opposition	9600 Feb 23 00:24	6° Mp 47′19	-0°54'58	evening set	9605 Oct 16 02:30	16°M17'23	
min. Earth dist.	9600 Feb 22 18:32	6° Mp 48′28	8.53470 AU				
direct	9600 Apr 30 20:49	3°M/25'13		conjunction	9605 Nov 02 22:46	18°M31'22	1°28'32
evening set	9600 Aug 09 14:46	10° m 53'01		minimum elong	9605 Nov 02 22:43	18°M31'21	1°28'47
				max. Earth dist.	9605 Nov 02 21:16	18°M30'54	10.32084 AU
conjunction	9600 Aug 27 01:33	13° m 01'47	-0°32'27	morning rise	9605 Nov 20 19:28	20°M45'33	
minimum elong	9600 Aug 27 01:34	13° m 01'47	0°32'35	retrograde	9606 Mar 04 23:42	28°M39'23	
max. Earth dist.	9600 Aug 27 08:47	13°Mp04'01	10.50902 AU	opposition	9606 May 11 14:13	25°M13'21	2°00'06
morning rise	9600 Sep 13 15:46	15° Mp 11'37		min. Earth dist.	9606 May 11 15:42	25°M13'03	8.31466 AU
retrograde	9600 Dec 27 21:25	22° m 58'01		direct	9606 Jul 18 06:16	21°M47'00	
opposition	9601 Mar 07 02:01	19° m 31'49	-0°24'07	evening set	9606 Oct 30 06:37	29°M40'12	
min. Earth dist.	9601 Mar 06 20:23	~	8.48370 AU	5 · • • • • • • • • • • • • • • • • • •	9606 Nov 01 22:34	0° ⊼	
direct	9601 May 13 16:50	16° mp 09'03	0.10570110		,0001101 01 22.51	• •	
evening set	9601 Aug 22 20:49	23° m 41'02		conjunction	9606 Nov 17 02:46	1° ∡ 754'21	1°43'41
evening set	7001 Aug 22 20.47	25 11/41 02		minimum elong	9606 Nov 17 02:44	1° × ⁷ 54'21	1°43'59
conjunction	9601 Sep 09 10:46	25° m 51'19	0°06'42	max. Earth dist.	9606 Nov 16 23:28		10.30892 AU
					9606 Dec 04 22:20	4° ₹ 08'25	10.30892 AU
minimum elong	9601 Sep 09 10:46	25° m 51'19	0-00-40	morning rise			
behind sun begin	9601 Sep 09 04:03	25° m/49'15		retrograde	9607 Mar 18 16:12	12° х 01'19	2015121
behind sun end	9601 Sep 09 17:30	25° m 53'23		opposition	9607 May 25 01:28	8° ∡ ³35'45	
max. Earth dist.	9601 Sep 09 16:59		10.45917 AU	min. Earth dist.	9607 May 25 04:29	8° ∡ ³35′08	8.30796 AU
morning rise	9601 Sep 27 03:49	28° Mp 02'36		direct	9607 Jul 31 21:44	5° ≯ 08'53	
	9601 Oct 13 16:52	0∘ ত		evening set	9607 Nov 13 11:52	13° ≯ 04'39	
asc. node	9601 Dec 14 13:37	5° ≙ 14'47					
retrograde	9602 Jan 10 09:42	5° £ 51'49		conjunction	9607 Dec 01 07:18	15° ∡ 18'44	1°53'13
opposition	9602 Mar 20 05:33	2° £ 25′21	0°08'18	minimum elong	9607 Dec 01 07:17	15° ∡ 18'43	1°53'33
min. Earth dist.	9602 Mar 20 00:59	2° £ 26'16	8.43547 AU	max. Earth dist.	9607 Dec 01 01:52	15° ∡ 17′00	10.30706 AU
	9602 Apr 23 06:38	30°₽, ™)		morning rise	9607 Dec 19 01:20	17° ∡ ³32′26	
direct	9602 May 26 16:37	29° m 01'53		retrograde	9608 Mar 31 08:38	25° ∡ ¹23'33	
	9602 Jun 28 18:21	0∘ ⊽		opposition	9608 Jun 06 13:11	21° ₹ ′58'35	2°23'36
evening set	9602 Sep 05 08:46	6° £ 38'26		min. Earth dist.	9608 Jun 06 17:56	21° х 57'38	8.31163 AU
8.11				direct	9608 Aug 13 14:38	18° ∡ ³31'21	
conjunction	9602 Sep 23 01:16	8° ჲ 50'04	0°19'44	evening set	9608 Nov 26 16:38	26° ₹ 28'41	
minimum elong	9602 Sep 23 01:15	8° £ 50'03	0°19'46	5 · • • • • • • • • • • • • • • • • • •			
max. Earth dist.	9602 Sep 23 05:28		10.41329 AU	conjunction	9608 Dec 14 10:53	28° х 42'23	1°56'37
morning rise	9602 Oct 10 20:32	11° ⊆ 02'33	10.41327 AO	minimum elong	9608 Dec 14 10:53	28° × 42'23	1°56'59
retrograde	9603 Jan 23 23:32	11° ⊆ 02'33		max. Earth dist.	9608 Dec 14 10:33 9608 Dec 14 03:26		10.31619 AU
opposition	9603 Apr 02 11:18	16 ≅ 34 00 15° £ 27'33	0°40'40	max. Earth dist.	9608 Dec 24 17:06	20 メ 40 02 0°る	10.31019 AO
min. Earth dist.	•	15° £ 27'33	8.39265 AU		9609 Jan 01 03:07	0° ろ 55'31	
	9603 Apr 02 08:26		8.39203 AU	morning rise			
direct	9603 Jun 08 20:53	12° Ω 03'19		retrograde	9609 Apr 13 21:49	8°る44'00	2022154
evening set	9603 Sep 19 02:07	19° ≏ 44'32		opposition	9609 Jun 20 01:12	5°る19'44	
				min. Earth dist.	9609 Jun 20 07:28	5°る18'28	8.32649 AU
conjunction	9603 Oct 06 20:34	21° £ 57'16		direct	9609 Aug 27 10:09	1°る52'19	
minimum elong	9603 Oct 06 20:33	21° ≏ 57'16		evening set	9609 Dec 10 19:10	9° る 49'52	
max. Earth dist.	9603 Oct 06 22:39		10.37382 AU			_	
morning rise	9603 Oct 24 17:17	24° ≏ 10'41		conjunction	9609 Dec 28 11:55	12°る02'55	1°53'44
	9603 Dec 19 01:44	0°M₊		minimum elong	9609 Dec 28 11:56	12° る 02'56	1°54'05
retrograde	9604 Feb 06 15:17	2°M03'53		max. Earth dist.	9609 Dec 28 03:05		10.33675 AU
	9604 Mar 28 02:26	30° ₹ Ω		morning rise	9610 Jan 15 02:11	14° る 15'15	
opposition	9604 Apr 14 18:54	28° ≏ 37'22	1°11'13	retrograde	9610 Apr 27 07:52	22° る 00'23	
min. Earth dist.	9604 Apr 14 17:48	28° ≏ 37'35	8.35736 AU	opposition	9610 Jul 03 12:46	18° る 36'49	2°16'29
direct	9604 Jun 21 04:23	25° ≏ 12'22		min. Earth dist.	9610 Jul 03 19:32	18° る 35'28	8.35243 AU
	9604 Sep 06 15:58	0° M.		direct	9610 Sep 10 06:10	15° る 09'26	
evening set	9604 Oct 02 00:29	2°M58'07		evening set	9610 Dec 24 18:19	23° る 05'48	
conjunction	9604 Oct 19 20:12	5°M11'40	1°08'41	conjunction	9611 Jan 11 09:26	25° る 18'02	1°44'49
minimum elong	9604 Oct 19 20:10	5°M11'39	1°08'52	minimum elong	9611 Jan 11 09:28	25° る 18'02	
max. Earth dist.	9604 Oct 19 20:16		10.34259 AU	max. Earth dist.	9611 Jan 11 00:25		10.36809 AU
morning rise	9604 Nov 06 17:22	7°M25'39		morning rise	9611 Jan 28 21:38	27° る 29'22	
	9605 Jan 31 04:18	15°M			9611 Feb 19 02:01	0°≈	
retrograde	9605 Feb 19 07:27	15°M19'35		retrograde	9611 May 10 15:41	5°≈10'35	
	9605 Mar 10 11:53	15°RM		opposition	9611 Jul 16 23:05	1°≈47'42	2°01'54
opposition	9605 Apr 28 03:53		1°38'13	min. Earth dist.	9611 Jul 17 05:36	1°≈46'24	8.38828 AU
min. Earth dist.	9605 Apr 28 04:16	11°M.53'11	8.33114 AU	mm. Bartii Uist.	9611 Jul 17 03:36 9611 Aug 09 18:20	1 ≈40 24 30°Rる	0.30020 AU
direct	9605 Jul 04 15:53	8°M27'32	0.33114 AU	direct	9611 Aug 09 18.20 9611 Sep 24 00:17	30 KO 28° ろ 20'30	
direct		15°M		direct	=	28° 6 2030 0° ≈	
	9605 Oct 05 11:23	1.5 III6			9611 Nov 07 12:37	∪ ~ ~	

evening set	9612 Jan 07 12:59	6°≈14'28		opposition	9617 Oct 01 22:05	17° Ƴ 46'42	-0°46'00
e vennig sec	5012 tun 0, 12.05	0.11.20		min. Earth dist.	9617 Oct 01 22:42	17° Y 46'35	
conjunction	9612 Jan 25 02:22	8° ≈ 25'42	1°30'29	direct	9617 Dec 11 04:33	14° Y 23'35	
minimum elong	9612 Jan 25 02:24	8°≈25'43	1°30'47	evening set	9618 Mar 24 13:20	21° Y ′51'59	
max. Earth dist.	9612 Jan 24 18:00	8° ≈ 23'04	10.40854 AU	Ü			
morning rise	9612 Feb 11 12:20	10° ≈ 35'55		conjunction	9618 Apr 10 12:18	23° Y ′55′29	-0°49'06
C	9612 Mar 21 22:12	15° ≈		minimum elong	9618 Apr 10 12:16	23° Y ′55′28	0°49'13
retrograde	9612 May 22 20:58	18° ≈ 12'55		max. Earth dist.	9618 Apr 10 12:03	23° Y ′55′24	10.70568 AU
-	9612 Jul 27 08:40	15°R≈		morning rise	9618 Apr 27 09:12	25° Y ′58′25	
opposition	9612 Jul 29 08:04	14° ≈ 50'39	1°41'09		9618 Jun 03 04:53	9° 8	
min. Earth dist.	9612 Jul 29 13:56	14° ≈ 49'30	8.43205 AU	retrograde	9618 Aug 06 12:06	3° 8 17'53	
direct	9612 Oct 06 16:30	11° ≈ 23'52		opposition	9618 Oct 14 18:56	29° Ƴ 57'40	-1°13'49
	9612 Dec 13 05:53	15° ≈			9618 Oct 14 06:35	30° ₹Ƴ	
evening set	9613 Jan 20 02:25	19° ≈ 14′24		min. Earth dist.	9618 Oct 14 18:16	29° Ƴ 57'47	8.72496 AU
				direct	9618 Dec 23 23:16	26° Ƴ 35′25	
conjunction	9613 Feb 06 13:44	21° ≈ 24′27	1°11'39		9619 Feb 28 05:49	9° 8	
minimum elong	9613 Feb 06 13:47	21° ≈ 24'27	1°11'53	evening set	9619 Apr 05 21:43	4° 8 00'04	
max. Earth dist.	9613 Feb 06 06:33	21° ≈ 22'12	10.45579 AU				
morning rise	9613 Feb 23 21:23	23° ≈ 33′26		conjunction	9619 Apr 22 18:23	6° 8 02'31	-1°10'24
	9613 Apr 30 12:22	0° ∀		minimum elong	9619 Apr 22 18:21	6° 8 02'30	
retrograde	9613 Jun 04 22:16	1° ∺ 06'14		max. Earth dist.	9619 Apr 22 19:23	_	10.74149 AU
	9613 Jul 10 23:39	30°R ≈		morning rise	9619 May 09 13:44	8° 8 04'36	
opposition	9613 Aug 11 15:12	27° ≈ 44'33	1°15'31		9619 Jul 28 09:34	15° 8	
min. Earth dist.	9613 Aug 11 20:37	27° ≈ 43'29	8.48146 AU	retrograde	9619 Aug 18 23:30	15° 8 23'41	
direct	9613 Oct 20 06:21	24° ≈ 18'17			9619 Sep 09 19:18	15° ₹ 8	
	9614 Jan 15 19:21	0° ∀		opposition	9619 Oct 27 14:20	12° 8 03'27	
evening set	9614 Feb 02 10:18	2° ₩ 04'41		min. Earth dist.	9619 Oct 27 12:49	_	8.75671 AU
				direct	9620 Jan 05 17:20	8° 8 41'59	
conjunction	9614 Feb 19 19:19	4° ★ 13'25	0°49'26		9620 Apr 08 02:43	15° 8	
minimum elong	9614 Feb 19 19:21	4°) 13′26	0°49'36	evening set	9620 Apr 17 03:22	16° 8 03'29	
max. Earth dist.	9614 Feb 19 12:56		10.50739 AU				
morning rise	9614 Mar 09 00:43	6° ∺ 21'08		conjunction	9620 May 03 22:08	18° 8 05'06	
retrograde	9614 Jun 17 20:39	13°) (49′59		minimum elong	9620 May 03 22:06	18° 8 05'05	
opposition	9614 Aug 24 20:10	10°) €28'48	0°46'27	max. Earth dist.	9620 May 04 00:03	_	10.76826 AU
min. Earth dist.	9614 Aug 25 01:22	10°) € 27'47	8.53405 AU	morning rise	9620 May 20 16:30	20° 8 06'34	
direct	9614 Nov 02 16:40	7° \ 03'10		retrograde	9620 Aug 30 11:52	27° 8 26'03	1050100
evening set	9615 Feb 15 12:37	14°) 45′01		opposition	9620 Nov 08 08:45	24° 8 05'40	
	061534 04 10 05	1.60)/.5010.5	000 5100	min. Earth dist.	9620 Nov 08 06:06	24° 8 06'10	8.77887 AU
conjunction	9615 Mar 04 19:05	16° ¥ 52'25		direct	9621 Jan 17 08:57	20° 8 44'53	
minimum elong	9615 Mar 04 19:06	16° ¥ 52'25	0°25'07	evening set	9621 Apr 29 06:53	28° 8 03'48	
max. Earth dist.	9615 Mar 04 13:11		10.56073 AU		9621 May 15 08:26	Π °0	
morning rise	9615 Mar 21 22:21 9615 Jun 30 15:16	18° ₩ 58'50 26° ₩ 24'13			0621 M 16 00 20	0° I I04'53	1040125
retrograde		20° X 24 13 23° X 03'26	0°15'30	conjunction	9621 May 16 00:30	0°П04'53 0°П04'52	
opposition min. Earth dist.	9615 Sep 06 22:57 9615 Sep 07 03:19	23°\(\frac{1}{100}\) 20°235	8.58714 AU	minimum elong max. Earth dist.	9621 May 16 00:28 9621 May 16 04:13		1 42 33 10.78495 AU
direct	9615 Nov 15 23:31	19°\dagger 38'34	6.36/14 AU		9621 May 16 04.13 9621 Jun 01 18:23	2° I 106'02	10.78493 AU
evening set	9616 Feb 28 09:35	27° H 15'45		morning rise retrograde	9621 Sep 12 00:26	2 H 00 02 9° H 26'36	
desc. node	9616 Mar 11 13:26	28° H 44'48		opposition	9621 Nov 21 02:19	6° ∏ 05'54	-2012/38
dese. Houe	7010 IVIGI 11 13.20	20 // 1110		min. Earth dist.	9621 Nov 20 21:50		8.79048 AU
conjunction	9616 Mar 16 13:25	29° ₩ 21'46	-0°00'21	direct	9622 Jan 29 21:54	2° I I45'42	0.77010710
minimum elong	9616 Mar 16 13:25	29° H 21'46	0°00'19	evening set	9622 May 11 09:30	10° ∏ 02'45	
behind sun begin	9616 Mar 16 06:21	29° H 19'37	5 00 17	t.timg set	, 022 ing 11 07.50	10 102 73	
behind sun end	9616 Mar 16 20:29	29° ₩ 23'55		conjunction	9622 May 28 02:43	12° Ⅱ 03'35	-1°52'12
max. Earth dist.	9616 Mar 16 08:41		10.61315 AU	minimum elong	9622 May 28 02:42	12° I I03'35	
man. Darun dist.	9616 Mar 21 17:32	0°Υ	10.01310110	max. Earth dist.	9622 May 28 08:33		10.79083 AU
morning rise	9616 Apr 02 14:29	1° Y 26'56		morning rise	9622 Jun 13 20:40	14° ∏ 04'41	
retrograde	9616 Jul 12 06:29	8° Ƴ 49'34		retrograde	9622 Sep 24 14:28	21° Ⅱ 26'57	
opposition	9616 Sep 18 23:31	5° Y 29'03	-0°15'47	opposition	9622 Dec 03 19:19	18° Ⅱ 05'52	-2°21'29
min. Earth dist.	9616 Sep 19 02:11	5° Υ 28'33	8.63819 AU	min. Earth dist.	9622 Dec 03 13:22	18° Ⅱ 06'59	
direct	9616 Nov 28 04:32	2° Y 05'03		direct	9623 Feb 11 10:08	14° Ⅱ 46′04	
evening set	9617 Mar 12 01:38	9° Ƴ 37'42		evening set	9623 May 23 12:04	22° Ⅱ 01'56	
-				ū	•		
conjunction	9617 Mar 29 02:58	11° Y 42'23	-0°25'25	conjunction	9623 Jun 09 05:30	24° Ⅱ 02'52	-1°56'56
minimum elong	9617 Mar 29 02:57	11° Y 42'23	0°25'28	minimum elong	9623 Jun 09 05:29	24° Ⅱ 02'52	1°57'17
max. Earth dist.	9617 Mar 29 00:26	11° Y 41'36	10.66223 AU	max. Earth dist.	9623 Jun 09 12:39	24° Ⅱ 05′03	10.78576 AU
morning rise	9617 Apr 15 01:50	13° Ƴ 46′21		morning rise	9623 Jun 26 00:21	26° Ⅲ 04'15	
retrograde	9617 Jul 24 21:59	21° Y 07'02			9623 Aug 01 01:36	0ංම	

retrograde	9623 Oct 07 06:48	3°528'43		retrograde	9629 Dec 22 05:39	17° mp 28'10	
opposition	9623 Dec 16 12:33	0°907'09	-2°24'12	opposition	9630 Mar 01 13:36	14° m 02'37	-0°38'08
min. Earth dist.	9623 Dec 16 05:58	0°908'24	8.78064 AU	min. Earth dist.	9630 Mar 01 09:34	14° Mp 03'24	8.52751 AU
	9623 Dec 18 02:22	30°RⅡ		direct	9630 May 08 06:22	10° m 40'30	
direct	9624 Feb 23 20:01	26° Ⅱ 47'35		evening set	9630 Aug 17 05:53	18° m 09'28	
	9624 Apr 27 06:35	0ංම					
evening set	9624 Jun 03 15:18	4° © 02'58		conjunction	9630 Sep 03 18:08	20° Mp 18'45	-0°18'22
				minimum elong	9630 Sep 03 18:09	20° Mp 18'46	
conjunction	9624 Jun 20 09:41	6° ≤ 04'19		max. Earth dist.	9630 Sep 03 22:14	-	10.49958 AU
minimum elong	9624 Jun 20 09:41	6° © 04'19	1°56'54	morning rise	9630 Sep 21 09:56	22° m 29'07	
max. Earth dist.	9624 Jun 20 16:56		10.77002 AU		9630 Dec 17 23:40	0∘ ʊ	
morning rise	9624 Jul 07 06:22	8°906'20		retrograde	9631 Jan 04 14:15	0° ჲ 16'04	
retrograde	9624 Oct 18 23:18 9624 Dec 28 06:08	15° © 33'25 12° © 11'16	2020125	:	9631 Jan 22 06:51	30°RM)	090(122
opposition min. Earth dist.	9624 Dec 27 23:42	12 S11 16 12°S12'29	8.75962 AU	opposition min. Earth dist.	9631 Mar 14 15:36 9631 Mar 14 12:36	26° m/49'58 26° m/50'33	8.47201 AU
direct	9625 Mar 07 06:16	8°951'44	8.73902 AU	direct	9631 May 21 05:39	23° Mp 26'57	8.47201 AU
evening set	9625 Jun 15 20:20	16° © 07'25		asc. node	9631 May 27 06:59	23° m) 28'57	
e venning see	7023 Juli 13 20.20	10 -007 23		use. Houe	9631 Aug 22 05:04	ე° Ω	
conjunction	9625 Jul 02 16:34	18° © 09'31	-1°51'01	evening set	9631 Aug 30 14:11	° - 1° - 00'27	
minimum elong	9625 Jul 02 16:35	18°909'32			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
max. Earth dist.	9625 Jul 03 00:04	18° © 11'48	10.74400 AU	conjunction	9631 Sep 17 05:29	3° Ω 11'15	0°07'53
morning rise	9625 Jul 19 15:42	20°9512'27		minimum elong	9631 Sep 17 05:28	3° Ω 11'15	0°07'52
retrograde	9625 Oct 31 17:48	27° 5 42'28		behind sun begin	9631 Sep 16 23:00	3° ჲ 09'16	
opposition	9626 Jan 10 00:04	24° © 19'40	-2°10'42	behind sun end	9631 Sep 17 11:57	3° ≙ 13'15	
min. Earth dist.	9626 Jan 09 17:35	24°520'54	8.72842 AU	max. Earth dist.	9631 Sep 17 08:59		10.44569 AU
direct	9626 Mar 19 18:47	20° © 59'57		morning rise	9631 Oct 04 23:45	5° ≏ 22'59	
evening set	9626 Jun 28 03:55	28°916'42		retrograde	9632 Jan 18 02:09	13° ≏ 12'44	
	9626 Jul 12 09:38	0 \circ Ω		opposition	9632 Mar 26 19:32	9° Ω 46'12	0°26'08
		_		min. Earth dist.	9632 Mar 26 17:06	9° ≙ 46'41	8.42039 AU
conjunction	9626 Jul 15 02:49	0° Ω 19'53		direct	9632 Jun 02 07:42	6° Ω 22'16	
minimum elong	9626 Jul 15 02:51	0° Ω 19'54		evening set	9632 Sep 12 04:17	14° £ 00'34	
max. Earth dist.	9626 Jul 15 10:47	0°8122'19 2°Ω24'00	10.70812 AU	agnismation	0622 San 20 22:00	16° £ 12'41	0°33'53
morning rise retrograde	9626 Aug 01 04:51 9626 Nov 13 16:34	2 δι 24 00 9° Ω 57'16		conjunction minimum elong	9632 Sep 29 22:00 9632 Sep 29 21:59	16° £ 12'41	0°33'57
opposition	9627 Jan 22 19:04	6°Ω33'45	-1°54'52	max. Earth dist.	9632 Sep 30 00:21		10.39678 AU
min. Earth dist.	9627 Jan 22 12:23	6°Ω35'02		morning rise	9632 Oct 17 17:59	18° £ 25'33	10.57076 AC
direct	9627 Apr 01 06:39	3° Ω 13'41	0.0072.110	retrograde	9633 Jan 30 17:42	26° £ 17'30	
evening set	9627 Jul 10 14:59	10° £ 32'19		opposition	9633 Apr 09 01:30	22° ≏ 50'43	0°57'39
Č				min. Earth dist.	9633 Apr 09 00:05	22° ≙ 51'00	8.37510 AU
conjunction	9627 Jul 27 17:00	12° Ω 36′50	-1°25'17	direct	9633 Jun 15 11:34	19° ≙ 25'51	
minimum elong	9627 Jul 27 17:03	12° Ω 36'51	1°25'34	evening set	9633 Sep 25 23:44	27° ≙ 09'01	
max. Earth dist.	9627 Jul 28 01:03	12° Ω 39'18	10.66315 AU				
morning rise	9627 Aug 13 22:22	14° Ω 42'24		conjunction	9633 Oct 13 19:00	29° ≙ 22'09	0°58'23
	9627 Aug 16 09:26	15° Ω		minimum elong	9633 Oct 13 18:57	29° ჲ 22'08	0°58'32
retrograde	9627 Nov 26 17:55	22° Ω 19'09		max. Earth dist.	9633 Oct 13 19:26		10.35524 AU
opposition	9628 Feb 04 15:31	18° Ω 54'55			9633 Oct 18 19:37	0°M	
min. Earth dist.	9628 Feb 04 09:00	18° Ω 56'11	8.63842 AU	morning rise	9633 Oct 31 15:49	1°M35'50	
direct	9628 Apr 12 20:01	15° Ω 34'21		retrograde	9634 Feb 13 09:40	9°M29'14	1927/27
evening set	9628 Jul 22 06:38	22° Ω 55'44		opposition min. Earth dist.	9634 Apr 22 09:19	6°M02'25 6°M02'24	1°26'26 8.33841 AU
conjunction	9628 Aug 08 12:03	25° Ω 01'47	-1°05'59	direct	9634 Apr 22 09:28 9634 Jun 28 20:21	2°M36'39	0.33841 AU
minimum elong	9628 Aug 08 12:05	25° Ω 01'48		evening set	9634 Oct 09 23:33	10°M24'27	
max. Earth dist.	9628 Aug 08 18:54		10.61133 AU	evening set	7034 Oct 07 23.33	10 1102427	
morning rise	9628 Aug 25 21:05	27° Ω 08'56	10.01133110	conjunction	9634 Oct 27 19:35	12°M38'16	1°19'58
	9628 Sep 19 19:14	0° m)		minimum elong	9634 Oct 27 19:32	12°M38'15	1°20'12
retrograde	9628 Dec 08 22:20	4° m)49'15		max. Earth dist.	9634 Oct 27 17:36		10.32328 AU
opposition	9629 Feb 16 13:34	1° m 24'20	-1°07'39	morning rise	9634 Nov 14 16:31	14°M52'25	
min. Earth dist.	9629 Feb 16 08:11		8.58401 AU		9634 Nov 15 17:10	15°M	
	9629 Mar 07 04:48	30° ₹Ω		retrograde	9635 Feb 27 01:25	22°M46'25	
direct	9629 Apr 25 11:45	28° Ω 03'04		opposition	9635 May 05 18:47	19° ™ 19'47	1°50'49
	9629 Jun 12 07:51	0° m)		min. Earth dist.	9635 May 05 20:52	19°M19'21	8.31229 AU
evening set	9629 Aug 04 03:30	5° Mp 27′56		direct	9635 Jul 12 08:53	15°M53'13	
	0.00 4 51 155		00.4015	evening set	9635 Oct 24 02:28	23°M45'02	
conjunction	9629 Aug 21 12:24	7° Mp 35'37			0/2534 10 22 22	0.50m 5011 :	102722
minimum elong	9629 Aug 21 12:26	7° Mp 35'38	0°43'31	conjunction	9635 Nov 10 22:39	25°M59'14	
max. Earth dist.	9629 Aug 21 17:40		10.55579 AU	minimum elong max. Earth dist.	9635 Nov 10 22:36		1°37'40 10.30259 AU
morning rise	9629 Sep 08 01:03	9° m) 44'25		max. Earm dist.	9635 Nov 10 18:27	23 IIG3/33	10.30239 AU

J			0 (,,		, 1	2
morning rise	9635 Nov 28 18:59	28°M13'30		max. Earth dist.	9642 Jan 31 09:38	15° ≈ 38'48	10.43130 AU
3	9635 Dec 13 12:01	0° ∡ 7		morning rise	9642 Feb 18 02:21	17° ≈ 50'54	
retrograde	9636 Mar 11 17:27	6° ₹ 07'10		retrograde	9642 May 30 06:19	25° ≈ 25'52	
opposition	9636 May 18 05:28	2° ∡ ¹40'52	2°09'21	opposition	9642 Aug 05 21:07	22° ≈ 04'02	1°27'50
min. Earth dist.	9636 May 18 08:59	2° ∡ ¹40'09	8.29797 AU	min. Earth dist.	9642 Aug 06 02:50	22°≈02'54	8.45766 AU
	9636 Jun 25 08:11	30°RM₊		direct	9642 Oct 14 09:09	18° ≈ 37'39	
direct	9636 Jul 24 23:51	29°M13'39		evening set	9643 Jan 27 16:03	26° ≈ 26′18	
	9636 Aug 23 12:08	0° ∡ ¹					
evening set	9636 Nov 06 07:14	7° ∡ ¹08'38		conjunction	9643 Feb 14 02:08	28° ≈ 35'41	1°00'00
				minimum elong	9643 Feb 14 02:10	28° ≈ 35'42	1°00'12
conjunction	9636 Nov 24 02:59	9° ∡ ¹22'53	1°49'35	max. Earth dist.	9643 Feb 13 19:13	28° ≈ 33'32	10.48424 AU
minimum elong	9636 Nov 24 02:57	9° ∡ ¹22'53	1°49'55		9643 Feb 25 09:20	0°) €	
max. Earth dist.	9636 Nov 23 21:23	9° ∡ ¹21'07	10.29418 AU	morning rise	9643 Mar 03 08:48	0°) 44'03	
morning rise	9636 Dec 11 22:00	11° ∡ ³36'56		retrograde	9643 Jun 12 06:38	8° 升 14'56	
retrograde	9637 Mar 25 09:17	19° ∡ ¹29'16		opposition	9643 Aug 19 03:13	4°) 53′47	1°00'07
opposition	9637 May 31 16:50	16° ₮ 03'28	2°20'54	min. Earth dist.	9643 Aug 19 07:41	4°) 52′54	8.51204 AU
min. Earth dist.	9637 May 31 21:05	16° ∡ °02'37	8.29619 AU	direct	9643 Oct 27 21:34	1° ∺ 28′10	
direct	9637 Aug 07 16:50	12° ⋌ 35'51		evening set	9644 Feb 09 21:27	9° ℋ 12'25	
evening set	9637 Nov 20 12:05	20° ∡ ³32'51					
				conjunction	9644 Feb 27 05:13	11° ∺ 20′28	0°36'25
conjunction	9637 Dec 08 06:59	22° ҂ ¹46'52	1°55'51	minimum elong	9644 Feb 27 05:15	11° ∺ 20′28	0°36'33
minimum elong	9637 Dec 08 06:58	22° ∡ ¹46'52	1°56'12	max. Earth dist.	9644 Feb 27 00:05	11° 升 18′52	10.53996 AU
max. Earth dist.	9637 Dec 08 00:41	22° ∡ ¹44'52	10.29863 AU	morning rise	9644 Mar 15 09:30	13°) €27'30	
morning rise	9637 Dec 26 00:12	25° ₹ 100′25		retrograde	9644 Jun 24 04:43	20°) 54′38	
	9638 Feb 09 03:30	0°ප		opposition	9644 Aug 31 07:29	17° ∺ 34'03	0°29'50
retrograde	9638 Apr 07 23:08	2°る50'29		min. Earth dist.	9644 Aug 31 10:54	17°) ₹33′23	8.56785 AU
	9638 Jun 06 23:49	30°₹ ⋌ 7		direct	9644 Nov 09 05:40	14° ∺ 09'18	
opposition	9638 Jun 14 04:37	29° ₹ 25'21	2°24'48	evening set	9645 Feb 21 21:18	21°) 48′48	
min. Earth dist.	9638 Jun 14 09:11	29° ₰ ¹24'26	8.30713 AU				
direct	9638 Aug 21 11:36	25° ₹ 57'32		conjunction	9645 Mar 11 02:32	23° ¥ 55′27	
	9638 Oct 31 11:59	0°ප		minimum elong	9645 Mar 11 02:32	23° ¥ 55′27	0°11'26
evening set	9638 Dec 04 15:27	3° る 55'17		behind sun begin	9645 Mar 10 21:22	23° ¥ 53′52	
				behind sun end	9645 Mar 11 07:42	23° ¥ 57′02	
conjunction	9638 Dec 22 09:08			max. Earth dist.	9645 Mar 10 22:48		10.59551 AU
minimum elong	9638 Dec 22 09:09	6° る 08'47		morning rise	9645 Mar 28 04:28	26° ∺ 01'11	
max. Earth dist.	9638 Dec 22 02:32		10.31581 AU		9645 May 03 01:41	$0^{\circ}\Upsilon$	
morning rise	9639 Jan 09 00:21	8° る 21'35		retrograde	9645 Jul 06 22:27	3° Y 25'09	
retrograde	9639 Apr 21 11:31	16° る 08'37		desc. node	9645 Aug 26 15:09	1° Y 24'32	
opposition	9639 Jun 27 16:14	12° ₹ 44'16		opposition	9645 Sep 13 09:36	0° Y 04'58	
min. Earth dist.	9639 Jun 27 21:19		8.33023 AU	min. Earth dist.	9645 Sep 13 12:23		8.62213 AU
direct	9639 Sep 04 05:57	9° る 16'30			9645 Sep 14 11:30	30° ₹ ₩	
evening set	9639 Dec 18 16:17	17° る 13'41		direct	9645 Nov 22 11:26	26°) 41′04	
					9646 Jan 26 16:14	0°Υ	
conjunction	9640 Jan 05 08:25	19° る 26'25	1°49'39	evening set	9646 Mar 06 16:10	4° Ƴ 15'52	
minimum elong	9640 Jan 05 08:26	19° る 26'26	1°50'00		064634 02 10 41	600001100	001.4102
max. Earth dist.	9640 Jan 05 01:13		10.34477 AU	conjunction	9646 Mar 23 18:41	6°Υ21'08	
morning rise	9640 Jan 22 21:31	21° る 38'18		minimum elong	9646 Mar 23 18:40	6° Υ 21'08	0°14'03
retrograde	9640 May 03 21:54	29°₹21'36	2000120	behind sun begin	9646 Mar 23 15:04	6°Υ20'02	
opposition	9640 Jul 10 03:05	25° る 58'07		behind sun end	9646 Mar 23 22:16	6°Υ22'13	10 (4550 177
min. Earth dist.	9640 Jul 10 09:00	25° る 56'56	8.36428 AU	max. Earth dist.	9646 Mar 23 15:34		10.64778 AU
direct	9640 Sep 16 23:17	22° る 30'37		morning rise	9646 Apr 09 18:30	8°Υ25'37	
	9640 Dec 28 00:15	0°≈		retrograde	9646 Jul 19 14:05	15° Y 47'08	0022122
evening set	9640 Dec 31 13:14	0° ≈ 26′00		opposition	9646 Sep 26 09:26	12° Υ 27'13	
. ,.	0641 1 10 02 20	20 25145	1027142	min. Earth dist.	9646 Sep 26 11:54		8.67167 AU
conjunction	9641 Jan 18 03:29	2°≈37'47		direct	9646 Dec 05 13:34	9° Υ 04'07	
minimum elong	9641 Jan 18 03:31	2°≈37'48	1°38'02	evening set	9647 Mar 19 06:26	16° Ƴ 34'32	
max. Earth dist.	9641 Jan 17 19:39		10.38396 AU		0647 4 05 06 21	100000000	0020120
morning rise	9641 Feb 04 14:30	4°≈48'37		conjunction	9647 Apr 05 06:21	18° Υ 38'32	
retrograde	9641 May 17 04:31	12°≈27'47	1951125	minimum elong	9647 Apr 05 06:19	18° Y 38'31	
opposition	9641 Jul 23 12:55	9°≈05'10	1°51'25	max. Earth dist.	9647 Apr 05 03:34		10.69353 AU
min. Earth dist.	9641 Jul 23 19:08	9°≈03'56	8.40752 AU	morning rise	9647 Apr 22 04:14	20° Υ 41'55	
direct	9641 Sep 30 16:38	5°≈38'09		retrograde	9647 Aug 01 03:44	28° Y 01'53	1001127
evening set	9642 Jan 14 05:14	13°≈30'36		opposition	9647 Oct 09 07:29	24° Y 42'04	
	9642 Jan 26 05:39	15° ≈		min. Earth dist.	9647 Oct 09 08:51		8.71331 AU
	0642 1 21 17 21	1.50 - 1111.5	1020140	direct	9647 Dec 18 12:16	21°Υ19'48	
conjunction	9642 Jan 31 17:26	15°≈41'15		evening set	9648 Mar 30 16:44	28° Y 46′20	
minimum elong	9642 Jan 31 17:29	15° ≈ 41'16	1~21.05		9648 Apr 09 20:55	0°8	

conjunction	9648 Apr 16 14:21	0° 8 49'14	-1°01'00	max. Earth dist.	9654 Jun 27 22:59	13° © 07'05	10.73127 AU
minimum elong	9648 Apr 16 14:19	0° 8 49'13	1°01'09	morning rise	9654 Jul 14 13:27	15° © 07'35	
max. Earth dist.	9648 Apr 16 13:10	0° 8 48'53	10.73018 AU	retrograde	9654 Oct 26 12:19	22° © 37'23	
morning rise	9648 May 03 10:27	2° 8 51'43		opposition	9655 Jan 04 18:07	19° © 14'13	-2°15'52
retrograde	9648 Aug 12 16:44	10° 8 11'08		min. Earth dist.	9655 Jan 04 11:27	19° © 15'29	8.71633 AU
opposition	9648 Oct 21 04:05	6° 8 51'15	-1°27'29	direct	9655 Mar 14 15:52	15° © 53'56	
min. Earth dist.	9648 Oct 21 03:43	6° 8 51'19	8.74526 AU	evening set	9655 Jun 23 02:53	23°5911'16	
direct	9648 Dec 30 08:44	3° 8 29'44					
evening set	9649 Apr 12 00:04	10° 8 52'59		conjunction	9655 Jul 10 00:37	25° © 14'18	-1°45'41
				minimum elong	9655 Jul 10 00:39	25° © 14'18	1°46'01
conjunction	9649 Apr 28 19:48	12° 8 55'01	-1°20'39	max. Earth dist.	9655 Jul 10 08:03	25° © 16'34	10.69683 AU
minimum elong	9649 Apr 28 19:46	12° 8 55'01	1°20'52	morning rise	9655 Jul 27 01:23	27° 5 018'13	
max. Earth dist.	9649 Apr 28 20:42	12° 8 55'18	10.75674 AU		9655 Aug 19 17:02	$0^{\circ}\Omega$	
morning rise	9649 May 15 14:30	14° 8 56'48		retrograde	9655 Nov 08 10:37	4° Ω 51'13	
	9649 May 16 01:14	15° 8		opposition	9656 Jan 17 13:28	1° Ω 27′20	-2°02'34
retrograde	9649 Aug 25 07:05	22° 8 16'29		min. Earth dist.	9656 Jan 17 07:01	1° Ω 28'34	8.67774 AU
opposition	9649 Nov 02 23:28	18° 8 56'22	-1°49'31		9656 Feb 06 04:20	30°ષ્ટ્	
min. Earth dist.	9649 Nov 02 21:36	_	8.76694 AU	direct	9656 Mar 26 02:37	28° © 06'44	
direct	9650 Jan 12 00:50	15° 8 35'26			9656 May 12 12:26	0 \circ Ω	
evening set	9650 Apr 24 05:13	22° 8 55'59		evening set	9656 Jul 04 12:50	5° Ω 25'40	
		4.4					
conjunction	9650 May 10 23:29	24° 8 57'25		conjunction	9656 Jul 21 13:26	7° Ω 29'56	
minimum elong	9650 May 10 23:27	24° 8 57'25		minimum elong	9656 Jul 21 13:29	7° Ω 29'57	
max. Earth dist.	9650 May 11 01:45		10.77281 AU	max. Earth dist.	9656 Jul 21 20:35		10.65503 AU
morning rise	9650 May 27 17:26	26° 8 58'48		morning rise	9656 Aug 07 17:36	9° Ω 35'13	
	9650 Jun 23 14:14	0°II			9656 Sep 29 01:00	15° Ω	
retrograde	9650 Sep 06 20:00	4° Ⅱ 19'23	2006120	retrograde	9656 Nov 20 09:22	17° Ω 11'39	
opposition	9650 Nov 15 18:05	0° П 58'52		•,•	9657 Jan 13 07:30	15°RΩ	1042121
min. Earth dist.	9650 Nov 15 15:33	0° Ⅱ 59'21	8.77791 AU	opposition	9657 Jan 29 10:00	13° Ω 47'02	
T'	9650 Nov 28 23:07	30°R ႘		min. Earth dist.	9657 Jan 29 03:57		8.63252 AU
direct	9651 Jan 24 14:45	27° 8 38'23 0° I I		direct	9657 Apr 07 17:19	10°Ω26'00	
evening set	9651 Mar 19 20:08 9651 May 06 08:57	0 П 4°П56'54		evening set	9657 Jun 22 18:18 9657 Jul 17 02:58	15° Ω 17° Ω 47'19	
evening set	9031 Way 00 08.37	4 113034		evening set	9037 Jul 17 02.36	1/ 064/19	
conjunction	9651 May 23 02:14	6°∏57'58	-1°48'23	conjunction	9657 Aug 03 06:59	19°Ω53'02	-1°14'49
conjunction minimum elong	9651 May 23 02:14 9651 May 23 02:12	6°Ⅲ57'58 6°Ⅲ57'58		conjunction minimum elong	9657 Aug 03 06:59 9657 Aug 03 07:01	19° Ω 53'02 19° Ω 53'02	
minimum elong	9651 May 23 02:12	6° Ⅱ 57'58	-1°48'23 1°48'44 10.77811 AU	minimum elong	9657 Aug 03 07:01	19° Ω 53′02	1°15'04
minimum elong max. Earth dist.	9651 May 23 02:12 9651 May 23 05:08	6°Д57'58 6°Д58'51	1°48'44	minimum elong max. Earth dist.	9657 Aug 03 07:01 9657 Aug 03 14:22	19° £ 53'02 19° £ 55'18	
minimum elong max. Earth dist. morning rise	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10	6° Ⅱ 57'58	1°48'44	minimum elong max. Earth dist. morning rise	9657 Aug 03 07:01	19° Ω 53′02	1°15'04
minimum elong max. Earth dist. morning rise retrograde	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22	1°48'44 10.77811 AU	minimum elong max. Earth dist. morning rise retrograde	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38	19°Ω53'02 19°Ω55'18 21°Ω59'49	1°15'04 10.60752 AU
minimum elong max. Earth dist. morning rise	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19	1°48'44 10.77811 AU	minimum elong max. Earth dist. morning rise	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22	19° N 53'02 19° N 55'18 21° N 59'49 29° N 39'44 26° N 14'28	1°15'04 10.60752 AU
minimum elong max. Earth dist. morning rise retrograde opposition	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19	1°48'44 10.77811 AU -2°18'13	minimum elong max. Earth dist. morning rise retrograde opposition	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43	19° N 53'02 19° N 55'18 21° N 59'49 29° N 39'44 26° N 14'28	1°15'04 10.60752 AU -1°19'25
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57	1°48'44 10.77811 AU -2°18'13	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39	1°15'04 10.60752 AU -1°19'25
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05	1°48'44 10.77811 AU -2°18'13	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53	1°15'04 10.60752 AU -1°19'25
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05	1°48'44 10.77811 AU -2°18'13 8.77805 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43 9658 Jul 27 12:33	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53 0° \$\Omega\$	1°15'04 10.60752 AU -1°19'25
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41 9652 May 17 12:01	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05 16°Д57'13	1°48'44 10.77811 AU -2°18'13 8.77805 AU -1°55'23	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43 9658 Jul 27 12:33	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53 0° \$\Omega\$	1°15'04 10.60752 AU -1°19'25 8.58261 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41 9652 May 17 12:01 9652 Jun 03 05:13	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05 16°Д57'13 18°Д58'17	1°48'44 10.77811 AU -2°18'13 8.77805 AU -1°55'23	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43 9658 Jul 27 12:33 9658 Jul 29 21:57	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53 0° \$\Omega 0\$ 0° \$\Omega 17'16	1°15'04 10.60752 AU -1°19'25 8.58261 AU -0°53'28
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41 9652 May 17 12:01 9652 Jun 03 05:13 9652 Jun 03 05:13	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05 16°Д57'13 18°Д58'17	1°48'44 10.77811 AU -2°18'13 8.77805 AU -1°55'23 1°55'44	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43 9658 Jul 27 12:33 9658 Jul 29 21:57	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53 0° \$\Omega 0' \text{m} 17'16 2° \$\Omega 24'34 2° \$\Omega 24'34	1°15'04 10.60752 AU -1°19'25 8.58261 AU -0°53'28
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9651 May 23 02:12 9651 May 23 05:08 9651 Jun 08 20:10 9651 Sep 19 08:58 9651 Nov 28 12:11 9651 Nov 28 08:53 9652 Feb 06 04:41 9652 May 17 12:01 9652 Jun 03 05:13 9652 Jun 03 05:13 9652 Jun 03 09:31	6°Д57'58 6°Д58'51 8°Д59'14 16°Д21'22 13°Д00'19 13°Д00'57 9°Д40'05 16°Д57'13 18°Д58'17 18°Д58'17 18°Д59'35 20°Д59'44 28°Д23'59	1°48'44 10.77811 AU -2°18'13 8.77805 AU -1°55'23 1°55'44 10.77273 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	9657 Aug 03 07:01 9657 Aug 03 14:22 9657 Aug 20 14:38 9657 Dec 03 12:22 9658 Feb 11 07:48 9658 Feb 11 01:43 9658 Apr 20 09:43 9658 Jul 27 12:33 9658 Jul 29 21:57 9658 Aug 16 05:33 9658 Aug 16 05:34	19° \$\Omega 53'02 19° \$\Omega 55'18 21° \$\Omega 59'49 29° \$\Omega 39'44 26° \$\Omega 14'28 26° \$\Omega 15'39 22° \$\Omega 52'53 0° \$\Omega 0' \text{m} 17'16 2° \$\Omega 24'34 2° \$\Omega 24'34	1°15'04 10.60752 AU -1°19'25 8.58261 AU -0°53'28 0°53'40
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behind sun begin	9660 Sep 10 11:46	27° m 53'10		min. Earth dist.	9666 May 26 13:46	10° ₹ 42'58	8.30585 AU
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morning rise	9660 Sep 28 12:15	0° ჲ 06'46		conjunction	9666 Dec 02 17:31	17° ∡ ¹26'47	1°53'47
asc. node	9660 Oct 30 18:01	3° £ 46'41		minimum elong	9666 Dec 02 17:30	17° ×2 6'47	1°54'08
retrograde	9661 Jan 11 17:26	7° £ 56'13		max. Earth dist.	9666 Dec 02 11:32		10.30591 AU
opposition	9661 Mar 21 13:07	4° ≙ 29'41	0°12'15	morning rise	9666 Dec 20 11:27	19° ∡ 40′29	
min. Earth dist.	9661 Mar 21 09:25	4° £ 30′25	8.42967 AU	retrograde	9667 Apr 02 17:26	27° ∡ ³31′28	
direct	9661 May 28 00:25	1° ≏ 06'02		opposition	9667 Jun 08 22:22	24° ∡ ¹06'33	2°23'49
evening set	9661 Sep 06 17:16	8° ≏ 43'03		min. Earth dist.	9667 Jun 09 03:37	24° ₹ 05'30	8.31134 AU
				direct	9667 Aug 16 01:07	20° ∡ ³39'16	
conjunction	9661 Sep 24 09:54	10° ≙ 54'48	0°22'52	evening set	9667 Nov 29 02:55	28° ∡ ³36'44	
minimum elong	9661 Sep 24 09:53	10° ≙ 54'48	0°22'54		9667 Dec 10 05:22	5°0	
max. Earth dist.	9661 Sep 24 13:06	10° £ 55'48	10.40731 AU				
morning rise	9661 Oct 12 05:24	13° ≏ 07'24		conjunction	9667 Dec 16 20:59	0° る 50'23	
retrograde	9662 Jan 25 07:53	20° ≏ 59'12		minimum elong	9667 Dec 16 20:59	0° る 50'23	1°56'46
opposition	9662 Apr 03 19:04	17° ≏ 32'33	0°44'26	max. Earth dist.	9667 Dec 16 12:57		10.31652 AU
min. Earth dist.	9662 Apr 03 16:54	17° ≙ 32'59	8.38652 AU	morning rise	9668 Jan 03 13:09	3° る 03'29	
direct	9662 Jun 10 04:29	14° ≙ 08'10		retrograde	9668 Apr 15 05:59	10° る 51'48	
evening set	9662 Sep 20 11:03	21° ≏ 49'55		opposition	9668 Jun 21 10:23	7° る 27'36	2°23'09
	06600 . 00 0500	240 2 0 0 14 5	0040112	min. Earth dist.	9668 Jun 21 16:45	7°る26'19	8.32730 AU
conjunction	9662 Oct 08 05:39	24° Ω 02'45	0°48'12	direct	9668 Aug 28 20:41	4°る00'11	
minimum elong	9662 Oct 08 05:37	24° £ 02'45	0°48'19	evening set	9668 Dec 12 05:21	11° る 57'47	
max. Earth dist.	9662 Oct 08 07:33		10.36764 AU	. ,.	0660 D 20 22 00	140=710140	1052145
morning rise	9662 Oct 26 02:23	26° ₽ 16'16 0° I L		conjunction	9668 Dec 29 22:00	14°る10'49 14°る10'49	1°52'45 1°53'07
ratragrada	9662 Nov 27 15:14 9663 Feb 07 23:28	0°11L 4°11L09'44		minimum elong max. Earth dist.	9668 Dec 29 22:01 9668 Dec 29 13:08	14°る1049 14°る08'01	10.33791 AU
retrograde opposition	9663 Apr 17 02:54	0°M43'08	1°14'36	morning rise	9669 Jan 16 12:08	14 30801 16° る 23'05	10.55/91 AU
min. Earth dist.	9663 Apr 17 01:47	0°M43'22	8.35130 AU	retrograde	9669 Apr 28 17:04	10 3 23 03 24° 3 08'04	
mm. Lartii dist.	9663 Apr 26 03:26	30°R <u>Ω</u>	6.55150 AC	opposition	9669 Jul 04 21:54	20°る44'34	2°14'48
direct	9663 Jun 23 13:15	27° £ 18'01		min. Earth dist.	9669 Jul 05 04:15	20° ප් 43'18	8.35380 AU
	9663 Aug 19 00:11	0°M		direct	9669 Sep 11 15:42	17°る17'15	0.56500110
evening set	9663 Oct 04 09:51	5°ML04'20		evening set	9669 Dec 26 04:16	25° ප 13'36	
C				Ü			
conjunction	9663 Oct 22 05:42	7° M 17'58	1°11'11	conjunction	9670 Jan 12 19:22	27° る 25'48	1°43'07
minimum elong	9663 Oct 22 05:39	7° M 17'57	1°11'23	minimum elong	9670 Jan 12 19:24	27° る 25'49	1°43'28
max. Earth dist.	9663 Oct 22 06:20	7°ML18'10	10.33672 AU	max. Earth dist.	9670 Jan 12 10:57	27° る 23'09	10.36970 AU
morning rise	9663 Nov 09 02:44	9°M32'01		morning rise	9670 Jan 30 07:19	29° る 37'06	
	9663 Dec 29 20:08	15°M			9670 Feb 02 10:00	0° ≈	
retrograde	9664 Feb 21 15:48	17°M26'16		retrograde	9670 May 12 01:30	7° ≈ 18'11	
	9664 Apr 16 21:05	15°RM		opposition	9670 Jul 18 08:25	3° ≈ 55'23	1°59'25
opposition	9664 Apr 29 12:13	13°M59'52	1°41'01	min. Earth dist.	9670 Jul 18 14:28	3° ≈ 54'11	8.39000 AU
min. Earth dist.	9664 Apr 29 12:05	13°M59'54	8.32569 AU	direct	9670 Sep 25 09:34	0° ≈ 28'18	
direct	9664 Jul 06 00:49	10°M34'04		evening set	9671 Jan 08 22:40	8° ≈ 22'11	
	9664 Sep 18 04:46	15°M					
evening set	9664 Oct 17 12:23	18°M24'26		conjunction	9671 Jan 26 11:59	10°≈33'23	1°28'11
agniumation	0664 Nov. 04, 00:42	200m 20122	1920/20	minimum elong	9671 Jan 26 12:01	10°≈33'24	1°28'28 10.41044 AU
conjunction	9664 Nov 04 08:42 9664 Nov 04 08:39	20°M38'32 20°M38'31	1°30'30 1°30'46	max. Earth dist. morning rise	9671 Jan 26 04:12	10°≈30'36 12°≈43'34	10.41044 AU
minimum elong max. Earth dist.	9664 Nov 04 07:46		1 30 40 10.31591 AU	morning rise	9671 Feb 12 21:44 9671 Mar 04 01:48	12 ≈43 34 15°≈	
morning rise	9664 Nov 22 05:13	20 Mc38 14 22°Mc52'45	10.31391 AU	retrograde	9671 May 25 06:17	15 ≈ 20°≈20'28	
morning risc	9665 Feb 04 18:00	0° √		opposition	9671 Jul 31 17:31	20 ≈ 20 28 16° ≈ 58'19	1°37'59
retrograde	9665 Mar 06 09:29	0° ∡ 746'49		min. Earth dist.	9671 Jul 31 23:29	16°≈57'09	8.43403 AU
renograde	9665 Apr 05 04:37	30°RML		mm. Larm dist.	9671 Aug 27 10:03	15°R≈	0.43403 710
opposition	9665 May 12 22:55	27°M20'45	2°02'09	direct	9671 Oct 09 02:04	13° ≈ 31'38	
min. Earth dist.	9665 May 13 00:09	27°M20'30	8.31054 AU		9671 Nov 20 03:08	15° ≈	
direct	9665 Jul 19 14:19	23°M54'20		evening set	9672 Jan 22 12:03	21° ≈ 22'06	
	9665 Oct 16 18:43	0° ∡ ¹		Č			
evening set	9665 Oct 31 17:00	1° ×7 47'59		conjunction	9672 Feb 08 23:12	23° ≈ 32'06	1°08'51
-				minimum elong	9672 Feb 08 23:14	23° ≈ 32'06	1°09'05
conjunction	9665 Nov 18 13:00	4° ≯ 02'11	1°44'59	max. Earth dist.	9672 Feb 08 15:51	23° ≈ 29'48	10.45791 AU
minimum elong	9665 Nov 18 12:58	4° ≯ 02'10	1°45'18	morning rise	9672 Feb 26 06:43	25° ≈ 41′03	
max. Earth dist.	0665 N 10 00 42	4° √ 01'00	10.30572 AU		9672 Apr 05 01:04	0° ∀	
morning rise	9665 Nov 18 09:43	4 × 01 09	10.30372 AC		7072 Apr 03 01.04	. , (
morning risc	9665 Nov 18 09:43 9665 Dec 06 08:24	6° ≯ 16'16	10.30372 AO	retrograde	9672 Jun 06 08:04	3°) 13'46	
retrograde	9665 Dec 06 08:24 9666 Mar 20 02:39	6° ₰ 16'16 14° ₰ 09'12		-	9672 Jun 06 08:04 9672 Aug 11 08:51	3°) 13′46 30°R ≈	
	9665 Dec 06 08:24	6° ≯ 16'16		retrograde opposition	9672 Jun 06 08:04	3°) 13′46	1°11'49

