{Z} 33'50	45°55'23
	11979 Jun 28 17:36	0° \mathfrak{E}			11981 Nov 26 22:57	0° \approx	
morning set	11979 Jul 21 17:43	28° \mathfrak{E} 48'43		greatest brilliancy	11981 Dec 18 14:59	12° \approx 56'06	-4.7m
	11979 Jul 22 16:28	0° Ω		retrograde	11981 Dec 28 11:35	14° \approx 41'22	
	11979 Aug 15 15:29	0° \mathfrak{M}		evening set	11982 Jan 14 04:05	9° \approx 22'41	
				inferior conj	11982 Jan 18 20:40	6° \approx 29'53	-6°03'41
superior conj	11979 Aug 30 04:33	18° \mathfrak{M} 10'50	-0°02'28	minimum elong	11982 Jan 19 06:50	6° \approx 13'54	6°00'45

min. Earth dist.	11982 Jan 19 09:13	6°≈10'08	0.28738 AU	evening rise	11984 Jul 23 13:12	21°Ω20'18	
morning rise	11982 Jan 24 09:24	3°≈07'59			11984 Jul 30 11:19	0°Π	
	11982 Jan 30 22:54	30°R3		asc. node	11984 Aug 01 16:49	2°Π47'14	
direct	11982 Feb 09 06:42	28°315'29			11984 Aug 23 12:42	0°Ω	
asc. node	11982 Feb 15 03:22	28°354'53			11984 Sep 16 18:22	0°Π	
	11982 Feb 18 23:08	0°≈			11984 Oct 11 06:49	0°♂	
greatest brilliancy	11982 Feb 20 03:57	0°≈26'14	-4.8m		11984 Nov 05 06:08	0°3	
morning max el	11982 Mar 30 21:29	29°≈43'02	46°12'23	desc. node	11984 Nov 21 11:59	19°305'22	
	11982 Mar 31 04:21	0°X			11984 Nov 30 22:47	0°≈	
	11982 Apr 28 07:33	0°Υ			11984 Dec 27 21:07	0°X	
	11982 May 24 06:04	0°8		evening max el	11985 Jan 19 15:41	23°X22'28	45°56'44
desc. node	11982 Jun 07 01:58	16°830'39			11985 Jan 26 17:09	0°Υ	
	11982 Jun 18 05:38	0°II		greatest brilliancy	11985 Feb 27 22:55	22°Υ08'31	-4.8m
	11982 Jul 12 17:23	0°6		retrograde	11985 Mar 09 19:40	23°Υ56'49	
	11982 Aug 05 23:27	0°Ω		asc. node	11985 Mar 14 13:16	23°Υ29'39	
	11982 Aug 30 03:34	0°Π		evening set	11985 Mar 24 15:50	19°Υ38'22	
	11982 Sep 23 07:33	0°Ω		inferior conj	11985 Mar 30 18:52	15°Υ59'57	3°58'44
asc. node	11982 Sep 27 18:45	5°Ω32'35		minimum elong	11985 Mar 30 10:31	16°Υ12'55	3°56'11
morning set	11982 Oct 02 07:48	11°Ω10'51		min. Earth dist.	11985 Mar 30 21:30	15°Υ55'51	0.27743 AU
	11982 Oct 17 11:59	0°Π		morning rise	11985 Apr 05 04:47	12°Υ43'57	
				direct	11985 Apr 20 18:32	7°Υ56'47	
superior conj	11982 Nov 09 01:06	27°Π56'13	1°20'02	greatest brilliancy	11985 May 01 03:55	9°Υ57'46	-4.9m
minimum elong	11982 Nov 08 18:15	27°Π35'01	1°20'33		11985 May 30 04:31	0°8	
	11982 Nov 10 17:06	0°♂		morning max el	11985 Jun 10 03:11	10°830'31	46°53'30
max. Earth dist.	11982 Nov 10 22:02	0°♂15'17	1.72890 AU		11985 Jun 28 13:44	0°II	
	11982 Dec 04 23:39	0°3		desc. node	11985 Jul 04 13:36	6°II39'30	
evening rise	11982 Dec 15 21:42	13°327'22			11985 Jul 24 21:19	0°6	
	11982 Dec 29 08:35	0°≈			11985 Aug 19 03:19	0°Ω	
desc. node	11983 Jan 17 09:57	23°≈21'13			11985 Sep 12 22:38	0°Π	
	11983 Jan 22 20:24	0°X			11985 Oct 07 13:11	0°Ω	
	11983 Feb 16 10:52	0°Υ		asc. node	11985 Oct 25 08:33	21°Ω48'11	
	11983 Mar 13 03:50	0°8			11985 Nov 01 00:57	0°Π	
	11983 Apr 07 01:04	0°II			11985 Nov 25 10:33	0°♂	
	11983 May 02 08:19	0°6		morning set	11985 Dec 11 00:36	19°♂12'07	
asc. node	11983 May 10 06:51	9°613'23			11985 Dec 19 18:42	0°3	
	11983 May 28 15:39	0°Ω			11986 Jan 13 02:19	0°≈	
evening max el	11983 Jun 17 10:32	20°Ω56'46	46°49'42				
	11983 Jun 26 18:58	0°Π		superior conj	11986 Jan 16 17:44	4°≈29'40	1°01'22
greatest brilliancy	11983 Jul 27 06:09	21°Π28'16	-4.9m	minimum elong	11986 Jan 17 03:34	4°≈59'58	1°01'45
retrograde	11983 Aug 06 17:56	23°Π31'35		max. Earth dist.	11986 Jan 16 13:17	4°≈15'56	1.73164 AU
evening set	11983 Aug 21 11:04	19°Π17'12			11986 Feb 06 09:57	0°X	
inferior conj	11983 Aug 27 14:47	15°Π39'42	0°42'08	desc. node	11986 Feb 13 23:21	9°X19'36	
minimum elong	11983 Aug 27 16:25	15°Π37'12	0°41'20	evening rise	11986 Feb 23 14:33	21°X12'55	
min. Earth dist.	11983 Aug 27 07:54	15°Π50'16	0.27201 AU		11986 Mar 02 17:21	0°Υ	
desc. node	11983 Aug 30 08:07	14°Π00'22			11986 Mar 26 23:59	0°8	
morning rise	11983 Sep 02 22:13	11°Π58'09			11986 Apr 20 06:00	0°II	
direct	11983 Sep 17 10:05	7°Π53'32			11986 May 14 13:05	0°6	
greatest brilliancy	11983 Sep 27 04:44	9°Π38'39	-4.8m	asc. node	11986 Jun 06 17:41	28°625'59	
	11983 Oct 27 12:54	0°Ω			11986 Jun 08 00:34	0°Ω	
morning max el	11983 Nov 05 15:34	8°Ω28'46	46°02'04		11986 Jul 02 21:52	0°Π	
	11983 Nov 26 16:03	0°Π			11986 Jul 28 15:06	0°Ω	
asc. node	11983 Dec 21 08:07	27°Π20'39			11986 Aug 25 07:00	0°Π	
	11983 Dec 23 15:58	0°♂		evening max el	11986 Aug 28 01:25	2°Π47'00	46°27'35
	11984 Jan 18 09:47	0°3		desc. node	11986 Sep 26 17:50	27°Π45'24	
	11984 Feb 12 11:23	0°≈			11986 Sep 30 15:28	0°♂	
	11984 Mar 08 03:16	0°X		greatest brilliancy	11986 Oct 06 03:13	2°♂31'03	-4.8m
	11984 Apr 01 12:41	0°Υ		retrograde	11986 Oct 17 01:26	4°♂42'53	
desc. node	11984 Apr 11 01:25	11°Υ47'49			11986 Nov 01 14:54	30°RΠ	
	11984 Apr 25 17:05	0°8		evening set	11986 Nov 03 08:47	28°Π59'34	
morning set	11984 May 03 22:39	10°815'48		inferior conj	11986 Nov 07 11:36	26°Π28'03	-8°06'41
	11984 May 19 17:30	0°II		minimum elong	11986 Nov 07 04:07	26°Π39'42	8°05'10
max. Earth dist.	11984 Jun 12 01:11	29°II15'25	1.71378 AU	min. Earth dist.	11986 Nov 06 19:00	26°Π53'55	0.28657 AU
	11984 Jun 12 15:24	0°6		morning rise	11986 Nov 10 23:42	24°Π18'55	
				direct	11986 Nov 28 18:17	18°Π21'58	
superior conj	11984 Jun 13 04:15	0°640'23	-1°26'02	greatest brilliancy	11986 Dec 08 13:41	20°Π06'57	-4.7m
minimum elong	11984 Jun 13 08:40	0°654'13	1°26'49		11986 Dec 26 06:39	0°♂	
	11984 Jul 06 12:43	0°Ω		morning max el	11987 Jan 16 16:05	18°♂29'13	45°42'30

asc. node	11987 Jan 17 19:10	19°♊34'51		asc. node	11989 Jul 04 05:43	15°♌46'19	
	11987 Jan 28 03:32	0°♊			11989 Jul 15 17:07	0°♌	
	11987 Feb 24 14:42	0°♋			11989 Aug 09 02:44	0°♍	
	11987 Mar 22 09:56	0°♌			11989 Sep 02 22:50	0°♎	
	11987 Apr 16 09:55	0°♍			11989 Sep 28 14:08	0°♏	
desc. node	11987 May 09 15:01	28°♎22'59		desc. node	11989 Oct 24 03:33	28°♏09'50	
	11987 May 10 22:31	0°♎			11989 Oct 25 21:39	0°♐	
	11987 Jun 04 03:43	0°♏		evening max el	11989 Nov 07 03:40	12°♐20'07	45°56'02
	11987 Jun 28 04:23	0°♐			11989 Nov 27 10:05	0°♑	
morning set	11987 Jul 19 06:06	26°♐23'44		greatest brilliancy	11989 Dec 16 06:55	10°♑46'35	-4.7m
	11987 Jul 22 03:08	0°♑		retrograde	11989 Dec 26 02:35	12°♑31'21	
	11987 Aug 15 02:02	0°♒		evening set	11990 Jan 11 22:48	7°♑08'21	
				inferior conj	11990 Jan 16 12:37	4°♒19'32	-6°18'14
superior conj	11987 Aug 27 17:56	15°♒49'51	-0°06'11	minimum elong	11990 Jan 16 22:47	4°♒03'31	6°15'21
minimum elong	11987 Aug 27 19:31	15°♒54'47	0°06'23	min. Earth dist.	11990 Jan 17 01:03	3°♒59'57	0.28768 AU
behind sun begin	11987 Aug 26 20:34	14°♒43'07		morning rise	11990 Jan 21 22:35	1°♒01'12	
behind sun end	11987 Aug 28 18:27	17°♒06'26			11990 Jan 23 19:05	30°♒3	
max. Earth dist.	11987 Aug 30 03:14	18°♒48'48	1.71885 AU	direct	11990 Feb 06 22:29	26°♒04'55	
asc. node	11987 Aug 30 06:35	18°♒59'14		asc. node	11990 Feb 14 05:28	27°♒04'56	
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	11987 Oct 02 04:51	0°♓			11990 Feb 21 19:41	0°♓	
evening rise	11987 Oct 05 05:05	3°♓44'11		morning max el	11990 Mar 28 11:36	27°♓25'58	46°10'47
	11987 Oct 26 10:26	0°♓			11990 Mar 31 01:24	0°♔	
	11987 Nov 19 20:38	0°♔			11990 Apr 27 22:51	0°♕	
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desc. node	11987 Dec 19 23:25	6°♕31'48		desc. node	11990 Jun 06 03:51	15°♖58'31	
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	11988 Mar 28 02:00	0°♙			11990 Aug 29 14:28	0°♚	
evening max el	11988 Apr 01 22:29	4°♙53'00	46°29'07		11990 Sep 22 18:16	0°♛	
asc. node	11988 Apr 10 22:51	13°♙30'25		asc. node	11990 Sep 26 20:32	5°♛04'58	
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greatest brilliancy	11988 May 12 07:01	5°♚07'57	-4.9m		11990 Oct 16 22:33	0°♜	
retrograde	11988 May 21 21:52	6°♚51'56					
evening set	11988 Jun 09 01:29	0°♚35'00		superior conj	11990 Nov 06 17:42	25°♜46'33	1°18'43
	11988 Jun 10 00:29	30°♜11		minimum elong	11990 Nov 06 10:17	25°♜23'37	1°19'12
inferior conj	11988 Jun 11 13:07	29°♜03'39	9°07'59	max. Earth dist.	11990 Nov 08 13:20	28°♜01'37	1.72861 AU
minimum elong	11988 Jun 11 16:29	28°♜58'27	9°06'59		11990 Nov 10 03:36	0°♝	
min. Earth dist.	11988 Jun 11 20:18	28°♜52'34	0.27264 AU		11990 Dec 04 10:09	0°♞	
morning rise	11988 Jun 14 07:30	27°♜22'11		evening rise	11990 Dec 13 14:19	11°♞18'19	
direct	11988 Jul 02 08:11	21°♜11'36			11990 Dec 28 19:12	0°♟	
greatest brilliancy	11988 Jul 12 04:27	23°♜01'55	-4.9m	desc. node	11991 Jan 16 11:56	22°♟54'18	
	11988 Jul 25 06:13	0°♟			11991 Jan 22 07:15	0°♠	
desc. node	11988 Aug 01 00:16	4°♟59'17			11991 Feb 15 22:06	0°♡	
morning max el	11988 Aug 21 17:52	23°♟50'55	46°47'42		11991 Mar 12 15:38	0°♢	
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	11988 Nov 14 17:15	0°♣			11991 May 28 09:07	0°♥	
asc. node	11988 Nov 21 21:44	8°♣35'58		evening max el	11991 Jun 14 22:56	18°♥30'57	46°49'47
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	11989 Jan 27 19:23	0°♦		retrograde	11991 Aug 04 07:15	21°♦09'19	
morning set	11989 Feb 17 21:07	25°♦57'36		evening set	11991 Aug 19 01:46	16°♦53'13	
	11989 Feb 21 03:39	0°♧		inferior conj	11991 Aug 25 04:07	13°♧18'04	1°05'50
desc. node	11989 Mar 13 13:19	25°♧14'24		minimum elong	11991 Aug 25 06:39	13°♧14'11	1°04'41
	11989 Mar 17 09:27	0°♨		min. Earth dist.	11991 Aug 24 22:42	13°♧26'22	0.27173 AU
max. Earth dist.	11989 Mar 25 08:55	9°♨54'02	1.72361 AU	desc. node	11991 Aug 29 10:10	10°♨44'59	
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superior conj	11989 Mar 28 11:07	13°♨44'30	-0°35'13	direct	11991 Sep 14 22:30	5°♨31'53	
minimum elong	11989 Mar 28 03:10	13°♨19'48	0°34'57	greatest brilliancy	11991 Sep 24 19:00	7°♨18'30	-4.8m
	11989 Apr 10 12:43	0°♩			11991 Oct 27 15:59	0°♪	
	11989 May 04 13:36	0°♪		morning max el	11991 Nov 03 05:12	6°♪10'11	46°03'32
evening rise	11989 May 06 16:32	2°♪39'13			11991 Nov 26 08:57	0°♫	
	11989 May 28 13:12	0°♫		asc. node	11991 Dec 20 10:02	26°♫46'26	
	11989 Jun 21 13:33	0°♬			11991 Dec 23 05:41	0°♭	

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	11992 Apr 25 03:53	0°☾		evening set	11994 Oct 31 20:52	26°☾51'01	
morning set	11992 May 01 10:26	7°☾49'08		min. Earth dist.	11994 Nov 04 09:09	24°☾42'17	0.28611 AU
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max. Earth dist.	11992 Jun 09 08:37	26°☾34'09	1.71393 AU	minimum elong	11994 Nov 04 18:57	24°☾27'01	7°56'49
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superior conj	11992 Jun 10 15:51	28°☾12'11	-1°26'40	direct	11994 Nov 26 09:53	16°☾09'26	
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	11993 Jan 26 20:05	0°☾			11995 Aug 14 12:54	0°☾	
greatest brilliancy	11993 Feb 25 12:25	19°☾50'21	-4.8m				
retrograde	11993 Mar 07 10:27	21°☾39'23		superior conj	11995 Aug 25 07:17	13°☾27'37	-0°09'52
asc. node	11993 Mar 13 15:11	20°☾52'34		minimum elong	11995 Aug 25 09:47	13°☾35'25	0°10'03
evening set	11993 Mar 22 04:48	17°☾22'20		behind sun begin	11995 Aug 24 14:09	12°☾34'05	
inferior conj	11993 Mar 28 09:16	13°☾41'52	3°38'01	behind sun end	11995 Aug 26 05:24	14°☾36'44	
minimum elong	11993 Mar 28 01:31	13°☾53'54	3°35'38	max. Earth dist.	11995 Aug 27 18:26	16°☾32'23	1.71853 AU
min. Earth dist.	11993 Mar 28 12:04	13°☾37'31	0.27767 AU	asc. node	11995 Aug 29 08:24	18°☾31'00	
morning rise	11993 Apr 02 21:51	10°☾22'22			11995 Sep 07 13:13	0°☾	
direct	11993 Apr 18 09:34	5°☾38'16			11995 Oct 01 15:44	0°☾	
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morning max el	11993 Jun 07 18:39	8°☾13'21	46°52'34		11995 Nov 19 07:48	0°☾	
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desc. node	11993 Jul 03 15:42	5°☾59'31		desc. node	11995 Dec 19 01:26	6°☾02'44	
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morning set	11993 Dec 08 17:32	17°☾03'16		greatest brilliancy	11996 May 09 20:29	2°☾44'11	-4.9m
	11993 Dec 19 05:25	0°☾		retrograde	11996 May 19 10:32	4°☾27'22	
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superior conj	11994 Jan 14 10:20	2°☾19'49	1°03'41	inferior conj	11996 Jun 09 02:17	26°☾39'13	9°10'54
minimum elong	11994 Jan 14 20:06	2°☾49'57	1°04'05	minimum elong	11996 Jun 09 04:42	26°☾35'29	9°10'00
max. Earth dist.	11994 Jan 14 10:06	2°☾19'04	1.73172 AU	min. Earth dist.	11996 Jun 09 09:08	26°☾28'37	0.27277 AU
	11994 Feb 05 20:42	0°☾		morning rise	11996 Jun 11 17:57	25°☾01'35	
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evening rise	11994 Feb 21 06:09	18°☾59'33		greatest brilliancy	11996 Jul 09 17:30	20°☾36'47	-4.9m
	11994 Mar 02 04:13	0°☾			11996 Jul 26 04:47	0°☾	
	11994 Mar 26 11:03	0°☾		desc. node	11996 Jul 31 02:14	3°☾48'38	
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asc. node	11994 Jun 05 19:42	27°☾54'29			11996 Sep 23 23:24	0°☾	
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	11994 Jul 28 06:45	0°☾		asc. node	11996 Nov 20 23:42	8°☾05'44	
	11994 Aug 25 04:25	0°☾			11996 Dec 09 03:40	0°☾	
evening max el	11994 Aug 25 17:37	0°☾32'57	46°28'48		11997 Jan 02 19:13	0°☾	



















































































































	11997 Jan 27 06:19	0°♊		retrograde	11999 Aug 01 21:03	18°♏46'17	
morning set	11997 Feb 15 13:01	23°♊45'03		evening set	11999 Aug 16 16:36	14°♏28'03	
	11997 Feb 20 14:30	0°♋		inferior conj	11999 Aug 22 17:22	10°♏55'30	1°29'26
desc. node	11997 Mar 12 15:03	24°♋46'11		minimum elong	11999 Aug 22 20:49	10°♏50'14	1°27'58
	11997 Mar 16 20:18	0°♌		min. Earth dist.	11999 Aug 22 13:12	11°♏01'52	0.27146 AU
max. Earth dist.	11997 Mar 22 22:30	7°♌33'33	1.72405 AU	desc. node	11999 Aug 28 12:04	7°♏31'24	
				morning rise	11999 Aug 29 01:18	7°♏13'37	
superior conj	11997 Mar 26 00:57	11°♌24'40	-0°31'50	direct	11999 Sep 12 11:12	3°♏09'18	
minimum elong	11997 Mar 25 17:41	11°♌02'04	0°31'35	greatest brilliancy	11999 Sep 22 08:47	4°♏57'11	-4.8m
	11997 Apr 09 23:38	0°♍			11999 Oct 27 17:41	0°♐	
evening rise	11997 May 04 05:08	0°♍14'07		morning max el	11999 Oct 31 19:46	3°♐53'29	46°05'10
	11997 May 04 00:37	0°♎			11999 Nov 26 01:36	0°♐	
	11997 May 28 00:21	0°♏		asc. node	11999 Dec 19 12:05	26°♐12'32	
	11997 Jun 21 00:52	0°♏			11999 Dec 22 19:22	0°♑	
asc. node	11997 Jul 03 07:42	15°♏16'53			12000 Jan 17 10:22	0°♑	
	11997 Jul 15 04:42	0°♐			12000 Feb 11 10:31	0°♒	
	11997 Aug 08 14:47	0°♑			12000 Mar 07 01:38	0°♋	
	11997 Sep 02 11:42	0°♒			12000 Mar 31 10:37	0°♌	
desc. node	11997 Sep 28 04:39	0°♑		desc. node	12000 Apr 09 05:09	10°♌51'41	
	11997 Oct 23 05:29	27°♑27'15			12000 Apr 24 14:48	0°♍	
	11997 Oct 25 16:21	0°♒		morning set	12000 Apr 28 22:17	5°♒22'22	
evening max el	11997 Nov 04 17:44	10°♒04'16	45°56'38		12000 May 18 15:08	0°♓	
	11997 Nov 28 01:47	0°♓		max. Earth dist.	12000 Jun 06 19:18	24°♓02'46	1.71410 AU
greatest brilliancy	11997 Dec 13 22:44	8°♓35'44	-4.7m				
retrograde	11997 Dec 23 17:50	10°♓20'30		superior conj	12000 Jun 08 03:21	25°♓43'26	-1°27'08
evening set	11998 Jan 09 17:32	4°♓52'53		minimum elong	12000 Jun 08 05:41	25°♓50'44	1°27'57
inferior conj	11998 Jan 14 04:37	2°♓08'15	-6°32'03		12000 Jun 11 13:04	0°♏	
minimum elong	11998 Jan 14 14:46	1°♓52'17	6°29'16		12000 Jul 05 10:29	0°♏	
min. Earth dist.	11998 Jan 14 17:01	1°♓48'44	0.28799 AU	evening rise	12000 Jul 18 12:20	16°♏23'55	
	11998 Jan 17 15:03	30°♋♑			12000 Jul 29 09:12	0°♐	
morning rise	11998 Jan 19 11:45	28°♑53'52		asc. node	12000 Jul 30 20:35	1°♐50'32	
direct	11998 Feb 04 14:02	23°♑53'18			12000 Aug 22 10:46	0°♑	
asc. node	11998 Feb 13 07:20	25°♑17'55			12000 Sep 15 16:51	0°♒	
greatest brilliancy	11998 Feb 15 12:18	26°♑03'51	-4.8m		12000 Oct 10 06:05	0°♑	
	11998 Feb 23 13:22	0°♒			12000 Nov 04 06:53	0°♓	
morning max el	11998 Mar 26 02:15	25°♒09'23	46°09'17	desc. node	12000 Nov 19 15:59	18°♓00'51	
	11998 Mar 30 22:05	0°♋			12000 Nov 30 02:24	0°♓	
	11998 Apr 27 14:14	0°♌			12000 Dec 27 07:07	0°♋	
desc. node	11998 May 23 08:40	0°♍		evening max el	12001 Jan 14 22:28	18°♋56'26	45°55'31
	11998 Jun 05 05:51	15°♍25'59			12001 Jan 27 00:46	0°♌	
	11998 Jun 17 06:13	0°♎		greatest brilliancy	12001 Feb 23 02:06	17°♌32'32	-4.8m
	11998 Jul 11 16:46	0°♏		retrograde	12001 Mar 05 01:06	19°♌21'50	
	11998 Aug 04 22:03	0°♏		asc. node	12001 Mar 12 17:12	18°♌10'14	
	11998 Aug 29 01:36	0°♐		evening set	12001 Mar 19 18:07	15°♌06'15	
	11998 Sep 22 05:11	0°♑		inferior conj	12001 Mar 25 23:44	11°♌23'51	3°16'57
asc. node	11998 Sep 25 22:21	4°♑36'50		minimum elong	12001 Mar 25 16:38	11°♌34'53	3°14'46
morning set	11998 Sep 27 13:47	6°♑39'15		min. Earth dist.	12001 Mar 26 02:42	11°♌19'14	0.27793 AU
	11998 Oct 16 09:19	0°♒		morning rise	12001 Mar 31 14:50	8°♌00'53	
				direct	12001 Apr 16 00:56	3°♌20'01	
superior conj	11998 Nov 04 10:33	23°♒36'59	1°17'18	greatest brilliancy	12001 Apr 26 10:07	5°♌21'34	-4.8m
minimum elong	11998 Nov 04 02:38	23°♒12'30	1°17'46		12001 May 30 08:51	0°♍	
max. Earth dist.	11998 Nov 06 04:46	25°♒47'40	1.72837 AU	morning max el	12001 Jun 05 09:56	5°♍55'45	46°51'32
	11998 Nov 09 14:18	0°♑			12001 Jun 27 23:49	0°♎	
	11998 Dec 03 20:53	0°♒		desc. node	12001 Jul 02 17:40	5°♎19'34	
evening rise	11998 Dec 11 07:10	9°♒09'15			12001 Jul 24 01:42	0°♏	
	11998 Dec 28 06:05	0°♓			12001 Aug 18 04:56	0°♏	
desc. node	11999 Jan 15 13:49	22°♓26'16			12001 Sep 11 22:37	0°♐	
	11999 Jan 21 18:24	0°♋			12001 Oct 06 12:02	0°♑	
	11999 Feb 15 09:37	0°♌		asc. node	12001 Oct 23 12:21	20°♑51'26	
	11999 Mar 12 03:43	0°♍			12001 Oct 30 23:01	0°♒	
	11999 Apr 06 02:45	0°♎			12001 Nov 24 08:08	0°♑	
	11999 May 01 13:11	0°♏		morning set	12001 Dec 06 10:41	14°♑55'18	
asc. node	11999 May 08 10:44	7°♏57'36			12001 Dec 18 16:02	0°♒	
	11999 May 28 03:15	0°♏			12002 Jan 11 23:35	0°♓	
evening max el	11999 Jun 12 11:56	16°♏06'01	46°49'48				
	11999 Jun 27 05:17	0°♐		superior conj	12002 Jan 12 03:13	0°♓11'14	1°05'52
greatest brilliancy	11999 Jul 22 12:11	16°♐44'45	-4.9m	minimum elong	12002 Jan 12 12:52	0°♓41'01	1°06'19

