						.	
superior conj	12100 Jan 09 20:24	28° る 23'24		morning set	12100 Dec 17 20:40	27° ∡ ¹45′02	
minimum elong	12100 Jan 09 22:51	28° る 35'54	1°22'18		12100 Dec 18 22:07	0°₹	
	12100 Jan 10 15:22	0° ≈					
max. Earth dist.	12100 Jan 14 23:31	8° ≈ 37'31	1.35916 AU	superior conj	12100 Dec 24 21:41	12° る 47'22	1°33'29
evening rise	12100 Jan 18 21:25	16° ≈ 02'23		minimum elong	12100 Dec 24 23:10	12° る 55'11	1°34'14
desc. node	12100 Jan 21 08:50	20° ≈ 32'47		max. Earth dist.	12100 Dec 28 14:22	20° ろ 30'26	1.34098 AU
	12100 Jan 26 20:02	0°) €		evening rise	12101 Jan 02 01:09	29° る 23'45	
	12100 Feb 16 12:37	0° Υ		evening rise	12101 Jan 02 08:38	0°≈	
evening max el	12100 Feb 23 08:37	7° Υ 31'45	26011122	desc. node	12101 Jan 08 05:39	10°≈53'43	
Č		14° Y 47'23	20 11 22	desc. flode		0° ₩	
retrograde	12100 Mar 08 02:56				12101 Jan 19 23:18		25002125
evening set	12100 Mar 14 07:42	12° Y 16'53		evening max el	12101 Feb 05 22:08	21°) 10′46	27°02'35
asc. node	12100 Mar 17 02:34	9° Ƴ 32'12		retrograde	12101 Feb 19 06:30	28° ¥ 35′16	
min. Earth dist.	12100 Mar 18 11:58	7° Y ′54'06	0.66960 AU	evening set	12101 Feb 25 21:10	26° ∺ 02'16	
inferior conj	12100 Mar 20 04:20	5° Ƴ 49'40	0°58'03	min. Earth dist.	12101 Mar 01 20:03	22°) 13′08	0.65538 AU
minimum elong	12100 Mar 20 02:56	5° Ƴ 53'59	0°57'31	asc. node	12101 Mar 03 23:56	19°) 45′50	
morning rise	12100 Mar 25 22:56	0° Ƴ 04'07		inferior conj	12101 Mar 04 00:28	19°) 44'17	0°00'26
	12100 Mar 26 01:44	30° Ŗ ₩		minimum elong	12101 Mar 04 00:27	19°) 44 ′21	0°00'39
direct	12100 Mar 29 03:06	29° ₩ 07'00		transit middle	12101 Mar 04 00:27	19°) 44'21	0°00'39
	12100 Apr 01 06:55	$0^{\circ}\Upsilon$		transit begin	12101 Mar 03 21:28	19°) 52′52	
morning max el	12100 Apr 04 17:22	2° Υ 39'18	18°37'29	transit end	12101 Mar 04 03:26	19°) ₹35'50	
desc. node	12100 Apr 19 10:34	22° Υ 56'51	10 37 27	morning rise	12101 Mar 10 05:11	14°) 10'57	
desc. node	-	0° 8		•		13° ¥ 29'40	
	12100 Apr 23 22:54			direct	12101 Mar 12 23:35		1000 4110
morning set	12100 Apr 25 23:26	3° 8 10'16		morning max el	12101 Mar 19 08:25	16° ¥ 50'06	18°04'12
max. Earth dist.	12100 May 11 11:34	27° 8 25'45	1.45692 AU		12101 Mar 29 02:47	0° Υ	
				desc. node	12101 Apr 06 07:11	13° Y 11'51	
superior conj	12100 May 12 02:54	28° 8 25'41	-2°05'52	morning set	12101 Apr 06 18:08	13° Y 56′27	
minimum elong	12100 May 11 20:31	28° 8 00'42	2°06'14		12101 Apr 16 17:04	$_{0\circ}$ 8	
	12100 May 13 03:01	Π° 0					
evening rise	12100 May 27 16:04	22° Ⅲ 57′08		superior conj	12101 Apr 21 11:48	7° と 34'12	-1°39'21
Č	12100 Jun 01 02:11	0°95		minimum elong	12101 Apr 21 02:28	6° 8 57'27	1°38'53
greatest brilliancy	12100 Jun 04 10:33	5° © 18'42	-0.9m	max. Earth dist.	12101 Apr 24 07:39	12° 8 00'33	1.45636 AU
asc. node	12100 Jun 13 00:15	18°9511'37	0.7111	max. Earth dist.	12101 May 05 21:24	0°Ⅱ	1.43030710
	12100 Jun 17 23:03	24°909'53	18°42'06	ovanina rica	•	2° ∏ 38'44	
evening max el			18 42 00	evening rise	12101 May 07 14:29		0.7
retrograde	12100 Jun 24 13:01	27°5645'22		greatest brilliancy	12101 May 20 11:40	22° Ⅱ 19'37	-0./m
evening set	12100 Jun 27 19:37	26° © 44'02			12101 May 25 19:33	0° ©	
inferior conj	12100 Jul 03 10:25	21° © 05'17	3°01'00	asc. node	12101 May 30 21:19	6° 5 24'33	
minimum elong	12100 Jul 03 12:01	21° © 00'19	2°59'57	evening max el	12101 Jun 01 06:46	7° 9 53'26	19°27'09
min. Earth dist.	12100 Jul 05 08:11	18° 5 44'17	0.65678 AU	retrograde	12101 Jun 08 10:27	11° © 55'09	
morning rise	12100 Jul 09 03:35	14° © 43'19		evening set	12101 Jun 12 01:54	10° © 37'45	
direct	12100 Jul 15 13:40	12° © 01'27		inferior conj	12101 Jun 17 11:09	4°9544'41	3°13'37
desc. node	12100 Jul 16 10:25	12°904'06		minimum elong	12101 Jun 17 11:41	4°9342'58	3°12'44
morning max el	12100 Jul 28 19:23	19° © 51'26	26°50'50	min. Earth dist.	12101 Jun 18 18:11	3° © 02'29	0.67139 AU
	12100 Aug 06 11:27	0°N			12101 Jun 21 05:58	30°RⅡ	
	12100 Aug 06 11:27	0° mp		morning rise	12101 Jun 22 21:01	28° Ⅱ 22'11	
mamina aat	Č			•			
morning set	12100 Sep 02 13:35	13° Tp 33'16	1 2200 = 1 11	direct	12101 Jun 28 21:34	25° Ⅱ 43'40	
max. Earth dist.	12100 Sep 06 18:05	21° m 45'23	1.33997 AU	desc. node	12101 Jul 03 07:36	26° Ⅱ 53'20	
asc. node	12100 Sep 09 00:56	26° Tp 23'49			12101 Jul 07 21:27	0ა ௐ	
	12100 Sep 10 18:42	0∘ ⊽		morning max el	12101 Jul 11 06:07	3° 5 07'47	25°38'08
					12101 Jul 31 16:41	0 $^{\circ}$ Ω	
superior conj	12100 Sep 11 05:29	0° ჲ 56'14	0°21'02	morning set	12101 Aug 16 06:31	26° Ω 01'34	
minimum elong	12100 Sep 11 04:24	0° ჲ 50'35	0°20'45		12101 Aug 18 10:19	o∘ m y	
evening rise	12100 Sep 18 13:21	16° ≏ 26'50		max. Earth dist.	12101 Aug 19 22:52	2° m 51'42	1.35875 AU
C	12100 Sep 25 07:16	0° M			Č	•	
evening max el	12100 Oct 08 12:11	19° ™ 14'53	21°28'08	superior conj	12101 Aug 25 21:44	14° m) 29'20	-0°09'30
desc. node	12100 Oct 00 12:11 12100 Oct 12 07:15	22°M25'42	21 20 00	minimum elong	12101 Aug 25 22:19	14° m ₂ 32'19	0°09'41
					-		0 0941
retrograde	12100 Oct 20 16:08	25°M17'43		behind sun begin	12101 Aug 25 17:18	14° Mp 07'06	
evening set	12100 Oct 23 10:07	25°M00'22		behind sun end	12101 Aug 26 03:21	14° m 57'34	
inferior conj	12100 Nov 01 09:28	21°M05'23		asc. node	12101 Aug 26 21:34	16°M)29'28	
minimum elong	12100 Nov 01 01:07		5°17'07		12101 Sep 02 11:42	0∘ ⊽	
min. Earth dist.	12100 Nov 01 12:59	21° ML00'28	0.54561 AU	evening rise	12101 Sep 02 20:14	0° ჲ 43'40	
morning rise	12100 Nov 09 17:02	17°M16'38		evening max el	12101 Sep 20 15:29	0°M01'53	20°06'05
direct	12100 Nov 13 12:17	16°M45'26		-	12101 Sep 20 14:44	0°M	
morning max el	12100 Nov 26 02:29	22°M46'18	22°21'48	desc. node	12101 Sep 29 04:39	5° ™ 06'28	
	12100 Nov 20 02:29	0° ₹		retrograde	12101 Oct 01 05:30	5° ™ 17'47	
asc. node	12100 Dec 02 03:00 12100 Dec 06 01:53	5° ∡ 127'56		evening set	12101 Oct 01 03:30 12101 Oct 03 04:49	5°M07'38	
	12100 Dec 00 01.33	5 7. 21 30		2	-2101 000 00 04.49	2 11007 30	

inferior conj	12101 Oct 12 04:13	1°M08'52	-3°53'16	desc. node	12102 Sep 16 02:04	15° ≏ 21'59	
minimum elong	12101 Oct 11 18:37	1°M23'14		inferior conj	12102 Sep 22 14:09	11° ≏ 40'57	-2°02'28
min. Earth dist.	12101 Oct 13 21:28	0°M07'06		minimum elong	12102 Sep 22 08:51	11° ≏ 50'01	2°00'18
	12101 Oct 14 02:16	30° ₽ Ω		min. Earth dist.	12102 Sep 25 10:10	9° ≏ 45'01	0.56189 AU
morning rise	12101 Oct 20 07:21	26° ♀ 59'52		morning rise	12102 Sep 30 10:55	6° ≏ 57'13	
direct	12101 Oct 24 22:49	26° ₽ 13'00		direct	12102 Oct 05 21:59	5° ≏ 47'33	
	12101 Nov 04 02:27	0° M		morning max el	12102 Oct 20 01:34	13° ഫ 01'31	25°51'22
morning max el	12101 Nov 07 13:52	2°M54'20	24°09'50		12102 Nov 02 08:20	0° M	
asc. node	12101 Nov 22 22:49	23°M57'08		asc. node	12102 Nov 09 19:41	12°M59'46	
	12101 Nov 26 05:20	0° ∡ 7		morning set	12102 Nov 16 19:46	27° M 12'27	
morning set	12101 Dec 02 08:31	12° ∡ ³31′22			12102 Nov 18 02:48	0° ∡ ¹	
superior conj	12101 Dec 09 04:38	27° ∡ ¹24'58	1°38'33	superior conj	12102 Nov 23 14:58	12° √ 09'21	1°37'27
minimum elong	12101 Dec 09 04:58	27° ∡ ¹26'47	1°39'23	minimum elong	12102 Nov 23 14:13	12° √ 05'12	1°38'12
č	12101 Dec 10 09:11	ರ°0		max. Earth dist.	12102 Nov 24 17:50	14° ∡ °38′03	1.31773 AU
max. Earth dist.	12101 Dec 11 12:50	2º ろ 29'02	1.32697 AU	evening rise	12102 Nov 30 15:55	27° х 24′06	
evening rise	12101 Dec 16 16:18	13° る 13'27			12102 Dec 01 22:05	ರ∘ರ	
	12101 Dec 25 13:12	0° ≈		desc. node	12102 Dec 12 23:32	20° る 39'52	
desc. node	12101 Dec 26 02:33	0° ≈ 58′23			12102 Dec 18 20:51	0° ≈	
	12102 Jan 15 03:45	0°)		evening max el	12103 Jan 01 19:39	17° ≈ 12'33	27°26'28
evening max el	12102 Jan 19 10:26	4°) €28'18	27°29'43	retrograde	12103 Jan 15 17:15	24° ≈ 30'39	
retrograde	12102 Feb 02 03:40	11°) 52′54		evening set	12103 Jan 22 16:08	22° ≈ 15′08	
evening set	12102 Feb 09 00:57	9° ∺ 24'25		min. Earth dist.	12103 Jan 26 09:55	19° ≈ 21'33	0.61749 AU
min. Earth dist.	12102 Feb 12 19:53		0.63771 AU	inferior conj	12103 Jan 29 10:22	16° ≈ 36′27	
inferior conj	12102 Feb 15 11:32	3° ¥ 22′30		minimum elong	12103 Jan 29 15:18	16° ≈ 25′10	2°20'33
minimum elong	12102 Feb 15 13:40	3° ¥ 16′59	1°05'49	morning rise	12103 Feb 05 17:13	11° ≈ 35′24	
asc. node	12102 Feb 18 21:18	0°) €07'49		asc. node	12103 Feb 05 18:38	11° ≈ 34'18	
	12102 Feb 19 01:07	30°R≈		direct	12103 Feb 07 21:36	11° ≈ 14'39	
morning rise	12102 Feb 22 04:34	28°≈03'56		morning max el	12103 Feb 14 18:56	14° ≈ 43'50	17°49'47
direct	12102 Feb 24 14:50	27°≈34'48		. ,	12103 Feb 25 08:15	0°) {	
	12102 Mar 02 02:10	0°) (17949105	morning set	12103 Mar 02 12:08	9°) (09'15	
morning max el	12102 Mar 03 02:00 12102 Mar 19 16:20	0° ¥ 54'37 26° ¥ 02'16	17°48'05	desc. node	12103 Mar 11 00:23	24° ∺ 13'21	
morning set	12102 Mar 19 10:20 12102 Mar 22 00:08	20 γ (02 10 0° γ		superior conj	12103 Mar 13 13:48	28° ¥ 37'15	0°10'42
desc. node	12102 Mar 22 00:08 12102 Mar 24 03:48	3° Υ 38'50		minimum elong	12103 Mar 13 13:48	28°\(\frac{7}{3}\)713	
dese. Hode	12102 Widi 24 03.40	3 13030		minimum clong	12103 Mar 14 09:17	0° Υ	0 1710
superior conj	12102 Apr 01 12:48	17° Ƴ 31'48	-1°00'53	max. Earth dist.	12103 Mar 20 17:52	10° Υ 33'04	1.43428 AU
minimum elong	12102 Apr 01 06:26	17° Υ '05'55	1°00'11	evening rise	12103 Mar 27 18:23	21° Υ '43'31	
max. Earth dist.	12102 Apr 07 02:20	26° Y °27'37	1.44849 AU	0.00000	12103 Apr 02 03:33	0°8	
	12102 Apr 09 08:09	0°8			12103 Apr 23 10:10	0°II	
evening rise	12102 Apr 17 01:59	12° 8 00'52		evening max el	12103 Apr 28 05:41	5° Ⅱ 25'40	21°39'13
	12102 Apr 29 00:38	$\Pi^{\circ}0$		asc. node	12103 May 04 15:44	10° Ⅱ 12'08	
evening max el	12102 May 15 08:59	21° Ⅲ 39′09	20°27'14	retrograde	12103 May 07 07:35	10° Ⅱ 45'37	
asc. node	12102 May 17 18:29	23° Ⅱ 49'46		evening set	12103 May 11 19:07	8° Ⅱ 56′10	
retrograde	12102 May 23 09:19	26° Ⅱ 17'06		inferior conj	12103 May 17 01:37	2° Ⅲ 39'42	3°01'35
evening set	12102 May 27 10:21	24° Ⅱ 43'30		minimum elong	12103 May 17 00:13	2° Ⅱ 44'34	3°00'41
inferior conj	12102 Jun 01 17:00	18° Ⅱ 37'47		min. Earth dist.	12103 May 17 05:19	2° Ⅱ 26'47	0.68695 AU
minimum elong	12102 Jun 01 16:28	18° Ⅱ 39'37	3°12'22		12103 May 19 00:18	30° ₹ 8	
min. Earth dist.	12102 Jun 02 09:59	17° Ⅱ 39'29	0.68149 AU	morning rise	12103 May 22 05:07	26° 8 25'12	
morning rise	12102 Jun 06 22:17	12° Ⅱ 18'13		direct	12103 May 27 05:01	24° 8 15'33	
direct	12102 Jun 12 11:05	9° ∏ 51'11			12103 Jun 05 23:59	0°II	220 12112
desc. node	12102 Jun 20 04:41	13° Ⅱ 22'49	24012100	morning max el	12103 Jun 06 02:52	0° П 07'11	22°42'12
morning max el	12102 Jun 23 16:02	16° ∏ 34'09 0° ©	24°12'00	desc. node	12103 Jun 07 01:41	1° Ⅱ 06′04 0° ©	
	12102 Jul 04 19:00 12102 Jul 24 16:18	0°€ 0°€		morning set	12103 Jun 28 14:16 12103 Jul 10 02:54	18°9508'27	
morning set	12102 Jul 24 10:18 12102 Jul 29 04:35	7° Ω 37'39		max. Earth dist.	12103 Jul 10 02:34 12103 Jul 14 18:50	25°\$55'59	1.40417 AU
max. Earth dist.	12102 Jul 25 04:55	14° Ω 05'12	1.38092 AU	max. Earth dist.	12103 Jul 17 03:39	0° Ω	1.40417 710
uit		0000 12				- 00	
superior conj	12102 Aug 09 02:10	27° Ω 27'25	-0°43'00	superior conj	12103 Jul 22 14:35	9° Ω 40'09	-1°17'03
minimum elong	12102 Aug 09 05:07	27° Ω 41'30	0°43'00	minimum elong	12103 Jul 22 20:04	10° Ω 05'02	1°16'58
-	12102 Aug 10 09:55	0° m/		asc. node	12103 Jul 31 15:01	26° Ω 27'55	
asc. node	12102 Aug 13 18:17	6° Mp 32′17		evening rise	12103 Aug 01 13:23	28° Ω 13'53	
evening rise	12102 Aug 17 21:20	14° m 42'19			12103 Aug 02 11:49	0° m	
	12102 Aug 26 00:05	0∘ ⊽		evening max el	12103 Aug 17 13:01		18°25'20
evening max el	12102 Sep 03 08:47	11° ≏ 37'20	19°05'00	retrograde	12103 Aug 25 04:04	27° m 46'57	
retrograde	12102 Sep 12 07:18	16° Ω 05'09		evening set	12103 Aug 27 05:49	27° m/30'43	
evening set	12102 Sep 14 03:48	15° £ 54'25		desc. node	12103 Sep 02 23:30	23° Mp 40'18	

inferior conj	12103 Sep 03 21:27	22° m 56'47	-0°17'03	minimum elong	12104 Aug 16 03:41	4° m 52'29	1°06'18
minimum elong	12103 Sep 03 21:27 12103 Sep 03 20:48	22° m 58'05	0°16'58	min. Earth dist.	12104 Aug 19 07:20	1° m) 57'36	0.60324 AU
min. Earth dist.	12103 Sep 03 20:16 12103 Sep 07 04:45	20° m) 19'05	0.58094 AU	desc. node	12104 Aug 19 20:56	1° mg 28'00	0.00321710
morning rise	12103 Sep	17° m/36'20	0.00071110	dese. node	12104 Aug 21 16:58	30°RΩ	
direct	12103 Sep 17 11:24	15° m 59'09		morning rise	12104 Aug 23 00:07	29° Ω 06'45	
morning max el	12103 Oct 01 19:15	23° m) 36'45	27°09'07	direct	12104 Aug 29 13:12	27°Ω02'05	
5 5	12103 Oct 07 13:46	0∘ <u>⊽</u>			12104 Sep 06 22:23	0° m)	
	12103 Oct 26 10:29	0°M₊		morning max el	12104 Sep 12 20:27	4° m 56'04	27°51'27
asc. node	12103 Oct 27 16:29	2°M27'01		Ü	12104 Oct 01 12:17	0∘ <u>v</u>	
morning set	12103 Nov 01 04:44	11° M .43'49		asc. node	12104 Oct 13 13:11	22° ₽ 11'25	
S				morning set	12104 Oct 15 09:33	26° ♀ 00'02	
superior conj	12103 Nov 08 02:40	26°M54'32	1°30'31	Ü	12104 Oct 17 06:57	0°M₊	
minimum elong	12103 Nov 08 01:03	26°M45'30	1°31'02	max. Earth dist.	12104 Oct 21 10:54	9° M 04'50	1.31420 AU
max. Earth dist.	12103 Nov 08 02:27	26°M53'18	1.31345 AU				
	12103 Nov 09 11:55	0° ∡ ¹		superior conj	12104 Oct 22 13:50	11° M .34'15	1°17'58
evening rise	12103 Nov 14 21:30	11° ∡ ′49′02		minimum elong	12104 Oct 22 11:41	11°M22'18	1°18'10
•	12103 Nov 24 02:02	8°0		evening rise	12104 Oct 29 06:47	26°M21'35	
desc. node	12103 Nov 29 20:37	9° ප 49'01			12104 Oct 30 23:48	0° ∡ ¹	
evening max el	12103 Dec 14 23:06	29° る 11'34	26°49'01	desc. node	12104 Nov 15 17:48	28° ∡ 12'33	
	12103 Dec 15 20:07	0° ≈			12104 Nov 17 00:08	0°ප	
retrograde	12103 Dec 28 21:42	6° ≈ 20'25		evening max el	12104 Nov 25 18:15	10° る 17'09	25°38'32
evening set	12104 Jan 04 15:03	4° ≈ 26'31		retrograde	12104 Dec 09 15:20	17° る 17'04	
min. Earth dist.	12104 Jan 08 13:19	1° ≈ 48'21	0.59608 AU	evening set	12104 Dec 15 17:08	15° ಕ 51'51	
	12104 Jan 10 20:02	30°Ŗる		min. Earth dist.	12104 Dec 20 06:35	13° る 14'28	0.57546 AU
inferior conj	12104 Jan 11 17:30	29° る 16'49	-3°42'46	inferior conj	12104 Dec 23 05:23	11° る 12'27	-4°55'55
minimum elong	12104 Jan 12 01:06	29° る 01'39	3°39'27	minimum elong	12104 Dec 23 13:39	10° る 58'10	4°53'09
morning rise	12104 Jan 19 14:01	24° る 36'20		morning rise	12104 Dec 31 12:40	6° る 54'35	
direct	12104 Jan 21 15:58	24° る 20'18		direct	12105 Jan 02 17:18	6° る 39'47	
asc. node	12104 Jan 23 15:56	24° る 35'45		asc. node	12105 Jan 09 13:09	9° ප 14'02	
morning max el	12104 Jan 29 07:40	28° පි 08'13	18°10'35	morning max el	12105 Jan 11 12:17	10°る55'54	18°52'20
	12104 Jan 31 01:11	0°≈			12105 Jan 24 02:55	0° ≈	
morning set	12104 Feb 13 23:27	22° ≈ 59′20		morning set	12105 Jan 27 21:19	7° ≈ 16'50	
	12104 Feb 17 17:06	0° ∀					
				superior conj	12105 Feb 05 10:13	23° ≈ 53′12	0°48'34
superior conj	12104 Feb 23 14:24	10°) 48'45	0°17'48	minimum elong	12105 Feb 05 12:59	24° ≈ 06′16	0°48'43
minimum elong	12104 Feb 23 15:46	10° ¥ 54'53	0°17'56		12105 Feb 08 16:43	0° ∀	
desc. node	12104 Feb 25 21:01	14° ¥ 52'01		desc. node	12105 Feb 11 17:39	5°) 30′36	
max. Earth dist.	12104 Mar 02 05:16	24° ∺ 05′16	1.41521 AU	max. Earth dist.	12105 Feb 12 12:41	6° ¥ 55'10	1.39330 AU
	12104 Mar 05 18:40	0° Y		evening rise	12105 Feb 16 10:07	13°) 40′36	
evening rise	12104 Mar 07 03:42	2° Y 14'30			12105 Feb 26 12:06	0° Y	
	12104 Mar 25 12:35	0°B			12105 Mar 20 14:06	0°B	
evening max el	12104 Apr 09 22:05	19° 8 14'00	22°58'17	evening max el	12105 Mar 23 12:03	3° 8 04'18	24°18'40
retrograde	12104 Apr 20 03:43	25° 8 16'16		retrograde	12105 Apr 03 20:34	9° 8 43'42	
asc. node	12104 Apr 20 13:02	25° 8 15'34		asc. node	12105 Apr 07 10:22	8° 8 45'46	
evening set	12104 Apr 25 02:36	23° 8 11'57		evening set	12105 Apr 09 07:15	7° 8 26'28	
inferior conj	12104 Apr 30 11:02	16° 8 47'11	2°39'45	min. Earth dist.	12105 Apr 13 22:00	2° 8 08'36	0.68410 AU
minimum elong	12104 Apr 30 09:03	16° 8 54'02	2°38'46	inferior conj	12105 Apr 14 19:20	0° 8 56'49	2°08'06
min. Earth dist.	12104 Apr 30 02:03	17° 8 18'18	0.68781 AU	minimum elong	12105 Apr 14 17:10	1° 8 04'07	2°07'06
morning rise	12104 May 05 15:24	10° 8 39'11			12105 Apr 15 12:17	30° ŖƳ	
direct	12104 May 10 02:10	8° 8 50'13		morning rise	12105 Apr 20 03:12	24° Ƴ 56'27	
morning max el	12104 May 18 17:58	13° 8 50'00	21°17'15	direct	12105 Apr 24 01:14	23° Y 28'56	
desc. node	12104 May 23 22:36	19° 8 43'17		morning max el	12105 May 01 16:08	27° Y ′45′12	20°03'23
	12104 May 31 14:51	Π °0			12105 May 03 18:53	0° 8	
morning set	12104 Jun 18 23:28	27° Ⅱ 30′36		desc. node	12105 May 10 19:25	8° 8 59'54	
	12104 Jun 20 13:17	0 \circ			12105 May 25 01:41	Π °0	
max. Earth dist.	12104 Jun 25 22:37	8° © 41'03	1.42564 AU	morning set	12105 May 29 01:50	6° Ⅱ 07'56	
				max. Earth dist.	12105 Jun 08 09:18	22° Ⅱ 16′05	1.44276 AU
superior conj	12104 Jul 03 06:27	20° © 57'12			12105 Jun 13 04:36	0 \circ \odot	
minimum elong	12104 Jul 03 13:18	21° © 26'37	1°47'40				
	12104 Jul 08 11:07	$0^{\circ}\Omega$		superior conj	12105 Jun 13 22:30	1° © 12'54	
evening rise	12104 Jul 14 16:20	11° Ω 08'14		minimum elong	12105 Jun 14 03:09	1° © 31'50	2°08'58
asc. node	12104 Jul 17 11:49	16° Ω 12′09		evening rise	12105 Jun 27 01:21	23° © 14'07	
	12104 Jul 25 15:32	0° ™			12105 Jul 01 00:02	$0^{\circ}\Omega$	
evening max el	12104 Jul 30 23:59	6° Mp 48′56	18°05'58	asc. node	12105 Jul 04 08:40	5° Ω 40'19	
retrograde	12104 Aug 06 18:57	10° My $17'11$		evening max el	12105 Jul 14 13:52		18°05'45
evening set	12104 Aug 09 04:17	9° m 51'40		retrograde	12105 Jul 20 23:32	23° N 26'12	
inferior conj	12104 Aug 16 01:43	4° m 57'03	1°07'24	evening set	12105 Jul 23 16:55	22° Ω 48′25	

inferior conj	12105 Jul 29 23:27	17° Ω 35'19	2°07'50	minimum elong	12106 Jul 13 12:35	0° Ω 35'57	2015127
minimum elong	12105 Jul 29 23.27 12105 Jul 30 02:05	$17^{\circ}\Omega_{28'19}$	2°06'28	minimum ciong	12106 Jul 13 12:33	30°R95	2 43 37
min. Earth dist.	12105 Jul 30 02:03	$17^{\circ}02019$ $14^{\circ}\Omega36'11$	0.62580 AU	min. Earth dist.	12106 Jul 14 00.43	28°©02'53	0.64644 AU
	-	$14^{\circ} \Omega 25'29$	0.02380 AU		12106 Jul 13 16.48 12106 Jul 19 08:58	28 30 2 33 24° 5 22'35	0.04044 AU
morning rise	12105 Aug 05 09:10			morning rise			
desc. node	12105 Aug 06 18:19	10° Ω 30'48		desc. node	12106 Jul 24 15:39	21°5548'48	
direct	12105 Aug 12 01:37	8° Ω 58'42	2705.4155	direct	12106 Jul 25 22:53	21°542'52	25022110
morning max el	12105 Aug 26 03:39	17° Ω 01'08	27°54'55	morning max el	12106 Aug 08 13:53	29°5542'02	27°22'40
	12105 Sep 05 22:12	0° m)			12106 Aug 08 20:58	0 \circ Ω	
	12105 Sep 24 06:30	0∘ ⊽			12106 Aug 30 21:05	0° ™	
morning set	12105 Sep 29 08:07	9° ₽ 55'59		morning set	12106 Sep 12 21:50	23° m 24'04	
asc. node	12105 Sep 30 09:52	12° ≏ 07'34			12106 Sep 16 05:06	0∘ ⊽	
max. Earth dist.	12105 Oct 04 15:13	21° ≏ 02'19	1.32008 AU	asc. node	12106 Sep 17 06:30	2° ₽ 10'12	
				max. Earth dist.	12106 Sep 17 11:29	2° ≏ 35'55	1.33118 AU
superior conj	12105 Oct 06 22:39	26° ₽ 03'30	0°59'56				
minimum elong	12105 Oct 06 20:26	25° ≙ 51'21	0°59'52	superior conj	12106 Sep 21 03:00	10° ≙ 15'43	0°36'39
	12105 Oct 08 17:44	0° M		minimum elong	12106 Sep 21 01:18	10° ≏ 06'40	0°36'24
evening rise	12105 Oct 13 17:53	10°M56'41		evening rise	12106 Sep 28 04:53	25° ≏ 28'24	
	12105 Oct 23 08:00	0° ∡ 7			12106 Sep 30 08:31	0° M	
desc. node	12105 Nov 02 15:02	15° ∡ ³33′06			12106 Oct 19 00:37	0° ∡ ¹	
evening max el	12105 Nov 07 05:55	20° ∡ ³37′28	24°04'27	evening max el	12106 Oct 19 16:53	0° ∡ ′40'41	22°23'09
retrograde	12105 Nov 20 20:55	27° ∡ ¹25'48		desc. node	12106 Oct 20 12:21	1° ∡ 726'53	
evening set	12105 Nov 25 19:09	26° х 32'35		retrograde	12106 Nov 01 14:18	7° х 04'59	
min. Earth dist.	12105 Nov 25 15:65	23°×736'55	0.55835 AU	evening set	12106 Nov 05 01:43	6° х 38′24	
inferior conj	12105 Dec 03 20:36	22° 🗷 18'11		min. Earth dist.	12106 Nov 12 23:54	3° ₹ 06'23	0.54773 AU
minimum elong	12105 Dec 05 20:50 12105 Dec 04 00:47	22°×1011		inferior conj	12106 Nov 12 23:34 12106 Nov 13 18:42	2°×739'52	
morning rise	12105 Dec 04 00:47	18° × 20'37	3 43 13	minimum elong	12106 Nov 13 14:25	2° x ⁷ 45'54	
direct	12105 Dec 12 08:24 12105 Dec 14 22:50	18° × 20 37		minimum ciong		2 x 43 34 30°RM	3 44 33
			10057142		12106 Nov 18 21:55		
morning max el	12105 Dec 25 04:58	22° 🗷 56'43	19°56'42	morning rise	12106 Nov 22 04:31	28°M52'29	
asc. node	12105 Dec 27 10:16	25° ∡ 17'30		direct	12106 Nov 25 12:03	28°M27'44	
	12105 Dec 31 00:42	0°る			12106 Dec 01 16:30	0° ∡ 7	21022122
morning set	12106 Jan 12 02:11	21° ප් 51'16		morning max el	12106 Dec 07 07:33	4° ⋌ ¹04'36	21°23'32
	12106 Jan 16 01:57	0° ≈		asc. node	12106 Dec 14 07:19	12° ∡ 29'34	
					12106 Dec 24 06:20	0°ಕ	
superior conj	12106 Jan 19 20:31	7° ≈ 37'08	1°11'47	morning set	12106 Dec 27 11:24	6° る 35'12	
minimum elong	12106 Jan 19 23:19	7° ≈ 51'06	1°12'10				
max. Earth dist.	12106 Jan 25 18:59	19° ≈ 06'42	1.37111 AU	superior conj	12107 Jan 03 17:17	21° る 49'08	1°27'34
evening rise	12106 Jan 29 12:44	25° ≈ 58′20		minimum elong	12107 Jan 03 19:21	21° る 59'55	1°28'12
desc. node	12106 Jan 29 14:20	26° ≈ 05'32			12107 Jan 07 17:26	0° ≈	
	12106 Jan 31 19:21	0° ∀		max. Earth dist.	12107 Jan 08 05:25	0° ≈ 59'47	1.35096 AU
	12106 Feb 20 00:53	0° Y		evening rise	12107 Jan 12 08:21	8° ≈ 59'27	
evening max el	12106 Mar 06 01:21	16° Ƴ 54'58	25°33'35	desc. node	12107 Jan 16 11:05	16° ≈ 33'00	
retrograde	12106 Mar 18 09:06	24° Y ′01'32			12107 Jan 24 09:47	0° ∀	
evening set	12106 Mar 24 07:27	21° Y 34'34			12107 Feb 15 22:06	$0^{\circ}\mathbf{\Upsilon}$	
asc. node	12106 Mar 25 07:45	20° Ƴ 39'17		evening max el	12107 Feb 16 15:00	0° Ƴ 41'34	26°35'42
min. Earth dist.	12106 Mar 28 15:08	16° Ƴ 51'51	0.67605 AU	retrograde	12107 Mar 01 16:21	8° Y 02'50	
inferior conj	12106 Mar 30 00:36	15° Ƴ 04'38	1°26'33	evening set	12107 Mar 08 01:26	5° Ƴ 30'41	
minimum elong	12106 Mar 29 22:45	15° Ƴ 10'35	1°25'45	min. Earth dist.	12107 Mar 12 03:17	1° Y ′22'12	0.66396 AU
morning rise	12106 Apr 04 14:33	9° Y 13'09		asc. node	12107 Mar 12 05:08	1° Y 16'47	
direct	12106 Apr 08 00:48	8° Y 05'48			12107 Mar 13 06:55	30° Ŗ ₩	
morning max el	12106 Apr 14 21:57	11° Y ′50'45	19°04'08	inferior conj	12107 Mar 14 00:47	29° ¥ 06'17	0°34'53
desc. node	12106 Apr 27 16:09	28° Y ′45'08		minimum elong	12107 Mar 13 23:53	29° ¥ 09'00	0°34'37
greatest brilliancy	12106 Apr 28 01:56	29° Υ 21'55	-0.7m	morning rise	12107 Mar 19 23:23	23° H 25'28	0 2 . 2 ,
greatest orimaney	12106 Apr 28 12:03	0°8	0.7111	direct	12107 Mar 22 23:08	22°) 35'35	
morning set	12106 May 08 05:52	14° 8 56'43		morning max el	12107 Mar 29 10:16	26°) €01'45	18°21'11
morning set	12106 May 17 22:32	0°П		morning max ci	12107 Apr 01 21:57	20 γ (01 4 3	10 21 11
max. Earth dist.	12106 May 17 22:32 12106 May 22 01:12	6° Ⅱ 25'49	1.45377 AU	desc. node	12107 Apr 01 21:37 12107 Apr 14 12:47	18° Υ 51'18	
max. Earm dist.	12100 May 22 01.12	0 Д2349	1.43377 AU	morning set	12107 Apr 14 12.47 12107 Apr 18 08:05	24° Υ 54'20	
gumariar agni	12106 May 24 16:24	100∏24!50	2012126	morning set		0° 8	
superior conj	12106 May 24 16:34	10° Ⅱ 34'59			12107 Apr 21 13:01	υ Ο	
minimum elong	12106 May 24 14:24	10° Ⅱ 26'27	2 13 21	aumori	12107 M 02 22 50	100 425145	1056140
- -	12106 Jun 05 19:41	0°©		superior conj	12107 May 03 23:50	19° 8 35'45	
evening rise	12106 Jun 08 11:41	4°520'49		minimum elong	12107 May 03 15:20	19° 8 02'31	
asc. node	12106 Jun 21 05:36	24°9545'44		max. Earth dist.	12107 May 04 20:23	20° 8 56'03	1.45760 AU
	12106 Jun 24 23:31	0° U	10000:::0		12107 May 10 15:46	0°II	
evening max el	12106 Jun 28 03:20	3° Ω 37'49	18°23'48	evening rise	12107 May 19 21:55	14° Ⅲ 29'03	
retrograde	12106 Jul 04 13:19	7° Ω 04'08			12107 May 29 20:19	0ა ௐ	
evening set	12106 Jul 07 14:56	6° Ω 11'57		greatest brilliancy	12107 May 30 02:04	0°522'06	-0.8m
inferior conj	12106 Jul 13 10:26	0° Ω 42'17	2°46'49	asc. node	12107 Jun 08 02:39	13° © 21'03	

evening max el	12107 Jun 11 13:52	17° © 19'28	18°59'18	asc. node	12108 May 24 23:47	1° © 15'29	
retrograde	12107 Jun 11 13:32 12107 Jun 18 08:43	21°S04'29	10 39 10	evening max el	12108 May 24 23.47 12108 May 24 19:28	1°504'41	19°51'01
evening set	12107 Jun 18 08:43	19°956'27		retrograde	12108 Jun 01 06:58	5°\$20'15	19 31 01
inferior conj	12107 Jun 21 19:00 12107 Jun 27 07:05	19 936 27 14°9511'43	3°08'03	evening set	12108 Jun 05 02:29	3°955'49	
minimum elong	12107 Jun 27 08:15	14 S 11 43 14°S 08'03	3°07'05	evening set	12108 Jun 08 21:06	30°RⅡ	
min. Earth dist.	12107 Jun 28 22:38	14 908 03 12°906'02	0.66360 AU	inforior coni	12108 Jun 10 10:19	30 KII 27°II57'16	201.415.1
			0.00300 AU	inferior conj		27° I I57'16	
morning rise	12107 Jul 02 20:49	7°949'03		minimum elong	12108 Jun 10 10:23	2/°Щ3/03 26°Щ33'30	3°14'01 0.67635 AU
direct	12107 Jul 09 03:22	5°907'09		min. Earth dist.	12108 Jun 11 11:16		0.07033 AU
desc. node	12107 Jul 11 12:53	5°527'39	2 () 2 2 1 0 1	morning rise	12108 Jun 15 17:56	21° I I35'58	
morning max el	12107 Jul 22 00:42	12°548'00	26°22'01	direct	12108 Jun 21 13:47	19° Ⅱ 01'30	
	12107 Aug 04 21:08	0° N		desc. node	12108 Jun 27 10:02	21° I I03'02	25002127
	12107 Aug 23 13:19	0° Mp		morning max el	12108 Jul 03 10:55	26° Ⅱ 08'53	25°02'27
morning set	12107 Aug 26 23:28	6° Mp 16'44	1 2 4 7 4 2 4 4 4		12108 Jul 06 23:57	0°©	
max. Earth dist.	12107 Aug 30 21:37	13° Mp 47'33	1.34743 AU		12108 Jul 28 10:28	0°N	
asc. node	12107 Sep 04 03:09	22° m 15'47		morning set	12108 Aug 08 08:58	18° Ω 24'03	1 26704 ATT
	12107.6 05.00.21	2.40 m. 0.511 0	000012.4	max. Earth dist.	12108 Aug 11 22:59	24° Ω 54'08	1.36794 AU
superior conj	12107 Sep 05 00:31	24° Mp 05'18	0°08'34		12108 Aug 14 16:16	0° m)	
minimum elong	12107 Sep 05 00:03	24° m 02'54	0°08'18				
behind sun begin	12107 Sep 04 18:56	23° m/36'38		superior conj	12108 Aug 18 12:14	7° m 24'54	
behind sun end	12107 Sep 05 05:10	24° m/29'13		minimum elong	12108 Aug 18 13:46	7° m/32'23	0°23'34
	12107 Sep 07 20:51	0∘ ⊽		asc. node	12108 Aug 20 23:50	12° m 20'52	
evening rise	12107 Sep 12 13:54	9° ≙ 52'12		evening rise	12108 Aug 26 18:42	24° m 02'30	
	12107 Sep 23 03:35	0° M .			12108 Aug 29 18:19	0∘ ত	
evening max el	12107 Oct 01 12:34	11°ML04'12	20°50'53	evening max el	12108 Sep 12 22:03	22° ≙ 11'40	19°37'24
desc. node	12107 Oct 07 09:45	15°M25'54		retrograde	12108 Sep 22 18:25	27° ≏ 06'14	
retrograde	12107 Oct 13 01:07	16°M47'27		desc. node	12108 Sep 23 07:11	27° ≏ 05'26	
evening set	12107 Oct 15 09:03	16°M34'26		evening set	12108 Sep 24 15:16	26° ≏ 56'25	
inferior conj	12107 Oct 24 10:22	12°M39'55		inferior conj	12108 Oct 03 10:17	22° ≏ 52'15	
minimum elong	12107 Oct 24 00:30	12°M53'57	4°45'00	minimum elong	12108 Oct 03 02:10	23° ഫ 05'02	3°04'05
min. Earth dist.	12107 Oct 25 06:56	12°M10'37	0.54599 AU	min. Earth dist.	12108 Oct 05 16:37	21° ≏ 26'52	0.55368 AU
morning rise	12107 Nov 01 16:04	8°M44'57		morning rise	12108 Oct 11 11:09	18° 亞 30′00	
direct	12107 Nov 05 20:13	8°M07'35		direct	12108 Oct 16 11:20	17° ≏ 34'21	
morning max el	12107 Nov 18 22:15	14°M26'42	23°07'24	morning max el	12108 Oct 30 08:41		24°55'05
	12107 Nov 30 20:00	0° ∡ ¹			12108 Nov 04 10:15	0° M	
asc. node	12107 Dec 01 04:17	0° ∡ ³34′28		asc. node	12108 Nov 17 01:10	19° M 19′13	
morning set	12107 Dec 11 22:49	21° × 22'08			12108 Nov 22 12:48	0° ⊀	
	12107 Dec 15 23:01	0°ප		morning set	12108 Nov 25 10:40	6° ∡ 07'05	
		_				_	
superior conj	12107 Dec 18 21:15	6° る 19'26		superior conj	12108 Dec 02 05:54	21°×700'40	
minimum elong	12107 Dec 18 22:15	6°る24'48	1°37'13	minimum elong	12108 Dec 02 05:46	20° ₹ 59'54	1°39'38
max. Earth dist.	12107 Dec 21 23:36	12° る 54'16	1.33445 AU	max. Earth dist.	12108 Dec 04 01:25	24° 🗷 58'50	1.32244 AU
evening rise	12107 Dec 26 17:20	22° る 33'56			12108 Dec 06 09:17	0°ਰ	
	12107 Dec 30 14:07	0° ≈		evening rise	12108 Dec 09 12:28	6° る 33'32	
desc. node	12108 Jan 03 07:54	6°≈47'43		desc. node	12108 Dec 20 04:52	26° ⋜ 43'47	
	12108 Jan 18 03:17	0° ∀			12108 Dec 22 03:17	0° ≈	
evening max el	12108 Jan 30 04:28	14° ★ 13'59	27°17'36	evening max el	12109 Jan 11 15:52		27°32'22
retrograde	12108 Feb 12 17:16	21°) 38'55			12109 Jan 14 17:13	0°) {	
evening set	12108 Feb 19 11:06	19°) €07'16	0.64005.444	retrograde	12109 Jan 25 11:02	4°) (40'56	
min. Earth dist.	12108 Feb 23 08:14	15° ¥ 31′23	0.64825 AU	evening set	12109 Feb 01 09:55	2°) 16′57	
inferior conj	12108 Feb 25 17:28	12° ¥ 55'16			12109 Feb 04 06:19	30°R ≈	
minimum elong	12108 Feb 25 18:16	12° ¥ 53′05	0°26'22	min. Earth dist.	12109 Feb 05 03:57		0.62943 AU
asc. node	12108 Feb 27 02:32	11° ¥ 26′28		inferior conj	12109 Feb 07 23:45	26°≈24'24	
morning rise	12108 Mar 03 03:09	7° ∺ 27'32		minimum elong	12109 Feb 08 03:01	26°≈16′23	1°36'36
direct	12108 Mar 05 17:54	6° ¥ 51'47		asc. node	12109 Feb 12 23:53	22°≈10′25	
morning max el	12108 Mar 12 02:43	10°) 10′43	17°55'09	morning rise	12109 Feb 14 22:33	21°≈12'51	
	12108 Mar 25 20:15	0° Υ		direct	12109 Feb 17 06:08	20° ≈ 47'37	.=
morning set	12108 Mar 29 15:06	6° Y 16'42		morning max el	12109 Feb 23 20:25	24°≈09'50	17°46'34
desc. node	12108 Mar 31 09:23	9° Ƴ 11'57			12109 Feb 28 14:15	0°) {	
	10100 : 15 :5	000000	100017	morning set	12109 Mar 11 23:18	18°) € 51'12	
superior conj	12108 Apr 12 13:53	29° Υ 00'39		desc. node	12109 Mar 18 05:59	29°) (42'44	
minimum elong	12108 Apr 12 05:19	28° Y ′26'31	1°23'15		12109 Mar 18 10:02	0 ° Υ	
	12108 Apr 13 04:49	0°8			444007	0.00-	
max. Earth dist.	12108 Apr 16 16:29	5° 8 30'33	1.45396 AU	superior conj	12109 Mar 24 00:43	9° Y 26'17	
evening rise	12108 Apr 28 13:55	23° 8 57'47		minimum elong	12109 Mar 23 20:20	9° Υ 08'06	
	12108 May 02 12:37	0°II		max. Earth dist.	12109 Mar 30 10:35	19° Y 52'13	1.44325 AU
greatest brilliancy	12108 May 13 02:25	15° Ⅱ 52'13	-0.6m		12109 Apr 05 20:50	0°8	
	12108 May 23 18:44	0ං ව		evening rise	12109 Apr 08 01:42	3° 8 24'25	

	12109 Apr 26 00:11	0°Щ		evening rise	12110 Mar 19 00:13	13° Ƴ 25'17	
evening max el	12109 Apr 20 00:11 12109 May 07 19:14	14° П 50'33	20°56'34	evening rise	12110 Mar 19 00:13	0° 8	
asc. node	12109 May 17 13:14 12109 May 11 21:00	14 П 3033	20 30 34	evening max el	12110 Mai 29 20:21 12110 Apr 20 13:45	28° 8 37'35	22012112
retrograde	12109 May 11 21:00 12109 May 16 05:49	18 П 15 38		evening max er	12110 Apr 20 13:43 12110 Apr 22 00:01	28 O 3733	22 12 13
•	12109 May 10 03:49 12109 May 20 11:19	19 П 4548 18° П 05'07		asc. node	12110 Apr 22 00:01 12110 Apr 28 18:16	0 Π 4°Π07'21	
evening set	12109 May 20 11:19 12109 May 25 17:37	18 П 03 07 11° П 54'23	3°09'33		12110 Apr 28 18.16 12110 Apr 30 03:31	4 II 0721 4° II 16′26	
inferior conj	•	11° Д 54'23		retrograde		2° I I20'24	
minimum elong	12109 May 25 16:41	11° Д 3/3/	3°08'42	evening set	12110 May 04 19:45		
min. Earth dist.	12109 May 26 04:46		0.68444 AU		12110 May 07 02:27	30°R 8	2052124
morning rise	12109 May 30 21:50	5° Ⅱ 36'56		inferior conj	12110 May 10 02:49	25° 8 59'45	
direct	12109 Jun 05 05:08	3° Ⅱ 17'03		minimum elong	12110 May 10 01:08	26° 8 05'38	2°52'37
desc. node	12109 Jun 14 07:05	8° Ⅱ 06'42		min. Earth dist.	12110 May 10 01:00	26° 8 06'04	0.68784 AU
morning max el	12109 Jun 15 21:03	9° Ⅱ 38'30	23°33'40	morning rise	12110 May 15 06:21	19° 8 47'47	
	12109 Jul 01 22:40	0		direct	12110 May 20 00:32	17° 8 46'53	
morning set	12109 Jul 20 21:26	29° © 33'30		morning max el	12110 May 29 09:28	23° 8 16'28	22°05'02
	12109 Jul 21 03:43	0 \circ Ω		desc. node	12110 Jun 01 04:04	26° 8 15'32	
max. Earth dist.	12109 Jul 24 20:36	6° Ω 22'18	1.39087 AU		12110 Jun 04 06:57	Π $^{\circ}$ 0	
					12110 Jun 25 06:53	0 \circ \odot	
superior conj	12109 Aug 01 10:22	20° Ω 04'40	-0°57'35	morning set	12110 Jul 01 08:48	9° © 35'38	
minimum elong	12109 Aug 01 14:26	20° Ω 23'39	0°57'31	max. Earth dist.	12110 Jul 06 20:31	18° © 35'26	1.41366 AU
	12109 Aug 06 15:26	0° m y			12110 Jul 13 12:27	0 $^{\circ}$ Ω	
asc. node	12109 Aug 07 20:34	2° Mp 21'06					
evening rise	12109 Aug 10 16:25	7° m 50'58		superior conj	12110 Jul 14 14:36	1° Ω 55'09	-1°30'45
	12109 Aug 23 08:59	0∘ ⊽		minimum elong	12110 Jul 14 20:56	2° Ω 23′13	1°30'42
evening max el	12109 Aug 26 20:23	4° £ 06'06	18°45'30	evening rise	12110 Jul 25 03:30	21° Ω 08'40	
retrograde	12109 Sep 04 04:24	8° ≙ 16'54		asc. node	12110 Jul 25 17:20	22° Ω 12'50	
evening set	12109 Sep 06 02:27	8° ഫ 04'24			12110 Jul 29 23:08	0° m)	
desc. node	12109 Sep 10 04:38	6° ₽ 24'18		evening max el	12110 Aug 10 03:59	16° m 40'57	18°14'40
inferior conj	12109 Sep 14 05:02	3° ≏ 42'11	-1°15'47	retrograde	12110 Aug 17 09:17	20° m/20'21	
minimum elong	12109 Sep 14 01:53	3° ≏ 47'57		evening set	12110 Aug 19 13:59	20° m 00'43	
min. Earth dist.	12109 Sep 17 07:31	1° Ω 26'32	0.56934 AU	inferior conj	12110 Aug 26 21:38	15° m) 18'04	0°21'43
min. Darm dige.	12109 Sep 19 11:59	30°R.M)	0.0075.110	minimum elong	12110 Aug 26 22:22	15° Mp 16'30	0°21'09
morning rise	12109 Sep 21 21:58	28° m/42'13		desc. node	12110 Aug 28 02:04	14° m) 16'48	0 21 0)
direct	12109 Sep 27 16:10	27° m 21'30		min. Earth dist.	12110 Aug 30 05:36	12° Mp 28'04	0.59021 AU
ancer	12109 Oct 05 22:31	0° ⊽		morning rise	12110 Sep 03 03:17	9° m) 43'23	0.37021710
morning max el	12109 Oct 03 22:31 12109 Oct 11 22:42	ა <u>—</u> 4° Ω 46'32	26°28'24	direct	12110 Sep 09 05:17	7° m) 53'56	
morning max ci	12109 Oct 30 06:53	4 <u>=</u> 40 32 0°M	20 28 24	morning max el	12110 Sep 03 11:23 12110 Sep 23 19:48	15° m) 40'23	27°31'46
asc. node	12109 Oct 30 00:33 12109 Nov 03 22:00	8°M33'06		morning max er	12110 Sep 23 19.48 12110 Oct 05 12:10	0∘ ⊽	27 31 40
				1-		0 = 28° ⊆ 08'21	
morning set	12109 Nov 09 21:09	20°M.44'31 0°⊀		asc. node	12110 Oct 21 18:46	0°M	
	12109 Nov 14 02:52	0° X '			12110 Oct 22 16:50		
	12100 N 16 17 02	50 7 45145	1025112	morning set	12110 Oct 25 04:33	5°M09'56	1 21211 477
superior conj	12109 Nov 16 17:02	5° ₹ 45'45		max. Earth dist.	12110 Oct 31 17:11	19° M 24'55	1.31311 AU
minimum elong	12109 Nov 16 15:53	5° ∡ 39'21	1°35'53		1011037 01 04 12	200 m 20110	1005150
max. Earth dist.	12109 Nov 17 08:23	7° √ 11'11	1.31526 AU	superior conj	12110 Nov 01 04:43	20°M29'10	
evening rise	12109 Nov 23 14:51	20° ₹ 50'24		minimum elong	12110 Nov 01 02:49	20°M18'37	1°26'16
	12109 Nov 28 02:39	0° ろ			12110 Nov 05 11:31	0° ∡ 7	
desc. node	12109 Dec 07 01:54	16° る 12'43		evening rise	12110 Nov 07 22:13	5° ∡ 18'49	
	12109 Dec 16 09:10	0° ≈			12110 Nov 20 19:04	0°ಕ	
evening max el	12109 Dec 24 22:43	9° ≈ 44'20	27°14'43	desc. node	12110 Nov 23 23:01	5° ට 04'03	
retrograde	12110 Jan 07 20:54	16° ≈ 59'03		evening max el	12110 Dec 06 22:35	21° ප 19'50	26°22'41
evening set	12110 Jan 14 18:38	14° ≈ 51'19		retrograde	12110 Dec 20 21:17	28° 号 25'46	
min. Earth dist.	12110 Jan 18 13:12	12° ≈ 06'06	0.60842 AU	evening set	12110 Dec 27 09:12	26° පි 43'16	
inferior conj	12110 Jan 21 16:16	9° ≈ 24'33	-2°56'53	min. Earth dist.	12110 Dec 31 12:09	24° る 07'24	0.58697 AU
minimum elong	12110 Jan 21 22:26	9° ≈ 11'15	2°53'53	inferior conj	12111 Jan 03 15:28	21° る 46'19	-4°15'33
morning rise	12110 Jan 29 05:08	4° ≈ 32'18		minimum elong	12111 Jan 03 23:46	21° る 30'44	4°12'18
asc. node	12110 Jan 30 21:11	4° ≈ 14'50		morning rise	12111 Jan 11 17:10	17° る 15'33	
direct	12110 Jan 31 08:00	4° ≈ 13'59		direct	12111 Jan 13 19:16	17° る 00'37	
morning max el	12110 Feb 07 12:03	7° ≈ 49'44	17°56'18	asc. node	12111 Jan 17 18:26	17° ප 57'36	
	12110 Feb 21 20:05	0° ∀		morning max el	12111 Jan 21 21:49	20° る 59'43	18°25'45
morning set	12110 Feb 23 02:21	2° ₩ 18'18			12111 Jan 28 17:48	0° ≈	
desc. node	12110 Mar 05 02:35	20°) 19′31		morning set	12111 Feb 06 18:36	16° ≈ 20'55	
				-	12111 Feb 13 22:45	0° ∀	
superior conj	12110 Mar 05 12:12	21° ∺ 01′28	-0°03'08				
minimum elong	12110 Mar 05 11:57	21° ∺ 00′22	0°02'53	superior conj	12111 Feb 15 21:29	3°) 36'45	0°31'45
behind sun begin						3°){ 46'41	0°31'51
	12110 Mar 05 03:55	20°) 25′17		minimum elong	12111 Feb 15 23:39	J //4041	0 3131
behind sun end	12110 Mar 05 03:55 12110 Mar 05 20:00	20° ★ 25'17 21° ★ 35'22		desc. node	12111 Feb 13 23:39 12111 Feb 19 23:12	10° H 58'27	0 3131
-				_			1.40598 AU
-	12110 Mar 05 20:00	21°) 35′22	1.42660 AU	desc. node	12111 Feb 19 23:12	10° ¥ 58′27	

	12111 Mar 03 06:02	0° Ƴ		desc. node	12112 Feb 06 19:50	1° ¥ 36'16	
	12111 Mar 23 16:34	0.8 0.1		evening rise	12112 Feb 09 09:39	6° ₩ 09'02	
evening max el	12111 Apr 03 04:48	12° 8 26'45	23°32'47	evening rise	12112 Feb 24 05:34	0°Υ	
retrograde	12111 Apr 13 22:28	18° 8 46'23	23 32 .,	evening max el	12112 Mar 15 18:31	26° Y 18'38	24°51'43
asc. node	12111 Apr 15 15:35	18° 8 32'45			12112 Mar 19 23:29	0°8	
evening set	12111 Apr 19 02:12	16° 8 36'28		retrograde	12112 Mar 27 13:30	3° 8 10'33	
inferior conj	12111 Apr 24 11:58	10° 8 09'03	2°27'34	asc. node	12112 Apr 01 12:55	1° 8 21'26	
minimum elong	12111 Apr 24 09:52	10° 8 16'17	2°26'33	evening set	12112 Apr 02 05:08	0° 8 49'00	
min. Earth dist.	12111 Apr 23 21:46	10° 8 57'50	0.68671 AU	-	12112 Apr 03 02:31	30° ŖƳ	
morning rise	12111 Apr 29 17:29	4° 8 03'52		min. Earth dist.	12112 Apr 06 16:49	25° Y 46'02	0.68120 AU
direct	12111 May 03 22:43	2° 8 24'00		inferior conj	12112 Apr 07 19:13	24° Ƴ 18'47	1°51'45
morning max el	12111 May 12 03:15	7° 8 04'24	20°44'11	minimum elong	12112 Apr 07 17:07	24° Y 25'44	1°50'47
desc. node	12111 May 19 00:54	15° 8 11'13		morning rise	12112 Apr 13 05:20	18° Y 21′50	
	12111 May 29 13:44	Π °0		direct	12112 Apr 16 22:19	17° Ƴ 02'55	
morning set	12111 Jun 10 19:54	18° 耳 33′50		morning max el	12112 Apr 24 04:35	21° Y ′04'06	19°36'15
	12111 Jun 18 01:36	0 \circ \odot			12112 May 01 13:40	$0^{\circ}S$	
max. Earth dist.	12111 Jun 19 02:44	1°5641'15	1.43361 AU	desc. node	12112 May 04 21:40	4° 8 41'16	
				greatest brilliancy	12112 May 06 21:08	7° 8 33'44	-0.6m
superior conj	12111 Jun 25 20:35	12°5546'49		morning set	12112 May 19 20:03	27° 8 07'53	
minimum elong	12111 Jun 26 03:05	13°9514'04	1°58'17		12112 May 21 16:44	Π °0	
	12111 Jul 05 20:41	0 $^{\circ}\Omega$		max. Earth dist.	12112 May 31 16:03	15° Ⅱ 33'51	1.44836 AU
evening rise	12111 Jul 07 23:25	3° Ω 43'47				_	
asc. node	12111 Jul 12 14:08	11° Ω 51'02		superior conj	12112 Jun 05 02:37	22° Ⅲ 38′04	
evening max el	12111 Jul 24 16:40	29° Ω 45'25	18°03'36	minimum elong	12112 Jun 05 04:48	22° Ⅱ 46'50	2°13'18
	12111 Jul 24 22:41	0° m)			12112 Jun 09 15:55	0°©	
retrograde	12111 Jul 31 06:21	3°Mp08'16		evening rise	12112 Jun 18 23:14	15°\$25'26	
evening set	12111 Aug 02 19:07	2° m/37'51		1	12112 Jun 27 17:25	0° Ω	
: <i>£</i> :	12111 Aug 06 20:06	30°R Ω	1925152	asc. node	12112 Jun 28 11:01	1° Ω 10′32	18°11'12
inferior conj	12111 Aug 09 09:48	$27^{\circ}\Omega 35'24$ $27^{\circ}\Omega 29'23$	1°35'52 1°34'33	evening max el	12112 Jul 07 06:48	13°Ω10'12 16°Ω31'10	18°11'12
minimum elong min. Earth dist.	12111 Aug 09 12:14 12111 Aug 12 12:09	$24^{\circ} \Omega 33'17$	0.61305 AU	retrograde evening set	12112 Jul 13 15:17 12112 Jul 16 12:16	$15^{\circ} \Omega 47'18$	
desc. node	12111 Aug 12 12:09 12111 Aug 14 23:29	$24^{\circ} \Omega 25'07$	0.01303 AU	inferior conj	12112 Jul 16 12.16 12112 Jul 22 13:38	$10^{\circ}\Omega 26'50$	2°26'45
morning rise	12111 Aug 14 23:29 12111 Aug 16 02:44	$21^{\circ} \Omega 35'40$		minimum elong	12112 Jul 22 15:38 12112 Jul 22 16:09	10° Ω 19'49	2°25'26
direct	12111 Aug 10 02:44 12111 Aug 22 18:17	$19^{\circ}\Omega 20'19$		min. Earth dist.	12112 Jul 25 04:01	7° Ω 34'18	0.63504 AU
morning max el	12111 Aug 22 18:17 12111 Sep 05 23:38	27°Ω19'06	27°57'27	morning rise	12112 Jul 28 18:23	4°Ω12'05	0.03304 AU
morning max ci	12111 Sep 03 23:56 12111 Sep 08 12:55	0° m	21 3121	desc. node	12112 Jul 31 20:50	2°Ω21'49	
	12111 Sep 30 12:35	0∘ ⊽		direct	12112 July 91 20:30	1° Ω 38'41	
asc. node	12111 Oct 08 15:27	ა — 17° ჲ 58'27		morning max el	12112 Aug 18 08:17	9°Ω40'16	27°45'07
morning set	12111 Oct 09 06:58	19° £ 18'14		morning man er	12112 Sep 03 05:13	0° m)	27 .5 07
	12111 Oct 14 07:32	0° M ,			12112 Sep 20 13:07	0∘ ⊽	
max. Earth dist.	12111 Oct 15 00:09	1°ML30'53	1.31605 AU	morning set	12112 Sep 22 02:05	3° ഫ 03'10	
				asc. node	12112 Sep 24 12:06	7° £ 57'58	
superior conj	12111 Oct 16 15:07	5°M05'30	1°10'58	max. Earth dist.	12112 Sep 27 01:33	13° ≙ 19'32	1.32421 AU
minimum elong	12111 Oct 16 12:53	4°M53'06	1°11'04		•		
evening rise	12111 Oct 23 08:30	19°ML53'21		superior conj	12112 Sep 29 22:18	19° ≏ 28'28	0°50'41
	12111 Oct 28 05:02	0° ∡ ¹		minimum elong	12112 Sep 29 20:14	19° ≙ 17'12	0°50'31
desc. node	12111 Nov 10 20:13	23° ₹ 03'31			12112 Oct 04 18:11	0°M₊	
	12111 Nov 16 12:49	5°0		evening rise	12112 Oct 06 19:48	4°ML28'08	
evening max el	12111 Nov 18 14:22	2° る 05'13	25°00'40		12112 Oct 20 08:36	0° ∡ ¹	
retrograde	12111 Dec 02 10:00	9° ට 00'39		desc. node	12112 Oct 27 17:31	9° ∡ 750'37	
evening set	12111 Dec 08 01:15	7° る 49'28		evening max el	12112 Oct 30 00:45	12° ⊀ 14′22	23°21'10
min. Earth dist.	12111 Dec 13 02:20		0.56751 AU	retrograde	12112 Nov 12 09:38	18° ∡ 53′48	
inferior conj	12111 Dec 15 18:36	3° る 21'44		evening set	12112 Nov 16 17:29	18° ∡ 13′08	
minimum elong	12111 Dec 16 01:50	3° ට 09'54	5°18'48	min. Earth dist.	12112 Nov 23 10:30	15° ∡ ¹04'17 −	0.55289 AU
	12111 Dec 21 17:17	30°R ∡ 7		inferior conj	12112 Nov 25 01:42	14° ∡ °07′12	
morning rise	12111 Dec 24 04:39	29° 🖈 12'45		minimum elong	12112 Nov 25 02:31	14° 🗷 06'00	5°51'05
direct	12111 Dec 26 12:26	28° ⋠ 57′22		morning rise	12112 Dec 03 13:15	10° 🖈 15'47	
1	12111 Dec 31 01:18	0°る		direct	12112 Dec 06 10:31	9° 🗷 55'42	20021105
asc. node	12112 Jan 04 15:36	3°る14'18	1001(152	morning max el	12112 Dec 17 08:24	15° 🗷 06'57	20°31'05
morning max el	12112 Jan 04 21:45	3°₹28'56	19°16'53	asc. node	12112 Dec 21 12:42	19° ∡ 748'59	
marning sat	12112 Jan 21 10:21 12112 Jan 21 19:50	0° ≈ 0° ≈ 47'13		morning set	12112 Dec 28 03:38	0°る 15°る26'50	
morning set	12112 Jan 21 19:30	∪ ≈4/13		morning set	12113 Jan 05 02:51 12113 Jan 12 04:01	15° 6 26′50	
superior conj	12112 Jan 29 24:00	16° ≈ 59'38	0°59'21		12113 Jan 12 04.01	· ~	
minimum elong	12112 Jan 30 02:54	10 ≈3938 17°≈13'43	0°59'34	superior conj	12113 Jan 12 15:11	0° ≈ 56'43	1°19'22
max. Earth dist.	12112 Jah 30 02:34 12112 Feb 05 15:38	17 ≈1343 29°≈29'13	1.38373 AU	minimum elong	12113 Jan 12 17:44	0 ≈3043 1°≈09'43	1°19'51
Zarur diot.	12112 Feb 05 13:36	0° \	1.50575710	max. Earth dist.	12113 Jan 17 23:34	11°≈32'11	1.36219 AU
		- /\		diot.			

evening rise	12113 Jan 21 19:56	18° ≈ 46'14			12114 Jan 03 20:27	0° ≈ ≈	
desc. node	12113 Jan 21 19:30	22°≈08'31		evening rise	12114 Jan 03 20:27	0 ≈ 2°≈02'23	
desc. flode	12113 Jan 28 04:48	0° ∺		desc. node	12114 Jan 10 13:20	2 ≈02 23 12°≈31'05	
	12113 Jan 28 04:48 12113 Feb 17 09:39	0° Υ		desc. node	12114 Jan 21 03:52	0° \	
evening max el	12113 Feb 26 08:02	10° Y ′08'39	26°02'01	evening max el	12114 Jan 21 03:32 12114 Feb 08 21:30	23° ¥ 49'33	26°56'20
retrograde	12113 Mar 10 23:40	17° Υ 22'09	20 02 01	evening max er	12114 Feb 17 05:09	0° Υ	20 30 20
evening set	12113 Mar 17 02:53	14° Υ '52'20		retrograde	12114 Feb 22 04:18	1° Υ 13'49	
asc. node	12113 Mar 19 10:19	12° Υ '38'05		retrograde	12114 Feb 26 18:12	30°R ₩	
min. Earth dist.	12113 Mar 21 07:59	10° Y 24'31	0.67142 AU	evening set	12114 Feb 28 17:36	28° ¥ 40'44	
inferior conj	12113 Mar 22 22:35	8° Υ 24'17	1°05'54	min. Earth dist.	12114 Mar 04 17:10	24°) 46'43	0.65769 AU
minimum elong	12113 Mar 22 21:03	8° Υ 29'05	1°05'17	asc. node	12114 Mar 06 07:44	22°) 55'56	0.00,00110
morning rise	12113 Mar 28 15:54	2° Y '37'14		inferior conj	12114 Mar 06 19:52	22°) 20'47	0°09'49
direct	12113 Mar 31 21:37	1° Y '37'33		minimum elong	12114 Mar 06 19:35	22°) 21'36	0°09'55
morning max el	12113 Apr 07 13:23	5° Y 12'36	18°43'53	transit middle	12114 Mar 06 19:35	22°) 21'36	0°09'55
desc. node	12113 Apr 21 18:21	24° Ƴ 36′05		transit begin	12114 Mar 06 17:15	22°) 28'21	
	12113 Apr 25 05:56	0°B		transit end	12114 Mar 06 21:55	22° 升 14'52	
morning set	12113 Apr 29 07:44	6° 8 21'28		morning rise	12114 Mar 12 22:55	16°) 45'33	
C	12113 May 14 11:07	$\Pi^{\circ}0$		direct	12114 Mar 15 18:37	16°) €02'12	
max. Earth dist.	12113 May 14 10:15	29° 8 56'34	1.45632 AU	morning max el	12114 Mar 22 03:51	19° ¥ 23'49	18°08'05
	·			Č	12114 Mar 30 07:16	$0^{\circ}\mathbf{\Upsilon}$	
superior conj	12113 May 15 14:06	1° Ⅱ 45'32	-2°08'18	desc. node	12114 Apr 08 14:58	14° Ƴ 48'48	
minimum elong	12113 May 15 08:42	1° Ⅱ 24'26	2°08'48	morning set	12114 Apr 09 22:05	16° Ƴ 54'47	
evening rise	12113 May 30 23:12	26° Ⅱ 06'57		C	12114 Apr 18 01:26	0° ႘	
C	12113 Jun 02 09:19	0 \circ \odot			•		
greatest brilliancy	12113 Jun 06 16:41	6°953'40	-0.9m	superior conj	12114 Apr 24 21:59	10° 8 50'29	-1°44'22
asc. node	12113 Jun 15 08:00	20° © 04'39		minimum elong	12114 Apr 24 12:39	10° 8 13'49	1°43'59
evening max el	12113 Jun 20 19:19	26°9547'34	18°36'47	max. Earth dist.	12114 Apr 27 06:01	14° 8 30'02	1.45687 AU
C	12113 Jun 25 09:50	$0^{\circ}\Omega$			12114 May 07 04:58	0°II	
retrograde	12113 Jun 27 08:00	0° Ω 20′23		evening rise	12114 May 11 00:21	5° Ⅱ 54'25	
Č	12113 Jun 29 05:23	30° ℝ ∽		greatest brilliancy	12114 May 23 05:58	24° Ⅱ 41'41	-0.7m
evening set	12113 Jun 30 13:17	29° © 21'27		,	12114 May 26 20:32	0∘ ©	
inferior conj	12113 Jul 06 05:11	23°544'55	2°57'45	asc. node	12114 Jun 02 05:06	8°924'02	
minimum elong	12113 Jul 06 06:56	23°539'33	2°56'40	evening max el	12114 Jun 04 03:49	10° © 30'43	19°19'27
min. Earth dist.	12113 Jul 08 05:09	21°518'50	0.65421 AU	retrograde	12114 Jun 11 05:03	14° © 27'57	
morning rise	12113 Jul 11 23:40	17° © 23'16		evening set	12114 Jun 14 19:06	13° © 13'03	
direct	12113 Jul 18 10:48	14° © 41'45		inferior conj	12114 Jun 20 04:59	7°522'07	3°12'33
desc. node	12113 Jul 18 18:08	14°9542'05		minimum elong	12114 Jun 20 05:41	7° © 19'52	3°11'40
morning max el	12113 Jul 31 19:15	22° © 34'40	26°59'55	min. Earth dist.	12114 Jun 21 14:14	5° © 33'31	0.66948 AU
	12113 Aug 07 08:08	$0^{\circ}\Omega$		morning rise	12114 Jun 25 15:45	0°\$59'22	
	12113 Aug 27 11:40	0° m)		•	12114 Jun 26 21:29	30°RⅡ	
morning set	12113 Sep 05 11:10	16° m) 18'10		direct	12114 Jul 01 17:55	28° Ⅱ 19'38	
max. Earth dist.	12113 Sep 09 18:03	24° m 45'37	1.33756 AU	desc. node	12114 Jul 05 15:21	29° Ⅲ 13'47	
asc. node	12113 Sep 11 08:44	28° m 02'54			12114 Jul 07 03:34	0 \circ \odot	
	12113 Sep 12 07:25	0∘ ⊽		morning max el	12114 Jul 14 06:05	5° 9 348'55	25°50'01
					12114 Aug 01 21:48	$0^{\circ}\Omega$	
superior conj	12113 Sep 14 00:07	3° ≏ 32'36	0°25'19	morning set	12114 Aug 19 06:32	28° Ω 53'32	
minimum elong	12113 Sep 13 22:51	3° £ 25'56	0°25'01		12114 Aug 19 21:00	0° m y	
evening rise	12113 Sep 21 06:17	18° ≏ 58'11		max. Earth dist.	12114 Aug 23 00:07	5° m 52'43	1.35570 AU
	12113 Sep 26 16:05	0° M					
evening max el	12113 Oct 11 14:15	22°M21'58	21°41'54	superior conj	12114 Aug 28 17:52	17° Mp $10^{\circ}28$	-0°04'37
desc. node	12113 Oct 14 14:53	24°M59'48		minimum elong	12114 Aug 28 18:09	17° m) 11'55	0°04'51
retrograde	12113 Oct 23 23:15	28°M31'06		behind sun begin	12114 Aug 28 12:15	16° Mp 42′09	
evening set	12113 Oct 26 21:20	28°M11'46		behind sun end	12114 Aug 29 00:03	17° m)41'45	
inferior conj	12113 Nov 04 19:22	24°M16'07	-5°28'03	asc. node	12114 Aug 29 05:24	18° m 08'52	
minimum elong	12113 Nov 04 11:53	24°M26'35	5°26'14		12114 Sep 03 23:37	0∘ ⊽	
min. Earth dist.	12113 Nov 04 16:57	24°M19'29	0.54587 AU	evening rise	12114 Sep 05 13:49	3° ≏ 17'11	
morning rise	12113 Nov 13 03:32	20°M28'24			12114 Sep 20 21:59	0° M	
direct	12113 Nov 16 19:36	19°M59'07		evening max el	12114 Sep 23 15:31	3°M02'36	20°17'00
morning max el	12113 Nov 29 05:23	25°M53'49	22°06'17	desc. node	12114 Oct 01 12:19	8°M02'02	
	12113 Dec 03 01:00	0° ∡ ¹		retrograde	12114 Oct 04 11:32	8°M25'41	
asc. node	12113 Dec 08 09:43	7° ∡ ¹25'24		evening set	12114 Oct 06 12:29	8° ™ 15′05	
	12113 Dec 20 10:48	5°0		inferior conj	12114 Oct 15 12:52	4° ™ 17'55	-4°08'42
morning set	12113 Dec 20 13:16	0° る 12'59		minimum elong	12114 Oct 15 02:59	4° ™ 32'30	4°05'17
				min. Earth dist.	12114 Oct 17 01:09	3°M24'24	0.54816 AU
superior conj	12113 Dec 27 15:23		1°32'08	morning rise	12114 Oct 23 16:40	0° ™ 12'59	
minimum elong	12113 Dec 27 17:02	15° පි 26'27	1°32'51		12114 Oct 24 10:21	30° ₹ Ω	
max. Earth dist.	12113 Dec 31 13:04	23° る 23'56	1.34343 AU	direct	12114 Oct 28 05:14	29° ≏ 28'45	

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morning max el

12116 Oct 03 21:07

 26° Mp 40'02 $26^{\circ}59'39$

0°M

12115 Nov 03 09:36

	12116 Oct 07 01:30	0∘ ত		direct	12117 Sep 01 13:30	0° m 00'24	
	12116 Oct 07 01:30	o <u>—</u> o∘n∟		morning max el	12117 Sep 01 13:30 12117 Sep 15 21:21	7° m 52'49	27°47'40
asc. node	12116 Oct 29 00:16	4° ጤ 11'18		morning max or	12117 Oct 02 17:05	0∘ ⊽	27 17 10
morning set	12116 Nov 02 21:56	14°ML15'35		asc. node	12117 Oct 15 20:59	23° £ 53'34	
Č				morning set	12117 Oct 18 03:28	28° ≏ 34'28	
superior conj	12116 Nov 09 19:13	29°M23'32	1°31'56	Č	12117 Oct 18 19:44	0° M	
minimum elong	12116 Nov 09 17:43	29°M15'08	1°32'30	max. Earth dist.	12117 Oct 24 07:45	11° M 57'41	1.31375 AU
max. Earth dist.	12116 Nov 09 23:03	29°M44'57	1.31379 AU				
	12116 Nov 10 01:45	0° ∡ ¹		superior conj	12117 Oct 25 06:33	14°Ml04'22	1°20'13
evening rise	12116 Nov 16 14:42	14° ∡ ¹20′24		minimum elong	12117 Oct 25 04:27	13°M52'43	1°20'29
	12116 Nov 24 10:46	0°ಕ		evening rise	12117 Oct 31 23:31	28°M51'59	
desc. node	12116 Dec 01 04:19	11° る 39'48			12117 Nov 01 12:12	0° ∡ ′	
	12116 Dec 14 21:04	0° ≈			12117 Nov 17 22:24	0° ろ	
evening max el	12116 Dec 17 00:35		26°56'42	desc. node	12117 Nov 18 01:28	0°る11'18	25050145
retrograde	12116 Dec 30 22:59	9°≈18'37		evening max el	12117 Nov 28 20:51	13°る21'32 20°る23'10	25°50'47
evening set min. Earth dist.	12117 Jan 06 17:50 12117 Jan 10 14:52	7°≈20'54 4°≈41'22	0.59931 AU	retrograde evening set	12117 Dec 12 18:26 12117 Dec 18 23:17	18° る 53'11	
inferior conj	12117 Jan 10 14:32	4 ≈41 22 2°≈06'47		min. Earth dist.	12117 Dec 18 23:17 12117 Dec 23 09:26	16°る16'49	0.57839 AU
minimum elong	12117 Jan 13 19:02 12117 Jan 14 02:18		3°27'32	inferior conj	12117 Dec 25 09:52	10 01049 14°る09'19	
minimum ciong	12117 Jan 14 02:10	30°Rる	3 21 32	minimum elong	12117 Dec 26 18:17	13° る 54'27	
morning rise	12117 Jan 21 13:38	27° ට 23'10		morning rise	12118 Jan 03 15:55	9°₹48'14	5 01
direct	12117 Jan 23 15:44	27° පි 06'36		direct	12118 Jan 05 19:40	9° ට 33'32	
asc. node	12117 Jan 24 23:42	27° ප 13'36		asc. node	12118 Jan 11 20:53	11° る 37'35	
	12117 Jan 30 06:01	0° ≈		morning max el	12118 Jan 14 10:06	13° る 44'49	18°44'45
morning max el	12117 Jan 31 04:03	0° ≈ 50'56	18°06'14		12118 Jan 25 11:55	0° ≈	
morning set	12117 Feb 15 18:53	25° ≈ 34′20		morning set	12118 Jan 30 15:22	9° ≈ 48'15	
	12117 Feb 18 03:49	0° ∀					
				superior conj	12118 Feb 08 07:40	26° ≈ 34'12	0°44'23
superior conj	12117 Feb 25 14:27		0°12'30	minimum elong	12118 Feb 08 10:19	26°≈46'38	0°44'31
minimum elong	12117 Feb 25 15:27	13°) € 41'13	0°12'40		12118 Feb 10 03:45	0° ∺	
behind sun begin	12117 Feb 25 10:43	13° ¥ 20'04 14° ¥ 02'20		desc. node	12118 Feb 14 01:23	7° 米 05′26 9° 米 43′37	1 20050 AII
behind sun end desc. node	12117 Feb 25 20:11 12117 Feb 27 04:45	14° X 02′20 16° X 26′30		max. Earth dist. evening rise	12118 Feb 15 13:08 12118 Feb 19 12:48	9° X 43′37 16° ¥ 35′24	1.39659 AU
max. Earth dist.	12117 Pco 27 04:43 12117 Mar 05 05:31	26°) 48'14	1.41829 AU	evening rise	12118 Feb 17 12:48	10 γ (33 24	
max. Larm dist.	12117 Mar 07 03:39	0°Υ	1.4102) AO		12118 Mar 21 07:05	0°8	
evening rise	12117 Mar 10 09:37	5° Ƴ 17'35		evening max el	12118 Mar 26 11:24	5° 8 41'04	24°06'54
<i>5</i>	12117 Mar 26 16:22	0°B		retrograde	12118 Apr 06 16:14	12° 8 15'57	
evening max el	12117 Apr 12 21:18	21° 8 51'01	22°46'13	asc. node	12118 Apr 09 18:08	11° 8 32'38	
retrograde	12117 Apr 22 22:45	27° 8 47'17		evening set	12118 Apr 12 01:06	10° 8 00'27	
asc. node	12117 Apr 22 20:49	27° 8 47'15		min. Earth dist.	12118 Apr 16 17:01	4° 8 37'14	0.68489 AU
evening set	12117 Apr 27 19:56	25° 8 44'57		inferior conj	12118 Apr 17 12:31	3° 8 31'10	2°13'34
inferior conj	12117 May 03 03:57	19° 8 21'08	2°43'43	minimum elong	12118 Apr 17 10:21	3° 8 38'30	2°12'33
minimum elong	12117 May 03 02:02	19° 8 27'46	2°42'43		12118 Apr 20 06:06	30° Ŗ ♈	
min. Earth dist.	12117 May 02 20:47	19° 8 46'02	0.68798 AU	morning rise	12118 Apr 22 19:42	27° Y ′29'31	
morning rise	12117 May 08 08:02	13° 8 12'09		direct	12118 Apr 26 19:32	25° Y 58'53	
direct	12117 May 12 20:42	11° 8 20'09	21020110		12118 May 04 05:08	0°8	20012122
morning max el	12117 May 21 16:48	16° 8 27'19 21° 8 33'38	21°29'19	morning max el desc. node	12118 May 04 13:50	0° 8 21'12 10° 8 45'26	20°13'32
desc. node	12117 May 26 06:21 12117 Jun 01 17:15	0°Ⅱ		desc. node	12118 May 13 03:09 12118 May 26 08:05	10 3 43 20 0° Ⅱ	
	12117 Jun 01 17.13 12117 Jun 21 21:05	0°©		morning set	12118 May 26 08.03	9° П 32'50	
morning set	12117 Jun 22 10:03	0°951'11		max. Earth dist.	12118 Jun 11 08:44		1.44057 AU
max. Earth dist.	12117 Jun 28 23:14	11° © 24'51	1.42265 AU	man Barur dige.	12118 Jun 14 13:04	0.ಲ	1.1.007110
superior conj	12117 Jul 06 10:32	24°900'35	-1°43'23	superior conj	12118 Jun 17 06:14	4° 5 25'48	-2°06'04
minimum elong	12117 Jul 06 17:22	24°530'04	1°43'27	minimum elong	12118 Jun 17 11:32	4° 5 47'34	2°06'40
	12117 Jul 09 20:50	0 $^{\circ}$ Ω		evening rise	12118 Jun 30 02:49	26°9510'28	
evening rise	12117 Jul 17 14:47	13° Ω 56′18			12118 Jul 02 07:55	0 $^{\circ}$ Ω	
asc. node	12117 Jul 19 19:38	17° Ω 56'16		asc. node	12118 Jul 06 16:30	7° Ω 27'30	
	12117 Jul 26 17:52	0° m)		evening max el	12118 Jul 17 09:34	22° Ω 46'19	18°04'34
evening max el	12117 Aug 02 19:55	9° m/32'29	18°07'36	retrograde	12118 Jul 23 20:02	26° Ω 07'02	
retrograde	12117 Aug 09 17:16	13°M)03'19		evening set	12118 Jul 26 12:09	25° Ω 31'18	2000106
evening set	12117 Aug 12 01:20	12° Mp 39'28	0056!11	inferior conj	12118 Aug 01 20:42	20° Ω 20'56	2°00'06
inferior conj minimum elong	12117 Aug 19 01:19 12117 Aug 19 03:01	7° Mp 47'50 7° Mp 43'57	0°56'11 0°55'10	minimum elong min. Earth dist.	12118 Aug 01 23:19 12118 Aug 04 18:28	20° Ω 14'06 17° Ω 20'17	1°58'44 0.62256 AU
desc. node	12117 Aug 19 03:01 12117 Aug 22 04:37	4° My 56'59	0 33 10	min. Earth dist.	12118 Aug 04 18:28 12118 Aug 08 08:14	$1/^{3} \Omega^{20} 17$ $14^{\circ} \Omega^{13} 19$	0.02230 AU
min. Earth dist.	12117 Aug 22 07:37 12117 Aug 22 07:47	4° m) 50'07	0.59979 AU	desc. node	12118 Aug 09 02:00	13°Ω43'05	
morning rise	12117 Aug 26 01:36	2° Mp 01'09		direct	12118 Aug 15 00:39	11° Ω 49'06	
<i>3</i>		4					

morning max el	12118 Aug 29 03:47	19° Ω 51'14	27°56'44	desc. node	12119 Jul 26 23:20	24° © 39'40	
	12118 Sep 06 20:00	0° m)		direct	12119 Jul 28 20:47	24° © 27'13	
	12118 Sep 25 16:28	0∘ 亚			12119 Aug 08 23:27	$0 {\circ} \Omega$	
morning set	12118 Oct 02 03:06	12° ₽ 33'30		morning max el	12119 Aug 11 13:39	2° Ω 27′23	27°29'22
asc. node	12118 Oct 02 17:41	13° ≏ 48'13			12119 Sep 01 03:18	0° m	
max. Earth dist.	12118 Oct 07 12:44	23° ♀ 56'41	1.31884 AU	morning set	12119 Sep 15 18:20	26° Mp 06'23	
				Ü	12119 Sep 17 17:12	0∘ ⊽	
superior conj	12118 Oct 09 15:49	28° ჲ 35'18	1°03'01	asc. node	12119 Sep 19 14:22	3° £ 50′26	
minimum elong	12118 Oct 09 13:35	28° ≏ 22'59	1°02'59	max. Earth dist.	12119 Sep 19 11:22 12119 Sep 20 10:22	5° £ 34'06	1.32919 AU
minimum clong		0°M	1 02 39	max. Earth dist.	12119 Sep 20 10.22	3 = 34 00	1.32919 AU
	12118 Oct 10 07:14				101100 00 01 01	1000 50151	0040122
evening rise	12118 Oct 16 10:26	13°M26'38		superior conj	12119 Sep 23 21:01	12° ≙ 50'51	0°40'32
	12118 Oct 24 15:18	0° ∡ ¹		minimum elong	12119 Sep 23 19:12	12° ≏ 41'07	0°40'17
desc. node	12118 Nov 04 22:43	17° ∡ ′42'40		evening rise	12119 Sep 30 21:37	27° ≏ 59'34	
evening max el	12118 Nov 10 09:22	23° х¹ 47′20	24°19'25		12119 Oct 01 20:18	0° M ₊	
	12118 Nov 20 00:09	0°ರ			12119 Oct 19 07:20	0° ∡ ¹	
retrograde	12118 Nov 24 02:02	0° る 38'03		desc. node	12119 Oct 22 20:02	3° ∡ ′51'39	
C	12118 Nov 28 05:14	30°R. ✓		evening max el	12119 Oct 22 20:00	3° ∡ 751'33	22°38'04
evening set	12118 Nov 29 04:55	29° × 7'40'17		retrograde	12119 Nov 04 20:54	10° х 20′09	
min. Earth dist.	12118 Dec 04 20:38	26° × 48'25	0.56050 AU	evening set	12119 Nov 04 20:34 12119 Nov 08 13:31	9° ×7 50'23	
		25° x 22'38		_			0.54076 ATT
inferior conj	12118 Dec 07 04:07			min. Earth dist.	12119 Nov 16 04:02	6° ₹ 24'56	0.54876 AU
minimum elong	12118 Dec 07 09:17		5°38'16	inferior conj	12119 Nov 17 04:20	5° ∡ ¹50'27	
morning rise	12118 Dec 15 15:42	21° × 22'20		minimum elong	12119 Nov 17 01:23	5° ∡ 754'39	5°48'20
direct	12118 Dec 18 04:03	21° ∡ 05'41		morning rise	12119 Nov 25 14:41	2° ≯ 02'28	
morning max el	12118 Dec 28 04:48	25° ₹ '53'25	19°45'39	direct	12119 Nov 28 19:28	1° ₮ 39'02	
asc. node	12118 Dec 29 18:01	27° х 29'19		morning max el	12119 Dec 10 09:29	7° ∡ ¹09'27	21°09'19
	12118 Dec 31 20:28	0°ჳ		asc. node	12119 Dec 16 15:06	14° ∡ ³32'28	
morning set	12119 Jan 14 19:23	24° る 20'49			12119 Dec 25 16:39	0°ප	
morning sec	12119 Jan 17 14:12	0°≈		morning set	12119 Dec 30 04:10	9° る 04'22	
	1211) Juli 1/ 14.12	0 701		morning set	12117 Dec 30 04.10) 00422	
aumorior comi	12110 Ion 22 16:04	10% 012104	1900145	aumorior aoni	12120 Ion 06 11:22	24° る 22'01	1°25'37
superior conj	12119 Jan 22 16:04	10°≈13'04	1°08'45	superior conj	12120 Jan 06 11:33		
minimum elong	12119 Jan 22 18:55	10° ≈ 27'12	1°09'04	minimum elong	12120 Jan 06 13:46	24°る33'28	1°26'13
max. Earth dist.	12119 Jan 28 19:08	21° ≈ 59′25	1.37431 AU		12120 Jan 09 05:44	0° ≈	
desc. node	12119 Jan 31 22:03	27° ≈ 41′20		max. Earth dist.	12120 Jan 11 04:56	3° ≈ 55'17	1.35377 AU
evening rise	12119 Feb 01 12:34	28° ≈ 46′12		evening rise	12120 Jan 15 05:59	11° ≈ 42′07	
	12119 Feb 02 05:13	0° ∀		desc. node	12120 Jan 18 18:49	18° ≈ 10′35	
	12119 Feb 21 03:27	$0^{\circ}\mathbf{\Upsilon}$			12120 Jan 25 16:57	0° ∀	
evening max el	12119 Mar 09 00:45	19° Ƴ 32'10	25°23'08		12120 Feb 16 09:04	$0^{\circ}\Upsilon$	
retrograde	12119 Mar 21 05:30	26° Ƴ 35'33		evening max el	12120 Feb 19 14:30	3° Y 20'32	26°27'32
evening set	12119 Mar 27 02:04	24° Υ '09'56		retrograde	12120 Mar 03 13:31	10° Υ 39'54	20 27 32
•	12119 Mar 27 15:30	23° Υ 40'15		•	12120 Mar 09 21:07	8° Υ 08'17	
asc. node			0.67740.411	evening set		6 1 06 17 4° Υ 26'54	
min. Earth dist.	12119 Mar 31 10:46	19° Y ′21'54	0.67748 AU	asc. node	12120 Mar 13 12:53		
inferior conj	12119 Apr 01 18:23	17° Ƴ 39'40	1°33'31	min. Earth dist.	12120 Mar 13 23:49	3° Y 54'45	0.66606 AU
minimum elong	12119 Apr 01 16:26	17° Ƴ 45'56	1°32'41	inferior conj	12120 Mar 15 19:30	1° Y 42'45	0°43'24
morning rise	12119 Apr 07 07:14	11° Ƴ 46′39		minimum elong	12120 Mar 15 18:24	1° Ƴ 46′05	0°43'03
direct	12119 Apr 10 19:11	10° Ƴ 36′23			12120 Mar 17 06:07	30° ₹ ₩	
morning max el	12119 Apr 17 18:30	14° Y 25′16	19°11'56	morning rise	12120 Mar 21 16:38	26° ₩ 00'08	
desc. node	12119 Apr 29 23:52	0° 8 26'53		direct	12120 Mar 24 17:55	25°) €07'45	
	12119 Apr 29 16:37	0°8		morning max el	12120 Mar 31 05:57	28°) 35′48	18°26'28
greatest brilliancy	12119 Apr 30 16:44	1° 8 29'41	-0.7m	<i>3</i>	12120 Apr 01 14:13	0°Υ	
morning set	12119 May 11 16:25	18° 8 15'38	0.7111	desc. node	12120 Apr 15 20:32	20° Ƴ 30'17	
morning set	-	0°Ⅱ			-	28° Υ '00'46	
To all the	12119 May 19 06:12		1 45050 411	morning set	12120 Apr 20 14:31		
max. Earth dist.	12119 May 24 23:50	8° Ⅱ 57'59	1.45259 AU		12120 Apr 21 20:39	9° 8	
		—					
superior conj	12119 May 28 03:09	13° Ⅱ 54'54		superior conj	12120 May 06 10:53	22° 8 55'30	
minimum elong	12119 May 28 02:11	13° Ⅱ 51′04	2°14'02	minimum elong	12120 May 06 03:00	22° 8 24'41	2°00'27
	12119 Jun 07 03:41	0 \circ \odot		max. Earth dist.	12120 May 06 18:54	23° 8 26'48	1.45755 AU
evening rise	12119 Jun 11 16:45	7° © 26'25			12120 May 10 23:34	$\Pi^{\circ}0$	
asc. node	12119 Jun 23 13:27	26°537'08		evening rise	12120 May 22 06:21	17° Ⅱ 42′26	
	12119 Jun 25 20:38	$0^{\circ}\Omega$		-	12120 May 30 01:48	0ංම	
evening max el	12119 Jun 30 23:22	6° Ω 17'09	18°19'58	greatest brilliancy	12120 May 31 15:37	2°527'11	-0.8m
retrograde	12119 Jul 07 08:39	9° Ω 41'33	10 1/00	asc. node	12120 Jun 09 10:29	15°917'34	0.0111
•	12119 Jul 10 09:04	8° Ω 51'35			12120 Jun 13 10:31	13 9 17 34	10050150
evening set			2042102	evening max el			18°52'58
inferior conj	12119 Jul 16 05:59	3° Ω 24'21	2°42'03	retrograde	12120 Jun 20 03:27	23°539'11	
minimum elong	12119 Jul 16 08:15	3°Ω17'46	2°40'50	evening set	12120 Jun 23 12:28	22° © 33'29	
min. Earth dist.	12119 Jul 18 14:31	0° Ω 41′00	0.64364 AU	inferior conj	12120 Jun 29 01:25	16°950'50	3°05'47
	12119 Jul 19 05:21	30° ℝ ∽		minimum elong	12120 Jun 29 02:45	16°9546'40	3°04'47
morning rise	12119 Jul 22 06:04	27° 5 05'44		min. Earth dist.	12120 Jun 30 19:08	14° 5 39'40	0.66132 AU

morning rise	12120 Jul 04 16:19	10°528'23			12121 Jun 13 14:09	30° Ŗ Ⅱ	
direct	12120 Jul 11 00:11	7° 5 46'19		min. Earth dist.	12121 Jun 14 06:53	29° Ⅱ 04'11	0.67471 AU
desc. node	12120 Jul 12 20:35	7° © 58'30		morning rise	12121 Jun 18 12:12	24° Ⅱ 12'41	
morning max el	12120 Jul 24 00:31	15° © 30'31	26°32'30	direct	12121 Jun 24 09:43	21° Ⅱ 36'44	
	12120 Aug 04 22:23	$0^{\circ}\Omega$		desc. node	12121 Jun 29 17:45	23° Ⅱ 18′09	
	12120 Aug 23 22:50	0° m		morning max el	12121 Jul 06 10:57	28° Ⅱ 50′09	25°15'11
morning set	12120 Aug 28 22:02	9° m 05'08			12121 Jul 07 13:51	0 \circ \odot	
max. Earth dist.	12120 Sep 01 22:14	16° M 49′29	1.34475 AU		12121 Jul 29 16:59	$0^{\circ}\Omega$	
asc. node	12120 Sep 05 11:02	23° Mp 56'06		morning set	12121 Aug 11 10:15	21° Ω 20′13	
				max. Earth dist.	12121 Aug 15 00:52	27° Ω 56′13	1.36468 AU
superior conj	12120 Sep 06 19:47	26° Mp 44'37	0°13'07		12121 Aug 16 03:16	0° m	
minimum elong	12120 Sep 06 19:05	26° Mp 40'59	0°12'51		•	-	
behind sun begin	12120 Sep 06 15:31	26° m 22'37		superior conj	12121 Aug 21 09:11	10° m 09'15	-0°18'24
behind sun end	12120 Sep 06 22:38	26° m 59'22		minimum elong	12121 Aug 21 10:21	10° m) 15'05	
	12120 Sep 08 09:20	0∘ ⊽		asc. node	12121 Aug 23 07:43	14° m) 01'36	
evening rise	12120 Sep 14 07:07	12° £ 25'24		evening rise	12121 Aug 29 12:43	26° m/38'22	
	12120 Sep 23 07:34	0°M		01411118	12121 Aug 31 04:41	0∘ ಹ	
evening max el	12120 Oct 03 13:54	14°ML09'59	21°03'31	evening max el	12121 Sep 15 21:11	ა — 25° ჲ 10'04	19°46'55
desc. node	12120 Oct 08 17:26	18°ML10'04	21 03 31	evening max er	12121 Sep 13 21:11 12121 Sep 23 22:22	0°ML	17 1033
retrograde	12120 Oct 15 07:57	20°ML00'12		retrograde	12121 Sep 25 22:22 12121 Sep 25 23:41	0°ML12'07	
evening set	12120 Oct 17 19:06	19°M45'53		desc. node	12121 Sep 25 25:41 12121 Sep 25 14:52	0°ML11'44	
inferior conj	12120 Oct 17 19:00 12120 Oct 26 20:02	15°M51'31	500000	evening set	12121 Sep 27 21:07	0°ML02'18	
•	12120 Oct 26 20:02 12120 Oct 26 10:32	16°M04'55	4°57'27	evening set	-	0 11C02 18 30°RΩ	
minimum elong	12120 Oct 26 10.32 12120 Oct 27 10:43			:c:	12121 Sep 28 02:15	30 K== 26° Ω 00'07	2022150
min. Earth dist.			0.54566 AU	inferior conj	12121 Oct 06 17:53 12121 Oct 06 09:09	26° 2 13'37	
morning rise	12120 Nov 04 02:22	11°M59'15		minimum elong			
direct	12120 Nov 08 03:29	11°M24'07	22051122	min. Earth dist.	12121 Oct 08 19:53	24° £ 42'56	0.55199 AU
morning max el	12120 Nov 21 01:32	17°M36'51	22°51'22	morning rise	12121 Oct 14 19:35	21° £ 42'46	
_	12120 Nov 30 22:34	0° ∡ 7		direct	12121 Oct 19 16:44	20° ⊆ 50'22	
asc. node	12120 Dec 02 12:06	2° ∡ 30′10		morning max el	12121 Nov 02 12:09	27° ≙ 40'55	24°39'32
morning set	12120 Dec 13 15:25	23° ∡ ′51′19			12121 Nov 04 19:11	0° M ,	
	12120 Dec 16 12:14	0°ප		asc. node	12121 Nov 19 09:01	21°ML09'27	
					12121 Nov 23 23:58	0° ∡ ¹	
superior conj	12120 Dec 20 14:39	8° る 50'03	1°35'28	morning set	12121 Nov 28 03:17	8° ∡ ³36'37	
minimum elong	12120 Dec 20 15:50	8° ප 56'19					
max. Earth dist.	12120 Dec 23 22:00	15° ⋜ 49'04	1.33664 AU	superior conj	12121 Dec 04 22:45	23° х 29'52	1°38'49
evening rise	12120 Dec 28 13:13	25° ප 12'04		minimum elong	12121 Dec 04 22:46	23° ҂ ³30′01	1°39'40
	12120 Dec 31 00:53	0° ≈		max. Earth dist.	12121 Dec 06 22:40	27° ₹ ¹51'09	1.32391 AU
desc. node	12121 Jan 04 15:39	8° ≈ 27'33			12121 Dec 07 22:33	0°ಕ	
	12121 Jan 18 04:17	0° ∀		evening rise	12121 Dec 12 06:59	9° ට 07'56	
evening max el	12121 Feb 01 04:03	16° ¥ 55'36	27°12'52	desc. node	12121 Dec 22 12:35	28° る 26'36	
retrograde	12121 Feb 14 15:21	24°) €20′21			12121 Dec 23 10:22	0° ≈	
evening set	12121 Feb 21 08:10	21°) 48′08		evening max el	12122 Jan 14 15:47	0° ₩ 05'09	27°32'05
min. Earth dist.	12121 Feb 25 05:54	18°) €07'42	0.65084 AU		12122 Jan 14 13:38	0° ∀	
inferior conj	12121 Feb 27 13:28	15°) 33′56	-0°16'58	retrograde	12122 Jan 28 10:18	7° ∺ 27'56	
minimum elong	12121 Feb 27 13:58	15° ¥ 32'35	0°16'28	evening set	12122 Feb 04 08:46	5°) 02′07	
asc. node	12121 Feb 28 10:17	14°) ₹36'44		min. Earth dist.	12122 Feb 08 03:01	1° 米 51′25	0.63235 AU
morning rise	12121 Mar 05 21:22	10°) 04'11			12122 Feb 10 00:02	30° R ≈	
direct	12121 Mar 08 13:24	9° ∺ 26'31		inferior conj	12122 Feb 10 21:29	29° ≈ 06′11	-1°27'07
morning max el	12121 Mar 14 22:00	12°) 45′37	17°57'56	minimum elong	12122 Feb 11 00:20	28° ≈ 59'04	1°25'26
	12121 Mar 27 03:16	$0^{\circ}\mathbf{\Upsilon}$		asc. node	12122 Feb 15 07:38	25°≈11'26	
morning set	12121 Apr 01 17:21	9° Y 11'01		morning rise	12122 Feb 17 18:14	23° ≈ 52'12	
desc. node	12121 Apr 02 17:09	10° Ƴ 49'05		direct	12122 Feb 20 02:43	23° ≈ 25'41	
	12121 Apr 14 13:07	0°B		morning max el	12122 Feb 26 15:44	26° ≈ 46'48	17°46'45
	1			Č	12122 Mar 01 11:39	0° ∀	
superior conj	12121 Apr 15 22:51	2° 8 13'58	-1°29'36	morning set	12122 Mar 14 22:11	21° ¥ 35'52	
minimum elong	12121 Apr 15 13:54	1° 8 38'29		<i>5 2 1 1 1 1 1 1 1 1 1 1</i>	12122 Mar 19 19:19	0°Υ	
max. Earth dist.	12121 Apr 19 15:12	8° 8 02'19		desc. node	12122 Mar 20 13:44	1° Y 18′29	
evening rise	12121 May 02 00:22	27° 8 15'08					
	12121 May 03 19:18	0°II		superior conj	12122 Mar 27 06:09	12° Y 29'41	-0°49'35
greatest brilliancy	12121 May 16 00:29	18° Ⅱ 27'47	-0.6m	minimum elong	12122 Mar 27 01:03	12° Υ '08'42	0°48'56
oest crimaney	12121 May 10 00:27	0°9		max. Earth dist.	12122 Apr 02 09:37	22° Υ 26'30	1.44520 AU
asc. node	12121 May 27 07:36	3°918'57			12122 Apr 02 03:37 12122 Apr 07 04:35	0°8	1520 710
evening max el	12121 May 27 07:30 12121 May 27 16:53	3°942'40	19°42'23	evening rise	12122 Apr 07 04:33	6° 8 39'23	
retrograde	12121 May 27 10.33 12121 Jun 04 01:29	7°953'10	17 74 43	Croning 1150	12122 Apr 11 11.43 12122 Apr 27 03:12	0°Ⅱ	
evening set	12121 Jun 07 19:35	6°931'08		evening max el	12122 Apr 27 03:12 12122 May 10 17:27	17° Ⅱ 28'19	20°46'03
inferior conj	12121 Jun 13 03:51	0°934'25	3°14'40	asc. node	12122 May 10 17.27 12122 May 14 04:47	20° Ⅱ 28'32	20 40 03
minimum elong	12121 Jun 13 03:31 12121 Jun 13 04:05		3°13'48	retrograde	12122 May 14 04:47 12122 May 19 00:23	20° II 28°32 22° II 17'30	
minimum ciong	12121 Juli 13 04.03	14 دو د ت ن	J 1J 40	renograde	12122 Way 19 00.23	22 H 1/30	

evening set	12122 May 23 04:18	20° Ⅲ 39'15		evening set	12123 May 07 12:53	4° Ⅱ 53'55	
inferior conj	12122 May 28 10:40	14° Ⅲ 30′10	3°11'06		12123 May 11 19:07	30° ₹ ႘	
minimum elong	12122 May 28 09:52	14° Ⅱ 32'54	3°10'14	inferior conj	12123 May 12 19:42	28° 8 34'37	2°56'39
min. Earth dist.	12122 May 28 23:50	13° Ⅲ 44'41	0.68350 AU	minimum elong	12123 May 12 18:07	28° 8 40'10	2°55'43
morning rise	12122 Jun 02 15:13	8° Ⅱ 11'53		min. Earth dist.	12123 May 12 19:50	28° 8 34'12	0.68766 AU
direct	12122 Jun 08 00:25	5° Ⅱ 49'27		morning rise	12123 May 17 23:10	22° 8 21'39	
desc. node	12122 Jun 16 14:48	10° I I10'00		direct	12123 May 22 19:21	20° 8 17'37	
morning max el	12122 Jun 18 21:00	12° Ⅱ 18'44	23°47'05	morning max el	12123 Jun 01 08:47	25° 8 54'59	22°17'49
morning max cr	12122 Jul	0°95	23 47 03	desc. node	12123 Jun 01 08:47 12123 Jun 03 11:45	28° 8 10'03	22 17 47
				desc. Hode			
	12122 Jul 22 12:30	0°N			12123 Jun 05 02:09	0°II	
morning set	12122 Jul 24 02:08	2° Ω 38'59			12123 Jun 26 13:38	0°9	
max. Earth dist.	12122 Jul 27 22:25	9° 31 18'27	1.38738 AU	morning set	12123 Jul 04 17:18	12° © 50'59	
				max. Earth dist.	12123 Jul 09 21:21	21° © 22'34	1.41042 AU
superior conj	12122 Aug 04 09:33	22° Ω 55'16	-0°52'24		12123 Jul 14 22:10	$0 {\circ} \Omega$	
minimum elong	12122 Aug 04 13:12	23° Ω 12'32	0°52'20				
	12122 Aug 08 02:29	0° m)		superior conj	12123 Jul 17 16:41	4° Ω 53'27	-1°25'58
asc. node	12122 Aug 10 04:24	4° m 02'39		minimum elong	12123 Jul 17 22:45	5° Ω 20'33	1°25'54
evening rise	12122 Aug 13 11:39	10° m 30'17		evening rise	12123 Jul 28 00:31	23°Ω52'44	
	12122 Aug 24 06:32	0∘ ⊽		asc. node	12123 Jul 28 01:09	23°Ω55'40	
evening max el	12122 Aug 29 17:48	∘ – 6° ჲ 57'49	18°51'53	use. Houe	12123 Jul 31 07:30	0° m)	
retrograde	12122 Nug 25 17:46 12122 Sep 07 06:45	11° ≏ 14'24	10 31 33	evening max el	12123 Aug 13 00:17	19° m) 27'04	18°18'00
•	•			•	_	23° m) 10'00	18 18 00
evening set	12122 Sep 09 04:06	11° Ω 02'37		retrograde	12123 Aug 20 08:46	~	
desc. node	12122 Sep 12 12:19	9° Ω 49'55		evening set	12123 Aug 22 12:23	22° m 51'39	
inferior conj	12122 Sep 17 09:29	6° £ 43'35		inferior conj	12123 Aug 29 22:48	18° m) 12'07	0°08'24
minimum elong	12122 Sep 17 05:35	6° £ 50'32	1°30'36	minimum elong	12123 Aug 29 23:05	18° m ,11'30	0°08'02
min. Earth dist.	12122 Sep 20 10:01	4° ≙ 34'29	0.56661 AU	transit middle	12123 Aug 29 23:05	18° m 11'30	0°08'02
morning rise	12122 Sep 25 03:48	1° ≏ 49'11		transit begin	12123 Aug 29 20:04	18° m 17'49	
direct	12122 Sep 30 19:35	0° ჲ 32'24		transit end	12123 Aug 30 02:07	18° m)05'11	
morning max el	12122 Oct 15 01:19	7° ≙ 53'56	26°16'02	desc. node	12123 Aug 30 09:44	17° m 49'09	
	12122 Oct 31 12:53	0° M .		min. Earth dist.	12123 Sep 02 06:50	15° m) 25'55	0.58692 AU
asc. node	12122 Nov 06 05:50	10° M ₁9'24		morning rise	12123 Sep 06 06:18	12° m/42'15	
morning set	12122 Nov 12 14:03	23°M15'23		direct	12123 Sep 12 12:51	10° m) 56'56	
	12122 Nov 15 16:26	0° ∡ 7		morning max el	12123 Sep 26 21:06	18° m) 40'32	27°24'37
	121221101 13 10.20	٠,		morning max cr	12123 Oct 06 10:20	0° ⊡	27 2137
superior conj	12122 Nov 19 09:36	8° ∡ 14'48	1°36'07	asc. node	12123 Oct 00 10:20 12123 Oct 24 02:34	0 _ 29° £ 51'42	
minimum elong	12122 Nov 19 09:36 12122 Nov 19 08:35	8° × 1448	1°36'50	asc. node	12123 Oct 24 02:34 12123 Oct 24 04:14	0°M	
U				. ,			
max. Earth dist.	12122 Nov 20 04:57	10° ⋌ °02'18	1.31599 AU	morning set	12123 Oct 27 21:59	7°M42'41	
evening rise	12122 Nov 26 08:26	23° ∡ 22'40					
	12122 Nov 29 13:52	0°ಕ		superior conj	12123 Nov 03 21:18	22°M58'48	
desc. node	12122 Dec 09 09:38	18° ろ 00'19		minimum elong	12123 Nov 03 19:30	22°M48'45	1°28'06
	12122 Dec 17 06:22	0° ≈		max. Earth dist.	12123 Nov 03 13:40	22°M16'16	1.31310 AU
evening max el	12122 Dec 27 23:28	12° ≈ 37′04	27°19'36		12123 Nov 07 00:59	0° ∡ ¹	
retrograde	12123 Jan 10 21:35	19° ≈ 53'17		evening rise	12123 Nov 10 15:10	7° ∡ ¹49'48	
evening set	12123 Jan 17 19:51	17° ≈ 42'37			12123 Nov 22 00:51	0° ප	
min. Earth dist.	12123 Jan 21 13:59	14° ≈ 54'42	0.61157 AU	desc. node	12123 Nov 26 06:44	6° ප 58'10	
inferior conj	12123 Jan 24 16:17	12° ≈ 11'29	-2°44'48	evening max el	12123 Dec 10 00:37	24° る 20'44	26°32'38
minimum elong	12123 Jan 24 22:01	11° ≈ 58'52		<i>5</i>	12123 Dec 17 21:35	0° ≈	
morning rise	12123 Feb 01 03:04	7° ≈ 16'11		retrograde	12123 Dec 23 23:27	1°≈27'45	
asc. node	12123 Feb 02 04:56	7° ≈ 01'53		101108111110	12123 Dec 29 22:29	30°Rる	
direct	12123 Feb 02 04:30 12123 Feb 03 06:21	6°≈57'08		evening set	12123 Dec 30 13:25	29°る41'12	
morning max el	12123 Feb 03 06.21 12123 Feb 10 07:55	0 ≈3708 10°≈30'26	17°53'38	min. Earth dist.	12123 Dec 30 13.23 12124 Jan 03 14:30	29 3 41 12 27° る 04'46	0.59010 AU
morning max er			17 33 38				
	12123 Feb 23 05:18	0°) {		inferior conj	12124 Jan 06 18:18	24° る 39'44	
morning set	12123 Feb 25 22:49	4°) € 56'27		minimum elong	12124 Jan 07 02:24	24° る 24'10	4°00'49
desc. node	12123 Mar 07 10:20	21° ¥ 54'39		morning rise	12124 Jan 14 18:15	20° る 05'29	
				direct	12124 Jan 16 20:09	19° る 50'15	
superior conj	12123 Mar 08 14:03	23° ¥ 54'59		asc. node	12124 Jan 20 02:11	20° る 29'28	
minimum elong	12123 Mar 08 13:16	23° ¥ 51'35	0°08'40	morning max el	12124 Jan 24 18:46	23° る 45'22	18°20'00
behind sun begin	12123 Mar 08 06:13	23°) €21'06			12124 Jan 29 19:32	0° ≈	
behind sun end	12123 Mar 08 20:19	24° ¥ 22'01		morning set	12124 Feb 09 13:24	18° ≈ 54'39	
	12123 Mar 12 03:35	0° Υ		-	12124 Feb 15 09:49	0° ∀	
max. Earth dist.	12123 Mar 15 23:55	6° Y 23'36	1.42937 AU				
evening rise	12123 Mar 22 07:56	16° Y 33'44		superior conj	12124 Feb 18 20:21	6°) 21'48	0°26'54
	12123 Mar 31 02:14	0°8		minimum elong	12124 Feb 18 22:16	6°\(\frac{21}{30}\)'31	0°27'00
	12123 Mai 31 02.14 12123 Apr 22 07:43	0°II		desc. node	12124 Feb 18 22.10 12124 Feb 22 06:56	12°\(\frac{1}{3031}\)	3 27 00
ovenina ma1	•		2200020				1 40025 411
evening max el	12123 Apr 23 12:42	1° Ⅱ 15'17	22 UU 29	max. Earth dist.	12124 Feb 26 09:33	19° ¥ 42'11	1.40925 AU
asc. node	12123 May 01 02:01	6° Ⅱ 31'29		evening rise	12124 Mar 01 22:51	27° ¥ 19′27	
retrograde	12123 May 02 22:20	6° Ⅱ 47'38			12124 Mar 03 14:17	0° Υ	

	12124 Mar 23 17:35	0°8		evening max el	12125 Mar 18 18:00	28° Y 55'19	24°40'19
evening max el	12124 Apr 05 04:13	15° 8 04'10	23°20'42		12125 Mar 19 20:55	0 \circ 8	
retrograde	12124 Apr 15 17:41	21° 8 17'45		retrograde	12125 Mar 30 09:21	5° 8 42'53	
asc. node	12124 Apr 16 23:20	21° 8 10'38		asc. node	12125 Apr 03 20:41	4° 8 13'49	
evening set	12124 Apr 20 19:42	19° 8 09'49		evening set	12125 Apr 04 23:16	3° 8 22'45	
min. Earth dist.	12124 Apr 25 16:37	13° 8 25'53	0.68721 AU		12125 Apr 08 03:18	30° Ŗ ♈	
inferior conj	12124 Apr 26 04:59	12° 8 43'17	2°32'08	min. Earth dist.	12125 Apr 09 12:01	28° Y 14'38	0.68231 AU
minimum elong	12124 Apr 26 02:54	_	2°31'08	inferior conj	12125 Apr 10 12:38	26° Y ′52'43	1°57'47
morning rise	12124 May 01 10:02	6° 8 37'03		minimum elong	12125 Apr 10 10:30	26° Y 59'49	1°56'50
direct	12124 May 05 17:13	4° 8 53'55		morning rise	12125 Apr 15 21:54	20° Y 54'36	
morning max el	12124 May 14 01:32	9° 8 40'51	20°55'29	direct	12125 Apr 19 16:40	19° Ƴ 32'39	
desc. node	12124 May 20 08:36	16° 8 59'14		morning max el	12125 Apr 27 01:45	23° Y 38'44	19°45'27
	12124 May 29 18:21	0°II			12125 May 02 12:58	0° 8	
morning set	12124 Jun 13 07:33	21° Ⅱ 57′08		desc. node	12125 May 07 05:23	6° 8 24'21	
	12124 Jun 18 09:49	0° ©		greatest brilliancy	12125 May 09 21:51	10° 8 16'51	-0.6m
max. Earth dist.	12124 Jun 21 02:44	4° © 21'28	1.43094 AU	_	12125 May 22 23:58	0°II	
				morning set	12125 May 23 08:02	0°Щ30′58	
superior conj	12124 Jun 28 02:14	15° © 54'28		max. Earth dist.	12125 Jun 03 15:24	18° Ⅱ 08'59	1.44654 AU
minimum elong	12124 Jun 28 08:57	16° © 22'51	1°54'44			_	
	12124 Jul 06 05:57	0 \circ Ω		superior conj	12125 Jun 08 11:44	25° Ⅱ 53'58	
evening rise	12124 Jul 09 23:01	6° Ω 35'01		minimum elong	12125 Jun 08 14:53	26° Ⅱ 06'41	2°12'09
asc. node	12124 Jul 13 21:58	13° Ω 36′20			12125 Jun 11 00:26	0° ©	
	12124 Jul 24 07:31	0° m)		evening rise	12125 Jun 22 02:11	18° © 25'25	
evening max el	12124 Jul 26 12:29	2° m)27'51	18°04'01		12125 Jun 28 23:10	0 ° Ω	
retrograde	12124 Aug 02 03:44	5° m 52'13		asc. node	12125 Jun 30 18:52	2° Ω 59'04	
evening set	12124 Aug 04 15:19	5° m 23'32		evening max el	12125 Jul 10 02:37	15° Ω 50′00	18°08'53
inferior conj	12124 Aug 11 08:18	0° Mp 23'46	1°26'09	retrograde	12125 Jul 16 11:18	19° Ω 10′30	
minimum elong	12124 Aug 11 10:36	0° mp 18'12	1°24'54	evening set	12125 Jul 19 07:01	18° Ω 28'47	
	12124 Aug 11 18:05	30°R Ω		inferior conj	12125 Jul 25 10:07	13° Ω 10'46	
min. Earth dist.	12124 Aug 14 11:56		0.60963 AU	minimum elong	12125 Jul 25 12:41	13° Ω 03'42	
desc. node	12124 Aug 16 07:07	25° Ω 48'23		min. Earth dist.	12125 Jul 28 02:27	10° Ω 15'39	0.63186 AU
morning rise	12124 Aug 18 03:09	24° Ω 27'13		morning rise	12125 Jul 31 16:34	6° Ω 57'33	
direct	12124 Aug 24 18:00	22° Ω 15′28		desc. node	12125 Aug 03 04:29	5° Ω 25'00	
	12124 Sep 07 18:56	0° m)		direct	12125 Aug 07 08:55	4° Ω 26'22	
morning max el	12124 Sep 08 00:02	0° m/ 12'33	27°56'11	morning max el	12125 Aug 21 08:18	12° Ω 28′21	27°49'17
	12124 Sep 29 12:45	0° ⊽			12125 Sep 04 07:42	0° m)	
asc. node	12124 Oct 09 23:16	19° ≙ 40'01			12125 Sep 22 00:14	0∘ ⊽	
morning set	12124 Oct 11 01:18	21° ≏ 54'00		morning set	12125 Sep 24 21:42	5° Ω 42'42	
T	12124 Oct 14 20:50	0°M,	1 21520 477	asc. node	12125 Sep 26 19:58	9° 2 38′20	1 222 (5 1 1 1 1
max. Earth dist.	12124 Oct 16 21:18	4°11L24'47	1.31530 AU	max. Earth dist.	12125 Sep 29 23:50	16° 22 16'36	1.32267 AU
	10104 0 4 10 00 00	70 m 26125	1012126		10105 0 + 00 15 50	220 0 0112 (0054100
superior conj	12124 Oct 18 08:02	7°M36'35		superior conj	12125 Oct 02 15:50	22° ₽ 01'36	
minimum elong	12124 Oct 18 05:49	7°M24'17	1°13'44	minimum elong	12125 Oct 02 13:41	21° Ω 49'57	0°53'58
evening rise	12124 Oct 25 01:10	22°M23'58			12125 Oct 06 07:20	0°M	
1 1	12124 Oct 28 15:55	0° ⊼ ¹		evening rise	12125 Oct 09 12:27	6°M58'45	
desc. node	12124 Nov 12 03:56	25° ∡ 106'37			12125 Oct 21 10:50	0° ₹ ¹	
	12124 Nov 15 21:56	0°る	25014122	desc. node	12125 Oct 30 01:14	12° ∡ 05'52	22927121
evening max el	12124 Nov 20 17:37	5°る13'10 12°る09'59	25 14 22	evening max el	12125 Nov 02 04:14	15° 🗷 25'07	23°30'21
retrograde	12124 Dec 04 13:48	12 3 09 39		retrograde	12125 Nov 15 15:27	22° ∡ *07'58	
evening set min. Earth dist.	12124 Dec 10 09:00 12124 Dec 15 05:40		0.57023 AU	evening set	12125 Nov 20 04:32	21° х 23'00	0.55466 ATT
				min. Earth dist.	12125 Nov 26 14:25	18° 🗷 19'09	0.55466 AU
inferior conj	12124 Dec 18 00:30	6° る 22'16		inferior conj	12125 Nov 28 10:19	17° 🗷 14'21	
minimum elong	12124 Dec 18 08:14	6°る09'25 2°る10'09	5-10-19	minimum elong	12125 Nov 28 12:25	17° 🗷 11'15	3-49-28
morning rise	12124 Dec 26 09:44	1°る55'02		morning rise	12125 Dec 06 22:07	13° × 21'06	
direct	12124 Dec 28 16:17			direct	12125 Dec 09 16:53	13°×702'05	20010127
asc. node	12125 Jan 05 23:21	5°る32'29 6°る21'00	10007147	morning max el asc. node	12125 Dec 20 09:12	18° х 06'53 21° х 56'09	20°18'37
morning max el	12125 Jan 06 20:23 12125 Jan 21 21:22	6° 6 21′00 0° ≈	17 U/4/	asc. node	12125 Dec 23 20:28 12125 Dec 29 09:00	21°×156'09	
morning sot		0°≈ 3°≈17'51		morning set	12125 Dec 29 09:00 12126 Jan 07 19:52	0°る 17° る 55'49	
morning set	12125 Jan 23 13:31	<i>5</i> ≈1/31		morning set	12126 Jan 07 19:32 12126 Jan 13 16:38	1/° © 33′49 0° ≈	
superior conj	12125 Jan 31 20:35	19° ≈ 38'08	0°55'39		12120 Jan 13 10:38	U 🌤	
minimum elong			0°55'50	superior con-	12126 Ion 15 10:10	300020150	1°16'48
	12125 Inn 21 22:20		0 22 20	superior conj	12126 Jan 15 10:10	3° ≈ 30′50	1 1040
minimum clong	12125 Jan 31 23:28	19° ≈ 51'57		minima1	12126 Inn 15 12:50	2000/11/	1017!14
	12125 Feb 06 09:15	0° ∀		minimum elong	12126 Jan 15 12:50	3°≈44'15	1°17'14
max. Earth dist.	12125 Feb 06 09:15 12125 Feb 07 16:19	0° ∺ 2° ∺ 20'36	1.38710 AU	max. Earth dist.	12126 Jan 20 23:37	14° ≈ 26′17	1°17'14 1.36525 AU
max. Earth dist. desc. node	12125 Feb 06 09:15 12125 Feb 07 16:19 12125 Feb 08 03:37	0° 光 2° 光 20'36 3° 光 11'16		max. Earth dist. evening rise	12126 Jan 20 23:37 12126 Jan 24 18:48	14°≈26'17 21°≈31'05	
max. Earth dist.	12125 Feb 06 09:15 12125 Feb 07 16:19	0° ∺ 2° ∺ 20'36		max. Earth dist.	12126 Jan 20 23:37	14° ≈ 26′17	

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	12126 Feb 18 08:38	0° Y		evening rise	12127 Jan 07 18:28	4° ≈ 42'08	
evening max el	12126 Mar 01 07:24	12° Y '45'35	25°52'23	desc. node	12127 Jan 12 21:08	14° ≈ 08'58	
retrograde	12126 Mar 13 20:23	19° Y 57'00			12127 Jan 22 09:19	0°) €	
evening set	12126 Mar 19 21:58	17° Y ′28′00		evening max el	12127 Feb 11 20:56		26°49'35
asc. node	12126 Mar 21 18:04	15° Ƴ 43'18		C	12127 Feb 15 22:16	0° Y	
min. Earth dist.	12126 Mar 24 03:55	12° Y 55'05	0.67311 AU	retrograde	12127 Feb 25 02:02	3° Y ′52'12	
inferior conj	12126 Mar 25 16:45	10° Ƴ 59'10	1°13'31	evening set	12127 Mar 03 13:53	1° Y 19'15	
minimum elong	12126 Mar 25 15:05	11° Y ′04'25	1°12'51	C	12127 Mar 05 02:00	30° ₹	
morning rise	12126 Mar 31 08:50	5° Y 10'37		min. Earth dist.	12127 Mar 07 14:12		0.65995 AU
direct	12126 Apr 03 16:06	4° Υ ′08'20		asc. node	12127 Mar 08 15:28	26° ¥ 06'57	
morning max el	12126 Apr 10 09:36	7° Y 46'33	18°50'39	inferior conj	12127 Mar 09 15:07	24° ¥ 57'32	0°19'03
desc. node	12126 Apr 24 02:05	26° Y 15'54		minimum elong	12127 Mar 09 14:36	24°) 59′03	0°18'59
greatest brilliancy	12126 Apr 24 10:21	26° Y 47'25	-0.8m	morning rise	12127 Mar 15 16:34	19°) €20'19	
	12126 Apr 26 12:28	9° 8		direct	12127 Mar 18 13:38	18°) (34′48	
morning set	12126 May 02 16:42	9° 8 34'59		morning max el	12127 Mar 24 23:24	21° ¥ 57′50	18°12'17
	12126 May 15 19:08	Π $^{\circ}0$			12127 Mar 31 09:53	0° Y	
max. Earth dist.	12126 May 17 08:53	2° Ⅱ 27'39	1.45556 AU	desc. node	12127 Apr 10 22:44	16° Y 26′15	
				morning set	12127 Apr 13 02:42	19° Y 55'18	
superior conj	12126 May 19 01:15	5° Ⅱ 05'49	-2°10'16		12127 Apr 19 09:41	0° 8	
minimum elong	12126 May 18 20:57	4° Ⅱ 48'59	2°10'52				
evening rise	12126 Jun 03 05:50	29° Ⅱ 15'54		superior conj	12127 Apr 28 08:30	14° 8 08'00	-1°49'03
	12126 Jun 03 16:46	0°ಅ		minimum elong	12127 Apr 27 23:19	13° 8 32'00	1°48'49
asc. node	12126 Jun 17 15:52	21° 9 57'32		max. Earth dist.	12127 Apr 30 04:22	16° 8 59'34	1.45727 AU
evening max el	12126 Jun 23 15:33	29° 5 25'44	18°31'51		12127 May 08 12:40	Π °0	
	12126 Jun 24 05:49	$0^{\circ}\Omega$		evening rise	12127 May 14 09:57	9° Ⅱ 09'39	
retrograde	12126 Jun 30 03:09	2° Ω 56′07		greatest brilliancy	12127 May 25 23:07	26° Ⅱ 59'41	-0.7m
evening set	12126 Jul 03 07:07	1° Ω 59'36			12127 May 27 23:17	0 \circ	
	12126 Jul 05 19:29	30°ષ્દ્		asc. node	12127 Jun 04 12:57	10° © 22'38	
inferior conj	12126 Jul 09 00:12	26° © 25'24	2°54'07	evening max el	12127 Jun 07 00:47	13° © 08'12	19°12'05
minimum elong	12126 Jul 09 02:06	26° © 19'38	2°53'00	retrograde	12127 Jun 13 23:40	17° © 00'57	
min. Earth dist.	12126 Jul 11 02:24	23° © 54'23	0.65157 AU	evening set	12127 Jun 17 12:22	15° © 48'32	
morning rise	12126 Jul 14 20:03	20° © 04'12		inferior conj	12127 Jun 22 22:58	9° © 59'47	3°11'11
direct	12126 Jul 21 08:11	17° © 23'07		minimum elong	12127 Jun 22 23:49	9° © 57'00	3°10'16
desc. node	12126 Jul 21 01:46	17° © 23'23		min. Earth dist.	12127 Jun 24 10:26	8°904'58	0.66751 AU
morning max el	12126 Aug 03 19:09		27°08'23	morning rise	12127 Jun 28 10:43	3° © 36'54	
	12126 Aug 08 01:53	0° N		direct	12127 Jul 04 14:28	0°956'11	
	12126 Aug 28 19:42	0° m		desc. node	12127 Jul 07 22:59	1° © 36'26	
morning set	12126 Sep 08 08:30	19° Mp 02'29		morning max el	12127 Jul 17 06:00	8°930'03	26°01'32
max. Earth dist.	12126 Sep 12 17:45		1.33524 AU		12127 Aug 03 02:08	0° N	
asc. node	12126 Sep 13 16:39	29° m/42'36			12127 Aug 21 07:28	0° Mp	
	12126 Sep 13 20:02	0∘ ⊽		morning set	12127 Aug 22 06:10	1° Mp 44'15	1 25251 444
	1010/0 1/ 10 07	60 0 00127	0020120	max. Earth dist.	12127 Aug 26 01:07	8° m 53'18	1.35271 AU
superior conj	12126 Sep 16 18:37	6° Ω 08'37			10107 4 21 12 46	100 m 50155	0000110
minimum elong	12126 Sep 16 17:10		0°29'12	superior conj	12127 Aug 31 13:46	19° m 50'55	0°00'10
evening rise	12126 Sep 23 23:11	21° £ 29'25		minimum elong	12127 Aug 31 13:46	19° m 50'53	0°00'03
	12126 Sep 28 02:00 12126 Oct 14 16:37	0°M 25°M30'05	21°56'01	behind sun begin behind sun end	12127 Aug 31 07:54	19° Mp 21'06 20° Mp 20'44	
evening max el desc. node	12126 Oct 14 16.37 12126 Oct 16 22:34	27°M31'17	21 3001	asc. node	12127 Aug 31 19:38 12127 Aug 31 13:20	19° Mp 48'42	
desc. node	12126 Oct 16 22.34 12126 Oct 20 15:00	27 IIG3117 0° √		asc. node	12127 Aug 31 13.20 12127 Sep 05 11:50	19 IIV4842	
retrograde	12126 Oct 27 06:20	1° × ⁷ 45'00		evening rise	12127 Sep 03 11:30 12127 Sep 08 07:18	ა 5° ჲ 50'19	
evening set	12126 Oct 27 00:20 12126 Oct 30 08:50	1°×723'25		evening rise	12127 Sep 08 07.18 12127 Sep 21 14:58	0°M	
evening set	12126 Oct 30 08:30 12126 Nov 03 08:40	30°RM		evening max el	12127 Sep 21 14:38 12127 Sep 26 15:56	6°M04'50	20028127
inferior conj	12126 Nov 08 05:17	27°M26'57	_5°35'35	desc. node	12127 Sep 20 13:50 12127 Oct 03 19:57	10°M54'34	20 28 27
minimum elong	12126 Nov 08 03:17 12126 Nov 07 22:50	27°M36'00		retrograde	12127 Oct 03 13:57 12127 Oct 07 17:52	11°M35'00	
min. Earth dist.	12126 Nov 07 22:30	27°M38'27	0.54632 AU	evening set	12127 Oct 07 17:32 12127 Oct 09 20:52	11°M23'46	
morning rise	12126 Nov 07 21:04 12126 Nov 16 14:03	27 IIL3827 23°M39'46	0.57052 AU	inferior conj	12127 Oct 09 20:32 12127 Oct 18 21:54	7°M27'53	-4°23'29
direct	12126 Nov 20 03:01	23°M12'12		minimum elong	12127 Oct 18 21:54 12127 Oct 18 11:52	7°M42'28	
morning max el	12126 Nov 20 03:01 12126 Dec 02 08:06	29°M00'49	21°51'04	min. Earth dist.	12127 Oct 18 11:32 12127 Oct 20 04:54	6°M42'46	0.54720 AU
morning max or	12126 Dec 02 08:06 12126 Dec 03 08:18	29 11 0 00 49	21 2107	morning rise	12127 Oct 20 04:34 12127 Oct 27 02:21	3°M26'45	0.5 1120 AU
asc. node	12126 Dec 10 17:31	9° × ⁷ 24'02		direct	12127 Oct 27 02:21 12127 Oct 31 12:01	2°M45'00	
200. Houe	12126 Dec 10 17:31 12126 Dec 21 23:01	9 x 2402		morning max el	12127 Oct 31 12:01 12127 Nov 13 20:54	9°M15'28	23°37'32
morning set	12126 Dec 23 05:55	2° ප් 41'13		asc. node	12127 Nov 13 20:34 12127 Nov 27 14:28	27°M41'17	_5 5 5 5 5
morning sot	12120 200 20 00.00	2 0-1113		asc. 110de	12127 Nov 27 14.28 12127 Nov 28 22:05	27 11C41 17 0° ₹ ¹	
superior conj	12126 Dec 30 09:15	17° る 48'56	1°30'37	morning set	12127 Nov 28 22:03 12127 Dec 07 17:39	17° ∡ 28′25	
minimum elong	12126 Dec 30 11:03	17°る58'23			12127 Dec 07 17:39 12127 Dec 13 12:20	0°る	
max. Earth dist.	12127 Jan 03 11:57		1.34595 AU				
dibt.	12127 Jan 05 08:27	0°≈	1375 110	superior conj	12127 Dec 14 14:48	2° る 23'34	1°37'39
	1212, 3411 03 00.27	J . • .		superior conj	.2.2, 200 17 17.70		. 5/5/

minimum elong	12127 Dec 14 15:29	2°る27'17	1°38'30	minimum elong	12128 Nov 27 23:52	17° ∡ '03'58	1°39'12
max. Earth dist.	12127 Dec 17 08:11	8°₹14'05	1.33063 AU	max. Earth dist.	12128 Nov 29 11:38	20° ∡ °20'57	1.31998 AU
evening rise	12127 Dec 22 06:37	18° る 24'54			12128 Dec 03 23:12	ರ°0	
	12127 Dec 28 08:01	0° ≈		evening rise	12128 Dec 05 03:59	2° る 30'03	
desc. node	12127 Dec 30 18:00	4° ≈ 19'30		desc. node	12128 Dec 16 14:57	24° る 08'56	
	12128 Jan 16 15:08	0° ∀			12128 Dec 20 04:10	0° ≈	
evening max el	12128 Jan 25 09:58	9° ¥ 54'51	27°24'39	evening max el	12129 Jan 06 20:31	22° ≈ 50'48	27°30'57
retrograde	12128 Feb 08 01:17	17° ¥ 20′08			12129 Jan 18 17:47	0° ∀	
evening set	12128 Feb 14 20:51	14°) (49′47		retrograde	12129 Jan 20 16:59	0°) 10′32	
min. Earth dist.	12128 Feb 18 16:51	11°) 22′20	0.64328 AU		12129 Jan 22 15:12	30° R ≈	
inferior conj	12128 Feb 21 05:14	8°) 42′10	-0°45'34	evening set	12129 Jan 27 16:04	27° ≈ 50'30	
minimum elong	12128 Feb 21 06:38	8° ¥ 38′27	0°44'37	min. Earth dist.	12129 Jan 31 09:53	24° ≈ 50′14	0.62375 AU
asc. node	12128 Feb 23 12:48	6° ∺ 20′21		inferior conj	12129 Feb 03 08:02	22° ≈ 04'22	
morning rise	12128 Feb 27 18:22	3° ¥ 18′38		minimum elong	12129 Feb 03 12:05		1°57'09
direct	12128 Mar 01 06:50	2°) 46′16		asc. node	12129 Feb 09 10:08	17° ≈ 22'31	
morning max el	12128 Mar 07 16:32	6°) €05'20	17°50'58	morning rise	12129 Feb 10 10:40	16°≈57'36	
	12128 Mar 23 17:37	0°Υ ••••••		direct	12129 Feb 12 16:39	16° ≈ 34'37	
morning set	12128 Mar 24 17:18	1° Υ 39'37		morning max el	12129 Feb 19 09:55	19° ≈ 59'48	17°47'20
desc. node	12128 Mar 27 19:22	6° Ƴ 50′20		. ,	12129 Feb 26 20:43	0° ∺ 14° ∺ 30'48	
	12120 A 07 02:25	23° Ƴ 47'45	1012112	morning set	12129 Mar 07 07:21	27° ¥ 23'06	
superior conj	12128 Apr 07 03:25 12128 Apr 06 19:47	23° \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		desc. node	12129 Mar 14 15:58	2/°π23'06 0°Υ	
minimum elong	12128 Apr 06 19:47 12128 Apr 11 00:47	0° 8	1-12/30		12129 Mar 16 04:36	U- Y	
max. Earth dist.	12128 Apr 11 00.47 12128 Apr 11 23:42	1° 8 30'37	1.45165 AU	superior conj	12129 Mar 18 21:01	4° Ƴ 32'32	0°32'00
evening rise	12128 Apr 11 23.42 12128 Apr 22 23:07	18° 8 33'24	1.43103 AO	minimum elong	12129 Mar 18 27:01 12129 Mar 18 17:52	4°Υ19'22	
evening rise	12128 Apr 22 25:07 12128 Apr 30 11:53	0°Ⅱ		max. Earth dist.	12129 Mar 16 17:32 12129 Mar 25 16:47	15°Υ45'47	1.43920 AU
greatest brilliancy	12128 May 08 00:20	11° I I08'34	-0.6m	evening rise	12129 Apr 02 12:34	28° Y ′06'49	1.43720710
evening max el	12128 May 20 04:46	26° I 53'34	20°07'57	evening rise	12129 Apr 03 17:54	0°8	
asc. node	12128 May 21 10:04	28° I I03'33	20 0, 0,		12129 Apr 24 07:02	0°II	
	12128 May 23 22:28	0.00 T		evening max el	12129 May 03 03:02	10° ∏ 40'07	21°16'43
retrograde	12128 May 27 22:12	1°9519'27		asc. node	12129 May 08 07:14	14° ∏ 46′54	
evening set	12128 May 31 20:21	29° Ⅱ 50'38		retrograde	12129 May 11 20:45	15° Ⅱ 46'50	
C	12128 May 31 15:16	30°RⅡ		evening set	12129 May 16 05:11	14° Ⅱ 01'50	
inferior conj	12128 Jun 06 03:31	23° Ⅱ 48'42	3°14'32	inferior conj	12129 May 21 11:30	7° Ⅱ 48'20	3°06'13
minimum elong	12128 Jun 06 03:18	23° Ⅱ 49′28	3°13'41	minimum elong	12129 May 21 10:20	7° ∏ 52'22	3°05'19
min. Earth dist.	12128 Jun 07 00:38	22° II 36'58	0.67906 AU	min. Earth dist.	12129 May 21 19:02	7° Ⅱ 22'07	0.68589 AU
morning rise	12128 Jun 11 09:55	17° Ⅲ 28′08		morning rise	12129 May 26 15:17	1° Ⅱ 32'21	
direct	12128 Jun 17 02:28	14° Ⅲ 56′52			12129 May 28 20:32	30° ₹ 8	
desc. node	12128 Jun 23 20:07	17° Ⅲ 38′09		direct	12129 May 31 19:05	29° 8 17'14	
morning max el	12128 Jun 28 15:53	21° Ⅱ 52'55	24°38'19		12129 Jun 03 22:58	Π °0	
	12128 Jul 05 17:29	0 \circ 60		desc. node	12129 Jun 10 17:09	5° Ⅱ 01'37	
	12128 Jul 26 08:34	0 ° Ω		morning max el	12129 Jun 11 02:10	5° Ⅱ 24'07	23°08'44
morning set	12128 Aug 03 10:18	13° Ω 36′29			12129 Jun 30 01:15	0 \circ	
max. Earth dist.	12128 Aug 07 00:20	20° Ω 00'42	1.37410 AU	morning set	12129 Jul 15 16:04	24° © 27'36	
	12128 Aug 12 08:42	0° m			12129 Jul 18 22:50	0 \circ Ω	
				max. Earth dist.	12129 Jul 19 22:03	1° {\2 39'47	1.39732 AU
superior conj	12128 Aug 13 22:06	3° mp 00'13				0	
minimum elong	12128 Aug 14 00:16	3° Mp 10'48	0°32'42	superior conj	12129 Jul 27 15:43	15° Ω 27'31	
asc. node	12128 Aug 17 10:00	9° TD 52'39		minimum elong	12129 Jul 27 20:29	15° Ω 49'28	1°06'49
evening rise	12128 Aug 22 10:23	19° m 54'53		asc. node	12129 Aug 04 06:42	29° Ω 51'01	
arraning may al	12128 Aug 27 14:18	0° ჲ 17° ჲ 25'54	19°20'56	arranina rias	12129 Aug 04 08:34	0° Тф 3° Тф 35'45	
evening max el retrograde	12128 Sep 08 05:18 12128 Sep 17 14:45	22° £ 07'00	19 20 30	evening rise evening max el	12129 Aug 06 05:30 12129 Aug 22 06:37	29° Mp 32'33	1803/157
evening set	12128 Sep 17 14:43	22 ⊆ 07 00 21° ⊆ 56'55		evening max er	12129 Aug 22 00.37 12129 Aug 22 17:58	0° ⊽	10 3437
desc. node	12128 Sep 19 17:22	21° ⊆ 53'55		retrograde	12129 Aug 22 17:38 12129 Aug 30 05:59	ა 3° _ 33'08	
inferior conj	12128 Sep 19 17:22 12128 Sep 28 02:15	17° ≏ 48'39	-2°36'32	evening set	12129 Sep 01 05:42	3° ⊆ 18'59	
minimum elong	12128 Sep 27 19:25	17° ⊆ 59'49		desc. node	12129 Sep 06 14:48	0° £ 41'30	
min. Earth dist.	12128 Sep 27 15:23 12128 Sep 30 15:52	16° ⊆ 08'12	0.55734 AU	acce. node	12129 Sep 00 14:48 12129 Sep 07 14:13	30°RM)	
morning rise	12128 Oct 06 01:17	13° ⊆ 16'28		inferior conj	12129 Sep 07 14:13	28° m 50'59	-0°47'09
direct	12128 Oct 11 07:00	12° Ω 14'11		minimum elong	12129 Sep 09 01:08	28° m 54'35	0°46'30
morning max el	12128 Oct 25 07:30	19° ≏ 18'42	25°23'01	min. Earth dist.	12129 Sep	26° m) 24'08	0.57473 AU
<u> </u>	12128 Nov 03 08:06	0°M	-	morning rise	12129 Sep 16 17:08	23° m/41'04	
asc. node	12128 Nov 13 11:20	16°M34'58		direct	12129 Sep 22 15:49	22° m 12'37	
	12128 Nov 20 04:32	0° ∡ 7		morning max el	12129 Oct 06 23:11	29° m 43'38	26°49'26
morning set	12128 Nov 21 05:14	2° ҂ 11′30		-	12129 Oct 07 05:54	0∘ ⊽	
					12129 Oct 28 05:18	0° M	
superior conj	12128 Nov 28 00:18	17° ∡ °06′21	1°38'24	asc. node	12129 Oct 31 08:09	5°M55'45	

morning set	12129 Nov 05 15:02	16°M46'17		morning max el	12130 Sep 18 22:23	10° m 49'35	27°42'57
	12129 Nov 11 15:43	0° ∡ ¹			12130 Oct 03 20:48	0∘ ⊽	
				asc. node	12130 Oct 18 04:53	25° ≏ 35'30	
superior conj	12129 Nov 12 11:44	1° ∡ ′51′36	1°33'13		12130 Oct 20 08:23	0° M ₊	
minimum elong	12129 Nov 12 10:21	1° ∡ ¹43'54	1°33'50	morning set	12130 Oct 20 21:16	1° M 07'25	
max. Earth dist.	12129 Nov 12 19:39	2° ∡ ³35'44	1.31421 AU	max. Earth dist.	12130 Oct 27 04:25	14° M 48'39	1.31338 AU
evening rise	12129 Nov 19 07:58	16° ∡ 751′02					
<i>5</i>	12129 Nov 25 20:28	0° ठ		superior conj	12130 Oct 27 23:14	16°M33'19	1°22'22
desc. node	12129 Dec 03 11:59	13° る 28'56		minimum elong	12130 Oct 27 21:12	16°M22'00	1°22'40
dese. node	12129 Dec 05 11:39 12129 Dec 15 07:10	0°≈		minimum ciong	12130 Nov 03 01:13	0° √	1 22 40
			27002142				
evening max el	12129 Dec 20 01:49	5°≈03'28	27°03'42	evening rise	12130 Nov 03 16:18	1° ₹ 21'24	
retrograde	12130 Jan 03 00:04	12° ≈ 15′02			12130 Nov 18 23:37	0°ಕ	
evening set	12130 Jan 09 20:10	10° ≈ 13'34		desc. node	12130 Nov 20 09:09	2° る 07'54	
min. Earth dist.	12130 Jan 13 16:09	7° ≈ 32'22	0.60252 AU	evening max el	12130 Dec 01 23:20	16° る 24'19	26°02'36
inferior conj	12130 Jan 16 20:07	4° ≈ 55'02	-3°18'48	retrograde	12130 Dec 15 21:25	23° る 27'44	
minimum elong	12130 Jan 17 03:01	4° ≈ 40'42	3°15'35	evening set	12130 Dec 22 04:59	21° る 53'12	
morning rise	12130 Jan 24 12:45	0°≈08'21		min. Earth dist.	12130 Dec 26 12:14	19° る 17'26	0.58130 AU
Č	12130 Jan 25 03:14	30°Rる		inferior conj	12130 Dec 29 13:59	17° る 04'45	-4°35'33
direct	12130 Jan 26 15:03	29° ろ 51'14		minimum elong	12130 Dec 29 22:27	16° る 49'30	4°32'27
asc. node	12130 Jan 27 07:25	29°る53'07			12131 Jan 06 18:39	10 さ 40'25	7 32 27
asc. noue				morning rise			
	12130 Jan 28 02:22	0° ≈		direct	12131 Jan 08 21:39	12° る 25'44	
morning max el	12130 Feb 03 00:15	3° ≈ 32'15	18°02'20	asc. node	12131 Jan 14 04:40	14° る 02'55	
morning set	12130 Feb 18 14:31	28° ≈ 09'12		morning max el	12131 Jan 17 07:46	16° る 32'33	18°37'39
	12130 Feb 19 14:25	0° ∀			12131 Jan 26 19:47	0° ≈	
				morning set	12131 Feb 02 09:39	12° ≈ 19'47	
superior conj	12130 Feb 28 14:54	16° ¥ 25′20	0°07'04				
minimum elong	12130 Feb 28 15:29	16° ¥ 27'57	0°07'15	superior conj	12131 Feb 11 05:30	29° ≈ 15'49	0°40'00
behind sun begin	12130 Feb 28 08:25	15° ¥ 56'40	,	minimum elong	12131 Feb 11 08:00	29° ≈ 27'29	0°40'07
behind sun end	12130 Feb 28 22:33	16° X 59'09		minimum ciong	12131 Feb 11 14:59	0° ∀	0 4007
desc. node		18° ₩ 00'45		11-		8° ¥ 39'59	
	12130 Mar 01 12:33		1 40106 411	desc. node	12131 Feb 16 09:10		1 20000 411
max. Earth dist.	12130 Mar 08 05:35	29° ¥ 29'27	1.42126 AU	max. Earth dist.	12131 Feb 18 13:33	12°) (30′40	1.39989 AU
	12130 Mar 08 12:56	0° Υ		evening rise	12131 Feb 22 16:00	19° ∺ 31′10	
evening rise	12130 Mar 13 15:57	8° Y 21'12			12131 Mar 01 02:43	0° Y	
	12130 Mar 27 21:02	9° 8			12131 Mar 22 03:22	9° 8	
evening max el	12130 Apr 15 20:24	24° 8 27'31	22°34'15	evening max el	12131 Mar 29 10:47	8° 8 17'22	23°54'59
	12130 Apr 23 18:14	$\Pi^{\circ}0$		retrograde	12131 Apr 09 11:50	14° 8 47'18	
asc. node	12130 Apr 25 04:30	0° Ⅱ 16′22		asc. node	12131 Apr 12 01:51	14° 8 16'35	
retrograde	12130 Apr 25 17:44	0° Ⅱ 17'49		evening set	12131 Apr 14 18:53	12° 8 33'40	
retrograde	12130 Apr 27 15:04	30°R 8		min. Earth dist.	12131 Apr 19 12:02	7° 8 05'00	0.68562 AU
avanina aat	•	28° 8 17'33			•	6° 8 04'52	
evening set	12130 Apr 30 13:12		2047126	inferior conj	12131 Apr 20 05:41		
inferior conj	12130 May 05 20:50	21° 8 54'45	2°47'26	minimum elong	12131 Apr 20 03:32	6° 8 12'12	2°17'46
minimum elong	12130 May 05 19:00	22° 8 01'09	2°46'28	morning rise	12131 Apr 25 12:13	0° 8 01'55	
min. Earth dist.	12130 May 05 15:31	22° 8 13'18	0.68803 AU		12131 Apr 25 13:13	30° ₹Ƴ	
morning rise	12130 May 11 00:41	15° 8 44'44		direct	12131 Apr 29 13:55	28° Y 28′06	
direct	12130 May 15 15:15	13° 8 49'39			12131 May 03 23:02	9° 8	
morning max el	12130 May 24 15:48	19° 8 04'34	21°41'37	morning max el	12131 May 07 11:42	2° 8 56'38	20°23'57
desc. node	12130 May 28 14:05	23° 8 24'33		desc. node	12131 May 15 10:54	12° 8 30'58	
	12130 Jun 02 18:29	$\Pi^{\circ}0$			12131 May 27 14:19	$\Pi^{\circ}0$	
	12130 Jun 23 04:47	0° ©		morning set	12131 Jun 05 02:24	12° Ⅲ 56'46	
morning set	12130 Jun 25 20:09	4°9510'02		max. Earth dist.	12131 Jun 14 08:11		1.43828 AU
•			1 410C1 ATT	max. Earth dist.		0°95	1.43626 AU
max. Earth dist.	12130 Jul 01 23:55	14° © 09'01	1.41961 AU		12131 Jun 15 21:40	0-50	
superior conj	12130 Jul 09 14:06	27° © 01'55		superior conj	12131 Jun 20 13:26	7° © 36'35	
minimum elong	12130 Jul 09 20:48	27° © 31'10	1°39'04	minimum elong	12131 Jun 20 19:16	8° © 00'42	2°03'59
	12130 Jul 11 06:45	$0^{\circ}\Omega$		evening rise	12131 Jul 03 03:47	29° © 04'35	
evening rise	12130 Jul 20 12:51	16° Ω 42'38			12131 Jul 03 16:31	$0^{\circ}\Omega$	
asc. node	12130 Jul 22 03:27	19° Ω 39'17		asc. node	12131 Jul 09 00:19	9° Ω 13'14	
	12130 Jul 27 22:49	0° m)		evening max el	12131 Jul 20 05:20	25° Ω 26'36	18°03'49
evening max el	12130 Aug 05 15:55	12° m) 15'45	18°09'39	retrograde	12131 Jul 26 16:44	28° Ω 47'46	
retrograde	12130 Aug 12 15:52	15° mp 49'22	10 0/ 5/	evening set	12131 Jul 29 07:39	28° Ω 13'59	
•	•	-		-			1051150
evening set	12130 Aug 14 22:42	15° TQ 27'06	0044122	inferior conj	12131 Aug 04 18:16	23° Ω 06'24	1°51'52
inferior conj	12130 Aug 22 01:19	10° m 38'34	0°44'22	minimum elong	12131 Aug 04 20:51	22° Ω 59'47	1°50'31
minimum elong	12130 Aug 22 02:43	10° m/35'26	0°43'29	min. Earth dist.	12131 Aug 07 17:47	20° Ω 04'43	0.61930 AU
desc. node	12130 Aug 24 12:15	8° Mp 26'44		morning rise	12131 Aug 11 07:41	17° Ω 01'17	
min. Earth dist.	12130 Aug 25 08:29	7° m 43'04	0.59641 AU	desc. node	12131 Aug 11 09:38	16° Ω 57'51	
morning rise	12130 Aug 29 03:29	4° m 55'47		direct	12131 Aug 17 23:56	14° Ω 39'53	
direct	12130 Sep 04 14:09	2° m 58'55		morning max el	12131 Sep 01 03:57	22° Ω 41'12	27°57'43
	-			-	-		

	12131 Sep 07 15:20	0° ™		direct	12132 Jul 30 18:49	27° © 11'51	
	12131 Sep 27 02:05	0∘ ⊽			12132 Aug 07 10:42	$0^{\circ}\Omega$	
morning set	12131 Oct 04 21:56	15° ≏ 09'44		morning max el	12132 Aug 13 13:27	5° Ω 12'43	27°35'31
asc. node	12131 Oct 05 01:35	15° ≏ 28'32		Č	12132 Sep 01 08:48	0° m/	
max. Earth dist.	12131 Oct 10 10:08	26° Ω 49'48	1.31772 AU	morning set	12132 Sep	28° Mp 47'28	
max. Earth dist.			1.51772 AU	morning set	•		
	12131 Oct 11 20:55	0° M			12132 Sep 18 05:13	0∘ ত	
				asc. node	12132 Sep 20 22:16	5° ≏ 30'15	
superior conj	12131 Oct 12 08:58	1°M06'12	1°05'59	max. Earth dist.	12132 Sep 22 09:10	8° ≏ 31'43	1.32735 AU
minimum elong	12131 Oct 12 06:43	0°M53'48	1°05'59				
evening rise	12131 Oct 19 03:03	15°M56'00		superior conj	12132 Sep 25 14:58	15° ≏ 25'04	0°44'17
S	12131 Oct 26 00:06	0° ∡ ¹		minimum elong	12132 Sep 25 13:02	15° Ω 14'42	0°44'04
desc. node	12131 Vov 07 06:23	19° × 749'36		minimum crong	12132 Oct 02 08:43	0°M	0 1101
			24024111				
evening max el	12131 Nov 13 12:54	26° ₹ 56′22	24°34'11	evening rise	12132 Oct 02 14:22	0° M 30′11	
	12131 Nov 17 03:45	0°ප			12132 Oct 18 22:54	0° ∡ ¹	
retrograde	12131 Nov 27 06:56	3° ⋜ 49'01		desc. node	12132 Oct 24 03:42	6° ∡ 12'55	
evening set	12131 Dec 02 14:15	2° る 46'41		evening max el	12132 Oct 24 23:19	7° ∡ ¹01'55	22°53'02
•	12131 Dec 07 23:21	30°R ✓		retrograde	12132 Nov 07 03:16	13° ∡ ³34'26	
min. Earth dist.	12131 Dec 08 00:29	29° х 58′16	0.56278 AU	evening set	12132 Nov 11 01:12	13° ∡ ′01′06	
		28° × 25'41		-		9° × 741'48	0.55004.411
inferior conj	12131 Dec 10 11:18			min. Earth dist.	12132 Nov 18 08:06		0.55004 AU
minimum elong	12131 Dec 10 17:19	28° ∡ 16′10	5°32'16	inferior conj	12132 Nov 19 13:46	8° ∡ 59'26	
morning rise	12131 Dec 18 22:31	24° ∡ ¹22'27		minimum elong	12132 Nov 19 12:09	9° ∡ 01'44	5°50'39
direct	12131 Dec 21 09:02	24° ∡ ¹06′21		morning rise	12132 Nov 28 00:36	5° ∡ 10'30	
morning max el	12131 Dec 31 04:23	28° ∡ ¹48'32	19°35'09	direct	12132 Dec 01 02:42	4° ∡ ¹48'19	
asc. node	12132 Jan 01 01:51	29° × 742'24		morning max el	12132 Dec 12 11:07	10° х 12′02	20°55'32
asc. node		0°る		-		16° × 12° 02	20 33 32
	12132 Jan 01 08:30			asc. node	12132 Dec 17 22:57		
morning set	12132 Jan 17 12:47	26° る 50'22			12132 Dec 26 02:11	0° ろ	
	12132 Jan 19 02:23	0° ≈		morning set	12132 Dec 31 21:00	11° る 32'39	
superior conj	12132 Jan 25 11:57	12° ≈ 49′24	1°05'31	superior conj	12133 Jan 08 06:00	26° る 54'12	1°23'30
minimum elong	12132 Jan 25 14:51	13° ≈ 03'37	1°05'49	minimum elong	12133 Jan 08 08:21	27° る 06'16	1°24'04
max. Earth dist.	12132 Jan 31 19:33	24°≈51'50	1.37757 AU	minimum ciong	12133 Jan 09 18:24	0°≈	1 2404
			1.57757 AU	To all the		* -	1.25666 433
desc. node	12132 Feb 03 05:51	29°≈16'40		max. Earth dist.	12133 Jan 13 04:38	6° ≈ 49'46	1.35666 AU
	12132 Feb 03 15:32	0° ∀		evening rise	12133 Jan 17 03:55	14° ≈ 24'24	
evening rise	12132 Feb 04 12:56	1°) 34′56		desc. node	12133 Jan 20 02:36	19° ≈ 47′02	
	12132 Feb 22 07:15	$0^{\circ}\mathbf{\Upsilon}$			12133 Jan 26 00:56	0°) €	
evening max el	12132 Mar 11 00:18	22° Y '09'01	25°12'21		12133 Feb 16 01:12	$0^{\circ}\Upsilon$	
retrograde	12132 Mar 23 01:47	29° Y ′08'38		evening max el	12133 Feb 21 14:00	5° Υ 58'13	26°19'00
C		26°\dagger44'26		-		13°Υ15'35	20 1900
evening set	12132 Mar 28 20:36			retrograde	12133 Mar 06 10:32		
asc. node	12132 Mar 28 23:14	26° Ƴ 38'47		evening set	12133 Mar 12 16:37	10° Ƴ 44'33	
min. Earth dist.	12132 Apr 02 06:20	21° Y 51'07	0.67889 AU	asc. node	12133 Mar 15 20:38	7° Ƴ 35'14	
inferior conj	12132 Apr 03 12:07	20° Y 14′02	1°40'16	min. Earth dist.	12133 Mar 16 20:11	6° Y ′26′02	0.66803 AU
minimum elong	12132 Apr 03 10:06	20° Y ′20′35	1°39'24	inferior conj	12133 Mar 18 14:04	4° Ƴ 18'04	0°51'43
morning rise	12132 Apr 08 23:57	14° Ƴ 19'31		minimum elong	12133 Mar 18 12:48	4° Υ ′21'57	0°51'15
direct	•	13° Υ 06'14		minimum crong		30°R ₩	0 31 13
	12132 Apr 12 13:38		10000104		12133 Mar 22 11:37		
morning max el	12132 Apr 19 15:13	16° Y ′59′12	19°20'04	morning rise	12133 Mar 24 09:49	28°) 33′48	
	12132 Apr 29 20:23	9° 8		direct	12133 Mar 27 12:38	27°) €38'53	
desc. node	12132 May 01 07:39	2° 8 08'32			12133 Apr 01 19:19	0 ° Υ	
greatest brilliancy	12132 May 02 09:47	3° 8 44'59	-0.7m	morning max el	12133 Apr 03 01:46	1° Y ′09'02	18°32'10
morning set	12132 May 14 03:26	21° 8 35'04		desc. node	12133 Apr 18 04:20	22° Y ′09'01	
8	12132 May 19 14:02	0°II			12133 Apr 23 04:14	0°8	
Danila diat			1 4510C ATT		-		
max. Earth dist.	12132 May 26 22:38	11° Ⅱ 30′01	1.45126 AU	morning set	12133 Apr 23 21:38	1° 8 08'31	
superior conj	12132 May 30 13:25	17° Ⅱ 13'09	-2°13'24	superior conj	12133 May 09 22:03	26° 8 14'58	-2°03'33
minimum elong	12132 May 30 13:37	17° Ⅱ 13'58	2°14'13	minimum elong	12133 May 09 14:56	25° 8 47'08	2°03'50
•	12132 Jun 07 12:04	0°ಅ		max. Earth dist.	12133 May 09 17:32	25° 8 57'18	1.45730 AU
evening rise	12132 Jun 13 21:15	10° © 29'42			12133 May 12 07:37	0°II	
•				avanina rica	-	20° ∏ 54'14	
asc. node	12132 Jun 24 21:15	28°\$26'48		evening rise	12133 May 25 14:22		
	12132 Jun 25 21:39	0 ° Ω			12133 May 31 08:06	0ა ௐ	
evening max el	12132 Jul 02 19:21	8° Ω 56′00	18°16'33	greatest brilliancy	12133 Jun 03 03:33	4° ॐ 25'21	-0.8m
retrograde	12132 Jul 09 04:08	12° Ω 18'49		asc. node	12133 Jun 11 18:15	17° © 12'15	
evening set	12132 Jul 12 03:22	11° Ω 31′00		evening max el	12133 Jun 16 07:01	22° © 35'34	18°46'59
inferior conj	12132 Jul 18 01:46	6° Ω 06'11	2°36'55	retrograde	12133 Jun 22 22:16	26° © 13'37	
minimum elong	12132 Jul 18 04:09	5° Ω 59'24	2°35'40	evening set	12133 Jun 26 05:59	25°9510'15	
•				-			2002112
min. Earth dist.	12132 Jul 20 12:25	3° Ω 19′18	0.64069 AU	inferior conj	12133 Jul 01 19:54	19°529'39	3°03'12
	12132 Jul 23 21:54	30°ષ્		minimum elong	12133 Jul 01 21:23	19° © 25'02	3°02'10
morning rise	12132 Jul 24 03:28	29° 5 348'49		min. Earth dist.	12133 Jul 03 15:47	17° © 13'10	0.65891 AU
desc. node	12132 Jul 28 06:58	27° 5 33'16		morning rise	12133 Jul 07 12:00	13° 5 07'28	
				-			

direct	12133 Jul 13 21:06	10° © 25'27		min. Earth dist.	12134 Jun 17 02:38	1° 9 34'41	0.67298 AU
desc. node	12133 Jul 15 04:15	10° © 31'26			12134 Jun 18 08:10	30°RⅡ	
morning max el	12133 Jul 27 00:21	18°9512'49	26°42'34	morning rise	12134 Jun 21 06:36	26° Ⅱ 49'10	
	12133 Aug 05 22:19	0 \circ Ω		direct	12134 Jun 27 05:43	24° Ⅱ 11'51	
	12133 Aug 25 08:06	0° m)		desc. node	12134 Jul 02 01:25	25° Ⅱ 34'45	
morning set	12133 Aug 31 20:14	11° m 51'57			12134 Jul 07 21:41	0 \circ	
max. Earth dist.	12133 Sep 04 22:42	19° m 50'55	1.34215 AU	morning max el	12134 Jul 09 10:58	1° © 31'07	25°27'36
asc. node	12133 Sep 07 18:54	25° m 35'42			12134 Jul 30 23:06	0 ° Ω	
				morning set	12134 Aug 14 11:00	24° Ω 14'17	
superior conj	12133 Sep 09 14:48	29° m/22'30			12134 Aug 17 14:13	0° ™	
minimum elong	12133 Sep 09 13:53	29° m 17'43	0°17'18	max. Earth dist.	12134 Aug 18 02:30	0° m 57'33	1.36148 AU
	12133 Sep 09 22:00	0° ⊽			10104 4 05 45	1003 51110	0010105
evening rise	12133 Sep 17 00:13	14° £ 57'38		superior conj	12134 Aug 24 05:45	12° m 51'49	
	12133 Sep 24 13:52	0°M	01016100	minimum elong	12134 Aug 24 06:35	12° m 56'01	0°13'35
evening max el	12133 Oct 06 15:28	17°M 15'48	21°16'33	behind sun begin	12134 Aug 24 03:09	12° m 38'53	
desc. node	12133 Oct 11 01:05	20°M50'05		behind sun end	12134 Aug 24 10:01	13° mp 13'11	
retrograde	12133 Oct 18 14:53	23°M12'52		asc. node	12134 Aug 25 15:34	15° m) 41'28	
evening set	12133 Oct 21 05:38	22°M57'00	5011110	evening rise	12134 Sep 01 06:31	29° Mp 12'48	
inferior conj	12133 Oct 30 05:49	19°M02'26			12134 Sep 01 15:47	0° ⊽	10056150
minimum elong	12133 Oct 29 20:52	19°M 15'00	5°08'46	evening max el	12134 Sep 18 20:34	28° Ω 08'45	19°56'59
min. Earth dist.	12133 Oct 30 14:32	18°M50'11	0.54557 AU		12134 Sep 20 22:02	0°M,	
morning rise	12133 Nov 07 12:48	15°M12'17		desc. node	12134 Sep 27 22:28	3°M 13'42	
direct	12133 Nov 11 10:47	14°M39'19	22025125	retrograde	12134 Sep 29 05:15	3°M18'17	
morning max el	12133 Nov 24 04:43	20°M45'40	22°35'25	evening set	12134 Oct 01 03:34	3°M08'20	
i	12133 Dec 01 22:20	0° ⊀¹			12134 Oct 08 15:17	30°R₽	2040110
asc. node	12133 Dec 04 19:56	4° 🗷 26'02		inferior conj	12134 Oct 10 01:51	29° ₽ 08'02	
morning set	12133 Dec 16 07:58	26° ₹ 19'21		minimum elong	12134 Oct 09 16:36	29° £ 22'05	
	12133 Dec 18 01:24	0°₹		min. Earth dist.	12134 Oct 11 23:16	27° £ 59'06	0.55047 AU
	12122 D 22 00 07	11071050	1024124	morning rise	12134 Oct 18 04:18	24° £ 55'18	
superior conj	12133 Dec 23 08:07	11° ろ 19'50		direct	12134 Oct 22 22:26	24° Ω 05'56	
minimum elong	12133 Dec 23 09:28	11° る 26'59			12134 Nov 04 17:07	0°M	24022142
max. Earth dist.	12133 Dec 26 20:27	18°る42'35 27°る49'31	1.33892 AU	morning max el	12134 Nov 05 15:39	0°M51'36	24°23'42
evening rise	12133 Dec 31 09:16			asc. node	12134 Nov 21 16:50	22°M59'53 0°⊀	
desc. node	12134 Jan 01 12:13	0°≈ 10°≈≈06'07		marning sat	12134 Nov 25 10:28		
desc. node	12134 Jan 06 23:26 12134 Jan 19 06:59	10° ≈ 06'07 0° ∀		morning set	12134 Nov 30 19:49	11° ∡ *05'19	
evening max el	12134 Feb 04 03:33	0 X 19° ¥ 35'37	27°07'37	superior conj	12134 Dec 07 15:35	25° ∡ ¹58'36	1°38'44
retrograde	12134 Feb 04 03:33 12134 Feb 17 13:18	19 ★ 3337	27 0737	minimum elong	12134 Dec 07 15:47	25° x 58' 58' 42	
	12134 Feb 17 13:18 12134 Feb 24 05:00	24° X 27'39		minimum ciong	12134 Dec 07 13:47 12134 Dec 09 12:00	23 メ ・3942 0° る	1 39 34
evening set min. Earth dist.	12134 Feb 24 03:00 12134 Feb 28 03:20		0.65329 AU	max. Earth dist.	12134 Dec 09 12:00 12134 Dec 09 19:57		1.32548 AU
inferior conj	12134 Mar 02 09:14	18° H 11'21		evening rise	12134 Dec 15 01:38	11°る42'10	1.32346 AU
minimum elong	12134 Mar 02 09:14 12134 Mar 02 09:26	18°\(\)1121	0°06'48	desc. node	12134 Dec 24 20:19	0°≈08'24	
transit middle	12134 Mar 02 09:26	18° H 10'48	0°06'48	desc. node	12134 Dec 24 20:19 12134 Dec 24 18:23	0 ≈00 24 0°≈	
transit begin	12134 Mar 02 06:43	18° H 18'29	0 00 48		12134 Dec 24 18:23 12135 Jan 14 20:42	0 ∞ 0° ∺	
transit end	12134 Mar 02 12:09	18° X 1829		evening max el	12135 Jan 17 15:34	2°) 49'38	27°31'00
asc. node	12134 Mar 02 18:00	17°) 46'45		retrograde	12135 Jan 31 09:28	10° ¥ 13'35	27 31 09
morning rise	12134 Mar 08 15:23	12° H 39'43		evening set	12135 Feb 07 07:19	7° ¥ 46'14	
direct	12134 Mar 11 08:42	12° H 00'07		min. Earth dist.	12135 Feb 11 01:53		0.63523 AU
morning max el	12134 Mar 17 17:19	15°) 19'46	18°01'09	inferior conj	12135 Feb 13 18:53	1°) 47'00	
morning max or	12134 Mar 28 09:36	0°Υ	10 01 07	minimum elong	12135 Feb 13 21:20	1°) (40'47	
morning set	12134 Apr 04 20:11	12° Υ 06'30		minimum clong	12135 Feb 15 14:15	30°R≈	1 172/
desc. node	12134 Apr 05 00:58	12° Y ′26′07		asc. node	12135 Feb 17 15:22	28° ≈ 13'47	
dese. Hode	12134 Apr 15 21:30	0°8		morning rise	12135 Feb 20 13:38	26°≈30'35	
	1213 . 11p1 10 21.50	• •		direct	12135 Feb 22 23:03	26°≈02'42	
superior conj	12134 Apr 19 08:18	5° 8 28'20	-1°35'06	morning max el	12135 Mar 01 11:01	29° ≈ 23'02	17°47'20
minimum elong	12134 Apr 18 23:05	4° 8 51'57		morning max or	12135 Mar 02 01:34	0° ∀	17 47 20
max. Earth dist.	12134 Apr 22 13:52		1.45579 AU	morning set	12135 Mar 17 21:30	24° ∺ 21′26	
evening rise	12134 May 05 10:42	0° Ц 32'00	1.13377110	morning sec	12135 Mar 21 04:34	0°Υ	
	12134 May 05 02:24	0°Ⅱ 0°Ⅱ		desc. node	12135 Mar 22 21:34	2° Υ 54'19	
greatest brilliancy	12134 May 18 20:49	20° I 57'02	-0.7m	2000. 11040	-2100 Mai 22 21.5T	- 1341)	
51 carest offiliancy	12134 May 25 06:09	20 H 37 02 0°ණ	V. / III	superior conj	12135 Mar 30 12:10	15° Y '34'26	-0°55'52
asc. node	12134 May 29 15:20	5°920'32		minimum elong	12135 Mar 30 06:22	15° Υ 10'43	
evening max el	12134 May 30 14:09	6°920'06	19°34'00	max. Earth dist.	12135 Apr 05 08:28	24° Υ 59'34	1.44704 AU
retrograde	12134 Jun 06 20:01	10°925'45	27 5100	max. Durin dist.	12135 Apr 03 08:28 12135 Apr 08 12:34	0° 8	1.11/07 AU
evening set	12134 Jun 10 12:41	9°906'11		evening rise	12135 Apr 08 12:54 12135 Apr 14 21:59	9° 8 54'51	
inferior conj	12134 Jun 15 21:27	3°9511'24	3°14'07	5 (5 min 5	12135 Apr 14 21:39 12135 Apr 28 07:14	9 О 3431	
minimum elong	12134 Jun 15 21:51	3°9510'06		evening max el	12135 Apr 28 07:14 12135 May 13 15:34	20° Ⅱ 05'48	20°35'46
mmmum ciong	121.Jun 1.J 21.J1	5 -10 00	5 15 15	Stomme max of	12133 141uy 13 13.34	20 405 70	20 33 40

1	12125 M 16 12 20	220H20107			12126 M 02 00 44	00Ж5211.0	
asc. node	12135 May 16 12:30	22° I I39'06		asc. node	12136 May 02 09:44	8° Ⅱ 53'10	
retrograde	12135 May 21 18:56	24° Ⅱ 48'55		retrograde	12136 May 04 17:02	9° Ⅱ 18'17	
evening set	12135 May 25 21:16	23° I I13'11		evening set	12136 May 09 05:57	7° Ⅱ 26'52	
inferior conj	12135 May 31 03:45	17° Ⅱ 05'51		inferior conj	12136 May 14 12:35	1° Ⅱ 09'06	
minimum elong	12135 May 31 03:07	17° Ⅱ 08'05	3°11'29	minimum elong	12136 May 14 11:06	1° Ⅱ 14'16	2°58'34
min. Earth dist.	12135 May 31 18:58	16° Ⅱ 13'27	0.68250 AU	min. Earth dist.	12136 May 14 14:39	1° Ⅱ 01'53	0.68737 AU
morning rise	12135 Jun 05 08:41	10° Ⅱ 46'48			12136 May 15 08:27	30° ₹8	
direct	12135 Jun 10 19:49	8° Ⅱ 21'52		morning rise	12136 May 19 16:03	24° 8 55'14	
desc. node	12135 Jun 18 22:30	12° Ⅱ 14'27		direct	12136 May 24 14:14	22° 8 48'08	
morning max el	12135 Jun 21 20:58	14° Ⅱ 58'40	24°00'26	morning max el	12136 Jun 03 08:10	28° 8 33'09	22°30'48
	12135 Jul 04 03:51	0		desc. node	12136 Jun 04 19:31	0° Ⅱ 05'27	
	12135 Jul 23 21:07	0 \circ Ω			12136 Jun 04 17:30	Π \circ 0	
morning set	12135 Jul 27 06:15	5° Ω 42'25			12136 Jun 26 20:04	0 \circ	
max. Earth dist.	12135 Jul 31 00:03	12° Ω 14'17	1.38391 AU	morning set	12136 Jul 07 01:16	16° © 04'42	
				max. Earth dist.	12136 Jul 11 22:24	24° © 11'02	1.40709 AU
superior conj	12135 Aug 07 08:18	25° Ω 44'17	-0°47'11		12136 Jul 15 07:50	$0^{\circ}\Omega$	
minimum elong	12135 Aug 07 11:34	25° Ω 59'48	0°47'10				
	12135 Aug 09 13:42	0° m)		superior conj	12136 Jul 19 18:20	7° Ω 50'32	-1°21'05
asc. node	12135 Aug 12 12:14	5° m 43'31		minimum elong	12136 Jul 20 00:06	8° Ω 16′30	1°21'00
evening rise	12135 Aug 16 06:37	13° M 08'22		asc. node	12136 Jul 29 08:58	25° Ω 38′05	
C	12135 Aug 25 08:31	0∘ ⊽		evening rise	12136 Jul 29 21:15	26° Ω 35'55	
evening max el	12135 Sep 01 15:26	9° £ 50'03	18°58'45	Č	12136 Jul 31 16:41	0° m	
retrograde	12135 Sep 10 09:28	14° ♀ 12'37		evening max el	12136 Aug 14 20:45	22° m/ 14'03	18°21'46
evening set	12135 Sep 12 06:16	14° ≏ 01'28		retrograde	12136 Aug 22 08:39	26° m) 00'57	
desc. node	12135 Sep 14 19:53	13° £ 12'38		evening set	12136 Aug 24 11:14	25° m 43'46	
inferior conj	12135 Sep 20 14:22	9° £ 45'31	-1°48'51	desc. node	12136 Aug 31 17:20	21° m) 21'47	
minimum elong	12135 Sep 20 09:42		1°46'57	inferior conj	12136 Sep 01 00:27	21° m) 07'16	-0°05'30
min. Earth dist.	12135 Sep 23 12:38	7° ഫ 43'21	0.56397 AU	minimum elong	12136 Sep 01 00:15	21° mg 07' 10	0°05'38
morning rise	12135 Sep 28 09:59	4° £ 56'52	0.30377 110	transit middle	12136 Sep 01 00:15	21° mg 07'42	0°05'38
direct	12135 Oct 03 23:18	3° ₽ 43'54		transit begin	12136 Aug 31 20:57	21° mg 14'25	0 03 30
morning max el	12135 Oct 03 23:18 12135 Oct 18 03:59	11° ⊆ 01'36	26°03'06	transit end	12136 Sep 01 03:33	21° my 00'57	
morning max cr	12135 Nov 01 17:21	0°ML	20 03 00	min. Earth dist.	12136 Sep 04 08:14	18° m) 25'25	0.58365 AU
asc. node	12135 Nov 01 17:21 12135 Nov 08 13:41	12°ML06'17		morning rise	12136 Sep 04 08:14 12136 Sep 08 09:45	15° m/42'28	0.36303 AO
morning set	12135 Nov 08 13:41 12135 Nov 15 06:52	25°M45'53		direct		13 my 42 28 14° my 01'27	
morning set		25 11645 55 0° 1 7			12136 Sep 14 14:33	~	27°16'42
	12135 Nov 17 05:48	0 x .		morning max el	12136 Sep 28 22:35 12136 Oct 06 05:26	21°Mp41'54 0°Ω	27 10 42
aumorior coni	12125 Nov. 22, 02.11	100.7/42/40	1°36'55			0°M	
superior conj minimum elong	12135 Nov 22 02:11	10° х 43'49		4-	12136 Oct 24 15:02		
C	12135 Nov 22 01:19	10° ₹ 39'02 12° ₹ 53'29	1°37'39	asc. node	12136 Oct 25 10:27	1°M35'54	
max. Earth dist.	12135 Nov 23 01:34		1.31684 AU	morning set	12136 Oct 29 15:22	10°M15'24	
evening rise	12135 Nov 29 02:07	25° ∡ 55'17			12126N 05 12 52	250M 20121	1020110
	12135 Dec 01 01:32	0°る		superior conj	12136 Nov 05 13:53	25°M28'31	1°29'18
desc. node	12135 Dec 11 17:18	19° る 46'48		minimum elong	12136 Nov 05 12:11	25°M19'01	1°29'48
	12135 Dec 18 06:08	0° ≈	27022140	max. Earth dist.	12136 Nov 05 10:15	25°M08'13	1.31320 AU
evening max el	12135 Dec 31 00:06	15°≈28'40	27°23'40		12136 Nov 07 14:35	0° √ ¹	
retrograde	12136 Jan 13 22:01	22°≈46'04		evening rise	12136 Nov 12 08:13	10° ₹ 21'16	
evening set	12136 Jan 20 20:39	20°≈32'45			12136 Nov 22 07:52	0°る	
min. Earth dist.	12136 Jan 24 14:33	17°≈41'51	0.61475 AU	desc. node	12136 Nov 27 14:23	8°る51'01	• • • • • • • •
inferior conj	12136 Jan 27 15:55	14°≈57'25		evening max el	12136 Dec 12 02:31	27° る 20'42	26°41'48
minimum elong	12136 Jan 27 21:12	14° ≈ 45'31	2°30'02		12136 Dec 15 04:27	0° ≈	
morning rise	12136 Feb 04 00:35	9° ≈ 59'01		retrograde	12136 Dec 26 01:18	4° ≈ 28'39	
asc. node	12136 Feb 04 12:41	9° ≈ 50'53		evening set	12137 Jan 01 17:07	2° ≈ 38′08	
direct	12136 Feb 06 04:25	9° ≈ 39'06		min. Earth dist.	12137 Jan 05 16:36	0° ≈ 00'52	0.59331 AU
morning max el	12136 Feb 13 03:37	13° ≈ 10′07	17°51'22		12137 Jan 05 17:04	30°Ŗる	
	12136 Feb 24 13:53	0° ∀		inferior conj	12137 Jan 08 20:42	27° る 32'12	
morning set	12136 Feb 28 19:35	7° ∺ 35'04		minimum elong	12137 Jan 09 04:33	27° る 16'48	3°49'05
desc. node	12136 Mar 08 18:10	23°) 29'47		morning rise	12137 Jan 16 18:51	22° る 54'31	
				direct	12137 Jan 18 20:42	22° る 38'53	
superior conj	12136 Mar 10 16:23	26° ¥ 49'19		asc. node	12137 Jan 21 09:59	23° る 03'38	
minimum elong	12136 Mar 10 15:02	26°) 43′31	0°14'33	morning max el	12137 Jan 26 15:31	26° る 30'06	18°14'42
behind sun begin	12136 Mar 10 11:29	26° ∺ 28′18			12137 Jan 29 16:47	0° ≈	
behind sun end	12136 Mar 10 18:34	26°) 58'43		morning set	12137 Feb 11 08:25	21° ≈ 28′53	
	12136 Mar 12 13:08	0° Y			12137 Feb 15 20:48	0° ∀	
max. Earth dist.	12136 Mar 17 23:18	9° Ƴ 00'54	1.43209 AU				
evening rise	12136 Mar 24 16:03	19° Ƴ 42'53		superior conj	12137 Feb 20 19:36	9° ∺ 07'48	0°21'53
	12136 Mar 31 08:40	0° 8		minimum elong	12137 Feb 20 21:14	9° ∺ 15′08	0°22'00
	12136 Apr 21 22:48	Π °0		desc. node	12137 Feb 23 14:45	14° ₩ 08'17	
evening max el	12136 Apr 25 11:34	3° Ⅱ 52'38	21°48'55	max. Earth dist.	12137 Feb 28 09:52	22°) €26'48	1.41249 AU

	10107.14 04 00 51	0° Ƴ			12120 E 1 14 12 00	1101/52126	
	12137 Mar 04 22:51			evening rise	12138 Feb 14 13:00	11°) €53'36	
evening rise	12137 Mar 05 03:53	0° Υ ′20′30			12138 Feb 25 17:26	0° Υ	
	12137 Mar 24 19:51	0°8			12138 Mar 20 05:22	0°8	
evening max el	12137 Apr 08 03:36	17° 8 41'34	23°08'39	evening max el	12138 Mar 21 17:27	1° 8 32'20	24°28'46
retrograde	12137 Apr 18 12:51	23° 8 49'04		retrograde	12138 Apr 02 05:09	8° 8 15'38	
asc. node	12137 Apr 19 07:04	23° 8 46'22		asc. node	12138 Apr 06 04:27	7° 8 04'45	
evening set	12137 Apr 23 13:11	21° 8 43'03		evening set	12138 Apr 07 17:22	5° 8 56'59	
inferior conj	12137 Apr 28 21:59	15° 8 17'29	2°36'31	min. Earth dist.	12138 Apr 12 07:10	0° 8 43'40	0.68331 AU
minimum elong	12137 Apr 28 19:57	15° 8 24'28	2°35'30		12138 Apr 12 20:13	30° ŖƳ	
min. Earth dist.	12137 Apr 28 11:26	15° 8 53'55	0.68757 AU	inferior conj	12138 Apr 13 06:01	29° Y '27'08	2°03'41
morning rise	12137 May 04 02:38	9° 8 10'19		minimum elong	12138 Apr 13 03:51	29° Y ′34'22	2°02'41
direct	12137 May 08 11:46	7° 8 24'00		morning rise	12138 Apr 18 14:30	23° Y '27'50	
morning max el	12137 May 17 00:02	12° 8 17'46	21°07'06	direct	12138 Apr 22 11:01	22° Y '02'54	
desc. node	12137 May 22 16:25	18° 8 48'26	21 0, 00	morning max el	12138 Apr 29 23:09	26° Y 14'19	19°54'58
dese. Hode	12137 May 22 10:23	0°Ⅱ		morning max er	12138 May 03 08:57	0°8	17 5450
morning set	12137 Jun 16 18:57	25° Ⅱ 20'05		desc. node	12138 May 09 13:12	8° 8 08'55	
morning set	12137 Jun 10 18.57	0°95		desc. Hode		0°II	
n d r			1 40015 477		12138 May 24 06:50		
max. Earth dist.	12137 Jun 24 03:09	7° © 03'56	1.42815 AU	morning set	12138 May 26 20:14	3° Ⅱ 55'18	
				max. Earth dist.	12138 Jun 06 14:49	20° Ⅱ 45'05	1.44458 AU
superior conj	12137 Jul 01 07:24	19° © 01'05				_	
minimum elong	12137 Jul 01 14:14	19° 5 30'12	1°50'55	superior conj	12138 Jun 11 20:24	29° Ⅱ 09'14	
	12137 Jul 07 15:22	0 \circ Ω		minimum elong	12138 Jun 12 00:26	29° Ⅱ 25'35	2°10'34
evening rise	12137 Jul 12 22:16	9° Ω 25'36			12138 Jun 12 08:54	0 \circ \odot	
asc. node	12137 Jul 16 05:47	15° Ω 21'16		evening rise	12138 Jun 25 04:39	21° © 24'35	
	12137 Jul 25 02:30	0° m y			12138 Jun 30 05:49	$0^{\circ}\Omega$	
evening max el	12137 Jul 29 08:23	5° mp 11'08	18°04'51	asc. node	12138 Jul 03 02:40	4° Ω 47'14	
retrograde	12137 Aug 05 01:30	8° m 37'25		evening max el	12138 Jul 12 22:25	18° Ω 30′27	18°06'58
evening set	12137 Aug 07 11:52	8° Mp 10'27		retrograde	12138 Jul 19 07:33	21°Ω50'50	
inferior conj	12137 Aug 14 07:14	3° m) 13'25	1°15'55	evening set	12138 Jul 22 01:59	21° Ω 11'17	
minimum elong	12137 Aug 14 09:22	3° m) 08'23	1°14'43	inferior conj	12138 Jul 28 06:54	15°Ω55'49	2°13'31
min. Earth dist.	12137 Aug 17 03:22	0° mg 12'49	0.60621 AU	minimum elong	12138 Jul 28 09:31	15°Ω48'46	2°12'09
mm. Earth dist.	12137 Aug 17 17:43	30°RΩ	0.00021710	min. Earth dist.	12138 Jul 31 01:10	12°Ω58'26	0.62867 AU
desc. node	12137 Aug 17 17:43	29° Ω 14'26		morning rise	12138 Aug 03 15:06	9° Ω 44'18	0.02807 AU
	•			•	=		
morning rise	12137 Aug 21 04:00	27° Ω 20'09		desc. node	12138 Aug 05 12:10	8° Ω 31'57	
direct	12137 Aug 27 17:58	25° Ω 12'11		direct	12138 Aug 10 07:33	7° Ω 15'26	
	12137 Sep 07 13:40	0° m		morning max el	12138 Aug 24 08:24	15° Ω 17'41	27°52'36
morning max el	12137 Sep 11 00:40	3°m,07'33	27°54'01		12138 Sep 05 08:38	0° m)	
	12137 Sep 30 19:17	0∘ ⊽			12138 Sep 23 10:52	0∘ ⊽	
asc. node	12137 Oct 12 07:10	21° ≏ 22'12		morning set	12138 Sep 27 17:07	8° ≏ 21'56	
morning set	12137 Oct 13 19:31	24° ₽ 29'27		asc. node	12138 Sep 29 03:51	11° ≏ 19'12	
	12137 Oct 16 09:59	0° M		max. Earth dist.	12138 Oct 02 21:53	19° ≙ 13'05	1.32123 AU
max. Earth dist.	12137 Oct 19 18:22	7° M 18′28	1.31466 AU				
				superior conj	12138 Oct 05 09:16	24° ≗ 34'37	0°57'25
superior conj	12137 Oct 21 00:54	10° M ₀07'26	1°16'05	minimum elong	12138 Oct 05 07:05	24° ≏ 22'40	0°57'19
minimum elong	12137 Oct 20 22:42	9° ጤ 55'19	1°16'16	-	12138 Oct 07 20:39	0° M	
evening rise	12137 Oct 27 17:53	24°M54'41		evening rise	12138 Oct 12 05:06	9°M29'31	
	12137 Oct 30 03:28	0° ⊼ ¹		01111118	12138 Oct 22 15:19	0° ⊼ 7	
desc. node	12137 Nov 14 11:34	27° х 07′52		desc. node	12138 Nov 01 08:51	14° √ 19'04	
desc. node	12137 Nov 16 13:37	0°る		evening max el	12138 Nov 05 07:45	18° ∡ 35'59	23°51'30
evening max el	12137 Nov 10 13:37 12137 Nov 23 20:40	8°る20'06	25°27'36	retrograde	12138 Nov 18 21:07	25° ×7'22'00	23 31 30
•	12137 Nov 23 20:40 12137 Dec 07 17:20	8 82000 15° 8 18'29	23 27 30	evening set		23 x 22 00 24° x 32'39	
retrograde				Č	12138 Nov 23 15:13		0.55652 ATT
evening set	12137 Dec 13 16:14	13° る 57'26	0.57201.411	min. Earth dist.	12138 Nov 29 18:20	21° 🗷 33'24	0.55652 AU
min. Earth dist.	12137 Dec 18 08:52	11°る18'44		inferior conj	12138 Dec 01 18:36	20° ₹ 21'04	
inferior conj	12137 Dec 21 05:57	9° ප 21'46		minimum elong	12138 Dec 01 21:54	20° ∡ 16′07	5°46'39
minimum elong	12137 Dec 21 14:02	9° පි 08'02	5°01'09	morning rise	12138 Dec 10 06:30	16° ∡ °25'41	
morning rise	12137 Dec 29 14:13	5° そ 06'33		direct	12138 Dec 12 22:50	16° ∡ °07'37	
direct	12137 Dec 31 19:39	4° る 51'38		morning max el	12138 Dec 23 09:42	21° ∡ ¹06′21	20°06'41
asc. node	12138 Jan 08 07:12	7° る 52'58		asc. node	12138 Dec 26 04:19	24° ₹ 05'43	
morning max el	12138 Jan 09 18:45	9° ට 12'11	18°59'15		12138 Dec 30 11:35	ರ∘ರ	
	12138 Jan 23 07:43	0° ≈		morning set	12139 Jan 10 12:58	20° る 25'43	
morning set	12138 Jan 26 07:22	5° ≈ 49'07		-	12139 Jan 15 05:03	0° ≈	
5 ·							
superior conj	12138 Feb 03 17:30	22° ≈ 17'49	0°51'45	superior conj	12139 Jan 18 05:23	6° ≈ 06'24	1°14'02
minimum elong	12138 Feb 03 20:19	22° ≈ 31'16	0°51'56	minimum elong	12139 Jan 18 08:08	6°≈20'09	1°14'27
Ciong	12138 Feb 07 20:08	0° ₩	3 2 2 2 0	max. Earth dist.	12139 Jan 23 23:46	17°≈20'50	1.36834 AU
desc. node	12138 Feb	4°) 46'30		evening rise	12139 Jan 27 18:02	17 ≈2030 24°≈17'47	1.50057 AU
acsc. Hour				CACHILIS LINE			
max. Earth dist.	12138 Feb 10 17:23		1.39043 AU	desc. node	12139 Jan 28 08:04	25°≈20'58	

	12139 Jan 30 23:18	0° \			12140 Jan 06 20:28	0°æ	
	12139 Feb 19 09:02	0° Υ		evening rise	12140 Jan 10 15:33	7°≈23'34	
evening max el	12139 Mar 04 06:48	15° Y ′23'13	25°42'23	desc. node	12140 Jan 15 04:49	15°≈47'00	
retrograde	12139 Mar 16 17:02	22° Y '32'13	20 .2 25	desc. node	12140 Jan 23 15:21	0° ∀	
evening set	12139 Mar 22 16:53	20° Y ′04'13		evening max el	12140 Feb 14 20:22		26°42'19
asc. node	12139 Mar 24 01:50	18° Ƴ 47'46		Ü	12140 Feb 15 18:17	0° Υ	
min. Earth dist.	12139 Mar 26 23:44	15° Y ′26′05	0.67474 AU	retrograde	12140 Feb 27 23:33	6° Ƴ 30'40	
inferior conj	12139 Mar 28 10:47	13° Ƴ 34'42	1°20'56	evening set	12140 Mar 05 09:55	3° Y 58'05	
minimum elong	12139 Mar 28 09:00	13° Y ′40'21	1°20'11	-	12140 Mar 09 08:57	30° ₹	
morning rise	12139 Apr 03 01:41	7° Ƴ 44'35		min. Earth dist.	12140 Mar 09 11:02	29°) 53′59	0.66216 AU
direct	12139 Apr 06 10:33	6° Ƴ 39'36		asc. node	12140 Mar 09 23:12	29°) 18′25	
morning max el	12139 Apr 13 05:57	10° Y 21'18	18°57'44	inferior conj	12140 Mar 11 10:08	27°) 34′47	0°28'00
desc. node	12139 Apr 26 09:54	27° Y ′57'06		minimum elong	12140 Mar 11 09:23	27° ¥ 36′59	0°27'50
greatest brilliancy	12139 Apr 26 16:45	28° Y 23'02	-0.8m	morning rise	12140 Mar 17 10:01	21° ¥ 55'35	
	12139 Apr 27 18:17	0° 8		direct	12140 Mar 20 08:30	21°) €07'46	
morning set	12139 May 06 02:14	12° 8 50'45		morning max el	12140 Mar 26 18:56	24°) 32′24	18°16'52
	12139 May 17 02:56	Π °0			12140 Mar 31 09:39	0° Y	
max. Earth dist.	12139 May 20 07:26	4° Ⅱ 59'04	1.45468 AU	desc. node	12140 Apr 12 06:32	18° Ƴ 04'59	
				morning set	12140 Apr 15 07:56	22° Y ′58′24	
superior conj	12139 May 22 12:14	8° Ⅲ 26′19			12140 Apr 19 17:38	0°B	
minimum elong	12139 May 22 09:06	8° Ⅱ 14'01	2°12'27				
	12139 Jun 05 00:26	0 \circ		superior conj	12140 Apr 30 19:15	17° 8 26'56	
evening rise	12139 Jun 06 11:54	2° © 23'52		minimum elong	12140 Apr 30 10:23	16° 8 52'13	
asc. node	12139 Jun 19 23:39	23°5549'49		max. Earth dist.	12140 May 02 02:38	19° 8 29'36	1.45755 AU
	12139 Jun 24 14:04	0 ° Ω			12140 May 08 20:17	0°II	
evening max el	12139 Jun 26 11:40	2° Ω 04'24	18°27'19	evening rise	12140 May 16 19:08	12° Ⅱ 24'39	0.0
retrograde	12139 Jul 02 22:19	5° Ω 32'30		greatest brilliancy	12140 May 27 14:55	29° Ⅱ 13'25	-0.8m
evening set	12139 Jul 06 01:01	4° Ω 38′20		1	12140 May 28 03:10	0°5	
	12139 Jul 11 01:16	30°R≌	2050106	asc. node	12140 Jun 05 20:41	12°520'36	10005107
inferior conj	12139 Jul 11 19:22	29°506'33	2°50'06	evening max el	12140 Jun 08 21:35	15°5546'15	19°05'06
minimum elong min. Earth dist.	12139 Jul 11 21:24 12139 Jul 13 23:49	29°©00'28 26°©30'53	2°48'57 0.64886 AU	retrograde	12140 Jun 15 18:15	19° © 34'44 18° © 24'43	
morning rise	12139 Jul 13 23.49 12139 Jul 17 16:39	20 930 33 22°946'03	0.04880 AU	evening set inferior conj	12140 Jun 19 05:38 12140 Jun 24 17:00	18 32443 12°538'09	3°09'29
desc. node	12139 Jul 17 10.39 12139 Jul 23 09:29	22 \$340 03 20°\$08'08		minimum elong	12140 Jun 24 17:00 12140 Jun 24 18:01	12 \$38 09 12°\$34'51	3°08'33
direct	12139 Jul 23 09:29 12139 Jul 24 05:44	20°905'37		min. Earth dist.	12140 Jun 26 06:40	12 \$3431 10°\$37'22	0.66542 AU
morning max el	12139 Aug 06 18:59	28°903'18	27°16'17	morning rise	12140 Jun 30 05:48	6°9515'20	0.00342 AC
morning max ci	12139 Aug 08 15:30	0°Ω	27 1017	direct	12140 Jul 06 11:05	3°933'53	
	12139 Aug 30 03:00	0° m/y		desc. node	12140 Jul 09 06:42	4°902'16	
morning set	12139 Sep 11 05:32	21° Mp 46'33		morning max el	12140 Jul 19 05:49	11°9511'48	26°12'45
morning sec	12139 Sep 15 08:22	0∘ ⊽		morning mair vi	12140 Aug 03 05:17	0° Ω	20 12 .5
max. Earth dist.	12139 Sep 15 17:07	0° ჲ 44'49	1.33301 AU		12140 Aug 21 17:28	0° m)	
asc. node	12139 Sep 16 00:30	1° ≏ 22'44		morning set	12140 Aug 24 05:23	4° m) 34'37	
	1			max. Earth dist.	12140 Aug 28 01:56	11° m)54'49	1.34980 AU
superior conj	12139 Sep 19 12:56	8° ≏ 44'46	0°33'32	asc. node	12140 Sep 01 21:08	21° m/28'50	
minimum elong	12139 Sep 19 11:20	8° 亞 36'20	0°33'16		•		
evening rise	12139 Sep 26 16:01	24° ₽ 01'03		superior conj	12140 Sep 02 09:24	22° m 31'25	0°04'55
	12139 Sep 29 12:42	0° M		minimum elong	12140 Sep 02 09:08	22° m 30'04	0°04'40
evening max el	12139 Oct 17 19:17	28°M39'51	22°10'29	behind sun begin	12140 Sep 02 03:22	22° m 00'37	
desc. node	12139 Oct 19 06:11	0° ∡ °00'43		behind sun end	12140 Sep 02 14:53	22° m 59'34	
	12139 Oct 19 05:51	0° ∡ ¹			12140 Sep 06 00:04	0∘ 亚	
retrograde	12139 Oct 30 13:21	4° ∡ ¹59'59		evening rise	12140 Sep 10 00:38	8° ≏ 23'56	
evening set	12139 Nov 02 20:31	4° ∡ ³35'52			12140 Sep 21 13:25	0° M	
min. Earth dist.	12139 Nov 11 01:13	0° ≯ 758'00	0.54696 AU	evening max el	12140 Sep 28 16:41	9° M 09'01	20°40'23
inferior conj	12139 Nov 11 15:08	0° ∡ ³38'25		desc. node	12140 Oct 05 03:35	13°M44'42	
minimum elong	12139 Nov 11 09:50	0° ∡ ¹45'52	5°40'29	retrograde	12140 Oct 10 00:23	14°M46'13	
	12139 Nov 12 18:36	30°RM		evening set	12140 Oct 12 05:53	14°MJ34'06	
morning rise	12139 Nov 20 00:29	26°M51'19		inferior conj	12140 Oct 21 07:12	10°M39'06	
direct	12139 Nov 23 10:29	26°M25'18		minimum elong	12140 Oct 20 21:11	10°M53'29	4°34'15
	12139 Dec 02 22:19	0° ₹ ¹	2102600	min. Earth dist.	12140 Oct 22 08:40	10°M02'30	0.54648 AU
morning max el	12139 Dec 05 10:34	2° × ⁷ 07'47	21~36'09	morning rise	12140 Oct 29 12:18	6°M41'28	
asc. node	12139 Dec 13 01:21	11° ∡ ′25′00		direct	12140 Nov 02 19:02	6°M02'06	22021114
marning set	12139 Dec 23 10:31	0°る 5° る 10'21		morning max el	12140 Nov 16 00:19	12°M26'30	23°21'14
morning set	12139 Dec 25 22:35	5° る 10'21		asc. node	12140 Nov 28 22:18	29° ™ 35'34 0° ✓	
superior conj	12140 Jan 02 03:14	20° る 21'19	1°28'57	morning set	12140 Nov 29 04:02 12140 Dec 09 10:09	0° x ' 19° x '57'25	
minimum elong	12140 Jan 02 05:12	20° ろ 31'31		morning set	12140 Dec 09 10:09 12140 Dec 14 01:44	19 x・3/23	
max. Earth dist.	12140 Jan 02 03.12 12140 Jan 06 11:02		1.34857 AU		12170 DCC 14 01.44	Ü	
man. Darm Wist.	12170 Juli 00 11.02	27 01232	1.5705 / AU				

superior conj	12140 Dec 16 07:58	4° る 53'37		superior conj	12141 Nov 30 17:00	19° ∡ ³35′21	1°38'41
minimum elong	12140 Dec 16 08:49	4° ප 58'15	1°37'49	minimum elong	12141 Nov 30 16:44	19° ∡ ³33'52	1°39'29
max. Earth dist.	12140 Dec 19 06:07	11° る 07'50	1.33267 AU	max. Earth dist.	12141 Dec 02 08:44	23° ҂ 13′24	1.32128 AU
evening rise	12140 Dec 24 02:02	21° る 01'56			12141 Dec 05 12:07	0°る	
	12140 Dec 28 18:03	0° ≈		evening rise	12141 Dec 07 22:12	5° そ 03'55	
desc. node	12141 Jan 01 01:41	5° ≈ 59'50		desc. node	12141 Dec 18 22:38	25° る 52'50	
	12141 Jan 16 13:03	0° ∀			12141 Dec 21 09:38	0° ≈	
evening max el	12141 Jan 27 09:39	12°) 37′34	27°21'06	evening max el	12142 Jan 09 20:43	25° ≈ 38'38	27°32'01
retrograde	12141 Feb 09 23:41	20°) €02'43			12142 Jan 15 05:29	0° ∀	
evening set	12141 Feb 16 18:19	17°) 31'41		retrograde	12142 Jan 23 16:29	2° ₩ 59'17	
min. Earth dist.	12141 Feb 20 14:56	13° ¥ 59'41	0.64599 AU	evening set	12142 Jan 30 15:30	0°) 37′06	
inferior conj	12141 Feb 23 01:37	11°) 21′35	-0°35'10	•	12142 Jan 31 12:18	30° ₹ ≈	
minimum elong	12141 Feb 23 02:41	11° ∺ 18'43	0°34'22	min. Earth dist.	12142 Feb 03 09:25	27°≈33'20	0.62681 AU
asc. node	12141 Feb 24 20:34	9°) 28'44		inferior conj	12142 Feb 06 06:20	24° ≈ 47'28	-1°47'42
morning rise	12141 Mar 01 12:52	5°) 55'44		minimum elong	12142 Feb 06 09:57	24°≈38'45	
direct	12141 Mar 04 02:34	5°) €21'34		asc. node	12142 Feb 11 17:54	20°≈20'07	
morning max el	12141 Mar 10 11:41	8°) (40′26	17°53'02	morning rise	12142 Feb 13 06:53	19° ≈ 38'06	
morning max or	12141 Mar 25 01:34	0°Υ	17 33 02	direct	12142 Feb 15 13:43	19°≈13'55	
morning set	12141 Mar 27 18:29	4° Υ 30'56		morning max el	12142 Feb 22 05:17	22°≈37'24	17°46'46
desc. node	12141 Mar 30 03:08	8° Υ 27'02		morning max ci	12142 Feb 27 24:00	22 ≈37 24 0°¥	17 40 40
desc. node	12141 Wiai 30 03.06	0 12/02		morning set	12142 Feb 27 24:00 12142 Mar 10 05:29	0 X 17° ¥ 13′29	
	12141 A 10 11.25	260060110	1010/11	=			
superior conj	12141 Apr 10 11:25	26° Y 58'19		desc. node	12142 Mar 16 23:44	28°) 58'43	
minimum elong	12141 Apr 10 03:15	26° Y 25'36	1°18'30		12142 Mar 17 14:03	0 ° Υ	
	12141 Apr 12 09:02	0° 8					
max. Earth dist.	12141 Apr 14 22:21	4° 8 02'27	1.45298 AU	superior conj	12142 Mar 22 01:25	7° Ƴ 33'00	
evening rise	12141 Apr 26 09:40	21° 8 50'37		minimum elong	12142 Mar 21 21:35	7° Y 17′04	
	12141 May 01 17:59	$0^{\circ}\Pi$		max. Earth dist.	12142 Mar 28 16:12	18° Y 22′02	1.44142 AU
greatest brilliancy	12141 May 11 06:45	14° Ⅱ 13'32	-0.6m		12142 Apr 05 01:20	9° 8	
evening max el	12141 May 23 02:25	29° Ⅱ 31′27	19°58'44	evening rise	12142 Apr 05 22:09	1° 8 20'28	
asc. node	12141 May 23 17:47	0° ട്ട 09'05			12142 Apr 25 08:06	Π °0	
	12141 May 23 14:00	0ං ව		evening max el	12142 May 06 01:32	13° Ⅱ 18′01	21°05'44
retrograde	12141 May 30 16:35	3° © 51'37		asc. node	12142 May 10 15:00	17° Ⅱ 02'30	
evening set	12141 Jun 03 13:20	2° © 25'08		retrograde	12142 May 14 15:20	18° Ⅱ 18′26	
	12141 Jun 06 01:37	30° Ŗ Ⅱ		evening set	12142 May 18 22:11	16° Ⅲ 35'42	
inferior conj	12141 Jun 08 20:50	26° Ⅲ 25′03	3°14'46	inferior conj	12142 May 24 04:28	10° Ⅲ 23'40	3°08'10
minimum elong	12141 Jun 08 20:46	26° Ⅲ 25'17	3°13'56	minimum elong	12142 May 24 03:26	10° Ⅲ 27'15	3°07'17
min. Earth dist.	12141 Jun 09 20:01	25° Ⅱ 06'47	0.67765 AU	min. Earth dist.	12142 May 24 13:56	9° Ⅱ 50'48	0.68518 AU
morning rise	12141 Jun 14 03:52	20° Ⅱ 04'05		morning rise	12142 May 29 08:28	4° Ⅱ 06'53	
direct	12141 Jun 19 22:12	17° Ⅲ 31′01		direct	12142 Jun 03 14:10	1° Ⅱ 49'12	
desc. node	12141 Jun 26 03:51	19° Ⅱ 49'25		desc. node	12142 Jun 13 00:54	7° Ⅱ 02'19	
morning max el	12141 Jul 01 15:47	24° Ⅲ 33'12	24°51'22	morning max el	12142 Jun 14 02:00	8° Ⅱ 03'53	23°22'08
Ü	12141 Jul 06 13:18	0ಂತ		C	12142 Jul 01 05:39	0ಂತಾ	
	12141 Jul 27 15:54	0°N		morning set	12142 Jul 18 21:47	27° © 35'29	
morning set	12141 Aug 06 12:22	16° Ω 34'30			12142 Jul 20 08:02	0° Ω	
max. Earth dist.	12141 Aug 10 02:12	23° Ω 01'00	1.37076 AU	max. Earth dist.	12142 Jul 22 23:53		1.39390 AU
max. Darm dist.	12141 Aug 13 19:51	0° m)	1.57070110	max. Dartii dist.	12112 941 22 23.33	1 003 117	1.57570710
	12141 Aug 13 17.31	پ راا ن		superior conj	12142 Jul 30 15:37	18° Ω 19'50	-1°01'45
superior conj	12141 Aug 16 19:32	5° m 45'53	-0°27'30	minimum elong	12142 Jul 30 20:00	18° Ω 40'11	
minimum elong	12141 Aug 16 17:32	5° M) 54'44		minimum clong	12142 Aug 05 19:20	0° m)	1 01 40
asc. node	12141 Aug 10 21:20 12141 Aug 19 17:47	11° m)33'08	0 27 30	asc. node	12142 Aug 05 13:20 12142 Aug 06 14:31	1° m ₂ 32'30	
	-	-			_		
evening rise	12141 Aug 25 04:37	22° m 31'09 0° ₽		evening rise	12142 Aug 09 01:10	6°M)16′03 0°Ω	
	12141 Aug 28 23:16		10020127		12142 Aug 23 00:34		10040124
evening max el	12141 Sep 11 03:54	20° £ 22'17	19°29'37	evening max el	12142 Aug 25 03:37	2° £ 21'57	18°40'24
retrograde	12141 Sep 20 19:10	25° £ 10'36		retrograde	12142 Sep 02 07:33	6° £ 27'56	
desc. node	12141 Sep 22 01:02	25° 2 06'06		evening set	12142 Sep 04 06:19	6° £ 14'43	
evening set	12141 Sep 22 15:43	25° ⊆ 00'41		desc. node	12142 Sep 08 22:28	4° £ 10'08	
inferior conj	12141 Oct 01 09:02	20° ≙ 54'41		inferior conj	12142 Sep 12 06:29	1° ≏ 49'47	
minimum elong	12141 Oct 01 01:28	21° Ω 06'48	2°50'34	minimum elong	12142 Sep 12 03:55	1° £ 54'35	1°01'52
min. Earth dist.	12141 Oct 03 18:51	19° ≙ 22'19	0.55530 AU		12142 Sep 14 17:10	30°R Mp	
morning rise	12141 Oct 09 09:03	16° ≏ 27'59		min. Earth dist.	12142 Sep 15 10:22	29° m 28'50	0.57179 AU
direct	12141 Oct 14 11:51	15° ≏ 29'20		morning rise	12142 Sep 19 22:07	26° Mp 45'12	
morning max el	12141 Oct 28 10:42		25°08'07	direct	12142 Sep 25 18:28	25° Mp 20'56	
	12141 Nov 04 02:45	0° M .			12142 Oct 06 20:39	0∘ ⊽	
asc. node	12141 Nov 15 19:10	18°ML24'10		morning max el	12142 Oct 10 01:27	2° ≏ 48'47	26°38'29
	12141 Nov 21 16:37	0° ∡ ¹			12142 Oct 29 13:19	0°ML	
morning set	12141 Nov 23 21:53	4° ∡ 141'19		asc. node	12142 Nov 02 15:59	7° M 40'57	
				morning set	12142 Nov 08 08:05	19°ML17'24	

	12142 Nov 13 05:32	0° ∡ ¹			12143 Oct 21 20:33	0°M	
	121121101 13 03.32	· ^		morning set	12143 Oct 23 15:00	3°M40'59	
superior conj	12142 Nov 15 04:18	4° ∡ "20′22	1°34'22	max. Earth dist.	12143 Oct 30 01:04		1.31311 AU
minimum elong	12142 Nov 15 03:02	4° ∡ 13'23	1°35'02				
max. Earth dist.	12142 Nov 15 16:14	5° ∡ ¹26'52	1.31470 AU	superior conj	12143 Oct 30 15:56	19° M 03'09	1°24'22
evening rise	12142 Nov 22 01:21	19° ∡ ′22'32		minimum elong	12143 Oct 30 13:59	18°M52'15	1°24'45
C	12142 Nov 27 06:47	ರ°0		Č	12143 Nov 04 14:24	0° ∡ ″	
desc. node	12142 Dec 05 19:41	15° る 17'50		evening rise	12143 Nov 06 09:12	3° ∡ ′51′58	
	12142 Dec 15 22:35	0° ≈			12143 Nov 20 02:49	ರ°ರ	
evening max el	12142 Dec 23 02:52	7° ≈ 58'01	27°09'59	desc. node	12143 Nov 22 16:49	4° る 03'55	
retrograde	12143 Jan 06 01:04	15° ≈ 11′20		evening max el	12143 Dec 05 01:41	19° る 27'03	26°13'48
evening set	12143 Jan 12 22:09	13° ≈ 06′24		retrograde	12143 Dec 19 00:13	26° る 32'00	
min. Earth dist.	12143 Jan 16 17:18	10° ≈ 23'11	0.60568 AU	evening set	12143 Dec 25 10:12	24° る 53'07	
inferior conj	12143 Jan 19 20:53	7° ≈ 43'24		min. Earth dist.	12143 Dec 29 14:58	22° る 17'30	0.58431 AU
minimum elong	12143 Jan 20 03:23	7° ≈ 29'37	3°03'34	inferior conj	12144 Jan 01 17:42	20° る 00'04	
morning rise	12143 Jan 27 11:30	2° ≈ 53'45		minimum elong	12144 Jan 02 02:07	19° る 44'33	4°21'27
direct	12143 Jan 29 14:04	2° ≈ 36′02		morning rise	12144 Jan 09 20:50	15° පි 32'18	
asc. node	12143 Jan 29 15:14	2°≈36'02		direct	12144 Jan 11 23:15	15° る 17'33	
morning max el	12143 Feb 05 20:23	6°≈14'02	17°58'54	asc. node	12144 Jan 16 12:30	16°る31'08	10021100
morning set	12143 Feb 21 10:29	0°) 45'49		morning max el	12144 Jan 20 05:14		18°31'00
	12143 Feb 21 00:31	0° \			12144 Jan 28 01:49	0°≈	
	12142 M 02 15 54	1001/16/20	0001127	morning set	12144 Feb 05 04:09	14°≈52'31	
superior conj minimum elong	12143 Mar 03 15:54 12143 Mar 03 16:02	19° ¥ 16′20 19° ¥ 16′56	0°01'27 0°01'41		12144 Feb 13 02:09	0°) €	
behind sun begin	12143 Mar 03 08:03	19 X 10 30 18° X 41'53	0 0141	superior conj	12144 Feb 14 03:44	1° ¥ 59'02	0°35'26
behind sun end	12143 Mar 04 00:01	19° X 51'54		minimum elong	12144 Feb 14 05:44 12144 Feb 14 06:03	2° ∺ 09'47	0°35'33
desc. node	12143 Mar 03 20:19	19 X 31 34 19° X 35'44		desc. node	12144 Feb 14 00:05	10°) 14'48	0 33 33
desc. node	12143 Mar 09 22:11	0° Υ		max. Earth dist.	12144 Feb 21 13:56	15° H 17'20	1.40322 AU
max. Earth dist.	12143 Mar 11 05:30	2° Υ 10'17	1.42417 AU	evening rise	12144 Feb 25 19:43	22° H 28'51	1.40322710
evening rise	12143 Mar 16 22:50	11° Υ 27'10	1.12117110	evening rise	12144 Mar 01 10:34	0°Υ	
e vennig 1150	12143 Mar 29 02:08	0°8			12144 Mar 22 01:49	0°8	
evening max el	12143 Apr 18 19:29	27° 8 04'53	22°22'19	evening max el	12144 Mar 31 10:14	10° 8 54'15	23°43'00
<i>y</i>	12143 Apr 22 01:14	0°II		retrograde	12144 Apr 11 07:21	17° 8 18'42	
asc. node	12143 Apr 27 12:18	2° Ⅱ 44'14		asc. node	12144 Apr 13 09:39	16° 8 58'24	
retrograde	12143 Apr 28 12:44	2° Ⅱ 49'08		evening set	12144 Apr 16 12:36	15° 8 07'04	
evening set	12143 May 03 06:29	0° Ⅱ 51′05		inferior conj	12144 Apr 21 22:50	8° 8 38'55	2°23'48
-	12143 May 04 04:38	30° ₹ 8		minimum elong	12144 Apr 21 20:42	8° 8 46'13	2°22'46
inferior conj	12143 May 08 13:46	24° 8 29'24	2°50'58	min. Earth dist.	12144 Apr 21 07:02	9° 8 32'59	0.68630 AU
minimum elong	12143 May 08 12:01	24° 8 35'30	2°49'59	morning rise	12144 Apr 27 04:48	2° 8 34'43	
min. Earth dist.	12143 May 08 10:20	24° 8 41'24	0.68800 AU	direct	12144 May 01 08:23	0° 8 57'39	
morning rise	12143 May 13 17:26	18° 8 18'17		morning max el	12144 May 09 09:44	5° 8 32'28	20°34'37
direct	12143 May 18 09:55	16° 8 20'05		desc. node	12144 May 16 18:41	14° 8 17'36	
morning max el	12143 May 27 14:59	21° 8 42'53	21°54'07		12144 May 27 20:00	Π °0	
desc. node	12143 May 30 21:50	25° 8 17'19		morning set	12144 Jun 07 14:28	16° Ⅱ 20'36	
	12143 Jun 03 17:47	Π \circ 0			12144 Jun 16 06:07	0	
	12143 Jun 24 12:02	0ං ම		max. Earth dist.	12144 Jun 16 07:44	0° © 06'32	1.43583 AU
morning set	12143 Jun 29 05:47	7° 5 28'23					
max. Earth dist.	12143 Jul 05 00:39	16°954'28	1.41648 AU	superior conj	12144 Jun 22 20:06	10°5546'22	
	10140 1 1 10 17 11	00 000145	102421	minimum elong	12144 Jun 23 02:21	11° © 12'25	2°00'59
superior conj	12143 Jul 12 17:11 12143 Jul 12 23:43	0° Ω 02'45 0° Ω 31'27		avanina riss	12144 Jul 04 01:25 12144 Jul 05 04:16	0° Ω 1° Ω 57'44	
minimum elong	12143 Jul 12 23:43 12143 Jul 12 16:34	0° λ (31'2/	1°34′30	evening rise asc. node	12144 Jul 05 04:16 12144 Jul 10 08:08	1° 0 57'44 10° 0 58'57	
evening rise	12143 Jul 23 10:36	19° Ω 28'43		evening max el	12144 Jul 22 01:08	28° Ω 08'01	18°03'31
asc. node	12143 Jul 24 11:18	21° Ω 22'37		evening max er	12144 Jul 24 06:28	0° m)	18 03 31
asc. Houc	12143 Jul 29 05:20	0° m)		retrograde	12144 Jul 28 13:39	1°Mp29'56	
evening max el	12143 Aug 08 12:02	15° Mp 00'28	18°12'08	evening set	12144 Jul 31 03:24	0° m ₂ 58'00	
retrograde	12143 Aug 08 12:02 12143 Aug 15 14:48	18° Mp 37'07	10 12 00	0.0mig 50t	12144 Aug 01 22:48	30°RΩ	
evening set	12143 Aug 17 20:26	18° mg 16'20		inferior conj	12144 Aug 06 16:11	25° Ω 53'12	1°43'08
inferior conj	12143 Aug 25 01:44	13° Mp 30'56	0°32'01	minimum elong	12144 Aug 06 18:42	25° Ω 46'53	1°41'48
minimum elong	12143 Aug 25 02:47	13° m/ 28'39	0°31'18	min. Earth dist.	12144 Aug 09 17:17	22° Ω 51'02	0.61594 AU
desc. node	12143 Aug 26 19:55	11° m 58'19		desc. node	12144 Aug 12 17:20	20°Ω16'11	
min. Earth dist.	12143 Aug 28 09:27	10° mp 38'08	0.59305 AU	morning rise	12144 Aug 13 07:28	19° Ω 50'53	
morning rise	12143 Sep 01 05:46	7° m 52'23		direct	12144 Aug 19 23:26	17° £ 32'36	
direct	12143 Sep 07 15:07	5° m 59'25		morning max el	12144 Sep 03 04:12	25° Ω 32'42	27°57'58
morning max el	12143 Sep 21 23:33	13° m 48'01	27°37'25		12144 Sep 07 06:54	0° m	
	12143 Oct 04 22:40	0∘ 亚			12144 Sep 27 10:54	0∘ ⊽	
asc. node	12143 Oct 20 12:45	27° ≏ 18'13		asc. node	12144 Oct 06 09:26	17° ≏ 09'26	

	12144 0 + 06 16 26	170 0 46114			12145 4 02 12 50	00.0	
morning set	12144 Oct 06 16:36	17° Ω 46'14			12145 Aug 03 13:58	0°Ω	27040150
max. Earth dist.	12144 Oct 12 10:26 12144 Oct 12 07:26	0°M 29° £ 43'39	1.31674 AU	morning max el	12145 Aug 16 13:15	7° Ω 58'47 0° m	27°40'58
max. Earm dist.	12144 Oct 12 07.26	29 == 43 39	1.310/4 AU		12145 Sep 02 13:15 12145 Sep 19 16:55	0∘ ⊽ رااا	
superior conj	12144 Oct 14 02:03	3°M37'38	1°08'49	morning set	12145 Sep 19 10:35	0 == 1° £ 27'41	
minimum elong	12144 Oct 14 02:03	3°M25'12	1°08'53	asc. node	12145 Sep 20 10:30 12145 Sep 23 06:05	7° £ 09'53	
evening rise	12144 Oct 13 23:47 12144 Oct 20 19:42	18°M26'13	1 08 33	max. Earth dist.	12145 Sep 25 07:44	11° £ 28'58	1.32563 AU
evening rise	12144 Oct 26 09:46	0° √		max. Earth dist.	12143 Scp 23 07.44	11 = 28 38	1.32303 AU
desc. node	12144 Oct 20 09:40 12144 Nov 08 14:03	21° х 55'18		superior conj	12145 Sep 28 08:41	17° ≏ 58'37	0°47'55
evening max el	12144 Nov 15 16:24	0°る05'36	24048138	minimum elong	12145 Sep 28 06:40	17° ⊆ 47'43	0°47'44
evening max er	12144 Nov 15 14:03	0°る。	24 40 30	minimum ciong	12145 Oct 03 21:27	0°M	0 47 44
retrograde	12144 Nov 29 11:26	6° る 59'48		evening rise	12145 Oct 05 07:01	3°ML00'36	
evening set	12144 Dec 04 23:05	5° る 52'44		evening rise	12145 Oct 19 19:47	0° ⊼ 7	
min. Earth dist.	12144 Dec 10 04:13		0.56525 AU	desc. node	12145 Oct 26 11:21	8° × 731'41	
inferior conj	12144 Dec 12 18:05	1° る 28'12		evening max el	12145 Oct 28 02:40	10° √ 12'15	23°08'06
minimum elong	12144 Dec 13 00:50	1° る 17'21		retrograde	12145 Nov 10 09:19	16° х 48′29	
	12144 Dec 15 02:30	30°R. ✓		evening set	12145 Nov 14 12:40	16° √ 11'17	
morning rise	12144 Dec 21 04:45	27° × ⁷ 21'53		min. Earth dist.	12145 Nov 21 12:03	12° √ 57'44	0.55151 AU
direct	12144 Dec 23 13:41	27° х 06′14		inferior conj	12145 Nov 22 22:52	12° х 07′30	-5°52'19
	12144 Dec 31 04:10	0°ਰ		minimum elong	12145 Nov 22 22:36	12° х 07′53	5°51'32
morning max el	12145 Jan 02 03:38	1° る 42'45	19°25'06	morning rise	12145 Dec 01 10:09	8° ∡ 17′20	
asc. node	12145 Jan 02 09:40	1° る 57'28		direct	12145 Dec 04 09:38	7° ∡ 756'19	
morning set	12145 Jan 19 06:17	29° る 20'26		morning max el	12145 Dec 15 12:23	13° ∡ 13'18	20°42'14
C	12145 Jan 19 14:11	0° ≈		asc. node	12145 Dec 20 06:44	18° ∡ ′40′01	
					12145 Dec 27 10:27	ರ°0	
superior conj	12145 Jan 27 08:05	15° ≈ 26'31	1°02'07	morning set	12146 Jan 03 13:51	14° る 00'54	
minimum elong	12145 Jan 27 10:59	15° ≈ 40'41	1°02'22	C			
max. Earth dist.	12145 Feb 02 20:05	27° ≈ 44'04	1.38089 AU	superior conj	12146 Jan 11 00:34	29° る 26'45	1°21'15
	12145 Feb 04 02:04	0°)		minimum elong	12146 Jan 11 03:03	29° る 39'22	1°21'46
desc. node	12145 Feb 04 13:35	0° ¥ 51'46			12146 Jan 11 07:06	0° ≈	
evening rise	12145 Feb 06 13:40	4°) €24'45		max. Earth dist.	12146 Jan 16 04:28	9° ≈ 44'02	1.35959 AU
	12145 Feb 22 11:52	0° Υ		evening rise	12146 Jan 20 02:07	17° ≈ 07'17	
evening max el	12145 Mar 13 23:50	24° Y 45'56	25°01'20	desc. node	12146 Jan 22 10:18	21° ≈ 22'53	
	12145 Mar 20 12:10	9° 8			12146 Jan 27 09:26	0° ∀	
retrograde	12145 Mar 25 21:53	1° 8 41'29			12146 Feb 16 20:37	0° Y	
	12145 Mar 30 17:55	30° ₹Ƴ		evening max el	12146 Feb 24 13:26	8° Y 35'33	26°10'03
asc. node	12145 Mar 31 07:01	29° Y 35'08		retrograde	12146 Mar 09 07:23	15° Ƴ 50'54	
evening set	12145 Mar 31 14:59	29° Y 18'41		evening set	12146 Mar 15 11:57	13° Y 20'29	
min. Earth dist.	12145 Apr 05 01:47	24° Y 20'10	0.68020 AU	asc. node	12146 Mar 18 04:23	10° Y 42'23	
inferior conj	12145 Apr 06 05:44	22° Y '48'21	1°46'48	min. Earth dist.	12146 Mar 19 16:19	8° Ƴ 57'01	0.66990 AU
minimum elong	12145 Apr 06 03:40	22° Y 55'09	1°45'52	inferior conj	12146 Mar 21 08:27	6° Ƴ 53'07	0°59'45
morning rise	12145 Apr 11 16:37	16° Ƴ 52'29		minimum elong	12146 Mar 21 07:01	6° Ƴ 57'32	0°59'12
direct	12145 Apr 15 08:04	15° Y 36′09		morning rise	12146 Mar 27 02:51	1° Y ′07'21	
morning max el	12145 Apr 22 12:04	19° Ƴ 33'25	19°28'34	direct	12146 Mar 30 07:15	0° Y ′09'53	
	12145 Apr 30 22:48	0°8		morning max el	12146 Apr 05 21:41	3° Y 42′28	18°38'18
desc. node	12145 May 03 15:26	3° 8 50'54		desc. node	12146 Apr 20 12:06	23° Y '48'09	
greatest brilliancy	12145 May 05 04:39	6° 8 07'06	-0.7m		12146 Apr 24 11:27	0°8	
morning set	12145 May 17 14:50	24° 8 56'03		morning set	12146 Apr 27 05:27	4° 8 18'31	1 45005 137
To all Par	12145 May 20 21:38	0°II	1 11000 177	max. Earth dist.	12146 May 12 16:16	28° 8 28'25	1.45687 AU
max. Earth dist.	12145 May 29 21:39	14~Щ03′18	1.44977 AU	·	1014634 12 00 10	20002502	2007/22
	10145 1 00 00 10	200 T 20146	2012105	superior conj	12146 May 13 09:18	29° 8 35'03	
superior conj	12145 Jun 02 23:18	20° Ⅱ 30'46		minimum elong	12146 May 13 03:05	29° 8 10'45 0° Ⅱ	2°06'46
minimum elong	12145 Jun 03 00:38	20° ∏ 36′03	2-13-55		12146 May 13 15:41		
	12145 Jun 08 20:29	0°©		evening rise	12146 May 28 21:58	24° Ⅱ 05'17 0° ©	
evening rise	12145 Jun 17 01:11	13°531'53			12146 Jun 01 14:54		0.0
asc. node	12145 Jun 27 05:03	0° Ω 15'57 0° Ω		greatest brilliancy	12146 Jun 05 13:18	6°515'00	-0.9m
evening max el	12145 Jun 27 01:00 12145 Jul 05 15:16	11° Ω 35'11	18°13'30	asc. node evening max el	12146 Jun 14 02:02 12146 Jun 19 03:23	19° © 06'04 25° © 13'16	18°41'18
retrograde	12145 Jul 05 15:16 12145 Jul 11 23:47	$14^{\circ} \Omega 56'50$	10 13 30	retrograde	12146 Jun 19 03:23 12146 Jun 25 17:10	25°9913'16 28°9948'21	10 41 18
evening set	12145 Jul 11 23:47 12145 Jul 14 21:48	14 δ (36 30 14° Ω 11'09		evening set	12146 Jun 28 23:34	28 948 21 27°947'22	
inferior conj	12145 Jul 14 21:46 12145 Jul 20 21:46	8° Ω 48'39	2°31'20	inferior conj	12146 Jul 04 14:31	27 947 22 22°908'55	3°00'13
minimum elong	12145 Jul 20 21:40 12145 Jul 21 00:14		2°30'03	minimum elong	12146 Jul 04 14:31 12146 Jul 04 16:10	22° © 03'51	2°59'10
min. Earth dist.	12145 Jul 23 10:26	5°Ω58'38	0.63768 AU	min. Earth dist.	12146 Jul 06 12:36	19°547'11	0.65645 AU
morning rise	12145 Jul 27 01:06	2° Ω 32'39	3.03 / 00 / 10	morning rise	12146 Jul 10 07:54	15°9546'56	5.550 15 710
desc. node	12145 Jul 30 14:40	0° Ω 30'13		direct	12146 Jul 16 18:05	13° 5 05'10	
	12145 Aug 01 20:12	30°R.95		desc. node	12146 Jul 17 11:57	13°907'08	
direct	12145 Aug 02 16:56	29° 5 57'32		morning max el	12146 Jul 30 00:11	20°955'33	26°52'04
		2					

	12146 Aug 06 20:26	$0^{\circ}\Omega$		direct	12147 Jun 30 01:56	26° ∏ 47'04	
	12146 Aug 26 16:56	0° m)		desc. node	12147 Jul 04 09:09	27° I I53'09	
morning set	12146 Sep 03 18:04	14° m) 37'27		dese. Hode	12147 Jul 07 18:12	0°95	
max. Earth dist.	12146 Sep 07 22:53	22° m 51'34	1.33966 AU	morning max el	12147 Jul 12 11:00	4° © 11'53	25°39'42
asc. node	12146 Sep 10 02:43	27° m) 14'47			12147 Aug 01 04:43	$0^{\circ}\Omega$	
	12146 Sep 11 10:42	0∘ <u>v</u>		morning set	12147 Aug 17 11:21	27° Ω 06'42	
	ī			Ü	12147 Aug 19 01:05	0° m)	
superior conj	12146 Sep 12 09:34	1° ≏ 59'16	0°21'56	max. Earth dist.	12147 Aug 21 03:51	3° m 57'56	1.35835 AU
minimum elong	12146 Sep 12 08:27	1° ≏ 53'24	0°21'38		-		
evening rise	12146 Sep 19 17:12	17° ≏ 29'07		superior conj	12147 Aug 27 02:03	15° m 33'03	-0°08'30
	12146 Sep 25 21:51	0° M.		minimum elong	12147 Aug 27 02:35	15° m 35'43	0°08'42
evening max el	12146 Oct 09 17:16	20°M21'59	21°29'59	behind sun begin	12147 Aug 26 21:18	15°Mp09'12	
desc. node	12146 Oct 13 08:42	23°M26'33		behind sun end	12147 Aug 27 07:51	16°Mp02'16	
retrograde	12146 Oct 21 21:53	26° M25'42		asc. node	12147 Aug 27 23:22	17° m 20'33	
evening set	12146 Oct 24 16:31	26° ML $08'03$			12147 Sep 03 03:29	0∘ ⊽	
inferior conj	12146 Nov 02 15:37	22°M13'01	-5°21'02	evening rise	12147 Sep 04 00:10	1° ≏ 46'13	
minimum elong	12146 Nov 02 07:24	22°M24'32	5°18'56		12147 Sep 20 18:12	0° M	
min. Earth dist.	12146 Nov 02 18:22	22°M09'10	0.54562 AU	evening max el	12147 Sep 21 20:18	1°M08'10	20°07'33
morning rise	12146 Nov 10 23:14	18°M24'26		desc. node	12147 Sep 30 06:08	6° ™ 11'45	
direct	12146 Nov 14 18:04	17°M53'29		retrograde	12147 Oct 02 11:08	6°M25'03	
morning max el	12146 Nov 27 07:44	23°M53'38	22°19'45	evening set	12147 Oct 04 10:41	6° ™ 14'50	
	12146 Dec 02 17:56	0° ∡ ¹		inferior conj	12147 Oct 13 10:12	2° ™ 16′20	
asc. node	12146 Dec 07 03:43	6° ∡ ¹22'30		minimum elong	12147 Oct 13 00:33	2° ™ 30'46	
morning set	12146 Dec 19 00:31	28° ∡ ¹47'20		min. Earth dist.	12147 Oct 15 02:48		0.54912 AU
	12146 Dec 19 14:16	0°ප			12147 Oct 17 08:00	30° ₹ Ω	
				morning rise	12147 Oct 21 13:22	28° Ω 07'57	
superior conj	12146 Dec 26 01:41	13°る50'00	1°33'11	direct	12147 Oct 26 04:31	27° Ω 21'22	
minimum elong	12146 Dec 26 03:12	13°る58'00	1°33'56		12147 Nov 03 15:20	0°M	24007142
max. Earth dist.	12146 Dec 29 19:04	21° る 36'21	1.34125 AU	morning max el	12147 Nov 08 19:11		24°07'42
	12147 Jan 02 23:51	0° ≈ 0° ≈ 27'37		asc. node	12147 Nov 24 00:38	24°M50'34 0°⊀	
evening rise desc. node	12147 Jan 03 05:32 12147 Jan 09 07:06	0°≈2/3/ 11°≈44'00		marning sat	12147 Nov 26 20:08 12147 Dec 03 12:21	13° x ⁷ 33'42	
desc. node	12147 Jan 09 07.06 12147 Jan 20 10:51	0°)		morning set	1214/ Dec 03 12.21	13 X·3342	
evening max el	12147 Jan 20 10.51 12147 Feb 07 02:58	22° ∺ 15'08	2700140	superior conj	12147 Dec 10 08:31	28° ∡ '27'21	1°38'28
retrograde	12147 Feb 07 02.38 12147 Feb 20 11:10	22 X 13 08 29° X 39'45	27 0149	minimum elong	12147 Dec 10 08:54	28° x 27'21' 28° x 29'23	1°39'19
evening set	12147 Feb 27 01:36	27°\(\) 06'45		minimum clong	12147 Dec 10 08:34 12147 Dec 11 01:34	20 × 29 23	1 39 19
min. Earth dist.	12147 Mar 03 00:34	23° ∺ 17′00	0.65568 AU	max. Earth dist.	12147 Dec 11 01:34 12147 Dec 12 17:22	3° 云 34'46	1.32715 AU
inferior conj	12147 Mar 05 04:47	20°\(\frac{1}{48}\)'26	0°02'27	evening rise	12147 Dec 17 20:28	14° ට 16'48	1.52715710
minimum elong	12147 Mar 05 04:42	20°\(\frac{1}{48'40}\)	0°02'39	evening rise	12147 Dec 26 03:11	0°≈	
transit middle	12147 Mar 05 04:42	20°) 48'40	0°02'39	desc. node	12147 Dec 27 04:00	1° ≈ 49'13	
transit begin	12147 Mar 05 01:45	20° ¥ 57'05			12148 Jan 15 10:00	0°) €	
transit end	12147 Mar 05 07:39	20°) 40′16		evening max el	12148 Jan 20 15:19	5° ¥ 33'17	27°29'33
asc. node	12147 Mar 05 01:45	20° ¥ 57'05		retrograde	12148 Feb 03 08:29	12°) 58′08	
morning rise	12147 Mar 11 09:14	15° ¥ 14'52		evening set	12148 Feb 10 05:37	10°) 29′32	
direct	12147 Mar 14 03:50	14°) 33′16		min. Earth dist.	12148 Feb 14 00:37	7°) 10′25	0.63806 AU
morning max el	12147 Mar 20 12:42	17° ¥ 53'51	18°04'45	inferior conj	12148 Feb 16 16:04	4°){ 27'07	-1°04'55
	12147 Mar 29 14:53	0° Y		minimum elong	12148 Feb 16 18:07	4°) €21'48	1°03'37
desc. node	12147 Apr 07 08:43	14° Y 02'57		asc. node	12148 Feb 19 23:08	1°) 17′36	
morning set	12147 Apr 07 23:39	15° Ƴ 03'41			12148 Feb 21 16:56	30° ₹ ≈	
	12147 Apr 17 05:53	0° 8		morning rise	12148 Feb 23 08:49	29° ≈ 08'14	
				direct	12148 Feb 25 19:14	28° ≈ 38'53	
superior conj	12147 Apr 22 18:12	8° 8 43'56	-1°40'20		12148 Feb 29 20:30	0°)	
minimum elong	12147 Apr 22 08:52		1°39'54	morning max el	12148 Mar 03 06:16	1° ¥ 58'37	17°48'16
max. Earth dist.	12147 Apr 25 12:27		1.45647 AU	morning set	12148 Mar 19 21:18	27° ∺ 07'58	
	12147 May 06 09:48	Π °0			12148 Mar 21 13:42	0° Y	
evening rise	12147 May 08 20:51	3° Ⅱ 48′20		desc. node	12148 Mar 24 05:18	4° Υ 29'28	
greatest brilliancy	12147 May 21 15:46	23° Ⅱ 21'16	-0.7m				
_	12147 May 26 05:44	0°®		superior conj	12148 Apr 01 18:45	18° Y 40'16	
asc. node	12147 May 31 23:07	7°520'43	1000	minimum elong	12148 Apr 01 12:15	18° Y 13'54	
evening max el	12147 Jun 02 11:16	8°557'09	19°25'57	max. Earth dist.	12148 Apr 07 07:09	27° Y 31'10	1.44877 AU
retrograde	12147 Jun 09 14:34	12°958'07			12148 Apr 08 20:49	0°8	
evening set	12147 Jun 13 05:49	11°9541'05	2012110	evening rise	12148 Apr 17 08:25	13° 8 10'25	
inferior conj	12147 Jun 18 15:10	5°548'19	3°13'19	ovenie 1	12148 Apr 28 12:12	0° Π 22° Π 42/52	20025146
minimum elong	12147 Jun 18 15:44	5°946'28	3°12'25	evening max el	12148 May 15 13:37	22° Ⅱ 42'53 24° Ⅱ 47'47	20-25.46
min. Earth dist.	12147 Jun 19 22:31	4°905'10	0.67119 AU	asc. node	12148 May 17 20:18	24°Щ4/4/ 27°Щ19'53	
morning rise	12147 Jun 23 10:30 12147 Jun 24 01:11	30°RⅡ 29°Ⅱ25'42		retrograde evening set	12148 May 23 13:26 12148 May 27 14:16	27°Щ19'33 25°Щ46'37	
morning 1150	1217/ Jun 24 VI.II	2) 11 2342		evening set	12170 Iviay 21 14.10	43 44 03/	

inferior conj minimum elong	12148 Jun 01 20:57 12148 Jun 01 20:27	19° Ⅱ 41'10 19° Ⅱ 42'53	3°13'21 3°12'29	min. Earth dist.	12149 May 17 09:31 12149 May 20 00:10	3°∏29'16 30°R 8	0.68693 AU
min. Earth dist.	12148 Jun 02 14:14	18° Ⅱ 41'52	0.68139 AU	morning rise	12149 May 22 09:03	27° 8 28'32	
morning rise	12148 Jun 07 02:20	13° Ⅱ 21'28		direct	12149 May 27 09:14	25° 8 18'30	
direct	12148 Jun 12 15:23	10° Ⅱ 54'09			12149 Jun 05 02:24	0°II	22044100
desc. node	12148 Jun 20 06:15 12148 Jun 23 20:56	14° Ⅱ 19'56 17° Ⅱ 38'03	24°13'45	morning max el desc. node	12149 Jun 06 07:42 12149 Jun 07 03:14	1°Ⅲ11'09 2°Ⅲ01'22	22°44'00
morning max el	12148 Jul	0°©	24 13 43	desc. node	12149 Jun 07 03.14 12149 Jun 28 02:10	2 п от 22 0° ©	
	12148 Jul 24 05:36	0° U		morning set	12149 Jul 10 08:44	19° © 16'42	
morning set	12148 Jul 29 09:52	8° Ω 44'04		max. Earth dist.	12149 Jul 14 23:53	27°901'23	1.40372 AU
max. Earth dist.	12148 Aug 02 01:48	15° Ω 10'49	1.38045 AU		12149 Jul 16 17:33	$0^{\circ}\Omega$	
superior conj	12148 Aug 09 06:47	28° Ω 32'07		superior conj	12149 Jul 22 19:36	10° Ω 46'14	
minimum elong	12148 Aug 09 09:39	28° Ω 45'51	0°41'58	minimum elong	12149 Jul 23 01:02	11° Ω 10'53	1°15'59
asc. node	12148 Aug 10 01:06 12148 Aug 13 20:05	0° Mp 7° Mp 23′43		asc. node evening rise	12149 Jul 31 16:51 12149 Aug 01 17:46	27° Ω 19'57 29° Ω 18'07	
evening rise	12148 Aug 18 01:26	15° Mp 45'31		evening rise	12149 Aug 01 17.40 12149 Aug 02 02:36	0° m)	
evening rise	12148 Aug 25 13:30	0ಂ ⊽		evening max el	12149 Aug 17 17:25	25° m ₀ 01'20	18°25'55
evening max el	12148 Sep 03 13:22	12° ₽ 43'03	19°06'05	retrograde	12149 Aug 25 09:01	28° m 52'37	10 20 00
retrograde	12148 Sep 12 12:39	17° ≏ 11'50		evening set	12149 Aug 27 10:36	28° m/36'33	
evening set	12148 Sep 14 09:06	17° ≏ 01'09		desc. node	12149 Sep 03 01:03	24° m 53'29	
desc. node	12148 Sep 16 03:36	16° ≏ 32'16		inferior conj	12149 Sep 04 02:39	24° Mp $03'01$	-0°19'54
inferior conj	12148 Sep 22 19:49	12° ≏ 48'06	-2°05'44	minimum elong	12149 Sep 04 01:53	24° My $04'32$	0°19'47
minimum elong	12148 Sep 22 14:22	12° ≏ 57'22	2°03'30	min. Earth dist.	12149 Sep 07 09:49	21° Mp 26'04	0.58050 AU
min. Earth dist.	12148 Sep 25 15:26	10° ≏ 53'15	0.56152 AU	morning rise	12149 Sep 11 13:41	18° m 43'21	
morning rise	12148 Sep 30 16:41	8° 2 05'17		direct	12149 Sep 17 16:31	17° m 06'45	
direct	12148 Oct 06 03:27	6° £ 56'05	25040121	morning max el	12149 Oct 02 00:20	24° m/43'50	27°07'53
morning max el	12148 Oct 20 06:49 12148 Nov 01 20:06	14° ♀ 09'24 0° ル	25°49'31		12149 Oct 06 20:46 12149 Oct 26 01:23	0° ™	
asc. node	12148 Nov 01 20.06 12148 Nov 09 21:29	13°M52'43		asc. node	12149 Oct 26 01.23	3°M 19'15	
morning set	12148 Nov 16 23:39	28°M15'22		morning set	12149 Oct 27 18:17 12149 Nov 01 08:40	12°M46'48	
morning sec	12148 Nov 17 19:05	0° ₹		morning sec	121191101 01 00.10	12 110 10 10	
		• •		superior conj	12149 Nov 08 06:29	27°M57'02	1°30'49
superior conj	12148 Nov 23 18:49	13° ∡ 12'05	1°37'33	minimum elong	12149 Nov 08 04:53	27°M48'08	1°31'21
minimum elong	12148 Nov 23 18:06	13° ∡ °08′07	1°38'20	max. Earth dist.	12149 Nov 08 06:51	27°M59'08	1.31348 AU
max. Earth dist.	12148 Nov 24 22:18	15° ∡ ¹44'07	1.31785 AU		12149 Nov 09 04:31	0° ∡ ¹	
evening rise	12148 Nov 30 19:58	28° ∡ ¹27'29		evening rise	12149 Nov 15 01:24	12° ∡ ′51'54	
	12148 Dec 01 13:48	0°⋜			12149 Nov 23 16:13	0°₹	
desc. node	12148 Dec 13 01:01	21° る 31'50		desc. node	12149 Nov 29 22:07	10°る41'56	
evening max el	12148 Dec 18 08:10 12149 Jan 02 00:39	0° ≈ 18° ≈ 18'31	27°26'56	evening max el	12149 Dec 14 20:36 12149 Dec 15 04:12	0° ≈ 0° ≈ 18'06	26°50'09
retrograde	12149 Jan 15 22:13	25°≈36'47	27 20 30	retrograde	12149 Dec 13 04:12 12149 Dec 29 02:46	7°≈27'05	20 30 09
evening set	12149 Jan 22 21:05	23°≈21'01		evening set	12150 Jan 04 20:18	5°≈32'41	
min. Earth dist.	12149 Jan 26 14:53	20°≈26'56	0.61793 AU	min. Earth dist.	12150 Jan 08 18:25	2° ≈ 54'18	0.59652 AU
inferior conj	12149 Jan 29 15:12	17° ≈ 41'43	-2°20'45	inferior conj	12150 Jan 11 22:37	0° ≈ 22'22	-3°40'33
minimum elong	12149 Jan 29 20:02	17° ≈ 30'36	2°18'13	minimum elong	12150 Jan 12 06:10	0° ≈ 07'15	3°37'15
morning rise	12149 Feb 05 21:44	12° ≈ 40′14			12150 Jan 12 09:48	30°Ŗる	
asc. node	12149 Feb 05 20:28	12° ≈ 41'15		morning rise	12150 Jan 19 18:53	25° ප් 41'26	
direct	12149 Feb 08 02:13	12°≈19'20		direct	12150 Jan 21 20:49	25°る25'21	
morning max el	12149 Feb 14 23:13	15° ≈ 48'13	17°49'32	asc. node	12150 Jan 23 17:44	25° る 38'56	10000157
morning set	12149 Feb 24 21:42 12149 Mar 02 16:41	0° 光 10° 光 13'45		morning max el	12150 Jan 29 12:02 12150 Jan 30 06:30	29°る12'46 0°≈	18°09'57
desc. node	12149 Mar 11 01:54	25° H 03'44		morning set	12150 Feb 14 03:39	0 ≈ 24°≈02'42	
dese. Hode	1214) Will 11 01.54	23 /(03 44		morning set	12150 Feb 17 07:49	0° \	
superior conj	12149 Mar 13 19:12	29°) 44′09	-0°20'56		12100100 17 07.15	٠,٨	
minimum elong	12149 Mar 13 17:14	29° ∺ 35'49		superior conj	12150 Feb 23 19:16	11° ¥ 54′02	0°16'43
	12149 Mar 13 22:55	0° Y		minimum elong	12150 Feb 23 20:33	11° ¥ 59'50	0°16'52
max. Earth dist.	12149 Mar 20 22:42	11° Y '37'04	1.43466 AU	desc. node	12150 Feb 25 22:30	15°) 42′08	
evening rise	12149 Mar 28 00:33	22° Y ′52'20		max. Earth dist.	12150 Mar 03 10:12	25° ∺ 10′00	1.41561 AU
	12149 Apr 01 15:39	0°₽			12150 Mar 06 07:52	0°Υ ••••••••	
	12149 Apr 22 18:19	0°II	01005:22	evening rise	12150 Mar 08 09:22	3° Y 21′52	
evening max el	12149 Apr 28 10:26	6° Ⅱ 29'39	21°37'33		12150 Mar 25 23:19	0°8	22056125
asc. node	12149 May 04 17:34	11° Ⅲ 12'41 11° Ⅲ 48'35		evening max el	12150 Apr 11 02:54	20° 8 18'13 26° 8 19'42	22-36-37
retrograde evening set	12149 May 07 11:43 12149 May 11 23:04	9° П 59'24		retrograde asc. node	12150 Apr 21 07:57 12150 Apr 21 14:52	26° 8 19'18	
inferior conj	12149 May 17 05:32	3° Ⅱ 43'10	3°02'07	evening set	12150 Apr 21 14:32 12150 Apr 26 06:36	24° 8 15'36	
minimum elong	12149 May 17 04:10	3° Ⅱ 47'57		inferior conj	12150 May 01 14:57	17° 8 51'00	2°40'38
3	J			,	J,		

minimum elong	12150 May 01 12:59	17° 8 57'48	2°39'38	inferior conj	12151 Apr 15 23:16	2° 8 00'38	2°09'17
min. Earth dist.	12150 May 01 06:13	18° 8 21'15	0.68782 AU	minimum elong	12151 Apr 15 21:06	2° 8 07'56	
morning rise	12150 May 06 19:16	11° 8 42'53		8	12151 Apr 17 11:42	30°R Ƴ	_ 00.00
direct	12150 May 11 06:18	9° 8 53'27		morning rise	12151 Apr 21 07:01	26° Y ′00′05	
morning max el	12150 May 19 22:44	14° 8 54'21	21°19'00	direct	12151 Apr 25 05:19	24° Y ′32'08	
desc. node	12150 May 25 00:07	20° 8 37'28		morning max el	12151 May 02 20:41	28° Ƴ 49'14	20°04'48
	12150 Jun 01 01:23	$\Pi^{\circ}0$		C	12151 May 04 00:11	0°B	
morning set	12150 Jun 20 05:57	28° Ⅱ 41'19		desc. node	12151 May 11 20:54	9° 8 52'56	
	12150 Jun 21 01:54	0ಂಣ			12151 May 25 13:38	$\Pi^{\circ}0$	
max. Earth dist.	12150 Jun 27 03:44	9° 5 346'42	1.42526 AU	morning set	12151 May 30 08:29	7° Ⅱ 19'00	
				max. Earth dist.	12151 Jun 09 14:09	23° Ⅲ 20′24	1.44248 AU
superior conj	12150 Jul 04 12:01	22° © 05'26	-1°46'44		12151 Jun 13 17:34	0 \circ \odot	
minimum elong	12150 Jul 04 18:53	22° © 34'55	1°46'52				
	12150 Jul 09 01:06	$0^{\circ}\Omega$		superior conj	12151 Jun 15 04:30	2° © 22'11	-2°07'56
evening rise	12150 Jul 15 21:07	12° Ω 14'18		minimum elong	12151 Jun 15 09:17	2° 5 41'43	2°08'35
asc. node	12150 Jul 18 13:40	17° Ω 05'21		evening rise	12151 Jun 28 06:31	24° 5 21'14	
	12150 Jul 26 02:56	0° ™			12151 Jul 01 13:26	$0^{\circ}\Omega$	
evening max el	12150 Aug 01 04:19	7° m 53'50	18°06'05	asc. node	12151 Jul 05 10:31	6° Ω 34'15	
retrograde	12150 Aug 07 23:35	11° m) 22'24		evening max el	12151 Jul 15 18:08		18°05'31
evening set	12150 Aug 10 08:42	10° m 57'09		retrograde	12151 Jul 22 03:55	24° Ω 30'41	
inferior conj	12150 Aug 17 06:32	6° Mg 02'55	1°05'06	evening set	12151 Jul 24 21:05	23° Ω 53'14	
minimum elong	12150 Aug 17 08:26	5° m 58'29	1°04'00	inferior conj	12151 Jul 31 03:55	18° Ω 40′28	2°06'08
min. Earth dist.	12150 Aug 20 12:14	3° m 03'44	0.60280 AU	minimum elong	12151 Jul 31 06:33	18° Ω 33'31	2°04'47
desc. node	12150 Aug 20 22:27	2° Mp 41'28		min. Earth dist.	12151 Aug 03 00:06	15° Ω 41′08	0.62538 AU
morning rise	12150 Aug 24 05:11	0° Mp 13′06		morning rise	12151 Aug 06 13:54	12° Ω 30'55	
	12150 Aug 24 13:46	30°R Ω		desc. node	12151 Aug 07 19:49	11° Ω 41'10	
direct	12150 Aug 30 18:08	28° Ω 08'59		direct	12151 Aug 13 06:20	10° Ω 04'29	
	12150 Sep 06 07:03	0° m)		morning max el	12151 Aug 27 08:32	18° Ω 06'51	27°55'12
morning max el	12150 Sep 14 01:27	•	27°50'57		12151 Sep 06 07:55	0° m)	
	12150 Oct 02 01:00	0∘ ⊽			12151 Sep 24 21:10	0∘ ⊽	
asc. node	12150 Oct 14 15:01	23° ♀ 03'24		morning set	12151 Sep 30 12:20	11° ≏ 00'02	
morning set	12150 Oct 16 13:35	27° ♀ 03'25		asc. node	12151 Oct 01 11:42	12° ≏ 59'34	
	12150 Oct 17 23:05	0°M,		max. Earth dist.	12151 Oct 05 19:43	22° ≏ 08'28	1.31986 AU
max. Earth dist.	12150 Oct 22 15:18	10°M₁10'37	1.31413 AU		10151 0	270 2 0 0 1 4 4	1000127
	10150 0 . 00 15 11	100M 2050	1010107	superior conj	12151 Oct 08 02:35	27° Ω 06'44	1°00'37
superior conj	12150 Oct 23 17:41	12°M36'58	1°18'27	minimum elong	12151 Oct 08 00:21	26° ≏ 54'33	1°00'33
	12150 0 + 22 15 22	100m 05105	1010141	-		000	
minimum elong	12150 Oct 23 15:33	12°M25'05	1°18'41		12151 Oct 09 10:10	0°M	
minimum elong evening rise	12150 Oct 30 10:37	27°M24'18	1°18'41	evening rise	12151 Oct 09 10:10 12151 Oct 14 21:43	11° M 59'36	
evening rise	12150 Oct 30 10:37 12150 Oct 31 15:46	27° M 24'18 0° √	1°18'41	evening rise	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44	11° M 59'36 0° √	
_	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17	27° M 24'18 0° ⊀' 29° ⊀ 07'01	1°18'41	evening rise desc. node	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32	11° ™ 59'36 0° ҂ ¹ 16° ҂ ³30'05	24°06'28
evening rise desc. node	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02	27°M24'18 0°ダ 29°ダ07'01 0°る		evening rise desc. node evening max el	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19	11°M59'36 0°\$\displaystyle{\sqrt{1}} 16°\$\displaystyle{\sqrt{3}}30'05 21°\$\displaystyle{\sqrt{4}}6'18	24°06'38
evening rise desc. node evening max el	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29	27°M24'18 0°ダ 29°ダ07'01 0°る 11°る24'42		evening rise desc. node evening max el retrograde	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35	11°M59'36 0°\$\tilde{\sigma}\) 16°\$\tilde{\sigma}\]30'05 21°\$\tilde{\sigma}\]46'18 28°\$\tilde{\sigma}\]35'02	24°06'38
evening rise desc. node evening max el retrograde	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29 12150 Dec 10 20:38	27°M24'18 0°メ 29°メ*07'01 0°उ 11°उ24'42 18°उ24'53		evening rise desc. node evening max el retrograde evening set	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30	11°M59'36 0° ₹ 16° ₹30'05 21° ₹46'18 28° ₹35'02 27° ₹41'11	
evening rise desc. node evening max el retrograde evening set	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52	27°M24'18 0°ペ 29°ペ07'01 0°で 11°で24'42 18°で24'53 16°で59'01	25°40'18	desc. node evening max el retrograde evening set min. Earth dist.	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15	11°M59'36 0° ₹ 16° ₹30'05 21° ₹46'18 28° ₹35'02 27° ₹41'11 24° ₹46'07	0.55858 AU
evening rise desc. node evening max el retrograde evening set min. Earth dist.	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 21 11:52	27°M24'18 0°ズ 29°ズ07'01 0°궁 11°궁24'42 18°궁24'53 16°궁59'01 14°궁21'46	25°40'18 0.57583 AU	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 02:34	11° M 59'36 0° ₹ 16° ₹ 30'05 21° ₹ 46'18 28° ₹ 35'02 27° ₹ 41'11 24° ₹ 46'07 23° ₹ 26'26	0.55858 AU -5°43'48
evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 21 11:52 12150 Dec 24 10:53	27°M24'18 0°ズ 29°ズ07'01 0°궁 11°궁24'42 18°궁24'53 16°궁59'01 14°궁21'46 12°궁19'02	25°40'18 0.57583 AU -4°54'16	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 02:34 12151 Dec 05 06:56	11° M 59'36 0° ₹ 16° ₹ 30'05 21° ₹ 46'18 28° ₹ 35'02 27° ₹ 41'11 24° ₹ 46'07 23° ₹ 26'26 23° ₹ 19'45	0.55858 AU -5°43'48
evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 17 10:02 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 21 11:52 12150 Dec 24 10:53 12150 Dec 24 19:12	27°M24'18 0°ズ 29°ズ07'01 0°云 11°云24'42 18°云24'53 16°云59'01 14°云21'46 12°云19'02 12°云04'37	25°40'18 0.57583 AU -4°54'16	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 02:34 12151 Dec 05 06:56 12151 Dec 13 14:24	11° M 59'36 0° ₹ 16° ₹ 30'05 21° ₹ 46'18 28° ₹ 35'02 27° ₹ 41'11 24° ₹ 46'07 23° ₹ 26'26 23° ₹ 19'45 19° ₹ 28'32	0.55858 AU -5°43'48
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evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 16 19:17 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 24 10:53 12150 Dec 24 19:12 12151 Jan 01 18:03 12151 Jan 03 22:29 12151 Jan 10 14:57 12151 Jan 12 16:51 12151 Jan 24 17:27 12151 Jan 29 01:19 12151 Feb 06 14:42 12151 Feb 06 17:25 12151 Feb 07:18 12151 Feb 12 19:07 12151 Feb 13 17:36 12151 Feb 17 15:18 12151 Feb 27 00:20 12151 Mar 20 20:09 12151 Mar 24 16:49 12151 Apr 05 00:51 12151 Apr 05 00:51	27°M24'18 0°ズ 29°ズ07'01 0°云 11°云24'42 18°云24'53 16°云59'01 14°云21'46 12°云19'02 12°云04'37 8°云00'45 7°云46'00 10°云14'23 12°云01'29 0°≈ 8°≈19'50 24°≈57'35 25°≈10'31 0°ዧ 6°ዧ20'50 8° ℋ00'42 14° ℋ46'53 0°ዣ 0°℧ 4°℧08'22 10°℧47'16 9°℧52'34	25°40'18 0.57583 AU -4°54'16 4°51'27 18°51'15 0°47'42 0°47'51 1.39373 AU	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 06:56 12151 Dec 13 14:24 12151 Dec 16 04:27 12151 Dec 26 09:54 12151 Dec 31 10:34 12152 Jan 13 06:08 12152 Jan 16 17:29 12152 Jan 21 00:47 12152 Jan 21 03:36 12152 Jan 26 23:57 12152 Jan 30 17:37 12152 Jan 30 17:37 12152 Feb 01 09:09 12152 Feb 01 10:09 12152 Mar 06 06:09 12152 Mar 18 13:31	11° M.59'36 0° ♂ 16° ♂30'05 21° ♂46'18 28° ♂35'02 27° ♂41'11 24° ♂46'07 23° ♂26'26 23° ♂19'45 19° ♂28'32 19° ♂11'19 24° ♂04'09 26° ♂16'01 0° ♂ 22° ♂554'53 0° ≈ 8° ≈41'39 8° ≈55'39 20° ≈13'53 27° ≈04'34 26° ≈56'32 0° ♂ 17° ♀59'39 25° ♀05'46 22° ♀38'59 21° ♀49'23	0.55858 AU -5°43'48 5°42'34 19°55'09 1°11'08 1°11'29 1.37154 AU
evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise evening max el retrograde	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 16 19:17 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 24 10:53 12150 Dec 24 19:12 12151 Jan 01 18:03 12151 Jan 10 14:57 12151 Jan 10 14:57 12151 Jan 24 17:27 12151 Jan 29 01:19 12151 Feb 06 14:42 12151 Feb 06 17:25 12151 Feb 06 17:25 12151 Feb 12 19:07 12151 Feb 13 17:36 12151 Feb 13 17:36 12151 Feb 27 00:20 12151 Mar 20 20:09 12151 Mar 20 20:09 12151 Mar 20 20:09 12151 Apr 05 00:51 12151 Apr 08 12:12 12151 Apr 10 11:18	27°M24'18 0°ズ 29°ズ07'01 0°云 11°云24'42 18°云24'53 16°云59'01 14°云21'46 12°云19'02 12°云04'37 8°云00'45 7°云46'00 10°云14'23 12°云01'29 0°≈ 8°≈19'50 24°≈57'35 25°≈10'31 0°ዧ 6°ዧ20'50 8°ዧ00'42 14°ዃ46'53 0°♈ 0°℧ 4°℧08'22 10°℧47'16 9°℧52'34 8°℧30'14	25°40'18 0.57583 AU -4°54'16 4°51'27 18°51'15 0°47'42 0°47'51 1.39373 AU 24°17'04	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set asc. node min. Earth dist.	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 06:56 12151 Dec 13 14:24 12151 Dec 16 04:27 12151 Dec 26 09:54 12151 Dec 31 10:34 12152 Jan 13 06:08 12152 Jan 16 17:29 12152 Jan 21 00:47 12152 Jan 21 03:36 12152 Jan 26 23:57 12152 Jan 30 17:37 12152 Jan 30 17:37 12152 Feb 01 09:09 12152 Feb 01 10:04 12152 Mar 06 06:09 12152 Mar 18 13:31 12152 Mar 24 11:36	11° \$\mathbb{T}.59'36 0° \$\times\$ 21° \$\times\$46'18 28° \$\times\$35'02 27° \$\times\$41'11 24° \$\times\$46'07 23° \$\times\$26'26 23° \$\times\$19'45 19° \$\times\$28'32 19° \$\times\$11'19 24° \$\times\$04'09 26° \$\times\$16'01 0° \$\times\$22° \$\times\$54'53 0° \$\times\$ 8° \$\times\$41'39 8° \$\times\$55'39 20° \$\times\$13'53 27° \$\times\$04'34 26° \$\times\$56'32 0° \$\times\$1 0° \$\times\$1 0° \$\times\$1 25° \$\times\$05'46 22° \$\times\$38'59 21° \$\times\$49'23 17° \$\times\$55'32	0.55858 AU -5°43'48 5°42'34 19°55'09 1°11'08 1°11'29 1.37154 AU 25°32'04
evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node	12150 Oct 30 10:37 12150 Oct 31 15:46 12150 Nov 16 19:17 12150 Nov 16 19:17 12150 Nov 26 23:29 12150 Dec 10 20:38 12150 Dec 16 22:52 12150 Dec 24 10:53 12150 Dec 24 19:12 12151 Jan 01 18:03 12151 Jan 03 22:29 12151 Jan 10 14:57 12151 Jan 12 16:51 12151 Jan 24 17:27 12151 Jan 29 01:19 12151 Feb 06 14:42 12151 Feb 06 17:25 12151 Feb 07:18 12151 Feb 12 19:07 12151 Feb 13 17:36 12151 Feb 17 15:18 12151 Feb 27 00:20 12151 Mar 20 20:09 12151 Mar 24 16:49 12151 Apr 05 00:51 12151 Apr 05 00:51	27°M24'18 0°ズ 29°ズ07'01 0°云 11°云24'42 18°云24'53 16°云59'01 14°云21'46 12°云19'02 12°云04'37 8°云00'45 7°云46'00 10°云14'23 12°云01'29 0°≈ 8°≈19'50 24°≈57'35 25°≈10'31 0°ዧ 6°ዧ20'50 8°ዧ00'42 14°ዃ46'53 0°♈ 0°℧ 4°℧08'22 10°℧47'16 9°℧52'34 8°℧30'14	25°40'18 0.57583 AU -4°54'16 4°51'27 18°51'15 0°47'42 0°47'51 1.39373 AU	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set asc. node	12151 Oct 09 10:10 12151 Oct 14 21:43 12151 Oct 23 21:44 12151 Nov 03 16:32 12151 Nov 08 11:19 12151 Nov 22 02:35 12151 Nov 27 01:30 12151 Dec 02 22:15 12151 Dec 05 06:56 12151 Dec 13 14:24 12151 Dec 16 04:27 12151 Dec 26 09:54 12151 Dec 31 10:34 12152 Jan 13 06:08 12152 Jan 21 00:47 12152 Jan 21 00:47 12152 Jan 21 03:36 12152 Jan 20 33:6 12152 Jan 30 17:37 12152 Jan 30 17:37 12152 Jan 30 15:49 12152 Feb 01 09:09 12152 Feb 01 09:09 12152 Mar 06 06:09 12152 Mar 18 13:31 12152 Mar 24 11:36 12152 Mar 25 09:32	11° M.59'36 0° ♂ 16° ♂30'05 21° ♂46'18 28° ♂35'02 27° ♂41'11 24° ♂46'07 23° ♂26'26 23° ♂19'45 19° ♂28'32 19° ♂11'19 24° ♂04'09 26° ♂16'01 0° ♂ 22° ♂554'53 0° ≈ 8° ≈41'39 8° ≈55'39 20° ≈13'53 27° ≈04'34 26° ≈56'32 0° ♂ 17° ♀59'39 25° ♀05'46 22° ♀38'59 21° ♀49'23	0.55858 AU -5°43'48 5°42'34 19°55'09 1°11'08 1°11'29 1.37154 AU 25°32'04