				_			
min. Earth dist.	9672 Aug 13 06:43		8.48365 AU	retrograde	9678 Aug 20 08:26	17° 8 29'56	
direct	9672 Oct 21 15:21	26° ≈ 26′02			9678 Oct 17 18:05	15° ₹8	
	9672 Dec 28 01:47	0° ∀		opposition	9678 Oct 28 23:40	14° 8 09'38	-1°40'55
evening set	9673 Feb 03 19:48	4° 升 12′20		min. Earth dist.	9678 Oct 28 22:09	14° 8 09'55	8.75863 AU
				direct	9679 Jan 07 02:52	10° 8 48'10	
conjunction	9673 Feb 21 04:33	6° ℋ 21'02	0°46'17		9679 Mar 22 06:14	15° 8	
minimum elong	9673 Feb 21 04:34	6° ¥ 21'03	0°46'27	evening set	9679 Apr 19 11:23	18° 8 09'23	
max. Earth dist.	9673 Feb 20 21:28		10.50968 AU		, , , , P	0	
morning rise	9673 Mar 10 09:54	8°) (28'43	10.50700710	conjunction	9679 May 06 06:05	20° 8 10'56	1°30'27
•				3	•	20°810'55	
retrograde	9673 Jun 19 05:33	15°) € 57'30	00.4010.6	minimum elong	9679 May 06 06:03	. •	
opposition	9673 Aug 26 05:50	12°) 36′24		max. Earth dist.	9679 May 06 08:20	. •	10.77001 AU
min. Earth dist.	9673 Aug 26 11:09	12°) 35′22	8.53638 AU	morning rise	9679 May 23 00:23	22° 8 12'22	
direct	9673 Nov 04 02:10	9° ₩ 10'54		retrograde	9679 Sep 01 19:52	29° 8 31'50	
evening set	9674 Feb 16 21:46	16° ¥ 52'36		opposition	9679 Nov 10 17:49	26° 8 11'20	-2°00'05
				min. Earth dist.	9679 Nov 10 14:27	26° 8 11'58	8.78048 AU
conjunction	9674 Mar 06 04:02	18° ¥ 59'55	0°21'43	direct	9680 Jan 19 17:53	22° 8 50'34	
minimum elong	9674 Mar 06 04:03	18°) 59'56	0°21'48		9680 Apr 29 07:38	0°П	
max. Earth dist.	9674 Mar 05 22:03		10.56313 AU	evening set	9680 Apr 30 14:42	0°П09'12	
		21° X 06'19	10.30313 AU	evening set	9000 Apr 30 14.42	0 д09 12	
morning rise	9674 Mar 23 07:13				0.600 M 17 00 20	20 T 10112	1042150
retrograde	9674 Jul 01 23:14	28°) (31'42		conjunction	9680 May 17 08:20	2° Ⅱ 10'13	
opposition	9674 Sep 08 08:36	25° ∺ 10′57		minimum elong	9680 May 17 08:18	2° Ⅱ 10′13	
min. Earth dist.	9674 Sep 08 12:22	25° 升 10′14	8.58952 AU	max. Earth dist.	9680 May 17 13:03	2° Ⅱ 11'39	10.78631 AU
direct	9674 Nov 17 10:43	21°) (46′12		morning rise	9680 Jun 03 02:05	4° Ⅱ 11'19	
desc. node	9675 Jan 22 22:09	25° 升 13′08		retrograde	9680 Sep 13 08:58	11° Ⅲ 31'54	
evening set	9675 Mar 01 18:29	29° ∺ 23'12		opposition	9680 Nov 22 11:14	8° Ⅱ 11′06	-2°13'57
Č	9675 Mar 06 19:58	$_{0}^{\circ}\mathbf{\Upsilon}$		min. Earth dist.	9680 Nov 22 06:04	8°∏12'05	8.79166 AU
	, , , , ,			direct	9681 Jan 31 07:15	4°∏50'53	
conjunction	9675 Mar 18 22:13	1° Y 29'08	0°03'44	evening set	9681 May 12 17:11	12° П 07'39	
		1° Υ 29'08	0°03'43	evening set	9001 Way 12 17.11	12 110/39	
minimum elong	9675 Mar 18 22:14		0-0343		0.001.14 00 10 00	1 40 TO 010 F	1050155
behind sun begin	9675 Mar 18 15:13	1° Y 27'00		conjunction	9681 May 29 10:23	14° ∐ 08'27	
behind sun end	9675 Mar 19 05:15	1° Ƴ 31'17		minimum elong	9681 May 29 10:21	14° Ⅱ 08'27	1°53'18
max. Earth dist.	9675 Mar 18 18:16	1° Y 27'57	10.61553 AU	max. Earth dist.	9681 May 29 16:34	14° Ⅱ 10′20	10.79179 AU
morning rise	9675 Apr 04 23:06	3° Ƴ 34'14		morning rise	9681 Jun 15 04:22	16° Ⅱ 09'32	
retrograde	9675 Jul 14 16:45	10° Y 56'53		retrograde	9681 Sep 26 00:04	23° Ⅲ 31'47	
opposition	9675 Sep 21 09:02	7° Ƴ 36'23	-0°19'50	opposition	9681 Dec 05 04:07	20° Ⅱ 10'36	-2°21'59
min. Earth dist.	9675 Sep 21 10:59	7° Ƴ 36'01	8.64050 AU	min. Earth dist.	9681 Dec 04 22:15	20°∏11'43	8.79184 AU
direct	9675 Nov 30 13:59	4°Υ12'29		direct	9682 Feb 12 17:27	16° Ⅱ 50'47	
evening set	9676 Mar 13 10:22	11° Υ 44'52		evening set	9682 May 24 19:38	24° I I06'23	
evening set	90/0 Wai 13 10.22	11 14432		evening set	9062 Way 24 19.36	24 1100 23	
	0/7/1/ 20 11 24	12000 40120	0000107		0.000 1 10 10 04	260 T 07110	1057100
conjunction	9676 Mar 30 11:34	13° Y 49'30		conjunction	9682 Jun 10 13:04	26° Ⅱ 07'19	
minimum elong	9676 Mar 30 11:33	13° Ƴ 49'30		minimum elong	9682 Jun 10 13:03	26° Ⅱ 07'19	
max. Earth dist.	9676 Mar 30 09:52	13° Ƴ 48'59	10.66447 AU	max. Earth dist.	9682 Jun 10 19:41		10.78635 AU
morning rise	9676 Apr 16 10:12	15° Ƴ 53'25		morning rise	9682 Jun 27 08:10	28° Ⅱ 08'43	
retrograde	9676 Jul 26 07:39	23° Ƴ 14′03			9682 Jul 13 10:09	0 \circ \odot	
opposition	9676 Oct 03 07:42	19° Ƴ 53'44	-0°49'47	retrograde	9682 Oct 08 14:05	5° 5 33'09	
min. Earth dist.	9676 Oct 03 08:10	19° Ƴ 53'38	8.68703 AU	opposition	9682 Dec 17 21:08	2° © 11'30	-2°23'51
direct	9676 Dec 12 12:39	16° Ƴ 30'41		min. Earth dist.	9682 Dec 17 15:04		8.78104 AU
evening set	9677 Mar 25 21:53	23° Υ 58'49			9683 Jan 18 13:16	30°R∏	
				direct	9683 Feb 25 03:57	28° ∏ 51'53	
agniumation	9677 Apr 11 20:34	26° Y 02'13	0952101	direct		0°95	
conjunction	•		0°52'08	ovening set	9683 Apr 02 23:23		
minimum elong	9677 Apr 11 20:33	26° Y 02'13		evening set	9683 Jun 05 22:46	6° © 07'06	
max. Earth dist.	9677 Apr 11 20:20		10.70775 AU				
morning rise	9677 Apr 28 17:20	28° Y 05′06		conjunction	9683 Jun 22 17:17	8° 5 08'27	-1°55'56
	9677 May 15 05:19	9° 8		minimum elong	9683 Jun 22 17:18	8° © 08'28	1°56'18
retrograde	9677 Aug 07 20:02	5° 8 24'34		max. Earth dist.	9683 Jun 23 00:23	8°9510'37	10.77025 AU
opposition	9677 Oct 16 04:31	2° 8 04'19	-1°17'10	morning rise	9683 Jul 09 14:13	10° © 10'30	
min. Earth dist.	9677 Oct 16 04:10	2° 8 04'23	8.72702 AU	retrograde	9683 Oct 21 06:42	17° © 37'35	
	9677 Nov 14 15:37	30°RƳ		opposition	9683 Dec 30 14:30	14° © 15'21	-2°19'24
direct	9677 Dec 25 09:02	28° Υ 42'05		min. Earth dist.	9683 Dec 30 07:59		8.75969 AU
311001	9678 Feb 03 05:46	0° 8		direct	9684 Mar 08 15:38	10°955'47	5.75707 AU
arranin+		_					
evening set	9678 Apr 07 06:01	6° 8 06'28		evening set	9684 Jun 17 03:43	18° © 11'18	
	a.=a	0.64 4 -					40.40
conjunction	9678 Apr 24 02:26	8° 8 08'50		conjunction	9684 Jul 04 00:16	20° © 13'28	
minimum elong	9678 Apr 24 02:24	8° 8 08'49		minimum elong	9684 Jul 04 00:17	20° © 13'28	1°50'06
max. Earth dist.	9678 Apr 24 03:05	8° 8 09'01	10.74345 AU	max. Earth dist.	9684 Jul 04 08:33	20° © 15'59	10.74403 AU
morning rise	9678 May 10 21:47	10° 8 10'52		morning rise	9684 Jul 20 23:35	22° © 16'27	
	9678 Jun 25 17:00	15° 8		retrograde	9684 Nov 02 02:52	29° 5 46'29	
				-			

opposition	9685 Jan 11 08:20	26°\$23'36		behind sun end	9690 Sep 18 19:29	5° £ 17'23	10 44560 411
min. Earth dist.	9685 Jan 11 01:06 9685 Mar 21 02:26	26°\$24'59 23°\$03'53	8.72845 AU	max. Earth dist.	9690 Sep 18 17:45 9690 Oct 06 08:25	5° 1 6'51 7° 2 27'31	10.44560 AU
direct	9685 Jun 26 14:21	23 20 03 33		morning rise retrograde	9691 Jan 19 11:49	7 2 27 31 15° 2 17'17	
evening set	9685 Jun 29 11:22	0° Ω 20'30		opposition	9691 Mar 29 03:12	13 ≅ 1717 11° ⊆ 50'50	0°30'01
evening set	7003 Juli 27 11.22	0 662030		min. Earth dist.	9691 Mar 29 00:42	11° ⊆ 50'30	8.42009 AU
conjunction	9685 Jul 16 10:36	2° Ω 23'45	-1°38'36	direct	9691 Jun 04 14:02	8° £ 26'56	0.42007710
minimum elong	9685 Jul 16 10:38	2°Ω23'45		evening set	9691 Sep 14 13:01	16° Ω 05'30	
max. Earth dist.	9685 Jul 16 19:20		10.70831 AU		, , , , , , , , , , , , , , , , , , ,		
morning rise	9685 Aug 02 12:52	4°Ω27'56		conjunction	9691 Oct 02 06:46	18° ≏ 17'39	0°36'54
retrograde	9685 Nov 15 01:00	12° Ω 01'10		minimum elong	9691 Oct 02 06:44	18° ≏ 17'38	0°37'00
opposition	9686 Jan 24 03:11	8° Ω 37'36	-1°52'13	max. Earth dist.	9691 Oct 02 08:28	18° ≏ 18'11	10.39629 AU
min. Earth dist.	9686 Jan 23 19:58	8° Ω 38'59	8.68794 AU	morning rise	9691 Oct 20 02:47	20° ჲ 30'33	
direct	9686 Apr 02 14:12	5° Ω 17'32		retrograde	9692 Feb 02 02:33	28° ≏ 22'32	
evening set	9686 Jul 11 22:39	12° Ω 36′04		opposition	9692 Apr 10 09:20	24° ≏ 55'52	1°01'12
				min. Earth dist.	9692 Apr 10 08:29	24° ≏ 56′02	8.37449 AU
conjunction	9686 Jul 29 00:54	14° Ω 40′39	-1°22'54	direct	9692 Jun 16 19:22	21° ≙ 31′00	
minimum elong	9686 Jul 29 00:56	14° Ω 40'40	1°23'10	evening set	9692 Sep 27 08:50	29° ≙ 14'30	
max. Earth dist.	9686 Jul 29 08:42	14° Ω 43′02	10.66383 AU		9692 Oct 03 12:00	0° M	
	9686 Jul 31 16:12	15° Ω					
morning rise	9686 Aug 15 06:36	16° Ω 46'16		conjunction	9692 Oct 15 04:03	1°M27'40	1°01'04
retrograde	9686 Nov 28 02:32	24° Ω 22'55		minimum elong	9692 Oct 15 04:00	1°M27'39	1°01'14
opposition	9687 Feb 05 23:28	20° Ω 58'42		max. Earth dist.	9692 Oct 15 03:19		10.35454 AU
min. Earth dist.	9687 Feb 05 17:17		8.63926 AU	morning rise	9692 Nov 02 00:57	3° M 41′22	
direct	9687 Apr 15 03:24	17° Ω 38'07		retrograde	9693 Feb 14 17:29	11° M 34'47	
evening set	9687 Jul 24 14:25	24° Ω 59'26		opposition	9693 Apr 23 17:13	8°M08'06	1°29'29
		0		min. Earth dist.	9693 Apr 23 18:16	8°M07'53	8.33768 AU
conjunction	9687 Aug 10 20:01	27° Ω 05'32		direct	9693 Jun 30 04:49	4°M42'19	
minimum elong	9687 Aug 10 20:03	27° Ω 05'33	1°03'25	evening set	9693 Oct 11 08:56	12°M30'28	
max. Earth dist.	9687 Aug 11 02:06		10.61230 AU		0602.0 4 20 04.54	1.40 W 4.411.0	1022110
morning rise	9687 Aug 28 05:25	29° Ω 12'45		conjunction	9693 Oct 29 04:54	14°M44'19	1°22'10
ratra ara da	9687 Sep 03 20:19 9687 Dec 11 06:45	0°Mp 6°m 52150		minimum elong max. Earth dist.	9693 Oct 29 04:52	14°M44'18	1°22'25 10.32250 AU
retrograde opposition	9687 Dec 11 00:43 9688 Feb 18 21:28	6° Mp 52'58 3° Mp 28'06	1004'00	max. Earm dist.	9693 Oct 29 02:02 9693 Oct 31 06:43	14 11643 23 15°M	10.32230 AU
min. Earth dist.	9688 Feb 18 16:44	3°My28'01	8.58492 AU	morning rise	9693 Nov 16 01:51	16°M58'28	
direct	9688 Apr 26 18:52	0° Mp 06'49	6.36472 AC	retrograde	9694 Feb 28 09:55	24°M52'29	
evening set	9688 Aug 05 11:19	7° m 31'42		opposition	9694 May 07 02:50	21°M25'56	1°53'12
e venning see	,000 1 11 00 11.11	, .,, 51 .2		min. Earth dist.	9694 May 07 05:22	21°M25'25	8.31152 AU
conjunction	9688 Aug 22 20:30	9° m 39'27	-0°40'16	direct	9694 Jul 13 17:11	17°M59'22	0.57102110
minimum elong	9688 Aug 22 20:32	9° m 39'27		evening set	9694 Oct 25 11:55	25°M51'29	
max. Earth dist.	9688 Aug 23 01:37	-	10.55663 AU	C			
morning rise	9688 Sep 09 09:26	11° m 48'18		conjunction	9694 Nov 12 08:04	28°M05'42	1°38'58
retrograde	9688 Dec 23 12:29	19° m 32'00		minimum elong	9694 Nov 12 08:02	28°M05'41	1°39'17
opposition	9689 Mar 02 21:22	16°№06'30	-0°34'13	max. Earth dist.	9694 Nov 12 03:49	28°M04'21	10.30183 AU
min. Earth dist.	9689 Mar 02 17:31	16°Mp07'16	8.52816 AU		9694 Nov 27 11:53	0° ∡ 7	
direct	9689 May 09 15:10	12° m 44'25		morning rise	9694 Nov 30 04:16	0° ҂ 19'57	
evening set	9689 Aug 18 14:01	20° Mp 13'29		retrograde	9695 Mar 14 02:08	8° ҂ 13'37	
				opposition	9695 May 20 13:37	4° ∡ °47'22	
conjunction	9689 Sep 05 02:36	22° m 22'51		min. Earth dist.	9695 May 20 16:56	4° ₹ 46'42	8.29731 AU
minimum elong	9689 Sep 05 02:37	22° m 22'51	0°15'14	direct	9695 Jul 27 08:37	1° ∡ 720′11	
behind sun begin	9689 Sep 05 00:26	22° m 22'12		evening set	9695 Nov 08 16:45	9° ∡ 15'24	
behind sun end	9689 Sep 05 04:47	22° m 23'31	10.50000 ATT		060531 26 12 22	110 700120	1050120
max. Earth dist.	9689 Sep 05 07:05		10.50000 AU	conjunction	9695 Nov 26 12:32	11° 🗷 29'39	1°50'28
morning rise	9689 Sep 22 18:30	24° Mp33'14 0° <u>₽</u>		minimum elong	9695 Nov 26 12:30	11°×729'38	1°50'49
retrograde	9689 Nov 13 09:48 9690 Jan 05 22:29	ე° ഫ 20'12		max. Earth dist. morning rise	9695 Nov 26 07:24 9695 Dec 14 07:19	13° x '28'02	10.29359 AU
renograde	9690 Mar 01 20:02	2 == 2012 30°R M p		retrograde	9696 Mar 26 17:27	21° x ⁷ 35'57	
opposition	9690 Mar 15 23:10	28° Mp 54'10	-0°02'22	opposition	9696 Jun 02 01:04	21 x ·33 37 18° x 10'12	2°21'33
min. Earth dist.	9690 Mar 15 19:53	28° Mp 54'49		min. Earth dist.	9696 Jun 02 05:03	18° х 10 12 18° х 09'24	8.29569 AU
asc. node	9690 Apr 12 08:15	26° m 53'03	5,21,7110	direct	9696 Aug 09 02:07	14° × 42'34	5.2,50,710
direct	9690 May 22 13:19	25° mp 31'12		evening set	9696 Nov 21 21:42	22° × ⁷ 39'45	
	9690 Aug 05 05:25	0∘ ರ					
evening set	9690 Aug 31 22:38	3° Ω 04'52		conjunction	9696 Dec 09 16:33	24° ₹ 53'44	1°55'59
Ü	<u> </u>			minimum elong	9696 Dec 09 16:32	24° ₹ 53'44	1°56'22
conjunction	9690 Sep 18 14:08	5° ≏ 15'44	0°11'04	max. Earth dist.	9696 Dec 09 10:30	24° ∡ °51′50	10.29823 AU
minimum elong	9690 Sep 18 14:08	5° ≙ 15'44	0°11'05	morning rise	9696 Dec 27 09:32	27° ∡ °07'15	
behind sun begin	9690 Sep 18 08:46	5° ≙ 14'05			9697 Jan 20 17:53	8°0	

Tranctary Tricin	omena or Saturn in	JIII 7000 till	10ugii 10102 (O 1), Astrodictist I	AG 16-1 CO-2023 14	r.23, pag	gc y
retrograde	9697 Apr 09 08:12	4° ප 57'13		retrograde	9703 Jun 27 12:09	22°) 58'40	
opposition	9697 Jun 15 13:01	1°る32'07	2°24'30	opposition	9703 Sep 03 15:53	19°) 38′05	0°25'52
min. Earth dist.	9697 Jun 15 17:48	1°る31'09	8.30683 AU	min. Earth dist.	9703 Sep 03 19:39	19°) ₹37'23	8.56981 AU
mm. Earth dist.	9697 Jul 05 07:26	30°R. ₹	0.50005710	direct	9703 Nov 12 14:19	16° ¥ 13′21	0.50701710
direct	9697 Aug 22 19:36	28° ×7 04'15		evening set	9704 Feb 25 05:10	23°) 52'37	
uncet	9697 Oct 09 13:26	0°중		evening sec	27 03.10	23 7(3237	
evening set	9697 Dec 06 00:59	6° ප 02'04		conjunction	9704 Mar 13 10:07	25° ¥ 59'11	0°08'09
evening set	7077 DCC 00 00.37	0 002 04		minimum elong	9704 Mar 13 10:07	25° X 59'11	0°08'11
conjunction	9697 Dec 23 18:29	8° 궁 15'33	1°55'14	behind sun begin	9704 Mar 13 10:07	25° H 57'15	0 00 11
minimum elong	9697 Dec 23 18:30	8° ろ 15'33	1°55'36	behind sun end	9704 Mar 13 16:25	26°\(\frac{1}{26}\)	
max. Earth dist.	9697 Dec 23 11:32	8°る13'31	1 33 30 10.31564 AU	max. Earth dist.	9704 Mar 13 16:23 9704 Mar 13 06:09		10.59775 AU
morning rise	9698 Jan 10 09:31	8 31321 10° 3 28'18	10.31304 AU	morning rise	9704 Mar 30 11:58	28° H 04'51	10.39773 AU
retrograde	9698 Apr 22 20:55	10 32818 18° る 15'10		morning rise	9704 Apr 15 20:37	28 χ0431 0° Υ	
•	9698 Jun 29 00:47	18 31310 14° 3 50'49	2°19'40	rotro ara do	9704 Apr 13 20:37 9704 Jul 09 06:26	5° Υ 28'43	
opposition min. Earth dist.	9698 Jun 29 06:32	14 03049 14° る 49'40	8.33023 AU	retrograde desc. node	9704 Jul 12 04:51	5° Υ 28'15	
		14 34940 11° る 22'59	8.33023 AU			2°Υ08'33	0005120
direct	9698 Sep 05 14:02			opposition	9704 Sep 15 17:56	2° \(\partial 08.33 \) 2° \(\partial 07.59 \)	
evening set	9698 Dec 20 01:33	19° る 20'09		min. Earth dist.	9704 Sep 15 20:53		8.02470 AU
	0.000 1 0.017.07	210 7 22151	1040110	11	9704 Oct 16 00:32	30° ₹	
conjunction	9699 Jan 06 17:27	21° る 32'51	1°48'19	direct	9704 Nov 24 19:39	28°) 44'42	
minimum elong	9699 Jan 06 17:28	21°る32'52	1°48'40		9705 Jan 02 22:38	0° Υ	
max. Earth dist.	9699 Jan 06 09:27		10.34497 AU	evening set	9705 Mar 08 23:44	6° Ƴ 19'14	
morning rise	9699 Jan 24 06:30	23° る 44'43				22002 442 5	
	9699 Mar 26 12:10	0° ≈		conjunction	9705 Mar 26 01:59	8° Y 24'25	
retrograde	9699 May 06 05:44	1°≈27'47		minimum elong	9705 Mar 26 01:58	8° Y 24'25	
	9699 Jun 16 17:11	30°Rる		max. Earth dist.	9705 Mar 25 22:48		10.65087 AU
opposition	9699 Jul 12 11:37	28° る 04'17	2°07'25	morning rise	9705 Apr 12 01:43	10° Y 28'50	
min. Earth dist.	9699 Jul 12 18:00	28° ろ 03'01	8.36468 AU	retrograde	9705 Jul 21 20:52	17° Y 50′16	
direct	9699 Sep 19 08:57	24° る 36'43		opposition	9705 Sep 28 17:42	14° Ƴ 30′22	
	9699 Dec 12 11:57	0° ≈		min. Earth dist.	9705 Sep 28 19:31	14° Ƴ 30′01	8.67539 AU
evening set	9700 Jan 02 22:11	2° ≈ 32'00		direct	9705 Dec 07 22:00	11° Y 07′22	
				evening set	9706 Mar 21 13:35	18° Ƴ 37'25	
conjunction	9700 Jan 20 12:17	4° ≈ 43'44	1°35'44				
minimum elong	9700 Jan 20 12:19	4° ≈ 43'45	1°36'03	conjunction	9706 Apr 07 13:21	20° Ƴ 41'19	
max. Earth dist.	9700 Jan 20 03:57	4° ≈ 41'07	10.38458 AU	minimum elong	9706 Apr 07 13:19	20° Ƴ 41'18	
morning rise	9700 Feb 06 23:16	6° ≈ 54'32		max. Earth dist.	9706 Apr 07 11:34		10.69792 AU
retrograde	9700 May 19 11:01	14° ≈ 33'29		morning rise	9706 Apr 24 11:04	22° Ƴ 44'36	
opposition	9700 Jul 25 21:22	11° ≈ 10′50	1°48'37		9706 Jul 25 04:47	9° 8	
min. Earth dist.	9700 Jul 26 03:23	11° ≈ 09'39	8.40829 AU	retrograde	9706 Aug 03 10:44	0° 8 04'28	
direct	9700 Oct 03 03:13	7° ≈ 43'46			9706 Aug 12 18:50	30° ₹Ƴ	
	9701 Jan 11 15:21	15° ≈		opposition	9706 Oct 11 15:29	26° Ƴ 44'39	-1°04'51
evening set	9701 Jan 16 13:53	15° ≈ 36′02		min. Earth dist.	9706 Oct 11 15:39	26° Ƴ 44'37	8.71841 AU
				direct	9706 Dec 20 21:16	23° Y 22'29	
conjunction	9701 Feb 03 02:01	17° ≈ 46'39	1°18'18		9707 Mar 27 03:05	0°8	
minimum elong	9701 Feb 03 02:03	17° ≈ 46'39	1°18'34	evening set	9707 Apr 02 23:34	0° 8 48'34	
max. Earth dist.	9701 Feb 02 18:33	17° ≈ 44'18	10.43228 AU				
morning rise	9701 Feb 20 10:46	19° ≈ 56'14		conjunction	9707 Apr 19 21:05	2° 8 51'21	-1°03'35
retrograde	9701 Jun 01 14:49	27° ≈ 31'01		minimum elong	9707 Apr 19 21:03	2° 8 51'20	1°03'46
opposition	9701 Aug 08 05:31	24° ≈ 09'08	1°24'27	max. Earth dist.	9707 Apr 19 21:11	2° 8 51'23	10.73584 AU
min. Earth dist.	9701 Aug 08 10:32	24° ≈ 08'09	8.45875 AU	morning rise	9707 May 06 16:56	4° 8 53'42	
direct	9701 Oct 16 17:46	20° ≈ 42'45		retrograde	9707 Aug 16 01:18	12° 8 12'55	
evening set	9702 Jan 30 00:22	28° ≈ 31'08		opposition	9707 Oct 24 11:43	8° 8 53'04	-1°30'24
	9702 Feb 11 00:28	0° ∀		min. Earth dist.	9707 Oct 24 10:44	8° 8 53'15	8.75138 AU
				direct	9708 Jan 02 15:37	5° 8 31'40	
conjunction	9702 Feb 16 10:23	0°) 40′29	0°57'05	evening set	9708 Apr 14 06:36	12° 8 54'26	
minimum elong	9702 Feb 16 10:25	0°) 40′30	0°57'17				
max. Earth dist.	9702 Feb 16 04:25	0°) 38′38	10.48558 AU	conjunction	9708 May 01 02:07	14° 8 56'21	-1°22'46
morning rise	9702 Mar 05 16:48	2°) 48'47		minimum elong	9708 May 01 02:05	14° 8 56'21	1°23'01
retrograde	9702 Jun 14 15:15	10°) 19′30		max. Earth dist.	9708 May 01 03:22	14° 8 56'44	10.76310 AU
opposition	9702 Aug 21 11:40	6°) 58′19	0°56'21		9708 May 01 14:06	15° 8	
min. Earth dist.	9702 Aug 21 15:43	6°) 57'31	8.51352 AU	morning rise	9708 May 17 20:41	16° 8 58'02	
direct	9702 Oct 30 05:23	3°) 32'44		retrograde	9708 Aug 27 13:29	24° 8 17'28	
evening set	9703 Feb 12 05:27	11°) 16′42		opposition	9708 Nov 05 06:56	20° 8 57'26	-1°51'47
-				min. Earth dist.	9708 Nov 05 05:14		8.77348 AU
conjunction	9703 Mar 01 13:05	13°) 24'41	0°33'16	direct	9709 Jan 14 06:59	17° 8 36'38	
minimum elong	9703 Mar 01 13:06	13°) 24'41	0°33'24	evening set	9709 Apr 26 11:21	24° 8 56'45	
max. Earth dist.	9703 Mar 01 08:28		10.54170 AU		*		
morning rise	9703 Mar 18 17:11	15°) 31'40		conjunction	9709 May 13 05:22	26° 8 58'03	-1°38'14
		-		-	-	-	

minimum elong	9709 May 13 05:20	26° 8 58'02		minimum elong	9715 Jul 24 18:52	9° Ω 28'12	
max. Earth dist.	9709 May 13 07:13		10.77935 AU	max. Earth dist.	9715 Jul 25 02:06		10.65645 AU
morning rise	9709 May 29 23:21	28° 8 59'20		morning rise	9715 Aug 10 23:12	11° Ω 33'30	
	9709 Jun 07 14:11	0° I I			9715 Sep 10 16:04	15° Ω	
retrograde	9709 Sep 09 01:53	6° Ⅱ 19'44	2000112	retrograde	9715 Nov 23 15:04	19° Ω 09'51	1040142
opposition min. Earth dist.	9709 Nov 18 01:14 9709 Nov 17 22:56	2° ∏ 59'18	-2°08°12 8.78443 AU	opposition min. Earth dist.	9716 Feb 01 15:25 9716 Feb 01 09:15	15° Ω 45'12	8.63327 AU
min. Earth dist.	9710 Jan 06 07:12	2°Д39'44 30°R 8	8.78443 AU	min. Earth dist.	9716 Feb 01 09:13 9716 Feb 11 11:17	15°RΩ	8.03327 AU
direct	9710 Jan 26 22:24	29° 8 38'56		direct	9716 Apr 09 23:23	13 κοι 12° Ω 24'09	
direct	9710 Feb 16 08:37	0° Ⅱ		uncer	9716 Jun 04 19:20	15°Ω	
evening set	9710 May 08 14:45	6° Ⅱ 57'02		evening set	9716 Jul 19 08:06	19° Ω 45'20	
e venning see	7/10 May 00 11.15	0 1237 02		evening sec	7/10 Jul 17 00.00	19 00 13 20	
conjunction	9710 May 25 08:00	8° Ⅲ 58′01	-1°49'21	conjunction	9716 Aug 05 12:28	21° Ω 51'07	-1°12'21
minimum elong	9710 May 25 07:58	8° Ⅱ 58'01	1°49'42	minimum elong	9716 Aug 05 12:30	21° Ω 51'08	1°12'36
max. Earth dist.	9710 May 25 10:58	8° Ⅱ 58'55	10.78443 AU	max. Earth dist.	9716 Aug 05 20:19		10.60767 AU
morning rise	9710 Jun 11 01:58	10° Ⅱ 59'12		morning rise	9716 Aug 22 20:18	23° Ω 57'58	
retrograde	9710 Sep 21 15:36	18° Ⅲ 21′10			9716 Oct 22 02:09	0° ™	
opposition	9710 Nov 30 18:49	15° Ⅱ 00'12	-2°19'00	retrograde	9716 Dec 05 19:06	1°M 37'50	
min. Earth dist.	9710 Nov 30 15:10	15° Ⅱ 00'53	8.78411 AU		9717 Jan 20 06:55	30° R Ω	
direct	9711 Feb 08 11:19	11° Ⅱ 40′06		opposition	9717 Feb 13 13:06	28° Ω 12'30	-1°16'10
evening set	9711 May 20 17:32	18° Ⅱ 56'51		min. Earth dist.	9717 Feb 13 06:43	28° Ω 13'45	8.58210 AU
				direct	9717 Apr 22 13:59	24° Ω 50′53	
conjunction	9711 Jun 06 10:53	20° Ⅱ 57'51			9717 Jul 12 18:36	0° ™	
minimum elong	9711 Jun 06 10:52	20° ∏ 57'50		evening set	9717 Aug 01 03:19	2° mg 15'15	
max. Earth dist.	9711 Jun 06 15:53		10.77841 AU				
morning rise	9711 Jun 23 05:26	22° ∏ 59'14		conjunction	9717 Aug 18 11:10	4° TD 22'36	
	9711 Sep 12 15:32	0°©		minimum elong	9717 Aug 18 11:11	4° m) 22'37	
retrograde	9711 Oct 04 05:58	0°523'20		max. Earth dist.	9717 Aug 18 18:21	4° m/24'49	10.55530 AU
•,•	9711 Oct 26 02:27	30°RⅡ	2022144	morning rise	9717 Sep 04 22:32	6° Mp 31'04	
opposition	9711 Dec 13 12:20	27° Ⅱ 01'41		retrograde	9717 Dec 19 01:43	14° Mp 14'23	0047120
min. Earth dist.	9711 Dec 13 07:05	27° I I 02'41 23° I I 41'42	8.77277 AU	opposition	9718 Feb 26 12:48	10° Mp 48'29	
direct	9712 Feb 20 23:07 9712 May 23 15:46	23°Щ41'42 0°95		min. Earth dist. direct	9718 Feb 26 07:08 9718 May 05 07:43	10° Mp 49'36 7° Mp 26'12	8.52860 AU
evening set	9712 May 23 13:40 9712 May 31 20:36	0°957'47		evening set	9718 May 03 07:43 9718 Aug 14 04:00	14° Mp 54'24	
evening set	7/12 Way 31 20.30	0 3747		evening set	7/10 Aug 14 04.00	וד ביין און דו	
conjunction	9712 Jun 17 14:47	2° © 59'09	-1°56'59	conjunction	9718 Aug 31 15:08	17° m 03'21	-0°26'21
minimum elong	9712 Jun 17 14:47	2° © 59'09	1°57'21	minimum elong	9718 Aug 31 15:09	17° mp 03'21	0°26'28
max. Earth dist.	9712 Jun 17 21:23	3° 5 01'09	10.76170 AU	max. Earth dist.	9718 Aug 31 20:53	17° m 05'07	10.50188 AU
morning rise	9712 Jul 04 10:44	5° 5 01'04		morning rise	9718 Sep 18 05:51	19° m 13'23	
retrograde	9712 Oct 15 23:41	12° 5 27'46		retrograde	9719 Jan 01 11:14	27° Mp 00'00	
opposition	9712 Dec 25 05:59	9° 5 05'23	-2°22'11	opposition	9719 Mar 11 14:38	23° m 33'40	-0°16'27
min. Earth dist.	9712 Dec 24 23:51	9° 5 06'33	8.75093 AU	min. Earth dist.	9719 Mar 11 10:15	23° m 34'32	8.47553 AU
direct	9713 Mar 04 10:15	5° 5 45'21		direct	9719 May 18 04:53	20° Mp 10'38	
evening set	9713 Jun 13 01:12	13° © 01'33		evening set	9719 Aug 27 10:40	27° m 43'13	
conjunction	9713 Jun 29 20:52	15°903'35		conjunction	9719 Sep 14 00:55	29° m 53'42	
minimum elong	9713 Jun 29 20:53	15°503'36	1°53'28	minimum elong	9719 Sep 14 00:53	29° M 53'42	0°00'29
max. Earth dist.	9713 Jun 30 03:37		10.73503 AU	behind sun begin behind sun end	9719 Sep 13 17:41	29° Mp 51'29	
morning rise retrograde	9713 Jul 16 19:05 9713 Oct 28 18:49	17°506'23 24°536'00		max. Earth dist.	9719 Sep 14 08:06 9719 Sep 14 05:02	29° M 55'55	10.45019 AU
opposition	9714 Jan 07 00:01	24 \$3000 21°\$12'53	-2°14'19	max. Earth dist.	9719 Sep 14 03.02 9719 Sep 14 21:10	0° ⊽	10.43019 AU
min. Earth dist.	9714 Jan 06 18:05		8.71950 AU	asc. node	9719 Sep 14 21:10 9719 Sep 20 01:57	0° ჲ 38'48	
direct	9714 Mar 16 20:18	17°952'38	0.71730710	morning rise	9719 Oct 01 18:27	ა <u>თ</u> ან 10 2° ჲ 05'10	
evening set	9714 Jun 25 08:03	25°909'45		retrograde	9720 Jan 14 23:17	9° £ 54'43	
	7,751.000			opposition	9720 Mar 23 18:29	6° £ 28'06	0°15'58
conjunction	9714 Jul 12 05:58	27° © 12'46	-1°44'10	min. Earth dist.	9720 Mar 23 15:31	6° £ 28'42	8.42572 AU
minimum elong	9714 Jul 12 06:00	27° © 12'47	1°44'29	direct	9720 May 30 05:45	3° ჲ 04'18	
max. Earth dist.	9714 Jul 12 12:40		10.69949 AU	evening set	9720 Sep 08 23:19	10° ≏ 41'38	
morning rise	9714 Jul 29 07:05	29° © 16'43		-	-		
	9714 Aug 04 09:21	$0^{\circ}\Omega$		conjunction	9720 Sep 26 16:11	12° ≏ 53'28	0°25'48
retrograde	9714 Nov 10 14:33	6° Ω 49'35		minimum elong	9720 Sep 26 16:10	12° ≏ 53'28	0°25'51
opposition	9715 Jan 19 19:06	3° Ω 25'42		max. Earth dist.	9720 Sep 26 19:13	12° ≏ 54'25	10.40289 AU
min. Earth dist.	9715 Jan 19 13:14	3° Ω 26'49	8.67973 AU	morning rise	9720 Oct 14 11:47	15° ≏ 06'10	
direct	9715 Mar 29 08:53	0° Ω 05'06		retrograde	9721 Jan 27 13:07	22° ≏ 58'07	
evening set	9715 Jul 07 17:54	7° Ω 23'53		opposition	9721 Apr 06 00:30	19° ≏ 31'23	0°47'56
		0.4.0		min. Earth dist.	9721 Apr 05 22:23	19° Ω 31'49	8.38173 AU
conjunction	9715 Jul 24 18:50	9° Ω 28'11	-1°30′24	direct	9721 Jun 12 10:59	16° ≏ 06'52	