max. Earth dist.	12002 Jan 12 06:59	0°≈22'52	1.73176 AU	min. Earth dist.	12004 Jun 06 22:12	24°II04'53	0.27296 AU
	12002 Feb 05 07:19	0°✕		morning rise	12004 Jun 09 04:57	22°II40'49	
desc. node	12002 Feb 12 03:05	8°✕24'55		direct	12004 Jun 27 09:57	16°II22'36	
evening rise	12002 Feb 18 21:54	16°✕47'01		greatest brilliancy	12004 Jul 07 07:15	18°II12'54	-4.9m
	12002 Mar 01 14:59	0°Ÿ			12004 Jul 26 21:19	0°☾	
	12002 Mar 25 22:03	0°♂		desc. node	12004 Jul 30 04:08	2°☾40'13	
	12002 Apr 19 04:41	0°II		morning max el	12004 Aug 16 19:04	19°☾00'06	46°49'54
	12002 May 13 12:36	0°☾			12004 Aug 27 11:00	0°♂	
asc. node	12002 Jun 04 21:40	27°☾22'55			12004 Sep 23 14:26	0°♍	
	12002 Jun 07 01:22	0°♂			12004 Oct 19 11:05	0°♂	
	12002 Jul 02 00:54	0°♍			12004 Nov 13 17:28	0°♍	
	12002 Jul 27 22:34	0°♂		asc. node	12004 Nov 20 01:36	7°♍36'17	
evening max el	12002 Aug 23 09:26	28°♂18'03	46°29'55		12004 Dec 08 14:56	0°♂	
	12002 Aug 25 02:35	0°♍			12005 Jan 02 06:05	0°♂	
desc. node	12002 Sep 24 21:49	24°♍57'56			12005 Jan 26 16:57	0°≈	
greatest brilliancy	12002 Oct 01 09:11	28°♍01'42	-4.8m	morning set	12005 Feb 13 05:04	21°≈33'58	
	12002 Oct 08 20:25	0°♂			12005 Feb 20 01:01	0°✕	
retrograde	12002 Oct 12 09:25	0°♂14'33		desc. node	12005 Mar 11 16:59	24°✕19'37	
	12002 Oct 15 20:50	30°♍			12005 Mar 16 06:49	0°Ÿ	
evening set	12002 Oct 29 08:44	24°♍42'30		max. Earth dist.	12005 Mar 20 14:23	5°Ÿ21'16	1.72445 AU
min. Earth dist.	12002 Nov 01 23:34	22°♍29'55	0.28561 AU				
inferior conj	12002 Nov 02 18:11	22°♍00'53	-7°49'28	superior conj	12005 Mar 23 15:04	9°Ÿ06'51	-0°28'26
minimum elong	12002 Nov 02 09:39	22°♍14'12	7°47'42	minimum elong	12005 Mar 23 08:30	8°Ÿ46'29	0°28'10
morning rise	12002 Nov 06 10:55	19°♍44'55			12005 Apr 09 10:11	0°♂	
direct	12002 Nov 24 01:08	13°♍56'51		evening rise	12005 May 01 18:05	27°♂51'27	
greatest brilliancy	12002 Dec 03 16:26	15°♍38'34	-4.7m		12005 May 03 11:15	0°II	
	12002 Dec 27 05:46	0°♂			12005 May 27 11:08	0°☾	
morning max el	12003 Jan 11 21:53	14°♂02'28	45°42'10		12005 Jun 20 11:54	0°♂	
asc. node	12003 Jan 15 23:06	18°♂00'16		asc. node	12005 Jul 02 09:29	14°♂47'49	
	12003 Jan 27 15:45	0°♂			12005 Jul 14 16:03	0°♍	
	12003 Feb 23 19:08	0°≈			12005 Aug 08 02:38	0°♂	
	12003 Mar 21 11:10	0°✕			12005 Sep 02 00:24	0°♍	
	12003 Apr 15 09:33	0°Ÿ			12005 Sep 27 19:05	0°♂	
desc. node	12003 May 07 18:52	27°Ÿ24'31		desc. node	12005 Oct 22 07:34	26°♂45'16	
	12003 May 09 21:19	0°♂			12005 Oct 25 11:15	0°♂	
	12003 Jun 03 02:01	0°II		evening max el	12005 Nov 02 07:40	7°♂48'55	45°57'26
	12003 Jun 27 02:21	0°☾			12005 Nov 28 22:30	0°≈	
morning set	12003 Jul 14 06:51	21°☾32'21		greatest brilliancy	12005 Dec 11 13:47	6°≈24'47	-4.7m
	12003 Jul 21 00:51	0°♂		retrograde	12005 Dec 21 09:24	8°≈10'19	
	12003 Aug 13 23:35	0°♍		evening set	12006 Jan 07 12:06	2°≈37'51	
				inferior conj	12006 Jan 11 20:27	29°♂57'27	-6°45'21
superior conj	12003 Aug 22 20:18	11°♍05'01	-0°13'34	minimum elong	12006 Jan 12 06:30	29°♂41'39	6°42'40
minimum elong	12003 Aug 22 23:43	11°♍15'40	0°13'45		12006 Jan 11 18:50	30°♍♂	
behind sun begin	12003 Aug 22 10:30	10°♍34'23		min. Earth dist.	12006 Jan 12 08:35	29°♂38'23	0.28829 AU
behind sun end	12003 Aug 23 12:55	11°♍56'57		morning rise	12006 Jan 17 00:39	26°♂47'25	
max. Earth dist.	12003 Aug 25 08:15	14°♍12'18	1.71816 AU	direct	12006 Feb 02 05:31	21°♂42'05	
asc. node	12003 Aug 28 10:12	18°♍03'18		asc. node	12006 Feb 12 09:22	23°♂35'30	
	12003 Sep 06 23:51	0°♂		greatest brilliancy	12006 Feb 13 04:30	23°♂53'07	-4.8m
evening rise	12003 Sep 30 11:52	29°♂14'53			12006 Feb 24 17:31	0°≈	
	12003 Oct 01 02:24	0°♍		morning max el	12006 Mar 23 17:48	22°≈56'10	46°07'59
	12003 Oct 25 08:10	0°♂			12006 Mar 30 17:42	0°✕	
	12003 Nov 18 18:47	0°♂			12006 Apr 27 04:59	0°Ÿ	
	12003 Dec 13 12:17	0°≈			12006 May 22 21:31	0°♂	
desc. node	12003 Dec 18 03:19	5°≈33'56		desc. node	12006 Jun 04 07:44	14°♂54'36	
	12004 Jan 07 14:41	0°✕			12006 Jun 16 18:06	0°II	
	12004 Feb 02 04:46	0°Ÿ			12006 Jul 11 04:08	0°☾	
	12004 Feb 28 14:04	0°♂			12006 Aug 04 09:05	0°♂	
	12004 Mar 27 21:45	0°II			12006 Aug 28 12:25	0°♍	
evening max el	12004 Mar 28 01:01	0°II08'05	46°26'27		12006 Sep 21 15:49	0°♂	
asc. node	12004 Apr 09 02:50	11°II30'56		morning set	12006 Sep 25 04:28	4°♂22'53	
	12004 May 06 10:25	0°☾		asc. node	12006 Sep 25 00:20	4°♂10'03	
greatest brilliancy	12004 May 07 10:01	0°☾21'14	-4.9m		12006 Oct 15 19:48	0°♍	
retrograde	12004 May 16 22:50	2°☾03'37					
	12004 May 27 01:09	30°♍II		superior conj	12006 Nov 02 02:51	21°♍26'32	1°15'46
evening set	12004 Jun 04 04:39	25°II45'38		minimum elong	12006 Nov 01 18:29	21°♍00'37	1°16'09
inferior conj	12004 Jun 06 15:24	24°II15'24	9°12'43	max. Earth dist.	12006 Nov 03 20:51	23°♍36'38	1.72811 AU
minimum elong	12004 Jun 06 16:49	24°II13'14	9°11'53		12006 Nov 09 00:42	0°♂	

	12006 Dec 03 07:19	0° Z		desc. node	12009 Jul 01 19:29	4° II 40'13	
evening rise	12006 Dec 08 23:40	7° Z 00'05			12009 Jul 23 15:25	0° G	
	12006 Dec 27 16:40	0° \approx			12009 Aug 17 17:21	0° Q	
desc. node	12007 Jan 14 15:38	21° \approx 58'54			12009 Sep 11 10:14	0° P	
	12007 Jan 21 05:15	0° H			12009 Oct 05 23:08	0° A	
	12007 Feb 14 20:51	0° Y		asc. node	12009 Oct 22 14:11	20° A 23'41	
	12007 Mar 11 15:33	0° B			12009 Oct 30 09:48	0° M	
	12007 Apr 05 15:30	0° II			12009 Nov 23 18:43	0° X	
	12007 May 01 03:34	0° G		morning set	12009 Dec 04 03:43	12° X 47'29	
asc. node	12007 May 07 12:46	7° G 20'24			12009 Dec 18 02:31	0° Z	
	12007 May 27 21:20	0° Q					
evening max el	12007 Jun 10 01:50	13° Q 44'57	46°49'50	superior conj	12010 Jan 09 19:59	28° Z 02'39	1°07'58
	12007 Jun 27 13:20	0° P		minimum elong	12010 Jan 10 05:28	28° Z 31'53	1°08'27
greatest brilliancy	12007 Jul 20 02:16	14° P 22'56	-4.9m	max. Earth dist.	12010 Jan 10 01:43	28° Z 20'20	1.73181 AU
retrograde	12007 Jul 30 11:12	16° P 24'24			12010 Jan 11 10:02	0° \approx	
evening set	12007 Aug 14 07:38	12° P 03'47			12010 Feb 04 17:50	0° H	
inferior conj	12007 Aug 20 06:35	8° P 33'50	1°52'54	desc. node	12010 Feb 11 04:59	7° H 58'13	
minimum elong	12007 Aug 20 10:54	8° P 27'14	1°51'09	evening rise	12010 Feb 16 13:22	14° H 33'59	
min. Earth dist.	12007 Aug 20 03:18	8° P 38'50	0.27127 AU		12010 Mar 01 01:40	0° Y	
morning rise	12007 Aug 26 14:29	4° P 52'25			12010 Mar 25 09:00	0° B	
desc. node	12007 Aug 27 14:08	4° P 21'49			12010 Apr 18 15:58	0° II	
direct	12007 Sep 10 00:26	0° P 47'40			12010 May 13 00:20	0° G	
greatest brilliancy	12007 Sep 19 22:06	2° P 36'09	-4.8m	asc. node	12010 Jun 03 23:29	26° G 51'01	
	12007 Oct 27 17:48	0° A			12010 Jun 06 13:47	0° Q	
morning max el	12007 Oct 29 11:03	1° A 39'11	46°06'35		12010 Jul 01 14:28	0° P	
	12007 Nov 25 17:41	0° M			12010 Jul 27 14:31	0° A	
asc. node	12007 Dec 18 13:55	25° M 38'54		evening max el	12010 Aug 21 00:44	26° A 02'21	46°31'09
	12007 Dec 22 08:41	0° X			12010 Aug 25 01:25	0° M	
	12008 Jan 16 22:22	0° Z		desc. node	12010 Sep 23 23:50	23° M 30'56	
	12008 Feb 10 21:49	0° \approx		greatest brilliancy	12010 Sep 29 01:03	25° M 48'56	-4.8m
	12008 Mar 06 12:34	0° H		retrograde	12010 Oct 10 00:46	28° M 01'27	
	12008 Mar 30 21:21	0° Y		evening set	12010 Oct 26 20:53	22° M 35'11	
desc. node	12008 Apr 08 07:02	10° Y 24'18		min. Earth dist.	12010 Oct 30 14:35	20° M 18'22	0.28511 AU
	12008 Apr 24 01:26	0° B		inferior conj	12010 Oct 31 09:40	19° M 48'35	-7°39'54
morning set	12008 Apr 26 10:12	2° B 56'46		minimum elong	12010 Oct 31 00:42	20° M 02'36	7°37'58
	12008 May 18 01:44	0° II		morning rise	12010 Nov 04 04:51	17° M 28'50	
max. Earth dist.	12008 Jun 04 05:58	21° II 32'21	1.71420 AU	direct	12010 Nov 21 16:15	11° M 45'29	
				greatest brilliancy	12010 Dec 01 06:43	13° M 26'09	-4.7m
superior conj	12008 Jun 05 15:04	23° II 16'16	-1°27'26		12010 Dec 27 12:34	0° X	
minimum elong	12008 Jun 05 16:21	23° II 20'17	1°28'15	morning max el	12011 Jan 09 11:51	11° X 47'15	45°41'58
	12008 Jun 10 23:39	0° G		asc. node	12011 Jan 15 01:07	17° X 14'43	
	12008 Jul 04 21:04	0° Q			12011 Jan 27 09:02	0° Z	
evening rise	12008 Jul 16 00:09	13° Q 57'22			12011 Feb 23 09:00	0° \approx	
	12008 Jul 28 19:50	0° P			12011 Mar 20 23:35	0° H	
asc. node	12008 Jul 29 22:27	1° P 23'09			12011 Apr 14 21:16	0° Y	
	12008 Aug 21 21:31	0° A		desc. node	12011 May 06 20:42	26° Y 55'11	
	12008 Sep 15 03:51	0° M			12011 May 09 08:38	0° B	
	12008 Oct 09 17:32	0° X			12011 Jun 02 13:06	0° II	
	12008 Nov 03 19:09	0° Z			12011 Jun 26 13:17	0° G	
desc. node	12008 Nov 18 17:50	17° Z 28'33		morning set	12011 Jul 11 18:50	19° G 05'28	
	12008 Nov 29 16:12	0° \approx			12011 Jul 20 11:40	0° Q	
	12008 Dec 27 00:29	0° H			12011 Aug 13 10:20	0° P	
evening max el	12009 Jan 12 14:18	16° H 45'04	45°54'53				
	12009 Jan 27 07:21	0° Y		superior conj	12011 Aug 20 09:26	8° P 42'31	-0°17'15
greatest brilliancy	12009 Feb 20 16:11	15° Y 15'44	-4.8m	minimum elong	12011 Aug 20 13:44	8° P 55'58	0°17'25
retrograde	12009 Mar 02 15:14	17° Y 04'35		max. Earth dist.	12011 Aug 22 19:14	11° P 43'09	1.71776 AU
asc. node	12009 Mar 11 19:16	15° Y 22'56		asc. node	12011 Aug 27 12:11	17° P 36'02	
evening set	12009 Mar 17 07:36	12° Y 50'24			12011 Sep 06 10:33	0° A	
inferior conj	12009 Mar 23 14:07	9° Y 06'18	2°55'41	evening rise	12011 Sep 28 03:18	27° A 00'37	
minimum elong	12009 Mar 23 07:43	9° Y 16'16	2°53'42		12011 Sep 30 13:05	0° M	
min. Earth dist.	12009 Mar 23 17:28	9° Y 01'04	0.27817 AU		12011 Oct 24 18:55	0° X	
morning rise	12009 Mar 29 07:32	5° Y 39'52			12011 Nov 18 05:45	0° Z	
direct	12009 Apr 13 16:08	1° Y 02'16			12011 Dec 12 23:42	0° \approx	
greatest brilliancy	12009 Apr 24 01:10	3° Y 03'39	-4.8m	desc. node	12011 Dec 17 05:11	5° \approx 04'53	
	12009 May 30 08:53	0° B			12012 Jan 07 02:54	0° H	
morning max el	12009 Jun 03 00:29	3° B 36'51	46°50'33		12012 Feb 01 18:19	0° Y	
	12009 Jun 27 16:10	0° II			12012 Feb 28 06:16	0° B	

evening max el	12012 Mar 25 13:28	27° 8 43'38	46°25'09	morning set	12014 Sep 22 19:02	2° 2 04'59	
	12012 Mar 27 21:04	0° II		asc. node	12014 Sep 24 02:07	3° 2 41'31	
asc. node	12012 Apr 08 04:50	10° II 28'50			12014 Oct 15 06:39	0° III	
greatest brilliancy	12012 May 04 23:12	27° II 57'15	-4.9m				
retrograde	12012 May 14 11:19	29° II 39'29		superior conj	12014 Oct 30 19:08	19° III 14'48	1°14'06
evening set	12012 Jun 01 17:12	23° II 21'55		minimum elong	12014 Oct 30 10:20	18° III 47'32	1°14'26
inferior conj	12012 Jun 04 04:30	21° II 50'59	9°13'31	max. Earth dist.	12014 Nov 01 14:28	21° III 29'03	1.72783 AU
minimum elong	12012 Jun 04 04:54	21° II 50'22	9°12'43		12014 Nov 08 11:29	0° X	
min. Earth dist.	12012 Jun 04 11:11	21° II 40'40	0.27317 AU		12014 Dec 02 18:08	0° Z	
morning rise	12012 Jun 06 16:34	20° II 18'40		evening rise	12014 Dec 06 16:24	4° Z 50'32	
direct	12012 Jun 24 22:36	13° II 57'25			12014 Dec 27 03:36	0° \approx	
greatest brilliancy	12012 Jul 04 21:07	15° II 48'38	-4.9m	desc. node	12015 Jan 13 17:37	21° \approx 31'12	
	12012 Jul 27 09:56	0° 6			12015 Jan 20 16:25	0° H	
desc. node	12012 Jul 29 06:15	1° 6 33'27			12015 Feb 14 08:25	0° Y	
morning max el	12012 Aug 14 08:18	16° 6 35'43	46°51'03		12015 Mar 11 03:45	0° 8	
	12012 Aug 27 06:16	0° 9			12015 Apr 05 04:44	0° II	
	12012 Sep 23 05:28	0° II			12015 Apr 30 18:39	0° 6	
	12012 Oct 19 00:12	0° 2		asc. node	12015 May 06 14:36	6° 6 40'49	
	12012 Nov 13 05:30	0° III			12015 May 27 16:32	0° 9	
asc. node	12012 Nov 19 03:27	7° III 06'17		evening max el	12015 Jun 07 16:34	11° 9 24'11	46°49'40
	12012 Dec 08 02:17	0° X			12015 Jun 28 01:21	0° II	
	12013 Jan 01 17:02	0° Z		greatest brilliancy	12015 Jul 17 16:16	11° II 58'59	-4.9m
	12013 Jan 26 03:44	0° \approx		retrograde	12015 Jul 28 01:12	14° II 00'01	
morning set	12013 Feb 10 21:22	19° \approx 23'01		evening set	12015 Aug 11 22:42	9° II 37'10	
	12013 Feb 19 11:45	0° H		inferior conj	12015 Aug 17 19:34	6° II 09'54	2°16'25
desc. node	12013 Mar 10 18:55	23° H 52'15		minimum elong	12015 Aug 18 00:45	6° II 01'59	2°14'22
	12013 Mar 15 17:35	0° Y		min. Earth dist.	12015 Aug 17 17:06	6° II 13'40	0.27105 AU
max. Earth dist.	12013 Mar 18 07:38	3° Y 12'26	1.72490 AU	morning rise	12015 Aug 24 03:11	2° II 29'10	
				desc. node	12015 Aug 26 16:08	1° II 13'41	
superior conj	12013 Mar 21 05:09	6° Y 48'08	-0°24'59		12015 Aug 29 16:18	30° R 9	
minimum elong	12013 Mar 20 23:21	6° Y 30'06	0°24'42	direct	12015 Sep 07 13:52	28° 9 24'00	
	12013 Apr 08 21:01	0° 8			12015 Sep 16 20:11	0° II	
evening rise	12013 Apr 29 06:57	25° 8 27'37		greatest brilliancy	12015 Sep 17 10:49	0° II 12'28	-4.8m
	12013 May 02 22:12	0° II		morning max el	12015 Oct 27 01:49	29° II 22'15	46°08'03
	12013 May 26 22:15	0° 6			12015 Oct 27 17:22	0° 2	
	12013 Jun 19 23:14	0° 9			12015 Nov 25 09:55	0° III	
asc. node	12013 Jul 01 11:27	14° 9 18'18		asc. node	12015 Dec 17 15:53	25° III 04'37	
	12013 Jul 14 03:44	0° II			12015 Dec 21 22:16	0° X	
	12013 Aug 07 14:50	0° 2			12016 Jan 16 10:41	0° Z	
	12013 Sep 01 13:29	0° III			12016 Feb 10 09:27	0° \approx	
	12013 Sep 27 10:00	0° X			12016 Mar 05 23:48	0° H	
desc. node	12013 Oct 21 09:29	26° X 01'31			12016 Mar 30 08:23	0° Y	
	12013 Oct 25 07:01	0° Z		desc. node	12016 Apr 07 08:50	9° Y 55'49	
evening max el	12013 Oct 30 22:39	5° Z 35'30	45°58'28	morning set	12016 Apr 23 22:33	0° 8 31'39	
	12013 Nov 30 03:24	0° \approx			12016 Apr 23 12:23	0° 8	
greatest brilliancy	12013 Dec 09 04:24	4° \approx 13'20	-4.7m		12016 May 17 12:42	0° II	
retrograde	12013 Dec 19 01:37	6° \approx 00'22		max. Earth dist.	12016 Jun 01 14:10	18° II 53'01	1.71440 AU
evening set	12014 Jan 05 06:54	0° \approx 23'00					
	12014 Jan 05 22:21	30° R 3		superior conj	12016 Jun 03 02:50	20° II 48'01	-1°27'33
inferior conj	12014 Jan 09 12:33	27° Z 46'46	-6°57'57	minimum elong	12016 Jun 03 03:02	20° II 48'39	1°28'21
minimum elong	12014 Jan 09 22:26	27° Z 31'15	6°55'22		12016 Jun 10 10:40	0° 6	
min. Earth dist.	12014 Jan 09 23:58	27° Z 28'52	0.28857 AU		12016 Jul 04 08:08	0° 9	
morning rise	12014 Jan 14 13:46	24° Z 41'21		evening rise	12016 Jul 13 11:28	11° 9 27'44	
direct	12014 Jan 30 21:45	19° Z 31'09			12016 Jul 28 06:57	0° II	
greatest brilliancy	12014 Feb 10 20:24	21° Z 42'10	-4.8m	asc. node	12016 Jul 29 00:23	0° II 54'27	
asc. node	12014 Feb 11 11:25	21° Z 56'46			12016 Aug 21 08:46	0° 2	
	12014 Feb 25 13:58	0° \approx			12016 Sep 14 15:20	0° III	
morning max el	12014 Mar 21 10:11	20° \approx 44'32	46°06'25		12016 Oct 09 05:29	0° X	
	12014 Mar 30 13:01	0° H			12016 Nov 03 07:55	0° Z	
	12014 Apr 26 19:54	0° Y		desc. node	12016 Nov 17 19:46	16° Z 55'03	
	12014 May 22 10:42	0° 8			12016 Nov 29 06:36	0° \approx	
desc. node	12014 Jun 03 09:37	14° 8 21'57			12016 Dec 26 18:40	0° H	
	12014 Jun 16 06:24	0° II		evening max el	12017 Jan 10 05:44	14° H 31'50	45°54'22
	12014 Jul 10 15:54	0° 6			12017 Jan 27 16:51	0° Y	
	12014 Aug 03 20:30	0° 9		greatest brilliancy	12017 Feb 18 07:09	12° Y 59'47	-4.8m
	12014 Aug 27 23:36	0° II		retrograde	12017 Feb 28 05:16	14° Y 47'39	
	12014 Sep 21 02:48	0° 2		asc. node	12017 Mar 10 21:11	12° Y 31'22	