	10150 14 20 00 46	1.60001.4150	1007116	,	10150) (10 0 (54	2° Y '28'30	
minimum elong	12152 Mar 30 02:46	16° ℃ 14'58	1°27'16	asc. node	12153 Mar 12 06:54		0.66421.441
morning rise	12152 Apr 04 18:25	10° ℃ 17'15		min. Earth dist.	12153 Mar 12 07:42	2° Υ 26'11	0.66431 AU
direct	12152 Apr 08 04:55	9° Υ ′09'27	1000 5100	inferior conj	12153 Mar 14 04:57	0° Υ 10'46	0°36'44
morning max el	12152 Apr 15 02:21	12° Y 54'54	19°05'08	minimum elong	12153 Mar 14 04:00	0° Y 13'37	0°36'26
desc. node	12152 Apr 27 17:37	29° Y 37'32			12153 Mar 14 08:33	30° ₹	
	12152 Apr 27 23:37	0°8		morning rise	12153 Mar 20 03:20	24° ∺ 29'42	
greatest brilliancy	12152 Apr 28 05:24	0° 8 21'46	-0.7m	direct	12153 Mar 23 03:18	23° ¥ 39′28	
morning set	12152 May 08 12:12	16° 8 06'50		morning max el	12153 Mar 29 14:32	27°) €05'48	18°21'51
	12152 May 17 10:53	Π °0			12153 Apr 01 05:41	0° Υ	
max. Earth dist.	12152 May 22 05:51	7° Ⅱ 29'20	1.45364 AU	desc. node	12153 Apr 14 14:17	19° Ƴ 43'10	
				morning set	12153 Apr 18 13:48	26° Y ′02'38	
superior conj	12152 May 24 22:53	11° Ⅱ 45'10			12153 Apr 21 01:34	0° 8	
minimum elong	12152 May 24 20:57	11° Ⅱ 37'30	2°13'32				
	12152 Jun 05 08:32	0 \circ		superior conj	12153 May 04 06:12	20° 8 45'49	-1°57'22
evening rise	12152 Jun 08 17:18	5° © 29'10		minimum elong	12153 May 03 21:48	20° 8 13'00	1°57'25
asc. node	12152 Jun 21 07:26	25° © 40'43		max. Earth dist.	12153 May 05 01:00	_	1.45763 AU
	12152 Jun 24 08:13	$0 {\circ} \Omega$			12153 May 10 04:09	$\Pi^{\circ}0$	
evening max el	12152 Jun 28 07:40	4° Ω 42'22	18°23'16	evening rise	12153 May 20 03:57	15° Ⅱ 38′20	
retrograde	12152 Jul 04 17:32	8° Ω 08'24			12153 May 29 08:14	0 \circ \odot	
evening set	12152 Jul 07 18:59	7° Ω 16′32		greatest brilliancy	12153 May 30 05:33	1°522'13	-0.8m
inferior conj	12152 Jul 13 14:41	1° Ω 47'13	2°45'43	asc. node	12153 Jun 08 04:27	14°9517'11	
minimum elong	12152 Jul 13 16:51	1° Ω 40′50	2°44'32	evening max el	12153 Jun 11 18:16	18° © 23'54	18°58'26
	12152 Jul 15 03:05	30° Ŗ ூ		retrograde	12153 Jun 18 12:50	22° 5 08'22	
min. Earth dist.	12152 Jul 15 21:21	29° © 07'15	0.64603 AU	evening set	12153 Jun 21 22:57	21°900'40	
morning rise	12152 Jul 19 13:27	25° 5 27'38		inferior conj	12153 Jun 27 11:09	15° © 16'15	3°07'31
desc. node	12152 Jul 24 17:08	22° © 55'17		minimum elong	12153 Jun 27 12:20	15°512'28	3°06'33
direct	12152 Jul 26 03:27	22°5548'08		min. Earth dist.	12153 Jun 29 03:01	13° © 09'46	0.66325 AU
	12152 Aug 07 23:34	$0^{\circ}\Omega$		morning rise	12153 Jul 03 01:04	8° 9 53'36	
morning max el	12152 Aug 08 18:44	0° Ω 47'30	27°23'39	direct	12153 Jul 09 07:46	6° ୭ 11'43	
S	12152 Aug 30 09:46	0° m)		desc. node	12153 Jul 11 14:23	6° © 30'13	
morning set	12152 Sep 13 02:16	24° m) 29'17		morning max el	12153 Jul 22 05:33		26°23'35
	12152 Sep 15 20:37	0∘ ⊽			12153 Aug 04 07:28	0°N	
asc. node	12152 Sep 17 08:21	3° ഫ 02'35			12153 Aug 23 03:18	0° m)	
max. Earth dist.	12152 Sep 17 16:13	3° £ 43'16	1.33087 AU	morning set	12153 Aug 27 04:11	7° m) 23'07	
max. Earth dist.	12132 Sep 17 10.13	3 — 13 10	1.55007 110	max. Earth dist.	12153 Aug 27 0 1:17 12153 Aug 31 02:37	14° m) 55'48	1.34701 AU
superior conj	12152 Sep 21 07:04	11° ≏ 20'00	0°37'30	asc. node	12153 Aug 51 02:57 12153 Sep 04 05:00	23° My 08'35	1.54701710
minimum elong	12152 Sep 21 07:04 12152 Sep 21 05:21	11° ⊆ 20°00	0°37'15	asc. node	12133 Бер он оз.оо	23 110 00 33	
evening rise	12152 Sep 21 03:21 12152 Sep 28 08:46	26° £ 32'02	0 37 13	superior conj	12153 Sep 05 04:47	25° m/ 10'32	0°09'32
evening rise	12152 Sep 28 08:40	0°M		minimum elong	12153 Sep 05 04:47 12153 Sep 05 04:16	25° m) 07'52	0°09'16
	12152 Sep 30 00:10	0° ⊼ ¹		behind sun begin	12153 Sep 03 04:10 12153 Sep 04 23:24	24° m) 42'48	0 0710
evening max el	12152 Oct 10 03:45	1° × 750'09	22°25'17	behind sun end	12153 Sep 04 25:24 12153 Sep 05 09:08	25° m/32'57	
desc. node	12152 Oct 19 22:15	2° × ⁷ 27'23	22 23 17	bennia sun ena	12153 Sep 03 03:00 12153 Sep 07 12:35	0∘ ರ	
retrograde	12152 Nov 01 20:11	8°×714'59		evening rise	12133 Sep 07 12.33		
evening set	12152 Nov 05 08:22	7° × ⁷ 47'56			12153 Sep. 12 17:51	10° Ω 56'31	
min. Earth dist.				evening rise	12153 Sep 12 17:51	10° ≏ 56'31	
			0.54786 ATT	_	12153 Sep 22 15:50	0° M	20°52'42
inferior coni	12152 Nov 13 05:25	4° ∡ 16'52	0.54786 AU -5°46'31	evening max el	12153 Sep 22 15:50 12153 Oct 01 17:42	0° ጤ 12° ጤ 13'20	20°52'42
inferior conj	12152 Nov 13 05:25 12152 Nov 14 00:58	4° х 16′52 3° х 49′16	-5°46'31	evening max el desc. node	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15	0°M 12°M13'20 16°M30'48	20°52'42
minimum elong	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56	4° ₹ 16'52 3° ₹ 49'16 3° ₹ 54'58		evening max el desc. node retrograde	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00	0°M 12°M13'20 16°M30'48 17°M57'34	20°52'42
	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52	4° ₹ 16'52 3° ₹ 49'16 3° ₹ 54'58 0° ₹ 01'48	-5°46'31	evening max el desc. node retrograde evening set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19	
minimum elong morning rise	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54	4° 🖈 16'52 3° 🖈 49'16 3° 🖈 54'58 0° 🖈 01'48 30° RM	-5°46'31	evening max el desc. node retrograde evening set inferior conj	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50	-4°50'26
minimum elong	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01	4° \$\tilde{x}\$16'52 3° \$\tilde{x}\$49'16 3° \$\tilde{x}\$54'58 0° \$\tilde{x}\$01'48 30° RML 29° \$\tilde{x}\$37'14	-5°46'31	evening max el desc. node retrograde evening set inferior conj minimum elong	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50 14°M03'46	-4°50'26 4°47'29
minimum elong morning rise direct	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01	4° ₹ 16'52 3° ₹ 49'16 3° ₹ 54'58 0° ₹ 01'48 30° RM 29° M.37'14 0° ₹	-5°46'31 5°45'28	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50 14°M03'46 13°M21'45	-4°50'26 4°47'29
minimum elong morning rise direct morning max el	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46	4° ₹ 16'52 3° ₹ 49'16 3° ₹ 54'58 0° ₹ 01'48 30° RM 29° M37'14 0° ₹ 13'17	-5°46'31 5°45'28	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25 12153 Nov 01 22:25	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50 14°M03'46 13°M21'45 9°M55'17	-4°50'26 4°47'29
minimum elong morning rise direct	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07	4° \$\tilde{X}\$16'52 3° \$\tilde{X}\$49'16 3° \$\tilde{X}\$54'58 0° \$\tilde{X}\$01'48 30° RM 29° M.37'14 0° \$\tilde{X}\$ 5° \$\tilde{X}\$13'17 13° \$\tilde{X}\$26'23	-5°46'31 5°45'28	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11	0°M 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50 14°M03'46 13°M21'45 9°M55'17	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el asc. node	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26	4° \$\frac{16}{52} 3° \$\frac{7}{49}'16 3° \$\frac{7}{54}'58 0° \$\frac{7}{50}'148 30° R IL 29° IL 37'14 0° \$\frac{7}{50}' \$\frac{7}{31}'17 13° \$\frac{7}{26}'23 0° \$\frac{7}{50}' \$\frac{7}{	-5°46'31 5°45'28	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07	4° \$\tilde{X}\$16'52 3° \$\tilde{X}\$49'16 3° \$\tilde{X}\$54'58 0° \$\tilde{X}\$01'48 30° RM 29° M.37'14 0° \$\tilde{X}\$ 5° \$\tilde{X}\$13'17 13° \$\tilde{X}\$26'23	-5°46'31 5°45'28	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° ✓	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el asc. node morning set	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17	4° ₹16'52 3° ₹49'16 3° ₹54'58 0° ₹01'48 30° RML 29° M.37'14 0° ₹ 5° ₹13'17 13° ₹26'23 0° ₹ 7° ₹38'49	-5°46'31 5°45'28 21°21'30	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° ✓ 1° ✓ 30'03	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el asc. node morning set superior conj	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22	4° ₹16'52 3° ₹49'16 3° ₹54'58 0° ₹01'48 30° RM 29° M37'14 0° ₹ 5° ₹13'17 13° ₹26'23 0° ₹ 7° ₹38'49	-5°46'31 5°45'28 21°21'30	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° 🗷 1° 🗷 30'03 22° 🗷 25'53	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el asc. node morning set	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29	4° ₹16'52 3° ₹49'16 3° ₹54'58 0° ₹01'48 30° RM 29° M37'14 0° ₹ 5° ₹13'17 13° ₹26'23 0° ₹ 7° ₹38'49 22° ₹53'15 23° ₹04'11	-5°46'31 5°45'28 21°21'30	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° ✓ 1° ✓ 30'03	-4°50'26 4°47'29 0.54596 AU
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49	4° \$\tilde{\$\tilde{\$7}16'52} 3° \$\tilde{\$\tilde{\$4}49'16} 3° \$\tilde{\$\tilde{\$4}54'58} 0° \$\tilde{\$\tilde{\$7}01'48} 30° \tilde{\$\tilde{\$8}\$\tilde{\$1}12'17} 13° \$\tilde{\$\tilde{\$7}26'23} 0° \tilde{\$7}0' \tilde{\$3}3'49} 22° \tilde{\$53'15} 23° \tilde{\$3}0'4'11 0° \$\tilde{\$8}\$	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° 🚜 1° 🚜 30'03 22° 🚜 25'53 0° 🗟	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 14 00:58 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49 12153 Jan 08 10:17	4° ₹16'52 3° ₹49'16 3° ₹54'58 0° ₹01'48 30° RM 29° M37'14 0° ₹ 5° ₹13'17 13° ₹26'23 0° ₹ 7° ₹38'49 22° ₹553'15 23° ₹04'11 0° ≈ 2° ≈07'14	-5°46'31 5°45'28 21°21'30	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 24 06:52 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° 1° √30'03 22° √25'53 0° √323'20	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49 12153 Jan 08 10:17 12153 Jan 08 10:17 12153 Jan 08 10:17	4° \$\tilde{\$\tilde{\$7}16'52} 3° \$\tilde{\$\tilde{\$7}49'16} 3° \$\tilde{\$7}54'58 0° \$\tilde{\$7}01'48 30° RM 29° M.37'14 0° \$\tilde{\$7} 5° \$\tilde{\$7}13'17 13° \$\tilde{\$7}26'23 0° \$\tilde{\$7} 7° \$\tilde{\$38'49} 22° \$\tilde{\$53'15} 23° \$\tilde{\$504'11} 0° \$\tilde{\$2} \$\tilde{\$20\$} \$\tilde{\$7}07'14 10° \$\tilde{\$805'00} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$100\$} \$\tilde{\$300\$} \$\tilde{\$100\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\tilde{\$1000\$} \$\til	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 10 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 19 01:14	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° ✓ 1° ✓ 30'03 22° ✓ 225'53 0° ¬° С23'20 7° С28'54	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 14 00:58 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49 12153 Jan 08 10:17 12153 Jan 08 10:17 12153 Jan 12 12:56 12153 Jan 16 12:35	4° \$\tilde{\$\tilde{\$7}16'52}\$ 3° \$\tilde{\$\tilde{\$4}49'16}\$ 3° \$\tilde{\$\tilde{\$7}64'58}\$ 0° \$\tilde{\$\tilde{\$7}01'48}\$ 30° \$\tilde{\$\tilde{\$1}}\$ 29° \$\tilde{\$\tilde{\$1}37'14}\$ 0° \$\tilde{\$\tilde{\$7}\$}\$ 5° \$\tilde{\$\tilde{\$1}31'17}\$ 13° \$\tilde{\$\tilde{\$2}6'23}\$ 0° \$\tilde{\$\tilde{\$7}\$}\$ 7° \$\tilde{\$38'49}\$ 22° \$\tilde{\$53'15}\$ 23° \$\tilde{\$04'11}\$ 0° \$\approx\$ 2° \$\approx 07'14\$ 10° \$\approx 05'00\$ 17° \$\approx 24'20	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 10 06:06 12153 Dec 11 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 19 02:17 12153 Dec 22 04:17	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° ✓ 1° ✓ 30'03 22° ✓ 225'53 0° ¬ 323'20 ¬ 328'54 14° 30'134	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 14 00:58 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49 12153 Jan 08 10:17 12153 Jan 12 12:56 12153 Jan 16 12:35 12153 Jan 23 22:20	4° \$\times^16'52 3° \$\times^49'16 3° \$\times^454'58 0° \$\times^01'48 30° RM 29° \$\mathbb{M}\$.37'14 0° \$\times^150' \$\times^13'17 13° \$\times^226'23 0° \$\times^70' \$\times^38'49 22° \$\times^53'15 23° \$\times^07'14 10° \$\approx 2° \$\approx 07'14 10° \$\approx 05'00 17° \$\approx 24'20 0° \$\times^1	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 10 06:06 12153 Dec 11 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 19 02:17 12153 Dec 22 04:17 12153 Dec 26 21:42	0°M、 12°M13'20 16°M30'48 17°M44'19 13°M49'50 14°M03'46 13°M21'45 9°M55'17 9°M18'12 15°M36'21 0°ズ 1°ズ30'03 22°ズ25'53 0°उ 7°る23'20 7°る28'54 14°る01'34 23°る38'57	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 14 00:58 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 08 10:17 12153 Jan 08 10:17 12153 Jan 12 12:56 12153 Jan 16 12:35 12153 Jan 23 22:20 12153 Feb 15 01:30	4° \$\times^16'52 3° \$\times^49'16 3° \$\times^49'16 3° \$\times^59'148 30° RM 29° M.37'14 0° \$\times^50' \times^13'17 13° \$\times^226'23 0° \$\times^70' \times^38'49 22° \$\times^53'15 23° \$\times^04'11 0° \$\times^205'00 17° \$\times^24'20 0° \$\times^97'	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46 1.35137 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 22 04:17 12153 Dec 26 21:42 12153 Dec 30 04:42	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° 7° 7° 7° 7° 7° 7° 7° 7° 7°	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 13 20:56 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 07 08:49 12153 Jan 08 10:17 12153 Jan 08 10:17 12153 Jan 12 12:56 12153 Jan 23 22:20 12153 Feb 15 01:30 12153 Feb 16 19:49	4° ₹16'52 3° ₹49'16 3° ₹54'58 0° ₹01'48 30° RML 29° M.37'14 0° ₹ 5° ₹13'17 13° ₹26'23 0° ₹ 7° ₹38'49 22° ₹53'15 23° ₹04'11 0° ≈ 2° ≈07'14 10° ≈05'00 17° ≈24'20 0° 升 0° ↑ 1° ↑46'24	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 22 04:17 12153 Dec 26 21:42 12153 Dec 30 04:42 12154 Jan 03 09:26	0°M、 12°M13'20 16°M30'48 17°M57'34 17°M44'19 13°M49'50 14°M03'46 13°M21'45 9°M55'17 9°M18'12 15°M36'21 0°ズ 1°ズ30'03 22°ズ25'53 0°중 7°云23'20 7°云28'54 14°云01'34 23°云38'57 0°≈ 7°≈39'33	-4°50'26 4°47'29 0.54596 AU 23°05'05
minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12152 Nov 13 05:25 12152 Nov 14 00:58 12152 Nov 14 00:58 12152 Nov 22 10:52 12152 Nov 22 13:54 12152 Nov 25 18:01 12152 Nov 28 20:01 12152 Dec 07 12:46 12152 Dec 14 09:07 12152 Dec 23 21:26 12152 Dec 27 15:17 12153 Jan 03 21:22 12153 Jan 03 23:29 12153 Jan 08 10:17 12153 Jan 08 10:17 12153 Jan 12 12:56 12153 Jan 16 12:35 12153 Jan 23 22:20 12153 Feb 15 01:30	4° \$\times^16'52 3° \$\times^49'16 3° \$\times^454'58 0° \$\times^901'48 30° RM 29° M.37'14 0° \$\times^7 5° \$\times^13'17 13° \$\times^226'23 0° \$\times^7 7° \$\times^38'49 22° \$\times^53'15 23° \$\times^04'11 0° \$\times 2° \$\times^07'14 10° \$\times^05'00 17° \$\times^24'20 0° \$\times^9\$	-5°46'31 5°45'28 21°21'30 1°27'08 1°27'46 1.35137 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12153 Sep 22 15:50 12153 Oct 01 17:42 12153 Oct 07 11:15 12153 Oct 13 07:00 12153 Oct 15 15:27 12153 Oct 24 16:40 12153 Oct 25 12:25 12153 Nov 01 22:25 12153 Nov 06 02:11 12153 Nov 19 03:39 12153 Nov 30 08:10 12153 Dec 01 06:06 12153 Dec 12 02:42 12153 Dec 15 15:10 12153 Dec 19 01:14 12153 Dec 22 04:17 12153 Dec 26 21:42 12153 Dec 30 04:42	0°M. 12°M.13'20 16°M.30'48 17°M.57'34 17°M.44'19 13°M.49'50 14°M.03'46 13°M.21'45 9°M.55'17 9°M.18'12 15°M.36'21 0° 7° 7° 7° 7° 7° 7° 7° 7° 7°	-4°50'26 4°47'29 0.54596 AU 23°05'05 1°36'11 1°37'00 1.33479 AU

	10154 F. 1. 10. 01.55	220\/ 44111			10155 1 14 14 15	001/	
retrograde	12154 Feb 12 21:55	22°) (44'11			12155 Jan 14 14:15	0° ∀	
evening set	12154 Feb 19 15:34	20° ★ 12'30		retrograde	12155 Jan 26 15:54	5°) 47′33	
min. Earth dist.	12154 Feb 23 12:48	16° ∺ 35'59		evening set	12155 Feb 02 14:42	3° ¥ 23′20	
inferior conj	12154 Feb 25 21:49	14°) €00'08	-0°24'54	min. Earth dist.	12155 Feb 06 08:46	0° ∺ 15'56	0.62981 AU
minimum elong	12154 Feb 25 22:33	13° ¥ 58′08	0°24'17		12155 Feb 06 15:27	30° ₹ ≈	
asc. node	12154 Feb 27 04:18	12°) 37′56		inferior conj	12155 Feb 09 04:24	27° ≈ 30'15	-1°36'09
morning rise	12154 Mar 04 07:14	8° ∺ 32'09		minimum elong	12155 Feb 09 07:36	27° ≈ 22'25	1°34'19
direct	12154 Mar 06 22:11	7° ¥ 56′06		asc. node	12155 Feb 14 01:41	23° ≈ 20′13	
morning max el	12154 Mar 13 06:56	11°) (15′00	17°55'31	morning rise	12155 Feb 16 02:54	22° ≈ 18′23	
	12154 Mar 26 09:06	$0^{\circ}\mathbf{\Upsilon}$		direct	12155 Feb 18 10:36	21°≈52'58	
morning set	12154 Mar 30 20:17	7° Ƴ 23'38		morning max el	12155 Feb 25 00:42	25°≈15'00	17°46'34
desc. node	12154 Apr 01 10:55	10° Ƴ 03'39			12155 Mar 01 00:04	0° ∀	
	r			morning set	12155 Mar 13 04:03	19° ¥ 57'22	
superior conj	12154 Apr 13 20:01	0° 8 10'15	-1°25'00		12155 Mar 18 23:27	0°Υ	
minimum elong	12154 Apr 13 11:22	29° Y 35'51		desc. node	12155 Mar 19 07:30	0° Υ 34'26	
minimum ciong	12154 Apr 13 17:26	0° 8	1 2425	dese. Hode	12133 Will 17 07.30	0 13420	
max. Earth dist.	12154 Apr 17 21:12	6° 8 34'27	1.45412 AU	superior conj	12155 Mar 25 06:25	10° Ƴ 35'12	0044122
	-	_	1.43412 AU				
evening rise	12154 Apr 29 20:16	25° 8 07'57		minimum elong	12155 Mar 25 01:54		0°43'56
	12154 May 03 00:33	0°II		max. Earth dist.	12155 Mar 31 15:27	20° Y 57'17	1.44354 AU
greatest brilliancy	12154 May 14 07:09	16° ∏ 56′55	-0.6m		12155 Apr 06 09:01	0° 8	
	12154 May 24 00:10	0ಂತಾ		evening rise	12155 Apr 09 08:02	4° 8 34'55	
evening max el	12154 May 25 23:59	2° 5 09'14	19°49'45		12155 Apr 26 10:32	Π °0	
asc. node	12154 May 26 01:35	2° © 13'16		evening max el	12155 May 08 23:54	15° Ⅱ 55'41	20°54'58
retrograde	12154 Jun 02 11:03	6° ॐ 24'01		asc. node	12155 May 12 22:48	19° Ⅱ 16'17	
evening set	12154 Jun 06 06:23	4° © 59'54		retrograde	12155 May 17 09:57	20° ∏ 50′00	
	12154 Jun 10 20:47	30° ₹Ⅱ		evening set	12155 May 21 15:14	19° Ⅱ 09'39	
inferior conj	12154 Jun 11 14:16	29° Ⅱ 01'38	3°14'48	inferior conj	12155 May 26 21:31	12° Ⅱ 59'09	3°09'52
minimum elong	12154 Jun 11 14:22	29° Ⅱ 01'18	3°13'55	minimum elong	12155 May 26 20:37	13° Ⅱ 02'16	3°08'59
min. Earth dist.	12154 Jun 12 15:31	27° Ⅲ 36′53	0.67615 AU	min. Earth dist.	12155 May 27 08:58	12° Ⅱ 19'31	0.68437 AU
morning rise	12154 Jun 16 22:00	22° I I40'13		morning rise	12155 Jun 01 01:48	6° Ⅱ 41'32	
direct	12154 Jun 22 18:04	20° I I05'35		direct	12155 Jun 06 09:22	4° Ⅱ 21'18	
desc. node	12154 Jun 28 11:33	22° I I02'32		desc. node	12155 Jun 15 08:36	9° Ⅱ 04'14	
morning max el	12154 Jul 04 15:47	27° I 13'49	25°04'13	morning max el	12155 Jun 17 01:57	10° Ⅱ 43'52	23°35'29
morning max cr	12154 Jul 07 05:58	0°95	25 04 15	morning max er	12155 Jul 02 09:19	0°95	25 55 27
	12154 Jul 28 22:51	0° U			12155 Jul 21 17:01	0° U	
		19°Ω30'58				0° Ω 41'50	
morning set	12154 Aug 09 13:59		1 2 6 7 4 0 4 7 7	morning set	12155 Jul 22 02:57		1 20045 411
max. Earth dist.	12154 Aug 13 04:05	26° Ω 01'51	1.36749 AU	max. Earth dist.	12155 Jul 26 01:40	7° Ω 29'09	1.39045 AU
	12154 Aug 15 07:01	0° m)				0	
				superior conj	12155 Aug 02 15:08	21°Ω10'57	
superior conj	12154 Aug 19 16:41	8° m 30'18		minimum elong	12155 Aug 02 19:07	21° Ω 29'37	0°56'30
minimum elong	12154 Aug 19 18:08	8° m 37'27	0°22'32		12155 Aug 07 06:21	0° m y	
asc. node	12154 Aug 22 01:41	13° Mp 13'30		asc. node	12155 Aug 08 22:24	3° Mp 13′59	
evening rise	12154 Aug 27 22:43	25°Mp06'38		evening rise	12155 Aug 11 20:37	8° m 55'37	
	12154 Aug 30 09:17	0∘ ट			12155 Aug 23 18:22	0∘ ट	
evening max el	12154 Sep 14 02:46	23° ₽ 19′02	19°38'43	evening max el	12155 Aug 28 00:50	5° ≏ 12'16	18°46'20
retrograde	12154 Sep 24 00:01	28° ≏ 14'43		retrograde	12155 Sep 05 09:33	9° ഫ 23'53	
desc. node	12154 Sep 24 08:42	28° ≏ 14'21		evening set	12155 Sep 07 07:28	9° £ 11'30	
evening set	12154 Sep 25 20:57	28° ≏ 04'54		desc. node	12155 Sep 11 06:08	7° ≏ 36'56	
inferior conj	12154 Oct 04 16:12	24° £ 01'01	-3°10'27	inferior conj	12155 Sep 15 10:27	4° £ 49'44	-1°18'53
minimum elong	12154 Oct 04 07:58	24° £ 13'57	3°07'14	minimum elong	12155 Sep 15 07:10	4° £ 55'44	1°17'36
min. Earth dist.	12154 Oct 06 21:56	22° £ 36'47	0.55342 AU	min. Earth dist.	12155 Sep 18 12:41	2° £ 34'58	0.56894 AU
morning rise	12154 Oct 12 17:07	19° £ 39'31	0.000 .2 110	IIIII. Burur uibt.	12155 Sep 22 19:28	30°R, Mp	0.0007 1.110
direct	12154 Oct 17 16:57	18° ≏ 44'18		morning rise	12155 Sep 23 03:31	29° m 50'36	
		25° £ 39'05	24052150	•	12155 Sep 28 21:28	-	
morning max el	12154 Oct 31 14:03		24 32 39	direct		28° m/30'21	
	12154 Nov 04 16:26	0°M			12155 Oct 05 01:17	0° ⊽	26026150
asc. node	12154 Nov 18 03:01	20°M13'41		morning max el	12155 Oct 13 03:54	5° £ 54'57	26°26'50
_	12154 Nov 23 04:13	0° ∡ 7		_	12155 Oct 30 20:11	0° M	
morning set	12154 Nov 26 14:33	7° ∡ 10'55		asc. node	12155 Nov 04 23:50	9°M26'48	
				morning set	12155 Nov 11 01:04	21°M48'28	
superior conj	12154 Dec 03 09:48	22° ҂ 04′22	1°38'48		12155 Nov 14 19:13	0° ∡ ¹	
minimum elong	12154 Dec 03 09:42	22° ∡ 03'48	1°39'39				
max. Earth dist.	12154 Dec 05 05:58	26° ₹ 05'58	1.32260 AU	superior conj	12155 Nov 17 20:52	6° х 49′23	1°35'24
	12154 Dec 07 01:18	0°ರ		minimum elong	12155 Nov 17 19:45	6° ∡ ¹43'09	1°36'06
evening rise	12154 Dec 10 16:36	7° る 38'02		max. Earth dist.	12155 Nov 18 12:48	8° ∡ 18′01	1.31528 AU
desc. node	12154 Dec 21 06:23	27° ප 36'21		evening rise	12155 Nov 24 18:50	21° х 54'31	
	12154 Dec 22 16:09	0° ≈		-	12155 Nov 28 17:41	0°ರ	
evening max el	12155 Jan 12 20:49	28° ≈ 25'43	27°32'25	desc. node	12155 Dec 08 03:25	17° ට 06'18	
						0010	

evening max el	12155 Dec 16 17:51 12155 Dec 26 03:46	0° ≈ 10° ≈ 51'51	27°15'35	desc. node	12156 Nov 20 07:42 12156 Nov 24 00:32	0°る 5°る59'05	
retrograde	12156 Jan 09 01:59	18° ≈ 06'55		evening max el	12156 Dec 07 03:50	22° る 28'43	26°24'15
evening set	12156 Jan 15 23:47	15° ≈ 58'48		retrograde	12156 Dec 21 02:36	29° る 34'50	
min. Earth dist.	12156 Jan 19 18:16	13° ≈ 13′14	0.60883 AU	evening set	12156 Dec 27 14:47	27° ප් 51'47	
inferior conj	12156 Jan 22 21:17	10° ≈ 31′21	-2°54'33	min. Earth dist.	12156 Dec 31 17:27	25° ප 15'51	0.58739 AU
minimum elong	12156 Jan 23 03:22	10° ≈ 18′10	2°51'34	inferior conj	12157 Jan 03 20:52	22° る 54'10	
morning rise	12156 Jan 30 09:51	5° ≈ 38'41		minimum elong	12157 Jan 04 05:08	22° る 38'34	4°10'11
asc. node	12156 Jan 31 23:00	5°≈21'40		morning rise	12157 Jan 11 22:21	18°る22'53	
direct	12156 Feb 01 12:45	5°≈20'18	17055151	direct	12157 Jan 14 00:22 12157 Jan 17 20:13	18°る07'56 19°る01'12	
morning max el	12156 Feb 08 16:25 12156 Feb 22 10:07	8°≈55'39 0°¥	17°55'51	asc. node morning max el	12157 Jan 17 20:13 12157 Jan 22 02:21	19 ⁻ ろ 01 ⁻ 12	18°24'53
morning set	12156 Feb 24 06:45	3° ¥ 23'32		morning max ci	12157 Jan 28 05:26	0° ≈	16 24 33
desc. node	12156 Mar 05 04:05	21° H 10'59		morning set	12157 Feb 06 22:46	17°≈25'40	
dese. node	12100 11111 00 0 1.00	21 /(100)		morning sec	12157 Feb 13 13:16	0°) €	
superior conj	12156 Mar 05 17:22	22°) €08'55	-0°04'20				
minimum elong	12156 Mar 05 17:01	22°) €07'21	0°04'04	superior conj	12157 Feb 16 02:15	4°) €43'08	0°30'44
behind sun begin	12156 Mar 05 09:04	21°) 32′44		minimum elong	12157 Feb 16 04:22	4°) €52'48	0°30'50
behind sun end	12156 Mar 06 00:58	22°) 41′54		desc. node	12157 Feb 20 00:43	11°) 49′56	
	12156 Mar 10 07:29	0 ° $\mathbf{\gamma}$		max. Earth dist.	12157 Feb 23 14:13	18° ∺ 03'14	1.40650 AU
max. Earth dist.	12156 Mar 13 05:13	4° Ƴ 50'09	1.42704 AU	evening rise	12157 Feb 27 23:51	25° ∺ 27'45	
evening rise	12156 Mar 19 06:12	14° Ƴ 34'40			12157 Mar 02 18:39	0° Υ	
	12156 Mar 29 07:45	0°8			12157 Mar 23 01:54	0°8	
evening max el	12156 Apr 20 18:30		22°10'29	evening max el	12157 Apr 03 09:38	13° 8 31'37	23°31'01
aca mada	12156 Apr 21 01:33	0°Ⅱ 5°Ⅱ09'56		retrograde asc. node	12157 Apr 14 02:41	19° 8 50'18	
asc. node retrograde	12156 Apr 28 20:05 12156 Apr 30 07:40	5° Π 20'20		evening set	12157 Apr 15 17:23 12157 Apr 19 06:12	19 8 38 14	
evening set	12156 May 04 23:41	3° I I20′20 3° I I24′35		min. Earth dist.	12157 Apr 19 00.12 12157 Apr 24 01:57	17 8 40 39	0.68685 AU
evening set	12156 May 04 23:41 12156 May 08 03:01	30°R 8		inferior conj	12157 Apr 24 15:53	11° 8 13'19	2°28'32
inferior conj	12156 May 10 06:42	27° 8 04'08	2°54'12	minimum elong	12157 Apr 24 13:47	11° 8 20'32	
minimum elong	12156 May 10 05:03	27° 8 09'57	2°53'15	morning rise	12157 Apr 29 21:20	5° 8 07'59	
min. Earth dist.	12156 May 10 05:11	27° 8 09'27	0.68789 AU	direct	12157 May 04 02:51	3° 8 27'38	
morning rise	12156 May 15 10:14	20° 8 51'59		morning max el	12157 May 12 07:53	8° 8 08'53	20°45'40
direct	12156 May 20 04:41	18° 8 50'39		desc. node	12157 May 19 02:23	16° 8 05'14	
morning max el	12156 May 29 14:15	24° 8 21'19	22°06'44		12157 May 29 00:58	$\Pi^{\circ}0$	
desc. node	12156 Jun 01 05:31	27° 8 10'57		morning set	12157 Jun 11 02:22	19° Ⅱ 44'40	
	12156 Jun 03 14:46	$\Pi^{\circ}0$			12157 Jun 17 14:18	0_{\circ} වෙ	
	12156 Jun 24 18:58	0ංම		max. Earth dist.	12157 Jun 19 07:34	2°5546'00	1.43326 AU
morning set	12156 Jul 01 14:50	10°545'21	1 41224 433		10157 1 06 00 14	120055121	1057110
max. Earth dist.	12156 Jul 07 01:24 12156 Jul 13 02:15	19°≌40′55 0° Ω	1.41324 AU	superior conj	12157 Jun 26 02:14	13°955'31 14°923'02	
	12130 Jul 13 02.13	0 86		minimum elong	12157 Jun 26 08:48 12157 Jul 05 10:28	14 2 3 02 02 0° Ω	1 3/39
superior conj	12156 Jul 14 19:46	3° Ω 02'33	-1°29'50	evening rise	12157 Jul 08 04:16	4° Ω 50'19	
minimum elong	12156 Jul 15 02:04	3° Ω 30′29		asc. node	12157 Jul 12 15:59	12° Ω 44'55	
evening rise	12156 Jul 25 07:58	22° Ω 14'07			12157 Jul 24 01:26	0° m)	
asc. node	12156 Jul 25 19:10	23° Ω 06′10		evening max el	12157 Jul 24 20:56	0° m 50'32	18°03'37
	12156 Jul 29 13:01	0° m		retrograde	12157 Jul 31 10:49	4° m 13'35	
evening max el	12156 Aug 10 08:17	17° m 46'29	18°15'05	evening set	12157 Aug 02 23:23	3° Mp 43'25	
retrograde	12156 Aug 17 14:02	21°M 26'25			12157 Aug 08 05:48	30°R Ω	
evening set	12156 Aug 19 18:33	21°Mp06'59		inferior conj	12157 Aug 09 14:25	28° Ω 41′20	1°33'50
inferior conj	12156 Aug 27 02:36	16° Mp 24′46	0°19'04	minimum elong	12157 Aug 09 16:49	28° Ω 35'25	1°32'33
minimum elong	12156 Aug 27 03:14	16° m 23'23	0°18'32	min. Earth dist.	12157 Aug 12 16:55	25° Ω 39'19	0.61256 AU
desc. node	12156 Aug 28 03:32	15° Mp 31'13	0.50072 ATT	desc. node	12157 Aug 15 00:56	23° Ω 37'59	
min. Earth dist.	12156 Aug 30 10:36	13° Mp 35'16	0.58973 AU	morning rise direct	12157 Aug 16 07:36	22° Ω 42'03 20° Ω 27'12	
morning rise direct	12156 Sep 03 08:29 12156 Sep 09 16:23	10° Mp 50'48 9° Mp 01'52		morning max el	12157 Aug 22 23:04 12157 Sep 06 04:30	$28^{\circ}\Omega 25'43$	27°57'22
morning max el	12156 Sep 09 16.23 12156 Sep 24 00:48	9 11JU1 32 16° Mp 47'56	27°30'56	morning max ci	12157 Sep 06 04.30 12157 Sep 07 17:12	28 8 6 23 43	21 31 44
	12156 Oct 04 22:18	0° <u>₽</u>	2, 2000		12157 Sep 07 17:12 12157 Sep 28 18:48	0∘ ಹ	
asc. node	12156 Oct 21 20:35	29° ⊆ 01'39		asc. node	12157 Oct 08 17:17	0 — 18° ≏ 51'13	
	12156 Oct 22 08:10	0°M		morning set	12157 Oct 09 11:03	20° £ 22'36	
morning set	12156 Oct 25 08:33	6° M ₁4'22		Č	12157 Oct 13 23:44	0°M	
				max. Earth dist.	12157 Oct 15 04:36	2°M37'42	1.31592 AU
superior conj	12156 Nov 01 08:34	21°M33'07	1°26'16				
minimum elong	12156 Nov 01 06:41	21°M22'40	1°26'40	superior conj	12157 Oct 16 19:00	6° M 09′11	1°11'33
max. Earth dist.	12156 Oct 31 21:36	20°M31'58	1.31303 AU	minimum elong	12157 Oct 16 16:45	5°M56'48	1°11'38
	12156 Nov 05 03:44	0° ∡ 7		evening rise	12157 Oct 23 12:19	20°M56'56	
evening rise	12156 Nov 08 02:06	6° ≯ 22'58			12157 Oct 27 20:11	0° ∡ 7	

1 1	10157 N 10 01 44	220 750142			12150 0 4 20 20 00	00.7	
desc. node	12157 Nov 10 21:44	23° ₹ 59'42		1 1	12158 Oct 20 20:09	0°×7	
	12157 Nov 15 17:00	0°る	25002120	desc. node	12158 Oct 28 19:00	10° х 48′54	22022116
evening max el	12157 Nov 18 19:42	3°る14'10	25°02'38	evening max el	12158 Oct 31 06:05	13° x ⁷ 23'19	23°23'16
retrograde	12157 Dec 02 15:24	10°る09'43		retrograde	12158 Nov 13 15:16	20°×703'10	
evening set	12157 Dec 08 07:13	8° る 57'50		evening set	12158 Nov 17 23:55	19° ∡ 21′52	
min. Earth dist.	12157 Dec 13 07:41	6°る15'09	0.56786 AU	min. Earth dist.	12158 Nov 24 15:55	16° ∡ 13'42	0.55311 AU
inferior conj	12157 Dec 16 00:18	4° る 29'38		inferior conj	12158 Nov 26 07:43	15° ∡ 15'38	
minimum elong	12157 Dec 16 07:38	4° ට 17'36	5°17'25	minimum elong	12158 Nov 26 08:47	15° ∡ 14'05	5°51'02
morning rise	12157 Dec 24 10:17	0° ට 20'12		morning rise	12158 Dec 04 19:21	11° × ⁷ 23'58	
direct	12157 Dec 26 17:50	0° ට 04'53		direct	12158 Dec 07 16:15	11° ∡ 704′04	
asc. node	12158 Jan 04 17:23	4° ට 14'14		morning max el	12158 Dec 18 13:23	16° ≯ 14'30	20°29'22
morning max el	12158 Jan 05 02:27	4° ට 35'44	19°15'37	asc. node	12158 Dec 22 14:29	20° ∡ ¹46′28	
	12158 Jan 21 01:28	0° ≈			12158 Dec 28 16:53	0°ಕ	
morning set	12158 Jan 21 23:50	1°≈51'01		morning set	12159 Jan 06 06:45	16° පි 30'14	
					12159 Jan 12 19:37	0° ≈	
superior conj	12158 Jan 30 04:24	18° ≈ 04'34	0°58'34				
minimum elong	12158 Jan 30 07:18	18° ≈ 18′36	0°58'46	superior conj	12159 Jan 13 19:20	2° ≈ 00'49	1°18'48
	12158 Feb 05 12:41	0° ∀		minimum elong	12159 Jan 13 21:55	2°≈13'54	1°19'17
max. Earth dist.	12158 Feb 05 20:38	0° ∺ 36′03	1.38419 AU	max. Earth dist.	12159 Jan 19 04:26	12° ≈ 39'09	1.36258 AU
desc. node	12158 Feb 06 21:23	2° ∺ 27'31		evening rise	12159 Jan 23 00:38	19° ≈ 51'53	
evening rise	12158 Feb 09 14:44	7° ∺ 15'49		desc. node	12159 Jan 24 18:05	22° ≈ 59'49	
	12158 Feb 23 17:01	$0^{\circ}\mathbf{\Upsilon}$			12159 Jan 28 18:11	0° ∀	
evening max el	12158 Mar 16 23:20	27° Y 23'26	24°50'09		12159 Feb 17 18:13	0° Y	
	12158 Mar 19 19:43	0° 8		evening max el	12159 Feb 27 12:50	11° Υ 13'29	26°00'43
retrograde	12158 Mar 28 17:49	4° 8 14'46		retrograde	12159 Mar 12 04:08	18° Y 26'48	
asc. node	12158 Apr 02 14:42	2° 8 30'08		evening set	12159 Mar 18 07:07	15° Ƴ 57'04	
evening set	12158 Apr 03 09:14	1° 8 53'23		asc. node	12159 Mar 20 12:04	13° Ƴ 49'25	
	12158 Apr 05 07:12	30° ŖƳ		min. Earth dist.	12159 Mar 22 12:19	11° Y 28'36	0.67167 AU
min. Earth dist.	12158 Apr 07 21:04	26° Ƴ 49'44	0.68137 AU	inferior conj	12159 Mar 24 02:41	9° Ƴ 28'53	1°07'35
inferior conj	12158 Apr 08 23:13	25° Ƴ 23'12	1°53'05	minimum elong	12159 Mar 24 01:07	9° Ƴ 33'47	1°06'57
minimum elong	12158 Apr 08 21:06	25° Ƴ 30'12	1°52'08	morning rise	12159 Mar 29 19:49	3° Ƴ 41'38	
morning rise	12158 Apr 14 09:12	19° Y 26′06		direct	12159 Apr 02 01:46	2° Υ 41'34	
direct	12158 Apr 18 02:27	18° Ƴ 06'43		morning max el	12159 Apr 08 17:46	6° Ƴ 17'01	18°44'49
morning max el	12158 Apr 25 09:05	22° Y ′08'33	19°37'30	desc. node	12159 Apr 22 19:52	25° Y 28'31	
morning man vi	12158 May 01 23:14	0°8	1, 3, 30	dese. node	12159 Apr 25 18:04	0°8	
desc. node	12158 May 05 23:10	5° 8 34'25		morning set	12159 Apr 30 13:54	7° 8 31'20	
greatest brilliancy	12158 May 08 01:55	8° 8 38'34	-0.6m	morning sec	12159 May 14 23:31	0°II	
morning set	12158 May 21 02:38	28° 8 19'09	0.0111	max. Earth dist.	12159 May 15 15:01	1° Ⅱ 00'34	1.45627 AU
morning set	12158 May 22 04:51	0°II		max. Earth dist.	1213) May 13 13.01	1 110034	1.43027 710
max. Earth dist.	12158 Jun 01 20:53		1.44813 AU	superior conj	12159 May 16 20:33	2° Ⅱ 56'08	-2°08'42
max. Earth dist.	12130 Juli 01 20.33	10 11 30 23	1.4-015710	minimum elong	12159 May 16 25:35	2° I 35'49	
superior conj	12158 Jun 06 08:48	23° Ⅱ 48'14	2012120	evening rise	12159 Jun 01 05:04	27° I 16'02	2 0) 14
minimum elong	12158 Jun 06 11:11	23° I I57'46		evening rise	12159 Jun 02 21:56	0°9	
minimum ciong	12158 Jun 10 04:48	0°9	2 13 07	greatest brilliancy	12159 Jun 07 18:05	7°945'27	-0.9m
evening rise	12158 Jun 20 04:36	16°933'31		asc. node	12159 Jun 16 09:50	20°959'59	-0.9111
evening rise	12158 Jun 28 05:50	0°Ω		evening max el		20 3 59 39 27° 9 51'54	18°36'02
asc. node	12158 Jun 29 12:52	2° Ω 05'15		evening max er	12159 Jun 21 23:40 12159 Jun 24 12:28	27 3 31 34 0° Ω	18 30 02
evening max el	12158 Jul	$14^{\circ}\Omega 15'09$	18°10'50	retrograde	12159 Jun 28 12:11	1° Ω 24'19	
retrograde	12158 Jul 14 19:36	17° Ω 36'02	16 10 30	evening set	12159 Jul	0° Ω 25'44	
•	12158 Jul 17 16:23	16° Ω 52'29		evening set		30°Rூ	
evening set			2025120	inforior coni	12159 Jul 02 08:55		2056155
inferior conj	12158 Jul 23 18:00	11° Ω 32′20	2°25'20	inferior conj	12159 Jul 07 09:21	24°549'31	2°56'55
minimum elong	12158 Jul 23 20:32	11° Ω 25'18	2°24'01	minimum elong	12159 Jul 07 11:09	24°5944'03	2°55'49
min. Earth dist.	12158 Jul 26 08:40	8° Ω 39'28	0.63461 AU	min. Earth dist.	12159 Jul 09 09:39	22°522'41	0.65388 AU
morning rise	12158 Jul 29 23:01	5° Ω 17'47		morning rise	12159 Jul 13 04:03	18°927'51	
desc. node	12158 Aug 01 22:17	3° Ω 31′05		direct	12159 Jul 19 15:17	15°546'26	
direct	12158 Aug 05 15:10	2° Ω 44'43	25045142	desc. node	12159 Jul 19 19:36	15°546'33	27001102
morning max el	12158 Aug 19 13:08	10° Ω 46'17	2/~45'43	morning max el	12159 Aug 02 00:06	23°939'43	27°01'03
	12158 Sep 03 16:26	0° Mp			12159 Aug 07 15:53	0°N	
	12158 Sep 21 04:09	0° ™			12159 Aug 28 01:06	0° M)	
morning set	12158 Sep 23 06:21	4° £ 07'53		morning set	12159 Sep 06 15:40	17° m 23'10	1.00=21 :==
asc. node	12158 Sep 25 13:57	8° £ 50'33		max. Earth dist.	12159 Sep 10 22:50	25° m 52'36	1.33721 AU
max. Earth dist.	12158 Sep 28 06:09	14° ≏ 26'34	1.32400 AU	asc. node	12159 Sep 12 10:38	28° m 55'12	
					12159 Sep 12 23:12	0。 ত	
superior conj	12158 Oct 01 02:16	20° ≙ 32'17	0°51'25				
minimum elong	12158 Oct 01 00:11	20° £ 20'56	0°51'16	superior conj	12159 Sep 15 04:13	4° ≏ 36'31	0°26'10
	12158 Oct 05 10:23	0° M ₊		minimum elong	12159 Sep 15 02:55	4° £ 29'39	0°25'54
evening rise	12158 Oct 07 23:38	5°M31'31		evening rise	12159 Sep 22 10:09	20° ≏ 01'23	

evening max el	12159 Sep 27 06:57 12159 Oct 12 19:27	0°M. 23°M.30′36	21°43'55	superior conj minimum elong	12160 Aug 28 22:10 12160 Aug 28 22:24	18° Mp 14'48 18° Mp 15'59	-0°03'40 0°03'52
desc. node	12159 Oct 15 16:21	26°Mo1'21		behind sun begin	12160 Aug 28 16:25	17° m) 45'44	
retrograde	12159 Oct 25 05:09	29°M40'35		behind sun end	12160 Aug 29 04:23	18° m) 46'17	
evening set	12159 Oct 28 03:54	29°M20'55		asc. node	12160 Aug 29 07:19	19° m) 01'07	
inferior conj	12159 Nov 06 01:38	25°M25'13	-5°29'42		12160 Sep 03 15:23	0∘ <u>v</u>	
minimum elong	12159 Nov 05 18:19	25°M35'27	5°27'55	evening rise	12160 Sep 05 17:46	4° Ω 20'29	
min. Earth dist.	12159 Nov 05 22:25	25°M29'42	0.54588 AU	Ü	12160 Sep 20 05:35	0° M	
morning rise	12159 Nov 14 09:51	21°M37'38		evening max el	12160 Sep 23 20:26	4° M ₁0′12	20°18'38
direct	12159 Nov 18 01:30	21°M08'35		desc. node	12160 Oct 01 13:46	9° ™ 07'45	
morning max el	12159 Nov 30 10:41	27°Mo2'34	22°04'12	retrograde	12160 Oct 04 17:20	9° M 34'18	
	12159 Dec 03 06:49	0° ∡ ″		evening set	12160 Oct 06 18:34	9° ™ 23'37	
asc. node	12159 Dec 09 11:32	8° ∡ 121'24		inferior conj	12160 Oct 15 19:00	5°M26'41	-4°11'34
	12159 Dec 21 02:33	ರ∘ರ		minimum elong	12160 Oct 15 09:05	5° M 41'17	4°08'10
morning set	12159 Dec 21 17:08	1° る 16'32		min. Earth dist.	12160 Oct 17 06:34	4°M34'20	0.54797 AU
				morning rise	12160 Oct 23 22:50	1° M 22'21	
superior conj	12159 Dec 28 19:26	16° පි 21'46	1°31'47	direct	12160 Oct 28 11:02	0°M38'25	
minimum elong	12159 Dec 28 21:06	16° පි 30'35	1°32'31	morning max el	12160 Nov 10 22:46	7° M 13'47	23°51'31
max. Earth dist.	12160 Jan 01 17:52	24° る 31'25	1.34374 AU	asc. node	12160 Nov 25 08:31	26°M43'23	
	12160 Jan 04 11:34	0° ≈			12160 Nov 27 04:30	0° ∡ ¹	
evening rise	12160 Jan 06 02:08	3° ≈ 07'40		morning set	12160 Dec 05 04:56	16° ∡ °03′07	
desc. node	12160 Jan 11 14:54	13° ≈ 22'51			12160 Dec 11 15:02	8°0	
	12160 Jan 21 15:33	0°)					
evening max el	12160 Feb 10 02:22	24°) 54′54	26°55'24	superior conj	12160 Dec 12 01:36	0° る 57'26	1°38'03
	12160 Feb 16 10:01	0° Y		minimum elong	12160 Dec 12 02:09	1° る 00'25	1°38'54
retrograde	12160 Feb 23 08:56	2° Y 19'11		max. Earth dist.	12160 Dec 14 15:00	6° る 27'57	1.32898 AU
evening set	12160 Feb 29 22:01	29°) 46′07		evening rise	12160 Dec 19 15:35	16° る 53'08	
	12160 Feb 29 14:48	30° ₹ ₩			12160 Dec 26 12:25	0° ≈	
min. Earth dist.	12160 Mar 04 21:41	25° ¥ 51′26	0.65804 AU	desc. node	12160 Dec 28 11:46	3° ≈ 30'41	
asc. node	12160 Mar 06 09:28	24° ₭ 08'29			12161 Jan 15 03:16	0°) €	
inferior conj	12160 Mar 07 00:09	23° ¥ 25'52	0°11'51	evening max el	12161 Jan 22 15:05	8° ¥ 17'09	27°27'10
minimum elong	12160 Mar 06 23:49	23° ¥ 26′50	0°11'54	retrograde	12161 Feb 05 07:21	15°) 42′23	
transit middle	12160 Mar 06 23:49	23° ¥ 26′50	0°11'54	evening set	12161 Feb 12 03:38	13° ¥ 12'49	
transit begin	12160 Mar 06 21:50	23°) 32'35		min. Earth dist.	12161 Feb 15 23:09	9° ∺ 49'14	0.64090 AU
transit end	12160 Mar 07 01:48	23° ¥ 21′05		inferior conj	12161 Feb 18 12:59	7° ∺ 07'26	-0°54'04
morning rise	12160 Mar 13 02:57	17° ¥ 50′20		minimum elong	12161 Feb 18 14:40	7° ∺ 03′00	0°52'57
direct	12160 Mar 15 22:52	17°) € 06'40		asc. node	12161 Feb 21 06:52	4°) €23'48	
morning max el	12160 Mar 22 08:09	20° ¥ 28′26	18°08'38	morning rise	12161 Feb 25 03:46	1°) 46′02	
	12160 Mar 29 18:30	0° Y		direct	12161 Feb 27 15:16	1°) 15′06	
desc. node	12160 Apr 08 16:32	15° Ƴ 40'53		morning max el	12161 Mar 06 01:31	4°) ₹34'24	17°49'32
morning set	12160 Apr 10 03:40	18° Ƴ 02'59		morning set	12161 Mar 22 21:34	29° ¥ 56′20	
	12160 Apr 17 14:04	$_{0\circ}$ 8			12161 Mar 22 22:26	0° Y	
				desc. node	12161 Mar 26 13:09	6° Ƴ 05'47	
superior conj	12160 Apr 25 04:25	12° 8 01'00					
minimum elong	12160 Apr 24 19:06	11° 8 24'25		superior conj	12161 Apr 05 01:49	21° Y 47'59	
max. Earth dist.	12160 Apr 27 10:45	15° 8 33'51	1.45700 AU	minimum elong	12161 Apr 04 18:41	21° Y 19'09	1°07'35
	12160 May 06 17:16	Π °0		max. Earth dist.	12161 Apr 10 05:44	0° 8 02'48	1.45036 AU
evening rise	12160 May 11 06:41	7° Ⅱ 04'31			12161 Apr 10 05:01	0°8	
greatest brilliancy	12160 May 23 09:51	25° Ⅱ 43'09	-0.7m	evening rise	12161 Apr 20 18:56	16° 8 26'57	
	12160 May 26 07:18	0 \circ 60			12161 Apr 29 17:37	Π °0	
asc. node	12160 Jun 02 06:54	9°520'31	10010:10	evening max el	12161 May 18 11:33	25° Ⅱ 20'48	20°16'04
evening max el	12160 Jun 04 08:18	11° © 34'59	19°18'19	asc. node	12161 May 20 04:03	26° Ⅱ 55'40	
retrograde	12160 Jun 11 09:11	15° © 31'28		retrograde	12161 May 26 07:53	29° Ⅱ 51'43	
evening set	12160 Jun 14 23:02	14° © 16'55		evening set	12161 May 30 07:16	28° Ⅲ 20'52	
inferior conj	12160 Jun 20 09:02	8°\$26'16	3°12'12	inferior conj	12161 Jun 04 14:11	22° Ⅱ 17'22	3°14'05
minimum elong	12160 Jun 20 09:45	8°523'54	3°11'17	minimum elong	12161 Jun 04 13:50	22° Ⅱ 18'32	
min. Earth dist.	12160 Jun 21 18:35	6°536'45	0.66927 AU	min. Earth dist.	12161 Jun 05 09:33	21° I I1'16	0.68017 AU
morning rise	12160 Jun 25 19:57	2°503'26		morning rise	12161 Jun 09 20:05	15° Ⅱ 57'07	
41	12160 Jun 28 23:14	30°RⅡ 20°Ⅲ22126		direct	12161 Jun 15 11:02	13° Ⅱ 27'36	
direct	12160 Jul 01 22:20	29° Ⅱ 23'36		desc. node	12161 Jun 22 13:57	16° Ⅱ 27'48	24927102
	12160 Jul 05 02:18	0°©		morning max el	12161 Jun 26 20:52	20° Ⅱ 18'11	24°27'02
desc. node	12160 Jul 05 16:50	0°514'28	25051122		12161 Jul 05 04:08	0° ©	
morning max el	12160 Jul 14 10:57	6°953'31	25°51'33		12161 Jul 25 13:35	0°N	
	12160 Aug 01 09:24	0°N		morning set	12161 Aug 01 12:59	11°Ω45'01	1 27704 : **
morning set	12160 Aug 19 11:21	29° Ω 59'12		max. Earth dist.	12161 Aug 05 03:40	18° Ω 09'25	1.37704 AU
may Forth 3:-4	12160 Aug 19 11:32	0°M) 6°M>50/20	1 25526 ATT		12161 Aug 11 12:19	0° m)	
max. Earth dist.	12160 Aug 23 05:02	U 11J39720	1.35526 AU				

	10161 4 10 04 56	1070 10140	0026146		101/0 1 1 0/ 01 05	1.40.00.410.4	1010155
superior conj	12161 Aug 12 04:56	1° m 19'48		minimum elong	12162 Jul 26 01:25	14° Ω 04'04	1°10'55
minimum elong	12161 Aug 12 07:25	1° m y31'47	0°36'48	asc. node	12162 Aug 03 00:41	29° Ω 01'57	
asc. node	12161 Aug 16 03:59	9° ™ 04'44			12162 Aug 03 12:50	0° m)	
evening rise	12161 Aug 20 20:05	18° m 22'51		evening rise	12162 Aug 04 13:56	1° m 59'46	
	12161 Aug 26 20:21	0∘ ⊽		evening max el	12162 Aug 20 14:09	27° m 49'29	18°30'32
evening max el	12161 Sep 06 11:33	15° ≏ 37'39	19°13'49		12162 Aug 23 04:31	0∘ ত	
retrograde	12161 Sep 15 16:12	20° ₽ 12'53		retrograde	12162 Aug 28 09:47	1° - 45'35	
evening set	12161 Sep 17 12:32	20° ჲ 02'34		evening set	12162 Aug 30 10:21	1° £ 30'34	
desc. node	12161 Sep 17 12:32	19° ≏ 49'41		evening sec	12162 Sep 02 23:21	30°R, MD	
	•		2022144	1 1	•		
inferior conj	12161 Sep 26 01:43	15° £ 52'10		desc. node	12162 Sep 05 08:39	28° m/24'41	002.450
minimum elong	12161 Sep 25 19:29	16° ≏ 02'32		inferior conj	12162 Sep 07 05:14	26° Mp 59'56	
min. Earth dist.	12161 Sep 28 18:16	14° ≏ 04'56	0.55923 AU	minimum elong	12162 Sep 07 03:53	27° Mg 02'36	0°34'25
morning rise	12161 Oct 03 23:44	11° ≏ 15′08		min. Earth dist.	12162 Sep 10 11:30	24° Mp 28'17	0.57740 AU
direct	12161 Oct 09 07:54	10° ഫ 09'39		morning rise	12162 Sep 14 17:56	21° m 45'30	
morning max el	12161 Oct 23 09:46	17° ≏ 18'17	25°35'29	direct	12162 Sep 20 18:40	20° Mp 13'14	
•	12161 Nov 02 20:19	0° M .		morning max el	12162 Oct 05 02:14	27° m/46'58	26°58'20
asc. node	12161 Nov 12 05:24	15°M40'46			12162 Oct 07 06:16	0∘ <u>⊽</u>	
use. node	12161 Nov 19 07:57	0° ∡ 7			12162 Oct 27 10:53	o° m .	
. ,				1			
morning set	12161 Nov 19 16:25	0° ∡ ¹45'17		asc. node	12162 Oct 30 02:10	5°M03'51	
		_		morning set	12162 Nov 04 01:52	15°M18'16	
superior conj	12161 Nov 26 11:29	15° ∡ ′40′52	1°38'04				
minimum elong	12161 Nov 26 10:55	15° ∡ ³37'47	1°38'52	superior conj	12162 Nov 10 23:02	0° ∡ ¹25'46	1°32'12
max. Earth dist.	12161 Nov 27 19:09	18° ∡ ³35'42	1.31894 AU	minimum elong	12162 Nov 10 21:33	0° ∡ 17'32	1°32'47
	12161 Dec 03 02:18	0°ರ			12162 Nov 10 18:25	0° ∡ ¹	
evening rise	12161 Dec 03 13:57	1° る 00'37		max. Earth dist.	12162 Nov 11 03:26	0° ∡ 750′20	1.31379 AU
desc. node	12161 Dec 15 08:43	23° る 16'45		evening rise	12162 Nov 17 18:36	15° ₹ ¹23'01	
dese. Hode	12161 Dec 19 11:39	0°≈		evening rise	12162 Nov 25 01:19	0°중	
			27020127	1 1			
evening max el	12162 Jan 05 01:08	21°≈08'11	27°29'27	desc. node	12162 Dec 02 05:47	12° る 32'22	
retrograde	12162 Jan 18 22:09	28° ≈ 27'13			12162 Dec 15 01:23	0° ≈	
evening set	12162 Jan 25 21:10	26° ≈ 09'08		evening max el	12162 Dec 18 05:40	3° ≈ 15′04	26°57'52
min. Earth dist.	12162 Jan 29 14:57	23° ≈ 11'46	0.62106 AU	retrograde	12163 Jan 01 04:04	10° ≈ 25′27	
inferior conj	12162 Feb 01 14:08	20° ≈ 26′05	-2°08'52	evening set	12163 Jan 07 23:05	8° ≈ 27'13	
minimum elong	12162 Feb 01 18:33	20°≈15'47	2°06'29	min. Earth dist.	12163 Jan 11 19:58	5° ≈ 47'30	0.59970 AU
asc. node	12162 Feb 08 04:13	15° ≈ 34'49		inferior conj	12163 Jan 15 00:08	3°≈12'30	-3°28'35
morning rise	12162 Feb 08 18:34	15° ≈ 21'41		minimum elong	12163 Jan 15 07:21	2°≈57'46	
direct	12162 Feb 10 23:49	14°≈59'43		minimum ciong	12163 Jan 19 08:20	2 %37 40 30°Rる	3 23 10
			17040100			30 KO 28°る28'28	
morning max el	12162 Feb 17 18:44	18° ≈ 26'31	17°48'08	morning rise	12163 Jan 22 18:29		
	12162 Feb 26 04:06	0° ∀		direct	12163 Jan 24 20:34	28° ට 11'51	
morning set	12162 Mar 05 14:07	12° ¥ 54'15		asc. node	12163 Jan 26 01:31	28° る 17'36	
desc. node	12162 Mar 13 09:42	26°) ₹38′58			12163 Jan 30 01:14	0° ≈	
	12162 Mar 15 08:33	0 ° Υ		morning max el	12163 Feb 01 08:26	1° ≈ 55'41	18°05'39
				morning set			
superior conj	12162 Mar 16 22:33				12163 Feb 16 23:08	26° ≈ 38′03	
minimum elong		2° Y 41'17	-0°27'02	morning set			
•		2° Y 41'17 2° Y 30'19		morning sec	12163 Feb 16 23:08 12163 Feb 18 18:27	26°≈38'03 0° 米	
may Farth dist	12162 Mar 16 19:57	2° Y 30'19	0°26'35	·	12163 Feb 18 18:27	0° ∀	0°11'23
max. Earth dist.	12162 Mar 16 19:57 12162 Mar 23 22:11	2° Υ 30'19 14° Υ 13'53		superior conj	12163 Feb 18 18:27 12163 Feb 26 19:23	0° 光 14° 光 42′28	0°11'23
max. Earth dist. evening rise	12162 Mar 16 19:57 12162 Mar 23 22:11 12162 Mar 31 09:27	2° Υ 30'19 14° Υ 13'53 26° Υ 03'42	0°26'35	superior conj minimum elong	12163 Feb 18 18:27 12163 Feb 26 19:23 12163 Feb 26 20:18	0°) 14°) {42'28 14°) {46'34	0°11'23 0°11'33
	12162 Mar 16 19:57 12162 Mar 23 22:11 12162 Mar 31 09:27 12162 Apr 02 22:43	2° Y 30'19 14° Y 13'53 26° Y 03'42 0° B	0°26'35	superior conj minimum elong behind sun begin	12163 Feb 18 18:27 12163 Feb 26 19:23 12163 Feb 26 20:18 12163 Feb 26 14:55	0°¥ 14°¥42'28 14°¥46'34 14°¥22'32	
evening rise	12162 Mar 16 19:57 12162 Mar 23 22:11 12162 Mar 31 09:27 12162 Apr 02 22:43 12162 Apr 23 16:29	2°Y30'19 14°Y13'53 26°Y03'42 0°႘ 0°Ⅱ	0°26'35 1.43714 AU	superior conj minimum elong behind sun begin behind sun end	12163 Feb 18 18:27 12163 Feb 26 19:23 12163 Feb 26 20:18 12163 Feb 26 14:55 12163 Feb 27 01:42	0°¥ 14°¥42'28 14°¥46'34 14°¥22'32 15°¥10'33	
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Septimen 1216 11 11 12 12 12 12	max. Earth dist.	12163 Jun 30 04:14	12° © 29'54	1.42228 AU		12164 Jun 14 02:09	0ಂತಾ	
Part	superior conj	12163 Jul 07 15:57	25° © 07'57	-1°42'33	superior conj	12164 Jun 17 12:06	5° © 33'57	-2°05'38
Secondary 1216 July 1216					1 3		5° © 56'13	2°06'12
Second 1916 18 1927 1970	Č	12163 Jul 10 10:53	$0^{\circ}\Omega$		evening rise	12164 Jun 30 07:51	27° © 16'27	
ceroning max of 2163 Liu 27 60-26 0°By ceroning max of 2163 Liu 27 60-26 18°90805 revorgade revorgade 12164 Jul 20 10-22 297-2017 18°0182 revorgade revorgade 12164 Jul 20 10-22 297-217 18°0182 revorgade revening set 12164 Jul 20 10-22 297-217 18°12 18°12 18°12 18°12 18°12 12164 Jul 20 10-22 297-217 18°12	evening rise	12163 Jul 18 19:27	15° Ω 01'35		C	12164 Jul 01 21:38	$0^{\circ}\Omega$	
Second 1916 Aug 1916 Aug 1918 Aug	asc. node	12163 Jul 20 21:26	18° Ω 48'48		asc. node	12164 Jul 06 18:17	8° Ω 20'27	
Serversing set 1216 Aug 10 2155 1479,0805 1479,0805 1216 Aug 10 1216		12163 Jul 27 06:26	0° m)		evening max el	12164 Jul 17 13:51	23° Ω 50′17	18°04'28
Second 1216 Aug 13654 13794419 137	evening max el	12163 Aug 04 00:13	10° m/36'52	18°07'48	retrograde	12164 Jul 24 00:26	27° Ω 11'04	
	retrograde	12163 Aug 10 21:55	14° m) 08'05		evening set	12164 Jul 26 16:22	26° Ω 35'39	
minimum elong 2163 Aug 20 07.48 8" 94" 90 0" 27" 47" 57" 57" 57" 57" 57" 57" 57" 57" 57" 5	evening set	12163 Aug 13 05:46	13° m 44'29		inferior conj	12164 Aug 02 01:13	21° Ω 25'42	1°58'21
March Marc	inferior conj	12163 Aug 20 06:10	8° m 53'14	0°53'46	minimum elong	12164 Aug 02 03:49	21° Ω 18'54	1°56'59
aminath aid 12163 Aug 23 12.44 \$"\$\$559 0.5990 AU descende 12164 Aug 09 03.26 18*203*41 3**000*5 4**200*3*4 3**000*5 4**200*3*4 20**25*8 3**000*5 4**20*25*8 27*4703 morning max el 12164 Sep 06 0452 0**04*25*8 27*8708 morning max el 12164 Sep 06 0452 0**04 27*8708 ass. node 12164 Sep 06 0452 0**04 2**000*25 0**04 ass. node 12164 Sep 06 0452 0**04 7**04*00*25 ass. node 12164 Oct 07 020 29**24*3*5 0**04*3*72 ass. node 12164 Oct 07 17:18 20**200*5 3.1386 AU minimum eloni 12163 Oct 28 0124 15**1000*5 1.3386 AU ***000*200 19**1000*5 19**300*20 29**20*35 1.3186 AU evening rise 12163 Nov 00 02.22 29**10*24*8 1.2041 ****000*20 29**10*34*8 1.2041 ***000*20 29**10*34*8 1.2041 ***000*20 1.209*10*34*8 1.2040 1.2164 Oct 07**1 1.20**20**20**20**3 1.20**20**20**3 1.20**20**20**3 1.20**20**20**3 1.20**20**20**3 1.20**20**20**3	minimum elong	12163 Aug 20 07:48	8° m 49'30	0°52'47	min. Earth dist.	12164 Aug 04 23:14	18° Ω 24'53	0.62207 AU
nin. Earl dist. 2163 Aug 21 (214) \$"\$\$559 0.5996 AU descende 2164 Aug 09 0326 14"25741 27.00 3.70 27.00 3.70	desc. node	_			morning rise	-	15° Ω 18'25	
morning micred micret 12163 Aug 27 0641 3"β07015 cented 12164 Aug 15 0552 12"β35 Ng 12" 22" 27" 28" 28" 28" 28" 28" 28" 28" 28" 28" 28	min. Earth dist.		5° m 55'50	0.59936 AU	desc. node	-	14° Ω 53'41	
aircet 12164 Sep 02 1827 1°B00640 morning max el 12164 Sep 10 6.452 0°B0 2°F3578 morning max el 12164 Oct 30 30:26 0°B0 12164 Oct 20 30:25 0°B0 12164 Oct 10 20:31 13°F24722 morning set 12164 Oct 19 11:39 0°B0 21264 Oct 02 07:31 13°B3722 13°B3722 max. Earth dist. 12164 Oct 10 19:31 0°B0 13°B0722 13°B0732 13°B6740 seperior conj 12163 Oct 26 10:24 15°B10638 12°941 minimum cloug 12164 Oct 09 17:32 29°B20404 10°39 evening rise 12163 Oct 26 00:24 14°B1503 12°058 12164 Oct 09 17:32 29°B20404 10°39 evening rise 12163 Nov 10 02:32 19°B148 evening rise 12164 Oct 10 07:32 9°B20604 10°B3 desc. node 12163 Nov 10 02:36 19°B148 evening rise 12164 Oct 10 14:18 14°B119292 devening max el 12163 Nov 10 02:36 14°B25857 25°S235 evening rise 12164 Nov 10 14:50 29°B2004 10°B2383 evening set	morning rise	-			direct	-	12° Ω 54'36	
morning max el 1216 Sep 17 0.220 8° lb 88° s 4 274'703 12164 Sep 60 64.52 0° lb 12164 Oct 10 2163 Oct 16 22.53 24° 244'831 morning set 12164 Oct 10 27:18 13° 24.722 1267 Oct 10 17:18 25° 2602'55 131865 AU morning set 12164 Oct 10 17:18 25° 2602'55 131865 AU max. Farth dist. 12164 Oct 10 17:18 25° 2602'55 131865 AU max. Farth dist. 12164 Oct 10 17:18 25° 2602'55 131865 AU max. Farth dist. 12164 Oct 10 17:18 25° 2602'55 131865 AU max. Farth dist. 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 2602'55 131865 AU minimum clong 12164 Oct 10 17:18 25° 26° 25° 25° 25° 25° 25° 25° 25° 25° 25° 25	direct	12163 Sep 02 18:27	1° Mp 06'49		morning max el	-	20° Ω 56'42	27°56'58
1216 Oct 03 05.26 0°A 1265 Oct 07.28 13°A 0°B 1216 Oct 07.28 13°A 07.28 1216 Oct 07.28 07.28 Oct 07.28 O	morning max el	•	8° m 58'54	27°47'03	C	-		
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max. Earth dist.	12165 May 25 04:29	10° Ⅲ 00'32	1.45244 AU		12166 Apr 22 09:21	0° ႘	
superior conj	12165 May 28 09:25	15° Ⅱ 03'57	-2°13'19	superior conj	12166 May 07 17:22	24° 8 05'19	-2°00'58
minimum elong	12165 May 28 08:41	15° Ⅱ 01'00		minimum elong	12166 May 07 09:37	23° 8 35'00	
8	12165 Jun 06 16:49	0.ತಿ		max. Earth dist.	12166 May 07 23:39	24° 8 29'49	1.45753 AU
evening rise	12165 Jun 11 22:16	8°533'31			12166 May 11 12:10	0°II	
asc. node	12165 Jun 23 15:12	27°530'42		evening rise	12166 May 23 12:27	18° Ⅱ 51'17	
	12165 Jun 25 07:17	$0^{\circ}\Omega$		<i>3</i>	12166 May 30 14:10	0° ©	
evening max el	12165 Jul 01 03:40	7° Ω 20'42	18°19'30	greatest brilliancy	12166 Jun 01 18:52	3° 5 25'41	-0.8m
retrograde	12165 Jul 07 12:53	10° Ω 44'52		asc. node	12166 Jun 10 12:15	16° © 12'33	
evening set	12165 Jul 10 13:07	9° Ω 55'13		evening max el	12166 Jun 14 14:55	21° © 01'36	18°52'04
inferior conj	12165 Jul 16 10:14	4° Ω 28′20	2°40'57	retrograde	12166 Jun 21 07:35	24° © 42'23	
minimum elong	12165 Jul 16 12:32	4° Ω 21'43	2°39'42	evening set	12166 Jun 24 16:25	23° © 37'01	
min. Earth dist.	12165 Jul 18 19:04	1° Ω 44'29	0.64319 AU	inferior conj	12166 Jun 30 05:31	17° © 54'39	3°05'09
	12165 Jul 20 10:10	30° ₹🥯		minimum elong	12166 Jun 30 06:52	17° © 50'23	3°04'09
morning rise	12165 Jul 22 10:34	28° © 09'53		min. Earth dist.	12166 Jul 01 23:33	15° 5 42'41	0.66100 AU
desc. node	12165 Jul 27 00:49	25°9545'50		morning rise	12166 Jul 05 20:36	11° © 32'11	
direct	12165 Jul 29 01:21	25°531'38		direct	12166 Jul 12 04:37	8° 9 50'11	
	12165 Aug 07 21:54	$0^{\circ}\Omega$		desc. node	12166 Jul 13 22:05	9° 5 00'49	
morning max el	12165 Aug 11 18:28	3° Ω 31′58	27°30'19	morning max el	12166 Jul 25 05:22	16° © 34'47	26°33'55
	12165 Aug 31 15:51	0° ™			12166 Aug 05 08:28	$0^{\circ}\Omega$	
morning set	12165 Sep 15 22:43	27° Mp 10'39			12166 Aug 24 12:55	0° ™	
	12165 Sep 17 08:46	0∘ ⊽		morning set	12166 Aug 30 02:39	10° m 10'00	
asc. node	12165 Sep 19 16:12	4° £ 42'02		max. Earth dist.	12166 Sep 03 03:10	17° m 56'20	1.34437 AU
max. Earth dist.	12165 Sep 20 15:06	6° ≙ 40'40	1.32891 AU	asc. node	12166 Sep 06 12:52	24° m 47'35	
superior conj	12165 Sep 24 01:04	13° ≏ 54'13	0°41'20	superior conj	12166 Sep 07 23:58	27° m 48'17	0°14'03
minimum elong	12165 Sep 23 23:13	13° ≏ 44'19	0°41'06	minimum elong	12166 Sep 07 23:13	27° m 44'24	0°13'47
evening rise	12165 Oct 01 01:28	29° ഫ 02′20		behind sun begin	12166 Sep 07 20:11	27° m 28'41	
	12165 Oct 01 12:19	0° M		behind sun end	12166 Sep 08 02:15	28° Mp 00'08	
	12165 Oct 18 14:33	0° ⊀			12166 Sep 09 01:18	0∘ ⊽	
desc. node	12165 Oct 22 21:30	4° ≯ 50'33		evening rise	12166 Sep 15 11:00	13° ≏ 28'11	
evening max el	12165 Oct 23 01:23	5° ∡ 00'02	22°40'11		12166 Sep 23 21:03	0°M₊	
retrograde	12165 Nov 05 02:40	11° ∡ ¹29′05		evening max el	12166 Oct 04 18:59	15° ™ 17'36	21°05'22
evening set	12165 Nov 08 20:07	10° ∡ 58'45		desc. node	12166 Oct 09 18:53	19° ™ 12'41	
min. Earth dist.	12165 Nov 16 09:32	7° ∡ ³34'10	0.54897 AU	retrograde	12166 Oct 16 13:47	21°M08'47	
inferior conj	12165 Nov 17 10:34	6° ≯ 58'38		evening set	12166 Oct 19 01:30	20°M54'14	
minimum elong	12165 Nov 17 07:50	7° ∡ °02'30	5°48'59	inferior conj	12166 Oct 28 02:17	16°M59′52	
morning rise	12165 Nov 25 21:00	3° ∡ 10′28		minimum elong	12166 Oct 27 16:52	17° ™ 13'09	
direct	12165 Nov 29 01:24	2° √ 47'14	210050	min. Earth dist.	12166 Oct 28 16:08	16°M40'18	0.54564 AU
morning max el	12165 Dec 10 14:39	8° ∡ 16'43	21°07'20	morning rise	12166 Nov 05 08:41	13°M07'57	
asc. node	12165 Dec 16 16:58	15° ∡ 28'32		direct	12166 Nov 09 09:24	12°M33'06	222.4010.6
	12165 Dec 25 07:38	0°る		morning max el	12166 Nov 22 06:53	18°M44'58	22°49'06
morning set	12165 Dec 30 08:03	10° る 06'42			12166 Dec 01 09:59	0° 🗷 2° ⋅ 🗷 2.415.4	
	12166 I 06 15:20	250=22451	1925100	asc. node morning set	12166 Dec 03 13:58	3°×724'54	
superior conj	12166 Jan 06 15:39			morning set	12166 Dec 14 19:15	24° ₹ 53'45	
minimum elong	12166 Jan 06 17:54 12166 Jan 08 21:27	25° る 36'25 0°≈	1°25'45		12166 Dec 17 04:31	0°₹	
max. Earth dist.	12166 Jan 11 09:44	0 ∞ 5°≈01'05	1.35419 AU	superior conj	12166 Dec 21 18:37	9° る 52'40	1°35'14
evening rise	12166 Jan 15 10:36	3 ≈01 03 12°≈46'25	1.55+15 AU	minimum elong	12166 Dec 21 18:37 12166 Dec 21 19:49	9 3 5240 9° 3 59'07	1°36'02
desc. node	12166 Jan 18 20:22	12 ≈ 40 23 19° ≈ 00'49		max. Earth dist.	12166 Dec 25 02:40	16°る55'08	1.33696 AU
desc. node	12166 Jan 25 06:04	0° ∀		evening rise	12166 Dec 29 17:33	10 3 5500 26° る 15'49	1.55070 AC
	12166 Feb 15 15:01	0°Υ		evening rise	12166 Dec 31 15:52	0°≈	
evening max el	12166 Feb 19 19:20	4° Υ 24'19	26°26'25	desc. node	12167 Jan 05 17:10	9° ≈ 18'12	
retrograde	12166 Mar 04 18:02	11° Υ 43'30	20 2020	acce. noue	12167 Jan 18 15:06	0° ∀	
evening set	12166 Mar 11 01:24	9° Υ 11'59		evening max el	12167 Feb 02 08:55	17° ¥ 59'53	27°12'12
asc. node	12166 Mar 14 14:40	5° Υ 37'36		retrograde	12167 Feb 15 20:00	25° ¥ 24'41	
min. Earth dist.	12166 Mar 15 04:13	4° Υ 57'48	0.66632 AU	evening set	12167 Feb 22 12:39	22°) 52'25	
inferior conj	12166 Mar 16 23:40	2° Υ 46'18	0°45'14	min. Earth dist.	12167 Feb 26 10:28	19°) 11'22	0.65117 AU
minimum elong	12166 Mar 16 22:32	2° Υ 49'44	0°44'50	inferior conj	12167 Feb 28 17:49	16°) €37'53	
	12166 Mar 19 09:00	30°R ₩		minimum elong	12167 Feb 28 18:15	16°) (36'42	
morning rise	12166 Mar 22 20:35	27° ¥ 03′28		transit middle	12167 Feb 28 18:15	16° ¥ 36'42	0°14'26
direct	12166 Mar 25 22:06	26°) 10'43		transit begin	12167 Feb 28 16:56	16° X 40'20	
morning max el	12166 Apr 01 10:16	29° H 39'00	18°27'16	transit end	12167 Feb 28 19:33	16° ¥ 33'04	
	12166 Apr 01 18:42	0°Υ		asc. node	12167 Mar 01 12:05	15°) (47'28	
desc. node	12166 Apr 16 22:07	21° Υ 21'44		morning rise	12167 Mar 07 01:27	11°) (17'53	
morning set	12166 Apr 21 20:26	29° Υ '08'58		direct	12167 Mar 09 17:40	10°) €29'56	
Ü							

	12177 17 17 02 14	1201/40104	17050122		121(0 F 1 12 0(2(2005	
morning max el	12167 Mar 16 02:14	13°) 49′04 0° °	17°58'22	Ī	12168 Feb 12 06:36	30°R≈	
	12167 Mar 27 16:04	10° Υ 17'25		asc. node	12168 Feb 16 09:26	26°≈20'55	
morning set	12167 Apr 02 22:38	10° \ \begin{picture}(17.25) \\ 11^{\circ} \begin{picture}\chi 40.08\\ \end{picture}		morning rise	12168 Feb 18 22:34	24°≈56'56	
desc. node	12167 Apr 03 18:44			direct	12168 Feb 21 07:10	24°≈30'14	17046145
	12167 Apr 15 01:58	0°8		morning max el	12168 Feb 27 20:00 12168 Feb 29 19:11	27°≈51'09 0°) €	17°46'45
aumorior aoni	12167 Apr. 17 05:05	3° 8 23'04	1920/41	marning got		22°) (41'12	
superior conj	12167 Apr 16 20:05	2° 8 47'24		morning set	12168 Mar 15 02:59 12168 Mar 19 08:57	22 π 41 12 0° Υ	
minimum elong max. Earth dist.	12167 Apr 16 20:05 12167 Apr 20 20:00	9° 8 05'43	1.45510 AU	desc. node	12168 Mar 20 15:19	2°Υ′09'32	
evening rise	12167 Apr 20 20:00 12167 May 03 06:45	28° 8 24'40	1.43310 AU	desc. Hode	12106 Widi 20 13.19	2 1 09 32	
evening rise	12167 May 04 07:34	28 O 24 40 0° Ⅱ		superior conj	12168 Mar 27 11:55	13° Ƴ 37'45	0°50'48
greatest brilliancy	12167 May 17 04:57	19° Ⅱ 30'46	-0.6m	minimum elong	12168 Mar 27 06:41	13°Υ16'15	
greatest of illiancy	12167 May 17 04.57	0°95	-0.0111	max. Earth dist.	12168 Apr 02 14:23	23° Υ 30'04	1.44552 AU
asc. node	12167 May 28 09:23	4° © 15'34		max. Earth dist.	12168 Apr 06 17:08	0° 8	1.44332 710
evening max el	12167 May 28 21:25	4°9346'26	19°41'06	evening rise	12168 Apr 11 18:04	7° 8 48'48	
retrograde	12167 Jun 05 05:35	8°956'09	17 11 00	evening rise	12168 Apr 26 14:16	0°II	
evening set	12167 Jun 08 23:30	7° © 34'28		evening max el	12168 May 10 22:05	18° ∏ 32'07	20°44'31
inferior conj	12167 Jun 14 07:50	1°538'01	3°14'27	asc. node	12168 May 14 06:33	21° I 27'10	2051
minimum elong	12167 Jun 14 08:05	1° © 37'09	3°13'35	retrograde	12168 May 19 04:30	23° II 20'24	
min. Earth dist.	12167 Jun 15 11:10	0°906'51	0.67453 AU	evening set	12168 May 23 08:12	21° I I42'29	
	12167 Jun 15 13:14	30°R∏		inferior conj	12168 May 28 14:34	15° ∏ 33'39	3°11'18
morning rise	12167 Jun 19 16:18	25° Ⅱ 16'08		minimum elong	12168 May 28 13:49	15° ∏ 36'16	
direct	12167 Jun 25 14:02	22° I I40'03		min. Earth dist.	12168 May 29 04:02	14° ∏ 47'08	0.68343 AU
desc. node	12167 Jun 30 19:15	24° I 17'11		morning rise	12168 Jun 02 19:11	9° Ⅱ 15'12	0.003 13 110
morning max el	12167 Jul 07 15:50	29° ∏ 54'16	25°16'51	direct	12168 Jun 08 04:38	6°П52'26	
	12167 Jul 07 18:05	0.ಪ		desc. node	12168 Jun 16 16:20	11° ∏ 06'40	
	12167 Jul 30 05:24	$0^{\circ}\Omega$		morning max el	12168 Jun 19 01:52	13° ∏ 22'46	23°48'52
morning set	12167 Aug 12 15:11	22° Ω 25'44		morning max or	12168 Jul 02 12:20	0°9	23 1032
max. Earth dist.	12167 Aug 16 05:52	29° Ω 02'27	1.36425 AU		12168 Jul 22 01:56	$0 {\circ} \Omega$	
man zam ust.	12167 Aug 16 18:10	0° m)	1.50 .20 110	morning set	12168 Jul 24 07:33	3° Ω 46'01	
	1210/ 11 u g 10 10.10	עויי		max. Earth dist.	12168 Jul 28 03:24	10° Ω 24'01	1.38692 AU
superior conj	12167 Aug 22 13:34	11° m)13'18	-0°17'23	max. Earth dist.	12100 341 20 03.21	10 002 101	1.500)2710
minimum elong	12167 Aug 22 14:40	11° Mp 18'48		superior conj	12168 Aug 04 14:15	24° Ω 00′23	-0°51'22
asc. node	12167 Aug 24 09:33	14° m 53'02		minimum elong	12168 Aug 04 17:51	24°Ω17'19	
evening rise	12167 Aug 30 16:42	27° Mp 41'12		minimum ciong	12168 Aug 07 17:37	0° m	0 31 17
	12167 Aug 31 20:07	0∘ ರ		asc. node	12168 Aug 10 06:14	4° m 54'25	
evening max el	12167 Sep 17 01:55	26° Ω 16'22	19°48'19	evening rise	12168 Aug 13 15:49	11° m 33'51	
<i>8</i>	12167 Sep 21 23:58	0°M₊		8	12168 Aug 23 18:07	0∘ ⊽	
desc. node	12167 Sep 26 16:17	1°M18'42		evening max el	12168 Aug 29 22:17	8° ഫ 03'12	18°52'47
retrograde	12167 Sep 27 05:19	1°M19'32		retrograde	12168 Sep 07 11:56	12° ≏ 20'39	
evening set	12167 Sep 29 02:51	1° M 09'43		evening set	12168 Sep 09 09:10	12° Ω 08'59	
S	12167 Oct 02 19:31	30° ₽ Ω		desc. node	12168 Sep 12 13:43	11° ≏ 01'12	
inferior conj	12167 Oct 07 23:49	27° Ω 07'51	-3°27'05	inferior conj	12168 Sep 17 14:56	7° ≏ 50'24	-1°35'22
minimum elong	12167 Oct 07 14:59	27° ≏ 21'27	3°23'44	minimum elong	12168 Sep 17 10:54	7° ≏ 57'35	1°33'44
min. Earth dist.	12167 Oct 10 01:12	25° ≏ 51'48	0.55172 AU	min. Earth dist.	12168 Sep 20 15:12	5° º 42'13	0.56620 AU
morning rise	12167 Oct 16 01:33	22° ჲ 51'15		morning rise	12168 Sep 25 09:22	2° ჲ 56'52	
direct	12167 Oct 20 22:20	21° ≏ 59'14		direct	12168 Oct 01 00:52	1° ≏ 40'32	
morning max el	12167 Nov 03 17:30	28° ≏ 49'13	24°37'27	morning max el	12168 Oct 15 06:29	9° ჲ 01'36	26°14'25
	12167 Nov 04 22:23	0° M			12168 Oct 31 01:47	0° M	
asc. node	12167 Nov 20 10:52	22°M03'22		asc. node	12168 Nov 06 07:41	11°M12'36	
	12167 Nov 24 15:14	0° ≯ 7		morning set	12168 Nov 12 17:57	24°M18'35	
morning set	12167 Nov 29 07:09	9° ,⊼ 39'39			12168 Nov 15 08:50	0° ∡ ¹	
superior conj	12167 Dec 06 02:38	24° ₰ ³32'50	1°38'48	superior conj	12168 Nov 19 13:26	9° √ 17'44	1°36'18
minimum elong	12167 Dec 06 02:42	24° ₹ 33'12	1°39'39	minimum elong	12168 Nov 19 12:27	9° √ 12'18	1°37'01
max. Earth dist.	12167 Dec 08 03:14	28° ₹ 57'43	1.32407 AU	max. Earth dist.	12168 Nov 20 09:23	11° ₹ 08′29	1.31604 AU
	12167 Dec 08 14:46	5°0		evening rise	12168 Nov 26 12:25	24° ₰ ¹26′08	
evening rise	12167 Dec 13 11:08	10° ප 11'46			12168 Nov 29 05:15	5°0	
desc. node	12167 Dec 23 14:04	29° る 18'12		desc. node	12168 Dec 09 11:03	18° る 52'38	
	12167 Dec 23 23:45	0° ≈			12168 Dec 16 16:19	0° ≈	
	12168 Jan 14 15:50	0° ∀		evening max el	12168 Dec 28 04:28	13° ≈ 43′27	27°20'16
evening max el	12168 Jan 15 20:41	1° ∺ 10'40	27°32'02	retrograde	12169 Jan 11 02:36	20° ≈ 59'54	
retrograde	12168 Jan 29 15:09	8°) 33′45		evening set	12169 Jan 18 00:52	18° ≈ 48'55	
evening set	12168 Feb 05 13:31	6°) €07'45		min. Earth dist.	12169 Jan 21 18:58	16° ≈ 00'36	0.61203 AU
min. Earth dist.	12168 Feb 09 07:48	2° ¥ 56′28	0.63278 AU	inferior conj	12169 Jan 24 21:11	13° ≈ 17′07	-2°42'27
inferior conj	12168 Feb 12 02:05	0°) 11′15	-1°24'49	minimum elong	12169 Jan 25 02:50	13° ≈ 04'38	2°39'36
minimum elong	12168 Feb 12 04:52	0°) 04′19	1°23'10	morning rise	12169 Feb 01 07:40	8° ≈ 21′23	

	12160 F 1 02 06 45	0000106		. ,	121 (0 D 20 10 50	0040122	
asc. node	12169 Feb 02 06:45	8°≈08'06		evening set	12169 Dec 30 18:50	0°≈48'23	
direct	12169 Feb 03 11:00	8°≈02'13			12170 Jan 01 04:32	30°Rる	
morning max el	12169 Feb 10 12:13	11° ≈ 35′10	17°53'15	min. Earth dist.	12170 Jan 03 19:43	28° る 11'49	0.59054 AU
	12169 Feb 22 19:18	0° ∀		inferior conj	12170 Jan 06 23:33	25° ⋜ 46'17	
morning set	12169 Feb 26 03:13	6°) €00'40		minimum elong	12170 Jan 07 07:38	25° る 30'44	3°58'39
desc. node	12169 Mar 07 11:53	22°) 45′22		morning rise	12170 Jan 14 23:18	21° る 11'32	
				direct	12170 Jan 17 01:08	20° る 56'17	
superior conj	12169 Mar 08 19:15	25° ₩ 01'25	-0°10'09	asc. node	12170 Jan 20 04:00	21° る 32'30	
minimum elong	12169 Mar 08 18:21	24° ¥ 57'33	0°09'51	morning max el	12170 Jan 24 23:13	24° る 50'51	18°19'13
behind sun begin	12169 Mar 08 11:44	24°) 28'56	0 0 0 0 1	morning man er	12170 Jan 29 05:50	0° ≈	10 17 15
behind sun end	12169 Mar 09 00:59	25°\(\frac{1}{2}6'08\)		mamina aat	12170 Feb 09 17:34	0 ~ 19° ≈ 58'28	
bennia sun ena				morning set			
	12169 Mar 11 17:08	0°Υ 2 0			12170 Feb 15 00:30	0° ∀	
max. Earth dist.	12169 Mar 16 04:40	7° Y ′27′30	1.42980 AU				
evening rise	12169 Mar 22 13:54	17° Y ′42'03		superior conj	12170 Feb 19 01:07	7° ∺ 27'18	0°25'52
	12169 Mar 30 14:05	9° 8		minimum elong	12170 Feb 19 02:58	7°) 35′44	0°25'58
	12169 Apr 21 13:07	$\Pi^{\circ}0$		desc. node	12170 Feb 22 08:28	13°) 24′03	
evening max el	12169 Apr 23 17:25	2° Ⅱ 19′08	21°58'51	max. Earth dist.	12170 Feb 26 14:29	20°) 47′33	1.40973 AU
asc. node	12169 May 01 03:47	7° Ⅱ 32'36		evening rise	12170 Mar 03 04:25	28° ¥ 26'58	
retrograde	12169 May 03 02:28	7° ∏ 50′29			12170 Mar 04 03:13	0° Υ	
evening set	12169 May 07 16:48	5° П 57'04			12170 Mar 24 03:37	0°8	
•	•	29° 8 38'02	2°57'15				22010100
inferior conj	12169 May 12 23:35			evening max el	12170 Apr 06 09:00	16° 8 08'22	23-1900
minimum elong	12169 May 12 22:01	29° 8 43'29	2°56'19	retrograde	12170 Apr 16 21:53	22° 8 21'05	
	12169 May 12 17:17	30° ₹8		asc. node	12170 Apr 18 01:06	22° 8 15'06	
min. Earth dist.	12169 May 12 24:00	29° 8 36'36	0.68765 AU	evening set	12170 Apr 21 23:42	20° 8 13'22	
morning rise	12169 May 18 03:03	23° 8 24'54		inferior conj	12170 Apr 27 08:53	13° 8 47'00	2°33'07
direct	12169 May 22 23:31	21° 8 20'26		minimum elong	12170 Apr 27 06:50	13° 8 54'06	2°32'06
morning max el	12169 Jun 01 13:34	26° 8 58'55	22°19'36	min. Earth dist.	12170 Apr 26 20:47	14° 8 28'44	0.68730 AU
desc. node	12169 Jun 03 13:19	29° 8 05'04		morning rise	12170 May 02 13:53	7° 8 40'38	
desc. node	12169 Jun 04 08:52	0°Ⅱ		direct	12170 May 06 21:21	5° 8 57'02	
		0° ©			•	10° 8 44'54	20°57'02
	12169 Jun 26 01:46			morning max el	12170 May 15 06:12	_	20-37-02
morning set	12169 Jul 04 23:18	14° © 00'00		desc. node	12170 May 21 10:11	17° 8 53'15	
max. Earth dist.	12169 Jul 10 02:21	22° © 27'57	1.40995 AU		12170 May 30 05:27	Π °0	
	12169 Jul 14 12:03	$0 {\circ} \Omega$		morning set	12170 Jun 14 13:59	23° Ⅱ 07'26	
						000	
					12170 Jun 18 22:34	0 \circ ∞	
superior conj	12169 Jul 17 21:50	6° Ω 00'15	-1°25'02	max. Earth dist.	12170 Jun 18 22:34 12170 Jun 22 07:40	0°99 5°9926'14	1.43059 AU
	12169 Jul 17 21:50 12169 Jul 18 03:51	6°Ω00'15 6°Ω27'11		max. Earth dist.			1.43059 AU
minimum elong	12169 Jul 18 03:51	6° Ω 27'11			12170 Jun 22 07:40	5°\$26'14	
minimum elong evening rise	12169 Jul 18 03:51 12169 Jul 28 04:59	6°Ω27'11 24°Ω57'37		superior conj	12170 Jun 22 07:40 12170 Jun 29 07:49	5°\$26'14 17°\$02'29	-1°53'47
minimum elong	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58	6°Ω27'11 24°Ω57'37 24°Ω48'10			12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35	5°\$26'14 17°\$02'29 17°\$31'04	-1°53'47
minimum elong evening rise asc. node	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50	6°	1°24'58	superior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53	5°\$26'14 17°\$02'29 17°\$31'04 0°Ω	-1°53'47
minimum elong evening rise asc. node evening max el	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40	6° N 27'11 24° N 57'37 24° N 48'10 0° M 20° M 32'25		superior conj minimum elong evening rise	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49	5°\$26'14 17°\$02'29 17°\$31'04 0°\$Ω 7°\$Ω40'54	-1°53'47
minimum elong evening rise asc. node evening max el retrograde	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37	6°\$\Omega 27'11 24°\$\Omega 57'37 24°\$\Omega 48'10 0°\$\Omega 32'25 24°\$\Omega 15'56	1°24'58	superior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45	5°\$26'14 17°\$02'29 17°\$31'04 0°\$Ω 7°\$\Omega 40'54 14°\$\Omega 29'18	-1°53'47
minimum elong evening rise asc. node evening max el	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04	6° N 27'11 24° N 57'37 24° N 48'10 0° M 20° M 32'25	1°24'58 18°18'30	superior conj minimum elong evening rise asc. node	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathrm{m}\$	-1°53'47 1°54'03
minimum elong evening rise asc. node evening max el retrograde	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37	6°\$\Omega 27'11 24°\$\Omega 57'37 24°\$\Omega 48'10 0°\$\Omega 32'25 24°\$\Omega 15'56	1°24'58	superior conj minimum elong evening rise	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45	5°\$26'14 17°\$02'29 17°\$31'04 0°\$Ω 7°\$\Omega 40'54 14°\$\Omega 29'18	-1°53'47
minimum elong evening rise asc. node evening max el retrograde evening set	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04	6° N 27'11 24° N 57'37 24° N 48'10 0° M 20° M 32'25 24° M 15'56 23° M 57'45	1°24'58 18°18'30	superior conj minimum elong evening rise asc. node	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathrm{m}\$	-1°53'47 1°54'03
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54	6° \$\Omega 27'11\) 24° \$\Omega 57'37\) 24° \$\Omega 48'10\) 0° \$\mathrm{m}\) 20° \$\mathrm{m}\) 32'25\) 24° \$\mathrm{m}\) 15'56\) 23° \$\mathrm{m}\) 57'45\) 19° \$\mathrm{m}\) 18'38	1°24'58 18°18'30 0°05'36	superior conj minimum elong evening rise asc. node evening max el	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33	-1°53'47 1°54'03
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 20 13:37 12169 Aug 30 03:54 12169 Aug 30 04:05	6° N 27'11 24° N 57'37 24° N 48'10 0° M 20° M 32'25 24° M 15'56 23° M 57'45 19° M 18'38 19° M 18'14	1°24'58 18°18'30 0°05'36 0°05'17	superior conj minimum elong evening rise asc. node evening max el retrograde	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 05 19:40	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\Omega\$ 3°\$\Omega\$32'33 6°\$\Omega\$57'11	-1°53'47 1°54'03
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 20 13:37 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 04:05 12169 Aug 30 00:47	6° \$\Omega 27'11\) 24° \$\Omega 57'37\) 24° \$\Omega 48'10\) 0° \$\mathred{m}\) 20° \$\mathred{m}\) 32'25\) 24° \$\mathred{m}\) 15'56\) 23° \$\mathred{m}\) 57'45\) 19° \$\mathred{m}\) 18'38\) 19° \$\mathred{m}\) 18'14\) 19° \$\mathred{m}\) 18'14\) 19° \$\mathred{m}\) 25'06	1°24'58 18°18'30 0°05'36 0°05'17	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33 6°\$\mathbf{m}\$57'11 6°\$\mathbf{m}\$28'45 1°\$\mathbf{m}\$29'20	-1°53'47 1°54'03 18°04'06 1°24'04
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 20 13:37 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23	6° \$\Omega 27'11\) 24° \$\Omega 57'37\) 24° \$\Omega 48'10\) 0° \$\mathbf{m}\) 20° \$\mathbf{m}\) 32'25\) 24° \$\mathbf{m}\) 15'56\) 23° \$\mathbf{m}\) 57'45\) 19° \$\mathbf{m}\) 18'14\) 19° \$\mathbf{m}\) 18'14\) 19° \$\mathbf{m}\) 18'16\) 19° \$\mathbf{m}\) 11'22	1°24'58 18°18'30 0°05'36 0°05'17	superior conj minimum elong evening rise asc. node evening max el retrograde evening set	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00 12170 Aug 12 15:16	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33 6°\$\mathbf{m}\$57'11 6°\$\mathbf{m}\$28'45 1°\$\mathbf{m}\$29'20 1°\$\mathbf{m}\$23'52	-1°53'47 1°54'03 18°04'06 1°24'04
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36	6° \$\Omega 27'11 \\ 24° \$\Omega 57'37 \\ 24° \$\Omega 48'10 \\ 0° \$\mathbf{m} \\ 20° \$\mathbf{m} 32'25 \\ 24° \$\mathbf{m} 15'56 \\ 23° \$\mathbf{m} 57'45 \\ 19° \$\mathbf{m} 18'14 \\ 19° \$\mathbf{m} 18'14 \\ 19° \$\mathbf{m} 11'22 \\ 19° \$\mathbf{m} 03'25 \\ 16° \$\mathbf{m} 33'04 \\ 13° \$\mathbf{m} 49'32	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00 12170 Aug 14 01:50 12170 Aug 15 16:46 12170 Aug 17 08:37	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33 6°\$\mathbf{m}\$57'11 6°\$\mathbf{m}\$28'45 1°\$\mathbf{m}\$29'20 1°\$\mathbf{m}\$23'52 30°\$\mathbf{R}\Omega\$ 28°\$\Omega\$27'56 27°\$\Omega\$01'11	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36 12169 Sep 12 17:58 12169 Sep 27 02:10	6° \$\Omega 27'11 24° \$\Omega 57'37 24° \$\Omega 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'14 19° m 18'14 19° m 25'06 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 15 16:46 12170 Aug 17 08:37 12170 Aug 19 08:07 12170 Aug 25 22:51	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\Omega\$ 3°\$\Omega\$32'33 6°\$\Omega\$57'11 6°\$\Omega\$28'45 1°\$\Omega\$29'20 1°\$\Omega\$23'52 30°\$\Omega\$0 28°\$\Omega\$27'56 27°\$\Omega\$01'11 25°\$\Omega\$33'15 23°\$\Omega\$22'01 0°\$\Omega\$	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36 12169 Sep 12 17:58 12169 Sep 12 17:58 12169 Sep 27 02:10 12169 Oct 05 19:35 12169 Oct 23 19:28 12169 Oct 24 04:26 12169 Oct 28 01:58 12169 Nov 04 01:09 12169 Nov 03 23:22 12169 Nov 03 18:06 12169 Nov 06 17:25 12169 Nov 06 17:25 12169 Nov 06 17:25	6° \$\Partial 22'11 24° \$\Partial 25'137 24° \$\Partial 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'14 19° m 18'14 19° m 25'06 19° m 11'22 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54 0° \$\Partial 20' m 04'25 0° m 00' m 44'37 8° m 46'21 24° m 01'57 23° m 52'02 23° m 22'38 0° \$\mathref{z}\$ 8° \$\mathref{z}\$53'13	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17 0.58645 AU 27°23'37	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 15 16:46 12170 Aug 17 08:37 12170 Aug 17 08:37 12170 Aug 19 08:07 12170 Aug 19 08:07 12170 Aug 25 22:51 12170 Sep 07 20:05 12170 Sep 09 04:57 12170 Sep 30 02:05 12170 Oct 11 01:08 12170 Oct 12 05:22 12170 Oct 15 13:06 12170 Oct 19 11:54 12170 Oct 19 11:54	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33 6°\$\mathbf{m}\$57'11 6°\$\mathbf{m}\$28'45 1°\$\mathbf{m}\$29'20 1°\$\mathbf{m}\$23'52 30°\$\RO\$ 28°\$\Omega\$27'56 27°\$\Omega\$01'11 25°\$\Omega\$33'15 23°\$\Omega\$22'01 0°\$\mathbf{m}\$ 1°\$\mathbf{m}\$18'46 0°\$\Omega\$ 20°\$\Omega\$32'15 22°\$\Omega\$57'36 0°\$\mathbf{m}\$ 5°\$\mathbf{m}\$30'41 8°\$\mathbf{m}\$39'31 8°\$\mathbf{m}\$27'16	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49 0.60918 AU 27°55'55
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 28 02:58 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36 12169 Sep 12 17:58 12169 Sep 12 17:58 12169 Sep 27 02:10 12169 Oct 05 19:35 12169 Oct 23 19:28 12169 Oct 24 04:26 12169 Oct 28 01:58 12169 Nov 04 01:09 12169 Nov 03 23:22 12169 Nov 03 18:06 12169 Nov 06 17:25 12169 Nov 06 17:25 12169 Nov 06 17:25	6° \$\Partial 22'11 24° \$\Partial 25'137 24° \$\Partial 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'14 19° m 18'14 19° m 25'06 19° m 11'22 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54 0° \$\Partial 20' m 04'25 0° m 00' m 44'37 8° m 46'21 24° m 01'57 23° m 52'02 23° m 22'38 0° \$\mathref{z}\$ 8° \$\mathref{z}\$53'13	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17 0.58645 AU 27°23'37	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 14 23:45 12170 Jul 24 15:34 12170 Aug 03 08:17 12170 Aug 05 19:40 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 15 16:46 12170 Aug 17 08:37 12170 Aug 17 08:37 12170 Aug 19 08:07 12170 Aug 19 08:07 12170 Aug 25 22:51 12170 Sep 07 20:05 12170 Sep 09 04:57 12170 Sep 30 02:05 12170 Oct 11 01:08 12170 Oct 12 05:22 12170 Oct 15 13:06 12170 Oct 19 11:54 12170 Oct 19 11:54	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\mathbf{m}\$ 3°\$\mathbf{m}\$32'33 6°\$\mathbf{m}\$57'11 6°\$\mathbf{m}\$28'45 1°\$\mathbf{m}\$29'20 1°\$\mathbf{m}\$23'52 30°\$\RO\$ 28°\$\Omega\$27'56 27°\$\Omega\$01'11 25°\$\Omega\$33'15 23°\$\Omega\$22'01 0°\$\mathbf{m}\$ 1°\$\mathbf{m}\$18'46 0°\$\Omega\$ 20°\$\Omega\$32'15 22°\$\Omega\$57'36 0°\$\mathbf{m}\$ 5°\$\mathbf{m}\$30'41 8°\$\mathbf{m}\$39'31 8°\$\mathbf{m}\$27'16	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49 0.60918 AU 27°55'55
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 04:05 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36 12169 Sep 12 17:58 12169 Sep 12 17:58 12169 Oct 23 19:28 12169 Oct 24 04:26 12169 Oct 28 01:58 12169 Nov 04 01:09 12169 Nov 03 18:06 12169 Nov 04 10:09 12169 Nov 04 17:25 12169 Nov 06 17:25 12169 Nov 07 19:04 12169 Nov 10 19:04 12169 Nov 10 19:04 12169 Nov 21 14:13	6° \$\Partial 22'11 24° \$\Partial 57'37 24° \$\Partial 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'38 19° m 18'14 19° m 25'06 19° m 11'22 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54 0° \$\Partial 6'21 24° m 01'57 23° m 52'02 23° m 22'38 0° \$\mathref{z}\$ 8° \$\mathref{z}\$53'13 0° \$\mathref{S}\$	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17 0.58645 AU 27°23'37 1°28'00 1°28'28 1.31308 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 14 01:50 12170 Aug 17 08:37 12170 Aug 18 16:46 12170 Aug 19 08:07 12170 Aug 19 08:07 12170 Aug 25 22:51 12170 Sep 07 20:05 12170 Sep 09 04:57 12170 Sep 09 04:57 12170 Sep 30 02:05 12170 Oct 11 01:08 12170 Oct 12 05:22 12170 Oct 18 01:43 12170 Oct 19 11:54 12170 Oct 19 11:54 12170 Oct 19 09:41 12170 Oct 19 09:41 12170 Oct 19 09:41 12170 Oct 26 05:00	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\Omega\$ 3°\$\Omega\$32'33 6°\$\Omega\$25'33 6°\$\Omega\$25'52 30°\$\Omega\$02'52 30°\$\Omega\$02'56 27°\$\Omega\$01'11 25°\$\Omega\$33'15 23°\$\Omega\$22'01 0°\$\Omega\$10'\$\Omega\$18'46 0°\$\Omega\$22'15 22°\$\Omega\$57'36 0°\$\Omega\$1.30'41 8°\$\Omega\$32'15 22°\$\Omega\$57'36 0°\$\Omega\$1.30'41	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49 0.60918 AU 27°55'55
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 22 17:04 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 04:05 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 06 11:36 12169 Sep 12 17:58 12169 Sep 12 17:58 12169 Sep 27 02:10 12169 Oct 23 19:28 12169 Oct 24 04:26 12169 Oct 28 01:58 12169 Nov 04 01:09 12169 Nov 03 18:06 12169 Nov 04 17:25 12169 Nov 0 18:06 12169 Nov 0 18:06 12169 Nov 0 19:04 12169 Nov 0 19:04 12169 Nov 0 19:04 12169 Nov 0 21 14:13 12169 Nov 26 08:09	6° \$\Partial 27'11 24° \$\Partial 27'37 24° \$\Partial 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'38 19° m 18'14 19° m 25'06 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54 0° \$\Partial 20' \text{ m} \text{ a'' \text{ m}} \text{ a'' \text{ a'' \text{ m}} \text{ a'' \text{ a'' \text{ m}} \text{ a'' \text{ a'' \text{ a''}} \text{ a'' \text{ a'' \text{ a''}} \text{ a'' \text{ a''}} \text{ a'' \text{ a'' \text{ a''}} \text{ a'' \text{ a''}} \text{ a'' \text{ a'' \text{ a''}} \text{ a'' \text{ a'' \text{ a''}} \text{ a'' \text{ a''}} \text{ a'' \text{ a''}} \text{ a'' \text{ a''}} a''	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17 0.58645 AU 27°23'37 1°28'00 1°28'28 1.31308 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 14 01:50 12170 Aug 17 08:37 12170 Aug 19 08:07 12170 Aug 19 08:07 12170 Aug 25 22:51 12170 Sep 07 20:05 12170 Sep 09 04:57 12170 Sep 09 04:57 12170 Sep 30 02:05 12170 Oct 11 01:08 12170 Oct 12 05:22 12170 Oct 15 13:06 12170 Oct 19 11:54 12170 Oct 19 09:41 12170 Oct 26 05:00 12170 Oct 29 07:29	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\Omega\$ 3°\$\Omega\$2'33 6°\$\Omega\$2'33 6°\$\Omega\$2'52 30°\$\Omega\$01'11 25°\$\Omega\$3'15 23°\$\Omega\$22'01 0°\$\Omega\$152 30°\$\Omega\$15 23°\$\Omega\$22'01 0°\$\Omega\$18'46 0°\$\Omega\$22'01 0°\$\Omega\$18'46 0°\$\Omega\$22'15 22°\$\Omega\$57'36 0°\$\Omega\$1.30'41 8°\$\Omega\$39'31 8°\$\Omega\$27'16 23°\$\Omega\$26'53 0°\$\Sign\$	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49 0.60918 AU 27°55'55
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12169 Jul 18 03:51 12169 Jul 28 04:59 12169 Jul 30 21:50 12169 Aug 13 04:40 12169 Aug 20 13:37 12169 Aug 20 13:37 12169 Aug 30 03:54 12169 Aug 30 04:05 12169 Aug 30 04:05 12169 Aug 30 00:47 12169 Aug 30 07:23 12169 Aug 30 11:10 12169 Sep 02 11:53 12169 Sep 02 11:53 12169 Sep 12 17:58 12169 Sep 12 17:58 12169 Sep 27 02:10 12169 Oct 05 19:35 12169 Oct 23 19:28 12169 Oct 24 04:26 12169 Oct 28 01:58 12169 Nov 04 01:09 12169 Nov 03 18:06 12169 Nov 04 10:09 12169 Nov 06 17:25 12169 Nov 01 19:04 12169 Nov 02 08:09 12169 Nov 26 08:09 12169 Dec 10 05:48	6° \$\Partial 27'11 24° \$\Partial 57'37 24° \$\Partial 48'10 0° m 20° m 32'25 24° m 15'56 23° m 57'45 19° m 18'38 19° m 18'14 19° m 25'06 19° m 11'22 19° m 03'25 16° m 33'04 13° m 49'32 12° m 04'46 19° m 47'54 0° \$\Partial 20' \text{ m} \text{ odd } 4'37 8° m 46'21 24° m 01'57 23° m 52'02 23° m 22'38 0° \$\text{ s} \text{ s} \	1°24'58 18°18'30 0°05'36 0°05'17 0°05'17 0.58645 AU 27°23'37 1°28'00 1°28'28 1.31308 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12170 Jun 22 07:40 12170 Jun 29 07:49 12170 Jun 29 14:35 12170 Jul 06 19:53 12170 Jul 11 03:49 12170 Jul 24 15:34 12170 Jul 27 16:47 12170 Aug 03 08:17 12170 Aug 12 13:00 12170 Aug 12 15:16 12170 Aug 14 01:50 12170 Aug 15 16:46 12170 Aug 17 08:37 12170 Aug 19 08:07 12170 Aug 19 08:07 12170 Sep 07 20:05 12170 Sep 09 04:57 12170 Sep 09 04:57 12170 Sep 30 02:05 12170 Oct 11 01:08 12170 Oct 12 05:22 12170 Oct 15 13:06 12170 Oct 19 11:54 12170 Oct 19 09:41 12170 Oct 26 05:00 12170 Oct 29 07:29 12170 Oct 29 07:29	5°\$26'14 17°\$02'29 17°\$31'04 0°\$\Omega\$ 7°\$\Omega\$40'54 14°\$\Omega\$29'18 0°\$\Omega\$ 3°\$\Omega\$2'33 6°\$\Omega\$57'11 6°\$\Omega\$28'45 1°\$\Omega\$29'20 1°\$\Omega\$25'25 30°\$\Omega\$027'56 27°\$\Omega\$01'11 25°\$\Omega\$32'15 23°\$\Omega\$22'01 0°\$\Omega\$18'46 0°\$\Omega\$22'01 0°\$\Omega\$18'46 0°\$\Omega\$22'01 0°\$\Omega\$18'46 0°\$\Omega\$257'36 0°\$\Omega\$1.30'41 8°\$\Omega\$39'31 8°\$\Omega\$27'16 23°\$\Omega\$27'16 23°\$\Omega\$26'53 0°\$\sqrt{2}\$26'\$\sqrt{0}1'37	-1°53'47 1°54'03 18°04'06 1°24'04 1°22'49 0.60918 AU 27°55'55 1.31518 AU 1°14'07 1°14'17

. 1	12170 D 05 10 11	120710121		. 1	12171 N 17 21 10	220 71727	
retrograde	12170 Dec 05 19:11	13°る18'31		retrograde	12171 Nov 16 21:10	23° 🖈 17'27	
evening set	12170 Dec 11 14:56	12°る01'45	0.57054.411	evening set	12171 Nov 21 10:59	22° 🖈 31'51	0.55404.411
min. Earth dist.	12170 Dec 16 11:02		0.57054 AU	min. Earth dist.	12171 Nov 27 19:51	19° 🗷 28'41	0.55484 AU
inferior conj	12170 Dec 19 06:09	7° る 29'39		inferior conj	12171 Nov 29 16:22	18° ∡ 22′52	
minimum elong	12170 Dec 19 13:58	7° 云 16'37	5°08'49	minimum elong	12171 Nov 29 18:41	18° ∡ 19′26	5°49'14
morning rise	12170 Dec 27 15:18	3° ට 17'09		morning rise	12171 Dec 08 04:13	14° ≯ 29'22	
direct	12170 Dec 29 21:38	3°₹02'05		direct	12171 Dec 10 22:35	14° ≯ 10'30	
asc. node	12171 Jan 07 01:12	6° る 32'43		morning max el	12171 Dec 21 14:11	19° ⊀ 14'37	20°16'59
morning max el	12171 Jan 08 01:04	7° る 27'24	19°06'38	asc. node	12171 Dec 24 22:21	22° ₹ 54'24	
	12171 Jan 22 12:18	0° ≈			12171 Dec 29 21:15	0°ප	
morning set	12171 Jan 24 17:34	4° ≈ 21'40		morning set	12172 Jan 08 23:48	18° る 59'35	
					12172 Jan 14 08:11	0° ≈	
superior conj	12171 Feb 02 01:04	20° ≈ 43'11	0°54'48				
minimum elong	12171 Feb 02 03:55	20° ≈ 56′56	0°55'00	superior conj	12172 Jan 16 14:24	4° ≈ 35'27	1°16'11
	12171 Feb 06 23:37	0° ℋ		minimum elong	12172 Jan 16 17:04	4° ≈ 48'55	1°16'38
max. Earth dist.	12171 Feb 08 21:22	3° ∺ 27'34	1.38753 AU	max. Earth dist.	12172 Jan 22 04:37	15° ≈ 33'54	1.36564 AU
desc. node	12171 Feb 09 05:07	4° ₩ 02'16		evening rise	12172 Jan 25 23:36	22° ≈ 37'20	
evening rise	12171 Feb 12 16:18	10°) 07′37		desc. node	12172 Jan 27 01:49	24° ≈ 35'44	
	12171 Feb 24 22:59	$0^{\circ}\mathbf{\Upsilon}$			12172 Jan 30 03:28	0°) €	
	12171 Mar 19 22:45	9° 8			12172 Feb 18 17:51	$0^{\circ}\mathbf{\Upsilon}$	
evening max el	12171 Mar 19 22:51	0° 8 00'14	24°38'39	evening max el	12172 Mar 01 12:14	13° Ƴ 50'40	25°50'57
retrograde	12171 Mar 31 13:41	6° 8 47'14		retrograde	12172 Mar 14 00:50	21° Y 01'48	
asc. node	12171 Apr 04 22:28	5° 8 22'17		evening set	12172 Mar 20 02:10	18° Ƴ 32'55	
evening set	12171 Apr 06 03:22	4° 8 27'17		asc. node	12172 Mar 21 19:52	16° Ƴ 54'25	
C	12171 Apr 10 03:36	30° ₹ Υ		min. Earth dist.	12172 Mar 24 08:14	13° Y 59'19	0.67339 AU
min. Earth dist.	12171 Apr 10 16:15	29° Υ 18'28	0.68250 AU	inferior conj	12172 Mar 25 20:50	12° Ƴ 03'58	1°15'10
inferior conj	12171 Apr 11 16:38	27° Υ 57'15	1°59'09	minimum elong	12172 Mar 25 19:08	12° Υ 09'18	1°14'28
minimum elong	12171 Apr 11 14:29	28° Υ '04'24	1°58'09	morning rise	12172 Mar 31 12:44	6°Υ15'11	1 11.20
morning rise	12171 Apr 17 01:47	21°Υ58'59	1 50 0)	direct	12172 Apr 03 20:15	5° Υ 12'30	
direct	12171 Apr 20 20:49	20° Υ 36'36		morning max el	12172 Apr 10 14:00	8° Υ 51'10	18°51'36
morning max el	12171 Apr 28 06:18	24° Υ 43'22	19°46'44	desc. node	12172 Apr 10 14:00 12172 Apr 24 03:40	27° Y 08'47	10 31 30
morning max cr	12171 Apr 28 00:18 12171 May 02 21:24	0°8	17 40 44	greatest brilliancy	12172 Apr 24 03:40 12172 Apr 24 12:07	27° Υ 40'59	-0.8m
desc. node	12171 May 02 21:24 12171 May 08 06:58	7° 8 17'58		greatest orimaney	12172 Apr 24 12:07 12172 Apr 26 00:23	0°8	-0.0111
greatest brilliancy	12171 May 08 00:38	11° 8 26'02	0.6m	morning set	12172 Apr 20 00.23	10° 8 45'09	
greatest offinality	12171 May 11 03:30 12171 May 23 12:01	0° Ⅱ	-0.0111	morning set	•	0° I	
marning sat	12171 May 23 12:01 12171 May 24 14:40	0 П 1°П42'15		max. Earth dist.	12172 May 15 07:29		1.45551 AU
morning set max. Earth dist.	12171 May 24 14.40 12171 Jun 04 20:15	1 П 42 13	1.44635 AU	max. Earm dist.	12172 May 17 13:36	э шэгээ	1.43331 AU
max. Earm dist.	121/1 Juli 04 20.13	19 щ13 20	1.44033 AU		12172 M 10, 07.41	€0 T 1€120	201.012.5
	12171 1 00 17.51	270T02144	2011107	superior conj	12172 May 19 07:41	6° Ⅱ 16'28	
superior conj	12171 Jun 09 17:51	27° I 103'44		minimum elong	12172 May 19 03:36	6° Ⅱ 00'27	2-11-13
minimum elong	12171 Jun 09 21:11	27° I 17'11	2°11'54	evening rise	12172 Jun 03 11:38	0°924'51	
	12171 Jun 11 13:22	0°©			12172 Jun 03 05:28	0°©	
evening rise	12171 Jun 23 07:29	19° © 32'59		asc. node	12172 Jun 17 17:38	22° © 52'34	
	12171 Jun 29 12:04	0° Ω			12172 Jun 23 08:04	0° Ω	
asc. node	12171 Jul 01 20:39	3° £ 53′00	10000122	evening max el	12172 Jun 23 19:52	0° Ω 30'07	18°31'10
evening max el	12171 Jul 11 06:54	16° £ 54′29	18°08'33	retrograde	12172 Jun 30 07:19	4° Ω 00'08	
retrograde	12171 Jul 17 15:39	20° Ω 14'57		evening set	12172 Jul 03 11:06	3° Ω 03'58	
evening set	12171 Jul 20 11:09	19° Ω 33'34			12172 Jul 07 00:36	30°Rூ	
inferior conj	12171 Jul 26 14:31	14° Ω 15'52		inferior conj	12172 Jul 09 04:22	27° © 30'06	2°53'12
minimum elong	12171 Jul 26 17:06	14° Ω 08'48	2°17'32	minimum elong	12172 Jul 09 06:18		2°52'04
min. Earth dist.	12171 Jul 29 07:08	11° Ω 20′24	0.63146 AU	min. Earth dist.	12172 Jul 11 06:54	24°958'24	0.65121 AU
morning rise	12171 Aug 01 21:14	8° Ω 02'50		morning rise	12172 Jul 15 00:27	21° © 08'57	
desc. node	12171 Aug 04 06:01	6° Ω 34'16		desc. node	12172 Jul 21 03:20	18°528'33	
direct	12171 Aug 08 13:35	5° Ω 32'00		direct	12172 Jul 21 12:42	18° 5 28'01	
morning max el	12171 Aug 22 13:10	13° Ω 33'59	27°49'45	morning max el	12172 Aug 04 00:00	26° © 23'56	27°09'31
	12171 Sep 04 18:31	0° m			12172 Aug 07 08:11	$0^{\circ}\Omega$	
	12171 Sep 22 15:10	0∘ ⊽			12172 Aug 28 08:49	0° m	
morning set	12171 Sep 26 01:57	6° £ 46'59		morning set	12172 Sep 08 12:59	20° m 07'52	
asc. node	12171 Sep 27 21:49	10° ≏ 30′28		max. Earth dist.	12172 Sep 12 22:31	28° m 52'38	1.33488 AU
max. Earth dist.	12171 Oct 01 04:25	17° ≏ 23'09	1.32243 AU		12172 Sep 13 11:41	0∘ ত	
				asc. node	12172 Sep 13 18:28	0° ჲ 34'54	
superior conj	12171 Oct 03 19:48	23° ≏ 05'03	0°54'49				
minimum elong	12171 Oct 03 17:38	22° ჲ 53′20	0°54'42	superior conj	12172 Sep 16 22:43	7° £ 12'58	0°30'20
	12171 Oct 06 23:40	0°M		minimum elong	12172 Sep 16 21:15	7° ≙ 05'11	0°30'04
evening rise	12171 Oct 10 16:17	8°ML01'52		evening rise	12172 Sep 24 03:04	22° ₽ 33'04	
	12171 Oct 21 23:24	0° ∡ ¹			12172 Sep 27 17:11	0° M ₊	
desc. node	12171 Oct 31 02:40	13° ∡ 03'30		evening max el	12172 Oct 14 21:55	26°M39'29	21°58'07
evening max el	12171 Nov 03 09:38	16° ∡ ³34′09	23°38'32	desc. node	12172 Oct 17 00:02	28° MJ $32'$ 48	

	12172 Oct 18 22:20	0° ∡ ¹			12173 Sep 05 03:32	0∘ ত	
retrograde	12172 Oct 27 12:17	2° × 755'11		evening rise	12173 Sep 08 11:13	6° £ 54'10	
evening set	12172 Oct 30 15:29	2°×733'13		evening rise	12173 Sep 21 00:55	0°M	
evening sec	12172 Nov 05 23:11	30°RM		evening max el	12173 Sep 26 20:53	7°ML13'00	20°30'06
inferior conj	12172 Nov 08 11:36	28°MJ36'41	5026157	desc. node	12173 Oct 03 21:27	12°ML00'04	20 30 00
	12172 Nov 08 11:30	28°M45'28		retrograde	12173 Oct 03 21:27 12173 Oct 07 23:37	12°M44'10	
minimum elong							
min. Earth dist.	12172 Nov 08 02:35	28°M49'19	0.54636 AU	evening set	12173 Oct 10 03:00	12°M32'47	4026100
morning rise	12172 Nov 16 20:26	24°M49'32		inferior conj	12173 Oct 19 04:03	8°M37'05	
direct	12172 Nov 20 08:57	24°M22'12		minimum elong	12173 Oct 18 18:00	8°M51'40	
	12172 Dec 02 09:06	0° ∡		min. Earth dist.	12173 Oct 20 10:19	7°M53'08	0.54709 AU
morning max el	12172 Dec 02 13:24	0° ∡ 10′03	21°48'57	morning rise	12173 Oct 27 08:32	4°M36'30	
asc. node	12172 Dec 10 19:23	10° ∡ ¹20'55		direct	12173 Oct 31 17:51	3°M55'03	
	12172 Dec 21 14:31	0°ಕ		morning max el	12173 Nov 14 02:15	10°M24'42	23°35'16
morning set	12172 Dec 23 09:48	3° る 45'07		asc. node	12173 Nov 27 16:19	28°M36'30	
					12173 Nov 28 11:33	0° ∡ ¹	
superior conj	12172 Dec 30 13:18	18° る 53'15		morning set	12173 Dec 07 21:28	18° ∡ ³31'52	
minimum elong	12172 Dec 30 15:08	19° る 02'52	1°30'56		12173 Dec 13 04:32	0°₹	
max. Earth dist.	12173 Jan 03 16:45	27° る 25'30	1.34631 AU				
	12173 Jan 04 23:38	0° ≈		superior conj	12173 Dec 14 18:42	3° ⋜ 27'06	1°37'30
evening rise	12173 Jan 07 22:58	5° ≈ 47'47		minimum elong	12173 Dec 14 19:26	3° ⋜ 31′01	1°38'20
desc. node	12173 Jan 12 22:35	15° ≈ 00'27		max. Earth dist.	12173 Dec 17 12:45	9° ප 20'57	1.33090 AU
	12173 Jan 21 21:19	0° ₩		evening rise	12173 Dec 22 10:50	19° る 29'27	
evening max el	12173 Feb 12 01:45	27° ¥ 33'49	26°48'34	Ü	12173 Dec 27 22:15	0° ≈	
v , v	12173 Feb 14 18:25	0° Υ		desc. node	12173 Dec 30 19:27	5°≈11'10	
retrograde	12173 Feb 25 06:36	4° Y 57'26			12174 Jan 15 23:43	0°) €	
evening set	12173 Mar 03 18:14	2° Y '24'33		evening max el	12174 Jan 25 14:49	11° ¥ 00′23	27°24'16
evening set	12173 Mar 06 08:11	30°R ₩		retrograde	12174 Feb 08 05:59	18°) 25'43	27 24 10
min. Earth dist.	12173 Mar 07 18:39	28° ¥ 24'50	0.66029 AU	evening set	12174 Feb 15 01:23	15° X 55'19	
asc. node	12173 Mar 08 17:17	27° H 19'09	0.00029 AU	min. Earth dist.	12174 Feb 18 21:29		0.64363 AU
		26° ₩ 02'32	0920157			9° \(\) 47'18	
inferior conj	12173 Mar 09 19:20			inferior conj	12174 Feb 21 09:38		
minimum elong	12173 Mar 09 18:46	26°) €04'12	0°20'53	minimum elong	12174 Feb 21 10:58	9°) 43'45	0°42'30
morning rise	12173 Mar 15 20:32	20°) € 25'04		asc. node	12174 Feb 23 14:39	7°) € 31'19	
direct	12173 Mar 18 17:49	19°) (39′12		morning rise	12174 Feb 27 22:29	4°) €23'27	
morning max el	12173 Mar 25 03:39	23°) €02'24	18°12'53	direct	12174 Mar 02 11:08	3° ¥ 50'49	
	12173 Mar 30 20:08	0° Υ		morning max el	12174 Mar 08 20:43	7° ∺ 09'50	17°51'14
desc. node	12173 Apr 11 00:17	17° Y 18'34			12174 Mar 24 06:43	0° Υ	
morning set	12173 Apr 13 08:19	21° Y '03'45		morning set	12174 Mar 25 22:19	2° Y 46′24	
	12173 Apr 18 22:14	0°B		desc. node	12174 Mar 28 20:52	7° Y 42'06	
superior conj	12173 Apr 28 14:54	15° 8 18'40	-1°49'55	superior conj	12174 Apr 08 09:25	24° Ƴ 57'22	
minimum elong	12173 Apr 28 05:46	14° 8 42'53		minimum elong	12174 Apr 08 01:40	24° Y 26′16	1°13'40
max. Earth dist.	12173 Apr 30 08:59	18° 8 03'17	1.45735 AU		12174 Apr 11 13:15	9° 8	
	12173 May 08 00:54	Π \circ 0		max. Earth dist.	12174 Apr 13 04:26	2° 8 34'59	1.45181 AU
evening rise	12173 May 14 16:10	10° Ⅱ 19'48		evening rise	12174 Apr 24 05:30	19° 8 44'04	
greatest brilliancy	12173 May 26 02:54	28° Ⅲ 01'15	-0.7m		12174 Apr 30 23:28	Π \circ 0	
	12173 May 27 10:28	0 \circ \odot		greatest brilliancy	12174 May 09 07:16	12° Ⅲ 21'40	-0.6m
asc. node	12173 Jun 04 14:42	11° © 19'14		evening max el	12174 May 21 09:22	27° Ⅱ 58'50	20°06'35
evening max el	12173 Jun 07 05:13	14°9512'50	19°11'02	asc. node	12174 May 22 11:51	29° Ⅲ 02'27	
retrograde	12173 Jun 14 03:46	18° 5 04'55			12174 May 23 14:40	0ංම	
evening set	12173 Jun 17 16:16	16° © 52'50		retrograde	12174 May 29 02:18	2° 5 23'49	
inferior conj	12173 Jun 23 02:58	11° 5 04'24	3°10'45	evening set	12174 Jun 02 00:15	0°955'20	
minimum elong	12173 Jun 23 03:52	11° © 01'31	3°09'49	Ü	12174 Jun 03 02:10	30°RⅡ	
min. Earth dist.	12173 Jun 24 14:46	9° 5 08'42	0.66725 AU	inferior conj	12174 Jun 07 07:27	24° Ⅱ 53'42	3°14'31
morning rise	12173 Jun 28 14:53	4°9541'30		minimum elong	12174 Jun 07 07:16	24° I I54'20	3°13'40
direct	12173 Jul 04 18:50	2°500'42		min. Earth dist.	12174 Jun 08 04:52	23° II 40'59	0.67888 AU
desc. node	12173 Jul 08 00:33	2°938'14		morning rise	12174 Jun 12 13:57	18° Ⅱ 33'02	0.07000710
morning max el	12173 Jul 17 10:50	9°935'08	26°03'05	direct	12174 Jun 18 06:45	16° Ⅱ 01'32	
morning max ci	12173 Jul 17 10:30 12173 Aug 02 13:11	0°Ω	20 03 03	desc. node	12174 Jun 24 21:39	18° II 37'35	
	-	0° m)			12174 Jun 24 21:39 12174 Jun 29 20:46	18°Щ3/35 22°Щ58'28	24940110
	12173 Aug 20 21:42			morning max el			24 40 10
morning set	12173 Aug 22 10:55	2° Mp 50'27	1 25220 411		12174 Jul 06 01:22	0° ©	
max. Earth dist.	12173 Aug 26 06:03	10° Mp 00'50	1.35230 AU		12174 Jul 26 21:09	0°N	
	10150	200======	000115	morning set	12174 Aug 04 15:28	14° Ω 44'13	
superior conj	12173 Aug 31 18:02	20° m 55'47	0°01'11	max. Earth dist.	12174 Aug 08 05:30	21° Ω 08'49	1.37369 AU
minimum elong	12173 Aug 31 17:58	20° m 55'30	0°00'56		12174 Aug 12 23:28	0° m)	
behind sun begin	12173 Aug 31 11:56	20° m 24'48					
behind sun end	12173 Sep 01 00:01	21°M)26'17		superior conj	12174 Aug 15 02:38	4° ™ 06'17	
asc. node	12173 Aug 31 15:07	20° m 40'55		minimum elong	12174 Aug 15 04:45	4° Mp 16'31	0°31'40

asc. node	12174 Aug 18 11:47	10° Mp 45'21		asc. node	12175 Aug 05 08:30	0° Mp 44'01	
evening rise	12174 Aug 23 14:28	20° m 59'29		evening rise	12175 Aug 07 09:47	4° ™ 40'53	
	12174 Aug 28 04:38	0∘ ⊽			12175 Aug 22 20:00	0∘ ত	
evening max el	12174 Sep 09 09:56	18° ≏ 33'01	19°22'02	evening max el	12175 Aug 23 11:01	0° ჲ 38'41	18°35'38
retrograde	12174 Sep 18 20:10	23° ≏ 15'05		retrograde	12175 Aug 31 11:02	4° ჲ 40'02	
evening set	12174 Sep 20 16:32	23° ჲ 05'01		evening set	12175 Sep 02 10:35	4° £ 26'02	
desc. node	12174 Sep 20 18:51	23° Ω 03'57		desc. node	12175 Sep 07 16:17	1° Ω 55'07	
inferior conj	12174 Sep 29 08:01	18° ⊆ 57'02	2°30'47	inferior conj	12175 Sep 07 10:17 12175 Sep 10 08:18	29° m 58'25	0°50'11
	-	18 ≅ 37 02 19° £ 08'24		•	•		
minimum elong	12174 Sep 29 01:02			minimum elong	12175 Sep 10 06:18	0° Ω 02'15	0°49'28
min. Earth dist.	12174 Oct 01 21:06	17° Ω 17'42	0.55709 AU		12175 Sep 10 07:29	30°R, Mp	
morning rise	12174 Oct 07 07:07	14° ≏ 25'40		min. Earth dist.	12175 Sep 13 13:24	27° m 32'24	0.57433 AU
direct	12174 Oct 12 12:32	13° ≏ 23'50		morning rise	12175 Sep 17 22:35	24° Mp 49'18	
morning max el	12174 Oct 26 12:47	20° £ 27'35	25°21'00	direct	12175 Sep 23 21:00	23° m 21'21	
	12174 Nov 03 17:26	0° M $_{\circ}$			12175 Oct 07 06:18	0∘ ত	
asc. node	12174 Nov 14 13:10	17° M 29'04		morning max el	12175 Oct 08 04:19	0° £ 51'54	26°48'01
	12174 Nov 20 20:21	0° ∡ ¹			12175 Oct 28 19:19	0° M	
morning set	12174 Nov 22 09:05	3° х 15′03		asc. node	12175 Nov 01 09:58	6° M 49'11	
morning sec	121711107 22 05.00	3 7 10 03		morning set	12175 Nov 06 18:58	17°M 50'18	
superior conj	12174 Nov. 20, 04:09	100.700142	1°38'27	morning set	12175 Nov 12 08:09	0° ⊼ ¹	
1 5	12174 Nov 29 04:08	18° ₹ 09'42			121/3 NOV 12 08:09	0.8.	
minimum elong	12174 Nov 29 03:45	18° ₹ 07'31	1°39'16				
max. Earth dist.	12174 Nov 30 16:06	21° ∡ *27'39	1.32013 AU	superior conj	12175 Nov 13 15:35		1°33'27
	12174 Dec 04 15:05	0°ප		minimum elong	12175 Nov 13 14:14	2° ∡ ¹47'42	1°34'06
evening rise	12174 Dec 06 08:02	3° る 34'09		max. Earth dist.	12175 Nov 14 00:03	3° ∡ ¹42'29	1.31422 AU
desc. node	12174 Dec 17 16:24	25° පි 01'18		evening rise	12175 Nov 20 11:55	17° ∡ ¹55′05	
	12174 Dec 20 16:24	0° ≈			12175 Nov 26 11:05	0°ಕ	
evening max el	12175 Jan 08 01:27	23°≈57'09	27°31'14	desc. node	12175 Dec 04 13:27	14° る 22'35	
3	12175 Jan 16 11:12	0°) €			12175 Dec 15 13:25	0° ≈	
retrograde	12175 Jan 21 21:50	1° ¥ 17'05		evening max el	12175 Dec 21 06:54	6° ≈ 11'13	27°04'44
retrograde	12175 Jan 27 01:39	30°R≈		retrograde	12176 Jan 04 05:11	13°≈23'10	27 0444
. ,				•			
evening set	12175 Jan 28 20:53	28°≈56'47	0.60444.477	evening set	12176 Jan 11 01:24	11°≈21'16	0.60001.477
min. Earth dist.	12175 Feb 01 14:44	25° ≈ 56′03	0.62414 AU	min. Earth dist.	12176 Jan 14 21:16	8° ≈ 39'49	0.60291 AU
inferior conj	12175 Feb 04 12:44	23° ≈ 10′08	-1°57'03	inferior conj	12176 Jan 18 01:13	6° ≈ 02'04	
minimum elong	12175 Feb 04 16:42	23° ≈ 00'42	1°54'52	minimum elong	12176 Jan 18 08:03	5° ≈ 47'50	3°13'16
asc. node	12175 Feb 10 11:59	18° ≈ 31'07		morning rise	12176 Jan 25 17:35	1° ≈ 15′00	
morning rise	12175 Feb 11 15:04	18° ≈ 03'01		direct	12176 Jan 27 19:53	0° ≈ 57'49	
direct	12175 Feb 13 21:09	17° ≈ 39'52		asc. node	12176 Jan 28 09:15	0° ≈ 59'05	
morning max el	12175 Feb 20 14:10	21°≈04'46	17°47'13	morning max el	12176 Feb 04 04:40	4° ≈ 38'24	18°01'50
	12175 Feb 27 08:40	0° ∀		morning set	12176 Feb 19 18:53	29° ≈ 14'28	
morning set	12175 Mar 08 11:57	15°) (36′22		morning set	12176 Feb 20 04:43	0°) €	
desc. node	12175 Mar 15 17:27	28°) 14'30			121/0100 20 04.43	0 X	
desc. node		28 Υ 1430			12176 F. L. 20, 10.50	170 V 22140	0005154
	12175 Mar 16 18:03	O-Y		superior conj	12176 Feb 29 19:59	17°) € 32'40	0°05'54
		• •		minimum elong	12176 Feb 29 20:29	17°) (34′54	0°06'06
superior conj	12175 Mar 20 02:29	5° Y 40'38		behind sun begin	12176 Feb 29 13:09	17° ¥ 02′26	
minimum elong	12175 Mar 19 23:13	5° Y 26′56	0°32'44	behind sun end	12176 Mar 01 03:50	18° ∺ 07'17	
max. Earth dist.	12175 Mar 26 21:38	16° Ƴ 50'47	1.43951 AU	desc. node	12176 Mar 01 14:03	18° ¥ 52'15	
evening rise	12175 Apr 03 18:46	29° Ƴ 16'43			12176 Mar 08 02:03	0° Y	
	12175 Apr 04 05:58	0° ႘		max. Earth dist.	12176 Mar 08 10:33	0° Ƴ 35'25	1.42171 AU
	12175 Apr 24 16:34	$\Pi^{\circ}0$		evening rise	12176 Mar 13 21:51	9° Y 30'30	
evening max el	12175 May 04 07:44	11° Ⅱ 45'12	21°15'07	Č	12176 Mar 27 08:03	0°8	
asc. node	12175 May 09 09:04	15° Ⅱ 47'53		evening max el	12176 Apr 16 01:11	25° 8 32'30	22°32'29
retrograde	12175 May 13 00:53	16° ∏ 51'01		evening max er	12176 Apr 21 12:31	0°II	22 32 27
•	•	15° Д 06'16		aca mada	-	1° Ⅱ 19'52	
evening set	12175 May 17 09:06		2007127	asc. node	12176 Apr 25 06:20		
inferior conj	12175 May 22 15:23	8° Ⅱ 52'59		retrograde	12176 Apr 25 21:56	1° Ⅱ 21'52	
minimum elong	12175 May 22 14:15	8° Ⅱ 56'55	3°05'43		12176 Apr 29 21:29	30°R 8	
min. Earth dist.	12175 May 22 23:12	8° Ⅱ 25'49	0.68583 AU	evening set	12176 Apr 30 17:11	29° 8 21'53	
morning rise	12175 May 27 19:12	2° Ⅱ 36′52		inferior conj	12176 May 06 00:45	22° 8 59'14	2°48'13
direct	12175 Jun 01 23:16	0° Ⅱ 21′25		minimum elong	12176 May 05 22:56	23° 8 05'33	2°47'14
desc. node	12175 Jun 11 18:40	5° Ⅱ 58'39		min. Earth dist.	12176 May 05 19:42	23° 8 16'50	0.68809 AU
morning max el	12175 Jun 12 07:02	6° ∏ 29′24	23°10'35	morning rise	12176 May 11 04:34	16° 8 49'01	
5	12175 Jun 30 12:22	0.ಪ		direct	12176 May 15 19:24	14° 8 53'30	
morning set	12175 Jul 16 21:44	25° © 36'35		morning max el	12176 May 24 20:35	20° 8 09'30	21°43'18
morning set	12175 Jul 19 12:16	0° Ω		desc. node		24° 8 19'49	21 13 10
mov Ftl- U t			1 20000 411	uese. Houe	12176 May 28 15:37	0°Ⅱ	
max. Earth dist.	12175 Jul 21 03:10	2° Ω 46'50	1.39689 AU		12176 Jun 02 03:46		
	10175 7 1 00 000	160 02	100515 4		12176 Jun 22 17:03	0°©	
superior conj	12175 Jul 28 20:36	16° Ω 34'23		morning set	12176 Jun 26 02:22	5° © 20'23	
minimum elong	12175 Jul 29 01:18	16° Ω 56′03	1°05'48	max. Earth dist.	12176 Jul 02 04:51	15° © 14'35	1.41918 AU
	12175 Aug 04 23:20	0° ™					

superior conj	12176 Jul 09 19:25	28° © 09'50	1020111	superior conj	12177 Jun 20 19:16	8°945'38	2002157
minimum elong	12176 Jul 10 02:07	28° © 39'03		minimum elong	12177 Jun 20 19:10	9° © 10'12	
minimum ciong	12176 Jul 10 02:07	0°Ω	1 30 12	evening rise	12177 Jul 03 08:46	0°Ω11'27	2 03 20
evening rise	12176 Jul 20 17:26	17° Ω 48'33		evening rise	12177 Jul 03 06:09	0°Ω	
asc. node	12176 Jul 22 05:16	20° Ω 32'43		asc. node	12177 Jul 09 02:07	10° Ω 07'09	
use. Houe	12176 Jul 27 11:53	0° m)		evening max el	12177 Jul 20 09:38	26°Ω31'49	18°03'48
evening max el	12176 Aug 05 20:14	13° m) 21'23	18°09'59	retrograde	12177 Jul 26 21:11	29°Ω53'06	10 03 10
retrograde	12176 Aug 12 20:35	16° m 55'29		evening set	12177 Jul 29 11:55	29°Ω19'36	
evening set	12176 Aug 15 03:13	16° m 33'26		inferior conj	12177 Aug 04 22:52	24°Ω12'26	1°50'01
inferior conj	12176 Aug 22 06:14	11° m) 45'21	0°41'52	minimum elong	12177 Aug 05 01:26	24° Ω 05'53	1°48'40
minimum elong	12176 Aug 22 07:34	11° mp 42'23	0°41'01	min. Earth dist.	12177 Aug 07 22:35	21°Ω10'42	0.61877 AU
desc. node	12176 Aug 24 13:44	9° m) 41'26		desc. node	12177 Aug 11 11:10	18° Ω 10′08	
min. Earth dist.	12176 Aug 25 13:29	8° m 50'13	0.59591 AU	morning rise	12177 Aug 11 12:32	18° Ω 07'44	
morning rise	12176 Aug 29 08:38	6° mp 03'10		direct	12177 Aug 18 04:45	15° Ω 46'46	
direct	12176 Sep 04 19:08	4° m) 06'49		morning max el	12177 Sep 01 08:53	23° Ω 47'58	27°57'52
morning max el	12176 Sep 19 03:24	11° m 57'12	27°42'17	C	12177 Sep 06 22:38	0° m	
-	12176 Oct 03 08:11	0∘ ⊽			12177 Sep 26 16:04	0∘ ⊽	
asc. node	12176 Oct 18 06:42	26° ≏ 28'34		morning set	12177 Oct 05 02:06	16° ≙ 14'40	
	12176 Oct 20 00:02	0° M ₊		asc. node	12177 Oct 05 03:24	16° ≏ 21'20	
morning set	12176 Oct 21 01:18	2°M11'53		max. Earth dist.	12177 Oct 10 14:41	27° ≏ 57'14	1.31756 AU
max. Earth dist.	12176 Oct 27 08:52	15°M55'44	1.31331 AU		12177 Oct 11 13:10	0° M	
superior conj	12176 Oct 28 03:06	17° ™ 37'12	1°22'47	superior conj	12177 Oct 12 12:54	2°M10'23	1°06'36
minimum elong	12176 Oct 28 01:05	17° M 25'58	1°23'08	minimum elong	12177 Oct 12 10:39	1° M 57'58	1°06'38
	12176 Nov 02 17:18	0° ∡ 7		evening rise	12177 Oct 19 06:55	16° M 59'57	
evening rise	12176 Nov 03 20:12	2° ₹ 25'23			12177 Oct 25 14:39	0° ∡ ¹	
	12176 Nov 18 11:14	0°ප		desc. node	12177 Nov 07 07:52	20° ∡ ¹46'30	
desc. node	12176 Nov 20 10:37	3° る 02'53		evening max el	12177 Nov 13 18:20	28° ₹ 05'55	24°36'16
evening max el	12176 Dec 02 04:36	17° る 32'57	26°04'14		12177 Nov 15 21:32	0°ಕ	
retrograde	12176 Dec 16 02:46	24° る 36'34		retrograde	12177 Nov 27 12:28	4° る 58'40	
evening set	12176 Dec 22 10:39	23° る 01'26		evening set	12177 Dec 02 20:28	3° る 55'37	
min. Earth dist.	12176 Dec 26 17:34	20° る 25'39		min. Earth dist.	12177 Dec 08 05:58		0.56316 AU
inferior conj	12176 Dec 29 19:27	18° る 12'20			12177 Dec 10 00:55	30°Ŗ ⋌ 7	
minimum elong	12176 Dec 30 03:55	17° る 57'00	4°30'29	inferior conj	12177 Dec 10 17:12	29° ∡ ³34′08	
morning rise	12177 Jan 06 23:56	13° ठ 47'30		minimum elong	12177 Dec 10 23:22	29° ∡ ¹24'22	5°31'09
direct	12177 Jan 09 02:48	13° る 32'50		morning rise	12177 Dec 19 04:24	25° ⋌ ³30'24	
asc. node	12177 Jan 14 06:30	15° පි 05'18		direct	12177 Dec 21 14:38	25° 🖈 14'25	
morning max el	12177 Jan 17 12:21	17°る39'06	18°36'41		12177 Dec 31 10:58	0°る	
	12177 Jan 26 09:04	0° ≈		morning max el	12177 Dec 31 09:13	29° х 55'47	19°33'39
morning set	12177 Feb 02 13:47	13° ≈ 24′02		asc. node	12178 Jan 01 03:40	0°る41'50	
	10177 5 1 11 10 11	001/21/26	0020102	morning set	12178 Jan 17 16:45	27° る 53'55	
superior conj	12177 Feb 11 10:11	0°) €21'36	0°39'03		12178 Jan 18 17:47	0° ≈	
minimum elong	12177 Feb 11 12:38 12177 Feb 11 05:33	0°) (33'04 0°) (0°39'09	gunariar agni	12178 Jan 25 16:18	13° ≈ 53'56	1°04'47
desc. node	12177 Feb 11 03:33	9° ∺ 31'04		superior conj minimum elong	12178 Jan 25 19:12	13 ≈33 30 14°≈08'08	1°04'47 1°05'04
max. Earth dist.	12177 Feb 16 10:41 12177 Feb 18 18:32	13°) ₹36'54	1.40038 AU	max. Earth dist.	12178 Feb 01 00:29	25°≈58'19	1.37806 AU
		20° H 38'53	1.40038 AU	desc. node	12178 Feb 01 00.29 12178 Feb 03 07:21	0° ∺ 07'30	1.37800 AU
evening rise	12177 Feb 22 21:26 12177 Feb 28 15:11	20 π3833 0° Υ		desc. Hode	12178 Feb 03 07:21 12178 Feb 03 05:40	0 X 0/30 0° X	
	12177 Mar 21 11:38	%8 0°8		evening rise	12178 Feb 04 17:56	2° ∺ 41'16	
evening max el	12177 Mar 21 11:38 12177 Mar 29 15:36	9° 8 22'02	23°53'17	0 1 011111 <u>G</u> 11 <u>5</u> 0	12178 Feb 21 18:19	2 γ (41 10	
retrograde	12177 Apr 09 16:07	15° 8 51'11	25 55 17	evening max el	12178 Mar 12 05:07	23° Υ 13'32	25°10'49
asc. node	12177 Apr 12 03:40	15° 8 22'51		evening man er	12178 Mar 22 10:12	0°8	20 10 19
evening set	12177 Apr 14 22:56	13° 8 37'49		retrograde	12178 Mar 24 06:09	0° 8 12'38	
min. Earth dist.	12177 Apr 19 16:15	8° 8 08'23	0.68576 AU		12178 Mar 26 00:21	30°R Ƴ	
inferior conj	12177 Apr 20 09:38	7° 8 09'05	2°19'55	evening set	12178 Mar 30 00:44	27° Y ′48'37	
minimum elong	12177 Apr 20 07:29	7° 8 16'25		asc. node	12178 Mar 30 01:04	27° Y '47'55	
morning rise	12177 Apr 25 16:05	1° 8 05'57		min. Earth dist.	12178 Apr 03 10:36	22° Y ′54'35	0.67909 AU
2	12177 Apr 27 11:57	30°RƳ		inferior conj	12178 Apr 04 16:08	21° Y ′18'13	1°41'43
direct	12177 Apr 29 18:03	29° Y '31'39		minimum elong	12178 Apr 04 14:07	21° Y ′24'50	1°40'49
	12177 May 02 02:49	0°8		morning rise	12178 Apr 10 03:49	15° Y ′23'31	
morning max el	12177 May 07 16:20	4° 8 01'03	20°25'23	direct	12178 Apr 13 17:46	14° Ƴ 09'47	
desc. node	12177 May 15 12:28	13° 8 24'50		morning max el	12178 Apr 20 19:40	18° Y 03'18	19°21'13
	12177 May 27 01:56	Π $^{\circ}0$			12178 Apr 30 07:09	9° 8	
morning set	12177 Jun 05 08:58	14° Ⅱ 07'49		desc. node	12178 May 02 09:12	3° 8 01'25	
max. Earth dist.	12177 Jun 14 12:58	28° Ⅲ 33'30	1.43793 AU	greatest brilliancy	12178 May 03 13:47	4° 8 46'44	-0.7m
	12177 Jun 15 10:29	0 \circ \odot		morning set	12178 May 15 09:56	22° 8 45'44	
					12178 May 20 02:19	$\Pi^{\circ}0$	

max. Earth dist.	12178 May 28 03:24	12° Ⅱ 33'56	1.45109 AU	morning set	12179 Apr 25 03:41	2° 8 17'56	
superior conj	12178 May 31 19:42	18° Ⅲ 23'14	-2°13'23	superior conj	12179 May 11 04:35	27° 8 25'46	-2°04'07
minimum elong	12178 May 31 20:07	18° ∏ 24'54		minimum elong	12179 May 10 21:38	26° 8 58'34	
	12178 Jun 08 01:00	0ಂತಾ		max. Earth dist.	12179 May 10 22:22		1.45729 AU
evening rise	12178 Jun 15 02:45	11°937'44			12179 May 12 20:03	0°II	
asc. node	12178 Jun 25 23:04	29° 5 21'13		evening rise	12179 May 26 20:27	22° I 103'51	
	12178 Jun 26 09:07	$0^{\circ}\Omega$		C	12179 May 31 20:30	0ಂತಾ	
evening max el	12178 Jul 03 23:39	10° Ω 00′24	18°16'03	greatest brilliancy	12179 Jun 04 06:36	5° 5 23'39	-0.8m
retrograde	12178 Jul 10 08:23	13° Ω 23′00		asc. node	12179 Jun 12 20:05	18° © 07'48	
evening set	12178 Jul 13 07:25	12° Ω 35'30		evening max el	12179 Jun 17 11:25	23° © 39'53	18°46'03
inferior conj	12178 Jul 19 06:03	7° Ω 10′58	2°35'41	retrograde	12179 Jun 24 02:25	27° 5 017'24	
minimum elong	12178 Jul 19 08:26	7° Ω 04'09	2°34'25	evening set	12179 Jun 27 09:57	26°514'22	
min. Earth dist.	12178 Jul 21 16:59	4° Ω 23′38	0.64030 AU	inferior conj	12179 Jul 03 00:00	20° 5 34'04	3°02'28
morning rise	12178 Jul 25 07:59	0° Ω 53'46		minimum elong	12179 Jul 03 01:31	20° © 29'20	3°01'26
	12178 Jul 26 13:54	30° ₹ 5		min. Earth dist.	12179 Jul 04 20:12	18° © 16'47	0.65864 AU
desc. node	12178 Jul 29 08:31	28° © 40'43		morning rise	12179 Jul 08 16:19	14° © 11'48	
direct	12178 Jul 31 23:24	28° © 17'05		direct	12179 Jul 15 01:32	11° © 29'53	
	12178 Aug 06 20:49	0 \circ Ω		desc. node	12179 Jul 16 05:47	11° © 34'48	
morning max el	12178 Aug 14 18:15	6° Ω 17'55	27°36'18	morning max el	12179 Jul 28 05:11	19° © 17'36	26°43'51
	12178 Sep 01 20:50	0°Ту			12179 Aug 06 07:37	0 \circ Ω	
morning set	12178 Sep 18 18:56	29° m 51'56			12179 Aug 25 21:55	0° m/y	
	12178 Sep 18 20:33	0∘ ⊽		morning set	12179 Sep 02 00:48	12° m 56'47	
asc. node	12178 Sep 22 00:04	6° Ω 22'11		max. Earth dist.	12179 Sep 06 03:31	20° m 57'32	1.34179 AU
max. Earth dist.	12178 Sep 23 13:48	9° ჲ 38'23	1.32708 AU	asc. node	12179 Sep 08 20:44	26° Mp 27'19	
	12170 0 26 10 56	1.60.0.2012.0	0045104		12170 0 10 10 56	00.000(110	001.0120
superior conj	12178 Sep 26 18:56	16° Ω 28'38	0°45'04	superior conj	12179 Sep 10 18:56	0° Ω 26'12	
minimum elong	12178 Sep 26 16:59	16° Ω 18'09	0°44'51	minimum elong	12179 Sep 10 17:59	0° ჲ 21'11	0°18'12
	12178 Oct 03 00:46	0°M 1°M 22114			12179 Sep 10 13:54	16° £ 00'30	
evening rise	12178 Oct 03 18:10 12178 Oct 19 08:12	1°MJ33'14 0°⊀		evening rise	12179 Sep 18 04:05 12179 Sep 25 03:59	0°M	
desc. node	12178 Oct 19 08.12 12178 Oct 25 05:11	0 x . 7° x 11'55		evening max el	12179 Sep 23 03.39 12179 Oct 07 20:33	18°M23'39	21°18'26
evening max el	12178 Oct 25 03:11 12178 Oct 26 04:40	8° ₹ 10'52	22°55'13	desc. node	12179 Oct 07 20:33 12179 Oct 12 02:33	21°M52'16	21 18 20
retrograde	12178 Nov 08 08:59	14° × 10 52	22 33 13	retrograde	12179 Oct 12 02:33	24°M21'40	
evening set	12178 Nov 12 07:46	14° × ⁷ 10'00		evening set	12179 Oct 19 20:43	24°M05'33	
min. Earth dist.	12178 Nov 19 13:33	10° ₹ 51'34	0.55020 AU	inferior conj	12179 Oct 22 12:02 12179 Oct 31 12:00	20°M10'59	-5°13'12
inferior conj	12178 Nov 20 19:55	10° ≯ 08'08		minimum elong	12179 Oct 31 03:10	20°M23'23	
minimum elong	12178 Nov 20 18:33	10° √ 10′06		min. Earth dist.	12179 Oct 31 19:55		0.54550 AU
morning rise	12178 Nov 29 06:51	6° ∡ 19'04		morning rise	12179 Nov 08 19:02	16°M21'09	
direct	12178 Dec 02 08:34	5° ₹ '57'03		direct	12179 Nov 12 16:36	15°M48'27	
morning max el	12178 Dec 13 16:12	11° ∡ 19'56	20°53'39	morning max el	12179 Nov 25 10:00	21°M54'03	22°33'18
asc. node	12178 Dec 19 00:45	17° ∡ ³32'45		_	12179 Dec 02 08:10	0° ∡ ″	
	12178 Dec 26 16:29	ರ°0		asc. node	12179 Dec 05 21:45	5° ∡ ′21'19	
morning set	12179 Jan 02 00:53	12° る 35'56		morning set	12179 Dec 17 11:49	27° ∡ "22'33	
					12179 Dec 18 17:26	5°0	
superior conj	12179 Jan 09 10:07	27° る 58'06	1°23'00				
minimum elong	12179 Jan 09 12:29	28° る 10'17	1°23'34	superior conj	12179 Dec 24 12:05	12° る 23'17	1°34'07
	12179 Jan 10 09:57	0° ≈		minimum elong	12179 Dec 24 13:28	12° る 30'37	1°34'54
max. Earth dist.	12179 Jan 14 09:32	7° ≈ 56'55	1.35706 AU	max. Earth dist.	12179 Dec 28 01:12	19° る 49'47	1.33920 AU
evening rise	12179 Jan 18 08:34	15° ≈ 29'50		evening rise	12180 Jan 01 13:37	28° る 54'10	
desc. node	12179 Jan 21 04:04	20°≈37'56			12180 Jan 02 03:11	0° ≈	
	12179 Jan 26 14:02	0°) €		desc. node	12180 Jan 08 00:52	10°≈57'12	
	12179 Feb 16 08:14	0°Υ 2 0°			12180 Jan 19 18:03	0°) {	
evening max el	12179 Feb 22 18:51	7° Υ 03'03	26°17'46	evening max el	12180 Feb 05 08:21	20°) (40′33	27~06'50
retrograde	12179 Mar 07 15:01	14° Υ 20'10		retrograde	12180 Feb 18 17:54	28°) €05'19	
evening set	12179 Mar 13 20:54	11° Y 49'13 8° Y 46'41		evening set	12180 Feb 25 09:26	25° ¥ 32'36	0.65267 411
asc. node min. Earth dist.	12179 Mar 16 22:27 12179 Mar 18 00:33	8°°γ°46'41 7° Υ 30'03	0.66831 AU	min. Earth dist. inferior conj	12180 Feb 29 07:51	21° 1 ₹46′56 19° 1 15′57	0.65367 AU
inferior conj	12179 Mar 18 00:33 12179 Mar 19 18:13	5° Υ 22'34	0.66831 AU 0°53'28	minimum elong	12180 Mar 02 13:32 12180 Mar 02 13:41	19° X 15'57 19° X 15'33	-0°05'06 0°04'47
minimum elong	12179 Mar 19 18:13 12179 Mar 19 16:54	5°Υ26'34	0°52'59	transit middle	12180 Mar 02 13:41 12180 Mar 02 13:41	19° X 15'33	0°04'47 0°04'47
minimum etong	12179 Mar 19 16:54 12179 Mar 24 23:59	3° ₹ 26°34 30°Ŗ 光	0 3437	transit middle transit begin	12180 Mar 02 13:41 12180 Mar 02 10:49	19° ★ 13'33	0 044/
morning rise	12179 Mar 24 23:39 12179 Mar 25 13:44	29°) 38′07		transit begin	12180 Mar 02 16:33	19 X 23 39 19° X 07'28	
direct	12179 Mar 28 16:49	29 X 3807 28° X 42'48		asc. node	12180 Mar 02 19:49	18° H 58'15	
	12179 Apr 01 12:57	20 γ (42 40		morning rise	12180 Mar 08 19:26	13°) 44'02	
morning max el	12179 Apr 04 06:06	2°Υ13'15	18°33'01	direct	12180 Mar 11 12:56	13°) (44'08	
desc. node	12179 Apr 19 05:51	23° Υ 01'11		morning max el	12180 Mar 17 21:34	16°) €23'49	18°01'35
	12179 Apr 23 16:37	0°8		5	12180 Mar 27 21:54	0° Υ	•
		-					

morning set	12180 Apr 05 01:31	13° Y 13′28			12181 Feb 16 23:22	30°R≈	
desc. node	12180 Apr 05 02:27	13° Y 17'15		asc. node	12181 Feb 17 17:10	29° ≈ 23'29	
	12180 Apr 15 10:16	$0^{\circ}B$		morning rise	12181 Feb 20 17:53	27° ≈ 35'05	
	•			direct	12181 Feb 23 03:27	27° ≈ 07'00	
superior conj	12180 Apr 19 14:33	6° 8 37'49	-1°36'06		12181 Mar 01 03:48	0°) €	
minimum elong	12180 Apr 19 05:18	6° 8 01'21	1°35'36	morning max el	12181 Mar 01 15:14	0° ¥ 27′10	17°47'22
max. Earth dist.	12180 Apr 22 18:33	11° 8 36'38	1.45595 AU	morning set	12181 Mar 18 02:18	25° ¥ 26'40	
	12180 May 04 14:40	Π °0			12181 Mar 20 18:09	0° Y	
evening rise	12180 May 05 17:01	1° Ⅱ 41'34		desc. node	12181 Mar 22 23:02	3° Y 44'51	
greatest brilliancy	12180 May 19 01:03	21° Ⅱ 59'26	-0.7m				
	12180 May 24 15:39	0° ©		superior conj	12181 Mar 30 17:56	16° Y ′42′20	
asc. node	12180 May 29 17:10	6°517'10		minimum elong	12181 Mar 30 12:00	16° Y 18′07	
evening max el	12180 May 30 18:38	7° © 23'55	19°32'49	max. Earth dist.	12181 Apr 05 13:07	26° Y ′02'34	1.44734 AU
retrograde	12180 Jun 07 00:07	11°528'52			12181 Apr 08 01:12	0°8	
evening set	12180 Jun 10 16:36	10°509'40	2012154	evening rise	12181 Apr 15 04:16	11° 8 03'55 0° Ⅱ	
inferior conj minimum elong	12180 Jun 16 01:26 12180 Jun 16 01:52	4°©15'10 4°©13'44	3°13'54 3°13'01	evening max el	12181 Apr 27 18:37 12181 May 13 20:10	0°П 21°П09'26	20024120
min. Earth dist.	12180 Jun 17 06:55	2°937'30	0.67277 AU	asc. node	12181 May 16 14:19	23° I I37'20	20 34 20
iiiii. Eartii tist.	12180 Jun 19 09:26	2 3 3730 30°R Ⅱ	0.07277 AU	retrograde	12181 May 21 23:01	25° П 51'38	
morning rise	12180 Jun 21 10:43	27° II 52'50		evening set	12181 May 26 01:10	24° Ⅱ 16'13	
direct	12180 Jun 27 10:03	25° I 15'21		inferior conj	12181 May 31 07:40	18° Ⅱ 09'10	3°12'32
desc. node	12180 Jul 02 02:56	26° ∏ 34'25		minimum elong	12181 May 31 07:03	18° Ⅱ 11'17	3°11'40
	12180 Jul 06 22:13	0°99		min. Earth dist.	12181 May 31 23:12	17° Ⅱ 15'44	0.68237 AU
morning max el	12180 Jul 09 15:51	2° © 35'27	25°29'17	morning rise	12181 Jun 05 12:41	11° Ⅱ 49'59	
-	12180 Jul 30 11:12	$0^{\circ}\Omega$		direct	12181 Jun 11 00:03	9° Ⅱ 24'44	
morning set	12180 Aug 14 15:56	25° Q 20′10		desc. node	12181 Jun 19 00:01	13° Ⅱ 11'15	
	12180 Aug 17 04:57	0° m		morning max el	12181 Jun 22 01:49	16° Ⅱ 02'34	24°02'15
max. Earth dist.	12180 Aug 18 07:30	2°Mp04'12	1.36104 AU		12181 Jul 03 14:00	0 \circ \odot	
					12181 Jul 23 10:25	0 $^{\circ}$ Ω	
superior conj	12180 Aug 24 10:08	13° m 56'13		morning set	12181 Jul 27 11:36	6° Ω 49'23	
minimum elong	12180 Aug 24 10:55	14° m) 00'07	0°12'35	max. Earth dist.	12181 Jul 31 05:10	13° Ω 20′32	1.38343 AU
behind sun begin	12180 Aug 24 06:56	13° m 40'16				0	
behind sun end	12180 Aug 24 14:53	14° m/20'01		superior conj	12181 Aug 07 12:59	26° Ω 49'28	
asc. node	12180 Aug 25 17:23	16° Tp 33'09		minimum elong	12181 Aug 07 16:11	27° Ω 04'38	0°46'0'/
evening rise	12180 Sep 01 10:30 12180 Sep 01 07:21	0° ჲ 16'04 0° ჲ		asc. node	12181 Aug 09 04:49 12181 Aug 12 14:04	0° mp 6° mp 35'19	
evening max el	12180 Sep 01 07.21 12180 Sep 19 01:23	0 = 29° £ 15'40	19°58'27	evening rise	12181 Aug 12 14:04 12181 Aug 16 10:47	14° Mg 12'01	
evening max er	12180 Sep 19 19:50	0°M₁	19 36 27	evening rise	12181 Aug 10 10:47	0° ⊡	
desc. node	12180 Sep 27 23:58	4°M20'24		evening max el	12181 Sep 01 20:00	0 — 10° ≏ 55'50	18°59'44
retrograde	12180 Sep 29 10:57	4°M26'17		retrograde	12181 Sep 10 14:45	15° ⊆ 19'15	10 09 11
evening set	12180 Oct 01 09:26	4°M16'18		evening set	12181 Sep 12 11:29	15° ≏ 08'10	
inferior conj	12180 Oct 10 07:52	0°M16'19	-3°43'24	desc. node	12181 Sep 14 21:25	14° ≏ 23'27	
minimum elong	12180 Oct 09 22:32	0°M30'27	3°39'57	inferior conj	12181 Sep 20 19:58	10° ≏ 52'37	-1°52'04
	12180 Oct 10 18:36	30° ₹ Ω		minimum elong	12181 Sep 20 15:09	11° ≏ 00'59	1°50'06
min. Earth dist.	12180 Oct 12 04:39	29° ≏ 08'29	0.55023 AU	min. Earth dist.	12181 Sep 23 17:52	8° ≏ 51'28	0.56364 AU
morning rise	12180 Oct 18 10:21	26° ≙ 04'15		morning rise	12181 Sep 28 15:42	6° ჲ 04'49	
direct	12180 Oct 23 04:06	25° ≏ 15'14		direct	12181 Oct 04 04:45	4° ≏ 52'18	
	12180 Nov 03 14:02	0°M,		morning max el	12181 Oct 18 09:13	12° ≏ 09'20	26°01'17
morning max el	12180 Nov 05 21:01	2°M00'17	24°21'34		12181 Nov 01 05:40	0°M	
asc. node	12180 Nov 21 18:39	23°M53'54		asc. node	12181 Nov 08 15:29	12°M58'53	
marring gat	12180 Nov 25 01:21	0° द्र ⁷ 12° द्र ⁷ 08'32		morning set	12181 Nov 15 10:45	26°M48'31 0°⊀	
morning set	12180 Nov 30 23:41	12° X '08'32			12181 Nov 16 22:12	0° X '	
superior conj	12180 Dec 07 19:29	27° ∡ "01'47	1°38'39	superior conj	12181 Nov 22 06:01	11° ∡ 746′12	1°37'02
minimum elong	12180 Dec 07 19:44	27° × 01'47 27° × 03'06	1°39'30	minimum elong	12181 Nov 22 05:12	11° x 4012	1°37'48
	12180 Dec 09 04:14	0°る		max. Earth dist.	12181 Nov 23 05:59	13° ₹ 59'00	1.31696 AU
max. Earth dist.	12180 Dec 10 00:31	1° る 49'36	1.32567 AU	evening rise	12181 Nov 29 06:08	26° ₹ 58'14	
evening rise	12180 Dec 15 05:48	12° る 46'14		Č	12181 Nov 30 17:14	ರ°0	
-	12180 Dec 24 08:04	0° ≈		desc. node	12181 Dec 11 18:48	20° る 38'39	
desc. node	12180 Dec 24 21:47	0° ≈ 59'57			12181 Dec 17 17:06	0° ≈	
	12181 Jan 14 01:38	0° ∀		evening max el	12181 Dec 31 05:04	16° ≈ 34'16	27°24'13
evening max el	12181 Jan 17 20:26	3° ¥ 55′00	27°30'58	retrograde	12182 Jan 14 02:58	23° ≈ 51'51	
retrograde	12181 Jan 31 14:16	11° ∺ 19'08		evening set	12182 Jan 21 01:36	21° ≈ 38'14	
evening set	12181 Feb 07 11:59	8° ¥ 51'39		min. Earth dist.	12182 Jan 24 19:29	18° ≈ 46'53	0.61515 AU
min. Earth dist.	12181 Feb 11 06:36		0.63566 AU	inferior conj	12182 Jan 27 20:44	16° ≈ 02'19	
inferior conj	12181 Feb 13 23:26	2°) 51'52		minimum elong	12182 Jan 28 01:56	15°≈50'34	2°27'44
minimum elong	12181 Feb 14 01:48	2°) 45'49	1*12/12	morning rise	12182 Feb 04 05:06	11° ≈ 03′29	

asc. node	12182 Feb 04 14:28	10° ≈ 56'58		evening set	12183 Jan 02 22:26	3° ≈ 44'11	
		10 ≈36 38 10°≈43'27		•			0.50260 ATT
direct	12182 Feb 06 08:59		17051107	min. Earth dist.	12183 Jan 06 21:46	1°≈06'44	0.59369 AU
morning max el	12182 Feb 13 07:54	14°≈14'10	17°51'07		12183 Jan 08 08:16	30°Rる	2050115
_	12182 Feb 24 03:39	0°) {		inferior conj	12183 Jan 10 01:52	28° る 37'38	
morning set	12182 Mar 01 00:03	8°) (39′07		minimum elong	12183 Jan 10 09:40	28° る 22'17	3°46'56
desc. node	12182 Mar 09 19:39	24° ∺ 19'56		morning rise	12183 Jan 17 23:46	23° ろ 59'32	
				direct	12183 Jan 20 01:36	23° る 43'51	
superior conj	12182 Mar 11 21:39	27° ¥ 55'43		asc. node	12183 Jan 22 11:45	24° る 06'12	
minimum elong	12182 Mar 11 20:11	27°) 49′25	0°15'45	morning max el	12183 Jan 27 19:55	27° る 34'34	18°14'04
behind sun begin	12182 Mar 11 18:42	27°) 43′02			12183 Jan 30 00:44	0° ≈	
behind sun end	12182 Mar 11 21:41	27° ¥ 55'48		morning set	12183 Feb 12 12:38	22° ≈ 32'11	
	12182 Mar 13 02:47	0° Y			12183 Feb 16 11:37	0° ∀	
max. Earth dist.	12182 Mar 19 04:08	10° Ƴ 04'50	1.43244 AU				
evening rise	12182 Mar 25 22:05	20° Ƴ 51'14		superior conj	12183 Feb 22 00:27	10° ¥ 12'55	0°20'50
C	12182 Mar 31 20:43	0°B		minimum elong	12183 Feb 22 02:01	10° ¥ 19'57	0°20'57
	12182 Apr 22 06:07	0°II		desc. node	12183 Feb 24 16:16	14° ¥ 58'19	
evening max el	12182 Apr 26 16:19	4° Ⅱ 56'35	21°47'18	max. Earth dist.	12183 Mar 01 14:51	23°) €31'41	1.41291 AU
asc. node	12182 May 03 11:33	9°∏54'00	21 ., 10	Titali. Darin dibi.	12183 Mar 05 12:03	0°Υ	12,1110
retrograde	12182 May 05 21:11	10° Ⅲ 21'15		evening rise	12183 Mar 06 09:32	1° Υ 27'43	
evening set	12182 May 10 09:54	8° Д 30'06		evening rise	12183 Mar 25 06:27	0°8	
•	•	2° П 12'34	3°00'03	avanina may al		18° 8 45'23	23°06'55
inferior conj	12182 May 15 16:29			evening max el	12183 Apr 09 08:23		23 00 33
minimum elong	12182 May 15 15:02	2° Ⅱ 17'40	2°59'07	retrograde	12183 Apr 19 17:02	24° 8 52'00	
min. Earth dist.	12182 May 15 18:50	2° ∏ 04'24	0.68733 AU	asc. node	12183 Apr 20 08:52	24° 8 49'58	
	12182 May 17 06:59	30° ₹ 8		evening set	12183 Apr 24 17:10	22° 8 46'13	
morning rise	12182 May 20 19:58	25° 8 58'35		min. Earth dist.	12183 Apr 29 15:36	16° 8 56'21	0.68767 AU
direct	12182 May 25 18:26	23° 8 51'04		inferior conj	12183 Apr 30 01:53	16° 8 20'48	2°37'24
morning max el	12182 Jun 04 13:00	29° 8 37'11	22°32'38	minimum elong	12183 Apr 29 23:52	16° 8 27'44	2°36'24
	12182 Jun 04 21:59	$\Pi^{\circ}0$		morning rise	12183 May 05 06:30	10° 8 13'28	
desc. node	12182 Jun 05 21:00	1° Ⅲ 00′27		direct	12183 May 09 15:54	8° 8 26'42	
	12182 Jun 27 08:04	0°9		morning max el	12183 May 18 04:44	13° 8 21'24	21°08'42
morning set	12182 Jul 08 07:12	17° © 13'20		desc. node	12183 May 23 17:54	19° 8 41'49	
max. Earth dist.	12182 Jul 13 03:31	25°916'42	1.40666 AU		12183 May 31 09:08	$\Pi^{\circ}0$	
	12182 Jul 15 21:44	$0^{\circ}\Omega$		morning set	12183 Jun 18 01:19	26° Ⅲ 29'34	
				S	12183 Jun 20 06:42	0°ಅ	
superior coni	12182 Jul 20 23:26	8°Ω56'57	-1°20'07	max Earth dist			1 42782 AU
superior conj	12182 Jul 20 23:26 12182 Jul 21 05:09	8° Ω 56'57 9° Ω 22'42		max. Earth dist.	12183 Jun 25 08:04	8° © 07'59	1.42782 AU
minimum elong	12182 Jul 21 05:09	9° Ω 22'42			12183 Jun 25 08:04	8° © 07'59	
minimum elong asc. node	12182 Jul 21 05:09 12182 Jul 30 10:50	9° \Omega 22'42 26° \Omega 30'24		superior conj	12183 Jun 25 08:04 12183 Jul 02 12:54	8°507'59 20°508'07	-1°49'59
minimum elong	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41	9°Ω22'42 26°Ω30'24 27°Ω40'26			12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46	8°507'59 20°508'07 20°537'23	
minimum elong asc. node evening rise	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20	9°N22'42 26°N30'24 27°N40'26 0°M	1°20'02	superior conj minimum elong	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$	-1°49'59
minimum elong asc. node evening rise evening max el	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10	9° N 22'42 26° N 30'24 27° N 40'26 0° M 23° M 19'04	1°20'02	superior conj minimum elong evening rise	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59	8°507'59 20°508'07 20°537'23 0°\$\Omega\$ 10°\$\Omega\$30'29	-1°49'59
minimum elong asc. node evening rise evening max el retrograde	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34	9° N 22'42 26° N 30'24 27° N 40'26 0° M 23° M 19'04 27° M 06'33	1°20'02	superior conj minimum elong	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43	-1°49'59
minimum elong asc. node evening rise evening max el retrograde evening set	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00	9° £ 22'42 26° £ 30'24 27° £ 40'26 0° \$\text{m}\$ 23° \$\text{m}\$ 19'04 27° \$\text{m}\$ 06'33 26° \$\text{m}\$ 49'33	1°20'02	superior conj minimum elong evening rise asc. node	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathbf{m}\$	-1°49'59 1°50'11
minimum elong asc. node evening rise evening max el retrograde evening set desc. node	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51	9° \$\Omega 22'42 26° \$\Omega 30'24 27° \$\Omega 40'26 0° \$\mathrm{m}\$ 23° \$\mathrm{m}\$ 19'04 27° \$\mathrm{m}\$ 06'33 26° \$\mathrm{m}\$ 49'33 22° \$\mathrm{m}\$ 35'17	1°20'02 18°22'17	superior conj minimum elong evening rise asc. node evening max el	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$6"\$\Omega\$14'55	-1°49'59
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38	9° \$\Omega 22'42 \\ 26° \$\Omega 30'24 \\ 27° \$\Omega 40'26 \\ 0° \$\Omega \\ 23° \$\Omega 19'04 \\ 27° \$\Omega 06'33 \\ 26° \$\Omega 49'33 \\ 22° \$\Omega 35'17 \\ 22° \$\Omega 13'25 \\	1°20'02 18°22'17 -0°08'21	superior conj minimum elong evening rise asc. node evening max el retrograde	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$6°\$\Omega\$14'55 9°\$\Omega\$41'34	-1°49'59 1°50'11
minimum elong asc. node evening rise evening max el retrograde evening set desc. node	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38 12182 Sep 02 05:19	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\omega \) 23° \(\omega \) 19'04 27° \(\omega \) 06'33 26° \(\omega \) 49'33 22° \(\omega \) 35'17 22° \(\omega \) 13'25 22° \(\omega \) 14'04	1°20'02 18°22'17 -0°08'21 0°08'26	superior conj minimum elong evening rise asc. node evening max el retrograde evening set	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$6"\$\Omega\$14'55	-1°49'59 1°50'11 18°04'59
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38 12182 Sep 02 05:19 12182 Sep 02 05:19	9° \$\Omega 22'42 \\ 26° \$\Omega 30'24 \\ 27° \$\Omega 40'26 \\ 0° \$\Omega \\ 23° \$\Omega 19'04 \\ 27° \$\Omega 06'33 \\ 26° \$\Omega 49'33 \\ 22° \$\Omega 35'17 \\ 22° \$\Omega 13'25 \\	1°20'02 18°22'17 -0°08'21	superior conj minimum elong evening rise asc. node evening max el retrograde	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$6°\$\Omega\$14'55 9°\$\Omega\$41'34	-1°49'59 1°50'11
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minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38 12182 Sep 02 05:19 12182 Sep 02 05:19	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 23° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 14'04	1°20'02 18°22'17 -0°08'21 0°08'26	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathrm{m}\$ 6°\$\mathrm{m}\$14'55 9°\$\mathrm{m}\$14'52 4°\$\mathrm{m}\$18'11	-1°49'59 1°50'11 18°04'59
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 23° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 20'10	1°20'02 18°22'17 -0°08'21 0°08'26	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58 12183 Aug 15 14:03	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathrm{m}\$14'55 9°\$\mathrm{m}\$14'52 4°\$\mathrm{m}\$13'15	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin transit end	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19 12182 Sep 02 08:19	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 20'10 22° \(\mathref{m} \) 07'56	1°20'02 18°22'17 -0°08'21 0°08'26 0°08'26	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58 12183 Aug 15 14:03 12183 Aug 18 16:50	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathrm{m}\$ 6°\$\mathrm{m}\$14'55 9°\$\mathrm{m}\$14'52 4°\$\mathrm{m}\$13'15 1°\$\mathrm{m}\$17'47	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin transit end min. Earth dist.	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:38 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19 12182 Sep 02 08:19 12182 Sep 02 08:19 12182 Sep 02 08:19	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 23° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 20'10 22° \(\mathref{m} \) 07'56 19° \(\mathref{m} \) 32'18	1°20'02 18°22'17 -0°08'21 0°08'26 0°08'26	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 06 06:05 12183 Aug 15 11:58 12183 Aug 15 14:03 12183 Aug 18 16:50 12183 Aug 19 16:16	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathrm{m}\$ 6°\$\mathrm{m}\$14'55 9°\$\mathrm{m}\$14'52 4°\$\mathrm{m}\$13'15 1°\$\mathrm{m}\$17'47 0°\$\mathrm{m}\$26'39	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin transit end min. Earth dist. morning rise direct	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19 12182 Sep 02 08:19 12182 Sep 02 08:19 12182 Sep 05 13:18 12182 Sep 05 13:18	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 23° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 07'56 19° \(\mathref{m} \) 32'18 16° \(\mathref{m} \) 49'22	1°20'02 18°22'17 -0°08'21 0°08'26 0°08'26 0.58325 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58 12183 Aug 15 14:03 12183 Aug 18 16:50 12183 Aug 19 16:16 12183 Aug 20 05:08	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\mathred{m}\$ 6°\$\mathred{m}\$14'55 9°\$\mathred{m}\$14'52 4°\$\mathred{m}\$18'11 4°\$\mathred{m}\$13'15 1°\$\mathred{m}\$17'47 0°\$\mathred{m}\$26'39 30°\$\R\$\Omega\$	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin transit end min. Earth dist. morning rise	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19 12182 Sep 02 02:19 12182 Sep 02 02:19 12182 Sep 02 08:19 12182 Sep 02 08:19 12182 Sep 05 13:18 12182 Sep 09 15:08 12182 Sep 15 19:44 12182 Sep 30 03:41	9° \(\Omega \) 22'42 26° \(\Omega \) 30'24 27° \(\Omega \) 40'26 0° \(\mathref{m} \) 23° \(\mathref{m} \) 19'04 27° \(\mathref{m} \) 06'33 26° \(\mathref{m} \) 49'33 22° \(\mathref{m} \) 13'25 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 14'04 22° \(\mathref{m} \) 20'10 22° \(\mathref{m} \) 32'18 16° \(\mathref{m} \) 49'22 15° \(\mathref{m} \) 08'54	1°20'02 18°22'17 -0°08'21 0°08'26 0°08'26 0.58325 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58 12183 Aug 15 14:03 12183 Aug 18 16:50 12183 Aug 19 16:16 12183 Aug 20 05:08 12183 Aug 22 08:59 12183 Aug 28 22:48	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$ 6°\$\Omega\$14'55 9°\$\Omega\$41'34 9°\$\Omega\$14'52 4°\$\Omega\$18'11 4°\$\Omega\$13'15 1°\$\Omega\$17'47 0°\$\Omega\$26'39 30°\$\Omega\$0 28°\$\Omega\$25'24 26°\$\Omega\$17'58	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32
minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong transit middle transit begin transit end min. Earth dist. morning rise direct	12182 Jul 21 05:09 12182 Jul 30 10:50 12182 Jul 31 01:41 12182 Aug 01 07:20 12182 Aug 16 01:10 12182 Aug 23 13:34 12182 Aug 25 16:00 12182 Sep 01 18:51 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 05:19 12182 Sep 02 02:19 12182 Sep 02 02:19 12182 Sep 02 03:19 12182 Sep 02 03:19 12182 Sep 05 13:18 12182 Sep 09 15:08 12182 Sep 15 19:44 12182 Sep 30 03:41 12182 Oct 06 13:35	9° £ 22'42 26° £ 30'24 27° £ 40'26 0° m 23° m 19'04 27° m 06'33 26° m 49'33 22° m 35'17 22° m 14'04 22° m 14'04 22° m 20'10 22° m 07'56 19° m 32'18 16° m 49'22 15° m 08'54 22° m 48'44 0° £	1°20'02 18°22'17 -0°08'21 0°08'26 0°08'26 0.58325 AU	superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct	12183 Jun 25 08:04 12183 Jul 02 12:54 12183 Jul 02 19:46 12183 Jul 08 05:30 12183 Jul 14 02:59 12183 Jul 17 07:38 12183 Jul 25 13:12 12183 Jul 30 12:39 12183 Aug 06 06:05 12183 Aug 08 16:14 12183 Aug 15 11:58 12183 Aug 15 14:03 12183 Aug 19 16:16 12183 Aug 19 16:16 12183 Aug 20 05:08 12183 Aug 22 08:59 12183 Aug 28 22:48 12183 Sep 07 08:36	8°\$07'59 20°\$08'07 20°\$37'23 0°\$\Omega\$ 10°\$\Omega\$30'29 16°\$\Omega\$13'43 0°\$\Omega\$ 6°\$\Omega\$14'55 9°\$\Omega\$41'34 9°\$\Omega\$14'52 4°\$\Omega\$18'11 4°\$\Omega\$13'15 1°\$\Omega\$17'47 0°\$\Omega\$26'39 30°\$\Omega\$0 28°\$\Omega\$25'24 26°\$\Omega\$17'58 0°\$\Omega\$0	-1°49'59 1°50'11 18°04'59 1°13'41 1°12'32 0.60574 AU
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retrograde evening set	12183 Dec 08 22:46 12183 Dec 14 22:09	16°る26'36 15°る04'52		evening set min. Earth dist.	12184 Nov 23 21:40 12184 Nov 29 23:50	25° ⋌ ¹40'59 22° ⋌ ¹42'22	0.55679 AU
min. Earth dist.	12183 Dec 14 22.09	13 3 0432	0.57334 AU	inferior conj	12184 Dec 02 00:41	22 x 42 22 21° x 29'01	
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morning man er	12184 Jan 23 22:31	0° ≈	10 0007	morning set	12185 Jan 10 16:54	21° ට 28'24	
morning set	12184 Jan 27 11:26	6°≈52'21		morning sec	12185 Jan 14 20:47	0°≈	
3							
superior conj	12184 Feb 04 22:02	23° ≈ 22'23	0°50'54	superior conj	12185 Jan 18 09:37	7° ≈ 09'56	1°13'24
minimum elong	12184 Feb 05 00:50	23° ≈ 35'43	0°51'03	minimum elong	12185 Jan 18 12:23	7° ≈ 23'44	1°13'48
	12184 Feb 08 10:45	0°)		max. Earth dist.	12185 Jan 24 04:42	18° ≈ 26'57	1.36881 AU
desc. node	12184 Feb 11 12:55	5° ¥ 36'52		evening rise	12185 Jan 27 22:52	25° ≈ 22'56	
max. Earth dist.	12184 Feb 11 22:05	6° ∺ 17'48	1.39089 AU	desc. node	12185 Jan 28 09:36	26° ≈ 11'15	
evening rise	12184 Feb 15 18:16	13° ∺ 00'05			12185 Jan 30 13:15	0° ∀	
	12184 Feb 26 05:36	0° Y			12185 Feb 18 19:12	0° Y	
	12184 Mar 19 10:24	0° 8		evening max el	12185 Mar 04 11:35	16° Ƴ 26'49	25°40'57
evening max el	12184 Mar 21 22:17	2° 8 36'18	24°27'03	retrograde	12185 Mar 16 21:26	23° Y 35'30	
retrograde	12184 Apr 02 09:27	9° 8 18'56		evening set	12185 Mar 22 21:03	21° Y 07'39	
asc. node	12184 Apr 06 06:13	8° 8 11'43		asc. node	12185 Mar 24 03:36	19° Ƴ 57'11	
evening set	12184 Apr 07 21:25	7° 8 00'29		min. Earth dist.	12185 Mar 27 04:01	16° Ƴ 28'47	0.67499 AU
min. Earth dist.	12184 Apr 12 11:21	1° 8 46'26	0.68350 AU	inferior conj	12185 Mar 28 14:49	14° Ƴ 38′02	1°22'30
inferior conj	12184 Apr 13 09:58	0° 8 30'39	2°04'55	minimum elong	12185 Mar 28 13:01	14° Ƴ 43'46	1°21'44
minimum elong	12184 Apr 13 07:49	_	2°03'55	morning rise	12185 Apr 03 05:33	8° Ƴ 47'42	
	12184 Apr 13 19:07	30° Ŗ ♈		direct	12185 Apr 06 14:39	7° Y 42'19	
morning rise	12184 Apr 18 18:21	24° Y 31′10		morning max el	12185 Apr 13 10:19	11° Y 24'31	18°58'44
direct	12184 Apr 22 15:08	23° Y ′05'47		desc. node	12185 Apr 26 11:24	28° Y ′48'40	
morning max el	12184 Apr 30 03:42	27° Y 17'56	19°56'17	greatest brilliancy	12185 Apr 26 19:37	29° Y 19'43	-0.8m
	12184 May 02 15:58	0°8			12185 Apr 27 06:15	0°8	
desc. node	12184 May 09 14:42	9° 8 01'21		morning set	12185 May 06 08:30	13° 8 59'56	
	12184 May 23 19:03	0° Ц 5° Ц 05'28		n a r	12185 May 16 15:31	0°II	1 45455 411
morning set	12184 May 27 02:50	5°Щ05'28 21°Щ48'26	1 44426 ATT	max. Earth dist.	12185 May 20 12:05	6°Щ01'4/	1.45455 AU
max. Earth dist.	12184 Jun 06 19:37 12184 Jun 11 22:03	21°Щ48′26 0°©	1.44436 AU	aumorior coni	12105 May 22 10.27	00П25154	2012/00
	12184 Jun 11 22:03	0.50		superior conj minimum elong	12185 May 22 18:37 12185 May 22 15:42	9° Ⅱ 35'54 9° Ⅱ 24'27	
superior conj	12184 Jun 12 02:24	0° © 17'41	2000122	minimum elong	12185 Jun 04 13:25	9 H2427 0°95	2 1243
minimum elong	12184 Jun 12 06:35	0°934'40	2°10'14	evening rise	12185 Jun 06 17:36	3°931'42	
evening rise	12184 Jun 25 09:49	22°©30'49	2 10 14	asc. node	12185 Jun 20 01:27	24°9544'06	
evening rise	12184 Jun 29 19:13	0°Ω		asc. node	12185 Jun 23 21:28	0°Ω	
asc. node	12184 Jul 03 04:30	5° Ω 40'22		evening max el	12185 Jun 26 15:58	3° Ω 08'03	18°26'42
evening max el	12184 Jul 13 02:39	19° Ω 33'56	18°06'43	retrograde	12185 Jul 03 02:30	6° Ω 35'51	10 20 42
retrograde	12184 Jul 19 11:52	22° Ω 54'19		evening set	12185 Jul 06 05:00	5° Ω 42'02	
evening set	12184 Jul 22 06:06	22° Ω 15'05		inferior conj	12185 Jul 11 23:33	0°Ω10'36	2°49'07
inferior conj	12184 Jul 28 11:18	17° Ω 00'00	2°11'55	minimum elong	12185 Jul 12 01:37	0° Ω 04'27	
minimum elong	12184 Jul 28 13:55	16° Ω 52'57	2°10'34	Č	12185 Jul 12 03:06	30° ℝ ∽	
min. Earth dist.	12184 Jul 31 05:51	14° Ω 02'18	0.62820 AU	min. Earth dist.	12185 Jul 14 04:19	27°534'17	0.64847 AU
morning rise	12184 Aug 03 19:46	10° Ω 48'42		morning rise	12185 Jul 17 21:03	23°950'11	
desc. node	12184 Aug 05 13:39	9° Ω 40'51		desc. node	12185 Jul 23 10:56	21°5513'13	
direct	12184 Aug 10 12:12	8° Q 20′12		direct	12185 Jul 24 10:16	21° © 09'54	
morning max el							0.701.7101
	12184 Aug 24 13:16	16° £ 22′33	27°53'03	morning max el	12185 Aug 06 23:48	29° © 07'51	2/1/21
	12184 Aug 24 13:16 12184 Sep 04 19:00	16° Ω 22'33 0° m	27°53'03	morning max el	12185 Aug 06 23:48 12185 Aug 07 20:06	29° © 07'51 0° Ω	2/~1/-21
	•		27°53'03	morning max el	•		2/~1/-21
morning set	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20	0° m/	27°53'03	morning max el	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57	$0^{\circ}\Omega$	2/~1/-21
asc. node	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42	0°M 0°Ω 9°Ω25'35 12°Ω10'45		morning set	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05	0° N 0° M 22° M 50'58 0° <u>Ω</u>	
-	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20	0° നു 0° ഫ 9° ഫ 25'35	27°53′03 1.32098 AU	morning set max. Earth dist.	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51	0° N 0° M 22° M 50'58 0° Ω 1° Ω 51'16	1.33269 AU
asc. node max. Earth dist.	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28	0° നു 0° മ 9° മ25'35 12° മ10'45 20° മ19'08	1.32098 AU	morning set	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05	0° N 0° M 22° M 50'58 0° <u>Ω</u>	
asc. node max. Earth dist. superior conj	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13	0° M 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27	1.32098 AU 0°58'07	morning set max. Earth dist. asc. node	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21	0° Ω 0° m 22° m 50'58 0° Ω 1° Ω 51'16 2° Ω 14'25	1.33269 AU
asc. node max. Earth dist.	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00	0° m 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26	1.32098 AU	morning set max. Earth dist. asc. node superior conj	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59	0° \$\mathrm{0}\$ \(\text{0} \) \(\	1.33269 AU 0°34'23
asc. node max. Earth dist. superior conj minimum elong	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00 12184 Oct 07 13:08	0° M 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26 0° M	1.32098 AU 0°58'07	morning set max. Earth dist. asc. node superior conj minimum elong	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59 12185 Sep 19 15:22	0° \$\mathbb{O}\$ 0° \$\mathbb{M}\$ 22° \$\mathbb{M}\$50'58 0° \$\mathbb{O}\$ 1° \$\mathbb{O}\$51'16 2° \$\mathbb{O}\$14'25 9° \$\mathbb{O}\$48'09 9° \$\mathbb{O}\$39'32	1.33269 AU
asc. node max. Earth dist. superior conj	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00 12184 Oct 07 13:08 12184 Oct 12 08:55	0° M 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26 0° M 10° M32'02	1.32098 AU 0°58'07	morning set max. Earth dist. asc. node superior conj	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59 12185 Sep 19 15:22 12185 Sep 26 19:51	0° \$\mathbb{O}\$ 0° \$\mathbb{M}\$ 22° \$\mathbb{M}\$ 50'58 0° \$\mathbb{O}\$ 1° \$\mathbb{O}\$ 51'16 2° \$\mathbb{O}\$ 14'25 9° \$\mathbb{O}\$ 48'09 9° \$\mathbb{O}\$ 39'32 25° \$\mathbb{O}\$ 03'46	1.33269 AU 0°34'23
asc. node max. Earth dist. superior conj minimum elong evening rise	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00 12184 Oct 07 13:08 12184 Oct 12 08:55 12184 Oct 22 04:46	0° m 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26 0° m 10° m32'02 0° √	1.32098 AU 0°58'07	morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59 12185 Sep 19 15:22 12185 Sep 26 19:51 12185 Sep 29 04:20	0° N 0° M 22° M 50'58 0° Ω 1° Ω 51'16 2° Ω 14'25 9° Ω 48'09 9° Ω 39'32 25° Ω 03'46 0° M	1.33269 AU 0°34'23 0°34'07
asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00 12184 Oct 07 13:08 12184 Oct 12 08:55 12184 Oct 22 04:46 12184 Nov 01 10:22	0° m 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26 0° m 10° m 32'02 0° 15° 16'04	1.32098 AU 0°58'07 0°58'01	morning set max. Earth dist. asc. node superior conj minimum elong	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59 12185 Sep 19 15:22 12185 Sep 26 19:51 12185 Sep 29 04:20 12185 Oct 18 00:35	0° N 0° M 22° M 50'58 0° Ω 1° Ω 51'16 2° Ω 14'25 9° Ω 48'09 9° Ω 39'32 25° Ω 03'46 0° M 29° M 48'16	1.33269 AU 0°34'23 0°34'07
asc. node max. Earth dist. superior conj minimum elong evening rise	12184 Sep 04 19:00 12184 Sep 23 01:45 12184 Sep 27 21:20 12184 Sep 29 05:42 12184 Oct 03 02:28 12184 Oct 05 13:13 12184 Oct 05 11:00 12184 Oct 07 13:08 12184 Oct 12 08:55 12184 Oct 22 04:46	0° m 0° Ω 9° Ω25'35 12° Ω10'45 20° Ω19'08 25° Ω37'27 25° Ω25'26 0° m 10° m32'02 0° √	1.32098 AU 0°58'07	morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12185 Aug 07 20:06 12185 Aug 29 16:02 12185 Sep 11 09:57 12185 Sep 15 00:05 12185 Sep 15 21:51 12185 Sep 16 02:21 12185 Sep 19 16:59 12185 Sep 19 15:22 12185 Sep 26 19:51 12185 Sep 29 04:20	0° N 0° M 22° M 50'58 0° Ω 1° Ω 51'16 2° Ω 14'25 9° Ω 48'09 9° Ω 39'32 25° Ω 03'46 0° M	1.33269 AU 0°34'23 0°34'07

behind sun begin

behind sun end

12186 Sep 03 07:40

12186 Sep 03 18:56

12186 Sep 06 16:01

 23° Mp 04'43

24° Mp 02'25

0∘**⊽**

superior conj

asc. node

minimum elong

12187 Aug 18 00:02

12187 Aug 18 01:46

12187 Aug 20 19:40

6° m 50'48 -0°26'29

0°26'34

6° m 59'19

12° m 25'14

	10105 1 06 00 10	2207 2442			10100 1 00 05 06	70 W 20121	
evening rise	12187 Aug 26 08:40	23° m/34'43		evening rise	12188 Aug 09 05:26	7° m/20'31	
	12187 Aug 29 14:12	0∘ ⊽			12188 Aug 22 08:13	0∘ 亚	
evening max el	12187 Sep 12 08:35	21° Ω 28'35	19°30'48	evening max el	12188 Aug 25 08:07		18°41'15
retrograde	12187 Sep 22 00:39	26° £ 17'55		retrograde	12188 Sep 02 12:45	7° △ 34'56	
desc. node	12187 Sep 23 02:29	26° △ 14'33		evening set	12188 Sep 04 11:22	7° Ω 21'51	
evening set	12187 Sep 23 21:15	26° ≏ 08'01		desc. node	12188 Sep 08 23:56	5° ഫ 23'28	
inferior conj	12187 Oct 02 14:50	22° ≏ 02'17		inferior conj	12188 Sep 12 11:56	2° ≏ 57'22	
minimum elong	12187 Oct 02 07:08	22° ≏ 14'34		minimum elong	12188 Sep 12 09:15		1°04'58
min. Earth dist.	12187 Oct 05 00:06	20° ≏ 31'02	0.55504 AU	min. Earth dist.	12188 Sep 15 15:35	0° ჲ 37'18	0.57135 AU
morning rise	12187 Oct 10 14:54	17° ≏ 36'23			12188 Sep 16 13:00	30°R, Mp	
direct	12187 Oct 15 17:23	16° ≏ 38'07		morning rise	12188 Sep 20 03:43	27° m 53'37	
morning max el	12187 Oct 29 16:00	23° ≏ 37'01	25°06'07	direct	12188 Sep 25 23:45	26° Mp 29′52	
	12187 Nov 04 10:40	0°M			12188 Oct 05 13:01	0∘ ত	
asc. node	12187 Nov 16 21:00	19° ™ 17'43		morning max el	12188 Oct 10 06:41	3° ≙ 57'15	26°36'56
	12187 Nov 22 08:20	0° ∡			12188 Oct 29 02:57	0° M	
morning set	12187 Nov 25 01:45	5° ∡ ¹44'16		asc. node	12188 Nov 02 17:50	8° M 34'24	
				morning set	12188 Nov 08 12:01	20°M21'13	
superior conj	12187 Dec 01 20:52	20° ∡ ³38′09	1°38'41		12188 Nov 12 21:59	0° ∡ ¹	
minimum elong	12187 Dec 01 20:38	20° ∡ ³36'53	1°39'32				
max. Earth dist.	12187 Dec 03 13:14	24° х 19'36	1.32140 AU	superior conj	12188 Nov 15 08:09	5° ∡ ¹23'49	1°34'36
	12187 Dec 06 04:13	8°0		minimum elong	12188 Nov 15 06:56	5° ∡ 17'00	1°35'16
evening rise	12187 Dec 09 02:17	6° る 07'32		max. Earth dist.	12188 Nov 15 20:42	6° ∡ ³33'40	1.31476 AU
desc. node	12187 Dec 20 00:09	26° පි 44'48		evening rise	12188 Nov 22 05:21	20° х 26′27	
	12187 Dec 21 22:26	0° ≈		* · · · · · · · · · · · · · · · · · · ·	12188 Nov 26 21:45	0°る	
evening max el	12188 Jan 11 01:39	26° ≈ 44'29	27°32'12	desc. node	12188 Dec 05 21:12	16° ප 11'07	
e venning man er	12188 Jan 14 21:06	0° ∀	2, 3212	dese. Hode	12188 Dec 15 06:39	0° ≈	
retrograde	12188 Jan 24 21:21	4° ¥ 05'27		evening max el	12188 Dec 23 07:56	9°≈05'05	27°10'50
evening set	12188 Jan 31 20:19	1°) 43'02		retrograde	12189 Jan 06 06:10	16° ≈ 18'40	27 1030
evening set	12188 Feb 03 01:56	30°R≈		evening set	12189 Jan 13 03:18	14°≈13'20	
min. Earth dist.	12188 Feb 04 14:15	28°≈38'48	0.62721 AU	min. Earth dist.	12189 Jan 16 22:22	11°≈29'46	0.60613 AU
inferior conj	12188 Feb 04 14:13	25°≈52'51		inferior conj	12189 Jan 20 01:53	8°≈49'39	
•			1°43'22	,		8°≈35'58	
minimum elong	12188 Feb 07 14:34	25°≈44'19	1 43 22	minimum elong	12189 Jan 20 08:19		3 01 13
asc. node	12188 Feb 12 19:42	21°≈29'03		morning rise	12189 Jan 27 16:14	3°≈59'34	
morning rise	12188 Feb 14 11:17	20°≈43'10		direct	12189 Jan 29 18:49	3°≈41'46	
direct	12188 Feb 16 18:15	20°≈18'49	17046140	asc. node	12189 Jan 29 17:01	3°≈41'47	15050106
morning max el	12188 Feb 23 09:35	23°≈42'02	17°46'42	morning max el	12189 Feb 06 00:46	7°≈19'24	17°58'26
	12188 Feb 28 10:57	0°) {			12189 Feb 20 14:49	0° ∀	
morning set	12188 Mar 10 10:11	18°) 18'46		morning set	12189 Feb 21 14:51	1° ¥ 50′24	
desc. node	12188 Mar 17 01:16	29°) 49'41					
	12188 Mar 17 03:40	0° Υ		superior conj	12189 Mar 03 21:01	20° ¥ 23′03	0°00'17
				minimum elong	12189 Mar 03 21:04	20° ¥ 23′16	0°00'30
superior conj	12188 Mar 22 07:02	8° Ƴ 40'51		behind sun begin	12189 Mar 03 13:03	19°) 48′05	
minimum elong	12188 Mar 22 03:04	8° Y 24'23		behind sun end	12189 Mar 04 05:05	20° ¥ 58′22	
max. Earth dist.	12188 Mar 28 21:01	19° Y ′26′07	1.44177 AU	desc. node	12189 Mar 03 21:53	20° ∺ 26'49	
	12188 Apr 04 13:42	0°8			12189 Mar 09 11:32	0° Y	
evening rise	12188 Apr 06 04:25	2° 8 29'48		max. Earth dist.	12189 Mar 11 10:24	3° Ƴ 15′18	1.42462 AU
	12188 Apr 24 18:28	Π $^{\circ}0$		evening rise	12189 Mar 17 04:46	12° Ƴ 35'52	
evening max el	12188 May 06 06:12	14° Ⅱ 22'04	21°04'11		12189 Mar 28 13:34	9° 8	
asc. node	12188 May 10 16:48	18° Ⅲ 02'03		evening max el	12189 Apr 19 00:15	28° 8 09'11	22°20'35
retrograde	12188 May 14 19:28	19° Ⅲ 21'35			12189 Apr 20 23:09	$\Pi^{\circ}0$	
evening set	12188 May 19 02:07	17° Ⅲ 39′09		asc. node	12189 Apr 27 14:05	3° Ⅱ 46'34	
inferior conj	12188 May 24 08:23	11° Ⅲ 27′20	3°08'29	retrograde	12189 Apr 28 16:55	3° Ⅱ 52′29	
minimum elong	12188 May 24 07:23	11° Ⅲ 30'49	3°07'37	evening set	12189 May 03 10:26	1° Ⅱ 54'43	
min. Earth dist.	12188 May 24 18:09	10° Ⅲ 53′28	0.68511 AU		12189 May 05 08:16	30° ₹ 8	
morning rise	12188 May 29 12:26	5° Ⅱ 10′24		inferior conj	12189 May 08 17:41	25° 8 33'12	2°51'39
direct	12188 Jun 03 18:23	2° I 52'24		minimum elong	12189 May 08 15:57	25° 8 39'14	
desc. node	12188 Jun 13 02:23	7° Ⅱ 58'34		min. Earth dist.	12189 May 08 14:31	25° 8 44'15	0.68804 AU
morning max el	12188 Jun 14 06:53		23°23'57	morning rise	12189 May 13 21:20	19° 8 21'55	
V.	12188 Jun 30 16:44	0.20 Too 12		direct	12189 May 18 14:05	17° 8 23'16	
morning set	12188 Jul 19 03:23	28°5643'33		morning max el	12189 May 27 19:46	22° 8 47'11	21°55'48
	12188 Jul 19 21:32	0°Ω		desc. node	12189 May 30 23:21	26° 8 12'06	55 10
max. Earth dist.	12188 Jul 23 04:59		1.39339 AU	acco. node	12189 Jun 03 02:26	0°II	
Zurur dist.	12100 341 25 04.57	5 06 10 52	1.5,55,110		12189 Jun 24 00:20	0°©	
superior conj	12188 Jul 30 20:28	19° Ω 25'54	-1°00'44	morning set	12189 Jun 29 11:54	8° 9 37'54	
minimum elong	12188 Jul 31 00:46	19° Ω 45'57		max. Earth dist.	12189 Jul	17°959'35	1.41603 AU
mmmum ciong	12188 Aug 05 10:18	0° Mp	1 00 37	max. Earm tist.	12189 Jul 12 06:29	0°Ω	1.7100 <i>3 I</i> AU
asc. node	12188 Aug 05 10:18 12188 Aug 06 16:23	رابات 2° الله 25'07			12109 Jul 12 00.29	0 06	
use. Houe	12100 Aug 00 10.23	∠ ny∠30/					

superior conj	12189 Jul 12 22:26	1° Ω 09'57	_1033'37	evening rise	12190 Jul 06 09:13	3° Ω 04'36	
minimum elong	12189 Jul 12 22:20 12189 Jul 13 04:56	1° Ω 38'34		asc. node	12190 Jul 11 09:58	11° Ω 52'48	
evening rise	12189 Jul 23 15:07	20°Ω34'01	1 3337	evening max el	12190 Jul 23 05:25	29°Ω13'04	18°03'27
asc. node	12189 Jul 24 13:08	22°Ω15'39		evening max er	12190 Jul 24 01:31	0° m)	10 03 27
use. Hode	12189 Jul 28 19:02	0° m)		retrograde	12190 Jul 29 18:07	2° Mp 35'07	
evening max el	12189 Aug 08 16:23	16° Mp 05'52	18°12'33	evening set	12190 Aug 01 07:40	2° m) 03'28	
retrograde	12189 Aug 15 19:34	19° m) 43'01	10 1233	evening sec	12190 Aug 04 14:47	30°RΩ	
evening set	12189 Aug 18 01:01	19° m/22'27		inferior conj	12190 Aug 07 20:47	26° Ω 59'01	1°41'10
inferior conj	12189 Aug 25 06:44	14° mp 37'32	0°29'23	minimum elong	12190 Aug 07 23:16	26° Ω 52'47	1°39'51
minimum elong	12189 Aug 25 07:42	14° m/35'25	0°28'43	min. Earth dist.	12190 Aug 10 22:05	23° Ω 56'53	0.61548 AU
desc. node	12189 Aug 26 21:23	13° m/ 12'52		desc. node	12190 Aug 13 18:47	21° Ω 28'45	
min. Earth dist.	12189 Aug 28 14:28	11° m)45'13	0.59255 AU	morning rise	12190 Aug 14 12:20	20° Ω 57'08	
morning rise	12189 Sep 01 10:59	8° m 59'40		direct	12190 Aug 21 04:15	18° Ω 39'19	
direct	12189 Sep 07 20:10	7° m)07'14		morning max el	12190 Sep 04 09:05	26° Ω 39'08	27°57'57
morning max el	12189 Sep 22 04:35	14° m 55'30	27°36'36		12190 Sep 07 12:38	0° m)	
	12189 Oct 04 09:24	0∘ ⊽			12190 Sep 28 00:40	0∘ ⊽	
asc. node	12189 Oct 20 14:35	28° ₤ 11'13		asc. node	12190 Oct 07 11:18	18° ഫ 02'12	
	12189 Oct 21 12:04	0° M		morning set	12190 Oct 07 20:43	18° ≏ 50'34	
morning set	12189 Oct 23 18:59	4°M45'00			12190 Oct 13 02:41	0° M.	
max. Earth dist.	12189 Oct 30 05:29	18°M46'54	1.31309 AU	max. Earth dist.	12190 Oct 13 11:54	0°M50'19	1.31658 AU
	10100 0 . 20 10 45	200M 0 (12 m	100 445		10100 0 . 15 05 56	40300 4444 6	1000105
superior conj	12189 Oct 30 19:47	20°M 06'37	1°24'47	superior conj	12190 Oct 15 05:56	4°M41'16	1°09'25
minimum elong	12189 Oct 30 17:51	19°M55'49	1°25'10	minimum elong	12190 Oct 15 03:41	4°M28'50	1°09'29
	12189 Nov 04 06:40	0° √ 1 4°⋅ 7 155122		evening rise	12190 Oct 21 23:31	19° ™ 29'40 0° √	
evening rise	12189 Nov 06 13:04	4° <i>₹</i> 755'33 0° そ		11-	12190 Oct 27 00:46		
desc. node	12189 Nov 19 15:15	0°る 4°る58'22		desc. node	12190 Nov 09 15:31	22° メ *51'36 0° る	
	12189 Nov 22 18:19 12189 Dec 05 06:53	4 038 22 20° る 34'54	26°15'18	avaning may al	12190 Nov 15 15:36	0 3 1° る 14'39	24°50'42
evening max el retrograde	12189 Dec 19 05:26	20 33 4 34 27° る 39'58	20 13 18	evening max el retrograde	12190 Nov 16 21:46 12190 Nov 30 16:54	1 31439 8° る 08'58	24 30 42
evening set	12189 Dec 25 15:43	26°る00'32		evening set	12190 Nov 30 10:34 12190 Dec 06 05:09	7°る01'14	
min. Earth dist.	12189 Dec 29 20:14	20 3 00 32 23° 3 24'48	0.58474 AU	min. Earth dist.	12190 Dec 11 09:36		0.56558 AU
inferior conj	12190 Jan 01 23:02	23 3 2448 21° る 06'49		inferior conj	12190 Dec 11 03:50 12190 Dec 13 23:51	2° る 36'15	
minimum elong	12190 Jan 02 07:26	20°る51'17	4°19'26	minimum elong	12190 Dec 14 06:44	2°る25'10	
morning rise	12190 Jan 10 01:59	16° る 38'33	1 1 2 2 0	minimum ciong	12190 Dec 18 09:06	30°R ✓	3 2 . 0 .
direct	12190 Jan 12 04:18	16° ろ 23'48		morning rise	12190 Dec 22 10:29	28° ×7 29'29	
asc. node	12190 Jan 16 14:16	17° ට 33'16		direct	12190 Dec 24 19:10	28° × 13'54	
morning max el	12190 Jan 20 09:43	20° ට 25'50	18°30'07		12190 Dec 30 17:48	್ತಿ	
S	12190 Jan 27 14:20	0° ≈		asc. node	12191 Jan 03 11:27	2° ප 57'10	
morning set	12190 Feb 05 08:15	15° ≈ 56'14		morning max el	12191 Jan 03 08:23	2° る 49'42	19°23'43
C	12190 Feb 12 16:49	0° ∀		morning set	12191 Jan 20 10:13	0° ≈ 24'05	
					12191 Jan 20 05:24	0° ≈	
superior conj	12190 Feb 14 08:24	3°) €04'23	0°34'29				
minimum elong	12190 Feb 14 10:40	3° ¥ 14'54	0°34'34	superior conj	12191 Jan 28 12:25	16° ≈ 31'14	1°01'21
desc. node	12190 Feb 18 18:30	11°) €05'52		minimum elong	12191 Jan 28 15:19	16° ≈ 45′22	1°01'36
max. Earth dist.	12190 Feb 21 18:49	16° ¥ 22'52	1.40367 AU	max. Earth dist.	12191 Feb 04 01:02	28° ≈ 50'49	1.38135 AU
evening rise	12190 Feb 26 01:09	23° ¥ 36′15			12191 Feb 04 16:15	0°)	
	12190 Mar 01 23:14	0° Y		desc. node	12191 Feb 05 15:07	1°) 43′03	
	12190 Mar 22 10:51	0° 8		evening rise	12191 Feb 07 18:40	5° ∺ 31'19	
evening max el	12190 Apr 01 15:02	11° 8 58'55	23°41'19		12191 Feb 22 23:09	0° Y	
retrograde	12190 Apr 12 11:36	18° 8 22'37		evening max el	12191 Mar 15 04:39	25° Y 50'46	24°59'46
asc. node	12190 Apr 14 11:24	18° 8 04'17		_	12191 Mar 20 00:53	0° 8	
evening set	12190 Apr 17 16:37	16° 8 11'15		retrograde	12191 Mar 27 02:12	2° 8 45'45	
min. Earth dist.	12190 Apr 22 11:14	10° 8 36'25		asc. node	12191 Apr 01 08:46	0° 8 44'14	
inferior conj	12190 Apr 23 02:45	9° 8 43'14	2°24'51	evening set	12191 Apr 01 19:05	0° 8 23'08	
minimum elong	12190 Apr 23 00:38	9° 8 50'30	2°23'50	i matra	12191 Apr 02 05:34	30° ₹ Υ	0.60020.444
morning rise	12190 Apr 28 08:38	3° 8 38'52		min. Earth dist.	12191 Apr 06 06:00	25° Y 23'56	0.68039 AU
direct	12190 May 02 12:30	2° 8 01'18	20027111	inferior conj	12191 Apr 07 09:42	23° Y 52'49 23° Y 59'39	1°48'11 1°47'15
morning max el desc. node	12190 May 10 14:23	6° 8 37'03	20°36'11	minimum elong	12191 Apr 07 07:38	23° √ 59'39 17° ℃ 56'47	1 4/13
uesc. node	12190 May 17 20:12	15° ⊘ 11′40 0° Ⅱ		morning rise direct	12191 Apr 12 20:26	1/°° \ ′36'4/ 16° \ ′39'59	
morning set	12190 May 28 07:23 12190 Jun 08 21:05	0°Щ 17°Щ31'58		morning max el	12191 Apr 16 12:10 12191 Apr 23 16:32	16° Y 39′59 20° Y 37′51	19°29'47
morning set	12190 Jun 08 21:05 12190 Jun 16 18:51	0°9		morning max er	12191 Apr 23 16:32 12191 May 01 08:50	0° 8	17 4741
max. Earth dist.	12190 Jun 17 12:37	0 99 1°9911'27	1.43551 AU	desc. node	12191 May 01 08.30	4° 8 44'08	
mas. Duruf Gist.	14.J/	112/	1.13331 AU	greatest brilliancy	12191 May 04 10:50 12191 May 06 08:53	7° 8 10'03	-0.7m
superior conj	12190 Jun 24 01:54	11° © 55'32	-1°59'58	morning set	12191 May 18 21:24	26° 8 07'15	V. / 111
minimum elong	12190 Jun 24 08:14	12°921'55			12191 May 21 09:47	0°II	
	12190 Jul 04 15:09	0°Ω	_ 00 _ 20	max. Earth dist.	12191 May 31 02:29	15° Ⅱ 07'51	1.44961 AU
		- 00					

	12101 1 04 05 22	210T 41102	2012150		12102.14 20 02 52	250 T 14144	
superior conj	12191 Jun 04 05:32	21° II 41'02		evening rise	12192 May 29 03:52	25° Ⅱ 14'44	
minimum elong	12191 Jun 04 07:04	21° II 47'10	2°13'48	araataat brillianas	12192 Jun 01 03:20 12192 Jun 05 15:51	0°9	0.0
avanina riaa	12191 Jun 09 09:20 12191 Jun 18 06:37	0°ഇ 14° ഇ 40'01		greatest brilliancy asc. node	12192 Jun 03 13:31 12192 Jun 14 03:49	7°511'42 20°501'45	-0.9m
evening rise	12191 Jun 27 13:05	14 ≥94001 0°Ω			12192 Jun 14 03.49 12192 Jun 19 07:44	20 901 43 26°917'54	18°40'31
asc. node	12191 Jun 28 06:52	0 δί 1° Ω 10'31		evening max el retrograde	12192 Jun 19 07.44 12192 Jun 25 21:19	20 \$17 34 29° \$52'33	18 40 31
evening max el	12191 Jul 28 00:32 12191 Jul 06 19:33	12° Ω 39'47	18°13'02	evening set	12192 Jun 29 03:32	29 9 52 55 28° 9 51'55	
retrograde	12191 Jul 13 04:01	12 00 3947 16° Ω 01'16	16 13 02	inferior conj	12192 Jul 29 03:32 12192 Jul 04 18:39	23°913'45	2°59'28
evening set	12191 Jul 16 01:52	15° Ω 15'54		minimum elong	12192 Jul 04 20:19	23°908'36	2°58'23
inferior conj	12191 Jul 22 02:04	9° Ω 53'43	2°30'02	min. Earth dist.	12192 Jul 06 17:02	20°951'18	0.65611 AU
minimum elong	12191 Jul 22 04:33	9°Ω46'45	2°28'44	morning rise	12192 Jul 10 12:13	16°951'47	0.05011710
min. Earth dist.	12191 Jul 24 15:01	7°Ω03'16	0.63729 AU	direct	12192 Jul 16 22:32	14°9510'06	
morning rise	12191 Jul 28 05:39	3° Ω 37′52	0.03727110	desc. node	12192 Jul 17 13:24	14°9511'28	
desc. node	12191 Jul 31 16:07	1° Ω 38'32		morning max el	12192 Jul 30 05:01	22°900'54	26°53'20
direct	12191 Aug 03 21:31	1° Ω 03'04		morning man er	12192 Aug 06 04:41	0°Ω	20 23 20
morning max el	12191 Aug 17 18:05	9° Ω 04'21	27°41'40		12192 Aug 26 06:23	0°m)	
	12191 Sep 03 00:49	0° m)		morning set	12192 Sep 03 22:37	15° Mp 43'03	
	12191 Sep 20 08:03	0∘ <u>⊽</u>		max. Earth dist.	12192 Sep 08 03:42	23° m/59'01	1.33928 AU
morning set	12191 Sep 21 14:54	2° ₽ 32'28		asc. node	12192 Sep 10 04:36	28° m 07'28	
asc. node	12191 Sep 24 07:58	8° ഫ 02'31			12192 Sep 11 02:26	0∘ <u>⊽</u>	
max. Earth dist.	12191 Sep 26 12:21	12° ≙ 35'56	1.32534 AU		•		
	•			superior conj	12192 Sep 12 13:43	3° ≏ 03'47	0°22'48
superior conj	12191 Sep 29 12:40	19° ≙ 02'32	0°48'39	minimum elong	12192 Sep 12 12:33	2° £ 57'42	0°22'33
minimum elong	12191 Sep 29 10:38	18° ≏ 51'32	0°48'29	evening rise	12192 Sep 19 21:05	18° ≏ 32'54	
	12191 Oct 04 13:34	0°M₊			12192 Sep 25 12:21	0° M	
evening rise	12191 Oct 06 10:50	4°ML04'04		evening max el	12192 Oct 09 22:27	21°ML31'07	21°31'59
	12191 Oct 20 06:30	0° ∡ ¹		desc. node	12192 Oct 13 10:10	24°M29'06	
desc. node	12191 Oct 27 12:48	9° ∡ ³30'45		retrograde	12192 Oct 22 03:49	27°M35'46	
evening max el	12191 Oct 29 08:05	11° ∡ ¹21'59	23°10'23	evening set	12192 Oct 24 23:04	27°M17'49	
retrograde	12191 Nov 11 15:08	17° ∡ ¹58'47		inferior conj	12192 Nov 02 21:55	23°M22'47	-5°22'52
evening set	12191 Nov 15 19:17	17° ∡ 120′58		minimum elong	12192 Nov 02 13:50	23°M34'05	5°20'49
min. Earth dist.	12191 Nov 22 17:31	14° ₹ 08'18	0.55165 AU	min. Earth dist.	12192 Nov 02 23:51	23°M20'03	0.54560 AU
inferior conj	12191 Nov 24 05:04	13° ∡ 16′59	-5°52'32	morning rise	12192 Nov 11 05:35	19°M34'23	
minimum elong	12191 Nov 24 05:03	13° ∡ 17′00	5°51'43	direct	12192 Nov 14 23:57	19°M03'43	
morning rise	12191 Dec 02 16:26	9° ∡ ¹26'40		morning max el	12192 Nov 27 13:04	25°M03'06	22°17'35
direct	12191 Dec 05 15:28	9° ∡ ¹05'51			12192 Dec 02 01:26	0° ∡ ¹	
morning max el	12191 Dec 16 17:29	14° ∡ ¹22'02	20°40'23	asc. node	12192 Dec 07 05:34	7° ∡ 19'02	
asc. node	12191 Dec 21 08:33	19° ∡ ³38'11		morning set	12192 Dec 19 04:24	29° ₹ 51'25	
	12191 Dec 27 23:58	0°ಕ			12192 Dec 19 06:02	0°ಕ	
morning set	12192 Jan 04 17:45	15° ට 05'09					
	12192 Jan 11 22:32	0° ≈		superior conj	12192 Dec 26 05:42	14°₹54'23	
				minimum elong	12192 Dec 26 07:15	15° පි 02'34	1°33'37
superior conj	12192 Jan 12 04:44	0°≈31'39		max. Earth dist.	12192 Dec 29 23:51	22° る 44'16	1.34159 AU
minimum elong	12192 Jan 12 07:14	0°≈44'22	1°21'13		12193 Jan 02 14:50	0° ≈	
max. Earth dist.	12192 Jan 17 09:28	10°≈52'26	1.36001 AU	evening rise	12193 Jan 03 09:59	1°≈33'14 12°≈36'03	
evening rise	12192 Jan 21 06:50	18°≈13'45 22°≈14'51		desc. node	12193 Jan 09 08:38	0° \	
desc. node	12192 Jan 23 11:50 12192 Jan 27 22:34	0° ₩		avanina may al	12193 Jan 19 22:13 12193 Feb 07 07:46	23° ¥ 20'31	27°00'54
	12192 Jan 27 22.34 12192 Feb 17 04:31	0° Υ		evening max el	12193 Feb 07 07.46 12193 Feb 16 19:12	23 π 2031 0° Υ	27 00 34
evening max el	12192 Feb 25 18:16	9° Υ 40'55	26°08'41	retrograde	12193 Feb 10 15:12 12193 Feb 20 15:46	0° Υ 45'09	
retrograde	12192 Mar 09 11:49	16° Υ 55'59	20 08 41	retrograde	12193 Feb 24 06:40	0 1 43 09 30°R) €	
evening set	12192 Mar 15 16:11	14° Υ 25'39		evening set	12193 Feb 27 06:00	28°) 12'09	
asc. node	12192 Mar 18 06:08	11° Υ 54'18		min. Earth dist.	12193 Mar 03 05:03	24°) (21'44	0.65606 AU
min. Earth dist.	12192 Mar 19 20:40	10° Υ 01'29	0.67022 AU	inferior conj	12193 Mar 05 09:03	21° H 53'29	0°04'29
inferior conj	12192 Mar 21 12:33	7° Υ '58'07	1°01'30	minimum elong	12193 Mar 05 08:55	21° H 53'52	0°04'38
minimum elong	12192 Mar 21 11:06	8° Υ 02'38	1°00'54	transit middle	12193 Mar 05 08:55	21° H 53'52	0°04'38
morning rise	12192 Mar 27 06:46	2° Υ 12'08	1 00 5 1	transit begin	12193 Mar 05 06:04	22° H 02'03	0 0130
direct	12192 Mar 30 11:24	1° Υ 14'16		transit end	12193 Mar 05 00:07	21°) (45'42	
morning max el	12192 Apr 06 02:01	4° Υ 47'10	18°39'07	asc. node	12193 Mar 05 03:31	22°) (09'21	
desc. node	12192 Apr 20 13:38	24° Υ 40'54		morning rise	12193 Mar 11 13:16	16°) 19'40	
	12192 Apr 23 23:36	0°8		direct	12193 Mar 14 08:03	15°) (37'46	
morning set	12192 Apr 27 11:28	5° 8 28'15		morning max el	12193 Mar 20 16:57	18° ¥ 58′25	18°05'12
max. Earth dist.	12192 May 12 20:58	29° 8 32'29	1.45685 AU	<i>5</i>	12193 Mar 29 02:30	0°Υ	- •
	12192 May 13 04:00	0°II	-	desc. node	12193 Apr 07 10:17	14° Ƴ 55'07	
	y			morning set	12193 Apr 08 05:02	16° Ƴ 11'22	
superior conj	12192 May 13 15:44	0° Ⅱ 45'49	-2°06'49	Č	12193 Apr 16 18:29	0°8	
minimum elong	12192 May 13 09:41	0° Ⅲ 22'13			•		
č	-						

,	10107 1 10 16 47	110715150			10107 D 00 10 55	270 71 411 5	
asc. node	12197 Jan 10 16:47	11°る15'50		asc. node	12197 Dec 28 13:55	27° ∡ 14'15	
morning max el	12197 Jan 12 21:29	13° る 08'04	18°50'09		12197 Dec 30 19:44	0° ろ	
	12197 Jan 24 07:41	0° ≈		morning set	12198 Jan 13 10:02	23° る 57'46	
morning set	12197 Jan 29 05:23	9° ≈ 23'47			12198 Jan 16 09:07	0° ≈	
superior conj	12197 Feb 06 19:15	26° ≈ 02'56	0°46'48	superior conj	12198 Jan 21 05:02	9° ≈ 45'27	1°10'27
minimum elong	12197 Feb 06 21:58	26°≈15'43	0°46'57	minimum elong	12198 Jan 21 07:51	9° ≈ 59'29	1°10'49
	12197 Feb 08 21:49	0° ∀		max. Earth dist.	12198 Jan 27 04:47	21° ≈ 19'52	1.37198 AU
desc. node	12197 Feb 12 20:40	7° ∺ 11'57		evening rise	12198 Jan 30 22:27	28° ≈ 10′03	
max. Earth dist.	12197 Feb 13 22:36	9° ₩ 07'10	1.39422 AU	desc. node	12198 Jan 30 17:20	27° ≈ 47′08	
evening rise	12197 Feb 17 20:37	15°) 54′08			12198 Jan 31 23:10	0°)	
	12197 Feb 26 12:33	0° Y			12198 Feb 19 21:35	0 ° Υ	
	12197 Mar 20 02:41	8° 0		evening max el	12198 Mar 07 10:57	19° Ƴ 03'52	25°30'41
evening max el	12197 Mar 24 21:38	5° 8 12'53	24°15'21	retrograde	12198 Mar 19 17:56	26° Ƴ 09'39	
retrograde	12197 Apr 05 05:08	11° 8 51'09		evening set	12198 Mar 25 15:46	23° Y 43'03	
asc. node	12197 Apr 08 13:58	10° 8 59'40		asc. node	12198 Mar 26 11:20	22° Y ′59'06	
evening set	12197 Apr 10 15:20	9° 8 34'19		min. Earth dist.	12198 Mar 29 23:42	18° Ƴ 58'53	0.67649 AU
min. Earth dist.	12197 Apr 15 06:24	4° 8 14'57	0.68438 AU	inferior conj	12198 Mar 31 08:40	17° Ƴ 12'57	1°29'38
inferior conj	12197 Apr 16 03:12	3° 8 04'45	2°10'30	minimum elong	12198 Mar 31 06:47	17° Y 19′02	1°28'48
minimum elong	12197 Apr 16 01:02	3° 8 12'04	2°09'29	morning rise	12198 Apr 05 22:17	11° Y 21'03	
	12197 Apr 18 12:11	30° R Ƴ		direct	12198 Apr 09 09:02	10° Ƴ 12'49	
morning rise	12197 Apr 21 10:51	27° Y ′04'01		morning max el	12198 Apr 16 06:46	13° Y 58'49	19°06'15
direct	12197 Apr 25 09:24	25° Y 35'35		morning max cr	12198 Apr 28 11:07	0°8	17 00 15
morning max el	12197 Apr 23 03:24 12197 May 03 01:16	29° Υ 53'33	20°06'10	desc. node	12198 Apr 28 19:11	0° B 30'08	
morning max ci	12197 May 03 03:52	0° ႘	20 00 10	greatest brilliancy	12198 Apr 29 08:38	1° B 20'29	-0.7m
desc. node	12197 May 03 03:32 12197 May 11 22:28	10° 8 46'30		-	12198 May 09 18:39	17° 8 17'18	-0.7III
desc. node	-	0°Ⅱ		morning set	•	0° Ⅱ	
	12197 May 25 01:32			E 41 E 4	12198 May 17 23:16		1 45247 ATT
morning set	12197 May 30 15:06	8° Ⅱ 30′02	1 44221 ATT	max. Earth dist.	12198 May 23 10:37	8°Д33°13	1.45347 AU
max. Earth dist.	12197 Jun 09 18:57	24° Ⅱ 24'35	1.44221 AU		1010037 06 05 00	100 W 55146	2012155
	12197 Jun 13 06:28	0ං ව		superior conj	12198 May 26 05:20	12° Ⅱ 55'46	
				minimum elong	12198 May 26 03:37	12° Ⅱ 48'59	2°13'42
superior conj	12197 Jun 15 10:29	3° © 31'26			12198 Jun 05 21:24	0° ©	
minimum elong	12197 Jun 15 15:24	3° © 51'33	2°08'10	evening rise	12198 Jun 09 23:01	6° © 37'53	
evening rise	12197 Jun 28 11:39	25° © 28'15		asc. node	12198 Jun 22 09:13	26° © 35'26	
	12197 Jul 01 02:52	0 $^{\circ}$ Ω			12198 Jun 24 17:42	0 $^{\circ}$ Ω	
asc. node	12197 Jul 05 12:17	7° Ω 27'50		evening max el	12198 Jun 29 12:01		18°22'38
evening max el	12197 Jul 15 22:23	22° Ω 14'36	18°05'17	retrograde	12198 Jul 05 21:46	9° Ω 12'39	
retrograde	12197 Jul 22 08:15	25° Ω 35'07		evening set	12198 Jul 08 23:02	8° Ω 21′08	
evening set	12197 Jul 25 01:13	24° Ω 57'59		inferior conj	12198 Jul 14 18:56	2° Ω 52′09	2°44'37
inferior conj	12197 Jul 31 08:21	19° Ω 45'36	2°04'31	minimum elong	12198 Jul 14 21:08	2° Ω 45'43	2°43'25
minimum elong	12197 Jul 31 10:59	19° Ω 38'41	2°03'09	min. Earth dist.	12198 Jul 17 01:55	0° £ 11′36	0.64568 AU
min. Earth dist.	12197 Aug 03 04:47	16° Ω 46′03	0.62494 AU		12198 Jul 17 06:01	30° ℝ ∽	
morning rise	12197 Aug 06 18:36	13° Ω 36′21		morning rise	12198 Jul 20 17:57	26° 5 32'41	
desc. node	12197 Aug 07 21:18	12° Ω 51'35		desc. node	12198 Jul 25 18:37	24°901'52	
direct	12197 Aug 13 11:02	11° Ω 10′16		direct	12198 Jul 27 08:03	23° 9 53'22	
morning max el	12197 Aug 27 13:23	19° Ω 12'35	27°55'29		12198 Aug 08 00:48	$0^{\circ}\Omega$	
Ü	12197 Sep 05 17:15	0° m)		morning max el	12198 Aug 09 23:34	1° Ω 52'46	27°24'33
	12197 Sep 24 11:42	0∘ <u>⊽</u>		C	12198 Aug 30 22:25	0° m	
morning set	12197 Sep 30 16:29	12° ≏ 04'02		morning set	12198 Sep 14 06:38	25° m/33'46	
asc. node	12197 Oct 01 13:31	13° ჲ 51'39		. 8	12198 Sep 16 12:11	0∘ ⊽	
max. Earth dist.	12197 Oct 06 00:12	23° ♀ 14'41	1.31968 AU	asc. node	12198 Sep 18 10:11	3° ≏ 54'23	
max. Darm dist.	121) / 000 00 00.12	25 —1111	1.51700710	max. Earth dist.	12198 Sep 18 20:54	4° ≏ 49'45	1.33062 AU
superior conj	12197 Oct 08 06:28	28° ഫ 09'55	1°01'15	max. Earth dist.	12170 Sep 10 20.51	. — 1,7 1,5	1.55002 110
minimum elong	12197 Oct 08 04:14	27° ♀ 57'41	1°01'13	superior conj	12198 Sep 22 11:06	12° ₽ 23'27	0°38'18
minimum clong	12197 Oct 08 04:14 12197 Oct 09 02:32	27 <u>=</u> 3741 0°M	1 01 13	minimum elong	12198 Sep 22 09:21	12 = 23 27 12° ⊆ 14'05	0°38'04
avanina riaa		13°ML02'28		evening rise	-	27° 2 34'49	0 38 04
evening rise	12197 Oct 15 01:30			evening rise	12198 Sep 29 12:36		
daga	12197 Oct 23 11:42	0° √ 17°. 7 26/42			12198 Sep 30 16:01	0°M 0°. 7	
desc. node	12197 Nov 03 17:58	17° х 26'43	24900145		12198 Oct 18 08:58	0° ∡ ⁷	22027112
evening max el	12197 Nov 08 16:38	22° 🗷 54'49	24°08'45	evening max el	12198 Oct 21 03:31		22°27'18
retrograde	12197 Nov 22 08:08	29° х 43'49		desc. node	12198 Oct 21 15:18	3° ∡ 726'34	
evening set	12197 Nov 27 07:44	28° ∡ ′49'19		retrograde	12198 Nov 03 01:54	9° ∡ 123'39	
min. Earth dist.	12197 Dec 03 03:41	25° ⋌ '54'45	0.55886 AU	evening set	12198 Nov 06 14:52	8° ₹ 756'08	
inferior conj	12197 Dec 05 08:27	24° ∡ °34′10		min. Earth dist.	12198 Nov 14 10:51	5° ⋌ ¹25'58	0.54798 AU
minimum elong	12197 Dec 05 13:01	24° ∡ ¹27'11 −	5°41'51	inferior conj	12198 Nov 15 07:07	4° ∡ ¹57'21	
morning rise	12197 Dec 13 20:19	20° ∡ ³35'51		minimum elong	12198 Nov 15 03:17	5° ₹ 02'45	5°46'21
direct	12197 Dec 16 10:01	20° ∡ 18'46		morning rise	12198 Nov 23 17:06	1° ∡ ′09'48	
morning max el	12197 Dec 26 14:45	25° ∡ 10′52	19°53'36	direct	12198 Nov 26 23:52	0° ∡ ¹45′25	

morning max el	12198 Dec 08 17:54	6° ∡ ¹20'42	21°19'34	morning rise	12199 Nov 03 04:40	11° M .04'13	
asc. node	12198 Dec 15 10:58	14° ∡ ¹22'31		direct	12199 Nov 07 08:04	10° M 27'25	
	12198 Dec 24 12:34	0°る		morning max el	12199 Nov 20 09:00	16°M44'43	23°02'54
morning set	12198 Dec 28 19:08	8° る 41'26			12199 Nov 30 20:11	0° ∡ ¹	
	12100 1 05 01 25	220756122	100/140	asc. node	12199 Dec 02 07:58	2° ₹ 24'55	
superior conj	12199 Jan 05 01:25	23°₹56'22	1°26'42	morning set	12199 Dec 13 06:34	23° ∡ 28'53	
minimum elong	12199 Jan 05 03:33 12199 Jan 08 00:24	24°る07'26 0°≈	1°27'19		12199 Dec 16 07:25	0°₹	
max. Earth dist.	12199 Jan 08 00.24 12199 Jan 09 15:04	0 ≈ 3°≈13'36	1.35171 AU	superior conj	12199 Dec 20 05:12	8° る 26'29	1035!58
evening rise	12199 Jan 13 17:27	11°≈09'33	1.55171 AU	minimum elong	12199 Dec 20 05:12 12199 Dec 20 06:17		
desc. node	12199 Jan 17 14:04	18°≈14'54		max. Earth dist.	12199 Dec 23 09:00	5 32 14 15°る08'22	1.33506 AU
dese. Hode	12199 Jan 24 11:11	0° ∀		evening rise	12199 Dec 28 02:02	24°る43'16	1.55500 710
	12199 Feb 15 06:04	0° Υ		evening rise	12199 Dec 30 19:28	0°≈	
evening max el	12199 Feb 18 00:38	2° Y ′50'47	26°33'29	desc. node	12200 Jan 04 10:55	8° ≈ 30'38	
retrograde	12199 Mar 03 01:23	10° Ƴ 11'37			12200 Jan 17 23:30	0°) €	
evening set	12199 Mar 09 10:02	7° Y ′39'38		evening max el	12200 Jan 31 14:11	16°) 24′16	27°16'18
asc. node	12199 Mar 13 08:44	3° Y ′39'42		retrograde	12200 Feb 14 02:35	23°) 49′14	
min. Earth dist.	12199 Mar 13 12:07	3° Y ′29'47	0.66458 AU	evening set	12200 Feb 20 20:06	21°) 17'31	
inferior conj	12199 Mar 15 09:09	1° Y 14'50	0°38'34	min. Earth dist.	12200 Feb 24 17:24	17°) € 40′23	0.64901 AU
minimum elong	12199 Mar 15 08:09	1° Y 17'49	0°38'15	inferior conj	12200 Feb 27 02:13	15° ¥ 04'46	-0°22'47
	12199 Mar 16 10:22	30° ₹		minimum elong	12200 Feb 27 02:53	15°) 02′56	0°22'11
morning rise	12199 Mar 21 07:17	25°) 33′31		asc. node	12200 Feb 28 06:07	13°) (49′13	
direct	12199 Mar 24 07:30	24°) 42′54		morning rise	12200 Mar 05 11:21	9° ∺ 36'30	
morning max el	12199 Mar 30 18:50	28° ∺ 09'29	18°22'35	direct	12200 Mar 08 02:31	9° ∺ 00'10	
	12199 Apr 01 12:25	0° Y		morning max el	12200 Mar 14 11:11	12° 米 18′59	17°55'52
desc. node	12199 Apr 15 15:51	20° Y ′34'51			12200 Mar 26 22:01	0° Υ	
morning set	12199 Apr 19 19:37	27° Y °10′54		morning set	12200 Apr 01 01:30	8° Y 30'07	
	12199 Apr 21 14:13	0°8		desc. node	12200 Apr 02 12:29	10° Y 54'53	
	1210011 05 12 20	210115555	1050106		12200 Apr 14 06:15	0°8	
superior conj	12199 May 05 12:39	21° 8 55'53			12200 4 15 02 11	10110	100 (10 (
minimum elong	12199 May 05 04:21	21° 8 23'30		superior conj	12200 Apr 15 02:11	1° 8 19'18	
max. Earth dist.	12199 May 06 05:46	23° O 02′45 0° I I	1.45763 AU	minimum elong	12200 Apr 14 17:28	0° 8 44'40 7° 8 37'41	1°25′29 1.45433 AU
evening rise	12199 May 10 16:38 12199 May 21 10:05	0 <u>П</u> 16° П 47'38		max. Earth dist. evening rise	12200 Apr 19 01:56 12200 May 01 02:38	26° 8 17'26	1.43433 AU
evening rise	12199 May 21 10.03 12199 May 29 20:21	10 Д 4/38		evening rise	12200 May 01 02.38 12200 May 03 12:43	26 3 1726 0° Ⅱ	
greatest brilliancy	12199 May 31 09:03	2° © 21'56	-0.8m	greatest brilliancy	12200 May 05 12:43	18° Ⅱ 00'33	-0.6m
asc. node	12199 Jun 09 06:16	15°9512'49	0.0111	greatest orimane y	12200 May 13 11:49 12200 May 24 07:04	0°95	0.0111
evening max el	12199 Jun 12 22:44	19° \$ 28'07	18°57'30	evening max el	12200 May 27 04:32	3° © 12'58	19°48'30
retrograde	12199 Jun 19 17:00	23° © 11'59		asc. node	12200 May 27 03:23	3° © 10'04	
evening set	12199 Jun 23 02:56	22° © 04'37		retrograde	12200 Jun 03 15:10	7° © 26'58	
inferior conj	12199 Jun 28 15:16	16° © 20'29	3°06'54	evening set	12200 Jun 07 10:19	6°503'10	
minimum elong	12199 Jun 28 16:29	16° © 16'35	3°05'56	inferior conj	12200 Jun 12 18:15	0° © 05'09	3°14'38
min. Earth dist.	12199 Jun 30 07:26	14° © 13'13	0.66296 AU	minimum elong	12200 Jun 12 18:23	0°504'42	3°13'47
morning rise	12199 Jul 04 05:21	9° 9 57'49			12200 Jun 12 19:47	30°Ŗ Ⅱ	
direct	12199 Jul 10 12:14	7° © 15'58		min. Earth dist.	12200 Jun 13 19:48	28° Ⅲ 39'27	0.67595 AU
desc. node	12199 Jul 12 15:53	7° © 32'31		morning rise	12200 Jun 18 02:06	23° Ⅱ 43'37	
morning max el	12199 Jul 23 10:25	14° © 57'50	26°25'00	direct	12200 Jun 23 22:22	21° Ⅱ 08'50	
	12199 Aug 04 17:48	0° N		desc. node	12200 Jun 29 13:05	23° I I01'16	0.500.51=0
	12199 Aug 23 17:25	0° m		morning max el	12200 Jul 05 20:40	28° Ⅱ 17'55	25°05'58
morning set	12199 Aug 28 08:52	8° m 28'21	1.24665.433		12200 Jul 07 11:35	0°©	
max. Earth dist.	12199 Sep 01 07:32	16° Mp 02'43 24° Mp 00'18	1.34665 AU	morning sat	12200 Jul 29 11:21	0°Ω 20°Ω37'07	
asc. node	12199 Sep 05 06:51	24*111/00/18		morning set	12200 Aug 10 19:03		1 26701 ATT
superior conj	12199 Sep 06 09:01	26° m) 14'34	0°10'20	max. Earth dist.	12200 Aug 14 09:12 12200 Aug 15 21:54	27° Ω 08'37 0° m	1.36701 AU
minimum elong	12199 Sep 06 09:01 12199 Sep 06 08:27	26° To 11'39			12200 Aug 13 21.34	V III	
behind sun begin	12199 Sep 06 08.27 12199 Sep 06 03:51	25° Mp 47'59	0 1013	superior conj	12200 Aug 20 21:10	9° m 34'56	-0°21'24
behind sun end	12199 Sep 06 03:31 12199 Sep 06 13:03	26° m/35'20		minimum elong	12200 Aug 20 22:33	9° Mp 41'46	
James James James	12199 Sep 08 04:30	ე∘ <u>ი</u>		asc. node	12200 Aug 23 03:31	14° Mp 05'09	
evening rise	12199 Sep 13 21:47	0 — 11° Ω 59'36		evening rise	12200 Aug 29 02:46	26° m) 10'04	
<i>5 5</i>	12199 Sep 23 04:45	0°M		<i>5</i>	12200 Aug 31 00:32	0∘ ರ	
evening max el	12199 Oct 02 22:45	13° M 21'01	20°54'27	evening max el	12200 Sep 15 07:32	24° ≏ 25'45	19°40'04
desc. node	12199 Oct 08 12:41	17°M34'05		retrograde	12200 Sep 25 05:39	29° ≏ 22'34	
retrograde	12199 Oct 14 12:49	19° M 06'11		desc. node	12200 Sep 25 10:08	29° ჲ 22'28	
evening set	12199 Oct 16 21:46	18°M52'45		evening set	12200 Sep 27 02:41	29° ≏ 12'44	
inferior conj	12199 Oct 25 22:53	14°M58'19	-4°52'46	inferior conj	12200 Oct 05 22:09	99'99 <u>م</u> 9	-3°13'41
minimum elong	12199 Oct 25 13:07	15° ™ 12'10		minimum elong	12200 Oct 05 13:48	25° ≏ 22'13	
min. Earth dist.	12199 Oct 26 17:50	14°M31'24	0.54589 AU	min. Earth dist.	12200 Oct 08 03:17	23° ≏ 46'04	0.55316 AU

	12200 0 . 12 22 07	200 0 40124			10001 0 04 00 10	00 0 50140	
morning rise	12200 Oct 13 23:07	20° Ω 48'24		morning rise	12201 Sep 24 09:12	0° £ 58'48	
direct	12200 Oct 18 22:34	19° Ω 53'35			12201 Sep 27 04:45	30°R, Mp	
morning max el	12200 Nov 01 19:25		24°50'50	direct	12201 Sep 30 02:52	29° m 39'03	
	12200 Nov 04 21:51	0° M			12201 Oct 03 01:31	0∘ ⊽	
asc. node	12200 Nov 19 04:52	21°M07'26		morning max el	12201 Oct 14 09:10	7° ≙ 03'10	26°25'08
	12200 Nov 23 19:40	0° ∡ 7			12201 Oct 31 09:26	0° M	
morning set	12200 Nov 27 18:25	8° ∡ 13'49		asc. node	12201 Nov 06 01:42	10° M ₊19'51	
				morning set	12201 Nov 12 04:59	22°M51'37	
superior conj	12200 Dec 04 13:41	23° ∡ ¹07'08	1°38'48	•	12201 Nov 15 11:42	0° ∡ ¹	
minimum elong	12200 Dec 04 13:37	23° х 06'47	1°39'38				
max. Earth dist.	12200 Dec 06 10:30	27°×12'10	1.32281 AU	superior conj	12201 Nov 19 00:43	7° ∡ ′52'09	1°35'35
max. Earth dist.	12200 Dec 07 17:32	0°る	1.52201 110	minimum elong	12201 Nov 18 23:38	7° × 746'06	1°36'18
ovanina rias		8° る 41'36		max. Earth dist.		9°×724'09	1.31539 AU
evening rise	12200 Dec 11 20:44				12201 Nov 19 17:16		1.31339 AU
desc. node	12200 Dec 22 07:50	28° る 27'36		evening rise	12201 Nov 25 22:50	22° х 57'47	
	12200 Dec 23 05:25	0° ≈			12201 Nov 29 09:02	0°ಕ	
evening max el	12201 Jan 14 01:41	29° ≈ 30'43	27°32'22	desc. node	12201 Dec 09 04:50	17° る 58'14	
	12201 Jan 14 14:09	0° ∀			12201 Dec 17 03:22	0° ≈	
retrograde	12201 Jan 27 20:42	6°) 52'45		evening max el	12201 Dec 27 08:45	11° ≈ 57'40	27°16'14
evening set	12201 Feb 03 19:24	4° ¥ 28'19		retrograde	12202 Jan 10 06:58	19° ≈ 12'55	
min. Earth dist.	12201 Feb 07 13:30	1°) €20'23	0.63024 AU	evening set	12202 Jan 17 04:48	17° ≈ 04'27	
	12201 Feb 08 22:34	30° R ≈		min. Earth dist.	12202 Jan 20 23:16	14° ≈ 18′25	0.60930 AU
inferior conj	12201 Feb 10 08:59	28° ≈ 34'42	-1°33'52	inferior conj	12202 Jan 24 02:10	11° ≈ 36′18	-2°52'12
minimum elong	12201 Feb 10 12:05	28°≈27'03	1°32'04	minimum elong	12202 Jan 24 08:10	11° ≈ 23'15	
asc. node	12201 Feb 15 03:29	24°≈28'35	1 32 04	morning rise	12202 Jan 31 14:27	6° ≈ 43'12	2 4) 13
	12201 Feb 13 03:29 12201 Feb 17 07:11			-			
morning rise		23°≈22'30		asc. node	12202 Feb 02 00:49	6°≈26'43	
direct	12201 Feb 19 15:01	22°≈56'54		direct	12202 Feb 02 17:24	6° ≈ 24'43	
morning max el	12201 Feb 26 04:55	26°≈18'44	17°46'34	morning max el	12202 Feb 09 20:42	9° ≈ 59'42	17°55'27
	12201 Mar 01 09:25	0° ∀			12202 Feb 23 00:24	0° ∀	
morning set	12201 Mar 14 08:46	21°) €02'01		morning set	12202 Feb 25 11:04	4°) €26'59	
	12201 Mar 19 13:12	0° Y		desc. node	12202 Mar 07 05:37	22° ∺ 01′08	
desc. node	12201 Mar 20 09:05	1° Y 25'01					
				superior conj	12202 Mar 07 22:29	23°) 14'35	-0°05'29
superior conj	12201 Mar 26 12:04	11° Y 42'31	-0°45'45	minimum elong	12202 Mar 07 22:01	23° ¥ 12'36	0°05'13
minimum elong	12201 Mar 26 07:25	11° Y 23'15	0°45'10	behind sun begin	12202 Mar 07 14:14	22° ¥ 38'40	
max. Earth dist.	12201 Apr 01 20:12	22°Υ′00'27	1.44384 AU	behind sun end	12202 Mar 08 05:49	23°) 46'28	
max. Latin dist.	12201 Apr 06 21:37	0°8	1.44304 AO	ocimia sun cha	12202 Mar 11 21:06	0° Υ	
	=			Eth dit		5° Υ 53'40	1.42743 AU
evening rise	12201 Apr 10 14:18	5° 8 43'40		max. Earth dist.	12202 Mar 15 09:58		1.42/43 AU
	12201 Apr 26 21:27	0°П		evening rise	12202 Mar 21 12:05	15° Y 42′20	
evening max el	12201 May 10 04:32	16° ∏ 59'11	20°53'29		12202 Mar 30 19:35	0°8	
asc. node	12201 May 14 00:33	20° Ⅱ 14'52			12202 Apr 22 05:17	Π °0	
retrograde	12201 May 18 14:03	21° ∏ 52'35		evening max el	12202 Apr 22 23:12	0° Ⅱ 45'58	22°08'50
evening set	12201 May 22 19:08	20° Ⅱ 12'33		asc. node	12202 Apr 30 21:49	6° Ⅱ 11'08	
inferior conj	12201 May 28 01:25	14° ∏ 02'18	3°10'09	retrograde	12202 May 02 11:48	6° Ⅱ 22'58	
minimum elong	12201 May 28 00:33	14° Ⅲ 05′18	3°09'16	evening set	12202 May 07 03:36	4° Ⅲ 27'31	
min. Earth dist.	12201 May 28 13:09	13° Ⅲ 21'38	0.68425 AU		12202 May 11 01:57	30° ₹ 8	
morning rise	12201 Jun 02 05:45	7° Ⅱ 44'31		inferior conj	12202 May 12 10:34	28° 8 07'17	2°54'53
direct	12201 Jun 07 13:34	5° Ⅱ 23'57		minimum elong	12202 May 12 08:56	28° 8 13'00	
desc. node	12201 Jun 16 10:10	10° Ⅱ 00'30		min. Earth dist.	12202 May 12 09:19		0.68788 AU
morning max el	12201 Jun 18 06:50	11° II 47'41	23°37'22	morning rise	12202 May 17 14:05	21° 8 54'57	2.23,00110
	12201 Jul 02 20:12	0°95		direct	12202 May 17 14:03 12202 May 22 08:50	19° 8 53'10	
		0°€ 0°€			•		22000121
	12201 Jul 22 06:32			morning max el	12202 May 31 19:01	25° 8 24'58	22 08 31
morning set	12201 Jul 23 08:30	1° Ω 49'19		desc. node	12202 Jun 03 07:07	28° 8 05'35	
max. Earth dist.	12201 Jul 27 06:47	8° Ω 35'14	1.38992 AU		12202 Jun 04 22:30	Π °0	
					12202 Jun 26 07:17	0 \circ	
superior conj	12201 Aug 03 19:56	22° Ω 16'30	-0°55'32	morning set	12202 Jul 03 20:52	11° © 53'57	
minimum elong	12201 Aug 03 23:51	22° Ω 34'51	0°55'28	max. Earth dist.	12202 Jul 09 06:22	20° © 45'33	1.41283 AU
	12201 Aug 07 21:26	0° ™			12202 Jul 14 16:17	0 $^{\circ}\Omega$	
asc. node	12201 Aug 10 00:13	4° ™ 05'48					
evening rise	12201 Aug 13 00:51	9° m 59'34		superior conj	12202 Jul 17 00:55	4° Ω 08'46	-1°28'56
-	12201 Aug 24 04:49	0∘ <u>v</u>		minimum elong	12202 Jul 17 07:11	4° Ω 36'33	
evening max el	12201 Aug 29 05:22	6° ≏ 18'07	18°47'15	evening rise	12202 Jul 27 12:26	23° Ω 18'20	
retrograde	12201 Sep 06 14:48	10° ⊆ 30'38	. , 	asc. node	12202 Jul 27 20:56	23° Ω 57'54	
evening set	12201 Sep 00 14:48 12201 Sep 08 12:36	10° ⊆ 30'38'10° ⊆ 18'22		use. Hode	12202 Jul 27 20:30 12202 Jul 31 03:18	0°m)	
•	-			avanina ma1			10015121
desc. node	12201 Sep 12 07:35	8° Ω 49'24	1922110	evening max el	12202 Aug 12 12:37	18° M 50'49	10 13 31
inferior conj	12201 Sep 16 16:00	5° £ 57'04		retrograde	12202 Aug 19 18:48	22° Tp 31'15	
minimum elong	12201 Sep 16 12:34	6° Ω 03'18		evening set	12202 Aug 21 23:08	22° m/ 12'02	
min. Earth dist.	12201 Sep 19 17:56	3° ≏ 43'17	0.56852 AU	inferior conj	12202 Aug 29 07:36	17° m 30'13	0°16'26

minimum elong	12202 Aug 29 08:09	17° m 29'02	0°15'56	retrograde	12203 Aug 02 15:15	5° m) 17'34	
transit middle	12202 Aug 29 08:09	17° Mp 29'02	0°15'56	evening set	12203 Aug 05 03:40	4° m) 47'40	
transit begin	12202 Aug 29 07:34	17° Mp 30'16		inferior conj	12203 Aug 11 19:01	29° Ω 45'54	1°31'51
transit end	12202 Aug 29 08:44	17° m) 27'47		minimum elong	12203 Aug 11 21:24	29° Ω 40'04	1°30'33
desc. node	12202 Aug 30 05:03	16° m) 44'20		Č	12203 Aug 11 13:16	30°RΩ	
min. Earth dist.	12202 Sep 01 15:36	14° m) 41'16	0.58927 AU	min. Earth dist.	12203 Aug 14 21:43	26° Ω 43'57	0.61212 AU
morning rise	12202 Sep 05 13:43	11° m 56'59		desc. node	12203 Aug 17 02:27	24° Ω 49'24	
direct	12202 Sep 11 21:27	10° m 08'33		morning rise	12203 Aug 18 12:29	23° Ω 47′03	
morning max el	12202 Sep 26 05:49	17° m 54'11	27°30'02	direct	12203 Aug 25 03:51	21° Q 32'41	
	12202 Oct 06 08:28	0∘ ⊽		morning max el	12203 Sep 08 09:23	29° Ω 30'53	27°57'15
asc. node	12202 Oct 23 22:26	29° ჲ 53'36			12203 Sep 08 20:58	0° ™	
	12202 Oct 23 23:43	0° M			12203 Sep 30 08:32	0∘ ⊽	
morning set	12202 Oct 27 12:31	7° M ₁7'10		asc. node	12203 Oct 10 19:07	19° ≏ 42'38	
max. Earth dist.	12202 Nov 03 01:58	21°M37'16	1.31297 AU	morning set	12203 Oct 11 15:09	21° ≏ 25'40	
					12203 Oct 15 16:09	0° ™	
superior conj	12202 Nov 03 12:24	22°M35'26	1°26'37	max. Earth dist.	12203 Oct 17 09:03	3° M 43′06	1.31574 AU
minimum elong	12202 Nov 03 10:32	22°M25'06	1°27'04			m	
	12202 Nov 06 20:17	0° ∕ 7 70 7 10 5100		superior conj	12203 Oct 18 22:53		1°12'06
evening rise	12202 Nov 10 05:58	7° ∡ ¹25'28		minimum elong	12203 Oct 18 20:38	6°M59'14	1°12'14
daga mada	12202 Nov 21 20:56 12202 Nov 26 01:57	0°궁 6°궁52'07		evening rise	12203 Oct 25 16:09	21°M.59'17 0° ∡ 7	
desc. node	12202 Nov 26 01:57 12202 Dec 09 09:03		26°25'47	desc. node	12203 Oct 29 11:42 12203 Nov 12 23:10	0° x ¹ 24° x ¹54'37	
evening max el	12202 Dec 09 09:03 12202 Dec 19 03:19	23 ⊘ 33 31 0° ≈	20 23 47	desc. node	12203 Nov 12 23.10 12203 Nov 16 22:40	24 x・343/ 0°る	
retrograde	12202 Dec 19 03:19 12202 Dec 23 07:52	0 ∞ 0°≈42'10		evening max el	12203 Nov 10 22:40 12203 Nov 21 01:07	4°る22'28	25°04'45
retrograde	12202 Dec 23 07:32 12202 Dec 27 11:03	0 ~42 10 30°Rる		retrograde	12203 Nov 21 01:07 12203 Dec 04 20:55	11° る 18'15	23 04 43
evening set	12202 Dec 29 20:18	28° ろ 58'36		evening set	12203 Dec 10 13:19	10°る05'40	
min. Earth dist.	12202 Bec 29 20:10 12203 Jan 02 22:43		0.58779 AU	min. Earth dist.	12203 Dec 15 13:06	7° る 23'25	0.56816 AU
inferior conj	12203 Jan 06 02:12	24°る00'20		inferior conj	12203 Dec 18 06:06	5° る 37'01	
minimum elong	12203 Jan 06 10:27	23° る 44'44		minimum elong	12203 Dec 18 13:33	5° る 24'47	
morning rise	12203 Jan 14 03:28	19° る 28'35		morning rise	12203 Dec 26 16:00	1° る 27'10	
direct	12203 Jan 16 05:25	19° る 13'37		direct	12203 Dec 28 23:19	1° る 11'56	
asc. node	12203 Jan 19 22:04	20° ට 03'24		asc. node	12204 Jan 06 19:15	5° る 13'54	
morning max el	12203 Jan 24 06:50	23° る 11'39	18°24'01	morning max el	12204 Jan 07 07:13	5° る 42'05	19°14'19
	12203 Jan 29 16:52	0° ≈			12204 Jan 22 16:39	0°≈	
morning set	12203 Feb 09 02:54	18° ≈ 28'59		morning set	12204 Jan 24 03:51	2° ≈ 54'16	
				morning sec	12204 Jan 24 03.31	2 7013410	
	12203 Feb 15 04:04	0° ∀		-	12204 Jan 24 03.31	2 705410	
	12203 Feb 15 04:04	0° ∀		superior conj	12204 Feb 01 08:50	19° ≈ 08'58	0°57'45
superior conj	12203 Feb 15 04:04 12203 Feb 18 06:59	0°) 5°) {48'07	0°29'43	-	12204 Feb 01 08:50 12204 Feb 01 11:43	19°≈08'58 19°≈22'55	0°57'45 0°57'58
minimum elong	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02	0° ₩ 5° ₩ 48'07 5° ₩ 57'32		superior conj minimum elong	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09	19°≈08'58 19°≈22'55 0°¥	0°57'58
minimum elong desc. node	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03	0°29'49	superior conj minimum elong max. Earth dist.	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45	19°≈08'58 19°≈22'55 0° ℋ 1° ℋ 42'41	
minimum elong desc. node max. Earth dist.	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20		superior conj minimum elong max. Earth dist. desc. node	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50	19°≈08'58 19°≈22'55 0°¥ 1°¥42'41 3°¥17'37	0°57'58
minimum elong desc. node	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20 26°¥34'50	0°29'49	superior conj minimum elong max. Earth dist.	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53	19°≈08'58 19°≈22'55 0°¥ 1°¥42'41 3°¥17'37 8°¥22'04	0°57'58
minimum elong desc. node max. Earth dist.	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20 26°¥34'50 0°Υ	0°29'49	superior conj minimum elong max. Earth dist. desc. node evening rise	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49	19°≈08'58 19°≈22'55 0°₩ 1°₩42'41 3°₩17'37 8°₩22'04 0°❤	0°57'58 1.38469 AU
minimum elong desc. node max. Earth dist. evening rise	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45	0°₩ 5°₩48'07 5°₩57'32 12°₩40'03 19°₩08'20 26°₩34'50 0°Ψ 0°₩	0°29'49 1.40696 AU	superior conj minimum elong max. Earth dist. desc. node	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10	19°≈08'58 19°≈22'55 0° ₭ 1° ₭42'41 3° ₭17'37 8° ₭22'04 0° ♀ 28° ♀27'19	0°57'58
minimum elong desc. node max. Earth dist. evening rise	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27	0° ₩ 5° ₩48'07 5° ₩57'32 12° ₩40'03 19° ₩08'20 26° ₩34'50 0° Ψ 0° ₩ 14° ₩35'34	0°29'49 1.40696 AU	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 19 19:17	19°≈08'58 19°≈22'55 0° ₭ 1° ₭42'41 3° ₭17'37 8° ₭22'04 0° ♀ 28° ♀27'19	0°57'58 1.38469 AU
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minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 17 19:09 12203 Apr 21 10:11	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20 26°¥34'50 0°° 0°¥ 14°♥35'34 20°♥53'22	0°29'49 1.40696 AU 23°29'16	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 04 13:18	19°≈08'58 19°≈22'55 0° ₩ 1° ₩42'41 3° ₩17'37 8° ₩22'04 0° Ψ 28° Ψ27'19 0° ੴ 5° ੴ17'59 3° ੴ37'37 2° ੴ56'46	0°57'58 1.38469 AU
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minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 17 19:09 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 17:42 12203 Apr 26 06:07 12203 May 02 01:10	5° ₩48'07 5° ₩57'32 12° ₩40'03 19° ₩08'20 26° ₩34'50 0° Ψ 0° ₩ 14° ₩35'34 20° ₩53'22 20° ₩42'47 18° ₩43'58 12° ₩16'48 12° ₩23'59 13° ₩03'50 6° ₩11'18	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 04 13:18 12204 Apr 07 09:04 12204 Apr 09 01:17 12204 Apr 10 03:11 12204 Apr 10 01:04	19°≈08'58 19°≈22'55 0° ₩ 1° ₩ 42'41 3° ₩ 17'37 8° ₩ 22'04 0° Ψ 28° Ψ 27'19 0° ੴ 5° ੴ 17'59 3° ੴ 37'37 2° ∰ 56'46 30° ℝ Ψ 27° Ψ 52'23 26° Ψ 26'35 26° Ψ 33'36	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 17 19:09 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 17:42 12203 Apr 26 06:07 12203 May 02 01:10 12203 May 06 06:58	5° ¥48'07 5° ¥57'32 12° ¥40'03 19° ¥08'20 26° ¥34'50 0° ¥ 0° ¥ 14° ₩35'34 20° ₩53'22 20° ₩42'47 18° ₩43'58 12° ₩16'48 12° ₩23'59 13° ₩03'50 6° ₩11'18 4° ₩30'27	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32 0.68697 AU	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise	12204 Feb 01 08:50 12204 Feb 01 11:43 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 19 19:17 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 04 13:18 12204 Apr 07 09:04 12204 Apr 09 01:17 12204 Apr 10 03:11 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 10 01:04	19°≈08'58 19°≈22'55 0° ₩ 1° ₩ 42'41 3° ₩ 17'37 8° ₩ 22'04 0° Ψ 28° Ψ 27'19 0° ੴ 5° ੴ 17'59 3° ੴ 37'37 2° ੴ 56'46 30° ℝ Ψ 27° Ψ 52'23 26° Ψ 26'35 26° Ψ 33'36 20° Ψ 29'19 19° Ψ 09'29 23° Ψ 11'56	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25
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minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 18 09:02 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 17 19:09 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 06:07 12203 May 02 01:10 12203 May 04 06:58 12203 May 14 12:31 12203 May 21 03:57 12203 May 30 12:20 12203 Jun 13 08:52	5° ₩48'07 5° ₩57'32 12° ₩40'03 19° ₩08'20 26° ₩34'50 0° Ψ 0° ₩ 14° ₩35'34 20° ₩53'22 20° ₩42'47 18° ₩43'58 12° ₩16'48 12° ₩23'59 13° ₩03'50 6° ₩11'18 4° ₩30'27 9° ₩12'36 16° ₩58'45 0° Ⅲ 20° Ⅲ54'44	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32 0.68697 AU	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node	12204 Feb 01 08:50 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 19 19:17 12204 Apr 03 16:32 12204 Apr 04 13:18 12204 Apr 07 09:04 12204 Apr 10 03:11 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 19 06:34 12204 Apr 26 13:34 12204 Apr 26 13:34 12204 May 07 00:42	19°≈08'58 19°≈22'55 0° ₩ 1° ₩42'41 3° ₩17'37 8° ₩22'04 0° Ψ 28° Ψ27'19 0° ₩ 5° ₩17'59 3° ₩37'37 2° ₩56'46 30° ℝ Ψ 27° Ψ52'23 26° Ψ26'35 26° Ψ33'36 20° Ψ29'19 19° Ψ09'29 23° Ψ11'56 0° ₩ 6° ₩26'40	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25 1°53'27 19°38'42
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minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong evening rise	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 06:07 12203 May 02 01:10 12203 May 04 06:58 12203 May 14 12:31 12203 May 21 03:57 12203 May 30 12:20 12203 Jun 13 08:52 12203 Jun 19 03:13 12203 Jun 28 07:54 12203 Jun 28 07:54 12203 Jun 28 14:31 12203 Jun 28 14:31 12203 Jun 17 00:29 12203 Jul 07 00:29 12203 Jul 10 09:07	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20 26°¥34'50 0°Y 0°℧ 14°℧35'34 20°℧53'22 20°℧42'47 18°℧43'58 12°℧16'48 12°℧3'59 13°℧03'50 6°℧11'18 4°℧30'27 9°℧12'36 16°℧58'45 0°Ⅲ 20°爪54'44 0°亞 3°亞50'03 15°亞03'15 15°亞03'15 15°亞03'15 5°邓55'45	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32 0.68697 AU 20°47'13	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12204 Feb 01 08:50 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 19 19:17 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 07 09:04 12204 Apr 09 01:17 12204 Apr 10 03:11 12204 Apr 10 03:11 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 19 06:34 12204 Apr 26 13:34 12204 Apr 26 13:34 12204 May 02 08:43 12204 May 07 00:42 12204 May 09 06:42 12204 May 20 90:09 12204 May 22 17:13 12204 Jun 07 14:55 12204 Jun 07 17:28	19°≈08'58 19°≈22'55 0° ₩ 1° ₩ 42'41 3° ₩ 17'37 8° ₩ 22'04 0° Ψ 28° Ψ 27'19 0° ℧ 5° ℧ 17'59 3° ℧ 56'46 30° ℝ Ψ 27° Ψ 52'23 26° Ψ 26'35 26° Ψ 33'36 20° Ψ 29'19 19° Ψ 09'29 23° Ψ 11'56 0° ℧ 6° ℧ 26'40 9° ℧ 42'22 29° ℧ 29'00 0° Ⅲ 17° Ⅲ 41'31 24° Ⅲ 56'58 25° Ⅲ 07'15	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25 1°53'27 19°38'42 -0.6m 1.44793 AU -2°12'08
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 06:07 12203 May 02 01:10 12203 May 04 06:58 12203 May 14 12:31 12203 May 21 03:57 12203 May 30 12:20 12203 May 30 12:20 12203 Jun 13 08:52 12203 Jun 19 03:13 12203 Jun 28 07:54 12203 Jun 28 14:31 12203 Jun 28 14:31 12203 Jun 10 09:07 12203 Jul 10 09:07 12203 Jul 10 09:07 12203 Jul 17:44	5° ₩48'07 5° ₩57'32 12° ₩40'03 19° ₩08'20 26° ₩34'50 0° ℉ 0° ℉ 14° ℧35'34 20° ℧53'22 20° ℧42'47 18° ℧43'58 12° ℧16'48 12° ℧23'59 13° ℧03'50 6° ℧11'18 4° ℧30'27 9° ℧12'36 16° ℧58'45 0° Ⅲ 20° Ⅲ 54'44 0° ☞ 3° ℱ50'03 15° ℱ03'15 15° ℱ03'15 15° ℱ03'15 15° ℱ31'03 0° ℳ 5° ℳ55'45 13° ℳ37'16	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32 0.68697 AU 20°47'13	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist. superior conj minimum elong	12204 Feb 01 08:50 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 04 13:18 12204 Apr 07 09:04 12204 Apr 10 03:11 12204 Apr 10 03:11 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 10 06:34 12204 Apr 26 13:34 12204 Apr 26 13:34 12204 May 02 08:43 12204 May 07 00:42 12204 May 09 06:42 12204 May 09 06:42 12204 May 22 17:13 12204 Jun 07 14:55 12204 Jun 07 17:28 12204 Jun 07 17:56	19°≈08'58 19°≈22'55 0° ₩ 1° ₩ 42'41 3° ₩ 17'37 8° ₩ 22'04 0° Ψ 28° Ψ 27'19 0° ੴ 5° ੴ 17'59 3° ੴ 37'37 2° ੴ 56'46 30° ℝ Ψ 27° Ψ 52'23 26° Ψ 26'35 26° Ψ 29'19 19° Ψ 09'29 23° Ψ 11'56 0° ੴ 6° ੴ 26'40 9° ੴ 42'22 29° ⑥ 29'00 0° Ⅲ 17° Ⅲ 41'31 24° Ⅲ 56'58 25° Ⅲ 07'15 0° ©	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25 1°53'27 19°38'42 -0.6m 1.44793 AU -2°12'08
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong evening rise	12203 Feb 15 04:04 12203 Feb 18 06:59 12203 Feb 22 02:12 12203 Feb 25 19:10 12203 Mar 02 05:22 12203 Mar 04 07:37 12203 Mar 24 11:45 12203 Apr 05 14:27 12203 Apr 16 06:54 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 19:47 12203 Apr 26 06:07 12203 May 02 01:10 12203 May 04 06:58 12203 May 14 12:31 12203 May 21 03:57 12203 May 30 12:20 12203 Jun 13 08:52 12203 Jun 19 03:13 12203 Jun 28 07:54 12203 Jun 28 07:54 12203 Jun 28 14:31 12203 Jun 28 14:31 12203 Jun 17 00:29 12203 Jul 07 00:29 12203 Jul 10 09:07	0°¥ 5°¥48'07 5°¥57'32 12°¥40'03 19°¥08'20 26°¥34'50 0°Y 0°℧ 14°℧35'34 20°℧53'22 20°℧42'47 18°℧43'58 12°℧16'48 12°℧3'59 13°℧03'50 6°℧11'18 4°℧30'27 9°℧12'36 16°℧58'45 0°Ⅲ 20°爪54'44 0°亞 3°亞50'03 15°亞03'15 15°亞03'15 15°亞03'15 5°邓55'45	0°29'49 1.40696 AU 23°29'16 2°29'35 2°28'32 0.68697 AU 20°47'13	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist. superior conj	12204 Feb 01 08:50 12204 Feb 07 03:09 12204 Feb 08 01:45 12204 Feb 08 01:45 12204 Feb 08 22:50 12204 Feb 11 19:53 12204 Feb 25 04:49 12204 Mar 18 04:10 12204 Mar 19 19:17 12204 Mar 29 22:07 12204 Apr 03 16:32 12204 Apr 07 09:04 12204 Apr 09 01:17 12204 Apr 10 03:11 12204 Apr 10 03:11 12204 Apr 10 01:04 12204 Apr 10 01:04 12204 Apr 19 06:34 12204 Apr 26 13:34 12204 Apr 26 13:34 12204 May 02 08:43 12204 May 07 00:42 12204 May 09 06:42 12204 May 20 90:09 12204 May 22 17:13 12204 Jun 07 14:55 12204 Jun 07 17:28	19°≈08'58 19°≈22'55 0° ₩ 1° ₩ 42'41 3° ₩ 17'37 8° ₩ 22'04 0° Ψ 28° Ψ 27'19 0° ℧ 5° ℧ 17'59 3° ℧ 56'46 30° ℝ Ψ 27° Ψ 52'23 26° Ψ 26'35 26° Ψ 33'36 20° Ψ 29'19 19° Ψ 09'29 23° Ψ 11'56 0° ℧ 6° ℧ 26'40 9° ℧ 42'22 29° ℧ 29'00 0° Ⅲ 17° Ⅲ 41'31 24° Ⅲ 56'58 25° Ⅲ 07'15	0°57'58 1.38469 AU 24°48'27 0.68162 AU 1°54'25 1°53'27 19°38'42 -0.6m 1.44793 AU -2°12'08

