retrograde	5600 Jan 12 05:16 5600 Mar 11 09:07	2° ₽ 48'56 30°R M		max. Earth dist. morning rise	5605 Dec 03 13:37 5605 Dec 20 20:09	12° ⊀ 48'27 14° ≮ 56'25	10.50339 AU
opposition	5600 Mar 19 03:31	29° m 22'09	1°28'53	retrograde	5606 Mar 31 08:26	22° х 24′26	
min. Earth dist.	5600 Mar 19 03:44	29° TD 22'06	8.17790 AU	opposition	5606 Jun 07 02:49	19° ∡ *03'11	2°23'10
direct	5600 May 25 15:46	25° m 53'50		min. Earth dist.	5606 Jun 07 04:20	19° ₹ 02'53	8.54625 AU
	5600 Aug 04 13:57	0∘ ʊ		direct	5606 Aug 16 02:13	15° ₹ 36'58	
evening set	5600 Sep 07 19:51	3° ≏ 59'10		evening set	5606 Nov 29 10:53	23° ≯ ′20′06	
conjunction	5600 Sep 25 19:46	6° £ 16′21	1°23'27	conjunction	5606 Dec 16 16:26	25° ∡ ¹26'42	1°49'36
minimum elong	5600 Sep 25 19:43	6° ≏ 16′20	1°23'27	minimum elong	5606 Dec 16 16:28	25° ∡ ¹26'43	1°49'37
max. Earth dist.	5600 Sep 25 18:46	6° ≙ 16′02	10.18863 AU	max. Earth dist.	5606 Dec 16 14:26	25° ₹ 26′05	10.58685 AU
morning rise	5600 Oct 13 17:50	8° ॒ 33'01		morning rise	5607 Jan 02 17:49	27° ∡ ³32′05	
retrograde	5601 Jan 25 02:23	16° ≏ 30'56			5607 Jan 24 00:30	0°ප	
opposition	5601 Apr 01 21:55	13° ≏ 04'53	1°57'03	retrograde	5607 Apr 13 00:19	4° る 54'20	
min. Earth dist.	5601 Apr 01 22:48	13° ≏ 04'42	8.20548 AU	opposition	5607 Jun 20 02:53	1° る 33'59	
direct	5601 Jun 08 18:42	9° ≏ 36'16		min. Earth dist.	5607 Jun 20 04:43	1° る 33'38	8.62863 AU
evening set	5601 Sep 22 10:17	17° ≏ 41'37			5607 Jul 11 05:27	30°₹⊀	
		_		direct	5607 Aug 29 08:19	28° ∡ ′08'49	
conjunction	5601 Oct 10 07:43	19° Ω 57'34	1°43'35		5607 Oct 16 10:24	0° ろ	
minimum elong	5601 Oct 10 07:41	19° Ω 57'33	1°43'35	evening set	5607 Dec 12 06:34	5° る 45'22	
max. Earth dist.	5601 Oct 10 05:49	19° Ω 56'57	10.22512 AU		5.05 D 20 00 20	5 0 7 50114	1022120
morning rise	5601 Oct 28 02:29	22° Ω 12'45		conjunction	5607 Dec 29 09:26	7°る50'14	
. 1	5602 Jan 28 16:04	0°M		minimum elong	5607 Dec 29 09:28	7°る50'15	
retrograde	5602 Feb 07 18:29	0°M05'41		max. Earth dist.	5607 Dec 29 07:05	/°る49'31 9°る54'00	10.66777 AU
	5602 Feb 17 21:11	30° ₹ Ω	201.0122	morning rise	5608 Jan 15 08:35		
opposition min. Earth dist.	5602 Apr 15 14:35	26° £ 40'31 26° £ 40'09	2°18'22 8.25098 AU	retrograde	5608 Apr 24 10:11	17°ත11'12 13°ත51'38	1°43'02
direct	5602 Apr 15 16:22 5602 Jun 22 21:35	20 2 40 09 23° 2 11'53	6.23098 AU	opposition min. Earth dist.	5608 Jul 01 23:19 5608 Jul 02 01:23	13° る 51'14	8.70657 AU
direct	5602 Sep 26 13:16	0°M		direct	5608 Sep 10 11:10	13 3 31 14 10° る 27'33	8.70037 AU
evening set	5602 Oct 06 20:12	1°M15'27		evening set	5608 Dec 23 19:06	10 3 27 33	
evening set	3002 Oct 00 20.12	1 1101327		evening set	3008 DCC 23 19.00	17 03743	
conjunction	5602 Oct 24 14:29	3°M29'46	1°57'46	conjunction	5609 Jan 09 19:35	20° පි 01'01	1°13'03
minimum elong	5602 Oct 24 14:27	3°M29'45	1°57'46	minimum elong	5609 Jan 09 19:37	20° る 01'02	1°13'05
max. Earth dist.	5602 Oct 24 11:38	3°M28'52	10.27833 AU	max. Earth dist.	5609 Jan 09 17:03	20° る 00'15	10.74246 AU
morning rise	5602 Nov 11 05:33	5°M43'06		morning rise	5609 Jan 26 16:57	22° る 03'22	
retrograde	5603 Feb 21 05:39	13°M30'13		retrograde	5609 May 06 17:59	29° る 16'34	
opposition	5603 Apr 29 04:44	10°M06'01	2°31'47	opposition	5609 Jul 14 16:44	25° る 57'34	1°16'01
min. Earth dist.	5603 Apr 29 06:59	10°M05'34	8.31162 AU	min. Earth dist.	5609 Jul 14 18:03	25° る 57'19	8.77661 AU
direct	5603 Jul 06 22:12	6° ™ 37'37		direct	5609 Sep 23 09:08	22° る 34'38	
evening set	5603 Oct 20 23:38	14°M37'45		evening set	5610 Jan 05 01:14	29° る 58'48	
	5603 Oct 23 23:30	15° M ₊			5610 Jan 05 05:19	0° ≈	
conjunction	5603 Nov 07 14:34	16°M50'12	2°05'24	conjunction	5610 Jan 21 23:44	2° ≈ 00'45	0°49'50
minimum elong	5603 Nov 07 14:33	16°M50'12	2°05'24	minimum elong	5610 Jan 21 23:46	2° ≈ 00'45	0°49'51
max. Earth dist.	5603 Nov 07 11:14	16° ™ 49'09	10.34506 AU	max. Earth dist.	5610 Jan 21 22:19	2° ≈ 00'19	10.80766 AU
morning rise	5603 Nov 25 01:51	19° M 01'30		morning rise	5610 Feb 07 19:34	4° ≈ 01'55	
retrograde	5604 Mar 05 11:34	26°M42'17		retrograde	5610 May 19 00:07	11° ≈ 12'14	
opposition	5604 May 11 15:42	23°M19'04	2°36'54	opposition	5610 Jul 27 07:28	7° ≈ 53'36	0°46'05
min. Earth dist.	5604 May 11 17:50	23°M18'39	8.38371 AU	min. Earth dist.	5610 Jul 27 07:45	7° ≈ 53'33	8.83582 AU
direct	5604 Jul 19 20:08	19° M .51'11		direct	5610 Oct 06 00:54	4° ≈ 31'46	
evening set	5604 Nov 02 19:41	27°M46'32		evening set	5611 Jan 17 02:28	11° ≈ 50'37	
conjunction	5604 Nov 20 07:16	29°M56'59	2°06'21	conjunction	5611 Feb 02 23:14	13° ≈ 51'27	0°24'44
minimum elong	5604 Nov 20 07:17	29°M56'59	2°06'21	minimum elong	5611 Feb 02 23:15	13° ≈ 51′28	0°24'44
max. Earth dist.	5604 Nov 20 04:06	29°M56'00	10.42143 AU	max. Earth dist.	5611 Feb 02 22:59	13° ≈ 51′23	10.86067 AU
	5604 Nov 20 16:53	0° ≯			5611 Feb 12 11:32	15° ≈	
morning rise	5604 Dec 07 14:51	2° х 06′13		morning rise	5611 Feb 19 17:48	15° ≈ 51'41	
retrograde	5605 Mar 18 11:57	9° ∡ ¹40'31		retrograde	5611 May 31 04:26	23° ≈ 00′18	
opposition	5605 May 24 23:01	6° ₰ 18'17	2°33'49	opposition	5611 Aug 08 19:56	19° ≈ 41′50	0°14'34
min. Earth dist.	5605 May 25 00:38	6° √ 17'58	8.46326 AU	min. Earth dist.	5611 Aug 08 19:48	19° ≈ 41'52	8.88184 AU
direct	5605 Aug 02 13:57	2° x 51'09		direct	5611 Oct 18 12:57	16°≈20'57	
evening set	5605 Nov 16 07:30	10° ∡ ′40′43		desc. node	5612 Jan 27 22:09	23°≈27'53	
	5005 P	100 = 100	20001	evening set	5612 Jan 28 23:59	23° ≈ 35′27	
conjunction	5605 Dec 03 15:57	12° ₹ 49'11	2°00'52		5610 F 1 14 10 05	0.50 0.5100	0001116
minimum elong	5605 Dec 03 15:59	12° ≯ 49'11	2°00'54	conjunction	5612 Feb 14 19:05	25° ≈ 35'23	-0~01'16

minimum elong	5612 Feb 14 19:06	25° ≈ 35'24	0°01'16	conjunction	5618 Apr 24 16:50	5° 8 57'00	2°00'16
behind sun begin	5612 Feb 14 12:06	25°≈33'19	0 01 10	minimum elong	5618 Apr 24 16:49	5° 8 56'59	
behind sun end	5612 Feb 15 02:06	25°≈37'28		max. Earth dist.	5618 Apr 24 17:46	_	10.77899 AU
max. Earth dist.	5612 Feb 14 19:02		10.89938 AU	morning rise	5618 May 11 13:56	7° 8 58'57	10.77677 AC
morning rise	5612 Mar 02 12:49	27°≈34'57	10.07730 AC	morning risc	5618 Jul 30 22:37	15° 8	
morning 1130	5612 Mar 24 01:28	0° ∀		retrograde	5618 Aug 23 20:38	15° 8 28'18	
retrograde	5612 Jun 11 08:28	4°) 43′05		retrograde	5618 Sep 17 00:25	15°R 8	
opposition	5612 Aug 20 07:06	1°) (13°03	-0°17'18	opposition	5618 Nov 02 08:17	12° 8 05'20	-2°32'19
min. Earth dist.	5612 Aug 20 07:14		8.91288 AU	min. Earth dist.	5618 Nov 02 07:01	_	8.74560 AU
mm. Earth dist.	5612 Sep 08 20:02	30°R≈	0.91200710	direct	5619 Jan 10 02:42	8° 8 45'51	0.7 1500 110
direct	5612 Oct 29 21:10	28°≈04'31		uncer	5619 Apr 11 12:49	15° 8	
ancer	5612 Dec 18 03:48	0° ∀		evening set	5619 Apr 20 04:27	16° 8 01'09	
evening set	5613 Feb 08 18:50	5°) 15′38		evening sec	301) 11pt 20 01.27	10 3010)	
e venning see	3013160 00 10.30	3 7(1330		conjunction	5619 May 07 00:36	18° 8 03'35	-2°06'14
conjunction	5613 Feb 25 12:30	7°) 14'56	-0°26'59	minimum elong	5619 May 07 00:36	18° 8 03'35	
minimum elong	5613 Feb 25 12:39	7°) 14'56		max. Earth dist.	5619 May 07 00:36	_	10.70714 AU
max. Earth dist.	5613 Feb 25 12:12		10.92227 AU	morning rise	5619 May 24 00:12	20° 8 07'07	10.70711110
morning rise	5613 Mar 14 05:44	9° H 14'06	10.92227 110	retrograde	5619 Sep 05 20:13	27° 8 42'37	
retrograde	5613 Jun 23 10:44	16° ¥ 23'01		opposition	5619 Nov 15 03:32	24° 8 18'29	-2°36'27
opposition	5613 Sep 01 17:26	13°) (23'01'	-0°48'18	min. Earth dist.	5619 Nov 15 01:21		8.66939 AU
min. Earth dist.	5613 Sep 01 17:13	13°) (04'16	8.92759 AU	direct	5620 Jan 22 13:20	20° 8 58'20	0.00737710
direct	5613 Nov 11 02:59	9°) (44'48	0.72737710	evening set	5620 May 01 15:40	28° 8 17'55	
evening set	5614 Feb 20 12:23	16°) 53'40		evening set	5620 May 15 14:41	0°II	
e venning sec	3011100 20 12.23	10 7(33 10			3020 May 13 11.11	٠ ـ	
conjunction	5614 Mar 09 05:06	18° ¥ 52'37	-0°51'33	conjunction	5620 May 18 14:42	0° ∏ 22'08	-2°06'33
minimum elong	5614 Mar 09 05:05	18° ¥ 52'37		minimum elong	5620 May 18 14:43	0°П22'08	
max. Earth dist.	5614 Mar 09 05:29		10.92820 AU	max. Earth dist.	5620 May 18 17:21		10.62738 AU
morning rise	5614 Mar 25 22:06	20°) 51'39	10.92020110	morning rise	5620 Jun 04 17:34	2° П 27'34	10.02750710
retrograde	5614 Jul 05 16:32	28°) (02'36		retrograde	5620 Sep 18 02:55	10° ∏ 09'18	
opposition	5614 Sep 14 03:21	24°) (43'16	-1°17'16	opposition	5620 Nov 27 02:11	6° П 44'03	-2°33'24
min. Earth dist.	5614 Sep 14 03:21		8.92493 AU	min. Earth dist.	5620 Nov 26 23:40		8.58692 AU
direct	5614 Nov 23 08:58	21°) (24'17	6.72473 AU	direct	5621 Feb 03 01:59	3° П 23'03	0.30072 AC
evening set	5615 Mar 04 05:53	28° H 32'04		evening set	5621 May 14 09:19	10° I I47'37	
evening set	3013 Wai 04 03.33			evening set	3021 May 14 09.19	10 14/3/	
	5615 Mar 16 14:33	0 \circ \mathbf{V}					
	5615 Mar 16 14:33	0°Υ		conjunction	5621 May 31 11:55	12°∏53'54	-2°00'54
conjunction			-1°14'00	conjunction	5621 May 31 11:55	12°∏53'54 12°∏53'54	
conjunction	5615 Mar 20 22:08	0° Υ 31'01		minimum elong	5621 May 31 11:57	12° Ⅱ 53'54	2°00'55
minimum elong	5615 Mar 20 22:08 5615 Mar 20 22:06	0° Y 31'01 0° Y 31'00	1°13'59	minimum elong max. Earth dist.	5621 May 31 11:57 5621 May 31 14:13	12° Д 53'54 12° Д 54'36	
minimum elong max. Earth dist.	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27	0° Y 31'01 0° Y 31'00 0° Y 31'24		minimum elong max. Earth dist. morning rise	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47	12°Д53'54 12°Д54'36 15°Д01'29	2°00'55
minimum elong max. Earth dist. morning rise	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11	0° Y 31'01 0° Y 31'00 0° Y 31'24 2° Y 30'14	1°13'59	minimum elong max. Earth dist. morning rise retrograde	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15	2°00'55 10.54333 AU
minimum elong max. Earth dist. morning rise retrograde	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21	1°13'59 10.91622 AU	minimum elong max. Earth dist. morning rise retrograde opposition	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59	2°00'55 10.54333 AU -2°22'56
minimum elong max. Earth dist. morning rise retrograde opposition	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20	1°13'59 10.91622 AU -1°43'08	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59 19°Д23'24	2°00'55 10.54333 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20	0°Y31'01 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20 6°Y24'37	1°13'59 10.91622 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59 19°Д23'24 16°Д00'59	2°00'55 10.54333 AU -2°22'56
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20 5615 Dec 05 11:20	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20 6°Y24'37 3°Y05'35	1°13'59 10.91622 AU -1°43'08	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59 19°Д23'24	2°00'55 10.54333 AU -2°22'56
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20	0°Y31'01 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20 6°Y24'37	1°13'59 10.91622 AU -1°43'08	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59 19°Д23'24 16°Д00'59 23°Д31'11	2°00'55 10.54333 AU -2°22'56 8.50189 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20 5615 Dec 05 11:20 5616 Mar 15 00:40	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'37 3°Y05'35 10°Y13'33	1°13'59 10.91622 AU -1°43'08 8.90412 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13 5622 Jun 13 16:59	12°Д53'54 12°Д54'36 15°Д01'29 22°Д49'15 19°Д22'59 19°Д23'24 16°Д00'59 23°Д31'11 25°Д39'42	2°00'55 10.54333 AU -2°22'56 8.50189 AU -1°49'16
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Dec 05 11:20 5616 Mar 15 00:40	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'37 3°Y05'35 10°Y13'33	1°13'59 10.91622 AU -1°43'08 8.90412 AU -1°33'27	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13 5622 Jun 13 16:59 5622 Jun 13 17:02	12° Д 53'54 12° Д 54'36 15° Д 01'29 22° Д 49'15 19° Д 22'59 19° Д 23'24 16° Д 00'59 23° Д 31'11 25° Д 39'42 25° Д 39'43	2°00'55 10.54333 AU -2°22'56 8.50189 AU -1°49'16 1°49'17
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20 5615 Dec 05 11:20 5616 Mar 15 00:40 5616 Mar 31 16:46 5616 Mar 31 16:44	0°Y31'01 0°Y31'00 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'37 3°Y05'35 10°Y13'33	1°13'59 10.91622 AU -1°43'08 8.90412 AU -1°33'27 1°33'28	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13 5622 Jun 13 16:59 5622 Jun 13 17:02 5622 Jun 13 18:43	12° Д 53'54 12° Д 54'36 15° Д 01'29 22° Д 49'15 19° Д 22'59 19° Д 23'24 16° Д 00'59 23° Д 31'11 25° Д 39'42 25° Д 39'43 25° Д 40'14	2°00'55 10.54333 AU -2°22'56 8.50189 AU -1°49'16
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20 5615 Dec 05 11:20 5616 Mar 15 00:40 5616 Mar 31 16:46 5616 Mar 31 16:44 5616 Mar 31 17:53	0°Y31'01 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20 6°Y24'37 3°Y05'35 10°Y13'33 12°Y12'48 12°Y12'48 12°Y12'48	1°13'59 10.91622 AU -1°43'08 8.90412 AU -1°33'27	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13 5622 Jun 13 16:59 5622 Jun 13 17:02 5622 Jun 13 18:43 5622 Jul 01 04:11	12° Д 53'54 12° Д 54'36 15° Д 01'29 22° Д 49'15 19° Д 22'59 19° Д 23'24 16° Д 00'59 23° Д 31'11 25° Д 39'42 25° Д 39'43 25° Д 40'14 27° Д 49'34	2°00'55 10.54333 AU -2°22'56 8.50189 AU -1°49'16 1°49'17
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5615 Mar 20 22:08 5615 Mar 20 22:06 5615 Mar 20 23:27 5615 Apr 06 15:11 5615 Jul 18 00:59 5615 Sep 26 13:54 5615 Sep 26 12:20 5615 Dec 05 11:20 5616 Mar 15 00:40 5616 Mar 31 16:46 5616 Mar 31 16:44 5616 Mar 31 17:53 5616 Apr 17 10:30	0°Y31'01 0°Y31'24 2°Y30'14 9°Y44'21 6°Y24'20 6°Y24'37 3°Y05'35 10°Y13'33 12°Y12'48 12°Y12'48 12°Y13'08 14°Y12'35	1°13'59 10.91622 AU -1°43'08 8.90412 AU -1°33'27 1°33'28	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5621 May 31 11:57 5621 May 31 14:13 5621 Jun 17 18:47 5621 Oct 01 12:58 5621 Dec 10 04:22 5621 Dec 10 02:14 5622 Feb 15 19:22 5622 May 27 10:13 5622 Jun 13 16:59 5622 Jun 13 17:02 5622 Jun 13 18:43 5622 Jul 01 04:11 5622 Jul 19 13:18	12°П53'54 12°П54'36 15°П01'29 22°П49'15 19°П22'59 19°П23'24 16°П00'59 23°П31'11 25°П39'42 25°П39'43 25°П40'14 27°П49'34 0°©	2°00'55 10.54333 AU -2°22'56 8.50189 AU -1°49'16 1°49'17
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conjunction	5624 Jul 10 02:29	21° 9 53'27	1000128	min. Earth dist.	5630 Mar 27 02:41	7° Ω 08'42	8.18327 AU
minimum elong	5624 Jul 10 02:32	21°953'28	1°09'28	direct	5630 Jun 02 19:34	7 = 0842 3° ⊆ 40'15	6.16327 AU
max. Earth dist.	5624 Jul 10 04:49		10.30423 AU	evening set	5630 Sep 16 05:25	11° ≏ 46'21	
morning rise	5624 Jul 27 22:00	24°907'46	10.30423 AO	evening set	3030 БСР 10 03.23	11 =4021	
morning risc	5624 Sep 21 01:43	0°Ω		conjunction	5630 Oct 04 04:04	14° ≙ 03'02	1°35'04
retrograde	5624 Nov 10 21:11	2° Ω 09'44		minimum elong	5630 Oct 04 04:04	14° ⊆ 03'02 14° ⊆ 03'01	
retrograde	5625 Jan 01 15:52	2 0 €05 44 30°RS		max. Earth dist.	5630 Oct 04 04:01 5630 Oct 04 03:03		10.20079 AU
opposition	5625 Jan 18 07:37	30 k≅ 28°€41'25	1010/06	morning rise	5630 Oct 22 00:36	14 ⊆ 02 42 16° ⊆ 19'05	10.20079 AU
min. Earth dist.	5625 Jan 18 05:49		8.27174 AU	Č			
			8.2/1/4 AU	retrograde	5631 Feb 01 23:53	24° Ω 15'00	2000122
direct	5625 Mar 26 07:55	25°916'07		opposition	5631 Apr 09 20:23	20° Ω 49'31	2°09'33
	5625 Jun 10 10:26	0°N		min. Earth dist.	5631 Apr 09 20:32	20° Ω 49'29	8.22454 AU
evening set	5625 Jul 06 10:16	3° Ω 04'27		direct	5631 Jun 16 22:47	17° Ω 21'03	
		0		evening set	5631 Sep 30 18:17	25° ≏ 26′08	
conjunction	5625 Jul 24 06:13	5° Ω 19'38					
minimum elong	5625 Jul 24 06:15	5° Ω 19'38		conjunction	5631 Oct 18 14:13	27° Ω 41'21	1°52'02
max. Earth dist.	5625 Jul 24 08:31		10.24225 AU	minimum elong	5631 Oct 18 14:11	27° Ω 41'21	1°52'02
morning rise	5625 Aug 11 04:59	7° Ω 35'44		max. Earth dist.	5631 Oct 18 13:26		10.25048 AU
	5625 Oct 28 09:34	15° Ω		morning rise	5631 Nov 05 07:03	29° ≏ 55'39	
retrograde	5625 Nov 24 22:46	15° Ω 40'14			5631 Nov 05 21:01	0° M	
	5625 Dec 22 13:35	15° ₹Ω		retrograde	5632 Feb 15 15:33	7° IL 46'03	
opposition	5626 Jan 31 22:44	12° Ω 11'44	-0°35'21	opposition	5632 Apr 22 12:18	4°M21'39	2°26'36
min. Earth dist.	5626 Jan 31 20:56	12° Ω 12'06	8.21672 AU	min. Earth dist.	5632 Apr 22 12:43	4° M 21′34	8.28242 AU
direct	5626 Apr 08 21:46	8° Ω 45'25		direct	5632 Jun 29 23:31	0° M 53′30	
	5626 Jul 07 03:34	15° Ω		evening set	5632 Oct 14 01:46	8° M 55'49	
evening set	5626 Jul 20 16:45	16° Ω 39'26					
				conjunction	5632 Oct 31 18:27	11° M 09'14	2°02'38
conjunction	5626 Aug 07 15:46	18° Ω 56'10	-0°13'47	minimum elong	5632 Oct 31 18:25	11° M 09'13	2°02'39
minimum elong	5626 Aug 07 15:46	18° Ω 56'11	0°13'48	max. Earth dist.	5632 Oct 31 17:22	11°ML08'53	10.31516 AU
behind sun begin	5626 Aug 07 12:06	18° Ω 55'01		morning rise	5632 Nov 18 07:21	13°M21'31	
behind sun end	5626 Aug 07 19:27	18° Ω 57'20			5632 Dec 01 20:26	15° ™	
max. Earth dist.	5626 Aug 07 17:21	18° Ω 56'41	10.19535 AU	retrograde	5633 Feb 28 01:49	21°M05'38	
morning rise	5626 Aug 25 16:44	21° Ω 13'34		opposition	5633 May 06 01:29	17° ™ 42'22	2°35'25
retrograde	5626 Dec 09 01:48	29° Ω 19'15		min. Earth dist.	5633 May 06 02:35	17° ™ 42'09	8.35323 AU
asc. node	5627 Jan 27 19:44	27° Ω 15'42			5633 Jun 14 04:28	15°RM	
opposition	5627 Feb 14 16:17	25°Ω50'51	0°01'46	direct	5633 Jul 13 22:58	14°M14'43	
min. Earth dist.	5627 Feb 14 15:04	25° Ω 51'06	8.17847 AU	uncer	5633 Aug 12 15:50	15°M	
direct	5627 Apr 22 15:58	22° Ω 23'38	0.17047 710	evening set	5633 Oct 28 02:07	22°M12'43	
direct	5627 Aug 01 04:12	0° m)		evening set	3033 001 20 02.07	22 11012 43	
evening set	5627 Aug 01 04:12 5627 Aug 04 04:30	0° Mp 22'34		conjunction	5633 Nov 14 15:15	24°M24'07	2°06'33
evening set	3027 Aug 04 04.30	0 11/22 34		minimum elong	5633 Nov 14 15:15	24°M24'07	2°06'34
conjunction	5627 Aug 22 05:22	2° m/40'18	0°16'28	max. Earth dist.	5633 Nov 14 13:15		10.39071 AU
•	5627 Aug 22 05:21	-	0°16'27			26°M34'18	10.39071 AU
minimum elong	~	2° Mp 40'18		morning rise	5633 Dec 02 00:21		
max. Earth dist.	5627 Aug 22 05:53	2° Mp 40'28	10.10040 AU		5633 Dec 31 16:14	0° √ 7 49. ₹ 1.1140	
morning rise	5627 Sep 09 07:16	4° Mp 58'22		retrograde	5634 Mar 13 04:42	4°×711'49	2025155
retrograde	5627 Dec 23 05:03	13° Mp 03'46	0020104	opposition	5634 May 19 11:13		2°35'55
opposition	5628 Feb 28 11:22	9° m 35'45	0°39'04	min. Earth dist.	5634 May 19 13:17	0° √ 49'14	8.43244 AU
min. Earth dist.	5628 Feb 28 10:58	9° m 35'50	8.15952 AU	1'	5634 May 30 00:53	30°₹M	
direct	5628 May 05 13:52	6° Mp 07'50		direct	5634 Jul 27 19:52	27°M22'38	
evening set	5628 Aug 17 20:08	14° m 10'39			5634 Sep 22 21:04	0° ₹	
	5/20 G 04 21 22	1.00%.00145	0045150	evening set	5634 Nov 10 18:18	5° ∡ 15'09	
conjunction	5628 Sep 04 21:30	16° Mp 28'42	0°45'50				
minimum elong	5628 Sep 04 21:28	16° Mp 28'41	0°45'49	conjunction	5634 Nov 28 04:02	7° ∡ °24'30	
max. Earth dist.	5628 Sep 04 21:05		10.15752 AU	minimum elong	5634 Nov 28 04:03	7° ∡ °24'30	
morning rise	5628 Sep 22 22:56	18° m 46'45		max. Earth dist.	5634 Nov 28 00:56		10.47229 AU
retrograde	5629 Jan 05 06:49	26° Mp 50'19		morning rise	5634 Dec 15 09:46	9° ∡ ³32'38	
opposition	5629 Mar 13 06:55	23° m 22'58	1°14'12	retrograde	5635 Mar 26 02:46	17° ∡ ′03'39	
min. Earth dist.	5629 Mar 13 07:11	23° m 22'54	8.16114 AU	opposition	5635 Jun 01 17:01	13° ∡ °42′28	2°28'31
direct	5629 May 19 15:46	19° m 54'35		min. Earth dist.	5635 Jun 01 19:36	13° ∡ ¹41'58	8.51493 AU
evening set	5629 Sep 01 13:18	27° m 59'54		direct	5635 Aug 10 11:37	10° ∡ 16′17	
	5629 Sep 17 07:05	0∘ ⊽		evening set	5635 Nov 24 02:01	18° ∡ °02'39	
conjunction	5629 Sep 19 13:54	0° ≙ 17'35	1°12'35	conjunction	5635 Dec 11 08:44	20° х 10′05	1°55'03
minimum elong	5620 C 10 12 51	0° ჲ 17'34	1°12'34	minimum elong	5635 Dec 11 08:46	20° ∡ 10′05	1°55'05
E 4 E 4	5629 Sep 19 13:51	0 -1734		_			
max. Earth dist.	5629 Sep 19 13:51 5629 Sep 19 12:51		10.16918 AU	max. Earth dist.	5635 Dec 11 04:56	20° ∡ 08'54	10.55473 AU
max. Earth dist. morning rise	-			max. Earth dist.	5635 Dec 11 04:56 5635 Dec 28 11:32	20° х 08'54 22° х 16'19	10.55473 AU
	5629 Sep 19 12:51	0° £ 17'14					10.55473 AU
morning rise	5629 Sep 19 12:51 5629 Oct 07 13:27	0° £ 17'14 2° £ 34'55	10.16918 AU	morning rise	5635 Dec 28 11:32	22° ∡ 16'19	

min. Earth dist.	5636 Jun 13 21:36	26° ≯ 20'37	8.59588 AU	conjunction	5642 Feb 20 22:15	2° ₩ 33'51	-0°16'13
direct	5636 Aug 22 21:33	22° ∡ 55'53		minimum elong	5642 Feb 20 22:15	2°) 33′50	0°16'13
	5636 Dec 01 01:33	0°₹		behind sun begin	5642 Feb 20 21:50	2°) 33'43	
evening set	5636 Dec 06 01:43	0° る 35'50		behind sun end	5642 Feb 20 22:40	2°) 33′58	
				max. Earth dist.	5642 Feb 20 21:53		10.89189 AU
conjunction	5636 Dec 23 05:47	2°₹41'31		morning rise	5642 Mar 09 15:43	4°) (33′25	
minimum elong	5636 Dec 23 05:49	2°る41'32	1°40'53	retrograde	5642 Jun 18 17:02	11°) (42'47	0025126
max. Earth dist.	5636 Dec 23 02:22	4°る46'04	10.63396 AU	opposition min. Earth dist.	5642 Aug 27 19:38	8° ¥ 23'33 8° ¥ 23'36	-0°35′26 8.89906 AU
morning rise	5637 Jan 09 05:58	12° る 05'56		min. Earth dist.	5642 Aug 27 19:23 5642 Nov 06 07:59	5° ★ 23'36	8.89900 AU
retrograde	5637 Apr 19 10:06 5637 Jun 26 17:47	8° る 46'24	1°53'25		5643 Feb 15 22:19	12° X 13'55	
opposition min. Earth dist.	5637 Jun 26 19:55	8° る 45'59	8.67211 AU	evening set	3043 Feb 13 22.19	12 大1333	
direct	5637 Sep 05 03:11	5° る 22'11	8.07211 AU	conjunction	5643 Mar 04 15:39	14°) 13′18	0°41'26
evening set	5637 Dec 18 18:00	3 3 22 11		minimum elong	5643 Mar 04 15:37	14° X 13'17	
evening set	3037 Dec 16 16.00	12 033 40		max. Earth dist.	5643 Mar 04 15:44		10.90208 AU
conjunction	5638 Jan 04 19:43	14° る 59'52	1°22'10	morning rise	5643 Mar 21 08:43	16°) 12'38	10.70200 AC
minimum elong	5638 Jan 04 19:45	14°る59'52		retrograde	5643 Jun 30 22:02	23°\(\frac{12}{23}\)'30	
max. Earth dist.	5638 Jan 04 17:00		10.70722 AU	opposition	5643 Sep 09 06:09	20°\(\)(03'46	-1°05'28
morning rise	5638 Jan 21 17:46	17°る02'56	10.70722710	min. Earth dist.	5643 Sep 09 05:48	20°\(\)(03'\(\	
retrograde	5638 May 01 21:06	24°る18'30		direct	5643 Nov 18 13:26	16°) 43'54	0.90131710
opposition	5638 Jul 09 13:20	20° る 59'28	1°28'03	evening set	5644 Feb 27 16:20	23°) 53'03	
min. Earth dist.	5638 Jul 09 15:33	20°る59'03	8.74113 AU			,(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
direct	5638 Sep 18 02:53	17° る 36'13		conjunction	5644 Mar 15 08:45	25° ¥ 52'15	-1°04'56
evening set	5638 Dec 31 03:39	25° る 03'42		minimum elong	5644 Mar 15 08:43	25°) 52'14	1°04'55
Č				max. Earth dist.	5644 Mar 15 08:47	25° ¥ 52'16	10.89633 AU
conjunction	5639 Jan 17 03:10	27° る 06'25	1°00'04	morning rise	5644 Apr 01 01:55	27°) 51'40	
minimum elong	5639 Jan 17 03:11	27° る 06'25	1°00'05	C	5644 Apr 19 23:39	$0^{\circ}\mathbf{Y}$	
max. Earth dist.	5639 Jan 17 00:24	27° る 05'35	10.77193 AU	retrograde	5644 Jul 12 04:19	5° Y 05'13	
morning rise	5639 Feb 02 23:39	29° පි 08'15		opposition	5644 Sep 20 17:07	1° Y 44'50	-1°32'51
	5639 Feb 10 08:06	0° ≈		min. Earth dist.	5644 Sep 20 16:33	1° Y 44'56	8.88809 AU
retrograde	5639 May 14 04:17	6° ≈ 20′28			5644 Oct 15 07:38	30° ₹	
opposition	5639 Jul 22 06:00	3° ≈ 01'45	0°59'10	direct	5644 Nov 29 17:30	28° ¥ 25′16	
min. Earth dist.	5639 Jul 22 08:27	3° ≈ 01'17	8.80037 AU		5645 Jan 12 18:13	0° Y	
	5639 Sep 10 07:47	30°R₹		evening set	5645 Mar 10 10:47	5° Y 34'01	
direct	5639 Sep 30 21:14	29° る 39'23					
	5639 Oct 21 09:08	0° ≈		conjunction	5645 Mar 27 02:55	7° Y 33'22	
evening set	5640 Jan 12 07:49	7° ≈ 01'20		minimum elong	5645 Mar 27 02:53	7° Ƴ 33'22	
				max. Earth dist.	5645 Mar 27 03:47		10.87480 AU
conjunction	5640 Jan 29 05:19	9° ≈ 02'51		morning rise	5645 Apr 12 20:33	9° Ƴ 33'10	
minimum elong	5640 Jan 29 05:20	9° ≈ 02'51		retrograde	5645 Jul 24 13:15	16° Y 50'32	
max. Earth dist.	5640 Jan 29 02:22	9° ≈ 01'57	10.82555 AU	opposition	5645 Oct 03 04:58	13° Y 29′21	
morning rise	5640 Feb 15 00:36	11° ≈ 03'41		min. Earth dist.	5645 Oct 03 03:21	13° Y 29'39	8.85918 AU
	5640 Mar 22 12:32	15° ≈		direct	5645 Dec 11 22:14	10° ℃ 09'56	
retrograde	5640 May 25 07:43	18°≈13'43		evening set	5646 Mar 22 07:15	17° Ƴ 19'27	
,	5640 Aug 01 17:42	15°R≈	0020106		56464 07 02 47	1000010110	1042110
opposition	5640 Aug 02 20:07	14°≈55'03	0°28'06	conjunction	5646 Apr 07 23:47	19° Υ 19'19	
min. Earth dist.	5640 Aug 02 22:05	14°≈54'40	8.84752 AU	minimum elong	5646 Apr 07 23:45	19° Y 19'19	1°43°10 10.83817 AU
direct	5640 Oct 12 13:21 5640 Dec 18 16:34	11°≈33'27 15°≈		max. Earth dist. morning rise	5646 Apr 08 02:08 5646 Apr 24 18:18	19° \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10.8381 / AU
ovening set	5641 Jan 23 07:26	13 ∞ 18°≈50'41		retrograde	5646 Aug 06 03:58	28° Y '41'52	
evening set	3041 Jan 23 07.20	16 ≈3041		opposition	5646 Oct 15 18:14	26 γ 41 32 25°γ 19'48	2°15'25
conjunction	5641 Feb 09 03:19	20°≈51'13	0°09'52	min. Earth dist.	5646 Oct 15 15:34		8.81576 AU
minimum elong	5641 Feb 09 03:19	20°≈51'13	0°09'52	direct	5646 Dec 24 03:01	22°Υ′00'23	6.61370 AC
behind sun begin	5641 Feb 08 21:34	20°≈49'31	0 07 52	evening set	5647 Apr 03 06:54	29°Υ11'46	
behind sun end	5641 Feb 09 09:04	20°≈52'56		evening sec	5647 Apr 10 00:22	0°8	
max. Earth dist.	5641 Feb 09 01:16		10.86606 AU		20.7.11p1 10 00.22	Ÿ O	
morning rise	5641 Feb 25 21:35	22°≈51'17		conjunction	5647 Apr 20 00:22	1° 8 12'30	-1°56'17
5	5641 Jun 03 18:59	0° ∀		minimum elong	5647 Apr 20 00:21	1° 8 12'30	
retrograde	5641 Jun 06 12:39	0° ₩ 00'23		max. Earth dist.	5647 Apr 20 03:20		10.78784 AU
5	5641 Jun 09 06:20	30°R≈		morning rise	5647 May 06 20:28	3° 8 14'04	
desc. node	5641 Jul 01 01:14	29° ≈ 30'59		retrograde	5647 Aug 18 21:39	10° 8 41'29	
opposition	5641 Aug 15 08:29	26° ≈ 41'31	-0°03'50	opposition	5647 Oct 28 09:55	7° 8 18'31	-2°28'43
min. Earth dist.	5641 Aug 15 09:07	26° ≈ 41′24	8.88084 AU	min. Earth dist.	5647 Oct 28 06:51	7° 8 19'06	8.75953 AU
direct	5641 Oct 25 01:05	23° ≈ 20′38		direct	5648 Jan 05 07:43	3° 8 58'54	
	5642 Jan 30 06:53	0° ∀		evening set	5648 Apr 14 10:39	11° 8 13'11	
evening set	5642 Feb 04 03:43	0°) 34′01					
				conjunction	5648 May 01 05:43	13° 8 15'07	-2°04'26

minimum elong	5648 May 01 05:42	13° 8 15'06	2°04'28	minimum elong	5654 Jul 18 17:35	29° © 59'42	0°54'13
max. Earth dist.	5648 May 01 08:26		10.72597 AU	minimum ciong	5654 Jul 18 18:31	0°Ω	0 34 13
max. Lartii dist.	5648 May 15 15:46	15° 8	10.72377 110	max. Earth dist.	5654 Jul 18 19:21		10.28757 AU
morning rise	5648 May 18 04:14	15° 8 18'05		morning rise	5654 Aug 05 14:59	2° Ω 14'49	10.20757 110
retrograde	5648 Aug 30 19:27	22° 8 51'24		retrograde	5654 Nov 19 11:45	10°Ω17'33	
opposition	5648 Nov 09 04:29	19° 8 27'30	-2°35'37	opposition	5655 Jan 26 15:53	6° Ω 49'49	-0°50'00
min. Earth dist.	5648 Nov 09 01:42	· · · · · ·	8.69293 AU	min. Earth dist.	5655 Jan 26 14:43	6°Ω50'03	8.25962 AU
direct	5649 Jan 16 17:00	16° 8 07'29	0.07273710	direct	5655 Apr 03 15:07	3° Ω 24'36	0.20,02110
evening set	5649 Apr 26 19:43	23° 8 25'34		evening set	5655 Jul 15 02:44	11° Ω 15'27	
<i>8</i>	r			<i>8</i>			
conjunction	5649 May 13 17:19	25° 8 29'05	-2°07'06	conjunction	5655 Aug 02 00:18	13° Ω 31'17	-0°26'01
minimum elong	5649 May 13 17:19	25° 8 29'05	2°07'08	minimum elong	5655 Aug 02 00:19	13° Ω 31'17	0°26'01
max. Earth dist.	5649 May 13 20:19	25° 8 30'00	10.65529 AU	max. Earth dist.	5655 Aug 02 01:09	13° Ω 31'33	10.23479 AU
morning rise	5649 May 30 18:53	27° 8 33'47			5655 Aug 13 15:41	15° Ω	
-	5649 Jun 20 21:50	$\Pi^{\circ}0$		morning rise	5655 Aug 20 00:27	15° Ω 47'54	
retrograde	5649 Sep 12 22:52	5° Ⅱ 13'11		retrograde	5655 Dec 03 12:51	23° Ω 52′24	
opposition	5649 Nov 22 02:00	1° Ⅱ 48′23	-2°35'30	opposition	5656 Feb 09 08:03	20° Ω 24'38	-0°13'42
min. Earth dist.	5649 Nov 21 23:10	1° Ⅱ 48'55	8.61896 AU	min. Earth dist.	5656 Feb 09 07:26	20° Ω 24'45	8.21365 AU
	5649 Dec 16 19:01	30° ₹ 8		direct	5656 Apr 16 07:49	16° Ω 58′26	
direct	5650 Jan 29 05:20	28° 8 27'47		asc. node	5656 Jun 27 00:46	21° Ω 13'30	
	5650 Mar 12 11:17	$\Pi^{\circ}0$		evening set	5656 Jul 28 11:53	24° Ω 54'32	
evening set	5650 May 09 10:49	5° Ⅱ 50′27					
				conjunction	5656 Aug 15 12:01	27° Ω 11'39	0°04'00
conjunction	5650 May 26 11:52	7° Ⅱ 55'51	-2°03'54	minimum elong	5656 Aug 15 12:01	27° Ω 11'39	0°04'00
minimum elong	5650 May 26 11:53	7° Ⅱ 55'52	2°03'56	behind sun begin	5656 Aug 15 04:47	27° Ω 09'22	
max. Earth dist.	5650 May 26 15:45	7° Ⅱ 57'03	10.57893 AU	behind sun end	5656 Aug 15 19:14	27° Ω 13′56	
morning rise	5650 Jun 12 17:01	10° Ⅱ 02'32		max. Earth dist.	5656 Aug 15 12:36	27° Ω 11'49	10.19674 AU
retrograde	5650 Sep 26 06:58	17° Ⅱ 47'56		morning rise	5656 Sep 02 13:36	29° Ω 29'14	
opposition	5650 Dec 05 02:54	14° Ⅱ 22'17	-2°28'02		5656 Sep 06 16:35	0° ™	
min. Earth dist.	5650 Dec 04 23:33	14° Ⅱ 22'56	8.54087 AU	retrograde	5656 Dec 16 15:41	7° m 34'07	
direct	5651 Feb 10 21:48	11° II 01'00		opposition	5657 Feb 22 01:59	4° ™ 06'31	0°23'43
evening set	5651 May 22 08:48	18° Ⅱ 28'51		min. Earth dist.	5657 Feb 22 01:25	4° ™ 06'37	8.18429 AU
				direct	5657 Apr 30 03:43	0° m ,39′27	
conjunction	5651 Jun 08 13:50	20° Ⅱ 36′23		evening set	5657 Aug 12 01:42	8° m 39'55	
minimum elong	5651 Jun 08 13:52	20° Ⅱ 36′23	1°54'42				
max. Earth dist.	5651 Jun 08 18:29		10.50033 AU	conjunction	5657 Aug 30 03:01	10° m 57'40	0°33'50
morning rise	5651 Jun 25 22:59	22° Ⅱ 45'12		minimum elong	5657 Aug 30 03:00	10° m 57'40	0°33'49
	5651 Sep 13 03:39	0ංම		max. Earth dist.	5657 Aug 30 03:09	10° m 57'43	10.17657 AU
retrograde	5651 Oct 09 20:15	0°936'15		morning rise	5657 Sep 17 04:34	13° m) 15'33	
	5651 Nov 05 17:00	30° ŖⅡ		retrograde	5657 Dec 30 18:27	21° m)19'18	
opposition	5651 Dec 18 07:18	27° Ⅱ 09'50		opposition	5658 Mar 07 20:50	17° m 52'04	0°59'57
min. Earth dist.	5651 Dec 18 03:28		8.46232 AU	min. Earth dist.	5658 Mar 07 20:38	17° m 52'07	8.17407 AU
direct	5652 Feb 23 18:53	23° Ⅱ 47'44		direct	5658 May 14 02:46	14° m 24'18	
	5652 May 23 08:30	0ංව		evening set	5658 Aug 26 17:54	22° m 27'54	
evening set	5652 Jun 03 14:13	1° 5 21'09			5650 0 12 10 50	0.40 7 4.510.5	1001150
. ,.	5650 1 20 22 26	20520156	1020126	conjunction	5658 Sep 13 18:58	24° m 45'35	1°01'50
conjunction	5652 Jun 20 23:36	3°930'56		minimum elong	5658 Sep 13 18:55	24° m 45'34	1°01'50
minimum elong	5652 Jun 20 23:39	3°930'57		max. Earth dist.	5658 Sep 13 18:23	-•	10.17612 AU
max. Earth dist.	5652 Jun 21 03:56		10.42330 AU	morning rise	5658 Oct 01 19:08	27° Mp 03'04	
morning rise	5652 Jul 08 13:05	5° © 42'00 13° © 37'56		ratra ara da	5658 Oct 26 10:23	0° Ω	
retrograde opposition	5652 Oct 22 14:47 5652 Dec 30 15:07	13 \$37 36 10°\$10'54	1051114	retrograde opposition	5659 Jan 13 18:02 5659 Mar 21 15:53	5° £ 04'14 1° £ 37'35	1°32'44
min. Earth dist.	5652 Dec 30 11:42		8.38713 AU	min. Earth dist.	5659 Mar 21 16:22	1° ⊆ 37'33	8.18398 AU
direct	5653 Mar 07 19:41	6°947'50	8.38/13 AU	min. Earth dist.	5659 Apr 11 10:30	30°RM)	6.16396 AU
evening set	5653 Jun 17 03:12	14°927'03		direct	5659 May 28 05:06	28°M)09'18	
evening set	3033 Juli 17 03.12	14 32/03		direct	5659 Jul 13 08:44	0° ⊽	
conjunction	5653 Jul 04 17:01	16° © 39'04	-1°19'09	evening set	5659 Sep 10 09:59	0 <u>⊶</u> 6° ≏ 14'26	
minimum elong	5653 Jul 04 17:04	16°939'05		evening set	2027 Sep 10 07.39	0 -1420	
max. Earth dist.	5653 Jul 04 17:04 5653 Jul 04 20:10		10.35140 AU	conjunction	5659 Sep 28 09:31	8° ჲ 31'25	1°26'15
morning rise	5653 Jul 22 10:48	18°952'19	10.55170 AU	minimum elong	5659 Sep 28 09:28	8° ⊆ 31'24	
retrograde	5653 Nov 05 12:58	26°952'09		max. Earth dist.	5659 Sep 28 08:00		10.19561 AU
opposition	5654 Jan 13 02:08	23°924'41	-1°23'05	morning rise	5659 Oct 16 07:16	10° Ω 47'52	
min. Earth dist.	5654 Jan 12 23:51	23°925'08	8.31859 AU	retrograde	5660 Jan 27 13:50	18° - 45'07	
direct	5654 Mar 21 01:57	20°900'31	5.5.557.110	opposition	5660 Apr 03 10:01	15° ⊆ 19'14	2°00'04
evening set	5654 Jun 30 23:33	27°5945'37		min. Earth dist.	5660 Apr 03 11:29	15° ⊆ 18'56	8.21338 AU
	,	1001		direct	5660 Jun 10 08:00	13 ⊆ 10 30 11° ⊆ 50'41	22000710
conjunction	5654 Jul 18 17:33	29°959'42	-0°54'13	evening set	5660 Sep 23 23:52	19° £ 55'38	
		_, _,, 12					