evening set	12017 Mar 14 21:38	10° Υ 34'35		max. Earth dist.	12019 Aug 20 04:59	9° η 09'59	1.71747 AU
inferior conj	12017 Mar 21 04:52	6° Υ 49'15	2°34'19	asc. node	12019 Aug 26 13:59	17° η 07'58	
minimum elong	12017 Mar 20 23:11	6° Υ 58'07	2°32'34		12019 Sep 05 21:20	0° $\underline{\Omega}$	
min. Earth dist.	12017 Mar 21 08:53	6° Υ 42'59	0.27840 AU	evening rise	12019 Sep 25 18:28	24° $\underline{\Omega}$ 45'04	
morning rise	12017 Mar 27 00:23	3° Υ 19'29			12019 Sep 29 23:54	0° \mathbb{M}	
	12017 Apr 03 10:59	30° \mathbb{R} \mathbb{H}			12019 Oct 24 05:51	0° \mathbb{J}	
direct	12017 Apr 11 07:12	28° \mathbb{H} 45'02			12019 Nov 17 16:55	0° \mathbb{Z}	
	12017 Apr 19 09:27	0° Υ			12019 Dec 12 11:19	0° \approx	
greatest brilliancy	12017 Apr 21 16:55	0° Υ 46'40	-4.8m	desc. node	12019 Dec 16 07:12	4° \approx 35'50	
	12017 May 30 08:02	0° \mathbb{B}			12020 Jan 06 15:18	0° \mathbb{H}	
morning max el	12017 May 31 14:04	1° \mathbb{B} 14'59	46°49'19		12020 Feb 01 08:07	0° Υ	
	12017 Jun 27 08:31	0° \mathbb{I}			12020 Feb 27 22:50	0° \mathbb{B}	
desc. node	12017 Jun 30 21:36	4° \mathbb{I} 01'11		evening max el	12020 Mar 23 02:20	25° \mathbb{B} 20'27	46°24'01
	12017 Jul 23 05:22	0° \mathbb{G}			12020 Mar 27 21:29	0° \mathbb{I}	
	12017 Aug 17 06:06	0° Ω		asc. node	12020 Apr 07 06:47	9° \mathbb{I} 25'06	
	12017 Sep 10 22:15	0° η		greatest brilliancy	12020 May 02 11:55	25° \mathbb{I} 33'11	-4.9m
	12017 Oct 05 10:39	0° $\underline{\Omega}$		retrograde	12020 May 12 00:29	27° \mathbb{I} 16'11	
asc. node	12017 Oct 21 16:02	19° $\underline{\Omega}$ 54'47		evening set	12020 May 30 05:18	20° \mathbb{I} 59'42	
	12017 Oct 29 20:57	0° \mathbb{M}		inferior conj	12020 Jun 01 17:44	19° \mathbb{I} 27'14	9°13'19
	12017 Nov 23 05:38	0° \mathbb{J}		minimum elong	12020 Jun 01 17:09	19° \mathbb{I} 28'07	9°12'31
morning set	12017 Dec 01 20:27	10° \mathbb{J} 37'42		min. Earth dist.	12020 Jun 01 23:56	19° \mathbb{I} 17'39	0.27333 AU
	12017 Dec 17 13:18	0° \mathbb{Z}		morning rise	12020 Jun 04 04:58	17° \mathbb{I} 56'18	
				direct	12020 Jun 22 11:45	11° \mathbb{I} 33'04	
superior conj	12018 Jan 07 12:47	25° \mathbb{Z} 53'17	1°09'58	greatest brilliancy	12020 Jul 02 10:35	13° \mathbb{I} 24'53	-4.9m
minimum elong	12018 Jan 07 22:02	26° \mathbb{Z} 21'50	1°10'28		12020 Jul 27 18:56	0° \mathbb{G}	
max. Earth dist.	12018 Jan 07 18:44	26° \mathbb{Z} 11'39	1.73183 AU	desc. node	12020 Jul 28 08:11	0° \mathbb{G} 28'49	
	12018 Jan 10 20:48	0° \approx		morning max el	12020 Aug 11 22:27	14° \mathbb{G} 14'26	46°52'08
	12018 Feb 04 04:39	0° \mathbb{H}			12020 Aug 27 00:44	0° Ω	
desc. node	12018 Feb 10 06:54	7° \mathbb{H} 30'38			12020 Sep 22 20:07	0° η	
evening rise	12018 Feb 14 05:03	12° \mathbb{H} 20'49			12020 Oct 18 13:06	0° $\underline{\Omega}$	
	12018 Feb 28 12:38	0° Υ			12020 Nov 12 17:25	0° \mathbb{M}	
	12018 Mar 24 20:10	0° \mathbb{B}		asc. node	12020 Nov 18 05:24	6° \mathbb{M} 36'45	
	12018 Apr 18 03:25	0° \mathbb{I}			12020 Dec 07 13:36	0° \mathbb{J}	
	12018 May 12 12:14	0° \mathbb{G}			12021 Jan 01 03:59	0° \mathbb{Z}	
asc. node	12018 Jun 03 01:31	26° \mathbb{G} 19'12			12021 Jan 25 14:27	0° \approx	
	12018 Jun 06 02:24	0° Ω		morning set	12021 Feb 08 13:30	17° \approx 11'50	
	12018 Jul 01 04:22	0° η			12021 Feb 18 22:24	0° \mathbb{H}	
	12018 Jul 27 07:04	0° $\underline{\Omega}$		desc. node	12021 Mar 09 20:38	23° \mathbb{H} 24'36	
evening max el	12018 Aug 18 15:02	23° $\underline{\Omega}$ 42'49	46°32'06		12021 Mar 15 04:14	0° Υ	
	12018 Aug 25 01:51	0° \mathbb{M}		max. Earth dist.	12021 Mar 16 01:56	1° Υ 07'15	1.72529 AU
desc. node	12018 Sep 23 01:46	21° \mathbb{M} 58'57					
greatest brilliancy	12018 Sep 26 16:52	23° \mathbb{M} 34'04	-4.8m	superior conj	12021 Mar 18 19:08	4° Υ 29'28	-0°21'29
retrograde	12018 Oct 07 15:43	25° \mathbb{M} 46'15		minimum elong	12021 Mar 18 14:06	4° Υ 13'52	0°21'13
evening set	12018 Oct 24 08:38	20° \mathbb{M} 25'43			12021 Apr 08 07:44	0° \mathbb{B}	
min. Earth dist.	12018 Oct 28 05:40	18° \mathbb{M} 04'13	0.28461 AU	evening rise	12021 Apr 26 19:58	23° \mathbb{B} 04'43	
inferior conj	12018 Oct 29 00:51	17° \mathbb{M} 34'16	-7°29'19		12021 May 02 09:01	0° \mathbb{I}	
minimum elong	12018 Oct 28 15:29	17° \mathbb{M} 48'54	7°27'16		12021 May 26 09:12	0° \mathbb{G}	
morning rise	12018 Nov 01 22:39	15° \mathbb{M} 10'34			12021 Jun 19 10:24	0° Ω	
direct	12018 Nov 19 06:32	9° \mathbb{M} 31'58		asc. node	12021 Jun 30 13:23	13° Ω 49'25	
greatest brilliancy	12018 Nov 28 21:24	11° \mathbb{M} 12'28	-4.7m		12021 Jul 13 15:11	0° η	
	12018 Dec 27 17:41	0° \mathbb{J}			12021 Aug 07 02:47	0° $\underline{\Omega}$	
morning max el	12019 Jan 07 01:23	9° \mathbb{J} 30'01	45°42'02		12021 Sep 01 02:22	0° \mathbb{M}	
asc. node	12019 Jan 14 03:12	16° \mathbb{J} 29'10			12021 Sep 27 00:51	0° \mathbb{J}	
	12019 Jan 27 02:13	0° \mathbb{Z}		desc. node	12021 Oct 20 11:27	25° \mathbb{J} 17'54	
	12019 Feb 22 22:55	0° \approx			12021 Oct 25 03:12	0° \mathbb{Z}	
	12019 Mar 20 12:05	0° \mathbb{H}		evening max el	12021 Oct 28 14:21	3° \mathbb{Z} 24'20	45°59'13
	12019 Apr 14 09:02	0° Υ			12021 Dec 01 21:33	0° \approx	
desc. node	12019 May 05 22:34	26° Υ 25'49		greatest brilliancy	12021 Dec 06 18:35	2° \approx 01'31	-4.7m
	12019 May 08 20:00	0° \mathbb{B}		retrograde	12021 Dec 16 17:49	3° \approx 50'02	
	12019 Jun 02 00:12	0° \mathbb{I}			12021 Dec 30 17:34	30° \mathbb{R} \mathbb{Z}	
	12019 Jun 26 00:13	0° \mathbb{G}		evening set	12022 Jan 03 01:32	28° \mathbb{Z} 08'01	
morning set	12019 Jul 09 07:08	16° \mathbb{G} 39'28		inferior conj	12022 Jan 07 04:25	25° \mathbb{Z} 35'48	-7°09'58
	12019 Jul 19 22:30	0° Ω		minimum elong	12022 Jan 07 14:07	25° \mathbb{Z} 20'36	7°07'30
	12019 Aug 12 21:07	0° η		min. Earth dist.	12022 Jan 07 14:50	25° \mathbb{Z} 19'29	0.28885 AU
				morning rise	12022 Jan 12 02:33	22° \mathbb{Z} 35'07	
superior conj	12019 Aug 17 22:35	6° η 19'57	-0°20'54	direct	12022 Jan 28 14:17	17° \mathbb{Z} 20'09	
minimum elong	12019 Aug 18 03:46	6° η 36'07	0°21'03	greatest brilliancy	12022 Feb 08 11:33	19° \mathbb{Z} 30'23	-4.8m

asc. node	12022 Feb 10 13:18	20°  21'15			12024 Aug 20 19:37	0° 		
	12022 Feb 26 05:01	0° 			12024 Sep 14 02:26	0° 		
morning max el	12022 Mar 19 02:36	18°  33'30	46°04'56		12024 Oct 08 17:01	0° 		
	12022 Mar 30 07:37	0° 			12024 Nov 02 20:16	0° 		
	12022 Apr 26 10:23	0° 		desc. node	12024 Nov 16 21:51	16°  23'15		
	12022 May 21 23:30	0° 			12024 Nov 28 20:38	0° 		
desc. node	12022 Jun 02 11:37	13°  50'37			12024 Dec 26 12:47	0° 		
	12022 Jun 15 18:20	0° 		evening max el	12025 Jan 07 20:02	12°  17'10	45°53'39	
	12022 Jul 10 03:19	0° 			12025 Jan 28 05:06	0° 		
	12022 Aug 03 07:35	0° 		greatest brilliancy	12025 Feb 15 22:11	10°  44'41	-4.8m	
	12022 Aug 27 10:25	0° 		retrograde	12025 Feb 25 18:51	12°  31'29		
morning set	12022 Sep 20 09:59	29°  49'21		asc. node	12025 Mar 09 23:11	9°  35'26		
	12022 Sep 20 13:24	0° 		evening set	12025 Mar 12 11:41	8°  18'55		
asc. node	12022 Sep 23 03:57	3°  14'19		inferior conj	12025 Mar 18 19:29	4°  32'51	2°12'33	
	12022 Oct 14 17:06	0° 		minimum elong	12025 Mar 18 14:33	4°  40'33	2°11'03	
				min. Earth dist.	12025 Mar 19 00:29	4°  25'03	0.27869 AU	
superior conj	12022 Oct 28 11:37	17°  04'47	1°12'19	morning rise	12025 Mar 24 16:59	0°  59'55		
minimum elong	12022 Oct 28 02:27	16°  36'24	1°12'37		12025 Mar 26 13:58	30°  18'06		
max. Earth dist.	12022 Oct 30 10:23	19°  29'43	1.72757 AU	direct	12025 Apr 08 21:42	26°  18'06		
	12022 Nov 07 21:54	0° 		greatest brilliancy	12025 Apr 19 09:15	28°  30'52	-4.8m	
	12022 Dec 02 04:36	0° 			12025 Apr 22 21:07	0° 		
evening rise	12022 Dec 04 09:15	2°  34'21'4		morning max el	12025 May 29 03:06	28°  52'23	46°48'15	
	12022 Dec 26 14:14	0° 			12025 May 30 05:59	0° 		
desc. node	12023 Jan 12 19:30	21°  03'55			12025 Jun 27 00:16	0° 		
	12023 Jan 20 03:20	0° 		desc. node	12025 Jun 29 23:32	3°  22'55		
	12023 Feb 13 19:45	0° 			12025 Jul 22 18:50	0° 		
	12023 Mar 10 15:43	0° 			12025 Aug 16 18:23	0° 		
	12023 Apr 04 17:45	0° 			12025 Sep 10 09:48	0° 		
	12023 Apr 30 09:35	0° 			12025 Oct 04 21:43	0° 		
asc. node	12023 May 05 16:40	6°  02'34		asc. node	12025 Oct 20 17:59	19°  12'27		
	12023 May 27 11:52	0° 			12025 Oct 29 07:41	0° 		
evening max el	12023 Jun 05 07:24	9°  04'47	46°49'27		12025 Nov 22 16:09	0° 		
	12023 Jun 28 16:43	0° 		morning set	12025 Nov 29 13:25	8°  29'43		
greatest brilliancy	12023 Jul 15 06:44	9°  36'57	-4.9m		12025 Dec 16 23:40	0° 		
retrograde	12023 Jul 25 14:56	11°  36'50						
evening set	12023 Aug 09 14:04	7°  11'48		superior conj	12026 Jan 05 05:56	23°  34'17	1°11'50	
inferior conj	12023 Aug 15 08:39	3°  47'20	2°39'42	minimum elong	12026 Jan 05 14:55	24°  31'57	1°12'23	
minimum elong	12023 Aug 15 14:39	3°  38'10	2°37'22	max. Earth dist.	12026 Jan 05 11:53	24°  04'37	1.73185 AU	
min. Earth dist.	12023 Aug 15 07:04	3°  49'45	0.27082 AU		12026 Jan 10 07:08	0° 		
morning rise	12023 Aug 21 15:39	0° 			12026 Feb 03 15:05	0° 		
	12023 Aug 21 21:17	30°  18'06		desc. node	12026 Feb 09 08:42	7°  18'06		
desc. node	12023 Aug 25 18:05	28°  01'12'3		evening rise	12026 Feb 11 21:01	10°  18'06		
direct	12023 Sep 05 03:21	26°  01'54			12026 Feb 27 23:15	0° 		
greatest brilliancy	12023 Sep 14 23:35	27°  05'01'4	-4.8m		12026 Mar 24 07:03	0° 		
	12023 Sep 20 02:14	0° 			12026 Apr 17 14:40	0° 		
morning max el	12023 Oct 24 15:44	27°  04'33	46°09'35		12026 May 11 23:57	0° 		
	12023 Oct 27 15:20	0° 		asc. node	12026 Jun 02 03:27	25°  04'39		
	12023 Nov 25 01:20	0° 			12026 Jun 05 14:52	0° 		
asc. node	12023 Dec 16 17:53	24°  32'06			12026 Jun 30 18:08	0° 		
	12023 Dec 21 11:15	0° 			12026 Jul 26 23:36	0° 		
	12024 Jan 15 22:31	0° 		evening max el	12026 Aug 16 04:44	21°  12'46	46°33'17	
	12024 Feb 09 20:41	0° 			12026 Aug 25 03:07	0° 		
	12024 Mar 05 10:42	0° 		desc. node	12026 Sep 22 03:49	20°  24'58		
	12024 Mar 29 19:06	0° 		greatest brilliancy	12026 Sep 24 08:21	21°  19'50	-4.8m	
desc. node	12024 Apr 06 10:46	9°  28'37		retrograde	12026 Oct 05 06:54	23°  32'26		
morning set	12024 Apr 21 10:41	28°  06'51		evening set	12026 Oct 21 20:26	18°  17'10		
	12024 Apr 22 23:01	0° 		min. Earth dist.	12026 Oct 25 20:44	15°  51'17	0.28410 AU	
	12024 May 16 23:18	0° 		inferior conj	12026 Oct 26 16:06	15°  21'07	-7°18'01	
max. Earth dist.	12024 May 29 20:01	16° 07'31	1.71457 AU	minimum elong	12026 Oct 26 06:22	15° 36'17	7°15'50	
				morning rise	12026 Oct 30 16:37	12° 53'31		
superior conj	12024 May 31 14:28	18° 20'40	-1°27'30	direct	12026 Nov 16 20:44	7° 19'22		
minimum elong	12024 May 31 13:35	18° 17'54	1°28'18	greatest brilliancy	12026 Nov 26 12:27	9° 00'20	-4.8m	
	12024 Jun 09 21:17	0°			12026 Dec 27 20:28	0°		
	12024 Jul 03 18:47	0°		morning max el	12027 Jan 04 15:35	7° 15'31	45°42'17	
evening rise	12024 Jul 10 22:41	8° 58'58		asc. node	12027 Jan 13 05:01	15° 24'43		
	12024 Jul 27 17:41	0°			12027 Jan 26 18:37	0°		
asc. node	12024 Jul 28 02:11	0°			12027 Feb 22 12:19	0°		

	12027 Mar 20 00:12	0° H		evening max el	12029 Oct 26 06:24	1° Z 13'37	46°00'10
	12027 Apr 13 20:30	0° Y		greatest brilliancy	12029 Dec 04 09:15	29° Z 50'16	-4.7m
desc. node	12027 May 05 00:34	25° Y 57'30			12029 Dec 04 20:41	0° \approx	
	12027 May 08 07:08	0° B		retrograde	12029 Dec 14 09:59	1° \approx 39'39	
	12027 Jun 01 11:09	0° II			12029 Dec 23 12:46	30° R Z	
	12027 Jun 25 11:01	0° G		evening set	12029 Dec 31 20:15	25° Z 53'20	
morning set	12027 Jul 06 18:55	14° G 12'07		inferior conj	12030 Jan 04 20:23	23° Z 24'56	-7°21'20
	12027 Jul 19 09:12	0° Ω		minimum elong	12030 Jan 05 05:48	23° Z 10'09	7°19'00
	12027 Aug 12 07:45	0° M		min. Earth dist.	12030 Jan 05 05:39	23° Z 10'23	0.28906 AU
				morning rise	12030 Jan 09 15:18	20° Z 28'59	
superior conj	12027 Aug 15 11:19	3° M 56'26	-0°24'32	direct	12030 Jan 26 07:00	15° Z 09'28	
minimum elong	12027 Aug 15 17:21	4° M 15'16	0°24'41	greatest brilliancy	12030 Feb 06 02:16	17° Z 18'05	-4.8m
max. Earth dist.	12027 Aug 17 14:21	6° M 36'01	1.71714 AU	asc. node	12030 Feb 09 15:22	18° Z 49'08	
asc. node	12027 Aug 25 15:49	16° M 40'36			12030 Feb 26 16:10	0° \approx	
	12027 Sep 05 07:56	0° $\underline{\text{A}}$		morning max el	12030 Mar 16 18:37	16° \approx 21'27	46°03'31
evening rise	12027 Sep 23 09:31	22° $\underline{\text{A}}$ 29'43			12030 Mar 30 01:46	0° H	
	12027 Sep 29 10:32	0° M			12030 Apr 26 00:43	0° Y	
	12027 Oct 23 16:35	0° A			12030 May 21 12:14	0° B	
	12027 Nov 17 03:54	0° Z		desc. node	12030 Jun 01 13:31	13° B 19'02	
	12027 Dec 11 22:46	0° \approx			12030 Jun 15 06:16	0° II	
desc. node	12027 Dec 15 09:06	4° \approx 06'58			12030 Jul 09 14:48	0° G	
	12028 Jan 06 03:32	0° H			12030 Aug 02 18:47	0° Ω	
	12028 Jan 31 21:46	0° Y			12030 Aug 26 21:24	0° M	
	12028 Feb 27 15:25	0° B		morning set	12030 Sep 18 00:32	27° M 31'49	
evening max el	12028 Mar 20 15:59	23° B 00'09	46°22'46		12030 Sep 20 00:13	0° $\underline{\text{A}}$	
	12028 Mar 27 22:51	0° II		asc. node	12030 Sep 22 05:56	2° $\underline{\text{A}}$ 46'54	
asc. node	12028 Apr 06 08:50	8° II 20'32			12030 Oct 14 03:48	0° M	
greatest brilliancy	12028 Apr 29 23:53	23° II 08'55	-4.9m				
retrograde	12028 May 09 13:59	24° II 53'10		superior conj	12030 Oct 26 03:40	14° M 52'41	1°10'24
evening set	12028 May 27 16:39	18° II 38'39		minimum elong	12030 Oct 25 18:13	14° M 23'24	1°10'39
inferior conj	12028 May 30 06:53	17° II 03'31	9°11'57	max. Earth dist.	12030 Oct 28 05:35	17° M 27'26	1.72725 AU
minimum elong	12028 May 30 05:21	17° II 05'54	9°11'08		12030 Nov 07 08:33	0° A	
min. Earth dist.	12028 May 30 12:15	16° II 55'15	0.27355 AU		12030 Dec 01 15:18	0° Z	
morning rise	12028 Jun 01 18:00	15° II 32'56		evening rise	12030 Dec 02 01:47	0° Z 32'18	
direct	12028 Jun 20 01:30	9° II 08'50			12030 Dec 26 01:05	0° \approx	
greatest brilliancy	12028 Jun 29 23:36	11° II 00'34	-4.9m	desc. node	12031 Jan 11 21:20	20° \approx 35'54	
desc. node	12028 Jul 27 10:08	29° II 25'34			12031 Jan 19 14:27	0° H	
	12028 Jul 28 01:32	0° G			12031 Feb 13 07:19	0° Y	
morning max el	12028 Aug 09 13:14	11° G 54'31	46°53'04		12031 Mar 10 03:57	0° B	
	12028 Aug 26 18:50	0° Ω			12031 Apr 04 07:04	0° II	
	12028 Sep 22 10:38	0° M			12031 Apr 30 00:53	0° G	
	12028 Oct 18 01:54	0° $\underline{\text{A}}$		asc. node	12031 May 04 18:40	5° G 23'21	
	12028 Nov 12 05:13	0° M			12031 May 27 07:54	0° Ω	
asc. node	12028 Nov 17 07:20	6° M 07'27		evening max el	12031 Jun 02 21:27	6° Ω 43'09	46°49'08
	12028 Dec 07 00:47	0° A			12031 Jun 29 13:34	0° M	
	12028 Dec 31 14:49	0° Z		greatest brilliancy	12031 Jul 12 21:40	7° M 15'12	-4.9m
	12029 Jan 25 01:07	0° \approx		retrograde	12031 Jul 23 04:12	9° M 13'19	
morning set	12029 Feb 06 06:05	15° \approx 02'18		evening set	12031 Aug 07 05:39	4° M 45'54	
	12029 Feb 18 08:59	0° H		inferior conj	12031 Aug 12 21:49	1° M 24'28	3°02'31
desc. node	12029 Mar 08 22:37	22° H 58'03		minimum elong	12031 Aug 13 04:35	1° M 14'05	2°59'57
max. Earth dist.	12029 Mar 13 20:18	29° H 02'37	1.72563 AU	min. Earth dist.	12031 Aug 12 21:21	1° M 25'11	0.27066 AU
	12029 Mar 14 14:49	0° Y			12031 Aug 15 05:23	30° R Ω	
				morning rise	12031 Aug 19 03:55	27° Ω 45'23	
superior conj	12029 Mar 16 09:37	2° Y 12'43	-0°17'59	desc. node	12031 Aug 24 20:09	25° Ω 13'17	
minimum elong	12029 Mar 16 05:24	1° Y 59'37	0°17'44	direct	12031 Sep 02 16:29	23° Ω 39'16	
	12029 Apr 07 18:22	0° B		greatest brilliancy	12031 Sep 12 12:54	25° Ω 27'20	-4.8m
evening rise	12029 Apr 24 09:26	20° B 43'31			12031 Sep 21 24:00	0° M	
	12029 May 01 19:46	0° II		morning max el	12031 Oct 22 04:53	24° M 43'41	46°11'01
	12029 May 25 20:09	0° G			12031 Oct 27 12:54	0° $\underline{\text{A}}$	
	12029 Jun 18 21:36	0° Ω			12031 Nov 24 16:56	0° M	
asc. node	12029 Jun 29 15:12	13° Ω 19'52		asc. node	12031 Dec 15 19:44	23° M 58'09	
	12029 Jul 13 02:46	0° M			12031 Dec 21 00:32	0° A	
	12029 Aug 06 14:55	0° $\underline{\text{A}}$			12032 Jan 15 10:38	0° Z	
	12029 Aug 31 15:30	0° M			12032 Feb 09 08:10	0° \approx	
	12029 Sep 26 16:04	0° A			12032 Mar 04 21:50	0° H	
desc. node	12029 Oct 19 13:32	24° A 33'33			12032 Mar 29 06:04	0° Y	
	12029 Oct 25 00:13	0° Z		desc. node	12032 Apr 05 12:39	9° Y 00'32	