1-	12204 I 20 14.20	20 0 5 0 12 0			12205 I 24 07.49	000	
asc. node	12204 Jun 30 14:39	2° Ω 58'30	1001010		12205 Jun 24 07:48	0° Ω	
evening max el	12204 Jul 09 15:22	15° Ω 18'46	18°10'28	retrograde	12205 Jun 29 16:22	2° Ω 27'32	
retrograde	12204 Jul 15 23:54	18° Ω 39'34		evening set	12205 Jul 02 21:16	1° Ω 29'19	
evening set	12204 Jul 18 20:28	17° Ω 56′21			12205 Jul 04 20:07	30° ₹જી	
inferior conj	12204 Jul 24 22:21	12° Ω 36'31	2°23'55	inferior conj	12205 Jul 08 13:30	25° © 53'25	
minimum elong	12204 Jul 25 00:53	12° Ω 29'29	2°22'36	minimum elong	12205 Jul 08 15:19	25° © 47'53	2°54'57
min. Earth dist.	12204 Jul 27 13:16	9° Ω 43'17	0.63416 AU	min. Earth dist.	12205 Jul 10 14:07	23° © 25'53	0.65350 AU
morning rise	12204 Jul 31 03:36	6° Ω 22'09		morning rise	12205 Jul 14 08:24	19° © 31'47	
desc. node	12204 Aug 02 23:49	4° Ω 39'01		direct	12205 Jul 20 19:44	16° © 50'29	
direct	12204 Aug 06 19:46	3° Ω 49'26		desc. node	12205 Jul 20 21:08	16° © 50'29	
morning max el	12204 Aug 20 17:59	11° Ω 51′07	27°46'22	morning max el	12205 Aug 03 04:55	24° © 44'10	27°02'16
	12204 Sep 04 03:45	0° m y			12205 Aug 07 23:17	$0 {\circ} \Omega$	
	12204 Sep 21 19:18	0∘ 亚			12205 Aug 28 14:32	0° m y	
morning set	12204 Sep 24 10:39	5° ₽ 11'52		morning set	12205 Sep 07 20:09	18° m ∤27'47	
asc. node	12204 Sep 26 15:46	9° ≙ 41'58		max. Earth dist.	12205 Sep 12 03:39	26° Mp 59′18	1.33688 AU
max. Earth dist.	12204 Sep 29 10:47	15° ≏ 32'51	1.32373 AU	asc. node	12205 Sep 13 12:25	29° Mp 46′30	
					12205 Sep 13 15:03	0∘ ⊽	
superior conj	12204 Oct 02 06:16	21° ≏ 35'26	0°52'10				
minimum elong	12204 Oct 02 04:10	21° ≏ 24'00	0°52'01	superior conj	12205 Sep 16 08:20	5° ≏ 40'01	0°27'04
	12204 Oct 06 02:45	0° M .		minimum elong	12205 Sep 16 06:59	5° ჲ 32'57	0°26'47
evening rise	12204 Oct 09 03:29	6° ™ 34'18		evening rise	12205 Sep 23 14:01	21° ≙ 04'10	
	12204 Oct 21 08:16	0° ∡ ¹			12205 Sep 27 22:05	0° M ₊	
desc. node	12204 Oct 29 20:28	11° ∡ ¹46'38		evening max el	12205 Oct 14 00:39	24°M38'32	21°45'52
evening max el	12204 Nov 01 11:32	14° ∡ ³32'11	23°25'31	desc. node	12205 Oct 16 17:52	27°M02'11	
retrograde	12204 Nov 14 21:03	21° ∡ 12'33			12205 Oct 21 22:05	0° ⊼	
evening set	12204 Nov 19 06:30	20° ∡ ³30'36		retrograde	12205 Oct 26 10:58	0° х 49′18	
min. Earth dist.	12204 Nov 25 21:26	17° ∡ °23′12	0.55330 AU	evening set	12205 Oct 29 10:24	0° х 29′17	
inferior conj	12204 Nov 27 13:53	16° х 24'04			12205 Oct 31 04:39	30°RM	
minimum elong	12204 Nov 27 15:11	16°× 2 '22'11		inferior conj	12205 Nov 07 07:51	26°M33'32	-5°31'11
morning rise	12204 Dec 06 01:35	12° × ² 2'11		minimum elong	12205 Nov 07 00:43	26°M43'31	
direct	12204 Dec 08 22:04	12° × 32 11		min. Earth dist.	12205 Nov 07 03:53		
morning max el	12204 Dec 19 18:28	17° × 22'06	20°27'37	morning rise	12205 Nov 15 16:09	22°M46'01	0.54575710
asc. node	12204 Dec 23 16:21	21°×743'58	20 27 37	direct	12205 Nov 19 07:22	22°M17'12	
asc. node	12204 Dec 29 05:52	0°중		morning max el	12205 Nov 1) 07:22 12205 Dec 01 15:57	28°M10'26	22002107
morning set	12204 Dec 29 03.32 12205 Jan 07 10:43	0 0 17° る 33'29		morning max er	12205 Dec 01 13.37 12205 Dec 03 11:31	0°×7	22 02 07
morning set	12205 Jan 07 10.45	0°≈		aga mada	12205 Dec 03 11.31 12205 Dec 10 13:23	0 x . 9° x 16'40	
	12205 Jan 15 11.19	0 ≈		asc. node	12205 Dec 10 13.25 12205 Dec 21 18:25	9 メ ・10 40	
	12205 Jan 14 23:35	3°≈04'48	1°18'14		12205 Dec 21 18.25 12205 Dec 22 21:01	0 る 2° る 19'13	
superior conj			1°18'42	morning set	12203 Dec 22 21.01	2 01913	
minimum elong	12205 Jan 15 02:11	3°≈17'58			12205 D 20 22-29	170=21440	1021127
max. Earth dist.	12205 Jan 20 09:27	13°≈46'12	1.36302 AU	superior conj	12205 Dec 29 23:28	17°る24'49 17°る33'49	1°31'27 1°32'10
evening rise	12205 Jan 24 05:27	20°≈57'26		minimum elong	12205 Dec 30 01:10		
desc. node	12205 Jan 25 19:34	23°≈50'11		max. Earth dist.	12206 Jan 02 22:36	25° ⋜ 37'36	1.34405 AU
	12205 Jan 29 07:49	0°) €			12206 Jan 05 02:56	0° ≈	
	12205 Feb 18 03:19	0°Υ 12°Ω17122	25050117	evening rise	12206 Jan 07 06:35	4°≈11'58	
evening max el	12205 Feb 28 17:39	12° Y 17'32	25°59'17	desc. node	12206 Jan 12 16:22	14°≈13'22	
retrograde	12205 Mar 13 08:34	19° Ƴ 30'34			12206 Jan 22 03:38	0° ∀	
evening set	12205 Mar 19 11:20	17° Y ′00'57		evening max el	12206 Feb 11 07:11	25°) 59′20	26°54'33
asc. node	12205 Mar 21 13:55	14° Y ′59'35			12206 Feb 16 00:22	0°Υ	
min. Earth dist.	12205 Mar 23 16:39	12° Y 31'46	0.67198 AU	retrograde	12206 Feb 24 13:35	3° Y 23'40	
inferior conj	12205 Mar 25 06:48	10° Y 32'35	1°09'14	evening set	12206 Mar 03 02:26	0° Υ 50'38	
minimum elong	12205 Mar 25 05:12	10° Ƴ 37'35	1°08'35		12206 Mar 04 02:25	30° ₹	
morning rise	12205 Mar 30 23:44	4° Υ 45'08		min. Earth dist.	12206 Mar 07 02:10	26° ¥ 55'18	0.65834 AU
direct	12205 Apr 03 05:55	3° Y 44'42		asc. node	12206 Mar 08 11:19	25° 米 19′52	
morning max el	12205 Apr 09 22:08	7° Y ′20′29	18°45'39	inferior conj	12206 Mar 09 04:25	24° ∺ 30′05	0°13'48
desc. node	12205 Apr 23 21:24	26° Y ′20′06		minimum elong	12206 Mar 09 04:02	24°) 31′12	
	12205 Apr 26 06:23	$0^{\circ}S$		transit middle	12206 Mar 09 04:02	24° ∺ 31'12	0°13'49
morning set	12205 May 01 20:00	8° 8 40'00		transit begin	12206 Mar 09 02:32	24°) ₹35'33	
	12205 May 15 12:08	$\Pi^{\circ}0$		transit end	12206 Mar 09 05:32	24°) €26'52	
max. Earth dist.	12205 May 16 19:38	2° Ⅱ 03'09	1.45621 AU	morning rise	12206 Mar 15 06:59	18° ¥ 54'19	
				direct	12206 Mar 18 03:06	18° ¥ 10′20	
superior conj	12205 May 18 02:56	4° Ⅱ 05'36	-2°09'06	morning max el	12206 Mar 24 12:27	21°) 32′17	18°09'12
minimum elong	12205 May 17 21:56	3° Ⅱ 46′02	2°09'39		12206 Mar 31 05:35	$0^{\circ}\Upsilon$	
evening rise	12205 Jun 02 10:52	28° Ⅲ 24′03		desc. node	12206 Apr 10 18:03	16° Ƴ 32'12	
	12205 Jun 03 10:46	0 \circ \odot		morning set	12206 Apr 12 09:14	19° Y 10'31	
greatest brilliancy	12205 Jun 08 19:26	8° 9 36'12	-0.9m		12206 Apr 19 02:50	0°8	
asc. node	12205 Jun 17 11:38	21° © 54'26					
evening max el	12205 Jun 23 04:00	28° © 55'28	18°35'19	superior conj	12206 Apr 27 10:47	13° 8 10'54	-1°46'11

minimum elong	12206 Apr 27 01:30	12° 8 34'27	1°45'53	minimum elong	12207 Apr 07 00:34	22° Y 27'48	1°08'47
max. Earth dist.	12206 Apr 29 15:28	16° 8 37'11	1.45707 AU	minimum ciong	12207 Apr 11 17:38	0°8	1 00 47
max. Bartii dist.	12206 May 08 05:39	0°Ⅱ	1.15707110	max. Earth dist.	12207 Apr 12 10:32		1.45060 AU
evening rise	12206 May 13 12:57	8° Ⅱ 14'08		evening rise	12207 Apr 23 01:21	17° 8 37'05	1.10000110
greatest brilliancy	12206 May 25 13:50	26° ∏ 44'46	-0.7m		12207 May 01 05:17	0°II	
8	12206 May 27 18:21	0ಂತಾ		evening max el	12207 May 20 16:09	26° Ⅱ 25'06	20°14'37
asc. node	12206 Jun 04 08:43	10°516'51		asc. node	12207 May 22 05:53	27° II 53'56	
evening max el	12206 Jun 06 12:46	12° © 39'07	19°17'14		12207 May 25 04:46	0° ©	
retrograde	12206 Jun 13 13:18	16° © 34'53		retrograde	12207 May 28 11:58	0° © 55'05	
evening set	12206 Jun 17 02:58	15° © 20'43		-	12207 May 31 14:22	30°RⅡ	
inferior conj	12206 Jun 22 13:03	9° 5 30'24	3°11'48	evening set	12207 Jun 01 11:10	29° Ⅱ 24'33	
minimum elong	12206 Jun 22 13:49	9° 5 27'54	3°10'53	inferior conj	12207 Jun 06 18:07	23° Ⅲ 21′18	3°14'07
min. Earth dist.	12206 Jun 23 22:57	7° 9 39'57	0.66902 AU	minimum elong	12207 Jun 06 17:48	23° Ⅲ 22'22	3°13'15
morning rise	12206 Jun 28 00:08	3° 5 07'29		min. Earth dist.	12207 Jun 07 13:47	22° Ⅱ 14'14	0.68008 AU
direct	12206 Jul 04 02:43	0° ട് 27'33		morning rise	12207 Jun 12 00:07	17° Ⅱ 00'58	
desc. node	12206 Jul 07 18:21	1° © 15'19		direct	12207 Jun 17 15:19	14° Ⅲ 31'11	
morning max el	12206 Jul 16 15:50	7° © 58'08	25°53'08	desc. node	12207 Jun 24 15:28	17° Ⅲ 25'52	
	12206 Aug 02 20:49	$0^{\circ}\Omega$		morning max el	12207 Jun 29 01:43	21° Ⅲ 22'36	24°28'46
	12206 Aug 21 01:58	0° m			12207 Jul 06 12:52	0 \circ	
morning set	12206 Aug 21 16:08	1°Mp 04'52			12207 Jul 27 02:30	$0^{\circ}\Omega$	
max. Earth dist.	12206 Aug 25 10:01	8° Mp 06'22	1.35488 AU	morning set	12207 Aug 03 18:07	12° Ω 51'34	
				max. Earth dist.	12207 Aug 07 08:38	19° Ω 15'35	1.37660 AU
superior conj	12206 Aug 31 02:28	19° m 19'09			12207 Aug 13 03:18	0° m)	
minimum elong	12206 Aug 31 02:38	19° m 19'59	0°02'53				
behind sun begin	12206 Aug 30 20:36	18° m 49'25		superior conj	12207 Aug 14 09:26	2° Tp 24'43	
behind sun end	12206 Aug 31 08:41	19° m 50'37		minimum elong	12207 Aug 14 11:51	2° Mp 36'22	0°35'46
asc. node	12206 Aug 31 09:06	19° m 52'44		asc. node	12207 Aug 18 05:47	9° m 56'40	
	12206 Sep 05 07:10	0° ⊽		evening rise	12207 Aug 23 00:07	19° Mp 26'21	
evening rise	12206 Sep 07 21:43	5° Ω 23'41			12207 Aug 28 10:34	0° ত	10014157
	12206 Sep 21 14:20	0°M 50 m 17122	20020111	evening max el	12207 Sep 08 16:08	16° £ 43'50	19°14'57
evening max el	12206 Sep 26 01:20	5°M17'23	20°20'11	retrograde	12207 Sep 17 21:34	21° Ω 20'04	
desc. node	12206 Oct 03 15:16	10°M.12'54 10°M.42'25		evening set desc. node	12207 Sep 19 17:53	21° £ 09'47 20° £ 59'29	
retrograde	12206 Oct 06 23:01 12206 Oct 09 00:34	10 IIL42 23		inferior conj	12207 Sep 20 12:41	20 ≥ 39 29 16° ♀ 59'45	2026100
evening set inferior conj	12206 Oct 09 00.34 12206 Oct 18 01:05	6°M34'53	4014122	minimum elong	12207 Sep 28 07:23 12207 Sep 28 01:01	16 ≥ 3943	
minimum elong	12206 Oct 18 01.03 12206 Oct 17 15:07	6°M49'30		min. Earth dist.	12207 Sep 28 01:01 12207 Sep 30 23:29		0.55889 AU
min. Earth dist.	12206 Oct 17 13:07 12206 Oct 19 11:56	5°M43'40	0.54786 AU	morning rise	12207 Scp 30 25:29 12207 Oct 06 05:29	13 ≅ 13 37 12° £ 23'37	0.55669 AU
morning rise	12206 Oct 26 04:56	2°M31'06	0.54760 AC	direct	12207 Oct 00 03:23	11° ⊆ 18'34	
direct	12206 Oct 30 16:50	1°M47'26		morning max el	12207 Oct 25 14:59	18° ≏ 26'31	25°33'36
morning max el	12206 Nov 13 04:06	8°M22'02	23°49'19	morning max er	12207 Nov 04 06:34	0°M	23 33 30
asc. node	12206 Nov 27 10:19	27°M37'25	23 .5 15	asc. node	12207 Nov 14 07:11	16°M34'15	
	12206 Nov 28 18:31	0° ⊼			12207 Nov 20 23:54	0° ⊼	
morning set	12206 Dec 07 08:47	17° х 05'49		morning set	12207 Nov 21 20:17	1° х 48′38	
Ü	12206 Dec 13 07:23	ರ°0		C			
				superior conj	12207 Nov 28 15:19	16° ∡ ¹44'04	1°38'08
superior conj	12206 Dec 14 05:30	2° る 00'13	1°37'55	minimum elong	12207 Nov 28 14:48	16° ∡ ′41′11	1°38'57
minimum elong	12206 Dec 14 06:05	2° る 03'24	1°38'47	max. Earth dist.	12207 Nov 29 23:37	19° ∡ ⁴42'16	1.31905 AU
max. Earth dist.	12206 Dec 16 19:33	7° る 34'01	1.32920 AU		12207 Dec 04 18:09	ರ°0	
evening rise	12206 Dec 21 19:47	17° る 56'56		evening rise	12207 Dec 05 17:59	2° る 04'33	
	12206 Dec 28 02:42	0° ≈		desc. node	12207 Dec 17 10:12	24° る 09'13	
desc. node	12206 Dec 30 13:15	4° ≈ 21'51			12207 Dec 20 23:37	0°≈	
	12207 Jan 16 11:23	0°) €		evening max el	12208 Jan 07 06:07	22° ≈ 14'44	27°29'50
evening max el	12207 Jan 24 19:57	9° ∺ 22'21	27°26'55	retrograde	12208 Jan 21 03:05	29° ≈ 33'59	
retrograde	12207 Feb 07 12:07	16°) 47′46		evening set	12208 Jan 28 02:04	27° ≈ 15'39	
evening set	12207 Feb 14 08:15	14° ∺ 18′08		min. Earth dist.	12208 Jan 31 19:52	24° ≈ 17'49	0.62147 AU
min. Earth dist.	12207 Feb 18 03:51	10° ¥ 53'57		inferior conj	12208 Feb 03 18:54	21° ≈ 32'01	-2°06'28
inferior conj	12207 Feb 20 17:28	8° ¥ 12′20		minimum elong	12208 Feb 03 23:13	21° ≈ 21'54	2°04'09
minimum elong	12207 Feb 20 19:05	8° ₩ 08'05	0°50'47	asc. node	12208 Feb 10 06:01	16° ≈ 43'13	
asc. node	12207 Feb 23 08:42	5°) (34′20		morning rise	12208 Feb 10 23:02	16° ≈ 27'15	
morning rise	12207 Feb 27 07:57	2°) € 50'36		direct	12208 Feb 13 04:23	16°≈05'06	
direct	12207 Mar 01 19:37	2°) 19′27		morning max el	12208 Feb 19 23:01	19° ≈ 31'38	17°48'00
morning max el	12207 Mar 08 05:45	5°) (38'40	17°49'46		12208 Feb 27 16:34	0°) {	
	12207 Mar 24 11:46	0°Υ 1° Ω °°214°		morning set	12208 Mar 06 18:44	13°) ₹59'51	
morning set	12207 Mar 25 02:35	1° Υ 02'40		desc. node	12208 Mar 14 11:13	27°) € 30'15	
desc. node	12207 Mar 28 14:38	6° Ƴ 56'56			12208 Mar 15 22:04	0° Ƴ	
superior conj	12207 Apr 07 07:49	22° Y '57'04	-1°09'28	superior conj	12208 Mar 18 04:04	3° Y '49'25	-0°28'17

minimum elong	12208 Mar 18 01:20	3° Ƴ 37'54	0°27'50	superior conj	12209 Feb 28 00:20	15° ¥ 48'49	0°10'16
max. Earth dist.	12208 Mar 25 03:05	15°Υ18'54	1.43752 AU	minimum elong	12209 Feb 28 01:10	15° X 52'31	0°10'26
evening rise	12208 Apr 01 15:43	27° Υ 13'40	1.43/32/10	behind sun begin	12209 Feb 27 19:15	15° X 26'10	0 1020
evening rise	12208 Apr 03 10:47	0°8		behind sun end	12209 Feb 28 07:06	16° X 18'50	
	12208 Apr 24 01:43	0°II		desc. node	12209 Mar 01 07:47	18° ₩ 07'59	
evening max el	12208 May 02 13:52	10° Ⅱ 11'58	21°24'35	max. Earth dist.	12209 Mar 07 15:22	28° H 58'29	1.41913 AU
asc. node	12208 May 08 03:06	14° Ⅱ 31'41	21 2433	max. Earth dist.	12209 Mar 08 06:07	0°Υ	1.41713710
retrograde	12208 May 11 10:26	15° Д 23'13		evening rise	12209 Mar 12 21:07	7° Υ 33'41	
evening set	12208 May 15 20:00	13° I I36'31		evening rise	12209 Mar 12 21:07 12209 Mar 27 14:22	0°8	
inferior conj	12208 May 21 02:20	7° I I22'00	3°04'55	evening max el	12209 Apr 15 06:51	23° 8 59'50	22042148
minimum elong	12208 May 21 02:20 12208 May 21 01:07	7° П 22'00	3°04'00	retrograde	12209 Apr 15 00:31 12209 Apr 25 07:08	29° 8 54'27	22 42 46
min. Earth dist.	12208 May 21 01:07	7° Ⅱ 2010	0.68643 AU	asc. node	12209 Apr 25 00:22	29° 8 54'04	
morning rise	12208 May 26 06:01	1° П 06'30	0.06043 AU	evening set	12209 Apr 23 00:22 12209 Apr 30 03:52	29 8 52'36	
morning rise	•	1 дос 30 30°R 8		•		21° 8 29'06	2045121
J:4	12208 May 27 17:11	. –		inferior conj	12209 May 05 11:44	21° 8 35'37	
direct	12208 May 31 08:26	28° ႘ 53'20		minimum elong	12209 May 05 09:52	_	
	12208 Jun 04 07:53	0°П 4°П 5 4120	22050102	min. Earth dist.	12209 May 05 05:06	21° 8 52'11	0.68805 AU
morning max el	12208 Jun 10 12:09	4° ∏ 54'38	22°59'03	morning rise	12209 May 10 15:45	15° 8 19'48	
desc. node	12208 Jun 10 12:29	4° ∏ 55'27		direct	12209 May 15 04:57	13° 8 26'55	
	12208 Jun 29 19:02	0°95		morning max el	12209 May 24 02:20	18° 8 36'21	21°32'46
morning set	12208 Jul 14 21:15	23°935'44		desc. node	12209 May 28 09:23	23° 8 22'53	
	12208 Jul 18 16:38	0 ° Ω			12209 Jun 02 13:04	Π °0	
max. Earth dist.	12208 Jul 19 06:32	0° Ω 59'28	1.39989 AU		12209 Jun 22 22:00	0 \circ \odot	
				morning set	12209 Jun 24 22:44	3° © 11'52	
superior conj	12208 Jul 27 01:15	14° Ω 47'07		max. Earth dist.	12209 Jul 01 09:16	13° © 35'46	1.42187 AU
minimum elong	12208 Jul 27 06:15	15° Ω 10′04	1°09'56				
asc. node	12208 Aug 04 02:30	29° Ω 54'29		superior conj	12209 Jul 08 21:23	26° © 16'15	-1°41'43
	12208 Aug 04 03:39	0° т у		minimum elong	12209 Jul 09 04:12	26° © 45'45	1°41'48
evening rise	12208 Aug 05 18:12	3°₩04'15			12209 Jul 11 00:43	$0 {\circ} \Omega$	
evening max el	12208 Aug 21 18:31	28° m 54'57	18°31'12	evening rise	12209 Jul 20 00:07	16° Ω 07'47	
	12208 Aug 22 22:40	0∘ ರಾ		asc. node	12209 Jul 21 23:16	19° Ω 42'22	
retrograde	12208 Aug 29 14:46	2° ჲ 51'50			12209 Jul 27 19:05	0° m ∕	
evening set	12208 Aug 31 15:09	2° ჲ 36'59		evening max el	12209 Aug 05 04:31	11° m 42'23	18°08'02
	12208 Sep 05 21:44	30°R Mp		retrograde	12209 Aug 12 02:36	15° m 14'00	
desc. node	12208 Sep 06 10:08	29° m 38'00		evening set	12209 Aug 14 10:14	14° m 50'39	
inferior conj	12208 Sep 08 10:27	28° Mp 06'47	-0°37'47	inferior conj	12209 Aug 21 11:01	9° m 59'51	0°51'21
minimum elong	12208 Sep 08 08:58	28° m 09'40	0°37'19	minimum elong	12209 Aug 21 12:36	9° mp 56'15	0°50'23
min. Earth dist.	12208 Sep 11 16:34	25° m 35'54	0.57694 AU	desc. node	12209 Aug 24 07:34	7° mp 24'42	
morning rise	12208 Sep 15 23:19	22° m 53'08		min. Earth dist.	12209 Aug 24 17:39	7° m 02'47	0.59889 AU
direct	12208 Sep 21 23:46	21° m) 21'28		morning rise	12209 Aug 28 11:48	4° m) 14'16	
morning max el	12208 Oct 06 07:19	28° m 54'47	26°57'03	direct	12209 Sep 03 23:25	2° m) 14'31	
	12208 Oct 07 09:30	0∘ <u>⊽</u>		morning max el	12209 Sep 18 07:21	10° m) 06'21	27°46'27
	12208 Oct 28 01:09	0°M			12209 Oct 03 17:13	0∘ <u>⊽</u>	
asc. node	12208 Oct 31 03:57	5°M56'57		asc. node	12209 Oct 18 00:42	25° ≏ 38'27	
morning set	12208 Nov 05 05:46	16°M22'03		morning set	12209 Oct 20 11:31	0°M41'36	
morning sec	12208 Nov 11 10:52	0° √		morning sec	12209 Oct 20 03:34	0° M	
	122001107 11 10.32	0 <i>X</i>		max. Earth dist.	12209 Oct 26 16:32	14°M09'36	1.31358 AU
superior conj	12208 Nov 12 02:50	1° х 29′06	1°32'28	max. Earth dist.	1220) Oct 20 10.32	14 11007 50	1.51550710
minimum elong	12208 Nov 12 01:23	1°×2'00	1°33'05	superior conj	12209 Oct 27 14:15	16°M10'16	1°21'08
max. Earth dist.	12208 Nov 12 07:51	1° × 757'06	1.31380 AU	minimum elong	12209 Oct 27 12:11	15°M58'45	1°21'27
evening rise	12208 Nov 18 22:31	16° ₹ 26'46	1.51500 AC	minimum clong	12209 Nov 02 20:28	0° ⊼ ¹	1 212/
evening rise	12208 Nov 18 22:31 12208 Nov 25 15:47	0°る		evening rise	12209 Nov 03 07:13	0° ∡ ¹57'58	
desc. node	12208 Nov 23 13.47 12208 Dec 03 07:15	13° පි 25'56		evening rise	12209 Nov 18 20:36	0×3/38	
desc. node		0°≈		desc. node		0 3 2° る 00'10	
	12208 Dec 15 06:24		26959155		12209 Nov 20 04:24	2 300 10 15° る 37'21	25054117
evening max el	12208 Dec 19 10:44	4°≈22'23	26°58'55	evening max el	12209 Dec 01 07:21		25°54'17
retrograde	12209 Jan 02 09:07	11°≈32'59		retrograde	12209 Dec 15 05:07	22° る 39'34	
evening set	12209 Jan 09 04:17	9°≈34'15	0.60015.411	evening set	12209 Dec 21 10:43	21° ろ 08'21	0.57012.411
min. Earth dist.	12209 Jan 13 01:03	6°≈54'16		min. Earth dist.	12209 Dec 25 20:02	18° る 32'09	0.57912 AU
inferior conj	12209 Jan 16 05:12	4°≈18'52		inferior conj	12209 Dec 28 20:52	16° る 23'12	
minimum elong	12209 Jan 16 12:21	4°≈04'13	5~25'01	minimum elong	12209 Dec 29 05:20	16° ろ 08'10	4°39'19
	12209 Jan 22 16:45	30°₹₹		morning rise	12210 Jan 06 02:37	12°る01'16	
morning rise	12209 Jan 23 23:17	29°₹34'24		direct	12210 Jan 08 06:02	11°る46'38	
direct	12209 Jan 26 01:22	29° る 17'44		asc. node	12210 Jan 14 00:31	13° る 40'12	
asc. node	12209 Jan 27 03:18	29° る 22'21		morning max el	12210 Jan 16 19:17	15° ප් 56'45	18°42'42
	12209 Jan 29 07:17	0° ≈			12210 Jan 26 15:44	0° ≈	
morning max el	12209 Feb 02 12:47	3° ≈ 01'04	18°05'05	morning set	12210 Feb 01 23:30	11° ≈ 55'18	
morning set	12209 Feb 18 03:23	27° ≈ 42'23					
	12209 Feb 19 08:56	0° ∀		superior conj	12210 Feb 10 16:49	28° ≈ 44'09	0°42'33

asc. node

morning set

12210 Dec 31 21:41

12211 Jan 01 09:39

12211 Jan 17 03:20

12211 Jan 18 21:14

29°×726'59

26°る27'48

0°궁

0°≈

asc. node

morning set

12211 Dec 18 18:46

12211 Dec 26 22:07

12212 Jan 01 11:57

16°**₹**25'51

11°る10'38

0°궁

superior conj	12212 Jan 08 19:46	26° る 29'21	1°24'40	morning set	12212 Dec 15 23:08	25° х 57′46	
minimum elong	12212 Jan 08 22:03	26° る 41'03	1°25'16		12212 Dec 17 20:30	0°ರ	
	12212 Jan 10 12:54	0° ≈					
max. Earth dist.	12212 Jan 13 14:40	6° ≈ 09'04	1.35456 AU	superior conj	12212 Dec 22 22:36	10° る 56'53	1°34'58
evening rise	12212 Jan 17 15:13	13° ≈ 52'27		minimum elong	12212 Dec 22 23:50	11° る 03'32	1°35'46
desc. node	12212 Jan 20 21:50	19°≈52'25		max. Earth dist.	12212 Dec 26 07:23	18° る 02'50	1.33729 AU
desc. Hode	12212 Jan 26 18:53	0° \			12212 Dec 20 07:25 12212 Dec 30 21:55	18 3 0230 27° る 21'10	1.33729 AU
				evening rise			
	12212 Feb 16 21:01	0°Υ			12213 Jan 01 06:38	0° ≈	
evening max el	12212 Feb 22 00:10	5° Y ′29'43	26°25'11	desc. node	12213 Jan 06 18:40	10° ≈ 10′10	
retrograde	12212 Mar 05 22:31	12° Y ′48′37			12213 Jan 19 01:45	0° ∀	
evening set	12212 Mar 12 05:41	10° Ƴ 17'12		evening max el	12213 Feb 03 13:43	19° ∺ 05′21	27°11'25
asc. node	12212 Mar 15 16:28	6° Ƴ 49'42		retrograde	12213 Feb 17 00:36	26° ∺ 30′10	
min. Earth dist.	12212 Mar 16 08:36	6° Ƴ 02′20	0.66665 AU	evening set	12213 Feb 23 17:04	23°) 57′53	
inferior conj	12212 Mar 18 03:49	3° Y 51'20	0°47'01	min. Earth dist.	12213 Feb 27 14:58	20° ¥ 16'12	0.65156 AU
minimum elong	12212 Mar 18 02:39	3° Y ′54'54	0°46'36	inferior conj	12213 Mar 01 22:07	17° ¥ 42'58	-0°12'48
	12212 Mar 21 14:38	30°R) €		minimum elong	12213 Mar 01 22:29	17°) (41'58	
morning rise	12212 Mar 24 00:32	28° ₩ 08'15		transit middle	12213 Mar 01 22:29	17°) 41'58	0°12'23
C		27° H 15'07				17°) 47'18	0 12 23
direct	12212 Mar 27 02:17			transit begin	12213 Mar 01 20:34		
	12212 Apr 01 19:53	0°Υ		transit end	12213 Mar 02 00:24	17°) (36′38	
morning max el	12212 Apr 02 14:34	0° Y 43'37	18°28'00	asc. node	12213 Mar 02 13:51	16° ¥ 59'25	
desc. node	12212 Apr 17 23:37	22° Y 14'05		morning rise	12213 Mar 08 05:29	12° 米 12'44	
	12212 Apr 22 21:43	9° 8		direct	12213 Mar 10 21:55	11°) 34′30	
morning set	12212 Apr 23 02:18	0° 8 18'08		morning max el	12213 Mar 17 06:27	14° ¥ 53'37	17°58'46
					12213 Mar 28 04:28	$0^{\circ}\mathbf{\Upsilon}$	
superior conj	12212 May 08 23:47	25° 8 15'56	-2°01'35	morning set	12213 Apr 04 03:53	11° Y ′24'45	
minimum elong	12212 May 08 16:10	24° 8 46'10		desc. node	12213 Apr 04 20:13	12° Y '31'57	
max. Earth dist.	12212 May 09 04:18	_	1.45755 AU	door. node	12213 Apr 15 14:34	0°8	
max. Lartii dist.	12212 May 12 00:30	0°Ⅱ	1.43733 AU		12213 Apr 13 14.34	٥ ن	
	•				12212 A 10 11.14	40 422157	1021142
evening rise	12212 May 24 18:27	20° Ⅱ 00'52		superior conj	12213 Apr 18 11:14	4° 8 32'56	
	12212 May 31 02:19	0°€		minimum elong	12213 Apr 18 02:12	3° 8 57'06	
greatest brilliancy	12212 Jun 02 22:06	4° © 25'05	-0.8m	max. Earth dist.	12213 Apr 22 00:40	10° 8 09'30	1.45526 AU
asc. node	12212 Jun 11 14:05	17° © 08'44		evening rise	12213 May 04 13:02	29° 8 34'46	
evening max el	12212 Jun 15 19:19	22° © 06'19	18°51'14		12213 May 04 19:36	Π \circ 0	
retrograde	12212 Jun 22 11:44	25° © 46'38		greatest brilliancy	12213 May 18 09:17	20° Ⅲ 34′10	-0.7m
evening set	12212 Jun 25 20:23	24°5541'34			12213 May 25 02:27	0°9	
inferior conj	12212 Jul 01 09:37	18° © 59'30	3°04'32	asc. node	12213 May 29 11:10	5°912'58	
minimum elong	12212 Jul 01 11:00	18° © 55'08	3°03'31	evening max el	12213 May 30 01:53	5° © 50'52	19°39'55
min. Earth dist.	12212 Jul 03 03:57	16°9546'46	0.66065 AU	retrograde	12213 Jun 06 09:39	9° 9 59'51	-, -, -,
	12212 Jul 07 00:53	12°937'03	0.00003 710		12213 Jun 10 03:22	8°538'29	
morning rise				evening set			2014!10
direct	12212 Jul 13 09:03	9°955'06		inferior conj	12213 Jun 15 11:46	2°542'20	
desc. node	12212 Jul 14 23:35	10°9504'18		minimum elong	12213 Jun 15 12:04	2°5641'20	
morning max el	12212 Jul 26 10:13	17° © 40'13	26°35'24	min. Earth dist.	12213 Jun 16 15:25		0.67428 AU
	12212 Aug 05 17:56	0 \circ Ω			12213 Jun 17 13:00	30°Ŗ Ⅱ	
	12212 Aug 25 02:37	0° m y		morning rise	12213 Jun 20 20:22	26° Ⅲ 20'19	
morning set	12212 Aug 31 07:20	11° Mp 16'22		direct	12213 Jun 26 18:18	23° Ⅱ 44′05	
max. Earth dist.	12212 Sep 04 08:08	19° m 04'38	1.34396 AU	desc. node	12213 Jul 01 20:46	25° Ⅱ 17'07	
asc. node	12212 Sep 07 14:43	25° m 40'27			12213 Jul 07 20:47	0°©	
	i	•		morning max el	12213 Jul 08 20:41	0° © 59'12	25°18'37
superior conj	12212 Sep 09 04:12	28° m 53'31	0°15'00	0	12213 Jul 30 17:26	0°Ω	
minimum elong	12212 Sep 09 03:24	28° m/49'23	0°14'44	morning set	12213 Aug 13 20:09	23° Ω 32'38	
	1		0 1444	morning set	•		
behind sun begin	12212 Sep 09 01:03	28° Mp 37'09		F d v .	12213 Aug 17 08:44	0° M)	1 2/277 433
behind sun end	12212 Sep 09 05:46	29° m 01'38		max. Earth dist.	12213 Aug 17 10:58	0° ll) 10'25	1.36377 AU
	12212 Sep 09 17:00	0∘ ⊽					
evening rise	12212 Sep 16 14:57	14° ≏ 32'34		superior conj	12213 Aug 23 17:58	12° Mp 18'43	-0°16'22
	12212 Sep 24 10:30	0° M ₊		minimum elong	12213 Aug 23 19:00	12° m 23'54	0°16'31
evening max el	12212 Oct 06 00:08	16°M26'56	21°07'13	asc. node	12213 Aug 25 11:22	15° m 45'39	
desc. node	12212 Oct 10 20:23	20°M16'51		evening rise	12213 Aug 31 20:41	28° m 45'27	
retrograde	12212 Oct 17 19:41	22°M19'06		-	12213 Sep 01 11:23	0∘ ⊽	
evening set	12212 Oct 20 07:59	22°M04'17		evening max el	12213 Sep 18 06:43	27° ≏ 24'12	19°49'46
inferior conj	12212 Oct 20 07:35 12212 Oct 29 08:35	18°M09'55	-5°04'34	2. J	12213 Sep 18 00:43 12213 Sep 21 07:59	0°M	., ., 10
		18°M23'04		desc nodo	•		
minimum elong	12212 Oct 28 23:16			desc. node	12213 Sep 27 17:49	2°M27'03	
min. Earth dist.	12212 Oct 29 21:37		0.54561 AU	retrograde	12213 Sep 28 10:59	2°M28'29	
morning rise	12212 Nov 06 15:03	14° ™ 18′20		evening set	12213 Sep 30 08:40	2°M18'38	
direct	12212 Nov 10 15:21	13° M 43'47			12213 Oct 06 08:21	30°Ŗ <u>Ω</u>	
morning max el	12212 Nov 23 12:17	19° M 54'45	22°46'50	inferior conj	12213 Oct 09 05:50	28° ≏ 17'02	-3°30'14
	12212 Dec 01 20:30	0° ∡ ¹		minimum elong	12213 Oct 08 20:54	28° ≏ 30'46	3°26'51
asc. node	12212 Dec 04 15:46	4° ∡ ¹20'55		min. Earth dist.	12213 Oct 11 06:33	27° ≏ 02'11	0.55150 AU

morning rise	12213 Oct 17 07:36	24° ♀ 01'07		morning rise	12214 Sep 27 15:02	4° ≙ 05'33	
direct	12213 Oct 22 04:02	23° ഫ 09'29		direct	12214 Oct 03 06:17	2° ♀ 49'40	
	12213 Nov 04 23:25	0°M		morning max el	12214 Oct 17 11:42	10° ≙ 10′08	26°12'40
morning max el	12213 Nov 04 22:53	29° ≏ 58'46	24°35'13	J	12214 Nov 01 14:18	0° M	
asc. node	12213 Nov 21 12:40	22°M57'53		asc. node	12214 Nov 08 09:30	12°M06'06	
	12213 Nov 25 06:12	0° ∡ ⊓		morning set	12214 Nov 14 21:50	25°M22'09	
morning set	12213 Nov 30 10:59	10° ∡ ¹43'15			12214 Nov 17 01:07	0° ∡ ¹	
superior conj	12213 Dec 07 06:30	25° ∡ ³36′21	1°38'45	superior conj	12214 Nov 21 17:16	10° ∡ ′21′02	
minimum elong	12213 Dec 07 06:36	25° ∡ ³36'55	1°39'37	minimum elong	12214 Nov 21 16:19	10° ∡ 15'47	
	12213 Dec 09 06:54	0°ಕ		max. Earth dist.	12214 Nov 22 13:47	12° ∡ 14'54 −	1.31613 AU
max. Earth dist.	12213 Dec 09 07:45	0° る 04'35	1.32430 AU	evening rise	12214 Nov 28 16:24	25° ₹ 29'58	
evening rise	12213 Dec 14 15:16	11°る16'06			12214 Nov 30 20:40	0°る	
desc. node	12213 Dec 24 15:35	0°≈10'27		desc. node	12214 Dec 11 12:35	19°る45'38	
	12213 Dec 24 13:11	0° ≈			12214 Dec 18 02:34	0°≈ 1.40××50!05	27920157
avanina may al	12214 Jan 14 19:10	0°) (27921156	evening max el	12214 Dec 30 09:27	14°≈50'05	27°20'56
evening max el	12214 Jan 17 01:32 12214 Jan 30 19:55	2° 升 16'19 9° 升 39'37	2/-3130	retrograde	12215 Jan 13 07:35 12215 Jan 20 05:53	22°≈06'47 19°≈55'29	
retrograde evening set	12214 Jan 30 19.33 12214 Feb 06 18:10	9 ★3937 7°¥13'27		evening set min. Earth dist.	12215 Jan 20 03.33	19 ≈33 29 17°≈06'43	0.61244 AU
min. Earth dist.	12214 Feb 00 18:10		0.63317 AU	inferior conj	12215 Jan 27 02:03	17 ≈0043 14°≈23'02	
inferior conj	12214 Feb 13 06:37	1° ¥ 16′26		minimum elong	12215 Jan 27 07:37	14°≈10'41	
minimum elong	12214 Feb 13 00:37	1° ∺ 09'41		morning rise	12215 Feb 03 12:15	9°≈26'52	2 37 10
minimum ciong	12214 Feb 14 13:37	30°R≈	1 20 30	asc. node	12215 Feb 04 08:32	9° ≈ 14'44	
asc. node	12214 Feb 17 11:12	27°≈30'33		direct	12215 Feb 05 15:39	9°≈07'36	
morning rise	12214 Feb 20 02:48	26° ≈ 01'48		morning max el	12215 Feb 12 16:31	12° ≈ 40'13	17°52'54
direct	12214 Feb 22 11:32	25° ≈ 34'54		5 5	12215 Feb 24 09:06	0° ∀	
morning max el	12214 Mar 01 00:12	28° ≈ 55'41	17°46'49	morning set	12215 Feb 28 07:38	7°) €05'25	
S	12214 Mar 02 00:56	0° ∀		desc. node	12215 Mar 09 13:23	23°) € 36′24	
morning set	12214 Mar 17 07:44	23°) 47′00					
	12214 Mar 20 22:25	$0^{\circ}\Upsilon$		superior conj	12215 Mar 11 00:27	26° ¥ 08'27	-0°11'21
desc. node	12214 Mar 22 16:48	3° Y '00'53		minimum elong	12215 Mar 10 23:27	26°) €04'07	0°11'02
				behind sun begin	12215 Mar 10 17:21	25°) 37'45	
superior conj	12214 Mar 29 17:37	14° Ƴ 46'22	-0°52'02	behind sun end	12215 Mar 11 05:33	26°) ⊀30′25	
minimum elong	12214 Mar 29 12:16	14° Y ′24'20	0°51'24		12215 Mar 13 06:35	0° Y	
max. Earth dist.	12214 Apr 04 19:07	24° Ƴ 34'22	1.44576 AU	max. Earth dist.	12215 Mar 18 09:28	8° Ƴ 32'10	1.43019 AU
	12214 Apr 08 05:30	0° 8		evening rise	12215 Mar 24 19:54	18° Y ′51′04	
evening rise	12214 Apr 14 00:22	8° 8 58'53			12215 Apr 01 01:50	0°B	
	12214 Apr 28 01:09	0°Щ			12215 Apr 22 19:09	Π °0	
evening max el	12214 May 13 02:42	19° Ⅱ 37'00	20°43'01	evening max el	12215 Apr 25 22:09	3° Ⅱ 23'42	21°57'09
asc. node	12214 May 16 08:20	22° II 26'50		asc. node	12215 May 03 05:35	8° ∏ 34'23	
retrograde	12214 May 21 08:36	24° Ⅲ 24'22 22° Ⅲ 46'47		retrograde	12215 May 05 06:35	8° П 54'04 7° П 00'57	
evening set inferior conj	12214 May 25 12:05 12214 May 30 18:28	16° Д 38'13	3°11'33	evening set inferior conj	12215 May 09 20:43 12215 May 15 03:27	0° П 42'08	2°57'50
minimum elong	12214 May 30 17:44	16° Ⅱ 40'44	3°10'40	minimum elong	12215 May 15 03:27 12215 May 15 01:55	0° П 42'08 0° П 47'31	2°56'53
min. Earth dist.	12214 May 31 08:14	15° Ⅱ 50'41	0.68331 AU	min. Earth dist.	12215 May 15 04:09	0° Д 39'42	0.68766 AU
morning rise	12214 Jun 04 23:08	10° Ⅱ 19'37	0.00331710	iiiii. Lattii dist.	12215 May 15 04:09	30°R ∀	0.00700710
direct	12214 Jun 10 08:51	7° I I56'30		morning rise	12215 May 20 06:55	24° 8 28'51	
desc. node	12214 Jun 18 17:48	12° Ⅱ 04'22		direct	12215 May 25 03:40	22° 8 23'57	
morning max el	12214 Jun 21 06:45	14° Ⅱ 27'57	23°50'44	morning max el	12215 Jun 03 18:20	28° 8 03'28	22°21'21
	12214 Jul 03 22:26	0ಂತಾ		desc. node	12215 Jun 05 14:46	0° Ⅱ 00'29	
	12214 Jul 23 15:03	$0^{\circ}\Omega$			12215 Jun 05 14:36	$\Pi^{\circ}0$	
morning set	12214 Jul 26 12:59	4° Ω 54'11			12215 Jun 27 13:42	0 \circ	
max. Earth dist.	12214 Jul 30 08:28	11° Ω 31′04	1.38647 AU	morning set	12215 Jul 07 05:14	15° © 09'05	
				max. Earth dist.	12215 Jul 12 07:17	23° © 33'21	1.40955 AU
superior conj	12214 Aug 06 18:57	25° Ω 06'34			12215 Jul 16 01:50	0 \circ Ω	
minimum elong	12214 Aug 06 22:28	25° Ω 23'11	0°50'17			_	
	12214 Aug 09 08:30	0° m		superior conj	12215 Jul 20 02:54	7° Ω 07'02	
asc. node	12214 Aug 12 08:03	5° Mp 47'13		minimum elong	12215 Jul 20 08:53	7° Ω 33'47	1°24'02
evening rise	12214 Aug 15 19:59	12° Tp 38'27		evening rise	12215 Jul 30 09:23	26° Ω 02'25	
	12214 Aug 25 05:59	0∘ ʊ	10052142	asc. node	12215 Jul 30 04:49	25° Ω 41'01	
evening max el	12214 Sep 01 02:48	9° <u>Ω</u> 09'42	18°53'43	avanina ma1	12215 Aug 01 12:14	0°M) 21°M⊳27'21	10010150
retrograde evening set	12214 Sep 09 17:10 12214 Sep 11 14:19	13° £ 27'59 13° £ 16'25		evening max el retrograde	12215 Aug 15 08:59 12215 Aug 22 18:23	21° m/37'31 25° m/21'36	18°18'58
desc. node	12214 Sep 11 14.19 12214 Sep 14 15:14	13 ≗ 16 23		evening set	12215 Aug 22 18.23 12215 Aug 24 21:40	25° m) 03'36	
inferior conj	12214 Sep 14 13.14 12214 Sep 19 20:29	8° £ 58'14	-1°38'33	inferior conj	12215 Aug 24 21.40 12215 Sep 01 08:55	20° m) 24'53	0°02'52
minimum elong	12214 Sep 19 16:18	9° ₽ 05'39		minimum elong	12215 Sep 01 08:55	20° m) 24'41	0°02'36
min. Earth dist.	12214 Sep 22 20:25		0.56584 AU	transit middle	12215 Sep 01 09:00 12215 Sep 01 09:00	20° m) 24'41	0°02'36
	~-r == 20.20	. — • •=				, =	

evening set

12216 Aug 06 24:00

7° m 33'52

12217 Jul 12 11:11

evening max el

17° **Ω**58'46 18°08'16

	10017 1 10 00 00	210 01011			10010 1 1 05 15 05	40.00=120	
retrograde	12217 Jul 18 20:00	21° Ω 19'14		evening set	12218 Jul 05 15:05	4° Ω 07'39	
evening set	12217 Jul 21 15:18	20° Ω 38'11			12218 Jul 10 03:31	30° ₹ 5	
inferior conj	12217 Jul 27 18:56	15° Ω 20′50	2°17'21	inferior conj	12218 Jul 11 08:33	28° © 34'07	2°52'17
minimum elong	12217 Jul 27 21:31	15° Ω 13'46	2°16'01	minimum elong	12218 Jul 11 10:30	28° © 28'13	2°51'08
min. Earth dist.	12217 Jul 30 11:49	12° Ω 25′05	0.63099 AU	min. Earth dist.	12218 Jul 13 11:24	26° © 01'44	0.65086 AU
morning rise	12217 Aug 03 01:54	9° Ω 08'02		morning rise	12218 Jul 17 04:50	22° © 13'01	
desc. node	12217 Aug 05 07:27	7° Ω 43'41		desc. node	12218 Jul 23 04:47	19° © 33'09	
direct	12217 Aug 09 18:14	6° Ω 37'33		direct	12218 Jul 23 17:12	19° 5 32'12	
morning max el	12217 Aug 23 18:02	14° Ω 39'34	27°50'16	morning max el	12218 Aug 06 04:49	27° © 28'24	27°10'34
Č	12217 Sep 05 05:06	0° m		C	12218 Aug 08 14:03	$0^{\circ}\Omega$	
	12217 Sep 23 06:02	0∘ ⊽			12218 Aug 29 22:01	0° mp	
morning set	12217 Sep 23 06:02 12217 Sep 27 06:12	∘ — 7° ჲ 51'18		morning set	12218 Sep 10 17:24	21° Mp 12'03	
asc. node	12217 Sep 27 00:12 12217 Sep 28 23:41	7 = 31 18 11° £ 22'41		max. Earth dist.	12218 Sep 16 17.24 12218 Sep 15 03:14	21 m/1203 29° m/58'49	1.33457 AU
	•		1 22222 ATT	max. Latin dist.	•	-•	1.33437 AU
max. Earth dist.	12217 Oct 02 09:02	18° ≏ 29'51	1.32222 AU	,	12218 Sep 15 03:27	0° ⊽	
	10017 0 + 04 00 46	2.40.0.00120	0055122	asc. node	12218 Sep 15 20:20	1° ≏ 26'31	
superior conj	12217 Oct 04 23:46	24° £ 08'28	0°55'32				
minimum elong	12217 Oct 04 21:36	23° ≏ 56'41	0°55'26	superior conj	12218 Sep 19 02:46	8° ≏ 16′05	0°31'10
	12217 Oct 07 16:02	0° M		minimum elong	12218 Sep 19 01:15	8° ഫ 08'07	0°30'55
evening rise	12217 Oct 11 20:08	9° ™ 04'56		evening rise	12218 Sep 26 06:53	23° ≏ 35'30	
	12217 Oct 22 12:19	0° ∡ ¹			12218 Sep 29 08:41	0° M	
desc. node	12217 Nov 01 04:09	14° ₰ 00'56		evening max el	12218 Oct 17 03:07	27° M 47'19	22°00'08
evening max el	12217 Nov 04 15:02	17° ∡ ¹42'54	23°40'42	desc. node	12218 Oct 19 01:28	29°M32'47	
retrograde	12217 Nov 18 02:50	24° х 26′36			12218 Oct 19 14:47	0° ⊼ ¹	
evening set	12217 Nov 22 17:26	23° ∡ 740′20		retrograde	12218 Oct 29 18:06	4° х 03′41	
min. Earth dist.	12217 Nov 29 01:20	20° х 37′48	0.55510 AU	evening set	12218 Nov 01 22:00	3° ₹ '41'21	
inferior conj	12217 Nov 30 22:25	19° х 30′59		evening set	12218 Nov 10 06:54	30°RM	
	12217 Nov 30 22:23 12217 Dec 01 00:58	19° × 30'39		inforior comi	12218 Nov 10 00:34 12218 Nov 10 17:46	29°M44'45	5020110
minimum elong			3 46 33	inferior conj			
morning rise	12217 Dec 09 10:20	15° 🗷 37'10		minimum elong	12218 Nov 10 11:43		5°36'50
direct	12217 Dec 12 04:19	15° ∡ 18′28		min. Earth dist.	12218 Nov 10 08:01	29°M58'25	0.54642 AU
morning max el	12217 Dec 22 19:11	20° ∡ ¹21'47	20°15'18	morning rise	12218 Nov 19 02:40	25°M57'37	
asc. node	12217 Dec 26 00:09	23° ₹ 51'53		direct	12218 Nov 22 14:49	25°M30'30	
	12217 Dec 30 09:12	0°₹			12218 Dec 03 07:40	0° ⊼	
morning set	12218 Jan 10 03:44	20° る 02'31		morning max el	12218 Dec 04 18:36	1° ҂ 17'39	21°46'56
	12218 Jan 14 23:55	0° ≈		asc. node	12218 Dec 12 21:11	11° ⊀ 16′20	
					12218 Dec 23 06:08	0°る	
superior conj	12218 Jan 17 18:37	5°≈39'11	1°15'35	morning set	12218 Dec 25 13:39	4° ♂ 47'45	
minimum elong	12218 Jan 17 21:19	5°≈52'43	1°16'01	C			
max. Earth dist.	12218 Jan 23 09:31	16° ≈ 40'13	1.36608 AU	superior conj	12219 Jan 01 17:20	19° ප 56'22	1°29'51
evening rise	12218 Jan 27 04:23	23°≈42'37	1.50000110	minimum elong	12219 Jan 01 19:12	20° ප 06'09	1°30'34
desc. node	12218 Jan 28 03:23	25°≈26'25		max. Earth dist.	12219 Jan 05 21:32		1.34662 AU
desc. node		23 ≈ 2023		max. Lattii uist.	12219 Jan 06 15:05	28 ⊘ 31 30 0° ≈	1.34002 AU
	12218 Jan 30 17:18						
	12218 Feb 19 03:37	0°Υ		evening rise	12219 Jan 10 03:27	6°≈52'17	
evening max el	12218 Mar 03 17:02	14° Y 54'41	25°49'35	desc. node	12219 Jan 15 00:08	15°≈51'20	
retrograde	12218 Mar 16 05:17	22° Y 05'32			12219 Jan 23 09:42	0° ∀	
evening set	12218 Mar 22 06:23	19° Ƴ 36'46		evening max el	12219 Feb 14 06:35	28° ∺ 38'24	26°47'37
asc. node	12218 Mar 23 21:38	18° Ƴ 04'33			12219 Feb 15 17:31	0 ° Υ	
min. Earth dist.	12218 Mar 26 12:32	15° Ƴ 02'28	0.67364 AU	retrograde	12219 Feb 27 11:12	6° Ƴ 01'59	
inferior conj	12218 Mar 28 00:55	13° Ƴ 07'40	1°16'48	evening set	12219 Mar 05 22:37	3° Y 29'11	
minimum elong	12218 Mar 27 23:12	13° Ƴ 13′06	1°16'04		12219 Mar 09 12:08	30°₽ ₩	
morning rise	12218 Apr 02 16:38	7° Ƴ 18'42		min. Earth dist.	12219 Mar 09 23:08	29°) 28'46	0.66059 AU
direct	12218 Apr 06 00:23	6° Ƴ 15'37		asc. node	12219 Mar 10 19:01	28°) 31′01	
morning max el	12218 Apr 12 18:23	9° Υ 54'43	18°52'32	inferior conj	12219 Mar 11 23:34	27°) €06'53	0°22'57
desc. node	12218 Apr 26 05:12	28° Υ 00'36	10 0202	minimum elong	12219 Mar 11 22:57	27°) €08'42	0°22'49
greatest brilliancy	12218 Apr 26 13:50	28° Y 33'27	-0.8m	morning rise	12219 Mar 18 00:32	21° X 29'08	0 22 49
greatest offinality			-0.6111	-			
	12218 Apr 27 12:28	0°8		direct	12219 Mar 20 22:01	20°) 42′55	1001010
morning set	12218 May 05 05:09	11° 8 54'20		morning max el	12219 Mar 27 07:57	24°) €06'19	18°13'32
	12218 May 16 20:03	$\Pi^{\circ}0$			12219 Apr 01 06:07	0° Υ	
max. Earth dist.	12218 May 19 18:18	4° Ⅱ 34'37	1.45541 AU	desc. node	12219 Apr 13 01:51	18° Ƴ 10′10	
				morning set	12219 Apr 15 14:01	22° Ƴ 11'44	
			2010152		12219 Apr 20 10:59	8° 0	
superior conj	12218 May 21 14:04	7° Ⅱ 26′10			12217 Apr 20 10.37	v O	
superior conj minimum elong	12218 May 21 14:04 12218 May 21 10:12	7° Ⅱ 26′10 7° Ⅱ 11′00			12217 Apr 20 10.57	ů O	
	•			superior conj	12219 Apr 30 21:23	16° 8 28'50	-1°50'44
minimum elong	12218 May 21 10:12	7° Ⅱ 11'00			12219 Apr 30 21:23	16° 8 28'50	
minimum elong evening rise	12218 May 21 10:12 12218 Jun 04 18:22 12218 Jun 05 17:23	7° I I1'00 0°ഇ 1°ഇ32'56		minimum elong	12219 Apr 30 21:23 12219 Apr 30 12:18	16° 8 28'50 15° 8 53'16	1°50'35
minimum elong	12218 May 21 10:12 12218 Jun 04 18:22 12218 Jun 05 17:23 12218 Jun 19 19:27	7°II11'00 0°© 1°©32'56 23°©47'01			12219 Apr 30 21:23 12219 Apr 30 12:18 12219 May 02 13:45	16° 8 28'50 15° 8 53'16 19° 8 06'40	
minimum elong evening rise asc. node	12218 May 21 10:12 12218 Jun 04 18:22 12218 Jun 05 17:23 12218 Jun 19 19:27 12218 Jun 24 13:07	7°Π11'00 0°© 1°©32'56 23°©47'01 0°Ω	2°11'33	minimum elong max. Earth dist.	12219 Apr 30 21:23 12219 Apr 30 12:18 12219 May 02 13:45 12219 May 09 13:22	16° と 28'50 15° と 53'16 19° と 06'40 0°耳	1°50'35
minimum elong evening rise	12218 May 21 10:12 12218 Jun 04 18:22 12218 Jun 05 17:23 12218 Jun 19 19:27	7°II11'00 0°© 1°©32'56 23°©47'01		minimum elong	12219 Apr 30 21:23 12219 Apr 30 12:18 12219 May 02 13:45	16° 8 28'50 15° 8 53'16 19° 8 06'40	1°50'35

	12219 May 28 22:05	0°ಅ		greatest brilliancy	12220 May 10 13:12	13° Ⅱ 29'42	0.6m
asc. node	12219 Jun 06 16:29	12° © 14'54		evening max el	12220 May 10 13.12 12220 May 22 13:55	13 H 2942 29° H 02'25	20°05'13
evening max el	12219 Jun 09 09:40	12 914 34 15°916'35	19°09'56	asc. node	12220 May 22 13:35 12220 May 23 13:36	29° II 59'33	20 03 13
retrograde	12219 Jun 16 07:52	13 3 10 33	19 09 30	asc. node	12220 May 23 13:30 12220 May 23 13:47	29 π 3933	
-	12219 Jun 19 20:11	17°956'13		ratra ara da	12220 May 23 13.47 12220 May 30 06:22	3°\$26'30	
evening set	12219 Jun 19 20:11 12219 Jun 25 07:00	17 936 13 12°908'05	3°10'19	retrograde evening set	12220 May 30 06.22 12220 Jun 03 04:08	1° 9 58'19	
inferior conj				evening set		1 3 38 19	
minimum elong	12219 Jun 25 07:56	12°505'04	3°09'22	: <i>c</i> :	12220 Jun 05 06:35		201.412.1
min. Earth dist.	12219 Jun 26 19:07	10°911'29	0.66703 AU	inferior conj	12220 Jun 08 11:23 12220 Jun 08 11:14	25° П 56'58 25° П 57'29	3°14'31
morning rise	12219 Jun 30 19:06	5°945'06		minimum elong			3°13'40
direct	12219 Jul 06 23:15	3°904'15		min. Earth dist.	12220 Jun 09 09:07	24° Ⅱ 43'16	0.67873 AU
desc. node	12219 Jul 10 02:01	3°539'02	26004124	morning rise	12220 Jun 13 17:59	19° Ⅱ 36'11	
morning max el	12219 Jul 19 15:40	10°939'11	26°04'34	direct	12220 Jun 19 11:01	17° Ⅱ 04'28	
	12219 Aug 04 00:23	0° N		desc. node	12220 Jun 25 23:09	19° Ⅲ 35′20	- 10 111-5
	12219 Aug 22 12:08	0° m)		morning max el	12220 Jul 01 01:37	24° Ⅱ 02'13	24°41'56
morning set	12219 Aug 24 15:38	3° m 55'14			12220 Jul 06 09:23	0°©	
max. Earth dist.	12219 Aug 28 10:54	11° Mp 06'46	1.35191 AU		12220 Jul 27 10:02	0°Ω	
				morning set	12220 Aug 05 20:36	15° Ω 50'15	
superior conj	12219 Sep 02 22:15	21° m 59'17	0°02'07	max. Earth dist.	12220 Aug 09 10:33	22° Ω 14'53	1.37322 AU
minimum elong	12219 Sep 02 22:09	21° m 58'45	0°01'54		12220 Aug 13 14:31	0° m	
behind sun begin	12219 Sep 02 16:09	21° m 28'10					
behind sun end	12219 Sep 03 04:10	22° m 29'23		superior conj	12220 Aug 16 07:10	5° m 10'44	-0°30'34
asc. node	12219 Sep 02 16:58	21°M)32'23		minimum elong	12220 Aug 16 09:12	5° Mg 20′37	0°30'38
	12219 Sep 06 19:29	0∘ ত		asc. node	12220 Aug 19 13:38	11° m 36'57	
evening rise	12219 Sep 10 15:07	7° ≏ 56'39		evening rise	12220 Aug 24 18:30	22° m 02'33	
	12219 Sep 22 11:53	0° M			12220 Aug 28 19:25	0∘ ত	
evening max el	12219 Sep 29 01:48	8°MJ19'50	20°31'45	evening max el	12220 Sep 10 14:35	19° ≏ 39'01	19°23'16
desc. node	12219 Oct 05 22:52	13°ML04'02		retrograde	12220 Sep 20 01:38	24° ≏ 22'11	
retrograde	12219 Oct 10 05:20	13°ML51'58		evening set	12220 Sep 21 22:03	24° ≙ 12'09	
evening set	12219 Oct 12 09:06	13°ML40'28		desc. node	12220 Sep 21 20:18	24° ≙ 12'54	
inferior conj	12219 Oct 21 10:08	9° M 44'56	-4°28'50	inferior conj	12220 Sep 30 13:49	20° ഫ 04'31	-2°43'01
minimum elong	12219 Oct 21 00:05	9° M 59'29	4°25'33	minimum elong	12220 Sep 30 06:42	20° ≏ 16′05	2°40'09
min. Earth dist.	12219 Oct 22 15:40	9° M 02'07	0.54695 AU	min. Earth dist.	12220 Oct 03 02:23	18° ≏ 26'20	0.55675 AU
morning rise	12219 Oct 29 14:39	5°M44'54		morning rise	12220 Oct 08 12:59	15° ≏ 34'01	
direct	12219 Nov 02 23:37	5°ML03'43		direct	12220 Oct 13 18:03	14° ≏ 32'40	
morning max el	12219 Nov 16 07:33	11°MJ32'36	23°33'05	morning max el	12220 Oct 27 18:05	21° ≏ 35'45	25°19'00
asc. node	12219 Nov 29 18:09	29°M30'40			12220 Nov 04 02:28	0°M	
use. Hour	12219 Nov 30 00:59	0° ⊼ ¹		asc. node	12220 Nov 15 15:02	18°M22'33	
morning set	12219 Dec 10 01:18	19° х 34′24		use. Houe	12220 Nov 21 12:12	0° ₹	
morning sec	12219 Dec 14 20:54	0°ਰ		morning set	12220 Nov 23 12:57	4° ∡ 17'55	
	1221) Dec 14 20.54	° O		morning set	12220 1101 25 12.57	4 × 17 33	
superior conj	12219 Dec 16 22:36	4°₹29'44	1°37'20	superior conj	12220 Nov 30 07:59	19° ∡ 12'22	1°38'29
minimum elong	12219 Dec 16 23:22	4° ට 33'52		minimum elong	12220 Nov 30 07:38	19° х 10′23	1°39'19
max. Earth dist.	12219 Dec 19 17:20		1.33113 AU	max. Earth dist.	12220 Dec 01 20:37	22°×733'57	1.32028 AU
evening rise	12219 Dec 24 15:03	20° ප 33'11	1.55115110	max. Earth dist.	12220 Dec 05 07:09	0°る	1.52020 110
evening rise	12219 Dec 29 12:47	0°≈		evening rise	12220 Dec 03 07:09	。3 4° ろ 37'34	
desc. node	12220 Jan 01 20:57	6°≈02'15		desc. node	12220 Dec 17 12:00	25° る 53'01	
desc. Hode	12220 Jan 01 20:57 12220 Jan 17 08:54	0° ₩		desc. node	12220 Dec 16 17:54 12220 Dec 21 05:01	0°≈	
evening max el	12220 Jan 17 08:34 12220 Jan 27 19:40	12° ₩ 05'11	27023150	evening max el	12220 Dec 21 05:01 12221 Jan 09 06:23	0 ∞ 25° ≈ 02'37	27031125
retrograde	12220 Jan 27 17:40 12220 Feb 10 10:41	19° \(\frac{1}{3}\) 30'35	27 23 30	evening max er	12221 Jan 15 14:21	0° ∺	27 31 23
evening set	12220 Feb 17 05:56	17° X 00'09		retrograde	12221 Jan 23 02:40	2° ¥ 22'41	
min. Earth dist.	12220 Feb 21 02:06	13°) 31'27	0.64401 AU	evening set	12221 Jan 30 01:42	0°\(\frac{1}{22}\)	
inferior conj	12220 Feb 21 02:00 12220 Feb 23 14:03	10° H 51'42		evening set	12221 Jan 30 01:42 12221 Jan 30 02:57	0 7(02 00 30°R≈	
,		10 X 31 42	0°40'21	min. Earth dist.	12221 Jan 30 02.37 12221 Feb 02 19:34	30 k≈ 27°≈00'52	0.62459 AU
minimum elong	12220 Feb 23 15:19	8° H 41'53	0 40 21				
asc. node	12220 Feb 25 16:24			inferior conj	12221 Feb 05 17:26	24°≈14'53	
morning rise	12220 Mar 01 02:37	5° ∺ 27'32 4° ∺ 54'38		minimum elong	12221 Feb 05 21:18	24°≈05'38	1°52'34
direct	12220 Mar 03 15:28		17051121	asc. node	12221 Feb 11 13:45	19°≈38'54	
morning max el	12220 Mar 10 00:56	8° 升 13'34	1/31/31	morning rise	12221 Feb 12 19:27	19° ≈ 07'24	
	12220 Mar 24 20:01	0° Υ		direct	12221 Feb 15 01:39	18°≈44'05	17047105
morning set	12220 Mar 27 03:24	3° Y 52′21		morning max el	12221 Feb 21 18:24	22°≈08'41	17°47'05
desc. node	12220 Mar 29 22:26	8° Ƴ 33'02			12221 Feb 27 20:30	0°) {	
_				morning set	12221 Mar 09 16:32	16°) (40'45	
superior conj	12220 Apr 09 15:28	26° Y 06′01		desc. node	12221 Mar 16 19:00	29°) €05'00	
minimum elong	12220 Apr 09 07:38	25° Y 34'33	1°14'51		12221 Mar 17 07:48	0° Y	
	12220 Apr 12 02:04	0° 8					
max. Earth dist.	12220 Apr 14 09:10	3° 8 38'06	1.45205 AU	superior conj	12221 Mar 21 07:59	6° Y 47'35	
evening rise	12220 Apr 25 11:54	20° 8 53'32		minimum elong	12221 Mar 21 04:35	6° Ƴ 33'21	
	12220 May 01 11:28	Π °0		max. Earth dist.	12221 Mar 28 02:27	17° Ƴ 54'21	1.43985 AU

	12221 Apr 04 18:24	0° ႘			12222 Mar 09 15:34	0° Ƴ	
evening rise	12221 Apr 05 00:58	0° 8 25'23		max. Earth dist.	12222 Mar 10 15:24	1° Υ 39'29	1.42210 AU
	12221 Apr 25 02:45	0°II		evening rise	12222 Mar 16 03:39	10° Y °37'59	.,
evening max el	12221 May 05 12:25	12° Ⅱ 48'52	21°13'33	8	12222 Mar 28 19:31	0°8	
asc. node	12221 May 10 10:49	16° Ⅱ 47'14		evening max el	12222 Apr 18 05:57	26° 8 36'22	22°30'49
retrograde	12221 May 14 05:00	17° Ⅱ 53'44		Č	12222 Apr 22 02:36	$\Pi^{\circ}0$	
evening set	12221 May 18 13:01	16° Ⅱ 09'16		asc. node	12222 Apr 27 08:06	2° Ⅲ 22′18	
inferior conj	12221 May 23 19:17	9° Ⅱ 56'12	3°06'59	retrograde	12222 Apr 28 02:08	2° Ⅱ 24'58	
minimum elong	12221 May 23 18:11	10° Ⅲ 00′02	3°06'05	evening set	12222 May 02 21:09	0° Ⅲ 25′15	
min. Earth dist.	12221 May 24 03:22	9° Ⅲ 28′05	0.68575 AU		12222 May 03 08:32	30° ₹ 8	
morning rise	12221 May 28 23:08	3° Ⅱ 39'57		inferior conj	12222 May 08 04:40	24° 8 02'46	2°48'57
direct	12221 Jun 03 03:28	1° Ⅱ 24'09		minimum elong	12222 May 08 02:52	24° 8 09'02	2°47'59
desc. node	12221 Jun 12 20:11	6° Ⅱ 54'20		min. Earth dist.	12222 May 07 23:53	24° 8 19'25	0.68808 AU
morning max el	12221 Jun 13 11:54	7° Ⅱ 33'17	23°12'27	morning rise	12222 May 13 08:27	17° 8 52'23	
	12221 Jun 30 23:45	0° ©		direct	12222 May 17 23:33	15° 8 56'26	
morning set	12221 Jul 18 03:24	26°9544'15		morning max el	12222 May 27 01:23	21° 8 13'37	21°45'06
	12221 Jul 20 01:57	0°N	1 20 6 12 1 7 7	desc. node	12222 May 30 17:07	25° 8 14'10	
max. Earth dist.	12221 Jul 22 08:20	3° Ω 52'43	1.39643 AU		12222 Jun 03 13:01	0° I I	
	12221 IJ. 20 01.20	17° Ω 39'58	1004153	morning set	12222 Jun 24 05:29	0°ഇ 6° ഇ 30'16	
superior conj minimum elong	12221 Jul 30 01:29 12221 Jul 30 06:07	$17^{\circ}03958$ $18^{\circ}\Omega01'21$		max. Earth dist.	12222 Jun 28 08:41 12222 Jul 04 09:55		1.41877 AU
illillilliulli clong	12221 Jul 30 00:07 12221 Aug 05 14:23	0° m)	1 04 46	max. Earth dist.	12222 Jul 04 09.33	10 391932	1.416// AU
asc. node	12221 Aug 05 14:23 12221 Aug 06 10:20	1° m)35'48		superior conj	12222 Jul 12 00:49	29° © 17'12	-1°37'18
evening rise	12221 Aug 00 10:20 12221 Aug 08 14:05	5° m) 44'46		minimum elong	12222 Jul 12 00:49		1°37'20
evening rise	12221 Aug 23 01:12	0∘ ⊽		minimum crong	12222 Jul 12 10:36	0°Ω	1 37 20
evening max el	12221 Aug 24 15:28	ა — 1° ჲ 43'41	18°36'21	evening rise	12222 Jul 22 22:06	18° Ω 53'52	
retrograde	12221 Sep 01 16:06	5° Ω 45'49		asc. node	12222 Jul 24 07:07	21° Ω 25'17	
evening set	12221 Sep 03 15:30	5° - 31'57			12222 Jul 29 01:24	0° m)	
desc. node	12221 Sep 08 17:46	3° ഫ 07'35		evening max el	12222 Aug 08 00:35	14° Mp 26'04	18°10'15
inferior conj	12221 Sep 11 13:39	1° ≏ 04'45	-0°53'15	retrograde	12222 Aug 15 01:19	18° m 00'35	
minimum elong	12221 Sep 11 11:31	1° ≏ 08'49	0°52'28	evening set	12222 Aug 17 07:45	17° m 38'47	
	12221 Sep 12 23:32	30°₽,₩)		inferior conj	12222 Aug 24 11:10	12° m 51'05	0°39'19
min. Earth dist.	12221 Sep 14 18:32	28° Mp 39'35	0.57393 AU	minimum elong	12222 Aug 24 12:26	12°M/48'17	0°38'31
morning rise	12221 Sep 19 04:05	25° m 56'25		desc. node	12222 Aug 26 15:12	10° m 55'12	
direct	12221 Sep 25 02:15	24° Tp 29'00		min. Earth dist.	12222 Aug 27 18:29	9° m 56'21	0.59550 AU
	12221 Oct 07 05:06	0∘ ⊽		morning rise	12222 Aug 31 13:49	7° m 09'30	
morning max el	12221 Oct 09 09:30	1° ≏ 59'04	26°46'33	direct	12222 Sep 07 00:10	5° To 13'38	
	12221 Oct 29 09:27	0°M,		morning max el	12222 Sep 21 08:26	13° m 03'37	27°41'30
asc. node	12221 Nov 02 11:50	7°M41'38			12222 Oct 04 19:39	0° <u>დ</u>	
morning set	12221 Nov 07 22:53 12221 Nov 13 00:48	18°M⋅52'53 0°⊀		asc. node	12222 Oct 20 08:35 12222 Oct 21 15:53	27° £ 20'34 0° I L	
	12221 NOV 13 00.48	0 🗴		morning set	12222 Oct 21 15:33 12222 Oct 23 05:20	3°M14'48	
superior conj	12221 Nov 14 19:24	3° ∡ ¹57'25	1°33'43	max. Earth dist.	12222 Oct 23 03:20 12222 Oct 29 13:15	17°M00'53	1.31326 AU
minimum elong	12221 Nov 14 18:05	3°×750'01	1°34'21	max. Earth dist.	12222 000 27 13.13	17 1100033	1.51520110
max. Earth dist.	12221 Nov 15 04:27	4° ∡ 747'52	1.31427 AU	superior conj	12222 Oct 30 06:58	18°M39'31	1°23'14
evening rise	12221 Nov 21 15:51	18° ∡ 57'40		minimum elong	12222 Oct 30 04:58	18°M28'23	1°23'35
C	12221 Nov 27 02:07	8°0			12222 Nov 04 09:44	0° ∡ ¹	
desc. node	12221 Dec 05 14:57	15° る 14'51		evening rise	12222 Nov 06 00:05	3° ∡ ¹27'46	
	12221 Dec 15 20:53	0° ≈			12222 Nov 19 23:31	ರ∘ರ	
evening max el	12221 Dec 22 11:56	7° ≈ 17'06	27°05'41	desc. node	12222 Nov 22 12:06	3° ⋜ 56'21	
retrograde	12222 Jan 05 10:13	14° ≈ 29′21		evening max el	12222 Dec 04 09:49	18° る 40'00	26°05'52
evening set	12222 Jan 12 06:33	12° ≈ 27'01		retrograde	12222 Dec 18 08:04	25° る 43'52	
min. Earth dist.	12222 Jan 16 02:19	9° ≈ 45'16	0.60333 AU	evening set	12222 Dec 24 16:16	24° る 08'12	
inferior conj	12222 Jan 19 06:13	7°≈07'09		min. Earth dist.	12222 Dec 28 22:50	21°る32'26	0.58207 AU
minimum elong	12222 Jan 19 12:59		3°11'01	inferior conj	12223 Jan 01 00:52	19° ろ 18'28	
morning rise	12222 Jan 26 22:19	2°≈19'42		minimum elong	12223 Jan 01 09:20	19° る 03'05	4°28'32
direct asc. node	12222 Jan 29 00:38 12222 Jan 29 11:04	2°≈02'27 2°≈03'13		morning rise direct	12223 Jan 09 05:11 12223 Jan 11 07:54	14°る53'11 14°る38'33	
morning max el	12222 Jan 29 11:04 12222 Feb 05 09:00	2 ≈03 13 5°≈42'35	18°01'20	asc. node	12223 Jan 11 07.34 12223 Jan 16 08:20	14 03833 16°る06'28	
morning set	12222 Feb 03 03:00 12222 Feb 20 23:09	0°) 17'48	10 01 20	morning max el	12223 Jan 19 16:54	18° 石 44'19	18°35'46
	12222 Feb 20 19:18	0°) (1/48		moning max of	12223 Jan 27 22:18	0°≈	10 00 10
	20 20 17.10	- /\		morning set	12223 Feb 04 17:53	14° ≈ 27'09	
superior conj	12222 Mar 03 00:59	18° ¥ 38′09	0°04'47	U .	12223 Feb 12 20:21	0°) €	
minimum elong	12222 Mar 03 01:24	18° ¥ 39'57	0°04'58				
behind sun begin	12222 Mar 02 17:50	18°) €06'32		superior conj	12223 Feb 13 14:48	1°) 26′14	0°38'05
behind sun end	12222 Mar 03 08:57	19° ¥ 13'16		minimum elong	12223 Feb 13 17:14	1°) 37'31	0°38'12
desc. node	12222 Mar 03 15:36	19°) 42′28		desc. node	12223 Feb 18 12:13	10° ¥ 21′23	

12224 Jan 27 23:35

15°≈12'37

1°04'19

minimum elong

direct	12226 Oct 25 09:46	26° ≏ 24'34		direct	12227 Oct 06 10:06	6° ≏ 01'03	
	12226 Nov 04 06:59	0°M		morning max el	12227 Oct 20 14:24	13° ⊆ 17'31	25°59'34
morning max el	12226 Nov 08 02:21		24°19'27	,	12227 Nov 02 17:29	0°M	
asc. node	12226 Nov 23 20:31	24°M48′27 0°⊀		asc. node	12227 Nov 10 17:22 12227 Nov 17 14:39	13°M52'44 27°M52'09	
morning set	12226 Nov 26 16:01 12226 Dec 03 03:33	13° ∡ 11'58		morning set	12227 Nov 17 14:39 12227 Nov 18 14:22	2/°11៤52′09 0° √ 1	
morning set	12220 Dec 03 03.33	13 🗶 11 36			1222/ NOV 16 14.22	0 🗡	
superior conj	12226 Dec 09 23:23	28° ₹ 05'13	1°38'35	superior conj	12227 Nov 24 09:52	12° ∡ ¹49'38	1°37'11
minimum elong	12226 Dec 09 23:40	28° ₹ 06'44	1°39'26	minimum elong	12227 Nov 24 09:04	12° х ⁴45′13	1°37'57
	12226 Dec 10 20:27	5°0		max. Earth dist.	12227 Nov 25 10:25	15° ₹ 05'40	1.31700 AU
max. Earth dist.	12226 Dec 12 05:04	2° る 56'26	1.32584 AU	evening rise	12227 Dec 01 10:08	28° ∡ °02′18	
evening rise	12226 Dec 17 09:58	13°る50'35			12227 Dec 02 08:48	0°る	
	12226 Dec 25 21:48	0°≈		desc. node	12227 Dec 13 20:15	21° る 31'25	
desc. node	12226 Dec 26 23:15	1°≈51'52 0°) €			12227 Dec 19 04:02	0°≈ 17°≈ •41!24	27924150
evening max el	12227 Jan 15 07:12 12227 Jan 20 01:19	5° ₩ 00'55	27°30'50	evening max el retrograde	12228 Jan 02 10:06 12228 Jan 16 08:00	17° ≈ 41'24 24° ≈ 59'13	27-24-50
retrograde	12227 Feb 02 19:06	12° ¥ 25′21	27 30 30	evening set	12228 Jan 23 06:37	22°≈45'20	
evening set	12227 Feb 02 15:00 12227 Feb 09 16:42	9°) 57'44		min. Earth dist.	12228 Jan 27 00:29	19°≈53'33	0.61558 AU
min. Earth dist.	12227 Feb 13 11:22		0.63604 AU	inferior conj	12228 Jan 30 01:37	17° ≈ 08'46	
inferior conj	12227 Feb 16 04:00	3°) 57′24		minimum elong	12228 Jan 30 06:45	16° ≈ 57'11	
minimum elong	12227 Feb 16 06:18	3° ¥ 51'34	1°09'58	morning rise	12228 Feb 06 09:42	12° ≈ 09'31	
asc. node	12227 Feb 19 18:59	0°) 34′01		asc. node	12228 Feb 06 16:20	12° ≈ 04'44	
	12227 Feb 20 12:58	30° R ≈		direct	12228 Feb 08 13:40	11° ≈ 49′21	
morning rise	12227 Feb 22 22:10	28° ≈ 40′19		morning max el	12228 Feb 15 12:14	15° ≈ 19'45	17°50'48
direct	12227 Feb 25 07:52	28° ≈ 12′02			12228 Feb 25 16:59	0° ∀	
	12227 Mar 02 00:55	0° ∀		morning set	12228 Mar 02 04:33	9°) 44'30	
morning max el	12227 Mar 03 19:31	1°) (32′04	17°47'29	desc. node	12228 Mar 10 21:11	25°) 11′25	
morning set	12227 Mar 20 07:12	26°) €33'01			12220 14 12 02 50	2001/02/22	0017110
	12227 Mar 22 07:35	0°Υ 4°Υ36'39		superior conj	12228 Mar 13 02:59	29° ¥ 03'23	
desc. node	12227 Mar 25 00:37	4*1/36/39		minimum elong	12228 Mar 13 01:24 12228 Mar 13 16:14	28° ¥ 56'35 0° Ƴ	0°16'58
superior conj	12227 Apr 01 23:49	17° Y ′51′30	-0°58'18	max. Earth dist.	12228 Mar 13 10:14 12228 Mar 20 09:01	11° Υ 09'54	1.43287 AU
minimum elong	12227 Apr 01 17:45	17° Y 26'47		evening rise	12228 Mar 27 04:12	22°Υ′00'45	1.43207 710
max. Earth dist.	12227 Apr 07 17:53	27°Υ′06'53	1.44761 AU		12228 Apr 01 08:34	0°ප	
	12227 Apr 09 13:39	0°8			12228 Apr 22 13:46	0°II	
evening rise	12227 Apr 17 10:41	12° 8 14'23		evening max el	12228 Apr 27 21:04	6° Ⅱ 01'18	21°45'38
	12227 Apr 29 05:50	Π °0		asc. node	12228 May 04 13:21	10° Ⅱ 55'26	
evening max el	12227 May 16 00:49	22° Ⅱ 14'13	20°32'49	retrograde	12228 May 07 01:19	11° Ⅱ 24'54	
asc. node	12227 May 18 16:05	24° ∏ 36′26		evening set	12228 May 11 13:50	9°Ⅱ34′04	
retrograde	12227 May 24 03:08	26° ∏ 55'28		inferior conj	12228 May 16 20:24	3° Ⅱ 16'45	3°00'35
evening set	12227 May 28 05:04	25° Ⅱ 20'24	2012110	minimum elong	12228 May 16 18:58	3° Ⅱ 21'45	
inferior conj	12227 Jun 02 11:36	19° Ⅱ 13'38		min. Earth dist.	12228 May 16 23:01	3° Ⅱ 07'35	0.68734 AU
minimum elong min. Earth dist.	12227 Jun 02 11:01 12227 Jun 03 03:26	19° П 15'38 18° П 19'09	3°11'48 0.68229 AU	morning rise	12228 May 19 06:34 12228 May 21 23:53	30°R と 27° と 02'37	
morning rise	12227 Jun 07 16:41	18 Ⅱ 1909 12° Ⅱ 54'17	0.08229 AU	direct	12228 May 26 22:38	24° 8 54'42	
direct	12227 Jun 13 04:19	10° Ⅲ 28'44		direct	12228 Jun 05 00:49	0°П	
desc. node	12227 Jun 21 01:34	14° ∏ 09'14		morning max el	12228 Jun 05 17:49	0° Ⅱ 41'52	22°34'23
morning max el	12227 Jun 24 06:42	17° Ⅱ 07'31	24°04'02	desc. node	12228 Jun 06 22:34	1° Ⅱ 56'25	
	12227 Jul 04 23:41	0 \circ \odot			12228 Jun 27 19:47	0 \circ \odot	
	12227 Jul 24 23:29	0 $^{\circ}$ Ω		morning set	12228 Jul 09 13:05	18° 5 22'30	
morning set	12227 Jul 29 16:56	7° Ω 56'53		max. Earth dist.	12228 Jul 14 08:32	26° © 22'46	1.40621 AU
max. Earth dist.	12227 Aug 02 10:10	14° Ω 27'01	1.38301 AU		12228 Jul 16 11:24	0 \circ Ω	
	12227 A 00 17:29	279 0 55107	0945106		12220 1-1 22 04-20	100 002150	1010100
superior conj minimum elong	12227 Aug 09 17:38 12227 Aug 09 20:45	27° Ω 55'06 28° Ω 09'56		superior conj minimum elong	12228 Jul 22 04:29 12228 Jul 22 10:08	10°Ω03'59 10°Ω29'31	
minimum ciong	12227 Aug 07 20:43 12227 Aug 10 19:47	0° m)	0 43 00	asc. node	12228 Jul 31 12:37	27° Ω 23'14	1 1704
asc. node	12227 Aug 14 15:53	7° m) 27'36		evening rise	12228 Aug 01 06:05	28° Ω 45'35	
evening rise	12227 Aug 18 14:55	15° m) 16'04		<i>y</i>	12228 Aug 01 21:52	0° m)	
Č	12227 Aug 26 10:23	0∘ <u>⊽</u>		evening max el	12228 Aug 17 05:33	24° m 24'54	18°22'51
evening max el	12227 Sep 04 00:30	12° ≏ 01'54	19°00'41	retrograde	12228 Aug 24 18:28	28° m 13'02	
retrograde	12227 Sep 12 19:58	16° ≏ 26'12		evening set	12228 Aug 26 20:43	27° m 56'12	
evening set	12227 Sep 14 16:39	16° ≏ 15'12		desc. node	12228 Sep 02 20:19	23° m 49'40	
desc. node	12227 Sep 16 22:51	15° ≏ 34'28		inferior conj	12228 Sep 03 10:46	23° Mp 20'28	
inferior conj	12227 Sep 23 01:30	12° ⊆ 00'03		minimum elong	12228 Sep 03 10:21	23° m/21'20	0°11'14
minimum elong	12227 Sep 22 20:33	12° Ω 08'38	1°53'14	transit middle	12228 Sep 03 10:21	23° m 21'20	0°11'14
min. Earth dist.	12227 Sep 25 23:05	9° Ω 59'51	0.56328 AU	transit begin	12228 Sep 03 07:49	23° Th 26'28	
morning rise	12227 Sep 30 21:20	7° ≙ 13'08		transit end	12228 Sep 03 12:53	23°Mp16'11	

i. Darde diet	12220 0 0(10.21	20° Mp 40'04	0.50270 ATT	4 4-	12220 4 20 17.46	1° m 40'27	
min. Earth dist.	12228 Sep 06 18:21		0.58279 AU	desc. node	12229 Aug 20 17:46		
morning rise	12228 Sep 10 20:28	17° m 57'12			12229 Aug 22 21:20	30°R€	
direct	12228 Sep 17 00:51	16° To 17'19	2501.412.5	morning rise	12229 Aug 23 13:58	29° Ω 32'12	
morning max el	12228 Oct 01 08:46	23° m 56'41	27°14'25	direct	12229 Aug 30 03:40	27° Ω 25'16	
	12228 Oct 06 20:44	0∘ ⊽			12229 Sep 06 21:56	0° m)	
	12228 Oct 25 20:57	0° M		morning max el	12229 Sep 13 10:32	5° m 20'05	27°53'18
asc. node	12228 Oct 27 14:08	3°M21'18			12229 Oct 01 21:00	0∘ ಹ	
morning set	12228 Oct 31 23:18	12°M22'16		asc. node	12229 Oct 14 10:51	23° ഫ 06'35	
				morning set	12229 Oct 16 03:38	26° ≙ 36'41	
superior conj	12228 Nov 07 21:35	27° M 34'29	1°29'57		12229 Oct 17 18:15	0° M	
minimum elong	12228 Nov 07 19:56	27°M25'15	1°30'29	max. Earth dist.	12229 Oct 22 03:15	9° ™ 30'37	1.31445 AU
max. Earth dist.	12228 Nov 07 19:04	27° M 20'28	1.31321 AU				
	12228 Nov 08 23:40	0° ∡ ¹		superior conj	12229 Oct 23 08:37	12°ML13'21	1°17'05
evening rise	12228 Nov 14 16:05	12° ∡ ¹27'53		minimum elong	12229 Oct 23 06:27	12° M 01'19	1°17'19
	12228 Nov 23 11:46	0° ට		evening rise	12229 Oct 30 01:35	27°ML00'37	
desc. node	12228 Nov 29 17:21	10° る 37'48			12229 Oct 31 11:11	0° ∡ ¹	
evening max el	12228 Dec 14 12:51	29° る 35'22	26°44'21	desc. node	12229 Nov 16 14:31	28° ∡ ¹57'37	
Č	12228 Dec 14 23:25	0° ≈			12229 Nov 17 08:06	ರ°0	
retrograde	12228 Dec 28 11:34	6° ≈ 43'37		evening max el	12229 Nov 26 07:16	10° ට 36'17	25°31'19
evening set	12229 Jan 04 03:50	4°≈52'07		retrograde	12229 Dec 10 04:04	17° る 35'12	20 31 17
min. Earth dist.	12229 Jan 08 02:59	2°≈14'31	0.59413 AU	evening set	12229 Dec 16 03:55	16°る12'49	
mm. Earth dist.	12229 Jan 10 23:30	30°Rる	0.57415710	min. Earth dist.	12229 Dec 20 19:31	13° る 34'33	0.57369 AU
inforior coni	12229 Jan 10 23:30	30 KO 29° 石 44'56	2040102	inferior conj	12229 Dec 20 19:31 12229 Dec 23 17:08	13 3 3433	
inferior conj		29 3 44 36		•		11 83602 11° 8 22'01	
minimum elong	12229 Jan 11 14:52	29° ろ 29'38	3-44-41	minimum elong	12229 Dec 24 01:20		4-5/51
morning rise	12229 Jan 19 04:46			morning rise	12230 Jan 01 01:11	7°る20'00	
direct	12229 Jan 21 06:35	24° ろ 50'38		direct	12230 Jan 03 06:14	7° る 05'12	
asc. node	12229 Jan 23 13:37	25° る 10'43		asc. node	12230 Jan 10 10:48	9° ට 53'53	
morning max el	12229 Jan 29 00:22	28° る 40'48	18°13'22	morning max el	12230 Jan 12 04:03	11° る 24'29	18°57'03
	12229 Jan 30 06:32	0° ≈			12230 Jan 24 12:59	0° ≈	
morning set	12229 Feb 13 16:52	23° ≈ 36′57		morning set	12230 Jan 28 15:27	7° ≈ 56'17	
	12229 Feb 17 02:09	0° ∀					
				superior conj	12230 Feb 06 02:31	24° ≈ 27'39	0°50'02
superior conj	12229 Feb 23 05:20	11° ∺ 19'29	0°19'45	minimum elong	12230 Feb 06 05:18	24° ≈ 40′52	0°50'11
minimum elong	12229 Feb 23 06:49	11° ∺ 26′10	0°19'52		12230 Feb 09 01:13	0° ∀	
desc. node	12229 Feb 25 17:47	15°) 49′42		desc. node	12230 Feb 12 14:25	6° ∺ 28′03	
max. Earth dist.	12229 Mar 02 19:51	24°) €37'50	1.41340 AU	max. Earth dist.	12230 Feb 13 03:03	7°) €24'23	1.39132 AU
	12229 Mar 06 01:01	$0^{\circ}\mathbf{\Upsilon}$		evening rise	12230 Feb 16 23:27	14° ₩ 07'14	
evening rise	12229 Mar 07 15:13	2° Y 36'16			12230 Feb 26 17:37	$0^{\circ}\mathbf{\Upsilon}$	
•	12229 Mar 25 16:52	0°B			12230 Mar 20 15:50	0° ႘	
evening max el	12229 Apr 10 13:12	19° 8 50'12	23°05'10	evening max el	12230 Mar 24 03:05	3° 8 41'15	24°25'25
retrograde	12229 Apr 20 21:14	25° 8 55'55		retrograde	12230 Apr 04 13:45	10° 8 23'21	
asc. node	12229 Apr 21 10:40	25° 8 54'27		asc. node	12230 Apr 08 08:00	9° 8 19'40	
evening set	12229 Apr 25 21:09	23° 8 50'20		evening set	12230 Apr 10 01:29	8° 8 05'04	
inferior conj	12229 May 01 05:48	17° 8 25'04	2°38'19	min. Earth dist.	12230 Apr 14 15:33	2° 8 50'19	0.68365 AU
minimum elong	12229 May 01 03:49	17° 8 31'58	2°37'17	inferior conj	12230 Apr 15 13:56	1° 8 35'16	2°06'12
min. Earth dist.	12229 Apr 30 19:47	17° 8 59'45	0.68777 AU	minimum elong	12230 Apr 15 11:46	1° 8 42'31	2°05'10
morning rise	12229 Apr 30 19:47 12229 May 06 10:22	11° 8 17'36	0.08777 AO	minimum clong	12230 Apr 16 18:39	30°RΥ	2 03 10
direct	•	9° 8 30'23		morning rise	12230 Apr 10 18.39 12230 Apr 20 22:11	25° Y 35'38	
	12229 May 10 20:02	14° 8 26'03	21910117	morning rise	•	23 γ 33 38 24° γ 09'48	
morning max el	12229 May 19 09:27		21°10'17	direct	12230 Apr 24 19:15		10057120
desc. node	12229 May 24 19:28	20° 8 36'30		morning max el	12230 May 02 08:16	28° Y ′22'44	19°57'39
	12229 May 31 19:38	0°П			12230 May 03 21:33	0°8	
morning set	12229 Jun 19 07:42	27° Ⅱ 40′12		desc. node	12230 May 11 16:16	9° 8 55'18	
	12229 Jun 20 19:12	0°€		_	12230 May 25 06:52	0°Щ	
max. Earth dist.	12229 Jun 26 13:00	9° © 13'17	1.42743 AU	morning set	12230 May 29 09:28	6° Ⅱ 17'08	
				max. Earth dist.	12230 Jun 09 00:27	22° Ⅱ 53'17	1.44410 AU
superior conj	12229 Jul 03 18:24	21° © 16'29			12230 Jun 13 10:50	0ංම	
minimum elong	12229 Jul 04 01:17	21° © 45'51	1°49'26				
	12229 Jul 08 19:19	$0 {\circ} \Omega$		superior conj	12230 Jun 14 08:27	1° 5 27'41	-2°09'11
evening rise	12229 Jul 15 07:44	11° Ω 36'47		minimum elong	12230 Jun 14 12:47	1° 5 45'18	2°09'54
asc. node	12229 Jul 18 09:25	17° Ω 07'08		evening rise	12230 Jun 27 15:01	23° © 38'37	
	12229 Jul 26 00:09	0° ™			12230 Jul 01 08:22	$0^{\circ}\Omega$	
evening max el		7° mp 20'15	18°05'08	asc. node	12230 Jul 05 06:17	6° Ω 34'41	
	12229 Jul 31 16:56	/ III/2013					
retrograde	12229 Jul 31 16:56 12229 Aug 07 10:40	10° Mp 47'13		evening max el	12230 Jul 15 06:56	20° Ω 38'59	18°06'27
•				evening max el retrograde	12230 Jul 15 06:56 12230 Jul 21 16:13	20° Ω 38'59 23° Ω 59'22	18°06'27
retrograde	12229 Aug 07 10:40 12229 Aug 09 20:37	10° Mp 47'13	1°11'29	retrograde			18°06'27
retrograde evening set inferior conj	12229 Aug 07 10:40 12229 Aug 09 20:37 12229 Aug 16 16:43	10° m/47'13 10° m/20'48	1°11'29 1°10'20	-	12230 Jul 21 16:13	23° Q 59'22	18°06'27 2°10'20
retrograde evening set	12229 Aug 07 10:40 12229 Aug 09 20:37	10° m/47'13 10° m/20'48 5° m/24'28		retrograde evening set	12230 Jul 21 16:13 12230 Jul 24 10:15	23° Ω 59'22 23° Ω 20'27	2°10'20

evening set	12232 Jun 21 13:28	20° © 32'34		retrograde	12233 Jun 02 00:48	5° © 59'03	
inferior conj	12232 Jun 27 01:04	14° 5 46'37	3°08'29	evening set	12233 Jun 05 21:10	4° © 33'12	
minimum elong	12232 Jun 27 02:10	14° 5 43'06	3°07'31		12233 Jun 10 02:53	30° Ŗ Ⅱ	
min. Earth dist.	12232 Jun 28 15:23	12° 5 44'08	0.66489 AU	inferior conj	12233 Jun 11 04:45	28° Ⅲ 33'39	3°14'40
morning rise	12232 Jul 02 14:13	8° 5 23'44		minimum elong	12233 Jun 11 04:45	28° Ⅲ 33'38	3°13'47
direct	12232 Jul 08 19:52	5°932'15		min. Earth dist.	12233 Jun 12 04:32	27° Ⅱ 13'29	0.67727 AU
desc. node	12232 Jul 11 09:43	6°€06'02		morning rise	12233 Jun 16 12:01	22° Ⅱ 12'29	
morning max el	12232 Jul 21 15:26	13° © 21'03	26°15'43	direct	12233 Jun 22 06:49	19° Ⅲ 39'03	
8	12232 Aug 04 02:37	0°N		desc. node	12233 Jun 28 06:53	21° ∏ 47'41	
	12232 Aug 22 21:49	0° m)		morning max el	12233 Jul 04 01:35	26° Ⅱ 42'59	24°54'59
morning set	12232 Aug 26 14:45	6° Mp 45'29		morning max er	12233 Jul 07 02:40	0°95	24 3437
max. Earth dist.	12232 Aug 20 14:45	14° m) 08'43	1.34903 AU		12233 Jul 28 16:55	0°N	
asc. node	12232 Aug 30 11:43 12232 Sep 04 00:48	23° m) 12'42	1.54905 AU	morning set	12233 Jul 28 10:33 12233 Aug 08 22:36	18° Ω 48'21	
asc. node	12232 Sep 04 00.48	23 11/1242		•	=		1 26000 ATT
	12222 0 04 17 51	2.40 m- 2015 1	0007150	max. Earth dist.	12233 Aug 12 12:30	25° Ω 15'56	1.36989 AU
superior conj	12232 Sep 04 17:51	24° m) 39'51	0°06'50		12233 Aug 15 01:30	0° m)	
minimum elong	12232 Sep 04 17:28	24° m 37'56	0°06'35		10000 1 10 01 01	50 m 5 (100	000 510 6
behind sun begin	12232 Sep 04 12:00	24° m 09'52		superior conj	12233 Aug 19 04:34	7° m 56'33	
behind sun end	12232 Sep 04 22:57	25° m 06'04		minimum elong	12233 Aug 19 06:14	8° Mp 04'43	0°25'32
	12232 Sep 07 07:46	0∘ ⊽		asc. node	12233 Aug 21 21:29	13° m) 17'44	
evening rise	12232 Sep 12 08:26	10° ჲ 30′20		evening rise	12233 Aug 27 12:46	24° m 39'07	
	12232 Sep 22 13:21	0° M			12233 Aug 30 05:07	0∘ ⊽	
evening max el	12232 Oct 01 02:39	11° M 24'27	20°43'48	evening max el	12233 Sep 13 13:18	22° ≏ 35'55	19°32'02
desc. node	12232 Oct 07 06:32	15° M 53′00		retrograde	12233 Sep 23 06:13	27° ≏ 26′16	
retrograde	12232 Oct 12 11:53	17° M 03'37		desc. node	12233 Sep 24 03:58	27° ≏ 23'54	
evening set	12232 Oct 14 18:18	16°M51'09		evening set	12233 Sep 25 02:52	27° ≏ 16′23	
inferior conj	12232 Oct 23 19:31	12°M56'25	-4°42'27	inferior conj	12233 Oct 03 20:43	23° ♀ 10'56	-3°00'02
minimum elong	12232 Oct 23 09:33	13°ML10'41	4°39'21	minimum elong	12233 Oct 03 12:54	23° ہ 23'23	2°56'55
min. Earth dist.	12232 Oct 24 19:27	12° M 22'07	0.54628 AU	min. Earth dist.	12233 Oct 06 05:24	21° ≏ 40'50	0.55478 AU
morning rise	12232 Nov 01 00:41	8° M 59'47		morning rise	12233 Oct 11 20:51	18° ≏ 45'49	
direct	12232 Nov 05 06:43	8°M20'59		direct	12233 Oct 16 23:00	17° ≏ 47'59	
morning max el	12232 Nov 18 10:59	14°M43'46	23°16'50	morning max el	12233 Oct 30 21:21	24° Ω 46'09	25°04'03
morning man vi	12232 Nov 30 05:24	0° ₹ 7	23 1000		12233 Nov 04 17:33	0°M	20 0.00
asc. node	12232 Dec 01 01:58	1° x ⁷ 25'23		asc. node	12233 Nov 17 22:52	20°M12'00	
morning set	12232 Dec 11 17:51	22°× 03'42		use. Houe	12233 Nov 17 22:32 12233 Nov 22 23:51	0° ₹	
morning set					12233 NOV 22 23.31		
	12232 Dec 15 10:14	0°≠		morning set	12233 Nov. 26, 05:30	6° √ 1/7'53	
	12232 Dec 15 10:14	0°ಕ		morning set	12233 Nov 26 05:39	6° ∡ ¹47'53	
superior aoni			1026127	-			1020142
superior conj	12232 Dec 18 15:49	7° る 00'08	1°36'37	superior conj	12233 Dec 03 00:45	21° ∡ ¹41'34	1°38'42
minimum elong	12232 Dec 18 15:49 12232 Dec 18 16:46	7° ට 00'08 7° ට 05'11	1°37'26	superior conj minimum elong	12233 Dec 03 00:45 12233 Dec 03 00:34	21° х 41'34 21° х 40'30	1°39'33
minimum elong max. Earth dist.	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25	7°る00'08 7°る05'11 13°る21'29		superior conj	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46	21° 🖈 41'34 21° 🖈 40'30 25° 🖈 26'31	
minimum elong	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35	7°る00'08 7°る05'11 13°る21'29 23°る10'41	1°37'26	superior conj minimum elong max. Earth dist.	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° 云	1°39'33
minimum elong max. Earth dist. evening rise	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈	1°37'26	superior conj minimum elong max. Earth dist.	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° さ 7° さ11'43	1°39'33
minimum elong max. Earth dist.	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40	1°37'26	superior conj minimum elong max. Earth dist.	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° उ 7° उ 11'43 27° उ 36'50	1°39'33
minimum elong max. Earth dist. evening rise desc. node	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°升	1°37'26 1.33321 AU	superior conj minimum elong max. Earth dist. evening rise desc. node	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20	21° ₹41'34 21° ₹40'30 25° ₹26'31 0° ♂ 7° ♂31'43 27° ♂36'50 0°≈	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°升 14°升47'54	1°37'26 1.33321 AU	superior conj minimum elong max. Earth dist.	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° ರ 7° ರ 311'43 27° ರ 36'50 0° ≈ 27° ≈ 50'21	1°39'33
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22 12233 Feb 12 09:02	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°米 14°升47'54 22°升13'04	1°37'26 1.33321 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で 11'43 27° で 336'50 0° 念 27° 念 50'21 0° 米	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22 12233 Feb 12 09:02 12233 Feb 19 03:22	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 19° ¥41'55	1°37'26 1.33321 AU 27°20'03	superior conj minimum elong max. Earth dist. evening rise desc. node	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で 11'43 27° で 336'50 0° ※ 27° ※ 50'21 0° 光 5° 光 11'28	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22 12233 Feb 12 09:02 12233 Feb 19 03:22 12233 Feb 23 00:09	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 19° ¥41'55 16° ¥08'41	1°37'26 1.33321 AU 27°20'03 0.64673 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° 云 7° 云 11'43 27° 云 36'50 0° ≈ 27° ≈ 50'21 0° 米 5° 升 11'28 2° 升 48'48	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22 12233 Feb 12 09:02 12233 Feb 19 03:22	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°¥ 14°¥47'54 22°¥13'04 19°¥41'55 16°¥08'41 13°¥31'05	1°37'26 1.33321 AU 27°20'03 0.64673 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で 11'43 27° で 336'50 0° ※ 27° ※ 50'21 0° 光 5° 光 11'28	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Jan 29 19:22 12233 Feb 12 09:02 12233 Feb 19 03:22 12233 Feb 23 00:09	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 19° ¥41'55 16° ¥08'41	1°37'26 1.33321 AU 27°20'03 0.64673 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12233 Dec 03 00:45 12233 Dec 03 00:34 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° 云 7° 云 11'43 27° 云 36'50 0° ≈ 27° ≈ 50'21 0° 米 5° 升 11'28 2° 升 48'48	1°39'33 1.32158 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°¥ 14°¥47'54 22°¥13'04 19°¥41'55 16°¥08'41 13°¥31'05	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04 12234 Feb 05 12:10	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で 11'43 27° で 36'50 0° ≈ 27° ≈ 50'21 0° 米 5° 米 11'28 2° 米 48'48 30° R≈	1°39'33 1.32158 AU 27°32'17 0.62763 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°¥ 14°¥47'54 22°¥13'04 19°¥41'55 16°¥08'41 13°¥31'05 13°¥28'35	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist.	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 05 19:03	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で 11'43 27° で 36'50 0° ※ 27° ※ 50'21 0° 光 5° 米 11'28 2° 米 48'48 30° R※ 29° ※ 44'03	1°39'33 1.32158 AU 27°32'17 0.62763 AU
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 19° ¥41'55 16° ¥08'41 13° ¥31'05 13° ¥28'35 11° ¥50'59	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 05 19:03 12234 Feb 08 15:40	21° 🗗 41'34 21° 🗗 40'30 25° 🗗 26'31 0° で 7° で31'43 27° で36'50 0° ≈ 27° ≈ 50'21 0° 光 5° 光 11'28 2° 光 48'48 30° R ≈ 29° ≈ 44'03 26° ≈ 58'05	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°¥ 14°¥47'54 22°¥13'04 19°¥41'55 16°¥08'41 13°¥31'05 13°¥28'35 11°¥50'59 8°¥04'38	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 05 19:03 12234 Feb 08 15:40 12234 Feb 08 19:07	21° * 41'34 21° * 40'30 25° * 26'31 0° で 7° で31'43 27° で36'50 0° ≈ 27° ≈ 50'21 0° 光 5° 光 11'28 2° 光 48'48 30° R ≈ 29° ≈ 44'03 26° ≈ 58'05 26° ≈ 49'43	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 06 11:10	7°る00'08 7°る05'11 13°る21'29 23°る10'41 0°≈ 7°≈42'40 0°米 14°升47'54 22°升13'04 19°升41'55 16°升08'41 13°升31'05 13°升28'35 11°升50'59 8°升04'38 7°升29'55	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Jan 26 02:09 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 05 19:03 12234 Feb 08 15:40 12234 Feb 08 19:07 12234 Feb 08 19:07 12234 Feb 08 19:07	21° * 41'34 21° * 40'30 25° * 26'31 0° で 7° で 11'43 27° で 36'50 0° ≈ 27° ≈ 50'21 0°) 米 5°)	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03
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minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong	12232 Dec 18 15:49 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 25 10:25 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 04:45 12233 Mar 26 03:38 12233 Mar 30 04:45 12233 Apr 12 23:38 12233 Apr 12 15:16 12233 Apr 12 15:16 12233 Apr 13 10:25 12233 Apr 17 07:55 12233 Apr 28 22:28	7°♂00'08 7°♂05'11 13°♂21'29 23°♂10'41 0°≈ 7°≈42'40 0°¥ 14°¥47'54 22°¥13'04 19°¥41'55 16°¥08'41 13°¥31'05 13°¥28'35 11°¥50'59 8°¥04'38 7°¥29'55 10°¥48'41 0°Y 6°Y44'07 10°Y09'52 29°Y17'00 28°Y43'38 0°℧ 6°℧10'12 24°℧10'53	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08 17°53'40 -1°21'26 1°20'48	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 08 15:40 12234 Feb 08 15:40 12234 Feb 08 19:07 12234 Feb 13 21:32 12234 Feb 15 15:38 12234 Feb 15 15:38 12234 Feb 24 13:48 12234 Feb 28 21:17 12234 Mar 12 14:49 12234 Mar 19 02:47 12234 Mar 24 12:34 12234 Mar 24 12:34	21° ₹41'34 21° ₹40'30 25° ₹26'31 0° ₹ 7° ₹31'43 27° ₹36'50 0° ≈ 27° ≈50'21 0° ₹ 5° ₹11'28 2° ₹48'48 30° ₹≈ 29° ≈44'03 26° ≈58'05 26° ≈49'43 22° ≈37'45 21° ≈48'02 21° ≈23'31 24° ≈46'27 0° ₹ 19° ₹23'55 0° ₹ 0° ₹40'46	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03 1°41'06 17°46'38
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong max. Earth dist. evening rise	12232 Dec 18 15:49 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 25 10:25 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 06 11:10 12233 Mar 12 20:08 12233 Mar 26 03:38 12233 Mar 30 04:45 12233 Apr 12 23:38 12233 Apr 12 23:38 12233 Apr 12 15:16 12233 Apr 13 10:25 12233 Apr 14 07:55 12233 Apr 28 22:28 12233 May 02 17:50	7°500'08 7°505'11 13°521'29 23°510'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 19° ¥41'55 16° ¥08'41 13° ¥31'05 13° ¥28'35 11° ¥50'59 8° ¥04'38 7° ¥29'55 10° ¥48'41 0° Y 6° Y44'07 10° Y09'52 29° Y17'00 28° Y43'38 0° ¥ 6° ₩10'12 24° ₩10'53 0° Ⅱ	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08 17°53'40 -1°21'26 1°20'48 1.45332 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 08 15:40 12234 Feb 08 15:40 12234 Feb 13 21:32 12234 Feb 15 15:38 12234 Feb 17 22:43 12234 Feb 24 13:48 12234 Feb 28 21:17 12234 Mar 12 14:49 12234 Mar 19 02:47 12234 Mar 24 12:34 12234 Mar 24 08:29 12234 Mar 24 12:34	21° ₹41'34 21° ₹40'30 25° ₹26'31 0° ₹ 7° ₹31'43 27° ₹36'50 0° ≈ 27° ≈50'21 0° ¥ 5° ¥11'28 2° ¥48'48 30° ₹≈ 29° ≈44'03 26° ≈58'05 26° ≈49'43 22° ≈37'45 21° ≈48'02 21° ≈23'31 24° ≈46'27 0° ¥ 19° ¥23'55 0° ♀ 0° ♀40'46 9° ♀48'38 9° ♀31'37 20° ♀30'13	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03 1°41'06 17°46'38
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong max. Earth dist.	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 06 11:10 12233 Mar 12 20:08 12233 Mar 26 03:38 12233 Mar 26 03:38 12233 Mar 30 04:45 12233 Apr 10 06:12 12233 Apr 12 15:16 12233 Apr 12 15:16 12233 Apr 13 10:25 12233 Apr 14 07:55 12233 Apr 28 22:28 12233 May 02 17:50 12233 May 13 17:11	7°500'08 7°505'11 13°521'29 23°510'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 13° ¥31'05 13° ¥28'35 11° ¥50'59 8° ¥04'38 7° ¥29'55 10° ¥48'41 0° Y 6° Y44'07 10° Y09'52 29° Y17'00 28° Y43'38 0° ¥ 6° ₩10'12 24° ₩10'53 0° Ⅲ 16° №26'03	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08 17°53'40 -1°21'26 1°20'48 1.45332 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong asc. node	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 08 15:40 12234 Feb 08 15:40 12234 Feb 13 21:32 12234 Feb 15 15:38 12234 Feb 17 22:43 12234 Feb 24 13:48 12234 Feb 28 21:17 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 24 08:29 12234 Mar 31 01:47 12234 Mar 31 01:47 12234 Mar 31 01:47 12234 Mar 31 01:47	21° * 41'34 21° * 40'30 25° * 26'31 0° * 7° * 511'43 27° * 536'50 0° ※ 27° ※ 50'21 0°	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03 1°41'06 17°46'38
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong max. Earth dist. evening rise greatest brilliancy	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 10:25 12233 Feb 25 10:25 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 06 11:10 12233 Mar 12 20:08 12233 Mar 26 03:38 12233 Mar 26 03:38 12233 Mar 30 04:45 12233 Apr 10 06:12 12233 Apr 12 15:16 12233 Apr 12 15:16 12233 Apr 13 10:25 12233 Apr 28 22:28 12233 May 02 17:50 12233 May 13 17:11 12233 May 23 21:49	7°500'08 7°505'11 13°521'29 23°510'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 13° ¥31'05 13° ¥28'35 11° ¥50'59 8° ¥04'38 7° ¥29'55 10° ¥48'41 0° Y 6° Y44'07 10° Y09'52 29° Y17'00 28° Y43'38 0° ¥ 6° ₺10'12 24° ₺10'53 0° Ⅱ 16° Ⅲ26'03 0° €	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08 17°53'40 -1°21'26 1°20'48 1.45332 AU -0.6m	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 05 12:10 12234 Feb 08 15:40 12234 Feb 08 19:07 12234 Feb 13 21:32 12234 Feb 15 15:38 12234 Feb 15 15:38 12234 Feb 24 13:48 12234 Feb 28 21:17 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 14 12:34 12234 Mar 24 08:29 12234 Mar 24 08:29 12234 Mar 31 01:47 12234 Mar 10 02:02 12234 Apr 06 02:02 12234 Apr 06 02:02	21° ₹41'34 21° ₹40'30 25° ₹26'31 0° ₹ 7° ₹311'43 27° ₹36'50 0° ≈ 27° ≈50'21 0° ₹ 5° ₹11'28 2° ₹48'48 30° ₹≈ 29° ≈44'03 26° ≈58'05 26° ≈49'43 22° ≈37'45 21° ≈48'02 21° ≈23'31 24° ≈46'27 0° ₹ 19° ₹23'55 0° ₹ 0° ₹40'46 9° ₹48'38 9° ₹31'37 20° ₹30'13 0° ₹ 3° ₹39'14	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03 1°41'06 17°46'38
minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong max. Earth dist. evening rise	12232 Dec 18 15:49 12232 Dec 18 16:46 12232 Dec 21 15:25 12232 Dec 26 10:35 12232 Dec 29 23:14 12233 Jan 03 04:40 12233 Jan 17 08:29 12233 Feb 12 09:02 12233 Feb 12 09:02 12233 Feb 23 00:09 12233 Feb 25 10:25 12233 Feb 25 11:20 12233 Feb 27 00:10 12233 Mar 03 21:06 12233 Mar 06 11:10 12233 Mar 12 20:08 12233 Mar 26 03:38 12233 Mar 26 03:38 12233 Mar 30 04:45 12233 Apr 10 06:12 12233 Apr 12 15:16 12233 Apr 12 15:16 12233 Apr 13 10:25 12233 Apr 14 07:55 12233 Apr 28 22:28 12233 May 02 17:50 12233 May 13 17:11	7°500'08 7°505'11 13°521'29 23°510'41 0°≈ 7°≈42'40 0° ¥ 14° ¥47'54 22° ¥13'04 13° ¥31'05 13° ¥28'35 11° ¥50'59 8° ¥04'38 7° ¥29'55 10° ¥48'41 0° Y 6° Y44'07 10° Y09'52 29° Y17'00 28° Y43'38 0° ¥ 6° ₩10'12 24° ₩10'53 0° Ⅲ 16° №26'03	1°37'26 1.33321 AU 27°20'03 0.64673 AU -0°30'52 0°30'08 17°53'40 -1°21'26 1°20'48 1.45332 AU	superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong asc. node morning rise direct morning max el morning set desc. node superior conj minimum elong asc. node	12233 Dec 03 00:45 12233 Dec 04 17:46 12233 Dec 06 20:18 12233 Dec 10 06:24 12233 Dec 21 01:36 12233 Dec 22 11:20 12234 Jan 12 06:33 12234 Jan 14 16:44 12234 Feb 02 01:04 12234 Feb 05 12:10 12234 Feb 08 15:40 12234 Feb 08 15:40 12234 Feb 13 21:32 12234 Feb 15 15:38 12234 Feb 17 22:43 12234 Feb 24 13:48 12234 Feb 28 21:17 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 12 14:49 12234 Mar 24 08:29 12234 Mar 31 01:47 12234 Mar 31 01:47 12234 Mar 31 01:47 12234 Mar 31 01:47	21° * 41'34 21° * 40'30 25° * 26'31 0° * 7° * 511'43 27° * 536'50 0° ※ 27° ※ 50'21 0°	1°39'33 1.32158 AU 27°32'17 0.62763 AU -1°43'03 1°41'06 17°46'38

evening max el	12236 Apr 02 19:50	13° 8 03'03	23030133		12237 Feb 23 10:47	0° Ƴ	
retrograde	12236 Apr 13 15:49	19° 8 25'52	23 39 33	evening max el	12237 Mar 16 09:28	0 1 26° Υ 54'43	24°58'09
asc. node	12236 Apr 15 13:12	19° 8 09'19		evening max er	12237 Mar 19 19:54	0° 8	24 36 09
evening set	12236 Apr 18 20:36	19 8 09 19		ratragrada	12237 Mar 19 19.34 12237 Mar 28 06:30	3° 8 49'03	
•	12236 Apr 23 15:24	11° 8 39'08	0.68655 AU	retrograde asc. node	12237 Apr 02 10:34	1° 8 52'10	
min. Earth dist.	•	10° 8 46'49	0.08033 AU 2°25'54		1	1° 8 26'38	
inferior conj	12236 Apr 24 06:40	_		evening set	12237 Apr 02 23:10	_	
minimum elong	12236 Apr 24 04:33	10° 8 54'04	2°24'51	i n a r	12237 Apr 04 11:22	30°₹ Υ	0.60061.444
morning rise	12236 Apr 29 12:28	4° 8 42'15		min. Earth dist.	12237 Apr 07 10:13	26° Y 26'42	0.68061 AU
direct	12236 May 03 16:37	3° 8 04'13	20025125	inferior conj	12237 Apr 08 13:41	24°Υ56'18	1°49'34
morning max el	12236 May 11 18:59	7° 8 40'48	20°37'37	minimum elong	12237 Apr 08 11:36	25° ℃ 03'11	1°48'37
desc. node	12236 May 18 21:43	16° 8 05'00		morning rise	12237 Apr 14 00:17	19° Y ′00′06	
	12236 May 28 18:52	0°П		direct	12237 Apr 17 16:17	17° Y 42'51	
morning set	12236 Jun 10 03:33	18° Ⅱ 42'02		morning max el	12237 Apr 24 20:58	21° Υ 41'16	19°30'59
	12236 Jun 17 07:43	0.20			12237 May 01 18:51	0°8	
max. Earth dist.	12236 Jun 18 17:22	2° © 15'09	1.43517 AU	desc. node	12237 May 05 18:28	5° 8 36'24	
				greatest brilliancy	12237 May 07 13:18	8° 8 12'41	-0.7m
superior conj	12236 Jun 25 07:35	13° © 03'31		morning set	12237 May 20 03:53	27° 8 17'12	
minimum elong	12236 Jun 25 13:59	13° © 30'14	1°59'47		12237 May 21 22:10	0 ° Π	
	12236 Jul 05 05:02	0 ° Ω		max. Earth dist.	12237 Jun 01 07:11	16° Ⅱ 10'53	1.44941 AU
evening rise	12236 Jul 07 14:05	4°Ω10′23				_	
asc. node	12236 Jul 12 11:45	12° Ω 45'46		superior conj	12237 Jun 05 11:42	22° II 50'03	
	12236 Jul 24 02:42	0° m)		minimum elong	12237 Jun 05 13:25	22° Ⅱ 56'58	2°13'42
evening max el	12236 Jul 24 09:40	0° m 17′30	18°03'30		12237 Jun 09 22:26	0 \circ 60	
retrograde	12236 Jul 30 22:34	3° m 39'44		evening rise	12237 Jun 19 11:58	15° © 46'56	
evening set	12236 Aug 02 11:56	3°M)08'21			12237 Jun 28 01:36	0 \circ Ω	
	12236 Aug 07 01:20	30° ŖΩ		asc. node	12237 Jun 29 08:38	2° Ω 04'01	
inferior conj	12236 Aug 09 01:23	28° Ω 04'17	1°39'14	evening max el	12237 Jul 07 23:48	13° Ω 43'29	18°12'39
minimum elong	12236 Aug 09 03:51	27° Ω 58′08	1°37'54	retrograde	12237 Jul 14 08:16	17° Ω 04'51	
min. Earth dist.	12236 Aug 12 02:52	25° Ω 02'12	0.61496 AU	evening set	12237 Jul 17 05:55	16° Ω 19'49	
desc. node	12236 Aug 14 20:17	22° Ω 40'42		inferior conj	12237 Jul 23 06:22	10° Ω 57'56	2°28'42
morning rise	12236 Aug 15 17:12	22° Ω 02'52		minimum elong	12237 Jul 23 08:51	10° Ω 50'57	2°27'24
direct	12236 Aug 22 09:03	19° Ω 45'33		min. Earth dist.	12237 Jul 25 19:35	8° Ω 07'05	0.63684 AU
morning max el	12236 Sep 05 13:58	27° Ω 45′10	27°57'59	morning rise	12237 Jul 29 10:11	4° Ω 42'17	
	12236 Sep 07 17:42	0° m)		desc. node	12237 Aug 01 17:39	2° Ω 46′04	
	12236 Sep 28 14:22	0० ত		direct	12237 Aug 05 02:05	2° Ω 07'48	
asc. node	12236 Oct 08 13:05	18° ≏ 54'17		morning max el	12237 Aug 18 22:53	10° Ω 09'08	27°42'25
morning set	12236 Oct 09 00:51	19° ≏ 54'42			12237 Sep 03 12:22	0° m ∕	
	12236 Oct 13 18:57	0° M.			12237 Sep 20 23:15	0∘ ত	
max. Earth dist.	12236 Oct 14 16:25	1° M 56'59	1.31643 AU	morning set	12237 Sep 22 19:10	3° ჲ 36'30	
				asc. node	12237 Sep 25 09:44	8° ≏ 53'54	
superior conj	12236 Oct 16 09:50	5° M 44'43	1°10'00	max. Earth dist.	12237 Sep 27 17:00	13° ≏ 42'27	1.32508 AU
minimum elong	12236 Oct 16 07:35	5°M32'18	1°10'06				
evening rise	12236 Oct 23 03:22	20°M32'59		superior conj	12237 Sep 30 16:38	20° ≏ 05'39	0°49'25
	12236 Oct 27 15:57	0° ∡ ¹		minimum elong	12237 Sep 30 14:34	19° ≏ 54'33	0°49'15
desc. node	12236 Nov 10 16:59	23° ∡ ¹47'30			12237 Oct 05 05:51	0° M	
	12236 Nov 15 18:55	0°₹		evening rise	12237 Oct 07 14:38	5° ™ 06'46	
evening max el	12236 Nov 18 03:12	2° る 23'34	24°52'45		12237 Oct 20 17:57	0° ∡ ¹	
retrograde	12236 Dec 01 22:22	9° ප 18′00		desc. node	12237 Oct 28 14:17	10° ∡ ′28'44	
evening set	12236 Dec 07 11:17	8° ろ 09'33		evening max el	12237 Oct 30 13:26	12° ∡ ′30′26	23°12'32
min. Earth dist.	12236 Dec 12 15:04	5° る 24'58	0.56596 AU	retrograde	12237 Nov 12 20:49	19° ∡ ¹07'42	
inferior conj	12236 Dec 15 05:41	3° ₹ 44'04	-5°24'45	evening set	12237 Nov 17 01:48	18° ∡ ¹29'16	
minimum elong	12236 Dec 15 12:41	3° る 32'45	5°22'42	min. Earth dist.	12237 Nov 23 22:57	15° ∡ 17′21	0.55188 AU
	12236 Dec 22 06:28	30°₽ ⋌		inferior conj	12237 Nov 25 11:10	14° ∡ ¹24'57	-5°52'37
morning rise	12236 Dec 23 16:16	29° ∡ ³36'49		minimum elong	12237 Nov 25 11:24	14° ∡ °24'38	5°51'48
direct	12236 Dec 26 00:43	29° х 21'19		morning rise	12237 Dec 03 22:38	10° ∡ ³34'26	
	12236 Dec 29 15:09	0°ප		direct	12237 Dec 06 21:18	10° ∡ 13'46	
morning max el	12237 Jan 04 13:09	3° ප 56'19	19°22'20	morning max el	12237 Dec 17 22:32	15° ∡ ¹29'06	20°38'34
asc. node	12237 Jan 04 13:16	3° ප 56'35		asc. node	12237 Dec 22 10:21	20° х 34′48	
	12237 Jan 20 20:42	0° ≈			12237 Dec 28 13:32	ರ∘ರ	
morning set	12237 Jan 21 14:13	1° ≈ 27'18		morning set	12238 Jan 05 21:38	16° පි 07'40	
-					12238 Jan 12 14:20	0° ≈	
superior conj	12237 Jan 29 16:49	17° ≈ 35'32	1°00'35				
minimum elong	12237 Jan 29 19:43	17° ≈ 49'37	1°00'49	superior conj	12238 Jan 13 08:53	1° ≈ 34'50	1°20'10
5	12237 Feb 05 06:40	0° ∀		minimum elong	12238 Jan 13 11:24	1° ≈ 47'38	1°20'40
max. Earth dist.	12237 Feb 05 06:01	29° ≈ 57'00	1.38185 AU	max. Earth dist.	12238 Jan 18 14:20	11° ≈ 58′29	1.36043 AU
desc. node	12237 Feb 06 16:36	2°) 33′18		evening rise	12238 Jan 22 11:31	19° ≈ 18'26	
evening rise	12237 Feb 08 23:45	6° ¥ 37'27		desc. node	12238 Jan 24 13:19	23° ≈ 04'55	
_							

	12238 Jan 28 12:11	0° \		desc. node	12239 Jan 11 10:06	13° ≈ 26′28	
	12238 Feb 17 13:16	0 K 0°Υ		desc. node	12239 Jan 21 10:08	13 ≈ 26 28 0° ∺	
evening max el	12238 Feb 17 13:10 12238 Feb 26 23:05	0 1 10° Υ 44'48	26°07'25	evening max el	12239 Feb 09 12:35	24° H 24'43	2700005
retrograde	12238 Feb 26 25:05 12238 Mar 11 16:17	10 1 44 48 17° Y 59'39	20 07 23	evening max er	12239 Feb	24 π 2443 0° Υ	27 00 03
•	12238 Mar 17 10:17	17 γ 39 39 15° γ 29'23		ratra arada	12239 Feb 10 17:02 12239 Feb 22 20:23	0 1 1° Υ 49'27	
evening set	12238 Mar 17 20.23 12238 Mar 20 07:57	13 Y 29 23		retrograde	12239 Feb 22 20.23 12239 Feb 28 10:22	1 1492/ 30°R ∺	
asc. node		13 γ 04 32 11° γ 04'35	0.67046 ATT	avanina aat		30 KA 29° ∺ 16′27	
min. Earth dist.	12238 Mar 22 01:00	9° Υ 01'43	0.67046 AU 1°03'11	evening set min. Earth dist.	12239 Mar 01 10:26	25° X 25'22	0.65620 AII
inferior conj	12238 Mar 23 16:40				12239 Mar 05 09:34		0.65639 AU
minimum elong	12238 Mar 23 15:11	9° Υ 06'21	1°02'35	asc. node	12239 Mar 07 05:21	23°) € 20′24	000 (100
morning rise	12238 Mar 29 10:40	3°Υ15'35		inferior conj	12239 Mar 07 13:21	22°) 57′27	0°06'28
direct	12238 Apr 01 15:32	2°Υ17'19		minimum elong	12239 Mar 07 13:10	22° \ 57'59	0°06'36
morning max el	12238 Apr 08 06:23	5°Υ50'36	18°40'03	transit middle	12239 Mar 07 13:10	22°) 57′59	0°06'36
desc. node	12238 Apr 22 15:09	25° Y ′32′26		transit begin	12239 Mar 07 10:27	23° ¥ 05'47	
	12238 Apr 25 12:00	0° 8		transit end	12239 Mar 07 15:53	22° ∺ 50′12	
morning set	12238 Apr 29 17:37	6° 8 37'18		morning rise	12239 Mar 13 17:19	17° ∺ 23′22	
	12238 May 14 16:35	0°Щ		direct	12239 Mar 16 12:17	16°) 41′10	
max. Earth dist.	12238 May 15 01:48	0°Ⅱ36′01	1.45678 AU	morning max el	12239 Mar 22 21:13	20° 米 01′56	18°05'43
					12239 Mar 30 14:09	0° Υ	
superior conj	12238 May 15 22:15	1° Ⅱ 55'58		desc. node	12239 Apr 09 11:46	15° Ƴ 45'54	
minimum elong	12238 May 15 16:24	1° Ⅱ 33'06	2°07'46	morning set	12239 Apr 10 10:30	17° Ƴ 18'16	
evening rise	12238 May 31 09:51	26° Ⅲ 23'33			12239 Apr 18 07:22	8° 0	
	12238 Jun 02 16:02	0°©					
greatest brilliancy	12238 Jun 07 18:23	8° 5 07'27	-0.9m	superior conj	12239 Apr 25 06:48	11° 8 03'25	-1°42'14
asc. node	12238 Jun 16 05:39	20°956'36		minimum elong	12239 Apr 24 21:27	10° 8 26'42	1°41'51
evening max el	12238 Jun 21 12:07	27° © 21'45	18°39'41	max. Earth dist.	12239 Apr 27 21:44	15° 8 10'16	1.45669 AU
	12238 Jun 24 20:07	$0^{\circ}\Omega$			12239 May 07 10:26	Π°	
retrograde	12238 Jun 28 01:29	0° Ω 55'58		evening rise	12239 May 11 09:24	6° Ⅱ 07'39	
evening set	12238 Jul 01 07:31	29° 9 55'41		greatest brilliancy	12239 May 24 00:06	25° Ⅲ 26′02	-0.7m
	12238 Jul 01 04:39	30° Ŗ ூ			12239 May 27 02:44	0°9	
inferior conj	12238 Jul 06 22:47	24°917'50	2°58'38	asc. node	12239 Jun 03 02:45	9° © 13'52	
minimum elong	12238 Jul 07 00:29	24°9512'35	2°57'34	evening max el	12239 Jun 04 20:13	11° © 05'23	19°23'43
min. Earth dist.	12238 Jul 08 21:29	21° © 54'37	0.65579 AU	retrograde	12239 Jun 11 22:49	15° © 05'01	
morning rise	12238 Jul 12 16:34	17° © 55'48		evening set	12239 Jun 15 13:40	13°5548'40	
direct	12238 Jul 19 03:01	15° © 14'14		inferior conj	12239 Jun 20 23:11	7°956'32	3°12'41
desc. node	12238 Jul 19 14:56	15° © 15'07		minimum elong	12239 Jun 20 23:49	7°954'27	3°11'46
morning max el	12238 Aug 01 09:53	23° © 05'26	26°54'34	min. Earth dist.	12239 Jun 22 07:11	6°911'28	0.67070 AU
morning man er	12238 Aug 07 12:50	0° Ω	200.0.	morning rise	12239 Jun 26 09:29	1°533'44	0.07070110
	12238 Aug 27 19:58	0° m)		morning rise	12239 Jun 28 12:42	30°R Ⅱ	
morning set	12238 Sep 06 03:08	16° Mp 47'29		direct	12239 Jul 02 10:39	28° I I54'49	
max. Earth dist.	12238 Sep 10 08:31	25° m) 05'26	1.33895 AU	desc. node	12239 Jul 06 12:08	29° I 53'57	
asc. node	12238 Sep 10 06:31	28° m 58'39	1.55075 710	dese. Hode	12239 Jul 06 17:17	0°99	
asc. node	12238 Sep 12 00:24 12238 Sep 12 18:20	0° ⊽		morning max el	12239 Jul 14 20:43	6° 5 21'08	25042158
	12236 Sep 12 16.20	٥ –		morning max cr	12239 Aug 02 04:04	0°Ω	23 42 36
superior conj	12238 Sep 14 17:50	4° ≏ 07'05	0°23'43	morning set	12239 Aug 19 21:06	29° Ω 18'46	
minimum elong	12238 Sep 14 17:38	4° Ω 00'46	0°23'26	morning set	12239 Aug 19 21:00 12239 Aug 20 06:07	0° m)	
evening rise	12238 Sep 14 10:58 12238 Sep 22 00:56	19° £ 35'23	0 23 20	max. Earth dist.	12239 Aug 20 00:07 12239 Aug 23 13:50	-	1.35749 AU
evening rise	12238 Sep 27 03:16	0° ™		max. Earth dist.	12239 Aug 23 13.30	0 11/1201	1.33749 AU
evening max el	12238 Oct 12 03:36	22°M38'45	21°33'55	superior conj	12239 Aug 29 10:45	17° m 42'18	0°06'31
desc. node	12238 Oct 12 03:30 12238 Oct 15 11:40	25°M30'13	21 33 33	minimum elong	12239 Aug 29 10.43 12239 Aug 29 11:10	17 mg 42 18 17° mg 44'21	0°06'42
		28°M44'16		behind sun begin	12239 Aug 29 11:10 12239 Aug 29 05:29	17 my 44 21 17° my 15'47	0 00 42
retrograde evening set	12238 Oct 24 09:42	28°M26'01		behind sun end	Č		
Č	12238 Oct 27 05:33		5024125	asc. node	12239 Aug 29 16:50	18° M) 12'58	
inferior conj	12238 Nov 05 04:08	24°M30'55		asc. node	12239 Aug 30 03:05	19° സ് 04'44 0° മ	
minimum elong	12238 Nov 04 20:13	24°M42'01	5°22'35		12239 Sep 04 10:50	0 <u>₽</u> 3° ₽ 53'16	
min. Earth dist.	12238 Nov 05 05:17	24°M29'19	0.54561 AU	evening rise	12239 Sep 06 08:08		
morning rise	12238 Nov 13 11:53	20°M42'42			12239 Sep 21 06:06	0°M 23103	20010127
direct	12238 Nov 17 05:48	20°M12'17	2201.512.7	evening max el	12239 Sep 24 06:03	3°M23'03	20°10'37
morning max el	12238 Nov 29 18:21	26°M₁0'55	22°15'27	desc. node	12239 Oct 02 09:04	8°M24'09	
1	12238 Dec 03 08:23	0° ₹ 1 89 • ₹ 1215 4		retrograde	12239 Oct 04 22:35	8°M42'00	
asc. node	12238 Dec 09 07:22	8° ∡ 13'54		evening set	12239 Oct 06 22:38	8°M31'38	4002100
. ,	12238 Dec 20 22:01	0°る		inferior conj	12239 Oct 15 22:22	4°M33'40	
morning set	12238 Dec 21 08:15	0°る53'52		minimum elong	12239 Oct 15 12:36	4°M48'12	
	12220 D 20 00 11	15075500	1022122	min. Earth dist.	12239 Oct 17 13:38	3°M35'14	0.54874 AU
superior conj	12238 Dec 28 09:41	15° る 57'09	1°32'32	morning rise	12239 Oct 24 01:34	0°M26'31	
minimum elong	12238 Dec 28 11:16	16° る 05'31	1°33'17	1.	12239 Oct 25 16:48	30°R ≏	
max. Earth dist.	12239 Jan 01 04:34	23° る 50'30	1.34190 AU	direct	12239 Oct 28 16:02	29° Ω 40'35	
	12239 Jan 04 06:10	0°≈			12239 Oct 31 14:31	0°M	24002120
evening rise	12239 Jan 05 14:22	2° ≈ 37'14		morning max el	12239 Nov 11 05:57	6° M 19'57	24~03'20

asc. node	12239 Nov 26 04:19	26°M39'35			12240 Nov 19 03:23	0° ₹	
. ,	12239 Nov 28 00:48	0° ⊼			12240 N 26 02 22	150 71000	1027145
morning set	12239 Dec 05 20:07 12239 Dec 12 10:06	15° メ *40'31 0°る		superior conj	12240 Nov 26 02:32	15° ₹ 18'02 15° ₹ 14'28	1°37'45 1°38'34
	12239 Dec 12 10.00	0.0		minimum elong max. Earth dist.	12240 Nov 26 01:53 12240 Nov 27 07:12	17° x 14 28	1.31805 AU
superior conj	12239 Dec 12 16:23	0° る 34'16	1°38'15	max. Earth dist.	12240 Nov 27 07:12 12240 Dec 02 21:23	17 メ -30 37	1.31803 AU
minimum elong	12239 Dec 12 16:50		1°39'07	evening rise	12240 Dec 02 21:23 12240 Dec 03 04:03	0°る34'47	
max. Earth dist.	12239 Dec 15 02:33	5° ਰ 48'27	1.32758 AU	desc. node	12240 Dec 15 04:00	23° る 16'22	
evening rise	12239 Dec 20 04:55	16° ට 25'37			12240 Dec 19 07:22	0° ≈	
	12239 Dec 27 07:10	0° ≈		evening max el	12241 Jan 04 10:38	20° ≈ 31'03	27°27'51
desc. node	12239 Dec 29 07:01	3° ≈ 32'49		retrograde	12241 Jan 18 08:06	27° ≈ 49'41	
	12240 Jan 15 23:56	0° ∀		evening set	12241 Jan 25 06:56	25° ≈ 33'24	
evening max el	12240 Jan 23 01:06	7°) 44′28	27°28'59	min. Earth dist.	12241 Jan 29 00:45	22° ≈ 38′23	0.61875 AU
retrograde	12240 Feb 05 18:06	15° ∺ 09'34		inferior conj	12241 Feb 01 00:47	19° ≈ 52'57	-2°16'01
evening set	12240 Feb 12 14:55	12°) 40′48		minimum elong	12241 Feb 01 05:28	19° ≈ 42′10	2°13'33
min. Earth dist.	12240 Feb 16 10:03		0.63888 AU	morning rise	12241 Feb 08 06:44	14°≈50'40	
inferior conj	12240 Feb 19 01:06	6° ∺ 37'23		asc. node	12241 Feb 08 00:02	14°≈56'17	
minimum elong	12240 Feb 19 03:01	6°¥32′26	0°59'10	direct	12241 Feb 10 11:24	14°≈29'29	17040107
asc. node	12240 Feb 22 02:43 12240 Feb 25 17:17	3° ∺ 38'39 1° ∺ 17'46		morning max el	12241 Feb 17 07:48 12241 Feb 25 23:50	17°≈57'44 0° ¥	17°49'07
morning rise direct	12240 Feb 28 04:00	0°) 47′59		morning set	12241 Feb 23 23.30 12241 Mar 05 01:45	0 X 12° ¥ 23'41	
morning max el	12240 Mar 05 14:46	4° ∺ 07′29	17°48'30	desc. node	12241 Mar 13 04:59	26°) 45'49	
morning set	12240 Mar 22 07:09	29°) 19'50	17 4030	dese. Hode	12241 Mar 15 04:95	0° Υ	
	12240 Mar 22 16:35	0°Υ				•	
desc. node	12240 Mar 26 08:23	6° Ƴ 11'55		superior conj	12241 Mar 16 05:59	1° Y 58'54	-0°23'23
				minimum elong	12241 Mar 16 03:47	1° Y 49'32	0°22'58
superior conj	12240 Apr 04 06:31	20° Ƴ 57'33	-1°04'30	max. Earth dist.	12241 Mar 23 08:27	13° Y 46'15	1.43542 AU
minimum elong	12240 Apr 03 23:47	20° Ƴ 30′15	1°03'50	evening rise	12241 Mar 30 12:51	25° Y 10'50	
max. Earth dist.	12240 Apr 09 16:34	29° Ƴ 38'19	1.44931 AU		12241 Apr 02 15:45	$0^{\circ}S$	
	12240 Apr 09 22:02	0° 8			12241 Apr 23 11:34	0°Щ	
evening rise	12240 Apr 19 21:08	15° 8 29'53		evening max el	12241 Apr 30 19:53	8° Ⅱ 38'26	21°34'15
	12240 Apr 29 11:18	0°Ⅱ	20022156	asc. node	12241 May 06 21:06	13° Ⅱ 14'15	
evening max el	12240 May 17 22:50	24° Ⅱ 51'14	20°22'56	retrograde	12241 May 09 19:57	13° Ⅲ 55'20 12° Ⅲ 06'42	
asc. node	12240 May 19 23:54	26° Ⅱ 44'25 29° Ⅱ 26'19		evening set	12241 May 14 06:54	12°Щ06'42 5°Щ50'56	3°03'06
retrograde evening set	12240 May 25 21:38 12240 May 29 22:05	29 II 26 19 27° II 53'43		inferior conj minimum elong	12241 May 19 13:19 12241 May 19 12:00	5° П 55'31	3°02'10
inferior conj	12240 Jun 04 04:48	21° II 48'50	3°13'33	min. Earth dist.	12241 May 19 17:52	5° П 35'05	0.68690 AU
minimum elong	12240 Jun 04 04:22	21° I I50'18		mm. Darur diov.	12241 May 24 06:26	30°R 8	0.000,0110
min. Earth dist.	12240 Jun 04 22:42	20° Ⅱ 47'31	0.68114 AU	morning rise	12241 May 24 16:53	29° 8 36'03	
morning rise	12240 Jun 09 10:22	15° Ⅱ 28'53		direct	12241 May 29 17:37	27° 8 25'14	
direct	12240 Jun 14 23:55	13° II 01'00			12241 Jun 04 23:14	$\Pi^{\circ}0$	
desc. node	12240 Jun 22 09:15	16° Ⅱ 15'11		morning max el	12241 Jun 08 17:22	3° Ⅱ 19'59	22°47'36
morning max el	12240 Jun 26 06:39	19° Ⅱ 46'47	24°17'20	desc. node	12241 Jun 09 06:16	3° Ⅱ 52'55	
	12240 Jul 04 23:33	0ංම			12241 Jun 29 01:29	0° ©	
	12240 Jul 25 07:41	0° Ω		morning set	12241 Jul 12 20:20	21° © 33'49	
morning set	12240 Jul 31 20:25	10° £ 58'05	1 27054 ATT	max. Earth dist.	12241 Jul 17 09:59	29° © 13'07	1.40284 AU
max. Earth dist.	12240 Aug 04 11:57 12240 Aug 11 07:06	0° m)	1.37954 AU		12241 Jul 17 20:58	$0^{\circ}\Omega$	
	12240 Aug 11 07.00	עווי ט		superior conj	12241 Jul 25 05:35	12° Ω 59'03	-1°14'07
superior conj	12240 Aug 11 16:01	0° m 42'43	-0°39'55	minimum elong	12241 Jul 25 10:53	13°Ω23'13	
minimum elong	12240 Aug 11 18:45	0° mp 55'47		asc. node	12241 Aug 02 20:30	29° Ω 04'58	
asc. node	12240 Aug 15 23:47	9° m 08'01			12241 Aug 03 08:05	0° m)	
evening rise	12240 Aug 20 09:41	17° m 53'08		evening rise	12241 Aug 04 02:27	1°M)27'16	
	12240 Aug 26 16:58	0∘ ⊽		evening max el	12241 Aug 20 02:12	27° Mp $12'04$	18°27'08
evening max el	12240 Sep 05 22:32	14° ≙ 55'23	19°08'09		12241 Aug 23 17:37	0∘ ⊽	
retrograde	12240 Sep 14 23:17	19° ≙ 25'57		retrograde	12241 Aug 27 18:55	1° ≏ 04'44	
evening set	12240 Sep 16 19:41	19° £ 15'23		evening set	12241 Aug 29 20:10	0° ჲ 49'00	
desc. node	12240 Sep 18 06:31	18° Ω 53'08	2012112	dono = - 1-	12241 Sep 01 00:51	30°RM)	
inferior conj	12240 Sep 25 07:06	15° £ 03'04		desc. node	12241 Sep 05 03:58	27° Tp 20'41	0°25'47
minimum elong min. Earth dist.	12240 Sep 25 01:22 12240 Sep 28 01:53	15° ♀ 12'47 13° ♀ 10'20	2°09'51 0.56086 AU	inferior conj minimum elong	12241 Sep 06 13:02 12241 Sep 06 12:03	26° Mp 16'12 26° Mp 18'10	
morning rise	12240 Sep 28 01.33 12240 Oct 03 04:09	13 ≗ 10 20 10° £ 22'00	0.50000 AU	min. Earth dist.	12241 Sep 06 12:05 12241 Sep 09 19:56	23° Mp 40'47	0.57964 AU
direct	12240 Oct 03 04:03 12240 Oct 08 14:23	9° £ 13'40		morning rise	12241 Sep 14 00:27	20° m 58'06	3.5 / JUT AU
morning max el	12240 Oct 22 17:17	16° £ 25'40	25°45'51	direct	12241 Sep 14 00:27 12241 Sep 20 02:49	19° m) 22'35	
<i>5</i>	12240 Nov 02 18:27	0° M ₊	· -	morning max el	12241 Oct 04 10:30	26° m 58'34	27°05'24
asc. node	12240 Nov 12 01:11	15°M39'32		-	12241 Oct 07 08:12	0∘ <u>⊽</u>	
morning set	12240 Nov 19 07:27	0° ∡ 721'46			12241 Oct 27 06:42	0°M	

asa mada	12241 Oat 20 21:50	50 m 0.4152			12242 Oat 02 01:49	0∘ ত	
asc. node	12241 Oct 29 21:59 12241 Nov 03 16:33	5°M04'53 14°M53'24		asc. node	12242 Oct 03 01:48	0° <u>≥</u> 24° <u>♀</u> 48'07	
morning set	12241 NOV 05 10.55	14 11633 24		morning set	12242 Oct 16 18:42 12242 Oct 18 21:39	24 ≅ 4807 29° ♀ 10'35	
superior conj	12241 Nov 10 14:08	0° ∡ '02'45	1°31'24	morning set	12242 Oct 18 21:39 12242 Oct 19 07:04	0°M	
minimum elong	12241 Nov 10 14:08 12241 Nov 10 12:35	29°M54'08	1°31'59	max. Earth dist.	12242 Oct 19 07:04 12242 Oct 25 00:09		1.31389 AU
max. Earth dist.	12241 Nov 10 12:33	0° ٦ 11'09	1.31349 AU	max. Latin dist.	12242 Oct 23 00.09	12 11622 34	1.31369 AU
max. Earm dist.	12241 Nov 10 13:39	0° x ⁷ 1	1.31349 AU	superior conj	12242 Oct 26 01:22	14°M42'51	1°19'24
evening rise	12241 Nov 17 09:14	14° ∡ 58′20		minimum elong	12242 Oct 25 01:22 12242 Oct 25 23:15	14°M31'05	1°19'41
evening rise	12241 Nov 24 20:52	0°る		evening rise	12242 Nov 01 18:18	29°M30'18	1 1741
desc. node	12241 Dec 02 01:03	12°る28'18		evening rise	12242 Nov 01 23:49	0° ⊼	
desc. node	12241 Dec 15 01:58	0°≈			12242 Nov 18 06:56	0°₹	
evening max el	12241 Dec 17 14:26	2° ≈ 32'17	26°52'31	desc. node	12242 Nov 18 22:13	0° ろ 56'28	
retrograde	12241 Dec 31 12:58	9° ≈ 41'44	20 32 31	evening max el	12242 Nov 29 10:04	13° 石 41'05	25°44'00
evening set	12242 Jan 07 06:52	7°≈46'21		retrograde	12242 Dec 13 07:24	20°₹41'49	23 1100
min. Earth dist.	12242 Jan 11 04:40	5°≈07'36	0.59733 AU	evening set	12242 Dec 19 10:28	19° ට 14'36	
inferior conj	12242 Jan 14 08:52	2° ≈ 34'46		min. Earth dist.	12242 Dec 23 22:30	16° る 37'41	0.57654 AU
minimum elong	12242 Jan 14 16:19	2°≈19'46		inferior conj	12242 Dec 26 21:59	14° る 33'25	
	12242 Jan 17 19:00	30°Rる	3 32 .,	minimum elong	12242 Dec 27 06:23	14° る 18'46	
morning rise	12242 Jan 22 04:39	27°る53'00		morning rise	12243 Jan 04 04:53	10°る14'15	1 17 33
direct	12242 Jan 24 06:34	27° る 36'47		direct	12243 Jan 06 08:58	9° る 59'35	
asc. node	12242 Jan 25 21:20	27° る 46'58		asc. node	12243 Jan 12 18:33	12° る 16'27	
use. noue	12242 Jan 30 07:13	0° ≈		morning max el	12243 Jan 15 02:06	14° る 13'50	18°49'08
morning max el	12242 Jan 31 20:50	1° ≈ 23'13	18°08'44	morning must vi	12243 Jan 25 21:51	0° ≈	10 1,7 00
morning set	12242 Feb 16 12:08	26°≈10'53	10 00 11	morning set	12243 Jan 31 09:27	10° ≈ 27'13	
morning sev	12242 Feb 18 13:02	0° ∀		morning sec	122 13 0411 31 07.27	10	
	122.2100 10 15.02	٠,٨		superior conj	12243 Feb 08 23:49	27° ≈ 07'51	0°45'54
superior conj	12242 Feb 26 05:05	14° ₩ 06'03	0°14'32	minimum elong	12243 Feb 09 02:29	27°≈20'30	0°46'02
minimum elong	12242 Feb 26 06:14	14°) 11'08	0°14'40	g	12243 Feb 10 12:28	0° ∀	0 .002
behind sun begin	12242 Feb 26 03:12	13°) € 57'34		desc. node	12243 Feb 14 22:10	8° ₩ 02'32	
behind sun end	12242 Feb 26 09:15	14°) (24'41		max. Earth dist.	12243 Feb 16 03:39	10°) 13′24	1.39465 AU
desc. node	12242 Feb 28 01:33	17°) 23'45		evening rise	12243 Feb 20 01:54	17° ¥ 01'01	
max. Earth dist.	12242 Mar 05 20:08	27°) (20'48	1.41649 AU		12243 Feb 28 00:56	0° Υ	
	12242 Mar 07 10:14	0°Υ			12243 Mar 21 09:49	0°8	
evening rise	12242 Mar 10 20:48	5° Ƴ 37'56		evening max el	12243 Mar 27 02:27	6° 8 17'17	24°13'37
evening rise	12242 Mar 26 20:57	0°8		retrograde	12243 Apr 07 09:26	12° 8 54'54	2. 1557
evening max el	12242 Apr 13 12:26	22° 8 26'48	22°53'06	asc. node	12243 Apr 10 15:43	12° 8 06'35	
retrograde	12242 Apr 23 16:17	28° 8 26'30		evening set	12243 Apr 12 19:23	10° 8 38'17	
asc. node	12242 Apr 23 18:23	28° 8 26'28		min. Earth dist.	12243 Apr 17 10:35	5° 8 18'12	0.68455 AU
evening set	12242 Apr 28 14:30	26° 8 22'53		inferior conj	12243 Apr 18 07:09	4° 8 08'46	2°11'42
inferior conj	12242 May 03 22:43	19° 8 58'33	2°42'20	minimum elong	12243 Apr 18 04:59	4° 8 16'05	
minimum elong	12242 May 03 20:47	20° 8 05'15	2°41'19		12243 Apr 21 14:21	30°RƳ	
min. Earth dist.	12242 May 03 14:30	20° 8 27'02	0.68799 AU	morning rise	12243 Apr 23 14:41	28° Y °07'50	
morning rise	12242 May 09 02:58	13° 8 50'07		direct	12243 Apr 27 13:31	26° Y ′38'57	
direct	12242 May 13 14:32	11° 8 59'51			12243 May 04 05:25	0°8	
morning max el	12242 May 22 08:10		21°22'15	morning max el	12243 May 05 05:51	0° 8 57'45	20°07'33
desc. node	12242 May 27 03:10	22° 8 26'00		desc. node	12243 May 13 23:58	11° 8 39'39	
	12242 Jun 01 21:58	0°II			12243 May 26 13:26	0°II	
	12242 Jun 22 03:02	0° ©		morning set	12243 Jun 01 21:42	9° Ⅱ 40'47	
morning set	12242 Jun 22 18:33	1° © 01'01		max. Earth dist.	12243 Jun 11 23:46		1.44199 AU
max. Earth dist.	12242 Jun 29 13:34	11° © 56'11	1.42452 AU		12243 Jun 14 19:25	0ಂತಾ	
superior conj	12242 Jul 06 22:49	24°\$20'14	-1°45'10	superior conj	12243 Jun 17 16:24	4° 5 540'14	-2°07'07
minimum elong	12242 Jul 07 05:42	24°9549'50		minimum elong	12243 Jun 17 21:27	5°900'53	
8	12242 Jul 10 05:03	$0^{\circ}\Omega$		evening rise	12243 Jun 30 16:44	26°934'45	
evening rise	12242 Jul 18 06:24	14° Ω 24'55		evening rise	12243 Jul 02 16:26	0°Ω	
asc. node	12242 Jul 20 17:15	18° Ω 50'54		asc. node	12243 Jul 07 14:05	8° Ω 21'13	
	12242 Jul 27 03:09	0° m)		evening max el	12243 Jul 18 02:38	23° Ω 18'35	18°05'04
evening max el	12242 Aug 03 12:49	10° Mp 02'49	18°06'29	retrograde	12243 Jul 24 12:37	26° Ω 39'06	
retrograde	12242 Aug 10 08:47	13° m ₂ 32'11		evening set	12243 Jul 27 05:23	26° Ω 02'17	
evening set	12242 Aug 10 00:47	13° Mp 07'27		inferior conj	12243 Aug 02 12:49	20° Ω 50'17	2°02'49
inferior conj	12242 Aug 19 16:05	8° Mp 14'00	1°00'28	minimum elong	12243 Aug 02 12:49 12243 Aug 02 15:26	20° Ω 43'23	2°01'27
minimum elong	12242 Aug 19 10:03	8° Mp 09'51	0°59'26	min. Earth dist.	12243 Aug 02 13:20 12243 Aug 05 09:31	$17^{\circ}\Omega 50'31$	0.62451 AU
min. Earth dist.	12242 Aug 19 17:32 12242 Aug 22 22:00	5° mg 15'19	0.60184 AU	morning rise	12243 Aug 03 03:31 12243 Aug 08 23:20	17 % 23031	0.02731 AU
desc. node	12242 Aug 22 22:00 12242 Aug 23 01:24	5° Mp 07'56	J.00107110	desc. node	12243 Aug 08 23:20 12243 Aug 09 22:47	14°Ω01'39	
morning rise	12242 Aug 25 01:24 12242 Aug 26 15:13	2° m/25'13		direct	12243 Aug 09 22:47 12243 Aug 15 15:45	14 δ <i>l</i> 01 39	
direct	12242 Aug 20 13.13 12242 Sep 02 03:51	0° mg 22'09		morning max el	12243 Aug 13 13:43 12243 Aug 29 18:15	20°Ω17'53	27°55'44
morning max el	12242 Sep 02 03.31 12242 Sep 16 11:21	8° My 15'23	27°50'02	morning max ci	12243 Aug 29 18.13 12243 Sep 07 02:22	0° m)	41 33 44
morning max ci	12272 Sep 10 11.21	0 IIJ 13 23	27 30 02		12273 Sep 07 02.22	עניי	

desc. node	12245 Jul 13 17:23	8° © 35'13		morning rise	12246 Jun 19 06:12	24° ∏ 48'24	
morning max el	12245 Jul 24 15:15	16°902'46	26°26'28	direct	12246 Jun 25 02:41	22° Ⅱ 13'26	
	12245 Aug 05 03:46	$0^{\circ}\Omega$		desc. node	12246 Jun 30 14:32	24° Ⅲ 01'18	
	12245 Aug 24 07:20	0° m y		morning max el	12246 Jul 07 01:35	29° Ⅲ 23′24	25°07'46
morning set	12245 Aug 29 13:31	9° m 33'56		_	12246 Jul 07 15:50	0°ಅ	
max. Earth dist.	12245 Sep 02 12:29	17° m) 10'11	1.34630 AU		12246 Jul 29 23:27	$0^{\circ}\Omega$	
asc. node	12245 Sep 06 08:41	24° m 52'29		morning set	12246 Aug 12 00:06	21° Ω 44'20	
use. Houe	122 13 Sep 00 00.11	2. 193223		max. Earth dist.	12246 Aug 15 14:21	28° Ω 16'45	1.36661 AU
superior conj	12245 Sep 07 13:14	27° m/ 18'58	0°11'25	max. Lartii dist.	12246 Aug 16 12:30	0°m)	1.50001 AC
1 3	•				12240 Aug 10 12.30	עוו ט	
minimum elong	12245 Sep 07 12:37	27° m 15'47	0°11'10		100464 00 01 00	100% 10101	0000100
behind sun begin	12245 Sep 07 08:20	26° m 53'45		superior conj	12246 Aug 22 01:38	10° mp 40'34	
behind sun end	12245 Sep 07 16:53	27° m 37'51		minimum elong	12246 Aug 22 02:57	10° m 47'02	0°20'29
	12245 Sep 08 20:19	0∘ ⊽		asc. node	12246 Aug 24 05:22	14° m 57'55	
evening rise	12245 Sep 15 01:41	13° ഫ 03'03		evening rise	12246 Aug 30 06:49	27° m 14'24	
	12245 Sep 23 17:55	0° M			12246 Aug 31 15:41	0∘ ত	
evening max el	12245 Oct 04 03:47	14° M 28'58	20°56'09	evening max el	12246 Sep 16 12:15	25° ≏ 32'58	19°41'19
desc. node	12245 Oct 09 14:12	18° ™ 37'39			12246 Sep 23 05:34	0° M ₊	
retrograde	12245 Oct 15 18:35	20°M15'04		retrograde	12246 Sep 26 11:13	0°M30'47	
evening set	12245 Oct 18 04:02	20°M01'26		desc. node	12246 Sep 26 11:37	0°M30'47	
inferior conj	12245 Oct 27 05:03	16°ML07'02	-4°55'05	evening set	12246 Sep 28 08:20	0°M20'57	
minimum elong	12245 Oct 26 19:21	16°M20'47		evening set	12246 Sep 29 20:02	30°R Ω	
•				:c:	12246 Oct 07 04:02	26° £ 17'36	2017/47
min. Earth dist.	12245 Oct 27 23:12	15°M41'16	0.54586 AU	inferior conj			
morning rise	12245 Nov 04 10:54	12° ™ 13'21		minimum elong	12246 Oct 06 19:34	26° △ 30'49	
direct	12245 Nov 08 13:56	11°M36'50		min. Earth dist.	12246 Oct 09 08:34	24° ≏ 55'38	0.55297 AU
morning max el	12245 Nov 21 14:19	17°M53'19	23°00'42	morning rise	12246 Oct 15 05:03	21° ≏ 57'33	
	12245 Dec 01 07:43	0° ∡ ¹		direct	12246 Oct 20 04:09	21° ≙ 03'06	
asc. node	12245 Dec 03 09:48	3° ∡ 19'58		morning max el	12246 Nov 03 00:44	27° ≏ 56'28	24°48'43
morning set	12245 Dec 14 10:25	24° ∡ ′31′58			12246 Nov 05 01:55	0° M	
	12245 Dec 16 23:37	0°₹		asc. node	12246 Nov 20 06:41	22°M01'34	
					12246 Nov 24 10:54	0° ∡ 7	
superior conj	12245 Dec 21 09:09	9° る 29'42	1°35'43	morning set	12246 Nov 28 22:16	9° ∡ 17'06	
minimum elong	12245 Dec 21 10:16	9° ට 35'39		. 8			
max. Earth dist.	12245 Dec 24 13:39	16° ප 15'04	1.33533 AU	superior conj	12246 Dec 05 17:32	24° х 10′20	1°38'46
evening rise	12245 Dec 29 06:19	25° る 47'36	1.55555 710	minimum elong	12246 Dec 05 17:31	24°×10'11	1°39'38
evening rise	12245 Dec 31 10:18	0° ≈		max. Earth dist.	12246 Dec 07 14:58	28°× 18'34	1.32298 AU
daga mada	12246 Jan 05 12:27	0 ≈ 9°≈22'08		max. Earth dist.	12246 Dec 07 14.38 12246 Dec 08 09:42	20 X 10 34 0°る	1.32296 AU
desc. node							
	12246 Jan 18 10:00	0°) {		evening rise	12246 Dec 13 00:50	9° る 45'35	
evening max el	12246 Feb 01 19:01	17° ¥ 29′20	27°15'44	desc. node	12246 Dec 23 09:22	29° る 19'53	
retrograde	12246 Feb 15 07:14	24° ¥ 54'22			12246 Dec 23 18:41	0° ≈	
evening set	12246 Feb 22 00:35	22° ∺ 22'35			12247 Jan 14 15:24	0° ∀	
min. Earth dist.	12246 Feb 25 21:58	18°) 4 44′51	0.64933 AU	evening max el	12247 Jan 15 06:34	0°) 36′38	27°32'26
inferior conj	12246 Feb 28 06:35	16° ∺ 09'30	-0°20'39	retrograde	12247 Jan 29 01:32	7° ¥ 59'00	
minimum elong	12246 Feb 28 07:11	16° ∺ 07'50	0°20'08	evening set	12247 Feb 05 00:08	5°) 34′22	
asc. node	12246 Mar 01 07:54	15°) €00'38		min. Earth dist.	12247 Feb 08 18:16	2°) €25'56	0.63062 AU
morning rise	12246 Mar 06 15:27	10°) 40′59			12247 Feb 11 05:37	30°R≈	
direct	12246 Mar 09 06:47	10° ¥ 04'23		inferior conj	12247 Feb 11 13:36	29° ≈ 40'13	-1°31'34
morning max el	12246 Mar 15 15:25	13° ¥ 23'11	17°56'15	minimum elong	12247 Feb 11 16:37	29° ≈ 32'45	1°29'48
	12246 Mar 27 10:42	0°Υ		asc. node	12247 Feb 16 05:16	25°≈38'15	
morning set	12246 Apr 02 06:42	9° Υ 37'08		morning rise	12247 Feb 18 11:31	24°≈27'43	
desc. node	12246 Apr 02 00.42 12246 Apr 03 13:59	11° Υ 46'26		direct	12247 Feb 18 11:31 12247 Feb 20 19:28	24 ≈27 43 24°≈01'57	
desc. node	•						17946124
	12246 Apr 14 18:54	0°8		morning max el	12247 Feb 27 09:10	27°≈23'35	17°46'34
					12247 Mar 01 17:22	0° ∀	
superior conj	12246 Apr 16 08:20	2° 8 29'03		morning set	12247 Mar 15 13:29	22°) (07'49	
minimum elong	12246 Apr 15 23:33	1° 8 54'10			12247 Mar 20 02:42	0° Y	
max. Earth dist.	12246 Apr 20 06:43	8° 8 41'51	1.45443 AU	desc. node	12247 Mar 21 10:34	2° Y 16'26	
evening rise	12246 May 02 09:00	27° 8 27'53					
	12246 May 04 00:40	Π $^{\circ}0$		superior conj	12247 Mar 27 17:43	12° Y 50'58	-0°47'00
greatest brilliancy	12246 May 16 16:36	19° Ⅱ 05'43	-0.6m	minimum elong	12247 Mar 27 12:56	12° Y 31'12	0°46'24
•	12246 May 24 14:27	0ಂತಾ		max. Earth dist.	12247 Apr 03 00:58	23° Y ′04'52	1.44413 AU
asc. node	12246 May 28 05:11	4° © 08'08			12247 Apr 07 09:57	0°8	
evening max el	12246 May 28 09:05	4°9518'00	19°47'15	evening rise	12247 Apr 11 20:33	6° 8 53'35	
retrograde	12246 Jun 04 19:18	8°931'14			12247 Apr 27 08:10	0°П	
evening set	12246 Jun 08 14:15	7° 5 07'46		evening max el	12247 May 11 09:10	18° ∏ 03'52	20°51'57
inferior conj	12246 Jun 13 22:14		3°14'31	asc. node	12247 May 11 03:10 12247 May 15 02:22	21° Ⅱ 14'40	20 3137
-					•	21 II 14 40 22° II 56'23	
minimum elong	12246 Jun 13 22:24		3°13'38	retrograde	12247 May 19 18:09		
t materia	12246 Jun 14 19:06	30°RⅡ 200Ⅱ43124	0.67572 111	evening set	12247 May 23 23:02	21° I 16'40	2010/24
min. Earth dist.	12246 Jun 15 00:05	29° Ⅱ 43'24	0.67572 AU	inferior conj	12247 May 29 05:19	15° Ⅱ 06'40	5°10'24

minimum elong	12247 May 29 04:29	15° Ⅱ 09'33	3°09'31	inferior conj	12248 May 12 14:26	29° 8 11'34	
min. Earth dist.	12247 May 29 17:21	14° Ⅱ 24'59	0.68416 AU	minimum elong	12248 May 12 12:49	29° 8 17'13	2°54'32
morning rise	12247 Jun 03 09:42	8° Ⅱ 48'42		min. Earth dist.	12248 May 12 13:29	29° 8 14'54	0.68792 AU
direct	12247 Jun 08 17:46	6° Ⅱ 27'49		morning rise	12248 May 17 17:58	22° 8 59'04	
desc. node	12247 Jun 17 11:36	10° Ⅱ 57'43		direct	12248 May 22 12:59	20° 8 56'50	
morning max el	12247 Jun 19 11:41	12° Ⅱ 52'39	23°39'11	morning max el	12248 May 31 23:48	26° 8 29'43	22°10'14
	12247 Jul 03 06:36	0°€		desc. node	12248 Jun 03 08:35	29° 8 01'01	
	12247 Jul 22 19:42	0 $^{\circ}$ Ω			12248 Jun 04 05:16	Π \circ 0	
morning set	12247 Jul 24 13:58	2° Ω 57'37			12248 Jun 25 19:15	0ං ම	
max. Earth dist.	12247 Jul 28 11:50	9° Ω 42'07	1.38944 AU	morning set	12248 Jul 04 02:52	13° © 03'36	
				max. Earth dist.	12248 Jul 09 11:16	21° © 51'05	1.41236 AU
superior conj	12247 Aug 05 00:40	23° Ω 22'50	-0°54'31		12248 Jul 14 05:59	$0^{\circ}\Omega$	
minimum elong	12247 Aug 05 04:31	23° Ω 40′52	0°54'27				
	12247 Aug 08 12:17	0° m p		superior conj	12248 Jul 17 06:03	5° Ω 16′09	-1°28'01
asc. node	12247 Aug 11 02:04	4° m 58'53		minimum elong	12248 Jul 17 12:17	5° Ω 43'47	1°27'58
evening rise	12247 Aug 14 05:02	11° m 04'19		evening rise	12248 Jul 27 16:52	24° Ω 23'47	
	12247 Aug 24 15:45	0∘ 亚		asc. node	12248 Jul 27 22:47	24° Ω 51'19	
evening max el	12247 Aug 30 09:51	7° £ 24'38	18°48'09		12248 Jul 30 17:23	0° m)	
retrograde	12247 Sep 07 19:58	11° ≏ 38′01		evening max el	12248 Aug 12 16:57	19° m 56'45	18°16'02
evening set	12247 Sep 09 17:40	11° ≏ 25'52		retrograde	12248 Aug 19 23:36	23° m 37'45	
desc. node	12247 Sep 13 09:01	10° ≏ 02'16		evening set	12248 Aug 22 03:46	23° m 18'43	
inferior conj	12247 Sep 17 21:28	7° £ 05'01	-1°25'20	inferior conj	12248 Aug 29 12:38	18° m 37′22	0°13'41
minimum elong	12247 Sep 17 17:54	7° £ 11'29	1°23'54	minimum elong	12248 Aug 29 13:06	18° m 36'22	0°13'15
min. Earth dist.	12247 Sep 20 23:07	4° £ 52'09	0.56812 AU	transit middle	12248 Aug 29 13:06	18° m) 36'22	0°13'15
morning rise	12247 Sep 25 14:47	2° ₽ 07'35		transit begin	12248 Aug 29 11:07	18° m) 40'34	
direct	12247 Oct 01 08:10	0° £ 48'19		transit end	12248 Aug 29 15:05	18° m) 32'10	
morning max el	12247 Oct 15 14:22	8° £ 11'56	26°23'29	desc. node	12248 Aug 30 06:28	17° m) 59'21	
	12247 Oct 31 22:14	0° M		min. Earth dist.	12248 Sep 01 20:37	15° m) 49'01	0.58875 AU
asc. node	12247 Nov 07 03:31	11°ML13'40		morning rise	12248 Sep 05 18:57	13° m 04'53	
morning set	12247 Nov 13 08:53	23°M55'41		direct	12248 Sep 12 02:31	11° Mp 17'01	
morning sec	12247 Nov 16 03:58	0° ₹		morning max el	12248 Sep 26 10:51	19° Mp 02'16	27°29'08
	12217 1101 10 03.30	· ^		morning max or	12248 Oct 05 17:44	0° ⊽	27 27 00
superior conj	12247 Nov 20 04:34	8° ∡ 755'56	1°35'46		12248 Oct 23 14:47	0° M	
minimum elong	12247 Nov 20 03:30	8° √ 50'04		asc. node	12248 Oct 24 00:16	0° M L47'15	
max. Earth dist.	12247 Nov 20 03:30 12247 Nov 20 21:41	10° ₹ 30'07	1.31546 AU	morning set	12248 Oct 27 16:30	8°M21'47	
evening rise	12247 Nov 27 02:49	24° × ⁷ 02'04	1.515 10 110	morning sec	12210 000 27 10.50	0 11021 17	
evening rise	12247 Nov 30 00:15	0°ਰ					
				superior coni	12248 Nov 03 16:14	23°M.39'33	1°27'01
desc node				superior conj	12248 Nov 03 16:14	23°M.39'33	1°27'01 1°27'28
desc. node	12247 Dec 10 06:22	18° ප් 51'50		minimum elong	12248 Nov 03 14:24	23°M29'20	1°27'28
	12247 Dec 10 06:22 12247 Dec 17 12:55	18°₹51'50 0°≈	27°16'59		12248 Nov 03 14:24 12248 Nov 03 06:24	23°M29'20 22°M44'40	
evening max el	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47	18°ජ51'50 0°≈ 13°≈05'05	27°16'59	minimum elong max. Earth dist.	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32	23°M29'20 22°M44'40 0°⊀	1°27'28
evening max el retrograde	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02	18°る51'50 0°≈ 13°≈05'05 20°≈20'36	27°16'59	minimum elong	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52	23°M29'20 22°M44'40 0°⊀ 8°⊀29'48	1°27'28
evening max el retrograde evening set	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47		minimum elong max. Earth dist. evening rise	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02	23°M29'20 22°M44'40 0°ダ 8°ダ29'48 0°る	1°27'28
evening max el retrograde evening set min. Earth dist.	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17	18°₹51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22	0.60972 AU	minimum elong max. Earth dist. evening rise desc. node	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27	23°M29'20 22°M44'40 0°メ 8°メ29'48 0°る 7°る46'56	1°27'28 1.31295 AU
evening max el retrograde evening set min. Earth dist. inferior conj	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06	18°⋜51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59	0.60972 AU -2°49'51	minimum elong max. Earth dist. evening rise	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13	23°M29'20 22°M44'40 0° ፟፟፟፟፟ 8° ፟፟፟፟፟፟፟፟29'48 0° ፟፟ 7° ፟፟፟፟፟546'56 24° ፟፟፟፟544'16	1°27'28 1.31295 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04	0.60972 AU	minimum elong max. Earth dist. evening rise desc. node evening max el	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22	23°M29'20 22°M44'40 0° ₹ 8° ₹29'48 0° ₹ 7°₹46'56 24°₹44'16 0°≈	1°27'28 1.31295 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27	0.60972 AU -2°49'51	minimum elong max. Earth dist. evening rise desc. node evening max el	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02	23°M29'20 22°M44'40 0° ₹' 8°₹29'48 0°₹ 7°₹46'56 24°₹44'16 0°≈ 1°≈50'40	1°27'28 1.31295 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈33'39	0.60972 AU -2°49'51	minimum elong max. Earth dist. evening rise desc. node evening max el	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02 12248 Dec 30 01:45	23°M29'20 22°M44'40 0° ₹' 8° ₹29'48 0° ₹ 7°₹46'56 24°₹44'16 0° ≈ 1°≈50'40 0°≈06'35	1°27'28 1.31295 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈49'27 7°≈49'27 7°≈33'39 7°≈30'53	0.60972 AU -2°49'51 2°46'55	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02 12248 Dec 30 01:45 12248 Dec 30 06:46	23°M29'20 22°M44'40 0° ₹ 8° ₹29'48 0° ₹ 7° ₹46'56 24° ₹44'16 0° ≈ 1° ≈ 50'40 0° ≈06'35 30° ₹₹	1°27'28 1.31295 AU 26°27'11
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈33'39 7°≈30'53 11°≈05'32	0.60972 AU -2°49'51 2°46'55	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist.	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58	23°M29'20 22°M44'40 0°ズ 8°ズ29'48 0°궁 7°궁46'56 24°궁44'16 0°≈ 1°≈50'40 0°≈06'35 30°R♂ 27°♂30'25	1°27'28 1.31295 AU 26°27'11 0.58825 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16	18°る51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈33'39 7°≈30'53 11°≈05'32 0°)€	0.60972 AU -2°49'51 2°46'55	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29	23°M29'20 22°M44'40 0°ズ 8°ズ29'48 0°궁 7°궁46'56 24°궁44'16 0°≈ 1°≈50'40 0°≈06'35 30°R♂ 27°♂30'25 25°♂07'38	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30	18°る51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈33'39 7°≈30'53 11°≈05'32 0° 升 5°升32'21	0.60972 AU -2°49'51 2°46'55	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 23 13:02 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43	23°M29'20 22°M44'40 0°ズ 8°ズ29'48 0°उ 7°उ46'56 24°उ44'16 0°≈ 1°≈50'40 0°≈06'35 30°Rउ 27°उ30'25 25°उ07'38 24°उ52'02	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17
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evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist.	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30 12248 Mar 07 07:11 12248 Mar 08 03:42 12248 Mar 08 03:08 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 15 14:52 12248 Mar 21 18:06 12248 Mar 30 07:08	18°♂51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈33'39 7°≈30'53 11°≈05'32 0°ℋ 5°ℋ32'21 22°ℋ52'52 24°ℋ22'15 24°ℋ19'46 23°ℋ46'48 24°ℋ52'40 0°Ƴ 6°℉59'11 16°℉51'53 0°℧	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 24 11:18 12249 Jan 29 03:21 12249 Feb 09 07:03 12249 Feb 14 18:42	23°M29'20 22°M44'40 0°ズ 8°ズ29'48 0°उ 7°उ46'56 24°उ44'16 0°≈ 1°≈50'40 0°≈06'35 30°Rउ 27°उ30'25 25°उ07'38 24°उ52'02 20°उ35'21 20°उ20'22 21°उ06'41 24°उ17'49 0°≈ 19°≈33'19 0°Ж 6°Ж54'07 7°Ж03'15	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30 12248 Mar 07 07:11 12248 Mar 08 03:42 12248 Mar 08 03:08 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 15 14:52 12248 Mar 21 18:06 12248 Mar 30 07:08 12248 Mar 30 07:08	18° ₹51'50 0° ≈ 13° ≈05'05 20° ≈20'36 18° ≈11'47 15° ≈25'22 12° ≈42'59 12° ≈30'04 7° ≈49'27 7° ≈30'53 11° ≈05'32 0° ₩ 5° ₩32'21 22° ₩52'52 24° ₩22'15 24° ₩19'46 23° ₩46'48 24° ₩52'40 0° Ψ 6° Ψ'59'11 16° Ψ'51'53 0° ₩ 0° Π	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25 1.42787 AU	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 29 03:21 12249 Jan 29 03:21 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 18 13:43 12249 Feb 18 13:43 12249 Feb 18 13:43	23°M29'20 22°M44'40 0° ズ 8°ズ29'48 0° 云 7° 云46'56 24° 云44'16 0° ※ 1° ※50'40 0° ※06'35 30° R云 27° 云30'25 25° 云07'38 24° 云52'02 20° 云35'21 20° 云20'22 21° 云06'41 24° 云17'49 0° ※ 19° ※33'19 0° ዢ 6° ዢ54'07 7° 光03'15 13° 米31'33	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57 18°23'11
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 02:33 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30 12248 Feb 27 07:11 12248 Mar 08 03:42 12248 Mar 08 03:08 12248 Mar 07 19:33 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 11 10:26 12248 Mar 21 18:06 12248 Mar 30 07:08 12248 Mar 30 07:08 12248 Apr 21 09:49 12248 Apr 21 09:49 12248 Apr 23 03:57	18° ₹51'50 0° ≈ 13° ≈05'05 20° ≈20'36 18° ≈11'47 15° ≈25'22 12° ≈42'59 12° ≈30'04 7° ≈49'27 7° ≈30'53 11° ≈05'32 0° ₩ 5° ₩32'21 22° ₩52'52 24° ₩22'15 24° ₩22'15 24° ₩29'40 0° Υ 6° Υ59'11 16° Υ51'53 0° ₩ 0° Π 1° Π50'48	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 23:49 12249 Jan 24 11:18 12249 Jan 29 03:21 12249 Feb 10 07:03 12249 Feb 11 18:42 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 22 03:47 12249 Feb 26 00:03	23°M29'20 22°M44'40 0° ズ 8° ズ29'48 0° 云 7° 云46'56 24° 云44'16 0° ※ 1° ※50'40 0° ※06'35 30° R云 27° 云30'25 25° 云07'38 24° 云52'02 20° 云35'21 20° 云20'22 21° 云06'41 24° 云17'49 0° ※ 19° ※33'19 0° 沃 6° 沃54'07 7° 光03'15 13° 光31'33 20° 光14'06	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57 18°23'11
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30 12248 Feb 27 07:11 12248 Mar 08 03:42 12248 Mar 07 07:11 12248 Mar 08 03:42 12248 Mar 08 10:43 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 11 10:26 12248 Mar 21 18:06 12248 Mar 30 07:08 12248 Mar 21 09:49 12248 Apr 21 09:49 12248 Apr 23 03:57 12248 Apr 30 23:36	18° ₹51'50 0° ≈ 13° ≈05'05 20° ≈20'36 18° ≈11'47 15° ≈25'22 12° ≈42'59 12° ≈30'04 7° ≈49'27 7° ≈30'53 11° ≈05'32 0° ₩ 5° ₩32'21 22° ₩52'52 24° ₩22'15 24° ₩22'15 24° ₩19'46 23° ₩46'48 24° ₩52'40 0° Υ 6° Υ59'11 16° Υ51'53 0° ℧ 0° Ⅲ 1° Ⅲ50'48 7° Ⅲ13'25	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25 1.42787 AU	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 17 23:49 12249 Jan 24 11:18 12249 Jan 29 03:21 12249 Jan 29 03:21 12249 Feb 10 07:03 12249 Feb 11 18:42 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 18 13:43 12249 Feb 22 03:47 12249 Feb 26 00:03 12249 Mar 02 10:54	23°M29'20 22°M44'40 0° ズ 8° ズ29'48 0° 云 7° 云46'56 24° 云44'16 0° ※ 1° ※50'40 0° ※06'35 30° R云 27° 云30'25 25° 云07'38 24° 云52'02 20° 云35'21 20° 云20'22 21° 云06'41 24° 云17'49 0° ※ 19° ※33'19 0° 沃 6° 沃54'07 7° 光03'15 13° 光31'33 20° 光14'06 27° 光42'51	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57 18°23'11
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 26 15:30 12248 Feb 27 14:16 12248 Feb 28 14:16 12248 Feb 29 15:30 12248 Mar 07 07:11 12248 Mar 08 03:42 12248 Mar 08 03:08 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 11 10:26 12248 Mar 30 07:08 12248 Mar 30 07:08 12248 Mar 30 07:08 12248 Apr 21 09:49 12248 Apr 21 09:49 12248 Apr 30 23:36 12248 Mar 30 23:36 12248 Mar 30 07:55	18°る51'50 0°≈ 13°≈05'05 20°≈20'36 18°≈11'47 15°≈25'22 12°≈42'59 12°≈30'04 7°≈49'27 7°≈30'53 11°≈05'32 0°米 5°升32'21 22°升52'52 24°升22'15 24°升22'15 24°升9'46 23°升46'48 24°升52'40 0°Y 6°Y59'11 16°Y51'53 0°出 1°耳50'48 7°耳13'25 7°耳26'46	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25 1.42787 AU	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 17 23:49 12249 Jan 29 03:21 12249 Jan 29 03:21 12249 Jan 29 03:21 12249 Feb 14 18:42 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 18 13:43 12249 Feb 26 00:03 12249 Mar 02 10:54 12249 Mar 03 20:25	23°M29'20 22°M44'40 0° メー 8° メー29'48 0° ピー 7° ピー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー・ロー	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57 18°23'11
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node	12247 Dec 10 06:22 12247 Dec 17 12:55 12247 Dec 28 13:47 12248 Jan 11 12:02 12248 Jan 18 09:52 12248 Jan 22 04:17 12248 Jan 25 07:06 12248 Jan 25 13:02 12248 Feb 01 19:06 12248 Feb 03 02:33 12248 Feb 03 22:05 12248 Feb 11 01:03 12248 Feb 23 14:16 12248 Feb 26 15:30 12248 Feb 27 07:11 12248 Mar 08 03:42 12248 Mar 07 07:11 12248 Mar 08 03:42 12248 Mar 08 10:43 12248 Mar 08 10:43 12248 Mar 11 10:26 12248 Mar 11 10:26 12248 Mar 21 18:06 12248 Mar 30 07:08 12248 Mar 21 09:49 12248 Apr 21 09:49 12248 Apr 23 03:57 12248 Apr 30 23:36	18° ₹51'50 0° ≈ 13° ≈05'05 20° ≈20'36 18° ≈11'47 15° ≈25'22 12° ≈42'59 12° ≈30'04 7° ≈49'27 7° ≈30'53 11° ≈05'32 0° ₩ 5° ₩32'21 22° ₩52'52 24° ₩22'15 24° ₩22'15 24° ₩19'46 23° ₩46'48 24° ₩52'40 0° Υ 6° Υ59'11 16° Υ51'53 0° ℧ 0° Ⅲ 1° Ⅲ50'48 7° Ⅲ13'25	0.60972 AU -2°49'51 2°46'55 17°55'04 -0°06'40 0°06'25 1.42787 AU	minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12248 Nov 03 14:24 12248 Nov 03 06:24 12248 Nov 06 12:32 12248 Nov 10 09:52 12248 Nov 21 10:02 12248 Nov 26 03:27 12248 Dec 09 14:13 12248 Dec 16 16:22 12248 Dec 30 01:45 12248 Dec 30 06:46 12249 Jan 03 03:58 12249 Jan 06 07:29 12249 Jan 06 15:43 12249 Jan 14 08:33 12249 Jan 16 10:26 12249 Jan 17 23:49 12249 Jan 24 11:18 12249 Jan 29 03:21 12249 Jan 29 03:21 12249 Feb 10 07:03 12249 Feb 11 18:42 12249 Feb 18 11:43 12249 Feb 18 11:43 12249 Feb 18 13:43 12249 Feb 22 03:47 12249 Feb 26 00:03 12249 Mar 02 10:54	23°M29'20 22°M44'40 0° ズ 8° ズ29'48 0° 云 7° 云46'56 24° 云44'16 0° ※ 1° ※50'40 0° ※06'35 30° R云 27° 云30'25 25° 云07'38 24° 云52'02 20° 云35'21 20° 云20'22 21° 云06'41 24° 云17'49 0° ※ 19° ※33'19 0° 沃 6° 沃54'07 7° 光03'15 13° 光31'33 20° 光14'06 27° 光42'51	1°27'28 1.31295 AU 26°27'11 0.58825 AU -4°09'17 4°05'57 18°23'11 0°28'43 0°28'48 1.40745 AU

retrograde	12249 Apr 16 11:06	21° 8 57'21		retrograde	12250 Mar 31 02:26	6° 8 22'12	
asc. node	12249 Apr 17 20:53	21° 8 48'09		asc. node	12250 Apr 04 18:16	4° 8 46'12	
evening set	12249 Apr 21 14:10	19° 8 48'12		evening set	12250 Apr 05 17:23	4° 8 01'09	
inferior conj	12249 Apr 26 23:42	13° 8 21'11	2°30'34		12250 Apr 09 09:48	30° ŖƳ	
minimum elong	12249 Apr 26 21:37	13° 8 28'20	2°29'31	min. Earth dist.	12250 Apr 10 05:29	28° Y 56′06	0.68179 AU
min. Earth dist.	12249 Apr 26 10:17	14° 8 07'19	0.68706 AU	inferior conj	12250 Apr 11 07:10	27° Ƴ 30'59	1°55'45
morning rise	12249 May 02 05:00	7° 8 15'31		minimum elong	12250 Apr 11 05:02	27° Y 38'02	1°54'46
direct	12249 May 06 11:06	5° 8 34'13		morning rise	12250 Apr 16 16:53	21° Y 33'35	
morning max el	12249 May 14 17:11	10° 8 17'16	20°48'47	direct	12250 Apr 20 10:40	20° Y 13'19	
desc. node	12249 May 21 05:28	17° 8 53'08		morning max el	12250 Apr 27 18:04	24° Ƴ 16′27	19°39'59
dese. Hode	12249 May 29 23:20	0°II		morning max or	12250 May 02 17:25	0°8	1, 3, 3,
morning set	12249 Jun 13 15:24	22° I 105'58		desc. node	12250 May 02 17:25 12250 May 08 02:15	7° 8 20'10	
morning set	12249 Jun 18 15:48	0°95		greatest brilliancy	12250 May 08 02:13		-0.6m
F 41 F 4			1 42250 ATT	greatest oriniancy			-0.0111
max. Earth dist.	12249 Jun 21 17:19	4°955'07	1.43259 AU		12250 May 23 05:14	0°II	
	12240 1 20 12 24	1.6061011.4	1056101	morning set	12250 May 23 15:45	0°II40'22	1 44551 411
superior conj	12249 Jun 28 13:34	16°9512'14		max. Earth dist.	12250 Jun 04 06:31	18° Ⅱ 46′21	1.44771 AU
minimum elong	12249 Jun 28 20:15	16°9540'16	1°56'21				
	12249 Jul 06 14:12	0 ° Ω		superior conj	12250 Jun 08 21:04	26° Ⅱ 07'08	
evening rise	12249 Jul 10 13:58	7° Ω 02'30		minimum elong	12250 Jun 08 23:49	26° Ⅱ 18'11	2°12'45
asc. node	12249 Jul 14 19:34	14° Ω 31'17			12250 Jun 11 06:45	0 \circ \odot	
	12249 Jul 24 14:20	0° m y		evening rise	12250 Jun 22 15:15	18° 5 348'14	
evening max el	12249 Jul 27 05:28	2° m 59'48	18°03'40		12250 Jun 29 07:23	$\mathfrak{O}^{\circ} \mathfrak{O}$	
retrograde	12249 Aug 02 19:47	6° Mp 23′18		asc. node	12250 Jul 01 16:27	3° £ 53′00	
evening set	12249 Aug 05 07:59	5° m 53′40		evening max el	12250 Jul 10 19:39	16° Ω 23'35	18°10'05
inferior conj	12249 Aug 11 23:41	0° m 52'16	1°29'46	retrograde	12250 Jul 17 04:12	19° Ω 44'17	
minimum elong	12249 Aug 12 02:02	0° mp 46'32		evening set	12250 Jul 20 00:35	19° Ω 01'24	
g	12249 Aug 12 20:56	30°RΩ	1 2000	inferior conj	12250 Jul 26 02:43	13° Ω 41'53	2°22'31
min. Earth dist.	12249 Aug 15 02:33	27° Ω 50'26	0.61161 AU	minimum elong	12250 Jul 26 05:16	13° Ω 34'50	2°21'11
desc. node	12249 Aug 17 03:53	26°Ω03'00	0.01101 AU	min. Earth dist.	12250 Jul 28 17:54	13° Ω 48'17	0.63375 AU
	_						0.03373 AU
morning rise	12249 Aug 18 17:25	24° Ω 53'54		morning rise	12250 Aug 01 08:13	7° Ω 27'40	
direct	12249 Aug 25 08:41	22° Ω 40′03		desc. node	12250 Aug 04 01:17	5° Ω 48'16	
	12249 Sep 07 22:45	0° m)		direct	12250 Aug 08 00:24	4° Ω 55'17	
morning max el	12249 Sep 08 14:18	0° m ,37′59	27°57'09	morning max el	12250 Aug 21 22:51	12° Ω 56′59	27°46'56
	12249 Sep 29 21:42	0∘ ⊽			12250 Sep 04 14:35	0° m	
asc. node	12249 Oct 10 20:59	20° ≙ 36′01			12250 Sep 22 10:11	0∘ ত	
morning set	12249 Oct 11 19:15	22° ≏ 30'34		morning set	12250 Sep 25 14:54	6° ≏ 16'32	
	12249 Oct 15 08:12	0° M ₊		asc. node	12250 Sep 27 17:40	10° ≏ 34'39	
max. Earth dist.	12249 Oct 17 13:33	4°ML50'38	1.31560 AU	max. Earth dist.	12250 Sep 30 15:22	16° ≏ 39'45	1.32347 AU
					-		
superior conj	12249 Oct 19 02:46	8° M .15'48	1°12'40	superior conj	12250 Oct 03 10:14	22° ≏ 39'14	0°52'52
minimum elong	12249 Oct 19 00:32	8°ML03'27	1°12'48	minimum elong	12250 Oct 03 08:06		0°52'45
evening rise	12249 Oct 25 20:00	23°ML03'24			12250 Oct 06 18:59	0°M	
e vennig rise	12249 Oct 29 03:01	0° ⊼ ¹		evening rise	12250 Oct 10 07:18	7°M37'42	
desc. node	12249 Nov 13 00:38	25° × 751'02		evening rise	12250 Oct 10 07:10 12250 Oct 21 20:32	0° √	
desc. Hode	12249 Nov 16 04:51	0°중		desc. node	12250 Oct 21 20:52 12250 Oct 30 21:56	12° × ⁷ 45'01	
			25006144				22027147
evening max el	12249 Nov 21 06:30	5° る 31'57	25°06'44	evening max el	12250 Nov 02 16:56	15° 🗷 41'44	23°27'46
retrograde	12249 Dec 05 02:21	12° る 27'52		retrograde	12250 Nov 16 02:49	22° × ⁷ 22'37	
evening set	12249 Dec 10 19:20	11° る 14'34		evening set	12250 Nov 20 13:03	21° х 40'01	
min. Earth dist.	12249 Dec 15 18:30		0.56856 AU	min. Earth dist.	12250 Nov 27 02:54		0.55347 AU
inferior conj	12249 Dec 18 11:50	6° ප 45'22		inferior conj	12250 Nov 28 20:01	17° ≯ ³33'13	-5°51'45
minimum elong	12249 Dec 18 19:23	6° る 32'56	5°14'32	minimum elong	12250 Nov 28 21:32	17° ∡ ³30'58	5°50'52
morning rise	12249 Dec 26 21:41	2°る35'02		morning rise	12250 Dec 07 07:47	13° ҂ ′41′06	
direct	12249 Dec 29 04:47	2° る 19'51		direct	12250 Dec 10 03:50	13° ₹ 21'34	
asc. node	12250 Jan 06 21:02	6° る 14'23		morning max el	12250 Dec 20 23:31	18° ∡ ³30′25	20°25'53
morning max el	12250 Jan 07 11:57	6° ප 49'14	19°12'58	asc. node	12250 Dec 24 18:11	22° ҂ ¹42'20	
	12250 Jan 22 07:34	0° ≈			12250 Dec 29 18:14	8°0	
morning set	12250 Jan 24 07:49	3° ≈ 58'08		morning set	12251 Jan 08 14:38	18° る 37'33	
				3	12251 Jan 14 02:51	0° ≈	
superior conj	12250 Feb 01 13:14	20°≈13'58	0°56'57			J . J .	
minimum elong	12250 Feb 01 15:14 12250 Feb 01 16:06	20 ≈13 38 20°≈27'51	0°57'09	superior conj	12251 Jan 16 03:47	4° ≈ 09'38	1°17'38
mmmum elong			0 3/09				
n at v	12250 Feb 06 17:30	0°) 3°) √ 40/21	1 20510 433	minimum elong	12251 Jan 16 06:24	4°≈22'53	1°18'06
max. Earth dist.	12250 Feb 08 06:41	2°) 49'21	1.38518 AU	max. Earth dist.	12251 Jan 21 14:27	14°≈54'14	1.36344 AU
desc. node	12250 Feb 09 00:24	4°) €09'03		evening rise	12251 Jan 25 10:13	22° ≈ 03'52	
evening rise	12250 Feb 12 00:57	9° ¥ 28'52		desc. node	12251 Jan 26 21:06	24° ≈ 41'57	
	12250 Feb 24 16:30	0° Y			12251 Jan 29 21:17	0° ∀	
evening max el	12250 Mar 19 08:59	29° Ƴ 32'07	24°46'51		12251 Feb 18 12:22	0 ° $\mathbf{\gamma}$	
	12250 Mar 19 20:25	$0^{\circ}S$		evening max el	12251 Mar 01 22:29	13° Y 22′50	25°57'53

retrograde	12251 Mar 14 13:02	20° Ƴ 35'37			12252 Jan 22 15:35	0° \	
evening set	12251 Mar 20 15:35	18° Υ '06'05		evening max el	12252 Feb 12 12:00	27° ₩ 04'40	26°53'33
asc. node	12251 Mar 22 15:40	16° Y 11'16		v , v 8 v .	12252 Feb 15 18:56	0°Υ	
min. Earth dist.	12251 Mar 24 21:00	13° Y ′36'12	0.67227 AU	retrograde	12252 Feb 25 18:10	4° Υ 28'58	
inferior conj	12251 Mar 26 10:54	11° Y ′37'35	1°10'56	evening set	12252 Mar 03 06:48	1° Y 55'58	
minimum elong	12251 Mar 26 09:17	11° Y '42'40	1°10'15	C	12252 Mar 05 10:05	30° ₹ ₩	
morning rise	12251 Apr 01 03:40	5° Ƴ 49'55		min. Earth dist.	12252 Mar 07 06:39	27° ¥ 59'56	0.65872 AU
direct	12251 Apr 04 10:04	4° Ƴ 49'05		asc. node	12252 Mar 08 13:04	26°) 32′12	
morning max el	12251 Apr 11 02:31	8° Y 25'16	18°46'34	inferior conj	12252 Mar 09 08:40	25°) €35'04	0°15'48
desc. node	12251 Apr 24 22:58	27° Y 13'04		minimum elong	12252 Mar 09 08:14	25°) 36′21	0°15'46
	12251 Apr 26 18:20	0° 8		transit middle	12252 Mar 09 08:14	25°) ₹36′21	0°15'46
morning set	12251 May 03 02:12	9° 8 50'16		transit begin	12252 Mar 09 07:43	25°) 37′52	
	12251 May 16 00:27	Π °0		transit end	12252 Mar 09 08:46	25°) 34'49	
max. Earth dist.	12251 May 18 00:24	3° Ⅱ 07'26	1.45617 AU	morning rise	12252 Mar 15 11:00	19° ¥ 59′02	
				direct	12252 Mar 18 07:19	19°) (14'43	
superior conj	12251 May 19 09:25	5° Ⅱ 16'38		morning max el	12252 Mar 24 16:42	22°) €36'45	18°09'43
minimum elong	12251 May 19 04:37	4° Ⅱ 57'53	2°10'03		12252 Mar 30 16:07	0°Υ	
evening rise	12251 Jun 03 16:46	29° Ⅱ 33'35		desc. node	12252 Apr 10 19:36	17° Υ 24'16 20° Υ 18'23	
	12251 Jun 03 23:21	0° © 9° © 24'05	-0.9m	morning set	12252 Apr 12 14:44	0° 8	
greatest brilliancy asc. node	12251 Jun 09 19:48 12251 Jun 18 13:26	9°9024'03 22°9049'53	-0.9m		12252 Apr 18 15:29	0.0	
asc. Houe	12251 Jun 24 08:19	0°Ω		superior conj	12252 Apr 27 17:07	14° 8 21'00	1047'04
evening max el	12251 Jun 24 08:19	0°Ω00'08	18°34'32	minimum elong	12252 Apr 27 17:07 12252 Apr 27 07:51	13° 8 44'41	1°46'48
retrograde	12251 Jun 30 20:34	3° Ω 31'48	10 3432	max. Earth dist.	12252 Apr 29 20:03	17° 8 40'24	1.45719 AU
evening set	12251 Jul 04 01:16	2°Ω33'57		max. Bartii dist.	12252 May 07 17:57	0°II	1.13/17/10
	12251 Jul 07 02:34	30°Rூ		evening rise	12252 May 13 19:09	9° ∏ 23'50	
inferior conj	12251 Jul 09 17:40	26°958'21	2°55'11	greatest brilliancy	12252 May 25 17:49	27° ∏ 46'44	-0.7m
minimum elong	12251 Jul 09 19:31	26°952'44	2°54'03	8	12252 May 27 05:30	0°95	
min. Earth dist.	12251 Jul 11 18:36	24°930'06	0.65319 AU	asc. node	12252 Jun 04 10:29	11° © 13'13	
morning rise	12251 Jul 15 12:47	20°536'43		evening max el	12252 Jun 06 17:13	13° 5 43'22	19°16'10
desc. node	12251 Jul 21 22:36	17° © 55'31		retrograde	12252 Jun 13 17:24	17° 5 38'28	
direct	12251 Jul 22 00:16	17° 9 55'30		evening set	12252 Jun 17 06:52	16° 5 24'38	
morning max el	12251 Aug 04 09:47	25° © 49'32	27°03'23	inferior conj	12252 Jun 22 17:04	10° © 34'39	3°11'26
	12251 Aug 08 05:54	$0^{\circ}\Omega$		minimum elong	12252 Jun 22 17:51	10° © 32'03	3°10'30
	12251 Aug 29 03:42	0° m)		min. Earth dist.	12252 Jun 24 03:17	8° 5 43'16	0.66875 AU
morning set	12251 Sep 09 00:39	19° m 32'58		morning rise	12252 Jun 28 04:18	4°9511'41	
max. Earth dist.	12251 Sep 13 08:24	28° Mp 06'09	1.33653 AU	direct	12252 Jul 04 07:04	1° © 31'40	
	12251 Sep 14 06:44	0∘ 亚		desc. node	12252 Jul 07 19:50	2° © 16'25	
asc. node	12251 Sep 14 14:19	0° ჲ 38'57		morning max el	12252 Jul 16 20:40	9° © 02'55	25°54'44
	12251 0 17 12 26	60 0 44107	0027155		12252 Aug 02 08:01	0° N	
superior conj	12251 Sep 17 12:26	6° Ω 44'07	0°27'55		12252 Aug 20 16:15	0° Mp	
minimum elong evening rise	12251 Sep 17 11:04 12251 Sep 24 17:53	6° £ 36'50 22° £ 07'32	0°27'40	morning set max. Earth dist.	12252 Aug 21 20:58 12252 Aug 25 15:00	2° Mp 11'05 9° Mp 13'45	1.35444 AU
evening rise	12251 Sep 24 17:35 12251 Sep 28 13:14	0°M₁		max. Earth dist.	12232 Aug 23 13.00	9 IIJ 13 43	1.33444 AU
evening max el	12251 Oct 15 05:51	25°M47'19	21°47'54	superior conj	12252 Aug 31 06:48	20° m 24'01	-0°01'40
desc. node	12251 Oct 17 19:17	28°M03'33	21 1,01	minimum elong	12252 Aug 31 06:54	20° m) 24'35	0°01'53
	12251 Oct 20 15:59	0° ∡ 7		behind sun begin	12252 Aug 31 00:50	19° m 53'48	
retrograde	12251 Oct 27 16:51	1° ∡ ¹58'56		behind sun end	12252 Aug 31 12:59	20° m 55'25	
evening set	12251 Oct 30 16:57	1° ∡ ³38'34		asc. node	12252 Aug 31 10:58	20° m/ 45'09	
	12251 Nov 04 06:52	30°RML			12252 Sep 04 22:53	0∘ ⊽	
inferior conj	12251 Nov 08 14:05	27° M 42'49	-5°32'47	evening rise	12252 Sep 08 01:41	6° ≏ 27'28	
minimum elong	12251 Nov 08 07:08	27°M52'34	5°31'04		12252 Sep 20 23:50	0° M	
min. Earth dist.	12251 Nov 08 09:22	27°M49'25	0.54591 AU	evening max el	12252 Sep 26 06:16	6°M25'24	20°21'47
morning rise	12251 Nov 16 22:27	23°M55'24		desc. node	12252 Oct 03 16:42	11° M .18'41	
direct	12251 Nov 20 13:13	23°M26'51		retrograde	12252 Oct 07 04:46	11°M51'26	
morning max el	12251 Dec 02 21:14	29° ™ 19'25	22°00'04	evening set	12252 Oct 09 06:39	11°M40'32	
	12251 Dec 03 14:01	0° द्र ⁷		inferior conj	12252 Oct 18 07:13	7°M44'01	
asc. node	12251 Dec 11 15:14	10° ∡ 13'14		minimum elong	12252 Oct 17 21:13	7°M58'39	
	12251 Dec 22 09:58	0°る		min. Earth dist.	12252 Oct 19 17:21	6°M53'56	0.54769 AU
morning set	12251 Dec 24 00:54	3° る 23'06		morning rise	12252 Oct 26 11:05	3°M40'49	
superior cor:	12251 Dec 31 03:30	18° る 29'05	1°31'04	direct	12252 Oct 30 22:40 12252 Nov 13 09:29	2°M57'27 9°M31'21	23°47'06
superior conj minimum elong	12251 Dec 31 05:30 12251 Dec 31 05:15	18° る 29'05	1°31'04 1°31'48	morning max el asc. node	12252 Nov 13 09:29 12252 Nov 27 12:11	28°M32'37	23 4/00
max. Earth dist.	12251 Dec 31 03.13 12252 Jan 04 03:24	18 33 813 26° る 45'23	1.34437 AU	ase. Houe	12252 Nov 27 12.11 12252 Nov 28 08:08	28 1163237 0° √	
max. Lutin dist.	12252 Jan 05 18:08	20° ≈	1.5 1757 110	morning set	12252 Dec 07 12:39	18° ∡ 09'30	
evening rise	12252 Jan 08 11:03	5°≈17'33			12252 Dec 07 12:35 12252 Dec 12 23:36	0°る	
desc. node	12252 Jan 13 17:52	15° ≈ 05'09				=	

superior conj	12252 Dec 14 09:26	3° る 03'59	1°37'47	minimum elong	12253 Nov 28 18:40	17° ∡ ¹44'06	1°39'02
minimum elong	12252 Dec 14 10:03	3°る03'39	1°38'38	max. Earth dist.	12253 Nov 28 18:40 12253 Nov 30 04:03	20° √ 48'13	1.31918 AU
max. Earth dist.		8° る 41'18	1.32943 AU	max. Earth dist.	12253 Nov 30 04:03 12253 Dec 04 10:08	20 x 40 13	1.51916 AU
	12252 Dec 17 00:10		1.32943 AU				
evening rise	12252 Dec 22 00:02	19° る 01'42		evening rise	12253 Dec 05 22:01	3°る07'59	
	12252 Dec 27 16:55	0°≈		desc. node	12253 Dec 17 11:41	25° පි 01'10	
desc. node	12252 Dec 30 14:43	5°≈13'45			12253 Dec 20 11:55	0° ≈	25020111
	12253 Jan 15 19:45	0°) (2002		evening max el	12254 Jan 07 11:02	23°≈20'33	27°30'11
evening max el	12253 Jan 25 00:49	10°) €28'02	27°26'31		12254 Jan 17 10:32	0°) {	
retrograde	12253 Feb 07 16:50	17°) €53′28		retrograde	12254 Jan 21 07:57	0°) 40′01	
evening set	12253 Feb 14 12:50	15° ¥ 23'45			12254 Jan 25 01:50	30° R ≈	
min. Earth dist.	12253 Feb 18 08:30	11° ¥ 58'55		evening set	12254 Jan 28 06:54	28° ≈ 21′26	
inferior conj	12253 Feb 20 21:55	9° ∺ 17'29		min. Earth dist.	12254 Feb 01 00:43	25° ≈ 23'08	0.62184 AU
minimum elong	12253 Feb 20 23:27	9° ∺ 13′26	0°48'36	inferior conj	12254 Feb 03 23:37	22° ≈ 37'16	
asc. node	12253 Feb 23 10:28	6°) 45′19		minimum elong	12254 Feb 04 03:51	22° ≈ 27'19	2°01'51
morning rise	12253 Feb 27 12:07	3° ¥ 55′24		asc. node	12254 Feb 10 07:48	17° ≈ 51'01	
direct	12253 Mar 01 23:57	3° ¥ 23′59		morning rise	12254 Feb 11 03:26	17° ≈ 32'08	
morning max el	12253 Mar 08 09:58	6°) 43′06	17°49'56	direct	12254 Feb 13 08:55	17° ≈ 09'50	
	12253 Mar 24 01:02	0° Y		morning max el	12254 Feb 20 03:15	20° ≈ 36′03	17°47'53
morning set	12253 Mar 25 07:32	2° Y 08'48			12254 Feb 27 04:49	0° ∀	
desc. node	12253 Mar 28 16:11	7° Ƴ 48'26		morning set	12254 Mar 07 23:18	15°) 04′50	
				desc. node	12254 Mar 15 12:46	28° ∺ 21′22	
superior conj	12253 Apr 07 13:43	24° Y 05'51	-1°10'39		12254 Mar 16 11:41	0° Y	
minimum elong	12253 Apr 07 06:22	23° Y 36'10	1°09'58				
	12253 Apr 11 06:16	0° ႘		superior conj	12254 Mar 19 09:30	4° Ƴ 56'54	-0°29'31
max. Earth dist.	12253 Apr 12 15:12	2° 8 10'24	1.45086 AU	minimum elong	12254 Mar 19 06:39	4° Ƴ 44'52	0°29'04
evening rise	12253 Apr 23 07:39	18° 8 46'44		max. Earth dist.	12254 Mar 26 07:56	16° Ƴ 23'21	1.43784 AU
	12253 Apr 30 17:01	$\Pi^{\circ}0$		evening rise	12254 Apr 02 21:53	28° Y 23'00	
evening max el	12253 May 20 20:42	27° Ⅲ 29'13	20°13'17		12254 Apr 03 22:58	0° ႘	
asc. node	12253 May 22 07:36	28° Ⅲ 51'48			12254 Apr 24 11:17	$\Pi^{\circ}0$	
	12253 May 23 17:13	0°ಅ		evening max el	12254 May 03 18:34	11° Ⅱ 16′24	21°22'57
retrograde	12253 May 28 16:02	1° © 58'16		asc. node	12254 May 09 04:49	15° Ⅲ 32'05	
evening set	12253 Jun 01 15:02	0°\$28'03		retrograde	12254 May 12 14:31	16° Ⅱ 26'40	
C	12253 Jun 02 04:47	30°R∏		evening set	12254 May 16 23:54	14° ∏ 40′15	
inferior conj	12253 Jun 06 22:01	24° ∏ 25'05	3°14'09	inferior conj	12254 May 22 06:13	8° Ⅱ 25'56	3°05'20
minimum elong	12253 Jun 06 21:44	24° ∏ 26′01	3°13'17	minimum elong	12254 May 22 05:01	8°Ⅲ30'06	3°04'25
min. Earth dist.	12253 Jun 07 17:59	23° I 17'03	0.67991 AU	min. Earth dist.	12254 May 22 12:41	8° ∏ 03'28	0.68638 AU
morning rise	12253 Jun 12 04:07	18° ∏ 04'39		morning rise	12254 May 27 09:56	2° ∏ 10′18	
direct	12253 Jun 17 19:34	15° ∏ 34'38			12254 May 31 16:53	30°R ႘	
desc. node	12253 Jun 24 16:58	18° Ⅲ 23'56		direct	12254 Jun 01 12:36	29° 8 56'46	
morning max el	12253 Jun 29 06:33	22° I I26'57	24°30'34	ancer	12254 Jun 02 08:44	0°П	
morning max or	12253 Jul 05 21:15	0°95	213031	morning max el	12254 Jun 11 16:59	5°∏59'08	23°00'53
	12253 Jul 05 21:15	$0 {\circ} {\mathfrak O}$		desc. node	12254 Jun 11 13:59	5° ∏ 51'35	25 00 55
morning set	12253 Jul 20 13:17 12253 Aug 03 23:18	13° Ω 58′28		dese. Hode	12254 Jun 30 06:23	0°95	
max. Earth dist.	12253 Aug 07 13:44	20° Ω 22'33	1.37615 AU	morning set	12254 Jul 16 02:56	24°5944'00	
max. Lartii dist.	12253 Aug 07 13:44 12253 Aug 12 18:11	0° my	1.57015 AC	morning set	12254 Jul 19 06:13	0°Ω	
	12233 Aug 12 16.11	V III		max. Earth dist.	12254 Jul 20 11:37		1.39947 AU
superior conj	12253 Aug 14 14:00	3°m/30'01	0°34'42	max. Earth dist.	12234 Jul 20 11.37	2 660337	1.33347 AU
minimum elong	12253 Aug 14 14:00 12253 Aug 14 16:20	3°Mp41'19		superior conj	12254 Jul 28 06:08	15° Ω 53'15	-1°09'01
asc. node	12253 Aug 14 10:20 12253 Aug 18 07:36	10°Mp48'49	0 34 43	minimum elong	12254 Jul 28 11:05	16°Ω15'55	
evening rise	12253 Aug 18 07:30 12253 Aug 23 04:12	20° m/30'14		minimum ciong	12254 Aug 04 18:30	0°m)	1 00 30
evening rise	12253 Aug 28 00:56	ე∘ <u>ი</u>		asc. node	12254 Aug 05 04:17	ريان 0° Mp 46′45	
evening max el	12253 Aug 28 00:30 12253 Sep 08 20:45	0 = 17° £ 50'19	19°16'04	evening rise	12254 Aug 05 04.17 12254 Aug 06 22:30	4° Mg 08'36	
retrograde	12253 Sep 08 20:45 12253 Sep 18 02:57	22° £ 27'29	19 10 04	evening rise	=	0∘ ʊ	
•	•	22° £ 17'15		avanina may al	12254 Aug 22 22:49	0° ⊆ 00'15	18°31'52
evening set desc. node	12253 Sep 19 23:17	22° £ 09'25		evening max el	12254 Aug 22 22:55	3° £ 57'54	16 31 32
	12253 Sep 20 14:08	18° Ω 07'30	2920112	retrograde	12254 Aug 30 19:47	3° £ 3734 3° £ 43'12	
inferior conj	12253 Sep 28 13:06			evening set	12254 Sep 01 20:01		
minimum elong	12253 Sep 28 06:36			desc. node	12254 Sep 07 11:34	0° ჲ 51'10	
min. Earth dist.	12253 Oct 01 04:42	16° £ 22'29	0.55861 AU		12254 Sep 08 15:24	30°₹ ™	0040140
morning rise	12253 Oct 06 11:18	13° Ω 32'12		inferior conj	12254 Sep 09 15:44	29° Mp 13'21	
direct	12253 Oct 11 18:52	12° Ω 27'35	25921127	minimum elong	12254 Sep 09 14:07	29° Mp 16'28	0°40'16
morning max el	12253 Oct 25 20:14	19° Ω 34'47	25°31'3/	min. Earth dist.	12254 Sep 12 21:40	26° Mp 43'17	0.57655 AU
•	12253 Nov 03 16:25	0°M		morning rise	12254 Sep 17 04:46	24° Mp 00'29	
asc. node	12253 Nov 14 09:03	17°M27'52		direct	12254 Sep 23 04:56	22° m/29'20	
•	12253 Nov 20 15:51	0° ⊼ 20 ⊼ 5112.4			12254 Oct 07 11:34	0° ⊽	0.605.510.0
morning set	12253 Nov 22 00:08	2° ∡ 751'34		morning max el	12254 Oct 07 12:26	0° Ω 02'05	26°55'39
	1005037	150 5	1020:12		12254 Oct 28 15:26	0°M	
superior conj	12253 Nov 28 19:09	17° ∡ ¹46'47	1°38'13	asc. node	12254 Nov 01 05:49	6°M49′39	

morning set	12254 Nov 06 09:41	17° M 24'56		asc. node	12255 Oct 19 02:34	26° ≏ 30'42	
	12254 Nov 12 03:29	0° ∡ ¹			12255 Oct 20 19:26	0° M	
				morning set	12255 Oct 21 15:33	1° M 45'00	
superior conj	12254 Nov 13 06:39	2° × 31'34	1°32'44	max. Earth dist.	12255 Oct 27 20:59	15° M ւ15'34	1.31347 AU
minimum elong	12254 Nov 13 05:14	2° ∡ ¹23'38	1°33'22				
max. Earth dist.	12254 Nov 13 12:14	3° ₹ '02'40	1.31383 AU	superior conj	12255 Oct 28 18:07	17° M L13'04	1°21'35
evening rise	12254 Nov 20 02:26	17°×729'38	1.51505710	minimum elong	12255 Oct 28 16:04	17°ML01'38	1°21'55
evening rise		0° る		minimum clong		0° √	1 21 33
	12254 Nov 26 06:36				12255 Nov 03 12:44		
desc. node	12254 Dec 04 08:43	14° る 18'34		evening rise	12255 Nov 04 11:06	2° ∡ 00'52	
	12254 Dec 15 12:35	0° ≈			12255 Nov 19 08:16	0°ಕ	
evening max el	12254 Dec 20 15:49	5° ≈ 28'56	27°00'00	desc. node	12255 Nov 21 05:52	2° る 54'25	
retrograde	12255 Jan 03 14:12	12° ≈ 39'50		evening max el	12255 Dec 02 12:40	16° る 45'22	25°56'04
evening set	12255 Jan 10 09:30	10° ≈ 40′38		retrograde	12255 Dec 16 10:30	23° る 47'52	
min. Earth dist.	12255 Jan 14 06:07	8° ≈ 00'26	0.60052 AU	evening set	12255 Dec 22 16:28	22° る 16'01	
inferior conj	12255 Jan 17 10:15	5° ≈ 24'37	-3°24'02	min. Earth dist.	12255 Dec 27 01:24	19° る 39'54	0.57949 AU
minimum elong	12255 Jan 17 17:21	5° ≈ 10'04	3°20'47	inferior conj	12255 Dec 30 02:24	17° る 30'14	
morning rise	12255 Jan 25 04:04	0° ≈ 39'46	3 20 47	minimum elong	12255 Dec 30 10:53	17° ろ 15'07	
•				•			4 37 24
direct	12255 Jan 27 06:10	0°≈23'02		morning rise	12256 Jan 07 07:59	13° る 07'49	
asc. node	12255 Jan 28 05:07	0° ≈ 26'40		direct	12256 Jan 09 11:14	12° る 53'14	
morning max el	12255 Feb 03 17:09	4° ≈ 05'57	18°04'36	asc. node	12256 Jan 15 02:22	14° る 41'40	
morning set	12255 Feb 19 07:41	28° ≈ 46′28		morning max el	12256 Jan 17 23:55	17° る 02'46	18°41'43
	12255 Feb 19 23:29	0° ∀			12256 Jan 27 05:20	0° ≈	
				morning set	12256 Feb 03 03:38	12° ≈ 58'57	
superior conj	12255 Mar 01 05:21	16° ¥ 54'58	0°09'09	•			
minimum elong	12255 Mar 01 06:06	16° ¥ 58'18	0°09'19	superior conj	12256 Feb 11 21:28	29° ≈ 49'21	0°41'35
behind sun begin	12255 Feb 28 23:43	16° ¥ 29'57	0 0) 1)	minimum elong	12256 Feb 12 00:01	0° ₩ 01'16	0°41'43
_		10 X 2937 17° ¥ 26'35		minimum clong		0 X 01 10	0 41 43
behind sun end	12255 Mar 01 12:28				12256 Feb 11 23:45		
desc. node	12255 Mar 02 09:20	18°) 58'47		desc. node	12256 Feb 17 05:58	9°) 37′28	
	12255 Mar 08 19:28	0° Υ		max. Earth dist.	12256 Feb 19 04:04		1.39800 AU
max. Earth dist.	12255 Mar 08 20:22	0° Y 03'49	1.41953 AU	evening rise	12256 Feb 23 04:50	19° ¥ 56′21	
evening rise	12255 Mar 14 02:56	8° Ƴ 41'54			12256 Feb 29 08:36	0 ° Υ	
	12255 Mar 28 01:33	0° 8			12256 Mar 21 06:34	0° 8	
evening max el	12255 Apr 16 11:38	25° 8 04'06	22°41'01	evening max el	12256 Mar 29 01:49	8° 8 53'39	24°01'47
	12255 Apr 22 19:17	$\Pi^{\circ}0$		retrograde	12256 Apr 09 05:05	15° 8 26'30	
retrograde	12255 Apr 26 11:18	0° Ⅱ 57'47		asc. node	12256 Apr 11 23:28	14° 8 51'30	
asc. node	12255 Apr 26 02:07	0° Ц 57'17		evening set	12256 Apr 14 13:14	13° 8 11'41	
asc. node	12255 Apr 29 20:16	30°R B		•	12256 Apr 19 05:38	7° 8 46'09	0.68532 AU
	*			min. Earth dist.	*	. •	
evening set	12255 May 01 07:49	28° 8 56'12		inferior conj	12256 Apr 20 00:21	6° 8 42'34	2°17'01
inferior conj	12255 May 06 15:37	22° 8 32'50	2°46'08	minimum elong	12256 Apr 19 22:12	6° 8 49'54	2°15'59
minimum elong	12255 May 06 13:46	22° 8 39'17	2°45'08	morning rise	12256 Apr 25 07:14	0° 8 40'20	
min. Earth dist.	12255 May 06 09:15	22° 8 55'01	0.68813 AU		12256 Apr 26 07:14	30° ŖƳ	
morning rise	12255 May 11 19:37	16° 8 23'21		direct	12256 Apr 29 07:52	29° Ƴ 08'18	
direct	12255 May 16 09:05	14° 8 30'02			12256 May 02 13:13	0°B	
morning max el	12255 May 25 07:05	19° 8 40'30	21°34'25	morning max el	12256 May 07 03:38	3° 8 33'12	20°17'47
desc. node	12255 May 29 10:55	24° 8 17'16		desc. node	12256 May 15 07:46	13° 8 25'15	
dese. Hode	12255 Jun 02 22:44	0° П		dese. Hode	12256 May 26 19:34	0°Ⅱ	
	12255 Jun 23 10:30						
		0°©		morning set	12256 Jun 04 09:59	13° Ⅱ 04'59	1 42070 411
morning set	12255 Jun 26 04:57	4°521'15		max. Earth dist.	12256 Jun 13 23:07		1.43970 AU
max. Earth dist.	12255 Jul 02 14:11	14° © 40'18	1.42151 AU		12256 Jun 15 03:53	0 \circ	
superior conj	12255 Jul 10 02:43	27° 5 23'07	-1°40'54	superior conj	12256 Jun 19 23:56	7° 9 52'08	-2°04'41
minimum elong	12255 Jul 10 09:30	27° © 52'36	1°40'58	minimum elong	12256 Jun 20 05:34	8° © 15'22	2°05'14
	12255 Jul 11 14:44	$0^{\circ}\Omega$		evening rise	12256 Jul 02 18:00	29° 5 30'06	
evening rise	12255 Jul 21 04:41	17° Ω 12'34		•	12256 Jul 03 00:54	$0^{\circ}\Omega$	
asc. node	12255 Jul 23 01:03	20° Ω 34'40		asc. node	12256 Jul 08 21:54	10° Ω 07'37	
use. Hode	12255 Jul 28 08:16	0°m)		evening max el	12256 Jul 19 22:24	25° Ω 59'20	10004100
		-	10000110	•			10 04 00
evening max el	12255 Aug 06 08:46	12° Mp 46'35	10 08 18	retrograde	12256 Jul 26 09:14	29° Ω 20'13	
retrograde	12255 Aug 13 07:14	16° Mp 18'37		evening set	12256 Jul 29 00:46	28° Ω 45'24	
evening set	12255 Aug 15 14:40	15° m 55'31		inferior conj	12256 Aug 04 10:15	23° Ω 36′11	1°54'49
inferior conj	12255 Aug 22 15:50	11° M 05'08	0°48'56	minimum elong	12256 Aug 04 12:50	23° Ω 29'29	1°53'26
minimum elong	12255 Aug 22 17:21	11° m)01'42	0°48'01	min. Earth dist.	12256 Aug 07 08:44	20° Ω 35′06	0.62119 AU
desc. node	12255 Aug 25 09:00	8° m 37'52		morning rise	12256 Aug 10 22:35	17° Ω 29'36	
min. Earth dist.	12255 Aug 25 22:35	8° m 08'22	0.59840 AU	desc. node	12256 Aug 11 06:26	17° Ω 15'56	
morning rise	12255 Aug 29 16:51	5° m/20'07		direct	12256 Aug 17 14:56	15° Ω 06'33	
direct	12255 Sep 05 04:19	3° m/20'53		morning max el	12256 Aug 31 18:26	23° Ω 08'19	27°57'17
morning max el	12255 Sep 19 12:20	11° mg 12'32	27045154	morning max or	12256 Sep 06 21:04	0° m)	2, 3/1/
morning max ei	-		41 73 34		=	0ം ⊽	
	12255 Oct 04 05:02	0∘ ⊽			12256 Sep 26 11:28	U ==	

morning set	12256 Oct 04 15:37	15° ≏ 45'20		morning max el	12257 Aug 14 04:10	5° Ω 42'51	27°32'00
asc. node	12256 Oct 04 23:14	16° ≏ 24'22			12257 Sep 01 16:12	0° m/y	
max. Earth dist.	12256 Oct 10 02:16	27° ≙ 15'15	1.31827 AU	morning set	12257 Sep 18 07:27	29° m 20'03	
	12256 Oct 11 08:29	0° M ₊			12257 Sep 18 15:31	0∘ ⊽	
				asc. node	12257 Sep 21 19:54	6° ≏ 26'13	
superior conj	12256 Oct 12 03:36	1°ML44'50	1°04'55	max. Earth dist.	12257 Sep 23 00:28	8° £ 54'21	1.32840 AU
minimum elong	12256 Oct 12 01:21	1°M32'27	1°04'57				
evening rise	12256 Oct 18 21:57	16°M35'24		superior conj	12257 Sep 26 09:09	16° £ 01'44	0°42'55
1 1	12256 Oct 25 10:46	0° द्र ⁷ 20° द्र ⁷ 31'44		minimum elong	12257 Sep 26 07:15	15° ≏ 51'34 0° ™	0°42'43
desc. node evening max el	12256 Nov 07 03:07 12256 Nov 13 01:38	20° x '31'44 27° x '13'35	24025151	evening rise	12257 Oct 02 20:20 12257 Oct 03 09:11	บาแน 1° M L08'41	
evening max er	12256 Nov 16 07:13	2/メ1333 0°る	24 23 31	evening rise	12257 Oct 03 03:11 12257 Oct 19 07:28	0° ∡ 7	
retrograde	12256 Nov 26 18:54	⁰ ਠ 4°ਠ05'01		desc. node	12257 Oct 15 07:25 12257 Oct 25 00:25	6° ∡ 748'51	
evening set	12256 Dec 01 23:44	3°₹05'18		evening max el	12257 Oct 25 12:05	7° × 717'43	22°44'23
min. Earth dist.	12256 Dec 07 13:04	0° ට 14'56	0.56137 AU	retrograde	12257 Nov 07 14:12	13° ∡ ¹47'43	
	12256 Dec 07 22:48	30°R ✓		evening set	12257 Nov 11 09:15	13° ∡ 16′21	
inferior conj	12256 Dec 09 21:53	28° ⊀ ¹46′26	-5°37'04	min. Earth dist.	12257 Nov 18 20:28	9° ∡ 753'31	0.54927 AU
minimum elong	12256 Dec 10 03:34	28° х ³37'34	5°35'29	inferior conj	12257 Nov 19 22:55	9° ∡ 15'54	-5°51'04
morning rise	12256 Dec 18 09:29	24° ∡ ⁴44'51		minimum elong	12257 Nov 19 20:40	9° ∡ 19'06	5°50'11
direct	12256 Dec 20 20:52	24° ≯ 28'32		morning rise	12257 Nov 28 09:33	5° ∡ 127'31	
morning max el	12256 Dec 30 19:27	29° ∡ 14'14	19°41'10	direct	12257 Dec 01 13:09	5° ∡ 04'38	
asc. node	12256 Dec 31 23:33	0° る 25'31		morning max el	12257 Dec 13 00:54	10° ∡ 32′28	21°03'30
	12256 Dec 31 13:50	0°る		asc. node	12257 Dec 18 20:38	17° ∡ 22′08	
morning set	12257 Jan 17 07:18	27° る 30'32 0°≈		mamina aat	12257 Dec 26 12:42	0°る 12°る13'03	
	12257 Jan 18 12:51	0-∞		morning set	12258 Jan 01 15:49	12 613 03	
superior conj	12257 Jan 25 05:03	13° ≈ 25'43	1°06'37	superior conj	12258 Jan 08 23:52	27° る 32'17	1°24'11
minimum elong	12257 Jan 25 07:55	13° ≈ 39'52	1°06'56	minimum elong	12258 Jan 09 02:10	27° る 44'07	1°24'46
max. Earth dist.	12257 Jan 31 10:02	25°≈18'56	1.37569 AU		12258 Jan 10 04:40	0° ≈	
	12257 Feb 02 23:39	0° ∺		max. Earth dist.	12258 Jan 13 19:31	7°≈15'14	1.35497 AU
desc. node	12257 Feb 03 02:37	0° ★ 13'22		evening rise	12258 Jan 17 19:48	14°≈56'50	
evening rise	12257 Feb 04 03:27	2° 光 04'08 0° Ƴ		desc. node	12258 Jan 20 23:20 12258 Jan 26 08:11	20° ≈ 42'36 0° 米	
evening max el	12257 Feb 21 12:14 12257 Mar 11 15:16	22° Υ 45'02	25°18'35		12258 Jan 26 08.11 12258 Feb 16 04:10	0 Υ	
retrograde	12257 Mar 23 18:42	22 γ 45 02 29° γ 46'55	23 16 33	evening max el	12258 Feb 10 04:10 12258 Feb 22 05:00	6° Υ 33'30	26°24'02
evening set	12257 Mar 29 14:32	27° Υ 21'52		retrograde	12258 Mar 07 03:00	13° Υ 52'10	20 21 02
asc. node	12257 Mar 29 20:52	27° Υ 08'10		evening set	12258 Mar 13 09:57	11° Υ 20'48	
min. Earth dist.	12257 Apr 02 23:38	22° Ƴ 31'39	0.67816 AU	asc. node	12258 Mar 16 18:17	8° Ƴ 00'10	
inferior conj	12257 Apr 04 06:30	20° Ƴ 51′28	1°38'01	min. Earth dist.	12258 Mar 17 13:00	7° Y 05′16	0.66693 AU
minimum elong	12257 Apr 04 04:31	20° Ƴ 57'56	1°37'06	inferior conj	12258 Mar 19 07:59	4° Ƴ 54'47	0°48'49
morning rise	12257 Apr 09 18:53	14° Ƴ 57'49		minimum elong	12258 Mar 19 06:46	4° Υ 58'28	0°48'22
direct	12257 Apr 13 07:36	13° Ƴ 46′11			12258 Mar 23 23:51	30° ₹ ₩	
morning max el	12257 Apr 20 07:49	17° Ƴ 36'41	19°15'14	morning rise	12258 Mar 25 04:28	29° ∺ 11'30	
	12257 Apr 30 02:04	0° 8		direct	12258 Mar 28 06:27	28° ¥ 17'59	
desc. node	12257 May 02 04:31	3° 8 04'13			12258 Apr 01 17:02	0° Υ	
greatest brilliancy	12257 May 03 04:06	4° 8 31'37	-0.7m	morning max el	12258 Apr 03 18:52	1° Υ 46'45	18°28'46
morning set	12257 May 14 11:47	21° 8 46'11		desc. node	12258 Apr 19 01:11	23° Y 05'30	
max. Earth dist.	12257 May 19 19:26 12257 May 27 14:03	0°Ⅱ 12°Ⅱ08'28	1.45210 AU	morning set	12258 Apr 23 10:22 12258 Apr 24 08:12	0° と 1° と 26'11	
mun zum ubv	1220 / 1114 2 / 1 1100	12 20020	1.10210110	morning sec	12200 14p1 2 1 00.12	. 02011	
superior conj	12257 May 30 22:09	17° Ⅱ 24'41	-2°13'24	superior conj	12258 May 10 06:14	26° 8 25'36	-2°02'12
minimum elong	12257 May 30 21:51	17° Ⅱ 23'28	2°14'15	minimum elong	12258 May 09 22:45	25° 8 56'23	2°02'26
	12257 Jun 07 18:36	0 \circ \odot		max. Earth dist.	12258 May 10 09:04	26° 8 36'43	1.45751 AU
evening rise	12257 Jun 14 09:28	10° © 50'18			12258 May 12 13:06	Π $^{\circ}0$	
asc. node	12257 Jun 25 18:50	29° © 20'00		evening rise	12258 May 26 00:31	21° Ⅱ 09'41	
	12257 Jun 26 05:19	0° U	10010125	1 211	12258 May 31 14:47	0.©	0.0
evening max el	12257 Jul 03 12:22	9° £ 30′00	18°18'25	greatest brilliancy	12258 Jun 04 01:26	5°923'53	-0.8m
retrograde	12257 Jul 09 21:23	12° Ω 53'37		asc. node	12258 Jun 12 15:51	18°903'42	19050/10
evening set inferior conj	12257 Jul 12 21:16 12257 Jul 18 18:50	12° Ω 04'37 6° Ω 38'23	2°38'33	evening max el retrograde	12258 Jun 16 23:44 12258 Jun 23 15:53	23°S10'08 26°S49'56	18°50'19
minimum elong	12257 Jul 18 18:30 12257 Jul 18 21:09	6° Ω 31'41		evening set	12258 Jun 27 00:21	25°945'13	
min. Earth dist.	12257 Jul 18 21:09 12257 Jul 21 04:15	3° Ω 53'32	0.64241 AU	inferior conj	12258 Jul 02 13:42	20°903'26	3°03'51
morning rise	12257 Jul 24 19:39	0° Ω 20'13		minimum elong	12258 Jul 02 15:08	19°958'57	3°02'49
-0	12257 Jul 25 06:05	30°RS		min. Earth dist.	12258 Jul 04 08:21	17° 5 49'57	0.66034 AU
desc. node	12257 Jul 29 03:48	28°900'32		morning rise	12258 Jul 08 05:10	13°940'57	
direct	12257 Jul 31 10:35	27°5642'28		direct	12258 Jul 14 13:29	10° © 59'05	
	12257 Aug 07 06:59	$0^{\circ}\Omega$		desc. node	12258 Jul 16 01:05	11° © 06'56	

morning max el	12258 Jul 27 15:03	18° © 44'35	26°36'45	min. Earth dist.	12259 Jun 17 19:43	2° © 12'51	0.67408 AU
	12258 Aug 06 03:29	$0^{\circ}\Omega$			12259 Jun 19 13:32	30°RⅡ	
	12258 Aug 25 16:31	0° m)		morning rise	12259 Jun 22 00:29	27° Ⅲ 23'50	
morning set	12258 Sep 01 11:55	12°M/20'56		direct	12259 Jun 27 22:36	24° ∐ 47'27	
max. Earth dist.	12258 Sep 05 12:59	20° Mp 11'00	1.34364 AU	desc. node	12259 Jul 02 22:17	26° Ⅱ 16′25	
asc. node	12258 Sep 08 16:32	26°M/31'42			12259 Jul 07 22:17	0 \circ 50	
				morning max el	12259 Jul 10 01:34	2° 5 03'23	25°20'18
superior conj	12258 Sep 10 08:21	29° m 56'54	0°15'55		12259 Jul 31 05:36	0 \circ Ω	
minimum elong	12258 Sep 10 07:31	29° m 52'31	0°15'39	morning set	12259 Aug 15 01:07	24° Ω 38'23	
behind sun begin	12258 Sep 10 06:10	29° m 45'33			12259 Aug 17 23:29	0° m y	
behind sun end	12258 Sep 10 08:51	29° m 59'28		max. Earth dist.	12259 Aug 18 16:01	1° Mp 17'00	1.36333 AU
	12258 Sep 10 08:57	0∘ ⊽					
evening rise	12258 Sep 17 18:49	15° ≏ 35'04		superior conj	12259 Aug 24 22:21	13° m 22'57	-0°15'21
	12258 Sep 25 00:36	0° M		minimum elong	12259 Aug 24 23:20	13° m 27'48	0°15'30
evening max el	12258 Oct 07 05:10	17°M34'02	21°08'59	behind sun begin	12259 Aug 24 21:33	13° m y 18'58	
desc. node	12258 Oct 11 21:47	21°MJ18'39		behind sun end	12259 Aug 25 01:07	13° m 36'38	
retrograde	12258 Oct 19 01:27	23°M27'06		asc. node	12259 Aug 26 13:10	16° m 37'04	
evening set	12258 Oct 21 14:17	23°M12'03		evening rise	12259 Sep 02 00:41	29° m 48'28	
inferior conj	12258 Oct 30 14:43	19°M17'42	-5°06'39		12259 Sep 02 02:57	0∘ ত	
minimum elong	12258 Oct 30 05:29	19°M30'42	5°04'05	evening max el	12259 Sep 19 11:27	28° ≏ 30'35	19°51'08
min. Earth dist.	12258 Oct 31 02:58	19°M00'26	0.54557 AU		12259 Sep 21 02:19	0° M .	
morning rise	12258 Nov 07 21:14	15°M26'28		desc. node	12259 Sep 28 19:13	3°M33'42	
direct	12258 Nov 11 21:08	14°ML52'11		retrograde	12259 Sep 29 16:36	3°M35'56	
morning max el	12258 Nov 24 17:33	21°ML02'22	22°44'44	evening set	12259 Oct 01 14:25	3°M26'03	
-	12258 Dec 02 06:55	0° ⊼ ¹			12259 Oct 09 12:40	30° ₹ Ω	
asc. node	12258 Dec 05 17:37	5° ∡ 15'31		inferior conj	12259 Oct 10 11:46	29° ₽ 24'43	-3°33'21
morning set	12258 Dec 17 02:59	27° ∡ ¹00′16		minimum elong	12259 Oct 10 02:45	29° ≏ 38'34	3°29'55
C	12258 Dec 18 12:42	ರ°0		min. Earth dist.	12259 Oct 12 11:53	28° ♀ 10'58	0.55127 AU
				morning rise	12259 Oct 18 13:34	25° ჲ 09'29	
superior conj	12258 Dec 24 02:33	11° ට 59'35	1°34'43	direct	12259 Oct 23 09:38	24° ≏ 18'13	
minimum elong	12258 Dec 24 03:50	12° ට 06'26	1°35'30		12259 Nov 04 22:47	0°M	
max. Earth dist.	12258 Dec 27 12:05	19° ට 09'06	1.33754 AU	morning max el	12259 Nov 06 04:13	1°ML06'51	24°33'05
evening rise	12259 Jan 01 02:15	28° ට 25'05		asc. node	12259 Nov 22 14:31	23°M51'33	
8 21	12259 Jan 01 21:44	0° ≈			12259 Nov 25 21:14	0° ∡ ⊓	
desc. node	12259 Jan 07 20:08	11° ≈ 00'45		morning set	12259 Dec 01 14:50	11° × 7'45'53	
	12259 Jan 19 12:55	0°) €					
evening max el	12259 Feb 04 18:33	20°) €09'57	27°10'45	superior conj	12259 Dec 08 10:22	26° х 38'57	1°38'42
retrograde	12259 Feb 18 05:15	27°) 34'55	_, _, _,	minimum elong	12259 Dec 08 10:30	26° х 39'44	1°39'34
evening set	12259 Feb 24 21:33	25°) €02'34			12259 Dec 09 23:14	0°ਰ	1 37 3 .
min. Earth dist.	12259 Feb 28 19:31		0.65191 AU	max. Earth dist.	12259 Dec 10 12:15		1.32447 AU
inferior conj	12259 Mar 03 02:28	18°) (47'18		evening rise	12259 Dec 15 19:23	12° る 19'33	
minimum elong	12259 Mar 03 02:46	18°) (46′28	0°10'20	evening rise	12259 Dec 15 13:25 12259 Dec 25 02:55	0° ≈	
transit middle	12259 Mar 03 02:46	18°) (46'28	0°10'20	desc. node	12259 Dec 25 17:00	1° ≈ 01'29	
transit begin	12259 Mar 03 00:28	18° ¥ 52'55	0 10 20	dese. Hode	12260 Jan 14 23:46	0° ∀	
transit end	12259 Mar 03 05:05	18°) (40'01		evening max el	12260 Jan 18 06:24	3° ¥ 21'25	27°31'51
asc. node	12259 Mar 03 15:39	18°) 10'41		retrograde	12260 Feb 01 00:45	10°) 44'59	2, 3101
morning rise	12259 Mar 09 09:34	13° ¥ 16′50		evening set	12260 Feb 07 22:51	8°) 18'38	
direct	12259 Mar 12 02:12	12°) €38'18		min. Earth dist.	12260 Feb 11 17:14	5° ¥ 06'14	0.63357 AU
morning max el	12259 Mar 18 10:43	15°) 57'26	17°59'12	inferior conj	12260 Feb 14 11:10	2° ∺ 21'06	
morning man vi	12259 Mar 28 16:57	0°Υ	1, 0, 12	minimum elong	12260 Feb 14 13:47	2°) 14'32	
morning set	12259 Apr 05 09:13	12° Υ 31'29			12260 Feb 16 21:54	30°R≈	1 10 .2
desc. node	12259 Apr 05 21:48	13° Υ 23'11		asc. node	12260 Feb 18 13:01	28° ≈ 39'46	
dese. Hode	12259 Apr 16 03:26	0°8		morning rise	12260 Feb 21 07:03	27°≈06'08	
	1223) 11p1 10 03.20	° O		direct	12260 Feb 23 15:55	26°≈39'03	
superior conj	12259 Apr 19 17:30	5° 8 42'17	-1°32'46	morning max el	12260 Mar 01 04:27	20 ≈ 59'42	17°46'54
minimum elong	12259 Apr 19 08:25	5° 8 06'18		morning max cr	12260 Mar 01 04:27	0° ∺	17 4034
max. Earth dist.	12259 Apr 19 08:25 12259 Apr 23 05:25		1.45542 AU	morning set	12260 Mar 17 12:32	24° ¥ 52'10	
max. Durur dist.	12259 Apr 25 03:25 12259 May 05 07:54	0° I	1. 15572 MU	morning set	12260 Mar 20 12:06	24 γ (32 10	
avaning risa	•	0° П 44'23		desc node		3° Υ 51'37	
evening rise greatest brilliancy	12259 May 05 19:26	21° II 37'01	-0.7m	desc. node	12260 Mar 22 18:21	2 213/	
greatest brilliancy	12259 May 19 13:43	21° ய 3701	-0./111	superior con:	12260 Mar 29 23:23	15° Ƴ 54'14	0.053115
aga nada	12259 May 25 11:45			superior conj		15° Y '34'14	
asc. node		6° ∽ 09'24		minimum elong	12260 Mar 29 17:54		0 3438
avaning may al	12259 May 30 12:55	60054120	10038140	may Forth dist	12260 Apr 04 22:52	250W271/11	1 11600 411
evening max el	12259 May 31 06:24	6°954'38	19°38'40	max. Earth dist.	12260 Apr 04 23:52	25° Y 37'41	1.44608 AU
retrograde	12259 May 31 06:24 12259 Jun 07 13:46	11° © 02'52	19°38'40		12260 Apr 07 18:10	$0^{\circ}B$	1.44608 AU
retrograde evening set	12259 May 31 06:24 12259 Jun 07 13:46 12259 Jun 11 07:18	11° © 02'52 9° © 41'51		max. Earth dist.	12260 Apr 07 18:10 12260 Apr 14 06:41	0° と 10° と 07'59	1.44608 AU
retrograde	12259 May 31 06:24 12259 Jun 07 13:46	11° © 02'52	3°14'05		12260 Apr 07 18:10	$0^{\circ}B$	

asc. node	12260 May 16 10:05	23° ∏ 25'00		asc. node	12261 May 03 07:21	9° Ⅱ 35'20	
retrograde	12260 May 21 12:42	25° H 25'00		retrograde	12261 May 05 07:21 12261 May 05 10:43	9° П 56'56	
evening set	12260 May 25 15:59	23° II 49'43		•	12261 May 10 00:38	9 ∏ 3030 8° ∏ 04'06	
Č	•		2011145	evening set	•		2050127
inferior conj	12260 May 30 22:22	17° Ⅱ 41'25	3°11'45	inferior conj	12261 May 15 07:20	1° Ⅱ 45'32	
minimum elong	12260 May 30 21:40	17° Ⅱ 43'48	3°10'52	minimum elong	12261 May 15 05:49	1° Ⅱ 50'49	2°57'29
min. Earth dist.	12260 May 31 12:26	16° Ⅱ 52'50	0.68320 AU	min. Earth dist.	12261 May 15 08:19	1° Ⅱ 42'06	0.68766 AU
morning rise	12260 Jun 05 03:07	11° Ⅱ 22'39			12261 May 16 13:49	30°R ႘	
direct	12260 Jun 10 13:06	8° ∏ 59'14		morning rise	12261 May 20 10:49	25° 8 32'06	
desc. node	12260 Jun 18 19:23	13° Ⅲ 01'00		direct	12261 May 25 07:50	23° 8 26'46	
morning max el	12260 Jun 21 11:37	15° Ⅲ 31'47	23°52'34	morning max el	12261 Jun 03 23:09	29° 8 07'21	22°23'09
	12260 Jul 03 08:44	0ა ௐ			12261 Jun 04 19:38	0∘Щ	
	12260 Jul 23 04:22	0 $^{\circ}\Omega$		desc. node	12261 Jun 05 16:22	0° ∏ 55'35	
morning set	12260 Jul 26 18:24	6° Ω 01'16			12261 Jun 27 01:44	0 \circ	
max. Earth dist.	12260 Jul 30 13:32	12° Ω 37'01	1.38595 AU	morning set	12261 Jul 07 11:11	16° © 17'43	
		_		max. Earth dist.	12261 Jul 12 12:16	24° © 38'26	1.40911 AU
superior conj	12260 Aug 06 23:40	26°Ω11'50			12261 Jul 15 15:42	0 \circ Ω	
minimum elong	12260 Aug 07 03:06	26° Ω 28'06	0°49'15				
	12260 Aug 08 23:34	0° m ⁄		superior conj	12261 Jul 20 08:01	8° Ω 13'27	
asc. node	12260 Aug 12 09:51	6° Mp 38′54		minimum elong	12261 Jul 20 13:56	8° Ω 40′00	1°23'05
evening rise	12260 Aug 16 00:08	13° Mp 42'10		asc. node	12261 Jul 30 06:35	26° Ω 33'00	
	12260 Aug 24 18:30	0∘ ⊽		evening rise	12261 Jul 30 13:48	27° Ω 06'55	
evening max el	12260 Sep 01 07:21	10° ≙ 15'42	18°54'45		12261 Aug 01 02:47	0° m y	
retrograde	12260 Sep 09 22:28	14° ≏ 34'55		evening max el	12261 Aug 15 13:21	22° m 42'33	18°19'30
evening set	12260 Sep 11 19:32	14° ≏ 23'26		retrograde	12261 Aug 22 23:16	26° Mp 27'13	
desc. node	12260 Sep 14 16:41	13° ≏ 25'07		evening set	12261 Aug 25 02:23	26° Mp 09'24	
inferior conj	12260 Sep 20 02:05	10° ≙ 05'44	-1°41'52	inferior conj	12261 Sep 01 14:02	21° m 31'05	0°00'06
minimum elong	12260 Sep 19 21:45	10° ≙ 13'23	1°40'04	minimum elong	12261 Sep 01 14:01	21° m 31'06	0°00'07
min. Earth dist.	12260 Sep 23 01:40	7° ♀ 59'35	0.56543 AU	transit middle	12261 Sep 01 14:01	21° m 31'06	0°00'07
morning rise	12260 Sep 27 20:45	5° ≏ 13'58		transit begin	12261 Sep 01 10:32	21° m 38'20	
direct	12260 Oct 03 11:43	ვ° ჲ 58'33		transit end	12261 Sep 01 17:31	21° m 23'51	
morning max el	12260 Oct 17 16:58	11° ≏ 18'29	26°10'53	desc. node	12261 Sep 01 14:10	21° m/30'48	
C	12260 Nov 01 02:38	0°M		min. Earth dist.	12261 Sep 04 21:56	18° m) 46'47	0.58553 AU
asc. node	12260 Nov 08 11:20	12° ™ 59'22		morning rise	12261 Sep 08 22:10	16° m) 03'31	
morning set	12260 Nov 15 01:44	26°M25′26		direct	12261 Sep 15 04:08	14° m) 19'51	
Ü	12260 Nov 16 17:25	0° ∡ ¹		morning max el	12261 Sep 29 12:14	22° m) 01'59	27°21'36
				Č	12261 Oct 06 12:48	0∘ <u>v</u>	
superior conj	12260 Nov 21 21:07	11° ≯ 24'01	1°36'36		12261 Oct 25 01:42	0°M₊	
minimum elong	12260 Nov 21 20:12	11° √ 18'57	1°37'22	asc. node	12261 Oct 26 08:06	2°M29'49	
max. Earth dist.	12260 Nov 22 18:14	13° ∡ ′21'16	1.31625 AU	morning set	12261 Oct 30 09:55	10°M53'19	
evening rise	12260 Nov 28 20:25	26° ₹ 33'32					
e vennig 1150	12260 Nov 30 12:15	0°る		superior conj	12261 Nov 06 08:50	26°ML08'01	1°28'42
desc. node	12260 Dec 11 14:00	20° ට 37'41		minimum elong	12261 Nov 06 07:06	25°M58'20	1°29'13
desc. node	12260 Dec 17 13:17	0°≈		max. Earth dist.	12261 Nov 06 07:54	25°M34'56	1.31301 AU
evening max el	12260 Dec 30 14:26	15°≈56'12	27°21'30	max. Earth dist.	12261 Nov 08 02:25	0° √	1.51501710
retrograde	12261 Jan 13 12:33	23°≈13'03	27 2130	evening rise	12261 Nov 13 02:53	10° × 59'48	
evening set	12261 Jan 20 10:52	21°≈01'26		evening rise	12261 Nov 22 17:36	0°る	
min. Earth dist.	12261 Jan 24 04:57	18°≈12'11	0.61290 AU	desc. node	12261 Nov 28 11:07	9° る 39'03	
inferior conj	12261 Jan 27 06:54	15°≈28'19		evening max el	12261 Dec 12 16:12	27° る 43'34	26°36'48
minimum elong	12261 Jan 27 12:24	15°≈16'07		evening max or	12261 Dec 15 06:34	0°≈	20 30 10
morning rise	12261 Feb 03 16:49	10°≈31'42	2 3 1 3 0	retrograde	12261 Dec 26 15:04	4° ≈ 50'59	
asc. node	12261 Feb 04 10:21	10°≈20'50		evening set	12262 Jan 02 05:43	3°≈02'54	
direct	12261 Feb 05 20:16	10°≈12'20		min. Earth dist.	12262 Jan 06 06:10	0°≈26'06	0.59136 AU
morning max el	12261 Feb 12 20:48	13°≈44'35	17°52'34	mm. Latti dist.	12262 Jan 06 20:03	0 ≈2000 30°Rる	0.57130 AC
morning max cr	12261 Feb 23 22:55	0°)	17 32 34	inferior conj	12262 Jan 09 10:07	27°る59'31	3°57'30
morning set	12201100 23 22.33			minimum elong			
desc. node	12261 Feb. 28, 12:03	X° H Marya					
desc. Hode	12261 Feb 28 12:03	8° ¥ 09′29		_	12262 Jan 09 18:07		
	12261 Feb 28 12:03 12261 Mar 09 14:55	8° ★ 09°29 24° ★ 26'51		morning rise	12262 Jan 17 09:23	23° る 23'48	
superior coni	12261 Mar 09 14:55	24° ∺ 26′51	-0°12'32	morning rise direct	12262 Jan 17 09:23 12262 Jan 19 11:09	23°පි23'48 23°පි08'28	
superior conj	12261 Mar 09 14:55 12261 Mar 11 05:41	24°¥26'51 27°¥14'50		morning rise direct asc. node	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38	23°පි23'48 23°පි08'28 23°පි38'58	
minimum elong	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34	24°¥26′51 27°¥14′50 27°¥10′01	-0°12'32 0°12'13	morning rise direct	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09	23° පි23'48 23° පි08'28 23° පි38'58 27° පි02'00	18°17'41
minimum elong behind sun begin	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07	24°¥26′51 27°¥14′50 27°¥10′01 26°¥46′31		morning rise direct asc. node morning max el	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32	23°る23'48 23°る8'28 23°る38'58 27°る02'00 0°≈	
minimum elong	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01	24° \times 26'51 27° \times 14'50 27° \times 10'01 26° \times 46'31 27° \times 33'29		morning rise direct asc. node	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32 12262 Feb 12 01:57	23°る23'48 23°る08'28 23°る38'58 27°る02'00 0°≈ 22°≈06'24	
minimum elong behind sun begin behind sun end	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01 12261 Mar 12 20:15	24°¥26′51 27°¥14′50 27°¥10′01 26°¥46′31 27°¥33′29 0° Y	0°12'13	morning rise direct asc. node morning max el	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32	23°る23'48 23°る8'28 23°る38'58 27°る02'00 0°≈	
minimum elong behind sun begin behind sun end max. Earth dist.	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01 12261 Mar 12 20:15 12261 Mar 18 14:16	24°¥26′51 27°¥14′50 27°¥10′01 26°¥46′31 27°¥33′29 0°°Y 9°°Y36′02		morning rise direct asc. node morning max el morning set	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32 12262 Feb 12 01:57 12262 Feb 16 05:55	23°る23'48 23°る08'28 23°る38'58 27°る02'00 0°≈ 22°≈06'24 0°升	18°17'41
minimum elong behind sun begin behind sun end	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01 12261 Mar 12 20:15 12261 Mar 18 14:16 12261 Mar 25 01:55	24° ★26′51 27° ★14′50 27° ★10′01 26° ★46′31 27° ★33′29 0° ♀ 9° ♀36′02 19° ♀59′24	0°12'13	morning rise direct asc. node morning max el morning set	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32 12262 Feb 12 01:57 12262 Feb 16 05:55	23°♂23'48 23°♂08'28 23°♂38'58 27°♂02'00 0°≈ 22°≈06'24 0°⊁ 9°⊁38'43	18°17'41 0°23'46
minimum elong behind sun begin behind sun end max. Earth dist.	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01 12261 Mar 12 20:15 12261 Mar 18 14:16 12261 Mar 25 01:55 12261 Mar 31 13:50	24°¥26′51 27°¥14′50 27°¥10′01 26°¥46′31 27°¥33′29 0°°Y 9°°Y36′02 19°°Y59′24 0°8	0°12'13	morning rise direct asc. node morning max el morning set superior conj minimum elong	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32 12262 Feb 12 01:57 12262 Feb 16 05:55 12262 Feb 21 10:45 12262 Feb 21 12:28	23°る23'48 23°る08'28 23°る38'58 27°る02'00 0°≈ 22°≈06'24 0°升 9°升38'43 9°升46'33	18°17'41
minimum elong behind sun begin behind sun end max. Earth dist.	12261 Mar 09 14:55 12261 Mar 11 05:41 12261 Mar 11 04:34 12261 Mar 10 23:07 12261 Mar 11 10:01 12261 Mar 12 20:15 12261 Mar 18 14:16 12261 Mar 25 01:55	24° ★26′51 27° ★14′50 27° ★10′01 26° ★46′31 27° ★33′29 0° ♀ 9° ♀36′02 19° ♀59′24	0°12'13 1.43059 AU	morning rise direct asc. node morning max el morning set	12262 Jan 17 09:23 12262 Jan 19 11:09 12262 Jan 22 07:38 12262 Jan 27 08:09 12262 Jan 29 23:32 12262 Feb 12 01:57 12262 Feb 16 05:55	23°♂23'48 23°♂08'28 23°♂38'58 27°♂02'00 0°≈ 22°≈06'24 0°⊁ 9°⊁38'43	18°17'41 0°23'46

	122(2 M-= 05 05.1(0° Ƴ			10062 E-L 15 00.20	120 W 20146	
	12262 Mar 05 05:16			evening rise	12263 Feb 15 02:38	12°) € 20'46	
evening rise	12262 Mar 05 15:39	0° Υ '42'30			12263 Feb 25 22:59	0° Υ	
	12262 Mar 25 00:10	0°8			12263 Mar 20 06:41	0°8	
evening max el	12262 Apr 08 18:39	18° 8 17'10	23°15'30	evening max el	12263 Mar 22 08:28	2° 8 08'40	24°35'21
retrograde	12262 Apr 19 06:18	24° 8 28'04		retrograde	12263 Apr 02 22:16	8° 8 54'28	
asc. node	12262 Apr 20 04:41	24° 8 24'01		asc. node	12263 Apr 07 02:04	7° 8 37'16	
evening set	12262 Apr 24 07:40	22° 8 20'49		evening set	12263 Apr 08 11:31	6° ႘ 34'51	
min. Earth dist.	12262 Apr 29 05:08	16° 8 34'44	0.68751 AU	min. Earth dist.	12263 Apr 13 00:40	1° 8 24'37	0.68288 AU
inferior conj	12262 Apr 29 16:43	15° 8 54'45	2°35'00	inferior conj	12263 Apr 14 00:34	0° ප 04'52	2°01'41
minimum elong	12262 Apr 29 14:41	16° 8 01'46	2°33'58	minimum elong	12263 Apr 13 22:25	0° 8 12'03	2°00'41
morning rise	12262 May 04 21:36	9° 8 48'06	2 33 50	mmunum viong	12263 Apr 14 02:02	30°RY	2 00 .1
direct	12262 May 09 05:38	8° 8 03'34		morning rise	12263 Apr 19 09:29	24° Υ 06'16	
morning max el	12262 May 17 15:34	12° 8 53'18	21°00'13	direct	12263 Apr 23 05:02	22° Υ '43'00	
•	•		21 00 13		-		10040110
desc. node	12262 May 23 13:14	19° 8 41'12		morning max el	12263 Apr 30 15:21	26° Y 51'12	19°49'18
	12262 May 31 03:16	0°Щ			12263 May 03 12:44	0° 8	
morning set	12262 Jun 17 02:56	25° Ⅱ 28'22		desc. node	12263 May 10 10:01	9° 8 03'36	
	12262 Jun 19 23:58	0 \circ		greatest brilliancy	12263 May 13 16:35	13° 8 46'01	-0.6m
max. Earth dist.	12262 Jun 24 17:35	7° © 35'56	1.42991 AU		12263 May 24 12:16	Π \circ 0	
				morning set	12263 May 27 03:49	4° Ⅱ 03'27	
superior conj	12262 Jul 01 19:03	19° © 18'44	-1°52'23	max. Earth dist.	12263 Jun 07 05:50	21° Ⅲ 21′09	1.44587 AU
minimum elong	12262 Jul 02 01:52	19° 5 47'41	1°52'38				
	12262 Jul 07 23:45	$0^{\circ}\Omega$		superior conj	12263 Jun 12 05:59	29° Ⅲ 22'08	-2°10'36
evening rise	12262 Jul 13 13:26	9° £ 52'44		minimum elong	12263 Jun 12 09:39	29° II 36'59	
asc. node	12262 Jul 17 03:24	16°Ω15'28		minimum ciong	12263 Jun 12 15:20	0°95	2 11 22
asc. node	12262 Jul 25 10:53	0°m)		evening rise	12263 Jun 25 17:58	21° 9 547'12	
		•	10004112	evening rise			
evening max el	12262 Jul 30 01:20	5° Mp 41'41	18°04'13	,	12263 Jun 30 14:17	0° N	
retrograde	12262 Aug 05 17:20	9° Mp 06'52		asc. node	12263 Jul 04 00:17	5° Ω 40'39	
evening set	12262 Aug 08 04:21	8° m 38'58		evening max el	12263 Jul 13 15:27	19° Ω 03'00	18°07'57
inferior conj	12262 Aug 14 22:23	3° m 40'15	1°19'48	retrograde	12263 Jul 20 00:19	22° Ω 23′26	
minimum elong	12262 Aug 15 00:34	3° Mg 35'00	1°18'34	evening set	12263 Jul 22 19:25	21° Ω 42'43	
min. Earth dist.	12262 Aug 18 02:26	0° m ,39′08	0.60824 AU	inferior conj	12263 Jul 28 23:19	16° Ω 25'43	2°15'50
	12262 Aug 18 19:58	30° R Ω		minimum elong	12263 Jul 29 01:55	16° Ω 18'39	2°14'30
desc. node	12262 Aug 19 11:36	29° Ω 26′38		min. Earth dist.	12263 Jul 31 16:28	13° Ω 29'38	0.63055 AU
morning rise	12262 Aug 21 18:00	27° Ω 45′04		morning rise	12263 Aug 04 06:32	10° Ω 13'07	
direct	12262 Aug 28 08:31	25° Ω 34'52		desc. node	12263 Aug 06 08:59	8° Ω 52'57	
	12262 Sep 07 16:12	o∘ mp		direct	12263 Aug 10 22:53	7° Ω 42'58	
morning max el	12262 Sep 11 14:48	3°m)31'05	27°55'28	morning max el	12263 Aug 24 22:55	15° Ω 45'06	27°50'47
	12262 Oct 01 04:19	0∘ ⊽			12263 Sep 05 15:26	0° m)	
asc. node	12262 Oct 13 04:50	ა — 22° ჲ 16'39			12263 Sep 33 13:28 12263 Sep 23 20:48	0∘ ত مس	
morning set	12262 Oct 14 13:33	25° ⊆ 05'07		morning sot	12263 Sep 28 10:28	ა _ 8° ჲ 55'42	
morning set				morning set	-		
	12262 Oct 16 21:28	0°M		asc. node	12263 Sep 30 01:31	12° 2 14'41	
max. Earth dist.	12262 Oct 20 10:39	7°11L43'10	1.31490 AU	max. Earth dist.	12263 Oct 03 13:36	19° ≏ 36'24	1.32195 AU
superior conj	12262 Oct 21 19:40	10°M45'42	1°15'11	superior conj	12263 Oct 06 03:44	25° ≙ 12'02	0°56'14
minimum elong	12262 Oct 21 17:28	10°M33'30	1°15'23	minimum elong	12263 Oct 06 01:34	25° ♀ 00'10	0°56'09
evening rise	12262 Oct 28 12:42	25°M33'00	1 10 20	mmunum viong	12263 Oct 08 08:23	0°M	0 00 00
evening rise	12262 Oct 30 14:55	23 118 33 00		evening rise	12263 Oct 06 08:23 12263 Oct 12 23:58	10°ML08'08	
desc. node		27° × ⁷ 52'05		evening rise		10 11 3 00 00	
desc. node	12262 Nov 15 08:20			1 1	12263 Oct 23 01:28		
	12262 Nov 16 21:27	0°る		desc. node	12263 Nov 02 05:36	14° ₹ 58'44	
evening max el	12262 Nov 24 09:40	8° る 38'28	25°20'15	evening max el	12263 Nov 05 20:28	18° ∡ ′52′16	23°42'57
retrograde	12262 Dec 08 06:02	15° る 35'58		retrograde	12263 Nov 19 08:36	25° ∡ ³36′29	
evening set	12262 Dec 14 02:51	14° る 17'46		evening set	12263 Nov 23 23:57	24° ∡ ⁴49'35	
min. Earth dist.	12262 Dec 18 21:47	11° る 38'02	0.57123 AU	min. Earth dist.	12263 Nov 30 06:50	21° ∡ ¹47'45	0.55529 AU
inferior conj	12262 Dec 21 17:32	9° る 44'40	-5°08'13	inferior conj	12263 Dec 02 04:31	20° ∡ ³39'55	-5°49'34
minimum elong	12262 Dec 22 01:31	9° ට 31'17	5°05'41	minimum elong	12263 Dec 02 07:18	20° ∡ ³35'48	5°48'33
morning rise	12262 Dec 30 02:30	5° る 31'17		morning rise	12263 Dec 10 16:30	16° ∡ ¹45'50	
direct	12263 Jan 01 08:24	5° る 16'22		direct	12263 Dec 13 10:03	16° ∡ ¹27'19	
asc. node	12263 Jan 09 04:51	8° ප 33'16		morning max el	12263 Dec 24 00:13	21° ₹ '29'54	20°13'36
morning max el	12263 Jan 10 10:29	9° る 40'14	19°04'13	asc. node	12263 Dec 27 01:59	24° × 50'24	
	12263 Jan 23 17:58	0°≈	22 0110	200. 11000	12263 Dec 30 20:24	0°る	
morning set		0 ≈ 6°≈28'42		morning set		0 3 21° る 06'27	
morning set	12263 Jan 27 01:37	υ ≈ ×∠842		morning set	12264 Jan 11 07:41		
	100/2 E 1 04 10 00	220 52140	0053100		12264 Jan 15 15:29	0° ≈	
superior conj	12263 Feb 04 10:00	22°≈52'40	0°53'08		100647 10 22 53	60 45	1014450
minimum elong	12263 Feb 04 12:50	23°≈06'13	0°53'19	superior conj	12264 Jan 18 22:52	6°≈43'54	
	12263 Feb 08 04:40	0° ∀		minimum elong	12264 Jan 19 01:34	6° ≈ 57'30	1°15'23
desc. node	12263 Feb 11 08:08	5°) 43′33		max. Earth dist.	12264 Jan 24 14:30	17° ≈ 47'53	1.36652 AU
max. Earth dist.	12263 Feb 11 07:28	5°) 40′35	1.38848 AU	evening rise	12264 Jan 28 09:13	24° ≈ 48'58	