aaniumatian	5660 Oat 11 20:54	22° ≏ 11'22	1045120	aaniumatian	5666 Dag 20 17:20	9° る 53'40	1°30'52
conjunction	5660 Oct 11 20:54			conjunction	5666 Dec 30 17:29		
minimum elong	5660 Oct 11 20:51	22° £ 11'21	1°45'38	minimum elong	5666 Dec 30 17:32	9°₹53'41	1°30'55
max. Earth dist.	5660 Oct 11 18:10		10.23377 AU	max. Earth dist.	5666 Dec 30 14:30		10.67594 AU
morning rise	5660 Oct 29 15:22	24° £ 26'18		morning rise	5667 Jan 16 16:36	11° ろ 57'17	
	5660 Dec 19 19:36	0° M		retrograde	5667 Apr 26 17:50	19° る 13'59	
retrograde	5661 Feb 09 05:28	2°M18'29		opposition	5667 Jul 04 07:54	15° る 54'25	1°39'44
	5661 Apr 03 02:47	30°Ŗჲ		min. Earth dist.	5667 Jul 04 09:47	15° る 54'04	8.71395 AU
opposition	5661 Apr 17 02:12	28° ≏ 53'29	2°20'24	direct	5667 Sep 12 21:03	12° る 30'25	
min. Earth dist.	5661 Apr 17 04:15	28° ≏ 53'04	8.26033 AU	evening set	5667 Dec 26 02:34	19° る 59'54	
direct	5661 Jun 24 10:14	25° ≙ 24'55					
	5661 Sep 08 17:17	0° M		conjunction	5668 Jan 12 02:59	22°る03'05	1°10'11
evening set	5661 Oct 08 09:05	3°M27'58		minimum elong	5668 Jan 12 03:01	22° る 03'05	1°10'13
				max. Earth dist.	5668 Jan 12 00:40	22° る 02'22	10.74899 AU
conjunction	5661 Oct 26 03:01	5°M42'03	1°59'00	morning rise	5668 Jan 29 00:15	24° る 05'19	
minimum elong	5661 Oct 26 02:59	5°M42'02	1°59'00		5668 Mar 29 18:43	0° ≈	
max. Earth dist.	5661 Oct 25 23:47	5°M41'01	10.28819 AU	retrograde	5668 May 08 01:41	1° ≈ 18′09	
morning rise	5661 Nov 12 17:45	7°M55'08		Ü	5668 Jun 17 10:07	30°Rる	
8	5662 Jan 26 03:14	15° M ₊		opposition	5668 Jul 16 00:50	27° る 59'07	1°12'17
retrograde	5662 Feb 22 16:07	15°M41'26		min. Earth dist.	5668 Jul 16 01:43	27° る 58'57	8.78212 AU
retrograde	5662 Mar 22 11:04	15°RM		direct	5668 Sep 24 17:07	24° る 36'15	0.70212110
opposition	5662 Apr 30 15:54	12°M17'22	2°32'46	uncet	5668 Dec 19 21:08	0°≈	
min. Earth dist.	*	12°M16'59	8.32187 AU	avanina aat	5669 Jan 06 08:11	0 ∞ 1°≈59'52	
	5662 Apr 30 17:51		8.32187 AU	evening set	3009 Jan 00 08:11	1°≈39'32	
direct	5662 Jul 08 10:59	8°M49'05			5660 I 22 06 20	40 0114.4	0046140
	5662 Oct 07 10:35	15°M		conjunction	5669 Jan 23 06:39	4°≈01'44	0°46'40
evening set	5662 Oct 22 11:37	16°M48'33		minimum elong	5669 Jan 23 06:41	4° ≈ 01'44	0°46'41
				max. Earth dist.	5669 Jan 23 05:39		10.81215 AU
conjunction	5662 Nov 09 02:15	19°M00'45	2°05'47	morning rise	5669 Feb 09 02:19	6° ≈ 02'49	
minimum elong	5662 Nov 09 02:14	19°M00'44	2°05'47	retrograde	5669 May 20 07:26	13° ≈ 12'57	
max. Earth dist.	5662 Nov 08 23:17	18° M 59'48	10.35559 AU	opposition	5669 Jul 28 15:18	9° ≈ 54'17	0°42'05
morning rise	5662 Nov 26 13:08	21°M11'48		min. Earth dist.	5669 Jul 28 15:50	9° ≈ 54'11	8.83920 AU
retrograde	5663 Mar 07 21:04	28°M51'47		direct	5669 Oct 07 08:49	6° ≈ 32'29	
opposition	5663 May 14 02:22	25°M28'41	2°36'49	evening set	5670 Jan 18 09:03	13° ≈ 50'58	
min. Earth dist.	5663 May 14 04:01	25°M28'22	8.39436 AU		5670 Jan 28 01:23	15° ≈	
direct	5663 Jul 22 08:29	22°M00'55					
evening set	5663 Nov 05 06:41	29°M55'30		conjunction	5670 Feb 04 05:40	15° ≈ 51'44	0°21'25
Ç	5663 Nov 05 21:23	0° ∡ ¹		minimum elong	5670 Feb 04 05:41	15° ≈ 51'45	0°21'25
				max. Earth dist.	5670 Feb 04 04:59		10.86294 AU
conjunction	5663 Nov 22 18:03	2° × 105'43	2°05'53	morning rise	5670 Feb 21 00:12	17°≈51'56	10.0027.110
minimum elong	5663 Nov 22 18:04	2°×705'43	2°05'54	retrograde	5670 Jun 01 12:04	25°≈00'31	
max. Earth dist.	5663 Nov 22 15:33		10.43213 AU	opposition	5670 Aug 10 03:44	21°≈42'02	0°10'27
morning rise	5663 Dec 10 01:14	4° × 14'42	10.43213 AU	min. Earth dist.	5670 Aug 10 03:44 5670 Aug 10 04:22	21°≈42'02 21°≈41'54	8.88303 AU
					Č		6.66303 AU
retrograde	5664 Mar 19 22:04	11° х 48'13	2022145	direct	5670 Oct 19 19:38	18°≈21'10	
opposition	5664 May 26 09:10	8°×726'06	2°32'45	desc. node	5670 Dec 11 17:12	20°≈33'03	
min. Earth dist.	5664 May 26 10:53	8° × 25'46	8.47380 AU	evening set	5671 Jan 30 06:16	25° ≈ 35'26	
direct	5664 Aug 04 00:27	4° ₹ 59'03					
evening set	5664 Nov 17 17:36	12° ∡ ⁴47'48		conjunction	5671 Feb 16 01:15	27° ≈ 35′21	
				minimum elong	5671 Feb 16 01:14	27° ≈ 35′21	0°04'38
conjunction	5664 Dec 05 01:48	14° ₹ 56'04	1°59'39	behind sun begin	5671 Feb 15 18:22	27° ≈ 33'19	
minimum elong	5664 Dec 05 01:49	14° ₹ 56'04	1°59'40	behind sun end	5671 Feb 16 08:05	27° ≈ 37'23	
max. Earth dist.	5664 Dec 04 23:29	14° ₹ 55'21	10.51370 AU	max. Earth dist.	5671 Feb 16 00:17	27° ≈ 35′05	10.89943 AU
morning rise	5664 Dec 22 05:43	17° ∡ ¹03'04		morning rise	5671 Mar 04 19:03	29° ≈ 34'55	
retrograde	5665 Apr 01 17:52	24° ⋌ ³30′20			5671 Mar 08 09:03	0° ∀	
opposition	5665 Jun 08 12:26	21° ₹ 09′10	2°21'11	retrograde	5671 Jun 13 14:14	6°) 43′12	
min. Earth dist.	5665 Jun 08 14:41	21° ₹ 08'44	8.55616 AU	opposition	5671 Aug 22 14:46	3°) €24'38	-0°21'21
direct	5665 Aug 17 11:32	17° ∡ ¹43'02		min. Earth dist.	5671 Aug 22 15:13	3°) €24'33	8.91183 AU
evening set	5665 Nov 30 20:07	25° ∡ ¹25'23		direct	5671 Nov 01 04:20	0°) €04'35	
Č				evening set	5672 Feb 11 01:05	7°) €15'41	
conjunction	5665 Dec 18 01:20	27° х 31'46	1°47'42			,,,1	
minimum elong	5665 Dec 18 01:22	27° х 31'47	1°47'44	conjunction	5672 Feb 27 18:44	9° ₩ 14'59	-0°30'14
max. Earth dist.	5665 Dec 17 22:34		10.59628 AU	minimum elong	5672 Feb 27 18:43	9° X 14'59	
morning rise	5666 Jan 04 02:36	27 × 30 33 29° × 37'00	10.57020 AU	max. Earth dist.	5672 Feb 27 18:27		10.92009 AU
morning rise							10.74007 AU
, ,	5666 Jan 07 07:15	0°る		morning rise	5672 Mar 15 11:58	11°) (14'10	
retrograde	5666 Apr 14 07:11	6°る58'34	2002100	retrograde	5672 Jun 24 18:35	18°) €23'27	0050100
opposition	5666 Jun 21 12:02	3°₹38'17	2°03'08	opposition	5672 Sep 03 01:03	15°) €04'34	
min. Earth dist.	5666 Jun 21 14:24	3° る 37'49	8.63747 AU	min. Earth dist.	5672 Sep 03 00:24	15°) €04'41	8.92436 AU
direct	5666 Aug 30 19:00	0° ろ 13'10		direct	5672 Nov 12 11:44	11°) 45'09	
evening set	5666 Dec 13 14:53	7° る 48'59		evening set	5673 Feb 21 18:45	18°) ₹ 54'08	

conjunction	5673 Mar 10 11:32	20° ¥ 53′09	-0°54'33		5679 Apr 30 10:59	Π $^{\circ}0$	
minimum elong	5673 Mar 10 11:30	20° ¥ 53′08	0°54'33	evening set	5679 May 04 01:34	0° Ⅲ 25'55	
max. Earth dist.	5673 Mar 10 12:32	20° ¥ 53′27	10.92398 AU				
morning rise	5673 Mar 27 04:26	22° ¥ 52'14		conjunction	5679 May 21 00:52	2° Ⅲ 30′22	-2°06'02
Č	5673 Jun 28 10:50	$0^{\circ}\Upsilon$		minimum elong	5679 May 21 00:52	2° ∏ 30′22	2°06'04
retrograde	5673 Jul 07 01:19	0° Υ 03'40		max. Earth dist.	5679 May 21 02:50		10.61705 AU
retrograde	5673 Jul 15 15:38	30°R) €		morning rise	5679 Jun 07 04:10	4° I I36'03	10.01703710
.,.		26° ¥ 44'15	1020146	-		12° Ⅱ 18'34	
opposition	5673 Sep 15 11:19			retrograde	5679 Sep 20 14:40		2022110
min. Earth dist.	5673 Sep 15 09:51		8.91991 AU	opposition	5679 Nov 29 12:58	8° ∏ 53'15	
direct	5673 Nov 24 14:59	23° ∺ 25'17		min. Earth dist.	5679 Nov 29 10:55		8.57642 AU
	5674 Feb 28 18:04	0° Υ		direct	5680 Feb 05 11:02	5° Ⅱ 32'11	
evening set	5674 Mar 05 12:32	0° Ƴ 33'17		evening set	5680 May 15 20:01	12° Ⅱ 57'30	
conjunction	5674 Mar 22 04:45	2° Ƴ 32'18	-1°16'40	conjunction	5680 Jun 01 22:59	15° Ⅱ 04'02	-1°59'36
minimum elong	5674 Mar 22 04:43	2° Y 32'17	1°16'40	minimum elong	5680 Jun 01 23:01	15° 耳 04′02	1°59'37
max. Earth dist.	5674 Mar 22 06:07	2° Y 32'42	10.91051 AU	max. Earth dist.	5680 Jun 02 00:48	15° Ⅱ 04'35	10.53291 AU
morning rise	5674 Apr 07 21:52	4° Υ 31'37		morning rise	5680 Jun 19 06:21	17° Ⅱ 11'53	
retrograde	5674 Jul 19 08:50	11° Ƴ 46'19		retrograde	5680 Oct 03 00:15	25° Ⅱ 00'24	
opposition	5674 Sep 27 22:15	8° Υ 26'12	1946'00	opposition	5680 Dec 11 15:49	21° I I34'04	2°20'52
**	*		8.89793 AU	**			8.49159 AU
min. Earth dist.	5674 Sep 27 20:56		6.69793 AU	min. Earth dist.	5680 Dec 11 14:06		8.49139 AU
direct	5674 Dec 06 18:17	5° Y 07'26		direct	5681 Feb 17 06:56	18° Ⅱ 11'59	
evening set	5675 Mar 17 07:49	12° Y 15'44		evening set	5681 May 28 21:48	25° Ⅱ 42'55	
		• •				-	
conjunction	5675 Apr 02 23:53	14° Y 15′04		conjunction	5681 Jun 15 05:06	27° ∏ 51'44	
minimum elong	5675 Apr 02 23:51	14° Y 15′03		minimum elong	5681 Jun 15 05:09	27° Ⅱ 51'45	1°47'13
max. Earth dist.	5675 Apr 03 00:21		10.87948 AU	max. Earth dist.	5681 Jun 15 07:14	27° ∏ 52'24	10.44883 AU
morning rise	5675 Apr 19 17:48	16° Ƴ 14'58		morning rise	5681 Jul 02 16:45	0° © 01'52	
retrograde	5675 Jul 31 20:18	23° Y 33'59			5681 Jul 02 10:38	0 \circ \odot	
opposition	5675 Oct 10 10:29	20° Y 13′02	-2°07'16	retrograde	5681 Oct 16 15:41	7° © 55'51	
min. Earth dist.	5675 Oct 10 09:46	20° Ƴ 13'10	8.85864 AU	opposition	5681 Dec 24 21:56	4° © 28'39	-2°02'08
direct	5675 Dec 18 22:26	16° Ƴ 54'14		min. Earth dist.	5681 Dec 24 20:14		8.40875 AU
evening set	5676 Mar 28 05:37	24° Ƴ ′04'02		direct	5682 Mar 02 06:35	1°505'28	
e venning see	20 05.57	2 0. 02		evening set	5682 Jun 11 07:08	8°542'22	
conjunction	5676 Apr 13 22:19	26° Y ′04′06	-1°50'46	evening sec	0002 buil 11 07.00	0 0 .2 22	
minimum elong	5676 Apr 13 22:18	26° Υ '04'06		conjunction	5682 Jun 28 19:04	10° © 53'31	1020100
max. Earth dist.	•		10.83190 AU	minimum elong	5682 Jun 28 19:07	10°953'32	
	5676 Apr 13 22:56		10.83190 AU	2			
morning rise	5676 Apr 30 17:36	28° Y 04'57		max. Earth dist.	5682 Jun 28 21:51		10.36880 AU
	5676 May 17 11:08	0° 8		morning rise	5682 Jul 16 10:57	13° © 05'56	
retrograde	5676 Aug 12 10:47	5° 8 29'12		retrograde	5682 Oct 30 11:46	21° © 04'36	
opposition	5676 Oct 22 00:55	2° 8 07'16	-2°23'13	opposition	5683 Jan 07 07:34	17° © 36'43	-1°36'43
min. Earth dist.	5676 Oct 21 23:50	2° 8 07'28	8.80384 AU	min. Earth dist.	5683 Jan 07 05:23	17° © 37'09	8.33196 AU
	5676 Nov 21 12:39	30° ₹Ƴ		direct	5683 Mar 15 10:54	14°9512'26	
direct	5676 Dec 30 03:24	28° Ƴ 48'13		evening set	5683 Jun 25 00:03	21° © 55'24	
	5677 Feb 05 20:00	$_{0\circ}$ 8					
evening set	5677 Apr 09 07:01	6° 8 00'36		conjunction	5683 Jul 12 16:24	24°908'47	-1°06'07
•	•			minimum elong	5683 Jul 12 16:26	24°908'48	1°06'08
conjunction	5677 Apr 26 01:14	8° 8 01'46	-2°01'15	max. Earth dist.	5683 Jul 12 19:14		10.29685 AU
minimum elong	5677 Apr 26 01:13	8° 8 01'46		morning rise	5683 Jul 30 12:11	26°523'18	
max. Earth dist.	5677 Apr 26 02:56		10.77018 AU	morning rise	5683 Aug 30 13:50	0° Ω	
		10° 8 03'54	10.77010 AU	ratra ara da	5683 Nov 13 11:05	4° Ω 25'37	
morning rise	5677 May 12 22:27			retrograde			1005140
, ,	5677 Jun 29 00:56	15° 8		opposition	5684 Jan 20 20:25	0° Ω 57'16	
retrograde	5677 Aug 25 06:42	17° 8 34'03		min. Earth dist.	5684 Jan 20 18:11		8.26529 AU
	5677 Oct 23 21:39	15°R 8			5684 Feb 01 19:59	30° ₹ 5	
opposition	5677 Nov 03 17:51	14° 8 10'58		direct	5684 Mar 27 20:30	27°531'53	
min. Earth dist.	5677 Nov 03 15:55	14° 8 11'20	8.73631 AU		5684 May 20 03:28	$0^{\circ}\Omega$	
direct	5678 Jan 11 12:03	10° 8 51'28		evening set	5684 Jul 08 00:28	5° Ω 20'49	
	5678 Mar 24 19:42	15° 8					
evening set	5678 Apr 21 13:25	18° 8 07'22		conjunction	5684 Jul 25 20:40	7° Ω 36′09	-0°39'12
				minimum elong	5684 Jul 25 20:42	7° Ω 36′10	0°39'13
conjunction	5678 May 08 09:51	20° 8 10'01	-2°06'30	max. Earth dist.	5684 Jul 25 22:51	7° Ω 36'51	10.23691 AU
minimum elong	5678 May 08 09:51	20° 8 10'01		morning rise	5684 Aug 12 19:42	9° £ 52′24	
max. Earth dist.	5678 May 08 12:09		10.69739 AU	5	5684 Sep 27 22:04	15° Ω	
morning rise	5678 May 25 09:43	22° 8 13'46	, , 110	retrograde	5684 Nov 26 13:07	17° Ω 57'04	
•	5678 Sep 07 08:35	29° 8 50'04		ronograde	5685 Jan 27 00:43	17 8ℓ 3704 15°R Ω	
retrograde	=		2026110	annasition			0020122
opposition	5678 Nov 16 13:39	26° 8 25'51		opposition	5685 Feb 02 11:52	14° £ 28'34	
min. Earth dist.	5678 Nov 16 11:19		8.65929 AU	min. Earth dist.	5685 Feb 02 10:13		8.21252 AU
direct	5679 Jan 23 21:40	23° 8 05'40		direct	5685 Apr 10 10:15	11° Ω 02'08	

	5685 Jun 18 08:47	15° Ω		min. Earth dist.	5691 Apr 25 00:48	6°M34'28	8.29066 AU
evening set	5685 Jul 22 07:29	13° Ω 56'37		direct	5691 Jul 02 12:06	3°M06'30	8.29000 AU
evening set	3003 Jul 22 07.27	10 863037		evening set	5691 Oct 16 14:20	11°M08'16	
conjunction	5685 Aug 09 06:38	21° Ω 13'28	-0°09'51	evening set	3071 001 10 14.20	11 1100010	
minimum elong	5685 Aug 09 06:38	21°Ω13'28	0°09'52	conjunction	5691 Nov 03 06:34	13°M21'26	2°03'25
behind sun begin	5685 Aug 09 00:43	21° Ω 11'36	0 0,02	minimum elong	5691 Nov 03 06:33	13°M21'25	
behind sun end	5685 Aug 09 12:32	21°Ω15'20		max. Earth dist.	5691 Nov 03 05:04		10.32393 AU
max. Earth dist.	5685 Aug 09 07:35		10.19238 AU	man. Barun dige.	5691 Nov 16 07:28	15°M	10.52575110
morning rise	5685 Aug 27 07:49	23° Ω 30'57		morning rise	5691 Nov 20 19:08	15°M33'30	
3	5685 Oct 28 15:53	0° m/		retrograde	5692 Mar 01 11:23	23°M16'51	
retrograde	5685 Dec 10 16:10	1° m 36'33		opposition	5692 May 07 12:40	19° ™ 53'42	2°35'50
asc. node	5685 Dec 10 17:21	1° m) 36'33		min. Earth dist.	5692 May 07 14:14	19°M53'24	8.36253 AU
	5686 Jan 23 02:16	30°R Ω		direct	5692 Jul 15 12:00	16° ™ 26′06	
opposition	5686 Feb 16 05:31	28° Ω 08'11	0°06'42	evening set	5692 Oct 29 13:48	24°M23'28	
min. Earth dist.	5686 Feb 16 04:49	28° Ω 08'19	8.17675 AU	Ü			
direct	5686 Apr 24 05:09	24° Ω 40'51		conjunction	5692 Nov 16 02:33	26°M34'37	2°06'29
	5686 Jul 14 15:40	0° m)		minimum elong	5692 Nov 16 02:32	26° ™ 34'37	2°06'29
evening set	5686 Aug 05 19:36	2° m/40'07		max. Earth dist.	5692 Nov 16 00:05		10.40047 AU
S	C	•		morning rise	5692 Dec 03 11:25	28° M 44'34	
conjunction	5686 Aug 23 20:27	4° m 57'51	0°20'22	Č	5692 Dec 13 20:53	0° ∡ ¹	
minimum elong	5686 Aug 23 20:26	4° m 57'51	0°20'21	retrograde	5693 Mar 14 14:23	6° ∡ 721'19	
max. Earth dist.	5686 Aug 23 20:31	4° m 57'53	10.16594 AU	opposition	5693 May 20 21:46	2° ∡ 759'16	2°35'17
morning rise	5686 Sep 10 22:22	7° m 15'55		min. Earth dist.	5693 May 20 23:45	2° ∡ ¹58'52	8.44266 AU
retrograde	5686 Dec 24 18:26	15° m) 21'02			5693 Jul 05 23:27	30°RM₊	
opposition	5687 Mar 02 00:29	11° m 53'03	0°43'47	direct	5693 Jul 29 07:36	29°M32'22	
min. Earth dist.	5687 Mar 02 00:15	11° m 53'06	8.16027 AU		5693 Aug 21 13:32	0° ∡ ¹	
direct	5687 May 08 04:33	8° m/25'03		evening set	5693 Nov 12 05:03	7° ∡ ¹24'06	
evening set	5687 Aug 20 11:08	16° m 28'01		Ü			
C	C			conjunction	5693 Nov 29 14:30	9° ∡ ³33'14	2°02'59
conjunction	5687 Sep 07 12:26	18° M 45'59	0°49'27	minimum elong	5693 Nov 29 14:31	9° ∡ 33'15	2°03'00
minimum elong	5687 Sep 07 12:24	18° m) 45'58	0°49'26	max. Earth dist.	5693 Nov 29 11:28	9° ∡ ³32'18	10.48303 AU
max. Earth dist.	5687 Sep 07 12:10	18° m 45'54	10.15942 AU	morning rise	5693 Dec 16 19:59	11° ∡ ′41′08	
morning rise	5687 Sep 25 13:39	21° m 03'56		retrograde	5694 Mar 27 12:01	19° ∡ 11'21	
retrograde	5688 Jan 07 18:32	29° m 07'05		opposition	5694 Jun 03 03:04	15° ∡ 50′16	2°26'56
opposition	5688 Mar 14 19:49	25° m 39'45	1°18'26	min. Earth dist.	5694 Jun 03 04:52	15° ∡ ¹49'55	8.52610 AU
min. Earth dist.	5688 Mar 14 19:39	25° m 39'47	8.16425 AU	direct	5694 Aug 11 22:32	12° ∡ ¹24'13	
direct	5688 May 21 06:36	22° m 11'20		evening set	5694 Nov 25 11:38	20° ∡ ¹09'38	
	5688 Aug 31 22:59	0∘ ⊽		Č			
evening set	5688 Sep 03 03:56	0° ჲ 16'33		conjunction	5694 Dec 12 18:11	22° ∡ 16'51	1°53'27
C	•			minimum elong	5694 Dec 12 18:13	22° ∡ 16'51	1°53'29
conjunction	5688 Sep 21 04:25	2° ≏ 34'06	1°15'42	max. Earth dist.	5694 Dec 12 15:19	22° ∡ 15'58	10.56638 AU
minimum elong	5688 Sep 21 04:22	2° £ 34'05	1°15'42	morning rise	5694 Dec 29 20:41	24° ∡ ¹22'51	
max. Earth dist.	5688 Sep 21 04:03	2° ഫ 33'59	10.17333 AU	C	5695 Feb 22 14:10	6°0	
morning rise	5688 Oct 09 03:35	4° £ 51'16		retrograde	5695 Apr 09 04:49	1° る 47'05	
retrograde	5689 Jan 20 17:07	12° ♀ 51'05		C	5695 May 26 07:23	30°₽ ⋌	
opposition	5689 Mar 28 14:47	9° £ 24'37	1°48'27	opposition	5695 Jun 16 04:33	28° ∡ ¹26'52	2°11'35
min. Earth dist.	5689 Mar 28 14:34	9° £ 24'40	8.18845 AU	min. Earth dist.	5695 Jun 16 06:29	28° ∡ ¹26'30	8.60767 AU
direct	5689 Jun 04 08:35	5° ≏ 56'03		direct	5695 Aug 25 08:19	25° ∡ *01'46	
evening set	5689 Sep 17 19:38	14° ♀ 01'52			5695 Nov 15 01:55	0°る	
				evening set	5695 Dec 08 10:21	2° る 40'43	
conjunction	5689 Oct 05 18:04	16° ≏ 18′24	1°37'31	-			
minimum elong	5689 Oct 05 18:01	16° ≏ 18′23	1°37'31	conjunction	5695 Dec 25 14:17	4° පි 46'11	1°38'38
max. Earth dist.	5689 Oct 05 17:44	16° ≏ 18'17	10.20683 AU	minimum elong	5695 Dec 25 14:19	4° පි 46'11	1°38'40
morning rise	5689 Oct 23 14:06	18° ≏ 34'12		max. Earth dist.	5695 Dec 25 11:27	4° る 45'19	10.64575 AU
retrograde	5690 Feb 03 12:49	26° ≏ 29'27		morning rise	5696 Jan 11 14:13	6° ප 50'30	
opposition	5690 Apr 11 08:28	23° ჲ 04'01	2°12'05	retrograde	5696 Apr 20 18:56	14° る 09'34	
min. Earth dist.	5690 Apr 11 08:28	23° ჲ 04'01	8.23141 AU	opposition	5696 Jun 28 02:31	10°る50'07	1°50'22
direct	5690 Jun 18 10:41	19° ჲ 35'34		min. Earth dist.	5696 Jun 28 05:00	10° る 49'38	8.68351 AU
evening set	5690 Oct 02 07:48	27° ≏ 40'13		direct	5696 Sep 06 11:54	7° පි 26'00	
-				evening set	5696 Dec 20 01:48	14° る 58'39	
conjunction	5690 Oct 20 03:22	29° ≏ 55'13	1°53'40	- C			
minimum elong	5690 Oct 20 03:20	29° ≏ 55'13	1°53'41	conjunction	5697 Jan 06 03:16	17° る 02'34	1°19'30
max. Earth dist.	5690 Oct 20 02:46		10.25804 AU	minimum elong	5697 Jan 06 03:18	17° る 02'34	1°19'31
	5690 Oct 20 18:23	0°M		max. Earth dist.	5697 Jan 06 00:04		10.71806 AU
morning rise	5690 Nov 06 19:43	2°ML09'17		morning rise	5697 Jan 23 01:13	19° る 05'27	
retrograde	5691 Feb 17 03:24	9°M58'56		retrograde	5697 May 03 03:59	26° る 20'19	
opposition	5691 Apr 25 00:01	6°M34'38	2°28'05	opposition	5697 Jul 10 21:33	23° る 01'24	1°24'30
11	r			11	=		

min Earth diat	5697 Jul 11 00:32	220	8.75116 AU	morning rise	5702 Amr 04 00:10	29°) 51'32	
min. Earth dist. direct	5697 Sep 19 10:38	23 00030 19° る 38'14	8.73110 AU	morning rise	5703 Apr 04 08:18 5703 Apr 05 13:12	29 π 3132	
evening set	5698 Jan 01 10:40	19 336 14 27° る 04'56		retrograde	5703 Apr 05 13:12 5703 Jul 15 11:27	7° Υ 05'41	
evening set	3096 Jan 01 10.40	27 00430		opposition	5703 Sep 24 00:54	3° Υ 45'11	1026/02
agniumation	5698 Jan 18 09:56	29° る 07'29	0°57'03	min. Earth dist.	5703 Sep 24 00:34 5703 Sep 24 00:20	3° Υ 45'17	
conjunction	5698 Jan 18 09:57	29 30729 29° る 07'29	0°57'04	direct	5703 Dec 03 01:25	0°Υ25'35	6.661/1 AU
minimum elong			10.78101 AU			0 1 23 33 7° Υ 34'43	
max. Earth dist.	5698 Jan 18 06:15 5698 Jan 25 15:27	29 000 22 0°≈	10.78101 AU	evening set	5704 Mar 12 17:28	/ 13443	
mamina risa	5698 Feb 04 06:24	0 ≈ 1°≈09'11		agniumation	5704 Mar 29 09:44	9° Ƴ 34'11	1020111
morning rise				conjunction		9 γ 3411 9° γ 34'11	
retrograde	5698 May 15 09:39	8°≈20'57	0055110	minimum elong	5704 Mar 29 09:42		1°28'11 10.86694 AU
opposition	5698 Jul 23 13:47	5°≈02'17	0°55'18	max. Earth dist.	5704 Mar 29 11:01		10.86694 AU
min. Earth dist.	5698 Jul 23 16:24	5°≈01'48	8.80836 AU	morning rise	5704 Apr 15 03:20	11° Υ 34'06	
direct	5698 Oct 02 06:22	1°≈40'01		retrograde	5704 Jul 26 22:54	18° Y 52'13	1050100
evening set	5699 Jan 13 14:14	9° ≈ 01'22		opposition	5704 Oct 05 13:08	15° Y 30'54	
	5000 X 20 11 10	110 00116	0000100	min. Earth dist.	5704 Oct 05 11:11	15° Υ 31'15	8.85003 AU
conjunction	5699 Jan 30 11:40	11°≈02'46	0°32'22	direct	5704 Dec 14 05:50	12°Υ11'26	
minimum elong	5699 Jan 30 11:41	11°≈02'46	0°32'23	evening set	5705 Mar 24 14:32	19° Ƴ 21'29	
max. Earth dist.	5699 Jan 30 08:38		10.83236 AU				
morning rise	5699 Feb 16 06:54	13° ≈ 03'30		conjunction	5705 Apr 10 07:08	21°Υ21'30	
	5699 Mar 05 06:27	15° ≈		minimum elong	5705 Apr 10 07:06	21° Υ 21'29	
retrograde	5699 May 27 15:27	20° ≈ 13′18		max. Earth dist.	5705 Apr 10 09:17		10.82772 AU
opposition	5699 Aug 05 03:29	16° ≈ 54'39	0°24'05	morning rise	5705 Apr 27 01:45	23° Y 22'11	
min. Earth dist.	5699 Aug 05 05:08	16° ≈ 54'20	8.85298 AU		5705 Jul 09 04:22	$0^{\circ}S$	
	5699 Sep 01 06:31	15°R ≈		retrograde	5705 Aug 08 13:27	0° 8 45'06	
direct	5699 Oct 14 21:18	13° ≈ 33'11			5705 Sep 08 07:06	30° ₹Ƴ	
	5699 Nov 26 08:31	15° ≈		opposition	5705 Oct 18 03:04	27° Y 22'54	-2°17'24
evening set	5700 Jan 25 13:33	20° ≈ 49'57		min. Earth dist.	5705 Oct 18 00:41	27° Ƴ 23'21	8.80423 AU
				direct	5705 Dec 26 09:14	24° Ƴ 03′23	
conjunction	5700 Feb 11 09:26	22° ≈ 50′27	0°06'35		5706 Mar 25 19:46	9° 8	
minimum elong	5700 Feb 11 09:26	22° ≈ 50′27	0°06'35	evening set	5706 Apr 05 14:51	1° 8 15'28	
behind sun begin	5700 Feb 11 02:51	22° ≈ 48′29					
behind sun end	5700 Feb 11 16:01	22° ≈ 52'24		conjunction	5706 Apr 22 08:24	3° 8 16'24	-1°57'33
max. Earth dist.	5700 Feb 11 07:43	22° ≈ 49'57	10.87010 AU	minimum elong	5706 Apr 22 08:22	3° 8 16'23	1°57'35
morning rise	5700 Feb 28 03:34	24° ≈ 50′27		max. Earth dist.	5706 Apr 22 10:27	3° 8 17'01	10.77528 AU
	5700 Apr 20 04:23	0°) €		morning rise	5706 May 09 04:49	5° 8 18'11	
desc. node	5700 May 16 15:01	1°) 32′30		retrograde	5706 Aug 21 07:16	12° 8 46'36	
retrograde	5700 Jun 08 19:40	1°) 59'30		opposition	5706 Oct 30 19:23	9° 8 23'29	-2°29'55
	5700 Jul 30 10:59	30° Ŗ ≈		min. Earth dist.	5706 Oct 30 17:06	9° 8 23'55	8.74608 AU
opposition	5700 Aug 17 15:45	28° ≈ 40'39	-0°07'53	direct	5707 Jan 07 16:33	6° 8 03'42	
min. Earth dist.	5700 Aug 17 16:29	28° ≈ 40'31	8.88338 AU	evening set	5707 Apr 17 19:27	13° 8 18'50	
direct	5700 Oct 27 07:14	25°≈19'52		•	5707 May 01 17:52	15° 8	
	5701 Jan 14 15:09	0° ∀			•		
evening set	5701 Feb 06 09:48	2° ℋ 33'02		conjunction	5707 May 04 14:45	15° 8 21'01	-2°05'02
-				minimum elong	5707 May 04 14:44	15° 8 21'01	2°05'04
conjunction	5701 Feb 23 04:13	4°) 32'49	-0°19'27	max. Earth dist.	5707 May 04 17:00	15° 8 21'43	10.71172 AU
minimum elong	5701 Feb 23 04:12	4°) 32'49	0°19'27	morning rise	5707 May 21 13:36	17° 8 24'16	
max. Earth dist.	5701 Feb 23 03:23	4°) 32'35	10.89291 AU	retrograde	5707 Sep 03 06:20	24° 8 58'38	
morning rise	5701 Mar 11 21:39	6° ℋ 32'22		opposition	5707 Nov 12 14:31	21° 8 34'34	-2°35'55
retrograde	5701 Jun 21 00:13	13°) 41′56		min. Earth dist.	5707 Nov 12 12:06	21° 8 35'02	8.67802 AU
opposition	5701 Aug 30 03:03	10° ∺ 22'42	-0°39'20	direct	5708 Jan 20 02:09	18° 8 14'23	
min. Earth dist.	5701 Aug 30 03:39	10°) 22'35	8.89857 AU	evening set	5708 Apr 29 05:21	25° 8 33'25	
direct	5701 Nov 08 14:54	7°) 02'27		C	1		
evening set	5702 Feb 18 04:27	14° ℋ 13'06		conjunction	5708 May 16 03:23	27° 8 37'13	-2°06'57
Č				minimum elong	5708 May 16 03:23	27° 8 37'13	
conjunction	5702 Mar 06 21:37	16° ℋ 12'28	-0°44'30	max. Earth dist.	5708 May 16 06:51		10.63985 AU
minimum elong	5702 Mar 06 21:36	16°) 12′28		morning rise	5708 Jun 02 05:15	29° 8 42'13	
max. Earth dist.	5702 Mar 06 20:40		10.90008 AU	5 24	5708 Jun 04 16:37	0°II	
morning rise	5702 Mar 23 14:49	18°) 11'51		retrograde	5708 Sep 15 10:17	7° Ⅱ 22'44	
retrograde	5702 Jul 03 05:02	25°) 23'06		opposition	5708 Nov 24 12:49	3° I 57'44	-2°34'52
opposition	5702 Sep 11 13:46	22°) (03'19	-1°09'06	min. Earth dist.	5708 Nov 24 09:33	3° П 58'21	8.60314 AU
min. Earth dist.	5702 Sep 11 13:40		8.89806 AU	direct	5709 Jan 31 15:16	0° П 36'59	
direct	5702 Nov 20 19:53	18°) (43'27	500 110	evening set	5709 May 11 21:27	8° ∏ 00'38	
evening set	5702 Nov 20 19:35 5703 Mar 01 22:36	25° H 52'47		oronnig set	5,05 May 11 21.2/	5 11 00 36	
J. J	5,05ui 01 22.50	/\J_¬/		conjunction	5709 May 28 22:59	10° Ⅱ 06'23	-2°02'57
conjunction	5703 Mar 18 15:03	27° ¥ 52'02	-1°07'43	minimum elong	5709 May 28 22:39	10° I I06'23	
minimum elong	5703 Mar 18 15:01	27° X 52'02		max. Earth dist.	5709 May 29 03:24		10.56290 AU
max. Earth dist.	5703 Mar 18 14:44		10.89137 AU	morning rise	5709 Jun 15 04:30	10 H 07 43	10.50270 AU
man. Lui ui uist.	5,05 Mai 10 17.77	2, 7(313)	10.0713 / AU	morning 1150	5,0,5um 15 07.50	12 11 12 24	

ratragrada	5709 Sep 28 19:46	19° Ⅱ 59'54			5715 Aug 22 16:18	0° m	
retrograde	-		2927124		e		
opposition	5709 Dec 07 14:30	16° Ⅲ 34'03		morning rise	5715 Sep 06 06:06	1° m 50'51	
min. Earth dist.	5709 Dec 07 10:37	16° Ⅱ 34'49	8.52480 AU	retrograde	5715 Dec 20 07:52	9° TQ 55'36	0020142
direct	5710 Feb 13 08:45	13° Ⅱ 12'36		opposition	5716 Feb 25 16:41	6° Mp 28'01	0°28'42
evening set	5710 May 24 20:39	20° Ⅱ 41'28		min. Earth dist.	5716 Feb 25 15:41	6° Mp 28'13	8.18381 AU
		🗕		direct	5716 May 02 18:28	3° Mp 00'54	
conjunction	5710 Jun 11 02:08	22° ∏ 49'22 —		evening set	5716 Aug 14 18:23	11° m 01'36	
minimum elong	5710 Jun 11 02:11	22° ∏ 49'23					
max. Earth dist.	5710 Jun 11 06:35		10.48448 AU	conjunction	5716 Sep 01 19:38	13° m 19'19	0°37'43
morning rise	5710 Jun 28 11:48	24° Ⅱ 58'34		minimum elong	5716 Sep 01 19:36	13° m 19'18	0°37'42
	5710 Aug 13 19:43	0		max. Earth dist.	5716 Sep 01 19:52	13° m 19'23	10.17761 AU
retrograde	5710 Oct 12 11:13	2° © 50'35		morning rise	5716 Sep 19 21:03	15° Mp 37′08	
	5710 Dec 13 04:15	30°R Ⅱ		retrograde	5717 Jan 02 09:25	23° Mp 40'33	
opposition	5710 Dec 20 19:38	29° Ⅲ 24′02	-2°10'33	opposition	5717 Mar 10 11:32	20° Mp 13'24	1°04'33
min. Earth dist.	5710 Dec 20 15:50	29° Ⅲ 24'47	8.44682 AU	min. Earth dist.	5717 Mar 10 11:33	20° Mp 13′24	8.17661 AU
direct	5711 Feb 26 05:02	26° Ⅱ 01'44		direct	5717 May 16 18:25	16° Mp 45'36	
	5711 May 06 16:19	0 \circ \odot		evening set	5717 Aug 29 10:39	24° Mp49'16	
evening set	5711 Jun 07 03:12	3°536'13					
				conjunction	5717 Sep 16 11:27	27° m 06'50	1°05'18
conjunction	5711 Jun 24 13:01	5° © 46'21	-1°37'05	minimum elong	5717 Sep 16 11:24	27° m 06'49	1°05'18
minimum elong	5711 Jun 24 13:04	5° © 46'21	1°37'06	max. Earth dist.	5717 Sep 16 10:22	27° m 06'29	10.17999 AU
max. Earth dist.	5711 Jun 24 16:44	5°547'31		morning rise	5717 Oct 04 11:26	29° m 24'10	
morning rise	5711 Jul 12 03:05	7°957'47	1000.9110		5717 Oct 09 06:32	0° ⊽	
retrograde	5711 Oct 26 05:35	15° © 54'35		retrograde	5718 Jan 16 08:29	∘ – 7° ჲ 24'50	
opposition	5712 Jan 03 04:17	12° © 27'27	-1°47'43	opposition	5718 Mar 24 06:28	3° £ 58'19	1°36'40
min. Earth dist.	5712 Jan 03 04:17		8.37313 AU	min. Earth dist.	5718 Mar 24 00:28	3° ⊆ 58'08	8.18918 AU
	5712 Jan 03 01:13	9° 5 04'11	6.57515 AU	direct		ე° ჲ 30'03	6.16916 AU
direct					5718 May 30 20:16		
evening set	5712 Jun 19 17:10	16°944'27		evening set	5718 Sep 13 02:27	8° ≏ 35'02	
conjunction	5712 Jul 07 07:28	18° © 56'47	1015'50	conjunction	5718 Oct 01 01:36	10° £ 51'50	1°29'05
minimum elong	5712 Jul 07 07:31	18°956'48		minimum elong	5718 Oct 01 01:30	10° ⊆ 51'49	1°29'05
max. Earth dist.	5712 Jul 07 07:31 5712 Jul 07 10:39			max. Earth dist.			10.20195 AU
			10.33865 AU		5718 Sep 30 23:32		10.20195 AU
morning rise	5712 Jul 25 01:45	21°910'21		morning rise	5718 Oct 18 23:03	13° Ω 08'06	
retrograde	5712 Nov 08 02:32	29°©10'55	1010110	retrograde	5719 Jan 30 04:04	21° Ω 04'42	200210#
opposition	5713 Jan 15 15:59	25°5643'21		opposition	5719 Apr 07 00:20	17° £ 38'58	2°03'07
min. Earth dist.	5713 Jan 15 13:38	25° © 43'50	8.30725 AU	min. Earth dist.	5719 Apr 07 01:52	17° £ 38'39	8.22089 AU
direct	5713 Mar 23 16:44	22° © 19'03		direct	5719 Jun 13 23:26	14° ≙ 10′28	
	5713 Jul 02 22:19	$0^{\circ}\Omega$		evening set	5719 Sep 27 15:41	22° ≏ 15'05	
evening set	5713 Jul 03 14:36	0° Ω 05'03				_	
		_		conjunction	5719 Oct 15 12:22	24° ≏ 30'35	1°47'42
conjunction	5713 Jul 21 09:06	2° Ω 19'24		minimum elong	5719 Oct 15 12:19	24° £ 30'34	1°47'43
minimum elong	5713 Jul 21 09:08	2° Ω 19′25	0°50'32	max. Earth dist.	5719 Oct 15 09:39	24° £ 29'43	10.24224 AU
max. Earth dist.	5713 Jul 21 11:49	2° Ω 20'16	10.27801 AU	morning rise	5719 Nov 02 06:28	26° ≏ 45'17	
morning rise	5713 Aug 08 06:53	4° Ω 34'46			5719 Nov 29 18:22	0° M	
retrograde	5713 Nov 22 02:12	12° Ω 37'56		retrograde	5720 Feb 12 18:32	4°M36'44	
opposition	5714 Jan 29 06:08	9° Ω 10′08	-0°45'11	opposition	5720 Apr 19 16:04	1°M11'52	2°22'24
min. Earth dist.	5714 Jan 29 04:17	9° Ω 10′30	8.25197 AU	min. Earth dist.	5720 Apr 19 17:38	1°M11'33	8.26971 AU
direct	5714 Apr 06 05:24	5° Ω 44'47			5720 May 04 19:44	30° Ŗ Ω	
evening set	5714 Jul 17 18:39	13° Ω 36'16		direct	5720 Jun 27 01:59	27° ≏ 43′26	
	5714 Jul 28 20:25	15° Ω			5720 Aug 18 05:21	0°M	
				evening set	5720 Oct 11 00:09	5°M45'56	
conjunction	5714 Aug 04 16:36	15° Ω 52'17	-0°22'01	•			
minimum elong	5714 Aug 04 16:37	15° Ω 52'17		conjunction	5720 Oct 28 17:48	7°M59'46	2°00'12
max. Earth dist.	5714 Aug 04 18:42		10.22907 AU	minimum elong	5720 Oct 28 17:46		2°00'13
morning rise	5714 Aug 22 16:52	18° Ω 09'03		max. Earth dist.	5720 Oct 28 15:08		10.29830 AU
retrograde	5714 Dec 06 04:56	26°Ω13'39		morning rise	5720 Nov 15 08:04	10°M12'35	22020110
opposition	5715 Feb 11 22:35	20° Ω 45'50	-0°08'39		5720 Dec 28 06:51	15°M	
min. Earth dist.	5715 Feb 11 21:04	22° Ω 46'09		retrograde	5721 Feb 25 04:26	17°M58'06	
direct	5715 Apr 19 21:48	19° Ω 19'33	0.20717 AU	renograde	5721 Apr 27 20:07	17 1103800 15°RM	
asc. node	5715 May 10 10:46	19 δ (1933 19° Ω 42'49		opposition	5721 Apr 27 20.07 5721 May 03 05:17	13 KIIL 14°M34'12	2033140
	-			* *	•		8.33256 AU
evening set	5715 Aug 01 04:17	27° Ω 16′03		min. Earth dist.	5721 May 03 06:43	14°M.33'54	6.33230 AU
	5715 A 10 04 25	200 0 2211 4	0000102	direct	5721 Jul 11 01:59	11°ML06'03	
conjunction	5715 Aug 19 04:35	29° Ω 33'14	0°08'03		5721 Sep 19 05:32	15°M	
minimum elong	5715 Aug 19 04:34	29° £ 33'14	0°08'03	evening set	5721 Oct 25 01:53	19°M04'50	
behind sun begin	5715 Aug 18 22:04	29° £ 31′10			### TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.1.c.m	••••
behind sun end	5715 Aug 19 11:04	29° £ 35′17	10.10.150	conjunction	5721 Nov 11 16:14	21°M16'47	2°06'04
max. Earth dist.	5715 Aug 19 06:00	29~ 8 (33'40	10.19459 AU	minimum elong	5721 Nov 11 16:14	21°M16'46	2°06'06