evening set	9721 Sep 22 17:35	23° ≙ 49′02		opposition min. Earth dist.	9727 Jun 24 17:23 9727 Jun 24 23:09	9° ප 30'17 9° ප 29'07	2°22'20 8.32698 AU
conjunction	9721 Oct 10 12:22	26° ≏ 01'58	0°50'53	direct	9727 Sep 01 03:51	6° る 02'54	
minimum elong	9721 Oct 10 12:20	26° ≏ 01'58	0°51'02	evening set	9727 Dec 15 13:09	14° る 00'34	
max. Earth dist.	9721 Oct 10 14:31	26° ♀ 02'39	10.36246 AU				
morning rise	9721 Oct 28 09:01	28° ≙ 15'32		conjunction	9728 Jan 02 05:50	16° る 13'36	1°51'43
	9721 Nov 11 21:23	0° M		minimum elong	9728 Jan 02 05:51	16° る 13'37	1°52'05
retrograde	9722 Feb 10 05:05	6° M ∙09'15		max. Earth dist.	9728 Jan 01 21:44	16° ප 11'03	10.33803 AU
opposition	9722 Apr 19 08:27	2°M42'35	1°17'43	morning rise	9728 Jan 19 19:46	18° る 25'52	
min. Earth dist.	9722 Apr 19 07:05	2°M42'51	8.34591 AU	retrograde	9728 May 01 00:19	26° る 10'46	
	9722 May 28 10:06	30° ₹ Ω		opposition	9728 Jul 07 04:58	22° る 47'20	2°13'07
direct	9722 Jun 25 19:08	29° ₽ 17'22		min. Earth dist.	9728 Jul 07 10:54	22° る 46'09	8.35418 AU
	9722 Jul 23 22:53	0° M		direct	9728 Sep 13 23:08	19° る 20'04	
evening set	9722 Oct 06 16:47	7° IL 04'09		evening set	9728 Dec 28 12:01	27° る 16'28	
conjunction	9722 Oct 24 12:40	9° M ₁7'53	1°13'29	conjunction	9729 Jan 15 03:04	29° る 28'39	1°41'26
minimum elong	9722 Oct 24 12:38	9° ጤ 17'53	1°13'42	minimum elong	9729 Jan 15 03:06	29° る 28'40	1°41'46
max. Earth dist.	9722 Oct 24 13:24	9° M ₊18'07	10.33116 AU	max. Earth dist.	9729 Jan 14 19:07	29° る 26'09	10.37034 AU
morning rise	9722 Nov 11 09:35	11°MJ32'00			9729 Jan 19 06:36	0° ≈	
	9722 Dec 11 06:57	15° M ₊		morning rise	9729 Feb 01 14:49	1° ≈ 39'55	
retrograde	9723 Feb 23 23:39	19°M26'32		retrograde	9729 May 14 08:42	9° ≈ 20'58	
opposition	9723 May 02 18:10	16°ML00'07	1°43'34	opposition	9729 Jul 20 15:45	5° ≈ 58'15	1°56'57
min. Earth dist.	9723 May 02 18:04	16°ML00'08	8.32020 AU	min. Earth dist.	9729 Jul 20 21:59	5° ≈ 57'01	8.39077 AU
	9723 May 15 09:08	15°RM		direct	9729 Sep 27 17:03	2° ≈ 31'14	
direct	9723 Jul 09 05:27	12°M34'13		evening set	9730 Jan 11 06:15	10° ≈ 25′08	
	9723 Aug 31 16:39	15° M ₊					
evening set	9723 Oct 20 19:43	20°M25'09		conjunction	9730 Jan 28 19:23	12° ≈ 36′18	1°25'55
				minimum elong	9730 Jan 28 19:25	12° ≈ 36′19	1°26'12
conjunction	9723 Nov 07 15:57	22°M39'19	1°32'16	max. Earth dist.	9730 Jan 28 11:22	12° ≈ 33'47	10.41142 AU
minimum elong	9723 Nov 07 15:54	22°M39'18	1°32'33	morning rise	9730 Feb 15 05:00	14° ≈ 46′27	
max. Earth dist.	9723 Nov 07 14:33	22°M38'52	10.31059 AU		9730 Feb 17 01:15	15° ≈	
morning rise	9723 Nov 25 12:25	24°M53'37		retrograde	9730 May 27 14:26	22° ≈ 23′20	
	9724 Jan 10 22:43	0°⊀		opposition	9730 Aug 03 01:01	19° ≈ 01'17	1°34'53
retrograde	9724 Mar 08 17:09	2° ∡ ¹47'57		min. Earth dist.	9730 Aug 03 07:29	19° ≈ 00'00	8.43516 AU
	9724 May 07 07:25	30°RML		direct	9730 Oct 11 08:35	15° ≈ 34'40	
opposition	9724 May 15 05:17	29°M21'55	2°03'59	evening set	9731 Jan 24 19:29	23° ≈ 25′05	
min. Earth dist.	9724 May 15 07:03	29°M21'33	8.30565 AU				
direct	9724 Jul 21 20:23	25°M55'25		conjunction	9731 Feb 11 06:26	25° ≈ 35′04	1°06'09
	9724 Sep 30 19:18	0°⊀		minimum elong	9731 Feb 11 06:28	25° ≈ 35′05	1°06'22
evening set	9724 Nov 03 00:50	3° ∡ ¹49'39		max. Earth dist.	9731 Feb 10 22:27	25° ≈ 32'34	10.45922 AU
				morning rise	9731 Feb 28 13:56	27° ≈ 44′00	
conjunction	9724 Nov 20 20:41	6° ₰ 03'54	1°46'07		9731 Mar 19 18:42	0° ∀	
minimum elong	9724 Nov 20 20:39	6° ₰ 03'53	1°46'27	retrograde	9731 Jun 09 14:37	5°) 16'41	
max. Earth dist.	9724 Nov 20 16:37	6° ∡ 02'36	10.30142 AU	opposition	9731 Aug 16 08:16	1° ¥ 55'13	1°08'15
morning rise	9724 Dec 08 16:04	8° ₰ 18'02		min. Earth dist.	9731 Aug 16 14:24	1° ¥ 54'01	8.48506 AU
retrograde	9725 Mar 22 08:59	16° ∤ 11'09			9731 Sep 11 10:41	30° ₹ ≈	
opposition	9725 May 28 17:07	12° ∡ ¹45'38	2°17'42	direct	9731 Oct 24 23:19	28° ≈ 29'09	
min. Earth dist.	9725 May 28 20:53	12° ∡ ¹44'53	8.30240 AU		9731 Dec 06 18:45	0° ∀	
direct	9725 Aug 04 14:07	9° ∡ 18'39		evening set	9732 Feb 07 03:08	6° ℋ 15′23	
evening set	9725 Nov 17 06:22	17° ∡ 15′08					
				conjunction	9732 Feb 24 11:44	8°) 24′02	0°43'16
conjunction	9725 Dec 05 01:26	19° ∡ "29′12	1°54'13	minimum elong	9732 Feb 24 11:45	8°) 24′03	0°43'25
minimum elong	9725 Dec 05 01:25	19° ∡ ¹29'11	1°54'35	max. Earth dist.	9732 Feb 24 04:30	8°) €21'48	10.51123 AU
max. Earth dist.	9725 Dec 04 19:07	19° ∡ ¹27'12	10.30338 AU	morning rise	9732 Mar 12 17:02	10°) (31′42	
morning rise	9725 Dec 22 19:18	21° ∡¹ 42'54		retrograde	9732 Jun 21 11:42	18°) €00'30	
retrograde	9726 Apr 04 23:42	29° ∡ ³33'57		opposition	9732 Aug 28 13:28	14°) 39′28	0°38'34
opposition	9726 Jun 11 05:17	26° ₹ 09'04	2°23'55	min. Earth dist.	9732 Aug 28 18:13	14°) €38'33	8.53795 AU
min. Earth dist.	9726 Jun 11 10:24	26° ₹ '08'02	8.30972 AU	direct	9732 Nov 06 11:22	11° ∺ 14'05	
direct	9726 Aug 18 08:40	22° х 41'46		evening set	9733 Feb 19 04:56	18° ¥ 55'39	
	9726 Nov 26 02:16	5°0					
evening set	9726 Dec 01 10:48	0° る 39'25		conjunction	9733 Mar 08 11:07	21° ∺ 02'55	0°18'32
				minimum elong	9733 Mar 08 11:08	21° ∺ 02'55	0°18'37
conjunction	9726 Dec 19 04:49	2° る 53'05	1°56'06	max. Earth dist.	9733 Mar 08 05:55	21° ∺ 01'19	10.56479 AU
minimum elong	9726 Dec 19 04:49	2° そ 53'05	1°56'29	morning rise	9733 Mar 25 14:05	23° ¥ 09′15	
max. Earth dist.	9726 Dec 18 21:09	2° る 50'39	10.31565 AU		9733 Jun 08 15:00	0° Y	
morning rise	9727 Jan 05 20:52	5° る 06'09		retrograde	9733 Jul 04 07:43	0° Ƴ 34'42	
retrograde	9727 Apr 18 13:27	12° る 54'27			9733 Jul 30 08:20	30° Ŗ ₩	

opposition	9733 Sep 10 16:22	27° ¥ 13'58	0°07'25	minimum elong	9739 May 20 14:30	4° Ⅱ 11'08	10/15/35
min. Earth dist.	9733 Sep 10 10:22 9733 Sep 10 19:23	27° X 13'23	8.59118 AU	max. Earth dist.	9739 May 20 14:30		10.78758 AU
direct	9733 Nov 19 18:26	23°\(\frac{1}{4}\)9'21	0.57110710	morning rise	9739 Jun 06 08:13	6° Ⅱ 12'11	10.70730710
desc. node	9733 Dec 08 13:28	24°) (07'14		retrograde	9739 Sep 16 16:48	13° I I32'44	
dese. Hode	9734 Feb 19 21:54	0°Υ		opposition	9739 Nov 25 18:26	10° Ⅱ 11'52	-2°15'07
evening set	9734 Mar 04 01:33	1° Υ 26'07		min. Earth dist.	9739 Nov 25 13:19		8.79282 AU
e venning see	775 Titlar 0 T 01.55	1 12007		direct	9740 Feb 03 13:16	6° Ⅱ 51'37	0.77202710
conjunction	9734 Mar 21 05:12	3° Ƴ 32'02	-0°06'55	evening set	9740 May 14 23:17	14° Ⅱ 08'07	
minimum elong	9734 Mar 21 05:11	3° Υ 32'01		evening sec	> 10 11mg 11 25:17	1. 20007	
behind sun begin	9734 Mar 20 22:36	3° Y '30'01		conjunction	9740 May 31 16:23	16° Ⅱ 08'53	-1°53'35
behind sun end	9734 Mar 21 11:47	3° Y ′34′02		minimum elong	9740 May 31 16:21		1°53'57
max. Earth dist.	9734 Mar 21 02:08		10.61726 AU	max. Earth dist.	9740 May 31 22:07		10.79278 AU
morning rise	9734 Apr 07 05:50	5° Y 37'04	10.01720110	morning rise	9740 Jun 17 10:30	18° Ⅱ 09'58	10.7,52,0110
retrograde	9734 Jul 17 00:29	12° Y ′59'43		retrograde	9740 Sep 28 05:35	25° I 32'11	
opposition	9734 Sep 23 16:52	9° Ƴ 39'15	-0°23'42	opposition	9740 Dec 07 11:16	22° I I10'56	-2°22'22
min. Earth dist.	9734 Sep 23 18:40	9° Ƴ 38'54		min. Earth dist.	9740 Dec 07 05:48		8.79270 AU
direct	9734 Dec 02 20:16	6° Y 15′24		direct	9741 Feb 14 23:56	18° Ⅲ 51'04	
evening set	9735 Mar 16 17:22	13° Ƴ 47'36		evening set	9741 May 27 01:29	26° Ⅱ 06'28	
evening sec	9,00 Hai 10 17.22	15 150		evening sec	>	20 20020	
conjunction	9735 Apr 02 18:20	15° Ƴ 52'09	-0°31'39	conjunction	9741 Jun 12 18:58	28° Ⅱ 07'22	-1°56'58
minimum elong	9735 Apr 02 18:19	15° Ƴ 52'09	0°31'43	minimum elong	9741 Jun 12 18:58	28° Ⅲ 07′22	1°57'21
max. Earth dist.	9735 Apr 02 16:42	15° Y 51'39	10.66620 AU	max. Earth dist.	9741 Jun 13 01:24	28° Ⅱ 09'19	10.78707 AU
morning rise	9735 Apr 19 16:50	17° Ƴ 56′01			9741 Jun 28 08:43	0ංම	
retrograde	9735 Jul 29 14:14	25° Ƴ 16'39		morning rise	9741 Jun 29 14:17	0°908'47	
opposition	9735 Oct 06 15:30	21° Y ′56'19	-0°53'22	retrograde	9741 Oct 10 20:25	7° © 33'13	
min. Earth dist.	9735 Oct 06 16:26	21° Y ′56'09	8.68879 AU	opposition	9741 Dec 20 04:01	4°911'29	-2°23'25
direct	9735 Dec 15 20:39	18° Ƴ 33'18		min. Earth dist.	9741 Dec 19 21:54		8.78157 AU
evening set	9736 Mar 28 04:47	26° Y 01'13		direct	9742 Feb 27 11:35	0°951'49	0.70107110
evening sec) / 50 mm 20 0 mm	20 . 01 13		evening set	9742 Jun 08 04:32	8°906'51	
conjunction	9736 Apr 14 03:10	28° Y ′04'32	-0°54'46	evening sec	77.2 Van 00 01.52	0 20001	
minimum elong	9736 Apr 14 03:08	28° Υ '04'31	0°54'54	conjunction	9742 Jun 24 23:19	10°908'15	-1°55'16
max. Earth dist.	9736 Apr 14 02:27	28° Υ '04'19		minimum elong	9742 Jun 24 23:19		1°55'38
max. Lattii dist.	9736 Apr 29 23:21	0°8	10.70743 AO	max. Earth dist.	9742 Jun 25 07:05		10.77060 AU
morning rise	•	0° と 07'21			9742 Jul 11 20:22	10 3 10 30	10.77000 AC
morning rise	9736 Apr 30 23:53	7° 8 26'49		morning rise	9742 Jul 11 20.22 9742 Oct 23 13:38	12 \$310 19 19°\$37'23	
retrograde	9736 Aug 10 03:08	_	1920/20	retrograde			2010111
opposition	9736 Oct 18 12:15	4° 8 06'31		opposition	9743 Jan 01 21:02	16°515'05	
min. Earth dist.	9736 Oct 18 11:54	_	8.72876 AU	min. Earth dist.	9743 Jan 01 13:50		8.75986 AU
direct	9736 Dec 27 17:13	0° 8 44'18		direct	9743 Mar 11 21:44	12°955'30	
evening set	9737 Apr 09 12:38	8° 8 08'25		evening set	9743 Jun 20 09:28	20°©10'54	
conjunction	9737 Apr 26 08:53	10° 8 10'42	-1°15'15	conjunction	9743 Jul 07 06:18	22°513'06	-1°48'27
minimum elong	9737 Apr 26 08:51	10°810'42		minimum elong	9743 Jul 07 06:19	22°S13'07	
max. Earth dist.	9737 Apr 26 09:53		10.74512 AU	max. Earth dist.	9743 Jul 07 00:19 9743 Jul 07 15:15		1 46 46 10.74408 AU
morning rise	9737 May 13 04:08	10 8 11 00	10.74312 AU	morning rise	9743 Jul 24 05:46	24° © 16'08	10.74408 AU
morning risc	9737 Jun 06 18:43	15° 8		morning risc	9743 Sep 19 10:16	0°Ω	
ratra ara da	9737 Aug 22 14:37	19° 8 31'45		ratra arada	9743 Sep 19 10:10 9743 Nov 05 09:21	0 δι 1° Ω 46'11	
retrograde opposition	9737 Aug 22 14.37 9737 Oct 31 07:15	19 8 31 43	1942120	retrograde	9743 Nov 03 09.21 9743 Dec 23 13:28	30°Rூ	
min. Earth dist.	9737 Oct 31 07:13 9737 Oct 31 04:59	_		omnosition	9744 Jan 14 14:48		2006140
mm. Earm dist.	9/3/ Oct 31 04:59 9737 Nov 16 09:23	15°R 8	8.76031 AU	opposition min. Earth dist.	9744 Jan 14 14:48 9744 Jan 14 07:05	28°\$23'16 28°\$24'44	
11							8.72843 AU
direct	9738 Jan 09 10:22	12° 8 49'54		direct	9744 Mar 23 08:23	25°903'33	
avanina aat	9738 Mar 02 09:32	15° と 20° と 10'50		avanina aat	9744 Jun 11 08:35	0° Ω 2° Ω 20'05	
evening set	9738 Apr 21 17:44	20 01030		evening set	9744 Jul 01 17:10	2 862003	
conjunction	9738 May 08 12:25	22° 8 12'19	-1°32'18	conjunction	9744 Jul 18 16:35	4° Ω 23'23	-1°36'45
minimum elong	9738 May 08 12:23	22° 8 12'19		minimum elong	9744 Jul 18 16:37	4°Ω23'24	
max. Earth dist.	9738 May 08 15:40	_	10.77155 AU	max. Earth dist.	9744 Jul 19 01:11		10.70842 AU
		24° 8 13'42	10.77133 AO			6° Ω 27'38	10.70642 AU
morning rise	9738 May 25 06:35 9738 Jul 22 14:27	0° I		morning rise	9744 Aug 04 19:10 9744 Nov 17 08:30	$14^{\circ}\Omega 00'52$	
ratragrada		0°П 1°П33'10		retrograde		$14^{\circ} 00052$ $10^{\circ} \Omega 37'18$	1940126
retrograde	9738 Sep 04 03:19			opposition	9745 Jan 26 09:35		
	9738 Oct 18 23:29	30°R 8	2002100	min. Earth dist.	9745 Jan 26 02:35		8.68822 AU
opposition	9738 Nov 13 01:11	28° 8 12'34		direct	9745 Apr 04 19:32	7° Ω 17'15	
min. Earth dist.	9738 Nov 12 21:05	28° 8 13'21	8.78194 AU	evening set	9745 Jul 14 04:37	14° Ω 35'43	
direct	9739 Jan 22 01:42	24° 8 51'48			9745 Jul 17 13:28	15° Ω	
	9739 Apr 14 22:23	0°II				•	
evening set	9739 May 03 20:57	2° Ⅱ 10′09		conjunction	9745 Jul 31 07:04	16° Ω 40'21	
		—		minimum elong	9745 Jul 31 07:07	16° Ω 40'22	
conjunction	9739 May 20 14:32	4° Ⅱ 11'08	-1°45'15	max. Earth dist.	9745 Jul 31 14:19	16° &l 42'34	10.66451 AU

morning rise	9745 Aug 17 13:11	18° Ω 46'02		evening set	9751 Sep 30 15:46	1° M 15'04	
retrograde	9745 Nov 30 08:42	26° £ 22'36					
opposition	9746 Feb 08 05:36	22° Ω 58'24	-1°27'12	conjunction	9751 Oct 18 10:59	3° ™ 28'14	1°03'35
min. Earth dist.	9746 Feb 07 23:57	22° Ω 59'30	8.64023 AU	minimum elong	9751 Oct 18 10:57	3°M28'14	1°03'46
direct	9746 Apr 17 08:57	19° Ω 37'48		max. Earth dist.	9751 Oct 18 09:37	3° M 27'49	10.35506 AU
evening set	9746 Jul 26 20:27	26° Ω 59'06		morning rise	9751 Nov 05 07:56	5° ™ 41'56	
				retrograde	9752 Feb 18 00:05	13°M35'19	
conjunction	9746 Aug 13 02:22	29° Ω 05'15	-1°00'27	opposition	9752 Apr 25 23:06	10°M08'42	1°32'20
minimum elong	9746 Aug 13 02:24	29° Ω 05'16	1°00'41	min. Earth dist.	9752 Apr 26 00:31	10°M08'25	8.33818 AU
max. Earth dist.	9746 Aug 13 08:29	29°Ω07'08	10.61358 AU	direct	9752 Jul 02 10:38	6°M₄42'56	
	9746 Aug 20 12:55	0° m		evening set	9752 Oct 13 16:01	14°M31'17	
morning rise	9746 Aug 30 12:02	1° m/ 12'30		evening sec	9752 Oct 17 12:52	15°M	
retrograde	9746 Dec 13 11:37	8° Mp 52'37			7/32 Oct 1/ 12.32	13 110	
•	9747 Feb 21 03:26	5° Mp 27'46	1000/27	agnismation	0752 Oct 21 12:04	16°M45'08	1°24'13
opposition		-		conjunction	9752 Oct 31 12:04		
min. Earth dist.	9747 Feb 20 22:41		8.58630 AU	minimum elong	9752 Oct 31 12:02	16°M45'07	
direct	9747 Apr 30 02:02	2° Mp 06'31		max. Earth dist.	9752 Oct 31 09:16		10.32292 AU
evening set	9747 Aug 08 17:23	9° m ,31′23		morning rise	9752 Nov 18 08:54	18°M59'16	
				retrograde	9753 Mar 02 15:53	26°M53'12	
conjunction	9747 Aug 26 02:55	11° m)39'11		opposition	9753 May 09 08:43	23°M26'44	1°55'22
minimum elong	9747 Aug 26 02:56	11° m ,39'11	0°37'26	min. Earth dist.	9753 May 09 11:03	23°M26'15	8.31194 AU
max. Earth dist.	9747 Aug 26 08:36	11° m)40'56	10.55805 AU	direct	9753 Jul 16 00:07	20° ™ 00'11	
morning rise	9747 Sep 12 15:57	13° m 48'03		evening set	9753 Oct 27 19:10	27° M 52'29	
retrograde	9747 Dec 26 19:08	21° m /31'41			9753 Nov 13 18:10	0° ∡ ¹	
opposition	9748 Mar 05 03:11	18° Mp 06'14	-0°30'27				
min. Earth dist.	9748 Mar 04 22:54	18° m)07'05	8.52951 AU	conjunction	9753 Nov 14 15:19	0° ∡ ¹06'41	1°40'25
direct	9748 May 11 20:53	14° m)44'12		minimum elong	9753 Nov 14 15:17	0° √ 06'40	1°40'45
evening set	9748 Aug 20 20:21	22° m) 13'17		max. Earth dist.	9753 Nov 14 11:32	0° ∡ *05'29	
evening sec	77 10 11ag 20 20.21	22 11/13 17		morning rise	9753 Dec 02 11:16	2°×720'53	10.50217710
conjunction	9748 Sep 07 09:11	24° m 22'42	0°12'04	retrograde	9754 Mar 16 08:04	10°×714'28	
•	•	24° m) 22'42		opposition			2°12'18
minimum elong	9748 Sep 07 09:11	-	0 12 08		9754 May 22 19:35	6° ₹ 48'17	
behind sun begin	9748 Sep 07 04:22	24° Mp 21'13		min. Earth dist.	9754 May 22 22:38	6° √ 47'40	8.29769 AU
behind sun end	9748 Sep 07 14:01	24° m) 24'11	10.50104.444	direct	9754 Jul 29 15:15	3°×21'06	
max. Earth dist.	9748 Sep 07 13:52		10.50126 AU	evening set	9754 Nov 10 23:59	11° ∡ 16′26	
morning rise	9748 Sep 25 01:11	26° m ₂ 33'07				_	
	9748 Oct 25 08:23	0∘ ಹ		conjunction	9754 Nov 28 19:40	13° ∡ ³30'40	1°51'15
retrograde	9749 Jan 08 06:12	4° £ 19'59		minimum elong	9754 Nov 28 19:39	13° ≯ 30'40	1°51'37
asc. node	9749 Mar 01 08:00	2° ≏ 12'01		max. Earth dist.	9754 Nov 28 14:40	13° ∡ ¹29'05	10.29398 AU
opposition	9749 Mar 18 04:54	0° ≏ 54'02	0°01'27	morning rise	9754 Dec 16 14:14	15° ∡ ⁴44'38	
min. Earth dist.	9749 Mar 18 01:30	0° £ 54'42	8.47331 AU	retrograde	9755 Mar 30 00:22	23° ∡ ³36'48	
	9749 Mar 29 17:34	30°R Mp		opposition	9755 Jun 05 07:11	20° ∡ 11′06	2°22'04
direct	9749 May 24 17:48	27° m/31'05		min. Earth dist.	9755 Jun 05 11:28	20° ∡ 10′14	8.29615 AU
	9749 Jul 17 20:51	0∘ ত		direct	9755 Aug 12 07:28	16° ∡ ¹43'26	
evening set	9749 Sep 03 05:17	5° £ 04'54		evening set	9755 Nov 25 04:54	24° ≯ ′40'40	
Z .	1			Č			
conjunction	9749 Sep 20 20:52	7° £ 15'47	0°14'07	conjunction	9755 Dec 12 23:35	26° ₹ ′54'38	1°56'03
minimum elong	9749 Sep 20 20:52	7° £ 15'47	0°14'08	minimum elong	9755 Dec 12 23:34	26° ₹ 54'38	1°56'26
behind sun begin	9749 Sep 20 20:32 9749 Sep 20 17:27	7° ⊆ 14'44	0 1400	max. Earth dist.	9755 Dec 12 16:55		10.29873 AU
behind sun end	9749 Sep 21 00:17	7° ⊆ 16'50		morning rise	9755 Dec 30 16:27	29° 🗷 08'06	10.27673 AC
max. Earth dist.	9749 Sep 20 23:45		10.44656 AU	morning risc	9756 Jan 06 17:50	0°る	
	9749 Sep 20 23:43 9749 Oct 08 15:17		10.44030 AU				
morning rise		9° £ 27'35		retrograde	9756 Apr 11 15:19	6° る 57'53	2024100
retrograde	9750 Jan 21 18:08	17° £ 17'16	0000110	opposition	9756 Jun 17 19:11	3°₹32'49	
opposition	9750 Mar 31 08:59	13° £ 50'56		min. Earth dist.	9756 Jun 18 00:45	3° る 31'42	8.30736 AU
min. Earth dist.	9750 Mar 31 07:06	13° ≏ 51'18	8.42089 AU	direct	9756 Aug 25 01:45	0° る 04'54	
direct	9750 Jun 06 19:57	10° £ 27'02		evening set	9756 Dec 08 08:07	8° る 02'45	
evening set	9750 Sep 16 19:50	18° ≏ 05'48					
				conjunction	9756 Dec 26 01:25	10° る 16'10	1°54'34
conjunction	9750 Oct 04 13:33	20° ≏ 17'58	0°39'46	minimum elong	9756 Dec 26 01:25	10° る 16'10	1°54'57
minimum elong	9750 Oct 04 13:31	20° ≙ 17'57	0°39'52	max. Earth dist.	9756 Dec 25 17:28	10° る 13'39	10.31618 AU
max. Earth dist.	9750 Oct 04 14:05	20° ≏ 18′08	10.39696 AU	morning rise	9757 Jan 12 16:23	12° る 28'54	
morning rise	9750 Oct 22 09:40	22° ჲ 30'52		retrograde	9757 Apr 25 01:59	20° ප 15'31	
Č	9751 Jan 14 12:59	0° M		opposition	9757 Jul 01 06:56	16° る 51'12	2°18'25
retrograde	9751 Feb 04 08:11	0°M22'48		min. Earth dist.	9757 Jul 01 13:14	16° る 49'56	8.33078 AU
- · · · · · · · · · · · · · · · · · · ·	9751 Feb 25 04:07	30°R ≏		direct	9757 Sep 07 21:54	13° る 23'18	
opposition	9751 Apr 13 15:12	26° £ 56'14	1°04'34	evening set	9757 Dec 22 08:23	21° ට 20'26	
min. Earth dist.	9751 Apr 13 15:12	26° £ 56'14		overning set) Dec 22 00.23	21 02020	
	9751 Apr 13 13.12 9751 Jun 20 01:43	23° £ 3014 23° £ 31'22	3.37300 AU	conjunction	9758 Jan 09 00:07	23° る 33'05	1°46'59
direct		23° ≥≥ 31°22		conjunction		23° る 33'05	
	9751 Sep 20 07:11	U IIIG		minimum elong	9758 Jan 09 00:09	23 033 03	1 7/20

9763 Nov 27 02:04

direct

0°Y43'17

conjunction	9770 Jun 07 15:31	22° ∏ 55'05			9776 Jun 25 11:36	0° m	
minimum elong	9770 Jun 07 15:30	22° Ⅱ 55'05		evening set	9776 Aug 02 07:24	4° ™ 09'49	
max. Earth dist.	9770 Jun 07 21:07		10.78276 AU				
morning rise	9770 Jun 24 10:05	24° ∏ 56′26		conjunction	9776 Aug 19 15:22	6°Mp17'11	
	9770 Aug 12 04:51	0ංම		minimum elong	9776 Aug 19 15:24	6°Mp17'11	0°48'09
retrograde	9770 Oct 05 12:33	2°520'25		max. Earth dist.	9776 Aug 19 21:35		10.55757 AU
	9770 Dec 01 00:53	30°R Ⅱ		morning rise	9776 Sep 06 03:03	8° ™ 25'39	
opposition	9770 Dec 14 17:41	28° Ⅱ 58'50	-2°23'38	retrograde	9776 Dec 20 05:51	16°№08'41	
min. Earth dist.	9770 Dec 14 12:15	28° Ⅱ 59'51	8.77704 AU	opposition	9777 Feb 27 16:41	12° ™ 42'47	-0°44'10
direct	9771 Feb 22 04:12	25° Ⅱ 38'57		min. Earth dist.	9777 Feb 27 11:50	12° Mp 43'44	8.53054 AU
	9771 May 08 04:15	0 \circ \odot		direct	9777 May 06 11:35	9° m 20′25	
evening set	9771 Jun 03 01:06	2° © 54'44		evening set	9777 Aug 15 08:07	16° Mp 48′29	
conjunction	9771 Jun 19 19:16	4° 9 56'03	-1°56'36	conjunction	9777 Sep 01 19:25	18° ™ 57'27	-0°23'28
minimum elong	9771 Jun 19 19:16	4° 9 56'03	1°56'59	minimum elong	9777 Sep 01 19:26	18° m ∤57'27	0°23'35
max. Earth dist.	9771 Jun 20 01:28	4°957'56	10.76588 AU	max. Earth dist.	9777 Sep 02 00:20	18° m ∕58'58	10.50352 AU
morning rise	9771 Jul 06 15:25	6° © 57'58		morning rise	9777 Sep 19 10:22	21°M)07'29	
retrograde	9771 Oct 18 04:53	14° 5 24'29		retrograde	9778 Jan 02 14:45	28° m 53'50	
opposition	9771 Dec 27 11:12	11° 5 02'10	-2°21'19	opposition	9778 Mar 12 18:09	25° ™ 27'29	-0°12'52
min. Earth dist.	9771 Dec 27 05:34	11° © 03'14	8.75499 AU	min. Earth dist.	9778 Mar 12 14:26	25° m 28'13	8.47678 AU
direct	9772 Mar 05 13:48	7°542'12		direct	9778 May 19 08:42	22° Mp 04'22	
evening set	9772 Jun 14 05:32	14° © 58'07		asc. node	9778 Aug 10 05:18	27° m) 26'57	
8				evening set	9778 Aug 28 14:44	29° m 36'54	
conjunction	9772 Jul 01 01:18	17°500'07	-1°52'07	0. tg	9778 Aug 31 18:24	0∘ ⊽	
minimum elong	9772 Jul 01 01:19	17°500'07			7770 Hug 31 10.21	~ —	
max. Earth dist.	9772 Jul 01 07:35		10.73903 AU	conjunction	9778 Sep 15 05:10	1° ≏ 47'23	0°02'32
morning rise	9772 Jul 17 23:48	19°902'54	10.73703 AO	minimum elong	9778 Sep 15 05:10	1° - 47′23	0°02'31
retrograde	9772 Oct 29 22:08	26°932'20		behind sun begin	9778 Sep 14 21:56	1° ⊆ 4723	0 02 31
•	9772 Oct 29 22:08 9773 Jan 08 05:01	20 \$32 20 23°\$09'14	2012/44	behind sun end	•	1° ⊆ 4310	
opposition					9778 Sep 15 12:22		10 45102 ATT
min. Earth dist.	9773 Jan 07 23:24		8.72333 AU	max. Earth dist.	9778 Sep 15 09:14		10.45103 AU
direct	9773 Mar 18 01:52	19°549'01		morning rise	9778 Oct 02 22:46	3° £ 58'51	
evening set	9773 Jun 26 12:12	27° © 05'51		retrograde	9779 Jan 16 01:44	11° £ 48'12	0010100
				opposition	9779 Mar 25 21:49	8° £ 21'32	0°19'29
conjunction	9773 Jul 13 10:26	29° © 08'53		min. Earth dist.	9779 Mar 25 18:49	8° £ 22'08	8.42615 AU
minimum elong	9773 Jul 13 10:28	29° © 08'53		direct	9779 Jun 01 10:26	4° ≙ 57'41	
max. Earth dist.	9773 Jul 13 17:32		10.70320 AU	evening set	9779 Sep 11 03:20	12° ≏ 35'01	
	9773 Jul 20 10:13	0 $^{\circ}$ Ω					
morning rise	9773 Jul 30 11:46	1° Ω 12'49		conjunction	9779 Sep 28 20:23	14° ≏ 46'52	
retrograde	9773 Nov 11 19:27	8° Ω 45'28		minimum elong	9779 Sep 28 20:22	14° ≏ 46'52	0°28'37
opposition	9774 Jan 20 23:43	5° Ω 21'34	-1°58'06	max. Earth dist.	9779 Sep 28 23:45	14° ≙ 47'55	10.40286 AU
min. Earth dist.	9774 Jan 20 17:31	5° Ω 22'46	8.68322 AU	morning rise	9779 Oct 16 15:54	16° ≏ 59'32	
direct	9774 Mar 30 14:28	2° Ω 01′00		retrograde	9780 Jan 29 16:43	24° £ 51′23	
evening set	9774 Jul 08 22:04	9° Ω 19'29		opposition	9780 Apr 07 03:39	21° ≏ 24'37	0°51'12
				min. Earth dist.	9780 Apr 07 01:17	21° ≏ 25'05	8.38127 AU
conjunction	9774 Jul 25 23:18	11° Ω 23'48	-1°28'21	direct	9780 Jun 13 14:11	18° ഫ 00'01	
minimum elong	9774 Jul 25 23:21	11° £ 23′48	1°28'40	evening set	9780 Sep 23 21:49	25° ≏ 42'17	
max. Earth dist.	9774 Jul 26 07:12	11° Ω 26′13	10.65971 AU				
morning rise	9774 Aug 12 03:49	13° Ω 29'06		conjunction	9780 Oct 11 16:38	27° ≙ 55'14	0°53'22
	9774 Aug 25 02:13	15° Ω		minimum elong	9780 Oct 11 16:36	27° ≙ 55'14	0°53'32
retrograde	9774 Nov 24 20:15	21° Ω 05'11		max. Earth dist.	9780 Oct 11 18:30	27° £ 55'49	10.36154 AU
opposition	9775 Feb 02 19:42	17° Ω 40'33	-1°37'55		9780 Oct 28 08:34	0°M	
min. Earth dist.	9775 Feb 02 13:05	17° Ω 41'49	8.63626 AU	morning rise	9780 Oct 29 13:13	0°M08'48	
	9775 Mar 14 23:12	15°R Ω		retrograde	9781 Feb 11 09:57	8°M02'26	
direct	9775 Apr 12 02:50	14° Ω 19'30		opposition	9781 Apr 20 11:32	4°M35'45	1°20'34
	9775 May 09 21:58	15° Ω		min. Earth dist.	9781 Apr 20 10:31	4°M35'57	8.34460 AU
evening set	9775 Jul 21 12:14	21° Ω 40′26		direct	9781 Jun 26 21:06	1°M10'26	0.5 1 100 110
e venning see	7775 Jul 21 12.11	21 001020		evening set	9781 Oct 07 21:10	8°M57'29	
conjunction	9775 Aug 07 16:48	23° Ω 46'13	-1°09'54	e vennig set	7,01 OC 07 21.10	5 HV3 / 49	
minimum elong	9775 Aug 07 16:50	23°Ω46'13		conjunction	9781 Oct 25 16:57	11°ML11'13	1°15'3/
max. Earth dist.	_		10.61044 AU			11°ML11'12	
	9775 Aug 08 00:30		10.01044 AU	minimum elong	9781 Oct 25 16:55		
morning rise	9775 Aug 25 00:50	25° Ω 53'03		max. Earth dist.	9781 Oct 25 16:38		10.32946 AU
	9775 Oct 01 09:45	0°M)		morning rise	9781 Nov 12 13:49	13°M25'21	
retrograde	9775 Dec 07 23:19	3° m/32'39	1010157	, ,	9781 Nov 25 15:32	15°M	
opposition	9776 Feb 15 17:14	0° m, 07'19		retrograde	9782 Feb 25 03:22	21°M19'52	104553
min. Earth dist.	9776 Feb 15 11:02		8.58459 AU	opposition	9782 May 03 21:23	17°M53'27	
	9776 Feb 17 06:45	30°R€		min. Earth dist.	9782 May 03 22:08		8.31820 AU
direct	9776 Apr 23 18:00	26° Ω 45'39			9782 Jun 15 17:35	15°RM	

direct	9782 Jul 10 09:15	14° M 27'29		min. Earth dist.	9788 Jul 22 02:52	7°≈51'57	8.39032 AU
direct	9782 Aug 03 23:22	15°M		direct	9788 Sep 28 20:26	4°≈26'21	0.57032 AO
evening set	9782 Oct 22 00:04	22°ML18'45		evening set	9789 Jan 12 10:38	12°≈20'20	
e venning see	370 2 0 01 22 00.0.	22 11010 10		ovening sev	,,o, tan 12 10.50	12 10 20 20	
conjunction	9782 Nov 08 20:10	24°MJ32'56	1°33'50	conjunction	9789 Jan 29 23:34	14° ≈ 31'30	1°23'47
minimum elong	9782 Nov 08 20:07	24°M32'55	1°34'09	minimum elong	9789 Jan 29 23:36	14° ≈ 31'31	1°24'04
max. Earth dist.	9782 Nov 08 17:35	24°MJ32'07	10.30837 AU	max. Earth dist.	9789 Jan 29 14:40	14° ≈ 28'42	10.41081 AU
morning rise	9782 Nov 26 16:38	26°M47'15			9789 Feb 02 18:23	15° ≈	
C	9782 Dec 24 02:59	0° ∡ ¹		morning rise	9789 Feb 16 09:12	16° ≈ 41'41	
retrograde	9783 Mar 10 20:01	4° х 41'40		retrograde	9789 May 28 17:34	24°≈18'37	
opposition	9783 May 17 08:38	1° √ 15'41	2°05'35	opposition	9789 Aug 04 05:21	20°≈56'37	1°31'58
min. Earth dist.	9783 May 17 11:09	1° ∡ 15'10	8.30335 AU	min. Earth dist.	9789 Aug 04 12:04	20°≈55'18	8.43437 AU
	9783 Jun 02 08:50	30°RML		direct	9789 Oct 12 13:49	17° ≈ 30'04	
direct	9783 Jul 24 00:33	27° M 49'08		evening set	9790 Jan 25 23:47	25° ≈ 20'35	
	9783 Sep 12 13:50	0° ∡ ¹					
evening set	9783 Nov 05 05:19	5° ∡ ¹43'44		conjunction	9790 Feb 12 10:37	27° ≈ 30'33	1°03'36
-				minimum elong	9790 Feb 12 10:39	27° ≈ 30'34	1°03'50
conjunction	9783 Nov 23 01:07	7° ∡ ¹58'01	1°47'05	max. Earth dist.	9790 Feb 12 02:26	27° ≈ 28'00	10.45831 AU
minimum elong	9783 Nov 23 01:05	7° ∡ ′58′01	1°47'27	morning rise	9790 Mar 01 18:07	29° ≈ 39'31	
max. Earth dist.	9783 Nov 22 20:30	7° ∡¹ 56'33	10.29915 AU		9790 Mar 04 13:19	0° ℋ	
morning rise	9783 Dec 10 20:30	10° ∡ 12'11		retrograde	9790 Jun 10 18:11	7°) 12′21	
retrograde	9784 Mar 23 12:32	18° ₹ 05'24		opposition	9790 Aug 17 12:48	3°) € 50'55	1°04'55
opposition	9784 May 29 20:34	14° ∡ ³39'57	2°18'31	min. Earth dist.	9790 Aug 17 18:26	3°) 49′49	8.48399 AU
min. Earth dist.	9784 May 30 00:21	14° ₹ 39'11	8.30035 AU	direct	9790 Oct 26 05:07	0°) 24'55	
direct	9784 Aug 05 17:53	11° ∡ 12'56		evening set	9791 Feb 08 07:26	8°) 11'14	
evening set	9784 Nov 18 10:59	19° ∡ ¹09'45					
				conjunction	9791 Feb 25 16:03	10°) 1 9′54	0°40'26
conjunction	9784 Dec 06 06:04	21° ∡ ¹23'51	1°54'32	minimum elong	9791 Feb 25 16:04	10°) (19′55	0°40'35
minimum elong	9784 Dec 06 06:03	21° ∡ ¹23'51	1°54'55	max. Earth dist.	9791 Feb 25 09:28	10°) (17′52	10.51007 AU
max. Earth dist.	9784 Dec 06 00:09	21° ∡ ¹21'59	10.30170 AU	morning rise	9791 Mar 14 21:14	12°) €27'34	
morning rise	9784 Dec 23 23:48	23° ∡ ³37'34		retrograde	9791 Jun 23 17:28	19°) € 56'34	
	9785 Feb 24 05:01	8°0		opposition	9791 Aug 30 18:15	16°) ₹35'33	0°34'58
retrograde	9785 Apr 06 03:58	1° る 28'39		min. Earth dist.	9791 Aug 30 22:22	16°) 34′46	8.53663 AU
	9785 May 17 17:47	30°₽ ⋌		direct	9791 Nov 08 15:25	13°) (10′15	
opposition	9785 Jun 12 08:57	28° ∡ 03'48	2°23'55	evening set	9792 Feb 21 09:28	20°) €51'53	
min. Earth dist.	9785 Jun 12 13:29	28° ₰ 02'53	8.30851 AU				
direct	9785 Aug 19 12:41	24° ∡ ³36'31		conjunction	9792 Mar 09 15:35	22° ∺ 59'11	0°15'33
	9785 Nov 11 00:10	0°ರ		minimum elong	9792 Mar 09 15:36	22° ∺ 59'11	0°15'38
evening set	9785 Dec 02 15:21	2° る 34'20		behind sun begin	9792 Mar 09 13:52	22° ∺ 58'39	
				behind sun end	9792 Mar 09 17:20	22° 升 59'43	
conjunction	9785 Dec 20 09:22	4° ප 48'00	1°55'45	max. Earth dist.	9792 Mar 09 11:09	22°) 57'49	10.56341 AU
minimum elong	9785 Dec 20 09:22	4° ප 48'00	1°56'08	morning rise	9792 Mar 26 18:21	25°) €05'31	
max. Earth dist.	9785 Dec 20 02:29	4° ප 45'49	10.31491 AU		9792 May 11 14:28	0 ° Υ	
morning rise	9786 Jan 07 01:11	7° る 01'04		retrograde	9792 Jul 05 13:02	2° Ƴ 31′10	
retrograde	9786 Apr 19 17:06	14° る 49'20			9792 Sep 01 01:55	30° ₹ ₩	
opposition	9786 Jun 25 21:11	11° る 25'10	2°21'30	opposition	9792 Sep 11 21:31	29°) 1 0′28	0°03'43
min. Earth dist.	9786 Jun 26 02:36	11° පි 24'05	8.32655 AU	min. Earth dist.	9792 Sep 12 00:30	29° ₩ 09'53	8.58972 AU
direct	9786 Sep 02 08:13	7° る 57'48		desc. node	9792 Oct 26 07:27	26° 升 18′22	
evening set	9786 Dec 16 17:35	15° そ 55'32		direct	9792 Nov 20 22:10	25°) 45′54	
					9793 Feb 03 08:42	0 ° $\mathbf{\gamma}$	
conjunction	9787 Jan 03 10:13	18° る 08'34		evening set	9793 Mar 05 06:12	3° Y 22'45	
minimum elong	9787 Jan 03 10:14	18° る 08'35	1°51'06				
max. Earth dist.	9787 Jan 03 02:25		10.33780 AU	conjunction	9793 Mar 22 09:40	5° Y 28'38	
morning rise	9787 Jan 20 23:59	20°る20'48		minimum elong	9793 Mar 22 09:39	5° Y 28'38	0°09'53
retrograde	9787 May 03 04:50	28° පි 05'41		behind sun begin	9793 Mar 22 03:52	5° Y 26'52	
opposition	9787 Jul 09 08:53	24° ⋜ 42'18	2°11'30	behind sun end	9793 Mar 22 15:26	5° Y 30′24	
min. Earth dist.	9787 Jul 09 15:12	24° ⋜ 41'02	8.35395 AU	max. Earth dist.	9793 Mar 22 06:37		10.61580 AU
direct	9787 Sep 16 02:29	21° る 15'02		morning rise	9793 Apr 08 10:11	7° Ƴ 33'42	
evening set	9787 Dec 30 16:25	29° る 11'30		retrograde	9793 Jul 18 05:12	14° Y 56'34	
	9788 Jan 06 04:46	0° ≈		opposition	9793 Sep 24 22:23	11° Y 36'06	
				min. Earth dist.	9793 Sep 25 00:33	11° Ƴ 35'41	8.64085 AU
conjunction	9788 Jan 17 07:20	1° ≈ 23'42		direct	9793 Dec 04 02:00	8° Ƴ 12'17	
minimum elong	9788 Jan 17 07:22	1° ≈ 23'43	1°40'10	evening set	9794 Mar 17 22:03	15° Ƴ 44'30	
max. Earth dist.	9788 Jan 16 22:49	1° ≈ 21'01	10.37005 AU				
morning rise	9788 Feb 03 19:02	3° ≈ 34'58		conjunction	9794 Apr 03 22:48	17° Y 49'02	-0°34'30
retrograde	9788 May 15 13:29	11° ≈ 15'59		minimum elong	9794 Apr 03 22:46	17° Ƴ 49'02	
opposition	9788 Jul 21 19:51	7° ≈ 53'20	1°54'38	max. Earth dist.	9794 Apr 03 20:45	17° Ƴ 48'25	10.66486 AU