	10064 7 00 04 50	260 15121		The state of	100(5) 0(00 10	200720100	1 2 4 5 0 0 1 4 4 4
desc. node	12264 Jan 29 04:50	26°≈17'31		max. Earth dist.	12265 Jan 06 02:18	29°₹39'09	1.34700 AU
	12264 Jan 31 07:00	0°) €			12265 Jan 06 06:26	0° ≈	
	12264 Feb 19 13:21	0° Υ		evening rise	12265 Jan 10 07:57	7° ≈ 57'35	
evening max el	12264 Mar 03 21:50	15° Ƴ 59'27	25°48'06	desc. node	12265 Jan 15 01:35	16° ≈ 42'35	
retrograde	12264 Mar 16 09:42	23° Y ′09'59			12265 Jan 22 22:05	0° ∀	
evening set	12264 Mar 22 10:33	20° Ƴ 41'21		evening max el	12265 Feb 14 11:23	29°) 43′19	26°46'35
asc. node	12264 Mar 23 23:26	19° Ƴ 15'10			12265 Feb 14 18:20	0 ° Υ	
min. Earth dist.	12264 Mar 26 16:50	16° Ƴ 06'19	0.67394 AU	retrograde	12265 Feb 27 15:46	7° Y ′06'46	
inferior conj	12264 Mar 28 04:58	14° Y 12′06	1°18'24	evening set	12265 Mar 06 02:56	4° Y 34'02	
minimum elong	12264 Mar 28 03:14	14° Ƴ 17'37	1°17'39	min. Earth dist.	12265 Mar 10 03:34	0° Ƴ 32'57	0.66093 AU
morning rise	12264 Apr 02 20:31	8° Y '22'54		asc. node	12265 Mar 10 20:49	29°) 42'47	
direct	12264 Apr 06 04:30	7° Ƴ 19'26			12265 Mar 10 14:56	30°R) €	
morning max el	12264 Apr 12 22:45	10° Ƴ 58'57	18°53'27	inferior conj	12265 Mar 12 03:46	28°) 11'29	0°24'50
desc. node	12264 Apr 26 06:42	28° Y ′53'01		minimum elong	12265 Mar 12 03:06	28°) 13'26	0°24'41
greatest brilliancy	12264 Apr 26 16:07	29° Y 28'50	-0.8m	morning rise	12265 Mar 18 04:29	22°\(\)33'28	0 2 1 11
greatest orimaney	12264 Apr 27 00:18	0°8	0.0111	direct	12265 Mar 21 02:12	21°) 46'54	
morning set	12264 May 05 11:20	13° 8 04'01		morning max el	12265 Mar 27 12:11	25° H 10'29	18°14'07
morning set	•			morning max ei		25 Υ 1029	18 14 07
m at m	12264 May 16 08:26	0°П	1 45504 477		12265 Mar 31 15:22		
max. Earth dist.	12264 May 19 22:53	5° Ⅱ 37'50	1.45534 AU	desc. node	12265 Apr 13 03:21	19° Y ′02'04	
		_		morning set	12265 Apr 15 19:35	23° Y 19'45	
superior conj	12264 May 21 20:25	8° Ⅱ 36'19			12265 Apr 19 23:35	9° 8	
minimum elong	12264 May 21 16:46	8° Ⅱ 21'57	2°11'51				
	12264 Jun 04 07:07	0 \circ ∞		superior conj	12265 May 01 03:43	17° 8 38'59	-1°51'34
evening rise	12264 Jun 05 23:06	2° © 41'25		minimum elong	12265 Apr 30 18:41	17° 8 03'40	1°51'26
asc. node	12264 Jun 19 21:14	24° © 41'56		max. Earth dist.	12265 May 02 18:21	20° 8 10'04	1.45749 AU
	12264 Jun 23 19:40	$0^{\circ}\Omega$			12265 May 09 01:40	$\Pi^{\circ}0$	
evening max el	12264 Jun 26 04:30	2° Ω 38′01	18°29'50	evening rise	12265 May 17 04:34	12° Ⅲ 39'01	
retrograde	12264 Jul 02 15:40	6° Ω 07'21		Č	12265 May 28 09:36	0°ಅ	
evening set	12264 Jul 05 19:04	5° Ω 11'53		greatest brilliancy	12265 May 28 10:23	0° © 02'57	-0.7m
5 · • • • • • • • • • • • • • • • • • •	12264 Jul 11 05:35	30°Rூ		asc. node	12265 Jun 06 18:16	13° © 11'25	
inferior conj	12264 Jul 11 12:42	29° © 38'42	2°51'18	evening max el	12265 Jun 09 14:05	16°521'09	19°08'58
minimum elong	12264 Jul 11 14:41	29° © 32'43	2°50'10	retrograde	12265 Jun 16 11:57	20°9511'51	17 00 30
min. Earth dist.	12264 Jul 13 15:53	29 \$3243 27°\$05'37	0.65048 AU	•		19°500'28	
			0.03048 AU	evening set	12265 Jun 20 00:05		2000150
morning rise	12264 Jul 17 09:12	23°5517'38		inferior conj	12265 Jun 25 11:00	13°5512'40	3°09'50
desc. node	12264 Jul 23 06:18	20°538'24		minimum elong	12265 Jun 25 11:59	13° © 09'32	3°08'54
direct	12264 Jul 23 21:40	20° © 36'57		min. Earth dist.	12265 Jun 26 23:27	11° © 15'11	0.66672 AU
morning max el	12264 Aug 06 09:37		27°11'42	morning rise	12265 Jun 30 23:16	6° © 49'40	
	12264 Aug 07 18:55	0 $^{\circ}\Omega$		direct	12265 Jul 07 03:37	4° © 08'45	
	12264 Aug 29 10:55	0° m y		desc. node	12265 Jul 10 03:31	4° © 40'57	
morning set	12264 Sep 10 21:51	22° Mp 17'14		morning max el	12265 Jul 19 20:29	11° 5 544'18	26°06'09
	12264 Sep 14 19:01	0∘ ⊽			12265 Aug 03 11:03	$0 ^{\circ} \Omega$	
max. Earth dist.	12264 Sep 15 07:59	1° ≏ 06'03	1.33423 AU		12265 Aug 22 02:11	0° m y	
asc. node	12264 Sep 15 22:08	2° ₽ 18'35		morning set	12265 Aug 24 20:22	5° mp 01'35	
				max. Earth dist.	12265 Aug 28 15:53	12° Mp 14'44	1.35151 AU
superior conj	12264 Sep 19 06:51	9° ≏ 20'14	0°32'02	asc. node	12265 Sep 02 18:46	22° m/24'52	
minimum elong	12264 Sep 19 05:18	9° £ 12'05	0°31'47		1	•	
evening rise	12264 Sep 26 10:44	24° Ω 38'58		superior conj	12265 Sep 03 02:32	23° m) 04'26	0°03'07
o voiming rise	12264 Sep 29 00:07	0°M		minimum elong	12265 Sep 03 02:22	23° mp 03'33	0°02'53
evening max el	12264 Oct 17 08:23	28°M56'24	22°02'12	behind sun begin	12265 Sep 02 20:25	22° m/33'14	0 0200
evening max er	12264 Oct 18 11:28	0° √	22 02 12	behind sun end	12265 Sep 02 20:25 12265 Sep 03 08:19	23° m 33'56	
daga nada		0° ₹ 33'52		ocimia sun cha	-	0° ⊡	
desc. node	12264 Oct 19 02:58				12265 Sep 06 11:09		
retrograde	12264 Oct 29 23:58	5° 🖈 13'29		evening rise	12265 Sep 10 19:03	9° Ω 00'42	
evening set	12264 Nov 02 04:36	4° ⋌ 750'45			12265 Sep 21 23:07	0°M	
min. Earth dist.	12264 Nov 10 13:31		0.54649 AU	evening max el	12265 Sep 29 06:47	9° ™ 28'17	20°33'25
inferior conj	12264 Nov 11 00:02	0° ∡ 754'06		desc. node	12265 Oct 06 00:21	14°M09'25	
minimum elong	12264 Nov 10 18:11	1° ∡ ′02'19	5°38'08	retrograde	12265 Oct 10 11:06	15° ™ 01'21	
	12264 Nov 12 14:56	30°ŖM₊		evening set	12265 Oct 12 15:16	14° M 49'41	
morning rise	12264 Nov 19 09:01	27°M07'00		inferior conj	12265 Oct 21 16:18	10°M54'16	-4°31'30
direct	12264 Nov 22 20:45	26° MJ $40'06$		minimum elong	12265 Oct 21 06:15	11° M 08'48	4°28'13
	12264 Dec 02 01:34	0° ∡ ¹		min. Earth dist.	12265 Oct 22 21:04	10°M12'38	0.54687 AU
morning max el	12264 Dec 04 23:53	2° ∡ ¹26'30	21°44'50	morning rise	12265 Oct 29 20:51	6° ™ 54'45	
asc. node	12264 Dec 12 23:01	12° ∡ 12'51		direct	12265 Nov 03 05:30	6° ™ 13'50	
	12264 Dec 22 21:29	0°る		morning max el	12265 Nov 16 12:54	12°M41'52	23°30'50
morning set	12264 Dec 25 17:31	5° る 51'18		asc. node	12265 Nov 29 19:58	0° ₹ 25'48	
morning sot	1220 1 1000 23 17.31	5 051 10		use. Houe	12265 Nov 29 13:53	0 × 25 48 0° × 7	
superior con-	12265 Jan 01 21:23	21° る 00'21	1°20'20	morning set	12265 Dec 10 05:09	0 x · 20° x 737'57	
superior conj				morning set			
minimum elong	12265 Jan 01 23:17	21° る 10'17	1-30/10		12265 Dec 14 13:07	0°ಕ	

		_					
superior conj	12265 Dec 17 02:32	5° る 33'24	1°37'10	superior conj	12266 Dec 01 11:51	20° ≯ 15'54	1°38'31
minimum elong	12265 Dec 17 03:20	5° る 37'43	1°38'01	minimum elong	12266 Dec 01 11:32	20° ҂ 14'07	1°39'22
max. Earth dist.	12265 Dec 19 21:57	11° る 34'10	1.33141 AU	max. Earth dist.	12266 Dec 03 01:06	23° ҂ 40′48	1.32040 AU
evening rise	12265 Dec 24 19:19	21° る 37'56			12266 Dec 05 23:08	0°る	
	12265 Dec 29 03:14	0°≈		evening rise	12266 Dec 08 16:11	5° る 41'53	
desc. node	12266 Jan 01 22:26	6° ≈ 53'59		desc. node	12266 Dec 19 19:22	26° る 45'35	
	12266 Jan 16 18:13	0° ∀			12266 Dec 21 17:35	0° ≈	
evening max el	12266 Jan 28 00:31	13° ¥ 10′45	27°23'22	evening max el	12267 Jan 10 11:22	26° ≈ 09′21	27°31'41
retrograde	12266 Feb 10 15:22	20°) 36′12			12267 Jan 15 02:15	0° ∀	
evening set	12266 Feb 17 10:28	18° ¥ 05'43		retrograde	12267 Jan 24 07:35	3° ∺ 29'42	
min. Earth dist.	12266 Feb 21 06:44	14°) 36′23	0.64438 AU	evening set	12267 Jan 31 06:33	1° ₩ 08'53	
inferior conj	12266 Feb 23 18:28	11° ¥ 56'53	-0°39'04		12267 Feb 01 20:07	30° ₹ ≈	
minimum elong	12266 Feb 23 19:39	11° ¥ 53'42	0°38'13	min. Earth dist.	12267 Feb 04 00:25	28° ≈ 07'12	0.62497 AU
asc. node	12266 Feb 25 18:12	9° ¥ 53'09		inferior conj	12267 Feb 06 22:09	25° ≈ 21'08	-1°52'20
morning rise	12266 Mar 02 06:45	6°) 32′25		minimum elong	12267 Feb 07 01:56	25°≈12'03	1°50'14
direct	12266 Mar 04 19:46	5°) 59'15		asc. node	12267 Feb 12 15:34	20°≈48'20	
morning max el	12266 Mar 11 05:09	9° ¥ 18'06	17°51'48	morning rise	12267 Feb 13 23:52	20°≈13'19	
morning max er	12266 Mar 25 09:03	0°Υ	1, 21 10	direct	12267 Feb 16 06:12	19° ≈ 49'50	
morning set	12266 Mar 28 08:28	4° Υ 59'11		morning max el	12267 Feb 22 22:42	23°≈14'11	17°47'03
desc. node	12266 Mar 30 23:56	9° Υ 24'45		morning max ci	12267 Feb 28 07:29	0°¥	17 47 03
desc. node	12200 Wai 30 23.30	9 1 24 43		morning set	12267 Mar 10 21:15	17°) 47′04	
	12266 Arr. 10 21:20	2700015124	101740	•		29° H 56'51	
superior conj	12266 Apr 10 21:30	27°Υ15'34		desc. node	12267 Mar 17 20:31		
minimum elong	12266 Apr 10 13:33	26° Y 43'44	1°16'01		12267 Mar 17 21:15	0 ° Υ	
	12266 Apr 12 14:39	0° 8					
max. Earth dist.	12266 Apr 15 13:54	4° 8 42'19	1.45225 AU	superior conj	12267 Mar 22 13:37	7° Y 56'32	
evening rise	12266 Apr 26 18:16	22° 8 03'58		minimum elong	12267 Mar 22 10:05	7° Y 41'45	
	12266 May 01 23:12	Π °0		max. Earth dist.	12267 Mar 29 07:24	18° Ƴ 59'55	1.44019 AU
greatest brilliancy	12266 May 11 19:00	14° Ⅱ 38'21	-0.6m		12267 Apr 05 06:30	9° 8	
	12266 May 23 15:38	0		evening rise	12267 Apr 06 07:18	1° 8 36'04	
evening max el	12266 May 23 18:28	0° © 07'11	20°03'51		12267 Apr 25 12:40	Π °0	
asc. node	12266 May 24 15:23	0° © 57'54		evening max el	12267 May 06 17:08	13° Ⅱ 54'07	21°11'52
retrograde	12266 May 31 10:25	4° 5 30'23		asc. node	12267 May 11 12:37	17° Ⅱ 48'06	
evening set	12266 Jun 04 08:01	3° © 02'30		retrograde	12267 May 15 09:07	18° Ⅱ 57'58	
	12266 Jun 07 08:35	30°RⅡ		evening set	12267 May 19 16:56	17° Ⅱ 13'49	
inferior conj	12266 Jun 09 15:18	27° Ⅲ 01′25	3°14'30	inferior conj	12267 May 24 23:11	11° 耳 00′57	3°07'23
minimum elong	12266 Jun 09 15:11	27° Ⅱ 01'48	3°13'38	minimum elong	12267 May 24 22:07	11° 耳 04'40	3°06'27
min. Earth dist.	12266 Jun 10 13:20	25° Ⅱ 46'46	0.67858 AU	min. Earth dist.	12267 May 25 07:34	10° Ⅱ 31'50	0.68573 AU
morning rise	12266 Jun 14 22:01	20° Ⅱ 40'32		morning rise	12267 May 30 03:06	4° ∏ 44'32	
direct	12266 Jun 20 15:17	18° Ⅱ 08'37		direct	12267 Jun 04 07:41	2° Ⅲ 28′24	
desc. node	12266 Jun 27 00:40	20° Ⅲ 34'26		desc. node	12267 Jun 13 21:44	7° Ⅱ 51'33	
morning max el	12266 Jul 02 06:27	25° I 107'10	24°43'42	morning max el	12267 Jun 14 16:47	8° Ⅱ 38'34	23°14'14
	12266 Jul 06 16:32	0ంత			12267 Jul 01 10:40	0°ಅ	
	12266 Jul 27 22:31	0° U		morning set	12267 Jul 19 09:00	27°952'48	
morning set	12266 Aug 07 01:41	16° Ω 57'16		morning sec	12267 Jul 20 15:19	0°Ω	
max. Earth dist.	12266 Aug 10 15:35	23° Ω 22'05	1.37279 AU	max. Earth dist.	12267 Jul 23 13:23	4° Ω 59'21	1.39601 AU
max. Latin dist.	12266 Aug 14 05:15	0° m)	1.37217 AU	max. Larm dist.	1220/Jul 23 13.23	4 66 3721	1.57001 AC
	12200 Aug 14 03.13	Ų ių		superior conj	12267 Jul 31 06:19	18° Ω 46'23	1003153
superior conj	12266 Aug 17 11:38	6° Mp 16'08	0020122	minimum elong	12267 Jul 31 10:53	$19^{\circ} \Omega 07'28$	
minimum elong	12266 Aug 17 11:36	6° m) 25'41		minimum ciong	12267 Jul 31 10:33 12267 Aug 06 05:12	0° m)	1 0347
C	· ·	•	0 29 30	4-	Č		
asc. node	12266 Aug 20 15:26	12° Mp 29'24		asc. node	12267 Aug 07 12:08	2° M) 28'36	
evening rise	12266 Aug 25 22:32	23° Mp 06'36		evening rise	12267 Aug 09 18:19	6° Mp 49'28	
	12266 Aug 29 10:07	0° 亞	1000 407		12267 Aug 23 07:58	0° ⊽	1000505
evening max el	12266 Sep 11 19:12	20° £ 45'52	19°24'27	evening max el	12267 Aug 25 19:51	2° Ω 49'34	18°37'05
retrograde	12266 Sep 21 07:04	25° Ω 30'03		retrograde	12267 Sep 02 21:09	6° ≙ 52'31	
desc. node	12266 Sep 22 21:47	25° ≏ 22'25		evening set	12267 Sep 04 20:23	6° ≙ 38'47	
evening set	12266 Sep 23 03:31	25° ≏ 20'02		desc. node	12267 Sep 09 19:16	4° £ 20'45	
inferior conj	12266 Oct 01 19:34	21° ≏ 12'42	-2°46'16	inferior conj	12267 Sep 12 18:57	2° ≏ 12'01	-0°56'17
minimum elong	12266 Oct 01 12:19	21° ≏ 24'26		minimum elong	12267 Sep 12 16:41	2° ≏ 16'19	0°55'26
min. Earth dist.	12266 Oct 04 07:37	19° ≏ 35'37	0.55647 AU		12267 Sep 15 16:52	30°R, Mp	
morning rise	12266 Oct 09 18:48	16° ≙ 43'01		min. Earth dist.	12267 Sep 15 23:39	29° m 47'39	0.57349 AU
direct	12266 Oct 14 23:32	15° ≏ 42'05		morning rise	12267 Sep 20 09:32	27° m 04'28	
morning max el	12266 Oct 28 23:21	22° ₽ 44'28	25°17'03	direct	12267 Sep 26 07:25	25° m 37'35	
	12266 Nov 04 10:38	0°M₊			12267 Oct 07 00:33	0∘ ⊽	
asc. node	12266 Nov 16 16:51	19°M16'38		morning max el	12267 Oct 10 14:38	3° ≏ 07'14	26°45'10
	12266 Nov 22 03:49	0° ∡¹			12267 Oct 29 23:07	0° M	
morning set	12266 Nov 24 16:49	5° ∡ 121'36		asc. node	12267 Nov 03 13:39	8°M35'08	
-				morning set	12267 Nov 09 02:48	19°M56'53	
				-			

18°**£**22'41

12269 Oct 07 10:23

morning set

28°**♀**13'43

12268 Oct 20 10:24

asc. node

inferior conj	12273 Jun 02 15:30	20° Ⅱ 17'26	3°12'51	min. Earth dist.	12274 May 18 03:11	4°∏10'07	0.68731 AU
minimum elong	12273 Jun 02 14:58	20° I 19'19	3°11'57	mm. Burur ulov.	12274 May 21 07:18	30°R 8	0.00751110
min. Earth dist.	12273 Jun 03 07:39	19° Ⅱ 21'56	0.68214 AU	morning rise	12274 May 23 03:46	28° 8 06'00	
morning rise	12273 Jun 07 20:40	13° Ⅱ 57'58		direct	12274 May 28 02:48	25° 8 57'41	
direct	12273 Jun 13 08:35	11° Ⅱ 32'04			12274 Jun 05 02:03	Π °0	
desc. node	12273 Jun 21 03:03	15° Ⅱ 06'35		morning max el	12274 Jun 06 22:37	1° Ⅱ 45'52	22°36'13
morning max el	12273 Jun 24 11:35	18° Ⅱ 11'55	24°05'55	desc. node	12274 Jun 08 00:03	2° Ⅱ 51'38	
	12273 Jul 04 09:17	0° ©			12274 Jun 28 07:36	0°©	
. ,	12273 Jul 24 12:33	0° N		morning set	12274 Jul 10 18:57	19°930'55	1 40500 411
morning set max. Earth dist.	12273 Jul 29 22:20 12273 Aug 02 15:16	9° Ω 04'20	1.38252 AU	max. Earth dist.	12274 Jul 15 13:35 12274 Jul 17 01:11	27° © 28'12 0° Ω	1.40580 AU
max. Latur dist.	12275 Aug 02 15.10	13 663337	1.36232 AU		122/4 Jul 1/ 01.11	0 00	
superior conj	12273 Aug 09 22:20	29° Ω 00'44	-0°44'05	superior conj	12274 Jul 23 09:31	11° Ω 10′08	-1°18'11
minimum elong	12273 Aug 10 01:23	29° Ω 15′14	0°44'03	minimum elong	12274 Jul 23 15:07	11° Ω 35′26	1°18'06
	12273 Aug 10 10:45	0° m		asc. node	12274 Aug 01 14:29	28° Ω 15′27	
asc. node	12273 Aug 14 17:45	8° m) 19'58		evening rise	12274 Aug 02 10:27	29° Ω 49'47	
evening rise	12273 Aug 18 19:05	16° m 20'11			12274 Aug 02 12:37	0° m	
	12273 Aug 25 23:47	0° ⊽	10001142	evening max el	12274 Aug 18 09:54	25° m) 29'33	18°23'22
evening max el	12273 Sep 04 05:07 12273 Sep 13 01:20	13° £ 08′21	19°01'43	retrograde evening set	12274 Aug 25 23:19 12274 Aug 28 01:25	29° Mp 18'20	
retrograde evening set	12273 Sep 13 01.20 12273 Sep 14 21:58	17° ♀ 33'33		desc. node	12274 Aug 28 01:23 12274 Sep 03 21:47	29° My 01'40 25° My 02'38	
desc. node	12273 Sep 14 21:38 12273 Sep 17 00:20	17 = 22 37 16° £ 45'50		inferior conj	12274 Sep 03 21:47 12274 Sep 04 15:53	24° m/ 26'18	-0°14'03
inferior conj	12273 Sep 17 00:20 12273 Sep 23 07:11	13° ⊆ 07'52	-1°58'33	minimum elong	12274 Sep 04 15:33	24° m) 27'23	0°14'01
minimum elong	12273 Sep 23 02:05	13° £ 16'41	1°56'27	transit middle	12274 Sep 04 15:21	24° m) 27'23	0°14'01
min. Earth dist.	12273 Sep 26 04:22	11° ≙ 08'45	0.56293 AU	transit begin	12274 Sep 04 13:36	24° m/30'56	
morning rise	12273 Oct 01 03:08	8° ഫ 21'52		transit end	12274 Sep 04 17:07	24° m 23'49	
direct	12273 Oct 06 15:37	7° ≙ 10'14		min. Earth dist.	12274 Sep 07 23:23	21°Mp46'33	0.58235 AU
morning max el	12273 Oct 20 19:42	14° ≏ 26′01	25°57'42	morning rise	12274 Sep 12 01:47	19° m 03'47	
	12273 Nov 02 05:01	0°M₊		direct	12274 Sep 18 05:56	17° m 24'26	
asc. node	12273 Nov 10 19:12	14°M46'05		morning max el	12274 Oct 02 13:49	25° m 03'19	27°13'19
morning set	12273 Nov 17 18:34	28°M55'26			12274 Oct 07 03:38	0∘ 亚	
	12273 Nov 18 06:34	0° ∡ ¹		1-	12274 Oct 26 11:50	0°M₁2127	
superior conj	12273 Nov 24 13:44	13° ∡ 52'40	1°37'17	asc. node morning set	12274 Oct 28 16:00 12274 Nov 02 03:17	4°M13'37 13°M25'16	
minimum elong	12273 Nov 24 13:44 12273 Nov 24 12:59	13° x '32 40	1°38'05	morning set	122/4 NOV 02 03.17	13 11623 10	
max. Earth dist.	12273 Nov 25 14:53	16° × 11'56	1.31714 AU	superior conj	12274 Nov 09 01:26	28°M37'01	1°30'16
evening rise	12273 Dec 01 14:11	29° ∡ ¹05'55		minimum elong	12274 Nov 08 23:48	28°M27'55	1°30'49
	12273 Dec 02 00:34	ರ°0		max. Earth dist.	12274 Nov 08 23:29	28°M26'09	1.31316 AU
desc. node	12273 Dec 13 21:46	22° る 23'42			12274 Nov 09 16:18	0° ∡ ¹	
	12273 Dec 18 15:29	0° ≈		evening rise	12274 Nov 15 19:59	13° ∡ ³30'45	
evening max el	12274 Jan 02 15:04	18° ≈ 47'17	27°25'18		12274 Nov 24 02:02	0°ප	
retrograde	12274 Jan 16 12:56	26° ≈ 05′13		desc. node	12274 Nov 30 18:51	11° る 31'00	
evening set	12274 Jan 23 11:33	23°≈51'03			12274 Dec 15 00:22	0° ≈	
min. Earth dist.	12274 Jan 27 05:26	20°≈58'47 18°≈13'52	0.61603 AU	evening max el	12274 Dec 15 18:03	0°≈42'36	26°45'42
inferior conj minimum elong	12274 Jan 30 06:26 12274 Jan 30 11:28		2°23'03	retrograde evening set	12274 Dec 29 16:46 12275 Jan 05 09:14	7°≈51'05 5°≈59'03	
morning rise	12274 Feb 06 14:12	13°≈14'10	2 23 03	min. Earth dist.	12275 Jan 09 08:10	3°≈21'21	0.59453 AU
asc. node	12274 Feb 06 18:06	13°≈11'17		inferior conj	12275 Jan 12 12:21	0°≈51'16	
direct	12274 Feb 08 18:16	12°≈53'52		minimum elong	12275 Jan 12 20:04	0° ≈ 36'00	
morning max el	12274 Feb 15 16:30	16° ≈ 23'55	17°50'30	C	12275 Jan 13 14:32	30°Ŗ₹	
	12274 Feb 25 06:24	0°)		morning rise	12275 Jan 20 09:46	26° ප 12'14	
morning set	12274 Mar 03 09:00	10°) 48′35		direct	12275 Jan 22 11:33	25° る 56'29	
desc. node	12274 Mar 11 22:43	26° 米 01'53		asc. node	12275 Jan 24 15:24	26° る 14'21	
		••		morning max el	12275 Jan 30 04:50	29° る 46'06	18°12'39
superior conj	12274 Mar 14 08:15	0° Y 09'49			12275 Jan 30 10:26	0° ≈	
minimum elong	12274 Mar 14 06:33	0° Y 02'32	0°18'09	morning set	12275 Feb 14 21:06	24°≈40'50	
mov Forth di-t	12274 Mar 14 05:58	0° Υ 12° Υ 13'35	1 42222 411		12275 Feb 17 16:51	0° ∺	
max. Earth dist. evening rise	12274 Mar 21 13:46 12274 Mar 28 10:14	12° γ 13'35 23° Υ 09'09	1.43323 AU	superior conj	12275 Feb 24 10:13	12° ¥ 25'11	0°18'40
evening 1150	12274 Mai 28 10.14 12274 Apr 01 20:42	0° 8		minimum elong	12275 Feb 24 10:13 12275 Feb 24 11:38	12 X 23 11 12° X 31'33	0°18'47
	12274 Apr 01 20:42 12274 Apr 22 22:05	0°II		desc. node	12275 Feb 26 19:19	12 ★ 31 33	J 107/
evening max el	12274 Apr 29 01:47	7° Ⅱ 05'16	21°44'00	max. Earth dist.	12275 Mar 04 00:53	25°) 43'22	1.41386 AU
asc. node		11° II 56'07			12275 Mar 06 14:15	0° Υ	
	12274 May 05 15:07	11 113007					
retrograde	12274 May 05 15:07 12274 May 08 05:26	11 П 3007 12° П 27'53		evening rise	12275 Mar 08 20:55	3° Y 44'01	
evening set				evening rise		3° Ƴ 44'01 0° ႘	
•	12274 May 08 05:26	12° Д 27'53 10° Д 37'19 4° Д 20'17	3°01'07 3°00'10	evening rise evening max el retrograde	12275 Mar 08 20:55		23°03'23

asc. node	12275 Apr 22 12:25	26° 8 58'04		asc. node	12276 Apr 08 09:46	10° 8 26'06	
evening set	12275 Apr 27 01:07	24° 8 53'42		evening set	12276 Apr 10 05:31	9° 8 08'16	
inferior conj	12275 Apr 27 01:07 12275 May 02 09:41	18° 8 28'33	2°39'11	min. Earth dist.	12276 Apr 10 03:31 12276 Apr 14 19:45	3° 8 52'45	0.68386 AU
	•	18° 8 35'24	2°38'09	inferior conj	•	2° 6 38'28	2°07'23
minimum elong	12275 May 02 07:43			3	12276 Apr 15 17:52	2° 8 45'44	
min. Earth dist.	12275 May 01 23:55	19° 8 02'21	0.68788 AU	minimum elong	12276 Apr 15 15:42	•	2*06*22
morning rise	12275 May 07 14:13	12° 8 20'56			12276 Apr 17 18:29	30°₹ Υ	
direct	12275 May 12 00:10	10° 8 33'17		morning rise	12276 Apr 21 02:01	26° Y 38'38	
morning max el	12275 May 20 14:09	_	21°11'53	direct	12276 Apr 24 23:19	25° Y 12'22	
desc. node	12275 May 25 20:57	21° 8 30'11		morning max el	12276 May 02 12:48	29° Y ′26′04	19°58'55
	12275 Jun 01 06:13	0°Щ			12276 May 03 02:16	0°8	
morning set	12275 Jun 20 14:04	28° Ⅱ 49'55		desc. node	12276 May 11 17:44	10° 8 47'35	
	12275 Jun 21 07:53	0° ©			12276 May 24 19:01	0°Щ	
max. Earth dist.	12275 Jun 27 17:57	10° © 17'43	1.42709 AU	morning set	12276 May 29 15:59	7° Ⅱ 26'56	
				max. Earth dist.	12276 Jun 09 05:08	23° Ⅱ 56'11	1.44384 AU
superior conj	12275 Jul 04 23:53	22° © 23'44			12276 Jun 12 23:55	0 \circ	
minimum elong	12275 Jul 05 06:47	22° © 53'13	1°48'41				
	12275 Jul 09 09:21	0 $^{\circ}$ Ω		superior conj	12276 Jun 14 14:23	2° © 35'52	-2°08'51
evening rise	12275 Jul 16 12:26	12° Ω 41'52		minimum elong	12276 Jun 14 18:51	2° © 54'06	2°09'32
asc. node	12275 Jul 19 11:15	17° Ω 59'41		evening rise	12276 Jun 27 20:08	24° 5 644'43	
	12275 Jul 26 11:56	0° m)			12276 Jun 30 21:54	$0^{\circ}\Omega$	
evening max el	12275 Aug 01 21:11	8° m) 24'12	18°05'15	asc. node	12276 Jul 05 08:05	7° Ω 27'46	
retrograde	12275 Aug 08 15:13	11° m 51'29		evening max el	12276 Jul 15 11:10	21° Ω 42'35	18°06'14
evening set	12275 Aug 11 00:58	11° m 25'19		retrograde	12276 Jul 21 20:33	25° Ω 03'01	
inferior conj	12275 Aug 17 21:25	6° Mp 29′21	1°09'13	evening set	12276 Jul 24 14:23	24° Ω 24'26	
minimum elong	12275 Aug 17 23:24	6° Mp 24'40	1°08'07	inferior conj	12276 Jul 30 20:09	19° Ω 10′05	2°08'43
min. Earth dist.	12275 Aug 21 02:31	3°m/29'24	0.60480 AU	minimum elong	12276 Jul 30 22:46	19° Ω 03'05	2°07'22
desc. node	12275 Aug 21 19:13	2° m/52'52		min. Earth dist.	12276 Aug 02 15:14	16° Ω 11'51	0.62730 AU
morning rise	12275 Aug 24 18:56	0°m)37'32		morning rise	12276 Aug 06 05:07	12° Ω 59'18	
S	12275 Aug 25 20:28	30°RΩ		desc. node	12276 Aug 07 16:35	12° Ω 00'50	
direct	12275 Aug 31 08:30	28° Ω 31'08		direct	12276 Aug 12 21:31	10° Ω 31'30	
	12275 Sep 06 03:45	0° m)		morning max el	12276 Aug 26 22:58	18° Ω 33'50	27°53'49
morning max el	12275 Sep 14 15:28	6° m) 25'42	27°52'59		12276 Sep 05 14:25	0° m)	_, _,
morning man vi	12275 Oct 02 09:44	0∘ ⊽	2, 020)		12276 Sep 24 06:56	0∘ ⊽	
asc. node	12275 Oct 15 12:42	23° ₽ 58'22		morning set	12276 Sep 30 05:44	ა — 11° ჲ 33'54	
morning set	12275 Oct 17 07:41	27° ⊆ 39'46		asc. node	12276 Oct 01 09:21	13° ≏ 54'58	
morning set	12275 Oct 17 07:41 12275 Oct 18 10:23	0°M		max. Earth dist.	12276 Oct 05 11:32	22° £ 32'02	1.32056 AU
max. Earth dist.	12275 Oct 18 10.23 12275 Oct 23 07:40	10°M36'09	1.31429 AU	max. Earm dist.	122/0 Oct 03 11.32	22 = 32 02	1.32030 AO
max. Earth dist.	12273 OCt 23 07.40	10 1163009	1.31429 AU	superior conj	12276 Oct 07 21:03	27° ≏ 44'04	0°59'28
superior conj	12275 Oct 24 12:29	13°M15'48	1017126	minimum elong	12276 Oct 07 21:03	27° ⊆ 44°04 27° ⊆ 31'57	
minimum elong	12275 Oct 24 12:29 12275 Oct 24 10:19	13°M03'50	1°17'51	minimum ciong	12276 Oct 07 18:30 12276 Oct 08 21:53	0°M	0 3923
			1 1/31	evening rise		12°MJ38'01	
evening rise	12275 Oct 31 05:25	28°M03'06		evening rise	12276 Oct 14 16:33		
	12275 Nov 01 03:14	0° √ ¹			12276 Oct 23 08:12	0° ₹ ¹	
desc. node	12275 Nov 17 16:01	29° ₹ 52'14		desc. node	12276 Nov 03 13:16	17° 🗷 10'05	22050102
. ,	12275 Nov 17 18:10	0°る	25022115	evening max el	12276 Nov 07 23:56	22° х 02'04	23°58'03
evening max el	12275 Nov 27 12:37		25°33'17	retrograde	12276 Nov 21 14:06	28° ∡ ¹49'09	
retrograde	12275 Dec 11 09:30	18° る 43'35		evening set	12276 Nov 26 10:21	27° ₹ '57'50	
evening set	12275 Dec 17 09:50	17°る20'31	0.55402.433	min. Earth dist.	12276 Dec 02 10:41	25° ₹ 00'21	0.55729 AU
min. Earth dist.	12275 Dec 22 00:53		0.57403 AU	inferior conj	12276 Dec 04 12:35	23° х 45'05	
inferior conj	12275 Dec 24 22:47	12° る 43'10		minimum elong	12276 Dec 04 16:30	23° ⋌ 39'11	5°44'59
minimum elong	12275 Dec 25 07:03	12° る 29'01	4°56'09	morning rise	12276 Dec 13 00:36	19° ∡ ¹48'37	
morning rise	12276 Jan 02 06:44	8° る 26'43		direct	12276 Dec 15 15:48	19° ∡ 31'01	
direct	12276 Jan 04 11:34	8° る 11'59		morning max el	12276 Dec 26 00:31	24° ∡ ¹27'34 −	20°01'50
asc. node	12276 Jan 11 12:37	10° る 54'21		asc. node	12276 Dec 28 09:44	26° ₹ 59'32	
morning max el	12276 Jan 13 08:44	12° る 30'35	18°55'53		12276 Dec 30 18:42	0°ಕ	
	12276 Jan 25 03:27	0° ≈		morning set	12277 Jan 13 00:44	23° る 34'49	
morning set	12276 Jan 29 19:31	8° ≈ 59'36			12277 Jan 16 04:03	0° ≈	
superior conj	12276 Feb 07 07:03	25° ≈ 32'18	0°49'09	superior conj	12277 Jan 20 18:06	9° ≈ 18′09	1°12'07
minimum elong	12276 Feb 07 09:48	25° ≈ 45'23	0°49'18	minimum elong	12277 Jan 20 20:53	9° ≈ 32'02	1°12'30
	12276 Feb 09 15:54	0° ∀		max. Earth dist.	12277 Jan 26 14:32	20° ≈ 40'17	1.36967 AU
desc. node	12276 Feb 13 15:56	7° ∺ 18'25		evening rise	12277 Jan 30 08:32	27° ≈ 34'28	
max. Earth dist.	12276 Feb 14 08:07	8°) 30′32	1.39182 AU	desc. node	12277 Jan 30 12:37	27° ≈ 52'50	
evening rise		150 1 12145			12277 Jan 31 17:07	0°) €	
Č	12276 Feb 18 04:43	15° ∺ 13'45			122// 0411 51 1/.0/		
C	12276 Feb 18 04:43 12276 Feb 27 06:00	0° Ƴ			12277 Feb 19 15:46	0° Y	
Ü				evening max el		18° Ƴ 35'32	25°38'03
evening max el	12276 Feb 27 06:00	0° Ƴ	24°23'40	evening max el retrograde	12277 Feb 19 15:46	18° Υ 35'32 25° Υ 43'31	25°38'03
·	12276 Feb 27 06:00 12276 Mar 19 22:22	0° Υ	24°23'40	•	12277 Feb 19 15:46 12277 Mar 06 21:10	18° Ƴ 35'32	25°38'03

asc. node	12277 Mar 26 07:08	22° Ƴ 17'14		evening max el	12278 Feb 17 10:49	2° Υ 21'29	26°39'10
min. Earth dist.	12277 Mar 29 12:34	18° Ƴ 35'40	0.67549 AU	retrograde	12278 Mar 02 13:11	9° Ƴ 43'39	
inferior conj	12277 Mar 30 22:53	16° Ƴ 46'09	1°25'39	evening set	12278 Mar 08 22:52	7° Υ 11'21	
minimum elong	12277 Mar 30 21:03	16° Ƴ 52'02	1°24'50	min. Earth dist.	12278 Mar 13 00:20	3° Y 05′11	0.66307 AU
morning rise	12277 Apr 05 13:16	10° Ƴ 55′23		asc. node	12278 Mar 13 04:31	2° Y 52'56	
direct	12277 Apr 08 22:52	9° Ƴ 49'08		inferior conj	12278 Mar 14 22:42	0° Υ 47'22	0°33'41
morning max el	12277 Apr 15 19:05	13° Y 32'20	19°00'44	minimum elong	12278 Mar 14 21:49	0° Ƴ 49'59	0°33'24
	12277 Apr 28 05:36	$0^{\circ}S$			12278 Mar 15 14:42	30° ₹ ₩	
desc. node	12277 Apr 28 14:28	0° 8 33'20		morning rise	12278 Mar 20 21:53	25° ₭ 07'25	
greatest brilliancy	12277 Apr 29 02:07	1° 8 17'13	-0.7m	direct	12278 Mar 23 21:03	24°) 18′30	
morning set	12277 May 08 21:04	16° 8 19'26		morning max el	12278 Mar 30 07:46	27°) 43′43	18°18'55
	12277 May 17 16:23	$\Pi^{\circ}0$			12278 Apr 01 10:12	0 ° $\mathbf{\gamma}$	
max. Earth dist.	12277 May 22 21:25	8° Ⅱ 08'22	1.45435 AU	desc. node	12278 Apr 15 11:08	20° Ƴ 39'57	
				morning set	12278 Apr 19 01:08	26° Y 22′50	
superior conj	12277 May 25 07:19	11° II 55'46			12278 Apr 21 07:39	9° 8	
minimum elong	12277 May 25 04:50	11° Ⅱ 46′02	2°13'10				
	12277 Jun 05 15:11	0ං ව		superior conj	12278 May 04 14:35	20° 8 57'25	
evening rise	12277 Jun 09 04:55	5° © 47'55		minimum elong	12278 May 04 05:58	20° 8 23'42	
asc. node	12277 Jun 22 05:01	26°933'02		max. Earth dist.	12278 May 05 16:43	22° 8 39'31	1.45766 AU
	12277 Jun 24 15:02	0°Ω			12278 May 10 09:37	0°II	
evening max el	12277 Jun 29 00:34	5° Ω 16'01	18°25'29	evening rise	12278 May 20 13:40	15° Ⅱ 53'06	
retrograde	12277 Jul 05 10:51	8° Ω 43'06			12278 May 29 14:49	0°©	
evening set	12277 Jul 08 12:59	7° Ω 49'59	20.4510.5	greatest brilliancy	12278 May 31 01:41	2°514'00	-0.8m
inferior conj	12277 Jul 14 07:55	2° Ω 19'15		asc. node	12278 Jun 09 02:02	15°508'02	10000105
minimum elong	12277 Jul 14 10:02	2° Ω 12'58	2°45'53	evening max el	12278 Jun 12 10:52	18°958'33	19°02'05
i matra	12277 Jul 16 06:59	30°R≌	0.64770.444	retrograde	12278 Jun 19 06:33	22°545'05	
min. Earth dist.	12277 Jul 16 13:20	29°541'41	0.64772 AU	evening set	12278 Jun 22 17:24	21°936'04	2007150
morning rise	12277 Jul 20 05:53	25°959'00		inferior conj	12278 Jun 28 05:08	15°950'25	3°07'58 3°06'59
desc. node	12277 Jul 25 13:56	23°524'20		minimum elong	12278 Jun 28 06:16	15°946'47	
direct	12277 Jul 26 19:19 12277 Aug 08 01:47	23° © 19'04 0° Ω		min. Earth dist.	12278 Jun 29 19:45 12278 Jul 03 18:28	13° © 47'07 9° © 27'31	0.66463 AU
morning max el	12277 Aug 08 01.47 12277 Aug 09 09:25	0 δί 1° Ω 17'29	27°19'22	morning rise direct	12278 Jul 10 00:18	9 \$52731 6° \$546'02	
morning max er	12277 Aug 09 09.23 12277 Aug 30 17:34	0°m	21 1922	desc. node	12278 Jul 10 00:18	7°907'37	
morning set	12277 Aug 30 17:34 12277 Sep 13 18:44	25° Mp 00'06		morning max el	12278 Jul 22 20:17	14°925'16	26°17'10
morning set	12277 Sep 15 18.44 12277 Sep 16 07:13	ე∘ ഹ		morning max ci	12278 Aug 04 13:08	0°Ω	20 17 10
asc. node	12277 Sep 18 06:00	ა <u>ი</u> 58'09			12278 Aug 04 13:00 12278 Aug 23 12:00	0° m)	
max. Earth dist.	12277 Sep 18 00:00 12277 Sep 18 07:13	4° £ 04'24	1.33206 AU	morning set	12278 Aug 27 19:25	7° Mp 50'18	
max. Earth dist.	12277 Sep 10 07.13	0.2.	1.55200110	max. Earth dist.	12278 Aug 31 16:38	15° m 15'06	1.34867 AU
superior conj	12277 Sep 22 01:03	11° ≏ 55'18	0°36'02	asc. node	12278 Sep 05 02:39	24° Mp 04'12	1.5 100 / 110
minimum elong	12277 Sep 21 23:22	11° Ω 46'21	0°35'48	use. noue	12270 Sep 00 02.53	v	
evening rise	12277 Sep 29 03:30	27° ₽ 09'35		superior conj	12278 Sep 05 22:03	25° m 43'26	0°07'46
Č	12277 Sep 30 11:46	0° M .		minimum elong	12278 Sep 05 21:38	25° mp 41'16	0°07'32
	12277 Oct 18 11:16	0° ∡ ¹		behind sun begin	12278 Sep 05 16:20	25° m 14'05	
evening max el	12277 Oct 20 11:08	2° ∡ ¹05'27	22°16'46	behind sun end	12278 Sep 06 02:56	26° m 08'29	
desc. node	12277 Oct 21 10:35	3° ∡ ¹00'44			12278 Sep 07 23:43	0∘ ত	
retrograde	12277 Nov 02 06:48	8° ∡ ¹27'24		evening rise	12278 Sep 13 12:20	11° ≏ 32'56	
evening set	12277 Nov 05 16:16	8° ∡ 101'57			12278 Sep 23 02:08	0° M	
min. Earth dist.	12277 Nov 13 17:40	4° ∡ ¹26'58	0.54727 AU	evening max el	12278 Oct 02 07:37	12°M31'29	20°45'29
inferior conj	12277 Nov 14 09:49	4° ∡ 04'13	-5°44'58	desc. node	12278 Oct 08 07:59	16°M56'12	
minimum elong	12277 Nov 14 05:11	4° ∡ 10'46	5°43'47	retrograde	12278 Oct 13 17:37	18°M11'35	
morning rise	12277 Nov 22 19:24	0° ∡ 16'57		evening set	12278 Oct 16 00:30	17°M58'56	
	12277 Nov 24 06:03	30°RM₊		inferior conj	12278 Oct 25 01:39	14°M04'17	-4°44'55
direct	12277 Nov 26 04:12	29°M51'33		minimum elong	12278 Oct 24 15:42	14°M18'29	4°41'50
	12277 Nov 28 01:36	0° ∡ ¹		min. Earth dist.	12278 Oct 26 00:49	13°MJ31'07	0.54621 AU
morning max el	12277 Dec 08 02:10	5° ∡ ³31'40	21°30'03	morning rise	12278 Nov 02 06:52	10°M08'05	
asc. node	12277 Dec 15 06:48	14° ∡ 13′09		direct	12278 Nov 06 12:33	9° ™ 29'34	
	12277 Dec 24 08:22	0°₹		morning max el	12278 Nov 19 16:17	15°M51'29	23°14'38
morning set	12277 Dec 28 10:10	8° る 19'00			12278 Nov 30 17:46	0° ⊀ 30 ₹10022	
	10050 1 04 15 04	222	1005140	asc. node	12278 Dec 02 03:47	2°×19'32	
superior conj	12278 Jan 04 15:24	23° る 31'23	1°27'42	morning set	12278 Dec 12 21:41	23° ₹ 05'58	
minimum elong	12278 Jan 04 17:27	23° る 42'03	1°28'22		12278 Dec 16 02:37	0°₹	
n a v	12278 Jan 07 19:01	0°≈	1 240/0 477		12270 D 10 10 11	00.702:22	1027/24
max. Earth dist.	12278 Jan 09 01:22	2°≈32'36	1.34968 AU	superior conj	12278 Dec 19 19:44	8°る02'33	1°36'24
evening rise	12278 Jan 13 05:07	10°≈37'53		minimum elong	12278 Dec 19 20:43	8°る07'48	1°37'15
desc. node	12278 Jan 17 09:22	18° ≈ 19'37 0° ∀		max. Earth dist.	12278 Dec 22 20:01	14°る27'18 24°る14'13	1.33345 AU
	12278 Jan 24 05:22 12278 Feb 15 03:09	0° π 0° Υ		evening rise	12278 Dec 27 14:51 12278 Dec 30 14:07	24°01413 0°≈	
	122/01/00 13 03.09	v I			122/0 DCC 30 14.0/	υ ~	

8°る15'23

12279 Dec 11 10:30

evening rise

max. Earth dist.

12280 Nov 18 05:30

8°**≯**45'47 1.31484 AU

minimum elong	12282 Oct 17 11:29	6°M35'36	1°10'42	minimum elong	12283 Oct 01 18:34	20° £ 58'30	0°50'01
evening rise	12282 Oct 24 07:12	21°M36'08	1 10 .2	g	12283 Oct 05 22:02	0°M	0 20 01
evening rise	12282 Oct 28 07:16	0° ⊼		evening rise	12283 Oct 08 18:30	6°M10'26	
desc. node	12282 Nov 11 18:25	24° × ⁷ 43'14		evening rise	12283 Oct 21 05:37	0°×7'	
dese. Hode	12282 Nov 15 23:34	0°る		desc. node	12283 Oct 29 15:43	11° × 727'25	
evening max el	12282 Nov 19 08:35	3°る32'24	24054148	evening max el	12283 Oct 29 13:43 12283 Oct 31 18:52	13° x ⁷ 40'03	23°14'44
retrograde	12282 Nov 19 08:53 12282 Dec 03 03:51	3 032 24 10°る27'02	24 34 46	retrograde	12283 Nov 14 02:34	20° х 17'48	23 14 44
•		9°る17'54		•		20 x 17 48 19° x 38'44	
evening set	12282 Dec 08 17:21 12282 Dec 13 20:29	9 01734 6° る 33'44	0.56625 AU	evening set min. Earth dist.	12283 Nov 18 08:23	19 x 38 44 16° x 27'37	0.55207 AU
min. Earth dist.					12283 Nov 25 04:27		
inferior conj	12282 Dec 16 11:27	4°る52'02		inferior conj	12283 Nov 26 17:20	15° ∡ ′34′10	
minimum elong	12282 Dec 16 18:35	4°る40'29	5°21'24	minimum elong	12283 Nov 26 17:48	15° 🗷 33'29	5°51′54
morning rise	12282 Dec 24 22:00	0°る44'22		morning rise	12283 Dec 05 04:53	11° х 43'26	
direct	12282 Dec 27 06:10	0° る 28'57		direct	12283 Dec 08 03:08	11° ⋌ ¹22'58	
morning max el	12283 Jan 05 17:55	5° る 03'17	19°21'01	morning max el	12283 Dec 19 03:37	16° ∡ ³37′28	20°36'45
asc. node	12283 Jan 05 15:05	4° る 56'30		asc. node	12283 Dec 23 12:12	21° ∡ ′32'54	
	12283 Jan 21 11:48	0° ≈			12283 Dec 29 02:30	0°ಕ	
morning set	12283 Jan 22 18:13	2° ≈ 31'15		morning set	12284 Jan 07 01:33	17° る 11'36	
					12284 Jan 13 05:54	0° ≈	
superior conj	12283 Jan 30 21:12	18° ≈ 40'36	0°59'47				
minimum elong	12283 Jan 31 00:06	18° ≈ 54'38	1°00'02	superior conj	12284 Jan 14 13:04	2° ≈ 39'27	1°19'35
	12283 Feb 05 20:58	0° ∀		minimum elong	12284 Jan 14 15:36	2° ≈ 52′20	1°20'06
max. Earth dist.	12283 Feb 06 11:05	1°) €04'26	1.38230 AU	max. Earth dist.	12284 Jan 19 19:17	13° ≈ 06′14	1.36086 AU
desc. node	12283 Feb 07 18:08	3°) €24'42		evening rise	12284 Jan 23 16:15	20° ≈ 24'37	
evening rise	12283 Feb 10 04:49	7°) 44′24		desc. node	12284 Jan 25 14:50	23° ≈ 56′25	
	12283 Feb 23 22:18	0 ° Υ			12284 Jan 29 01:36	0° ∀	
evening max el	12283 Mar 17 14:18	27° Y 59'40	24°56'30		12284 Feb 17 21:57	0° Y	
	12283 Mar 19 17:50	9° 8		evening max el	12284 Feb 28 03:53	11° Y 49'48	26°06'01
retrograde	12283 Mar 29 10:49	4° 8 53'25		retrograde	12284 Mar 11 20:43	19° Ƴ 04'23	
asc. node	12283 Apr 03 12:17	3° 8 01'14		evening set	12284 Mar 18 00:38	16° Ƴ 34'14	
evening set	12283 Apr 04 03:15	2° 8 31'08		asc. node	12284 Mar 20 09:42	14° Ƴ 15'59	
C	12283 Apr 06 14:35	30° ₹Ƴ		min. Earth dist.	12284 Mar 22 05:18	12° Y ′08'44	0.67078 AU
min. Earth dist.	12283 Apr 08 14:27	27° Y ′30'30	0.68084 AU	inferior conj	12284 Mar 23 20:45	10° Y ′06′23	1°04'54
inferior conj	12283 Apr 09 17:40	26° Y ′00′50	1°50'58	minimum elong	12284 Mar 23 19:14	10° Y 11'07	1°04'16
minimum elong	12283 Apr 09 15:34	26° Y °07'45	1°49'59	morning rise	12284 Mar 29 14:35	4° Υ ′20'03	
morning rise	12283 Apr 15 04:08	20° Υ '04'26	1 ., 0,	direct	12284 Apr 01 19:41	3° Y 21'25	
direct	12283 Apr 18 20:24	18° Y 46'44		morning max el	12284 Apr 08 10:43	6° Y 55'01	18°40'54
morning max el	12283 Apr 26 01:27	22° Y '45'45	19°32'10	desc. node	12284 Apr 22 16:43	26° Y °25'07	10 100.
morning max or	12283 May 02 04:14	0°8	19 32 10	desc. Hode	12284 Apr 25 00:08	0°8	
desc. node	12283 May 06 20:01	6° 8 29'43		morning set	12284 Apr 29 23:40	7° 8 46'48	
greatest brilliancy	12283 May 08 17:58	9° 8 17'05	-0.7m	morning set	12284 May 14 04:58	0°П	
morning set	12283 May 21 10:25	28° 8 28'11	-0.7111	max. Earth dist.	12284 May 15 06:26		1.45674 AU
morning set	12283 May 21 10:23 12283 May 22 10:17	0°Ⅱ		max. Latin dist.	12204 Way 13 00.20	1 113732	1.430/4 AO
max. Earth dist.	12283 May 22 10.17 12283 Jun 02 11:57		1.44922 AU	superior conj	12284 May 16 04:39	3° Ⅱ 06'23	2007!44
max. Earth dist.	12263 Juli 02 11.37	1/ 11304	1.44922 AU	minimum elong	12284 May 15 04.39	2° ∏ 44'14	
aumorior comi	12202 Jun 06 17:52	24° Ⅱ 00'02	2012/44	•	12284 May 31 15:42	27° I 32'35	2 00 13
superior conj	12283 Jun 06 17:52 12283 Jun 06 19:48	24 H00 02 24°H07'46		evening rise	•	27 п 3233	
minimum elong			2-13-33	4 41 711	12284 Jun 02 04:35		0.0
	12283 Jun 10 11:16	0°95		greatest brilliancy	12284 Jun 07 20:48	9°503'25	-0.9m
evening rise	12283 Jun 20 17:20	16°954'50		asc. node	12284 Jun 16 07:23	21°951'51	10020157
,	12283 Jun 28 14:04	0°N		evening max el	12284 Jun 21 16:27	28°526'10	18°38'57
asc. node	12283 Jun 30 10:25	2° Ω 58'21	10010117		12284 Jun 23 10:24	0° U	
evening max el	12283 Jul 09 04:06	14°Ω48'13	18°12'17	retrograde	12284 Jun 28 05:39	2° Ω 00'00	
retrograde	12283 Jul 15 12:35	18° Ω 09'29		evening set	12284 Jul 01 11:29	1° Ω 00'05	
evening set	12283 Jul 18 10:02	17° Ω 24'46			12284 Jul 02 20:29	30° ₹ 5	
inferior conj	12283 Jul 24 10:43	12° Ω 03'11	2°27'22	inferior conj	12284 Jul 07 02:54	25° © 22'33	
minimum elong	12283 Jul 24 13:13	11° Ω 56'11	2°26'02	minimum elong	12284 Jul 07 04:38	25° © 17'13	2°56'46
min. Earth dist.	12283 Jul 27 00:13	9° Ω 11'58	0.63641 AU	min. Earth dist.	12284 Jul 09 01:56	22° © 58'33	0.65540 AU
morning rise	12283 Jul 30 14:47	5° Ω 47'43		morning rise	12284 Jul 12 20:53	19° © 00'32	
desc. node	12283 Aug 02 19:06	3° Ω 54'53		direct	12284 Jul 19 07:27	16° © 19'04	
direct	12283 Aug 06 06:42	3° Ω 13'33		desc. node	12284 Jul 19 16:26	16° © 19'34	
morning max el	12283 Aug 20 03:44	11° Ω 14'55	27°43'05	morning max el	12284 Aug 01 14:44	24°9510'47	26°55'54
	12283 Sep 03 23:30	0° m			12284 Aug 06 20:14	0 $^{\circ}$ Ω	
	12283 Sep 21 14:12	0∘ ⊽			12284 Aug 27 09:10	0° ™	
morning set	12283 Sep 23 23:28	4° ≏ 41'25		morning set	12284 Sep 06 07:43	17° m 53'31	
asc. node	12283 Sep 26 11:37	9° ≏ 46'34		max. Earth dist.	12284 Sep 10 13:26	26° Mp 13'38	1.33854 AU
max. Earth dist.	12283 Sep 28 21:39	14° ≏ 49'40	1.32482 AU	asc. node	12284 Sep 12 08:15	29° m 51'27	
					12284 Sep 12 09:55	0∘ ত	
superior conj	12283 Oct 01 20:38	21° ჲ 09'43	0°50'09				

superior conj	12284 Sep 14 22:00	5° ≙ 12'00			12285 Aug 19 20:23	0° m)	
minimum elong	12284 Sep 14 20:45	5° ≏ 05'28	0°24'21	morning set	12285 Aug 20 01:56	0° m 25'15	
evening rise	12284 Sep 22 04:50	20° ≏ 39'35		max. Earth dist.	12285 Aug 23 18:48	7° m 19'35	1.35705 AU
	12284 Sep 26 18:03	0°M₊					
evening max el	12284 Oct 12 08:52	23°M48'28	21°35'58	superior conj	12285 Aug 29 15:04	18° m ,47'25	-0°05'31
desc. node	12284 Oct 15 13:06	26°M32'57		minimum elong	12285 Aug 29 15:25	18° m 49'08	0°05'43
retrograde	12284 Oct 24 15:41	29°M54'53		behind sun begin	12285 Aug 29 09:36	18° m 19'50	
evening set	12284 Oct 27 12:12	29°M36'18		behind sun end	12285 Aug 29 21:14	19° m 18'30	
inferior conj	12284 Nov 05 10:31	25°M41'09	-5°26'21	asc. node	12285 Aug 30 04:53	19° m 57'11	
minimum elong	12284 Nov 05 02:45	25°M52'01	5°24'23		12285 Sep 04 02:26	0० ट	
min. Earth dist.	12284 Nov 05 10:48	25°M40'44	0.54564 AU	evening rise	12285 Sep 06 12:05	4° £ 57'14	
morning rise	12284 Nov 13 18:19	21°M53'05			12285 Sep 20 13:55	0°M₊	
direct	12284 Nov 17 11:49	21°M22'56		evening max el	12285 Sep 24 10:56	4°MJ31'06	20°12'11
morning max el	12284 Nov 29 23:45	27°M20'45	22°13'12	desc. node	12285 Oct 02 10:32	9° M 30'41	
	12284 Dec 02 13:32	0°⊀		retrograde	12285 Oct 05 04:19	9° M ₅51′03	
asc. node	12284 Dec 09 09:15	9° ∡ 10'43		evening set	12285 Oct 07 04:38	9° M 40'37	
	12284 Dec 20 13:40	0°ප		inferior conj	12285 Oct 16 04:27	5°M42'52	-4°05'00
morning set	12284 Dec 21 12:08	1° る 57'57		minimum elong	12285 Oct 15 18:38	5°M57'27	4°01'32
C				min. Earth dist.	12285 Oct 17 19:02	4°M45'35	0.54857 AU
superior conj	12284 Dec 28 13:44	17° る 01'35	1°32'12	morning rise	12285 Oct 24 07:41	1°MJ36'20	
minimum elong	12284 Dec 28 15:21	17° る 10'07	1°32'57	direct	12285 Oct 28 21:49	0°M50'42	
max. Earth dist.	12285 Jan 01 09:22	24°る58'19	1.34228 AU	morning max el	12285 Nov 11 11:19	7° M 29'21	24°01'07
	12285 Jan 03 21:19	0° ≈		asc. node	12285 Nov 26 06:12	27°MJ34'49	
evening rise	12285 Jan 05 18:51	3°≈42'53			12285 Nov 27 14:44	0° ∡ ¹	
desc. node	12285 Jan 11 11:37	14° ≈ 18'15		morning set	12285 Dec 05 23:59	16° ∡ 744'14	
	12285 Jan 20 21:54	0°) €		. 8	12285 Dec 12 02:18	0°ප	
evening max el	12285 Feb 09 17:24	25°) € 30'00	26°59'07				
e venning man er	12285 Feb 15 03:33	0°Υ	20 05 07	superior conj	12285 Dec 12 20:18	1°₹38'01	1°38'08
retrograde	12285 Feb 23 00:59	2° Υ 54'42		minimum elong	12285 Dec 12 20:47	1°る40'41	1°39'00
evening set	12285 Mar 01 14:49	0° Υ 21'42		max. Earth dist.	12285 Dec 15 07:07	6° ろ 55'32	1.32781 AU
evening set	12285 Mar 02 01:33	30°R) €		evening rise	12285 Dec 20 09:07	17° る 30'19	1.52701710
min. Earth dist.	12285 Mar 05 14:03	26° ¥ 29'55	0.65676 AU	evening rise	12285 Dec 26 21:14	0°≈	
asc. node	12285 Mar 07 07:08	24°) 32'31	0.03070710	desc. node	12285 Dec 29 08:29	4°≈24'52	
inferior conj	12285 Mar 07 17:36	24° X 02'22	0°08'28	dese. Hode	12286 Jan 15 07:34	0° ₩	
minimum elong	12285 Mar 07 17:30 12285 Mar 07 17:21	24°\(\text{10222}\)	0°08'33	evening max el	12286 Jan 23 05:58	8°¥50'23	27°28'44
transit middle	12285 Mar 07 17:21 12285 Mar 07 17:21	24°\(\)(03'04')	0°08'33	retrograde	12286 Feb 05 22:52	16°\dagger 15'39	27 28 44
transit begin	12285 Mar 07 14:50	24° X 10'18	0 0833	evening set	12286 Feb 12 19:33	13°) 46'48	
transit end	12285 Mar 07 19:52	23°\(\)\(\)\(\)55'50		min. Earth dist.	12286 Feb 16 14:45	10°\(\frac{1}{4048}\)	0.63926 AU
	12285 Mar 13 21:19	18° ∺ 28′01		inferior conj	12286 Feb 19 05:36	7°) 42'54	
morning rise direct	12285 Mar 16 16:29	17° X 45'31		minimum elong	12286 Feb 19 07:26	7°\(\dagger)34'08	
morning max el	12285 Mar 23 01:28	21° H 06'25	18°06'14	asc. node	12286 Feb 19 07.20 12286 Feb 22 04:32	4° H 49'35	0 30 39
morning max ci	12285 Mar 30 01:14	21 γ (00 23	10 00 14		12286 Feb 25 21:29	2°\(\frac{4}{2}2'58\)	
desc. node		0 γ 16° Υ 38'11		morning rise direct	12286 Feb 28 08:22	2 X 22 38 1° X 52'57	
	12285 Apr 09 13:21	18° Y 26'06				5° ¥ 12′21	17°48'40
morning set	12285 Apr 10 15:57 12285 Apr 17 19:59	0°8		morning max el	12286 Mar 06 19:00 12286 Mar 23 05:50	3 χ 12 21 0° Υ	17 46 40
	12203 Apr 17 19.39	0.0		marning sat	12286 Mar 23 12:04	0° Υ 26'27	
aumorior aoni	12205 Apr. 25 12:06	12° 8 13'42	1942!10	morning set desc. node	12286 Mar 27 09:56	7° Υ 03'55	
superior conj minimum elong	12285 Apr 25 13:06 12285 Apr 25 03:46	12 8 13 42		desc. node	12200 Wai 27 09.30	/ 10333	
max. Earth dist.	12285 Apr 28 02:24		1.45679 AU	superior conj	12296 Apr 05 12:25	22° Υ '06'58	1905!42
max. Earm dist.	12285 Apr 28 02.24 12285 May 06 22:38	0°Ⅱ	1.430/9 AU	1 3	12286 Apr 05 12:25	22 1 00 38 21° Υ 39'13	1°05'03
evening rise	12285 May 11 15:39	0 H 7°∏17'46		minimum elong	12286 Apr 05 05:34 12286 Apr 10 10:29	0° 8	1 03 03
greatest brilliancy	12285 May 11 13.39 12285 May 24 04:08	26° Ⅱ 28'26	0.7m	max. Earth dist.	12286 Apr 10 10.29	0° 8 42'41	1.44954 AU
greatest offinancy	•	20 H2820 0°9	-0./III		-		1.44934 AU
1	12285 May 26 13:27			evening rise	12286 Apr 21 03:31	16° 8 40'32 0° Ⅱ	
asc. node	12285 Jun 03 04:28	10°510'39	10922127		12286 Apr 29 22:43		20921120
evening max el	12285 Jun 05 00:40	12°909'57	19°22'36	evening max el	12286 May 19 03:26	25° Ⅱ 56'22	20°21'29
retrograde	12285 Jun 12 02:54	16°908'53		asc. node	12286 May 21 01:39	27° Ⅱ 43'31 0° ©	
evening set	12285 Jun 15 17:33	14°952'54	2012121		12286 May 24 15:15		
inferior conj	12285 Jun 21 03:10	9°901'04	3°12'21	retrograde	12286 May 27 01:43	0°€30'32	
minimum elong	12285 Jun 21 03:50	8°958'52	3°11'26	. ,	12286 May 29 09:25	30°RⅡ	
min. Earth dist.	12285 Jun 22 11:29	7°915'03	0.67045 AU	evening set	12286 May 31 01:58	28° Ⅱ 58'15	2012127
morning rise	12285 Jun 26 13:37	2°938'11		inferior conj	12286 Jun 05 08:43	22° I 53'40	3°13'37
direct	12285 Jul 02 03:52	30°RII		minimum elong	12286 Jun 05 08:19	22° I 55'01	3°12'45
direct	12285 Jul 02 14:59	29° Ⅱ 59'09		min. Earth dist.	12286 Jun 06 02:56	21° ∏ 51′20	0.68102 AU
4 1	12285 Jul 03 02:13	0°©		morning rise	12286 Jun 10 14:22	16° Ⅱ 33'36	
desc. node	12285 Jul 06 13:41	0°955'00	25044125	direct	12286 Jun 16 04:11	14° Ⅱ 05'26	
morning max el	12285 Jul 15 01:34	7° © 26'13	25~44'3/	desc. node	12286 Jun 23 10:47	17° Ⅱ 13'58	24910100
	12285 Aug 01 15:23	0 ° Ω		morning max el	12286 Jun 27 11:30	20° ∏ 52'05	24°19'09

	12206 1 1 05 00 10	000			12207 1 20 12 50	000	
	12286 Jul 05 08:10	0° ⊙			12287 Jun 29 12:50	0°©	
	12286 Jul 25 20:23	0°Ω 12°Ω05'48		morning set	12287 Jul 14 02:04	22° © 42'40 0° Ω	
morning set max. Earth dist.	12286 Aug 02 01:39	12° 0 03'48 18° Ω 31'10	1.37913 AU	max. Earth dist.	12287 Jul 18 10:27 12287 Jul 18 15:01		1.40242 AU
max. Earm dist.	12286 Aug 05 17:00 12286 Aug 11 21:52	0° Mp	1.5/913 AU	max. Earth dist.	1228/Jul 18 13.01	0 861927	1.40242 AU
	12280 Aug 11 21.32	עוו ט		superior conj	12287 Jul 26 10:30	14°Ω05'48	-1°13'09
superior conj	12286 Aug 12 20:36	1° m 48'39	-0°38'51	minimum elong	12287 Jul 26 15:45	14°Ω29'42	
minimum elong	12286 Aug 12 23:15	2° mp 01'23		asc. node	12287 Aug 03 22:17	29° Ω 57'46	1 13 02
asc. node	12286 Aug 17 01:34	10° m 00'36			12287 Aug 03 22:45	0° m)	
evening rise	12286 Aug 21 13:46	18° m) 57'31		evening rise	12287 Aug 05 06:45	2°m/32'12	
C	12286 Aug 27 06:55	0∘ ⊽		evening max el	12287 Aug 21 06:32	28° m 17'46	18°27'44
evening max el	12286 Sep 07 03:05	16° ≏ 02'04	19°09'11		12287 Aug 23 05:12	0∘ ⊽	
retrograde	12286 Sep 16 04:34	20° ≏ 33'32		retrograde	12287 Aug 28 23:49	2° ≏ 11'10	
evening set	12286 Sep 18 00:58	20° ≙ 23'01		evening set	12287 Aug 31 00:54	1° ≏ 55'35	
desc. node	12286 Sep 19 07:58	20° ჲ 03'51			12287 Sep 04 04:46	30°R.Mp	
inferior conj	12286 Sep 26 12:43	16° ≏ 11'03	-2°15'26	desc. node	12287 Sep 06 05:24	28° m 34'29	
minimum elong	12286 Sep 26 06:50	16° ≏ 20'58	2°13'00	inferior conj	12287 Sep 07 18:11	27° TD 23'10	-0°28'43
min. Earth dist.	12286 Sep 29 07:06	14° ≙ 19'20	0.56055 AU	minimum elong	12287 Sep 07 17:05	27° m 25'22	0°28'24
morning rise	12286 Oct 04 09:52	11° ≏ 30'50		min. Earth dist.	12287 Sep 11 00:57	24° m 48'30	0.57919 AU
direct	12286 Oct 09 19:49	10° ≏ 22'56		morning rise	12287 Sep 15 05:47	22°m/05'51	
morning max el	12286 Oct 23 22:30	17° Ω 34'16	25°44'01	direct	12287 Sep 21 07:54	20° Mp 30′54	
	12286 Nov 03 04:53	0° ™		morning max el	12287 Oct 05 15:34	28° m) 06'27	27°04'14
asc. node	12286 Nov 13 03:03	16°M33'40			12287 Oct 07 12:15	0∘ ⊽	
	12286 Nov 19 19:18	0° 🗷		,	12287 Oct 27 20:58	0°M	
morning set	12286 Nov 20 11:19	1° ∡ ¹25'27		asc. node	12287 Oct 30 23:49	5°M58'22	
	12296 N 27 06-21	170.701121	1927151	morning set	12287 Nov 04 20:29	15°M57'32	
superior conj	12286 Nov 27 06:21	16° ₹ 21'31 16° ₹ 18'09	1°37'51 1°38'40		12287 Nov 11 06:03	0° ∡ 7	
minimum elong max. Earth dist.	12286 Nov 27 05:45 12286 Nov 28 11:38	10 x ·1809 19° x ¹03'22	1.31813 AU	superior conj	12287 Nov 11 17:58	1° ∡ '06'27	103142
max. Earth dist.	12286 Dec 03 13:09	19 × 03 22	1.51615 AU	minimum elong	12287 Nov 11 17:38 12287 Nov 11 16:27	0° ₹ 58'00	
evening rise	12286 Dec 03 13:09 12286 Dec 04 08:04	1°る38'57		max. Earth dist.	12287 Nov 11 10:27 12287 Nov 11 20:04	1° x 3800	1.31345 AU
desc. node	12286 Dec 04 08:04 12286 Dec 16 05:27	1 33837 24° る 09'08		evening rise	12287 Nov 11 20:04 12287 Nov 18 13:09	16° ₹ 1010	1.51545 AO
dese. Hode	12286 Dec 19 19:10	0°≈		evening rise	12287 Nov 25 11:13	0°る	
evening max el	12287 Jan 05 15:38	21° ≈ 38'04	27°28'22	desc. node	12287 Dec 03 02:30	13° る 22'18	
retrograde	12287 Jan 19 13:03	28°≈56'54		dese. Hode	12287 Dec 15 06:08	0°≈	
evening set	12287 Jan 26 11:52	26°≈40'20		evening max el	12287 Dec 18 19:35	3° ≈ 40'33	26°53'45
min. Earth dist.	12287 Jan 30 05:41	23° ≈ 44'54	0.61915 AU	retrograde	12288 Jan 01 18:06	10° ≈ 50'16	
inferior conj	12287 Feb 02 05:36	20°≈59'18	-2°13'41	evening set	12288 Jan 08 12:12	8° ≈ 54'23	
minimum elong	12287 Feb 02 10:12	20°≈48'41	2°11'14	min. Earth dist.	12288 Jan 12 09:50	6°≈15'26	0.59774 AU
morning rise	12287 Feb 09 11:14	15° ≈ 56'37		inferior conj	12288 Jan 15 14:03	3° ≈ 42′08	-3°33'47
asc. node	12287 Feb 09 01:53	16°≈04'41		minimum elong	12288 Jan 15 21:26	3° ≈ 27'13	3°30'29
direct	12287 Feb 11 16:00	15° ≈ 35'18			12288 Jan 20 20:45	30°Rる	
morning max el	12287 Feb 18 12:05	19° ≈ 03'13	17°48'54	morning rise	12288 Jan 23 09:34	28° る 59'56	
	12287 Feb 26 12:22	0° ∀		direct	12288 Jan 25 11:29	28° る 43'40	
morning set	12287 Mar 06 06:17	13° ∺ 29′20		asc. node	12288 Jan 26 23:09	28° る 52'19	
desc. node	12287 Mar 14 06:30	27°) €37'30			12288 Jan 29 20:55	0° ≈	
	12287 Mar 15 15:33	0 ° Υ		morning max el	12288 Feb 02 01:16		18°08'07
avmoni	12207 M 17 11 22	20000000	0924127	morning set	12288 Feb 17 16:26	27°≈16'02	
superior conj	12287 Mar 17 11:22	3°Υ06'57			12288 Feb 19 03:27	0° ∀	
minimum elong max. Earth dist.	12287 Mar 17 09:02 12287 Mar 24 13:21	2° Υ 57'04 14° Υ 51'36		superior conj	12288 Feb 27 10:04	15°) € 13'06	0°13'25
evening rise	12287 Mar 24 13:21 12287 Mar 31 19:00	26° Υ 20'46	1.43380 AU	minimum elong	12288 Feb 27 10:04 12288 Feb 27 11:07	15° X 13'06 15° X 17'50	
evening rise	12287 Apr 03 03:43	0° 8		behind sun begin	12288 Feb 27 11:07 12288 Feb 27 07:03	13 K 1730 14° H 59'35	0 13 33
	12287 Apr 03 03:43 12287 Apr 23 20:31	0°II		behind sun end	12288 Feb 27 07:03 12288 Feb 27 15:12	15° X 36'04	
evening max el	12287 May 02 00:36		21°32'34	desc. node	12288 Feb 29 03:05	18°) 15'24	
asc. node	12287 May 07 22:53	14° ∏ 15'28		max. Earth dist.	12288 Mar 06 01:09		1.41698 AU
retrograde	12287 May 11 00:03	14° ∏ 59'15		max. Darm dist.	12288 Mar 06 23:20	0°Υ	1.110/0710
evening set	12287 May 15 10:48	13° Ⅱ 10'54		evening rise	12288 Mar 11 02:36	6° Υ 46'59	
inferior conj	12287 May 20 17:11	6° П 55'20	3°03'32	-0	12288 Mar 26 07:47	0°8	
minimum elong	12287 May 20 15:54	6° Ⅲ 59'49		evening max el	12288 Apr 13 17:13	23° 8 31'40	22°51'18
min. Earth dist.	12287 May 20 22:01	6° Ⅲ 38'32		retrograde	12288 Apr 23 20:27	29° 8 30'27	
morning rise	12287 May 25 20:47	0° Ⅱ 40'18		asc. node	12288 Apr 23 20:09	29° 8 30'27	
-	12287 May 26 16:44	30° ₹ 8		evening set	12288 Apr 28 18:28	27° 8 27'04	
direct	12287 May 30 21:47	28° 8 29'08		inferior conj	12288 May 04 02:36	21° 8 02'52	2°43'10
	12287 Jun 04 13:51	$\Pi^{\circ}0$		minimum elong	12288 May 04 00:42	21° 8 09'30	2°42'08
morning max el	12287 Jun 09 22:10		22°49'22	min. Earth dist.	12288 May 03 18:39	21° 8 30'27	0.68810 AU
desc. node	12287 Jun 10 07:47	4° Ⅱ 49'22		morning rise	12288 May 09 06:49	14° 8 54'15	

direct morning max el desc. node	12288 May 13 18:40 12288 May 22 12:53 12288 May 27 04:42	13°803'33 18°807'27 23°820'53	21°23'51	morning max el desc. node	12289 May 03 03:23 12289 May 05 10:27 12289 May 14 01:33	0° ප් 2° ප් 02'12 12° ප් 33'27	20°08'57
morning set	12288 Jun 01 07:49 12288 Jun 21 15:24 12288 Jun 23 00:49	0°Ⅱ 0°ᢒ 2°ᢒ11'18		morning set max. Earth dist.	12289 May 26 01:11 12289 Jun 02 04:19 12289 Jun 12 04:34	0°Ⅲ 10°Ⅲ52'01 26°Ⅲ33'02	1.44169 AU
max. Earth dist.	12288 Jun 29 18:27	13° © 01'17	1.42414 AU		12289 Jun 14 08:12	0ං ව	
superior conj minimum elong	12288 Jul 07 04:13 12288 Jul 07 11:06 12288 Jul 09 18:52	25°\$28'07 25°\$57'46 0°\$\Omega\$		superior conj minimum elong evening rise	12289 Jun 17 22:21 12289 Jun 18 03:32 12289 Jun 30 21:51	5°\$49'40 6°\$10'52 27°\$41'59	
evening rise asc. node evening max el	12288 Jul 18 11:02 12288 Jul 20 19:02 12288 Jul 26 15:40 12288 Aug 03 17:05	15° Ω30'47 19° Ω44'07 0° Mp 11° Mp 07'57	18°06'42	asc. node evening max el retrograde	12289 Jul 02 05:53 12289 Jul 07 15:52 12289 Jul 18 06:55 12289 Jul 24 17:00	0°Ω 9°Ω15'11 24°Ω23'32 27°Ω44'06	18°04'55
retrograde evening set inferior conj	12288 Aug 10 13:24 12288 Aug 12 21:53 12288 Aug 19 20:51	14° m/37'44 14° m/13'16 9° m/20'13	0°58'09	evening set inferior conj minimum elong	12289 Jul 27 09:35 12289 Aug 02 17:20 12289 Aug 02 19:56	27° Ω07'36 21° Ω55'59 21° Ω49'08	2°01'06 1°59'44
minimum elong min. Earth dist. desc. node	12288 Aug 19 22:35 12288 Aug 23 02:53 12288 Aug 23 02:51	9° m 16'12 6° m 21'49 6° m 21'54	0°57'08 0.60135 AU	min. Earth dist. morning rise desc. node	12289 Aug 05 14:16 12289 Aug 09 04:06 12289 Aug 10 00:16	18° Ω56'02 15° Ω47'19 15° Ω12'58	0.62405 AU
morning rise direct morning max el	12288 Aug 26 20:14 12288 Sep 02 08:43 12288 Sep 16 16:17	3° m/31'59 1° m/29'24 9° m/22'24	27°49'35	direct morning max el	12289 Aug 15 20:30 12289 Aug 29 23:08 12289 Sep 06 10:48	13°Ω22'01 21°Ω24'13 0° Mp	27°55'58
asc. node	12288 Oct 02 13:42 12288 Oct 16 20:31 12288 Oct 18 22:50 12288 Oct 19 01:40	0° Ω 25° Ω 41'00 0° M . 0° M .14'49		morning set asc. node max. Earth dist.	12289 Sep 25 16:26 12289 Oct 03 00:49 12289 Oct 03 17:12 12289 Oct 08 09:13	0° £ 14° £ 12'13 15° £ 36'01 25° £ 27'26	1.31929 AU
max. Earth dist.	12288 Oct 25 04:34	13°M29'37	1.31379 AU	max. Darm dist.	12289 Oct 10 11:17	0°M	1.51727110
superior conj minimum elong evening rise	12288 Oct 26 05:13 12288 Oct 26 03:07 12288 Nov 01 22:08 12288 Nov 01 15:50	15°M46'26 15°M34'44 0°×733'55	1°19'52 1°20'11	superior conj minimum elong evening rise	12289 Oct 10 14:18 12289 Oct 10 12:03 12289 Oct 17 09:08 12289 Oct 24 16:14	0°M16'31 0°M04'13 15°M08'30 0°×7'	1°02'33 1°02'34
desc. node evening max el	12288 Nov 17 17:50 12288 Nov 18 23:38 12288 Nov 29 15:19	0°පි 1°පි51'30 14°පි49'36	25°45'46	desc. node evening max el	12289 Nov 05 20:53 12289 Nov 11 03:26 12289 Nov 17 11:12	19°፟፟፟ ₹ 20'11 25°፟ ₹ 12'31 0°፟፟፟፟፟፟	24°13'04
retrograde evening set min. Earth dist.	12288 Dec 13 12:43 12288 Dec 19 16:12 12288 Dec 24 03:47	21°る50'36 20°る22'45 17°る45'56 15°る40'55	0.57692 AU	retrograde evening set	12289 Nov 24 19:23 12289 Nov 29 20:20 12289 Dec 02 09:43	2°る02'03 1°る06'14 30°Rメ	0.55940 AU
inferior conj minimum elong morning rise direct	12288 Dec 27 03:30 12288 Dec 27 11:56 12289 Jan 04 10:15 12289 Jan 06 14:10	15° ප්26'10 11° ප්21'19 11° ප්06'41	4°46'03	min. Earth dist. inferior conj minimum elong morning rise	12289 Dec 05 14:36 12289 Dec 07 20:19 12289 Dec 08 01:15 12289 Dec 16 08:12	26° \$\times^150'17 26° \$\times^142'41 22° \$\times^151'08	-5°41'43
asc. node morning max el	12289 Jan 12 20:22 12289 Jan 15 06:42 12289 Jan 25 11:41	13°පි18'00 15°පි20'20 0°≈	18°48'06	direct morning max el asc. node	12289 Dec 18 21:12 12289 Dec 29 00:31 12289 Dec 30 17:33	22° х ³34'18 27° х ³25'02 29° х ³11'20	19°50'33
morning set	12289 Jan 31 13:31	11°≈31'14		morning set	12289 Dec 31 10:32 12290 Jan 15 17:54	0° る 26° る04'23	
superior conj minimum elong	12289 Feb 09 04:23 12289 Feb 09 07:02 12289 Feb 10 03:04	28°≈13'17 28°≈25'46 0°¥	0°44'59 0°45'07	superior conj	12290 Jan 17 16:15 12290 Jan 23 13:35	0°≈ 11°≈54'00	1°09'06
desc. node max. Earth dist. evening rise	12289 Feb 14 23:42 12289 Feb 16 08:35 12289 Feb 20 07:12 12289 Feb 27 13:18	8°¥53'42 11°¥19'38 18°¥08'18 0° Y	1.39512 AU	minimum elong max. Earth dist. desc. node evening rise	12290 Jan 23 16:25 12290 Jan 29 14:41 12290 Feb 01 20:21 12290 Feb 02 08:14	12°≈08'04 23°≈33'18 29°≈28'50 0°¥22'04	1°09'27 1.37285 AU
evening max el retrograde asc. node	12289 Mar 20 17:18 12289 Mar 27 07:15 12289 Apr 07 13:43 12289 Apr 10 17:29	0°8 7°821'56 13°858'55 13°813'37	24°11'57	evening max el retrograde	12290 Feb 02 03:18 12290 Feb 20 19:00 12290 Mar 09 20:35 12290 Mar 22 02:44	0° Υ 0° Υ 21° Υ 12'55 28° Υ 17'55	25°27'44
evening set min. Earth dist. inferior conj minimum elong	12289 Apr 12 23:26 12289 Apr 17 14:47 12289 Apr 18 11:06 12289 Apr 18 08:56	11°842'30 6°821'40 5°813'02 5°820'20	0.68468 AU 2°12'55 2°11'52	evening set asc. node min. Earth dist. inferior conj	12290 Mar 28 00:05 12290 Mar 28 14:53 12290 Apr 01 08:17 12290 Apr 02 16:45	25°Υ51'39 25°Υ18'50 21°Υ06'01 19°Υ21'25	0.67694 AU 1°32'42
morning rise	12289 Apr 22 19:41 12289 Apr 23 18:33 12289 Apr 27 17:38	30°RΥ 29°Υ11'55 27°Υ42'34	2 11 32	minimum elong morning rise direct	12290 Apr 02 14:49 12290 Apr 08 06:01 12290 Apr 11 17:18	19° Υ 27'39 13° Υ 29'05 12° Υ 19'57	1°31'49

morning max el	12290 Apr 18 15:37	16° Ƴ 07'01	19°08'24	morning rise	12291 Mar 23 15:11	27°) 42′08	
	12290 Apr 29 09:39	9° 8		direct	12291 Mar 26 15:53	26°) 50'44	
desc. node	12290 Apr 30 22:17	2° 8 15'25			12291 Apr 01 20:02	0 ° Υ	
greatest brilliancy	12290 May 01 15:59	3° 8 21'32	-0.7m	morning max el	12291 Apr 02 03:26	0° Ƴ 17'45	18°24'04
morning set	12290 May 12 07:27	19° 8 37'54		desc. node	12291 Apr 17 18:57	22° Ƴ 19'04	
	12290 May 19 00:00	$\Pi^{\circ}0$		morning set	12291 Apr 22 07:21	29° Y 28'33	
max. Earth dist.	12290 May 25 20:04	10° Ⅱ 40′32	1.45323 AU		12291 Apr 22 15:17	9° 8	
superior conj	12290 May 28 18:04	15° Ⅱ 16′09	-2°13'09	superior conj	12291 May 08 01:38	24° 8 17'01	-1°59'28
minimum elong	12290 May 28 16:47	15° Ⅱ 11'07	2°13'58	minimum elong	12291 May 07 17:34	23° 8 45'34	1°59'36
	12290 Jun 06 23:10	0 \circ \odot		max. Earth dist.	12291 May 08 15:14	25° 8 10'09	1.45769 AU
evening rise	12290 Jun 12 10:16	8° 9 54'21			12291 May 11 17:28	$\Pi^{\circ}0$	
asc. node	12290 Jun 24 12:49	28° © 24'27		evening rise	12291 May 23 22:22	19° Ⅱ 06'59	
	12290 Jun 25 14:28	$0^{\circ}\Omega$			12291 May 30 20:38	0 \circ \odot	
evening max el	12290 Jul 01 20:39	7° Ω 55'25	18°21'29	greatest brilliancy	12291 Jun 02 15:53	4° छ 21'26	-0.8m
retrograde	12290 Jul 08 06:11	11° Ω 20′30		asc. node	12291 Jun 11 09:51	17° © 04'23	
evening set	12290 Jul 11 07:04	10° Ω 29'38		evening max el	12291 Jun 15 07:34	21° © 36'46	18°55'33
inferior conj	12290 Jul 17 03:25	5° Ω 01'19	2°42'24	retrograde	12291 Jun 22 01:15	25° © 19'27	
minimum elong	12290 Jul 17 05:39	4° Ω 54'47	2°41'11	evening set	12291 Jun 25 10:49	24° © 12'44	
min. Earth dist.	12290 Jul 19 11:00	2° Ω 19'40	0.64494 AU	inferior conj	12291 Jun 30 23:24	18° ട്ട 29'11	3°05'43
	12290 Jul 21 15:52	30° ₹ 5		minimum elong	12291 Jul 01 00:42	18° © 25'04	3°04'43
morning rise	12290 Jul 23 02:54	28° 5 42'06		min. Earth dist.	12291 Jul 02 16:12	16° © 20'17	0.66240 AU
desc. node	12290 Jul 27 21:39	26°514'43		morning rise	12291 Jul 06 13:53	12° 5 06'27	
direct	12290 Jul 29 17:12	26°503'13		direct	12291 Jul 12 21:04	9° 5 24'40	
	12290 Aug 07 21:11	$0^{\circ}\Omega$		desc. node	12291 Jul 14 18:56	9° 5 37'44	
morning max el	12290 Aug 12 09:12	4° Ω 02'49	27°26'22	morning max el	12291 Jul 25 20:05	17° © 07'18	26°27'50
	12290 Aug 31 23:16	o∘ m y			12291 Aug 05 13:38	$0^{\circ}\Omega$	
morning set	12290 Sep 16 15:23	27° m/42'57			12291 Aug 24 21:16	o∘ mp	
· ·	12290 Sep 17 19:05	0∘ <u>⊽</u>		morning set	12291 Aug 30 18:09	10° mp 38'54	
asc. node	12290 Sep 20 13:52	5° ≏ 38'23		max. Earth dist.	12291 Sep 03 17:20	18° m) 16'43	1.34592 AU
max. Earth dist.	12290 Sep 21 06:13	7° ♀ 02'54	1.33002 AU	asc. node	12291 Sep 07 10:30	25° m/ 44'03	
	ī				ī	•	
superior conj	12290 Sep 24 19:11	14° ≏ 30'47	0°39'55	superior conj	12291 Sep 08 17:25	28° m 22'46	0°12'21
minimum elong	12290 Sep 24 17:22	14° ≙ 21'07	0°39'43	minimum elong	12291 Sep 08 16:45	28° m 19'19	0°12'06
evening rise	12290 Oct 01 20:16	29° ≙ 40'57		behind sun begin	12291 Sep 08 12:50	27° m 59'09	
	12290 Oct 01 23:51	0° M .		behind sun end	12291 Sep 08 20:40	28° m 39'31	
	12290 Oct 18 22:36	0° ∡ ¹			12291 Sep 09 12:12	0∘ ত	
evening max el	12290 Oct 23 14:12	5° ∡ 16'13	22°31'36	evening rise	12291 Sep 16 05:34	14° ≏ 05'56	
desc. node	12290 Oct 23 18:14	5° ∡ ¹25'58			12291 Sep 24 07:29	0° M .	
retrograde	12290 Nov 05 13:30	11° ∡ °42'40		evening max el	12291 Oct 05 08:49	15°M36'36	20°57'57
evening set	12290 Nov 09 04:06	11° ∡ 14′09		desc. node	12291 Oct 10 15:38	19° M 40'41	
min. Earth dist.	12290 Nov 16 21:52	7° ∡ ¹45'53	0.54822 AU	retrograde	12291 Oct 17 00:23	21°M23'43	
inferior conj	12290 Nov 17 19:35	7° ∡ 15'10	-5°49'00	evening set	12291 Oct 19 10:21	21°ML09'52	
minimum elong	12290 Nov 17 16:14	7° ∡ 19'55	5°48'00	inferior conj	12291 Oct 28 11:13	17° M 15'34	-4°57'23
morning rise	12290 Nov 26 05:44	3° ∡ ¹27'27		minimum elong	12291 Oct 28 01:35	17° M 29'12	4°54'33
direct	12290 Nov 29 11:42	3° ∡ ¹03′28		min. Earth dist.	12291 Oct 29 04:35	16° M 50'57	0.54576 AU
morning max el	12290 Dec 11 04:15	8° ∡ ³37′06	21°15'36	morning rise	12291 Nov 05 17:07	13°M22'18	
asc. node	12290 Dec 17 14:38	16° ∡ 15'59		direct	12291 Nov 09 19:46	12°M46'05	
	12290 Dec 25 18:08	8°0		morning max el	12291 Nov 22 19:38	19° M 01'47	22°58'31
morning set	12290 Dec 31 02:55	10° පි 48'04			12291 Dec 01 18:49	0° ∡ ¹	
				asc. node	12291 Dec 04 11:38	4° ∡ 15′05	
superior conj	12291 Jan 07 09:37	26° පි 04'03	1°25'47	morning set	12291 Dec 15 14:15	25° ∡ ³35′00	
minimum elong	12291 Jan 07 11:48	26° ප 15'23	1°26'24		12291 Dec 17 15:46	0° ප	
	12291 Jan 09 07:31	0° ≈					
max. Earth dist.	12291 Jan 12 00:46	5° ≈ 27'51	1.35248 AU	superior conj	12291 Dec 22 13:05	10° る 32'54	1°35'30
evening rise	12291 Jan 16 02:38	13° ≈ 20′12		minimum elong	12291 Dec 22 14:14	10° る 39'03	1°36'19
desc. node	12291 Jan 19 17:05	19° ≈ 57'07		max. Earth dist.	12291 Dec 25 18:21	17° る 21'57	1.33561 AU
	12291 Jan 25 13:00	0° ∀		evening rise	12291 Dec 30 10:37	26° ප් 51'57	
	12291 Feb 15 17:13	0° Y			12292 Jan 01 01:14	0° ≈	
evening max el	12291 Feb 20 10:20	5° Y '00'32	26°31'12	desc. node	12292 Jan 06 13:53	10° ≈ 13'07	
retrograde	12291 Mar 05 10:26	12° Y ′20'56			12292 Jan 18 20:46	0° ∀	
evening set	12291 Mar 11 18:39	9° Y 49'08		evening max el	12292 Feb 02 23:51	18°) 34′13	27°15'04
asc. node	12291 Mar 15 12:18	6° Y 03′15		retrograde	12292 Feb 16 11:51	25° ¥ 59′17	
min. Earth dist.	12291 Mar 15 20:57	5° Ƴ 37'54	0.66519 AU	evening set	12292 Feb 23 05:03	23° ¥ 27′25	
inferior conj	12291 Mar 17 17:30	3° Y 23'56	0°42'15	min. Earth dist.	12292 Feb 27 02:30	19°) 49′04	0.64972 AU
minimum elong	12291 Mar 17 16:26	3° Y 27'10	0°41'53	inferior conj	12292 Feb 29 10:54	17° ¥ 13'58	-0°18'35
	12291 Mar 20 17:49	30° Ŗ ₩		minimum elong	12292 Feb 29 11:27	17° ¥ 12′29	0°18'04

asa mada	12202 Mar 01 00:42	160 ¥ 11144		min Forth dist	12202 Eab 09 22:00	201/20120	0.62105 ATT
asc. node	12292 Mar 01 09:43	16° 光 11'44 11° 光 45'11		min. Earth dist. inferior conj	12293 Feb 08 23:00	0°) 44'45	0.63105 AU
morning rise direct	12292 Mar 06 19:31 12292 Mar 09 11:03	11° X 4311		,	12293 Feb 11 18:10	0° X 4443 0° X 37'28	
morning max el	12292 Mar 15 19:38	14° H 27'04	17°56'37	minimum elong	12293 Feb 11 21:06 12293 Feb 12 12:22	0 K3/28 30°R≈	1 2/34
morning max er	12292 Mar 13 19:38 12292 Mar 26 23:23	0° Υ	1/ 303/	asc. node	12293 Feb 12 12.22 12293 Feb 16 07:05	30 k∞ 26°≈46'52	
morning set	12292 Mar 20 23:23 12292 Apr 02 11:55	0 1 10° Υ 43'43		morning rise	12293 Feb 18 15:47	25°≈31'55	
desc. node	12292 Apr 02 11:33 12292 Apr 03 15:31	12° Υ 37'44		direct	12293 Feb 20 23:52	25°≈05'58	
desc. node	12292 Apr 03 13:31 12292 Apr 14 07:43	0°8		morning max el	12293 Feb 27 13:22	28°≈27'22	17°46'33
	122)2 Apr 14 07.43	° O		morning max er	12293 Mar 01 00:10	0° ∀	17 4033
superior conj	12292 Apr 16 14:30	3° 8 38'18	-1°28'16	morning set	12293 Mar 15 18:09	23° ¥ 12′28	
minimum elong	12292 Apr 16 05:40	3° 8 03'12		morning sev	12293 Mar 19 16:25	0°Υ	
max. Earth dist.	12292 Apr 20 11:27	_	1.45461 AU	desc. node	12293 Mar 21 12:04	3° Y 06'55	
evening rise	12292 May 02 15:22	28° 8 37'36					
8	12292 May 03 12:51	0°II		superior conj	12293 Mar 27 23:19	13° Y 58'19	-0°48'12
greatest brilliancy	12292 May 16 21:10	20° Ⅱ 09'18	-0.6m	minimum elong	12293 Mar 27 18:24	13° Ƴ 38'01	0°47'37
	12292 May 23 22:50	0°€		max. Earth dist.	12293 Apr 03 05:38	24° Ƴ 07'58	1.44441 AU
asc. node	12292 May 28 06:57	5° © 05'02			12293 Apr 06 22:34	0°B	
evening max el	12292 May 28 13:36	5°521'57	19°45'58	evening rise	12293 Apr 12 02:46	8° 8 02'24	
retrograde	12292 Jun 04 23:23	9° © 34'24		· ·	12293 Apr 26 19:15	Π°	
evening set	12292 Jun 08 18:08	8°911'16		evening max el	12293 May 11 13:47	19° Ⅱ 07'40	20°50'29
inferior conj	12292 Jun 14 02:11	2°513'47	3°14'22	asc. node	12293 May 15 04:08	22° I I13'28	
minimum elong	12292 Jun 14 02:23	2°513'05	3°13'29	retrograde	12293 May 19 22:16	23° II 59'20	
min. Earth dist.	12292 Jun 15 04:20	0°9546'12	0.67551 AU	evening set	12293 May 24 02:55	22° Ⅱ 19'55	
	12292 Jun 15 18:22	30° Ŗ Ⅱ		inferior conj	12293 May 29 09:12	16° Ⅱ 10′12	3°10'41
morning rise	12292 Jun 19 10:17	25° Ⅱ 52′02		minimum elong	12293 May 29 08:24	16° Ⅱ 12'58	3°09'47
direct	12292 Jun 25 06:59	23° Ⅱ 16'55		min. Earth dist.	12293 May 29 21:32	15° Ⅱ 27'29	0.68402 AU
desc. node	12292 Jun 30 16:07	25° Ⅱ 00'31		morning rise	12293 Jun 03 13:39	9° Ⅱ 52'05	
	12292 Jul 06 19:24	0 \circ \odot		direct	12293 Jun 08 21:57	7° Ⅱ 30'51	
morning max el	12292 Jul 07 06:28	0°527'46	25°09'32	desc. node	12293 Jun 17 13:10	11° Ⅱ 54'29	
	12292 Jul 29 11:43	$0^{\circ}\Omega$		morning max el	12293 Jun 19 16:33	13° Ⅱ 56'51	23°41'06
morning set	12292 Aug 12 05:08	22° Ω 50′33			12293 Jul 02 17:04	0 \circ \odot	
max. Earth dist.	12292 Aug 15 19:26	29° Ω 23'40	1.36615 AU		12293 Jul 22 09:00	0 $^{\circ}$ Ω	
	12292 Aug 16 03:15	0° m		morning set	12293 Jul 24 19:29	4° Ω 05'13	
				max. Earth dist.	12293 Jul 28 16:58	10° Ω 48′28	1.38898 AU
superior conj	12292 Aug 22 06:05	11° m 45'15				_	
minimum elong	12202 122 22 07.20	11° m 51'24					
_	12292 Aug 22 07:20	-	0°19′28	superior conj	12293 Aug 05 05:27	24° Ω 28'24	
asc. node	12292 Aug 24 07:10	15° m/49'33	0°19'28	minimum elong	12293 Aug 05 09:13	24° Ω 46′06	
asc. node evening rise	12292 Aug 24 07:10 12292 Aug 30 10:50	15° Mp 49'33 28° Mp 17'49	0*19/28	minimum elong	12293 Aug 05 09:13 12293 Aug 08 03:19	24° Ω 46'06 0° M	
evening rise	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04	15° m 49'33 28° m 17'49 0° Ω		minimum elong asc. node	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49	24° \$\alpha 46'06 0° m/ 5° m/50'33	
	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40		minimum elong	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15	24° \(\Omega \)46'06 0° \(\mathref{m} \) 5° \(\mathref{m} \)50'33 12° \(\mathref{m} \)08'16	
evening rise evening max el	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M.		minimum elong asc. node evening rise	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33	24° Ω46'06 0° m 5° m 50'33 12° m 08'16 0° Ω	0°53'24
evening rise evening max el retrograde	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M 1° M 38'34		minimum elong asc. node evening rise evening max el	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20	24° Ω46'06 0° mp 5° mp 50'33 12° mp 08'16 0° Ω 8° Ω 30'06	
evening rise evening max el retrograde desc. node	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m 1° m 38'34 1° m 38'30		minimum elong asc. node evening rise evening max el retrograde	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09	24° Ω46'06 0° my 5° my 50'33 12° my 08'16 0° Ω 8° Ω 30'06 12° Ω 44'17	0°53'24
evening rise evening max el retrograde	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M 1° M 38'34 1° M 38'30 1° M 28'44		minimum elong asc. node evening rise evening max el retrograde evening set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43	24° \Omega 44'06 0° \text{ The 50'33} 12° \text{ The 08'16} 0° \Omega 8° \Omega 30'06 12° \Omega 44'17 12° \Omega 32'14	0°53'24
evening rise evening max el retrograde desc. node evening set	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M 1° M 38'34 1° M 38'30 1° M 28'44 30° R Ω	19°42'39	minimum elong asc. node evening rise evening max el retrograde evening set desc. node	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32	24° \Omega44'06 0° my 5° my 50'33 12° my 08'16 0° \Omega 8° \Omega 30'06 12° \Omega 44'17 12° \Omega 32'14 11° \Omega 13'44	0°53'24 18°48'58
evening rise evening max el retrograde desc. node evening set inferior conj	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19 12292 Oct 07 09:58	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M 1° M 38'34 1° M 38'30 1° M 28'44 30° R Ω 27° Ω 25'41	19°42'39 -3°20'00	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56	24° \$\Omega 44'06\\ 0° m\) 5° m 50'33\\ 12° m 08'16\\ 0° \omega \\ 8° \Omega 30'06\\ 12° \Omega 44'17\\ 12° \Omega 32'14\\ 11° \Omega 13'44\\ 8° \Omega 11'47\\	0°53'24 18°48'58 -1°28'30
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24	15° m 49'33 28° m 17'49 0° \overline{O} 26° \overline{O} 39'40 0° m 1° m 38'34 1° m 38'30 1° m 28'44 30° R \overline{O} 27° \overline{O} 25'41 27° \overline{O} 29'03	19°42'39 -3°20'00 3°16'39	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56 12293 Sep 17 23:13	24° \$\Omega 44'06\\ 0° m\\ 5° m\(50'33\) 12° m\(08'16\) 0° \(\Omega\) 8° \(\Omega 30'06\) 12° \(\Omega 44'17\) 12° \(\Omega 32'14\) 11° \(\Omega 13'44\) 8° \(\Omega 11'47\) 8° \(\Omega 18'30\)	0°53'24 18°48'58 -1°28'30 1°26'59
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist.	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53	15° m 49'33 28° m 17'49 0° \(\Omega\) 26° \(\Omega\) 39'40 0° \(\Omega\) 1° \(\Omega\) 38'34 1° \(\Omega\) 38'30 1° \(\Omega\) 28'44 30° \(\Omega\) 27° \(\Omega\) 25'41 27° \(\Omega\) 39'03 26° \(\Omega\) 04'53	19°42'39 -3°20'00	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist.	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56 12293 Sep 17 23:13 12293 Sep 21 04:19	24° \$\Omega 44'06 0° \$\mathref{m}\$ 5° \$\mathref{m}\$ 50'33 12° \$\mathref{m}\$ 08'16 0° \$\Omega\$ 8° \$\Omega 30'06 12° \$\Omega 44'17 12° \$\Omega 32'14 11° \$\Omega 13'44 8° \$\Omega 11'47 8° \$\Omega 18'30 5° \$\Omega 59'50	0°53'24 18°48'58 -1°28'30
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53 12292 Oct 15 11:02	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m 1° m 38'34 1° m 38'30 1° m 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24	19°42'39 -3°20'00 3°16'39	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 13 10:32 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24	24° \$\Omega 44'06\\ 0° m\\ 5° m\(50'33\) 12° m\(08'16\) 0° \(\Omega\) 8° \(\Omega 30'06\) 12° \(\Omega 44'17\) 12° \(\Omega 32'14\) 11° \(\Omega 13'44\) 8° \(\Omega 11'47\) 8° \(\Omega 18'30\) 5° \(\Omega 59'50\) 3° \(\Omega 15'09\)	0°53'24 18°48'58 -1°28'30 1°26'59
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53 12292 Oct 15 11:02 12292 Oct 20 09:47	15° m 49'33 28° m 17'49 0° \(\Omega\) 26° \(\Omega\) 39'40 0° m. 1° m 38'34 1° m 38'30 1° m 28'44 30° \(\Omega\) 27° \(\Omega\) 25'41 27° \(\Omega\) 39'03 26° \(\Omega\) 04'53 23° \(\Omega\) 06'24 22° \(\Omega\) 12'21	19°42'39 -3°20'00 3°16'39 0.55270 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 13 10:32 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30	24° \$\Omega 44'06\\ 0° \$\mathbf{m}\) 5° \$\mathbf{m}\) 50'33\\ 12° \$\mathbf{m}\) 08'16\\ 0° \$\Omega \\ 8° \$\Omega 30'06\\ 12° \$\Omega 44'17\\ 12° \$\Omega 32'14\\ 11° \$\Omega 13'44\\ 8° \$\Omega 11'47\\ 8° \$\Omega 18'30\\ 5° \$\Omega 59'50\\ 3° \$\Omega 15'09\\ 1° \$\Omega 56'20\\	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU
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evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 07 01:24 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 24 02:04 12292 Nov 29 02:07	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m 1° m 38'34 1° m 38'30 1° m 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24 22° Ω 12'21 29° Ω 05'05 0° m 22° m 55'29 0° ズ 10° ズ 20'08	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 13 02:56 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Nov 17 05:20 12293 Nov 13 12:45 12293 Nov 15 20:27	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50'33\\ 12° \$\mathbf{m}\\ 08'16\\ 0° \$\mathbf{n}\\ 8° \$\mathbf{m}\\ 30'06\\ 12° \$\mathbf{m}\\ 44'17\\ 12° \$\mathbf{m}\\ 32'14\\ 11° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 11'47\\ 8° \$\mathbf{m}\\ 18'30\\ 5° \$\mathbf{m}\\ 58'55'50\\ 3° \$\mathbf{m}\\ 15'09\\ 1° \$\mathbf{m}\\ 56'20\\ 9° \$\mathbf{m}\\ 19'21\\ 0° \$\mathbf{m}\\ 12° \$\mathbf{m}\\ 06'06\\ 24° \$\mathbf{m}\\ 58'08\\ 0° \$\mathbf{m}\\ 9° \$\mathbf{m}\\ 58'04\\ 9° \$\mathbf{m}\\ 58'222\\	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19 12292 Oct 07 01:24 12292 Oct 07 01:24 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 29 02:07 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° M 1° M 38'34 1° M 38'30 1° M 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24 22° Ω 12'21 29° Ω 05'05 0° M 22° M 55'29 0° 🛪 10° 🛪 20'08 25° 🛪 13'14 25° 🛪 13'17 29° 🛪 25'01	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Nov 13 12:45 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50'33\\ 12° \$\mathbf{m}\\ 08'16\\ 0° \$\mathbf{n}\\ 8° \$\mathbf{n}\\ 30'06\\ 12° \$\mathbf{n}\\ 44'17\\ 12° \$\mathbf{n}\\ 32'14\\ 11° \$\mathbf{n}\\ 13'44\\ 8° \$\mathbf{n}\\ 11'47\\ 8° \$\mathbf{n}\\ 18'30\\ 5° \$\mathbf{n}\\ 58'59'50\\ 3° \$\mathbf{n}\\ 15'09\\ 1° \$\mathbf{n}\\ 56'20\\ 9° \$\mathbf{n}\\ 19'21\\ 0° \$\mathbf{m}\\ 12° \$\mathbf{m}\\ 06'06\\ 24° \$\mathbf{m}\\ 58'08\\ 0° \$\mathbf{n}\\ 9° \$\mathbf{n}\\ 58'22\\ 11° \$\mathbf{n}\\ 36'12\\	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 02 22:19 12292 Oct 07 01:24 12292 Oct 07 01:24 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 02:07 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30 12292 Dec 08 01:57	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m 1° m 38'34 1° m 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24 22° Ω 12'21 29° Ω 05'05 0° m 22° m 55'29 0° ズ 10° ズ 20'08 25° ズ 13'14 25° ズ 13'17 29° ズ 25'01 0° ጜ	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Nov 13 12:45 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01 12293 Nov 27 06:46	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50'33\\ 12° \$\mathbf{m}\\ 08'16\\ 0° \$\mathbf{n}\\ 8° \$\mathbf{n}\\ 30'06\\ 12° \$\mathbf{n}\\ 44'17\\ 12° \$\mathbf{n}\\ 32'14\\ 11° \$\mathbf{n}\\ 13'44\\ 8° \$\mathbf{n}\\ 11'47\\ 8° \$\mathbf{n}\\ 18'30\\ 5° \$\mathbf{n}\\ 58'59'50\\ 3° \$\mathbf{n}\\ 15'09\\ 1° \$\mathbf{n}\\ 56'20\\ 9° \$\mathbf{n}\\ 19'21\\ 0° \$\mathbf{m}\\ 12° \$\mathbf{m}\\ 06'06\\ 24° \$\mathbf{m}\\ 58'08\\ 0° \$\mathbf{n}\\ 9° \$\mathbf{n}\\ 58'04\\ 9° \$\mathbf{n}\\ 52'22\\ 11° \$\mathbf{n}\\ 36'12\\ 25° \$\mathbf{n}\\ 04'41\\	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 07 01:24 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 02:07 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30 12292 Dec 08 01:57 12292 Dec 13 04:56	15° m49'33 28° m17'49 0° Ω 26° Ω39'40 0° m. 1° m.38'34 1° m.38'30 1° m.28'44 30° RΩ 27° Ω25'41 27° Ω39'03 26° Ω04'53 23° Ω06'24 22° Ω 12'21 29° Ω05'05 0° m. 22° m.55'29 0° ¾ 10° ¾ 20'08 25° ¾ 13'17 29° ¾ 25'01 0° ♂ 10° ♂ 49'17	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 17 23:13 12293 Sep 17 23:13 12293 Sep 25 20:24 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Oct 31 11:08 12293 Nov 07 05:20 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01 12293 Nov 27 06:46 12293 Nov 29 15:51	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50'33\\ 12° \$\mathbf{m}\\ 08'16\\ 0° \$\mathbf{n}\\ 8° \$\mathbf{m}\\ 30'06\\ 12° \$\mathbf{m}\\ 44'17\\ 12° \$\mathbf{m}\\ 32'14\\ 11° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 18'30\\ 5° \$\mathbf{m}\\ 58'55'50\\ 3° \$\mathbf{m}\\ 15'09\\ 1° \$\mathbf{m}\\ 56'20\\ 9° \$\mathbf{m}\\ 19'21\\ 0° \$\mathbf{m}\\ 12° \$\mathbf{m}\\ 06'06\\ 24° \$\mathbf{m}\\ 58'08\\ 0° \$\mathbf{m}\\ 9° \$\mathbf{m}\\ 58'04\\ 9° \$\mathbf{m}\\ 52'22\\ 11° \$\mathbf{m}\\ 36'12\\ 25° \$\mathbf{m}\\ 04'41\\ 0° \$\mathbf{G}\\ 0° \$G	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30 12292 Dec 08 01:57 12292 Dec 13 04:56 12292 Dec 23 10:47	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m. 1° m 38'34 1° m 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24 22° Ω 12'21 29° Ω 05'05 0° m. 22° m 55'29 0° ¾ 10° ¾ 20'08 25° ¾ 13'14 25° ¾ 13'17 29° ¾ 25'01 0° ♂ 10° ♂ 49'17 0° ≈ 11'11	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 17 23:13 12293 Sep 25 20:24 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Nov 13 12:45 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01 12293 Nov 27 06:46 12293 Nov 29 15:51 12293 Dec 10 07:48	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50° \$\mathbf{m}\\ 50° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 8° \$\mathbf{m}\\ 30'06\\ 12° \$\mathbf{m}\\ 44'17\\ 12° \$\mathbf{m}\\ 32'14\\ 11° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'09\\ 1° \$\mathbf{m}\\ 50' \$\mathbf{m}\\ 15'09\\ 1° \$\mathbf{m}\\ 10° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 9° \$\mathbf{m}\\ 58'104\\ 9° \$\mathbf{m}\\ 58'12\\ 25° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 19° \$\mathbf{m}\\ 36'12\\ 25° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 19° \$\mathbf{m}\\ 34'32\\	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41 1.31553 AU
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 03 06:05 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 02:07 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30 12292 Dec 08 01:57 12292 Dec 08 01:57 12292 Dec 23 10:47 12292 Dec 23 10:47 12292 Dec 23 08:12	15° m49'33 28° m17'49 0° Ω 26° Ω39'40 0° m. 1° m38'34 1° m38'30 1° m28'44 30° RΩ 27° Ω25'41 27° Ω39'03 26° Ω04'53 23° Ω06'24 22° Ω12'21 29° Ω05'05 0° m. 22° m.55'29 0° ¾ 10° ¾ 20'08 25° ¾ 13'14 25° ¾ 13'17 29° ¾ 25'01 0° ♂ 10° ♂ 49'17 0° ≈ 11'11 0° ≈	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35 1°38'44 1°39'37 1.32316 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 18 02:56 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Oct 31 11:08 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01 12293 Nov 27 06:46 12293 Nov 29 15:51 12293 Dec 10 07:48 12293 Dec 16 23:16	24° \$\Pi46'06\\ 0° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 50° \$\mathbf{m}\\ 0° \$\mathbf{n}\\ 8° \$\mathbf{m}\\ 30'06\\ 12° \$\mathbf{m}\\ 44'17\\ 12° \$\mathbf{m}\\ 32'14\\ 11° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'44\\ 8° \$\mathbf{m}\\ 13'09\\ 1° \$\mathbf{m}\\ 5° \$\mathbf{m}\\ 5' \$\mathbf{m}\\ 5' \$\mathbf{m}\\ 19' \$\mathbf{m}\\ 12' \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 9° \$\mathbf{m}\\ 5' \$\mathbf{m}\\ 19° \$\mathbf{m}\\\ 19° \$\mathbf{m}\\\ 19° \$\mathbf{m}\\\ 19° \$\mathbf{m}\\\ 20° \$\mathbf{m}\\\ 20° \$\mathbf{m}\\\ 20° \$\mathbf{m}\\\ 20° \$\mathbf{m}\\\ 20° \$\mathbf{m}\\\ 20° \$\mat	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41 1.31553 AU
evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12292 Aug 24 07:10 12292 Aug 30 10:50 12292 Aug 31 07:04 12292 Sep 16 16:59 12292 Sep 20 22:32 12292 Sep 26 16:50 12292 Sep 26 13:05 12292 Sep 28 14:02 12292 Oct 07 09:58 12292 Oct 07 01:24 12292 Oct 09 13:53 12292 Oct 15 11:02 12292 Oct 20 09:47 12292 Oct 20 09:47 12292 Nov 04 04:40 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 08:32 12292 Nov 20 02:07 12292 Dec 05 21:24 12292 Dec 05 21:25 12292 Dec 07 19:30 12292 Dec 08 01:57 12292 Dec 13 04:56 12292 Dec 23 10:47 12292 Dec 23 08:12 12293 Jan 13 18:20	15° m 49'33 28° m 17'49 0° Ω 26° Ω 39'40 0° m. 1° m 38'34 1° m 28'44 30° R Ω 27° Ω 25'41 27° Ω 39'03 26° Ω 04'53 23° Ω 06'24 22° Ω 12'21 29° Ω 05'05 0° m. 22° m 55'29 0° ¾ 10° ¾ 20'08 25° ¾ 13'14 25° ¾ 13'17 29° ¾ 25'01 0° ♂ 10° ♂ 49'17 0° ≈ 11'11 0° ≈ 0° 升	19°42'39 -3°20'00 3°16'39 0.55270 AU 24°46'35 1°38'44 1°39'37 1.32316 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12293 Aug 05 09:13 12293 Aug 08 03:19 12293 Aug 11 03:49 12293 Aug 14 09:15 12293 Aug 24 03:33 12293 Aug 30 14:20 12293 Sep 08 01:09 12293 Sep 09 22:43 12293 Sep 13 10:32 12293 Sep 17 23:13 12293 Sep 17 23:13 12293 Sep 21 04:19 12293 Sep 25 20:24 12293 Oct 01 13:30 12293 Oct 15 19:33 12293 Oct 31 11:08 12293 Oct 31 11:08 12293 Nov 13 12:45 12293 Nov 15 20:27 12293 Nov 20 08:22 12293 Nov 20 07:21 12293 Nov 21 02:01 12293 Nov 27 06:46 12293 Nov 29 15:51 12293 Dec 16 23:16 12293 Dec 28 18:45	24° \$\tilde{\Omega}46'06 0° \$\tilde{\Omega}\$ 5° \$\tilde{\Omega}50'33 12° \$\tilde{\Omega}08'16 0° \$\tilde{\Omega}\$ 8° \$\tilde{\Omega}30'06 12° \$\tilde{\Omega}44'17 12° \$\tilde{\Omega}32'14 11° \$\tilde{\Omega}13'44 8° \$\tilde{\Omega}11'47 8° \$\tilde{\Omega}18'30 5° \$\tilde{\Omega}59'50 3° \$\tilde{\Omega}15'09 1° \$\tilde{\Omega}56'20 9° \$\tilde{\Omega}19'21 0° \$\tilde{\Omega}\$ 12° \$\tilde{\Omega}58'08 0° \$\tilde{\Omega}\$ 9° \$\tilde{\Omega}58'04 9° \$\tilde{\Omega}52'22 11° \$\tilde{\Omega}36'12 25° \$\tilde{\Omega}04'41 0° \$\tilde{\Omega}\$ 19° \$\tilde{\Omega}43'32 0° \$\impsime{\Omega}10'42	0°53'24 18°48'58 -1°28'30 1°26'59 0.56779 AU 26°21'46 1°35'56 1°36'41 1.31553 AU

inferior conj	12294 Jan 25 11:59	13° ≈ 47'56	2047'31	evening max el	12294 Dec 10 19:25	25° る 51'01	26028138
minimum elong	12294 Jan 25 17:50	13°≈35'09	2°44'37	evening max er	12294 Dec 15 23:51	25 ⊘ 51 01 0° ≈	20 20 30
morning rise	12294 Feb 01 23:42	8°≈54'00	2 4437	retrograde	12294 Dec 24 18:15	0 ~ 2° ≈ 57'35	
asc. node	12294 Feb 03 04:23	8°≈38'58		evening set	12294 Dec 31 07:12	1°≈12'59	
direct	12294 Feb 04 02:43	8°≈35'20		evening sec	12295 Jan 02 09:04	30°Rる	
morning max el	12294 Feb 11 05:20	12°≈09'40	17°54'41	min. Earth dist.	12295 Jan 04 09:11	28° る 36'43	0.58861 AU
morning mun er	12294 Feb 23 04:20	0° ∀	1, 51	inferior conj	12295 Jan 07 12:46	26° ප 13'27	
morning set	12294 Feb 26 19:51	6° ¥ 36′02		minimum elong	12295 Jan 07 20:58	25° る 57'51	
desc. node	12294 Mar 08 08:38	23°) 42'53		morning rise	12295 Jan 15 13:36	21° ප් 40'42	
				direct	12295 Jan 17 15:25	21° る 25'42	
superior conj	12294 Mar 09 08:49	25° ¥ 28′09	-0°07'51	asc. node	12295 Jan 21 01:39	22° ろ 08'48	
minimum elong	12294 Mar 09 08:08	25°) 25'13	0°07'35	morning max el	12295 Jan 25 15:46	25° る 22'40	18°22'26
behind sun begin	12294 Mar 09 00:50	24°) 53'28		č	12295 Jan 29 13:23	0° ≈	
behind sun end	12294 Mar 09 15:27	25°) € 56'55		morning set	12295 Feb 10 11:13	20° ≈ 36'36	
	12294 Mar 12 00:06	0° Υ		C	12295 Feb 15 09:34	0° ∀	
max. Earth dist.	12294 Mar 16 19:39	8° Y 03'00	1.42824 AU				
evening rise	12294 Mar 23 00:01	17° Y ′59'48		superior conj	12295 Feb 19 16:29	7° ¥ 59'06	0°27'40
	12294 Mar 30 19:03	0°8		minimum elong	12295 Feb 19 18:25	8° ∺ 07'58	0°27'47
	12294 Apr 21 15:41	Π $^{\circ}0$		desc. node	12295 Feb 23 05:14	14°) €21'28	
evening max el	12294 Apr 24 08:41	2° Ⅱ 54'43	22°05'27	max. Earth dist.	12295 Feb 27 05:04	21°) 1 9′24	1.40790 AU
asc. node	12294 May 02 01:23	8° Ⅱ 14'48		evening rise	12295 Mar 03 16:26	28°) (49′54	
retrograde	12294 May 03 20:05	8° Ⅱ 29'44			12295 Mar 04 09:32	0° Y	
evening set	12294 May 08 11:27	6° Ⅱ 34'53			12295 Mar 24 07:46	9° 8	
inferior conj	12294 May 13 18:19	0° Ⅱ 15′04	2°56'09	evening max el	12295 Apr 07 00:02	16° 8 44'09	23°25'48
minimum elong	12294 May 13 16:44	0° Ⅲ 20′38	2°55'10	retrograde	12295 Apr 17 15:17	23° 8 00'13	
min. Earth dist.	12294 May 13 17:39	0° Ⅱ 17′25	0.68789 AU	asc. node	12295 Apr 18 22:42	22° 8 52'15	
	12294 May 13 22:38	30° ₹ 8		evening set	12295 Apr 22 18:08	20° 8 51'16	
morning rise	12294 May 18 21:50	24° 8 02'25		min. Earth dist.	12295 Apr 27 14:27	15° 8 09'39	0.68720 AU
direct	12294 May 23 17:08	21° 8 59'44		inferior conj	12295 Apr 28 03:36	14° 8 24'24	2°31'33
morning max el	12294 Jun 02 04:35	27° 8 33'44	22°12'03	minimum elong	12295 Apr 28 01:31	14° 8 31'31	2°30'30
desc. node	12294 Jun 04 10:06	29° 8 55'55		morning rise	12295 May 03 08:50	8° 8 18'34	
	12294 Jun 04 11:34	Π °0		direct	12295 May 07 15:13	6° 8 36'47	
	12294 Jun 26 07:20	0		morning max el	12295 May 15 21:49	11° 8 20'44	20°50'19
morning set	12294 Jul 05 08:56	14° © 12'45		desc. node	12295 May 22 06:59	18° 8 46'17	
max. Earth dist.	12294 Jul 10 16:19	22° © 56'33	1.41194 AU		12295 May 30 10:34	Π °0	
	12294 Jul 14 19:50	0 \circ Ω		morning set	12295 Jun 14 21:50	23° Ⅱ 15'39	
					12295 Jun 19 04:39	0 \circ 60	
superior conj	12294 Jul 18 11:15	6° Ω 22'57		max. Earth dist.	12295 Jun 22 22:09	5° © 58'50	1.43225 AU
minimum elong	12294 Jul 18 17:26	6° Ω 50′25	1°27'01				
evening rise	12294 Jul 28 21:21	25° Ω 28'34		superior conj	12295 Jun 29 19:11	17° © 19'42	
asc. node	12294 Jul 29 00:33	25° Ω 43′28		minimum elong	12295 Jun 30 01:54	17° © 47'59	1°55'41
	12294 Jul 31 07:46	0° m/y			12295 Jul 07 04:13	0°N	
evening max el	12294 Aug 13 21:19	21° mp 01'37	18°16'27	evening rise	12295 Jul 11 18:46	8° Ω 07'48	
retrograde	12294 Aug 21 04:24	24° m 43'05		asc. node	12295 Jul 15 21:22	15° Ω 23'49	
evening set	12294 Aug 23 08:24	24° Mp 24'15	0010150		12295 Jul 24 23:08	0°M) 4°M≻02154	10002146
inferior conj	12294 Aug 30 17:41	19° Mp 43'17	0°10'59	evening max el	12295 Jul 28 09:45	4° Mp 03'54	18°03'46
minimum elong	12294 Aug 30 18:03	19° Mp 42'29	0°10'35	retrograde	12295 Aug 04 00:18	7° Mp 27'39	
transit middle	12294 Aug 30 18:03 12294 Aug 30 15:26	19° Mp 42'29	0°10'35	evening set	12295 Aug 06 12:19 12295 Aug 13 04:22	6° Mp 58'18 1° Mp 57'16	1027/41
transit begin		19° Mp 48'01		inferior conj	Č	1° My 51'37	
transit end desc. node	12294 Aug 30 20:40	19° Mp 36'57		minimum elong	12295 Aug 13 06:40	1°1₩31'37 30°RΩ	1-26-26
min. Earth dist.	12294 Aug 31 07:59 12294 Sep 03 01:38	19° Mp 12'55 16° Mp 55'31	0.58834 AU	min. Earth dist.	12295 Aug 15 04:14 12295 Aug 16 07:22		0.61110 AU
morning rise	12294 Sep 03 01:38 12294 Sep 07 00:14	14° Mp 11'29	0.36634 AU	desc. node	12295 Aug 10 07:22 12295 Aug 18 05:24	$27^{\circ}\Omega 15'06$	0.01110 AU
direct	12294 Sep 13 07:38	12° Mg 24'09		morning rise	12295 Aug 18 03:24 12295 Aug 19 22:20	25° Ω 59'23	
morning max el	12294 Sep 13 07:38 12294 Sep 27 15:53	20° Mp 08'51	27°28'06	direct	12295 Aug 19 22:20 12295 Aug 26 13:31	23° Ω 46'03	
morning max ci	12294 Oct 06 03:03	ე∘ <u>ი</u>	27 28 00	direct	12295 Aug 20 13:31 12295 Sep 07 23:30	0°m)	
	12294 Oct 24 06:08	0° m .		morning max el	12295 Sep 07 23:30 12295 Sep 09 19:13	1° Mp 43'45	27°57'03
asc. node	12294 Oct 25 02:04	1°M.38'58			12295 Sep 30 11:01	0° ⊽	_, 5, 05
morning set	12294 Oct 28 20:28	9°M24'27		asc. node	12295 Oct 11 22:47	0 = 21° ⊆ 27'41	
g ove	-227. 000 20 20.20	> IIV=T2/		morning set	12295 Oct 11 22:47 12295 Oct 12 23:24	23° Ω 34'14	
superior conj	12294 Nov 04 20:04	24°M41'43	1°27'22	morning sot	12295 Oct 16 00:28	0°M	
minimum elong	12294 Nov 04 18:16	24°M31'37	1°27'51	max. Earth dist.	12295 Oct 18 18:04	5°M56'48	1.31546 AU
max. Earth dist.	12294 Nov 04 10:45	23°M49'45	1.31294 AU	Dartii dist.	1220 000 10 10.04	5 HM20 TO	1.515 TO AU
Zurur dist.	12294 Nov 07 05:11	25 11 0 +5+5		superior conj	12295 Oct 20 06:41	9° ™ 18'48	1°13'13
evening rise	12294 Nov 11 13:45	9° × ⁷ 32'11		minimum elong	12295 Oct 20 04:28	9°M06'29	1°13'23
	12294 Nov 21 23:45	0°る		evening rise	12295 Oct 26 23:53	24°M06'21	
desc. node	12294 Nov 27 04:55	8° る 39'47			12295 Oct 29 18:42	0°×7	
		5 057 17				~ **	

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desc. node	12295 Nov 14 02:08	26° х 46′13			12296 Oct 21 09:19	0° ∡ ¹	
desc. node	12295 Nov 16 12:18	0°ਰ		desc. node	12296 Oct 30 23:26	13° × 742'43	
evening max el	12295 Nov 22 11:55	6° ට 40'24	25°08'44	evening max el	12296 Nov 02 22:23	16° х 50'34	23°30'00
retrograde	12295 Dec 06 07:48	13° る 36'29		retrograde	12296 Nov 16 08:34	23° x ⁷ 31'53	
evening set	12295 Dec 12 01:23	12° る 22'30		evening set	12296 Nov 20 19:36	22° × ⁷ 48'38	
min. Earth dist.	12295 Dec 16 23:57		0.56891 AU	min. Earth dist.	12296 Nov 27 08:23		0.55374 AU
inferior conj	12295 Dec 10 23:37 12295 Dec 19 17:37	7°る52'47		inferior conj	12296 Nov 29 02:09	18° × 41'26	
minimum elong	12295 Dec 20 01:16	7°る40'09		minimum elong	12296 Nov 29 03:55	18° х 38'51	
morning rise	12295 Dec 28 03:24	3°₹42'01	0 10 00	morning rise	12296 Dec 07 14:01	14° × 749'03	2 2029
direct	12295 Dec 30 10:16	3° る 26'54		direct	12296 Dec 10 09:40	14° × 729'41	
asc. node	12296 Jan 07 22:51	7°る14'03		morning max el	12296 Dec 21 04:35	19° ∡ ³37'40	20°24'03
morning max el	12296 Jan 08 16:42	· <u> </u>	19°11'42	asc. node	12296 Dec 24 20:00	23° × 739'30	20 2.03
monning man er	12296 Jan 22 22:37	0° ≈	1, 11 .2	uso. Houe	12296 Dec 29 06:29	0°ਰ	
morning set	12296 Jan 25 11:53	5°≈01'25		morning set	12297 Jan 08 18:33	19° ろ 40'10	
					12297 Jan 13 18:40	0° ≈	
superior conj	12296 Feb 02 17:43	21° ≈ 18'25	0°56'08				
minimum elong	12296 Feb 02 20:35	21° ≈ 32'13	0°56'19	superior conj	12297 Jan 16 07:59	5° ≈ 12'59	1°17'03
8	12296 Feb 07 08:07	0°) €		minimum elong	12297 Jan 16 10:37	5° ≈ 26'18	1°17'30
max. Earth dist.	12296 Feb 09 11:45	3°) ₹55'39	1.38567 AU	max. Earth dist.	12297 Jan 21 19:20	16° ≈ 00'16	1.36390 AU
desc. node	12296 Feb 10 01:54	4°) 59'14		evening rise	12297 Jan 25 14:58	23° ≈ 08'43	
evening rise	12296 Feb 13 06:09	10°) (35′12		desc. node	12297 Jan 26 22:36	25° ≈ 32'01	
	12296 Feb 25 04:32	0° Υ			12297 Jan 29 11:12	0° ∀	
	12296 Mar 18 23:25	0°8			12297 Feb 17 22:08	0° Υ	
evening max el	12296 Mar 19 13:49	0° 8 36'01	24°45'09	evening max el	12297 Mar 02 03:17	14° Υ 26'28	25°56'32
retrograde	12296 Mar 31 06:44	7° 8 25'27		retrograde	12297 Mar 14 17:29	21° Y 39'00	
asc. node	12296 Apr 04 20:05	5° 8 53'36		evening set	12297 Mar 20 19:47	19° Y ′09'34	
evening set	12296 Apr 05 21:28	5° 8 04'36		asc. node	12297 Mar 22 17:29	17° Υ 20'59	
evening sec	12296 Apr 10 09:21	30°R Y		min. Earth dist.	12297 Mar 25 01:18	14° Y 39'01	0.67252 AU
min. Earth dist.	12296 Apr 10 09:42	29° Υ 58'48	0.68202 AU	inferior conj	12297 Mar 26 14:59	12° Y '40'56	1°12'34
inferior conj	12296 Apr 11 11:08	28° Υ '34'26	1°57'04	minimum elong	12297 Mar 26 13:20		1°11'51
minimum elong	12296 Apr 11 09:00	28° Y 41'30	1°56'04	morning rise	12297 Apr 01 07:33	6°Υ′53'05	1 1101
morning rise	12296 Apr 16 20:45	22° Y 36'51	1 3001	direct	12297 Apr 04 14:11	5° Υ 51'52	
direct	12296 Apr 20 14:48	21° Y 16'08		morning max el	12297 Apr 11 06:52	9° Υ 28'31	18°47'30
morning max el	12296 Apr 27 22:34	25° Y 19'53	19°41'12	desc. node	12297 Apr 25 00:28	28° Y ′04'34	
	12296 May 02 01:54	0°8			12297 Apr 26 06:32	0°8	
desc. node	12296 May 08 03:46	8° 8 12'24		morning set	12297 May 03 08:22	10° 8 59'11	
greatest brilliancy	12296 May 10 16:31	11° 8 51'57	-0.6m	Č	12297 May 15 13:02	Π°	
	12296 May 22 17:33	$\Pi^{\circ}0$		max. Earth dist.	12297 May 18 05:08	4° Ⅱ 10′28	1.45606 AU
morning set	12296 May 23 22:17	1° Ⅱ 50′16			•		
max. Earth dist.	12296 Jun 04 11:14	19° Ⅱ 49'16	1.44751 AU	superior conj	12297 May 19 15:51	6° Ⅲ 26′23	-2°09'50
				minimum elong	12297 May 19 11:16	6° Ⅲ 08′25	2°10'27
superior conj	12296 Jun 09 03:10	27° Ⅱ 15'44	-2°11'44	evening rise	12297 Jun 03 22:36	0° 5 41'51	
minimum elong	12296 Jun 09 06:05	27° Ⅲ 27'31	2°12'33		12297 Jun 03 12:12	0 \circ \odot	
	12296 Jun 10 19:52	0 \circ \odot		greatest brilliancy	12297 Jun 12 08:19	14° © 10'35	-0.9m
evening rise	12296 Jun 22 20:31	19° © 54'41		asc. node	12297 Jun 18 15:15	23° 5 44'27	
	12296 Jun 28 20:29	$0^{\circ}\Omega$			12297 Jun 23 12:19	$0^{\circ}\Omega$	
asc. node	12296 Jul 01 18:16	4° Ω 46′13		evening max el	12297 Jun 24 12:42	1° Ω 03'52	18°33'49
evening max el	12296 Jul 10 23:55	17° Ω 27′05	18°09'46	retrograde	12297 Jul 01 00:44	4° Ω 35′09	
retrograde	12296 Jul 17 08:30	20° Ω 47'47		evening set	12297 Jul 04 05:14	3° £ 37′40	
evening set	12296 Jul 20 04:41	20° Ω 05′13			12297 Jul 08 06:03	30° ₹ 5	
inferior conj	12296 Jul 26 07:04	14° Ω 46′02	2°21'04	inferior conj	12297 Jul 09 21:49	28° © 02'25	2°54'16
minimum elong	12296 Jul 26 09:37	14° Ω 38'59	2°19'44	minimum elong	12297 Jul 09 23:42	27° 9 56'43	2°53'09
min. Earth dist.	12296 Jul 28 22:32	11° Ω 52′04	0.63327 AU	min. Earth dist.	12297 Jul 11 23:04	25° © 33'27	0.65281 AU
morning rise	12296 Aug 01 12:49	8° Ω 32'03		morning rise	12297 Jul 15 17:09	21° 5 540'48	
desc. node	12296 Aug 04 02:48	6° Ω 56′25		direct	12297 Jul 22 04:45	18° © 59'42	
direct	12296 Aug 08 05:00	6° Ω 00'01		desc. node	12297 Jul 22 00:07	18° © 59'50	
morning max el	12296 Aug 22 03:42	14° Ω 01'50	27°47'36	morning max el	12297 Aug 04 14:38	26° © 54'10	27°04'36
	12296 Sep 04 01:25	0° m y			12297 Aug 07 12:07	0 $^{\circ}$ Ω	
	12296 Sep 22 01:08	0∘ 亚			12297 Aug 28 16:53	0° m	
morning set	12296 Sep 25 19:11	7° ≙ 20'38		morning set	12297 Sep 09 05:09	20° m 37'40	
asc. node	12296 Sep 27 19:27	11° ≏ 26′08		max. Earth dist.	12297 Sep 13 13:12	-	1.33618 AU
max. Earth dist.	12296 Sep 30 20:03	17° ≏ 46'26	1.32320 AU		12297 Sep 13 22:27	0∘ ⊽	
				asc. node	12297 Sep 14 16:07	1° ≏ 30'28	
superior conj	12296 Oct 03 14:13	23° ≏ 42'27	0°53'36				
minimum elong	12296 Oct 03 12:04	23° ≏ 30'50	0°53'30	superior conj	12297 Sep 17 16:32	7° ≏ 47'43	0°28'48
	12296 Oct 06 11:22	0° M		minimum elong	12297 Sep 17 15:07	7° ≏ 40'15	0°28'32
evening rise	12296 Oct 10 11:08	8°M40'34		evening rise	12297 Sep 24 21:44	23° ≏ 10′23	

	12297 Sep 28 04:36	0°M		behind sun begin	12298 Sep 01 05:01	20° m 57'14	
evening max el	12297 Oct 15 11:06	26°M55'42	21°49'57	behind sun end	12298 Sep 01 17:11	21° m 58'59	
desc. node	12297 Oct 17 20:47	29°M04'28		asc. node	12298 Sep 01 12:47	21° m/36'36	
	12297 Oct 19 02:13	0° ⊼			12298 Sep 05 14:44	0∘ ⊽	
retrograde	12297 Oct 27 22:47	3° ∡ 08'05		evening rise	12298 Sep 09 05:35	7° £ 30'11	
evening set	12297 Oct 30 23:34	2° ∡ ¹47'22		C	12298 Sep 21 10:21	0° M	
C	12297 Nov 06 18:57	30°RM		evening max el	12298 Sep 27 11:08	7°M32'14 20°23'2	2
inferior conj	12297 Nov 08 20:23	28°M51'32	-5°34'13	desc. node	12298 Oct 04 18:10	12°M23'15	
minimum elong	12297 Nov 08 13:37	29°M01'01	5°32'34	retrograde	12298 Oct 08 10:26	12°M59'17	
min. Earth dist.	12297 Nov 08 14:52	28°M59'16	0.54598 AU	evening set	12298 Oct 10 12:40	12°M48'16	
morning rise	12297 Nov 17 04:50	25°M04'10		inferior conj	12298 Oct 19 13:15	8°M52'00 -4°19'58	:
direct	12297 Nov 20 19:09	24°M35'51		minimum elong	12298 Oct 19 03:14	9°M06'39 4°16'33	
	12297 Dec 02 14:35	0° ≯		min. Earth dist.	12298 Oct 20 22:43	8°ML03'02 0.54752	2 AU
morning max el	12297 Dec 03 02:32	0° ∡ 127'37	21°57'52	morning rise	12298 Oct 27 17:10	4° ™ 49′24	
asc. node	12297 Dec 11 17:02	11° ₹ 08'40		direct	12298 Nov 01 04:23	4° ጤ 06'21	
	12297 Dec 22 01:38	0°ප		morning max el	12298 Nov 14 14:47	10°M39'34 23°44'5	7
morning set	12297 Dec 24 04:45	4° る 25'44		asc. node	12298 Nov 28 13:58	29°M26'45	
					12298 Nov 28 21:38	0° ∡ 7	
superior conj	12297 Dec 31 07:31	19° る 32'06	1°30'43	morning set	12298 Dec 08 16:30	19° ∡ 12'27	
minimum elong	12297 Dec 31 09:17	19° る 41'26	1°31'26		12298 Dec 13 15:56	0°ප	
max. Earth dist.	12298 Jan 04 08:08	27° る 51'39	1.34475 AU				
	12298 Jan 05 09:37	0° ≈		superior conj	12298 Dec 15 13:20	4° る 07'02 1°37'38	
evening rise	12298 Jan 08 15:30	6° ≈ 21'51		minimum elong	12298 Dec 15 14:00	4° る 10'39 1°38'30	
desc. node	12298 Jan 13 19:22	15°≈55'40		max. Earth dist.	12298 Dec 18 04:46	9° る 47'51 1.32964	4 AU
	12298 Jan 22 04:00	0° ∀		evening rise	12298 Dec 23 04:15	20° る 05'49	
evening max el	12298 Feb 12 16:47	28°) (08'43	26°52'37		12298 Dec 28 07:22	0° ≈	
	12298 Feb 14 17:10	0°Υ 22		desc. node	12298 Dec 31 16:12	6°≈05'11	
retrograde	12298 Feb 25 22:45	5° Υ 33'00			12299 Jan 16 04:38	0° ∺	0
evening set	12298 Mar 04 11:10	3°Υ00'03		evening max el	12299 Jan 26 05:43	11° X 33'27 27°26'1	0
i patra	12298 Mar 07 14:46	30° ₹ ₩	0.65004.433	retrograde	12299 Feb 08 21:37	18° ¥ 58'58	
min. Earth dist.	12298 Mar 08 11:07	29°) €03'19	0.65904 AU	evening set	12299 Feb 15 17:26	16° ¥ 29'11	
asc. node	12298 Mar 09 14:53	27°\(\dagger)43'10 26°\(\dagger)38'52	0°17'43	min. Earth dist.	12299 Feb 19 13:11	13° ★ 03'45 0.64205 10° ★ 22'29 -0°47'23	
inferior conj	12298 Mar 10 12:54 12298 Mar 10 12:25	26° ★ 38'32 26° ★ 40'16		inferior conj minimum elong	12299 Feb 22 02:24 12299 Feb 22 03:52	10° H 18'36 0°46'24	
minimum elong morning rise	12298 Mar 10 12.23 12298 Mar 16 14:59	20 X 40 10 21° X 02'33	0 1/40	asc. node	12299 Feb 22 03.32 12299 Feb 24 12:14	7° \ 56'17	•
direct	12298 Mar 10 14:39 12298 Mar 19 11:30	21 \(\)(0233) 20°\(\)(17'55)		morning rise	12299 Feb 24 12:14 12299 Feb 28 16:19	5° ₩ 00'03	
morning max el	12298 Mar 25 20:57	23°) (40'07	18°10'17	direct	12299 Mar 03 04:19	4° ∺ 28′23	
morning max cr	12298 Mar 31 02:27	0° Υ	10 10 17	morning max el	12299 Mar 09 14:13	7° ¥ 47'24 17°50'0	ıQ
desc. node	12298 Apr 11 21:05	18° Υ 15'16		morning max er	12299 Mar 24 14:19	0°Υ	
morning set	12298 Apr 13 20:16	21° Y 25'32		morning set	12299 Mar 26 12:34	3° Y 15′03	
morning sec	12298 Apr 19 04:19	0°8		desc. node	12299 Mar 29 17:41	8° Ƴ 39'30	
		• •					
superior conj	12298 Apr 28 23:28	15° 8 30'32	-1°47'56	superior conj	12299 Apr 08 19:44	25° Y 14'49 -1°11'49)
minimum elong	12298 Apr 28 14:15	14° 8 54'22		minimum elong	12299 Apr 08 12:16	24° Υ '44'43 1°11'10)
max. Earth dist.	12298 May 01 00:42		1.45724 AU	Č	12299 Apr 11 18:59	0° ႘	
	12298 May 08 06:25	Π $^{\circ}0$		max. Earth dist.	12299 Apr 13 19:57	3° 8 14'06 1.45111	A U
evening rise	12298 May 15 01:24	10° Ⅲ 33′08		evening rise	12299 Apr 24 14:04	19° 8 56'40	
greatest brilliancy	12298 May 26 21:49	28° Ⅱ 48'13	-0.7m		12299 May 01 04:50	Π $^{\circ}$ 0	
	12298 May 27 16:57	0 \circ \odot		greatest brilliancy	12299 May 09 08:02	12° 耳 04′20 -0.6m	
asc. node	12298 Jun 05 12:18	12° © 09'15		evening max el	12299 May 22 01:18	28° 耳 33′20 20°11′5	1
evening max el	12298 Jun 07 21:39	14° 5 347'10	19°15'04	asc. node	12299 May 23 09:25	29° Ⅱ 49'43	
retrograde	12298 Jun 14 21:29	18° © 41'35			12299 May 23 14:05	0 \circ	
evening set	12298 Jun 18 10:46	17° © 28'07		retrograde	12299 May 29 20:06	3° © 01'26	
inferior conj	12298 Jun 23 21:03	11° © 38'26		evening set	12299 Jun 02 18:55	1° © 31'32	
minimum elong	12298 Jun 23 21:53	11° © 35'43	3°10'04		12299 Jun 04 11:08	30°RⅡ	
min. Earth dist.	12298 Jun 25 07:36	9° © 46'09	0.66852 AU	inferior conj	12299 Jun 08 01:56	25° I 28'51 3°14'11	
morning rise	12298 Jun 29 08:28	5° © 15'24		minimum elong	12299 Jun 08 01:42	25° Ⅲ 29'40 3°13'18	
direct	12298 Jul 05 11:26	2°535'17		min. Earth dist.	12299 Jun 08 22:13	24° I 19'49 0.67979	₽AU
desc. node	12298 Jul 08 21:20	3°517'06	2505646	morning rise	12299 Jun 13 08:09	19° Ⅱ 08'17	
morning max el	12298 Jul 18 01:28	10°507'06	25°56'16	direct	12299 Jun 18 23:50	16° Ⅲ 38'03	
	12298 Aug 02 19:12	0° N		desc. node	12299 Jun 25 18:28	19° Ⅱ 21'57	.0
	12298 Aug 21 06:37	0°Mp		morning max el	12299 Jun 30 11:23	23° Ⅱ 31'13 24°32'2	U
morning set	12298 Aug 23 01:42	3°Mp16'12	1 25405 411		12299 Jul 06 05:18	0₀ ೮ 0₀	
max. Earth dist.	12298 Aug 26 19:51	10 119.23	1.35405 AU	morning set	12299 Jul 27 04:04	0° 3ℓ 15° Ω 04'59	
superior con-	12208 Can 01 11:02	21° m 27'47	0°00!42	morning set max. Earth dist.	12299 Aug 05 04:28	_	LATT
superior conj minimum elong	12298 Sep 01 11:02 12298 Sep 01 11:06	21° m) 28'05		max. Latui Uist.	12299 Aug 08 18:46 12299 Aug 13 09:06	$21^{\circ}\Omega 28'55 1.37571$	AU
mmmum ciong	12276 Sep 01 11.00	21 Hy 20 U3	0 00 54		12277 Aug 13 09.00	עוו ∨	

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superior conj	12299 Aug 15 18:32	4° mp 34'53	-0°33'41	minimum elong	12300 Jul 29 15:56	17° Ω 21'55	1°07'55
minimum elong	12299 Aug 15 20:48	4° Mp 45'50	0°33'43	minimum clong	12300 Aug 05 09:21	0°m	1 07 33
asc. node	12299 Aug 19 09:25	11°Mp40'42	0 33 43	asc. node	12300 Aug 05 05:21 12300 Aug 06 06:08	1° Mp 39'20	
evening rise	12299 Aug 24 08:15	21°m/33'38		evening rise	12300 Aug 08 02:48	5° Mg 13'11	
evening rise	12299 Aug 28 15:33	0° 亞		evening rise	12300 Aug 23 02:18	0° ت	
evening max el	12299 Sep 10 01:20	0 — 18° Ω 56'16	19°17'10	evening max el	12300 Aug 24 03:21	ა <u>⊸</u> 1° ჲ 06'01	18°32'35
retrograde	12299 Sep 19 08:18	23° Ω 34'26	17 17 10	retrograde	12300 Sep 01 00:51	5° ഫ 04'28	10 32 33
evening set	12299 Sep 21 04:38	23° Ω 24'13		evening set	12300 Sep 03 00:54	4° Ω 49'55	
desc. node	12299 Sep 21 15:36	23° Ω 18'40		desc. node	12300 Sep 08 13:04	2° ₽ 04'43	
inferior conj	12299 Sep 29 18:46	19° Ω 14'50	-2°32'27	inferior conj	12300 Sep 10 21:02	0° ₽ 20'29	-0°43'50
minimum elong	12299 Sep 29 12:07	19° £ 25'47	2°29'43	minimum elong	12300 Sep 10 19:18	0° £ 23′50	0°43'14
min. Earth dist.	12299 Oct 02 09:54	17° £ 30'53	0.55828 AU	g	12300 Sep 11 07:35	30°R.M)	0 .5
morning rise	12299 Oct 07 17:02	14° Ω 40'24	0.00020110	min. Earth dist.	12300 Sep 14 02:46	27° mp 51'15	0.57610 AU
direct	12299 Oct 13 00:19	13° Ω 36'14		morning rise	12300 Sep 18 10:14	25° m) 08'26	0.57010110
morning max el	12299 Oct 27 01:28	20° Ω 42'49	25°29'46	direct	12300 Sep 24 10:08	23° m) 37'49	
morning max or	12299 Nov 04 01:46	0°M	23 27 10	ancer	12300 Oct 07 11:37	0∘ ರ	
asc. node	12299 Nov 15 10:50	18°M21'15		morning max el	12300 Oct 07 17:37 12300 Oct 08 17:35	° ≏ 10'06	26°54'17
use. Houe	12299 Nov 21 07:41	0° ₹		morning max er	12300 Oct 00 17:33 12300 Oct 29 05:24	0°M	20 5417
morning set	12299 Nov 23 04:00	3° ∡ 754'48		asc. node	12300 Oct 25 03:24 12300 Nov 02 07:38	7°M42'46	
morning set	12299 NOV 23 04.00	3 × 34 40		morning set	12300 Nov 02 07:38 12300 Nov 07 13:37	18°M28'41	
superior conj	12299 Nov 29 22:59	18° ∡ ¹49'50	1°38'16	morning set	12300 Nov 07 13.37 12300 Nov 12 19:57	0°×7	
minimum elong	12299 Nov 29 22:39 12299 Nov 29 22:32	18° х 49'30	1°39'07		12300 NOV 12 19.37	0 X	
max. Earth dist.	12299 Nov 29 22.32 12299 Dec 01 08:32	21° x '4/21	1.31928 AU	superior conj	12200 N 14 10-20	3° ∡ ³34'54	1922/50
max. Earm dist.		21 x・3449	1.51928 AU	1	12300 Nov 14 10:30	3° x '34 34 34 3° x '27'07	
	12299 Dec 05 02:07	0°る 4° る 11'48		minimum elong	12300 Nov 14 09:06		
evening rise	12299 Dec 07 02:04			max. Earth dist.	12300 Nov 14 16:40	4° ⋌ ¹09'17	1.31386 AU
desc. node	12299 Dec 18 13:09	25° る 53'24		evening rise	12300 Nov 21 06:23	18° ∡ ³33'22	
·	12299 Dec 21 00:20	0°≈	27020121	1 1	12300 Nov 26 21:23	0°る	
evening max el	12300 Jan 08 16:00	24°≈26'51	27°30'31	desc. node	12300 Dec 05 10:12	15° る 11'58	
	12300 Jan 16 01:47	0°) {			12300 Dec 15 19:17	0° ≈	2501100
retrograde	12300 Jan 22 12:50	1°) 46′29		evening max el	12300 Dec 21 20:54	6°≈36'09	27°01'00
	12300 Jan 28 14:55	30°R≈		retrograde	12301 Jan 04 19:17	13°≈47'20	
evening set	12300 Jan 29 11:45	29°≈27'38		evening set	12301 Jan 11 14:43	11° ≈ 47'41	
min. Earth dist.	12300 Feb 02 05:36	26°≈28'53	0.62229 AU	min. Earth dist.	12301 Jan 15 11:12	9°≈07'13	0.60096 AU
inferior conj	12300 Feb 05 04:21	23°≈42'55		inferior conj	12301 Jan 18 15:20	6°≈30'59	
minimum elong	12300 Feb 05 08:30	23° ≈ 33'08	1°59'30	minimum elong	12301 Jan 18 22:21	6°≈16'31	3°18'29
asc. node	12300 Feb 11 09:35	18°≈59'22		morning rise	12301 Jan 26 08:53	1°≈45'44	
morning rise	12300 Feb 12 07:53	18° ≈ 37′24		direct	12301 Jan 28 10:59	1° ≈ 28'56	
direct	12300 Feb 14 13:28	18° ≈ 14'56		asc. node	12301 Jan 29 06:53	1° ≈ 31'40	
morning max el	12300 Feb 21 07:31	21° ≈ 40'49	17°47'43	morning max el	12301 Feb 04 21:32	5°≈11'23	18°04'02
	12300 Feb 27 16:41	0° ∀		morning set	12301 Feb 20 11:58	29° ≈ 50'48	
morning set	12300 Mar 09 03:53	16°) €09'54			12301 Feb 20 13:56	0° ∀	
desc. node	12300 Mar 16 14:15	29° ∺ 12'12					
	12300 Mar 17 01:21	0° Y		superior conj	12301 Mar 02 10:20	18° ∺ 01'19	0°08'01
				minimum elong	12301 Mar 02 11:00	18° ∺ 04'16	0°08'11
superior conj	12300 Mar 20 14:58	6° Y 04'24		behind sun begin	12301 Mar 02 04:15	17°) 34′16	
minimum elong	12300 Mar 20 11:59	5° Y 51′50	0°30'17	behind sun end	12301 Mar 02 17:45	18° ∺ 34'11	
max. Earth dist.	12300 Mar 27 12:46	17° Y 27'37	1.43824 AU	desc. node	12301 Mar 03 10:50	19°) 49'38	
evening rise	12300 Apr 04 04:04	29° Y 32′10			12301 Mar 09 08:48	0° Υ	
	12300 Apr 04 11:15	0°B		max. Earth dist.	12301 Mar 10 01:15	1° Y ′08'52	1.41999 AU
	12300 Apr 24 21:10	Π °0		evening rise	12301 Mar 15 08:43	9° Ƴ 50'11	
evening max el	12300 May 04 23:14	12° Ⅱ 20′28	21°21'22		12301 Mar 28 12:47	9° 8	
asc. node	12300 May 10 06:38	16° Ⅱ 32'08		evening max el	12301 Apr 17 16:23	26° 8 08'23	22°39'19
retrograde	12300 May 13 18:38	17° Ⅱ 29'46			12301 Apr 22 04:39	Π °0	
evening set	12300 May 18 03:49	15° Ⅱ 43'37		asc. node	12301 Apr 27 03:55	2° Ⅱ 00′07	
inferior conj	12300 May 23 10:07	9° Ⅱ 29'32	3°05'46	retrograde	12301 Apr 27 15:29	2° Ⅱ 01'13	
minimum elong	12300 May 23 08:57	9° Ⅱ 33'36	3°04'50	evening set	12301 May 02 11:47	29° 8 59'53	
min. Earth dist.	12300 May 23 16:51	9° Ⅱ 06′05	0.68633 AU		12301 May 02 11:44	30° ₹ 8	
morning rise	12300 May 28 13:52	3° Ⅱ 13'47		inferior conj	12301 May 07 19:32	23° 8 36'40	2°46'55
direct	12300 Jun 02 16:47	0° Ⅱ 59'54		minimum elong	12301 May 07 17:41	23° 8 43'04	2°45'54
desc. node	12300 Jun 12 15:30	6° Ⅱ 47'30		min. Earth dist.	12301 May 07 13:25	23° 8 57'56	0.68817 AU
morning max el	12300 Jun 12 21:50	7° Ⅱ 03′23	23°02'42	morning rise	12301 May 12 23:29	17° 8 27'01	
	12300 Jun 30 17:40	0 \circ \odot		direct	12301 May 17 13:13	15° 8 33'17	
morning set	12300 Jul 17 08:38	25° © 52'17		morning max el	12301 May 26 11:50	20° 8 44'49	21°36'04
	12300 Jul 19 19:45	$0^{\circ}\Omega$		desc. node	12301 May 30 12:26	25° 8 11'51	
max. Earth dist.	12300 Jul 21 16:41	3° Ω 11'41	1.39898 AU		12301 Jun 03 08:04	Π $^{\circ}0$	
					12301 Jun 23 22:50	0ಂಣ	
superior conj	12300 Jul 29 11:03	16° Ω 59'31	-1°08'02	morning set	12301 Jun 27 11:10	5° 5 31'08	
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max. Earth dist.	12301 Jul 03 19:08	15° © 45'27	1.42109 AU	superior conj	12302 Jun 22 05:50	9° © 01'35	-2°04'10
				minimum elong	12302 Jun 22 11:34	9° 5 25'17	2°04'44
superior conj	12301 Jul 11 08:03	28° 5 30'37	-1°40'04	evening rise	12302 Jul 04 23:04	0° Ω 37'16	
minimum elong	12301 Jul 11 14:50	29° © 00'05		Č	12302 Jul 04 14:28	$0^{\circ}\Omega$	
8	12301 Jul 12 04:36	0°Ω		asc. node	12302 Jul 10 23:45	11° Ω 01'41	
avanina riaa	12301 Jul 22 09:18	18° Ω 18'06			12302 Jul 10 23:43		18°03'59
evening rise				evening max el			18 03 39
asc. node	12301 Jul 24 02:53	21° Ω 27'46			12302 Jul 26 07:58	0° m)	
	12301 Jul 28 21:31	0° m ∤		retrograde	12302 Jul 28 13:39	0° m 25'10	
evening max el	12301 Aug 07 13:05	13° m 51'40	18°08'35		12302 Jul 30 19:37	30° R Ω	
retrograde	12301 Aug 14 11:55	17° m 24'10		evening set	12302 Jul 31 04:59	29° Ω 50′39	
evening set	12301 Aug 16 19:10	17° mp 01'18		inferior conj	12302 Aug 06 14:47	24° Ω 41'48	1°52'58
inferior conj	12301 Aug 23 20:44	12° mp 11'20	0°46'29	minimum elong	12302 Aug 06 17:22	24° Ω 35′09	1°51'38
minimum elong	12301 Aug 23 22:11	12° mp 08'04	0°45'36	min. Earth dist.	12302 Aug 09 13:30	21° Ω 40'37	0.62077 AU
desc. node	12301 Aug 26 10:32	9° Mp 51'54	0 43 30	morning rise	12302 Aug 13 03:23	18°Ω35'34	0.02077710
	-		0.50704.411	-	_		
min. Earth dist.	12301 Aug 27 03:32	9° Mp 14'56	0.59794 AU	desc. node	12302 Aug 13 07:56	18° Ω 27'35	
morning rise	12301 Aug 30 21:59	6° Mp 26′53		direct	12302 Aug 19 19:44	16° Ω 12'55	
direct	12301 Sep 06 09:16	4° Mp 28'11		morning max el	12302 Sep 02 23:19	24° Ω 14'31	27°57'23
morning max el	12301 Sep 20 17:19	12° m 19'31	27°45'14		12302 Sep 08 04:17	0° m y	
	12301 Oct 04 16:26	0ಂ ರ			12302 Sep 28 01:29	0∘ ত	
asc. node	12301 Oct 20 04:23	27° ₽ 23'12		morning set	12302 Oct 06 19:46	16° ₽ 49'33	
	12301 Oct 21 11:07	0°M		asc. node	12302 Oct 07 01:05	17° ≏ 16'48	
morning set	12301 Oct 22 19:33	2°M48'41		max. Earth dist.	12302 Oct 12 06:43	28° ₽ 21'38	1.31810 AU
max. Earth dist.	12301 Oct 22 13:33 12301 Oct 29 01:22	16°M21'41	1.31341 AU	max. Lartii dist.	12302 Oct 12 00:43	0°M	1.51610 AC
max. Earm dist.	12301 Oct 29 01.22	10 1162141	1.51541 AU		12302 Oct 13 00.47	UIL	
		4.00 W 4.5100					
superior conj	12301 Oct 29 21:57	18° M 16'09	1°22'02	superior conj	12302 Oct 14 07:30	2°M48'19	1°05'33
minimum elong	12301 Oct 29 19:54	18° ™ 04'48	1°22'23	minimum elong	12302 Oct 14 05:15	2°M35'55	1°05'35
	12301 Nov 04 04:59	0° ∡ 7		evening rise	12302 Oct 21 01:46	17° M 38'37	
evening rise	12301 Nov 05 14:56	3° ∡ ¹04'01			12302 Oct 27 01:32	0° ∡ ¹	
	12301 Nov 19 20:11	0° ට		desc. node	12302 Nov 09 04:37	21° × ⁷ 28'24	
desc. node	12301 Nov 22 07:23	3°₹49'00		evening max el	12302 Nov 15 07:00	28° ∡ ¹22'30	24°27'57
evening max el	12301 Dec 03 17:53	17° る 53'14	25°57'45	ovening man er	12302 Nov 17 02:13	0°중	2.2707
retrograde	12301 Dec 03 17:33 12301 Dec 17 15:49	24°る56'00	23 37 43	retrograde	12302 Nov 29 00:26	5° る 14'08	
•				•			
evening set	12301 Dec 23 22:07	23° る 23'33		evening set	12302 Dec 04 05:54	4°る13'46	
min. Earth dist.	12301 Dec 28 06:40		0.57984 AU	min. Earth dist.	12302 Dec 09 18:30		0.56164 AU
inferior conj	12301 Dec 31 07:49	18° る 37'10		inferior conj	12302 Dec 12 03:44	29° ₹ 54'30	-5°36'09
minimum elong	12301 Dec 31 16:19	18° る 21'58	4°35'32	minimum elong	12302 Dec 12 09:34	29° ∡ ¹45'22	5°34'31
morning rise	12302 Jan 08 13:15	14° る 14'18			12302 Dec 12 00:13	30°₽ ⋌	
direct	12302 Jan 10 16:20	13° る 59'44		morning rise	12302 Dec 20 15:18	25° ∡ 52'30	
asc. node	12302 Jan 16 04:08	15° る 43'14		direct	12302 Dec 23 02:22	25° ∡ ³36′18	
morning max el	12302 Jan 19 04:27	18° る 08'46	18°40'47		12303 Jan 01 15:13	0°ਰ	
morning max or	12302 Jan 27 18:32	0°≈	10 10 17	morning max el	12303 Jan 02 00:15	0° る 21'19	10°30'45
. ,				•			19 39 43
morning set	12302 Feb 04 07:43	14°≈02'51		asc. node	12303 Jan 03 01:19	1°る24'37	
	12302 Feb 12 14:24	0° ∀		morning set	12303 Jan 19 11:14	28° る 34'16	
					12303 Jan 20 04:13	0° ≈	
superior conj	12302 Feb 13 02:05	0° ¥ 54'48	0°40'40				
minimum elong	12302 Feb 13 04:35	1°) €06'33	0°40'46	superior conj	12303 Jan 27 09:21	14° ≈ 30′28	1°05'55
desc. node	12302 Feb 18 07:28	10°) €28'30		minimum elong	12303 Jan 27 12:13	14° ≈ 44'37	1°06'13
max. Earth dist.	12302 Feb 20 09:03	14°) €07'30	1.39843 AU	max. Earth dist.	12303 Feb 02 15:00	26° ≈ 26′06	1.37611 AU
evening rise	12302 Feb 24 10:12	21°) 03'49			12303 Feb 04 13:46	0° ∀	
8 21	12302 Mar 01 21:08	0° Υ		desc. node	12303 Feb 05 04:07	1°) 04'39	
	12302 Mar 07 21:00	0°8		evening rise	12303 Feb 05 04:07 12303 Feb 06 08:23	3° ¥ 10'44	
			24000107	evening rise		3 γ (1044 0° γ	
evening max el	12302 Mar 31 06:39	9° 8 58'35	24°00'06		12303 Feb 22 23:15		25015102
retrograde	12302 Apr 11 09:23	16° 8 30'45		evening max el	12303 Mar 13 20:05	23° Y ′50'08	25°17'03
asc. node	12302 Apr 14 01:15	15° 8 58'20			12303 Mar 22 03:39	0°8	
evening set	12302 Apr 16 17:16	14° 8 16'11		retrograde	12303 Mar 25 23:03	0° 8 51'33	
min. Earth dist.	12302 Apr 21 09:50	8° 8 49'54	0.68545 AU		12303 Mar 29 11:24	30° ŖƳ	
inferior conj	12302 Apr 22 04:18	7° 8 47'08	2°18'09	evening set	12303 Mar 31 18:39	28° Y 26'41	
minimum elong	12302 Apr 22 02:09	7° 8 54'28		asc. node	12303 Mar 31 22:38	28° Y ′18'08	
morning rise	12302 Apr 27 11:05	1° 8 44'43		min. Earth dist.	12303 Apr 05 03:54	23° Y '35'44	0.67839 AU
direct	12302 Apr 27 11:03 12302 May 01 12:00	0° 8 12'12		inferior conj	12303 Apr 06 10:30	21° Υ 56'16	1°39'27
		4° 8 38'00	20°19'15		=	21 γ 36 16 22° γ 02'47	1°38'33
morning max el	12302 May 09 08:16		20 1913	minimum elong	12303 Apr 06 08:30		1 30 33
desc. node	12302 May 17 09:16	14° 8 19'12		morning rise	12303 Apr 11 22:44	16° Y ′02'25	
	12302 May 28 07:05	0° Π		direct	12303 Apr 15 11:43	14° Y 50′19	
morning set	12302 Jun 06 16:37	14° Ⅱ 16'30		morning max el	12303 Apr 22 12:15	18° Y 41'22	19°16'23
max. Earth dist.	12302 Jun 16 03:59	29° Ⅱ 09'30	1.43943 AU		12303 May 01 12:36	$0^{\circ}S$	
	12302 Jun 16 16:35	0 \circ \odot		desc. node	12303 May 04 06:00	3° 8 57'20	
				greatest brilliancy	12303 May 05 08:08	5° 8 34'04	-0.7m
				-	-		

morning set	12303 May 16 18:15	22° 8 57'15		desc. node	12304 Apr 20 02:39	23° Y ′58'02	
	12303 May 21 07:37	$\Pi^{\circ}0$			12304 Apr 23 22:38	0° 8	
max. Earth dist.	12303 May 29 18:46	13° Ⅱ 12'39	1.45199 AU	morning set	12304 Apr 25 14:06	2° 8 35'42	
	12202 1 02 04 20	100Ж25114	2012126		1220434 11 12 41	250 42 212 5	2002147
superior conj	12303 Jun 02 04:28	18° Ⅲ 35'14		superior conj	12304 May 11 12:41	27° 8 36'35	
minimum elong	12303 Jun 02 04:23	18° Ⅱ 34'53	2°14'16	minimum elong	12304 May 11 05:21	27° 8 07'57	
	12303 Jun 09 07:23	0		max. Earth dist.	12304 May 11 13:48	_	1.45752 AU
evening rise	12303 Jun 16 15:00	11° 9 58'44			12304 May 13 01:23	Π °0	
asc. node	12303 Jun 27 20:40	0° Ω 14'52		evening rise	12304 May 27 06:32	22° Ⅱ 19'35	
	12303 Jun 27 16:48	$0^{\circ}\Omega$			12304 Jun 01 03:00	0 \circ	
evening max el	12303 Jul 05 16:39	10° Ω 34'35	18°17'53	greatest brilliancy	12304 Jun 05 04:34	6° © 23'05	-0.8m
retrograde	12303 Jul 12 01:35	13° Ω 57'57		asc. node	12304 Jun 13 17:39	18° © 59'49	
evening set	12303 Jul 15 01:17	13° Ω 09'16		evening max el	12304 Jun 18 04:06	24° © 14'53	18°49'25
inferior conj	12303 Jul 20 23:04	7° Ω 43′21	2°37'20	retrograde	12304 Jun 24 19:59	27° 9 54'09	
minimum elong	12303 Jul 21 01:25	7° Ω 36′36	2°36'05	evening set	12304 Jun 28 04:16	26° 5 49'47	
min. Earth dist.	12303 Jul 23 08:48	4° Ω 57'59	0.64203 AU	inferior conj	12304 Jul 03 17:46	21° © 08'17	3°03'12
morning rise	12303 Jul 27 00:08	1° Ω 25′20		minimum elong	12304 Jul 03 19:13	21° © 03'42	3°02'09
	12303 Jul 29 02:54	30° Ŗ ூ		min. Earth dist.	12304 Jul 05 12:44	18° 9 54'00	0.66003 AU
desc. node	12303 Jul 31 05:17	29° © 07'59		morning rise	12304 Jul 09 09:26	14° © 45'46	
direct	12303 Aug 02 15:08	28° 5 47'51		direct	12304 Jul 15 17:53	12° © 03'58	
	12303 Aug 07 11:56	$0^{\circ}\Omega$		desc. node	12304 Jul 17 02:33	12° © 10'35	
morning max el	12303 Aug 16 08:58	6° Ω 48'16	27°32'51	morning max el	12304 Jul 28 19:52	19° © 49'55	26°38'07
-	12303 Sep 03 04:04	0° m/		•	12304 Aug 06 12:24	$0^{\circ}\Omega$	
morning set	12303 Sep 20 11:48	0° ჲ 25'05			12304 Aug 26 06:03	0° m	
C	12303 Sep 20 06:43	0∘ ⊽		morning set	12304 Sep 02 16:30	13° m 26'47	
asc. node	12303 Sep 23 21:45	7° ≏ 18'47		max. Earth dist.	12304 Sep 06 17:52	21° m) 18'48	1.34326 AU
max. Earth dist.	12303 Sep 25 05:07	10° ≏ 01'27	1.32808 AU	asc. node	12304 Sep 09 18:23	27° m 24'20	
					12304 Sep 11 00:38	0∘ ⊽	
superior conj	12303 Sep 28 13:10	17° ≏ 05'52	0°43'42				
minimum elong	12303 Sep 28 11:15	16° ≏ 55'34	0°43'31	superior conj	12304 Sep 11 12:31	1° ჲ 01'36	0°16'50
minimum vieng	12303 Oct 04 12:19	0°M	0 .551	minimum elong	12304 Sep 11 11:38	0° ჲ 56'59	0°16'35
evening rise	12303 Oct 05 13:00	2°M12'17		evening rise	12304 Sep 18 22:42	16° ≏ 38'55	0 1030
evening rise	12303 Oct 20 16:51	0°×7		evening rise	12304 Sep 25 14:38	0°M	
desc. node	12303 Oct 27 01:55	7° ∡ 748'46		evening max el	12304 Oct 08 10:16		21°10'52
evening max el	12303 Oct 27 07:33	8° ∡ 127'26	22°46'37	desc. node	12304 Oct 12 23:18	22°M22'10	21 1002
retrograde	12303 Nov 09 19:59	14° × 58'01	22 4037	retrograde	12304 Oct 20 07:19	24°M36'56	
evening set	12303 Nov 13 15:54	14° × 26'05		evening set	12304 Oct 22 20:43	24°M21'38	
min. Earth dist.	12303 Nov 21 01:58	11° × 20'03	0.54939 AU	inferior conj	12304 Oct 31 20:58	20°M27'17	5°08'47
inferior conj	12303 Nov 21 01:38 12303 Nov 22 05:09	10° × 25'30		minimum elong	12304 Oct 31 11:50	20°M40'08	
minimum elong	12303 Nov 22 03:09	10° × 23°30	5°50'43	min. Earth dist.	12304 Nov 01 08:23		0.54554 AU
morning rise	12303 Nov 30 15:53	6°×737'01	3 30 43	morning rise	12304 Nov 09 03:33	16°M36'23	0.54554 AC
direct	12303 Nov 30 13:33 12303 Dec 03 19:04	6°×714'20		direct	12304 Nov 13 03:02	16°M02'24	
morning max el	12303 Dec 05 19:04 12303 Dec 15 06:03		21°01'33	morning max el	12304 Nov 25 22:53	22°M11'45	22042120
asc. node	12303 Dec 13 00:05	18° х 19'44	21 0133	morning max ci	12304 Nov 23 22:33 12304 Dec 02 16:18	0° x ⁷	22 722)
ase. Houe	12303 Dec 28 02:44	0°ਰ		asc. node	12304 Dec 06 19:25	6° ₹ 11'25	
morning set	12304 Jan 03 19:42	13°る17'06		morning set	12304 Dec 18 06:48	28°×1123	
morning set	12304 Jan 03 19.42	13 01700		morning set	12304 Dec 19 04:38	28 × 03 39	
superior conj	12304 Jan 11 03:58	28° る 36'53	1°23'41		12304 Dec 17 04.30	٥ ٠	
minimum elong	12304 Jan 11 06:17	28° る 48'50	1°24'16	superior conj	12304 Dec 25 06:30	13° る 03'29	1°34'26
minimum crong	12304 Jan 11 20:09	0°≈	1 2110	minimum elong	12304 Dec 25 07:49	13° る 10'31	1°35'14
max. Earth dist.	12304 Jan 16 00:24	8° ≈ 23'13	1.35536 AU	max. Earth dist.	12304 Dec 28 16:47	20° ප 16'36	1.33786 AU
evening rise	12304 Jan 20 00:25	16°≈02'56	1.55550110	evening rise	12305 Jan 02 06:35	29° る 30'07	1.55700710
desc. node	12304 Jan 23 00:51	21°≈34'26		evening rise	12305 Jan 02 12:42	0° ≈	
dese. Hode	12304 Jan 27 21:13	0° ∀		desc. node	12305 Jan 08 21:39	11° ≈ 52'43	
	12304 Feb 17 11:15	0°Υ		desc. Hode	12305 Jan 20 00:02	0°)	
evening max el	12304 Feb 24 09:49	7° Υ 38'54	26°22'47	evening max el	12305 Feb 05 23:21		27°10'01
retrograde	12304 Net 24 09.49 12304 Mar 08 07:28	14° Υ 57'17	20 22 71	retrograde	12305 Feb	28°) 40'11	2, 1001
evening set	12304 Mar 14 14:13	14 γ 3/1/ 12° γ 26'00		evening set	12305 Feb 19 09:50 12305 Feb 26 01:58	26°) (4011	
asc. node	12304 Mar 17 20:01	9° Υ 12'18		min. Earth dist.	12305 Feb 26 01:38 12305 Mar 02 00:01	20 X 0/4/ 22° X 24'52	0.65226 AU
min. Earth dist.	12304 Mar 18 17:21	8° Υ 09'48	0.66725 AU	inferior conj	12305 Mar 04 06:45	19° ¥ 52'10	
inferior conj	12304 Mar 20 12:06	5° Υ 59'48	0.66723 AU 0°50'36	minimum elong	12305 Mar 04 07:00	19 X 52 10 19° X 51'30	0°08'19
minimum elong	12304 Mar 20 12:06 12304 Mar 20 10:51	5° γ 3948 6° γ 03'36	0°50'07	transit middle	12305 Mar 04 07:00 12305 Mar 04 07:00	19° ★ 51'30	0°08'19
morning rise	12304 Mar 20 10:31 12304 Mar 26 08:22	0° Υ 16'19	0 3007	transit middle transit begin	12305 Mar 04 07:00 12305 Mar 04 04:25	19° X 51'30	0 00 17
morning rise		0° 1 16°19 30° R ∺		transit begin transit end		19° X 38'43	
direct	12304 Mar 26 20:39 12304 Mar 29 10:36	30° ₹ ₹ 29° ¥ 22'24		asc. node	12305 Mar 04 09:34 12305 Mar 04 17:24	19° X 44°17 19° X 22'30	
direct	12304 Mar 29 10:36 12304 Apr 01 02:07	29° π 22°24 0° Υ		morning rise	12305 Mar 04 17:24 12305 Mar 10 13:36	14° X 22'30	
		T		morning rise		14 77 / 1 / /	
morning max el	12304 Apr 04 23:09		18°29'33	direct	12305 Mar 13 06:24	13°) (42'38	

morning max el	12305 Mar 19 14:55	17° ∺ 01'48	17°59'37	inferior conj	12306 Feb 15 15:43	3° ∺ 26′29	-1°17'58
	12305 Mar 29 05:03	0 ° Υ		minimum elong	12306 Feb 15 18:15	3° ¥ 20′06	1°16'28
morning set	12305 Apr 06 14:27	13° Y 38'50			12306 Feb 19 09:28	30° R ≈	
desc. node	12305 Apr 06 23:17	14° Y 15'04		asc. node	12306 Feb 19 14:46	29° ≈ 49'52	
	12305 Apr 16 16:02	9° 8		morning rise	12306 Feb 22 11:18	28° ≈ 11'12	
				direct	12306 Feb 24 20:19	27° ≈ 43'56	
superior conj	12305 Apr 20 23:41	6° 8 52'19	-1°33'47		12306 Mar 02 04:08	0°) €	
minimum elong	12305 Apr 20 14:33	6° 8 16'12	1°33'17	morning max el	12306 Mar 03 08:40	1°) €04'25	17°46'58
max. Earth dist.	12305 Apr 24 10:05	12° 8 16'45	1.45551 AU	morning set	12306 Mar 19 17:18	25° ¥ 58′06	
	12305 May 05 19:54	Π° 0			12306 Mar 22 01:33	0° Y	
evening rise	12305 May 07 01:44	1° Ⅱ 54'52		desc. node	12306 Mar 24 19:53	4° Υ 43'13	
greatest brilliancy	12305 May 20 18:13	22° Ⅱ 41'27	-0.7m				
	12305 May 25 21:04	0°9		superior conj	12306 Apr 01 05:06	17° Ƴ 02'54	-0°54'29
asc. node	12305 May 31 14:43	7° 5 07'16		minimum elong	12306 Mar 31 23:29	16° Ƴ 39'52	0°53'51
evening max el	12305 Jun 01 10:54	7° 9 59'43	19°37'29	max. Earth dist.	12306 Apr 07 04:33	26° Ƴ 41'49	1.44632 AU
retrograde	12305 Jun 08 17:53	12° © 07'16			12306 Apr 09 06:35	0° ႘	
evening set	12305 Jun 12 11:12	10°5546'36		evening rise	12306 Apr 16 12:57	11° 8 18'02	
inferior conj	12305 Jun 17 19:43	4° 9 51'01	3°13'54	Ü	12306 Apr 28 23:34	0°II	
minimum elong	12305 Jun 17 20:05	4° © 49'46	3°12'59	evening max el	12306 May 15 11:56	21° ∏ 45'27	20°40'05
min. Earth dist.	12305 Jun 18 24:00	3°916'56	0.67382 AU	asc. node	12306 May 18 11:52	24° ∏ 24'35	
	12305 Jun 21 16:08	30°R Ⅱ		retrograde	12306 May 23 16:48	26° Ⅱ 30'59	
morning rise	12305 Jun 23 04:35	28° ∏ 28'47		evening set	12306 May 27 19:53	24°∏54'05	
direct	12305 Jun 29 02:55	25° I 52'14		inferior conj	12306 Jun 02 02:16	18° ∏ 46'04	3°11'57
desc. node	12305 Jul 03 23:43	27° I 17'07		minimum elong	12306 Jun 02 01:37	18° ∏ 48'20	3°11'04
desc. node	12305 Jul 07 21:03	0°95		min. Earth dist.	12306 Jun 02 16:39	17° II 56'27	0.68306 AU
morning max el	12305 Jul 11 06:27	3°509'04	25°22'04	morning rise	12306 Jun 07 07:05	12° П 27'09	0.00500710
morning max er	12305 Jul 31 17:16	0° U	23 22 04	direct	12306 Jun 12 17:19	12 П 27 05	
morning set	12305 Aug 16 06:05	25° Ω 45'44		desc. node	12306 Jun 20 20:49	13° Д 58'53	
morning set	12305 Aug 10 00:05	0°m)		morning max el	12306 Jun 23 16:29	16° ∏ 37'01	23°54'26
max. Earth dist.	12305 Aug 18 13:31 12305 Aug 19 21:07		1.36292 AU	morning max ci	12306 Jul 04 18:24	0°95	23 34 20
max. Earm dist.	12303 Aug 19 21.07	2 111/2324	1.30292 AU		12306 Jul 24 17:17	0°Ω	
superior conj	12305 Aug 26 02:47	14° m 28'46	001420	morning set	12306 Jul 28 23:49	7° Ω 09'35	
minimum elong	12305 Aug 26 03:41	14° my 33'17		max. Earth dist.	12306 Aug 01 18:39	13° Ω 44'26	1.38550 AU
behind sun begin	12305 Aug 26 00:51	14° My 19'11	0 1426	max. Earth dist.	12300 Aug 01 16.39	13 6644 20	1.36330 AU
behind sun begin	Č	-		aumorior coni	12206 Aug 00 04:22	27°Ω18'13	0040115
	12305 Aug 26 06:31	14° Mp 47'23		superior conj	12306 Aug 09 04:22 12306 Aug 09 07:44	$27^{\circ} \Omega 34'09$	
asc. node	12305 Aug 27 15:02	17° ™ 30'08 0° ⊆		minimum elong	12306 Aug 10 14:22	2/ 3(3409	0 48 13
	12305 Sep 02 18:17 12305 Sep 03 04:42	0° £ 53'05		1-	12306 Aug 10 14.22 12306 Aug 14 11:42	0 ly 7°Mg31'59	
evening rise		0 2 33 03 29° 2 38'28	10052120	asc. node	U		
evening max el	12305 Sep 20 16:15	0°M	19 32 30	evening rise	12306 Aug 18 04:19	14° Mp 46'57 0° <u> </u>	
daga mada	12305 Sep 21 01:02			arranina marral	12306 Aug 26 07:13		10055120
desc. node	12305 Sep 29 20:41	4°M41'39		evening max el	12306 Sep 03 11:52		18°55'39
retrograde	12305 Sep 30 22:15	4°ጤ44'49 4°ጤ34'55		retrograde	12306 Sep 12 03:41	15° Ω 42'21	
evening set	12305 Oct 02 20:13		2027/25	evening set	12306 Sep 14 00:40	15° Ω 30'57	
inferior conj	12305 Oct 11 17:45	0°M33'50		desc. node	12306 Sep 16 18:07	14° △ 37'08	1945102
minimum elong	12305 Oct 11 08:38	0°ጤ47'47	3-32-38	inferior conj	12306 Sep 22 07:37	11° Ω 13'39	
i Palita	12305 Oct 12 15:46	30° ₹ Ω	0.55110.411	minimum elong	12306 Sep 22 03:09	11° Ω 21'33	1°43'12
min. Earth dist.	12305 Oct 13 17:14	29° £ 21'12	0.55110 AU	min. Earth dist.	12306 Sep 25 06:53	9° Ω 08'27	0.56510 AU
morning rise	12305 Oct 19 19:36	26° £ 19'14		morning rise	12306 Sep 30 02:24	6° Ω 22'43	
direct	12305 Oct 24 15:19	25° Ω 28'18		direct	12306 Oct 05 17:06	5° Ω 07'46	26000100
	12305 Nov 04 18:40	0°M	24020154	morning max el	12306 Oct 19 22:12		26°09'08
morning max el	12305 Nov 07 09:34	2°M16'14	24°30′54	1	12306 Nov 02 14:34	0°M	
asc. node	12305 Nov 23 16:20	24°M46'10		asc. node	12306 Nov 10 13:11	13°M53'09	
	12305 Nov 26 11:55	0° ₹		morning set	12306 Nov 17 05:38	27°M29'13	
morning set	12305 Dec 02 18:41	12° ₹ 49'33			12306 Nov 18 09:36	0° ∡ 7	
superior conj	12305 Dec 09 14:15	27° 🗷 42'34		superior conj	12306 Nov 24 00:58	12° 🗷 27'33	1°36'44
minimum elong	12305 Dec 09 14:25	27° ∡ ¹43'34	1°39'31	minimum elong	12306 Nov 24 00:06	12° × ⁷ 22'40	1°37'31
	12305 Dec 10 15:25	0° ろ		max. Earth dist.	12306 Nov 24 22:39	14° ₹ 27'50	1.31632 AU
max. Earth dist.	12305 Dec 11 16:45		1.32468 AU	evening rise	12306 Dec 01 00:26	27° ∡ ³37'38	
evening rise	12305 Dec 16 23:32	13° る 23'59			12306 Dec 02 03:48	0°る	
	12305 Dec 25 16:36	0°≈		desc. node	12306 Dec 13 15:32	21° පි 30'51	
desc. node	12305 Dec 26 18:33	1°≈53'54			12306 Dec 19 00:05	0° ≈	
	12306 Jan 15 04:56	0°) {		evening max el	12307 Jan 01 19:28	17°≈03'22	27°22'11
evening max el	12306 Jan 19 11:14	4°) €27'16	27°31'45	retrograde	12307 Jan 15 17:36	24° ≈ 20′29	
retrograde	12306 Feb 02 05:32	11° 米 51′04		evening set	12307 Jan 22 15:54	22° ≈ 08'34	
evening set	12306 Feb 09 03:31	9°) (24′34		min. Earth dist.	12307 Jan 26 09:58		0.61328 AU
min. Earth dist.	12306 Feb 12 21:57	6° 米 11′36	0.63395 AU	inferior conj	12307 Jan 29 11:48	16° ≈ 34'51	-2°35'23

minimum elong	12307 Jan 29 17:13	16° ≈ 22'47	2022127		12307 Dec 16 03:21	0°æ	
morning rise	12307 Feb 05 21:25	10 ≈2247 11°≈37'48	2 32 31	retrograde	12307 Dec 16 03:21 12307 Dec 28 20:14	0 ≈ 5°≈59'17	
asc. node	12307 Feb 06 12:07	11°≈28′21		evening set	12307 Dec 28 20:14 12308 Jan 04 11:08	3 ≈3917 4°≈10'42	
direct	12307 Feb 08 00:56	11°≈18'19		min. Earth dist.	12308 Jan 04 11:08 12308 Jan 08 11:25	1°≈33'44	0.59179 AU
morning max el	12307 Feb 15 01:08	14°≈50'17	17°52'17	iiiii. Lattii dist.	12308 Jan 10 12:08	1 ~55 +4 30°Rる	0.57177 AO
morning max ci	12307 Feb 15 01:08 12307 Feb 25 12:21	0° \	1/ 321/	inferior conj	12308 Jan 11 15:23	29° ろ 06'39	_3°55'20
morning set	12307 Mar 02 16:33	9° ₩ 15'03		minimum elong	12308 Jan 11 23:21	29 さ 000 39 28° そ 51'12	
desc. node	12307 Mar 11 16:29	25° H 18'37		morning rise	12308 Jan 19 14:26	28 3 31 12 24° る 30'27	3 32 07
desc. flode	1230/ Wiai 11 10.2)	23 11037		direct	12308 Jan 21 16:10	24°る15'05	
superior coni	12307 Mar 13 11:00	28° ¥ 22'44	0012145	asc. node	12308 Jan 24 09:26	24°る13'03 24°る42'52	
superior conj minimum elong	12307 Mar 13 11:00 12307 Mar 13 09:46	28° X 17'25		morning max el	12308 Jan 29 12:37	24°る42'32 28°る08'03	18°16'57
behind sun begin	12307 Mar 13 05:11	28 X 17 23 27° X 57'39	0 1327	morning max er	12308 Jan 29 12.37 12308 Jan 31 06:16	28 3 08 03 08 03	18 10 37
behind sun end	12307 Mar 13 14:22	28°\(\frac{1}{3739}\)		morning set	12308 Jan 31 00:10 12308 Feb 14 06:10	0 ≈ 23°≈10'54	
ociniia sun cha	12307 Mar 14 09:41	28 γ (3/10		morning set	12308 Feb 17 20:34	0° ∺	
max. Earth dist.	12307 Mar 14 09.41 12307 Mar 20 19:12	0 1 10° Υ 41'39	1.43099 AU		12308 Feb 17 20.34	0 K	
		10 γ 41 39 21° Υ 09'13	1.43099 AU	aumorior aoni	12200 Eab 22 15:25	10° ¥ 44'57	0°22'43
evening rise	12307 Mar 27 08:01			superior conj	12308 Feb 23 15:35	10 X 44 37 10° ¥ 52′29	0°22'49
	12307 Apr 02 01:36	0°B		minimum elong	12308 Feb 23 17:15	10° X 52′29 15° X 56'49	0-2249
	12307 Apr 23 09:24	0°Ⅱ 5°Ⅲ22124	21052145	desc. node	12308 Feb 26 13:04		1 41115 411
evening max el	12307 Apr 28 07:38	5° Ⅱ 32'34	21°53'47	max. Earth dist.	12308 Mar 02 05:25	24°) €04'38	1.41115 AU
asc. node	12307 May 05 09:06	10° Ⅱ 37'15			12308 Mar 05 18:18	0°Υ 1° 0 650145	
retrograde	12307 May 07 14:51	11° I I00'53		evening rise	12308 Mar 06 21:17	1° Y ′50′45	
evening set	12307 May 12 04:34	9°Ⅱ08'20			12308 Mar 25 10:35	0°8	
inferior conj	12307 May 17 11:14	2° Ⅱ 49'59	2°59'00	evening max el	12308 Apr 09 23:27	19° 8 21'49	23°13'44
minimum elong	12307 May 17 09:45	2° I 55'10	2°58'02	retrograde	12308 Apr 20 10:30	25° 8 31'48	
min. Earth dist.	12307 May 17 12:30		0.68768 AU	asc. node	12308 Apr 21 06:26	25° 8 28'35	
	12307 May 19 13:04	30° ₹ 8		evening set	12308 Apr 25 11:39	23° 8 24'46	
morning rise	12307 May 22 14:44	26° 8 36'23		inferior conj	12308 Apr 30 20:37	_	2°35'55
direct	12307 May 27 12:02	24° 8 30'37		minimum elong	12308 Apr 30 18:36	17° 8 05'50	2°34'52
	12307 Jun 05 23:03	Π °0		min. Earth dist.	12308 Apr 30 09:18	17° 8 37'56	0.68762 AU
morning max el	12307 Jun 06 03:58	0° Ⅱ 12'16	22°24'54	morning rise	12308 May 06 01:27	10° 8 52'02	
desc. node	12307 Jun 07 17:51	1° Ⅱ 51′25		direct	12308 May 10 09:45	9° 8 07'03	
	12307 Jun 28 13:27	0 \circ \odot		morning max el	12308 May 18 20:15	13° 8 57'41	21°01'47
morning set	12307 Jul 09 17:07	17°527'08		desc. node	12308 May 24 14:45	20° 8 35'25	
max. Earth dist.	12307 Jul 14 17:15	25° © 44'23	1.40867 AU		12308 May 31 13:55	Π °0	
	12307 Jul 17 05:19	0 $^{\circ}\Omega$		morning set	12308 Jun 18 09:21	26° Ⅱ 38'50	
					12308 Jun 20 12:32	0 \circ	
superior conj	12307 Jul 22 13:05	9° Ω 20'37		max. Earth dist.	12308 Jun 25 22:26	8° 5 40'34	1.42953 AU
minimum elong	12307 Jul 22 18:58	9° Ω 46'58	1°22'08				
asc. node	12307 Aug 01 08:25	27° Ω 26′13		superior conj	12308 Jul 03 00:35	20°926'53	-1°51'40
evening rise	12307 Aug 01 18:12	28° Ω 12'09		minimum elong	12308 Jul 03 07:27	20°956'00	1°51'55
	12307 Aug 02 17:12	0° m)			12308 Jul 08 13:35	0 \circ Ω	
evening max el	12307 Aug 17 17:43	23° m 48'22	18°20'02	evening rise	12308 Jul 14 18:11	10° Ω 58'44	
retrograde	12307 Aug 25 04:08	27° m 33'38		asc. node	12308 Jul 18 05:13	17° Ω 08'52	
evening set	12307 Aug 27 07:05	27° Mp 16'00			12308 Jul 25 21:33	0° m)	
inferior conj	12307 Sep 03 19:08	22° m 38'05	-0°02'44	evening max el	12308 Jul 31 05:36	6° Mp 46'44	18°04'22
minimum elong	12307 Sep 03 19:02	22° m 38'18	0°02'53	retrograde	12308 Aug 06 21:55	10° m 12'15	
transit middle	12307 Sep 03 19:02	22° m 38'18	0°02'53	evening set	12308 Aug 09 08:42	9° m 44'38	
transit begin	12307 Sep 03 15:35	22° Mp 45'24		inferior conj	12308 Aug 16 03:06	4° Mp 46'17	1°17'36
transit end	12307 Sep 03 22:28	22° m 31'11		minimum elong	12308 Aug 16 05:14	4° m 41'09	1°16'25
desc. node	12307 Sep 03 15:36	22° m 45'23		min. Earth dist.	12308 Aug 19 07:17	1° m 45'21	0.60771 AU
min. Earth dist.	12307 Sep 07 02:58	19° m 54'27	0.58506 AU	desc. node	12308 Aug 20 13:02	0° Mp 40'12	
morning rise	12307 Sep 11 03:29	17° m y 11'17			12308 Aug 21 08:51	30° R Ω	
direct	12307 Sep 17 09:15	15° m 28'10		morning rise	12308 Aug 22 22:58	28° Ω 51'37	
morning max el	12307 Oct 01 17:18	23° Mp 09'49	27°20'33	direct	12308 Aug 29 13:21	26° Ω 41'58	
	12307 Oct 07 20:24	0° ⊽			12308 Sep 07 09:04	0° m y	
	12307 Oct 26 16:30	0° M		morning max el	12308 Sep 12 19:44	4° ™ 37'58	27°55'16
asc. node	12307 Oct 28 09:58	3°M23'15			12308 Oct 01 16:59	0∘ 亚	
morning set	12307 Nov 01 13:54	11°ML57'27		asc. node	12308 Oct 14 06:41	23° ≏ 09'45	
				morning set	12308 Oct 15 17:39	26° ჲ 09'40	
superior conj	12307 Nov 08 12:41	27°ML11'41	1°29'02		12308 Oct 17 13:26	0° M	
minimum elong	12307 Nov 08 10:58	27°ML02'08	1°29'34	max. Earth dist.	12308 Oct 21 15:10	8°M50'29	1.31477 AU
max. Earth dist.	12307 Nov 08 07:20	26°M41'49	1.31300 AU				
	12307 Nov 09 18:51	0° ∡ 7		superior conj	12308 Oct 22 23:33	11°M49'33	1°15'43
evening rise						110M 25125	1015156
	12307 Nov 15 06:48	12° ∡ ¹03'47		minimum elong	12308 Oct 22 21:21	11°M37'25	1°15'56
	12307 Nov 15 06:48 12307 Nov 24 07:25	12° メ 03'47 0° る		minimum elong evening rise	12308 Oct 22 21:21 12308 Oct 29 16:33	26°M36'52	1°15'56
desc. node				_			1°15'56
desc. node evening max el	12307 Nov 24 07:25	0°⋜	26°38'08	_	12308 Oct 29 16:33	26°M36'52	1*15'56

	12308 Nov 17 06:24	0°⋜		desc. node	12309 Nov 03 07:03	15° ∡ 55'59	
evening max el	12308 Nov 25 15:02	9° ⋜ 47'34	25°22'10	evening max el	12309 Nov 07 01:49	20° ∡ 100′57	23°45'08
retrograde	12308 Dec 09 11:27	16°る45'14		retrograde	12309 Nov 20 14:15	26° ₹ 45'34	
evening set	12308 Dec 15 08:48 12308 Dec 20 03:09	15°る26'20 12°る46'50	0.57165 AU	evening set min. Earth dist.	12309 Nov 25 06:20 12309 Dec 01 12:15	25° ₹ 58'00 22° ₹ 56'49	0.55553 AU
min. Earth dist.	12308 Dec 20 03:09 12308 Dec 22 23:14	12 3 40 30		inferior conj	12309 Dec 01 12:13	21° х 47'59	
minimum elong	12308 Dec 23 07:16	10° ろ 32'90	5°04'01	minimum elong	12309 Dec 03 13:30	21° х 43'32	
morning rise	12308 Dec 31 08:07	6° ට 38'45		morning rise	12309 Dec 11 22:32	17° ∡ 753'34	
direct	12309 Jan 02 13:49	6° පි 23'53		direct	12309 Dec 14 15:41	17° ∡ ³35'14	
asc. node	12309 Jan 10 06:39	9° る 33'59		morning max el	12309 Dec 25 05:09	22° ∡ ³37′03	20°11'56
morning max el	12309 Jan 11 15:10	10° ප් 47'00	19°02'56	asc. node	12309 Dec 28 03:47	25° ∡ ¹48'13	
	12309 Jan 24 08:33	0° ≈			12309 Dec 31 07:09	0°る	
morning set	12309 Jan 28 05:38	7° ≈ 32'19		morning set	12310 Jan 12 11:33	22° る 09'26 0°≈	
superior conj	12309 Feb 05 14:28	23°≈57'32	0°52'17		12310 Jan 16 07:09	0°≈	
minimum elong	12309 Feb 05 17:17	24°≈10'58	0°52'28	superior conj	12310 Jan 20 03:03	7° ≈ 47'45	1°14'20
8	12309 Feb 08 19:15	0°) €		minimum elong	12310 Jan 20 05:46	8° ≈ 01'24	1°14'46
desc. node	12309 Feb 12 09:41	6°) 34'32		max. Earth dist.	12310 Jan 25 19:24	18° ≈ 54'26	1.36695 AU
max. Earth dist.	12309 Feb 12 12:26	6°) 46′47	1.38900 AU	evening rise	12310 Jan 29 13:59	25° ≈ 54'26	
evening rise	12309 Feb 16 07:48	13° ¥ 27′26		desc. node	12310 Jan 30 06:22	27° ≈ 08′21	
	12309 Feb 26 11:08	$0^{\circ}\mathbf{\Upsilon}$			12310 Jan 31 20:56	0° ∀	
	12309 Mar 20 12:02	0° 8			12310 Feb 19 23:29	0° Υ	
evening max el	12309 Mar 23 13:16	3° 8 12'52	24°33'41	evening max el	12310 Mar 06 02:37	17° Υ 03'41	25°46'43
retrograde asc. node	12309 Apr 04 02:33	9° 8 58'03 8° 8 44'40		retrograde	12310 Mar 18 14:07	24° Y 13'59 21° Y 45'28	
evening set	12309 Apr 08 03:48 12309 Apr 09 15:35	7° 8 38'37		evening set asc. node	12310 Mar 24 14:44 12310 Mar 26 01:11	20° Y 25'26	
min. Earth dist.	12309 Apr 09 13:33 12309 Apr 14 04:51	2° 8 27'39	0.68305 AU	min. Earth dist.	12310 Mar 28 21:08	17° Υ 09'43	0.67417 AU
inferior conj	12309 Apr 15 04:31	1° 8 08'38	2°02'57	inferior conj	12310 Mar 30 09:01	15°Υ16'06	1°20'01
minimum elong	12309 Apr 15 02:22	1° 8 15'50	2°01'56	minimum elong	12310 Mar 30 07:16	15° Y 21'42	1°19'14
_	12309 Apr 16 01:12	30° ₹Ƴ		morning rise	12310 Apr 05 00:23	9° Ƴ 26'42	
morning rise	12309 Apr 20 13:19	25° Y 09'52		direct	12310 Apr 08 08:37	8° Ƴ 22'48	
direct	12309 Apr 24 09:07	23° Y 46'10		morning max el	12310 Apr 15 03:08	12° Y 02'49	18°54'27
morning max el	12309 May 01 19:52	27° Y ′55′06	19°50'36	desc. node	12310 Apr 28 08:15	29° Y 45′20	
1 1	12309 May 03 19:04	0°8		4 41 211	12310 Apr 28 12:07	0° 8 0° 8 24'00	0.0
desc. node greatest brilliancy	12309 May 11 11:33 12309 May 14 23:46	9° 8 56'38 14° 8 59'02	-0.6m	greatest brilliancy morning set	12310 Apr 28 18:26 12310 May 07 17:37	14° 8 13'54	-0.8m
greatest offinalicy	12309 May 14 23.40 12309 May 25 00:19	0° I	-0.0111	morning set	12310 May 17 20:51	0° I	
morning set	12309 May 28 10:23	5° Ⅱ 14'07		max. Earth dist.	12310 May 22 03:38	6° Ⅱ 41'27	1.45523 AU
max. Earth dist.	12309 Jun 08 10:39		1.44561 AU				
	12309 Jun 13 04:16	0ංම		superior conj	12310 May 24 02:53	9° Ⅱ 46'44	-2°11'26
				minimum elong	12310 May 23 23:27	9° Ⅱ 33'14	2°12'09
superior conj	12309 Jun 13 12:02	0° ട് 31'22			12310 Jun 05 19:55	0 \circ \odot	
minimum elong	12309 Jun 13 15:52	0°946'54	2°11'04	evening rise	12310 Jun 08 04:54	3°950'11	
evening rise	12309 Jun 26 23:12	22°954'18		asc. node	12310 Jun 21 23:01	25°936'40	
asc. node	12309 Jul 01 03:30 12309 Jul 05 02:04	0° Ω 6° Ω 34'22		evening max el	12310 Jun 25 03:28 12310 Jun 28 08:50	0° Ω 3° Ω 42'13	18°29'07
evening max el	12309 Jul 03 02:04 12309 Jul 14 19:41	20°Ω07'12	18°07'38	retrograde	12310 Jul 28 08:50 12310 Jul 04 19:51	7°Ω11'10	18 2907
retrograde	12309 Jul 21 04:36	23° Ω 27'36	10 07 50	evening set	12310 Jul 07 23:03	6° Ω 16'04	
evening set	12309 Jul 23 23:30	22° Ω 47'13		inferior conj	12310 Jul 13 16:53	0° Ω 43'11	2°50'21
inferior conj	12309 Jul 30 03:41	17° Ω 30'33	2°14'20	minimum elong	12310 Jul 13 18:53	0° Ω 37'09	2°49'11
minimum elong	12309 Jul 30 06:17	17° Ω 23'30	2°12'59		12310 Jul 14 07:15	30°R∽	
min. Earth dist.	12309 Aug 01 21:06	14° Ω 34'09	0.63010 AU	min. Earth dist.	12310 Jul 15 20:22	28° © 09'27	0.65014 AU
morning rise	12309 Aug 05 11:09	11° Ω 18'10		morning rise	12310 Jul 19 13:37	24°522'12	
desc. node direct	12309 Aug 07 10:26 12309 Aug 12 03:30	10° Ω 02'18 8° Ω 48'22		desc. node direct	12310 Jul 25 07:45 12310 Jul 26 02:13	21°5643'42 21°5641'37	
morning max el	12309 Aug 12 03:30 12309 Aug 26 03:44	16°Ω50'32	27°51'16	morning max el	12310 Jul 26 02.13 12310 Aug 08 14:27	21 \$341 37 29°\$38'22	27°12'45
morning max cr	12309 Sep 06 01:29	0° m)	27 31 10	morning max cr	12310 Aug 08 14:27	0°Ω	27 12 73
	12309 Sep 00 01:29 12309 Sep 24 11:28	0∘ ⊽			12310 Aug 30 23:49	0° m)	
morning set	12309 Sep 29 14:39	9° ₽ 59'48		morning set	12310 Sep 13 02:16	23° m) 21'43	
asc. node	12309 Oct 01 03:21	13° ≏ 06'49			12310 Sep 16 10:39	0∘ ⊽	
max. Earth dist.		200 0 12150	1.32172 AU	max. Earth dist.	12310 Sep 17 12:39	2° ♀ 12'17	1.33392 AU
	12309 Oct 04 18:09	20° £ 42'50	1.32172 AU		-		
	12309 Oct 04 18:09			asc. node	12310 Sep 17 12:59	3° ჲ 10′23	
superior conj	12309 Oct 04 18:09 12309 Oct 07 07:39	26° £ 15'15	0°56'55	asc. node	12310 Sep 17 23:59	3° £ 10′23	
superior conj minimum elong	12309 Oct 04 18:09 12309 Oct 07 07:39 12309 Oct 07 05:27	26° £ 15'15 26° £ 03'19		asc. node superior conj	12310 Sep 17 23:59 12310 Sep 21 10:54	3° ♀ 10'23 10° ♀ 23'38	0°32'52
minimum elong	12309 Oct 04 18:09 12309 Oct 07 07:39 12309 Oct 07 05:27 12309 Oct 09 00:45	26° £ 15'15 26° £ 03'19 0° M	0°56'55	asc. node superior conj minimum elong	12310 Sep 17 23:59 12310 Sep 21 10:54 12310 Sep 21 09:19	3° £ 10′23 10° £ 23′38 10° £ 15′18	
	12309 Oct 04 18:09 12309 Oct 07 07:39 12309 Oct 07 05:27	26° £ 15'15 26° £ 03'19	0°56'55	asc. node superior conj	12310 Sep 17 23:59 12310 Sep 21 10:54	3° ♀ 10'23 10° ♀ 23'38	0°32'52

evening max el	12310 Oct 19 11:45 12310 Oct 19 13:36	0° ҂ 0° ҂ 04'31	22°04'15	behind sun begin behind sun end	12311 Sep 05 00:41 12311 Sep 05 12:26	23° m 37'14 24° m 37'09	
desc. node	12310 Oct 21 04:23	1° ∡ 133′52			12311 Sep 08 03:03	0∘ ⊽	
retrograde	12310 Nov 01 05:45	6° ₹ 22'17		evening rise	12311 Sep 12 22:57	10° ⊆ 03'32	
evening set inferior conj	12310 Nov 04 11:06 12310 Nov 13 06:13	5° х 59'10 2° х 02'28	-5°40'48	evening max el	12311 Sep 23 11:08 12311 Oct 01 11:45	0°ጤ 10°ጤ35'38	20°35'07
minimum elong	12310 Nov 13 00:13		5°39'25	desc. node	12311 Oct 01 11:45	15°ML13'34	20 33 07
min. Earth dist.	12310 Nov 12 18:58	2° ∡ 18'15	0.54653 AU	retrograde	12311 Oct 12 16:51	16°M09'42	
	12310 Nov 17 01:28	30° ₹M L		evening set	12311 Oct 14 21:26	15°M57'53	
morning rise	12310 Nov 21 15:17	28°M15'22		inferior conj	12311 Oct 23 22:27	12°ML02'39	
direct	12310 Nov 25 02:35	27°M48'41		minimum elong	12311 Oct 23 12:24	12°M17'10	4°30'52
morning may al	12310 Dec 02 13:22 12310 Dec 07 05:04	0° ᡘ 3° ᡘ ³34'23	21°42'49	min. Earth dist. morning rise	12311 Oct 25 02:28 12311 Nov 01 03:02	11°M22'11 8°M03'42	0.54671 AU
morning max el asc. node	12310 Dec 07 03:04 12310 Dec 15 00:50	3 x 34 23 13° x 08'45	21 42 49	direct	12311 Nov 01 03:02 12311 Nov 05 11:20	7°M23'05	
use. Houe	12310 Dec 24 12:50	0°중		morning max el	12311 Nov 18 18:15	13°M50'23	23°28'39
morning set	12310 Dec 27 21:21	6° ප 54'11		Č	12311 Dec 01 02:38	0° ∡ ¹	
				asc. node	12311 Dec 01 21:48	1° ∡ °20′27	
superior conj	12311 Jan 04 01:24	22° ろ 03'40	1°29'04	morning set	12311 Dec 12 09:01	21° ∡ ′41′03	
minimum elong	12311 Jan 04 03:20	22° る 13'45	1°29'46		12311 Dec 16 05:24	0°₹	
may Earth dist	12311 Jan 07 21:57	0°≈ 0°≈ 245!48	1 24722 ATT	aumorior coni	12211 Dec. 10, 06:29	60 3 26126	192650
max. Earth dist. evening rise	12311 Jan 08 07:03 12311 Jan 12 12:24	0°≈45'48 9°≈02'17	1.34733 AU	superior conj minimum elong	12311 Dec 19 06:28 12311 Dec 19 07:18	6°る36'36 6°る41'08	1°37'50
desc. node	12311 Jan 17 03:05	17°≈33'32		max. Earth dist.	12311 Dec 19 07:18 12311 Dec 22 02:38	12°る41'06	1.33165 AU
dese. Hode	12311 Jan 24 10:41	0° ∀		evening rise	12311 Dec 26 23:36	22° る 42'14	1.55100110
	12311 Feb 15 20:45	0° Y			12311 Dec 30 17:53	0° ≈	
evening max el	12311 Feb 16 16:11	0° Ƴ 47'51	26°45'35	desc. node	12312 Jan 03 23:56	7° ≈ 45'26	
retrograde	12311 Mar 01 20:19	8° Y 11'12			12312 Jan 18 03:58	0° ∀	
evening set	12311 Mar 08 07:16	5° Y 38'33	0.66126.444	evening max el	12312 Jan 30 05:24	14°) 15′57	27°22'52
min. Earth dist.	12311 Mar 12 08:00 12311 Mar 12 22:34	1° Y 36'46 0° Y 54'22	0.66126 AU	retrograde	12312 Feb 12 20:04 12312 Feb 19 15:01	21°) 41'23 19°) 10'50	
asc. node	12311 Mar 12 22.34 12311 Mar 13 17:00	0 1 34 22 30°R ∺		evening set min. Earth dist.	12312 Feb 19 13.01 12312 Feb 23 11:23	19 X 10 30 15° X 40′52	0.64480 AU
inferior conj	12311 Mar 14 07:59	29° ₩ 15'42	0°26'46	inferior conj	12312 Feb 25 11:25	13°) €01'35	
minimum elong	12311 Mar 14 07:16	29° ∺ 17'49	0°26'35	minimum elong	12312 Feb 26 00:01	12° ¥ 58'35	0°36'03
morning rise	12311 Mar 20 08:28	23°) ₹37'25		asc. node	12312 Feb 27 19:57	11°) €04'13	
direct	12311 Mar 23 06:24	22° ¥ 50′31		morning rise	12312 Mar 03 10:54	7°) 36′46	
morning max el	12311 Mar 29 16:27	26°) 14′14	18°14'43	direct	12312 Mar 06 00:06	7° 米 03′21	
	12311 Apr 02 00:02	0° Υ		morning max el	12312 Mar 12 09:23	10°) 22′05	17°52'02
desc. node	12311 Apr 15 04:53 12311 Apr 18 01:13	19° Y 53'33 24° Y 27'25		morning set	12312 Mar 25 22:13 12312 Mar 29 13:32	0°Υ 6°Υ05'10	
morning set	12311 Apr 18 01:13	0° 8		desc. node	12312 Mai 29 13:32 12312 Apr 01 01:30	10° Υ 15'50	
	1201111p1 21 12:21	ů O		desc. node	1231211pr 01 01.50	10 , 1000	
superior conj	12311 May 03 10:05	18° 8 48'41	-1°52'22	superior conj	12312 Apr 12 03:31	28° Y ′24'08	-1°17'49
minimum elong	12311 May 03 01:08	18° 8 13'38	1°52'16	minimum elong	12312 Apr 11 19:29	27° Y ′51′58	1°17'10
max. Earth dist.	12311 May 04 22:59		1.45758 AU		12312 Apr 13 03:30	0°8	
	12311 May 10 14:09	0°II		max. Earth dist.	12312 Apr 16 18:38	5° 8 45'29	1.45251 AU
evening rise	12311 May 19 10:44	13° Ⅱ 48'06 0° ©		evening rise	12312 Apr 28 00:37	23° ႘ 13'14 0° Ⅱ	
greatest brilliancy	12311 May 29 21:27 12311 May 30 14:07	0 ৩ 1°903′24	-0.8m	greatest brilliancy	12312 May 02 11:16 12312 May 13 00:26	0 <u>П</u> 15° П 44'33	-0.6m
asc. node	12311 Jun 08 20:02	14°906'58	0.011	greatest similare)	12312 May 23 20:02	0°9	0.0111
evening max el	12311 Jun 11 18:30	17°524'50	19°07'57	evening max el	12312 May 24 23:02	1°9510'44	20°02'32
retrograde	12311 Jun 18 16:02	21°514'52		asc. node	12312 May 25 17:09	1° 9 54'53	
evening set	12311 Jun 22 04:00	20°503'48		retrograde	12312 Jun 01 14:31	5° © 33'04	
inferior conj	12311 Jun 27 15:02	14°5516'20	3°09'22	evening set	12312 Jun 05 11:55	4°505'29	
minimum elong	12311 Jun 27 16:02	14°913'05	3°08'24	: <i>C</i> :	12312 Jun 09 08:36	30°RⅡ 200Ⅲ04/20	3°14'27
min. Earth dist. morning rise	12311 Jun 29 03:48 12311 Jul 03 03:28	12° © 17'59 7° © 53'17	0.66647 AU	inferior conj minimum elong	12312 Jun 10 19:15 12312 Jun 10 19:10	28°Ⅲ04'38 28°Ⅱ04'55	3°14'27' 3°13'34
direct	12311 Jul 09 08:00	5°912'20		min. Earth dist.	12312 Jun 10 17:10	26° I I49'03	0.67842 AU
desc. node	12311 Jul 12 04:59	5°542'00		morning rise	12312 Jun 16 02:04	21° Ⅱ 43'40	
morning max el	12311 Jul 22 01:18	12°5548'24	26°07'39	direct	12312 Jun 21 19:34	19° Ⅱ 11'34	
	12311 Aug 04 21:51	0 $^{\circ}$ Ω		desc. node	12312 Jun 28 02:10	21° Ⅱ 32′20	
	12311 Aug 23 16:25	0° m)		morning max el	12312 Jul 03 11:19	26° Ⅱ 10'59	24°45'28
morning set	12311 Aug 27 01:06	6° Mp 06'43	1 25100 477		12312 Jul 06 23:33	0° ©	
max. Earth dist. asc. node	12311 Aug 30 20:47 12311 Sep 04 20:38	13° Mp 21'10 23° Mp 16'33	1.35109 AU	morning set	12312 Jul 28 11:12 12312 Aug 08 06:48	0° Ω 18° Ω 03'22	
ase. Houc	12311 Sep 04 20.38	25 10 كار الله		max. Earth dist.	12312 Aug 08 00.48 12312 Aug 11 20:39	18 δι 03 22 24° Ω 28'27	1.37232 AU
superior conj	12311 Sep 05 06:47	24° Mp 08'18	0°04'04		12312 Aug 14 20:10	0° m)	
minimum elong	12311 Sep 05 06:34	24° m 07'10	0°03'51				

superior conj	12312 Aug 18 16:10	7° m 20'44	-0°28'31	minimum elong	12313 Aug 01 15:42	20° Ω 12'53	1°02'46
minimum elong	12312 Aug 18 18:03	7° m/29'57			12313 Aug 06 20:13	0° m)	
asc. node	12312 Aug 21 17:17	13° m/21'04		asc. node	12313 Aug 08 13:59	3°m/20'35	
evening rise	12312 Aug 27 02:36	24° m 09'53		evening rise	12313 Aug 10 22:37	7° m 53'30	
	12312 Aug 30 01:09	0∘ ⊽			12313 Aug 23 16:24	0∘ ⊽	
evening max el	12312 Sep 12 23:54	21° ≏ 52'07	19°25'41	evening max el	12313 Aug 27 00:19	3° ≏ 54'53	18°37'51
retrograde	12312 Sep 22 12:35	26° ≏ 37'21		retrograde	12313 Sep 04 02:17	7° ≏ 58'39	
desc. node	12312 Sep 23 23:14	26° ≙ 31'15		evening set	12313 Sep 06 01:22	7° ≏ 45'04	
evening set	12312 Sep 24 09:04	26° ≏ 27'21		desc. node	12313 Sep 10 20:41	5° ₽ 33'29	
inferior conj	12312 Oct 03 01:23	22° ≏ 20'18	-2°49'30	inferior conj	12313 Sep 14 00:21	3° ≙ 18'43	-0°59'26
minimum elong	12312 Oct 02 18:01	22° ჲ 32'13	2°46'30	minimum elong	12313 Sep 13 21:57	3° ഫ 23'15	0°58'30
min. Earth dist.	12312 Oct 05 12:53	20° ≏ 44'22	0.55617 AU	min. Earth dist.	12313 Sep 17 04:49	0° ჲ 55'11	0.57310 AU
morning rise	12312 Oct 11 00:41	17° ≙ 51'27			12313 Sep 18 12:31	30°R, Mp	
direct	12312 Oct 16 05:05	16° ≏ 50'56		morning rise	12313 Sep 21 15:05	28° Mp 11'56	
morning max el	12312 Oct 30 04:39	23° ჲ 52'35	25°15'02	direct	12313 Sep 27 12:41	26° Mp 45'34	
	12312 Nov 04 18:22	0°M₊			12313 Oct 06 16:20	0∘ ಹ	
asc. node	12312 Nov 17 18:42	20°M10'03		morning max el	12313 Oct 11 19:50	4° ₽ 14'42	26°43'38
	12312 Nov 22 19:31	0° ∡			12313 Oct 30 12:51	0° M	
morning set	12312 Nov 25 20:42	6° ∡ ¹24'23		asc. node	12313 Nov 04 15:32	9° ™ 27'46	
				morning set	12313 Nov 10 06:44	20°M59'38	
superior conj	12312 Dec 02 15:43	21° ∡ 18′29	1°38'34		12313 Nov 14 09:47	0° ∡ ¹	
minimum elong	12312 Dec 02 15:26	21° ∡ 16'55 −	1°39'25			_	
max. Earth dist.	12312 Dec 04 05:37	24° ∡ ¹46'50	1.32056 AU	superior conj	12313 Nov 17 03:04		1°34'10
	12312 Dec 06 15:21	0° ろ		minimum elong	12313 Nov 17 01:48		1°34'51
evening rise	12312 Dec 09 20:16	6° る 45'14		max. Earth dist.	12313 Nov 17 13:17	7° ⋌ ¹00'18	1.31432 AU
desc. node	12312 Dec 20 20:53	27° る 37'09		evening rise	12313 Nov 23 23:45	21° ∡ *04′27	
	12312 Dec 22 06:37	0°≈	25021151		12313 Nov 28 08:14	0°る	
evening max el	12313 Jan 11 16:16	27°≈14'36	27°31'51	desc. node	12313 Dec 07 17:54	17°る00'36	
	12313 Jan 14 20:12	0°) {			12313 Dec 16 13:05	0° ≈	2700712.5
retrograde	12313 Jan 25 12:25	4°) €35'07		evening max el	12313 Dec 24 22:03	9° ≈ 30'43	27°07'35
evening set	12313 Feb 01 11:20	2°) € 14'05		retrograde	12314 Jan 07 20:22	16° ≈ 43'34	
i. Darde dia	12313 Feb 04 07:53	30°R≈	0.62520 AII	evening set	12314 Jan 14 16:52	14°≈40'20	0.60414.411
min. Earth dist.	12313 Feb 05 05:14		0.62539 AU	min. Earth dist.	12314 Jan 18 12:25	11°≈58'00	0.60414 AU
inferior conj minimum elong	12313 Feb 08 02:48 12313 Feb 08 06:31	26°≈25'46 26°≈16'52	1°47'57	inferior conj minimum elong	12314 Jan 21 16:15 12314 Jan 21 22:53	9°≈19'09 9°≈05'13	3°06'25
asc. node	12313 Feb 08 06.31 12313 Feb 13 17:20	20 ≈16 32 21°≈56'14	1 4/3/	morning rise	12314 Jan 29 07:49	9 ≈03 13 4°≈30'52	3 00 23
morning rise	12313 Feb 15 17:20 12313 Feb 15 04:14	21°≈17'37		direct	12314 Jan 31 10:09	4 ≈30 32 4°≈13'30	
direct	12313 Feb 17 10:41	21°≈53'58		asc. node	12314 Jan 31 14:41	4°≈13'38	
morning max el	12313 Feb 24 02:56	20 ≈3338 24°≈18'01	17°46'58	morning max el	12314 Feb 07 17:43		18°00'23
morning max cr	12313 Feb 28 18:18	0°) €	17 4030	morning max ci	12314 Feb 22 00:01	0° ∺	10 00 23
morning set	12313 Mar 12 01:52	18° ¥ 51'32		morning set	12314 Feb 23 07:48	2° ∺ 26′28	
morning sec	12313 Mar 18 11:04	0°Υ		morning sec	12311100 23 07.10	2 7(2020	
desc. node	12313 Mar 18 22:06	0° Υ 47'29		superior conj	12314 Mar 05 11:06	20° ¥ 51'04	0°02'29
				minimum elong	12314 Mar 05 11:20	20° ¥ 52'04	0°02'40
superior conj	12313 Mar 23 19:09	9° Y 03'34	-0°36'57	behind sun begin	12314 Mar 05 03:28	20°) 17′25	
minimum elong	12313 Mar 23 15:29			behind sun end	12314 Mar 05 19:12	21° ¥ 26'38	
max. Earth dist.	12313 Mar 30 12:11	20° Y ′03′24		desc. node	12314 Mar 05 18:42	21°) 24'28	
	12313 Apr 05 19:02	0°8			12314 Mar 10 18:23	0° Y	
evening rise	12313 Apr 07 13:31	2° 8 44'45		max. Earth dist.	12314 Mar 13 01:15	3° Y 49'40	1.42292 AU
	12313 Apr 25 23:11	$\Pi^{\circ}0$		evening rise	12314 Mar 18 15:23	12° Y ′54'55	
evening max el	12313 May 07 21:48	14° Ⅱ 57'47	21°10'18		12314 Mar 29 18:23	0° 8	
asc. node	12313 May 12 14:21	18° Ⅱ 47′20		evening max el	12314 Apr 20 15:29	28° 8 45'07	22°27'20
retrograde	12313 May 16 13:14	20° Ⅱ 00'44			12314 Apr 21 22:29	$\Pi^{\circ}0$	
evening set	12313 May 20 20:51	18° Ⅱ 16′52		asc. node	12314 Apr 29 11:38	4° Ⅲ 27'40	
inferior conj	12313 May 26 03:05	12° Ⅲ 04'15	3°07'43	retrograde	12314 Apr 30 10:30	4° Ⅲ 31′56	
minimum elong	12313 May 26 02:03	12° Ⅲ 07'51	3°06'48	evening set	12314 May 05 05:03	2° Ⅱ 32'46	
min. Earth dist.	12313 May 26 11:45	11° Ⅱ 34'07	0.68565 AU		12314 May 07 15:42	30°R ∀	
morning rise	12313 May 31 07:02	5° Ⅱ 47'40		inferior conj	12314 May 10 12:26	26° 8 10'39	2°50'26
direct	12313 Jun 05 11:51	3° Ⅲ 31′12		minimum elong	12314 May 10 10:41	26° 8 16'45	2°49'26
desc. node	12313 Jun 14 23:15	8° Ⅱ 47′25		min. Earth dist.	12314 May 10 08:12	26° 8 25'24	0.68817 AU
morning max el	12313 Jun 15 21:39		23°16'06	morning rise	12314 May 15 16:12	19° 8 59'54	
	12313 Jul 01 21:47	0 \circ		direct	12314 May 20 07:50	18° 8 03'03	
morning set	12313 Jul 20 14:40	29° © 00'33		morning max el	12314 May 29 10:57	23° 8 22'29	21°48'29
	12313 Jul 21 04:51	0 ° Ω		desc. node	12314 Jun 01 20:12	27° 8 03'56	
max. Earth dist.	12313 Jul 24 18:31	6° Ω 05'16	1.39554 AU		12314 Jun 04 06:17	0°Щ	
					12314 Jun 25 06:01	0°95	
superior conj	12313 Aug 01 11:12	19° Ω 52'06	-1°02'51	morning set	12314 Jun 30 21:01	8° 5 49'31	

max. Earth dist.	12314 Jul 06 19:50	18° © 30'03	1.41799 AU	superior conj	12315 Jun 25 12:42	12° © 11'25	-2°01'19
	12314 Jul 13 14:22	$0^{\circ}\Omega$		minimum elong	12315 Jun 25 18:54	12° 5 37'10	2°01'47
				_	12315 Jul 05 23:31	$0^{\circ}\Omega$	
superior conj	12314 Jul 14 11:22	1° Ω 31'32	-1°35'35	evening rise	12315 Jul 07 23:42	3° Ω 30′23	
minimum elong	12314 Jul 14 17:59	2°Ω00'32		asc. node	12315 Jul 13 07:31	12°Ω46'46	
U			1 33 33			• • • •	100002120
evening rise	12314 Jul 25 07:11	21°Ω04'07		evening max el	12315 Jul 24 22:25	29° Ω 44'50	18°03'30
asc. node	12314 Jul 26 10:43	23° Ω 10′37			12315 Jul 25 04:40	0° ™	
	12314 Jul 30 04:50	0° m)		retrograde	12315 Jul 31 10:25	3° Mp 06'23	
evening max el	12314 Aug 10 09:10	16° Mp 35'39	18°10'54	evening set	12315 Aug 03 00:35	2° m 33'45	
retrograde	12314 Aug 17 10:42	20° m 11'03			12315 Aug 06 20:55	30° R Ω	
evening set	12314 Aug 19 16:44	19° m 49'43		inferior conj	12315 Aug 09 12:30	27° Ω 27'40	1°44'24
inferior conj	12314 Aug 26 20:58	15° m/02'54	0°34'16	minimum elong	12315 Aug 09 15:01	27° Ω 21'18	1°43'03
minimum elong	12314 Aug 26 22:05	15° Mp 00'26	0°33'33	min. Earth dist.	12315 Aug 12 12:53	24° Ω 25'47	0.61744 AU
desc. node	•	13° m) 22'44	0 33 33	desc. node	_	21°Ω44'36	0.01744710
	12314 Aug 28 18:09		0.50455.411		12315 Aug 15 15:34		
min. Earth dist.	12314 Aug 30 04:25	12° Mp 08'58	0.59455 AU	morning rise	12315 Aug 16 02:58	21°Ω24'09	
morning rise	12314 Sep 03 00:05	9° m 22'35		direct	12315 Aug 22 19:05	19° Ω 04'30	
direct	12314 Sep 09 10:08	7° ™ 27'43		morning max el	12315 Sep 05 23:28	27° Ω 04'59	27°58'02
morning max el	12314 Sep 23 18:26	15° m 17'09	27°40'07		12315 Sep 08 17:46	0° m y	
	12314 Oct 05 17:26	0∘ ত			12315 Sep 29 09:55	0∘ ত	
asc. node	12314 Oct 22 12:17	29° ₽ 05'44		asc. node	12315 Oct 09 08:57	18° ≏ 57'25	
	12314 Oct 22 23:02	0° M .		morning set	12315 Oct 09 14:30	19° ≏ 25'53	
morning set	12314 Oct 25 13:21	5°M22'06		morning sec	12315 Oct 14 14:14	0°M	
max. Earth dist.	12314 Oct 23 13:21 12314 Oct 31 22:03	19°ML13'11	1.31307 AU	max. Earth dist.	12315 Oct 14 14:14 12315 Oct 15 04:04		1.31704 AU
max. Earm dist.	12314 Oct 31 22.03	19 1161311	1.51307 AU	max. Earm dist.	12313 Oct 13 04.04	1 1161312	1.31/04 AU
						======================================	
superior conj	12314 Nov 01 14:39	20°M45'42		superior conj	12315 Oct 17 00:35	5° ™ 19'28	1°08'24
minimum elong	12314 Nov 01 12:42	20°M34'45	1°24'28	minimum elong	12315 Oct 16 22:20	5° ™ 07'02	1°08'30
	12314 Nov 05 18:24	0° ∡ ¹		evening rise	12315 Oct 23 18:22	20°M08'27	
evening rise	12314 Nov 08 07:48	5° ∡ ³34'11			12315 Oct 28 11:49	0° ∡ ¹	
	12314 Nov 21 00:27	0° ろ		desc. node	12315 Nov 11 12:13	23° х 34'09	
desc. node	12314 Nov 24 15:01	5°₹44'54			12315 Nov 16 21:46	0°₹	
evening max el	12314 Dec 06 20:19	20° ろ 56'08	26°09'16	evening max el	12315 Nov 18 10:32	1° る 31'51	24°42'37
retrograde	12314 Dec 20 18:43	28° පි 00'31	20 07 10	retrograde	12315 Nov 18 10:32 12315 Dec 02 05:07	8° る 25'11	24 42 37
•				-			
evening set	12314 Dec 27 03:34	26°る23'40		evening set	12315 Dec 07 14:58	7°る20'09	
min. Earth dist.	12314 Dec 31 09:28		0.58283 AU	min. Earth dist.	12315 Dec 12 22:17		0.56404 AU
inferior conj	12315 Jan 03 11:45	21° る 32'37		inferior conj	12315 Dec 15 10:44	2° る 57'25	
minimum elong	12315 Jan 03 20:14	21° る 17'08	4°24'32	minimum elong	12315 Dec 15 17:20	2° る 46'53	5°27'44
morning rise	12315 Jan 11 15:42	17° る 06'22			12315 Dec 20 14:54	30°₽ ⋌	
direct	12315 Jan 13 18:09	16° る 51'46		morning rise	12315 Dec 23 21:51	28° ∡ 52′24	
asc. node	12315 Jan 18 11:57	18° る 10'47		direct	12315 Dec 26 07:14	28° ∡ ³36'41	
morning max el	12315 Jan 22 02:01	20° る 56'24	18°33'52		12315 Dec 31 14:46	0°ප	
morning man vi	12315 Jan 28 23:18	0°≈	10 33 02	morning max el	12316 Jan 04 23:39	3° ප 16'00	19°29'25
mamina aat	12315 Feb 07 02:05	16° ≈ 34'49		asc. node	12316 Jan 05 09:09	3°る39'20	1) 2) 23
morning set				asc. node			
	12315 Feb 14 01:47	0°) €			12316 Jan 21 15:53	0° ≈	
		>		morning set	12316 Jan 22 04:39	1° ≈ 03'55	
superior conj	12315 Feb 16 00:07	3°) 37′05	0°36'09				
minimum elong	12315 Feb 16 02:27	3°) 47′56	0°36'15	superior conj	12316 Jan 30 05:20	17° ≈ 07'02	1°02'32
desc. node	12315 Feb 20 15:15	12° ∺ 03'06		minimum elong	12316 Jan 30 08:13	17° ≈ 21'09	1°02'49
max. Earth dist.	12315 Feb 23 09:24	16°) 53′59	1.40177 AU	max. Earth dist.	12316 Feb 05 15:29	29° ≈ 18′15	1.37944 AU
evening rise	12315 Feb 27 13:40	24°) €00′24			12316 Feb 06 00:36	0° ∀	
· ·	12315 Mar 03 05:23	$0^{\circ}\mathbf{Y}$		desc. node	12316 Feb 07 11:52	2° ¥ 39'38	
	12315 Mar 23 14:36	0°8		evening rise	12316 Feb 09 08:56	5° ¥ 59'49	
evening max el	12315 Apr 03 06:03	12° 8 34'52	23°48'07	evening rise	12316 Feb 24 04:27	0° Υ	
•	•		23 46 07			26° Υ 26'37	2590(10(
retrograde	12315 Apr 14 04:54	19° 8 01'44		evening max el	12316 Mar 15 19:36		25 06 06
asc. node	12315 Apr 16 08:59	18° 8 40'03			12316 Mar 19 20:25	0°8	
evening set	12315 Apr 19 11:00	16° 8 49'06		retrograde	12316 Mar 27 19:10	3° 8 23'58	
min. Earth dist.	12315 Apr 24 04:50	11° 8 17'23	0.68616 AU	asc. node	12316 Apr 02 06:22	1° 8 14'22	
inferior conj	12315 Apr 24 21:26	10° 8 20'40	2°23'11	evening set	12316 Apr 02 13:04	1° 8 00'29	
minimum elong	12315 Apr 24 19:18	10° 8 27'57	2°22'07		12316 Apr 03 15:12	30° ŖƳ	
morning rise	12315 Apr 30 03:37	4° 8 16'58		min. Earth dist.	12316 Apr 06 23:21	26° Y ′04'19	0.67976 AU
direct	12315 May 04 06:25	2° 8 41'13		inferior conj	12316 Apr 08 04:07	24° Y ′30'05	1°46'01
morning max el	12315 May 12 06:11	7° 8 13'15	20°29'47	minimum elong	12316 Apr 08 02:04	24° Υ 36'50	1°45'03
desc. node	•	16° 8 05'23	20 27 77	•	•	18° Υ 34'49	1 13 03
uese. Houe	12315 May 19 17:03			morning rise	12316 Apr 13 15:22		
	12315 May 29 12:37	0°II		direct	12316 Apr 17 06:07	17° ℃ 19'41	1000 ****
morning set	12315 Jun 10 04:43	17° Ⅱ 39'51		morning max el	12316 Apr 24 08:59	21° Y 14'54	19°24'42
	12315 Jun 18 01:00	0 \circ			12316 May 01 14:11	0°8	
max. Earth dist.	12315 Jun 19 03:24	1° 5 45'49	1.43705 AU	desc. node	12316 May 05 13:47	5° 8 39'17	
				greatest brilliancy	12316 May 07 01:58	7° 8 52'03	-0.7m

marning got	12216 May 10, 05:25	260 17102		aumorior coni	12217 May 14 22:51	00П55157	2005142
morning set	12316 May 19 05:25 12316 May 21 15:15	26° 8 17'02 0° I I		superior conj minimum elong	12317 May 14 23:51 12317 May 14 17:23	0° П 55'57 0° П 30'41	2°06'07
max. Earth dist.	12316 May 21 13:13	0 H 15°H45'03	1.45056 AU	max. Earth dist.	12317 May 14 17:23 12317 May 14 12:28	0° П 11'27	1.45716 AU
max. Lattii dist.	12310 Way 31 17.40	13 11-303	1.43030 AC	evening rise	12317 May 14 12:28 12317 May 30 14:18	25° I I30'37	1.43/10 AC
superior conj	12316 Jun 04 14:28	21° Ⅱ 52'40	-2°13'14	evening rise	12317 Jun 02 10:02	0°95	
minimum elong	12316 Jun 04 15:32	21° I I56'52		greatest brilliancy	12317 Jun 07 15:25	8°9316'51	-0.8m
minimum crong	12316 Jun 09 15:50	0°95	2 1100	asc. node	12317 Jun 16 01:23	20° © 53'22	0.0111
evening rise	12316 Jun 18 19:09	15° © 01'01		evening max el	12317 Jun 21 00:30	26°952'15	18°43'37
<i>5</i>	12316 Jun 27 21:10	0°N		3	12317 Jun 25 08:10	$0^{\circ}\Omega$	
asc. node	12316 Jun 29 04:24	2° Ω 03'35		retrograde	12317 Jun 27 14:52	0° Ω 28'28	
evening max el	12316 Jul 07 12:33	13° Ω 13'16	18°14'40	C	12317 Jun 29 20:19	30° ℝ ∽	
retrograde	12316 Jul 13 21:07	16° Ω 35'19		evening set	12317 Jun 30 21:49	29° 5 26'29	
evening set	12316 Jul 16 19:36	15° Ω 48'46		inferior conj	12317 Jul 06 12:19	23° 5 47'05	3°00'17
inferior conj	12316 Jul 22 18:56	10° £ 25′12	2°31'53	minimum elong	12317 Jul 06 13:55	23°5542'04	2°59'13
minimum elong	12316 Jul 22 21:22	10° Ω 18'17	2°30'35	min. Earth dist.	12317 Jul 08 09:27	21° © 27'32	0.65758 AU
min. Earth dist.	12316 Jul 25 06:42	7° Ω 36'33	0.63904 AU	morning rise	12317 Jul 12 05:13	17° 5 24'48	
morning rise	12316 Jul 28 21:36	4° Ω 08'30		direct	12317 Jul 18 14:49	14° 5 43'09	
desc. node	12316 Aug 01 12:56	2° Ω 03'50		desc. node	12317 Jul 19 10:15	14° 5 945'29	
direct	12316 Aug 04 13:09	1° £ 32′44		morning max el	12317 Jul 31 19:42	22° © 32'15	26°47'53
morning max el	12316 Aug 18 08:44	9° £ 33'42	27°38'39		12317 Aug 07 09:19	0 $^{\circ}\Omega$	
	12316 Sep 03 07:58	0° m			12317 Aug 27 14:33	0° ™	
	12316 Sep 20 18:10	0∘ ⊽		morning set	12317 Sep 05 14:30	16° Mp 12'42	
morning set	12316 Sep 22 07:53	3° ჲ 05'27		max. Earth dist.	12317 Sep 09 18:11	24° m 19'39	1.34071 AU
asc. node	12316 Sep 25 05:34	8° ≏ 58'11		asc. node	12317 Sep 12 02:12	29° mg 03'20	
max. Earth dist.	12316 Sep 27 03:47	12° ≙ 58'45	1.32630 AU		12317 Sep 12 13:14	0∘ ⊽	
superior conj	12316 Sep 30 06:57	19° £ 39'27	0°47'21	superior conj	12317 Sep 14 07:24	3° ₾ 38'39	
minimum elong	12316 Sep 30 04:56	19° £ 28'36	0°47'12	minimum elong	12317 Sep 14 06:18	3° Ω 32'56	0°20'57
	12316 Oct 05 01:15	0°M		evening rise	12317 Sep 21 15:43	19° Ω 10'34	
evening rise	12316 Oct 07 05:40	4°M42'35			12317 Sep 26 23:25	0°M	2102400
11-	12316 Oct 20 15:51	0° √ 10°√ 7 07/49		evening max el	12317 Oct 11 11:58	21°M48'42	21°24'08
desc. node	12316 Oct 28 09:31 12316 Oct 29 20:47	10° х 07'48 11° х 37'39	23°01'40	desc. node	12317 Oct 15 06:54 12317 Oct 23 14:18	24°M59'07 27°M49'30	
evening max el	12316 Oct 29 20.47 12316 Nov 12 02:12	18° x 12'05	23 01 40	retrograde	12317 Oct 25 14.18 12317 Oct 26 07:27	27 1164930 27°M32'31	
retrograde evening set	12316 Nov 12 02.12 12316 Nov 16 03:27	18 x · 12 03 17° x ¹ 36′25		evening set inferior conj	12317 Oct 26 07.27 12317 Nov 04 06:45	27 IIL3231 23°M37'51	5010157
min. Earth dist.	12316 Nov 16 05.27 12316 Nov 23 05:56	17 x · 36 23 14° x 20'28	0.55076 AU	minimum elong	12317 Nov 04 06.43 12317 Nov 03 22:18	23°M49'43	5°16'44
inferior conj	12316 Nov 24 14:24	13° x 33'52		min. Earth dist.	12317 Nov 03 22:18 12317 Nov 04 12:14	23°M30'10	0.54552 AU
minimum elong	12316 Nov 24 13:45	13° × 33'32'	5°52'01	morning rise	12317 Nov 04 12:14 12317 Nov 12 13:59	19°M48'42	0.54552 AO
morning rise	12316 Dec 03 01:37	9° х 44'18	3 32 01	direct	12317 Nov 12 13:39	19°M16'50	
direct	12316 Dec 06 02:06	9° × 722'51		morning max el	12317 Nov 29 01:59	25°M20'00	22°26'44
morning max el	12316 Dec 17 07:28	14° ×7 43'07	20°48'02	morning max or	12317 Dec 03 09:05	0° ₹	22 20 11
asc. node	12316 Dec 22 06:14	20° ₹ ¹23'52	20 .002	asc. node	12317 Dec 09 03:14	8° х 07'45	
	12316 Dec 28 10:04	0°ਰ		morning set	12317 Dec 20 23:23	0° る 31'59	
morning set	12317 Jan 05 12:32	15° ප් 45'17		8-11	12317 Dec 20 17:19	0°ਰ	
Č	12317 Jan 12 09:00	0° ≈					
				superior conj	12317 Dec 28 00:03	15° そ 33'33	1°33'14
superior conj	12317 Jan 12 22:29	1°≈09'12	1°21'27	minimum elong	12317 Dec 28 01:32	15° る 41'26	1°34'00
minimum elong	12317 Jan 13 00:56	1° ≈ 21'42	1°21'59	max. Earth dist.	12317 Dec 31 15:20	23° る 10'13	1.34015 AU
max. Earth dist.	12317 Jan 18 00:12	11° ≈ 17'37	1.35829 AU		12318 Jan 04 00:39	0° ≈	
evening rise	12317 Jan 21 22:30	18° ≈ 45′27		evening rise	12318 Jan 05 02:47	2° ≈ 08'00	
desc. node	12317 Jan 24 08:34	23° ≈ 10′18		desc. node	12318 Jan 11 05:21	13° ≈ 30'42	
	12317 Jan 28 06:08	0°) €			12318 Jan 21 04:37	0°)	
	12317 Feb 17 08:18	0° Y		evening max el	12318 Feb 08 22:48	23°) 54′59	27°04'26
evening max el	12317 Feb 26 09:15	10° Y 16′05	26°13'58		12318 Feb 17 02:28	0° Y	
retrograde	12317 Mar 11 04:21	17° Ƴ 32′28		retrograde	12318 Feb 22 07:46	1° Y 19'58	
evening set	12317 Mar 17 09:36	15° Y 01'45			12318 Feb 27 03:19	30° ₹	
asc. node	12317 Mar 20 03:46	12° Y 19′25		evening set	12318 Feb 28 22:42	28°) 47 ′10	
min. Earth dist.	12317 Mar 21 13:34	10° Y 40'34	0.66918 AU	min. Earth dist.	12318 Mar 04 21:21	24°) € 59'36	0.65469 AU
inferior conj	12317 Mar 23 06:32	8° Y 34'38	0°58'42	inferior conj	12318 Mar 07 02:25	22°) €29'29	0°01'01
minimum elong	12317 Mar 23 05:08	8° Y 38'59	0°58'08	minimum elong	12318 Mar 07 02:23	22°) €29'36	0°01'13
morning rise	12317 Mar 29 01:27	2° Y 49'36		transit middle	12318 Mar 07 02:23	22°) € 29'36	0°01'13
direct	12317 Apr 01 05:14	1°Υ53'08	10005:50	transit begin	12318 Mar 06 23:24	22°) (38′05	
morning max el	12317 Apr 07 19:01	5° Υ 24'26	18°35'29	transit end	12318 Mar 07 05:22	22°) (21'07	
desc. node	12317 Apr 22 10:28	25° Ƴ 36'57		asc. node	12318 Mar 07 01:10	22°) (33'03	
	12317 Apr 25 05:49	0°8		morning rise	12318 Mar 13 07:33	16° ¥ 56'51	
morning set	12317 Apr 28 21:35	5° 8 44'20		direct	12318 Mar 16 01:38	16°) 16′04 19°) 36′00	10002102
	12317 May 14 09:32	0°Щ		morning max el	12318 Mar 22 10:18	19 九 56700	18°03'02

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	12318 Mar 30 09:35	0 ° Υ		minimum elong	12319 Feb 18 15:11	6° 米 01'43	1°05'32
desc. node	12318 Apr 09 07:05	15° Y 52'03		asc. node	12319 Feb 21 22:34	2° ¥ 53'55	
morning set	12318 Apr 09 17:40	16° Ƴ 35'14		morning rise	12319 Feb 25 06:37	0°) 49′26	
	12318 Apr 18 00:30	9° 8		direct	12319 Feb 27 16:36	0°) € 20'43	
				morning max el	12319 Mar 06 03:59	3°) 40′33	17°47'44
superior conj	12318 Apr 24 09:23	10° 8 07'13	-1°39'05	morning set	12319 Mar 22 16:57	28°) (44′29	
minimum elong	12318 Apr 24 00:06	9° 8 30'36	1°38'40		12319 Mar 23 10:37	0 ° Υ	
max. Earth dist.	12318 Apr 27 08:40	14° 8 47'10	1.45628 AU	desc. node	12319 Mar 27 03:40	6° Y 18'50	
	12318 May 07 03:26	Π°					
evening rise	12318 May 10 11:58	5° Ⅱ 11'12		superior conj	12319 Apr 04 11:29	20° Y ′08′28	-1°00'43
greatest brilliancy	12318 May 23 13:43	25° I I07'25	-0.7m	minimum elong	12319 Apr 04 05:11	19° Y ′42'46	1°00'05
greatest stillary	12318 May 26 22:01	0.20 20, 70	0.7111	max. Earth dist.	12319 Apr 10 03:22	29° Υ 14'16	1.44814 AU
asc. node	12318 Jun 02 22:29	9° 5 07'22		max. Lartii dist.	12319 Apr 10 14:54	0°8	1.44014710
evening max el	12318 Jun 04 08:05	10°936'35	19°29'19	evening rise	12319 Apr 10 14:34 12319 Apr 19 23:23	14° 8 33'45	
-	12318 Jun 11 12:26	14° © 39'25	19 29 19	evening rise		0°Ⅱ	
retrograde					12319 Apr 30 04:47	0 П 24°П22'36	20920157
evening set	12318 Jun 15 04:20	13°921'15	2012105	evening max el	12319 May 18 10:03		20°29'56
inferior conj	12318 Jun 20 13:24	7° © 27'39	3°13'05	asc. node	12319 May 20 19:40	26° Ⅱ 33'29	
minimum elong	12318 Jun 20 13:56	7°\$25'52	3°12'10	retrograde	12319 May 26 11:20	29° Ⅱ 01'58	
min. Earth dist.	12318 Jun 21 19:51	5° © 47'06	0.67206 AU	evening set	12319 May 30 12:53	27° Ⅲ 27'34	
morning rise	12318 Jun 25 23:06	1° © 04'59		inferior conj	12319 Jun 04 19:26	21° Ⅲ 21'21	3°12'57
	12318 Jun 27 07:59	30°ŖⅡ		minimum elong	12319 Jun 04 18:55	21° Ⅲ 23′06	3°12'04
direct	12318 Jul 01 23:03	28° Ⅲ 27′05		min. Earth dist.	12319 Jun 05 11:53	20° Ⅱ 24'50	0.68203 AU
desc. node	12318 Jul 06 07:28	29° Ⅱ 35′00		morning rise	12319 Jun 10 00:41	15° Ⅱ 01'45	
	12318 Jul 07 02:27	0°€		direct	12319 Jun 15 12:51	12° Ⅲ 35'34	
morning max el	12318 Jul 14 06:28	5° © 49'35	25°34'17	desc. node	12319 Jun 23 04:36	16° Ⅲ 04'12	
	12318 Aug 01 22:28	$0^{\circ}\Omega$		morning max el	12319 Jun 26 16:27	19° Ⅱ 16′24	24°07'42
morning set	12318 Aug 19 06:38	28° Ω 38'39			12319 Jul 05 18:36	0°9	
-	12318 Aug 20 00:29	O° Mp			12319 Jul 26 01:30	$0^{\circ}\Omega$	
max. Earth dist.	12318 Aug 22 22:35	5° m 25'49	1.35974 AU	morning set	12319 Aug 01 03:38	10° Ω 11'40	
	Č	•		max. Earth dist.	12319 Aug 04 20:18	16° Ω 40'08	1.38203 AU
superior conj	12318 Aug 28 23:12	17° mp 10'21	-0°09'23				
minimum elong	12318 Aug 28 23:48	17° Mp 13'18	0°09'34	superior conj	12319 Aug 12 02:58	0° m) 06'20	-0°43'02
behind sun begin	12318 Aug 28 18:43	16° mp 47'50	0 0, 5.	minimum elong	12319 Aug 12 05:56	0° m/20'29	
behind sun end	12318 Aug 29 04:53	17° mp 38'47		minimum crong	12319 Aug 12 01:38	0°m)	0 15 01
asc. node	12318 Aug 29 22:51	19°Mp09'12		asc. node	12319 Aug 16 19:32	9° m) 12'09	
asc. node	12318 Aug 29 22:31 12318 Sep 04 06:08	0° ⊽			Ü	-	
	12318 Sep 04 06.08 12318 Sep 05 22:26	ა <u>•</u> 3° • 26'43		evening rise	12319 Aug 20 23:12	17° ™ 24'16 0° ⊆	
evening rise					12319 Aug 27 13:24		10000140
	12318 Sep 21 06:47	0°M	20002152	evening max el	12319 Sep 06 09:42	14° £ 14'58	19°02'48
evening max el	12318 Sep 23 15:51	2°M37'32	20°02'53	retrograde	12319 Sep 15 06:40	18° ≏ 41'07	
desc. node	12318 Oct 02 04:20	7°M40'23		evening set	12319 Sep 17 03:15	18° ≏ 30'15	
retrograde	12318 Oct 04 04:00	7° M 51′15		desc. node	12319 Sep 19 01:48	17° ≏ 57'15	
evening set	12318 Oct 06 03:05	7° ጤ 41'07		inferior conj	12319 Sep 25 12:50	14° ≏ 15'55	
inferior conj	12318 Oct 15 01:58	3°M41'56		minimum elong	12319 Sep 25 07:35	14° ≏ 24'57	
minimum elong	12318 Oct 14 16:24	3° M 56'19	3°48'56	min. Earth dist.	12319 Sep 28 09:37		0.56255 AU
min. Earth dist.	12318 Oct 16 20:45	2°M37'31	0.54965 AU	morning rise	12319 Oct 03 08:53	9° ഫ 30'50	
	12318 Oct 21 22:05	30° Ŗ亞		direct	12319 Oct 08 21:05	8° ≙ 19'40	
morning rise	12318 Oct 23 04:32	29° ≙ 31'48		morning max el	12319 Oct 23 00:57	15° ≙ 34'50	25°55'51
direct	12318 Oct 27 21:17	28° ≏ 43'46			12319 Nov 03 16:04	0° M	
	12318 Nov 02 17:11	0° M		asc. node	12319 Nov 12 21:01	15° ™ 39'56	
morning max el	12318 Nov 10 13:08	5°M26'52	24°14'58	morning set	12319 Nov 19 22:27	29° M 59'14	
asc. node	12318 Nov 26 00:10	26°M36′56			12319 Nov 19 22:36	0° ∡ ¹	
	12318 Nov 27 20:55	0° ∡ ¹					
morning set	12318 Dec 05 11:15	15° ∡ 18'10		superior conj	12319 Nov 26 17:36	14° ∡ 756′14	1°37'24
Ü				minimum elong	12319 Nov 26 16:52	14° ₹ 52'12	1°38'13
superior conj	12318 Dec 12 07:10	0° る 11'27	1°38'24	max. Earth dist.	12319 Nov 27 19:21	17° ∡ 18'55	1.31726 AU
minimum elong	12318 Dec 12 07:32	0° る 13'23		evening rise	12319 Dec 03 18:14	0° る 10'10	
8	12318 Dec 12 05:05	0°ਰ			12319 Dec 03 16:17	0°ಕ	
max. Earth dist.	12318 Dec 14 14:09	5° る 09'17	1.32630 AU	desc. node	12319 Dec 15 23:13	23° る 16'22	
evening rise	12318 Dec 14 14:09	5 3 0917	1.52050 AU	dose, node	12319 Dec 13 23:13 12319 Dec 20 02:59	0° ≈	
Svennig 1150	12318 Dec 19 18:20 12318 Dec 27 01:52	0° ≈		evening max el	12319 Dec 20 02:39 12320 Jan 04 20:05	0 ∞ 19°≈54'07	27°25'47
desc. node	12318 Dec 27 01.32 12318 Dec 29 02:14	0 ≈ 3°≈34'59		retrograde	12320 Jan 04 20.03 12320 Jan 18 17:54	19 ≈3407 27°≈12'13	21 23 41
uese. Hout		3°≈3439 0°) {		-			
avanir 1	12319 Jan 15 20:43		27920127	evening set	12320 Jan 25 16:30	24°≈57'47	0.61647 411
evening max el	12319 Jan 22 11:04	7°) (11'33	21-30-26	min. Earth dist.	12320 Jan 29 10:25	22°≈05'01	0.61647 AU
retrograde	12319 Feb 05 04:42	14°) (36′22		inferior conj	12320 Feb 01 11:15	19°≈19'59	
evening set	12319 Feb 12 01:59	12°) €08'31	0.60604 :==	minimum elong	12320 Feb 01 16:13	19°≈08'42	2~20'42
min. Earth dist.	12319 Feb 15 20:48		0.63681 AU	morning rise	12320 Feb 08 18:44	14°≈19'51	
inferior conj	12319 Feb 18 13:03	6°) €07'12	-1~06'52	asc. node	12320 Feb 08 19:54	14° ≈ 18′58	

T'	12220 F 1 10 22 52	12050126			12221 1 16 07 21	2005	
direct	12320 Feb 10 22:53	13°≈59'26	17050115		12321 Jan 16 07:21	30°Rる	
morning max el	12320 Feb 17 20:47	17° ≈ 29'08	17°50'15	morning rise	12321 Jan 21 14:40	27° ろ 18'20	
	12320 Feb 26 19:24	0°) {		direct	12321 Jan 23 16:26	27°る02'31	
morning set	12320 Mar 04 13:31	11° 米 53′50		asc. node	12321 Jan 25 17:12	27° る 18'23	
desc. node	12320 Mar 13 00:15	26° ¥ 53′12			12321 Jan 30 10:51	0° ≈	
	12320 Mar 14 19:32	0° Υ		morning max el	12321 Jan 31 09:12	0° ≈ 51'37	18°11'58
				morning set	12321 Feb 16 01:17	25° ≈ 44'57	
superior conj	12320 Mar 15 13:37	1° Y 17′28			12321 Feb 18 07:28	0° ∀	
minimum elong	12320 Mar 15 11:48	1° Y 09'39					
max. Earth dist.	12320 Mar 22 18:38	13° Ƴ 18′28	1.43364 AU	superior conj	12321 Feb 25 15:03	13° ∺ 31′09	0°17'36
evening rise	12320 Mar 29 16:23	24° Y 18'42		minimum elong	12321 Feb 25 16:23	13°) 37′11	0°17'43
	12320 Apr 02 08:42	9° 8		desc. node	12321 Feb 27 20:49	17°) €31'16	
	12320 Apr 23 06:37	Π °0		max. Earth dist.	12321 Mar 05 05:46	26°) 48′40	1.41431 AU
evening max el	12320 Apr 30 06:31	8° Ⅱ 09'51	21°42'18		12321 Mar 07 03:25	0 ° Υ	
asc. node	12320 May 06 16:55	12° Ⅱ 57'16		evening rise	12321 Mar 10 02:32	4° Y 52'01	
retrograde	12320 May 09 09:32	13° Ⅲ 31′25			12321 Mar 26 14:24	9° 8	
evening set	12320 May 13 21:39	11° Ⅲ 41′07		evening max el	12321 Apr 12 22:47	21° 8 58'57	23°01'40
inferior conj	12320 May 19 04:09	5° Ⅲ 24'18	3°01'38	retrograde	12321 Apr 23 05:36	28° 8 02'54	
minimum elong	12320 May 19 02:47	5° Ⅱ 29'07	3°00'40	asc. node	12321 Apr 23 14:12	28° 8 02'18	
min. Earth dist.	12320 May 19 07:21	5° Ⅱ 13'10	0.68733 AU	evening set	12321 Apr 28 05:04	25° 8 57'47	
	12320 May 23 10:35	30°R₩		min. Earth dist.	12321 May 03 04:04	20° 8 05'44	0.68792 AU
morning rise	12320 May 24 07:41	29° 8 09'53		inferior conj	12321 May 03 13:34	19° 8 32'48	2°40'05
direct	12320 May 29 06:59	27° 8 01'10		minimum elong	12321 May 03 11:36	19° 8 39'36	2°39'02
	12320 Jun 05 00:19	0°II		morning rise	12321 May 08 18:03	13° 8 25'03	
morning max el	12320 Jun 08 03:25	2° I I50'22	22°37'59	direct	12321 May 13 04:16	11° 8 36'58	
desc. node	12320 Jun 09 01:37	3° Ⅱ 47'32		morning max el	12321 May 21 18:51	16° 8 34'39	21°13'34
door. Hode	12320 Jun 28 19:12	0°95		desc. node	12321 May 26 22:30	22° 8 25'02	21 133.
morning set	12320 Jul 12 00:47	20°939'44		desc. node	12321 Jun 01 16:22	0°II	
max. Earth dist.	12320 Jul 16 18:32	28°933'45	1.40534 AU	morning set	12321 Jun 21 20:30	0°900'56	
max. Earth dist.	12320 Jul 17 14:47	0°Ω	1.40354710	morning set	12321 Jun 21 20:16	0.8e	
	12320 Jul 17 14.47	0 86		max. Earth dist.	12321 Jun 28 22:57	11° © 23'26	1.42671 AU
superior conj	12320 Jul 24 14:31	12° Ω 16'50	1017113	max. Earth dist.	12321 Juli 26 22.37	11 32320	1.420/1 AU
minimum elong	12320 Jul 24 20:04	12°Ω41'54		superior conj	12321 Jul 06 05:26	23° © 32'19	1047'44
asc. node		29°Ω08'03	1 1700	minimum elong	12321 Jul 06 03:20	24° © 01'54	
asc. node	12320 Aug 02 16:15	0° m)		minimum elong	12321 Jul 00 12.21 12321 Jul 09 23:07	24 3 01 34 0° Ω	1 4/34
avanina risa	12320 Aug 03 03:15	0° Mp 54'37		avanina riaa	12321 Jul 09 23.07 12321 Jul 17 17:10	13°Ω48'18	
evening rise	12320 Aug 03 14:48	~	18°23'59	evening rise		13 δ (48 18 18° Ω 53'11	
evening max el	12320 Aug 19 14:16	26° Mp 35′16 0° <u>₽</u>	18 23 39	asc. node	12321 Jul 20 13:02 12321 Jul 26 23:50		
	12320 Aug 24 16:27					0° m)	10005122
retrograde	12320 Aug 27 04:15	0° 2 24'46		evening max el	12321 Aug 03 01:28	9° Mp 29'32	18°05'23
evening set	12320 Aug 29 06:10	0° 2 08'16		retrograde	12321 Aug 09 19:48	12° m 57'11	
	12320 Aug 29 17:39	30°R, M)		evening set	12321 Aug 12 05:21	12° Tp 31'17	1006150
desc. node	12320 Sep 04 23:16	26° To 16'48	0016156	inferior conj	12321 Aug 19 02:10	7° m) 35'42	1°06'59
inferior conj	12320 Sep 05 21:02	25° m 33'19		minimum elong	12321 Aug 19 04:07	7° Mp 31'09	1°05'52
minimum elong	12320 Sep 05 20:24	25° m) 34'37		min. Earth dist.	12321 Aug 22 07:24	4° m) 35'58	0.60432 AU
min. Earth dist.	12320 Sep 09 04:26	22° m 54'19	0.58186 AU	desc. node	12321 Aug 22 20:42	4° Mp 06'49	
morning rise	12320 Sep 13 07:08	20° m 11'37		morning rise	12321 Aug 25 23:56	1° m/44'23	
direct	12320 Sep 19 11:02	18° m 32'51			12321 Aug 29 20:03	30°R Ω	
morning max el	12320 Oct 03 18:52	26° To 11'13	27°12'11	direct	12321 Sep 01 13:22	29° £ 38'31	
	12320 Oct 07 09:19	0∘ ⊽			12321 Sep 04 08:30	0° m	
_	12320 Oct 27 02:18	0°M√		morning max el	12321 Sep 15 20:26	7° m/32'51	27°52'35
asc. node	12320 Oct 29 17:48	5° ™ 06'54			12321 Oct 02 21:57	0∘ ত	
morning set	12320 Nov 03 07:13	14° ™ 29′20		asc. node	12321 Oct 16 14:31	24° ≏ 51'14	
				morning set	12321 Oct 18 11:44	28° ≏ 44'06	
superior conj	12320 Nov 10 05:15	29° M 40′37	1°30'34		12321 Oct 19 02:13	0° M	
minimum elong	12320 Nov 10 03:38	29°M31'40	1°31'09	max. Earth dist.	12321 Oct 24 12:07	11° M 43'05	1.31418 AU
max. Earth dist.	12320 Nov 10 03:54	29°M33'09	1.31318 AU				
	12320 Nov 10 08:43	0° ∡ ″		superior conj	12321 Oct 25 16:19	14° M 19′27	1°18'05
evening rise	12320 Nov 16 23:53	14° ₹ 34'42		minimum elong	12321 Oct 25 14:10	14° M 07'32	1°18'22
	12320 Nov 24 16:14	0°ಕ		evening rise	12321 Nov 01 09:14	29°M06'45	
desc. node	12320 Dec 01 20:17	12° る 24'45			12321 Nov 01 19:08	0° ∡ °	
	12320 Dec 15 02:41	0° ≈			12321 Nov 18 04:26	8°0	
evening max el	12320 Dec 16 23:09	1° ≈ 50'14	26°46'52	desc. node	12321 Nov 18 17:26	0° る 47'31	
retrograde	12320 Dec 30 21:50	8° ≈ 58'50		evening max el	12321 Nov 28 17:53	12° る 53'04	25°35'08
evening set	12321 Jan 06 14:31	7° ≈ 06′18		retrograde	12321 Dec 12 14:51	19° る 52'31	
min. Earth dist.	12321 Jan 10 13:18	4° ≈ 28′23	0.59500 AU	evening set	12321 Dec 18 15:38	18° る 28'46	
inferior conj	12321 Jan 13 17:29	1° ≈ 57'50	-3°43'33	min. Earth dist.	12321 Dec 23 06:11	15° る 50'57	0.57441 AU
minimum elong	12321 Jan 14 01:09	1° ≈ 42'38	3°40'13	inferior conj	12321 Dec 26 04:21	13° る 50'49	-4°57'12