max. Earth dist. morning rise	5721 Nov 11 13:56 5721 Nov 29 02:36	21°M16'03 23°M27'33 0°×7	10.36673 AU	max. Earth dist. morning rise	5728 Jan 26 14:01 5728 Feb 12 10:56	8° ≈ 08'41	10.81811 AU
retrograde	5722 Feb 03 03:25 5722 Mar 10 10:32 5722 Apr 15 05:57	1° ⊀ ⁷ 06'42 30°RM		retrograde	5728 May 03 14:59 5728 May 22 17:08 5728 Jun 10 21:39	15°≈ 15°≈18'30 15°R≈	
opposition	5722 May 16 15:18	27°M43'47	2°36'36	opposition	5728 Jul 31 01:05	11° ≈ 59'51	0°37'54
min. Earth dist.	5722 May 16 16:58	27°M43'27	8.40577 AU	min. Earth dist.	5728 Jul 31 02:22	11° ≈ 59'37	8.84408 AU
direct	5722 Jul 24 21:07	24°M16'10		direct	5728 Oct 09 18:08	8° ≈ 38'05	
evening set	5722 Oct 20 13:00 5722 Nov 07 19:59	0° ₰ 2° ₰ 09'56		evening set	5729 Jan 12 16:06 5729 Jan 20 17:27	15° ≈ 15° ≈ 56'05	
conjunction	5722 Nov 25 07:00	4° ∡ 19'55	2°05'19	conjunction	5729 Feb 06 13:51	17° ≈ 56'46	0°17'57
minimum elong	5722 Nov 25 07:00	4° √ 19'55	2°05'20	minimum elong	5729 Feb 06 13:51	17° ≈ 56'46	0°17'57
max. Earth dist.	5722 Nov 25 04:38	4° √ 19'11	10.44372 AU	max. Earth dist.	5729 Feb 06 12:13	17° ≈ 56'17	10.86670 AU
morning rise	5722 Dec 12 13:47	6° ₹ 28'39		morning rise	5729 Feb 23 08:24	19° ≈ 56'54	
retrograde	5723 Mar 23 10:02	14° ₰ 01'19		retrograde	5729 Jun 03 19:14	27° ≈ 05′21	
opposition	5723 May 29 21:36	10° ₹ 39'22	2°31'30	opposition	5729 Aug 12 13:17	23° ≈ 46′50	0°06'11
min. Earth dist.	5723 May 29 23:56	10° ∡ ³38'55	8.48542 AU	min. Earth dist.	5729 Aug 12 14:20	23° ≈ 46′38	8.88564 AU
direct	5723 Aug 07 13:03	7° ₰ 12'27		direct	5729 Oct 22 04:55	20° ≈ 25'59	
evening set	5723 Nov 21 05:51	15° ₹ 00'21		desc. node	5729 Oct 24 16:35	20° ≈ 26′18	
				evening set	5730 Feb 01 14:13	27° ≈ 39'55	
conjunction	5723 Dec 08 13:41	17° ₹ 08'23	1°58'16				
minimum elong	5723 Dec 08 13:42	17° ₹ 08'23	1°58'18	conjunction	5730 Feb 18 09:05	29°≈39'47	
max. Earth dist.	5723 Dec 08 10:41		10.52521 AU	minimum elong	5730 Feb 18 09:04	29°≈39'47	0°08'05
morning rise	5723 Dec 25 17:25	19° ₹ 15'11		behind sun begin	5730 Feb 18 02:49	29°≈37'56	
retrograde	5724 Apr 04 03:30	26° ₹ 41'38	2010101	behind sun end	5730 Feb 18 15:20	29°≈41'38	10.00006 ATT
opposition	5724 Jun 11 00:15	23° ₹ 20'37	2°19'01	max. Earth dist.	5730 Feb 18 07:57	29°≈39°27 0°) €	10.90086 AU
min. Earth dist. direct	5724 Jun 11 02:58	23° 尽 20'05 19° 尽 54'35	8.56738 AU	marning rise	5730 Feb 21 04:33 5730 Mar 07 02:52	1° H 39'19	
	5724 Aug 20 01:08	19 x · 34 33 27° ₹ 36'06		morning rise	5730 Jun 15 23:12	8°) (47'43	
evening set	5724 Dec 03 07:26	27 X ·30 00		retrograde opposition	5730 Aug 25 00:09	5°) € 29'04	0°25'32
conjunction	5724 Dec 20 12:21	29° ∡ ¹42'16	1°45'38	min. Earth dist.	5730 Aug 25 00:09 5730 Aug 25 00:12	5° \(\) 29'03	8.91207 AU
minimum elong	5724 Dec 20 12:21 5724 Dec 20 12:23	29° × 42'16	1°45'40	direct	5730 Nov 03 14:49	2° H 09'01	6.71207 AC
max. Earth dist.	5724 Dec 20 08:53		10.60709 AU	evening set	5731 Feb 13 08:54	9° H 19'55	
max. Earth dist.	5724 Dec 22 22:01	ිපි වී	10.00707110	evening sec	3731100 13 00.31	, ,(1) 55	
morning rise	5725 Jan 06 13:29	1° る 47'17		conjunction	5731 Mar 02 02:36	11°) 19'14	-0°33'33
retrograde	5725 Apr 16 17:25	9° ප 08'10		minimum elong	5731 Mar 02 02:34	11°) 19'14	0°33'33
opposition	5725 Jun 23 23:10	5° る 47'57	2°00'12	max. Earth dist.	5731 Mar 02 02:53	11°) 19'19	10.91912 AU
min. Earth dist.	5725 Jun 24 01:23	5° る 47'32	8.64770 AU	morning rise	5731 Mar 18 19:43	13° ¥ 18′25	
direct	5725 Sep 02 07:37	2° る 22'57		retrograde	5731 Jun 28 04:34	20°) €27'56	
evening set	5725 Dec 16 01:13	9° ප 57'56		opposition	5731 Sep 06 10:18	17° ∺ 08′58	-0°56'06
				min. Earth dist.	5731 Sep 06 09:20	17° ∺ 09'08	8.92226 AU
conjunction	5726 Jan 02 03:41	12° る 02'26	1°28'15	direct	5731 Nov 15 19:50	13°) (49′34	
minimum elong	5726 Jan 02 03:43	12° る 02'27		evening set	5732 Feb 25 02:43	20°) 58′32	
max. Earth dist.	5726 Jan 02 00:51		10.68554 AU				
morning rise	5726 Jan 19 02:36	14° る 05'53		conjunction	5732 Mar 12 19:26	22°) 57'34	
retrograde	5726 Apr 29 03:35	21° る 22'00		minimum elong	5732 Mar 12 19:25	22°) 57'33	
opposition	5726 Jul 06 18:35	18°る02'28		max. Earth dist.	5732 Mar 12 20:23		10.92076 AU
min. Earth dist.	5726 Jul 06 19:58		8.72273 AU	morning rise	5732 Mar 29 12:20	24°) € 56'42	
direct	5726 Sep 15 07:52 5726 Dec 28 11:58	14°る38'35 22°る07'16			5732 May 18 08:52	0° Υ 2° Υ 08'31	
evening set	3/26 Dec 28 11:38	22 00/10		retrograde	5732 Jul 09 10:12 5732 Sep 01 15:02	2° 1 08'31 30°R) €	
conjunction	5727 Jan 14 12:20	24° ප 10'18	1°07'08	opposition	5732 Sep 01 13.02 5732 Sep 17 20:50	28°) 49'01	1°24'20
minimum elong	5727 Jan 14 12:22	24°る10'19	1°07'09	min. Earth dist.	5732 Sep 17 20:30 5732 Sep 17 19:42		8.91576 AU
max. Earth dist.	5727 Jan 14 10:35		10.75694 AU	direct	5732 Nov 26 23:14	25° H 30'03	6.71370 AC
morning rise	5727 Jan 31 09:23	26° ප 12'24	10.75074710	direct	5733 Feb 12 05:45	0°Υ	
	5727 Mar 07 02:24	20°≈		evening set	5733 Mar 07 20:45	2° Υ 38'13	
retrograde	5727 May 11 11:05	3° ≈ 24'48		evening sec	0,00 11111 0, 20.10	2 , 50 15	
opposition	5727 Jul 19 11:02	0°≈05'48	1°08'20	conjunction	5733 Mar 24 12:50	4° Ƴ 37'16	-1°19'22
min. Earth dist.	5727 Jul 19 12:03	0°≈05'36	8.78909 AU	minimum elong	5733 Mar 24 12:48	4° Υ 37'15	
	5727 Jul 20 17:39	30°Ŗる	-	max. Earth dist.	5733 Mar 24 13:31		10.90555 AU
direct	5727 Sep 28 03:44	26° ප් 43'00		morning rise	5733 Apr 10 06:05	6° Ƴ 36'40	
	5727 Dec 02 14:23	0° ≈		retrograde	5733 Jul 21 18:46	13° Y 51'52	
evening set	5728 Jan 09 17:03	4° ≈ 05'58		opposition	5733 Sep 30 08:05	10° Ƴ 31'41	-1°49'11
				min. Earth dist.	5733 Sep 30 07:17		8.89238 AU
conjunction	5728 Jan 26 15:21	6° ≈ 07'42		direct	5733 Dec 09 03:25	7° Ƴ 12'52	
minimum elong	5728 Jan 26 15:23	6° ≈ 07'43	0°43'21	evening set	5734 Mar 19 16:21	14° Ƴ 21'25	

	5724 4 05 00 27	1.600020150	1027152		5740 1 17 10 26	00506120	1045100
conjunction	5734 Apr 05 08:27	16° Y 20′50		conjunction	5740 Jun 17 18:26	0°906'30	
minimum elong	5734 Apr 05 08:25		1°37'53	minimum elong	5740 Jun 17 18:29	0°906'31	1°45'01
max. Earth dist.	5734 Apr 05 08:58		10.87345 AU	max. Earth dist.	5740 Jun 17 21:22		10.43979 AU
morning rise	5734 Apr 22 02:32	18° Y 20′51		morning rise	5740 Jul 05 06:27	2° © 16'53	
retrograde	5734 Aug 03 05:38	25° Ƴ 40′26		retrograde	5740 Oct 19 06:02	10° © 11'31	
opposition	5734 Oct 12 20:31	22° Ƴ 19′21	-2°09'39	opposition	5740 Dec 27 10:59	6° 5 344'16	-1°58'59
min. Earth dist.	5734 Oct 12 19:38	22° Ƴ 19'31	8.85222 AU	min. Earth dist.	5740 Dec 27 08:37	6°9344'44	8.40009 AU
direct	5734 Dec 21 07:34	19° Ƴ 00'31		direct	5741 Mar 04 18:57	3° 5 21'03	
evening set	5735 Mar 31 14:35	26° Ƴ 10'40		evening set	5741 Jun 13 20:50	10° © 58'39	
conjunction	5735 Apr 17 07:30	28° Ƴ 10′50	-1°52'23	conjunction	5741 Jul 01 09:16	13° © 10'04	-1°26'14
minimum elong	5735 Apr 17 07:28	28° Ƴ 10′50	1°52'25	minimum elong	5741 Jul 01 09:19	13°910'05	1°26'15
max. Earth dist.	5735 Apr 17 08:51	28° Ƴ 11'15	10.82497 AU	max. Earth dist.	5741 Jul 01 12:24	13° © 11'03	10.36069 AU
	5735 May 02 11:00	0°8		morning rise	5741 Jul 19 01:33	15°9522'43	
morning rise	5735 May 04 02:51	0° 8 11'48		retrograde	5741 Nov 02 02:30	23°921'54	
retrograde	5735 Aug 15 21:30	7° 8 36'42		opposition	5742 Jan 09 21:05	19° © 53'59	-1°32'45
opposition	5735 Oct 25 11:12	4° 8 14'38	2024148	min. Earth dist.	5742 Jan 09 18:35	19° © 54'29	8.32447 AU
		4°814'56		direct	5742 Mar 17 23:56		6.32447 AU
min. Earth dist.	5735 Oct 25 09:33		8.79646 AU			16°529'38	
direct	5736 Jan 02 13:57	0° 8 55'34		evening set	5742 Jun 27 14:44	24° © 13'18	
evening set	5736 Apr 11 16:35	8° 8 08'22			5740 1 15 07 06	200020154	1000100
				conjunction	5742 Jul 15 07:26	26° © 26'54	
conjunction	5736 Apr 28 11:00	10° 8 09'42		minimum elong	5742 Jul 15 07:28	26°926'55	1°02'40
minimum elong	5736 Apr 28 10:59	10° 8 09'42		max. Earth dist.	5742 Jul 15 09:51	26° © 27'40	10.29016 AU
max. Earth dist.	5736 Apr 28 12:58	10° 8 10'18	10.76225 AU	morning rise	5742 Aug 02 03:37	28° 5 41'37	
morning rise	5736 May 15 08:22	12° 8 11'59			5742 Aug 12 20:42	$0^{\circ}\Omega$	
	5736 Jun 09 02:22	15° 8		retrograde	5742 Nov 16 02:37	6° Ω 44'15	
retrograde	5736 Aug 27 19:33	19° 8 42'49		opposition	5743 Jan 23 10:18	3° Ω 15′56	-1°01'06
opposition	5736 Nov 06 04:39	16° 8 19'40	-2°33'50	min. Earth dist.	5743 Jan 23 08:22	3° Ω 16′20	8.25945 AU
min. Earth dist.	5736 Nov 06 02:31	16° 8 20'04	8.72795 AU		5743 Mar 18 06:55	30° ₹ 5	
	5736 Nov 24 02:53	15° ₹ 8		direct	5743 Mar 31 09:10	29° © 50'28	
direct	5737 Jan 13 20:49	13° 8 00'08			5743 Apr 13 12:18	0°N	
anov	5737 Mar 03 17:34	15° 8		evening set	5743 Jul 11 15:50	7° Ω 40'01	
evening set	5737 Apr 23 23:42	20° 8 16'33		evening set	3743 Jul 11 13.30	7 66-10 01	
evening set	3/3/Apr 23 23.42	20 01033		conjunction	5743 Jul 29 12:16	9° Ω 55'31	0°25'21
agniumation	5727 May 10, 20-19	22° 8 19'23	2006141	minimum elong	5743 Jul 29 12:17	9° Ω 55'31	
conjunction	5737 May 10 20:18			- C			
minimum elong	5737 May 10 20:18	_	2°06'42	max. Earth dist.	5743 Jul 29 13:46		10.23209 AU
max. Earth dist.	5737 May 10 22:00		10.68865 AU	morning rise	5743 Aug 16 11:37	12° Ω 11'55	
morning rise	5737 May 27 20:33	24° 8 23'21			5743 Sep 08 22:56	15° Ω	
	5737 Jul 21 17:39	0°Ⅲ		retrograde	5743 Nov 30 04:51	20° Ω 16'43	
retrograde	5737 Sep 09 20:38	2° Ⅱ 00′22		opposition	5744 Feb 06 02:03	16° Ω 48'15	
	5737 Oct 31 07:04	30° ₹8		min. Earth dist.	5744 Feb 06 00:53	16° Ω 48'29	8.20875 AU
opposition	5737 Nov 19 01:04	28° 8 36'07	-2°36'05		5744 Feb 29 10:52	15° ŖΩ	
min. Earth dist.	5737 Nov 18 23:14	28° 8 36'28	8.65023 AU	direct	5744 Apr 13 00:25	13° Ω 21'44	
direct	5738 Jan 26 07:20	25° 8 15'51			5744 May 25 22:33	15° Ω	
	5738 Apr 13 20:20	$\Pi^{\circ}0$		evening set	5744 Jul 24 23:14	21° Ω 16'43	
evening set	5738 May 06 12:37	2° Ⅲ 36'47					
-							
				conjunction	5744 Aug 11 22:32	23° Ω 33'38	-0°05'50
conjunction	5738 May 23 12:15	4° Ⅱ 41'27	-2°05'25	conjunction minimum elong	5744 Aug 11 22:32 5744 Aug 11 22:33	23°N33'38 23°N33'38	
	•			minimum elong	5744 Aug 11 22:33	23° Ω 33'38	
minimum elong	5738 May 23 12:15	4° Ⅱ 41'27	2°05'27	minimum elong behind sun begin	5744 Aug 11 22:33 5744 Aug 11 15:34	23° Ω 33'38 23° Ω 31'26	
minimum elong max. Earth dist.	5738 May 23 12:15 5738 May 23 13:39	4°П41'27 4°П41'53		minimum elong behind sun begin behind sun end	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32	23°\O33'38 23°\O31'26 23°\O35'51	0°05'51
minimum elong max. Earth dist. morning rise	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03	4°П41'27 4°П41'53 6°П47'23	2°05'27	minimum elong behind sun begin behind sun end max. Earth dist.	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16	23° \Omega 33'38 23° \Omega 31'26 23° \Omega 35'51 23° \Omega 33'51	
minimum elong max. Earth dist. morning rise retrograde	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24	4°П41'27 4°П41'53 6°П47'23 14°П30'37	2°05'27 10.60782 AU	minimum elong behind sun begin behind sun end	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55	23° N 33'38 23° N 31'26 23° N 35'51 23° N 33'51 25° N 51'12	0°05'51
minimum elong max. Earth dist. morning rise retrograde opposition	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16	2°05'27 10.60782 AU -2°31'04	minimum elong behind sun begin behind sun end max. Earth dist. morning rise	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 23° \(\Omega 33'51\) 25° \(\Omega 51'12\) 0° \(\omega \)	0°05'51
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33	2°05'27 10.60782 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13	23° \Omega 33'38 23° \Omega 31'26 23° \Omega 33'51 25° \Omega 51'12 0° My 1° My 45'13	0°05'51
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03	4°П41'27 4°П41'53 6°П47'23 14°П30'37 11°П05'16 11°П05'33 7°П44'07	2°05'27 10.60782 AU -2°31'04	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19	23° \Omega 33'38 23° \Omega 31'26 23° \Omega 35'51 23° \Omega 33'51 25° \Omega 51'12 0° m 1° m 45'13 3° m 56'46	0°05'51 10.18974 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33	2°05'27 10.60782 AU -2°31'04	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45	23° \Omega 33'38 23° \Omega 33'26 23° \Omega 33'51 23° \Omega 33'51 25° \Omega 51'12 0° m 1° m 45'13 3° m 56'46 0° m 28'25	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56	4°П41'27 4°П41'53 6°П47'23 14°П30'37 11°П05'16 11°П05'33 7°П44'07 15°П10'09	2°05'27 10.60782 AU -2°31'04 8.56702 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10	23° \Omega 33'38 23° \Omega 33'51 23° \Omega 33'51 25° \Omega 51'12 0° my 1° my 45'13 3° my 56'46 0° my 28'25 0° my 28'32	0°05'51 10.18974 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33 7°Д44'07 15°Д10'09	2°05'27 10.60782 AU -2°31'04 8.56702 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17	23° \Omega 33'38 23° \Omega 33'51 23° \Omega 33'51 25° \Omega 51'12 0° m 1° m 45'13 3° m 56'46 0° m 28'25 0° m 28'32 30° R \Omega 8	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33 7°Д44'07 15°Д10'09 17°Д16'57	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\omega \) 1° \(\omega 45'13\) 3° \(\omega 56'46\) 0° \(\omega 28'25\) 0° \(\omega 28'32\) 30° \(\omega \) 27° \(\Omega 01'01\)	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25 5739 Jun 05 13:28	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33 7°Д44'07 15°Д10'09 17°Д16'57 17°Д16'57 17°Д17'35	2°05'27 10.60782 AU -2°31'04 8.56702 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\Omega \) 1° \(\Omega 45'13\) 3° \(\Omega 56'46\) 0° \(\Omega 28'25\) 0° \(\Omega 28'32\) 30° \(\Omega \) 27° \(\Omega 01'01\) 0° \(\Omega \)	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33 7°Д44'07 15°Д10'09 17°Д16'57	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\omega \) 1° \(\omega 45'13\) 3° \(\omega 56'46\) 0° \(\omega 28'25\) 0° \(\omega 28'32\) 30° \(\omega \) 27° \(\Omega 01'01\)	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25 5739 Jun 05 13:28	4°Д41'27 4°Д41'53 6°Д47'23 14°Д30'37 11°Д05'16 11°Д05'33 7°Д44'07 15°Д10'09 17°Д16'57 17°Д16'57 17°Д17'35	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\Omega \) 1° \(\Omega 45'13\) 3° \(\Omega 56'46\) 0° \(\Omega 28'25\) 0° \(\Omega 28'32\) 30° \(\Omega \) 27° \(\Omega 01'01\) 0° \(\Omega \)	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 13:28 5739 Jun 05 13:28 5739 Jun 22 19:10	4°П41'27 4°П41'53 6°П47'23 14°П30'37 11°П05'16 11°П05'33 7°П44'07 15°П10'09 17°П16'57 17°П16'57 17°П17'35 19°П25'03	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12 10.52352 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 11 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\Omega \) 1° \(\Omega 45'13\) 3° \(\Omega 56'46\) 0° \(\Omega 28'25\) 0° \(\Omega 28'32\) 30° \(\Omega \) 27° \(\Omega 01'01\) 0° \(\Omega \)	0°05'51 10.18974 AU 0°11'42
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 13:28 5739 Jun 05 13:28 5739 Jun 22 19:10 5739 Oct 06 14:00	4° II 41'27 4° II 41'53 6° II 47'23 14° II 30'37 11° II 05'16 11° II 05'33 7° II 44'07 15° II 10'09 17° II 16'57 17° II 16'57 17° II 17'35 19° II 25'03 27° II 14'16	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12 10.52352 AU	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51 5745 Aug 08 11:44	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\mu\) 1° \(\mu 45'13\) 3° \(\mu 56'46\) 0° \(\mu 28'25\) 0° \(\mu 28'32\) 30° \(\mu \Omega 7\) 27° \(\Omega 01'01\) 0° \(\mu\) 5° \(\mu \) 00'37	0°05'51 10.18974 AU 0°11'42 8.17525 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 13:28 5739 Jun 05 13:28 5739 Jun 22 19:10 5739 Oct 06 14:00 5739 Dec 15 04:16	4°II41'27 4°II41'53 6°II47'23 14°II30'37 11°II05'16 11°II05'33 7°II44'07 15°II10'09 17°II16'57 17°II16'57 17°II17'35 19°II25'03 27°II14'16 23°II47'54	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12 10.52352 AU -2°18'38	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51 5745 Aug 08 11:44	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\mu \) 1° \(\mu 45'13\) 3° \(\mu 56'46\) 0° \(\mu 28'25\) 0° \(\mu 28'32\) 30° \(\mu \) 27° \(\Omega 01'01\) 0° \(\mu \) 5° \(\mu 00'37\) 7° \(\mu 18'23\) 7° \(\mu 18'23\) 7° \(\mu 18'23\)	0°05'51 10.18974 AU 0°11'42 8.17525 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25 5739 Jun 05 13:28 5739 Jun 22 19:10 5739 Oct 06 14:00 5739 Dec 15 04:16 5739 Dec 15 02:26 5740 Feb 20 18:31	4° II 41'27 4° II 41'53 6° II 47'23 14° II 30'37 11° II 05'16 11° II 05'33 7° II 44'07 15° II 10'09 17° II 16'57 17° II 16'57 17° II 17'35 19° II 25'03 27° II 14'16 23° II 4'16 23° II 48'16	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12 10.52352 AU -2°18'38	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51 5745 Aug 08 11:44 5745 Aug 26 12:42 5745 Aug 26 12:40	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\omega \) 1° \(\omega 45'13\) 3° \(\omega 56'46\) 0° \(\omega 28'25\) 0° \(\omega 28'32\) 30° \(\omega \) 27° \(\Omega 01'01\) 0° \(\omega \) 5° \(\omega 00'37\) 7° \(\omega 18'23\) 7° \(\omega 18'23\) 7° \(\omega 18'22\) 7° \(\omega 18'29\)	0°05'51 10.18974 AU 0°11'42 8.17525 AU 0°24'19 0°24'19
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5738 May 23 12:15 5738 May 23 13:39 5738 Jun 09 16:03 5738 Sep 23 02:24 5738 Dec 02 00:56 5738 Dec 01 23:25 5739 Feb 07 23:03 5739 May 19 07:56 5739 Jun 05 11:24 5739 Jun 05 11:25 5739 Jun 05 13:28 5739 Jun 22 19:10 5739 Oct 06 14:00 5739 Dec 15 04:16 5739 Dec 15 02:26	4° II 41'27 4° II 41'53 6° II 47'23 14° II 30'37 11° II 05'16 11° II 05'33 7° II 44'07 15° II 10'09 17° II 16'57 17° II 16'57 17° II 17'35 19° II 25'03 27° II 14'16 23° II 47'54 23° II 48'16 20° II 25'46	2°05'27 10.60782 AU -2°31'04 8.56702 AU -1°58'11 1°58'12 10.52352 AU -2°18'38	minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5744 Aug 11 22:33 5744 Aug 11 15:34 5744 Aug 12 05:32 5744 Aug 12 05:32 5744 Aug 12 23:16 5744 Aug 29 23:55 5744 Oct 04 19:28 5744 Oct 23 17:13 5744 Dec 13 06:19 5745 Feb 18 19:45 5745 Feb 18 19:10 5745 Feb 24 15:17 5745 Apr 26 20:59 5745 Jun 24 21:51 5745 Aug 08 11:44 5745 Aug 26 12:42 5745 Aug 26 12:40 5745 Aug 26 13:03	23° \(\Omega 33'38\) 23° \(\Omega 31'26\) 23° \(\Omega 35'51\) 25° \(\Omega 51'12\) 0° \(\mu \) 1° \(\mu 45'13\) 3° \(\mu 56'46\) 0° \(\mu 28'25\) 0° \(\mu 28'32\) 30° \(\mu \) 27° \(\Omega 01'01\) 0° \(\mu \) 5° \(\mu 00'37\) 7° \(\mu 18'23\) 7° \(\mu 18'23\) 7° \(\mu 18'23\)	0°05'51 10.18974 AU 0°11'42 8.17525 AU 0°24'19 0°24'19

opposition	5746 Mar 04 14:33	14° Mp 13'21	0°48'33	min. Earth dist.	5752 May 23 10:58	5° √ 11'48	8.45165 AU
min. Earth dist.	5746 Mar 04 13:56	14° Mp 13'28	8.16100 AU	direct	5752 Jul 31 20:43	1° × ⁷ 45'15	0.10100110
direct	5746 May 10 20:07	10° mp 45'17		evening set	5752 Nov 14 16:59	9° ∡ ³36'17	
evening set	5746 Aug 23 03:17	18° m) 48'22		, and the second			
C	C	-		conjunction	5752 Dec 02 02:16	11° ∡ ³45'13	2°01'58
conjunction	5746 Sep 10 04:34	21°M)06'18	0°53'06	minimum elong	5752 Dec 02 02:17	11° ∡ ⁴45'13	2°01'59
minimum elong	5746 Sep 10 04:32	21°M)06'17	0°53'05	max. Earth dist.	5752 Dec 02 00:04	11° ∡ ¹44'32	10.49242 AU
max. Earth dist.	5746 Sep 10 04:59	21° Mp 06'25	10.16117 AU	morning rise	5752 Dec 19 07:25	13° ∡ 52'55	
morning rise	5746 Sep 28 05:29	23° m 24'08		retrograde	5753 Mar 29 22:26	21° ₹ '22'26	
	5746 Dec 01 01:30	0° ⊽		opposition	5753 Jun 05 14:32	18° ₹ '01'26	2°25'10
retrograde	5747 Jan 10 08:50	1° ≏ 26'54		min. Earth dist.	5753 Jun 05 15:45	18° ∡ 01'12	8.53579 AU
	5747 Feb 20 04:08	30°R, Mp		direct	5753 Aug 14 11:17	14° ∡ ³35'30	
opposition	5747 Mar 18 09:45	27° m 59'35	1°22'39	evening set	5753 Nov 27 22:44	22° ҂ ¹20′06	
min. Earth dist.	5747 Mar 18 09:03	27° m 59'44	8.16706 AU				
direct	5747 May 24 20:23	24° Mp 31'07		conjunction	5753 Dec 15 05:05	24° ҂ 27'06	1°51'42
	5747 Aug 16 05:16	0० ट		minimum elong	5753 Dec 15 05:07	24° ₹ 27'06	1°51'44
evening set	5747 Sep 06 19:45	2° £ 36'14		max. Earth dist.	5753 Dec 15 03:09	24° ≯ ¹26'30	10.57659 AU
				morning rise	5754 Jan 01 07:15	26° х 32′53	
conjunction	5747 Sep 24 20:02	4° £ 53'41	1°18'48		5754 Jan 31 20:23	8°0	
minimum elong	5747 Sep 24 19:59	4° £ 53'40	1°18'48	retrograde	5754 Apr 11 15:44	3° る 56′24	
max. Earth dist.	5747 Sep 24 20:15	4° £ 53'45	10.17706 AU	opposition	5754 Jun 18 15:38	0° ප 36'16	2°09'00
morning rise	5747 Oct 12 18:48	7° £ 10'41		min. Earth dist.	5754 Jun 18 17:35	0° る 35'53	8.61826 AU
retrograde	5748 Jan 24 08:13	15° ≙ 09'57			5754 Jun 26 12:20	30°₹ ҂ 7	
opposition	5748 Mar 31 04:29	11° ≏ 43'31	1°51'53	direct	5754 Aug 27 19:32	27° ҂ 11'16	
min. Earth dist.	5748 Mar 31 04:09	11° ≏ 43'35	8.19312 AU		5754 Oct 26 16:28	8°0	
direct	5748 Jun 06 22:19	8° £ 14'54		evening set	5754 Dec 10 20:33	4° ප 49'17	
evening set	5748 Sep 20 11:00	16° ≏ 20'29					
				conjunction	5754 Dec 28 00:12	6° る 54'32	1°36'16
conjunction	5748 Oct 08 09:07	18° ≏ 36'49	1°39'55	minimum elong	5754 Dec 28 00:14	6° る 54'32	1°36'19
minimum elong	5748 Oct 08 09:05	18° ≏ 36'48	1°39'55	max. Earth dist.	5754 Dec 27 21:25	6° る 53'40	10.65671 AU
max. Earth dist.	5748 Oct 08 08:46	18° ≏ 36'42	10.21229 AU	morning rise	5755 Jan 13 23:59	8° る 58'39	
morning rise	5748 Oct 26 04:45	20° £ 52'26		retrograde	5755 Apr 24 03:57	16° පි 16'58	
retrograde	5749 Feb 06 01:57	28° ≏ 47'00		opposition	5755 Jul 01 13:00	12° る 57'34	1°47'07
opposition	5749 Apr 13 21:45	25° £ 21'38	2°14'33	min. Earth dist.	5755 Jul 01 15:53	12° る 57'01	8.69454 AU
min. Earth dist.	5749 Apr 13 22:16	25° £ 21'31	8.23765 AU	direct	5755 Sep 09 22:14	9° ට 33'33	
direct	5749 Jun 21 01:20	21° ≏ 53'08		evening set	5755 Dec 23 11:09	17° る 05'17	
evening set	5749 Oct 04 22:32	29° £ 57'25					
	5749 Oct 05 06:51	0°M		conjunction	5756 Jan 09 12:20	19° る 08'59	1°16'39
				minimum elong	5756 Jan 09 12:23	19° る 08'59	1°16'41
conjunction	5749 Oct 22 17:40	2°M12'11	1°55'15	max. Earth dist.	5756 Jan 09 08:34	19° る 07'50	10.72893 AU
minimum elong	5749 Oct 22 17:37	2°M12'11	1°55'15	morning rise	5756 Jan 26 10:16	21° る 11'42	
max. Earth dist.	5749 Oct 22 16:22	2°M11'47	10.26489 AU	retrograde	5756 May 05 11:41	28° る 25'55	
morning rise	5749 Nov 09 09:41	4°M26'02		opposition	5756 Jul 13 07:23	25° る 07'03	1°20'46
retrograde	5750 Feb 19 14:52	12°MJ4'57		min. Earth dist.	5756 Jul 13 10:25	25° る 06'28	8.76158 AU
opposition	5750 Apr 27 12:57	8°M50'44	2°29'28	direct	5756 Sep 21 22:12	21° පි 44'00	
min. Earth dist.	5750 Apr 27 14:15	8°M50'28	8.29809 AU	evening set	5757 Jan 03 19:16	29° る 09'53	
direct	5750 Jul 05 02:52	5°M22'36			5757 Jan 10 19:15	0° ≈	
evening set	5750 Oct 19 04:07	13°M23'51					
	5750 Oct 31 23:27	15°M		conjunction	5757 Jan 20 18:21	1°≈12'15	0°53'52
				minimum elong	5757 Jan 20 18:23	1°≈12'15	
conjunction	5750 Nov 05 19:54	15°M36'46	2°04'07	max. Earth dist.	5757 Jan 20 14:42		10.79083 AU
minimum elong	5750 Nov 05 19:53	15° M ₊36'46	2°04'08	morning rise	5757 Feb 06 14:43	3° ≈ 13'47	
max. Earth dist.	5750 Nov 05 17:44	15°M36'05	10.33182 AU	retrograde	5757 May 17 18:41	10° ≈ 25′05	
morning rise	5750 Nov 23 08:11	17° M 48'37		opposition	5757 Jul 25 23:07	7° ≈ 06′28	0°51'15
retrograde	5751 Mar 04 22:57	25°M31'15		min. Earth dist.	5757 Jul 26 01:12	7° ≈ 06'05	8.81736 AU
opposition	5751 May 11 01:06	22°ML08'10	2°36'07	direct	5757 Oct 04 16:30	3° ≈ 44'21	
min. Earth dist.	5751 May 11 02:36	22°M07'53	8.37085 AU	evening set	5758 Jan 15 22:12	11° ≈ 04'59	
direct	5751 Jul 19 01:23	18°M40'38					
evening set	5751 Nov 02 02:37	26°M37'20		conjunction	5758 Feb 01 19:34	13° ≈ 06′15	0°29'00
				minimum elong	5758 Feb 01 19:35	13° ≈ 06′15	0°29'01
conjunction	5751 Nov 19 15:04	28°M48'16	2°06'17	max. Earth dist.	5758 Feb 01 17:11	13° ≈ 05'32	10.84046 AU
minimum elong	5751 Nov 19 15:04	28°M48'16	2°06'18		5758 Feb 17 15:22	15° ≈	
max. Earth dist.	5751 Nov 19 12:38		10.40918 AU	morning rise	5758 Feb 18 14:35	15° ≈ 06'51	
	5751 Nov 29 04:14	0° ∡		retrograde	5758 May 29 23:46	22° ≈ 16′21	
morning rise	5751 Dec 06 23:40	0° ≯ 58'01		opposition	5758 Aug 07 12:33	18° ≈ 57'46	0°19'54
retrograde	5752 Mar 17 01:17	8° ҂ ³34′02		min. Earth dist.	5758 Aug 07 14:00	18° ≈ 57′29	8.86007 AU
opposition	5752 May 23 09:38	5° ҂ 12'04	2°34'30	direct	5758 Oct 17 05:27	15° ≈ 36′27	

direct evening set	5771 Mar 12 21:07 5771 Jun 22 06:54	11°©19'41 19°©00'59		opposition min. Earth dist.	5777 Mar 25 21:37 5777 Mar 25 22:33	6° £ 20′25 6° £ 20′14	1°40'33 8.19158 AU
C				direct	5777 Jun 01 12:38	2° ჲ 52'10	
conjunction	5771 Jul 09 21:46	21° © 13'40	-1°12'47	evening set	5777 Sep 14 19:37	10° ≙ 57'16	
minimum elong	5771 Jul 09 21:49	21° © 13'41	1°12'48				
max. Earth dist.	5771 Jul 10 01:29	21° © 14'51	10.32516 AU	conjunction	5777 Oct 02 18:32	13° ≙ 13'57	1°31'52
morning rise	5771 Jul 27 16:27	23° © 27'32		minimum elong	5777 Oct 02 18:29		1°31'52
	5771 Sep 29 23:21	$0^{\circ}\Omega$		max. Earth dist.	5777 Oct 02 16:35		10.20549 AU
retrograde	5771 Nov 10 16:45	1° Ω 28'53		morning rise	5777 Oct 20 15:37	15° Ω 30'04	
•,•	5771 Dec 22 22:21	30°Rூ	101.422	retrograde	5778 Jan 31 18:14	23° £ 26'17	2006105
opposition	5772 Jan 18 05:27	28°501'12		opposition	5778 Apr 08 15:21	20° Ω 00'40	2°06'05
min. Earth dist.	5772 Jan 18 02:39		8.29461 AU	min. Earth dist. direct	5778 Apr 08 16:20	20° Ω 00'28	8.22561 AU
direct	5772 Mar 25 05:52 5772 Jun 15 05:58	24° © 36'44 0° Ω			5778 Jun 15 16:18	16° £ 32'16 24° £ 36'46	
evening set	5772 Jul	0 8ℓ 2° Ω 23'42		evening set	5778 Sep 29 08:28	24 == 30 40	
evening set	3772 Jul 03 03.20	2 0623 42		conjunction	5778 Oct 17 04:53	26° ≏ 52'07	1°49'41
conjunction	5772 Jul 23 00:27	4° Ω 38'22	-0°46'49	minimum elong	5778 Oct 17 04:59	26° ⊆ 52'06	1°49'42
minimum elong	5772 Jul 23 00:29	4°Ω38'22	0°46'51	max. Earth dist.	5778 Oct 17 02:56		10.24799 AU
max. Earth dist.	5772 Jul 23 04:13		10.26657 AU	morning rise	5778 Nov 03 22:29	29° Ω 06'37	
morning rise	5772 Aug 09 22:31	6° Ω 54'00		. 8	5778 Nov 11 03:40	0°M	
retrograde	5772 Nov 23 18:26	14° Ω 57'46		retrograde	5779 Feb 14 09:09	6° ™ 57'35	
opposition	5773 Jan 30 20:16	11° Ω 29′52	-0°40'24	opposition	5779 Apr 22 06:59	3°M32'53	2°24'18
min. Earth dist.	5773 Jan 30 17:35	11° Ω 30′25	8.24201 AU	min. Earth dist.	5779 Apr 22 07:53	3°M32'42	8.27649 AU
direct	5773 Apr 07 18:41	8° Ω 04'23		direct	5779 Jun 29 17:33	0° ™ 04'34	
	5773 Jul 11 18:46	15° Ω		evening set	5779 Oct 13 16:19	8°M06'44	
evening set	5773 Jul 19 10:35	15° Ω 56'43					
				conjunction	5779 Oct 31 09:41	10°M20'23	2°01'17
conjunction	5773 Aug 06 08:52	18° Ω 12'57		minimum elong	5779 Oct 31 09:39	10°M20'23	2°01'18
minimum elong	5773 Aug 06 08:53	18° Ω 12'57		max. Earth dist.	5779 Oct 31 07:53	10° M 19'49	10.30599 AU
max. Earth dist.	5773 Aug 06 11:43		10.22082 AU	morning rise	5779 Nov 17 23:27	12°M32'59	
morning rise	5773 Aug 24 09:17	20° Ω 29'53		1	5779 Dec 08 11:55	15°M	
retrograde	5773 Dec 07 20:59	28° \O 34'47 25° \O 06'55	0002127	retrograde opposition	5780 Feb 27 19:52	20°M17'55 16°M54'11	2°34'26
opposition min. Earth dist.	5774 Feb 13 13:13 5774 Feb 13 11:17	25° Ω 07'19	8.20331 AU	min. Earth dist.	5780 May 04 19:57 5780 May 04 21:18	16°M53'55	8.34107 AU
asc. node	5774 Mar 22 03:36	23° Ω 30'06	6.20331 AU	mm. Lattii dist.	5780 May 30 01:21	15°RM	6.54107 AC
direct	5774 Apr 21 12:28	21°Ω40'30		direct	5780 Jul 12 16:09	13°M26'11	
evening set	5774 Aug 02 21:01	29° Ω 37'39			5780 Aug 24 19:45	15°M	
C	5774 Aug 05 20:11	0° m		evening set	5780 Oct 26 17:28	21°M24'28	
	•			•			
conjunction							
J	5774 Aug 20 21:22	1°M 54'56	0°12'05	conjunction	5780 Nov 13 07:28	23°M36'13	2°06'15
minimum elong	5774 Aug 20 21:22 5774 Aug 20 21:21	1° Mp 54'56 1° Mp 54'56	0°12'05 0°12'04	conjunction minimum elong	5780 Nov 13 07:28 5780 Nov 13 07:27	23°M36'13 23°M36'12	
•	5774 Aug 20 21:21 5774 Aug 20 16:28	-		•		23°M36'12	
minimum elong behind sun begin behind sun end	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14	1° m 54'56 1° m 53'23 1° m 56'29	0°12'04	minimum elong	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25	23°M36'12 23°M35'32 25°M46'46	2°06'16
minimum elong behind sun begin behind sun end max. Earth dist.	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22		minimum elong max. Earth dist. morning rise	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19	23°M36'12 23°M35'32 25°M46'46 0°×7	2°06'16
minimum elong behind sun begin behind sun end max. Earth dist. morning rise	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38	0°12'04	minimum elong max. Earth dist. morning rise	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33	23°M36'12 23°M35'32 25°M46'46 0°\$\mathref{Z}\$ 3°\$\mathref{Z}\$25'13	2°06'16 10.37596 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31	1° Mp 54'56 1° Mp 53'23 1° Mp 56'29 1° Mp 55'22 4° Mp 12'38 12° Mp 17'26	0°12'04 10.18979 AU	minimum elong max. Earth dist. morning rise retrograde opposition	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36	23°M36'12 23°M35'32 25°M46'46 0°\$\sqrt{1}\$ 3°\$\sqrt{2}5'13 0°\$\sqrt{0}2'29	2°06'16 10.37596 AU 2°36'14
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51	0°12'04 10.18979 AU 0°33'39	minimum elong max. Earth dist. morning rise	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42	23°M36'12 23°M35'32 25°M46'46 0°\$\mathref{X}\) 3°\$\mathref{X}\)25'13 0°\$\mathref{X}\)02'29 0°\$\mathref{X}\)02'04	2°06'16 10.37596 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01	0°12'04 10.18979 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09	23°M36'12 23°M35'32 25°M46'46 0° × 7 3° × 725'13 0° × 702'29 0° × 702'04 30°RM	2°06'16 10.37596 AU 2°36'14
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minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Aug 17 11:27 5775 Sep 04 12:35 5775 Sep 04 12:33	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'32 15° m 41'32	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45	23°M.36'12 23°M.35'32 25°M.46'46 0° 🗷 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🗷 4° 🗷 28'10	2°06'16 10.37596 AU 2°36'14 8.41560 AU 2°04'36
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minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 20 16:28 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Sep 04 12:35 5775 Sep 04 12:35 5775 Sep 04 12:33 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 04 12:17 5776 Mar 12 03:07 5776 May 18 09:46 5776 Aug 31 03:49	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'32 15° m 41'32 15° m 41'31 15° m 41'26 17° m 59'21 26° m 02'39 22° m 35'34 22° m 35'29 19° m 07'43 27° m 11'39	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33 10.17591 AU 1°09'06 8.17639 AU 1°08'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45 5781 Nov 26 21:20 5781 Nov 26 21:21 5781 Nov 26 18:28 5781 Dec 14 03:52 5782 Mar 24 22:11 5782 May 31 11:33 5782 May 31 14:08 5782 Nov 22 19:30	23°M.36'12 23°M.35'32 25°M.46'46 0° 🖈 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🖈 4° 🗷 28'10 6° 🗷 37'55 6° 🗷 37'55 6° 🗷 37'01 8° 🗷 46'26 16° 🗷 18'23 12° 🗷 56'36 12° 🗷 56'06 9° 🗷 29'50 17° 🗷 16'58	2°36'16 10.37596 AU 2°36'14 8.41560 AU 2°04'36 2°04'37 10.45405 AU 2°30'04 8.49610 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Aug 17 11:27 5775 Sep 04 12:35 5775 Sep 04 12:33 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 22 13:57 5776 Jan 05 01:03 5776 Mar 12 02:42 5776 Mar 12 03:07 5776 May 18 09:46 5776 Aug 31 03:49 5776 Sep 18 04:26 5776 Sep 18 04:26	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'32 15° m 41'32 15° m 41'31 15° m 41'26 17° m 59'21 26° m 02'39 22° m 35'34 22° m 35'29 19° m 07'43 27° m 11'39 29° m 29'10 29° m 29'10	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33 10.17591 AU 1°09'06 8.17639 AU 1°08'43 1°08'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45 5781 Nov 26 21:20 5781 Nov 26 21:21 5781 Nov 26 18:28 5781 Dec 14 03:52 5782 Mar 24 22:11 5782 May 31 11:33 5782 May 31 14:08 5782 Nov 22 19:30 5782 Dec 10 03:00	23°M.36'12 23°M.35'32 25°M.46'46 0° 🖈 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🖈 4° 🗷 28'10 6° 🗷 37'55 6° 🗷 37'55 6° 🗷 37'01 8° 🗷 46'26 16° 🗷 18'23 12° 🗷 56'36 12° 🗷 56'06 9° 🗷 29'50 17° 🗷 16'58	2°36'14 8.41560 AU 2°36'14 8.41560 AU 2°04'36 2°04'37 10.45405 AU 2°30'04 8.49610 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Aug 17 11:27 5775 Sep 04 12:35 5775 Sep 04 12:33 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 22 13:57 5776 Jan 05 01:03 5776 Mar 12 02:42 5776 Mar 12 03:07 5776 May 18 09:46 5776 Aug 31 03:49 5776 Sep 18 04:26 5776 Sep 18 04:23 5776 Sep 18 04:23 5776 Sep 18 04:23	1° m 54'56 1° m 55'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'32 15° m 41'32 15° m 41'31 15° m 41'26 17° m 59'21 26° m 02'39 22° m 35'34 22° m 35'29 19° m 07'43 27° m 11'39 29° m 29'10 29° m 29'10 29° m 29'09 29° m 28'42	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33 10.17591 AU 1°09'06 8.17639 AU 1°08'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening set	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45 5781 Nov 26 21:20 5781 Nov 26 21:21 5781 Nov 26 18:28 5781 Dec 14 03:52 5782 Mar 24 22:11 5782 May 31 11:33 5782 May 31 14:08 5782 Nov 22 19:30 5782 Dec 10 03:00 5782 Dec 10 03:00	23°M.36'12 23°M.35'32 25°M.46'46 0° 🖈 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🖈 4° 🗷 28'10 6° 🗷 37'55 6° 🗷 37'55 6° 🗷 37'01 8° 🗷 46'26 16° 🗷 18'23 12° 🗷 56'36 12° 🗷 56'06 9° 🗷 29'50 17° 🗷 16'58	2°36'14 8.41560 AU 2°36'14 8.41560 AU 2°04'36 2°04'37 10.45405 AU 2°30'04 8.49610 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Aug 17 11:27 5775 Sep 04 12:35 5775 Sep 04 12:33 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 22 13:57 5776 Jan 05 01:03 5776 Mar 12 02:42 5776 Mar 12 03:07 5776 May 18 09:46 5776 Sep 18 04:23 5776 Sep 18 04:23 5776 Sep 18 04:23 5776 Sep 18 04:23 5776 Sep 18 02:56 5776 Sep 22 04:45	1° m 54'56 1° m 53'23 1° m 56'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'31 15° m 41'31 15° m 41'31 26° m 02'39 22° m 35'34 22° m 35'29 19° m 07'43 27° m 11'39 29° m 29'10 29° m 29'10 29° m 29'09 29° m 28'42 0° •	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33 10.17591 AU 1°09'06 8.17639 AU 1°08'43 1°08'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening set	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45 5781 Nov 26 21:20 5781 Nov 26 21:21 5781 Nov 26 18:28 5781 Dec 14 03:52 5782 Mar 24 22:11 5782 May 31 11:33 5782 May 31 14:08 5782 Nov 22 19:30 5782 Dec 10 03:00 5782 Dec 10 03:02 5782 Dec 09 23:37	23°M.36'12 23°M.35'32 25°M.46'46 0° 🗷 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🗷 4° 🗷 28'10 6° 🗷 37'55 6° 🗷 37'55 6° 🗷 37'01 8° 🗷 46'26 16° 🗷 18'23 12° 🗷 56'06 9° 🗷 29'50 17° 🗷 16'58	2°36'14 8.41560 AU 2°36'14 8.41560 AU 2°04'36 2°04'37 10.45405 AU 2°30'04 8.49610 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5774 Aug 20 21:21 5774 Aug 20 16:28 5774 Aug 20 16:28 5774 Aug 21 02:14 5774 Aug 20 22:45 5774 Sep 07 22:55 5774 Dec 21 23:31 5775 Feb 27 07:40 5775 Feb 27 06:53 5775 May 05 09:37 5775 Aug 17 11:27 5775 Sep 04 12:35 5775 Sep 04 12:33 5775 Sep 04 12:17 5775 Sep 04 12:17 5775 Sep 22 13:57 5776 Jan 05 01:03 5776 Mar 12 02:42 5776 Mar 12 03:07 5776 May 18 09:46 5776 Aug 31 03:49 5776 Sep 18 04:26 5776 Sep 18 04:23 5776 Sep 18 04:23 5776 Sep 18 04:23	1° m 54'56 1° m 55'29 1° m 55'22 4° m 12'38 12° m 17'26 8° m 49'51 8° m 50'01 5° m 22'38 13° m 23'48 15° m 41'32 15° m 41'32 15° m 41'31 15° m 41'26 17° m 59'21 26° m 02'39 22° m 35'34 22° m 35'29 19° m 07'43 27° m 11'39 29° m 29'10 29° m 29'10 29° m 29'09 29° m 28'42	0°12'04 10.18979 AU 0°33'39 8.18064 AU 0°41'34 0°41'33 10.17591 AU 1°09'06 8.17639 AU 1°08'43 1°08'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening set	5780 Nov 13 07:27 5780 Nov 13 05:19 5780 Nov 30 17:25 5781 Jan 07 03:19 5781 Mar 12 00:33 5781 May 18 05:36 5781 May 18 07:42 5781 May 18 18:09 5781 Jul 26 12:03 5781 Sep 30 05:38 5781 Nov 09 10:45 5781 Nov 26 21:20 5781 Nov 26 21:21 5781 Nov 26 18:28 5781 Dec 14 03:52 5782 Mar 24 22:11 5782 May 31 11:33 5782 May 31 14:08 5782 Nov 22 19:30 5782 Dec 10 03:00 5782 Dec 10 03:00	23°M.36'12 23°M.35'32 25°M.46'46 0° 🖈 3° 🗷 25'13 0° 🗷 02'29 0° 🗷 02'04 30°RM. 26°M.35'01 0° 🖈 4° 🗷 28'10 6° 🗷 37'55 6° 🗷 37'55 6° 🗷 37'01 8° 🗷 46'26 16° 🗷 18'23 12° 🗷 56'36 12° 🗷 56'06 9° 🗷 29'50 17° 🗷 16'58	2°36'14 8.41560 AU 2°36'14 8.41560 AU 2°04'36 2°04'37 10.45405 AU 2°30'04 8.49610 AU