	0704 A 20 21-10	19° Ƴ 52'54	Davida diat	9800 Jun 15 06:49	00000(114 14	0.70722 ATT
morning rise	9794 Apr 20 21:19	19° γ 3234 27° Υ 13'46	max. Earth dist.		0°506'14 10	0.78733 AU
retrograde	9794 Jul 30 19:31		morning rise	9800 Jul 01 18:58	2° © 05'28	
opposition	9794 Oct 07 21:09	23° Y 53'24 -0°56'44	retrograde	9800 Oct 13 01:48	9° © 29'56	
min. Earth dist.	9794 Oct 07 22:05	23° Y 53'14 8.68757	11	9800 Dec 22 09:27	6° © 08'07 -2	2°22'56
direct	9794 Dec 17 02:01	20° Ƴ 30′23	min. Earth dist.	9800 Dec 22 02:29	6° © 09'26 8	3.78194 AU
evening set	9795 Mar 30 09:32	27° Ƴ 58'18	direct	9801 Mar 01 16:22	2° © 48'28	
			evening set	9801 Jun 10 08:57	10° © 03'19	
conjunction	9795 Apr 16 07:47	0° 8 01'36 -0°57'21				
minimum elong	9795 Apr 16 07:45	0° ප 01'35 0°57'31	conjunction	9801 Jun 27 03:57	12° 5 04'44 -1	°54'34
max. Earth dist.	9795 Apr 16 07:18	0° 8 01'27 10.70828	AU minimum elong	9801 Jun 27 03:58	12° © 04'44 1	°54'56
	9795 Apr 16 02:34	0°8	max. Earth dist.	9801 Jun 27 12:34	12° © 07'21 10	
morning rise	9795 May 03 04:26	2° 8 04'25	morning rise	9801 Jul 14 01:07	14° © 06'49	0.77100110
retrograde	9795 Aug 12 07:43	9° 8 24'05	retrograde	9801 Oct 25 18:54	21° © 33'53	
•	•	. •	_			01.057
opposition	9795 Oct 20 17:58	6° 8 03'42 -1°23'17	opposition	9802 Jan 04 02:07	18° © 11'32 -2	
min. Earth dist.	9795 Oct 20 16:50	6° 8 03'55 8.72772		9802 Jan 03 18:22	18° © 13'00 8	3.76039 AU
direct	9795 Dec 29 23:02	2° 8 41'30	direct	9802 Mar 14 02:41	14° 9 51'57	
evening set	9796 Apr 10 17:24	10° 8 05'34	evening set	9802 Jun 22 13:54	22° © 07'12	
conjunction	9796 Apr 27 13:37	12° 8 07'50 -1°17'27	conjunction	9802 Jul 09 10:52	24° © 09'26 -1	°47'09
minimum elong	9796 Apr 27 13:35	12° 8 07'49 1°17'41	minimum elong	9802 Jul 09 10:53	24° © 09'26 1	°47'31
max. Earth dist.	9796 Apr 27 15:41	12° 8 08'28 10.74416	AU max. Earth dist.	9802 Jul 09 19:41	24°9512'07 10	0.74475 AU
morning rise	9796 May 14 08:41	14° 8 09'47	morning rise	9802 Jul 26 10:36	26° © 12'29	
morning rise	9796 May 21 11:01	15° 8	morning rist	9802 Aug 29 22:48	0°Ω	
retrograde	9796 Aug 23 20:42	21° 8 29'04	retrograde	9802 Nov 07 15:15	3° Ω 42'27	
•	=	<u> </u>	•			1904153
opposition	9796 Nov 01 13:08	18° 8 08'35 -1°45'56	opposition	9803 Jan 16 19:44	0°Ω19'32 -2	
min. Earth dist.	9796 Nov 01 10:00	18° 8 09'11 8.75951	AU min. Earth dist.	9803 Jan 16 12:16	0° Ω 20'58 8	3.72920 AU
	9796 Dec 25 13:31	15° ₹		9803 Jan 21 02:13	30° ₹ 5	
direct	9797 Jan 10 16:44	14° 8 47'09	direct	9803 Mar 26 12:30	26° © 59'49	
	9797 Jan 26 15:38	15° 8		9803 May 26 07:51	0 $^{\circ}\Omega$	
evening set	9797 Apr 22 22:26	22° 8 07'56	evening set	9803 Jul 04 21:30	4° Ω 16′13	
conjunction	9797 May 09 17:03	24° 8 09'25 -1°34'01	conjunction	9803 Jul 21 21:03	6° Ω 19'32 -1	°34'55
minimum elong	9797 May 09 17:01	24° 8 09'25 1°34'19	minimum elong	9803 Jul 21 21:05	6° Ω 19'33 1	°35'14
max. Earth dist.	9797 May 09 21:04	24° 8 10'38 10.77087	· ·	9803 Jul 22 05:08	6° Ω 22'00 10	0 70946 AU
morning rise	9797 May 26 11:07	26° 8 10'47	morning rise	9803 Aug 07 23:59	8° Ω 23'51	0.70710710
morning risc	•	0°II	morning risc	•		
. 1	9797 Jun 30 08:38		. 1	9803 Oct 17 12:03	15° Ω	
retrograde	9797 Sep 05 09:43	3° Ⅲ 30′23	retrograde	9803 Nov 20 12:48	15° Ω 56'58	
opposition	9797 Nov 14 07:07	0° Ⅱ 09'44 -2°03'47		9803 Dec 24 22:38	15°R Ω	
min. Earth dist.	9797 Nov 14 02:51	0° Ⅱ 10'32 8.78147	T F	9804 Jan 29 14:22	12° Ω 33'25 -1	
	9797 Nov 16 10:40	30° ₹ 8	min. Earth dist.	9804 Jan 29 07:45	12° Ω 34'41 8	8.68949 AU
direct	9798 Jan 23 05:47	26° 8 48'56	direct	9804 Apr 06 23:31	9° Ω 13'22	
	9798 Mar 27 22:08	0° I I		9804 Jul 03 07:11	15° Ω	
evening set	9798 May 05 01:44	4° Ⅱ 07'10	evening set	9804 Jul 16 08:53	16° Ω 31'43	
-	•					
conjunction	9798 May 21 19:10	6° Ⅱ 08'07 -1°46'24	conjunction	9804 Aug 02 11:37	18° Ω 36'23 -1	°18'16
minimum elong	9798 May 21 19:09	6° I 108'07 1°46'45	minimum elong	9804 Aug 02 11:40	18° Ω 36'24 1	
max. Earth dist.	9798 May 22 00:03	6° П 09'36 10.78725	-	9804 Aug 02 19:07	18° Ω 38'40 10	
morning rise	9798 Jun 07 12:57	8° П 09'11	morning rise	9804 Aug 19 18:01	20° Ω 42'06	0.00024710
retrograde	9798 Sep 17 21:12	8 Д0911 15°Д29'48	retrograde	9804 Aug 19 18:01 9804 Dec 02 12:07	20° Ω 18'32	
•	•		- C			02.4100
opposition	9798 Nov 27 00:13	12° I 108'52 -2°16'11	opposition	9805 Feb 10 10:05	24°Ω54'20 -1	
min. Earth dist.	9798 Nov 26 19:27	12° Ⅲ 09'46 8.79269		9805 Feb 10 04:14	24° Ω 55'28 8	3.64237 AU
direct	9799 Feb 04 18:31	8° Ⅱ 48'36	direct	9805 Apr 19 14:43	21° Ω 33'45	
evening set	9799 May 17 03:57	16° Ⅱ 04'59	evening set	9805 Jul 29 00:44	28° Ω 54'52	
				9805 Aug 06 23:44	0° m	
conjunction	9799 Jun 02 21:01	18° Ⅲ 05'45 -1°54'08				
minimum elong	9799 Jun 02 21:00	18° Ⅲ 05'44 1°54'31	conjunction	9805 Aug 15 07:00	1° Mp 01'04 -0)°57'50
max. Earth dist.	9799 Jun 03 02:36	18° Ⅲ 07′26 10.79280	AU minimum elong	9805 Aug 15 07:02	1°Mp01'04 0	0°58'03
morning rise	9799 Jun 19 15:16	20° I 106'49	max. Earth dist.	9805 Aug 15 14:03	1° mp 03'13 10	
retrograde	9799 Sep 30 10:35	27° I I29'06	morning rise	9805 Sep 01 16:49	3° mp 08'19	
opposition	9799 Dec 09 16:56	24° I 107'47 -2°22'39	retrograde	9805 Dec 15 16:41	10° m) 48'12	
min. Earth dist.		24°II08'51 8.79286	•		-	0.5710.2
	9799 Dec 09 11:14		11	9806 Feb 23 07:33	7° m 23'22 -0	
direct	9800 Feb 17 06:27	20° I I47'53	min. Earth dist.	9806 Feb 23 02:11		8.58918 AU
evening set	9800 May 29 05:56	28° Ⅱ 03'07	direct	9806 May 02 06:04	4° Mp 02'08	
			evening set	9806 Aug 10 21:43	11° m 26'49	
conjunction	9800 Jun 14 23:35	0°904'02 -1°56'54				
minimum elong	9800 Jun 14 23:35	0°504'02 1°57'17	conjunction	9806 Aug 28 07:26	13° Mp 34'37 -0)°34'26
	9800 Jun 14 10:16	0ං ව	minimum elong	9806 Aug 28 07:28	13° m 34'37 0)°34'35

max. Earth dist.	9806 Aug 28 13:28	13° m 36'28	10.56108 AU	direct	9812 Jul 18 03:26	21°M54'42	
morning rise	9806 Sep 14 20:34	15° m 43'29		evening set	9812 Oct 30 00:02	29° M 47'08	
retrograde	9806 Dec 29 00:24	23°My26'51			9812 Oct 31 17:35	0° ∡ ¹	
opposition	9807 Mar 08 07:04	20°Mp01'26					
min. Earth dist.	9807 Mar 08 02:37	20° m 02'19	8.53258 AU	conjunction	9812 Nov 16 20:07	2° ∡ 01'19	1°41'42
direct	9807 May 14 23:38	16° Mp 39′26		minimum elong	9812 Nov 16 20:04		1°42'03
evening set	9807 Aug 24 00:42	24° Mp 08'25		max. Earth dist.	9812 Nov 16 16:02		10.30296 AU
				morning rise	9812 Dec 04 15:51	4° ∡ 15'28	
conjunction	9807 Sep 10 13:35	26° Mp 17'48		retrograde	9813 Mar 18 13:13	12° ∡ 08′56	
minimum elong	9807 Sep 10 13:35	26° Mp 17'48	0°09'13	opposition	9813 May 24 23:09	8° ∡ ′42'49	2°13'30
behind sun begin	9807 Sep 10 07:31	26° Mp 15'56		min. Earth dist.	9813 May 25 02:42	8° ∡ ¹42'06	8.29830 AU
behind sun end	9807 Sep 10 19:40	26° m 19'39		direct	9813 Jul 31 17:56	5° ∡ 15'37	
max. Earth dist.	9807 Sep 10 17:37	-•	10.50429 AU	evening set	9813 Nov 13 04:54	13° ⋌ 11'06	
morning rise	9807 Sep 28 05:44	28° m 28'12				_	
	9807 Oct 11 03:18	0∘ ⊽		conjunction	9813 Dec 01 00:24	15° ₹ '25'19	1°51'54
retrograde	9808 Jan 11 09:47	6° Ω 14'49		minimum elong	9813 Dec 01 00:22	15° ∡ 25′18	1°52'17
asc. node	9808 Jan 21 12:03	6° Ω 09'32		max. Earth dist.	9813 Nov 30 18:24		10.29441 AU
opposition	9808 Mar 20 08:40	2° Ω 48'56	0°05'03	morning rise	9813 Dec 18 18:51	17° ⋌ ³39'15	
min. Earth dist.	9808 Mar 20 05:53	2° Ω 49'29	8.47621 AU	retrograde	9814 Apr 01 04:47	25° ⋌ '31'17	
	9808 May 01 13:07	30°R, Mp		opposition	9814 Jun 07 10:56	22° ⋌ ¹05'39 _	2°22'28
direct	9808 May 26 21:59	29° Mp 26'01		min. Earth dist.	9814 Jun 07 16:06	22° ∡ °04'36	8.29648 AU
	9808 Jun 21 02:44	0∘ ⊽		direct	9814 Aug 14 11:34	18° ∡ ³37'57	
evening set	9808 Sep 05 09:41	6° £ 59'47		evening set	9814 Nov 27 09:38	26° ₹ 35'19	
i	0000 0 22 01.17	09 0 10/20	001750		0014 D 15 04:00	200.740115	1957101
conjunction	9808 Sep 23 01:17	9° £ 10'39	0°16'59	conjunction	9814 Dec 15 04:09	28° 🗷 49'15	1°56'01
minimum elong	9808 Sep 23 01:17	9° Ω 10'39	0°17'00	minimum elong	9814 Dec 15 04:08	28° 🗷 49'15	1°56'25
max. Earth dist.	9808 Sep 23 03:02		10.44929 AU	max. Earth dist.	9814 Dec 14 20:25		10.29894 AU
morning rise	9808 Oct 10 19:53	11° £ 22'25			9814 Dec 24 12:14	0°る	
retrograde	9809 Jan 23 22:02	19° £ 11'53	0027100	morning rise	9815 Jan 01 21:00	1°る02'43	
opposition	9809 Apr 02 12:35	15° Ω 45'38	0°37'08	retrograde	9815 Apr 14 17:53	8°る52'22	2022141
min. Earth dist.	9809 Apr 02 11:37	15° Ω 45'49	8.42340 AU	opposition	9815 Jun 20 23:00	5°る27'21 5°る26'08	2°23'41
direct	9809 Jun 08 23:39	12° £ 21'44 20° £ 00'32		min. Earth dist. direct	9815 Jun 21 05:06	1°る59'25	8.30747 AU
evening set	9809 Sep 19 00:20	20 ==00 32		evening set	9815 Aug 28 07:17 9815 Dec 11 12:47	1 03923 9° る 57'21	
conjunction	9809 Oct 06 18:05	22° ≏ 12'40	0°42'25	evening set	9813 DCC 11 12.47	9 03/21	
minimum elong	9809 Oct 06 18:03	22° ⊆ 12'40	0°42'33	conjunction	9815 Dec 29 06:00	12° る 10'45	1°53'53
max. Earth dist.	9809 Oct 06 18:01	22° ₽ 12'39		minimum elong	9815 Dec 29 06:01	12°る10'45	1°54'16
morning rise	9809 Oct 24 14:13	24° £ 25'33	10.57720710	max. Earth dist.	9815 Dec 28 21:32		10.31617 AU
morning rise	9809 Dec 16 01:54	0°M		morning rise	9816 Jan 15 20:57	14° る 23'28	10.51017 710
retrograde	9810 Feb 06 12:01	2°M17'16		retrograde	9816 Apr 27 05:24	22° る 09'59	
remograde	9810 Apr 01 01:51	30°R ≏		opposition	9816 Jul 03 10:41	18° る 45'41	2°17'10
opposition	9810 Apr 15 18:39	28° ♀ 50'48	1°07'39	min. Earth dist.	9816 Jul 03 16:54	18° る 44'26	8.33061 AU
min. Earth dist.	9810 Apr 15 19:01	28° £ 50'43	8.37707 AU	direct	9816 Sep 10 02:18	15° る 17'46	0.55001110
direct	9810 Jun 22 05:34	25° £ 25'57		evening set	9816 Dec 24 12:51	23° る 14'54	
	9810 Sep 05 15:31	0°M		8			
evening set	•						
2	9810 Oct 02 20:18	3°[[L09'44		conjunction	9817 Jan 11 04:37	25° る 27'33	1°45'39
	9810 Oct 02 20:18	3°M09'44		conjunction minimum elong	9817 Jan 11 04:37 9817 Jan 11 04:38	25°පි27'33 25°පි27'34	1°45'39 1°46'01
conjunction	9810 Oct 02 20:18 9810 Oct 20 15:35	3°IL09'44 5°IL22'52	1°05'54	•		25° る 27'34	
conjunction minimum elong			1°05'54 1°06'07	minimum elong	9817 Jan 11 04:38	25° る 27'34	1°46'01
	9810 Oct 20 15:35	5°M22'52 5°M22'51		minimum elong max. Earth dist.	9817 Jan 11 04:38 9817 Jan 10 20:22	25° පි 27'34 25° පි 24'57	1°46'01
minimum elong	9810 Oct 20 15:35 9810 Oct 20 15:33	5°M22'52 5°M22'51	1°06'07	minimum elong max. Earth dist.	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28	25° පි27'34 25° පි24'57 27° පි39'21	1°46'01
minimum elong max. Earth dist.	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22	5°M22'52 5°M22'51 5°M22'29	1°06'07	minimum elong max. Earth dist. morning rise	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34	25°る27'34 25°る24'57 27°る39'21 0°≈	1°46'01 10.34524 AU
minimum elong max. Earth dist.	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23	5°M22'52 5°M22'51 5°M22'29 7°M36'31	1°06'07	minimum elong max. Earth dist. morning rise retrograde	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09	1°46'01 10.34524 AU
minimum elong max. Earth dist. morning rise	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M	1°06'07	minimum elong max. Earth dist. morning rise retrograde opposition	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45	1°06'07	minimum elong max. Earth dist. morning rise retrograde opposition	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise retrograde	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45	1°06'07 10.35675 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°R♂	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise retrograde opposition	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13	1°06'07 10.35675 AU 1°34'56	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33	25°る27'34 25°る24'57 27°る39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°Rる 28°る31'00	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58	1°06'07 10.35675 AU 1°34'56	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°R♂ 28°♂31'00 0°≈	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28	1°06'07 10.35675 AU 1°34'56	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°R♂ 28°♂31'00 0°≈	1°46'01 10.34524 AU 2°03'24
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M	1°06'07 10.35675 AU 1°34'56	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°₹♂ 28°♂31'00 0°≈ 6°≈26'06	1°46'01 10.34524 AU 2°03'24 8.36477 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M	1°06'07 10.35675 AU 1°34'56 8.33966 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:52 9818 Jan 24 22:54 9818 Jan 24 15:33	25° で27'34 25° で24'57 27° で39'21 0° 総 5° 総22'09 1° 総57'29 30° Rで 28° で31'00 0° 総 6° 総26'06 8° 総37'49 8° 総37'49 8° 総35'31	1°46'01 10.34524 AU 2°03'24 8.36477 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38 9811 Nov 03 16:43 9811 Nov 03 16:43	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M 16°M25'55	1°06'07 10.35675 AU 1°34'56 8.33966 AU 1°26'04 1°26'21	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:54 9818 Jan 24 15:33 9818 Feb 11 09:32	25°G27'34 25°G24'57 27°G39'21 0°& 5°&22'09 1°&58'37 1°&57'29 30°RG 28°G31'00 0°& 6°&26'06 8°&37'49 8°&37'49 8°&35'31 10°&48'32	1°46'01 10.34524 AU 2°03'24 8.36477 AU 1°31'55 1°32'14
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38 9811 Nov 03 16:43 9811 Nov 03 16:41 9811 Nov 03 14:12	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M 16°M25'55	1°06'07 10.35675 AU 1°34'56 8.33966 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:52 9818 Jan 24 22:54 9818 Jan 24 15:33 9818 Feb 11 09:32 9818 Mar 20 12:53	25°♂27'34 25°♂24'57 27°♂39'21 0°≈ 5°≈22'09 1°≈58'37 1°≈57'29 30°R♂ 28°♂31'00 0°≈ 6°≈26'06 8°≈37'49 8°≈37'49 8°≈35'31 10°≈48'32 15°≈	1°46'01 10.34524 AU 2°03'24 8.36477 AU 1°31'55 1°32'14
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38 9811 Nov 03 16:43 9811 Nov 03 16:41 9811 Nov 03 14:12 9811 Nov 21 13:21	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M 16°M25'55 18°M39'45 18°M39'44 18°M39'44	1°06'07 10.35675 AU 1°34'56 8.33966 AU 1°26'04 1°26'21	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:52 9818 Jan 24 15:33 9818 Feb 11 09:32 9818 May 23 21:21	25° \(\frac{7}{327} \) 25° \(\frac{7}{324} \) 5° \(\frac{7}{32} \) 21' 0° \(\times \) 5° \(\times 22' \) 09' 1° \(\times 57' \) 29' 30° \(\frac{7}{30} \) 6° \(\times 26' \) 06' \(\times 26' \) 06' \(\times 37' \) 49' 8° \(\times 37' \) 49' 8° \(\times 37' \) 49' 8° \(\times 35' \) 31' 10° \(\times 48' \) 32' 15° \(\times 18' \times 27' \) 18	1°46'01 10.34524 AU 2°03'24 8.36477 AU 1°31'55 1°32'14 10.38460 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	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38 9811 Nov 03 16:43 9811 Nov 03 16:41 9811 Nov 03 14:12 9811 Nov 21 13:21 9812 Mar 04 19:46	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M 16°M25'55 18°M39'45 18°M39'45 18°M38'57 20°M53'49 28°M47'40	1°06'07 10.35675 AU 1°34'56 8.33966 AU 1°26'04 1°26'21 10.32413 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	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:52 9818 Jan 24 15:33 9818 Feb 11 09:32 9818 May 23 21:21 9818 Jul 30 07:27	25° \(\frac{7}{327} \) 27° \(\frac{7}{32} \) 21' 0° \(\frac{7}{32} \) 21' 0° \(\frac{7}{32} \) 28' \(\frac{7}{32} \) 28' \(\frac{7}{32} \) 30° \(\frac{7}{32} \) 28' \(\frac{7}{32} \) 30° \(\frac{7}{32} \) 28' \(\frac{7}{32} \) 31'00 0° \(\frac{7}{32} \) 6° \(\frac{2}{32} \) 6' \(\frac{7}{32} \) 32' \(\frac{7}{32} \) 8' \(\frac{7}{32} \) 31' \(\frac{7}{32} \) 32' \(\frac{7}{32} \) 15' \(\frac{7}{32} \) 18' \(\frac{7}{32} \) 18' \(\frac{7}{32} \) 15' \(\frac{7}{32} \) 18' \(\frac{7}{32} \) 15' \(\frac{7}{32} \) 18' \(\frac{7}{32} \) 13' \(\frac{7}{32} \) 18' \(1°46'01 10.34524 AU 2°03'24 8.36477 AU 1°31'55 1°32'14 10.38460 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	9810 Oct 20 15:35 9810 Oct 20 15:33 9810 Oct 20 14:22 9810 Nov 07 12:23 9811 Jan 27 11:31 9811 Feb 20 03:12 9811 Mar 15 21:30 9811 Apr 29 02:32 9811 Apr 29 03:45 9811 Jul 05 15:26 9811 Oct 05 00:29 9811 Oct 16 20:38 9811 Nov 03 16:43 9811 Nov 03 16:41 9811 Nov 03 14:12 9811 Nov 21 13:21	5°M22'52 5°M22'51 5°M22'29 7°M36'31 15°M 15°M29'45 15°RM 12°M03'13 12°M02'58 8°M37'28 15°M 16°M25'55 18°M39'45 18°M39'44 18°M38'57 20°M53'49 28°M47'40 25°M21'15	1°06'07 10.35675 AU 1°34'56 8.33966 AU 1°26'04 1°26'21	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	9817 Jan 11 04:38 9817 Jan 10 20:22 9817 Jan 28 17:28 9817 Feb 17 09:34 9817 May 10 14:57 9817 Jul 16 21:41 9817 Jul 17 03:21 9817 Aug 12 08:38 9817 Sep 23 20:33 9817 Nov 04 18:58 9818 Jan 07 08:46 9818 Jan 24 22:52 9818 Jan 24 15:33 9818 Feb 11 09:32 9818 May 23 21:21	25° \(\frac{7}{327} \) 25° \(\frac{7}{324} \) 5° \(\frac{7}{32} \) 21' 0° \(\times \) 5° \(\times 22' \) 09' 1° \(\times 57' \) 29' 30° \(\frac{7}{30} \) 6° \(\times 26' \) 06' \(\times 26' \) 06' \(\times 37' \) 49' 8° \(\times 37' \) 49' 8° \(\times 37' \) 49' 8° \(\times 35' \) 31' 10° \(\times 48' \) 32' 15° \(\times 18' \times 27' \) 18	1°46'01 10.34524 AU 2°03'24 8.36477 AU 1°31'55 1°32'14 10.38460 AU

direct	9818 Oct 07 13:21	11° ≈ 37'28		opposition	9824 Oct 15 02:20	0° ප 37'44	-1°11'07
direct	9818 Dec 11 15:39	11 ≈ 37 28		min. Earth dist.	9824 Oct 15 01:46		8.72061 AU
evening set	9819 Jan 21 00:08	19° ≈ 29'32		mm. Darm dist.	9824 Oct 23 10:32	30°RY	0.72001710
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,, -		direct	9824 Dec 24 05:55	27° Y 15'45	
conjunction	9819 Feb 07 12:12	21° ≈ 40'06	1°13'33		9825 Feb 21 03:33	0°8	
minimum elong	9819 Feb 07 12:15	21° ≈ 40'07	1°13'49	evening set	9825 Apr 06 08:20	4° 8 41'31	
max. Earth dist.	9819 Feb 07 05:29	21° ≈ 38′00	10.43201 AU	Č	1		
morning rise	9819 Feb 24 20:39	23° ≈ 49'38		conjunction	9825 Apr 23 05:25	6° 8 44'11	-1°08'19
	9819 Apr 26 23:24	0° ∀		minimum elong	9825 Apr 23 05:23	6° 8 44'10	1°08'31
retrograde	9819 Jun 06 00:52	1°) 24′16		max. Earth dist.	9825 Apr 23 06:07	6° 8 44'24	10.73931 AU
	9819 Jul 16 22:59	30° R ≈		morning rise	9825 May 10 01:10	8° 8 46'27	
opposition	9819 Aug 12 15:36	28° ≈ 02'20	1°18'07		9825 Jul 14 05:12	15° 8	
min. Earth dist.	9819 Aug 12 20:56	28° ≈ 01'18	8.45826 AU	retrograde	9825 Aug 19 10:01	16° 8 05'45	
direct	9819 Oct 21 03:37	24° ≈ 35'55			9825 Sep 25 11:00	15° ₹ 8	
	9820 Jan 13 23:19	0°) €		opposition	9825 Oct 27 22:25	12° 8 45'56	-1°35'42
evening set	9820 Feb 03 10:19	2°) 24′08		min. Earth dist.	9825 Oct 27 21:24	12° 8 46'07	8.75627 AU
				direct	9826 Jan 06 01:33	9° 8 24'39	
conjunction	9820 Feb 20 20:02	4°) 33′27	0°51'39		9826 Apr 03 05:24	15° 8	
minimum elong	9820 Feb 20 20:04	4°) €33'27	0°51'50	evening set	9826 Apr 18 15:04	16° 8 46'58	
max. Earth dist.	9820 Feb 20 13:44		10.48504 AU				
morning rise	9820 Mar 09 02:17	6°) 41′43		conjunction	9826 May 05 10:13	18° 8 48'43	
retrograde	9820 Jun 18 01:02	14° ∺ 12'22		minimum elong	9826 May 05 10:10	18° 8 48'43	
opposition	9820 Aug 24 22:03	10° 米 51′10	0°49'21	max. Earth dist.	9826 May 05 11:36	_	10.76910 AU
min. Earth dist.	9820 Aug 25 02:54	10° ∺ 50'14	8.51287 AU	morning rise	9826 May 22 04:47	20° 8 50'18	
direct	9820 Nov 02 15:17	7° ∺ 25'35		retrograde	9826 Aug 31 22:29	28° 8 09'40	
evening set	9821 Feb 15 14:53	15° ∺ 09'23		opposition	9826 Nov 09 17:14	24° 8 49'38	
				min. Earth dist.	9826 Nov 09 14:59	_	8.78048 AU
conjunction	9821 Mar 04 22:06	17° ∺ 17'19	0°27'26	direct	9827 Jan 18 17:34	21° 8 29'00	
minimum elong	9821 Mar 04 22:07	17° 米 17'19	0°27'32	evening set	9827 Apr 30 19:22	28° 8 48'33	
max. Earth dist.	9821 Mar 04 16:35		10.54105 AU		9827 May 10 17:26	$\Pi^{\circ}0$	
morning rise	9821 Mar 22 02:10	19° ∺ 24'17					
retrograde	9821 Jun 30 20:36	26° ∺ 51′24		conjunction	9827 May 17 13:15	0° ∏ 49'42	
opposition	9821 Sep 07 02:19	23° ∺ 30'46	0°18'32	minimum elong	9827 May 17 13:13	0° Ⅱ 49'41	
min. Earth dist.	9821 Sep 07 05:56	23°) € 30'04	8.56917 AU	max. Earth dist.	9827 May 17 16:23		10.78694 AU
direct	9821 Nov 16 01:16	20°) €06'05		morning rise	9827 Jun 03 07:06	2° ∏ 50'52	
evening set	9822 Feb 28 14:17	27°) 45′13		retrograde	9827 Sep 13 10:42	10° Ⅱ 11'09	
				opposition	9827 Nov 22 11:10	6° Ⅱ 50'45	
conjunction	9822 Mar 17 18:57	29°) € 51'44	0°02'11	min. Earth dist.	9827 Nov 22 07:17	6° Ⅱ 51'29	8.79255 AU
minimum elong	9822 Mar 17 18:57	29°) 51'44	0°02'13	direct	9828 Jan 31 08:18	3° ∏ 30'36	
behind sun begin	9822 Mar 17 11:51	29°) (49'34		evening set	9828 May 11 22:25	10° Ⅱ 48'05	
behind sun end	9822 Mar 18 02:03	29°) 53'54	10.50500 133		0000016 00 15 40	100T 10155	1051100
max. Earth dist.	9822 Mar 17 15:07		10.59722 AU	conjunction	9828 May 28 15:43	12° Ⅱ 48'57	
	9822 Mar 18 21:45	0° Υ		minimum elong	9828 May 28 15:42	12° Ⅱ 48'56	
morning rise	9822 Apr 03 20:42	1°Υ57'23		max. Earth dist.	9828 May 28 20:37		10.79280 AU
desc. node	9822 Apr 18 16:46	3° Y 42'13 9° Y 21'28		morning rise	9828 Jun 14 09:33	14° Ⅱ 50'00	
retrograde	9822 Jul 13 14:48		0912146	retrograde	9828 Sep 25 01:20	22° Ⅱ 11'49	2020115
opposition min. Earth dist.	9822 Sep 20 04:15 9822 Sep 20 06:00	6° Y 01'16 6° Y 00'56		opposition min. Earth dist.	9828 Dec 04 04:24 9828 Dec 03 23:29	18° Ⅱ 50'55	-2°20'15 8.79272 AU
direct	9822 Sep 20 00:00 9822 Nov 29 07:22	2° Υ 37'32	6.02430 AU	direct		15° II 31'02	6.79272 AU
evening set	9822 Nov 29 07.22 9823 Mar 13 08:41	10° Υ 11'58		evening set	9829 Feb 11 20:17 9829 May 24 01:00	22° II 47'08	
evening set	7023 WIAI 13 VO.41	10 1138		evening set	3023 Way 24 U1.00	22 11 4/08	
conjunction	9823 Mar 30 10:47	12° Ƴ 17'06	-0°23'01	conjunction	9829 Jun 09 18:22	24° Ⅱ 48'02	-1°56'07
minimum elong	9823 Mar 30 10:46	12° \begin{picture}(17.06) \\ 12^{\circ} \begin{picture}(17.05) \\ 12^{\circ} \		minimum elong	9829 Jun 09 18:22	24° II 48'02 24° II 48'02	
max. Earth dist.	9823 Mar 30 10:46		10.65077 AU	max. Earth dist.	9829 Jun 09 23:47		10.78705 AU
morning rise	9823 Apr 16 10:12	14° Y 21'28	10.050// AU	morning rise	9829 Jun 26 13:06	24 H 4941 26° H 49'22	10.70703 AU
retrograde	9823 Apr 10 10:12 9823 Jul 26 08:18	21° Y $43'12$		morning 1130	9829 Jul 24 23:56	20 H4922 0°9	
opposition	9823 Oct 03 04:16	18° Υ 23'17	-0°43'06	retrograde	9829 Oct 07 16:15	4°913'11	
min. Earth dist.	9823 Oct 03 04:31	18° Y 23'14	8.67573 AU	opposition	9829 Dec 16 21:31	0°951'39	-2°23'28
direct	9823 Dec 12 07:47	15° Υ 00'29	3.0,3,3110	min. Earth dist.	9829 Dec 16 21:31 9829 Dec 16 16:27		8.78139 AU
evening set	9824 Mar 24 22:25	22° Υ 30'21		Darm dist.	9829 Dec 28 09:53	30°RⅡ	0.,015,710
2. J	, (2.1.1ml 2 / 22.2)	1 30 21		direct	9830 Feb 24 06:21	27° I I31'50	
conjunction	9824 Apr 10 21:56	24° Ƴ 34'11	-0°46'49	*****	9830 Apr 20 11:40	0°95	
minimum elong	9824 Apr 10 21:54	24° Υ 34'10	0°46'57	evening set	9830 Jun 05 03:56	4°9347'19	
max. Earth dist.	9824 Apr 10 21:34 9824 Apr 10 22:05		10.69902 AU	t.timg set	,050 tun 05 05.50	. — 1/1/	
morning rise	9824 Apr 27 19:16	26° Y 37'24	20.0,702710	conjunction	9830 Jun 21 22:08	6°948'35	-1°56'11
	9824 May 27 22:47	0° 8		minimum elong	9830 Jun 21 22:08	6°948'35	
retrograde	9824 Aug 06 21:31	3° 8 57'31		max. Earth dist.	9830 Jun 22 03:52		10.77024 AU
		2 00,01		Landi dibt.		2 20020	

	0020 1 1 00 10 20	00050120		. 1	0027 1 04 15 24	00 0 42110	
morning rise	9830 Jul 08 18:30	8°950'28		retrograde	9837 Jan 04 15:34	0° ჲ 43'18	
retrograde	9830 Oct 20 06:53	16° © 16'49			9837 Feb 02 23:25	30°R, Mp	
opposition	9830 Dec 29 14:44	12° © 54'32		opposition	9837 Mar 14 19:51	27° m 16'56	
min. Earth dist.	9830 Dec 29 09:21	12° © 55'33	8.75928 AU	min. Earth dist.	9837 Mar 14 16:01	27° Mp 17'42	8.47891 AU
direct	9831 Mar 08 18:08	9° © 34'37		direct	9837 May 21 11:57	23° m 53'48	
evening set	9831 Jun 17 08:10	16° © 50'13		asc. node	9837 Jul 03 05:21	25° m 29'09	
					9837 Aug 18 15:56	0∘ ⊽	
conjunction	9831 Jul 04 04:08	18° © 52'12	-1°51'07	evening set	9837 Aug 30 17:03	1° ≏ 26'15	
minimum elong	9831 Jul 04 04:09	18° © 52'13	1°51'30				
max. Earth dist.	9831 Jul 04 10:50	18° © 54'15	10.74326 AU	conjunction	9837 Sep 17 07:41	3° £ 36'45	0°05'17
morning rise	9831 Jul 21 02:46	20°954'58		minimum elong	9837 Sep 17 07:40	3° ≏ 36'45	0°05'16
retrograde	9831 Nov 02 01:40	28° © 24'13		behind sun begin	9837 Sep 17 00:41	3° ჲ 34'36	
opposition	9832 Jan 11 08:20	25° © 01'08	-2°11'08	behind sun end	9837 Sep 17 14:39	ვ° ჲ 38'53	
min. Earth dist.	9832 Jan 11 02:13	25°902'18	8.72743 AU	max. Earth dist.	9837 Sep 17 12:04		10.45279 AU
direct	9832 Mar 20 05:35	21°540'58	0.727.0710	morning rise	9837 Oct 05 01:15	5° Ω 48'10	100277110
evening set	9832 Jun 28 14:42	28°957'27		retrograde	9838 Jan 18 04:35	13° ⊆ 37'19	
evening set	9832 Jul 07 06:29	0°Ω		opposition	9838 Mar 27 23:17	10° ⊆ 10'39	0°22'49
	9032 Jul 07 00.29	0 86					
	0022 1 1 15 12 12	10.000120	1041104	min. Earth dist.	9838 Mar 27 20:03	10° £ 11'18	8.42755 AU
conjunction	9832 Jul 15 13:12	1° Ω 00′29		direct	9838 Jun 03 11:12	6° Ω 46'46	
minimum elong	9832 Jul 15 13:14	1° Ω 00′29		evening set	9838 Sep 13 05:36	14° ≏ 24'03	
max. Earth dist.	9832 Jul 15 21:07		10.70718 AU				
morning rise	9832 Aug 01 14:39	3° Ω 04'24		conjunction	9838 Sep 30 22:39	16° ≏ 35'54	0°31'09
retrograde	9832 Nov 13 23:02	10° Ω 36'49		minimum elong	9838 Sep 30 22:38	16° ≏ 35'54	0°31'14
opposition	9833 Jan 23 02:42	7° Ω 12'57	-1°55'54	max. Earth dist.	9838 Oct 01 01:42	16° ≏ 36'51	10.40385 AU
min. Earth dist.	9833 Jan 22 19:54	7° Ω 14'15	8.68702 AU	morning rise	9838 Oct 18 18:08	18° ≏ 48'33	
direct	9833 Apr 01 16:39	3° £ 52′25		retrograde	9839 Jan 31 19:23	26° ♀ 40'13	
evening set	9833 Jul 11 00:37	11° Ω 10'37		opposition	9839 Apr 10 05:01	23° ₽ 13'26	0°54'17
				min. Earth dist.	9839 Apr 10 02:59	23° £ 13'51	8.38192 AU
conjunction	9833 Jul 28 02:02	13° Ω 14'55	-1°26'22	direct	9839 Jun 16 14:58	19° ≏ 48'47	
minimum elong	9833 Jul 28 02:05	13°Ω14'55		evening set	9839 Sep 27 00:02	27° Ω 31'07	
max. Earth dist.	9833 Jul 28 09:51		10.66337 AU	evening set	7037 Bep 27 00.02	27 —3107	
max. Earth dist.	9833 Aug 11 11:24	15° Ω	10.00337 710	conjunction	9839 Oct 14 18:47	29° ≏ 44'03	0°55'42
morning rise	9833 Aug 14 06:45	15° Ω 20'13		minimum elong	9839 Oct 14 18:47 9839 Oct 14 18:45	29° £ 44'02	0°55'53
morning rise	•			· ·			
retrograde	9833 Nov 26 23:01	22° Ω 56'01	1025112	max. Earth dist.	9839 Oct 14 19:31		10.36181 AU
opposition	9834 Feb 04 22:18	19° Ω 31'24			9839 Oct 16 21:38	0°M	
min. Earth dist.	9834 Feb 04 15:52		8.63971 AU	morning rise	9839 Nov 01 15:24	1°M57'36	
direct	9834 Apr 14 05:25	16° Ω 10′22		retrograde	9840 Feb 14 11:07	9°M51'05	
evening set	9834 Jul 23 14:45	23° £ 31′04		opposition	9840 Apr 22 12:47	6° ™ 24'25	1°23'14
				min. Earth dist.	9840 Apr 22 12:42	6°M24'26	8.34453 AU
conjunction	9834 Aug 09 19:24	25° Ω 36′50	-1°07'32	direct	9840 Jun 28 23:14	2°M59'01	
minimum elong	9834 Aug 09 19:26	25° Ω 36'51	1°07'47	evening set	9840 Oct 09 23:23	10°M46'13	
max. Earth dist.	9834 Aug 10 02:11	25° Ω 38'55	10.61377 AU				
morning rise	9834 Aug 27 03:44	27° Ω 43'41		conjunction	9840 Oct 27 19:05	12° ™ 59'57	1°17'30
	9834 Sep 15 18:34	o° my		minimum elong	9840 Oct 27 19:02	12°M59'56	1°17'46
retrograde	9834 Dec 10 02:17	5° m/22'58		max. Earth dist.	9840 Oct 27 17:34	12°M59'28	10.32903 AU
opposition	9835 Feb 17 19:39	1° m 57'41	-1°09'51		9840 Nov 12 18:30	15°M	
min. Earth dist.	9835 Feb 17 14:14		8.58768 AU	morning rise	9840 Nov 14 16:00	15°M14'03	
	9835 Mar 16 17:21	30°R€		retrograde	9841 Feb 27 03:59	23°M08'29	
direct	9835 Apr 26 19:49	28° Ω 36'01		opposition	9841 May 05 22:33	19°M42'07	1°47'59
direct	9835 Jun 06 02:29	0° m)		min. Earth dist.	9841 May 06 00:05	19°M41'48	8.31745 AU
ovening set	9835 Aug 05 09:43	5° m) 59'58		direct	9841 Jul 12 10:55	16°M16'05	6.31743 AU
evening set	9855 Aug 05 09.45	3 1113938					
. ,.	0025 4 22 17 51	00.00.00110	0045100	evening set	9841 Oct 24 02:13	24°M07'31	
conjunction	9835 Aug 22 17:51	8° m ,07'19					
minimum elong	9835 Aug 22 17:53	8° Mp 07'20		conjunction	9841 Nov 10 22:15	26°M21'43	1°35'17
max. Earth dist.	9835 Aug 22 23:31		10.56052 AU	minimum elong	9841 Nov 10 22:13		1°35'36
morning rise	9835 Sep 09 05:46	10° m) 15'47		max. Earth dist.	9841 Nov 10 19:11	26° ™ 20'44	10.30732 AU
retrograde	9835 Dec 23 07:24	17° m 58'33		morning rise	9841 Nov 28 18:39	28°M36'01	
opposition	9836 Mar 01 18:48	14° m 32'40	-0°40'50		9841 Dec 10 07:15	0° ⊀	
min. Earth dist.	9836 Mar 01 14:26	14° m 33'31	8.53322 AU	retrograde	9842 Mar 12 21:38	6° ₰ ³30'26	
direct	9836 May 08 14:11	11° m) 10'17		opposition	9842 May 19 09:48	3° ₹ 04'28	2°07'02
evening set	9836 Aug 17 10:24	18° m 38'13		min. Earth dist.	9842 May 19 12:23	3° ∡ 03'57	8.30210 AU
-	-	•			9842 Jul 05 18:38	30°RM	
conjunction	9836 Sep 03 21:59	20° Mp 47'10	-0°20'43	direct	9842 Jul 26 01:59	29°M37'53	
minimum elong	9836 Sep 03 22:00	20° Mp 47'11			9842 Aug 15 07:50	0° √	
max. Earth dist.	9836 Sep 04 03:05		10.50596 AU	evening set	9842 Nov 07 07:26	7° ∡ ³32'42	
	9836 Sep 21 13:01	20° mp 48° 43° 111° 22° mp 57' 11	10.50570 AU	o tolling sot	JOIN 01 01.20	, , 3474	
morning rise	9836 Dec 06 13:04	22 اللي 12 الم		conjunction	9842 Nov 25 03:16	9° ∡ 747'01	1°47'58
	7030 DCC 00 13.04	v ==		conjunction	7072 INUV 23 U3.10) , , 4 /Ul	1 7/30

minimum elong

max. Earth dist.

9849 Feb 14 12:25

9849 Feb 14 04:40

29°≈19'29

1°01'27

29°≈17'04 10.45787 AU

evening set

9855 Apr 13 20:03

11°**8**57'19

•			`	**		, .	
conjunction	9855 Apr 30 16:12	13° 8 59'37	-1°19'28	max. Earth dist.	9861 Jul 10 22:40	26° © 05'55	10.74349 AU
minimum elong	9855 Apr 30 16:10	13° 8 59'37	1°19'43	morning rise	9861 Jul 27 14:25	28° © 06'31	
max. Earth dist.	9855 Apr 30 18:55	14° 8 00'27	10.74063 AU		9861 Aug 12 23:24	$0^{\circ}\Omega$	
	9855 May 08 22:32	15° 8		retrograde	9861 Nov 08 18:26	5° Ω 36'31	
morning rise	9855 May 17 11:09	16° 8 01'37		opposition	9862 Jan 17 23:43	2° Ω 13'33	-2°02'55
retrograde	9855 Aug 27 01:10	23° 8 21'16		min. Earth dist.	9862 Jan 17 16:37		8.72829 AU
opposition	9855 Nov 04 16:53	20° 8 00'44			9862 Feb 18 22:48	30°ષ્દ્	
min. Earth dist.	9855 Nov 04 13:42		8.75598 AU	direct	9862 Mar 27 15:45	28° © 53'47	
direct	9856 Jan 13 18:36	16° 8 39'18		_	9862 May 02 15:40	0 ° Ω	
evening set	9856 Apr 25 01:16	24° 8 00'15		evening set	9862 Jul 06 00:50	6° Ω 10′10	
conjunction	9856 May 11 19:43	26° 8 01'44	-1°35'34	conjunction	9862 Jul 23 00:39	8° Ω 13'32	-1°33'05
minimum elong	9856 May 11 19:41	26° 8 01'44	1°35'54	minimum elong	9862 Jul 23 00:41	8° Ω 13'33	1°33'25
max. Earth dist.	9856 May 11 23:31	26° 8 02'54	10.76736 AU	max. Earth dist.	9862 Jul 23 09:02	8° Ω 16′05	10.70902 AU
morning rise	9856 May 28 13:49	28° 8 03'10		morning rise	9862 Aug 09 03:52	10° Ω 17'54	
	9856 Jun 14 10:59	$\Pi^{\circ}0$			9862 Sep 22 07:52	15° Ω	
retrograde	9856 Sep 07 12:29	5° Ⅱ 23'07		retrograde	9862 Nov 21 15:19	17° Ω 51′00	
opposition	9856 Nov 16 11:06	2° Ⅱ 02'24			9863 Jan 23 15:36	15°R Ω	
min. Earth dist.	9856 Nov 16 07:09		8.77811 AU	opposition	9863 Jan 30 18:09	14° Ω 27'25	
	9856 Dec 15 13:30	30° ₹ 8		min. Earth dist.	9863 Jan 30 11:11		8.68953 AU
direct	9857 Jan 25 09:19	28° 8 41'36		direct	9863 Apr 09 04:48	11° Ω 07'20	
	9857 Mar 06 06:13	0°Ⅱ 5°Ⅱ59'58			9863 Jun 17 19:51 9863 Jul 18 12:13	15° Ω	
evening set	9857 May 07 04:40	5°Щ59′58		evening set	9863 Jul 18 12:13	18° Ω 25'36	
conjunction	9857 May 23 22:03	8° Ⅱ 00'57	-1°47'26	conjunction	9863 Aug 04 15:18	20° Ω 30′19	-1°16'00
minimum elong	9857 May 23 22:02	8° II 00'56	1°47'48	minimum elong	9863 Aug 04 15:20	20° Ω 30′20	1°16'17
max. Earth dist.	9857 May 24 02:44	8° Ⅱ 02'22	10.78403 AU	max. Earth dist.	9863 Aug 04 23:54	20° Ω 32'57	10.66689 AU
morning rise	9857 Jun 09 15:59	10° Ⅱ 02'04		morning rise	9863 Aug 21 21:51	22° Ω 36′05	
retrograde	9857 Sep 20 01:04	17° Ⅲ 23′00			9863 Nov 19 00:47	0° ™	
opposition	9857 Nov 29 04:12	14° Ⅱ 02'00	-2°17'07	retrograde	9863 Dec 04 17:06	0° My $12'25$	
min. Earth dist.	9857 Nov 28 23:16		8.78965 AU		9863 Dec 20 10:22	30° R Ω	
direct	9858 Feb 06 22:45	10° Ⅱ 41'42		opposition	9864 Feb 12 13:42	26° Ω 48'11	
evening set	9858 May 19 06:58	17° Ⅱ 58'11		min. Earth dist.	9864 Feb 12 06:56		8.64373 AU
		—		direct	9864 Apr 20 17:39	23° Ω 27'37	
conjunction	9858 Jun 05 00:10	19° Ⅱ 59'00			9864 Jul 23 08:35	0° m/	
minimum elong	9858 Jun 05 00:09	19° Ⅱ 58'59		evening set	9864 Jul 30 04:10	0° Mp 48'34	
max. Earth dist.	9858 Jun 05 06:29		10.78991 AU		0064 4 16 10 41	20m 54146	005511.4
morning rise	9858 Jun 21 18:29	22°∏00'08		conjunction	9864 Aug 16 10:41	2° M 54'46	
retrograde opposition	9858 Oct 02 14:32 9858 Dec 11 20:54	29° Ⅱ 22'41 26° Ⅱ 01'16	2022152	minimum elong max. Earth dist.	9864 Aug 16 10:43 9864 Aug 16 18:31	2° Mp 54'47	10.61832 AU
min. Earth dist.	9858 Dec 11 14:21		8.79015 AU	morning rise	9864 Sep 02 20:39	5° My 02'03	10.01632 AU
direct	9859 Feb 19 09:51	20 H 02 30 22° H 41'22	8.79013 AU	retrograde	9864 Dec 16 20:42	12° Mp 41'40	
evening set	9859 May 31 09:02	29° II 56'39		opposition	9865 Feb 24 10:54	9° m) 16'50	-0°53'42
evening set	9859 May 31 20:20	0°9		min. Earth dist.	9865 Feb 24 05:01		8.59213 AU
	,, ,			direct	9865 May 03 08:43	5° m 55'36	0.07.2.0
conjunction	9859 Jun 17 02:52	1°957'37	-1°56'45	evening set	9865 Aug 12 01:14	13° m) 20'05	
minimum elong	9859 Jun 17 02:52	1° 9 57'37	1°57'09			•	
max. Earth dist.	9859 Jun 17 11:06	2°500'07	10.78482 AU	conjunction	9865 Aug 29 11:02	15° m 27'50	-0°31'39
morning rise	9859 Jul 03 22:17	3°959'06		minimum elong	9865 Aug 29 11:03	15°M 27'51	0°31'47
retrograde	9859 Oct 15 06:00	11° © 23'48		max. Earth dist.	9865 Aug 29 16:44	15° m 29'35	10.56472 AU
opposition	9859 Dec 24 13:30	8° 5 01'53	-2°22'24	morning rise	9865 Sep 16 00:21	17° m 36'40	
min. Earth dist.	9859 Dec 24 05:52	8° © 03'20	8.77966 AU	retrograde	9865 Dec 30 03:04	25° m 19'39	
direct	9860 Mar 02 20:22	4°9542'14		opposition	9866 Mar 09 10:05	21°M 54'17	-0°23'21
evening set	9860 Jun 11 12:12	11° © 57'05		min. Earth dist.	9866 Mar 09 06:00		8.53677 AU
	00001 20 07 10	12000000	1052140	direct	9866 May 16 03:12	18° Mp 32'17	
conjunction	9860 Jun 28 07:19	13°958'34		evening set	9866 Aug 25 04:05	26° Mp 01'01	
minimum elong	9860 Jun 28 07:20	13°958'34			0066 9 11 16 50	200 m. 10121	0006110
max. Earth dist.	9860 Jun 28 16:06		10.76910 AU	conjunction	9866 Sep 11 16:59	28° Mp 10'21	
morning rise retrograde	9860 Jul 15 04:42 9860 Oct 27 00:12	16°©00'43 23°©27'53		minimum elong behind sun begin	9866 Sep 11 17:00 9866 Sep 11 10:12	28° Mp 10'21 28° Mp 08'16	0°06'22
opposition	9860 Oct 27 00:12 9861 Jan 05 06:13	23°92753 20°905'29	-2°15'41	behind sun begin	9866 Sep 11 10:12 9866 Sep 11 23:47	28° Mp 12'26	
min. Earth dist.	9861 Jan 04 22:34		8.75873 AU	max. Earth dist.	9866 Sep 11 23:47 9866 Sep 11 20:18	-	10.50890 AU
direct	9861 Mar 15 05:12	20 906 36 16°945'51	0.13013 AU	max. Earth tist.	9866 Sep 26 13:10	0° ت 0° ي	10.50050 AU
evening set	9861 Jun 23 17:13	24°901'05		morning rise	9866 Sep 29 09:19	0° ⊆ 20'42	
	5001 July 25 17.15	0103		asc. node	9866 Dec 12 12:16	0 — 20 4 2 7° Ω 17'55	
conjunction	9861 Jul 10 14:19	26°503'22	-1°45'50	retrograde	9867 Jan 12 12:49	8° Ω 06'54	
minimum elong	9861 Jul 10 14:21	26°903'23		opposition	9867 Mar 22 11:26	4° ≙ 41'04	0°08'33
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min. Earth dist. direct evening set	9867 Mar 22 09:14 9867 May 29 00:37 9867 Sep 07 12:51	4° £ 41'30 1° £ 18'09 8° £ 51'41	8.48110 AU	retrograde opposition min. Earth dist. direct	9873 Apr 02 05:14 9873 Jun 08 12:23 9873 Jun 08 18:06 9873 Aug 15 14:23	27° × 19'54 23° × 54'23 23° × 53'14 20° × 26'44	2°22'45 8.29939 AU
conjunction minimum elong	9867 Sep 25 04:33 9867 Sep 25 04:32	11° ჲ 02'29 11° ჲ 02'29	0°19'44 0°19'47	evening set	9873 Nov 28 11:50 9873 Dec 11 06:21	28°メ24'02 0°る	
max. Earth dist.	9867 Sep 25 06:06		10.45434 AU		0072 D 16 06 15	00727155	1055157
morning rise retrograde	9867 Oct 12 23:11 9868 Jan 26 00:05	13° ≙ 14'11 21° ≙ 03'13		conjunction minimum elong	9873 Dec 16 06:15 9873 Dec 16 06:15	0°る37'55 0°る37'55	1°55'57 1°56'21
opposition	9868 Apr 03 14:59	17° £ 37'02	0°40'25	max. Earth dist.	9873 Dec 15 00:15	0° ろ 35'21	10.30146 AU
min. Earth dist.	9868 Apr 03 14:09	17° ⊆ 37'12	8.42853 AU	morning rise	9874 Jan 02 23:00	2° ප 51'18	10.50110110
direct	9868 Jun 10 02:59	14° £ 13′10		retrograde	9874 Apr 15 19:07	10°₹40'46	
evening set	9868 Sep 20 03:29	21° ≏ 51'46		opposition	9874 Jun 22 00:20	7° る 15'49	2°23'12
				min. Earth dist.	9874 Jun 22 06:19	7° る 14'37	8.30955 AU
conjunction	9868 Oct 07 21:20	24° ≙ 03'49	0°44'57	direct	9874 Aug 29 08:57	3° ₹ 47'56	
minimum elong	9868 Oct 07 21:19	24° ≙ 03'48	0°45'06	evening set	9874 Dec 12 14:44	11° る 45'47	
max. Earth dist.	9868 Oct 07 21:40		10.40426 AU				
morning rise	9868 Oct 25 17:21	26° £ 16'35		conjunction	9874 Dec 30 07:59	13°る59'10	1°53'11
	9868 Nov 27 08:33 9869 Feb 07 13:27	0° ጤ 4° ጤ 07'54		minimum elong max. Earth dist.	9874 Dec 30 08:00	13° る 59'10	1°53'34 10.31783 AU
retrograde opposition	9869 Apr 16 20:38	0°M41'30	1°10'35	morning rise	9874 Dec 29 23:47 9875 Jan 16 22:46	15 03034 16° る 11'50	10.51785 AU
min. Earth dist.	9869 Apr 16 20:40	0°M41'30	8.38206 AU	retrograde	9875 Apr 29 07:09	10 3 11 30	
iiiii. Eartii dist.	9869 Apr 25 13:32	30°R <u>₽</u>	0.30200710	opposition	9875 Jul 05 11:57	20°る33'56	2°15'56
direct	9869 Jun 23 08:48	27° £ 16'43		min. Earth dist.	9875 Jul 05 17:55	20° る 32'45	8.33176 AU
	9869 Aug 19 02:44	0° M		direct	9875 Sep 12 03:53	17° る 06'03	
evening set	9869 Oct 03 23:21	5° M 00'19		evening set	9875 Dec 26 14:41	25° පි 03'10	
conjunction	9869 Oct 21 18:38	7° M 13'22	1°08'05	conjunction	9876 Jan 13 06:28	27° る 15'48	1°44'23
minimum elong	9869 Oct 21 18:36	7°ML13'22	1°08'19	minimum elong	9876 Jan 13 06:29	27° る 15'49	1°44'45
max. Earth dist.	9869 Oct 21 17:40	7°M13'04	10.36153 AU	max. Earth dist.	9876 Jan 12 22:31	27° る 13'18	10.34592 AU
morning rise	9869 Nov 08 15:13	9°M26'54		morning rise	9876 Jan 30 19:07	29° る 27'34	
	9869 Dec 30 13:42	15° M ₊			9876 Feb 04 04:53	0° ≈	
retrograde	9870 Feb 21 05:36	17° M 19'46		retrograde	9876 May 11 16:19	7° ≈ 10'17	
	9870 Apr 16 02:35	15°RM	1005101	opposition	9876 Jul 17 23:02	3°≈46'47	2°01'30
opposition	9870 Apr 30 04:23	13°M.53'19	1°37'21	min. Earth dist.	9876 Jul 18 04:57	3°≈45'36	8.36489 AU
min. Earth dist.	9870 Apr 30 05:29 9870 Jul 06 16:52	13°M53'05 10°M27'37	8.34430 AU	direct evening set	9876 Sep 24 22:09 9877 Jan 08 10:28	0°≈19'10 8°≈14'15	
direct	9870 Sep 19 22:15	10 1162737 15°M		evening set	98// Jan 08 10.28	0 201413	
evening set	9870 Oct 17 23:28	18°M15'54		conjunction	9877 Jan 26 00:27	10° ≈ 25'57	1°30'09
e venning see	3070 GGC 17 23:20	10 1101001		minimum elong	9877 Jan 26 00:29	10°≈25'58	1°30'28
conjunction	9870 Nov 04 19:26	20°M29'38	1°27'46	max. Earth dist.	9877 Jan 25 16:51		10.38426 AU
minimum elong	9870 Nov 04 19:23	20°M29'38	1°28'05	morning rise	9877 Feb 12 10:59	12° ≈ 36′39	
max. Earth dist.	9870 Nov 04 16:27	20° ML $28'42$	10.32852 AU		9877 Mar 04 14:21	15° ≈	
morning rise	9870 Nov 22 15:53	22°M43'37		retrograde	9877 May 24 23:11	20° ≈ 15′24	
	9871 Feb 08 13:08	0°⊀		opposition	9877 Jul 31 08:57	16° ≈ 52'42	1°40'50
retrograde	9871 Mar 06 22:58	0° ∡ 37'06		min. Earth dist.	9877 Jul 31 15:05	16° ≈ 51′29	8.40728 AU
	9871 Apr 02 09:04	30°RM	1050105		9877 Aug 25 12:26	15°R≈	
opposition	9871 May 13 13:54	27°M10'47	1°59'07	direct	9877 Oct 08 14:24	13°≈25'34	
min. Earth dist. direct	9871 May 13 16:41 9871 Jul 20 04:29	27°M10'14 23°M44'17	8.31713 AU	evening set	9877 Nov 21 01:19 9878 Jan 22 01:39	15° ≈ 21° ≈ 17'38	
direct	9871 Jul 20 04:29 9871 Oct 18 18:55	23 11044 17 0°×7		evening set	96/6 Jan 22 01.39	21 21/30	
evening set	9871 Nov 01 02:47	1° ∡ 736'37		conjunction	9878 Feb 08 13:33	23° ≈ 28′13	1°11'22
				minimum elong	9878 Feb 08 13:36	23° ≈ 28'14	
conjunction	9871 Nov 18 22:40	3° х 50′43	1°42'52	max. Earth dist.	9878 Feb 08 05:56		10.43082 AU
minimum elong	9871 Nov 18 22:38	3° ∡ 750'42	1°43'13	morning rise	9878 Feb 25 22:01	25°≈37'46	
max. Earth dist.	9871 Nov 18 17:25		10.30685 AU		9878 Apr 06 02:54	0°) (
morning rise	9871 Dec 06 18:20	6° ₹ 04'47		retrograde	9878 Jun 07 02:20	3° 光 12′26	
retrograde opposition	9872 Mar 19 14:33 9872 May 26 00:40	13° ₹ 57'53 10° ₹ 31'55	2°14'34	opposition	9878 Aug 11 16:41 9878 Aug 13 17:08	30°R≈ 29°≈50'30	1°15'13
min. Earth dist.	9872 May 26 00:40 9872 May 26 05:13	10 x ·31 33	8.30191 AU	min. Earth dist.	9878 Aug 13 17:08 9878 Aug 13 23:02	29 ≈30 30 29°≈49'20	8.45668 AU
direct	9872 Aug 01 20:34	7°×704'43	5.50171 AU	direct	9878 Oct 22 04:46	26°≈24'03	5. 15000 AU
evening set	9872 Nov 14 07:28	15° ₹ 00'10			9878 Dec 28 20:53	0° ∀	
				evening set	9879 Feb 04 11:43	4° ∺ 12'20	
conjunction	9872 Dec 02 02:47	17° ∡ 14'17					
minimum elong	9872 Dec 02 02:46	17° 🖈 14'17	1°52'50	conjunction	9879 Feb 21 21:19	6° ∺ 21'39	0°49'10
max. Earth dist.	9872 Dec 01 19:36		10.29769 AU	minimum elong	9879 Feb 21 21:21	6° ¥ 21'39	0°49'21
morning rise	9872 Dec 19 21:11	19° ⊀ 28'09		max. Earth dist.	9879 Feb 21 14:19	o" 大 19'28	10.48310 AU