morning set	12032 Apr 18 22:58	25° Υ 41'46		evening set	12034 Oct 19 08:12	16° \mathbb{M} 07'13	
	12032 Apr 22 09:55	0° \mathcal{B}		min. Earth dist.	12034 Oct 23 11:26	13° \mathbb{M} 37'32	0.28361 AU
	12032 May 16 10:11	0° \mathbb{I}		inferior conj	12034 Oct 24 07:15	13° \mathbb{M} 06'45	-7°06'02
max. Earth dist.	12032 May 27 00:29	13° \mathbb{I} 16'57	1.71476 AU	minimum elong	12034 Oct 23 21:14	13° \mathbb{M} 22'19	7°03'42
				morning rise	12034 Oct 28 10:36	10° \mathbb{M} 35'21	
superior conj	12032 May 29 02:26	15° \mathbb{I} 53'36	-1°27'17	direct	12034 Nov 14 11:08	5° \mathbb{M} 05'32	
minimum elong	12032 May 29 00:31	15° \mathbb{I} 47'33	1°28'04	greatest brilliancy	12034 Nov 24 03:04	6° \mathbb{M} 46'49	-4.8m
	12032 Jun 09 08:10	0° \mathcal{E}			12034 Dec 27 22:14	0° \mathcal{A}	
	12032 Jul 03 05:41	0° \mathcal{Q}		morning max el	12035 Jan 02 06:36	5° \mathcal{A} 01'56	45°42'27
evening rise	12032 Jul 08 10:11	6° \mathcal{Q} 30'18		asc. node	12035 Jan 12 07:03	15° \mathcal{A} 00'15	
asc. node	12032 Jul 27 04:06	29° \mathcal{Q} 58'16			12035 Jan 26 11:09	0° \mathcal{Z}	
	12032 Jul 27 04:39	0° \mathbb{P}			12035 Feb 22 02:02	0° \approx	
	12032 Aug 20 06:45	0° \mathcal{L}			12035 Mar 19 12:40	0° \mathcal{H}	
	12032 Sep 13 13:52	0° \mathbb{M}			12035 Apr 13 08:19	0° Υ	
	12032 Oct 08 04:56	0° \mathcal{A}		desc. node	12035 May 04 02:22	25° Υ 27'42	
	12032 Nov 02 09:06	0° \mathcal{Z}			12035 May 07 18:34	0° \mathcal{B}	
desc. node	12032 Nov 15 23:42	15° \mathcal{Z} 49'18			12035 May 31 22:21	0° \mathbb{I}	
	12032 Nov 28 11:16	0° \approx			12035 Jun 24 22:06	0° \mathcal{E}	
	12032 Dec 26 07:53	0° \mathcal{H}		morning set	12035 Jul 04 06:38	11° \mathcal{E} 43'43	
evening max el	12033 Jan 05 09:45	9° \mathcal{H} 59'59	45°53'12		12035 Jul 18 20:12	0° \mathcal{Q}	
	12033 Jan 28 22:11	0° Υ			12035 Aug 11 18:42	0° \mathbb{P}	
greatest brilliancy	12033 Feb 13 13:15	8° Υ 28'52	-4.8m				
retrograde	12033 Feb 23 08:47	10° Υ 15'05		superior conj	12035 Aug 13 00:01	1° \mathbb{P} 31'45	-0°28'09
asc. node	12033 Mar 09 01:15	6° Υ 34'59		minimum elong	12035 Aug 13 06:52	1° \mathbb{P} 53'11	0°28'18
evening set	12033 Mar 10 02:04	6° Υ 02'21		max. Earth dist.	12035 Aug 15 00:44	4° \mathbb{P} 04'11	1.71685 AU
inferior conj	12033 Mar 16 10:16	2° Υ 16'03	1°50'49	asc. node	12035 Aug 24 17:47	16° \mathbb{P} 12'40	
minimum elong	12033 Mar 16 06:07	2° Υ 22'33	1°49'35		12035 Sep 04 18:51	0° \mathcal{L}	
min. Earth dist.	12033 Mar 16 16:13	2° Υ 06'46	0.27898 AU	evening rise	12035 Sep 21 00:37	20° \mathcal{L} 13'37	
	12033 Mar 20 02:34	30° \mathcal{R} \mathcal{H}			12035 Sep 28 21:27	0° \mathbb{M}	
morning rise	12033 Mar 22 09:36	28° \mathcal{H} 40'23			12035 Oct 23 03:36	0° \mathcal{A}	
direct	12033 Apr 06 12:09	24° \mathcal{H} 10'38			12035 Nov 16 15:11	0° \mathcal{Z}	
greatest brilliancy	12033 Apr 17 01:56	26° \mathcal{H} 15'02	-4.8m		12035 Dec 11 10:32	0° \approx	
	12033 Apr 24 20:08	0° Υ		desc. node	12035 Dec 14 10:59	3° \approx 37'06	
morning max el	12033 May 26 16:55	26° Υ 30'59	46°47'10		12036 Jan 05 16:10	0° \mathcal{H}	
	12033 May 30 03:26	0° \mathcal{B}			12036 Jan 31 11:57	0° Υ	
	12033 Jun 26 16:04	0° \mathbb{I}			12036 Feb 27 08:47	0° \mathcal{B}	
desc. node	12033 Jun 29 01:23	2° \mathbb{I} 43'53		evening max el	12036 Mar 18 06:34	20° \mathcal{B} 41'07	46°21'36
	12033 Jul 22 08:28	0° \mathcal{E}			12036 Mar 28 02:14	0° \mathbb{I}	
	12033 Aug 16 06:53	0° \mathcal{Q}		asc. node	12036 Apr 05 10:49	7° \mathbb{I} 12'51	
	12033 Sep 09 21:36	0° \mathbb{P}		greatest brilliancy	12036 Apr 27 11:46	20° \mathbb{I} 43'41	-4.9m
	12033 Oct 04 09:04	0° \mathcal{L}		retrograde	12036 May 07 03:39	22° \mathbb{I} 29'01	
asc. node	12033 Oct 19 19:49	18° \mathcal{L} 58'47		evening set	12036 May 25 03:30	16° \mathbb{I} 17'34	
	12033 Oct 28 18:44	0° \mathbb{M}		inferior conj	12036 May 27 20:02	14° \mathbb{I} 38'52	9°09'42
	12033 Nov 22 03:00	0° \mathcal{A}		minimum elong	12036 May 27 17:31	14° \mathbb{I} 42'45	9°08'50
morning set	12033 Nov 27 06:13	6° \mathcal{A} 20'03		min. Earth dist.	12036 May 28 00:19	14° \mathbb{I} 32'16	0.27372 AU
	12033 Dec 16 10:26	0° \mathcal{Z}		morning rise	12036 May 30 07:32	13° \mathbb{I} 07'43	
				direct	12036 Jun 17 15:25	6° \mathbb{I} 44'02	
superior conj	12034 Jan 02 22:53	21° \mathcal{Z} 37'21	1°13'36	greatest brilliancy	12036 Jun 27 12:00	8° \mathbb{I} 34'47	-4.9m
minimum elong	12034 Jan 03 07:33	22° \mathcal{Z} 04'04	1°14'11	desc. node	12036 Jul 26 12:15	28° \mathbb{I} 23'33	
max. Earth dist.	12034 Jan 03 05:14	21° \mathcal{Z} 56'54	1.73189 AU		12036 Jul 28 06:21	0° \mathcal{E}	
	12034 Jan 09 17:54	0° \approx		morning max el	12036 Aug 07 03:51	9° \mathcal{E} 33'33	46°53'48
	12034 Feb 03 01:55	0° \mathcal{H}			12036 Aug 26 12:46	0° \mathcal{Q}	
desc. node	12034 Feb 08 10:38	6° \mathcal{H} 36'27			12036 Sep 22 01:13	0° \mathbb{P}	
evening rise	12034 Feb 09 12:47	7° \mathcal{H} 57'00			12036 Oct 17 14:51	0° \mathcal{L}	
	12034 Feb 27 10:15	0° Υ			12036 Nov 11 17:12	0° \mathbb{M}	
	12034 Mar 23 18:18	0° \mathcal{B}		asc. node	12036 Nov 16 09:09	5° \mathbb{M} 37'16	
	12034 Apr 17 02:16	0° \mathbb{I}			12036 Dec 06 12:10	0° \mathcal{A}	
	12034 May 11 12:04	0° \mathcal{E}			12036 Dec 31 01:50	0° \mathcal{Z}	
asc. node	12034 Jun 01 05:18	25° \mathcal{E} 14'35			12037 Jan 24 11:57	0° \approx	
	12034 Jun 05 03:46	0° \mathcal{Q}		morning set	12037 Feb 03 22:39	12° \approx 52'08	
	12034 Jun 30 08:26	0° \mathbb{P}			12037 Feb 17 19:47	0° \mathcal{H}	
	12034 Jul 26 16:52	0° \mathcal{L}		desc. node	12037 Mar 08 00:30	22° \mathcal{H} 30'24	
evening max el	12034 Aug 13 18:51	19° \mathcal{L} 02'44	46°34'31	max. Earth dist.	12037 Mar 11 12:40	26° \mathcal{H} 51'02	1.72601 AU
	12034 Aug 25 06:16	0° \mathbb{M}					
desc. node	12034 Sep 21 05:50	18° \mathbb{M} 46'29		superior conj	12037 Mar 13 23:56	29° \mathcal{H} 54'40	-0°14'27
greatest brilliancy	12034 Sep 21 23:10	19° \mathbb{M} 03'44	-4.8m	minimum elong	12037 Mar 13 20:32	29° \mathcal{H} 44'11	0°14'12
retrograde	12034 Oct 02 22:27	21° \mathbb{M} 17'36		behind sun begin	12037 Mar 13 09:05	29° \mathcal{H} 08'41	

behind sun end	12037 Mar 14 07:59	0° Υ 19'40		greatest brilliancy	12039 Sep 10 02:30	23° Ω 04'29	-4.8m
	12037 Mar 14 01:39	0° Υ			12039 Sep 23 07:15	0° \mathfrak{M}	
	12037 Apr 07 05:17	0° \mathcal{B}		morning max el	12039 Oct 19 17:24	22° \mathfrak{M} 21'16	46°12'35
evening rise	12037 Apr 21 22:30	18° \mathcal{B} 20'19			12039 Oct 27 09:37	0° \mathcal{A}	
	12037 May 01 06:47	0° Π			12039 Nov 24 08:10	0° \mathfrak{M}	
	12037 May 25 07:20	0° \mathcal{E}		asc. node	12039 Dec 14 21:42	23° \mathfrak{M} 25'07	
	12037 Jun 18 09:02	0° Ω			12039 Dec 20 13:34	0° \mathcal{X}	
asc. node	12037 Jun 28 17:10	12° Ω 50'11			12040 Jan 14 22:34	0° \mathcal{Z}	
	12037 Jul 12 14:33	0° \mathfrak{M}			12040 Feb 08 19:28	0° \approx	
	12037 Aug 06 03:16	0° \mathcal{A}			12040 Mar 04 08:47	0° \mathcal{H}	
	12037 Aug 31 04:54	0° \mathfrak{M}			12040 Mar 28 16:50	0° Υ	
	12037 Sep 26 07:42	0° \mathcal{X}		desc. node	12040 Apr 04 14:27	8° Υ 32'46	
desc. node	12037 Oct 18 15:27	23° \mathcal{X} 47'35		morning set	12040 Apr 16 11:27	23° Υ 17'49	
evening max el	12037 Oct 23 22:18	29° \mathcal{X} 01'58	46°01'04		12040 Apr 21 20:38	0° \mathcal{B}	
	12037 Oct 24 22:16	0° \mathcal{Z}			12040 May 15 20:55	0° Π	
greatest brilliancy	12037 Dec 02 00:31	27° \mathcal{Z} 39'24	-4.7m	max. Earth dist.	12040 May 24 06:48	10° Π 32'35	1.71505 AU
retrograde	12037 Dec 12 01:46	29° \mathcal{Z} 28'53					
evening set	12037 Dec 29 14:54	23° \mathcal{Z} 38'42		superior conj	12040 May 26 14:19	13° Π 26'39	-1°26'53
inferior conj	12038 Jan 02 12:22	21° \mathcal{Z} 13'59	-7°32'02	minimum elong	12040 May 26 11:21	13° Π 17'23	1°27'39
minimum elong	12038 Jan 02 21:26	20° \mathcal{Z} 59'43	7°29'51		12040 Jun 08 18:56	0° \mathcal{E}	
min. Earth dist.	12038 Jan 02 20:39	21° \mathcal{Z} 00'58	0.28924 AU		12040 Jul 02 16:30	0° Ω	
morning rise	12038 Jan 07 03:57	18° \mathcal{Z} 22'41		evening rise	12040 Jul 05 21:16	4° Ω 00'39	
direct	12038 Jan 23 23:26	12° \mathcal{Z} 58'51		asc. node	12040 Jul 26 06:02	29° Ω 30'18	
greatest brilliancy	12038 Feb 03 16:54	15° \mathcal{Z} 05'35	-4.8m		12040 Jul 26 15:33	0° \mathfrak{M}	
asc. node	12038 Feb 08 17:23	17° \mathcal{Z} 19'54			12040 Aug 19 17:47	0° \mathcal{A}	
	12038 Feb 27 00:24	0° \approx			12040 Sep 13 01:09	0° \mathfrak{M}	
morning max el	12038 Mar 14 09:36	14° \approx 06'38	46°01'58		12040 Oct 07 16:43	0° \mathcal{X}	
	12038 Mar 29 19:35	0° \mathcal{H}			12040 Nov 01 21:47	0° \mathcal{Z}	
	12038 Apr 25 15:02	0° Υ		desc. node	12040 Nov 15 01:39	15° \mathcal{Z} 16'07	
	12038 May 21 01:04	0° \mathcal{B}			12040 Nov 28 01:52	0° \approx	
desc. node	12038 May 31 15:23	12° \mathcal{B} 46'57			12040 Dec 26 03:17	0° \mathcal{H}	
	12038 Jun 14 18:19	0° Π		evening max el	12041 Jan 02 23:38	7° \mathcal{H} 44'05	45°52'51
	12038 Jul 09 02:23	0° \mathcal{E}			12041 Jan 29 20:49	0° Υ	
	12038 Aug 02 06:03	0° Ω		greatest brilliancy	12041 Feb 11 03:55	6° Υ 13'33	-4.8m
	12038 Aug 26 08:24	0° \mathfrak{M}		retrograde	12041 Feb 20 23:15	7° Υ 59'51	
morning set	12038 Sep 15 14:58	25° \mathfrak{M} 13'47		evening set	12041 Mar 07 16:41	3° Υ 46'29	
	12038 Sep 19 11:03	0° \mathcal{A}		asc. node	12041 Mar 08 03:10	3° Υ 32'13	
asc. node	12038 Sep 21 07:41	2° \mathcal{A} 18'45		inferior conj	12041 Mar 14 01:04	0° Υ 00'14	1°28'57
	12038 Oct 13 14:31	0° \mathfrak{M}		minimum elong	12041 Mar 13 21:42	0° Υ 05'29	1°27'58
					12041 Mar 14 01:13	30° \mathcal{R} \mathcal{H}	
superior conj	12038 Oct 23 19:42	12° \mathfrak{M} 40'27	1°08'23	min. Earth dist.	12041 Mar 14 07:48	29° \mathcal{H} 49'45	0.27929 AU
minimum elong	12038 Oct 23 10:01	12° \mathfrak{M} 10'24	1°08'35	morning rise	12041 Mar 20 02:08	26° \mathcal{H} 22'18	
max. Earth dist.	12038 Oct 25 23:11	15° \mathfrak{M} 20'02	1.72692 AU	direct	12041 Apr 04 02:50	21° \mathcal{H} 54'08	
	12038 Nov 06 19:14	0° \mathcal{X}		greatest brilliancy	12041 Apr 14 18:24	24° \mathcal{H} 00'14	-4.8m
evening rise	12038 Nov 29 18:21	28° \mathcal{X} 22'22			12041 Apr 26 03:05	0° Υ	
	12038 Dec 01 02:02	0° \mathcal{Z}		morning max el	12041 May 24 07:36	24° Υ 12'55	46°46'01
	12038 Dec 25 11:56	0° \approx			12041 May 29 23:44	0° \mathcal{B}	
desc. node	12039 Jan 10 23:19	20° \approx 08'25			12041 Jun 26 07:18	0° Π	
	12039 Jan 19 01:34	0° \mathcal{H}		desc. node	12041 Jun 28 03:29	2° Π 06'47	
	12039 Feb 12 18:52	0° Υ			12041 Jul 21 21:43	0° \mathcal{E}	
	12039 Mar 09 16:13	0° \mathcal{B}			12041 Aug 15 19:05	0° Ω	
	12039 Apr 03 20:29	0° Π			12041 Sep 09 09:10	0° \mathfrak{M}	
	12039 Apr 29 16:28	0° \mathcal{E}			12041 Oct 03 20:10	0° \mathcal{A}	
asc. node	12039 May 03 20:31	4° \mathcal{E} 43'02		asc. node	12041 Oct 18 21:41	18° \mathcal{A} 31'05	
	12039 May 27 04:46	0° Ω			12041 Oct 28 05:31	0° \mathfrak{M}	
evening max el	12039 May 31 10:27	4° Ω 18'19	46°48'42		12041 Nov 21 13:33	0° \mathcal{X}	
	12039 Jun 30 18:41	0° \mathfrak{M}		morning set	12041 Nov 24 22:47	4° \mathcal{X} 10'36	
greatest brilliancy	12039 Jul 10 12:58	4° \mathfrak{M} 53'01	-4.9m		12041 Dec 15 20:52	0° \mathcal{Z}	
retrograde	12039 Jul 20 16:56	6° \mathfrak{M} 48'56					
evening set	12039 Aug 04 21:09	2° \mathfrak{M} 18'47		superior conj	12041 Dec 31 15:45	19° \mathcal{Z} 29'09	1°15'16
	12039 Aug 08 20:07	30° \mathcal{R} Ω		minimum elong	12042 Jan 01 00:03	19° \mathcal{Z} 54'44	1°15'53
inferior conj	12039 Aug 10 10:47	29° Ω 00'53	3°25'13	max. Earth dist.	12042 Jan 01 00:33	19° \mathcal{Z} 56'17	1.73193 AU
minimum elong	12039 Aug 10 18:17	28° Ω 49'23	3°22'26		12042 Jan 09 04:19	0° \approx	
min. Earth dist.	12039 Aug 10 11:44	28° Ω 59'26	0.27050 AU		12042 Feb 02 12:27	0° \mathcal{H}	
morning rise	12039 Aug 16 15:41	25° Ω 22'57		evening rise	12042 Feb 07 04:39	5° \mathcal{H} 45'34	
desc. node	12039 Aug 23 22:08	22° Ω 19'28		desc. node	12042 Feb 07 12:30	6° \mathcal{H} 09'44	
direct	12039 Aug 31 04:49	21° Ω 15'45			12042 Feb 26 20:57	0° Υ	