max. Earth dist. morning rise	5795 Apr 30 22:00 5795 May 17 18:17	14° 8 19'40	10.75645 AU	morning rise retrograde	5801 Aug 04 18:54 5801 Nov 18 17:48	0° Ω 59'45 9° Ω 02'47	0056120
retrograde	5795 May 23 11:03 5795 Aug 30 06:12	15° 8 21° 8 51'02		opposition min. Earth dist.	5802 Jan 25 23:56 5802 Jan 25 22:38	5° Ω 34'30	8.25234 AU
opposition	5795 Nov 08 15:21	18° 8 27'50	-2°34'25	direct	5802 Apr 02 22:44	2° Ω 08'57	6.23234 AU
min. Earth dist.	5795 Nov 08 13:47	18° 8 28'08	8.72153 AU	evening set	5802 Jul 14 07:06	9° Ω 59'16	
direct	5796 Jan 16 06:04	15° 8 08'16	0.72105710	evening sec	3002341 11 07.00	7 000710	
evening set	5796 Apr 25 09:49	22° 8 25'10		conjunction	5802 Aug 01 03:53	12° Ω 14'57	-0°31'29
S	ī			minimum elong	5802 Aug 01 03:55	12° Ω 14'58	
conjunction	5796 May 12 06:35	24° 8 28'10	-2°06'45	max. Earth dist.	5802 Aug 01 05:09	12° Ω 15′21	10.22583 AU
minimum elong	5796 May 12 06:35	24° 8 28'10	2°06'47	morning rise	5802 Aug 19 03:33	14° Ω 31'32	
max. Earth dist.	5796 May 12 07:33	24° 8 28'27	10.68164 AU		5802 Aug 22 23:16	15° Ω	
morning rise	5796 May 29 07:13	26° 8 32'18		retrograde	5802 Dec 02 18:32	22° Ω 36′36	
	5796 Jun 29 04:21	$\Pi^{\circ}0$		opposition	5803 Feb 08 16:07	19° Ω 08′10	-0°20'40
retrograde	5796 Sep 11 07:54	4° Ⅱ 09'58		min. Earth dist.	5803 Feb 08 15:04	19° Ω 08'23	8.20338 AU
opposition	5796 Nov 20 12:16	0° Ⅱ 45'40		direct	5803 Apr 16 15:53	15° Ω 41'35	
min. Earth dist.	5796 Nov 20 11:02	0° Ⅱ 45'55	8.64264 AU	evening set	5803 Jul 28 15:05	23° Ω 37'11	
	5796 Nov 30 11:31	30° ₹ 8				_	
direct	5797 Jan 27 18:15	27° 8 25'23		conjunction	5803 Aug 15 14:41	25° Ω 54'15	
	5797 Mar 24 07:05	0°II		minimum elong	5803 Aug 15 14:41	25° Ω 54'15	0°01'50
evening set	5797 May 07 23:18	4° Ⅱ 46'52		behind sun begin	5803 Aug 15 07:22	25° Ω 51'56	
	5505.) (04.00.01	60 T 51146	200 4142	behind sun end	5803 Aug 15 22:01	25° Ω 56'34	10.10525.444
conjunction	5797 May 24 23:21	6° Ⅱ 51'46		max. Earth dist.	5803 Aug 15 15:53		10.18537 AU
minimum elong	5797 May 24 23:22	6° Ⅱ 51'46		morning rise	5803 Sep 02 16:07	28° Ω 11'54	
max. Earth dist.	5797 May 25 00:54		10.59975 AU	asc. node	5803 Sep 06 18:12	28° Ω 42'26	
morning rise	5797 Jun 11 03:31	8° Ⅱ 57'55 16° Ⅱ 41'52			5803 Sep 17 09:50	0° Mp	
retrograde	5797 Sep 24 15:06 5797 Dec 03 12:32	16°Щ41′52 13° Ц 16′29	2020142	retrograde opposition	5803 Dec 16 20:44	6° Mp 17'35	0°16'40
opposition min. Earth dist.	5797 Dec 03 12:32 5797 Dec 03 11:00		8.55850 AU	min. Earth dist.	5804 Feb 22 10:04 5804 Feb 22 09:00	2° m/49'15 2° m/49'28	8.17196 AU
direct	5798 Feb 09 09:48	9° ∏ 55'19	6.55650 AU	min. Earth dist.	5804 Apr 02 22:35	2 11/4928 30°RΩ	6.17190 AU
evening set	5798 May 20 19:33	17° Ⅲ 22'02		direct	5804 Apr 29 11:31	29° Ω 21'48	
evening set	3776 Way 20 17.33	17 1122 02		direct	5804 May 25 20:48	0° M)	
conjunction	5798 Jun 06 23:32	19° Ⅱ 29'05	-1°56'40	evening set	5804 Aug 11 04:04	7°Mp21'50	
minimum elong	5798 Jun 06 23:34	19° Ⅱ 29'05		evening sec	20011148 11 01.01	, .,,2100	
max. Earth dist.	5798 Jun 07 02:05		10.51467 AU	conjunction	5804 Aug 29 05:12	9° m 39'40	0°28'15
morning rise	5798 Jun 24 07:38	21° Ⅱ 37′26		minimum elong	5804 Aug 29 05:11	9° m 39'40	0°28'14
retrograde	5798 Oct 08 03:02	29° Ⅲ 27'21		max. Earth dist.	5804 Aug 29 06:21	9° m/40'02	10.16336 AU
opposition	5798 Dec 16 16:16	26° Ⅱ 00'58	-2°16'18	morning rise	5804 Sep 16 06:56	11° m 57'43	
min. Earth dist.	5798 Dec 16 14:01	26° Ⅱ 01'25	8.47319 AU	retrograde	5804 Dec 29 23:36	20° M 02'30	
direct	5799 Feb 22 06:01	22° Ⅲ 38'48		opposition	5805 Mar 07 04:57	16°M 34'33	0°53'16
	5799 Jun 01 10:24	0ංම		min. Earth dist.	5805 Mar 07 03:49	16°M 34'47	8.15996 AU
evening set	5799 Jun 02 23:08	0°911'14		direct	5805 May 13 10:03	13°M) 06'26	
				evening set	5805 Aug 25 19:55	21°Mp09'47	
conjunction	5799 Jun 20 07:27	2°520'35					
minimum elong	5799 Jun 20 07:30	2° © 20'36	1°42'44	conjunction	5805 Sep 12 21:09	23° m 27'41	0°56'42
max. Earth dist.	5799 Jun 20 10:24		10.43067 AU	minimum elong	5805 Sep 12 21:07	23° Mp 27'40	0°56'41
morning rise	5799 Jul 07 19:51	4°931'14		max. Earth dist.	5805 Sep 12 22:00	-•	10.16121 AU
retrograde	5799 Oct 21 20:21	12°926'32	1055145	morning rise	5805 Sep 30 21:48	25° Mp 45'27	
opposition	5799 Dec 29 23:37	8°959'17			5805 Nov 06 13:18	0° Ω 2° Ω 47!55	
min. Earth dist.	5799 Dec 29 21:04 5800 Mar 07 06:29	5°936'02	8.39101 AU	retrograde	5806 Jan 13 00:44 5806 Mar 21 00:13	3° Ω 47'55	1°26'48
direct evening set	5800 Mar 07 06:29 5800 Jun 16 10:18	13°9514'25		opposition min. Earth dist.	5806 Mar 20 23:30	0° ჲ 20'37 0° ჲ 20'46	8.16825 AU
evening set	3600 Juli 10 10.16	13 301423		iiiii. Eartii dist.	5806 Mar 25 05:13	0 ==20 40 30°RM)	6.10623 AU
conjunction							
·	5800 Jul 03 23:06	15°626'06	-1°23'17	direct			
minimiim elong	5800 Jul 03 23:06 5800 Jul 03 23:09	15° © 26'06 15° © 26'07		direct	5806 May 27 11:11	26° m 52'05	
minimum elong	5800 Jul 03 23:09	15° 5 26'07	1°23'18		5806 May 27 11:11 5806 Jul 27 13:23	26° № 52'05 0° <u>Ω</u>	
max. Earth dist.	5800 Jul 03 23:09 5800 Jul 04 01:36	15°©26'07 15°©26'54		direct evening set	5806 May 27 11:11	26° m 52'05	
-	5800 Jul 03 23:09	15° 5 26'07	1°23'18	evening set	5806 May 27 11:11 5806 Jul 27 13:23	26° № 52'05 0° <u>Ω</u>	1°21'51
max. Earth dist. morning rise	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52	15°©26'07 15°©26'54 17°©39'02	1°23'18 10.35193 AU		5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14	26° № 52'05 0° Ω 4° Ω 57'16 7° Ω 14'35	1°21'51 1°21'51
max. Earth dist. morning rise retrograde	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53	1°23'18 10.35193 AU	evening set	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14	26° \$\mathbf{n}\$ 52'05 0° \mathbf{o}\$ 4° \mathbf{\Omega}\$ 57'16 7° \mathbf{\Omega}\$ 14'35 7° \mathbf{\Omega}\$ 14'34	
max. Earth dist. morning rise retrograde opposition	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53	1°23'18 10.35193 AU -1°28'45	evening set conjunction minimum elong	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11	26° \$\mathbf{n}\$ 52'05 0° \mathbf{o}\$ 4° \mathbf{\Omega}\$ 57'16 7° \mathbf{\Omega}\$ 14'35 7° \mathbf{\Omega}\$ 14'34	1°21'51
max. Earth dist. morning rise retrograde opposition min. Earth dist.	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20 5801 Jan 12 08:14	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53 22°\$11'19	1°23'18 10.35193 AU -1°28'45	evening set conjunction minimum elong max. Earth dist.	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11 5806 Sep 27 12:18	26° M 52'05 0° Ω 4° Ω 57'16 7° Ω 14'35 7° Ω 14'34 7° Ω 14'36	1°21'51
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20 5801 Jan 12 08:14 5801 Mar 20 11:34	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53 22°\$11'19 18°\$46'28	1°23'18 10.35193 AU -1°28'45	evening set conjunction minimum elong max. Earth dist. morning rise	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11 5806 Sep 27 12:18 5806 Oct 15 10:39	26° M 52'05 0° <u>a</u> 4° <u>a</u> 57'16 7° <u>a</u> 14'35 7° <u>a</u> 14'36 9° <u>a</u> 31'27	1°21'51
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20 5801 Jan 12 08:14 5801 Mar 20 11:34	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53 22°\$11'19 18°\$46'28	1°23'18 10.35193 AU -1°28'45 8.31607 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11 5806 Sep 27 12:18 5806 Oct 15 10:39 5807 Jan 26 22:11 5807 Apr 03 18:50 5807 Apr 03 18:56	26° \$\mathbb{n}\$52'05 0° \omega 4° \omega 57'16 7° \omega 14'35 7° \omega 14'34 7° \omega 14'36 9° \omega 31'27 17° \omega 30'16 14° \omega 03'51 14° \omega 03'50	1°21'51 10.17928 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20 5801 Jan 12 08:14 5801 Mar 20 11:34 5801 Jun 30 05:11	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53 22°\$11'19 18°\$46'28 26°\$30'56	1°23'18 10.35193 AU -1°28'45 8.31607 AU -0°59'09	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11 5806 Sep 27 12:18 5806 Oct 15 10:39 5807 Jan 26 22:11 5807 Apr 03 18:50 5807 Apr 03 18:56 5807 Jun 10 14:08	26° \$\mathbf{n}\$ 52'05 0° \omega 4° \omega 57'16 7° \omega 14'35 7° \omega 14'34 7° \omega 14'36 9° \omega 31'27 17° \omega 30'16 14° \omega 03'51	1°21'51 10.17928 AU 1°55'14
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5800 Jul 03 23:09 5800 Jul 04 01:36 5800 Jul 21 15:52 5800 Nov 04 17:59 5801 Jan 12 10:20 5801 Jan 12 08:14 5801 Mar 20 11:34 5801 Jun 30 05:11 5801 Jul 17 22:14	15°\$26'07 15°\$26'54 17°\$39'02 25°\$38'46 22°\$10'53 22°\$11'19 18°\$46'28 26°\$30'56 28°\$44'46 28°\$44'47	1°23'18 10.35193 AU -1°28'45 8.31607 AU -0°59'09	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5806 May 27 11:11 5806 Jul 27 13:23 5806 Sep 09 12:14 5806 Sep 27 12:14 5806 Sep 27 12:11 5806 Sep 27 12:18 5806 Oct 15 10:39 5807 Jan 26 22:11 5807 Apr 03 18:50 5807 Apr 03 18:56	26° \$\mathbb{n}\$52'05 0° \omega 4° \omega 57'16 7° \omega 14'35 7° \omega 14'34 7° \omega 14'36 9° \omega 31'27 17° \omega 30'16 14° \omega 03'51 14° \omega 03'50	1°21'51 10.17928 AU 1°55'14

conjunction	5807 Oct 12 00:44	20° £ 56'44		conjunction	5813 Dec 30 10:53	9° ⋜ 04'28	1°33'48
minimum elong	5807 Oct 12 00:41	20° ≏ 56'44		minimum elong	5813 Dec 30 10:55	9° る 04'29	1°33'51
max. Earth dist.	5807 Oct 11 23:46	20° £ 56′26	10.21659 AU	max. Earth dist.	5813 Dec 30 07:45		10.66741 AU
morning rise	5807 Oct 29 20:04	23° ≏ 12'11		morning rise	5814 Jan 16 10:35	11° る 08'25	
	5808 Jan 05 16:39	0° M.		retrograde	5814 Apr 26 12:47	18° る 26'02	
retrograde	5808 Feb 09 15:10	1°M06'08		opposition	5814 Jul 04 00:14	15° ට 06'43	1°43'45
C	5808 Mar 15 22:50	30° ₽ Ω		min. Earth dist.	5814 Jul 04 02:52	15° る 06'12	8.70552 AU
opposition	5808 Apr 16 11:45	27° £ 40'48	2°16'55	direct	5814 Sep 12 11:24	11° る 42'48	
min. Earth dist.	5808 Apr 16 12:41	27° Ω 40'37	8.24294 AU	evening set	5814 Dec 25 21:06	19° る 13'37	
	•		6.24294 AU	evening set	3614 DCC 23 21.00	19 01337	
direct	5808 Jun 23 16:30	24° £ 12'14			5015 7 11 00 05	210715105	1010110
	5808 Sep 18 17:05	0°M		conjunction	5815 Jan 11 22:07		1°13'43
evening set	5808 Oct 07 13:51	2°M16'10		minimum elong	5815 Jan 11 22:09	21° る 17'07	1°13'45
				max. Earth dist.	5815 Jan 11 18:35	21° る 16'02	10.74002 AU
conjunction	5808 Oct 25 08:36	4°M30'45	1°56'44	morning rise	5815 Jan 28 19:57	23° る 19'38	
minimum elong	5808 Oct 25 08:34	4° ጤ 30'44	1°56'44		5815 Apr 13 12:42	0° ≈	
max. Earth dist.	5808 Oct 25 06:44	4°M30'09	10.27095 AU	retrograde	5815 May 08 21:45	0° ≈ 33'14	
morning rise	5808 Nov 12 00:20	6° ™ 44'22		Ü	5815 Jun 03 15:38	30°Rる	
retrograde	5809 Feb 22 03:49	14°M32'36		opposition	5815 Jul 16 17:56	27°る14'25	1016'56
•		11°M08'24	2°30'45	min. Earth dist.	5815 Jul 16 20:14	27°る13'59	8.77243 AU
opposition	5809 Apr 30 02:29						6.77243 AU
min. Earth dist.	5809 Apr 30 03:42	11°M08'10	8.30490 AU	direct	5815 Sep 25 09:14	23° る 51'32	
direct	5809 Jul 07 17:40	7°M40'15			5815 Dec 27 04:52	0° ≈	
	5809 Oct 16 04:52	15° ™		evening set	5816 Jan 07 04:26	1°≈16'32	
evening set	5809 Oct 21 18:37	15° ™ 40′58					
				conjunction	5816 Jan 24 03:28	3° ≈ 18'44	0°50'38
conjunction	5809 Nov 08 10:05	17°M53'41	2°04'42	minimum elong	5816 Jan 24 03:29	3°≈18'44	0°50'39
minimum elong	5809 Nov 08 10:04	17° M 53'41	2°04'43	max. Earth dist.	5816 Jan 24 00:35	3°≈17'51	10.80127 AU
max. Earth dist.	5809 Nov 08 08:01		10.33924 AU	morning rise	5816 Feb 09 23:37	5°≈20'06	
morning rise	5809 Nov 25 22:00	20°M05'18	10.55724710	retrograde	5816 May 20 03:51	12° ≈ 30'53	
•		27°M47'12			•	9°≈12'21	0°47'09
retrograde	5810 Mar 07 10:58		2027117	opposition	5816 Jul 28 09:06		
opposition	5810 May 13 14:11	24°M24'10	2°36'16	min. Earth dist.	5816 Jul 28 10:51	9° ≈ 12'01	8.82712 AU
min. Earth dist.	5810 May 13 15:03	24°M23'59	8.37878 AU	direct	5816 Oct 07 02:13	5°≈50'24	
direct	5810 Jul 21 16:14	20°M56'39		evening set	5817 Jan 18 06:47	13° ≈ 10′19	
evening set	5810 Nov 04 16:09	28°M52'41			5817 Feb 02 14:05	15° ≈	
	5810 Nov 13 17:42	0° ∡ ¹					
				conjunction	5817 Feb 04 04:00	15°≈11'25	0°25'36
conjunction	5810 Nov 22 04:22	1° ∡ 03'25	2°05'59	3	5817 Feb 04 04:00 5817 Feb 04 04:01		
conjunction		1° ҂ 03′25 1° ҂ 03′25	2°05'59	minimum elong	5817 Feb 04 04:01	15° ≈ 11'25	0°25'37
minimum elong	5810 Nov 22 04:22	1° ≯ 03'25	2°06'01	minimum elong max. Earth dist.	5817 Feb 04 04:01 5817 Feb 04 01:47	15°≈11'25 15°≈10'45	
minimum elong max. Earth dist.	5810 Nov 22 04:22 5810 Nov 22 02:44	1° 尽 03'25 1° 尽 02'54		minimum elong max. Earth dist. morning rise	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51	15°≈11'25 15°≈10'45 17°≈11'52	0°25'37
minimum elong max. Earth dist. morning rise	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34	1° ₹ 03'25 1° ₹ 02'54 3° ₹ 12'57	2°06'01	minimum elong max. Earth dist. morning rise retrograde	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03	0°25'37 10.84945 AU
minimum elong max. Earth dist. morning rise retrograde	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56	1° ₹03'25 1° ₹02'54 3° ₹12'57 10° ₹48'15	2°06'01 10.41758 AU	minimum elong max. Earth dist. morning rise retrograde opposition	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33	0°25'37 10.84945 AU 0°15'40
minimum elong max. Earth dist. morning rise	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15	1° 🗷 03'25 1° 🗷 02'54 3° 🗷 12'57 10° 🗷 48'15 7° 🗷 26'20	2°06'01 10.41758 AU 2°33'35	minimum elong max. Earth dist. morning rise retrograde	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12	0°25'37 10.84945 AU
minimum elong max. Earth dist. morning rise retrograde	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56	1° ₹03'25 1° ₹02'54 3° ₹12'57 10° ₹48'15	2°06'01 10.41758 AU	minimum elong max. Earth dist. morning rise retrograde opposition	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33	0°25'37 10.84945 AU 0°15'40
minimum elong max. Earth dist. morning rise retrograde opposition	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15	1° 🗷 03'25 1° 🗷 02'54 3° 🗷 12'57 10° 🗷 48'15 7° 🗷 26'20	2°06'01 10.41758 AU 2°33'35	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12	0°25'37 10.84945 AU 0°15'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07	1° ₹ 03'25 1° ₹ 02'54 3° ₹ 12'57 10° ₹ 48'15 7° ₹ 26'20 7° ₹ 26'09	2°06'01 10.41758 AU 2°33'35	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24	0°25'37 10.84945 AU 0°15'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35	1° ₹03'25 1° ₹02'54 3° ₹12'57 10° ₹48'15 7° ₹26'20 7° ₹26'09 3° ₹59'36	2°06'01 10.41758 AU 2°33'35	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04	0°25'37 10.84945 AU 0°15'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37	1° ₹03'25 1° ₹02'54 3° ₹12'57 10° ₹48'15 7° ₹26'20 7° ₹26'09 3° ₹59'36 11° ₹49'53	2°06'01 10.41758 AU 2°33'35 8.46040 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈22'21	0°25'37 10.84945 AU 0°15'40 8.86817 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42	1° \$\tilde{\$7}02'54 3° \$\tilde{\$7}02'54 3° \$\tilde{\$7}12'57 10° \$\tilde{\$7}48'15 7° \$\tilde{\$7}26'20 7° \$\tilde{\$7}26'09 3° \$\tilde{\$7}59'36 11° \$\tilde{\$7}49'53 13° \$\tilde{\$7}58'37	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:45	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈22'21 26°≈57'20	0°25'37 10.84945 AU 0°15'40 8.86817 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 14:43	1° \$\tilde{\pi}02'54 3° \$\tilde{\pi}12'57 10° \$\tilde{\pi}48'15 7° \$\tilde{\pi}26'20 7° \$\tilde{\pi}26'09 3° \$\tilde{\pi}59'36 11° \$\tilde{\pi}49'53 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'37	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:45 5818 Feb 16 00:43	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'13 21°≈02'12 17°≈41'24 24°≈57'04 26°≈22'21 26°≈57'20 26°≈57'19	0°25'37 10.84945 AU 0°15'40 8.86817 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 14:43 5811 Dec 05 13:14	1° \$\tilde{\pi}03'25 1° \$\tilde{\pi}02'54 3° \$\tilde{\pi}12'57 10° \$\tilde{\pi}48'15 7° \$\tilde{\pi}26'20 7° \$\tilde{\pi}26'09 3° \$\tilde{\pi}59'36 11° \$\tilde{\pi}49'53 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'37	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:45 5818 Feb 16 00:43 5818 Feb 15 17:44	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'13 21°≈02'12 17°≈41'24 24°≈57'04 26°≈57'20 26°≈57'19 26°≈55'15	0°25'37 10.84945 AU 0°15'40 8.86817 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 13:14 5811 Dec 22 19:31	1° \$\tilde{\pi}03'25 1° \$\tilde{\pi}02'54 3° \$\tilde{\pi}12'57 10° \$\tilde{\pi}48'15 7° \$\tilde{\pi}26'20 7° \$\tilde{\pi}26'09 3° \$\tilde{\pi}59'36 11° \$\tilde{\pi}49'53 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'09 16° \$\tilde{\pi}06'06	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin behind sun end	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:43 5818 Feb 15 17:44 5818 Feb 16 07:43	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈57'20 26°≈57'19 26°≈55'15 26°≈59'24	0°25'37 10.84945 AU 0°15'40 8.86817 AU -0°00'21 0°00'21
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 13:14 5811 Dec 22 19:31 5812 Apr 01 10:54	1° \$\tilde{\sigma}03'25 1° \$\tilde{\sigma}02'54 3° \$\tilde{\sigma}12'57 10° \$\tilde{\sigma}48'15 7° \$\tilde{\sigma}26'20 7° \$\tilde{\sigma}26'09 3° \$\tilde{\sigma}59'36 11° \$\tilde{\sigma}49'53 13° \$\tilde{\sigma}58'37 13° \$\tilde{\sigma}58'09 16° \$\tilde{\sigma}06'06 23° \$\tilde{\sigma}34'55	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52 10.50156 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin behind sun end max. Earth dist.	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:43 5818 Feb 16 07:43 5818 Feb 16 07:43 5818 Feb 15 22:13	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈57'19 26°≈55'15 26°≈55'15 26°≈59'24 26°≈56'38	0°25'37 10.84945 AU 0°15'40 8.86817 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 14:43 5811 Dec 05 13:14 5811 Dec 22 19:31 5812 Apr 01 10:54 5812 Jun 08 02:44	1° \$\tilde{\pi}03'25 1° \$\tilde{\pi}02'54 3° \$\tilde{\pi}12'57 10° \$\tilde{\pi}48'15 7° \$\tilde{\pi}26'20 7° \$\tilde{\pi}26'09 3° \$\tilde{\pi}59'36 11° \$\tilde{\pi}49'53 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'37 13° \$\tilde{\pi}58'09 16° \$\tilde{\pi}06'06	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin behind sun end	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:43 5818 Feb 15 17:44 5818 Feb 16 07:43	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈57'20 26°≈55'15 26°≈55'15 26°≈55'24 26°≈56'38 28°≈57'09	0°25'37 10.84945 AU 0°15'40 8.86817 AU -0°00'21 0°00'21
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 13:14 5811 Dec 22 19:31 5812 Apr 01 10:54	1° \$\tilde{\sigma}03'25 1° \$\tilde{\sigma}02'54 3° \$\tilde{\sigma}12'57 10° \$\tilde{\sigma}48'15 7° \$\tilde{\sigma}26'20 7° \$\tilde{\sigma}26'09 3° \$\tilde{\sigma}59'36 11° \$\tilde{\sigma}49'53 13° \$\tilde{\sigma}58'37 13° \$\tilde{\sigma}58'37 13° \$\tilde{\sigma}58'37 13° \$\tilde{\sigma}58'09 16° \$\tilde{\sigma}06'06 23° \$\tilde{\sigma}34'55 20° \$\tilde{\sigma}14'00 20° \$\tilde{\sigma}13'44	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52 10.50156 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin behind sun end max. Earth dist.	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:43 5818 Feb 16 07:43 5818 Feb 16 07:43 5818 Feb 15 22:13	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈57'20 26°≈55'15 26°≈55'15 26°≈56'38 28°≈57'09 0° ★	0°25'37 10.84945 AU 0°15'40 8.86817 AU -0°00'21 0°00'21
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minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise	5810 Nov 22 04:22 5810 Nov 22 02:44 5810 Dec 09 12:34 5811 Mar 20 12:56 5811 May 26 22:15 5811 May 26 23:07 5811 Aug 04 10:35 5811 Nov 18 05:37 5811 Dec 05 14:42 5811 Dec 05 14:43 5811 Dec 05 14:43 5811 Dec 05 13:14 5811 Dec 22 19:31 5812 Apr 01 10:54 5812 Jun 08 02:44 5812 Jun 08 02:44 5812 Jun 08 04:05 5812 Aug 16 23:03 5812 Nov 30 10:38 5812 Dec 17 16:41 5812 Dec 17 16:43 5812 Dec 17 16:43 5812 Dec 17 16:43 5813 Jan 03 18:39 5813 Jan 14 09:30 5813 Jan 14 09:30 5813 Jun 21 03:23 5813 Jun 21 05:40 5813 Aug 02 13:45	1° \$\tilde{\alpha}03'25 1° \$\tilde{\alpha}02'54 3° \$\tilde{\alpha}12'57 10° \$\tilde{\alpha}48'15 7° \$\tilde{\alpha}26'20 7° \$\tilde{\alpha}26'09 3° \$\tilde{\alpha}59'36 11° \$\tilde{\alpha}49'53 13° \$\tilde{\alpha}58'37 13° \$\tilde{\alpha}58'37 13° \$\tilde{\alpha}58'37 13° \$\tilde{\alpha}58'37 13° \$\tilde{\alpha}58'37 13° \$\tilde{\alpha}58'39 16° \$\tilde{\alpha}06'06 23° \$\tilde{\alpha}34'55 20° \$\tilde{\alpha}14'00 20° \$\tilde{\alpha}13'44 16° \$\tilde{\alpha}48'10 24° \$\tilde{\alpha}31'59 26° \$\tilde{\alpha}38'48 26° \$\tilde{\alpha}38'48 26° \$\tilde{\alpha}38'12 28° \$\tilde{\alpha}44'24 0° \$\tilde{\alpha}6" \$\tilde{\alpha}70'9 2° \$\tilde{\alpha}6'43 30° \$\tilde{\alpha}22'16	2°06'01 10.41758 AU 2°33'35 8.46040 AU 2°00'50 2°00'52 10.50156 AU 2°23'17 8.54523 AU 1°49'50 1°49'52 10.58644 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set desc. node conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct	5817 Feb 04 04:01 5817 Feb 04 01:47 5817 Feb 20 22:51 5817 Jun 01 09:11 5817 Aug 09 22:19 5817 Aug 10 00:12 5817 Oct 19 15:08 5818 Jan 30 05:13 5818 Feb 11 04:11 5818 Feb 16 00:45 5818 Feb 16 00:43 5818 Feb 15 17:44 5818 Feb 15 17:44 5818 Feb 16 07:43 5818 Feb 15 22:13 5818 Mar 04 18:47 5818 Mar 13 20:01 5818 Jun 13 12:45 5818 Aug 22 10:03 5818 Aug 22 10:03 5818 Aug 22 12:01 5818 Oct 05 16:03 5818 Oct 31 23:52 5818 Nov 27 01:35 5819 Feb 27 19:06 5819 Feb 27 19:06 5819 Feb 27 19:06 5819 Feb 27 16:45 5819 Mar 16 12:36	15°≈11'25 15°≈10'45 17°≈11'52 24°≈21'03 21°≈02'33 21°≈02'12 17°≈41'24 24°≈57'04 26°≈55'15 26°≈55'15 26°≈56'38 28°≈57'09 0° H 6° H05'55 2° H47'13 2° H46'51 30°R≈ 29°≈26'42 0° H 6° H39'08 8° H38'46	0°25'37 10.84945 AU 0°15'40 8.86817 AU -0°00'21 10.88320 AU -0°16'12 8.89428 AU -0°26'07 0°26'07 10.90138 AU

direct	5819 Nov 13 08:19	11° ₩ 08'39		direct	5826 Jan 23 21:25	22° 8 29'34	
evening set	5820 Feb 22 19:25	18° ¥ 18'56		evening set	5826 May 04 00:56	29° 8 49'52	
C				S	5826 May 05 10:30	0°Ⅱ	
conjunction	5820 Mar 10 12:30	20°) 18′15	-0°50'44		•		
minimum elong	5820 Mar 10 12:28	20°) 18′14	0°50'44	conjunction	5826 May 20 23:39	1° Ⅱ 54'10	-2°06'20
max. Earth dist.	5820 Mar 10 11:31	20° ∺ 17'57	10.90345 AU	minimum elong	5826 May 20 23:40	1° Ⅱ 54'11	2°06'21
morning rise	5820 Mar 27 05:35	22° ∺ 17'34		max. Earth dist.	5826 May 21 02:55	1° Ⅱ 55'11	10.61635 AU
retrograde	5820 Jul 06 22:38	29° ∺ 29'16		morning rise	5826 Jun 07 02:10	3° Ⅱ 59'40	
opposition	5820 Sep 15 07:37	26° ₩ 09'28	-1°16′21	retrograde	5826 Sep 20 10:38	11° Ⅱ 41'45	
min. Earth dist.	5820 Sep 15 07:30	26° ∺ 09'30	8.89881 AU	opposition	5826 Nov 29 10:05	8° Ⅱ 16′25	-2°33'12
direct	5820 Nov 24 14:06	22°) 49′48		min. Earth dist.	5826 Nov 29 06:53	8° Ⅱ 17′02	8.57832 AU
evening set	5821 Mar 05 13:32	29° ∺ 59′00		direct	5827 Feb 05 10:03	4° ∏ 55′20	
	5821 Mar 05 16:57	$0^{\circ}\mathbf{\Upsilon}$		evening set	5827 May 16 18:39	12° Ⅱ 20′29	
conjunction	5821 Mar 22 06:01	1° Y 58'17		conjunction	5827 Jun 02 20:49	14° Ⅱ 26'46	-2°00'46
minimum elong	5821 Mar 22 05:59			minimum elong	5827 Jun 02 20:50	14° Ⅱ 26'46	
max. Earth dist.	5821 Mar 22 06:19		10.88940 AU	max. Earth dist.	5827 Jun 02 23:46		10.53712 AU
morning rise	5821 Apr 07 23:08	3° Y 57'49		morning rise	5827 Jun 20 03:16	16° ∏ 34'22	
retrograde	5821 Jul 19 06:44	11° Ƴ 12'41		retrograde	5827 Oct 03 20:59	24° Ⅱ 22'29	
opposition	5821 Sep 27 18:57	7° Ƴ 52'07	-1°42'22	opposition	5827 Dec 12 13:04	20° Ⅱ 56′17	
min. Earth dist.	5821 Sep 27 18:10	7° Y 52'16	8.87717 AU	min. Earth dist.	5827 Dec 12 10:14		8.49820 AU
direct	5821 Dec 06 16:41	4° Ƴ 32'38		direct	5828 Feb 18 04:24	17° Ⅲ 34′26	
evening set	5822 Mar 17 09:02	11° Ƴ 41'58		evening set	5828 May 28 19:34	25° Ⅱ 05'00	
conjunction	5822 Apr 03 01:14	13° Y 41'31		conjunction	5828 Jun 15 01:55	27° Ⅱ 13'29	
minimum elong	5822 Apr 03 01:11	13° Y 41'31		minimum elong	5828 Jun 15 01:57	27° Ⅱ 13'30	
max. Earth dist.	5822 Apr 03 01:37		10.85977 AU	max. Earth dist.	5828 Jun 15 05:06		10.45762 AU
morning rise	5822 Apr 19 18:59	15° Y 41'34		morning rise	5828 Jul 02 12:41	29° ∏ 23'19	
retrograde	5822 Jul 31 17:21	23° Y ′00′37			5828 Jul 07 13:33	0° ©	
opposition	5822 Oct 10 07:24	19° Ƴ 39'11		retrograde	5828 Oct 16 11:37	7° © 16'56	
min. Earth dist.	5822 Oct 10 06:37	19° Y 39'20	8.84043 AU	opposition	5828 Dec 24 19:28	3°950'03	
direct	5822 Dec 18 21:34	16° Y 19'41		min. Earth dist.	5828 Dec 24 16:44		8.41974 AU
evening set	5823 Mar 29 06:45	23° Y 30'18		direct	5829 Mar 02 04:38	0°527'18	
				evening set	5829 Jun 11 04:04	8° © 03'37	
	5000 4 14 00 00	2500020120	1040127	8	50 2 5 ca n 11 0		
conjunction	5823 Apr 14 23:20	25°Υ30'30		-		100614125	1021155
minimum elong	5823 Apr 14 23:18	25° Ƴ 30′29	1°48'38	conjunction	5829 Jun 28 15:00	10°©14'25	
minimum elong max. Earth dist.	5823 Apr 14 23:18 5823 Apr 14 23:46	25°Υ30'29 25°Υ30'38		conjunction minimum elong	5829 Jun 28 15:00 5829 Jun 28 15:02	10°©14'25	1°31'57
minimum elong	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20	25° Y 30'29 25° Y 30'38 27° Y 31'24	1°48'38	conjunction minimum elong max. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45	10°©14'25 10°©15'36	
minimum elong max. Earth dist. morning rise	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48	25° Y 30'29 25° Y 30'38 27° Y 31'24 0° 8	1°48'38	conjunction minimum elong max. Earth dist. morning rise	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03	10°©14'25 10°©15'36 12°©26'29	1°31'57
minimum elong max. Earth dist. morning rise retrograde	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30	1°48'38 10.81570 AU	conjunction minimum elong max. Earth dist. morning rise retrograde	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48	10°©14'25 10°©15'36 12°©26'29 20°©24'48	1°31'57 10.38179 AU
minimum elong max. Earth dist. morning rise retrograde opposition	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07	1°48'38 10.81570 AU -2°21'04	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'22	1°31'57 10.38179 AU -1°40'34
minimum elong max. Earth dist. morning rise retrograde	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19	1°48'38 10.81570 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58	1°31'57 10.38179 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y	1°48'38 10.81570 AU -2°21'04	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42	1°31'57 10.38179 AU -1°40'34
minimum elong max. Earth dist. morning rise retrograde opposition	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y 28°Y13'28	1°48'38 10.81570 AU -2°21'04	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58	1°31'57 10.38179 AU -1°40'34
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36	25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y 28°Y13'28 0°8	1°48'38 10.81570 AU -2°21'04	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jun 24 20:09	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42 21°@15'51	1°31'57 10.38179 AU -1°40'34 8.34693 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y 28°Y13'28	1°48'38 10.81570 AU -2°21'04	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jun 24 20:09 5830 Jul 12 11:33	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42 21°@15'51	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47	25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y 28°Y13'28 0°8 5°826'22	1°48'38 10.81570 AU -2°21'04 8.78996 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jun 24 20:09 5830 Jul 12 11:33 5830 Jul 12 11:36	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42 21°@15'51 23°@28'50 23°@28'50	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47	25°Y30'29 25°Y30'38 27°Y31'24 0°8 4°855'30 1°833'07 1°833'19 30°8Y 28°Y13'28 0°8 5°826'22	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jun 24 20:09 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 15:56	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42 21°@15'51 23°@28'50 23°@28'50	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47 5824 Apr 26 01:38 5824 Apr 26 01:37	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'34 7°B27'34	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jul 24 20:09 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 30 06:32	10°@14'25 10°@15'36 12°@26'29 20°@24'48 16°@57'22 16°@57'58 13°@33'42 21°@15'51 23°@28'50 23°@28'51 23°@30'13 25°@42'58	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35
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minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47 5824 Apr 26 01:38 5824 Apr 26 01:37 5824 Apr 26 03:20 5824 May 12 22:27 5824 Jul 06 02:52 5824 Aug 25 02:53 5824 Oct 15 16:38 5824 Nov 03 14:57 5824 Nov 03 12:54 5825 Mar 30 09:12 5825 May 08 09:29 5825 May 08 09:29 5825 May 08 09:29	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'34 7°B27'33 7°B28'05 9°B29'41 15°B 16°B59'29 15°RB 13°B36'05 13°B36'28 10°B16'07 15°B 17°B32'18	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53 10.75886 AU -2°31'56 8.72767 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 30 06:32 5830 Sep 05 21:53 5830 Nov 13 07:16 5831 Jan 20 18:13 5831 Jan 20 14:48 5831 Jul 26 15:02 5831 Jul 08 19:40	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'22 16°\$57'58 13°\$33'42 21°\$15'51 23°\$28'50 23°\$28'50 23°\$30'13 25°\$42'58 0°\$\Omega_3\Omega_4'57 0°\$\Omega_17'50 30°\$\Omega_26'\$52'31 0°\$\Omega_4'\Omega_4'0'22 6°\$\Omega_55'17 6°\$\Omega_56'34	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35 10.31354 AU -1°10'16 8.28363 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47 5824 Apr 26 01:38 5824 Apr 26 01:37 5824 Apr 26 03:20 5824 May 12 22:27 5824 Aug 25 02:53 5824 Oct 15 16:38 5824 Nov 03 14:57 5824 Nov 03 12:54 5825 Mar 30 09:12 5825 May 08 09:29	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'34 7°B27'33 7°B28'05 9°B29'41 15°B 16°B59'29 15°RB 13°B36'05 13°B36'28 10°B16'07 15°B 17°B32'18	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53 10.75886 AU -2°31'56 8.72767 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist.	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 30 06:32 5830 Sep 05 21:53 5830 Nov 13 07:16 5831 Jan 20 18:13 5831 Jan 20 14:48 5831 Jan 20 14:48 5831 Jan 20 14:48 5831 Jan 24 07:36 5831 Mar 28 17:57 5831 May 28 06:39 5831 Jul 08 19:40 5831 Jul 26 15:02 5831 Jul 26 15:04 5831 Jul 26 19:05 5831 Aug 13 13:20	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'22 16°\$57'58 13°\$33'42 21°\$15'51 23°\$28'50 23°\$28'51 23°\$30'13 25°\$42'58 0°\$\Omega\$3'\Omega\$4'57 0°\Omega\$17'09 0°\Omega\$17'50 30°\Omega\$26'\$52'31 0°\Omega\$4'\Omega\$4'0'22 6°\Omega\$55'17 6°\Omega\$56'34 9°\Omega\$11'09	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35 10.31354 AU -1°10'16 8.28363 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction min. Earth dist. direct	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 26 01:38 5824 Apr 26 01:37 5824 Apr 26 03:20 5824 Apr 26 03:20 5824 Aug 25 02:53 5824 Oct 15 16:38 5824 Nov 03 14:57 5824 Nov 03 12:54 5825 May 08 12:23 5825 May 08 09:29 5825 May 08 09:29 5825 May 08 09:28 5825 May 08 12:23	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'34 7°B27'33 7°B28'05 9°B29'41 15°B 16°B59'29 15°RB 13°B36'05 13°B36'05 13°B36'28 10°B16'07 15°B 17°B32'18	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53 10.75886 AU -2°31'56 8.72767 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jun 07 05:18 5830 Jun 07 02:17 5830 Mar 15 08:42 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 30 06:32 5830 Sep 05 21:53 5830 Nov 13 07:16 5831 Jul 20 18:13 5831 Jun 20 14:48	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'22 16°\$57'58 13°\$33'42 21°\$15'51 23°\$28'50 23°\$28'51 23°\$30'13 25°\$42'58 0°\$\Omega_3\text{0'}\Omega_17'50 30°\text{0'}\Omega_17'50	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35 10.31354 AU -1°10'16 8.28363 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47 5824 Apr 26 01:38 5824 Apr 26 01:37 5824 Apr 26 03:20 5824 May 12 22:27 5824 Jul 06 02:52 5824 Aug 25 02:53 5824 Oct 15 16:38 5824 Nov 03 14:57 5824 Nov 03 12:54 5825 Jan 11 10:45 5825 Mar 30 09:12 5825 May 08 09:29 5825 May 08 09:29 5825 May 08 09:28 5825 May 08 12:23 5825 May 25 08:44	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'33 7°B28'05 9°B29'41 15°B 16°B59'29 15°RB 13°B36'05 13°B36'05 13°B36'28 10°B16'07 15°B 17°B32'18	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53 10.75886 AU -2°31'56 8.72767 AU -2°05'56 2°05'57 10.69143 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jan 07 05:18 5830 Jan 07 02:17 5830 Mar 15 08:42 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 30 06:32 5830 Sep 05 21:53 5830 Nov 13 07:16 5831 Jan 20 18:13 5831 Jan 20 18:13 5831 Jan 20 14:48 5831 Jan 20 14:48 5831 Jan 24 07:36 5831 Mar 28 17:57 5831 May 28 06:39 5831 Jul 08 19:40 5831 Jul 26 15:04 5831 Jul 26 15:04 5831 Jul 26 15:04 5831 Jul 26 15:04 5831 Jul 26 15:05 5831 Aug 13 13:20 5831 Oct 06 15:09 5831 Nov 27 09:00	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'22 16°\$57'58 13°\$33'42 21°\$15'51 23°\$28'50 23°\$28'51 23°\$30'13 25°\$42'58 0°\$\Omega_17'50 30°\R\$ 26°\$52'31 0°\$\Omega_4\$'\Omega_40'22 6°\$\Omega_55'17 6°\$\Omega_55'17 6°\$\Omega_55'17 6°\$\Omega_56'34 9°\$\Omega_11'09 15°\$\Omega_17'\Omega_15'26	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35 10.31354 AU -1°10'16 8.28363 AU -0°43'11 10.25652 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct	5823 Apr 14 23:18 5823 Apr 14 23:46 5823 May 01 18:20 5823 May 23 14:48 5823 Aug 13 08:10 5823 Oct 22 21:57 5823 Oct 22 20:55 5823 Nov 13 06:06 5823 Dec 31 03:01 5824 Feb 15 08:36 5824 Apr 09 07:47 5824 Apr 26 01:37 5824 Apr 26 01:37 5824 Apr 26 03:20 5824 May 12 22:27 5824 Jul 06 02:52 5824 Aug 25 02:53 5824 Oct 15 16:38 5824 Nov 03 14:57 5824 Nov 03 12:54 5825 Jan 11 10:45 5825 Mar 30 09:12 5825 May 08 09:29 5825 May 08 09:29 5825 May 08 09:28 5825 May 08 12:23 5825 May 25 08:44 5825 Sep 07 04:06	25°Y30'29 25°Y30'38 27°Y31'24 0°B 4°B55'30 1°B33'07 1°B33'19 30°RY 28°Y13'28 0°B 5°B26'22 7°B27'34 7°B27'33 7°B28'05 9°B29'41 15°B 16°B59'29 15°RB 13°B36'05 13°B36'05 13°B36'28 10°B16'07 15°B 17°B32'18 19°B34'53 19°B34'52 19°B35'46 21°B38'31 29°B14'25 25°B50'01	1°48'38 10.81570 AU -2°21'04 8.78996 AU -1°59'52 1°59'53 10.75886 AU -2°31'56 8.72767 AU -2°05'56 2°05'57 10.69143 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	5829 Jun 28 15:00 5829 Jun 28 15:02 5829 Jun 28 18:45 5829 Jul 16 06:03 5829 Oct 30 07:48 5830 Jun 07 05:18 5830 Jun 07 02:17 5830 Mar 15 08:42 5830 Jul 12 11:33 5830 Jul 12 11:36 5830 Jul 12 11:36 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 12 15:56 5830 Jul 30 06:32 5830 Sep 05 21:53 5830 Nov 13 07:16 5831 Jul 20 18:13 5831 Jan 20 14:48 5831 Jan 20 14:48 5831 Jan 20 14:48 5831 Jul 26 15:07 5831 May 28 06:39 5831 Jul 08 19:40 5831 Jul 26 15:04 5831 Aug 13 13:20 5831 Oct 06 15:09 5831 Nov 27 09:00 5832 Jan 19 03:43	10°\$14'25 10°\$15'36 12°\$26'29 20°\$24'48 16°\$57'58 13°\$33'42 21°\$15'51 23°\$28'50 23°\$28'51 23°\$30'13 25°\$42'58 0°\$\Omega_17'50 30°\R\$ 26°\$52'31 0°\$\Omega_4'\	1°31'57 10.38179 AU -1°40'34 8.34693 AU -1°09'34 1°09'35 10.31354 AU -1°10'16 8.28363 AU -0°43'11 10.25652 AU