morning rise	9879 Mar 11 03:37	8° ¥ 29'57		conjunction	9885 May 06 11:58	20° 8 39'00	-1°28'21
retrograde	9879 Jun 20 00:50	16°) 00'44		minimum elong	9885 May 06 11:56	20° 8 39'00	1°28'39
opposition	9879 Aug 26 23:37	12°) 39′29	0°46'09	max. Earth dist.	9885 May 06 14:38	20° 8 39'49	10.76828 AU
min. Earth dist.	9879 Aug 27 04:21	12°) 38′34	8.51056 AU	morning rise	9885 May 23 06:27	22° 8 40'35	
direct	9879 Nov 04 18:25	9° ¥ 13'52		Č	9885 Aug 31 10:19	0°II	
evening set	9880 Feb 17 16:14	16°) 57'47		retrograde	9885 Sep 02 00:27	0°II00'08	
evening set	7000100 17 10.14	10 7(3747		retrograde	9885 Sep 03 14:43	30°R 8	
	0000 Man 05 22-25	100 105144	0924146		=		1057144
conjunction	9880 Mar 05 23:25	19° ₩ 05'44		opposition	9885 Nov 10 20:01	26° 8 40'02	
minimum elong	9880 Mar 05 23:26	19°) €05'44	0°24'52	min. Earth dist.	9885 Nov 10 16:34	26° 8 40'41	8.78044 AU
max. Earth dist.	9880 Mar 05 18:08		10.53842 AU	direct	9886 Jan 19 20:42	23° 8 19'26	
morning rise	9880 Mar 23 03:23	21° 米 12'43			9886 Apr 26 09:20	Π °0	
retrograde	9880 Jul 01 22:31	28°) 40′03		evening set	9886 May 01 21:14	0° Ⅲ 38'51	
opposition	9880 Sep 08 04:02	25° ∺ 19'22	0°15'11				
min. Earth dist.	9880 Sep 08 06:57	25°) 18'48	8.56624 AU	conjunction	9886 May 18 15:07	2° Ⅲ 39'59	-1°42'16
direct	9880 Nov 17 03:29	21°) 54'41		minimum elong	9886 May 18 15:06	2° Ⅱ 39'59	1°42'38
evening set	9881 Mar 01 15:36	29° ₩ 33'55		max. Earth dist.	9886 May 18 19:22	2° Ⅱ 41'17	10.78754 AU
<i>8</i> - 1 - 1	9881 Mar 05 05:35	0° Υ		morning rise	9886 Jun 04 08:52	4° Ⅱ 41'07	
desc. node	9881 Mar 09 23:18	0° Υ 34'47		retrograde	9886 Sep 14 14:44	12° I 101'28	
desc. node	7001 Wai 07 23.10	0 13447		opposition	9886 Nov 23 13:53	8° I I41'03	2012100
	0001 Mar. 10 20-15	1° Ƴ 40'28	0000127	**			
conjunction	9881 Mar 18 20:15			min. Earth dist.	9886 Nov 23 09:29		8.79377 AU
minimum elong	9881 Mar 18 20:16	1° Y 40′28	0°00'35	direct	9887 Feb 01 10:17	5° Ⅱ 20'57	
behind sun begin	9881 Mar 18 13:11	1° Y 38'18		evening set	9887 May 14 00:20	12° ∏ 38'15	
behind sun end	9881 Mar 19 03:21	1° Ƴ 42'38					
max. Earth dist.	9881 Mar 18 17:21	1° Ƴ 39'37	10.59410 AU	conjunction	9887 May 30 17:33	14° Ⅱ 39'05	-1°51'42
morning rise	9881 Apr 04 21:50	3° Ƴ 46′08		minimum elong	9887 May 30 17:31	14° Ⅲ 39'05	1°52'05
retrograde	9881 Jul 14 17:53	11° Y 10'30		max. Earth dist.	9887 May 30 22:30	14° Ⅱ 40'35	10.79452 AU
opposition	9881 Sep 21 06:16	7° Ƴ 50'14	-0°16'06	morning rise	9887 Jun 16 11:27	16° Ⅱ 40'09	
min. Earth dist.	9881 Sep 21 07:42	7° Ƴ 49'58	8.62109 AU	retrograde	9887 Sep 27 03:41	24° Ⅱ 01'56	
direct	9881 Nov 30 07:46	4° Y 26'31		opposition	9887 Dec 06 07:14	20° Ⅱ 41′02	-2°20'45
evening set	9882 Mar 14 10:07	12° Y ′01′03		min. Earth dist.	9887 Dec 06 02:31		8.79494 AU
evening sec	>00 2 11111 11 10.07	12 . 01 03		direct	9888 Feb 13 21:31	17° I I21'13	0.77.57.110
conjunction	9882 Mar 31 12:07	14° Ƴ 06'13	-0°25'39	evening set	9888 May 25 02:48	24° I I37'07	
minimum elong	9882 Mar 31 12:06			evening set	7000 May 25 02.40	24 1137 07	
•			10.64745 AU	:	9888 Jun 10 20:08	260T27150	105(115
max. Earth dist.	9882 Mar 31 10:54		10.04/43 AU	conjunction		26° I 37'59	
morning rise	9882 Apr 17 11:26	16° Y 10'38		minimum elong	9888 Jun 10 20:08	26° Ⅲ 37'59	
retrograde	9882 Jul 27 09:38	23° Y 32'39		max. Earth dist.	9888 Jun 11 01:18		10.78969 AU
opposition	9882 Oct 04 06:32	20° Y 12'42		morning rise	9888 Jun 27 15:03	28° Ⅱ 39'18	
min. Earth dist.	9882 Oct 04 07:04	20° Ƴ 12'36	8.67248 AU		9888 Jul 09 04:17	0	
direct	9882 Dec 13 09:22	16° Ƴ 49'53		retrograde	9888 Oct 08 17:18	6° ॐ 03'05	
evening set	9883 Mar 27 00:05	24° Ƴ 19'56		opposition	9888 Dec 18 00:14	2° 5 41'34	-2°23'15
				min. Earth dist.	9888 Dec 17 19:11	2° © 42'31	8.78441 AU
conjunction	9883 Apr 12 23:23	26° Ƴ 23'46	-0°49'16		9889 Jan 28 13:49	30°Ŗ Ⅱ	
minimum elong	9883 Apr 12 23:21	26° Y 23'45	0°49'25	direct	9889 Feb 25 09:37	29° Ⅱ 21'49	
max. Earth dist.	9883 Apr 12 23:11	26° Ƴ 23'42	10.69592 AU		9889 Mar 24 19:32	0°ಅ	
morning rise	9883 Apr 29 20:44	28° Ƴ 27'01		evening set	9889 Jun 06 05:41	6°537'04	
	9883 May 13 02:15	0°8		evening see	,00, buil 00 05.11	0 23,0.	
retrograde	9883 Aug 08 23:48	5° 8 47'27		conjunction	9889 Jun 23 00:04	8°538'20	10551/12
opposition	9883 Oct 17 04:51	2° 8 27'38	-1013'58	minimum elong	9889 Jun 23 00:04 9889 Jun 23 00:04	8°938'20	
11		_		•			
min. Earth dist.	9883 Oct 17 04:24		8.71787 AU	max. Earth dist.	9889 Jun 23 06:21		10.77358 AU
	9883 Nov 22 16:14	30° ₹ Υ		morning rise	9889 Jul 09 20:34	10°5540'12	
direct	9883 Dec 26 08:36	29° Y 05'39		retrograde	9889 Oct 21 09:47	18°506'26	
	9884 Jan 28 11:47	$0^{\circ}S$		opposition	9889 Dec 30 17:06	14°5944'11	-2°19'30
evening set	9884 Apr 07 10:07	6° 8 31'33		min. Earth dist.	9889 Dec 30 11:07	14° © 45'19	8.76287 AU
				direct	9890 Mar 09 20:43	11° 5 24'21	
conjunction	9884 Apr 24 07:03	8° 8 34'13	-1°10'27	evening set	9890 Jun 18 09:52	18° © 39'41	
minimum elong	9884 Apr 24 07:01	8° 8 34'13	1°10'40				
max. Earth dist.	9884 Apr 24 07:55	8° 8 34'29	10.73705 AU	conjunction	9890 Jul 05 06:06	20°5541'40	-1°50'06
morning rise	9884 May 11 02:47	10° 8 36'31		minimum elong	9890 Jul 05 06:07	20°5641'40	1°50'29
5	9884 Jun 20 23:08	15° 8		max. Earth dist.	9890 Jul 05 13:45		10.74706 AU
retrograde	9884 Aug 20 12:16	17° 8 56'05		morning rise	9890 Jul 22 04:48	22°544'25	,
10110Brude	9884 Oct 23 18:46	17 03003		morning rise	9890 Oct 17 18:26	0°Ω	
annasition			1020106	ratra ara da			
opposition	9884 Oct 29 01:11	14° 8 36'12		retrograde	9890 Nov 03 04:05	0° Ω 13'28	
min. Earth dist.	9884 Oct 28 23:21		8.75472 AU	*,*	9890 Nov 19 16:04	30°R≌	2000122
direct	9885 Jan 07 03:54	11° 8 14'58		opposition	9891 Jan 12 10:31	26°550'26	
	9885 Mar 17 21:11	15° 8		min. Earth dist.	9891 Jan 12 03:38		8.73139 AU
evening set	9885 Apr 19 16:48	18° 8 37'15		direct	9891 Mar 22 07:14	23°530'22	
					9891 Jun 24 02:34	$0^{\circ}\Omega$	

evening set	9891 Jun 30 16:19	0° Ω 46'34		direct	9897 Jun 04 11:14	8° ≙ 32'35	
				evening set	9897 Sep 14 06:22	16° ≏ 09'44	
conjunction	9891 Jul 17 14:59	2° Ω 49'34					
minimum elong	9891 Jul 17 15:01	2° Ω 49'35		conjunction	9897 Oct 01 23:19	18° ≏ 21'30	0°33'37
max. Earth dist.	9891 Jul 17 23:06		10.71135 AU	minimum elong	9897 Oct 01 23:18	18° ≏ 21'30	0°33'43
morning rise	9891 Aug 03 16:36	4° £ 53′29		max. Earth dist.	9897 Oct 02 01:11		10.40706 AU
retrograde	9891 Nov 16 01:24	12° Ω 25'40		morning rise	9897 Oct 19 18:50	20° △ 34'04	
opposition	9892 Jan 25 04:46	9° Ω 01'51		retrograde	9898 Feb 01 18:40	28° Ω 25'24	
min. Earth dist.	9892 Jan 24 21:56	9° Ω 03'10	8.69131 AU	opposition	9898 Apr 11 04:50	24° ≙ 58'40	
direct	9892 Apr 02 18:25	5° Ω 41'23		min. Earth dist.	9898 Apr 11 03:46	24° ≏ 58'52	8.38474 AU
evening set	9892 Jul 12 02:12	12° Ω 59'16		direct	9898 Jun 17 15:33	21° △ 33'57	
	9892 Jul 28 16:06	15° Ω		evening set	9898 Sep 28 00:31	29° Ω 16'10	
	0000 1 1 00 00 15	15000000	100 410 4		9898 Oct 03 22:28	0°M₊	
conjunction	9892 Jul 29 03:45	15° Ω 03'33			0000 0 + 15 10 10	107 20102	0057153
minimum elong	9892 Jul 29 03:47	15° Ω 03'34		conjunction	9898 Oct 15 19:10	1°M29'03	0°57'53
max. Earth dist.	9892 Jul 29 10:56		10.66788 AU	minimum elong	9898 Oct 15 19:08	1°M29'02	0°58'04
morning rise	9892 Aug 15 08:48	17° Ω 08'52		max. Earth dist.	9898 Oct 15 18:50		10.36419 AU
retrograde	9892 Nov 28 01:27	24° Ω 44'21	1022122	morning rise	9898 Nov 02 15:49	3°M42'31	
opposition	9893 Feb 06 00:02	21° Ω 19'48		retrograde	9899 Feb 15 10:26	11°M35'43	1025142
min. Earth dist.	9893 Feb 05 18:11		8.64428 AU	opposition	9899 Apr 24 12:20	8°M09'04	1°25'42
direct	9893 Apr 15 06:13	17° £ 58'48		min. Earth dist.	9899 Apr 24 12:58	8°M08'57	8.34646 AU
evening set	9893 Jul 24 16:11	25° Ω 19'13		direct	9899 Jun 30 23:15	4°M43'36	
	0002 4 10 21 02	270 02457	1005114	evening set	9899 Oct 11 23:37	12°M30'44	
conjunction	9893 Aug 10 21:02	27° Ω 24'57			0000 0-4 20 10-20	1.40 m 4.412.5	1010110
minimum elong	9893 Aug 10 21:04	27° Ω 24'58		conjunction	9899 Oct 29 19:20	14°M44'25	1°19'18 1°19'34
max. Earth dist.	9893 Aug 11 03:26		10.61846 AU	minimum elong	9899 Oct 29 19:17	14°M44'24	
morning rise	9893 Aug 28 05:39	29° Ω 31'48 0° m		max. Earth dist.	9899 Oct 29 17:29 9899 Oct 31 20:49	14°11643'30 15°M	10.33044 AU
ratra ara da	9893 Sep 01 04:10 9893 Dec 11 02:21	0°110/ 7°10/10′44		mamina risa	9899 Oct 31 20:49 9899 Nov 16 16:10	15°116 16°11658'28	
retrograde		3° Mp 45'30	1906150	morning rise		24°M52'42	
opposition min. Earth dist.	9894 Feb 18 20:59 9894 Feb 18 15:53	3°My46'29	8.59233 AU	retrograde opposition	9900 Mar 01 03:25 9900 May 07 21:50	24 IIL3242 21°M26'18	1°49'55
direct	9894 Apr 27 22:01	0° Mp 23'52	6.39233 AU	min. Earth dist.	9900 May 07 21:30 9900 May 07 23:26	21°M25'59	8.31837 AU
evening set	9894 Aug 06 10:55	7° Mp 47'33		direct	9900 May 07 23:20 9900 Jul 14 11:00	18°ML00'13	6.51657 AU
evening set	9094 Aug 00 10.33	/ IIV+/33		evening set	9900 Jul 14 11:00 9900 Oct 26 02:24	25°M51'41	
conjunction	9894 Aug 23 19:18	9° m 54'52	-0°42'48	evening set	9900 OCI 20 02.24	23 11631 41	
minimum elong	9894 Aug 23 19:19	9° Mp 54'53		conjunction	9900 Nov 12 22:28	28°M05'50	1°36'36
max. Earth dist.	9894 Aug 24 01:26		10.56516 AU	minimum elong	9900 Nov 12 22:25	28°M05'49	1°36'56
morning rise	9894 Sep 10 07:18	12° m 03'17	10.50510710	max. Earth dist.	9900 Nov 12 19:35		10.30767 AU
retrograde	9894 Dec 24 07:51	19° m 45'43		max. Earth dist.	9900 Nov 28 01:50	0° ⊼	10.50707710
opposition	9895 Mar 03 19:42	16° Mp 19'52	-0°37'37	morning rise	9900 Nov 30 18:39	0° ₹ 20'05	
min. Earth dist.	9895 Mar 03 14:59		8.53776 AU	retrograde	9901 Mar 14 20:19	8° √ 14'23	
direct	9895 May 10 16:09	12° m 57'32		opposition			2000120
evening set	9895 Aug 19 11:25	12 190, 32			9901 May 21 08:57	4° √ 48'24	2°08'20
evening sec		20° m 25'09			9901 May 21 08:57 9901 May 21 11:18	4° х ⁷ 48'24 4° х ⁷ 47'56	
	7075 Hug 17 11.25	20° Tp 25'09		min. Earth dist.	9901 May 21 11:18	4° ∡ ¹47'56	2°08°20 8.30197 AU
conjunction	-		-0°18'05	min. Earth dist. direct	9901 May 21 11:18 9901 Jul 28 02:16	4° ⊀ ¹47'56 1° ⊀ ¹21'48	
conjunction minimum elong	9895 Sep 05 23:12	22° m 34'05		min. Earth dist.	9901 May 21 11:18	4° ∡ ¹47'56	
conjunction minimum elong max. Earth dist.	-	22° m 34'05 22° m 34'05		min. Earth dist. direct	9901 May 21 11:18 9901 Jul 28 02:16	4° ⊀ ¹47'56 1° ⊀ ¹21'48	
minimum elong	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52	22° m 34'05 22° m 34'05 22° m 35'50	0°18'10	min. Earth dist. direct evening set	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32	4° ₹ 47'56 1° ₹ 21'48 9° ₹ 16'42	8.30197 AU
minimum elong max. Earth dist.	9895 Sep 05 23:12 9895 Sep 05 23:13	22° m 34'05 22° m 34'05	0°18'10	min. Earth dist. direct evening set conjunction	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20	4° ₹47'56 1° ₹21'48 9° ₹16'42 11° ₹30'59 11° ₹30'59	8.30197 AU 1°48'44
minimum elong max. Earth dist.	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03	0°18'10	min. Earth dist. direct evening set conjunction minimum elong	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18	4° ₹47'56 1° ₹21'48 9° ₹16'42 11° ₹30'59 11° ₹30'59	8.30197 AU 1°48'44 1°49'07
minimum elong max. Earth dist. morning rise	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u>	0°18'10	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19	4° ₹47'56 1° ₹21'48 9° ₹16'42 11° ₹30'59 11° ₹30'59 11° ₹29'44	8.30197 AU 1°48'44 1°49'07
minimum elong max. Earth dist. morning rise	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u> 2° <u>a</u> 29'48	0°18'10 10.51036 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07	8.30197 AU 1°48'44 1°49'07 10.29720 AU
minimum elong max. Earth dist. morning rise retrograde	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u> 2° <u>a</u> 29'48 30° R m 29° m 03'28	0°18'10 10.51036 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56	8.30197 AU 1°48'44 1°49'07 10.29720 AU
minimum elong max. Earth dist. morning rise retrograde opposition	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u> 2° <u>a</u> 29'48 30° R m 29° m 03'28	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u> 2° <u>a</u> 29'48 30° R m 29° m 03'28 29° m 04'17	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° <u>a</u> 2° <u>a</u> 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° a 2° a 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° D 2° D 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29 0° D	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 43'04	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° D 2° D 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29 0° D	0°18'10 10.51036 AU -0°06'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 45'712 24° \$\times 57'12 24° \$\times 57'12	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° D 2° D 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29 0° D 3° D 12'33	0°18'10 10.51036 AU -0°06'11 8.48311 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18 9902 Dec 11 08:18 9902 Dec 11 08:18	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 45'712 24° \$\times 57'12 24° \$\times 57'12	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° Ω 2° Ω 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29 0° Ω 3° Ω 12'33	0°18'10 10.51036 AU -0°06'11 8.48311 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18 9902 Dec 11 08:18 9902 Dec 11 08:17 9902 Dec 11 02:48	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 43'04 24° \$\times 57'12 24° \$\times 57'12 24° \$\times 55'27	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° Ω 2° Ω 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 41'29 0° Ω 3° Ω 12'33 5° Ω 23'00 5° Ω 22'59	0°18'10 10.51036 AU -0°06'11 8.48311 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Dec 11 08:18 9902 Dec 11 08:17 9902 Dec 11 02:48 9902 Dec 29 01:43	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 43'04 24° \$\times 57'12 24° \$\times 55'27 27° \$\times 10'54	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong behind sun begin	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39 9896 Sep 18 02:11	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0°	0°18'10 10.51036 AU -0°06'11 8.48311 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 04 00:28 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Dec 11 08:18 9902 Dec 11 08:18 9902 Dec 11 02:48 9902 Dec 29 01:43 9903 Jan 21 20:36	4° ¾47'56 1° ¾21'48 9° ¾16'42 11° ¾30'59 11° ¾30'59 11° ¾29'44 13° ¾45'07 21° ¾38'22 18° ¾12'15 14° ¾45'54 22° ¾43'04 24° ¾57'12 24° ¾55'27 27° ¾10'54 0° ♂	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23 10.29942 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong behind sun begin behind sun end	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39 9896 Sep 18 02:11 9896 Sep 18 02:11	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0°	0°18'10 10.51036 AU -0°06'11 8.48311 AU 0°07'53 0°07'53	min. Earth dist. direct evening set 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	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 04 00:28 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Dec 11 08:18 9902 Dec 11 08:17 9902 Dec 11 02:48 9902 Dec 29 01:43 9903 Jan 21 20:36 9903 Apr 11 06:02	4° ₹47'56 1° ₹21'48 9° ₹16'42 11° ₹30'59 11° ₹30'59 11° ₹39'44 13° ₹45'07 21° ₹38'22 18° ₹12'15 14° ₹45'54 22° ₹43'04 24° ₹57'12 24° ₹55'27 27° ₹10'54 0° ₹ 5° ₹02'01	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23 10.29942 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist.	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39 9896 Sep 18 02:11 9896 Sep 18 15:08 9896 Sep 18 15:08	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0°	0°18'10 10.51036 AU -0°06'11 8.48311 AU 0°07'53 0°07'53	min. Earth dist. direct evening set 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	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18 9902 Dec 11 08:18 9902 Dec 11 08:18 9902 Dec 11 02:48 9902 Dec 29 01:43 9903 Jan 21 20:36 9903 Apr 11 06:02 9903 Jun 17 09:49	4° ₹47'56 1° ₹21'48 9° ₹16'42 11° ₹30'59 11° ₹30'59 11° ₹39'44 13° ₹45'07 21° ₹38'22 18° ₹12'56 18° ₹12'56 18° ₹12'15 14° ₹45'54 22° ₹43'04 24° ₹57'12 24° ₹57'12 24° ₹55'27 27° ₹10'54 0° ♂ 5° ♂02'01 1° ♂37'14	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23 10.29942 AU 2°23'43
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39 9896 Sep 18 02:11 9896 Sep 18 15:08 9896 Sep 18 12:40 9896 Oct 06 02:16	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° \(\overline{\text{\sigma}}\) 2° \(\overline{\text{\sigma}}\) 2° \(\overline{\text{\sigma}}\) 2° \(\overline{\text{\sigma}}\) 2° \(\overline{\text{\sigma}}\) 29° \(\overline{\text{\sigma}}\) 25° \(\overline{\text{\sigma}}\) 25° \(\overline{\text{\sigma}}\) 40'21 25° \(\overline{\text{\sigma}}\) 3° \(\overline{\text{\sigma}}\) 3° \(\overline{\text{\sigma}}\) 5° \(\o	0°18'10 10.51036 AU -0°06'11 8.48311 AU 0°07'53 0°07'53	min. Earth dist. direct evening set 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	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18 9902 Dec 11 08:18 9902 Dec 11 08:18 9902 Dec 11 02:48 9902 Dec 11 02:48 9902 Dec 29 01:43 9903 Jan 21 20:36 9903 Apr 11 06:02 9903 Jun 17 09:49 9903 Jun 17 14:42	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'56 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 45'712 24° \$\times 57'12 24° \$\times 55'27 27° \$\times 10'54 0° \$\times 50'2'01 1° \$\times 33'14 1° \$\times 36'14	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23 10.29942 AU 2°23'43
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct asc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	9895 Sep 05 23:12 9895 Sep 05 23:13 9895 Sep 06 04:52 9895 Sep 23 14:15 9895 Nov 12 04:29 9896 Jan 06 17:29 9896 Mar 03 18:33 9896 Mar 15 20:20 9896 Mar 15 16:11 9896 May 22 11:34 9896 May 27 01:19 9896 Aug 03 18:42 9896 Aug 31 17:59 9896 Sep 18 08:40 9896 Sep 18 08:39 9896 Sep 18 02:11 9896 Sep 18 15:08 9896 Sep 18 12:40 9896 Oct 06 02:16 9897 Jan 19 05:22	22° m 34'05 22° m 34'05 22° m 35'50 24° m 44'03 0° a 2° a 29'48 30° R m 29° m 03'28 29° m 04'17 25° m 40'21 25° m 40'21 25° m 41'29 0° a 3° a 12'33 5° a 23'00 5° a 22'59 5° a 21'00 5° a 24'59 5° a 24'13 7° a 34'23 15° a 23'08	0°18'10 10.51036 AU -0°06'11 8.48311 AU 0°07'53 0°07'53 10.45671 AU	min. Earth dist. direct evening set 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	9901 May 21 11:18 9901 Jul 28 02:16 9901 Nov 09 07:32 9901 Nov 27 03:20 9901 Nov 27 03:18 9901 Nov 26 23:19 9901 Dec 14 22:18 9902 Mar 28 13:43 9902 Jun 03 21:06 9902 Jun 04 00:28 9902 Aug 10 18:36 9902 Nov 23 13:18 9902 Dec 11 08:18 9902 Dec 11 08:18 9902 Dec 11 02:48 9902 Dec 11 02:48 9902 Dec 29 01:43 9903 Jun 17 09:49 9903 Jun 17 09:49 9903 Jun 17 14:42 9903 Jul 08 09:30	4° \$\times 47'56 1° \$\times 21'48 9° \$\times 16'42 11° \$\times 30'59 11° \$\times 30'59 11° \$\times 29'44 13° \$\times 45'07 21° \$\times 38'22 18° \$\times 12'15 14° \$\times 45'54 22° \$\times 45'54 22° \$\times 45'712 24° \$\times 57'12 25' \$\times 57'12 25' \$\times 57'12	8.30197 AU 1°48'44 1°49'07 10.29720 AU 2°19'50 8.29811 AU 1°54'58 1°55'23 10.29942 AU 2°23'43

ovening set	9903 Dec 07 17:58	6° ප 08'01		conjunction	9910 Mar 14 17:24	26°) €33'38	0°10'13
evening set	9903 Dec 07 17.38	0 00001		minimum elong	9910 Mar 14 17:24	26°\(\frac{1}{33}\)38	0°10'16
conjunction	9903 Dec 25 11:44	8° ප 21'41	1°54'58	behind sun begin	9910 Mar 14 11:45	26°) (33'56	0 10 10
minimum elong	9903 Dec 25 11:44	8° ප 21'41	1°55'22	behind sun end	9910 Mar 14 23:04	26°\(\frac{1}{35}\)'22	
max. Earth dist.	9903 Dec 25 04:15		10.31356 AU	max. Earth dist.	9910 Mar 14 11:51		10.55877 AU
morning rise	9904 Jan 12 03:20	10°る34'43	10.51550710	morning rise	9910 Mar 31 20:09	28°) (31'30'	10.55077710
retrograde	9904 Apr 23 19:14	18° る 22'50		morning rise	9910 Apr 12 00:38	0°Υ	
opposition	9904 Jun 29 22:21	14° る 58'44	2°19'48	retrograde	9910 Jul 10 15:28	6° Υ 06'15	
min. Earth dist.	9904 Jun 30 04:41	14° る 57'28	8.32596 AU	desc. node	9910 Aug 13 02:27	5°Υ10'05	
direct	9904 Sep 06 09:07	11° る 31'18	0.52570710	opposition	9910 Sep 17 00:45	2° Υ 45'37	-0°02'56
evening set	9904 Dec 20 19:59	19° る 29'06		min. Earth dist.	9910 Sep 17 04:36	2° Υ 44'53	8.58450 AU
evening sec))01 BCC 20 1).5)	17 027 00		min. Dartii dist.	9910 Oct 28 22:35	30°R ₩	0.50 150 110
conjunction	9905 Jan 07 12:16	21° ප 42'05	1°48'46	direct	9910 Nov 26 00:59	29° \ 21'08	
minimum elong	9905 Jan 07 12:18	21° ප් 42'05	1°49'09	direct	9910 Dec 23 21:20	0°Υ	
max. Earth dist.	9905 Jan 07 03:18		10.33791 AU	evening set	9911 Mar 10 08:46	6°Υ58'26	
morning rise	9905 Jan 25 01:59	23° る 54'17	10.55771710	evening set))11 Will 10 00.40	0 13020	
morning rise	9905 Mar 24 21:41	0°≈		conjunction	9911 Mar 27 11:55	9° Ƴ 04'22	-0°15'12
retrograde	9905 May 07 04:43	1°≈38'54		minimum elong	9911 Mar 27 11:54	9° Υ 04'22	
retrograde	9905 Jun 20 11:18	1 ≈3034 30°Rる		behind sun begin	9911 Mar 27 11:34 9911 Mar 27 09:30	9° Υ 03'38	0 13 14
opposition	9905 Jul 13 10:14	30 KO 28°る15'32	2000124	behind sun end	9911 Mar 27 09:30 9911 Mar 27 14:19	9° Υ 05'06	
min. Earth dist.	9905 Jul 13 17:15	28°る13'32	8.35446 AU	max. Earth dist.	9911 Mar 27 14.19 9911 Mar 27 07:58		10.61000 AU
	9905 Sep 20 05:39	28 3 1408 24° 3 48'12	6.55440 AU		9911 Apr 13 12:27	11° Υ 09'32	10.01000 AU
direct	9905 Sep 20 03:39 9905 Dec 11 12:02			morning rise	*	11 γ 09 32 18° Υ 33'08	
		0°≈ 2°≈ • 4.412.5		retrograde	9911 Jul 23 07:57	15° Y 15° Y $12'$ 40	0022140
evening set	9906 Jan 03 18:15	2° ≈ 44'35		opposition	9911 Sep 30 02:24		
	0006 1 21 00 50	40 - 56144	1026140	min. Earth dist.	9911 Sep 30 04:08	15°Υ12'20	8.63454 AU
conjunction	9906 Jan 21 08:59	4°≈56'44	1°36'48	direct	9911 Dec 09 06:11	11° Υ 48'58	
minimum elong	9906 Jan 21 09:01	4°≈56'45	1°37'09	evening set	9912 Mar 22 00:51	19° Ƴ 21'37	
max. Earth dist.	9906 Jan 20 23:34		10.37062 AU	. ,.	0012 4 00 01 20	2100026112	0020125
morning rise	9906 Feb 07 20:41	7°≈07'58		conjunction	9912 Apr 08 01:28	21° Υ 26'13	
retrograde	9906 May 20 13:11	14°≈48'49		minimum elong	9912 Apr 08 01:26	21° Υ 26'13	
opposition	9906 Jul 26 21:10	11°≈26′11	1°50'18	max. Earth dist.	9912 Apr 08 00:14		10.65808 AU
min. Earth dist.	9906 Jul 27 03:56	11°≈24'50	8.39055 AU	morning rise	9912 Apr 24 23:47	23° Y 30′10	
direct	9906 Oct 03 23:44	7° ≈ 59'11			9912 Jul 03 04:08	0°8	
_	9907 Jan 10 05:24	15° ≈		retrograde	9912 Aug 04 00:25	0° 8 51'53	
evening set	9907 Jan 17 12:19	15° ≈ 53'07			9912 Sep 05 10:17	30° ₹ Υ	
				opposition	9912 Oct 12 01:50	27° Ƴ 31'28	
conjunction	9907 Feb 04 01:14	18° ≈ 04'17	1°19'51	min. Earth dist.	9912 Oct 12 01:27	27° Ƴ 31'32	8.68043 AU
minimum elong	9907 Feb 04 01:17	18° ≈ 04'18	1°20'08	direct	9912 Dec 21 06:49	24° Y ′08'34	
max. Earth dist.	9907 Feb 03 16:38		10.41057 AU		9913 Mar 20 17:16	0°8	
morning rise	9907 Feb 21 10:42	20°≈14′26		evening set	9913 Apr 03 12:48	1° 8 36'52	
retrograde	9907 Jun 02 18:56	27° ≈ 51'22					
opposition	9907 Aug 09 06:47	24° ≈ 29′23	1°26'39	conjunction	9913 Apr 20 11:01	3° 8 40'16	
min. Earth dist.	9907 Aug 09 12:49	24° ≈ 28′12	8.43335 AU	minimum elong	9913 Apr 20 10:59	3° 8 40'16	
direct	9907 Oct 17 15:50	21° ≈ 02'54		max. Earth dist.	9913 Apr 20 12:07		10.70084 AU
evening set	9908 Jan 31 01:25	28° ≈ 53′27		morning rise	9913 May 07 07:24	5° 8 43'10	
	9908 Feb 09 00:57	0° ∀		retrograde	9913 Aug 16 14:12	13° 8 03'40	
				opposition	9913 Oct 24 23:10	9° 8 43'14	
conjunction	9908 Feb 17 12:16	1° ∺ 03′28	0°58'58	min. Earth dist.	9913 Oct 24 21:21		8.72011 AU
minimum elong	9908 Feb 17 12:18	1° ∺ 03′28	0°59'11	direct	9914 Jan 03 02:09	6° 8 21'05	
max. Earth dist.	9908 Feb 17 04:56		10.45659 AU	evening set	9914 Apr 15 21:14	13° 8 45'34	
morning rise	9908 Mar 05 19:26	3°) 12′26			9914 Apr 26 04:00	15° 8	
retrograde	9908 Jun 14 21:12	10°) 45′29					
opposition	9908 Aug 21 14:54	7° ∺ 24'05		conjunction	9914 May 02 17:15	15° 8 47'54	
min. Earth dist.	9908 Aug 21 20:24	7° ∺ 23'00	8.48144 AU	minimum elong	9914 May 02 17:13	15° 8 47'54	
direct	9908 Oct 30 05:52	3° ¥ 58′12		max. Earth dist.	9914 May 02 19:42	_	10.73640 AU
evening set	9909 Feb 12 09:07	11°) 44'39		morning rise	9914 May 19 12:14	17° 8 49'58	
				retrograde	9914 Aug 29 02:14	25° 8 10'02	
conjunction	9909 Mar 01 17:34	13° ¥ 53′22		opposition	9914 Nov 06 19:00	21° 8 49'28	
minimum elong	9909 Mar 01 17:36	13° ¥ 53′23	0°35'27	min. Earth dist.	9914 Nov 06 16:19		8.75183 AU
max. Earth dist.	9909 Mar 01 11:11	13° ¥ 51′23	10.50680 AU	direct	9915 Jan 15 20:21	18° 8 28'02	
morning rise	9909 Mar 18 22:32	16° ∺ 01'05		evening set	9915 Apr 28 02:41	25° 8 49'14	
retrograde	9909 Jun 27 20:22	23°) €30′30					
opposition	9909 Sep 03 20:59	20°) €09'33	0°28'28	conjunction	9915 May 14 21:00	27° 8 50'45	
min. Earth dist.	9909 Sep 04 01:55	20° ∺ 08'36	8.53265 AU	minimum elong	9915 May 14 20:58	27° 8 50'45	
direct	9909 Nov 12 16:51	16°) 44'2 0		max. Earth dist.	9915 May 15 00:30		10.76326 AU
evening set	9910 Feb 25 11:35	24°) €26'17		morning rise	9915 May 31 15:11	29° 8 52'14	
					9915 Jun 01 17:19	$\Pi^{\circ}0$	