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minimum elong	12321 Dec 26 12:39	13° る 36'32	4°54'24	morning rise	12322 Dec 15 06:38	20° ∡ 757'14	
morning rise	12322 Jan 03 12:10	9° ට 33'55		direct	12322 Dec 17 21:26	20° х 39'47	
direct	12322 Jan 05 16:49	9° ට 19'14		morning max el	12322 Dec 17 21:20 12322 Dec 28 05:28	25° ×7 35'40	20°00'15
asc. node	12322 Jan 12 14:25	11° る 55'35		asc. node	12322 Dec 30 11:34	27°×7'58'42	20 00 15
morning max el	12322 Jan 14 13:20	13° る 37'09	18°54'45	asc. node	12323 Jan 01 03:06	0°중	
morning max er	12322 Jan 14 13.20 12322 Jan 25 17:34	0°≈	16 3443	morning set	12323 Jan 15 04:40	24°る39'02	
marning ast	12322 Jan 23 17.34 12322 Jan 30 23:30	0 ≈ 10°≈03'24		morning set	12323 Jan 17 19:29	24 ⊘ 3902 0° ≈	
morning set	12322 Jan 30 23.30	10 ≈03 24			12323 Jan 17 19.29	0 &	
aumorior comi	12222 Eab 00 11:20	26°≈37'27	0°48'16	gumariar agni	12222 Ion 22 22:22	10° ≈ 23'17	1011127
superior conj	12322 Feb 08 11:30			superior conj	12323 Jan 22 22:22		
minimum elong	12322 Feb 08 14:14	26°≈50'24	0°48'25	minimum elong	12323 Jan 23 01:09	10°≈37'12	
	12322 Feb 10 06:27	0° ∀		max. Earth dist.	12323 Jan 28 19:31	21°≈48'08	1.37009 AU
desc. node	12322 Feb 14 17:24	8° ¥ 09′26	1 20220 177	evening rise	12323 Feb 01 13:23	28°≈41'19	
max. Earth dist.	12322 Feb 15 13:02	9° ₩ 36'57	1.39229 AU	desc. node	12323 Feb 01 14:04	28°≈44'22	
evening rise	12322 Feb 19 09:53	16°) € 20'44			12323 Feb 02 06:58	0°) €	
	12322 Feb 27 18:14	0° Υ			12323 Feb 21 02:04	0° Υ	
	12322 Mar 21 05:06	0° 8		evening max el	12323 Mar 09 01:59	19° Y 40'54	25°36'33
evening max el	12322 Mar 26 12:38	5° 8 49'34	24°22'02	retrograde	12323 Mar 21 10:41	26° Ƴ 48'30	
retrograde	12322 Apr 06 22:16	12° 8 30'29		evening set	12323 Mar 27 09:32	24° Y 21′08	
asc. node	12322 Apr 10 11:33	11° 8 33'33		asc. node	12323 Mar 28 08:55	23° Y 28'09	
evening set	12322 Apr 12 09:33	10° 8 12'35		min. Earth dist.	12323 Mar 31 16:52	19° Ƴ 40′05	0.67576 AU
min. Earth dist.	12322 Apr 16 23:55	4° 8 56'21	0.68400 AU	inferior conj	12323 Apr 02 02:57	17° Ƴ 51'11	1°27'13
inferior conj	12322 Apr 17 21:47	3° 8 42'50	2°08'38	minimum elong	12323 Apr 02 01:05	17° Ƴ 57'09	1°26'23
minimum elong	12322 Apr 17 19:38	3° 8 50'07	2°07'35	morning rise	12323 Apr 07 17:09	12° Y 00'12	
	12322 Apr 20 20:03	30° ₹Ƴ		direct	12323 Apr 11 03:00	10° Ƴ 53'31	
morning rise	12322 Apr 23 05:50	27° Y 42'50		morning max el	12323 Apr 17 23:30	14° Ƴ 37'11	19°01'44
direct	12322 Apr 27 03:23	26° Ƴ 16′07			12323 Apr 29 16:51	9° 8	
	12322 May 04 04:37	8° 0		desc. node	12323 Apr 30 16:00	1° 8 26'35	
morning max el	12322 May 04 17:20	0° 8 30'40	20°00'18	greatest brilliancy	12323 May 01 05:22	2° 8 16'53	-0.7m
desc. node	12322 May 13 19:17	11° 8 41'25		morning set	12323 May 11 03:23	17° 8 30'09	
	12322 May 26 06:46	Π°		-	12323 May 19 04:36	Π°	
morning set	12322 May 31 22:36	8° Ⅱ 38'25		max. Earth dist.	12323 May 25 02:05	9° Ⅱ 12'26	1.45427 AU
max. Earth dist.	12322 Jun 11 09:59	25° Ⅱ 01'03	1.44359 AU		· ·		
	12322 Jun 14 12:39	0 \circ \odot		superior conj	12323 May 27 13:41	13° Ⅱ 06'37	-2°12'35
				minimum elong	12323 May 27 11:26	12° Ⅱ 57'44	2°13'22
superior conj	12322 Jun 16 20:23	3° 5 45'41	-2°08'28	Č	12323 Jun 07 03:52	0ංම	
minimum elong	12322 Jun 17 01:00	4° © 04'32	2°09'10	evening rise	12323 Jun 11 10:36	6°956'55	
evening rise	12322 Jun 30 01:19	25° © 52'20		asc. node	12323 Jun 24 06:48	27° © 28'13	
Č	12322 Jul 02 11:11	$0^{\circ}\Omega$			12323 Jun 26 00:41	$0^{\circ}\Omega$	
asc. node	12322 Jul 07 09:52	8° Ω 21'57		evening max el	12323 Jul 01 04:54	6° Ω 20'49	18°24'51
evening max el	12322 Jul 17 15:25	22° Ω 47'26	18°05'58	retrograde	12323 Jul 07 15:03	9° Ω 47'34	
retrograde	12322 Jul 24 00:54	26°Ω07'51	10 00 00	evening set	12323 Jul 10 16:59	8° Ω 54'47	
evening set	12322 Jul 26 18:31	25° Ω 29'35		inferior conj	12323 Jul 16 12:08	3° Ω 24'23	2°46'00
inferior conj	12322 Aug 02 00:35	20°Ω15'35	2°07'05	minimum elong	12323 Jul 16 14:17	3° Ω 18′03	2°44'48
minimum elong	12322 Aug 02 03:12	20°Ω08'37	2°05'44	min. Earth dist.	12323 Jul 18 17:52	0°Ω46'12	
min. Earth dist.	12322 Aug 04 19:55	17° Ω 17'06	0.62689 AU	min. Luttii dist.	12323 Jul 19 10:15	30°R95	0.01750710
morning rise	12322 Aug 08 09:49	14°Ω05'03	0.02009 110	morning rise	12323 Jul 22 10:20	27°904'14	
desc. node	12322 Aug 09 18:06	13°Ω11'23		desc. node	12323 Jul 27 15:27	24°930'52	
direct	12322 Aug 15 02:13	11° Ω 37'35		direct	12323 Jul 28 23:52	24°9524'28	
morning max el	12322 Aug 29 03:50	19° Ω 39'54	27°54'08	direct	12323 Aug 09 02:05	0°Ω	
morning max cr	12322 Sep 06 23:30	0° m)	27 3400	morning max el	12323 Aug 11 14:13	2° Ω 23'00	27°20'10
	12322 Sep 00 23:30 12322 Sep 25 21:18	0∘ ত المار		morning max ci	12323 Aug 11 14:13 12323 Sep 01 05:59	0° m)	27 20 19
morning set	12322 Sep 23 21:18 12322 Oct 02 09:55	12° £ 38'23		morning set	12323 Sep 01 03:39 12323 Sep 15 23:08	26° Mp 05'16	
asc. node	12322 Oct 02 09:33 12322 Oct 03 11:11	12 = 38 23 14° £ 47′23		morning set	-	0° ⊽	
			1 22022 ATT	asc. node	12323 Sep 17 22:36		
max. Earth dist.	12322 Oct 07 16:01	23° ≏ 38'34	1.32033 AU		12323 Sep 20 07:49	4° £ 50'30	1 22175 444
	12222 0 + 10 00 50	200 0 47144	1000107	max. Earth dist.	12323 Sep 20 11:53	5° £ 11'27	1.33175 AU
superior conj	12322 Oct 10 00:58	28° Ω 47'44			10202 0 24 05 07	100 0 50100	0026151
minimum elong	12322 Oct 09 22:45		1°00'05	superior conj	12323 Sep 24 05:07	12° ♀ 59'30	
	12322 Oct 10 14:10	0°M,		minimum elong	12323 Sep 24 03:24	12° ⊆ 50'23	0°36'38
evening rise	12322 Oct 16 20:21	13°M41'21		evening rise	12323 Oct 01 07:21	28° △ 13'09	
	12322 Oct 24 22:10	0° द्र ⁷			12323 Oct 02 03:31	0° M ○0. 7	
desc. node	12322 Nov 05 14:42	18° ₹ '07'35	2.1000:10		12323 Oct 19 16:28	0° ∡ ¹	220101
evening max el	12322 Nov 10 05:19	23° ⋌ 11'32	24°00'18	evening max el	12323 Oct 22 16:27	3° √ 14'47	22°18'53
retrograde	12322 Nov 23 19:47	29° ₹ 59'05		desc. node	12323 Oct 23 12:03	4° ⋌ ¹01'16	
evening set	12322 Nov 28 16:44	29° ∡ 107'06		retrograde	12323 Nov 04 12:39	9° ∡ ¹37'23	
min. Earth dist.	12322 Dec 04 16:10	26° ∡ 10′16	0.55749 AU	evening set	12323 Nov 07 22:52	9° ∡ 11'30	
inferior conj	12322 Dec 06 18:35	24° ∡ ¹54'01		min. Earth dist.	12323 Nov 15 23:09	5° ∡ ³37'31	0.54733 AU
minimum elong	12322 Dec 06 22:42	24° ∡ ¹47'48	5°44'24	inferior conj	12323 Nov 16 16:03	5° ∡ 13'42	-5°45'57

minimum elong	12323 Nov 16 11:38	5° ∡ 19'56	5°44'48	inferior conj	12324 Oct 26 07:51	15°M13'51	-4°47'23
morning rise	12323 Nov 25 01:43	1° ∡ ¹26'26		minimum elong	12324 Oct 25 21:58	15°M27'59	4°44'20
direct	12323 Nov 28 10:07	1° ∡ '01'14		min. Earth dist.	12324 Oct 27 06:14	14° M 41'53	0.54614 AU
morning max el	12323 Dec 10 07:23	6° ∡ ¹40'37	21°28'03	morning rise	12324 Nov 03 13:07	11°ML18'08	
asc. node	12323 Dec 17 08:38	15° √ 10'21		direct	12324 Nov 07 18:27	10°M39'53	
	12323 Dec 25 23:11	ರ°0		morning max el	12324 Nov 20 21:39	17° M 00'57	23°12'24
morning set	12323 Dec 30 14:03	9° ට 23'01			12324 Dec 01 05:22	0° ∡ ¹	
				asc. node	12324 Dec 03 05:38	3° ∡ 15′12	
superior conj	12324 Jan 06 19:29	24° る 35'55	1°27'17	morning set	12324 Dec 14 01:33	24° ₹ 09'51	
minimum elong	12324 Jan 06 21:34	24° る 46'43	1°27'56		12324 Dec 16 18:43	ರ°ರ	
	12324 Jan 09 10:26	0° ≈					
max. Earth dist.	12324 Jan 11 06:14	3° ≈ 40'36	1.35005 AU	superior conj	12324 Dec 20 23:42	9° ට 06'33	1°36'11
evening rise	12324 Jan 15 09:40	11° ≈ 43'51		minimum elong	12324 Dec 21 00:43		1°37'02
desc. node	12324 Jan 19 10:49	19° ≈ 11'13		max. Earth dist.	12324 Dec 24 00:42	15° る 34'50	1.33374 AU
	12324 Jan 25 18:02	0° ∀		evening rise	12324 Dec 28 19:10	25° る 19'20	
	12324 Feb 16 07:47	0° Υ			12324 Dec 31 04:49	0° ≈	
evening max el	12324 Feb 19 15:39	3° Y 26'54	26°38'02	desc. node	12325 Jan 05 07:39	9° ≈ 25'20	
retrograde	12324 Mar 03 17:42	10° Y 48'48			12325 Jan 18 05:04	0° ∀	
evening set	12324 Mar 10 03:11	8° Y 16'35		evening max el	12325 Feb 01 05:04	16° ¥ 58′08	27°18'58
min. Earth dist.	12324 Mar 14 04:45	4° Υ ′09'42	0.66343 AU	retrograde	12325 Feb 14 18:22	24°) €23'25	
asc. node	12324 Mar 14 06:20	4°Υ05'06		evening set	12325 Feb 21 12:23	21°) 52′10	
inferior conj	12324 Mar 16 02:53	1°Υ′52'22	0°35'31	min. Earth dist.	12325 Feb 25 09:20	18° ¥ 17'43	0.64745 AU
minimum elong	12324 Mar 16 01:58	1° Y 55'07	0°35'14	inferior conj	12325 Feb 27 19:11	15°) (40′34	
	12324 Mar 17 17:27	30° ₹ ₩		minimum elong	12325 Feb 27 19:58	15°) € 38′26	0°25'56
morning rise	12324 Mar 22 01:50	26°) 12'08		asc. node	12325 Mar 01 03:45	14°) € 13'28	
direct	12324 Mar 25 01:14	25°) € 22'51	10010122	morning rise	12325 Mar 06 05:20	10°) 13'35	
morning max el	12324 Mar 31 12:02	28°) 48'14 0° °	18°19'33	direct	12325 Mar 08 19:47	9°) 38'18 12°) 56'57	17054121
desc. node	12324 Apr 01 15:45	0° γ 21° Υ 32'18		morning max el	12325 Mar 15 04:36 12325 Mar 27 05:23	12° π 36'37 0° Υ	1/-54/21
	12324 Apr 16 12:40 12324 Apr 20 06:50	27° Y 31'26		mamina sat		8° Υ 57'27	
morning set	12324 Apr 20 00:30 12324 Apr 21 20:08	0° 8		morning set desc. node	12325 Apr 01 15:05 12325 Apr 03 09:16	8 1 37 27 11° Υ 52'40	
	12324 Apr 21 20.06	0.0		desc. Hode	12325 Apr 03 09:10 12325 Apr 14 11:54	0° 8	
superior conj	12324 May 05 20:57	22° 8 07'50	-1°56'26		12323 Apr 14 11.34	0.0	
minimum elong	12324 May 05 12:26	_	1°56'28	superior conj	12325 Apr 15 11:51	1° 8 35'37	-1°23'39
max. Earth dist.	12324 May 06 21:21	23° 8 43'11	1.45772 AU	minimum elong	12325 Apr 15 03:20	_	
max. Darm dist.	12324 May 10 21:55	0°Ⅱ	1.43772710	max. Earth dist.	12325 Apr 19 17:25	8° 8 17'41	1.45370 AU
evening rise	12324 May 21 19:45	17° I 102'46		evening rise	12325 May 01 11:13	26° 8 30'47	1.10570110
	12324 May 30 02:44	0ಂಣ			12325 May 03 17:52	0°II	
greatest brilliancy	12324 Jun 01 05:16	3°9514'42	-0.8m	greatest brilliancy	12325 May 16 02:53	18° Ⅲ 35'34	-0.6m
asc. node	12324 Jun 10 03:50	16° 5 04'18		<i>g</i>	12325 May 24 11:14	0°©	
evening max el	12324 Jun 13 15:17	20° © 03'10	19°01'09	evening max el	12325 May 27 20:39	3° © 48'55	19°53'28
retrograde	12324 Jun 20 10:40	23° 5 49'06		asc. node	12325 May 28 00:57	3° © 59'39	
evening set	12324 Jun 23 21:20	22°5640'24		retrograde	12325 Jun 04 08:58	8° © 05'45	
inferior conj	12324 Jun 29 09:10	16° © 55'03	3°07'25	evening set	12325 Jun 08 04:58	6°5540'32	
minimum elong	12324 Jun 29 10:20	16° © 51'19	3°06'25	inferior conj	12325 Jun 13 12:38	0° 5 41'31	3°14'29
min. Earth dist.	12324 Jul 01 00:07	14° © 50'56	0.66431 AU	minimum elong	12325 Jun 13 12:43	0° 5 41'14	3°13'35
morning rise	12324 Jul 04 22:41	10° © 32'09			12325 Jun 14 00:57	30°RⅡ	
direct	12324 Jul 11 04:41	7° 9 50'41		min. Earth dist.	12325 Jun 14 13:02	29° Ⅱ 19'26	0.67693 AU
desc. node	12324 Jul 13 12:44	8°910'14		morning rise	12325 Jun 18 20:09	24° Ⅱ 20′06	
morning max el	12324 Jul 24 01:06	15° © 30'27	26°18'41	direct	12325 Jun 24 15:22	21° Ⅱ 46′21	
	12324 Aug 04 23:07	0 $^{\circ}\Omega$		desc. node	12325 Jun 30 09:55	23° Ⅱ 45'37	
	12324 Aug 24 01:49	0° m)		morning max el	12325 Jul 06 11:17	28° Ⅱ 51'54	24°58'27
morning set	12324 Aug 29 00:08	8° Mp 56'34			12325 Jul 07 13:32	0ංම	
max. Earth dist.	12324 Sep 01 21:36	16° Mp 23'03	1.34827 AU		12325 Jul 29 17:39	0 ° Ω	
asc. node	12324 Sep 06 04:28	24° m 56'45		morning set	12325 Aug 11 08:41	21°Ω01'05	
				max. Earth dist.	12325 Aug 14 22:38	27° Ω 29'47	1.36901 AU
superior conj	12324 Sep 07 02:19	26° m) 48'34	0°08'44		12325 Aug 16 07:00	0° m)	
minimum elong	12324 Sep 07 01:51	26° Mp 46'07	0°08'30		10005 1 01 12 1	100***	0000100
behind sun begin	12324 Sep 06 20:45	26° Th 20'00		superior conj	12325 Aug 21 13:28	10° Mp 06'12	
behind sun end	12324 Sep 07 06:56	27° m 12'15		minimum elong	12325 Aug 21 15:00	10° Mp 13'42	0~23′29
i ·	12324 Sep 08 15:24	0° <u>ი</u>		asc. node	12325 Aug 24 01:07	15° Mp 01'44	
evening rise	12324 Sep 14 16:17	12° £ 37'06		evening rise	12325 Aug 29 20:47	26° Mp 46'13 0° <u>₽</u>	
avanina may al	12324 Sep 23 14:58	0°M 13°M 40'15	20047112	avaning may al	12325 Aug 31 11:25		10021125
evening max el desc. node	12324 Oct 03 12:41	13°M40'15 18°M00'56	20°47'13	evening max el	12325 Sep 15 22:39	24° Ω 49'07 29° Ω 41'40	19°34'35
retrograde	12324 Oct 09 09:28 12324 Oct 14 23:26	18°11L00'56		retrograde desc. node	12325 Sep 25 17:16 12325 Sep 26 06:56	29° 2 41′40 29° 2 40′44	
evening set	12324 Oct 14 23:26 12324 Oct 17 06:48	19 IIL21 17		evening set	12325 Sep 26 06.36 12325 Sep 27 14:04	29° 2 31'47	
Stelling Set	1232 1 300 17 00.40	17 110002/		croning set	. 2020 бер 27 14.04	2, — 31 T/	

	12225 () + 0(00 25	250 0 26156	2007/25		12226 0 17 04 05	60.0.10120	1015120
inferior conj	12325 Oct 06 08:25	25° £ 26'56		inferior conj	12326 Sep 17 04:05	6° ₽ 18'29	
minimum elong	12325 Oct 06 00:21	25° △ 39'42	3°03'12	minimum elong	12326 Sep 17 00:59		
min. Earth dist.	12325 Oct 08 15:58	23° ≏ 59'05	0.55425 AU	min. Earth dist.	12326 Sep 20 07:01	4° ≏ 01'02	0.57019 AU
morning rise	12325 Oct 14 08:39	21° ഫ 03'21		morning rise	12326 Sep 24 20:17	1° ≏ 17'08	
direct	12325 Oct 19 10:04	20° ഫ 06'22			12326 Sep 29 04:53	30°R, Mp	
morning max el	12325 Nov 02 07:58	27° ≙ 03'12	24°59'55	direct	12326 Sep 30 15:33	29° m 54'50	
	12325 Nov 05 04:47	0° M			12326 Oct 02 02:22	0∘ ত	
asc. node	12325 Nov 20 02:32	21°M59'42		morning max el	12326 Oct 14 22:12	7° ≏ 20'50	26°32'16
	12325 Nov 24 06:37	0° ∡ ¹			12326 Oct 31 18:53	0° M .	
morning set	12325 Nov 28 13:21	8° × 754'10		asc. node	12326 Nov 06 23:19	11°ML13'35	
				morning set	12326 Nov 12 23:43	23°MJ31'02	
superior conj	12325 Dec 05 08:28	23° ∡ ¹47'35	1°38'42	Č	12326 Nov 15 23:18	0° ∡ ¹	
minimum elong	12325 Dec 05 08:21	23° ∡ ¹46'56	1°39'34				
max. Earth dist.	12325 Dec 07 02:46	27°×739'20	1.32189 AU	superior conj	12326 Nov 19 19:37	8° ∡ "32'33	1°35'12
max. Earth dist.	12325 Dec 07 02:10	0°る	1.52107110	minimum elong	12326 Nov 19 18:29	8° ×726'15	1°35'56
evening rise	12325 Dec 10 04:40	。3 9° 3 19'18		max. Earth dist.	12326 Nov 20 09:51	9° × 51'50	1.31488 AU
desc. node	12325 Dec 12 14:35 12325 Dec 23 04:35	29°る20'47		evening rise	12326 Nov 26 17:11	23° x 36'33	1.51400 AC
desc. node				evening rise		23 メ ・30 33	
	12325 Dec 23 13:43	0° ≈	27022122	1 1	12326 Nov 29 19:29		
evening max el	12326 Jan 14 16:23	0°) €01'59	21°32'32	desc. node	12326 Dec 10 01:36	18° る 49'21	
_	12326 Jan 14 15:33	0° \			12326 Dec 17 09:58	0° ≈	
retrograde	12326 Jan 28 11:51	7° ∺ 23'39		evening max el	12326 Dec 27 22:58	12° ≈ 24'59	27°13'27
evening set	12326 Feb 04 10:37	5° ∺ 00'30		retrograde	12327 Jan 10 21:18	19° ≈ 39'35	
min. Earth dist.	12326 Feb 08 04:38	1° ¥ 54'46	0.62841 AU	evening set	12327 Jan 17 18:37	17° ≈ 33'04	
	12326 Feb 10 04:04	30° R ≈		min. Earth dist.	12327 Jan 21 13:27	14° ≈ 48′28	0.60733 AU
inferior conj	12326 Feb 11 00:57	29° ≈ 08'43	-1°38'24	inferior conj	12327 Jan 24 16:47	12° ≈ 07'21	-2°57'21
minimum elong	12326 Feb 11 04:14	29° ≈ 00'43	1°36'32	minimum elong	12327 Jan 24 22:59	11° ≈ 54′02	2°54'20
asc. node	12326 Feb 16 01:07	24°≈55'54		morning rise	12327 Feb 01 06:17	7° ≈ 16'04	
morning rise	12326 Feb 18 00:19	23° ≈ 58′02		asc. node	12327 Feb 02 22:27	6° ≈ 58'50	
direct	12326 Feb 20 07:38	23° ≈ 33'10		direct	12327 Feb 03 08:56	6°≈58'03	
morning max el	12326 Feb 26 22:18	26° ≈ 55'40	17°46'36	morning max el	12327 Feb 10 13:46	10° ≈ 34'33	17°57'08
morning man er	12326 Mar 01 15:21	0° ∀	17 .030		12327 Feb 23 09:21	0° ₩	1, 2, 00
morning set	12326 Mar 15 00:13	21°) 34'55		morning set	12327 Feb 26 03:53	5° ₩ 03'36	
morning set	12326 Mar 19 20:29	0° Υ		desc. node	12327 Mar 08 02:22	22° ¥ 59'21	
	12320 Wai 19 20.29			desc. Hode	1232/ Mai 06 02.22	22 1 39 21	
daga mada	12226 Mar. 21 05:50	200022112					
desc. node	12326 Mar 21 05:50	2° Y 23'12			12227 M 00 12 10	220 1/ 42/52	000211.5
			0042112	superior conj	12327 Mar 08 12:19	23°) 42'53	
superior conj	12326 Mar 26 23:51	12° Y ′05'02		minimum elong	12327 Mar 08 12:04	23°) 41′45	-0°03'15 0°03'01
superior conj minimum elong	12326 Mar 26 23:51 12326 Mar 26 19:30	12° Υ 05'02 11° Υ 46'57	0°42'39	minimum elong behind sun begin	12327 Mar 08 12:04 12327 Mar 08 04:05	23°¥41'45 23°¥06'50	
superior conj	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30	12°\mathbf{Y}\05'\02 11°\mathbf{Y}\46'\57 22°\mathbf{Y}\39'\12		minimum elong	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03	23°¥41'45 23°¥06'50 24°¥16'35	
superior conj minimum elong	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50	12°Y05'02 11°Y46'57 22°Y39'12 0°8	0°42'39	minimum elong behind sun begin behind sun end	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52	23°¥41'45 23°¥06'50 24°¥16'35 0°Υ	0°03'01
superior conj minimum elong	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13	12°Y05'02 11°Y46'57 22°Y39'12 0°8 5°858'51	0°42'39	minimum elong behind sun begin behind sun end max. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57	23°\dagger41'45 23°\dagger406'50 24°\dagger416'35 0°\dagger 6°\dagger29'42	
superior conj minimum elong max. Earth dist.	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52	23°\(\dagger)41'45 23°\(\dagger)60'50 24°\(\dagger)16'35 0°\(\gamma\) 6°\(\gamma\)29'42 16°\(\gamma\)01'37	0°03'01
superior conj minimum elong max. Earth dist.	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13	12°Y05'02 11°Y46'57 22°Y39'12 0°8 5°858'51	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end max. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57	23°\dagger41'45 23°\dagger406'50 24°\dagger416'35 0°\dagger 6°\dagger29'42	0°03'01
superior conj minimum elong max. Earth dist. evening rise	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end max. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28	23°\(\dagger)41'45 23°\(\dagger)60'50 24°\(\dagger)16'35 0°\(\gamma\) 6°\(\gamma\)29'42 16°\(\gamma\)01'37	0°03'01
superior conj minimum elong max. Earth dist. evening rise evening max el	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Щ 17°瓜35'36	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end max. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18	23° X 41'45 23° X 06'50 24° X 16'35 0° Y 6° Y 29'42 16° Y 01'37 0° X	0°03'01 1.42582 AU
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Ⅱ 17°Ⅲ35'36 21°Ⅲ01'31	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end max. Earth dist. evening rise	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45	23° X 41'45 23° X 06'50 24° X 16'35 0° Y 6° Y 29'42 16° Y 01'37 0° X 0° Π	0°03'01 1.42582 AU
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49	12°Y05'02 11°Y46'57 22°Y39'12 0°℧ 5°℧58'51 0°瓜 17°瓜35'36 21°瓜01'31 22°瓜32'21	0°42'39 1.44266 AU	minimum elong behind sun begin behind sun end max. Earth dist. evening rise	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29	23° X 41'45 23° X 06'50 24° X 16'35 0° Y 6° Y 29'42 16° Y 01'37 0° Z 0° II 1° II 22'30	0°03'01 1.42582 AU
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51	0°42'39 1.44266 AU 20°59'28	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24	23° X 41'45 23° X 06'50 24° X 16'35 0° Y 6° Y 29'42 16° Y 01'37 0° Z 0° <u>Π</u> 1° <u>Π</u> 22'30 6° <u>Π</u> 53'38	0°03'01 1.42582 AU
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51 12326 May 28 20:05 12326 May 28 19:10	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51 14°П39'43	0°42'39 1.44266 AU 20°59'28 3°09'27	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26	23° X 41'45 23° X 06'50 24° X 16'35 0° Y 6° Y 29'42 16° Y 01'37 0° X 0° X 1° X 22'30 6° X 53'38 7° X 03'05	0°03'01 1.42582 AU
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51 12326 May 28 20:05	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51 14°П39'43 14°П42'52 14°П02'52	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 12 07:49	23° χ41'45 23° χ06'50 24° χ16'35 0° Υ 6° Υ29'42 16° Υ01'37 0° Σ 0° Π 1° Π22'30 6° Π53'38 7° Π03'05 5° Π06'11 30° R	0°03'01 1.42582 AU 22°15'29
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 28 13:51 12326 May 28 20:05 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51 14°П39'43 14°П42'52 14°П02'52 8°П22'17	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 12 07:49 12327 May 13 05:19	23° χ41'45 23° χ06'50 24° χ16'35 0° Υ 6° Υ29'42 16° Υ01'37 0° Σ 0° Π 1° Π22'30 6° Π53'38 7° Π03'05 5° Π06'11 30° R Σ 28° Σ45'15	0°03'01 1.42582 AU 22°15'29 2°53'43
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 28 13:51 12326 May 28 20:05 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17 12326 Jun 08 06:59	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Ⅱ 17°∏35'36 21°∏01'31 22°∏32'21 20°∏50'51 14°∏39'43 14°Щ42'52 14°Щ02'52 8°Щ22'17 6°∭03'16	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 07 22:15 12327 May 07 22:15 12327 May 12 07:49 12327 May 13 05:19 12327 May 13 05:19	23° χ41'45 23° χ06'50 24° χ16'35 0° Υ 6° Υ29'42 16° Υ01'37 0° ႘ 0° Π 1° Π22'30 6° Π53'38 7° Π03'05 5° Π06'11 30° κ႘ 28° ႘45'15 28° ႘51'04	0°03'01 1.42582 AU 22°15'29 2°53'43 2°52'43
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51 12326 May 28 20:05 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17 12326 Jun 08 06:59 12326 Jun 17 06:57	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Ⅲ 17°Ⅲ35'36 21°Ⅲ01'31 22°Ⅲ32'21 20°爪50'51 14°Ⅲ39'43 14°Ⅲ42'52 14°Ⅲ02'52 8°Ⅲ22'17 6°Ⅲ03'16 10°Ⅲ49'19	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32 0.68487 AU	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 12 07:49 12327 May 13 05:19 12327 May 13 03:39 12327 May 13 03:00	23° \(\ceigma\) 41'45 23° \(\ceigma\) 60'50 24° \(\ceigma\) 16'35 0° \(\ceigma\) 6° \(\ceigma\) 29'42 16° \(\ceigma\) 00' \(\ceigma\) 1° \(\ceigma\) 22'30 6° \(\ceigma\) 53'38 7° \(\ceigma\) 30° \(\ceigma\) 28° \(\ceigma\) 45'15 28° \(\ceigma\) 53'20	0°03'01 1.42582 AU 22°15'29 2°53'43
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51 12326 May 28 20:05 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17 12326 Jun 08 06:59 12326 Jun 17 06:57 12326 Jun 18 21:31	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51 14°П39'43 14°П42'52 14°П02'52 8°П22'17 6°П03'16 10°П49'19 12°П22'28	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32 0.68487 AU	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 13 05:19 12327 May 13 03:39 12327 May 13 03:00 12327 May 18 08:55	23° \(\centcolor{\chi}\)41'45 23° \(\chi\)06'50 24° \(\chi\)16'35 0° \(\chi\) 6° \(\chi\)29'42 16° \(\chi\)01'37 0° \(\chi\) 0° \(\mathbb{I}\) 1° \(\mathbb{I}\)22'30 6° \(\mathbb{I}\)53'38 7° \(\mathbb{I}\)03'05 5° \(\mathbb{I}\)06'11 30° \(\chi\) 28° \(\chi\)45'15 28° \(\chi\)53'20 22° \(\chi\)33'25	0°03'01 1.42582 AU 22°15'29 2°53'43 2°52'43
superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 23 13:51 12326 May 28 20:05 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17 12326 Jun 08 06:59 12326 Jun 17 06:57 12326 Jun 18 21:31 12326 Jul 03 00:53	12°Υ05'02 11°Υ46'57 22°Υ39'12 0°႘ 5°႘58'51 0°Π 17°Π35'36 21°Π01'31 22°Π32'21 20°П50'51 14°П39'43 14°П42'52 14°П02'52 8°П22'17 6°П03'16 10°П49'19 12°П22'28 0°©	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32 0.68487 AU	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 12 07:49 12327 May 13 05:19 12327 May 13 03:39 12327 May 13 03:00 12327 May 18 08:55 12327 May 23 02:31	23° \(\center \) \(41'\) 45 23° \(\center \) \(6'\) 50 24° \(\center \) \(16'\) 35 0° \(\center \) 6° \(\center \) 29'\) 42 16° \(\center \) 0° \(\center \) 1° \(\center \) 22'30 6° \(\center \) 5° \(\center \) 103'05 5° \(\center \) 106'11 30° \(\center \) 30° \(\center \) 28° \(\center \) 45'15 28° \(\center \) 55'20 22° \(\center \) 33'25 20° \(\center \) 33'26	0°03'01 1.42582 AU 22°15'29 2°53'43 2°52'43 0.68809 AU
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superior conj minimum elong max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. superior conj minimum elong	12326 Mar 26 23:51 12326 Mar 26 19:30 12326 Apr 02 11:30 12326 Apr 07 02:50 12326 Apr 10 23:13 12326 Apr 27 02:08 12326 May 10 20:12 12326 May 14 22:10 12326 May 19 07:49 12326 May 28 19:10 12326 May 28 19:10 12326 May 28 19:10 12326 May 29 06:42 12326 Jun 03 00:17 12326 Jun 03 00:17 12326 Jun 03 00:17 12326 Jun 17 06:57 12326 Jun 18 21:31 12326 Jul 21 3:33 12326 Jul 22 13:33 12326 Jul 23 20:03 12326 Jul 27 20:16 12326 Aug 04 10:52 12326 Aug 04 14:58 12326 Aug 08 07:06 12326 Aug 10 21:48	12°Y05'02 11°Y46'57 22°Y39'12 0°8 5°858'51 0° Π 17° Π35'36 21° Π01'31 22° Π32'21 20°	0°42'39 1.44266 AU 20°59'28 3°09'27 3°08'32 0.68487 AU 23°29'29	minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist.	12327 Mar 08 12:04 12327 Mar 08 04:05 12327 Mar 08 20:03 12327 Mar 12 03:52 12327 Mar 16 00:57 12327 Mar 21 22:28 12327 Mar 31 00:18 12327 Apr 22 06:45 12327 Apr 23 14:29 12327 May 01 19:26 12327 May 03 05:24 12327 May 07 22:15 12327 May 13 05:19 12327 May 13 03:39 12327 May 13 03:39 12327 May 13 03:00 12327 May 18 08:55 12327 May 23 02:31 12327 Jun 01 10:07 12327 Jun 04 03:53 12327 Jun 05 01:29 12327 Jun 06:17 12327 Jul 04 06:17 12327 Jul 09 20:27 12327 Jul 14 23:54	23° \ \ 41'45 23° \ \ \ 406'50 24° \ \ \ 16'35 0° \ \ \ 6° \ \ \ 29'42 16° \ \ \ 00'137 0° \ \ \ 0° \ \ 10'305 0° \ \ 10'137 0° \ \ \ 0° \ \ 10'3'05 5° \ \ 106'11 30° \ \ \ 28° \ \ \ 45'15 28° \ \ \ \ 53'20 22° \ \ \ 33'25 20° \ \ \ 33'25 20° \ \ \ \ 33'25 20° \ \ \ \ 33'26 26° \ \ \ \ 00'44 28° \ \ \ \ 557'27 0° \ \ \ \ 0° \ \ \ 10'50 12° \ \ \ \ 0° \ \ 10'50 12° \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0°03'01 1.42582 AU 22°15'29 2°53'43 2°52'43 0.68809 AU 22°01'03 1.41477 AU -1°30'56
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retrograde	12327 Aug 20 09:46	22° m 59'53		retrograde	12328 Aug 02 07:28	5° m) 49'31	
evening set	12327 Aug 22 14:39	22° m 39'57		evening set	12328 Aug 04 20:28	5° m) 18'40	
inferior conj	12327 Aug 29 21:36	17° m 56'17	0°21'33	inferior conj	12328 Aug 11 10:35	0° m ,15′19	1°35'14
minimum elong	12327 Aug 29 22:20	17° m 54'44	0°20'59	minimum elong	12328 Aug 11 13:00	0° Mp 09'20	1°33'57
desc. node	12327 Aug 31 01:48	16° Mp 55'08			12328 Aug 11 16:44	30°R Ω	
min. Earth dist.	12327 Sep 02 05:27	15° Mp 05'26	0.59118 AU	min. Earth dist.	12328 Aug 14 12:26	27° Ω 13′20	0.61405 AU
morning rise	12327 Sep 06 02:34	12° m 20'29		desc. node	12328 Aug 16 23:13	25° Ω 05'25	
direct	12327 Sep 12 11:15	10° m 29'34		morning rise	12328 Aug 18 02:56	24° Ω 14'45	
morning max el	12327 Sep 26 19:36	18° Mp 16′38	27°34'04	direct	12328 Aug 24 18:38	21° Ω 58′23	
	12327 Oct 06 15:51	0∘ ⊽		morning max el	12328 Sep 07 23:44	29° Ω 57'25	27°57'51
	12327 Oct 24 10:16	0° M			12328 Sep 08 00:46	0° m)	
asc. node	12327 Oct 24 20:04	0° ™ 48'59			12328 Sep 29 17:21	0∘ ত	
morning set	12327 Oct 28 06:57	7° M 55'54		asc. node	12328 Oct 10 16:45	20° ≏ 38'48	
				morning set	12328 Oct 11 09:03	22° ഫ 02'32	
superior conj	12327 Nov 04 07:17	23°M15'57	1°25'58	C	12328 Oct 15 03:26	0° M	
minimum elong	12327 Nov 04 05:25	23°M05'28	1°26'25	max. Earth dist.	12328 Oct 17 01:19	4°ML09'32	1.31614 AU
max. Earth dist.	12327 Nov 03 18:37	22°M05'18	1.31292 AU				
man. Bartin diot.	12327 Nov 07 07:51	0° ₹ ¹	1.512,2110	superior conj	12328 Oct 18 17:36	7° M 51'09	1°11'09
evening rise	12327 Nov 07 07:51 12327 Nov 11 00:41	8° ∡ 705'21		minimum elong	12328 Oct 18 17:30 12328 Oct 18 15:21	7°ML38'46	1°11'17
evening rise	12327 Nov 11 00:41 12327 Nov 22 06:09	0°る		evening rise	12328 Oct 18 13:21 12328 Oct 25 11:00	22°M39'10	1 11 17
desc. node	12327 Nov 26 00:09	7°る40'33		evening rise	12328 Oct 23 11:00 12328 Oct 28 22:43	0° √	
		7 34033 23° る 58'30	26920100				
evening max el	12327 Dec 09 22:32		26°20'00	desc. node	12328 Nov 12 19:55	25° х 39′00	
	12327 Dec 18 16:33	0° ≈			12328 Nov 16 05:24	0°る	24056140
retrograde	12327 Dec 23 21:15	1°≈04'08		evening max el	12328 Nov 20 13:56	4°る40'56	24°56'49
	12327 Dec 29 00:16	30°Ŗ₹		retrograde	12328 Dec 04 09:17	11° ठ 35'41	
evening set	12327 Dec 30 08:22	29° පි 23'05		evening set	12328 Dec 09 23:22	10° පි 25'52	
min. Earth dist.	12328 Jan 03 12:02	26° ♂ 47'11	0.58593 AU	min. Earth dist.	12328 Dec 15 01:51	7° る 42'05	0.56661 AU
inferior conj	12328 Jan 06 15:08	24° る 27'24	-4°16'33	inferior conj	12328 Dec 17 17:12	5° る 59'31	
minimum elong	12328 Jan 06 23:30	24° る 11'48	4°13'14	minimum elong	12328 Dec 18 00:27	5° る 47'45	5°20'02
morning rise	12328 Jan 14 17:29	19° る 57'38		morning rise	12328 Dec 26 03:42	1° る 51'23	
direct	12328 Jan 16 19:29	19° る 42'53		direct	12328 Dec 28 11:37	1° る 36'03	
asc. node	12328 Jan 20 19:41	20° ප් 40'41		asc. node	12329 Jan 06 16:52	5°₹55'50	
morning max el	12328 Jan 24 23:15	23° る 43'20	18°27'28	morning max el	12329 Jan 06 22:39	6° る 09'38	19°19'41
	12328 Jan 30 00:56	0° ≈			12329 Jan 22 02:57	0° ≈	
morning set	12328 Feb 09 20:37	19° ≈ 07'40		morning set	12329 Jan 23 22:11	3° ≈ 34'18	
Ü	12328 Feb 15 13:01	0°) €		C			
				superior conj	12329 Feb 01 01:34	19° ≈ 44'43	0°59'02
superior conj	12328 Feb 18 22:28	6°) €20'37	0°31'29	minimum elong	12329 Feb 01 04:27	19° ≈ 58'42	0°59'14
1 3				minimum elong			
minimilm elong				minimum eiong			0 37 14
minimum elong	12328 Feb 19 00:36	6°) 30′25	0°31'35	C	12329 Feb 06 11:32	0° ₩	
desc. node	12328 Feb 19 00:36 12328 Feb 22 22:59	6°) 30′25 13°) 37′57	0°31'35	max. Earth dist.	12329 Feb 06 11:32 12329 Feb 07 16:02	0° ∺ 2° ∺ 10'26	1.38278 AU
desc. node max. Earth dist.	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38	6°¥30'25 13°¥37'57 19°¥39'48		max. Earth dist. desc. node	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38	0° 	
desc. node	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34	6°\;\;\30'25 13°\;\;\37'57 19°\;\;\39'48 26°\;\;\58'31	0°31'35	max. Earth dist.	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51	0° 光 2° 光 10'26 4° 光 15'03 8° 光 50'17	
desc. node max. Earth dist.	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47	6° \ 30'25 13° \ 37'57 19° \ 39'48 26° \ \58'31 0° \	0°31'35	max. Earth dist. desc. node evening rise	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10	0°₩ 2°₩10'26 4°₩15'03 8°₩50'17 0°Ψ	1.38278 AU
desc. node max. Earth dist. evening rise	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37	6° X 30'25 13° X 37'57 19° X 39'48 26° X 58'31 0° Υ 0° Y	0°31'35 1.40511 AU	max. Earth dist. desc. node	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07	0°₩ 2°₩10'26 4°₩15'03 8°₩50'17 0°Ψ 29°Ψ03'43	
desc. node max. Earth dist. evening rise evening max el	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26	6°₩30'25 13°₩37'57 19°₩39'48 26°₩58'31 0°Ψ 0°₩ 15°₩11'48	0°31'35 1.40511 AU	max. Earth dist. desc. node evening rise evening max el	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29	0°₩ 2°₩10'26 4°₩15'03 8°₩50'17 0°Ψ 29°Ψ03'43 0°₩	1.38278 AU
desc. node max. Earth dist. evening rise evening max el retrograde	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$' 0°\\$' 15°\\$11'48 21°\\$32'57	0°31'35 1.40511 AU	max. Earth dist. desc. node evening rise evening max el retrograde	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09	0° X 2° X 10'26 4° X 15'03 8° X 50'17 0° Y 29° Y 03'43 0° & 5° & 56'53	1.38278 AU
desc. node max. Earth dist. evening rise evening max el retrograde asc. node	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45	6°\(30'25\) 13°\(37'57\) 19°\(39'48\) 26°\(58'31\) 0°\(\) 0°\(\) 15°\(511'48\) 21°\(532'57\) 21°\(519'47\)	0°31'35 1.40511 AU	max. Earth dist. desc. node evening rise evening max el retrograde asc. node	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06	0°₩ 2°₩10'26 4°₩15'03 8°₩50'17 0°Ψ 29°Ψ03'43 0°₩ 5°₩56'53 4°₩09'10	1.38278 AU
desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35	6°\(30'25\) 13°\(37'57\) 19°\(39'48\) 26°\(58'31\) 0°\(0°\(68'32'57\) 21°\(58'32'57\) 21°\(58'32'57\) 21°\(58'32'18'47\) 19°\(58'22'18\)	0°31'35 1.40511 AU 23°36'09	max. Earth dist. desc. node evening rise evening max el retrograde	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22	0°¥ 2°¥10'26 4°¥15'03 8°¥50'17 0°Y 29°Y03'43 0°8 5°856'53 4°809'10 3°834'46	1.38278 AU
desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist.	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44	6°\(\)30'25 13°\(\)37'57 19°\(\)39'48 26°\(\)58'31 0°\(\) 0°\(\) 0°\(\) 15°\(\)31'48 21°\(\)32'57 21°\(\)31'47 19°\(\)32'18 13°\(\)45'13	0°31'35 1.40511 AU 23°36'09 0.68676 AU	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41	0°¥ 2°¥10'26 4°¥15'03 8°¥50'17 0°Y 29°Y03'43 0°8 5°856'53 4°809'10 3°834'46 30°8Y	1.38278 AU 24°54'59
desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44 12328 Apr 26 14:28	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$\ 0°\\$\ 15°\\$11'48 21°\\$32'57 21°\\$19'47 19°\\$22'18 13°\\$45'13 12°\\$54'39	0°31'35 1.40511 AU 23°36'09 0.68676 AU 2°27'57	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist.	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41 12329 Apr 09 18:41	0°¥ 2°¥10'26 4°¥15'03 8°¥50'17 0°Y 29°Y03'43 0°∀ 5°∀56'53 4°∀09'10 3°∀34'46 30°RY 28°Y33'26	1.38278 AU 24°54'59 0.68100 AU
desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44 12328 Apr 26 14:28 12328 Apr 26 12:22	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$\ 0°\\$\ 15°\\$31'48 21°\\$32'57 21°\\$32'57 21°\\$45'13 12°\\$54'39 13°\\$01'52	0°31'35 1.40511 AU 23°36'09 0.68676 AU 2°27'57	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41 12329 Apr 09 18:41 12329 Apr 10 21:40	0°\text{\text{\text{2°}\text{\text{10'26}}}} 4°\text{\text{\text{15'03}}} 8°\text{\text{\text{\text{50'17}}}} 0°\text{\text{\text{29}}°\text{\text{\text{03'43}}}} 0°\text{\text{\text{5}}} 5°\text{\text{\text{56'53}}} 4°\text{\text{\text{09'10}}} 3°\text{\text{\text{34'46}}} 30°\text{\tex	1.38278 AU 24°54'59 0.68100 AU 1°52'18
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desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44 12328 Apr 26 14:28 12328 Apr 26 12:22	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$\ 0°\\$\ 15°\\$32'57 21°\\$32'57 21°\\$19'47 19°\\$22'18 13°\\$45'13 12°\\$54'39 13°\\$01'52 6°\\$49'46 5°\\$10'45	0°31'35 1.40511 AU 23°36'09 0.68676 AU 2°27'57 2°26'54	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41 12329 Apr 09 18:41 12329 Apr 10 21:40	0°\text{2°\text{10'26}} 4°\text{15'03} 8°\text{15'017} 0°\text{7} 29°\text{703'43} 0°\text{8} 5°\text{856'53} 4°\text{809'10} 3°\text{83'46} 30°\text{8}\text{709'10} 28°\text{733'26} 27°\text{704'29} 27°\text{\$\text{11'26}} 21°\text{\$\text{707'57}}	1.38278 AU 24°54'59 0.68100 AU 1°52'18
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desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44 12328 Apr 26 14:28 12328 Apr 26 12:22 12328 May 01 20:07 12328 May 06 00:50 12328 May 14 04:14	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$\ 0°\\$\ 15°\\$11'48 21°\\$32'57 21°\\$19'47 19°\\$22'18 13°\\$45'13 12°\\$54'39 13°\\$01'52 6°\\$49'46 5°\\$10'45 9°\\$49'08	0°31'35 1.40511 AU 23°36'09 0.68676 AU 2°27'57 2°26'54	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41 12329 Apr 09 18:41 12329 Apr 10 21:40 12329 Apr 10 19:33 12329 Apr 16 07:59 12329 Apr 20 00:31	0°\text{2°\text{10'26}} 4°\text{15'03} 8°\text{15'017} 0°\text{7} 29°\text{703'43} 0°\text{8} 5°\text{856'53} 4°\text{809'10} 3°\text{834'46} 30°\text{8}\text{709'126} 27°\text{704'29} 27°\text{\$\text{11'26}} 21°\text{\$\text{707'57}} 19°\text{\$\text{\$\text{49'47}}	1.38278 AU 24°54'59 0.68100 AU 1°52'18 1°51'19
desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12328 Feb 19 00:36 12328 Feb 22 22:59 12328 Feb 26 09:38 12328 Mar 01 17:34 12328 Mar 03 13:47 12328 Mar 23 15:37 12328 Apr 05 05:26 12328 Apr 16 00:15 12328 Apr 17 16:45 12328 Apr 21 04:35 12328 Apr 25 23:44 12328 Apr 26 14:28 12328 Apr 26 12:22 12328 May 01 20:07 12328 May 06 00:50 12328 May 14 04:14 12328 May 21 00:44	6°\\$30'25 13°\\$37'57 19°\\$39'48 26°\\$58'31 0°\\$\ 0°\\$\ 15°\\$511'48 21°\\$32'57 21°\\$19'47 19°\\$22'18 13°\\$45'13 12°\\$54'39 13°\\$01'52 6°\\$49'46 5°\\$10'45 9°\\$49'08 17°\\$52'34	0°31'35 1.40511 AU 23°36'09 0.68676 AU 2°27'57 2°26'54	max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct	12329 Feb 06 11:32 12329 Feb 07 16:02 12329 Feb 08 19:38 12329 Feb 11 09:51 12329 Feb 24 10:10 12329 Mar 18 19:07 12329 Mar 19 18:29 12329 Mar 30 15:09 12329 Apr 04 14:06 12329 Apr 05 07:22 12329 Apr 08 15:41 12329 Apr 09 18:41 12329 Apr 10 21:40 12329 Apr 10 19:33 12329 Apr 10 19:33 12329 Apr 16 07:59 12329 Apr 20 00:31 12329 Apr 27 05:56	0°\text{\text{2°\text{\text{\text{10'26}}}} 4°\text{\text{\text{\text{\text{15'03}}}} 8°\text{\te}\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex	1.38278 AU 24°54'59 0.68100 AU 1°52'18 1°51'19
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asc. node	12329 Jul 01 12:16	3° Ω 52'40 15° Ω 52'49	10011152		12330 Jun 24 09:11	0°Ω 3°Ω03'37	
evening max el	12329 Jul 10 08:25	$19^{\circ} \Omega 13'59$	18°11'52	retrograde	12330 Jun 30 09:51 12330 Jul 03 15:30	2° Ω 04'02	
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•	12329 Jul 19 14:09 12329 Jul 25 15:05	13° Ω 08'19	2°25'55	infarior aoni	12330 Jul 09 07:05	26°€26'49	2°57'01
inferior conj minimum elong	12329 Jul 25 17:36	13° Ω 01'18	2°24'37	inferior conj minimum elong	12330 Jul 09 07.03	26°921'24	2°55'54
min. Earth dist.	12329 Jul 28 04:50	13 δ ι 01 18 10° Ω 16'44	0.63597 AU	min. Earth dist.	12330 Jul 11 06:25	24°902'07	0.65505 AU
morning rise	12329 Jul 28 04:30 12329 Jul 31 19:25	6°Ω53'02	0.03397 AU	morning rise	12330 Jul 15 01:16	24 \$02 07 20°\$04'48	0.03303 AU
desc. node	12329 Aug 03 20:36	5° Ω 03'40		direct	12330 Jul 21 11:56	17°923'26	
direct	12329 Aug 07 11:22	4° Ω 19'13		desc. node	12330 Jul 21 17:55	17° S 23'39	
morning max el	12329 Aug 07 11:22 12329 Aug 21 08:37	$12^{\circ}\Omega 20'35$	279/31/15	morning max el	12330 Aug 03 19:36	25° © 15'31	26°57'06
morning max ci	12329 Sep 04 10:31	0° m)	27 43 43	morning max ci	12330 Aug 08 03:20	0°Ω	20 37 00
	12329 Sep 04 10:31 12329 Sep 22 05:11	0∘ ⊽			12330 Aug 28 22:29	0° m)	
morning set	12329 Sep 25 03:46	∘ – 5° Ω 45'46		morning set	12330 Sep 08 12:14	18° m) 58'13	
asc. node	12329 Sep 27 13:26	10° £ 38′24		max. Earth dist.	12330 Sep 08 12:14 12330 Sep 12 18:15	27° m) 20'20	1.33821 AU
max. Earth dist.	12329 Sep 27 13:20 12329 Sep 30 02:18	15° ⊆ 56'21	1.32461 AU	asc. node	12330 Sep 12 10:15	ე° ഫ 43'05	1.55021 AC
max. Larm dist.	1232) Sep 30 02.16	13 -3021	1.32401 AO	ase. Hode	12330 Sep 14 10:00 12330 Sep 14 01:42	0∘ ⊽	
superior conj	12329 Oct 03 00:37	22° ₽ 13'09	0°50'54		12330 Sep 11 01.12	~	
minimum elong	12329 Oct 02 22:32	22° £ 01'50	0°50'46	superior conj	12330 Sep 17 02:07	6° £ 15'34	0°25'29
g	12329 Oct 06 14:21	0°M	0 00 10	minimum elong	12330 Sep 17 02:07	6° £ 08'50	0°25'15
evening rise	12329 Oct 09 22:20	7°ML13'23		evening rise	12330 Sep 24 08:43	21° ≏ 42'23	v ==
	12329 Oct 21 17:53	0° ∡ 7			12330 Sep 28 09:15	0°M	
desc. node	12329 Oct 30 17:13	12° ×1 25'18		evening max el	12330 Oct 14 14:02	24°ML56'23	21°37'55
evening max el	12329 Nov 02 00:13	14° ∡ ¹48'33	23°16'50	desc. node	12330 Oct 17 14:35	27°M34'00	21 37 55
retrograde	12329 Nov 15 08:14	21° х 26'42	25 1000	dese. Hode	12330 Oct 21 18:24	0° × 7	
evening set	12329 Nov 19 14:51	20° ×1 47'01		retrograde	12330 Oct 26 21:31	1° ∡ 103'38	
min. Earth dist.	12329 Nov 26 09:53	17° ∡ 36'36	0.55229 AU	evening set	12330 Oct 29 18:42	0° ₹ ¹44'44	
inferior conj	12329 Nov 27 23:25	16° ∡ ¹42'09		evening sec	12330 Nov 01 07:10	30°RML	
minimum elong	12329 Nov 28 00:07	16° × ⁷ 41'08		inferior conj	12330 Nov 07 16:45	26°M49'33	-5°28'01
morning rise	12329 Dec 06 11:02	12° х 51'11	5 5165	minimum elong	12330 Nov 07 09:09	27°ML00'11	5°26'05
direct	12329 Dec 09 08:54	12° × 31'11		min. Earth dist.	12330 Nov 07 16:16	26°M50'12	0.54565 AU
morning max el	12329 Dec 20 08:38	17° ×7 44'33	20°34'59	morning rise	12330 Nov 16 00:37	23°ML01'36	0.0 10 00 110
asc. node	12329 Dec 24 13:59	22° × 129'41	20 3 . 0 ,	direct	12330 Nov 19 17:42	22°M31'42	
use. Irode	12329 Dec 29 15:22	0°ਰ		morning max el	12330 Dec 02 05:02	28°M28'47	22°11'06
morning set	12329 Dec 29 15:22 12330 Jan 08 05:27	ਾਤ 18° ਤ 14'18		morning max ci	12330 Dec 02 03:02 12330 Dec 03 17:42	0°×7	22 11 00
morning set	12330 Jan 13 21:42	0°≈		asc. node	12330 Dec 13 11:02	10° √ 05'48	
	12000 0000 10 21.12			use. noue	12330 Dec 22 05:27	0°ਰ	
superior conj	12330 Jan 15 17:13	3° ≈ 42'49	1°19'03	morning set	12330 Dec 23 16:00	³° ට 00'46	
minimum elong	12330 Jan 15 19:46	3°≈55'48	1°19'32	morning sec	12330 200 23 10.00	3 000.0	
max. Earth dist.	12330 Jan 21 00:10	14°≈12'34	1.36126 AU	superior conj	12330 Dec 30 17:45	18° ට 04'46	1°31'52
evening rise	12330 Jan 24 20:56	21°≈29'30	1.50120110	minimum elong	12330 Dec 30 19:24	18° ට 13'28	1°32'37
desc. node	12330 Jan 26 16:21	24°≈46'51		max. Earth dist.	12331 Jan 03 14:06	26° පි 04'50	1.34258 AU
dese. node	12330 Jan 29 15:21	0°) €		man. Darum andı.	12331 Jan 05 12:43	0°≈	1.5 .200 110
	12330 Feb 18 07:14	0° Υ		evening rise	12331 Jan 07 23:16	4°≈47'20	
evening max el	12330 Mar 01 08:40	12° Υ 53'46	26°04'45	desc. node	12331 Jan 13 13:08	15° ≈ 09'10	
retrograde	12330 Mar 14 01:10	20° Υ 08'10	20 0	acco. noue	12331 Jan 22 10:03	0° ∀	
evening set	12330 Mar 20 04:52	17° Υ 38'06		evening max el	12331 Feb 11 22:14	26° ¥ 34'39	26°58'15
asc. node	12330 Mar 22 11:30	15° Υ 26'21		evening man er	12331 Feb 15 20:34	0°Υ	20 00 10
min. Earth dist.	12330 Mar 24 09:39	13° Υ 11'56	0.67103 AU	retrograde	12331 Feb 25 05:37	3° Υ 59'24	
inferior conj	12330 Mar 26 00:52	11° Υ 10'07	1°06'34	evening set	12331 Mar 03 19:14	1° Y 26'25	
minimum elong	12330 Mar 25 23:19	11° Υ 14'56	1°05'55		12331 Mar 05 10:50	30° ₹ ₩	
morning rise	12330 Mar 31 18:30	5° Y 23'34		min. Earth dist.	12331 Mar 07 18:33	27°) €33'59	0.65710 AU
direct	12330 Apr 03 23:50	4° Υ 24'34		asc. node	12331 Mar 09 08:53	25°) (44'16	
morning max el	12330 Apr 10 15:04	7° Υ 58'31	18°41'47	inferior conj	12331 Mar 09 21:53	25°) €06'45	0°10'30
desc. node	12330 Apr 24 18:13	27° Υ 16'39	10 11 17	minimum elong	12331 Mar 09 21:35	25° ₩ 07'36	0°10'32
	12330 Apr 26 12:25	0°8		transit middle	12331 Mar 09 21:35	25°) €07'36	0°10'32
morning set	12330 May 02 05:45	8° 8 55'41		transit begin	12331 Mar 09 19:21	25°) 14'04	-
3	12330 May 15 17:31	0°II		transit end	12331 Mar 09 23:50	25°) (01'10	
max. Earth dist.	12330 May 17 11:10	2° I I42'44	1.45666 AU	morning rise	12331 Mar 16 01:21	19°) € 32'09	
	· · · · · · · · · · · · · ·			direct	12331 Mar 18 20:44	18°) (49'19	
superior conj	12330 May 18 11:05	4° Ⅱ 16'16	-2°08'10	morning max el	12331 Mar 25 05:45	22° H 10'21	18°06'46
minimum elong	12330 May 18 05:36	3° ∏ 54'52		5	12331 Mar 31 12:10	0°Υ	•
evening rise	12330 Jun 02 21:36	28° I I41'10		desc. node	12331 Apr 11 14:52	17° Y 29'25	
6	12330 Jun 03 17:19	0°ඉ		morning set	12331 Apr 12 21:28	19° Ƴ 33'27	
greatest brilliancy	12330 Jun 09 23:10	9° © 58'32	-0.9m	0 ~	12331 Apr 19 08:50	0°8	
asc. node	12330 Jun 18 09:14	22°546'50			r	_	
evening max el	12330 Jun 23 20:50	29°530'09	18°38'12	superior conj	12331 Apr 27 19:28	13° 8 23'23	-1°44'05
<i>3</i>		/		1 3	r		

minimum elong	12331 Apr 27 10:09	12° 8 46'48	1°43'47	minimum elong	12332 Apr 06 11:21	22° Y 46'49	1°06'15
max. Earth dist.	12331 Apr 30 07:06	17° 8 17'07	1.45692 AU	minimum ciong	12332 Apr 10 23:20	0°8	1 00 15
	12331 May 08 11:05	0°Щ		max. Earth dist.	12332 Apr 12 01:57	1° 8 45'33	1.44981 AU
evening rise	12331 May 13 21:57	8°Ⅲ27′09		evening rise	12332 Apr 22 09:51	17° 8 49'37	
greatest brilliancy	12331 May 26 08:10	27° Ⅱ 29'51	-0.7m		12332 Apr 30 10:34	Π $^{\circ}0$	
	12331 May 28 00:39	0 \circ \odot		evening max el	12332 May 20 08:00	26° ∏ 59'48	20°20'05
asc. node	12331 Jun 05 06:18	11° © 06'38		asc. node	12332 May 22 03:25	28° Ⅱ 40′59	
evening max el	12331 Jun 07 05:08	13° © 13'34	19°21'28		12332 May 23 20:57	0∘ ௐ	
retrograde	12331 Jun 14 07:00	17° © 11'46		retrograde	12332 May 28 05:46	1° © 33'02	
evening set	12331 Jun 17 21:29	15°956'09	2012101	evening set	12332 Jun 01 05:50	0°901'03	
inferior conj	12331 Jun 23 07:10	10°504'37		:::	12332 Jun 01 06:23	30°RⅡ 22°Ⅱ5647	2012144
minimum elong min. Earth dist.	12331 Jun 23 07:53 12331 Jun 24 15:50	10° © 02'18 8° © 17'39	3°11'04 0.67022 AU	inferior conj minimum elong	12332 Jun 06 12:36 12332 Jun 06 12:15	23° П 56'47 23° П 58'00	3°13'44 3°12'50
morning rise	12331 Jun 28 17:47	3°9541'39	0.07022 AU	min. Earth dist.	12332 Jun 07 07:08	23 H 38 00 22°H 53'26	0.68088 AU
direct	12331 Jul 28 17:47 12331 Jul 04 19:21	1°902'30		morning rise	12332 Jun 11 18:22	17° П 36'36	0.08088 AC
desc. node	12331 Jul 04 15:21 12331 Jul 08 15:09	1°955'04		direct	12332 Jun 17 08:26	15° Д 08'09	
morning max el	12331 Jul 17 06:26	8°930'17	25°46'13	desc. node	12332 Jun 24 12:17	18° I I1'06	
5 5	12331 Aug 03 02:51	$0^{\circ}\Omega$		morning max el	12332 Jun 28 16:21	21° ∏ 55'46	24°20'59
	12331 Aug 21 10:50	0° m/y		5 6	12332 Jul 05 16:57	0° ©	
morning set	12331 Aug 22 06:46	1° m 30'41			12332 Jul 26 09:22	$0^{\circ}\Omega$	
max. Earth dist.	12331 Aug 25 23:46	8° m 26'05	1.35660 AU	morning set	12332 Aug 03 06:56	13° Ω 12′21	
				max. Earth dist.	12332 Aug 06 22:02	19° Ω 37′05	1.37862 AU
superior conj	12331 Aug 31 19:24	19° m 51'28	-0°04'32		12332 Aug 12 12:52	0° ™	
minimum elong	12331 Aug 31 19:41	19° m 52'54	0°04'43				
behind sun begin	12331 Aug 31 13:45	19° m 22'59		superior conj	12332 Aug 14 01:13	2° m 53'32	
behind sun end	12331 Sep 01 01:37	20° Tp 22'52		minimum elong	12332 Aug 14 03:47	3°Mp05'55	0°37'50
asc. node	12331 Sep 01 06:46	20° m/48'52		asc. node	12332 Aug 18 03:25	10° m 52'24	
	12331 Sep 05 18:15	0∘ ರ		evening rise	12332 Aug 22 17:52	20° Mp 00'56	
evening rise	12331 Sep 08 16:02	6° Ω 00'11			12332 Aug 27 21:16	0° Ω	10010120
arranina marral	12331 Sep 21 23:05 12331 Sep 26 15:49	0°ጤ 5°ጤ38'13	20°13'47	evening max el	12332 Sep 08 07:43 12332 Sep 17 09:59	17° Ω 08'14 21° Ω 40'43	19°10'20
evening max el desc. node	12331 Sep 26 13.49 12331 Oct 04 12:00	10°M36'09	20 1347	retrograde evening set	12332 Sep 17 09.39 12332 Sep 19 06:22	21° ⊆ 40'43	
retrograde	12331 Oct 04 12:00 12331 Oct 07 10:04	10°M59'12		desc. node	12332 Sep 19 00.22 12332 Sep 20 09:26	21° ⊆ 30°13	
evening set	12331 Oct 07 10:04 12331 Oct 09 10:40	10°M48'41		inferior conj	12332 Sep 27 05:27	17° ⊆ 18'40	-2°18'45
inferior conj	12331 Oct 18 10:34	6°M51'12	-4°07'58	minimum elong	12332 Sep 27 12:26		2°16'15
minimum elong	12331 Oct 18 00:41	7° M 05'49		min. Earth dist.	12332 Sep 30 12:22	15° ≏ 28'06	0.56018 AU
min. Earth dist.	12331 Oct 20 00:26	5°M55'05	0.54838 AU	morning rise	12332 Oct 05 15:41	12° ≏ 39'24	
morning rise	12331 Oct 26 13:49	2°M45'17		direct	12332 Oct 11 01:20	11° ≏ 31'58	
direct	12331 Oct 31 03:37	1°M59'57		morning max el	12332 Oct 25 03:47	18° ≏ 42'35	25°42'04
morning max el	12331 Nov 13 16:41	8°M37'55	23°58'53		12332 Nov 03 15:03	0° M	
asc. node	12331 Nov 28 07:59	28°M28'49		asc. node	12332 Nov 14 04:52	17° M 26'58	
	12331 Nov 29 04:37	0° ∡			12332 Nov 20 11:17	0° ∡	
morning set	12331 Dec 08 03:49	17° ∡ 747′05		morning set	12332 Nov 21 15:11	2° ≯ 28'30	
	12331 Dec 13 18:40	0°ප			12222 N 20 10-12	179.70.4100	1927155
superior conj	12331 Dec 15 00:11	2° る 40'54	1°38'00	superior conj	12332 Nov 28 10:12	17° ҂ 24'20 17° ҂ 21'10	1°37'55 1°38'46
minimum elong	12331 Dec 15 00:11 12331 Dec 15 00:43	2°る40'34 2°る43'46		minimum elong max. Earth dist.	12332 Nov 28 09:38 12332 Nov 29 16:07	20°×709'40	1.31829 AU
max. Earth dist.	12331 Dec 13 00:43	8° る 01'56		max. Earth dist.	12332 Nov 29 10:07 12332 Dec 04 05:08	20×0940	1.31829 AU
evening rise	12331 Dec 27 13:20	18° ට 34'11	1.32000110	evening rise	12332 Dec 05 12:06	。3 2° る 42'27	
	12331 Dec 28 11:38	0° ≈		desc. node	12332 Dec 17 06:56	25° ට 01'01	
desc. node	12331 Dec 31 09:59	5°≈16'04			12332 Dec 20 07:26	0° ≈	
	12332 Jan 16 16:00	0° ∀		evening max el	12333 Jan 06 20:34	22° ≈ 43'37	27°28'40
evening max el	12332 Jan 25 10:48	9°) 55′12	27°28'23		12333 Jan 19 18:50	0°) €	
retrograde	12332 Feb 08 03:35	17° ¥ 20′33		retrograde	12333 Jan 20 17:55	0° ∺ 02'31	
evening set	12332 Feb 15 00:07	14°) € 51'36			12333 Jan 21 16:47	30° R ≈	
min. Earth dist.	12332 Feb 18 19:25		0.63967 AU	evening set	12333 Jan 27 16:43	27° ≈ 45'41	
inferior conj	12332 Feb 21 10:03	8°) 47′13		min. Earth dist.	12333 Jan 31 10:33	24° ≈ 49'45	0.61962 AU
minimum elong	12332 Feb 21 11:49	8°) (42'39	0°54'47	inferior conj	12333 Feb 03 10:20	22°≈04'03	
asc. node	12332 Feb 24 06:16	5°) € 59'29		minimum elong	12333 Feb 03 14:50	21°≈53'35	2°08'54
morning rise	12332 Feb 28 01:39	3°¥26'56		asc. node	12333 Feb 10 03:38	17°≈11'37	
direct	12332 Mar 01 12:41 12332 Mar 07 23:12	2° ¥ 56'41	17°48'50	morning rise direct	12333 Feb 10 15:40	17°≈00'57 16°≈39'27	
morning max el	12332 Mar 07 23:12 12332 Mar 23 19:22	6°π15'58	1/4030	morning max el	12333 Feb 12 20:33 12333 Feb 19 16:18	16°≈39'27 20°≈07'02	17°48'39
morning set	12332 Mar 23 19:22 12332 Mar 24 16:59	0° γ 1° Υ 31'47		morning max er	12333 Feb 19 10:18 12333 Feb 27 00:57	20° € 0702	1 / 40 37
desc. node	12332 Mar 28 11:27	7° Υ 54'28		morning set	12333 Nar 07 10:45	14°) 33'14	
		5120		desc. node	12333 Mar 15 08:00	28° H 27'38	
superior conj	12332 Apr 06 18:19	23° Y 15'01	-1°06'54		12333 Mar 16 05:24	0°Υ	
. J	1						

superior conj	12333 Mar 18 16:42	4° Υ 13'15	-0°25'49		12334 Feb 19 18:08	0°) {	
minimum elong	12333 Mar 18 14:14	4°Υ°02'51	0°25'24		12331100 17 10.00	٠٨	
max. Earth dist.	12333 Mar 25 18:04	15° Y ′54'48	1.43616 AU	superior conj	12334 Feb 28 14:58	16° ¥ 18'32	0°12'19
evening rise	12333 Apr 02 01:04	27° Y ′28'54		minimum elong	12334 Feb 28 15:56	16° ¥ 22'54	0°12'27
	12333 Apr 03 16:06	9° 8		behind sun begin	12334 Feb 28 11:06	16° 米 01'14	
	12333 Apr 24 06:10	Π °0		behind sun end	12334 Feb 28 20:47	16°) 44′32	
evening max el	12333 May 03 05:16	10° Ⅱ 46′53	21°30'58	desc. node	12334 Mar 02 04:35	19° ⊁ 05'36	
asc. node	12333 May 09 00:38	15° Ⅱ 15'13		max. Earth dist.	12334 Mar 08 06:06		1.41740 AU
retrograde	12333 May 12 04:08	16° ∏ 01'46			12334 Mar 08 12:48	0° Υ	
evening set	12333 May 16 14:41	14° Ⅱ 13'41		evening rise	12334 Mar 13 08:18	7° Y ′54′27	
inferior conj	12333 May 21 21:02	7° Ⅱ 58'22	3°04'01		12334 Mar 27 19:01	0°8	220 4012 4
minimum elong	12333 May 21 19:47	8° Ⅱ 02'45	3°03'04	evening max el	12334 Apr 15 22:00	24° 8 35'33	22°49'34
min. Earth dist.	12333 May 22 02:08	7° ∏ 40'35	0.68685 AU	1	12334 Apr 23 06:09	0°П	
morning rise	12333 May 27 00:40	1°∏43'13 30°R ୪		asc. node	12334 Apr 25 21:55	0° П 33'25 0° П 33'29	
direct	12333 May 29 16:43 12333 Jun 01 01:56	29° 8 31'40		retrograde	12334 Apr 26 00:38 12334 Apr 28 14:56	0°Щ33°29 30°R 8	
direct	12333 Jun 03 14:38	0° Π		evening set	12334 Apr 30 22:25	28° 8 30'20	
morning max el	12333 Jun 11 02:58	5° П 28'31	22051113	inferior conj	12334 May 06 06:29	22° 8 06'17	2°43'58
desc. node	12333 Jun 11 02:38	5° ∏ 44'33	22 31 13	minimum elong	12334 May 06 04:35	22° 8 12'52	
dese. Hode	12333 Jun 30 00:24	0° ©		min. Earth dist.	12334 May 05 22:48	22° 8 32'59	0.68815 AU
morning set	12333 Jul 15 07:49	23°950'30		morning rise	12334 May 11 10:39	15° 8 57'31	0.00015710
	12333 Jul 19 00:10	$0 {\circ} \Omega$		direct	12334 May 15 22:46	14° 8 06'23	
max. Earth dist.	12333 Jul 19 20:06	1°Ω24'53	1.40198 AU	morning max el	12334 May 24 17:37	19° 8 11'23	21°25'32
				desc. node	12334 May 29 06:11	24° 8 14'48	
superior conj	12333 Jul 27 15:27	15° Ω 11′28	-1°12'09		12334 Jun 02 17:40	Π°	
minimum elong	12333 Jul 27 20:38	15° Ω 35'07	1°12'03		12334 Jun 23 03:55	0ಂಣ	
	12333 Aug 04 13:40	0° ™		morning set	12334 Jun 25 07:09	3° 5 21'02	
asc. node	12333 Aug 05 00:06	0° ™ 49'36		max. Earth dist.	12334 Jul 01 23:28	14° © 06'09	1.42378 AU
evening rise	12333 Aug 06 11:04	3°M 36'02					
evening max el	12333 Aug 22 10:55	29° m 22'27	18°28'21	superior conj	12334 Jul 09 09:39	26° © 35'21	-1°43'34
	12333 Aug 23 02:38	0∘ ত		minimum elong	12334 Jul 09 16:31	27° © 05'02	1°43'41
retrograde	12333 Aug 30 04:46	3° ≏ 16'35			12334 Jul 11 08:51	0 \circ Ω	
evening set	12333 Sep 01 05:42	3° ჲ 01'09		evening rise	12334 Jul 20 15:43	16° Ω 35'54	
	12333 Sep 06 23:56	30°R Mp		asc. node	12334 Jul 22 20:52	20° Ω 36'38	
desc. node	12333 Sep 07 06:54	29° m/47'08	0021120		12334 Jul 28 04:41	0° Mp	10006152
inferior conj	12333 Sep 08 23:23	28° m 29'08		evening max el	12334 Aug 05 21:22	12° To 12'08	18°06'53
minimum elong	12333 Sep 08 22:10 12333 Sep 12 06:01	28° Tp 31'33 25° Tp 55'13	0°31'16	retrograde	12334 Aug 12 18:01 12334 Aug 15 02:18	15° Mp 42'16	
min. Earth dist.	12333 Sep 12 06:01 12333 Sep 16 11:10	23° My 12'35	0.57876 AU	evening set inferior conj	12334 Aug 13 02:18 12334 Aug 22 01:39	15° Mp 18'03 10° Mp 25'23	0°55'46
morning rise direct	12333 Sep 16 11.10 12333 Sep 22 13:01	23 11/12/33 21°M)38'12		minimum elong	12334 Aug 22 01:39 12334 Aug 22 03:20	10° my 23' 23' 10° my 21'31	0°54'47
morning max el	12333 Sep 22 13:01 12333 Oct 06 20:40	29° mg 13'15	27°02'57	desc. node	12334 Aug 25 04:20	7° m) 34'48	0 3447
morning max or	12333 Oct 07 15:33	0° ت	27 0237	min. Earth dist.	12334 Aug 25 07:46	7° m ₂ 27'16	0.60091 AU
	12333 Oct 28 11:23	0° ™		morning rise	12334 Aug 29 01:17	4° m) 37'39	0.00031110
asc. node	12333 Nov 01 01:38	6°M50′32		direct	12334 Sep 04 13:38	2° m) 35'34	
morning set	12333 Nov 06 00:25	17°ML00'12		morning max el	12334 Sep 18 21:16	10° m 28'19	27°49'03
	12333 Nov 11 22:43	0° ∡			12334 Oct 04 01:44	0∘ ⊽	
				asc. node	12334 Oct 18 22:22	26° ≏ 32'43	
superior conj	12333 Nov 12 21:46	2° ҂ 08′39	1°31'58		12334 Oct 20 14:47	0° M	
minimum elong	12333 Nov 12 20:17	2° х 00′20	1°32'35	morning set	12334 Oct 21 05:42	1° M ₁7'45	
max. Earth dist.	12333 Nov 13 00:27	2° х 23′37	1.31346 AU	max. Earth dist.	12334 Oct 27 08:58	14°M34'53	1.31368 AU
evening rise	12333 Nov 19 17:02	17° ∡ 05'02					
	12333 Nov 26 02:01	0°る		superior conj	12334 Oct 28 09:04	16° M 48'46	1°20'21
desc. node	12333 Dec 04 04:00	14° る 14'59		minimum elong	12334 Oct 28 06:59	16° M ₃37'08	1°20'40
	12333 Dec 15 11:51	0°≈	2605.4155		12334 Nov 03 08:10	0° ∡ ¹	
evening max el	12333 Dec 20 00:41	4°≈47'00	26°54'55	evening rise	12334 Nov 04 01:59	1°ス₹36'17 0°る	
retrograde	12334 Jan 02 23:12	11°≈56'59		desc. node	12334 Nov 19 05:25	2°る45'40	
evening set min. Earth dist.	12334 Jan 09 17:28 12334 Jan 13 14:56	10°≈00'35 7°≈21'27	0.59815 AU	evening max el	12334 Nov 21 01:09 12334 Dec 01 20:35	15° る 57'10	25047136
inferior conj	12334 Jan 16 19:10	7 ≈21 27 4°≈47'43		retrograde	12334 Dec 01 20:33 12334 Dec 15 18:06	13 3 57 10 22° る 58'31	23 47 30
minimum elong	12334 Jan 17 02:30	4°≈32'52	3°28'15	evening set	12334 Dec 13 18:00 12334 Dec 21 21:59	22 3 30'03	
morning rise	12334 Jan 24 14:25	0°≈05'05	5 20 15	min. Earth dist.	12334 Dec 26 09:07	18° る 53'22	0.57725 AU
	12334 Jan 24 23:02	30°Rる		inferior conj	12334 Dec 29 09:02	16° る 47'37	
direct	12334 Jan 26 16:19	29° පි 48'47		minimum elong	12334 Dec 29 17:30		4°44'15
asc. node	12334 Jan 28 00:55	29° ප 56'01		morning rise	12335 Jan 06 15:40	12° る 27'36	-
	12334 Jan 28 08:53	0° ≈		direct	12335 Jan 08 19:23	12° る 13'02	
morning max el	12334 Feb 03 05:38	3° ≈ 34'10	18°07'30	asc. node	12335 Jan 14 22:10	14° る 18'50	
morning set	12334 Feb 18 20:39	28° ≈ 19′29		morning max el	12335 Jan 17 11:19	16° පි 26'05	18°47'04

						_	
	12335 Jan 27 01:27	0° ≈		asc. node	12336 Jan 01 19:20	0° る 09'58	
morning set	12335 Feb 02 17:35	12° ≈ 34'33			12336 Jan 01 15:42	0°₹	
				morning set	12336 Jan 17 21:55	27° る 07'53	
superior conj	12335 Feb 11 08:57	29° ≈ 18′03	0°44'05		12336 Jan 19 07:48	0° ≈	
minimum elong	12335 Feb 11 11:34	29° ≈ 30'23	0°44'12				
	12335 Feb 11 17:52	0° \		superior conj	12336 Jan 25 17:56	12° ≈ 58'27	1°08'24
desc. node	12335 Feb 17 01:12	9° ¥ 44'06		minimum elong	12336 Jan 25 20:46	13°≈12'32	1°08'44
		12° H 25'34	1 20550 AII	C			
max. Earth dist.	12335 Feb 18 13:37		1.39559 AU	max. Earth dist.	12336 Jan 31 19:42	24°≈40'15	1.37332 AU
evening rise	12335 Feb 22 12:31	19° ¥ 15′01		desc. node	12336 Feb 03 21:54	0°) 19'43	
	12335 Mar 01 01:55	0° Υ			12336 Feb 03 17:31	0° ∀	
	12335 Mar 22 01:25	9° 8		evening rise	12336 Feb 04 13:12	1° ∺ 28'16	
evening max el	12335 Mar 29 12:02	8° 8 25'49	24°10'13		12336 Feb 22 06:01	$0^{\circ}\mathbf{\Upsilon}$	
retrograde	12335 Apr 09 17:59	15° 8 02'08		evening max el	12336 Mar 11 01:26	22° Y 17'13	25°26'09
asc. node	12335 Apr 12 19:16	14° 8 19'45		retrograde	12336 Mar 23 07:08	29° Y 21'40	
evening set	12335 Apr 15 03:28	12° 8 45'57		evening set	12336 Mar 29 04:14	26° Y ′55'35	
min. Earth dist.	12335 Apr 19 18:59	7° 8 24'20	0.68487 AU	asc. node	12336 Mar 29 16:39	26° Υ 28'17	
	-	6°816'30	2°14'02			22° Υ '09'13	0.67723 AU
inferior conj	12335 Apr 20 15:02	_		min. Earth dist.	12336 Apr 02 12:34		
minimum elong	12335 Apr 20 12:52	6° 8 23'49	2°13'00	inferior conj	12336 Apr 03 20:47	20° Y 25′17	1°34'11
morning rise	12335 Apr 25 22:23	0° 8 15'11		minimum elong	12336 Apr 03 18:51	20° Ƴ 31'35	1°33'18
	12335 Apr 26 06:46	30° ŖƳ		morning rise	12336 Apr 09 09:54	14° Y 32'43	
direct	12335 Apr 29 21:44	28° Y '45'23		direct	12336 Apr 12 21:26	13° Y 23'09	
	12335 May 03 19:17	0°B		morning max el	12336 Apr 19 20:02	17° Ƴ 10'42	19°09'25
morning max el	12335 May 07 15:00	3° 8 05'50	20°10'18	C	12336 Apr 29 20:48	0°8	
desc. node	12335 May 16 03:01	13° 8 26'07		desc. node	12336 May 01 23:46	3° 8 07'29	
dese. Hode	12335 May 27 13:05	0°II		greatest brilliancy	12336 May 02 19:48	4° 8 22'07	0.7m
. ,	•			-	•	•	-0.7111
morning set	12335 Jun 04 10:52	12° Ⅱ 02'07		morning set	12336 May 13 13:47	20° 8 47'27	
max. Earth dist.	12335 Jun 14 09:16	27° Ⅱ 36′13	1.44142 AU		12336 May 19 12:28	0∘Щ	
	12335 Jun 15 21:11	0		max. Earth dist.	12336 May 27 00:42	11° ∏ 43′25	1.45312 AU
superior conj	12335 Jun 20 04:14	6° © 57'55	-2°06'16	superior conj	12336 May 30 00:20	16° Ⅲ 25'32	-2°13'15
minimum elong	12335 Jun 20 09:32	7° 5 19'38	2°06'53	minimum elong	12336 May 29 23:17	16° Ⅲ 21′23	2°14'05
evening rise	12335 Jul 03 02:54	28°548'04		•	12336 Jun 07 12:09	0°©	
Ü	12335 Jul 03 19:35	$0^{\circ}\Omega$		evening rise	12336 Jun 13 15:48	10° © 01'48	
asc. node	12335 Jul 09 17:42	10°Ω08'20		asc. node	12336 Jun 25 14:37	29° © 18'31	
		$25^{\circ}\Omega 27'19$	10004145	asc. nouc		0°Ω	
evening max el	12335 Jul 20 11:09		18°04'45		12336 Jun 26 01:38		10020150
retrograde	12335 Jul 26 21:22	28° Ω 47'58		evening max el	12336 Jul 03 00:56	8° Ω 59'11	18°20'58
evening set	12335 Jul 29 13:45	28° Ω 11'46		retrograde	12336 Jul 09 10:22	12° Ω 23′58	
inferior conj	12335 Aug 04 21:48	23° Ω 00′32	1°59'22	evening set	12336 Jul 12 11:05	11° Ω 33'26	
minimum elong	12335 Aug 05 00:23	22° Ω 53'43	1°58'01	inferior conj	12336 Jul 18 07:38	6° Ω 05′28	2°41'17
min. Earth dist.	12335 Aug 07 18:59	20° Ω 00′23	0.62358 AU	minimum elong	12336 Jul 18 09:53	5° Ω 58'53	2°40'03
morning rise	12335 Aug 11 08:49	16° Ω 52'12		min. Earth dist.	12336 Jul 20 15:32	3° Ω 23′16	0.64452 AU
desc. node	12335 Aug 12 01:43	16° Ω 23'11		morning rise	12336 Jul 24 07:21	29° © 46'23	
direct	12335 Aug 18 01:12	14° Ω 27'15			12336 Jul 24 00:44	30°Rூ	
morning max el	12335 Nug 10 01:12 12335 Sep 01 04:00	22° Ω 29'24	27°56'16	desc. node	12336 Jul 28 23:05	27°\$20'55	
morning max ci	•		27 30 10			27° 5 07'44	
	12335 Sep 07 19:06	0° m)		direct	12336 Jul 30 21:44		
	12335 Sep 27 06:44	0∘ ⊽			12336 Aug 07 14:39	0 \circ Ω	
morning set	12335 Oct 05 05:02	15° ≏ 16'05		morning max el	12336 Aug 13 14:00	5° Ω 07'31	27°27'20
asc. node	12335 Oct 05 19:04	16° ≏ 27'52			12336 Sep 01 11:31	0° m)	
max. Earth dist.	12335 Oct 10 13:45	26° ჲ 33'29	1.31906 AU	morning set	12336 Sep 17 19:45	28° m 47'26	
	12335 Oct 12 03:43	0° M			12336 Sep 18 10:28	0∘ ⊽	
				asc. node	12336 Sep 21 15:43	6° ₽ 30'19	
superior conj	12335 Oct 12 18:15	1° ™ 19'35	1°03'13	max. Earth dist.	12336 Sep 22 10:55	8° ₾ 09'38	1.32972 AU
minimum elong	12335 Oct 12 16:01	1°M07'15	1°03'13	man. Darm dist.	12550 Sep 22 10.00	0 -0750	1.525,2110
			1 03 13		10007 8 05 00.10	15° ≏ 34'21	0940144
evening rise	12335 Oct 19 12:59	16°M11'19		superior conj	12336 Sep 25 23:13		0°40'44
	12335 Oct 26 06:52	0° ∡ 7		minimum elong	12336 Sep 25 21:23	15° ≏ 24'32	0°40'32
desc. node	12335 Nov 07 22:24	20° ∡ 16'49			12336 Oct 02 15:53	0° M	
evening max el	12335 Nov 13 08:54	26° ∡ ¹21'24	24°15'17	evening rise	12336 Oct 03 00:06	0° M 43'55	
	12335 Nov 17 19:35	5°0			12336 Oct 19 06:58	0° ∡ ¹	
retrograde	12335 Nov 27 01:06	3° ප 11'16		desc. node	12336 Oct 24 19:44	6° ₹ ¹25'24	
evening set	12335 Dec 02 02:42	2° る 14'48		evening max el	12336 Oct 24 19:33	6° ∡ 124'57	22°33'44
Ü	12335 Dec 06 18:21	30°R. ✓		retrograde	12336 Nov 06 19:17	12° ∡ ¹51'55	
min. Earth dist.	12335 Dec 07 10:21	29° ₹ 21'51	0.55965 AU	evening set	12336 Nov 10 10:42	12° ⋌ 3133	
inferior conj	12335 Dec 07 20:00 12335 Dec 10 02:19	27° × 758'28		min. Earth dist.	12336 Nov 18 03:21		0.54837 AU
5							
minimum elong	12335 Dec 10 07:26	27° ₹ 50'35	5-39/21	inferior conj	12336 Nov 19 01:47	8° ×723'46	
morning rise	12335 Dec 18 14:12	23° ∡ ¹58'57 −		minimum elong	12336 Nov 18 22:41	8° ∡ ′28′10	5~48'43
direct	12335 Dec 21 02:52	23° ∡ ⁴42'14		morning rise	12336 Nov 27 12:03	4° ∡ ³35'56	
morning max el	12335 Dec 31 05:28	28° ₹ 32'19	19°49'01	direct	12336 Nov 30 17:36	4° ∡ °12′08	

morning max el	12336 Dec 12 09:25	9° ×7 44'56	21°13'37	morning rise	12337 Nov 06 23:22	14°M31'26	
asc. node	12336 Dec 18 16:27	17° ∡ 12'21		direct	12337 Nov 11 01:38	13°M55'29	
	12336 Dec 26 08:43	8°0		morning max el	12337 Nov 24 00:57	20° M 10′17	22°56'17
morning set	12337 Jan 01 06:48	11° る 51'01			12337 Dec 02 05:23	0° ∡ ¹	
				asc. node	12337 Dec 05 13:27	5° ∡ 10′05	
superior conj	12337 Jan 08 13:42	27° る 07'30	1°25'19	morning set	12337 Dec 16 18:05	26° ∡ ³37'55	
minimum elong	12337 Jan 08 15:55	27° る 18'57	1°25'56		12337 Dec 18 07:55	0° ろ	
	12337 Jan 09 23:13	0° ≈				_	
max. Earth dist.	12337 Jan 13 05:37	6° ≈ 34'31	1.35287 AU	superior conj	12337 Dec 23 17:01	11° る 35'59	1°35'15
evening rise	12337 Jan 17 07:13	14° ≈ 25′05		minimum elong	12337 Dec 23 18:12	11° る 42'20	1°36'05
desc. node	12337 Jan 20 18:38	20°≈48'05		max. Earth dist.	12337 Dec 26 22:58	18°る28'24	1.33590 AU
	12337 Jan 26 02:11	0°) €		evening rise	12337 Dec 31 14:55	27° පි 56'11	
	12337 Feb 15 23:54	0°Υ 6° Ω 0 4155	26020104		12338 Jan 01 16:16	0° ≈	
evening max el	12337 Feb 21 15:09	6° Υ 04'55 13° Υ 25'07	26°30'04	desc. node	12338 Jan 07 15:26	11°≈04'32 0° ¥	
retrograde	12337 Mar 06 14:56	13°° Y ′23'07 10° Y ′53'24			12338 Jan 19 07:47	0° X 19° ¥ 39'08	2701 4127
evening set asc. node	12337 Mar 12 22:56 12337 Mar 16 14:03	7° Υ 14'38		evening max el	12338 Feb 04 04:40 12338 Feb 17 16:30	19° ★ 39'08 27° ★ 04'18	2/14/2/
min. Earth dist.	12337 Mar 17 01:21	6° Υ 41'31	0.66549 AU	retrograde evening set	12338 Feb 17 16.30 12338 Feb 24 09:31	24° X 32'24	
inferior conj	12337 Mar 17 01.21 12337 Mar 18 21:40	6 1 41 31 4° Υ 28'03	0.66349 AU 0°44'06	min. Earth dist.	12338 Feb 24 09.31 12338 Feb 28 07:02	24 K 52 24 20° X 53'28	0.65005 AU
minimum elong	12337 Mar 18 20:33	4° Υ 31'24	0°43'41	inferior conj	12338 Mar 02 15:15	18° X 18'36	
minimum clong	12337 Mar 18 20:33	4 13124 30° ₹	0 43 41	minimum elong	12338 Mar 02 15:43	18° ∺ 17'17	0°16'00
morning rise	12337 Mar 24 19:08	28° ¥ 46′01		asc. node	12338 Mar 03 11:27	17° ¥ 23'16	0 1000
direct	12337 Mar 27 20:03	27°) 54'15		morning rise	12338 Mar 08 23:34	12° X 49'36	
direct	12337 Apr 01 19:03	0° Υ		direct	12338 Mar 11 15:18	12° X 12'25	
morning max el	12337 Apr 03 07:43	1° Υ 21'29	18°24'47	morning max el	12338 Mar 17 23:51	15° X 31'13	17°57'03
desc. node	12337 Apr 18 20:28	23° Y 10'48	10 2 ,	moming man er	12338 Mar 28 11:51	0°Υ	1, 5, 05
dese. node	12337 Apr 23 03:50	0°8		morning set	12338 Apr 04 17:10	11° Υ ′50'47	
morning set	12337 Apr 23 13:10	0° 8 36'56		desc. node	12338 Apr 05 17:04	13° Y ′29'25	
3	r				12338 Apr 15 20:26	0°8	
superior conj	12337 May 09 08:03	25° 8 27'06	-2°00'07		ī		
minimum elong	12337 May 09 00:07	24° 8 56'07	2°00'18	superior conj	12338 Apr 18 20:41	4° 8 48'03	-1°29'21
max. Earth dist.	12337 May 09 19:55	26° 8 13'29	1.45769 AU	minimum elong	12338 Apr 18 11:48	4° 8 12'44	
	12337 May 12 05:55	Π \circ 0		max. Earth dist.	12338 Apr 22 16:14	10° 8 49'18	1.45476 AU
evening rise	12337 May 25 04:26	20° Ⅱ 16′13		evening rise	12338 May 04 21:46	29° 8 47'52	
	12337 May 31 08:53	0 \circ \mathfrak{S}			12338 May 05 00:55	Π $^{\circ}0$	
greatest brilliancy	12337 Jun 03 19:11	5° 5 20'39	-0.8m	greatest brilliancy	12338 May 19 01:41	21° II 13'08	-0.6m
asc. node	12337 Jun 12 11:38	18° 5 00'01			12338 May 25 07:39	0 \circ	
evening max el	12337 Jun 16 11:58	22° 5 40'57	18°54'39	asc. node	12338 May 30 08:43	6° 5 02'19	
retrograde	12337 Jun 23 05:22	26° 5 23'06		evening max el	12338 May 30 18:06	6°\$26'18	19°44'40
evening set	12337 Jun 26 14:45	25° © 16'43		retrograde	12338 Jun 07 03:27	10° © 37'57	
inferior conj	12337 Jul 02 03:27	19° © 33'27	3°05'08	evening set	12338 Jun 10 22:01	9° © 15'10	
minimum elong	12337 Jul 02 04:47	19° 5 29'14	3°04'06	inferior conj	12338 Jun 16 06:07	3° © 17'57	
min. Earth dist.	12337 Jul 03 20:34	17° © 23'47	0.66208 AU	minimum elong	12338 Jun 16 06:21	3° © 17'08	3°13'18
morning rise	12337 Jul 07 18:07	13° © 10'43		min. Earth dist.	12338 Jun 17 08:35	1° © 49'24	0.67535 AU
direct	12337 Jul 14 01:28	10° © 29'00			12338 Jun 18 18:29	30°RⅡ	
desc. node	12337 Jul 15 20:22	10°5540'26		morning rise	12338 Jun 21 14:21	26° Ⅱ 56'03	
morning max el	12337 Jul 27 00:54	18°9512'04	26°29'17	direct	12338 Jun 27 11:15	24° Ⅱ 20'48	
	12337 Aug 05 23:08	0° N		desc. node	12338 Jul 02 17:33	26°∏00'02 0° ©	
	12337 Aug 25 11:01	0°M)			12338 Jul 07 21:25		25011111
morning set	12337 Aug 31 22:46	11° Mp 44'21	1 24555 ATT	morning max el	12338 Jul 09 11:18 12338 Jul 30 23:45	1° © 32'26 0° Ω	25-11-11
max. Earth dist. asc. node	12337 Sep 04 22:14 12337 Sep 08 12:21	19° Mp 24'05 26° Mp 36'18	1.34555 AU	morning set	12338 Aug 14 10:03	23° Ω 56'39	
asc. Houe	12337 Sep 08 12.21	20 11/30 18		morning set	12338 Aug 14 10.03	0°m)	
superior conj	12337 Sep 09 21:35	29° m 27'02	0°13'16	max. Earth dist.	12338 Aug 17 17:31 12338 Aug 18 00:26	0° Mp 30'32	1.36573 AU
minimum elong	12337 Sep 09 21:53 12337 Sep 09 20:53	29° m) 23'20	0°13'03	max. Earth tist.	12336 Aug 16 00.20	U 111/3032	1.30373 AU
behind sun begin	12337 Sep 09 20:33 12337 Sep 09 17:25	29° m) 05'27	0 13 03	superior conj	12338 Aug 24 10:26	12° m 49'50	-0°18'20
behind sun end	12337 Sep 09 17:29 12337 Sep 10 00:20	29° mp 41'15		minimum elong	12338 Aug 24 11:37	12° m 55'40	
our oud	12337 Sep 10 00:20	0° <u>م</u>		asc. node	12338 Aug 26 09:00	16° Mp 41'47	
evening rise	12337 Sep 17 09:27	ა _ 15° ჲ 09'18		evening rise	12338 Sep 01 14:47	29° m) 21'12	
	12337 Sep 17 05:27 12337 Sep 24 21:15	0°M		-0	12338 Sep 01 11:17	0∘ ত	
evening max el	12337 Oct 06 13:51		20°59'44	evening max el	12338 Sep	ა — 27° Ω 46'19	19°44'00
desc. node	12337 Oct 11 17:05	20°M43'56		<i>C</i>	12338 Sep 21 10:52	0°M	•
retrograde	12337 Oct 18 06:10	22°M32'43		retrograde	12338 Sep 28 22:22	2°M46'20	
evening set	12337 Oct 20 16:41	22°M18'38		desc. node	12338 Sep 28 14:29	2°M46'02	
inferior conj	12337 Oct 29 17:25	18°M24'20	-4°59'39	evening set	12338 Sep 30 19:40	2°M36'30	
minimum elong	12337 Oct 29 07:51	18° ™ 37'51	4°56'51		12338 Oct 07 06:50	30° ₹ Ω	
min. Earth dist.	12337 Oct 30 09:59	18°ML00'53	0.54574 AU	inferior conj	12338 Oct 09 15:49	28° ≏ 33'45	-3°23'06

minimum elong	12338 Oct 09 07:08	28° £ 47'15	3°19'43	minimum elong	12339 Sep 20 04:30	9° £ 26′03	1°30'05
min. Earth dist.	12338 Oct 09 07:08 12338 Oct 11 19:09	28 ⊆ 47 13 27° ⊆ 14'04	0.55243 AU	min. Earth dist.	12339 Sep 20 04:30 12339 Sep 23 09:28	7° ⊆ 08'04	0.56738 AU
morning rise	12338 Oct 17 16:55	24° 2 15'12	0.33243 AU	morning rise	12339 Sep 28 01:56	7 2 08 04 4° 2 23′21	0.30738 AU
direct	12338 Oct 17 10:33 12338 Oct 22 15:18	23° £ 21'33		direct	12339 Oct 03 18:47	3° Ω 04'59	
uncer	12338 Nov 05 05:33	0°M		morning max el	12339 Oct 05 10:47 12339 Oct 18 00:42	10° ≏ 27'34	26°20'11
morning max el	12338 Nov 05 11:23		24°44'31	morning max or	12339 Nov 01 23:30	0°M	20 20 11
asc. node	12338 Nov 22 10:21	23°M49'43	21 1131	asc. node	12339 Nov 09 07:11	12°M59'55	
use. Hode	12338 Nov 25 17:01	0° ₹		morning set	12339 Nov 15 16:38	26°M01'55	
morning set	12338 Dec 01 05:57	11° × ⁷ 23'30		morning sec	12339 Nov 17 12:39	0° ∡ 7	
superior conj	12338 Dec 08 01:15	26° ∡ 16'31	1°38'42	superior conj	12339 Nov 22 12:10	11° ₹ 01'33	1°36'07
minimum elong	12338 Dec 08 01:18		1°39'36	minimum elong	12339 Nov 22 11:11	10° ∡ 56′02	1°36'52
	12338 Dec 09 18:09	8°0		max. Earth dist.	12339 Nov 23 06:25	12° ∡ ⁴42'58	1.31557 AU
max. Earth dist.	12338 Dec 10 00:00	0° る 31'46	1.32331 AU	evening rise	12339 Nov 29 10:42	26° ₹ 08'41	
evening rise	12338 Dec 15 09:02	11° る 53'25			12339 Dec 01 07:16	0°ප	
	12338 Dec 24 21:44	0° ≈		desc. node	12339 Dec 12 09:16	20° る 36'44	
desc. node	12338 Dec 25 12:18	1°≈03'30			12339 Dec 18 09:34	0° ≈	
	12339 Jan 14 22:03	0° \		evening max el	12339 Dec 30 23:43	15°≈17'45	27°18'29
evening max el	12339 Jan 17 16:18	2°) (47'51	27°32'26	retrograde	12340 Jan 13 22:01	22°≈33'52	
retrograde	12339 Jan 31 11:08	10°) 10'45		evening set	12340 Jan 20 19:55	20°≈24'23	
evening set	12339 Feb 07 09:34	7°) (45'42	0.621.42.437	min. Earth dist.	12340 Jan 24 14:15	17°≈37'10	0.61055 AU
min. Earth dist.	12339 Feb 11 03:46			inferior conj	12340 Jan 27 16:53	14°≈54'14	
inferior conj	12339 Feb 13 22:46	1°) € 50′27		minimum elong	12340 Jan 27 22:39	14°≈41'35	2°42'17
minimum elong	12339 Feb 14 01:37	1°) 43′21	1°25'17	morning rise	12340 Feb 04 04:19 12340 Feb 05 06:10	9°≈59'52	
aca mada	12339 Feb 15 20:37	30°R≈ 27°2056/59		asc. node direct		9°≈45'45 9°≈41'07	
asc. node	12339 Feb 18 08:49 12339 Feb 20 20:05	27°≈56'58 26°≈37'17			12340 Feb 06 07:23 12340 Feb 13 09:38	9°≈41'07 13°≈15'04	17054!10
morning rise direct	12339 Feb 20 20.03 12339 Feb 23 04:17	26°≈11'09		morning max el	12340 Feb 13 09.38 12340 Feb 24 18:04	13 ≈13 04 0°) {	1/ 3418
morning max el	12339 Mar 01 17:37	20 ≈11 09 29°≈32'24	17°46'37	morning set	12340 Feb 29 00:14	0) (7°) (40'57	
morning max ci	12339 Mar 01 17:37 12339 Mar 02 04:35	0°) €	17 4037	desc. node	12340 Mar 09 10:12	24°) 34'25	
morning set	12339 Mar 17 22:57	24° ¥ 18'41		desc. Hode	12340 IVIAI 07 10.12	24 /(3423	
morning set	12339 Mar 21 05:55	0° Υ		superior conj	12340 Mar 10 14:00	26° ¥ 35′20	-0°09'02
desc. node	12339 Mar 23 13:39	3° Υ 58'49		minimum elong	12340 Mar 10 13:13	26°\(\frac{7}{33}\)26	0°08'46
				behind sun begin	12340 Mar 10 06:15	26°) (01'41	
superior conj	12339 Mar 30 05:06	15° Y ′07'21	-0°49'28	behind sun end	12340 Mar 10 20:11	27°) 02'06	
minimum elong	12339 Mar 30 00:02	14° Y 46'31	0°48'52		12340 Mar 12 13:35	0° Υ	
max. Earth dist.	12339 Apr 05 10:29	25° Y °12′50	1.44471 AU	max. Earth dist.	12340 Mar 18 00:26	9° Y '07'47	1.42865 AU
	12339 Apr 08 10:58	0°B		evening rise	12340 Mar 24 05:59	19° Y ′08'54	
evening rise	12339 Apr 14 09:10	9° 8 12'55			12340 Mar 31 06:48	9° 8	
	12339 Apr 28 06:10	$\Pi^{\circ}0$			12340 Apr 21 22:02	Π $^{\circ}0$	
evening max el	12339 May 13 18:26	20° Ⅲ 12′28	20°48'53	evening max el	12340 Apr 25 13:26	3° Ⅱ 59'32	22°03'48
asc. node	12339 May 17 05:52	23° II 13'03		asc. node	12340 May 03 03:08	9° Ⅱ 16′58	
retrograde	12339 May 22 02:22	25° Ⅲ 03′10		retrograde	12340 May 05 00:15	9° Ⅱ 33'37	
evening set	12339 May 26 06:48	23° Ⅲ 24′06		evening set	12340 May 09 15:23	7° Ⅱ 39'03	
inferior conj	12339 May 31 13:05	17° Ⅱ 14'37	3°10'54	inferior conj	12340 May 14 22:13	1° Ⅱ 19'30	2°56'45
minimum elong	12339 May 31 12:19	17° Ⅱ 17'16	3°10'00	minimum elong	12340 May 14 20:39	1° Ⅱ 24'58	2°55'47
min. Earth dist.	12339 Jun 01 01:44	16° Ⅲ 30'53	0.68397 AU	min. Earth dist.	12340 May 14 21:50	1° Ⅱ 20′50	0.68789 AU
morning rise	12339 Jun 05 17:36	10° ∏ 56'19			12340 May 15 21:05	30°₹ 8	
direct	12339 Jun 11 02:11	8° Ⅱ 34'45		morning rise	12340 May 20 01:43	25° 8 06'40	
desc. node	12339 Jun 19 14:39	12° Ⅱ 51'55	220 42152	direct	12340 May 24 21:18	23° 8 03'34	22012150
morning max el	12339 Jun 21 21:26	15° Ⅱ 01'49	23°42'52	morning max el	12340 Jun 03 09:24	28° 8 38'40	22°13'50
	12339 Jul 04 03:09	0。 Ư 0。ௐ		daga mada	12340 Jun 04 16:41	0° П 0° П 51'45	
mamina sat	12339 Jul 23 22:07 12339 Jul 27 00:54	5° Ω 13'00		desc. node	12340 Jun 05 11:38 12340 Jun 26 19:08	0°©	
morning set max. Earth dist.	12339 Jul 27 00.34 12339 Jul 30 21:57		1.38854 AU	morning set	12340 Jul 26 19:08 12340 Jul 06 15:00	0 95 15°9522'47	
max. Earth dist.	12339 Jul 30 21.37	11 663443	1.36634 AU	max. Earth dist.	12340 Jul 11 21:19	24°502'36	1.41150 AU
superior conj	12339 Aug 07 10:09	25° Ω 34'13	-0°52'26	max. Larui dist.	12340 Jul 15 09:26	24 3 02 30	1.71130 AU
minimum elong	12339 Aug 07 13:50	25° Ω 51'35			12540 Jul 15 07.20	0 00	
	12339 Aug 07 13:30 12339 Aug 09 18:12	0° m)	0 02 23	superior conj	12340 Jul 19 16:26	7° Ω 30'40	-1°26'08
asc. node	12339 Aug 13 05:40	6° Mp 43'09		minimum elong	12340 Jul 19 22:34	7° Ω 57'58	
evening rise	12339 Aug 16 13:24	13° m) 12'27		evening rise	12340 Jul 30 01:50	26° Ω 34'17	
<i>5</i> - <i>,</i>	12339 Aug 25 15:43	0∘ ⊽		asc. node	12340 Jul 30 02:23	26° Ω 36'47	
evening max el	12339 Sep 01 18:46	9° ჲ 36'01	18°49'51		12340 Jul 31 22:01	0° m)	
retrograde	12339 Sep 10 06:17	13° ♀ 51'02		evening max el	12340 Aug 15 01:39	22° m) 07'32	18°16'53
evening set	12339 Sep 12 03:44	13° ჲ 39'06		retrograde	12340 Aug 22 09:12	25° m/49'33	
desc. node	12339 Sep 15 11:56	12° ≏ 25'41		evening set	12340 Aug 24 13:01	25° m/30'54	
inferior conj	12339 Sep 20 08:21	9° ≙ 19'07	-1°31'40	inferior conj	12340 Aug 31 22:43	20° m 50'21	0°08'13
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	12240 4 21 22-00	200 m 40146	0007152		12241 A 05 04-50	00 m 22122	
minimum elong	12340 Aug 31 23:00	20° Mp 49'46	0°07'53	retrograde	12341 Aug 05 04:50	8° m) 33'23	
transit middle	12340 Aug 31 23:00	20° m/49'46	0°07'53	evening set	12341 Aug 07 16:39	8° Mp 04'17	1025125
transit begin	12340 Aug 31 19:59	20° M 56'08		inferior conj	12341 Aug 14 09:03	3°M)03'36	1°25'35
transit end	12340 Sep 01 02:02	20° m/43'22		minimum elong	12341 Aug 14 11:19	2° m/58'03	1°24'21
desc. node	12340 Sep 01 09:25	20° Mp 27'46	0.50700 AII	min. Earth dist.	12341 Aug 17 12:12	0° Mp 02'03	0.61066 AU
min. Earth dist.	12340 Sep 04 06:41	18° Mp 03'10	0.58789 AU	4 4-	12341 Aug 17 13:05	30°R Ω 28° Ω 28'41	
morning rise	12340 Sep 08 05:30	15° Mp 19'19		desc. node	12341 Aug 19 06:52	$28^{\circ} \Omega 2841$ $27^{\circ} \Omega 06'09$	
direct	12340 Sep 14 12:43	13° Mp 32'31	27027107	morning rise direct	12341 Aug 21 03:17	21° Ω 53'21	
morning max el	12340 Sep 28 20:55 12340 Oct 06 11:30	21°Mp16'44 0° ₽	2/2/0/	direct	12341 Aug 27 18:22		
	12340 Oct 06 11.30 12340 Oct 24 21:04	0°M		marring may al	12341 Sep 07 21:38 12341 Sep 11 00:08	0° m) 2° m)50'41	27°56'47
aca mada		2°M32'31		morning max el	12341 Sep 11 00.08 12341 Sep 30 23:57	2 110/30/41 0° Ω	2/ 304/
asc. node	12340 Oct 26 03:57			asc. node			
morning set	12340 Oct 30 00:27	10°M28'42			12341 Oct 13 00:39	22° £ 20'34	
	12240 N 05 22.54	250 m 45120	1007144	morning set	12341 Oct 14 03:28	24° ≗ 38'25 0° I L	
superior conj	12340 Nov 05 23:54	25°M45'28	1°27'44	Eth dit	12341 Oct 16 16:31		1 21527 AII
minimum elong	12340 Nov 05 22:07	25°M35'30	1°28'14	max. Earth dist.	12341 Oct 19 22:30	7°M03'19	1.31537 AU
max. Earth dist.	12340 Nov 05 15:09	24°M56'41	1.31292 AU		12241 0 4 21 10 22	100 M 22110	1012145
	12340 Nov 07 21:33	0° ∡ 7		superior conj	12341 Oct 21 10:33	10°M22'18	1°13'45
evening rise	12340 Nov 12 17:38	10°♂36'10 0°♂		minimum elong	12341 Oct 21 08:20	10°M10'01	1°13'56
44-	12340 Nov 22 13:18	0°る 9°る34'09		evening rise	12341 Oct 28 03:42	25°M09'46 0° <i>₹</i> 7	
desc. node	12340 Nov 28 06:22		26020104	1 1	12341 Oct 30 10:21		
evening max el	12340 Dec 12 00:36	26° る 59'17	26°30'04	desc. node	12341 Nov 15 03:35	27° ∡ 741'47	
	12340 Dec 15 13:51	0°≈ 4°≈ ≈05157			12341 Nov 16 20:19	0°る	25010120
retrograde	12340 Dec 25 23:27	4°≈05'57		evening max el	12341 Nov 23 17:14	7°る49'03	25°10'39
evening set	12341 Jan 01 12:39	2°≈20'50		retrograde	12341 Dec 07 13:10	14° 3 45'20	
i E di li d	12341 Jan 05 05:51	30°R♂	0.5000C ATT	evening set	12341 Dec 13 07:18	13°る30'40	0.56022 ATT
min. Earth dist.	12341 Jan 05 14:24	29°₹44'28	0.58906 AU	min. Earth dist.	12341 Dec 18 05:17	10° る 49'21	0.56923 AU
inferior conj	12341 Jan 08 18:03	27° る 20'38		inferior conj	12341 Dec 20 23:15	9° ろ 00'30	
minimum elong	12341 Jan 09 02:13	27°る05'03	4°01'42	minimum elong	12341 Dec 21 07:00	8°る47'41	5°11'34
morning rise	12341 Jan 16 18:41	22°る47'22		morning rise	12341 Dec 29 08:58	4°る49'19	
direct	12341 Jan 18 20:26	22°る32'20		direct	12341 Dec 31 15:37	4°る34'17	
asc. node	12341 Jan 22 03:27	23°る12'17	10001107	asc. node	12342 Jan 09 00:40	8°る14'26	10010121
morning max el	12341 Jan 26 20:14	26° る 28'45	18°21'36	morning max el	12342 Jan 09 21:22	9° ප 02'13	19°10'31
	12341 Jan 29 22:06	0° ≈		. ,	12342 Jan 23 13:21	0° ≈	
morning set	12341 Feb 11 15:20	21° ≈ 40'48		morning set	12342 Jan 26 15:52	6°≈05'22	
				morning sec	12542 Jan 20 15.52		
	12341 Feb 16 00:14	0° ∀		C			0055110
	12341 Feb 16 00:14	0° ∀	000 (140	superior conj	12342 Feb 03 22:08	22°≈23'33	0°55'18
superior conj	12341 Feb 16 00:14 12341 Feb 20 21:12	0° \ 9° \ 04'55	0°26'40	C	12342 Feb 03 22:08 12342 Feb 04 00:59	22°≈23'33 22°≈37'17	0°55'18 0°55'30
minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04	0°¥ 9°¥04'55 9°¥13'30	0°26'40 0°26'45	superior conj minimum elong	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34	22°≈23'33 22°≈37'17 0°¥	0°55'30
minimum elong desc. node	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47	0°¥ 9°¥04'55 9°¥13'30 15°¥12'49	0°26'45	superior conj minimum elong max. Earth dist.	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46	22°≈23'33 22°≈37'17 0°₩ 5°₩02'45	
minimum elong desc. node max. Earth dist.	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57	0°₩ 9°₩04'55 9°₩13'30 15°₩12'49 22°₩25'05		superior conj minimum elong max. Earth dist. desc. node	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26	22°≈23'33 22°≈37'17 0°¥ 5°¥02'45 5°¥50'40	0°55'30
minimum elong desc. node	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56	0°₩ 9°₩04'55 9°₩13'30 15°₩12'49 22°₩25'05 29°₩57'41	0°26'45	superior conj minimum elong max. Earth dist.	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12	0°55'30
minimum elong desc. node max. Earth dist.	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30	0° H 9° H 04'55 9° H 13'30 15° H 12'49 22° H 25'05 29° H 57'41 0° Υ	0°26'45	superior conj minimum elong max. Earth dist. desc. node	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23	22°≈23'33 22°≈37'17 0°₩ 5°₩02'45 5°₩50'40 11°₩42'12 0°°	0°55'30
minimum elong desc. node max. Earth dist. evening rise	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55	0°\;\\ 9°\;\(\)04'55 9°\;\(\)13'30 15°\;\(\)12'49 22°\;\(\)25'05 29°\;\(\)57'41 0°\(\)\(\)0°\;\(\)	0°26'45 1.40838 AU	superior conj minimum elong max. Earth dist. desc. node evening rise	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ' 0° ₩	0°55'30 1.38610 AU
minimum elong desc. node max. Earth dist. evening rise	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50	0° H 9° H 04'55 9° H 13'30 15° H 12'49 22° H 25'05 29° H 57'41 0° Y 0° B 17° B 48'53	0°26'45 1.40838 AU	superior conj minimum elong max. Earth dist. desc. node evening rise	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38	22°≈23'33 22°≈37'17 0° ₭ 5° ₭02'45 5° ₭50'40 11° ₭42'12 0° ♈ 0° ႘ 1° ႘႘1'04	0°55'30 1.38610 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31	0°₩ 9°₩04'55 9°₩13'30 15°₩12'49 22°₩25'05 29°₩57'41 0°Ψ 0°₩ 17°₩48'53 24°₩04'06	0°26'45 1.40838 AU	superior conj minimum elong max. Earth dist. desc. node evening rise	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ₩ 1° ₩41'04 8° ₩29'58	0°55'30 1.38610 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28	0°₩ 9°₩04'55 9°₩13'30 15°₩12'49 22°₩25'05 29°₩57'41 0°Ψ 0°₩ 17°₩48'53 24°₩04'06 23°₩57'21	0°26'45 1.40838 AU	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03 12342 Apr 06 21:49	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Υ 0° ₩ 1° ₩41'04 8° ₩229'58 7° ₩02'16	0°55'30 1.38610 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 23 22:09	9° ₩ 04'55 9° ₩ 13'30 15° ₩ 12'49 22° ₩ 25'05 29° ₩ 57'41 0° ₩ 17° ₩ 48'53 24° ₩ 04'06 23° ₩ 57'21 21° ₩ 55'23	0°26'45 1.40838 AU 23°24'09	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ₩ 1° ₩41'04 8° ₩29'58 7° ₩02'16 6° ₩09'15	0°55'30 1.38610 AU 24°43'34
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 23 22:09 12341 Apr 29 07:31	9° χ04'55 9° χ13'30 15° χ12'49 22° χ25'05 29° χ57'41 0° γ 0° χ 17° χ48'53 24° χ04'06 23° χ57'21 21° χ55'23 15° χ28'39	0°26'45 1.40838 AU 23°24'09 2°32'30	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ₩ 1° ₩41'04 8° ₩29'58 7° ₩02'16 6° ₩09'15 1° ₩02'46	0°55'30 1.38610 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 23 22:09 12341 Apr 29 07:31 12341 Apr 29 05:27	9° ₩ 04'55 9° ₩ 13'30 15° ₩ 12'49 22° ₩ 25'05 29° ₩ 57'41 0° ₩ 17° ₺ 48'53 24° ₺ 04'06 23° ₺ 57'21 21° ₺ 55'23 15° ₺ 28'39 15° ₺ 35'45	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist.	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56 12342 Apr 13 08:50	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ϒ 1° ℧ 41'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℟ ϒ	0°55'30 1.38610 AU 24°43'34 0.68218 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist.	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 23 22:09 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37	9° ₩ 04'55 9° ₩ 13'30 15° ₩ 12'49 22° ₩ 25'05 29° ₩ 57'41 0° Ψ 0° ₩ 17° ₺ 48'53 24° ₺ 04'06 23° ₺ 57'21 21° ₺ 55'23 15° ₺ 28'39 15° ₺ 35'45 16° ₺ 13'03	0°26'45 1.40838 AU 23°24'09 2°32'30	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56 12342 Apr 13 08:50 12342 Apr 13 15:07	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ℧ 1° ℧ 41'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℝ Ψ 29° Ψ 39'07	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 May 04 12:41	9° ₩ 04'55 9° ₩ 13'30 15° ₩ 12'49 22° ₩ 25'05 29° ₩ 57'41 0° Ψ 0° ₩ 17° ₺ 48'53 24° ₺ 04'06 23° ₺ 57'21 21° ₺ 55'23 15° ₺ 28'39 15° ₺ 35'45 16° ₺ 13'03 9° ₺ 22'42	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 15:07	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ℧ 1° ℧ 41'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℝ Ψ 29° Ψ 39'07 29° Ψ 46'13	0°55'30 1.38610 AU 24°43'34 0.68218 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20	9° ₩ 04'55 9° ₩ 13'30 15° ₩ 12'49 22° ₩ 25'05 29° ₩ 57'41 0° ϒ 0° ℧ 17° ℧ 48'53 24° ℧ 04'06 23° ℧ 55'23 15° ℧ 28'39 15° ℧ 28'39 15° ℧ 35'45 16° ℧ 13'03 9° ℧ 22'42 7° ℧ 40'27	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Mar 21 18:38 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 13 108:50 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ℧ 1° ℧ 41'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℝ Ψ 29° Ψ 39'07 29° Ψ 46'13 23° Ψ 41'22	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24
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minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist.	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 23 08:32 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 24 03:08	9° ₩04'55 9° ₩13'30 15° ₩12'49 22° ₩25'05 29° ₩57'41 0° Ψ 0° ₩ 17° ₩48'53 24° ₩04'06 23° ₩57'21 21° ₩55'23 15° ₩28'39 15° ₩35'45 16° ₩13'03 9° ₩22'42 7° ₩40'27 12° ₩25'22 19° ₩40'46 0° Ⅲ 24° Ⅲ26'56 0° \$\text{9}\$7° \$\text{9}04'31 18° \$\text{9}28'48	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56 12342 Apr 13 15:07 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 03 09:18 12342 May 10 05:20 12342 May 10 05:20 12342 May 12 21:35	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ৳ 1° ৳41'04 8° ₺29'58 7° ₺02'16 6° ₺09'15 1° ₺02'46 30° ዪ Ψ 29° Ψ'39'07 29° Ψ'46'13 23° Ψ'41'22 22° Ψ'20'13 26° Ψ'24'39 0° ₺ 9° ₺06'09 12° ₺58'07 0° Ⅱ	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 30 21:20 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 24 03:08	9° ₩04'55 9° ₩13'30 15° ₩12'49 22° ₩25'05 29° ₩57'41 0° Ψ 0° ₩ 17° ₩48'53 24° ₩04'06 23° ₩57'21 21° ₩55'23 15° ₩28'39 15° ₩35'45 16° ₩13'03 9° ₩22'42 7° ₩40'27 12° ₩25'22 19° ₩40'46 0° Ⅲ 24° Ⅲ26'56 0° ∰ 7° ∰04'31 18° ∰28'48 18° ∰57'18	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 06 21:49 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 10 05:20 12342 May 10 05:20 12342 May 24 05:27 12342 May 26 04:54 12342 Jun 06 16:06	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ℧ 1° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℝ Ψ 29° Ψ 39'07 29° Ψ 46'13 23° Ψ 41'22 22° Ψ 20'13 26° Ψ 24'39 0° ℧ 9° ℧ 06'09 12° ℧ 58'07 0° Ⅱ 3° Ⅲ 01'57 20° Ⅲ 54'14	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30 -0.6m 1.44727 AU
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 17 02:29 12341 May 30 21:20 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 24 03:08	9° \(\)40'55 9° \(\)40'55 9° \(\)40'55 9° \(\)41'30 15° \(\)41'249 22° \(\)425'05 29° \(\)457'41 0° \(\)70° \(\)48'53 24° \(\)40'406 23° \(\)45'21 21° \(\)45'5'23 15° \(\)428'39 15° \(\)43'34 16° \(\)41'303 9° \(\)22'42 7° \(\)40'27 12° \(\)425'22 19° \(\)40'46 0° \(\)7 24° \(\)126'56 0° \(\)7° \(\)904'31 18° \(\)528'48 18° \(\)557'18 0° \(\)7	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist. superior conj	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 12 13:56 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 15:07 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 03 09:18 12342 May 10 05:20 12342 May 12 21:35 12342 May 26 04:54 12342 Jun 06 16:06	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Ψ 0° ℧ 1° ℧ 1'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℝ Ψ 29° Ψ 39'07 29° Ψ 46'13 23° Ψ 41'22 22° Ψ 20'13 26° Ψ 24'39 0° ℧ 9° ℧ 06'09 12° ℧ 58'07 0° Ⅲ 3° Ⅲ 01'57 20° Ⅲ 54'14	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30 -0.6m 1.44727 AU -2°11'31
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 17 02:29 12341 May 30 21:20 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 24 03:08 12341 Jul 01 00:52 12341 Jul 01 07:38 12341 Jul 01 07:38 12341 Jul 07 17:54 12341 Jul 12 23:38	9° χ04'55 9° χ13'30 15° χ12'49 22° χ25'05 29° χ57'41 0° Υ 0° ϒ 17° ႘48'53 24° ႘04'06 23° ႘57'21 21° ႘55'23 15° ႘28'39 15° ႘35'45 16° ႘13'03 9° ႘22'42 7° ႘40'27 12° ႘25'22 19° ႘40'46 0° Π 24° Π26'56 0° ⑤ 7° ⑤04'31 18° ⑤28'48 18° ⑤57'18 0° Ω 9° Ω14'43	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 03 09:18 12342 May 10 05:20 12342 May 24 05:27 12342 May 26 04:54 12342 Jun 11 09:20 12342 Jun 11 09:20 12342 Jun 11 09:20	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30 -0.6m 1.44727 AU -2°11'31
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Mar 24 17:55 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 07:31 12341 Apr 29 07:31 12341 Apr 29 07:31 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 17 02:29 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 19 17:08 12341 Jun 01 00:52 12341 Jun 01 07:38 12341 Jul 01 07:38 12341 Jul 01 07:38 12341 Jul 07 17:54 12341 Jul 12 23:38 12341 Jul 16 23:10	9° χ04'55 9° χ13'30 15° χ12'49 22° χ25'05 29° χ57'41 0° Υ 0° ϒ 0° ϒ 17° ႘48'53 24° ႘04'06 23° ႘57'21 21° ႘55'23 15° ႘28'39 15° ႘35'45 16° ႘13'03 9° ႘22'42 7° ႘40'27 12° ႘25'22 19° ႘40'46 0° Π 24° Π26'56 0° ⑤ 7° ⑤04'31 18° ⑤28'48 18° ⑤57'18 0° Ω 9° Ω14'43 16° Ω17'40	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist. superior conj minimum elong	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 10 05:20 12342 May 10 05:20 12342 May 24 05:27 12342 May 26 04:54 12342 Jun 11 09:20 12342 Jun 11 09:20 12342 Jun 11 12:27 12342 Jun 11 09:20	22°≈23'33 22°≈37'17 0° ₩ 5° ₩ 02'45 5° ₩ 50'40 11° ₩ 42'12 0° Υ 0° ℧ 1° ℧ 41'04 8° ℧ 29'58 7° ℧ 02'16 6° ℧ 09'15 1° ℧ 02'46 30° ℟ Υ 29° Ύ 39'07 29° Ύ 46'13 23° Ύ 41'22 22° Ύ 20'13 26° Ύ 24'39 0° ℧ 9° ℧ 06'09 12° ℧ 58'07 0° Ⅲ 3° Ⅲ 01'57 20° Ⅲ 53'14'14 28° Ⅲ 26'11 28° Ⅲ 26'11 28° Ⅲ 38'43 0° ©	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30 -0.6m 1.44727 AU -2°11'31
minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12341 Feb 16 00:14 12341 Feb 20 21:12 12341 Feb 20 23:04 12341 Feb 24 06:47 12341 Feb 28 09:57 12341 Mar 04 21:56 12341 Mar 04 22:30 12341 Apr 08 04:50 12341 Apr 18 19:31 12341 Apr 20 00:28 12341 Apr 20 00:28 12341 Apr 29 07:31 12341 Apr 29 07:31 12341 Apr 29 05:27 12341 Apr 28 18:37 12341 Apr 28 18:37 12341 May 04 12:41 12341 May 08 19:20 12341 May 17 02:29 12341 May 17 02:29 12341 May 30 21:20 12341 May 30 21:20 12341 Jun 16 04:21 12341 Jun 19 17:08 12341 Jun 24 03:08 12341 Jul 01 00:52 12341 Jul 01 07:38 12341 Jul 01 07:38 12341 Jul 07 17:54 12341 Jul 12 23:38	9° χ04'55 9° χ13'30 15° χ12'49 22° χ25'05 29° χ57'41 0° Υ 0° ϒ 0° ϒ 17° ႘48'53 24° ႘04'06 23° ႘57'21 21° ႘55'23 15° ႘28'39 15° ႘35'45 16° ႘13'03 9° ႘22'42 7° ႘40'27 12° ႘25'22 19° ႘40'46 0° Π 24° Π26'56 0° ⑤ 7° ⑤04'31 18° ⑤28'48 18° ⑤57'18 0° Ω 9° Ω14'43 16° Ω17'40 0° ዂ	0°26'45 1.40838 AU 23°24'09 2°32'30 2°31'27 0.68726 AU 20°51'53 1.43188 AU -1°54'41	superior conj minimum elong max. Earth dist. desc. node evening rise evening max el retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist. superior conj	12342 Feb 03 22:08 12342 Feb 04 00:59 12342 Feb 07 22:34 12342 Feb 10 16:46 12342 Feb 11 03:26 12342 Feb 14 11:14 12342 Feb 25 16:23 12342 Mar 20 03:08 12342 Apr 02 11:03 12342 Apr 06 21:49 12342 Apr 08 01:34 12342 Apr 13 08:50 12342 Apr 13 15:07 12342 Apr 13 15:07 12342 Apr 13 12:59 12342 Apr 19 00:36 12342 Apr 22 18:54 12342 Apr 22 18:54 12342 Apr 30 03:05 12342 Apr 30 03:05 12342 May 03 09:18 12342 May 10 05:20 12342 May 24 05:27 12342 May 26 04:54 12342 Jun 11 09:20 12342 Jun 11 09:20 12342 Jun 11 09:20	22°≈23'33 22°≈37'17 0° ₩ 5° ₩02'45 5° ₩50'40 11° ₩42'12 0° Ψ 0° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1° ℧ 1	0°55'30 1.38610 AU 24°43'34 0.68218 AU 1°58'24 1°57'23 19°42'30 -0.6m 1.44727 AU -2°11'31

asc. node	12342 Jul 03 20:03	5° Ω 40'54		retrograde	12343 Jul 03 04:54	5° Ω 39'20	
evening max el	12342 Jul 13 04:14	18° Ω 32′23	18°09'25	evening set	12343 Jul 06 09:12	4° Ω 42'11	
retrograde	12342 Jul 19 12:51	21° Ω 53′02			12343 Jul 11 08:25	30° Ŗ ∽	
evening set	12342 Jul 22 08:50	21° Ω 10'49		inferior conj	12343 Jul 12 01:58	29° © 07'17	2°53'24
inferior conj	12342 Jul 28 11:29	15° Ω 51'57	2°19'36	minimum elong	12343 Jul 12 03:52	29° © 01'30	2°52'15
minimum elong	12342 Jul 28 14:02	15° Ω 44'54	2°18'15	min. Earth dist.	12343 Jul 14 03:33	26°937'35	0.65243 AU
min. Earth dist.	12342 Jul 31 03:13	12°Ω57'39	0.63284 AU	morning rise	12343 Jul 17 21:30	22° © 45'42	0.03243710
	12342 Aug 03 17:29	9° Ω 38'09	0.03204 AU	direct	12343 Jul 24 09:13	20°904'43	
morning rise	•	8°Ω06'33					
desc. node	12342 Aug 06 04:16			desc. node	12343 Jul 24 01:35	20°905'05	25005140
direct	12342 Aug 10 09:40	7° Ω 06′27		morning max el	12343 Aug 06 19:28	27° © 59'37	27°05'48
morning max el	12342 Aug 24 08:34	15° Ω 08'16	27°48'07		12343 Aug 08 17:19	0 \circ Ω	
	12342 Sep 05 11:39	0° m)			12343 Aug 30 05:43	0° ™	
	12342 Sep 23 15:46	0∘ ⊽		morning set	12343 Sep 11 09:39	21° m 43'28	
morning set	12342 Sep 27 23:27	8° ≙ 25'40		max. Earth dist.	12343 Sep 15 18:01	0° ჲ 20'50	1.33580 AU
asc. node	12342 Sep 29 21:19	12° ₽ 19′00			12343 Sep 15 13:55	0∘ ত	
max. Earth dist.	12342 Oct 03 00:39	18° ≏ 53'42	1.32299 AU	asc. node	12343 Sep 16 17:58	2° ഫ 23'15	
superior conj	12342 Oct 05 18:11	24° ₽ 46'34	0°54'19	superior conj	12343 Sep 19 20:39	8° ≏ 52'26	0°29'39
minimum elong	12342 Oct 05 16:02	24° ₽ 34'52	0°54'14	minimum elong	12343 Sep 19 19:12	8° ≏ 44'46	0°29'26
	12342 Oct 08 03:36	0° M .		evening rise	12343 Sep 27 01:36	24° ₽ 14'23	
evening rise	12342 Oct 12 14:59	9° M .44'18		evening rise	12343 Sep 29 19:53	0°M	
evening rise	12342 Oct 12 14:39	0° ∡ 7		evening max el	12343 Oct 17 16:22		21°52'03
JJ.				=			21 32 03
desc. node	12342 Nov 02 00:51	14° 🗷 40'45	22022107	desc. node	12343 Oct 19 22:12	0° ₹ 06'22	
evening max el	12342 Nov 05 03:44	17° 🗷 59'49	23°32'06		12343 Oct 19 19:05	0° ₹ 1	
retrograde	12342 Nov 18 14:12	24° ⋌ ¹41'34		retrograde	12343 Oct 30 04:44	4° ∡ 18'34	
evening set	12342 Nov 23 02:01	23° ∡ ¹57'41		evening set	12343 Nov 02 06:12	3° ≯ 57'30	
min. Earth dist.	12342 Nov 29 13:49	20° ≯ 52′26	0.55395 AU	inferior conj	12343 Nov 11 02:43	0° ∡ '01'35	-5°35'42
inferior conj	12342 Dec 01 08:10	19° ∡ ′50′11	-5°51'23	minimum elong	12343 Nov 10 20:08	0° ∡ 10'49	5°34'04
minimum elong	12342 Dec 01 10:10	19° ∡ ¹47'14	5°50'27	min. Earth dist.	12343 Nov 10 20:22	0° ∡ 10′29	0.54602 AU
morning rise	12342 Dec 09 20:06	15° ₹ 57'31			12343 Nov 11 03:51	30°RM₊	
direct	12342 Dec 12 15:21	15° ∡ ³38′20		morning rise	12343 Nov 19 11:14	26° ™ 14'19	
morning max el	12342 Dec 23 09:33	20° ∡ ¹45'35	20°22'23	direct	12343 Nov 23 01:08	25°M46'13	
asc. node	12342 Dec 26 21:49	24° х 37'46			12343 Dec 03 11:23	0° ∡ ¹	
	12342 Dec 30 17:58	0°₹		morning max el	12343 Dec 05 07:51	1° ∡ ³37'13	21°55'41
morning set	12343 Jan 10 22:26	20°る44'00		asc. node	12343 Dec 13 18:52	12° ∡ 05'40	
	12343 Jan 15 10:14	0° ≈			12343 Dec 23 16:56	0°ਰ	
	120 10 0011 10 10.11			morning set	12343 Dec 26 08:36	5° る 29'46	
superior conj	12343 Jan 18 12:10	6°≈17'36	1°16'27	morning sec	123.3 200 20 00.30	5 32 5 .0	
minimum elong	12343 Jan 18 14:49	6°≈30'59		superior conj	12344 Jan 02 11:33	20° ට 36'32	1°30'20
max. Earth dist.			1.36428 AU		12344 Jan 02 13:21	20°る46'02	
	12343 Jan 24 00:14	17°≈07'46	1.30428 AU	minimum elong			
evening rise	12343 Jan 27 19:42	24°≈14'55		max. Earth dist.	12344 Jan 06 12:54		1.34512 AU
desc. node	12343 Jan 29 00:06	26°≈23'31			12344 Jan 07 00:54	0° ≈	
	12343 Jan 31 00:51	0° ∀		evening rise	12344 Jan 10 19:58	7° ≈ 27'36	
	12343 Feb 19 07:41	0° Y		desc. node	12344 Jan 15 20:51	16° ≈ 47'30	
evening max el	12343 Mar 04 08:04	15° Ƴ 31'36	25°55'09		12344 Jan 23 16:14	0° ∀	
retrograde	12343 Mar 16 21:54	22° Y 43'53		evening max el	12344 Feb 14 21:35	29°) 14′03	26°51'36
evening set	12343 Mar 22 23:58	20° Ƴ 14'34			12344 Feb 15 16:58	0 ° Υ	
asc. node	12343 Mar 24 19:14	18° Ƴ 32'17		retrograde	12344 Feb 28 03:18	6° Ƴ 38'15	
min. Earth dist.	12343 Mar 27 05:35	15° Ƴ 43'19	0.67279 AU	evening set	12344 Mar 05 15:30	4° Y ′05′21	
inferior conj	12343 Mar 28 19:02	13° Ƴ 45'47	1°14'13	min. Earth dist.	12344 Mar 09 15:34	0° Ƴ 07'54	0.65939 AU
minimum elong	12343 Mar 28 17:22	13° Y 51'03	1°13'29		12344 Mar 09 18:20	30° Ŗ ₩	
morning rise	12343 Apr 03 11:25	7° Ƴ 57'44		asc. node	12344 Mar 10 16:38	28°) 55′28	
direct	12343 Apr 06 18:19	6° Y 56'06		inferior conj	12344 Mar 11 17:06	27°) 43'51	0°19'41
morning max el	12343 Apr 13 11:14	10° Y 33′09	18°48'25	minimum elong	12344 Mar 11 16:34	27°) 45'25	0°19'35
	-		10 40 23	_		22°\(\frac{4}{3}\)23	0 1933
desc. node	12343 Apr 27 02:01	28° Y 57'29 0° と		morning rise direct	12344 Mar 17 18:56	22° X 0/16 21° X 22'17	
. ,	12343 Apr 27 18:21				12344 Mar 20 15:40		10010151
morning set	12343 May 05 14:31	12° 8 09'13		morning max el	12344 Mar 27 01:11	24°) (44'39	18°10'51
	12343 May 17 01:20	0°II			12344 Mar 31 11:55	0° Υ	
max. Earth dist.	12343 May 20 09:46	5° ∏ 14'14	1.45600 AU	desc. node	12344 Apr 12 22:39	19° Y ′07'37	
				morning set	12344 Apr 15 01:48	22° Y '33'43	
superior conj	12343 May 21 22:14	7° Ⅱ 36'59			12344 Apr 19 16:54	$0^{\circ}S$	
minimum elong	12343 May 21 17:51	7° Ⅱ 19'49	2°10'49				
	12343 Jun 05 00:48	0ංම		superior conj	12344 Apr 30 05:48	16° 8 40'55	-1°48'48
evening rise	12343 Jun 06 04:22	1° 9 50'49		minimum elong	12344 Apr 29 20:37	16° 8 04'56	1°48'36
asc. node	12343 Jun 20 17:00	24°539'39		max. Earth dist.	12344 May 02 05:19	19° 8 46'53	1.45735 AU
	12343 Jun 24 18:01	$0^{\circ}\Omega$			12344 May 08 18:40	$\Pi^{\circ}0$	
evening max el	12343 Jun 26 17:01	2° Ω 08'24	18°33'09	evening rise	12344 May 16 07:34	11° Ⅱ 43'02	
				<i>-</i>	J		

greatest brilliancy	12344 May 28 01:33	29° ∏ 49'28	-0.7m		12345 May 01 16:34	0°Щ	
greatest orimancy	12344 May 28 04:21	0°95	0.7111	greatest brilliancy	12345 May 10 19:22	13° Ⅱ 32'54	-0.6m
asc. node	12344 Jun 06 14:01	13° © 05'36		evening max el	12345 May 23 05:51	29° I I38'01	20°10'30
evening max el	12344 Jun 09 02:03	15°951'32	19°14'02	8	12345 May 23 14:43	0°9	
retrograde	12344 Jun 16 01:33	19° 5 45'16		asc. node	12345 May 24 11:09	0°9548'01	
evening set	12344 Jun 19 14:38	18°932'08		retrograde	12345 May 31 00:10	4°905'14	
inferior conj	12344 Jun 25 01:02	12° 5 642'46	3°10'36	evening set	12345 Jun 03 22:48	2° © 35'38	
minimum elong	12344 Jun 25 01:54	12° © 39'56	3°09'39	C	12345 Jun 06 14:01	30° Ŗ Ⅱ	
min. Earth dist.	12344 Jun 26 11:54	10° 5 49'34	0.66825 AU	inferior conj	12345 Jun 09 05:50	26° Ⅲ 33'15	3°14'10
morning rise	12344 Jun 30 12:36	6° © 19'41		minimum elong	12345 Jun 09 05:38	26° Ⅲ 33'56	3°13'18
direct	12344 Jul 06 15:47	3° 5 39'27		min. Earth dist.	12345 Jun 10 02:25	25° Ⅲ 23'14	0.67961 AU
desc. node	12344 Jul 09 22:50	4° © 18'28		morning rise	12345 Jun 14 12:09	20° Ⅲ 12'35	
morning max el	12344 Jul 19 06:17	11° © 11'56	25°57'53	direct	12345 Jun 20 04:05	17° Ⅱ 42′06	
	12344 Aug 03 06:01	$0^{\circ}\Omega$		desc. node	12345 Jun 26 19:58	20° Ⅱ 20'45	
	12344 Aug 21 20:42	0° m ∕		morning max el	12345 Jul 01 16:13	24° Ⅱ 36′07	24°34'11
morning set	12344 Aug 24 06:29	4° Mp 22′28			12345 Jul 06 12:42	0 \circ	
max. Earth dist.	12344 Aug 28 00:47	11°Mp27'24	1.35359 AU		12345 Jul 27 16:34	0 $^{\circ}$ Ω	
				morning set	12345 Aug 06 09:39	16° Ω 12'22	
superior conj	12344 Sep 02 15:19	22° m 32'48	0°00'18	max. Earth dist.	12345 Aug 09 23:53	22° Ω 36′21	1.37526 AU
minimum elong	12344 Sep 02 15:19	22° m 32'45	0°00'05		12345 Aug 13 23:49	0° m	
behind sun begin	12344 Sep 02 09:18	22° m 02'18					
behind sun end	12344 Sep 02 21:19	23° m 03'16		superior conj	12345 Aug 16 23:05	5° Mp 40'36	
asc. node	12344 Sep 02 14:35	22° m 29'00		minimum elong	12345 Aug 17 01:17	5° m 51'13	0°32'40
	12344 Sep 06 06:24	0∘ ⊽		asc. node	12345 Aug 20 11:13	12° m 33'12	
evening rise	12344 Sep 10 09:30	8° ≏ 34'06		evening rise	12345 Aug 25 12:20	22° m 37'54	
	12344 Sep 21 21:12	0° M			12345 Aug 29 06:10	0∘ ⊽	
evening max el	12344 Sep 28 16:06	8° ™ 40'44	20°25'05	evening max el	12345 Sep 11 05:58	20° ≙ 03'13	19°18'19
desc. node	12344 Oct 05 19:37	13°M29'12		retrograde	12345 Sep 20 13:43	24° £ 42'23	
retrograde	12344 Oct 09 16:15	14°M08'48		evening set	12345 Sep 22 10:06	24° £ 32'11	
evening set	12344 Oct 11 18:50	13°M57'40	1000110	desc. node	12345 Sep 22 17:02	24° £ 28'49	0005140
inferior conj	12344 Oct 20 19:27	10°M01'35		inferior conj	12345 Oct 01 00:32	20° £ 23'07	
minimum elong	12344 Oct 20 09:25	10°M 16'14		minimum elong	12345 Sep 30 17:45	20° £ 34'16	
min. Earth dist.	12344 Oct 22 04:09	9°M13'50	0.54738 AU	min. Earth dist.	12345 Oct 03 15:11	18° ♀ 40'17	0.55798 AU
morning rise	12344 Oct 28 23:24	5°M59'35		morning rise	12345 Oct 08 22:53	15° Ω 49'31	
direct	12344 Nov 02 10:15 12344 Nov 15 20:10	5°M16'50	22042120	direct	12345 Oct 14 05:50	14° Ω 45'48 21° Ω 51'39	25927147
morning max el		11°M49'13 0°⊀	23-42-38	morning max el	12345 Oct 28 06:45 12345 Nov 04 10:24	0°M	25-27-47
asc. node	12344 Nov 29 10:39 12344 Nov 29 15:49	0° x ¹ 22'12		asc. node	12345 Nov 16 12:42	19°ML15'21	
morning set	12344 Nov 29 13.49 12344 Dec 09 20:20	20° × 16'08		asc. node	12345 Nov 10 12.42 12345 Nov 21 23:22	0° √	
morning set	12344 Dec 14 08:07	0°る		morning set	12345 Nov 24 07:53	4° ∡ 758′20	
	12344 DCC 14 00.07	0 0		morning set	12343 1407 24 07.33	T X 30 20	
superior conj	12344 Dec 16 17:14	5°る10'47	1°37'29	superior conj	12345 Dec 01 02:51	19° ₹ '53'09	1°38'20
minimum elong	12344 Dec 16 17:57	5° ਰ 14'35		minimum elong	12345 Dec 01 02:31		1°39'10
max. Earth dist.	12344 Dec 19 09:21	10° る 55'03	1.32994 AU	max. Earth dist.	12345 Dec 02 13:02		1.31943 AU
evening rise	12344 Dec 24 08:29	21° る 10'35			12345 Dec 05 18:09	್ತಿ	-10-17-10-11-0
8	12344 Dec 28 21:48	0° ≈		evening rise	12345 Dec 08 06:08	5° ਰ 15'51	
desc. node	12345 Jan 01 17:41	6° ≈ 57'04		desc. node	12345 Dec 19 14:37	26° පි 45'41	
	12345 Jan 16 13:49	0° ∀			12345 Dec 21 12:56	0° ≈	
evening max el	12345 Jan 27 10:32	12° ¥ 38'51	27°25'43	evening max el	12346 Jan 09 20:57	25° ≈ 33'02	27°30'47
retrograde	12345 Feb 10 02:17	20°) 04'23			12346 Jan 15 09:33	0° ∀	
evening set	12345 Feb 16 21:58	17°) € 34'33		retrograde	12346 Jan 23 17:41	2°) 52′48	
min. Earth dist.	12345 Feb 20 17:49	14° ∺ 08′28	0.64245 AU	evening set	12346 Jan 30 16:36	0°) 33'41	
inferior conj	12345 Feb 23 06:48	11° ¥ 27'24	-0°45'13		12346 Jan 31 12:00	30° R ≈	
minimum elong	12345 Feb 23 08:12	11° ¥ 23'43	0°44'16	min. Earth dist.	12346 Feb 03 10:27	27° ≈ 34'28	0.62272 AU
asc. node	12345 Feb 25 14:01	9° ∺ 07'05		inferior conj	12346 Feb 06 09:04	24° ≈ 48′24	-1°59'26
morning rise	12345 Mar 01 20:26	6°) €04'39		minimum elong	12346 Feb 06 13:08	24° ≈ 38'48	1°57'12
direct	12345 Mar 04 08:37	5°) 32'43		asc. node	12346 Feb 12 11:23	20° ≈ 07'37	
morning max el	12345 Mar 10 18:23	8° ¥ 51'38	17°50'21	morning rise	12346 Feb 13 12:18	19° ≈ 42'31	
	12345 Mar 25 03:28	0° Υ		direct	12346 Feb 15 18:00	19° ≈ 19'54	
morning set	12345 Mar 27 17:31	4° Υ 21'18		morning max el	12346 Feb 22 11:46	22°≈45'28	17°47'34
desc. node	12345 Mar 30 19:14	9° Ƴ 31'11			12346 Feb 28 04:06	0° ∀	
				morning set	12346 Mar 10 08:27	17°) 14′56	
superior conj	12345 Apr 10 01:39	26° Y 23'50		desc. node	12346 Mar 17 15:48	0° Y 03′27	
minimum elong	12345 Apr 09 18:05	25° Y ′53′20	1°12'20		12346 Mar 17 15:00	0 ° Υ	
m at er c	12345 Apr 12 07:38	0°8	1 45101 433		1004634 01 00 00	70001117	0021150
max. Earth dist.	12345 Apr 15 00:36	4° 8 17'46	1.45131 AU	superior conj	12346 Mar 21 20:25	7° Υ 11'56	
evening rise	12345 Apr 25 20:24	21° 8 06'45		minimum elong	12346 Mar 21 17:18	6° Ƴ 58'51	0~31'31

P. 4. F.	1004634 00 15 06	100000000	1 42055 477		1001531 01 10 01	2001/10151	
max. Earth dist.	12346 Mar 28 17:36	18° Ƴ 32'08	1.43857 AU	desc. node	12347 Mar 04 12:24	20°) 40′54	
	12346 Apr 04 23:32	0°8			12347 Mar 09 22:10	0°Υ •••••••	
evening rise	12346 Apr 05 10:14	0° 8 41'30		max. Earth dist.	12347 Mar 11 06:16	2°Υ14'35	1.42045 AU
	12346 Apr 25 07:10	0°Щ		evening rise	12347 Mar 16 14:36	10° Y 58'58	
evening max el	12346 May 06 03:55		21°19'45		12347 Mar 29 00:05	0°8	
asc. node	12346 May 11 08:23	17° Ⅱ 32'26		evening max el	12347 Apr 18 21:09	27° 8 12'49	22°37'30
retrograde	12346 May 14 22:44	18° Ⅲ 33'15			12347 Apr 21 22:46	0°Щ	
evening set	12346 May 19 07:43	16° Ⅱ 47'23		asc. node	12347 Apr 28 05:40	3° Ⅱ 03'08	
inferior conj	12346 May 24 13:59	10° Ⅲ 33'31	3°06'09	retrograde	12347 Apr 28 19:40	3° Ⅱ 04'44	
minimum elong	12346 May 24 12:51	10° Ⅱ 37'28	3°05'13	evening set	12347 May 03 15:44	1° Ⅱ 03'40	
min. Earth dist.	12346 May 24 20:59	10° Ⅱ 09'07	0.68628 AU		12347 May 04 18:45	30°₽ ႘	
morning rise	12346 May 29 17:46	4° Ⅱ 17'37		inferior conj	12347 May 08 23:25	24° 8 40'36	2°47'41
direct	12346 Jun 03 20:57	2° Ⅲ 03′23		minimum elong	12347 May 08 21:36	24° 8 46'55	2°46'39
desc. node	12346 Jun 13 17:01	7° Ⅱ 43'55		min. Earth dist.	12347 May 08 17:35	25° 8 00'54	0.68827 AU
morning max el	12346 Jun 14 02:40	8° Ⅱ 07'58	23°04'32	morning rise	12347 May 14 03:21	18° 8 30'44	
	12346 Jul 01 04:46	0°ಅ		direct	12347 May 18 17:21	16° 8 36'34	
morning set	12346 Jul 18 14:18	27° © 00'34		morning max el	12347 May 27 16:36	21° 8 49'10	21°37'42
Č	12346 Jul 20 09:12	$0^{\circ}\Omega$		desc. node	12347 May 31 13:59	26° 8 06'34	
max. Earth dist.	12346 Jul 22 21:47	4°Ω17'57	1.39856 AU		12347 Jun 03 17:05	0°II	
man. Bartin dibt.	123 10 041 22 21.17	. 001757	1.57000110		12347 Jun 24 11:09	0.ee	
superior conj	12346 Jul 30 15:56	18° Ω 05'40	-1°07'01	morning set	12347 Jun 28 17:22	6°9540'42	
minimum elong	12346 Jul 30 20:45	$18^{\circ}\Omega 27'46$		max. Earth dist.	12347 Jul	16°\$50'08	1.42072 AU
minimum eiong			1 00 33	max. Earm dist.	1234/Jul 03 00.01	10 93008	1.42072 AU
1	12346 Aug 06 00:13	0°M)			10247 1 1 12 12 22	200627142	1020114
asc. node	12346 Aug 07 07:55	2° m/31'38		superior conj	12347 Jul 12 13:22	29°537'43	
evening rise	12346 Aug 09 07:04	6° Mp 17'34		minimum elong	12347 Jul 12 20:08	0° Ω 07'09	1°39'1'/
	12346 Aug 23 08:13	0∘ ⊽			12347 Jul 12 18:29	0 \circ Ω	
evening max el	12346 Aug 25 07:43	2° ≏ 11'18	18°33'14	evening rise	12347 Jul 23 13:53	19° Ω 23'11	
retrograde	12346 Sep 02 05:49	6° ≏ 10'29		asc. node	12347 Jul 25 04:40	22° Ω 20′16	
evening set	12346 Sep 04 05:43	5° ≏ 56'06			12347 Jul 29 11:03	0° m ∕	
desc. node	12346 Sep 09 14:30	3° ≏ 17'37		evening max el	12347 Aug 08 17:21	14° m 56'12	18°08'52
inferior conj	12346 Sep 12 02:16	1° ≏ 27'04	-0°46'52	retrograde	12347 Aug 15 16:34	18° m 29'08	
minimum elong	12346 Sep 12 00:24	1° ≏ 30'39	0°46'11	evening set	12347 Aug 17 23:37	18° Mp 06'30	
	12346 Sep 13 23:14	30°R, Mp		inferior conj	12347 Aug 25 01:34	13° Mp 16'56	0°44'02
min. Earth dist.	12346 Sep 15 07:50	28° m 58'36	0.57567 AU	minimum elong	12347 Aug 25 02:57	13° m 13'49	0°43'11
morning rise	12346 Sep 19 15:38	26° Mp 15'46		desc. node	12347 Aug 27 11:59	11° m 05'23	
direct	12346 Sep 25 15:17	24° m/45'41		min. Earth dist.	12347 Aug 28 08:28	10° m/20'52	0.59746 AU
	12346 Oct 07 09:38	0∘ <u>⊽</u>		morning rise	12347 Sep 01 03:03	7° m) 33'05	
morning max el	12346 Oct 09 22:42	2° ₽ 17'33	26°53'00	direct	12347 Sep 07 14:12	5° m) 34'49	
	12346 Oct 29 19:17	0° M .		morning max el	12347 Sep 21 22:17	13° m) 25'54	27°44'40
asc. node	12346 Nov 03 09:30	8°M35'50			12347 Oct 05 03:41	0∘ ⊽	_,
morning set	12346 Nov 08 17:35	19°M32'13		asc. node	12347 Oct 21 06:14	28° ≏ 15'35	
morning sec	12346 Nov 13 12:28	0° ⊼ ¹		use. Houe	12347 Oct 21 00:14 12347 Oct 22 02:47	0° ™	
	12340 NOV 13 12.28	· ×		morning set	12347 Oct 22 02:47 12347 Oct 23 23:35	3°M52'14	
superior conj	12346 Nov 15 14:21	4° ∡ ³38'00	1°33'15	max. Earth dist.	12347 Oct 23 23:33 12347 Oct 30 05:46	17°M27'41	1.31328 AU
minimum elong		4°×30'23	1°33'55	max. Earth dist.	1234/ Ост 30 03.40	1/ 1162/41	1.51528 AU
C	12346 Nov 15 12:59				12247.0 + 21 01 40	100 M 10107	1022120
max. Earth dist.	12346 Nov 15 21:05	5° ⋌ 15'37	1.31383 AU	superior conj	12347 Oct 31 01:48	19°M 19'07	1°22'28
evening rise	12346 Nov 22 10:20	19° ∡ 36′54		minimum elong	12347 Oct 30 23:47	19°M07'51	1°22'51
	12346 Nov 27 12:19	0°る			12347 Nov 04 21:19	0° ∡ 7	
desc. node	12346 Dec 06 11:39	16° る 05'07		evening rise	12347 Nov 06 18:48	4° ∡ °07'04	
	12346 Dec 16 02:39	0° ≈			12347 Nov 20 08:24	0°ප	
evening max el	12346 Dec 23 02:01	7° ≈ 43'37	27°02'08	desc. node	12347 Nov 23 08:48	4° る 43'14	
retrograde	12347 Jan 06 00:25	14° ≈ 55′10		evening max el	12347 Dec 04 23:10	19° る 01'24	25°59'32
evening set	12347 Jan 12 20:00	12° ≈ 55'03		retrograde	12347 Dec 18 21:12	26° る 04'28	
min. Earth dist.	12347 Jan 16 16:21	10° ≈ 14′21	0.60135 AU	evening set	12347 Dec 25 03:51	24° る 31'26	
inferior conj	12347 Jan 19 20:28	7° ≈ 37'41	-3°19'22	min. Earth dist.	12347 Dec 29 12:00	21° る 55'26	0.58021 AU
minimum elong	12347 Jan 20 03:25	7° ≈ 23'19	3°16'09	inferior conj	12348 Jan 01 13:20	19° る 44'23	-4°36'42
morning rise	12347 Jan 27 13:45	2° ≈ 52'01		minimum elong	12348 Jan 01 21:52	19° る 29'07	4°33'34
direct	12347 Jan 29 15:51	2° ≈ 35′10		morning rise	12348 Jan 09 18:36	15° る 21'03	
asc. node	12347 Jan 30 08:43	2° ≈ 37'08		direct	12348 Jan 11 21:32	15° る 06'32	
morning max el	12347 Feb 06 01:58	6° ≈ 17'09	18°03'29	asc. node	12348 Jan 17 05:59	16° පි 45'09	
-	12347 Feb 21 04:20	0° ∀		morning max el	12348 Jan 20 09:05	19° る 14'59	18°39'46
morning set	12347 Feb 21 16:18	0° ¥ 55'34		<i>Q</i>	12348 Jan 28 07:27	0° ≈	
		. , ,		morning set	12348 Feb 05 11:50	15° ≈ 06'39	
superior conj	12347 Mar 03 15:24	19° ₩ 08'09	0°06'53		12348 Feb 13 05:11	0° ∀	
minimum elong	12347 Mar 03 15:58	19° X 10'40	0°07'02		01.00 10 00.11	- /1	
behind sun begin	12347 Mar 03 08:54	18° X 39'16	3 0, 02	superior conj	12348 Feb 14 06:44	2°) 00'05	0°39'42
behind sun end	12347 Mar 03 08.34 12347 Mar 03 23:03	18 X 39 10 19° X 42'00		minimum elong	12348 Feb 14 00:44 12348 Feb 14 09:12	2° ∺ 11'38	0°39'49
ocimia sun ena	1234/ Wal 03 23.03	17 144 00		minimum elong	12540 FEU 14 U9.12	∠ 八 11 38	0 3247

JJ.	12240 E-L 10 00.50	110W 10112			12240 I 27 16:22	1500040120	1905120
desc. node	12348 Feb 19 08:59	11°) (19'12	1 20002 ATT	minimum elong	12349 Jan 27 16:33	15°≈48'38 27°≈32'24	1°05'29
max. Earth dist.	12348 Feb 21 14:03	13° X 13′27 22° X 11′01	1.39893 AU	max. Earth dist.	12349 Feb 02 19:59 12349 Feb 04 04:11	2/°≈32′24 0° ∺	1.37658 AU
evening rise	12348 Feb 25 15:36 12348 Mar 01 09:53	22 π 1101 0° Υ		desc. node	12349 Feb 04 04.11 12349 Feb 05 05:37	0 X 1° ¥ 54'59	
	12348 Mar 21 23:50	0°8		evening rise	12349 Feb 05 03:37 12349 Feb 06 13:22	4°) 16'32	
evening max el	12348 Mar 31 11:27	11° 8 02'38	23°58'21	evening rise	12349 Feb 06 13.22 12349 Feb 22 10:41	4 χ 10 32 0°Υ	
retrograde	12348 Mai 31 11.27 12348 Apr 11 13:39	17° 8 34'00	23 36 21	evening max el	12349 Mar 14 00:54	24° Υ 54'05	25015120
asc. node	12348 Apr 14 03:01	17° 8 04'04		evening max er	12349 Mar 20 07:25	0° 8	25 15 50
evening set	12348 Apr 16 21:18	15° 8 19'41		retrograde	12349 Mar 26 03:24	1° 8 54'56	
min. Earth dist.	12348 Apr 21 14:02	9° 8 52'38	0.68562 AU	retrograde	12349 Mar 31 07:55	1 O 34 30	
inferior conj	12348 Apr 22 08:14	8° 8 50'42	2°19'17	evening set	12349 Mar 31 22:46	29° Y 30'14	
minimum elong	12348 Apr 22 06:05	8° 8 58'01	2°18'13	asc. node	12349 Apr 01 00:25	29° Υ 26'44	
morning rise	12348 Apr 27 14:56	2° 8 48'05	2 1013	min. Earth dist.	12349 Apr 05 08:09	24° Υ 38'34	0.67862 AU
direct	12348 May 01 16:08	1° 8 15'06		inferior conj	12349 Apr 06 14:31	22° Υ 59'48	1°40'56
morning max el	12348 May 09 12:51	5° 8 41'43	20°20'37	minimum elong	12349 Apr 06 12:30	23°Υ06'22	1°40'00
desc. node	12348 May 17 10:50	15° 8 12'27	20 20 37	morning rise	12349 Apr 12 02:35	17° Υ 05'44	1 40 00
dese. Hode	12348 May 27 18:48	0°II		direct	12349 Apr 15 15:50	15° Υ 53'11	
morning set	12348 Jun 06 23:07	15° Ⅱ 26'35		morning max el	12349 Apr 22 16:40	19° Y ′44'46	19°17'28
morning set	12348 Jun 16 05:29	0°95		morning max er	12349 Apr 30 23:15	0°8	17 17 20
max. Earth dist.	12348 Jun 16 08:42	0° © 12'56	1.43913 AU	desc. node	12349 May 04 07:34	4° 8 49'38	
max. Larm dist.	12540 Juli 10 00.42	0 31230	1.43713710	greatest brilliancy	12349 May 05 12:08	6° 8 35'09	-0.7m
superior conj	12348 Jun 22 11:37	10° © 09'47	-2°03'40	morning set	12349 May 17 00:40	24° 8 06'55	0.7111
minimum elong	12348 Jun 22 17:28	10°933'55		morning set	12349 May 20 20:04	0°Ⅱ	
minimum ciong	12348 Jul 04 04:15	0°Ω	2 0413	max. Earth dist.	12349 May 29 23:29		1.45183 AU
evening rise	12348 Jul 05 04:02	1° Ω 43'16		max. Lartii dist.	1234) Way 2) 23.2)	14 11342	1.43103710
asc. node	12348 Jul 11 01:30	11°Ω54'35		superior conj	12349 Jun 02 10:43	19° ∏ 44'29	-2°13'25
evening max el	12348 Jul 22 06:56	28°Ω08'23	18°03'55	minimum elong	12349 Jun 02 10:51	19° Ⅱ 44′59	
evening max er	12348 Jul 24 12:01	0° m)	10 03 33	minimum clong	12349 Jun 08 20:24	0°95	2 14 10
retrograde	12348 Jul 28 18:02	1° Mp 29'24		evening rise	12349 Jun 16 20:29	13°906'00	
evening set	12348 Jul 31 09:11	0° m ₀ 55'10		evening rise	12349 Jun 27 04:48	0°Ω	
evening set	12348 Aug 02 01:26	30°RΩ		asc. node	12349 Jun 27 22:24	1° Ω 08'22	
inferior conj	12348 Aug 06 19:18	25°Ω46'43	1°51'11	evening max el	12349 Jul 05 20:55	11°Ω38'11	18°17'23
minimum elong	12348 Aug 06 21:52	25°Ω40'08	1°49'49	retrograde	12349 Jul 12 05:47	15° Ω 01'19	10 1723
min. Earth dist.	12348 Aug 09 18:15	22°Ω45'26	0.62028 AU	evening set	12349 Jul 15 05:18	14°Ω12'57	
morning rise	12348 Aug 13 08:09	$19^{\circ} \Omega 40'52$	0.02020 AC	inferior conj	12349 Jul 21 03:18	8°Ω47'21	2°36'08
desc. node	12348 Aug 13 09:25	19° Ω 38'39		minimum elong	12349 Jul 21 05:40	8°Ω40'33	2°34'52
direct	12348 Aug 20 00:28	17° Ω 18'39		min. Earth dist.	12349 Jul 23 13:19	6°Ω01'32	0.64164 AU
morning max el	12348 Sep 03 04:10	25° Ω 20'07	27°57'34	morning rise	12349 Jul 27 04:37	2°Ω29'29	0.01101710
morning max ci	12348 Sep 07 11:05	0° m)	21 3134	desc. node	12349 Jul 31 06:47	0°Ω14'34	
	12348 Sep 27 15:27	0∘ ⊽		dese. Hode	12349 Aug 01 07:35	30°RS	
morning set	12348 Oct 06 23:55	0 — 17° ≏ 53'26		direct	12349 Aug 02 19:41	29° 9 52'17	
asc. node	12348 Oct 07 02:54	17 — 99 20 18° ≏ 08'47		uncet	12349 Aug 04 08:43	0°Ω	
max. Earth dist.	12348 Oct 12 11:13	29° ₽ 27'54	1.31792 AU	morning max el	12349 Aug 16 13:44	7° Ω 52'43	27°33'39
max. Darm dist.	12348 Oct 12 17:07	0°M.	1.51772110	morning max or	12349 Sep 02 16:00	0° m)	27 33 37
	12310 000 12 17.07	0 110			12349 Sep 19 22:02	0∘ ⊽	
superior conj	12348 Oct 14 11:24	3°M51'27	1°06'09	morning set	12349 Sep 20 16:04	1° ≏ 28'45	
minimum elong	12348 Oct 14 09:09	3°M39'02	1°06'14	asc. node	12349 Sep 23 23:32	8° ഫ 09'58	
evening rise	12348 Oct 21 05:35	18°M41'31	1 00 1 1	max. Earth dist.	12349 Sep 25 09:42	11° Ω 07'17	1.32783 AU
	12348 Oct 26 16:32	0° ∡ 7					
desc. node	12348 Nov 09 06:02	22° х 24′20		superior conj	12349 Sep 28 17:07	18° ≏ 08'38	0°44'28
evening max el	12348 Nov 15 12:25	29° ∡ '31'12	24°30'05	minimum elong	12349 Sep 28 15:11	17° ≏ 58'13	0°44'18
	12348 Nov 16 00:39	0°ਰ			12349 Oct 04 04:34	0°M	
retrograde	12348 Nov 29 06:00	6° る 22'59		evening rise	12349 Oct 05 16:47	3° ™ 14'32	
evening set	12348 Dec 04 12:07	5° る 21'56		5 · • • • • • • • • • • • • • • • • • •	12349 Oct 20 03:16	0° ⊼	
min. Earth dist.	12348 Dec 09 23:58	2° る 32'28	0.56195 AU	desc. node	12349 Oct 27 03:20	8° х 46'46	
inferior conj	12348 Dec 12 09:37	1° る 02'14		evening max el	12349 Oct 27 22:45	9° х 35′17	22°48'42
minimum elong	12348 Dec 12 15:36	0° る 52'49		retrograde	12349 Nov 10 01:38	16° х 06′20	
U	12348 Dec 14 01:53	30°R. ₹		evening set	12349 Nov 13 22:22	15° ∡ ³33'51	
morning rise	12348 Dec 20 21:11	26° ₹ 759'45		min. Earth dist.	12349 Nov 21 07:22	12° ✓ 12'47	0.54955 AU
direct	12348 Dec 23 07:56	26° х 43′39		inferior conj	12349 Nov 22 11:14	11° ∡ 33'05	
	12348 Dec 31 13:12	0°る		minimum elong	12349 Nov 22 09:28	11° x ⁷ 35'36	
morning max el	12349 Jan 02 05:05	1°る27'58	19°38'17	morning rise	12349 Nov 30 22:02	7° ∡ ¹44'27	· -
asc. node	12349 Jan 03 03:10	2° る 23'24		direct	12349 Dec 04 00:51	7° ∡ 721'57	
morning set	12349 Jan 19 15:12	29° る 37'17		morning max el	12349 Dec 15 11:05		20°59'43
5 <i>'</i>	12349 Jan 19 19:43	0°≈		asc. node	12349 Dec 21 00:14	19° √ 15'51	· · · ·
					12349 Dec 27 16:52	0°ਰ	
superior conj	12349 Jan 27 13:41	15° ≈ 34'30	1°05'11	morning set	12350 Jan 03 23:33	14° る 19'29	
. ,				<i>C</i> -			

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	12351 Nov 04 10:57	0°M		morning max el	12352 Oct 20 03:25	13° ≏ 34'43	26°07'20
morning max el	12351 Nov 08 14:56	3°M24'31	24°28'45	morning man vi	12352 Nov 02 02:27	0°M	20 07 20
asc. node	12351 Nov 24 18:09	25°M39'52		asc. node	12352 Nov 10 15:00	14°M45'46	
	12351 Nov 27 02:37	0° ⊼ ¹		morning set	12352 Nov 17 09:31	28°M31'50	
morning set	12351 Dec 03 22:32	13° ∡ 52′20		C	12352 Nov 18 01:54	0° ∡ ¹	
C							
superior conj	12351 Dec 10 18:07	28° ∡ ¹45'17	1°38'35	superior conj	12352 Nov 24 04:48	13° ∡ ¹29'55	1°36'52
minimum elong	12351 Dec 10 18:20	28° ∡ ⁴46′30	1°39'28	minimum elong	12352 Nov 24 03:57	13° ∡ ²25′13	1°37'40
	12351 Dec 11 07:47	0°ප		max. Earth dist.	12352 Nov 25 03:03	15° ∡ ³33′22	1.31643 AU
max. Earth dist.	12351 Dec 12 21:18	3° る 23'37	1.32486 AU	evening rise	12352 Dec 01 04:25	28° ∡ 40′33	
evening rise	12351 Dec 18 03:40	14° る 27'36			12352 Dec 01 19:39	0°₹	
	12351 Dec 26 06:36	0°≈		desc. node	12352 Dec 13 16:59	22° る 22'32	
desc. node	12351 Dec 27 19:59	2°≈45'01			12352 Dec 18 11:31	0° ≈	27022145
·	12352 Jan 15 11:08	0°) (33110	27021120	evening max el	12353 Jan 02 00:26	18°≈08'54	27°22'45
evening max el	12352 Jan 20 16:06	5°) 32'18 12°) 56'21	2/31/38	retrograde	12353 Jan 15 22:33	25°≈26'11	
retrograde	12352 Feb 03 10:20 12352 Feb 10 08:12	12° X 36′21 10° X 29′41		evening set min. Earth dist.	12353 Jan 22 20:51 12353 Jan 26 14:54	23°≈14'00 20°≈23'53	0.61371 AU
evening set min. Earth dist.	12352 Feb 10 08:12 12352 Feb 14 02:42	7° X 16'06	0.63437 AU	inferior conj	12353 Jan 29 16:38	20 ≈23 33 17°≈39'38	
inferior conj	12352 Feb 14 02.42 12352 Feb 16 20:16	4°) 31'02		minimum elong	12353 Jan 29 10.38 12353 Jan 29 21:58	17 ≈3938 17°≈27'44	
minimum elong	12352 Feb 16 20:10 12352 Feb 16 22:43	4° X 24'50		morning rise	12353 Jan 29 21:38 12353 Feb 06 01:57	17 ≈27 44 12°≈42'10	2 30 18
asc. node	12352 Feb 20 16:35	0° ¥ 59'07	1 1415	asc. node	12353 Feb 06 01:57	12°≈34'11	
use. Houe	12352 Feb 22 03:09	30°R≈		direct	12353 Feb 08 05:31	12°≈22'34	
morning rise	12352 Feb 23 15:34	29°≈15'25		morning max el	12353 Feb 15 05:24	15°≈54'12	17°51'57
direct	12352 Feb 26 00:42	28° ≈ 47'56			12353 Feb 25 01:56	0° ∀	-,,
	12352 Feb 29 20:58	0°) €		morning set	12353 Mar 02 20:57	10°) €18'45	
morning max el	12352 Mar 03 12:53	2° ₩ 08'16	17°47'01	desc. node	12353 Mar 11 17:59	26°) €08'41	
morning set	12352 Mar 19 22:06	27° ¥ 03′08					
-	12352 Mar 21 15:15	0 ° Υ		superior conj	12353 Mar 13 16:12	29°) €28'43	-0°14'56
desc. node	12352 Mar 24 21:23	5° Y 33'44		minimum elong	12353 Mar 13 14:51	29°) €22'55	0°14'37
				behind sun begin	12353 Mar 13 11:25	29°) €08'08	
superior conj	12352 Apr 01 10:52	18° Y °10′42	-0°55'42	behind sun end	12353 Mar 13 18:17	29°) 37'41	
minimum elong	12352 Apr 01 05:07	17° Y 47'09	0°55'05		12353 Mar 13 23:29	0 ° Υ	
max. Earth dist.	12352 Apr 07 09:15	27° Y ′44′53	1.44660 AU	max. Earth dist.	12353 Mar 20 23:57	11° Y 45'07	1.43135 AU
	12352 Apr 08 19:19	0°8		evening rise	12353 Mar 27 13:59	22° Y 17'10	
evening rise	12352 Apr 16 19:17	12° 8 27'11			12353 Apr 01 13:46	0°B	
	12352 Apr 28 11:03	0°II			12353 Apr 22 17:31	0°Щ	
evening max el	12352 May 15 16:35	22° Ⅱ 49'12	20°38'37	evening max el	12353 Apr 28 12:23	6° Ⅱ 36'29	21°52'12
asc. node	12352 May 18 13:40	25° Ⅱ 22'54		asc. node	12353 May 05 10:55	11° Ⅱ 38′08	
retrograde	12352 May 23 20:55	27° Ⅱ 33'51		retrograde	12353 May 07 19:01	12° Ⅱ 03'51	
evening set	12352 May 27 23:48 12352 Jun 02 06:12	25° Ⅲ 57'15 19° Ⅲ 49'31	3°12'08	evening set	12353 May 12 08:31	10° Ⅱ 11'36 3° Ⅱ 53'30	2°59'35
inferior conj minimum elong	12352 Jun 02 06:12 12352 Jun 02 05:34	19 П 4931 19° П 51'40	3°11'14	inferior conj minimum elong	12353 May 17 15:08 12353 May 17 13:40	3° Д 58'36	
min. Earth dist.	12352 Jun 02 03:54 12352 Jun 02 20:53	19 Ⅱ 51 40	0.68294 AU	min. Earth dist.	12353 May 17 15:40 12353 May 17 16:41		0.68761 AU
morning rise	12352 Jun 07 11:05	13° ∏ 30′27	0.00274710	mm. Larm dist.	12353 May 17 10:41 12353 May 20 13:11	30°R 8	0.00701710
direct	12352 Jun 12 21:34	11° I I06'22		morning rise	12353 May 22 18:37	27° 8 39'46	
desc. node	12352 Jun 20 22:23	14° ∏ 55'49		direct	12353 May 27 16:13	25° 8 33'35	
morning max el	12352 Jun 23 21:22	17° Ⅱ 41′03	23°56'16		12353 Jun 05 01:10	0°II	
	12352 Jul 04 04:15	0 \circ \odot		morning max el	12353 Jun 06 08:47	1° Ⅱ 16′22	22°26'47
	12352 Jul 24 06:28	$0^{\circ}\Omega$		desc. node	12353 Jun 07 19:23	2° Ⅱ 46'37	
morning set	12352 Jul 29 05:14	8° Ω 16′38			12353 Jun 28 01:16	0 \circ \odot	
max. Earth dist.	12352 Aug 01 23:43	14° Ω 50′23	1.38504 AU	morning set	12353 Jul 09 23:09	18° © 36'23	
				max. Earth dist.	12353 Jul 14 22:25	26° © 50'27	1.40821 AU
superior conj	12352 Aug 09 09:05	28° Ω 23'24			12353 Jul 16 19:01	0 ° Ω	
minimum elong	12352 Aug 09 12:23	28° Ω 39'00	0°47'10				
	12352 Aug 10 05:25	0° ™		superior conj	12353 Jul 22 18:16	10° Ω 27'37	
asc. node	12352 Aug 14 13:30	8° TD 23'30		minimum elong	12353 Jul 23 00:06	10° Ω 53'45	1°21'08
evening rise	12352 Aug 18 08:30	15° m 50'34		asc. node	12353 Aug 01 10:14	28°Ω18'36	
	12352 Aug 25 20:34	0° 亞	1005724	evening rise	12353 Aug 01 22:42	29° Ω 17'09	
evening max el	12352 Sep 03 16:24	12° Ω 27'53	18°56'34		12353 Aug 02 07:49	0°M)	10020120
retrograde	12352 Sep 12 08:56	16° Ω 48'47		evening max el	12353 Aug 17 22:08	24° Mp 53'40	18°20'30
evening set desc. node	12352 Sep 14 05:51 12352 Sep 16 19:38	16° £ 37'28 15° £ 47'56		retrograde	12353 Aug 25 09:00	28°M 39'29	
inferior conj	12352 Sep 16 19:38 12352 Sep 22 13:10	13° ± 4/'36 12° £ 20'35	-1°48'17	evening set desc. node	12353 Aug 27 11:48 12353 Sep 03 17:06	28° m/22'02 23° m/59'15	
minimum elong	12352 Sep 22 13.10 12352 Sep 22 08:33	12 ≗ 20 33 12° ≗ 28'42		inferior conj	12353 Sep 03 17.06 12353 Sep 04 00:17	23° Mp 44'30	-0°05'34
min. Earth dist.	12352 Sep 25 12:08		0.56476 AU	minimum elong	12353 Sep 04 00:17 12353 Sep 04 00:04	23° Mp 44'56	0°05'41
morning rise	12352 Sep 25 12:06 12352 Sep 30 08:05	7° ⊆ 30'31		transit middle	12353 Sep 04 00:04 12353 Sep 04 00:04	23° Mp 44'56	0°05'41
direct	12352 Sep 30 08:09 12352 Oct 05 22:30	6° £ 16'01		transit begin	12353 Sep 04 00:04 12353 Sep 03 20:47	23° m 51'41	

4	12252 9 04 02-21	220 m 20110		i. Fauth diet	12254 A 20 12:00	20 m = 1100	0.60722.411
transit end	12353 Sep 04 03:21	23° Mp 38'10	0.50466.411	min. Earth dist.	12354 Aug 20 12:08	~	0.60723 AU
min. Earth dist.	12353 Sep 07 08:02	21° Mp 01'34	0.58466 AU	desc. node	12354 Aug 21 14:32	1° M 53'04 29° Ω 57'32	
morning rise direct	12353 Sep 11 08:51	18° Mp 18'26		morning rise	12354 Aug 24 03:57	29°8 Ω / 32 30°RΩ	
	12353 Sep 17 14:25 12353 Oct 01 22:23	16° Mp 35'54	27°19'23	direct	12354 Aug 24 02:26	30 κδι 27°Ω48'24	
morning max el	12353 Oct 01 22.23 12353 Oct 07 03:39	24°Mp16'56 0°Ω	27 1923	direct	12354 Aug 30 18:13 12354 Sep 06 20:40	2/ 3/48/24 0° m)	
	12353 Oct 07 03:39 12353 Oct 26 07:24	0°M		morning max el	12354 Sep 06 20:40 12354 Sep 14 00:41	עוי ט 5° m) 44'06	2705/150
asc. node	12353 Oct 28 07.24 12353 Oct 28 11:47	4°M15'20		morning max er	12354 Sep 14 00.41 12354 Oct 02 05:41	ე∘ <u>ი</u>	27 34 36
morning set	12353 Oct 28 11:47 12353 Nov 01 17:52	13°M00'22		asc. node	12354 Oct 02 03:41 12354 Oct 15 08:30	0 = 24° £ 01'40	
morning set	12333 NOV 01 17.32	13 11600 22		morning set	12354 Oct 16 21:44	27° 2 13'14	
superior conj	12353 Nov 08 16:31	28° M ₊14'07	1°29'21	morning set	12354 Oct 18 05:31	27 = 13 14 0° ™	
minimum elong	12353 Nov 08 10:51 12353 Nov 08 14:50	28°M04'42	1°29'55	max. Earth dist.	12354 Oct 18 03:31 12354 Oct 22 19:37	9°M56'28	1.31465 AU
max. Earth dist.	12353 Nov 08 14:30 12353 Nov 08 11:43	27°M47'17	1.31303 AU	max. Earth dist.	12334 Oct 22 19.37	9 11630 20	1.31403 AU
max. Earth dist.	12353 Nov 08 11:43 12353 Nov 09 11:29	27 1104717 0° x 7	1.51505 AU	superior conj	12354 Oct 24 03:25	12°M52'27	1°16'13
evening rise	12353 Nov 05 11:29 12353 Nov 15 10:42	13° ∡ 106'29		minimum elong	12354 Oct 24 03:25	12°M40'21	1°16'29
evening rise	12353 Nov 13 10.42 12353 Nov 23 21:42	0°る		evening rise	12354 Oct 30 20:24	27°M39'45	1 1029
desc. node	12353 Nov 25 21:42 12353 Nov 30 14:05	11°る26'02		evening rise	12354 Oct 30 20:24 12354 Oct 31 22:37	27 IIG3943 0° √	
evening max el	12353 Nov 30 14:03 12353 Dec 15 02:32	11 3 2002 29° る 58'19	26°30'25	desc. node	12354 Nov 17 11:15	29° х 42'39	
evening max er	12353 Dec 15 02:32 12353 Dec 15 03:15	29 ⊙ 36 19	20 39 23	desc. Hode	12354 Nov 17 11:13	29 メ ・42 39	
retrograde	12353 Dec 13 03:13 12353 Dec 29 01:20	0 ∞ 7°≈06'00		evening max el	12354 Nov 26 20:22	10°る55'44	25°24'05
evening set	12354 Jan 04 16:28	5°≈16'56		retrograde	12354 Nov 20 20:22 12354 Dec 10 16:51	10 3 53 44	23 24 03
min. Earth dist.	12354 Jan 08 16:34	2°≈39'49	0.59219 AU	evening set	12354 Dec 16 14:42	17 3 3340	
inferior conj	12354 Jan 11 20:33	2 ≈3949 0°≈12'18		min. Earth dist.	12354 Dec 10 14:42 12354 Dec 21 08:31		0.57198 AU
minimum elong	12354 Jan 12 04:29	0 ≈12 18 29° 云 56'52		inferior conj	12354 Dec 24 04:53	13 3 54 52	
minimum ciong	12354 Jan 12 04:29	29 03032 30°Rる	3 49 30	minimum elong	12354 Dec 24 13:00	11° る 46'08	
morning rise	12354 Jan 19 19:22	25° る 35'39		morning rise	12354 Dec 24 13:00 12355 Jan 01 13:40	7° る 45'36	3 02 24
direct	12354 Jan 21 21:04	25° る 20'15		direct	12355 Jan 03 19:09	7°る30'47	
asc. node	12354 Jan 24 11:14	25° る 45'31		asc. node	12355 Jan 11 08:27	7 03047 10°る34'18	
morning max el	12354 Jan 29 17:01	29°る12'42	18°16'15	morning max el	12355 Jan 12 19:51	10 さ 5416	19°01'47
morning max ci	12354 Jan 30 11:31	0°≈	10 10 15	morning max cr	12355 Jan 24 23:03	0°≈	17 01 47
morning set	12354 Feb 14 10:20	0 ~ 24° ≈ 14'10		morning set	12355 Jan 29 09:39	0 ~ 8°≈35'52	
morning set	12354 Feb 17 11:24	0°) €		morning set	12555 Jan 27 07.57	0 ~3332	
	123341 00 17 11.24	0 /		superior conj	12355 Feb 06 18:57	25° ≈ 02'22	0°51'26
superior conj	12354 Feb 23 20:22	11°) 49'57	0°21'40	minimum elong	12355 Feb 06 21:44	25°≈15'42	0°51'35
minimum elong	12354 Feb 23 21:57	11° X 4937	0°21'46	minimum ciong	12355 Feb 09 09:54	0°)	0 31 33
desc. node	12354 Feb 26 14:33	16° ¥ 46'53	0 21 40	desc. node	12355 Feb 13 11:10	7° ¥ 25′07	
max. Earth dist.	12354 Mar 03 10:22	25°\(\frac{10}{40}\)33	1.41158 AU	max. Earth dist.	12355 Feb 13 17:28	7° ¥ 53'18	1.38945 AU
max. Larm dist.	12354 Mar 06 07:36	25 γ (0) 33	1.41136 AC	evening rise	12355 Feb 17 13:00	14° X 33'10	1.56745 AC
evening rise	12354 Mar 08 02:50	2° Υ 57'48		evening rise	12355 Feb 26 23:22	0°Υ	
evening rise	12354 Mar 25 21:20	0°8			12355 Nar 20 18:02	%8 0°8	
evening max el	12354 Apr 11 04:13	20° 8 25'40	23°12'03	evening max el	12355 Mar 24 18:04	4° 8 17'12	24°31'58
retrograde	12354 Apr 21 14:40	26° 8 34'49	23 12 03	retrograde	12355 Apr 05 06:50	11° 8 01'47	24 31 30
asc. node	12354 Apr 22 08:14	26° 8 32'19		asc. node	12355 Apr 09 05:34	9° 8 52'05	
evening set	12354 Apr 26 15:37	24° 8 28'00		evening set	12355 Apr 00 03:34 12355 Apr 10 19:37	8° 8 42'32	
min. Earth dist.	12354 May 01 13:26	18° 8 40'26	0.68769 AU	min. Earth dist.	12355 Apr 15 09:02	3° 8 30'51	0.68326 AU
inferior conj	12354 May 02 00:30	18° 8 02'14	2°36'51	inferior conj	12355 Apr 16 08:27	2° 8 12'33	2°04'14
minimum elong	12354 May 01 22:30	18° 8 09'10	2°35'47	minimum elong	12355 Apr 16 06:18	2° 8 19'47	
morning rise	12354 May 07 05:17	11° 8 55'17	2 30 17	g	12355 Apr 18 00:59	30°RY	2 03 11
direct	12354 May 11 13:52	10° 8 09'51		morning rise	12355 Apr 21 17:08	26° Y °13'37	
morning max el	12354 May 20 00:55	15° 8 01'28	21°03'25	direct	12355 Apr 25 13:12	24° Y '49'29	
desc. node	12354 May 25 16:16	21° 8 29'05	21 03 20	morning max el	12355 May 03 00:23		19°51'53
acse. noue	12354 Jun 01 00:35	0°II		morning man er	12355 May 04 00:11	0°8	1, 0103
morning set	12354 Jun 19 15:47	27° I I48'55		desc. node	12355 May 12 13:03	10° 8 49'35	
morning sec	12354 Jun 21 01:10	0.2 2		dese. Hode	12355 May 25 12:20	0°II	
max. Earth dist.	12354 Jun 27 03:22		1.42916 AU	morning set	12355 May 29 16:56	6° Ⅱ 24'38	
man zam ust.	1230 . Can 27 03:22	, 0.0.10	1.12/10/10	max. Earth dist.	12355 Jun 09 15:22	23° Ⅱ 28'44	1.44539 AU
superior conj	12354 Jul 04 06:08	21° © 34'38	-1°50'57	man. Bartii dige.	12355 Jun 13 17:12	0.00	1
minimum elong	12354 Jul 04 13:02	22°503'54					
mmmum clong	12354 Jul 09 03:30	0°Ω	1 2111	superior conj	12355 Jun 14 18:01	1°540'18	-2°10'00
evening rise	12354 Jul 15 22:56	12° Ω 04'20		minimum elong	12355 Jun 14 18:01	1°956'29	
asc. node	12354 Jul 19 07:01	12 δ 04 20		evening rise	12355 Jun 28 04:22	24°901'03	2 10 70
ase. Houc	12354 Jul 26 08:57	0°M)		Croning Hisc	12355 Jul 01 16:49	0°Ω	
evening max el	12354 Aug 01 09:53	7° Mg 51'13	18°04'30	asc. node	12355 Jul 06 03:51	7° Ω 27'54	
retrograde	12354 Aug 01 09.33 12354 Aug 08 02:29	11°M)17'04	10 04 30	evening max el	12355 Jul 06 03.51 12355 Jul 15 23:55	_	18°07'24
evening set	12354 Aug 08 02:29 12354 Aug 10 13:04	10° Mp 49'43		retrograde	12355 Jul 15 23:55 12355 Jul 22 08:55	21° Ω 31'38	10 0/24
•	•	=	1°15'24	-	12355 Jul 22 08:35 12355 Jul 25 03:37	24° Ω 51'38	
inferior conj minimum elong	12354 Aug 17 07:49 12354 Aug 17 09:55	5° Mp 51'42 5° Mp 46'41	1°15'24 1°14'14	evening set inferior conj	12355 Jul 25 03:37 12355 Jul 31 08:05	$18^{\circ} \Omega 35'17$	2012146
mmmum ciong	12337 Aug 1/ 07.33	J 111/4∪41	1 1717	microi conj	12333 Jul 31 00.03	10 06331/	4 1440

minimum elong	12355 Jul 31 10:40	18° Ω 28'15	2011!25		12356 Jul 15 08:55	30° №	
min. Earth dist.	12355 Aug 03 01:46	$15^{\circ} \Omega 38'33$	0.62963 AU	min. Earth dist.	12356 Jul 16 00:50	29° © 13'09	0.64974 AU
morning rise	12355 Aug 05 01:46 12355 Aug 06 15:48	$13^{\circ} \Omega 23'07$	0.02903 AU	morning rise	12356 Jul 19 17:58	29 \$313 09 25°\$26'38	0.04974 AU
desc. node	12355 Aug 00 13:48 12355 Aug 08 11:56	12 0 2307 $11^{\circ}\Omega 11'40$		desc. node	12356 Jul 25 09:16	23 32 0 38 22° 3 649'00	
direct	12355 Aug 08 11:30 12355 Aug 13 08:07	9°Ω53'40		direct	12356 Jul 26 06:41	22°546'12	
	Č	$9^{\circ}0.53^{\circ}40$ $17^{\circ}\Omega.55^{\circ}56$	27951146	direct		22°9946°12 0°Ω	
morning max el	12355 Aug 27 08:35		2/31/40		12356 Aug 08 01:49		27012154
	12355 Sep 06 11:14	0° m)		morning max el	12356 Aug 08 19:15	0° Ω 43'19	2/*13'54
	12355 Sep 25 02:01	0° ⊽			12356 Aug 30 12:29	0° m/y	
morning set	12355 Sep 30 18:53	11° ≏ 04'06		morning set	12356 Sep 13 06:43	24° m 26'53	
asc. node	12355 Oct 02 05:09	13° ≏ 58'45			12356 Sep 16 02:06	0∘ ত	
max. Earth dist.	12355 Oct 05 22:44	21° ≏ 49'36	1.32146 AU	max. Earth dist.	12356 Sep 17 17:24	3° ₾ 19'31	1.33355 AU
				asc. node	12356 Sep 18 01:47	4° ჲ 02'30	
superior conj	12355 Oct 08 11:35	27° ≏ 18'42	0°57'37				
minimum elong	12355 Oct 08 09:23	27° ≏ 06'43	0°57'34	superior conj	12356 Sep 21 14:58	11° ≏ 27'47	0°33'44
	12355 Oct 09 17:05	0° M		minimum elong	12356 Sep 21 13:21	11° ≏ 19'17	0°33'30
evening rise	12355 Oct 15 07:34	12°M14'08		evening rise	12356 Sep 28 18:24	26° ≏ 45'07	
	12355 Oct 24 04:37	0° ∡			12356 Sep 30 07:24	0° M ₊	
desc. node	12355 Nov 04 08:32	16° ∡ 53′33			12356 Oct 18 14:02	0° ∡ ¹	
evening max el	12355 Nov 08 07:15	21° ∡ 10′12	23°47'23	evening max el	12356 Oct 19 18:55	1° ∡ 13'54	22°06'24
retrograde	12355 Nov 21 19:59	27° ∡ ′55′13		desc. node	12356 Oct 21 05:52	2° ҂ ³34'54	
evening set	12355 Nov 26 12:49	27° ₹ 07'00		retrograde	12356 Nov 01 11:40	7° ∡ ³32'21	
min. Earth dist.	12355 Dec 02 17:44	24° ∡ ¹06'30	0.55579 AU	evening set	12356 Nov 04 17:47	7° ∡ ¹08'48	
inferior conj	12355 Dec 04 16:36	22° ∡ ¹56'36	-5°48'46	min. Earth dist.	12356 Nov 13 00:30	3° ∡ ¹28'55	0.54663 AU
minimum elong	12355 Dec 04 19:48	22° х 51'48	5°47'41	inferior conj	12356 Nov 13 12:33	3° ∡ 12′00	-5°41'58
morning rise	12355 Dec 13 04:41	19° ∡ '01'50		minimum elong	12356 Nov 13 07:06	3° ∡ 19'39	5°40'38
direct	12355 Dec 15 21:26	18° ∡ ′43'40		•	12356 Nov 20 00:11	30°RM₊	
morning max el	12355 Dec 26 10:09	23° ∡ ⁴44'42	20°10'12	morning rise	12356 Nov 21 21:41	29°M24'53	
asc. node	12355 Dec 29 05:35	26° х 46′24		direct	12356 Nov 25 08:33	28°M58'25	
	12355 Dec 31 17:08	0°ਰ			12356 Nov 30 11:04	0° ∡¹	
morning set	12356 Jan 13 15:28	23° ප 12'44		morning max el	12356 Dec 07 10:20	4° ∡ 743'16	21°40'40
morning sec	12356 Jan 16 22:48	0°≈		asc. node	12356 Dec 15 02:38	14° × 705'19	21 10 10
	12550 3411 10 22.10	0.70		use. Houe	12356 Dec 24 03:57	0°る	
superior conj	12356 Jan 21 07:16	8° ≈ 51'53	1°13'43	morning set	12356 Dec 28 01:13	7° る 57'36	
minimum elong	12356 Jan 21 10:00	9°≈05'35	1°14'07	morning set	12330 Dec 20 01.13	7 03730	
max. Earth dist.	12356 Jan 27 00:19	20°≈01'15	1.36743 AU	superior conj	12357 Jan 04 05:27	23° る 07'31	1°28'40
evening rise	12356 Jan 30 18:47	20 ≈01 13 27°≈00'10	1.30743 AU	minimum elong	12357 Jan 04 03:27	23°る0731 23°る17'46	1°29'21
desc. node	12356 Jan 31 07:49	27°≈58'58		minimum clong	12357 Jan 04 07:23 12357 Jan 07 13:28	23 O1740 0°≈	1 29 21
desc. node		27 ≈ 3636		Eth dit		0 ≈ 1°≈52'53	1.34775 AU
	12356 Feb 01 10:55	0° Υ 0° Υ		max. Earth dist.	12357 Jan 08 11:50		1.34//3 AU
	12356 Feb 20 09:49		25045115	evening rise	12357 Jan 12 16:56	10°≈07'30	
evening max el	12356 Mar 06 07:23	18° ℃ 07'50	25°45'15	desc. node	12357 Jan 17 04:34	18°≈24'35	
retrograde	12356 Mar 18 18:31	25° Y 17'47			12357 Jan 23 23:24	0°) €	
evening set	12356 Mar 24 18:52	22° Y '49'26			12357 Feb 15 00:19	0° Υ	
asc. node	12356 Mar 26 02:58	21° Y 35'16	0.65444.477	evening max el	12357 Feb 16 20:58	1°Υ52'23	26°44'30
min. Earth dist.	12356 Mar 29 01:24	18° ℃ 12'57	0.67444 AU	retrograde	12357 Mar 02 00:50	9°Υ15'34	
inferior conj	12356 Mar 30 13:02	16° Y 19'58	1°21'34	evening set	12357 Mar 08 11:34	6° Y 43′00	
minimum elong	12356 Mar 30 11:15	16° Y ′25'38	1°20'47	min. Earth dist.	12357 Mar 12 12:25	2° Y 40′29	0.66160 AU
morning rise	12356 Apr 05 04:13	10° Y ′30′20		asc. node	12357 Mar 13 00:22	2° Y 05'42	
direct	12356 Apr 08 12:41	9° Y ′26′02		inferior conj	12357 Mar 14 12:09	0° Υ 19'54	0°28'37
morning max el	12356 Apr 15 07:28	13° Y ′06′32	18°55'24	minimum elong	12357 Mar 14 11:23	0° Υ 22'08	0°28'25
	12356 Apr 27 23:51	0°8			12357 Mar 14 18:54	30° ₹	
desc. node	12356 Apr 28 09:45	0° 8 37'28		morning rise	12357 Mar 20 12:24	24° ∺ 41′21	
greatest brilliancy	12356 Apr 28 21:08	1° 8 20'36	-0.8m	direct	12357 Mar 23 10:33	23° ¥ 54′06	
morning set	12356 May 07 23:48	15° 8 23'18		morning max el	12357 Mar 29 20:41	27° ∺ 17'59	18°15'20
	12356 May 17 09:17	Π $^{\circ}0$			12357 Apr 01 07:42	0 ° Υ	
max. Earth dist.	12356 May 22 08:15	7° Ⅱ 44'34	1.45513 AU	desc. node	12357 Apr 15 06:23	20° Ƴ 45'13	
				morning set	12357 Apr 18 06:49	25° Ƴ 35'15	
superior conj	12356 May 24 09:13	10° Ⅱ 56'36	-2°11'42		12357 Apr 21 01:01	9° 8	
minimum elong	12356 May 24 06:00	10° Ⅱ 43'56	2°12'26				
-	12356 Jun 05 08:44	0°€		superior conj	12357 May 03 16:26	19° 8 58'41	-1°53'09
evening rise	12356 Jun 08 10:35	4° 9 58'21		minimum elong	12357 May 03 07:33	19° 8 23'55	1°53'06
asc. node	12356 Jun 22 00:47	26°931'17		max. Earth dist.	12357 May 05 03:35	22° 8 16'03	1.45761 AU
					12357 May 10 02:32	0°II	
	12356 Jun 24 12:14	$0^{\circ}\Omega$					
evening max el	12356 Jun 24 12:14 12356 Jun 28 13:07	4° Ω 46'12	18°28'29	evening rise	12357 May 19 16:53	14° Ⅱ 57'39	
evening max el retrograde			18°28'29	evening rise	-	14°∏57'39 0°©	
•	12356 Jun 28 13:07	4° Ω 46′12	18°28'29	J	12357 May 29 09:15		-0.8m
retrograde	12356 Jun 28 13:07 12356 Jul 05 00:00	4° Ω 46'12 8° Ω 14'49		evening rise greatest brilliancy asc. node	-	0ංම	-0.8m
retrograde evening set	12356 Jun 28 13:07 12356 Jul 05 00:00 12356 Jul 08 03:00	4°Ω46'12 8°Ω14'49 7°Ω20'04	2°49'22	greatest brilliancy	12357 May 29 09:15 12357 May 30 17:54	0°গু 2°গু04'37	-0.8m 19°06'56

retrograde	12357 Jun 18 20:07	22° © 18'32		asc. node	12358 May 26 18:58	2° © 53'10	
evening set	12357 Jun 22 07:54	21° © 07'49		retrograde	12358 Jun 02 18:36	6° ॐ 37'01	
inferior conj	12357 Jun 27 19:02	15° 5 20'39	3°08'54	evening set	12358 Jun 06 15:49	5° 5 09'45	
minimum elong	12357 Jun 27 20:05	15° © 17'18	3°07'55		12358 Jun 11 08:06	30°RⅡ	
min. Earth dist.	12357 Jun 29 08:07	13° 5 21'27	0.66619 AU	inferior conj	12358 Jun 11 23:11	29° Ⅱ 09'12	3°14'25
morning rise	12357 Jul 03 07:38	8° 9 57'35		minimum elong	12358 Jun 11 23:08	29° Ⅱ 09'20	3°13'31
direct	12357 Jul 09 12:22	6°916'36		min. Earth dist.	12358 Jun 12 21:48	27° Ⅱ 52'39	0.67826 AU
desc. node	12357 Jul 12 06:31	6°9643'55		morning rise	12358 Jun 17 06:08	22° Ⅱ 48′06	
morning max el	12357 Jul 22 06:05	13° © 53'09	26°09'11	direct	12358 Jun 22 23:51	20° Ⅱ 15'49	
	12357 Aug 04 08:14	$0^{\circ}\Omega$		desc. node	12358 Jun 29 03:41	22° Ⅲ 31'38	
	12357 Aug 23 06:24	0° m y		morning max el	12358 Jul 04 16:11	27° Ⅱ 16′04	24°47'13
morning set	12357 Aug 27 05:48	7° Mp 12′28			12358 Jul 07 05:32	0 \circ \mathfrak{S}	
max. Earth dist.	12357 Aug 31 01:41	14° m 28'21	1.35071 AU		12358 Jul 28 23:30	$0^{\circ}\Omega$	
asc. node	12357 Sep 04 22:25	24° Mp 08'33		morning set	12358 Aug 09 11:54	19° Ω 10′21	
				max. Earth dist.	12358 Aug 13 01:45	25° Ω 35'51	1.37191 AU
superior conj	12357 Sep 05 11:01	25° Mp 12'46	0°05'03		12358 Aug 15 10:50	0° m)	
minimum elong	12357 Sep 05 10:44	25° Mp 11'22	0°04'49				
behind sun begin	12357 Sep 05 04:58	24° Mp 41'56		superior conj	12358 Aug 19 20:39	8° ™ 26'07	-0°27'29
behind sun end	12357 Sep 05 16:30	25° m 40'51		minimum elong	12358 Aug 19 22:28	8° m 34'59	0°27'33
	12357 Sep 07 18:48	0∘ 亚		asc. node	12358 Aug 22 19:05	14° M y 13'26	
evening rise	12357 Sep 13 02:51	11° ≏ 06'59		evening rise	12358 Aug 28 06:39	25° m 13'52	
	12357 Sep 22 23:28	0° M .			12358 Aug 30 16:07	0∘ ⊽	
evening max el	12357 Oct 01 16:41	11°M43'24	20°36'46	evening max el	12358 Sep 14 04:31	22° ♀ 58'45	19°26'50
desc. node	12357 Oct 08 03:17	16°M18'06		retrograde	12358 Sep 23 18:00	27° ≏ 44'59	
retrograde	12357 Oct 12 22:34	17°M18'26		desc. node	12358 Sep 25 00:44	27° ≏ 40'11	
evening set	12357 Oct 15 03:34	17° M 06'28		evening set	12358 Sep 25 14:31	27° ≏ 35'00	
inferior conj	12357 Oct 24 04:33	13°M11'24	-4°36'42	inferior conj	12358 Oct 04 07:07	23° ≏ 28'15	-2°52'41
minimum elong	12357 Oct 23 18:31	13°M25'51	4°33'28	minimum elong	12358 Oct 03 23:37	23° ≏ 40'20	2°49'38
min. Earth dist.	12357 Oct 25 07:51	12°M32'02	0.54661 AU	min. Earth dist.	12358 Oct 06 18:06	21° ≏ 53'24	0.55590 AU
morning rise	12357 Nov 01 09:11	9° ™ 12'56		morning rise	12358 Oct 12 06:29	19° ഫ 00'11	
direct	12357 Nov 05 17:08	8°M32'37		direct	12358 Oct 17 10:35	18° ≏ 00'05	
morning max el	12357 Nov 18 23:34	14° M 59'08	23°26'28	morning max el	12358 Oct 31 09:54	25° ♀ 01'07	25°13'06
	12357 Nov 30 14:58	0° ∡ ¹			12358 Nov 05 01:07	0° M	
asc. node	12357 Dec 01 23:37	2° ∡ 15′21		asc. node	12358 Nov 18 20:30	21°ML03'57	
morning set	12357 Dec 12 12:52	22° ∡ ⁴44'23			12358 Nov 23 10:57	0° ∡ ¹	
	12357 Dec 15 21:38	0°ಕ		morning set	12358 Nov 27 00:34	7° ∡ ¹27'53	
superior conj	12357 Dec 19 10:24	7° る 40'05	1°36'48	superior conj	12358 Dec 03 19:34	22° ∡ ¹21'50	1°38'34
minimum elong	12357 Dec 19 10:24 12357 Dec 19 11:16	7°る40'03		minimum elong	12358 Dec 03 19:19	22° x ⁷ 20'28	
max. Earth dist.	12357 Dec 19 11:10 12357 Dec 22 07:15		1.33189 AU	max. Earth dist.	12358 Dec 05 19:19 12358 Dec 05 10:06		1.32066 AU
evening rise	12357 Dec 27 03:51	23° ठ 46'48	1.55107 AC	max. Lartii dist.	12358 Dec 03 10:00 12358 Dec 07 07:27	25 ス 33 36	1.52000 AC
evening rise	12357 Dec 27 03:31 12357 Dec 30 08:34	0°≈		evening rise	12358 Dec 07 07:27 12358 Dec 11 00:20	7° る 49'22	
desc. node	12357 Dec 30 08:34 12358 Jan 04 01:25	0 ∞ 8°≈37'05		desc. node	12358 Dec 11 00:20 12358 Dec 21 22:22	7 34922 28° る 29'41	
desc. flode	12358 Jan 17 13:55	0° ∺		desc. node	12358 Dec 21 22:22 12358 Dec 22 19:33	20° ≈	
evening max el	12358 Jan 30 10:17	15° ¥ 21'33	27°22'25	evening max el	12359 Jan 12 21:13	0 ~ 28° ≈ 21'10	27°32'07
retrograde	12358 Feb 13 00:48	22°\dagger47'03	21 22 23	evening max er	12359 Jan 12 21:13	0° ∺	27 32 07
evening set	12358 Feb 19 19:35	20°\(\frac{1}{16}\)'25		retrograde	12359 Jan 26 17:17	5°) 41′59	
min. Earth dist.	12358 Feb 23 16:01	16°) 45'53	0.64516 AU	evening set	12359 Feb 02 16:11	3° ¥ 20'41	
inferior conj	12358 Feb 26 03:20	14°) 06'48		min. Earth dist.	12359 Feb 06 10:05	0° ¥ 18′02	0.62578 AU
minimum elong	12358 Feb 26 04:23	14° X 00'40		mm. Lattii dist.	12359 Feb 06 17:50	30°R≈	0.02370710
asc. node	12358 Feb 27 21:46	12°) 15'42	0 33 33	inferior conj	12359 Feb 09 07:32	27°≈31'50	-1°47'39
morning rise	12358 Mar 04 15:03	8°) (41'41		minimum elong	12359 Feb 09 11:09	27°≈23'07	
direct	12358 Mar 07 04:26	8°) (07'59		asc. node	12359 Feb 14 19:09	23°≈05'41	1 43 37
morning max el	12358 Mar 13 13:37	11° ∺ 26'40	17°52'19	morning rise	12359 Feb 16 08:39	22°≈23'20	
morning max cr	12358 Mar 26 11:08	0° Υ	17 32 17	direct	12359 Feb 18 15:13	21°≈59'32	
morning set	12358 Mar 30 18:38	7° Υ 12'05		morning max el	12359 Feb 25 07:12	25°≈23'18	17°46'52
desc. node	12358 Apr 02 02:59	11° Y '07'25		morning max or	12359 Mar 01 04:03	0° ∀	17 1032
acce. node	-2000 ripi 02 02.0)	11 10/23		morning set	12359 Mar 13 06:31	19° ¥ 57′23	
superior conj	12358 Apr 13 09:35	29° Y '33'46	-1°18'57		12359 Mar 19 00:36	0° Υ	
minimum elong	12358 Apr 13 01:28	29° Υ '01'15		desc. node	12359 Mar 19 00:30 12359 Mar 19 23:34	1° Υ 38'53	
Ciong	12358 Apr 13 16:08	0°8	1020	2000. 11040	-2007 Mai 17 25.5T	. 15055	
max. Earth dist.	12358 Apr 17 23:25	6° 8 49'49	1.45270 AU	superior conj	12359 Mar 25 00:42	10° Ƴ 11'57	-0°38'12
evening rise	12358 Apr 17 23:23 12358 Apr 29 07:02	24° 8 23'45	1.102/0710	minimum elong	12359 Mar 24 20:54	9° Υ 56'06	
2.46 1100	12358 May 02 23:06	0°Ⅱ		max. Earth dist.	12359 Mar 31 17:03	21° Υ '08'25	1.44087 AU
greatest brilliancy	12358 May 14 06:06	16° Ⅱ 52'43	-0.6m	max. Durin dist.	12359 Apr 06 07:18	0° 8	1.1100/ AU
51 carest of fillaticy						· ·	
	•		0.0111	evening rise			
evening max el	12358 May 14 00:00 12358 May 24 01:28 12358 May 26 03:36	0°95 2°9515'34		evening rise	12359 Apr 08 19:45 12359 Apr 26 09:34	3° 8 54'43 0° Ⅱ	

	12250 14 00 02 20	1.00 \$\tag{\tag{1}}	21000142		100/03/4 20 05 47	۰	
evening max el	12359 May 09 02:28	16° Ⅱ 02'26	21°08'42		12360 Mar 29 05:47	0°8	22025126
asc. node	12359 May 13 16:11	19° Ⅱ 47'35		evening max el	12360 Apr 20 20:13	. •	22°25'36
retrograde	12359 May 17 17:20	21° I I04'27		,	12360 Apr 21 00:16	0°П	
evening set	12359 May 22 00:45	19° Ⅱ 20'53	2000104	asc. node	12360 Apr 29 13:27	5° Ⅱ 30'36	
inferior conj	12359 May 27 06:59	13° Ⅱ 08′28	3°08'04	retrograde	12360 Apr 30 14:39	5° ∏ 35'47	
minimum elong	12359 May 27 05:58	13° Ⅱ 11'58	3°07'08	evening set	12360 May 05 09:00	3° Ⅱ 36'55	
min. Earth dist.	12359 May 27 15:56	12° Ⅱ 37'22	0.68561 AU		12360 May 08 15:57	30°₽ 8	
morning rise	12359 Jun 01 10:59	6° Ⅱ 51'44		inferior conj	12360 May 10 16:20	27° 8 14'56	
direct	12359 Jun 06 16:03	4° Ⅱ 34'56		minimum elong	12360 May 10 14:35	27° 8 20'59	
desc. node	12359 Jun 16 00:43	9° Ⅱ 44'13		min. Earth dist.	12360 May 10 12:22	27° 8 28'44	0.68823 AU
morning max el	12359 Jun 17 02:30	10° Ⅱ 47'20	23°17'52	morning rise	12360 May 15 20:04	21° 8 04'00	
	12359 Jul 02 08:30	0ංම		direct	12360 May 20 11:58	19° 8 06'43	
morning set	12359 Jul 21 20:14	0° Ω 08'54		morning max el	12360 May 29 15:42	_	21°50'08
	12359 Jul 21 18:06	0 $^{\circ}\Omega$		desc. node	12360 Jun 01 21:41	27° 8 59'07	
max. Earth dist.	12359 Jul 25 23:32	7° Ω 11'41	1.39507 AU		12360 Jun 03 14:09	0°Щ	
		_			12360 Jun 24 18:04	0 \circ \odot	
superior conj	12359 Aug 02 16:01	20° Ω 58'28		morning set	12360 Jul 01 03:08	9° © 59'25	
minimum elong	12359 Aug 02 20:26	21° Ω 18'57	1°01'45	max. Earth dist.	12360 Jul 07 00:42	19° © 35'22	1.41756 AU
	12359 Aug 07 11:01	0° m)			12360 Jul 13 04:04	0 $^{\circ}$ Ω	
asc. node	12359 Aug 09 15:48	4° Mp 13'28					
evening rise	12359 Aug 12 02:51	8° m 58'15		superior conj	12360 Jul 14 16:36	2° Ω 39'08	
	12359 Aug 24 01:40	0∘ 亚		minimum elong	12360 Jul 14 23:12		1°34'43
evening max el	12359 Aug 28 04:44	5° ≙ 01'00	18°38'37	evening rise	12360 Jul 25 11:43	22° Ω 09'45	
retrograde	12359 Sep 05 07:22	9° ഫ 05'36		asc. node	12360 Jul 26 12:33	24° Ω 04'02	
evening set	12359 Sep 07 06:18	8° ≏ 52'10			12360 Jul 29 18:36	O° m y	
desc. node	12359 Sep 11 22:11	6° ≙ 46'44		evening max el	12360 Aug 10 13:27	17° m 41'12	18°11'15
inferior conj	12359 Sep 15 05:41	4° ≙ 26'14	-1°02'30	retrograde	12360 Aug 17 15:24	21°Mp17'04	
minimum elong	12359 Sep 15 03:09	4° ≙ 31'01	1°01'30	evening set	12360 Aug 19 21:15	20° m 55'57	
min. Earth dist.	12359 Sep 18 09:56	2° ≙ 03'35	0.57266 AU	inferior conj	12360 Aug 27 01:52	16° Mp 09'35	0°31'43
	12359 Sep 21 14:02	30° ₽, M)		minimum elong	12360 Aug 27 02:54	16°₩07'18	0°31'02
morning rise	12359 Sep 22 20:34	29° m 20'17		desc. node	12360 Aug 28 19:38	14° m 37'15	
direct	12359 Sep 28 17:53	27° m 54'25		min. Earth dist.	12360 Aug 30 09:22	13° m) 16'05	0.59406 AU
	12359 Oct 06 00:52	0∘ ⊽		morning rise	12360 Sep 03 05:13	10° m 29'56	
morning max el	12359 Oct 13 00:58	5° ഫ 23'08	26°42'12	direct	12360 Sep 09 15:06	8° Mg 35'35	
	12359 Oct 31 02:05	0° M ₊		morning max el	12360 Sep 23 23:24	16° Mp 24'40	27°39'21
asc. node	12359 Nov 05 17:19	10°M21'18			12360 Oct 05 03:37	0∘ ⊽	
morning set	12359 Nov 11 10:39	22°M03'50		asc. node	12360 Oct 22 14:03	29° ≏ 58'42	
	12359 Nov 15 02:06	0° ∡ ¹			12360 Oct 22 14:19	0° M	
		_		morning set	12360 Oct 25 17:19	6°M26'18	
superior conj	12359 Nov 18 06:54		1°34'23	max. Earth dist.	12360 Nov 01 02:25	20°1119'57	1.31303 AU
minimum elong	12359 Nov 18 05:40	7° ∡ 100′17	1°35'06			m	
max. Earth dist.	12359 Nov 18 17:42	8° ∡ 107′23	1.31434 AU	superior conj	12360 Nov 01 18:28	21°M49'20	1°24'29
evening rise	12359 Nov 25 03:43	22° ₹ '08'44		minimum elong	12360 Nov 01 16:31	21°M38'29	1°24'54
	12359 Nov 28 23:17	0°る			12360 Nov 05 10:41	0° ⊼ ¹	
desc. node	12359 Dec 08 19:24	17° る 54'29		evening rise	12360 Nov 08 11:38	6° ∡ ³37'56	
	12359 Dec 16 21:41	0° ≈	27000122		12360 Nov 20 13:11	0°る	
evening max el	12359 Dec 26 03:06	10°≈38′29	27°08'32	desc. node	12360 Nov 24 16:31	6°る39'45	26010110
retrograde	12360 Jan 09 01:28	17°≈51'41		evening max el	12360 Dec 07 01:29	22° る 04'18	26°10'48
evening set	12360 Jan 15 22:03	15°≈48'02		retrograde	12360 Dec 20 23:56	29° る 08'50	
min. Earth dist.	12360 Jan 19 17:30	13°≈05'23	0.60457 AU	evening set	12360 Dec 27 09:05	27°る31'26	0.50004.477
inferior conj	12360 Jan 22 21:17	10°≈26'08		min. Earth dist.	12360 Dec 31 14:42		0.58324 AU
minimum elong	12360 Jan 23 03:51	10°≈12'19	3°04'04	inferior conj	12361 Jan 03 17:05	22°₹39'44	
morning rise	12360 Jan 30 12:34	5°≈37'27		minimum elong	12361 Jan 04 01:33	22° ♂ 24'13	4°22'33
direct	12360 Feb 01 14:56	5°≈20'00		morning rise	12361 Jan 11 20:51	18°る12'59	
asc. node	12360 Feb 01 16:27	5°≈20'01	15050154	direct	12361 Jan 13 23:10	17°る58'24	
morning max el	12360 Feb 08 22:06	8°≈58'55	17°59'54	asc. node	12361 Jan 18 13:41	19°る13'08	10022150
	12360 Feb 22 14:08	0° ∀		morning max el	12361 Jan 22 06:30	22° ろ 02'30	18°32'59
morning set	12360 Feb 24 12:09	3° ∺ 31'39			12361 Jan 28 11:02	0°≈ 17°≈ •2°15€	
	1226034 07 1617	2101/2012	0001110	morning set	12361 Feb 07 06:11	17°≈38'56	
superior conj	12360 Mar 05 16:13	21°) 58'26	0°01'18		12361 Feb 13 16:28	0°) €	
minimum elong	12360 Mar 05 16:20	21°) 58'58	0°01'30		10071 71 17 07 17	40\/ 45	0025111
behind sun begin	12360 Mar 05 08:24	21°\(\frac{1}{2}24'00		superior conj	12361 Feb 16 04:45	4°) (42'47	0°35'11
behind sun end	12360 Mar 06 00:16	22°\(\frac{1}{33}\)'50		minimum elong	12361 Feb 16 07:03	4°) ₹53'24	0°35'16
desc. node	12360 Mar 05 20:10	22°) 15′50		desc. node	12361 Feb 20 16:46	12°) 54'22	1 40222 : ***
m at er c	12360 Mar 10 07:43	0°Υ 40 % 55117	1 42220 ***	max. Earth dist.	12361 Feb 23 14:18	18°) €00'02	1.40223 AU
max. Earth dist.	12360 Mar 13 06:08	4° Υ '55'17 14° Υ '04'08	1.42338 AU	evening rise	12361 Feb 27 19:04	25°¥08'06 0° Υ	
evening rise	12360 Mar 18 21:17	14 1 04 08			12361 Mar 02 18:06	U I	

	12361 Mar 22 23:53	0° ႘		evening rise	12362 Feb 09 13:53	7°) €06'21	
evening max el	12361 Apr 03 10:50	13° 8 39'47	23°46'27	evening rise	12362 Feb 23 15:55	0° Υ	
retrograde	12361 Apr 14 09:08	20° 8 05'52	23 1027	evening max el	12362 Mar 17 00:24	27° Y ′31'36	25°04'35
asc. node	12361 Apr 16 10:45	19° 8 46'12		evening man er	12362 Mar 19 17:00	0°8	20 0.00
evening set	12361 Apr 19 14:59	17° 8 53'29		retrograde	12362 Mar 28 23:29	4° 8 28'26	
min. Earth dist.	12361 Apr 24 09:00	12° 8 21'01	0.68626 AU	asc. node	12362 Apr 03 08:07	2° 8 23'42	
inferior conj	12361 Apr 25 01:20	11° 8 25'10	2°24'14	evening set	12362 Apr 03 17:09	2° 8 05'08	
minimum elong	12361 Apr 24 23:13	11° 8 32'26	2°23'11	•	12362 Apr 05 19:34	30° ₹ Υ	
morning rise	12361 Apr 30 07:26	5° 8 21'17		min. Earth dist.	12362 Apr 08 03:34	27° Y ′08'16	0.67994 AU
direct	12361 May 04 10:31	3° 8 45'03		inferior conj	12362 Apr 09 08:06	25° Y '34'44	1°47'24
morning max el	12361 May 12 10:48	8° 8 18'00	20°31'18	minimum elong	12362 Apr 09 06:02	25° Y 41'32	1°46'27
desc. node	12361 May 19 18:32	16° 8 59'31		morning rise	12362 Apr 14 19:12	19° Y 39'18	
	12361 May 28 23:49	Π $^{\circ}0$		direct	12362 Apr 18 10:13	18° Y 23'43	
morning set	12361 Jun 10 11:17	18° Ⅲ 51′20		morning max el	12362 Apr 25 13:26	22° Y 19'30	19°25'55
	12361 Jun 17 13:34	0 \circ 60			12362 May 01 23:43	0° 8	
max. Earth dist.	12361 Jun 19 08:16	2° © 50'54	1.43673 AU	desc. node	12362 May 06 15:16	6° 8 32'33	
				greatest brilliancy	12362 May 08 06:16	8° 8 55'23	-0.7m
superior conj	12361 Jun 25 18:29	13° © 20'48	-2°00'45	morning set	12362 May 20 11:58	27° 8 28'19	
minimum elong	12361 Jun 26 00:46	13° © 46'54	2°01'13		12362 May 22 03:20	Π °0	
	12361 Jul 05 13:07	$0^{\circ}\Omega$		max. Earth dist.	12362 Jun 01 22:28	16° Ⅱ 49'35	1.45039 AU
evening rise	12361 Jul 08 04:39	4° Ω 37'29					
asc. node	12361 Jul 13 09:21	13° Ω 41′01		superior conj	12362 Jun 05 20:43	23° II 03'06	
	12361 Jul 24 07:19	0° m		minimum elong	12362 Jun 05 21:58	23° Ⅱ 08'07	2°14'01
evening max el	12361 Jul 25 02:41	0° m 50'09	18°03'27		12362 Jun 10 04:35	0 \circ 60	
retrograde	12361 Jul 31 14:52	4° TD 11'49		evening rise	12362 Jun 20 00:35	16° © 09'18	
evening set	12361 Aug 03 04:50	3°m/39'28			12362 Jun 28 09:28	0 \circ Ω	
	12361 Aug 08 06:07	30°R Ω		asc. node	12362 Jun 30 06:14	2° Ω 58'22	
inferior conj	12361 Aug 09 17:05	28° Ω 33'45	1°42'26	evening max el	12362 Jul 08 16:49	14°Ω17'58	18°14'12
minimum elong	12361 Aug 09 19:34	28° Ω 27'28	1°41'08	retrograde	12362 Jul 15 01:21	17° Ω 39'50	
min. Earth dist.	12361 Aug 12 17:39	25° Ω 31'53	0.61697 AU	evening set	12362 Jul 17 23:39	16° £ 53'36	
desc. node	12361 Aug 15 17:02	22°Ω57'18		inferior conj	12362 Jul 23 23:13	11° Ω 30'19	
morning rise	12361 Aug 16 07:49	22° Ω 30'39		minimum elong	12362 Jul 24 01:40	11° Ω 23'23	2°29'16
direct	12361 Aug 22 23:54	20°Ω11'28	27050102	min. Earth dist.	12362 Jul 26 11:16	8° Ω 41'15	0.63866 AU
morning max el	12361 Sep 06 04:21	28° Ω 11'41	27°58'02	morning rise	12362 Jul 30 02:09	5° Ω 13'46	
	12361 Sep 07 22:14	0° m)		desc. node	12362 Aug 02 14:24	3°Ω12'08	
1-	12361 Sep 28 23:23	0° ჲ 19° ჲ 50'12		direct	12362 Aug 05 17:45	2° Ω 38'19 10° Ω 39'15	27920121
asc. node	12361 Oct 09 10:45	19 ≥ 30 12 20° ♀ 30′24		morning max el	12362 Aug 19 13:32		27 39 21
morning set	12361 Oct 09 18:35 12361 Oct 14 06:22	0°M			12362 Sep 03 19:13	0° റ 0°ആ	
max. Earth dist.	12361 Oct 14 06.22 12361 Oct 15 08:30		1.31691 AU	morning sat	12362 Sep 21 09:08 12362 Sep 23 12:09	0 <u></u> 4° - 210'08	
max. Earm dist.	12301 Oct 13 08.30	2 11622 03	1.31091 AU	morning set asc. node	12362 Sep 26 07:25	9° £ 50'42	
superior conj	12361 Oct 17 04:27	6° ™ 23'16	1°09'00	max. Earth dist.	12362 Sep 28 08:22	14° £ 05'38	1.32602 AU
minimum elong	12361 Oct 17 04:27 12361 Oct 17 02:12	6°M10'50	1°09'06	max. Earm dist.	12302 Sep 28 08.22	14 = 03 36	1.32002 AU
evening rise	12361 Oct 17 02:12 12361 Oct 23 22:10	21°M12'02	1 0700	superior conj	12362 Oct 01 10:54	20° ≏ 43'15	0°48'07
evening rise	12361 Oct 28 02:59	0° √		minimum elong	12362 Oct 01 10:54 12362 Oct 01 08:53	20° ⊆ 32'18	0°47'58
desc. node	12361 Nov 11 13:43	24° × ⁷ 30'39		g	12362 Oct 05 17:24	0°M	0 1750
dese. node	12361 Nov 16 01:21	0°ਰ		evening rise	12362 Oct 08 09:28	5°M45'56	
evening max el	12361 Nov 18 15:52	2° る 40'50	24°44'38		12362 Oct 21 03:16	0° ⊼ 7	
retrograde	12361 Dec 02 10:31	9° ට 34'17		desc. node	12362 Oct 29 11:00	11° ∡ ¹06'51	
evening set	12361 Dec 07 21:00	8° る 28'35		evening max el	12362 Oct 31 02:09	12° ∡ ¹47'04	23°03'54
min. Earth dist.	12361 Dec 13 03:40	5° ⋜ 42'19	0.56437 AU	retrograde	12362 Nov 13 07:56	19° ∡ °22'03	
inferior conj	12361 Dec 15 16:28	4° る 05'24	-5°28'28	evening set	12362 Nov 17 10:01	18° ∡ ′45'47	
minimum elong	12361 Dec 15 23:12	3° ⋜ 54'38	5°26'31	min. Earth dist.	12362 Nov 24 11:23	15° ∡ ³30'42	0.55091 AU
morning rise	12361 Dec 24 03:33	29° ₹ ′59'55		inferior conj	12362 Nov 25 20:33	14° ∡ °43′00	-5°53'05
	12361 Dec 24 03:24	30°Ŗ ⋌ ¹		minimum elong	12362 Nov 25 20:09	14° ∡ ¹43'35	5°52'15
direct	12361 Dec 26 12:41	29° ∡ ¹44'17		morning rise	12362 Dec 04 07:51	10° ∡ 753′18	
	12361 Dec 28 20:27	ರ∘ರ		direct	12362 Dec 07 07:57	10° ∡ °32′02	
morning max el	12362 Jan 05 04:22	4° る 22'53	19°28'04	morning max el	12362 Dec 18 12:33	15° ∡ ′51′29	20°46'11
asc. node	12362 Jan 05 10:53	4° る 38'48		asc. node	12362 Dec 23 08:00	21° ₹ ′21'32	
	12362 Jan 21 07:02	0° ≈			12362 Dec 28 23:11	8°0	
morning set	12362 Jan 22 08:35	2° ≈ 07'33		morning set	12363 Jan 06 16:24	16° る 49'09	
					12363 Jan 13 00:34	0° ≈	
superior conj	12362 Jan 30 09:38	18° ≈ 11'44	1°01'48				
minimum elong	12362 Jan 30 12:31	18° ≈ 25'49	1°02'03	superior conj	12363 Jan 14 02:37	2° ≈ 13'43	1°20'55
	12362 Feb 05 14:56	0° ∀		minimum elong	12363 Jan 14 05:05	2° ≈ 26′19	1°21'27
max. Earth dist.	12362 Feb 05 20:23	0° ∺ 25'00	1.37988 AU	max. Earth dist.	12363 Jan 19 05:07	12° ≈ 25′26	1.35868 AU
desc. node	12362 Feb 07 13:23	3°) (30′55		evening rise	12363 Jan 23 03:10	19° ≈ 51'31	

desc. node	12363 Jan 25 10:05	24°≈02'00		evening rise	12364 Jan 06 07:10	3° ≈ 13'11	
	12363 Jan 28 19:31	0° ∀		desc. node	12364 Jan 12 06:53	14° ≈ 22'27	
	12363 Feb 17 16:48	0° Y			12364 Jan 21 16:22	0° ℋ	
evening max el	12363 Feb 27 14:05	11° Y 21′26	26°12'40	evening max el	12364 Feb 10 03:35	25° ∺ 00'02	27°03'34
retrograde	12363 Mar 12 08:49	18° Ƴ 37'35			12364 Feb 16 08:22	0° Y	
evening set	12363 Mar 18 13:50	16° Ƴ 06'56		retrograde	12364 Feb 23 12:21	2° Y 25'03	
asc. node	12363 Mar 21 05:30	13° Ƴ 31'24			12364 Feb 29 23:03	30° Ŗ ₩	
min. Earth dist.	12363 Mar 22 17:54	11° Ƴ 45′06	0.66948 AU	evening set	12364 Mar 01 03:06	29°) 52′14	
inferior conj	12363 Mar 24 10:39	9° Ƴ 39'40	1°00'27	min. Earth dist.	12364 Mar 05 01:51	26°) €03'58	0.65507 AU
minimum elong	12363 Mar 24 09:13	9° Ƴ 44'07	0°59'51	inferior conj	12364 Mar 07 06:41	23° ¥ 34'11	0°03'03
morning rise	12363 Mar 30 05:22	3° Y ′54′26		minimum elong	12364 Mar 07 06:36	23° ¥ 34′27	0°03'12
direct	12363 Apr 02 09:24	2° Ƴ 57'34		transit middle	12364 Mar 07 06:36	23° ¥ 34′27	0°03'12
morning max el	12363 Apr 08 23:21	6° Ƴ 29'11	18°36'20	transit begin	12364 Mar 07 03:40	23°) 42′48	
desc. node	12363 Apr 23 11:58	26° Ƴ 29'37		transit end	12364 Mar 07 09:32	23°) €26'07	
	12363 Apr 25 17:56	$_{0\circ}$ 8		asc. node	12364 Mar 07 02:55	23°) 44′56	
morning set	12363 Apr 30 03:38	6° 8 54'17		morning rise	12364 Mar 13 11:34	18° ₩ 01'17	
	12363 May 14 21:50	Π $^{\circ}0$		direct	12364 Mar 16 05:50	17° ¥ 20′13	
max. Earth dist.	12363 May 15 17:15	1° Ⅱ 15'51	1.45716 AU	morning max el	12364 Mar 22 14:32	20°) 40′13	18°03'30
	•			· ·	12364 Mar 29 20:54	0° Y	
superior conj	12363 May 16 06:21	2° 川 07'02	-2°06'12	desc. node	12364 Apr 09 08:36	16° Ƴ 43'47	
minimum elong	12363 May 16 00:04	1° Ⅱ 42'29	2°06'39	morning set	12364 Apr 09 23:02	17° Ƴ 42'36	
evening rise	12363 May 31 20:17	26° Ⅱ 40'23		Ü	12364 Apr 17 13:12	0°႘	
8 21	12363 Jun 02 22:27	0°9			r		
greatest brilliancy	12363 Jun 08 18:10	9° 5 014'19	-0.9m	superior conj	12364 Apr 24 15:39	11° 8 17'08	-1°40'03
asc. node	12363 Jun 17 03:12	21°9549'06		minimum elong	12364 Apr 24 06:21	10° 8 40'29	1°39'40
evening max el	12363 Jun 22 04:52	27°956'52	18°42'46	max. Earth dist.	12364 Apr 27 13:19	15° 8 50'38	1.45639 AU
v , v	12363 Jun 24 14:26	0°Ω			12364 May 06 15:40	0°П	
retrograde	12363 Jun 28 19:00	1°Ω32'36		evening rise	12364 May 10 18:16	6° ∏ 21'12	
evening set	12363 Jul 02 01:46	0° £ 30'58		greatest brilliancy	12364 May 23 17:59	26° I I10'30	-0.7m
evening see	12363 Jul 02 19:49	30°R95		greatest stilliane,	12364 May 26 08:37	0.8e	0.7111
inferior conj	12363 Jul 07 16:26	24°951'50	2°59'32	asc. node	12364 Jun 03 00:16	10°904'20	
minimum elong	12363 Jul 07 18:04	24°9346'45	2°58'26	evening max el	12364 Jun 04 12:34	11°9541'04	19°28'10
min. Earth dist.	12363 Jul 09 13:53	22°931'32		retrograde	12364 Jun 11 16:33	15°9543'13	19 20 10
morning rise	12363 Jul 13 09:32	18°929'31	0.03727710	evening set	12364 Jun 15 08:14	14°925'25	
direct	12363 Jul 19 19:16	15° © 47'58		inferior conj	12364 Jun 20 17:23	8°932'07	3°12'49
desc. node	12363 Jul 20 11:43	15°9549'38		minimum elong	12364 Jun 20 17:58	8°930'13	3°11'53
morning max el	12363 Aug 02 00:33	23°937'27	26°49'08	min. Earth dist.	12364 Jun 22 00:10	6°950'36	0.67180 AU
morning max cr	12363 Aug 07 17:01	0° Ω	20 49 08	morning rise	12364 Jun 26 03:14	2° © 09'22	0.07180 AC
	12363 Aug 28 03:51	0° m)		morning risc	12364 Jun 29 12:41	2 3 09 22	
morning set	12363 Sep 06 19:03	17° Mg 18'01		direct	12364 Jul 02 03:23	29° Ⅱ 31'18	
max. Earth dist.	12363 Sep 10 13:03	25° m) 26'49	1.34034 AU	direct	12364 Jul 04 21:57	0°95	
asc. node	12363 Sep 10 23:00 12363 Sep 13 04:04	29° m 55'43	1.54054 AU	desc. node	12364 Jul 06 08:57	0°©35'40	
asc. node	12363 Sep 13 04:54	29 III) 33 43			12364 Jul 14 11:21	6°954'38	25926100
	12303 Sep 13 04.34	0 ==		morning max el	12364 Aug 01 09:52	0°Ω	25°36'00
gunariar aani	12262 San 15 11:22	1°. 0 .12!52	0°22'06	morning sot	12364 Aug 19 11:34	29° Ω 45'20	
superior conj	12363 Sep 15 11:32	4° Ω 42'53	0°21'52	morning set	Č		
minimum elong	12363 Sep 15 10:24	4° £ 36'56	0-21-52	Double diet	12364 Aug 19 14:48	0°M)	1 25020 AII
evening rise	12363 Sep 22 19:36	20° ₽ 14'00		max. Earth dist.	12364 Aug 23 03:37	6° Mg 33'26	1.35929 AU
	12363 Sep 27 14:14	0°M	21926106		12264 A 20, 02-27	100 m 1512 4	0000122
evening max el	12363 Oct 12 17:07	22°M57'26	21-2606	superior conj	12364 Aug 29 03:37	18° Mp 15'34	
desc. node	12363 Oct 16 08:23	26°M01'34		minimum elong	12364 Aug 29 04:08	18° Mp 18'11	0°08'33
retrograde	12363 Oct 24 20:14	28°M59'12		behind sun begin	12364 Aug 28 22:47	17° m 51'25	
evening set	12363 Oct 27 13:58	28°M41'56	5020152	behind sun end	12364 Aug 29 09:28	18° Mp 45'00	
inferior conj	12363 Nov 05 13:01	24°M47'16		asc. node	12364 Aug 30 00:43	20° Mp 01'48	
minimum elong	12363 Nov 05 04:42	24°M58'56	5°18'41		12364 Sep 03 21:44	0∘ ⊽	
min. Earth dist.	12363 Nov 05 17:41	24°M40'44	0.54547 AU	evening rise	12364 Sep 06 02:26	4° £ 30'46	
morning rise	12363 Nov 13 20:19	20°M58'22			12364 Sep 20 13:55	0°M	2000 422
direct	12363 Nov 17 16:09	20°M26'46	22024122	evening max el	12364 Sep 23 20:43	3°M45'18	20°04'22
morning max el	12363 Nov 30 07:19	26°M29'11	22°24'33	desc. node	12364 Oct 02 05:49	8°M47'11	
,	12363 Dec 03 15:16	0° ⊼ ¹		retrograde	12364 Oct 04 09:44	9°M00'02	
asc. node	12363 Dec 10 05:03	9° ∡ '03'49		evening set	12364 Oct 06 09:02	8°M49'51	2055126
	12363 Dec 21 09:03	0°る		inferior conj	12364 Oct 15 08:02	4°M50'55	
morning set	12363 Dec 22 03:14	1° る 35'42		minimum elong	12364 Oct 14 22:24	5°M05'23	3°51'55
	100/03 00 01 00	1.60 72 272 5	1022154	min. Earth dist.	12364 Oct 17 02:10	3°M47'38	0.54947 AU
superior conj	12363 Dec 29 04:02	16° る 37'31		morning rise	12364 Oct 23 10:38	0°M41'26	
minimum elong	12363 Dec 29 05:33	16°₹45'35		r.	12364 Oct 26 10:46	30° ₹ Ω	
max. Earth dist.	12364 Jan 01 20:06	24° る 17'50	1.34049 AU	direct	12364 Oct 28 03:02	29° £ 53'43	
	12364 Jan 04 15:50	0° ≈			12364 Oct 29 19:05	0° M	

morning max el	12364 Nov 10 18:31	6° M ₊36'07	2401245		12365 Nov 03 02:57	0°M.	
asc. node	12364 Nov 26 02:01	27°M31'37	24 12 43	asc. node	12365 Nov 12 22:52	16°M33'09	
use. Houe	12364 Nov 27 11:00	0° ⊼		ase. Houe	12365 Nov 19 14:42	0° ⊼	
morning set	12364 Dec 05 15:07	16° ∡ 721'42		morning set	12365 Nov 20 02:20	1°×702'09	
morning sec	12364 Dec 11 21:21	0°る		morning sec	12303 1101 20 02.20	1 % 02 0)	
	12301 Dec 11 21:21	ů O		superior conj	12365 Nov 26 21:25	15° ∡ ′58'55	1°37'30
superior conj	12364 Dec 12 11:05	1° る 14'58	1°38'17	minimum elong	12365 Nov 26 20:44	15° √ 55'04	1°38'20
minimum elong	12364 Dec 12 11:29	1°る17'07	1°39'11	max. Earth dist.	12365 Nov 27 23:45	18° × ⁷ 24'41	1.31736 AU
max. Earth dist.	12364 Dec 14 18:42	6° ප 16'08	1.32653 AU		12365 Dec 03 08:13	0°ප	
evening rise	12364 Dec 19 22:31	17° ට 03'02		evening rise	12365 Dec 03 22:14	1° る 13'27	
<i>8</i> 11	12364 Dec 26 16:00	0° ≈		desc. node	12365 Dec 16 00:44	24° ろ 08'33	
desc. node	12364 Dec 29 03:45	4° ≈ 26'54			12365 Dec 19 14:54	0° ≈	
	12365 Jan 15 04:15	0° ∀		evening max el	12366 Jan 05 01:03	21° ≈ 00'14	27°26'21
evening max el	12365 Jan 22 15:54	8° ¥ 16'57	27°30'11	retrograde	12366 Jan 18 22:51	28° ≈ 18'33	
retrograde	12365 Feb 05 09:27	15° ¥ 41'52		evening set	12366 Jan 25 21:26	26° ≈ 03'51	
evening set	12365 Feb 12 06:36	13°) 13′54		min. Earth dist.	12366 Jan 29 15:21	23° ≈ 10′39	0.61685 AU
min. Earth dist.	12365 Feb 16 01:29	9° ¥ 56′05	0.63723 AU	inferior conj	12366 Feb 01 16:04	20° ≈ 25'28	-2°20'56
inferior conj	12365 Feb 18 17:32	7°) 12′03	-1°04'36	minimum elong	12366 Feb 01 20:56	20° ≈ 14'21	2°18'23
minimum elong	12365 Feb 18 19:36	7°) €06'46	1°03'19	morning rise	12366 Feb 08 23:14	15° ≈ 24'56	
asc. node	12365 Feb 22 00:19	4°) €04'02		asc. node	12366 Feb 08 21:40	15° ≈ 26′10	
morning rise	12365 Feb 25 10:49	1° ¥ 53'56		direct	12366 Feb 11 03:28	15° ≈ 04'23	
direct	12365 Feb 27 20:57	1° ¥ 25′01		morning max el	12366 Feb 18 01:04	18° ≈ 33'47	17°50'01
morning max el	12365 Mar 06 08:10	4°) 44'42	17°47'48		12366 Feb 26 08:16	0° ∀	
morning set	12365 Mar 22 21:46	29°) (49′57		morning set	12366 Mar 05 18:00	12° ¥ 58'36	
	12365 Mar 23 00:07	0° Y		desc. node	12366 Mar 14 01:46	27°) (44′08	
desc. node	12365 Mar 27 05:12	7° Y 09'56			12366 Mar 15 09:12	0 ° Υ	
superior conj	12365 Apr 04 17:15	21° Y 16'37	-1°01'55	superior conj	12366 Mar 16 18:56	2° Y 24'35	
minimum elong	12365 Apr 04 10:49		1°01'16	minimum elong	12366 Mar 16 16:59	2° Y 16′16	
	12365 Apr 10 03:34	0°B		max. Earth dist.	12366 Mar 23 23:30	14° Y ′23'07	1.43401 AU
max. Earth dist.	12365 Apr 10 07:58	0° 8 17'27	1.44838 AU	evening rise	12366 Mar 30 22:28	25° Y ′27'45	
evening rise	12365 Apr 20 05:38	15° 8 43'08			12366 Apr 02 20:48	0°8	
	12365 Apr 29 16:21	0°II			12366 Apr 23 15:33	0∘П	
evening max el	12365 May 18 14:38	25° Ⅱ 26'52	20°28'33	evening max el	12366 May 01 11:14	9° Ⅱ 14'12	21°40'39
asc. node	12365 May 20 21:25	27° Ⅱ 31'59		asc. node	12366 May 07 18:39	13° Ⅱ 58'06	
_	12365 May 25 15:20	0°9		retrograde	12366 May 10 13:39	14° Ⅲ 34'45	
retrograde	12365 May 26 15:25	0°505'20		evening set	12366 May 15 01:33	12° ∏ 44'44	
	12365 May 27 15:00	30°RⅡ		inferior conj	12366 May 20 08:01	6°Ⅱ28'08	3°02'07
evening set	12365 May 30 16:46	28° Ⅱ 31'15	2012106	minimum elong	12366 May 20 06:40	6° Ⅱ 32'51	
inferior conj	12365 Jun 04 23:20	22° I I25'22		min. Earth dist.	12366 May 20 11:29	6°Ⅱ16'02	0.68731 AU
minimum elong	12365 Jun 04 22:51	22° I I27'00	3°12'12	morning rise	12366 May 25 11:34	0° Ⅱ 13'36	
min. Earth dist.	12365 Jun 05 16:05	21° Ⅱ 27'49 16° Ⅱ 05'38	0.68186 AU	J:4	12366 May 25 17:56	30°R ႘	
morning rise	12365 Jun 10 04:40 12365 Jun 15 17:05	18°Щ05'38 13°Щ39'09		direct	12366 May 30 11:09 12366 Jun 04 18:08	28° 8 04'28 0° Ⅱ	
direct desc. node	12365 Jun 23 06:04	13 Ⅲ 3909 17° Ⅲ 01'55		morning max el	12366 Jun 09 08:14	0 П 3°П54'45	22020149
morning max el	12365 Jun 26 21:18	20°II21'00	24°09'35	desc. node	12366 Jun 10 03:05	4° ∏ 43'08	22 3948
morning max ci	12365 Jul 05 03:34	0°95	24 09 33	desc. Hode	12366 Jun 29 06:44	0.20 4 H+200	
	12365 Jul 25 14:21	0° U		morning set	12366 Jul 13 06:36	21° © 48'25	
morning set	12365 Aug 01 08:59	11° Ω 19'14		max. Earth dist.	12366 Jul 17 23:35	21 348 23 29° 539'40	1.40490 AU
max. Earth dist.	12365 Aug 05 01:26		1.38158 AU	man. Barm dist.	12366 Jul 18 04:22	0°Ω	1.10190110
man. Darun uibt.	12365 Aug 11 16:29	0° m)	1.50150110		12300 (41 10 0 1.22	v 00	
		* ***		superior conj	12366 Jul 25 19:31	13° Ω 23′20	-1°16'14
superior conj	12365 Aug 12 07:38	1° mp 12'05	-0°41'59	minimum elong	12366 Jul 26 01:01	13° Ω 48′09	
minimum elong	12365 Aug 12 10:31	1° m) 25'54		asc. node	12366 Aug 03 18:04	0° mp 00'34	
asc. node	12365 Aug 16 21:22	10° m) 04'34			12366 Aug 03 17:57	0° m)	
evening rise	12365 Aug 21 03:21	18° m) 28'27		evening rise	12366 Aug 04 19:09	1° m) 59'14	
C	12365 Aug 27 03:18	0∘ <u>⊽</u>		evening max el	12366 Aug 20 18:38	27° m/40'34	18°24'34
evening max el	12365 Sep 06 14:15	15° ≏ 21'14	19°03'46	-	12366 Aug 23 14:51	0∘ <u>⊽</u>	
retrograde	12365 Sep 15 11:56	19° ≏ 48'12		retrograde	12366 Aug 28 09:09	1° ≏ 30'43	
evening set	12365 Sep 17 08:29	19° ₽ 37'23		evening set	12366 Aug 30 10:55	1° ≏ 14'23	
desc. node	12365 Sep 19 03:16	19° ≏ 07'57		-	12366 Sep 02 09:56	30°₽,₩)	
inferior conj	12365 Sep 25 18:26	15° ≏ 23'25	-2°05'04	desc. node	12366 Sep 06 00:42	27° m 30'26	
minimum elong	12365 Sep 25 13:03	15° ≏ 32'41	2°02'49	inferior conj	12366 Sep 07 02:12	26° m 39'47	-0°19'51
min. Earth dist.	12365 Sep 28 14:50	13° ≏ 26'25	0.56226 AU	minimum elong	12366 Sep 07 01:27	26°M/41'18	0°19'41
morning rise	12365 Oct 03 14:36	10° ഫ 39'10		min. Earth dist.	12366 Sep 10 09:28	24° m 01'33	0.58144 AU
direct	12365 Oct 09 02:34	9° ഫ 28'25		morning rise	12366 Sep 14 12:30	21°M)18'51	
morning max el	12365 Oct 23 06:11	16° ≏ 42'53	25°54'00	direct	12366 Sep 20 16:10	19° m 40'38	

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morning max el	12366 Oct 04 23:57	27° m) 18'25	27°10'57	morning max el	12367 Sep 17 01:21	8° m 39'03	27°52'16
	12366 Oct 07 14:22	0∘ ⊽			12367 Oct 03 10:08	0∘ ⊽	
	12366 Oct 27 16:49	o° m .		asc. node	12367 Oct 17 16:21	25° - 43'35	
asc. node	12366 Oct 30 19:38	5°M59'30		morning set	12367 Oct 19 15:48	29° Ω 47'52	
				morning set			
morning set	12366 Nov 04 11:08	15° ™ 32'24			12367 Oct 19 18:07	0° ™	
				max. Earth dist.	12367 Oct 25 16:36	12° M 49'34	1.31405 AU
superior conj	12366 Nov 11 09:04	0° ∡ ¹43'14	1°30'52				
minimum elong	12366 Nov 11 07:29	0° х 34′26	1°31'28	superior conj	12367 Oct 26 20:11	15°M22'34	1°18'35
	12366 Nov 11 01:19	0° ∡ ¹		minimum elong	12367 Oct 26 18:03	15°ML10'42	1°18'53
max. Earth dist.	12366 Nov 11 08:16	0° ∡ ³38'50	1.31319 AU		12367 Nov 02 11:15	0° ∡ ¹	
		15° × 30'30'	1.51517710	avanina risa		0° ∡ ¹09'56	
evening rise	12366 Nov 18 03:48			evening rise	12367 Nov 02 13:05		
	12366 Nov 25 06:48	0° ろ			12367 Nov 18 15:15	0° る	
desc. node	12366 Dec 02 21:47	13° る 17'52		desc. node	12367 Nov 19 18:56	1° る 42'27	
	12366 Dec 15 06:36	0° ≈		evening max el	12367 Nov 29 23:14	14° る 01'28	25°37'00
evening max el	12366 Dec 18 04:17	2° ≈ 57'12	26°48'07	retrograde	12367 Dec 13 20:16	21° ට 01'10	
retrograde	12367 Jan 01 02:57	10° ≈ 06'02		evening set	12367 Dec 19 21:30	19° る 36'43	
•				•		16° る 59'04	0.57401 ATT
evening set	12367 Jan 07 19:50	8°≈13'01		min. Earth dist.	12367 Dec 24 11:32		0.57481 AU
min. Earth dist.	12367 Jan 11 18:26	5° ≈ 34'55	0.59538 AU	inferior conj	12367 Dec 27 09:58	14° る 58'07	-4°55'27
inferior conj	12367 Jan 14 22:39	3° ≈ 03'55	-3°41'22	minimum elong	12367 Dec 27 18:20	14° る 43'43	4°52'36
minimum elong	12367 Jan 15 06:16	2° ≈ 48'46	3°38'00	morning rise	12368 Jan 04 17:41	10°る40'45	
	12367 Jan 19 04:15	30°Rる		direct	12368 Jan 06 22:08	10° る 26'07	
morning rise	12367 Jan 22 19:35	28° る 24'00		asc. node	12368 Jan 13 16:12	12° る 56'21	
•							10052126
direct	12367 Jan 24 21:20	28° පි 08'08		morning max el	12368 Jan 15 18:00	14° る 43'20	18°53'36
asc. node	12367 Jan 26 18:58	28° る 22'04			12368 Jan 26 07:38	0° ≈	
	12367 Jan 30 05:59	0° ≈		morning set	12368 Feb 01 03:33	11° ≈ 06'48	
morning max el	12367 Feb 01 13:36	1° ≈ 56'43	18°11'20				
morning set	12367 Feb 17 05:31	26° ≈ 48'54		superior conj	12368 Feb 09 16:04	27° ≈ 42'14	0°47'23
morning sec	12367 Feb 18 22:08	0° ∀		minimum elong	12368 Feb 09 18:46	27°≈55'03	0°47'31
	1230/160 16 22.06	0 /		minimum ciong			0 4/31
					12368 Feb 10 21:14	0° ∀	
superior conj	12367 Feb 26 19:56	14° ¥ 36'58	0°16'30	desc. node	12368 Feb 15 18:58	9° ₩ 00'03	
minimum elong	12367 Feb 26 21:12	14°) (42′40	0°16'37	max. Earth dist.	12368 Feb 16 18:03	10°) 42′53	1.39279 AU
desc. node	12367 Feb 28 22:21	18° ¥ 21'56		evening rise	12368 Feb 20 15:10	17°) €27'23	
max. Earth dist.	12367 Mar 06 10:46	27° ¥ 54'10	1.41476 AU	Č	12368 Feb 28 06:46	$0^{\circ}\mathbf{\Upsilon}$	
man. Darun dist.	12367 Mar 07 16:45	0°Υ	1.111,0110		12368 Mar 20 12:38	0°8	
							2.402.011.0
evening rise	12367 Mar 11 08:14	5° Y ′59'54		evening max el	12368 Mar 26 17:26	6° 8 53'26	24°20'18
	12367 Mar 27 01:23	0°8		retrograde	12368 Apr 07 02:33	13° 8 33'39	
evening max el	12367 Apr 14 03:32	23° 8 02'58	22°59'52	asc. node	12368 Apr 10 13:17	12° 8 40'02	
retrograde	12367 Apr 24 09:45	29° 8 05'59		evening set	12368 Apr 12 13:35	11° 8 15'58	
asc. node	12367 Apr 24 15:56	29° 8 05'40		min. Earth dist.	12368 Apr 17 04:06	5° 8 58'59	0.68418 AU
evening set	12367 Apr 29 09:00	27° 8 01'07		inferior conj	12368 Apr 18 01:43	4° 8 46'14	
•	-		2°40'54	,			
inferior conj	12367 May 04 17:26	20° 8 36'14		minimum elong	12368 Apr 17 23:33	4° 8 53'31	2°08'46
minimum elong	12367 May 04 15:29	20° 8 42'59	2°39'52		12368 Apr 21 23:43	30° ŖƳ	
min. Earth dist.	12367 May 04 08:11	21° 8 08'17	0.68804 AU	morning rise	12368 Apr 23 09:39	28° Ƴ 46′02	
morning rise	12367 May 09 21:52	14° 8 28'19		direct	12368 Apr 27 07:29	27° Y 18'52	
direct	12367 May 14 08:22	12° 8 39'48			12368 May 03 04:33	0°B	
morning max el	12367 May 22 23:31	17° 8 38'25	21°15'09	morning max el	12368 May 04 21:53	1° 8 34'13	20°01'38
desc. node	12367 May 27 23:59	23° 8 18'46	21 13 0)	desc. node	12368 May 13 20:48	12° 8 34'03	20 01 30
uese. Houe				desc. Hode	-		
	12367 Jun 02 02:35	0°Щ		_	12368 May 25 18:47	0°II	
	12367 Jun 22 08:51	0 \circ \odot		morning set	12368 Jun 01 05:10	9° Ⅱ 48'32	
morning set	12367 Jun 23 02:47	1° © 10'20		max. Earth dist.	12368 Jun 11 14:44	26° Ⅱ 04'18	1.44333 AU
max. Earth dist.	12367 Jun 30 03:46	12° 5 27'22	1.42633 AU		12368 Jun 14 01:39	0 \circ \odot	
superior conj	12367 Jul 07 10:50	24° © 39'21	1046'58	superior conj	12368 Jun 17 02:19	4°954'03	2008106
minimum elong	12367 Jul 07 17:45		1°47'08	minimum elong	12368 Jun 17 07:06	5° © 13'29	2°08'47
	12367 Jul 10 13:04	0 $^{\circ}$ Ω		evening rise	12368 Jun 30 06:25	26° © 58'29	
evening rise	12367 Jul 18 21:48	14° Ω 53'15			12368 Jul 02 00:47	$0^{\circ}\Omega$	
asc. node	12367 Jul 21 14:50	19° Ω 45'45		asc. node	12368 Jul 07 11:39	9° Ω 14'57	
	12367 Jul 27 12:20	0° m)		evening max el	12368 Jul 17 19:38		18°05'45
evening max el	12367 Aug 04 05:42	10° mp 33'45	18°05'36	retrograde	12368 Jul 24 05:13	27° Ω 11'28	
•	-		10 03 30	-			
retrograde	12367 Aug 11 00:23	14° Mp 01'49		evening set	12368 Jul 26 22:38	26° Ω 33'32	2005:20
evening set	12367 Aug 13 09:43	13°M)36'11		inferior conj	12368 Aug 02 05:00	21° Ω 19'55	
inferior conj	12367 Aug 20 06:55	8° m 41'00	1°04'40	minimum elong	12368 Aug 02 07:36	21° Ω 12'59	2°04'06
minimum elong	12367 Aug 20 08:48	8° Mp 36'36	1°03'37	min. Earth dist.	12368 Aug 05 00:35	18° Ω 21'10	0.62641 AU
min. Earth dist.	12367 Aug 23 12:16	5° m 41'30	0.60379 AU	morning rise	12368 Aug 08 14:28	15° Ω 09'41	
desc. node	12367 Aug 23 22:07	5° m) 19'52	,,	desc. node	12368 Aug 09 19:33	14° Ω 20'56	
		-			•		
morning rise	12367 Aug 27 04:54	2° m 50'14		direct	12368 Aug 15 06:52	12° Ω 42'34	2505.05
direct	12367 Sep 02 18:11	0° Mp 44′52		morning max el	12368 Aug 29 08:41	20° Ω 44'58	27°54'33

	122/0.0	00.00		t' .	100/01/1 00 04/0/	250520157	
	12368 Sep 06 08:29	0° m)		direct	12369 Jul 29 04:26	25°928'57	
	12368 Sep 25 11:44	0∘ ⊽			12369 Aug 08 00:43	0° Ω	
morning set	12368 Oct 02 14:06	13° ≏ 42'10		morning max el	12369 Aug 11 19:03	3° Ω 27'37	27°21'18
asc. node	12368 Oct 03 13:01	15° ≏ 39'09			12369 Aug 31 18:31	0° m þ	
max. Earth dist.	12368 Oct 07 20:34	24° ≏ 44'45	1.32009 AU	morning set	12369 Sep 16 03:32	27° m 09'27	
					12369 Sep 17 14:06	0∘ ⊽	
superior conj	12368 Oct 10 04:53	29° ≙ 50'41	1°00'47	asc. node	12369 Sep 20 09:41	5° ≙ 42'05	
minimum elong	12368 Oct 10 02:39	29° ₽ 38'28	1°00'46	max. Earth dist.	12369 Sep 20 16:34	6° £ 17'36	1.33146 AU
Č	12368 Oct 10 06:35	0° M .			1		
evening rise	12368 Oct 17 00:09	14°ML43'59		superior conj	12369 Sep 24 09:10	14° ≏ 02'39	0°37'40
evening rise	12368 Oct 24 12:30	0° √		minimum elong	12369 Sep 24 07:25	13° £ 53′23	0°37'28
JJ.		19° ∡ ¹04'13			-	13 = 33 23 29° £ 15'38	0 37 28
desc. node	12368 Nov 05 16:10		2.400.212.0	evening rise	12369 Oct 01 11:10		
evening max el	12368 Nov 10 10:43	24° ∡ ¹20′06	24°02'29		12369 Oct 01 19:32	0° M ₊	
	12368 Nov 18 14:25	0°ಕ			12369 Oct 18 23:18	0° ∡ ¹	
retrograde	12368 Nov 24 01:26	1° る 07'55		evening max el	12369 Oct 22 21:44	4° ҂ 22'53	22°20'58
evening set	12368 Nov 28 23:06	0° る 15'16		desc. node	12369 Oct 23 13:30	5° х 00′29	
	12368 Nov 29 15:41	30°R ✓		retrograde	12369 Nov 04 18:25	10° ≯ ¹46′04	
min. Earth dist.	12368 Dec 04 21:38	27° ∡ 19′00	0.55778 AU	evening set	12369 Nov 08 05:27	10° ∡ 19'43	
inferior conj	12368 Dec 07 00:35	26° ∡ ′01'47	-5°44'58	min. Earth dist.	12369 Nov 16 04:39	6° х 46'41	0.54745 AU
minimum elong	12368 Dec 07 04:53	25° ₹ '55'14		inferior conj	12369 Nov 16 22:16	6° ₹ 121'50	
morning rise	12368 Dec 15 12:39	22° × ⁷ 04'34	0 .5 .2	minimum elong	12369 Nov 16 18:05	6° х ¹27'45	
direct	12368 Dec 18 03:05	21° х 47'16		morning rise	12369 Nov 25 08:02	2° × ⁷ 34'30	3 43 43
			10050126	-			
morning max el	12368 Dec 28 10:23	26° √ 42'22	19°58'36	direct	12369 Nov 28 16:01	2° ∡ 09'30	
asc. node	12368 Dec 30 13:22	28° ∡ ¹56'30		morning max el	12369 Dec 10 12:34	7° ∡ ¹48'05	21°26'02
	12368 Dec 31 10:48	0°ಕ		asc. node	12369 Dec 17 10:27	16° ≯ 06'08	
morning set	12369 Jan 15 08:35	25° る 41'36			12369 Dec 25 14:08	0°ප	
	12369 Jan 17 11:13	0° ≈		morning set	12369 Dec 30 17:54	10° る 25'25	
superior conj	12369 Jan 23 02:36	11° ≈ 26'44	1°10'47	superior conj	12370 Jan 06 23:32	25° る 38'48	1°26'50
minimum elong	12369 Jan 23 05:24	11° ≈ 40'40	1°11'10	minimum elong	12370 Jan 07 01:38	25° ⋜ 49'45	1°27'29
max. Earth dist.	12369 Jan 29 00:24	22°≈53'53	1.37056 AU		12370 Jan 09 02:11	0° ≈	
evening rise	12369 Feb 01 18:14	29° ≈ 46'24	1.57050110	max. Earth dist.	12370 Jan 11 11:01	4°≈46'40	1.35043 AU
desc. node		29°≈34'43				12°≈48'08	1.55045 AU
desc. node	12369 Feb 01 15:38			evening rise	12370 Jan 15 14:12		
	12369 Feb 01 21:16	0°) €		desc. node	12370 Jan 19 12:22	20°≈01'44	
	12369 Feb 20 13:03	0° Υ			12370 Jan 25 07:11	0° ∀	
evening max el	12369 Mar 09 06:46	20° Ƴ 44'29	25°35'08		12370 Feb 15 13:41	0° Υ	
retrograde	12369 Mar 21 15:05	27° Ƴ 51'45		evening max el	12370 Feb 19 20:29	4° Ƴ 30'55	26°36'59
evening set	12369 Mar 27 13:42	25° Ƴ 24'33		retrograde	12370 Mar 04 22:15	11° Y 52'39	
asc. node	12369 Mar 28 10:40	24° Y 37'21		evening set	12370 Mar 11 07:31	9° Ƴ 20′30	
min. Earth dist.	12369 Mar 31 21:10	20° Ƴ 42'46	0.67597 AU	asc. node	12370 Mar 15 08:06	5° Ƴ 16′08	
inferior conj	12369 Apr 02 06:59	18° Ƴ 54'31	1°28'46	min. Earth dist.	12370 Mar 15 09:11	5° Y 12'58	0.66373 AU
minimum elong	12369 Apr 02 05:06	19° Ƴ 00'34	1°27'54	inferior conj	12370 Mar 17 07:06	2° Y '56'04	0°37'25
morning rise	12369 Apr 07 21:01	13° Υ 03'19	1 2, 0.	minimum elong	12370 Mar 17 06:08	2° Υ 58'58	0°37'04
direct	12369 Apr 11 07:07	11° Y ′56'13		minimum ciong	12370 Mar 19 21:06	30° R ₩	0 37 04
	-	15° Υ 40'26	19°02'47	morning rice		27° ₩ 15'36	
morning max el	12369 Apr 18 03:53		19 0247	morning rise	12370 Mar 23 05:49		
	12369 Apr 29 04:23	0°8		direct	12370 Mar 26 05:26	26° ₩ 25'56	
desc. node	12369 Apr 30 17:33	2° 8 18'24		morning max el	12370 Apr 01 16:19	29° ¥ 51'32	18°20'14
greatest brilliancy	12369 May 01 08:36	3° 8 15'00	-0.7m		12370 Apr 01 19:46	0° Υ	
morning set	12369 May 11 09:45	18° 8 39'41		desc. node	12370 Apr 17 14:13	22° Y 23'34	
	12369 May 18 17:07	Π $\circ 0$		morning set	12370 Apr 21 12:35	28° Ƴ 39'07	
max. Earth dist.	12369 May 25 06:48	10° Ⅱ 15'30	1.45411 AU		12370 Apr 22 08:55	8° 0	
superior conj	12369 May 27 20:06	14° Ⅱ 16′24	-2°12'45	superior conj	12370 May 07 03:22	23° 8 17'24	-1°57'09
minimum elong	12369 May 27 18:04	14° Ⅱ 08′25	2°13'33	minimum elong	12370 May 06 18:57	22° 8 44'29	1°57'14
Č	12369 Jun 06 16:50	0 \circ \odot		max. Earth dist.	12370 May 08 02:05	24° 8 46'07	1.45775 AU
evening rise	12369 Jun 11 16:18	8°904'54			12370 May 11 10:30	0°II	
asc. node	12369 Jun 24 08:36	28°522'24		evening rise	12370 May 23 01:54	18° Ⅱ 11'40	
asc. nouc	12369 Jun 25 11:10	28 3 22 24 0° Ω		evening 1150	12370 May 23 01:34 12370 May 30 15:01	18 ப 1140	
			10004114		•		0.0
evening max el	12369 Jul 01 09:13	7° Ω 24'40	18°24'14	greatest brilliancy	12370 Jun 02 08:53	4°5514'28	-0.8m
retrograde	12369 Jul 07 19:15	10° Ω 51′06		asc. node	12370 Jun 11 05:37	16° © 59'29	
evening set	12369 Jul 10 21:00	9° Ω 58'39		evening max el	12370 Jun 14 19:43	21° © 06'47	19°00'10
inferior conj	12369 Jul 16 16:21	4° Ω 28'35	2°44'57	retrograde	12370 Jun 21 14:47	24° © 52'06	
minimum elong	12369 Jul 16 18:31	4° £ 22′11	2°43'44	evening set	12370 Jun 25 01:16	23°5643'43	
min. Earth dist.	12369 Jul 18 22:24	1° Ω 49'49	0.64700 AU	inferior conj	12370 Jun 30 13:14	17° 9 58'41	3°06'51
	12369 Jul 20 14:40	30° ℝ ∽		minimum elong	12370 Jun 30 14:26	17° 9 54'50	3°05'50
morning rise	12369 Jul 22 14:47	28°908'33		min. Earth dist.	12370 Jul 02 04:29	15° © 53'45	0.66406 AU
desc. node	12369 Jul 27 16:54	25° © 36'39		morning rise	12370 Jul 06 02:56	11°935'44	
	,	/		5			

direct	12370 Jul 12 09:06	8° © 54'16			12371 Jun 15 23:49	30°RⅡ	
	12370 Jul 12 09:00 12370 Jul 14 14:11	9° © 11'50		marnina rias	12371 Jun 20 00:13	25° ∏ 23'16	
desc. node			26920106	morning rise	12371 Jun 25 19:40	23 H 23 16 22° H 49'21	
morning max el	12370 Jul 25 05:55	16°934'26	26°20'06	direct			
	12370 Aug 05 09:13	0° N		desc. node	12371 Jul 01 11:23	24° ∏ 43'59	25000100
	12370 Aug 24 15:52	0° m)		morning max el	12371 Jul 07 16:09	29° ∏ 55'44	25°00'09
morning set	12370 Aug 30 04:47	10° Mp 01'07	1.24500.444		12371 Jul 07 17:50	0° ©	
max. Earth dist.	12370 Sep 03 02:28	17° m) 29'08	1.34790 AU		12371 Jul 30 06:02	0°N	
asc. node	12370 Sep 07 06:20	25° Mp 48'06		morning set	12371 Aug 12 13:42	22°Ω06'46	
				max. Earth dist.	12371 Aug 16 03:39	28° Ω 35'54	1.36856 AU
superior conj	12370 Sep 08 06:31	27° m 51'55	0°09'40		12371 Aug 16 21:49	0° m)	
minimum elong	12370 Sep 08 05:59	27° m 49'12	0°09'27				
behind sun begin	12370 Sep 08 01:09	27° m 24'20		superior conj	12371 Aug 22 17:55	11°Mp 10'23	
behind sun end	12370 Sep 08 10:50	28° m 14'07		minimum elong	12371 Aug 22 19:22	11°Mp17'33	0°22'28
	12370 Sep 09 07:21	0∘ ত		asc. node	12371 Aug 25 02:58	15° m 53'15	
evening rise	12370 Sep 15 20:09	13° ≏ 39'28		evening rise	12371 Aug 31 00:48	27° m 49'08	
	12370 Sep 24 04:29	0° ™			12371 Sep 01 02:50	0∘ ত	
evening max el	12370 Oct 04 17:40	14° M 47'11	20°48'56	evening max el	12371 Sep 17 03:20	25° ≏ 55'06	19°35'51
desc. node	12370 Oct 10 10:53	19° ™ 03'44			12371 Sep 22 22:06	0° M	
retrograde	12370 Oct 16 05:12	20°M29'13		retrograde	12371 Sep 26 22:48	0° ™ 48'44	
evening set	12370 Oct 18 13:01	20°M16'12		desc. node	12371 Sep 27 08:19	0° ™ 48'16	
inferior conj	12370 Oct 27 13:59	16°M21'44	-4°49'48	evening set	12371 Sep 28 19:39	0°M38'51	
minimum elong	12370 Oct 27 04:08	16° ™ 35'47	4°46'46		12371 Oct 01 04:35	30° Ŗ Ω	
min. Earth dist.	12370 Oct 28 11:36	15° ™ 50'54	0.54602 AU	inferior conj	12371 Oct 07 14:13	26° ≏ 34'18	-3°09'34
morning rise	12370 Nov 04 19:18	12°M26'31		minimum elong	12371 Oct 07 06:03	26° ≙ 47'13	3°06'19
direct	12370 Nov 09 00:15	11° M 48'33		min. Earth dist.	12371 Oct 09 21:13	25° ♀ 07'34	0.55396 AU
morning max el	12370 Nov 22 02:58	18° ™ 08'53	23°10'16	morning rise	12371 Oct 15 14:31	22° ₽ 11'30	
	12370 Dec 01 16:52	0° ∡ ¹		direct	12371 Oct 20 15:35	21° ≏ 14'55	
asc. node	12370 Dec 04 07:28	4° ₮ 09'41		morning max el	12371 Nov 03 13:15	28° ₽ 11′08	24°57'55
morning set	12370 Dec 15 05:25	25° ∡ 12'35			12371 Nov 05 08:51	0°M	
	12370 Dec 17 10:59	0°ರ		asc. node	12371 Nov 21 04:22	22°M53'17	
					12371 Nov 24 21:53	0° ∡ ¹	
superior conj	12370 Dec 22 03:39	10° る 09'26	1°35'58	morning set	12371 Nov 29 17:12	9° ∡ ¹56'58	
minimum elong	12370 Dec 22 04:42	10°る15'04	1°36'49				
max. Earth dist.	12370 Dec 25 05:24	16° る 41'28	1.33398 AU	superior conj	12371 Dec 06 12:19	24° ∡ ′50′15	1°38'42
evening rise	12370 Dec 29 23:28	26° る 23'23		minimum elong	12371 Dec 06 12:14	24° ∡ ¹49'48	1°39'34
	12370 Dec 31 19:49	0° ≈		max. Earth dist.	12371 Dec 08 07:16	28° ∡ ¹45'29	1.32204 AU
desc. node	12371 Jan 06 09:10	10° ≈ 16′29			12371 Dec 08 20:58	8°0	
	12371 Jan 18 15:49	0°) €		evening rise	12371 Dec 13 18:40	10° る 22'46	
evening max el	12371 Feb 02 09:57	18° ¥ 03′05	27°18'24	desc. node	12371 Dec 24 06:03	0° ≈ 12'17	
retrograde	12371 Feb 15 23:03	25° ∺ 28′24			12371 Dec 24 03:13	0° ≈	
evening set	12371 Feb 22 16:55	22°) 57′05			12372 Jan 14 17:44	0°) €	
min. Earth dist.	12371 Feb 26 13:56	19° ∺ 22'02	0.64784 AU	evening max el	12372 Jan 15 21:14	1° ₩ 07'15	27°32'34
inferior conj	12371 Feb 28 23:35	16°) 45′07	-0°24'23	retrograde	12372 Jan 29 16:39	8°) €29'11	
minimum elong	12371 Mar 01 00:19	16°) 43′09	0°23'48	evening set	12372 Feb 05 15:21	6°) €05'48	
asc. node	12371 Mar 02 05:29	15°) €24'48		min. Earth dist.	12372 Feb 09 09:23	2°) 59′33	0.62885 AU
morning rise	12371 Mar 07 09:28	11° ∺ 17'50		inferior conj	12372 Feb 12 05:34	0°) (13′27	-1°36'05
direct	12371 Mar 10 00:07	10°) 42′17		minimum elong	12372 Feb 12 08:46	0°) €05'38	1°34'15
morning max el	12371 Mar 16 08:51	14° ₩ 00'51	17°54'40		12372 Feb 12 11:04	30° R ≈	
	12371 Mar 27 18:13	$0^{\circ}\mathbf{\Upsilon}$		asc. node	12372 Feb 17 02:52	26° ≈ 04'34	
morning set	12371 Apr 02 20:16	10° Ƴ 03'46		morning rise	12372 Feb 19 04:38	25° ≈ 02'26	
desc. node	12371 Apr 04 10:50	12° Ƴ 43'52		direct	12372 Feb 21 12:04	24° ≈ 37'24	
	12371 Apr 15 00:48	9° 8		morning max el	12372 Feb 28 02:31	27° ≈ 59'39	17°46'34
	-				12372 Feb 29 22:49	0° ∀	
superior conj	12371 Apr 16 17:59	2° 8 44'31	-1°24'46	morning set	12372 Mar 15 04:54	22° 升 39'38	
minimum elong	12371 Apr 16 09:24	2° 8 10'19	1°24'11	C	12372 Mar 19 10:16	$0^{\circ}\mathbf{Y}$	
max. Earth dist.	12371 Apr 20 22:12	9° 8 21'00	1.45393 AU	desc. node	12372 Mar 21 07:24	3° Y 13'59	
evening rise	12371 May 02 17:36	27° 8 40'15					
•	12371 May 04 06:05	$\Pi^{\circ}0$		superior conj	12372 Mar 27 05:27	13° Ƴ 12'21	-0°44'25
greatest brilliancy	12371 May 17 07:40	19° Ⅲ 39'25	-0.6m	minimum elong	12372 Mar 27 00:58	12° Y 53'45	0°43'53
-	12371 May 24 19:24	0ಂತಾ		max. Earth dist.	12372 Apr 02 16:13	23° Y '42'25	1.44299 AU
evening max el	12371 May 29 01:11	4° © 52'27	19°52'09		12372 Apr 06 15:28	0°8	
asc. node	12371 May 29 02:43	4° © 56'17		evening rise	12372 Apr 11 05:27	7° 8 07'37	
retrograde	12371 Jun 05 13:03	9° © 08'29		-	12372 Apr 26 13:10	0°Щ	
evening set	12371 Jun 09 08:51	7° © 43'35		evening max el	12372 May 11 00:49	18° Ⅱ 39′06	20°57'57
inferior conj	12371 Jun 14 16:35	1°9544'47	3°14'21	asc. node	12372 May 14 23:52	22° I 100'09	
minimum elong	12371 Jun 14 16:42	1° 5 644'24	3°13'27	retrograde	12372 May 19 11:54	23° Ⅱ 34'58	
min. Earth dist.	12371 Jun 15 17:16	0° © 21'46	0.67677 AU	evening set	12372 May 23 17:44	21° Ⅱ 53'46	
				-	•		

inferior conj	12372 May 28 23:57	15° ∏ 42'55	3°09'44	inferior conj	12373 May 13 09:10	29° 8 48'32	2054122
minimum elong	12372 May 28 23:05	15° I I42'56	3°08'49	minimum elong	12373 May 13 07:32	29° 8 54'16	2°53'22
min. Earth dist.	12372 May 29 10:53	15° ∏ 05'01	0.68477 AU	minimum clong	12373 May 13 07:52 12373 May 13 05:53	30°RB	2 33 22
morning rise	12372 Jun 03 04:13	9° П 25'18	0.064// AU	min. Earth dist.	12373 May 13 07:08	29° 8 55'39	0.68810 AU
direct	12372 Jun 08 11:09	7° П 05'58		morning rise	12373 May 18 12:46	23° 8 36'33	0.00010710
desc. node	12372 Jun 17 08:28	11° II 45'30		direct	12373 May 23 06:39	21° 8 36'06	
morning max el	12372 Jun 19 02:22	13° П 26'18	23°31'20	morning max el	12373 Jun 01 14:52	27° 8 04'32	22°02'47
morning max ci	12372 Jul 02 11:30	0°95	23 31 20	desc. node	12373 Jun 04 05:27	29° 8 52'10	22 02 47
	12372 Jul 22 02:53	$0 {\circ} \Omega$		desc. node	12373 Jun 04 08:12	0°II	
morning set	12372 Jul 24 01:36	3°Ω15'13			12373 Jun 26 00:50	0°es	
max. Earth dist.	12372 Jul 28 01:20	10° Ω 05'53	1.39156 AU	morning set	12373 Jul 04 12:18	13° © 15'49	
max. Darm dist.	123/2341 20 01.20	10 000000	1.57150710	max. Earth dist.	12373 Jul 10 01:24	22°S20'32	1.41436 AU
superior conj	12372 Aug 04 15:39	23° Ω 49′26	-0°56'37	man. Bartir dist.	12373 Jul 14 13:45	0°Ω	1.11.50110
minimum elong	12372 Aug 04 19:41	24°Ω08'13					
	12372 Aug 07 22:06	0° m)		superior conj	12373 Jul 17 19:18	5° Ω 38'19	-1°30'01
asc. node	12372 Aug 10 23:38	5° m 54'06		minimum elong	12373 Jul 18 01:40	6°Ω06'26	1°30'00
evening rise	12372 Aug 13 22:20	11° mp 37'28		evening rise	12373 Jul 28 09:08	24° Ω 54'19	
	12372 Aug 24 01:16	0∘ ⊽		asc. node	12373 Jul 28 20:19	25°Ω46'12	
evening max el	12372 Aug 30 01:54	ა — 7° ჲ 50'41	18°44'27	use. Itsue	12373 Jul 31 03:17	0° m)	
retrograde	12372 Sep 07 09:14	12° ⊆ 00'51	102,	evening max el	12373 Aug 13 09:38	20° m) 25'55	18°14'05
evening set	12372 Sep 09 07:19	11° Ω 48'16		retrograde	12373 Aug 20 14:31	24° m) 04'58	
desc. node	12372 Sep 13 05:46	10° ₽ 13'01		evening set	12373 Aug 22 19:13	23° mp 45'14	
inferior conj	12372 Sep 17 09:32	7° م 25'32	-1°18'33	inferior conj	12373 Aug 30 02:34	19° m 02'00	0°18'54
minimum elong	12372 Sep 17 06:17	7° ₽ 31'31	1°17'13	minimum elong	12373 Aug 30 03:13	19° mp 00'38	0°18'24
min. Earth dist.	12372 Sep 20 12:13	5° ഫ 08'59	0.56978 AU	desc. node	12373 Aug 31 03:15	18° m) 08'39	
morning rise	12372 Sep 25 01:52	2° ₽ 25'01		min. Earth dist.	12373 Sep 02 10:25	16° Mp 11'41	0.59073 AU
direct	12372 Sep 30 20:50	1° ഫ 03'13		morning rise	12373 Sep 06 07:45	13° m) 26'53	0.07075110
morning max el	12372 Oct 15 03:24	8° ഫ 28'42	26°30'38	direct	12373 Sep 12 16:18	11° mp 36'29	
8	12372 Oct 31 07:48	0°M		morning max el	12373 Sep 27 00:36	19° m) 23'07	27°33'10
asc. node	12372 Nov 07 01:11	12°M06'41			12373 Oct 06 01:23	0∘ ⊽	
morning set	12372 Nov 13 03:36	24°M34'06			12373 Oct 24 01:34	0° M	
	12372 Nov 15 15:43	0° ⊼		asc. node	12373 Oct 24 21:56	1° M 41'17	
		• •		morning set	12373 Oct 28 10:53	8°M58'48	
superior conj	12372 Nov 19 23:26	9° ∡ ³35'15	1°35'23				
minimum elong	12372 Nov 19 22:20	9° ∡ ¹29'08	1°36'08	superior conj	12373 Nov 04 11:05	24°M18'21	1°26'20
max. Earth dist.	12372 Nov 20 14:15	10° ∡ 57'46	1.31496 AU	minimum elong	12373 Nov 04 09:14	24° M ₀07'58	1°26'49
evening rise	12372 Nov 26 21:08	24° ₹ ³39'43		max. Earth dist.	12373 Nov 03 22:57	23°M10'39	1.31288 AU
C	12372 Nov 29 10:59	ರ°0			12373 Nov 07 00:24	0° ∡ ¹	
desc. node	12372 Dec 10 03:02	19° ප් 41'32		evening rise	12373 Nov 11 04:31	9° х 07'56	
	12372 Dec 16 20:01	0° ≈		Č	12373 Nov 21 19:41	ರ°0	
evening max el	12372 Dec 28 03:57	13° ≈ 31'03	27°14'12	desc. node	12373 Nov 27 00:09	8° ප 33'47	
retrograde	12373 Jan 11 02:18	20° ≈ 45'54		evening max el	12373 Dec 10 03:41	25° る 05'36	26°21'32
evening set	12373 Jan 17 23:39	18° ≈ 39'01		Č	12373 Dec 16 14:14	0° ≈	
min. Earth dist.	12373 Jan 21 18:26	15° ≈ 54'02	0.60777 AU	retrograde	12373 Dec 24 02:28	2°≈11'26	
inferior conj	12373 Jan 24 21:40	13° ≈ 12'38		evening set	12373 Dec 30 13:51	0° ≈ 29'52	
minimum elong	12373 Jan 25 03:48	12° ≈ 59'26		Ü	12373 Dec 31 12:00	30°Rる	
morning rise	12373 Feb 01 10:54	8° ≈ 20'55		min. Earth dist.	12374 Jan 03 17:16	27° る 53'53	0.58630 AU
asc. node	12373 Feb 03 00:12	8° ≈ 04'06		inferior conj	12374 Jan 06 20:26	25° る 33'35	-4°14'30
direct	12373 Feb 03 13:35	8° ≈ 02'49		minimum elong	12374 Jan 07 04:46	25° る 17'58	
morning max el	12373 Feb 10 18:03	11° ≈ 38'58	17°56'43	morning rise	12374 Jan 14 22:33	21° る 03'20	
	12373 Feb 22 23:29	0°) {		direct	12374 Jan 17 00:28	20° ප් 48'35	
morning set	12373 Feb 26 08:12	6°) €07'23		asc. node	12374 Jan 20 21:29	21° る 42'48	
desc. node	12373 Mar 08 03:56	23°) € 50'00		morning max el	12374 Jan 25 03:42	24° る 48'32	18°26'40
				Č	12374 Jan 29 11:16	0° ≈	
superior conj	12373 Mar 08 17:24	24°) (48'52	-0°04'24	morning set	12374 Feb 10 00:44	20°≈11'13	
minimum elong	12373 Mar 08 17:02	24°) (47'16		. 8	12374 Feb 15 03:50	0°) €	
behind sun begin	12373 Mar 08 09:09	24°) 12'50					
behind sun end	12373 Mar 09 00:55	25°) 21'38		superior conj	12374 Feb 19 03:10	7°) €25'52	0°30'29
	12373 Mar 11 17:32	0°Υ		minimum elong	12374 Feb 19 05:14	7°) €35'25	0°30'35
max. Earth dist.	12373 Mar 16 05:45	7° Υ '33'43	1.42623 AU	desc. node	12374 Feb 23 00:31	14°) 28'41	
evening rise	12373 Mar 22 04:20	17° Υ '09'32		max. Earth dist.	12374 Feb 26 14:36	20°) 45'23	1.40554 AU
	12373 Mar 30 12:10	0°8		evening rise	12374 Mar 02 23:02	28° \ 05'54	
	12373 Apr 21 12:12	0°II			12374 Mar 04 02:47	20 γ (03 34	
evening max el	12373 Apr 23 19:11	0°П 2°П26'14	22°13'49		12374 Mar 04 02:47	%8 0°B	
asc. node	12373 May 01 21:08	7° П 55'01	22 13 77	evening max el	12374 Mai 24 01:30 12374 Apr 06 10:14	16° 8 16'16	23°34'25
retrograde	12373 May 01 21:08 12373 May 03 09:32	7 П 3301 8° П 05'51		retrograde	12374 Apr 00 10.14 12374 Apr 17 04:28	22° 8 36'36	23 37 23
evening set	12373 May 03 09.32 12373 May 08 02:09	6° П 09'16		asc. node	12374 Apr 17 04.28 12374 Apr 18 18:28	22° 8 25'01	
evening set	12313 Iviay 00 02.09	0 1107 10		ase. Houc	12317 Apr 10 10.20	22 023 01	

evening set	12374 Apr 22 08:35	20° 8 26'12		evening set	12375 Apr 06 11:27	4° 8 38'59	
min. Earth dist.	12374 Apr 27 03:54	14° 8 48'23	0.68687 AU	evening set	12375 Apr 00 11:27 12375 Apr 10 15:50	4 O 36 3 <i>y</i>	
inferior conj	12374 Apr 27 18:23	13° 8 58'42	2°28'59	min. Earth dist.	12375 Apr 10 13:50 12375 Apr 10 22:54	29° Y ′36′57	0.68123 AU
minimum elong	12374 Apr 27 16:17	14° 8 05'53	2°27'55	inferior conj	12375 Apr 10 22:34 12375 Apr 12 01:38	28° Υ '08'42	1°53'41
morning rise	12374 May 02 23:57	7° 8 53'39	2 27 33	minimum elong	12375 Apr 11 23:31	28° Υ 15'41	1°52'40
direct	12374 May 07 04:57	6° 8 14'09		morning rise	12375 Apr 17 11:50	22°Υ12'01	1 32 40
morning max el	12374 May 15 08:52	10° 8 53'26	20°42'14	direct	12375 Apr 21 04:38	20° Υ '53'24	
desc. node	12374 May 13 00:32 12374 May 22 02:18	18° 8 46'38	20 42 14	morning max el	12375 Apr 28 10:25	24° Υ 53'42	19°34'39
dese. Hode	12374 May 30 04:26	0°II		morning max or	12375 May 02 21:56	0°8	17 3 . 37
morning set	12374 Jun 13 23:11	22° ∏ 14'23		desc. node	12375 May 08 23:04	8° 8 15'21	
morning set	12374 Jun 18 21:47	0°95		greatest brilliancy	12375 May 11 02:35	11° 8 22'29	-0.6m
max. Earth dist.	12374 Jun 22 07:59	5° © 28'56	1.43422 AU	greatest similare	12375 May 23 10:37	0°II	0.0111
max. Lartii dist.	12574 Jun 22 07.57	3 32030	1.43422 110	morning set	12375 May 23 23:35	0° П 49'46	
superior conj	12374 Jun 29 00:45	16° © 29'14	_1°57'31	max. Earth dist.	12375 Jun 04 21:37	19° Ⅱ 23'18	1.44880 AU
minimum elong	12374 Jun 29 07:21	16°956'51		max. Earth dist.	125/5 Juli 04 21.5/	17 1125 10	1.44000710
minimum ciong	12374 Jul 06 22:26	0°Ω	1 3 / 34	superior conj	12375 Jun 09 06:18	26° Ⅱ 19'40	-2°12'26
evening rise	12374 Jul 11 04:45	7° Ω 29'15		minimum elong	12375 Jun 09 08:37	26° I 13'40	
asc. node	12374 Jul 15 17:07	15° Ω 25'33		minimum clong	12375 Jun 11 13:05	0°95	2 13 10
asc. Houe	12374 Jul 13 17:07 12374 Jul 24 21:33	0° m)		avanina riaa	12375 Jun 23 04:08	19° © 10'17	
	12374 Jul 24 21:33		10002125	evening rise		19 3 10 17	
evening max el		3° Mp 31'20	18°03'25	4-	12375 Jun 29 15:34	0 8 <i>t</i> 4°Ω46'33	
retrograde	12374 Aug 03 11:55	6° Mp 54'03		asc. node	12375 Jul 02 14:01	4 δ l 46 33 16° Ω 57'03	10011127
evening set	12374 Aug 06 00:44	6° Mp 23'29	1022116	evening max el	12375 Jul 11 12:41		18°11'27
inferior conj	12374 Aug 12 15:11	1° Mp 20'27	1°33'16	retrograde	12375 Jul 17 21:09	20° Ω 18'06	
minimum elong	12374 Aug 12 17:34	1° Mp 14'33	1°31'58	evening set	12375 Jul 20 18:12	19° Ω 34'03	202424
	12374 Aug 13 23:30	30°R€	0.61060.477	inferior conj	12375 Jul 26 19:24	14° Ω 13'06	
min. Earth dist.	12374 Aug 15 17:13	28° Ω 18'31	0.61362 AU	minimum elong	12375 Jul 26 21:55	14° Ω 06'04	2°23'14
desc. node	12374 Aug 18 00:41	26° Ω 17'30		min. Earth dist.	12375 Jul 29 09:26	11° Ω 21'06	0.63555 AU
morning rise	12374 Aug 19 07:48	25° Ω 20'19		morning rise	12375 Aug 01 23:58	7° Ω 57'59	
direct	12374 Aug 25 23:26	23° Ω 04'26		desc. node	12375 Aug 04 22:05	6° Ω 12'07	
	12374 Sep 08 02:31	0° ™		direct	12375 Aug 08 15:56	5° Ω 24'30	
morning max el	12374 Sep 09 04:36	1° m 03'07	27°57'45	morning max el	12375 Aug 22 13:27	13° Ω 25'57	27°44'25
	12374 Sep 30 06:42	0∘ ⊽			12375 Sep 04 21:20	0° m)	
asc. node	12374 Oct 11 18:37	21° ≏ 30'56			12375 Sep 22 20:02	0∘ ⊽	
morning set	12374 Oct 12 13:08	23° ≏ 06'04		morning set	12375 Sep 26 08:04	6° ≏ 50'20	
	12374 Oct 15 19:39	0° M		asc. node	12375 Sep 28 15:17	11° ≏ 30'34	
max. Earth dist.	12374 Oct 18 05:45	5°M15′23	1.31599 AU	max. Earth dist.	12375 Oct 01 06:56	17° ≏ 03'11	1.32433 AU
superior conj	12374 Oct 19 21:28	8°M54'03	1°11'42	superior conj	12375 Oct 04 04:37	23° ≏ 16'50	0°51'38
minimum elong	12374 Oct 19 19:13	8°M41'40	1°11'52	minimum elong	12375 Oct 04 02:30	23° ჲ 05'26	0°51'32
evening rise	12374 Oct 26 14:49	23°M41'58		Z .	12375 Oct 07 06:38	0° M .	
<i>8</i> 21	12374 Oct 29 14:20	0° ⊼ ¹		evening rise	12375 Oct 11 02:10	8°M16'41	
desc. node	12374 Nov 13 21:21	26° х 34′19		* · · · · · · · · · · · · · · · · · · ·	12375 Oct 22 06:21	0° ∡ 7	
***************************************	12374 Nov 16 12:13	0°ਰ		desc. node	12375 Oct 31 18:40	13° ∡ ¹23'39	
evening max el	12374 Nov 21 19:18	5° る 49'25	24°58'53	evening max el	12375 Nov 03 05:39	15° ∡ 58'00	23°19'05
retrograde	12374 Dec 05 14:45	12° る 44'24		retrograde	12375 Nov 16 14:02	22° ∡ ³36'41	
evening set	12374 Dec 11 05:26	11° る 33'55		evening set	12375 Nov 20 21:26	21° × 756'22	
min. Earth dist.	12374 Dec 16 07:15		0.56691 AU	min. Earth dist.	12375 Nov 27 15:21		0.55246 AU
inferior conj	12374 Dec 18 07:13	7° る 07'06		inferior conj	12375 Nov 29 05:35	17° × 751'14	
minimum elong	12374 Dec 19 06:19	6° る 55'07		minimum elong	12375 Nov 29 06:32	17° × 7'49'51	
morning rise	12374 Dec 17 00:17	2°る58'34	3 10 41	morning rise	12375 Dec 07 17:18	14° × ⁷ 00'04	5 51 55
direct	12374 Dec 27 07:25	2°る43'18		direct	12375 Dec 07 17:18 12375 Dec 10 14:43	13° × ⁷ 39'59	
asc. node	12374 Dec 29 17:03 12375 Jan 07 18:43	6° る 55'39		morning max el	12375 Dec 10 14:43 12375 Dec 21 13:44	13 ✗ 39 39 18° ✗ 52'48	20°33'10
morning max el	12375 Jan 08 03:23	0 3 3339 7° る 16'11	19°18'23	asc. node	12375 Dec 21 13:44 12375 Dec 25 15:51	23° x 27'48	20 33 10
morning max er	12375 Jan 22 17:57	0°≈	19 16 23	asc. node	12375 Dec 23 13:31 12375 Dec 30 03:36	23 メ ・2746 0°る	
	12375 Jan 22 17:37 12375 Jan 25 02:10					0°る 19°る18'04	
morning set	125/5 Jan 25 02:10	4° ≈ 37'50		morning set	12376 Jan 09 09:22		
superior conj					12276 Ion 14 12:20	0°00	
minimum elong		20°≈≈49'23	0°58'13		12376 Jan 14 13:20	0° ≈	
	12375 Feb 02 05:58	20°≈49'23 21°≈03'18	0°58'13 0°58'27	superior coni			1°18'28
minimum crong	12375 Feb 02 05:58 12375 Feb 02 08:50	21° ≈ 03'18	0°58'13 0°58'27	superior conj	12376 Jan 16 21:24	4° ≈ 47'16	1°18'28 1°18'57
_	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02	21° ≈ 03'18 0° 米	0°58'27	minimum elong	12376 Jan 16 21:24 12376 Jan 16 23:58	4°≈47'16 5°≈00'20	1°18'57
max. Earth dist.	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04	21°≈03'18 0°¥ 3°¥17'16		minimum elong max. Earth dist.	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08	4°≈47'16 5°≈00'20 15°≈20'13	
max. Earth dist. desc. node	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08	21°≈03'18 0° X 3° X 17'16 5° X 05'53	0°58'27	minimum elong max. Earth dist. evening rise	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28	1°18'57
max. Earth dist.	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08 12375 Feb 12 14:56	21°≈03'18 0° X 3° X 17'16 5° X 05'53 9° X 56'50	0°58'27	minimum elong max. Earth dist.	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40 12376 Jan 27 17:50	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28 25°≈38'03	1°18'57
max. Earth dist. desc. node	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08 12375 Feb 12 14:56 12375 Feb 24 22:00	21°≈03'18 0° ₩ 3° ₩ 17'16 5° ₩ 05'53 9° ₩ 56'50 0° ❤	0°58'27	minimum elong max. Earth dist. evening rise	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40 12376 Jan 27 17:50 12376 Jan 30 05:01	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28 25°≈38'03 0°¥	1°18'57
max. Earth dist. desc. node evening rise	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08 12375 Feb 12 14:56 12375 Feb 24 22:00 12375 Mar 19 20:34	21°≈03'18 0° ₩ 3° ₩17'16 5° ₩05'53 9° ₩56'50 0° ₩ 0° ₩	0°58'27 1.38323 AU	minimum elong max. Earth dist. evening rise desc. node	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40 12376 Jan 27 17:50 12376 Jan 30 05:01 12376 Feb 18 16:35	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28 25°≈38'03 0°)€ 0°°	1°18'57 1.36169 AU
max. Earth dist. desc. node evening rise	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08 12375 Feb 12 14:56 12375 Feb 24 22:00 12375 Mar 19 20:34 12375 Mar 19 23:57	21°≈03'18 0° ₩ 3° ₩17'16 5° ₩05'53 9° ₩56'50 0° Ψ 0° ₩ 0° ₩08'21	0°58'27	minimum elong max. Earth dist. evening rise desc. node	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40 12376 Jan 27 17:50 12376 Jan 30 05:01 12376 Feb 18 16:35 12376 Mar 01 13:29	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28 25°≈38'03 0°₩ 0°Ψ' 13°Υ'58'31	1°18'57
max. Earth dist. desc. node evening rise	12375 Feb 02 05:58 12375 Feb 02 08:50 12375 Feb 07 02:02 12375 Feb 08 21:04 12375 Feb 09 21:08 12375 Feb 12 14:56 12375 Feb 24 22:00 12375 Mar 19 20:34	21°≈03'18 0° ₩ 3° ₩17'16 5° ₩05'53 9° ₩56'50 0° ₩ 0° ₩	0°58'27 1.38323 AU	minimum elong max. Earth dist. evening rise desc. node	12376 Jan 16 21:24 12376 Jan 16 23:58 12376 Jan 22 05:08 12376 Jan 26 01:40 12376 Jan 27 17:50 12376 Jan 30 05:01 12376 Feb 18 16:35	4°≈47'16 5°≈00'20 15°≈20'13 22°≈35'28 25°≈38'03 0°)€ 0°°	1°18'57 1.36169 AU