direct	5832 Apr 10 07:54	10° Ω 21'53		opposition	5838 Apr 24 20:57	5°M51'38	2025150
direct	5832 Jun 24 13:58	10 δί 21 33		min. Earth dist.	5838 Apr 24 20:54	5°M51'26	8.28253 AU
evening set	5832 Jul 22 01:42	18° Ω 15'00		direct	5838 Jul 02 07:05	2°M23'25	6.26233 AC
evening set	3032 Jul 22 01.42	10 0013 00		evening set	5838 Oct 16 07:33	10°M25'21	
conjunction	5832 Aug 09 00:10	20° Ω 31'25	-0°14'07	evening sec	3030 001 10 07.33	10 1102321	
minimum elong	5832 Aug 09 00:11	20°Ω31'26		conjunction	5838 Nov 03 00:32	12°M38'50	2°02'13
behind sun begin	5832 Aug 08 20:48	20°Ω30'22	0 1.00	minimum elong	5838 Nov 03 00:31	12°M38'50	2°02'14
behind sun end	5832 Aug 09 03:34	20° £ 332'30		max. Earth dist.	5838 Nov 02 22:44		10.31266 AU
max. Earth dist.	5832 Aug 09 02:54		10.21344 AU	morning rise	5838 Nov 20 13:54	14°M51'15	
morning rise	5832 Aug 27 00:49	22° Ω 48'32		. 8	5838 Nov 21 18:12	15° ™	
8	5832 Nov 08 16:23	0°m		retrograde	5839 Mar 02 09:26	22°M35'39	
retrograde	5832 Dec 10 11:54	0° m 53'44		opposition	5839 May 08 09:47	19° M 12'07	2°35'00
C	5833 Jan 11 10:02	30°R Ω		min. Earth dist.	5839 May 08 11:38	19° M 11'45	8.34836 AU
asc. node	5833 Feb 03 02:34	28° Ω 28'26		direct	5839 Jul 16 06:50	15° M 44'14	
opposition	5833 Feb 16 03:06	27° Ω 25'51	0°01'17	evening set	5839 Oct 30 08:05	23°M42'09	
min. Earth dist.	5833 Feb 16 01:19	27° Ω 26′13	8.19761 AU				
direct	5833 Apr 24 01:44	23° Ω 59'18		conjunction	5839 Nov 16 21:40	25°M53'42	2°06'16
	5833 Jul 20 12:38	0° m)		minimum elong	5839 Nov 16 21:40	25°M53'42	2°06'17
evening set	5833 Aug 05 12:55	1° m 57'05		max. Earth dist.	5839 Nov 16 18:53	25°M52'49	10.38375 AU
				morning rise	5839 Dec 04 07:23	28°M04'05	
conjunction	5833 Aug 23 13:17	4° Mp 14′27	0°16'00		5839 Dec 20 10:50	0° ∡ ¹	
minimum elong	5833 Aug 23 13:16	4° Mp 14′27	0°16'00	retrograde	5840 Mar 14 12:22	5° ∡ 141'58	
max. Earth dist.	5833 Aug 23 14:14	4° m) 14'45	10.18582 AU	opposition	5840 May 20 19:05	2° ∡ 19'25	2°35'42
morning rise	5833 Sep 10 14:56	6° Mp 32'13		min. Earth dist.	5840 May 20 21:31	2° ∡ 18'57	8.42382 AU
retrograde	5833 Dec 24 14:39	14° m 37'00			5840 Jun 22 01:59	30°RML	
opposition	5834 Mar 01 21:42	11° m)09'27	0°38'25	direct	5840 Jul 29 03:19	28°M52'05	
min. Earth dist.	5834 Mar 01 21:16	11° m 09'33	8.17833 AU		5840 Sep 03 20:25	0° ∡ ¹	
direct	5834 May 08 00:03	7° m 42'08		evening set	5840 Nov 12 00:37	6° ∡ ¹44'44	
evening set	5834 Aug 20 03:39	15° m 43'44					
				conjunction	5840 Nov 29 10:53	8° ∡ ¹54'17	2°03'45
conjunction	5834 Sep 07 04:42	18° m 01'28	0°45'16	minimum elong	5840 Nov 29 10:54	8° ∡ 754'17	2°03'47
minimum elong	5834 Sep 07 04:40	18° m 01'27	0°45'15	max. Earth dist.	5840 Nov 29 07:31	8° ₹ 53'14	10.46261 AU
max. Earth dist.	5834 Sep 07 04:10	18° m 01'18	10.17504 AU	morning rise	5840 Dec 16 17:13	11° ₹ 02'38	
morning rise	5834 Sep 25 05:58	20° m 19'15		retrograde	5841 Mar 27 10:57	18° ∡ ³34′00	
retrograde	5835 Jan 07 15:13	28° m 22'23		opposition	5841 Jun 03 00:44	15° ⊀ 12'22	2°28'30
opposition	5835 Mar 15 16:51	24° m 55'22	1°13'27	min. Earth dist.	5841 Jun 03 02:58	15° ∡ 11'56	8.50482 AU
min. Earth dist.	5835 Mar 15 17:12	24° m 55'18	8.17689 AU	direct	5841 Aug 11 18:32	11° ∡ ¹45'46	
direct	5835 May 22 01:30	21° m 27'30		evening set	5841 Nov 25 08:30	19° ∡ ³32'14	
evening set	5835 Sep 03 19:58	29° m 31'41					
	5835 Sep 07 14:05	0∘ ऌ		conjunction	5841 Dec 12 15:48	21° ∡ ³39′52	1°55'07
				minimum elong	5841 Dec 12 15:50	21° ∡ ³39′52	1°55'09
conjunction	5835 Sep 21 20:28	1° ≏ 49'08	1°11'57	max. Earth dist.	5841 Dec 12 12:46	21° ₹ 38'55	10.54504 AU
minimum elong	5835 Sep 21 20:25	1° ≏ 49'07	1°11'57	morning rise	5841 Dec 29 19:08	23° х 46′17	
max. Earth dist.	5835 Sep 21 19:18	1° ≏ 48'45	10.18269 AU		5842 Mar 03 05:28	0°ರ	
morning rise	5835 Oct 09 20:02	4° ≏ 06'19		retrograde	5842 Apr 09 03:47	1° る 11'28	
retrograde	5836 Jan 21 13:17	12° ≏ 06′26			5842 May 16 21:39	30°₹ ৴	
opposition	5836 Mar 28 11:42	8° ≏ 40'07	1°44'11	opposition	5842 Jun 16 02:26	27° ₹ 50'40	2°14'12
min. Earth dist.	5836 Mar 28 12:09	8° ≏ 40'02	8.19431 AU	min. Earth dist.	5842 Jun 16 04:04	27° ₹ 50′21	8.58721 AU
direct	5836 Jun 04 04:23	5° ≙ 11'54		direct	5842 Aug 25 05:10	24° ₹ 24'56	
evening set	5836 Sep 17 11:43	13° ≏ 17'05			5842 Nov 20 11:16	0°ප	
				evening set	5842 Dec 08 08:17	2° る 04'49	
conjunction	5836 Oct 05 10:29	15° ≏ 33'40	1°34'27				
minimum elong	5836 Oct 05 10:26	15° ≏ 33'39		conjunction	5842 Dec 25 12:56	4° ප 10'38	
max. Earth dist.	5836 Oct 05 09:11		10.20913 AU	minimum elong	5842 Dec 25 12:58	4° ප 10'39	
morning rise	5836 Oct 23 07:09	17° ≏ 49'38		max. Earth dist.	5842 Dec 25 10:44		10.62692 AU
retrograde	5837 Feb 03 08:36	25° ≏ 45'29		morning rise	5843 Jan 11 13:36	6° る 15'17	
opposition	5837 Apr 11 05:19	22° ≏ 20'01	2°08'48	retrograde	5843 Apr 21 16:45	13° る 34'55	
min. Earth dist.	5837 Apr 11 05:53	22° ≏ 19'54	8.23014 AU	opposition	5843 Jun 29 00:16	10° ප 14'51	1°53'51
direct	5837 Jun 18 06:07	18° ≙ 51'41		min. Earth dist.	5843 Jun 29 01:44	10° ප 14'34	8.66702 AU
evening set	5837 Oct 02 00:19	26° ≏ 56'07		direct	5843 Sep 07 10:04	6° ප 50'06	
				evening set	5843 Dec 21 00:29	14° る 23'25	
conjunction	5837 Oct 19 20:27	29° ≏ 11'20	1°51'29				
minimum elong	5837 Oct 19 20:25	29° £ 11'19		conjunction	5844 Jan 07 02:40	16° පි 27'34	
max. Earth dist.	5837 Oct 19 19:01		10.25328 AU	minimum elong	5844 Jan 07 02:42	16° 云 27'35	
	5837 Oct 26 05:33	0° M .		max. Earth dist.	5844 Jan 07 00:49		10.70441 AU
morning rise	5837 Nov 06 13:34	1°M25'39		morning rise	5844 Jan 24 01:09	18° පි 30'40	
retrograde	5838 Feb 17 00:28	9°MJ16'10		retrograde	5844 May 03 03:02	25° る 45'37	

opposition	5844 Jul 10 18:54	22° る 26'11	1°28'42	conjunction	5850 Mar 17 12:27	27° ₩ 09'03	-1°03'42
min. Earth dist.	5844 Jul 10 20:40	22° る 25'51	8.74075 AU	minimum elong	5850 Mar 17 12:27	27° \ 09'02	
direct	5844 Sep 19 08:31	19° る 02'28	0.71073710	max. Earth dist.	5850 Mar 17 12:14		10.92197 AU
evening set	5845 Jan 01 09:46	26° පි 29'31		morning rise	5850 Apr 03 05:31	29°) (08'09	10.9219 / 110
		_,,			5850 Apr 10 16:48	0°Υ	
conjunction	5845 Jan 18 09:37	28° る 32'12	1°00'42	retrograde	5850 Jul 14 04:43	6° Y 20'14	
minimum elong	5845 Jan 18 09:39	28° ප 32'13	1°00'43	opposition	5850 Sep 22 17:03	3° Y 00'34	-1°31'17
max. Earth dist.	5845 Jan 18 07:27	28° ප 31'33	10.77413 AU	min. Earth dist.	5850 Sep 22 16:37	3° Y 00'39	
	5845 Jan 30 12:27	0° ≈			5850 Nov 12 09:48	30° ₹	
morning rise	5845 Feb 04 06:28	0° ≈ 34'00		direct	5850 Dec 01 18:41	29°) 41′33	
retrograde	5845 May 15 07:35	7° ≈ 45'22			5850 Dec 20 23:29	$0^{\circ}\mathbf{\Upsilon}$	
opposition	5845 Jul 23 10:30	4° ≈ 26'24	1°00'03	evening set	5851 Mar 12 13:58	6° Ƴ 49'32	
min. Earth dist.	5845 Jul 23 12:19	4° ≈ 26'03	8.80523 AU				
direct	5845 Oct 02 02:54	1° ≈ 03'42		conjunction	5851 Mar 29 06:03	8° Y 48'34	-1°24'35
evening set	5846 Jan 13 13:24	8° ≈ 25′09		minimum elong	5851 Mar 29 06:00	8° Y 48'33	1°24'36
				max. Earth dist.	5851 Mar 29 06:55		10.90322 AU
conjunction	5846 Jan 30 11:15	10° ≈ 26′35	0°36'24	morning rise	5851 Apr 14 23:21	10° Ƴ 47'59	
minimum elong	5846 Jan 30 11:16	10° ≈ 26'35	0°36'25	retrograde	5851 Jul 26 13:46	18° Ƴ 03'45	
max. Earth dist.	5846 Jan 30 09:01		10.83312 AU	opposition	5851 Oct 05 04:09	14° Y 43′22	
morning rise	5846 Feb 16 06:49	12° ≈ 27'18		min. Earth dist.	5851 Oct 05 02:44	14° Y 43'38	8.88858 AU
	5846 Mar 10 21:12	15° ≈		direct	5851 Dec 13 23:26	11° Y 24'34	
retrograde	5846 May 27 11:33	19° ≈ 36'19		evening set	5852 Mar 23 09:47	18° Ƴ 33'10	
opposition	5846 Aug 04 23:25	16°≈17'36	0°29'12				
min. Earth dist.	5846 Aug 05 00:32	16°≈17'23	8.85774 AU	conjunction	5852 Apr 09 02:04	20° Υ 32'40	
	5846 Aug 22 15:44	15°R≈		minimum elong	5852 Apr 09 02:02	20° Υ 32'39	
direct	5846 Oct 14 18:08	12°≈55'54		max. Earth dist.	5852 Apr 09 03:56		10.86826 AU
. ,	5846 Dec 04 22:50	15° ≈		morning rise	5852 Apr 25 20:08	22° Y 32'44	
evening set	5847 Jan 25 12:32	20°≈12'33		retrograde	5852 Aug 07 03:11	29° Υ 53'05 26° Υ 31'50	2014102
	5047 E-L 11 00.45	22% - 12/50	0010150	opposition	5852 Oct 16 16:53	26° Υ 31'30' 26° Υ 32'13	8.84610 AU
conjunction	5847 Feb 11 08:45 5847 Feb 11 08:45	22°≈12'59 22°≈12'59	0°10'50 0°10'50	min. Earth dist. direct	5852 Oct 16 14:51 5852 Dec 25 02:25	23° Y $13'01$	8.84010 AU
minimum elong behind sun begin	5847 Feb 11 08:43	22 ≈12 39 22°≈11'23	0 10 30	direct	5853 Apr 01 01:05	0° 8	
behind sun end	5847 Feb 11 03:22 5847 Feb 11 14:09	22 ≈11 23 22°≈14'34		evening set	5853 Apr 04 08:31	0° 8 23'21	
max. Earth dist.	5847 Feb 11 14:09 5847 Feb 11 07:36		10.87886 AU	evening set	3633 Apr 04 06.31	0 02321	
morning rise	5847 Feb 28 03:09	24°≈12'53	10.07000 AC	conjunction	5853 Apr 21 01:34	2° 8 23'40	-1°55'20
morning rise	5847 Apr 29 03:59	0° \		minimum elong	5853 Apr 21 01:33	2° 8 23'39	
retrograde	5847 Jun 08 15:56	1° ¥ 20'47		max. Earth dist.	5853 Apr 21 03:09	_	10.81790 AU
desc. node	5847 Jul 18 04:11	0°) €07'25		morning rise	5853 May 07 21:13	4° 8 24'47	
	5847 Jul 20 06:32	30°R≈		retrograde	5853 Aug 19 19:22	11° 8 50'30	
opposition	5847 Aug 17 10:42	28° ≈ 02'07	-0°02'33	opposition	5853 Oct 29 07:51	8° 8 28'17	-2°27'35
min. Earth dist.	5847 Aug 17 10:47	28°≈02'06	8.89609 AU	min. Earth dist.	5853 Oct 29 06:19	8° 8 28'34	8.78862 AU
direct	5847 Oct 27 03:54	24° ≈ 41'21		direct	5854 Jan 06 07:31	5° 8 09'11	
	5848 Jan 20 14:05	0°) €		evening set	5854 Apr 16 11:24	12° 8 22'26	
evening set	5848 Feb 06 08:26	1° ¥ 54′09					
				conjunction	5854 May 03 05:58	14° 8 23'57	-2°03'44
conjunction	5848 Feb 23 03:10	3° 升 53'48	-0°15'07	minimum elong	5854 May 03 05:57	14° 8 23'56	2°03'46
minimum elong	5848 Feb 23 03:09	3° ∺ 53'48	0°15'06	max. Earth dist.	5854 May 03 06:44	14° 8 24'11	10.75345 AU
behind sun begin	5848 Feb 23 00:30	3° ¥ 53′01			5854 May 08 04:40	15° 8	
behind sun end	5848 Feb 23 05:48	3° ¥ 54'35		morning rise	5854 May 20 03:54	16° 8 26'28	
max. Earth dist.	5848 Feb 23 03:03		10.90950 AU	retrograde	5854 Sep 01 16:31	23° 8 58'11	
morning rise	5848 Mar 10 20:38	5°) 53′09		opposition	5854 Nov 11 01:33	20° 8 34'57	
retrograde	5848 Jun 19 19:09	13° 米 01′15		min. Earth dist.	5854 Nov 11 00:33		8.71814 AU
opposition	5848 Aug 28 21:02	9°) 42′27		direct	5855 Jan 18 16:13	17° 8 15'22	
min. Earth dist.	5848 Aug 28 20:46		8.91887 AU	evening set	5855 Apr 28 19:17	24° 8 32'31	
direct	5848 Nov 07 10:10	6° ₩ 22'27		. ,.	5055 M 15 16 22	260 425120	2007142
evening set	5849 Feb 17 02:34	13° ¥ 32'30		conjunction	5855 May 15 16:22	26° 8 35'38	
conjunction	5849 Mar 05 19:57	15° ₩ 31'39	0040114	minimum elong max. Earth dist.	5855 May 15 16:22	26° ႘ 35'38	2°06'45 10.67779 AU
conjunction minimum elong	5849 Mar 05 19:56	15° X 31'39		max. Earth dist.	5855 May 15 17:26 5855 Jun 01 17:13	26° 6 35'58 28° 6 39'54	10.0///9 AU
max. Earth dist.	5849 Mar 05 19:52		10.92403 AU	morning 1150	5855 Jun 13 01:30	28 O 3934 0° I	
morning rise	5849 Mar 22 13:01	17° H 30'43	10.72703 AU	retrograde	5855 Sep 14 18:43	6° Ⅱ 17'59	
retrograde	5849 Jul 01 23:33	24° H 40'13		opposition	5855 Nov 23 22:36	2° I I53'41	-2°35'12
opposition	5849 Sep 10 06:53	21° H 21'05	-1°03'57	min. Earth dist.	5855 Nov 23 21:21		8.63828 AU
min. Earth dist.	5849 Sep 10 06:51		8.92537 AU		5856 Jan 08 11:32	30°R 8	
direct	5849 Nov 19 14:58	18°) €01'40		direct	5856 Jan 31 03:43	29° 8 33'24	
evening set	5850 Feb 28 20:00	25°) 10′07			5856 Feb 22 13:56	0°II	
Ü				evening set	5856 May 10 09:11	6° Ⅱ 55'14	
				-	•		

direct	5868 Jul 09 08:09	9°M55'27		direct	5874 Sep 26 19:48	25° ප 59'15	
	5868 Sep 28 11:12	15°M			5874 Dec 08 20:24	0° ≈	
evening set	5868 Oct 23 08:22	17° M 55'49		evening set	5875 Jan 08 13:35	3° ≈ 23'25	
conjunction	5868 Nov 09 23:37	20° M $08'23$	2°05'09	conjunction	5875 Jan 25 12:30	5° ≈ 25'26	0°47'22
minimum elong	5868 Nov 09 23:36	20°M08'23	2°05'10	minimum elong	5875 Jan 25 12:31	5° ≈ 25'27	0°47'23
max. Earth dist.	5868 Nov 09 22:18	20°M07'58	10.34409 AU	max. Earth dist.	5875 Jan 25 10:19	5° ≈ 24'47	10.81147 AU
morning rise	5868 Nov 27 11:06	22° M 19'49		morning rise	5875 Feb 11 08:29	7° ≈ 26'38	
	5869 Mar 04 07:29	0° ∡ ¹		retrograde	5875 May 22 13:40	14° ≈ 36'54	
retrograde	5869 Mar 08 22:50	0° ∡ 01'12		opposition	5875 Jul 30 19:06	11° ≈ 18′28	0°43'01
-	5869 Mar 13 14:35	30°RM₊		min. Earth dist.	5875 Jul 30 21:02	11° ≈ 18′06	8.83718 AU
opposition	5869 May 15 02:33	26°M38'11	2°36'16	direct	5875 Oct 09 12:12	7°≈56'40	
min. Earth dist.	5869 May 15 03:03	26°M38'05	8.38413 AU		5876 Jan 18 09:24	15° ≈	
direct	5869 Jul 23 05:33	23°M10'41		evening set	5876 Jan 20 15:21	15°≈15'49	
	5869 Oct 28 01:55	0° ∡ ¹		C			
evening set	5869 Nov 06 05:11	1° ∡ ¹06'17		conjunction	5876 Feb 06 12:20	17°≈16'46	0°22'12
* · · · · · · · · · · · · · · · · · · ·				minimum elong	5876 Feb 06 12:20	17°≈16'46	0°22'12
conjunction	5869 Nov 23 17:09	3° ∡ 16'51	2°05'34	max. Earth dist.	5876 Feb 06 09:42		10.85924 AU
minimum elong	5869 Nov 23 17:10	3°×10'51	2°05'36	morning rise	5876 Feb 23 07:10	19°≈17'05	10.03724710
max. Earth dist.	5869 Nov 23 16:09		10.42345 AU	retrograde	5876 Jun 02 17:35	26°≈25'49	
morning rise	5869 Dec 11 00:57	5°×726'12	10.42545 AO	opposition	5876 Aug 11 07:56	23°≈07'25	0°11'28
retrograde	5870 Mar 22 01:36	13° ₹ 00'58		min. Earth dist.	•	23°≈07'23 23°≈07'00	8.87752 AU
Č		9° 🗷 39'06	2°32'32	direct	5876 Aug 11 10:14 5876 Oct 20 23:53	23 ≈0700 19°≈46'26	6.67732 AU
opposition	5870 May 28 10:27	9° × '39'06 9° × '38'54					
min. Earth dist.	5870 May 28 11:29		8.46672 AU	desc. node	5876 Dec 25 01:34	23°≈01'00	
direct	5870 Aug 05 22:05	6° ₹ 12'25		evening set	5877 Jan 31 13:12	27° ≈ 01'26	
evening set	5870 Nov 19 17:48	14° ₹ 02'09			5077 F. 1. 17. 00.20	200 - 01122	0002140
	5050 5 05 05 05	160 310144	1050106	conjunction	5877 Feb 17 08:30	29°≈01'32	
conjunction	5870 Dec 07 02:35	16° √ 10'44	1°59'36	minimum elong	5877 Feb 17 08:29	29°≈01'32	0°03'48
minimum elong	5870 Dec 07 02:37	16° √ 10'44	1°59'38	behind sun begin	5877 Feb 17 01:33	28°≈59'28	
max. Earth dist.	5870 Dec 07 01:06		10.50834 AU	behind sun end	5877 Feb 17 15:25	29° ≈ 03'35	
morning rise	5870 Dec 24 07:11	18° ∡ 18′05		max. Earth dist.	5877 Feb 17 05:38		10.89197 AU
retrograde	5871 Apr 03 21:28	25° ₹ 46'20			5877 Feb 25 11:45	0° ∀	
opposition	5871 Jun 10 14:36	22° ₹ 25'32	2°21'17	morning rise	5877 Mar 06 02:32	1° 米 01′15	
min. Earth dist.	5871 Jun 10 16:18	22° ≯ 25'12	8.55242 AU	retrograde	5877 Jun 14 19:53	8°) €09'44	
direct	5871 Aug 19 11:35	18° ∡ 59'46		opposition	5877 Aug 23 19:15	4° ∺ 51'06	-0°20'19
evening set	5871 Dec 02 22:08	26° ∡ ⁴43'01		min. Earth dist.	5877 Aug 23 21:00	4°) (50′46	8.90238 AU
				direct	5877 Nov 02 09:51	1°) 30′45	
conjunction	5871 Dec 20 03:54	28° ∡ ⁴49'39	1°47'53	evening set	5878 Feb 12 08:34	8°) 42′38	
minimum elong	5871 Dec 20 03:56	28° ₰ ⁴49'40	1°47'54				
max. Earth dist.	5871 Dec 20 01:34	28° ∡ ⁴48'56	10.59411 AU	conjunction	5878 Mar 01 02:37	10°) (42′09	-0°29'23
	5871 Dec 29 16:35	0°ප		minimum elong	5878 Mar 01 02:36	10°) (42′08	0°29'22
morning rise	5872 Jan 06 05:47	0° る 55'07		max. Earth dist.	5878 Mar 01 00:45	10°) 41′35	10.90868 AU
retrograde	5872 Apr 15 11:55	8° る 17'23		morning rise	5878 Mar 17 20:00	12° ¥ 41'29	
opposition	5872 Jun 22 14:47	4° る 57'28	2°03'29	retrograde	5878 Jun 27 01:17	19° ∺ 50'56	
min. Earth dist.	5872 Jun 22 16:49	4° る 57'05	8.63665 AU	opposition	5878 Sep 05 05:36	16° ₩ 31'51	-0°51'07
direct	5872 Aug 31 20:34	1° る 32'42		min. Earth dist.	5878 Sep 05 06:19	16°) 31'43	8.91100 AU
evening set	5872 Dec 14 18:17	9° ට 09'13		direct	5878 Nov 14 17:13	13° ₩ 11'58	
				evening set	5879 Feb 24 02:42	20° ∺ 21'47	
conjunction	5872 Dec 31 21:25	11° る 14'05	1°31'16				
minimum elong	5872 Dec 31 21:27	11° る 14'06	1°31'18	conjunction	5879 Mar 12 19:46	22°) €21'01	-0°53'44
max. Earth dist.	5872 Dec 31 18:38	11° る 13'14	10.67616 AU	minimum elong	5879 Mar 12 19:44	22°) €21'00	0°53'44
morning rise	5873 Jan 17 21:01	13° る 17'52		max. Earth dist.	5879 Mar 12 19:11	22° ℋ 20'50	10.90886 AU
retrograde	5873 Apr 27 23:24	20°る34'59		morning rise	5879 Mar 29 12:45	24°) €20'16	
opposition	5873 Jul 05 11:17	17° る 15'43	1°40'19	_	5879 May 26 15:25	$0^{\circ}\mathbf{\Upsilon}$	
min. Earth dist.	5873 Jul 05 12:55	17° る 15'25	8.71477 AU	retrograde	5879 Jul 09 06:54	1° Y 31'53	
direct	5873 Sep 13 23:05	13° る 51'59		C	5879 Aug 23 04:44	30°₽)	
evening set	5873 Dec 27 06:56	21° る 21'59		opposition	5879 Sep 17 16:09	28°) 12'08	-1°19'49
-				min. Earth dist.	5879 Sep 17 16:05		8.90319 AU
conjunction	5874 Jan 13 07:53	23° る 25'19	1°10'45	direct	5879 Nov 26 20:57	24°) 52'35	-
minimum elong	5874 Jan 13 07:55	23° る 25'20	1°10'46		5880 Feb 18 00:14	0°Υ	
max. Earth dist.	5874 Jan 13 05:32		10.74984 AU	evening set	5880 Mar 06 20:45	2° Υ 01'29	
morning rise	5874 Jan 30 05:30	25° පි 27'41	,			012/	
	5874 Mar 13 23:55	0°≈		conjunction	5880 Mar 23 13:04	4° Υ 00'41	-1°15'54
retrograde	5874 May 10 07:11	0 ~ 2° ≈ 40'44		minimum elong	5880 Mar 23 13:02	4° Υ 00'40	
. ca o grade	5874 Jul 09 18:31	2 ※40 44 30°Rる		max. Earth dist.	5880 Mar 23 12:44		10.89269 AU
opposition	5874 Jul 18 04:30	30 KO 29° る 21'59	1°13'04	morning rise	5880 Apr 09 06:14	6° Υ 00'10	10.07207 AU
min. Earth dist.	5874 Jul 18 04:30		8.78250 AU	retrograde	5880 Jul 20 14:38	13° Υ 15'06	
mm. Lam uist.	2017 Jul 10 00.03	27 02141	3.70230 AU	renograde	2000 Jul 20 14.30	15 11500	

opposition	5880 Sep 29 03:26	9° Ƴ 54'32	-1°45'18	opposition	5886 Dec 13 22:13	23° I I01'50	-2°20'56
min. Earth dist.	5880 Sep 29 03:22	9° Ƴ 54'33	8.87941 AU	min. Earth dist.	5886 Dec 13 19:55		8.48884 AU
direct	5880 Dec 08 01:06	6° Ƴ 35'06		direct	5887 Feb 19 14:03	19° Ⅲ 39'48	
evening set	5881 Mar 18 16:08	13° Ƴ 44'15		evening set	5887 May 31 04:50	27° Ⅱ 10'57	
C				C	,		
conjunction	5881 Apr 04 08:16	15° Ƴ 43'47	-1°35'00	conjunction	5887 Jun 17 11:40	29° Ⅱ 19'41	-1°47'19
minimum elong	5881 Apr 04 08:13	15° Ƴ 43'46	1°35'00	minimum elong	5887 Jun 17 11:43	29° Ⅱ 19'42	1°47'20
max. Earth dist.	5881 Apr 04 07:57	15° Ƴ 43'41	10.86092 AU	max. Earth dist.	5887 Jun 17 15:04	29° Ⅲ 20'45	10.44772 AU
morning rise	5881 Apr 21 02:10	17° Ƴ 43'50			5887 Jun 22 20:39	0°ಅ	
retrograde	5881 Aug 02 01:31	25° Y ′03′01		morning rise	5887 Jul 04 22:45	1° © 29'45	
opposition	5881 Oct 11 15:49	21° Y 41'33	-2°06'33	retrograde	5887 Oct 18 22:22	9° © 23'58	
min. Earth dist.	5881 Oct 11 15:34	21° Y ′41'36	8.84052 AU	opposition	5887 Dec 27 05:00	5°\$56'55	-2°02'22
direct	5881 Dec 20 05:10	18° Y ′22'04		min. Earth dist.	5887 Dec 27 02:06		8.40938 AU
evening set	5882 Mar 30 13:53	25° Y '32'36		direct	5888 Mar 03 13:27	2° © 34'01	0.10350110
e venning see	3002 11111 30 13.33	23 13230		evening set	5888 Jun 12 14:03	10°911'01	
conjunction	5882 Apr 16 06:36	27° Ƴ 32'49	-1°50'13				
minimum elong	5882 Apr 16 06:35	27° Ƴ 32'49		conjunction	5888 Jun 30 01:29	12° © 22'05	-1°29'23
max. Earth dist.	5882 Apr 16 07:12		10.81466 AU	minimum elong	5888 Jun 30 01:32	12°522'06	
morning rise	5882 May 03 01:42	29° Y 33'46	10.01.00110	max. Earth dist.	5888 Jun 30 05:35		10.37114 AU
morning rise	5882 May 06 18:56	0°8		morning rise	5888 Jul 17 16:51	14°934'24	10.57111110
retrograde	5882 Aug 14 15:40	6° 8 58'06		retrograde	5888 Oct 31 18:59	22°933'21	
opposition	5882 Oct 24 06:16	3° B 35'38	2022128	opposition	5889 Jan 08 15:17	19° © 05'46	1037'05
min. Earth dist.	5882 Oct 24 05:04	_	8.78784 AU	min. Earth dist.	5889 Jan 08 11:55		8.33609 AU
direct	5882 Oct 24 03:04 5883 Jan 01 11:17	0° 8 15'57	6.76764 AU	direct	5889 Mar 16 18:19	15°941'56	8.33009 AU
evening set	5883 Apr 11 15:08	7° 8 28'55		evening set	5889 Jun 26 07:08	23°\$24'55	
evening set	3003 Apr 11 13.00	/ 02633		evening set	3009 Juli 20 07.00	23 3924 33	
conjunction	5883 Apr 28 09:12	9° 8 30'11	-2°00'49	conjunction	5889 Jul 13 22:56	25° © 38'10	-1°06'29
minimum elong	5883 Apr 28 09:10	9° 8 30'11	2°00'51	minimum elong	5889 Jul 13 22:58	25° © 38'11	1°06'30
max. Earth dist.	5883 Apr 28 11:16		10.75558 AU	max. Earth dist.	5889 Jul 14 03:03		10.30275 AU
morning rise	5883 May 15 06:04	11° 8 32'22	10.73336 AU	morning rise	5889 Jul 31 18:15	23 3 39 28 27° 9 52'33	10.30273 AU
morning risc	5883 Jun 15 09:48	15° 8		morning risc	5889 Aug 18 10:11	27 3 3233	
retrograde	5883 Aug 27 12:15	19° 8 02'32		retrograde	5889 Nov 14 19:05	5° Ω 55'07	
opposition	5883 Nov 05 23:21	15° 8 39'00	2022142	opposition	5890 Jan 22 04:40	2° Ω 27'15	1006!11
min. Earth dist.		15° 8 39'27		min. Earth dist.			8.27298 AU
IIIII. Eartii dist.	5883 Nov 05 21:02	_	6.72550 AU	mm. Earm dist.	5890 Jan 22 01:24 5890 Feb 25 06:11		8.27298 AU
r:	5883 Nov 14 13:18	15°R 8		1		30°R≌	
direct	5884 Jan 13 19:09	12° 8 18'59		direct	5890 Mar 30 03:43	29° © 02'28	
. ,	5884 Mar 10 21:36	15° 엉 19° 엉 35'20		. ,	5890 May 01 17:05	0°Ω 6°Ω51'13	
evening set	5884 Apr 22 21:15	19°035'20		evening set	5890 Jul 10 07:35	6,3721,13	
conjunction	5884 May 09 17:21	21° 8 38'01	-2°06'12	conjunction	5890 Jul 28 03:13	9° Ω 06'23	-0°39'41
minimum elong	5884 May 09 17:20	21° 8 38'01		minimum elong	5890 Jul 28 03:14	9° Ω 06'23	
max. Earth dist.	5884 May 09 19:47		10.68610 AU	max. Earth dist.	5890 Jul 28 06:28		10.24634 AU
morning rise	5884 May 26 16:51	23° 8 41'47	10.00010 AC	morning rise	5890 Aug 15 01:51	11°Ω22'30	10.24034 AC
morning risc	5884 Jul 30 13:15	0° Ⅱ		morning risc	5890 Sep 15 01:59	11° Ω 22230	
retrograde	5884 Sep 08 14:10	1° I 18'06		retrograde	5890 Nov 28 21:44	19° Ω 27'20	
retrograde	5884 Oct 19 05:00	30°R 8		opposition	5891 Feb 04 20:48	15° Ω 59'22	0°31'11
opposition	5884 Nov 17 19:26	27° 8 53'34	2°36'04	min. Earth dist.	5891 Feb 04 18:21		8.22360 AU
min. Earth dist.	5884 Nov 17 19:20 5884 Nov 17 16:54	_	8.64980 AU	mm. Earth dist.	5891 Feb 17 05:53	15° ₹ Ω	8.22300 AU
direct	5885 Jan 25 03:50	24° 8 33'00	0.04700 AC	direct	5891 Apr 12 17:59	13° \32 ′33'37	
direct	5885 Apr 19 04:38	0° Ⅱ		direct	5891 Jun 04 17:47	12 θ 233 37	
evening set	5885 May 05 09:03	0 Ⅱ 1°Ⅱ53'39		evening set	5891 Jul 24 14:24	20° Ω 27'39	
evening set	3003 Way 03 07.03	1 113337		evening set	3071 Jul 24 14.24	20 062737	
conjunction	5885 May 22 07:58	3° Ⅱ 58′05	-2°05'52	conjunction	5891 Aug 11 13:03	22° Ω 44'16	-0°10'26
minimum elong	5885 May 22 07:59	3° Ⅱ 58'05		minimum elong	5891 Aug 11 13:03	22° Ω 44'17	
max. Earth dist.	5885 May 22 10:09		10.60925 AU	behind sun begin	5891 Aug 11 07:23	22° Ω 42′29	
morning rise	5885 Jun 08 10:55	6° Ⅱ 03'45		behind sun end	5891 Aug 11 18:44	22° Ω 46'04	
retrograde	5885 Sep 21 19:11	13° Ⅱ 46'19		max. Earth dist.	5891 Aug 11 15:13		10.20488 AU
opposition	5885 Nov 30 19:01	10° Ⅱ 20′50	-2°32'12	morning rise	5891 Aug 29 13:57	25°Ω01'36	20.20100710
min. Earth dist.	5885 Nov 30 15:45		8.57036 AU		5891 Oct 12 19:54	0° m	
direct	5886 Feb 06 18:42	6° Ц 59'35	5.57050 AU	retrograde	5891 Dec 13 00:59	3°Mp07'14	
evening set	5886 May 18 03:21	14° ∏ 25'14		asc. node	5891 Dec 20 17:23	3°My04'00	
evening set	3000 Way 10 03.21	17 114		asc. nouc	5891 Dec 20 17.23 5892 Feb 14 09:19	3 11/04 00 30°RΩ	
conjunction	5886 Jun 04 05:52	16° Ⅱ 31'43	1050125	onnosition		30° ₹ 8€ 29° Ω 39'22	0°05'55
conjunction				opposition	5892 Feb 18 14:47		
minimum elong	5886 Jun 04 05:54	16° Ⅱ 31'44		min. Earth dist.	5892 Feb 18 13:18	29° Ω 39'40	8.19029 AU
max. Earth dist.	5886 Jun 04 08:15		10.52846 AU	direct	5892 Apr 25 13:35	26° Ω 12'44	
morning rise	5886 Jun 21 12:44	18° Ⅱ 39'31		ovonina sat	5892 Jul 01 21:03	0°M) 4°m⊾11'10	
retrograde	5886 Oct 05 05:55	26° Ⅱ 28'10		evening set	5892 Aug 07 02:25	4° Mp 11'18	

	5005 5 1 22 00 05	1.50			7011 1 20 0100	0.40000 (10.4	
	5905 Feb 22 08:05	15° ≈		morning rise	5911 Apr 29 04:08	24° Ƴ 36'34	
retrograde	5905 May 29 21:37	21° ≈ 42'51			5911 Jun 21 18:53	9° 8	
opposition	5905 Aug 07 09:44	18° ≈ 24'04	0°24'57	retrograde	5911 Aug 10 11:48	1° 8 57'11	
min. Earth dist.	5905 Aug 07 10:07	18° ≈ 24'00	8.86359 AU		5911 Sep 30 20:00	30° ጺƳ	
direct	5905 Oct 17 04:09	15° ≈ 02'27		opposition	5911 Oct 20 02:01	28° Ƴ 35'55	-2°15'59
evening set	5906 Jan 27 21:14	22°≈18'28		min. Earth dist.	5911 Oct 20 00:19	28° Ƴ 36'14	8.84428 AU
S				direct	5911 Dec 28 10:20	25° Ƴ 17'07	
conjunction	5906 Feb 13 17:23	24°≈18'46	0°07'22	4.1.000	5912 Mar 15 23:11	0°8	
·		24°≈18'47	0°07'22	avanina aat		2° 8 27'33	
minimum elong	5906 Feb 13 17:24		0 07 22	evening set	5912 Apr 06 16:33	2 02/33	
behind sun begin	5906 Feb 13 10:58	24°≈16'52					
behind sun end	5906 Feb 13 23:49	24° ≈ 20'41		conjunction	5912 Apr 23 09:36	4° 8 27'54	
max. Earth dist.	5906 Feb 13 16:56	24° ≈ 18'39	10.88418 AU	minimum elong	5912 Apr 23 09:35	4° 8 27'53	1°56'37
morning rise	5906 Mar 02 11:38	26° ≈ 18'35		max. Earth dist.	5912 Apr 23 10:40	4° 8 28'13	10.81581 AU
	5906 Apr 05 14:56	0° ∀		morning rise	5912 May 10 05:29	6° 8 29'04	
desc. node	5906 May 31 01:48	3° ¥ 20′11		retrograde	5912 Aug 22 04:29	13° 8 55'06	
retrograde	5906 Jun 11 00:50	3° ¥ 26'15		opposition	5912 Oct 31 17:06	10° 8 32'52	-2°28'44
opposition	5906 Aug 19 20:41	0°) €07'32	-0°06'48	min. Earth dist.	5912 Oct 31 15:57	10° 8 33'05	8.78638 AU
min. Earth dist.	5906 Aug 19 20:47	0°) €07'31	8.90082 AU	direct	5913 Jan 08 16:36	7° 8 13'46	0.70030710
IIIII. Eartii tist.			6.90062 AU			_	
	5906 Aug 21 13:01	30°R≈		evening set	5913 Apr 18 19:36	14° 8 27'08	
direct	5906 Oct 29 13:16	26°≈46'48			5913 Apr 23 09:32	15° 8	
	5907 Jan 02 08:05	0° ∀					
evening set	5907 Feb 08 16:51	3° ∺ 59'06		conjunction	5913 May 05 14:24	16° 8 28'43	-2°04'18
				minimum elong	5913 May 05 14:23	16° 8 28'43	2°04'20
conjunction	5907 Feb 25 11:23	5° ¥ 58'39	-0°18'31	max. Earth dist.	5913 May 05 15:32	16° 8 29'04	10.75112 AU
minimum elong	5907 Feb 25 11:22	5° ¥ 58'39	0°18'30	morning rise	5913 May 22 12:34	18° 8 31'20	
max. Earth dist.	5907 Feb 25 10:54		10.91358 AU	retrograde	5913 Sep 04 01:50	26° 8 03'20	
morning rise	5907 Mar 14 04:51	7° ₩ 57'55	10.71550710	opposition	5913 Nov 13 10:44	22° 8 40'04	2°35'06
-		15° ¥ 05'52		**		_	8.71566 AU
retrograde	5907 Jun 23 04:30		000000	min. Earth dist.	5913 Nov 13 09:33	_	8./1300 AU
opposition	5907 Sep 01 06:40	11°) 47′02		direct	5914 Jan 21 00:35	19° 8 20'30	
min. Earth dist.	5907 Sep 01 06:57		8.92232 AU	evening set	5914 May 01 03:49	26° 8 37'48	
direct	5907 Nov 10 19:31	8° ¥ 27′03					
evening set	5908 Feb 20 10:41	15°) 36′43		conjunction	5914 May 18 01:15	28° 8 41'02	-2°06'34
				minimum elong	5914 May 18 01:15	28° 8 41'02	2°06'35
conjunction	5908 Mar 08 03:53	17°) 35'47	-0°43'26	max. Earth dist.	5914 May 18 03:01	28° 8 41'34	10.67504 AU
minimum elong	5908 Mar 08 03:52	17° ¥ 35'47	0°43'26		5914 May 28 19:47	0° I I	
max. Earth dist.	5908 Mar 08 03:16		10.92676 AU	morning rise	5914 Jun 04 02:18	0° П 45'24	
morning rise	5908 Mar 24 21:01	19° X 33'30	10.72070 AC	retrograde	5914 Sep 17 04:06	8° Ⅱ 23'47	
•				•	•		202.412.2
retrograde	5908 Jul 04 07:12	26°) 44′18		opposition	5914 Nov 26 07:50	4° ∏ 59'27	
opposition	5908 Sep 12 16:22	23° ∺ 25′06		min. Earth dist.	5914 Nov 26 06:04		8.63523 AU
min. Earth dist.	5908 Sep 12 16:22	23° ∺ 25′06	8.92741 AU	direct	5915 Feb 02 13:05	1° Ⅱ 39'12	
direct	5908 Nov 22 00:02	20°) €05'42		evening set	5915 May 13 18:07	9° Ⅱ 01'16	
evening set	5909 Mar 03 03:48	27° ₩ 13'53					
				conjunction	5915 May 30 18:52	11° Ⅱ 06′28	-2°03'00
conjunction	5909 Mar 19 20:14	29°) 12'46	-1°06'34	minimum elong	5915 May 30 18:54	11° Ⅱ 06'29	2°03'01
minimum elong	5909 Mar 19 20:12	29°) 12'45		max. Earth dist.	5915 May 30 21:04		10.59151 AU
max. Earth dist.	5909 Mar 19 20:29		10.92325 AU	morning rise	5915 Jun 16 23:33	13° Ⅱ 12'54	10.07101110
max. Earm dist.	5909 Mar 26 10:17	0° Υ	10.92323 AU	retrograde	5915 Sep 30 13:24	20° I I57'39	
				C	•		2026141
morning rise	5909 Apr 05 13:16	1°Υ11'50		opposition	5915 Dec 09 08:35	17° Ⅱ 32'17	
retrograde	5909 Jul 16 13:38	8° Y 24'04		min. Earth dist.	5915 Dec 09 06:28	17° ∏ 32'41	8.54946 AU
opposition	5909 Sep 25 02:18	5° Ƴ 04'18		direct	5916 Feb 15 04:17	14° Ⅱ 11'08	
min. Earth dist.	5909 Sep 25 01:13	5° Ƴ 04'31	8.91580 AU	evening set	5916 May 25 15:33	21° Ⅲ 38'36	
direct	5909 Dec 04 04:40	1° Ƴ 45'20					
evening set	5910 Mar 14 21:45	8° Ƴ 53'08		conjunction	5916 Jun 11 20:13	23° Ⅱ 46′00	-1°53'28
•				minimum elong	5916 Jun 11 20:15	23° Ⅱ 46′01	1°53'30
conjunction	5910 Mar 31 13:54	10° Ƴ 52'11	-1°27'00	max. Earth dist.	5916 Jun 11 21:53		10.50505 AU
minimum elong	5910 Mar 31 13:52	10° Υ 52'10		morning rise	5916 Jun 29 05:08	25° ∏ 54'44	10.50505710
•			1 2701 10.90304 AU	morning 1150		23 ന 3444 0°	
max. Earth dist.	5910 Mar 31 15:23		10.70304 AU	, ,	5916 Aug 04 16:11		
morning rise	5910 Apr 17 07:09	12°Υ51'36		retrograde	5916 Oct 13 03:01	3°545'25	2011:20
retrograde	5910 Jul 28 23:56	20° Y 07'34		opposition	5916 Dec 21 12:53	0° © 19'05	
opposition	5910 Oct 07 13:12	16° Ƴ 47'07		min. Earth dist.	5916 Dec 21 11:14		8.46293 AU
min. Earth dist.	5910 Oct 07 11:25	16° Ƴ 47'27	8.88779 AU		5916 Dec 25 13:58	30° Ŗ Ⅱ	
direct	5910 Dec 16 06:57	13° Y 28′22		direct	5917 Feb 26 23:56	26° Ⅱ 56'53	
evening set	5911 Mar 26 17:42	20° Ƴ 36'56			5917 Apr 28 05:00	0ಂತಾ	
-				evening set	5917 Jun 07 20:27	4° © 30'15	
conjunction	5911 Apr 12 09:57	22° Ƴ 36'27	-1°43'56	<i>3</i>			
	-			conjunction	5917 Jun 25 05:20	6°0330'50	-1°38'08
minimum elong max. Earth dist.	5911 Apr 12 09:55 5911 Apr 12 11:34	22° Y 36'26		conjunction minimum elong	5917 Jun 25 05:29 5917 Jun 25 05:32	6°\$39'59 6°\$40'00	