9922 Feb 01 20:28

opposition

16°**Ω**18'00 -1°42'02

morning rise

9927 Oct 28 19:12

28°**♀**04'26

retrograde opposition	9927 Nov 13 23:59 9928 Feb 10 15:47 9928 Apr 18 21:30	0°M 5°M55'23 2°M29'04	1°13'22	minimum elong max. Earth dist. morning rise	9934 Jan 01 08:36 9934 Jan 01 00:40 9934 Jan 18 23:10	15°844'44 15°842'14 17°857'20	1°52'52 10.32015 AU
min. Earth dist.	9928 Apr 18 21:26	2°M29'05	8.38697 AU	retrograde	9934 May 01 07:12	25° る 43'33	
	9928 May 23 18:06	30° ₹ Ω		opposition	9934 Jul 07 12:02	22°る19'21	2°14'42
direct	9928 Jun 25 08:47 9928 Jul 27 17:39	29° £ 04'20 0° IL		min. Earth dist. direct	9934 Jul 07 18:21 9934 Sep 14 03:55	22°る18'05 18°る51'30	8.33366 AU
evening set	9928 Oct 06 01:12	6°M47'46		evening set	9934 Sep 14 05:35 9934 Dec 28 15:09	16 3 5130 26° る 48'31	
<i>3</i>				<i>3</i>			
conjunction	9928 Oct 23 20:23	9° ™ 00'45	1°10'09	conjunction	9935 Jan 15 06:48	29° ප් 01'07	1°43'07
minimum elong max. Earth dist.	9928 Oct 23 20:21	9°M00'44	1°10'23 10.36634 AU	minimum elong max. Earth dist.	9935 Jan 15 06:50 9935 Jan 14 22:22	29° ろ 01'08	1°43'29 10.34741 AU
max. Earth dist.	9928 Oct 23 18:48 9928 Nov 10 16:53	11°M14'11	10.30034 AU	max. Earth dist.	9935 Jan 14 22:22 9935 Jan 23 01:45	28° ⊙ 38′28 0° ≈	10.34/41 AU
	9928 Dec 13 13:48	15°M₁		morning rise	9935 Feb 01 19:22	1°≈12'51	
retrograde	9929 Feb 23 07:22	19° M 06'40		retrograde	9935 May 14 17:17	8° ≈ 55'25	
opposition	9929 May 02 05:06	15°M40'21	1°39'37	opposition	9935 Jul 20 23:06	5° ≈ 31'57	1°59'38
min. Earth dist.	9929 May 02 06:50	15°M40'00	8.34901 AU	min. Earth dist.	9935 Jul 21 05:54	5°≈30'36	8.36592 AU
direct	9929 May 10 15:07 9929 Jul 08 17:25	15°RM 12°M14'42		direct evening set	9935 Sep 27 21:19 9936 Jan 11 10:48	2°≈04'20 9°≈59'21	
direct	9929 Jul 08 17.23 9929 Sep 03 22:43	15°M		evening set	9930 Jan 11 10.46	9 ~3921	
evening set	9929 Oct 20 01:05	20°M02'52		conjunction	9936 Jan 29 00:35	12° ≈ 11'02	1°28'25
				minimum elong	9936 Jan 29 00:37	12° ≈ 11'03	1°28'44
conjunction	9929 Nov 06 20:50	22°M16'31	1°29'23	max. Earth dist.	9936 Jan 28 15:54		10.38482 AU
minimum elong	9929 Nov 06 20:47	22°M16'30	1°29'42	morning rise	9936 Feb 15 11:07	14° ≈ 21'43	
max. Earth dist. morning rise	9929 Nov 06 16:44 9929 Nov 24 17:14	24°M30'23	10.33308 AU	retrograde	9936 Feb 20 16:27 9936 May 26 22:33	15° ≈ 22° ≈ 00'21	
morning rise	9930 Jan 14 18:08	24 11€30 23 0° √ 1		opposition	9936 Aug 02 09:00	18°≈37'39	1°38'26
retrograde	9930 Mar 08 22:50	2° ≯ 23'33		min. Earth dist.	9936 Aug 02 15:45	18° ≈ 36'19	8.40738 AU
	9930 May 02 10:32	30°RM		direct	9936 Oct 10 15:04	15° ≈ 10'30	
opposition	9930 May 15 14:28	28°M57'23	2°00'46	evening set	9937 Jan 24 01:43	23° ≈ 02'32	
min. Earth dist.	9930 May 15 18:05	28°M56'39	8.32156 AU				
direct	9930 Jul 22 06:17 9930 Oct 05 01:41	25°M30'56 0°⊀		conjunction minimum elong	9937 Feb 10 13:29 9937 Feb 10 13:31	25°≈13'05 25°≈13'05	1°09'15 1°09'31
evening set	9930 Nov 03 04:07	3° ₹ ⁷ 23'10		max. Earth dist.	9937 Feb 10 15:31 9937 Feb 10 05:10		1 0931 10.43046 AU
evening set))30 1 10	3 × 23 10		morning rise	9937 Feb 27 21:56	27°≈22'38	10.43040710
conjunction	9930 Nov 20 23:52	5° ∡ ³37'11	1°43'56	Č	9937 Mar 22 05:47	0° ∀	
minimum elong	9930 Nov 20 23:50	5° ∡ ³37'10	1°44'18	retrograde	9937 Jun 09 00:33	4°) 57'17	
max. Earth dist.	9930 Nov 20 17:46		10.31109 AU	opposition	9937 Aug 15 17:12	1°) 35′18	1°12'26
morning rise	9930 Dec 08 19:30	7° 🗷 51'10		min. Earth dist.	9937 Aug 15 22:55	1°) €34'11	8.45587 AU
retrograde opposition	9931 Mar 22 14:30 9931 May 29 01:01	15° х 43'59 12° х 18'08	2°15'32	direct	9937 Sep 05 18:22 9937 Oct 24 06:47	30°R≈ 28°≈08'49	
min. Earth dist.	9931 May 29 05:58	12 × 18 08 12° × 17'08	8.30594 AU	direct	9937 Dec 10 17:00	0° ∺	
direct	9931 Aug 04 21:22	8° ≯ 51'01		evening set	9938 Feb 06 11:30	5° ¥ 57'04	
evening set	9931 Nov 17 08:36	16° ∡ ¹46′22					
				conjunction	9938 Feb 23 21:07	8°) €06'22	
conjunction minimum elong	9931 Dec 05 03:52 9931 Dec 05 03:51	19° х 00′25 19° х 00′25	1°52'56 1°53'20	minimum elong max. Earth dist.	9938 Feb 23 21:08	8° ¥ 06'23 8° ¥ 04'16	0°46'58 10.48185 AU
max. Earth dist.	9931 Dec 03 03:31 9931 Dec 04 20:32		1 33 20 10.30144 AU	morning rise	9938 Feb 23 14:21 9938 Mar 13 03:19	8 ★04 16 10°¥ 14'40	10.46163 AU
morning rise	9931 Dec 22 22:09	21° ✓ 14'12	10.50111110	retrograde	9938 Jun 22 01:25	17°) (45'33	
retrograde	9932 Apr 04 05:42	29° ₹ 05'42		opposition	9938 Aug 28 23:41	14°) €24'13	0°43'06
opposition	9932 Jun 10 12:32	25° ∡ ¹40'17	2°22'58	min. Earth dist.	9938 Aug 29 03:54	14°) €23'24	8.50880 AU
min. Earth dist.	9932 Jun 10 18:04	25° √ 39'11	8.30281 AU	direct	9938 Nov 06 18:38	10°) € 58'35	
direct	9932 Aug 17 14:57 9932 Nov 29 04:35	22°メ12'43 0°る		evening set	9939 Feb 19 16:03	18° ¥ 42'28	
evening set	9932 Nov 30 12:44	0° る 09'55		conjunction	9939 Mar 08 23:15	20° ¥ 50'27	0°22'14
evening see),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0 00,00		minimum elong	9939 Mar 08 23:16	20°) 50'27	0°22'20
conjunction	9932 Dec 18 07:09	2° る 23'45	1°55'49	max. Earth dist.	9939 Mar 08 18:35	20°) (49′00	10.53621 AU
minimum elong	9932 Dec 18 07:09	2° ප් 23'45		morning rise	9939 Mar 26 03:02	22°) 57′26	
max. Earth dist.	9932 Dec 17 23:29		10.30453 AU		9939 Jun 13 06:16	0°Υ 0°ΩΩ 415.4	
morning rise	9933 Jan 04 23:40	4°る37'03 12°る26'19		retrograde	9939 Jul 04 23:22	0° Υ 24'54	
retrograde opposition	9933 Apr 17 19:18 9933 Jun 24 00:26	12° 6 26'19 9° る 01'28	2°22'40	opposition	9939 Jul 26 20:35 9939 Sep 11 04:15	30° ₹ 27° ¥ 04'08	0°12'01
min. Earth dist.	9933 Jun 24 06:10	9° ろ 00'19	8.31223 AU	min. Earth dist.	9939 Sep 11 04:13	27° H 03'35	8.56356 AU
direct	9933 Aug 31 09:40	5° පි 33'39	-	direct	9939 Nov 20 02:24	23°) €39'25	-
evening set	9933 Dec 14 15:22	13° පි 31'24		desc. node	9940 Feb 02 10:45	27°) 53′28	
	0004 X	1.50-7	1050150		9940 Feb 21 14:22	0°Υ	
conjunction	9934 Jan 01 08:35	15° ⋜ 44'44	1°52′28	evening set	9940 Mar 03 15:30	1° Y 18'43	

conjunction	9940 Mar 20 20:02	3° Y 25′17		evening set	9946 May 16 01:11	14° Ⅱ 25'32	
minimum elong	9940 Mar 20 20:03	3° Y 25′17	0°03'13				
behind sun begin	9940 Mar 20 12:59	3° Y 23′07		conjunction	9946 Jun 01 18:19	16° Ⅱ 26'22	
behind sun end	9940 Mar 21 03:07	3° Y 27′26		minimum elong	9946 Jun 01 18:18	16° Ⅱ 26′22	1°52'42
max. Earth dist.	9940 Mar 20 17:12		10.59102 AU	max. Earth dist.	9946 Jun 01 23:00	16° Ⅱ 27'48	10.79337 AU
morning rise	9940 Apr 06 21:29	5° Ƴ 30'58		morning rise	9946 Jun 18 12:23	18° Ⅱ 27'28	
retrograde	9940 Jul 16 17:35	12° Y 55'33		retrograde	9946 Sep 29 04:32	25° Ⅱ 49'26	
opposition	9940 Sep 23 06:49	9° Ƴ 35'14		opposition	9946 Dec 08 08:57	22° Ⅱ 28'33	-2°21'10
min. Earth dist.	9940 Sep 23 08:46	9° Ƴ 34'52	8.61769 AU	min. Earth dist.	9946 Dec 08 04:16	22° Ⅱ 29'26	8.79423 AU
direct	9940 Dec 02 08:04	6° Ƴ 11'27		direct	9947 Feb 15 23:45	19° Ⅱ 08'45	
evening set	9941 Mar 16 10:02	13° Ƴ 46′07		evening set	9947 May 28 03:41	26° Ⅱ 24'42	
conjunction	9941 Apr 02 11:51	15° Ƴ 51'17	-0°28'08	conjunction	9947 Jun 13 21:07	28° Ⅱ 25'36	-1°56'18
minimum elong	9941 Apr 02 11:50	15° Ƴ 51'17	0°28'13	minimum elong	9947 Jun 13 21:07	28° Ⅱ 25'36	1°56'42
max. Earth dist.	9941 Apr 02 09:59	15° Ƴ 50'43	10.64374 AU	max. Earth dist.	9947 Jun 14 02:51	28° Ⅲ 27′20	10.78936 AU
morning rise	9941 Apr 19 11:11	17° Ƴ 55'44			9947 Jun 26 21:43	0ංම	
retrograde	9941 Jul 29 10:02	25° Ƴ 18′04		morning rise	9947 Jun 30 16:07	0°ഇ26'56	
opposition	9941 Oct 06 07:17	21° Y 58'03	-0°49'13	retrograde	9947 Oct 11 19:26	7° © 50'54	
min. Earth dist.	9941 Oct 06 08:10	21° Y 57'53	8.66858 AU	opposition	9947 Dec 21 02:00	4° 5 29'23	-2°22'58
direct	9941 Dec 15 10:23	18° Ƴ 35'11		min. Earth dist.	9947 Dec 20 20:12	4° © 30'29	8.78444 AU
evening set	9942 Mar 29 00:11	26° Ƴ 05'24		direct	9948 Feb 28 11:17	1° © 09'43	
				evening set	9948 Jun 08 06:42	8° 5 24'57	
conjunction	9942 Apr 14 23:20	28° Ƴ 09'15	-0°51'33				
minimum elong	9942 Apr 14 23:19	28° Ƴ 09'15	0°51'43	conjunction	9948 Jun 25 01:19	10° 5 26'15	-1°55'13
max. Earth dist.	9942 Apr 14 22:52	28° Ƴ 09'07	10.69184 AU	minimum elong	9948 Jun 25 01:19	10° 5 26'15	1°55'37
	9942 Apr 30 02:53	$B_{\circ 0}$		max. Earth dist.	9948 Jun 25 08:41	10° 5 28'30	10.77395 AU
morning rise	9942 May 01 20:43	0° 8 12'34		morning rise	9948 Jul 11 21:53	12° 5 28'10	
retrograde	9942 Aug 10 23:50	7° 8 33'20		retrograde	9948 Oct 23 11:39	19° 9 54'30	
opposition	9942 Oct 19 05:43	4° 8 13'26	-1°16'38	opposition	9949 Jan 01 18:49	16° © 32'17	-2°18'32
min. Earth dist.	9942 Oct 19 04:50	4° 8 13'36	8.71376 AU	min. Earth dist.	9949 Jan 01 12:01	16° © 33'35	8.76356 AU
direct	9942 Dec 28 09:02	0° 8 51'26		direct	9949 Mar 11 21:44	13° © 12'33	
evening set	9943 Apr 10 10:23	8° 8 17'32		evening set	9949 Jun 20 11:06	20° © 27'51	
conjunction	9943 Apr 27 07:19	10° 8 20'14	-1°12'26	conjunction	9949 Jul 07 07:30	22° © 29'53	-1°49'03
minimum elong	9943 Apr 27 07:17	10° 8 20'14	1°12'41	minimum elong	9949 Jul 07 07:31	22° © 29'53	1°49'26
max. Earth dist.	9943 Apr 27 09:01	10° 8 20'45	10.73300 AU	max. Earth dist.	9949 Jul 07 15:29	22° © 32'18	10.74809 AU
morning rise	9943 May 14 02:57	12° 8 22'35		morning rise	9949 Jul 24 06:24	24° © 32'40	
	9943 Jun 06 03:03	15° 8			9949 Sep 15 19:37	$0 {\circ} \Omega$	
retrograde	9943 Aug 23 13:13	19° 8 42'33		retrograde	9949 Nov 05 07:01	2° Ω 01'45	
opposition	9943 Nov 01 02:25	16° 8 22'35	-1°40'20		9949 Dec 27 05:40	30° ₹ 5	
min. Earth dist.	9943 Oct 31 23:31	16° 8 23'07	8.75091 AU	opposition	9950 Jan 14 12:15	28° © 38'47	-2°07'56
	9943 Nov 19 21:08	15°₹ ႘		min. Earth dist.	9950 Jan 14 05:17	28° 5 40'07	8.73272 AU
direct	9944 Jan 10 05:29	13° 8 01'21		direct	9950 Mar 24 08:13	25° © 18'48	
	9944 Feb 28 17:18	15° 8			9950 Jun 10 01:39	$0 {\circ} \Omega$	
evening set	9944 Apr 21 17:14	20° 8 23'48		evening set	9950 Jul 02 17:40	2° Ω 34'56	
conjunction	9944 May 08 12:24	22° 8 25'35		conjunction	9950 Jul 19 16:25	4° Ω 37'58	
minimum elong	9944 May 08 12:22	22° 8 25'34		minimum elong	9950 Jul 19 16:27	4° Ω 37'59	
max. Earth dist.	9944 May 08 16:13		10.76488 AU	max. Earth dist.	9950 Jul 19 24:00		10.71307 AU
morning rise	9944 May 25 06:45	24° 8 27'11		morning rise	9950 Aug 05 18:21	6° Ω 41'56	
	9944 Jul 19 08:14	0°Ⅱ		retrograde	9950 Nov 18 03:31	14° Ω 14'03	
retrograde	9944 Sep 04 03:09	1° Ⅱ 47'05		opposition	9951 Jan 27 06:29	10° Ω 50'18	
	9944 Oct 22 11:27	30°R 8		min. Earth dist.	9951 Jan 27 00:09		8.69336 AU
opposition	9944 Nov 12 21:32	28° 8 26'55		direct	9951 Apr 05 18:54	7° Ω 29'54	
min. Earth dist.	9944 Nov 12 17:34		8.77762 AU	evening set	9951 Jul 15 03:32	14° Ω 47'42	
direct	9945 Jan 21 21:20	25° 8 06'20			9951 Jul 16 20:37	15° Ω	
	9945 Apr 12 13:54	0°II			0051 4 01 05 15	1.60.0.50100	1000105
evening set	9945 May 03 21:56	2° Ⅱ 25'49		conjunction	9951 Aug 01 05:17	16° Ω 52'00	
aaniumatiam	0045 Mars 20, 15:44	40 Π 26150	10/12/25	minimum elong	9951 Aug 01 05:19	16° Ω 52'00	
conjunction	9945 May 20 15:44	4° Ⅱ 26'58		max. Earth dist.	9951 Aug 01 12:23		10.67039 AU
minimum elong	9945 May 20 15:42	4° Ⅱ 26'58		morning rise	9951 Aug 18 10:37	18° Ω 57'20	
max. Earth dist.	9945 May 20 20:09		10.78532 AU	retrograde	9951 Dec 01 01:34	26° Ω 32'41	1920/52
morning rise	9945 Jun 06 09:32	6° Ⅱ 28'09		opposition	9952 Feb 09 01:35	23° Ω 08'11	
retrograde	9945 Sep 16 15:42	13° Ⅱ 48'43	2012112	min. Earth dist.	9952 Feb 08 19:48		8.64714 AU
opposition	9945 Nov 25 15:30	10° Ⅱ 28'16		direct	9952 Apr 17 08:30	19° Ω 47'15	
min. Earth dist.	9945 Nov 25 11:17		8.79214 AU	evening set	9952 Jul 26 17:28	27° Ω 07'31	
direct	9946 Feb 03 10:14	7° Ⅱ 08'10					

. ,.	0052 4 12 22 20	200 0 1 211 7	1002155	***	0050 4 26 11 40	0077 52112	1020107
conjunction	9952 Aug 12 22:39	29° Ω 13'17		opposition	9958 Apr 26 11:40	9°M53'12	
minimum elong	9952 Aug 12 22:41	29° Ω 13'17		min. Earth dist.	9958 Apr 26 12:07	9°M53'06	8.35111 AU
max. Earth dist.	9952 Aug 13 05:46		10.62171 AU	direct	9958 Jul 02 23:57	6°M27'42	
	9952 Aug 19 07:10	0° Т р		evening set	9958 Oct 13 23:33	14°M14'30	
morning rise	9952 Aug 30 07:26	1° Mp 20'07			9958 Oct 20 02:28	15° M	
retrograde opposition	9952 Dec 13 03:58	8° ту 58'50 5° ту 33'38	1902140	agniumation	0059 Oat 21 10:19	160 m 20105	1°21'03
min. Earth dist.	9953 Feb 20 22:11 9953 Feb 20 16:34		8.59590 AU	conjunction minimum elong	9958 Oct 31 19:18 9958 Oct 31 19:15	16°M28'05 16°M28'04	1°21'20
direct	9953 Apr 29 23:52	2° My 12'04	6.39390 AU	max. Earth dist.	9958 Oct 31 17:55		10.33478 AU
evening set	9953 Apr 29 25:32 9953 Aug 08 12:14	9° m) 35'32		morning rise	9958 Nov 18 15:55	18°M42'00	10.33478 AU
evening set	9933 Aug 06 12.14	9 IIJ 33 32		retrograde	9959 Mar 03 01:36	26°M35'46	
conjunction	9953 Aug 25 20:52	11° m 42'51	0°40'15	opposition	9959 May 09 20:44	23°M09'21	1°51'47
minimum elong	9953 Aug 25 20:52 9953 Aug 25 20:53	11° Mp 42'52		min. Earth dist.	9959 May 09 20:44 9959 May 09 22:01	23°M09'06	8.32243 AU
max. Earth dist.	9953 Aug 26 03:43	-	10.56902 AU	direct	9959 Jul 16 11:02	19°M43'13	0.32243 AC
morning rise	9953 Sep 12 08:56	13° m 51'15	10.50702 AC	evening set	9959 Oct 28 02:05	27°M34'24	
retrograde	9953 Dec 26 10:11	21° mp 33'22		evening set))3) OCI 28 02.03	27 1163424	
opposition	9954 Mar 05 20:35	18° m 07'33	-0°34'23	conjunction	9959 Nov 14 22:05	29° M 48'27	1°37'51
min. Earth dist.	9954 Mar 05 15:21		8.54190 AU	minimum elong	9959 Nov 14 22:03	29° M 48'27	1°38'12
direct	9954 May 12 16:05	14° m/ 45'15	0.5 1170 110	max. Earth dist.	9959 Nov 14 19:10		10.31133 AU
evening set	9954 Aug 21 12:40	22° m 12'39		max. Earth dist.	9959 Nov 16 10:40	0° ⊼	10.51155 110
e venning see))5111ug 21 12.10	22 11,1237		morning rise	9959 Dec 02 18:03	2° × ⁷ 02'35	
conjunction	9954 Sep 08 00:30	24° m 21'31	-0°15'26	retrograde	9960 Mar 15 19:35	9° ×1 56'27	
minimum elong	9954 Sep 08 00:31	24° m/21'31		opposition	9960 May 22 07:28	6°×730'28	2°09'33
behind sun begin	9954 Sep 07 22:50	24° m/21'01	0 13 31	min. Earth dist.	9960 May 22 10:07	6° ₹ 129'56	8.30525 AU
behind sun end	9954 Sep 08 02:12	24° m/22'02		direct	9960 Jul 28 23:55	3° х 03′48	0.50525710
max. Earth dist.	9954 Sep 08 05:59		10.51476 AU	evening set	9960 Nov 10 06:55	10° ₹ 58'29	
morning rise	9954 Sep 25 15:39	26° Mp 31'26	10.51170110	evening sec))00 1\0\ 10 00.55	10 7 302)	
morning 1130	9954 Oct 26 07:00	0° ⊡		conjunction	9960 Nov 28 02:32	13° ∡ 12'42	1°49'27
retrograde	9955 Jan 08 18:17	∘ — 4° Ω 16'48		minimum elong	9960 Nov 28 02:31	13°×12'42	
opposition	9955 Mar 18 20:59	0° £ 50'30	-0°02'54	max. Earth dist.	9960 Nov 27 21:45		10.30005 AU
min. Earth dist.	9955 Mar 18 17:03		8.48775 AU	morning rise	9960 Dec 15 21:22	15° ∡ 126'44	10.50005 110
mm. Eurin dist.	9955 Mar 29 15:22	30°R, My	0.10775710	retrograde	9961 Mar 29 13:03	23° х 19'37	
asc. node	9955 Apr 21 20:38	28° m/ 25'55		opposition	9961 Jun 04 19:30	19° х 54'13	2°20'21
direct	9955 May 25 12:18	27° m) 27'24		min. Earth dist.	9961 Jun 04 23:42	19° х 53′22	8.30057 AU
ancer	9955 Jul 19 08:56	0° ⊡		direct	9961 Aug 11 16:54	16° ₹ 27'07	0.50057710
evening set	9955 Sep 03 19:00	4° ≙ 59'20		evening set	9961 Nov 24 12:15	24° ₹ 24'10	
conjunction	9955 Sep 21 09:40	7° ≏ 09'42	0°10'29	conjunction	9961 Dec 12 07:04	26° ≯ 38'12	1°55'07
minimum elong	9955 Sep 21 09:39	7° ≏ 09'42	0°10'30	minimum elong	9961 Dec 12 07:03		1°55'32
behind sun begin	9955 Sep 21 04:03	7° ≏ 07'58		max. Earth dist.	9961 Dec 12 00:23		10.30152 AU
behind sun end	9955 Sep 21 15:16	7° £ 11'25		morning rise	9961 Dec 30 00:27	28° ∡ ′51'51	
max. Earth dist.	9955 Sep 21 12:48	7° ≙ 10'39	10.46155 AU		9962 Jan 08 07:37	0°₹	
morning rise	9955 Oct 09 03:25	9° ≙ 21'00		retrograde	9962 Apr 12 03:27	6° る 42'43	
retrograde	9956 Jan 22 05:05	17° Ω 09'18		opposition	9962 Jun 18 08:06	3°る17'58	
opposition	9956 Mar 30 23:41	13° Ω 42'43	0°29'07	min. Earth dist.	9962 Jun 18 13:43	3° る 16'50	8.30836 AU
min. Earth dist.	9956 Mar 30 21:36	13° Ω 43'08	8.43611 AU		9962 Aug 12 06:43	30°R.✓	
direct	9956 Jun 06 12:14	10° £ 18'46		direct	9962 Aug 25 12:41	29° ₹ 50'37	
evening set	9956 Sep 16 07:11	17° £ 55'37		ovonir	9962 Sep 07 18:06 9962 Dec 08 16:43	0°る 7° る 48140	
. ,.	00560 + 04 00 00	200 0 07110	002 (102	evening set	9962 Dec 08 16:43	7° る 48'40	
conjunction	9956 Oct 04 00:08	20° Ω 07'18	0°36'03		00(2.D 2(10.22	10070011	105422
minimum elong	9956 Oct 04 00:06	20° £ 07'18	0°36'11	conjunction	9962 Dec 26 10:22	10°る02'16	
max. Earth dist.	9956 Oct 04 01:16		10.41204 AU	minimum elong	9962 Dec 26 10:22	10° ろ 02'16	1°54'57
morning rise	9956 Oct 21 19:42	22° £ 19'47		max. Earth dist.	9962 Dec 26 02:11		10.31523 AU
. 1	9957 Jan 20 14:13	0°M		morning rise	9963 Jan 13 01:59	12°る15'16	
retrograde	9957 Feb 03 18:40	0°M10'35		retrograde	9963 Apr 25 15:57	20°る03'11	2010156
ammaaiti	9957 Feb 17 22:41	30° ₹ Ω	1900/01	opposition	9963 Jul 01 20:28	16° る 39'08	
opposition	9957 Apr 13 04:35	26° Ω 43'52	1°00'01	min. Earth dist.	9963 Jul 02 02:47		8.32758 AU
min. Earth dist.	9957 Apr 13 04:02	26° £ 43'59	8.38969 AU	direct	9963 Sep 08 08:48	13°る11'41	
direct	9957 Jun 19 15:40	23° £ 19'06		evening set	9963 Dec 22 18:31	21° ろ 09'23	
avanie+	9957 Sep 21 15:16	0°M			0064 I 00 10 40	220-2222	1047!40
evening set	9957 Sep 30 00:56	1°ML01'02		conjunction	9964 Jan 09 10:49	23°₹22'20	1°47'48
	0057.0 : 17.10.05	20M 12112	1000102	minimum elong	9964 Jan 09 10:51	23° る 22'20	1°48'11
conjunction	9957 Oct 17 19:37	3°M13'48	1°00'02	max. Earth dist.	9964 Jan 09 02:06		10.33962 AU
minimum elong	9957 Oct 17 19:34	3°M13'47	1°00'14	morning rise	9964 Jan 27 00:27	25°₹34'29	
max. Earth dist.	9957 Oct 17 19:18		10.36898 AU		9964 Mar 06 07:25	0° ≈	
morning rise	9957 Nov 04 16:08	5°M27'10		retrograde	9964 May 08 03:04	3°≈18'54	
retrograde	9958 Feb 17 09:07	13°M19'52			9964 Jul 13 09:54	30°R₹	

opposition	9964 Jul 14 08:20	29° る 55'32	2°06'55	morning rise	9970 Apr 14 10:43	12° Υ 50'54	
min. Earth dist.	9964 Jul 14 14:48	29° る 54'15	8.35618 AU	retrograde	9970 Jul 24 08:29	20° Y 15′02	
direct	9964 Sep 21 03:42	26° පි 28'14		opposition	9970 Oct 01 01:35	16° Ƴ 54'35	-0°36'43
	9964 Nov 26 12:26	0° ≈		min. Earth dist.	9970 Oct 01 02:54	16° Ƴ 54'20	8.62961 AU
evening set	9965 Jan 04 16:28	4° ≈ 24'24		direct	9970 Dec 10 04:44	13° Y 30'59	
				evening set	9971 Mar 23 23:43	21° Y 04'00	
conjunction	9965 Jan 22 07:13	6° ≈ 36'31	1°35'22				
minimum elong	9965 Jan 22 07:16	6° ≈ 36'32	1°35'43	conjunction	9971 Apr 10 00:17	23° Y 08'42	-0°41'52
max. Earth dist.	9965 Jan 21 22:32	6° ≈ 33'47	10.37234 AU	minimum elong	9971 Apr 10 00:16	23° Y 08'41	0°42'00
morning rise	9965 Feb 08 18:45	8° ≈ 47'43		max. Earth dist.	9971 Apr 09 23:28	23° Y 08'27	10.65260 AU
	9965 Apr 10 13:45	15° ≈		morning rise	9971 Apr 26 22:28	25° Y 12'44	
retrograde	9965 May 21 11:30	16° ≈ 28'23			9971 Jun 10 20:23	0°8	
	9965 Jul 02 05:42	15°R≈		retrograde	9971 Aug 06 00:43	2° 8 35'01	
opposition	9965 Jul 27 19:15	13°≈05'45	1°48'17	*.*	9971 Oct 04 01:23	30°RƳ	1005105
min. Earth dist.	9965 Jul 28 01:45	13°≈04'28	8.39199 AU	opposition	9971 Oct 14 01:37	29°Υ14'36	
direct	9965 Oct 04 21:43	9°≈38'47		min. Earth dist.	9971 Oct 14 01:29	29° Υ 14'38 25° Υ 51'46	8.67451 AU
	9965 Dec 27 21:09	15° ≈		direct	9971 Dec 23 04:16	0° 8	
evening set	9966 Jan 18 10:18	17° ≈ 32'33		avanina aat	9972 Mar 05 17:37	3° 8 20'30	
conjunction	9966 Feb 04 23:14	19° ≈ 43'41	1°18'02	evening set	9972 Apr 04 12:08	3 02030	
minimum elong	9966 Feb 04 23:16	19 ≈43 41 19°≈43'42	1°18'19	conjunction	9972 Apr 21 10:10	5° 8 23'58	1°04'00
max. Earth dist.	9966 Feb 04 14:52		10.41163 AU	minimum elong	9972 Apr 21 10:10	5° 6 23'57	
morning rise	9966 Feb 22 08:34	21°≈53'49	10.41103 AU	max. Earth dist.	9972 Apr 21 10:53	_	10.69453 AU
retrograde	9966 Jun 03 16:56	29°≈30'41		morning rise	9972 May 08 06:33	7° 8 26'59	10.07433 AC
opposition	9966 Aug 10 04:52	26°≈08'44	1°24'11	retrograde	9972 Aug 17 14:00	14° 8 48'06	
min. Earth dist.	9966 Aug 10 11:27	26°≈07'27	8.43383 AU	opposition	9972 Oct 25 23:32	11° 8 27'38	-1°30'55
direct	9966 Oct 18 13:51	22°≈42'16	0.13303710	min. Earth dist.	9972 Oct 25 22:15	11° 8 27'53	
	9967 Jan 27 11:28	0° ∀		direct	9973 Jan 04 02:23	8° 8 05'29	0.71500110
evening set	9967 Jan 31 23:24	0°) 32'48			9973 Apr 12 14:26	15° 8	
8				evening set	9973 Apr 16 20:56	15° 8 30'24	
conjunction	9967 Feb 18 10:07	2°) 42'49	0°56'50	Ü	1		
minimum elong	9967 Feb 18 10:09	2°) 42'49	0°57'03	conjunction	9973 May 03 16:49	17° 8 32'50	-1°23'04
max. Earth dist.	9967 Feb 18 02:04	2°) 40′18	10.45643 AU	minimum elong	9973 May 03 16:47	17° 8 32'49	1°23'22
morning rise	9967 Mar 07 17:17	4°) ₹51'46		max. Earth dist.	9973 May 03 18:46	17° 8 33'26	10.72967 AU
retrograde	9967 Jun 16 19:40	12° ∺ 24'55		morning rise	9973 May 20 11:54	19° 8 35'00	
opposition	9967 Aug 23 13:08	9° ∺ 03'34	0°56'05	retrograde	9973 Aug 30 03:10	26° 8 55'40	
min. Earth dist.	9967 Aug 23 19:31	9° ∺ 02'19	8.48057 AU	opposition	9973 Nov 07 19:44	23° 8 35'03	-1°52'07
direct	9967 Nov 01 03:34	5°) 37'43		min. Earth dist.	9973 Nov 07 16:59	23° 8 35'35	8.74503 AU
evening set	9968 Feb 14 07:09	13° ∺ 24'18		direct	9974 Jan 16 20:55	20° 8 13'35	
				evening set	9974 Apr 29 02:46	27° 8 35'11	
conjunction	9968 Mar 02 15:24	15° ∺ 33'02					
minimum elong	9968 Mar 02 15:26	15°) 33′02	0°33'08	conjunction	9974 May 15 21:06	29° 8 36'49	
max. Earth dist.	9968 Mar 02 08:00		10.50519 AU	minimum elong	9974 May 15 21:04	29° 8 36'49	
morning rise	9968 Mar 19 20:24	17°) € 40'47		max. Earth dist.	9974 May 16 01:06		10.75637 AU
retrograde	9968 Jun 28 18:01	25° € 10'27			9974 May 19 01:12	0°II	
opposition	9968 Sep 04 19:29	21°) (49'33	0°25'31	morning rise	9974 Jun 01 15:17	1° Ⅱ 38'24	
min. Earth dist.	9968 Sep 05 00:44	21°) 48'32 18°) 24'24	8.53035 AU	retrograde opposition	9974 Sep 11 15:35	8°Ⅲ59'20 5°Ⅲ38'27	2000115
direct evening set	9968 Nov 13 15:11 9969 Feb 26 09:42	18 ★2424 26°★06'35		min. Earth dist.	9974 Nov 20 14:30 9974 Nov 20 09:36		8.76732 AU
evening set	7707 I CU ZU U7.42	20 1 (0033		direct	9974 Nov 20 09.36 9975 Jan 29 12:27	2° П 17'36	0.10134 AU
conjunction	9969 Mar 15 15:26	28° ₩ 13'58	0°07'48	evening set	9975 May 11 06:37	9° П 36'30	
minimum elong	9969 Mar 15 15:27	28° X 13'58	0°07'51	training set	>> 10 1.1ug 11 00.51	, 10000	
behind sun begin	9969 Mar 15 09:03	28°) 12'01	0 0/01	conjunction	9975 May 28 00:10	11° Ⅱ 37'38	-1°49'13
behind sun end	9969 Mar 15 21:50	28°) 15'56		minimum elong	9975 May 28 00:09	11° Ⅱ 37'38	
max. Earth dist.	9969 Mar 15 09:37		10.55577 AU	max. Earth dist.	9975 May 28 06:34		10.77345 AU
	9969 Mar 29 23:01	0°Υ		morning rise	9975 Jun 13 18:03	13° Ⅲ 38'55	
morning rise	9969 Apr 01 18:11	0° Υ 20'27		retrograde	9975 Sep 24 05:33	21° Ⅱ 00'45	
desc. node	9969 Jul 09 03:52	7° Ƴ 46'46		opposition	9975 Dec 03 08:13	17° Ⅱ 39'31	-2°18'41
retrograde	9969 Jul 11 13:35	7° Ƴ 47'05		min. Earth dist.	9975 Dec 03 01:42	17° Ⅱ 40'45	8.77950 AU
opposition	9969 Sep 17 23:32	4° Υ 26′28	-0°05'56	direct	9976 Feb 11 02:09	14° Ⅱ 19'10	
min. Earth dist.	9969 Sep 18 02:56	4° Y 25'49	8.58083 AU	evening set	9976 May 22 09:23	21° Ⅲ 36′02	
direct	9969 Nov 27 00:39	1° Y 02'04					
evening set	9970 Mar 11 07:08	8° Y 39'40		conjunction	9976 Jun 08 02:46	23° Ⅲ 37′01	-1°55'17
				minimum elong	9976 Jun 08 02:46	23° II 37'00	
conjunction	9970 Mar 28 10:20	10° Y 45'42		max. Earth dist.	9976 Jun 08 10:30		10.78015 AU
minimum elong	9970 Mar 28 10:19	10° Y 45'41	0°17'39	morning rise	9976 Jun 24 21:12	25° ∏ 38'19	
max. Earth dist.	9970 Mar 28 06:59	10° 'Y' 44'40	10.60569 AU		9976 Aug 04 14:09	0ං ව	