	12042 Mar 23 05:14	0°♄		asc. node	12044 Nov 15 11:08	5°♍08'46	
	12042 Apr 16 13:32	0°♂			12044 Dec 05 23:09	0°♄	
	12042 May 10 23:49	0°♄			12044 Dec 30 12:29	0°♄	
asc. node	12042 May 31 07:21	24°♄43'14			12045 Jan 23 22:27	0°♄	
	12042 Jun 04 16:20	0°♂		morning set	12045 Feb 01 15:13	10°♄43'05	
	12042 Jun 29 22:30	0°♄			12045 Feb 17 06:13	0°♄	
	12042 Jul 26 10:09	0°♄		desc. node	12045 Mar 07 02:14	22°♄03'31	
evening max el	12042 Aug 11 09:46	16°♄45'37	46°35'36	max. Earth dist.	12045 Mar 09 03:51	24°♄37'08	1.72637 AU
	12042 Aug 25 10:52	0°♍					
greatest brilliancy	12042 Sep 19 13:36	16°♍47'33	-4.8m	superior conj	12045 Mar 11 14:22	27°♄38'22	-0°10'55
desc. node	12042 Sep 20 07:46	17°♍04'41		minimum elong	12045 Mar 11 11:49	27°♄30'29	0°10'40
retrograde	12042 Sep 30 14:24	19°♍02'50		behind sun begin	12045 Mar 10 17:33	26°♄33'51	
evening set	12042 Oct 16 19:51	13°♍57'19		behind sun end	12045 Mar 12 06:06	28°♄27'07	
min. Earth dist.	12042 Oct 21 01:45	11°♍24'06	0.28308 AU		12045 Mar 13 12:05	0°♄	
inferior conj	12042 Oct 21 22:11	10°♍52'26	-6°53'11		12045 Apr 06 15:48	0°♄	
minimum elong	12042 Oct 21 11:57	11°♍08'17	6°50'44	evening rise	12045 Apr 19 11:47	15°♄58'56	
morning rise	12042 Oct 26 04:27	8°♍17'12			12045 Apr 30 17:28	0°♂	
direct	12042 Nov 12 01:44	2°♍51'57			12045 May 24 18:12	0°♄	
greatest brilliancy	12042 Nov 21 16:56	4°♍33'01	-4.8m		12045 Jun 17 20:09	0°♂	
	12042 Dec 27 22:15	0°♄		asc. node	12045 Jun 27 19:06	12°♂21'23	
morning max el	12042 Dec 30 22:07	2°♄50'41	45°42'41		12045 Jul 12 02:00	0°♄	
asc. node	12043 Jan 11 09:07	14°♄17'34			12045 Aug 05 15:17	0°♄	
	12043 Jan 26 02:56	0°♄			12045 Aug 30 17:59	0°♍	
	12043 Feb 21 15:12	0°♄			12045 Sep 25 23:07	0°♄	
	12043 Mar 19 00:39	0°♄		desc. node	12045 Oct 17 17:26	23°♄02'21	
	12043 Apr 12 19:41	0°♄		evening max el	12045 Oct 21 13:32	26°♄49'44	46°01'51
desc. node	12043 May 03 04:15	24°♄59'24			12045 Oct 24 20:43	0°♄	
	12043 May 07 05:35	0°♄		greatest brilliancy	12045 Nov 29 16:24	25°♄30'13	-4.7m
	12043 May 31 09:08	0°♂		retrograde	12045 Dec 09 17:11	27°♄19'22	
	12043 Jun 24 08:44	0°♄		evening set	12045 Dec 27 09:37	21°♄25'23	
morning set	12043 Jul 01 18:44	9°♄17'52		inferior conj	12045 Dec 31 04:30	19°♄04'22	-7°42'04
	12043 Jul 18 06:45	0°♂		minimum elong	12045 Dec 31 13:10	18°♄50'42	7°40'01
				min. Earth dist.	12045 Dec 31 12:07	18°♄52'22	0.28941 AU
superior conj	12043 Aug 10 12:50	29°♂08'43	-0°31'42	morning rise	12046 Jan 04 16:42	16°♄17'42	
minimum elong	12043 Aug 10 20:27	29°♂32'34	0°31'50	direct	12046 Jan 21 15:31	10°♄49'23	
	12043 Aug 11 05:13	0°♄		greatest brilliancy	12046 Feb 01 08:08	12°♄54'46	-4.8m
max. Earth dist.	12043 Aug 12 13:53	1°♄42'14	1.71658 AU	asc. node	12046 Feb 07 19:17	15°♄54'21	
asc. node	12043 Aug 23 19:34	15°♄45'29			12046 Feb 27 05:50	0°♄	
	12043 Sep 04 05:21	0°♄		morning max el	12046 Mar 12 00:05	11°♄51'27	46°00'32
evening rise	12043 Sep 18 15:39	17°♄58'29			12046 Mar 29 12:39	0°♄	
	12043 Sep 28 07:59	0°♍			12046 Apr 25 04:52	0°♄	
	12043 Oct 22 14:15	0°♄			12046 May 20 13:31	0°♄	
	12043 Nov 16 02:06	0°♄		desc. node	12046 May 30 17:23	12°♄16'18	
	12043 Dec 10 21:58	0°♄			12046 Jun 14 06:02	0°♂	
desc. node	12043 Dec 13 12:58	3°♄08'41			12046 Jul 08 13:41	0°♄	
	12044 Jan 05 04:29	0°♄			12046 Aug 01 17:03	0°♂	
	12044 Jan 31 01:50	0°♄			12046 Aug 25 19:10	0°♄	
	12044 Feb 27 02:04	0°♄		morning set	12046 Sep 13 05:35	22°♄56'58	
evening max el	12044 Mar 15 21:28	18°♄24'14	46°20'19		12046 Sep 18 21:37	0°♄	
	12044 Mar 28 06:49	0°♂		asc. node	12046 Sep 20 09:33	1°♄51'43	
asc. node	12044 Apr 04 12:47	6°♂04'34			12046 Oct 13 00:58	0°♍	
greatest brilliancy	12044 Apr 25 00:16	18°♂20'38	-4.8m				
retrograde	12044 May 04 17:09	20°♂06'13		superior conj	12046 Oct 21 11:59	10°♍29'49	1°06'16
evening set	12044 May 22 14:01	13°♂58'56		minimum elong	12046 Oct 21 02:07	9°♍59'11	1°06'26
inferior conj	12044 May 25 09:17	12°♂15'53	9°06'32	max. Earth dist.	12046 Oct 23 15:46	13°♍10'20	1.72658 AU
minimum elong	12044 May 25 05:50	12°♂21'12	9°05'35		12046 Nov 06 05:39	0°♄	
min. Earth dist.	12044 May 25 12:44	12°♂10'32	0.27385 AU	evening rise	12046 Nov 27 11:10	26°♄13'59	
morning rise	12044 May 27 21:39	10°♂43'14			12046 Nov 30 12:30	0°♄	
direct	12044 Jun 15 05:18	4°♂21'00			12046 Dec 24 22:35	0°♄	
greatest brilliancy	12044 Jun 25 00:37	6°♂10'38	-4.9m	desc. node	12047 Jan 10 01:10	19°♄41'00	
desc. node	12044 Jul 25 14:09	27°♂23'59			12047 Jan 18 12:30	0°♄	
	12044 Jul 28 08:49	0°♄			12047 Feb 12 06:17	0°♄	
morning max el	12044 Aug 04 17:49	7°♄12'26	46°54'35		12047 Mar 09 04:23	0°♄	
	12044 Aug 26 05:45	0°♂			12047 Apr 03 09:52	0°♂	
	12044 Sep 21 15:07	0°♄			12047 Apr 29 08:08	0°♄	
	12044 Oct 17 03:15	0°♄		asc. node	12047 May 02 22:36	4°♄03'27	
	12044 Nov 11 04:43	0°♍			12047 May 27 02:13	0°♂	

evening max el	12047 May 28 22:42	1°Ω52'07	46°48'13			12049 Nov 21 00:20	0°♊	
	12047 Jul 02 12:40	0°♍		morning set		12049 Nov 22 15:27	2°♊00'43	
greatest brilliancy	12047 Jul 08 04:06	2°♍30'50	-4.9m			12049 Dec 15 07:31	0°♊	
retrograde	12047 Jul 18 05:35	4°♍24'58						
	12047 Aug 02 06:28	30°♋Ω		superior conj		12049 Dec 29 08:50	17°♊20'56	1°16'49
evening set	12047 Aug 02 12:45	29°Ω51'23		minimum elong		12049 Dec 29 16:42	17°♊45'12	1°17'28
inferior conj	12047 Aug 07 23:44	26°Ω37'28	3°47'38	max. Earth dist.		12049 Dec 29 21:45	18°♊00'46	1.73190 AU
minimum elong	12047 Aug 08 07:55	26°Ω24'54	3°44'38			12050 Jan 08 14:57	0°♋	
min. Earth dist.	12047 Aug 08 02:12	26°Ω33'41	0.27038 AU			12050 Feb 01 23:10	0°♋	
morning rise	12047 Aug 14 03:13	23°Ω01'10		evening rise		12050 Feb 04 20:49	3°♋34'27	
desc. node	12047 Aug 23 00:05	19°Ω31'14		desc. node		12050 Feb 06 14:18	5°♋42'11	
direct	12047 Aug 28 16:56	18°Ω52'02				12050 Feb 26 07:53	0°♌	
greatest brilliancy	12047 Sep 07 16:23	20°Ω42'05	-4.8m			12050 Mar 22 16:27	0°♌	
	12047 Sep 24 05:42	0°♍				12050 Apr 16 01:07	0°♌	
morning max el	12047 Oct 17 06:36	20°♍00'38	46°14'25			12050 May 10 11:57	0°♍	
	12047 Oct 27 05:31	0°♌		asc. node		12050 May 30 09:15	24°♍10'16	
	12047 Nov 23 23:02	0°♌				12050 Jun 04 05:21	0°♌	
asc. node	12047 Dec 13 23:42	22°♌52'49				12050 Jun 29 13:04	0°♍	
	12047 Dec 20 02:22	0°♊				12050 Jul 26 04:13	0°♌	
	12048 Jan 14 10:19	0°♊		evening max el		12050 Aug 09 01:27	14°♌29'22	46°36'44
	12048 Feb 08 06:40	0°♋				12050 Aug 25 18:04	0°♌	
	12048 Mar 03 19:42	0°♋		greatest brilliancy		12050 Sep 17 04:02	14°♌30'11	-4.8m
	12048 Mar 28 03:37	0°♌		desc. node		12050 Sep 19 09:49	15°♌17'59	
desc. node	12048 Apr 03 16:23	8°♌05'26		retrograde		12050 Sep 28 06:19	16°♌46'28	
morning set	12048 Apr 13 24:00	20°♌54'09		evening set		12050 Oct 14 07:32	11°♌45'56	
	12048 Apr 21 07:22	0°♌		min. Earth dist.		12050 Oct 18 15:56	9°♌09'11	0.28253 AU
	12048 May 15 07:39	0°♌		inferior conj		12050 Oct 19 12:59	8°♌36'35	-6°39'32
max. Earth dist.	12048 May 21 16:18	7°♌58'19	1.71533 AU	minimum elong		12050 Oct 19 02:38	8°♌52'38	6°37'00
				morning rise		12050 Oct 23 22:12	5°♌57'23	
superior conj	12048 May 24 02:09	10°♌59'39	-1°26'19	direct		12050 Nov 09 16:37	0°♌36'58	
minimum elong	12048 May 23 22:10	10°♌47'09	1°27'03	greatest brilliancy		12050 Nov 19 06:19	2°♌17'11	-4.8m
	12048 Jun 08 05:41	0°♍				12050 Dec 27 21:39	0°♊	
	12048 Jul 02 03:19	0°Ω		morning max el		12050 Dec 28 13:37	0°♊38'15	45°43'02
evening rise	12048 Jul 03 08:25	1°Ω31'13		asc. node		12051 Jan 10 10:55	13°♊33'44	
asc. node	12048 Jul 25 07:49	29°Ω01'44				12051 Jan 25 18:50	0°♊	
	12048 Jul 26 02:28	0°♍				12051 Feb 21 04:35	0°♋	
	12048 Aug 19 04:54	0°♌				12051 Mar 18 12:53	0°♋	
	12048 Sep 12 12:33	0°♌				12051 Apr 12 07:21	0°♌	
	12048 Oct 07 04:36	0°♊		desc. node		12051 May 02 06:13	24°♌30'20	
	12048 Nov 01 10:37	0°♊				12051 May 06 16:56	0°♌	
desc. node	12048 Nov 14 03:43	14°♊42'56				12051 May 30 20:18	0°♌	
	12048 Nov 27 16:41	0°♋				12051 Jun 23 19:48	0°♍	
	12048 Dec 25 23:18	0°♋		morning set		12051 Jun 29 06:27	6°♍49'32	
evening max el	12048 Dec 31 14:21	5°♋30'22	45°52'33			12051 Jul 17 17:45	0°Ω	
	12049 Jan 31 04:24	0°♌						
greatest brilliancy	12049 Feb 08 18:00	3°♌57'42	-4.8m	superior conj		12051 Aug 08 01:10	26°Ω42'44	-0°35'14
retrograde	12049 Feb 18 14:09	5°♌44'36		minimum elong		12051 Aug 08 09:30	27°Ω08'52	0°35'22
evening set	12049 Mar 05 07:34	1°♌30'19		max. Earth dist.		12051 Aug 10 03:19	29°Ω19'46	1.71629 AU
asc. node	12049 Mar 07 05:11	0°♌26'21				12051 Aug 10 16:10	0°♍	
	12049 Mar 07 23:10	30°♋♋		asc. node		12051 Aug 22 21:25	15°♍17'08	
inferior conj	12049 Mar 11 15:54	27°♋44'12	1°06'53			12051 Sep 03 16:17	0°♌	
minimum elong	12049 Mar 11 13:21	27°♋48'09	1°06'13	evening rise		12051 Sep 16 06:13	15°♌40'28	
min. Earth dist.	12049 Mar 11 23:06	27°♋32'58	0.27965 AU			12051 Sep 27 18:57	0°♌	
morning rise	12049 Mar 17 18:35	24°♋04'19				12051 Oct 22 01:22	0°♊	
direct	12049 Apr 01 18:07	19°♋37'27				12051 Nov 15 13:32	0°♊	
greatest brilliancy	12049 Apr 12 10:33	21°♋44'44	-4.8m			12051 Dec 10 09:55	0°♋	
	12049 Apr 27 01:34	0°♌		desc. node		12051 Dec 12 14:51	2°♋38'20	
morning max el	12049 May 21 23:19	21°♌56'58	46°44'46			12052 Jan 04 17:19	0°♋	
	12049 May 29 19:39	0°♌				12052 Jan 30 16:19	0°♌	
	12049 Jun 25 22:32	0°♌				12052 Feb 26 20:10	0°♌	
desc. node	12049 Jun 27 05:22	1°♌28'48		evening max el		12052 Mar 13 11:53	16°♌05'07	46°19'01
	12049 Jul 21 11:02	0°♍				12052 Mar 28 13:59	0°♌	
	12049 Aug 15 07:24	0°Ω		asc. node		12052 Apr 03 14:50	4°♌53'28	
	12049 Sep 08 20:52	0°♍		greatest brilliancy		12052 Apr 22 13:14	15°♌57'13	-4.8m
	12049 Oct 03 07:28	0°♌		retrograde		12052 May 02 06:00	17°♌42'26	
asc. node	12049 Oct 17 23:37	18°♌02'54		evening set		12052 May 20 00:08	11°♌40'12	
	12049 Oct 27 16:30	0°♌		inferior conj		12052 May 22 22:37	9°♌52'04	9°02'16

minimum elong	12052 May 22 18:17	9° Π 58'47	9°01'14			12054 Nov 05 16:28	0° \mathcal{X}	
min. Earth dist.	12052 May 23 01:36	9° Π 47'26	0.27401 AU	evening rise		12054 Nov 25 03:37	24° \mathcal{X} 03'17	
morning rise	12052 May 25 12:24	8° Π 17'03				12054 Nov 29 23:22	0° \mathcal{Z}	
direct	12052 Jun 12 18:57	1° Π 56'58				12054 Dec 24 09:37	0° \approx	
greatest brilliancy	12052 Jun 22 14:03	3° Π 46'06	-4.9m	desc. node		12055 Jan 09 03:01	19° \approx 12'26	
desc. node	12052 Jul 24 16:06	26° Π 24'21				12055 Jan 17 23:51	0° \mathcal{H}	
	12052 Jul 28 10:31	0° \mathcal{E}				12055 Feb 11 18:08	0° \mathcal{Y}	
morning max el	12052 Aug 02 06:55	4° \mathcal{E} 47'20	46°55'10			12055 Mar 08 16:59	0° \mathcal{B}	
	12052 Aug 25 22:59	0° Ω				12055 Apr 02 23:42	0° Π	
	12052 Sep 21 05:27	0° \mathcal{M}				12055 Apr 29 00:19	0° \mathcal{E}	
	12052 Oct 16 16:05	0° \mathcal{L}		asc. node		12055 May 02 00:35	3° \mathcal{E} 22'25	
	12052 Nov 10 16:40	0° \mathcal{M}		evening max el		12055 May 26 11:11	29° \mathcal{E} 26'14	46°47'59
asc. node	12052 Nov 14 13:01	4° \mathcal{M} 38'40				12055 May 27 00:41	0° Ω	
	12052 Dec 05 10:33	0° \mathcal{X}				12055 Jul 05 09:51	0° \mathcal{M}	
	12052 Dec 29 23:36	0° \mathcal{Z}		greatest brilliancy		12055 Jul 05 18:47	0° \mathcal{M} 08'13	-4.9m
	12053 Jan 23 09:23	0° \approx		retrograde		12055 Jul 15 18:50	2° \mathcal{M} 01'32	
morning set	12053 Jan 30 07:46	8° \approx 32'36				12055 Jul 25 18:58	30° \mathcal{R} Ω	
	12053 Feb 16 17:05	0° \mathcal{H}		evening set		12055 Jul 31 04:40	27° Ω 23'56	
desc. node	12053 Mar 06 04:13	21° \mathcal{H} 36'03		inferior conj		12055 Aug 05 12:54	24° Ω 14'14	4°09'19
max. Earth dist.	12053 Mar 06 18:16	22° \mathcal{H} 19'34	1.72669 AU	minimum elong		12055 Aug 05 21:43	24° Ω 00'44	4°06'11
				min. Earth dist.		12055 Aug 05 16:34	24° Ω 08'37	0.27032 AU
superior conj	12053 Mar 09 05:07	25° \mathcal{H} 21'46	-0°07'23	morning rise		12055 Aug 11 14:48	20° Ω 40'09	
minimum elong	12053 Mar 09 03:25	25° \mathcal{H} 16'28	0°07'09	desc. node		12055 Aug 22 02:09	16° Ω 49'08	
behind sun begin	12053 Mar 08 05:35	24° \mathcal{H} 08'53		direct		12055 Aug 26 05:28	16° Ω 28'25	
behind sun end	12053 Mar 10 01:14	26° \mathcal{H} 24'03		greatest brilliancy		12055 Sep 05 06:17	18° Ω 19'48	-4.8m
	12053 Mar 12 22:57	0° \mathcal{Y}				12055 Sep 24 22:26	0° \mathcal{M}	
	12053 Apr 06 02:44	0° \mathcal{B}		morning max el		12055 Oct 14 20:58	17° \mathcal{M} 42'13	46°15'58
evening rise	12053 Apr 17 01:26	13° \mathcal{B} 37'41				12055 Oct 27 01:03	0° \mathcal{L}	
	12053 Apr 30 04:31	0° Π				12055 Nov 23 13:59	0° \mathcal{M}	
	12053 May 24 05:27	0° \mathcal{E}		asc. node		12055 Dec 13 01:32	22° \mathcal{M} 19'22	
	12053 Jun 17 07:40	0° Ω				12055 Dec 19 15:22	0° \mathcal{X}	
asc. node	12053 Jun 26 20:55	11° Ω 50'56				12056 Jan 13 22:18	0° \mathcal{Z}	
	12053 Jul 11 13:54	0° \mathcal{M}				12056 Feb 07 18:04	0° \approx	
	12053 Aug 05 03:50	0° \mathcal{L}				12056 Mar 03 06:48	0° \mathcal{H}	
	12053 Aug 30 07:43	0° \mathcal{M}				12056 Mar 27 14:34	0° \mathcal{Y}	
	12053 Sep 25 15:25	0° \mathcal{X}		desc. node		12056 Apr 02 18:15	7° \mathcal{Y} 37'21	
desc. node	12053 Oct 16 19:30	22° \mathcal{X} 14'55		morning set		12056 Apr 11 12:35	18° \mathcal{Y} 30'08	
evening max el	12053 Oct 19 03:43	24° \mathcal{X} 33'10	46°02'46			12056 Apr 20 18:17	0° \mathcal{B}	
	12053 Oct 24 20:57	0° \mathcal{Z}				12056 May 14 18:32	0° Π	
greatest brilliancy	12053 Nov 27 08:10	23° \mathcal{Z} 19'01	-4.8m	max. Earth dist.		12056 May 19 03:04	5° Π 27'29	1.71558 AU
retrograde	12053 Dec 07 08:20	25° \mathcal{Z} 08'06						
evening set	12053 Dec 25 04:01	19° \mathcal{Z} 10'13		superior conj		12056 May 21 14:03	8° Π 32'22	-1°25'35
inferior conj	12053 Dec 28 20:28	16° \mathcal{Z} 52'55	-7°51'23	minimum elong		12056 May 21 09:06	8° Π 16'48	1°26'18
minimum elong	12053 Dec 29 04:41	16° \mathcal{Z} 39'58	7°49'28			12056 Jun 07 16:34	0° \mathcal{E}	
min. Earth dist.	12053 Dec 29 03:40	16° \mathcal{Z} 41'35	0.28957 AU	evening rise		12056 Jun 30 19:50	29° \mathcal{E} 02'24	
morning rise	12054 Jan 02 05:18	14° \mathcal{Z} 11'02				12056 Jul 01 14:13	0° Ω	
direct	12054 Jan 19 07:02	8° \mathcal{Z} 37'53		asc. node		12056 Jul 24 09:45	28° Ω 33'31	
greatest brilliancy	12054 Jan 29 23:47	10° \mathcal{Z} 42'45	-4.8m			12056 Jul 25 13:27	0° \mathcal{M}	
asc. node	12054 Feb 06 21:21	14° \mathcal{Z} 30'08				12056 Aug 18 16:02	0° \mathcal{L}	
	12054 Feb 27 10:00	0° \approx				12056 Sep 11 23:59	0° \mathcal{M}	
morning max el	12054 Mar 09 14:28	9° \approx 34'37	45°59'20			12056 Oct 06 16:35	0° \mathcal{X}	
	12054 Mar 29 05:50	0° \mathcal{H}				12056 Oct 31 23:38	0° \mathcal{Z}	
	12054 Apr 24 18:58	0° \mathcal{Y}		desc. node		12056 Nov 13 05:34	14° \mathcal{Z} 08'32	
	12054 May 20 02:13	0° \mathcal{B}				12056 Nov 27 07:51	0° \approx	
desc. node	12054 May 29 19:15	11° \mathcal{B} 44'24				12056 Dec 25 20:13	0° \mathcal{H}	
	12054 Jun 13 18:01	0° Π		evening max el		12056 Dec 29 05:54	3° \mathcal{H} 18'19	45°52'16
	12054 Jul 08 01:14	0° \mathcal{E}				12057 Feb 02 03:54	0° \mathcal{Y}	
	12054 Aug 01 04:20	0° Ω		greatest brilliancy		12057 Feb 06 07:53	1° \mathcal{Y} 41'22	-4.8m
	12054 Aug 25 06:15	0° \mathcal{M}		retrograde		12057 Feb 16 05:09	3° \mathcal{Y} 28'49	
morning set	12054 Sep 10 19:51	20° \mathcal{M} 37'54				12057 Mar 01 11:12	30° \mathcal{R} \mathcal{H}	
	12054 Sep 18 08:33	0° \mathcal{L}		evening set		12057 Mar 02 22:39	29° \mathcal{H} 13'41	
asc. node	12054 Sep 19 11:31	1° \mathcal{L} 23'53		asc. node		12057 Mar 06 07:14	27° \mathcal{H} 17'44	
	12054 Oct 12 11:49	0° \mathcal{M}		inferior conj		12057 Mar 09 06:39	25° \mathcal{H} 27'45	0°44'49
				minimum elong		12057 Mar 09 04:57	25° \mathcal{H} 30'25	0°44'26
superior conj	12054 Oct 19 03:50	8° \mathcal{M} 16'35	1°04'01	min. Earth dist.		12057 Mar 09 14:07	25° \mathcal{H} 16'08	0.27999 AU
minimum elong	12054 Oct 18 17:50	7° \mathcal{M} 45'33	1°04'08	morning rise		12057 Mar 15 10:45	21° \mathcal{H} 46'08	
max. Earth dist.	12054 Oct 21 05:56	10° \mathcal{M} 51'55	1.72626 AU	direct		12057 Mar 30 09:43	17° \mathcal{H} 20'37	