4-	12276 Mar. 22, 12-17	16° Ƴ 37'20			12277 E-L 14 17.04	0° Ƴ	
asc. node min. Earth dist.	12376 Mar 22 13:17 12376 Mar 24 13:58	16° Y 3720 14° Y $15'48$	0.67132 AU	retrograde	12377 Feb 14 17:04 12377 Feb 25 10:13	5° Υ 04'20	
inferior conj	12376 Mar 24 13.38 12376 Mar 26 04:57	12° Y $14'31$	1°08'15	evening set	12377 Feb 23 10.13 12377 Mar 03 23:36	2° Υ 31'23	
minimum elong	12376 Mar 26 03:23	12° Y $19'27$	1°07'34	evening set	12377 Mar 05 23:30 12377 Mar 06 17:00	2 1 31 23 30° ₹	
morning rise	12376 Mar 31 22:23	6° Y 27'47	1 0/34	min. Earth dist.	12377 Mar 07 17:00	28° ¥ 38'17	0.65741 AU
direct	12376 Mai 31 22:23 12376 Apr 04 03:57	5°Υ28'23		asc. node	12377 Mar 07 23:01 12377 Mar 09 10:41	26° X 56'03	0.03741 AU
morning max el	12376 Apr 10 19:24	9° Υ 02'42	18°42'39	inferior conj	12377 Mar 10 02:08	26° X 11'24	0°12'27
desc. node	12376 Apr 10 19:24 12376 Apr 24 19:46	28° Υ '09'10	16 42 39	minimum elong	12377 Mar 10 02:08 12377 Mar 10 01:47	26° X 12'24	0°12'28
desc. Hode	12376 Apr 26 00:28	0°8		transit middle	12377 Mar 10 01:47	26° X 12'24	0°12'28
morning set	12376 May 02 11:50	10° 8 05'13		transit begin	12377 Mar 10 01:47	26° X 17'47	0 12 20
morning set	12376 May 02 11:30 12376 May 15 05:53	0°II		transit ocgin	12377 Mar 10 03:39	26°\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\	
max. Earth dist.	12376 May 17 15:51	3° ∏ 46'26	1.45660 AU	morning rise	12377 Mar 16 05:39	20°\(\frac{1}{36}\)32	
max. Earth dist.	12370 Way 17 13.31	3 Д40 20	1.43000 AU	direct	12377 Mar 10 03:20 12377 Mar 19 00:55	19° H 53'24	
superior coni	12376 May 18 17:30	5° Ⅱ 26'47	2000125	morning max el	12377 Mar 19 00:55 12377 Mar 25 09:59	23°) 14'34	18°07'17
superior conj minimum elong	12376 May 18 17:30 12376 May 18 12:14	5° Π 06'08		morning max er	12377 Mar 23 09:39 12377 Mar 30 22:31	23 χ 14 34 0° Υ	18 0/1/
evening rise	12376 Jun 03 03:29	29° I I50'20	2 09 09	desc. node	12377 Apr 11 16:24	18° Υ 21'26	
evening rise	12376 Jun 03 05:54	0°95		morning set	12377 Apr 11 10:24 12377 Apr 13 02:54	20° Υ 41'12	
greatest brilliancy	12376 Jun 10 01:21	10° © 53'35	-0.9m	morning set	12377 Apr 13 02:34 12377 Apr 18 21:28	0°8	
asc. node	12376 Jun 18 10:59	23°942'04	-0.9111		123// Apr 16 21.26	00	
asc. Houc	12376 Jun 23 11:39	23 3 42 04		superior conj	12377 Apr 28 01:45	14° 8 33'38	1045'01
evening max el	12376 Jun 24 01:10	0° Ω 34'37	10027126	minimum elong	12377 Apr 28 01:43 12377 Apr 27 16:28	13° 8 57'07	
•	12376 Jun 30 14:01	4°Ω07'42	16 37 20	max. Earth dist.	•		1.45696 AU
retrograde				max. Earth dist.	12377 Apr 30 11:42	18 O 2042 0° Ⅱ	1.43090 AU
evening set	12376 Jul 03 19:27 12376 Jul 07 08:52	3° Ω 08'30			12377 May 07 23:17	0° П 9° П 37'21	
:c:		30°R≌	205(110	evening rise	12377 May 14 04:11	9° П 3/21 28° П 33'04	-0.7m
inferior conj	12376 Jul 09 11:12	27°531'36		greatest brilliancy	12377 May 26 12:21	28 п 33 04 0° ©	-0.7111
minimum elong min. Earth dist.	12376 Jul 09 12:59 12376 Jul 11 10:52	27°\$26'06 25°\$06'10	2°55'03 0.65469 AU	aga mada	12377 May 27 11:41 12377 Jun 05 08:03	12° © 03'42	
morning rise	12376 Jul 11 10.32 12376 Jul 15 05:36	23 \$300 10 21°\$09'36	0.03409 AU	asc. node		12 903 42 14°918'33	19°20'24
	12376 Jul 13 03.36 12376 Jul 21 16:23	18°\$28'19		evening max el	12377 Jun 07 09:36 12377 Jun 14 11:07	14 \$21633 18°\$16'05	19 20 24
direct desc. node				retrograde			
	12376 Jul 21 19:25	18°528'23	26959121	evening set	12377 Jun 18 01:24	17°500'49	2011127
morning max el	12376 Aug 04 00:26	26°\$20'52	26°58'21	inferior conj	12377 Jun 23 11:11	11°509'38	3°11'37
	12376 Aug 07 09:39	0° N		minimum elong	12377 Jun 23 11:55	11°507'12	3°10'41
	12376 Aug 28 11:30	0° mp		min. Earth dist.	12377 Jun 24 20:10	9°521'44	0.66993 AU
morning set	12376 Sep 08 16:45	20° m 03'42	1 22707 111	morning rise	12377 Jun 28 21:56	4°5546'36	
max. Earth dist.	12376 Sep 12 23:04	28° Mp 27'48 0° <u>₽</u>	1.33787 AU	direct	12377 Jul 04 23:43 12377 Jul 08 16:38	2°507'20	
1-	12376 Sep 13 17:16	1° -2 35'16		desc. node		2°956'44	25947152
asc. node	12376 Sep 14 11:54	1 == 35 16		morning max el	12377 Jul 17 11:18	9° © 35'50	25°47'53
	12276 S 17 06:14	70 0 10155	0927122		12377 Aug 02 13:45	0° N	
superior conj	12376 Sep 17 06:14	7° ♀ 19'55 7° ♀ 12'58		morning set	12377 Aug 21 00:54	0° Т р 2° Тр 37'34	
minimum elong evening rise	12376 Sep 17 04:55	7 ≗ 12 38 22° ≗ 45'58	0 2008	max. Earth dist.	12377 Aug 22 11:37 12377 Aug 26 04:49	2 11/3 / 34 9° 11/3 34'23	1 25621 AII
evening rise	12376 Sep 24 12:35 12376 Sep 28 00:25	0°M		max. Earth dist.	123// Aug 20 04.49	9 11/23423	1.35621 AU
evening max el	12376 Sep 28 00.23 12376 Oct 14 19:13	26°M05'08	21°39'52	superior conj	12377 Aug 31 23:43	20° m 56'55	0002121
desc. node	12376 Oct 14 19:13 12376 Oct 17 16:02	28°M35'42	21 39 32	minimum elong	12377 Aug 31 23:43 12377 Aug 31 23:57	20° m/ 58'03	0°03'43
desc. flode	12376 Oct 17 10.02 12376 Oct 19 17:26	20 11€35 42 0° 🗷		behind sun begin	12377 Aug 31 23.37 12377 Aug 31 17:55	20° my 27'40	0 03 43
ratra ara da	12376 Oct 19 17:20 12376 Oct 27 03:23	2° ∡ 13'12		behind sun end	•		
retrograde		1° × ⁷ 53'59			12377 Sep 01 05:58	21° Mp 28'29	
evening set	12376 Oct 30 01:13			asc. node	12377 Sep 01 08:33	21° Mp 41'35	
inferior conj	12376 Nov 04 04:47 12376 Nov 07 22:59	30°RM 27°M58'45	_5°20'25	evening rise	12377 Sep 05 09:50 12377 Sep 08 20:00	0° ჲ 7° ჲ 04'29	
3	12376 Nov 07 22:39 12376 Nov 07 15:33	28°M09'09		evening rise	-	0°M	
minimum elong min. Earth dist.			0.54569 AU	avaning may al	12377 Sep 21 08:49	6°M46'18	20015116
	12376 Nov 07 21:44		0.34309 AU	evening max el desc. node	12377 Sep 26 20:42 12377 Oct 04 13:26	11°M42'20	20 13 10
morning rise	12376 Nov 16 06:56	24°M10'55				12°M08'11	
direct	12376 Nov 19 23:33	23°M41'17	22909157	retrograde	12377 Oct 07 15:43		
morning max el	12376 Dec 02 10:19	29°M37'36	22°08'5 /	evening set	12377 Oct 09 16:38	11°M57'34	401.014.5
1-	12376 Dec 02 19:42	0° √ 110. ₹ 01150		inferior conj	12377 Oct 18 16:38	8°M00'17	
asc. node	12376 Dec 11 12:53	11° ₹ 01'58		minimum elong	12377 Oct 18 06:43	8°M14'57	
	12376 Dec 21 21:02	0°る		min. Earth dist.	12377 Oct 20 05:49		0.54828 AU
morning set	12376 Dec 23 19:51	4° る 04'09		morning rise	12377 Oct 26 19:56	3°M54'56	
·	1007(D - 20 01 47	10070000	1021122	direct	12377 Oct 31 09:25	3°M09'54	22056125
superior conj	12376 Dec 30 21:45	19° ろ 08'28		morning max el	12377 Nov 13 22:02	9°M47'04	23°56'37
minimum elong	12376 Dec 30 23:26	19°る17'21		asc. node	12377 Nov 28 09:49	29°M23'41	
max. Earth dist.	12377 Jan 03 18:47	27° る 11'44	1.34291 AU		12377 Nov 28 18:07	0° ₹	
	12377 Jan 05 04:04	0°≈		morning set	12377 Dec 08 07:38	18° ₹ 50′26	
evening rise	12377 Jan 08 03:40	5°≈52'15			12377 Dec 13 10:56	0°₹	
desc. node	12377 Jan 13 14:37	16°≈00'29			10000	20-7	1005:
	12377 Jan 21 22:13	0°) {		superior conj	12377 Dec 15 04:04		1°37'53
evening max el	12377 Feb 12 03:00	27°) €39'32	26°57'24	minimum elong	12377 Dec 15 04:38	3° る 47'25	1°38'46

max. Earth dist.	12377 Dec 17 16:12	9°舌08'32	1.32829 AU		12378 Dec 04 21:00	0°₹	
evening rise	12377 Dec 22 17:30	19° る 38'36	1.52027 110	evening rise	12378 Dec 06 16:09	3° る 46'58	
	12377 Dec 28 01:59	0° ≈		desc. node	12378 Dec 18 08:23	25° る 53'51	
desc. node	12377 Dec 31 11:27	6°≈07'52			12378 Dec 20 19:38	0° ≈	
	12378 Jan 16 00:35	0°) €		evening max el	12379 Jan 08 01:33	23° ≈ 50'40	27°29'04
evening max el	12378 Jan 25 15:39	11°) € 00′54	27°28'08	· ·	12379 Jan 16 18:03	0°)	
retrograde	12378 Feb 08 08:20	18° ¥ 26′23		retrograde	12379 Jan 21 22:50	1°) 09'46	
evening set	12378 Feb 15 04:43	15° ¥ 57'22			12379 Jan 26 21:46	30° ₹ ≈	
min. Earth dist.	12378 Feb 19 00:05	12°) € 35′09	0.64003 AU	evening set	12379 Jan 28 21:37	28° ≈ 52'42	
inferior conj	12378 Feb 21 14:31	9° ¥ 52'33	-0°53'43	min. Earth dist.	12379 Feb 01 15:28	25° ≈ 56'17	0.62003 AU
minimum elong	12378 Feb 21 16:12	9°) 48′09	0°52'37	inferior conj	12379 Feb 04 15:06	23° ≈ 10′29	-2°08'55
asc. node	12378 Feb 24 08:05	7°) 10′23		minimum elong	12379 Feb 04 19:31	23° ≈ 00′12	2°06'33
morning rise	12378 Feb 28 05:49	4°) 31′55		asc. node	12379 Feb 11 05:25	18° ≈ 20′22	
direct	12378 Mar 02 17:01	4° 米 01′26		morning rise	12379 Feb 11 20:08	18° ≈ 07'00	
morning max el	12378 Mar 09 03:24	7° ∺ 20′39	17°49'02	direct	12379 Feb 14 01:08	17° ≈ 45′21	
	12378 Mar 24 08:35	0° Υ		morning max el	12379 Feb 20 20:35	21° ≈ 12'37	17°48'30
morning set	12378 Mar 25 21:55	2° Y 38'18			12379 Feb 27 12:48	0° ∀	
desc. node	12378 Mar 29 12:59	8° Ƴ 46'17		morning set	12379 Mar 08 15:21	15°) 39'16	
		- 1000- 111		desc. node	12379 Mar 16 09:33	29°) 19'36	
superior conj	12378 Apr 08 00:12	24° Υ 24'16			12379 Mar 16 18:54	0° Y	
minimum elong	12378 Apr 07 17:08		1°07'26			00	
P. d. P.	12378 Apr 11 11:53	0°8	1 45000 477	superior conj	12379 Mar 19 22:10	5° Υ 21'45	
max. Earth dist.	12378 Apr 13 06:41	2° 8 49'53	1.45003 AU	minimum elong	12379 Mar 19 19:35	5°Υ10'49	
evening rise	12378 Apr 23 16:11	18° 8 59'56		max. Earth dist.	12379 Mar 26 22:58	17° Υ 00'19	1.43655 AU
	12378 Apr 30 22:09	0°Ⅱ 200Ⅲ04127	20010141	evening rise	12379 Apr 03 07:18	28° Ƴ 39'14	
evening max el	12378 May 21 12:35	28° Ⅱ 04'37 29° Ⅱ 39'43	20°18'41		12379 Apr 04 04:08	0°B 8°0	
asc. node	12378 May 23 05:11 12378 May 23 14:49	29°Щ3943 0° ©		evening max el	12379 Apr 24 15:38 12379 May 04 09:58	11° П 51'56	21°20'16
retrograde	12378 May 29 09:50	2° 9 36'56		asc. node	12379 May 10 02:23	16° Ⅱ 16'22	21 29 10
evening set	12378 Jun 02 09:42	1° © 05'16		retrograde	12379 May 10 02:23	10 H 1022 17° H 05'46	
evening set	12378 Jun 03 15:22	1 3 03 10		evening set	12379 May 17 18:34	17 H 03 40 15° H 17'57	
inferior conj	12378 Jun 07 16:30	25° Ⅱ 01'16	3°13'45	inferior conj	12379 May 17 18:54 12379 May 23 00:54	9° П 02'52	3°04'27
minimum elong	12378 Jun 07 16:11		3°12'52	minimum elong	12379 May 22 23:41	9° П 07'09	3°03'30
min. Earth dist.	12378 Jun 08 11:20	23°II56'57	0.68074 AU	min. Earth dist.	12379 May 23 06:18	8° Ⅱ 44'05	0.68686 AU
morning rise	12378 Jun 12 22:21	18° Ⅱ 40'59	0.0007.1110	morning rise	12379 May 28 04:35	2° I 47'33	0.00000110
direct	12378 Jun 18 12:40	16° Ⅱ 12'16		direct	12379 Jun 02 06:06	0° Д 35'38	
desc. node	12378 Jun 25 13:47	19° Ⅱ 09'43		desc. node	12379 Jun 12 10:50	6° ∏ 41'13	
morning max el	12378 Jun 29 21:11	23° Ⅱ 00'48	24°22'47	morning max el	12379 Jun 12 07:47	6° ∏ 33'30	22°53'00
C	12378 Jul 06 00:56	0ంతె		Č	12379 Jun 30 11:33	0ಂತಾ	
	12378 Jul 26 21:55	$0^{\circ}\Omega$		morning set	12379 Jul 16 13:32	24°559'22	
morning set	12378 Aug 04 12:07	14° Ω 19'56			12379 Jul 19 13:32	$0^{\circ}\Omega$	
max. Earth dist.	12378 Aug 08 03:04	20° Ω 44′23	1.37816 AU	max. Earth dist.	12379 Jul 21 01:04	2° Ω 31′02	1.40152 AU
	12378 Aug 13 03:32	0° ™					
				superior conj	12379 Jul 28 20:22	16° Ω 18′13	-1°11'10
superior conj	12378 Aug 15 05:46	3° m 59'27	-0°36'47	minimum elong	12379 Jul 29 01:29	16° Ω 41'36	1°11'04
minimum elong	12378 Aug 15 08:16	4° Mp 11′29	0°36'48		12379 Aug 05 04:20	0° ™	
asc. node	12378 Aug 19 05:11	11° M 45'04		asc. node	12379 Aug 06 01:52	1° ™ 42'29	
evening rise	12378 Aug 23 21:56	21°m/05'23		evening rise	12379 Aug 07 15:21	4° m 41'00	
	12378 Aug 28 11:33	0∘ ⊽			12379 Aug 23 04:07	0∘ ⊽	
evening max el	12378 Sep 09 12:18	18° ≏ 15'16	19°11'27	evening max el	12379 Aug 23 15:17	0° Ω 28'29	18°29'03
retrograde	12378 Sep 18 15:20	22° △ 48'42		retrograde	12379 Aug 31 09:46	4° £ 23'25	
evening set	12378 Sep 20 11:42	22° △ 38'17		evening set	12379 Sep 02 10:30	4° Ω 08'09	
desc. node	12378 Sep 21 10:51	22° £ 24'56	2022102	desc. node	12379 Sep 08 08:20	1° Ω 01'17	
inferior conj	12378 Sep 29 00:07	18° £ 27'03			12379 Sep 09 16:37	30°R Mp	0024120
minimum elong	12378 Sep 28 17:57	18° Ω 37'23	2°19'28	inferior conj	12379 Sep 10 04:37	29° Mp 36'33	
min. Earth dist.	12378 Oct 01 17:35	16° ♀ 37'35 13° ♀ 48'40	0.55986 AU	minimum elong	12379 Sep 10 03:16	29° mp 39'11	0°34'11
morning rise direct	12378 Oct 06 21:27 12378 Oct 12 06:48	13° 2 48′40 12° 2 41'41		min. Earth dist. morning rise	12379 Sep 13 11:05 12379 Sep 17 16:33	27° m 03'25 24° m 20'49	0.57827 AU
morning max el	12378 Oct 12 00.48 12378 Oct 26 09:01	12 2 4141 19° 2 51'37	25°40'09	direct	12379 Sep 17 10.33 12379 Sep 23 18:07	24 11/2049 22° 11/46'59	
morning max ci	12378 Oct 20 09:01 12378 Nov 04 00:28	0°M	25 70 07	uncer	12379 Sep 23 18:07 12379 Oct 07 16:45	0° ∵	
asc. node	12378 Nov 04 00:28 12378 Nov 15 06:40	18°M21'13		morning max el	12379 Oct 07 10:45 12379 Oct 08 01:45	0° - 21'36	27°01'43
200. 11000	12378 Nov 21 03:00	0° √			12379 Oct 08 01:43	0°M	_, 51 15
morning set	12378 Nov 22 19:03	3° ∡ ³32′28		asc. node	12379 Nov 02 03:27	7° M 44'21	
	2.			morning set	12379 Nov 07 04:20	18°M04'37	
superior conj	12378 Nov 29 14:02	18° ∡ ¹28'07	1°38'00	5	12379 Nov 12 15:03	0° ∡ 7	
minimum elong	12378 Nov 29 13:30	18° ∡ ¹25'09	1°38'51				
max. Earth dist.	12378 Nov 30 20:34	21° ∡ 16'48	1.31842 AU	superior conj	12379 Nov 14 01:35	3° ҂ 12'38	1°32'14
				- •			

minimum elong	12379 Nov 14 00:08	3° ₹ 04'28		superior conj	12380 Oct 28 12:55	17°M52'49	1°20'48
max. Earth dist.	12379 Nov 14 04:53	3°×731'04	1.31346 AU	minimum elong	12380 Oct 28 10:51	17°M41'16	1°21'09
evening rise	12379 Nov 20 20:58	18° ∡ ′09'25			12380 Nov 03 00:14	0° 🗷	
1 1-	12379 Nov 26 16:37	0°る 15°る08'54		evening rise	12380 Nov 04 05:50	2°፟፟፟҂⁴40'24 0°る	
desc. node	12379 Dec 05 05:25 12379 Dec 15 17:53	0°≈		desc. node	12380 Nov 18 16:56 12380 Nov 21 02:34	3° る 40'59	
ovening may al	12379 Dec 13 17.33 12379 Dec 21 05:47	0 ≈ 5°≈55'01	26°55'59	evening max el	12380 Nov 21 02.34 12380 Dec 02 01:53	3 04039 17° る 06'14	25040122
evening max el	12379 Dec 21 03.47 12380 Jan 04 04:17	3 ≈33 01 13°≈05'11	20 33 39	retrograde	12380 Dec 02 01.33 12380 Dec 15 23:28	17 300 14 24° る 07'48	23 49 23
retrograde evening set	12380 Jan 10 22:43	13 ≈03 11 11°≈08'17		evening set	12380 Dec 13 23:28 12380 Dec 22 03:45	24 00748 22°る38'39	
min. Earth dist.	12380 Jan 14 20:02	8°≈28'56	0.59862 AU	min. Earth dist.	12380 Dec 26 14:28	20°る02'05	0.57768 AU
inferior conj	12380 Jan 18 00:16	5°≈54'44		inferior conj	12380 Dec 29 14:35	17°る55'34	
minimum elong	12380 Jan 18 07:33	5°≈39'59		minimum elong	12380 Dec 29 23:05	17° る 40'37	
morning rise	12380 Jan 25 19:17	1°≈11'40	3 23 30	morning rise	12381 Jan 06 21:04	13° る 35'03	1 12 20
direct	12380 Jan 27 21:11	0°≈55'18		direct	12381 Jan 09 00:37	13° る 20'31	
asc. node	12380 Jan 29 02:44	1°≈01'15		asc. node	12381 Jan 15 00:00	15° る 20'57	
morning max el	12380 Feb 04 10:01	4° ≈ 40'11	18°06'53	morning max el	12381 Jan 17 15:55	17° る 32'54	18°45'57
morning set	12380 Feb 20 00:54	29° ≈ 24'14			12381 Jan 26 14:42	0° ≈	
8	12380 Feb 20 08:33	0°) €		morning set	12381 Feb 02 21:37	13° ≈ 38'36	
				Č	12381 Feb 11 08:31	0°) €	
superior conj	12380 Feb 29 19:55	17° ¥ 25′13	0°11'12				
minimum elong	12380 Feb 29 20:48	17° ¥ 29′13	0°11'20	superior conj	12381 Feb 11 13:30	0° ∺ 23'32	0°43'09
behind sun begin	12380 Feb 29 15:21	17°) 04'49		minimum elong	12381 Feb 11 16:05	0°) 35'42	0°43'17
behind sun end	12380 Mar 01 02:16	17° ¥ 53'35		desc. node	12381 Feb 17 02:42	10° ¥ 35′13	
desc. node	12380 Mar 02 06:06	19°) 57′00		max. Earth dist.	12381 Feb 18 18:32	13°) 31′49	1.39610 AU
	12380 Mar 08 02:03	0° Y		evening rise	12381 Feb 22 17:48	20°) €22'22	
max. Earth dist.	12380 Mar 08 11:00	0° Ƴ 37'35	1.41787 AU		12381 Feb 28 14:27	0° Υ	
evening rise	12380 Mar 13 14:03	9° Y 03'05			12381 Mar 21 09:40	$0^{\circ}B$	
	12380 Mar 27 06:05	0° 8		evening max el	12381 Mar 29 16:49	9° 8 30'25	24°08'33
evening max el	12380 Apr 16 02:45	25° 8 40'23	22°47'50	retrograde	12381 Apr 09 22:16	16° 8 06'06	
	12380 Apr 21 07:58	Π °0		asc. node	12381 Apr 12 21:04	15° 8 26'31	
asc. node	12380 Apr 25 23:41	1° Ⅲ 37′13		evening set	12381 Apr 15 07:30	13° 8 50'08	
retrograde	12380 Apr 26 04:48	1° Ⅱ 37'26		min. Earth dist.	12381 Apr 19 23:11	8° 8 27'46	0.68500 AU
	12380 Apr 30 13:43	30° ₹ 8		inferior conj	12381 Apr 20 18:58	7° 8 20'45	2°15'14
evening set	12380 May 01 02:22	29° 8 34'32		minimum elong	12381 Apr 20 16:49	7° 8 28'04	2°14'09
inferior conj	12380 May 06 10:22	23° 8 10'37	2°44'49	morning rise	12381 Apr 26 02:13	1° 8 19'14	
minimum elong	12380 May 06 08:29	23° 8 17'08	2°43'46		12381 Apr 28 16:01	30° ŖƳ	
min. Earth dist.	12380 May 06 02:56	23° 8 36'25	0.68820 AU	direct	12381 Apr 30 01:49	29° Y ′48'59	
morning rise	12380 May 11 14:31	17° 8 01'42			12381 May 01 12:37	0°8	
direct	12380 May 16 02:54	15° 8 10'08	21027112	morning max el	12381 May 07 19:35	4° 8 10'18	20°11'42
morning max el	12380 May 24 22:22	20° 8 16'13	21°2/12	desc. node	12381 May 16 04:35	14° 8 20'05	
desc. node	12380 May 29 07:46	25° 8 10'00			12381 May 27 00:41	0°П	
	12380 Jun 02 03:00	0°II		morning set max. Earth dist.	12381 Jun 04 17:28	13° Ⅱ 13'25 28° Ⅱ 40'53	1 44112 411
marning sat	12380 Jun 22 16:08 12380 Jun 25 13:28	0° © 4° © 31'39		max. Earth dist.	12381 Jun 14 14:06	28°Щ40′33 0° ©	1.44113 AU
morning set max. Earth dist.	12380 Jul 23 13.28 12380 Jul 02 04:25	4 931 39 15°9 11'42	1.42336 AU		12381 Jun 15 09:52	0 39	
max. Earm dist.	12380 Jul 02 04.23	13 591142	1.42330 AU	superior conj	12381 Jun 20 10:09	8° © 07'25	2005/48
superior conj	12380 Jul 09 15:03	27°5643'32	-1°42'46	minimum elong	12381 Jun 20 15:35	8°\$29'39	
minimum elong	12380 Jul 09 13:03	28°913'13		evening rise	12381 Jul 03 08:00	29°©55'22	2 00 20
minimum ciong	12380 Jul 10 22:34	0°Ω	1 42 32	evening rise	12381 Jul 03 09:04	0°Ω	
evening rise	12380 Jul 20 20:21	17° Ω 42'00		asc. node	12381 Jul 09 19:29	11° Ω 02'13	
asc. node	12380 Jul 22 22:38	21° Ω 30'01		evening max el	12381 Jul 20 15:25	26°Ω32'12	18°04'33
	12380 Jul 27 17:39	0° m)		retrograde	12381 Jul 27 01:45	29° Ω 52'51	
evening max el	12380 Aug 06 01:38		18°07'08	evening set	12381 Jul 29 17:55	29° Ω 16'58	
retrograde	12380 Aug 12 22:40	16° m) 48'12		inferior conj	12381 Aug 05 02:16	24° Ω 06′05	1°57'39
evening set	12380 Aug 15 06:44	16° m) 24'14		minimum elong	12381 Aug 05 04:52		1°56'17
inferior conj	12380 Aug 22 06:28	11° m 32'01	0°53'25	min. Earth dist.	12381 Aug 07 23:42	21° Ω 05'47	0.62316 AU
minimum elong	12380 Aug 22 08:06	11° m)28'18		morning rise	12381 Aug 11 13:33	17° Ω 58'04	
desc. node	12380 Aug 25 05:49	8° m 49'15		desc. node	12381 Aug 12 03:15	17° Ω 34'23	
min. Earth dist.	12380 Aug 25 12:43	8° m 34'10	0.60039 AU	direct	12381 Aug 18 05:57	15° Ω 33'28	
morning rise	12380 Aug 29 06:20	5° m 44'50		morning max el	12381 Sep 01 08:51	23° N 35'29	27°56'28
direct	12380 Sep 04 18:32	3° m 43'17			12381 Sep 07 02:38	0° ™	
morning max el	12380 Sep 19 02:16	11° m)35'51	27°48'34		12381 Sep 26 20:45	0∘ ⊽	
	12380 Oct 03 13:05	0∘ 亚		morning set	12381 Oct 05 09:10	16° ≏ 20'21	
asc. node	12380 Oct 19 00:11	27° ≏ 26′02		asc. node	12381 Oct 05 20:52	17° ≏ 20'10	
	12380 Oct 20 06:20	0° M		max. Earth dist.	12381 Oct 10 18:12	27° ≏ 39'49	1.31886 AU
morning set	12380 Oct 21 09:45	2°M22'28			12381 Oct 11 20:00	0° M	
max. Earth dist.	12380 Oct 27 13:26	15°M42'18	1.31358 AU				

superior conj	12381 Oct 12 22:09	2°M23'04	1°03'50		12382 Sep 19 01:43	0∘ ⊽	
minimum elong	12381 Oct 12 19:54	2°M10'43	1°03'52	asc. node	12382 Sep 22 17:31	7° ≙ 22'14	
evening rise	12381 Oct 19 16:46	17° M .14'30		max. Earth dist.	12382 Sep 23 15:33	9° ≏ 16'09	1.32945 AU
	12381 Oct 25 21:31	0° ∡ 7					
desc. node	12381 Nov 07 23:50	21° x 13'36	24017127	superior conj	12382 Sep 27 03:14	16° £ 38′01	0°41'31
evening max el	12381 Nov 13 14:15	27° ⋌ ³30'27	24°17'27	minimum elong	12382 Sep 27 01:22	16° £ 28′04	0°41'20
. 1	12381 Nov 16 11:01	0°る			12382 Oct 03 07:55	0°M	
retrograde	12381 Nov 27 06:41	4°る20'38		evening rise	12382 Oct 04 03:55	1°M46'58	
evening set	12381 Dec 02 08:57	3° そ 23'32	0.55000 444	1 1	12382 Oct 19 16:04	0° ⊼ ¹	
min. Earth dist.	12381 Dec 08 01:33		0.55990 AU	desc. node	12382 Oct 25 21:10	7° ∡ 724'42	22025140
	12381 Dec 08 21:54	30°₹ ⋌ ¹	5040100	evening max el	12382 Oct 26 00:50	7° х 33'41	22°35'49
inferior conj	12381 Dec 10 08:13	29° ₹ 06'50 28° ₹ 58'39		retrograde	12382 Nov 08 01:01	14° ∡ *01'11 13° ∡ *31'40	
minimum elong	12381 Dec 10 13:31 12381 Dec 18 20:07	25° x '36 39	3 3637	evening set min. Earth dist.	12382 Nov 11 17:12 12382 Nov 19 08:46		0.54845 AU
morning rise direct	12381 Dec 18 20.07 12381 Dec 21 08:26	23 x · 00 33 24° x · 50'20			12382 Nov 19 08.46 12382 Nov 20 07:55	9° ₹ 32′26	
morning max el	12381 Dec 21 08:20 12381 Dec 31 10:20	29° х 30'20	19°47'31	inferior conj minimum elong	12382 Nov 20 07:33 12382 Nov 20 05:02	9° x 32 20	
morning max er	12381 Dec 31 10:20	29 メ ・3944	19 4/31	morning rise	12382 Nov 28 18:15	5° × ⁷ 44'33	3 49 20
asc. node	12381 Dec 31 18:38 12382 Jan 01 21:10	1°る09'09		direct	12382 Nov 28 18:15	5° × 20'56	
morning set	12382 Jan 18 01:50	1 30909 28° 3 11'39		morning max el	12382 Dec 01 23:23 12382 Dec 13 14:32	10° x 20 30	21°11'45
morning set	12382 Jan 18 01:30	28 ⊘ 11 39		asc. node	12382 Dec 19 18:15	10 x 33 00 18° x 09'17	21 11 43
	12302 Juli 10 23.13	· ~		ase. Houe	12382 Dec 26 22:58	0° る	
superior conj	12382 Jan 25 22:12	14°≈03'12	1°07'42	morning set	12383 Jan 02 10:40	12°る54'32	
minimum elong	12382 Jan 26 01:03	14 ≈03 12 14°≈17'16	1°08'02	morning set	12363 Jan 02 10.40	12 03432	
max. Earth dist.	12382 Feb 01 00:38	25°≈47'23	1.37375 AU	superior conj	12383 Jan 09 17:47	28° る 11'34	1°24'51
max. Earth dist.	12382 Feb 03 07:39	0° ∀	1.57575710	minimum elong	12383 Jan 09 20:01	28° る 23'09	1°25'27
desc. node	12382 Feb 03 23:21	1° ∺ 10'50		minimum ciong	12383 Jan 10 14:49	0° ≈	1 23 27
evening rise	12382 Feb 04 18:06	2°) 34'46		max. Earth dist.	12383 Jan 14 10:29	0 ~ 7° ≈ 42'07	1.35322 AU
evening rise	12382 Feb 21 17:00	0° Υ		evening rise	12383 Jan 18 11:46	15°≈30'39	1.55522 710
evening max el	12382 Mar 12 06:15	23° Υ 22'15	25°24'40	desc. node	12383 Jan 21 20:03	21°≈39'11	
evening max er	12382 Mar 21 18:56	0°8	23 21 10	desc. Hode	12383 Jan 26 15:17	0° ∀	
retrograde	12382 Mar 24 11:32	0° 8 26'14			12383 Feb 16 06:52	0°Υ	
renograde	12382 Mar 27 00:31	30°RY		evening max el	12383 Feb 22 19:58	7° Υ 10'01	26°28'54
evening set	12382 Mar 30 08:23	28° Υ '00'21		retrograde	12383 Mar 07 19:25	14° Υ 29'58	20 20 3 .
asc. node	12382 Mar 30 18:27	27° Υ '38'21		evening set	12383 Mar 14 03:13	11° Υ 58'18	
min. Earth dist.	12382 Apr 03 16:52	23° Υ 13'14	0.67746 AU	asc. node	12383 Mar 17 15:51	8° Υ 26'22	
inferior conj	12382 Apr 05 00:49	21° Υ '30'00	1°35'41	min. Earth dist.	12383 Mar 18 05:44	7° Υ 45'45	0.66583 AU
minimum elong	12382 Apr 04 22:52	21° Υ 36'20	1°34'47	inferior conj	12383 Mar 20 01:49	5° Υ 32'46	0°45'53
morning rise	12382 Apr 10 13:46	15° Υ '37'13	1 3 1 17	minimum elong	12383 Mar 20 00:40	5° Υ 36'15	0°45'28
direct	12382 Apr 14 01:34	14° Y 27'11		morning rise	12383 Mar 25 23:04	29° \ 50'30	0 13 20
morning max el	12382 Apr 21 00:27	18° Υ 15'15	19°10'30	morning rise	12383 Mar 25 16:37	30°R ₩	
morning max er	12382 Apr 30 07:31	0°8	19 10 30	direct	12383 Mar 29 00:13	28° ¥ 58'21	
desc. node	12382 May 03 01:19	4° 8 00'38		4.1.001	12383 Apr 01 10:10	0°Υ	
greatest brilliancy	12382 May 03 23:24	5° 8 22'51	-0.7m	morning max el	12383 Apr 04 12:00	2° Υ 25'47	18°25'30
morning set	12382 May 14 20:13	21° 8 58'19	0.7111	desc. node	12383 Apr 19 21:58	24° Y 02'54	10 20 30
morning sec	12382 May 20 00:41	0°II		dese. Hode	12383 Apr 23 16:17	0°8	
max. Earth dist.	12382 May 28 05:27		1.45299 AU	morning set	12383 Apr 24 18:58	1° 8 45'39	
superior conj	12382 May 31 06:43	17° Ⅱ 36'15	-2°13'19	superior conj	12383 May 10 14:26	26° 8 37'20	-2°00'46
minimum elong	12382 May 31 05:53	17° Ⅲ 32'57		minimum elong	12383 May 10 06:38	26° 8 06'52	
	12382 Jun 08 00:54	0ಂತಾ		max. Earth dist.	12383 May 11 00:37		1.45774 AU
evening rise	12382 Jun 14 21:26	11° © 10'33			12383 May 12 18:20	0°II	
asc. node	12382 Jun 26 16:25	0° Ω 13'20		evening rise	12383 May 26 10:27	21° Ⅲ 25′28	
	12382 Jun 26 12:55	0°N		C	12383 May 31 21:10	0ංම	
evening max el	12382 Jul 04 05:16	10° Ω 03'53	18°20'21	greatest brilliancy	12383 Jun 04 22:27	6°9519'46	-0.8m
retrograde	12382 Jul 10 14:34	13° Ω 28'21		asc. node	12383 Jun 13 13:25	18° © 55'34	
evening set	12382 Jul 13 15:07	12° Ω 38′08		evening max el	12383 Jun 17 16:20	23°9545'03	18°53'44
inferior conj	12382 Jul 19 11:52	7° Ω 10′29	2°40'06	retrograde	12383 Jun 24 09:28	27° © 26'39	
minimum elong	12382 Jul 19 14:09	7° Ω 03'51		evening set	12383 Jun 27 18:40	26°9520'36	
min. Earth dist.	12382 Jul 21 20:04		0.64418 AU	inferior conj	12383 Jul 03 07:30	20°537'36	3°04'28
morning rise	12382 Jul 25 11:50	0° Ω 51'31		minimum elong	12383 Jul 03 08:52	20° © 33'18	3°03'27
<i>5</i>	12382 Jul 26 15:48	30°Rூ		min. Earth dist.	12383 Jul 05 00:55	18° © 27'10	0.66178 AU
desc. node	12382 Jul 30 00:37	28°\$28'02		morning rise	12383 Jul 08 22:22	14°9514'52	-
direct	12382 Aug 01 02:18	28° © 13'05		direct	12383 Jul 15 05:52	11°533'12	
	12382 Aug 07 01:29	0° Ω		desc. node	12383 Jul 16 21:54	11°5943'10	
morning max el	12382 Aug 14 18:48	6° Ω 12'51	27°28'10	morning max el	12383 Jul 28 05:42	19°5516'45	26°30'42
<i>5</i> 2-	12382 Sep 01 23:29	0° m)		<i>5</i> 22	12383 Aug 06 08:23	0°Ω	· ·
morning set	12382 Sep 19 00:06	29° m 52'03			12383 Aug 26 00:41	0° m/y	
<i>Q</i>	г	4				~	

morning set	12383 Sep 02 03:23	12° m 49'45		direct	12384 Jun 27 15:30	25° Ⅲ 24'15	
max. Earth dist.	12383 Sep 06 03:07	20° m 31'10	1.34516 AU	desc. node	12384 Jul 02 19:05	26° Ⅲ 59'22	
asc. node	12383 Sep 09 14:09	27° m) 28'08			12384 Jul 06 21:49	0°95	
	12383 Sep 10 19:43	0∘ ⊽		morning max el	12384 Jul 09 16:08	2°936'44	25°12'55
	12363 Sep 10 17.43	0 —		morning max ci		0°Ω	23 12 33
	10202 0 11 01 47	00.001110	001.4112		12384 Jul 30 11:44		
superior conj	12383 Sep 11 01:47	0° ჲ 31'18	0°14'13	morning set	12384 Aug 14 15:01	25° Ω 02'50	
minimum elong	12383 Sep 11 01:01	0° 9 27'21	0°13'59		12384 Aug 17 08:25	0° ™	
behind sun begin	12383 Sep 10 22:06	0° ჲ 12'14		max. Earth dist.	12384 Aug 18 05:29	1° m 37'33	1.36527 AU
behind sun end	12383 Sep 11 03:57	0° ٩ 2′29					
evening rise	12383 Sep 18 13:20	16° ₽ 12'41		superior conj	12384 Aug 24 14:50	13° m 54'32	-0°17'19
•	12383 Sep 25 11:16	0° M .		minimum elong	12384 Aug 24 15:57	14° m) 00'02	0°17'26
evening max el	12383 Oct 07 18:55	17°M52'53	21°01'34	asc. node	12384 Aug 26 10:46	17° m) 33'30	
desc. node	12383 Oct 17 18:34	21°M47'15	21 0154	evening rise	12384 Sep 01 18:47	0° ഫ 24'43	
				evening rise	•		
retrograde	12383 Oct 19 12:00	23°M41'56			12384 Sep 01 13:54	0∘ ⊽	
evening set	12383 Oct 21 23:02	23°M27'37		evening max el	12384 Sep 19 02:24	28° ≏ 53'12	19°45'22
inferior conj	12383 Oct 30 23:37	19°M33'21	-5°01'52		12384 Sep 20 06:47	0°M	
minimum elong	12383 Oct 30 14:08	19° ™ 46'45	4°59'07	desc. node	12384 Sep 28 16:00	3°M53'35	
min. Earth dist.	12383 Oct 31 15:23	19° M ₊11'04	0.54566 AU	retrograde	12384 Sep 29 03:58	3°M54'18	
morning rise	12383 Nov 08 05:38	15°M40'51		evening set	12384 Oct 01 01:24	3°M44'26	
direct	12383 Nov 12 07:28	15°ML05'12		Ç	12384 Oct 09 10:07	30°R <u>Ω</u>	
morning max el	12383 Nov 25 06:16	21°M19'11	22°54'07	inferior conj	12384 Oct 09 21:45	29° Ω 41'57	-3°26'15
morning max cr	12383 Dec 02 15:17	0° √	22 3407	minimum elong	12384 Oct 09 12:58	29° ⊆ 55'35	
,				Č			
asc. node	12383 Dec 06 15:14	6° ∡ ¹05′27		min. Earth dist.	12384 Oct 12 00:28	28° ≏ 23'24	0.55221 AU
morning set	12383 Dec 17 21:56	27° ∡ ′41′26		morning rise	12384 Oct 17 22:53	25° ≏ 24'05	
	12383 Dec 18 23:56	0°₹		direct	12384 Oct 22 20:55	24° ≏ 30'48	
					12384 Nov 04 04:13	0° M	
superior conj	12383 Dec 24 20:58	12° る 39'40	1°35'00	morning max el	12384 Nov 05 16:43	1°M22'16	24°42'21
minimum elong	12383 Dec 24 22:11	12° る 46'12	1°35'50	asc. node	12384 Nov 22 12:08	24°M43'23	
max. Earth dist.	12383 Dec 28 03:41	19° る 35'47	1.33618 AU		12384 Nov 25 07:54	0° ⊼ ¹	
evening rise	12384 Jan 01 19:14	29° ろ 01'02	1.55010710	morning set	12384 Dec 01 09:46	12° × ⁷ 26'20	
evening rise				morning set	12364 Dec 01 09.40	12 × 20 20	
	12384 Jan 02 07:16	0° ≈			100017	250 31046	1020140
desc. node	12384 Jan 08 16:52	11° ≈ 55'56		superior conj	12384 Dec 08 05:06	27° ∡ 19'16 −	1°38'40
	12384 Jan 19 18:52	0° ∀		minimum elong	12384 Dec 08 05:11	27° ∡ 19'44	1°39'34
evening max el	12384 Feb 05 09:29	20°) (44′21	27°13'45		12384 Dec 09 10:29	0°ಕ	
retrograde	12384 Feb 18 21:06	28° ∺ 09'34		max. Earth dist.	12384 Dec 10 04:28	1° る 37'45	1.32351 AU
evening set	12384 Feb 25 13:58	25°) 37′37		evening rise	12384 Dec 15 13:08	12° る 56'57	
min. Earth dist.	12384 Feb 29 11:34	21° ¥ 58′03	0.65044 AU	-	12384 Dec 24 11:33	0° ≈ ≈	
inferior conj	12384 Mar 02 19:34	19° ¥ 23'26	-0°14'22	desc. node	12384 Dec 25 13:46	1°≈54'54	
minimum elong	12384 Mar 02 19:59	19° ∺ 22'17		dese. Hode	12385 Jan 14 03:04	0°) €	
· ·		19 X 2217 19° X 22'17					27922124
transit middle	12384 Mar 02 19:59		0-13/30	evening max el	12385 Jan 17 21:08	3°) ₹52'58	21-32-24
transit begin	12384 Mar 02 18:29	19° ∺ 26′25		retrograde	12385 Jan 31 15:56	11° ∺ 16′07	
transit end	12384 Mar 02 21:28	19° ∺ 18'10		evening set	12385 Feb 07 14:14	8° ¥ 50′53	
asc. node	12384 Mar 03 13:14	18°) 34′52		min. Earth dist.	12385 Feb 11 08:28	5°) 40′48	0.63180 AU
morning rise	12384 Mar 09 03:38	13° ¥ 54′09		inferior conj	12385 Feb 14 03:18	2° 升 55′06	-1°24'40
direct	12384 Mar 11 19:34	13°) (16′41		minimum elong	12385 Feb 14 06:05	2°) (48'11	1°23'02
morning max el	12384 Mar 18 04:04	16° ¥ 35′26	17°57'24		12385 Feb 17 06:32	30°R≈	
Ü	12384 Mar 28 00:10	0° Ƴ		asc. node	12385 Feb 18 10:36	29° ≈ 05'57	
morning set	12384 Apr 04 22:22	12° Y ′57'35		morning rise	12385 Feb 21 00:19	27° ≈ 41'37	
desc. node	12384 Apr 05 18:33	14° Υ 20'46		direct	12385 Feb 23 08:39	27°≈15'18	
desc. Hode				uncci			
	12384 Apr 15 09:12	0°8			12385 Mar 01 06:17	0°) {	.=0.1.01.0
				morning max el	12385 Mar 01 21:49	0° ¥ 36′25	17°46'40
superior conj	12384 Apr 19 02:49	5° 8 57'23	-1°30'24	morning set	12385 Mar 18 03:41	25° ¥ 23'52	
minimum elong	12384 Apr 18 17:53	5° 8 21'54	1°29'53		12385 Mar 20 19:35	0 ° Υ	
max. Earth dist.	12384 Apr 22 20:53	11° 8 52'39	1.45495 AU	desc. node	12385 Mar 23 15:08	4° Ƴ 49'33	
	12384 May 04 13:05	$\Pi^{\circ}0$					
evening rise	12384 May 05 04:03	0° Ⅱ 57'30		superior conj	12385 Mar 30 10:47	16° Ƴ 15'17	-0°50'41
greatest brilliancy	12384 May 19 06:04	22° I I16'11	-0.6m	minimum elong	12385 Mar 30 05:35	15° Y ′53'56	
Disacest offiliancy		0°95	0.0111	max. Earth dist.		26° Υ 16'34	
	12384 May 24 17:01			max. Earth dist.	12385 Apr 05 15:14		1. 4449 / AU
asc. node	12384 May 30 10:29	6°\$59'11	100.000		12385 Apr 07 23:34	0°8	
evening max el	12384 May 30 22:34	7° © 30'10	19°43'26	evening rise	12385 Apr 14 15:26	10° 8 22'20	
retrograde	12384 Jun 07 07:31	11° 5 641'06			12385 Apr 27 17:21	Π °0	
evening set	12384 Jun 11 01:53	10°918'37		evening max el	12385 May 13 23:03	21° Ⅱ 16′38	20°47'23
inferior conj	12384 Jun 16 10:03	4° 5 21'41	3°14'02	asc. node	12385 May 17 07:40	24° Ⅱ 12'04	
minimum elong	12384 Jun 16 10:20	4°\$20'44	3°13'07	retrograde	12385 May 22 06:28	26° Ⅱ 06′25	
min. Earth dist.	12384 Jun 17 12:50	2°952'10	0.67514 AU	evening set	12385 May 26 10:41	24° Ⅱ 27'41	
	12384 Jun 19 19:43	30°RⅡ		inferior conj	12385 May 31 16:58	18° Ⅱ 18'27	3°11'09
morning rise	12384 Jun 21 18:24	27° ∏ 59'39		minimum elong	12385 May 31 16:14	18° Ⅲ 20'59	

min. Earth dist.	12385 Jun 01 05:55	17° Ⅲ 33'42	0.68386 AU	min. Earth dist.	12386 May 16 01:59	2° Ⅲ 23′28	0.68790 AU
morning rise	12385 Jun 05 21:34	12° Ⅱ 00'00			12386 May 17 19:46	30° ₹ 8	
direct	12385 Jun 11 06:24	9° Ⅲ 38′06		morning rise	12386 May 21 05:36	26° 8 10'08	
desc. node	12385 Jun 19 16:09	13° Ⅱ 48′56		direct	12386 May 26 01:28	24° 8 06'34	
morning max el	12385 Jun 22 02:18	16° Ⅱ 06'17	23°44'44	morning max el	12386 Jun 04 14:11	29° 8 42'45	22°15'36
-	12385 Jul 03 13:10	0 \circ \mathfrak{S}			12386 Jun 04 21:00	$\Pi^{\circ}0$	
	12385 Jul 23 11:14	$0^{\circ}\Omega$		desc. node	12386 Jun 06 13:09	1° Ⅱ 46'43	
morning set	12385 Jul 27 06:21	6° Ω 20'32			12386 Jun 27 07:05	0 ° \mathfrak{S}	
max. Earth dist.	12385 Jul 31 03:04	13° Ω 01'15	1.38810 AU	morning set	12386 Jul 07 20:58	16° © 31'25	
				max. Earth dist.	12386 Jul 13 02:15	25° 5 07'26	1.41112 AU
superior conj	12385 Aug 07 14:52	26° Ω 39'48	-0°51'25		12386 Jul 15 23:14	$0^{\circ}\Omega$	
minimum elong	12385 Aug 07 18:29	26° Ω 56'50	0°51'21				
-	12385 Aug 09 09:08	0° m)		superior conj	12386 Jul 20 21:33	8° Ω 36′56	-1°25'12
asc. node	12385 Aug 13 07:27	7° m 35'08		minimum elong	12386 Jul 21 03:38	9° Ω 04'03	1°25'08
evening rise	12385 Aug 16 17:35	14° Mp 16'26		evening rise	12386 Jul 31 06:16	27° Ω 38'31	
C	12385 Aug 25 04:24	0∘ <u>ଫ</u>		asc. node	12386 Jul 31 04:12	27° Ω 28'52	
evening max el	12385 Sep 01 23:16	10° ≏ 41'46	18°50'44		12386 Aug 01 12:35	0° m)	
retrograde	12385 Sep 10 11:29	14° £ 57'36		evening max el	12386 Aug 16 05:58	23° m) 11'56	18°17'19
evening set	12385 Sep 12 08:51	14° Ω 45'46		retrograde	12386 Aug 23 13:58	26° m 54'29	
desc. node	12385 Sep 15 13:27	13° Ω 37'13		evening set	12386 Aug 25 17:37	26° Mp 36'01	
inferior conj	12385 Sep 20 13:51	10° Ω 26'12	-1°34'51	inferior conj	12386 Sep 02 03:44	21° m/55'52	0°05'32
minimum elong	12385 Sep 20 09:51			minimum elong	12386 Sep 02 03:55	21° m/55'28	0°05'14
min. Earth dist.	12385 Sep 23 14:40	8° ⊆ 16'07		transit middle	12386 Sep 02 03:55	21° m/55'28	0°05'14
morning rise	12385 Sep 28 07:34	5° £ 31'15	0.50704710	transit begin	12386 Sep 02 00:38	22° m) 02'22	0 03 14
direct	12385 Oct 04 00:10	4° Ω 13'21		transit end	12386 Sep 02 07:12	21° m/48'33	
morning max el	12385 Oct	11° Ω 35'20	26°18'26	desc. node	12386 Sep 02 10:55	21° m/ 40'45	
morning max er	12385 Nov 01 11:49	0°M	20 16 20	min. Earth dist.	12386 Sep 02 10:33 12386 Sep 05 11:40	19° My 09'16	0.58744 AU
asc. node	12385 Nov 09 08:59	13°M52'30			=		0.38744 AU
		27°M04'37		morning rise	12386 Sep 09 10:44	16° M) 25'35	
morning set	12385 Nov 15 20:31	27 1160437 0° x 7		direct	12386 Sep 15 17:46	14° Mp 39'18	27926112
	12385 Nov 17 05:01	0° X '		morning max el	12386 Sep 30 01:55	22° ™ 23'03 0° ₽	27°26'12
	12295 N 22 16:00	100.70257	1027115		12386 Oct 06 19:52	0° ™	
superior conj	12385 Nov 22 16:00	12°×703'57	1°36'15	4-	12386 Oct 25 12:09	3°M24'30	
minimum elong	12385 Nov 22 15:02	11° 🗷 58'37		asc. node	12386 Oct 27 05:46		
max. Earth dist.	12385 Nov 23 10:48	13° ∡ 748'25	1.31567 AU	morning set	12386 Oct 31 04:25	11° M 31'39	
evening rise	12385 Nov 29 14:41	27° 🗷 11'36			1000631 07 00 45	0.60M 47150	1020104
	12385 Nov 30 23:01	0°る		superior conj	12386 Nov 07 03:45	26°M47'59	1°28'04
desc. node	12385 Dec 12 10:46	21° る 28'42		minimum elong	12386 Nov 07 01:59	26°M38'08	1°28'37
	12385 Dec 17 20:33	0° ≈		max. Earth dist.	12386 Nov 06 19:32	26°ML02'11	1.31286 AU
evening max el	12385 Dec 31 04:42	16°≈23'30	27°19'12		12386 Nov 08 14:10	0° ∡ ¹	
retrograde	12386 Jan 14 03:00	23°≈39'51		evening rise	12386 Nov 13 21:32	11° ∡ 738'55	
evening set	12386 Jan 21 00:55	21° ≈ 30′03			12386 Nov 23 03:17	0° る	
min. Earth dist.	12386 Jan 24 19:14	18° ≈ 42'24	0.61093 AU	desc. node	12386 Nov 29 07:52	10° る 27'28	
inferior conj	12386 Jan 27 21:44	15°≈59'16		evening max el	12386 Dec 13 05:49	28° る 06'35	26°31'33
minimum elong	12386 Jan 28 03:26	15°≈46'45	2°39'59		12386 Dec 15 08:55	0° ≈	
morning rise	12386 Feb 04 08:52	11° ≈ 04′29		retrograde	12386 Dec 27 04:42	5°≈13'26	
asc. node	12386 Feb 05 07:57	10° ≈ 51'22		evening set	12387 Jan 02 18:08	3° ≈ 27'48	
direct	12386 Feb 06 11:59	10° ≈ 45'38		min. Earth dist.	12387 Jan 06 19:39	0° ≈ 51'21	0.58944 AU
morning max el	12386 Feb 13 13:55	14°≈19'16	17°54'00		12387 Jan 07 23:02	30°₹₹	4000:
	12386 Feb 24 07:52	0°) {		inferior conj	12387 Jan 09 23:22	28° る 26'59	
morning set	12386 Mar 01 04:38	8°) 45′00		minimum elong	12387 Jan 10 07:31	28° る 11'25	3°59'32
desc. node	12386 Mar 10 11:41	25°) €24'45		morning rise	12387 Jan 17 23:46	23° ප් 53'14	
				direct	12387 Jan 20 01:28	23° る 38'10	
superior conj	12386 Mar 11 19:11	27°) (41'42		asc. node	12387 Jan 23 05:15	24° る 15'01	
minimum elong	12386 Mar 11 18:17	27°) 37′49	0°09'57	morning max el	12387 Jan 28 00:43	27° る 34'04	18°20'49
behind sun begin	12386 Mar 11 11:45	27° ∺ 09'27			12387 Jan 30 05:49	0° ≈	
behind sun end	12386 Mar 12 00:50	28° ∺ 06′08		morning set	12387 Feb 12 19:32	22° ≈ 44'30	
	12386 Mar 13 03:18	0° Υ			12387 Feb 16 15:04	0° ∀	
max. Earth dist.	12386 Mar 19 05:17	10° Y °12′06	1.42900 AU				
evening rise	12386 Mar 25 11:58	20° Y 17'19		superior conj	12387 Feb 22 02:00	10° 米 10′19	0°25'37
	12386 Mar 31 18:48	0°8		minimum elong	12387 Feb 22 03:49	10° ¥ 18'38	0°25'43
	12386 Apr 22 05:16	Π °0		desc. node	12387 Feb 25 08:17	16° 米 03′10	
evening max el	12386 Apr 26 18:10	5° Ⅱ 03'38	22°02'06	max. Earth dist.	12387 Mar 01 14:58	23°) € 30'33	1.40883 AU
asc. node	12386 May 04 04:56	10° Ⅱ 18′20			12387 Mar 05 11:42	0° Y	
retrograde	12386 May 06 04:23	10° Ⅱ 36'44		evening rise	12387 Mar 06 03:32	1° Y 05'11	
evening set	12386 May 10 19:18	8° Ⅱ 42'28			12387 Mar 25 04:25	0° 8	
inferior conj	12386 May 16 02:05			evening max el	12387 Apr 09 09:40	18° 8 53'06	23°22'22
minimum elong	12386 May 16 00:32	2° Ⅱ 28'31	2°56'23	retrograde	12387 Apr 19 23:44	25° 8 07'23	

aga mada	12297 Apr. 21 02:15	25° 8 01'43		aga mada	12200 Amr 06 22:27	8° 8 09'09	
asc. node	12387 Apr 21 02:15			asc. node	12388 Apr 06 23:37	_	
evening set	12387 Apr 25 02:08	22° 8 58'55	2022120	evening set	12388 Apr 08 05:38	7° 8 12'19	0.00000.111
inferior conj	12387 Apr 30 11:25	16° 8 32'20	2°33'29	min. Earth dist.	12388 Apr 12 18:08	2° 8 05'08	0.68236 AU
minimum elong	12387 Apr 30 09:22	16° 8 39'23	2°32'24	inferior conj	12388 Apr 13 19:05	0° 8 42'12	1°59'41
min. Earth dist.	12387 Apr 29 22:47	17° 8 15'50	0.68738 AU	minimum elong	12388 Apr 13 16:56	0° 8 49'20	1°58'39
morning rise	12387 May 05 16:32	10° 8 26'13			12388 Apr 14 07:48	30° Ŗ ♈	
direct	12387 May 09 23:29	8° 8 43'29		morning rise	12388 Apr 19 04:25	24° Ƴ 44'19	
morning max el	12387 May 18 07:09	13° 8 29'17	20°53'28	direct	12388 Apr 22 22:59	23° Y 22'42	
desc. node	12387 May 24 10:02	20° 8 34'22		morning max el	12388 Apr 30 07:34	27° ℃ 27'52	19°43'46
	12387 May 31 08:13	$\Pi^{\circ}0$			12388 May 02 16:19	0° 8	
morning set	12387 Jun 17 10:51	25° Ⅲ 37′05		desc. node	12388 May 10 06:49	9° 8 58'17	
	12387 Jun 20 05:52	0 \circ \circ		greatest brilliancy	12388 May 13 02:18	14° 8 01'32	-0.6m
max. Earth dist.	12387 Jun 25 08:03	8°908'44	1.43157 AU		12388 May 23 17:41	Π°	
				morning set	12388 May 26 11:28	4° Ⅱ 12'01	
superior conj	12387 Jul 02 06:30	19° © 36'35	-1°53'59	max. Earth dist.	12388 Jun 06 20:54	21° I 57'40	1.44700 AU
minimum elong	12387 Jul 02 13:19	20°905'18					
minimum crong	12387 Jul 08 07:51	0° Ω	1 3110	superior conj	12388 Jun 11 15:26	29° Ⅱ 35'05	-2°11'16
evening rise	12387 Jul 14 04:27	10° Ω 20'11		minimum elong	12388 Jun 11 18:43	29° Ⅱ 48'20	
asc. node				minimum ciong		29 п 46 20	2 12 03
asc. node	12387 Jul 18 00:59	17° Ω 10'18			12388 Jun 11 21:37		
	12387 Jul 25 19:06	0° Mp	10002145	evening rise	12388 Jun 25 07:09	22°509'54	
evening max el	12387 Jul 30 18:18	6° Mp 13'20	18°03'47		12388 Jun 29 22:33	0 ° Ω	
retrograde	12387 Aug 06 09:18	9° m ,37′33		asc. node	12388 Jul 03 21:52	6° Ω 34'23	
evening set	12387 Aug 08 20:56	9° ™ 08'44		evening max el	12388 Jul 13 08:29	19° Ω 36′18	18°09'06
inferior conj	12387 Aug 15 13:41	4° Mp 08'23	1°23'29	retrograde	12388 Jul 19 17:10	22° Ω 56'54	
minimum elong	12387 Aug 15 15:55	4° Mg 02′56	1°22'16	evening set	12388 Jul 22 12:56	22° Ω 15′01	
min. Earth dist.	12387 Aug 18 17:00	1° Mp 06'56	0.61020 AU	inferior conj	12388 Jul 28 15:50	16° Ω 56'30	2°18'05
	12387 Aug 19 23:07	30° ₽ Ω		minimum elong	12388 Jul 28 18:24	16° Ω 49'27	2°16'45
desc. node	12387 Aug 20 08:22	29° Ω 40'37		min. Earth dist.	12388 Jul 31 07:50	14° Ω 01'53	0.63239 AU
morning rise	12387 Aug 22 08:10	28° Ω 11′23		morning rise	12388 Aug 03 22:06	10° Ω 42'54	
direct	12387 Aug 28 23:09	25° Ω 59'04		desc. node	12388 Aug 06 05:45	9° Ω 15'21	
	12387 Sep 07 17:39	0° m)		direct	12388 Aug 10 14:18	8°Ω11'33	
morning max el	12387 Sep 12 05:02	3° Mp 56'09	27°56'38	morning max el	12388 Aug 24 13:26	16° Ω 13'26	27°48'41
morning max ci	12387 Oct 01 13:00	0∘ ⊽	27 30 30	morning max cr	12388 Sep 04 21:56	0° m)	27 40 41
1-					-	0∘ ⊽	
asc. node	12387 Oct 14 02:28	23° ₽ 12'09		. ,	12388 Sep 23 06:31		
morning set	12387 Oct 15 07:32	25° ₽ 41'39		morning set	12388 Sep 28 03:42	9° 2 29'34	
	12387 Oct 17 08:43	0° M ,		asc. node	12388 Sep 29 23:08	13° ≏ 10'30	
max. Earth dist.	12387 Oct 21 02:58	8°M09'05	1.31521 AU	max. Earth dist.	12388 Oct 03 05:15	19° ≏ 59'58	1.32277 AU
superior conj	12387 Oct 22 14:25	11° M 24'51	1°14'17	superior conj	12388 Oct 05 22:08	25° ≏ 49'34	0°55'02
minimum elong	12387 Oct 22 12:12	11°ML12'36	1°14'30	minimum elong	12388 Oct 05 19:58	25° ≏ 37'48	0°54'57
evening rise	12387 Oct 29 07:31	26°M12'17			12388 Oct 07 20:01	0° M	
	12387 Oct 31 02:15	0° ∡ ¹		evening rise	12388 Oct 12 18:48	10° M 46'54	
desc. node	12387 Nov 16 05:04	28° ∡ ³36'43			12388 Oct 22 11:40	0° ∡ ¹	
	12387 Nov 17 05:12	0°ರ		desc. node	12388 Nov 02 02:20	15° ∡ ³37'55	
evening max el	12387 Nov 24 22:36	8° ප 57'11	25°12'40	evening max el	12388 Nov 05 09:06	19° ∡ ′08′10	23°34'15
retrograde	12387 Dec 08 18:38	15°₹53'41		retrograde	12388 Nov 18 19:52	25° ₹ '50'20	
evening set	12387 Dec 14 13:18	14° る 38'19		evening set	12388 Nov 23 08:27	25° х 05'48	
min. Earth dist.	12387 Dec 19 10:39		0.56959 AU	min. Earth dist.	12388 Nov 29 19:16		0.55420 AU
inferior conj	12387 Dec 22 04:59	10°る07'38		inferior conj	12388 Dec 01 14:13	20° ₹ 57'58	
•	12387 Dec 22 04:39	9°る54'38		-	12388 Dec 01 14:13	20° ₹ 54'41	5°50'09
minimum elong			3 10 03	minimum elong		20 x 3441 17° x 05'01	3 30 09
morning rise	12387 Dec 30 14:38	5° ろ 56'01		morning rise	12388 Dec 10 02:14		
direct	12388 Jan 01 21:03	5° る 41'03		direct	12388 Dec 12 21:05	16° ⋌ ¹46'00	
asc. node	12388 Jan 10 02:29	9° る 14'04		morning max el	12388 Dec 23 14:33	21° ₹ 52′26	20°20'38
morning max el	12388 Jan 11 02:06	10° පි 08'14	19°09'12	asc. node	12388 Dec 26 23:36	25° ∡ '34'49	
	12388 Jan 24 04:11	0° ≈			12388 Dec 30 05:12	0°ಕ	
morning set	12388 Jan 27 19:52	7° ≈ 08'12		morning set	12389 Jan 11 02:20	21° る 46'28	
					12389 Jan 15 02:04	0° ≈	
superior conj	12388 Feb 05 02:33	23° ≈ 27'32	0°54'29				
minimum elong	12388 Feb 05 05:23	23° ≈ 41'10	0°54'40	superior conj	12389 Jan 18 16:20	7° ≈ 20'50	1°15'51
3	12388 Feb 08 13:20	0°) €		minimum elong	12389 Jan 18 19:00	7° ≈ 34'16	1°16'18
max. Earth dist.	12388 Feb 11 21:46	6° ¥ 08'31	1.38660 AU	max. Earth dist.	12389 Jan 24 05:07	18° ≈ 13'42	1.36474 AU
desc. node	12388 Feb 12 04:55	6° ¥ 40'37		evening rise	12389 Jan 28 00:26	25°≈19'40	
evening rise	12388 Feb 12 04:33	12°) 47'56		desc. node	12389 Jan 29 01:36	23 ≈1940 27°≈13'34	
evening 1150		12 χ 4/30		dese. Houe		27 ≈ 13 34 0° ∺	
	12388 Feb 26 04:42				12389 Jan 30 14:57	0° Υ 0°Υ	
	12388 Mar 19 08:21	0°8	0.40.41157		12389 Feb 18 17:57		25052145
evening max el	12388 Mar 21 23:25	2° 8 44'34	24~41'57	evening max el	12389 Mar 04 12:49	16° ° °34′57	25°53'47
retrograde	12388 Apr 02 15:20	9° 8 32'53		retrograde	12389 Mar 17 02:18	23° Y 46'59	

arranina aat	12200 Mar 22 04:00	21° Ƴ 17'46			12390 Feb 14 18:53	0°Υ	
evening set	12389 Mar 23 04:08	19° Y $41'38$				0° Υ 0° Υ 18'14	26050141
asc. node	12389 Mar 24 21:00		0.65304.433	evening max el	12390 Feb 15 02:23		26°50'41
min. Earth dist.	12389 Mar 27 09:52	16° Y 45'49	0.67304 AU	retrograde	12390 Feb 28 07:53	7° Y 42'25	
inferior conj	12389 Mar 28 23:05	14° Ƴ 48'51	1°15'49	evening set	12390 Mar 06 19:51	5° Ƴ 09'35	
minimum elong	12389 Mar 28 21:23	14° Ƴ 54'12	1°15'04	min. Earth dist.	12390 Mar 10 20:00	1° Ƴ 11′28	0.65970 AU
morning rise	12389 Apr 03 15:17	9° Ƴ 00'35		asc. node	12390 Mar 11 18:23	0° Y 06'46	
direct	12389 Apr 06 22:24	7° Ƴ 58'35			12390 Mar 11 20:42	30°Ŗ ℋ	
morning max el	12389 Apr 13 15:33	11° Y 36'03	18°49'20	inferior conj	12390 Mar 12 21:20	28°) 47′48	0°21'38
desc. node	12389 Apr 27 03:31	29° Ƴ 48'43		minimum elong	12390 Mar 12 20:44	28°)(49'31	0°21'30
	12389 Apr 27 06:28	0°B		morning rise	12390 Mar 18 22:55	23° ¥ 10′57	
greatest brilliancy	12389 Apr 27 19:03	0° 8 48'07	-0.8m	direct	12390 Mar 21 19:52	22°) €25'39	
morning set	12389 May 05 20:38	13° 8 17'45	******	morning max el	12390 Mar 28 05:27	25°) (48'12	18°11'28
morning set	12389 May 16 13:56	0°II		morning max er	12390 Mar 31 21:01	0° Υ	10 11 20
E d Ed	•		1 45507 ATT	1 1		0 ¶ 19° Υ 58'43	
max. Earth dist.	12389 May 20 14:24	6° Ⅱ 16'43	1.45587 AU	desc. node	12390 Apr 14 00:09		
				morning set	12390 Apr 16 07:24	23° Y 41′09	
superior conj	12389 May 22 04:35	8° Ⅱ 46'19			12390 Apr 20 05:45	9° 8	
minimum elong	12389 May 22 00:25	8° Ⅱ 29'58	2°11'10				
	12389 Jun 04 13:42	0 \circ \odot		superior conj	12390 May 01 12:11	17° 8 50'34	-1°49'38
evening rise	12389 Jun 06 10:08	2° © 58'45		minimum elong	12390 May 01 03:03	17° 8 14'47	1°49'29
asc. node	12389 Jun 20 18:48	25°534'05		max. Earth dist.	12390 May 03 10:00	20° 8 49'49	1.45742 AU
	12389 Jun 24 01:25	$0^{\circ}\Omega$			12390 May 09 07:10	0°II	
evening max el	12389 Jun 26 21:21	3°Ω12'05	18°32'28	evening rise	12390 May 17 13:48	12° ∏ 52'14	
retrograde	12389 Jul 03 09:04	6°Ω42'42	10 32 20	evening rise	12390 May 17 15:46 12390 May 28 16:06	0°95	
-		5° Ω 45'54			•	0°950'20	0.7
evening set	12389 Jul 06 13:11		20.50120	greatest brilliancy	12390 May 29 05:25		-0.7m
inferior conj	12389 Jul 12 06:07	0° Ω 11′20	2°52'28	asc. node	12390 Jun 07 15:50	14° © 01'23	
minimum elong	12389 Jul 12 08:03	0° Ω 05'29	2°51'19	evening max el	12390 Jun 10 06:30	16°©55'17	19°12'58
	12389 Jul 12 09:52	30° ₹ 5		retrograde	12390 Jun 17 05:39	20°5548'18	
min. Earth dist.	12389 Jul 14 08:01	27° © 40'57	0.65204 AU	evening set	12390 Jun 20 18:33	19° © 35'31	
morning rise	12389 Jul 18 01:52	23° © 49'49		inferior conj	12390 Jun 26 05:03	13° © 46'29	3°10'11
desc. node	12389 Jul 24 03:04	21° © 09'37		minimum elong	12390 Jun 26 05:57	13°9543'31	3°09'12
direct	12389 Jul 24 13:41	21° © 08'56		min. Earth dist.	12390 Jun 27 16:15	11° © 52'23	0.66799 AU
morning max el	12389 Aug 07 00:16	29°504'09	27°06'57	morning rise	12390 Jul 01 16:47	7°523'20	
morning man or	12389 Aug 07 21:58	0°Ω	2, 000,	direct	12390 Jul 07 20:10	4°543'03	
	=	0° m		desc. node	12390 Jul 11 00:19	5° © 19'17	
	12389 Aug 29 18:41	•					25950127
morning set	12389 Sep 11 14:06	22° m/47'52		morning max el	12390 Jul 20 11:07	12°5516'08	25°59'27
	12389 Sep 15 05:33	0∘ ⊽			12390 Aug 03 16:52	0 \circ Ω	
max. Earth dist.	12389 Sep 15 22:47	1° ≏ 27'18	1.33551 AU		12390 Aug 22 10:54	0° m	
asc. node	12389 Sep 16 19:45	3° ≏ 14'34		morning set	12390 Aug 25 11:14	5° Mg 27'44	
				max. Earth dist.	12390 Aug 29 05:44	12°M/34'01	1.35318 AU
superior conj	12389 Sep 20 00:43	9° £ 55'42	0°30'32				
minimum elong	12389 Sep 19 23:13	9° ≏ 47'51	0°30'17	superior conj	12390 Sep 03 19:35	23° Mp 36'44	0°01'17
evening rise	12389 Sep 27 05:26	25° £ 16'55		minimum elong	12390 Sep 03 19:31	23° m 36'25	0°01'05
Ç	12389 Sep 29 11:32	0° M .		behind sun begin	12390 Sep 03 13:27	23°m 05'39	
evening max el	12389 Oct 17 21:32	29°M13'00	21°53'58	behind sun end	12390 Sep 04 01:35	24° Mp 07'15	
evening max er	12389 Oct 17 21:32 12389 Oct 18 17:17	0° ₹	21 33 30	asc. node	12390 Sep 04 01:33 12390 Sep 03 16:23	23° m/ 20'32	
11.		1° × 706'23		asc. nouc	12390 Sep 05 10:25 12390 Sep 06 22:15	0° Ω	
desc. node	12389 Oct 19 23:40					()-32	
retrograde	12389 Oct 30 10:29	5° ∡ ¹26'49					
evening set				evening rise	12390 Sep 11 13:24	9° ≙ 36'57	
e '	12389 Nov 02 12:39	5° ∡ ¹05′24	500 SIG-5		12390 Sep 11 13:24 12390 Sep 22 08:56	9° £ 36'57 0° ™	0000 5112
inferior conj	12389 Nov 02 12:39 12389 Nov 11 08:52		-5°37'02	evening max el	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01	9° 요 36'57 0° ጤ 9° ጤ 47'49	20°26'42
minimum elong		5° ∡ 105′24	-5°37'02 5°35'27		12390 Sep 11 13:24 12390 Sep 22 08:56	9° £ 36'57 0° ™	20°26'42
	12389 Nov 11 08:52	5° х 05'24 1° х 09'25		evening max el	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01	9° 요 36'57 0° ጤ 9° ጤ 47'49	20°26'42
minimum elong	12389 Nov 11 08:52 12389 Nov 11 02:28	5° ₹05'24 1° ₹09'25 1° ₹18'23	5°35'27	evening max el desc. node	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05	9° £ 36'57 0° M 9° M 47'49 14° M 33'37	20°26'42
minimum elong	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48	5° 🗷 05'24 1° 🗷 09'25 1° 🗷 18'23 1° 🗷 19'20	5°35'27	evening max el desc. node retrograde	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57	9° £ 36'57 0° M 9° M 47'49 14° M 33'37 15° M 16'49	
minimum elong min. Earth dist.	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28	5° \$\tilde{x}\$05'24 1° \$\tilde{x}\$09'25 1° \$\tilde{x}\$18'23 1° \$\tilde{x}\$19'20 30° RML 27° \$\tilde{x}\$22'10	5°35'27	evening max el desc. node retrograde evening set inferior conj	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32	9° \(\Omega\) 36'57 0° \(\Omega\) 9° \(\Upsi\) 47'49 14° \(\Upsi\) 33'37 15° \(\Upsi\) 16'49 15° \(\Upsi\) 05'33 11° \(\Upsi\) 09'39	-4°25'28
minimum elong min. Earth dist.	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° RM 27° M 22'10 26° M 54'18	5°35'27	evening max el desc. node retrograde evening set inferior conj minimum elong	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17	-4°25'28 4°22'04
minimum elong min. Earth dist. morning rise direct	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40	5° \$\stack 05'24 1° \$\stack 09'25 1° \$\stack 18'23 1° \$\stack 19'20 30° RM. 27° M.22'10 26° M.54'18 0° \$\stack 1	5°35'27 0.54610 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02	-4°25'28
minimum elong min. Earth dist. morning rise direct morning max el	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03	5° \$\sigma 05'24 1° \$\sigma 09'25 1° \$\sigma 18'23 1° \$\sigma 19'20 30° RM 27° M22'10 26° M.54'18 0° \$\sigma 1 2° \$\sigma 44'35	5°35'27 0.54610 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11	-4°25'28 4°22'04
minimum elong min. Earth dist. morning rise direct	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38	5° \$\tilde{\$7}05'24 1° \$\tilde{\$7}09'25 1° \$\tilde{\$7}18'23 1° \$\tilde{\$7}19'20 30° RML 27° M22'10 26° M54'18 0° \$\tilde{\$7}\$ 2° \$\tilde{\$7}44'35 13° \$\tilde{\$7}00'37	5°35'27 0.54610 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28	5° \$\times 05'24 1° \$\times 09'25 1° \$\times 19'20 30° RML 27° M22'10 26° M54'18 0° \$\times 2 2° \$\times 44'35 13° \$\times 00'37 0° \$\times 00'37	5°35'27 0.54610 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19	-4°25'28 4°22'04
minimum elong min. Earth dist. morning rise direct morning max el	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38	5° \$\tilde{\$7}05'24 1° \$\tilde{\$7}09'25 1° \$\tilde{\$7}18'23 1° \$\tilde{\$7}19'20 30° RML 27° M22'10 26° M54'18 0° \$\tilde{\$7}\$ 2° \$\tilde{\$7}44'35 13° \$\tilde{\$7}00'37	5°35'27 0.54610 AU	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° 🗷	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° ₹M. 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02	5°35'27 0.54610 AU 21°53'38	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ₹ 1° ₹ 16'09	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° ₹ML 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02	5°35'27 0.54610 AU 21°53'38	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ₹ 1° ₹ 16'09 21° ₹ 18'39	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° ₹M. 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02	5°35'27 0.54610 AU 21°53'38	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ₹ 1° ₹ 16'09	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° ₹ML 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02	5°35'27 0.54610 AU 21°53'38	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36 12390 Dec 11 00:09	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ₹ 1° ₹ 16'09 21° ₹ 18'39	-4°25'28 4°22'04 0.54726 AU
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33 12390 Jan 02 17:23	5° \$\times 05'24 1° \$\times 09'25 1° \$\times 19'20 30° RML 27° \$\times 22'10 26° \$\times 54'18 0° \$\times 13^\circ \$\times 40'37 0° \$\times 6^\times 32'02 21° \$\times 39'17 21° \$\times 48'56	5°35'27 0.54610 AU 21°53'38 1°29'58 1°30'41	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36 12390 Dec 11 00:09	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ₹ 1° ₹ 16'09 21° ₹ 18'39	-4°25'28 4°22'04 0.54726 AU 23°40'25
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33 12390 Jan 02 17:23 12390 Jan 06 17:36	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° ₹M. 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02 21° ₹39'17 21° ₹48'56 0° ≈05'21	5°35'27 0.54610 AU 21°53'38 1°29'58 1°30'41	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36 12390 Dec 11 00:09 12390 Dec 15 00:30	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ※ 1 1° ※ 16'09 21° ※ 18'39 0° ※ 6° ※ 613'25	-4°25'28 4°22'04 0.54726 AU 23°40'25
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33 12390 Jan 02 17:23 12390 Jan 06 17:36 12390 Jan 06 16:33	5° ₹05'24 1° ₹09'25 1° ₹18'23 1° ₹19'20 30° RM. 27° M.22'10 26° M.54'18 0° ₹ 2° ₹44'35 13° ₹00'37 0° ₹ 6° ₹32'02 21° ₹39'17 21° ₹48'56 0° ≈05'21 0° ≈	5°35'27 0.54610 AU 21°53'38 1°29'58 1°30'41	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36 12390 Dec 11 00:09 12390 Dec 15 00:30 12390 Dec 17 21:08 12390 Dec 17 21:52	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 05'33 11° № 09'39 11° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ※ 1 1° ※ 16'09 21° ※ 18'39 0° ※ 6° ※ 613'25	-4°25'28 4°22'04 0.54726 AU 23°40'25
minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12389 Nov 11 08:52 12389 Nov 11 02:28 12389 Nov 11 01:48 12389 Nov 13 11:04 12389 Nov 19 17:28 12389 Nov 23 06:58 12389 Dec 02 04:40 12389 Dec 05 13:03 12389 Dec 13 20:38 12389 Dec 23 08:28 12389 Dec 26 12:26 12390 Jan 02 15:33 12390 Jan 02 17:23 12390 Jan 06 17:36 12390 Jan 06 16:33 12390 Jan 11 00:24	5° 水05'24 1° 水09'25 1° 水19'20 30°RM 27° M22'10 26° M54'18 0° メ 2° 水44'35 13° 水00'37 0° 云 6° 云32'02 21° 云48'56 0° ≈05'21 0° ≈ 8° ≈31'39	5°35'27 0.54610 AU 21°53'38 1°29'58 1°30'41	evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12390 Sep 11 13:24 12390 Sep 22 08:56 12390 Sep 29 21:01 12390 Oct 06 21:05 12390 Oct 10 21:57 12390 Oct 13 00:54 12390 Oct 22 01:32 12390 Oct 21 15:29 12390 Oct 23 09:30 12390 Oct 30 05:31 12390 Nov 03 16:03 12390 Nov 17 01:29 12390 Nov 29 23:39 12390 Nov 30 17:36 12390 Dec 11 00:09 12390 Dec 15 00:30	9° № 36'57 0° № 9° № 47'49 14° № 33'37 15° № 16'49 15° № 09'39 11° № 24'17 10° № 23'02 7° № 08'11 6° № 25'42 12° № 57'19 0° ¾ 1° ¾ 16'09 21° ¾ 18'39 0° ♥ 6° ♥ 13'25 6° ♥ 17'25	-4°25'28 4°22'04 0.54726 AU 23°40'25 1°37'18 1°37'18 1°38'12

	12390 Dec 29 12:31	0° ≈		evening rise	12391 Dec 09 10:13	6° る 19'50	
desc. node	12391 Jan 02 19:10	7° ≈ 48'05		desc. node	12391 Dec 20 16:08	27° る 37'57	
	12391 Jan 16 23:32	0° ∀			12391 Dec 22 01:46	0° ≈	
evening max el	12391 Jan 28 15:22	13°) 43′40	27°25'19	evening max el	12392 Jan 11 01:55	26° ≈ 39'02	27°30'58
retrograde	12391 Feb 11 06:59	21°) (09'18			12392 Jan 15 00:32	0° ∀	
evening set	12391 Feb 18 02:31	18°) (39′25	0.64000.433	retrograde	12392 Jan 24 22:34	3°) ₹58'56	
min. Earth dist.	12391 Feb 21 22:27	15°) € 12'43	0.64282 AU	evening set	12392 Jan 31 21:26	1°) €39'33	
inferior conj minimum elong	12391 Feb 24 11:13 12391 Feb 24 12:33	12°) 31'53	-0°43'00 0°42'06	min. Earth dist.	12392 Feb 03 02:33 12392 Feb 04 15:18	30°R≈ 28°≈39'49	0.62319 AU
asc. node	12391 Feb 24 12.33 12391 Feb 26 15:47	12 X 28 22 10° ¥ 17'35	0 42 00	inferior conj	12392 Feb 04 13:18 12392 Feb 07 13:47	25°≈53'41	
morning rise	12391 Mar 03 00:34	7° ₩ 08'48		minimum elong	12392 Feb 07 17:46		1°54'51
direct	12391 Mar 05 12:56	6° ¥ 36'37		asc. node	12392 Feb 13 13:09	21°≈15'51	1 0 .01
morning max el	12391 Mar 11 22:36	9° ¥ 55'27	17°50'37	morning rise	12392 Feb 14 16:43	20° ≈ 47'25	
-	12391 Mar 25 16:44	0° Y		direct	12392 Feb 16 22:33	20° ≈ 24'37	
morning set	12391 Mar 28 22:34	5° Y 27'15		morning max el	12392 Feb 23 16:01	23° ≈ 49'52	17°47'23
desc. node	12391 Mar 31 20:44	10° Y ′21'57			12392 Feb 28 15:04	0°) €	
				morning set	12392 Mar 10 13:02	18°) 1 9′42	
superior conj	12391 Apr 11 07:40	27° Y ′32′26			12392 Mar 17 04:47	0° Υ	
minimum elong	12391 Apr 10 23:59	27° Y ′01'33	1°13'30	desc. node	12392 Mar 17 17:19	0° Ƴ 54'07	
	12391 Apr 12 20:29	0° 8					
max. Earth dist.	12391 Apr 16 05:21	5° 8 21'06	1.45157 AU	superior conj	12392 Mar 22 01:53	8°Υ19'13	
evening rise	12391 Apr 27 02:46	22° 8 16'12		minimum elong	12392 Mar 21 22:39	8°Υ05'36	
arrantant brillianas	12391 May 02 04:34	0°Ⅱ 14°Ⅱ45'40	-0.6m	max. Earth dist.	12392 Mar 28 22:24 12392 Apr 04 11:58	19° Ƴ 36'01 0° ႘	1.43895 AU
greatest brilliancy	12391 May 12 02:36 12391 May 23 18:16	14 Д 45 40	-0.0111	evening rise	12392 Apr 04 11.38 12392 Apr 05 16:26	1° 8 50'30	
evening max el	12391 May 24 10:25	0°541'37	20°09'07	evening rise	12392 Apr 03 10:20 12392 Apr 24 17:29	0°Ⅱ	
asc. node	12391 May 25 12:57	1°9545'20	20 07 07	evening max el	12392 May 06 08:36	14° ∏ 28'51	21°18'08
retrograde	12391 Jun 01 04:13	5°907'56		asc. node	12392 May 11 10:11	18° Ⅲ 32'11	21 10 00
evening set	12391 Jun 05 02:40	3° 5 38'38		retrograde	12392 May 15 02:50	19° ∏ 36'13	
C	12391 Jun 08 14:30	30°RⅡ		evening set	12392 May 19 11:37	17° Ⅱ 50'39	
inferior conj	12391 Jun 10 09:45	27° Ⅱ 36'31	3°14'12	inferior conj	12392 May 24 17:52	11° Ⅱ 36′59	3°06'33
minimum elong	12391 Jun 10 09:35	27° Ⅲ 37′05	3°13'18	minimum elong	12392 May 24 16:45	11° Ⅱ 40′50	3°05'36
min. Earth dist.	12391 Jun 11 06:39	26° Ⅲ 25'31	0.67948 AU	min. Earth dist.	12392 May 25 01:09	11° Ⅱ 11'36	0.68624 AU
morning rise	12391 Jun 15 16:11	21° Ⅱ 15'45		morning rise	12392 May 29 21:42	5° Ⅱ 20′55	
direct	12391 Jun 21 08:21	18° Ⅱ 45'02		direct	12392 Jun 04 01:08	3° Ⅱ 06′23	
desc. node	12391 Jun 27 21:28	21° I I18'28		desc. node	12392 Jun 13 18:31	8° Ⅲ 39'46	
morning max el	12391 Jul 02 21:04	25° Ⅱ 39'55	24°35'58	morning max el	12392 Jun 14 07:30	9° Ⅱ 12'01	23°06'20
	12391 Jul 06 19:59	0° ©			12392 Jun 30 15:53	0.20	
morning set	12391 Jul 28 05:15	0°Ω 17°Ω10'42		morning set	12392 Jul 18 19:59	28°508'29	
morning set max. Earth dist.	12391 Aug 07 14:49 12391 Aug 11 04:53	17° Ω 18'42 23° Ω 42'28	1.37475 AU	max. Earth dist.	12392 Jul 19 22:41 12392 Jul 23 02:51	0°Ω 5°Ω23'//3	1.39809 AU
max. Larm dist.	12391 Aug 11 04:33	0°m)	1.57475 AO	max. Latur dist.	12372 Jul 23 02.31	3 6623 43	1.57607 AC
	123711148 11 11.10	پ را ٽ		superior conj	12392 Jul 30 20:50	19° Ω 11'33	-1°06'01
superior conj	12391 Aug 18 03:37	6° m 45'22	-0°31'36	minimum elong	12392 Jul 31 01:34	19° Ω 33'22	
minimum elong	12391 Aug 18 05:44	6° m 55′38	0°31'38	C	12392 Aug 05 15:07	0° m)	
asc. node	12391 Aug 21 13:04	13° m 25'03		asc. node	12392 Aug 07 09:46	3°m/23'54	
evening rise	12391 Aug 26 16:23	23° m 41'18		evening rise	12392 Aug 09 11:22	7° m 21'44	
	12391 Aug 29 21:03	0∘ ⊽			12392 Aug 22 15:50	0∘ ত	
evening max el	12391 Sep 12 10:38	21° ≏ 09'41	19°19'35	evening max el	12392 Aug 25 12:09	3° ≏ 16'43	18°33'58
retrograde	12391 Sep 21 19:13	25° ≏ 49'58		retrograde	12392 Sep 02 10:53	7° ≏ 16'43	
evening set	12391 Sep 23 15:36	25° Ω 39'49		evening set	12392 Sep 04 10:37	7° Ω 02'29	
desc. node	12391 Sep 23 18:32	25° △ 38'27	2020101	desc. node	12392 Sep 09 16:00	4° £ 30'37	0940152
inferior conj	12391 Oct 02 06:20 12391 Oct 01 23:25	21° Ω 31'05 21° Ω 42'27	-2°39'01 2°36'10	inferior conj	12392 Sep 12 07:34	2° £ 33'53 2° £ 37'41	-0°49'53 0°49'09
minimum elong min. Earth dist.	12391 Oct 01 23:23 12391 Oct 04 20:28	21° 24 2′27 19° 2 49′26	0.55762 AU	minimum elong min. Earth dist.	12392 Sep 12 05:35 12392 Sep 15 12:58	2° 2 3/41 0° 2 06'14	0.57522 AU
morning rise	12391 Oct 04 20:28 12391 Oct 10 04:46	16° ⊆ 58'25	0.55702 AO	iiiii. Lattii dist.	12392 Sep 15 12:38 12392 Sep 15 16:23	0 <u>=</u> 00 14 30°R, m)	0.57522 AO
direct	12391 Oct 15 04:40	15° ⊆ 55'10		morning rise	12392 Sep 19 10:25	27° m 23'23	
morning max el	12391 Oct 19 11:21 12391 Oct 29 12:04	23° ⊆ 00′20	25°25'48	direct	12392 Sep 15 21:00 12392 Sep 25 20:28	25° m 53'51	
	12391 Nov 04 18:27	0°M			12392 Oct 06 04:30	0° დ	
asc. node	12391 Nov 17 14:29	20°M09'01		morning max el	12392 Oct 10 03:51	3° ≏ 25'18	26°51'37
	12391 Nov 22 14:59	0° ∡ 7		-	12392 Oct 29 08:58	0° M	
morning set	12391 Nov 25 11:45	6° ∡ 101'45		asc. node	12392 Nov 03 11:19	9° ™ 28'42	
				morning set	12392 Nov 08 21:30	20°M35'37	
superior conj	12391 Dec 02 06:43	20° ∡ ¹56′23	1°38'22		12392 Nov 13 04:57	0° ∡ 7	
minimum elong	12391 Dec 02 06:20	20° ∡ °54′18	1°39'14				
max. Earth dist.	12391 Dec 03 17:33	24°×708'23	1.31959 AU	superior conj	12392 Nov 15 18:10	5° ∡ 140'57	
	12391 Dec 06 10:15	0°ಕ		minimum elong	12392 Nov 15 16:50	5° ≯ 33'30	1°34'10

	E d Ed	12202 N 16 01 22	(0. 7001 00	1 21207 ATT		12202 0 4 21 05 20	200 M 22110	1022155
Contame	max. Earth dist.	12392 Nov 16 01:32	6° ₹ 22'00	1.31387 AU	superior conj	12393 Oct 31 05:39		
	evening rise				mınımum elong			1°23'18
Second 1292 1293 130 130 130 1496 1399 130	desc. node	12392 Dec 06 13:11	16° ර 58'15		evening rise	12393 Nov 06 22:39		
Percentage 1239 Jam 0.6 0528 0.9640276 0.0018		12392 Dec 15 10:46	0° ≈			12393 Nov 19 20:54		
Semina 1299 May 10 10 10 1299 May 10 10 10 10 1299 May 10 12	evening max el	12392 Dec 23 07:04	8° ≈ 50'19	27°03'06		12393 Nov 23 10:18	5° る 37'42	
am. Earth dast 239 Jan 2 of 2124 11 'Sea'071 0.0018.0 evening set 2399 Jan 2 of 200 0.5858/s of 500 0.5808 A) of 10 minerant data 2399 Jan 2 of 5023 8*84991 3*13*51 mine Earth data 2399 Jan 2 of 5023 8*84991 3*13*51 mine Earth data 2399 Jan 1 of 10.88 4*378 4*378 direct 1239 Jan 2 of 203 of 10.88 3*8418 of 500 of 10.88 1239 Jan 2 of 203 of 10.88 3*8418 officed of 10.89 1239 Jan 1 of 202 of 10.87 6*75270 6*75270 6*75270 178527	retrograde	12393 Jan 06 05:28	16° ≈ 02'06		evening max el	12393 Dec 05 04:22	20° る 09'15	26°01'14
Minimium 1299 May 1299	evening set	12393 Jan 13 01:10	14° ≈ 01'30		retrograde	12393 Dec 19 02:30	27° る 12'36	
minimum elong 2393 Jan 2 00 8221 8782471 3133575 31351 31	min. Earth dist.	12393 Jan 16 21:24	11° ≈ 20'31	0.60181 AU	evening set	12393 Dec 25 09:29	25° る 38'59	
December 1,293 Jan 27 1831 3*96873 5 morning from 1,293 Jan 2,023 3*96474 5 morning max 1,293 Jan 2,0123 3*964748 5 morning max 1,293 Jan 2,0123 3*964748 5 morning max 1,293 Jan 2,0123 5 morning max 1,293 Jan 2,013 7 morning stand 1,293 Jan 2,003 1 morning stand 1,293 Jan 2,003 1 morning stand 1,293 Jan 2,003 1 morning stand 1,293 Jan 2,003 2,004 Jan 1,004 Jan	inferior conj	12393 Jan 20 01:29	8° ≈ 43'28	-3°17'04	min. Earth dist.	12393 Dec 29 17:17	23° る 03'00	0.58057 AU
Manifunction 1293 Am 27 1831 3*39573 5*39574 5	minimum elong	12393 Jan 20 08:23	8° ≈ 29'11	3°13'51	inferior conj	12394 Jan 01 18:46	20° る 51'16	-4°34'48
circe 12393 Jan 29 2031 3*sea(128 s) morning max cl 12393 Jan 30 1028 **sea*148 s direct 12394 Jan 10 2031 1**Sea*158 s 1**Color 10 2030 s 1**Sea*18 s	_	12393 Jan 27 18:31	3°≈57'23		minimum elong	12394 Jan 02 03:17	20° る 35'57	4°31'38
December 1293 for 5 0 10 28 39-841 48 concision 1294 for 1 0 1294 70 1295 60 1847 70 184	•	12393 Jan 29 20:37	3°≈40'28		_		16° 云 27'30	
Powering max el 1239 Feb 106 1618 78942158 18*0256 morning max el 12394 Jun 17 07.44 17*54658 18*3848 morning max el 12394 Jun 27 1928 18*3848 18*3848 morning max el 12394 Jun 27 1928 18*3848 18*3848 morning max el 12394 Jun 27 1928 18*384 18*3848 morning max el 12394 Jun 27 1928 18*384 18*3848 morning max el 12394 Jun 27 1928 18*384 18*3848 morning max el 12394 Jun 27 1928 19*35 18*384 18*3848					•			
March 1239 Feb 20 1847 1974 1975				18°02'56				
Promiting set 12393 Feb 21 20.33 1°H5921 Feb 20 12394 Feb 12 19.57 10°H2 13°H2 1	morning max cr			10 02 30				18°38'48
Superior Corp. 1299 May Corp. 2019 May Corp.	morning set				morning max cr			10 30 40
Superior Cong 12393 Mar 03 20.21 20°H.1379 0°G*46 20°H.1670 12394 Feb 12 19.75 0°F*1 12394 Mar 03 12.30 0°F*1 12394 Mar 03 12.30 0°F*1 12394 Mar 03 12.30 12394 Mar 03 12.30 129°H.1313 0°F*1 12394 Mar 04 04.10 0°F*1 12394 Mar 04 04.10 0°F*1 12394 Mar 03 12.35 12741 Mar 04 12.35 12	morning set	12393 1 00 21 20.33	1 /(3921					
minimum clong		12202 M 02 20-21	200W 12150	0005146	morning set			
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behind sun end 12393 Mar 04 0.41.0 20°F48374 desc. node 12394 Feb 14 13.44 3.9°F1673 0°8851 desc. node 12394 feb 15 10.30 12°F11070 13993 AU nax. Earth dist. 12393 Mar 04 11 11.07 3°F1970 1.42087 AU evening rise 12394 Feb 12 18.873 16°F170 13993 AU nax. Earth dist. 12394 Feb 12 18.873 16°F170 13993 AU nax. Earth dist. 12394 Feb 12 18.873 10°F170 13993 AU nax. Earth dist. 12394 Feb 12 18.873 10°F170 12393 Mar 28 11.35 0°F180 12393 Mar 28 11.35 0°F180 12393 Mar 20 12.16 0°F180 12393 Mar 20 12.16 0°F180 12394 Mar 20 12.16 12394 Mar 20 12.16 12394 Mar 20 12.16 12394 Mar 20 12.16 18°E374	•			0°05'55		10004771 14 14 14	201/05114	0000116
Canality	•							
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evening rise 12393 Mar 16 20.21 12°P'0649 evening max 12394 Mar 01 22.38 0°P'V evening max el 12393 Mar 28 11.35 0°B evening max 12394 Mar 10 10.54 28°B16'59 22°35'49 evening max 12394 Apr 12 17:53 18°85'741 asc. node 12393 Apr 28 20.116 0°B asc. node 12394 Apr 15 0444 18°B0707 evening set evening set 12393 May 03 1941 2°B10718 min. Earth dist. 12394 Apr 12 10.08 18°85'844 2°85'64U inferior conj 12393 May 09 03.18 2°B4724 2°48'26 minimum elong 12394 Apr 21 12.08 9°85'44 2°20'21 inferior conj 12393 May 09 03.18 2°B4'424 2°48'26 minimum elong 12394 May 21 12.08 9°85'445 2°20'17 imine Earth dist. 12393 May 80 21.44 2°B'80'347 068827 AU morning set 12394 May 10 17:25 6°44'55e 20°220'3 direct 12393 May 81 21:28 12"8'39'46 4°8'56'39'5 4°8'56'39'5 20°220'3 direct 12393 Jun 30 31'52 2°B'80'39'3 1		12393 Mar 09 11:41				12394 Feb 21 18:57		1.39939 AU
cvening max el 12393 Mar 28 11:35 0°B cvening max el 12394 Apr 10 16:13 12°B0701 23°5639 evening max el 12393 Apr 120 21:16 0°II retrograde 12394 Apr 12 11:33 18°B3731 18°B3731 esc. node 12393 Apr 28 23:50 4°II0555 asc. node 12394 Apr 18 01:18 16°B2376 18°B0707 evening set 12393 Apr 28 23:50 4°II05755 asc. node 12394 Apr 18 01:18 16°B2376 18°B3774 evening set 12393 May 03 19:41 2°II0718 min. Earth dist. 12394 Apr 23 12:08 9°85443 2°2021 min. Earth dist. 12393 May 09 01:30 2°B0347 2°4826 minimum elong 12393 May 09 01:30 2°B0347 0°8827 AU direct 12394 Apr 23 10:00 0°B02002 2°918 2°B1827 min. Earth dist. 12393 May 18 21:28 12°8049 0°8827 AU direct 12394 May 18 12:18 16°B355 0°22203 18°B355 0°22203 18°B355 0°22203 18°B355 0°22203 18°B355 0°22482 18°B355 0°22482 18°B355	max. Earth dist.	12393 Mar 11 11:07		1.42087 AU	evening rise	12394 Feb 25 20:55		
Conting max el 12393 Apr 20 11.54 28°B 16'99 22°35'49 retrograde 12394 Apr 10 16.13 12°B 70°B 18°B 37°B	evening rise	12393 Mar 16 20:21	12° Ƴ 06'49			12394 Mar 01 22:38	0 ° Υ	
12393 Apr 20 21:16		12393 Mar 28 11:35	0°8			12394 Mar 22 08:53	9° 8	
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Petrograde 12393 Apr 28 23:50 4°IO806 evening set 12394 Apr 18 01:18 16°B23736 evening set 12393 May 03 1941 2°IO718 min. Earth dist. 12394 Apr 22 18:12 10°B5574 2°100718 inferior conj 12393 May 05 21:14 30°R56 min. Earth dist. 12393 May 05 21:14 30°R56 min. Earth dist. 12393 May 09 03:18 25°B5402 24°R26 minimum elong 12394 Apr 28 18:45 3°B5154 morning rise 12393 May 08 12:14 6°B0374 0.68827 AU direct 12394 May 12 01:13 26°B5575 20°2203 direct 12394 May 18 12:18 16°B05757 morning max el 12393 May 14 07:12 19°B3423 1°3928 direct 12394 May 18 12:18 16°B05757 morning max el 12393 May 18 12:18 1°B05757 1°C50751 1		12393 Apr 20 21:16	$\Pi^{\circ}0$		retrograde	12394 Apr 12 17:53	18° 8 37'41	
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Pevening set 12393 May 03 19-41 2°B0718 min. Earth dist. 12394 Apr 23 18-12 10°B5548 0.88576 AU 16°F07 conj 12394 Apr 23 12-00 10°B5200 2°20'118 16°F07 conj 12394 Apr 23 10-00 10°B0200 2°20'118 16°F07 conj 12394 Apr 23 10-00 10°B0200 2°19'18 18°F07 conj 12394 May 02 20-13 2°18'18 18°F07 conj 12394 May 04 10°12 2°18'18 18°F07 conj 12394 May 04 10°12 12°18 18°F07 conj 12394 May 04 10°12 18°F07 conj 12394 May 04 10°12 12°18 18°F07 conj 12394 May 04 10°18 18°F07 conj 12394 May	retrograde	12393 Apr 28 23:50	4° Ⅱ 08'06		evening set	12394 Apr 18 01:18	16° 8 23'36	
12393 May 05 21:44 30°K 12394 May 12 12:08 9°K 54'43 2°021 116'ferior conj 12394 May 09 01:31 25°K 54'42 24'826 minimum elong 12394 May 09 01:36 25°K 54'43 25°K 54'43 24'826 morning rise 12394 May 12 12:36 36′K 54'83 27°K 54'83 27°K 54'83 12384 May 10 17:25 6°K 54'85 0°22'03 12394 May 10 17:25 6°K 54'85 0°22'03 12394 May 10 17:25 6°K 54'85 0°22'03 12394 May 10 17:25 12394 May 10 17:25 6°K 54'85 0°22'03 12394 May 10 17:25	•		2° Ⅲ 07'18		•	-	10° 8 55'48	0.68576 AU
minimum elong 12393 May 09 03:18 25°844'24 248'26 minimum elong 12394 Apr 23 10:00 10°80'200 2°19'18 minimum elong 12394 May 09 01:30 2°58'04'0 2°47'24 morning rise 12394 Apr 23 10:00 10°80'200 2°19'18 morning rise 12393 May 18 02:44 26°80'34'0 0.68827 AU direct 12394 May 10 2 20:13 2°818'25 2°02'03 direct 12393 May 18 12:12 17°83'946 desc. node 12394 May 10 17:25 6°84'556 20°22'03 desc. node 12393 May 18 12:12 17°83'946 desc. node 12394 May 10 17:25 6°84'556 20°22'03 desc. node 12393 May 18 12:12 17°83'946 desc. node 12394 May 10 17:25 6°84'556 20°22'03 desc. node 12393 May 18 12:12 17°83'946 desc. node 12394 May 10 17:25 6°84'556 20°22'03 desc. node 12393 May 18 12:12 10°85'33 142031 AU morning set 12394 Ju 10 16 18:11 18393 May 18 12:12 12393 May 18 12:13	C	•	30° ₹ 8		inferior conj	-	9° 8 54'43	2°20'21
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morning rise 12393 May 14 07:12 19°B'34'23 morning max el 12394 May 10 17:25 6°B'45'6 20°22'03 direct 12393 May 18 121:28 17°B'39'46 desc. node 12394 May 18 121:8 16°B'05'57 morning max el 12393 May 28 06:16 0°H cesc. node 12393 May 38 13:28 27°B'01'10 morning set 12394 Jun 08 05:40 16°H37'26 cesc. node 12393 Jun 23 23:22 20°B' max. Earth dist. 12394 Jun 16 18:11 0°B' 1.43885 AU morning set 12393 Jun 28 23:40 7°B'50'53 max. Earth dist. 12394 Jun 17 13:29 1°B'1709 1.43885 AU morning set 12393 Jul 2 0.5:03 17°B'50'53 1.42031 AU superior conj 12394 Jun 17 13:29 1°B'1709 1.43885 AU max. Earth dist. 12393 Jul 1 2 08:17 0°Ω minimum elong 12394 Jun 23 17:26 11°B'18'38 - 2°03'09 minimum elong 12393 Jul 1 2 18:45 0°Ω 4.5228 - 1°38'22 evening rise 12394 Jul 0 4 17:54 0°Ω 0°Ω 0°Ω 2°Q'8'52 1°38'25 asc. node 12394 Jul 1 20'320 12°Q'48'18 evening rise 12393 Jul 1 2 18:43 20°Q'28'52 evening max el 12394 Jul 1 20'320 12°Q'48'18 evening max el 12393 Aug 1 8 121:51 19°W 34'34 evening set 12394 Aug 0 11:233 20°W 00'02 retrograde 12393 Aug 1 8 04:05 19°W 1211 minerior conj 12394 Aug 0 12:25 2°W 35'58 evening set 12393 Aug 1 8 04:05 19°W 1211 minerior conj 12394 Aug 0 12:25 23°W 35'58 evening set 12393 Aug 2 8 13:25 11°W 270 0.59701 AU morning rise 12394 Aug 0 12:25 23°W 35'53 0.61985 AU 0°PW 1211 minerior conj 12394 Aug 0 12:25 23°W 35'53 0.61985 AU 0°PW 1211 morning max el 12393 Aug 1 8 121:35 12°W 121 morning max el 12394 Aug 0 12:25 23°W 35'53 0.61985 AU 0°PW 121 morning max el 12394 Aug 1 12:25 23°W 35'53 0.61985 AU 0°PW 121 0.61961 Aug 1 1239 Aug 1 12:25 23°W 35'53 0.61985 AU 0°PW 121 0.61961 Aug 1 12:39 Aug 1 12:25 23°W 35'53 0.61985 AU 0°PW 121 0.61961 Aug 1 12:39 Aug 1 12:25 23°W 35'53 0.61985 AU 0°PW 121 0.61961 Aug 1 12:39 Aug 1 12:25 23°W 35'53 0.61985 AU 0°PW 121	· ·	,	_		_	-	_	
direct				0.00027 AC			_	20°22'03
Morning max el 12393 May 27 21:22 22°853'34 21°39'28 morning set 12394 May 28 06:16 0°∏ 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726 16°∏ 1726	•	•			•	•		20 22 03
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12393 Jul 12 08:17 0°Ω minimum elong 12394 Jul 23 23:23 11°\$43'12 2°03'42	•							
Superior conj 12393 Jul 12 18:45 0°	max. Earth dist.			1.42031 AU				
Superior conj 12393 Jul 12 18:45 0°Q45'28 -1°38'22 evening rise 12394 Jul 06 09:01 2°Q49'52 evening rise 12393 Jul 13 01:31 1°Q14'52 1°38'25 asc. node 12394 Jul 12 03:20 12°Q48'18 evening rise 12393 Jul 23 18:31 20°Q28'52 evening max el 12394 Jul 24 07:21 0°M evening max el 12393 Jul 29 00:40 0°M retrograde 12394 Jul 29 22:25 2°M33'58 evening max el 12393 Aug 08 21:40 16°M01'15 18°09'06 evening set 12394 Aug 01 13:23 2°M00'02 retrograde 12393 Aug 18 04:05 19°M12'11 inferior conj 12394 Aug 04 16:30 30°R\$ evening set 12393 Aug 25 06:26 14°M23'03 0°41'32 minimum elong 12394 Aug 08 02:21 26°Q45'24 1°47'59 minimum elong 12393 Aug 25 07:45 14°M20'06 0°40'43 min. Earth dist. 12394 Aug 10 22:59 23°Q5'033 0.61985 AU desc. node 12393 Aug 28 13:25 11°M27'20 0.59701 AU morning rise 12394 Aug 14 10:51 20°Q\$ 0°40'43 morning max el 12394 Aug 14 10:51 20°Q\$ 0°40'43 morning rise 12394 Aug 14 10:51 20°Q\$ 0°40'40 morning rise 12394 Aug 14 10:51 20°Q\$ 0°50'46'28 morning max el 12393 Sep 01 08:10 8°M33'46 direct 12394 Aug 10 5:12 18°Q24'39 direct 12393 Sep 22 03:17 14°M32'47 27°44'00 morning max el 12394 Sep 04 09:01 26°Q\$ 25'55 27°57'41 morning max el 12393 Oct 21 18:20 0°M asc. node 12394 Oct 08 04:46 19°\$ 0°M 12393 Oct 21 18:20 0°M asc. node 12394 Oct 18 0°M 0°M 0°M 12394 Oct 18 0°M 0		12393 Jul 12 08:17	0 ° Ω		minimum elong	12394 Jun 23 23:23		2°03'42
minimum elong 12393 Jul 13 01:31 1°Ω14'52 1°38'25 asc. node 12394 Jul 12 03:20 12°Ω48'18 evening rise 12393 Jul 23 18:31 20°Ω28'52 evening max el 12394 Jul 23 11:10 29°Ω12'53 18°03'47 asc. node 12393 Jul 25 06:32 23°Ω13'26 retrograde 12394 Jul 24 07:21 0° m 12393 Jul 29 00:40 0° m retrograde 12394 Jul 29 22:25 2° m33'58 evening max el 12393 Aug 08 21:40 16° m01'15 18°09'06 evening set 12394 Aug 01 13:23 2° m00'02 retrograde 12393 Aug 15 21:15 19° m 34'34 revening set 12394 Aug 04 16:30 30° κΩ evening set 12393 Aug 18 04:05 19° m 12'11 inferior conj 12394 Aug 07 23:48 26° Ω51'56 1°49'19 inferior conj 12393 Aug 25 06:26 14° m 23'03 0°41'32 minimum elong 12394 Aug 08 02:21 26° Ω45'24 1°47'59 minimum elong 12393 Aug 25 07:45 14° m 20'06 0°40'43 min. Earth dist. 12394 Aug 10 22:59 23° Ω50'33 0.61985 AU desc. node 12393 Aug 28 13:25 11° m 27'20 0.59701 AU morning rise 12394 Aug 14 12:55 20° Ω46'28 morning rise 12393 Sep 07 19:11 6° m 42'01 morning max el 12394 Sep 04 09:01 26° Ω25'55 27° 57'41 morning max el 12393 Oct 24 18:20 0° m 27° 44'00 morning set 12394 Sep 28 05:14 0° m asc. node 12393 Oct 21 18:20 0° m 29° m 08'06 morning set 12394 Oct 08 04:46 19° m 09° m asc. node 12393 Oct 21 18:20 0° m 336'06 morning set 12394 Oct 08 04:46 19° m 09° m asc. node 12393 Oct 21 18:20 0° m 36'05'54 morning set 12394 Oct 08 04:46 19° m 09° m asc. node 12393 Oct 24 03:36 4° m.55'54 morning set 12394 Oct 08 04:46 19° m 09° m								
evening rise asc. node 12393 Jul 23 18:31 20°\(\)228'\(\)23'\(\) \(\)28'\(\)31'\(\)29'\(\)313'\(\)26'\(\)23'\(\)313'\(\)26'\(\)313'\(\)29'\(\)313'\(\)31'\(\)		12393 Jul 12 18:45			-	12394 Jul 06 09:01		
asc. node 12393 Jul 25 06:32 23°Ω13'26 Lase of the properties of the propert	minimum elong	12393 Jul 13 01:31	1° Ω 14'52	1°38'25	asc. node	12394 Jul 12 03:20		
12393 Jul 29 00:40 0° m retrograde 12394 Jul 29 22:25 2° m/33'58 evening max el 12393 Aug 08 21:40 16° m/01'15 18°09'06 evening set 12394 Aug 01 13:23 2° m/00'02 retrograde 12393 Aug 15 21:15 19° m/34'34	evening rise	12393 Jul 23 18:31	20° Ω 28'52		evening max el	12394 Jul 23 11:10	29° Ω 12'53	18°03'47
evening max el 12393 Aug 08 21:40 16°mp01'15 18°09'06 evening set 12394 Aug 01 13:23 2°mp00'02 retrograde 12393 Aug 15 21:15 19°mp34'34 12394 Aug 04 16:30 30°R\$\text{\t	asc. node	12393 Jul 25 06:32	23° Ω 13′26			12394 Jul 24 07:21	0° m)	
retrograde 12393 Aug 15 21:15 19° \$\mathbb{n}\$ 34'34 evening set 12393 Aug 18 04:05 19° \$\mathbb{n}\$ 12'11 inferior conj 12393 Aug 25 06:26 14° \$\mathbb{n}\$ 23'03 0°41'32 minimum elong 12394 Aug 07 23:48 26° \$\Omega\$ 51'56 1°49'19 inferior conj 12393 Aug 25 06:26 14° \$\mathbb{n}\$ 23'03 0°41'32 minimum elong 12394 Aug 08 02:21 26° \$\Omega\$ 45'24 1°47'59 min. Earth dist. 12393 Aug 25 07:45 14° \$\mathbb{n}\$ 20'06 0°40'43 min. Earth dist. 12394 Aug 10 22:59 23° \$\Omega\$ 50'33 0.61985 AU desc. node 12393 Aug 27 13:26 12° \$\mathbb{n}\$ 12'20 0.59701 AU morning rise 12394 Aug 14 10:51 20° \$\Omega\$ 40'20 morning max el 12393 Sep 07 19:11 6° \$\mathbb{n}\$ 42'01 morning max el 12393 Sep 07 19:11 6° \$\mathbb{n}\$ 42'01 morning max el 12393 Oct 04 14:35 0° \$\omega\$ 27° \$\omega\$ 08'06' 12393 Oct 04 14:35 0° \$\omega\$ asc. node 12393 Oct 21 18:20 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ asc. node 12394 Oct 13 09:23 0° \$\mathbb{n}\$ 12394 Oct 13 09:23		12393 Jul 29 00:40	0° m ∕		retrograde	12394 Jul 29 22:25	2° m/33'58	
evening set 12393 Aug 18 04:05 19° mp 12'11 inferior conj 12394 Aug 07 23:48 26° \$\Omega\$51'56 1° 49'19 inferior conj 12393 Aug 25 06:26 14° mp 23'03 0° 41'32 minimum elong 12394 Aug 08 02:21 26° \$\Omega\$45'24 1° 47'59 minimum elong 12393 Aug 25 07:45 14° mp 20'06 0° 40'43 min. Earth dist. 12394 Aug 10 22:59 23° \$\Omega\$50'03 0.61985 AU desc. node 12393 Aug 27 13:26 12° mp 19'25 desc. node 12394 Aug 14 10:51 20° \$\Omega\$50'09 min. Earth dist. 12393 Aug 28 13:25 11° mp 27'20 0.59701 AU morning rise 12394 Aug 14 12:55 20° \$\Omega\$46'28 morning rise 12393 Sep 01 08:10 8° mp 39'46 direct 12394 Aug 21 05:12 18° \$\Omega\$24'39 direct 12393 Sep 07 19:11 6° mp 42'01 morning max el 12394 Sep 04 09:01 26° \$\Omega\$25'55 27° 57'41 morning max el 12393 Oct 04 14:35 0° \$\Omega\$ morning set 12393 Oct 21 08:04 29° \$\Omega\$08'06 morning set 12394 Oct 08 04:03 18° \$\Omega\$57'33 asc. node 12393 Oct 24 03:36 4° mc55'54 12394 Oct 08 04:46 19° \$\Omega\$01'12 morning set 12394 Oct 13 09:23 0° \omega\$1.	evening max el	12393 Aug 08 21:40	16° Mp 01'15	18°09'06	evening set	12394 Aug 01 13:23	2° Mp 00'02	
evening set 12393 Aug 18 04:05 19° mp 12'11 inferior conj 12394 Aug 07 23:48 26° \$\Omega\$51'56 1° 49'19 inferior conj 12393 Aug 25 06:26 14° mp 23'03 0° 41'32 minimum elong 12394 Aug 08 02:21 26° \$\Omega\$45'24 1° 47'59 minimum elong 12393 Aug 25 07:45 14° mp 20'06 0° 40'43 min. Earth dist. 12394 Aug 10 22:59 23° \$\Omega\$50'03 0.61985 AU desc. node 12393 Aug 27 13:26 12° mp 19'25 desc. node 12394 Aug 14 10:51 20° \$\Omega\$50'09 min. Earth dist. 12393 Aug 28 13:25 11° mp 27'20 0.59701 AU morning rise 12394 Aug 14 12:55 20° \$\Omega\$46'28 morning rise 12393 Sep 01 08:10 8° mp 39'46 direct 12394 Aug 21 05:12 18° \$\Omega\$24'39 direct 12393 Sep 07 19:11 6° mp 42'01 morning max el 12394 Sep 04 09:01 26° \$\Omega\$25'55 27° 57'41 morning max el 12393 Oct 04 14:35 0° \$\Omega\$ morning set 12393 Oct 21 08:04 29° \$\Omega\$08'06 morning set 12394 Oct 08 04:03 18° \$\Omega\$57'33 asc. node 12393 Oct 24 03:36 4° mc55'54 12394 Oct 08 04:46 19° \$\Omega\$01'12 morning set 12394 Oct 13 09:23 0° \omega\$1.	retrograde	12393 Aug 15 21:15	19° m 34'34			12394 Aug 04 16:30	30° ₽ Ω	
inferior conj 12393 Aug 25 06:26 14° m²23'03 0°41'32 minimum elong 12394 Aug 08 02:21 26° A45'24 1°47'59 minimum elong 12393 Aug 25 07:45 14° m²20'06 0°40'43 min. Earth dist. 12394 Aug 10 22:59 23° A50'33 0.61985 AU desc. node 12393 Aug 27 13:26 12° m²19'25 desc. node 12394 Aug 14 10:51 20° A50'09 min. Earth dist. 12393 Aug 28 13:25 11° m²27'20 0.59701 AU morning rise 12394 Aug 14 12:55 20° A46'28 morning rise 12393 Sep 01 08:10 8° m³39'46 direct 12394 Aug 21 05:12 18° A24'39 direct 12393 Sep 07 19:11 6° m²42'01 morning max el 12394 Sep 04 09:01 26° A25'55 27°57'41 morning max el 12393 Sep 22 03:17 14° m³22'47 27°44'00 morning set 12394 Sep 07 17:08 0° m² 12394 Sep 28 05:14 0° Δ asc. node 12393 Oct 21 08:04 29° Δ08'06 morning set 12394 Oct 08 04:03 18° Δ57'33 norning set 12393 Oct 24 03:36 4° m²55'54 12394 Oct 08 04:46 19° Δ01'12 morning set 12394 Oct 13 09:23 0° m².	evening set	12393 Aug 18 04:05	19° m 12'11		inferior conj	=	26° Ω 51'56	1°49'19
minimum elong 12393 Aug 25 07:45 14° mp 20'06 0°40'43 min. Earth dist. 12394 Aug 10 22:59 23° € 50'33 0.61985 AU desc. node 12394 Aug 14 10:51 20° € 50'09 min. Earth dist. 12393 Aug 28 13:25 11° mp 27'20 0.59701 AU morning rise 12394 Aug 14 10:51 20° € 60'09 €	-	-		0°41'32		-		
desc. node 12393 Aug 27 13:26 12° m 19'25 desc. node 12394 Aug 14 10:51 20° € 50'09 min. Earth dist. 12393 Aug 28 13:25 11° m 27'20 0.59701 AU morning rise 12394 Aug 14 12:55 20° € € 624'39 direct 12393 Sep 01 08:10 8° m 39'46 direct 12394 Aug 21 05:12 18° € 24'39 direct 12393 Sep 07 19:11 6° m 42'01 morning max el 12394 Sep 04 09:01 26° € € 25'55 27° 57'41 morning max el 12393 Sep 22 03:17 14° m 32'47 27° 44'00 12394 Sep 07 17:08 0° m 12394 Sep 07 17:08 0° m 12394 Sep 28 05:14 0° € 12393 Oct 04 14:35 0° € 12394 Sep 28 05:14 0° € 12394 Sep 28 05:14 0° € 12393 Oct 21 08:04 29° € 08'06 morning set 12394 Oct 08 04:03 18° € 57'33 morning set 12393 Oct 24 03:36 4° m 55'54 12394 Oct 08 04:46 19° € 01'12 12 12394 Oct 08 04:46 19° € 01'12 12394 Oct 08 04:46 12394 Oct 08 0	-	-			_	-		
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direct 12393 Sep 07 19:11 6°m42'01 morning max el 12394 Sep 04 09:01 26°\(\Omega\)25'55 27°57'41 morning max el 12393 Sep 22 03:17 14°m32'47 27°44'00 12394 Sep 07 17:08 0°m 12394 Sep 08 05:14 0°\(\Omega\) asc. node 12393 Oct 21 08:04 29°\(\Omega\)08'06 morning set 12394 Oct 08 04:03 18°\(\Omega\)57'33 asc. node 12393 Oct 21 18:20 0°m asc. node 12394 Oct 08 04:46 19°\(\Omega\)01'12 morning set 12394 Oct 13 09:23 0°m.		-	-	3.57701 110	•	•		
morning max el 12393 Sep 22 03:17 14°my32'47 27°44'00 12394 Sep 07 17:08 0°m 12394 Sep 28 05:14 0°丘 12394 Sep 28 05:14 0°ℂ 12394 Sep 28 05:14 0°ℂ 12394 Sep 28 05:14 0°ℂ 12394 Sep 28	•	-				-		27°57'41
12393 Oct 04 14:35 0° \(\Omega\) asc. node 12393 Oct 21 08:04 29° \(\Omega\)08'06 morning set 12394 Oct 08 04:03 18° \(\Omega\)57'33 12393 Oct 21 18:20 0° \(\mathbb{M}\) morning set 12393 Oct 24 03:36 4° \(\mathbb{M}\)55'54 asc. node 12394 Oct 08 04:46 19° \(\Omega\)01'12 12394 Oct 13 09:23 0° \(\mathbb{M}\)		•		27944100	morning max er	=		41 3141
asc. node 12393 Oct 21 08:04 29° \(\Omega\)08'06 morning set 12394 Oct 08 04:03 18° \(\Omega\)57'33 12393 Oct 21 18:20 0° \(\mathbb{N}\) asc. node 12394 Oct 08 04:46 19° \(\Omega\)01'12 morning set 12393 Oct 24 03:36 4° \(\mathbb{N}\)55'54 12394 Oct 13 09:23 0° \(\mathbb{N}\)	morning max et	•	-	44 UU				
12393 Oct 21 18:20 0° M asc. node 12394 Oct 08 04:46 19° 2 01'12 morning set 12393 Oct 24 03:36 4° M 55'54 12394 Oct 13 09:23 0° M €	000 mc J-					-		
morning set 12393 Oct 24 03:36 4°M 55'54 12394 Oct 13 09:23 0°M	asc. node				•			
					asc. node			
max. Earth dist. 12393 Oct 30 10:09 18° III.33'42 1.31320 AU max. Earth dist. 12394 Oct 13 15:40 0° III.34'09 1.31771 AU	•			1.010=0 / ==				
	max. Earth dist.	12393 Oct 30 10:09	18°IIL33'42	1.31320 AU	max. Earth dist.	12394 Oct 13 15:40	บ"IIL34'09	1.31771 AU

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superior conj	12394 Oct 15 15:19	4°M.54'51	1°06'47	max. Earth dist.	12395 Sep 26 14:20	12° Ω 14'17	1.32754 AU
minimum elong	12394 Oct 15 13:03	4°M42'25	1°06'51	max. Lattii dist.	12373 Sep 20 14.20	12 —1417	1.32734 AU
evening rise	12394 Oct 22 09:24	19°M44'42	1 0031	superior conj	12395 Sep 29 21:07	19° ≏ 12'36	0°45'15
e vennig 1150	12394 Oct 27 07:35	0° ₹		minimum elong	12395 Sep 29 19:09	19° ഫ 02'03	0°45'06
desc. node	12394 Nov 10 07:31	23° ∡ 20′58			12395 Oct 04 20:39	0°M	
	12394 Nov 16 01:15	0°る		evening rise	12395 Oct 06 20:36	4°ML18'00	
evening max el	12394 Nov 16 17:50	0° る 40'27	24°32'17	<i>8</i> 23	12395 Oct 20 13:54	0° ∡ ⊓	
retrograde	12394 Nov 30 11:37	7° る 32'31		desc. node	12395 Oct 28 04:49	9° ∡ ¹46'14	
evening set	12394 Dec 05 18:22	6° る 30'49		evening max el	12395 Oct 29 04:08	10° ∡ ¹44'49	22°50'54
min. Earth dist.	12394 Dec 11 05:25	3°₹41'54	0.56220 AU	retrograde	12395 Nov 11 07:25	17° ∡ 16'23	
inferior conj	12394 Dec 13 15:30	2° る 10'45	-5°34'09	evening set	12395 Nov 15 04:58	16° ∡ ′43′20	
minimum elong	12394 Dec 13 21:40	2° る 01'04	5°32'25	min. Earth dist.	12395 Nov 22 12:51	13° ∡ °23′10	0.54969 AU
	12394 Dec 17 07:37	30°₽ , ₹		inferior conj	12395 Nov 23 17:26	12° ∡ ¹42'24	-5°52'32
morning rise	12394 Dec 22 03:03	28° ₰ 07'52		minimum elong	12395 Nov 23 15:55	12° ∡ ¹44'34	5°51'40
direct	12394 Dec 24 13:30	27° ∡ 751′52		morning rise	12395 Dec 02 04:19	8° ∡ ¹53'38	
	12394 Dec 31 04:50	8°0		direct	12395 Dec 05 06:43	8° ∡ ³31′20	
morning max el	12395 Jan 03 09:56	2° る 35'32	19°36'50	morning max el	12395 Dec 16 16:13	13° х 56′39	20°57'49
asc. node	12395 Jan 04 04:55	3° る 22'58		asc. node	12395 Dec 22 02:01	20° ∡ 13′22	
	12395 Jan 20 10:57	0° ≈			12395 Dec 28 06:27	ರ°ರ	
morning set	12395 Jan 20 19:10	0° ≈ 41'22		morning set	12396 Jan 05 03:27	15° る 23'22	
					12396 Jan 12 03:34	0° ≈	
superior conj	12395 Jan 28 18:01	16° ≈ 39'37	1°04'27				
minimum elong	12395 Jan 28 20:53	16° ≈ 53'44	1°04'44	superior conj	12396 Jan 12 12:10	0° ≈ 44'17	1°22'41
max. Earth dist.	12395 Feb 04 01:01	28° ≈ 40′03	1.37704 AU	minimum elong	12396 Jan 12 14:32	0° ≈ 56′28	1°23'16
	12395 Feb 04 18:25	0° ∀		max. Earth dist.	12396 Jan 17 10:09	10° ≈ 37'11	1.35613 AU
desc. node	12395 Feb 06 07:09	2°) 46′34		evening rise	12396 Jan 21 09:39	18° ≈ 13'24	
evening rise	12395 Feb 07 18:21	5° ¥ 23′28		desc. node	12396 Jan 24 03:51	23° ≈ 16′18	
	12395 Feb 22 21:58	0° Υ			12396 Jan 27 24:00	0° ∀	
evening max el	12395 Mar 15 05:44	25° Y ′59′08	25°13'54		12396 Feb 17 03:14	0° Υ	
	12395 Mar 19 21:17	0°8		evening max el	12396 Feb 25 19:26	9° Ƴ 48'06	26°20'21
retrograde	12395 Mar 27 07:45	2° 8 59'22		retrograde	12396 Mar 09 16:23	17° Y ′06′03	
evening set	12395 Apr 02 02:53	0° 8 34'51		evening set	12396 Mar 15 22:42	14° Ƴ 34'56	
asc. node	12395 Apr 02 02:07	0° 8 36'27		asc. node	12396 Mar 18 23:31	11° Y 35'00	
	12395 Apr 02 18:29	30°₹ Υ		min. Earth dist.	12396 Mar 20 02:03	10° ℃ 17'23	0.66784 AU
min. Earth dist.	12395 Apr 06 12:24	25° Y 42'29	0.67889 AU	inferior conj	12396 Mar 21 20:21	8° Υ '08'24	0°54'10
inferior conj	12395 Apr 07 18:31	24° Y ′04′24	1°42'23	minimum elong	12396 Mar 21 19:01	8°Υ12'27	0°53'37
minimum elong	12395 Apr 07 16:29	24°Υ11'01	1°41'25	morning rise	12396 Mar 27 16:12	2° Υ 24'31	
morning rise	12395 Apr 13 06:26	18° ℃ 10'07		direct	12396 Mar 30 18:54	1° Y 29'49	10021110
direct	12395 Apr 16 19:57	16° ℃ 57'07	10010122	morning max el	12396 Apr 06 07:45		18°31'10
morning max el	12395 Apr 23 21:05	20° Y 49'12	19°18'33	desc. node	12396 Apr 21 05:45	25° Y 42'15 0° と	
11-	12395 May 01 09:20 12395 May 05 09:03	0° と 5° と 42'37			12396 Apr 23 23:26 12396 Apr 27 01:59	4° 8 53'36	
desc. node greatest brilliancy	12395 May 05 09:03 12395 May 06 16:12	7° 8 37'31	-0.7m	morning set	12396 Apr 27 01:39	4 000000	
morning set	12395 May 18 07:03	25° 8 17'28	-U. /III	superior conj	12396 May 13 01:35	29° 8 57'14	2003/56
morning set	12395 May 21 08:15	0°Ⅱ		minimum elong	12396 May 12 18:34	29° 8 29'49	
max. Earth dist.	12395 May 31 04:10		1.45171 AU	max. Earth dist.	12396 May 12 23:14	29° 8 48'05	1.45751 AU
max. Latin dist.	12373 Way 31 04.10	13 11/34	1. 4 31/1 A0	max. Lartii dist.	12396 May 13 02:17	0°П	1.43731 AO
superior conj	12395 Jun 03 16:55	20° ∏ 54'29	-2°13'25	evening rise	12396 May 28 18:34	24° Ⅱ 38'01	
minimum elong	12395 Jun 03 17:16	20° I 55'50			12396 Jun 01 03:52	0°95	
	12395 Jun 09 09:12	0 - -		greatest brilliancy	12396 Jun 06 10:38	8° © 19'28	-0.8m
evening rise	12395 Jun 18 01:56	14°9513'56		asc. node	12396 Jun 14 21:09	20°950'22	
8	12395 Jun 27 16:48	$0^{\circ}\Omega$		evening max el	12396 Jun 19 12:49	26°523'05	18°47'39
asc. node	12395 Jun 29 00:12	2° Ω 02'55		<i>y</i>	12396 Jun 25 16:26	$0^{\circ}\Omega$	
evening max el	12395 Jul 07 01:11	12° Ω 42'35	18°16'54	retrograde	12396 Jun 26 04:14	0° Ω 01'22	
retrograde	12395 Jul 13 09:59	16° Ω 05′29		· ·	12396 Jun 26 15:58	30° ₹ 5	
evening set	12395 Jul 16 09:19	15° Ω 17'26		evening set	12396 Jun 29 12:07	28° © 57'41	
inferior conj	12395 Jul 22 07:33	9° £ 52′09	2°34'54	inferior conj	12396 Jul 05 01:54	23°916'45	3°01'49
minimum elong	12395 Jul 22 09:56	9° Ω 45′20	2°33'38	minimum elong	12396 Jul 05 03:26	23°511'59	3°00'44
min. Earth dist.	12395 Jul 24 17:50	7° Ω 05'53	0.64124 AU	min. Earth dist.	12396 Jul 06 21:30	21° © 00'56	0.65941 AU
morning rise	12395 Jul 28 09:06	3° Ω 34'26		morning rise	12396 Jul 10 17:58	16° 9 54'12	
desc. node	12395 Aug 01 08:13	1° Ω 22'08		direct	12396 Jul 17 02:41	14° © 12'33	
direct	12395 Aug 04 00:14	0° Ω 57'31		desc. node	12396 Jul 18 05:31	14° © 17'01	
morning max el	12395 Aug 17 18:31	8° N 58'03	27°34'29	morning max el	12396 Jul 30 05:29	21° © 59'19	26°40'49
	12395 Sep 03 03:31	0° m/y			12396 Aug 06 05:37	$0^{\circ}\Omega$	
	12395 Sep 20 13:05	0∘ ⊽			12396 Aug 26 09:06	0° m	
morning set	12395 Sep 21 20:23	2° م 33'34		morning set	12396 Sep 04 01:37	15° m 36'59	
asc. node	12395 Sep 25 01:24	9° ჲ 02'29		max. Earth dist.	12396 Sep 08 03:36	23° m 32'57	1.34254 AU

asc. node	12396 Sep 10 22:01	29°M 08'08			12397 Jul 06 08:43	0 \circ \odot	
	12396 Sep 11 08:08	0∘ ⊽		morning max el	12397 Jul 12 16:11	5° © 18'08	25°25'24
					12397 Jul 31 16:48	$0^{\circ}\Omega$	
superior conj	12396 Sep 12 20:48	3° ჲ 09'30	0°18'39	morning set	12397 Aug 17 15:54	27° Ω 57'39	
minimum elong	12396 Sep 12 19:49	3° ₽ 04'24	0°18'25		12397 Aug 18 18:51	0° m y	
evening rise	12396 Sep 20 06:25	18° ≏ 45'12		max. Earth dist.	12397 Aug 21 07:07	4° m 39'06	1.36206 AU
S	12396 Sep 25 19:38	o°M₊			, and the second	•	
evening max el	12396 Oct 09 20:25	20°M58'55	21°14'35	superior conj	12397 Aug 27 11:29	16° m) 37'43	-0°12'20
desc. node	12396 Oct 14 02:10	24°M26'56		minimum elong	12397 Aug 27 12:16	16° m) 41'36	
retrograde	12396 Oct 21 18:55	26°M54'53		behind sun begin	12397 Aug 27 08:13	16° m) 21'25	
evening set	12396 Oct 24 09:30	26°M39'04		behind sun end	12397 Aug 27 16:19	17° mp 01'48	
inferior conj	12396 Nov 02 09:22	22°M44'41	5012152	asc. node	12397 Aug 27 10:19 12397 Aug 28 18:39	19° mg 13'50	
minimum elong	12396 Nov 02 09:22 12396 Nov 02 00:27	22°M57'14		asc. node	12397 Rug 28 18:39 12397 Sep 03 01:27	0. ⊽	
•					•		
min. Earth dist.	12396 Nov 02 19:10		0.54549 AU	evening rise	12397 Sep 04 12:37	2° ≏ 59'40	
morning rise	12396 Nov 10 16:03	18°M54'21			12397 Sep 20 08:07	0°M,	10055101
direct	12396 Nov 14 14:43	18° ™ 20'56		evening max el	12397 Sep 22 01:46	1°M52'13	19°55'21
morning max el	12396 Nov 27 09:29	24°M28'40	22°38'09	desc. node	12397 Sep 30 23:36	6°M55'06	
	12396 Dec 02 09:16	0° ∡		retrograde	12397 Oct 02 09:31	7° ™ 00'40	
asc. node	12396 Dec 07 23:04	8° ∡ '01'59		evening set	12397 Oct 04 07:47	6° M 50'42	
morning set	12396 Dec 19 14:28	0°ප10'00		inferior conj	12397 Oct 13 05:40	2°M50'13	-3°42'30
	12396 Dec 19 12:35	8°0		minimum elong	12397 Oct 12 20:22	3°ML04'23	3°39'00
				min. Earth dist.	12397 Oct 15 03:53	1°MJ39'51	0.55065 AU
superior conj	12396 Dec 26 14:25	15°る10'00	1°33'52		12397 Oct 18 02:43	30° ₽ Ω	
minimum elong	12396 Dec 26 15:48	15° る 17'24	1°34'41	morning rise	12397 Oct 21 07:35	28° ♀ 37'00	
max. Earth dist.	12396 Dec 30 02:08	22° る 29'58	1.33845 AU	direct	12397 Oct 26 02:37	27° Ω 46'46	
	12397 Jan 02 19:06	0° ≈			12397 Nov 02 20:08	0°M	
evening rise	12397 Jan 02 15:15	1°≈38'59		morning max el	12397 Nov 08 20:15	4°M33'31	24°26'37
desc. node	12397 Jan 10 00:38	13°≈35'00		asc. node	12397 Nov 08 20:13 12397 Nov 24 20:00	26°M34'33	24 2037
desc. node	12397 Jan 10 00.38 12397 Jan 19 23:09	0°)		asc. node		20 11€3433 0° √	
			27000122		12397 Nov 26 16:58		
evening max el	12397 Feb 07 08:58	23°) €24'53	27°08'33	morning set	12397 Dec 04 02:22	14° ₹ 55'51	
	12397 Feb 16 16:35	0° Υ					
retrograde	12397 Feb 20 19:04	0° Y 50′03		superior conj	12397 Dec 10 21:59	29° ∡ ¹48'48 −	1°38'30
	12397 Feb 24 15:26	30° ₹		minimum elong	12397 Dec 10 22:15	29° ∡ 50′13	1°39'24
evening set	12397 Feb 27 10:50	28° ∺ 17'33			12397 Dec 11 00:02	0°ಕ	
min. Earth dist.	12397 Mar 03 09:01	24° ₩ 33'25		max. Earth dist.	12397 Dec 13 01:48	4° る 30'23	1.32504 AU
inferior conj	12397 Mar 05 15:21	22°) €01'16	-0°04'32	evening rise	12397 Dec 18 07:49	15° る 31'59	
minimum elong	12397 Mar 05 15:28	22°) €00'55	0°04'17		12397 Dec 25 20:33	0° ≈	
transit middle	12397 Mar 05 15:28	22° ℋ 00'55	0°04'17	desc. node	12397 Dec 27 21:30	3° ≈ 37'19	
transit begin	12397 Mar 05 12:34	22°) €09'05			12398 Jan 14 17:40	0° ∀	
transit end	12397 Mar 05 18:22	21°) (52'46		evening max el	12398 Jan 20 20:59	6°) 38′26	27°31'34
asc. node	12397 Mar 05 20:56	21°) 45'35		retrograde	12398 Feb 03 15:10	14°) €02'47	
morning rise	12397 Mar 11 21:40	16°) 30′03		evening set	12398 Feb 10 12:54	11° ¥ 35'58	
direct	12397 Mar 14 14:51	15° ¥ 50'39		min. Earth dist.	12398 Feb 14 07:27	8°) €21'49	0.63471 AU
morning max el	12397 Mar 20 23:22	19°) €09'56	18°00'34	inferior conj	12398 Feb 17 00:50	5° ¥ 36'50	
morning mun vi	12397 Mar 29 04:55	0°Υ	10 003.	minimum elong	12398 Feb 17 03:12	5°) (30'49	
morning set	12397 Apr 08 01:07	15°Υ53'09		asc. node	12398 Feb 20 18:21	2° ₩ 09'50	1 113)
desc. node	12397 Apr 08 02:22	15° Υ 58'15		morning rise	12398 Feb 23 19:49	0° ∺ 20'53	
desc. Hode	12397 Apr 08 02:22 12397 Apr 16 17:35	0° 8		morning risc	12398 Feb 25 00:52	0 /(2033 30°R≈	
	1239/ Apr 10 17.33	0.0		direct		30 k≈ 29°≈53'12	
	10207 4 00 10 11	00 🗸 11140	1025150	direct	12398 Feb 26 05:06		
superior conj	12397 Apr 22 12:11	9° 8 11'49			12398 Feb 27 09:13	0°) {	15045100
minimum elong	12397 Apr 22 03:00	8° 8 35'29		morning max el	12398 Mar 04 17:08	3°) 13′26	17°47'09
max. Earth dist.	12397 Apr 25 19:34		1.45578 AU	morning set	12398 Mar 21 02:59	28°) €09'50	
	12397 May 05 20:22	Π °0			12398 Mar 22 04:38	0° ℃	
evening rise	12397 May 08 14:25	4° Ⅱ 14'45		desc. node	12398 Mar 25 22:57	6° Y 25′52	
greatest brilliancy	12397 May 22 02:42	24° ∏ 46'49	-0.7m				
	12397 May 25 17:17	0 \circ \odot		superior conj	12398 Apr 02 16:43	19° Ƴ 20'14	-0°56'56
asc. node	12397 Jun 01 18:14	9° © 00'47		minimum elong	12398 Apr 02 10:51	18° Ƴ 56'11	0°56'19
evening max el	12397 Jun 02 19:51	10°907'57	19°35'02	max. Earth dist.	12398 Apr 08 14:04	28° Ƴ 49'54	1.44686 AU
retrograde	12397 Jun 10 02:03	14°9514'00			12398 Apr 09 07:44	0° ႘	
evening set	12397 Jun 13 18:58	12° © 54'02		evening rise	12398 Apr 18 01:42	13° 8 38'05	
inferior conj	12397 Jun 19 03:38	6°959'01	3°13'25		12398 Apr 28 22:13	0°Ⅱ	
minimum elong	12397 Jun 19 04:05	6°957'32	3°12'29	evening max el	12398 May 16 21:13	23° ∏ 54'24	20°37'04
min. Earth dist.	12397 Jun 19 04:03 12397 Jun 20 08:33	5°\$23'01	0.67341 AU	asc. node	12398 May 19 15:25	26° I I22'28	20 3/04
			0.07341 AU		•		
morning rise	12397 Jun 24 12:47	0°536'31		retrograde	12398 May 25 01:02	28° Ⅱ 38'05	
T' .	12397 Jun 25 06:10	30°RⅡ 270₩50142		evening set	12398 May 29 03:41	27° I I01'50	2012110
direct	12397 Jun 30 11:31	27° ∏ 59'42		inferior conj	12398 Jun 03 10:06	20° Ⅲ 54'22	
desc. node	12397 Jul 05 02:45	29° Ⅱ 16'52		minimum elong	12398 Jun 03 09:31	20° Ⅱ 56′24	3~11'23

min. Earth dist.	12398 Jun 04 01:06	20° Ⅲ 02'41	0.68287 AU	min. Earth dist.	12399 May 18 20:51	4° Ⅱ 51'38	0.68763 AU
morning rise	12398 Jun 08 15:04	14° Ⅱ 35′09			12399 May 22 15:32	30° ₹ 8	
direct	12398 Jun 14 01:50	12° Ⅲ 10′44		morning rise	12399 May 23 22:31	28° 8 44'09	
desc. node	12398 Jun 21 23:52	15° Ⅱ 54'02		direct	12399 May 28 20:23	26° 8 37'33	
morning max el	12398 Jun 25 02:15	18° Ⅱ 46′23	23°58'03		12399 Jun 05 00:30	Π°	
S	12398 Jul 04 13:27	0°€		morning max el	12399 Jun 07 13:35	2° Ⅱ 21'21	22°28'32
	12398 Jul 24 19:16	$0^{\circ}\Omega$		desc. node	12399 Jun 08 20:52	3° Ⅱ 42'43	
morning set	12398 Jul 30 10:35	9° £ 24'30			12399 Jun 28 12:46	0°©	
max. Earth dist.	12398 Aug 03 04:43	15° Ω 57'09	1.38462 AU	morning set	12399 Jul 11 05:03	19° © 45'47	
	Č			max. Earth dist.	12399 Jul 16 03:23	27°956'25	1.40779 AU
superior conj	12398 Aug 10 13:44	29° Ω 29'20	-0°46'10		12399 Jul 17 08:30	0°N	
minimum elong	12398 Aug 10 16:57	29° Ω 44'36	0°46'09				
	12398 Aug 10 20:11	0° m		superior conj	12399 Jul 23 23:19	11° Ω 34'47	-1°20'16
asc. node	12398 Aug 15 15:19	9° Mp 16'15		minimum elong	12399 Jul 24 05:06	12°Ω00'42	
evening rise	12398 Aug 19 12:37	16° Mp 54'54		asc. node	12399 Aug 02 12:03	29°Ω11'39	. 2011
e , emily me	12398 Aug 26 09:59	0∘ ⊽		use. House	12399 Aug 02 22:19	0° m)	
evening max el	12398 Sep 04 20:53	° — 13° Ω 34'11	18°57'31	evening rise	12399 Aug 03 03:04	0° m) 22'21	
retrograde	12398 Sep 13 14:08	17° ⊆ 55'55	10 37 31	evening max el	12399 Aug 19 02:27	25° m 59'20	18°21'00
evening set	12398 Sep 15 10:58	17 — 33 33 17° Ω 44'41		retrograde	12399 Aug 26 13:49	29° m) 45'47	10 21 00
desc. node	12398 Sep 17 21:04	16° £ 59'19		evening set	12399 Aug 28 16:27	29° m 28'30	
inferior conj	12398 Sep 17 21:04 12398 Sep 23 18:40	13° ⊆ 28'12	-1°51'27	desc. node	12399 Sep 04 18:31	25° m/ 13'28	
minimum elong	12398 Sep 23 13:55	13° ⊆ 36'32		inferior conj	12399 Sep 05 05:20	24° m/51'22	0.08,33
min. Earth dist.	12398 Sep 26 17:18	13 ⊆ 3032 11° ⊆ 24'57	0.56440 AU	minimum elong	12399 Sep 05 05:02	24° m) 52'01	0°08'26
morning rise	12398 Sep 20 17:18 12398 Oct 01 13:42	8° £ 39'01	0.30440 AU	transit middle	12399 Sep 05 05:02	24° m/52'01	0°08'26
direct	12398 Oct 01 13.42 12398 Oct 07 03:51	7° £ 24'56		transit begin	12399 Sep 05 03:02 12399 Sep 05 02:02	24° m 58'09	0 08 20
	12398 Oct 07 03:31 12398 Oct 21 08:35	7 = 24 30 14° £ 43'04	26°05'38	transit end	•	-	
morning max el		0°M	20 03 38	min. Earth dist.	12399 Sep 05 08:01 12399 Sep 08 13:02	24° m/45'52 22° m/09'04	0.58419 AU
asc. node	12398 Nov 02 13:45	บาแน 15° M .39'43					0.38419 AU
	12398 Nov 11 16:52	29°M35'30		morning rise direct	12399 Sep 12 14:07	19° M) 26'05	
morning set	12398 Nov 18 13:23	29 IIL33 30 0° ⊼ 1			12399 Sep 18 19:27	17° Mp 44'05	27919122
	12398 Nov 18 17:57	0-×,		morning max el	12399 Oct 03 03:24	25° m 24'39 0° ₽	27°18'22
	12200 NI 25 00-27	1.49.722120	1927/01		12399 Oct 07 09:54	0° ™	
superior conj	12398 Nov 25 08:37	14° 🖈 33'20	1°37'01	1-	12399 Oct 26 21:55		
minimum elong	12398 Nov 25 07:48	14° 🖈 28'50	1°37'49	asc. node	12399 Oct 29 13:38	5°M08'50	
max. Earth dist.	12398 Nov 26 07:26 12398 Dec 02 08:23	16° х 39'57 29° х 44'34	1.31649 AU	morning set	12399 Nov 02 21:49	14°M04'33	
evening rise		29° x '44'34		:	12200 N 00, 20-20	200 m 17150	1920142
JJ.	12398 Dec 02 11:20			superior conj	12399 Nov 09 20:20 12399 Nov 09 18:40	29°M17'50	1°29'42
desc. node	12398 Dec 14 18:29	23° る 15'36		minimum elong		29°M08'33	1°30'16
	12398 Dec 18 22:52	0°≈ 10°≈≈15!50	27922127	max. Earth dist.	12399 Nov 09 16:07	28°M54'17 0° <i>₹</i> 7	1.31298 AU
evening max el	12399 Jan 03 05:26	19°≈15'59	21-23-26		12399 Nov 10 03:53 12399 Nov 16 14:35	0° x ′ 14° x ′10′31	
retrograde	12399 Jan 17 03:34	26°≈33'33		evening rise		14°X'10'31	
evening set				Z .			
min. Earth dist.	12399 Jan 24 01:52	24°≈21′04	0.61411.411	-	12399 Nov 24 11:48	5 °0	
	12399 Jan 27 19:54	21° ≈ 30'32	0.61411 AU	desc. node	12399 Nov 24 11:48 12399 Dec 01 15:33	0°궁 12°궁20'22	
inferior conj	12399 Jan 27 19:54 12399 Jan 30 21:31	21°≈30'32 18°≈46'04	-2°30'41	desc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20	0°る 12°る20'22 0°≈	26940147
minimum elong	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45	21°≈30'32 18°≈46'04 18°≈34'18		desc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43	0°号 12°号20'22 0°≈ 1°≈06'41	26°40'47
minimum elong morning rise	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11	-2°30'41	desc. node evening max el retrograde	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31	0°号 12°号20'22 0°≈ 1°≈06'41 8°≈14'31	26°40'47
minimum elong morning rise asc. node	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50	-2°30'41	desc. node evening max el retrograde evening set	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52	0° ರ 12° ರ 20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54	
minimum elong morning rise asc. node direct	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27	-2°30'41 2°27'58	desc. node evening max el retrograde evening set min. Earth dist.	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45	0° ರ 12° ರ 20'22 0° ≈ 1° ≈ 06'41 8° ≈ 14'31 6° ≈ 24'54 3° ≈ 47'40	0.59264 AU
minimum elong morning rise asc. node	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45	-2°30'41	desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48	0°ප 12°ප20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥	-2°30'41 2°27'58	desc. node evening max el retrograde evening set min. Earth dist.	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48 12400 Jan 13 09:41	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0° ¥ 11°¥24'10	-2°30'41 2°27'58	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥	-2°30'41 2°27'58	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₹♂ 26°♂42'29	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el morning set desc. node	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0° H 11° H 24'10 27° H 00'22	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02	0°궁 12°♂20'22 0°ଛ 1°≋06'41 8°≋14'31 6°≈24'54 3°≋47'40 1°≋19'37 1°≈04'14 30°ੴ 26°♂42'29 26°♂27'02	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 09 21:45 12400 Jan 13 01:48 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01	0°る 12°る20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°Rる 26°る42'29 26°る27'02 26°る49'51	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 20:01	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨♂ 26°♂42'29 26°♂42'29 26°♂42'51 0°≈	0.59264 AU -3°51'05 3°47'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 20:01 12399 Mar 14 18:50	21°≈30'32 18°≈46'04 18°≈34'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0° ₩ 11° ₩ 24'10 27° ₩ 00'22 0° ❤ 36'28 0° ❤ 30'10 0° ❤ 25'04	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28	0°♂ 12°♂ 20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₹♂ 26°♂ 42'29 26°♂ 42'29 26°♂ 49'51 0°≈ 0°≈18'55	0.59264 AU -3°51'05
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 18:50 12399 Mar 14 18:50 12399 Mar 14 21:12	21°≈30'32 18°≈46'04 18°≈46'04 18°≈41'18 13°≈41'50 13°≈28'27 16°≈59'45 0°₩ 11°₩24'10 27°₩00'22 0°Ψ36'28 0°Ψ30'10 0°Ψ25'04 0°Ψ35'17	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Jan 30 21:28 12400 Feb 15 14:31	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₹♂ 26°♂42'29 26°♂42'29 26°♂49'51 0°≈ 0°≈18'55 25°≈18'44	0.59264 AU -3°51'05 3°47'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 18:50 12399 Mar 14 21:12 12399 Mar 14 13:00	21°≈30'32 18°≈46'04 18°≈46'04 18°≈41'18 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10 0°Y25'04 0°Y35'17 0°Y	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28	0°♂ 12°♂ 20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₹♂ 26°♂ 42'29 26°♂ 42'29 26°♂ 49'51 0°≈ 0°≈18'55	0.59264 AU -3°51'05 3°47'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist.	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 18:50 12399 Mar 14 18:50 12399 Mar 14 13:00 12399 Mar 22 04:49	21°≈30'32 18°≈46'04 18°≈46'04 18°≈41'18 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10 0°Y25'04 0°Y35'17 0°Y 12°Y50'27	-2°30'41 2°27'58 17°51'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 18 01:58	0°云 12°云20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨ご 26°云42'29 26°云27'02 26°云49'51 0°≈ 0°≈18'55 25°≈18'44 0°光	0.59264 AU -3°51'05 3°47'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 18:50 12399 Mar 14 13:00 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04	21°≈30'32 18°≈46'04 18°≈46'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10 0°Y25'04 0°Y35'17 0°Y 12°Y50'27 23°Y26'55	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 30 13:34 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 25 01:11	0°云 12°云20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°Rउ 26°云42'29 26°云27'02 26°云49'51 0°≈ 0°≈18'55 25°≈18'44 0°光	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist.	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 02 01:38	21°≈30'32 18°≈46'04 18°≈46'04 18°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°₩ 11°₩24'10 27°₩00'22 0°Ψ36'28 0°Ψ30'10 0°Ψ25'04 0°Ψ35'17 0°Ψ 12°Ψ50'27 23°Ψ26'55 0°℧	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 25 01:11 12400 Feb 25 01:11	0°云 12°云20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨ 26°云42'29 26°云42'29 26°云49'51 0°≈ 0°≈18'55 25°≈18'44 0°升	0.59264 AU -3°51'05 3°47'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 18:50 12399 Mar 14 13:00 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 02 01:38 12399 Apr 23 01:41	21°≈30'32 18°≈46'04 18°≈46'04 18°≈41'18 13°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10 0°Y25'04 0°Y35'17 0°Y 12°Y50'27 23°Y26'55 0°℧	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50 1.43175 AU	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 15 14:31 12400 Feb 25 01:11 12400 Feb 25 02:42 12400 Feb 27 16:06	0°云 12°云20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°R云 26°云42'29 26°云27'02 26°云49'51 0°≈ 0°≈18'55 25°≈18'44 0°兴 12°兴56'17 13°兴03'12 17°兴38'22	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36 0°20'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 21:29 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 21:12 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 02 01:38 12399 Apr 23 01:41 12399 Apr 29 17:07	21°≈30'32 18°≈46'04 18°≈46'04 18°≈48'11 13°≈41'50 13°≈28'27 16°≈59'45 0°¥ 11°¥24'10 27°¥00'22 0°Y36'28 0°Y30'10 0°Y25'04 0°Y35'17 0°Y 12°Y50'27 23°Y26'55 0°℧ 0°Ⅲ 7°Ⅲ41'33	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 18 01:58 12400 Feb 25 01:11 12400 Feb 25 02:42 12400 Feb 27 16:06 12400 Mar 03 15:20	0°♂ 12°♂ 20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₹ 26°♂ 42'29 26°♂ 42'29 26°♂ 49'51 0°≈ 0°≈18'55 25°≈18'44 0° ₩ 12° ₩ 56'17 13° ₩ 03'12 17° ₩ 38'22 26° ₩ 15'37	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 14 21:29 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 18:50 12399 Mar 14 21:12 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 02 01:38 12399 Apr 23 01:41 12399 Mar 29 17:07 12399 May 06 12:41	21°≈30'32 18°≈46'04 18°≈46'04 18°≈41'18 13°≈41'50 13°≈28'27 16°≈59'45 0° ₩ 11° ₩24'10 27° ₩00'22 0° Ψ36'28 0° Ψ30'10 0° Ψ25'04 0° Ψ35'17 0° Ψ 12° Ψ50'27 23° Ψ26'55 0° ੴ 0° Ⅲ 7° Ⅲ41'33 12° ∭39'59	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50 1.43175 AU	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 21 00:23 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 15 14:31 12400 Feb 25 01:11 12400 Feb 25 01:11 12400 Feb 27 16:06 12400 Mar 03 15:20 12400 Mar 05 20:43	0°云 12°云20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨ 26°云42'29 26°云27'02 26°云49'51 0°≈ 0°≈18'55 25°≈18'44 0°光 12°沃56'17 13°沃03'12 17°沃38'22 26°沃15'37 0°℃	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36 0°20'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 12:12 12399 Mar 14 21:12 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 29 01:38 12399 Apr 29 17:07 12399 May 06 12:41 12399 May 08 23:08	21° ≈ 30'32 18° ≈ 46'04 18° ≈ 34'18 13° ≈ 48'11 13° ≈ 41'50 13° ≈ 28'27 16° ≈ 59'45 0° ₩ 11° ₩ 24'10 27° ₩ 00'22 0° ϒ 36'28 0° ϒ 30'10 0° ϒ 25'04 0° ϒ 35'17 0° ϒ 12° ϒ 50'27 23° ϒ 26'55 0° ੴ 0° Ⅲ 7° Ⅲ 41'33 12° Ⅲ 39'59 13° Ⅲ 07'52	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50 1.43175 AU	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 18 01:58 12400 Feb 25 01:11 12400 Feb 25 02:42 12400 Mar 03 15:20 12400 Mar 05 20:43 12400 Mar 08 08:28	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨♂ 26°♂42'29 26°♂42'29 26°♂49'51 0°≈ 0°≈18'55 25°≈18'44 0°ዧ 12°ዧ56'17 13°ዧ03'12 17°ዧ38'22 26°ዧ15'37 0°♈ 4°♈06'07	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36 0°20'42
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde evening set	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 21:12 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 29 01:38 12399 Apr 29 17:07 12399 May 06 12:41 12399 May 08 23:08 12399 May 13 12:26	21° ≈ 30'32 18° ≈ 46'04 18° ≈ 34'18 13° ≈ 48'11 13° ≈ 41'50 13° ≈ 28'27 16° ≈ 59'45 0° ₩ 11° ₩ 24'10 27° ₩ 00'22 0° ϒ 36'28 0° ϒ 30'10 0° ϒ 25'04 0° ϒ 35'17 0° ϒ 12° ϒ 50'27 23° ϒ 26'55 0° ₩ 0° Ⅲ 7° Ⅲ 41'33 12° Ⅲ 39'59 13° Ⅲ 07'52 11° Ⅲ 15'54	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50 1.43175 AU 21°50'29	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 18 01:58 12400 Feb 25 01:11 12400 Feb 27 16:06 12400 Mar 03 15:20 12400 Mar 05 20:43 12400 Mar 08 08:28 12400 Mar 08 08:28 12400 Mar 08 08:28	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨♂ 26°♂42'29 26°♂42'29 26°♂49'51 0°≈ 0°≈18'55 25°≈18'44 0°ℋ 12°ℋ56'17 13°ℋ03'12 17°ℋ38'22 26°ℋ15'37 0°♈ 4°♈06'07 0°♉	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36 0°20'42 1.41207 AU
minimum elong morning rise asc. node direct morning max el morning set desc. node superior conj minimum elong behind sun begin behind sun end max. Earth dist. evening rise evening max el asc. node retrograde	12399 Jan 27 19:54 12399 Jan 30 21:31 12399 Jan 31 02:45 12399 Feb 07 06:31 12399 Feb 07 15:44 12399 Feb 09 10:11 12399 Feb 16 09:43 12399 Feb 25 15:00 12399 Mar 04 01:25 12399 Mar 12 19:31 12399 Mar 14 20:01 12399 Mar 14 18:50 12399 Mar 14 12:12 12399 Mar 14 21:12 12399 Mar 14 13:00 12399 Mar 22 04:49 12399 Mar 28 20:04 12399 Apr 29 01:38 12399 Apr 29 17:07 12399 May 06 12:41 12399 May 08 23:08	21° ≈ 30'32 18° ≈ 46'04 18° ≈ 34'18 13° ≈ 48'11 13° ≈ 41'50 13° ≈ 28'27 16° ≈ 59'45 0° ₩ 11° ₩ 24'10 27° ₩ 00'22 0° ϒ 36'28 0° ϒ 30'10 0° ϒ 25'04 0° ϒ 35'17 0° ϒ 12° ϒ 50'27 23° ϒ 26'55 0° ੴ 0° Ⅲ 7° Ⅲ 41'33 12° Ⅲ 39'59 13° Ⅲ 07'52	-2°30'41 2°27'58 17°51'38 -0°16'09 0°15'50 1.43175 AU 21°50'29	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12399 Nov 24 11:48 12399 Dec 01 15:33 12399 Dec 15 04:20 12399 Dec 16 07:43 12399 Dec 30 06:31 12400 Jan 05 21:52 12400 Jan 13 01:48 12400 Jan 13 09:41 12400 Jan 14 19:25 12400 Jan 21 00:23 12400 Jan 23 02:02 12400 Jan 25 13:01 12400 Jan 30 13:34 12400 Jan 30 21:28 12400 Feb 15 14:31 12400 Feb 18 01:58 12400 Feb 25 01:11 12400 Feb 25 02:42 12400 Mar 03 15:20 12400 Mar 05 20:43 12400 Mar 08 08:28	0°♂ 12°♂20'22 0°≈ 1°≈06'41 8°≈14'31 6°≈24'54 3°≈47'40 1°≈19'37 1°≈04'14 30°₨♂ 26°♂42'29 26°♂42'29 26°♂49'51 0°≈ 0°≈18'55 25°≈18'44 0°ዧ 12°ዧ56'17 13°ዧ03'12 17°ዧ38'22 26°ዧ15'37 0°♈ 4°♈06'07	0.59264 AU -3°51'05 3°47'42 18°15'29 0°20'36 0°20'42 1.41207 AU

	12400 4 22 00.50	270 426152		1-	12401 4 00 07.10	100 -	
asc. node	12400 Apr 22 09:59	27° 8 36'52		asc. node	12401 Apr 09 07:18	10° 8 59'39	
evening set	12400 Apr 26 19:36	25° 8 32'08		evening set	12401 Apr 10 23:40	9° 8 46'38	
min. Earth dist.	12400 May 01 17:35	19° 8 43'50	0.68778 AU	min. Earth dist.	12401 Apr 15 13:14	4° 8 34'14	0.68339 AU
inferior conj	12400 May 02 04:24	19° 8 06'29	2°37'43	inferior conj	12401 Apr 16 12:24	3° 8 16'42	2°05'29
minimum elong	12400 May 02 02:24	19° 8 13'23	2°36'40	minimum elong	12401 Apr 16 10:14	3° 8 23'56	2°04'26
morning rise	12400 May 07 09:07	12° 8 59'24			12401 Apr 19 01:57	30° ₹Ƴ	
direct	12400 May 11 17:58	11° 8 13'31		morning rise	12401 Apr 21 20:58	27° Ƴ 17'35	
morning max el	12400 May 20 05:36	16° 8 06'07	21°05'00	direct	12401 Apr 25 17:17	25° Ƴ 53'01	
desc. node	12400 May 25 17:47	22° 8 23'39		morning max el	12401 May 03 04:55	0° ප 03'27	19°53'15
4000. 11040	12400 May 31 10:50	0°II		morning man er	12401 May 03 03:30	0°8	1, 03 10
morning got	12400 May 31 10:30 12400 Jun 19 22:12	28° Ⅱ 59'49		desc. node	12401 May 03 03:30 12401 May 12 14:35	11° 8 43'02	
morning set				desc. node	•		
m at the	12400 Jun 20 13:33	0°©	1 10050 177		12401 May 25 00:10	0°II	
max. Earth dist.	12400 Jun 27 08:19	10° © 50'36	1.42879 AU	morning set	12401 May 29 23:34	7° Ⅱ 36'04	
				max. Earth dist.	12401 Jun 09 20:12	24° Ⅲ 33'22	1.44509 AU
superior conj	12400 Jul 04 11:42	22° © 43'13	-1°50'13		12401 Jun 13 05:56	0	
minimum elong	12400 Jul 04 18:37	23° © 12'38	1°50'26				
	12400 Jul 08 17:13	$0^{\circ}\Omega$		superior conj	12401 Jun 15 00:07	2° © 50'17	-2°09'41
evening rise	12400 Jul 16 03:42	13° Ω 10'46		minimum elong	12401 Jun 15 04:16	3° 5 07'08	2°10'26
asc. node	12400 Jul 19 08:48	18° Ω 55'13		evening rise	12401 Jun 28 09:37	25° © 08'56	
	12400 Jul 25 20:36	0° m)		8	12401 Jul 01 06:01	$0^{\circ}\Omega$	
evening max el	12400 Aug 01 14:09	8° Mp 56'27	18°04'34	asc. node	12401 Jul 06 05:38	8° Ω 22'15	
•	12400 Aug 08 07:01	12° m) 22'35	10 0434		12401 Jul 16 04:13	22°Ω16'20	18°07'07
retrograde	U	~		evening max el		• • • •	18 0/0/
evening set	12400 Aug 10 17:24	11° m 55'30		retrograde	12401 Jul 22 13:18	25° Ω 36'46	
inferior conj	12400 Aug 17 12:30		1°13'12	evening set	12401 Jul 25 07:47	24° Ω 57'02	
minimum elong	12400 Aug 17 14:34	6° My 52'57	1°12'03	inferior conj	12401 Jul 31 12:31	19° Ω 41′06	2°11'11
min. Earth dist.	12400 Aug 20 16:57	3° m , 57′20	0.60676 AU	minimum elong	12401 Jul 31 15:07	19° Ω 34'04	2°09'49
desc. node	12400 Aug 21 15:58	3° Mp 06'45		min. Earth dist.	12401 Aug 03 06:28	16° Ω 44'06	0.62919 AU
morning rise	12400 Aug 24 08:53	1° m 04'09		morning rise	12401 Aug 06 20:30	13° Ω 29'11	
	12400 Aug 26 07:03	30° ₽ Ω		desc. node	12401 Aug 08 13:22	12° Ω 22'24	
direct	12400 Aug 30 23:02	28° Ω 55'32		direct	12401 Aug 13 12:49	11° Ω 00'04	
	12400 Sep 04 20:29	0° m)		morning max el	12401 Aug 27 13:28	19° Ω 02'17	27°52'10
morning max el	12400 Sep 14 05:36	6° Mp 50'58	27°54'39	morning man er	12401 Sep 05 20:27	0° m)	2, 0210
morning max er	12400 Oct 01 18:00	0∘ ⊽	21 343)		12401 Sep 03 20:27 12401 Sep 24 16:23	0∘ ⊽	
				. ,	-		
asc. node	12400 Oct 15 10:19	24° £ 54'26		morning set	12401 Sep 30 23:05	12° ₽ 08'42	
morning set	12400 Oct 17 01:45	28° ≙ 17'19		asc. node	12401 Oct 02 06:59	14° ≙ 51'19	
	12400 Oct 17 21:23	0°M₊		max. Earth dist.	12401 Oct 06 03:18	22° £ 56'29	1.32129 AU
max. Earth dist.	12400 Oct 23 00:02	11°ML03'01	1.31456 AU				
				superior conj	12401 Oct 08 15:31	28° ≏ 22'24	0°58'17
superior conj	12400 Oct 24 07:15	13°M55'51	1°16'45	minimum elong	12401 Oct 08 13:18	28° ≏ 10′21	0°58'16
minimum elong	12400 Oct 24 05:05	13° M .43'48	1°17'00		12401 Oct 09 09:23	0° M .	
evening rise	12400 Oct 31 00:12	28°M43'06		evening rise	12401 Oct 15 11:23	13° M L17'27	
Č	12400 Oct 31 14:32	0° ∡ ¹		C	12401 Oct 23 18:31	0° ∡ ¹	
	12400 Nov 17 02:12	0°ප		desc. node	12401 Nov 04 09:57	17° ∡ 750'43	
desc. node	12400 Nov 17 12:42	0° る 37'54		evening max el	12401 Nov 08 12:34	22° ∡ 18'54	23°49'27
evening max el	12400 Nov 27 01:36	12° ろ 04'06	25°25'55	retrograde	12401 Nov 22 01:33	29° × 704'14	23 17 27
_		12 3 0400	23 23 33	-			
retrograde	12400 Dec 10 22:09	19° ろ 02°13		evening set	12401 Nov 26 19:06	28° 🖈 15'23	0.55605.441
evening set	12400 Dec 16 20:30		0.55004.433	min. Earth dist.	12401 Dec 02 23:08		0.55605 AU
min. Earth dist.	12400 Dec 21 13:48		0.57234 AU	inferior conj	12401 Dec 04 22:31	24° ∡ ¹04'35	
inferior conj	12400 Dec 24 10:26	13° る 07'11		minimum elong	12401 Dec 05 01:56		5°47'11
minimum elong	12400 Dec 24 18:37		5°00'44	morning rise	12401 Dec 13 10:39	20° ₹ 09'29	
morning rise	12401 Jan 01 19:08	8° る 52'32		direct	12401 Dec 16 03:02	19° ∡ 51′28	
direct	12401 Jan 04 00:25	8° る 37'46		morning max el	12401 Dec 26 15:03	24° х 51'47	20°08'37
asc. node	12401 Jan 11 10:13	11° る 34'52		asc. node	12401 Dec 29 07:23	27° ∡ ¹44'22	
morning max el	12401 Jan 13 00:27	12° そ 59'32	19°00'38		12401 Dec 31 02:20	0°రె	
S	12401 Jan 24 13:20	0° ≈		morning set	12402 Jan 13 19:20	24° ප 15'52	
morning set	12401 Jan 29 13:39	9° ≈ 39'26			12402 Jan 16 14:27	0°≈	
morning sec	121013411 2) 13.3))			12 102 3411 10 11.27	0 / 0 /	
superior com:	12401 Eab 04 22:22	260007112	0°50'25	superior con-	12402 Ion 21 11:27	000055150	1012104
superior conj	12401 Feb 06 23:23	26°≈07'13	0°50'35	superior conj	12402 Jan 21 11:27	9°≈55'52	1°13'04
minimum elong	12401 Feb 07 02:09	26°≈20'26	0°50'44	minimum elong	12402 Jan 21 14:12	10°≈09'37	1°13'29
	12401 Feb 09 00:32	0° ∀		max. Earth dist.	12402 Jan 27 05:09	21° ≈ 07'43	1.36782 AU
desc. node	12401 Feb 13 12:42	8° ∺ 16'14		evening rise	12402 Jan 30 23:32	28° ≈ 05'45	
max. Earth dist.	12401 Feb 13 22:24	8° ¥ 59'34	1.38991 AU	desc. node	12402 Jan 31 09:21	28° ≈ 50′00	
evening rise					12402 Feb 01 00:58	0° ∀	
	12401 Feb 17 18:08	15°) 40′51			12402 Feb 01 00.38	0 /	
<i>y</i>	12401 Feb 17 18:08 12401 Feb 26 11:39	15°) 40'51 0° °			12402 Feb 01 00.38 12402 Feb 19 20:16	0° Υ	
<i>5</i>				evening max el			25°43'53
·	12401 Feb 26 11:39	0° ႘	24°30'23	•	12402 Feb 19 20:16	0° Υ 19° Υ 12'22	25°43'53
evening max el	12401 Feb 26 11:39 12401 Mar 20 00:35	0 ° Υ	24°30'23	evening max el retrograde evening set	12402 Feb 19 20:16 12402 Mar 07 12:09	0° Y	25°43'53

aga mada	12402 Mar 27, 04:41	22° Ƴ '45'42		avanina aat	12402 Mar 00 15:54	7° Ƴ 47'52	
asc. node	12402 Mar 27 04:41	19° Y 16'39	0.67467 ATT	evening set	12403 Mar 09 15:54	3° Υ 44'39	0.66193 AU
min. Earth dist.	12402 Mar 30 05:40	19°° \ 16'39	0.67467 AU	min. Earth dist. asc. node	12403 Mar 13 16:52	3° Y 17'46	0.66193 AU
inferior conj	12402 Mar 31 17:05	17° Y 24 13	1°23'12 1°22'22		12403 Mar 14 02:06	3°γ1/46 1° Υ 24'31	0920124
minimum elong	12402 Mar 31 15:16		1°22'22	inferior conj	12403 Mar 15 16:21		
morning rise	12402 Apr 06 08:06	11° Υ 34'24		minimum elong	12403 Mar 15 15:33	1° Υ 26'54	0°30'18
direct	12402 Apr 09 16:48	10° Y 29'40	10056105		12403 Mar 16 21:22	30° ₹ ₩	
morning max el	12402 Apr 16 11:51	14° Y 10'40	18°56'25	morning rise	12403 Mar 21 16:22	25°) (45'41	
	12402 Apr 28 11:23	0°8		direct	12403 Mar 24 14:44	24°) € 58'04	
desc. node	12402 Apr 29 11:18	1° 8 30'03		morning max el	12403 Mar 31 00:57	28° ¥ 22'09	18°15'59
greatest brilliancy	12402 Apr 30 00:05	2° 8 18'25	-0.8m		12403 Apr 01 14:03	0° Υ	
morning set	12402 May 09 06:04	16° 8 33'15		desc. node	12403 Apr 16 07:58	21° Y '37'18	
	12402 May 17 21:39	0°Щ		morning set	12403 Apr 19 12:31	26° Y ′43'30	
max. Earth dist.	12402 May 23 12:57	8° Ⅱ 48'12	1.45503 AU		12403 Apr 21 13:40	0°B	
superior conj	12402 May 25 15:35	12° ∏ 06'52	2011/55	superior conj	12403 May 04 22:51	21° 8 08'53	1°53'56
minimum elong	12402 May 25 13:35	11° II 55'03		minimum elong	12403 May 04 14:03	20° 8 34'25	
minimum clong	12402 May 25 12.33 12402 Jun 05 21:30	0°©	2 12 42	max. Earth dist.	•	20 8 3423	1.45771 AU
				max. Earth dist.	12403 May 06 08:16		1.43//1 AU
evening rise	12402 Jun 09 16:17	6°506'51			12403 May 10 14:57	0°II	
asc. node	12402 Jun 23 02:33	27° © 26'01		evening rise	12403 May 20 23:04	16° Ⅱ 07'07	
	12402 Jun 24 21:41	0° Ω			12403 May 29 21:14	0° ©	
evening max el	12402 Jun 29 17:26	5° Ω 50'31	18°27'52	greatest brilliancy	12403 May 31 21:26	3° © 04'33	-0.8m
retrograde	12402 Jul 06 04:12	9° Ω 18'46		asc. node	12403 Jun 09 23:35	15° © 58'47	
evening set	12402 Jul 09 07:01	8° Ω 24'22		evening max el	12403 Jun 13 03:20	19° © 33'04	19°05'55
inferior conj	12402 Jul 15 01:13	2° Ω 52′12		retrograde	12403 Jun 20 00:13	23° © 21'47	
minimum elong	12402 Jul 15 03:17	2° Ω 46′02		evening set	12403 Jun 23 11:49	22°©11'24	
min. Earth dist.	12402 Jul 17 05:22	0° Ω 17'09	0.64936 AU	inferior conj	12403 Jun 28 23:04	16° © 24'31	3°08'23
	12402 Jul 17 11:19	30° ₹ 5		minimum elong	12403 Jun 29 00:09	16° © 21'04	3°07'24
morning rise	12402 Jul 20 22:24	26° © 31'21		min. Earth dist.	12403 Jun 30 12:28	14° 5 24'28	0.66593 AU
desc. node	12402 Jul 26 10:43	23° © 54'45		morning rise	12403 Jul 04 11:51	10° © 01'25	
direct	12402 Jul 27 11:14	23° © 51'04		direct	12403 Jul 10 16:46	7° 5 20'24	
	12402 Aug 08 03:14	$0^{\circ}\Omega$		desc. node	12403 Jul 13 08:01	7° 5 45'23	
morning max el	12402 Aug 10 00:05	1° Ω 48′27	27°14'56	morning max el	12403 Jul 23 10:55	14° © 57'27	26°10'41
	12402 Aug 31 01:02	0° m y			12403 Aug 04 18:34	$0^{\circ}\Omega$	
morning set	12402 Sep 14 11:09	25° m 31'49			12403 Aug 23 20:25	o∘ m y	
C	12402 Sep 16 17:31	0∘ <u>⊽</u>		morning set	12403 Aug 28 10:31	8° m) 17'49	
max. Earth dist.	12402 Sep 18 22:08	4° ₽ 26'29	1.33322 AU	max. Earth dist.	12403 Sep 01 06:34	15° m 34'59	1.35027 AU
asc. node	12402 Sep 19 03:38	4° ≙ 54'44		asc. node	12403 Sep 06 00:16	25° m/00'28	
	-						
superior conj	12402 Sep 22 19:01	12° ≏ 31'42	0°34'33	superior conj	12403 Sep 06 15:16	26° Mp 16'58	0°06'00
minimum elong	12402 Sep 22 17:23	12° ₽ 23′01	0°34'21	minimum elong	12403 Sep 06 14:56	26° Mp 15'16	0°05'47
evening rise	12402 Sep 29 22:14	27° ≏ 48'21		behind sun begin	12403 Sep 06 09:18	25° m 46'29	
	12402 Sep 30 23:10	0° M .		behind sun end	12403 Sep 06 20:34	26° Mp 44'06	
	12402 Oct 18 18:17	0° ∡ ¹			12403 Sep 08 10:37	0∘ ত	
evening max el	12402 Oct 21 00:12	2° ∡ ¹22'49	22°08'30	evening rise	12403 Sep 14 06:46	12° ♀ 10′10	
desc. node	12402 Oct 22 07:17	3° ∡ ³35′16			12403 Sep 23 12:16	0° M .	
retrograde	12402 Nov 02 17:32	8° ∡ '41'55		evening max el	12403 Oct 02 21:43	12° M 51'22	20°38'33
evening set	12402 Nov 06 00:23	8° ∡ 17'57		desc. node	12403 Oct 09 04:42	17° M 22'31	
min. Earth dist.	12402 Nov 14 05:59	4° ∡ ³39'04	0.54671 AU	retrograde	12403 Oct 14 04:24	18°M27'26	
inferior conj	12402 Nov 14 18:48	4° ∡ ¹21'04	-5°43'09	evening set	12403 Oct 16 09:51	18° M ₊15'19	
minimum elong	12402 Nov 14 13:34	4° ∡ °28'25	5°41'49	inferior conj	12403 Oct 25 10:47	14°M20'23	-4°39'18
morning rise	12402 Nov 23 04:01	0° ∡ ³33'56		minimum elong	12403 Oct 25 00:45	14°M34'47	4°36'05
direct	12402 Nov 26 14:29	0° ∡ *07'40		min. Earth dist.	12403 Oct 26 13:17	13°M42'14	0.54647 AU
morning max el	12402 Dec 08 15:34	5° ∡ 751'45	21°38'35	morning rise	12403 Nov 02 15:27	10°M22'28	0.0 10 17 110
asc. node	12402 Dec 16 04:28	15° × 701'46	21 3033	direct	12403 Nov 06 23:01	9°M42'27	
asc. node	12402 Dec 10 04:28	0°る		morning max el	12403 Nov 20 04:57	16°M08'07	23°24'11
morning set	12402 Dec 24 16:36 12402 Dec 29 05:05	9° る 00'54		morning max cr	12403 Dec 01 02:56	0° ∡ 7	23 2411
morning set	12402 Dec 27 03.03) 0 0034		asc. node	12403 Dec 01 02:30 12403 Dec 03 01:28	3° ∡ 10'30	
superior conj	12403 Jan 05 09:30	24° る 11'19	1°28'15	morning set	12403 Dec 03 01:28 12403 Dec 13 16:43	3 x 10 30 23° x 47'37	
	12403 Jan 05 09:30 12403 Jan 05 11:29	24°る11'19 24°る21'43		morning set	12403 Dec 13 16:43 12403 Dec 16 13:52	23° x' 4/'3/	
minimum elong			1 40 30		12403 Dec 10 13:32	v O	
may Forth 1:-4	12403 Jan 08 05:01	0°≈ 3°≈00'04	1 2/011 411	gunarier cor:	12402 Dec 20 14:10	00=42122	1026126
max. Earth dist.	12403 Jan 09 16:38	3°≈00'04	1.34811 AU	superior conj	12403 Dec 20 14:19	8°る43'23	1°36'36
evening rise	12403 Jan 13 21:27	11°≈12'42		minimum elong	12403 Dec 20 15:14	8° る 48'19	1°37'28
desc. node	12403 Jan 18 06:05	19° ≈ 15'55		max. Earth dist.	12403 Dec 23 11:55	14°る54'56	1.33220 AU
	12403 Jan 24 12:13	0°) €		evening rise	12403 Dec 28 08:08	24° る 51'12	
	12403 Feb 15 04:44	0°Υ •••••••			12403 Dec 30 23:25	0° ≈	
evening max el	12403 Feb 18 01:48	2° Υ 57'19	26°43'27	desc. node	12404 Jan 05 02:54	9° ≈ 28'22	
retrograde	12403 Mar 03 05:23	10° Y ′20′22			12404 Jan 18 00:17	0° ℋ	

evening max el	12404 Jan 31 15:07	16° ¥ 26'22	27°21'40	evening max el	12405 Jan 13 02:06	29° ≈ 26'29	2703211
retrograde	12404 Feb 14 05:26	23° H 51'49	27 21 49	evening max ci	12405 Jan 13 16:26	0° \	27 32 11
evening set	12404 Feb 21 00:04	21°\(\frac{1}{2}\)1'08		retrograde	12405 Jan 26 22:04	6°) 47′26	
min. Earth dist.	12404 Feb 24 20:36	17°) 49'56	0.64558 AU	evening set	12405 Feb 02 20:56	4° ¥ 25'51	
inferior conj	12404 Feb 27 07:42	15°) 11'06		min. Earth dist.	12405 Feb 06 14:52	1° ¥ 22'42	0.62624 AU
minimum elong	12404 Feb 27 08:41	15° ¥ 08'27	0°31'49	mm. Darur dist.	12405 Feb 08 01:41	30°R≈	0.02021710
asc. node	12404 Feb 28 23:32	13° ¥ 26′20	0 31 .5	inferior conj	12405 Feb 09 12:09	28° ≈ 36'27	-1°45'21
morning rise	12404 Mar 04 19:09	9°) (45'41		minimum elong	12405 Feb 09 15:42	28° ≈ 27'54	1°43'21
direct	12404 Mar 07 08:44	9°) 11'42		asc. node	12405 Feb 14 20:56	24° ≈ 13'42	
morning max el	12404 Mar 13 17:48	12°) 30′17	17°52'35	morning rise	12405 Feb 16 12:59	23° ≈ 27'35	
C	12404 Mar 26 00:10	0° Υ		direct	12405 Feb 18 19:41	23° ≈ 03'37	
morning set	12404 Mar 30 23:41	8° Y 17'58		morning max el	12405 Feb 25 11:25	26° ≈ 27'04	17°46'45
desc. node	12404 Apr 02 04:34	11° Y 58'38			12405 Feb 28 13:17	0° ∀	
	12404 Apr 13 05:02	0°8		morning set	12405 Mar 13 11:06	21° ∺ 01'38	
					12405 Mar 18 14:27	$0^{\circ}\Upsilon$	
superior conj	12404 Apr 13 15:36	0° 8 42'20	-1°20'04	desc. node	12405 Mar 20 01:07	2° Y ′29'28	
minimum elong	12404 Apr 13 07:24	0° 8 09'30	1°19'28				
max. Earth dist.	12404 Apr 18 04:05	7° 8 52'48	1.45290 AU	superior conj	12405 Mar 25 06:10	11° Y 18'45	-0°39'24
evening rise	12404 Apr 29 13:22	25° 8 33'08		minimum elong	12405 Mar 25 02:15	11° Y ′02'23	0°38'54
	12404 May 02 11:12	Π °0		max. Earth dist.	12405 Mar 31 21:47	22° Y °11'40	1.44118 AU
greatest brilliancy	12404 May 14 11:33	17° Ⅱ 59'17	-0.6m		12405 Apr 05 19:55	0° 8	
	12404 May 23 08:19	0ංම		evening rise	12405 Apr 09 01:53	5° 8 03'09	
evening max el	12404 May 26 08:09	3° © 19'25	19°59'52		12405 Apr 25 20:23	Π °0	
asc. node	12404 May 26 20:42	3° 9 50'17		evening max el	12405 May 09 07:05	17° Ⅱ 05'59	21°07'11
retrograde	12404 Jun 02 22:40	7° 5 40'01		asc. node	12405 May 13 17:54	20° Ⅱ 46'35	
evening set	12404 Jun 06 19:42	6° © 13'04		retrograde	12405 May 17 21:25	22° 川 07'07	
inferior conj	12404 Jun 12 03:06	0°9512'47	3°14'20	evening set	12405 May 22 04:37	20° Ⅲ 23'50	
minimum elong	12404 Jun 12 03:06	0°9512'48	3°13'26	inferior conj	12405 May 27 10:49	14° Ⅱ 11'39	3°08'23
	12404 Jun 12 06:53	30°RⅡ		minimum elong	12405 May 27 09:51	14° Ⅱ 15′02	3°07'28
min. Earth dist.	12404 Jun 13 02:02	28° Ⅱ 55'16	0.67806 AU	min. Earth dist.	12405 May 27 20:03	13° Ⅲ 39'35	0.68551 AU
morning rise	12404 Jun 17 10:10	23° II 51'35		morning rise	12405 Jun 01 14:52	7° Ⅱ 54'46	
direct	12404 Jun 23 04:07	21° Ⅱ 19'06		direct	12405 Jun 06 20:11	5° Ⅲ 37'38	
desc. node	12404 Jun 29 05:13	23° II 30'08		desc. node	12405 Jun 16 02:17	10° Ⅱ 40'19	
morning max el	12404 Jul 04 21:02	28° Ⅱ 20'14	24°49'03	morning max el	12405 Jun 17 07:19	11° ∏ 51'12	23°19'44
	12404 Jul 06 11:05	0°©			12405 Jul 01 19:20	0° ©	
	12404 Jul 28 11:54	0°N			12405 Jul 21 07:31	0°N	
morning set	12404 Aug 09 17:03	20° Ω 16'56	1 251 12 1 77	morning set	12405 Jul 22 01:49	1° Ω 16'22	1 20 1/2 177
max. Earth dist.	12404 Aug 13 06:53	26° Ω 42'47	1.37143 AU	max. Earth dist.	12405 Jul 26 04:38	8° Ω 17'33	1.39463 AU
	12404 Aug 15 01:34	0° m)			12405 4 02 20 40	220 002151	1000140
	12404 A 20 01-11	00 m 21107	0026126	superior conj	12405 Aug 02 20:49	22°Ω03'51	
superior conj	12404 Aug 20 01:11 12404 Aug 20 02:56	9° Mp 31'07 9° Mp 39'39		minimum elong	12405 Aug 03 01:11	22° Ω 24'01	1 00 44
minimum elong asc. node	12404 Aug 20 02:56 12404 Aug 22 20:55	15° My 05'21	0°20'31	asc. node	12405 Aug 07 02:01 12405 Aug 09 17:35	0° т у 5° т 05'01	
evening rise	12404 Aug 22 20:33 12404 Aug 28 10:43	26° Mp 17'31		evening rise	12405 Aug 09 17:35 12405 Aug 12 07:05	10° Mg 01'57	
evening rise	12404 Aug 30 07:16	ე∘ <u>ი</u>		evening rise	12405 Aug 12 07:05 12405 Aug 23 12:09	0° ⊽	
evening max el	12404 Sep 14 09:13	0 — 24° ≏ 05'24	19°28'05	evening max el	12405 Aug 28 09:09	6° ჲ 05'52	18°39'21
retrograde	12404 Sep 23 23:32	28° ♀ 52'45	17 20 03	retrograde	12405 Sep 05 12:25	10° ⊆ 11'13	10 37 21
desc. node	12404 Sep 25 02:09	28° ♀ 49'09		evening set	12405 Sep 07 11:12	9° £ 57'55	
evening set	12404 Sep 25 20:07	28° £ 42'46		desc. node	12405 Sep 11 23:38	7° ≏ 58'32	
inferior conj	12404 Oct 04 12:59	24° £ 36'21	-2°55'57	inferior conj	12405 Sep 15 10:59	5° £ 32'25	-1°05'35
minimum elong	12404 Oct 04 05:21	24° £ 48'37	2°52'51	minimum elong	12405 Sep 15 08:19	5° ₽ 37'25	1°04'31
min. Earth dist.	12404 Oct 06 23:25	23° ჲ 02'39	0.55560 AU	min. Earth dist.	12405 Sep 18 15:02	3° ≏ 10'34	0.57228 AU
morning rise	12404 Oct 12 12:25	20° ♀ 09'06		morning rise	12405 Sep 23 02:02	0° ≏ 27'14	
direct	12404 Oct 17 16:08	19° ഫ 09'29		Ü	12405 Sep 24 03:02	30°R, M)	
morning max el	12404 Oct 31 15:16	26° ♀ 09'48	25°11'01	direct	12405 Sep 28 23:06	29° m 01'50	
	12404 Nov 04 07:01	0° M ,			12405 Oct 03 20:58	0∘ <u>⊽</u>	
asc. node	12404 Nov 18 22:23	21°ML57'56		morning max el	12405 Oct 13 06:07	6° ≏ 30'06	26°40'45
	12404 Nov 23 02:21	0° ∡ ¹		Č	12405 Oct 30 15:28	0° M	
morning set	12404 Nov 27 04:27	8° ∡ '31'03		asc. node	12405 Nov 05 19:11	11° M .13'49	
-				morning set	12405 Nov 11 14:33	23°M06'25	
superior conj	12404 Dec 03 23:26	23° ∡ ¹24'47	1°38'35	ū	12405 Nov 14 18:39	0° ∡ ″	
minimum elong	12404 Dec 03 23:13	23° ∡ ¹23'37	1°39'28				
max. Earth dist.	12404 Dec 05 14:38	27° ∡ ¹00'08	1.32084 AU	superior conj	12405 Nov 18 10:43	8° ₹ 09'22	1°34'36
	12404 Dec 06 23:41	0°ಕ		minimum elong	12405 Nov 18 09:30	8° ∡ 02'39	1°35'19
evening rise	12404 Dec 11 04:26	8° る 53'04		max. Earth dist.	12405 Nov 18 22:04	9° х 12′40	1.31435 AU
desc. node	12404 Dec 21 23:48	29° る 21'12		evening rise	12405 Nov 25 07:38	23° ∡ 11′22	
	12404 Dec 22 08:51	0° ≈			12405 Nov 28 14:45	ರ∘8	

	12105 D 00 20 10	1007100			1010631 00 15 00	50 3 4011 5	
desc. node	12405 Dec 08 20:49	18°₹46'30		evening rise	12406 Nov 09 15:29	7° ∡ 740′17	
	12405 Dec 16 07:10	0° ≈			12406 Nov 21 02:28	0°る	
evening max el	12405 Dec 26 08:07	11° ≈ 44′38	27°09'31	desc. node	12406 Nov 25 17:56	7° ප 33'01	
retrograde	12406 Jan 09 06:32	18° ≈ 58'14		evening max el	12406 Dec 08 06:43	23° る 11'38	26°12'30
evening set	12406 Jan 16 03:12	16° ≈ 54′10			12406 Dec 19 14:33	0° ≈	
min. Earth dist.	12406 Jan 19 22:32	14° ≈ 11'13	0.60496 AU	retrograde	12406 Dec 22 05:17	0° ≈ 16′27	
inferior conj	12406 Jan 23 02:17	11° ≈ 31'36	-3°04'52		12406 Dec 24 19:35	30°Ŗる	
minimum elong	12406 Jan 23 08:46	11° ≈ 17'54	3°01'45	evening set	12406 Dec 28 14:41	28° る 38'30	
morning rise	12406 Jan 30 17:18	6°≈42'32		min. Earth dist.	12407 Jan 01 19:58	26° る 02'42	0.58359 AU
direct	12406 Feb 01 19:40	6° ≈ 25'01		inferior conj	12407 Jan 04 22:30	23° ⋜ 46'11	
asc. node	12406 Feb 01 18:16	6°≈25'02		minimum elong	12407 Jan 05 06:57	23° る 30'37	
morning max el	12406 Feb 09 02:26	10°≈03'31	17°59'25	morning rise	12407 Jan 13 02:03	19° ප 18'57	T 2030
morning max er			17 39 23	=			
	12406 Feb 22 04:25	0°) {		direct	12407 Jan 15 04:16	19°る04'22	
morning set	12406 Feb 24 16:27	4°) ₹35′29		asc. node	12407 Jan 19 15:32	20° ප 15'02	
				morning max el	12407 Jan 23 11:02	23° る 07'59	18°32'05
superior conj	12406 Mar 06 21:15	23° ¥ 04'21	0°00'09		12407 Jan 28 22:26	0° ≈	
minimum elong	12406 Mar 06 21:17	23°) €04'30	0°00'20	morning set	12407 Feb 08 10:18	18° ≈ 42′21	
behind sun begin	12406 Mar 06 13:18	22°) €29'26			12407 Feb 14 07:22	0°) €	
behind sun end	12406 Mar 07 05:15	23°) 39′28					
desc. node	12406 Mar 06 21:40	23°) €06'14		superior conj	12407 Feb 17 09:26	5°){ 47'47	0°34'11
	12406 Mar 10 21:21	0°Υ		minimum elong	12407 Feb 17 11:41	5° ¥ 58'11	0°34'17
max. Earth dist.	12406 Mar 14 11:00	5°Υ'59'43	1.42379 AU	desc. node	12407 Feb 21 18:15	13° ¥ 44'36	0 3117
		15° Υ 12'05	1.42379 AU	max. Earth dist.		19° X 05'35	1 40271 ATT
evening rise	12406 Mar 20 03:07				12407 Feb 24 19:18		1.40271 AU
	12406 Mar 29 17:33	0°8		evening rise	12407 Mar 01 00:31	26°) 15′06	
	12406 Apr 21 04:02	Π °0			12407 Mar 03 07:08	0° Υ	
evening max el	12406 Apr 22 00:57	0° Ⅱ 53'42	22°23'52		12407 Mar 23 09:44	9° 8	
asc. node	12406 Apr 30 15:11	6° Ⅱ 32'27		evening max el	12407 Apr 04 15:37	14° 8 43'30	23°44'40
retrograde	12406 May 01 18:48	6° Ⅲ 38'40		retrograde	12407 Apr 15 13:21	21° 8 08'42	
evening set	12406 May 06 12:54	4° Ⅱ 40'04		asc. node	12407 Apr 17 12:30	20° 8 50'56	
	12406 May 10 14:47	30° ₹ 8		evening set	12407 Apr 20 18:58	18° 8 56'34	
inferior conj	12406 May 11 20:11	28° 8 18'16	2°51'51	min. Earth dist.	12407 Apr 25 13:09	13° 8 23'20	0.68645 AU
minimum elong	12406 May 11 18:28	28° 8 24'15	2°50'49	inferior conj	12407 Apr 26 05:14	12° 8 28'21	2°25'18
min. Earth dist.	12406 May 11 16:31	28° 8 31'06	0.68828 AU	minimum elong	12407 Apr 26 03:07	12° 8 35'36	2°24'13
	•	22° 8 07'09	0.08828 AU	_	•	6° 8 24'16	2 24 13
morning rise	12406 May 16 23:54	_		morning rise	12407 May 01 11:15	_	
direct	12406 May 21 16:05	20° 8 09'25		direct	12407 May 05 14:37	4° 8 47'34	
morning max el	12406 May 30 20:27	25° 8 31'01	21°51'51	morning max el	12407 May 13 15:23	9° 8 21'19	20°32'42
desc. node	12406 Jun 02 23:13	28° 8 53'37		desc. node	12407 May 20 20:04	17° 8 52'32	
	12406 Jun 03 21:48	Π $^{\circ}0$			12407 May 29 11:18	Π $^{\circ}0$	
	12406 Jun 25 06:18	0 \circ \odot		morning set	12407 Jun 11 17:43	20° Ⅲ 00'51	
morning set	12406 Jul 02 09:14	11° © 08'20			12407 Jun 18 02:27	0 \circ \odot	
max. Earth dist.	12406 Jul 08 05:36	20°539'48	1.41718 AU	max. Earth dist.	12407 Jun 20 12:59	3°954'03	1.43643 AU
	12406 Jul 13 17:57	$0^{\circ}\Omega$					
	12.00041 15 17.07	° 00		superior conj	12407 Jun 27 00:09	14° 5 28'16	-2°00'11
superior conj	12406 Jul 15 21:50	3°Ω45'37	10331/10	minimum elong	12407 Jun 27 06:31	14°954'43	
minimum elong	12406 Jul 16 04:24	4°Ω14'26		minimum ciong	12407 Jul 06 03:03	0°Ω	2 00 30
Č			1 33 49				
evening rise	12406 Jul 26 16:13	23° Ω 14'13		evening rise	12407 Jul 09 09:30	5° Ω 42'44	
asc. node	12406 Jul 27 14:17	24° Ω 55'53		asc. node	12407 Jul 14 11:05	14° Ω 33'19	
	12406 Jul 30 08:46	0° ™			12407 Jul 24 13:08	0° m)	
evening max el	12406 Aug 11 17:43	18° Mp 45′21	18°11'35	evening max el	12407 Jul 26 06:55	1° m 53'49	18°03'26
retrograde	12406 Aug 18 20:04	22° Mp 21'40		retrograde	12407 Aug 01 19:15	5° Mp 15'38	
evening set	12406 Aug 21 01:44	22° Mp 00'46		evening set	12407 Aug 04 09:03	4° m 43'33	
inferior conj	12406 Aug 28 06:45	17° m ∤14'47	0°29'11	inferior conj	12407 Aug 10 21:37	29° Ω 38'12	1°40'33
minimum elong	12406 Aug 28 07:43	17° m) 12'41	0°28'32	minimum elong	12407 Aug 11 00:05	29° Ω 32′00	1°39'14
desc. node	12406 Aug 29 21:05	15° mp 50'16			12407 Aug 10 12:55	30° ₽ Ω	
min. Earth dist.	12406 Aug 31 14:18	14° m) 21'43	0.59363 AU	min. Earth dist.	12407 Aug 13 22:23	26° Ω 36′20	0.61648 AU
morning rise	12406 Sep 04 10:19	11° mp 35'46	0.07505110	desc. node	12407 Aug 16 18:30	24°Ω08'21	0.010.0110
direct	12406 Sep 10 20:04	9° Mp 41'53		morning rise	12407 Aug 10 18:30 12407 Aug 17 12:36	23°Ω35'32	
	•		27020125	=	=		
morning max el	12406 Sep 25 04:21	17° mp 30'35	21 38 33	direct	12407 Aug 24 04:37	21°Ω16'48	27050105
	12406 Oct 05 13:54	0∘ ⊽		morning max el	12407 Sep 07 09:11		27°58'06
	12406 Oct 23 05:49	0°M			12407 Sep 08 02:14	0° m)	
asc. node	12406 Oct 23 15:54	0° ™ 50′29			12407 Sep 29 13:00	0∘ ⊽	
morning set	12406 Oct 26 21:17	7°M29'02		morning set	12407 Oct 10 22:42	21° ≏ 33'49	
				asc. node	12407 Oct 10 12:33	20° ≏ 41'44	
superior conj	12406 Nov 02 22:17	22°M51'32	1°24'52		12407 Oct 14 22:41	0° M	
minimum elong	12406 Nov 02 20:22	22°M40'47	1°25'20	max. Earth dist.	12407 Oct 16 12:59	3°M27'53	1.31673 AU
max. Earth dist.	12406 Nov 02 06:46	21°M25'01	1.31294 AU			-	
	12406 Nov 06 03:15	0° √		superior conj	12407 Oct 18 08:21	7° M 26'01	1°09'35
		- ··			000 10 00.21		

minimum elong	12407 Oct 18 06:06	7°M13'35	1°09'43	minimum elong	12408 Oct 01 12:49	21° ≙ 35'06	0°48'44
evening rise	12407 Oct 25 02:00	22°M14'39	1 0, 13	minimum crong	12408 Oct 05 09:45	0°M	0 10 11
Ü	12407 Oct 28 18:30	0° ∡ 7		evening rise	12408 Oct 08 13:16	6°M48'24	
desc. node	12407 Nov 12 15:09	25° ∡ ¹26′00			12408 Oct 20 15:23	0° ∡ ¹	
	12407 Nov 16 06:31	5°0		desc. node	12408 Oct 29 12:27	12° ∡ ¹04'34	
evening max el	12407 Nov 19 21:17	3° ⋜ 49'18	24°46'45	evening max el	12408 Oct 31 07:30	13° ₹ 755'14	23°06'02
retrograde	12407 Dec 03 16:02	10°₹42'55		retrograde	12408 Nov 13 13:36	20° ₹ 30'40	
evening set	12407 Dec 09 03:09	9° る 36'32	0.5(4(0.AII	evening set	12408 Nov 17 16:31	19° х 53'47	0.55112 ATT
min. Earth dist. inferior conj	12407 Dec 14 09:07 12407 Dec 16 22:18	6°る50'41 5°る12'55		min. Earth dist. inferior conj	12408 Nov 24 16:49 12408 Nov 26 02:39	16° ∡ °39'28 15° ∡ °50'45	0.55112 AU
minimum elong	12407 Dec 10 22.18 12407 Dec 17 05:11	5° る 01'54		minimum elong	12408 Nov 26 02:39	15° x '50'45	
morning rise	12407 Dec 25 09:21	1° る 06'59	3 23 10	morning rise	12408 Dec 04 14:02	12°×7'00'50	3 32 23
direct	12407 Dec 27 18:12	0°る51'27		direct	12408 Dec 07 13:45	11° ∡ ³39'45	
morning max el	12408 Jan 06 09:10	5° る 29'19	19°26'42	morning max el	12408 Dec 18 17:36	16° ∡ 58'21	20°44'23
asc. node	12408 Jan 06 12:43	5° ප 37'56		asc. node	12408 Dec 23 09:50	22° ∡ 18′00	
	12408 Jan 21 22:18	0° ≈			12408 Dec 28 12:19	ರ∘ರ	
morning set	12408 Jan 23 12:35	3° ≈ 10'42		morning set	12409 Jan 06 20:18	17° る 51'35	
					12409 Jan 12 16:28	0° ≈	
superior conj	12408 Jan 31 14:03	19°≈15'57	1°01'01		12400 1 14 06 45	2016140	1020122
minimum elong	12408 Jan 31 16:55 12408 Feb 06 05:32	19° ≈ 30'00 0° ∀	1°01'16	superior conj minimum elong	12409 Jan 14 06:45 12409 Jan 14 09:14	3°≈16'48 3°≈29'29	1°20'23 1°20'54
max. Earth dist.	12408 Feb 06 03.32 12408 Feb 07 01:27	0 K 1° ∺ 31′29	1.38037 AU	max. Earth dist.	12409 Jan 19 09:59	3 ≈29 29 13°≈31'27	1.35907 AU
desc. node	12408 Feb 08 14:53	4° ∺ 21'10	1.50057 AU	evening rise	12409 Jan 23 07:50	20°≈56'07	1.55707 AC
evening rise	12408 Feb 10 18:58	8°) 12'24		desc. node	12409 Jan 25 11:35	24°≈52'06	
C	12408 Feb 24 03:48	0° Υ			12409 Jan 28 09:21	0° ∀	
evening max el	12408 Mar 17 05:13	28° Y 35'26	25°02'56		12409 Feb 17 02:01	0° Y	
	12408 Mar 18 16:50	9° 8		evening max el	12409 Feb 27 18:53	12° Y ′25′21	26°11'26
retrograde	12408 Mar 29 03:48	5° 8 31'38		retrograde	12409 Mar 12 13:17	19° Ƴ 41'20	
asc. node	12408 Apr 03 09:53	3° 8 31'37		evening set	12409 Mar 18 18:05	17° Y 10'46	
evening set	12408 Apr 03 21:15	3° 8 08'29		asc. node	12409 Mar 21 07:18	14° Y 41′50	0.66072.444
min Forth dist	12408 Apr 06 21:16	30°₹ Υ 28° Υ 10'55	0.68020 AU	min. Earth dist.	12409 Mar 22 22:15	12° Y 48'17 10° Y 43'21	0.66973 AU 1°02'10
min. Earth dist. inferior conj	12408 Apr 08 07:48 12408 Apr 09 12:05	26° Y 38'06	1°48'49	inferior conj minimum elong	12409 Mar 24 14:46 12409 Mar 24 13:18	10 γ 43 21 10° Υ 47'54	1°02'10 1°01'33
minimum elong	12408 Apr 09 10:00	26° Υ 44'56	1°47'49	morning rise	12409 Mar 30 09:17	4° Υ 57'57	1 01 33
morning rise	12408 Apr 14 23:03	20° Υ '42'28	1 17 15	direct	12409 Apr 02 13:33	4° Υ '00'43	
direct	12408 Apr 18 14:20	19° Ƴ 26'26		morning max el	12409 Apr 09 03:42	7° Υ 32'40	18°37'14
morning max el	12408 Apr 25 17:53	23° Y ′22'47	19°27'03	desc. node	12409 Apr 23 13:32	27° Y ′21'21	
	12408 May 01 09:16	0° 8			12409 Apr 25 06:19	$0^{\circ}S$	
desc. node	12408 May 06 16:50	7° 8 24'45		morning set	12409 Apr 30 09:43	8° 8 03'10	
greatest brilliancy	12408 May 08 10:42	9° 8 57'52	-0.7m		12409 May 14 10:24	0°II	
morning set	12408 May 20 18:24	28° 8 37'52		max. Earth dist.	12409 May 15 22:01	2°Ц19'07	1.45710 AU
max. Earth dist.	12408 May 21 15:44 12408 Jun 02 03:09	0° Ц 17° Ц 52'20	1.45022 AU	superior conj	12409 May 16 12:50	3° Ⅱ 17'04	2006/42
max. Earth dist.	12408 Juli 02 03.09	17 1132 20	1.43022 AU	minimum elong	12409 May 16 12:30 12409 May 16 06:44	2° I I53'12	
superior conj	12408 Jun 06 02:52	24° Ⅱ 11'50	-2°13'03	evening rise	12409 Jun 01 02:16	27° I I49'09	2 07 10
minimum elong	12408 Jun 06 04:20	24° Ⅱ 17'40		<i>5</i>	12409 Jun 02 11:07	0ංම	
	12408 Jun 09 17:39	0ංම		greatest brilliancy	12409 Jun 08 20:52	10°9510'47	-0.9m
evening rise	12408 Jun 20 05:57	17° © 15'58		asc. node	12409 Jun 17 04:58	22°5643'50	
	12408 Jun 27 22:13	$0^{\circ}\Omega$		evening max el	12409 Jun 22 09:14	29°900'41	18°41'56
asc. node	12408 Jun 30 07:58	3° Ω 51'30			12409 Jun 23 10:33	0 ° Ω	
evening max el	12408 Jul 08 21:04	15° Ω 21'21	18°13'48	retrograde	12409 Jun 28 23:10	2° Ω 35'59	
retrograde evening set	12408 Jul 15 05:35 12408 Jul 18 03:42	18° Ω 43'06 17° Ω 57'12		evening set	12409 Jul 02 05:44 12409 Jul 04 05:52	1° № 34'43 30°R©	
inferior conj	12408 Jul 24 03:30	$17^{\circ} \Omega 37^{12}$ $12^{\circ} \Omega 34'12$	2°20'16	inferior conj	12409 Jul 04 03:32 12409 Jul 07 20:33	25°955'53	2°58'43
minimum elong	12408 Jul 24 05:57		2°27'57	minimum elong	12409 Jul 07 22:13	25° 9 50'42	
min. Earth dist.	12408 Jul 26 15:49	9° Ω 44'45	0.63822 AU	min. Earth dist.	12409 Jul 09 18:19	23°534'49	0.65694 AU
morning rise	12408 Jul 30 06:40	6° Ω 17'52		morning rise	12409 Jul 13 13:52	19°533'32	
desc. node	12408 Aug 02 15:55	4° Ω 19'17		direct	12409 Jul 19 23:43	16° © 52'05	
direct	12408 Aug 05 22:17	3° Ω 42'42		desc. node	12409 Jul 20 13:14	16° © 53'13	
morning max el	12408 Aug 19 18:19	11° Ω 43'43	27°40'07	morning max el	12409 Aug 02 05:24	24°9541'59	26°50'24
	12408 Sep 03 06:30	0° m y			12409 Aug 07 00:27	0° Q	
	12408 Sep 21 00:13	0° ™			12409 Aug 27 17:12	0°M) 188™22127	
morning set asc. node	12408 Sep 23 16:26 12408 Sep 26 09:12	5° ♀ 13'56 10° ♀ 41'55		morning set max. Earth dist.	12409 Sep 06 23:34 12409 Sep 11 03:51	18° m/22'37 26° m/33'32	1.34000 AU
max. Earth dist.	12408 Sep 28 13:00	10° 22 41′33	1.32576 AU	max. Darui Uist.	12409 Sep 11 03:31 12409 Sep 12 20:39	ე∘ 亞	1.5 4 000 AU
Zarur dist.	-2.00 Sep 20 15.00	—1140	1.020,0110	asc. node	12409 Sep 13 05:51	0° 으 47'01	
superior conj	12408 Oct 01 14:52	21° ≏ 46′10	0°48'52		<u>.</u>		

superior conj	12409 Sep 15 15:38	5° ≏ 46'18	0°23'00		12410 Aug 20 05:13	0° ™	
minimum elong	12409 Sep 15 14:28	5° £ 40'08	0°22'46	morning set	12410 Aug 20 16:23	0° m 50'38	
evening rise	12409 Sep 22 23:26	21° ≏ 16'38		max. Earth dist.	12410 Aug 24 08:31	7° ™ 39'32	1.35888 AU
	12409 Sep 27 05:21	0° M					
evening max el	12409 Oct 12 22:14	24°M05'04	21°28'00	superior conj	12410 Aug 30 07:54	19° m , 19'27	-0°07'24
desc. node	12409 Oct 16 09:50	27°M02'46		minimum elong	12410 Aug 30 08:22	19° m 21'46	0°07'34
	12409 Oct 23 07:06	0° ∡ 7		behind sun begin	12410 Aug 30 02:49	18° m 53'55	
retrograde	12409 Oct 25 02:02	0° ∡ 107'42		behind sun end	12410 Aug 30 13:55	19° m 49'39	
	12409 Oct 26 21:43	30°RM₊		asc. node	12410 Aug 31 02:31	20° m 53'08	
evening set	12409 Oct 27 20:24	29°M50'09			12410 Sep 04 13:30	0∘ ⊽	
inferior conj	12409 Nov 05 19:14	25°M55'25	-5°22'37	evening rise	12410 Sep 07 06:21	5° ₽ 33'31	
minimum elong	12409 Nov 05 11:03	26°MJ06'52	5°20'29		12410 Sep 20 22:31	0° M ₊	
min. Earth dist.	12409 Nov 05 23:05	25°M50'00	0.54550 AU	evening max el	12410 Sep 25 01:31	4° ጤ 51'57	20°05'53
morning rise	12409 Nov 14 02:35	22°MJ06'41		desc. node	12410 Oct 03 07:15	9° M 52'44	
direct	12409 Nov 17 22:01	21°M35'21		retrograde	12410 Oct 05 15:24	10° M ₀07'44	
morning max el	12409 Nov 30 12:36	27°M36'59	22°22'23	evening set	12410 Oct 07 14:54	9° ጤ 57'30	
	12409 Dec 02 20:36	0° ∡ ¹		inferior conj	12410 Oct 16 14:01	5° ™ 58'52	-3°58'23
asc. node	12409 Dec 10 06:52	9° ₰ 758'44		minimum elong	12410 Oct 16 04:20	6° ™ 13′23	3°54'51
	12409 Dec 21 00:56	0°ರ		min. Earth dist.	12410 Oct 18 07:31	4°M56'42	0.54924 AU
morning set	12409 Dec 22 07:03	2° る 38'02		morning rise	12410 Oct 24 16:39	1°M50'03	
				direct	12410 Oct 29 08:42	1°M02'39	
superior conj	12409 Dec 29 08:00	17° ප් 40'11	1°32'37	morning max el	12410 Nov 11 23:50	7° M 44′28	24°10'37
minimum elong	12409 Dec 29 09:33	17° る 48'25	1°33'23	asc. node	12410 Nov 27 03:49	28°M25'42	
max. Earth dist.	12410 Jan 02 00:46	25° ට 23'46	1.34078 AU		12410 Nov 28 00:59	0° ∡	
	12410 Jan 04 07:19	0° ≈		morning set	12410 Dec 06 18:57	17° ∡ °24'40	
evening rise	12410 Jan 06 11:32	4° ≈ 17'02			12410 Dec 12 13:42	8°0	
desc. node	12410 Jan 12 08:21	15° ≈ 12'53					
	12410 Jan 21 04:34	0° ∀		superior conj	12410 Dec 13 14:57	2° る 17'58	1°38'12
evening max el	12410 Feb 10 08:24	26° ₩ 04'22	27°02'49	minimum elong	12410 Dec 13 15:23	2° る 20'19	1°39'05
	12410 Feb 14 23:05	0° Υ		max. Earth dist.	12410 Dec 15 23:15	7° る 22'37	1.32672 AU
retrograde	12410 Feb 23 16:59	3° Y 29'32		evening rise	12410 Dec 21 02:41	18° る 07'00	
evening set	12410 Mar 02 07:32	0° Y 56'41			12410 Dec 27 06:18	0° ≈	
	12410 Mar 03 10:34	30° ₹ ₩		desc. node	12410 Dec 30 05:12	5° ≈ 18′20	
min. Earth dist.	12410 Mar 06 06:21	27°) €07'49	0.65536 AU		12411 Jan 15 12:19	0° ∀	
inferior conj	12410 Mar 08 10:58	24° ∺ 38′21	0°05'03	evening max el	12411 Jan 23 20:46	9° ∺ 22'24	27°30'00
minimum elong	12410 Mar 08 10:50	24°) 38′46	0°05'10	retrograde	12411 Feb 06 14:14	16°) 47′33	
transit middle	12410 Mar 08 10:50	24°) 38′46	0°05'10	evening set	12411 Feb 13 11:16	14° ∺ 19'29	
transit begin	12410 Mar 08 08:00	24°) 46′50		min. Earth dist.	12411 Feb 17 06:12		0.63762 AU
transit end	12410 Mar 08 13:39	24°) € 30'43		inferior conj	12411 Feb 19 22:03	8° ¥ 17'07	
asc. node	12410 Mar 08 04:44	24° ¥ 56′09		minimum elong	12411 Feb 20 00:02	8° ¥ 12′00	1°01'06
morning rise	12410 Mar 14 15:35	19° ∺ 05'11		asc. node	12411 Feb 23 02:07	5°) 14′23	
direct	12410 Mar 17 10:03	18° ∺ 23'49		morning rise	12411 Feb 26 15:02	2° ∺ 58'39	
morning max el	12410 Mar 23 18:48	21°) 43'59	18°04'02	direct	12411 Mar 01 01:20	2° ∺ 29'31	
	12410 Mar 30 08:03	$0^{\circ}\mathbf{\Upsilon}$		morning max el	12411 Mar 07 12:24	5°) 49′05	17°47'57
desc. node	12410 Apr 10 10:08	17° Ƴ 35′06			12411 Mar 23 13:34	0° Υ	
morning set	12410 Apr 11 04:29	18° Ƴ 49'49		morning set	12411 Mar 24 02:41	0° Y 55'58	
	12410 Apr 18 02:03	9° 8		desc. node	12411 Mar 28 06:44	8° Ƴ 01'11	
	12410 4 27 22 00	1000000	1041101	: ·	12411 4 05 22 00	2200025125	1002107
superior conj	12410 Apr 25 22:00	12° 8 26'56		superior conj	12411 Apr 05 23:09	22°\cdot\cdot\cdot\cdot\cdot\cdot\cdot\cdot	
minimum elong	12410 Apr 25 12:42	11° 8 50'17		minimum elong	12411 Apr 05 16:36	21° Y 58'48	1°02′30
max. Earth dist.	12410 Apr 28 18:06		1.45650 AU	P 4 F 4	12411 Apr 10 16:14	0°8	1 44065 433
	12410 May 07 04:01	0°Ⅱ 5°Ⅱ		max. Earth dist.	12411 Apr 11 12:42	1° 8 21'16	1.44865 AU
evening rise	12410 May 12 00:37	7° I I31'00	^ 7	evening rise	12411 Apr 21 12:04	16° 8 53'13	
greatest brilliancy	12410 May 24 22:05	27° Ⅱ 12'25	-0.7m		12411 Apr 30 03:58	0°II	20025102
i	12410 May 26 19:35	0°©		evening max el	12411 May 19 19:15	26° Ⅲ 31'10	20°27'03
asc. node	12410 Jun 04 02:04	11°500'40	1000/157	asc. node	12411 May 21 23:13	28° Ⅱ 30′26	
evening max el	12410 Jun 05 17:02	12°544'59	19°26'57		12411 May 24 01:59	0.20 0.20	
retrograde	12410 Jun 12 20:39	16°946'23		retrograde	12411 May 27 19:30	1°508'40	
evening set	12410 Jun 16 12:08	15°928'57	2012/20		12411 May 31 06:46	30°RⅡ 200Ⅲ24155	
inferior conj	12410 Jun 21 21:22	9°935'56	3°12'28	evening set	12411 May 31 20:39	29° Ⅱ 34'55	2012111
minimum elong	12410 Jun 21 21:59	9°933'55	3°11'32	inferior conj	12411 Jun 06 03:15	23° Ⅱ 29'19	
min. Earth dist.	12410 Jun 23 04:28	7°553'29	0.67162 AU	minimum elong	12411 Jun 06 02:48	23° Ⅱ 30'50	3°12'17
morning rise	12410 Jun 27 07:22	3°513'04		min. Earth dist.	12411 Jun 06 20:19	22° Ⅱ 30'44	0.68178 AU
direct	12410 Jul 03 07:45	0°934'53		morning rise	12411 Jun 11 08:40	17° Ⅱ 09'27	
desc. node	12410 Jul 07 10:28	1°935'47	25027124	direct	12411 Jun 16 21:20	14° Ⅱ 42'40	
morning max el	12410 Jul 15 16:13	7°©58'55 0° 0	25°3/'34	desc. node	12411 Jun 24 07:36	17° ∏ 59'41	24011122
	12410 Aug 01 21:21	0 \circ Ω		morning max el	12411 Jun 28 02:09	21° Ⅱ 25'25	Z 4 11 ZZ