retrograde	9976 Oct 05 20:19	3°501'34		max. Earth dist.	9982 Aug 20 22:32	6° Mp 36'50	10.61979 AU
	9976 Dec 10 15:03	30° ₹ Ⅱ		morning rise	9982 Sep 07 01:40	8° Mp 41'54	
opposition	9976 Dec 15 01:17	29° Ⅱ 39'57	-2°23'03	retrograde	9982 Dec 21 01:03	16° Mp 21'10	
min. Earth dist.	9976 Dec 14 18:08	29° Ⅱ 41'18	8.78096 AU	opposition	9983 Feb 28 15:00	12° m 56'19	-0°47'16
direct	9977 Feb 22 12:24	26° Ⅱ 19'56		min. Earth dist.	9983 Feb 28 09:30	12° m 57'23	8.59532 AU
	9977 May 01 21:11	0°©		direct	9983 May 07 12:25	9° m 35'01	
evening set	9977 Jun 03 12:04	3° 5 35'31		evening set	9983 Aug 16 05:31	16° m 59'13	
conjunction	9977 Jun 20 05:58	5° © 36'39		conjunction	9983 Sep 02 15:41	19° T p06'58	
minimum elong	9977 Jun 20 05:59	5° © 36'39		minimum elong	9983 Sep 02 15:42	19° m 06'59	
max. Earth dist.	9977 Jun 20 13:52		10.77622 AU	max. Earth dist.	9983 Sep 02 21:31	-•	10.56985 AU
morning rise	9977 Jul 07 01:49	7°538'19		morning rise	9983 Sep 20 05:27	21° Mp 15'47	
retrograde opposition	9977 Oct 18 10:30	15°503'29 11°541'24	2021111	retrograde opposition	9984 Jan 03 05:41	28° Mp 58'08	0917120
min. Earth dist.	9977 Dec 27 18:05 9977 Dec 27 10:54	11 9941 24 11°9542'46		min. Earth dist.	9984 Mar 12 13:30 9984 Mar 12 09:28	25° m 32'47 25° m 33'35	8.54360 AU
direct	9978 Mar 06 23:00	8°921'34	6.7717 4 AO	direct	9984 May 19 07:51	22° My 10'44	6.54500 AC
evening set	9978 Jun 15 15:29	15°936'39		evening set	9984 Aug 28 08:15	29° m 39'04	
					9984 Aug 31 05:17	0∘ ⊽	
conjunction	9978 Jul 02 10:51	17° © 38'16	-1°52'15				
minimum elong	9978 Jul 02 10:52	17°538'16	1°52'40	conjunction	9984 Sep 14 21:32	1° ≏ 48'19	-0°00'51
max. Earth dist.	9978 Jul 02 19:25	17°540'52	10.76196 AU	minimum elong	9984 Sep 14 21:33	1° ≏ 48'19	0°00'52
morning rise	9978 Jul 19 08:46	19° 5 40'36		behind sun begin	9984 Sep 14 14:21	1° ≏ 46′07	
retrograde	9978 Oct 31 03:13	27° © 08'09		behind sun end	9984 Sep 15 04:45	1° ≏ 50'31	
opposition	9979 Jan 09 11:02	23°545'31	-2°13'06	max. Earth dist.	9984 Sep 15 02:01		10.51711 AU
min. Earth dist.	9979 Jan 09 03:16	23° © 46'59	8.75237 AU	asc. node	9984 Sep 26 23:25	3° ≏ 17'38	
direct	9979 Mar 19 10:40	20° © 25'43		morning rise	9984 Oct 02 13:57	3° Ω 58'33	
evening set	9979 Jun 27 20:34	27°541'01		retrograde	9985 Jan 15 14:47	11° Ω 43'58	0015111
	0070 I-1 14 10.14	2006-42120	1042112	opposition	9985 Mar 25 14:08	8° Ω 18'13	0°15'11
conjunction minimum elong	9979 Jul 14 18:14 9979 Jul 14 18:16	29°543'29 29°543'29	1°43'35	min. Earth dist. direct	9985 Mar 25 11:08 9985 Jun 01 05:04	8° £ 18'48 4° £ 55'21	8.49040 AU
max. Earth dist.	9979 Jul 14 18:10 9979 Jul 15 03:53		1 43 33 10.73801 AU	evening set	9985 Sep 10 16:40	12° £ 28′23	
max. Earth dist.	9979 Jul 17 00:34	0°Ω	10.75001 AC	evening set	7703 Sep 10 10.40	12 -2023	
morning rise	9979 Jul 31 18:45	1° Ω 46'46		conjunction	9985 Sep 28 08:35	14° £ 39'03	0°24'58
retrograde	9979 Nov 12 23:17	9° Ω 16'59		minimum elong	9985 Sep 28 08:33	14° Ω 39'03	0°25'03
opposition	9980 Jan 22 04:24	5° Ω 53'47	-1°59'04	max. Earth dist.	9985 Sep 28 11:10	14° ≏ 39'51	10.46431 AU
min. Earth dist.	9980 Jan 21 20:01	5° Ω 55'23	8.72365 AU	morning rise	9985 Oct 16 03:03	16° ჲ 50'35	
direct	9980 Mar 30 20:49	2° Ω 33'53		retrograde	9986 Jan 29 03:27	24° ≏ 38'48	
evening set	9980 Jul 09 04:36	9° Ω 50'14		opposition	9986 Apr 07 17:04	21° ≏ 12'46	0°46'38
				min. Earth dist.	9986 Apr 07 15:34	21° ≏ 13′03	8.43905 AU
conjunction	9980 Jul 26 05:02	11° Ω 53'46		direct	9986 Jun 14 04:37	17° ≏ 49'01	
minimum elong	9980 Jul 26 05:05	11° Ω 53'46		evening set	9986 Sep 24 07:03	25° ≏ 27'07	
max. Earth dist.	9980 Jul 26 15:07		10.70535 AU		0006 0 + 12 00 52	270 0 20101	0040142
morning rise	9980 Aug 12 08:37	13° Ω 58'15		conjunction	9986 Oct 12 00:52	27° Ω 39'01	0°49'43
retrograde	9980 Aug 21 02:47 9980 Nov 24 21:04	15° Ω 21° Ω 31'22		minimum elong max. Earth dist.	9986 Oct 12 00:50 9986 Oct 12 00:56	27° £ 39'00	0°49'53 10.41503 AU
opposition	9981 Feb 02 22:30	$18^{\circ}\Omega 07'36$	-1°39'34	morning rise	9986 Oct 29 20:45	29° £ 51'35	10.41303 AC
min. Earth dist.	9981 Feb 02 14:12		8.68684 AU	morning rise	9986 Oct 31 00:20	0° ™	
mm. zwim wist.	9981 Mar 27 18:25	15°RΩ	0.00001110	retrograde	9987 Feb 11 16:35	7° ™ 42'04	
direct	9981 Apr 12 08:10	14° Ω 47'25		opposition	9987 Apr 20 22:07	4°M15'53	1°16'04
	9981 Apr 27 19:35	15° Ω		min. Earth dist.	9987 Apr 20 22:39	4°M15'47	8.39301 AU
evening set	9981 Jul 21 16:19	22° Ω 05'37		direct	9987 Jun 27 09:52	0°M51'12	
				evening set	9987 Oct 08 02:38	8°M34'26	
conjunction	9981 Aug 07 19:48	24° Ω 10′26					
minimum elong	9981 Aug 07 19:50	24° Ω 10′27		conjunction	9987 Oct 25 21:41	10°M47'18	1°12'08
max. Earth dist.	9981 Aug 08 04:48		10.66542 AU	minimum elong	9987 Oct 25 21:38	10° ™ 47'17	1°12'23
morning rise	9981 Aug 25 02:49	26° Ω 16'18		max. Earth dist.	9987 Oct 25 18:58		10.37240 AU
ratra ar- 1-	9981 Sep 27 17:51	0°順 2°m 52129		morning rise	9987 Nov 12 18:11	13°M00'37	
retrograde	9981 Dec 07 21:59	3° Mp 52'28 0° Mp 28'09	1015'10	retrograda	9987 Nov 29 10:37	15°M 20°M52'39	
opposition min. Earth dist.	9982 Feb 15 18:01 9982 Feb 15 10:56		-1°15′18 8.64354 AU	retrograde opposition	9988 Feb 25 07:01 9988 May 03 05:23	17°M26'29	1°41'48
min. Darui uist.	9982 Feb 13 10.36 9982 Feb 21 19:55	0 11/2931 30°R Ω	0.07337 AU	min. Earth dist.	9988 May 03 07:59	17 IIC26 29 17°IIC25'58	8.35504 AU
direct	9982 Apr 24 21:06	27° Ω 07'30		Dartii dist.	9988 Jun 06 03:10	17 11023 38 15°RM	3.3330T AU
~~~	9982 Jun 22 21:44	0° mp		direct	9988 Jul 09 18:42	14°M00'54	
evening set	9982 Aug 03 08:19	4° <b>m</b> ) 28'18			9988 Aug 12 03:50	15°M	
- C	<u> </u>			evening set	9988 Oct 21 02:15	21°M48'53	
conjunction	9982 Aug 20 15:06	6° Mp 34′34	-0°50'14				
minimum elong	9982 Aug 20 15:08	6° Mp 34′34	0°50'26	conjunction	9988 Nov 07 21:52	24°M02'25	1°30'54

minimum elong	9988 Nov 07 21:50	24°M02'24	1°31'14	minimum elong	9995 Jan 29 23:58	13° <b>≈</b> 54'12	1°27'01
max. Earth dist.	9988 Nov 07 17:07		10.33894 AU	max. Earth dist.	9995 Jan 29 14:32		10.38560 AU
morning rise	9988 Nov 25 18:11	26°M16'10	10.55074 110	max. Earth dist.	9995 Feb 07 17:35	15° <b>≈</b>	10.50500 710
morning rise	9988 Dec 28 04:34	0°×7'		morning rise	9995 Feb 16 10:29	16°≈04'52	
retrograde	9989 Mar 09 22:37	4° <b>∡</b> 108'54		retrograde	9995 May 28 20:30	23°≈43'24	
opposition	9989 May 16 14:25	0° <b>∡</b> 142'53	2°02'20	opposition	9995 Aug 04 08:10	20°≈20'41	1°36'05
min. Earth dist.	9989 May 16 18:18	0° <b>×</b> ¹ 42'06	8.32726 AU	min. Earth dist.	9995 Aug 04 14:49	20°≈19'22	8.40752 AU
min. Bartii digt.	9989 May 25 12:51	30°RML	0.52720110	direct	9995 Oct 12 15:46	16°≈53'30	0.10702110
direct	9989 Jul 23 06:39	27°M16'31		evening set	9996 Jan 26 00:56	24°≈45'27	
	9989 Sep 18 05:28	0° <b>∡</b> ¹					
evening set	9989 Nov 04 04:52	5° <b>х</b> 08'34		conjunction	9996 Feb 12 12:43	26°≈56'00	1°07'11
<i>8</i>				minimum elong	9996 Feb 12 12:45	26°≈56'00	1°07'26
conjunction	9989 Nov 22 00:34	7° <b>∡</b> ¹22'28	1°44'56	max. Earth dist.	9996 Feb 12 04:36	26° <b>≈</b> 53'27	
minimum elong	9989 Nov 22 00:32	7° <b>∡</b> ¹22'27	1°45'19	morning rise	9996 Feb 29 21:04	29° <b>≈</b> 05'31	
max. Earth dist.	9989 Nov 21 18:35		10.31651 AU	5 5	9996 Mar 08 08:45	0° <b>)</b>	
morning rise	9989 Dec 09 20:01	9° <b>х</b> 36′20		retrograde	9996 Jun 10 00:23	6° <b>)</b> 40′10	
retrograde	9990 Mar 23 14:23	17° <b>∡</b> ¹28'47		opposition	9996 Aug 16 16:30	3° <b>)</b> €18'08	1°09'41
opposition	9990 May 30 00:43	14° <b>х</b> 03′04	2°16'23	min. Earth dist.	9996 Aug 16 21:45	3° <b>)</b> 17′06	8.45479 AU
min. Earth dist.	9990 May 30 05:25	14° <b>∡</b> °02'07	8.31110 AU		9996 Oct 12 10:48	30°R≈	
direct	9990 Aug 05 21:57	10° <b>х</b> 36′03		direct	9996 Oct 25 05:50	29°≈51'38	
evening set	9990 Nov 18 09:00	18° <b>∡</b> ³31'12			9996 Nov 06 23:36	0° <b>)</b> €	
<i>8</i>				evening set	9997 Feb 07 10:30	7° <b>)</b> 39'47	
conjunction	9990 Dec 06 04:17	20° <b>х</b> 45′10	1°53'21			, , , , , , , , , , , , , , , , , , , ,	
minimum elong	9990 Dec 06 04:16	20° <b>×</b> ⁷ 45'10	1°53'46	conjunction	9997 Feb 24 20:09	9° <b>)</b> 49'07	0°44'27
max. Earth dist.	9990 Dec 05 21:20		10.30622 AU	minimum elong	9997 Feb 24 20:10	9° <b>)</b> (49'08	0°44'38
morning rise	9990 Dec 23 22:20	22° <b>х</b> 58'51		max. Earth dist.	9997 Feb 24 13:59		10.48020 AU
	9991 Mar 06 17:01	0°ਰ		morning rise	9997 Mar 14 02:11	11° <b>)</b> 57'25	
retrograde	9991 Apr 06 05:00	0° <b>ට</b> 50'01		retrograde	9997 Jun 23 01:12	19° <b>)</b> 28'22	
	9991 May 06 23:10	30°R <b>✓</b>		opposition	9997 Aug 29 23:07	16° <b>¥</b> 06'58	0°40'07
opposition	9991 Jun 12 12:02	27° <b>х</b> 24'44	2°23'07	min. Earth dist.	9997 Aug 30 03:24	16° <b>¥</b> 06'08	8.50658 AU
min. Earth dist.	9991 Jun 12 17:24	27° <b>х</b> 23'39	8.30720 AU	direct	9997 Nov 07 16:58	12° <b>)</b> (41'16	
direct	9991 Aug 19 15:03	23° <b>х</b> 57'14		evening set	9998 Feb 20 15:08	20° <b>)</b> (25'11	
	9991 Nov 16 17:25	0°ਰ				_,,,_,	
evening set	9991 Dec 02 12:59	1° <b>る</b> 54'17		conjunction	9998 Mar 09 22:15	22° <b>)</b> 33'10	0°19'46
e venning see	,,,,1 Dec 02 12.0,	1 00.17		minimum elong	9998 Mar 09 22:16	22° <b>)</b> 33'10	
conjunction	9991 Dec 20 07:19	4° <b>ට</b> 08'02	1°55'39	max. Earth dist.	9998 Mar 09 17:28		10.53349 AU
minimum elong	9991 Dec 20 07:19	4° <b>ට</b> 08'02		morning rise	9998 Mar 27 01:57	24° <b>)</b> (40'10	
max. Earth dist.	9991 Dec 19 23:35		10.30846 AU		9998 May 16 18:21	0°Υ	
morning rise	9992 Jan 06 23:37	6° <b>ට</b> 21'14	10.500.0110	retrograde	9998 Jul 05 22:17	2° <b>Υ</b> '07'48	
retrograde	9992 Apr 18 19:17	14° <b>る</b> 10'13		renograde	9998 Aug 27 00:52	30° <b>₹</b> ₩	
opposition	9992 Jun 24 23:48	10° <b>る</b> 45'29	2°22'05	opposition	9998 Sep 12 03:49	28° <b>)</b> (46'58	0°08'56
min. Earth dist.	9992 Jun 25 06:04	10° <b>පි</b> 44'13	8.31568 AU	min. Earth dist.	9998 Sep 12 07:19	28° <b>)</b> (46'17	
direct	9992 Sep 01 08:34	7° <b>る</b> 17'43	0.51000110	direct	9998 Nov 21 02:10	25° <b>¥</b> 22'10	0.00000110
evening set	9992 Dec 15 15:21	15° <b>る</b> 15'19		desc. node	9998 Dec 28 01:24	26° <b>)</b> 30'01	
e venning see	,,,, <u>2</u> 2 00 10 10.21	10 010 17		dose. node	9999 Feb 07 04:46	0°Υ	
conjunction	9993 Jan 02 08:23	17° <b>る</b> 28'36	1°51'43	evening set	9999 Mar 05 14:42	3° <b>Υ</b> '01'34	
minimum elong	9993 Jan 02 08:24	17° <b>る</b> 28'36		evening sec	,,,,, man 00 11.12	5 ( 015 )	
max. Earth dist.	9993 Jan 01 23:38		10.32312 AU	conjunction	9999 Mar 22 19:03	5° <b>Υ</b> '08'09	-0°05'43
morning rise	9993 Jan 19 22:52	19° <b>る</b> 41'08		minimum elong	9999 Mar 22 19:04	5° <b>Υ</b> '08'09	
retrograde	9993 May 02 07:26	27° <b>පි</b> 27'06		behind sun begin	9999 Mar 22 12:15	5° <b>Y</b> ′06′04	
opposition	9993 Jul 08 11:25	24° <b>る</b> 02'59	2°13'27	behind sun end	9999 Mar 23 01:52	5° <b>Υ</b> 10'14	
min. Earth dist.	9993 Jul 08 18:37	24° <b>る</b> 01'33		max. Earth dist.	9999 Mar 22 15:23		10.58736 AU
direct	9993 Sep 15 02:39	20° <b>る</b> 35'10		morning rise	9999 Apr 08 20:32	7° <b>Υ</b> 13'52	
evening set	9993 Dec 29 14:45	28° <b>る</b> 32'02		retrograde	9999 Jul 18 17:09	14° <b>Y</b> ′38'43	
	9994 Jan 10 08:41	0° <b>≈</b>		opposition	9999 Sep 25 06:40	11° <b>Y</b> 18'19	-0°22'17
				min. Earth dist.	9999 Sep 25 09:04		8.61364 AU
conjunction	9994 Jan 16 06:14	0° <b>≈</b> 44'36	1°41'51	direct	9999 Dec 04 07:46	7° <b>Υ</b> ′54'28	
minimum elong	9994 Jan 16 06:16	0°≈44'36		evening set	10000 Mar 17 09:16	15° <b>Υ</b> 29'17	
max. Earth dist.	9994 Jan 15 20:41		10.34934 AU				
morning rise	9994 Feb 02 18:51	2°≈56'18		conjunction	10000 Apr 03 10:55	17° <b>Ƴ</b> 34'29	-0°30'33
retrograde	9994 May 15 15:20	10°≈38'40		minimum elong	10000 Apr 03 10:54	17° <b>Υ</b> '34'29	
opposition	9994 Jul 21 22:23	7°≈15'15	1°57'46	max. Earth dist.	10000 Apr 03 08:41		10.63933 AU
min. Earth dist.	9994 Jul 22 05:46	7°≈13'47	8.36729 AU	morning rise	10000 Apr 03 08:41 10000 Apr 20 10:16	17 γ 33 48 19° <b>γ</b> 38'59	.0.03733 AO
direct	9994 Sep 28 22:04	3°≈47'37	3.50/2/110	retrograde	10000 Apr 20 10:10 10000 Jul 30 09:07	27° <b>Υ</b> '01'41	
evening set	9995 Jan 12 10:13	11°≈42'33		opposition	10000 Jul 30 09:07 10000 Oct 07 07:23	23° <b>Y</b> 41'33	-0°52'05
evening set	7775 Jan 12 10.13	11 ~72 33		min. Earth dist.	10000 Oct 07 07:51	23° <b>Y</b> 41'27	8.66391 AU
conjunction	9995 Jan 29 23:55	13° <b>≈</b> 54'11	1°26'42	direct	10000 Oct 07 07:31 10000 Dec 16 10:25	23 γ 41 27 20° <b>Υ</b> 18'38	0.00391 AU
conjunction	1110 Jan 49 43.33	1.7 ~ 7.4 11	1 2042	ance	10000 DCC 10 10.23	20 1 10 JO	

evening set	10001 Mar 29 23:33	27° <b>Y</b> '49'03		direct	10007 Mar 01 12:13	2° <b>©</b> 56'57	
	10001 4 15 22 42	20000052150	0053146	evening set	10007 Jun 10 07:26	10°©12'14	
conjunction	10001 Apr 15 22:43	29° <b>Y</b> 52'58		. ,.	10007 1 27 02 00	120612125	1054140
minimum elong	10001 Apr 15 22:42	29° <b>Y</b> 52'57	0°53'56	conjunction	10007 Jun 27 02:08	12°©13'35	
max. Earth dist.	10001 Apr 15 22:55	0° <b>8</b>	10.68694 AU	minimum elong	10007 Jun 27 02:09	12°©13'35	
morning rise	10001 Apr 16 21:40	1° <b>8</b> 56'20		max. Earth dist. morning rise	10007 Jun 27 10:00 10007 Jul 13 22:49	12°915'38 14°9515'33	10.77366 AU
morning rise retrograde	10001 May 02 20:00 10001 Aug 12 00:06	9° <b>8</b> 17'32		retrograde	10007 Jul 13 22:49 10007 Oct 25 14:18	21°942'02	
opposition	10001 Aug 12 00:00 10001 Oct 20 06:00	5° <b>8</b> 57'32	1010/11	opposition	10007 Oct 23 14.18 10008 Jan 03 20:20	18°9519'52	2017122
min. Earth dist.	10001 Oct 20 06:00 10001 Oct 20 04:20		8.70874 AU	min. Earth dist.	10008 Jan 03 13:22		8.76368 AU
direct	10001 Oct 20 04.20 10001 Dec 29 10:01	2° <b>8</b> 35'31	8.70874 AU	direct	10008 Jan 03 13.22 10008 Mar 12 22:32	15°9500'12	8.70308 AU
evening set	10001 Dec 29 10:01 10002 Apr 11 10:02	10° <b>8</b> 01'51		evening set	10008 Mai 12 22.32 10008 Jun 21 11:59	22°S15'30	
evening set	10002 Apr 11 10.02	10 001 31		evening set	10008 Juli 21 11.39	22 913 30	
conjunction	10002 Apr 28 06:59	12° <b>8</b> 04'38	-1°14'21	conjunction	10008 Jul 08 08:27	24° <b>©</b> 17'35	-1°47'58
minimum elong	10002 Apr 28 06:57	12° <b>8</b> 04'37		minimum elong	10008 Jul 08 08:28	24°917'35	
max. Earth dist.	10002 Apr 28 09:35	_	10.72794 AU	max. Earth dist.	10008 Jul 08 16:02		10.74863 AU
morning rise	10002 May 15 02:29	14° <b>8</b> 07'01	10.72771110	morning rise	10008 Jul 25 07:39	26°\$20'26	10.7 1005 710
morning not	10002 May 22 13:54	15° <b>8</b>			10008 Aug 27 11:45	0°€	
retrograde	10002 Aug 24 15:09	21° <b>8</b> 27'26		retrograde	10008 Nov 06 08:43	3° <b>Ω</b> 49'34	
opposition	10002 Nov 02 03:05	18° <b>8</b> 07'25	-1°42'29	opposition	10009 Jan 15 13:44	0° <b>Ω</b> 26'40	-2°06'18
min. Earth dist.	10002 Nov 01 23:51	_	8.74598 AU	min. Earth dist.	10009 Jan 15 07:10		8.73361 AU
	10002 Dec 25 12:16	15°R <b>႘</b>			10009 Jan 21 09:54	30°R.55	
direct	10003 Jan 11 04:34	14° <b>8</b> 46'12		direct	10009 Mar 25 08:05	27° <b>©</b> 06'44	
	10003 Jan 27 18:34	15°8			10009 May 23 23:01	0°N	
evening set	10003 Apr 23 17:16	22° <b>8</b> 08'53		evening set	10009 Jul 03 18:40	4°Ω22'51	
<i>3</i>	r	• • • • • • • • • • • • • • • • • • • •		<i>3</i>			
conjunction	10003 May 10 12:17	24° <b>8</b> 10'44	-1°31'29	conjunction	10009 Jul 20 17:35	6° <b>Ω</b> 25'55	-1°36'25
minimum elong	10003 May 10 12:15	24° <b>8</b> 10'43	1°31'49	minimum elong	10009 Jul 20 17:37	6° <b>Ω</b> 25'56	
max. Earth dist.	10003 May 10 16:19	24° <b>8</b> 11'57	10.76025 AU	max. Earth dist.	10009 Jul 21 01:01	6° <b>Ω</b> 28'11	10.71436 AU
morning rise	10003 May 27 06:39	26° <b>8</b> 12'24		morning rise	10009 Aug 06 19:48	8° <b>Ω</b> 29'55	
C	10003 Jun 30 19:37	$\Pi^{\circ}0$		C	10009 Oct 14 15:47	15° <b>Ω</b>	
retrograde	10003 Sep 06 03:39	3°Ⅲ32'43		retrograde	10009 Nov 19 03:37	16° <b>Ω</b> 02'01	
opposition	10003 Nov 14 22:39	0° <b>Ⅱ</b> 12'31	-2°01'04		10009 Dec 25 04:35	15°R <b>Ω</b>	
min. Earth dist.	10003 Nov 14 18:50	0° <b>Ⅱ</b> 13'14	8.77354 AU	opposition	10010 Jan 28 07:49	12° <b>Ω</b> 38′20	-1°49'19
	10003 Nov 17 17:05	30° <b>₹</b> 8		min. Earth dist.	10010 Jan 28 01:32	12° <b>£</b> 39'33	8.69498 AU
direct	10004 Jan 23 20:58	26° <b>8</b> 51'57		direct	10010 Apr 06 21:10	9° <b>Ω</b> 17'59	
	10004 Mar 27 00:47	$\Pi$ $^{\circ}0$			10010 Jul 02 12:35	15° <b>Ω</b>	
evening set	10004 May 04 22:11	4° <b>Ⅱ</b> 11'39		evening set	10010 Jul 16 04:32	16° <b>Ω</b> 35'43	
conjunction	10004 May 21 15:52	6° <b>Ⅱ</b> 12'50	-1°44'29	conjunction	10010 Aug 02 06:35	18° <b>Ω</b> 40′03	-1°20'26
minimum elong	10004 May 21 15:50	6° <b>Ⅱ</b> 12'50	1°44'52	minimum elong	10010 Aug 02 06:37	18° <b>Ω</b> 40'04	1°20'45
max. Earth dist.	10004 May 21 20:11	6° <b>Ⅱ</b> 14'09	10.78188 AU	max. Earth dist.	10010 Aug 02 14:27		10.67239 AU
morning rise	10004 Jun 07 09:49	8° <b>Ⅱ</b> 14'05		morning rise	10010 Aug 19 12:04	20° <b>Ω</b> 45'24	
retrograde	10004 Sep 17 16:12	15° <b>Ⅱ</b> 34'59		retrograde	10010 Dec 02 03:17	28° <b>Ω</b> 20'40	
opposition	10004 Nov 26 16:46	12° <b>Ⅱ</b> 14'30		opposition	10011 Feb 10 02:49	24° <b>Ω</b> 56′12	-1°27'12
min. Earth dist.	10004 Nov 26 12:26		8.78943 AU	main Earth dist			
direct				min. Earth dist.	10011 Feb 09 20:21		8.64948 AU
evening set	10005 Feb 04 12:02	8° <b>∏</b> 54'24		direct	10011 Apr 19 10:16	21° <b>Q</b> 35'19	8.64948 AU
	10005 Feb 04 12:02 10005 May 17 01:34	8°Щ54'24 16° <b>Щ</b> 11'54			10011 Apr 19 10:16 10011 Jul 28 18:30	21° <b>Ω</b> 35'19 28° <b>Ω</b> 55'25	8.64948 AU
	10005 May 17 01:34	16° <b>Ⅱ</b> 11'54	1052152	direct	10011 Apr 19 10:16	21° <b>Q</b> 35'19	8.64948 AU
conjunction	10005 May 17 01:34 10005 Jun 02 18:46	16°Ⅲ11'54 18°Ⅲ12'47		direct evening set	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52	21° \( \Omega 35'19\) 28° \( \Omega 55'25\) 0° \( \mathrm{T}_{Q}\)	
minimum elong	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45	16°П11'54 18°П12'47 18°П12'47	1°53'16	direct evening set conjunction	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57	21° \Omega 35'19 28° \Omega 55'25 0° \mathred{m} 1° \mathred{m} 01'12	-1°00'36
minimum elong max. Earth dist.	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03	16°Д11'54 18°Д12'47 18°Д12'47 18°Д14'24		direct evening set  conjunction minimum elong	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59	21° N 35'19 28° N 55'25 0° M 1° M 01'12 1° M 01'13	-1°00'36 1°00'50
minimum elong max. Earth dist. morning rise	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54	16°Д11'54 18°Д12'47 18°Д12'47 18°Д14'24 20°Д13'56	1°53'16	direct evening set  conjunction minimum elong max. Earth dist.	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51	21° \Omega 35'19 28° \Omega 55'25 0° mp 1° mp 01'12 1° mp 01'13 1° mp 03'37	-1°00'36
minimum elong max. Earth dist. morning rise retrograde	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58	16° Д11'54 18° Д12'47 18° Д12'47 18° Д14'24 20° Д13'56 27° Д36'10	1°53'16 10.79126 AU	direct evening set  conjunction minimum elong max. Earth dist. morning rise	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50	21° \Omega 35'19 28° \Omega 55'25 0° mp  1° mp 01'12 1° mp 01'13 1° mp 03'37 3° mp 08'03	-1°00'36 1°00'50
minimum elong max. Earth dist. morning rise retrograde opposition	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12	16°Ш11'54 18°Ш12'47 18°Ш12'47 18°Ш14'24 20°Ш13'56 27°Ш36'10 24°Ш15'16	1°53'16 10.79126 AU -2°21'31	conjunction minimum elong max. Earth dist. morning rise retrograde	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22	21° \Omega 35'19 28° \Omega 55'25 0° mp  1° mp 01'12 1° mp 01'13 1° mp 03'37 3° mp 08'03 10° mp 46'35	-1°00'36 1°00'50 10.62440 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46	16° Д11'54 18° Д12'47 18° Д12'47 18° Д14'24 20° Д13'56 27° Д36'10 24° Д15'16 24° Д16'17	1°53'16 10.79126 AU	direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11	21° \( \Omega 35'19 \) 28° \( \Omega 55'25 \) 0° \( \mu_0 01'12 \) 1° \( \mu_0 01'13 \) 1° \( \mu_0 03'37 \) 3° \( \mu_0 08'03 \) 10° \( \mu_4 46'35 \) 7° \( \mu_2 21'25 \)	-1°00'36 1°00'50 10.62440 AU -1°00'48
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24	16° П11'54 18° П12'47 18° П12'47 18° П14'24 20° П13'56 27° П36'10 24° П15'16 24° П16'17 20° П55'31	1°53'16 10.79126 AU -2°21'31	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00	21° \( \Omega 35'19 \) 28° \( \Omega 55'25 \) 0° \( \mu \) 1° \( \mu \) 01'12 1° \( \mu \) 01'13 1° \( \mu \) 03'37 3° \( \mu \) 08'03 10° \( \mu \) 46'35 7° \( \mu \) 21'25 7° \( \mu \) 22'37	-1°00'36 1°00'50 10.62440 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13	16° Д 11'54 18° Д 12'47 18° Д 12'47 18° Д 14'24 20° Д 13'56 27° Д 36'10 24° Д 15'16 24° Д 16'17 20° Д 55'31 28° Д 11'32	1°53'16 10.79126 AU -2°21'31	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00 10012 Apr 30 23:37	21° \( \Omega 35'19 \) 28° \( \Omega 55'25 \) 0° \( \omega 01'12 \) 1° \( \omega 01'13 \) 1° \( \omega 03'37 \) 3° \( \omega 08'03 \) 10° \( \omega 46'35 \) 7° \( \omega 21'25 \) 7° \( \omega 22'37 \) 3° \( \omega 59'53 \)	-1°00'36 1°00'50 10.62440 AU -1°00'48
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	10005 May 17 01:34 10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24	16° П11'54 18° П12'47 18° П12'47 18° П14'24 20° П13'56 27° П36'10 24° П15'16 24° П16'17 20° П55'31	1°53'16 10.79126 AU -2°21'31	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00	21° \( \Omega 35'19 \) 28° \( \Omega 55'25 \) 0° \( \mu \) 1° \( \mu \) 01'12 1° \( \mu \) 01'13 1° \( \mu \) 03'37 3° \( \mu \) 08'03 10° \( \mu \) 46'35 7° \( \mu \) 21'25 7° \( \mu \) 22'37	-1°00'36 1°00'50 10.62440 AU -1°00'48
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41	16°П11'54  18°П12'47 18°П12'47 18°П14'24 20°П13'56 27°П36'10 24°П15'16 24°П16'17 20°П55'31 28°П11'32 0°©	1°53'16 10.79126 AU -2°21'31 8.79268 AU	direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00 10012 Apr 30 23:37 10012 Aug 09 13:26	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathref{m}\$ 01'12 1° \$\mathref{m}\$ 01'13 1° \$\mathref{m}\$ 03'37 3° \$\mathref{m}\$ 08'03 10° \$\mathref{m}\$ 46'35 7° \$\mathref{m}\$ 21'25 7° \$\mathref{m}\$ 22'37 3° \$\mathref{m}\$ 59'53 11° \$\mathref{m}\$ 23'10	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41	16°П11'54  18°П12'47 18°П12'47 18°П14'24 20°П13'56 27°П36'10 24°П15'16 24°П16'17 20°П55'31 28°П11'32 0°©	1°53'16 10.79126 AU -2°21'31 8.79268 AU	direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00 10012 Apr 30 23:37 10012 Aug 09 13:26	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathref{m}\$ 01'12 1° \$\mathref{m}\$ 01'13 1° \$\mathref{m}\$ 03'37 3° \$\mathref{m}\$ 08'03 10° \$\mathref{m}\$ 46'35 7° \$\mathref{m}\$ 22'37 3° \$\mathref{m}\$ 22'37 3° \$\mathref{m}\$ 23'10 13° \$\mathref{m}\$ 30'28	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41  10006 Jun 14 21:48 10006 Jun 14 21:48	16°П11'54  18°П12'47 18°П12'47 18°П14'24 20°П13'56 27°П36'10 24°П15'16 24°П16'17 20°П55'31 28°П11'32 0°© 0°©12'29 0°©12'29	1°53'16 10.79126 AU -2°21'31 8.79268 AU -1°56'19 1°56'44	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Feb 22 17:00 10012 Apr 30 23:37 10012 Aug 09 13:26	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathref{m}\$ 1° \$\mathref{m}\$01'12 1° \$\mathref{m}\$01'13 1° \$\mathref{m}\$03'37 3° \$\mathref{m}\$08'03 10° \$\mathref{m}\$46'35 7° \$\mathref{m}\$22'37 3° \$\mathref{m}\$22'37 3° \$\mathref{m}\$22'310 13° \$\mathref{m}\$30'28 13° \$\mathref{m}\$30'29	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU -0°37'44 0°37'53
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist.	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 02 18:45 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41  10006 Jun 14 21:48 10006 Jun 14 21:48 10006 Jun 15 04:44	16°П11'54  18°П12'47 18°П12'47 18°П14'24 20°П13'56 27°П36'10 24°П15'16 24°П16'17 20°П55'31 28°П11'32 0°© 0°©12'29 0°©12'29 0°©14'35	1°53'16 10.79126 AU -2°21'31 8.79268 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist.	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Apr 30 23:37 10012 Aug 09 13:26 10012 Aug 26 22:11 10012 Aug 26 22:12 10012 Aug 27 04:50	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathre{m}\text{ 01'12} 1° \$\mathre{m}\text{ 01'13} 1° \$\mathre{m}\text{ 03'37} 3° \$\mathre{m}\text{ 08'03} 10° \$\mathre{m}\text{ 46'35} 7° \$\mathre{m}\text{ 22'37} 3° \$\mathre{m}\text{ 59'53} 11° \$\mathre{m}\text{ 23'10}  13° \$\mathre{m}\text{ 30'28} 13° \$\mathre{m}\text{ 30'29} 13° \$\mathre{m}\text{ 32'31}	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41  10006 Jun 14 21:48 10006 Jun 15 04:44 10006 Jun 15 04:44 10006 Jul 01 16:47	16°П11'54  18°П12'47 18°П12'47 18°П14'24 20°П13'56 27°П36'10 24°П15'16 24°П16'17 20°П55'31 28°П11'32 0°© 0°©12'29 0°©12'29 0°©14'35 2°©13'52	1°53'16 10.79126 AU -2°21'31 8.79268 AU -1°56'19 1°56'44	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Apr 30 23:37 10012 Aug 09 13:26 10012 Aug 26 22:11 10012 Aug 26 22:11 10012 Aug 27 04:50 10012 Sep 13 10:24	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathre{m}\$ 01'12 1° \$\mathre{m}\$ 01'13 1° \$\mathre{m}\$ 03'37 3° \$\mathre{m}\$ 08'03 10° \$\mathre{m}\$ 46'35 7° \$\mathre{m}\$ 21'25 7° \$\mathre{m}\$ 22'37 3° \$\mathre{m}\$ 59'53 11° \$\mathre{m}\$ 23'10  13° \$\mathre{m}\$ 30'28 13° \$\mathre{m}\$ 30'29 13° \$\mathre{m}\$ 32'31 15° \$\mathre{m}\$ 38'51	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU -0°37'44 0°37'53
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41  10006 Jun 14 21:48 10006 Jun 15 04:44 10006 Jun 15 04:44 10006 Jul 01 16:47 10006 Oct 12 20:48	16° Ⅲ11'54  18° Ⅲ12'47 18° Ⅲ14'24 20° Ⅲ13'56 27° Ⅲ36'10 24° Ⅲ15'16 24° Ⅲ16'17 20° Ⅲ55'31 28° Ⅲ11'32 0° ☞ 0° ☞12'29 0° ☞12'29 0° ☞14'35 2° ℱ13'52 9° ℱ38'03	1°53'16 10.79126 AU -2°21'31 8.79268 AU -1°56'19 1°56'44 10.78823 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	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Apr 30 23:37 10012 Aug 09 13:26 10012 Aug 26 22:11 10012 Aug 26 22:12 10012 Aug 27 04:50 10012 Sep 13 10:24 10012 Dec 27 10:47	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathre{m}\$ 01'12 1° \$\mathre{m}\$ 01'13 1° \$\mathre{m}\$ 03'37 3° \$\mathre{m}\$ 08'03 10° \$\mathre{m}\$ 46'35 7° \$\mathre{m}\$ 21'25 7° \$\mathre{m}\$ 22'37 3° \$\mathre{m}\$ 23'10 13° \$\mathre{m}\$ 30'28 13° \$\mathre{m}\$ 30'29 13° \$\mathre{m}\$ 30'31 15° \$\mathre{m}\$ 38'51 23° \$\mathre{m}\$ 20'38	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU -0°37'44 0°37'53 10.57235 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise	10005 May 17 01:34  10005 Jun 02 18:46 10005 Jun 03 00:03 10005 Jun 19 12:54 10005 Sep 30 05:58 10005 Dec 09 10:12 10005 Dec 09 04:46 10006 Feb 17 00:24 10006 May 29 04:13 10006 Jun 13 04:41  10006 Jun 14 21:48 10006 Jun 15 04:44 10006 Jun 15 04:44 10006 Jul 01 16:47	16° II 11'54  18° II 12'47 18° II 12'47 18° II 14'24 20° II 13'56 27° II 36'10 24° II 15'16 24° II 16'17 20° II 55'31 28° II 11'32 0° II 12'29 0° II 12'29 0° II 13'5 2° II 13'5 2° II 15'5 2° II 15'3 2° II 15'3 3° II 11'3	1°53'16 10.79126 AU -2°21'31 8.79268 AU -1°56'19 1°56'44 10.78823 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	10011 Apr 19 10:16 10011 Jul 28 18:30 10011 Aug 06 15:52 10011 Aug 14 23:57 10011 Aug 14 23:59 10011 Aug 15 07:51 10011 Sep 01 08:50 10011 Dec 15 06:22 10012 Feb 22 23:11 10012 Apr 30 23:37 10012 Aug 09 13:26 10012 Aug 26 22:11 10012 Aug 26 22:11 10012 Aug 27 04:50 10012 Sep 13 10:24	21° \$\Omega 35'19 28° \$\Omega 55'25 0° \$\mathref{m}\$ 01'12 1° \$\mathref{m}\$ 01'13 1° \$\mathref{m}\$ 03'37 3° \$\mathref{m}\$ 08'03 10° \$\mathref{m}\$ 46'35 7° \$\mathref{m}\$ 21'25 7° \$\mathref{m}\$ 22'37 3° \$\mathref{m}\$ 22'37 3° \$\mathref{m}\$ 30'28 13° \$\mathref{m}\$ 30'28 13° \$\mathref{m}\$ 30'29 13° \$\mathref{m}\$ 30'29 13° \$\mathref{m}\$ 32'31 15° \$\mathref{m}\$ 38'51 23° \$\mathref{m}\$ 20'38 19° \$\mathref{m}\$ 54'53	-1°00'36 1°00'50 10.62440 AU -1°00'48 8.59891 AU -0°37'44 0°37'53 10.57235 AU

direct	10013 May 13 17:02	16° <b>m</b> 32'35		conjunction	10018 Nov 15 21:39	1° <b>∡</b> ³30'48	1°39'04
evening set	10013 May 13 17:02 10013 Aug 22 13:48	23° m 59'47		minimum elong	10018 Nov 15 21:36	1°×30'47	1°39'26
evening set	10013 Aug 22 13.40	23 III 37 47		max. Earth dist.	10018 Nov 15 27:36		10.31503 AU
conjunction	10013 Sep 09 01:39	26° Mp 08'37	-0°12'49	morning rise	10018 Dec 03 17:33	3°×7'44'50	10.51505710
minimum elong	10013 Sep 09 01:39	26° m) 08'37		retrograde	10019 Mar 17 18:36	11° <b>×</b> 738'13	
behind sun begin	10013 Sep 08 21:16	26° Mp 07'17	0 1233	opposition	10019 May 24 06:05	8° <b>₹</b> 12'15	2°10'43
behind sun end	10013 Sep 09 06:02	26° Mp 09'58		min. Earth dist.	10019 May 24 09:37	8°×11'32	8.30867 AU
max. Earth dist.	10013 Sep 09 06:14		10.51868 AU	direct	10019 Jul 30 23:17	4° <b>х</b> 45′30	0.000, 110
morning rise	10013 Sep 26 16:59	28° m) 18'29		evening set	10019 Nov 12 06:17	12° <b>х</b> 40′00	
C	10013 Oct 11 00:57	0∘ <u>⊽</u>		S			
retrograde	10014 Jan 09 18:44	6° <b>♀</b> 03'27		conjunction	10019 Nov 30 01:44	14° <b>∡</b> ′54′07	1°50'07
asc. node	10014 Mar 16 01:47	2° <b>£</b> 55'18		minimum elong	10019 Nov 30 01:43	14° <b>∡</b> °54′06	1°50'31
opposition	10014 Mar 19 21:28	2° <b>≏</b> 37'13	0°00'20	max. Earth dist.	10019 Nov 29 19:45	14° <b>∡</b> ′52'13	10.30313 AU
min. Earth dist.	10014 Mar 19 18:14	2° <b>£</b> 37'51	8.49191 AU	morning rise	10019 Dec 17 20:34	17° <b>∡</b> ′08′04	
	10014 Apr 26 21:15	30°R, M)		retrograde	10020 Mar 30 10:02	25° <b>∡</b> ¹00'33	
direct	10014 May 26 13:01	29° m 14'05		opposition	10020 Jun 05 17:52	21° <b>₹</b> ³35'11	2°20'50
	10014 Jun 24 22:23	0∘ <b>⊽</b>		min. Earth dist.	10020 Jun 05 22:47	21° <b>∡</b> °34′11	8.30330 AU
evening set	10014 Sep 04 19:51	6° <b>£</b> 45'45		direct	10020 Aug 12 16:51	18° <b>∡</b> ′08′03	
				evening set	10020 Nov 25 11:12	26° <b>х</b> 04′56	
conjunction	10014 Sep 22 10:34	8° <b>≏</b> 56'03	0°13'03				
minimum elong	10014 Sep 22 10:33	8° <b>≏</b> 56'03	0°13'06	conjunction	10020 Dec 13 05:53	28° <b>∡</b> 18'54	1°55'13
behind sun begin	10014 Sep 22 06:19	8° <b>£</b> 54'45		minimum elong	10020 Dec 13 05:53	28° <b>∡</b> 18'54	1°55'38
behind sun end	10014 Sep 22 14:47	8° <b>≏</b> 57'21		max. Earth dist.	10020 Dec 12 22:36	28° <b>∡</b> 16'36	10.30391 AU
max. Earth dist.	10014 Sep 22 13:20	8° <b>≙</b> 56'54	10.46593 AU		10020 Dec 26 14:49	8°0	
morning rise	10014 Oct 10 04:25	11° <b>≏</b> 07'18		morning rise	10020 Dec 30 23:14	0° <b>る</b> 32'29	
retrograde	10015 Jan 23 05:09	18° <b>≙</b> 55'09		retrograde	10021 Apr 13 01:04	8° <b>る</b> 23'05	
opposition	10015 Apr 01 23:46	15° <b>≏</b> 28'35	0°32'13	opposition	10021 Jun 19 06:15	4° <b>る</b> 58'22	2°23'18
min. Earth dist.	10015 Apr 01 21:59	15° <b>≏</b> 28'57	8.44063 AU	min. Earth dist.	10021 Jun 19 11:52	4° <b>る</b> 57'14	8.31044 AU
direct	10015 Jun 08 12:44	12° <b>≏</b> 04'36		direct	10021 Aug 26 11:28	1° <b>る</b> 31'01	
evening set	10015 Sep 18 07:52	19° <b>≏</b> 41'11		evening set	10021 Dec 09 15:17	9° <b>る</b> 28'56	
conjunction	10015 Oct 06 00:56	21° <b>≏</b> 52'47	0°38'28	conjunction	10021 Dec 27 08:57	11° <b>る</b> 42'31	1°54'04
minimum elong	10015 Oct 06 00:55	21° <b>≏</b> 52'47	0°38'36	minimum elong	10021 Dec 27 08:57	11° <b>る</b> 42'31	1°54'30
max. Earth dist.	10015 Oct 06 02:22		10.41662 AU	max. Earth dist.	10021 Dec 27 01:06	11° <b>る</b> 40'02	10.31709 AU
morning rise	10015 Oct 23 20:26	24° <b>£</b> 05′10		morning rise	10022 Jan 14 00:28	13° <b>る</b> 55'27	
	10015 Dec 19 19:37	0° <b>M</b> ,		retrograde	10022 Apr 26 14:23	21° <b>る</b> 43'13	
retrograde	10016 Feb 05 17:11	1°ML55'30		opposition	10022 Jul 02 18:31	18° <b>る</b> 19'11	2°18'01
	10016 Mar 25 11:15	30° <b>₹</b> Ω		min. Earth dist.	10022 Jul 03 00:17	18° <b>ろ</b> 18'02	8.32927 AU
opposition	10016 Apr 14 04:09	28° <b>£</b> 28'46	1°02'49	direct	10022 Sep 09 06:50	14°る51'48	
min. Earth dist.	10016 Apr 14 03:22		8.39429 AU	evening set	10022 Dec 23 16:56	22° <b>る</b> 49'24	
direct	10016 Jun 20 17:04	25° <b>₽</b> 03'58			10022 1 10 00 16	250702110	1046140
	10016 Sep 07 11:49	0°M,		conjunction	10023 Jan 10 09:16	25° <b>ろ</b> 02'19	1°46'49
evening set	10016 Oct 01 01:23	2°M45'36		minimum elong	10023 Jan 10 09:18	25°る02'20	1°47'12
amiumatian	10016 Oat 19 20:07	4° <b>M</b> .58'17	1002100	max. Earth dist.	10023 Jan 10 01:20		10.34135 AU
conjunction	10016 Oct 18 20:07			morning rise	10023 Jan 27 22:44	27° <b>る</b> 14'26	
minimum elong max. Earth dist.	10016 Oct 18 20:05	4°M58'17	1°02'22 10.37346 AU	retrograde	10023 Feb 20 06:59 10023 May 10 01:11	0° <b>≈</b> 4° <b>≈</b> 58'41	
morning rise	10016 Oct 18 20:14 10016 Nov 05 16:26	7°ML11'31	10.57540 AU	opposition	10023 Jul 16 06:21	1°≈35'22	2°05'23
morning risc	10010 Nov 03 10:20 10017 Feb 10 00:56	15°M		min. Earth dist.	10023 Jul 16 00:21 10023 Jul 16 12:35	1°≈34'08	8.35798 AU
retrograde	10017 Feb 18 08:24	15°ML03'44		iiiii. Lattii dist.	10023 Jul 10 12:33 10023 Aug 06 00:22	1 ~5400 30°Rる	6.55176 AC
renograde	10017 Feb 18 08.24 10017 Feb 26 16:40	15 11603 44 15°RM		direct	10023 Aug 06 00.22 10023 Sep 23 02:02	30 KO 28° <b>ろ</b> 08'07	
opposition	10017 Feb 20 10:40 10017 Apr 27 10:53	13 KIIC 11°ML37'03	1°30'29	direct	10023 Sep 23 02:02 10023 Nov 09 07:00	28 <b>3</b> 08 07 0° <b>≈</b>	
min. Earth dist.	10017 Apr 27 10:95	11°ML37'01	8.35548 AU	evening set	10024 Jan 06 14:45	6° <b>≈</b> 04'09	
direct	10017 Jul 03 23:27	8°M11'30	0.555 10 110	evening sec	100213411 00 11.15	0,4.010)	
ancet	10017 July 03 23:27 10017 Oct 07 00:46	15°M		conjunction	10024 Jan 24 05:26	8° <b>≈</b> 16'13	1°33'55
evening set	10017 Oct 14 23:37	15°ML58'00		minimum elong	10024 Jan 24 05:28		1°34'16
	551. 5 <b>5</b> 0 11 <b>2</b> 5.57	1100000		max. Earth dist.	10024 Jan 23 21:02		10.37434 AU
conjunction	10017 Nov 01 19:16	18°M11'29	1°22'45	morning rise	10024 Feb 10 16:48	10° <b>≈</b> 27'21	
minimum elong	10017 Nov 01 19:14	18°ML11'28	1°23'03	0	10024 Mar 22 09:54	15° <b>≈</b>	
max. Earth dist.	10017 Nov 01 17:44	18°ML11'00		retrograde	10024 May 22 09:40	18° <b>≈</b> 07'51	
morning rise	10017 Nov 19 15:42	20°M25'16			10024 Jul 25 14:47	15°R≈	
retrograde	10018 Mar 04 01:38	28°M18'34		opposition	10024 Jul 28 17:16	14° <b>≈</b> 45'15	1°46'14
opposition	10018 May 10 19:41	24°M52'08	1°53'35	min. Earth dist.	10024 Jul 29 00:11	14° <b>≈</b> 43'53	8.39407 AU
min. Earth dist.	10018 May 10 21:18	24°ML51'49	8.32639 AU	direct	10024 Oct 05 19:18	11° <b>≈</b> 18'19	
direct	10018 Jul 17 09:16	21°M25'56			10024 Dec 13 02:57	15° <b>≈</b>	
evening set	10018 Oct 29 01:48	29°M16'50		evening set	10025 Jan 19 08:18	19° <b>≈</b> 11'54	
	10018 Nov 03 20:48	0° <b>∡</b> ¹					

agnismation	10025 Eak 05 21:02	219002250	1°16'12		10031 Feb 17 12:04	0° <b>႘</b>	
conjunction	10025 Feb 05 21:02					_	
minimum elong	10025 Feb 05 21:05	21°≈23'00	1°16'30	evening set	10031 Apr 06 10:38	5° <b>8</b> 02'19	
max. Earth dist.	10025 Feb 05 12:06	21° <b>≈</b> 20′11	10.41365 AU				
morning rise	10025 Feb 23 06:21	23° <b>≈</b> 33'04		conjunction	10031 Apr 23 08:31	7° <b>8</b> 05'50	
	10025 Apr 29 07:21	0° <b>∀</b>		minimum elong	10031 Apr 23 08:29	7° <b>8</b> 05'50	
retrograde	10025 Jun 04 15:01	1° <b>∺</b> 09'47		max. Earth dist.	10031 Apr 23 08:28	7° <b>8</b> 05'50	10.68904 AU
	10025 Jul 11 13:24	30° <b>Ŗ</b> ≈		morning rise	10031 May 10 04:58	9° <b>8</b> 08'56	
opposition	10025 Aug 11 02:48	27° <b>≈</b> 47'53	1°21'44		10031 Jul 08 00:09	15° <b>႘</b>	
min. Earth dist.	10025 Aug 11 10:09	27° <b>≈</b> 46'27	8.43560 AU	retrograde	10031 Aug 19 13:43	16° <b>8</b> 30'36	
direct	10025 Oct 19 11:16	24° <b>≈</b> 21'27	0.15500110	ronogrado	10031 Oct 02 09:39	15°R <b>8</b>	
direct	10025 Get 17 11:10	0° <b>)</b> €		opposition	10031 Oct 02 03:33 10031 Oct 27 23:02	13° <b>8</b> 10'06	1922!10
						_	
evening set	10026 Feb 01 21:06	2° <b>升</b> 11'51		min. Earth dist.	10031 Oct 27 21:51		8.70759 AU
				direct	10032 Jan 06 01:17	9° <b>8</b> 47'57	
conjunction	10026 Feb 19 07:40	4° <b>∺</b> 21'50	0°54'44		10032 Mar 29 13:11	15° <b>8</b>	
minimum elong	10026 Feb 19 07:42	4° <b>∺</b> 21'51	0°54'57	evening set	10032 Apr 17 19:39	17° <b>8</b> 13'14	
max. Earth dist.	10026 Feb 18 22:38	4° <b>₩</b> 19'01	10.45776 AU				
morning rise	10026 Mar 08 14:53	6° <b>¥</b> 30'48		conjunction	10032 May 04 15:33	19° <b>8</b> 15'45	-1°24'42
retrograde	10026 Jun 17 16:17	14° <b>)</b> €03'54		minimum elong	10032 May 04 15:31	19° <b>8</b> 15'44	
opposition	10026 Aug 24 10:58	10° <b>¥</b> 42'35	0°53'21	max. Earth dist.	10032 May 04 17:46	_	10.72313 AU
	-				,	. •	10.72313 AU
min. Earth dist.	10026 Aug 24 17:35	10° <b>)</b> (41'18	8.48133 AU	morning rise	10032 May 21 10:38	21° <b>8</b> 18'01	
direct	10026 Nov 02 02:10	7° <b>∺</b> 16'47		retrograde	10032 Aug 31 02:31	28° <b>8</b> 39'18	
evening set	10027 Feb 15 04:47	15° <b>)</b> €03'22		opposition	10032 Nov 08 19:40	25° <b>8</b> 18'35	-1°53'55
				min. Earth dist.	10032 Nov 08 16:13	25° <b>8</b> 19'14	8.73806 AU
conjunction	10027 Mar 04 12:58	17° <b>¥</b> 12'05	0°30'42	direct	10033 Jan 17 20:29	21° <b>8</b> 57'05	
minimum elong	10027 Mar 04 13:00	17° <b>¥</b> 12'05	0°30'50	evening set	10033 Apr 30 01:59	29° <b>8</b> 19'05	
max. Earth dist.	10027 Mar 04 05:18		10.50529 AU	<b>8</b>	10033 May 05 18:22	0°II	
morning rise	10027 Mar 21 17:56	19° <b>X</b> 19'50	10.30327 AU		10033 Way 03 16.22	ОД	
-				. ,.	10022 M 16 20 25	10 <b>T</b> 20140	1020124
retrograde	10027 Jun 30 15:07	26° <b>)</b> (49'39		conjunction	10033 May 16 20:25	1° <b>Ⅱ</b> 20'49	
opposition	10027 Sep 06 17:23	23° <b>)</b> €28'46	0°22'37	minimum elong	10033 May 16 20:24	1° <b>∏</b> 20'49	
min. Earth dist.	10027 Sep 06 22:16	23° <b>∺</b> 27'49	8.52971 AU	max. Earth dist.	10033 May 17 01:17		10.74898 AU
direct	10027 Nov 15 14:31	20° <b>)</b> €03'42		morning rise	10033 Jun 02 14:32	3° <b>Ⅱ</b> 22'30	
evening set	10028 Feb 28 07:19	27° <b>)</b> 45′58		retrograde	10033 Sep 12 16:36	10° <b>Ⅱ</b> 44′03	
				opposition	10033 Nov 21 14:48	7° <b>Ⅲ</b> 23′03	-2°09'30
conjunction	10028 Mar 16 13:04	29° <b>¥</b> 53′22	0°05'27	min. Earth dist.	10033 Nov 21 09:26	7° <b>Ⅱ</b> 24'04	8.75964 AU
minimum elong	10028 Mar 16 13:04	29° <b>)</b> 53'23	0°05'30	direct	10034 Jan 30 12:42	4° <b>∏</b> 02'09	0.70701110
_	10028 Mar 16 06:13	29° <b>X</b> 53'23	0 03 30			11° <b>Ⅱ</b> 21'27	
behind sun begin		29 <del>X</del> 55'29		evening set	10034 May 12 06:21	11 11212/	
behind sun end	10028 Mar 16 19:55						
max. Earth dist.	10028 Mar 16 07:43		10.55439 AU	conjunction	10034 May 28 23:55	13° <b>∏</b> 22'42	
	10028 Mar 17 10:27	$0^{\circ}$ Y		minimum elong	10034 May 28 23:53	13° <b>Ⅲ</b> 22'41	1°50'23
morning rise	10028 Apr 02 15:39	1° <b>Ƴ</b> 59'52		max. Earth dist.	10034 May 29 06:25	13° <b>∏</b> 24'41	10.76551 AU
desc. node	10028 Jun 05 00:51	8° <b>Ƴ</b> 13'59		morning rise	10034 Jun 14 17:50	15° <b>Ⅲ</b> 24′06	
retrograde	10028 Jul 12 13:20	9° <b>Y</b> 26'46		retrograde	10034 Sep 25 07:29	22° <b>∏</b> 46'30	
opposition	10028 Sep 18 21:45	6° <b>Y</b> ′06′11	-0°08'50	opposition	10034 Dec 04 09:05	19° <b>Ⅱ</b> 25'10	-2°19'20
min. Earth dist.	10028 Sep 19 00:50	6°Υ°05'36	8.57873 AU	min. Earth dist.	10034 Dec 04 02:48		8.77144 AU
direct	10028 Nov 27 21:27	2° <b>Υ</b> 41'52	0.57075710	direct	10034 Bec 04 02:48 10035 Feb 12 00:58	16° <b>∏</b> 04'43	0.77144710
						23° <b>I</b> I21'59	
evening set	10029 Mar 12 04:53	10° <b>Ƴ</b> 19'38		evening set	10035 May 24 09:32	23°Щ21′59	
	1000075	10000	001017		10005		1055:22
conjunction	10029 Mar 29 08:03	12° <b>Y</b> ′25'43		conjunction	10035 Jun 10 02:54	25° <b>∏</b> 23'04	
minimum elong	10029 Mar 29 08:02	12° <b>Y</b> 25'43	0°19'59	minimum elong	10035 Jun 10 02:53	25° <b>Ⅱ</b> 23'03	1°55'57
max. Earth dist.	10029 Mar 29 05:00	12° <b>Y</b> ′24'47	10.60284 AU	max. Earth dist.	10035 Jun 10 10:07	25° <b>Ⅲ</b> 25'15	10.77205 AU