greatest brilliancy	12057 Apr 10 02:04	19° H 28'16	-4.8m		12059 Oct 21 12:08	0° X	
	12057 Apr 27 18:16	0° Y			12059 Nov 15 00:34	0° Z	
morning max el	12057 May 19 15:13	19° Y 41'30	46°43'27		12059 Dec 09 21:29	0° \approx	
	12057 May 29 15:00	0° B		desc. node	12059 Dec 11 16:47	2° \approx 09'23	
	12057 Jun 25 13:33	0° II			12060 Jan 04 05:51	0° H	
desc. node	12057 Jun 26 07:16	0° II 51'11			12060 Jan 30 06:37	0° Y	
	12057 Jul 21 00:13	0° G			12060 Feb 26 14:23	0° B	
	12057 Aug 14 19:35	0° Ω		evening max el	12060 Mar 11 01:36	13° B 45'07	46°17'37
	12057 Sep 08 08:25	0° M			12060 Mar 28 23:27	0° II	
	12057 Oct 02 18:35	0° A		asc. node	12060 Apr 02 16:49	3° II 40'57	
asc. node	12057 Oct 17 01:26	17° A 34'59		greatest brilliancy	12060 Apr 20 02:39	13° II 35'08	-4.8m
	12057 Oct 27 03:19	0° L		retrograde	12060 Apr 29 18:31	15° II 19'46	
morning set	12057 Nov 20 08:17	29° L 51'46		evening set	12060 May 17 09:53	9° II 23'06	
	12057 Nov 20 10:57	0° X		inferior conj	12060 May 20 12:01	7° II 29'24	8°56'58
	12057 Dec 14 18:03	0° Z		minimum elong	12060 May 20 06:47	7° II 37'31	8°55'51
				min. Earth dist.	12060 May 20 14:49	7° II 25'03	0.27416 AU
superior conj	12057 Dec 27 01:55	15° Z 12'57	1°18'15	morning rise	12060 May 23 03:39	5° II 51'24	
minimum elong	12057 Dec 27 09:19	15° Z 35'46	1°18'56		12060 Jun 05 17:24	30° R B	
max. Earth dist.	12057 Dec 27 18:50	16° Z 05'09	1.73189 AU	direct	12060 Jun 10 08:08	29° B 33'58	
	12058 Jan 08 01:31	0° \approx			12060 Jun 15 01:07	0° II	
	12058 Feb 01 09:51	0° H		greatest brilliancy	12060 Jun 20 04:07	1° II 23'24	-4.9m
evening rise	12058 Feb 02 12:46	1° H 22'53		desc. node	12060 Jul 23 18:14	25° II 27'38	
desc. node	12058 Feb 05 16:16	5° H 15'19			12060 Jul 28 10:31	0° G	
	12058 Feb 25 18:44	0° Y		morning max el	12060 Jul 30 19:24	2° G 21'45	46°55'46
	12058 Mar 22 03:34	0° B			12060 Aug 25 15:29	0° Ω	
	12058 Apr 15 12:37	0° II			12060 Sep 20 19:13	0° M	
	12058 May 10 00:01	0° G			12060 Oct 16 04:27	0° A	
asc. node	12058 May 29 11:07	23° G 37'21			12060 Nov 10 04:10	0° L	
	12058 Jun 03 18:20	0° Ω		asc. node	12060 Nov 13 14:52	4° L 09'48	
	12058 Jun 29 03:41	0° M			12060 Dec 04 21:31	0° X	
	12058 Jul 25 22:29	0° A			12060 Dec 29 10:14	0° Z	
evening max el	12058 Aug 06 17:45	12° A 15'18	46°37'55		12061 Jan 22 19:52	0° \approx	
	12058 Aug 26 03:27	0° L		morning set	12061 Jan 28 00:43	6° \approx 24'40	
greatest brilliancy	12058 Sep 14 19:12	12° L 14'57	-4.8m		12061 Feb 16 03:31	0° H	
desc. node	12058 Sep 18 11:51	13° L 28'41		max. Earth dist.	12061 Mar 04 10:06	20° H 07'38	1.72709 AU
retrograde	12058 Sep 25 22:10	14° L 31'28		desc. node	12061 Mar 05 06:06	21° H 09'30	
evening set	12058 Oct 11 19:38	9° L 36'05					
min. Earth dist.	12058 Oct 16 06:28	6° L 55'46	0.28194 AU	superior conj	12061 Mar 06 20:05	23° H 07'07	-0°03'52
inferior conj	12058 Oct 17 04:01	6° L 22'24	-6°25'24	minimum elong	12061 Mar 06 19:13	23° H 04'26	0°03'39
minimum elong	12058 Oct 16 17:35	6° L 38'34	6°22'47	behind sun begin	12061 Mar 05 19:39	21° H 51'27	
morning rise	12058 Oct 21 16:06	3° L 39'09		behind sun end	12061 Mar 07 18:48	24° H 17'25	
	12058 Oct 29 08:12	30° R A			12061 Mar 12 09:26	0° Y	
direct	12058 Nov 07 07:46	28° A 23'53			12061 Apr 05 13:19	0° B	
	12058 Nov 16 16:19	0° L		evening rise	12061 Apr 14 15:06	11° B 17'37	
greatest brilliancy	12058 Nov 16 19:46	0° L 02'51	-4.8m		12061 Apr 29 15:15	0° II	
morning max el	12058 Dec 26 04:35	28° L 25'42	45°43'11		12061 May 23 16:23	0° G	
	12058 Dec 27 19:36	0° X			12061 Jun 16 18:51	0° Ω	
asc. node	12059 Jan 09 13:00	12° X 52'13		asc. node	12061 Jun 25 22:55	11° Ω 22'01	
	12059 Jan 25 10:09	0° Z			12061 Jul 11 01:29	0° M	
	12059 Feb 20 17:38	0° \approx			12061 Aug 04 16:05	0° A	
	12059 Mar 18 00:53	0° H			12061 Aug 29 21:12	0° L	
	12059 Apr 11 18:46	0° Y			12061 Sep 25 07:34	0° X	
desc. node	12059 May 01 08:03	24° Y 01'39		desc. node	12061 Oct 15 21:25	21° X 27'42	
	12059 May 06 04:01	0° B		evening max el	12061 Oct 16 17:51	22° X 17'43	46°03'50
	12059 May 30 07:12	0° II			12061 Oct 24 21:50	0° Z	
	12059 Jun 23 06:35	0° G		greatest brilliancy	12061 Nov 24 23:38	21° Z 09'14	-4.8m
morning set	12059 Jun 26 18:00	4° G 21'31		retrograde	12061 Dec 05 00:02	22° Z 59'06	
	12059 Jul 17 04:29	0° Ω		evening set	12061 Dec 22 22:28	16° Z 57'18	
				inferior conj	12061 Dec 26 12:39	14° Z 43'37	-7°59'54
superior conj	12059 Aug 05 13:29	24° Ω 17'33	-0°38'41	minimum elong	12061 Dec 26 20:22	14° Z 31'29	7°58'09
minimum elong	12059 Aug 05 22:30	24° Ω 45'47	0°38'51	min. Earth dist.	12061 Dec 26 19:16	14° Z 33'13	0.28969 AU
max. Earth dist.	12059 Aug 07 15:26	26° Ω 53'58	1.71598 AU	morning rise	12061 Dec 30 18:11	12° Z 06'41	
	12059 Aug 10 02:51	0° M		direct	12062 Jan 16 22:38	6° Z 28'31	
asc. node	12059 Aug 21 23:23	14° M 50'00		greatest brilliancy	12062 Jan 27 15:49	8° Z 33'25	-4.8m
	12059 Sep 03 02:56	0° A		asc. node	12062 Feb 05 23:22	13° Z 10'32	
evening rise	12059 Sep 13 20:49	13° A 23'24			12062 Feb 27 11:43	0° \approx	
	12059 Sep 27 05:36	0° L		morning max el	12062 Mar 07 05:29	7° \approx 21'07	45°58'05

	12062 Mar 28 22:06	0° H			12064 Nov 26 23:03	0° \approx		
	12062 Apr 24 08:28	0° Y			12064 Dec 25 17:39	0° H		
	12062 May 19 14:31	0° B		evening max el	12064 Dec 26 21:59	1° H 08'14	45°52'03	
desc. node	12062 May 28 21:10	11° B 13'47		greatest brilliancy	12065 Feb 03 22:21	29° H 26'55	-4.8m	
	12062 Jun 13 05:40	0° II			12065 Feb 05 15:50	0° Y		
	12062 Jul 07 12:29	0° S		retrograde	12065 Feb 13 20:06	1° Y 14'17		
	12062 Jul 31 15:16	0° Q			12065 Feb 21 16:21	30° R H		
morning set	12062 Aug 24 16:58	0° M		evening set	12065 Feb 28 14:10	26° H 58'26		
	12062 Sep 08 09:54	18° M 19'10		asc. node	12065 Mar 05 09:10	24° H 09'27		
	12062 Sep 17 19:07	0° Q		inferior conj	12065 Mar 06 21:37	23° H 12'48	0°22'52	
asc. node	12062 Sep 18 13:16	0° Q 56'29		minimum elong	12065 Mar 06 20:44	23° H 14'10	0°22'46	
	12062 Oct 11 22:17	0° M		min. Earth dist.	12065 Mar 07 05:21	23° H 00'45	0.28027 AU	
				morning rise	12065 Mar 13 02:54	19° H 29'33		
superior conj	12062 Oct 16 19:37	6° M 04'12	1°01'40	direct	12065 Mar 28 01:39	15° H 05'31		
minimum elong	12062 Oct 16 09:33	5° M 32'56	1°01'44	greatest brilliancy	12065 Apr 07 17:24	17° H 12'55	-4.8m	
max. Earth dist.	12062 Oct 18 20:07	8° M 34'39	1.72594 AU		12065 Apr 28 06:07	0° Y		
	12062 Nov 05 02:55	0° X		morning max el	12065 May 17 06:24	17° Y 25'26	46°42'03	
evening rise	12062 Nov 22 20:18	21° X 54'25			12065 May 29 09:26	0° B		
	12062 Nov 29 09:52	0° Z		desc. node	12065 Jun 25 09:22	0° II 15'19		
	12062 Dec 23 20:15	0° \approx			12065 Jun 25 04:05	0° II		
desc. node	12063 Jan 08 05:02	18° \approx 45'37			12065 Jul 20 13:06	0° S		
	12063 Jan 17 10:46	0° H			12065 Aug 14 07:36	0° Q		
	12063 Feb 11 05:33	0° Y			12065 Sep 07 19:53	0° M		
	12063 Mar 08 05:11	0° B			12065 Oct 02 05:40	0° Q		
	12063 Apr 02 13:13	0° II		asc. node	12065 Oct 16 03:19	17° Q 07'13		
	12063 Apr 28 16:26	0° S			12065 Oct 26 14:06	0° M		
asc. node	12063 May 01 02:28	2° S 41'40		morning set	12065 Nov 18 00:43	27° M 41'41		
evening max el	12063 May 24 00:23	27° S 02'53	46°47'28		12065 Nov 19 21:32	0° X		
	12063 May 26 23:52	0° Q			12065 Dec 14 04:33	0° Z		
greatest brilliancy	12063 Jul 03 08:38	27° Q 44'37	-4.9m					
retrograde	12063 Jul 13 08:16	29° Q 37'42		superior conj	12065 Dec 24 18:49	13° Z 04'36	1°19'35	
evening set	12063 Jul 28 20:27	24° Q 55'48		minimum elong	12065 Dec 25 01:42	13° Z 25'50	1°20'18	
inferior conj	12063 Aug 03 01:44	21° Q 50'26	4°30'46	max. Earth dist.	12065 Dec 25 14:51	14° Z 06'23	1.73183 AU	
minimum elong	12063 Aug 03 11:07	21° Q 36'06	4°27'31		12066 Jan 07 12:02	0° \approx		
min. Earth dist.	12063 Aug 03 06:18	21° Q 43'27	0.27029 AU	evening rise	12066 Jan 31 04:39	29° \approx 11'17		
morning rise	12063 Aug 09 01:49	18° Q 19'08			12066 Jan 31 20:28	0° H		
desc. node	12063 Aug 21 04:08	14° Q 12'27		desc. node	12066 Feb 04 18:07	4° H 48'13		
direct	12063 Aug 23 18:17	14° Q 04'19			12066 Feb 25 05:33	0° Y		
greatest brilliancy	12063 Sep 02 19:28	15° Q 56'36	-4.8m		12066 Mar 21 14:37	0° B		
	12063 Sep 25 10:46	0° M			12066 Apr 15 00:02	0° II		
morning max el	12063 Oct 12 11:42	15° M 25'19	46°17'38		12066 May 09 12:00	0° S		
	12063 Oct 26 19:46	0° Q		asc. node	12066 May 28 13:11	23° S 05'23		
	12063 Nov 23 04:26	0° M			12066 Jun 03 07:15	0° Q		
asc. node	12063 Dec 12 03:32	21° M 47'31			12066 Jun 28 18:21	0° M		
	12063 Dec 19 03:57	0° X			12066 Jul 25 17:15	0° Q		
	12064 Jan 13 09:54	0° Z		evening max el	12066 Aug 04 09:10	9° Q 58'41	46°38'40	
	12064 Feb 07 05:07	0° \approx			12066 Aug 26 16:30	0° M		
	12064 Mar 02 17:32	0° H		greatest brilliancy	12066 Sep 12 10:41	9° M 58'51	-4.8m	
	12064 Mar 27 01:10	0° Y		desc. node	12066 Sep 17 13:47	11° M 33'46		
desc. node	12064 Apr 01 20:03	7° Y 10'12		retrograde	12066 Sep 23 13:07	12° M 14'40		
morning set	12064 Apr 09 01:46	16° Y 09'10		evening set	12066 Oct 09 07:27	7° M 24'28		
	12064 Apr 20 04:50	0° B		min. Earth dist.	12066 Oct 13 21:10	4° M 39'58	0.28137 AU	
	12064 May 14 05:06	0° II		inferior conj	12066 Oct 14 18:41	4° M 06'36	-6°10'24	
max. Earth dist.	12064 May 16 15:11	3° II 01'53	1.71590 AU	minimum elong	12066 Oct 14 08:15	4° M 22'46	6°07'41	
				morning rise	12066 Oct 19 09:40	1° M 19'06		
superior conj	12064 May 19 02:10	6° II 06'41	-1°24'42		12066 Oct 21 19:32	30° R Q		
minimum elong	12064 May 18 20:17	5° II 48'17	1°25'22	direct	12066 Nov 04 22:19	26° Q 09'06		
	12064 Jun 07 03:11	0° S		greatest brilliancy	12066 Nov 14 09:30	27° Q 47'17	-4.8m	
evening rise	12064 Jun 28 07:05	26° S 33'36			12066 Nov 19 19:09	0° M		
	12064 Jul 01 00:55	0° Q		morning max el	12066 Dec 23 18:17	26° M 09'16	45°43'33	
asc. node	12064 Jul 23 11:40	28° Q 05'40			12066 Dec 27 16:59	0° X		
	12064 Jul 25 00:17	0° M		asc. node	12067 Jan 08 15:01	12° X 10'32		
	12064 Aug 18 03:04	0° Q			12067 Jan 25 01:24	0° Z		
	12064 Sep 11 11:19	0° M			12067 Feb 20 06:41	0° \approx		
	12064 Oct 06 04:27	0° X			12067 Mar 17 12:53	0° H		
	12064 Oct 31 12:34	0° Z			12067 Apr 11 06:14	0° Y		
desc. node	12064 Nov 12 07:34	13° Z 34'55		desc. node	12067 Apr 30 09:55	23° Y 32'57		

	12067 May 05 15:08	0°♄	desc. node	12069 Oct 14 23:25	20°♄39'09	
	12067 May 29 18:07	0°♂		12069 Oct 25 00:29	0°♂	
	12067 Jun 22 17:23	0°♄	greatest brilliancy	12069 Nov 22 14:13	18°♄57'14	-4.8m
morning set	12067 Jun 24 05:55	1°♄54'32	retrograde	12069 Dec 02 16:01	20°♄48'40	
	12067 Jul 16 15:13	0°♂	evening set	12069 Dec 20 16:37	14°♄42'53	
			inferior conj	12069 Dec 24 04:40	12°♄32'38	-8°07'47
superior conj	12067 Aug 03 02:11	21°♂53'29 -0°42'03	minimum elong	12069 Dec 24 11:50	12°♄21'22	8°06'09
minimum elong	12067 Aug 03 11:48	22°♂23'35 0°42'12	min. Earth dist.	12069 Dec 24 10:22	12°♄23'40	0.28986 AU
max. Earth dist.	12067 Aug 05 02:47	24°♂25'41 1.71571 AU	morning rise	12069 Dec 28 07:00	10°♄00'42	
	12067 Aug 09 13:33	0°♄	direct	12070 Jan 14 14:23	4°♄17'22	
asc. node	12067 Aug 21 01:09	14°♄22'06	greatest brilliancy	12070 Jan 25 07:35	6°♄22'19	-4.8m
	12067 Sep 02 13:38	0°♄	asc. node	12070 Feb 05 01:15	11°♄51'44	
evening rise	12067 Sep 11 11:26	11°♄06'05		12070 Feb 27 12:43	0°♄	
	12067 Sep 26 16:23	0°♄	morning max el	12070 Mar 04 21:16	5°♄08'10	45°56'53
	12067 Oct 20 23:06	0°♄		12070 Mar 28 14:33	0°♄	
	12067 Nov 14 11:52	0°♄		12070 Apr 23 22:15	0°♄	
	12067 Dec 09 09:21	0°♄		12070 May 19 03:05	0°♄	
desc. node	12067 Dec 10 18:46	1°♄39'46	desc. node	12070 May 27 23:09	10°♄42'28	
	12068 Jan 03 18:41	0°♄		12070 Jun 12 17:36	0°♄	
	12068 Jan 29 21:19	0°♄		12070 Jul 07 00:01	0°♄	
	12068 Feb 26 09:21	0°♄		12070 Jul 31 02:31	0°♄	
evening max el	12068 Mar 08 14:21	11°♄22'16 46°16'21		12070 Aug 24 03:59	0°♄	
	12068 Mar 29 12:34	0°♄	morning set	12070 Sep 06 00:09	15°♄59'58	
asc. node	12068 Apr 01 18:47	2°♄25'41		12070 Sep 17 05:59	0°♄	
greatest brilliancy	12068 Apr 17 16:05	11°♄12'32 -4.8m	asc. node	12070 Sep 17 15:09	0°♄28'32	
retrograde	12068 Apr 27 07:13	12°♄56'55		12070 Oct 11 09:03	0°♄	
evening set	12068 May 14 19:23	7°♄05'52				
inferior conj	12068 May 18 01:28	5°♄06'24 8°50'49	superior conj	12070 Oct 14 11:33	3°♄51'19	0°59'13
minimum elong	12068 May 17 19:23	5°♄15'50 8°49'33	minimum elong	12070 Oct 14 01:27	3°♄19'58	0°59'15
min. Earth dist.	12068 May 18 04:12	5°♄02'09 0.27430 AU	max. Earth dist.	12070 Oct 16 12:40	6°♄23'45	1.72563 AU
morning rise	12068 May 20 19:18	3°♄24'59		12070 Nov 04 13:39	0°♄	
	12068 May 27 01:23	30°♄♄	evening rise	12070 Nov 20 13:12	19°♄45'17	
direct	12068 Jun 07 21:05	27°♄10'24		12070 Nov 28 20:41	0°♄	
greatest brilliancy	12068 Jun 17 18:34	29°♄00'49 -4.9m		12070 Dec 23 07:16	0°♄	
	12068 Jun 20 06:28	0°♄	desc. node	12071 Jan 07 06:52	18°♄17'01	
desc. node	12068 Jul 22 20:05	24°♄31'12		12071 Jan 16 22:08	0°♄	
	12068 Jul 28 09:34	0°♄		12071 Feb 10 17:28	0°♄	
morning max el	12068 Jul 28 08:11	29°♄56'31 46°56'31		12071 Mar 07 17:55	0°♄	
	12068 Aug 25 07:45	0°♄		12071 Apr 02 03:20	0°♄	
	12068 Sep 20 08:58	0°♄		12071 Apr 28 09:18	0°♄	
	12068 Oct 15 16:53	0°♄	asc. node	12071 Apr 30 04:33	1°♄59'46	
	12068 Nov 09 15:51	0°♄	evening max el	12071 May 21 14:19	24°♄40'16 46°47'01	
asc. node	12068 Nov 12 16:50	3°♄40'39		12071 May 27 00:40	0°♄	
	12068 Dec 04 08:44	0°♄	greatest brilliancy	12071 Jun 30 21:59	25°♄19'21	-4.9m
	12068 Dec 28 21:11	0°♄	retrograde	12071 Jul 10 21:52	27°♄12'26	
	12069 Jan 22 06:40	0°♄	evening set	12071 Jul 26 12:21	22°♄26'14	
morning set	12069 Jan 25 17:18	4°♄14'37	inferior conj	12071 Jul 31 14:29	19°♄25'11	4°51'52
	12069 Feb 15 14:15	0°♄	minimum elong	12071 Aug 01 00:23	19°♄10'05	4°48'30
max. Earth dist.	12069 Mar 02 03:40	18°♄00'11 1.72745 AU	min. Earth dist.	12071 Jul 31 19:35	19°♄17'24	0.27026 AU
			morning rise	12071 Aug 06 12:29	15°♄57'00	
superior conj	12069 Mar 04 10:43	20°♄50'33 -0°00'18	desc. node	12071 Aug 20 06:06	11°♄40'21	
minimum elong	12069 Mar 04 10:43	20°♄50'32 0°00'04	direct	12071 Aug 21 07:34	11°♄38'59	
behind sun begin	12069 Mar 03 11:31	19°♄38'42	greatest brilliancy	12071 Aug 31 07:58	13°♄31'18	-4.8m
behind sun end	12069 Mar 05 09:56	22°♄02'23		12071 Sep 25 20:23	0°♄	
desc. node	12069 Mar 04 07:50	20°♄41'35	morning max el	12071 Oct 10 02:35	13°♄07'39	46°19'21
	12069 Mar 11 20:11	0°♄		12071 Oct 26 14:21	0°♄	
	12069 Apr 05 00:11	0°♄		12071 Nov 22 19:01	0°♄	
evening rise	12069 Apr 12 04:42	8°♄56'34	asc. node	12071 Dec 11 05:29	21°♄14'50	
	12069 Apr 29 02:17	0°♄		12071 Dec 18 16:45	0°♄	
	12069 May 23 03:37	0°♄		12072 Jan 12 21:46	0°♄	
	12069 Jun 16 06:20	0°♄		12072 Feb 06 16:30	0°♄	
asc. node	12069 Jun 25 00:49	10°♄51'55		12072 Mar 02 04:41	0°♄	
	12069 Jul 10 13:22	0°♄		12072 Mar 26 12:13	0°♄	
	12069 Aug 04 04:38	0°♄	desc. node	12072 Mar 31 22:01	6°♄42'07	
	12069 Aug 29 11:02	0°♄	morning set	12072 Apr 06 14:43	13°♄46'12	
	12069 Sep 25 00:16	0°♄		12072 Apr 19 15:50	0°♄	
evening max el	12069 Oct 14 08:10	20°♄01'57 46°04'49		12072 May 13 16:05	0°♄	