max. Earth dist.	5917 Jun 25 06:43	6°540'23	10.42016 AU	minimum elong	5923 Sep 18 00:36	27° m 57'19	1°03'13
morning rise	5917 Jul 12 18:51	8°951'04		max. Earth dist.	5923 Sep 18 00:07	27° m 57'10	10.16014 AU
retrograde	5917 Oct 26 19:46	16°5547'02			5923 Oct 04 01:18	0∘ ত	
opposition	5918 Jan 03 20:54	13° © 19'52	-1°49'19	morning rise	5923 Oct 06 01:01	0° £ 15′00	
min. Earth dist.	5918 Jan 03 19:43	13° 5 20'07	8.38013 AU	retrograde	5924 Jan 18 01:08	8° £ 17'04	
direct	5918 Mar 12 02:31	୨° ୭ 56'31		opposition	5924 Mar 25 00:19	4° £ 49'50	1°34'18
evening set	5918 Jun 21 08:53	17°936'00		min. Earth dist.	5924 Mar 25 00:43	4° ≏ 49'45	8.16880 AU
				direct	5924 May 31 13:02	1° ≏ 21'06	
conjunction	5918 Jul 08 22:28	19° 5 348'05	-1°17'30	evening set	5924 Sep 13 16:12	9° £ 26'38	
minimum elong	5918 Jul 08 22:31	19° 5 48'06	1°17'31				
max. Earth dist.	5918 Jul 08 23:55		10.34117 AU	conjunction	5924 Oct 01 15:39	11° ≏ 43'46	1°27'18
morning rise	5918 Jul 26 16:04	22° © 01'23		minimum elong	5924 Oct 01 15:36		1°27'18
	5918 Nov 03 22:02	0 \circ Ω		max. Earth dist.	5924 Oct 01 14:23		10.18117 AU
retrograde	5918 Nov 09 16:19	0° Ω 01'46		morning rise	5924 Oct 19 13:36	14° £ 00′26	
	5918 Nov 15 11:32	30°Rூ	1020150	retrograde	5925 Jan 30 21:26	21° £ 58'36	2001110
opposition	5919 Jan 17 08:17	26°533'57		opposition	5925 Apr 07 18:45	18° £ 32'14	
min. Earth dist.	5919 Jan 17 07:05	26°534'11	8.30541 AU	min. Earth dist.	5925 Apr 07 19:13	18° £ 32'08	8.19990 AU
direct	5919 Mar 25 10:17	23°909'26		direct	5925 Jun 14 16:33	15° £ 03'24	
	5919 Jun 27 18:00	0°Ω 0°Ω54'59		evening set	5925 Sep 28 06:21	23° ≏ 08'48	
evening set	5919 Jul 05 05:03	0.87234.39		aaniumatian	5925 Oct 16 03:30	25° ≏ 24'43	1°46'16
agnismation	5919 Jul 22 22:58	3° Ω 09'13	0952125	conjunction minimum elong	5925 Oct 16 03:30 5925 Oct 16 03:27	25° Ω 24'42	1°46'17
conjunction minimum elong	5919 Jul 22 22:38 5919 Jul 22 23:00	3°Ω09'14		max. Earth dist.	5925 Oct 16 03:27		1 40 1 / 10.22128 AU
max. Earth dist.	5919 Jul 23 00:55		10.27226 AU	morning rise	5925 Nov 02 22:10	23 = 24 19 27° ⊆ 39'52	10.22128 AU
morning rise	5919 Aug 09 20:12	5° Ω 24'30	10.27220 AC	morning risc	5925 Nov 22 06:26	0°M	
retrograde	5919 Nov 23 17:11	13° Ω 28'05		retrograde	5926 Feb 13 13:33	5°M33'02	
opposition	5920 Jan 30 22:28	9° Ω 59'50	-0°47'44	opposition	5926 Apr 21 11:27	2°M07'43	2°20'56
min. Earth dist.	5920 Jan 30 20:56	10° Ω 00'09	8.24277 AU	min. Earth dist.	5926 Apr 21 11:42	2°11007'40	8.24901 AU
direct	5920 Apr 06 21:50	6°Ω34'10	0.2 .2 , , 110	mm. Durur ulov.	5926 May 19 20:25	30° R Ω	0.2 1901 110
evening set	5920 Jul 18 08:24	14°Ω25'33		direct	5926 Jun 28 19:13	28° £ 39'05	
	5920 Jul 22 22:14	15° Ω			5926 Aug 07 08:17	0°M	
				evening set	5926 Oct 12 16:02	6°M42'37	
conjunction	5920 Aug 05 05:55	16° Ω 41'34	-0°24'10	C			
minimum elong	5920 Aug 05 05:56	16° Ω 41'34	0°24'11	conjunction	5926 Oct 30 10:19	8°M56'55	1°59'09
max. Earth dist.	5920 Aug 05 08:00	16° Ω 42'14	10.21708 AU	minimum elong	5926 Oct 30 10:17	8°M56'54	1°59'10
morning rise	5920 Aug 23 05:50	18° Ω 58'24		max. Earth dist.	5926 Oct 30 09:19	8°M56'36	10.27816 AU
retrograde	5920 Dec 06 20:03	27° Ω 03'48		morning rise	5926 Nov 17 01:16	11°ML10'13	
opposition	5921 Feb 12 15:10	23° £ 35′23	-0°11'25		5926 Dec 20 03:53	15° M ₊	
min. Earth dist.	5921 Feb 12 13:31	23° Ω 35'43	8.19557 AU	retrograde	5927 Feb 27 02:16	18°M57'33	
direct	5921 Apr 20 14:10	20° Ω 08'41		opposition	5927 May 05 01:41	15°M33'23	2°32'41
asc. node	5921 Jun 08 09:58	22° Ω 14'17		min. Earth dist.	5927 May 05 01:59	15°M33'19	8.31317 AU
evening set	5921 Aug 01 17:43	28° Ω 05'17			5927 May 12 00:44	15°RM	
	5921 Aug 16 19:11	0° m p		direct	5927 Jul 12 18:38	12°M05'12	
					5927 Sep 10 13:43	15°M	
conjunction	5921 Aug 19 17:38	0° m/22'33		evening set	5927 Oct 26 19:45	20°M05'16	
minimum elong	5921 Aug 19 17:38	0° m/22'33	0°05'47			_	
behind sun begin	5921 Aug 19 10:38	0° m/20'20		conjunction	5927 Nov 13 10:46	22°M17'42	
behind sun end	5921 Aug 20 00:38	0° Mp 24'46	10 17065 ATT	minimum elong	5927 Nov 13 10:46	22°M17'42	
max. Earth dist.	5921 Aug 19 19:10		10.17865 AU	max. Earth dist.	5927 Nov 13 09:51		10.34846 AU
morning rise retrograde	5921 Sep 06 19:02 5921 Dec 20 23:02	2° Mp 40'20		morning rise	5927 Nov 30 21:52	24° M 28'59 0° ₹	
opposition	5921 Dec 20 23:02 5922 Feb 26 09:36	10° Mp 46'07 7° Mp 17'50	0°25'54	retrograde	5928 Jan 21 11:34 5928 Mar 11 09:44	0 x . 2° x 09'54	
min. Earth dist.	5922 Feb 26 08:28	7° Mg 18'03	8.16653 AU	retrograde	5928 May 01 20:41	2 x 09 34 30°RM	
direct	5922 May 04 10:58	3° m) 50'14	8.10033 AU	opposition	5928 May 17 12:51	28°M46'56	2°36'06
evening set	5922 Aug 16 07:32	11° Mp 51'07		min. Earth dist.	5928 May 17 12:31 5928 May 17 13:42	28°M46'46	8.38878 AU
Svennig set	5722 riug 10 07.32	11 III/J10/		direct	5928 Jul 25 15:30	25°M19'27	0.500 / 0 AU
conjunction	5922 Sep 03 08:34	14° m) 09'00	0°35'29		5928 Oct 11 15:43	0° ₹	
minimum elong	5922 Sep 03 08:33	14° Mp 09'00	0°35'28	evening set	5928 Nov 08 16:00	3° ҂ 14'41	
max. Earth dist.	5922 Sep 03 09:09	14° Mp 09'11	10.15928 AU				
morning rise	5922 Sep 21 10:07	16° Mp 27'04	-	conjunction	5928 Nov 26 03:39	5° х 25′07	2°05'02
retrograde	5923 Jan 04 01:05	24° m/31'43		minimum elong	5928 Nov 26 03:40	5° ∡ ¹25′07	
opposition	5923 Mar 12 04:55	21° m, 03'50	1°01'54	max. Earth dist.	5928 Nov 26 02:19		10.42835 AU
min. Earth dist.	5923 Mar 12 04:36	21° m 03'54	8.15745 AU	morning rise	5928 Dec 13 11:12	7° ∡ ³34′20	
direct	5923 May 18 10:38	17° m/35'32		retrograde	5929 Mar 24 10:34	15° ∡ 08'39	
evening set	5923 Aug 30 23:46	25° m 39'29		opposition	5929 May 30 20:37	11° ∡ ¹46'51	2°31'23
				min. Earth dist.	5929 May 30 22:09	11° ∡ ⁴46′33	8.47180 AU
conjunction	5923 Sep 18 00:38	27° m 57'20	1°03'14	direct	5929 Aug 08 09:17	8° ≯ 20′13	

evening set	5929 Nov 22 03:53	16° ₰ 09'32		desc. node	5935 Nov 10 10:06	22°≈02'58	
				evening set	5936 Feb 03 20:01	29° ≈ 03'04	
conjunction	5929 Dec 09 12:20	18° ∡ 17'58			5936 Feb 11 20:38	0° ∀	
minimum elong	5929 Dec 09 12:21	18° ∡ 17'58	1°58'20				
max. Earth dist.	5929 Dec 09 10:14	18° ∡ 17'19	10.51361 AU	conjunction	5936 Feb 20 15:14	1° ∺ 03'01	-0°07'05
morning rise	5929 Dec 26 16:49	20° ∡ ¹25′12		minimum elong	5936 Feb 20 15:14	1° ∺ 03'01	0°07'04
retrograde	5930 Apr 06 05:52	27° ҂ 53′05		behind sun begin	5936 Feb 20 08:45	1° ₩ 01'06	
opposition	5930 Jun 13 00:28	24° ҂ ³32'20	2°19'15	behind sun end	5936 Feb 20 21:43	1° ₩ 04'56	
min. Earth dist.	5930 Jun 13 02:06	24° ∡ ³32'01	8.55784 AU	max. Earth dist.	5936 Feb 20 12:58	1°) 02′22	10.89924 AU
direct	5930 Aug 21 22:57	21° ₹ 06'40		morning rise	5936 Mar 08 09:08	3° 米 02'36	
evening set	5930 Dec 05 07:32	28° ∡ ¹49'27		retrograde	5936 Jun 17 04:20	10° ¥ 10'53	
	5930 Dec 14 23:17	0°రె		opposition	5936 Aug 26 03:08	6° ¥ 52'17	-0°24'16
				min. Earth dist.	5936 Aug 26 04:06	6° ¥ 52'06	8.90926 AU
conjunction	5930 Dec 22 13:08	0° る 55'59	1°45'55	direct	5936 Nov 04 18:37	3°) 32′05	
minimum elong	5930 Dec 22 13:10	0° ರ 55'59		evening set	5937 Feb 14 15:03	10°) 43′27	
max. Earth dist.	5930 Dec 22 10:49		10.59975 AU				
morning rise	5931 Jan 08 14:55	3° る 01'20	10.07770110	conjunction	5937 Mar 03 09:02	12°) 42′52	-0°32'31
retrograde	5931 Apr 18 21:05	10° පි 23'16		minimum elong	5937 Mar 03 09:01	12°) 42'51	
opposition	5931 Jun 26 00:17	7°る03'24	2°00'42	max. Earth dist.	5937 Mar 03 07:57		10.91507 AU
min. Earth dist.	5931 Jun 26 01:31	7°る03'10	8.64241 AU	morning rise	5937 Mar 20 02:15	14° H 42'06	10.91307 AO
	5931 Sep 04 06:13	7 303 10 3° る 38'46	6.04241 AU	-	5937 Jun 29 08:27	21° H 51'24	
direct	*			retrograde		18°\dagger 32'21	0054140
evening set	5931 Dec 18 03:08	11° る 14'47		opposition	5937 Sep 07 13:19		
	5000 Y 04 06 10	120710122	1000145	min. Earth dist.	5937 Sep 07 13:44		8.91690 AU
conjunction	5932 Jan 04 06:13	13° る 19'33	1°28'45	direct	5937 Nov 16 23:12	15° ¥ 12'36	
minimum elong	5932 Jan 04 06:15	13° る 19'34		evening set	5938 Feb 26 09:00	22°) 22′00	
max. Earth dist.	5932 Jan 04 04:25		10.68225 AU				
morning rise	5932 Jan 21 05:37	15° 云 23'15		conjunction	5938 Mar 15 01:55	24° ∺ 21′08	
retrograde	5932 Apr 30 07:48	22° る 40'01		minimum elong	5938 Mar 15 01:53	24° ∺ 21′07	
opposition	5932 Jul 07 20:36	19° る 20'50	1°36'57	max. Earth dist.	5938 Mar 15 01:05		10.91414 AU
min. Earth dist.	5932 Jul 07 21:28	19° る 20'40	8.72110 AU	morning rise	5938 Mar 31 18:55	26° ∺ 20′19	
direct	5932 Sep 16 08:33	15° る 57'14			5938 May 04 15:51	$\mathbf{\gamma}_{0}$	
evening set	5932 Dec 29 15:17	23° る 26'41		retrograde	5938 Jul 11 13:50	3° Ƴ 31'50	
				opposition	5938 Sep 19 23:39	0° Y 12′08	
conjunction	5933 Jan 15 16:07	25° る 29'53	1°07'49	min. Earth dist.	5938 Sep 20 00:09	0° Y 12′02	8.90789 AU
minimum elong	5933 Jan 15 16:09	25° る 29'54	1°07'51		5938 Sep 22 16:37	30° ₹ ₩	
max. Earth dist.	5933 Jan 15 14:45	25° る 29'28	10.75667 AU	direct	5938 Nov 29 04:09	26° ∺ 52'39	
morning rise	5933 Feb 01 13:32	27° る 32'08			5939 Jan 31 10:08	0 ° Υ	
	5933 Feb 23 05:14	0° ≈		evening set	5939 Mar 10 02:57	4° Υ 01'14	
retrograde	5933 May 12 16:13	4° ≈ 44'50					
opposition	5933 Jul 20 13:37	1°≈26′09	1°09'17	conjunction	5939 Mar 26 19:07	6° Y ′00′22	-1°18'23
min. Earth dist.	5933 Jul 20 15:05	1°≈25'52	8.78971 AU	minimum elong	5939 Mar 26 19:05	6° Ƴ 00'21	1°18'24
	5933 Aug 09 04:29	30°Ŗ₹		max. Earth dist.	5939 Mar 26 18:05	6° Ƴ 00'03	10.89669 AU
direct	5933 Sep 29 05:10	28° る 03'33		morning rise	5939 Apr 12 12:22	7° Ƴ 59'48	
	5933 Nov 17 17:30	0° ≈		retrograde	5939 Jul 23 21:28	15° Ƴ 14'41	
evening set	5934 Jan 10 21:25	5° ≈ 27'05		opposition	5939 Oct 02 10:43	11° Y 54'08	-1°48'04
Č				min. Earth dist.	5939 Oct 02 11:05	11° Y 54'04	8.88273 AU
conjunction	5934 Jan 27 20:06	7° ≈ 28'58	0°44'11	direct	5939 Dec 11 08:01	8° Ƴ 34'46	
minimum elong	5934 Jan 27 20:07	7° ≈ 28'58	0°44'12	evening set	5940 Mar 20 22:11	15° Ƴ 43'40	
max. Earth dist.	5934 Jan 27 17:55	7° ≈ 28'18	10.81906 AU	Č			
morning rise	5934 Feb 13 16:03	9° ≈ 30'03		conjunction	5940 Apr 06 14:20	17° Ƴ 43'09	-1°37'00
	5934 Apr 09 23:09	15° ≈		minimum elong	5940 Apr 06 14:18	17° Y '43'08	
retrograde	5934 May 24 21:08	16°≈39'54		max. Earth dist.	5940 Apr 06 14:15		10.86349 AU
retrograde	5934 Jul 10 07:01	15°R≈		morning rise	5940 Apr 23 08:15	19° Y 43′10	10.003 17 110
opposition	5934 Aug 02 03:47	13°≈21'32	0°39'00	retrograde	5940 Aug 04 07:30	27° Υ '02'25	
min. Earth dist.	5934 Aug 02 05:58	13°≈21'08	8.84494 AU	opposition	5940 Oct 13 23:01	23° Y 40'54	2000/41
direct	5934 Oct 11 19:48	9°≈59'51	6.64494 AU	min. Earth dist.	5940 Oct 13 22:24		8.84239 AU
direct		9 ≈3931 15°≈		direct		20° Y 21'27	6.64239 AU
	5935 Jan 02 12:37				5940 Dec 22 12:34	20 γ 2127 27° γ 31'49	
evening set	5935 Jan 22 22:38	17° ≈ 18'24		evening set	5941 Apr 01 19:52	2/ 13149	
	5025 E 1 00 10 21	1001011	0010154		5041 A 10 10 44	200002202	1951120
conjunction	5935 Feb 08 19:24	19°≈19'11	0°18'54	conjunction	5941 Apr 18 12:44	29° Y 32'02	
minimum elong	5935 Feb 08 19:25	19°≈19'11	0°18'54	minimum elong	5941 Apr 18 12:42	29° Y 32'01	
max. Earth dist.	5935 Feb 08 16:29		10.86698 AU	max. Earth dist.	5941 Apr 18 13:59		10.81574 AU
morning rise	5935 Feb 25 14:15	21°≈19'24			5941 Apr 22 09:20	0°8	
retrograde	5935 Jun 05 23:42	28° ≈ 27'49		morning rise	5941 May 05 07:50	1° 8 32'57	
opposition	5935 Aug 14 16:08	25°≈09'28	0°07'24	retrograde	5941 Aug 16 23:50	8° 8 57'25	
min. Earth dist.	5935 Aug 14 18:11	25°≈09'05	8.88510 AU	opposition	5941 Oct 26 13:19	5° 8 34'52	
direct	5935 Oct 24 09:06	21° ≈ 48'36		min. Earth dist.	5941 Oct 26 11:40	5° 8 35'11	8.78819 AU

direct	5942 Jan 03 18:10	2° 8 15'12 9° 8 28'04		direct	5948 Mar 19 00:33	17°543'51	
evening set	5942 Apr 13 21:20	9°028'04		evening set	5948 Jun 28 15:18	25° © 27'20	
conjunction	5942 Apr 30 15:28	11° 8 29'22	-2°01'38	conjunction	5948 Jul 16 07:23	27° © 40'48	-1°03'35
minimum elong	5942 Apr 30 15:27	11° 8 29'22	2°01'40	minimum elong	5948 Jul 16 07:25	27° © 40'49	1°03'36
max. Earth dist.	5942 Apr 30 17:16	11° 8 29'55	10.75515 AU	max. Earth dist.	5948 Jul 16 10:22	27° © 41'44	10.29572 AU
morning rise	5942 May 17 12:30	13° 8 31'35		morning rise	5948 Aug 03 03:08	29° © 55'24	
	5942 May 30 04:20	15° 8		_	5948 Aug 03 18:00	$0^{\circ}\Omega$	
retrograde	5942 Aug 29 20:08	21° 8 01'50		retrograde	5948 Nov 17 04:34	7° Ω 58'17	
opposition	5942 Nov 08 06:17	17° 8 38'16	-2°33'18	opposition	5949 Jan 24 12:21	4° Ω 30'21	-1°02'21
min. Earth dist.	5942 Nov 08 04:18	_	8.72221 AU	min. Earth dist.	5949 Jan 24 09:55		8.26577 AU
	5942 Dec 18 04:23	15°R₩		direct	5949 Apr 01 10:28	1° Ω 05'25	
direct	5943 Jan 16 00:21	14° 8 18'13		evening set	5949 Jul 12 16:22	8°Ω54'50	
direct	5943 Feb 13 10:35	15° 8		evening set	3747 Jul 12 10.22	0 003-30	
evening set	5943 Apr 26 03:36	21° 8 34'35		conjunction	5949 Jul 30 12:15	11° Ω 10'11	0026127
evening set	3943 Apr 20 03.30	21 05455		minimum elong	5949 Jul 30 12:17	11° Ω 10'11	
agnismation	5042 May 12 22:46	23° 8 37'19	2006120	max. Earth dist.	5949 Jul 30 14:34		10.23920 AU
conjunction	5943 May 12 23:46						10.23920 AU
minimum elong	5943 May 12 23:46	23° 8 37'19		morning rise	5949 Aug 17 11:15	13° Ω 26′29	
max. Earth dist.	5943 May 13 01:15		10.68427 AU		5949 Aug 30 05:22	15° Ω	
morning rise	5943 May 29 23:35	25° 8 41'10		retrograde	5949 Dec 01 06:20	21° Ω 31'40	
	5943 Jul 08 15:13	$\Pi^{\circ}0$		opposition	5950 Feb 07 04:49	18° Ω 03'41	
retrograde	5943 Sep 11 20:18	3° Ⅱ 17'37		min. Earth dist.	5950 Feb 07 03:00	18° Ω 04'03	8.21656 AU
	5943 Nov 19 14:19	30° ₹8			5950 Mar 26 00:35	15° ₹Ω	
opposition	5943 Nov 21 02:29	29° 8 53'02	-2°35'49	direct	5950 Apr 15 02:44	14° Ω 37'50	
min. Earth dist.	5943 Nov 21 00:43	29° 8 53'22	8.64727 AU		5950 May 05 02:49	15° Ω	
direct	5944 Jan 28 10:54	26° 8 32'24		evening set	5950 Jul 26 23:45	22° Ω 32'35	
	5944 Apr 02 14:42	Π $^{\circ}$ 0					
evening set	5944 May 07 15:29	3° Ⅱ 53'09		conjunction	5950 Aug 13 22:37	24° Ω 49'22	-0°07'03
				minimum elong	5950 Aug 13 22:38	24° Ω 49'22	0°07'04
conjunction	5944 May 24 14:39	5° Ⅱ 57'41	-2°05'20	behind sun begin	5950 Aug 13 15:54	24° Ω 47'14	
minimum elong	5944 May 24 14:40	5° Ⅱ 57'42	2°05'21	behind sun end	5950 Aug 14 05:22	24° Ω 51'30	
max. Earth dist.	5944 May 24 16:25	5° Ⅱ 58'14	10.60612 AU	max. Earth dist.	5950 Aug 14 00:43		10.19821 AU
morning rise	5944 Jun 10 17:56	8° Ⅱ 03'28		morning rise	5950 Aug 31 23:40	27° Ω 06'49	
retrograde	5944 Sep 24 02:23	15° Ⅱ 46'14		5 5	5950 Sep 25 02:38	0° m	
opposition	5944 Dec 03 02:04	12° Ⅱ 20'41	-2°31'07	asc. node	5950 Nov 10 06:23	4° Mp 07'30	
min. Earth dist.	5944 Dec 03 00:15	12° I I21'02		retrograde	5950 Dec 15 08:46	5° mp 12'50	
direct	5945 Feb 09 01:47	8° I 59'20	0.30030710	opposition	5951 Feb 20 23:10	1° Mp 44'59	0°10'09
evening set	5945 May 20 10:06	16° Ⅱ 25'11		min. Earth dist.	5951 Feb 20 21:33	1° m)45'19	8.18419 AU
evening set	3943 May 20 10.00	10 112311		mm. Earth dist.	5951 Mar 15 12:12	1 11/4319 30°RΩ	6.16419 AU
aaniunation	5945 Jun 06 13:04	18° Ⅱ 31'49	1050101	direct			
conjunction		18° I 31'49		direct	5951 Apr 28 23:19 5951 Jun 11 16:03	28° Ω 18'17 0° m	
minimum elong	5945 Jun 06 13:06			. ,			
max. Earth dist.	5945 Jun 06 15:45		10.52407 AU	evening set	5951 Aug 10 12:21	6° Mp 17'30	
morning rise	5945 Jun 23 20:12	20° Ⅱ 39'45			5051 4 20 12 02	00 7 2 5100	0022102
retrograde	5945 Oct 07 13:37	28° I I28'38	2010101	conjunction	5951 Aug 28 13:03	8° Mp 35'09	0°23'03
opposition	5945 Dec 16 05:10	25° I I02'13		minimum elong	5951 Aug 28 13:02	8° m/35'09	0°23'02
min. Earth dist.	5945 Dec 16 02:44	25° Ⅱ 02'41	8.48383 AU	max. Earth dist.	5951 Aug 28 14:50		10.17469 AU
direct	5946 Feb 21 20:40	21° Ⅱ 40′04		morning rise	5951 Sep 15 14:44	10° m 53'07	
evening set	5946 Jun 02 12:01	29° Ⅱ 11'33		retrograde	5951 Dec 29 11:20	18° m 58'24	
	5946 Jun 09 01:17	0ಂತಾ		opposition	5952 Mar 05 18:24	15° Mp 30'53	0°46'58
				min. Earth dist.	5952 Mar 05 17:04	15° Mp 31'09	8.16984 AU
conjunction	5946 Jun 19 19:17	1° © 20'27	-1°45'26	direct	5952 May 11 21:49	12°Mp03'27	
minimum elong	5946 Jun 19 19:20	1°520'28	1°45'28	evening set	5952 Aug 24 04:09	20°M/06'06	
max. Earth dist.	5946 Jun 19 22:52	1° © 21'34	10.44216 AU				
morning rise	5946 Jul 07 06:38	3° 5 30'40		conjunction	5952 Sep 11 05:18	22° M 23'57	0°51'51
retrograde	5946 Oct 21 06:07	11° 5 25'10		minimum elong	5952 Sep 11 05:16	22° M 23'56	0°51'50
opposition	5946 Dec 29 12:07	7° © 58'02	-1°59'41	max. Earth dist.	5952 Sep 11 06:17	22° Mp 24'16	10.16910 AU
min. Earth dist.	5946 Dec 29 08:59	7° © 58'39	8.40328 AU	morning rise	5952 Sep 29 06:12	24° Mp 41'45	
direct	5947 Mar 06 20:31	4° © 35'01			5952 Nov 15 22:08	0∘ ⊽	
evening set	5947 Jun 15 21:38	12° © 12'26		retrograde	5953 Jan 11 13:52	2° ≏ 44'58	
-					5953 Mar 10 22:55	30°R Mp	
conjunction	5947 Jul 03 09:24	14° © 23'41	-1°26'57	opposition	5953 Mar 19 14:01	29° m 18'00	1°21'08
minimum elong	5947 Jul 03 09:27	14°9523'42		min. Earth dist.	5953 Mar 19 13:18	29° m 18'09	8.17338 AU
max. Earth dist.	5947 Jul 03 12:59		10.36466 AU	direct	5953 May 25 22:40	25° m 50'04	
morning rise	5947 Jul 21 01:07	16°936'11			5953 Aug 05 08:07	0ಂ ರ	
retrograde	5947 Nov 04 03:42	24°935'28		evening set	5953 Nag 03 00:07 5953 Sep 07 20:52	° – 3° ⊆ 54'55	
opposition	5948 Jan 11 22:42	21°507'49	-1°33'46		p 0, 20.02		
min. Earth dist.	5948 Jan 11 19:39		8.32922 AU	conjunction	5953 Sep 25 21:06	6° £ 12'20	1°17'39
Darm dist.	57 10 Juli 11 17.37	21 -0023	3.32722 110	conjunction	5755 Sep 25 21.00	J — 1220	1 1/3/

minimum elong	5953 Sep 25 21:04	6° ₽ 12'19	1017!20	marning rise	5960 Jan 03 15:43	28° ₹ 04'24	
_	*			morning rise		28 x・04 24 0°る	
max. Earth dist.	5953 Sep 25 21:08		10.18117 AU		5960 Jan 20 01:04		
morning rise	5953 Oct 13 19:59	8° £ 29'24		retrograde	5960 Apr 13 01:08	5°る28'50	2000110
retrograde	5954 Jan 25 12:46	16° £ 29'21	1050122	opposition	5960 Jun 19 23:43	2°る08'13	
opposition	5954 Apr 02 09:13	13° Ω 03'10	1°50'32	min. Earth dist.	5960 Jun 20 01:32	2°る07'52	8.59874 AU
min. Earth dist.	5954 Apr 02 09:24	13° ≙ 03'07	8.19469 AU		5960 Jul 19 20:13	30°₹ ⋌ 7	
direct	5954 Jun 09 01:33	9° £ 34'56		direct	5960 Aug 29 02:05	28° ∡ ⁴42'41	
evening set	5954 Sep 22 12:36	17° ≏ 40'32			5960 Oct 07 20:14	0°ಕ	
				evening set	5960 Dec 12 04:45	6° ප 21'35	
conjunction	5954 Oct 10 10:50	19° ≏ 56'58	1°38'54				
minimum elong	5954 Oct 10 10:47	19° ≙ 56'57	1°38'54	conjunction	5960 Dec 29 08:56	8° る 27'10	1°36'26
max. Earth dist.	5954 Oct 10 09:37	19° ≙ 56'35	10.21103 AU	minimum elong	5960 Dec 29 08:58	8° る 27'10	1°36'29
morning rise	5954 Oct 28 06:50	22° ≙ 12'46		max. Earth dist.	5960 Dec 29 06:45	8° る 26'29	10.63877 AU
	5955 Jan 27 02:37	0° M ₊		morning rise	5961 Jan 15 09:19	10° る 31'36	
retrograde	5955 Feb 08 07:20	0°MJ08'16		retrograde	5961 Apr 25 11:58	17° る 50'27	
	5955 Feb 20 12:15	30° ₹ Ω		opposition	5961 Jul 02 21:20	14° පි 30'31	1°47'27
opposition	5955 Apr 16 03:01	26° ≙ 42'59	2°13'26	min. Earth dist.	5961 Jul 02 23:25	14° る 30'07	8.67894 AU
min. Earth dist.	5955 Apr 16 04:19	26° ≏ 42'43	8.23356 AU	direct	5961 Sep 11 07:06	11° ප 05'56	
direct	5955 Jun 23 04:49	23° ₽ 14'42		evening set	5961 Dec 24 19:42	18° る 38'09	
	5955 Sep 26 05:48	0° M ₊		Č			
evening set	5955 Oct 07 00:59	1° M .19'19		conjunction	5962 Jan 10 21:25	20°る42'03	1°16'58
8				minimum elong	5962 Jan 10 21:28	20°පි42'04	1°17'00
conjunction	5955 Oct 24 20:25	3°MJ34'19	1°54'27	max. Earth dist.	5962 Jan 10 18:54		10.71638 AU
minimum elong	5955 Oct 24 20:23	3°MJ34'18	1°54'27	morning rise	5962 Jan 27 19:53	22° る 44'58	10.71030710
max. Earth dist.	5955 Oct 24 18:00		10.25790 AU	retrograde	5962 May 07 19:56	29° る 59'12	
morning rise	5955 Nov 11 12:59	5°M48'26	10.23770710	opposition	5962 Jul 15 15:19	26° る 39'49	1°21'17
retrograde	5956 Feb 21 21:16	13°ML38'27		min. Earth dist.	5962 Jul 15 16:49	26° る 39'32	8.75251 AU
•		10°ML14'10	2°28'39	direct		20 3 3932 23° る 16'14	6.73231 AU
opposition min. Earth dist.	5956 Apr 28 18:47		8.28839 AU	direct	5962 Sep 24 06:52 5962 Dec 31 04:10	23 O10 14 0°≈	
	5956 Apr 28 20:37	10°M 13'47	6.26639 AU	. ,			
direct	5956 Jul 06 06:44	6°M46'02		evening set	5963 Jan 06 03:58	0° ≈ 42′10	
evening set	5956 Oct 20 07:43	14°M47'54			50/2 1 22 02 24	20 - 14127	005401
	5956 Oct 21 22:44	15° M ₊		conjunction	5963 Jan 23 03:34	2°≈44'37	0°54'21
				minimum elong	5963 Jan 23 03:35	2°≈44'37	0°54'22
conjunction	5956 Nov 06 23:58	17°ML01'09	2°03'32	max. Earth dist.	5963 Jan 23 01:46		10.78565 AU
minimum elong	5956 Nov 06 23:57	17°M01'09	2°03'33	morning rise	5963 Feb 09 00:16	4°≈46'12	
max. Earth dist.	5956 Nov 06 21:02		10.31952 AU	retrograde	5963 May 20 02:06	11° ≈ 56'57	
morning rise	5956 Nov 24 12:48	19°M13'19		opposition	5963 Jul 28 06:10	8° ≈ 37'56	0°51'58
retrograde	5957 Mar 06 06:05	26°M57'10		min. Earth dist.	5963 Jul 28 06:45	8° ≈ 37'50	8.81625 AU
opposition	5957 May 12 07:35	23°M33'51	2°35'35	direct	5963 Oct 07 00:06	5°≈15'24	
min. Earth dist.	5957 May 12 09:21	23°M33'30	8.35625 AU	evening set	5964 Jan 18 06:34	12° ≈ 35'42	
direct	5957 Jul 20 06:32	20°ML06'08					
evening set	5957 Nov 03 07:20	28°ML03'41		conjunction	5964 Feb 04 04:18	14° ≈ 36′55	0°29'40
	5957 Nov 18 20:40	0° ∡ ¹		minimum elong	5964 Feb 04 04:19	14° ≈ 36′55	0°29'41
				max. Earth dist.	5964 Feb 04 03:36	14° ≈ 36'42	10.84366 AU
conjunction	5957 Nov 20 20:22	0° ≯ 15′00	2°05'55		5964 Feb 07 08:57	15° ≈	
minimum elong	5957 Nov 20 20:22	0° ∡ 15′00	2°05'57	morning rise	5964 Feb 20 23:31	16° ≈ 37'27	
max. Earth dist.	5957 Nov 20 17:36	0° ≯ 14'08	10.39256 AU	retrograde	5964 May 31 05:58	23° ≈ 45'57	
morning rise	5957 Dec 08 05:33	2° ∡ ¹25'08		opposition	5964 Aug 08 18:43	20° ≈ 27'10	0°20'49
retrograde	5958 Mar 19 08:59	10° ∡ ¹02'23		min. Earth dist.	5964 Aug 08 18:51	20° ≈ 27′09	8.86762 AU
opposition	5958 May 25 16:45	6° ≯ ¹40'02	2°34'15	direct	5964 Oct 18 12:52	17°≈05'36	
min. Earth dist.	5958 May 25 18:05	6° ∡ ³39'46	8.43341 AU	evening set	5965 Jan 29 04:47	24° ≈ 21'10	
direct	5958 Aug 03 02:40	3° ҂ 12'55		Č			
evening set	5958 Nov 16 22:52	11° ∡ 704'55		conjunction	5965 Feb 15 00:45	26° ≈ 21'24	0°04'01
<i>8</i>				minimum elong	5965 Feb 15 00:44	26° ≈ 21'23	0°04'01
conjunction	5958 Dec 04 08:50	13° ∡ 14'15	2°01'48	behind sun begin	5965 Feb 14 17:49	26°≈19'21	
minimum elong	5958 Dec 04 08:51		2°01'50	behind sun end	5965 Feb 15 07:40	26°≈23'26	
max. Earth dist.	5958 Dec 04 06:46		10.47297 AU	max. Earth dist.	5965 Feb 15 00:19		10.88806 AU
morning rise	5958 Dec 21 14:37	15° ∡ 1330	10.1/2// AU	morning rise	5965 Mar 03 18:56	20 ≈ 21 17 28° ≈ 21'07	10.00000 AU
retrograde	5959 Apr 01 07:22	22° x 53'01		morning 1130	5965 Mar 18 05:04	28 ≈ 2107 0° ∺	
opposition	5959 Apr 07 07.22 5959 Jun 07 22:11	19° ₹ 31'35	2°25'00	desc. node	5965 Apr 13 11:55	0 X 2° ¥ 38'39	
min. Earth dist.	5959 Jun 07 22:11 5959 Jun 07 23:35	19° x '31'18			5965 Apr 13 11:55 5965 Jun 12 09:11	5° H 28'40	
			8.51562 AU	retrograde			0010152
direct	5959 Aug 16 17:31	16° ₹ 05'12		opposition	5965 Aug 21 05:29	2°¥09'56	
evening set	5959 Nov 30 05:58	23° ₹ 50′50		min. Earth dist.	5965 Aug 21 05:56	2° \ 09'51	8.90456 AU
	5050 D 15 12 55	250 75011	1051140	1' 4	5965 Sep 21 19:15	30°R≈ 20040114	
conjunction	5959 Dec 17 12:56	25° 🖈 58'14		direct	5965 Oct 30 21:35	28°≈49'14	
minimum elong	5959 Dec 17 12:58	25° 🗷 58'14	1°51'44		5965 Dec 08 04:01	0°) (01107	
max. Earth dist.	5959 Dec 17 11:06	∠ɔ´ × ˙ɔ˙/'40	10.55638 AU	evening set	5966 Feb 10 00:05	6°) €01'07	

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conjunction	5966 Feb 26 18:25	8°) €00'35	-0°21'47	conjunction	5972 May 06 21:02	18° 8 29'10	-2°04'45
minimum elong	5966 Feb 26 18:24	8°) €00'35		minimum elong	5972 May 06 21:01	18° 8 29'09	
max. Earth dist.	5966 Feb 26 17:30	8° ¥ 00'19	10.91711 AU	max. Earth dist.	5972 May 06 23:11	18° 8 29'49	10.75151 AU
morning rise	5966 Mar 15 11:57	9° ¥ 59'48		morning rise	5972 May 23 19:16	20° 8 31'47	
retrograde	5966 Jun 24 10:42	17°) €07'39		retrograde	5972 Sep 05 08:36	28° 8 03'53	
opposition	5966 Sep 02 15:00	13°) 48'46	-0°41'57	opposition	5972 Nov 14 17:54	24° 8 40'34	-2°35'13
min. Earth dist.	5966 Sep 02 15:16	13°) (48'43	8.92562 AU	min. Earth dist.	5972 Nov 14 15:57		8.71615 AU
direct	5966 Nov 12 03:19	10°) €28'49		direct	5973 Jan 22 08:10	21° 8 21'00	
evening set	5967 Feb 21 17:33	17°) 38′09		evening set	5973 May 02 10:21	28° 8 38'13	
Č				C	5973 May 13 16:22	$\Pi^{\circ}0$	
conjunction	5967 Mar 10 10:43	19°) 37′08	-0°46'29		J		
minimum elong	5967 Mar 10 10:41	19°) 37′08	0°46'28	conjunction	5973 May 19 08:00	0° Ⅱ 41'29	-2°06'19
max. Earth dist.	5967 Mar 10 10:31	19° ∺ 37'05	10.92973 AU	minimum elong	5973 May 19 08:00	0° Ⅱ 41'29	2°06'20
morning rise	5967 Mar 27 03:47	21° ℋ 36′06		max. Earth dist.	5973 May 19 10:03	0° Ⅱ 42'07	10.67548 AU
retrograde	5967 Jul 06 15:05	28°) 45′35		morning rise	5973 Jun 05 09:16	2° Ⅱ 45'54	
opposition	5967 Sep 15 00:23	25° ∺ 26′19	-1°11'12	retrograde	5973 Sep 18 13:02	10° Ⅲ 24′18	
min. Earth dist.	5967 Sep 14 23:40	25° ℋ 26'27	8.93005 AU	opposition	5973 Nov 27 14:51	6°Ⅲ59'57	-2°33'48
direct	5967 Nov 24 09:14	22° ℋ 06'58		min. Earth dist.	5973 Nov 27 12:56	7° Ⅱ 00'19	8.63554 AU
evening set	5968 Mar 04 10:25	29° ℋ 14'50		direct	5974 Feb 03 18:54	3° ∏ 39'42	
	5968 Mar 10 19:47	$0^{\circ}\mathbf{\Upsilon}$		evening set	5974 May 15 00:53	11° Ⅱ 01'44	
conjunction	5968 Mar 21 02:51	1° Y 13'40	-1°09'16	conjunction	5974 Jun 01 01:48	13° Ⅱ 06'59	-2°02'03
minimum elong	5968 Mar 21 02:49	1° Y 13'40	1°09'16	minimum elong	5974 Jun 01 01:49	13° Ⅲ 06′59	2°02'05
max. Earth dist.	5968 Mar 21 04:01	1° Y 14'01	10.92547 AU	max. Earth dist.	5974 Jun 01 03:11	13° Ⅲ 07'25	10.59160 AU
morning rise	5968 Apr 06 19:45	3° Ƴ 12'41		morning rise	5974 Jun 18 06:50	15° Ⅱ 13'30	
retrograde	5968 Jul 17 22:07	10° Y 24'56		retrograde	5974 Oct 01 21:07	22° Ⅲ 58′13	
opposition	5968 Sep 26 10:08	7° Ƴ 05'08	-1°37'35	opposition	5974 Dec 10 15:33	19° Ⅲ 32'52	-2°25'06
min. Earth dist.	5968 Sep 26 08:29	7° Y 05'26	8.91767 AU	min. Earth dist.	5974 Dec 10 14:05	19° Ⅲ 33'10	8.54924 AU
direct	5968 Dec 05 11:19	3° Ƴ 46'12		direct	5975 Feb 16 09:59	16° Ⅱ 11'43	
evening set	5969 Mar 16 04:16	10° Ƴ 53'46		evening set	5975 May 27 22:29	23° Ⅱ 39'16	
conjunction	5969 Apr 01 20:20	12° Y 52'45	-1°29'16	conjunction	5975 Jun 14 03:24	25° Ⅱ 46'45	-1°51'52
minimum elong	5969 Apr 01 20:18	12° Ƴ 52'44	1°29'16	minimum elong	5975 Jun 14 03:26	25° Ⅱ 46'45	1°51'53
max. Earth dist.	5969 Apr 01 21:50	12° Y 53′12	10.90453 AU	max. Earth dist.	5975 Jun 14 04:14	25° Ⅱ 47'00	10.50458 AU
morning rise	5969 Apr 18 13:39	14° Ƴ 52'10		morning rise	5975 Jul 01 12:43	27° Ⅱ 55'33	
retrograde	5969 Jul 30 06:38	22° Y 08'11			5975 Jul 19 02:26	0	
opposition	5969 Oct 08 20:51	18° Ƴ 47'41	-2°00'04	retrograde	5975 Oct 15 09:15	5° © 46'16	
min. Earth dist.	5969 Oct 08 19:19	18° Ƴ 47'59	8.88897 AU	opposition	5975 Dec 23 19:56	2° © 19'57	-2°09'07
direct	5969 Dec 17 13:24	15° Y 28'57		min. Earth dist.	5975 Dec 23 19:01		8.46210 AU
evening set	5970 Mar 28 00:09	22° Y 37'23			5976 Jan 25 14:04	30°Ŗ Ⅱ	
				direct	5976 Feb 29 07:43	28° ∏ 57'44	
conjunction	5970 Apr 13 16:21	24° Ƴ 36'52			5976 Apr 03 11:36	$0 {\circ} {f \widehat{e}}$	
minimum elong	5970 Apr 13 16:19	24° Y 36'51		evening set	5976 Jun 09 03:35	6° © 31'15	
max. Earth dist.	5970 Apr 13 17:25		10.86773 AU				
morning rise	5970 Apr 30 10:43	26° Ƴ 37'00		conjunction	5976 Jun 26 13:03	8° 5 341'06	
	5970 May 31 05:33	0°8		minimum elong	5976 Jun 26 13:06	8° 95 41'07	
retrograde	5970 Aug 11 19:25	3° 8 57'41		max. Earth dist.	5976 Jun 26 14:14		10.41908 AU
opposition	5970 Oct 21 09:29	0° 8 36'23		morning rise	5976 Jul 14 02:45	10°952'16	
min. Earth dist.	5970 Oct 21 08:13	_	8.84490 AU	retrograde	5976 Oct 28 02:39	18°5548'18	
t' .	5970 Oct 29 12:00	30°R Y		opposition	5977 Jan 05 03:57	15°521'09	
direct	5970 Dec 29 17:44	27° Y 17'35		min. Earth dist.	5977 Jan 05 02:55		8.37872 AU
. ,	5971 Feb 25 16:40	0°8		direct	5977 Mar 13 10:05	11°957'47	
evening set	5971 Apr 08 22:56	4° 8 27'56		evening set	5977 Jun 22 16:32	19° © 37'28	
conjunction	5971 Apr 25 16:05	6° ႘ 28'17	10571/1	conjunction	5977 Jul 10 06:34	21° © 49'41	1017146
·	•	6° 8 28'17		minimum elong	5977 Jul 10 06:34		
minimum elong	5971 Apr 25 16:03					21°5649'41	
max. Earth dist.	5971 Apr 25 17:23		10.81625 AU	max. Earth dist.	5977 Jul 10 08:20		10.33952 AU
morning rise	5971 May 12 12:06 5971 Jul 21 16:45	8° ႘ 29'29		morning rise	5977 Jul 28 00:21	24°903'05	
	3871 1111 /1 15:/15	15° 8		retrograde	5977 Sep 22 09:14 5977 Nov 11 00:55	0° Ω 2° Ω 03'31	
ratragrada		150 4 55127		TELLOGENGE		/ 4/115/51	
retrograde	5971 Aug 24 11:16	15° 8 55'37		renograde			
-	5971 Aug 24 11:16 5971 Sep 27 18:36	15° ₹	2°20'40		5977 Dec 31 14:32	30° ₹ 5	1017120
opposition	5971 Aug 24 11:16 5971 Sep 27 18:36 5971 Nov 03 00:24	15°R 8 12° 8 33'21		opposition	5977 Dec 31 14:32 5978 Jan 18 15:20	30°R© 28°©35'43	
opposition min. Earth dist.	5971 Aug 24 11:16 5971 Sep 27 18:36 5971 Nov 03 00:24 5971 Nov 02 22:58	15°R 8 12° 8 33'21 12° 8 33'37	-2°29'40 8.78678 AU	opposition min. Earth dist.	5977 Dec 31 14:32 5978 Jan 18 15:20 5978 Jan 18 13:52	30°R 28°\$35'43 28°\$36'01	-1°17'20 8.30352 AU
opposition	5971 Aug 24 11:16 5971 Sep 27 18:36 5971 Nov 03 00:24 5971 Nov 02 22:58 5972 Jan 10 23:21	15°R ४ 12° ४ 33'21 12° ४ 33'37 9° ४ 14'16		opposition	5977 Dec 31 14:32 5978 Jan 18 15:20 5978 Jan 18 13:52 5978 Mar 26 16:44	30°R© 28°©35'43 28°©36'01 25°©11'11	
opposition min. Earth dist.	5971 Aug 24 11:16 5971 Sep 27 18:36 5971 Nov 03 00:24 5971 Nov 02 22:58	15°R 8 12° 8 33'21 12° 8 33'37		opposition min. Earth dist.	5977 Dec 31 14:32 5978 Jan 18 15:20 5978 Jan 18 13:52	30°R 28°\$35'43 28°\$36'01	