morning rise	10029 Apr 15 08:19	14° <b>Y</b> 30'59		morning rise	10035 Jun 26 21:33	27° <b>Ⅲ</b> 24'31	
retrograde	10029 Jul 25 07:17	21° <b>Y</b> 55'29		-	10035 Jul 19 17:07	0°ಅ	
opposition	10029 Oct 02 00:10	18° <b>Ƴ</b> 35′03	-0°39'31	retrograde	10035 Oct 07 20:24	4°5548'19	
min. Earth dist.	10029 Oct 02 01:54	18° <b>Υ</b> 34'44	8.62608 AU	opposition	10035 Dec 17 02:37	1°526'34	2022102
			6.02006 AU				
direct	10029 Dec 11 01:42	15° <b>Y</b> 11'30		min. Earth dist.	10035 Dec 16 19:51		8.77291 AU
evening set	10030 Mar 24 21:52	22° <b>Y</b> '44'50			10036 Jan 05 20:01	30°Ŗ <b>Ⅱ</b>	
				direct	10036 Feb 24 13:14	28° <b>∏</b> 06′26	
conjunction	10030 Apr 10 22:17	24° <b>Y</b> 49'34	-0°44'04		10036 Apr 12 13:28	$0$ $\circ$ $\odot$	
minimum elong	10030 Apr 10 22:15	24° <b>Y</b> ′49'33	0°44'12	evening set	10036 Jun 04 12:37	5° <b>©</b> 22'25	
max. Earth dist.	10030 Apr 10 20:48	24° <b>Y</b> ′49'06	10.64835 AU	-			
morning rise	10030 Apr 27 20:28	26° <b>Y</b> ′53'40		conjunction	10036 Jun 21 06:41	7°523'40	-1°56'02
0•	10030 May 25 04:40	0°8		minimum elong	10036 Jun 21 06:41	7°923'40	
retrograda	10030 May 23 04:40 10030 Aug 06 22:56	4° <b>8</b> 16'26		max. Earth dist.	10036 Jun 21 14:38		10.76829 AU
retrograde	-		1000102				10.70049 AU
opposition	10030 Oct 15 00:35	0° <b>8</b> 56'02		morning rise	10036 Jul 08 02:45	9°525'28	
min. Earth dist.	10030 Oct 15 01:11		8.66965 AU	retrograde	10036 Oct 19 11:51	16° <b>©</b> 51'10	
	10030 Oct 27 10:29	30° <b>ŖƳ</b>		opposition	10036 Dec 28 19:36	13° <b>©</b> 28'55	-2°20'31
direct	10030 Dec 24 03:26	27° <b>Ƴ</b> 33'11		min. Earth dist.	10036 Dec 28 12:06	13° <b>©</b> 30'21	8.76396 AU

Ji	10027 M 00 01.14	10° <b>©</b> 08'58		1:4	10042 M 21 00-40	2.40 m 0.114.6	
direct	10037 Mar 08 01:14			direct	10043 May 21 09:40	24° Mp 01'46	
evening set	10037 Jun 16 16:27	17° <b>©</b> 24'24			10043 Aug 17 18:38	0∘ <b>⊽</b>	
				asc. node	10043 Aug 19 07:10	0° <b>2</b> 10'34	
conjunction	10037 Jul 03 12:07	19° <b>©</b> 26'10		evening set	10043 Aug 30 11:04	1° <b>≏</b> 30'05	
minimum elong	10037 Jul 03 12:09	19° <b>5</b> 26'11	1°51'49				
max. Earth dist.	10037 Jul 03 21:36		10.75438 AU	conjunction	10043 Sep 17 00:32	3° <b>₾</b> 39'22	0°02'00
morning rise	10037 Jul 20 10:10	21° <b>©</b> 28'39		minimum elong	10043 Sep 17 00:31	3° <b>₽</b> 39'22	0°01'59
retrograde	10037 Nov 01 05:57	28° <b>©</b> 56'38		behind sun begin	10043 Sep 16 17:18	3° <b>≏</b> 37'10	
opposition	10038 Jan 10 12:47	25° <b>©</b> 33'51	-2°11'46	behind sun end	10043 Sep 17 07:44	3° <b>≏</b> 41'34	
min. Earth dist.	10038 Jan 10 04:10	25° <b>©</b> 35'29	8.74503 AU	max. Earth dist.	10043 Sep 17 05:44	3° <b>≙</b> 40'57	10.51844 AU
direct	10038 Mar 20 11:36	22° <b>©</b> 13'58		morning rise	10043 Oct 04 16:58	5° <b>≏</b> 49'36	
evening set	10038 Jun 28 21:55	29° <b>©</b> 29'35		retrograde	10044 Jan 17 18:22	13° <b>≏</b> 34'48	
	10038 Jul 03 03:37	$0^{\circ}\Omega$		opposition	10044 Mar 26 16:20	10° <b>≏</b> 09'05	0°18'32
				min. Earth dist.	10044 Mar 26 12:55	10° <b>≏</b> 09'46	8.49290 AU
conjunction	10038 Jul 15 19:50	1° <b>Ω</b> 32′10	-1°41'51	direct	10044 Jun 02 06:19	6° <b>≏</b> 46'14	
minimum elong	10038 Jul 15 19:52	1° <b>Ω</b> 32'11	1°42'14	evening set	10044 Sep 11 19:37	14° <b>₽</b> 19'12	
max. Earth dist.	10038 Jul 16 06:13	1° <b>Ω</b> 35'20	10.73102 AU	Č	•		
morning rise	10038 Aug 01 20:31	3° <b>Ω</b> 35'36		conjunction	10044 Sep 29 11:28	16° <b>≏</b> 29'49	0°27'37
retrograde	10038 Nov 14 01:43	11° <b>Ω</b> 06'13		minimum elong	10044 Sep 29 11:27	16° <b>£</b> 29'49	0°27'43
opposition	10039 Jan 23 06:26	7°Ω42'53	-1°57'06	max. Earth dist.	10044 Sep 29 13:43		10.46776 AU
min. Earth dist.	10039 Jan 22 21:34		8.71706 AU	morning rise	10044 Oct 17 05:59	18° <b>≏</b> 41'17	10.40770710
direct	10039 Apr 01 22:18	4°Ω22'52	0.71700 AC	retrograde	10045 Jan 30 05:10	26° <b>£</b> 29'10	
	-	$4 002232$ $11^{\circ}\Omega 39'30$		-			0°49'46
evening set	10039 Jul 11 06:22	11-8639'30		opposition	10045 Apr 08 19:01	23° <b>₽</b> 03'13	
	10020 1 1 20 07 00	120 0 42111	1007120	min. Earth dist.	10045 Apr 08 17:54	23° <b>₾</b> 03'26	8.44336 AU
conjunction	10039 Jul 28 07:00	13° <b>Ω</b> 43'11		direct	10045 Jun 15 07:22	19° <b>₽</b> 39'29	
minimum elong	10039 Jul 28 07:02		1°27'59	evening set	10045 Sep 25 09:48	27° <b>≏</b> 17'28	
max. Earth dist.	10039 Jul 28 16:53		10.69931 AU			_	
	10039 Aug 07 19:45	15° <b>Ω</b>		conjunction	10045 Oct 13 03:30	29° <b>≏</b> 29'16	0°52'07
morning rise	10039 Aug 14 10:55	15° <b>Ω</b> 47'49		minimum elong	10045 Oct 13 03:28	29° <b>≏</b> 29'16	0°52'18
retrograde	10039 Nov 27 00:15	23° <b>Ω</b> 21′13		max. Earth dist.	10045 Oct 13 02:54		10.42000 AU
opposition	10040 Feb 05 00:47	19° <b>Ω</b> 57'21	-1°37'03		10045 Oct 17 06:07	0° <b>M</b> ₊	
min. Earth dist.	10040 Feb 04 16:45	19° <b>Ω</b> 58'54	8.68135 AU	morning rise	10045 Oct 30 23:24	1° <b>M</b> 41'45	
direct	10040 Apr 13 09:29	16° <b>Ω</b> 37'04		retrograde	10046 Feb 12 18:03	9° <b>ጤ</b> 31'49	
evening set	10040 Jul 22 18:26	23° <b>Ω</b> 55'32		opposition	10046 Apr 21 23:49	6° <b>™</b> 05'46	1°18'48
				min. Earth dist.	10046 Apr 22 00:50	6° <b>M</b> ₀05'33	8.39860 AU
conjunction	10040 Aug 08 22:08	26° <b>Ω</b> 00′28	-1°09'21	direct	10046 Jun 28 11:52	2° <b>M</b> 41'07	
minimum elong	10040 Aug 08 22:11	26° <b>Ω</b> 00′29	1°09'38	evening set	10046 Oct 09 05:03	10° <b>M</b> ₊24'07	
max. Earth dist.	10040 Aug 09 06:48	26° <b>Ω</b> 03'07	10.66066 AU	•			
morning rise	10040 Aug 26 05:33	28° <b>Ω</b> 06'29		conjunction	10046 Oct 27 00:03	12°MJ36'53	1°14'09
	10040 Sep 11 12:23	0° m/y		minimum elong	10046 Oct 27 00:01	12°M36'52	1°14'26
retrograde	10040 Dec 09 00:19	5° m 42'49		max. Earth dist.	10046 Oct 26 21:10		10.37842 AU
opposition	10041 Feb 16 20:23	2° mp 18'27	-1°12'21	morning rise	10046 Nov 13 20:29	14°M50'06	
min. Earth dist.	10041 Feb 16 13:32		8.63948 AU	morning rise	10046 Nov 15 04:52	15°M	
mm. Earth dist.	10041 Mar 21 18:41	30°RΩ	0.03740710	retrograde	10047 Feb 26 08:27	22°M41'39	
direct	10041 Mar 25 10:41	28° <b>Ω</b> 57'43		opposition	10047 Nay 05 06:40	19°M15'37	1°44'00
direct	10041 Apr 23 22:55 10041 May 30 13:54	0° Mp		min. Earth dist.	10047 May 05 00:40	19°M 15'06	8.36144 AU
avanina aat	•	0 my 6° My 18'47		direct	10047 May 03 09:10 10047 Jul 11 20:34	15°M50'06	8.30144 AU
evening set	10041 Aug 04 10:42	0 11/1847		evening set			
:	10041 A 21 17:46	00 <b>m</b> 2 5100	0047141	evening set	10047 Oct 23 04:28	23°M37'49	
conjunction	10041 Aug 21 17:46	8° Mp 25'08			1004731 10 00 05	0.50M 5111.4	1022126
minimum elong	10041 Aug 21 17:48	8° Mp 25'08	0°47'53	conjunction	10047 Nov 10 00:05	25°M51'14	
max. Earth dist.	10041 Aug 22 01:48		10.61660 AU	minimum elong	10047 Nov 10 00:03	25°M51'13	
morning rise	10041 Sep 08 04:33	10° Tp 32'34		max. Earth dist.	10047 Nov 09 19:45		10.34553 AU
retrograde	10041 Dec 22 02:25	18° <b>m</b> )11'58		morning rise	10047 Nov 27 20:10	28°M04'51	
opposition	10042 Mar 01 17:23	14° <b>m</b> 47'04			10047 Dec 13 20:34	0° <b>∡</b> ¹	
min. Earth dist.	10042 Mar 01 11:19	14° Mp 48'15	8.59309 AU	retrograde	10048 Mar 10 23:11	5° <b>₹</b> 757'04	
direct	10042 May 08 16:03	11° Mp 25'46		opposition	10048 May 17 15:14	2° <b>∡</b> ′31′10	2°03'53
evening set	10042 Aug 17 08:07	18° <b>m</b> 50'06		min. Earth dist.	10048 May 17 18:42	2° <b>∡</b> "30′29	8.33403 AU
					10048 Jun 21 21:00	30°RM₊	
conjunction	10042 Sep 03 18:34	20° <b>m</b> 57'56	-0°23'35	direct	10048 Jul 24 08:47	29°M04'54	
minimum elong	10042 Sep 03 18:35	20° <b>m</b> 57'56	0°23'41		10048 Aug 25 14:26	0° <b>∡</b> 7	
max. Earth dist.	10042 Sep 04 01:42	21°M(00'07	10.56871 AU	evening set	10048 Nov 05 06:44	6° <b>∡</b> ¹56'38	
morning rise	10042 Sep 21 08:24	23° Mp 06'48					
	10042 Dec 04 04:11	0∘ <b>⊽</b>		conjunction	10048 Nov 23 02:23	9° <b>∡</b> 10′24	1°45'54
retrograde	10043 Jan 04 09:13	0° <b>₽</b> 49'09		minimum elong	10048 Nov 23 02:21	9° <b>х</b> 10′24	1°46'18
-							
	10043 Feb 04 19:04	30°R, Mp		max. Earth dist.	10048 Nov 22 20:51	9° <b>∡</b> 08'40	10.32331 AU
opposition		30°RM 27°M 23'48	-0°13'14		10048 Nov 22 20:51 10048 Dec 10 21:31	9° <b>҂</b> 08'40 11° <b>҂</b> 24'07	10.32331 AU
opposition min. Earth dist.	10043 Feb 04 19:04	27° m 23'48	-0°13'14 8.54372 AU	max. Earth dist. morning rise retrograde			10.32331 AU

opposition	10049 May 31 01:17	15° <b>₹</b> 50′28	2°17'13	min. Earth dist.	10055 Aug 18 21:15	4° <b>¥</b> 59′16	8.45602 AU
min. Earth dist.	10049 May 31 05:48	15° <b>∡</b> 749'33	8.31792 AU	direct	10055 Oct 27 04:52	1° <b>)</b> €33'50	
direct	10049 Aug 06 22:57	12° 🗷 23'32		evening set	10056 Feb 09 09:27	9° <b>∺</b> 21'48	
evening set	10049 Nov 19 10:23	20° <b>∡</b> 18'19		. ,.	1005CE 1 2C 10.57	110 1 21104	0042100
aaniumatian	10049 Dec 07 05:32	22° <b>∡</b> ³32'10	1°53'43	conjunction minimum elong	10056 Feb 26 18:57 10056 Feb 26 18:59	11° <b>)</b> (31'04 11° <b>)</b> (31'05	0°42'09 0°42'19
conjunction	10049 Dec 07 05:32 10049 Dec 07 05:30	22° <b>x</b> '32'10 22° <b>x</b> '32'09	1°53'43 1°54'09	max. Earth dist.	10056 Feb 26 18:39 10056 Feb 26 12:26		10.48066 AU
minimum elong max. Earth dist.	10049 Dec 07 03:30 10049 Dec 06 22:26		10.31297 AU	morning rise	10056 Mar 15 00:54	11 <b>X</b> 2902 13° <b>¥</b> 39'20	10.48000 AU
morning rise	10049 Dec 00 22:20 10049 Dec 24 23:21	24° <b>x</b> 45'41	10.31297 AU	retrograde	10056 Jun 23 23:45	21° <b>)</b> 10'14	
morning 1130	1004) Bec 24 23:21 10050 Feb 10 22:08	0°중		opposition	10056 Aug 30 22:21	17° <b>)</b> 48'47	0°37'10
retrograde	10050 Apr 07 06:32	2°る36'20		min. Earth dist.	10056 Aug 31 03:27	17° <b>)</b> 47'48	8.50628 AU
renograde	10050 Jun 03 07:31	30°R <i>X</i> ⁷		direct	10056 Nov 08 16:35	14° <b>)</b> 23'03	0.30020710
opposition	10050 Jun 13 12:20	29° <b>×</b> 11'11	2°23'11	evening set	10057 Feb 21 13:55	22° <b>H</b> 06'51	
min. Earth dist.	10050 Jun 13 18:13	29° <b>×</b> 11111	8.31381 AU	evening sec	10037100 21 13.33	22 7(0051	
direct	10050 Aug 20 14:20	25° <b>х</b> 43′44	0.51501110	conjunction	10057 Mar 10 20:50	24° <b>)</b> 14'49	0°17'20
	10050 Nov 01 19:29	ਹ°ਰ		minimum elong	10057 Mar 10 20:51	24° <b>)</b> 14'49	0°17'26
evening set	10050 Dec 03 14:01	3° <b>ප්</b> 40'25		max. Earth dist.	10057 Mar 10 15:04		10.53242 AU
<i>8</i>				morning rise	10057 Mar 28 00:35	26° <b>¥</b> 21′50	
conjunction	10050 Dec 21 08:10	5° <b>る</b> 54'03	1°55'25	3	10057 Apr 29 04:17	0° <b>Υ</b>	
minimum elong	10050 Dec 21 08:10	5°₹54'03	1°55'51	retrograde	10057 Jul 06 21:15	3° <b>Y</b> 49'31	
max. Earth dist.	10050 Dec 20 23:27	5° <b>ರ</b> 51'18	10.31487 AU	opposition	10057 Sep 13 03:01	0° <b>Y</b> ′28′37	0°05'55
morning rise	10051 Jan 08 00:23	8° <b>ろ</b> 07'08		min. Earth dist.	10057 Sep 13 07:06	0° <b>Υ</b> 27'50	8.55856 AU
retrograde	10051 Apr 20 19:30	15° <b>る</b> 55'33			10057 Sep 19 07:30	30° <b>₹</b>	
opposition	10051 Jun 26 23:45	12° <b>る</b> 30'57	2°21'26	direct	10057 Nov 22 01:00	27° <b>)</b> €03'46	
min. Earth dist.	10051 Jun 27 06:59	12° <b>る</b> 29'30	8.32180 AU	desc. node	10057 Nov 22 17:14	27° <b>)</b> €03'48	
direct	10051 Sep 03 09:00	9° <b>ප</b> 03'12			10058 Jan 21 22:46	$0^{\circ}\Upsilon$	
evening set	10051 Dec 17 15:56	17° <b>る</b> 00'29		evening set	10058 Mar 06 13:25	4° <b>Y</b> '43'12	
conjunction	10052 Jan 04 08:46	19° <b>る</b> 13'38	1°50'55	conjunction	10058 Mar 23 17:39	6° <b>Ƴ</b> 49'48	-0°08'08
minimum elong	10052 Jan 04 08:47	19° <b>る</b> 13'38	1°51'20	minimum elong	10058 Mar 23 17:39	6° <b>Ƴ</b> 49'48	0°08'09
max. Earth dist.	10052 Jan 03 22:49	19° <b>る</b> 10'29	10.32888 AU	behind sun begin	10058 Mar 23 11:20	6° <b>Ƴ</b> 47'52	
morning rise	10052 Jan 21 23:14	21° <b>る</b> 26'04		behind sun end	10058 Mar 23 23:58	6° <b>Y</b> 51'43	
retrograde	10052 May 03 05:34	29° <b>る</b> 11'32		max. Earth dist.	10058 Mar 23 13:20		10.58478 AU
opposition	10052 Jul 09 11:08	25° <b>る</b> 47'32	2°12'07	morning rise	10058 Apr 09 19:09	8° <b>Y</b> 55'33	
min. Earth dist.	10052 Jul 09 18:50	25° <b>る</b> 45'59	8.34142 AU	retrograde	10058 Jul 19 15:07	16° <b>Y</b> 20'36	
direct	10052 Sep 16 04:28	22° <b>る</b> 19'44		opposition	10058 Sep 26 05:55	13° <b>Y</b> ′00′07	
	10052 Dec 28 09:47	0° <b>≈</b>		min. Earth dist.	10058 Sep 26 08:09	12° <b>Y</b> ′59'41	8.61033 AU
evening set	10052 Dec 30 14:41	0° <b>≈</b> 16'15		direct	10058 Dec 05 07:42	9° <b>Υ</b> 36'13	
				evening set	10059 Mar 19 08:01	17° <b>Ƴ</b> 11'12	
conjunction	10053 Jan 17 06:04	2°≈28'42	1°40'33			100001	
minimum elong	10053 Jan 17 06:06	2°≈28'42	1°40'55	conjunction	10059 Apr 05 09:39	19° <b>Υ</b> 16'26	
max. Earth dist.	10053 Jan 16 20:04		10.35415 AU	minimum elong	10059 Apr 05 09:38	19° <b>Y</b> 16′25	
morning rise	10053 Feb 03 18:39	4°≈40'18		max. Earth dist.	10059 Apr 05 07:48		10.63529 AU
retrograde	10053 May 16 13:40	12°≈22'18	1055152	morning rise	10059 Apr 22 08:53	21° <b>Y</b> '20'58 28° <b>Y</b> '44'02	
opposition	10053 Jul 22 21:48	8°≈58'55	1°55'52	retrograde	10059 Aug 01 08:42		0054152
min. Earth dist.	10053 Jul 23 05:03	8°≈57'28 5°≈31'18	8.37147 AU	opposition min. Earth dist.	10059 Oct 09 06:53 10059 Oct 09 06:46	25° <b>Y</b> 23'49 25° <b>Y</b> 23'50	-0°54′52 8.65921 AU
direct evening set	10053 Sep 29 22:44 10054 Jan 13 09:41	3 ≈31 18 13°≈25'52		direct	10059 Dec 18 10:26	23 1 23 30 22°Υ00'53	8.03921 AU
evening set	10054 Jan 26 00:16	15 ≈25 52 15°≈		evening set	10060 Mar 30 22:28	29° <b>Y</b> 31'32	
	10034 Jan 20 00.10	13 🗪		evening set	10060 Apr 03 20:54	0° <b>8</b>	
conjunction	10054 Jan 30 23:25	15° <b>≈</b> 37'27	1°24'57		10000 Apr 03 20.34	v O	
minimum elong	10054 Jan 30 23:28	15°≈37'27	1°25'16	conjunction	10060 Apr 16 21:38	1° <b>8</b> 35'31	-0°55'54
max. Earth dist.	10054 Jan 30 14:17		10.38917 AU	minimum elong	10060 Apr 16 21:36	1° <b>8</b> 35'30	
morning rise	10054 Feb 17 09:52	17°≈48'02	10.50717110	max. Earth dist.	10060 Apr 16 22:30		10.68166 AU
retrograde	10054 May 29 20:26	25°≈26'16		morning rise	10060 May 03 18:46	3° <b>8</b> 38'56	10.00100710
opposition	10054 Aug 05 07:21	22°≈03'32	1°33'42	retrograde	10060 May 03 18:40 10060 Aug 13 01:18	11° <b>8</b> 00'37	
min. Earth dist.	10054 Aug 05 13:45	22°≈02'16	8.41032 AU	opposition	10060 Aug 13 01:16 10060 Oct 21 05:53	7° <b>8</b> 40'32	-1°21'40
direct	10054 Oct 13 14:33	18°≈36'22		min. Earth dist.	10060 Oct 21 04:11	7° <b>8</b> 40'51	
evening set	10055 Jan 27 00:07	26°≈28'00		direct	10060 Dec 30 08:03	4° <b>8</b> 18'31	
		2000		evening set	10061 Apr 12 09:17	11° <b>8</b> 45'10	
conjunction	10055 Feb 13 11:55	28° <b>≈</b> 38'31	1°05'06	<b>3</b>	r - *****		
minimum elong	10055 Feb 13 11:57	28°≈38'32	1°05'21	conjunction	10061 Apr 29 06:07	13° <b>8</b> 48'01	-1°16'11
max. Earth dist.	10055 Feb 13 04:09		10.43208 AU	minimum elong	10061 Apr 29 06:05	13° <b>8</b> 48'01	
	10055 Feb 24 08:41	0° <b>)</b> €		max. Earth dist.	10061 Apr 29 08:34	_	10.72180 AU
morning rise	10055 Mar 02 20:06	0° <b>)</b> 47′59			10061 May 09 02:07	15° <b>8</b>	
retrograde	10055 Jun 11 23:29	8° <b>)</b> 22′26		morning rise	10061 May 16 01:38	15° <b>8</b> 50'31	
opposition	10055 Aug 18 15:41	5° <b>∺</b> 00′22	1°06'57	retrograde	10061 Aug 25 14:45	23° <b>8</b> 11'27	
	-				-		

opposition	10061 Nov 03 03:20	19° <b>8</b> 51'23	-1°44'32		10068 Feb 19 08:40	30° <b>₹</b> 5	
min. Earth dist.	10061 Nov 03 00:37	_	8.73966 AU	direct	10068 Mar 26 11:00	28°956'05	
direct	10062 Jan 12 03:44	16° <b>8</b> 30'09			10068 Apr 30 19:14	$0^{\circ}\Omega$	
evening set	10062 Apr 24 16:54	23° <b>8</b> 53'16		evening set	10068 Jul 04 20:09	6° <b>Ω</b> 12'18	
Č	ī	_		S			
conjunction	10062 May 11 11:48	25° <b>8</b> 55'11	-1°32'56	conjunction	10068 Jul 21 19:25	8° <b>Ω</b> 15′28	-1°34'47
minimum elong	10062 May 11 11:46	25° <b>8</b> 55'11	1°33'17	minimum elong	10068 Jul 21 19:27	8° <b>Ω</b> 15′29	1°35'09
max. Earth dist.	10062 May 11 15:17	25° <b>8</b> 56'15	10.75383 AU	max. Earth dist.	10068 Jul 22 03:41	8° <b>Ω</b> 17'59	10.71325 AU
morning rise	10062 May 28 06:16	27° <b>8</b> 56'58		morning rise	10068 Aug 07 21:48	10° <b>Ω</b> 19'33	
	10062 Jun 15 00:47	$\Pi$ $^{\circ}0$			10068 Sep 20 19:09	15° <b>Ω</b>	
retrograde	10062 Sep 07 04:04	5° <b>Ⅱ</b> 17'51		retrograde	10068 Nov 20 06:46	17° <b>Ω</b> 51'47	
opposition	10062 Nov 15 23:19	1° <b>Ⅱ</b> 57'38	-2°02'36		10069 Jan 22 10:45	$15^{\circ}$ R $\Omega$	
min. Earth dist.	10062 Nov 15 19:34	1° <b>Ⅱ</b> 58′20	8.76728 AU	opposition	10069 Jan 29 09:48	14° <b>Ω</b> 28′06	-1°47'02
	10062 Dec 13 18:44	30° <b>₹</b> 8		min. Earth dist.	10069 Jan 29 02:44	14° <b>Ω</b> 29'27	8.69433 AU
direct	10063 Jan 24 21:48	28° <b>8</b> 37'03		direct	10069 Apr 07 22:55	11° <b>Ω</b> 07'48	
	10063 Mar 06 22:25	0°П			10069 Jun 16 13:34	15° <b>Ω</b>	
evening set	10063 May 06 22:08	5° <b>∏</b> 57'09		evening set	10069 Jul 17 06:20	18° <b>Ω</b> 25'33	
conjunction	10063 May 23 15:50	7° <b>Ⅱ</b> 58′26		conjunction	10069 Aug 03 08:40	20° <b>Ω</b> 29'57	
minimum elong	10063 May 23 15:49	7° <b>Ⅱ</b> 58'25		minimum elong	10069 Aug 03 08:42	20° <b>Ω</b> 29'58	
max. Earth dist.	10063 May 23 20:40		10.77593 AU	max. Earth dist.	10069 Aug 03 17:26		10.67224 AU
morning rise	10063 Jun 09 09:50	9° <b>∏</b> 59'47		morning rise	10069 Aug 20 14:16	22° <b>Ω</b> 35'22	
retrograde	10063 Sep 19 17:30	17° <b>Ⅱ</b> 21'14	2015111		10069 Nov 18 18:01	0° m/y	
opposition	10063 Nov 28 17:51	14° <b>Ⅱ</b> 00'42		retrograde	10069 Dec 03 06:17	0° mp 10'38	
min. Earth dist.	10063 Nov 28 12:39		8.78400 AU	•••	10069 Dec 17 19:10	30°R€	1024127
direct	10064 Feb 06 12:26	10° <b>∏</b> 40'37		opposition	10070 Feb 11 04:50	26° <b>Ω</b> 46'11	
evening set	10064 May 18 01:45	17° <b>∏</b> 58'24		min. Earth dist.	10070 Feb 10 21:40	26° <b>λ</b> (4/'34 23° <b>Ω</b> 25'21	8.64983 AU
conjunction	10064 Jun 03 19:08	19° <b>∏</b> 59'23	1052122	direct	10070 Apr 20 11:08 10070 Jul 23 11:31	0° Mp	
minimum elong	10064 Jun 03 19:07		1°53'47	evening set	10070 Jul 29 20:27	0° Mp 45'25	
max. Earth dist.	10064 Jun 04 01:41		1 33 47 10.78634 AU	evening set	100/0 Jul 29 20.2/	U 11/4323	
morning rise	10064 Jun 20 13:16	20° <b>H</b> 01'23	10.78034 AU	conjunction	10070 Aug 16 02:03	2° mp 51'13	-0°58'12
retrograde	10064 Oct 01 07:24	29° <b>I</b> I23'21		minimum elong	10070 Aug 16 02:05	2° Mp 51'14	
opposition	10064 Dec 10 11:33	26° <b>I</b> I02'22	-2°21'49	max. Earth dist.	10070 Aug 16 09:56		10.62533 AU
min. Earth dist.	10064 Dec 10 11:55		8.78829 AU	morning rise	10070 Sep 02 11:09	4° m 58'06	10.02333710
direct	10065 Feb 18 01:30	22° <b>I</b> 42'39	0.70027110	retrograde	10070 Dec 16 08:10	12° Mp 36'31	
evening set	10065 May 30 04:52	29° <b>I</b> I58'55		opposition	10071 Feb 24 01:12	9° mp 11'22	-0°57'41
<i>8</i>	10065 May 30 08:31	0ಂತಾ		min. Earth dist.	10071 Feb 23 19:06	9° m 12'34	8.60040 AU
	,			direct	10071 May 03 01:47	5° mp 49'51	
conjunction	10065 Jun 15 22:34	1° <b>©</b> 59'57	-1°56'16	evening set	10071 Aug 11 15:33	13° m) 13'02	
minimum elong	10065 Jun 15 22:34	1° <b>©</b> 59'57	1°56'42	C	C	•	
max. Earth dist.	10065 Jun 16 06:08	2° <b>©</b> 02'15	10.78429 AU	conjunction	10071 Aug 29 00:24	15°Mp20'21	-0°35'07
morning rise	10065 Jul 02 17:38	4° <b>©</b> 01'25		minimum elong	10071 Aug 29 00:25	15°Mp20'21	0°35'16
retrograde	10065 Oct 13 23:57	11° <b>©</b> 25'59		max. Earth dist.	10071 Aug 29 06:29	15°M 22'13	10.57449 AU
opposition	10065 Dec 23 04:55	8° <b>5</b> 04'29	-2°22'15	morning rise	10071 Sep 15 12:55	17° <b>m</b> 28'44	
min. Earth dist.	10065 Dec 22 21:59	8° <b>5</b> 05'48	8.78027 AU	retrograde	10071 Dec 29 13:14	25° Mp 10'16	
direct	10066 Mar 02 12:33	4° <b>5</b> 544'55		opposition	10072 Mar 07 23:05	21° <b>m</b> 44'33	-0°27'53
evening set	10066 Jun 11 08:26	12° <b>©</b> 00'25		min. Earth dist.	10072 Mar 07 18:35	21°Mp45'26	8.54820 AU
				direct	10072 May 14 18:27	18° Mp 22'13	
conjunction	10066 Jun 28 03:10	14° <b>©</b> 01'50	-1°54'04	evening set	10072 Aug 23 15:55	25° <b>m</b> 49'16	
minimum elong	10066 Jun 28 03:11	14°9501'51					
max. Earth dist.	10066 Jun 28 10:41		10.77064 AU	conjunction	10072 Sep 10 03:55	27° <b>m</b> 58'05	
morning rise	10066 Jul 15 00:06	16° <b>©</b> 03'55		minimum elong	10072 Sep 10 03:55	27° m 58'05	0°10'11
retrograde	10066 Oct 26 16:16	23°530'42		behind sun begin	10072 Sep 09 22:12	27° m 56'20	
opposition	10067 Jan 04 22:18	20°508'33		behind sun end	10072 Sep 10 09:38	27° m 59'50	10.50100.444
min. Earth dist.	10067 Jan 04 15:38		8.76111 AU	max. Earth dist.	10072 Sep 10 08:22		10.52193 AU
direct	10067 Mar 14 22:45	16°5548'55		morning ris-	10072 Sep 26 17:12	0° <b>Ω</b>	
evening set	10067 Jun 23 13:11	24° <b>©</b> 04'24		morning rise retrograde	10072 Sep 27 19:24 10073 Jan 10 19:48	0° <b>ჲ</b> 07'56 7° <b>ჲ</b> 52'31	
conjunction	10067 Jul 10 09:48	26°506'32	-1°46'50	asc. node	10073 Jan 10 19:48 10073 Feb 06 02:57	7° <b>£</b> 32′31 7° <b>£</b> 17′27	
minimum elong	10067 Jul 10 09:48 10067 Jul 10 09:50	26°906'33		opposition	10073 Feb 06 02:57 10073 Mar 20 22:58	4° <b>£</b> 1727	0°03'39
max. Earth dist.	10067 Jul 10 09:30		1 47 14 10.74657 AU	min. Earth dist.	10073 Mar 20 22:38 10073 Mar 20 19:49	4° <u>₽</u> 26'56	8.49563 AU
morning rise	10067 Jul 27 09:18	28°509'30	.0.71037 AU	direct	10073 May 27 15:13	1° <b>£</b> 03'09	5.17505 AU
	10067 Aug 12 07:33	0°Ω		evening set	10073 Nay 27 13:13 10073 Sep 05 21:47	8° <b>£</b> 34'37	
retrograde	10067 Nov 08 09:22	5° <b>Ω</b> 38'53		,B	Sep 00 21.1/		
opposition	10068 Jan 17 15:49	2° <b>Ω</b> 15'59	-2°04'35	conjunction	10073 Sep 23 12:39	10° <b>≏</b> 44'51	0°15'42
min. Earth dist.	10068 Jan 17 09:06		8.73200 AU	minimum elong	10073 Sep 23 12:39	10° <b>Ω</b> 44'51	0°15'45
			-	· · · · · ·	1		

behind sun begin	10073 Sep 23 11:39	10° <b>≏</b> 44'33		evening set	10079 Nov 27 10:51	27° <b>∡</b> 747′27	
behind sun end	10073 Sep 23 13:38	10° <b>≏</b> 45′09					
max. Earth dist.	10073 Sep 23 16:05	10° <b>≙</b> 45'55	10.47008 AU	conjunction	10079 Dec 15 05:31	0° <b>る</b> 01'21	1°55'16
morning rise	10073 Oct 11 06:28	12° <b>≙</b> 56'01		minimum elong	10079 Dec 15 05:31	0° <b>る</b> 01'21	1°55'42
retrograde	10074 Jan 24 05:19	20° <b>≙</b> 43'27		max. Earth dist.	10079 Dec 14 22:28	29° <b>₹</b> ′59'07	10.30761 AU
opposition	10074 Apr 03 00:53	17° <b>≏</b> 16'53	0°35'23		10079 Dec 15 01:15	0° <b>ප</b>	
min. Earth dist.	10074 Apr 02 22:35	17° <b>≏</b> 17'20	8.44520 AU	morning rise	10080 Jan 01 22:39	2° <b>る</b> 14'49	
direct	10074 Jun 09 15:24	13° <b>♀</b> 52'54		retrograde	10080 Apr 13 23:45	10° <b>る</b> 05'04	
evening set	10074 Sep 19 09:37	21° <b>≏</b> 29′10		opposition	10080 Jun 20 04:55	6° <b>る</b> 40'23	2°23'01
				min. Earth dist.	10080 Jun 20 10:14	6° <b>る</b> 39'19	8.31368 AU
conjunction	10074 Oct 07 02:46	23° <b>≙</b> 40'42	0°40'55	direct	10080 Aug 27 10:55	3° <b>る</b> 13'04	
minimum elong	10074 Oct 07 02:45	23° <b>≏</b> 40'41	0°41'04	evening set	10080 Dec 10 14:32	11° <b>る</b> 10'48	
max. Earth dist.	10074 Oct 07 04:50	23° <b>≏</b> 41′20	10.42147 AU				
morning rise	10074 Oct 24 22:09	25° <b>≏</b> 52'58		conjunction	10080 Dec 28 08:10	13° <b>る</b> 24'18	1°53'34
	10074 Nov 30 13:29	$0^{\circ}$ M		minimum elong	10080 Dec 28 08:11	13° <b>る</b> 24'19	1°54'00
retrograde	10075 Feb 06 18:30	3°M42'48		max. Earth dist.	10080 Dec 28 00:44		10.31993 AU
opposition	10075 Apr 16 04:50	0°M16′04	1°05'40	morning rise	10081 Jan 14 23:27	15° <b>る</b> 37'10	
min. Earth dist.	10075 Apr 16 03:42	0°M16′18	8.39942 AU	retrograde	10081 Apr 27 12:55	23° <b>る</b> 24'42	
	10075 Apr 19 13:16	30°Ŗ <b>죠</b>		opposition	10081 Jul 03 17:05	20° <b>る</b> 00'44	2°17'03
direct	10075 Jun 22 17:27	26° <b>≙</b> 51'15		min. Earth dist.	10081 Jul 03 22:56	19° <b>る</b> 59'33	8.33174 AU
	10075 Aug 23 03:52	$0^{\circ}$ M		direct	10081 Sep 10 05:38	16° <b>る</b> 33'23	
evening set	10075 Oct 03 02:56	4°M32'33		evening set	10081 Dec 24 15:53	24° <b>る</b> 30'51	
conjunction	10075 Oct 20 21:36	6° <b>™</b> 45'07	1°04'16	conjunction	10082 Jan 11 08:09	26° <b>る</b> 43'44	1°45'46
minimum elong	10075 Oct 20 21:33	6° <b>™</b> 45'06	1°04'31	minimum elong	10082 Jan 11 08:11		1°46'10
max. Earth dist.	10075 Oct 20 21:29		10.37869 AU	max. Earth dist.	10082 Jan 11 00:04		10.34359 AU
morning rise	10075 Nov 07 17:47	8°M58'14		morning rise	10082 Jan 28 21:30	28° <b>る</b> 55'47	
	10076 Jan 04 21:53	15° <b>™</b>			10082 Feb 06 16:12	0° <b>≈</b>	
retrograde	10076 Feb 20 09:53	16° <b>M</b> 49'52		retrograde	10082 May 11 00:15	6° <b>≈</b> 39'53	
	10076 Apr 07 12:53	15°RM		opposition	10082 Jul 17 04:54	3° <b>≈</b> 16'38	2°03'48
opposition	10076 Apr 28 11:10	13°M23'12	1°32'52	min. Earth dist.	10082 Jul 17 11:43	3° <b>≈</b> 15'17	8.36010 AU
min. Earth dist.	10076 Apr 28 11:42	13°M23'06	8.36081 AU		10082 Sep 09 19:23	30°Ŗਰ	
direct	10076 Jul 04 23:26	9° <b>™</b> 57'37		direct	10082 Sep 23 23:56	29° <b>る</b> 49'25	
	10076 Sep 22 19:53	15°M			10082 Oct 08 05:22	0° <b>≈</b>	
evening set	10076 Oct 16 00:47	17° <b>™</b> 43'47		evening set	10083 Jan 07 13:36	7° <b>≈</b> 45'21	
-			1924127				1922/25
conjunction	10076 Nov 02 20:13	19° <b>M</b> .57'07	1°24'27	conjunction	10083 Jan 25 04:07	9° <b>≈</b> 57'23	1°32'25
conjunction minimum elong	10076 Nov 02 20:13 10076 Nov 02 20:10	19° <b>M</b> 57'07 19° <b>M</b> 57'06	1°24'46	conjunction minimum elong	10083 Jan 25 04:07 10083 Jan 25 04:10	9°≈57'23 9°≈57'24	1°32'46
conjunction minimum elong max. Earth dist.	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38	19° <b>M</b> .57'07 19° <b>M</b> .57'06 19° <b>M</b> .56'18		conjunction minimum elong max. Earth dist.	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00	9°≈57'23 9°≈57'24 9°≈54'31	
conjunction minimum elong	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33	19°M57'07 19°M57'06 19°M56'18 22°M10'46	1°24'46	conjunction minimum elong	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29	1°32'46
conjunction minimum elong max. Earth dist. morning rise	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48	19°M57'07 19°M57'06 19°M56'18 22°M10'46 0° ✓	1°24'46	conjunction minimum elong max. Earth dist. morning rise	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈	1°32'46
conjunction minimum elong max. Earth dist.	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° ₹ 0° ₹03'29	1°24'46	conjunction minimum elong max. Earth dist. morning rise retrograde	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46	1°32'46 10.37649 AU
conjunction minimum elong max. Earth dist. morning rise retrograde	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0°\$\mathred{Z}' 0°\$\mathred{Z}'03'29 30°RM.	1°24'46 10.34420 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46	1°32'46 10.37649 AU 1°44'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° \$\vec{A}\$ 03'29 30°RM. 26°M.37'06	1°24'46 10.34420 AU 1°55'23	conjunction minimum elong max. Earth dist. morning rise retrograde	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45	1°32'46 10.37649 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0°\$\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\stacksquare\no\no\no\no\no\no\no\no\no\no\no\no\	1°24'46 10.34420 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈	1°32'46 10.37649 AU 1°44'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° × 1 0° × 103'29 30°RM. 26°M.37'06 26°M.36'36 23°M.10'50	1°24'46 10.34420 AU 1°55'23	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19	1°32'46 10.37649 AU 1°44'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° 🗷 0° 🗷 03'29 30°RM. 26°M.37'06 26°M.36'36 23°M.10'50 0° 🗷	1°24'46 10.34420 AU 1°55'23	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°₹≈ 12°≈59'19 15°≈	1°32'46 10.37649 AU 1°44'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° × 1 0° × 103'29 30°RM. 26°M.37'06 26°M.36'36 23°M.10'50	1°24'46 10.34420 AU 1°55'23	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19	1°32'46 10.37649 AU 1°44'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24	19°M.57'07 19°M.56'18 22°M.10'46 0° ₹ 0° ₹03'29 30°RM. 26°M.36'36 23°M.10'50 0° ₹ 1° ₹01'25	1°24'46 10.34420 AU 1°55'23 8.33161 AU	conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct evening set	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15° R≈ 12°≈59'19 15°≈ 20°≈52'45	1°32'46 10.37649 AU 1°44'07 8.39629 AU
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conjunction minimum elong max. Earth dist. morning rise  retrograde  opposition min. Earth dist. direct  evening set  conjunction minimum elong	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24 10077 Nov 16 22:02 10077 Nov 16 22:00	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° 🗷 0° 🗷 03'29 30°RM. 26°M.36'36 23°M.10'50 0° 🗷 1° 🗷 01'25 3° 🗷 15'14 3° 🗷 15'13	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38	conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct evening set  conjunction minimum elong	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51 10084 Feb 07 19:26 10084 Feb 07 19:28	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°8≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'48	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37
conjunction minimum elong max. Earth dist. morning rise  retrograde  opposition min. Earth dist. direct  evening set  conjunction minimum elong max. Earth dist.	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24 10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06	19°M.57'07 19°M.56'18 22°M.10'46 0° \$\tilde{X}\$ 0° \$\tilde{X}\$03'29 30°RM. 26°M.36'36 23°M.10'50 0° \$\tilde{X}\$ 1° \$\tilde{X}\$01'25 3° \$\tilde{X}\$15'14 3° \$\tilde{X}\$15'13 3° \$\tilde{X}\$13'41	1°24'46 10.34420 AU 1°55'23 8.33161 AU	conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct evening set  conjunction minimum elong max. Earth dist.	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51 10084 Feb 07 19:26 10084 Feb 07 19:28 10084 Feb 07 19:28	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'48 23°≈00'45	1°32'46 10.37649 AU 1°44'07 8.39629 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	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24 10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53	19°M.57'07 19°M.56'18 22°M.10'46 0° \$\mathrightarrow{7}\$ 0° \$\mathrightarrow{7}\$03'29 30°RM. 26°M.36'36 23°M.10'50 0° \$\mathrightarrow{7}\$15'14 3° \$\mathrightarrow{7}\$15'13 3° \$\mathrightarrow{7}\$13'41 5° \$\mathrightarrow{7}\$29'08	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38	conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct evening set  conjunction minimum elong	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51 10084 Feb 07 19:26 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 07 09:46 10084 Feb 25 04:45	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37
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	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24 10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53 10078 Mar 18 16:42	19°M.57'07 19°M.56'18 22°M.10'46 0°\$\tilde{\sigma}'\ 0°\$\tilde{\sigma}'03'29 30°RM. 26°M.36'36 23°M.10'50 0°\$\tilde{\sigma}'\ 10'125 3°\$\tilde{\sigma}'\ 15'14 3°\$\tilde{\sigma}'\ 15'14 5°\$\tilde{\sigma}'\ 29'08 13°\$\tilde{\sigma}'\ 22'00	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38 10.32007 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	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51 10084 Feb 07 19:26 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 07 09:46 10084 Feb 25 04:45 10084 Apr 08 13:24	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°₹≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50 0° ★	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37
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	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 21 16:33 10077 Nov 16 22:02 10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53 10078 Mar 18 16:42 10078 May 25 05:31	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° 🖈 0° 🗷'03'29 30°RM. 26°M.36'36 23°M.10'50 0° 🖈 1° 🗷'01'25 3° 🗷'15'14 3° 🗷'15'13 3° 🗷'15'14 5° 🗷'29'08 13° 🗷'22'00 9° 🗷'56'04	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38 10.32007 AU 2°11'51	conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct evening set  conjunction minimum elong max. Earth dist.	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51 10084 Feb 07 19:28 10084 Feb 07 19:28 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 25 04:45 10084 Apr 08 13:24 10084 Jun 05 11:35	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50 0° ★ 2° ★50'22	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37
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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 min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24  10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53 10078 Mar 18 16:42 10078 May 25 05:31 10078 May 25 05:31 10078 May 25 09:38 10078 Aug 01 00:11 10078 Nov 13 06:20  10078 Dec 01 01:42 10078 Dec 01 01:41 10078 Nov 30 19:20 10078 Dec 18 20:26 10079 Apr 01 08:51	19° M.57'07 19° M.57'06 19° M.56'18 22° M.10'46 0° 🖈 0° 🗷'03'29 30° R.M. 26° M.36'36 23° M.10'50 0° 🖈 1° 🗷'01'25 3° 🗷 15'14 3° 🗷 15'13 3° 🗷 13'41 5° 🗷 29'08 13° 🗷 22'00 9° 🗷'56'04 9° 🗷'55'14 6° 🗷'29'16 14° 🗷'23'27 16° 🗷'37'27 16° 🗷'35'27 18° 🗷'35'27 18° 🗷'35'21 26° 🗷'43'19	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38 10.32007 AU 2°11'51 8.31351 AU 1°50'45 1°51'10 10.30765 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	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51  10084 Feb 07 19:26 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 25 04:45 10084 Apr 08 13:24 10084 Apr 08 13:24 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Dec 30 15:51 10085 Feb 02 05:43 10085 Feb 20 05:43	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50 0° Ж 2° Ж 50'22 30°R≈ 29°≈28'29 29°≈27'02 26°≈02'04 0° Ж 3° Ж 52'18 6° Ж 02'14 6° Ж 02'14	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37 10.41589 AU 1°19'14 8.43768 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. direct evening set	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Nov 16 22:02 10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53 10078 Mar 18 16:42 10078 May 25 05:31 10078 May 25 05:31 10078 May 25 09:38 10078 Aug 01 00:11 10078 Nov 13 06:20 10078 Dec 01 01:42 10078 Dec 01 01:41 10078 Nov 30 19:20 10078 Dec 18 20:26 10079 Apr 01 08:51 10079 Jun 07 16:50	19°M.57'07 19°M.57'06 19°M.56'18 22°M.10'46 0° 🗷 0° 🗷'03'29 30°RM. 26°M.36'36 23°M.10'50 0° 🗷 1° 🗷'01'25 3° 🗷 15'14 3° 🗷 15'13 3° 🗷 13'41 5° 🗷 29'08 13° 🗷 22'00 9° 🗷'56'04 9° 🗷'55'14 6° 🗷'22'16 14° 🗷'23'27 16° 🗷'37'27 16° 🗷'35'27 18° 🗷'35'27 18° 🗷'35'17	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38 10.32007 AU 2°11'51 8.31351 AU 1°50'45 1°51'10 10.30765 AU 2°21'15	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	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51  10084 Feb 07 19:28 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 25 04:45 10084 Apr 08 13:24 10084 Apr 08 13:24 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Dec 30 15:51 10085 Feb 02 19:11	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50 0° Ж 2° Ж 50'22 30°R≈ 29°≈28'29 29°≈27'02 26°≈02'04 0° Ж 3° Ж 52'18 6° Ж 02'14 6° Ж 02'14 5° Ж 59'24	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37 10.41589 AU 1°19'14 8.43768 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 min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde	10076 Nov 02 20:13 10076 Nov 02 20:10 10076 Nov 02 17:38 10076 Nov 20 16:33 10077 Feb 24 23:48 10077 Mar 05 00:58 10077 Mar 13 02:14 10077 May 11 19:34 10077 May 11 22:04 10077 Jul 18 10:22 10077 Oct 21 16:33 10077 Oct 30 02:24  10077 Nov 16 22:02 10077 Nov 16 22:00 10077 Nov 16 17:06 10077 Dec 04 17:53 10078 Mar 18 16:42 10078 May 25 05:31 10078 May 25 05:31 10078 May 25 09:38 10078 Aug 01 00:11 10078 Nov 13 06:20  10078 Dec 01 01:42 10078 Dec 01 01:41 10078 Nov 30 19:20 10078 Dec 18 20:26 10079 Apr 01 08:51	19° M.57'07 19° M.57'06 19° M.56'18 22° M.10'46 0° 🖈 0° 🗷'03'29 30° R.M. 26° M.36'36 23° M.10'50 0° 🖈 1° 🗷'01'25 3° 🗷 15'14 3° 🗷 15'13 3° 🗷 13'41 5° 🗷 29'08 13° 🗷 22'00 9° 🗷'56'04 9° 🗷'55'14 6° 🗷'29'16 14° 🗷'23'27 16° 🗷'37'27 16° 🗷'35'27 18° 🗷'35'27 18° 🗷'35'21 26° 🗷'43'19	1°24'46 10.34420 AU 1°55'23 8.33161 AU 1°40'16 1°40'38 10.32007 AU 2°11'51 8.31351 AU 1°50'45 1°51'10 10.30765 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	10083 Jan 25 04:07 10083 Jan 25 04:10 10083 Jan 24 19:00 10083 Feb 11 15:28 10083 Mar 07 23:11 10083 May 24 08:21 10083 Jul 30 15:42 10083 Jul 30 23:12 10083 Aug 18 09:27 10083 Oct 07 17:41 10083 Nov 26 02:12 10084 Jan 21 06:51  10084 Feb 07 19:26 10084 Feb 07 19:28 10084 Feb 07 09:46 10084 Feb 25 04:45 10084 Apr 08 13:24 10084 Apr 08 13:24 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Aug 12 01:11 10084 Dec 30 15:51 10085 Feb 02 05:43 10085 Feb 20 05:43	9°≈57'23 9°≈57'24 9°≈54'31 12°≈08'29 15°≈ 19°≈48'46 16°≈26'14 16°≈24'45 15°R≈ 12°≈59'19 15°≈ 20°≈52'45 23°≈03'47 23°≈03'47 23°≈03'48 23°≈00'45 25°≈13'50 0° Ж 2° Ж 50'22 30°R≈ 29°≈28'29 29°≈27'02 26°≈02'04 0° Ж 3° Ж 52'18 6° Ж 02'14 6° Ж 02'14	1°32'46 10.37649 AU 1°44'07 8.39629 AU 1°14'20 1°14'37 10.41589 AU 1°19'14 8.43768 AU

10091 May 06 14:42

10091 May 06 14:40

conjunction

minimum elong

20°859'16 -1°26'18

20°**8**59'15 1°26'38

10097 Jun 29 23:49

evening set

1°Ω19'17

conjunction	10097 Jul 16 21:53	3° <b>£</b> 22'02 -1°40'25
minimum elong	10097 Jul 16 21:55	3° <b>Ω</b> 22'02 1°40'49
max. Earth dist.	10097 Jul 17 08:02	3° <b>Ω</b> 25'07 10.72364 AU
morning rise	10097 Aug 02 22:54	5° <b>Ω</b> 25'38
retrograde	10097 Nov 15 05:35	12° <b>Ω</b> 56'39
opposition	10098 Jan 24 09:03	9° <b>Ω</b> 33'13 -1°55'04
min. Earth dist.	10098 Jan 24 00:27	9° <b>Ω</b> 34'52 8.71002 AU
direct	10098 Apr 02 23:30	6° <b>Ω</b> 13'07
evening set	10098 Jul 12 08:36	13° <b>Ω</b> 30′05
Č	10098 Jul 24 18:14	15° <b>Ω</b>
conjunction	10098 Jul 29 09:25	15° <b>Ω</b> 33'54 -1°25'45
minimum elong	10098 Jul 29 09:27	15° <b>Ω</b> 33'55 1°26'06
max. Earth dist.	10098 Jul 29 18:57	15° <b>Ω</b> 36'48 10.69277 AU
morning rise	10098 Aug 15 13:43	17° <b>Ω</b> 38'42
retrograde	10098 Nov 28 02:31	25°Ω12'28
opposition	10099 Feb 06 03:41	21°Ω48'30 -1°34'28
min. Earth dist.	10099 Feb 05 19:51	21°Ω50'01 8.67529 AU
direct	10099 Apr 15 11:58	18°Ω28'07
evening set	10099 Jul 24 20:56	25° <b>Ω</b> 46'54
evening set	10099 Jul 24 20.30	23 0 (40 34
conjunction	10099 Aug 11 00:59	27° <b>Ω</b> 51'59 -1°07'04
minimum elong	10099 Aug 11 00:39 10099 Aug 11 01:01	$27^{\circ}\Omega51'59 - 1'07'20$
max. Earth dist.	10099 Aug 11 01:01 10099 Aug 11 10:11	27° <b>Ω</b> 54'47 10.65519 AU
	10099 Aug 11 10.11 10099 Aug 28 08:40	29° <b>Ω</b> 58'07
morning rise	-	
	10099 Aug 28 14:58 10099 Dec 11 02:35	0° <b>ሙ</b> 7°ሙ34'47
retrograde		
opposition	10100 Feb 18 23:19	4° m 10'18 -1°09'20
min. Earth dist.	10100 Feb 18 15:58	4° To 11'44 8.63462 AU
direct	10100 Apr 28 02:52	0° m/49'31
evening set	10100 Aug 06 13:36	8° Mp 10'50
	10100 4 22 21 02	100 7 17110 0047106
conjunction	10100 Aug 23 21:02	10° Mp 17'19 -0°45'06
minimum elong	10100 Aug 23 21:04	10° m 17'19 0°45'17
max. Earth dist.	10100 Aug 24 06:07	10° m 20'06 10.61241 AU
morning rise	10100 Sep 10 07:56	12° <b>m</b> 24'51
retrograde	10100 Dec 24 06:56	20° m 04'27
opposition	10101 Mar 03 20:16	16° m 39'30 -0°40'42
min. Earth dist.	10101 Mar 03 13:21	16° Mp 40'51 8.58968 AU
direct	10101 May 10 18:07	13° Mp 18'10
evening set	10101 Aug 19 11:24	20° Mp 42'44
conjunction	10101 Sep 05 22:02	22° m 50'38 -0°20'49
minimum elong	10101 Sep 05 22:03	22° m/50'39 0°20'55
max. Earth dist.	10101 Sep 06 05:47	22° m 53'01 10.56620 AU
morning rise	10101 Sep 23 11:59	24° <b>m</b> 59'35
	10101 Nov 09 10:14	0∘ <b>亚</b>
retrograde	10102 Jan 06 13:14	2° <b>-</b> 42′01