max. Earth dist.	12072 May 14 01:03	0°II28'06	1.71617 AU	inferior conj	12074 Oct 12 09:23	1°III50'22	-5°54'44
				minimum elong	12074 Oct 11 23:02	2°III06'26	5°51'58
superior conj	12072 May 16 13:58	3°II38'50	-1°23'38		12074 Oct 15 09:21	30°R _{II}	
minimum elong	12072 May 16 07:13	3°II17'42	1°24'15	morning rise	12074 Oct 17 03:12	28° _{II} 58'39	
	12072 Jun 06 14:11	0° _{II}		direct	12074 Nov 02 12:22	23° _{II} 53'47	
evening rise	12072 Jun 25 18:03	24° _{II} 02'49		greatest brilliancy	12074 Nov 11 23:51	25° _{II} 31'51	-4.8m
	12072 Jun 30 12:00	0° _{II}			12074 Nov 21 15:18	0° _{III}	
asc. node	12072 Jul 22 13:27	27° _{II} 36'19		morning max el	12074 Dec 21 07:28	23° _{III} 51'12	45°44'05
	12072 Jul 24 11:29	0° _{III}			12074 Dec 27 13:42	0° _{IV}	
	12072 Aug 17 14:27	0° _{II}		asc. node	12075 Jan 07 16:50	11° _{IV} 28'39	
	12072 Sep 10 23:01	0° _{III}			12075 Jan 24 16:30	0° _{II}	
	12072 Oct 05 16:42	0° _{IV}			12075 Feb 19 19:41	0° _{III}	
	12072 Oct 31 01:54	0° _{II}			12075 Mar 17 00:54	0° _{IV}	
desc. node	12072 Nov 11 09:36	13° _{II} 00'26			12075 Apr 10 17:42	0° _{III}	
	12072 Nov 26 14:46	0° _{III}		desc. node	12075 Apr 29 11:52	23° _{IV} 04'16	
evening max el	12072 Dec 24 13:41	28° _{III} 56'31	45°51'45		12075 May 05 02:20	0° _{IV}	
	12072 Dec 25 16:16	0° _{IV}			12075 May 29 05:10	0° _{II}	
greatest brilliancy	12073 Feb 01 13:13	27° _{IV} 12'11	-4.8m	morning set	12075 Jun 21 17:18	29° _{II} 25'18	
retrograde	12073 Feb 11 10:34	28° _{IV} 58'50			12075 Jun 22 04:22	0° _{II}	
evening set	12073 Feb 26 05:53	24° _{IV} 42'07			12075 Jul 16 02:09	0° _{II}	
asc. node	12073 Mar 04 11:11	20° _{IV} 59'12					
inferior conj	12073 Mar 04 12:36	20° _{IV} 56'59	0°00'53	superior conj	12075 Jul 31 14:20	19° _{II} 27'08	-0°45'23
minimum elong	12073 Mar 04 12:33	20° _{IV} 57'03	0°01'05	minimum elong	12075 Aug 01 00:29	19° _{II} 58'54	0°45'33
transit middle	12073 Mar 04 12:33	20° _{IV} 57'03	0°01'05	max. Earth dist.	12075 Aug 02 09:58	21° _{II} 43'48	1.71542 AU
transit begin	12073 Mar 04 08:31	21° _{IV} 03'22			12075 Aug 09 00:25	0° _{III}	
transit end	12073 Mar 04 16:36	20° _{IV} 50'45		asc. node	12075 Aug 20 03:02	13° _{III} 54'02	
min. Earth dist.	12073 Mar 04 20:48	20° _{IV} 44'10	0.28062 AU		12075 Sep 02 00:28	0° _{II}	
morning rise	12073 Mar 10 18:51	17° _{IV} 12'06		evening rise	12075 Sep 09 01:33	8° _{II} 46'47	
direct	12073 Mar 25 17:21	12° _{IV} 49'30			12075 Sep 26 03:16	0° _{III}	
greatest brilliancy	12073 Apr 05 09:05	14° _{IV} 56'41	-4.8m		12075 Oct 20 10:08	0° _{IV}	
	12073 Apr 28 15:27	0° _{IV}			12075 Nov 13 23:13	0° _{II}	
morning max el	12073 May 14 20:43	15° _{IV} 05'42	46°40'33		12075 Dec 08 21:16	0° _{III}	
	12073 May 29 03:55	0° _{IV}		desc. node	12075 Dec 09 20:37	1° _{III} 09'39	
desc. node	12073 Jun 24 11:14	29° _{IV} 37'46			12076 Jan 03 07:35	0° _{IV}	
	12073 Jun 24 18:52	0° _{II}			12076 Jan 29 12:08	0° _{IV}	
	12073 Jul 20 02:16	0° _{II}			12076 Feb 26 04:43	0° _{IV}	
	12073 Aug 13 19:52	0° _{II}		evening max el	12076 Mar 06 03:08	9° _{IV} 00'09	46°15'10
	12073 Sep 07 07:36	0° _{III}			12076 Mar 30 05:49	0° _{II}	
	12073 Oct 01 16:59	0° _{II}		asc. node	12076 Mar 31 20:50	1° _{II} 08'50	
asc. node	12073 Oct 15 05:15	16° _{II} 38'56		greatest brilliancy	12076 Apr 15 04:59	8° _{II} 50'00	-4.8m
	12073 Oct 26 01:07	0° _{III}		retrograde	12076 Apr 24 20:21	10° _{II} 34'58	
morning set	12073 Nov 15 17:18	25° _{III} 31'19		evening set	12076 May 12 04:42	4° _{II} 49'29	
	12073 Nov 19 08:21	0° _{IV}		inferior conj	12076 May 15 14:59	2° _{II} 43'57	8°43'35
	12073 Dec 13 15:16	0° _{II}		minimum elong	12076 May 15 08:08	2° _{II} 54'34	8°42'10
				min. Earth dist.	12076 May 15 17:26	2° _{II} 40'10	0.27452 AU
superior conj	12073 Dec 22 12:05	10° _{II} 56'46	1°20'47	morning rise	12076 May 18 11:28	0° _{II} 58'40	
minimum elong	12073 Dec 22 18:24	11° _{II} 16'16	1°21'31		12076 May 20 03:00	30° _{IV}	
max. Earth dist.	12073 Dec 23 09:28	12° _{II} 02'45	1.73174 AU	direct	12076 Jun 05 10:23	24° _{IV} 47'13	
	12074 Jan 06 22:45	0° _{III}		greatest brilliancy	12076 Jun 15 08:57	26° _{IV} 38'39	-4.9m
evening rise	12074 Jan 28 20:51	27° _{III} 00'08			12076 Jun 22 15:11	0° _{II}	
	12074 Jan 31 07:18	0° _{IV}		desc. node	12076 Jul 21 22:04	23° _{II} 36'09	
desc. node	12074 Feb 03 19:56	4° _{IV} 20'27		morning max el	12076 Jul 25 21:55	27° _{II} 33'32	46°57'02
	12074 Feb 24 16:34	0° _{IV}			12076 Jul 28 07:45	0° _{II}	
	12074 Mar 21 01:56	0° _{IV}			12076 Aug 24 23:51	0° _{II}	
	12074 Apr 14 11:47	0° _{II}			12076 Sep 19 22:40	0° _{III}	
	12074 May 09 00:24	0° _{II}			12076 Oct 15 05:17	0° _{II}	
asc. node	12074 May 27 15:04	22° _{II} 31'40			12076 Nov 09 03:27	0° _{III}	
	12074 Jun 02 20:39	0° _{II}		asc. node	12076 Nov 11 18:43	3° _{III} 11'27	
	12074 Jun 28 09:35	0° _{III}			12076 Dec 03 19:50	0° _{IV}	
	12074 Jul 25 12:53	0° _{II}			12076 Dec 28 07:59	0° _{II}	
evening max el	12074 Aug 01 23:33	7° _{II} 38'29	46°39'36		12077 Jan 21 17:18	0° _{III}	
	12074 Aug 27 10:25	0° _{III}		morning set	12077 Jan 23 10:06	2° _{III} 05'42	
greatest brilliancy	12074 Sep 10 02:35	7° _{III} 42'30	-4.8m		12077 Feb 15 00:50	0° _{IV}	
desc. node	12074 Sep 16 15:49	9° _{III} 33'56		max. Earth dist.	12077 Feb 27 23:06	15° _{IV} 59'00	1.72777 AU
retrograde	12074 Sep 21 03:44	9° _{III} 57'22					
evening set	12074 Oct 06 19:25	5° _{III} 11'59		superior conj	12077 Mar 02 01:47	18° _{IV} 35'50	0°03'16
min. Earth dist.	12074 Oct 11 12:13	2° _{III} 23'13	0.28078 AU	minimum elong	12077 Mar 02 02:36	18° _{IV} 38'20	0°03'28

behind sun begin	12077 Mar 01 03:03	17° H 25'28		greatest brilliancy	12079 Aug 28 20:21	11° Ω 07'33	-4.8m
behind sun end	12077 Mar 03 02:08	19° H 51'11			12079 Sep 26 02:45	0° M	
desc. node	12077 Mar 03 09:49	20° H 14'57		morning max el	12079 Oct 07 16:56	10° M 49'55	46°20'47
	12077 Mar 11 06:47	0° Y			12079 Oct 26 08:02	0° Ω	
	12077 Apr 04 10:52	0° B			12079 Nov 22 09:05	0° M	
evening rise	12077 Apr 09 18:51	6° B 37'59		asc. node	12079 Dec 10 07:19	20° M 42'54	
	12077 Apr 28 13:07	0° II			12079 Dec 18 05:09	0° A	
	12077 May 22 14:39	0° E			12080 Jan 12 09:15	0° B	
	12077 Jun 15 17:40	0° Ω			12080 Feb 06 03:28	0° \approx	
asc. node	12077 Jun 24 02:40	10° Ω 22'07			12080 Mar 01 15:23	0° H	
	12077 Jul 10 01:09	0° M			12080 Mar 25 22:48	0° Y	
	12077 Aug 03 17:10	0° Ω		desc. node	12080 Mar 30 23:49	6° Y 14'59	
	12077 Aug 29 00:56	0° M		morning set	12080 Apr 04 03:52	11° Y 25'17	
	12077 Sep 24 17:15	0° A			12080 Apr 19 02:22	0° B	
evening max el	12077 Oct 11 23:17	17° A 48'26	46°06'02	max. Earth dist.	12080 May 11 08:39	27° B 48'37	1.71646 AU
desc. node	12077 Oct 14 01:29	19° A 50'12			12080 May 13 02:38	0° II	
	12077 Oct 25 04:42	0° B					
greatest brilliancy	12077 Nov 20 04:30	16° B 45'28	-4.8m	superior conj	12080 May 14 02:06	1° II 13'29	-1°22'25
retrograde	12077 Nov 30 08:29	18° B 38'46		minimum elong	12080 May 13 18:33	0° II 49'50	1°22'59
evening set	12077 Dec 18 10:39	12° B 29'19			12080 Jun 06 00:46	0° E	
inferior conj	12077 Dec 21 20:41	10° B 22'14	-8°14'59	evening rise	12080 Jun 23 05:19	21° E 34'17	
minimum elong	12077 Dec 22 03:17	10° B 11'52	8°13'28		12080 Jun 29 22:38	0° Ω	
min. Earth dist.	12077 Dec 22 01:05	10° B 15'19	0.28994 AU	asc. node	12080 Jul 21 15:24	27° Ω 08'53	
morning rise	12077 Dec 25 19:53	7° B 55'15			12080 Jul 23 22:13	0° M	
direct	12078 Jan 12 06:36	2° B 07'03			12080 Aug 17 01:22	0° Ω	
greatest brilliancy	12078 Jan 22 22:38	4° B 11'22	-4.7m		12080 Sep 10 10:15	0° M	
asc. node	12078 Feb 04 03:21	10° B 36'34			12080 Oct 05 04:33	0° A	
	12078 Feb 27 12:08	0° \approx			12080 Oct 30 14:57	0° B	
morning max el	12078 Mar 02 13:40	2° \approx 57'51	45°55'44	desc. node	12080 Nov 10 11:26	12° B 26'12	
	12078 Mar 28 06:21	0° H			12080 Nov 26 06:24	0° \approx	
	12078 Apr 23 11:34	0° Y		evening max el	12080 Dec 22 04:38	26° \approx 43'56	45°51'29
	12078 May 18 15:15	0° B			12080 Dec 25 15:30	0° H	
desc. node	12078 May 27 00:58	10° B 11'51		greatest brilliancy	12081 Jan 30 04:47	24° H 59'24	-4.8m
	12078 Jun 12 05:08	0° II		retrograde	12081 Feb 09 00:47	26° H 44'49	
	12078 Jul 06 11:10	0° E		evening set	12081 Feb 23 21:49	22° H 26'54	
	12078 Jul 30 13:25	0° Ω		inferior conj	12081 Mar 02 03:40	18° H 42'46	-0°20'59
	12078 Aug 23 14:43	0° M		minimum elong	12081 Mar 02 04:27	18° H 41'32	0°20'29
morning set	12078 Sep 03 14:14	13° M 41'02		min. Earth dist.	12081 Mar 02 12:39	18° H 28'43	0.28094 AU
asc. node	12078 Sep 16 17:06	0° Ω 01'33		asc. node	12081 Mar 03 13:13	17° H 50'22	
	12078 Sep 16 16:36	0° Ω		morning rise	12081 Mar 08 10:39	14° H 56'23	
	12078 Oct 10 19:36	0° M		direct	12081 Mar 23 08:27	10° H 34'56	
				greatest brilliancy	12081 Apr 03 01:12	12° H 42'26	-4.8m
superior conj	12078 Oct 12 03:02	1° M 37'37	0°56'38		12081 Apr 28 21:34	0° Y	
minimum elong	12078 Oct 11 16:59	1° M 06'27	0°56'38	morning max el	12081 May 12 10:18	12° Y 45'34	46°39'04
max. Earth dist.	12078 Oct 14 05:37	4° M 14'42	1.72532 AU		12081 May 28 21:25	0° B	
	12078 Nov 04 00:10	0° A		desc. node	12081 Jun 23 13:07	29° B 02'00	
evening rise	12078 Nov 18 05:41	17° A 35'37			12081 Jun 24 09:00	0° II	
	12078 Nov 28 07:13	0° B			12081 Jul 19 14:54	0° E	
	12078 Dec 22 17:59	0° \approx			12081 Aug 13 07:40	0° Ω	
desc. node	12079 Jan 06 08:43	17° \approx 49'26			12081 Sep 06 18:50	0° M	
	12079 Jan 16 09:12	0° H			12081 Oct 01 03:49	0° Ω	
	12079 Feb 10 05:04	0° Y		asc. node	12081 Oct 14 07:02	16° Ω 11'33	
	12079 Mar 07 06:22	0° B			12081 Oct 25 11:41	0° M	
	12079 Apr 01 17:12	0° II		morning set	12081 Nov 13 09:49	23° M 21'54	
	12079 Apr 28 02:02	0° E			12081 Nov 18 18:45	0° A	
asc. node	12079 Apr 29 06:31	1° E 18'24			12081 Dec 13 01:36	0° B	
evening max el	12079 May 19 04:52	22° E 20'40	46°46'31				
	12079 May 27 02:08	0° Ω		superior conj	12081 Dec 20 05:14	8° B 49'41	1°21'52
greatest brilliancy	12079 Jun 28 11:38	22° Ω 56'27	-4.9m	minimum elong	12081 Dec 20 10:57	9° B 07'20	1°22'37
retrograde	12079 Jul 08 11:33	24° Ω 49'04		max. Earth dist.	12081 Dec 21 02:02	9° B 53'51	1.73168 AU
evening set	12079 Jul 24 04:35	19° Ω 58'45			12082 Jan 06 09:08	0° \approx	
inferior conj	12079 Jul 29 03:26	17° Ω 01'57	5°12'13	evening rise	12082 Jan 26 12:50	24° \approx 49'20	
minimum elong	12079 Jul 29 13:46	16° Ω 46'11	5°08'46		12082 Jan 30 17:48	0° H	
min. Earth dist.	12079 Jul 29 08:55	16° Ω 53'34	0.27025 AU	desc. node	12082 Feb 02 21:53	3° H 54'04	
morning rise	12079 Aug 03 23:05	13° Ω 37'02			12082 Feb 24 03:15	0° Y	
direct	12079 Aug 18 21:09	9° Ω 15'54			12082 Mar 20 12:55	0° B	
desc. node	12079 Aug 19 08:09	9° Ω 16'10			12082 Apr 13 23:11	0° II	

	12082 May 08 12:27	0°☿			12084 Oct 14 17:31	0°♊		
asc. node	12082 May 26 16:57	21°☿58'56			12084 Nov 08 14:56	0°♋		
	12082 Jun 02 09:45	0°♌		asc. node	12084 Nov 10 20:33	2°♋42'25		
	12082 Jun 28 00:37	0°♍			12084 Dec 03 06:52	0°♎		
	12082 Jul 25 08:40	0°♏			12084 Dec 27 18:43	0°♐		
evening max el	12082 Jul 30 13:14	5°♏17'39 46°40'34		morning set	12085 Jan 21 03:07	29°♐57'39		
	12082 Aug 28 09:58	0°♑			12085 Jan 21 03:53	0°♑		
greatest brilliancy	12082 Sep 07 18:28	5°♑27'10 -4.8m			12085 Feb 14 11:23	0°♒		
desc. node	12082 Sep 15 17:50	7°♑30'44		max. Earth dist.	12085 Feb 25 19:18	14°♒00'14 1.72811 AU		
retrograde	12082 Sep 18 18:24	7°♑41'28						
evening set	12082 Oct 04 07:33	3°♑00'22		superior conj	12085 Feb 27 16:50	16°♒21'06 0°06'46		
min. Earth dist.	12082 Oct 09 03:24	0°♑07'35 0.28020 AU		minimum elong	12085 Feb 27 18:28	16°♒26'10 0°06'58		
	12082 Oct 09 08:17	30°♒♏		behind sun begin	12085 Feb 26 20:41	15°♒18'45		
inferior conj	12082 Oct 10 00:07	29°♏35'27 -5°38'24		behind sun end	12085 Feb 28 16:16	17°♒33'34		
minimum elong	12082 Oct 09 13:54	29°♏51'19 5°35'37		desc. node	12085 Mar 02 11:40	19°♒47'51		
morning rise	12082 Oct 14 20:46	26°♏39'41			12085 Mar 10 17:25	0°♓		
direct	12082 Oct 31 02:02	21°♏39'33			12085 Apr 03 21:37	0°♈		
greatest brilliancy	12082 Nov 09 14:35	23°♏18'06 -4.8m		evening rise	12085 Apr 07 08:51	4°♈18'42		
	12082 Nov 22 20:39	0°♑			12085 Apr 28 00:03	0°♉		
morning max el	12082 Dec 18 20:58	21°♑34'53 45°44'36			12085 May 22 01:47	0°♊		
	12082 Dec 27 09:20	0°♒			12085 Jun 15 05:05	0°♋		
asc. node	12083 Jan 06 18:55	10°♒48'58		asc. node	12085 Jun 23 04:39	9°♋52'32		
	12083 Jan 24 07:05	0°♓			12085 Jul 09 13:01	0°♌		
	12083 Feb 19 08:21	0°♑			12085 Aug 03 05:48	0°♏		
	12083 Mar 16 12:39	0°♒			12085 Aug 28 15:01	0°♑		
	12083 Apr 10 04:57	0°♓			12085 Sep 24 10:41	0°♒		
desc. node	12083 Apr 28 13:41	22°♓35'54		evening max el	12085 Oct 09 15:17	15°♒36'45 46°07'12		
	12083 May 04 13:17	0°♈		desc. node	12085 Oct 13 03:23	18°♒59'44		
	12083 May 28 15:57	0°♉			12085 Oct 25 11:06	0°♓		
morning set	12083 Jun 19 04:36	26°♉56'40		greatest brilliancy	12085 Nov 17 18:52	14°♓33'30 -4.8m		
	12083 Jun 21 15:04	0°☿		retrograde	12085 Nov 28 00:58	16°♓28'18		
	12083 Jul 15 12:48	0°♊		evening set	12085 Dec 16 04:28	10°♓15'45		
				inferior conj	12085 Dec 19 12:38	8°♓11'24 -8°21'24		
superior conj	12083 Jul 29 02:29	17°♊01'30 -0°48'37		minimum elong	12085 Dec 19 18:37	8°♓02'00 8°20'01		
minimum elong	12083 Jul 29 13:06	17°♊34'45 0°48'49		min. Earth dist.	12085 Dec 19 15:30	8°♓06'53 0.28999 AU		
max. Earth dist.	12083 Jul 30 16:19	19°♊00'03 1.71519 AU		morning rise	12085 Dec 23 08:48	5°♓49'08		
	12083 Aug 08 11:03	0°♍			12086 Jan 08 06:32	30°♒♒		
asc. node	12083 Aug 19 04:58	13°♍26'51		direct	12086 Jan 09 23:05	29°♒56'36		
	12083 Sep 01 11:06	0°♏			12086 Jan 11 15:59	0°♓		
evening rise	12083 Sep 06 15:41	6°♏28'11		greatest brilliancy	12086 Jan 20 12:53	1°♓59'15 -4.7m		
	12083 Sep 25 13:56	0°♑		asc. node	12086 Feb 03 05:19	9°♓23'14		
	12083 Oct 19 20:58	0°♒			12086 Feb 27 10:39	0°♑		
	12083 Nov 13 10:22	0°♓		morning max el	12086 Feb 28 05:51	0°♑46'49 45°54'31		
	12083 Dec 08 09:00	0°♑			12086 Mar 27 22:02	0°♒		
desc. node	12083 Dec 08 22:34	0°♑40'23			12086 Apr 23 00:57	0°♓		
	12084 Jan 02 20:25	0°♒			12086 May 18 03:36	0°♈		
	12084 Jan 29 03:03	0°♓		desc. node	12086 May 26 02:54	9°♈40'54		
	12084 Feb 26 00:40	0°♈			12086 Jun 11 16:54	0°♉		
evening max el	12084 Mar 03 16:45	6°♈40'21 46°13'58			12086 Jul 05 22:34	0°☿		
asc. node	12084 Mar 30 22:47	29°♈49'13			12086 Jul 30 00:32	0°♊		
	12084 Mar 31 05:19	0°♉			12086 Aug 23 01:39	0°♍		
greatest brilliancy	12084 Apr 12 17:19	6°♉26'47 -4.8m		morning set	12086 Sep 01 04:07	11°♍20'54		
retrograde	12084 Apr 22 09:56	8°♉12'54		asc. node	12086 Sep 15 18:51	29°♍33'23		
evening set	12084 May 09 13:45	2°♉33'07			12086 Sep 16 03:24	0°♏		
inferior conj	12084 May 13 04:23	0°♉21'16 8°35'20						
minimum elong	12084 May 12 20:48	0°♉33'00 8°33'47		superior conj	12086 Oct 09 18:21	29°♏22'48 0°53'58		
min. Earth dist.	12084 May 13 06:14	0°♉18'25 0.27469 AU		minimum elong	12086 Oct 09 08:27	28°♏52'03 0°53'55		
	12084 May 13 18:08	30°♒♓			12086 Oct 10 06:19	0°♑		
morning rise	12084 May 16 03:47	28°♒31'46		max. Earth dist.	12086 Oct 11 23:53	2°♑09'04 1.72499 AU		
direct	12084 Jun 03 00:02	22°♒24'03			12086 Nov 03 10:53	0°♒		
greatest brilliancy	12084 Jun 12 22:39	24°♒15'53 -4.9m		evening rise	12086 Nov 15 22:11	15°♒25'13		
	12084 Jun 24 03:34	0°♉			12086 Nov 27 18:01	0°♓		
desc. node	12084 Jul 21 00:11	22°♉42'56			12086 Dec 22 04:58	0°♑		
morning max el	12084 Jul 23 12:27	25°♉13'03 46°57'29		desc. node	12087 Jan 05 10:43	17°♑21'31		
	12084 Jul 28 04:57	0°☿			12087 Jan 15 20:32	0°♒		
	12084 Aug 24 15:31	0°♊			12087 Feb 09 16:57	0°♓		
	12084 Sep 19 12:06	0°♍			12087 Mar 06 19:08	0°♈		