	5070 I I 24 07 25	50 011100	0040110		5004.0 + 17.10.44	270 0 20144	1047156
conjunction	5978 Jul 24 07:25	5° Ω 11'22		conjunction	5984 Oct 17 12:44	27° £ 28'44	1°47'56
minimum elong	5978 Jul 24 07:27	5° Ω 11'23		minimum elong	5984 Oct 17 12:41	27° ≏ 28'43	1°47'56
max. Earth dist.	5978 Jul 24 09:26	5° Ω 12'01	10.27026 AU	max. Earth dist.	5984 Oct 17 12:05	27° ≏ 28'31	10.22212 AU
morning rise	5978 Aug 11 04:46	7° Ω 26'45		morning rise	5984 Nov 04 07:00	29° ≏ 43'47	
	5978 Nov 01 02:52	15° Ω			5984 Nov 06 11:07	0°M₊	
retrograde	5978 Nov 25 01:43	15° Ω 30′23		retrograde	5985 Feb 14 22:21	7°M36'46	
	5978 Dec 19 01:31	15°R Ω		opposition	5985 Apr 22 19:25	4°M11'28	2°22'33
opposition	5979 Feb 01 05:46	12° Ω 02'10	0042144	min. Earth dist.	5985 Apr 22 19:32	4°M11'27	8.25017 AU
					-		6.23017 AU
min. Earth dist.	5979 Feb 01 04:07	12° Ω 02'30	8.24069 AU	direct	5985 Jun 30 02:25	0°M42'50	
direct	5979 Apr 09 04:57	8° Ω 36′29		evening set	5985 Oct 14 01:05	8°M46'20	
	5979 Jul 08 16:53	15° Ω					
evening set	5979 Jul 20 16:55	16° Ω 28'12		conjunction	5985 Oct 31 19:06	11°M00'33	2°00'05
				minimum elong	5985 Oct 31 19:04	11°ML00'33	2°00'05
conjunction	5979 Aug 07 14:36	18° Ω 44'18	-0°20'51	max. Earth dist.	5985 Oct 31 18:22	11°ML00'19	10.27963 AU
minimum elong	5979 Aug 07 14:37	18° Ω 44'19		morning rise	5985 Nov 18 09:40	13°M13'45	
max. Earth dist.	5979 Aug 07 16:08		10.21506 AU	morning rise	5985 Dec 03 00:04	15°M	
	=		10.21300 AU				
morning rise	5979 Aug 25 14:40	21° Ω 01'12		retrograde	5986 Feb 28 10:57	21°M00'51	
retrograde	5979 Dec 09 04:20	29° Ω 06′39		opposition	5986 May 06 09:40	17° M 36'43	2°33'21
opposition	5980 Feb 14 22:42	25° Ω 38'18	-0°07'14	min. Earth dist.	5986 May 06 10:21	17°M36'34	8.31499 AU
min. Earth dist.	5980 Feb 14 21:32	25° Ω 38'32	8.19363 AU		5986 Jun 12 10:03	15°RM	
direct	5980 Apr 21 21:41	22° Ω 11'34		direct	5986 Jul 14 02:31	14°M08'31	
asc. node	5980 Apr 28 10:20	22° Ω 13'56			5986 Aug 14 16:52	15° ™	
use. Houe	5980 Aug 01 23:31	0°m		evening set	5986 Oct 28 04:23	22°M08'28	
	-			evening set	3900 Oct 20 04.23	22 11600 20	
evening set	5980 Aug 03 02:46	0° Mp 08′31					
				conjunction	5986 Nov 14 19:05	24°M20'48	2°05'35
conjunction	5980 Aug 21 02:44	2°M/25'51	0°09'08	minimum elong	5986 Nov 14 19:04	24°M20'48	2°05'36
minimum elong	5980 Aug 21 02:43	2° Mp 25'51	0°09'07	max. Earth dist.	5986 Nov 14 17:45	24°M20'23	10.35058 AU
behind sun begin	5980 Aug 20 20:32	2° m/23'54		morning rise	5986 Dec 02 05:58	26°M32'00	
behind sun end	5980 Aug 21 08:54	2° m 27'49			5987 Jan 01 03:34	0° ⊼ ¹	
max. Earth dist.	5980 Aug 21 03:10	2° m 25'59	10.17691 AU	retrograde	5987 Mar 13 16:20	4° ≯ 12'38	
	•	4° Mp 43'41	10.17071710	opposition		0°×749'43	2°35'48
morning rise	5980 Sep 08 04:14			**	5987 May 19 20:40		
retrograde	5980 Dec 22 07:28	12° m 49'27		min. Earth dist.	5987 May 19 22:05	0° ∡ ¹49'26	8.39119 AU
opposition	5981 Feb 27 17:15	9° m ,21'14	0°29'59		5987 May 30 09:20	30°RM₊	
min. Earth dist.	5981 Feb 27 16:58	9° m ,21′18	8.16502 AU	direct	5987 Jul 28 00:40	27°M22'12	
direct	5981 May 05 18:21	5° m 53'35			5987 Sep 22 23:36	0° ∡ ¹	
evening set	5981 Aug 17 16:53	13° m 54'51		evening set	5987 Nov 11 00:10	5° ∡ 17'15	
conjunction	5981 Sep 04 17:52	16° Mp 12'46	0°38'40	conjunction	5987 Nov 28 11:31	7° ∡¹ 27'35	2°04'25
minimum elong	5981 Sep 04 17:50	16° Mp 12'45	0°38'39	minimum elong	5987 Nov 28 11:32	7° ∡ ¹27'35	2°04'27
max. Earth dist.	5981 Sep 04 17:29		10.15804 AU	max. Earth dist.	5987 Nov 28 09:27		10.43102 AU
morning rise	5981 Sep 22 19:25	18° m 30'50	10.13004710	morning rise	5987 Dec 15 18:58	9° × ⁷ 36'43	10.43102710
C	•			Č			
retrograde	5982 Jan 05 09:39	26° Mp 35'26		retrograde	5988 Mar 25 17:01	17° ∡ 10'46	
opposition	5982 Mar 13 12:47	23° Mp 07'37	1°05'40	opposition	5988 Jun 01 04:15	13° ∡ ⁴49'00	2°30'11
min. Earth dist.	5982 Mar 13 12:57	23°M 07'35	8.15655 AU	min. Earth dist.	5988 Jun 01 05:46	13° ∡ ⁴48'42	8.47466 AU
direct	5982 May 19 19:17	19° m 39'17		direct	5988 Aug 09 18:20	10° ≯ 22′23	
evening set	5982 Sep 01 09:10	27° m 43'33		evening set	5988 Nov 23 11:31	18° √ 11′26	
-	-			-			
conjunction	5982 Sep 19 09:57	0° ჲ 01'22	1°06'03	conjunction	5988 Dec 10 19:46	20° ∡ 19'46	1°56'59
minimum elong	5982 Sep 19 09:54	0° £ 01'21	1°06'03	minimum elong	5988 Dec 10 19:48	20° √ 19'47	1°57'01
	•		10.15957 AU	max. Earth dist.			
max. Earth dist.	5982 Sep 19 09:08		10.1595 / AU		5988 Dec 10 17:39		10.51669 AU
	5982 Sep 19 05:40	0∘ ट		morning rise	5988 Dec 28 00:07	22° ₹ 26'55	
morning rise	5982 Oct 07 10:10	2° ≏ 19'02		retrograde	5989 Apr 07 13:08	29° ₹ 54'34	
retrograde	5983 Jan 19 08:26	10° £ 21′00		opposition	5989 Jun 14 07:58	26° ₹ 33'49	2°17'14
opposition	5983 Mar 27 08:13	6° £ 53'49	1°37'32	min. Earth dist.	5989 Jun 14 08:54	26° ₹ ³33'38	8.56104 AU
min. Earth dist.	5983 Mar 27 08:29	6° £ 53'46	8.16862 AU	direct	5989 Aug 23 06:37	23° × ⁷ 08'13	
direct	5983 Jun 02 22:31	3° £ 25'05	0.10002 110	ancer	5989 Nov 29 12:42	0°る	
				avanina aat			
evening set	5983 Sep 16 01:38	11° ≏ 30'49		evening set	5989 Dec 06 14:36	0° る 50'38	
conjunction	5983 Oct 04 01:00	13° ≏ 47'55		conjunction	5989 Dec 23 20:08	2° る 57'06	1°43'59
minimum elong	5983 Oct 04 00:57	13° ≏ 47'54	1°29'36	minimum elong	5989 Dec 23 20:10	2° る 57'07	1°44'01
max. Earth dist.	5983 Oct 04 00:06	13° ≏ 47'38	10.18133 AU	max. Earth dist.	5989 Dec 23 18:43	2° る 56'40	10.60320 AU
morning rise	5983 Oct 21 22:40	16° ≏ 04'30		morning rise	5990 Jan 09 21:44	5° る 02'24	
retrograde	5984 Feb 02 04:53	24° ♀ 02'33		retrograde	5990 Apr 20 03:37	12° る 24'05	
opposition	5984 Apr 09 02:37	20° ⊆ 36'13	2°03'39	opposition	5990 Jun 27 07:39	9° ප 04'15	1°57'59
min. Earth dist.	•			min. Earth dist.		9° ठ 04'08	8.64599 AU
	5984 Apr 09 02:38	20° £ 36'13	8.20043 AU		5990 Jun 27 08:15		0.04379 AU
direct	5984 Jun 16 01:17	17° Ω 07'22		direct	5990 Sep 05 14:09	5° る 39'41	
evening set	5984 Sep 29 15:43	25° £ 12'52		evening set	5990 Dec 19 09:48	13° る 15'20	

agniumation	5001 Ion 05 12:50	15° පි 20'02	1026110	ammagition	5006 Can 00 10:24	20° ¥ 28'24	0050116
conjunction	5991 Jan 05 12:50			opposition	5996 Sep 08 19:24		
minimum elong	5991 Jan 05 12:52	15°₹20'02	1°26'21	min. Earth dist.	5996 Sep 08 20:09		8.92241 AU
max. Earth dist.	5991 Jan 05 11:56		10.68615 AU	direct	5996 Nov 18 05:12	17°) €08'46	
morning rise	5991 Jan 22 12:04	17° ⋜ 23'38		evening set	5997 Feb 27 13:39	24°) (17′46	
retrograde	5991 May 02 15:17	24° ろ 40'11					
opposition	5991 Jul 10 03:51	21° る 21'03	1°33'41	conjunction	5997 Mar 16 06:22	26° ∺ 16'47	
min. Earth dist.	5991 Jul 10 04:44	21° る 20'53	8.72527 AU	minimum elong	5997 Mar 16 06:21	26° ∺ 16'47	
direct	5991 Sep 18 15:40	17° る 57'33		max. Earth dist.	5997 Mar 16 04:58		10.91923 AU
evening set	5991 Dec 31 21:41	25° る 26'35		morning rise	5997 Apr 01 23:26	28° 升 15′54	
					5997 Apr 17 05:05	0 ° $\mathbf{\Upsilon}$	
conjunction	5992 Jan 17 22:19	27° る 29'42	1°05'00	retrograde	5997 Jul 12 18:52	5° Y 27′20	
minimum elong	5992 Jan 17 22:21	27° る 29'42	1°05'02	opposition	5997 Sep 21 05:29	2° Ƴ 07'39	-1°26'09
max. Earth dist.	5992 Jan 17 21:03	27° る 29'19	10.76130 AU	min. Earth dist.	5997 Sep 21 06:18	2° Y 07'30	8.91255 AU
morning rise	5992 Feb 03 19:41	29° る 31'52			5997 Oct 22 05:02	30° ₹ ₩	
	5992 Feb 07 19:02	0° ≈		direct	5997 Nov 30 09:17	28° ¥ 48'16	
retrograde	5992 May 13 22:31	6° ≈ 44'18			5998 Jan 07 15:24	0 ° Υ	
opposition	5992 Jul 21 20:46	3° ≈ 25'39	1°05'38	evening set	5998 Mar 11 07:27	5° Y 56'32	
min. Earth dist.	5992 Jul 21 22:22	3° ≈ 25′21	8.79485 AU				
direct	5992 Sep 30 11:25	0° ≈ 03'08		conjunction	5998 Mar 27 23:36	7° Ƴ 55'35	-1°20'41
evening set	5993 Jan 12 03:24	7° ≈ 26'10		minimum elong	5998 Mar 27 23:34	7° Ƴ 55'35	1°20'41
C				max. Earth dist.	5998 Mar 27 22:42	7° Y 55'19	10.90078 AU
conjunction	5993 Jan 29 01:51	9° ≈ 27'55	0°41'07	morning rise	5998 Apr 13 16:51	9° Ƴ 54'59	
minimum elong	5993 Jan 29 01:53	9° ≈ 27'56	0°41'08	retrograde	5998 Jul 25 01:42	17° Ƴ 09'50	
max. Earth dist.	5993 Jan 28 23:36		10.82475 AU	opposition	5998 Oct 03 16:11	13° Υ 49'18	-1°50'35
morning rise	5993 Feb 14 21:50	11°≈28'56	10.02.75.110	min. Earth dist.	5998 Oct 03 16:11	13° Υ 49'18	8.88628 AU
morning noe	5993 Mar 19 00:29	15° ≈		direct	5998 Dec 12 13:47	10° Y 30′00	0.00020110
retrograde	5993 May 26 01:46	18° ≈ 38'31		evening set	5999 Mar 23 02:36	17° Υ 38'41	
opposition	5993 Aug 03 10:41	15°≈20'08	0°35'10	evening set	3777 Wai 23 02.30	17 30 -11	
min. Earth dist.	5993 Aug 03 12:24	15°≈19'49	8.85106 AU	conjunction	5999 Apr 08 18:50	19° Ƴ 38'07	-1°38'//0
iiiii. Eartii dist.	5993 Aug 07 22:06	15 ≈ 1949 15° R ≈	6.65100 AU	minimum elong	5999 Apr 08 18:48	19° Υ 38'06	
direct	•	13 k∞ 11°≈58'32		max. Earth dist.	5999 Apr 08 19:26		1 38 31 10.86638 AU
direct	5993 Oct 13 03:54	11 ≈36 32 15°≈			*	19 γ 38 18 21° γ 38'05	10.80038 AU
. ,	5993 Dec 14 20:24			morning rise	5999 Apr 25 12:40	28° Y 57'23	
evening set	5994 Jan 24 04:04	19° ≈ 16'31		retrograde	5999 Aug 06 14:09		2010124
	5004E1 10 00 16	210 1511	0015145	opposition	5999 Oct 16 04:25	25° Y 35'52	
conjunction							
	5994 Feb 10 00:46	21°≈17'11	0°15'45	min. Earth dist.	5999 Oct 16 03:15	25° Y 36'05	8.84468 AU
minimum elong	5994 Feb 10 00:46	21° ≈ 17'11	0°15'45 0°15'45	direct	5999 Dec 24 18:05	22° Y 16'30	8.84468 AU
minimum elong behind sun begin	5994 Feb 10 00:46 5994 Feb 09 23:04	21°≈17'11 21°≈16'41			5999 Dec 24 18:05 6000 Apr 03 00:18	22° Y 16'30 29° Y 26'40	8.84468 AU
minimum elong behind sun begin behind sun end	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28	21°≈17'11 21°≈16'41 21°≈17'41	0°15'45	direct	5999 Dec 24 18:05	22° Y 16'30	8.84468 AU
minimum elong behind sun begin behind sun end max. Earth dist.	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31		direct evening set	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29	22° Y 16'30 29° Y 26'40 0° 8	
minimum elong behind sun begin behind sun end	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17	0°15'45	direct evening set conjunction	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10	22°Y16'30 29°Y26'40 0°8 1°826'51	-1°52'56
minimum elong behind sun begin behind sun end max. Earth dist. morning rise	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0°¥	0°15'45	direct evening set conjunction minimum elong	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08	22°Υ16'30 29°Υ26'40 0°႘ 1°႘26'51 1°႘26'51	-1°52'56 1°52'57
minimum elong behind sun begin behind sun end max. Earth dist.	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17	0°15'45	conjunction minimum elong max. Earth dist.	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24	22°Υ16'30 29°Υ26'40 0°႘ 1°႘26'51 1°႘26'51 1°႘27'14	-1°52'56
minimum elong behind sun begin behind sun end max. Earth dist. morning rise	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0°¥	0°15'45 10.87336 AU	direct evening set conjunction minimum elong	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47	-1°52'56 1°52'57
minimum elong behind sun begin behind sun end max. Earth dist. morning rise	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26	0°15'45	conjunction minimum elong max. Earth dist.	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24	22°Υ16'30 29°Υ26'40 0°႘ 1°႘26'51 1°႘26'51 1°႘27'14	-1°52'56 1°52'57
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩ 25'26 30°R≈	0°15'45 10.87336 AU	conjunction minimum elong max. Earth dist. morning rise	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47	-1°52'56 1°52'57 10.81738 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩ 25'26 30° R≈ 27°≈07'05	0°15'45 10.87336 AU 0°03'32	conjunction minimum elong max. Earth dist. morning rise retrograde	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45	-1°52'56 1°52'57 10.81738 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41	21°≈17'11 21°≈16'41 21°≈17'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30°R≈ 27°≈07'05 27°≈06'53	0°15'45 10.87336 AU 0°03'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45	-1°52'56 1°52'57 10.81738 AU -2°25'13
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30°R≈ 27°≈07'05 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩	0°15'45 10.87336 AU 0°03'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03	-1°52'56 1°52'57 10.81738 AU -2°25'13
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ¥ 0° ¥25'26 30°R≈ 27°≈07'05 27°≈06'53 24°≈25'32 23°≈46'20	0°15'45 10.87336 AU 0°03'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08	-1°52'56 1°52'57 10.81738 AU -2°25'13
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30°R≈ 27°≈07'05 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩	0°15'45 10.87336 AU 0°03'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30°R≈ 27°≈07'05 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩	0°15'45 10.87336 AU 0°03'32 8.89153 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53	22°Y16'30 29°Y26'40 0°B 1°B26'51 1°B26'51 1°B27'14 3°B27'47 10°B52'17 7°B29'45 7°B30'03 4°B10'08 11°B22'55	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30° № 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩ 1° ₩00'13	0°15'45 10.87336 AU 0°03'32 8.89153 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08 11°822'55 13°824'12 13°824'12	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU
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minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set conjunction minimum elong	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30° R≈ 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩ 1° ₩00'13 3° ₩00'05 3° ₩00'05	0°15'45 10.87336 AU 0°03'32 8.89153 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53 6001 May 01 20:02 6001 May 01 20:01 6001 May 01 20:55 6001 May 15 00:44	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08 11°822'55 13°824'12 13°824'12 13°824'29	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU -2°02'18 2°02'20
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minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set conjunction minimum elong behind sun begin behind sun end	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 10 02:28 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08 5995 Feb 21 20:18 5995 Feb 21 14:40 5995 Feb 22 01:56	21°≈17'11 21°≈16'41 21°≈16'31 23°≈17'17 0° ₩ 0° ₩25'26 30°R≈ 27°≈06'53 24°≈25'32 23°≈46'20 0° ₩ 1° ₩00'13 3° ₩00'05 3° ₩00'05 2° ₩58'25 3° ₩101'45	0°15'45 10.87336 AU 0°03'32 8.89153 AU -0°10'11 0°10'10	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53 6001 May 01 20:02 6001 May 01 20:01 6001 May 01 20:55 6001 May 15 00:44	22°Y16'30 29°Y26'40 0°8 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08 11°822'55 13°824'12 13°824'12 13°824'29 15°8 15°826'27	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU -2°02'18 2°02'20 10.75566 AU
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minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 09 23:04 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08 5995 Feb 21 20:18 5995 Feb 21 20:18 5995 Feb 21 14:40 5995 Feb 21 14:40 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Mar 10 14:02 5995 Jun 19 09:59 5995 Aug 28 09:18 5995 Aug 28 09:18 5995 Aug 28 09:18 5995 Nov 06 23:31 5996 Feb 16 19:58	21°≈17'11 21°≈16'41 21°≈16'41 21°≈16'31 23°≈17'17 0° H 0° H 25'26 30° R≈ 27°≈06'53 24°≈25'32 23°≈46'20 0° H 1° H 00'13 3° H 00'05 2° H 58'25 3° H 01'45 2° H 59'43 4° H 59'34 12° H 07'35 8° H 49'01 8° H 48'55 5° H 28'56 12° H 39'50 14° H 39'07 14° H 39'07	0°15'45 10.87336 AU 0°03'32 8.89153 AU -0°10'11 0°10'10 10.90556 AU -0°28'00 8.91539 AU -0°35'28 0°35'27	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53 6001 May 01 20:02 6001 May 01 20:01 6001 May 12 20:01 6001 May 13 10:35 6001 May 18 17:19 6001 Aug 31 00:37 6001 Nov 09 11:29 6001 Nov 09 10:18 6002 Jan 17 05:27 6002 Apr 27 08:12 6002 May 14 04:32 6002 May 14 04:32 6002 May 14 05:39 6002 May 31 04:36	22°Y16'30 29°Y26'40 0°B 1°B26'51 1°B26'51 1°B27'14 3°B27'47 10°B52'17 7°B29'45 7°B30'03 4°B10'08 11°B22'55 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 15°B33'13 19°B33'13 19°B33'26 16°B13'08 23°B29'32 25°B32'19 25°B32'19 25°B32'19 25°B32'39 27°B36'13	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU -2°02'18 2°02'20 10.75566 AU -2°33'44 8.72214 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 09 23:04 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08 5995 Feb 21 20:18 5995 Feb 21 20:18 5995 Feb 21 20:18 5995 Feb 21 14:40 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Mar 10 14:02 5995 Jun 19 09:59 5995 Aug 28 09:18 5995 Aug 28 09:18 5995 Aug 28 09:52 5995 Nov 06 23:31 5996 Feb 16 19:58 5996 Mar 04 13:46 5996 Mar 04 13:44 5996 Mar 04 12:40	21°≈17'11 21°≈16'41 21°≈16'41 21°≈16'31 23°≈17'17 0° H 0° H 25'26 30° R≈ 27°≈06'53 24°≈25'32 23°≈46'20 0° H 1° H 00'13 3° H 00'05 2° H 58'25 3° H 01'45 2° H 59'43 4° H 59'34 12° H 07'35 8° H 49'01 8° H 48'55 5° H 28'56 12° H 39'07 14° H 39'07 14° H 39'07 14° H 38'48	0°15'45 10.87336 AU 0°03'32 8.89153 AU -0°10'11 0°10'10 10.90556 AU -0°28'00 8.91539 AU -0°35'28	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 May 01 20:02 6001 May 01 20:02 6001 May 01 20:01 6001 May 15 00:44 6001 May 18 17:19 6001 Aug 31 00:37 6001 Nov 09 11:29 6001 Nov 09 10:18 6002 Jan 17 05:27 6002 May 14 04:32 6002 May 14 04:32 6002 May 14 04:32 6002 May 31 04:36 6002 Jun 21 00:12	1°826'51 1°826'51 1°826'51 1°827'14 3°827'47 10°852'17 7°829'45 7°830'03 4°810'08 11°822'55 13°824'12 13°824'12 13°824'29 15°8 15°826'27 22°856'47 19°833'13 19°833'26 16°813'08 23°829'32 25°832'19 25°832'19 25°832'39 27°836'13 0°II	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU -2°02'18 2°02'20 10.75566 AU -2°33'44 8.72214 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. desc. node direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	5994 Feb 10 00:46 5994 Feb 09 23:04 5994 Feb 09 23:04 5994 Feb 09 22:32 5994 Feb 26 19:32 5994 Feb 26 19:32 5994 May 15 19:19 5994 Jun 07 06:21 5994 Jun 30 00:15 5994 Aug 15 22:36 5994 Aug 15 23:41 5994 Sep 26 22:17 5994 Oct 25 16:11 5995 Jan 27 08:34 5995 Feb 05 01:08 5995 Feb 21 20:18 5995 Feb 21 20:18 5995 Feb 21 14:40 5995 Feb 21 14:40 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Feb 21 19:03 5995 Mar 10 14:02 5995 Jun 19 09:59 5995 Aug 28 09:18 5995 Aug 28 09:18 5995 Aug 28 09:18 5995 Nov 06 23:31 5996 Feb 16 19:58	21°≈17'11 21°≈16'41 21°≈16'41 21°≈16'31 23°≈17'17 0° H 0° H 25'26 30° R≈ 27°≈06'53 24°≈25'32 23°≈46'20 0° H 1° H 00'13 3° H 00'05 2° H 58'25 3° H 01'45 2° H 59'43 4° H 59'34 12° H 07'35 8° H 49'01 8° H 48'55 5° H 28'56 12° H 39'50 14° H 39'07 14° H 39'07	0°15'45 10.87336 AU 0°03'32 8.89153 AU -0°10'11 0°10'10 10.90556 AU -0°28'00 8.91539 AU -0°35'28 0°35'27	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	5999 Dec 24 18:05 6000 Apr 03 00:18 6000 Apr 07 16:29 6000 Apr 19 17:10 6000 Apr 19 17:08 6000 Apr 19 18:24 6000 May 06 12:19 6000 Aug 18 05:30 6000 Oct 27 18:41 6000 Oct 27 17:10 6001 Jan 04 21:35 6001 Apr 15 01:53 6001 May 01 20:02 6001 May 01 20:01 6001 May 12 20:01 6001 May 13 10:35 6001 May 18 17:19 6001 Aug 31 00:37 6001 Nov 09 11:29 6001 Nov 09 10:18 6002 Jan 17 05:27 6002 Apr 27 08:12 6002 May 14 04:32 6002 May 14 04:32 6002 May 14 05:39 6002 May 31 04:36	22°Y16'30 29°Y26'40 0°B 1°B26'51 1°B26'51 1°B27'14 3°B27'47 10°B52'17 7°B29'45 7°B30'03 4°B10'08 11°B22'55 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 13°B24'12 15°B33'13 19°B33'13 19°B33'26 16°B13'08 23°B29'32 25°B32'19 25°B32'19 25°B32'19 25°B32'39 27°B36'13	-1°52'56 1°52'57 10.81738 AU -2°25'13 8.78926 AU -2°02'18 2°02'20 10.75566 AU -2°33'44 8.72214 AU -2°06'22 2°06'23 10.68368 AU

min. Earth dist.	6002 Nov 22 06:12	1°π//8′26	8.64610 AU	min. Earth dist.	6009 Feb 08 08:27	20°Ω02'21	8.21184 AU
mm. Earm dist.	6002 Nov 22 00:12 6002 Dec 17 01:00	30°R 8	8.04010 AU	direct	6009 Apr 16 08:52	16°Ω36'02	6.21164 AU
direct	6003 Jan 29 16:09	28° 8 27'30		evening set	6009 Jul 28 06:31	24°Ω31'14	
direct	6003 Mar 13 02:00	0°II		evening set	000) 341 20 00.31	24 063114	
evening set	6003 May 09 20:08	5° Ⅱ 48'19		conjunction	6009 Aug 15 05:39	26° Ω 48'10	-0°03'54
e venning see	0003 May 07 20.00	3 12 10 17		minimum elong	6009 Aug 15 05:39	26°Ω48'10	
conjunction	6003 May 26 19:38	7° Ⅱ 52'56	-2°04'42	behind sun begin	6009 Aug 14 22:25	26°Ω45'52	0 03 22
minimum elong	6003 May 26 19:39	7° I 52'57		behind sun end	6009 Aug 15 12:52	26° Ω 50′27	
max. Earth dist.	6003 May 26 21:49		10.60443 AU	max. Earth dist.	6009 Aug 15 08:16		10.19366 AU
morning rise	6003 Jun 12 23:04	9° Ⅱ 58'48		morning rise	6009 Sep 02 06:41	29° Ω 05'42	
retrograde	6003 Sep 26 07:34	17° Ⅱ 41'43			6009 Sep 09 14:03	0° m⊅	
opposition	6003 Dec 05 07:06	14° Ⅱ 16′07	-2°29'57	asc. node	6009 Oct 02 15:07	2° m/40'07	
min. Earth dist.	6003 Dec 05 05:00	14° Ⅱ 16'31		retrograde	6009 Dec 16 15:20	7° Mp 11'54	
direct	6004 Feb 11 06:38	10° Ⅱ 54'44		opposition	6010 Feb 22 04:49	3° Mp 44'01	0°14'04
evening set	6004 May 21 14:58	18° Ⅱ 20'43		min. Earth dist.	6010 Feb 22 02:42	3° Mp 44'27	8.18000 AU
				direct	6010 Apr 30 04:16	0° Mp 17'16	
conjunction	6004 Jun 07 18:19	20° Ⅲ 27′27	-1°57'05	evening set	6010 Aug 11 19:33	8° Mp 16'57	
minimum elong	6004 Jun 07 18:21	20° Ⅱ 27′28	1°57'06				
max. Earth dist.	6004 Jun 07 21:19	20° Ⅲ 28′23	10.52140 AU	conjunction	6010 Aug 29 20:21	10° m 34'41	0°26'09
morning rise	6004 Jun 25 01:40	22° Ⅱ 35′29		minimum elong	6010 Aug 29 20:20	10° m 34'41	0°26'07
	6004 Sep 16 20:54	0ංම		max. Earth dist.	6010 Aug 29 22:42	10° m 35'26	10.17103 AU
retrograde	6004 Oct 08 19:13	0°924'32		morning rise	6010 Sep 16 21:54	12° m 52'42	
	6004 Oct 30 20:22	30° Ŗ Ⅱ		retrograde	6010 Dec 30 19:15	20° m 58'08	
opposition	6004 Dec 17 10:09	26° Ⅱ 58′03	-2°17'05	opposition	6011 Mar 08 00:22	17° m 30'36	0°50'41
min. Earth dist.	6004 Dec 17 07:27	26° Ⅱ 58'35	8.48068 AU	min. Earth dist.	6011 Mar 07 22:42	17° m 30'56	8.16700 AU
direct	6005 Feb 23 01:37	23° Ⅱ 35'51		direct	6011 May 14 03:10	14° m 03'07	
	6005 May 25 09:17	0ංම		evening set	6011 Aug 26 11:43	22° Mp 06'10	
evening set	6005 Jun 03 17:15	1°507'32					
				conjunction	6011 Sep 13 12:47	24° m 24'02	0°54'41
conjunction	6005 Jun 21 00:49	3° © 16'35	-1°43'35	minimum elong	6011 Sep 13 12:45	24° m 24'01	0°54'40
minimum elong	6005 Jun 21 00:52	3°516'36	1°43'36	max. Earth dist.	6011 Sep 13 13:57	24° m 24'24	10.16722 AU
max. Earth dist.	6005 Jun 21 03:47	3° © 17'30	10.43862 AU	morning rise	6011 Oct 01 13:32	26° Mp 41'51	
morning rise	6005 Jul 08 12:30	5° 5 26'56			6011 Oct 29 08:18	0∘ ত	
retrograde	6005 Oct 22 12:44	13° 5 21'34		retrograde	6012 Jan 13 20:33	4° £ 45'00	
opposition	6005 Dec 30 17:11	9° 9 54'23	-1°57'04	opposition	6012 Mar 20 20:13	1° ≙ 18′04	1°24'25
min. Earth dist.	6005 Dec 30 14:28	9° © 54'55	8.39931 AU	min. Earth dist.	6012 Mar 20 19:41	1° ഫ 18'10	8.17262 AU
direct	6006 Mar 08 00:28	6°531'16			6012 Apr 06 04:31	30°R M⊅	
evening set	6006 Jun 17 03:11	14° © 08'59		direct	6012 May 27 05:31	27° m 50'03	
					6012 Jul 16 08:01	0∘ ত	
conjunction	6006 Jul 04 15:10	16°ණ20'21	-1°24'34	evening set	6012 Sep 09 04:40	5° £ 55'07	
minimum elong	6006 Jul 04 15:13	16°ණ20'22	1°24'36				
max. Earth dist.	6006 Jul 04 17:38	16° © 21'08	10.36043 AU	conjunction	6012 Sep 27 04:39	8° £ 12'29	1°20'02
morning rise	6006 Jul 22 07:16	18° © 33'01		minimum elong	6012 Sep 27 04:36	8° ₤ 12'28	1°20'02
retrograde	6006 Nov 05 10:18	26° © 32'25		max. Earth dist.	6012 Sep 27 04:07	8° ≏ 12'19	10.18138 AU
opposition	6007 Jan 13 03:54	23° 5 04'44	-1°30'33	morning rise	6012 Oct 15 03:21	10° ≏ 29'29	
min. Earth dist.	6007 Jan 13 01:42	23° 5 05'11	8.32467 AU	retrograde	6013 Jan 26 18:33	18° ≏ 29'13	
direct	6007 Mar 21 05:07	19° 5 940'38		opposition	6013 Apr 03 15:24	15° ≏ 03'04	1°53'10
evening set	6007 Jun 30 21:09	27° 5 24'31		min. Earth dist.	6013 Apr 03 16:13	15° ≙ 02'54	8.19578 AU
				direct	6013 Jun 10 08:32	11° ≏ 34'47	
conjunction	6007 Jul 18 13:30	29° © 38'06		evening set	6013 Sep 23 20:13	19° ≏ 40′26	
minimum elong	6007 Jul 18 13:32	29° © 38'07	1°00'49				
max. Earth dist.	6007 Jul 18 15:44		10.29107 AU	conjunction	6013 Oct 11 18:08	21° ≏ 56'47	
	6007 Jul 21 10:34	$0^{\circ}\Omega$		minimum elong	6013 Oct 11 18:05	21° ≙ 56'46	1°40'43
morning rise	6007 Aug 05 09:36	1° Ω 52'51		max. Earth dist.	6013 Oct 11 16:03		10.21270 AU
retrograde	6007 Nov 19 09:23	9° Ω 55'53		morning rise	6013 Oct 29 13:57	24° £ 12'29	
opposition	6008 Jan 26 17:43	6° Ω 27'56			6013 Dec 22 07:09	0°M₊	
min. Earth dist.	6008 Jan 26 15:53		8.26098 AU	retrograde	6014 Feb 09 13:11	2°M07'43	
direct	6008 Apr 02 17:05	3° Ω 02'52			6014 Apr 01 00:26	30° ₹ Ω	
evening set	6008 Jul 13 22:36	10° Ω 52'43		opposition	6014 Apr 17 09:13	28° ≏ 42'29	2°15'16
				min. Earth dist.	6014 Apr 17 10:47	28° ≏ 42'10	8.23576 AU
conjunction	6008 Jul 31 18:50	13° Ω 08'13		direct	6014 Jun 24 11:37	25° ≙ 14'11	
minimum elong	6008 Jul 31 18:52	13° Ω 08′13			6014 Sep 10 05:04	0° M	
max. Earth dist.	6008 Jul 31 21:07		10.23443 AU	evening set	6014 Oct 08 08:12	3°M18'45	
	6008 Aug 15 11:18	15° Ω					
morning rise	6008 Aug 18 18:02	15° Ω 24'38		conjunction	6014 Oct 26 03:24		1°55'35
retrograde	6008 Dec 02 11:21	23° Ω 30′00		minimum elong	6014 Oct 26 03:22	5°M33'39	1°55'36
opposition	6009 Feb 08 10:17	20° Ω 01'58	-0°23'09	max. Earth dist.	6014 Oct 26 00:38	5°M32'47	10.26037 AU

morning rise	6014 Nov 12 19:46	7° ጤ 47'41		retrograde	6021 May 09 02:19	1° ≈ 56'41	
	6015 Jan 27 23:49	15° ™			6021 Jun 28 05:12	30°Ŗ₹	
retrograde	6015 Feb 23 03:07	15° ™ 37'27		opposition	6021 Jul 16 21:44	28° る 37'18	1°17'49
	6015 Mar 21 11:27	15°RM		min. Earth dist.	6021 Jul 16 22:26	28° る 37'10	8.75438 AU
opposition	6015 May 01 00:53	12°M13'13	2°29'36	direct	6021 Sep 25 12:51	25° る 13'50	
min. Earth dist.	6015 May 01 02:26	12°M12'54	8.29108 AU		6021 Dec 14 20:11	0° ≈	
direct	6015 Jul 08 13:57	8°M45'08		evening set	6022 Jan 07 09:19	2°≈39'31	
	6015 Oct 07 20:47	15° ™					
evening set	6015 Oct 22 14:42	16°M46'54		conjunction	6022 Jan 24 08:55	4° ≈ 41'56	0°51'24
Č				minimum elong	6022 Jan 24 08:57	4° ≈ 41'56	0°51'25
conjunction	6015 Nov 09 06:49	19°M00'03	2°03'56	max. Earth dist.	6022 Jan 24 08:04		10.78739 AU
minimum elong	6015 Nov 09 06:48	19°ML00'03	2°03'58	morning rise	6022 Feb 10 05:29	6°≈43'30	10.70757110
max. Earth dist.	6015 Nov 09 04:12		10.32231 AU	•	6022 May 21 07:57	13°≈54'16	
			10.32231 AU	retrograde	•		0040112
morning rise	6015 Nov 26 19:22	21°M12'08		opposition	6022 Jul 29 12:32	10°≈35'16	0°48'13
retrograde	6016 Mar 07 11:26	28°M55'44	2025125	min. Earth dist.	6022 Jul 29 12:57	10°≈35'11	8.81775 AU
opposition	6016 May 13 13:38	25°M32'30	2°35'37	direct	6022 Oct 08 06:09	7°≈12'47	
min. Earth dist.	6016 May 13 14:57	25°M32'14	8.35906 AU	evening set	6023 Jan 19 11:52	14° ≈ 32'53	
direct	6016 Jul 21 13:46	22°M04'51			6023 Jan 23 07:34	15° ≈	
evening set	6016 Nov 04 14:04	0° ∡ 02'16					
	6016 Nov 04 06:41	0° ∡ ¹		conjunction	6023 Feb 05 09:28	16° ≈ 34'04	0°26'33
				minimum elong	6023 Feb 05 09:29	16° ≈ 34'04	0°26'34
conjunction	6016 Nov 22 02:59	2° ∡ 13'30	2°05'35	max. Earth dist.	6023 Feb 05 08:50	16° ≈ 33'53	10.84500 AU
minimum elong	6016 Nov 22 02:59	2° ҂ 13′30	2°05'37	morning rise	6023 Feb 22 04:39	18° ≈ 34'34	
max. Earth dist.	6016 Nov 22 00:50	2° ∡ 12'50	10.39540 AU	retrograde	6023 Jun 02 12:30	25°≈43'06	
morning rise	6016 Dec 09 11:50	4° ∡ ¹23'32		opposition	6023 Aug 11 01:06	22° ≈ 24'19	0°16'57
retrograde	6017 Mar 20 15:45	12° х 00'37		min. Earth dist.	6023 Aug 11 01:39	22° ≈ 24'13	8.86877 AU
opposition	6017 May 26 23:00	8° ∡ 38′22	2°33'23	direct	6023 Oct 20 18:21	19° ≈ 02'48	0.00077110
min. Earth dist.	6017 May 27 00:18	8° ₹ 38'06	8.43619 AU	evening set	6024 Jan 31 09:57	26°≈18'10	
direct	6017 Aug 04 08:32	5°× 11'20	0.43017 AC	evening set	0024 Juli 31 07.37	20 ~10 10	
	-				(024 E-1, 17, 05,42	2001001	0°00'49
evening set	6017 Nov 18 05:14	13° ₹ 03'08		conjunction	6024 Feb 17 05:42	28°≈18'21	
	(0150 051501	150 31005	2000115	minimum elong	6024 Feb 17 05:41	28°≈18'21	0°00'50
conjunction	6017 Dec 05 15:01	15° ₹ 12'25	2°00'45	behind sun begin	6024 Feb 16 22:41	28°≈16'16	
minimum elong	6017 Dec 05 15:03	15° ∡ 12'25	2°00'47	behind sun end	6024 Feb 17 12:42	28° ≈ 20′25	
max. Earth dist.	6017 Dec 05 13:09		10.47574 AU	max. Earth dist.	6024 Feb 17 04:48	28° ≈ 18′08	10.88906 AU
morning rise	6017 Dec 22 20:35	17° ∡ ¹20'27		desc. node	6024 Feb 28 17:09	29° ≈ 40'38	
retrograde	6018 Apr 02 14:11	24° ₹ 50'58			6024 Mar 02 10:33	0° ∀	
opposition	6018 Jun 09 04:33	21° ∡ °29′37	2°23'27	morning rise	6024 Mar 04 23:55	0°) 18′04	
min. Earth dist.	6018 Jun 09 06:27	21° ∡ ¹29'15	8.51833 AU	retrograde	6024 Jun 13 13:38	7°) €25'41	
direct	6018 Aug 17 22:53	18° ∡ 03′20		opposition	6024 Aug 22 11:50	4°) €06'54	-0°14'43
evening set	6018 Dec 01 12:07	25° ∡ ¹48'47		min. Earth dist.	6024 Aug 22 12:17	4°){ 06'49	8.90543 AU
				direct	6024 Nov 01 03:29	0°) 46'15	
conjunction	6018 Dec 18 18:53	27° ∡ ¹56'07	1°50'01	evening set	6025 Feb 11 05:02	7°) 57′57	
minimum elong	6018 Dec 18 18:55	27° ₹ '56'08	1°50'03	<i>8</i>			
max. Earth dist.	6018 Dec 18 16:26		10.55904 AU	conjunction	6025 Feb 27 23:18	9° ¥ 57'22	-0°24'50
morning rise	6019 Jan 04 21:38	0° る 02'16	10.0000	minimum elong	6025 Feb 27 23:17	9°) 57'22	
morning rise	6019 Jan 04 14:08	0°る		max. Earth dist.	6025 Feb 27 22:48		10.91783 AU
retrograde	6019 Apr 15 05:47	7° る 26'33		morning rise	6025 Mar 16 16:49	11° X 56'34	10.91783 AU
•	6019 Apr 13 05:47 6019 Jun 22 06:02	4°る06'02	2006144	-		19° ¥ 04'33	
opposition				retrograde	6025 Jun 25 16:27		0945125
min. Earth dist.	6019 Jun 22 08:14	4° る 05'37	8.60129 AU	opposition	6025 Sep 03 21:12	15°) √45'35	
direct	6019 Aug 31 09:14	0°る40'36		min. Earth dist.	6025 Sep 03 20:41	15°) (45'41	8.92622 AU
evening set	6019 Dec 14 10:39	8° る 19'20		direct	6025 Nov 13 10:48	12° ∺ 25'39	
		_		evening set	6026 Feb 22 22:23	19°) 34'48	
conjunction	6019 Dec 31 14:40	10° る 24'51					
minimum elong	6019 Dec 31 14:43	10° る 24'51	1°34'15	conjunction	6026 Mar 11 15:35	21°) €33'47	-0°49'19
max. Earth dist.	6019 Dec 31 11:59	10° පි 24'01	10.64124 AU	minimum elong	6026 Mar 11 15:33	21°) €33'46	0°49'18
morning rise	6020 Jan 17 15:04	12° る 29'15		max. Earth dist.	6026 Mar 11 16:22	21°) 34'01	10.93012 AU
retrograde	6020 Apr 26 17:48	19° る 48'03		morning rise	6026 Mar 28 08:32	23°) 32′43	
opposition	6020 Jul 04 03:43	16° පි 28'11	1°44'26		6026 Jun 08 12:58	0° Y	
min. Earth dist.	6020 Jul 04 05:25	16° ප් 27'51		retrograde	6026 Jul 07 21:51	0° Υ 42'18	
direct	6020 Sep 12 14:24	13° る 03'42		Č	6026 Aug 06 16:50	30°₽)	
evening set	6020 Dec 26 01:16	20°る35'41		opposition	6026 Sep 16 06:24	27° H 22'58	-1°14'30
		11		min. Earth dist.	6026 Sep 16 05:01	27°) 23'14	
conjunction	6021 Jan 12 02:57	22° る 39'34	1014'10	direct	6026 Nov 25 14:00	24° H 03'39	3.75030 AU
				uncci		24°π03'39 0°Υ	
minimum elong	6021 Jan 12 02:59	22° る 39'34			6027 Feb 24 06:55		
max. Earth dist.	6021 Jan 12 00:55		10.71851 AU	evening set	6027 Mar 06 15:17	1° Υ 11'21	
morning rise	6021 Jan 29 01:19	24° る 42'26			COOR 15	2000	1011111
	6021 Mar 21 19:48	0° ≈		conjunction	6027 Mar 23 07:38	3° Y 10′10	-1°11'46

asc. node

6039 Mar 22 17:48

25°Ω03'13

6033 May 16 05:52

evening set

12°**I**57′36

direct	6039 Apr 24 02:12	24° Ω 07'04		evening set	6045 Oct 29 09:39	24°ML03'49	
	6039 Jul 19 08:18	0° m					
evening set	6039 Aug 05 08:36	2° Mp 04'13		conjunction	6045 Nov 16 00:04	26°M16'05	2°05'35
				minimum elong	6045 Nov 16 00:03	26°M16'05	2°05'37
conjunction	6039 Aug 23 08:37	4° m 21'33	0°12'11	max. Earth dist.	6045 Nov 15 21:54	26°M15'24	10.35115 AU
minimum elong	6039 Aug 23 08:36	4° Mp 21′32	0°12'09	morning rise	6045 Dec 03 10:49	28° M 27'13	
behind sun begin	6039 Aug 23 03:46	4° Mp 20'01			6045 Dec 16 05:44	0° ∡ ¹	
behind sun end	6039 Aug 23 13:26	4° Mp 23′04		retrograde	6046 Mar 14 20:37	6° ∡ ¹07'43	
max. Earth dist.	6039 Aug 23 08:11	4° Mp 21′25	10.17800 AU	opposition	6046 May 21 01:18	2° ∡ ¹44'48	2°35'23
morning rise	6039 Sep 10 10:13	6° Mp 39′22		min. Earth dist.	6046 May 21 02:46	2° ∡ ¹44'30	8.39176 AU
retrograde	6039 Dec 24 12:12	14° m 44'58			6046 Jun 30 04:54	30°RML	
opposition	6040 Feb 29 21:49	11° Mp 16'52	0°33'42	direct	6046 Jul 29 05:45	29° M 17'16	
min. Earth dist.	6040 Feb 29 22:02	11° m 16'49	8.16608 AU		6046 Aug 27 03:19	0° ∡ ¹	
direct	6040 May 07 00:16	7° m 49'13		evening set	6046 Nov 12 05:01	7° ∡ 12'13	
evening set	6040 Aug 18 22:53	15° m 50'42					
-	-			conjunction	6046 Nov 29 16:14	9° ∡ ¹22'30	2°03'44
conjunction	6040 Sep 05 23:55	18° Mp 08'36	0°41'32	minimum elong	6046 Nov 29 16:15	9° ∡ ¹22'31	2°03'47
minimum elong	6040 Sep 05 23:53	18° Mp 08'35	0°41'31	max. Earth dist.	6046 Nov 29 13:59	9° ∡ ¹21'48	10.43155 AU
max. Earth dist.	6040 Sep 05 23:20	18° Mp 08'24	10.15906 AU	morning rise	6046 Dec 16 23:35	11° ∡ ³31'36	
morning rise	6040 Sep 24 01:23	20° m 26'38		retrograde	6047 Mar 27 21:17	19° ∡ ′05'31	
retrograde	6041 Jan 06 13:18	28° m 31'06		opposition	6047 Jun 03 08:47	15° ∡ ¹43'44	2°28'57
opposition	6041 Mar 14 17:18	25° m 03'22	1°09'01	min. Earth dist.	6047 Jun 03 09:43	15° х ⁴43'33	8.47510 AU
min. Earth dist.	6041 Mar 14 17:26	25° m 03'21	8.15753 AU	direct	6047 Aug 11 23:17	12° × 17'06	0.17510710
direct	6041 May 21 01:15	21° m/ 35'04	0.13733710	evening set	6047 Nov 25 16:07	20°×7'06'01	
evening set	6041 Sep 02 15:11	29° m 39'30		evening set	0047 NOV 23 10.07	20 × 0001	
evening set	6041 Sep 05 08:19	ე∘ ღ		conjunction	6047 Dec 13 00:20	22° ∡ 14′20	1°55'40
	0041 Sep 03 08.19	0 ==		minimum elong	6047 Dec 13 00:20	22° x 14'21	1°55'42
agniumation	6041 Cap 20 15:56	19057119	1000124	_			1 55 42 10.51711 AU
conjunction	6041 Sep 20 15:56	1° £ 57'18	1°08'34	max. Earth dist.	6047 Dec 12 22:53		10.51/11 AU
minimum elong	6041 Sep 20 15:53	1° £ 57'17	1°08'33	morning rise	6047 Dec 30 04:29	24° ∡ ¹21'27	
max. Earth dist.	6041 Sep 20 15:27		10.16048 AU		6048 Feb 22 19:13	0°る	
morning rise	6041 Oct 08 15:53	4° £ 14'52		retrograde	6048 Apr 08 16:53	1°る49'00	
retrograde	6042 Jan 20 13:23	12° ≏ 16'46			6048 May 26 02:12	30°₹ ⋌	
opposition	6042 Mar 28 12:47	8° ≏ 49'38	1°40'21	opposition	6048 Jun 15 12:32	28° ⋌ ¹28'14	2°15'15
min. Earth dist.	6042 Mar 28 12:45	8° ≏ 49'39	8.16952 AU	min. Earth dist.	6048 Jun 15 13:02	28° ∡ ¹28'08	8.56134 AU
direct	6042 Jun 04 02:43	5° ≏ 20'55		direct	6048 Aug 24 11:58	25° ∡ 02'39	
evening set	6042 Sep 17 07:34	13° ≏ 26'46			6048 Nov 13 21:36	0°ಕ	
				evening set	6048 Dec 07 18:57	2° る 44'55	
conjunction	6042 Oct 05 06:50	15° ≏ 43'51	1°31'37				
minimum elong	6042 Oct 05 06:47	15° ≏ 43'50	1°31'37	conjunction	6048 Dec 25 00:26	4° る 51'21	1°42'06
max. Earth dist.	6042 Oct 05 06:20	15° ≏ 43'41	10.18218 AU	minimum elong	6048 Dec 25 00:28	4° る 51'21	1°42'08
morning rise	6042 Oct 23 04:10	18° ≏ 00'22		max. Earth dist.	6048 Dec 24 23:41	4° る 51'07	10.60356 AU
retrograde	6043 Feb 03 10:59	25° ≏ 58'17		morning rise	6049 Jan 11 01:50	6° る 56'36	
opposition	6043 Apr 11 07:12	22° ≏ 32'00	2°05'47	retrograde	6049 Apr 21 09:01	14° ⋜ 18'15	
min. Earth dist.	6043 Apr 11 07:22	22° £ 31'58	8.20127 AU	opposition	6049 Jun 28 12:24	10° る 58'24	1°55'22
direct	6043 Jun 18 05:08	19° ഫ 03'08		min. Earth dist.	6049 Jun 28 13:08	10° ⋜ 58'16	8.64636 AU
evening set	6043 Oct 01 21:33	27° ≙ 08'44		direct	6049 Sep 06 18:18	7° る 33'52	
				evening set	6049 Dec 20 13:53	15° る 09'19	
conjunction	6043 Oct 19 18:22	29° ≏ 24'33	1°49'20				
minimum elong	6043 Oct 19 18:19	29° ≏ 24'32	1°49'20	conjunction	6050 Jan 06 16:47	17° る 14'00	1°23'58
max. Earth dist.	6043 Oct 19 17:31	29° ≏ 24'16	10.22287 AU	minimum elong	6050 Jan 06 16:49	17° る 14'00	1°24'00
	6043 Oct 24 09:31	0°M		max. Earth dist.	6050 Jan 06 15:50	17° る 13'42	10.68668 AU
morning rise	6043 Oct 24 09:31	0° M. 1° M. 39'32			6050 Jan 06 15:50		10.68668 AU
morning rise	6043 Oct 24 09:31 6043 Nov 06 12:21	1°M39'32		morning rise	6050 Jan 06 15:50 6050 Jan 23 16:00	19° る 17'36	10.68668 AU
retrograde	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36	1°M39'32 9°M32'22	2°23'52	morning rise retrograde	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17	19° ට 17'36 26°ට34'06	
retrograde opposition	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04	1°M39'32 9°M32'22 6°M07'06	2°23'52 8 25092 AU	morning rise retrograde opposition	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38	19° ප්17'36 26° ප්34'06 23° ප්14'58	1°30'34
retrograde opposition min. Earth dist.	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54	1°M39'32 9°M32'22 6°M07'06 6°M06'56	2°23'52 8.25092 AU	morning rise retrograde opposition min. Earth dist.	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51	19°පි17'36 26°පි34'06 23°පි14'58 23°පි14'44	
retrograde opposition min. Earth dist. direct	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26		morning rise retrograde opposition min. Earth dist. direct	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29	19° ට 17'36 26° ට 34'06 23° ට 14'58 23° ට 14'44 19° ට 51'29	1°30'34
retrograde opposition min. Earth dist.	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54	1°M39'32 9°M32'22 6°M07'06 6°M06'56		morning rise retrograde opposition min. Earth dist.	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51	19°පි17'36 26°පි34'06 23°පි14'58 23°පි14'44	1°30'34
retrograde opposition min. Earth dist. direct evening set	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00	8.25092 AU	morning rise retrograde opposition min. Earth dist. direct evening set	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40	19° පි17'36 26° පි34'06 23° පි14'58 23° පි14'44 19° පි51'29 27° පි20'20	1°30'34 8.72601 AU
retrograde opposition min. Earth dist. direct evening set conjunction	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00	8.25092 AU 2°00'48	morning rise retrograde opposition min. Earth dist. direct evening set conjunction	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:08	19° පි17'36 26° පි34'06 23° පි14'58 23° පි14'44 19° පි51'29 27° පි20'20	1°30'34 8.72601 AU 1°02'18
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08	8.25092 AU 2°00'48 2°00'49	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:08 6051 Jan 19 02:10	19° \(\begin{align*} 19° \(\beta\)17'36 26° \(\beta\)34'06 23° \(\beta\)14'58 23° \(\beta\)14'44 19° \(\beta\)51'29 27° \(\beta\)20'20 29° \(\beta\)23'25 29° \(\beta\)23'26	1°30'34 8.72601 AU 1°02'18 1°02'19
retrograde opposition min. Earth dist. direct evening set conjunction	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 01 22:52	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08 12°M55'38	8.25092 AU 2°00'48	morning rise retrograde opposition min. Earth dist. direct evening set conjunction	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:08 6051 Jan 19 02:10 6051 Jan 19 00:31	19° \(\frac{1}{3}17'36\) 26° \(\frac{7}{3}34'06\) 23° \(\frac{7}{3}14'58\) 23° \(\frac{7}{3}14'44\) 19° \(\frac{7}{5}51'29\) 27° \(\frac{7}{2}20'20\) 29° \(\frac{7}{2}23'25\) 29° \(\frac{7}{2}23'26\) 29° \(\frac{7}{2}22'56\)	1°30'34 8.72601 AU 1°02'18
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 01 22:52 6044 Nov 18 08:59	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08 12°M55'38 15°M	8.25092 AU 2°00'48 2°00'49	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:10 6051 Jan 19 00:31 6051 Jan 24 02:44	19°る17'36 26°る34'06 23°る14'58 23°る14'44 19°る51'29 27°る20'20 29°る23'25 29°る23'26 29°る22'56 0°≈	1°30'34 8.72601 AU 1°02'18 1°02'19
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 01 22:52 6044 Nov 18 08:59 6044 Nov 19 14:49	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08 12°M55'38 15°M	8.25092 AU 2°00'48 2°00'49	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:10 6051 Jan 19 00:31 6051 Jan 24 02:44 6051 Feb 04 23:35	19°る17'36 26°る34'06 23°る14'58 23°る14'44 19°る51'29 27°る20'20 29°る23'25 29°る23'26 29°る22'56 0°≈ 1°≈25'35	1°30'34 8.72601 AU 1°02'18 1°02'19
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 18 08:59 6044 Nov 19 14:49 6045 Mar 01 14:24	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08 12°M55'38 15°M 15°M09'17 22°M56'13	8.25092 AU 2°00'48 2°00'49 10.28026 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:08 6051 Jan 19 00:31 6051 Jan 24 02:44 6051 Feb 04 23:35 6051 May 16 01:14	19°る17'36 26°る34'06 23°る14'58 23°る14'44 19°る51'29 27°る20'20 29°る23'25 29°る23'26 29°る22'56 0°≈ 1°≈25'35 8°≈37'59	1°30'34 8.72601 AU 1°02'18 1°02'19 10.76238 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 18 08:59 6044 Nov 19 14:49 6045 Mar 01 14:24 6045 May 07 14:20	1°M.39'32 9°M.32'22 6°M.07'06 6°M.06'56 2°M.38'26 10°M.42'00 12°M.56'08 12°M.56'08 12°M.55'38 15°M. 15°M.09'17 22°M.56'13 19°M.32'07	8.25092 AU 2°00'48 2°00'49 10.28026 AU 2°33'49	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:10 6051 Jan 19 00:31 6051 Jan 24 02:44 6051 Feb 04 23:35 6051 May 16 01:14 6051 Jul 24 01:28	19°る17'36 26°る34'06 23°る14'58 23°る14'44 19°る51'29 27°る20'20 29°る23'25 29°る23'26 29°る22'56 0°≈ 1°≈25'35 8°≈37'59 5°≈19'20	1°30'34 8.72601 AU 1°02'18 1°02'19 10.76238 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	6043 Oct 24 09:31 6043 Nov 06 12:21 6044 Feb 17 03:36 6044 Apr 24 00:04 6044 Apr 24 00:54 6044 Jul 01 07:35 6044 Oct 15 06:46 6044 Nov 02 00:27 6044 Nov 02 00:26 6044 Nov 18 08:59 6044 Nov 19 14:49 6045 Mar 01 14:24	1°M39'32 9°M32'22 6°M07'06 6°M06'56 2°M38'26 10°M42'00 12°M56'08 12°M56'08 12°M55'38 15°M 15°M09'17 22°M56'13	8.25092 AU 2°00'48 2°00'49 10.28026 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	6050 Jan 06 15:50 6050 Jan 23 16:00 6050 May 03 19:17 6050 Jul 11 08:38 6050 Jul 11 09:51 6050 Sep 19 19:29 6051 Jan 02 01:40 6051 Jan 19 02:08 6051 Jan 19 00:31 6051 Jan 24 02:44 6051 Feb 04 23:35 6051 May 16 01:14	19°る17'36 26°る34'06 23°る14'58 23°る14'44 19°る51'29 27°る20'20 29°る23'25 29°る23'26 29°る22'56 0°≈ 1°≈25'35 8°≈37'59	1°30'34 8.72601 AU 1°02'18 1°02'19 10.76238 AU