	12411 Jul 05 12:18	0°©			12412 Jun 28 18:07	0°99	
	12411 Jul 26 03:11	0° U		morning set	12412 Jul 13 12:30	22° © 57'41	
morning set	12411 Aug 02 14:16	12° Ω 26'14		morning sec	12412 Jul 17 17:50	0°Ω	
max. Earth dist.	12411 Aug 06 06:25	18° Ω 53'20	1.38114 AU	max. Earth dist.	12412 Jul 18 04:44		1.40443 AU
	12411 Aug 12 07:22	0° m)					
	Ü	•		superior conj	12412 Jul 26 00:35	14° Ω 30′26	-1°15'15
superior conj	12411 Aug 13 12:15	2° Mp 17'18	-0°40'57	minimum elong	12412 Jul 26 06:01	14° Ω 55'01	1°15'09
minimum elong	12411 Aug 13 15:04	2° m/30'47	0°40'56	•	12412 Aug 03 08:36	0° m	
asc. node	12411 Aug 17 23:10	10° m 56'25		asc. node	12412 Aug 03 19:51	0°m/53'19	
evening rise	12411 Aug 22 07:27	19° m 32'07		evening rise	12412 Aug 04 23:33	3°m/04'27	
	12411 Aug 27 17:29	0∘ ⊽		evening max el	12412 Aug 20 23:01	28° M 46'25	18°25'07
evening max el	12411 Sep 07 18:46	16° ≏ 27'07	19°04'46		12412 Aug 22 07:17	0∘ ⊽	
retrograde	12411 Sep 16 17:11	20° ≙ 55'01		retrograde	12412 Aug 28 14:05	2° م 37'14	
evening set	12411 Sep 18 13:42	20° ≏ 44'15		evening set	12412 Aug 30 15:41	2° ≏ 21'04	
desc. node	12411 Sep 20 04:43	20° ≙ 18'12			12412 Sep 04 09:15	30°R,™)	
inferior conj	12411 Sep 26 24:00	16° ≏ 30'42	-2°08'19	desc. node	12412 Sep 06 02:11	28° m 44'35	
minimum elong	12411 Sep 26 18:28	16° ≏ 40′10	2°05'59	inferior conj	12412 Sep 07 07:23	27° m 46'53	-0°22'46
min. Earth dist.	12411 Sep 29 20:02	14° ≏ 34'42	0.56190 AU	minimum elong	12412 Sep 07 06:31	27° m 48'37	0°22'34
morning rise	12411 Oct 04 20:15	11° ≏ 47'21		min. Earth dist.	12412 Sep 10 14:31	25° m 09'24	0.58101 AU
direct	12411 Oct 10 07:55	10° ≏ 37'04		morning rise	12412 Sep 14 17:53	22° TD 26'43	
morning max el	12411 Oct 24 11:22	17° ≏ 50'55	25°52'12	direct	12412 Sep 20 21:19	20° Mp 49'06	
	12411 Nov 03 13:22	0° M		morning max el	12412 Oct 05 05:03	28° Mp 26'21	27°09'42
asc. node	12411 Nov 14 00:40	17°M26'32			12412 Oct 06 18:08	0∘ ⊽	
	12411 Nov 20 06:39	0° ∡			12412 Oct 27 07:04	0° M	
morning set	12411 Nov 21 06:11	2° ∡ 05'24		asc. node	12412 Oct 30 21:26	6°M52′29	
				morning set	12412 Nov 04 15:04	16°M36'05	
superior conj	12411 Nov 28 01:14	17° ∡ *01'57	1°37'36		12412 Nov 10 17:48	0° ∡ 7	
minimum elong	12411 Nov 28 00:34	16° ₹ 758'18	1°38'27			_	
max. Earth dist.	12411 Nov 29 04:11	19° ∡ 31'07	1.31745 AU	superior conj	12412 Nov 11 12:52	1° ∡ ¹46′26	1°31'09
	12411 Dec 04 00:07	0°ප		minimum elong	12412 Nov 11 11:19	1° ∡ 37'46	1°31'47
evening rise	12411 Dec 05 02:13	2°る17'09		max. Earth dist.	12412 Nov 11 12:40	1° ∡ 745′18	1.31322 AU
desc. node	12411 Dec 17 02:09	25° る 00'46		evening rise	12412 Nov 18 07:41	16° ∡ 741'12	
. ,	12411 Dec 20 02:58	0° ≈	27026140	i i	12412 Nov 24 21:22	0°る	
evening max el	12412 Jan 06 06:00	22°≈06'29	27°26'48	desc. node	12412 Dec 02 23:12	14° る 11'12	
retrograde	12412 Jan 20 03:45	29°≈24'55			12412 Dec 14 11:27	0°≈ 40× ×0.4127	26040117
evening set min. Earth dist.	12412 Jan 27 02:20 12412 Jan 30 20:14	27°≈09'56	0.61731 AU	evening max el	12412 Dec 18 09:22	4°≈04'27 11°≈13'28	26°49'17
		24°≈16'17		retrograde	12413 Jan 01 07:59		
inferior conj	12412 Feb 02 20:50 12412 Feb 03 01:37	21°≈30'56 21°≈19'59		evening set min. Earth dist.	12413 Jan 08 01:05 12413 Jan 11 23:32	9°≈19'58 6°≈41'40	0.59582 AU
minimum elong asc. node	12412 Feb 03 01.37 12412 Feb 09 23:28	21 ≈1939 16°≈33'24	2 10 02	inferior conj	12413 Jan 11 23.32 12413 Jan 15 03:45	6 ≈41 40 4°≈10'14	
morning rise	12412 Feb 10 03:42	16°≈29'58		minimum elong	12413 Jan 15 11:19	3°≈55'09	
direct	12412 Feb 12 08:01	16°≈09'16		minimum clong	12413 Jan 21 12:29	30°Rる	3 33 43
morning max el	12412 Feb 19 05:18	19° ≈ 38'20	17°49'44	morning rise	12413 Jan 23 00:27	29°る29'53	
morning max cr	12412 Feb 26 20:52	0° \	17 47 44	direct	12413 Jan 25 02:12	29° ට 13'58	
morning set	12412 Mar 05 22:27	14°) €03'06		asc. node	12413 Jan 26 20:45	29° ට 26'07	
desc. node	12412 Mar 14 03:16	28°) 34'53		use. noue	12413 Jan 28 12:44	0° ≈	
dese. node	12412 Mar 14 22:56	0° Υ		morning max el	12413 Feb 01 17:58	3° ≈ 01'59	18°10'40
		• •		morning set	12413 Feb 17 09:41	27° ≈ 52'49	
superior conj	12412 Mar 17 00:13	3° Ƴ 31'26	-0°22'09	3	12413 Feb 18 12:45	0°) €	
minimum elong	12412 Mar 16 22:09	3° Y ′22'36					
max. Earth dist.	12412 Mar 24 04:15	15° Ƴ 27'07	1.43438 AU	superior conj	12413 Feb 27 00:45	15°) 42'43	0°15'25
evening rise	12412 Mar 31 04:30	26° Ƴ 36′28		minimum elong	12413 Feb 27 01:56	15°) 48′04	0°15'33
	12412 Apr 02 09:01	0°8		behind sun begin	12413 Feb 27 00:15	15° ¥ 40′27	
	12412 Apr 23 00:49	$\Pi^{\circ}0$		behind sun end	12413 Feb 27 03:38	15° ¥ 55'41	
evening max el	12412 May 01 15:56	10° Ⅲ 18'31	21°39'03	desc. node	12413 Feb 28 23:49	19° ¥ 12'37	
asc. node	12412 May 07 20:25	14° Ⅱ 58'54		max. Earth dist.	12413 Mar 06 15:38	28° ¥ 59'17	1.41521 AU
retrograde	12412 May 10 17:45	15° Ⅲ 38′06			12413 Mar 07 06:04	0° Y	
evening set	12412 May 15 05:28	13° Ⅱ 48′21		evening rise	12413 Mar 11 13:50	7° Y °07'35	
inferior conj	12412 May 20 11:53	7° Ⅲ 32′01	3°02'39		12413 Mar 26 12:25	0°8	
minimum elong	12412 May 20 10:34	7° Ⅱ 36'37	3°01'40	evening max el	12413 Apr 14 08:16	24° 8 07'15	22°58'13
min. Earth dist.	12412 May 20 15:38	7° Ⅱ 18'55	0.68724 AU		12413 Apr 23 03:02	Π °0	
morning rise	12412 May 25 15:28	1° Ⅱ 17′21		retrograde	12413 Apr 24 13:54	0° Ⅱ 09'27	
	12412 May 27 10:32	30°₽ ႘		asc. node	12413 Apr 24 17:42	0° Ⅱ 09'20	
direct	12412 May 30 15:18	29° 8 07'50			12413 Apr 25 23:35	30° ₹ 8	
	12412 Jun 03 02:24	Π °0		evening set	12413 Apr 29 12:57	28° 8 04'48	
morning max el	12412 Jun 09 13:03	4° Ⅱ 59'16	22°41'40	inferior conj	12413 May 04 21:18	21° 8 40'06	2°41'48
desc. node	12412 Jun 10 04:37	5° Ⅱ 39′06		minimum elong	12413 May 04 19:22	21° 8 46'47	2°40'44

min. Earth dist.	12413 May 04 12:19	22° 8 11'15	0.68807 AU	morning rise	12414 Apr 24 13:29	29° Y ′50'25	
morning rise	12413 May 10 01:42	15° 8 32'02		direct	12414 Apr 28 11:35	28° Y ′22'48	
direct	12413 May 14 12:27	13° 8 43'05			12414 May 02 22:56	9° 8	
morning max el	12413 May 23 04:13	18° 8 42'46	21°16'50	morning max el	12414 May 06 02:27	2° 8 38'56	20°03'01
desc. node	12413 May 28 01:31	24° 8 13'19		desc. node	12414 May 14 22:20	13° 8 27'54	
	12413 Jun 01 12:24	Π °0			12414 May 26 06:27	Π °0	
	12413 Jun 21 21:10	0 \circ		morning set	12414 Jun 02 11:46	10° Ⅱ 59'56	
morning set	12413 Jun 23 09:09	2° 5 20'56		max. Earth dist.	12414 Jun 12 19:31	27° Ⅱ 08'50	1.44307 AU
max. Earth dist.	12413 Jun 30 08:45	13° © 32'55	1.42593 AU		12414 Jun 14 14:21	0 \circ	
	12412 1 1 07 16 10	2506247125	1046111		12414 1 10 00 17	60503140	2007141
superior conj	12413 Jul 07 16:18	25°\$47'35 26°\$17'19		superior conj	12414 Jun 18 08:17	6°503'40	
minimum elong	12413 Jul 07 23:14 12413 Jul 10 02:48	26° Ω 1/19	1-46/21	minimum elong	12414 Jun 18 13:12 12414 Jul 01 11:33	6°523'41 28°505'54	2°08'23
avanina riaa	12413 Jul 19 02:31	15° Ω 59'26		evening rise	12414 Jul 01 11.33 12414 Jul 02 14:10	28 3 03 34 0° Ω	
evening rise asc. node	12413 Jul 19 02.31 12413 Jul 21 16:36	20° Ω 39'03		asc. node	12414 Jul 02 14.10 12414 Jul 08 13:27	10°Ω09'05	
asc. nouc	12413 Jul 27 00:56	0°m)		evening max el	12414 Jul 18 23:55	24°Ω56'00	18°05'34
evening max el	12413 Aug 04 10:00	11° m) 39'04	18°05'47	retrograde	12414 Jul 25 09:36	28° Ω 16'28	10 03 34
retrograde	12413 Aug 11 05:01	15° m ₀ 07'31	10 03 17	evening set	12414 Jul 28 02:49	27°Ω38'50	
evening set	12413 Aug 13 14:08	14° mg 42'09		inferior conj	12414 Aug 03 09:28	22°Ω25'36	2°03'47
inferior conj	12413 Aug 20 11:43	9° mp 47'20	1°02'22	minimum elong	12414 Aug 03 12:04	22°Ω18'42	
minimum elong	12413 Aug 20 13:33	9° m 43'04	1°01'19	min. Earth dist.	12414 Aug 06 05:19	19° Ω 26'37	0.62596 AU
min. Earth dist.	12413 Aug 23 17:10	6° Mp 48'07	0.60334 AU	morning rise	12414 Aug 09 19:12	16° Ω 15'38	
desc. node	12413 Aug 23 23:39	6° m) 33'53		desc. node	12414 Aug 10 21:05	15° Ω 31'55	
morning rise	12413 Aug 27 09:58	3° m 57'05		direct	12414 Aug 16 11:36	13° Ω 48'54	
direct	12413 Sep 02 23:06	1° m/52'14		morning max el	12414 Aug 30 13:34	21° Ω 51'15	27°54'51
morning max el	12413 Sep 17 06:20	9° m 46'05	27°51'45		12414 Sep 06 16:44	0° m	
	12413 Oct 02 21:59	0∘ ⊽			12414 Sep 26 01:51	0∘ ⊽	
asc. node	12413 Oct 17 18:09	26° ≏ 36'04		morning set	12414 Oct 03 18:18	14° ≏ 46'52	
	12413 Oct 19 09:53	0° M		asc. node	12414 Oct 04 14:49	16° ჲ 31'38	
morning set	12413 Oct 19 19:49	0°M51'46		max. Earth dist.	12414 Oct 09 01:07	25° ≙ 51'45	1.31989 AU
max. Earth dist.	12413 Oct 25 20:59	13°M55'48	1.31398 AU		12414 Oct 10 22:51	0° M	
superior conj	12413 Oct 27 00:01	16° ™ 25'47	1°19'03	superior conj	12414 Oct 11 08:50	0° M 54'34	1°01'27
minimum elong	12413 Oct 26 21:54	16° ™ 14'00	1°19'23	minimum elong	12414 Oct 11 06:35	0°M42'19	1°01'27
	12413 Nov 02 03:23	0° ∡ 7		evening rise	12414 Oct 18 03:59	15°M47'34	
evening rise	12413 Nov 02 16:55	1° ∡ 13'10			12414 Oct 25 02:52	0° ₹	
	12413 Nov 18 02:26	0°る		desc. node	12414 Nov 06 17:39	20° ∡ '01'37	2 400 4120
desc. node	12413 Nov 19 20:23	2° る 37'17	25020140	evening max el	12414 Nov 11 16:08	25° ₹ 29'32	24°04'39
evening max el	12413 Nov 30 04:28	15°る09'38 22°る09'38	25°38'48	natra anada	12414 Nov 17 11:53	0°る 2° ろ 17220	
retrograde evening set	12413 Dec 14 01:36 12413 Dec 20 03:15	22° ろ 09'38 20° ろ 44'34		retrograde evening set	12414 Nov 25 07:06 12414 Nov 30 05:26	2°る17'39 1°る24'22	
min. Earth dist.	12413 Dec 20 03:13	20 844 34 18° る 07'04	0.57514 AU	evening set	12414 Nov 30 03.20 12414 Dec 03 10:15	1 024 22 30°R ₹	
inferior conj	12413 Dec 24 10.49 12413 Dec 27 15:29	16°る07'04		min. Earth dist.	12414 Dec 06 03:06	28° ∡ 28'39	0.55804 AU
minimum elong	12413 Dec 27 13:29 12413 Dec 27 23:54	16 3 03 23	4°50'52	inferior conj	12414 Dec 08 06:33	26 × 2639 27°× 10'29	
morning rise	12414 Jan 04 23:04	11° る 47'38	4 30 32	minimum elong	12414 Dec 08 11:03	27°×703'38	5°43'00
direct	12414 Jan 07 03:20	11° る 33'03		morning rise	12414 Dec 16 18:39	23°×712'53	3 13 00
asc. node	12414 Jan 13 17:59	13° る 57'30		direct	12414 Dec 19 08:42	22° × 755'44	
morning max el	12414 Jan 15 22:36	15° ප් 49'41	18°52'34	morning max el	12414 Dec 29 15:18	27° х 50′09	19°57'02
Ü	12414 Jan 25 21:22	0° ≈		asc. node	12414 Dec 31 15:10	29° ₹ '55'32	
morning set	12414 Feb 01 07:36	12° ≈ 10'46			12414 Dec 31 16:45	ರ°0	
-				morning set	12415 Jan 16 12:31	26° る 45'29	
superior conj	12414 Feb 09 20:35	28° ≈ 47'37	0°46'29		12415 Jan 18 02:41	0° ≈	
minimum elong	12414 Feb 09 23:15	29° ≈ 00′17	0°46'37				
	12414 Feb 10 11:53	0° ∀		superior conj	12415 Jan 24 06:52	12° ≈ 31'35	1°10'07
desc. node	12414 Feb 15 20:25	9° ⊁ 51'04		minimum elong	12415 Jan 24 09:40	12° ≈ 45'33	1°10'29
max. Earth dist.	12414 Feb 16 23:02	11°) (49′34	1.39322 AU	max. Earth dist.	12415 Jan 30 05:21	24° ≈ 01′18	1.37100 AU
evening rise	12414 Feb 20 20:24	18° ¥ 34'42			12415 Feb 02 11:20	0° ∀	
	12414 Feb 27 19:10	0° Υ		evening rise	12415 Feb 02 23:06	0° ¥ 52'58	
	12414 Mar 20 20:14	0°8		desc. node	12415 Feb 02 17:05	0° ¥ 25'54	
evening max el	12414 Mar 27 22:14	7° 8 58'22	24°18'37		12415 Feb 20 23:47	0° Υ	
retrograde	12414 Apr 08 06:50	14° 8 37'59		evening max el	12415 Mar 10 11:34	21° Y '49'32	25°33'38
asc. node	12414 Apr 11 15:03	13° 8 47'32		retrograde	12415 Mar 22 19:28	28° Y 56'24	
evening set	12414 Apr 13 17:38	12° 8 20'30	0.60424.4**	evening set	12415 Mar 28 17:50	26° Y 29'22	
min. Earth dist.	12414 Apr 18 08:17	7° 8 02'47	0.68434 AU	asc. node	12415 Mar 29 12:28	25° Y 47'42	0.67602 411
inferior conj	12414 Apr 19 05:40	5° 8 50'48	2°11'02	min. Earth dist.	12415 Apr 02 01:27	21° Y 46'50 19° Y 59'16	0.67623 AU
minimum elong	12414 Apr 19 03:30 12414 Apr 24 08:30	5° ႘ 58'06 30°℞Ƴ	2°09'58	inferior conj	12415 Apr 03 11:00 12415 Apr 03 09:06	19°°γ′59′16 20° Υ ′05′22	1°30'17
	12414 Apr 24 U8:30	3U K, I		minimum elong	12413 Apr 03 09:06	20 1 05 22	1 29723

morning rise	12415 Apr 09 00:52	14° Ƴ 07'49		minimum elong	12416 Mar 17 10:14	4° Υ 03'56	0°38'52
direct	12415 Apr 12 11:13	13° Ƴ 00′17			12416 Mar 21 03:40	30° ₹ ₩	
morning max el	12415 Apr 19 08:17	16° Ƴ 45′00	19°03'49	morning rise	12416 Mar 23 09:44	28° ∺ 20′12	
	12415 Apr 29 15:24	9° 8		direct	12416 Mar 26 09:36	27°) € 30′10	
desc. node	12415 May 01 19:03	3° 8 11'23			12416 Mar 31 20:13	0° Y	
greatest brilliancy	12415 May 02 12:15	4° 8 15'51	-0.7m	morning max el	12416 Apr 01 20:34	0° Y 55′56	18°20'54
morning set	12415 May 12 16:05	19° 8 50'09		desc. node	12416 Apr 17 15:42	23° Y 15'49	
	12415 May 19 05:22	Π °0		morning set	12416 Apr 21 18:18	29° Ƴ 47'52	
max. Earth dist.	12415 May 26 11:27	11° Ⅱ 19'18	1.45402 AU		12416 Apr 21 21:22	9° 8	
	12415 M 20, 02-26	150Π2052	2012/54		12416 M 07 00-45	240 420100	1057150
superior conj	12415 May 29 02:26 12415 May 29 00:37	15° Ⅱ 26'53 15° Ⅱ 19'45		superior conj	12416 May 07 09:45 12416 May 07 01:26	24° 8 28'00 23° 8 55'30	
minimum elong	,	15°Щ19'45 0°©	2°13'43	minimum elong	,	25° 8 49'49	
	12415 Jun 07 05:34	0°95 9°9513'27		max. Earth dist.	12416 May 08 06:42	0° Ⅱ	1.45778 AU
evening rise asc. node	12415 Jun 12 21:55 12415 Jun 25 10:23	9 3 13 27 29° 5 17'21		evening rise	12416 May 10 22:48 12416 May 23 07:59	0 Ⅱ 19°Ⅱ21'30	
asc. Houe	12415 Jun 25 21:51	29 3 1721 0° Ω		evening rise	12416 May 30 03:03	0°©	
evening max el	12415 Jul 02 13:31	8° Ω 29'12	18°23'40	greatest brilliancy	12416 Jun 02 12:22	5° © 14'59	-0.8m
retrograde	12415 Jul 08 23:26	$11^{\circ}\Omega 55'19$	18 23 40	asc. node	12416 Jun 11 07:25	17°955'46	-0.6111
evening set	12415 Jul 12 01:00	$11^{\circ}\Omega_{03'13}$		evening max el	12416 Jun 15 00:05	22°911'24	18°59'12
inferior conj	12415 Jul 17 20:33	5° Ω 33'29	2°43'51	retrograde	12416 Jun 21 18:51	25°956'07	10 39 12
minimum elong	12415 Jul 17 22:44	$5^{\circ}\Omega_{27'02}$	2°42'39	evening set	12416 Jun 25 05:10	24°9548'03	
min. Earth dist.	12415 Jul 20 02:54	2° Ω 54'07	0.64660 AU	inferior conj	12416 Jun 30 17:15	19° © 03'19	3°06'17
iiiii. Lartii dist.	12415 Jul 22 21:46	2 0€ 5∓07	0.04000 AC	minimum elong	12416 Jun 30 18:29	18° © 59'22	3°05'16
morning rise	12415 Jul 23 19:13	29°913'34		min. Earth dist.	12416 Jul 02 08:49	16°957'33	0.66375 AU
desc. node	12415 Jul 28 18:26	26°543'13		morning rise	12416 Jul 06 07:08	12°940'21	0.00373710
direct	12415 Jul 30 08:58	26°534'09		direct	12416 Jul 12 13:27	9°958'54	
uncet	12415 Aug 07 19:58	0°Ω		desc. node	12416 Jul 14 15:42	10°514'39	
morning max el	12415 Aug 12 23:52	4° Ω 33'05	27°22'22	morning max el	12416 Jul 25 10:42	17°939'31	26°21'36
morning man vi	12415 Sep 01 06:37	0° m)	_,	morning must er	12416 Aug 04 18:43	0°Ω	20 21 50
morning set	12415 Sep 17 07:58	28° m/ 15'02			12416 Aug 24 05:30	0°mp	
	12415 Sep 18 05:18	0∘ ত		morning set	12416 Aug 30 09:26	11° m)07'13	
asc. node	12415 Sep 21 11:29	6° £ 34'39		max. Earth dist.	12416 Sep 03 07:23	18° mp 36'55	1.34750 AU
max. Earth dist.	12415 Sep 21 21:17	7° ≙ 25'12	1.33110 AU	asc. node	12416 Sep 07 08:07	26° m/40'31	
	•				•	•	
superior conj	12415 Sep 25 13:14	15° ≙ 07'17	0°38'30	superior conj	12416 Sep 08 10:43	28° m 56'48	0°10'37
superior conj minimum elong	12415 Sep 25 13:14 12415 Sep 25 11:28	15° ♀ 07'17 14° ♀ 57'52	0°38'30 0°38'18	superior conj minimum elong	12416 Sep 08 10:43 12416 Sep 08 10:09	28° Mp 56'48 28° Mp 53'49	0°10'37 0°10'23
	•				-		
	12415 Sep 25 11:28	14° ≙ 57'52		minimum elong	12416 Sep 08 10:09	28° m 53'49	
minimum elong	12415 Sep 25 11:28 12415 Oct 02 11:21	14° £ 57'52 0° ™		minimum elong behind sun begin	12416 Sep 08 10:09 12416 Sep 08 05:35	28° m 53'49 28° m 30'22	
minimum elong	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02	14° £ 57'52 0° M 0° M 19'38	0°38'18	minimum elong behind sun begin	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42	28° m 53'49 28° m 30'22 29° m 17'18	
minimum elong evening rise	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41	14° Ω 57'52 0° M 0° M 19'38 0° X	0°38'18	minimum elong behind sun begin behind sun end	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59	28° m 53'49 28° m 30'22 29° m 17'18 0° <u>Ω</u>	
minimum elong evening rise evening max el	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07	14° ⊆ 57'52 0° ™ 0° ™ 19'38 0° ४ 5° ४ 32'59	0°38'18	minimum elong behind sun begin behind sun end	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03	28° m 53'49 28° m 30'22 29° m 17'18 0° <u>Ω</u> 14° <u>Ω</u> 43'24	0°10'23
minimum elong evening rise evening max el desc. node	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00	14° \$\overline\$57'52 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$.19'38 0° \$\stacksigma\$ 5° \$\textsigma\$32'59 6° \$\stacksigma\$01'28	0°38'18 22°23'11	minimum elong behind sun begin behind sun end evening rise evening max el desc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58	28° m 53'49 28° m 30'22 29° m 17'18 0° \overline{\Omega} 14° \overline{\Omega}43'24 0° m.	0°10'23
evening rise evening max el desc. node retrograde evening set min. Earth dist.	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12	14° \$\Pi\$57'52 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$.19'38 0° \$\mathbb{A}\$ 5° \$\mathbb{A}\$32'59 6° \$\mathbb{A}\$01'28 11° \$\mathbb{A}\$56'47 11° \$\mathbb{A}\$29'57 7° \$\mathbb{A}\$57'56	0°38'18 22°23'11 0.54755 AU	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00	28° m 53'49 28° m 30'22 29° m 17'18 0° <u>a</u> 14° <u>a</u> 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52	0°10'23
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 07 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36	14° \$\simes 57'52 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$.19'38 0° \$\mathbb{A}\$ 5° \$\mathbb{A}\$32'59 6° \$\mathbb{A}\$01'28 11° \$\mathbb{A}\$56'47 11° \$\mathbb{A}\$57'56 7° \$\mathbb{A}\$31'58	0°38'18 22°23'11 0.54755 AU -5°47'47	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19	28° m 53'49 28° m 30'22 29° m 17'18 0° <u>a</u> 14° <u>a</u> 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39	0°10'23 20°50'43
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38	14° \$\simes 57'52 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$.19'38 0° \$\mathbb{A}\$' 5° \$\mathbb{A}\$32'59 6° \$\mathbb{A}\$01'28 11° \$\mathbb{A}\$29'57 7° \$\mathbb{A}\$57'56 7° \$\mathbb{A}\$31'58 7° \$\mathbb{A}\$37'34	0°38'18 22°23'11 0.54755 AU -5°47'47	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11	28° m 53'49 28° m 30'22 29° m 17'18 0° <u>n</u> 14° <u>n</u> 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16	0°10'23 20°50'43 -4°52'11
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27	14° \$\Omega 57'52 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$.19'38 0° \$\mathscr{A}\$' 5° \$\mathscr{A}\$32'59 6° \$\mathscr{A}\$01'28 11° \$\mathscr{A}\$56'47 11° \$\mathscr{A}\$29'57 7° \$\mathscr{A}\$57'56 7° \$\mathscr{A}\$31'58 7° \$\mathscr{A}\$37'34 3° \$\mathscr{A}\$44'34	0°38'18 22°23'11 0.54755 AU -5°47'47	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11 4°49'11
minimum elong evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00	14° \$\Omega 57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$ 32'59 6° \$\mathbb{n}\$ 01'28 11° \$\mathbb{n}\$ 56'47 11° \$\mathbb{n}\$ 29'57 7° \$\mathbb{n}\$ 57'56 7° \$\mathbb{n}\$ 37'34 3° \$\mathbb{n}\$ 44'34 3° \$\mathbb{n}\$ 19'48	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49	14° \$\Omega 57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$ 32'59 6° \$\mathbb{n}\$ 01'28 11° \$\mathbb{n}\$ 56'47 11° \$\mathbb{n}\$ 29'57 7° \$\mathbb{n}\$ 57'56 7° \$\mathbb{n}\$ 31'58 7° \$\mathbb{n}\$ 34'34 3° \$\mathbb{n}\$ 44'34 3° \$\mathbb{n}\$ 19'48 8° \$\mathbb{n}\$ 57'31	0°38'18 22°23'11 0.54755 AU -5°47'47	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11 4°49'11
minimum elong evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16	14° \$\Omega 57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$ 32'59 6° \$\mathbb{n}\$ 01'28 11° \$\mathbb{n}\$ 56'47 11° \$\mathbb{n}\$ 29'57 7° \$\mathbb{n}\$ 57'56 7° \$\mathbb{n}\$ 31'58 7° \$\mathbb{n}\$ 37'34 3° \$\mathbb{n}\$ 44'34 3° \$\mathbb{n}\$ 19'48 8° \$\mathbb{n}\$ 57'31 17° \$\mathbb{n}\$ 03'39	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 26 04:34	14° \$\Omega 57'52 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$ 32'59 6° \$\mathbb{n}\$ 01'28 11° \$\mathbb{n}\$ 56'47 11° \$\mathbb{n}\$ 29'57 7° \$\mathbb{n}\$ 57'56 7° \$\mathbb{n}\$ 31'58 7° \$\mathbb{n}\$ 37'34 3° \$\mathbb{n}\$ 44'34 3° \$\mathbb{n}\$ 19'48 8° \$\mathbb{n}\$ 57'31 17° \$\mathbb{n}\$ 03'39 0° \$\mathbb{G}\$	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 22 08:19	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16	14° \$\Omega 57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$ 32'59 6° \$\mathbb{n}\$ 01'28 11° \$\mathbb{n}\$ 56'47 11° \$\mathbb{n}\$ 29'57 7° \$\mathbb{n}\$ 57'56 7° \$\mathbb{n}\$ 31'58 7° \$\mathbb{n}\$ 37'34 3° \$\mathbb{n}\$ 44'34 3° \$\mathbb{n}\$ 19'48 8° \$\mathbb{n}\$ 57'31 17° \$\mathbb{n}\$ 03'39	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 22 08:19 12416 Dec 01 03:33	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° ズ	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
minimum elong evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 09 12:09 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 26 04:34 12415 Dec 31 21:48	14° \$\overline\$57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'44 3° \$\mathbb{n}\$19'48 8° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$ 11° \$\mathbb{n}\$29'35	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 22 08:19 12416 Dec 01 03:33 12416 Dec 04 09:15	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Omega\) 14° \(\Omega\) 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° \(\omega\) 5° \(\omega\)	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 07 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 31 21:48 12416 Jan 08 03:37	14° \$\overline\$57'52 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'48 8° \$\mathbb{n}\$19'48 8° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$ 11° \$\mathbb{n}\$29'35	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 22 08:19 12416 Dec 01 03:33 12416 Dec 04 09:15 12416 Dec 15 09:15	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Oldsymbol{\O	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
minimum elong evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 26 14:27 12415 Dec 18 12:16 12415 Dec 18 12:16 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 08 05:45	14° \$\Omega 57'52 0° M. 0° M.19'38 0° \$\mathref{x}\$ 5° \$\mathref{3}32'59 6° \$\mathref{x}01'28 11° \$\mathref{x}'29'57 7° \$\mathref{x}'57'56 7° \$\mathref{x}'31'58 7° \$\mathref{x}'37'34 3° \$\mathref{x}'44'34 3° \$\mathref{x}'19'48 8° \$\mathref{x}'57'31 17° \$\mathref{x}'03'39 0° \$\mathref{x}\$ 11° \$\mathref{z}29'35 26° \$\mathref{x}'43'26 26° \$\mathref{x}'54'31	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 22 08:19 12416 Dec 01 03:33 12416 Dec 04 09:15	28° m 53'49 28° m 30'22 29° m 17'18 0° \(\Omega\) 14° \(\Omega\) 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° \(\omega\) 5° \(\omega\)	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU
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evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 26 04:34 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 08 05:45 12416 Jan 12 15:52 12416 Jan 16 18:47 12416 Jan 20 13:49 12416 Jan 25 20:07 12416 Feb 15 19:46 12416 Feb 15 19:46	14° \$\overline\$57'52 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$37'34 3° \$\mathbb{n}\$44'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$ 11° \$\mathbb{n}\$29'35 26° \$\mathbb{n}\$43'26 26° \$\mathbb{n}\$54'31 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$54'13 20° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$5'20'9	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56 1°26'23 1°27'02	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 16 11:00 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 05 01:34 12416 Nov 02 08:19 12416 Dec 01 03:33 12416 Dec 01 03:33 12416 Dec 15 09:15 12416 Dec 17 03:02 12416 Dec 22 07:34 12416 Dec 22 08:40 12416 Dec 25 10:03 12416 Dec 31 03:44 12416 Dec 31 10:42 12417 Jan 06 10:39	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° ズ 5° ズ 05'15 26° ズ 16'17 0° ♂ 11° ♂ 13'15 11° ♂ 19'06 17° ♂ 48'49 27° ♂ 28'17 0° ≈ 11° ≈ 08'20	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU 23°08'01
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 07 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 26 04:34 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 09 17:41 12416 Jan 12 15:52 12416 Jan 16 18:47 12416 Jan 20 13:49 12416 Jan 25 20:07 12416 Feb 15 19:46 12416 Her Of Oct.	14° \$\overline\$57'52 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$37'34 3° \$\mathbb{n}\$44'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$ 11° \$\mathbb{n}\$29'35 26° \$\mathbb{n}\$4'326 26° \$\mathbb{n}\$54'31 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$54'13 20° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 13° \$\mathbb{n}\$5'737	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56 1°26'23 1°27'02 1.35085 AU	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 09 06:08 12416 Nov 02 08:19 12416 Dec 01 03:33 12416 Dec 01 03:33 12416 Dec 15 09:15 12416 Dec 17 03:02 12416 Dec 22 08:40 12416 Dec 23 10:42 12416 Dec 31 10:42 12416 Dec 31 10:42 12417 Jan 06 10:39 12417 Jan 18 02:34	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 45'13 17° m 18'19 0° ズ 5° ズ 05'15 26° ズ 16'17 0° 云 11° 云 13'15 11° 云 19'06 17° 云 48'49 27° 云 28'17 0° ≈ 11° ≈ 08'20 0° 光	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU 23°08'01 1°35'45 1°36'36 1.33428 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 07 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 08 05:45 12416 Jan 16 18:47 12416 Jan 20 13:49 12416 Jan 20 13:49 12416 Jan 20 13:49 12416 Feb 15 19:46 12416 Feb 21 01:17 12416 Mar 05 02:44 12416 Mar 11 11:47	14° \$\overline\$57'52 0° \$\mathbb{\text{N}}\$ 0° \$\mathbb{\text{N}}\$ 5° \$\mathbb{\text{N}}\$32'59 6° \$\mathbb{\text{N}}\$01'28 11° \$\mathbb{\text{N}}\$56'47 11° \$\mathbb{\text{N}}\$29'57 7° \$\mathbb{\text{N}}\$57'56 7° \$\mathbb{\text{N}}\$31'58 7° \$\mathbb{\text{N}}\$37'34 3° \$\mathbb{\text{N}}\$44'34 3° \$\mathbb{\text{N}}\$4'34 3° \$\mathbb{\text{N}}\$4'31 17° \$\mathbb{\text{N}}\$03'39 0° \$\mathbb{\text{N}}\$ 11° \$\mathbb{\text{N}}\$29'35 26° \$\mathbb{\text{N}}\$43'26 26° \$\mathbb{\text{N}}\$54'31 0° \$\mathbb{\text{N}}\$5'\mathbb{\text{N}}\$3'21 0° \$\mathbb{\text{N}}\$53'21 0° \$\mathbb{\text{N}}\$5'\mathbb{\text{N}}\$36'09 12° \$\mathbb{\text{Y}}\$57'37 10° \$\mathbb{\text{Y}}\$25'34	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56 1°26'23 1°27'02 1.35085 AU	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 05 01:34 12416 Nov 02 08:19 12416 Dec 01 03:33 12416 Dec 01 03:33 12416 Dec 15 09:15 12416 Dec 17 03:02 12416 Dec 22 08:40 12416 Dec 23 10:42 12416 Dec 31 10:42 12417 Jan 06 10:39 12417 Jan 18 02:34 12417 Feb 02 14:46	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° ♂ 5° ♂ 05'15 26° ♂ 16'17 0° ♂ 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU 23°08'01 1°35'45 1°36'36 1.33428 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong evening set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set asc. node	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 17 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 08 03:37 12416 Jan 08 05:45 12416 Jan 16 18:47 12416 Jan 20 13:49 12416 Jan 20 13:49 12416 Feb 15 19:46 12416 Feb 21 01:17 12416 Mar 05 02:44 12416 Mar 11 11:47 12416 Mar 15 09:54	14° \$\overline\$57'52 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$37'34 3° \$\mathbb{n}\$44'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$4'34 3° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$ 11° \$\mathbb{n}\$29'35 26° \$\mathbb{n}\$4'326 26° \$\mathbb{n}\$54'31 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$54'13 20° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 13° \$\mathbb{n}\$5'737	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56 1°26'23 1°27'02 1.35085 AU 26°35'48	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 05 01:34 12416 Nov 02 08:19 12416 Dec 01 03:33 12416 Dec 01 03:33 12416 Dec 15 09:15 12416 Dec 17 03:02 12416 Dec 22 08:40 12416 Dec 23 10:42 12416 Dec 31 10:42 12417 Jan 06 10:39 12417 Jan 18 02:34 12417 Feb 02 14:46 12417 Feb 02 14:46	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° ♂ 5° ♂ 05'15 26° ♂ 16'17 0° ♂ 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU 23°08'01 1°35'45 1°36'36 1.33428 AU
evening rise evening max el desc. node retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12415 Sep 25 11:28 12415 Oct 02 11:21 12415 Oct 02 15:02 12415 Oct 19 06:41 12415 Oct 24 03:07 12415 Oct 24 15:00 12415 Nov 06 00:19 12415 Nov 07 10:12 12415 Nov 18 04:36 12415 Nov 18 00:38 12415 Nov 26 14:27 12415 Nov 26 14:27 12415 Nov 29 22:00 12415 Dec 11 17:49 12415 Dec 18 12:16 12415 Dec 31 21:48 12416 Jan 08 03:37 12416 Jan 08 05:45 12416 Jan 16 18:47 12416 Jan 20 13:49 12416 Jan 20 13:49 12416 Jan 20 13:49 12416 Feb 15 19:46 12416 Feb 21 01:17 12416 Mar 05 02:44 12416 Mar 11 11:47	14° \$\overline\$57'52 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 5° \$\mathbb{n}\$32'59 6° \$\mathbb{n}\$01'28 11° \$\mathbb{n}\$56'47 11° \$\mathbb{n}\$29'57 7° \$\mathbb{n}\$57'56 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'58 7° \$\mathbb{n}\$31'48 8° \$\mathbb{n}\$44'34 3° \$\mathbb{n}\$19'48 8° \$\mathbb{n}\$57'31 17° \$\mathbb{n}\$03'39 0° \$\mathbb{n}\$10' \$\mathbb{n}\$29'35 26° \$\mathbb{n}\$43'26 26° \$\mathbb{n}\$54'31 0° \$\mathbb{n}\$50' \$\mathbb{n}\$54'13 20° \$\mathbb{n}\$54'13 20° \$\mathbb{n}\$5'21 0° \$\mathbb{n}\$ 0° \$\mathbb{n}\$ 10° \$\mathbb{n}\$5'75'37 10° \$\mathbb{n}\$25'34 6° \$\mathbb{n}\$28'05	0°38'18 22°23'11 0.54755 AU -5°47'47 5°46'41 21°23'56 1°26'23 1°27'02 1.35085 AU	minimum elong behind sun begin behind sun end evening rise evening max el desc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12416 Sep 08 10:09 12416 Sep 08 05:35 12416 Sep 08 14:42 12416 Sep 08 22:59 12416 Sep 16 00:03 12416 Sep 23 17:58 12416 Oct 04 22:41 12416 Oct 10 12:24 12416 Oct 18 19:19 12416 Oct 27 20:11 12416 Oct 27 10:23 12416 Oct 28 17:00 12416 Nov 05 01:34 12416 Nov 05 01:34 12416 Nov 02 08:19 12416 Dec 01 03:33 12416 Dec 01 03:33 12416 Dec 15 09:15 12416 Dec 17 03:02 12416 Dec 22 08:40 12416 Dec 23 10:42 12416 Dec 31 10:42 12417 Jan 06 10:39 12417 Jan 18 02:34 12417 Feb 02 14:46	28° m 53'49 28° m 30'22 29° m 17'18 0° Ω 14° Ω 43'24 0° m 15° m 55'49 20° m 08'12 21° m 38'52 21° m 25'39 17° m 31'16 17° m 45'13 17° m 01'37 13° m 36'30 12° m 58'50 19° m 18'19 0° ♂ 5° ♂ 05'15 26° ♂ 16'17 0° ♂ 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15 11° ♂ 13'15	0°10'23 20°50'43 -4°52'11 4°49'11 0.54595 AU 23°08'01 1°35'45 1°36'36 1.33428 AU

inforior coni	12417 Mar 01 03:56	17° ¥ 50'12	0°22'17	retrograde	12418 Jan 29 21:28	9° ₩ 35'37	
inferior conj minimum elong	12417 Mar 01 03:36	17 X 30 12 17° X 48'25		•	12418 Jan 29 21:28 12418 Feb 05 20:05	9 X 33 3 7 7° ¥ 12′01	
Č	12417 Mar 01 04.36	17 X 48 23 16° X 36'27	0 21 44	evening set min. Earth dist.	12418 Feb 03 20:03 12418 Feb 09 14:09		0.62923 AU
asc. node							
morning rise	12417 Mar 07 13:32	12°) € 22'40		inferior conj	12418 Feb 12 10:10	1° ¥ 19'06	
direct	12417 Mar 10 04:22	11°) (46'49	1,705,510,0	minimum elong	12418 Feb 12 13:17	1° ¥ 11′28	1°31′58
morning max el	12417 Mar 16 13:02	15°) €05'22	1/5500	1	12418 Feb 13 19:02	30°R≈	
	12417 Mar 27 06:42	0°Υ		asc. node	12418 Feb 17 04:39	27°≈14'14	
morning set	12417 Apr 03 01:23	11° Υ 10'49		morning rise	12418 Feb 19 08:57	26°≈07'47	
desc. node	12417 Apr 04 12:18	13° Y 35'35		direct	12418 Feb 21 16:30	25° ≈ 42'35	
	12417 Apr 14 13:26	0° 8		morning max el	12418 Feb 28 06:45	29° ≈ 04'36	17°46'32
					12418 Mar 01 04:12	0° ∀	
superior conj	12417 Apr 17 00:03	3° 8 54'17		morning set	12418 Mar 16 09:34	23°) ₹45′26	
minimum elong	12417 Apr 16 15:24		1°25'18		12418 Mar 19 23:48	0° Υ	
max. Earth dist.	12417 Apr 21 02:55	10° 8 25'15	1.45407 AU	desc. node	12418 Mar 22 08:52	4° Υ 05'24	
evening rise	12417 May 02 23:56	28° 8 50'45					
	12417 May 03 18:00	Π °0		superior conj	12418 Mar 28 11:03	14° Y 20'48	
greatest brilliancy	12417 May 17 12:35	20° Ⅱ 45'15	-0.6m	minimum elong	12418 Mar 28 06:26	14° Ƴ 01'41	0°45'06
	12417 May 24 03:43	0 \circ		max. Earth dist.	12418 Apr 03 20:59	24° Ƴ 47′03	1.44330 AU
evening max el	12417 May 29 05:42	5° © 57'27	19°50'52		12418 Apr 07 03:51	9° 8	
asc. node	12417 May 29 04:31	5° © 54'28		evening rise	12418 Apr 12 11:41	8° 8 17'37	
retrograde	12417 Jun 05 17:08	10°9512'41			12418 Apr 26 23:59	Π °0	
evening set	12417 Jun 09 12:44	8°9348'07		evening max el	12418 May 12 05:26	19° Ⅱ 43'47	20°56'23
inferior conj	12417 Jun 14 20:31	2° 5 49'36	3°14'14	asc. node	12418 May 16 01:42	23° II 00'03	
minimum elong	12417 Jun 14 20:40	2° © 49'05	3°13'19	retrograde	12418 May 20 15:59	24° Ⅲ 38'46	
min. Earth dist.	12417 Jun 15 21:30	1° 5 25'38	0.67656 AU	evening set	12418 May 24 21:36	22° I 57'53	
	12417 Jun 16 23:40	30° Ŗ Ⅱ		inferior conj	12418 May 30 03:49	16° Ⅱ 47'15	3°10'00
morning rise	12417 Jun 20 04:16	26° Ⅲ 27'58		minimum elong	12418 May 30 02:59	16° Ⅱ 50′10	3°09'04
direct	12417 Jun 25 23:55	23° Ⅱ 53'53		min. Earth dist.	12418 May 30 15:02	16° Ⅱ 08'21	0.68470 AU
desc. node	12417 Jul 01 12:51	25° Ⅱ 44'00		morning rise	12418 Jun 04 08:08	10° Ⅱ 29'28	
	12417 Jul 06 20:17	0°©		direct	12418 Jun 09 15:19	8° Ⅱ 09'48	
morning max el	12417 Jul 07 21:00	1° 5 01'09	25°01'56	desc. node	12418 Jun 18 09:55	12° Ⅱ 42'44	
	12417 Jul 29 17:54	$0^{\circ}\Omega$		morning max el	12418 Jun 20 07:12	14° Ⅱ 31'14	23°33'07
morning set	12417 Aug 12 18:43	23° Ω 13'59		•	12418 Jul 02 21:38	0°©	
max. Earth dist.	12417 Aug 16 08:45	29° Ω 43'55	1.36814 AU		12418 Jul 22 15:55	$0^{\circ}\Omega$	
	12417 Aug 16 12:14	0° m)		morning set	12418 Jul 25 07:03	4° Ω 23'17	
		•		max. Earth dist.	12418 Jul 29 06:20	11° Ω 12'22	1.39112 AU
superior conj	10417 4 00 00 01	120 m 1701	0021121				
	12417 Aug 22 22:21	12°Mp 16'01	-0-21-21				
minimum elong	1241 / Aug 22 22:21 12417 Aug 22 23:44	12° m/22'50	0°21'26	superior conj	12418 Aug 05 20:22	24° Ω 55'31	-0°55'37
minimum elong asc. node	•			superior conj minimum elong	Č	24°Ω55'31 25°Ω13'59	
	12417 Aug 22 23:44 12417 Aug 25 04:45	12° m/22'50 16° m/45'55			12418 Aug 05 20:22 12418 Aug 06 00:19 12418 Aug 08 12:53		
asc. node	12417 Aug 22 23:44	12° m/22'50			12418 Aug 06 00:19	25° Ω 13'59	
asc. node	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49	12° m 22'50 16° m 45'55 28° m 53'28 0° <u>0</u>		minimum elong	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26	25° Ω 13'59 0° m	
asc. node evening rise	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00	12° m/22'50 16° m/45'55 28° m/53'28	0°21'26	minimum elong asc. node	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30	25° \$\Omega\$13'59 0° my 6° my46'51	
asc. node evening rise	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01	12° m/22'50 16° m/45'55 28° m/53'28 0° Ω 27° Ω02'21	0°21'26	minimum elong asc. node	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26	25° Ω13'59 0° m 6° m 46'51 12° m 41'56	
asc. node evening rise evening max el	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω 02'21 0° m 1° m 56'59	0°21'26	minimum elong asc. node evening rise evening max el	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19	25° \$\Omega\$13'59 0° \$\mathref{m}\$\$ 6° \$\mathref{m}\$\$46'51\$ 12° \$\mathref{m}\$\$\$41'56\$ 0° \$\mathref{\Omega}\$\$\$	0°55'32
asc. node evening rise evening max el retrograde	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56	12° m 22'50 16° m 45'55 28° m 53'28 0° <u>a</u> 27° <u>a</u> 02'21 0° m 1° m 56'59 1° m 56'50	0°21'26	minimum elong asc. node evening rise evening max el retrograde	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06	25° \$\Omega\$13'59 0° my 6° my46'51 12° my41'56 0° \Omega\$ 8° \Omega\$56'40	0°55'32
asc. node evening rise evening max el retrograde desc. node	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49	12° m 22'50 16° m 45'55 28° m 53'28 0° \(\Omega\) 27° \(\Omega\) 20'21 0° m 1° m 56'59 1° m 56'50 1° m 47'07	0°21'26	minimum elong asc. node evening rise evening max el	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20	25° £13'59 0° m/ 6° m/46'51 12° m/41'56 0° Ω 8° Ω 56'40 13° Ω07'38	0°55'32
asc. node evening rise evening max el retrograde desc. node	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14	12° m 22'50 16° m 45'55 28° m 53'28 0° <u>a</u> 27° <u>a</u> 02'21 0° m 1° m 56'59 1° m 56'50	0°21'26 19°37'06	minimum elong asc. node evening rise evening max el retrograde evening set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15	25° \$\Omega 13'59 0° \$\mathbf{m}\$ 6° \$\mathbf{m}\$46'51 12° \$\mathbf{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11	0°55'32 18°45'16
asc. node evening rise evening max el retrograde desc. node evening set inferior conj	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω 02'21 0° m 1° m 56'59 1° m 56'50 1° m 47'07 30° R Ω	0°21'26 19°37'06 -3°12'44	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53	25° \$\Omega 13'59 0° \$\mathref{m}\$ 6° \$\mathref{m}\$ 46'51 12° \$\mathref{m}\$ 41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18	0°55'32 18°45'16
asc. node evening rise evening max el retrograde desc. node evening set	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 20:03	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω02'21 0° m 1° m 56'59 1° m 56'50 1° m 47'07 30° R Ω 27° Ω 42'50	0°21'26 19°37'06 -3°12'44	minimum elong asc. node evening rise evening max el retrograde evening set desc. node	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30	25° \$\Omega 13'59 0° \$\mathrm{m}\$ 46'51 12° \$\mathrm{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18 8° \$\Omega 32'53	0°55'32 18°45'16 -1°21'39
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Oct 03 23:10 12417 Oct 07 20:03 12417 Oct 07 11:45	12° m 22'50 16° m 45'55 28° m 53'28 0° \(\Omega\) 27° \(\Omega\) 02'21 0° m. 1° m 56'59 1° m 56'50 1° m 47'07 30° R \(\Omega\) 27° \(\Omega\) 42'50 27° \(\Omega\) 55'54 26° \(\Omega\) 17'13	0°21'26 19°37'06 -3°12'44 3°09'26	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist.	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20	25° \$\Omega 13'59 0° \$\mathrm{m}\$ 6° \$\mathrm{m}\$46'51 12° \$\mathrm{m}\$41'56 0° \$\omega\$ 8° \$\omega 56'40 13° \$\omega 07'38 12° \$\omega 55'11 11° \$\omega 25'18 8° \$\omega 32'53 8° \$\omega 39'05	0°55'32 18°45'16 -1°21'39 1°20'15
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asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Oct 03 23:10 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 15 20:24 12417 Oct 20 21:08	12° m22'50 16° m45'55 28° m53'28 0° \(\Omega\) 27° \(\Omega\) 27° \(\Omega\) 1° m.56'59 1° m.56'50 1° m.47'07 30° r. \(\Omega\) 27° \(\Omega\) 42'50 27° \(\Omega\) 25'55'54 26° \(\Omega\) 17'13 23° \(\Omega\) 22' \(\Omega\) 24'34	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 26 07:21 12418 Oct 02 02:04	25° \$\Omega 13'59 0° \$\mathbb{m}\$ 6° \$\mathbb{m}\$46'51 12° \$\mathbb{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18 8° \$\Omega 32'53 8° \$\Omega 39'05 6° \$\Omega 17'11 3° \$\Omega 33'10 2° \$\Omega 11'49	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU
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asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 10 02:24 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02	12° m22'50 16° m45'55 28° m53'28 0° \(\Omega\) 27° \(\Omega\) 20'21 0° m. 1° m.56'59 1° m.56'50 1° m.47'07 30° r.\(\Omega\) 27° \(\Omega\) 27° \(\Omega\) 27° \(\Omega\) 27° \(\Omega\) 26° \(\Omega\) 17'13 23° \(\Omega\) 22' \(\Omega\) 20' \(\Omega\)	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19	25° \$\Omega 13'59 0° \$\mathbb{m}\$ 6° \$\mathbb{m}\$46'51 12° \$\mathbb{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18 8° \$\Omega 32'53 8° \$\Omega 39'05 6° \$\Omega 17'11 3° \$\Omega 33'10 2° \$\Omega 11'49 9° \$\Omega 36'51 0° \$\mathbb{m}\$.	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU
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asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 07 20:03 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 10 02:24 12417 Nov 10 18:33 12417 Nov 04 11:02 12417 Nov 24 12:51 12417 Nov 29 21:02	12° M22'50 16° M45'55 28° M53'28 0° Ω 27° Ω02'21 0° M 1° M56'59 1° M56'50 1° M47'07 30° RΩ 27° Ω42'50 27° Ω55'54 26° Ω17'13 23° Ω20'45 22° Ω24'34 29° Ω20'07 0° M 23° M47'25 0° 🗷 11° 🗷 00'32	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 21 17:20 12418 Oct 16 08:31 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 08 02:58 12418 Nov 14 07:30 12418 Nov 16 07:56	25° \$\Omega 13'59 0° \$\mathbf{m}\$ 6° \$\mathbf{m}\$46'51 12° \$\mathbf{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18 8° \$\Omega 32'53 8° \$\Omega 32'53 8° \$\Omega 33'10 2° \$\Omega 11'49 9° \$\Omega 36'51 0° \$\mathbf{m}\$ 13° \$\mathbf{m}\$00'02 25° \$\mathbf{m}\$.37'57 0° \$\mathbf{x}\$	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj	12417 Aug 22 23:44 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 24 12:51 12417 Nov 29 21:02	12° m22'50 16° m45'55 28° m53'28 0° Ω 27° Ω02'21 0° m 1° m.56'59 1° m.47'07 30° RΩ 27° Ω42'50 27° Ω42'50 27° Ω55'54 26° Ω17'13 23° Ω20'45 22° Ω24'34 29° Ω20'07 0° m. 23° m.47'25 0° ズ 11° ズ 00'32	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 14 07:30 12418 Nov 16 07:56	25° \$\Omega 13'59 0° \$\mathbf{m}\$ 6° \$\mathbf{m}\$46'51 12° \$\mathbf{m}\$41'56 0° \$\Omega\$ 8° \$\Omega 56'40 13° \$\Omega 07'38 12° \$\Omega 55'11 11° \$\Omega 25'18 8° \$\Omega 32'53 8° \$\Omega 39'05 6° \$\Omega 17'11 3° \$\Omega 33'10 2° \$\Omega 11'49 9° \$\Omega 36'51 0° \$\mathbf{m}\$ 13° \$\mathbf{m}\$00'02 25° \$\mathbf{m}\$37'57 0° \$\scrip** 10° \$\scrip** 38'48	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Oct 03 23:10 12417 Oct 07 20:03 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 24 12:51 12417 Nov 29 21:02 12417 Dec 06 16:09 12417 Dec 06 16:09	12° m22'50 16° m45'55 28° m53'28 0° Ω 27° Ω02'21 0° m 1° m56'59 1° m56'50 1° m47'07 30° RΩ 27° Ω42'50 27° Ω55'54 26° Ω17'13 23° Ω20'45 22° Ω24'34 29° Ω20'07 0° m 23° m47'25 0° 🕏 11° ₹00'32 25° ₹53'41 25° ₹53'41	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 14:53 12418 Sep 21 17:20 12418 Sep 21 17:20 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 08 02:58 12418 Nov 14 07:30 12418 Nov 16 07:56	25° \$\Omega\$13'59 0° \$\mathbb{m}\$ 6° \$\mathbb{m}\$46'51 12° \$\mathbb{m}\$41'56 0° \$\Omega\$ 8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'3 8° \$\Omega\$39'05 6° \$\Omega\$17'11 3° \$\Omega\$33'10 2° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\mathbb{m}\$ 13° \$\mathbb{m}\$00'02 25° \$\mathbb{m}\$37'57 0° \$\sqrt{n}\$ 10° \$\sqrt{n}\$38'48 10° \$\sqrt{n}\$32'52	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 24 12:51 12417 Nov 29 21:02 12417 Dec 06 16:09 12417 Dec 06 16:07 12417 Dec 08 11:44	12° m22'50 16° m45'55 28° m53'28 0° Ω 27° Ω02'21 0° m 1° m.56'59 1° m.47'07 30° RΩ 27° Ω42'50 27° Ω42'50 27° Ω55'54 26° Ω17'13 23° Ω20'45 22° Ω24'34 29° Ω20'07 0° m. 23° m.47'25 0° ⊀ 11° ₹00'32 25° ₹53'41 25° ₹53'26 29° ₹52'17	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 14:53 12418 Sep 26 07:21 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 16 07:56 12418 Nov 21 03:15 12418 Nov 21 03:15 12418 Nov 21 03:15	25° \$\Omega\$13'59 0° \$\mathbb{m}\$ 6° \$\mathbb{m}\$46'51 12° \$\mathbb{m}\$41'56 0° \$\Omega\$8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'18 8° \$\Omega\$39'05 6° \$\Omega\$17'11 3° \$\Omega\$33'10 2° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\mathbb{m}\$. 13° \$\mathbb{m}\$00'02 25° \$\mathbb{m}\$37'57 0° \$\nall\$^100'\text{3} 10° \$\nall\$^338'48 10° \$\nall\$^332'52 12° \$\nall\$^04'24	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 20:03 12417 Oct 10 02:28 12417 Oct 15 20:24 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 24 12:51 12417 Nov 29 21:02 12417 Dec 06 16:09 12417 Dec 06 16:07 12417 Dec 08 11:44 12417 Dec 08 11:44	12° m22'50 16° m45'55 28° m53'28 0° Ω 27° Ω02'21 0° m 1° m56'59 1° m56'50 1° m47'07 30° RΩ 27° Ω42'50 27° Ω42'50 27° Ω42'50 27° Ω42'50 27° Ω55'54 26° Ω17'13 23° Ω20'45 22° Ω24'34 29° Ω20'07 0° m 23° m47'25 0° 🖈 11° ₹00'32 25° ₹53'41 25° ₹53'41 25° ₹52'17 0° ₹	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 16 07:56 12418 Nov 21 03:15 12418 Nov 21 03:15 12418 Nov 21 18:38 12418 Nov 28 01:05	25° \$\Omega\$13'59 0° \$\mathbb{m}\$ 6° \$\mathbb{m}\$46'51 12° \$\mathbb{m}\$41'56 0° \$\Omega\$ 8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'18 8° \$\Omega\$39'05 6° \$\Omega\$17'11 3° \$\Omega\$33'10 2° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\mathbb{m}\$ 13° \$\mathbb{m}\$00'02 25° \$\mathbb{m}\$37'57 0° \$\struct \frac{1}{2}\$ 10° \$\tar{2}\$38'48 10° \$\tar{2}\$32'52 12° \$\tar{2}\$04'24 25° \$\tar{2}\$43'45	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12417 Aug 22 23:44 12417 Aug 25 04:45 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 20:03 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 15 20:24 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 21 06:08 12417 Nov 22 1:02 12417 Dec 06 16:09 12417 Dec 06 16:07 12417 Dec 08 11:44 12417 Dec 08 13:09 12417 Dec 08 13:09 12417 Dec 13 22:45	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω02'21 0° m 1° m 56'59 1° m 56'50 1° m 47'07 30° R Ω 27° Ω 42'50 27° Ω 55'54 26° Ω 17'13 23° Ω 20'45 22° Ω 24'34 29° Ω 20'07 0° m 23° m 47'25 0° ⊀ 11° ₹ 00'32 25° ₹ 53'26 29° ₹ 52'17 0° ₹ 11° ₹ 26'59	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 26 07:21 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 16 07:56 12418 Nov 21 03:15 12418 Nov 21 03:15 12418 Nov 21 18:38 12418 Nov 21 18:38 12418 Nov 28 01:05 12418 Nov 30 02:24	25° \$\Pi\$13'59 0° \$\Pi\$ 0° \$\Pi\$46'51 12° \$\Pi\$41'56 0° \$\Omega\$ 8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'18 8° \$\Omega\$39'05 6° \$\Omega\$17'11 3° \$\Omega\$33'10 2° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\Pi\$ 13° \$\Pi\$00'02 25° \$\Pi\$37'57 0° \$\struct \frac{1}{2}\$ 10° \$\struct \frac{3}{2}\$32'52 12° \$\struct \frac{3}{2}\$43'45 0° \$\Struct \frac{1}{2}\$	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12417 Aug 22 23:44 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 20:03 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 10 02:24 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 21 06:08 12417 Nov 22 10:08 12417 Nov 24 12:51 12417 Dec 06 16:09 12417 Dec 06 16:07 12417 Dec 08 11:44 12417 Dec 08 13:09 12417 Dec 13 22:45 12417 Dec 23 16:41	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω02'21 0° m 1° m 56'59 1° m 56'50 1° m 47'07 30° R Ω 27° Ω 42'50 27° Ω 55'54 26° Ω 17'13 23° Ω 20'45 22° Ω 24'34 29° Ω 20'07 0° m 23° m 47'25 0° ⊀ 11° ⊀ 00'32 25° ⊀ 53'41 25° ⊀ 53'26 29° ⊀ 52'17 0° ♂ 11° ♂ 26'59 0° ≈	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 21 17:20 12418 Sep 26 07:21 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 14 07:30 12418 Nov 16 07:56 12418 Nov 21 03:15 12418 Nov 21 03:15 12418 Nov 21 18:38 12418 Nov 28 01:05 12418 Nov 30 02:24 12418 Nov 30 02:24 12418 Nov 30 02:24	25° \$\Pi\$13'59 0° \$\mathbf{m}\$ 6° \$\mathbf{m}\$46'51 12° \$\mathbf{m}\$41'56 0° \$\Omega\$ 8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'18 8° \$\Omega\$32'53 8° \$\Omega\$39'05 6° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\mathbf{m}\$ 13° \$\mathbf{m}\$00'02 25° \$\mathbf{m}\$37'57 0° \$\mathbf{m}\$ 10° \$\mathbf{m}\$38'48 10° \$\mathbf{m}\$32'52 12° \$\mathbf{m}\$04'24 25° \$\mathbf{m}\$43'45 0° \$\omega\$20° \$\omega\$35'03	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07 1°35'34 1°36'21 1.31498 AU
asc. node evening rise evening max el retrograde desc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12417 Aug 22 23:44 12417 Aug 31 04:49 12417 Aug 31 18:01 12417 Sep 17 08:00 12417 Sep 20 22:56 12417 Sep 27 04:18 12417 Sep 27 09:49 12417 Sep 29 01:14 12417 Oct 03 23:10 12417 Oct 07 11:45 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 10 02:28 12417 Oct 20 21:08 12417 Nov 03 18:33 12417 Nov 04 11:02 12417 Nov 21 06:08 12417 Nov 22 12:51 12417 Nov 29 21:02 12417 Dec 06 16:09 12417 Dec 08 13:09 12417 Dec 08 13:09 12417 Dec 13 22:45 12417 Dec 23 16:41 12417 Dec 24 07:33	12° m 22'50 16° m 45'55 28° m 53'28 0° Ω 27° Ω02'21 0° m 1° m 56'59 1° m 56'59 1° m 47'07 30° R Ω 27° Ω 42'50 27° Ω 55'54 26° Ω 17'13 23° Ω 20'45 22° Ω 24'34 29° Ω 20'07 0° m 23° m 47'25 0° ⊀ 11° ⊀ 00'32 25° ⊀ 53'41 25° ⊀ 53'26 29° ⊀ 52'17 0° ♂ 11° ♂ 26'59 0° ≈ 1° ≈ 04'44	0°21'26 19°37'06 -3°12'44 3°09'26 0.55372 AU 24°55'51 1°38'40 1°39'34 1.32219 AU	minimum elong asc. node evening rise evening max el retrograde evening set desc. node inferior conj minimum elong min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12418 Aug 06 00:19 12418 Aug 08 12:53 12418 Aug 12 01:26 12418 Aug 15 02:30 12418 Aug 24 13:06 12418 Aug 31 06:19 12418 Sep 08 14:20 12418 Sep 10 12:17 12418 Sep 14 07:15 12418 Sep 18 14:53 12418 Sep 18 11:30 12418 Sep 21 17:20 12418 Sep 21 17:20 12418 Sep 21 02:04 12418 Oct 02 02:04 12418 Oct 16 08:31 12418 Oct 31 20:19 12418 Nov 14 07:30 12418 Nov 14 07:30 12418 Nov 16 07:56 12418 Nov 21 03:15 12418 Nov 21 03:15 12418 Nov 21 18:38 12418 Nov 21 18:38 12418 Nov 22 01:05 12418 Nov 30 02:24 12418 Dec 11 04:33 12418 Dec 17 06:07	25° \$\Pi\$13'59 0° \$\mathbf{m}\$ 6° \$\mathbf{m}\$46'51 12° \$\mathbf{m}\$41'56 0° \$\Omega\$ 8° \$\Omega\$56'40 13° \$\Omega\$07'38 12° \$\Omega\$55'11 11° \$\Omega\$25'18 8° \$\Omega\$32'53 8° \$\Omega\$39'05 6° \$\Omega\$17'11 3° \$\Omega\$33'10 2° \$\Omega\$11'49 9° \$\Omega\$36'51 0° \$\mathbf{m}\$ 13° \$\mathbf{m}\$00'02 25° \$\mathbf{m}\$37'57 0° \$m\$ 10° \$m\$38'48 10° \$m\$32'52 12° \$m\$04'24 25° \$m\$43'45 0° \$G\$ 20° \$G\$35'03 0° \$\approx\$	0°55'32 18°45'16 -1°21'39 1°20'15 0.56938 AU 26°29'07 1°35'34 1°36'21 1.31498 AU

evening set	12419 Jan 19 04:46	19° ≈ 46′28			12419 Nov 22 09:13	0°రె	
min. Earth dist.	12419 Jan 22 23:28	19 ≈40 28 17°≈01'07	0.60817 AU	desc. node	12419 Nov 28 01:39	0 0 9° る 28'13	
	12419 Jan 26 02:39	17 ≈0107 14°≈19'24		evening max el	12419 Nov 28 01.39 12419 Dec 11 08:54	9 3 2813 26° る 13'45	26022102
inferior conj	12419 Jan 26 08:42	14 ≈1924 14°≈06'20		evening max er	12419 Dec 11 08.34 12419 Dec 15 23:41	20 ⊘ 13 43	20 23 03
minimum elong	12419 Jan 20 08:42 12419 Feb 02 15:35	9°≈27'16	2 49 39	rotro arado	12419 Dec 15 23:41 12419 Dec 25 07:41	0 ∞ 3°≈19'43	
morning rise	12419 Feb 02 13.33 12419 Feb 04 01:57	9°≈2710		retrograde	12419 Dec 23 07.41 12419 Dec 31 19:20	3 ≈1943 1°≈37'36	
asc. node				evening set		1°≈3/36 30°Rる	
direct	12419 Feb 04 18:18	9°≈09'05 12°≈44'52	17°56'19	min. Earth dist.	12420 Jan 03 12:59 12420 Jan 04 22:30	• -	0.58671 AU
morning max el	12419 Feb 11 22:24	0° \	1/-3019			29°る01'32 26°る40'40	
	12419 Feb 23 13:14			inferior conj	12420 Jan 08 01:45		
morning set	12419 Feb 27 12:37	7°) 12'44		minimum elong	12420 Jan 08 10:04	26°る25'03	4*09*04
desc. node	12419 Mar 09 05:27	24°) 41′32		morning rise	12420 Jan 16 03:40	22°る09'55	
	1041034 00 00 00	2521/55125	000 510 6	direct	12420 Jan 18 05:30	21°る55'09	
superior conj	12419 Mar 09 22:36	25° ¥ 56′25		asc. node	12420 Jan 21 23:15	22°る45'46	
minimum elong	12419 Mar 09 22:08	25° ¥ 54′23	0°05'22	morning max el	12420 Jan 26 08:11	25° る 54'34	18°25'50
behind sun begin	12419 Mar 09 14:24	25° ∺ 20'40			12420 Jan 29 20:32	0° ≈	
behind sun end	12419 Mar 10 05:51	26° ∺ 28'01		morning set	12420 Feb 11 04:53	21°≈15′22	
	12419 Mar 12 07:00	0° Υ			12420 Feb 15 18:36	0° ℋ	
max. Earth dist.	12419 Mar 17 10:39	8° Ƴ 39'16	1.42667 AU				
evening rise	12419 Mar 23 10:20	18° Y 19′02		superior conj	12420 Feb 20 07:54	8°) 31′38	
	12419 Mar 30 23:50	0°8		minimum elong	12420 Feb 20 09:55	8°) 40′55	0°29'33
	12419 Apr 21 18:09	Π $^{\circ}0$		desc. node	12420 Feb 24 02:03	15° ∺ 19'43	
evening max el	12419 Apr 24 23:56	3° Ⅲ 31′04	22°12'03	max. Earth dist.	12420 Feb 27 19:33	21° ¥ 51′15	1.40602 AU
asc. node	12419 May 02 22:55	8° Ⅱ 57'24		evening rise	12420 Mar 03 04:33	29° 升 13′38	
retrograde	12419 May 04 13:41	9° Ⅱ 09'40			12420 Mar 03 15:48	0 ° Υ	
evening set	12419 May 09 06:04	7° Ⅱ 13'23			12420 Mar 23 11:44	8° 0	
inferior conj	12419 May 14 13:03	0° Ⅱ 52'51	2°55'01	evening max el	12420 Apr 06 15:02	17° 8 20'44	23°32'42
minimum elong	12419 May 14 11:26	0°耳58'29	2°54'00	retrograde	12420 Apr 17 08:41	23° 8 40'11	
min. Earth dist.	12419 May 14 11:18	0° Ⅱ 58'58	0.68816 AU	asc. node	12420 Apr 18 20:14	23° 8 30'02	
	12419 May 15 04:14	30° ₹ 8		evening set	12420 Apr 22 12:34	21° 8 30'00	
morning rise	12419 May 19 16:39	24° 8 40'39		inferior conj	12420 Apr 27 22:17	15° 8 02'40	2°29'59
direct	12419 May 24 10:48	22° 8 39'47		minimum elong	12420 Apr 27 20:13	15° 8 09'49	2°28'54
morning max el	12419 Jun 02 19:38	28° 8 09'14	22°04'28	min. Earth dist.	12420 Apr 27 08:05	15° 8 51'28	0.68699 AU
	12419 Jun 04 13:49	Π°		morning rise	12420 May 03 03:48	8° 8 57'26	
desc. node	12419 Jun 05 06:55	0° Ⅱ 47'33		direct	12420 May 07 09:05	7° 8 17'28	
	12419 Jun 26 12:43	0°€		morning max el	12420 May 15 13:30	11° 8 57'38	20°43'44
morning set	12419 Jul 05 18:19	14° © 25'19		desc. node	12420 May 22 03:48	19° 8 40'28	
max. Earth dist.	12419 Jul 11 06:17	23°525'50	1.41395 AU		12420 May 29 15:24	$\Pi^{\circ}0$	
	12419 Jul 15 03:22	$0^{\circ}\Omega$		morning set	12420 Jun 14 05:39	23° Ⅱ 24'57	
				•	12420 Jun 18 10:24	0ංම	
superior conj	12419 Jul 19 00:27	6° Ω 45'29	-1°29'07	max. Earth dist.	12420 Jun 22 12:50	6°533'26	1.43388 AU
minimum elong	12419 Jul 19 06:46	7° Ω 13′29					
evening rise							
asc. node	12419 Jul 29 13:35	25° Ω 59'30		superior conj	12420 Jun 29 06:24	17° © 37'39	-1°56'52
	12419 Jul 29 13:35 12419 Jul 29 22:09			superior conj minimum elong	12420 Jun 29 06:24 12420 Jun 29 13:04	17°537'39 18°505'33	
	12419 Jul 29 22:09	26° Ω 39'17			12420 Jun 29 13:04	18° © 05'33	
evening max el	12419 Jul 29 22:09 12419 Jul 31 17:31	26° Ω 39'17 0° M	18°14'31	minimum elong	12420 Jun 29 13:04 12420 Jul 06 12:11	18°©05'33 0° Ω	
evening max el	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56	26° Ω 39'17 0° m 21° m 31'15	18°14'31		12420 Jun 29 13:04	18°©05'33 0°Ω 8°Ω35'28	
retrograde	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14	26° Ω 39'17 0° m 21° m 31'15 25° m 10'48	18°14'31	minimum elong evening rise	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06	
retrograde evening set	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47	26° N 39'17 0° m 21° m 31'15 25° m 10'48 24° m 51'16		minimum elong evening rise asc. node	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37	18°\$05'33 0°N 8°N35'28 16°N19'06 0°M	1°57'15
retrograde evening set inferior conj	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32	26° \mathcal{O}39'17 0° my 21° my31'15 25° my10'48 24° my51'16 20° my08'27	0°16'14	minimum elong evening rise asc. node evening max el	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\Omega\$40\$\$\Omega\$6'13	
retrograde evening set	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05	26° \Omega 39'17 0° my 21° my 31'15 25° my 10'48 24° my 51'16 20° my 08'27 20° my 07'17	0°16′14 0°15′47	minimum elong evening rise asc. node evening max el retrograde	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\Omega\$ 4°\$\Omega\$36'13 7°\$\Omega\$59'09	1°57'15
retrograde evening set inferior conj minimum elong transit middle	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05	26° \(\Omega 39'17\) 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31'15 25° \(\mathbf{m} \) 10'48 24° \(\mathbf{m} \) 51'16 20° \(\mathbf{m} \) 08'27 20° \(\mathbf{m} \) 07'17 20° \(\mathbf{m} \) 07'17	0°16'14	minimum elong evening rise asc. node evening max el retrograde evening set	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 06 05:01	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathrm{m}\$4\circ{m}\$36'13 7°\$\mathrm{m}\$59'09 7°\$\mathrm{m}\$28'51	1°57'15 18°03'27
retrograde evening set inferior conj minimum elong transit middle transit begin	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 07:20	26° \(\Omega 39'17\) 0° \(\mathref{m} \) 21° \(\mathref{m} \) 31'15 25° \(\mathref{m} \) 10'48 24° \(\mathref{m} \) 51'16 20° \(\mathref{m} \) 08'27 20° \(\mathref{m} \) 07'17 20° \(\mathref{m} \) 07'17 20° \(\mathref{m} \) 08'52	0°16′14 0°15′47	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 06 05:01 12420 Aug 12 19:49	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathrea{m}\$40'\$\mathrea{m}\$36'13 70'\$\mathrea{m}\$59'09 70'\$\mathrea{m}\$28'51 20'\$\mathrea{m}\$26'10	1°57'15 18°03'27 1°31'12
retrograde evening set inferior conj minimum elong transit middle transit begin transit end	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 07:20 12419 Aug 31 08:50	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 08'27 20° \(\text{m} \) 07'17 20° \(\text{m} \) 08'52 20° \(\text{m} \) 05'41	0°16′14 0°15′47	minimum elong evening rise asc. node evening max el retrograde evening set	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 06 05:01 12420 Aug 12 19:49 12420 Aug 12 22:10	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\Omega\$ 4°\$\Omega\$36'13 7°\$\Omega\$59'09 7°\$\Omega\$28'51 2°\$\Omega\$26'10 2°\$\Omega\$20'21	1°57'15 18°03'27
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 07:20 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43	$26^{\circ}\Omega 39'17$ $0^{\circ}m$ $21^{\circ}m 31'15$ $25^{\circ}m 10'48$ $24^{\circ}m 51'16$ $20^{\circ}m 08'27$ $20^{\circ}m 07'17$ $20^{\circ}m 07'17$ $20^{\circ}m 08'52$ $20^{\circ}m 05'41$ $19^{\circ}m 22'49$	0°16'14 0°15'47 0°15'47	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 10 05:01 12420 Aug 12 19:49 12420 Aug 12 22:10 12420 Aug 15 07:03	18°505'33 0°Ω 8°Ω35'28 16°Ω19'06 0°M 4°M36'13 7°M59'09 7°M28'51 2°M26'10 2°M20'21 30°RΩ	1°57'15 18°03'27 1°31'12 1°29'56
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist.	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 08'52 20° \(\text{m} \) 05'41 19° \(\text{m} \) 22'49 17° \(\text{m} \) 18'39	0°16′14 0°15′47	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 06 05:01 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 22:01	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\Omega\$ 4°\$\Omega\$36'13 7°\$\Omega\$59'09 7°\$\Omega\$26'10 2°\$\Omega\$20'21 30°\$\Omega\$2	1°57'15 18°03'27 1°31'12
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'52 19° \(\text{m} \) 05'41 19° \(\text{m} \) 22'49 17° \(\text{m} \) 18'39 14° \(\text{m} \) 34'03	0°16'14 0°15'47 0°15'47	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 10 05:01 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 22:01 12420 Aug 18 02:10	18°\$05'33 0°\$\Omega\$8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\Omega\$4"\$\Omega\$6'13 7°\$\Omega\$59'09 7°\$\Omega\$28'51 2°\$\Omega\$26'10 2°\$\Omega\$20'21 30°\$\Omega\$0 29°\$\Omega\$24'22 27°\$\Omega\$30'16	1°57'15 18°03'27 1°31'12 1°29'56
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 07:20 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18	26° \(\Omega 39' 17 \\ 0° \(\mathred{m} \) 21° \(\mathred{m} \) 31' 15 25° \(\mathred{m} \) 21° \(\mathred{m} \) 31' 15 25° \(\mathred{m} \) 20° \(\mathred{m} \) 20° \(\mathred{m} \) 20° \(\mathred{m} \) 20° \(\mathred{m} \) 30' \(\mathred{m} \) 31' \(\mathred{m} \) 34' \(\mathred{m} \) 35' \(\mathred{m} \mathred{m} \mathred{m} \mathred{m} \) 35' \(\mathred{m} \mathred{m} \mathred{m} \mathred{m} \) 35' \(\mathred{m} \mathred{m} \mathred{m} \mathred{m} \mathred{m} \) 35' \(\mathred{m} \mathred{m} \mathred{m} \mathred{m} \mathred{m} \) 35' \(\mathred{m} \mathred{m} \mathred{m} \mathred{m} \mathred{m} m	0°16'14 0°15'47 0°15'47 0.59026 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 10 05:01 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41	18°\$05'33 0°\$\Omega\$8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathbf{m}\$ 4°\$\mathbf{m}\$36'13 7°\$\mathbf{m}\$59'09 7°\$\mathbf{m}\$28'51 2°\$\mathbf{m}\$26'10 2°\$\mathbf{m}\$20'21 30°\$\mathbf{k}\$\Omega\$29'\$\Omega\$24'22 27°\$\Omega\$30'16 26°\$\Omega\$26'30	1°57'15 18°03'27 1°31'12 1°29'56
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35	26° \(\Omega 39' 17 \\ 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31' 15 25° \(\mathbf{m} \) 10' 48 24° \(\mathbf{m} \) 51' 16 20° \(\mathbf{m} \) 08' 27 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 05' 41 19° \(\mathbf{m} \) 22' 49 17° \(\mathbf{m} \) 18' 39 14° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 44' 10 20° \(\mathbf{m} \) 30' 24	0°16'14 0°15'47 0°15'47	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15	18°\$05'33 0°\$\Omega\$8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathred{m}\$4°\$\mathred{m}\$36'13 7°\$\mathred{m}\$59'09 7°\$\mathred{m}\$28'51 2°\$\mathred{m}\$20'21 30°\$\mathred{N}\$\Omega\$222 27°\$\Omega\$30'16 26°\$\Omega\$26'30 24°\$\Omega\$11'08	1°57'15 18°03'27 1°31'12 1°29'56
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 06 10:15	26° \(\Omega 33' 17 \\ 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31' 15 25° \(\mathbf{m} \) 10' 48 24° \(\mathbf{m} \) 51' 16 20° \(\mathbf{m} \) 08' 27 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 05' 41 19° \(\mathbf{m} \) 22' 49 17° \(\mathbf{m} \) 18' 39 14° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 44' 10 20° \(\mathbf{m} \) 30' 24 0° \(\mathbf{n} \)	0°16'14 0°15'47 0°15'47 0.59026 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 19 12:41 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathred{m}\$ 4°\$\mathred{m}\$36'13 7°\$\mathred{m}\$59'09 7°\$\mathred{m}\$28'51 2°\$\mathred{m}\$20'21 30°\$\mathred{n}\$\Omega\$ 29°\$\Omega\$24'22 27°\$\Omega\$30'16 26°\$\Omega\$26'30 24°\$\Omega\$11'08 0°\$\mathred{m}\$	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 07:20 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 06 10:15 12419 Oct 24 16:35	26° \(\Omega 33' 17 \\ 0° \(\mathref{m} \) 21° \(\mathref{m} \) 31' 15 25° \(\mathref{m} \) 10' 48 24° \(\mathref{m} \) 51' 16 20° \(\mathref{m} \) 08' 27 20° \(\mathref{m} \) 07' 17 20° \(\mathref{m} \) 08' 52 20° \(\mathref{m} \) 05' 41 19° \(\mathref{m} \) 22' 49 17° \(\mathref{m} \) 18' 39 14° \(\mathref{m} \) 34' 03 12° \(\mathref{m} \) 34' 24 0° \(\mathref{m} \) 30' 24 0° \(\mathref{m} \) 0° \(\mathref{m} \) 0° \(\mathref{m} \)	0°16'14 0°15'47 0°15'47 0.59026 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 16 02:10 12420 Aug 17 07:03 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29	18°\$05'33 0°\$\Omega\$ 8°\$\Omega\$35'28 16°\$\Omega\$19'06 0°\$\mathred{m}\$ 4°\$\mathred{m}\$36'13 7°\$\mathred{m}\$59'09 7°\$\mathred{m}\$28'51 2°\$\mathred{m}\$20'21 30°\$\mathred{R}\$\Omega\$ 29°\$\Omega\$24'22 27°\$\Omega\$30'16 26°\$\Omega\$26'30 24°\$\Omega\$11'08 0°\$\mathred{m}\$ 2°\$\mathred{m}\$09'33	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 06 10:15 12419 Oct 24 16:35 12419 Oct 25 23:43	26° \(\Omega 33' 17 \\ 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31' 15 25° \(\mathbf{m} \) 10' 48 24° \(\mathbf{m} \) 51' 16 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 05' 41 19° \(\mathbf{m} \) 22' 49 17° \(\mathbf{m} \) 18' 39 14° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 30' 24 0° \(\mathbf{m} \) 0° \(\mathbf{m} \) 0° \(\mathbf{m} \) 2° \(\mathbf{m} \) 34' 08	0°16'14 0°15'47 0°15'47 0.59026 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 17 07:03 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Sep 29 19:44	18°\$05'33 0°\$\Pi\$ 8°\$\Pi\$35'28 16°\$\Pi\$19'06 0°\$\pi\$ 4°\$\pi\$36'13 7°\$\pi\$59'09 7°\$\pi\$28'51 2°\$\pi\$26'10 2°\$\pi\$20'21 30°\$\RPi\$ 29°\$\Pi\$24'22 27°\$\Pi\$30'16 26°\$\Pi\$26'30 24°\$\Pi\$11'08 0°\$\pi\$ 2°\$\pi\$09'33 0°\$\Pi\$	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 06 10:15 12419 Oct 24 16:35 12419 Oct 25 23:43 12419 Oct 29 14:52	26° \(\Omega 339'17\) 0° \(\text{my} \) 21° \(\text{my} \) 31'15 25° \(\text{my} \) 10'48 24° \(\text{my} \) 51'16 20° \(\text{my} \) 07'17 20° \(\text{my} \) 07'17 20° \(\text{my} \) 07'17 20° \(\text{my} \) 05'41 19° \(\text{my} \) 22'49 17° \(\text{my} \) 18'39 14° \(\text{my} \) 34'03 12° \(\text{my} \) 44'10 20° \(\text{my} \) 30'24 0° \(\text{m} \) 0° \(\text{m} \) 2° \(\text{m} \) 34'08 10° \(\text{m} \) 34'08 10° \(\text{m} \) 34'08	0°16'14 0°15'47 0°15'47 0.59026 AU 27°32'19	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 17 5 07:03 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Sep 29 19:44 12420 Oct 11 20:26	18°\$05'33 0°Ω 8°Ω35'28 16°Ω19'06 0°m 4°m36'13 7°m59'09 7°m28'51 2°m20'21 30°RΩ 29°Ω24'22 27°Ω30'16 26°Ω26'30 24°Ω11'08 0°m 2°m09'33 0°Ω 22°Ω23'29	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 06 10:15 12419 Oct 24 16:35 12419 Oct 25 23:43	26° \(\Omega 33' 17 \\ 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31' 15 25° \(\mathbf{m} \) 10' 48 24° \(\mathbf{m} \) 51' 16 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 05' 41 19° \(\mathbf{m} \) 22' 49 17° \(\mathbf{m} \) 18' 39 14° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 30' 24 0° \(\mathbf{m} \) 0° \(\mathbf{m} \) 0° \(\mathbf{m} \) 2° \(\mathbf{m} \) 34' 08	0°16'14 0°15'47 0°15'47 0.59026 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Sep 29 19:44 12420 Oct 11 20:26 12420 Oct 12 17:14	18°\$05'33 0° Ω 8° Ω35'28 16° Ω19'06 0° m 4° m36'13 7° m59'09 7° m28'51 2° m20'21 30° κΩ 29° Ω24'22 27° Ω30'16 26° Ω26'30 24° Ω11'08 0° m 2° m09'33 0° Ω 22° Ω23'29 24° Ω10'16	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set max. Earth dist.	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 29 14:52 12419 Oct 29 14:52 12419 Nov 05 03:20	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 05'41 19° \(\text{m} \) 22'49 17° \(\text{m} \) 18'39 14° \(\text{m} \) 34'03 12° \(\text{m} \) 34'03 12° \(\text{m} \) 30'24 0° \(\text{n} \) 0° \(\text{m} \) 2° \(\text{m} \) 34'08 10° \(\text{m} \) 02'46 24° \(\text{m} \) 17'14	0°16'14 0°15'47 0°15'47 0.59026 AU 27°32'19	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Cet 11 20:26 12420 Oct 12 17:14 12420 Oct 15 11:43	18°\$05'33 0° Ω 8° Ω35'28 16° Ω19'06 0° M 4° M36'13 7° M59'09 7° M28'51 2° M26'10 2° M20'21 30° RΩ 29° Ω24'22 27° Ω30'16 26° Ω26'30 24° Ω11'08 0° M 2° M09'33 0° Ω 22° Ω23'29 24° Ω10'16 0° M	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU 27°57'40
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set max. Earth dist. superior conj	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 29 14:52 12419 Oct 29 14:52 12419 Nov 05 14:55	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 05'41 19° \(\text{m} \) 22'49 17° \(\text{m} \) 18'39 14° \(\text{m} \) 34'03 12° \(\text{m} \) 44'10 20° \(\text{m} \) 30'24 0° \(\text{n} \) 0° \(\text{m} \) 2° \(\text{m} \) 34'08 10° \(\text{m} \) 02'46 24° \(\text{m} \) 17'14	0°16'14 0°15'47 0°15'47 0.59026 AU 27°32'19 1.31283 AU 1°26'43	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Sep 29 19:44 12420 Oct 11 20:26 12420 Oct 12 17:14	18°\$05'33 0° Ω 8° Ω35'28 16° Ω19'06 0° m 4° m36'13 7° m59'09 7° m28'51 2° m20'21 30° κΩ 29° Ω24'22 27° Ω30'16 26° Ω26'30 24° Ω11'08 0° m 2° m09'33 0° Ω 22° Ω23'29 24° Ω10'16	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set max. Earth dist.	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 01 04:43 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 29 16:35 12419 Oct 29 14:52 12419 Nov 05 03:20	26° \(\Omega 39' 17 \\ 0° \(\mathbf{m} \) 21° \(\mathbf{m} \) 31' 15 25° \(\mathbf{m} \) 10' 48 24° \(\mathbf{m} \) 51' 16 20° \(\mathbf{m} \) 08' 27 20° \(\mathbf{m} \) 07' 17 20° \(\mathbf{m} \) 08' 52 20° \(\mathbf{m} \) 05' 41 19° \(\mathbf{m} \) 22' 49 17° \(\mathbf{m} \) 18' 39 14° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 34' 03 12° \(\mathbf{m} \) 30' 24 0° \(\mathbf{m} \) 2° \(\mathbf{m} \) 34' 08 10° \(\mathbf{m} \) 02' 46 24° \(\mathbf{m} \) 17' 14 25° \(\mathbf{m} \) 21' 49 25° \(\mathbf{m} \) 11' 33	0°16'14 0°15'47 0°15'47 0.59026 AU 27°32'19 1.31283 AU 1°26'43	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set max. Earth dist.	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 15 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Sep 29 19:44 12420 Oct 11 20:26 12420 Oct 15 11:43 12420 Oct 18 10:13	18°\$05'33 0° Ω 8° Ω35'28 16° Ω19'06 0° m 4° m36'13 7° m59'09 7° m28'51 2° m20'21 30° κΩ 29° Ω24'22 27° Ω30'16 26° Ω26'30 24° Ω11'08 0° m 2° m09'33 0° Ω 22° Ω23'29 24° Ω10'16 0° m 6° m22'06	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU 27°57'40
retrograde evening set inferior conj minimum elong transit middle transit begin transit end desc. node min. Earth dist. morning rise direct morning max el asc. node morning set max. Earth dist. superior conj	12419 Jul 29 22:09 12419 Jul 31 17:31 12419 Aug 14 13:56 12419 Aug 21 19:14 12419 Aug 23 23:47 12419 Aug 31 07:32 12419 Aug 31 08:05 12419 Aug 31 08:05 12419 Aug 31 08:50 12419 Aug 31 08:50 12419 Sep 01 04:43 12419 Sep 03 15:23 12419 Sep 07 12:56 12419 Sep 13 21:18 12419 Sep 28 05:35 12419 Oct 29 14:52 12419 Oct 29 14:52 12419 Nov 05 14:55	26° \(\Omega 39'17\) 0° \(\text{m} \) 21° \(\text{m} \) 31'15 25° \(\text{m} \) 10'48 24° \(\text{m} \) 51'16 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 07'17 20° \(\text{m} \) 05'41 19° \(\text{m} \) 22'49 17° \(\text{m} \) 18'39 14° \(\text{m} \) 34'03 12° \(\text{m} \) 44'10 20° \(\text{m} \) 30'24 0° \(\text{n} \) 0° \(\text{m} \) 2° \(\text{m} \) 34'08 10° \(\text{m} \) 02'46 24° \(\text{m} \) 17'14	0°16'14 0°15'47 0°15'47 0.59026 AU 27°32'19 1.31283 AU 1°26'43	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set	12420 Jun 29 13:04 12420 Jul 06 12:11 12420 Jul 11 09:36 12420 Jul 15 18:57 12420 Jul 24 06:37 12420 Jul 28 02:44 12420 Aug 03 16:24 12420 Aug 12 19:49 12420 Aug 15 07:03 12420 Aug 15 07:03 12420 Aug 18 02:10 12420 Aug 18 02:10 12420 Aug 19 12:41 12420 Aug 19 12:41 12420 Aug 26 04:15 12420 Sep 07 02:16 12420 Sep 09 09:29 12420 Cet 11 20:26 12420 Oct 12 17:14 12420 Oct 15 11:43	18°\$05'33 0° Ω 8° Ω35'28 16° Ω19'06 0° m 4° m36'13 7° m59'09 7° m28'51 2° m20'21 30° κΩ 29° Ω24'22 27° Ω30'16 26° Ω26'30 24° Ω11'08 0° m 2° m09'33 0° Ω 22° Ω23'29 24° Ω10'16 0° m 6° m22'06	1°57'15 18°03'27 1°31'12 1°29'56 0.61312 AU 27°57'40

	12420 0-4 26 19:20	240 m 45122			12421 0-4 06 22.59	0°M	
evening rise	12420 Oct 26 18:39 12420 Oct 29 05:57	24°M.45′22 0°⊀		ovenina riae	12421 Oct 06 22:58	9°M 19'24	
desc. node	12420 Oct 29 05:57 12420 Nov 13 22:51	0° x ¹ 27° x ¹30'09		evening rise	12421 Oct 11 05:57 12421 Oct 21 19:16	9°11619°24 0° √ 1	
desc. node	12420 Nov 13 22:31 12420 Nov 15 19:45	2/* メ ・3009		desc. node	12421 Oct 21 19:16 12421 Oct 31 20:08	0° x ' 14° x '21'21	
evening max el		6° ろ 58'09	25°00'52		12421 Oct 31 20.08 12421 Nov 03 10:59	14 x · 21 21 17° x 06'28	23°21'15
C	12420 Nov 22 00:40 12420 Dec 05 20:08	13° る 53'14	23 00 32	evening max el		17 x ·06 28 23° x ·45'38	23 21 13
retrograde		13 3 33 14 12° 3 42'03		retrograde	12421 Nov 16 19:42	23° x '43' 38' 23° x '04'42	
evening set min. Earth dist.	12420 Dec 11 11:26 12420 Dec 16 12:38		0.56727 AU	evening set min. Earth dist.	12421 Nov 21 03:53 12421 Nov 27 20:45		0.55266 AU
	12420 Dec 16 12.38 12420 Dec 19 04:41	9 3 3838 8° る 14'43		inferior conj	12421 Nov 27 20.43 12421 Nov 29 11:37	19 x · 55 50 18° ₹ '59'15	
inferior conj	12420 Dec 19 04.41 12420 Dec 19 12:08	8° ろ 02'33				18° ₹ '57'32	
minimum elong morning rise	12420 Dec 19 12:08 12420 Dec 27 15:03	8°02'33 4° 3 05'44	5-1/16	minimum elong	12421 Nov 29 12:48 12421 Dec 07 23:25	18° x ' 5 / 32 15° x ' 07' 53	3-3149
•		4 003 44 3°る50'32		morning rise	12421 Dec 07 23:23		
direct	12420 Dec 29 22:32			direct		14° × 47'58	20021127
asc. node	12421 Jan 07 20:28	7°る55'17	10017105	morning max el	12421 Dec 21 18:43	20°×7'00'00	20°31'27
morning max el	12421 Jan 08 08:05	8° ප් 22'39	19°1/'05	asc. node	12421 Dec 25 17:37	24° ∡ *24'55	
	12421 Jan 22 08:53	0° ≈			12421 Dec 29 15:33	0°る	
morning set	12421 Jan 25 06:08	5° ≈ 41'10		morning set	12422 Jan 09 13:14	20° පි 21'01	
	12421 F. L. 02 10 21	21052140	0057126		12422 Jan 14 05:05	0° ≈	
superior conj	12421 Feb 02 10:21	21°≈53'48	0°57'26		12422 1 17 01 22	5050/50	1017154
minimum elong	12421 Feb 02 13:13	22°≈07'40	0°57'39	superior conj	12422 Jan 17 01:33	5°≈50'58	1°17'54
n d r	12421 Feb 06 16:39	0°) {	1 20270 411	minimum elong	12422 Jan 17 04:08	6°≈04'07	1°18'23
max. Earth dist.	12421 Feb 09 02:01	4°) €23'29	1.38370 AU	max. Earth dist.	12422 Jan 22 10:01	16°≈26'55	1.36207 AU
desc. node	12421 Feb 09 22:40	5° ¥ 56'40		evening rise	12422 Jan 26 06:21	23° ≈ 40'44	
evening rise	12421 Feb 12 19:59	11°) €03'05		desc. node	12422 Jan 27 19:21	26°≈28'51	
	12421 Feb 24 10:01	0° Υ			12422 Jan 29 18:52	0° ∀	
	12421 Mar 19 00:04	0°8			12422 Feb 18 02:16	0° Υ	
evening max el	12421 Mar 20 04:45	1° 8 12'37	24°51'46	evening max el	12422 Mar 02 18:18	15° Y ′03′05	26°02'05
retrograde	12421 Mar 31 23:46	8° 8 04'38		retrograde	12422 Mar 15 10:04	22° Y 17′01	
asc. node	12421 Apr 05 17:38	6° 8 25'44		evening set	12422 Mar 21 13:18	19° Ƴ 47'06	
evening set	12421 Apr 06 15:32	5° 8 42'51		asc. node	12422 Mar 23 15:01	17° Ƴ 48'18	
min. Earth dist.	12421 Apr 11 03:07	0° 8 40'08	0.68140 AU	min. Earth dist.	12422 Mar 25 18:17	15° Ƴ 19'35	0.67157 AU
	12421 Apr 11 15:18	30° ŖƳ		inferior conj	12422 Mar 27 09:03	13° Ƴ 18'49	1°09'56
inferior conj	12421 Apr 12 05:37	29° Y 12'35	1°55'00	minimum elong	12422 Mar 27 07:26	13° Y 23'51	1°09'14
minimum elong	12421 Apr 12 03:29	29° Y 19'36	1°53'59	morning rise	12422 Apr 02 02:17	7° Ƴ 31'54	
morning rise	12421 Apr 17 15:40	23° Y 15'44		direct	12422 Apr 05 08:05	6° Ƴ 32'05	
direct	12421 Apr 21 08:45	21° Y 56'41		morning max el	12422 Apr 11 23:46	10° Ƴ 06′50	18°43'36
morning max el	12421 Apr 28 14:54	25° Ƴ 57'36	19°35'54	desc. node	12422 Apr 25 21:17	29° Ƴ 01′23	
	12421 May 02 05:55	0°B			12422 Apr 26 12:30	9° 8	
desc. node	12421 May 09 00:35	9° 8 08'08		morning set	12422 May 03 18:01	11° 8 14'59	
greatest brilliancy	12421 May 11 07:06	12° 8 25'54	-0.6m		12422 May 15 18:19	$\Pi^{\circ}0$	
	12421 May 22 22:46	$\Pi^{\circ}0$		max. Earth dist.	12422 May 18 20:40	4° Ⅱ 50′24	1.45655 AU
morning set	12421 May 24 06:07	2° Ⅱ 00′23					
max. Earth dist.	12421 Jun 05 02:26	20° Ⅲ 27'17	1.44859 AU	superior conj	12422 May 20 00:01	6° Ⅲ 37′25	-2°08'59
				minimum elong	12422 May 19 18:57	6° Ⅱ 17'34	2°09'35
superior conj	12421 Jun 09 12:27	27° Ⅲ 29'11	-2°12'15		12422 Jun 03 18:34	0 \circ \odot	
minimum elong	12421 Jun 09 14:57	27° Ⅲ 39'16	2°13'06	evening rise	12422 Jun 04 09:26	0°ഇ59'28	
	12421 Jun 11 01:58	0 \circ \odot		greatest brilliancy	12422 Jun 11 03:10	11° 5 346'49	-0.9m
evening rise	12421 Jun 23 09:29	20° © 17'43		asc. node	12422 Jun 19 12:48	24° © 37'03	
	12421 Jun 29 04:30	$0^{\circ}\Omega$			12422 Jun 23 16:42	$0^{\circ}\Omega$	
asc. node	12421 Jul 02 15:50	5° Ω 40'33		evening max el	12422 Jun 25 05:31	1° Ω 38'40	18°36'36
evening max el	12421 Jul 11 16:57	18° Ω 01'14	18°11'03	retrograde	12422 Jul 01 18:10	5° Ω 11'17	
retrograde	12421 Jul 18 01:26	21° Q 22'12		evening set	12422 Jul 04 23:24	4° Ω 12'27	
evening set	12421 Jul 20 22:17	20° Ω 38′28			12422 Jul 09 11:23	30° ₹ 🥯	
inferior conj	12421 Jul 26 23:44	15° Ω 17'50	2°23'09	inferior conj	12422 Jul 10 15:20	28° © 35'51	2°55'19
minimum elong	12421 Jul 27 02:16	15° Ω 10'47	2°21'49	minimum elong	12422 Jul 10 17:09	28° © 30'17	2°54'11
min. Earth dist.	12421 Jul 29 14:03	12° Ω 25′27	0.63514 AU	min. Earth dist.	12422 Jul 12 15:19	26° © 09'42	0.65439 AU
morning rise	12421 Aug 02 04:33	9° Ω 02'52		morning rise	12422 Jul 16 09:57	22° © 13'50	
desc. node	12421 Aug 04 23:34	7° Ω 20'39		direct	12422 Jul 22 20:52	19° 5 32'39	
direct	12421 Aug 08 20:32	6° Ω 29'43		desc. node	12422 Jul 22 20:53	19° © 32'39	
morning max el	12421 Aug 22 18:16	14° Ω 31′09	27°45'00	morning max el	12422 Aug 05 05:17	27° © 25'32	26°59'29
-	12421 Sep 04 07:56	0° m		-	12422 Aug 07 15:31	$0^{\circ}\Omega$	
	12421 Sep 22 10:51	0∘ <u>v</u>			12422 Aug 29 00:37	0° m)	
morning set	12421 Sep 26 12:17	7° ≏ 54'20		morning set	12422 Sep 09 21:13	21° m) 08'06	
asc. node	12421 Sep 28 17:07	12° ჲ 22'29		max. Earth dist.	12422 Sep 14 03:48	29° m 33'59	1.33754 AU
max. Earth dist.	12421 Oct 01 11:31	18° ഫ 09'32	1.32410 AU		12422 Sep 14 08:56	0∘ ⊽	-
			-	asc. node	12422 Sep 15 13:45	2° ≏ 26'54	
superior conj	12421 Oct 04 08:32	24° Ω 19'56	0°52'21		1		
minimum elong	12421 Oct 04 06:25	24° ≏ 08'27		superior conj	12422 Sep 18 10:18	8° ჲ 23'12	0°27'14
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		_					
minimum elong	12422 Sep 18 08:57	8° ≏ 16′03	0°27'00	morning set	12423 Aug 23 16:26	3° Mp 43'05	
evening rise	12422 Sep 25 16:24	23° ≏ 48'29		max. Earth dist.	12423 Aug 27 09:45	10° m) 40'51	1.35577 AU
	12422 Sep 28 15:53	0° M					
evening max el	12422 Oct 16 00:21	27°M12'55	21°41'50	superior conj	12423 Sep 02 04:02	22° m 01'05	-0°02'32
desc. node	12422 Oct 18 17:29	29°M36'23		minimum elong	12423 Sep 02 04:12	22° m 01'53	0°02'43
	12422 Oct 19 05:59	0° ∡ ¹		behind sun begin	12423 Sep 01 22:07	21° m 31'12	
retrograde	12422 Oct 28 09:14	3° ∡ ¹21'48		behind sun end	12423 Sep 02 10:17	22° m 32'38	
evening set	12422 Oct 31 07:40	3° ∡ ¹02'17		asc. node	12423 Sep 02 10:23	22° m 33'11	
	12422 Nov 07 15:04	30°RM₀			12423 Sep 06 01:38	0∘ ত	
inferior conj	12422 Nov 09 05:09	29°MJ07'01	-5°31'12	evening rise	12423 Sep 09 23:56	8° ഫ 07'30	
minimum elong	12422 Nov 08 21:53	29° M 17'11	5°29'22		12423 Sep 21 19:33	0° M .	
min. Earth dist.	12422 Nov 09 03:08	29°M09'51	0.54569 AU	evening max el	12423 Sep 28 01:35	7°M53'27	20°16'52
morning rise	12422 Nov 17 13:11	25° M ₊19'19		desc. node	12423 Oct 05 14:54	12° M 47'32	
direct	12422 Nov 21 05:21	24°M49'56		retrograde	12423 Oct 08 21:26	13°M16'22	
	12422 Dec 02 19:34	0° ∡ ¹		evening set	12423 Oct 10 22:39	13°M05'39	
morning max el	12422 Dec 03 15:33	0° х 45'34	22°06'52	inferior conj	12423 Oct 19 22:43	9°M08'39	-4°13'37
asc. node	12422 Dec 12 14:40	11° × 757'22	0002	minimum elong	12423 Oct 19 12:46	9°M23'20	4°10'08
use. Houe	12422 Dec 22 12:36	0°る		min. Earth dist.	12423 Oct 21 11:13	8°M14'47	0.54810 AU
morning set	12422 Dec 24 23:40	5°る06'54		morning rise	12423 Oct 28 02:03	5°M03'54	0.54010 AC
morning set	12422 DCC 24 23.40	3 00034		direct	12423 Nov 01 15:10	4°M19'12	
aumorior coni	12423 Jan 01 01:43	20° る 11'35	1921100		12423 Nov 15 03:23	10°M55'41	23°54'23
superior conj				morning max el			23 34 23
minimum elong	12423 Jan 01 03:26	20°る20'38	1°31'55	asc. node	12423 Nov 29 11:37	0° ₹ 17'58	
max. Earth dist.	12423 Jan 04 23:30	28° る 18'20	1.34322 AU		12423 Nov 29 07:28	0° ⊼ ¹	
	12423 Jan 05 19:34	0° ≈		morning set	12423 Dec 09 11:28	19° ∡ 753′24	
evening rise	12423 Jan 09 08:03	6°≈56'39			12423 Dec 14 03:16	0°₹	
desc. node	12423 Jan 14 16:05	16°≈51'21					
	12423 Jan 22 10:39	0° ∀		superior conj	12423 Dec 16 07:58	4° る 47'21	1°37'44
evening max el	12423 Feb 13 07:46	28°) 43′56	26°56'30	minimum elong	12423 Dec 16 08:34	4° ろ 50'38	1°38'38
	12423 Feb 14 16:18	0° Υ		max. Earth dist.	12423 Dec 18 20:47	10°る15'03	1.32853 AU
retrograde	12423 Feb 26 14:46	6° Y ′08'47		evening rise	12423 Dec 23 21:42	20° る 42'36	
evening set	12423 Mar 05 03:58	3° Ƴ 35'51			12423 Dec 28 16:32	0° ≈	
	12423 Mar 08 21:03	30° Ŗ ₩		desc. node	12424 Jan 01 12:57	6° ≈ 59'16	
min. Earth dist.	12423 Mar 09 03:28	29°) 42′03	0.65775 AU		12424 Jan 16 09:45	0°) €	
asc. node	12423 Mar 10 12:25	28° ∺ 07′29		evening max el	12424 Jan 26 20:29	12°) €05'50	27°27'45
inferior conj	12423 Mar 11 06:21	27° ₩ 15'31	0°14'26	retrograde	12424 Feb 09 13:03	19° ∺ 31′21	
minimum elong	12423 Mar 11 05:57	27° ∺ 16'41	0°14'24	evening set	12424 Feb 16 09:16	17° ∺ 02'14	
transit middle	12423 Mar 11 05:57	27° ₩ 16'41	0°14'24	min. Earth dist.	12424 Feb 20 04:44	13° ¥ 39′23	0.64046 AU
transit begin	12423 Mar 11 04:39	27°) € 20′27		inferior conj	12424 Feb 22 18:57	10°) 56′56	-0°51'28
transit end	12423 Mar 11 07:15	27°) 12′56		minimum elong	12424 Feb 22 20:34	10°) 52′43	0°50'26
morning rise	12423 Mar 17 09:18	21°) 40′24		asc. node	12424 Feb 25 09:48	8°) 20′32	
direct	12423 Mar 20 05:06	20° ¥ 56'57		morning rise	12424 Feb 29 09:58	5°) 35′57	
morning max el	12423 Mar 26 14:12	24° ₩ 18'15	18°07'50	direct	12424 Mar 02 21:20	5° ¥ 05'13	
C	12423 Mar 31 08:30	$0^{\circ}\Upsilon$		morning max el	12424 Mar 09 07:35	8°) 24′18	17°49'10
desc. node	12423 Apr 12 17:54	19° Ƴ 12'39		Č	12424 Mar 23 22:00	0° Υ	
morning set	12423 Apr 14 08:23	21° Y ′48'28		morning set	12424 Mar 26 02:48	3° Y 43'34	
8	12423 Apr 19 10:18	0°B		desc. node	12424 Mar 29 14:28	9° Y ′36'53	
	12 .25 .1p1 15 10.10	° O		dese. node	12 12 1 1 1 1 1 2 7 1 1 1 2 9	, , , , , ,	
superior conj	12423 Apr 29 08:05	15° 8 43'16	-1°45'54	superior conj	12424 Apr 08 06:03	25° Y '32'12	-1°09'15
minimum elong	12423 Apr 28 22:49	15° 8 06'51		minimum elong	12424 Apr 07 22:52	25° Y '03'09	
max. Earth dist.	12423 May 01 16:20	_	1.45707 AU		12424 Apr 11 00:45	0°8	1 000,
max. Lattii dist.	12423 May 08 11:43	0°Ⅱ	1.43707710	max. Earth dist.	12424 Apr 13 11:18	3° 8 52'37	1.45027 AU
evening rise	12423 May 15 10:27	10° Ⅱ 46'44		evening rise	12424 Apr 23 22:28	20° 8 08'56	1.43027 AC
greatest brilliancy	12423 May 27 16:19	29° ∏ 34'29	-0.7m	evening rise	12424 Apr 30 10:04	0°Ⅱ	
greatest brilliancy	•	29 п 3429	-0.7111		-		20017120
	12423 May 27 23:09			evening max el	12424 May 21 17:09	29° Ⅱ 08'19	20°17'20
asc. node	12423 Jun 06 09:50	12°959'42	10010110	4-	12424 May 22 14:26	0°©	
evening max el	12423 Jun 08 14:03	15°522'18	19°19'18	asc. node	12424 May 23 06:56	0°537'17	
retrograde	12423 Jun 15 15:12	19°5519'08		retrograde	12424 May 29 13:54	3°539'43	
evening set	12423 Jun 19 05:17	18°504'13	2011116	evening set	12424 Jun 02 13:35	2°508'22	
inferior conj	12423 Jun 24 15:10	12°5513'21	3°11'16		12424 Jun 04 19:03	30°RⅡ 260₩04440	2012110
minimum elong	12423 Jun 24 15:57	12°9510'48	3°10'18	inferior conj	12424 Jun 07 20:25	26° Ⅱ 04'40	3°13'49
min. Earth dist.	12423 Jun 26 00:29	10°©24'31	0.66969 AU	minimum elong	12424 Jun 07 20:07	26° Ⅱ 05'39	3°12'55
morning rise	12423 Jun 30 02:04	5° © 50'15		min. Earth dist.	12424 Jun 08 15:32	24° Ⅱ 59'20	0.68056 AU
direct	12423 Jul 06 04:04	3° © 10'51		morning rise	12424 Jun 13 02:21	19° ∐ 44'16	
desc. node	12423 Jul 09 18:07	3° 9 57'10		direct	12424 Jun 18 16:55	17° Ⅱ 15'18	
morning max el	12423 Jul 18 16:08	10°9540'02	25°49'30	desc. node	12424 Jun 25 15:15	20° Ⅱ 07'14	
	12423 Aug 03 00:51	0 $^{\circ}$ Ω		morning max el	12424 Jun 30 02:01	24° Ⅱ 04'46	24°24'39
	12423 Aug 21 15:10	0° ™			12424 Jul 05 08:52	0 \circ \odot	

	12424 Jul 26 10:38	0 \circ Ω		morning set	12425 Jul 16 19:20	26° © 07'44	
morning set	12424 Aug 04 17:23	15° Ω 26'43			12425 Jul 19 03:03	0 \circ Ω	
max. Earth dist.	12424 Aug 08 08:13	21° Ω 51′08	1.37769 AU	max. Earth dist.	12425 Jul 21 06:14	3° Ω 37'11	1.40105 AU
	12424 Aug 12 18:23	0° m)					
				superior conj	12425 Jul 29 01:21	17° Ω 24'29	
superior conj	12424 Aug 15 10:22	5° Mp 04'33		minimum elong	12425 Jul 29 06:24	17° Ω 47'35	1°10'03
minimum elong	12424 Aug 15 12:48	5°M) 16'14	0°35'45		12425 Aug 04 19:12	0° m y	
asc. node	12424 Aug 19 07:01	12° m 36'55		asc. node	12425 Aug 06 03:43	2° Mp 34'48	
evening rise	12424 Aug 24 02:03	22° m 08'59		evening rise	12425 Aug 07 19:42	5° ™ 45′28	
	12424 Aug 28 02:14	0∘ ⊽			12425 Aug 22 08:52	0∘ ত	
evening max el	12424 Sep 09 16:54	19° ≏ 21'19	19°12'31	evening max el	12425 Aug 23 19:43	1° ≏ 33'51	18°29'42
retrograde	12424 Sep 18 20:41	23° ≙ 55'41		retrograde	12425 Aug 31 14:48	5° ₽ 29'30	
evening set	12424 Sep 20 17:04	23° ≙ 45'17		evening set	12425 Sep 02 15:23	5° ≏ 14'24	
desc. node	12424 Sep 21 12:21	23° ₽ 34'35		desc. node	12425 Sep 08 09:47	2° ₽ 14'39	
inferior conj	12424 Sep 29 05:49	19° ₽ 34'23	-2°25'15	inferior conj	12425 Sep 10 09:54	0° ჲ 43'09	-0°37'39
minimum elong	12424 Sep 28 23:31	19° ≏ 44'56	2°22'37	minimum elong	12425 Sep 10 08:26	0° ჲ 46'02	0°37'09
min. Earth dist.	12424 Oct 01 22:49	17° ≏ 46'02	0.55958 AU		12425 Sep 11 07:48	30°₽, Mp	
morning rise	12424 Oct 07 03:15	14° ≙ 56'51		min. Earth dist.	12425 Sep 13 16:11	28° m 10'51	0.57788 AU
direct	12424 Oct 12 12:19	13° ≙ 50'19		morning rise	12425 Sep 17 22:02	25° m 28'11	
morning max el	12424 Oct 26 14:17	20° ♀ 59'30	25°38'10	direct	12425 Sep 23 23:21	23° m 54'54	
	12424 Nov 03 09:46	0° M .			12425 Oct 06 16:36	0∘ ⊽	
asc. node	12424 Nov 15 08:29	19° M ₊14'05		morning max el	12425 Oct 08 06:54	1° ≏ 28'55	27°00'19
	12424 Nov 20 18:54	0° ∡ ¹		_	12425 Oct 28 15:21	0° M	
morning set	12424 Nov 22 22:54	4° ∡ ³34'57		asc. node	12425 Nov 02 05:18	8°M36'39	
				morning set	12425 Nov 07 08:17	19°ML07'22	
superior conj	12424 Nov 29 17:52	19° ∡ ³30′21	1°38'04	_	12425 Nov 12 07:42	0° ∡ 7	
minimum elong	12424 Nov 29 17:22	19° ∡ ²27'35	1°38'56				
max. Earth dist.	12424 Dec 01 01:00	22° х 22'20	1.31857 AU	superior conj	12425 Nov 14 05:26	4° ∡ 14'56	1°32'31
	12424 Dec 04 13:12	0°ರ		minimum elong	12425 Nov 14 04:00	4° ∡ ¹06'55	1°33'10
evening rise	12424 Dec 06 20:10	4°₹49'54		max. Earth dist.	12425 Nov 14 09:17	4° ∡ ³36'27	1.31353 AU
desc. node	12424 Dec 18 09:54	26° ⋜ 45'30		evening rise	12425 Nov 21 00:54	19° ∡ 12'04	
	12424 Dec 20 08:24	0° ≈		C	12425 Nov 26 07:43	ა∘ნ	
evening max el	12425 Jan 08 06:28	24° ≈ 55'54	27°29'25	desc. node	12425 Dec 05 06:57	16° る 01'25	
C	12425 Jan 14 19:29	0°) €			12425 Dec 15 01:15	0° ≈	
retrograde	12425 Jan 22 03:41	2°) 15′09		evening max el	12425 Dec 21 10:51	7° ≈ 01'07	26°57'03
evening set	12425 Jan 29 02:26	29° ≈ 57'49		retrograde	12426 Jan 04 09:21	14° ≈ 11'34	
•	12425 Jan 29 01:06	30° R ≈		evening set	12426 Jan 11 03:55	12° ≈ 14'13	
min. Earth dist.	12425 Feb 01 20:19	27°≈00'56	0.62044 AU	min. Earth dist.	12426 Jan 15 01:06	9° ≈ 34'37	0.59901 AU
inferior conj	12425 Feb 04 19:48	24°≈15′04	-2°06'34	inferior conj	12426 Jan 18 05:20	7° ≈ 00'01	-3°26'59
minimum elong	12425 Feb 05 00:09	24° ≈ 04'57		minimum elong	12426 Jan 18 12:33	6° ≈ 45'21	3°23'41
asc. node	12425 Feb 11 07:09	19° ≈ 27'24		morning rise	12426 Jan 26 00:05	2° ≈ 16'34	
morning rise	12425 Feb 12 00:32	19° ≈ 11'12		direct	12426 Jan 28 01:59	2° ≈ 00'09	
direct	12425 Feb 14 05:39	18° ≈ 49'24		asc. node	12426 Jan 29 04:29	2° ≈ 04'57	
morning max el	12425 Feb 21 00:48	22° ≈ 16′21	17°48'19	morning max el	12426 Feb 04 14:23	5° ≈ 44'34	18°06'21
•	12425 Feb 27 00:40	0° ₩			12426 Feb 19 23:13	0° ∀	
morning set	12425 Mar 08 19:51	16° ¥ 43'18		morning set	12426 Feb 20 05:09	0° ¥ 27'42	
desc. node	12425 Mar 16 11:04	0° Ƴ 09'54		C			
	12425 Mar 16 08:47	$0^{\circ}\mathbf{\Upsilon}$		superior conj	12426 Mar 02 00:51	18°) 30′43	0°10'06
				minimum elong	12426 Mar 02 01:40	18° ¥ 34'20	0°10'13
superior conj	12425 Mar 20 03:31	6° Y ′28′12	-0°28'16	behind sun begin	12426 Mar 01 19:41	18°) €07'39	
minimum elong	12425 Mar 20 00:49	6° Ƴ 16'45	0°27'51	behind sun end	12426 Mar 02 07:39	19° ₩ 00'57	
max. Earth dist.	12425 Mar 27 03:46	18° Ƴ 03'53	1.43688 AU	desc. node	12426 Mar 03 07:39	20°) 47′20	
evening rise	12425 Apr 03 13:22	29° Ƴ 47'31			12426 Mar 08 15:38	$0^{\circ}\mathbf{\Upsilon}$	
	12425 Apr 03 16:35	0°B		max. Earth dist.	12426 Mar 09 15:57	1° Y '42'15	1.41828 AU
	12425 Apr 24 01:42	$\Pi^{\circ}0$		evening rise	12426 Mar 14 19:48	10° Ƴ 10'35	
evening max el	12425 May 04 14:39	12° Ⅲ 55'42	21°27'42	•	12426 Mar 27 17:32	0° ႘	
asc. node	12425 May 10 04:08	17° Ⅱ 16′13		evening max el	12426 Apr 17 07:30	26° 8 44'03	22°46'05
retrograde	12425 May 13 12:20	18° Ⅲ 08'36		-	12426 Apr 20 23:48	0°Щ	
evening set	12425 May 17 22:28	16° Ⅲ 21′03		retrograde	12426 Apr 27 08:58	2° Ⅱ 40′14	
inferior conj	12425 May 23 04:47	10° Ⅱ 06′10	3°04'53	asc. node	12426 Apr 27 01:26	2° ∏ 39'47	
minimum elong	12425 May 23 03:35	10° Ⅲ 10′22	3°03'56	evening set	12426 May 02 06:18	0°∏37'36	
min. Earth dist.	12425 May 23 10:27	9° Ⅱ 46'26	0.68677 AU	-	12426 May 02 22:51	30° ₹ 8	
morning rise	12425 May 28 08:28	3° Ⅱ 50'45		inferior conj	12426 May 07 14:14	24° 8 13'50	2°45'35
direct	12425 Jun 02 10:16	1°Ⅲ38′28		minimum elong	12426 May 07 12:23	24° 8 20'17	2°44'33
morning max el	12425 Jun 12 12:37	7° Ⅱ 37'29	22°54'54	min. Earth dist.	12426 May 07 07:05	24° 8 38'42	0.68827 AU
desc. node	12425 Jun 12 12:17	7° Ⅱ 36'39		morning rise	12426 May 12 18:21	18° 8 04'43	
	12425 Jun 29 22:50	0ಂತಾ		direct	12426 May 17 07:00	16° 8 12'44	
					•	-	

5°**8**13'59

15°**8**12'56

12427 May 09 00:10

12427 May 17 06:06

morning max el

desc. node

20°13'04

minimum elong

morning rise

22°**Y**39'45

16°**Y**40'21

12428 Apr 05 02:51

12428 Apr 10 17:36

1°36'14

		••				••	
direct	12428 Apr 14 05:39	15° Y 29'54		morning rise	12429 Mar 26 02:59	0° Y 53'58	
morning max el	12428 Apr 21 04:50	19° Ƴ 18′28	19°11'33	direct	12429 Mar 29 04:22	0° Y 01′26	
	12428 Apr 29 18:19	9° 8		morning max el	12429 Apr 04 16:15	3° Y 29'06	18°26'13
desc. node	12428 May 03 02:51	4° 8 52'40		desc. node	12429 Apr 19 23:30	24° Ƴ 54'29	
greatest brilliancy	12428 May 04 03:01	6° 8 22'30	-0.7m		12429 Apr 23 04:53	$_{0\circ}$ 8	
morning set	12428 May 15 02:34	23° 8 07'51		morning set	12429 Apr 25 00:46	2° 8 53'38	
	12428 May 19 13:08	Π $\circ 0$					
max. Earth dist.	12428 May 28 10:05	13° Ⅱ 50′24	1.45284 AU	superior conj	12429 May 10 20:49	27° 8 46'59	-2°01'22
				minimum elong	12429 May 10 13:09	27° 8 17'02	2°01'38
superior conj	12428 May 31 13:00	18° Ⅱ 45'39	-2°13'23	max. Earth dist.	12429 May 11 05:18	28° 8 20'07	1.45773 AU
minimum elong	12428 May 31 12:23	18° Ⅱ 43'15	2°14'15		12429 May 12 06:53	Π $^{\circ}0$	
	12428 Jun 07 13:52	0 \circ \odot		evening rise	12429 May 26 16:29	22° Ⅱ 34'19	
evening rise	12428 Jun 15 02:59	12° © 18'03			12429 May 31 09:36	0°€	
	12428 Jun 26 00:41	$0^{\circ}\Omega$		greatest brilliancy	12429 Jun 05 01:51	7° © 19'02	-0.8m
asc. node	12428 Jun 26 18:11	1° Ω 07'13		asc. node	12429 Jun 13 15:09	19° © 50'40	
evening max el	12428 Jul 04 09:32	11° Ω 07'37	18°19'49	evening max el	12429 Jun 17 20:42	24°9548'51	18°52'49
retrograde	12428 Jul 10 18:45	14° Ω 31′50		retrograde	12429 Jun 24 13:33	28° © 29'55	
evening set	12428 Jul 13 19:06	13° Ω 41'56		evening set	12429 Jun 27 22:34	27° 5 24'12	
inferior conj	12428 Jul 19 16:05	8° Ω 14'37	2°38'58	inferior conj	12429 Jul 03 11:32	21° 5 ⁄41'31	3°03'51
minimum elong	12428 Jul 19 18:22	8° Ω 07'57	2°37'42	minimum elong	12429 Jul 03 12:56	21° 5 37'05	3°02'48
min. Earth dist.	12428 Jul 22 00:35	5° Ω 31'22	0.64377 AU	min. Earth dist.	12429 Jul 05 05:15	19° © 30'17	0.66149 AU
morning rise	12428 Jul 25 16:17	1° Ω 55'49		morning rise	12429 Jul 09 02:35	15° © 18'44	
	12428 Jul 28 19:50	30° ₹ 5		direct	12429 Jul 15 10:13	12° 5 37'08	
desc. node	12428 Jul 30 02:02	29° 5 34'29		desc. node	12429 Jul 16 23:20	12° 5 45'42	
direct	12428 Aug 01 06:50	29° 5 17'37		morning max el	12429 Jul 28 10:29	20°521'06	26°32'04
	12428 Aug 04 22:57	$0^{\circ}\Omega$			12429 Aug 05 17:25	$0^{\circ}\Omega$	
morning max el	12428 Aug 14 23:34	7° Ω 17'29	27°29'08		12429 Aug 25 14:20	0° m p	
	12428 Sep 01 11:25	0° m		morning set	12429 Sep 02 07:57	13° m 54'30	
	12428 Sep 18 16:57	0° ⊙		max. Earth dist.	12429 Sep 06 07:57	21° m 37'45	1.34482 AU
morning set	12428 Sep 19 04:27	0° £ 56'27		asc. node	12429 Sep 09 15:59	28° m) 19'48	
asc. node	12428 Sep 22 19:22	8° £ 14'11			12429 Sep 10 11:32	0∘ ত	
max. Earth dist.	12428 Sep 23 20:13	10° £ 22'44	1.32914 AU		-		
				superior conj	12429 Sep 11 05:55	1° ≏ 34'52	0°15'08
superior conj	12428 Sep 27 07:14	17° ≏ 41'28	0°42'18	minimum elong	12429 Sep 11 05:06	1° ≏ 30'40	0°14'54
minimum elong	12428 Sep 27 05:21	17° ≏ 31'23	0°42'09	behind sun begin	12429 Sep 11 02:53	1° ≏ 19'11	
	12428 Oct 03 00:02	0°M		behind sun end	12429 Sep 11 07:19	1° ≏ 42'09	
evening rise	12428 Oct 04 07:44	2°M49'52		evening rise	12429 Sep 18 17:11	17° £ 15′21	
	12428 Oct 19 01:53	0° ∡ ¹			12429 Sep 25 01:38	0° M .	
desc. node	12428 Oct 25 22:36	8° ∡ 23'51		evening max el	12429 Oct 07 23:54	19°M00'10	21°03'19
evening max el	12428 Oct 26 06:11	8° ∡ 42'33	22°38'01	desc. node	12429 Oct 12 19:58	22°M49'30	
retrograde	12428 Nov 08 06:48	15° ∡ 10'37		retrograde	12429 Oct 19 17:44	24°M50'11	
evening set	12428 Nov 11 23:51	14° ∡ 740′34		evening set	12429 Oct 22 05:17	24°M35'40	
min. Earth dist.	12428 Nov 19 14:15	11° ∡ 15′04	0.54860 AU	inferior conj	12429 Oct 31 05:43	20°M41'26	-5°04'03
inferior conj	12428 Nov 20 14:10	10° ∡ 741'10	-5°51'04	minimum elong	12429 Oct 30 20:19	20°M54'43	5°01'20
minimum elong	12428 Nov 20 11:32	10° ∡ 744'55	5°50'06	min. Earth dist.	12429 Oct 31 20:42	20°M20'16	0.54559 AU
morning rise	12428 Nov 29 00:36	6° ₰ 53'11		morning rise	12429 Nov 08 11:47	16°M49'20	
direct	12428 Dec 02 05:22	6° ∡ ¹29'46		direct	12429 Nov 12 13:14	16°Ml13'58	
morning max el	12428 Dec 13 19:42	12° 渘 100′57	21°09'44	morning max el	12429 Nov 25 11:32	22°M27'13	22°52'01
asc. node	12428 Dec 19 20:04	19° ₰ 05'55			12429 Dec 02 00:44	0°⊀	
	12428 Dec 26 13:07	8°0		asc. node	12429 Dec 06 17:04	7° ₰ 00'23	
morning set	12429 Jan 02 14:31	13° る 57'26		morning set	12429 Dec 18 01:46	28° ⊀ 44'21	
					12429 Dec 18 16:00	0°ಕ	
superior conj	12429 Jan 09 21:52	29° る 14'59	1°24'21				
minimum elong	12429 Jan 10 00:08	29° る 26'42	1°24'58	superior conj	12429 Dec 25 00:54	13° る 42'47	1°34'44
	12429 Jan 10 06:35	0° ≈		minimum elong	12429 Dec 25 02:10	13° る 49'31	1°35'34
max. Earth dist.	12429 Jan 14 15:20	8° ≈ 48'45	1.35365 AU	max. Earth dist.	12429 Dec 28 08:23	20°る42'33	1.33642 AU
evening rise	12429 Jan 18 16:22	16° ≈ 35'31		evening rise	12430 Jan 01 23:33	0° ≈ 05'20	
desc. node	12429 Jan 21 21:35	22° ≈ 29'59			12430 Jan 01 22:27	0° ≈	
	12429 Jan 26 04:42	0° ∀		desc. node	12430 Jan 08 18:22	12° ≈ 47'13	
	12429 Feb 15 14:37	$0^{\circ}\Upsilon$			12430 Jan 19 06:15	0° ∀	
evening max el	12429 Feb 23 00:46	8° Ƴ 14'07	26°27'42	evening max el	12430 Feb 05 14:19	21°) 49′27	27°13'07
retrograde	12429 Mar 07 23:53	15° Ƴ 33'46		retrograde	12430 Feb 19 01:45	29°) 14′47	
evening set	12429 Mar 14 07:28	13° Y 02'11		evening set	12430 Feb 25 18:27	26°) 42′45	
asc. node	12429 Mar 17 17:35	9° Ƴ 37'13		min. Earth dist.	12430 Mar 01 16:07	23° ₭ 02'36	0.65079 AU
min. Earth dist.	12429 Mar 18 10:06	8° Ƴ 48'57	0.66615 AU	inferior conj	12430 Mar 03 23:55	20° ∺ 28'14	-0°12'15
inferior conj	12429 Mar 20 05:57	6° Ƴ 36′27	0°47'43	minimum elong	12430 Mar 04 00:16	20° ∺ 27'15	0°11'52
minimum elong	12429 Mar 20 04:45	6° Ƴ 40'04	0°47'14	transit middle	12430 Mar 04 00:16	20° ∺ 27'15	0°11'52

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transit begin	12430 Mar 03 22:14	20°) € 32'54		retrograde	12431 Feb 01 20:46	12°) €22'20	
transit end	12430 Mar 04 02:18	20° ∺ 21'37		evening set	12431 Feb 08 18:58	9° ∺ 56'55	
asc. node	12430 Mar 04 14:59	19°) (46′41		min. Earth dist.	12431 Feb 12 13:13	6°) 46′19	0.63219 AU
morning rise	12430 Mar 10 07:43	14°) ₹ 58'42		inferior conj	12431 Feb 15 07:54	4°) €00'35	-1°22'22
direct	12430 Mar 12 23:50	14° ∺ 20'57		minimum elong	12431 Feb 15 10:36	3° ¥ 53'51	1°20'46
morning max el	12430 Mar 19 08:19	17°) 39′42	17°57'49	asc. node	12431 Feb 19 12:22	0°) 16′00	
	12430 Mar 28 12:20	$0^{\circ}\mathbf{\Upsilon}$			12431 Feb 19 21:30	30° R ≈	
morning set	12430 Apr 06 03:39	14° Y ′04'41		morning rise	12431 Feb 22 04:37	28° ≈ 46'48	
desc. node	12430 Apr 06 20:07	15° Ƴ 12'30		direct	12431 Feb 24 13:06	28° ≈ 20'17	
	12430 Apr 15 21:59	0°8			12431 Mar 01 02:26	0°) €	
	12 150 Hpt 15 21.57	° O		morning max el	12431 Mar 03 02:04	1° ¥ 41'13	17°46'43
superior conj	12430 Apr 20 09:03	7° 8 07'06	-1°31'28	morning set	12431 Mar 19 08:28	26°\(\frac{1}{2}\)29'43	17 4045
minimum elong	12430 Apr 20 00:03	6° 8 31'26		morning set	12431 Mar 21 09:09	20 γ (2943	
Č	-	_		J J.		5° Υ 41'03	
max. Earth dist.	12430 Apr 24 01:40	_	1.45512 AU	desc. node	12431 Mar 24 16:41	5 4103	
	12430 May 05 01:16	0°II			10421.14 21 1621	1.700000140	0051155
evening rise	12430 May 06 10:26	2° Ⅱ 07'36		superior conj	12431 Mar 31 16:31	17° Y 23'48	
greatest brilliancy	12430 May 20 10:31	23° Ⅱ 19'34	-0.6m	minimum elong	12431 Mar 31 11:12	17° Y ′01'56	
	12430 May 25 02:45	0 \circ \odot		max. Earth dist.	12431 Apr 06 19:59	27° Y 20'37	1.44530 AU
asc. node	12430 May 31 12:14	7° ॐ 56′06			12431 Apr 08 12:07	9° 8	
evening max el	12430 Jun 01 03:05	8° 5 34'21	19°42'09	evening rise	12431 Apr 15 21:45	11° 8 32'07	
retrograde	12430 Jun 08 11:36	12° 5 44'30			12431 Apr 28 04:35	Π $^{\circ}0$	
evening set	12430 Jun 12 05:46	11° © 22'23		evening max el	12431 May 15 03:40	22° Ⅲ 20′50	20°45'52
inferior conj	12430 Jun 17 14:00	5° 5 25'42	3°13'49	asc. node	12431 May 18 09:24	25° Ⅱ 10′58	
minimum elong	12430 Jun 17 14:19	5° © 24'38	3°12'54	retrograde	12431 May 23 10:34	27° Ⅱ 09'42	
min. Earth dist.	12430 Jun 18 17:06	3° © 55'14	0.67496 AU	evening set	12431 May 27 14:35	25° Ⅲ 31'17	
	12430 Jun 21 23:07	30°R Ⅱ		inferior conj	12431 Jun 01 20:53	19° ∏ 22'19	3°11'20
morning rise	12430 Jun 22 22:30	29° ∏ 03'33		minimum elong	12431 Jun 01 20:11	19° Ⅲ 24'44	3°10'26
direct	12430 Jun 28 19:48	26° I I28'00		min. Earth dist.	12431 Jun 02 10:08	18° Д 36'32	0.68378 AU
desc. node	12430 Jul	20 H2800 27°H58'58			12431 Jun 07 01:32	18 П 3032	0.06378 AU
desc. node				morning rise			
	12430 Jul 06 19:36	0°€	2501.412.5	direct	12431 Jun 12 10:37	10° Ⅱ 41'29	
morning max el	12430 Jul 10 21:00	3°5541'18	25°14'35	desc. node	12431 Jun 20 17:40	14° ∏ 46′04	
	12430 Jul 30 23:35	0 \circ Ω		morning max el	12431 Jun 23 07:09	17° Ⅱ 10'43	23°46'30
morning set	12430 Aug 15 19:57	26° Ω 08'50			12431 Jul 03 22:58	0 \circ	
	12430 Aug 17 22:56	0° m)			12431 Jul 24 00:15	$0^{\circ}\Omega$	
max. Earth dist.	12430 Aug 19 10:28	2° m 44'14	1.36486 AU	morning set	12431 Jul 28 11:46	7° Ω 28'07	
				max. Earth dist.	12431 Aug 01 08:05	14° Ω 07'30	1.38761 AU
superior conj	12430 Aug 25 19:13	14° m 59'01	-0°16'18				
minimum elong	12430 Aug 25 20:15	15° Mp 04'11	0°16'26	superior conj	12431 Aug 08 19:34	27° Ω 45'31	-0°50'22
asc. node	12430 Aug 27 12:36	18° m 25'24		minimum elong	12431 Aug 08 23:07	28° Ω 02'14	0°50'19
	12430 Sep 02 05:26	0∘ <u>ଫ</u>		C	12431 Aug 09 24:00	0° m)	
evening rise	12430 Sep 02 22:45	1° ≏ 27'59		asc. node	12431 Aug 14 09:16	8° m) 27'29	
	12430 Sep 20 07:13	0°M		evening rise	12431 Aug 17 21:45	15° m/20'36	
evening max el	12430 Sep 20 07:05	29° ₽ 59'39	19°46'41	evening rise	12431 Aug 25 17:22	0° ⊽	
desc. node	12430 Sep 29 17:24	5° ™ 00'29	17 10 11	evening max el	12431 Sep 03 03:46	ა — 11° Ω 47'57	18°51'//1
retrograde	12430 Sep 30 09:32	5°M01'46		retrograde	12431 Sep 11 16:41	16° Ω 04'40	10 31 41
•	•			Č	•		
evening set	12430 Oct 02 07:03	4°M51'54	2020117	evening set	12431 Sep 13 13:58	15° Ω 52'55	
inferior conj	12430 Oct 11 03:36	0°M₄9'42		desc. node	12431 Sep 16 14:52	14° Ω 49'14	1020105
minimum elong	12430 Oct 10 18:43	1°M03'27	3°25'51	inferior conj	12431 Sep 21 19:21	11° △ 33'49	
	12430 Oct 12 11:38	30°Ŗ Ω		minimum elong	12431 Sep 21 15:13	11° ≏ 41'13	1°36'21
min. Earth dist.	12430 Oct 13 05:44	29° ≏ 32'13	0.55197 AU	min. Earth dist.	12431 Sep 24 19:53	9° ≏ 24'41	0.56664 AU
morning rise	12430 Oct 19 04:46	26° ≏ 32'31		morning rise	12431 Sep 29 13:11	6° ≏ 39'45	
direct	12430 Oct 24 02:27	25° ≏ 39'36		direct	12431 Oct 05 05:31	5° ≏ 22'19	
	12430 Nov 03 23:56	0° M		morning max el	12431 Oct 19 11:08	12° ≏ 43'48	26°16'45
morning max el	12430 Nov 06 21:59	2°M30'29	24°40'20		12431 Nov 01 23:38	0° M ₊	
asc. node	12430 Nov 23 13:59	25°M37'27		asc. node	12431 Nov 10 10:50	14° M 46'14	
	12430 Nov 25 22:36	0° ∡ ¹		morning set	12431 Nov 17 00:24	28°M08'22	
morning set	12430 Dec 02 13:37	13° ∡ ¹29'28		Č	12431 Nov 17 21:09	0° ∡ ¹	
superior conj	12430 Dec 09 08:57	28° ∡ ¹22'21	1°38'38	superior conj	12431 Nov 23 19:50	13° ∡ '07'26	1°36'26
minimum elong	12430 Dec 09 08:37 12430 Dec 09 09:04	28° x 22' 21' 28° x 23'02	1°39'31	minimum elong	12431 Nov 23 19:50 12431 Nov 23 18:54	13° x *0720 13° x *02'17	1°37'13
mmmum eiong		28° x '23'02	1 37 31	_			
n a v	12430 Dec 10 02:47		1 222 (2 177	max. Earth dist.	12431 Nov 24 15:13	14° 🗷 55'10	1.31574 AU
max. Earth dist.	12430 Dec 11 08:57	2° 3 44'11	1.32363 AU	evening rise	12431 Nov 30 18:41	28° ₹ 15'39	
evening rise	12430 Dec 16 17:14	14° る 00'53			12431 Dec 01 14:39	0°る	
	12430 Dec 25 01:24	0° ≈		desc. node	12431 Dec 13 12:14	22° る 21'39	
desc. node	12430 Dec 26 15:14	2° ≈ 46′50			12431 Dec 18 07:32	0° ≈	
	12431 Jan 14 08:38	0° ∀		evening max el	12432 Jan 01 09:43	17° ≈ 30'33	27°19'53
evening max el	12431 Jan 19 02:00	4°) 58′50	27°32'25	retrograde	12432 Jan 15 08:02	24° ≈ 47′08	

evening set	12432 Jan 22 05:57	22° ≈ 37′00			12432 Nov 22 17:18	0°る	
min. Earth dist.	12432 Jan 26 00:15	19° ≈ 48'55	0.61136 AU	desc. node	12432 Nov 29 09:19	11° る 21'13	
inferior conj	12432 Jan 29 02:39	17° ≈ 05'33	-2°40'28	evening max el	12432 Dec 13 10:56	29° る 14'05	26°32'54
minimum elong	12432 Jan 29 08:15	16° ≈ 53'11	2°37'38		12432 Dec 14 06:50	0° ≈	
morning rise	12432 Feb 05 13:29	12° ≈ 10′19		retrograde	12432 Dec 27 09:49	6° ≈ 21'05	
asc. node	12432 Feb 06 09:44	11° ≈ 58'21		evening set	12433 Jan 02 23:30	4° ≈ 34'58	
direct	12432 Feb 07 16:39	11° ≈ 51'22		min. Earth dist.	12433 Jan 07 00:50	1°≈58'21	0.58984 AU
morning max el	12432 Feb 14 18:14	15° ≈ 24'40	17°53'38		12433 Jan 09 14:51	30°Rる	
morning must vi	12432 Feb 24 21:18	0° ∀	1, 2330	inferior conj	12433 Jan 10 04:34	29° පි 33'31	-4°00'46
morning set	12432 Mar 01 09:04	9° ∺ 50'00		minimum elong	12433 Jan 10 12:40	29° ට 17'58	
desc. node		26° ∺ 16'13		morning rise		29 3 1738 24° る 59'18	3 31 23
desc. node	12432 Mar 10 13:16	20°π 1013		•	12433 Jan 18 04:44		
				direct	12433 Jan 20 06:24	24° ප් 44'13	
superior conj	12432 Mar 12 00:25	28°) 48′58		asc. node	12433 Jan 23 07:02	25° る 18'10	
minimum elong	12432 Mar 11 23:25	28°) (44′37	0°11'09	morning max el	12433 Jan 28 05:07	28° る 39'35	18°20'06
behind sun begin	12432 Mar 11 17:24	28°) 18′36			12433 Jan 29 11:46	0° ≈	
behind sun end	12432 Mar 12 05:25	29° ∺ 10'35		morning set	12433 Feb 12 23:41	23° ≈ 48'35	
	12432 Mar 12 16:53	$0^{\circ}\mathbf{\Upsilon}$			12433 Feb 16 05:46	0°) €	
max. Earth dist.	12432 Mar 19 10:09	11° Y 17'05	1.42943 AU				
evening rise	12432 Mar 25 17:59	21° Y ′26'31		superior conj	12433 Feb 22 06:44	11°) 16'10	0°24'35
evening rise	12432 Mar 31 06:42	0°8		minimum elong	12433 Feb 22 08:30	11° X 24'11	0°24'41
		0°II		desc. node		16° ¥ 54'27	0 2441
	12432 Apr 21 12:52		2222225		12433 Feb 25 09:50		1 10005 177
evening max el	12432 Apr 26 22:55	6° Ⅱ 08'13	22°00'25	max. Earth dist.	12433 Mar 01 19:53	24°) (36'19	1.40925 AU
asc. node	12432 May 04 06:40	11° Ⅱ 20′00			12433 Mar 05 00:48	0° Υ	
retrograde	12432 May 06 08:31	11° Ⅱ 40'17		evening rise	12433 Mar 06 09:04	2° Ƴ 13′08	
evening set	12432 May 10 23:14	9° Ⅱ 46′18			12433 Mar 24 14:50	9° 8	
inferior conj	12432 May 16 05:58	3° Ⅲ 27′11	2°57'57	evening max el	12433 Apr 09 14:28	19° 8 58'03	23°20'40
minimum elong	12432 May 16 04:27	3° Ⅲ 32′29	2°56'57	retrograde	12433 Apr 20 03:55	26° 8 11'31	
min. Earth dist.	12432 May 16 06:09	3° Ⅱ 26'33	0.68792 AU	asc. node	12433 Apr 21 03:59	26° 8 06'51	
	12432 May 18 19:30	30° ₹ 8		evening set	12433 Apr 25 06:07	24° 8 03'16	
morning rise	12432 May 21 09:30	27° 8 14'02		min. Earth dist.	12433 Apr 30 02:57	18° 8 19'28	0.68746 AU
direct	12432 May 26 05:39	25° 8 10'03		inferior conj	12433 Apr 30 15:19	_	2°34'26
direct	•			-	•	_	
	12432 Jun 03 23:41	0°Ⅱ	22015120	minimum elong	12433 Apr 30 13:17	17° 8 43'52	2°33'22
morning max el	12432 Jun 04 18:58	0° ∏ 47'17	22°17'20	morning rise	12433 May 05 20:22	11° 8 30'35	
desc. node	12432 Jun 06 14:41	2° ∏ 42'19		direct	12433 May 10 03:36	9° 8 47'23	
	12432 Jun 26 18:49	0		morning max el	12433 May 18 11:50	14° 8 34'08	20°55'06
morning set	12432 Jul 08 02:55	17° © 40'37		desc. node	12433 May 24 11:35	21° 8 29'05	
max. Earth dist.	12432 Jul 13 07:13	26°513'03	1.41068 AU		12433 May 30 18:42	$\Pi^{\circ}0$	
	12432 Jul 15 12:48	$0^{\circ}\Omega$		morning set	12433 Jun 17 17:22	26° Ⅱ 48'24	
					12433 Jun 19 18:16	0°ಲಾ	
superior conj	12432 Jul 21 02:39	9° Ω 43'57	-1°24'16	max. Earth dist.	12433 Jun 25 12:59	9° © 14'13	1.43123 AU
minimum elong	12432 Jul 21 08:42	10° Ω 10'53					
evening rise	12432 Jul 31 10:41	28° Ω 43'38		superior conj	12433 Jul 02 12:09	20°545'32	-1°53'18
asc. node	12432 Jul 31 05:59	28° Ω 21'38		minimum elong	12433 Jul 02 19:00	21° © 14'26	
asc. node				minimum ciong	12433 Jul 07 21:31	0°Ω	1 33 33
	12432 Aug 01 03:02	0° Mp	10017140				
evening max el	12432 Aug 16 10:19	24° Mp 17'28	18°17'49	evening rise	12433 Jul 14 09:17	11° Ω 26'53	
retrograde	12432 Aug 23 18:47	28° Mp 00'34		asc. node	12433 Jul 18 02:46	18° Ω 03'56	
evening set	12432 Aug 25 22:16	27° Mp 42'18			12433 Jul 25 05:59	0° ™	
inferior conj	12432 Sep 02 08:47	23° Mp 02'33	0°02'46	evening max el	12433 Jul 30 22:34	7° Mp 18′34	18°03'49
minimum elong	12432 Sep 02 08:52	23°Mp02'21	0°02'32	retrograde	12433 Aug 06 13:50	10°M 43'02	
transit middle	12432 Sep 02 08:52	23° Mp 02'21	0°02'32	evening set	12433 Aug 09 01:15	10° m 14'29	
transit begin	12432 Sep 02 05:26	23° Mp 09'33		inferior conj	12433 Aug 15 18:21	5° m 14'28	1°21'22
transit end	12432 Sep 02 12:18	22° m 55'09		minimum elong	12433 Aug 15 20:33	5° Mp 09'08	1°20'09
desc. node	12432 Sep 02 12:22	22° m 55'02		min. Earth dist.	12433 Aug 18 21:49	2° mp 13'10	0.60976 AU
min. Earth dist.	12432 Sep 05 16:39	-	0.58699 AU	desc. node	12433 Aug 20 09:49	0° m) 54'04	
morning rise	12432 Sep 09 16:00	17° mp 33'01			12433 Aug 21 13:11	30°R Ω	
direct	12432 Sep 05 10:00 12432 Sep 15 22:51	15° Mp 47'17		morning rise	12433 Aug 22 13:06	29° Ω 17'56	
	_		27025110	direct		27° Ω 06'08	
morning max el	12432 Sep 30 06:56	23° Tp 30'32	21 23 10	uncci	12433 Aug 29 03:59		
	12432 Oct 06 03:19	0∘ 亚			12433 Sep 06 08:53	0° m)	27056122
_	12432 Oct 25 02:54	0°M		morning max el	12433 Sep 12 09:56	5° My 02'52	27~56'23
asc. node	12432 Oct 27 07:36	4° ™ 17'33			12433 Oct 01 01:35	0∘ ত	
morning set	12432 Oct 31 08:21	12°M35'21		asc. node	12433 Oct 14 04:19	24° ≏ 04'58	
				morning set	12433 Oct 15 11:35	26° ≏ 45'46	
superior conj	12432 Nov 07 07:33	27°M51'12	1°28'26		12433 Oct 17 00:39	0° M	
minimum elong	12432 Nov 07 05:48	27°M41'28	1°28'58	max. Earth dist.	12433 Oct 21 07:23	9° ™ 15'39	1.31510 AU
max. Earth dist.	12432 Nov 06 23:54	27°M08'30	1.31287 AU				
	12432 Nov 08 06:38	0° ∡ 7		superior conj	12433 Oct 22 18:15	12° M 28'17	1°14'48
evening rise	12432 Nov 14 01:24	12° ∡ 42′22		minimum elong	12433 Oct 22 16:03	12°M16'04	1°15'03
2.05 1100	-2.521107 17 01.27	~ 12 22			12.55 000 22 10.05	- 110 IU UT	05

evening rise	12433 Oct 29 11:20 12433 Oct 30 18:03	27°M₁5'40 0°⊀		evening rise	12434 Oct 08 12:16 12434 Oct 13 22:35	0°ጤ 11°ጤ50'20	
desc. node	12433 Nov 16 06:29	29° × ⁷ 32'07		evening rise	12434 Oct 23 01:07	0° √	
	12433 Nov 16 14:26	ರ∘ರ		desc. node	12434 Nov 03 03:45	16° ∡ ³35'58	
evening max el	12433 Nov 25 03:53	10° る 05'44	25°14'34	evening max el	12434 Nov 06 14:29	20° х 17'44	23°36'30
retrograde	12433 Dec 08 23:59	17° る 02'25		retrograde	12434 Nov 20 01:37	27° ∡ "00′24	
evening set	12433 Dec 14 19:10	15° ප් 46'23		evening set	12434 Nov 24 14:56	26° ∡ 15'14	
min. Earth dist.	12433 Dec 19 15:57		0.56993 AU	min. Earth dist.	12434 Dec 01 00:42	23° ∡ 11′23	0.55439 AU
inferior conj	12433 Dec 22 10:35	11°る15'10		inferior conj	12434 Dec 02 20:18	22° х 07'05	
minimum elong	12433 Dec 22 18:30	11° ろ 01'59	5°08'30	minimum elong	12434 Dec 02 22:45	22° 尽 03'27 18° 尽 13'52	5°49'53
morning rise	12433 Dec 30 20:09 12434 Jan 02 02:21	7°る03'09 6°る48'14		morning rise direct	12434 Dec 11 08:22 12434 Dec 14 02:47	18° x ' 13'52 17° x ' 55'03	
direct asc. node	12434 Jan 10 04:17	6 348 14 10°る14'29		morning max el	12434 Dec 14 02.47 12434 Dec 24 19:32	23° ∡ 00'43	20°18'55
morning max el	12434 Jan 11 06:44	10 3 1429	19°08'01	asc. node	12434 Dec 28 01:26	26° ₹ 33'32	20 1833
morning max ci	12434 Jan 23 18:40	0°≈	17 00 01	ase. node	12434 Dec 30 15:23	0°る	
morning set	12434 Jan 27 23:49	8° ≈ 11'56		morning set	12435 Jan 12 06:12	22° る 50'29	
Ü				Ü	12435 Jan 15 17:35	0° ≈	
superior conj	12434 Feb 05 06:56	24° ≈ 32'30	0°53'39				
minimum elong	12434 Feb 05 09:45	24° ≈ 46′02	0°53'51	superior conj	12435 Jan 19 20:30	8° ≈ 25'38	1°15'14
	12434 Feb 08 03:54	0° ∀		minimum elong	12435 Jan 19 23:11	8° ≈ 39'08	1°15'41
max. Earth dist.	12434 Feb 12 02:43	7° ¥ 15′16	1.38702 AU	max. Earth dist.	12435 Jan 25 10:03	19° ≈ 21'32	1.36516 AU
desc. node	12434 Feb 12 06:25	7° 米 31'53		evening rise	12435 Jan 29 05:10	26° ≈ 26′04	
evening rise	12434 Feb 15 21:24	13° ¥ 54'47		desc. node	12435 Jan 30 03:05	28° ≈ 05'12	
	12434 Feb 25 16:45	0° Υ			12435 Jan 31 04:45	0° ∀	
	12434 Mar 19 13:47	0°8			12435 Feb 19 03:56	0°Υ	
evening max el	12434 Mar 23 04:13	3° 8 49'36	24°40'20	evening max el	12435 Mar 05 17:35	17° Υ 40'07	25°52'23
retrograde	12434 Apr 03 19:37	10° 8 37'23 9° 8 17'36		retrograde	12435 Mar 18 06:42 12435 Mar 24 08:18	24° Y 51'55 22° Y 22'49	
asc. node evening set	12434 Apr 08 01:22 12434 Apr 09 09:41	8° 8 16'59		evening set asc. node	12435 Mar 24 08:18 12435 Mar 25 22:45	22° \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
min. Earth dist.	12434 Apr 13 22:18	3° 8 09'07	0.68252 AU	min. Earth dist.	12435 Mar 28 14:09	17° Υ 50'08	0.67332 AU
inferior conj	12434 Apr 14 23:01	1° 8 46'54	2°00'59	inferior conj	12435 Mar 30 03:08	15° Υ 53'45	1°17'28
minimum elong	12434 Apr 14 20:52	1° 8 54'03	1°59'56	minimum elong	12435 Mar 30 01:24	15° Υ 59'12	1°16'40
	12434 Apr 16 07:37	30° R Υ		morning rise	12435 Apr 04 19:08	10° Y °05′16	
morning rise	12434 Apr 20 08:14	25° Ƴ 48'51		direct	12435 Apr 08 02:29	9° Υ ′02'52	
direct	12434 Apr 24 03:04	24° Y 26'48		morning max el	12435 Apr 14 19:53	12° Ƴ 40'47	18°50'17
morning max el	12434 May 01 12:04	28° Y 32'41	19°45'06		12435 Apr 27 18:03	9° 8	
	12434 May 02 21:42	0° 8		desc. node	12435 Apr 28 05:03	0° 8 41'52	
desc. node	12434 May 11 08:21	10° 8 52'08		greatest brilliancy	12435 Apr 28 19:46	1° 8 38'00	-0.8m
greatest brilliancy	12434 May 14 07:33	15° 8 08'25	-0.6m	morning set	12435 May 07 02:49	14° 8 28'06	
	12434 May 24 05:30	0°II			12435 May 17 02:09	0°II	
morning set	12434 May 27 18:05	5° Ⅲ 23'41		max. Earth dist.	12435 May 21 19:04	7° Ⅱ 20′52	1.45580 AU
max. Earth dist.	12434 Jun 08 01:45	23° Ⅱ 02'38	1.44680 AU		1242514 22 11 00	00W 55110	2010110
	12434 Jun 12 10:18	0₀ ©		superior conj	12435 May 23 11:00	9° Ⅱ 57'18	
superior conj	12434 Jun 12 21:33	0°9345'18	2011/00	minimum elong	12435 May 23 07:02 12435 Jun 05 02:15	9° Ⅱ 41'46 0° ©	2-11-30
minimum elong	12434 Jun 13 01:01	0°959'18		evening rise	12435 Jun 07 15:56	4°908'07	
evening rise	12434 Jun 26 12:26	23° © 17'53	2 11 4)	asc. node	12435 Jun 21 20:32	26°\$29'26	
evening rise	12434 Jun 30 11:35	0°Ω		use. node	12435 Jun 24 09:31	0°Ω	
asc. node	12434 Jul 04 23:37	7° Ω 28'41		evening max el	12435 Jun 28 01:39	4°Ω16'50	18°31'45
evening max el	12434 Jul 14 12:44	20° Ω 41'03	18°08'43	retrograde	12435 Jul 04 13:13	7° Ω 47'04	
retrograde	12434 Jul 20 21:26	24° Ω 01'34		evening set	12435 Jul 07 17:08	6° Ω 50'38	
evening set	12434 Jul 23 17:00	23° Q 20'02		inferior conj	12435 Jul 13 10:15	1° Ω 16′24	2°51'31
inferior conj	12434 Jul 29 20:11	18° Ω 01'50	2°16'36	minimum elong	12435 Jul 13 12:13	1° Ω 10′28	2°50'21
minimum elong	12434 Jul 29 22:46	17° Ω 54'48	2°15'15		12435 Jul 14 11:29	30°ષ્દ્	
min. Earth dist.	12434 Aug 01 12:28	15° Ω 06'51	0.63198 AU	min. Earth dist.	12435 Jul 15 12:29	28° © 45'19	0.65169 AU
morning rise	12434 Aug 05 02:42	11° Ω 48'25		morning rise	12435 Jul 19 06:14	24°954'54	
desc. node	12434 Aug 07 07:12	10° Ω 25'01		desc. node	12435 Jul 25 04:33	22°5015'16	
direct	12434 Aug 11 18:54	9° Ω 17'25	27040112	direct	12435 Jul 25 18:10	22°514'07	27000104
morning max el	12434 Aug 25 18:17	17° Ω 19'21	27°49'12	morning max el	12435 Aug 08 05:05	0° Ω 09'39	27°08'04
	12434 Sep 05 07:42	0° െ 0°ആ			12435 Aug 08 01:15	0° Ω	
morning set	12434 Sep 23 21:00 12434 Sep 29 07:55	ე° <u>ა</u> 2 10° ჲ 34'13		morning set	12435 Aug 30 07:16 12435 Sep 12 18:32	0° መ 23° ሙ 53'18	
asc. node	12434 Sep 29 07.53 12434 Oct 01 00:58	10 ≥ 34 13 14° ₽ 03'06		morning set	12435 Sep 12 18.32 12435 Sep 15 20:56	0° ت 23 الاردوال	
max. Earth dist.	12434 Oct 04 09:48	21° ⊆ 06'51	1.32251 AU	max. Earth dist.	12435 Sep 17 03:29	0 = 2° ჲ 34'33	1.33516 AU
Durin dist.	22.3.000 07 07.40		1.02201110	asc. node	12435 Sep 17 03:29 12435 Sep 17 21:34	4° £ 07'05	1.55510710
superior conj	12434 Oct 07 02:04	26° ≙ 53'21	0°55'43		1		
minimum elong	12434 Oct 06 23:53	26° ₽ 41'31	0°55'40	superior conj	12435 Sep 21 04:47	11° ≏ 00'04	0°31'22
				-			

minimum elong	12435 Sep 21 03:15	10° £ 52'02	0°31'09	superior conj	12436 Sep 03 23:54	24° m 42'18	0°02'17
evening rise	12435 Sep 28 09:16	26° ₽ 20'35	0 31 0)	minimum elong	12436 Sep 03 23:46	24° Mp 41'42	0°02'05
	12435 Sep 30 03:03	0°M		behind sun begin	12436 Sep 03 17:45	24° m) 11'05	
	12435 Oct 18 17:49	0° ∡ ¹		behind sun end	12436 Sep 04 05:48	25° m/ 12'22	
evening max el	12435 Oct 19 02:46	0° ∡ ¹22'15	21°56'02	asc. node	12436 Sep 03 18:11	24° mp 13'16	
desc. node	12435 Oct 21 01:06	2° ∡ '07'42			12436 Sep 06 13:49	0∘ ⊽	
retrograde	12435 Oct 31 16:21	6° ∡ ³36'51		evening rise	12436 Sep 11 17:22	10° ≏ 41'25	
evening set	12435 Nov 03 19:14	6° ∡ 15′03		•	12436 Sep 21 20:50	0°M	
inferior conj	12435 Nov 12 15:07	2° ∡ 19′03	-5°38'23	evening max el	12436 Sep 30 01:59	10°ML56'27	20°28'18
minimum elong	12435 Nov 12 08:55	2° ∡ ¹27'44	5°36'51	desc. node	12436 Oct 06 22:30	15°M39'20	
min. Earth dist.	12435 Nov 12 07:17	2° ₹ ³30′02	0.54614 AU	retrograde	12436 Oct 11 03:41	16°M26'22	
	12435 Nov 17 00:14	30°RML		evening set	12436 Oct 13 07:02	16°M14'58	
morning rise	12435 Nov 20 23:48	28°M31'50		inferior conj	12436 Oct 22 07:42	12°M19'13	-4°28'07
direct	12435 Nov 24 12:51	28°M04'13		minimum elong	12436 Oct 21 21:38	12°M33'50	4°24'45
	12435 Dec 01 13:27	0° ∡ ¹		min. Earth dist.	12436 Oct 23 14:55	11°MJ33'46	0.54718 AU
morning max el	12435 Dec 06 18:18	3° ∡ ′53'45	21°51'31	morning rise	12436 Oct 30 11:43	8°M18'16	
asc. node	12435 Dec 14 22:29	13° ₹ ′57′32		direct	12436 Nov 03 21:57	7°M36'04	
	12435 Dec 23 23:34	0°ප		morning max el	12436 Nov 17 06:52	14°ML06'51	23°38'09
morning set	12435 Dec 27 16:16	7° る 35'51			12436 Nov 29 12:03	0° ∡ ¹	
				asc. node	12436 Nov 30 19:27	2° ∡ 11'35	
superior conj	12436 Jan 03 19:33	22° る 43'29	1°29'35	morning set	12436 Dec 11 04:00	22° ×7 22'22	
minimum elong	12436 Jan 03 21:26	22° る 53'18	1°30'18		12436 Dec 14 16:41	0°ಕ	
	12436 Jan 07 07:58	0° ≈					
max. Earth dist.	12436 Jan 07 22:21	1°≈12'52	1.34582 AU	superior conj	12436 Dec 18 01:03	7° る 17'12	
evening rise	12436 Jan 12 04:51	9° ≈ 37'09		minimum elong	12436 Dec 18 01:50		1°38'01
desc. node	12436 Jan 16 23:49	18° ≈ 29'32		max. Earth dist.	12436 Dec 20 18:31	13° පි 08'16	1.33046 AU
	12436 Jan 23 17:30	0° ∀		evening rise	12436 Dec 25 16:57	23° る 19'06	
	12436 Feb 14 21:43	0° Υ			12436 Dec 29 03:09	0° ≈	
evening max el	12436 Feb 16 07:09	1°Υ23'16	26°49'40	desc. node	12437 Jan 02 20:38	8°≈39'54	
retrograde	12436 Feb 29 12:25	8° Υ 47'19			12437 Jan 16 09:19	0° ∀	2702452
evening set	12436 Mar 07 00:10	6° Y 14'34	0.66004.444	evening max el	12437 Jan 28 20:13	14°) 49'15	27°24'52
min. Earth dist.	12436 Mar 11 00:25	2°Υ15'44	0.66004 AU	retrograde	12437 Feb 11 11:40	22°) 14'52	
asc. node	12436 Mar 11 20:09	1°Υ18'39		evening set	12437 Feb 18 07:02	19°) 44'55	0.64222.411
: <i>c</i> :	12436 Mar 12 22:57	30° ₹ ₩ 29° ₩ 52'29	0022122	min. Earth dist.	12437 Feb 22 03:04	16° 光 17'35 13° 光 36'57	0.64322 AU
inferior conj	12436 Mar 13 01:31	29° H 52'29 29° H 54'21	0°23'32 0°23'23	inferior conj	12437 Feb 24 15:38 12437 Feb 24 16:53	13° X 36'5 / 13° X 33'38	
minimum elong morning rise	12436 Mar 13 00:53 12436 Mar 19 02:52	29 K 34 21 24° X 15'22	0 23 23	minimum elong asc. node	12437 Feb 24 16.33 12437 Feb 26 17:34	13 X 33 38 11° X 28'42	0 39 38
direct	12436 Mar 19 02:32 12436 Mar 22 00:01	24 X 13 22 23°¥ 29'43		morning rise	12437 Mar 03 04:42	8°\(\frac{1}{13}\)'33	
morning max el	12436 Mar 28 09:39	25 K 2945 26° X 52'25	18°12'01	direct	12437 Mar 05 04.42 12437 Mar 05 17:14	8 X 13 33 7° ¥ 41'07	
morning max ci	12436 Mar 31 04:59	20 γ (3223	18 12 01	morning max el	12437 Mar 12 02:47	10° X 59'51	17°50'51
desc. node	12436 Apr 14 01:42	20° Υ '51'00		morning max cr	12437 Mar 25 05:45	0° Υ	17 30 31
morning set	12436 Apr 16 12:55	24° Υ 49'10		morning set	12437 Mar 29 03:32	6° Υ 33'38	
morning sec	12436 Apr 19 18:20	0°8		desc. node	12437 Mar 31 22:18	11° Υ 13'45	
	12.5011p1 15 10.20	• •		dese. Hode	12.157 1/101 51 22.10	11 (15)	
superior conj	12436 May 01 18:29	19° 8 00'51	-1°50'29	superior conj	12437 Apr 11 13:35	28° Ƴ 41'27	-1°15'17
minimum elong	12436 May 01 09:24	18° 8 25'17	1°50'21	minimum elong	12437 Apr 11 05:49	28° Y 10′12	
max. Earth dist.	12436 May 03 14:33		1.45746 AU	8	12437 Apr 12 09:10	0°8	
	12436 May 08 19:24	Π°		max. Earth dist.	12437 Apr 16 10:02	6° 8 24'57	1.45177 AU
evening rise	12436 May 17 19:57	14° Ⅱ 02'14		evening rise	12437 Apr 27 09:03	23° 8 26'10	
	12436 May 28 03:39	0ංම			12437 May 01 16:23	$\Pi^{\circ}0$	
greatest brilliancy	12436 May 29 09:24	1° 9 52'50	-0.7m	greatest brilliancy	12437 May 12 09:54	15° Ⅱ 59'36	-0.6m
asc. node	12436 Jun 07 17:33	14° © 58'07			12437 May 22 23:05	0ංම	
evening max el	12436 Jun 10 10:56	18° © 00'13	19°11'59	evening max el	12437 May 24 14:58	1°546'17	20°07'49
retrograde	12436 Jun 17 09:44	21° © 52'36		asc. node	12437 May 25 14:41	2° 5 43'31	
evening set	12436 Jun 20 22:28	20°9540'10		retrograde	12437 Jun 01 08:18	6°9311'44	
inferior conj	12436 Jun 26 09:03	14° 9 51'28	3°09'43	evening set	12437 Jun 05 06:33	4°9542'44	
minimum elong	12436 Jun 26 10:00	14° © 48'24	3°08'45		12437 Jun 09 14:11	30°R Ⅱ	
min. Earth dist.	12436 Jun 27 20:35	12° © 56'28	0.66767 AU	inferior conj	12437 Jun 10 13:40		3°14'10
morning rise	12436 Jul 01 20:57	8°928'18		minimum elong	12437 Jun 10 13:32		3°13'16
direct	12436 Jul 08 00:32	5° 9 47'56		min. Earth dist.	12437 Jun 11 10:51	27° Ⅲ 28'58	0.67928 AU
desc. node	12436 Jul 11 01:49	6° © 21'32		morning rise	12437 Jun 15 20:12	22° II 20'03	
morning max el	12436 Jul 20 15:57	13° 5 21'39	26°01'05	direct	12437 Jun 21 12:36	19° ∏ 49'08	
						220 H 17122	
	12436 Aug 03 03:09	0° Ω		desc. node	12437 Jun 27 23:00	22° Ⅱ 17'32	
	12436 Aug 03 03:09 12436 Aug 22 00:43	0° m/y		desc. node morning max el	12437 Jul 03 01:55	26° Ⅱ 44'56	24°37'48
morning set	12436 Aug 03 03:09 12436 Aug 22 00:43 12436 Aug 25 16:02	0° m/ 6° m/34'37	1.05050 / **		12437 Jul 03 01:55 12437 Jul 06 02:17	26°∏44'56 0°©	24°37'48
morning set max. Earth dist.	12436 Aug 03 03:09 12436 Aug 22 00:43	0° m/ 6° m/34'37	1.35278 AU		12437 Jul 03 01:55	26° Ⅱ 44'56	24°37'48

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max. Earth dist.	12437 Aug 11 10:01	24° Ω 50′13	1.37431 AU	max. Earth dist.	12438 Jul 24 07:53	6° Ω 30′01	1.39763 AU
	12437 Aug 14 05:14	0° m)					
				superior conj	12438 Aug 01 01:40	20° Ω 17'53	-1°05'00
superior conj	12437 Aug 18 08:09	7° m 51'11	-0°30'33	minimum elong	12438 Aug 01 06:21	20° Ω 39'25	1°04'55
minimum elong	12437 Aug 18 10:12	8° mp 01'06		Ç	12438 Aug 06 05:54	0° m	
asc. node	12437 Aug 21 14:50	14° Mp 17'33	0 30 30	asc. node	12438 Aug 08 11:31	4° Mp 16'22	
evening rise	12437 Aug 26 20:27	24° Mp 45'42		evening rise	12438 Aug 10 15:36	8° M) 26'22	
evening rise	•	0° ⊡		evening rise	•	0° ⊡	
	12437 Aug 29 11:52		10020142		12438 Aug 23 00:33		10024142
evening max el	12437 Sep 12 15:16	22° £ 16'42	19°20'43	evening max el	12438 Aug 26 16:32	4° £ 22'33	18°34'43
retrograde	12437 Sep 22 00:38	26° £ 57'57		retrograde	12438 Sep 03 15:56	8° ≏ 23'23	
evening set	12437 Sep 23 21:03	26° ≏ 47'49		evening set	12438 Sep 05 15:31	8° ≏ 09'17	
desc. node	12437 Sep 23 19:59	26° ≏ 48'17		desc. node	12438 Sep 10 17:28	5° ≏ 43'58	
inferior conj	12437 Oct 02 12:05	22° ₽ 39'22	-2°42'16	inferior conj	12438 Sep 13 12:52	3° ≏ 41'06	-0°52'57
minimum elong	12437 Oct 02 05:02	22° ♀ 50'54	2°39'20	minimum elong	12438 Sep 13 10:46	3° ₽ 45′09	0°52'08
min. Earth dist.	12437 Oct 05 01:42	20° ≏ 58'50	0.55736 AU	min. Earth dist.	12438 Sep 16 18:04	1° ≏ 14'16	0.57478 AU
morning rise	12437 Oct 10 10:35	18° ≏ 07'30			12438 Sep 18 12:51	30°R, Mp	
direct	12437 Oct 15 16:53	17° ≏ 04'40		morning rise	12438 Sep 21 02:34	28° m/31'24	
morning max el	12437 Oct 29 17:20	24° ₽ 09'04	25°23'49	direct	12438 Sep 27 01:39	27° m 02'23	
	12437 Nov 04 01:44	0° M			12438 Oct 05 18:38	0∘ ಹ	
asc. node	12437 Nov 17 16:20	21°ML03'06		morning max el	12438 Oct 11 08:59	ە – 4° £ 33'22	26°50'13
use. Hode	12437 Nov 17 10:20	0° √ 7		morning max cr	12438 Oct 29 22:23	0° M	20 30 13
				1-	12438 Nov 04 13:08	10°M22'05	
morning set	12437 Nov 25 15:38	7° ∡ 705′14		asc. node			
	101055 00 10 01	210 3 50110	1000104	morning set	12438 Nov 10 01:25	21°M39'22	
superior conj	12437 Dec 02 10:34	21° х 59'40	1°38'24		12438 Nov 13 21:20	0° ∡ ¹	
minimum elong	12437 Dec 02 10:14	21° ≯ 57'48	1°39'17				
max. Earth dist.	12437 Dec 03 22:01	25° ∡ 14'54	1.31973 AU	superior conj	12438 Nov 16 21:59	6° ≯ ¹44'18	1°33'43
	12437 Dec 06 02:23	0°₹		minimum elong	12438 Nov 16 20:41	6° ₹ 37'01	1°34'26
evening rise	12437 Dec 09 14:17	7° る 23'52		max. Earth dist.	12438 Nov 17 05:56	7° ∡ ¹28'39	1.31388 AU
desc. node	12437 Dec 20 17:34	28° る 30'09		evening rise	12438 Nov 23 18:12	21° ҂¹ 44′03	
	12437 Dec 21 14:42	0° ≈			12438 Nov 27 18:31	8°0	
evening max el	12438 Jan 11 06:51	27° ≈ 45′24	27°31'17	desc. node	12438 Dec 07 14:36	17° る 51'26	
-	12438 Jan 13 19:32	0° ∀			12438 Dec 15 19:14	0° ≈	
retrograde	12438 Jan 25 03:26	5°) €05'34		evening max el	12438 Dec 24 12:09	9° ≈ 57'42	27°04'07
evening set	12438 Feb 01 02:16	2°) (45'58		retrograde	12439 Jan 07 10:34	17° ≈ 09'47	
	12438 Feb 04 13:53	30°R≈		evening set	12439 Jan 14 06:22	15°≈08'43	
min. Earth dist.	12438 Feb 04 20:10	29°≈45'46	0.62356 AU	min. Earth dist.	12439 Jan 18 02:28	12°≈27'28	0.60223 AU
inferior conj	12438 Feb 07 18:30	26°≈59'33		inferior conj	12439 Jan 21 06:33	9°≈49'59	
minimum elong	12438 Feb 07 22:24		1°52'33	minimum elong	12439 Jan 21 13:23	9° ≈ 35'49	
Č			1 32 33	C			3 11 32
asc. node	12438 Feb 13 14:58	22°≈24'44		morning rise	12439 Jan 28 23:19	5°≈03'30	
morning rise	12438 Feb 14 21:07	21°≈52'57		direct	12439 Jan 31 01:25	4°≈46'31	
direct	12438 Feb 17 03:04	21°≈30'00		asc. node	12439 Jan 31 12:19	4°≈47'20	
morning max el	12438 Feb 23 20:17	24°≈54'58	17°47'19	morning max el	12439 Feb 07 10:41	8°≈27'35	18°02'24
	12438 Feb 28 01:12	0° ∀			12439 Feb 21 09:03	0° ∀	
morning set	12438 Mar 11 17:40	19° ¥ 25'30		morning set	12439 Feb 23 00:51	3° ∺ 03'59	
	12438 Mar 17 18:23	0 ° $\mathbf{\gamma}$					
desc. node	12438 Mar 18 18:52	1° Y 45'48		superior conj	12439 Mar 05 01:23	21° 米 20'44	0°04'36
				minimum elong	12439 Mar 05 01:47	21°) 22'27	0°04'47
superior conj	12438 Mar 23 07:25	9° Ƴ 27'34	-0°34'26	behind sun begin	12439 Mar 04 18:14	20°) 49′02	
minimum elong	12438 Mar 23 04:03	9° Ƴ 13'24	0°33'59	behind sun end	12439 Mar 05 09:19	21°) 55'47	
max. Earth dist.	12438 Mar 30 03:19	20° Ƴ 41'12	1.43928 AU	desc. node	12439 Mar 05 15:24	22°) €22'34	
	12438 Apr 05 00:14	8° 0			12439 Mar 10 01:08	0° Υ	
evening rise	12438 Apr 06 22:41	3° 8 00'35		max. Earth dist.	12439 Mar 12 16:03	4° Ƴ 24'41	1.42131 AU
Ü	12438 Apr 25 03:43	0° I I		evening rise	12439 Mar 18 02:12	13° Υ 15'30	
evening max el	12438 May 07 13:17	15° Ⅲ 33'38	21°16'29		12439 Mar 28 23:02	0°8	
asc. node	12438 May 12 11:55	19° Ⅱ 32'38	21 102)	evening max el	12439 Apr 20 06:39	29° 8 21'27	22034103
		20° I 40′01		evening max ci	•	0° Ⅱ	22 34 03
retrograde	12438 May 16 06:55			1-	12439 Apr 20 22:18		
evening set	12438 May 20 15:30	18° Ⅱ 54'44	2007155	asc. node	12439 Apr 29 09:13	5° Ⅱ 08'46	
inferior conj	12438 May 25 21:44	12° Ⅱ 41'18	3°06'55	retrograde	12439 Apr 30 04:00	5° Ⅱ 11'38	
minimum elong	12438 May 25 20:40	12° Ⅱ 45'02	3°05'58	evening set	12439 May 04 23:37	3° Ⅱ 11'06	
min. Earth dist.	12438 May 26 05:19	12° Ⅱ 14'55	0.68621 AU		12439 May 07 22:31	30° ₹ 8	
morning rise	12438 May 31 01:37	6° Ⅱ 25'04		inferior conj	12439 May 10 07:10	26° 8 48'21	2°49'11
direct	12438 Jun 05 05:19	4° Ⅱ 10′10		minimum elong	12439 May 10 05:23	26° 8 54'32	2°48'08
desc. node	12438 Jun 14 20:05	9° Ⅱ 36'38		min. Earth dist.	12439 May 10 01:52	27° 8 06'48	0.68835 AU
morning max el	12438 Jun 15 12:21	10° Ⅱ 16′52	23°08'09	morning rise	12439 May 15 11:03	20° 8 38'09	
	12438 Jul 01 02:41	0ංම		direct	12439 May 20 01:35	18° 8 43'06	
morning set	12438 Jul 20 01:36	29° © 16'56		morning max el	12439 May 29 02:06	23° 8 57'58	21°41'06
- C	12438 Jul 20 11:56	$0^{\circ}\Omega$		desc. node	12439 Jun 01 17:01	27° 8 56'07	
						=	

	12439 Jun 03 09:57	Π °0			12440 Jun 16 06:57	0 \circ \odot	
	12439 Jun 24 11:32	0 \circ		max. Earth dist.	12440 Jun 17 18:13	2° © 20'57	1.43855 AU
morning set	12439 Jun 30 05:49	9° © 00'28					
max. Earth dist.	12439 Jul 06 09:54	19° © 00'25	1.41991 AU	superior conj	12440 Jun 23 23:14	12° © 27'08	-2°02'38
	12439 Jul 12 22:02	0 \circ Ω		minimum elong	12440 Jun 24 05:17	12° © 52'08	2°03'10
					12440 Jul 04 07:38	0 \circ Ω	
superior conj	12439 Jul 14 00:01	1° Ω 52'38		evening rise	12440 Jul 06 13:59	3° Ω 56′07	
minimum elong	12439 Jul 14 06:45	2° Ω 21'58	1°37'34	asc. node	12440 Jul 12 05:05	13° Ω 41'22	
evening rise	12439 Jul 24 23:03	21° Ω 34'00			12440 Jul 23 08:35	0° ™	
asc. node	12439 Jul 26 08:16	24° Ω 06′01		evening max el	12440 Jul 23 15:23	0° m 17'06	18°03'40
	12439 Jul 29 14:26	0° m/		retrograde	12440 Jul 30 02:46	3°M)38'16	
evening max el	12439 Aug 10 01:55		18°09'27	evening set	12440 Aug 01 17:32	3° Mp 04'37	
retrograde	12439 Aug 17 01:54	20° m/39'54			12440 Aug 06 02:18	30°R€	
evening set	12439 Aug 19 08:32	20° m) 17'45	002010.5	inferior conj	12440 Aug 08 04:17	27° Ω 56'53	1°47'31
inferior conj	12439 Aug 26 11:17	15° m 29'05	0°39'05	minimum elong	12440 Aug 08 06:48	27° Ω 50'25	1°46'10
minimum elong	12439 Aug 26 12:32	15° Tp 26'18	0°38'17	min. Earth dist.	12440 Aug 11 03:41	24°Ω55'25	0.61939 AU
desc. node	12439 Aug 28 14:55	13° TD 33'16	0.50640.411	morning rise	12440 Aug 14 17:40	21°Ω51'48	
min. Earth dist.	12439 Aug 29 18:21	12° Tp 33'43	0.59648 AU	desc. node	12440 Aug 14 12:21	22°Ω01'16 19°Ω30'23	
morning rise	12439 Sep 02 13:14	9° Mp 46'26		direct	12440 Aug 21 09:55		27857150
direct	12439 Sep 09 00:06	7° Mp 49'11	27942125	morning max el	12440 Sep 04 13:49	27° Ω 31'27	27-37-30
morning max el	12439 Sep 23 08:16 12439 Oct 05 01:05	15° ™ 39'47 0° ₽	21-43-23		12440 Sep 06 22:30	0° െ 0°ആ	
					12440 Sep 27 18:56	0° <u>≤</u> 20° <u>€</u> 01'20	
asc. node	12439 Oct 22 09:52	0°M00'52		morning set	12440 Oct 08 08:09		
marning gat	12439 Oct 22 09:41 12439 Oct 25 07:37	0°ጤ 6°ጤ00'03		asc. node	12440 Oct 08 06:31	19° £ 52'58 0° I L	
morning set max. Earth dist.	12439 Oct 23 07.37 12439 Oct 31 14:35	19°M40'33	1.31310 AU	may Forth dist	12440 Oct 13 01:38 12440 Oct 13 20:06	1°M40'13	1.31753 AU
max. Earth dist.	12439 Oct 31 14:33	1911164033	1.31310 AU	max. Earth dist.	12440 Oct 13 20:06	1 11640 13	1.31/33 AU
superior conj	12439 Nov 01 09:29	21°M25'43	1°23'20	superior conj	12440 Oct 15 19:10	5°M57'54	1°07'23
minimum elong	12439 Nov 01 07:29	21°M14'38	1°23'46	minimum elong	12440 Oct 15 16:54	5°M45'27	1°07'29
minimum clong	12439 Nov 05 05:58	0° √ 1	1 23 40	evening rise	12440 Oct 22 13:10	20°M47'31	1 0/2)
evening rise	12439 Nov 08 02:30	6° × ⁷ 13'51		evening rise	12440 Oct 26 22:49	20 lid∓731 0° √	
evening rise	12439 Nov 20 09:31	0°る		desc. node	12440 Nov 10 08:57	24° х 16'54	
desc. node	12439 Nov 24 11:44	6° る 32'22		dese. Hode	12440 Nov 15 03:57	0°중	
evening max el	12439 Dec 06 09:38	21° る 17'50	26°02'57	evening max el	12440 Nov 16 23:10	0 3 1° ろ 48'56	24°34'23
retrograde	12439 Dec 20 07:50	28° ろ 21'23	20 0237	retrograde	12440 Nov 30 17:06	8° る 41'11	213123
evening set	12439 Dec 26 15:10	26° る 47'08		evening set	12440 Dec 06 00:29	7° る 38'50	
min. Earth dist.	12439 Dec 30 22:37		0.58101 AU	min. Earth dist.	12440 Dec 11 10:49		0.56252 AU
inferior conj	12440 Jan 03 00:15	21° る 58'45		inferior conj	12440 Dec 13 21:19	3° ප 18'20	
minimum elong	12440 Jan 03 08:47	21° る 43'21	4°29'36	minimum elong	12440 Dec 14 03:37	3° る 08'23	5°31'19
morning rise	12440 Jan 11 05:11	17° る 34'26			12440 Dec 19 22:42	30°₽ ⋌	
direct	12440 Jan 13 07:50	17° る 19'58		morning rise	12440 Dec 22 08:51	29° ∡ 15′01	
asc. node	12440 Jan 18 09:34	18° ろ 49'08		direct	12440 Dec 24 19:02	28° ₹ ′59'07	
morning max el	12440 Jan 21 18:11	21° る 27'14	18°37'46		12440 Dec 29 09:05	8°0	
	12440 Jan 28 08:00	0° ≈		morning max el	12441 Jan 03 14:43	3° る 42'03	19°35'23
morning set	12440 Feb 06 19:57	17° ≈ 14′05		asc. node	12441 Jan 04 06:43	4° る 21'50	
	12440 Feb 13 10:45	0°)			12441 Jan 20 02:17	0° ≈	
				morning set	12441 Jan 20 23:05	1° ≈ 44'20	
superior conj	12440 Feb 15 15:55	4°) 10′33					
minimum elong	12440 Feb 15 18:19	4°) €21'42	0°37'54	superior conj	12441 Jan 28 22:18	17° ≈ 43'35	1°03'43
desc. node	12440 Feb 20 11:59	13°) € 00'47		minimum elong	12441 Jan 29 01:10	17° ≈ 57'40	1°03'59
max. Earth dist.	12440 Feb 22 23:53	17° ∺ 24'58	1.39991 AU	max. Earth dist.	12441 Feb 04 05:55	29° ≈ 46′06	1.37750 AU
evening rise	12440 Feb 27 02:18	24° ¥ 25'22			12441 Feb 04 08:56	0° ∀	
	12440 Mar 01 11:30	0° Y		desc. node	12441 Feb 06 08:36	3° ¥ 36′52	
	12440 Mar 21 18:15	$0^{\circ}S$		evening rise	12441 Feb 07 23:17	6° ∺ 29'12	
evening max el	12440 Apr 01 21:00	13° 8 11'07	23°54'55		12441 Feb 22 09:38	0° Υ	
retrograde	12440 Apr 12 22:07	19° 8 41'02		evening max el	12441 Mar 15 10:32	27° Y ′03'14	25°12'24
asc. node	12440 Apr 15 06:34	19° 8 15'42			12441 Mar 18 16:50	0° 8	
evening set	12440 Apr 18 05:17	17° 8 27'11	0.60500 :==	retrograde	12441 Mar 27 12:05	4° 8 02'56	
min. Earth dist.	12440 Apr 22 22:22			evening set	12441 Apr 02 06:59	1° 8 38'35	
inferior conj	12440 Apr 23 16:02	10° 8 58'23	2°21'28	asc. node	12441 Apr 02 03:56	1° 8 45'00	
minimum elong	12440 Apr 23 13:54	11° 8 05'40	2°20'22		12441 Apr 03 23:52	30°₹ Υ	0.08000 :=:
morning rise	12440 Apr 28 22:33	4° 8 55'22		min. Earth dist.	12441 Apr 06 16:38	26° Y 45'30	0.67909 AU
direct	12440 May 03 00:17	3° 8 21'27	20022120	inferior conj	12441 Apr 07 22:30	25° Y ′08'07	1°43'48
morning max el	12440 May 10 21:59	7° 8 49'47	20~23′29	minimum elong	12441 Apr 07 20:27	25° Y 14'48	1°42'50
desc. node	12440 May 18 13:50	16° 8 59'27		morning rise	12441 Apr 13 10:16	19° ℃ 13'40	
	12440 May 27 17:45	0°Ⅱ 17°Ⅲ47'54		direct	12441 Apr 17 00:04	18° Υ 00'11 21° Υ 52'50	19°19'44
morning set	12440 Jun 08 12:12	17° Ⅱ 47'54		morning max el	12441 Apr 24 01:30	Z1 1 3Z 30	17 17 44

	12441 Apr 30 19:19	0°B			12442 Apr 24 11:53	0°B	
desc. node	12441 May 05 10:35	6° 8 35'04		morning set	12442 Apr 28 07:56	6° 8 02'06	
greatest brilliancy	12441 May 06 20:00	8° 8 38'11	-0.7m		12442 May 13 14:51	0°II	
morning set	12441 May 18 13:33	26° 8 27'50			., .		
C	12441 May 20 20:34	0°II		superior conj	12442 May 14 08:00	1° II 07'01	-2°04'30
max. Earth dist.	12441 May 31 08:57	16° Ⅲ 23'16	1.45152 AU	minimum elong	12442 May 14 01:09	0° Ⅱ 40′13	2°04'52
	•			max. Earth dist.	12442 May 14 04:00	0° Ⅱ 51'22	1.45751 AU
superior conj	12441 Jun 03 23:14	22° I 104'24	-2°13'24	evening rise	12442 May 30 00:33	25° Ⅱ 46'41	
minimum elong	12441 Jun 03 23:47	22° I I06'36	2°14'17		12442 Jun 01 16:28	0 \circ \mathfrak{S}	
	12441 Jun 08 22:06	0 \circ \odot		greatest brilliancy	12442 Jun 07 13:38	9° © 16'59	-0.8m
evening rise	12441 Jun 18 07:27	15° © 21'51		asc. node	12442 Jun 15 22:57	21° 5 °45'14	
	12441 Jun 27 05:06	$0^{\circ}\Omega$		evening max el	12442 Jun 20 17:11	27° 5 26'44	18°46'48
asc. node	12441 Jun 29 01:59	2° Ω 57′02			12442 Jun 23 21:02	$0^{\circ}\Omega$	
evening max el	12441 Jul 07 05:29	13° Ω 46'49	18°16'23	retrograde	12442 Jun 27 08:22	1° Ω 04'31	
retrograde	12441 Jul 13 14:12	17° Ω 09'29		evening set	12442 Jun 30 16:05	0° Ω 01'11	
evening set	12441 Jul 16 13:21	16° Ω 21'45			12442 Jun 30 16:50	30°ષ્ટ્	
inferior conj	12441 Jul 22 11:49	10° Ω 56'47	2°33'37	inferior conj	12442 Jul 06 06:00	24° © 20'31	3°01'02
minimum elong	12441 Jul 22 14:13	10° Ω 49'55	2°32'21	minimum elong	12442 Jul 06 07:34	24° © 15'39	2°59'59
min. Earth dist.	12441 Jul 24 22:24	8° Ω 10′03	0.64085 AU	min. Earth dist.	12442 Jul 08 01:54	22° © 03'57	0.65910 AU
morning rise	12441 Jul 28 13:37	4° Ω 39'12		morning rise	12442 Jul 11 22:16	17° © 57'57	
desc. node	12441 Aug 01 09:44	2° Ω 29'34		direct	12442 Jul 18 07:07	15° © 16'23	
direct	12441 Aug 04 04:48	2° Ω 02'34		desc. node	12442 Jul 19 07:02	15° © 19'56	
morning max el	12441 Aug 17 23:20	10° Ω 03′03	27°35'15	morning max el	12442 Jul 31 10:20	23° © 03'34	26°42'07
	12441 Sep 02 15:00	0° m/y			12442 Aug 06 13:49	0 $^{\circ}\Omega$	
	12441 Sep 20 04:11	0∘ 亚			12442 Aug 26 22:37	0° m	
morning set	12441 Sep 22 00:40	3° △ 37'38		morning set	12442 Sep 05 06:11	16° m 41'30	
asc. node	12441 Sep 25 03:10	9° ₾ 53'53		max. Earth dist.	12442 Sep 09 08:25	24° m/39'14	1.34217 AU
max. Earth dist.	12441 Sep 26 18:58	13° ≏ 20'31	1.32730 AU	asc. node	12442 Sep 11 23:49	29° m 59'19	
	12441 0 20 01 05	200 0 1 5142	0046101		12442 Sep 11 23:57	0∘ ⊽	
superior conj	12441 Sep 30 01:05	20° ₽ 15'43	0°46'01		12442 0 14 00 56	40 0 10/52	0010124
minimum elong	12441 Sep 29 23:06	20° £ 05′03 0° I L	0°45'52	superior conj	12442 Sep 14 00:56	4° £ 12'53	0°19'34
avanina riaa	12441 Oct 04 12:55	5°M20'33		minimum elong evening rise	12442 Sep 13 23:55	4° Ω 07'33 19° Ω 47'46	0°19'20
evening rise	12441 Oct 07 00:24 12441 Oct 20 01:17	3 1162033 0° √ 1		evening rise	12442 Sep 21 10:17 12442 Sep 26 10:32	19 == 4740 0° ™	
desc. node	12441 Oct 28 06:15	10° ₹ ¹44'25		evening max el	12442 Sep 20 10.32 12442 Oct 11 01:31	22°M06'29	21°16'28
evening max el	12441 Oct 29 09:26	10 x 44 23	22°53'00	desc. node	12442 Oct 11 01:31 12442 Oct 15 03:38	25°M28'42	21 10 28
retrograde	12441 Nov 11 13:06	18° × 25'03	22 33 00	retrograde	12442 Oct 23 00:46	28°M03'26	
evening set	12441 Nov 15 11:27	17° х 23 03		evening set	12442 Oct 25 15:55	27°M47'21	
min. Earth dist.	12441 Nov 22 18:14	14° × 312'07	0.54984 AU	inferior conj	12442 Nov 03 15:34	23°M52'59	-5°14'51
inferior conj	12441 Nov 23 23:31	13° × 750'19		minimum elong	12442 Nov 03 06:46	24°M05'22	5°12'26
minimum elong	12441 Nov 23 22:14	13° ∡ 52'08		min. Earth dist.	12442 Nov 04 00:35	23°M40'19	0.54543 AU
morning rise	12441 Dec 02 10:30	10° х 01′26		morning rise	12442 Nov 11 22:19	20°M02'57	
direct	12441 Dec 05 12:30	9° ∡ ′39'18		direct	12442 Nov 15 20:32	19° ™ 29'49	
morning max el	12441 Dec 16 21:16	15° ∡ '03'48	20°55'59	morning max el	12442 Nov 28 14:47	25°M36'50	22°36'01
asc. node	12441 Dec 22 03:49	21° ₹ ′09'48		•	12442 Dec 02 16:31	0° ∡ ¹	
	12441 Dec 27 19:59	ರ∘ರ		asc. node	12442 Dec 09 00:51	8° ∡ ′56′53	
morning set	12442 Jan 05 07:18	16° පි 26'01			12442 Dec 20 04:30	ರ°ರ	
	12442 Jan 11 19:23	0° ≈ ≈		morning set	12442 Dec 20 18:20	1° る 12'57	
superior conj	12442 Jan 12 16:15	1° ≈ 47'32	1°22'12	superior conj	12442 Dec 27 18:23	16° る 13'13	1°33'36
minimum elong	12442 Jan 12 18:38	1° ≈ 59'49	1°22'45	minimum elong	12442 Dec 27 19:49	16° පි 20'48	1°34'23
max. Earth dist.	12442 Jan 17 15:01	11° ≈ 43'44	1.35650 AU	max. Earth dist.	12442 Dec 31 06:53	23° る 36'48	1.33872 AU
evening rise	12442 Jan 21 14:14	19° ≈ 18′08			12443 Jan 03 10:27	0° ≈	
desc. node	12442 Jan 24 05:18	24°≈06'38		evening rise	12443 Jan 04 19:38	2° ≈ 43'24	
	12442 Jan 27 13:37	0° ∀		desc. node	12443 Jan 11 02:06	14° ≈ 25'53	
	12442 Feb 16 11:54	0° Υ			12443 Jan 20 11:00	0° \	
evening max el	12442 Feb 26 00:14	10° Y 52'19	26°19'09	evening max el	12443 Feb 08 13:47	24°) € 29'39	27~07'46
retrograde	12442 Mar 10 20:51	18° Y 10′03		, 1	12443 Feb 15 15:16	0°Υ 1°0054155	
evening set	12442 Mar 17 02:58	15° Y 38'59		retrograde	12443 Feb 21 23:42	1°Υ54'55	
asc. node	12442 Mar 20 01:19	12° Y 45'45	0.66012 411	arranist	12443 Feb 27 18:26	30°₹ 光	
min. Earth dist.	12442 Mar 21 06:25	11° Y 20'48 9° Y 12'19	0.66812 AU 0°55'54	evening set	12443 Feb 28 15:17	29°\(\frac{1}{22}23\) 25°\(\frac{1}{37}36\)	0.65222 417
inferior conj minimum elong	12442 Mar 23 00:28 12442 Mar 22 23:07	9° γ ′12′19 9° γ ′16′28	0°55'54 0°55'21	min. Earth dist. inferior conj	12443 Mar 04 13:33 12443 Mar 06 19:40	25° ₹ 3 / 36 23° ¥ 05'43	0.65332 AU
minimum elong morning rise	12442 Mar 22 23:07 12442 Mar 28 20:07	3° Υ 28'13	0 33 41	minimum elong	12443 Mar 06 19:40 12443 Mar 06 19:44	23° X 05'43 23° X 05'32	
direct	12442 Mar 28 20:07 12442 Mar 31 23:04	2° Υ 33'09		transit middle	12443 Mar 06 19:44 12443 Mar 06 19:44	23° ★ 05'32 23° ★ 05'32	
morning max el	12442 Mai 31 23.04 12442 Apr 07 12:04	6° Υ 02'56	18°31'58	transit begin	12443 Mar 06 19:44 12443 Mar 06 16:45	23° X 13'56	0 04 14
desc. node	12442 Apr 07 12.04 12442 Apr 22 07:15	26° Υ 33'48	10 51 50	transit end	12443 Mar 06 22:43	23 X 13 30 22° X 57'10	
acse. Houc	12 1 12 1 1pt 22 07.13	20 1 22 70		manort ond	12 13 IVIGI OU 22.43	22 /(3/10	

asa nada	12443 Mar 06 22:43	22°) 57'09		ratragrada	12444 Feb 04 19:57	15° ¥ 07'48	
asc. node		17° H 34'15		retrograde		13 X 0/48 12° X 40'51	
morning rise	12443 Mar 13 01:44			evening set	12444 Feb 11 17:33		0.62512 ATT
direct	12443 Mar 15 19:07	16°) ₹54'33	10000150	min. Earth dist.	12444 Feb 15 12:09	9°) €26'06	0.63513 AU
morning max el	12443 Mar 22 03:38	20°) 13′52	18°00'59	inferior conj	12444 Feb 18 05:21	6°) (41′10	
_	12443 Mar 29 16:33	0°Υ		minimum elong	12444 Feb 18 07:38	6° ¥ 35′21	1°09'44
morning set	12443 Apr 09 06:28	16° Y ′59'58		asc. node	12444 Feb 21 20:07	3° ¥ 19′07	
desc. node	12443 Apr 09 03:53	16° Ƴ 49'21		morning rise	12444 Feb 25 00:02	1° ¥ 24'53	
	12443 Apr 17 06:29	9° 8		direct	12444 Feb 27 09:27	0° ¥ 57'00	
				morning max el	12444 Mar 04 21:21	4°) 17′07	17°47'13
superior conj	12443 Apr 23 18:27	10° 8 21'06	-1°36'50	morning set	12444 Mar 21 07:47	29° ∺ 14'47	
minimum elong	12443 Apr 23 09:14	9° 8 44'42	1°36'25		12444 Mar 21 18:19	0 ° Υ	
max. Earth dist.	12443 Apr 27 00:15	15° 8 27'04	1.45596 AU	desc. node	12444 Mar 26 00:28	7° Ƴ 16'19	
	12443 May 06 08:46	$\Pi^{\circ}0$					
evening rise	12443 May 09 20:45	5° Ⅱ 24'05		superior conj	12444 Apr 02 22:30	20° Ƴ 27'54	-0°58'08
greatest brilliancy	12443 May 23 06:56	25° Ⅱ 48'53	-0.7m	minimum elong	12444 Apr 02 16:29	20° Ƴ 03'21	0°57'32
	12443 May 26 03:58	0°ಅ		· ·	12444 Apr 08 20:34	0°B	
asc. node	12443 Jun 02 20:02	9° © 56'56		max. Earth dist.	12444 Apr 08 18:46	29° Y ′52'51	1.44714 AU
evening max el	12443 Jun 04 00:21	11° © 11'25	19°33'50	evening rise	12444 Apr 18 08:00	14° 8 47'00	
retrograde	12443 Jun 11 06:09	15°9516'45	17 33 30	evening rise	12444 Apr 28 09:54	0°II	
evening set	12443 Jun 14 22:53	13°957'08		evening max el	12444 May 17 01:49		20°35'37
inferior conj	12443 Jun 20 07:37	8°902'23	3°13'08	asc. node	12444 May 19 17:12	27° I I20'25	20 33 37
·	12443 Jun 20 08:06		3°12'12		•	27 H 2023 29° H 40'40	
minimum elong		8°500'46		retrograde	12444 May 25 05:07		
min. Earth dist.	12443 Jun 21 12:52	6°925'25	0.67321 AU	evening set	12444 May 29 07:34	28° Ⅱ 04'45	2012120
morning rise	12443 Jun 25 16:55	1° 5 39'46		inferior conj	12444 Jun 03 13:59	21° Ⅱ 57'34	3°12'28
	12443 Jun 28 00:29	30°Ŗ Ⅱ		minimum elong	12444 Jun 03 13:26	21° ∏ 59'28	3°11'33
direct	12443 Jul 01 15:50	29° Ⅱ 02'47		min. Earth dist.	12444 Jun 04 05:18	21° Ⅱ 04'51	0.68274 AU
	12443 Jul 05 14:51	0 \circ \odot		morning rise	12444 Jun 08 19:02	15° Ⅱ 38'13	
desc. node	12443 Jul 06 04:17	0° © 16'14		direct	12444 Jun 14 06:04	13° Ⅱ 13'29	
morning max el	12443 Jul 13 21:02	6° ॐ 22'01	25°27'02	desc. node	12444 Jun 22 01:24	16° Ⅱ 50'52	
	12443 Aug 01 04:32	$0^{\circ}\Omega$		morning max el	12444 Jun 25 07:07	19° Ⅱ 50'12	23°59'54
morning set	12443 Aug 18 20:48	29° Ω 03'06			12444 Jul 03 22:49	0 \circ \odot	
	12443 Aug 19 09:22	0° m ∕			12444 Jul 24 08:18	$0^{\circ}\Omega$	
max. Earth dist.	12443 Aug 22 12:07	5° m 45'21	1.36160 AU	morning set	12444 Jul 30 15:58	10° Ω 31'25	
				max. Earth dist.	12444 Aug 03 09:48	17° Ω 03'10	1.38413 AU
superior conj	12443 Aug 28 15:52	17° m) 41'45	-0°11'19		12444 Aug 10 11:09	o∘ mp	
minimum elong	12443 Aug 28 16:34	17° m) 45'18	0°11'28		Ü	•	
behind sun begin	12443 Aug 28 12:05	17° m) 22'57		superior conj	12444 Aug 10 18:25	0° Mp 34'28	-0°45'08
behind sun end	12443 Aug 28 21:03	18° Mp 07'41		minimum elong	12444 Aug 10 21:34	0° m 49'23	0°45'06
asc. node	12443 Aug 29 20:28	20° mg 05'07		asc. node	12444 Aug 15 17:08	10° m) 07'55	0 13 00
ase. Houe	12443 Sep 03 17:12	0° ರ		evening rise	12444 Aug 19 16:47	17° m ₀ 58'29	
evening rise	12443 Sep 05 16:36	ა _ 4° ჲ 02'34		evening rise	12444 Aug 25 23:52	ე° <u>ი</u>	
evening rise	*				-		10050121
	12443 Sep 20 14:40	0°M	10056140	evening max el	12444 Sep 05 01:27	14° £ 39'58	18°58'31
evening max el	12443 Sep 23 06:34	2°M58'48	19°56'49	retrograde	12444 Sep 13 19:24	19° 2 02'34	
desc. node	12443 Oct 02 01:05	8°M01'20		evening set	12444 Sep 15 16:11	18° 2 51'24	
retrograde	12443 Oct 03 15:11	8°M₀8′20		desc. node	12444 Sep 17 22:33	18° ≏ 10'06	
evening set	12443 Oct 05 13:39	7° M 58′20		inferior conj	12444 Sep 24 00:16	14° ≏ 35'21	
inferior conj	12443 Oct 14 11:40	3°M58'08		minimum elong	12444 Sep 23 19:22	14° ≏ 43'54	
minimum elong	12443 Oct 14 02:18		3°42'03	min. Earth dist.	12444 Sep 26 22:31	12° ≏ 33'08	0.56405 AU
min. Earth dist.	12443 Oct 16 09:15	2°M48'52	0.55042 AU	morning rise	12444 Oct 01 19:24	9° ≏ 47'02	
	12443 Oct 21 21:33	30° Ŗ Ω		direct	12444 Oct 07 09:19	8° ഫ 33'25	
morning rise	12443 Oct 22 13:36	29° ≙ 45'35		morning max el	12444 Oct 21 13:49	15° ≙ 50'54	26°03'48
direct	12443 Oct 27 08:17	28° ≏ 55'42			12444 Nov 02 00:56	0° M	
	12443 Nov 01 16:37	0° M		asc. node	12444 Nov 11 18:40	16°M32'27	
morning max el	12443 Nov 10 01:36	5° M 41'48	24°24'27		12444 Nov 18 10:07	0° ∡ ¹	
asc. node	12443 Nov 25 21:48	27°M28'08		morning set	12444 Nov 18 17:15	0° ∡ 38'11	
	12443 Nov 27 07:19	0° ∡ ¹		•			
morning set	12443 Dec 05 06:13	15° ∡ 58'33		superior conj	12444 Nov 25 12:26	15° ∡ ³35'45	1°37'07
C	12443 Dec 11 16:28	ರ°0		minimum elong	12444 Nov 25 11:40	15° ∡ ³31'26	1°37'57
		. •		max. Earth dist.	12444 Nov 26 11:51	17° × 45'35	1.31661 AU
superior conj	12443 Dec 12 01:52	0° る 51'29	1°38'25		12444 Dec 02 03:20	0°る	
minimum elong	12443 Dec 12 01:32 12443 Dec 12 02:10	0°る53'07		evening rise	12444 Dec 02 12:23	0° ろ 47'33	
max. Earth dist.	12443 Dec 12 02:10 12443 Dec 14 06:20	5° る 36'28	1.32525 AU	desc. node	12444 Dec 02 12:23 12444 Dec 14 19:56	0 04733 24°る07'12	
	12443 Dec 14 06:20 12443 Dec 19 11:58	16° る 35'33	1.34343 AU	acsc. Hour	12444 Dec 14 19:36 12444 Dec 18 10:48	24° ⊙ 0/12 0° ≈	
evening rise				ovonina ma1			27022150
daga (5 - 4 -	12443 Dec 26 10:50	0°≈ 4°a •2°!24		evening max el	12445 Jan 03 10:22	20°≈21'28	27°23'58
desc. node	12443 Dec 28 22:58	4°≈28'24		retrograde	12445 Jan 17 08:28	27°≈39'10	
	12444 Jan 15 01:09	0°){	27021122	evening set	12445 Jan 24 06:46	25°≈26'25	0.61452 ***
evening max el	12444 Jan 22 01:50	7° ∺ 43'16	21~31~23	min. Earth dist.	12445 Jan 28 00:49	22° ≈ 35′24	0.61453 AU

inforior agni	12445 Ion 21 02:19	19° ≈ 50'47	2020110		12445 Dec. 14, 07:25	0° ≈ ≈	
inferior conj minimum elong	12445 Jan 31 02:18 12445 Jan 31 07:27	19 ≈3047 19°≈39'11		evening max el	12445 Dec 14 07:35 12445 Dec 16 12:51	0 ≈ 2°≈13'19	26°42'09
morning rise	12445 Feb 07 11:00	19 ≈3911 14°≈52'28	2 23 36	retrograde	12445 Dec 30 11:39	2 ≈13 19 9°≈21'23	20 42 09
asc. node	12445 Feb 07 17:30	14°≈47'51		evening set	12446 Jan 06 03:13	7°≈31'17	
direct	12445 Feb 09 14:44	14°≈32'38		min. Earth dist.	12446 Jan 10 02:54	4°≈53'55	0.59301 AU
morning max el	12445 Feb 16 13:56	18°≈03'35	17°51'22	inferior conj	12446 Jan 13 07:00	2°≈25'22	
morning max cr	12445 Feb 25 04:11	0° ∀	17 31 22	minimum elong	12446 Jan 13 14:50	2°≈10'01	
morning set	12445 Mar 04 05:49	12° ¥ 27'58		minimum ciong	12446 Jan 16 13:47	30°Rる	3 43 30
desc. node	12445 Mar 12 21:00	27°) 50'29		morning rise	12446 Jan 21 05:20	27° る 47'48	
dose. Hode	12445 Mar 14 02:52	0°Υ		direct	12446 Jan 23 06:58	27° る 32'18	
	12110 11111 11 02.32	V 1		asc. node	12446 Jan 25 14:48	27° る 52'50	
superior conj	12445 Mar 15 02:43	1° Y '42'36	-0°17'21	use. Hous	12446 Jan 29 12:03	0° ≈	
minimum elong	12445 Mar 15 01:08	1° Y 35'49		morning max el	12446 Jan 31 01:51	1° ≈ 23'41	18°14'48
max. Earth dist.	12445 Mar 22 09:35	13° Y ′54'02	1.43212 AU	morning set	12446 Feb 15 18:41	26° ≈ 22'14	
evening rise	12445 Mar 29 02:04	24° Y °35'00		3	12446 Feb 17 16:46	0° ∀	
Č	12445 Apr 01 13:55	0°8					
	12445 Apr 22 10:38	0°II		superior conj	12446 Feb 25 05:59	14°) €01'37	0°19'32
evening max el	12445 Apr 29 21:49	8° ∏ 45'11	21°48'50	minimum elong	12446 Feb 25 07:27	14°) €08'13	0°19'38
asc. node	12445 May 06 14:26	13° Ⅱ 40′24		desc. node	12446 Feb 27 17:33	18° ¥ 28'33	
retrograde	12445 May 09 03:13	14° Ⅱ 10′32		max. Earth dist.	12446 Mar 04 20:19	27° ¥ 20′52	1.41249 AU
evening set	12445 May 13 16:19	12° Ⅱ 18′50			12446 Mar 06 10:06	0° Y	
inferior conj	12445 May 18 22:51	6° Ⅱ 01'14	3°00'40	evening rise	12446 Mar 09 14:05	5° Υ 13'35	
minimum elong	12445 May 18 21:27	6° Ⅱ 06'09	2°59'40	-	12446 Mar 25 18:55	0° 8	
min. Earth dist.	12445 May 19 00:58	5° Ⅱ 53'50	0.68762 AU	evening max el	12446 Apr 12 13:49	22° 8 34'41	23°08'32
	12445 May 23 20:39	30° ₹ 8		retrograde	12446 Apr 22 23:02	28° 8 42'00	
morning rise	12445 May 24 02:23	29° 8 47'12		asc. node	12446 Apr 23 11:45	28° 8 40'42	
direct	12445 May 29 00:31	27° 8 40'12		evening set	12446 Apr 27 23:33	26° 8 35'39	
	12445 Jun 03 20:47	Π $^{\circ}0$		inferior conj	12446 May 03 08:16	20° 8 10'09	2°38'39
morning max el	12445 Jun 07 18:21	3° Ⅱ 25′02	22°30'21	minimum elong	12446 May 03 06:17	20° 8 17'00	2°37'34
desc. node	12445 Jun 08 22:24	4° Ⅱ 37'43		min. Earth dist.	12446 May 02 21:43	20° 8 46'37	0.68788 AU
	12445 Jun 28 00:31	0 \circ \odot		morning rise	12446 May 08 12:56	14° 8 02'56	
morning set	12445 Jul 11 10:54	20° © 53'54		direct	12446 May 12 22:05	12° 8 16'36	
max. Earth dist.	12445 Jul 16 08:22	29° © 01'22	1.40738 AU	morning max el	12446 May 21 10:17	17° 8 10'09	21°06'38
	12445 Jul 16 22:13	0 $^{\circ}$ Ω		desc. node	12446 May 26 19:16	23° 8 17'34	
					12446 May 31 21:07	Π °0	
superior conj	12445 Jul 24 04:21	12° Ω 40′39		morning set	12446 Jun 21 04:37	0° © 09'50	
minimum elong	12445 Jul 24 10:04	13° Ω 06′22	1°19'13		12446 Jun 21 02:06	0∘ ௐ	
asc. node	12445 Aug 02 13:50	0° Mp 03′25		max. Earth dist.	12446 Jun 28 13:16	11° © 55'10	1.42848 AU
	12445 Aug 02 13:06	0° m)					
evening rise	12445 Aug 03 07:26	1° Mp 26'17		superior conj	12446 Jul 05 17:13	23°950'44	
evening max el	12445 Aug 19 06:46	27° m 03'43	18°21'31	minimum elong	12446 Jul 06 00:10	24°\$20'16	1°49'41
	12445 Aug 23 05:47	0° ⊽			12446 Jul 09 07:07	0°N	
retrograde	12445 Aug 26 18:39	0° £ 50'47		evening rise	12446 Jul 17 08:26	14°Ω16'02	
evening set	12445 Aug 28 21:06	0° Ω 33'40		asc. node	12446 Jul 20 10:35	19° Ω 47'41 0° m	
desc. node	12445 Aug 30 10:47	30°₹₩)		avanina may al	12446 Jul 26 08:56	0 ly 10° Mg 00'22	10004120
	12445 Sep 04 20:02	26° Mp 26'08	0011110	evening max el retrograde	12446 Aug 02 18:22		18°04'38
inferior conj minimum elong	12445 Sep 05 10:25 12445 Sep 05 10:00	25° m 56'54 25° m 57'45		evening set	12446 Aug 09 11:31 12446 Aug 11 21:42	13° m 26'48 12° m 59'59	
transit middle	12445 Sep 05 10:00	25° m 57'45		inferior conj	12446 Aug 18 17:11	8° m) 02'42	1°10'59
transit begin	12445 Sep 05 10:00	26° Mp 02'56	0 11 10	minimum elong	12446 Aug 18 19:12	7° my 57'55	1°09'52
transit end	12445 Sep 05 07:27	25° m 52'33		min. Earth dist.	12446 Aug 21 21:46	5° mg 02'20	0.60633 AU
min. Earth dist.	12445 Sep 08 18:02	23° m 15'16	0.58377 AU	desc. node	12446 Aug 22 17:28	4° m) 18'58	0.00033110
morning rise	12445 Sep 12 19:24	20° m/32'22		morning rise	12446 Aug 25 13:49	2° m) 09'27	
direct	12445 Sep 19 00:31	18° mp 50'55		direct	12446 Sep 01 03:50	0° mp 01'21	
morning max el	12445 Oct 03 08:25	26° m 30'55	27°17'16	morning max el	12446 Sep 15 10:30	7° m) 56'30	27°54'19
<i>S</i>	12445 Oct 06 15:51	0∘ ⊽		5	12446 Oct 02 06:26	0∘ ⊽	
	12445 Oct 26 12:37	0° M		asc. node	12446 Oct 16 12:07	25° ≏ 45'56	
asc. node	12445 Oct 29 15:26	6° ™ 00'40		morning set	12446 Oct 18 05:47	29° ≏ 20'16	
morning set	12445 Nov 03 01:44	15°M07'04		-	12446 Oct 18 13:24	0° M	
-	12445 Nov 09 20:34	0° ∡ ¹		max. Earth dist.	12446 Oct 24 04:26	12°M08'26	1.31442 AU
superior conj	12445 Nov 10 00:07	0° √ 19'53	1°30'00	superior conj	12446 Oct 25 11:05	14° M 58'08	1°17'14
minimum elong	12445 Nov 09 22:29	0° √ 10'44	1°30'36	minimum elong	12446 Oct 25 08:55	14° M 46'08	1°17'31
max. Earth dist.	12445 Nov 09 20:27	29°M59'24	1.31295 AU	evening rise	12446 Nov 01 04:00	29°M45'26	
evening rise	12445 Nov 16 18:27	15° ∡ 12'53			12446 Nov 01 06:43	0° ∡ 7	
	12445 Nov 24 02:23	5°0			12446 Nov 17 12:56	0°ප	
desc. node	12445 Dec 01 17:00	13° る 13'02		desc. node	12446 Nov 18 14:11	1° る 32'26	

evening max el	12446 Nov 28 06:56	13° る 12'00	25°27'54		12447 Nov 20 20:54	0°₹	
retrograde	12446 Dec 12 03:35	20°る10'28	23 27 34	retrograde	12447 Nov 20 20:34 12447 Nov 23 07:15	0°る13'30	
evening set	12446 Dec 18 02:23	18° る 49'31		retrograde	12447 Nov 25 18:13	30°R. ₹	
min. Earth dist.	12446 Dec 22 19:07		0.57267 AU	evening set	12447 Nov 28 01:32	29° 🗷 23'59	
inferior conj	12446 Dec 25 16:04	14° ろ 14'09		min. Earth dist.	12447 Dec 04 04:37	26° × ⁷ 24'40	0.55628 AU
minimum elong	12446 Dec 26 00:19	14°る00'10		inferior conj	12447 Dec 06 04:33	25° ×7 12'51	***************************************
morning rise	12447 Jan 03 00:39	9°₹59'05	. 57 05	minimum elong	12447 Dec 06 08:11	25° ×7 07'24	
direct	12447 Jan 05 05:43	9° る 44'24		morning rise	12447 Dec 14 16:45	21° × 717'25	2 .030
asc. node	12447 Jan 12 12:02	12° る 35'08		direct	12447 Dec 17 08:44	20° ₹ ′59'33	
morning max el	12447 Jan 14 05:06		18°59'28	morning max el	12447 Dec 27 20:01	25° × 759'09	20°06'57
	12447 Jan 25 03:33	0° ≈		asc. node	12447 Dec 30 09:10	28° × 742'24	
morning set	12447 Jan 30 17:39	10° ≈ 42'36			12447 Dec 31 10:33	0°ਰ	
morning sec	12117 0411 30 17.37	10 10 12 30		morning set	12448 Jan 14 23:17	25° ප 19'04	
superior conj	12447 Feb 08 03:51	27° ≈ 11'42	0°49'43		12448 Jan 17 06:07	0° ≈	
minimum elong	12447 Feb 08 06:36	27°≈24'48	0°49'52		12110 0011 17 00.07	0	
g	12447 Feb 09 15:20	0° ∀	0 ., 02	superior conj	12448 Jan 22 15:42	10° ≈ 59'55	1°12'26
desc. node	12447 Feb 14 14:09	9° ₩ 06'23		minimum elong	12448 Jan 22 18:27	11° ≈ 13'42	1°12'49
max. Earth dist.	12447 Feb 15 03:26	10° ¥ 05'45	1.39038 AU	max. Earth dist.	12448 Jan 28 10:05	22°≈14'20	1.36828 AU
evening rise	12447 Feb 18 23:18	16°) 47'11	1.57050710	evening rise	12448 Feb 01 04:22	29°≈11'24	1.50020710
e vennig rise	12447 Feb 27 00:10	0° Υ		desc. node	12448 Feb 01 10:50	29°≈40'32	
	12447 Mar 20 07:51	0°8		door. node	12448 Feb 01 15:10	0° ₩	
evening max el	12447 Mar 26 03:37		24°28'41		12448 Feb 20 07:02	0° Υ	
retrograde	12447 Apr 06 15:22	13° 8 09'03	2. 20	evening max el	12448 Mar 07 16:56	20° Υ 16'21	25°42'25
asc. node	12447 Apr 10 09:06	12° 8 06'26		retrograde	12448 Mar 20 03:19	27° Y °25'41	20 .220
evening set	12447 Apr 12 03:43	10° 8 50'09		evening set	12448 Mar 26 03:12	24° Y '57'36	
min. Earth dist.	12447 Apr 16 17:24	5° 8 37'01	0.68358 AU	asc. node	12448 Mar 27 06:29	23° Υ '55'17	
inferior conj	12447 Apr 17 16:20	4° 8 20'14	2°06'42	min. Earth dist.	12448 Mar 30 09:57	20° Υ 19'41	0.67493 AU
minimum elong	12447 Apr 17 14:10	4° 8 27'29	2°05'38	inferior conj	12448 Mar 31 21:07	18° Y ′27'53	1°24'43
g	12447 Apr 21 04:39	30°RY	2 00 00	minimum elong	12448 Mar 31 19:17		1°23'54
morning rise	12447 Apr 23 00:46	28° Y ′20'56		morning rise	12448 Apr 06 11:57	12° Y '37'50	1 23 5 .
direct	12447 Apr 26 21:21	26° Y 55'55		direct	12448 Apr 09 20:54	11° Y '32'42	
	12447 May 03 04:39	0°8		morning max el	12448 Apr 16 16:12	15° Y 14'09	18°57'22
morning max el	12447 May 04 09:25	1° 8 07'09	19°54'33	morning mun vi	12448 Apr 27 22:56	0°8	10 07 22
desc. node	12447 May 13 16:03	12° 8 35'40	15 0.55	desc. node	12448 Apr 29 12:47	2° 8 21'53	
dese. Hode	12447 May 25 12:10	0°II		greatest brilliancy	12448 Apr 30 02:51	3° 8 15'04	-0.8m
morning set	12447 May 31 06:09	8° Ⅱ 46'29		morning set	12448 May 09 12:18	17° 8 42'36	0.0111
max. Earth dist.	12447 Jun 11 00:58		1.44485 AU	morning sec	12448 May 17 10:07	0°II	
man. Barur dibu	12447 Jun 13 18:51	0°95	1	max. Earth dist.	12448 May 23 17:33	9° ∏ 51'03	1.45489 AU
	12.17 van 15 10.51	• •		man. Darin digi.	12110111119 20 17.55	, 20.00	1.10109110
superior conj	12447 Jun 16 06:08	3° 9 59'11	-2°09'21	superior conj	12448 May 25 21:57	13° Ⅱ 16'39	-2°12'10
minimum elong	12447 Jun 16 10:27	4°9516'40	2°10'06	minimum elong	12448 May 25 19:10	13° Ⅱ 05'42	
evening rise	12447 Jun 29 14:48	26°9515'40			12448 Jun 05 10:21	0ంత	
	12447 Jul 01 19:27	0°N		evening rise	12448 Jun 09 21:59	7°915'01	
asc. node	12447 Jul 07 07:26	9° Ω 15'41		asc. node	12448 Jun 23 04:22	28° © 20'41	
evening max el	12447 Jul 17 08:27	23° Ω 20′16	18°06'50		12448 Jun 24 07:47	$0^{\circ}\Omega$	
retrograde	12447 Jul 23 17:36	26° Ω 40'41		evening max el	12448 Jun 29 21:46	6°Ω54'40	18°27'15
evening set	12447 Jul 26 11:53	26°Ω01'18		retrograde	12448 Jul 06 08:23	10° £ 22'36	
inferior conj	12447 Aug 01 16:54	20° Ω 45'43	2°09'34	evening set	12448 Jul 09 11:01	9° £ 28'32	
minimum elong	12447 Aug 01 19:30	20° Ω 38'44	2°08'13	inferior conj	12448 Jul 15 05:25	3° Ω 56'44	2°47'20
min. Earth dist.	12447 Aug 04 11:06	17° Ω 48'27	0.62874 AU	minimum elong	12448 Jul 15 07:30	3°Ω50'30	2°46'09
morning rise	12447 Aug 08 01:08	14° Ω 34'04		min. Earth dist.	12448 Jul 17 09:53	1° Ω 21′03	0.64896 AU
desc. node	12447 Aug 09 14:51	13° Ω 31'54			12448 Jul 18 14:48	30°Rூ	
direct	12447 Aug 14 17:27	12° Ω 05'18		morning rise		27°536'00	
morning max el					12448 Jul 21 02:49		
morning man vi	•		27°52'36	•	12448 Jul 21 02:49 12448 Jul 26 12:13		
	12447 Aug 14 17.27 12447 Aug 28 18:19 12447 Sep 06 05:35	20° Ω 07'34 0° m	27°52'36	desc. node direct	12448 Jul 26 12:13 12448 Jul 27 15:44	25°\$00'31 24°\$55'52	
	12447 Aug 28 18:19 12447 Sep 06 05:35	20° Ω 07'34 0° m	27°52'36	desc. node	12448 Jul 26 12:13 12448 Jul 27 15:44	25°©00'31 24°©55'52	
morning set	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47	20° Ω 07'34 0° m 0° Ω	27°52'36	desc. node direct	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52	25°©00'31 24°©55'52 0° Ω	27°16'01
morning set	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18	20°₽07'34 0°₽0 0°₽ 13°₽12'42	27°52'36	desc. node	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54	25°\$00'31 24°\$55'52 0°\$\Omega\$ 2°\$\Omega\$53'29	27°16'01
asc. node	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47	20° № 07'34 0° № 0° Ω 13° Ω 12'42 15° Ω 42'57		desc. node direct morning max el	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27	25°\$00'31 24°\$55'52 0°\$\Omega\$ 2°\$\Omega\$53'29 0°\$\Omega\$	27°16'01
•	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18	20°₽07'34 0°₽0 0°₽ 13°₽12'42	27°52'36 1.32106 AU	desc. node direct	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34	25°\$00'31 24°\$55'52 0°\$A 2°\$\Omega\$53'29 0°\$\Omega\$260 \text{my} 36'41	27°16'01
asc. node max. Earth dist.	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50	20° Ω 07'34 0° m 0° Ω 13° Ω 12'42 15° Ω 42'57 24° Ω 02'43	1.32106 AU	desc. node direct morning max el morning set	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54	25°\$00'31 24°\$55'52 0°\$\Omega\$ 2°\$\Omega\$53'29 0°\$\Omega\$ 26°\$\Omega\$36'41 0°\$\Omega\$	
asc. node max. Earth dist. superior conj	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27	20° № 007'34 0° № 0° № 13° № 12'42 15° № 42'57 24° № 02'43 29° № 25'34	1.32106 AU 0°58'59	desc. node direct morning max el morning set max. Earth dist.	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54 12448 Sep 19 02:53	25°\$00'31 24°\$55'52 0°\$\lambda\$ 2°\$\Omega\$53'29 0°\$\mathrm{m}\$26°\$\mathrm{m}\$36'41 0°\$\mathrm{n}\$ 5°\$\mathrm{n}\$33'30	27°16′01 1.33295 AU
asc. node max. Earth dist.	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27 12447 Oct 09 17:14	20° № 007'34 0° № 0° Ω 13° Ω 12'42 15° Ω 42'57 24° Ω 02'43 29° Ω 25'34 29° Ω 13'28	1.32106 AU	desc. node direct morning max el morning set	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54	25°\$00'31 24°\$55'52 0°\$\Omega\$ 2°\$\Omega\$53'29 0°\$\Omega\$ 26°\$\Omega\$36'41 0°\$\Omega\$	
asc. node max. Earth dist. superior conj minimum elong	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27 12447 Oct 09 17:14 12447 Oct 10 01:46	20° № 007'34 0° № 0° Ω 13° Ω 12'42 15° Ω 42'57 24° Ω 02'43 29° Ω 25'34 29° Ω 13'28 0° M	1.32106 AU 0°58'59	desc. node direct morning max el morning set max. Earth dist. asc. node	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Sep 14 15:34 12448 Sep 16 08:54 12448 Sep 19 02:53 12448 Sep 19 05:25	25°\$00'31 24°\$55'52 0°\$\Omega\$ 2°\$\Omega\$53'29 0°\$\Omega\$ 26°\$\Omega\$36'41 0°\$\Omega\$ 5°\$\Omega\$33'30 5°\$\Omega\$46'29	1.33295 AU
asc. node max. Earth dist. superior conj	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27 12447 Oct 09 17:14 12447 Oct 10 01:46 12447 Oct 16 15:12	20° № 007'34 0° № 0° № 12'42 15° № 42'57 24° № 02'43 29° № 25'34 29° № 13'28 0° № 14° № 20'17	1.32106 AU 0°58'59	desc. node direct morning max el morning set max. Earth dist. asc. node superior conj	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54 12448 Sep 19 02:53 12448 Sep 19 05:25	25°©00'31 24°©55'52 0°Ω 2°Ω53'29 0°M 26°M36'41 0°Ω 5°Ω33'30 5°Ω46'29	1.33295 AU 0°35'25
asc. node max. Earth dist. superior conj minimum elong evening rise	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27 12447 Oct 09 17:14 12447 Oct 10 01:46 12447 Oct 16 15:12 12447 Oct 24 08:44	20° № 07'34 0° № 0° Ω 13° Ω 12'42 15° Ω 42'57 24° Ω 02'43 29° Ω 25'34 29° Ω 13'28 0° № 14° № 20'17 0° 🗷	1.32106 AU 0°58'59	desc. node direct morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54 12448 Sep 19 02:53 12448 Sep 19 05:25 12448 Sep 22 23:05 12448 Sep 22 21:25	25°©00'31 24°©55'52 0°Ω 2°Ω53'29 0°™ 26°™36'41 0°Ω 5°Ω33'30 5°Ω46'29 13°Ω35'30 13°Ω26'39	1.33295 AU
asc. node max. Earth dist. superior conj minimum elong	12447 Aug 28 18:19 12447 Sep 06 05:35 12447 Sep 25 06:47 12447 Oct 02 03:18 12447 Oct 03 08:47 12447 Oct 07 07:50 12447 Oct 09 19:27 12447 Oct 09 17:14 12447 Oct 10 01:46 12447 Oct 16 15:12	20° № 007'34 0° № 0° № 12'42 15° № 42'57 24° № 02'43 29° № 25'34 29° № 13'28 0° № 14° № 20'17	1.32106 AU 0°58'59 0°58'58	desc. node direct morning max el morning set max. Earth dist. asc. node superior conj	12448 Jul 26 12:13 12448 Jul 27 15:44 12448 Aug 07 02:52 12448 Aug 10 04:54 12448 Aug 30 13:27 12448 Sep 14 15:34 12448 Sep 16 08:54 12448 Sep 19 02:53 12448 Sep 19 05:25	25°©00'31 24°©55'52 0°Ω 2°Ω53'29 0°M 26°M36'41 0°Ω 5°Ω33'30 5°Ω46'29	1.33295 AU 0°35'25

	12448 Oct 18 00:09	0° ∡ ¹			12449 Sep 08 02:19	0° ⊽	
evening max el	12448 Oct 21 05:27	3° ∡ 731'11	22°10'29	evening rise	12449 Sep 14 10:42	° – 13° ⊆ 13'52	
desc. node	12448 Oct 22 08:48	4° × ⁷ 35'20	22 102)	evening rise	12449 Sep 23 01:21	0°M	
retrograde	12448 Nov 02 23:17	9° × 750'49		evening max el	12449 Oct 03 02:42	13°ML59'20	20°40'11
evening set	12448 Nov 06 06:53	9° ∡ 126'27		desc. node	12449 Oct 09 06:12	18°M26'50	
min. Earth dist.	12448 Nov 14 11:27	5° ∡ ¹48'30	0.54684 AU	retrograde	12449 Oct 14 10:08	19°MJ36'17	
inferior conj	12448 Nov 15 00:58	5° ∡ ¹29'29	-5°44'09	evening set	12449 Oct 16 16:02	19°M23'59	
minimum elong	12448 Nov 14 19:58	5° х 36′32	5°42'53	inferior conj	12449 Oct 25 16:55	15°M29'07	-4°41'48
morning rise	12448 Nov 23 10:18	1° ∡ ¹42'18		minimum elong	12449 Oct 25 06:55	15°ML43'28	4°38'36
direct	12448 Nov 26 20:23	1° ∡ 16′14		min. Earth dist.	12449 Oct 26 18:39	14°ML52'08	0.54644 AU
morning max el	12448 Dec 08 20:46	6° ∡ 759'33	21°36'34	morning rise	12449 Nov 02 21:39	11°ML31'41	
asc. node	12448 Dec 16 06:14	15° ∡ 757'30		direct	12449 Nov 07 04:52	10°M51'56	
	12448 Dec 24 09:56	0°₹		morning max el	12449 Nov 20 10:16	17°M16'42	23°21'55
morning set	12448 Dec 29 08:56	10° る 03'39			12449 Nov 30 14:33	0° ∡ ¹	
				asc. node	12449 Dec 03 03:14	4° ∡ ¹05'03	
superior conj	12449 Jan 05 13:33	25° ප 14'32		morning set	12449 Dec 13 20:32	24° ₹ ′50′30	
minimum elong	12449 Jan 05 15:34	25° පි 25'05	1°28'31		12449 Dec 16 06:06	0°₹	
	12449 Jan 07 20:44	0° ≈					
max. Earth dist.	12449 Jan 09 21:22	4° ≈ 06′21	1.34846 AU	superior conj	12449 Dec 20 18:14	9° ට 46'23	
evening rise	12449 Jan 14 01:56	12° ≈ 17'17		minimum elong	12449 Dec 20 19:11	9° ප් 51'31	1°37'16
desc. node	12449 Jan 18 07:36	20°≈06'44		max. Earth dist.	12449 Dec 23 16:29	16° පි 01'17	1.33247 AU
	12449 Jan 24 01:15	0° \		evening rise	12449 Dec 28 12:23	25° ප 555'18	
	12449 Feb 14 10:06	0° Υ			12449 Dec 30 14:21	0° ≈	
evening max el	12449 Feb 18 06:37	4° Υ 01'49	26°42'29	desc. node	12450 Jan 05 04:26	10°≈19'49	
retrograde	12449 Mar 03 09:56	11° Υ 24'45		. ,	12450 Jan 17 10:52	0° ∀	27021122
evening set	12449 Mar 09 20:14	8° Υ 52'19	0.66222 ATT	evening max el	12450 Jan 31 19:57	17°) 31'30	27°21'23
min. Earth dist.	12449 Mar 13 21:18	4° Y 48'27 4° Y 29'17	0.66222 AU	retrograde	12450 Feb 14 10:07	24°\(\frac{1}{2}\)57'04 22°\(\frac{1}{2}\)26'21	
asc. node	12449 Mar 14 03:53	2° Y 29'17' 2° Y 28'45	0°32'27	evening set min. Earth dist.	12450 Feb 21 04:36	18° H 54'34	0.64591 AU
inferior conj	12449 Mar 15 20:33 12449 Mar 15 19:42	2 1 28 43 2° Υ 31'17	0°32'10		12450 Feb 25 01:12 12450 Feb 27 12:05	16° ∺ 15'57	
minimum elong	12449 Mar 18 00:44	2 1 31 1 / 30°R 	0 32 10	inferior conj minimum elong	12450 Feb 27 12:03 12450 Feb 27 13:00	16° X 13'29	0°29'42
morning rise	12449 Mar 21 20:20	26° ¥ 49'40		asc. node	12450 Mar 01 01:18	14° H 37'39	0 2942
direct	12449 Mar 24 18:56	26° H 01'42		morning rise	12450 Mar 05 23:15	10° X 50'16	
morning max el	12449 Mar 31 05:14	29°\(\frac{1}{25}\)'59	18°16'39	direct	12450 Mar 08 13:02	10° X 16'01	
morning max ci	12449 Mar 31 18:46	0°Υ	10 1037	morning max el	12450 Mar 14 22:01	13°) (34'32	17°52'56
desc. node	12449 Apr 16 09:27	22° Υ 28'51		morning max er	12450 Mar 26 12:57	0°Υ	17 3230
morning set	12449 Apr 19 18:12	27° Υ 51'36		morning set	12450 Apr 01 04:49	9° Y 24'43	
5 5	12449 Apr 21 02:21	0°8		desc. node	12450 Apr 03 06:04	12° Y 50′02	
	· r				12450 Apr 13 17:46	0°8	
superior conj	12449 May 05 05:15	22° 8 19'03	-1°54'42		1		
minimum elong	12449 May 04 20:32	21° 8 44'55	1°54'43	superior conj	12450 Apr 14 21:40	1° 8 51'44	-1°21'12
max. Earth dist.	12449 May 06 12:58	24° 8 22'59	1.45771 AU	minimum elong	12450 Apr 14 13:23	1° 8 18'35	1°20'36
	12449 May 10 03:21	$\Pi^{\circ}0$		max. Earth dist.	12450 Apr 19 08:52	8° 8 56'52	1.45309 AU
evening rise	12449 May 21 05:14	17° Ⅱ 16'45		evening rise	12450 Apr 30 19:44	26° 8 43'18	
	12449 May 29 09:12	0ංම			12450 May 02 23:10	$\Pi^{\circ}0$	
greatest brilliancy	12449 Jun 01 01:09	4° © 05'33	-0.8m	greatest brilliancy	12450 May 15 16:41	19° Ⅱ 05'14	-0.6m
asc. node	12449 Jun 10 01:24	16° © 55'04			12450 May 23 15:50	0 \circ \odot	
evening max el	12449 Jun 13 07:47	20° © 37'38	19°04'57	evening max el	12450 May 27 12:41	4° 5 23'45	19°58'31
retrograde	12449 Jun 20 04:21	24°525'43		asc. node	12450 May 27 22:31	4°9548'02	
evening set	12449 Jun 23 15:46	23°915'40		retrograde	12450 Jun 04 02:44	8°9543'31	
inferior conj	12449 Jun 29 03:08	17° © 29'07	3°07'52	evening set	12450 Jun 07 23:35	7° © 16'52	
minimum elong	12449 Jun 29 04:14	17° © 25'33	3°06'52	inferior conj	12450 Jun 13 07:02	1°516'50	3°14'16
min. Earth dist.	12449 Jun 30 16:50	15°528'14	0.66562 AU	minimum elong	12450 Jun 13 07:03	1°516'44	3°13'21
morning rise	12449 Jul 04 16:05	11°506'00			12450 Jun 14 05:46	30°RⅡ	
direct	12449 Jul 10 21:10	8°524'58		min. Earth dist.	12450 Jun 14 06:16	29°II58'22	0.67791 AU
desc. node	12449 Jul 13 09:29	8°547'42	26012014	morning rise	12450 Jun 18 14:12	24°II55'32	
morning max el	12449 Jul 23 15:46	16°902'33	26°12'14	direct	12450 Jun 24 08:22	22° Ⅲ 22'51 24° Ⅲ 29'03	
	12449 Aug 04 04:28	0° Ω 0° ™		desc. node	12450 Jun 30 06:40 12450 Jul 06 01:52	24°H29'03 29°H24'48	24°50'48
morning set	12449 Aug 23 10:12 12449 Aug 28 15:14	0°110 9°110 23'50		morning max el	12450 Jul 06 01:32 12450 Jul 06 15:35	29°∏24′48 0°©	44 JU46
max. Earth dist.	12449 Aug 28 15:14 12449 Sep 01 11:34	16° Mp 42'45	1.34990 AU		12450 Jul 06 15:35 12450 Jul 29 00:05	0° U	
asc. node	12449 Sep 01 11.34 12449 Sep 06 02:04	25° m 52'43	1.JT/70 AU	morning set	12450 Jul 29 00.05 12450 Aug 10 22:06	21° Ω 23'37	
ase. Houc	12-т вер 00 02.04	20 III 0243		max. Earth dist.	12450 Aug 10 22.00 12450 Aug 14 11:54	21 δί 23 37 27° Ω 49'44	1.37096 AU
superior conj	12449 Sep 06 19:31	27° m) 21'41	0°06'58	man. Durin dist.	12450 Aug 15 16:09	0° m)	1.5,070 AU
minimum elong	12449 Sep 06 19:08	27° m) 19'43	0°06'45		-2.00.1ug 10 10.07	יעיי י	
behind sun begin	12449 Sep 06 13:39	26° m 51'44	·•	superior conj	12450 Aug 21 05:38	10° m) 36'15	-0°25'26
behind sun end	12449 Sep 07 00:36	27° m) 47'46		minimum elong	12450 Aug 21 07:18	10° Mp 44'26	
	т.	4				4	-

asc. node	12450 Aug 23 22:45	15° m 57'47		minimum elong	12451 Aug 04 05:54	23° Ω 29'55	0°59'43
evening rise	12450 Aug 29 14:43	27° m/21'22			12451 Aug 07 16:48	0° m)	
Č	12450 Aug 30 22:23	0∘ <u>⊽</u>		asc. node	12451 Aug 10 19:25	5° m 57'53	
evening max el	12450 Sep 15 13:52	25° ₽ 12'25	19°29'22	evening rise	12451 Aug 13 11:17	11° m 06'30	
	12450 Sep 24 15:51	0° M		_	12451 Aug 23 23:03	0∘ ⊽	
retrograde	12450 Sep 25 05:03	0°M00'54		evening max el	12451 Aug 29 13:33	7° £ 11'56	18°40'10
	12450 Sep 25 18:22	30° Ŗ Ω		retrograde	12451 Sep 06 17:30	11° ≏ 18'10	
desc. node	12450 Sep 26 03:37	29° ≙ 58'19		evening set	12451 Sep 08 16:08	11° ≙ 05'00	
evening set	12450 Sep 27 01:41	29° ≙ 50'57		desc. node	12451 Sep 13 01:04	9° ≏ 11'38	
inferior conj	12450 Oct 05 18:49	25° ≏ 44'50	-2°59'12	inferior conj	12451 Sep 16 16:20	6° ₽ 39'59	-1°08'41
minimum elong	12450 Oct 05 11:04	25° ≙ 57'17	2°56'02	minimum elong	12451 Sep 16 13:32	6° ≙ 45'13	1°07'33
min. Earth dist.	12450 Oct 08 04:41	24° ≏ 12'18	0.55528 AU	min. Earth dist.	12451 Sep 19 20:10	4° ₽ 19'00	0.57181 AU
morning rise	12450 Oct 13 18:18	21° ≏ 18′25		morning rise	12451 Sep 24 07:31	1° ≏ 35'39	
direct	12450 Oct 18 21:39	20° ₽ 19'15		direct	12451 Sep 30 04:18	0° ≙ 10'47	
morning max el	12450 Nov 01 20:34	27° ≏ 18'56	25°08'58	morning max el	12451 Oct 14 11:16	7° ≏ 38'41	26°39'16
	12450 Nov 04 11:37	0° M.			12451 Oct 31 04:15	0° M	
asc. node	12450 Nov 20 00:09	22°M52'07		asc. node	12451 Nov 06 20:58	12°M07'34	
	12450 Nov 23 17:27	0° ∡ ¹		morning set	12451 Nov 12 18:27	24°M10'36	
morning set	12450 Nov 28 08:17	9° ∡ ³34'50			12451 Nov 15 10:52	0° ∡ ¹	
superior conj	12450 Dec 05 03:17	24° ∡ ¹28'26	1°38'35	superior conj	12451 Nov 19 14:31	9° × 713'09	1°34'48
minimum elong	12450 Dec 05 03:17	24° x 28 28 28 24° x 27'28	1°39'30	minimum elong	12451 Nov 19 14:31 12451 Nov 19 13:20	9° × 1309	1°35'33
max. Earth dist.	12450 Dec 06 19:08	28° × ² 728	1.32101 AU	max. Earth dist.	12451 Nov 20 02:30	10° ×7 19'56	1.31440 AU
max. Lattii dist.	12450 Dec 07 15:49	20×0/17	1.52101 AO	evening rise	12451 Nov 26 11:34	24° x 15'36	1.51440 AC
evening rise	12450 Dec 12 08:31	9° る 57'31		evening rise	12451 Nov 29 06:00	0°る	
evening rise	12450 Dec 22 22:06	0°≈		desc. node	12451 Dec 09 22:19	0 ර 19° ට් 40'11	
desc. node	12450 Dec 23 01:20	0°≈13'57		dese. Hode	12451 Dec 16 16:42	0°≈	
dese. Hode	12451 Jan 13 17:23	0° ∺		evening max el	12451 Dec 27 13:07	12°≈51'55	27°10'20
evening max el	12451 Jan 14 07:02	0° ¥ 32'53	27°32'18	retrograde	12452 Jan 10 11:32	20°≈05'45	27 1020
retrograde	12451 Jan 28 02:55	7°) € 54'04	2, 3210	evening set	12452 Jan 17 08:17	18° ≈ 01'15	
evening set	12451 Feb 04 01:42	5° ¥ 32'15		min. Earth dist.	12452 Jan 21 03:33	15° ≈ 17'56	0.60545 AU
min. Earth dist.	12451 Feb 07 19:40	2°\(\frac{1}{2}\)28'35	0.62668 AU	inferior conj	12452 Jan 24 07:14	12° ≈ 37'58	
	12451 Feb 10 09:29	30°R ≈		minimum elong	12452 Jan 24 13:39	12° ≈ 24'23	2°59'25
inferior conj	12451 Feb 10 16:48	29° ≈ 42'16	-1°42'57	morning rise	12452 Jan 31 21:59	7° ≈ 48'28	
minimum elong	12451 Feb 10 20:16	29° ≈ 33'55		asc. node	12452 Feb 02 19:59	7° ≈ 31'01	
asc. node	12451 Feb 15 22:40	25° ≈ 23'12		direct	12452 Feb 03 00:22	7° ≈ 30'53	
morning rise	12451 Feb 17 17:21	24° ≈ 33'05		morning max el	12452 Feb 10 06:45	11° ≈ 08'56	17°58'54
direct	12451 Feb 20 00:10	24° ≈ 08'56		Ü	12452 Feb 22 18:26	0°) €	
morning max el	12451 Feb 26 15:39	27° ≈ 32'08	17°46'41	morning set	12452 Feb 25 20:44	5°) 39'56	
C	12451 Feb 28 21:02	0° ∀		desc. node	12452 Mar 06 23:12	23° ¥ 57′27	
morning set	12451 Mar 14 15:46	22° ∺ 07'26					
	12451 Mar 19 04:02	0° Y		superior conj	12452 Mar 07 02:17	24° ₩ 11'01	-0°01'01
desc. node	12451 Mar 21 02:39	3° Y 21'01		minimum elong	12452 Mar 07 02:12	24° ∺ 10'40	0°00'49
				behind sun begin	12452 Mar 06 18:12	23°) €35'33	
superior conj	12451 Mar 26 11:46	12° Y 27'12	-0°40'39	behind sun end	12452 Mar 07 10:12	24°) (45′42	
minimum elong	12451 Mar 26 07:43	12° Y 10'18	0°40'08		12452 Mar 10 10:52	$0^{\circ}\Upsilon$	
max. Earth dist.	12451 Apr 02 02:37	23° Y 16'25	1.44153 AU	max. Earth dist.	12452 Mar 14 15:46	7° Ƴ 04'25	1.42424 AU
	12451 Apr 06 08:17	0° 8		evening rise	12452 Mar 20 08:56	16° Y 20'35	
evening rise	12451 Apr 10 08:10	6° 8 13'14			12452 Mar 29 05:11	0° 8	
	12451 Apr 26 07:02	$\Pi^{\circ}0$			12452 Apr 20 08:43	Π °0	
evening max el	12451 May 10 11:45	18° Ⅲ 10′39	21°05'33	evening max el	12452 Apr 22 05:39	1° Ⅱ 58'11	22°22'12
asc. node	12451 May 14 19:42	21° Ⅱ 46'37		asc. node	12452 Apr 30 16:56	7° Ⅱ 34'58	
retrograde	12451 May 19 01:30	23° Ⅱ 10'48		retrograde	12452 May 01 22:56	7° Ⅱ 42'18	
evening set	12451 May 23 08:30	21° Ⅲ 27'50		evening set	12452 May 06 16:49	5° Ⅱ 43'59	
inferior conj	12451 May 28 14:42	15° Ⅱ 15'52	3°08'43		12452 May 11 13:14	30° ₹႘	
minimum elong	12451 May 28 13:45	15° Ⅱ 19'09	3°07'46	inferior conj	12452 May 12 00:02	29° 8 22'24	2°52'32
min. Earth dist.	12451 May 29 00:13	14° ∏ 42'47	0.68546 AU	minimum elong	12452 May 11 22:21	29° 8 28'17	2°51'30
morning rise	12451 Jun 02 18:48	8° Ⅱ 58'47		min. Earth dist.	12452 May 11 20:38	29° 8 34'14	0.68827 AU
direct	12451 Jun 08 00:22	6° ∐ 41'21		morning rise	12452 May 17 03:44	23° 8 11'06	
desc. node	12451 Jun 17 03:44	11° I I37'10		direct	12452 May 21 20:11	21° 8 12'55	
morning max el	12451 Jun 18 12:10	12° Ⅱ 55'59	23°21'32	morning max el	12452 May 31 01:11	26° 8 35'42	21°53'36
	12451 Jul 02 05:47	0°®		desc. node	12452 Jun 03 00:42	29° 8 48'53	
	12451 Jul 21 20:39	$0^{\circ}\Omega$			12452 Jun 03 04:33	Π°	
morning set	12451 Jul 23 07:22	2° Ω 24'36			12452 Jun 24 18:13	0°9	
max. Earth dist.	12451 Jul 27 09:39	9° € 23'51	1.39414 AU	morning set	12452 Jul 02 15:23	12° © 18'32	
	10451 1 01 01 5	220 01 212	0050140	max. Earth dist.	12452 Jul 08 10:32	21°5945'30	1.41673 AU
superior conj	12451 Aug 04 01:37	23° Ω 10′04	-u~59'49		12452 Jul 13 07:32	0 ° Ω	

superior conj	12452 Jul 16 03:05	4° Ω 53'27	-1°32'55	minimum elong	12453 Jun 27 12:19	16° © 04'07	2°00'02
minimum elong	12452 Jul 16 09:38	5° Ω 22'10	1°32'55	-	12453 Jul 05 16:40	$0^{\circ}\Omega$	
evening rise	12452 Jul 26 20:45	24° Ω 20′02		evening rise	12453 Jul 09 14:25	6° Ω 49'35	
asc. node	12452 Jul 27 16:08	25° Ω 49'26		asc. node	12453 Jul 14 12:55	15° Ω 27'19	
	12452 Jul 29 22:45	0° m)			12453 Jul 23 20:14	0° m/p	
evening max el	12452 Aug 11 22:01	19° m 51'02	18°11'57	evening max el	12453 Jul 26 11:10	2° m 58'56	18°03'23
retrograde	12452 Aug 19 00:47	23° m) 27'49		retrograde	12453 Aug 01 23:40	6° m) 20'53	
evening set	12452 Aug 21 06:15	23° m) 07'08		evening set	12453 Aug 04 13:17	5° m) 49'04	
inferior conj	12452 Aug 28 11:41	18° Mp 21'36	0°26'34	inferior conj	12453 Aug 11 02:11	0° Mp 44'04	1°38'35
minimum elong	12452 Aug 28 12:34	18° m) 19'41	0°25'58	minimum elong	12453 Aug 11 04:38		1°37'17
desc. node	12452 Aug 29 22:31	17° mg 05'01	0 23 36	minimum clong	12453 Aug 11 19:40	30°RΩ	1 3/1/
min. Earth dist.	12452 Aug 31 19:16	15° m/29'00	0.59314 AU	min. Earth dist.	12453 Aug 11 13:40 12453 Aug 14 03:09	27°Ω42'13	0.61605 AU
morning rise	12452 Sep 04 15:29	13 m/2900 12° m/43'16	0.39314 AU	desc. node	12453 Aug 14 03:09 12453 Aug 16 19:58	$25^{\circ}\Omega 20'58$	0.01003 AU
direct	12452 Sep 04 15.29 12452 Sep 11 01:04	12 11/43 10 10° 11/49'53			•	$23^{\circ} \Omega 20^{\circ} 38$ $24^{\circ} \Omega 41'48$	
			27927150	morning rise	12453 Aug 17 17:26		
morning max el	12452 Sep 25 09:21	18° ™ 38'15 0° Ω	21-31-30	direct	12453 Aug 24 09:24	22° Ω 23'31	
	12452 Oct 04 23:21				12453 Sep 07 04:36	0° Mp	27050105
	12452 Oct 22 20:53	0°M,		morning max el	12453 Sep 07 14:02	0° m/23'15	27°58'05
asc. node	12452 Oct 23 17:43	1°M43'50		4	12453 Sep 29 02:14	0° ⊽	
morning set	12452 Oct 27 01:16	8°M33'25		asc. node	12453 Oct 10 14:25	21° ≏ 34'31	
max. Earth dist.	12452 Nov 02 11:09	22°M31'56	1.31288 AU	morning set	12453 Oct 11 02:49	22° ≏ 38'08	
					12453 Oct 14 14:46	0° M ₊	
superior conj	12452 Nov 03 02:07	23°M55'21	1°25'16	max. Earth dist.	12453 Oct 16 17:25	4°M34'26	1.31656 AU
minimum elong	12452 Nov 03 00:12	23°M44'43	1°25'45				
	12452 Nov 05 19:34	0° ∡ ⊓		superior conj	12453 Oct 18 12:13	8°M29'37	1°10'10
evening rise	12452 Nov 09 19:19	8° ∡ ¹44'13		minimum elong	12453 Oct 18 09:58	8° ጤ 17'12	1°10'19
	12452 Nov 20 15:37	0°ಕ		evening rise	12453 Oct 25 05:48	23°M18'06	
desc. node	12452 Nov 25 19:25	8° る 27'52			12453 Oct 28 09:55	0° ∡ ¹	
evening max el	12452 Dec 08 11:54	24° る 20'04	26°14'04	desc. node	12453 Nov 12 16:38	26° ∡ ¹22'24	
	12452 Dec 16 10:12	0° ≈			12453 Nov 15 12:26	0°₹	
retrograde	12452 Dec 22 10:30	1° ≈ 25′03		evening max el	12453 Nov 20 02:40	4° る 58'35	24°48'52
	12452 Dec 28 09:05	30°Ŗ₹		retrograde	12453 Dec 03 21:33	11° る 52'25	
evening set	12452 Dec 28 20:14	29° る 46'33		evening set	12453 Dec 09 09:15	10° る 45'22	
min. Earth dist.	12453 Jan 02 01:13	27° る 10'43	0.58402 AU	min. Earth dist.	12453 Dec 14 14:30	7° る 59'59	0.56496 AU
inferior conj	12453 Jan 05 03:51	24° る 53'33	-4°21'45	inferior conj	12453 Dec 17 04:06	6° පි 21'21	-5°26'04
minimum elong	12453 Jan 05 12:18	24° る 37'58	4°18'26	minimum elong	12453 Dec 17 11:06	6° ප 10'06	5°24'00
morning rise	12453 Jan 13 07:14	20°る25'49		morning rise	12453 Dec 25 15:06	2° ප 15'01	
direct	12453 Jan 15 09:20	20° ප 11'15		direct	12453 Dec 27 23:41	1° る 59'33	
asc. node	12453 Jan 19 17:16	21° る 17'48		morning max el	12454 Jan 06 13:56	6° ප 36'45	19°25'21
morning max el	12453 Jan 23 15:31	24° ප 14'16	18°31'08	asc. node	12454 Jan 06 14:29	6° ප 38'05	
C	12453 Jan 28 08:53	0° ≈ ≈			12454 Jan 21 13:13	0° ≈	
morning set	12453 Feb 08 14:21	19° ≈ 46'23		morning set	12454 Jan 23 16:34	4° ≈ 14'58	
S	12453 Feb 13 22:05	0°) €		, and the second			
				superior conj	12454 Jan 31 18:25	20° ≈ 21'19	1°00'15
superior conj	12453 Feb 17 14:02	6° ¥ 53'21	0°33'13	minimum elong	12454 Jan 31 21:17	20° ≈ 35'19	1°00'29
minimum elong	12453 Feb 17 16:14	7°) €03'31	0°33'18		12454 Feb 05 19:54	0° ∀	
desc. node	12453 Feb 21 19:46	14°) 35'53		max. Earth dist.	12454 Feb 07 06:29		1.38082 AU
max. Earth dist.	12453 Feb 25 00:08	20° ₩ 11'15	1.40321 AU	desc. node	12454 Feb 08 16:24	5°) 12'53	1.50002110
evening rise	12453 Mar 01 05:53	27°) 22'37	1.10021110	evening rise	12454 Feb 11 00:00	9° ¥ 19'37	
o vonnig rise	12453 Mar 02 20:01	0° Υ		evening rise	12454 Feb 23 15:26	0° Υ	
	12453 Mar 22 19:30	0°8		evening max el	12454 Mar 18 10:04	29° Ƴ 40'47	25°01'19
evening max el	12453 Apr 04 20:23	15° 8 48'06	23°43'00	evening max er	12454 Mar 18 17:56	0°8	25 01 17
retrograde	12453 Apr 15 17:33	22° 8 12'30	23 43 00	retrograde	12454 Mar 30 08:08	6° 8 36'22	
asc. node	12453 Apr 17 14:15	21° 8 56'33		asc. node	12454 Apr 04 11:37	4° 8 41'06	
evening set	12453 Apr 20 22:56	20° 8 00'38		evening set	12454 Apr 05 01:21	4° 8 13'23	
min. Earth dist.	•	14° 8 26'39	0.68654 AU	evening set		4 O13 23 30°RΥ	
	12453 Apr 25 17:18	13° 8 32'32		min Forth dist	12454 Apr 08 22:08	30 K 1 29° Υ 15'06	0.68043 AU
inferior conj	12453 Apr 26 09:07			min. Earth dist.	12454 Apr 09 12:03	29 γ 13 00 27° Υ 43'00	1°50'12
minimum elong	12453 Apr 26 07:00	13° 8 39'46	4 43 1 4	inferior conj	12454 Apr 10 16:05		
morning rise	12453 May 01 15:04	7° 8 28'18		minimum elong	12454 Apr 10 13:59	27° Y 49'53	1°49'12
direct	12453 May 05 18:42	5° 8 51'07	2002412	morning rise	12454 Apr 16 02:54	21° Y 47'12	
morning max el	12453 May 13 19:57	10° 8 25'45	20~34'12	direct	12454 Apr 19 18:28	20° Y 30'42	10000110
desc. node	12453 May 20 21:33	18° 8 46'37		morning max el	12454 Apr 26 22:21		19°28'13
	12453 May 28 22:21	0°II			12454 May 01 17:52	0°8	
morning set	12453 Jun 12 00:14	21° Ⅱ 11'58		desc. node	12454 May 07 18:21	8° 8 18'15	
	12453 Jun 17 14:58	0°9		greatest brilliancy	12454 May 09 15:02	11° 8 01'29	-0.7m
max. Earth dist.	12453 Jun 20 17:49	4° 9 58'58	1.43610 AU	morning set	12454 May 22 00:54	29° 8 49'08	
					12454 May 22 03:44	Π °0	
superior conj	12453 Jun 27 05:53	15° © 37'20	-1°59'35	max. Earth dist.	12454 Jun 03 07:58	18° Ⅱ 57'02	1.45007 AU

superior conj	12454 Jun 07 09:04	25° Ⅲ 22'12	-2°12'57	evening rise	12455 Jun 02 08:08	28° ∏ 58′20	
minimum elong	12454 Jun 07 10:44	25° Ⅲ 28'52	2°13'49	Č	12455 Jun 02 23:37	0ಂಣ	
-	12454 Jun 10 06:21	0°©		greatest brilliancy	12455 Jun 09 23:29	11°507'41	-0.9m
evening rise	12454 Jun 21 11:22	18°524'16		asc. node	12455 Jun 18 06:45	23°539'17	
	12454 Jun 28 10:47	$0^{\circ}\Omega$			12455 Jun 23 11:32	$0^{\circ}\Omega$	
asc. node	12454 Jul 01 09:47	4° Ω 46′13		evening max el	12455 Jun 23 13:34	0° Ω 05′04	18°41'09
evening max el	12454 Jul 10 01:22	16° Ω 26′12	18°13'21	retrograde	12455 Jun 30 03:18	3° Ω 39'58	
retrograde	12454 Jul 16 09:51	19° Ω 47'47		evening set	12455 Jul 03 09:41	2° Ω 39'03	
evening set	12454 Jul 19 07:46	19° Ω 02'12			12455 Jul 06 11:26	30° ₹ 5	
inferior conj	12454 Jul 25 07:49	13° Ω 39'30	2°27'55	inferior conj	12455 Jul 09 00:39	27°500'32	2°57'57
minimum elong	12454 Jul 25 10:17	13° Ω 32'32	2°26'36	minimum elong	12455 Jul 09 02:21	26° © 55'15	2°56'50
min. Earth dist.	12454 Jul 27 20:24	10° Ω 49'39	0.63783 AU	min. Earth dist.	12455 Jul 10 22:44	24° © 38'43	0.65659 AU
morning rise	12454 Jul 31 11:13	7° Ω 23'18		morning rise	12455 Jul 14 18:10	20°538'11	
desc. node	12454 Aug 03 17:22	5° Ω 28'00		direct	12455 Jul 21 04:07	17° © 56'49	
direct	12454 Aug 07 02:53	4° Ω 48'28		desc. node	12455 Jul 21 14:42	17° © 57'30	
morning max el	12454 Aug 20 23:09	12° Ω 49'29	27°40'48	morning max el	12455 Aug 03 10:13	25°5647'11	26°51'43
	12454 Sep 03 17:17	0° m			12455 Aug 07 07:05	0 \circ Ω	
	12454 Sep 21 15:01	0∘ ⊽			12455 Aug 28 06:14	0° m)	
morning set	12454 Sep 24 20:43	6° £ 18'42		morning set	12455 Sep 08 04:07	19° m/28'22	1 220 (1 1 1 1 1
asc. node	12454 Sep 27 11:04	11° £ 34'30	1 20551 431	max. Earth dist.	12455 Sep 12 08:42	27° m/41'14	1.33961 AU
max. Earth dist.	12454 Sep 29 17:36	16° £ 18'40	1.32551 AU	1	12455 Sep 13 12:11	0° ⊽	
	12454 0 + 02 10 51	220 0 50105	0040127	asc. node	12455 Sep 14 07:43	1° ≏ 39'42	
superior conj minimum elong	12454 Oct 02 18:51 12454 Oct 02 16:47	22° £ 50'05 22° £ 38'55	0°49'36 0°49'30	aumorior comi	12455 Cap. 16, 10:47	6° £ 50'57	0022152
minimum eiong	12454 Oct 06 01:58	0°M	0 49 30	superior conj minimum elong	12455 Sep 16 19:47 12455 Sep 16 18:34	6° £ 44'34	0°23'40
evening rise	12454 Oct 00 01:38	7°M51'53		evening rise	12455 Sep 24 03:19	22° £ 20'32	0 23 40
evening rise	12454 Oct 21 03:37	/ IIC31 33 0° ∡ 7		evening rise	12455 Sep 27 20:24	0°M	
desc. node	12454 Oct 30 13:56	13° ∡ 103′22		evening max el	12455 Oct 14 03:25		21°29'59
evening max el	12454 Nov 01 12:52	15° × 03 22	23°08'13	desc. node	12455 Oct 17 11:18	28°M05'17	21 27 37
retrograde	12454 Nov 14 19:20	21° х 40'34	25 00 15	dese. Hode	12455 Oct 20 16:29	0°×7	
evening set	12454 Nov 18 23:03	21°×703'05		retrograde	12455 Oct 26 07:56	1° × 717'46	
min. Earth dist.	12454 Nov 25 22:15	17° х 49'34	0.55125 AU	evening set	12455 Oct 29 02:57	0° ₹ 159'55	
inferior conj	12454 Nov 27 08:45	16° ₹ 59'51			12455 Nov 01 07:45	30°RML	
minimum elong	12454 Nov 27 08:51	16° ₹ 59'43	5°52'35	inferior conj	12455 Nov 07 01:30	27°ML05'10	-5°24'27
morning rise	12454 Dec 05 20:14	13° ∡ ¹09'46		minimum elong	12455 Nov 06 17:29		5°22'21
direct	12454 Dec 08 19:30	12° ∡ ¹48'52		min. Earth dist.	12455 Nov 07 04:34	27°ML00'53	0.54548 AU
morning max el	12454 Dec 19 22:39	18° ∡ ¹06'41	20°42'38	morning rise	12455 Nov 15 08:56	23°M16'37	
asc. node	12454 Dec 24 11:38	23° ∡ 15'56		direct	12455 Nov 19 03:56	22°M45'33	
	12454 Dec 29 00:42	5°0		morning max el	12455 Dec 01 17:56	28°M46'27	22°20'13
morning set	12455 Jan 08 00:12	18° ප 555'41			12455 Dec 02 23:49	0° ∡ ¹	
	12455 Jan 13 08:04	0° ≈		asc. node	12455 Dec 11 08:41	10° ₹ ¹55'05	
					12455 Dec 21 16:28	0°ರ	
superior conj	12455 Jan 15 10:55	4° ≈ 21'33	1°19'49	morning set	12455 Dec 23 10:55	3° ප 42'01	
minimum elong	12455 Jan 15 13:25	4° ≈ 34'20	1°20'21				
max. Earth dist.	12455 Jan 20 14:57	14° ≈ 39'35	1.35946 AU	superior conj	12455 Dec 30 12:00	18° る 44'28	1°32'16
evening rise	12455 Jan 24 12:31	22° ≈ 02'25		minimum elong	12455 Dec 30 13:36	18° る 52'54	1°33'03
desc. node	12455 Jan 26 13:06	25° ≈ 43'54		max. Earth dist.	12456 Jan 03 05:30		1.34111 AU
	12455 Jan 28 22:54	0° ∀			12456 Jan 04 22:36	0° ≈	
	12455 Feb 17 11:05	0° Υ		evening rise	12456 Jan 07 15:57	5°≈22'32	
evening max el	12455 Feb 28 23:41	13° Y 30'37	26°10'05	desc. node	12456 Jan 13 09:52	16°≈04'51	
retrograde	12455 Mar 13 17:43	20° Υ 46'20			12456 Jan 21 16:35	0° ∺	05001156
evening set	12455 Mar 19 22:19	18° Y 15'52		evening max el	12456 Feb 11 13:12	27°) €09'46	27°01'56
asc. node	12455 Mar 22 09:02	15°Υ53'36	0.67006 ATT		12456 Feb 14 17:47	0°Υ 4° Ω 24156	
min. Earth dist.	12455 Mar 24 02:34	13° Y 52'42 11° Y 48'16	0.67006 AU 1°03'54	retrograde	12456 Feb 24 21:35	4° Y 34'56 2° Y 02'05	
inferior conj	12455 Mar 25 18:52 12455 Mar 25 17:22	11° Y 48°16	1°03'54 1°03'14	evening set	12456 Mar 02 11:55	2° 1 02 03 30°R ₩	
minimum elong morning rise	12455 Mar 31 13:11	6° Υ 02'39	1 03 14	min. Earth dist.	12456 Mar 04 18:21 12456 Mar 06 10:48	28° ₩ 12'33	0.65573 AU
direct	12455 Apr 03 17:42	5° Υ 05'02		asc. node	12456 Mar 08 06:27	26°\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\	0.03373 AO
morning max el	12455 Apr 10 08:01	8° Υ 37'16	18°38'02	inferior conj	12456 Mar 08 15:14	25°\(\frac{1}{43}\)'23	0°07'05
desc. node	12455 Apr 24 15:03	28° Υ 13'59	10 30 02	minimum elong	12456 Mar 08 15:01	25°\(\frac{43}{25}\)	0°07'09
acsc. Houc	12455 Apr 25 18:22	0° 8		transit middle	12456 Mar 08 15:01	25°\(\frac{43}{36}\)	0°07'09
morning set	12455 May 01 15:43	9° 8 12'41		transit begin	12456 Mar 08 12:21	25° H 51'36	5 5, 6,
	12455 May 14 22:44	0°Ⅱ		transit end	12456 Mar 08 17:42	25°\(\frac{1}{36}\)'20	
max. Earth dist.	12455 May 17 02:39		1.45710 AU	morning rise	12456 Mar 14 19:35	20° H 09'58	
	= 11 02.07			direct	12456 Mar 17 14:15	19° ∺ 28'17	
superior conj	12455 May 17 19:13	4° Ⅱ 27'35	-2°07'09	morning max el	12456 Mar 23 23:01	22°) (48'32	18°04'30
minimum elong	12455 May 17 13:18	4° Ⅱ 04'26		<i>C</i>	12456 Mar 29 18:34	0°Υ	•
	J	_					

desc. node	12456 Apr 10 11:40	18° Ƴ 27'11			12457 Mar 23 02:53	0°Υ	
morning set	12456 Apr 11 09:52	19° Y '57'32		morning set	12457 Mar 24 07:33	2° Υ '02'10	
morning sec	12456 Apr 17 14:43	0°8		desc. node	12457 Mar 28 08:15	8° Y 52'48	
superior conj	12456 Apr 26 04:15	13° 8 37'02	-1°41'58	superior conj	12457 Apr 06 05:00	23° Y '34'28	-1°04'20
minimum elong	12456 Apr 25 18:57	13° 8 00'25	1°41'38	minimum elong	12457 Apr 05 22:20	23° Y '07'22	1°03'42
max. Earth dist.	12456 Apr 28 22:43	17° 8 57'49	1.45663 AU	S	12457 Apr 10 04:50	0°8	
	12456 May 06 16:14	$\Pi^{\circ}0$		max. Earth dist.	12457 Apr 11 17:26	2° 8 25'28	1.44887 AU
evening rise	12456 May 12 06:51	8° Ⅱ 40'58		evening rise	12457 Apr 21 18:24	18° 8 03'30	
greatest brilliancy	12456 May 25 02:07	28° Ⅱ 14'45	-0.7m		12457 Apr 29 15:30	$\Pi^{\circ}0$	
	12456 May 26 06:34	0ಂತಾ		evening max el	12457 May 19 23:50	27° Ⅱ 35'56	20°25'36
asc. node	12456 Jun 04 03:48	11° © 57'22		asc. node	12457 May 22 00:56	29° Ⅱ 29'13	
evening max el	12456 Jun 05 21:28	13° 5 49'19	19°25'50		12457 May 22 16:21	0 \circ \odot	
retrograde	12456 Jun 13 00:43	17° 5 49'59		retrograde	12457 May 27 23:34	2° 5 12'29	
evening set	12456 Jun 16 16:00	16° © 32'55		evening set	12457 Jun 01 00:31	0° © 39'03	
inferior conj	12456 Jun 22 01:19	10°9540'14	3°12'10		12457 Jun 01 18:59	30°R∏	
minimum elong	12456 Jun 22 01:58	10° 5 38'05	3°11'13	inferior conj	12457 Jun 06 07:08	24° ∏ 33'45	3°13'16
min. Earth dist.	12456 Jun 23 08:45	8° 9 56'49	0.67137 AU	minimum elong	12457 Jun 06 06:43	24° ∏ 35′08	3°12'22
morning rise	12456 Jun 27 11:28	4° 9 017'15		min. Earth dist.	12457 Jun 07 00:30	23° Ⅱ 34'10	0.68165 AU
direct	12456 Jul 03 12:03	1° 5 38'57		morning rise	12457 Jun 11 12:38	18° Ⅲ 13'45	
desc. node	12456 Jul 07 11:56	2° 5 36'28		direct	12457 Jun 17 01:34	15° ∏ 46'40	
morning max el	12456 Jul 15 21:02	9° 5 03'45	25°39'12	desc. node	12457 Jun 24 09:03	18° Ⅱ 57'54	
	12456 Aug 01 08:27	0 $^{\circ}$ Ω		morning max el	12457 Jun 28 06:59	22° ∏ 30′21	24°13'12
	12456 Aug 19 19:21	0° m			12457 Jul 04 20:31	0 \circ \odot	
morning set	12456 Aug 20 21:13	1° m 56'57			12457 Jul 25 15:49	0 $^{\circ}$ Ω	
max. Earth dist.	12456 Aug 24 13:30	8° m 47'03	1.35844 AU	morning set	12457 Aug 02 19:31	13° Ω 33'39	
				max. Earth dist.	12457 Aug 06 11:27	20° Ω 00′10	1.38071 AU
superior conj	12456 Aug 30 12:12	20° m 24'21			12457 Aug 11 22:04	0° ™	
minimum elong	12456 Aug 30 12:36	20° Mp 26'22	0°06'34				
behind sun begin	12456 Aug 30 06:53	19° m 57'37		superior conj	12457 Aug 13 16:49	3° Tp 22'55	
behind sun end	12456 Aug 30 18:20	20° m 55'09		minimum elong	12457 Aug 13 19:34	3° TD 36'03	0°39'54
asc. node	12456 Aug 31 04:19	21° m/45'33		asc. node	12457 Aug 18 00:58	11° mp 48'55	
	12456 Sep 04 05:06	0° ⊽		evening rise	12457 Aug 22 11:31	20° m/36'11	
evening rise	12456 Sep 07 10:17	6° £ 37'17			12457 Aug 27 07:45	0° 亞	10005140
	12456 Sep 20 07:48	0°M, 50/20	20007124	evening max el	12457 Sep 07 23:18	17° Ω 33'27	19°05'48
evening max el desc. node	12456 Sep 25 06:20	5°M59'38 10°M59'06	20°07'24	retrograde	12457 Sep 16 22:27	22° £ 02'14 21° £ 51'32	
	12456 Oct 03 08:43 12456 Oct 05 21:03	10 IIL3900		evening set desc. node	12457 Sep 18 18:57 12457 Sep 20 06:09	21° £ 3132	
retrograde evening set	12456 Oct 07 20:49	11 IIL 16 23		inferior conj	12457 Sep 20 06.09 12457 Sep 27 05:36	21 2 2843 17° 2 38'18	2011/21
inferior conj	12456 Oct 16 20:03	7°ML07'42	1 °01'16	minimum elong	12457 Sep 27 03:30 12457 Sep 26 23:55	17 = 38 18 17° £ 47'59	
minimum elong	12456 Oct 16 10:18	7°M22'17		min. Earth dist.	12457 Sep 30 01:13	17 = 47 39 15° £ 43'22	0.56159 AU
min. Earth dist.	12456 Oct 18 12:52	6°M06'41	0.54909 AU	morning rise	12457 Oct 05 01:58	13° — 43°22 12° Ω 55'50	0.30137 AC
morning rise	12456 Oct 24 22:43	2°M59'29	0.54707710	direct	12457 Oct 10 13:21	11° Ω 45'59	
direct	12456 Oct 29 14:27	2°M12'24		morning max el	12457 Oct 24 16:33	18° ⊆ 59'07	25°50'19
morning max el	12456 Nov 12 05:10	8°M53'29	24°08'22	moning man vi	12457 Nov 02 23:19	0° ™	20 00 19
asc. node	12456 Nov 27 05:39	29°M20'19		asc. node	12457 Nov 14 02:30	18°M20'06	
	12456 Nov 27 14:38	0° ∡ ⊓			12457 Nov 19 22:31	0° ⊼	
morning set	12456 Dec 06 22:46	18° ∡ ¹27'52		morning set	12457 Nov 21 10:01	3° ∡ ′08′29	
	12456 Dec 12 05:59	ರ°0		•			
				superior conj	12457 Nov 28 05:02	18° ₰ 04'49	1°37'42
superior conj	12456 Dec 13 18:49	3° ට 21'11	1°38'05	minimum elong	12457 Nov 28 04:24	18° ₹ 01'21	1°38'33
minimum elong	12456 Dec 13 19:17	3° る 23'44	1°38'59	max. Earth dist.	12457 Nov 29 08:33	20° х 37′08	1.31758 AU
max. Earth dist.	12456 Dec 16 03:44	8° る 29'03	1.32694 AU		12457 Dec 03 16:07	0° ප	
evening rise	12456 Dec 21 06:49	19° る 11'07		evening rise	12457 Dec 05 06:12	3° る 20'40	
	12456 Dec 26 20:41	0° ≈		desc. node	12457 Dec 17 03:39	25° る 53'08	
desc. node	12456 Dec 30 06:43	6° ≈ 10′13			12457 Dec 19 15:17	0° ≈	
	12457 Jan 14 20:46	0° ∀		evening max el	12458 Jan 06 10:57	23° ≈ 12'39	27°27'19
evening max el	12457 Jan 24 01:36	10° ∺ 27'51	27°29'48		12458 Jan 16 21:50	0° ∀	
retrograde	12457 Feb 06 18:59	17° ¥ 53'12		retrograde	12458 Jan 20 08:40	0° ∺ 31'16	
evening set	12457 Feb 13 15:52	15° ¥ 25′01		_	12458 Jan 23 16:53	30°R≈	
min. Earth dist.	12457 Feb 17 10:53	12° 米 05'58	0.63797 AU	evening set	12458 Jan 27 07:14	28° ≈ 16′01	
inferior conj	12457 Feb 20 02:31	9° ¥ 22'11		min. Earth dist.	12458 Jan 31 01:08	25°≈21'56	0.61769 AU
minimum elong	12457 Feb 20 04:25	9°) 17'16	0°58'54	inferior conj	12458 Feb 03 01:36	22°≈36'27	
asc. node	12457 Feb 23 03:51	6°) €24'52		minimum elong	12458 Feb 03 06:18	22°≈25'39	2°13'44
morning rise	12457 Feb 26 19:12	4°) €03'24		morning rise	12458 Feb 10 08:09	17°≈35'05	
direct	12457 Mar 01 05:38	3°) (34′02	17040100	asc. node	12458 Feb 10 01:14	17°≈40'51	
morning max el	12457 Mar 07 16:35	6° ¥ 53'31	17°48'08	direct	12458 Feb 12 12:35	17° ≈ 14'14	

	12450 7 1 10 00 22	200 10150	15010100		10450 5 1 00 00 04	40 05125	10010101
morning max el	12458 Feb 19 09:32	20°≈42'59	17°49'32	morning max el	12459 Feb 02 22:24		18°10'01
	12458 Feb 26 09:06	0°) (morning set	12459 Feb 18 13:56	28°≈57'08	
morning set	12458 Mar 07 02:56	15°) (08'04			12459 Feb 19 03:19	0°) €	
desc. node	12458 Mar 15 04:48	29°) €26'06			10150 5 1 20 05 10	1.001/ 1015	001.412.0
	12458 Mar 15 12:37	0 ° Υ		superior conj	12459 Feb 28 05:40	16°) (48′56	
		40000040		minimum elong	12459 Feb 28 06:47	16°) ₹53'56	0°14'26
superior conj	12458 Mar 18 05:33	4°Υ38'49		behind sun begin	12459 Feb 28 03:32	16°) (39'19	
minimum elong	12458 Mar 18 03:22	4° Υ 29'29		behind sun end	12459 Feb 28 10:02	17°) €08'32	
max. Earth dist.	12458 Mar 25 09:06	16° Y 31'55	1.43472 AU	desc. node	12459 Mar 02 01:23	20°) €03'46	
evening rise	12458 Apr 01 10:36	27° Y 45'51			12459 Mar 07 19:28	0° Υ	
	12458 Apr 02 21:10	0°8		max. Earth dist.	12459 Mar 07 20:39	0° Υ 05'00	1.41567 AU
	12458 Apr 23 10:15	Π $\circ 0$		evening rise	12459 Mar 12 19:34	8° Y 15'49	
evening max el	12458 May 02 20:39	11° Ⅱ 23'10	21°37'22		12459 Mar 26 23:33	0° 8	
asc. node	12458 May 08 22:10	15° Ⅱ 59'51		evening max el	12459 Apr 15 13:04	25° 8 11'41	22°56'26
retrograde	12458 May 11 21:50	16° Ⅱ 41'42			12459 Apr 21 13:28	Π °0	
evening set	12458 May 16 09:21	14° Ⅱ 52'14		retrograde	12459 Apr 25 18:05	1° Ⅱ 13′00	
inferior conj	12458 May 21 15:45	8° Ⅱ 36′07	3°03'05	asc. node	12459 Apr 25 19:27	1° Ⅱ 12'59	
minimum elong	12458 May 21 14:27	8° Ⅱ 40'37	3°02'07		12459 Apr 29 13:37	30° ₹ 8	
min. Earth dist.	12458 May 21 19:47	8° Ⅲ 22'03	0.68724 AU	evening set	12459 Apr 30 16:55	29° 8 08'34	
morning rise	12458 May 26 19:20	2° Ⅱ 21'18		min. Earth dist.	12459 May 05 16:28	23° 8 14'15	0.68815 AU
direct	12458 May 31 19:28	0° Ⅱ 11'24		inferior conj	12459 May 06 01:12	22° 8 44'00	2°42'36
morning max el	12458 Jun 10 17:50	6° Ⅱ 03'49	22°43'28	minimum elong	12459 May 05 23:17	22° 8 50'37	2°41'33
desc. node	12458 Jun 11 06:05	6° Ⅲ 35′02		morning rise	12459 May 11 05:33	16° 8 35'46	
	12458 Jun 29 05:24	0 \circ \odot		direct	12459 May 15 16:34	14° 8 46'22	
morning set	12458 Jul 14 18:16	24°506'14		morning max el	12459 May 24 08:57	19° 8 47'06	21°18'28
	12458 Jul 18 07:18	$0^{\circ}\Omega$		desc. node	12459 May 29 03:01	25° 8 07'38	
max. Earth dist.	12458 Jul 19 09:44	1° Ω 51'57	1.40403 AU		12459 Jun 01 22:02	$\Pi^{\circ}0$	
					12459 Jun 22 09:33	0°ಅ	
superior conj	12458 Jul 27 05:32	15° Ω 36'46	-1°14'15	morning set	12459 Jun 24 15:31	3° © 31'06	
minimum elong	12458 Jul 27 10:54	16° Ω 01'06		max. Earth dist.	12459 Jul 01 13:42	14° © 37'51	1.42556 AU
	12458 Aug 03 23:20	0° m					
asc. node	12458 Aug 04 21:40	1° m 45'49		superior conj	12459 Jul 08 21:47	26° © 55'18	-1°45'24
evening rise	12458 Aug 06 03:51	4° m 08'53		minimum elong	12459 Jul 09 04:43	27° © 25'04	1°45'32
evening max el	12458 Aug 22 03:20	29° m 51'27	18°25'41	Č	12459 Jul 10 16:37	$0^{\circ}\Omega$	
***************************************	12458 Aug 22 06:48	0∘ ⊽		evening rise	12459 Jul 20 07:12	17° Ω 04'59	
retrograde	12458 Aug 29 18:56	3° £ 42'58		asc. node	12459 Jul 22 18:25	21° Ω 31'56	
evening set	12458 Aug 31 20:23	3° £ 26'58		use. Houe	12459 Jul 27 13:56	0° m)	
desc. node	12458 Sep 07 03:35	29° m 57'48		evening max el	12459 Aug 05 14:15	12° m) 43'37	18°05'56
dese. Hode	12458 Sep 07 02:26	30°R, Mb		retrograde	12459 Aug 12 09:36	16° m) 12'24	10 03 30
inferior conj	12458 Sep 08 12:30	28° m 53'10	-0°25'41	evening set	12459 Aug 14 18:30	15° m) 47'19	
minimum elong	12458 Sep 08 11:31	28° m 55'08		inferior conj	12459 Aug 21 16:27	10° m 52'53	1°00'02
min. Earth dist.	12458 Sep 11 19:32	26° Mp 16'22	0.58057 AU	minimum elong	12459 Aug 21 18:14	10° mp 48'45	0°59'01
morning rise	12458 Sep 15 23:10	23° m/33'46	0.50057110	min. Earth dist.	12459 Aug 24 22:01	7° mp 53'54	0.60285 AU
direct	12458 Sep 22 02:21	21° m 56'42		desc. node	12459 Aug 25 01:03	7° Mp 47'14	0.00203710
morning max el	12458 Oct 06 10:05	29° m 33'30	27°08'34	morning rise	12459 Aug 28 14:57	5° mp 03'08	
morning max or	12458 Oct 06 20:52	0ಂ ರ	27 0031	direct	12459 Sep 04 03:58	2° Mp 58'47	
	12458 Oct 27 21:14	0° M		morning max el	12459 Sep 18 11:16	10° mp 52'26	27°51'21
asc. node	12458 Oct 31 23:17	7°M45'26		morning max or	12459 Oct 03 09:43	0° ⊽	27 3121
morning set	12458 Nov 05 19:00	17°M39'34		asc. node	12459 Oct 18 20:00	27° ≏ 28'28	
morning sec	12458 Nov 11 10:19	0° ⊼ ¹		use. Houe	12459 Oct 20 01:38	0°M	
	124301101 11 10.17	0 X		morning set	12459 Oct 20 01:50	1°M55'24	
superior conj	12458 Nov 12 16:41	2° ₹ 49'28	1°31'28	max. Earth dist.	12459 Oct 27 01:25		1.31386 AU
minimum elong	12458 Nov 12 15:09	2° х 4928 2° х 40'57	1°32'06	max. Earth dist.	12439 Oct 27 01.23	13 1160137	1.51560 AC
max. Earth dist.	12458 Nov 12 17:04	2° x ⁷ 51'39	1.31318 AU	superior conj	12459 Oct 28 03:52	17°M28'46	1010122
		17° х 44'38	1.31316 AU			17 IIC28 40	
evening rise	12458 Nov 19 11:35	1/ x·44 38		minimum elong	12459 Oct 28 01:46	0° √	1°19'53
daga mada	12458 Nov 25 12:06	00 15° る 04'45		arranina rias	12459 Nov 02 19:37	0 x · 2° x 16'10	
desc. node	12458 Dec 04 00:41			evening rise	12459 Nov 03 20:45	2 x・10 10 0°る	
·	12458 Dec 14 17:11	0°≈	26950122		12459 Nov 18 14:01		
evening max el	12458 Dec 19 14:31	5°≈12'03	26°50'33	desc. node	12459 Nov 20 21:50	3° る 31'56	25040120
retrograde	12459 Jan 02 13:08	12°≈21'18		evening max el	12459 Dec 01 09:45	16° る 17'45	25°40'39
evening set	12459 Jan 09 06:25	10°≈27'16	0.50.554 : ==	retrograde	12459 Dec 15 06:57	23°る18'03	
min. Earth dist.	12459 Jan 13 04:41	7°≈48'50	0.59624 AU	evening set	12459 Dec 21 09:03	21°る52'19	0.555
inferior conj	12459 Jan 16 08:57	5°≈16'53		min. Earth dist.	12459 Dec 25 22:09	19°る14'59	0.57553 AU
minimum elong	12459 Jan 16 16:27	5°≈01'52	3°33'28	inferior conj	12459 Dec 28 21:04	17°る12'31	
morning rise	12459 Jan 24 05:23	0° ≈ 36'05		minimum elong	12459 Dec 29 05:31	16° る 57'53	4°49'02
direct	12459 Jan 26 07:07	0° ≈ 20'07		morning rise	12460 Jan 06 04:32	12° ろ 54'20	
asc. node	12459 Jan 27 22:32	0° ≈ 30'34		direct	12460 Jan 08 08:37	12° る 39'48	

aga mada	12460 Ion 14 10:49	1.40=7.50!26		direct	12460 Dec. 10, 14:20	249.702100	
asc. node	12460 Jan 14 19:48 12460 Jan 17 03:14	14°る58'26 16°る55'46	18°51'26	direct	12460 Dec 19 14:20	24° ₹ 03'09 28° ₹ 56'52	19°55'27
morning max el	12460 Jan 26 10:58	0°≈	18 31 20	morning max el	12460 Dec 29 20:12 12460 Dec 30 21:19	28 x・36 32 0°る	19 33 27
morning set	12460 Feb 02 11:38	0 ≈ 13°≈14'03		asc. node	12460 Dec 30 21.19 12460 Dec 31 16:59	0°る53'34	
morning set	12400 Feb 02 11.36	15 ~1405		morning set	12461 Jan 16 16:26	0 033 34 27° る 48'13	
superior conj	12460 Feb 11 01:06	29° ≈ 52'15	0°45'35	morning set	12461 Jan 17 18:20	27 ○ 48 13 0° ≈	
minimum elong	12460 Feb 11 03:45	0° ₩ 04'46	0°45'43		12401 Jan 17 18.20	0 ~	
minimum clong	12460 Feb 11 02:45	0° ₩	0 43 43	superior conj	12461 Jan 24 11:07	13° ≈ 35'13	1°09'26
desc. node	12460 Feb 16 21:59	0 X 10° ¥ 41'44		minimum elong	12461 Jan 24 13:56	13°≈49'12	1°09'48
max. Earth dist.	12460 Feb 18 03:59	12° H 55'09	1.39372 AU	max. Earth dist.	12461 Jan 30 10:14	25°≈07'14	1.37145 AU
evening rise	12460 Feb 22 01:39	19° ¥ 41'07	1.57572710	max. Earth dist.	12461 Feb 02 01:44	0° ₩	1.57145710
evening rise	12460 Feb 28 07:53	0°Υ		desc. node	12461 Feb 02 18:38	1° ∺ 16'25	
	12460 Mar 20 04:34	0°8		evening rise	12461 Feb 03 03:58	1° ¥ 58'16	
evening max el	12460 Mar 28 03:01	9° 8 02'08	24°16'59	evening rise	12461 Feb 20 11:02	0° Υ	
retrograde	12460 Apr 08 11:07	15° 8 41'10	2. 100)	evening max el	12461 Mar 10 16:22	22°Υ′53'20	25°32'11
asc. node	12460 Apr 11 16:48	14° 8 53'51		retrograde	12461 Mar 22 23:52	29° Y ′59'45	
evening set	12460 Apr 13 21:41	13° 8 23'53		evening set	12461 Mar 28 22:00	27° Y '32'53	
min. Earth dist.	12460 Apr 18 12:30	8° 8 05'24	0.68447 AU	asc. node	12461 Mar 29 14:12	26° Y ′56'53	
inferior conj	12460 Apr 19 09:37	6° 8 54'13	2°12'14	min. Earth dist.	12461 Apr 02 05:43	22° Y '49'39	0.67646 AU
minimum elong	12460 Apr 19 07:27	7° 8 01'31	2°11'09	inferior conj	12461 Apr 03 15:03	21° Y ′02'42	1°31'50
morning rise	12460 Apr 24 17:20	0° 8 53'39		minimum elong	12461 Apr 03 13:07	21° Y ′08'53	1°30'55
C	12460 Apr 26 04:26	30° R Υ		morning rise	12461 Apr 09 04:45	15° Ƴ 11'03	
direct	12460 Apr 28 15:40	29° Y ′25'36		direct	12461 Apr 12 15:21	14° Y °03'05	
	12460 May 01 05:55	0°8		morning max el	12461 Apr 19 12:41	17° Ƴ 48'18	19°04'50
morning max el	12460 May 06 07:00	3° 8 42'34	20°04'23		12461 Apr 29 02:34	0°8	
desc. node	12460 May 14 23:52	14° 8 20'51		desc. node	12461 May 01 20:37	4° 8 03'26	
	12460 May 25 18:19	0°II		greatest brilliancy	12461 May 02 15:38	5° 8 14'38	-0.7m
morning set	12460 Jun 02 18:23	12° Ⅱ 10'32		morning set	12461 May 12 22:23	20° 8 59'30	
max. Earth dist.	12460 Jun 13 00:17	28° Ⅱ 12'34	1.44275 AU	Ü	12461 May 18 17:51	0°II	
	12460 Jun 14 03:11	0ං ම		max. Earth dist.	12461 May 26 16:08	12° Ⅲ 22'14	1.45387 AU
					•		
superior conj	12460 Jun 18 14:17	7°512'40	-2°07'18	superior conj	12461 May 29 08:45	16° Ⅲ 36′19	-2°13'01
minimum elong	12460 Jun 18 19:19	7° © 33'15	2°07'58	minimum elong	12461 May 29 07:10	16° Ⅲ 30′04	2°13'53
evening rise	12460 Jul 01 16:42	29° © 12'46			12461 Jun 06 18:30	0 \circ \odot	
	12460 Jul 02 03:42	$0^{\circ}\Omega$		evening rise	12461 Jun 13 03:32	10° © 21'07	
asc. node	12460 Jul 08 15:14	11° £ 02'36			12461 Jun 25 09:08	0 $^{\circ}$ Ω	
evening max el	12460 Jul 19 04:12	26° Ω 00'30	18°05'23	asc. node	12461 Jun 25 12:09	0° Ω 11'18	
retrograde	12460 Jul 25 14:00	29° £ 21′02		evening max el	12461 Jul 02 17:50	9° £ 33′04	18°23'06
evening set	12460 Jul 28 07:01	28° Ω 43'44		retrograde	12461 Jul 09 03:38	12° Ω 58'51	
inferior conj	12460 Aug 03 13:58	23° Ω 30′52	2°02'05	evening set	12461 Jul 12 05:01	12° Ω 07'05	
minimum elong	12460 Aug 03 16:33	23° Ω 24'00	2°00'43	inferior conj	12461 Jul 18 00:47	6° Ω 37'43	2°42'46
min. Earth dist.	12460 Aug 06 10:04	20° Ω 31'41	0.62548 AU	minimum elong	12461 Jul 18 02:59	6° Ω 31'12	2°41'32
morning rise	12460 Aug 09 23:57	17° Ω 21'14		min. Earth dist.	12461 Jul 20 07:26	3° Ω 57'47	0.64620 AU
desc. node	12460 Aug 10 22:30	16° Ω 42'49		morning rise	12461 Jul 23 23:40	0° Ω 17'54	
direct	12460 Aug 16 16:20	14° Ω 54'50			12461 Jul 24 08:43	30° ₹ 5	
morning max el	12460 Aug 30 18:27	22° Ω 57'07	27°55'10	desc. node	12461 Jul 28 19:53	27° 5 49'16	
	12460 Sep 06 00:39	0° m)		direct	12461 Jul 30 13:31	27° © 38'42	
	12460 Sep 25 15:58	0∘ ⊽			12461 Aug 06 11:04	0° Ω	
morning set	12460 Oct 03 22:31	15° £ 51'02		morning max el	12461 Aug 13 04:40	5° Ω 37'46	27°23'19
asc. node	12460 Oct 04 16:41	17° ≙ 23'49			12461 Aug 31 18:48	0° m	
max. Earth dist.	12460 Oct 09 05:40	26° £ 58'16	1.31972 AU	morning set	12461 Sep 17 12:20	29° m 19'12	
	12460 Oct 10 15:11	0° M			12461 Sep 17 20:38	0∘ ⊽	
	101600 . 11 10 16	10M 55150	1000106	asc. node	12461 Sep 21 13:19	7° £ 26'16	
superior conj	12460 Oct 11 12:46	1°M.57'52		max. Earth dist.	12461 Sep 22 01:58	8° ≏ 31'31	1.33083 AU
minimum elong	12460 Oct 11 10:31	1°M45'34	1°02'08		12461.6 25 17.15	160 0 10100	0020110
evening rise	12460 Oct 18 07:49	16°M50'33		superior conj	12461 Sep 25 17:15	16° ♀ 10'29	0°39'18
	12460 Oct 24 17:34	0° ⊀ 7		minimum elong	12461 Sep 25 15:27	16° ♀ 00'55	0°39'08
desc. node	12460 Nov 06 19:04	20° 🖈 58'01	24006145		12461 Oct 02 03:27	0°M.	
evening max el	12460 Nov 11 21:31	26° ∡ '38'03	24°06'45	evening rise	12461 Oct 02 18:51	1°M22'11	
	12460 Nov 15 22:32	0°る			12461 Oct 18 15:26	0° × 7	22025115
retrograde	12460 Nov 25 12:43	3°る26'25		evening max el	12461 Oct 24 08:24	6°×741'08	22°25'15
evening set	12460 Nov 30 11:44	2°る32'29		desc. node	12461 Oct 24 16:24	7°×7'00'23	
t man at the	12460 Dec 05 17:13	30°₹ ⋌ 7	0.55024.433	retrograde	12461 Nov 06 06:04	13° 🗷 05'26	
min. Earth dist.	12460 Dec 06 08:33	29° 🗷 37'17		evening set	12461 Nov 09 18:41	12°×38'08	0.54560 : **
inferior conj	12460 Dec 08 12:29	28° ₹ 18'11		min. Earth dist.	12461 Nov 17 15:38	9°×707'02	0.54768 AU
minimum elong	12460 Dec 08 17:11	28° 🖈 11'01	5°42'13	inferior conj	12461 Nov 18 10:46	8° 🗷 40'02	
morning rise	12460 Dec 17 00:38	24° ∡ ¹20'11		minimum elong	12461 Nov 18 07:02	8° ∡ ¹45′18	5~47/33

	124(1 N 2(20.42	49.750122			12462 0-+ 29 16-26	100 M 52121	4051126
morning rise	12461 Nov 26 20:42	4° 🗷 52'33		minimum elong	12462 Oct 28 16:36	18°M.53'21	4°51'36
direct	12461 Nov 30 03:52	4° ₹ ¹27'58	21021150	min. Earth dist.	12462 Oct 29 22:23	18°M11'00	0.54585 AU
morning max el	12461 Dec 11 22:57	10° ∡ °04'53	21°21'58	morning rise	12462 Nov 06 07:46	14°M45'10	
asc. node	12461 Dec 18 14:05	17° ∡ ¹59'37		direct	12462 Nov 10 11:57	14° M 07'49	
	12461 Dec 25 19:07	0°ಕ		morning max el	12462 Nov 23 13:37	20°M26'28	23°05'48
morning set	12462 Jan 01 01:39	12° る 32'09			12462 Dec 01 14:00	0° ∡ ¹	
				asc. node	12462 Dec 05 11:05	6° ₰ 00'00	
superior conj	12462 Jan 08 07:41	27° る 46'31	1°25'56	morning set	12462 Dec 16 13:04	27° ∡ 18'57	
minimum elong	12462 Jan 08 09:50	27° る 57'44	1°26'35		12462 Dec 17 19:12	0° ろ	
	12462 Jan 09 09:29	0° ≈					
max. Earth dist.	12462 Jan 12 20:41	7° ≈ 01'03	1.35121 AU	superior conj	12462 Dec 23 11:29	12° る 16'04	
evening rise	12462 Jan 16 23:19	14° ≈ 58'47		minimum elong	12462 Dec 23 12:37	12° る 22'07	1°36'22
desc. node	12462 Jan 20 15:20	21° ≈ 43'58		max. Earth dist.	12462 Dec 26 14:42	18° る 55'18	1.33456 AU
	12462 Jan 25 09:26	0° ∀		evening rise	12462 Dec 31 08:01	28° る 32'16	
	12462 Feb 15 02:46	0 ° Υ			12463 Jan 01 01:52	0° ≈	
evening max el	12462 Feb 21 06:06	6° Ƴ 40'31	26°34'42	desc. node	12463 Jan 07 12:06	11° ≈ 59'06	
retrograde	12462 Mar 06 07:15	14° Ƴ 01'51			12463 Jan 18 13:47	0°) €	
evening set	12462 Mar 12 16:05	11° Y 29'53		evening max el	12463 Feb 03 19:35	20°) (13′07	27°17'09
asc. node	12462 Mar 16 11:37	7° Y 39'36		retrograde	12463 Feb 17 08:18	27°) 38′30	
min. Earth dist.	12462 Mar 16 18:00	7° Ƴ 20'57	0.66438 AU	evening set	12463 Feb 24 01:51	25°) €07'03	
inferior conj	12462 Mar 18 15:25	5° Ƴ 05'03	0°41'07	min. Earth dist.	12463 Feb 27 23:01	21°){ 30'47	0.64861 AU
minimum elong	12462 Mar 18 14:22	5° Ƴ 08'12	0°40'43	inferior conj	12463 Mar 02 08:16	18° ¥ 54'20	-0°20'10
S	12462 Mar 23 15:06	30° ₽ ₩		minimum elong	12463 Mar 02 08:51	18° ¥ 52'43	0°19'39
morning rise	12462 Mar 24 13:41	29°) € 24'04		asc. node	12463 Mar 03 09:02	17°) (47'16	
direct	12462 Mar 27 13:47	28°) 33'40		morning rise	12463 Mar 08 17:35	13° ¥ 26'33	
	12462 Mar 31 15:26	0°Υ		direct	12463 Mar 11 08:38	12° ¥ 50′24	
morning max el	12462 Apr 03 00:52	1° Υ ′59'38	18°21'38	morning max el	12463 Mar 17 17:14	16° ¥ 08'54	17°55'21
desc. node	12462 Apr 18 17:17	24° Υ '07'38	10 21 30	morning max cr	12463 Mar 27 19:18	0° Υ	17 33 21
dese. Hode	12462 Apr 22 10:01	0°8		morning set	12463 Apr 04 06:33	12°Υ16'58	
morning set	-	0° 8 56'08		desc. node	12463 Apr 05 13:51	14° Υ 26'38	
morning set	12462 Apr 23 00:08	0 03008		desc. node		0° 8	
aumanian aani	12462 May 09 16:14	25° 8 37'59	1050122		12463 Apr 15 02:23	0.0	
superior conj	12462 May 08 16:14		1°58'42		12462 A 10 06.11	50 00104	1926157
minimum elong	12462 May 08 08:02	25° 8 05'55		superior conj	12463 Apr 18 06:11	5° 8 03'04	
max. Earth dist.	12462 May 09 11:27	26° 8 53'01 0° Ⅱ	1.45785 AU	minimum elong	12463 Apr 17 21:28	4° 8 28'22	
	12462 May 11 11:21			max. Earth dist.	12463 Apr 22 07:38	• •	1.45428 AU
evening rise	12462 May 24 14:08	20° Ⅱ 30'36		evening rise	12463 May 04 06:17	0° Ⅱ 00'02	
	12462 May 30 15:24	0.ee			12463 May 04 06:17	0°П	
greatest brilliancy	12462 Jun 03 15:43	6°513'50	-0.8m	greatest brilliancy	12463 May 18 17:10	21° ∏ 48′28	-0.6m
asc. node	12462 Jun 12 09:08	18°950'42			12463 May 24 13:01	0° ©	
evening max el	12462 Jun 16 04:29	23° © 14'58	18°58'13	asc. node	12463 May 30 06:14	6°\$50'48	
retrograde	12462 Jun 22 22:57	26° © 59'04		evening max el	12463 May 30 10:12	7° © 00'50	19°49'34
evening set	12462 Jun 26 09:05	25° © 51'20		retrograde	12463 Jun 06 21:11	11° © 15'16	
inferior conj	12462 Jul 01 21:17	20° © 06'52	3°05'41	evening set	12463 Jun 10 16:36	9° © 51'01	
minimum elong	12462 Jul 01 22:33	20° © 02'49	3°04'39	inferior conj	12463 Jun 16 00:26	3° © 52'47	3°14'04
min. Earth dist.	12462 Jul 03 13:10	18° © 00'18	0.66349 AU	minimum elong	12463 Jun 16 00:37	3° © 52'07	3°13'10
morning rise	12462 Jul 07 11:21	13° © 43'53		min. Earth dist.	12463 Jun 17 01:44	2° © 27'50	0.67637 AU
direct	12462 Jul 13 17:51	11°902'26			12463 Jun 18 24:00	30°Ŗ Ⅱ	
desc. node	12462 Jul 15 17:11	11°©16'26		morning rise	12463 Jun 21 08:18	27° Ⅱ 30′59	
morning max el	12462 Jul 26 15:31	18° © 43'29	26°23'02	direct	12463 Jun 27 04:10	24° Ⅱ 56'46	
	12462 Aug 05 04:19	0 $^{\circ}$ Ω		desc. node	12463 Jul 02 14:23	26° Ⅱ 42'32	
	12462 Aug 24 19:20	0° m)			12463 Jul 06 21:50	0 \circ	
morning set	12462 Aug 31 14:04	12° Mp 11'53		morning max el	12463 Jul 09 01:51	2° 5 04'53	25°03'41
max. Earth dist.	12462 Sep 04 12:13	19° m 43'07	1.34709 AU		12463 Jul 30 06:05	$0 {\circ} \Omega$	
asc. node	12462 Sep 08 09:56	27° m 31'53		morning set	12463 Aug 13 23:45	24° Ω 19'44	
					12463 Aug 17 02:55	0° m ∕	
superior conj	12462 Sep 09 14:54	0° ჲ 00'18	0°11'33	max. Earth dist.	12463 Aug 17 13:48	0° m 50'10	1.36765 AU
minimum elong	12462 Sep 09 14:16	29° m 57'03	0°11'20				
behind sun begin	12462 Sep 09 10:02	29° m 35'16		superior conj	12463 Aug 24 02:47	13° m 20'16	-0°20'19
behind sun end	12462 Sep 09 18:31	0° ≏ 18'52		minimum elong	12463 Aug 24 04:06	13° m 26'45	0°20'25
	12462 Sep 09 14:51	0∘ ⊽		asc. node	12463 Aug 26 06:33	17° m 37'17	
evening rise	12462 Sep 17 03:55	15° ≏ 45'58		evening rise	12463 Sep 01 08:48	29° m 56'27	
	12462 Sep 24 08:00	0° M ,		-	12463 Sep 01 09:30	0∘ <u>v</u>	
evening max el	12462 Oct 06 03:41	17° M .03'09	20°52'31	evening max el	12463 Sep 18 12:43	28° ≏ 08'45	19°38'29
desc. node	12462 Oct 11 13:47	21°M11'02		<i>C</i>	12463 Sep 20 14:21	0°M	
retrograde	12462 Oct 17 16:46	22°M47'13		retrograde	12463 Sep 28 09:54	3°M04'34	
evening set	12462 Oct 20 01:36	22°M33'48		desc. node	12463 Sep 28 11:14	3°M04'33	
inferior conj	12462 Oct 29 02:21	18°M39'29	-4°54'33	evening set	12463 Sep 30 06:55	2°M54'42	
				-0			