	12087 Apr 01 07:29	0° Π		morning set	12089 Nov 11 02:03	21° \mathbb{M} 10'12	
	12087 Apr 27 19:31	0° \mathfrak{D}			12089 Nov 18 05:35	0° \mathfrak{X}	
asc. node	12087 Apr 28 08:24	0° \mathfrak{D} 35'14			12089 Dec 12 12:22	0° \mathfrak{Z}	
evening max el	12087 May 16 19:00	19° \mathfrak{D} 58'46	46°45'43				
	12087 May 27 05:42	0° Ω		superior conj	12089 Dec 17 22:19	6° \mathfrak{Z} 41'07	1°22'49
greatest brilliancy	12087 Jun 26 01:46	20° Ω 32'15	-4.9m	minimum elong	12089 Dec 18 03:26	6° \mathfrak{Z} 56'52	1°23'37
retrograde	12087 Jul 06 00:35	22° Ω 23'24		max. Earth dist.	12089 Dec 18 18:45	7° \mathfrak{Z} 44'08	1.73162 AU
evening set	12087 Jul 21 20:44	17° Ω 29'06			12090 Jan 05 19:57	0° \approx	
inferior conj	12087 Jul 26 16:11	14° Ω 36'44	5°32'05	evening rise	12090 Jan 24 04:56	22° \approx 37'43	
minimum elong	12087 Jul 27 02:51	14° Ω 20'24	5°28'38		12090 Jan 30 04:44	0° \mathfrak{H}	
min. Earth dist.	12087 Jul 26 22:19	14° Ω 27'19	0.27023 AU	desc. node	12090 Feb 01 23:44	3° \mathfrak{H} 26'03	
morning rise	12087 Aug 01 09:06	11° Ω 15'12			12090 Feb 23 14:23	0° \mathfrak{Y}	
direct	12087 Aug 16 10:07	6° Ω 50'50			12090 Mar 20 00:21	0° \mathfrak{B}	
desc. node	12087 Aug 18 10:07	6° Ω 55'35			12090 Apr 13 11:02	0° Π	
greatest brilliancy	12087 Aug 26 08:50	8° Ω 41'56	-4.8m		12090 May 08 00:56	0° \mathfrak{D}	
	12087 Sep 26 07:38	0° \mathfrak{M}		asc. node	12090 May 25 19:02	21° \mathfrak{D} 25'43	
morning max el	12087 Oct 05 06:09	8° \mathfrak{M} 27'54	46°22'20		12090 Jun 01 23:18	0° Ω	
	12087 Oct 26 01:43	0° \mathfrak{L}			12090 Jun 27 16:13	0° \mathfrak{M}	
	12087 Nov 21 23:20	0° \mathbb{M}			12090 Jul 25 05:32	0° \mathfrak{L}	
asc. node	12087 Dec 09 09:20	20° \mathbb{M} 10'44		evening max el	12090 Jul 28 02:46	2° \mathfrak{L} 55'19	46°41'23
	12087 Dec 17 17:47	0° \mathfrak{X}			12090 Aug 29 20:04	0° \mathbb{M}	
	12088 Jan 11 21:01	0° \mathfrak{Z}		greatest brilliancy	12090 Sep 05 09:51	3° \mathbb{M} 09'36	-4.8m
	12088 Feb 05 14:46	0° \approx		desc. node	12090 Sep 14 19:47	5° \mathbb{M} 21'05	
	12088 Mar 01 02:25	0° \mathfrak{H}		retrograde	12090 Sep 16 09:16	5° \mathbb{M} 23'59	
	12088 Mar 25 09:43	0° \mathfrak{Y}		evening set	12090 Oct 01 19:41	0° \mathbb{M} 46'33	
desc. node	12088 Mar 30 01:40	5° \mathfrak{Y} 46'54			12090 Oct 03 04:27	30° \mathfrak{R} \mathfrak{L}	
morning set	12088 Apr 01 17:22	9° \mathfrak{Y} 04'28		min. Earth dist.	12090 Oct 06 18:28	27° \mathfrak{L} 50'08	0.27967 AU
	12088 Apr 18 13:15	0° \mathfrak{B}		inferior conj	12090 Oct 07 14:46	27° \mathfrak{L} 18'44	-5°21'24
max. Earth dist.	12088 May 08 16:14	25° \mathfrak{B} 08'07	1.71680 AU	minimum elong	12090 Oct 07 04:43	27° \mathfrak{L} 34'16	5°18'35
				morning rise	12090 Oct 12 14:15	24° \mathfrak{L} 19'09	
superior conj	12088 May 11 14:28	28° \mathfrak{B} 47'54	-1°21'03	direct	12090 Oct 28 15:36	19° \mathfrak{L} 23'19	
minimum elong	12088 May 11 06:12	28° \mathfrak{B} 21'59	1°21'35	greatest brilliancy	12090 Nov 07 05:21	21° \mathfrak{L} 02'46	-4.8m
	12088 May 12 13:31	0° Π			12090 Nov 23 18:39	0° \mathbb{M}	
	12088 Jun 05 11:42	0° \mathfrak{D}		morning max el	12090 Dec 16 11:20	19° \mathbb{M} 19'21	45°45'17
evening rise	12088 Jun 20 16:28	19° \mathfrak{D} 04'07			12090 Dec 27 04:53	0° \mathfrak{X}	
	12088 Jun 29 09:41	0° Ω		asc. node	12091 Jan 05 20:55	10° \mathfrak{X} 08'18	
asc. node	12088 Jul 20 17:18	26° Ω 39'56			12091 Jan 23 21:54	0° \mathfrak{Z}	
	12088 Jul 23 09:25	0° \mathfrak{M}			12091 Feb 18 21:18	0° \approx	
	12088 Aug 16 12:46	0° \mathfrak{L}			12091 Mar 16 00:41	0° \mathfrak{H}	
	12088 Sep 09 21:59	0° \mathbb{M}			12091 Apr 09 16:29	0° \mathfrak{Y}	
	12088 Oct 04 16:55	0° \mathfrak{X}		desc. node	12091 Apr 27 15:35	22° \mathfrak{Y} 06'45	
	12088 Oct 30 04:34	0° \mathfrak{Z}			12091 May 04 00:33	0° \mathfrak{B}	
desc. node	12088 Nov 09 13:28	11° \mathfrak{Z} 51'05			12091 May 28 03:03	0° Π	
	12088 Nov 25 22:46	0° \approx		morning set	12091 Jun 16 16:14	24° Π 28'07	
evening max el	12088 Dec 19 18:48	24° \approx 28'12	45°51'17		12091 Jun 21 02:04	0° \mathfrak{D}	
	12088 Dec 25 16:25	0° \mathfrak{H}			12091 Jul 14 23:43	0° Ω	
greatest brilliancy	12089 Jan 27 20:31	22° \mathfrak{H} 45'36	-4.8m				
retrograde	12089 Feb 06 14:56	24° \mathfrak{H} 29'59		superior conj	12091 Jul 26 14:55	14° Ω 35'52	-0°51'45
evening set	12089 Feb 21 13:55	20° \mathfrak{H} 10'15		minimum elong	12091 Jul 27 01:56	15° Ω 10'25	0°51'58
inferior conj	12089 Feb 27 18:48	16° \mathfrak{H} 27'38	-0°42'42	max. Earth dist.	12091 Jul 28 01:19	16° Ω 23'44	1.71498 AU
minimum elong	12089 Feb 27 20:24	16° \mathfrak{H} 25'07	0°41'55		12091 Aug 07 21:55	0° \mathfrak{M}	
min. Earth dist.	12089 Feb 28 04:47	16° \mathfrak{H} 12'00	0.28127 AU	asc. node	12091 Aug 18 06:45	12° \mathfrak{M} 58'23	
asc. node	12089 Mar 02 15:09	14° \mathfrak{H} 41'26			12091 Aug 31 21:59	0° \mathfrak{L}	
morning rise	12089 Mar 06 02:21	12° \mathfrak{H} 40'05		evening rise	12091 Sep 04 06:02	4° \mathfrak{L} 09'28	
direct	12089 Mar 20 23:16	8° \mathfrak{H} 19'12			12091 Sep 25 00:55	0° \mathbb{M}	
greatest brilliancy	12089 Mar 31 17:50	10° \mathfrak{H} 27'49	-4.8m		12091 Oct 19 08:08	0° \mathfrak{X}	
	12089 Apr 29 02:07	0° \mathfrak{Y}			12091 Nov 12 21:53	0° \mathfrak{Z}	
morning max el	12089 May 09 23:58	10° \mathfrak{Y} 24'38	46°37'45		12091 Dec 07 21:07	0° \approx	
	12089 May 28 14:54	0° \mathfrak{B}		desc. node	12091 Dec 08 00:34	0° \approx 10'14	
desc. node	12089 Jun 22 15:13	28° \mathfrak{B} 26'03			12092 Jan 02 09:39	0° \mathfrak{H}	
	12089 Jun 23 23:21	0° Π			12092 Jan 28 18:29	0° \mathfrak{Y}	
	12089 Jul 19 03:51	0° \mathfrak{D}			12092 Feb 25 21:36	0° \mathfrak{B}	
	12089 Aug 12 19:50	0° Ω		evening max el	12092 Mar 01 07:20	4° \mathfrak{B} 22'24	46°12'50
	12089 Sep 06 06:31	0° \mathfrak{M}		asc. node	12092 Mar 30 00:47	28° \mathfrak{B} 26'28	
	12089 Sep 30 15:08	0° \mathfrak{L}			12092 Apr 01 14:37	0° Π	
asc. node	12089 Oct 13 08:56	15° \mathfrak{L} 43'03		greatest brilliancy	12092 Apr 10 05:30	4° Π 03'01	-4.8m
	12089 Oct 24 22:42	0° \mathbb{M}		retrograde	12092 Apr 19 23:54	5° Π 50'18	

evening set	12092 May 06 22:51	0° Π 16'28			12094 Sep 15 14:09	0° $\underline{\Omega}$	
	12092 May 07 09:59	30° \mathbb{R} \mathcal{B}					
inferior conj	12092 May 10 17:52	27° \mathcal{B} 58'07	8°26'16	superior conj	12094 Oct 07 09:54	27° $\underline{\Omega}$ 08'56	0°51'14
minimum elong	12092 May 10 09:37	28° \mathcal{B} 10'52	8°24'34	minimum elong	12094 Oct 07 00:11	26° $\underline{\Omega}$ 38'46	0°51'08
min. Earth dist.	12092 May 10 18:57	27° \mathcal{B} 56'26	0.27484 AU		12094 Oct 09 16:58	0° \mathbb{M}	
morning rise	12092 May 13 20:19	26° \mathcal{B} 04'06		max. Earth dist.	12094 Oct 09 18:14	0° \mathbb{M} 03'57	1.72460 AU
direct	12092 May 31 14:12	20° \mathcal{B} 00'35			12094 Nov 02 21:28	0° \mathcal{A}	
greatest brilliancy	12092 Jun 10 12:00	21° \mathcal{B} 52'10	-4.9m	evening rise	12094 Nov 13 14:58	13° \mathcal{A} 16'01	
	12092 Jun 25 05:32	0° Π			12094 Nov 27 04:41	0° \mathcal{B}	
desc. node	12092 Jul 20 02:02	21° Π 49'37			12094 Dec 21 15:51	0° \approx	
morning max el	12092 Jul 21 03:32	22° Π 53'29	46°57'59	desc. node	12095 Jan 04 12:35	16° \approx 53'29	
	12092 Jul 28 01:37	0° \mathcal{E}			12095 Jan 15 07:48	0° \mathcal{H}	
	12092 Aug 24 07:05	0° Ω			12095 Feb 09 04:47	0° \mathcal{Y}	
	12092 Sep 19 01:32	0° \mathbb{M}			12095 Mar 06 07:53	0° \mathcal{B}	
	12092 Oct 14 05:48	0° $\underline{\Omega}$			12095 Mar 31 21:49	0° Π	
	12092 Nov 08 02:32	0° \mathbb{M}		asc. node	12095 Apr 27 10:31	29° Π 52'38	
asc. node	12092 Nov 09 22:32	2° \mathbb{M} 13'23			12095 Apr 27 13:14	0° \mathcal{E}	
	12092 Dec 02 18:02	0° \mathcal{A}		evening max el	12095 May 14 08:19	17° \mathcal{E} 35'12	46°44'56
	12092 Dec 27 05:37	0° \mathcal{B}			12095 May 27 10:52	0° Ω	
morning set	12093 Jan 18 20:10	27° \mathcal{B} 49'08		greatest brilliancy	12095 Jun 23 16:24	18° Ω 09'14	-4.9m
	12093 Jan 20 14:39	0° \approx		retrograde	12095 Jul 03 13:09	19° Ω 58'28	
	12093 Feb 13 22:06	0° \mathcal{H}		evening set	12095 Jul 19 13:02	14° Ω 59'56	
max. Earth dist.	12093 Feb 23 14:26	11° \mathcal{H} 57'46	1.72840 AU	inferior conj	12095 Jul 24 05:02	12° Ω 12'16	5°51'18
				minimum elong	12095 Jul 24 15:57	11° Ω 55'32	5°47'52
superior conj	12093 Feb 25 07:56	14° \mathcal{H} 06'06	0°10'15	min. Earth dist.	12095 Jul 24 12:07	12° Ω 01'25	0.27025 AU
minimum elong	12093 Feb 25 10:22	14° \mathcal{H} 13'39	0°10'26	morning rise	12095 Jul 29 18:57	8° Ω 54'21	
behind sun begin	12093 Feb 24 16:03	13° \mathcal{H} 16'59		direct	12095 Aug 13 22:39	4° Ω 26'14	
behind sun end	12093 Feb 26 04:42	15° \mathcal{H} 10'19		desc. node	12095 Aug 17 12:07	4° Ω 41'04	
desc. node	12093 Mar 01 13:26	19° \mathcal{H} 20'05		greatest brilliancy	12095 Aug 23 22:00	6° Ω 17'26	-4.9m
	12093 Mar 10 04:11	0° \mathcal{Y}			12095 Sep 26 10:36	0° \mathbb{M}	
	12093 Apr 03 08:31	0° \mathcal{B}		morning max el	12095 Oct 02 18:59	6° \mathbb{M} 05'10	46°24'02
evening rise	12093 Apr 04 22:54	1° \mathcal{B} 59'16			12095 Oct 25 18:49	0° $\underline{\Omega}$	
	12093 Apr 27 11:06	0° Π			12095 Nov 21 13:11	0° \mathbb{M}	
	12093 May 21 13:03	0° \mathcal{E}		asc. node	12095 Dec 08 11:15	19° \mathbb{M} 39'07	
	12093 Jun 14 16:39	0° Ω			12095 Dec 17 06:06	0° \mathcal{A}	
asc. node	12093 Jun 22 06:33	9° Ω 22'16			12096 Jan 11 08:30	0° \mathcal{B}	
	12093 Jul 09 01:03	0° \mathbb{M}			12096 Feb 05 01:48	0° \approx	
	12093 Aug 02 18:36	0° $\underline{\Omega}$			12096 Feb 29 13:14	0° \mathcal{H}	
	12093 Aug 28 05:17	0° \mathbb{M}			12096 Mar 24 20:26	0° \mathcal{Y}	
	12093 Sep 24 04:28	0° \mathcal{A}		desc. node	12096 Mar 29 03:37	5° \mathcal{Y} 19'45	
evening max el	12093 Oct 07 07:34	13° \mathcal{A} 25'47	46°08'16	morning set	12096 Mar 30 06:50	6° \mathcal{Y} 44'08	
desc. node	12093 Oct 12 05:26	18° \mathcal{A} 08'50			12096 Apr 17 23:56	0° \mathcal{B}	
	12093 Oct 25 19:55	0° \mathcal{B}		max. Earth dist.	12096 May 06 00:07	22° \mathcal{B} 29'16	1.71716 AU
greatest brilliancy	12093 Nov 15 09:46	12° \mathcal{B} 22'23	-4.8m				
retrograde	12093 Nov 25 17:17	14° \mathcal{B} 17'58		superior conj	12096 May 09 02:43	26° \mathcal{B} 22'35	-1°19'32
evening set	12093 Dec 13 22:12	8° \mathcal{B} 02'59		minimum elong	12096 May 08 17:47	25° \mathcal{B} 54'37	1°20'00
inferior conj	12093 Dec 17 04:43	6° \mathcal{B} 00'54	-8°27'08		12096 May 12 00:12	0° Π	
minimum elong	12093 Dec 17 10:02	5° \mathcal{B} 52'33	8°25'53		12096 Jun 04 22:26	0° \mathcal{E}	
min. Earth dist.	12093 Dec 17 06:10	5° \mathcal{B} 58'37	0.29002 AU	evening rise	12096 Jun 18 03:31	16° \mathcal{E} 34'23	
morning rise	12093 Dec 20 21:56	3° \mathcal{B} 43'00			12096 Jun 28 20:31	0° Ω	
	12093 Dec 28 02:06	30° \mathbb{R} \mathcal{A}		asc. node	12096 Jul 19 19:06	26° Ω 11'23	
direct	12094 Jan 07 15:40	27° \mathcal{A} 46'35			12096 Jul 22 20:24	0° \mathbb{M}	
greatest brilliancy	12094 Jan 18 03:05	29° \mathcal{A} 47'06	-4.7m		12096 Aug 15 23:57	0° $\underline{\Omega}$	
	12094 Jan 18 16:51	0° \mathcal{B}			12096 Sep 09 09:31	0° \mathbb{M}	
asc. node	12094 Feb 02 07:13	8° \mathcal{B} 11'52			12096 Oct 04 05:07	0° \mathcal{A}	
morning max el	12094 Feb 25 21:35	28° \mathcal{B} 34'39	45°53'17		12096 Oct 29 18:02	0° \mathcal{B}	
	12094 Feb 27 08:19	0° \approx		desc. node	12096 Nov 08 15:31	11° \mathcal{B} 16'39	
	12094 Mar 27 13:30	0° \mathcal{H}			12096 Nov 25 15:05	0° \approx	
	12094 Apr 22 14:15	0° \mathcal{Y}		evening max el	12096 Dec 17 08:43	22° \approx 13'10	45°51'16
	12094 May 17 15:52	0° \mathcal{B}			12096 Dec 25 18:09	0° \mathcal{H}	
desc. node	12094 May 25 04:54	9° \mathcal{B} 10'20		greatest brilliancy	12097 Jan 25 11:47	20° \mathcal{H} 32'50	-4.8m
	12094 Jun 11 04:35	0° Π		retrograde	12097 Feb 04 05:28	22° \mathcal{H} 17'02	
	12094 Jul 05 09:53	0° \mathcal{E}		evening set	12097 Feb 19 06:17	17° \mathcal{H} 54'53	
	12094 Jul 29 11:37	0° Ω		inferior conj	12097 Feb 25 10:05	14° \mathcal{H} 14'04	-1°04'10
	12094 Aug 22 12:33	0° \mathbb{M}		minimum elong	12097 Feb 25 12:29	14° \mathcal{H} 10'18	1°03'07
morning set	12094 Aug 29 18:08	9° \mathbb{M} 01'14		min. Earth dist.	12097 Feb 25 20:55	13° \mathcal{H} 57'08	0.28165 AU
asc. node	12094 Sep 14 20:45	29° \mathbb{M} 05'49		asc. node	12097 Mar 01 17:10	11° \mathcal{H} 35'39	

morning rise	12097 Mar 03 18:03	10° H 25'50		evening rise	12099 Sep 01 19:49	1° L 49'52	
direct	12097 Mar 18 14:19	6° H 04'53			12099 Sep 24 11:35	0° M	
greatest brilliancy	12097 Mar 29 10:49	8° H 15'06	-4.8m		12099 Oct 18 19:00	0° J	
	12097 Apr 29 04:32	0° Y			12099 Nov 12 09:06	0° Z	
morning max el	12097 May 07 14:41	8° Y 07'16	46°36'18	desc. node	12099 Dec 07 02:24	29° Z 40'28	
	12097 May 28 07:44	0° X			12099 Dec 07 08:59	0° \approx	
desc. node	12097 Jun 21 17:03	27° X 50'20			12100 Jan 01 22:40	0° H	
	12097 Jun 23 13:17	0° II			12100 Jan 28 09:47	0° Y	
	12097 Jul 18 16:25	0° E			12100 Feb 25 18:49	0° X	
	12097 Aug 12 07:39	0° O		evening max el	12100 Feb 27 22:40	2° X 07'41	46°11'46
	12097 Sep 05 17:49	0° M		asc. node	12100 Mar 30 02:50	27° X 02'29	
	12097 Sep 30 02:04	0° L			12100 Apr 04 15:15	0° II	
asc. node	12097 Oct 12 10:51	15° L 15'36		greatest brilliancy	12100 Apr 08 17:52	1° II 41'15	-4.8m
	12097 Oct 24 09:23	0° M		retrograde	12100 Apr 18 13:45	3° II 29'16	
morning set	12097 Nov 08 18:13	18° M 59'08			12100 May 01 17:59	30° R X	
	12097 Nov 17 16:06	0° J		evening set	12100 May 05 08:09	28° X 01'40	
	12097 Dec 11 22:49	0° Z		inferior conj	12100 May 09 07:28	25° X 36'43	8°16'26
				minimum elong	12100 May 08 22:39	25° X 50'23	8°14'32
superior conj	12097 Dec 15 15:30	4° Z 33'47	1°23'40	min. Earth dist.	12100 May 09 07:48	25° X 36'13	0.27499 AU
minimum elong	12097 Dec 15 19:58	4° Z 47'33	1°24'28	morning rise	12100 May 12 13:06	23° X 37'53	
max. Earth dist.	12097 Dec 16 12:29	5° Z 38'32	1.73152 AU	direct	12100 May 30 04:39	17° X 39'05	
	12098 Jan 05 06:24	0° \approx		greatest brilliancy	12100 Jun 09 01:21	19° X 29'54	-4.9m
evening rise	12098 Jan 21 21:16	20° \approx 28'03			12100 Jun 26 23:56	0° II	
	12098 Jan 29 15:16	0° H		morning max el	12100 Jul 19 18:08	20° II 33'43	46°58'05
desc. node	12098 Feb 01 01:34	2° H 59'13		desc. node	12100 Jul 20 04:03	20° II 58'40	
	12098 Feb 23 01:08	0° Y			12100 Jul 28 21:16	0° E	
	12098 Mar 19 11:24	0° X			12100 Aug 24 22:09	0° O	
	12098 Apr 12 22:34	0° II			12100 Sep 19 14:38	0° M	
	12098 May 07 13:11	0° E			12100 Oct 14 17:49	0° L	
asc. node	12098 May 24 20:54	20° E 52'32			12100 Nov 08 13:52	0° M	
	12098 Jun 01 12:40	0° O		asc. node	12100 Nov 10 00:24	1° M 44'48	
	12098 Jun 27 07:47	0° M			12100 Dec 03 04:55	0° J	
	12098 Jul 25 02:51	0° L			12100 Dec 27 16:14	0° Z	
evening max el	12098 Jul 25 16:55	0° L 35'21	46°42'21	morning set	12101 Jan 17 13:04	25° Z 41'01	
	12098 Aug 31 23:21	0° M			12101 Jan 21 01:08	0° \approx	
greatest brilliancy	12098 Sep 03 00:28	0° M 51'35	-4.8m		12101 Feb 14 08:34	0° H	
desc. node	12098 Sep 13 21:50	3° M 06'44		max. Earth dist.	12101 Feb 22 07:23	9° H 49'24	1.72865 AU
retrograde	12098 Sep 14 00:23	3° M 06'45					
	12098 Sep 26 12:07	30° R L		superior conj	12101 Feb 23 23:09	11° H 52'20	0°13'43
evening set	12098 Sep 29 07:46	28° L 32'36		minimum elong	12101 Feb 24 02:22	12° H 02'17	0°13'54
min. Earth dist.	12098 Oct 04 09:01	25° L 33'06	0.27913 AU	behind sun begin	12101 Feb 23 14:25	11° H 25'21	
inferior conj	12098 Oct 05 05:08	25° L 02'05	-5°03'38	behind sun end	12101 Feb 24 14:18	12° H 39'12	
minimum elong	12098 Oct 04 19:22	25° L 17'09	5°00'50	desc. node	12101 Mar 01 15:25	18° H 53'45	
morning rise	12098 Oct 10 07:29	21° L 58'53			12101 Mar 10 14:41	0° Y	
direct	12098 Oct 26 05:22	17° L 07'10		evening rise	12101 Apr 03 13:07	29° Y 41'21	
greatest brilliancy	12098 Nov 04 19:30	18° L 47'14	-4.8m		12101 Apr 03 19:07	0° X	
	12098 Nov 24 10:34	0° M			12101 Apr 27 21:50	0° II	
morning max el	12098 Dec 14 02:31	17° M 06'40	45°46'02		12101 May 22 00:00	0° E	
	12098 Dec 26 23:31	0° J			12101 Jun 15 03:56	0° O	
asc. node	12099 Jan 04 22:44	9° J 28'35		asc. node	12101 Jun 22 08:24	8° O 52'45	
	12099 Jan 23 12:10	0° Z			12101 Jul 09 12:51	0° M	
	12099 Feb 18 09:47	0° \approx			12101 Aug 03 07:16	0° L	
	12099 Mar 15 12:16	0° H			12101 Aug 28 19:33	0° M	
	12099 Apr 09 03:35	0° Y			12101 Sep 24 22:36	0° J	
desc. node	12099 Apr 26 17:31	21° Y 38'59		evening max el	12101 Oct 05 23:14	11° J 13'23	46°09'19
	12099 May 03 11:24	0° X		desc. node	12101 Oct 12 07:28	17° J 17'08	
	12099 May 27 13:48	0° II			12101 Oct 27 07:50	0° Z	
morning set	12099 Jun 14 03:34	21° II 59'43		greatest brilliancy	12101 Nov 14 01:08	10° Z 11'44	-4.8m
	12099 Jun 20 12:45	0° E		retrograde	12101 Nov 24 08:53	12° Z 07'25	
	12099 Jul 14 10:21	0° O		evening set	12101 Dec 12 15:34	5° Z 50'32	
				inferior conj	12101 Dec 15 20:39	3° Z 50'27	-8°32'13
superior conj	12099 Jul 24 02:47	12° O 09'16	-0°54'49	minimum elong	12101 Dec 16 01:16	3° Z 43'11	8°31'03
minimum elong	12099 Jul 24 14:07	12° O 44'50	0°55'03	min. Earth dist.	12101 Dec 15 21:00	3° Z 49'54	0.29000 AU
max. Earth dist.	12099 Jul 25 11:24	13° O 51'33	1.71480 AU	morning rise	12101 Dec 19 11:01	1° Z 36'34	
	12099 Aug 07 08:30	0° M			12101 Dec 22 06:02	30° R J	
asc. node	12099 Aug 17 08:38	12° M 31'09		direct	12102 Jan 06 07:44	25° J 36'36	
	12099 Aug 31 08:34	0° L					