evening set	6052 Jan 14 07:09	9° ≈ 19'40		morning rise	6057 Apr 14 19:44	11° Y '46'08	
				retrograde	6057 Jul 26 06:38	19° Ƴ 00'58	
conjunction	6052 Jan 31 05:34	11° ≈ 21'22	0°38'12	opposition	6057 Oct 04 20:06	15° Y 40′29 -1°	
minimum elong	6052 Jan 31 05:35	11° ≈ 21'22	0°38'13	min. Earth dist.	6057 Oct 04 19:17		89038 AU
max. Earth dist.	6052 Jan 31 04:02	11° ≈ 20'54	10.82684 AU	direct	6057 Dec 13 17:33	12° Ƴ 21'19	
morning rise	6052 Feb 17 01:30	13° ≈ 22′20		evening set	6058 Mar 24 05:30	19° Ƴ 29'43	
	6052 Mar 02 04:55	15° ≈					
retrograde	6052 May 27 06:51	20° ≈ 31'52		conjunction	6058 Apr 09 21:43	21° Y ′29′06 -1°	40'29
opposition	6052 Aug 04 15:26	17° ≈ 13'27	0°31'30	minimum elong	6058 Apr 09 21:41	21° Y 29'06 1°	40'30
min. Earth dist.	6052 Aug 04 16:00	17° ≈ 13'21	8.85371 AU	max. Earth dist.	6058 Apr 09 22:34	21° Y 29'22 10.	.87023 AU
	6052 Sep 06 02:06	15°R ≈		morning rise	6058 Apr 26 15:34	23° Y 29'03	
direct	6052 Oct 14 09:24	13° ≈ 51'56			6058 Jul 07 06:33	0°B	
	6052 Nov 20 21:25	15° ≈		retrograde	6058 Aug 07 18:00	0° 8 48'16	
evening set	6053 Jan 25 07:31	21° ≈ 09'31		Č	6058 Sep 08 15:36	30° ₹ Υ	
S				opposition	6058 Oct 17 08:09	27° Y ′26'49 -2°	12'16
conjunction	6053 Feb 11 04:14	23° ≈ 10′09	0°12'45	min. Earth dist.	6058 Oct 17 07:01		84832 AU
minimum elong	6053 Feb 11 04:14	23° ≈ 10'09	0°12'45	direct	6058 Dec 25 19:59	24° Ƴ 07'34	
behind sun begin	6053 Feb 10 23:45	23°≈08'49	0 12 .0		6059 Mar 24 23:35	0°8	
behind sun end	6053 Feb 11 08:42	23°≈11'28		evening set	6059 Apr 05 03:09	1° 8 17'31	
max. Earth dist.	6053 Feb 11 03:20		10.87659 AU	evening set	0037 Apr 03 03.07	1 01/31	
morning rise	6053 Feb 27 22:51	25°≈10'11	10.07037 AC	conjunction	6059 Apr 21 19:55	3° 8 17'39 -1°	25/1/03
morning risc	6053 Apr 15 21:31	0° \		minimum elong	6059 Apr 21 19:54	3° 8 17'38 1°	
		0 K 2°₩18'14		2			
retrograde	6053 Jun 08 10:31			max. Earth dist.	6059 Apr 21 20:34	3° 8 17'50 10.	.82080 AU
	6053 Aug 03 12:11	30°R≈		morning rise	6059 May 08 15:14	5° 8 18'33	
desc. node	6053 Aug 15 12:24	29°≈07'07	0000100	retrograde	6059 Aug 20 08:31	12° 8 43'01	2011
opposition	6053 Aug 17 03:15	28°≈59'51		opposition	6059 Oct 29 22:17	9° 8 20'32 -2°	
min. Earth dist.	6053 Aug 17 03:35	28° ≈ 59'48	8.89518 AU	min. Earth dist.	6059 Oct 29 21:20	9° 8 20'43 8.	79245 AU
direct	6053 Oct 26 19:42	25° ≈ 39'11		direct	6060 Jan 07 01:22	6° 8 00'58	
	6054 Jan 11 05:01	0° ∀		evening set	6060 Apr 16 04:34	13° 8 13'33	
evening set	6054 Feb 06 04:30	2° ∺ 52'41			6060 Apr 30 21:58	15° 8	
conjunction	6054 Feb 22 23:33	4°) 52′28	-0°13'08	conjunction	6060 May 02 22:47	15° 8 14'50 -2°	02'50
minimum elong	6054 Feb 22 23:33	4°) 52'28	0°13'07	minimum elong	6060 May 02 22:46	15° 8 14'49 2°	02'52
behind sun begin	6054 Feb 22 19:17	4° ¥ 51'12		max. Earth dist.	6060 May 02 23:30	15° 8 15'03 10.	
behind sun end	6054 Feb 23 03:49	4°) 53'43		morning rise	6060 May 19 20:15	17° 8 17'04	.,
max. Earth dist.	6054 Feb 22 22:45		10.90954 AU	retrograde	6060 Sep 01 03:57	24° 8 47'19	
morning rise	6054 Mar 11 17:13	6° ¥ 51'53	10.50551710	opposition	6060 Nov 10 14:48	21° 8 23'47 -2°	34'00
retrograde	6054 Jun 20 13:57	13° ¥ 59'48		min. Earth dist.	6060 Nov 10 13:50		72486 AU
opposition	6054 Aug 29 13:45	10°) (41'15	0°31'32	direct	6061 Jan 18 08:33	18° 8 03'45	72400 AO
min. Earth dist.	6054 Aug 29 14:29		8.91961 AU	evening set	6061 Apr 28 10:47	25° 8 19'58	
direct	6054 Nov 08 03:39	7° H 21'15	8.91901 AU	evening set	0001 Apr 28 10.47	23 01938	
					(0(1)M 15, 07-24	270 422145 20	00(110
evening set	6055 Feb 17 23:13	14°) 31′48		conjunction	6061 May 15 07:24	27° 8 22'45 -2°	
. ,.	(055)4 0(1(40	1601/21100	002011.5	minimum elong	6061 May 15 07:24	27° 8 22'45 2°	
conjunction	6055 Mar 06 16:48	16° ¥ 31′00		max. Earth dist.	6061 May 15 09:07	27° 8 23'16 10.	.08610 AU
minimum elong	6055 Mar 06 16:47	16° ∺ 31′00		morning rise	6061 Jun 01 07:34	29° 8 26'39	
max. Earth dist.	6055 Mar 06 15:19		10.92523 AU		6061 Jun 05 23:50	0°П	
morning rise	6055 Mar 23 10:00	18°) € 30'06		retrograde	6061 Sep 14 04:12	7° Ⅱ 03'07	
retrograde	6055 Jul 02 17:30	25°) (39′09	1001121	opposition	6061 Nov 23 10:31	3° П 38'31 -2°	
opposition	6055 Sep 10 23:46	22° ∺ 20'11		min. Earth dist.	6061 Nov 23 08:45		64819 AU
min. Earth dist.	6055 Sep 11 00:39	22° ∺ 20'01	8.92684 AU	direct	6062 Jan 30 19:10	0° Ⅱ 17'53	
direct	6055 Nov 20 08:53	19° ∺ 00′39		evening set	6062 May 10 22:43	7° Ⅱ 38'33	
evening set	6056 Feb 29 16:40	26° ∺ 09'20					
				conjunction	6062 May 27 22:28	9° Ⅱ 43'12 -2°	04'01
conjunction	6056 Mar 17 09:18	28° ₩ 08'16	-1°01'47	minimum elong	6062 May 27 22:29	9° Ⅱ 43'12 2°	04'03
minimum elong	6056 Mar 17 09:16	28° ₩ 08'16	1°01'46	max. Earth dist.	6062 May 28 01:02	9° Ⅱ 43'59 10.	.60614 AU
max. Earth dist.			10.000 (4.47)				
	6056 Mar 17 08:11	28° ₩ 07'57	10.92364 AU	morning rise	6062 Jun 14 02:01	11° Ⅱ 49'03	
	6056 Mar 17 08:11 6056 Apr 02 01:18	28° ∺ 07'57 0° Ƴ	10.92364 AU	morning rise retrograde	6062 Jun 14 02:01 6062 Sep 27 10:46	11° ∏ 49'03 19° ∏ 31'52	
morning rise			10.92364 AU	•			28'44
retrograde	6056 Apr 02 01:18	0° Υ	10.92364 AU	retrograde	6062 Sep 27 10:46	19° Д 31'52 16° Д 06'15 -2°	228'44 56571 AU
•	6056 Apr 02 01:18 6056 Apr 03 02:20	0° Υ 0° Υ 07'20		retrograde opposition	6062 Sep 27 10:46 6062 Dec 06 09:48	19° Д 31'52 16° Д 06'15 -2°	
retrograde	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50	0° Υ 0° Υ 07'20 7° Υ 18'45		retrograde opposition min. Earth dist.	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22	19°П31'52 16°П06'15 -2° 16°П06'44 8.:	
retrograde opposition	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41	0°Υ 0°Υ07'20 7°Υ18'45 3°Υ59'05	-1°29'00	retrograde opposition min. Earth dist. direct	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37	19°П31'52 16°П06'15 -2° 16°П06'44 8.3 12°П44'53	
retrograde opposition min. Earth dist.	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41 6056 Sep 22 09:53	0°Υ 0°Υ07'20 7°Υ18'45 3°Υ59'05 3°Υ59'03	-1°29'00	retrograde opposition min. Earth dist. direct	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37	19°П31'52 16°П06'15 -2° 16°П06'44 8.3 12°П44'53	56571 AU
retrograde opposition min. Earth dist. direct	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41 6056 Sep 22 09:53 6056 Dec 01 13:59	0°Y 0°Y07'20 7°Y18'45 3°Y59'05 3°Y59'03 0°Y39'50	-1°29'00	retrograde opposition min. Earth dist. direct evening set conjunction	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37 6063 May 23 17:34	19° Π31'52 16° Π06'15 -2° 16° Π06'44 8.: 12° Π44'53 20° Π10'43	56571 AU 255'49
retrograde opposition min. Earth dist. direct	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41 6056 Sep 22 09:53 6056 Dec 01 13:59	0°Y 0°Y07'20 7°Y18'45 3°Y59'05 3°Y59'03 0°Y39'50	-1°29'00 8.91693 AU	retrograde opposition min. Earth dist. direct evening set	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37 6063 May 23 17:34 6063 Jun 09 21:04	19°П31'52 16°П06'15 -2° 16°П06'44 8.: 12°П44'53 20°П10'43 22°П17'31 -1°	56571 AU 255'49 255'51
retrograde opposition min. Earth dist. direct evening set conjunction	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41 6056 Sep 22 09:53 6056 Dec 01 13:59 6057 Mar 12 10:22	0°Υ 0°Υ07'20 7°Υ18'45 3°Υ59'05 3°Υ59'03 0°Υ39'50 7°Υ47'49	-1°29'00 8.91693 AU	retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37 6063 May 23 17:34 6063 Jun 09 21:04 6063 Jun 09 21:06	19°瓜31'52 16°瓜06'15 -2° 16°瓜06'44 8.: 12°瓜44'53 20°瓜10'43 22°瓜17'31 -1° 22°瓜17'31 1°	56571 AU 255'49 255'51
retrograde opposition min. Earth dist. direct evening set	6056 Apr 02 01:18 6056 Apr 03 02:20 6056 Jul 13 21:50 6056 Sep 22 09:41 6056 Sep 22 09:53 6056 Dec 01 13:59 6057 Mar 12 10:22	0°Y 0°Y07'20 7°Y18'45 3°Y59'05 3°Y59'03 0°Y39'50 7°Y47'49 9°Y46'49 9°Y46'49	-1°29'00 8.91693 AU -1°22'48	retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	6062 Sep 27 10:46 6062 Dec 06 09:48 6062 Dec 06 07:22 6063 Feb 12 09:37 6063 May 23 17:34 6063 Jun 09 21:04 6063 Jun 09 21:06 6063 Jun 09 23:33	19°П31'52 16°П06'15 -2° 16°П06'44 8 12°П44'53 20°П10'43 22°П17'31 -1° 22°П17'31 1° 22°П18'17 10	56571 AU 255'49 255'51

retrograde	6063 Oct 10 23:32	2° © 14'29		morning rise	6069 Sep 18 01:20	14° m 42'58	
Č	6063 Dec 03 22:02	30° ₹ Ⅱ		retrograde	6069 Dec 31 21:54	22° m/48'27	
opposition	6063 Dec 19 12:45	28° Ⅱ 48′00	-2°15'10	opposition	6070 Mar 09 02:46	19° m 20'57	0°53'59
min. Earth dist.	6063 Dec 19 10:25	28° Ⅱ 48′27	8.48130 AU	min. Earth dist.	6070 Mar 09 01:41	19° m 21'10	8.16437 AU
direct	6064 Feb 25 02:37	25° Ⅲ 25'44		direct	6070 May 15 06:04	15° m 53'24	
	6064 May 10 09:25	0ංම		evening set	6070 Aug 27 15:27	23° Mp 56'49	
evening set	6064 Jun 04 19:51	2° 9 57'22					
				conjunction	6070 Sep 14 16:21	26° Mp 14'42	0°57'10
conjunction	6064 Jun 22 03:36	5° 5 06'27	-1°41'47	minimum elong	6070 Sep 14 16:19	26° Mp 14'41	0°57'10
minimum elong	6064 Jun 22 03:39	5° 5 06'28	1°41'49	max. Earth dist.	6070 Sep 14 16:42	26° Mp 14′49	10.16498 AU
max. Earth dist.	6064 Jun 22 05:26		10.43893 AU	morning rise	6070 Oct 02 17:04	28° Mp 32'31	
morning rise	6064 Jul 09 15:40	7° © 16'52			6070 Oct 14 12:58	0∘ ⊽	
retrograde	6064 Oct 23 15:22	15° © 11'19		retrograde	6071 Jan 14 23:13	6° Ω 35'44	
opposition	6064 Dec 31 19:35	11°5544'08		opposition	6071 Mar 22 22:51	3° Ω 08'48	1°27'17
min. Earth dist.	6064 Dec 31 17:49		8.39916 AU	min. Earth dist.	6071 Mar 22 22:51	3° Ω 08'48	8.17104 AU
direct	6065 Mar 09 02:49	8°920'55		T' ·	6071 May 10 13:28	30°R Mp	
evening set	6065 Jun 18 05:52	15°958'40		direct	6071 May 29 08:07	29° m/40'44	
· · · · · · · · · · · · ·	(0(5 1) 05 10.0(10001010	1922110		6071 Jun 17 03:29	0° Ω 7° Ω 4€!04	
conjunction	6065 Jul 05 18:06 6065 Jul 05 18:09	18°©10'06 18°©10'07		evening set	6071 Sep 11 08:39	7° ≏ 46'04	
minimum elong max. Earth dist.	6065 Jul 05 19:53		1 22 21 10.35991 AU	conjunction	6071 Sep 29 08:28	10° ≏ 03'25	1°22'08
morning rise	6065 Jul 23 10:29	20°S22'48	10.33991 AU	minimum elong	6071 Sep 29 08:25	10° ⊆ 03′25	1°22'08
retrograde	6065 Nov 06 11:07	20 \$2248 28°\$22'04		max. Earth dist.	6071 Sep 29 07:20		10.18051 AU
opposition	6066 Jan 14 06:03	24°954'21	-1°27'32	morning rise	6071 Oct 17 07:05	10° 2 03'04	10.18031 AC
min. Earth dist.	6066 Jan 14 04:28	24°954'40	8.32369 AU	retrograde	6072 Jan 28 21:28	20° £ 20'01	
direct	6066 Mar 22 09:02	21°930'09	0.52507 110	opposition	6072 Apr 04 18:05	16° £ 53'53	1°55'27
evening set	6066 Jul 01 23:50	29°914'07		min. Earth dist.	6072 Apr 04 19:02	16° ⊆ 53'41	8.19565 AU
evening sec	6066 Jul 08 02:50	0°Ω		direct	6072 Jun 11 12:03	13° £ 25'33	0.17000 110
				evening set	6072 Sep 25 00:11	21° £ 31′20	
conjunction	6066 Jul 19 16:30	1° Ω 27'47	-0°58'12	, and the second	1		
minimum elong	6066 Jul 19 16:33	1° Ω 27'48	0°58'14	conjunction	6072 Oct 12 21:57	23° ≏ 47'38	1°42'16
max. Earth dist.	6066 Jul 19 18:46	1° £ 28′30	10.28970 AU	minimum elong	6072 Oct 12 21:55	23° ≏ 47'37	1°42'17
morning rise	6066 Aug 06 12:44	3° £ 42'33		max. Earth dist.	6072 Oct 12 19:46	23° ≏ 46'56	10.21307 AU
retrograde	6066 Nov 20 11:13	11° Ω 45'32		morning rise	6072 Oct 30 17:34	26° ≏ 03'15	
opposition	6067 Jan 27 19:47	8° Ω 17'31	-0°55'21		6072 Dec 03 16:15	0° M	
min. Earth dist.	6067 Jan 27 17:55	8° Ω 17'54	8.25920 AU	retrograde	6073 Feb 10 15:21	3°M58'20	
direct	6067 Apr 04 19:14	4° £ 52′22		opposition	6073 Apr 18 11:58	0°M33'07	2°16'50
evening set	6067 Jul 16 01:24	12° Ω 42′20		min. Earth dist.	6073 Apr 18 13:08	0° ™ 32'53	8.23648 AU
					6073 Apr 25 08:22	30°₽ ₽	
conjunction	6067 Aug 02 21:55	14° Ω 57'55		direct	6073 Jun 25 15:47	27° ≏ 04'49	
minimum elong	6067 Aug 02 21:57	14° Ω 57'55			6073 Aug 24 00:18	0°M	
max. Earth dist.	6067 Aug 03 00:33		10.23229 AU	evening set	6073 Oct 09 11:54	5°M09'26	
	6067 Aug 03 04:29	15° Ω					
morning rise	6067 Aug 20 21:09	17° Ω 14'23		conjunction	6073 Oct 27 07:00	7°M24'17	
retrograde	6067 Dec 04 14:50	25° Ω 19'44	0010120	minimum elong	6073 Oct 27 06:58	7°M24'16	1°56'31
opposition min. Earth dist.	6068 Feb 10 12:19	21° Ω 51'39		max. Earth dist.	6073 Oct 27 04:45		10.26125 AU
	6068 Feb 10 10:11		8.20938 AU	morning rise	6073 Nov 13 23:03	9°M38'13	
direct evening set	6068 Apr 17 10:21 6068 Jul 29 09:42	18° Ω 25'36 26° Ω 21'04		retrograde	6074 Jan 01 23:32 6074 Feb 24 05:24	15°M 17°M27'54	
evening set	0008 Jul 29 09.42	20 062104		renograde	6074 Apr 20 07:58	17 11027 34 15°RM	
conjunction	6068 Aug 16 08:59	28° Ω 38'03	-0°01'01	opposition	6074 May 02 03:42	13 KIIC 14°ML03'41	2°30'21
minimum elong	6068 Aug 16 08:58	28° Ω 38'03		min. Earth dist.	6074 May 02 03:42 6074 May 02 04:49	14°M03'41	8.29202 AU
behind sun begin	6068 Aug 16 01:39	28° Ω 35'44	0 01 02	direct	6074 Jul 09 17:30	10°M35'39	0.27202710
behind sun end	6068 Aug 16 16:18	28° Ω 40'22			6074 Sep 22 12:49	15°M	
max. Earth dist.	6068 Aug 16 11:31		10.19097 AU	evening set	6074 Oct 23 18:15	18°M37'25	
	6068 Aug 27 01:39	0°m)		5 4			
asc. node	6068 Aug 28 19:40	0° m/ 13'20		conjunction	6074 Nov 10 10:16	20°M50'32	2°04'12
morning rise	6068 Sep 03 09:59	0° m/ 55'38		minimum elong	6074 Nov 10 10:15	20°M50'32	2°04'13
retrograde	6068 Dec 17 18:41	9° m 01'51		max. Earth dist.	6074 Nov 10 08:11		10.32323 AU
opposition	6069 Feb 23 06:54	5° m/33'57	0°17'34	morning rise	6074 Nov 27 22:32	23°M02'33	
min. Earth dist.	6069 Feb 23 04:57	5° m 34'20	8.17716 AU		6075 Feb 08 11:45	0° ∡ ″	
direct	6069 May 01 06:24	2° Mp 07'06		retrograde	6075 Mar 09 15:31	0° ₰ ¹46'06	
evening set	6069 Aug 12 23:05	10° m 07'10			6075 Apr 08 01:48	30°RM₊	
				opposition	6075 May 15 16:32	27°M22'56	
conjunction	6069 Aug 30 23:49	12° m 24'55		min. Earth dist.	6075 May 15 18:00		8.35990 AU
minimum elong	6069 Aug 30 23:48	12° m 24'55	0°28'53	direct	6075 Jul 23 15:26	23°M55'20	
max. Earth dist.	6069 Aug 31 01:32	12° Mp 25'28	10.16819 AU		6075 Oct 22 00:45	0° ∡ 7	

evening set	6075 Nov 06 17:32	1° ∡ 752'46		evening set	6082 Jan 20 14:51	16° ≈ 24'35	
conjunction	6075 Nov 24 06:17	4° ∡ 03'59	2°05'10	conjunction	6082 Feb 06 12:18	18° ≈ 25'46	0°23'37
minimum elong	6075 Nov 24 06:18	4° ҂ 03'59	2°05'12	minimum elong	6082 Feb 06 12:18	18° ≈ 25'46	0°23'37
max. Earth dist.	6075 Nov 24 04:05	4° ≯ 03'18	10.39614 AU	max. Earth dist.	6082 Feb 06 11:12	18° ≈ 25'26	10.84457 AU
morning rise	6075 Dec 11 14:57	6° ≯ 14'00		morning rise	6082 Feb 23 07:34	20°≈26'18	
retrograde	6076 Mar 21 19:12	13° ≯ 751'02		retrograde	6082 Jun 03 14:28	27° ≈ 34'57	
opposition	6076 May 28 02:09	10° ∡ ¹28'53	2°32'28	opposition	6082 Aug 12 05:06	24°≈16'08	0°13'19
min. Earth dist.	6076 May 28 04:07	10° ∡ ¹28'29	8.43680 AU	min. Earth dist.	6082 Aug 12 05:45	24°≈16'01	8.86831 AU
direct	6076 Aug 05 11:13	7° ∡ 101'54		direct	6082 Oct 21 21:42	20°≈54'38	
evening set	6076 Nov 19 08:34	14° × 53'46		desc. node	6083 Jan 17 13:42	26°≈27'27	
e vennig see	0070110117 00.51	1.7.05.0		evening set	6083 Feb 01 12:52	28°≈09'56	
conjunction	6076 Dec 06 18:07	17° × 03'01	1°59'42	evening sec	6083 Feb 16 22:55	0° ∀	
minimum elong	6076 Dec 06 18:08	17° × 03'01	1°59'44		0003100 10 22.00	٠,٨	
max. Earth dist.	6076 Dec 06 15:31		10.47624 AU	conjunction	6083 Feb 18 08:33	0° ₩ 10'05	-0°02'14
morning rise	6076 Dec 23 23:37	19° × 11'03	10.17021110	minimum elong	6083 Feb 18 08:32	0° ₩ 10'05	
retrograde	6077 Apr 03 16:13	26° × ⁷ 41'35		behind sun begin	6083 Feb 18 01:32	0°) (10'03	0 02 14
opposition	6077 Jun 10 07:53	23°×720'21	2°21'47	behind sun end	6083 Feb 18 15:33	0° ₩ 12'09	
min. Earth dist.	6077 Jun 10 10:11	23° 🖈 20'21 23° 🖈 19'54	8.51875 AU	max. Earth dist.	6083 Feb 18 15:33		10.88852 AU
direct	6077 Aug 19 03:11	19° х 1934	6.51675 AU	morning rise	6083 Mar 07 02:47	2° H 09'48	10.88832 AU
evening set	6077 Dec 02 15:17	27° 🖈 39'38		retrograde	6083 Jun 15 17:20	9° ₩ 17'35	
evening set	0077 DCC 02 13.17	21 × 3936		opposition		5° H 58'44	0010110
agniumation	6077 Dec. 10, 21,52	200.746157	1°48'23		6083 Aug 24 15:47	5° H 58'47	
conjunction minimum elong	6077 Dec 19 21:53 6077 Dec 19 21:55	29° ₹ 46'57 29° ₹ 46'58	1°48'26	min. Earth dist. direct	6083 Aug 24 15:29 6083 Nov 03 08:43	2°\dagger 38'05	6.90463 AU
max. Earth dist.	6077 Dec 19 21:53		1 48 20 10.55940 AU		6084 Feb 13 07:52	2 ₹3803 9° ¥ 49'40	
max. Earth dist.	6077 Dec 19 18:35 6077 Dec 21 16:05	29 x ·4602	10.55940 AU	evening set	0084 Feb 13 07.32	9 X 4940	
		0°る 1°る53'06		:	(004 Mar. 01, 02-10	1101/40105	0927142
morning rise	6078 Jan 06 00:40			conjunction	6084 Mar 01 02:10	11° X 49'05	
retrograde	6078 Apr 16 08:54	9°る17'29	200.412.4	minimum elong	6084 Mar 01 02:09	11°) 49'05	
opposition	6078 Jun 23 09:26	5°る57'02	2°04'24	max. Earth dist.	6084 Mar 01 02:43		10.91714 AU
min. Earth dist.	6078 Jun 23 11:16	5° る 56'41	8.60152 AU	morning rise	6084 Mar 17 19:32	13°) (48'16	
direct	6078 Sep 01 13:26	2°る31'43		retrograde	6084 Jun 26 21:11	20°) 56′24	0040150
evening set	6078 Dec 15 13:43	10°る10'26		opposition min. Earth dist.	6084 Sep 05 01:14	17° 升 37'21 17° 升 37'35	-0°48°58 8.92549 AU
conjunction	6079 Jan 01 17:44	12° る 15'58	1°32'05	direct	6084 Sep 04 23:56 6084 Nov 14 13:55	14° H 17'26	6.92349 AU
minimum elong	6079 Jan 01 17:47	12 3 15 58	1°32'07	evening set	6085 Feb 24 01:10	21° X 26'26	
max. Earth dist.	6079 Jan 01 15:26		10.64141 AU	evening set	0003100 24 01.10	21 /(2020	
morning rise	6079 Jan 18 18:05	12 3 1913	10.04141710	conjunction	6085 Mar 12 18:19	23°) 25′24	-0°51'57
retrograde	6079 Apr 28 21:24	21° ප 39'17		minimum elong	6085 Mar 12 18:17	23°)(25'23	0°51'57
opposition	6079 Jul 06 07:16	18° る 19'28	1°41'33	max. Earth dist.	6085 Mar 12 19:34		10.92931 AU
min. Earth dist.	6079 Jul 06 08:18		8.68115 AU	morning rise	6085 Mar 29 11:14	25°) 24'21	10.92901110
direct	6079 Sep 14 17:25	14° る 55'06	0.00112110	morning rise	6085 May 12 19:07	0°Υ	
evening set	6079 Dec 28 04:19	22° る 27'03		retrograde	6085 Jul 09 00:54	2° Υ 34'04	
evening sec	0077 BCC 20 01:17	22 027 03		retrograde	6085 Sep 07 04:49	30° R ₩	
conjunction	6080 Jan 14 06:01	24° る 30'56	1°11'48	opposition	6085 Sep 17 10:26	29°) 14'39	-1°17'33
minimum elong	6080 Jan 14 06:03	24° ප 30'57		min. Earth dist.	6085 Sep 17 09:05		8.92948 AU
max. Earth dist.	6080 Jan 14 04:52		10.71841 AU	direct	6085 Nov 26 16:51	25° H 55'18	0.92910710
morning rise	6080 Jan 31 04:14	26°る33'49	10.710.1110		6086 Feb 08 01:07	0°Υ	
morning rise	6080 Mar 02 02:21	0°≈		evening set	6086 Mar 07 18:09	3° Y 02'54	
retrograde	6080 May 10 06:05	3°≈48'12		evening set	0000 11111 07 10.07	3 10231	
opposition	6080 Jul 18 01:33	0°≈28'52	1°14'32	conjunction	6086 Mar 24 10:21	5° Ƴ 01'41	-1°14'05
min. Earth dist.	6080 Jul 18 02:05	0°≈28'46	8.75411 AU	minimum elong	6086 Mar 24 10:19	5° Υ 01'41	
iiiii. Lartii dist.	6080 Jul 24 09:55	30°R♂	0.75411710	max. Earth dist.	6086 Mar 24 11:20		10.92461 AU
direct	6080 Sep 26 16:34	27° る 05'28		morning rise	6086 Apr 10 03:19	7° Υ 00'42	10.92401710
ancer	6080 Nov 26 22:31	0°≈		retrograde	6086 Jul 21 07:07	14° Υ 13'11	
evening set	6081 Jan 08 12:21	4°≈31'06		opposition	6086 Sep 29 20:04	10° Υ 53'14	-1°42'59
evening set	0001 3411 00 12.21	4 70 51 00		min. Earth dist.	6086 Sep 29 18:53	10° Υ 53'27	
conjunction	6081 Jan 25 11:52	6° ≈ 33'31	0°48'37	direct	6086 Dec 08 20:05	7° Υ 34'14	0.91072710
minimum elong	6081 Jan 25 11:53	6°≈33'32	0°48'38	evening set	6087 Mar 19 11:55	14° Υ 41'36	
max. Earth dist.	6081 Jan 25 11:15	6°≈33'20		evening set	500 / Iviai 1 / 11.55	17 17130	
morning rise	6081 Feb 11 08:24	8°≈35'05	10.76706 AC	conjunction	6087 Apr 05 03:49	16° Ƴ 40'33	-1°33'13
morning Hac	6081 Apr 22 09:48	8 ≈33 03 15°≈		minimum elong	6087 Apr 05 03:47	16° Υ 40'33	
retrograda	6081 May 22 12:24	15 ≈ 15°≈46'00		max. Earth dist.	6087 Apr 05 04:53		1 33 14 10.90340 AU
retrograde	6081 May 22 12:24 6081 Jun 22 02:11	15°≈46'00 15°R≈		max. Earth dist.	6087 Apr 03 04:33	18° Y 39'59	10.70340 AU
opposition	6081 Jul 30 16:33	13°k≈ 12°≈27'00	0°44'40	retrograde	6087 Apr 21 21:19 6087 Aug 02 15:06	25° Υ 56'16	
min. Earth dist.	6081 Jul 30 16:33	12°≈27'00 12°≈26'51	8.81738 AU	opposition	6087 Oct 12 06:45	23° Y 36 16 22° Y 35'35	-2°04'10
	6081 Jul 30 17:22 6081 Oct 09 09:21	9°≈04'35	0.01/30 AU	min. Earth dist.	6087 Oct 12 05:13	22° Y 35 35 22° Y 35'53	8.88783 AU
direct	6081 Oct 09 09:21 6082 Jan 08 09:19	9°≈0433 15°≈		direct	6087 Dec 20 22:54	19° Υ 16'47	0.00/03 AU
	0002 Jan 00 07.19	15 🗢		ancei	0001 DCC 20 22.34	17 104/	

evening set	6088 Mar 30 07:35	26° Ƴ 25'01		direct	6094 Mar 03 15:49	2° 5 44'10	
	(000 1 15 00 50	200002 420	1040124	evening set	6094 Jun 12 11:52	10° © 17'30	
conjunction	6088 Apr 15 23:58	28° Y 24'30		· · · · · · · · · · · · ·	COOM I 20 21.57	120627127	1021120
minimum elong	6088 Apr 15 23:56	28° Y 24'30	1°48'36 10.86649 AU	conjunction	6094 Jun 29 21:57	12°527'27	
max. Earth dist.	6088 Apr 16 02:15 6088 Apr 29 06:57	0° 8	10.80049 AU	minimum elong max. Earth dist.	6094 Jun 29 22:00 6094 Jun 29 23:47	12°527'28	10.42301 AU
morning rise	6088 May 02 18:27	0° 8 24'39		morning rise	6094 Jul 17 12:00	12 \$2801 14°\$38'40	10.42301 AU
retrograde	6088 Aug 14 03:41	7° 8 45'38		retrograde	6094 Oct 31 11:53	22° © 34'21	
opposition	6088 Oct 23 19:03	4° 8 24'08	-2°20'36	opposition	6095 Jan 08 11:35	19° © 07'19	-1°40'21
min. Earth dist.	6088 Oct 23 16:35	4° 8 24'35	8.84376 AU	min. Earth dist.	6095 Jan 08 10:00	19° 5 07'19	8.38252 AU
direct	6089 Jan 01 03:21	1° 8 05'18	0.04370 AC	direct	6095 Mar 16 17:08	15° © 44'02	6.56252 AC
evening set	6089 Apr 11 06:36	8° 8 15'28		evening set	6095 Jun 26 01:12	23°S23'39	
-				-			
conjunction	6089 Apr 28 00:04	10° 8 15'52	-1°59'27	conjunction	6095 Jul 13 15:42	25° © 35'57	-1°09'38
minimum elong	6089 Apr 28 00:02	10° 8 15'52	1°59'29	minimum elong	6095 Jul 13 15:45	25° © 35'58	1°09'40
max. Earth dist.	6089 Apr 28 02:57	10° 8 16'44	10.81515 AU	max. Earth dist.	6095 Jul 13 16:41	25° © 36'15	10.34331 AU
morning rise	6089 May 14 20:10	12° 8 17'06		morning rise	6095 Jul 31 09:58	27° 5 49'25	
	6089 Jun 07 22:25	15° 8			6095 Aug 18 14:47	0 $^{\circ}$ Ω	
retrograde	6089 Aug 26 21:59	19° 8 43'25		retrograde	6095 Nov 14 10:12	5° Ω 49'26	
opposition	6089 Nov 05 09:35	16° 8 21'01		opposition	6096 Jan 21 22:44	2° Ω 21′50	
min. Earth dist.	6089 Nov 05 06:50		8.78605 AU	min. Earth dist.	6096 Jan 21 21:51		8.30711 AU
	6089 Nov 23 18:10	15° ₹8			6096 Feb 23 12:40	30° ₹ 5	
direct	6090 Jan 13 07:39	13° 8 01'56		direct	6096 Mar 28 23:12	28° © 57'21	
	6090 Mar 03 00:14	15° 8			6096 May 02 01:17	$0^{\circ}\Omega$	
evening set	6090 Apr 23 09:53	20° 8 15'03		evening set	6096 Jul 08 22:17	6° Ω 43'17	
conjunction	6090 May 10 05:07	22° 8 16'43	-2°05'16	conjunction	6096 Jul 26 16:48	8° Ω 57'41	-0°43'36
minimum elong	6090 May 10 05:06	22° 8 16'42		minimum elong	6096 Jul 26 16:50	8° Ω 57'42	
max. Earth dist.	6090 May 10 03:00	_	10.75130 AU	max. Earth dist.	6096 Jul 26 16:58		10.27383 AU
morning rise	6090 May 27 03:43	24° 8 19'25	10.73130710	morning rise	6096 Aug 13 14:38	11° Ω 13'07	10.27505710
morning rise	6090 Jul 22 11:48	0° Ⅱ		morning rise	6096 Sep 15 04:51	15°Ω	
retrograde	6090 Sep 08 18:54	1° П 51'32		retrograde	6096 Nov 27 10:59	19° Ω 16'19	
retrograde	6090 Oct 28 07:26	30°R 8		opposition	6097 Feb 03 13:05	15° Ω 48'21	-0°36'24
opposition	6090 Nov 18 03:07	28° 8 28'09	-2°35'03	min. Earth dist.	6097 Feb 03 12:52	15° Ω 48'23	8.24407 AU
min. Earth dist.	6090 Nov 18 00:55	_	8.71674 AU	mm. Barur dige.	6097 Feb 13 14:08	15°R Ω	0.21.107.110
direct	6091 Jan 25 15:16	25° 8 08'34	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	direct	6097 Apr 11 11:58	12° Ω 22'42	
	6091 Apr 14 15:24	0°II			6097 Jun 05 13:41	15° Ω	
evening set	6091 May 05 18:18	2° Ⅱ 25'35		evening set	6097 Jul 23 02:13	20° Ω 14'36	
						0	
conjunction	6091 May 22 16:10	4° Ⅱ 28'53		conjunction	6097 Aug 10 00:03	22° Ω 30'44	
minimum elong	6091 May 22 16:11	4° Ⅱ 28'53		minimum elong	6097 Aug 10 00:03	22° Ω 30'44	0°14'53
max. Earth dist.	6091 May 22 17:46		10.67707 AU	behind sun begin	6097 Aug 09 21:31	22° Ω 29'56	
morning rise	6091 Jun 08 18:01	6° Ⅱ 33'22		behind sun end	6097 Aug 10 02:36	22° Ω 31'32	10.01011.171
retrograde	6091 Sep 21 20:52	14° I I1'35	2022102	max. Earth dist.	6097 Aug 09 23:50		10.21844 AU
opposition	6091 Nov 30 23:49	10° Ⅱ 47'13		morning rise	6097 Aug 28 00:24	24° Ω 47'38	
min. Earth dist.	6091 Nov 30 22:27	10° Ⅱ 47'29	8.63801 AU		6097 Oct 13 20:41	0° m/y	
direct	6092 Feb 07 03:32	7° I I26'55		retrograde	6097 Dec 11 11:46	2° m 52'42	
evening set	6092 May 17 08:57	14° Ⅱ 48'42		aca mada	6098 Feb 09 23:00	30°R N 29° N 35'44	
	6092 Jun 03 10:23	16° ∏ 54'00	2000101	asc. node	6098 Feb 14 23:06	29° Ω 24'35	0°00'13
conjunction	6092 Jun 03 10:25	16 Ⅲ 54'00 16° Ⅲ 54'00		opposition min. Earth dist.	6098 Feb 17 05:54 6098 Feb 17 05:59	29 δ (24 33 29° Ω 24'34	8.19696 AU
minimum elong max. Earth dist.	6092 Jun 03 10:23		10.59485 AU	direct	6098 Apr 25 06:18	29° 8€ 24°34 25° € 57'54	0.17070 AU
morning rise	6092 Jun 20 15:59	10 H 3428 19° H 00'35	10.39463 AU	direct	6098 Jul 03 21:04	0° m)	
retrograde	6092 Oct 04 04:52	26° ∏ 44'58		evening set	6098 Aug 06 12:13	3°My 55'06	
opposition	6092 Oct 04 04.32 6092 Dec 12 23:51	20 Ⅱ 44 38 23° Ⅱ 19'38	-2°21'48	evening set	0070 Aug 00 12.13	OO CCYII C	
min. Earth dist.	6092 Dec 12 22:38		8.55290 AU	conjunction	6098 Aug 24 12:20	6° ₪ 12'25	0°15'03
direct	6093 Feb 18 19:04	19° ∏ 58′28	5.55270710	minimum elong	6098 Aug 24 12:19	6° My 12'25	0°15'02
evening set	6093 May 30 06:39	27° I I25'48		behind sun begin	6098 Aug 24 10:00	6° Mg 11'41	3 10 02
2. cg 500	50,5 May 50 00.5)	_,		behind sun end	6098 Aug 24 14:38	6° m) 13'09	
conjunction	6093 Jun 16 12:16	29° Ⅱ 33'22	-1°48'37	max. Earth dist.	6098 Aug 24 12:08		10.18027 AU
minimum elong	6093 Jun 16 12:19	29° Ⅱ 33'23		morning rise	6098 Sep 11 13:51	8° mp 30'12	
max. Earth dist.	6093 Jun 16 14:05		10.50850 AU	retrograde	6098 Dec 25 14:05	16° m 35'38	
	6093 Jun 20 02:00	0ංම		opposition	6099 Mar 03 00:17	13° m 07'38	0°37'10
morning rise	6093 Jul 03 21:58	1°542'13		min. Earth dist.	6099 Mar 03 00:14	13° m 07'38	8.16840 AU
retrograde	6093 Oct 17 17:48	9°532'34		direct	6099 May 09 03:25	9° m/40'02	
opposition	6093 Dec 26 03:50	6°906'20	-2°04'25	evening set	6099 Aug 21 02:33	17° m 41'33	
min. Earth dist.	6093 Dec 26 02:17	6° 5 06'38	8.46604 AU				

conjunction	6099 Sep 08 03:38	19° m 59'26	0°44'12
minimum elong	6099 Sep 08 03:36	19° m 59'25	0°44'11
max. Earth dist.	6099 Sep 08 03:32	19° m 59'24	10.16137 AU
morning rise	6099 Sep 26 04:54	22° m 17'24	
	6099 Dec 19 20:34	0∘ ⊽	
retrograde	6100 Jan 08 16:36	0° £ 21'40	
	6100 Jan 28 14:07	30°R, Mp	
opposition	6100 Mar 16 19:40	26° M 54'02	1°12'08
min. Earth dist.	6100 Mar 16 19:32	26° M 54'03	8.15988 AU
direct	6100 May 23 02:44	23° M 25'46	
	6100 Aug 23 13:46	0∘ ত	
evening set	6100 Sep 04 18:57	1° ≏ 30'15	
conjunction	6100 Sep 22 19:35	3° £ 47'59	1°10'52
minimum elong	6100 Sep 22 19:32	3° ≏ 47'58	1°10'52
max. Earth dist.	6100 Sep 22 19:13	3° ≏ 47'52	10.16276 AU
morning rise	6100 Oct 10 19:14	6° ≏ 05'29	
retrograde	6101 Jan 22 17:21	14° £ 07'08	
opposition	6101 Mar 30 15:06	10° ≏ 40'06	1°42'56
min. Earth dist.	6101 Mar 30 15:20	10° ≏ 40'03	8.17182 AU
direct	6101 Jun 06 04:55	7° £ 11'24	
evening set	6101 Sep 19 11:12	15° ≏ 17'18	
conjunction	6101 Oct 07 10:12	17° ≏ 34'16	1°33'26
minimum elong	6101 Oct 07 10:09	17° ≏ 34'15	1°33'26
max. Earth dist.	6101 Oct 07 09:13	17° ≏ 33'57	10.18441 AU
morning rise	6101 Oct 25 07:16	19° ≏ 50'42	