	12462 0 + 07 05 06	2005 0		1 1	12464 9 14 00 42	120 0 27145	
	12463 Oct 07 05:06	30° ₹ Ω	2015157	desc. node	12464 Sep 14 08:42	12° £ 36'45	1004140
inferior conj	12463 Oct 09 01:58	28° £ 50'45		inferior conj	12464 Sep 18 20:19	9° £ 39'26	
minimum elong	12463 Oct 08 17:34	29° ₽ 03'58		minimum elong	12464 Sep 18 16:47		1°23'20
min. Earth dist.	12463 Oct 11 07:47	27° £ 26'18	0.55341 AU	min. Earth dist.	12464 Sep 21 22:30	7° £ 24'39	0.56900 AU
morning rise	12463 Oct 17 02:21	24° ₽ 29'28		morning rise	12464 Sep 26 12:55	4° £ 40'34	
direct	12463 Oct 22 02:43	23° £ 33'43		direct	12464 Oct 02 07:22	3° ≙ 19'40	0.000
	12463 Nov 04 11:36	0°M,	24052145	morning max el	12464 Oct 16 13:42	10° £ 44'13	26°27'30
morning max el	12463 Nov 04 23:54	0°M28'41	24°53'45		12464 Oct 31 08:50	0°M,	
asc. node	12463 Nov 22 07:59	24°M41'22		asc. node	12464 Nov 08 04:48	13°M52'41	
	12463 Nov 25 03:47	0° ∡ ¹		morning set	12464 Nov 14 11:23	26°M40'35	
morning set	12463 Dec 01 00:53	12° ∡ ′03'35			12464 Nov 16 00:20	0° ∡	
superior conj	12463 Dec 07 20:00	26° ∡ 756'36	1°38'39	superior conj	12464 Nov 21 07:04	11° ∡ 741′06	1°35'46
minimum elong	12463 Dec 07 20:00	26° ₹ ¹56'34	1°39'33	minimum elong	12464 Nov 21 06:01	11° ∡ ³35′20	1°36'32
	12463 Dec 09 05:29	0°ಕ		max. Earth dist.	12464 Nov 21 23:00	13° ₹ 09'48	1.31504 AU
max. Earth dist.	12463 Dec 09 16:17	0° る 58'53	1.32237 AU	evening rise	12464 Nov 28 05:02	26° х 46'31	
evening rise	12463 Dec 15 02:51	12° る 30'42	1.5225 / 110	evening rise	12464 Nov 29 18:08	0°ਰ	
e vennig nise	12463 Dec 24 06:27	0°≈		desc. node	12464 Dec 11 05:59	21° පි 26'56	
desc. node	12463 Dec 25 08:59	0 ~ 1° ≈ 56'07		desc. node	12464 Dec 16 16:56	0°≈	
desc. node	12464 Jan 14 01:21	0° ∺		evening max el	12464 Dec 29 13:57	0 ~ 15° ≈ 44'19	27°15'52
evening max el	12464 Jan 17 06:59	3° ∺ 18'39	27022120	retrograde	12465 Jan 12 12:23	22°≈59'51	27 13 32
•		10° X 41'05	21 32 39	-			
retrograde	12464 Jan 31 02:15			evening set	12465 Jan 19 09:49	20°≈52'15	0.60050 ATT
evening set	12464 Feb 07 00:48	8°) 17'14	0.60060.444	min. Earth dist.	12465 Jan 23 04:28	18°≈06'31	0.60858 AU
min. Earth dist.	12464 Feb 10 18:54		0.62969 AU	inferior conj	12465 Jan 26 07:33	15°≈24'30	
inferior conj	12464 Feb 13 14:46	2° ¥ 23'45		minimum elong	12465 Jan 26 13:32	15°≈11'34	2°47'20
minimum elong	12464 Feb 13 17:48	2° ₩ 16'18	1°29'41	morning rise	12465 Feb 02 20:13	10° ≈ 31'58	
	12464 Feb 16 04:06	30°R ≈		asc. node	12465 Feb 04 03:46	10° ≈ 16′21	
asc. node	12464 Feb 18 06:26	28° ≈ 22'56		direct	12465 Feb 04 22:58	10° ≈ 13'42	
morning rise	12464 Feb 20 13:14	27°≈12′05		morning max el	12465 Feb 12 02:42	13° ≈ 49′07	17°55'54
direct	12464 Feb 22 20:55	26° ≈ 46'42			12465 Feb 23 03:10	0° ∀	
	12464 Feb 29 07:27	0° ∀		morning set	12465 Feb 27 16:57	8° ∺ 16'27	
morning max el	12464 Feb 29 10:57	0°) €08'28	17°46'28	desc. node	12465 Mar 09 06:58	25° ∺ 31'53	
morning set	12464 Mar 16 14:13	24°) 49′59					
	12464 Mar 19 13:37	0 ° Υ		superior conj	12465 Mar 10 03:42	27°) €02'23	
desc. node	12464 Mar 22 10:24	4° Ƴ 55'58		minimum elong	12465 Mar 10 03:07	26° ¥ 59'52	0°06'32
				behind sun begin	12465 Mar 09 19:36	26°) €27'07	
superior conj	12464 Mar 28 16:38	15° Ƴ 28'01	-0°46'52	behind sun end	12465 Mar 10 10:38	27°) € 32'32	
minimum elong	12464 Mar 28 11:53	15° Ƴ 08'22	0°46'20		12465 Mar 11 20:46	0 ° Υ	
max. Earth dist.	12464 Apr 04 01:41	25° Ƴ 50′09	1.44362 AU	max. Earth dist.	12465 Mar 17 15:25	9° Ƴ 43'09	1.42706 AU
	12464 Apr 06 16:35	0° 8		evening rise	12465 Mar 23 16:13	19° Ƴ 26'57	
evening rise	12464 Apr 12 17:54	9° 8 26'18			12465 Mar 30 11:52	9° 8	
	12464 Apr 26 11:15	Π°			12465 Apr 21 01:08	Π $^{\circ}0$	
evening max el	12464 May 12 10:02	20° Ⅱ 47'15	20°54'53	evening max el	12465 Apr 25 04:39	4° Ⅱ 34'56	22°10'24
asc. node	12464 May 16 03:24	23° Ⅱ 58'30		asc. node	12465 May 03 00:40	9° Ⅱ 58'48	
retrograde	12464 May 20 20:04	25° Ⅱ 41'21		retrograde	12465 May 04 17:49	10° Ⅱ 12'37	
evening set	12464 May 25 01:28	24° Ⅱ 00'47		evening set	12465 May 09 09:59	8° Ⅱ 16'38	
inferior conj	12464 May 30 07:41	17° Ⅱ 50′23	3°10'15	inferior conj	12465 May 14 16:56	1° Ⅱ 56'19	2°55'39
minimum elong	12464 May 30 06:53	17° Ⅱ 53'11	3°09'20	minimum elong	12465 May 14 15:20		2°54'38
min. Earth dist.	12464 May 30 19:12	17° Ⅱ 10'30	0.68460 AU	min. Earth dist.	12465 May 14 15:28	2° Ⅱ 01′26	0.68815 AU
morning rise	12464 Jun 04 12:04	11° Ⅱ 32'28			12465 May 16 02:37	30°R₩	
direct	12464 Jun 09 19:30	9° Ⅱ 12'27		morning rise	12465 May 19 20:30	25° 8 43'58	
desc. node	12464 Jun 18 11:28	13° II 39'05		direct	12465 May 24 14:56	23° 8 42'40	
morning max el	12464 Jun 20 12:03	15° I 35'03	23°34'58	morning max el	12465 Jun 03 00:25	29° 8 13'14	22°06'15
morning max or	12464 Jul 02 07:55	0°95	23 3 1 3 0	morning max or	12465 Jun 03 18:41	0°II	22 00 13
	12464 Jul 22 05:09	0°Ω		desc. node	12465 Jun 05 08:27	1° ∏ 42'27	
morning set	12464 Jul 25 12:32	5° Ω 30'27		desc. node	12465 Jun 26 00:41	0°9	
max. Earth dist.	12464 Jul 29 11:24	12°Ω18'08	1.39066 AU	morning set	12465 Jul 06 00:24	15°934'28	
man. Latui uist.	14TOT JUL 49 11.44	12 061000	1.57000 AU	max. Earth dist.	12465 Jul 11 11:17	13 \$34.28 24°\$31'02	1.41354 AU
superior con:	12464 Aug 06 01:00	260 000142	0.54124	max. Earth dist.			1.41334 AU
superior conj	12464 Aug 06 01:08	26° Ω 00'42			12465 Jul 14 17:06	0 ° Ω	
minimum elong	12464 Aug 06 05:00	26° Ω 18'51	U-34-31		10465 1 1 10 05 20	70 0 50110	1020111
,	12464 Aug 08 03:53	0°M)		superior conj	12465 Jul 19 05:39	7° £ 52′19	
asc. node	12464 Aug 12 03:12	7° mp 38'18		minimum elong	12465 Jul 19 11:57	8° Ω 20'08	1°28'08
evening rise	12464 Aug 15 06:42	13° m/45'31		evening rise	12465 Jul 29 18:06	27° Ω 04'19	
	12464 Aug 24 01:39	0∘ ⊽		asc. node	12465 Jul 29 23:56	27° Ω 31′26	
evening max el	12464 Aug 31 10:46	10° ≙ 01'51	18°46'07		12465 Jul 31 07:58	0° m)	
retrograde	12464 Sep 08 19:28	14° ≙ 13'38		evening max el	12465 Aug 14 18:16	22° m/35'59	18°14'53
evening set	12464 Sep 10 17:18	14° ≙ 01'18		retrograde	12465 Aug 21 24:00	26° Mp 16'00	

ovening set	12465 Aug 24 04:22	25° m 56'40			12466 Jul 24 16:44	0° m)	
evening set inferior conj	12465 Aug 31 12:32	23 m/3040 21°m/14'14	0°13'33	evening max el	12466 Jul 29 06:59	5° Mp 40'21	18°03'28
minimum elong	•		0°13'33	•		9° Mg 03'29	18 03 28
2	12465 Aug 31 12:59	21° mp 13'15		retrograde	12466 Aug 04 20:52		
transit middle	12465 Aug 31 12:59	21° mp 13'15	0°13'09	evening set	12466 Aug 07 09:18	8° m 33'28	1000111
transit begin	12465 Aug 31 10:59	21° m 17'32		inferior conj	12466 Aug 14 00:26	3° Tp 31'09	1°29'11
transit end	12465 Aug 31 15:00	21° m 08'58		minimum elong	12466 Aug 14 02:45	~	1°27'55
desc. node	12465 Sep 01 06:11	20° Mp 36'22		min. Earth dist.	12466 Aug 17 02:47	-	0.61266 AU
min. Earth dist.	12465 Sep 03 20:23	18° m 24'58	0.58985 AU		12466 Aug 17 15:32	30°R Ω	
morning rise	12465 Sep 07 18:09	15° Mp 40'32		desc. node	12466 Aug 19 03:38	28° Ω 42'17	
direct	12465 Sep 14 02:22	13° m 51'09		morning rise	12466 Aug 20 17:33	27° Ω 31'55	
morning max el	12465 Sep 28 10:35	21°Mp36'51	27°31'23	direct	12466 Aug 27 09:01	25° Ω 17'03	
	12465 Oct 05 18:56	0∘ ⊽			12466 Sep 07 00:05	0° m)	
	12465 Oct 24 07:42	0° M.		morning max el	12466 Sep 10 14:22	3° m) 15'14	27°57'34
asc. node	12465 Oct 26 01:34	3° ™ 26′08			12466 Sep 30 08:48	0∘ ⊽	
morning set	12465 Oct 29 18:50	11° M 05'38		asc. node	12466 Oct 12 22:16	23° ≙ 15′22	
				morning set	12466 Oct 13 21:20	25° ≙ 13'51	
superior conj	12465 Nov 05 18:45	26°M24'11	1°27'05		12466 Oct 16 03:52	0° M	
minimum elong	12465 Nov 05 16:56	26° ™ 14'02	1°27'36	max. Earth dist.	12466 Oct 19 14:41	7° M 28′02	1.31570 AU
max. Earth dist.	12465 Nov 05 07:41	25°M22'29	1.31280 AU				
	12465 Nov 07 09:26	0° ∡ ¹		superior conj	12466 Oct 21 05:14	11°ML00'28	1°12'48
evening rise	12465 Nov 12 12:16	11° ∡ 14'09		minimum elong	12466 Oct 21 03:00	10°M48'08	1°13'01
Č	12465 Nov 21 23:11	0°ಕ		evening rise	12466 Oct 27 22:30	25°M48'13	
desc. node	12465 Nov 28 03:05	10° る 21'17		evening rise	12466 Oct 29 21:47	0° √	
evening max el	12465 Dec 11 14:05	27° පි 20'49	26°24'33	desc. node	12466 Nov 15 00:17	28° × ⁷ 25'21	
evening max er	12465 Dec 14 16:01	0°≈	20 2433	dese. Hode	12466 Nov 16 04:08	0°중	
retrograde	12465 Dec 25 12:56	0 ~ 4° ≈ 26'58		evening max el	12466 Nov 23 06:04	8° る 06'44	25°02'55
•	12466 Jan 01 00:49	4 ≈2038 2°≈44'21		•	12466 Dec 07 01:37	8 30044 15° る 02'03	23 02 33
evening set			0.50707 ATT	retrograde		13° る 50'11	
min. Earth dist.	12466 Jan 05 03:44	0°≈08'14 30°Rる	0.58707 AU	evening set	12466 Dec 12 17:29		0.56757 ATT
	12466 Jan 05 08:15	• -	4010110	min. Earth dist.	12466 Dec 17 18:03		
inferior conj	12466 Jan 08 07:03	27° る 46'49		inferior conj	12466 Dec 20 10:27	9° る 22'25	
minimum elong	12466 Jan 08 15:21	27° ට 31'11	4°06'57	minimum elong	12466 Dec 20 18:01	9°る10'02	5°15'49
morning rise	12466 Jan 16 08:45	23°る15'34		morning rise	12466 Dec 28 20:46	5°る13'01	
direct	12466 Jan 18 10:30	23° る 00'47		direct	12466 Dec 31 03:59	4° る 57'54	
asc. node	12466 Jan 22 01:04	23° る 48'03		asc. node	12467 Jan 08 22:18	8° ਰ 55'15	
morning max el	12466 Jan 26 12:40	26° る 59'44	18°25'02	morning max el	12467 Jan 09 12:51	9° る 29'18	19°15'49
	12466 Jan 29 04:56	0° ≈			12467 Jan 22 23:40	0° ≈	
morning set	12466 Feb 11 09:02	22°≈18'51		morning set	12467 Jan 26 10:10	6° ≈ 44'51	
	12466 Feb 15 09:29	0° ∀					
				superior conj	12467 Feb 03 14:47	22° ≈ 58'39	0°56'37
superior conj	12466 Feb 20 12:37	9°) 36′47	0°28'27	minimum elong	12467 Feb 03 17:38	23° ≈ 12′26	0°56'49
minimum elong	12466 Feb 20 14:35	9°) 45′49	0°28'32		12467 Feb 07 07:17	0° ∀	
desc. node	12466 Feb 24 03:33	16° ∺ 10′09		max. Earth dist.	12467 Feb 10 07:07	5°) 30′31	1.38417 AU
max. Earth dist.	12466 Feb 28 00:32	22° 升 56'46	1.40646 AU	desc. node	12467 Feb 11 00:11	6°) 47′29	
evening rise	12466 Mar 04 10:03	0° Y 20'51		evening rise	12467 Feb 14 01:07	12° ∺ 09'46	
	12466 Mar 04 05:00	0° Υ			12467 Feb 24 22:06	0° Y	
	12466 Mar 23 22:08	0°8			12467 Mar 19 04:33	0°8	
evening max el	12466 Apr 07 19:50	18° 8 24'53	23°30'58	evening max el	12467 Mar 21 09:34	2° 8 17'01	24°50'04
retrograde	12466 Apr 18 12:53	24° 8 43'26		retrograde	12467 Apr 02 04:04	9° 8 08'24	
asc. node	12466 Apr 19 22:00	24° 8 34'38		asc. node	12467 Apr 06 19:23	7° 8 33'45	
evening set	12466 Apr 23 16:33	22° 8 33'30		evening set	12467 Apr 07 19:36	6° ႘ 46'47	
min. Earth dist.	12466 Apr 28 12:14	16° 8 54'14	0.68712 AU	min. Earth dist.	12467 Apr 12 07:20	1° 8 43'21	0.68165 AU
inferior conj	12466 Apr 29 02:11	16° 8 06'17	2°30'58	inferior conj	12467 Apr 13 09:35	0° 8 16'32	1°56'22
minimum elong	12466 Apr 29 00:07	16° 8 13'24		minimum elong	12467 Apr 13 07:27	0° 8 23'35	
morning rise	12466 May 04 07:38	10° 8 00'54			12467 Apr 13 14:34	30°RƳ	
direct	12466 May 08 13:12	8° 8 20'27		morning rise	12467 Apr 18 19:31	24° Y 19'30	
morning max el	12466 May 16 18:08	13° 8 01'30	20°45'15	direct	12467 Apr 22 12:51	23° Υ '00'00	
desc. node	12466 May 23 05:21	20° 8 34'07	20 43 13	morning max el	12467 Apr 29 19:22	27° Υ '01'31	19°37'06
acse. Houc	12466 May 30 02:22	20 O 3407 0° I I		morning max ci	12467 Apr 29 19:22 12467 May 02 13:08	0° 8	17 3/00
morning sot	12466 Jun 15 12:07	24° ∏ 35'04		desc. node	-	10° 8 01'01	
morning set		24°Щ35704 0°9			12467 May 10 02:08		0.65
	12466 Jun 18 23:05		1 42257 433	greatest brilliancy	12467 May 12 12:02	13° ႘ 30'44	-0.6m
max. Earth dist.	12466 Jun 23 17:42	7° © 37'36	1.43357 AU		12467 May 23 10:54	0°П 20П 10120	
	104664 20 10 00	100004505	1056414	morning set	12467 May 25 12:36	3° Ⅱ 10′39	1 44041 ***
superior conj	12466 Jun 30 12:03	18°545'32		max. Earth dist.	12467 Jun 06 07:08	21° Ⅱ 30'43	1.44841 AU
minimum elong	12466 Jun 30 18:46	19° © 13'41	1°56'35		101/20 2	•••	2016:02
	12466 Jul 07 02:03	0°N		superior conj	12467 Jun 10 18:31	28° Ⅱ 38'16	
evening rise	12466 Jul 12 14:26	9° Ω 41'07		minimum elong	12467 Jun 10 21:13	28° Ⅱ 49'06	2°12'55
asc. node	12466 Jul 16 20:43	17° Ω 11'47			12467 Jun 11 14:52	0 \circ ∞	

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evening rise	12467 Jun 24 14:45	21° © 24'40		asc. node	12468 Jun 19 14:31	25° © 31'56	
	12467 Jun 29 17:34	0 $^{\circ}$ Ω			12468 Jun 22 23:17	0 $^{\circ}$ Ω	
asc. node	12467 Jul 03 17:34	6° Ω 34'02		evening max el	12468 Jun 25 09:49	2° Ω 42'51	18°35'53
evening max el	12467 Jul 12 21:11	19° Ω 05′05	18°10'42	retrograde	12468 Jul 01 22:18	6° Ω 15′07	
retrograde	12467 Jul 19 05:42	22° Ω 25′59		evening set	12468 Jul 05 03:20	5° Ω 16'38	
evening set	12467 Jul 22 02:21	21° Ω 42'35		inferior conj	12468 Jul 10 19:26	29°540'23	2°54'26
inferior conj	12467 Jul 28 04:03	16° Ω 22'15	2°21'44	minimum elong	12468 Jul 10 21:17	29° © 34'44	2°53'18
minimum elong	12467 Jul 28 06:35	16°Ω15'13	2°20'24		12468 Jul 10 13:00	30°Rூ	
min. Earth dist.	12467 Jul 30 18:37	13°Ω29'32	0.63470 AU	min. Earth dist.	12468 Jul 12 19:45	27°9513'29	0.65400 AU
			0.03470 AU				0.03400 AO
morning rise	12467 Aug 03 09:07	10° Ω 07'31		morning rise	12468 Jul 16 14:16	23°518'23	
desc. node	12467 Aug 06 01:03	8° Ω 29'00		desc. node	12468 Jul 22 22:23	20° © 37'22	
direct	12467 Aug 10 01:06	7° Ω 34'41		direct	12468 Jul 23 01:17	20° © 37'18	
morning max el	12467 Aug 23 23:04	15° Ω 36'13	27°45'40	morning max el	12468 Aug 05 10:05	28° © 30'37	27°00'44
	12467 Sep 04 18:18	0° m)			12468 Aug 06 20:26	$0^{\circ}\Omega$	
	12467 Sep 23 01:33	0∘ ⊽			12468 Aug 28 13:25	0° m y	
morning set	12467 Sep 27 16:32	8° ≏ 58'36		morning set	12468 Sep 10 01:41	22° m 13'26	
asc. node	12467 Sep 29 18:54	13° ₽ 14'20		C	12468 Sep 14 00:24	0∘ ⊽	
max. Earth dist.	12467 Oct 02 16:07	19° ₽ 16'11	1.32383 AU	max. Earth dist.	12468 Sep 14 08:37	0° ہ 41'33	1.33719 AU
max. Latin dist.	1240/ Oct 02 10.0/	17 =1011	1.32363 AC	asc. node		3° ₽ 19'02	1.55/17 AC
	12467.0 + 05 12 20	250 0 22120	0052104	asc. node	12468 Sep 15 15:32	3 == 1902	
superior conj	12467 Oct 05 12:29	25° ≏ 23'20	0°53'04				
minimum elong	12467 Oct 05 10:21	25° ≏ 11'45	0°53'00	superior conj	12468 Sep 18 14:23	9° ≏ 27'25	0°28'06
	12467 Oct 07 15:17	0° M ₊		minimum elong	12468 Sep 18 12:59	9° ഫ 20'05	0°27'53
evening rise	12467 Oct 12 09:46	10°M22'26		evening rise	12468 Sep 25 20:14	24° ≏ 51'59	
	12467 Oct 22 08:26	0° ∡ ¹			12468 Sep 28 07:17	0° M ₊	
desc. node	12467 Nov 01 21:34	15° ∡ 19'12		evening max el	12468 Oct 16 05:33	28° M 21'47	21°43'50
evening max el	12467 Nov 04 16:21	18° ∡ 15'25	23°23'26	Ç	12468 Oct 18 00:25	0° ∡ ¹	
retrograde	12467 Nov 18 01:24	24° x 755'05	23 23 20	desc. node	12468 Oct 18 18:55	0° ∡ ′37'51	
•	12467 Nov 22 10:23	24° × 13'31				4° × ³ 731'26	
evening set			0.55005.411	retrograde	12468 Oct 28 15:05		
min. Earth dist.	12467 Nov 29 02:13	21° × 05'23	0.55287 AU	evening set	12468 Oct 31 14:13	4° ⋌ 11'34	
inferior conj	12467 Nov 30 17:43	20° ∡ °07'45		inferior conj	12468 Nov 09 11:25	0° ∡ 16′13	
minimum elong	12467 Nov 30 19:08	20° ∡ 05'41	5°51'43	minimum elong	12468 Nov 09 04:19	0° ∡ ′26′09	5°30'55
morning rise	12467 Dec 09 05:36	16° ₰ 16′09		min. Earth dist.	12468 Nov 09 08:35	0° ∡ ¹20'11	0.54576 AU
direct	12467 Dec 12 02:13	15° ∡ 56′25			12468 Nov 09 23:00	30°RML	
morning max el	12467 Dec 22 23:45	21° × °07'39	20°29'40	morning rise	12468 Nov 17 19:31	26°M28'35	
asc. node	12467 Dec 26 19:26	25° ∡ ¹22'34		direct	12468 Nov 21 11:16	25°M59'26	
	12467 Dec 30 02:55	0°중			12468 Dec 01 15:49	0° ∡ 7	
morning set	12468 Jan 10 17:07	21° る 24'13		morning max el	12468 Dec 03 20:50	1° x 754'16	22°04'40
morning set		21 O 2413		•		12° ₹ 53'25	22 04 40
	12468 Jan 14 20:49	0°≈		asc. node	12468 Dec 12 16:29		
					12468 Dec 22 04:00	0°ಕ	
superior conj	12468 Jan 18 05:43	6° ≈ 54'53	1°17'19	morning set	12468 Dec 25 03:29	6° ප 10'01	
minimum elong	12468 Jan 18 08:19	7° ≈ 08'06	1°17'47				
max. Earth dist.	12468 Jan 23 14:54	17° ≈ 33'39	1.36250 AU	superior conj	12469 Jan 01 05:42	21° る 15'06	1°30'49
evening rise	12468 Jan 27 11:04	24° ≈ 46′09		minimum elong	12469 Jan 01 07:27	21° る 24'19	1°31'34
desc. node	12468 Jan 28 20:50	27°≈19'35		max. Earth dist.	12469 Jan 05 04:11	29° පි 25'01	1.34359 AU
	12468 Jan 30 08:48	0° ∀			12469 Jan 05 11:05	0° ≈	
	12468 Feb 18 12:12	0° Υ		evening rise	12469 Jan 09 12:28	8° ≈ 01'25	
avanina may al	12468 Mar 02 23:03	16° Υ 07'20	26°00'44	desc. node	12469 Jan 14 17:33	17°≈42'23	
evening max el			20 00 44	desc. node			
retrograde	12468 Mar 15 14:28	23° Y ′21′02			12469 Jan 21 23:11	0°) {	
evening set	12468 Mar 21 17:29	20° Y ′51′13		evening max el	12469 Feb 13 12:33	29°) 48′38	26°55'36
asc. node	12468 Mar 23 16:47	18° Ƴ 58'44			12469 Feb 13 17:16	0° Y	
min. Earth dist.	12468 Mar 25 22:34	16° Ƴ 23'01	0.67184 AU	retrograde	12469 Feb 26 19:20	7° Ƴ 13'29	
inferior conj	12468 Mar 27 13:06	14° Ƴ 22'48	1°11'36	evening set	12469 Mar 05 08:18	4° Ƴ 40'35	
minimum elong	12468 Mar 27 11:28	14° Ƴ 27'55	1°10'52	min. Earth dist.	12469 Mar 09 07:54	0° Ƴ 46′06	0.65806 AU
morning rise	12468 Apr 02 06:08	8° Y 35'41			12469 Mar 10 00:04	30° ₹	
direct	12468 Apr 05 12:11	7° Ƴ 35'30		asc. node	12469 Mar 10 14:12	29°) 19′04	
morning max el	12468 Apr 12 04:04	11° Υ 10'38	18°44'29	inferior conj	12469 Mar 11 10:33	28°) 19'58	0°16'22
_	-		10 77 47	3		28°\(\frac{1938}{21'17}\)	
desc. node	12468 Apr 25 22:50	29° Y 53'39		minimum elong	12469 Mar 11 10:06		0°16'19
	12468 Apr 26 00:29	0°8		morning rise	12469 Mar 17 13:16	22°) (44'35	
morning set	12468 May 04 00:06	12° 8 24'12		direct	12469 Mar 20 09:15	22° ∺ 00'49	
	12468 May 15 06:44	Π °0		morning max el	12469 Mar 26 18:26	25° ∺ 22'17	18°08'25
max. Earth dist.	12468 May 19 01:18	5° Ⅱ 53'39	1.45646 AU		12469 Mar 30 17:45	$0^{\circ}\Upsilon$	
				desc. node	12469 Apr 12 19:26	20° Y ′04'36	
superior conj	12468 May 20 06:24	7° Ⅱ 47'30	-2°09'21	morning set	12469 Apr 14 13:53	22° Y ′56'14	
minimum elong	12468 May 20 01:31	7° Ⅱ 28'25		<i>2</i> ·	12469 Apr 18 23:00	0°8	
viong					1.p. 10 25.00		
	12468 Jun 03 07:14	0ಂತಾ					
evening rice	12468 Jun 03 07:14	೨ಂತು ೧ಂತಾ		superior coni	12469 Apr 20 14:25	16°¥52!2°	-10/16/48
evening rise greatest brilliancy	12468 Jun 03 07:14 12468 Jun 04 15:13 12468 Jun 11 04:51	0°ഇ 2°ഇ08'08 12°ഇ39'40	-0.9m	superior conj minimum elong	12469 Apr 29 14:25 12469 Apr 29 05:10	16° 8 53'28 16° 8 17'12	

max. Earth dist.	12469 May 01 21:00		1.45714 AU	n d n	12470 Apr 11 13:20	0°8	1 45051 411
evening rise	12469 May 07 24:00 12469 May 15 16:41	0° Ⅱ 11° Ⅱ 56'44		max. Earth dist. evening rise	12470 Apr 14 16:05 12470 Apr 25 04:55	21° 8 19'51	1.45051 AU
evening rise	12469 May 27 10:33	0°95		evening rise	12470 Apr 30 21:43	0° Ⅱ	
greatest brilliancy	12469 May 27 20:15	0° © 36'25	-0.7m		12470 May 22 16:29	0° ©	
asc. node	12469 Jun 06 11:34	13°956'12	0.7111	evening max el	12470 May 22 21:45	0° © 13'21	20°15'52
evening max el	12469 Jun 08 18:28	16°\$26'41	19°18'10	asc. node	12470 May 24 08:42	1°536'02	
retrograde	12469 Jun 15 19:16	20°\$22'50		retrograde	12470 May 30 17:58	4° © 43'46	
evening set	12469 Jun 19 09:09	19° © 08'16		evening set	12470 Jun 03 17:28	3°912'45	
inferior conj	12469 Jun 24 19:07	13° © 17'42	3°10'51		12470 Jun 06 20:38	30°R Ⅱ	
minimum elong	12469 Jun 24 19:56	13° © 15'02	3°09'53	inferior conj	12470 Jun 09 00:19	27° Ⅲ 09'21	3°13'50
min. Earth dist.	12469 Jun 26 04:45	11° © 27'58	0.66946 AU	minimum elong	12470 Jun 09 00:04	27° Ⅱ 10′11	3°12'56
morning rise	12469 Jun 30 06:12	6° © 54'32		min. Earth dist.	12470 Jun 09 19:46	26° Ⅲ 03′00	0.68046 AU
direct	12469 Jul 06 08:24	4° © 15'02		morning rise	12470 Jun 14 06:22	20° Ⅱ 48'49	
desc. node	12469 Jul 09 19:38	4° 9 58'25		direct	12470 Jun 19 21:11	18° Ⅱ 19'36	
morning max el	12469 Jul 18 20:55	11° 9 544'50	25°51'03	desc. node	12470 Jun 26 16:48	21° Ⅱ 06'10	
	12469 Aug 02 11:35	$0^{\circ}\Omega$		morning max el	12470 Jul 01 06:52	25° Ⅱ 09'52	24°26'26
	12469 Aug 21 05:12	0° m)			12470 Jul 05 15:59	0°©	
morning set	12469 Aug 23 21:10	4° Mp 48'51	1 25520 ATT		12470 Jul 26 23:04	0° Ω 16° Ω 33'59	
max. Earth dist.	12469 Aug 27 14:37	11° m)47'41	1.35538 AU	morning set max. Earth dist.	12470 Aug 05 22:34		1.37727 AU
aumorior coni	12469 Sep 02 08:16	23° m 05'28	0001122	max. Earth dist.	12470 Aug 09 13:13 12470 Aug 13 09:01	0° m)	1.3//2/ AU
superior conj minimum elong	12469 Sep 02 08:10 12469 Sep 02 08:22	23° My 06'00	0°01'45		124/0 Aug 13 09.01	V III	
behind sun begin	12469 Sep 02 08:22 12469 Sep 02 02:15	22° m/35'08	0 01 43	superior conj	12470 Aug 16 14:55	6° m 10'06	-0°34'42
behind sun end	12469 Sep 02 14:29	23° m 36'55		minimum elong	12470 Aug 16 17:16	6° My 21'26	
asc. node	12469 Sep 02 12:08	23° m 25'06		asc. node	12470 Aug 20 08:47	13° m/ 29'13	0 31 13
use. noue	12469 Sep 05 17:19	0° ⊽		evening rise	12470 Aug 25 06:05	23° m 13'01	
evening rise	12469 Sep 10 03:48	9° ≏ 10'48			12470 Aug 28 16:53	0∘ ⊽	
S	12469 Sep 21 06:48	0° M		evening max el	12470 Sep 10 21:27	20° ≏ 27'46	19°13'35
evening max el	12469 Sep 28 06:24	9° M 00'48	20°18'25	retrograde	12470 Sep 20 01:59	25° ჲ 03'06	
desc. node	12469 Oct 05 16:19	13°M52'44		evening set	12470 Sep 21 22:22	24° ≏ 52'45	
retrograde	12469 Oct 09 03:05	14° M 24'42		desc. node	12470 Sep 22 13:48	24° ≏ 44'29	
evening set	12469 Oct 11 04:36	14°M13'53		inferior conj	12470 Sep 30 11:26	20° ≏ 42'12	-2°28'29
inferior conj	12469 Oct 20 04:43	10° ™ 17'06	-4°16'24	minimum elong	12470 Sep 30 05:00	20° ჲ 52'57	2°25'47
minimum elong	12469 Oct 19 18:44	10°M31'48	4°12'55	min. Earth dist.	12470 Oct 03 04:01	18° ≏ 54'52	0.55924 AU
min. Earth dist.	12469 Oct 21 16:32	9° ™ 24'22	0.54794 AU	morning rise	12470 Oct 08 08:57	16° ≏ 05'32	
morning rise	12469 Oct 28 08:05	6° ™ 12'58		direct	12470 Oct 13 17:43	14° ≏ 59'27	
direct	12469 Nov 01 20:52	5°M28′33		morning max el	12470 Oct 27 19:29	22° ₾ 07'59	25°36'20
morning max el	12469 Nov 15 08:39	12°M04'20	23°52'14		12470 Nov 03 18:12	0°M,	
1	12469 Nov 28 20:27	0° 🗷		asc. node	12470 Nov 16 10:18	20°M08'09	
asc. node	12469 Nov 29 13:26	1° ₹ 12'44 20° ₹ 56'40			12470 Nov 21 10:28	0° ⊀ ⁷ 5° ⋅ ₹29120	
morning set	12469 Dec 09 15:17 12469 Dec 13 19:31	20° X '36'40'		morning set	12470 Nov 24 02:45	5° ∡ ′38'39	
	12409 DCC 13 19.31	0.0		superior conj	12470 Nov 30 21:41	20° ∡ ³33'52	1°38'08
superior conj	12469 Dec 16 11:50	5° 云 50'43	1°37'36	minimum elong	12470 Nov 30 21:13	20° × 33'32	1°39'01
minimum elong	12469 Dec 16 12:28	5° る 54'12	1°38'30	max. Earth dist.	12470 Dec 02 05:27	23° × ⁷ 29'19	1.31866 AU
max. Earth dist.	12469 Dec 19 01:18	11° る 21'45	1.32875 AU		12470 Dec 05 05:12	0°ප	
evening rise	12469 Dec 24 01:52	21° る 46'59		evening rise	12470 Dec 08 00:11	5° る 54'08	
	12469 Dec 28 07:05	0° ≈		desc. node	12470 Dec 19 11:19	27° る 38'06	
desc. node	12470 Jan 01 14:23	7° ≈ 50'56			12470 Dec 20 21:00	0° ≈	
	12470 Jan 15 19:05	0°)		evening max el	12471 Jan 09 11:26	26° ≈ 02'47	27°29'49
evening max el	12470 Jan 27 01:20	13° ¥ 11'37	27°27'29		12471 Jan 14 06:25	0° ∀	
retrograde	12470 Feb 09 17:48	20°) 37′18		retrograde	12471 Jan 23 08:35	3° ¥ 22′13	
evening set	12470 Feb 16 13:52	18°) €08'08		evening set	12471 Jan 30 07:19	1°) 04'36	
min. Earth dist.	12470 Feb 20 09:24	14°)(44'40	0.64081 AU		12471 Jan 31 19:31	30°R≈	
inferior conj	12470 Feb 22 23:25	12°) €02'24		min. Earth dist.	12471 Feb 03 01:13	28°≈07'17	0.62087 AU
minimum elong	12470 Feb 23 00:57	11°) 58′22 9°) 31′45	0°48'15	inferior conj	12471 Feb 06 00:34	25°≈21'16	
asc. node morning rise	12470 Feb 25 11:37 12470 Mar 01 14:08	9° ★ 31'45 6° ★ 41'05		minimum elong asc. node	12471 Feb 06 04:49 12471 Feb 12 09:00	25°≈11'20 20°≈36'07	2 01 34
direct	12470 Mar 01 14.08 12470 Mar 04 01:40	6° ∺ 10'07		morning rise	12471 Feb 12 09:00 12471 Feb 13 05:00	20 ≈3607 20°≈17'01	
morning max el	12470 Mar 10 11:48	9° ∺ 29'07	17°49'25	direct	12471 Feb 13 03:00 12471 Feb 15 10:13	20 ≈1701 19°≈55'04	
mun or	12470 Mar 24 11:06	0° Υ	1, 20	morning max el	12471 Feb 22 05:04	23°≈21'41	17°48'08
morning set	12470 Mar 27 07:49	4°Υ′50'30		morning man or	12471 Feb 22 03:04 12471 Feb 27 11:41	0° \	1, 1000
desc. node	12470 Mar 30 16:00	10° Y ′28'49		morning set	12471 Mar 10 00:24	17°) 48′54	
				Ç	12471 Mar 16 22:23	0° Υ	
superior conj	12470 Apr 09 12:03	26° Ƴ 41'57	-1°10'26	desc. node	12471 Mar 17 12:33	1° Y 01'21	
minimum elong	12470 Apr 09 04:45	26° Y 12'28	1°09'49				

		00 0 - 514 - 4					
superior conj	12471 Mar 21 08:57	7° Y 36'14		behind sun begin	12472 Mar 02 00:07	19°) 12'05	
minimum elong	12471 Mar 21 06:06	7° Y ′24'16		behind sun end	12472 Mar 02 12:55	20°) €09'07	
max. Earth dist.	12471 Mar 28 08:37	19° Y ′08′58	1.43726 AU	desc. node	12472 Mar 03 09:08	21° ¥ 38'35	
	12471 Apr 04 04:47	$0^{\circ}S$			12472 Mar 08 05:00	0° Y	
evening rise	12471 Apr 04 19:32	0° 8 57'21		max. Earth dist.	12472 Mar 09 20:50	2° Ƴ 47'50	1.41875 AU
	12471 Apr 24 11:38	Π \circ 0		evening rise	12472 Mar 15 01:31	11° Ƴ 19'10	
evening max el	12471 May 05 19:22	14° Ⅱ 00'40	21°26'05		12472 Mar 27 04:47	9° 8	
asc. node	12471 May 11 05:57	18° Ⅲ 17'11		evening max el	12472 Apr 17 12:15	27° 8 48'47	22°44'23
retrograde	12471 May 14 16:27	19° Ⅲ 12'35			12472 Apr 19 20:30	$\Pi^{\circ}0$	
evening set	12471 May 19 02:24	17° Ⅲ 25'19		asc. node	12472 Apr 27 03:15	3° Ⅱ 43'22	
inferior conj	12471 May 24 08:41	11° Ⅱ 10'40	3°05'19	retrograde	12472 Apr 27 13:08	3° Ⅱ 44'10	
minimum elong	12471 May 24 07:30	11° Ⅱ 14'45	3°04'21	evening set	12472 May 02 10:16	1° Ⅱ 41'45	
min. Earth dist.	12471 May 24 14:37	10° Ⅱ 49'58	0.68673 AU	-	12472 May 04 03:22	30° ₹ 8	
morning rise	12471 May 29 12:24	4° Ⅱ 55'07		inferior conj	12472 May 07 18:08	25° 8 18'08	2°46'23
direct	12471 Jun 03 14:27	2° ∏ 42'29		minimum elong	12472 May 07 16:18	25° 8 24'32	2°45'20
morning max el	12471 Jun 13 17:28	8° Ⅱ 42'37	22°56'44	min. Earth dist.	12472 May 07 11:15	25° 8 42'06	0.68831 AU
desc. node	12471 Jun 13 13:50	8° П 33'29		morning rise	12472 May 12 22:13	19° 8 08'51	
	12471 Jun 30 09:44	0.8e		direct	12472 May 17 11:06	17° 8 16'27	
morning set	12471 Jul 18 01:06	27° © 16'58		morning max el	12472 May 17 17:00 12472 May 26 07:49	22° 8 24'41	21°30'32
morning set	12471 Jul 19 16:17	0°Ω		desc. node	12472 May 30 10:47	26° 8 58'55	21 30 32
max. Earth dist.	12471 Jul 19 10:17	4°Ω44'05	1.40059 AU	desc. Hode	12472 Jun 01 21:05	0°Ⅱ	
max. Earth dist.	124/1 Jul 22 11.21	4 6644 03	1.40039 AU			0°9	
	12471 1-1 20 06.19	100 021126	1900100		12472 Jun 22 16:41		
superior conj	12471 Jul 30 06:18	18° Ω 31'36		morning set	12472 Jun 27 02:00	6°951'35	1 42254 ATT
minimum elong	12471 Jul 30 11:18	18° Ω 54'25	1°09'02	max. Earth dist.	12472 Jul 03 14:15	1/°921'3/	1.42254 AU
	12471 Aug 05 09:51	0° m					
asc. node	12471 Aug 07 05:29	3° TD 27'46		superior conj	12472 Jul 11 01:49	29° © 58'41	
evening rise	12471 Aug 09 00:02	6° m 50'47		minimum elong	12472 Jul 11 08:41	0° Ω 28'23	1°41'12
	12471 Aug 22 15:18	0∘ ত			12472 Jul 11 02:08	0 \circ Ω	
evening max el	12471 Aug 25 00:07	2° ≏ 40'05	18°30'21	evening rise	12472 Jul 22 05:37	19° Ω 53'07	
retrograde	12471 Sep 01 19:47	6° ≏ 36'29		asc. node	12472 Jul 24 02:15	23° Ω 15'57	
evening set	12471 Sep 03 20:12	6° ₽ 21'33			12472 Jul 27 20:28	0° m)	
desc. node	12471 Sep 09 11:17	3° ჲ 28'41		evening max el	12472 Aug 07 10:13	15° ™ 27'35	18°07'39
inferior conj	12471 Sep 11 15:09	1° ≏ 50'42	-0°40'38	retrograde	12472 Aug 14 08:00	18° m 59'01	
minimum elong	12471 Sep 11 13:33	1° ≏ 53'49	0°40'05	evening set	12472 Aug 16 15:39	18° m 35'33	
	12471 Sep 13 23:43	30°R, Mp		inferior conj	12472 Aug 23 16:09	13° m 44'10	0°48'34
min. Earth dist.	12471 Sep 14 21:16	29° m 19'12	0.57743 AU	minimum elong	12472 Aug 23 17:39	13° m 40'45	0°47'40
morning rise	12471 Sep 19 03:27	26° Mp 36'32		desc. node	12472 Aug 26 08:46	11° m)17'11	
direct	12471 Sep 25 04:31	25° m 03'48		min. Earth dist.	12472 Aug 26 22:35	10° m 46'57	0.59942 AU
	12471 Oct 06 13:29	0∘ ⊽		morning rise	12472 Aug 30 16:30	7° m 58'08	
morning max el	12471 Oct 09 12:02	2° ₽ 37'22	26°59'01	direct	12472 Sep 06 04:23	5° m 57'34	
	12471 Oct 29 04:55	0° M .		morning max el	12472 Sep 20 12:13	13° m 49'37	27°47'27
asc. node	12471 Nov 03 07:05	9° ™ 30'14			12472 Oct 03 11:24	0∘ ত	
morning set	12471 Nov 08 12:13	20°M11'38		asc. node	12472 Oct 20 03:49	29° ₽ 11'01	
· ·	12471 Nov 13 00:03	0° ∡ ¹			12472 Oct 20 13:29	0° M	
				morning set	12472 Oct 22 17:49	4° M 30′10	
superior conj	12471 Nov 15 09:15	5° √ 18'45	1°32'46	max. Earth dist.	12472 Oct 28 22:17	17° M 54'59	1.31342 AU
minimum elong	12471 Nov 15 07:51	5° ∡ 10'54	1°33'27				
max. Earth dist.	12471 Nov 15 13:43	5° х 43′39	1.31353 AU	superior conj	12472 Oct 29 20:38	19° M 59'14	1°21'43
evening rise	12471 Nov 22 04:50	20° х 16′19		minimum elong	12472 Oct 29 18:35	19° M 47'51	1°22'06
	12471 Nov 26 22:35	0°ප		8	12472 Nov 03 08:50	0° ⊼	
desc. node	12471 Dec 06 08:23	0 ರ 16° ರ 55'15		evening rise	12472 Nov 05 13:33	4° х ⁷ 46'56	
dese. Hode	12471 Dec 00 08:23	0°≈		evening rise	12472 Nov 18 17:20	0°る	
evening max el	12471 Dec 13 06:42 12471 Dec 22 15:57	8° ≈ 09'03	26°58'09	desc. node	12472 Nov 22 05:32	5° ට 30'13	
retrograde	12471 Dec 22 13:37 12472 Jan 05 14:25	15°≈19'46	20 30 07	evening max el	12472 Dec 03 12:23	19° ට 22'23	25052151
•	12472 Jan 03 14.23 12472 Jan 12 09:10	13 ≈1946 13°≈21'55		•	12472 Dec 03 12.23 12472 Dec 17 10:09	19 3 22 23 26° 3 24'29	23 32 31
evening set			0.50046.411	retrograde			
min. Earth dist.	12472 Jan 16 06:13	10°≈42'06		evening set	12472 Dec 23 15:10	24°る54'08	0.57040.411
inferior conj	12472 Jan 19 10:27	8°≈07'03		min. Earth dist.	12472 Dec 28 01:03	22°る17'42	
minimum elong	12472 Jan 19 17:36	7°≈52'27	5~21722	inferior conj	12472 Dec 31 01:34	20° ろ 09'45	
morning rise	12472 Jan 27 04:57	3°≈23'10		minimum elong	12472 Dec 31 10:07	19°る54'38	4~38'33
direct	12472 Jan 29 06:51	3°≈06'42		morning rise	12473 Jan 08 07:45	15°る48'20	
asc. node	12472 Jan 30 06:18	3°≈10′28	4000	direct	12473 Jan 10 10:58	15° る 33'53	
morning max el	12472 Feb 05 18:46	6°≈50'35	18°05'43	asc. node	12473 Jan 16 03:33	17° る 23'52	
	12472 Feb 20 13:33	0° ∀		morning max el	12473 Jan 19 01:06	19° る 45'08	18°43'55
morning set	12472 Feb 21 09:24	1°) 32′26			12473 Jan 26 16:30	0° ≈	
				morning set	12473 Feb 04 05:46	15° ≈ 46′04	
superior conj	12472 Mar 02 05:48	19°) 37′24	0°08'58		12473 Feb 11 14:06	0° ∀	
minimum elong	12472 Mar 02 06:31	19°) (40′38	0°09'07				

superior conj minimum elong desc. node	12473 Feb 12 22:40 12473 Feb 13 01:11 12473 Feb 18 05:44	2°\(\frac{1}{33}\)'59 2°\(\frac{1}{45}\)'48 12°\(\frac{1}{17}\)'01	0°41'18 0°41'24	superior conj minimum elong max. Earth dist.	12474 Jan 27 06:45 12474 Jan 27 09:35 12474 Feb 02 10:29	16°≈11'44 16°≈25'49 28°≈00'35	1°06'18 1°06'36 1.37468 AU
max. Earth dist.	12473 Feb 20 04:28	15°) 44'02 22°) 36'41	1.39702 AU		12474 Feb 03 12:22	0°) €	1.37400 AU
evening rise	12473 Feb 24 04:26 12473 Feb 28 15:53	0° Υ		desc. node evening rise	12474 Feb 05 02:21 12474 Feb 06 03:54	2° ∺ 52'30 4° ∺ 46'48	
evening max el	12473 Mar 21 03:12 12473 Mar 31 02:25	0° と 11° と 39'20	24°05'08	evening max el	12474 Feb 21 15:41 12474 Mar 13 15:49	0° Υ 25° Υ 30'57	25°21'38
retrograde asc. node	12473 Apr 11 06:48 12473 Apr 14 00:34	18° 8 13'37 17° 8 39'26		retrograde	12474 Mar 18 23:23 12474 Mar 25 20:13	0° と 2° と 33'59	
evening set	12473 Apr 16 15:33	15° 8 58'07		evening set	12474 Mar 31 16:36	0° 8 08'28	
min. Earth dist.	12473 Apr 21 07:32 12473 Apr 22 02:49	10° 8 34'14 9° 8 28'51	0.68530 AU 2°17'31	asc. node	12474 Mar 31 21:57 12474 Mar 31 20:33	29° Y 56′56 30° RY	
minimum elong	12473 Apr 22 00:40	9° 8 36'09	2°16'25	min. Earth dist.	12474 Mar 31 20:33	25° Y 19'54	0.67793 AU
morning rise	12473 Apr 27 09:52	3° 8 26'57		inferior conj	12474 Apr 06 08:48	23° Y 38'03	1°38'38
direct morning max el	12473 May 01 10:02 12473 May 09 04:45	1° 8 55'45 6° 8 18'47	20°14'31	minimum elong morning rise	12474 Apr 06 06:49 12474 Apr 11 21:26	23° Y 44'31 17° Y 44'50	1°37'42
desc. node	12473 May 17 07:37	16° 8 07'04	20 1131	direct	12474 Apr 15 09:44	16° Ƴ 33'56	
. ,	12473 May 26 23:52	0° Ⅱ 15° Ⅱ 35'10		morning max el	12474 Apr 22 09:14	20° Y 23'03	19°12'41
morning set	12473 Jun 06 06:38 12473 Jun 15 11:21	0.ஒ		desc. node	12474 Apr 30 04:32 12474 May 04 04:20	0° と 5° と 45'47	
max. Earth dist.	12473 Jun 15 23:39	0°549'04	1.44057 AU	greatest brilliancy	12474 May 05 07:00	7° 8 24'45	-0.7m
superior coni	12473 Jun 21 21:56	10° © 25'22	2004!51	morning set	12474 May 16 08:59 12474 May 20 01:17	24° ႘ 18'41 0° Ⅱ	
superior conj minimum elong	12473 Jun 22 03:35	10 \$23 22 10°\$48'35		max. Earth dist.	12474 May 20 01.17 12474 May 29 14:48	0 II 14°II54'33	1.45272 AU
_	12473 Jul 03 12:17	0°N			-		
evening rise asc. node	12473 Jul 04 18:06 12473 Jul 10 23:04	2° Ω 08'48 12° Ω 49'25		superior conj minimum elong	12474 Jun 01 19:17 12474 Jun 01 18:53	19° Ⅲ 56'06 19° Ⅲ 54'33	
evening max el	12473 Jul 21 23:56	28° Ω 41'14	18°04'16	minimum clong	12474 Jun 08 02:35	0° ©	2 14 16
	12473 Jul 23 11:14	0° m		evening rise	12474 Jun 16 08:30	13° © 26'26	
retrograde evening set	12473 Jul 28 10:30 12473 Jul 31 02:17	2° Mp 02'00 1° Mp 26'43		asc. node	12474 Jun 26 12:28 12474 Jun 27 19:58	0° Ω 2° Ω 02'01	
evening sec	12473 Aug 02 11:31	30°R€		evening max el	12474 Jul 05 13:48	12° Ω 12'11	18°19'18
inferior conj	12473 Aug 06 11:15	26° Ω 16'37	1°54'05	retrograde	12474 Jul 11 22:56	15° Ω 36'08	
minimum elong min. Earth dist.	12473 Aug 06 13:49 12473 Aug 09 09:11	26° Ω 09'57 23° Ω 16'00	1°52'45 0.62222 AU	evening set inferior conj	12474 Jul 14 23:06 12474 Jul 20 20:18	14° Ω 46'34 9° Ω 19'33	2°37'46
morning rise	12473 Aug 12 23:03	20° Ω 09'18	0.0222	minimum elong	12474 Jul 20 22:37	9° Ω 12'50	2°36'31
desc. node	12473 Aug 13 06:11	19° Ω 56'47		min. Earth dist.	12474 Jul 23 05:06	6° Ω 35'48	0.64337 AU
direct morning max el	12473 Aug 19 15:25 12473 Sep 02 18:34	17° Ω 45'28 25° Ω 47'20	27°56'57	morning rise desc. node	12474 Jul 26 20:44 12474 Jul 31 03:33	3° Ω 00'54 0° Ω 41'49	
	12473 Sep 06 16:07	0° mp		direct	12474 Aug 02 11:23	0° £ 22′57	
	12473 Sep 27 00:29	0° ™		morning max el	12474 Aug 16 04:22		27°30'03
morning set asc. node	12473 Oct 06 17:30 12473 Oct 07 00:30	18° ♀ 28'57 19° ♀ 04'45			12474 Sep 01 22:58 12474 Sep 19 07:57	0∘ ರ್ 0∘∰	
max. Earth dist.	12473 Oct 12 03:13	29° ≏ 53'04	1.31846 AU	morning set	12474 Sep 20 08:48	2° ≏ 01'38	
	12473 Oct 12 04:29	0° M		asc. node max. Earth dist.	12474 Sep 23 21:09 12474 Sep 25 00:52	9° £ 06'35 11° £ 29'59	1.32881 AU
superior conj	12473 Oct 14 05:58	4°M30'06	1°05'06	max. Latin dist.	12474 Sep 23 00.32	11 =2/3/	1.52001 AC
minimum elong	12473 Oct 14 03:42	4°M17'42	1°05'11	superior conj	12474 Sep 28 11:14	18° Ω 45'44	
evening rise	12473 Oct 21 00:24 12473 Oct 26 03:22	19° M 20'59 0° ∡ ′		minimum elong	12474 Sep 28 09:20 12474 Oct 03 16:03	18° ≏ 35'31 0° ™	0°42'57
desc. node	12473 Nov 09 02:46	23° х ¹06′58		evening rise	12474 Oct 05 11:33	3°M53'34	
evening max el	12473 Nov 15 01:04	29° х 48'37	24°21'46		12474 Oct 19 12:06	0° ∡ ¹	
retrograde	12473 Nov 15 05:51 12473 Nov 28 17:51	0° 궁 6° 궁 39'12		desc. node evening max el	12474 Oct 27 00:04 12474 Oct 27 11:34	9° х 23′56 9° х 52′23	22°40'16
evening set	12473 Dec 03 21:28	5°₹40'45		retrograde	12474 Nov 09 12:37	16° ≯ 21'02	
min. Earth dist.	12473 Dec 09 12:27		0.56050 AU	evening set	12474 Nov 13 06:30	15° ₹ 50'25	0.54072 ATT
inferior conj minimum elong	12473 Dec 11 20:03 12473 Dec 12 01:41	1°る23'12 1°る14'27		min. Earth dist. inferior conj	12474 Nov 20 19:45 12474 Nov 21 20:25	12° ₹ 25'54 11° ₹ 50'54	0.54873 AU -5°51'39
C	12473 Dec 14 03:01	30°R ✓		minimum elong	12474 Nov 21 18:02	11° ≯ 754'18	5°50'42
morning rise	12473 Dec 20 07:57	27° 🖈 22'23		morning rise	12474 Nov 30 06:57	8° ₹ 02'48	
direct	12473 Dec 22 19:36 12473 Dec 30 14:45	27°⊀06'03 0°る		direct morning max el	12474 Dec 03 11:18 12474 Dec 15 00:51	7° х 39'36 13° х 09'54	21°07'44
morning max el	12474 Jan 01 20:02	1° ප් 53'59	19°44'26	asc. node	12474 Dec 20 21:50	20° ∡ 03'27	
asc. node morning set	12474 Jan 03 00:44 12474 Jan 19 09:40	3°る06'54 0°≈18'15		morning set	12474 Dec 27 02:46 12475 Jan 03 18:23	0°る 15°る01'26	
morning set	12474 Jan 19 09:40 12474 Jan 19 06:03	0°≈1813		morning set	12475 Jan 10 22:10	0°≈	

superior conj	12475 Jan 11 01:56	0°≈19'29		superior conj	12475 Dec 26 04:51	14°₹46'40	
minimum elong	12475 Jan 11 04:14	0°≈31'20	1°24'28	minimum elong	12475 Dec 26 06:09	14°る53'35	1°35'18
max. Earth dist.	12475 Jan 15 20:12	9°≈56'38	1.35406 AU	max. Earth dist.	12475 Dec 29 13:05	21°る50'05	1.33676 AU
evening rise	12475 Jan 19 20:57	17°≈41'32			12476 Jan 02 13:36	0° ≈	
desc. node	12475 Jan 22 23:03	23° ≈ 21'32		evening rise	12476 Jan 03 03:53	1°≈10'21	
	12475 Jan 26 17:58	0° ∀		desc. node	12476 Jan 09 19:50	13° ≈ 38'49	
	12475 Feb 15 22:25	0° Υ	0.000.00		12476 Jan 19 17:45	0° \	0.701.0101
evening max el	12475 Feb 24 05:35	9° Υ 19'21	26°26'27	evening max el	12476 Feb 06 19:07	22°) 54'30	27°12'21
retrograde	12475 Mar 09 04:20	16° Y 38'43			12476 Feb 17 17:00	0° Υ	
evening set	12475 Mar 15 11:43	14° Y 07'14		retrograde	12476 Feb 20 06:20	0° Υ 19'48	
asc. node	12475 Mar 18 19:21	10° Y 49'06	0.66640.444		12476 Feb 22 17:14	30° ₹ ₩	
min. Earth dist.	12475 Mar 19 14:27	9° Y 53'18	0.66648 AU	evening set	12476 Feb 26 22:52	27°) 47'43	0.65110.177
inferior conj	12475 Mar 21 10:03	7° Y 41'19	0°49'29	min. Earth dist.	12476 Mar 01 20:38	24° ₩ 06'54	0.65119 AU
minimum elong	12475 Mar 21 08:50	7° Y 45′02	0°49'00	inferior conj	12476 Mar 04 04:13	21°) € 32'49	
morning rise	12475 Mar 27 06:53	1° Y 58'36		minimum elong	12476 Mar 04 04:30	21°) € 32'01	0°09'50
direct	12475 Mar 30 08:31	1° Y 05'41		transit middle	12476 Mar 04 04:30	21° ¥ 32′01	0°09'50
morning max el	12475 Apr 05 20:31	4° Ƴ 33'32	18°26'58	transit begin	12476 Mar 04 02:07	21°) 38′40	
desc. node	12475 Apr 21 00:59	25° Y 46′50		transit end	12476 Mar 04 06:53	21° ¥ 25′23	
	12475 Apr 23 17:12	$0^{\circ}S$		asc. node	12476 Mar 04 16:45	20° ¥ 58′06	
morning set	12475 Apr 26 06:37	4° 8 02'48		morning rise	12476 Mar 10 11:45	16° ∺ 03'01	
				direct	12476 Mar 13 04:03	15° ¥ 24'59	
superior conj	12475 May 12 03:14	28° 8 57'39	-2°02'00	morning max el	12476 Mar 19 12:30	18°) (43′44	17°58'11
minimum elong	12475 May 11 19:43	28° 8 28'16	2°02'17		12476 Mar 28 00:16	0 ° Υ	
max. Earth dist.	12475 May 12 09:59	29° 8 23'58	1.45776 AU	morning set	12476 Apr 06 08:51	15° Ƴ 11′26	
	12475 May 12 19:12	Π $\circ 0$		desc. node	12476 Apr 06 21:36	16° Ƴ 03'55	
evening rise	12475 May 27 22:31	23° Ⅱ 43'57			12476 Apr 15 10:46	0° ႘	
	12475 May 31 21:53	0 \circ \odot					
greatest brilliancy	12475 Jun 06 04:59	8°918'01	-0.8m	superior conj	12476 Apr 20 15:10	8° 8 16'29	-1°32'29
asc. node	12475 Jun 14 16:56	20°5546'29		minimum elong	12476 Apr 20 06:08	7° 8 40'40	1°32'01
evening max el	12475 Jun 19 01:03	25° © 53'13	18°51'54	max. Earth dist.	12476 Apr 24 06:20	14° 8 00'01	1.45525 AU
retrograde	12475 Jun 25 17:38	29° © 33'45			12476 May 04 13:26	Π° 0	
evening set	12475 Jun 29 02:28	28° 5 28'22		evening rise	12476 May 06 16:44	3° Ⅱ 17'26	
inferior conj	12475 Jul 04 15:34	22° © 45'56	3°03'10	greatest brilliancy	12476 May 20 15:03	24° Ⅲ 23'33	-0.6m
minimum elong	12475 Jul 04 17:00	22°541'25	3°02'07		12476 May 24 12:44	0ංම	
min. Earth dist.	12475 Jul 06 09:37	20°533'55	0.66118 AU	asc. node	12476 May 31 14:01	8°953'22	
morning rise	12475 Jul 10 06:49	16°ഇ23'08		evening max el	12476 Jun 01 07:34	9° © 38'43	19°40'57
direct	12475 Jul 16 14:36	13°9641'35		retrograde	12476 Jun 08 15:41	13°9548'09	
desc. node	12475 Jul 18 00:50	13°9548'53		evening set	12476 Jun 12 09:39	12°526'23	
morning max el	12475 Jul 29 15:17	21° © 25'58	26°33'29	inferior conj	12476 Jun 17 17:56	6° © 29'59	3°13'38
. <i>8</i>	12475 Aug 06 01:56	0°N		minimum elong	12476 Jun 17 18:18	6°€28'47	3°12'42
	12475 Aug 26 03:45	0° m/y		min. Earth dist.	12476 Jun 18 21:20	4° 9 58'34	0.67471 AU
morning set	12475 Sep 03 12:33	15° mp 00'07		morning rise	12476 Jun 23 02:33	0°907'43	
max. Earth dist.	12475 Sep 07 12:50	22° mp 45'12	1.34440 AU		12476 Jun 23 06:03	30°R Ⅱ	
asc. node	12475 Sep 10 17:46	29° mp 11'59	1.5	direct	12476 Jun 29 00:04	27° I I32'00	
	12475 Sep 11 03:09	0∘ ⊽		desc. node	12476 Jul 03 22:02	28° I I58'56	
		-			12476 Jul 05 13:24	0°ల	
superior conj	12475 Sep 12 10:05	2° ₽ 39'21	0°16'04	morning max el	12476 Jul 11 01:52	4° 5 946'13	25°16'21
minimum elong	12475 Sep 12 09:13	2° £ 34'54	0°15'50		12476 Jul 30 11:12	0°N	
behind sun begin	12475 Sep 12 08:11	2° £ 29'31		morning set	12476 Aug 16 00:56	27° Ω 15'36	
behind sun end	12475 Sep 12 10:16	2° £ 40'18			12476 Aug 17 13:17	0° m/y	
evening rise	12475 Sep 19 21:03	18° ≙ 19'00		max. Earth dist.	12476 Aug 19 15:34	3° m/51'53	1.36441 AU
e renning rise	12475 Sep 25 16:00	0°M		man. Bartin dist.	121/01148 15 10.01	3	1.5011110
evening max el	12475 Oct 09 05:00	20°ML08'57	21°05'14	superior conj	12476 Aug 25 23:38	16° Mp 04'16	-0°15'17
desc. node	12475 Oct 13 21:28	23°M53'07	21 05 11	minimum elong	12476 Aug 26 00:37	16° Mp 09'06	
retrograde	12475 Oct 20 23:37	26°M00'01		behind sun begin	12476 Aug 25 22:42	15° m 59'33	0 13 24
evening set	12475 Oct 20 23:37 12475 Oct 23 11:44	25°M45'15		behind sun end	12476 Aug 26 02:32	16° My 18'38	
inferior conj	12475 Nov 01 12:00	21°M51'04	5°06'15	asc. node	12476 Aug 27 14:25	19° m) 17'45	
minimum elong	12475 Nov 01 12:00 12475 Nov 01 02:42	21 11631 04 22°Mc04'13	5°03'35	asc. Houc	12476 Aug 27 14.23 12476 Sep 01 20:54	19 m/1/43	
min. Earth dist.	12475 Nov 01 02.42 12475 Nov 02 02:08	21°M31'07	0.54552 AU	evening rise	12476 Sep 01 20.34 12476 Sep 03 02:46	2° £ 32'00	
			0.54554 AU	evening 1180	-	0°M	
morning rise	12475 Nov 09 18:08	17°M59'20		avaning may al	12476 Sep 19 10:17	1° M L07'03	19°48'04
direct	12475 Nov 13 19:09	17°M24'17	22040144	evening max el	12476 Sep 20 11:52		17 40 04
morning max el	12475 Nov 26 16:55	23°M36'43	22°49'44	desc. node	12476 Sep 29 18:54	6°M08'11	
aga nada	12475 Dec 02 09:08	0° • ⊼ 1 7° • ⊼ 156'00		retrograde	12476 Sep 30 15:10	6°M10'12	
asc. node	12475 Dec 07 18:51	7° 🗷 56'09		evening set	12476 Oct 02 12:49	6°M00'19	2022127
morning set	12475 Dec 19 05:36	29° х 48′03		inferior conj	12476 Oct 11 09:34	1°M.58'24	
	12475 Dec 19 07:51	0° ප		minimum elong	12476 Oct 11 00:35	2°M12'16	
				min. Earth dist.	12476 Oct 13 11:05	U 11642'04	0.55175 AU

morning rise	12476 Oct 14 15:23 12476 Oct 19 10:47 12476 Oct 24 08:08	30°R ≏ 27° ≏ 41'56 26° ≏ 49'22		min. Earth dist. morning rise direct	12477 Sep 25 01:03 12477 Sep 29 18:46 12477 Oct 05 10:50	10° ♀ 32'31 7° ♀ 47'30 6° ♀ 30'29	0.56629 AU
mamina may al	12476 Nov 02 14:48	0°M 3°M39'37	24929110	morning max el	12477 Oct 19 16:18	13° £ 51'25 0° N	26°15'07
morning max el asc. node	12476 Nov 07 03:22 12476 Nov 23 15:47	26°M31'39	24 38 10	asc. node	12477 Nov 01 11:20 12477 Nov 10 12:38	บาน 15°MJ39'06	
ase. Hode	12476 Nov 25 13:47	0° ⊼ ¹		morning set	12477 Nov 10 12:38 12477 Nov 17 04:19	29°M11'26	
morning set	12476 Dec 02 17:29	14° ∡ ³32'56		3	12477 Nov 17 13:21	0° ∡ ¹	
superior conj	12476 Dec 09 12:50	29° × ⁷ 25'43	1°38'33	superior conj	12477 Nov 23 23:40	14° √ 10′14	1°36'34
minimum elong	12476 Dec 09 13:00	29° メ 26'37 0°る	1°39'29	minimum elong	12477 Nov 23 22:47	14° × 705'17	1°37'23
max. Earth dist.	12476 Dec 09 19:06 12476 Dec 11 13:30	0°5 3° る 50'57	1.32384 AU	max. Earth dist. evening rise	12477 Nov 24 19:36 12477 Nov 30 22:40	16° ₹ 00'58 29° ₹ 18'59	1.31578 AU
evening rise	12476 Dec 16 21:23	15° る 05'05	1.32304 AU	evening rise	12477 Dec 01 06:29	0° る	
<i>y</i>	12476 Dec 24 15:24	0° ≈		desc. node	12477 Dec 13 13:44	23° ♂ 14'06	
desc. node	12476 Dec 26 16:44	3° ≈ 38'43			12477 Dec 17 18:56	0° ≈	
	12477 Jan 13 15:01	0° ∀		evening max el	12478 Jan 01 14:44		27°20'38
evening max el	12477 Jan 19 06:51	6° 米 04'19	27°32'19	retrograde	12478 Jan 15 13:05	25°≈54'00	
retrograde	12477 Feb 02 01:33	13° ¥ 28'03 11° ¥ 02'27		evening set	12478 Jan 22 11:01	23°≈43'34	0.61174.411
evening set min. Earth dist.	12477 Feb 08 23:39 12477 Feb 12 17:57		0.63261 AU	min. Earth dist. inferior conj	12478 Jan 26 05:15 12478 Jan 29 07:34	20°≈55'07 18°≈11'29	0.61174 AU
inferior conj	12477 Feb 15 12:27	5° ∺ 05'33		minimum elong	12478 Jan 29 13:06	17°≈59'16	
minimum elong	12477 Feb 15 15:04	4° ¥ 59'00		morning rise	12478 Feb 05 18:06	13°≈15'50	2 33 10
asc. node	12477 Feb 19 14:09	1° ¥ 25'32		asc. node	12478 Feb 06 11:31	13° ≈ 05'09	
morning rise	12477 Feb 22 08:53	29° ≈ 51'26		direct	12478 Feb 07 21:19	12° ≈ 56'46	
	12477 Feb 22 00:17	30°R ≈		morning max el	12478 Feb 14 22:34	16° ≈ 29'45	17°53'18
direct	12477 Feb 24 17:29	29° ≈ 24'44			12478 Feb 24 10:39	0° ∀	
	12477 Feb 27 10:02	0° \	15046140	morning set	12478 Mar 02 13:31	10°) €54'48	
morning max el	12477 Mar 03 06:17	2°) 45'28 27°) 34'57	17°46'43	desc. node	12478 Mar 11 14:45	27°) €07'04	
morning set	12477 Mar 19 13:12 12477 Mar 20 22:48	2/°π343/ 0° Υ		superior conj	12478 Mar 13 05:40	29°) € 56'02	-0°12'38
desc. node	12477 Mar 20 22:48 12477 Mar 24 18:11	6° Υ 31'57		minimum elong	12478 Mar 13 04:32	29° X 50'02	
dese. node	12.77 11.44 21 10.11	0 13107		behind sun begin	12478 Mar 12 23:12	29°) 28'07	V 1221
superior conj	12477 Mar 31 22:10	18° Ƴ 31'43	-0°53'07	behind sun end	12478 Mar 13 09:53	0° Υ 14'15	
minimum elong	12477 Mar 31 16:44	18° Y 09'20	0°52'33		12478 Mar 13 06:35	0° Y	
max. Earth dist.	12477 Apr 07 00:39	28° Y 24'06	1.44557 AU	max. Earth dist.	12478 Mar 20 15:02	12° Y ′21'57	1.42984 AU
	12477 Apr 08 00:46	0°8		evening rise	12478 Mar 27 00:01	22° Y '35'32	
evening rise	12477 Apr 16 04:00	12° 8 41'26			12478 Mar 31 18:43	0° B	
evening max el	12477 Apr 27 15:57 12477 May 15 08:16	0° Ц 23° Ц 24'57	20°44'24	avaning may al	12478 Apr 21 21:01 12478 Apr 28 03:39	0° П 7° П 12'34	21050141
asc. node	12477 May 13 08:10 12477 May 18 11:12	26° Ⅱ 09'51	20 44 24	evening max el asc. node	12478 May 05 08:26	7 Ⅲ 12 34 12° Ⅲ 21'21	21 3041
retrograde	12477 May 23 14:39	28° Ⅱ 12'56		retrograde	12478 May 07 12:39	12° I I43'33	
evening set	12477 May 27 18:28	26° Ⅲ 34'51		evening set	12478 May 12 03:08	10° Ⅱ 49'53	
inferior conj	12477 Jun 02 00:45	20° II 26'09	3°11'34	inferior conj	12478 May 17 09:51	4° Ⅲ 30′59	2°58'32
minimum elong	12477 Jun 02 00:06	20° Ⅲ 28'27	3°10'38	minimum elong	12478 May 17 08:21	4° Ⅱ 36'11	2°57'32
min. Earth dist.	12477 Jun 02 14:19	19° Ⅲ 39'20	0.68366 AU	min. Earth dist.	12478 May 17 10:19	4° Ⅲ 29'21	0.68796 AU
morning rise	12477 Jun 07 05:29	14° Ⅱ 07'23			12478 May 20 20:43	30°₹ ႘	
direct desc. node	12477 Jun 12 14:49 12477 Jun 20 19:10	11° Ⅱ 44'49 15° Ⅱ 43'14		morning rise direct	12478 May 22 13:23 12478 May 27 09:49	28° 8 17'39 26° 8 13'15	
morning max el	12477 Jun 23 11:59	13 ∐ 43 14 18° ∐ 15'08	23°48'21	direct	12478 Jun 04 00:27	0°II	
morning max cr	12477 Jul 03 08:32	0°95	25 40 21	morning max el	12478 Jun 05 23:45	1° П 51'29	22°19'03
	12477 Jul 23 13:12	$0^{\circ}\Omega$		desc. node	12478 Jun 07 16:10	3° Ⅱ 37'31	
morning set	12477 Jul 28 17:11	8° Ω 35'36			12478 Jun 27 06:34	0 \circ \odot	
max. Earth dist.	12477 Aug 01 13:07	15° Ω 13'49	1.38717 AU	morning set	12478 Jul 09 08:50	18° 5 49'18	
				max. Earth dist.	12478 Jul 14 12:11	27°518'11	1.41028 AU
superior conj	12477 Aug 09 00:16	28° Ω 51'04			12478 Jul 16 02:27	0 \circ Ω	
minimum elong	12477 Aug 09 03:44	29° Ω 07'26	0°49'17	aumorior coni	12479 Iul 22 07:44	100 0 50121	1022110
asc. node	12477 Aug 09 14:51 12477 Aug 14 11:05	0° m) 9° m)19'37		superior conj minimum elong	12478 Jul 22 07:44 12478 Jul 22 13:43	10° Ω 50'21 11° Ω 17'06	
evening rise	12477 Aug 14 11:03 12477 Aug 18 01:54	16° My 24'33		asc. node	12478 Aug 01 07:48	29° Ω 13'55	1 20 10
	12477 Aug 16 01:54 12477 Aug 25 06:45	ე° ഹ		evening rise	12478 Aug 01 15:05	29° Ω 48'02	
evening max el	12477 Sep 03 08:14	12° ≏ 53'35	18°52'33	5	12478 Aug 01 17:38	0° m)	
retrograde	12477 Sep 11 21:50	17° ≏ 11'06		evening max el	12478 Aug 17 14:37	25° Mp 22'11	18°18'17
evening set	12477 Sep 13 19:02	16° ≙ 59'27		retrograde	12478 Aug 24 23:33	29° m 05'49	
desc. node	12477 Sep 16 16:22	16° ≏ 00'18		evening set	12478 Aug 27 02:52	28° m 47'43	
inferior conj	12477 Sep 22 00:49	12° Ω 40'44		inferior conj	12478 Sep 03 13:48	24° Mp 08'22	0°00'02
minimum elong	12477 Sep 21 20:32	12° ≏ 48'22	1~39725	minimum elong	12478 Sep 03 13:47	24° Mp 08'23	0°00'09

transit middle	12478 Sep 03 13:47	24° Mp 08'23	0°00'09	evening set	12470 Aug 10 05:22	11° m) 19'07	
transit begin	12478 Sep 03 10:18	24° m) 15'38	0 00 09	inferior conj	12479 Aug 10 05:32 12479 Aug 16 22:59	6° M) 19'26	1°19'13
transit end	12478 Sep 03 17:16	24° m) 01'06		minimum elong	12479 Aug 10 22.39 12479 Aug 17 01:09	6° M) 14'13	1°18'02
desc. node	12478 Sep 03 17:10 12478 Sep 03 13:50	24° Mp 08'16		min. Earth dist.	12479 Aug 17 01:09 12479 Aug 20 02:35	3° m)18'19	0.60924 AU
min. Earth dist.	12478 Sep 06 21:38	21° m) 23'00	0.58655 AU	desc. node	12479 Aug 21 11:16	2° M) 06'21	0.00724710
morning rise	12478 Sep 10 21:13	18° m) 39'33	0.50055710	morning rise	12479 Aug 23 17:59	0° m 23'24	
direct	12478 Sep 17 03:54	16° Mp 54'21		morning rise	12479 Aug 24 08:53	30°RΩ	
morning max el	12478 Oct 01 11:56	24° m/37'05	27°24'11	direct	12479 Aug 30 08:45	28° Ω 12'06	
5 5	12478 Oct 06 10:25	0∘ ⊽			12479 Sep 05 17:47	0° m	
	12478 Oct 25 17:42	0° M .		morning max el	12479 Sep 13 14:48	6° Mp 08'36	27°56'13
asc. node	12478 Oct 28 09:24	5°M09'42		C	12479 Oct 01 14:11	0∘ <u>⊽</u>	
morning set	12478 Nov 01 12:18	13°ML38'23		asc. node	12479 Oct 15 06:06	24° £ 56'49	
-				morning set	12479 Oct 16 15:39	27° ≏ 49'17	
superior conj	12478 Nov 08 11:22	28°ML53'47	1°28'46		12479 Oct 17 16:39	0°M	
minimum elong	12478 Nov 08 09:38	28°M44'11	1°29'20	max. Earth dist.	12479 Oct 22 11:50	10°M21'43	1.31496 AU
max. Earth dist.	12478 Nov 08 04:16	28°M14'09	1.31281 AU				
	12478 Nov 08 23:13	0° ∡ ¹		superior conj	12479 Oct 23 22:06	13°ML31'08	1°15'21
evening rise	12478 Nov 15 05:16	13° ∡ ¹45'15		minimum elong	12479 Oct 23 19:54	13°ML18'57	1°15'36
	12478 Nov 23 07:35	0°ප		evening rise	12479 Oct 30 15:09	28°M18'30	
desc. node	12478 Nov 30 10:49	12° る 14'41			12479 Oct 31 10:04	0°⊀	
	12478 Dec 14 07:06	0° ≈		desc. node	12479 Nov 17 07:59	0° る 27'11	
evening max el	12478 Dec 14 16:09	0° ≈ 21'34	26°34'23		12479 Nov 17 00:21	0°ರ	
retrograde	12478 Dec 28 15:01	7° ≈ 28'46		evening max el	12479 Nov 26 09:13	11° る 13'58	25°16'32
evening set	12479 Jan 04 04:57	5° ≈ 42'07		retrograde	12479 Dec 10 05:22	18° る 10'52	
min. Earth dist.	12479 Jan 08 06:04	3° ≈ 05′26	0.59023 AU	evening set	12479 Dec 16 01:06	16° පි 54'08	
inferior conj	12479 Jan 11 09:52	0° ≈ 40′04		min. Earth dist.	12479 Dec 20 21:18	14° පි 13'43	0.57029 AU
minimum elong	12479 Jan 11 17:56	0° ≈ 24'33	3°55'12	inferior conj	12479 Dec 23 16:16	12° ප් 22'21	
	12479 Jan 12 06:49	30°Rる		minimum elong	12479 Dec 24 00:16	12° පි 09'01	5°06'55
morning rise	12479 Jan 19 09:48	26° ⋜ 05'23		morning rise	12480 Jan 01 01:45	8° る 09'54	
direct	12479 Jan 21 11:24	25° る 50'16		direct	12480 Jan 03 07:44	7° る 55'02	
asc. node	12479 Jan 24 08:49	26°る21'22	1001010	asc. node	12480 Jan 11 06:02	11°る14'19	1000 (110
morning max el	12479 Jan 29 09:35	29°₹45'06	18°19'20	morning max el	12480 Jan 12 11:24	12° る 20'49	19°06'48
	12479 Jan 29 15:36	0° ≈ 24° ≈ 52'30			12480 Jan 24 09:10	0°≈	
morning set	12479 Feb 14 03:53 12479 Feb 16 20:34	0° \		morning set	12480 Jan 29 03:50	9° ≈ 15′05	
	124/9 Feb 10 20.34	υ χ		superior conj	12480 Feb 06 11:24	25°≈36'53	0°52'50
superior conj	12479 Feb 23 11:33	12° ¥ 21'48	0°23'32	minimum elong	12480 Feb 06 14:12	25°≈50'19	0°53'00
minimum elong	12479 Feb 23 13:14	12° X 21'40	0°23'37	minimum clong	12480 Feb 08 18:43	0° ∀	0 33 00
desc. node	12479 Feb 26 11:20	17° \ 44'56	0 23 37	desc. node	12480 Feb 13 07:56	8° ∺ 22'13	
max. Earth dist.	12479 Mar 03 00:56		1.40975 AU	max. Earth dist.	12480 Feb 13 07:43		1.38751 AU
man zam ust.	12479 Mar 05 14:05	0°Υ	1.10576110	evening rise	12480 Feb 17 02:34	15°) €01'00	1.50,01110
evening rise	12479 Mar 07 14:41	3° Y 20'47			12480 Feb 26 05:12	0°Υ	
<i>8</i>	12479 Mar 25 01:36	0°8					
evening max el					12480 Mar 18 20:19	0°8	
retrograde	12479 Apr 10 19:15	21° 8 02'02	23°18'52	evening max el	12480 Mar 18 20:19 12480 Mar 23 09:00		24°38'39
renograde	12479 Apr 10 19:15 12479 Apr 21 08:06	21° 8 02'02 27° 8 14'32	23°18'52	evening max el retrograde		_	24°38'39
asc. node	12479 Apr 10 19:15 12479 Apr 21 08:06 12479 Apr 22 05:45		23°18'52	~	12480 Mar 23 09:00	4° 8 53'20	24°38'39
•	12479 Apr 21 08:06	27° 8 14'32	23°18'52	retrograde	12480 Mar 23 09:00 12480 Apr 03 23:53	4° 8 53'20 11° 8 40'30	24°38'39
asc. node	12479 Apr 21 08:06 12479 Apr 22 05:45	27° 8 14'32 27° 8 10'45		retrograde asc. node	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07	4°\dagger 53'20 11°\dagger 40'30 10°\dagger 24'33	24°38'39 0.68273 AU
asc. node evening set	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04	27°814'32 27°810'45 25°806'30	2°35′21	retrograde asc. node evening set	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43	4°853'20 11°840'30 10°824'33 9°820'17	
asc. node evening set inferior conj	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12	27°814'32 27°810'45 25°806'30 18°840'13	2°35′21	retrograde asc. node evening set min. Earth dist.	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41	0.68273 AU
asc. node evening set inferior conj minimum elong	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 17:11	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12	2°35'21 2°34'16	retrograde asc. node evening set min. Earth dist. inferior conj	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57	4°\delta53'20 11°\delta40'30 10°\delta24'33 9°\delta20'17 4°\delta11'41 2°\delta50'11	0.68273 AU 2°02'14
asc. node evening set inferior conj minimum elong min. Earth dist.	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 17:11 12479 May 01 07:06	27°\dagger 14'32 27°\dagger 10'45 25°\dagger 306'30 18°\dagger 40'13 18°\dagger 47'12 19°\dagger 21'58	2°35'21 2°34'16	retrograde asc. node evening set min. Earth dist. inferior conj	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48	4°\&53'20 11°\&40'30 10°\&24'33 9°\&20'17 4°\&11'41 2°\&50'11 2°\&57'21 30°\R\Υ 26°\Y51'58	0.68273 AU 2°02'14
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 17:11 12479 May 01 07:06 12479 May 07 00:12	27°\dagger 10'45 25°\dagger 206'30 18°\dagger 40'13 18°\dagger 47'12 19°\dagger 21'58 12°\dagger 33'48	2°35'21 2°34'16 0.68761 AU	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09	4°\S53'20 11°\S40'30 10°\S24'33 9°\S20'17 4°\S11'41 2°\S50'11 2°\S57'21 30°\RY 26°\Y51'58 25°\Y29'29	0.68273 AU 2°02'14
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 17:11 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29	2°35'21 2°34'16 0.68761 AU	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03	4°\S53'20 11°\S40'30 10°\S24'33 9°\S20'17 4°\S11'41 2°\S50'11 2°\S57'21 30°\RY 26°\Y51'58 25°\Y29'29 29°\Y36'03	0.68273 AU 2°02'14
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19	27°&14'32 27°&10'45 25°&06'30 18°&40'13 18°&47'12 19°&21'58 12°&33'48 10°&50'09 15°&37'47 22°&22'29 0°II	2°35'21 2°34'16 0.68761 AU	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 02 02:08	4°\S53'20 11°\S40'30 10°\S24'33 9°\S20'17 4°\S11'41 2°\S57'21 30°\KY 26°\Y51'58 25°\Y29'29 29°\Y36'03 0°\S	0.68273 AU 2°02'14 2°01'11
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57	2°35'21 2°34'16 0.68761 AU	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 02 02:08 12480 May 11 09:51	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26	0.68273 AU 2°02'14 2°01'11 19°46'21
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asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57 0°\$	2°35'21 2°34'16 0.68761 AU	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 01 16:33 12480 May 11 09:51 12480 May 14 13:13 12480 May 23 17:39	4°\S53'20 11°\S40'30 10°\S24'33 9°\S20'17 4°\S11'41 2°\S50'11 2°\S57'21 30°\R\Y 26°\Y51'58 25°\Y29'29 29°\Y36'03 0°\S 11°\S44'26 16°\S15'24 0°\I	0.68273 AU 2°02'14 2°01'11 19°46'21
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asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43 12479 Jun 20 06:54 12479 Jun 26 17:47 12479 Jul 03 17:40	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°11 27°1157'57 0°5 10°517'58	2°35'21 2°34'16 0.68761 AU 20°56'35 1.43089 AU -1°52'36	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 01 16:33 12480 May 11 09:51 12480 May 11 09:51 12480 May 23 17:39 12480 May 28 00:36 12480 Jun 08 06:28	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°850'11 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26 16°815'24 0°Π 6°Π33'36 24°Π05'41	0.68273 AU 2°02'14 2°01'11 19°46'21
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asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong evening rise	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43 12479 Jun 20 06:54 12479 Jun 26 17:47 12479 Jul 03 17:40 12479 Jul 03 17:40 12479 Jul 04 00:33 12479 Jul 08 11:25 12479 Jul 15 14:00	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57 0°9 10°917'58 21°952'49 22°921'55 0°0 12°032'01	2°35'21 2°34'16 0.68761 AU 20°56'35 1.43089 AU -1°52'36	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 01 16:33 12480 May 11 09:51 12480 May 14 13:13 12480 May 23 17:39 12480 May 28 00:36 12480 Jun 08 06:28 12480 Jun 11 23:18	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26 16°815'24 0°Π 6°Π33'36 24°Π05'41 0°9	0.68273 AU 2°02'14 2°01'11 19°46'21 -0.6m 1.44657 AU
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43 12479 Jun 20 06:54 12479 Jun 26 17:47 12479 Jul 03 17:40 12479 Jul 03 17:40 12479 Jul 08 11:25 12479 Jul 08 11:25 12479 Jul 15 14:00 12479 Jul 19 04:34	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57 0°\$ 10°\$17'58 21°\$52'49 22°\$21'55 0°\$ 12°\$32'01 18°\$56'32	2°35'21 2°34'16 0.68761 AU 20°56'35 1.43089 AU -1°52'36	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 02 02:08 12480 May 11 09:51 12480 May 14 13:13 12480 May 23 17:39 12480 May 28 00:36 12480 Jun 08 06:28 12480 Jun 11 23:18	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26 16°815'24 0°Π 6°Π33'36 24°Π05'41 0°9 1°953'50 2°908'31	0.68273 AU 2°02'14 2°01'11 19°46'21 -0.6m
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong evening rise asc. node	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43 12479 Jun 20 06:54 12479 Jun 26 17:47 12479 Jul 03 17:40 12479 Jul 04 00:33 12479 Jul 08 11:25 12479 Jul 15 14:00 12479 Jul 19 04:34 12479 Jul 19 04:34 12479 Jul 19 04:34 12479 Jul 25 17:39	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57 0°G 10°G17'58 21°G52'49 22°G21'55 0°A 12°A32'01 18°A56'32 0°M	2°35'21 2°34'16 0.68761 AU 20°56'35 1.43089 AU -1°52'36 1°52'53	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 02 02:08 12480 May 11 09:51 12480 May 14 13:13 12480 May 23 17:39 12480 May 28 00:36 12480 Jun 08 06:28 12480 Jun 11 23:18 12480 Jun 13 03:35 12480 Jun 13 07:13 12480 Jun 26 17:38	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26 16°815'24 0°11 6°133'36 24°105'41 0°5 1°553'50 2°508'31 24°524'18	0.68273 AU 2°02'14 2°01'11 19°46'21 -0.6m 1.44657 AU
asc. node evening set inferior conj minimum elong min. Earth dist. morning rise direct morning max el desc. node morning set max. Earth dist. superior conj minimum elong evening rise	12479 Apr 21 08:06 12479 Apr 22 05:45 12479 Apr 26 10:04 12479 May 01 19:12 12479 May 01 07:06 12479 May 07 00:12 12479 May 11 07:42 12479 May 19 16:28 12479 May 25 13:03 12479 May 31 05:19 12479 Jun 18 23:43 12479 Jun 20 06:54 12479 Jun 26 17:47 12479 Jul 03 17:40 12479 Jul 03 17:40 12479 Jul 08 11:25 12479 Jul 08 11:25 12479 Jul 15 14:00 12479 Jul 19 04:34	27°814'32 27°810'45 25°806'30 18°840'13 18°847'12 19°821'58 12°833'48 10°850'09 15°837'47 22°822'29 0°II 27°II57'57 0°\$ 10°\$17'58 21°\$52'49 22°\$21'55 0°\$ 12°\$32'01 18°\$56'32	2°35'21 2°34'16 0.68761 AU 20°56'35 1.43089 AU -1°52'36	retrograde asc. node evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el desc. node greatest brilliancy morning set max. Earth dist.	12480 Mar 23 09:00 12480 Apr 03 23:53 12480 Apr 08 03:07 12480 Apr 09 13:43 12480 Apr 14 02:29 12480 Apr 15 02:57 12480 Apr 15 00:48 12480 Apr 17 07:52 12480 Apr 20 12:03 12480 Apr 24 07:09 12480 May 01 16:33 12480 May 02 02:08 12480 May 11 09:51 12480 May 14 13:13 12480 May 23 17:39 12480 May 28 00:36 12480 Jun 08 06:28 12480 Jun 11 23:18	4°853'20 11°840'30 10°824'33 9°820'17 4°811'41 2°857'21 30°8Υ 26°Υ51'58 25°Υ29'29 29°Υ36'03 0°8 11°844'26 16°815'24 0°Π 6°Π33'36 24°Π05'41 0°9 1°953'50 2°908'31	0.68273 AU 2°02'14 2°01'11 19°46'21 -0.6m 1.44657 AU

evening max el	12480 Jul 14 16:57	21° Ω 44'34	18°08'25	retrograde	12481 Jul 04 17:23	8° Ω 50′26	
retrograde	12480 Jul 21 01:42	25° Ω 05'04		evening set	12481 Jul 07 21:06	7° Ω 54'23	
evening set	12480 Jul 23 21:04	24° Ω 23'51		inferior conj	12481 Jul 13 14:25	2° Ω 20′29	2°50'33
inferior conj	12480 Jul 30 00:31	19° Ω 06′01	2°15'05	minimum elong	12481 Jul 13 16:24	2° Ω 14'29	2°49'23
minimum elong	12480 Jul 30 03:06	18° Ω 58'58	2°13'45	min. Earth dist.	12481 Jul 15 16:58	29° © 48'43	0.65137 AU
min. Earth dist.	12480 Aug 01 17:04	16° Ω 10'41	0.63153 AU		12481 Jul 15 13:08	30° ₹ 🥯	
morning rise	12480 Aug 05 07:17	12° Ω 52'48		morning rise	12481 Jul 19 10:37	25° © 59'01	
desc. node	12480 Aug 07 08:40	11° Ω 33'36		desc. node	12481 Jul 25 06:01	23°520'05	
direct	12480 Aug 11 23:29	10° Ω 22'07		direct	12481 Jul 25 22:42	23° © 18'22	
morning max el	12480 Aug 25 23:04	18° Ω 24'06	27°49'43		12481 Aug 07 03:42	0°N	
8	12480 Sep 04 17:27	0° m)		morning max el	12481 Aug 08 09:55	1°Ω14'09	27°09'08
	12480 Sep 23 11:35	0∘ ⊽		morning max or	12481 Aug 29 20:02	0° m)	27 07 00
morning set	12480 Sep 29 12:05	11° ≏ 37'43		morning set	12481 Sep 12 22:57	24° m) 57'19	
asc. node	12480 Oct 01 02:45	11° 2 57'45		morning set	*	0° ⊽	
			1 22220 ATT	Danila diat	12481 Sep 15 12:30		1 2240C ATT
max. Earth dist.	12480 Oct 04 14:21	22° ≏ 12'49	1.32229 AU	max. Earth dist.	12481 Sep 17 08:10	3° £ 40′29	1.33486 AU
	10100 0 . 05 05 55	250 2 55150	0056105	asc. node	12481 Sep 17 23:24	4° ≙ 58'21	
superior conj	12480 Oct 07 05:57	27° Ω 55'58	0°56'25				
minimum elong	12480 Oct 07 03:46	27° ≏ 44'04	0°56'23	superior conj	12481 Sep 21 08:49	12° ≏ 03'00	0°32'13
	12480 Oct 08 04:41	0° M		minimum elong	12481 Sep 21 07:15	11° ≏ 54'47	0°32'00
evening rise	12480 Oct 14 02:21	12°M52'35		evening rise	12481 Sep 28 13:04	27° ≏ 22'46	
	12480 Oct 22 15:05	0° ∡ 7			12481 Sep 29 18:55	0° M	
desc. node	12480 Nov 03 05:14	17° ∡ ³32'45			12481 Oct 17 21:12	0°⊀	
evening max el	12480 Nov 06 19:47	21° ∡ ¹25'37	23°38'37	evening max el	12481 Oct 19 07:56	1° ∡ ¹29'47	21°58'02
retrograde	12480 Nov 20 07:12	28° ∡ 08'39		desc. node	12481 Oct 21 02:34	3° ҂ 07'24	
evening set	12480 Nov 24 21:16	27° ∡ ¹22'51		retrograde	12481 Oct 31 22:07	7° ҂ ¹45′03	
min. Earth dist.	12480 Dec 01 06:04	24° х 19'38	0.55463 AU	evening set	12481 Nov 04 01:42	7° ∡ ¹22'52	
inferior conj	12480 Dec 03 02:14	23°×14'19		inferior conj	12481 Nov 12 21:17	3° ₹ 126'47	-5°39'40
minimum elong	12480 Dec 03 04:54	23°×1417		minimum elong	12481 Nov 12 15:17	3° × ⁷ 35'13	
	12480 Dec 03 04:34 12480 Dec 11 14:22	19° х 1022	3 4931	min. Earth dist.	12481 Nov 12 13:17	3° ∡ 3313	
morning rise				iiiii. Eartii uist.			0.34021 AU
direct	12480 Dec 14 08:25	19° × ⁷ 02'08	20017117		12481 Nov 20 01:53	30°RM	
morning max el	12480 Dec 25 00:27	24°×707'04	20°17'17	morning rise	12481 Nov 21 06:02	29°M39'35	
asc. node	12480 Dec 28 03:10	27° ∡ ³30′18		direct	12481 Nov 24 18:40	29°M 12'11	
	12480 Dec 30 01:19	0°る			12481 Nov 29 07:07	0° ∡ ¹	
morning set	12481 Jan 12 10:04	23° る 52'44		morning max el	12481 Dec 06 23:29		21°49'28
	12481 Jan 15 09:26	0° ≈		asc. node	12481 Dec 15 00:14	14° ≯ 52'33	
					12481 Dec 23 14:50	0°₹	
superior conj	12481 Jan 20 00:40	9° ≈ 28'43	1°14'38	morning set	12481 Dec 27 20:04	8° る 37'55	
minimum elong	12481 Jan 20 03:22	9° ≈ 42'17	1°15'04				
max. Earth dist.	12481 Jan 25 14:53	20° ≈ 27'14	1.36555 AU	superior conj	12482 Jan 03 23:31	23° る 45'58	1°29'11
evening rise	12481 Jan 29 09:54	27° ≈ 30'45		minimum elong	12482 Jan 04 01:26	23° る 55'57	1°29'55
desc. node	12481 Jan 30 04:36	28° ≈ 55'22		_	12482 Jan 06 23:43	0° ≈	
	12481 Jan 30 19:00	0°) €		max. Earth dist.	12482 Jan 08 03:01	2°≈18'34	1.34614 AU
	12481 Feb 18 14:33	0° Υ		evening rise	12482 Jan 12 09:16	10°≈40'59	
evening max el	12481 Mar 05 22:22	18° Ƴ 43'56	25°51'04	desc. node	12482 Jan 17 01:19	19° ≈ 19'56	
retrograde	12481 Mar 18 11:08	25° Y '55'31	23 31 01	dese. Hode	12482 Jan 23 06:31	0° ∀	
evening set	12481 Mar 24 12:30	23° Y 26'32			12482 Feb 14 02:01	0°Υ	
asc. node	12481 Mar 26 00:29	23 γ 20 32 22° γ 02'46		avanina may al		2° Υ 27'15	26949147
min. Earth dist.		18° Υ 53'10	0.67352 AU	evening max el	12482 Feb 16 11:55	2 γ 27 13 9° γ 51'19	20 4647
	12481 Mar 28 18:27			retrograde	12482 Mar 01 16:59		
inferior conj	12481 Mar 30 07:11	16° Y 57′22	1°19'04	evening set	12482 Mar 08 04:31	7° Y 18'37	0.66022.477
minimum elong	12481 Mar 30 05:26	17° Y ′02'54	1°18'16	min. Earth dist.	12482 Mar 12 04:52	3° Y 19′07	0.66032 AU
morning rise	12481 Apr 04 23:00	11° Y ′08'41		asc. node	12482 Mar 12 21:55	2° Y 29'47	
direct	12481 Apr 08 06:36	10° Y ′05'52		inferior conj	12482 Mar 14 05:43	0° Υ 56'16	
morning max el	12481 Apr 15 00:16	13° Ƴ 44'18	18°51'18	minimum elong	12482 Mar 14 05:02	0° Υ 58'17	0°25'16
	12481 Apr 27 05:51	0°B			12482 Mar 15 01:05	30° ₹ ₩	
desc. node	12481 Apr 28 06:33	1° 8 33'36		morning rise	12482 Mar 20 06:49	25° ₩ 18'55	
greatest brilliancy	12 101 11p1 20 00.55						
	12481 Apr 28 21:16	2° 8 29'41	-0.8m	direct	12482 Mar 23 04:12	24°) 32'55	
morning set	-		-0.8m	direct morning max el	12482 Mar 23 04:12 12482 Mar 29 13:55	24° ∺ 32'55 27° ∺ 55'48	18°12'40
	12481 Apr 28 21:16 12481 May 07 09:06	2° 8 29'41 15° 8 37'38	-0.8m				18°12'40
morning set	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40	2° ႘ 29'41 15° ႘ 37'38 0°Ⅱ		morning max el	12482 Mar 29 13:55 12482 Mar 31 12:09	27°) 55'48 0° Υ	18°12'40
	12481 Apr 28 21:16 12481 May 07 09:06	2° ႘ 29'41 15° ႘ 37'38 0°Ⅱ	-0.8m 1.45570 AU	morning max el desc. node	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11	27°¥55'48 0°°Y 21°°Y42'03	18°12'40
morning set max. Earth dist.	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51	2° 8 29'41 15° 8 37'38 0°П 8°П24'19	1.45570 AU	morning max el	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33	27°), 55'48 0° Υ 21° Υ 42'03 25° Υ 56'41	18°12'40
morning set max. Earth dist. superior conj	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30	2° 8 29'41 15° 8 37'38 0°Ⅲ 8°Ⅲ24'19 11°Ⅲ07'28	1.45570 AU -2°11'06	morning max el desc. node	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11	27°¥55'48 0°°Y 21°°Y42'03	18°12'40
morning set max. Earth dist.	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30 12481 May 23 13:45	2° 8 29'41 15° 8 37'38 0° П 8° П 24'19 11° П 07'28 10° П 52'47	1.45570 AU -2°11'06	morning max el desc. node morning set	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33 12482 Apr 20 07:11	27° Υ 55'48 0° Υ 21° Υ 42'03 25° Υ 56'41 0° 8	
morning set max. Earth dist. superior conj minimum elong	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30 12481 May 23 13:45 12481 Jun 04 15:06	2° 8 29'41 15° 8 37'38 0° П 8° П 24'19 11° П 07'28 10° П 52'47 0° ©	1.45570 AU -2°11'06	morning max el desc. node morning set superior conj	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33 12482 Apr 20 07:11 12482 May 03 00:54	27° \ 55'48 0° Ψ 21° Ψ42'03 25° Ψ56'41 0° \ 20° \ 810'36	-1°51'18
morning set max. Earth dist. superior conj minimum elong evening rise	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30 12481 May 23 13:45 12481 Jun 04 15:06 12481 Jun 07 21:46	2°829'41 15°837'38 0°Ⅲ 8°Ⅲ24'19 11°Ⅲ07'28 10°Ⅲ52'47 0°ഈ 5°916'37	1.45570 AU -2°11'06	morning max el desc. node morning set superior conj minimum elong	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33 12482 Apr 20 07:11 12482 May 03 00:54 12482 May 02 15:53	27° \ 55'48 0° Υ 21° Υ 42'03 25° Υ 56'41 0° \ 20° \ 10'36 19° \ 35'16	-1°51'18 1°51'13
morning set max. Earth dist. superior conj minimum elong	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30 12481 May 23 13:45 12481 Jun 04 15:06 12481 Jun 07 21:46 12481 Jun 21 22:20	2° 8 29'41 15° 8 37'38 0° П 8° П 24'19 11° П 07'28 10° П 52'47 0° 9 5° 9 16'37 27° 9 23'55	1.45570 AU -2°11'06	morning max el desc. node morning set superior conj	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33 12482 Apr 20 07:11 12482 May 03 00:54 12482 May 02 15:53 12482 May 04 19:15	27° \tau55'48 0° \tau 21° \tau42'03 25° \tau56'41 0° \tau 20° \tau10'36 19° \tau35'16 22° \tau56'16	-1°51'18
morning set max. Earth dist. superior conj minimum elong evening rise	12481 Apr 28 21:16 12481 May 07 09:06 12481 May 16 14:40 12481 May 21 23:51 12481 May 23 17:30 12481 May 23 13:45 12481 Jun 04 15:06 12481 Jun 07 21:46	2°829'41 15°837'38 0°Ⅲ 8°Ⅲ24'19 11°Ⅲ07'28 10°Ⅲ52'47 0°ഈ 5°916'37	1.45570 AU -2°11'06 2°11'50	morning max el desc. node morning set superior conj minimum elong	12482 Mar 29 13:55 12482 Mar 31 12:09 12482 Apr 15 03:11 12482 Apr 17 18:33 12482 Apr 20 07:11 12482 May 03 00:54 12482 May 02 15:53	27° \ 55'48 0° Υ 21° Υ 42'03 25° Υ 56'41 0° \ 20° \ 10'36 19° \ 35'16	-1°51'18 1°51'13

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	12482 May 28 15:37	0°©			12483 May 02 04:28	Π°	
greatest brilliancy	12482 May 30 13:09	2° 9 53'17	-0.7m	greatest brilliancy	12483 May 13 16:44	17° Ⅱ 10'57	-0.6m
asc. node	12482 Jun 08 19:23	15°953'46	****	8	12483 May 23 05:28	0°9	
evening max el	12482 Jun 11 15:23	19° © 03'53	19°10'54	evening max el	12483 May 25 19:34	2°950'10	20°06'27
retrograde	12482 Jun 18 13:50	22°955'34		asc. node	12483 May 26 16:30	3°9540'54	
evening set	12482 Jun 22 02:23	21°5643'28		retrograde	12483 Jun 02 12:24	7° © 14'43	
inferior conj	12482 Jun 27 13:05	15°955'05	3°09'16	evening set	12483 Jun 06 10:28	5°946'02	
minimum elong	12482 Jun 27 14:04	15°951'54	3°08'16	inferior conj	12483 Jun 11 17:37	29° ∏ 44′28	3°14'09
min. Earth dist.	12482 Jun 29 00:56	13°959'12	0.66745 AU	minimum elong	12483 Jun 11 17:31	29° Ⅱ 44'47	
morning rise	12482 Jul 03 01:09	9° © 31'51	0.00743 AU	minimum clong	12483 Jun 11 17:31 12483 Jun 11 13:02	29 ∏ 4447 30°R ∏	3 13 14
direct	12482 Jul 09 04:55	6°951'26		min. Earth dist.	12483 Jun 12 15:06	•	0.67912 AU
						28 H 31 34 23° H 23'31	0.67912 AU
desc. node	12482 Jul 12 03:16	7°522'25	26002125	morning rise	12483 Jun 17 00:15	23°Щ23'31 20°Щ52'23	
morning max el	12482 Jul 21 20:47	14°925'37	20-02-33	direct	12483 Jun 22 16:53		
	12482 Aug 03 13:41	0° N		desc. node	12483 Jun 29 00:27	23° Ⅱ 15'36	2.402012.6
	12482 Aug 22 14:50	0° Mp		morning max el	12483 Jul 04 06:47	27° Ⅱ 49'04	24°39'36
morning set	12482 Aug 26 20:46	7° mp 39'28	1.05000 444		12483 Jul 06 08:15	0° ©	
max. Earth dist.	12482 Aug 30 15:38	14° m 48'25	1.35238 AU		12483 Jul 28 05:59	0 ° Ω	
asc. node	12482 Sep 04 20:03	25° Mp 04'45		morning set	12483 Aug 09 01:09	19° Ω 32'38	
				max. Earth dist.	12483 Aug 12 15:09	25° Ω 56′53	1.37386 AU
superior conj	12482 Sep 05 04:09	25° m 45'53	0°03'14		12483 Aug 14 20:00	0° ™	
minimum elong	12482 Sep 05 03:58	25° M 44'58	0°03'03				
behind sun begin	12482 Sep 04 22:00	25° m) 14'38		superior conj	12483 Aug 19 12:43	8° Mp 56'04	
behind sun end	12482 Sep 05 09:56	26° Mp 15'22		minimum elong	12483 Aug 19 14:41	9° ™ 05'39	0°29'33
	12482 Sep 07 05:43	0∘ 亚		asc. node	12483 Aug 22 16:42	15° m 09'28	
evening rise	12482 Sep 12 21:16	11° ≏ 43'55		evening rise	12483 Aug 28 00:32	25° m 49'10	
	12482 Sep 22 09:34	0° M ₊			12483 Aug 30 03:00	0∘ ত	
evening max el	12482 Oct 01 06:54	12°MJ03'19	20°29'58	evening max el	12483 Sep 13 19:55	23° ≏ 22'52	19°21'51
desc. node	12482 Oct 07 23:58	16°M43'16		retrograde	12483 Sep 23 06:04	28° ഫ 05'08	
retrograde	12482 Oct 12 09:25	17° M 34'15		desc. node	12483 Sep 24 21:26	27° ≏ 57'11	
evening set	12482 Oct 14 13:08	17° M 22'43		evening set	12483 Sep 25 02:31	27° ≏ 55'01	
inferior conj	12482 Oct 23 13:48	13°M27'11	-4°30'49	inferior conj	12483 Oct 03 17:51	23° ≏ 46'54	-2°45'28
minimum elong	12482 Oct 23 03:44	13° M 41'47	4°27'27	minimum elong	12483 Oct 03 10:40	23° ჲ 58'38	2°42'31
min. Earth dist.	12482 Oct 24 20:18	12°M42'52	0.54702 AU	min. Earth dist.	12483 Oct 06 06:57	22° ჲ 07'30	0.55707 AU
morning rise	12482 Oct 31 17:52	9°M26'49		morning rise	12483 Oct 11 16:25	19° ≏ 15'53	
direct	12482 Nov 05 03:43	8°M44'56		direct	12483 Oct 16 22:24	18° ₽ 13'31	
morning max el	12482 Nov 18 12:12	15°M15'00	23°35'57	morning max el	12483 Oct 30 22:38	25° ≏ 17'14	25°21'48
	12482 Nov 30 00:23	0° ∡ ″		•	12483 Nov 04 08:25	0° M	
asc. node	12482 Dec 01 21:14	3° ∡ ¹05'44		asc. node	12483 Nov 18 18:09	21°M56'23	
morning set	12482 Dec 12 07:50	23° ∡ °25′04			12483 Nov 22 21:57	0° ∡ ¹	
	12482 Dec 15 09:01	0°ಕ		morning set	12483 Nov 26 19:29	8° ₹ '08'04	
				C			
superior conj	12482 Dec 19 04:57	8° ට 20'01	1°36'58	superior conj	12483 Dec 03 14:24	23° х 02′16	1°38'26
minimum elong	12482 Dec 19 05:46	8° る 24'26	1°37'51	minimum elong	12483 Dec 03 14:06	23° ₹ '00'36	1°39'19
max. Earth dist.	12482 Dec 21 23:09	14° る 14'42	1.33070 AU	max. Earth dist.	12483 Dec 05 02:30		1.31989 AU
evening rise	12482 Dec 26 21:10	24° る 22'59			12483 Dec 06 18:40	0° ح	
<i>y</i>	12482 Dec 29 18:03	0° ≈		evening rise	12483 Dec 10 18:20	8° පි 27'14	
desc. node	12483 Jan 03 22:10	9° ≈ 31'12		desc. node	12483 Dec 21 19:06	29° පි 21'57	
	12483 Jan 16 19:37	0°) €			12483 Dec 22 03:59	0° ≈	
evening max el	12483 Jan 30 01:05	15° ¥ 54'09	27°24'26	evening max el	12484 Jan 12 11:44	28° ≈ 50'41	27°31'28
retrograde	12483 Feb 12 16:23	23°) 19'48	_,	• · • · · · · · · · · · · · · · · · · ·	12484 Jan 13 17:54	0° ∀	_,
evening set	12483 Feb 19 11:36	20°) 49'46		retrograde	12484 Jan 26 08:13	6° ₩ 11'01	
min. Earth dist.	12483 Feb 23 07:43	17°) 21'49	0.64362 AU	evening set	12484 Feb 02 07:02	3° ¥ 51′09	
inferior conj	12483 Feb 25 20:04	14°) (41'23		min. Earth dist.	12484 Feb 06 00:58	0° ¥ 50′27	0.62401 AU
minimum elong	12483 Feb 25 21:15	14°) 38'14		mm. Latin dist.	12484 Feb 06 22:39	30°R≈	0.02401 AC
asc. node	12483 Feb 23 21:13 12483 Feb 27 19:18	12°\(\frac{1}{30}\)14	0 3/46	inferior conj	12484 Feb 08 23:09	30 k≈ 28°≈04'10	105220
		9° H 17'38		-		28 ≈04 10 27°≈55'06	
morning rise	12483 Mar 04 08:50	9 X 1738 8° X 44'55		minimum elong	12484 Feb 09 02:58		1 30 14
direct	12483 Mar 06 21:34		17051105	asc. node	12484 Feb 14 16:41	23°≈32'32	
morning max el	12483 Mar 13 07:00	12°) €03'34	17°51'05	morning rise	12484 Feb 16 01:29	22°≈57'13	
	12483 Mar 25 18:53	0°Υ 7°W20127		direct	12484 Feb 18 07:33	22°≈34'06	17047110
morning set	12483 Mar 30 08:34	7° Y 39'27		morning max el	12484 Feb 25 00:29	25°≈58'44	1/~47/10
desc. node	12483 Apr 01 23:48	12° Y ′04'32			12484 Feb 28 10:52	0°) {	
	10100 :	20022	10175	morning set	12484 Mar 11 22:13	20°) €29'40	
superior conj	12483 Apr 12 19:35	29° Y 49'58			12484 Mar 17 08:16	0°Υ	
minimum elong	12483 Apr 12 11:43	29° Y 18′21	1°15'49	desc. node	12484 Mar 18 20:24	2° Y 36'16	
	12483 Apr 12 22:05	0°8					
max. Earth dist.	12483 Apr 17 14:46	7° 8 28'08	1.45199 AU	superior conj	12484 Mar 23 12:51	10° Y ′34′12	
evening rise	12483 Apr 28 15:27	24° 8 35'38		minimum elong	12484 Mar 23 09:21	10° Ƴ 19'31	0°35'12

max. Earth dist.	12484 Mar 30 08:02	21° Y '44'28	1.43961 AU	desc. node	12485 Mar 05 16:57	23° ¥ 13'10	
max. Lattii dist.	12484 Apr 04 12:50	0°8	1. 4 3701 AO	dese. Hode	12485 Mar 09 14:48	25 χ 1510	
evening rise	12484 Apr 07 04:47	4° 8 08'53		max. Earth dist.	12485 Mar 12 20:51	5°Υ28'50	1.42171 AU
evening rise	12484 Apr 24 14:26	0°II		evening rise	12485 Mar 18 07:55	14° Y ′23'02	121,1110
evening max el	12484 May 07 17:56	16° Ⅱ 37'19	21°14'59	8 21	12485 Mar 28 10:45	0°8	
asc. node	12484 May 12 13:40	20° Ⅲ 32′00			12485 Apr 20 01:25	0°II	
retrograde	12484 May 16 11:02	21° Ⅱ 42'50		evening max el	12485 Apr 20 11:20	0° Ⅱ 25′10	22°32'23
evening set	12484 May 20 19:24	19° ∏ 57'50		asc. node	12485 Apr 29 10:55	6° Ⅱ 10'51	
inferior conj	12484 May 26 01:37	13° ∏ 44′38	3°07'18	retrograde	12485 Apr 30 08:07	6° Ⅱ 14'30	
minimum elong	12484 May 26 00:34	13° Ⅱ 48'16	3°06'20	evening set	12485 May 05 03:31	4° Ⅱ 14'14	
min. Earth dist.	12484 May 26 09:29	13° Ⅲ 17'16	0.68609 AU	•	12485 May 08 21:43	30° ₹ 8	
morning rise	12484 May 31 05:31	7° Ⅱ 28'16		inferior conj	12485 May 10 11:00	27° 8 51'40	2°49'54
direct	12484 Jun 05 09:28	5° Ⅱ 13'02		minimum elong	12485 May 10 09:15	27° 8 57'47	2°48'52
desc. node	12484 Jun 14 21:32	10° Ⅱ 32′29		min. Earth dist.	12485 May 10 05:59	28° 8 09'10	0.68836 AU
morning max el	12484 Jun 15 17:12	11° Ⅱ 20′57	23°10'04	morning rise	12485 May 15 14:52	21° 8 41'16	
	12484 Jun 30 13:31	0 \circ \odot		direct	12485 May 20 05:39	19° 8 45'48	
morning set	12484 Jul 20 07:21	0° Ω 25′20		morning max el	12485 May 29 06:49	25° 8 01'47	21°42'50
	12484 Jul 20 01:15	$0^{\circ}\Omega$		desc. node	12485 Jun 01 18:30	28° 8 50'26	
max. Earth dist.	12484 Jul 24 13:03	7° Ω 36′29	1.39713 AU		12485 Jun 02 17:50	Π $^{\circ}0$	
					12485 Jun 23 23:43	0 \circ	
superior conj	12484 Aug 01 06:37	21° Ω 24'14	-1°03'58	morning set	12485 Jun 30 11:59	10° © 09'54	
minimum elong	12484 Aug 01 11:13	21° Ω 45′28	1°03'53	max. Earth dist.	12485 Jul 06 14:49	20° © 05'14	1.41947 AU
	12484 Aug 05 20:45	0° ™			12485 Jul 12 11:48	$0^{\circ}\Omega$	
asc. node	12484 Aug 08 13:23	5°№08'56					
evening rise	12484 Aug 10 19:56	9° m 31'01		superior conj	12485 Jul 14 05:18	2° Ω 59'41	
	12484 Aug 22 10:23	0∘ ⊽		minimum elong	12485 Jul 14 12:00	3° Ω 28'58	1°36'42
evening max el	12484 Aug 26 21:00	5° ჲ 28'20	18°35'26	evening rise	12485 Jul 25 03:35	22° Ω 39′03	
retrograde	12484 Sep 03 21:03	9° ჲ 29'58		asc. node	12485 Jul 26 10:05	24° Ω 58'43	
evening set	12484 Sep 05 20:27	9° ≏ 16'02			12485 Jul 29 04:22	0° m	
desc. node	12484 Sep 10 18:53	6° Ω 57'17		evening max el	12485 Aug 10 06:13	-	18°09'48
inferior conj	12484 Sep 13 18:14	4° Ω 48'14		retrograde	12485 Aug 17 06:36	21°M)45'12	
minimum elong	12484 Sep 13 16:00	4° Ω 52'32	0°55'11	evening set	12485 Aug 19 13:03	21° m 23'17	
min. Earth dist.	12484 Sep 16 23:13	2° ≏ 22'18	0.57439 AU	inferior conj	12485 Aug 26 16:11	16° m 35'03	0°36'31
	12484 Sep 20 15:53	30°R, Mp		minimum elong	12485 Aug 26 17:21	16° TQ 32'26	0°35'47
morning rise	12484 Sep 21 08:05	29° m 39'21		desc. node	12485 Aug 28 16:21	14° Mp 47'16	
direct	12484 Sep 27 06:55	28° To 10'51		min. Earth dist.	12485 Aug 29 23:19	13° m 40'05	0.59601 AU
	12484 Oct 04 01:13	0° 亞	26040142	morning rise	12485 Sep 02 18:22	10° m 53'02	
morning max el	12484 Oct 11 14:10	5° Ω 41'17	26°48'42	direct	12485 Sep 09 05:04	8° Mp 56'18	27042142
asc. node	12484 Oct 29 11:42	0° ጤ 11° ጤ 14'58		morning max el	12485 Sep 23 13:15	16°M)46'34 0° ⊆	27°42'42
	12484 Nov 04 14:59	22°M42'31		asc. node	12485 Oct 04 11:22	0°M53'26	
morning set	12484 Nov 10 05:20	22 1164231 0° x 7		asc. node	12485 Oct 22 11:43 12485 Oct 22 01:04	0°M	
	12484 Nov 13 13:48	0 X ·		morning set	12485 Oct 25 11:37	7°ML03'34	
superior conj	12484 Nov 17 01:48	7° ∡ ¹47'01	1°33'57	max. Earth dist.	12485 Oct 31 18:58	20°M46'35	1.31303 AU
minimum elong	12484 Nov 17 00:32	7° × 39'53	1°34'41	max. Earth dist.	12463 Oct 31 16.36	20 1164033	1.51505 AO
max. Earth dist.	12484 Nov 17 10:19	8° ∡ 34'28	1.31396 AU	superior conj	12485 Nov 01 13:19	22°M28'40	1°23'46
evening rise	12484 Nov 23 22:09	22° × ⁷ 47'07	1.51570710	minimum elong	12485 Nov 01 11:20	22°M17'40	1°24'12
evening rise	12484 Nov 27 09:54	0°る		minimum ciong	12485 Nov 04 22:24	0° ₹	1 2112
desc. node	12484 Dec 07 16:06	18° る 44'02		evening rise	12485 Nov 08 06:21	7° х 16′53	
	12484 Dec 15 04:27	0° ≈		8 21	12485 Nov 19 22:33	0°ਰ	
evening max el	12484 Dec 24 17:08	11° ≈ 03'49	27°05'01	desc. node	12485 Nov 24 13:12	7° る 26'30	
retrograde	12485 Jan 07 15:34	18° ≈ 16'11		evening max el	12485 Dec 06 14:52	22° る 25'39	26°04'37
evening set	12485 Jan 14 11:28	16° ≈ 14'42		retrograde	12485 Dec 20 13:09	29° る 29'26	
min. Earth dist.	12485 Jan 18 07:28	13° ≈ 33'09	0.60265 AU	evening set	12485 Dec 26 20:48	27° る 54'37	
inferior conj	12485 Jan 21 11:31	10° ≈ 55'18	-3°12'27	min. Earth dist.	12485 Dec 31 03:53	25° ට 18'41	0.58138 AU
minimum elong	12485 Jan 21 18:16	10° ≈ 41'14	3°09'15	inferior conj	12486 Jan 03 05:40	23° る 05'35	-4°30'51
morning rise	12485 Jan 29 04:01	6° ≈ 08'25		minimum elong	12486 Jan 03 14:13	22°る50'09	
direct	12485 Jan 31 06:08	5° ≈ 51'23		morning rise	12486 Jan 11 10:25	18° る 40'48	
asc. node	12485 Jan 31 14:01	5° ≈ 51'49		direct	12486 Jan 13 12:55	18° る 26'22	
morning max el	12485 Feb 07 14:59	9° ≈ 32'01	18°01'54	asc. node	12486 Jan 18 11:18	19° る 50'57	
	12485 Feb 20 23:26	0° ∀		morning max el	12486 Jan 21 22:43	22° る 33'06	18°36'49
morning set	12485 Feb 23 05:06	4° ₩ 07'32			12486 Jan 27 19:33	0° ≈	
				morning set	12486 Feb 07 00:02	18° ≈ 17'47	
superior conj	12485 Mar 05 06:20	22°) €26′20	0°03'30		12486 Feb 13 01:34	0°) €	
minimum elong	12485 Mar 05 06:38	22°) €27'39	0°03'39				
behind sun begin	12485 Mar 04 22:56	21°) 53′33		superior conj	12486 Feb 15 20:32	5° ¥ 15'52	
behind sun end	12485 Mar 05 14:21	23° 米 01′40		minimum elong	12486 Feb 15 22:53	5° ∺ 26'48	0°36'55

desc. node	12486 Feb 20 13:31	13°) €51'48		max. Earth dist.	12487 Feb 05 10:54	0°¥53'05	1.37801 AU
max. Earth dist.	12486 Feb 23 04:50	18° ₩ 30'59	1.40037 AU	desc. node	12487 Feb 07 10:08	4° ¥ 28′01	1.57001710
evening rise	12486 Feb 27 07:41	25°) 32'43	1.10037710	evening rise	12487 Feb 09 04:16	7°) 35'44	
	12486 Mar 02 00:24	0°Υ			12487 Feb 22 21:18	0°Υ	
	12486 Mar 22 03:46	0° ႘		evening max el	12487 Mar 16 15:20	28° Y ′07'42	25°10'46
evening max el	12486 Apr 03 01:47	14° 8 15'38	23°53'10	C	12487 Mar 18 15:18	0°8	
retrograde	12486 Apr 14 02:20	20° 8 44'45		retrograde	12487 Mar 28 16:23	5° 8 06'48	
asc. node	12486 Apr 16 08:15	20° 8 21'39		evening set	12487 Apr 03 11:04	2° 8 42'39	
evening set	12486 Apr 19 09:16	18° 8 31'09		asc. node	12487 Apr 03 05:39	2° 8 53'54	
min. Earth dist.	12486 Apr 24 02:31	13° 8 01'48	0.68606 AU		12487 Apr 06 02:39	30° ₹Ƴ	
inferior conj	12486 Apr 24 19:56	12° 8 02'26	2°22'33	min. Earth dist.	12487 Apr 07 20:51	27° Y ′48'50	0.67935 AU
minimum elong	12486 Apr 24 17:48	12° 8 09'43	2°21'27	inferior conj	12487 Apr 09 02:28	26° Y 12'11	1°45'13
morning rise	12486 Apr 30 02:21	5° 8 59'14		minimum elong	12487 Apr 09 00:24	26° Y 18'54	1°44'14
direct	12486 May 04 04:23	4° 8 24'49		morning rise	12487 Apr 14 14:05	20° Y 17'31	
morning max el	12486 May 12 02:34	_	20°24'55	direct	12487 Apr 18 04:08	19° Y ′03'36	
desc. node	12486 May 19 15:21	17° 8 53'07		morning max el	12487 Apr 25 05:54	22° Y ′56'47	19°20'50
	12486 May 28 05:04	0°Щ			12487 May 01 04:50	0° 8	
morning set	12486 Jun 09 18:43	18° ∏ 58'31		desc. node	12487 May 06 12:06	7° 8 27'52	
	12486 Jun 16 19:37	0∘ ©		greatest brilliancy	12487 May 08 00:04	9° 8 40'10	-0.7m
max. Earth dist.	12486 Jun 18 22:59	3° © 24'59	1.43828 AU	morning set	12487 May 19 19:58	27° 8 38'08	
					12487 May 21 08:46	0°П	
superior conj	12486 Jun 25 05:00	13°535'39		max. Earth dist.	12487 Jun 01 13:36	17° Ⅱ 26'45	1.45137 AU
minimum elong	12486 Jun 25 11:08	14°501'01	2°02'36		12407 1 05 05 26	220 T 1.407	2012121
	12486 Jul 04 21:20	0°N		superior conj	12487 Jun 05 05:26	23° Ⅱ 14'07 23° Ⅱ 17'11	
evening rise	12486 Jul 07 18:54	5° Ω 02'18		minimum elong	12487 Jun 05 06:13		2°14'15
asc. node	12486 Jul 13 06:51	14° Ω 34'36			12487 Jun 09 10:55	0° © 16° © 29'32	
avaning may al	12486 Jul 23 12:59 12486 Jul 24 19:37	0° Т р 1° Т р21'24	18°03'36	evening rise	12487 Jun 19 12:53 12487 Jun 27 17:31	16° £ 29'32 0° Ω	
evening max el retrograde	12486 Jul 31 07:09	4° Mg 42'39	18 03 30	asc. node	12487 Jun 30 03:44	3°Ω51'10	
evening set	12486 Aug 02 21:44	4°M)09'17		evening max el	12487 Jul 08 09:43	$14^{\circ}\Omega 50'58$	18°15'55
evening set	12486 Aug 08 09:44	30°RΩ		retrograde	12487 Jul 14 18:23	14° Ω 13'28	18 13 33
inferior conj	12486 Aug 09 08:48	29° Ω 01'55	1°45'38	evening set	12487 Jul 17 17:21	$17^{\circ}\Omega 26'03$	
minimum elong	12486 Aug 09 11:18	28° Ω 55'31	1°44'19	inferior conj	12487 Jul 23 16:03	12°Ω01'22	2°32'24
min. Earth dist.	12486 Aug 12 08:25	26°Ω00'24	0.61891 AU	minimum elong	12487 Jul 23 18:27	11°Ω54'30	2°31'06
morning rise	12486 Aug 15 22:26	22° Ω 57'14	0.01031110	min. Earth dist.	12487 Jul 26 02:55	9° Ω 14'11	0.64042 AU
desc. node	12486 Aug 15 13:47	23°Ω12'46		morning rise	12487 Jul 29 18:05	5° Ω 43'59	
direct	12486 Aug 22 14:40	20° Ω 36'15		desc. node	12487 Aug 02 11:10	3° Ω 37'09	
morning max el	12486 Sep 05 18:39	28° Ω 37'10	27°57'58	direct	12487 Aug 05 09:19	3° Ω 07'37	
C	12486 Sep 07 02:56	0° m		morning max el	12487 Aug 19 04:06	11° Ω 08′12	27°36'08
	12486 Sep 28 08:27	0∘ ⊽			12487 Sep 03 02:10	0° m	
asc. node	12486 Oct 09 08:23	20° ≏ 45′25			12487 Sep 20 19:05	0∘ ⊽	
morning set	12486 Oct 09 12:17	21° ≏ 05′25		morning set	12487 Sep 23 05:01	4° ≏ 42'36	
	12486 Oct 13 17:49	0° M		asc. node	12487 Sep 26 05:01	10° ≏ 46'24	
max. Earth dist.	12486 Oct 15 00:34	2°M46'37	1.31733 AU	max. Earth dist.	12487 Sep 27 23:38	14° ≏ 27'45	1.32697 AU
superior conj	12486 Oct 16 23:03	7° M 01'16	1°07'59	superior conj	12487 Oct 01 05:06	21° ≏ 19'48	0°46'47
minimum elong	12486 Oct 16 20:48	6° ™ 48'50	1°08'06	minimum elong	12487 Oct 01 03:06	21° ≏ 09'01	0°46'40
evening rise	12486 Oct 23 16:59	21°M50'43			12487 Oct 05 05:03	0° M	
	12486 Oct 27 14:09	0° ∡ ¹		evening rise	12487 Oct 08 04:14	6° M 24'11	
desc. node	12486 Nov 11 10:24	25° ∡ 13'17			12487 Oct 20 12:50	0° ∡ ¹	
	12486 Nov 15 07:56	0°る		desc. node	12487 Oct 29 07:42	11° ∡ ′43′50	
evening max el	12486 Nov 18 04:36	2°る58'14	24°36'35	evening max el	12487 Oct 30 14:51	13° ∡ *02'51	22°55'17
retrograde	12486 Dec 01 22:40	9° る 50'43		retrograde	12487 Nov 12 18:56	19° ∡ 35'30	
evening set	12486 Dec 07 06:43	8° る 47'40	0.56202.411	evening set	12487 Nov 16 18:08	19° ∡ *01'18	0.55000 ATT
min. Earth dist.	12486 Dec 12 16:17 12486 Dec 15 03:14	5°る59'41 4°る26'45	0.56282 AU	min. Earth dist. inferior conj	12487 Nov 23 23:45	15° х 42'53 14° х 59'57	0.55000 AU
inferior conj		4 02043 4° る 16'33			12487 Nov 25 05:47	14 x · 39 3 / 15° x · 01'25	
minimum elong morning rise	12486 Dec 15 09:41 12486 Dec 23 14:45	4°る16'33' 0°る23'00	5 50 09	minimum elong morning rise	12487 Nov 25 04:45 12487 Dec 03 16:53	13° x '01'23	J J4 44
direct	12486 Dec 26 00:37	0 32300 0° 3 07'12		direct	12487 Dec 03 16.33 12487 Dec 06 18:27	11 x ·10 36 10° x ⁷ 49'01	
morning max el	12480 Dec 20 00.37 12487 Jan 04 19:33	4°る49'22	19°33'54	morning max el	12487 Dec 18 02:26	16° × 12'38	20°54'01
asc. node	12487 Jan 05 08:31	5°る21'27	17 33 37	asc. node	12487 Dec 18 02:20 12487 Dec 23 05:39	22° × 12 38	20 JT 01
	12487 Jan 20 17:27	0°≈		200. 11000	12487 Dec 28 08:57	0°る	
morning set	12487 Jan 22 03:02	0 ∞ 2° ≈ 48'01		morning set	12488 Jan 06 11:12	0 3 17° る 29'58	
					12488 Jan 12 11:03	0°≈	
superior conj	12487 Jan 30 02:38	18° ≈ 48'17	1°02'57				
minimum elong	12487 Jan 30 05:30	19° ≈ 02'21	1°03'14	superior conj	12488 Jan 13 20:24	2° ≈ 52'03	1°21'39
U	12487 Feb 04 23:23	0°) €		minimum elong	12488 Jan 13 22:49	3°≈04'27	1°22'13
				0			

max. Earth dist.	12488 Jan 18 19:57	12° ≈ 51'33	1.35696 AU	max. Earth dist.	12488 Dec 31 11:35	24° පි 44'02	1.33902 AU
evening rise	12488 Jan 22 18:55	20° ≈ 24′09			12489 Jan 03 01:45	0° ≈	
desc. node	12488 Jan 25 06:49	24°≈58'08		evening rise	12489 Jan 04 23:59	3° ≈ 48′21	
	12488 Jan 28 03:10	0° ∀		desc. node	12489 Jan 11 03:37	15°≈17'36	
	12488 Feb 16 20:42	0°Υ 11° 0 657100	26017140		12489 Jan 19 22:53	0° \	27007102
evening max el	12488 Feb 27 05:03 12488 Mar 11 01:17	11° Υ 57'09 19° Υ 14'32	26°17'49	evening max el	12489 Feb 08 18:35 12489 Feb 14 02:10	25°) 34′56 0° °	27°07'02
retrograde evening set	12488 Mar 17 07:11	16° Y 43'33		retrograde	12489 Feb 14 02.10 12489 Feb 22 04:19	3° Υ 00'21	
asc. node	12488 Mar 20 03:04	13° Υ 57'03		evening set	12489 Feb 28 19:44	0° Υ 27'47	
min. Earth dist.	12488 Mar 21 10:45	12° Υ 24'41	0.66846 AU	evening sec	12489 Mar 01 09:34	30°R ∺	
inferior conj	12488 Mar 23 04:35	10° Y 16'41	0°57'40	min. Earth dist.	12489 Mar 04 18:04	26°) 42′22	0.65366 AU
minimum elong	12488 Mar 23 03:11	10° Y 20'57	0°57'04	inferior conj	12489 Mar 06 23:59	24°) 10′46	-0°00'25
morning rise	12488 Mar 29 00:01	4° Ƴ 32'24		minimum elong	12489 Mar 06 24:00	24°) (10′45	0°00'14
direct	12488 Apr 01 03:13	3° Y 36'56		transit middle	12489 Mar 06 24:00	24° ¥ 10'45	0°00'14
morning max el	12488 Apr 07 16:21	7° Y 06'59	18°32'43	transit begin	12489 Mar 06 20:59	24° 米 19'14	
desc. node	12488 Apr 22 08:47	27° Y 26′05		transit end	12489 Mar 07 03:00	24° ₭ 02'17	
	12488 Apr 24 00:09	0°8		asc. node	12489 Mar 07 00:30	24°) €09'21	
morning set	12488 Apr 28 13:50	7° 8 11'00		morning rise	12489 Mar 13 05:47	18°) ₹39'03	
	12488 May 13 03:15	Π $^{\circ}$ 0		direct	12489 Mar 15 23:22	17° ¥ 59'05	18°01'26
superior conj	12488 May 14 14:23	2° Ⅱ 17'16	2°05'01	morning max el	12489 Mar 22 07:53 12489 Mar 29 03:40	21°) 18'27 0° ℃	18-01-26
minimum elong	12488 May 14 07:42	2 ∏ 1710 1° ∏ 51'06		morning set	12489 Apr 09 11:49	18° Y ′07'37	
max. Earth dist.	12488 May 14 08:40	1° I I54'53	1.45748 AU	desc. node	12489 Apr 09 05:25	17° Υ 41'28	
evening rise	12488 May 30 06:30	26° I 55'55	1.107.10110	desc. node	12489 Apr 16 19:09	0°8	
<i>y</i>	12488 Jun 01 04:55	0ంత			r	. •	
greatest brilliancy	12488 Jun 07 16:46	10°915'49	-0.8m	superior conj	12489 Apr 24 00:41	11° 8 31'21	-1°37'50
asc. node	12488 Jun 16 00:43	22°5540'40		minimum elong	12489 Apr 23 15:27	10° 8 54'53	1°37'26
evening max el	12488 Jun 20 21:32	28°531'05	18°45'57	max. Earth dist.	12489 Apr 27 04:57	16° 8 31'09	1.45608 AU
	12488 Jun 22 12:51	0 $^{\circ}$ Ω			12489 May 05 20:53	Π °0	
retrograde	12488 Jun 27 12:29	2° Ω 08'26		evening rise	12489 May 10 03:04	6° Ⅱ 34'33	
evening set	12488 Jun 30 20:00	1° Ω 05'27		greatest brilliancy	12489 May 23 11:16	26° Ⅱ 52'30	-0.7m
	12488 Jul 02 06:44	30°R≌	2000121	1	12489 May 25 14:31	0°95	
inferior conj minimum elong	12488 Jul 06 10:04 12488 Jul 06 11:39	25° © 25'05 25° © 20'07	3°00'21 2°59'15	asc. node evening max el	12489 Jun 02 21:47 12489 Jun 04 04:49	10°©54'14 12°©16'14	19°32'38
min. Earth dist.	12488 Jul 08 06:16	23° © 07'45	0.65876 AU	retrograde	12489 Jun 11 10:15	16°\$20'53	19 32 36
morning rise	12488 Jul 12 02:31	19°502'29	0.03070710	evening set	12489 Jun 15 02:47	15°901'37	
direct	12488 Jul 18 11:30	16°521'00		inferior conj	12489 Jun 20 11:35	9° 5 07'10	3°12'51
desc. node	12488 Jul 19 08:30	16°523'44		minimum elong	12489 Jun 20 12:07	9° © 05'26	3°11'55
morning max el	12488 Jul 31 15:08	24°508'40	26°43'29	min. Earth dist.	12489 Jun 21 17:09	7° 5 29'15	0.67299 AU
	12488 Aug 05 21:17	$0^{\circ}\Omega$		morning rise	12489 Jun 25 21:01	2° 5 44'26	
	12488 Aug 26 11:48	0° ™		direct	12489 Jul 01 20:09	0° ട് 07'19	
morning set	12488 Sep 05 10:44	17° m) 47'01		desc. node	12489 Jul 06 05:44	1° © 17'03	
max. Earth dist.	12488 Sep 09 13:17	25° m) 46'45	1.34181 AU	morning max el	12489 Jul 14 01:54	7° © 27'21	25°28'42
	12488 Sep 11 15:31	0∘ ⊽			12489 Jul 31 15:46	0° N	
asc. node	12488 Sep 12 01:38	0° ჲ 51'39		morning set	12489 Aug 18 23:32 12489 Aug 19 01:42	0° m) 0° m) 09'46	
superior conj	12488 Sep 14 05:04	5° ₽ 17'15	0°20'28	max. Earth dist.	12489 Aug 19 01.42 12489 Aug 22 17:07	6° M) 52'56	1.36120 AU
minimum elong	12488 Sep 14 04:00	5° ⊆ 11'41	0°20'15	max. Earth dist.	12 10) Hug 22 17.07	0 11/2 2 3 0	1.50120710
evening rise	12488 Sep 21 14:08	20° ≙ 51'18		superior conj	12489 Aug 28 20:12	18° m 46'54	-0°10'19
-	12488 Sep 26 01:23	0°M		minimum elong	12489 Aug 28 20:51	18° m 50'08	0°10'27
evening max el	12488 Oct 11 06:36	23°M14'57	21°18'20	behind sun begin	12489 Aug 28 16:01	18° m 25'59	
desc. node	12488 Oct 15 05:05	26°M31'12		behind sun end	12489 Aug 29 01:42	19° m 14'20	
retrograde	12488 Oct 23 06:37	29°M12'48		asc. node	12489 Aug 29 22:17	20° m 57'38	
evening set	12488 Oct 25 22:19	28°M56'28			12489 Sep 03 08:44	0∘ ত	
inferior conj	12488 Nov 03 21:46	25°M02'06		evening rise	12489 Sep 05 20:34	5° ≏ 06'32	
minimum elong min. Earth dist.	12488 Nov 03 13:05 12488 Nov 04 05:59	25°M14'18 24°M50'33	5°14'25 0.54541 AU	evening max el	12489 Sep 19 22:16 12489 Sep 23 11:20	0°ጤ 4°ጤ06'12	19°58'13
morning rise	12488 Nov 12 04:35	21°M12'19	0.34341 AU	desc. node	12489 Oct 02 02:31	9°M08'06	19 36 13
direct	12488 Nov 16 02:23	20°M39'28		retrograde	12489 Oct 02 02:31 12489 Oct 03 20:47	9°M16'43	
morning max el	12488 Nov 28 20:06	26°M45'43	22°33'53	evening set	12489 Oct 05 19:25	9° ጤ 06'40	
<i>5</i>	12488 Dec 01 22:26	0° ∡ ¹		inferior conj	12489 Oct 14 17:36	5° ™ 06'43	-3°48'31
asc. node	12488 Dec 09 02:41	9° ∡ ¹52'45		minimum elong	12489 Oct 14 08:09	5°M21'03	3°44'59
	12488 Dec 19 20:15	0°ප		min. Earth dist.	12489 Oct 16 14:35	3°M58'31	0.55023 AU
morning set	12488 Dec 20 22:11	2° る 16'29		morning rise	12489 Oct 22 19:34	0° ™ 54'47	
		_		direct	12489 Oct 27 13:54	0°M05'13	
superior conj	12488 Dec 27 22:22	17° る 16'59		morning max el	12489 Nov 10 06:54	6°M50'41	24°22'20
minimum elong	12488 Dec 27 23:50	17° る 24'45	1~34.06	asc. node	12489 Nov 25 23:38	28° ™ 22'47	

	12490 Nov. 26, 21,17	0° ∡ 7			12400 Nov. 10, 01:59	0° ∡ 7	
morning set	12489 Nov 26 21:17 12489 Dec 05 10:03	0° x ¹ 17° x ¹02'04		morning set	12490 Nov 19 01:58 12490 Nov 19 21:07	1° x ⁷ 42'12	
morning set	12489 Dec 03 10:03	17 メ ・02 04 0°る		morning set	12490 NOV 19 21.07	1 *4212	
	1240) Dec 11 00.43	0 0		superior conj	12490 Nov 26 16:16	16° ∡ ³39'33	1°37'15
superior conj	12489 Dec 12 05:44	1°る55'00	1°38'21	minimum elong	12490 Nov 26 15:31	16° ∡ 35′26	1°38'05
minimum elong	12489 Dec 12 06:04	1°る56'50	1°39'15	max. Earth dist.	12490 Nov 27 16:16	18° × 52'41	1.31668 AU
max. Earth dist.	12489 Dec 14 10:49	6° ප 43'10		man. Barur dige.	12490 Dec 02 19:06	0°ਰ	1.51000110
evening rise	12489 Dec 19 16:06	17° る 39'57		evening rise	12490 Dec 03 16:23	1° る 52'01	
8	12489 Dec 26 01:00	0° ≈		desc. node	12490 Dec 15 21:25	25° පි 00'31	
desc. node	12489 Dec 29 00:29	5°≈20'41			12490 Dec 18 22:34	0° ≈	
	12490 Jan 14 08:46	0°) €		evening max el	12491 Jan 04 15:23	21° ≈ 28'57	27°24'35
evening max el	12490 Jan 22 06:42	8°) 49′26	27°31'19	retrograde	12491 Jan 18 13:27	28° ≈ 46'52	
retrograde	12490 Feb 05 00:47	16°) 14′15		evening set	12491 Jan 25 11:46	26° ≈ 33'48	
evening set	12490 Feb 11 22:14	13°)(47'10		min. Earth dist.	12491 Jan 29 05:48	23° ≈ 42'21	0.61495 AU
min. Earth dist.	12490 Feb 15 16:52	10°) 31′52	0.63549 AU	inferior conj	12491 Feb 01 07:09	20°≈57'34	-2°25'54
inferior conj	12490 Feb 18 09:54	7°) 46′59	-1°08'51	minimum elong	12491 Feb 01 12:14	20° ≈ 46′07	2°23'16
minimum elong	12490 Feb 18 12:07	7°) 41′20	1°07'30	morning rise	12491 Feb 08 15:33	15° ≈ 58'48	
asc. node	12490 Feb 21 21:54	4°) 30′01		asc. node	12491 Feb 08 19:15	15° ≈ 56′05	
morning rise	12490 Feb 25 04:18	2°) € 30′22		direct	12491 Feb 10 19:22	15° ≈ 38'50	
direct	12490 Feb 27 13:51	2°) €02'17		morning max el	12491 Feb 17 18:15	19° ≈ 09'28	17°51'05
morning max el	12490 Mar 06 01:36	5°) 22′16	17°47'19		12491 Feb 25 16:41	0° ∀	
	12490 Mar 22 07:40	$0^{\circ}\mathbf{Y}$		morning set	12491 Mar 05 10:19	13° ¥ 33'47	
morning set	12490 Mar 22 12:38	0° Y 21′17		desc. node	12491 Mar 13 22:35	28°) 42′32	
desc. node	12490 Mar 27 02:00	8° Ƴ 08'17			12491 Mar 14 16:25	0° Y	
superior conj	12490 Apr 04 04:18	21° Y 37'07	-0°59'22	superior conj	12491 Mar 16 08:03	2° Y 50'45	-0°18'33
minimum elong	12490 Apr 03 22:10	21° Y 12'05	0°58'45	minimum elong	12491 Mar 16 06:21	2° Y 43'27	
	12490 Apr 09 09:04	9° 8		max. Earth dist.	12491 Mar 23 14:29	14° Y 59'41	1.43254 AU
max. Earth dist.	12490 Apr 09 23:31	0° 8 57'26	1.44743 AU	evening rise	12491 Mar 30 08:11	25° Y 45′03	
evening rise	12490 Apr 19 14:20	15° 8 57'29			12491 Apr 02 01:52	0°8	
	12490 Apr 28 21:16	0°Щ			12491 Apr 22 19:29	0°Щ	
evening max el	12490 May 18 06:25	26° Ⅱ 02'43	20°34'07	evening max el	12491 May 01 02:32	9° ∏ 50′12	21°47'07
asc. node	12490 May 20 18:57	28° ∏ 19'32		asc. node	12491 May 07 16:10	14° ∏ 41'58	
_	12490 May 23 09:40	0°©		retrograde	12491 May 10 07:19	15° Ⅱ 14'27	
retrograde	12490 May 26 09:11	0°5544'29		evening set	12491 May 14 20:12	13° Ⅱ 23'02	
	12490 May 29 04:31	30°RⅡ		inferior conj	12491 May 20 02:43	7° Ⅱ 05'39	3°01'09
evening set	12490 May 30 11:26	29° Ⅱ 08'55	2012124	minimum elong	12491 May 20 01:20	7° Ⅱ 10′28	3°00'10
inferior conj	12490 Jun 04 17:53	23° I I02'00	3°12'34	min. Earth dist.	12491 May 20 05:07	6° Ⅱ 57'17	0.68766 AU
minimum elong	12490 Jun 04 17:22	23° Ⅱ 03'47 22° Ⅱ 08'16	3°11'39	morning rise	12491 May 25 06:16	0°П51'28	
min. Earth dist.	12490 Jun 05 09:30 12490 Jun 09 23:01	16° П 42'29	0.68267 AU	direct	12491 May 26 08:49	30°R と 28° と 44'04	
morning rise direct	12490 Jun 15 10:17	16 П 42 29 14° П 17'28		direct	12491 May 30 04:41 12491 Jun 03 09:37	28 3 44 04 0° Ⅱ	
desc. node	12490 Jun 23 02:52	14 H 17 28 17° H 48'50		morning max el	12491 Jun 08 23:08	0 Ⅱ 4°Ⅱ29'55	22032104
morning max el	12490 Jun 26 11:56	20° I 55'07	24001130	desc. node	12491 Jun 09 23:54	5° П 33'53	22 32 04
morning max ci	12490 Jul 04 07:32	20 m 33 07 0° ඉ	24 01 39	desc. flode	12491 Jun 28 11:51	0° ©	
	12490 Jul 24 20:59	$0 {\circ} \Omega$		morning set	12491 Jul 12 16:43	22° © 02'59	
morning set	12490 Jul 31 21:15	11° Ω 39'02		morning set	12491 Jul 17 11:36	0°Ω	
max. Earth dist.	12490 Aug 04 14:46	18° Ω 09'48	1.38368 AU	max. Earth dist.	12491 Jul 17 13:18		1.40695 AU
	12490 Aug 11 01:50	0° m				. 550, 15	,
		. 1		superior conj	12491 Jul 25 09:20	13° Ω 47'36	-1°18'21
superior conj	12490 Aug 11 23:02	1° m 40'18	-0°44'06	minimum elong	12491 Jul 25 15:00	14° Ω 13'05	
minimum elong	12490 Aug 12 02:06	1° m 54'53		8	12491 Aug 03 03:39	0° m	
asc. node	12490 Aug 16 18:56	11° Mp 00'35		asc. node	12491 Aug 03 15:37	0° m/56'24	
evening rise	12490 Aug 20 20:52	19° m 02'47		evening rise	12491 Aug 04 11:46	2° m/31'21	
Č	12490 Aug 26 13:45	0∘ ⊽		evening max el	12491 Aug 20 11:05	28° m 09'28	18°22'05
evening max el	12490 Sep 06 05:56	15° ≏ 46′28	18°59'30		12491 Aug 22 14:27	0∘ ⊽	
retrograde	12490 Sep 15 00:37	20° ჲ 09'58		retrograde	12491 Aug 27 23:29	1° ≏ 57'10	
evening set	12490 Sep 16 21:21	19° ≙ 58'52		evening set	12491 Aug 30 01:46	1° ≏ 40'14	
desc. node	12490 Sep 18 23:57	19° ≙ 21'29			12491 Sep 02 16:51	30°R, Mp	
inferior conj	12490 Sep 25 05:47	15° ≏ 43'14	-1°57'57	desc. node	12491 Sep 05 21:25	27° m 40'24	
minimum elong	12490 Sep 25 00:44	15° ≏ 52'01	1°55'48	inferior conj	12491 Sep 06 15:29	27° m 03'52	-0°14'03
min. Earth dist.	12490 Sep 28 03:42	13° ≏ 42'01	0.56367 AU	minimum elong	12491 Sep 06 14:58	27° m 04'57	0°13'58
morning rise	12490 Oct 03 01:01	10° ≏ 55'48		transit middle	12491 Sep 06 14:58	27° m 04'57	0°13'58
direct	12490 Oct 08 14:40	9° ≏ 42'38		transit begin	12491 Sep 06 13:12	27° m 08'33	
morning max el	12490 Oct 22 18:59	16° ჲ 59'34	26°02'05	transit end	12491 Sep 06 16:44	27° Mp 01'20	
	12490 Nov 02 11:25	0° M		min. Earth dist.	12491 Sep 09 23:01	24° m 22'57	0.58330 AU
asc. node	12490 Nov 12 20:29	17°M26'31		morning rise	12491 Sep 14 00:40	21° Mp 40'08	

direct	12491 Sep 20 05:35	19° m 59'15		direct	12492 Sep 01 08:40	1° Mp 08'46	
morning max el	12491 Sep 20 03:33 12491 Oct 04 13:25	27° M) 38'46	27°16'11	morning max el	12492 Sep 01 08:40 12492 Sep 15 15:26	9° Mp 03'40	27°53'57
morning max ci	12491 Oct 06 20:19	ე∘ <u>ი</u>	27 1011	morning max cr	12492 Oct 01 18:17	0∘ ⊽	21 33 31
	12491 Oct 27 02:49	0° m		asc. node	12492 Oct 16 13:58	ა _ 26° ჲ 39'08	
asc. node	12491 Oct 30 17:15	6°M54'12		morning set	12492 Oct 18 09:48	0°M24'40	
morning set	12491 Nov 04 05:38	16°ML11'11			12492 Oct 18 05:04	0°M	
	12491 Nov 10 12:57	0° ⊼ ⊓		max. Earth dist.	12492 Oct 24 08:52		1.31432 AU
superior conj	12491 Nov 11 03:55	1° ∡ °23'33	1°30'19	superior conj	12492 Oct 25 14:54	16° M 01'51	1°17'43
minimum elong	12491 Nov 11 02:18	1° ∡ 14'32	1°30'56	minimum elong	12492 Oct 25 12:45	15°M49'54	1°18'03
max. Earth dist.	12491 Nov 11 00:50	1° х ¹06′19	1.31295 AU		12492 Oct 31 22:43	0° ∡ 7	
evening rise	12491 Nov 17 22:19	16° ∡ 16'52		evening rise	12492 Nov 01 07:49	0° ∡ ¹49'09	
	12491 Nov 24 16:48	8°0			12492 Nov 16 23:46	8°0	
desc. node	12491 Dec 02 18:27	14° る 07'04		desc. node	12492 Nov 18 15:35	2° る 27'43	
	12491 Dec 14 11:32	0° ≈		evening max el	12492 Nov 28 12:11	14° る 20'40	25°29'44
evening max el	12491 Dec 17 17:57	3° ≈ 21'14	26°43'24	retrograde	12492 Dec 12 08:54	21° ろ 19'20	
retrograde	12491 Dec 31 16:43	10° ≈ 29′27		evening set	12492 Dec 18 08:11	19° る 57'42	
evening set	12492 Jan 07 08:31	8° ≈ 38'51		min. Earth dist.	12492 Dec 23 00:24	17° る 19'09	0.57305 AU
min. Earth dist.	12492 Jan 11 08:02	6°≈01'18	0.59344 AU	inferior conj	12492 Dec 25 21:37	15° ට 21'43	
inferior conj	12492 Jan 14 12:08	3°≈32'17		minimum elong	12492 Dec 26 05:55	15° る 07'36	4°57'21
minimum elong	12492 Jan 14 19:55	3°≈17'00	3°43'16	morning rise	12493 Jan 03 06:06	11°る06'12	
	12492 Jan 19 15:19	30°Rる 28°る54'15		direct	12493 Jan 05 10:59	10°る51'34 13°る36'08	
morning rise direct	12492 Jan 22 10:14 12492 Jan 24 11:52	28°る34'13 28°る38'43		asc. node	12493 Jan 12 13:49 12493 Jan 14 09:42	15°る36'08	18°58'20
asc. node	12492 Jan 26 16:33	28° る 57'02		morning max el	12493 Jan 24 17:23	13 ⊘ 11 38	18 38 20
asc. Houe	12492 Jan 29 02:20	28 3 7 02 0° ≈		morning set	12493 Jan 30 21:38	0 ∞ 11°≈46'21	
morning max el	12492 Feb 01 06:14	0 ∞ 2°≈29'33	18°14'08	morning set	12493 Jan 30 21.36	11 24021	
morning set	12492 Feb 16 22:52	2 ≈ 29 33 27° ≈ 26'46	16 14 06	superior conj	12493 Feb 08 08:18	28° ≈ 16'47	0°48'51
morning set	12492 Feb 18 07:19	0° ₩		minimum elong	12493 Feb 08 11:01	28° ≈ 29'45	0°49'00
	12192100 10 07.19	۰۸		minimum ciong	12493 Feb 09 06:02	0° ∀	0 1900
superior conj	12492 Feb 26 10:49	15° ¥ 07'57	0°18'28	desc. node	12493 Feb 14 15:41	9° ¥ 57'41	
minimum elong	12492 Feb 26 12:12	15°) 14'13	0°18'34	max. Earth dist.	12493 Feb 15 08:21	11°) 12'08	1.39082 AU
desc. node	12492 Feb 28 19:07	19° ¥ 20'09		evening rise	12493 Feb 19 04:27	17°) 54'06	
max. Earth dist.	12492 Mar 05 01:13	28°) €26'42	1.41294 AU	Č	12493 Feb 26 12:34	0° Υ	
	12492 Mar 05 23:20	0° Υ			12493 Mar 19 15:17	0° ႘	
evening rise	12492 Mar 09 19:42	6° Y 21'56		evening max el	12493 Mar 26 08:24	7° 8 30'25	24°27'05
_	12492 Mar 25 05:45	0° 8		retrograde	12493 Apr 06 19:39	14° 8 13'19	
evening max el	12492 Apr 12 18:35	23° 8 39'33	23°06'48	asc. node	12493 Apr 10 10:49	13° 8 14'10	
retrograde	12492 Apr 23 03:12	29° 8 46'02		evening set	12493 Apr 12 07:45	11° 8 54'35	
asc. node	12492 Apr 23 13:27	29° 8 45'11		min. Earth dist.	12493 Apr 16 21:35	6° 8 40'45	0.68371 AU
evening set	12492 Apr 28 03:30	27° 8 39'54		inferior conj	12493 Apr 17 20:16	5° 8 24'41	2°07'58
min. Earth dist.	12492 May 03 01:51	21° 8 50'08	0.68795 AU	minimum elong	12493 Apr 17 18:06	5° 8 31'57	2°06'52
inferior conj	12492 May 03 12:08	21° 8 14'34	2°39'32		12493 Apr 22 11:19	30° Ŗ ϒ	
minimum elong	12492 May 03 10:11	21° 8 21'21	2°38'27	morning rise	12493 Apr 23 04:36	29° Y ′25′15	
morning rise	12492 May 08 16:46	15° 8 07'11		direct	12493 Apr 27 01:26	27° Y ′59'46	
direct	12492 May 13 02:11	13° 8 20'25			12493 May 02 01:24	0° 8	
morning max el	12492 May 21 14:58	18° 8 14'57	21°08'16	morning max el	12493 May 04 13:58	2° 8 11'48	19°55'56
desc. node	12492 May 26 20:50	24° 8 12'29		desc. node	12493 May 13 17:38	13° 8 29'37	
	12492 May 31 06:57	0° Ⅱ		. ,	12493 May 24 23:52 12493 May 31 12:46	0° П 9° П 58'01	
morning sot	12492 Jun 20 14:21 12492 Jun 21 11:01	0°ഇ 1° ഇ 20'48		morning set	12493 May 31 12:46 12493 Jun 11 05:50		1.44461 AU
morning set max. Earth dist.	12492 Jun 28 18:12	1 \$2048 13°\$00'39	1.42810 AU	max. Earth dist.	12493 Jun 11 03.30 12493 Jun 13 07:30	20 п 41 32	1.44401 AU
max. Earth dist.	12492 Juli 26 16.12	13 3 000 39	1.42810 AU		12493 Juli 13 07.30	0 39	
superior conj	12492 Jul 05 22:45	24° © 59'19	-1°48'43	superior conj	12493 Jun 16 12:10	5° © 09'04	-2°09'00
minimum elong	12492 Jul 06 05:42	25°\$28'57		minimum elong	12493 Jun 16 16:38	5° 9 27'12	
mmmum viong	12492 Jul 08 20:44	0°Ω	1 1000	evening rise	12493 Jun 29 20:00	27° © 23'19	2 0 ,
evening rise	12492 Jul 17 13:09	15° Ω 22'28		0.00000	12493 Jul 01 08:45	0°N	
asc. node	12492 Jul 20 12:21	20° Ω 41'17		asc. node	12493 Jul 07 09:11	10° Ω 09'44	
	12492 Jul 25 21:17	0° m)		evening max el	12493 Jul 17 12:42		18°06'33
evening max el	12492 Aug 02 22:38	11° m 05'45	18°04'47	retrograde	12493 Jul 23 21:56	27° Ω 45'25	
retrograde	12492 Aug 09 16:06	14° m) 32'34		evening set	12493 Jul 26 16:00	27° Ω 06′21	
evening set	12492 Aug 12 02:04	14° m 06'01		inferior conj	12493 Aug 01 21:19	21° Ω 51'08	2°07'59
inferior conj	12492 Aug 18 21:55	9° m 09'06	1°08'44	minimum elong	12493 Aug 01 23:55	21° Q 44'09	2°06'37
minimum elong	12492 Aug 18 23:52	9° ™ 04'27	1°07'38	min. Earth dist.	12493 Aug 04 15:47	18° Ω 53'35	0.62834 AU
min. Earth dist.	12492 Aug 22 02:37	6° ™ 08'57	0.60584 AU	morning rise	12493 Aug 08 05:48	15° Ω 39'41	
desc. node	12492 Aug 22 18:53	5° m 33'06		desc. node	12493 Aug 09 16:20	14° Ω 42′19	
morning rise	12492 Aug 25 18:47	3° Mp 16'21		direct	12493 Aug 14 22:09	13° Ω 11'16	

morning may al	12402 Aug 29 22:11	21° Ω 13'32	27052156	desc. node	12404 Jul 27 12:42	26° © 06'46	
morning max el	12493 Aug 28 23:11 12493 Sep 05 14:09	0°m	27 32 30	direct	12494 Jul 27 13:43 12494 Jul 28 20:18	26°901'01	
	12493 Sep 03 14.09 12493 Sep 24 20:59	0∘ ⊽		direct	12494 Jul 28 20.18 12494 Aug 06 23:55	20 3 01 01 0°Ω	
morning set	12493 Sep 24 20.39 12493 Oct 02 07:28	0 ≗ 14° £ 16'59		morning max el	12494 Aug 10 23.33 12494 Aug 11 09:43	0 δ ε 3° Ω 58'46	27016150
asc. node	12493 Oct 02 07.28 12493 Oct 03 10:38	14 ⊆ 10 39 16° ⊆ 35'26		morning max er	12494 Aug 31 01:42	0°m	27 10 38
max. Earth dist.	12493 Oct 03 10:38	25° £ 09'09	1.32084 AU	morning set	12494 Sep 15 19:59	27° Mp 41'28	
max. Earth dist.	12493 OCt 07 12.19	23 = 09 09	1.32004 AU	morning set	12494 Sep 17 00:12	ე° <u>ი</u>	
superior conj	12493 Oct 09 23:21	0°M29'00	0°59'38	asc. node	12494 Sep 17 00.12 12494 Sep 20 07:16	6° £ 38'36	
minimum elong	12493 Oct 09 23:21 12493 Oct 09 21:07	0°M16'51	0°59'39	max. Earth dist.	12494 Sep 20 07:32	6° £ 40'00	1.33264 AU
minimum ciong	12493 Oct 09 21:07 12493 Oct 09 18:02	0°M	0 3939	max. Earm dist.	12494 Sep 20 07.32	0 ==4000	1.33204 AU
evening rise	12493 Oct 16 18:59	15°M23'23		superior conj	12494 Sep 24 03:08	14° ≙ 39'16	0°36'13
evening rise	12493 Oct 10 18:39 12493 Oct 23 23:03	13 llG23 23 0° x ⁷		minimum elong	12494 Sep 24 03:08 12494 Sep 24 01:27	14 = 3910 14° £ 30'15	0°36'02
desc. node	12493 Nov 05 12:51	19° ∡ ¹45′03		evening rise	12494 Oct 01 05:55	29° £ 54'33	0 30 02
evening max el	12493 Nov 03 12.31 12493 Nov 09 23:20	19 x 45 05 24° x 36′50	22052152	evening rise	12494 Oct 01 05:55	29 = 34 33 0° ™	
evening max er	12493 Nov 17 12:01	24 メ ・30 30	25 55 55		12494 Oct 18 07:07	0° ⊼ 1	
ratra ara da	12493 Nov 17 12.01 12493 Nov 23 12:55	0 3 1° る 23'00		avanina may al	12494 Oct 18 07.07 12494 Oct 22 10:42	0 x . 4° x 39'57	22012124
retrograde	12493 Nov 28 07:54	1 32300 0° る 32'51		evening max el desc. node	12494 Oct 22 10.42 12494 Oct 23 10:12	4 x ·3937 5° x ⁷ 35'22	22 12 34
evening set							
· P. d. F. d.	12493 Nov 29 18:21	30°R 🖈	0.55650 ATT	retrograde	12494 Nov 04 05:05	11°× 7 00'15	
min. Earth dist.	12493 Dec 04 10:03	27° 🖈 34'09	0.55650 AU	evening set	12494 Nov 07 13:27	10° х 35′27	0.54600.441
inferior conj	12493 Dec 06 10:32	26° ₹ 21'22		min. Earth dist.	12494 Nov 15 16:56	6° ≯ 58'31	0.54688 AU
minimum elong	12493 Dec 06 14:22	26° х 15′36	5°46'06	inferior conj	12494 Nov 16 07:11	6° ≯ 38'28	
morning rise	12493 Dec 14 22:46	22° ₹ 25'35		minimum elong	12494 Nov 16 02:23		5°44'00
direct	12493 Dec 17 14:20	22° ≯ 07'54		morning rise	12494 Nov 24 16:35	2° ≯ 51'18	
morning max el	12493 Dec 28 00:57	27° ҂ 06'47	20°05'20	direct	12494 Nov 28 02:14	2° ≯ 25'28	
asc. node	12493 Dec 30 11:00	29° ₰ 41'07		morning max el	12494 Dec 10 01:58	8° ₰ 08'04	21°34'33
	12493 Dec 30 17:24	0°₹		asc. node	12494 Dec 17 08:06	16° ₹ 54'21	
morning set	12494 Jan 15 03:10	26° る 22'44			12494 Dec 25 00:34	0°₹	
	12494 Jan 16 21:38	0° ≈		morning set	12494 Dec 30 12:47	11° る 07'09	
aumorior coni	12404 Ion 22 10:55	1290004120	1011146	aumorior coni	12405 Ion 06 17:25	26° ප 18'30	1°27'25
superior conj	12494 Jan 22 19:55	12°≈04'29	1°11'46	superior conj	12495 Jan 06 17:35		
minimum elong	12494 Jan 22 22:41	12°≈18'19	1°12'10	minimum elong	12495 Jan 06 19:38	26° පි 29'11	1°28'05
max. Earth dist.	12494 Jan 28 15:01	23°≈21'38	1.36869 AU	79 of 18 c	12495 Jan 08 12:20	0° ≈	1 2 4002 4 7 7
evening rise	12494 Feb 01 09:11	0°) 17'40		max. Earth dist.	12495 Jan 11 02:10	5°≈13'44	1.34882 AU
	12494 Feb 01 05:16	0° ∀		evening rise	12495 Jan 15 06:26	13° ≈ 22'39	
desc. node	12494 Feb 01 12:20	0°) 31′53		desc. node	12495 Jan 19 09:03	20°≈57'57	
	12494 Feb 19 17:44	0° Υ			12495 Jan 24 14:15	0° ∀	
evening max el	12494 Mar 08 21:45	21° Y 21'28	25°41'00		12495 Feb 14 16:00	0 ° $\mathbf{\Upsilon}$	
retrograde	12494 Mar 21 07:45	28° Ƴ 30'31		evening max el	12495 Feb 19 11:25	5° Y 06'46	26°41'23
evening set	12494 Mar 27 07:23	26° Y 02'35		retrograde	12495 Mar 04 14:28	12° Y 29′29	
asc. node	12494 Mar 28 08:14	25° Y 06′12		evening set	12495 Mar 11 00:32	9° Ƴ 57'08	
min. Earth dist.	12494 Mar 31 14:16	21° Y 23'55	0.67516 AU	min. Earth dist.	12495 Mar 15 01:43	5° Ƴ 52'34	0.66256 AU
inferior conj	12494 Apr 02 01:11	19° Ƴ 32'46	1°26'20	asc. node	12495 Mar 15 05:40	5° Ƴ 41'04	
minimum elong	12494 Apr 01 23:20	19° Ƴ 38'41	1°25'28	inferior conj	12495 Mar 17 00:44	3° Ƴ 33'19	0°34'19
morning rise	12494 Apr 07 15:50	13° Ƴ 42′29		minimum elong	12495 Mar 16 23:50	3° Ƴ 35'59	0°34'00
direct	12494 Apr 11 01:01	12° Ƴ 36'55			12495 Mar 20 06:11	30° ₹ ₩	
morning max el	12494 Apr 17 20:36	16° Ƴ 18'53	18°58'25	morning rise	12495 Mar 23 00:17	27° ¥ 53'58	
	12494 Apr 28 10:04	$8^{\circ 0}$		direct	12495 Mar 25 23:06	27° ₩ 05'37	
desc. node	12494 Apr 30 14:22	3° 8 15'10			12495 Mar 31 20:46	0 ° Υ	
greatest brilliancy	12494 May 01 05:48	4° 8 13'25	-0.8m	morning max el	12495 Apr 01 09:29	0° Ƴ 30'04	18°17'17
morning set	12494 May 10 18:39	18° 8 53'25		desc. node	12495 Apr 17 11:00	23° Y 20′57	
	12494 May 17 22:20	$\Pi^{\circ}0$		morning set	12495 Apr 20 23:53	28° Y 59'49	
max. Earth dist.	12494 May 24 22:18	10° Ⅱ 55′21	1.45481 AU	-	12495 Apr 21 14:57	0°8	
	1010135 -55		201215		1010535 05 115	0001.45	105550
superior conj	12494 May 27 04:25	14° ∏ 27'45		superior conj	12495 May 06 11:38	23° 8 29'16	
minimum elong	12494 May 27 01:51	14° Ⅱ 17'40	2°13'10	minimum elong	12495 May 06 03:00	22° 8 55'29	
	12494 Jun 05 23:01	$0 {\circ} \mathfrak{S}$		max. Earth dist.	12495 May 07 17:36	25° 8 26'19	1.45776 AU
evening rise	12494 Jun 11 03:45	8° © 24'16			12495 May 10 15:44	$\Pi^{\circ}0$	
asc. node	12494 Jun 24 06:07	29° © 15'38		evening rise	12495 May 22 11:22	18° Ⅲ 26′23	
	12494 Jun 24 18:12	0 $^{\circ}\Omega$			12495 May 29 21:14	0ං ම	
evening max el	12494 Jul 01 02:06	7° £ 59′20	18°26'33	greatest brilliancy	12495 Jun 02 04:52	5°506'33	-0.8m
retrograde	12494 Jul 07 12:34	11° Ω 26′53		asc. node	12495 Jun 11 03:08	17° © 51'00	
evening set	12494 Jul 10 15:01	10° Ω 33'11		evening max el	12495 Jun 14 12:13	21°5942'03	19°03'58
inferior conj	12494 Jul 16 09:37	5° Ω 01'41	2°46'18	retrograde	12495 Jun 21 08:26	25°529'30	
minimum elong	12494 Jul 16 11:44	4° Ω 55'24	2°45'05	evening set	12495 Jun 24 19:41	24°519'46	
min. Earth dist.	12494 Jul 18 14:23	2° Ω 25'23	0.64865 AU	inferior conj	12495 Jun 30 07:10	18° © 33'33	3°07'19
	12494 Jul 20 20:20	30°Rூ		minimum elong	12495 Jun 30 08:18	18° © 29'52	3°06'19
morning rise	12494 Jul 22 07:15	28°5541'01		min. Earth dist.	12495 Jul 01 21:11	16°531'48	0.66532 AU
		01				-51 10	

morning rise	12495 Jul 05 20:17	12° © 10'24		min. Earth dist.	12496 Jun 14 10:28	1° © 01'15	0.67768 AU
direct	12495 Jul 12 01:34	9° 5 29'21			12496 Jun 15 04:57	30°R Ⅱ	
desc. node	12495 Jul 14 11:00	9° © 50'00		morning rise	12496 Jun 18 18:13	25° Ⅱ 59'16	
morning max el	12495 Jul 24 20:36	17°507'27	26°13'47	direct	12496 Jun 24 12:37	23° Ⅱ 26′24	
	12495 Aug 04 14:10	$0^{\circ}\Omega$		desc. node	12496 Jun 30 08:12	25° Ⅲ 28′01	
	12495 Aug 23 23:56	0° m)			12496 Jul 05 19:01	0 \circ \odot	
morning set	12495 Aug 29 19:59	10° m 29'50		morning max el	12496 Jul 06 06:43	0° 5 29'18	24°52'38
max. Earth dist.	12495 Sep 02 16:32	17° m 50'20	1.34950 AU		12496 Jul 28 12:10	0 $^{\circ}\Omega$	
asc. node	12495 Sep 07 03:53	26° Mp 44'50		morning set	12496 Aug 11 03:11	22° Ω 30′24	
				max. Earth dist.	12496 Aug 14 17:02	28° Ω 57'12	1.37050 AU
superior conj	12495 Sep 07 23:48	28° Mp 26'26	0°07'56		12496 Aug 15 06:41	0° ™	
minimum elong	12495 Sep 07 23:21	28° m 24'12	0°07'43				
behind sun begin	12495 Sep 07 18:04	27° m 57'10		superior conj	12496 Aug 21 10:07	11° m ,41'28	
behind sun end	12495 Sep 08 04:38	28° m 51'17		minimum elong	12496 Aug 21 11:43	11° m 49'19	0°24'27
	12495 Sep 08 18:01	0° ⊽		asc. node	12496 Aug 24 00:29	16° m/49'39	
evening rise	12495 Sep 15 14:38	14° £ 17'35		evening rise	12496 Aug 29 18:45	28° Tp 25'16	
	12495 Sep 23 14:46	0°M	20041152		12496 Aug 30 13:38	0∘ ⊽	10020125
evening max el	12495 Oct 04 07:42	15°M07'29	20°41'52	evening max el	12496 Sep 15 18:33	26° ₽ 19'09	19°30'35
desc. node	12495 Oct 10 07:37	19°M31'07			12496 Sep 20 16:55	0°M	
retrograde evening set	12495 Oct 15 15:55 12495 Oct 17 22:15	20°M45'24 20°M32'56		retrograde desc. node	12496 Sep 25 10:34	1°M08'38 1°M06'54	
inferior conj	12495 Oct 17 22.15	16°MJ38'11	101117		12496 Sep 26 05:05 12496 Sep 27 07:15	0°ML58'41	
minimum elong	12495 Oct 26 23:08	16°M52'28	4°41'08	evening set	12496 Sep 27 07.13 12496 Sep 30 11:31	0 1163841 30°R Ω	
min. Earth dist.	12495 Oct 28 00:03	16°ML02'22	0.54634 AU	inferior conj	12496 Oct 06 00:39	26° £ 52'49	-3°02'23
morning rise	12495 Nov 04 03:53	12°ML41'15	0.54054 AU	minimum elong	12496 Oct 05 16:46	27° ⊆ 05'25	
direct	12495 Nov 08 10:45	12°M01'48		min. Earth dist.	12496 Oct 08 09:57	25° £ 21′26	0.55506 AU
morning max el	12495 Nov 21 15:38		23°19'41	morning rise	12496 Oct 14 00:12	22° 2 27'09	0.55500 110
morning max or	12495 Dec 01 01:38	0° ∡ 7	23 17 11	direct	12496 Oct 19 03:13	21° 2 28'23	
asc. node	12495 Dec 04 05:05	5° ∡ 100'22		morning max el	12496 Nov 02 01:52	28° ≙ 27'17	25°06'51
morning set	12495 Dec 15 00:23	25° ₹ '53'54			12496 Nov 03 15:14	0°M₊	
C	12495 Dec 16 22:14	ರ°0		asc. node	12496 Nov 20 01:58	23°M45'40	
					12496 Nov 23 08:38	0° ∡ ¹	
superior conj	12495 Dec 21 22:10	10° る 49'53	1°36'12	morning set	12496 Nov 28 12:07	10° ∡ ³37'31	
minimum elong	12495 Dec 21 23:09	10°る55'13	1°37'04				
max. Earth dist.	12495 Dec 24 21:09	17° ට 08'26	1.33275 AU	superior conj	12496 Dec 05 07:06	25° ∡ ³30'57	1°38'36
evening rise	12495 Dec 29 16:39	26° る 59'54		minimum elong	12496 Dec 05 06:58	25° ₹ ³30′12	1°39'30
	12495 Dec 31 05:19	0° ≈		max. Earth dist.	12496 Dec 06 23:34	29° ∡ 13′01	1.32119 AU
desc. node	12496 Jan 06 05:51	11° ≈ 11′09			12496 Dec 07 08:11	0°ප	
	12496 Jan 17 21:38	0° ∀		evening rise	12496 Dec 12 12:34	11° る 00'46	
evening max el	12496 Feb 02 00:46	18° ∺ 36'39	27°20'48		12496 Dec 22 11:44	0° ≈	
retrograde	12496 Feb 15 14:44	26° 米 02′10		desc. node	12496 Dec 23 02:46	1° ≈ 05'17	
evening set	12496 Feb 22 09:05	23°) 31′22			12497 Jan 12 20:12	0° ∀	
min. Earth dist.	12496 Feb 26 05:46	19° ¥ 58'58	0.64633 AU	evening max el	12497 Jan 14 11:52	1° ¥ 38′05	27°32'27
inferior conj	12496 Feb 28 16:27	17° ¥ 20′35		retrograde	12497 Jan 28 07:43	8°) € 59'34	
minimum elong	12496 Feb 28 17:18	17° ¥ 18'18	0°27'36	evening set	12497 Feb 04 06:26	6°) €37'32	0.62505.444
asc. node	12496 Mar 01 03:05	15°) 48'42		min. Earth dist.	12497 Feb 08 00:25	3°) €33'23	0.62705 AU
morning rise direct	12496 Mar 06 03:21 12496 Mar 08 17:18	11°) 54'36 11°) 20'04		inferior conj	12497 Feb 10 21:25	0°) 47'01 0°) 38'50	
morning max el	12496 Mar 15 02:12	14° H 38'29	17°53'11	minimum elong	12497 Feb 11 00:47 12497 Feb 11 16:59	0 753830 30°R≈	1 3643
morning max er	12496 Mar 26 01:42	14 γ (3829	17 33 11	asc. node	12497 Feb 11 10:39 12497 Feb 16 00:27	30 k≈ 26°≈31'36	
morning set	12496 Apr 01 09:51	10° Υ 30'50		morning rise	12497 Feb 17 21:39	25°≈37'32	
desc. node	12496 Apr 03 07:35	13° Υ 41'21		direct	12497 Feb 20 04:35	25°≈13'12	
dese. Hode	12496 Apr 13 06:37	0°8		morning max el	12497 Feb 26 19:51	28° ≈ 36'11	17°46'40
	12 150 Hpt 15 00.57	° O		morning max or	12497 Feb 28 03:32	0° ∀	17 10 10
superior conj	12496 Apr 15 03:39	3° 8 00'27	-1°22'18	morning set	12497 Mar 14 20:23	23° ¥ 12'19	
minimum elong	12496 Apr 14 19:17	2° 8 27'00			12497 Mar 18 17:48	0°Υ	
max. Earth dist.	12496 Apr 19 13:31	10° 8 00'05	1.45329 AU	desc. node	12497 Mar 21 04:09	4° Υ 11'51	
evening rise	12496 May 01 02:00	27° 8 52'43					
Ü	12496 May 02 11:16	0°II		superior conj	12497 Mar 26 17:18	13° Y ′34'43	-0°41'52
greatest brilliancy	12496 May 15 21:53	20° Ⅱ 11′09	-0.6m	minimum elong	12497 Mar 26 13:07	13° Y 17'18	0°41'22
-	12496 May 23 00:06	0ಂಣ		max. Earth dist.	12497 Apr 02 07:23	24° Y 20'18	1.44182 AU
evening max el	12496 May 27 17:11	5°527'47	19°57'17		12497 Apr 05 20:51	0°8	
asc. node	12496 May 28 00:14	5° © 45'15		evening rise	12497 Apr 10 14:22	7° 8 22'22	
retrograde	12496 Jun 04 06:48	9° 5 46'46			12497 Apr 25 17:57	Π °0	
evening set	12496 Jun 08 03:27	8°520'26		evening max el	12497 May 10 16:22	19° Ⅱ 14'42	21°04'00
inferior conj	12496 Jun 13 10:56	2° 5 20'39	3°14'10	asc. node	12497 May 14 21:25	22° Ⅱ 45'57	
minimum elong	12496 Jun 13 11:00	2°520'25	3°13'16	retrograde	12497 May 19 05:35	24° Ⅱ 13'57	

	12407 M 22 12-22	220T21117			12400 M 07 20-42	C0 Π 47117	
evening set	12497 May 23 12:22	22° I [31'17	2000101	evening set	12498 May 07 20:43	6° Ⅱ 47'17	2052112
inferior conj	12497 May 28 18:33	16° Ⅱ 19'33	3°09'01	inferior conj	12498 May 13 03:53	0° Ⅱ 25'51	
minimum elong	12497 May 28 17:38	16° Ⅱ 22'43	3°08'05	minimum elong	12498 May 13 02:13	0° Ⅲ 31'40	2°52'10
min. Earth dist.	12497 May 29 04:22	15° Ⅱ 45'27	0.68537 AU	min. Earth dist.	12498 May 13 00:46	0° Ⅱ 36'44	0.68833 AU
morning rise	12497 Jun 02 22:42	10° Ⅱ 02'18			12498 May 13 11:18	30° ₹8	
direct	12497 Jun 08 04:31	7° Ⅱ 44'31		morning rise	12498 May 18 07:34	24° 8 14'22	
desc. node	12497 Jun 17 05:16	12° Ⅲ 33'46		direct	12498 May 23 00:19	22° 8 15'45	
morning max el	12497 Jun 18 17:00	14° Ⅱ 00′18	23°23'25	morning max el	12498 Jun 01 05:56	27° 8 39'36	21°55'18
•	12497 Jul 01 16:11	0 \circ \odot		•	12498 Jun 03 10:50	Π°	
	12497 Jul 21 09:49	$0^{\circ}\Omega$		desc. node	12498 Jun 04 02:14	0° Ⅱ 43'33	
morning set	12497 Jul 23 12:55	3° Ω 32'29		desc. Hode	12498 Jun 25 06:19	0°95	
•			1 20267 AII	morning got		13°S27'20	
max. Earth dist.	12497 Jul 27 14:44	10° Ω 30′07	1.39367 AU	morning set	12498 Jul 03 21:26		1 41 62 4 4 7 7
		_		max. Earth dist.	12498 Jul 09 15:23	22° © 49'50	1.41634 AU
superior conj	12497 Aug 04 06:24	24° Ω 15'53			12498 Jul 13 21:19	0 \circ Ω	
minimum elong	12497 Aug 04 10:36	24° Ω 35′26	0°58'42				
	12497 Aug 07 07:39	0° m)		superior conj	12498 Jul 17 08:16	5° Ω 59'51	-1°32'03
asc. node	12497 Aug 10 21:09	6° ™ 49'48		minimum elong	12498 Jul 17 14:46	6° Ω 28′26	1°32'01
evening rise	12497 Aug 13 15:29	12° m) 10'39		evening rise	12498 Jul 28 01:12	25° Ω 24'23	
S	12497 Aug 23 10:42	0∘ <u>⊽</u>		asc. node	12498 Jul 28 17:53	26° Ω 41'21	
evening max el	12497 Aug 29 17:59	8° ₽ 17'33	18°41'00	uov. nouv	12498 Jul 30 13:03	0° m)	
retrograde	12497 Sep 06 22:37	12° £ 24'36	10 41 00	evening max el	12498 Aug 13 02:18	20° m) 55'25	18°12'21
•				•	· ·	~	10 1221
evening set	12497 Sep 08 21:07	12° £ 11'34		retrograde	12498 Aug 20 05:29	24° m/32'40	
desc. node	12497 Sep 13 02:32	10° £ 24'04		evening set	12498 Aug 22 10:46	24° Mp 12'13	
inferior conj	12497 Sep 16 21:44	7° £ 46'57	-1°11'51	inferior conj	12498 Aug 29 16:36	19° m 27'07	0°23'59
minimum elong	12497 Sep 16 18:48	7° £ 52′26	1°10'38	minimum elong	12498 Aug 29 17:23	19° m 25'23	0°23'25
min. Earth dist.	12497 Sep 20 01:20	5° £ 26'51	0.57143 AU	desc. node	12498 Aug 30 23:59	18° m 18'19	
morning rise	12497 Sep 24 13:03	2° ₽ 43'24		min. Earth dist.	12498 Sep 02 00:13	16° Mp 34'59	0.59263 AU
direct	12497 Sep 30 09:34	1° ≏ 19'02		morning rise	12498 Sep 05 20:37	13° m 49'29	
morning max el	12497 Oct 14 16:26	8° £ 46'23	26°37'39	direct	12498 Sep 12 06:04	11° m) 56'37	
morning max er	12497 Oct 30 17:04	0°ML	20 37 37	morning max el	12498 Sep 26 14:20	19° m) 44'42	27°37'06
				morning max er	•	0° ⊽	27 3700
asc. node	12497 Nov 06 22:46	13°ML00'12			12498 Oct 05 08:43		
morning set	12497 Nov 12 22:19	25°M13'26			12498 Oct 23 12:04	0° M	
	12497 Nov 15 03:16	0° ∡ ¹		asc. node	12498 Oct 24 19:31	2°M35'59	
				morning set	12498 Oct 28 05:16	9° ™ 36'49	
superior conj	12497 Nov 19 18:19	10° ∡ 15'38	1°35'00	max. Earth dist.	12498 Nov 03 15:33	23°M38'00	1.31280 AU
minimum elong	12497 Nov 19 17:11	10° ∡ 09'15	1°35'46				
max. Earth dist.	12497 Nov 20 06:52	11° ×2 5'31	1.31447 AU	superior conj	12498 Nov 04 05:57	24°M58'15	1°25'40
evening rise				1 3			
evening rise	1/49 / NOV /6 15:30	25° √ 18'32		minimum elong	12498 Nov 04 04:04	24°M.47'42	1°26'10
	12497 Nov 26 15:30	25° ⊀ 18'32		minimum elong	12498 Nov 04 04:04	24°M47'42	1°26'10
JJ.	12497 Nov 28 21:37	5°0		C	12498 Nov 06 12:05	0° ∡ ¹	1°26'10
desc. node	12497 Nov 28 21:37 12497 Dec 09 23:45	0°궁 20°궁32'18		minimum elong evening rise	12498 Nov 06 12:05 12498 Nov 10 23:12	0° √ 9° √ 47'17	1°26'10
	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58	0°ප් 20°ප්32'18 0°≈		evening rise	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12	0° ᄰ 9° ᄰ 47'17 0°중	1°26'10
evening max el	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07	0°る 20°る32'18 0°≈ 13°≈57'59	27°11'11	evening rise desc. node	12498 Nov 06 12:05 12498 Nov 10 23:12	0°፟፟፟፟፟፟፟፟፟፟፟፟	
	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58	0°ප් 20°ප්32'18 0°≈	27°11'11	evening rise	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12	0° 🗗 9° 🗗 47'17 0° පි 9° පි21'37 25° පි27'53	
evening max el	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07	0°る 20°る32'18 0°≈ 13°≈57'59	27°11'11	evening rise desc. node	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51	0°፟፟፟፟፟፟፟፟፟፟፟፟	
evening max el retrograde	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34	0°පි 20°පි32'18 0°≈ 13°≈57'59 21°≈12'06	27°11'11 0.60584 AU	evening rise desc. node	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09	0° 🗗 9° 🗗 47'17 0° පි 9° පි21'37 25° පි27'53	
evening max el retrograde evening set min. Earth dist.	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 17 13:21	0° පි 20° පි32'18 0° ≈ 13° ≈ 57'59 21° ≈ 12'06 19° ≈ 07'13	0.60584 AU	evening rise desc. node evening max el retrograde	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32	0°♂ 9°♂47'17 0°♂ 9°♂21'37 25°♂27'53 0°≈	
evening max el retrograde evening set min. Earth dist. inferior conj	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 17 13:21 12498 Jan 21 08:33 12498 Jan 24 12:11	0°♂ 20°♂32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17	0.60584 AU -3°00'10	evening rise desc. node evening max el	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59	
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 17 13:21 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 18:31	0°පි 20°පි32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49	0.60584 AU -3°00'10	evening rise desc. node evening max el retrograde evening set	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57	0° 🖈 9° 🗗 47'17 0° පි 9° පි21'37 25° පි27'53 0° ක 2° ≈33'03 0° ≈53'59 30° අපි	
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 17 13:21 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 18:31 12498 Feb 01 02:38	0°පි 20°පි32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22	0.60584 AU -3°00'10	evening rise desc. node evening max el retrograde evening set min. Earth dist.	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33	0° ₹ 9° ₹47'17 0° ♂ 9° ♂21'37 25° ♂27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₨ 28° ♂18'04	26°15'42 0.58443 AU
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evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Jan 24 18:31 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03	0°る。 20°る32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0°升 6°升43'52	0.60584 AU -3°00'10 2°57'06 17°58'29	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03	0° ₹ 9° ₹47'17 0° ℧ 9° ℧21'37 25° ℧27'53 0° ※ 2° ※33'03 0° ※53'59 30° ₦℧ 28° ℧18'04 26° ℧00'18 25° ℧44'42 21° ℧32'03 21° ℧17'29 22° ℧20'04 25° ℧19'55	26°15'42 0.58443 AU -4°19'38 4°16'19
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evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Jan 24 18:31 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 07 23:12	0°る 20°る32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0°升 6°升43'52 25°升17'07 25°升16'23 24°升41'21	0.60584 AU -3°00'10 2°57'06 17°58'29	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹ 28° ₹18'04 26° ₹300'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54	26°15'42 0.58443 AU -4°19'38 4°16'19
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Jan 24 18:31 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 20 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 07 23:12 12498 Mar 08 15:10	0°る 20°る32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0°升 6°升43'52 25°升17'07 25°升16'23 24°升41'21 25°升51'20	0.60584 AU -3°00'10 2°57'06 17°58'29	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00	0° ₹ 9° ₹47'17 0° ♂ 9° ♂21'37 25° ♂27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₨ 28° ♂18'04 26° ♂00'18 25° ♂44'42 21° ♂32'03 21° ♂17'29 22° ♂20'04 25° ♂19'55 0° ≈ 20° ≈49'54 0° ℋ	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 15:10 12498 Mar 08 00:41	0°♂ 20°♂32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0° ₩ 6° ₩43'52 25° ₩17'07 25° ₩16'23 24° ₩41'21 25° ₩51'20 24° ₩47'53	0.60584 AU -3°00'10 2°57'06 17°58'29	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00	0° ₹ 9° ₹47'17 0° ♂ 9° ♂21'37 25° ♂27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₨ 28° ♂18'04 26° ♂00'18 25° ♂44'42 21° ♂32'03 21° ♂17'29 22° ♂20'04 25° ♂19'55 0° ≈ 20° ≈49'54 0° ₭ 7° ₭58'29	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 15:10 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 10 00:35	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0°ℋ 6°ℋ43'52 25°ℋ17'07 25°ℋ16'23 24°ℋ41'21 25°ℋ51'20 24°ℋ47'53 0°℃	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹ 28° ₹318'04 26° ₹300'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ¥08'24	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist.	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 11 00:35	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0° ₩ 6° ₩43'52 25° ₩17'07 25° ₩16'23 24° ₩41'21 25° ₩51'20 24° ₩47'53 0° Ψ 8° ♥09'04	0.60584 AU -3°00'10 2°57'06 17°58'29	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 18 20:54 12499 Feb 18 20:54 12499 Feb 22 21:16	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹318'04 26° ₹300'18 25° ₹44'42 21° ₹332'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ₹08'24 15° ₹26'11	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 02 21:48 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 15 20:40 12498 Mar 21 14:49	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈35'42 12°≈13'25 0°ℋ 6°升43'52 25°升17'07 25°升16'23 24°升41'21 25°升5'20 24°升47'53 0°Ψ 8°Ψ09'04 17°Ψ28'47	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹318'04 26° ₹300'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ₹08'24 15° ₹26'11 21° ¥16'37	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist.	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 11 00:35	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0° ₩ 6° ₩43'52 25° ₩17'07 25° ₩16'23 24° ₩41'21 25° ₩51'20 24° ₩47'53 0° Ψ 8° ♥09'04	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 14 12:27 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 18 20:54 12499 Feb 18 20:54 12499 Feb 22 21:16	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹18'04 26° ₹300'18 25° ₹34'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ₹08'24 15° ¥26'11 21° ¥16'37 28° ¥29'46	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist.	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 02 21:48 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 15 20:40 12498 Mar 21 14:49	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈35'42 12°≈13'25 0°ℋ 6°升43'52 25°升17'07 25°升16'23 24°升41'21 25°升5'20 24°升47'53 0°Ψ 8°Ψ09'04 17°Ψ28'47	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 18 20:54 12499 Feb 22 21:16 12499 Feb 26 05:06	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹318'04 26° ₹300'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ₹08'24 15° ₹26'11 21° ¥16'37	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist.	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 02 21:48 12498 Feb 10 11:03 12498 Feb 20 08:32 12498 Feb 20 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 10 00:35 12498 Mar 11 00:35 12498 Mar 21 14:49 12498 Mar 21 14:49 12498 Mar 21 14:49	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0° H 6° H43'52 25° H17'07 25° H16'23 24° H41'21 25° H51'20 24° H47'53 0° Y 8° Y09'04 17° Y28'47 0° B	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 18 20:54 12499 Feb 22 21:16 12499 Feb 26 05:06 12499 Mar 02 11:23	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹18'04 26° ₹300'18 25° ₹34'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ₹ 7° ₹58'29 8° ₹08'24 15° ¥26'11 21° ¥16'37 28° ¥29'46	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist. evening rise	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 22 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 21 14:49 12498 Mar 29 17:04 12498 Mar 29 17:04 12498 Mar 20 14:34 12498 Apr 20 14:34 12498 Apr 20 14:34	0°♂ 32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈35'42 12°≈13'25 0°ℋ 6°升43'52 25°升17'07 25°升16'23 24°升41'21 25°升51'20 24°升47'53 0°℃ 8°℃9'09'04 17°℃28'47 0°份 0°Ы	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59 1.42463 AU	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 16 17:43 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 26 05:06 12499 Mar 03 09:12 12499 Mar 03 09:12 12499 Mar 03 09:12	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹18'04 26° ₹300'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ¥ 7° ¥58'29 8° ¥08'24 15° ¥26'11 21° ¥16'37 28° ¥29'46 0° ♀	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18 1.40371 AU
evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise asc. node direct morning max el morning set superior conj minimum elong behind sun begin behind sun end desc. node max. Earth dist. evening rise evening max el	12497 Nov 28 21:37 12497 Dec 09 23:45 12497 Dec 16 02:58 12497 Dec 27 18:07 12498 Jan 10 16:34 12498 Jan 21 08:33 12498 Jan 24 12:11 12498 Jan 24 12:11 12498 Feb 01 02:38 12498 Feb 02 21:48 12498 Feb 02 21:48 12498 Feb 03 05:02 12498 Feb 10 11:03 12498 Feb 20 08:32 12498 Feb 26 01:03 12498 Mar 08 07:21 12498 Mar 08 07:11 12498 Mar 08 07:11 12498 Mar 08 00:41 12498 Mar 11 00:35 12498 Mar 11 00:35 12498 Mar 21 14:49 12498 Mar 29 17:04 12498 Mar 29 17:04 12498 Mar 29 17:04	0°る。 20°る32'18 0°≈ 13°≈57'59 21°≈12'06 19°≈07'13 16°≈23'34 13°≈43'17 13°≈29'49 8°≈53'22 8°≈36'05 8°≈35'42 12°≈13'25 0°升 6°升43'52 25°升17'07 25°升16'23 24°升47'53 0°Υ 8°Υ09'04 17°Υ28'47 0°႘ 0°Π 3°用02'09	0.60584 AU -3°00'10 2°57'06 17°58'29 -0°02'12 0°01'59 1.42463 AU	evening rise desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12498 Nov 06 12:05 12498 Nov 10 23:12 12498 Nov 21 05:12 12498 Nov 26 20:51 12498 Dec 09 17:09 12498 Dec 15 12:32 12498 Dec 23 15:48 12498 Dec 30 01:50 12498 Dec 31 16:57 12499 Jan 03 06:33 12499 Jan 06 09:16 12499 Jan 06 17:43 12499 Jan 16 14:27 12499 Jan 20 19:05 12499 Jan 20 19:05 12499 Jan 24 20:03 12499 Jan 28 18:46 12499 Feb 09 18:29 12499 Feb 14 13:00 12499 Feb 18 18:45 12499 Feb 26 05:06 12499 Mar 02 11:23 12499 Mar 03 09:12	0° ₹ 9° ₹47'17 0° ₹ 9° ₹21'37 25° ₹27'53 0° ≈ 2° ≈33'03 0° ≈53'59 30° ₹₹ 28° ₹18'04 26° ₹30'18 25° ₹44'42 21° ₹32'03 21° ₹17'29 22° ₹20'04 25° ₹19'55 0° ≈ 20° ≈49'54 0° ¥ 7° ¥58'29 8° ¥08'24 15° ¥26'11 21° ¥16'37 28° ¥29'46 0° ♀	26°15'42 0.58443 AU -4°19'38 4°16'19 18°30'12 0°32'13 0°32'18 1.40371 AU

asc. node	12499 Apr 18 16:02	23° 8 01'12		asc. node	12500 Apr 05 13:25	5° 8 48'32	
evening set	12499 Apr 22 02:55	21° 8 03'51		evening set	12500 Apr 06 05:26	5° 8 16'28	
min. Earth dist.	12499 Apr 26 21:29	15° 8 29'06	0.68670 AU	min. Earth dist.	12500 Apr 10 16:16	0° 8 17'30	0.68063 AU
inferior conj	12499 Apr 27 13:01	14° 8 35'54		mm. Latti dist.	12500 Apr 10 21:37	30°RΥ	0.00003710
minimum elong	12499 Apr 27 10:55	14° 8 43'05		inferior conj	12500 Apr 11 20:04	28° Υ 46'05	1°51'34
morning rise	12499 May 02 18:53	8° 8 31'27	2 20 13	minimum elong	12500 Apr 11 17:58	28° Υ 53'01	1°50'32
direct	12499 May 06 22:48	6° 8 53'47		morning rise	12500 Apr 17 06:44	22° Y '50'08	1 3032
morning max el	12499 May 15 00:33	11° 8 29'17	20°35'41	direct	12500 Apr 20 22:34	21° Υ 33'11	
desc. node	12499 May 21 23:06	19° 8 39'53	20 33 11	morning max el	12500 Apr 28 02:48	25° Y '30'43	19°29'25
dese. Hode	12499 May 29 09:36	0°Ⅱ		morning max er	12500 May 02 02:24	0°8	1, 2, 23
morning set	12499 Jun 13 06:44	22° Ⅱ 21'51		desc. node	12500 May 08 19:53	9° 8 10'21	
morning set	12499 Jun 18 03:46	0°95		greatest brilliancy	12500 May 10 19:02	12° 8 02'20	-0.7m
max. Earth dist.	12499 Jun 21 22:35	6° © 02'21	1.43581 AU	greatest orimaney	12500 May 10 15:02 12500 May 22 16:04	0°Ⅱ	-0.7111
max. Earth dist.	12499 Juli 21 22.33	0 30221	1.43361 AU	morning set	12500 May 22 10:04 12500 May 23 07:25	0° П 58'59	
superior conj	12499 Jun 28 11:36	16° © 45'04	1050!50	max. Earth dist.	12500 Jun 04 12:45	0 П 3839 20° П 00'17	1.44984 AU
minimum elong	12499 Jun 28 18:06	10 \$343 04 17°\$12'10		max. Earth dist.	12300 Juli 04 12.43	20 Д0017	1.44964 AU
minimum ciong	12499 Jul 06 06:33	0°Ω	1 39 23	superior conj	12500 Jun 08 15:17	26° Ⅲ 31′20	2012/40
		7° Ω 55'00				26° I I38'47	
evening rise	12499 Jul 10 19:18 12499 Jul 15 14:40			minimum elong	12500 Jun 08 17:09 12500 Jun 10 19:21	26°Щ3847 0°©	2 13 43
asc. node		16° Ω 19'43					
	12499 Jul 24 05:02	0°M) 40 M→ 02/20	10002120	evening rise	12500 Jun 22 16:47	19° © 31'24	
evening max el	12499 Jul 27 15:23	4° m) 02'38	18°03'20		12500 Jun 28 23:43	0° N	
retrograde	12499 Aug 03 04:04	7° m/24'44		asc. node	12500 Jul 02 11:34	5° Ω 39'44	
evening set	12499 Aug 05 17:30	6° m 53'11		evening max el	12500 Jul 11 05:39	17° Ω 30'03	18°12'55
inferior conj	12499 Aug 12 06:43	1°M)48'32	1°36'39	retrograde	12500 Jul 17 14:07	20° Ω 51'30	
minimum elong	12499 Aug 12 09:08	1° Mp 42'29	1°35'22	evening set	12500 Jul 20 11:50	20° Ω 06′15	
	12499 Aug 14 01:54	30°R Ω		inferior conj	12500 Jul 26 12:07	14° Ω 43'53	2°26'32
min. Earth dist.	12499 Aug 15 07:53	28° Ω 46'41	0.61556 AU	minimum elong	12500 Jul 26 14:36	14° Ω 36'54	
desc. node	12499 Aug 17 21:28	26° Ω 32'07		min. Earth dist.	12500 Jul 29 00:59	11° Ω 53'37	0.63739 AU
morning rise	12499 Aug 18 22:13	25° Ω 46'43		morning rise	12500 Aug 01 15:46	8° Ω 27'51	
direct	12499 Aug 25 14:08	23° Ω 28'53		desc. node	12500 Aug 04 18:52	6° Ω 35'52	
	12499 Sep 07 05:59	0° m y		direct	12500 Aug 08 07:28	5° Ω 53′20	
morning max el	12499 Sep 08 18:52	1° m 28'24	27°58'10	morning max el	12500 Aug 22 03:59	13° Ω 54'24	27°41'31
	12499 Sep 29 15:33	0∘ ಹ			12500 Sep 04 04:05	0° m y	
asc. node	12499 Oct 11 16:12	22° ≏ 26'04			12500 Sep 22 05:53	0。 ಹ	
morning set	12499 Oct 12 06:55	23° ≙ 41'37		morning set	12500 Sep 26 01:01	7° ≙ 22'43	
	12499 Oct 15 06:58	0° M .		asc. node	12500 Sep 28 12:52	12° ≏ 25'54	
max. Earth dist.	12499 Oct 17 21:53	5° M ₊40′23	1.31636 AU	max. Earth dist.	12500 Sep 30 22:15	17° ≏ 25′06	1.32525 AU
superior conj	12499 Oct 19 16:06	9° ™ 32'24		superior conj	12500 Oct 03 22:50	23° ≏ 53'10	
minimum elong	12499 Oct 19 13:51	9° ™ 19'59	1°10'55	minimum elong	12500 Oct 03 20:45	23° ≏ 41'54	0°50'15
evening rise	12499 Oct 26 09:37	24°M20'45			12500 Oct 06 18:20	0° M ₊	
	12499 Oct 29 01:37	0° ∡ ¹		evening rise	12500 Oct 10 20:55	8°M54'31	
desc. node	12499 Nov 13 18:04	27° х 17'46			12500 Oct 21 16:25	0° ∡ 7	
	12499 Nov 15 19:35	0°₹		desc. node	12500 Oct 31 15:22	14° ∡ °01′03	
evening max el	12499 Nov 21 08:04	6° る 07'02	24°50'59	evening max el	12500 Nov 02 18:14	16° ∡ 13′04	23°10'23
retrograde	12499 Dec 05 03:03	13° る 01'03		retrograde	12500 Nov 16 01:04	22° ₹ '49'30	
evening set	12499 Dec 10 15:23	11° る 53'19		evening set	12500 Nov 20 05:35	22° х 11'24	
min. Earth dist.	12499 Dec 15 19:55	9° る 08'21	0.56531 AU	min. Earth dist.	12500 Nov 27 03:41	18° ∡ ′58'41	0.55146 AU
inferior conj	12499 Dec 18 09:56	7° る 28'48	-5°24'48	inferior conj	12500 Nov 28 14:54	18° ₮ 07'53	-5°53'33
minimum elong	12499 Dec 18 17:03	7° る 17'19	5°22'40	minimum elong	12500 Nov 28 15:13	18° ∡ ¹07'24	5°52'40
morning rise	12499 Dec 26 20:54	3° ₹ 22'01		morning rise	12500 Dec 07 02:28	14° ∡ 17'36	
direct	12499 Dec 29 05:15	3° る 06'37		direct	12500 Dec 10 01:20	13° ∡ ¹56'54	
asc. node	12500 Jan 07 16:18	7° る 37'16		morning max el	12500 Dec 21 03:43	19° ∡ 13'50	20°40'47
morning max el	12500 Jan 07 18:43	7°る43'03	19°23'56	asc. node	12500 Dec 25 13:26	24° ∡ 12'41	
•	12500 Jan 22 04:20	0° ≈ ≈			12500 Dec 29 12:59	0°ರ	
morning set	12500 Jan 24 20:32	5° ≈ 17'45		morning set	12501 Jan 09 04:05	19° る 58'14	
-					12501 Jan 13 23:56	0° ≈	
superior conj	12500 Feb 01 22:46	21° ≈ 25′06	0°59'28				
minimum elong	12500 Feb 02 01:38	21° ≈ 39′03	0°59'42	superior conj	12501 Jan 16 15:03	5° ≈ 24'44	1°19'17
5		0°) €		minimum elong	12501 Jan 16 17:34	5° ≈ 37'37	1°19'47
	12500 Feb 06 10:41	0 /(Č			
max. Earth dist.	12500 Feb 06 10:41 12500 Feb 08 11:26	3°) (44′54	1.38133 AU	max. Earth dist.	12501 Jan 21 19:51	15° ≈ 45'54	1.35989 AU
max. Earth dist. desc. node			1.38133 AU	max. Earth dist. evening rise	12501 Jan 21 19:51 12501 Jan 25 17:11	15°≈45'54 23°≈07'06	1.35989 AU
desc. node	12500 Feb 08 11:26	3°) 44′54	1.38133 AU				1.35989 AU
	12500 Feb 08 11:26 12500 Feb 09 17:53	3°¥44'54 6°¥02'50	1.38133 AU	evening rise	12501 Jan 25 17:11	23° ≈ 07'06	1.35989 AU
desc. node	12500 Feb 08 11:26 12500 Feb 09 17:53 12500 Feb 12 05:02	3°¥44'54 6°¥02'50 10°¥25'09	1.38133 AU	evening rise	12501 Jan 25 17:11 12501 Jan 27 14:34	23°≈07'06 26°≈33'59	1.35989 AU
desc. node evening rise	12500 Feb 08 11:26 12500 Feb 09 17:53 12500 Feb 12 05:02 12500 Feb 24 03:37 12500 Mar 18 21:11	3°¥44'54 6°¥02'50 10°¥25'09 0°Ƴ 0°¥		evening rise desc. node	12501 Jan 25 17:11 12501 Jan 27 14:34 12501 Jan 29 12:53 12501 Feb 17 20:53	23°≈07'06 26°≈33'59 0°¥ 0°Υ′	
desc. node	12500 Feb 08 11:26 12500 Feb 09 17:53 12500 Feb 12 05:02 12500 Feb 24 03:37	3°¥44'54 6°¥02'50 10°¥25'09 0° Y		evening rise	12501 Jan 25 17:11 12501 Jan 27 14:34 12501 Jan 29 12:53	23°≈07'06 26°≈33'59 0°¥	1.35989 AU 26°08'49

. ,	12501 M 21 02 22	1000010125			12502 F 1 12 10 00	2001/14/20	27001107
evening set	12501 Mar 21 02:33	19° Y 19'25		evening max el	12502 Feb 12 18:00	28°) 14′20 0° °	2/01/06
asc. node	12501 Mar 23 10:50 12501 Mar 25 06:54	1/°° \ °03'37	0.67033 AU	ratra ara da	12502 Feb 14 15:54	5° Υ 39'36	
min. Earth dist.		12° Y 51'40	1°05'34	retrograde	12502 Feb 26 02:12	3° Υ 06'45	
inferior conj	12501 Mar 26 22:58	12° Y 56'26	1°05'34 1°04'54	evening set	12502 Mar 04 16:20 12502 Mar 07 23:28	3° 1 06°45 30°R ∺	
minimum elong	12501 Mar 26 21:26	7° Y 05'52	1 04 54	i. David diet		30°₹ ⊼ 29° 光 16'33	0.65607 AU
morning rise direct	12501 Apr 01 17:06	6° Y 07'52		min. Earth dist. asc. node	12502 Mar 08 15:18 12502 Mar 10 08:14	29° ★ 16'33 27° ★ 20'03	0.03007 AU
morning max el	12501 Apr 04 21:49 12501 Apr 11 12:20	9° Υ 40'27	18°38'52	inferior conj	12502 Mar 10 08.14 12502 Mar 10 19:30	26°\(\frac{1}{47}\)'42	0°09'06
desc. node	12501 Apr 11 12:20 12501 Apr 25 16:34	29° Υ 05'24	10 30 32	minimum elong	12502 Mar 10 19:15	26°\(\frac{47}{42}\)	0°09'08
desc. node	12501 Apr 26 06:40	0° 8		transit middle	12502 Mar 10 19:15	26°\(\frac{4}{4}8'26\)	0°09'08
morning set	12501 Apr 20 00:40 12501 May 02 21:43	10° 8 21'02		transit begin	12502 Mar 10 19:13	26°)(55'27	0 0908
morning set	12501 May 02 21:43 12501 May 15 11:20	0°Ⅱ		transit begin	12502 Mar 10 10:48	26°\(\frac{1}{3327}\)	
max. Earth dist.	12501 May 18 07:22	0 <u>П</u> 4° П 25'44	1.45704 AU	morning rise	12502 Mar 16 23:37	20 X 41 20 21° X 14'02	
max. Earm dist.	12301 May 16 07.22	4 112344	1.43/04 AU	direct	12502 Mar 19 18:29	20°\(\)32'02	
aumorior comi	12501 May 19 01:37	5° Ⅱ 37'04	2007126	morning max el	12502 Mar 19 18.29 12502 Mar 26 03:17	20 X 52 02 23° X 52'24	18°05'01
superior conj minimum elong	12501 May 19 01.57 12501 May 18 19:53	5° П 14'38	2°08'09	morning max er	12502 Mar 31 04:50	23 χ3224 0° Υ	18 03 01
Č	12501 May 18 19.53 12501 Jun 03 14:03	о°©06'38	2 08 09	desc. node		0 1 19° Υ 18'27	
evening rise					12502 Apr 12 13:11		
4 41 311	12501 Jun 03 12:23	0°©	0.0	morning set	12502 Apr 13 15:20	21° Y 04'45	
greatest brilliancy	12501 Jun 11 02:13	12°503'59	-0.9m		12502 Apr 19 03:35	0°8	
asc. node	12501 Jun 19 08:32	24° © 33'47			12502 4 20 10 25	140 4 2140	1040154
	12501 Jun 23 15:47	0° N	10040101	superior conj	12502 Apr 28 10:35	14° 8 46'40	
evening max el	12501 Jun 24 17:54	1° Ω 08'34	18°40'21	minimum elong	12502 Apr 28 01:17	14° 8 10'06	
retrograde	12501 Jul 01 07:27	4°Ω43'04		max. Earth dist.	12502 May 01 03:24	_	1.45677 AU
evening set	12501 Jul 04 13:37	3° Ω 42'30			12502 May 08 04:40	0°Щ	
	12501 Jul 08 14:17	30° Ŗ ∽		evening rise	12502 May 14 13:10	9° ∏ 50′27	
inferior conj	12501 Jul 10 04:45	28° © 04'17		greatest brilliancy	12502 May 27 06:15	29° Ⅱ 16'35	-0.7m
minimum elong	12501 Jul 10 06:29	27° © 58'56	2°55'59		12502 May 27 17:56	0ა ௐ	
min. Earth dist.	12501 Jul 12 03:09	25° © 41'46	0.65627 AU	asc. node	12502 Jun 06 05:34	12° © 53'19	
morning rise	12501 Jul 15 22:28	21° © 41'56		evening max el	12502 Jun 08 01:55	14° © 52'55	19°24'39
direct	12501 Jul 22 08:33	19° © 00'39		retrograde	12502 Jun 15 04:48	18° © 52'53	
desc. node	12501 Jul 22 16:12	19° © 01'01		evening set	12502 Jun 18 19:53	17° © 36'10	
morning max el	12501 Aug 04 15:01	26°951'25	26°52'55	inferior conj	12502 Jun 24 05:18	11° 5 43'46	3°11'48
	12501 Aug 07 13:27	0 \circ Ω		minimum elong	12502 Jun 24 05:59	11° © 41'30	3°10'51
	12501 Aug 28 19:24	0° m y		min. Earth dist.	12502 Jun 25 13:03	9° © 59'24	0.67117 AU
morning set	12501 Sep 09 08:36	20° Mg 32'32		morning rise	12502 Jun 29 15:36	5° © 20'41	
max. Earth dist.	12501 Sep 13 13:27	28°M)47'12	1.33929 AU	direct	12502 Jul 05 16:22	2° 5 642'15	
	12501 Sep 14 03:53	0∘ 亚		desc. node	12502 Jul 09 13:27	3° 5 36'32	
asc. node	12501 Sep 15 09:30	2° ₽ 30'43		morning max el	12502 Jul 18 01:51	10° © 07'45	25°40'47
					12502 Aug 02 19:40	0 $^{\circ}$ Ω	
superior conj	12501 Sep 17 23:52	7° ≙ 53'59	0°24'46		12502 Aug 21 09:39	0° m	
minimum elong	12501 Sep 17 22:36	7° ₽ 47'23	0°24'33	morning set	12502 Aug 23 02:01	3°Mp02'10	
evening rise	12501 Sep 25 07:09	23° ≏ 22'48		max. Earth dist.	12502 Aug 26 18:26	9° ™ 53'14	1.35803 AU
	12501 Sep 28 11:50	0° M .					
evening max el	12501 Oct 15 08:30	26°M21'31	21°31'53	superior conj	12502 Sep 01 16:30	21°M/28'12	-0°05'25
desc. node	12501 Oct 18 12:44	29°M05'55		minimum elong	12502 Sep 01 16:50	21° m 29'53	0°05'35
	12501 Oct 19 20:20	0° ∡ ¹		behind sun begin	12502 Sep 01 10:58	21°M)00'24	
retrograde	12501 Oct 27 13:44	2° ∡ ¹25'56		behind sun end	12502 Sep 01 22:42	21° m 59'25	
evening set	12501 Oct 30 09:21	2° ₮ 07'47		asc. node	12502 Sep 02 06:07	22° m 36'47	
	12501 Nov 05 00:50	30°RML			12502 Sep 05 20:54	0∘ ত	
inferior conj	12501 Nov 08 07:39	28°M13'02	-5°26'09	evening rise	12502 Sep 09 14:12	7° ഫ 39'59	
minimum elong	12501 Nov 07 23:46	28°M24'05	5°24'05		12502 Sep 21 18:12	0° M	
min. Earth dist.	12501 Nov 08 09:57	28° ™ 09'48	0.54546 AU	evening max el	12502 Sep 27 11:08	7° M 06'09	20°08'53
morning rise	12501 Nov 16 15:09	24°M24'39		desc. node	12502 Oct 05 10:10	12° M 04'12	
direct	12501 Nov 20 09:40	23°M53'53		retrograde	12502 Oct 08 02:40	12°M23'55	
morning max el	12501 Dec 02 23:10	29°M54'05	22°18'10	evening set	12502 Oct 10 02:42	12°M13'32	
	12501 Dec 03 01:40	0° ∡ ¹		inferior conj	12502 Oct 19 02:01	8°M15'26	-4°04'12
asc. node	12501 Dec 12 10:28	11° ∡ ¹49'59		minimum elong	12502 Oct 18 16:13	8° ™ 30'04	4°00'39
	12501 Dec 22 08:09	ರ°0		min. Earth dist.	12502 Oct 20 18:12	7°M15'30	0.54888 AU
morning set	12501 Dec 24 14:46	4° ප 44'37		morning rise	12502 Oct 27 04:43	4°ML07'50	
<u>-</u>				direct	12502 Oct 31 20:07	3°M21'05	
superior conj	12501 Dec 31 15:59	19° る 47'26	1°31'57	morning max el	12502 Nov 14 10:28	10°M01'33	24°06'15
minimum elong	12501 Dec 31 17:37	19° ප් 56'01	1°32'43	asc. node	12502 Nov 29 07:25	0° ∡ 14'08	
max. Earth dist.	12502 Jan 04 10:13	27° る 37'50	1.34138 AU		12502 Nov 29 04:11	0° ∡ ¹	
	12502 Jan 05 14:10	0° ≈		morning set	12502 Dec 09 02:35	19° ∡ ³30'36	
evening rise	12502 Jan 08 20:19	6° ≈ 26'45		-	12502 Dec 13 22:22	8°0	
desc. node	12502 Jan 14 11:19	16° ≈ 55'26					
	12502 Jan 22 05:01	0°) €		superior conj	12502 Dec 15 22:41	4° る 23'59	1°37'58
				1			

minimum elong	12502 Dec 15 23:11	4° る 26'46	1°38'53	max. Earth dist.	12503 Dec 01 13:00	21° ×7 43'29	1.31771 AU
max. Earth dist.	12502 Dec 18 08:16	9°₹35'17	1.32713 AU	max. Bartii dist.	12503 Dec 05 08:11	0°중	1.51771110
evening rise	12502 Dec 23 10:58	20° ට 14'55		evening rise	12503 Dec 07 10:13	4° පි 24'16	
	12502 Dec 28 11:14	0° ≈		desc. node	12503 Dec 19 05:05	26° පි 45'10	
desc. node	12503 Jan 01 08:09	7° ≈ 01'21			12503 Dec 21 03:49	0° ≈	
	12503 Jan 16 05:44	0° ∀		evening max el	12504 Jan 08 15:53	24° ≈ 18'40	27°27'43
evening max el	12503 Jan 26 06:26		27°29'33		12504 Jan 16 08:44	0°)	
retrograde	12503 Feb 08 23:44	18° ¥ 58'32		retrograde	12504 Jan 22 13:32	1°) €37'25	
evening set	12503 Feb 15 20:28	16° ¥ 30'16 13° ¥ 10'36	0.62027.411		12504 Jan 28 10:37	30°R≈	
min. Earth dist. inferior conj	12503 Feb 19 15:33 12503 Feb 22 06:59	13° X 10'36 10° X 26'56	0.63837 AU	evening set min. Earth dist.	12504 Jan 29 12:06 12504 Feb 02 06:02	29°≈21'55 26°≈27'20	0.61813 AU
minimum elong	12503 Feb 22 08:49	10 X 2030		inferior conj	12504 Feb 05 06:21	20 ∞2720 23°≈41'45	
asc. node	12503 Feb 25 05:37	7°) 35'04	0 30 41	minimum elong	12504 Feb 05 10:58	23°≈31'08	
morning rise	12503 Feb 28 23:23	5°) €07'47		asc. node	12504 Feb 12 02:59	18° ≈ 48'12	2 11 23
direct	12503 Mar 03 09:59	4° ¥ 38'12		morning rise	12504 Feb 12 12:36	18° ≈ 39'59	
morning max el	12503 Mar 09 20:48	7°) € 57'34	17°48'16	direct	12504 Feb 14 17:08	18° ≈ 18'59	
	12503 Mar 24 16:20	0° Υ		morning max el	12504 Feb 21 13:46	21° ≈ 47′23	17°49'18
morning set	12503 Mar 26 12:27	3° Ƴ 07'47			12504 Feb 27 21:01	0° ∀	
desc. node	12503 Mar 30 09:45	9° Ƴ 43'35		morning set	12504 Mar 08 07:25	16° ¥ 12'36	
				desc. node	12504 Mar 16 06:17	0° Υ 16'41	
superior conj	12503 Apr 08 10:52	24°Υ'42'46			12504 Mar 16 02:26	0 ° Υ	
minimum elong	12503 Apr 08 04:05		1°04'55		1250434 10 10 52	500045144	0024126
max. Earth dist.	12503 Apr 11 17:40 12503 Apr 13 22:08	0° と 3° と 28'45	1.44916 AU	superior conj minimum elong	12504 Mar 19 10:53 12504 Mar 19 08:34	5° Υ 45'44 5° Υ 35'54	
evening rise	12503 Apr 13 22:08 12503 Apr 24 00:44	19° 8 12'51	1.44910 AU	max. Earth dist.	12504 Mar 26 13:53	17° Υ 35'55	1.43511 AU
evening rise	12503 May 01 03:20	0°Ⅱ		evening rise	12504 Apr 02 16:41	28° Y ′54'37	1.43311710
evening max el	12503 May 22 04:24	28° I I39'37	20°24'11	evening rise	12504 Apr 03 09:31	0° と	
<i>y</i>	12503 May 23 14:15	0ంత			12504 Apr 23 20:05	0°II	
asc. node	12503 May 24 02:42	0°526'58		evening max el	12504 May 04 01:19	12° Ⅱ 27'09	21°35'44
retrograde	12503 May 30 03:37	3° © 15'13		asc. node	12504 May 09 23:56	17° Ⅱ 00'09	
evening set	12503 Jun 03 04:22	1°5942'07		retrograde	12504 May 13 01:55	17° Ⅱ 44'41	
	12503 Jun 05 00:04	30°RⅡ		evening set	12504 May 17 13:14	15° Ⅱ 55'29	
inferior conj	12503 Jun 08 11:01	25° Ⅲ 37'05	3°13'22	inferior conj	12504 May 22 19:36	9° Ⅱ 39'36	3°03'35
minimum elong	12503 Jun 08 10:39	25° I I38'21	3°12'26	minimum elong	12504 May 22 18:20	9° ∏ 44'01	3°02'35
min. Earth dist.	12503 Jun 09 04:42	24° II 36'30	0.68153 AU	min. Earth dist.	12504 May 22 23:55	9° ∏ 24'34	0.68721 AU
morning rise direct	12503 Jun 13 16:37 12503 Jun 19 05:48	19° Ⅱ 16'58 16° Ⅱ 49'37		morning rise direct	12504 May 27 23:13 12504 Jun 01 23:36	3° Ⅲ 24'40 1° Ⅲ 14'24	
desc. node	12503 Jun 26 10:35	10 Ⅱ 4937 19° Ⅱ 55'18		morning max el	12504 Jun 11 22:38	7° П 07'52	22°45'17
morning max el	12503 Jun 30 11:49	23° I I34'16	24°15'00	desc. node	12504 Jun 12 07:37	7° Ⅱ 30'41	22 43 17
morning man er	12503 Jul 06 04:40	0°9	2. 1000	acse. noue	12504 Jun 29 16:42	0.00 0.00	
	12503 Jul 27 04:33	$0^{\circ}\Omega$		morning set	12504 Jul 16 00:03	25° © 14'32	
morning set	12503 Aug 05 00:46	14° Ω 40′22			12504 Jul 18 20:46	$0^{\circ}\Omega$	
max. Earth dist.	12503 Aug 08 16:29	21° Q 06'20	1.38022 AU	max. Earth dist.	12504 Jul 20 14:45	2° Ω 57'35	1.40358 AU
	12503 Aug 13 12:53	0° m					
				superior conj	12504 Jul 28 10:29	16° Ω 42'56	
superior conj	12503 Aug 15 21:25	4° Mp 27′58		minimum elong	12504 Jul 28 15:48	17° Ω 07'00	1°13'11
minimum elong	12503 Aug 16 00:05	4° Mp 40'45	0°38'52	,	12504 Aug 04 14:06	0°M) 2°M-27157	
asc. node	12503 Aug 20 02:45	12° Mp 40'37		asc. node	12504 Aug 05 23:26	2° Mp 37'57	
evening rise	12503 Aug 24 15:36 12503 Aug 28 22:17	21° m 39'45 0° ₽		evening rise	12504 Aug 07 08:10 12504 Aug 22 10:03	5°Mp13'14 0°Ω	
evening max el	12503 Aug 28 22.17 12503 Sep 10 03:53	0 = 18° £ 39'36	19°06'53	evening max el	12504 Aug 22 10:03 12504 Aug 23 07:42	0° ჲ 56'39	18°26'18
retrograde	12503 Sep 10 03:35 12503 Sep 19 03:48	23° ⊆ 09'20	17 00 33	retrograde	12504 Aug 30 23:53	4° Ω 48'54	10 20 10
evening set	12503 Sep 21 00:15	22° £ 58'42		evening set	12504 Sep 02 01:09	4° £ 33'04	
desc. node	12503 Sep 22 07:38	22° ₽ 39'03		desc. node	12504 Sep 08 05:07	1° ≏ 11'00	
inferior conj	12503 Sep 29 11:15	18° ≏ 45'52	-2°14'48	inferior conj	12504 Sep 09 17:41	29° m 59'38	-0°28'34
minimum elong	12503 Sep 29 05:26	18° ≙ 55'46	2°12'20	minimum elong	12504 Sep 09 16:35	0° ჲ 01'49	0°28'14
min. Earth dist.	12503 Oct 02 06:26		0.56124 AU		12504 Sep 09 17:30	30°R, ™	
morning rise	12503 Oct 07 07:43	14° £ 04'19		min. Earth dist.	12504 Sep 13 00:34	27° m) 23'37	0.58014 AU
direct	12503 Oct 12 18:49	12° £ 54'56	25040125	morning rise	12504 Sep 17 04:33	24° Mp 41'01	
morning max el	12503 Oct 26 21:48	20° ♀ 07'24	25°48'26	direct	12504 Sep 23 07:28	23° m 04'31	
ogo mg J-	12503 Nov 04 08:48	0°M		mamis 1	12504 Oct 06 22:03	0∘ ʊ 40¦46	27907110
asc. node	12503 Nov 16 04:16 12503 Nov 21 14:19	19° ™ 13'22 0° √		morning max el	12504 Oct 07 15:09 12504 Oct 28 11:16	0° ჲ 40'46 0° ル	27°07'18
morning set	12503 Nov 21 14.19 12503 Nov 23 13:52	0 x . 4° ∡ 11'38		asc. node	12504 Oct 28 11:16 12504 Nov 02 01:03	8°M 37'51	
morning set	12000 1101 20 10.02	. 7 11 30		morning set	12504 Nov 06 22:54	18°M42'38	
superior conj	12503 Nov 30 08:51	19° ∡ 107'44	1°37'47		12504 Nov 12 02:51	0° ∡ 7	
minimum elong	12503 Nov 30 08:16	19° ∡ ′04′29					
-							

superior conj	12504 Nov 13 20:28	3° ∡ 752'04	1°31'43	max. Earth dist.	12505 Oct 28 05:49	16°M07'59	1.31376 AU
minimum elong	12504 Nov 13 18:58	3° ∡ ′43'42	1°32'24	max. Dartii dist.	12303 000 20 03.17	10 11007 37	1.51570710
max. Earth dist.	12504 Nov 13 21:26	3° x ⁷ 57'27	1.31321 AU	superior conj	12505 Oct 29 07:43	18° M 31'43	1°20'00
evening rise	12504 Nov 20 15:28	18° ∡ ¹47'36		minimum elong	12505 Oct 29 05:37	18°M20'03	1°20'22
Č	12504 Nov 26 03:02	ರ°0		Č	12505 Nov 03 11:54	0° ∡ ¹	
desc. node	12504 Dec 05 02:10	15° る 57'43		evening rise	12505 Nov 05 00:35	3° ₹ 19'08	
	12504 Dec 14 23:56	0° ≈		C	12505 Nov 19 01:56	8°0	
evening max el	12504 Dec 20 19:35	6° ≈ 18'46	26°51'42	desc. node	12505 Nov 21 23:19	4° ප 26'37	
retrograde	12505 Jan 03 18:12	13° ≈ 28′15		evening max el	12505 Dec 02 15:00	17° る 25'46	25°42'27
evening set	12505 Jan 10 11:39	11° ≈ 33'44		retrograde	12505 Dec 16 12:18	24° පි 26'21	
min. Earth dist.	12505 Jan 14 09:46	8° ≈ 55'06	0.59664 AU	evening set	12505 Dec 22 14:48	22° る 59'58	
inferior conj	12505 Jan 17 14:01	6° ≈ 22'43	-3°34'34	min. Earth dist.	12505 Dec 27 03:27	20° る 22'47	0.57587 AU
minimum elong	12505 Jan 17 21:29	6° ≈ 07'46	3°31'13	inferior conj	12505 Dec 30 02:34	18° る 19'35	-4°50'14
morning rise	12505 Jan 25 10:12	1° ≈ 41'31		minimum elong	12505 Dec 30 11:04	18° る 04'50	4°47'15
direct	12505 Jan 27 11:56	1° ≈ 25'30		morning rise	12506 Jan 07 09:55	14° る 00'57	
asc. node	12505 Jan 29 00:18	1° ≈ 34'25		direct	12506 Jan 09 13:48	13° る 46'28	
morning max el	12505 Feb 04 02:45	5°≈12'31	18°09'26	asc. node	12506 Jan 15 21:35	15° る 59'32	
morning set	12505 Feb 19 18:08	0°) €01'00		morning max el	12506 Jan 18 07:49	18° る 01'50	18°50'22
	12505 Feb 19 17:55	0° ∀			12506 Jan 27 00:13	0°≈	
	12505 M 01 10 22	170 170 170	0012114	morning set	12506 Feb 03 15:39	14°≈17'39	
superior conj	12505 Mar 01 10:33	17°) ₹54'46			12506 Feb 11 17:32	0° ∀	
minimum elong	12505 Mar 01 11:35 12505 Mar 01 07:22	17° ¥ 59'25 17° ¥ 40'33	0°13'21	gunariar agni	12506 Eab. 12 05:27	0° ¥ 57'18	0°44'41
behind sun begin behind sun end	12505 Mar 01 07:22 12505 Mar 01 15:47	1/° X 40′33		superior conj minimum elong	12506 Feb 12 05:37 12506 Feb 12 08:14	1° ∺ 09'40	0°44'49
desc. node	12505 Mar 03 02:51	20°\(\frac{1}{5}\)4'20		desc. node	12506 Feb 17 23:27	11°) 32'26	0 44 49
dese. Hode	12505 Mar 08 08:55	20 γ (3420		max. Earth dist.	12506 Feb 19 08:57	14° ¥ 01'30	1.39416 AU
max. Earth dist.	12505 Mar 09 01:35	1° Υ 10'16	1.41606 AU	evening rise	12506 Feb 23 06:52	20°) 48'07	1.57410 AC
evening rise	12505 Mar 14 01:15	9° Υ 23'44	1.11000110	evening rise	12506 Feb 28 20:32	0° Υ	
e vennig 1150	12505 Mar 27 10:47	0°8			12506 Mar 21 12:58	0°8	
evening max el	12505 Apr 16 17:51	26° 8 16'18	22°54'42	evening max el	12506 Mar 30 07:48	10° 8 06'47	24°15'18
<i>Q</i>	12505 Apr 21 01:10	0°II		retrograde	12506 Apr 10 15:24	16° 8 45'15	
retrograde	12505 Apr 26 22:17	2° Ⅱ 16'46		asc. node	12506 Apr 13 18:36	16° 8 00'51	
asc. node	12505 Apr 26 21:14	2° Ⅱ 16'46		evening set	12506 Apr 16 01:43	14° 8 28'10	
evening set	12505 May 01 20:53	0° Ⅱ 12'35		min. Earth dist.	12506 Apr 20 16:41	9° 8 08'56	0.68462 AU
	12505 May 02 02:39	30° ₹ 8		inferior conj	12506 Apr 21 13:32	7° 8 58'34	2°13'23
inferior conj	12505 May 07 05:05	23° 8 48'09	2°43'28	minimum elong	12506 Apr 21 11:23	8° 8 05'51	2°12'18
minimum elong	12505 May 07 03:11	23° 8 54'44	2°42'23	morning rise	12506 Apr 26 21:09	1° 8 57'47	
min. Earth dist.	12505 May 06 20:36	24° 8 17'32	0.68820 AU	direct	12506 Apr 30 19:45	0° 8 29'16	
morning rise	12505 May 12 09:23	17° 8 39'47		morning max el	12506 May 08 11:34	4° 8 47'07	20°05'47
direct	12505 May 16 20:41	15° 8 49'58		desc. node	12506 May 17 01:20	15° 8 14'24	
morning max el	12505 May 25 13:41	20° 8 51'46	21°20'10		12506 May 27 05:54	0°П	
desc. node	12505 May 30 04:31	26° 8 02'19		morning set	12506 Jun 05 01:00	13° Ⅱ 21'50	1 11050 177
	12505 Jun 02 07:18	0°II		max. Earth dist.	12506 Jun 15 05:05	29° Ⅱ 17'01	1.44250 AU
marning sat	12505 Jun 22 21:47	0°ତ 4°ତ୍ୟ1'44			12506 Jun 15 15:52	0ං ව	
morning set max. Earth dist.	12505 Jun 25 21:54 12505 Jul 02 18:44		1.42520 AU	superior conj	12506 Jun 20 20:15	8° © 22'09	2006/52
max. Earth dist.	12303 Jul 02 16.44	13 34321	1.42320 AU	minimum elong	12506 Jun 21 01:25	8°943'17	
superior conj	12505 Jul 10 03:16	28°903'25	-1°44'35	evening rise	12506 Jul 03 21:50	0°Ω19'59	_ 0, 52
minimum elong	12505 Jul 10 10:12	28°933'14			12506 Jul 03 17:11	0°N	
· ·	12505 Jul 11 06:20	$0^{\circ}\Omega$		asc. node	12506 Jul 10 17:03	11° Ω 56'36	
evening rise	12505 Jul 21 11:54	18° Ω 10'55		evening max el	12506 Jul 21 08:27		18°05'09
asc. node	12505 Jul 23 20:13	22° Ω 25'04		-	12506 Jul 25 12:40	0° m)	
	12505 Jul 28 03:05	0° m		retrograde	12506 Jul 27 18:20	0° Mp 25′36	
evening max el	12505 Aug 06 18:32	13° m 48'30	18°06'04	evening set	12506 Jul 30 11:09	29° Ω 48'38	
retrograde	12505 Aug 13 14:12	17° m 17'38			12506 Jul 30 00:09	30° R Ω	
evening set	12505 Aug 15 22:54	16° m 52'48		inferior conj	12506 Aug 05 18:24	24° Ω 36′08	
inferior conj	12505 Aug 22 21:14	11° m 58'46	0°57'42	minimum elong	12506 Aug 05 20:59	24° Ω 29'18	1°59'01
minimum elong	12505 Aug 22 22:58	11° m 54'46		min. Earth dist.	12506 Aug 08 14:46		0.62505 AU
min. Earth dist.	12505 Aug 26 02:55	9° Mp 00'01	0.60242 AU	morning rise	12506 Aug 12 04:39	18° Ω 26'48	
desc. node	12505 Aug 26 02:34	9° Mp 00'46		desc. node	12506 Aug 12 23:59	17° Ω 53'36	
morning rise	12505 Aug 29 19:59	6° Mp 09'30		direct	12506 Aug 18 21:02	16°Ω00'45	0.000
direct	12505 Sep 05 08:52	4° Mp 05'40	0.50.50.51	morning max el	12506 Sep 01 23:19	24° Ω 02'59	27°55'29
morning max el	12505 Sep 19 16:15	11° m 59'02	27~50'51		12506 Sep 07 08:02	0° my	
aca mada	12505 Oct 03 21:12	ა∾ ი აიცი 0∘ ი		morning act	12506 Sep 27 05:55	0° <u>ი</u>	
asc. node	12505 Oct 19 21:48	28° £ 20'39 0° ™		morning set asc. node	12506 Oct 06 02:43 12506 Oct 06 18:30	16° £ 55'29 18° £ 16'06	
morning set	12505 Oct 20 17:18 12505 Oct 22 03:53	2°M.59'00		asc. node max. Earth dist.	12506 Oct 06 18:30 12506 Oct 11 10:09	18° ≥ 16'06 28° ≥ 04'46	1.31948 AU
morning set	12303 OCT 22 03.33	4 IIG37 00		max. Darui uist.	12300 Oct 11 10.09	20 == 04 40	1.31340 AU

	12506 Oct 12 07:26	0°M			12507 Sep 02 06:33	o° mp	
					12507 Sep 19 11:42	0∘ ⊽	
superior conj	12506 Oct 13 16:42	3°M01'31	1°02'45	morning set	12507 Sep 19 16:43	0° £ 24'33	
minimum elong	12506 Oct 13 14:27	2°M49'11	1°02'48	asc. node	12507 Sep 23 15:07	8° ≙ 18'44	
evening rise	12506 Oct 20 11:38	17° M 53'53		max. Earth dist.	12507 Sep 24 06:41	9° ₾ 39'00	1.33053 AU
	12506 Oct 26 08:18	0° ₹			10505 0 05 01 15	15001450	0040100
desc. node	12506 Nov 08 20:34	21° × 755'21	24000100	superior conj	12507 Sep 27 21:17	17° £ 14'52	0°40'08
evening max el	12506 Nov 14 02:56	27° ₹ 47'31	24°09'00	minimum elong	12507 Sep 27 19:28	17° £ 05′08	0°39'57
	12506 Nov 16 15:02	0°궁 4°궁36'16			12507 Oct 03 19:23	0°M 2°M25'56	
retrograde	12506 Nov 27 18:24 12506 Dec 02 18:06	4°036°16 3° で 41'42		evening rise	12507 Oct 04 22:41 12507 Oct 20 00:37	2°11625′56 0° √ 1	
evening set min. Earth dist.	12506 Dec 02 18:00 12506 Dec 08 14:03	0°る47'06	0.55857 AU	evening max el	12507 Oct 26 13:44	0 x ⁴ 7° x ¹50'36	22°27'22
iiiii. Eartii dist.	12506 Dec 09 21:01	30°R. ✓	0.55657 AU	desc. node	12507 Oct 26 17:54	8° ∡ 700'43	22 21 22
inferior conj	12506 Dec 10 18:30	29° ₹ 27'03	-5°42'52	retrograde	12507 Nov 08 11:52	14° 🖈 15'26	
minimum elong	12506 Dec 10 23:23	29°×719'35		evening set	12507 Nov 12 01:17	13° × ⁷ 47'39	
morning rise	12506 Dec 19 06:39	25° х 28'41		min. Earth dist.	12507 Nov 19 21:06	10° ∡ 17'31	0.54781 AU
direct	12506 Dec 21 19:59	25° х 11′48		inferior conj	12507 Nov 20 16:59	9° ∡ ¹49'26	
	12506 Dec 31 23:07	ರ°ರ		minimum elong	12507 Nov 20 13:29	9° ∡ 754'23	5°48'20
morning max el	12507 Jan 01 01:08	0° る 04'49	19°53'51	morning rise	12507 Nov 29 03:02	6° ∡ 101'54	
asc. node	12507 Jan 02 18:45	1° る 52'45		direct	12507 Dec 02 09:48	5° ∡ ³37'30	
morning set	12507 Jan 18 20:23	28° る 52'13		morning max el	12507 Dec 14 04:08	11° ∡ 13'37	21°19'57
	12507 Jan 19 09:43	0° ≈		asc. node	12507 Dec 20 15:50	18° ∡ ¹56'37	
					12507 Dec 27 09:12	5°0	
superior conj	12507 Jan 26 15:24	14° ≈ 40′07	1°08'46	morning set	12508 Jan 03 05:30	13° る 35'48	
minimum elong	12507 Jan 26 18:13	14° ≈ 54'07	1°09'06				
max. Earth dist.	12507 Feb 01 15:11	26° ≈ 14'41	1.37192 AU	superior conj	12508 Jan 10 11:44	28° る 50'40	1°25'29
	12507 Feb 03 15:57	0° ∀		minimum elong	12508 Jan 10 13:55	29° පි 02'01	1°26'07
desc. node	12507 Feb 04 20:07	2°) (07'43			12508 Jan 11 01:08	0° ≈	
evening rise	12507 Feb 05 08:50	3°) €04'52		max. Earth dist.	12508 Jan 15 01:29	8°≈08'28	1.35161 AU
	12507 Feb 21 22:06	0°Υ 222 0 650114	25020140	evening rise	12508 Jan 19 03:51	16°≈04'20	
evening max el	12507 Mar 12 21:10	23° Y 58'14	25°30'40	desc. node	12508 Jan 22 16:50	22°≈35'29	
	12507 Mar 20 20:42	0° と 1° と 04'11			12508 Jan 26 22:39	0° ∀ 0° Υ	
retrograde	12507 Mar 25 04:15 12507 Mar 29 03:03	1° 3 0° ₹ Υ		avanina may al	12508 Feb 16 10:00 12508 Feb 23 10:54	0° Y 7° Y 45'28	26°33'34
evening set	12507 Mar 31 02:08	28° Υ 37'30		evening max el retrograde	12508 Mar 07 11:43	15° Υ 06'32	20 33 34
asc. node	12507 Mar 31 15:59	28° Υ '06'57		evening set	12508 Mar 13 20:21	13° γ '34'38	
min. Earth dist.	12507 Apr 04 09:59	23° Y 53'31	0.67672 AU	asc. node	12508 Mar 17 13:22	8° Υ 51'19	
inferior conj	12507 Apr 05 19:03	22° Υ 07'15	1°33'19	min. Earth dist.	12508 Mar 17 22:22	8° Υ 25'02	0.66470 AU
minimum elong	12507 Apr 05 17:07	22° Y 13'29	1°32'24	inferior conj	12508 Mar 19 19:33	6° Y 09'37	0°42'56
morning rise	12507 Apr 11 08:35	16° Y 15′23		minimum elong	12508 Mar 19 18:28	6° Ƴ 12'53	0°42'30
direct	12507 Apr 14 19:27	15° Y ′06′58		morning rise	12508 Mar 25 17:36	0° Υ 28'24	
morning max el	12507 Apr 21 17:03	18° Y ′52'39	19°05'51		12508 Mar 26 17:58	30° ₹ ₩	
	12507 Apr 30 13:14	9° 8		direct	12508 Mar 28 17:55	29° ∺ 37'37	
desc. node	12507 May 03 22:05	4° 8 56'10			12508 Mar 30 18:42	0° Υ	
greatest brilliancy	12507 May 04 19:02	6° 8 14'34	-0.7m	morning max el	12508 Apr 04 05:06	3° Y 03'48	18°22'18
morning set	12507 May 15 04:43	22° 8 09'57		desc. node	12508 Apr 19 18:45	24° Ƴ 59'43	
	12507 May 20 06:04	Π °0			12508 Apr 22 22:27	0°8	
max. Earth dist.	12507 May 28 20:46	13° Ⅱ 25'59	1.45374 AU	morning set	12508 Apr 24 05:51	2° 8 04'42	
	1250734 21 15 65	170 77 4 215 2	2012100		10500 34 00 00 00	200 4000	1050114
superior conj	12507 May 31 15:05	17° ∏ 46'50		superior conj	12508 May 09 22:34 12508 May 09 14:29	26° 8 48'22 26° 8 16'45	
minimum elong	12507 May 31 13:43 12507 Jun 08 07:12	17° Ⅱ 41'27 0° ©	2°14'00	minimum elong max. Earth dist.	-		1°59°25 1.45784 AU
evening rise	12507 Jun 15 09:08	0 95 11°9529'46		max. Earm dist.	12508 May 10 16:05 12508 May 11 23:38	27 3 3643	1.43784 AU
evening rise	12507 Jun 26 20:28	0°Ω		evening rise	12508 May 11 25:38 12508 May 25 20:09	0 H 21° ∏ 40'19	
asc. node	12507 Jun 27 13:57	1° Ω 06'24		evening rise	12508 May 31 03:30	0°95	
evening max el	12507 Jul 04 22:08	10° Ω 37'48	18°22'32	greatest brilliancy	12508 Jun 04 19:13	7°€14'32	-0.8m
retrograde	12507 Jul 11 07:49	14° Ω 03'18	10 2232	asc. node	12508 Jun 13 10:56	19°5647'09	0.0111
evening set	12507 Jul 14 09:01	13° Ω 11'51		evening max el	12508 Jun 17 08:53	24°9519'55	18°57'20
inferior conj	12507 Jul 20 04:59	7° Ω 42'49	2°41'37	retrograde	12508 Jun 24 03:03	28° © 03'28	
minimum elong	12507 Jul 20 07:13	7° Ω 36′16	2°40'23	evening set	12508 Jun 27 13:00	26°956'05	
min. Earth dist.	12507 Jul 22 11:57	5° Ω 02'19	0.64580 AU	inferior conj	12508 Jul 03 01:19	21°©11'55	3°05'05
morning rise	12507 Jul 26 04:06	1° Ω 23′09		minimum elong	12508 Jul 03 02:38	21° 5 07'45	3°04'03
	12507 Jul 28 04:19	30° ₹ 5		min. Earth dist.	12508 Jul 04 17:31	19° 5 04'34	0.66313 AU
desc. node	12507 Jul 30 21:21	28° © 56'19		morning rise	12508 Jul 08 15:34	14°548'56	
direct	12507 Aug 01 18:03	28° © 44'09		direct	12508 Jul 14 22:14	12° © 07'32	
	12507 Aug 06 16:59	0 ° Ω		desc. node	12508 Jul 16 18:38	12°©19'51	
morning max el	12507 Aug 15 09:28	6° Ω 43'20	27°24'18	morning max el	12508 Jul 27 20:20	19° © 49'07	26°24'34

	12508 Aug 05 13:06	$0^{\circ}\Omega$		desc. node	12509 Jul 03 15:50	27° ∏ 42′28	
	12508 Aug 25 08:41	0° m)			12509 Jul 06 20:38	0 \circ \odot	
morning set	12508 Sep 01 18:44	13° m 18'27		morning max el	12509 Jul 10 06:40	3° © 10'00	25°05'26
max. Earth dist.	12508 Sep 05 17:12	20° m 51'42	1.34672 AU		12509 Jul 30 17:45	0 $^{\circ}$ Ω	
asc. node	12508 Sep 09 11:44	28° m 24'47		morning set	12509 Aug 15 04:43	25° Ω 26'45	
	12508 Sep 10 06:21	0∘ ⊽			12509 Aug 17 17:13	0° m)	
				max. Earth dist.	12509 Aug 18 18:50	1° m 57'54	1.36720 AU
superior conj	12508 Sep 10 19:07	1° 2 05'39			12500 4 25 07 11	1.40 m. 0.514.4	0010110
minimum elong	12508 Sep 10 18:26	1° Ω 02'09	0°12'18	superior conj	12509 Aug 25 07:11	14° TD 25'44	
behind sun begin	12508 Sep 10 14:36	0° ჲ 42'22		minimum elong	12509 Aug 25 08:25	14° Mp 31'53	0°19'23
behind sun end	12508 Sep 10 22:17 12508 Sep 18 07:49	1° £ 21'57 16° £ 50'23		asc. node	12509 Aug 27 08:22	18° ™ 30'04 0° Ω	
evening rise	12508 Sep 18 07.49 12508 Sep 24 21:56	0°M		evening rise	12509 Sep 02 00:47 12509 Sep 02 12:46	0 <u>≈</u> 1° ≏ 00'41	
evening max el	12508 Sep 24 21:30 12508 Oct 07 08:45		20°54'15	evening rise	12509 Sep 02 12:40 12509 Sep 19 17:24	29° £ 16'13	19°39'49
desc. node	12508 Oct 07 08:45	22°M15'23	20 34 13	evening max er	12509 Sep 19 17:24 12509 Sep 20 11:36	0°M	19 39 49
retrograde	12508 Oct 18 22:34	23°M57'05		retrograde	12509 Sep 29 15:27	4°M13'08	
evening set	12508 Oct 21 07:55	23°M43'27		desc. node	12509 Sep 29 12:41	4°M13'05	
inferior conj	12508 Oct 30 08:34	19°M49'07	-4°56'52	evening set	12509 Oct 01 12:34	4°ML03'15	
minimum elong	12508 Oct 29 22:53	20°ML02'53	4°53'56	inferior conj	12509 Oct 10 07:51	29° ₽ 59'35	-3°19'07
min. Earth dist.	12508 Oct 31 03:46	19° ™ 21'49	0.54584 AU	minimum elong	12509 Oct 09 23:19	0°M12'57	
morning rise	12508 Nov 07 14:03	15°M55'11			12509 Oct 10 07:35	30°R <u>Ω</u>	
direct	12508 Nov 11 17:50	15°M18'06		min. Earth dist.	12509 Oct 12 13:04	28° ≏ 36'16	0.55316 AU
morning max el	12508 Nov 24 18:56	21°M35'49	23°03'32	morning rise	12509 Oct 18 08:16	25° ₽ 39'02	
	12508 Dec 01 23:34	0° ∡ ⊓		direct	12509 Oct 23 08:16	24° ≏ 43'41	
asc. node	12508 Dec 06 12:50	6° ₹ ¹55'26			12509 Nov 04 09:22	0° M	
morning set	12508 Dec 17 16:53	28° ∡ ¹22'33		morning max el	12509 Nov 06 05:13	1° M 38'01	24°51'38
	12508 Dec 18 11:10	ರ∘ರ		asc. node	12509 Nov 23 09:45	25°M35'51	
					12509 Nov 25 18:24	0° ∡ 7	
superior conj	12508 Dec 24 15:25	13° る 19'49	1°35'16	morning set	12509 Dec 02 04:44	13° ∡ °07′27	
minimum elong	12508 Dec 24 16:34	13° る 26'02	1°36'08				
max. Earth dist.	12508 Dec 27 19:19	20° る 02'24	1.33487 AU	superior conj	12509 Dec 08 23:52	28° ∡ °00′23	1°38'37
evening rise	12509 Jan 01 12:18	29° る 37'08		minimum elong	12509 Dec 08 23:54	28° ∡ ′00'33	1°39'33
	12509 Jan 01 16:57	0° ≈			12509 Dec 09 21:41	0° る	
desc. node	12509 Jan 08 13:37	12°≈51'03		max. Earth dist.	12509 Dec 10 20:46	2°る05'59	1.32254 AU
	12509 Jan 19 01:00	0°) {	0.701 (10.0	evening rise	12509 Dec 16 06:57	13°る35'18	
evening max el	12509 Feb 05 00:23	21°) 18'30	27°16'33	1 1	12509 Dec 24 20:09	0° ≈	
retrograde	12509 Feb 18 12:55	28°) (43′57		desc. node	12509 Dec 26 10:30	2°≈48'49	
evening set	12509 Feb 25 06:18	26°) 12'27	0.64895 AU	i	12510 Jan 14 06:20	0° ∺ 4° ∺ 25'08	27922142
min. Earth dist. inferior conj	12509 Mar 01 03:33 12509 Mar 03 12:35	19° ¥ 59'24		evening max el retrograde	12510 Jan 18 11:53 12510 Feb 01 07:06	11° X 47'50	21-3242
minimum elong	12509 Mar 03 12:33	19 X 59 24		evening set	12510 Feb 01 07:00 12510 Feb 08 05:33	9° ¥ 23'47	
asc. node	12509 Mar 04 10:46	18° ¥ 59'07	0 1733	min. Earth dist.	12510 Feb 11 23:40		0.63007 AU
morning rise	12509 Mar 09 21:39	14° X 37'07		inferior conj	12510 Feb 14 19:22	3° ¥ 29'46	
direct	12509 Mar 12 12:53	13°) € 54'56		minimum elong	12510 Feb 14 22:19	3° ¥ 22'30	
morning max el	12509 Mar 18 21:25	17°) 13′23	17°55'44		12510 Feb 18 17:09	30°R≈	
Č	12509 Mar 28 07:28	0° Ƴ		asc. node	12510 Feb 19 08:09	29° ≈ 33'15	
morning set	12509 Apr 05 11:43	13° Y ′24'08		morning rise	12510 Feb 21 17:32	28° ≈ 17'46	
desc. node	12509 Apr 06 15:21	15° Ƴ 18'33		direct	12510 Feb 24 01:22	27° ≈ 52'12	
	12509 Apr 15 15:04	9° 8			12510 Mar 01 06:03	0°) €	
				morning max el	12510 Mar 02 15:12	1° ¥ 13′49	17°46'32
superior conj	12509 Apr 19 12:17	6° 8 12'52		morning set	12510 Mar 18 18:59	25° ¥ 56′28	
minimum elong	12509 Apr 19 03:30	5° 8 37'57	1°27'30		12510 Mar 21 03:06	0° Y	
max. Earth dist.	12509 Apr 23 12:20		1.45443 AU	desc. node	12510 Mar 24 11:56	5° Ƴ 47'58	
	12509 May 04 18:16	Π °0					
evening rise	12509 May 05 12:36	1° Ⅱ 10′24		superior conj	12510 Mar 30 22:22	16° Y 37'15	
greatest brilliancy	12509 May 19 21:50	22° Ⅱ 53'14	-0.6m	minimum elong	12510 Mar 30 17:29	16° Y 17'05	
_	12509 May 24 22:19	0°©		max. Earth dist.	12510 Apr 06 06:32	26° Y 55′21	1.44392 AU
asc. node	12509 May 31 08:00	7°548'35	1004040		12510 Apr 08 04:58	0°8	
evening max el	12509 May 31 14:40	8°505'32	19°48'18	evening rise	12510 Apr 15 00:16	10° 8 37'02	
retrograde	12509 Jun 08 01:14	12°519'12		avanina ma1	12510 Apr 27 22:11	0°Ⅱ 21°Ⅲ52'20	20052117
evening set	12509 Jun 11 20:27	10°©55'17	2012157	evening max el	12510 May 14 14:41	21° Ⅱ 52'20 24° Ⅱ 58'29	20-35-16
inferior conj minimum elong	12509 Jun 17 04:20 12509 Jun 17 04:34	4° © 57'19 4° © 56'32	3°13'57 3°13'00	asc. node retrograde	12510 May 18 05:10 12510 May 23 00:09	24°Щ58'29 26°Щ45'26	
min. Earth dist.	12509 Jun 17 04.34 12509 Jun 18 05:57	3°531'24	0.67617 AU	evening set	12510 May 27 05:21	26 H43 26 25°H05'12	
mm. Darm dist.	12509 Jun 21 02:26	30°R∏	5.57017 AU	inferior conj	12510 May 27 03.21 12510 Jun 01 11:34	18° II 55'03	3°10'31
morning rise	12509 Jun 22 12:20	28° Ⅱ 35'25		minimum elong	12510 Jun 01 10:47	18° Ⅱ 55'05	3°09'34
direct	12509 Jun 28 08:24	26° Ⅱ 01'01		min. Earth dist.	12510 Jun 01 23:22	18° Ⅱ 14'08	0.68455 AU

morning rise	12510 Jun 06 16:01	12° Ⅲ 36′56			12511 May 19 02:01	30° ₹ 8	
direct	12510 Jun 11 23:43	10° Ⅱ 16'35		morning rise	12511 May 22 00:23	26° 8 48'09	
desc. node	12510 Jun 20 12:57	14° Ⅲ 36′43		direct	12511 May 26 19:05	24° 8 46'24	
morning max el	12510 Jun 22 16:54	16° Ⅱ 40′15	23°36'45		12511 Jun 04 21:55	$\Pi^{\circ}0$	
	12510 Jul 03 17:38	0°9		morning max el	12511 Jun 05 05:12	0° Ⅱ 18′05	22°07'59
	12510 Jul 23 18:02	$0^{\circ}\Omega$		desc. node	12511 Jun 07 09:56	2° Ⅲ 38′05	
morning set	12510 Jul 27 18:00	6° Ω 38'38			12511 Jun 27 12:21	0∘ ©	
max. Earth dist.	12510 Jul 31 16:24		1.39020 AU	morning set	12511 Jul 08 06:26	16°9544'13	
man. Darun dige.	12010 001 31 10.21	13 002	1.57020110	max. Earth dist.	12511 Jul 13 16:11	25°936'35	1.41311 AU
superior conj	12510 Aug 08 05:50	27° Ω 06'53	-0°53'34	man. Darm dist.	12511 Jul 16 06:35	0°Ω	1.11011110
minimum elong	12510 Aug 08 09:39	27° Ω 24'42			12311 341 10 00.33	0 00	
minimum clong	12510 Aug 09 18:36	0° m)	0 33 27	superior conj	12511 Jul 21 10:49	8° Ω 59'45	1027115
1-	-			1 2	12511 Jul 21 17:04	9° Ω 27'25	
asc. node	12510 Aug 14 05:02	8° mp 31'12		minimum elong			1 2/13
evening rise	12510 Aug 17 10:51	14° m 50'04		evening rise	12511 Jul 31 22:33	28° Ω 09'45	
	12510 Aug 25 14:19	0∘ ʊ	10045100	asc. node	12511 Aug 01 01:45	28° Ω 24'41	
evening max el	12510 Sep 02 15:13	11° ₾ 08'11	18°47'00		12511 Aug 01 22:16	0° m/	
retrograde	12510 Sep 11 00:36	15° ≏ 20'48		evening max el	12511 Aug 16 22:35	23° m 41'38	18°15'20
evening set	12510 Sep 12 22:20	15° ഫ 08'35		retrograde	12511 Aug 24 04:46	27° m 22'12	
desc. node	12510 Sep 16 10:10	13° ≏ 49'15		evening set	12511 Aug 26 08:57	27° m 03'04	
inferior conj	12510 Sep 21 01:44	10° ≏ 47'12	-1°27'58	inferior conj	12511 Sep 02 17:31	22° m 21'04	0°10'52
minimum elong	12510 Sep 20 22:04	10° ≏ 53'52	1°26'25	minimum elong	12511 Sep 02 17:53	22° Mp 20'16	0°10'30
min. Earth dist.	12510 Sep 24 03:40	8° ॒ 33'19	0.56857 AU	transit middle	12511 Sep 02 17:53	22° m/20'16	0°10'30
morning rise	12510 Sep 28 18:28	5° ≙ 49'11		transit begin	12511 Sep 02 15:16	22° m 25'51	
direct	12510 Oct 04 12:39	4° ₽ 28'46		transit end	12511 Sep 02 20:31	22° m/ 14'41	
morning max el	12510 Oct 18 18:53	11° ≏ 52'54	26°25'56	desc. node	12511 Sep 03 07:38	21° m/50'52	
morning man vi	12510 Nov 01 20:43	0°M	20 20 00	min. Earth dist.	12511 Sep 06 01:23	19° m/32'20	0.58935 AU
asc. node	12510 Nov 10 06:36	14°M46'36		morning rise	12511 Sep 00 01:23	16° Mp 48'07	0.50755710
morning set	12510 Nov 16 15:17	27°M44'46		direct	12511 Sep 16 07:24	14° Mp 59'16	
morning set		27 IIC44 40 0° ⊼ ¹			*	22° Mp 44'34	27°30'32
	12510 Nov 17 16:23	0 ×.		morning max el	12511 Sep 30 15:35		27 30 32
	1051031 00 10 50	100 74450	1005155		12511 Oct 07 02:40	0∘ 亚	
superior conj	12510 Nov 23 10:53	12° ∡ ′44′58			12511 Oct 25 22:24	0°M.	
minimum elong	12510 Nov 23 09:52	12° ⋌ ³39'23	1°36'44	asc. node	12511 Oct 28 03:23	4° ጤ 19'34	
max. Earth dist.	12510 Nov 24 03:26	14° ∡ 17′03	1.31508 AU	morning set	12511 Oct 31 22:49	12° ™ 10′05	
evening rise	12510 Nov 30 08:59	27° ∡ 50′55					
	12510 Dec 01 09:40	0°ಕ		superior conj	12511 Nov 07 22:35	27°M28'08	1°27'27
desc. node	12510 Dec 13 07:29	22° る 20'34		minimum elong	12511 Nov 07 20:47	27°M18'06	1°28'00
	12510 Dec 18 03:39	0°≈		max. Earth dist.	12511 Nov 07 12:06	26° M 29'37	1.31274 AU
evening max el	12510 Dec 31 18:58	16° ≈ 51'52	27°16'39		12511 Nov 09 01:48	0° ∡ ¹	
retrograde	12511 Jan 14 17:25	24° ≈ 07'39		evening rise	12511 Nov 14 16:08	12° ∡ 18'19	
evening set	12511 Jan 21 14:54	21° ≈ 59'41			12511 Nov 23 12:59	0° ප	
min. Earth dist.	12511 Jan 25 09:30	19° ≈ 13'33	0.60903 AU	desc. node	12511 Nov 30 04:35	11° る 16'03	
inferior conj	12511 Jan 28 12:30	16° ≈ 31'15	-2°47'55	evening max el	12511 Dec 13 19:18	28° ろ 29'28	26°26'04
minimum elong	12511 Jan 28 18:24	16° ≈ 18′26		<i>y</i>	12511 Dec 15 11:31	0° ≈	
morning rise	12511 Feb 05 00:52	11° ≈ 38'16		retrograde	12511 Dec 27 18:10	5° ≈ 35'45	
asc. node	12511 Feb 06 05:32	11° ≈ 23'26		evening set	12512 Jan 03 06:20	3°≈52'36	
direct	12511 Feb 07 03:40	11° ≈ 19'54		min. Earth dist.	12512 Jan 07 09:00	1°≈16'23	0.58752 AU
morning max el	12511 Feb 14 07:02	14°≈54'56	17°55'28	iiiii. Lattii dist.	12512 Jan 09 01:56	30°Rる	0.36732 AO
morning max ci	12511 Feb 24 16:39	0°)	17 33 26	inferior conj	12512 Jan 10 12:24	28°る54'22	4000!11
morning set	12511 Mar 01 21:20	9°) €21'36		minimum elong	12512 Jan 10 20:40	28° る 38'45	4-04-47
desc. node	12511 Mar 11 08:29	26°) €23'22		morning rise	12512 Jan 18 13:54	24°る22'37	
				direct	12512 Jan 20 15:35	24° ろ 07'48	
superior conj	12511 Mar 12 08:52	28° 米 09'44		asc. node	12512 Jan 24 02:50	24° る 51'40	
minimum elong	12511 Mar 12 08:11	28° 米 06′47	0°07'43	morning max el	12512 Jan 28 17:09	28° ろ 06'08	18°24'08
behind sun begin	12511 Mar 12 00:57	27° ¥ 35′17			12512 Jan 30 11:33	0° ≈	
behind sun end	12511 Mar 12 15:25	28° ∺ 38'12		morning set	12512 Feb 13 13:09	23° ≈ 23'11	
	12511 Mar 13 10:19	0 ° Υ			12512 Feb 17 00:11	0° ∀	
max. Earth dist.	12511 Mar 19 20:15	10° Ƴ 48'21	1.42750 AU				
evening rise	12511 Mar 25 22:11	20° Y 36'15		superior conj	12512 Feb 22 17:20	10°){ 42'44	0°27'26
	12511 Mar 31 23:41	0°8		minimum elong	12512 Feb 22 19:14	10° ¥ 51'29	0°27'31
	12511 Apr 22 08:23	0°II		desc. node	12512 Feb 26 05:04	17°) €01'24	
evening max el	12511 Apr 27 09:23	5° Ⅱ 39'45	22°08'42	max. Earth dist.	12512 Mar 01 05:26	24°) 02'37	1.40698 AU
			-		12512 Mar 04 18:06	0°Υ	
asc. node	-	11°Ⅲ01'02			12312 Wiai 04 in 00	UI	
asc. node retrograde	12511 May 05 02:27	11° Ⅱ 01'02 11° Ⅱ 16'28		evening rise			
retrograde	12511 May 05 02:27 12511 May 06 21:58	11° Ⅱ 16′28		evening rise	12512 Mar 05 15:33	1° Y 28'46	
retrograde evening set	12511 May 05 02:27 12511 May 06 21:58 12511 May 11 13:55	11°∏16′28 9°∏20′46	2°56'16		12512 Mar 05 15:33 12512 Mar 24 08:32	1° Y 28'46 0° と	23°20'15
retrograde evening set inferior conj	12511 May 05 02:27 12511 May 06 21:58 12511 May 11 13:55 12511 May 16 20:48	11°П16'28 9°П20'46 3°П00'41		evening max el	12512 Mar 05 15:33 12512 Mar 24 08:32 12512 Apr 09 00:38	1° Y 28'46 0° 엉 19° 엉 29'29	23°29'15
retrograde evening set	12511 May 05 02:27 12511 May 06 21:58 12511 May 11 13:55	11°∏16′28 9°∏20′46	2°55'15		12512 Mar 05 15:33 12512 Mar 24 08:32	1° Y 28'46 0° と	23°29'15

evening set	12512 Apr 24 20:32	23° 8 37'26		evening set	12513 Apr 08 23:41	7° 8 51'05	
min. Earth dist.	12512 Apr 29 16:24	17° 8 57'25	0.68723 AU	min. Earth dist.	12513 Apr 08 25.41 12513 Apr 13 11:32	2° 8 46'57	0.68182 AU
	12512 Apr 30 06:05	17 8 3723	2°31'55	inferior conj	12513 Apr 14 13:32	1° 8 20'51	1°57'40
inferior conj	•	17 81021 17°817'26	2°30'50	,	-		1°56'37
minimum elong	12512 Apr 30 04:02	11° 8 04'49	2 30 30	minimum elong	12513 Apr 14 11:24	1 3 2730	1 3037
morning rise	12512 May 05 11:28	• •			12513 Apr 15 14:11	30° ₹ ° 1 °25° Y 23'40	
direct	12512 May 09 17:18	9° 8 23'54	20046146	morning rise	12513 Apr 19 23:21		
morning max el	12512 May 17 22:45	14° 8 05'49	20°46'46	direct	12513 Apr 23 16:56	24°Υ03'43	
desc. node	12512 May 24 06:50	21° 8 28'11		morning max el	12513 Apr 30 23:52	28° Y 05'55	19°38'22
	12512 May 30 13:01	Π °0			12513 May 02 19:11	0° 8	
morning set	12512 Jun 16 18:35	25° Ⅱ 45'52		desc. node	12513 May 11 03:37	10° 8 54'11	
	12512 Jun 19 11:32	0 \circ 60		greatest brilliancy	12513 May 13 16:39	14° 8 35'00	-0.6m
max. Earth dist.	12512 Jun 24 22:34	8° 5 42'29	1.43322 AU		12513 May 23 22:51	Π °0	
				morning set	12513 May 26 19:12	4° Ⅲ 21'52	
superior conj	12512 Jul 01 17:43	19° © 54'14	-1°55'34	max. Earth dist.	12513 Jun 07 12:00	22° Ⅱ 35′20	1.44819 AU
minimum elong	12512 Jul 02 00:29	20° 5 22'37	1°55'56				
	12512 Jul 07 15:43	$0^{\circ}\Omega$		superior conj	12513 Jun 12 00:42	29° ∏ 48′22	-2°11'51
evening rise	12512 Jul 13 19:17	10° Ω 47'37		minimum elong	12513 Jun 12 03:35	29° Ⅱ 59'57	2°12'42
asc. node	12512 Jul 17 22:32	18° Ω 05′26			12513 Jun 12 03:36	0 \circ \odot	
	12512 Jul 25 03:19	0° m y		evening rise	12513 Jun 25 20:07	22° © 32'40	
evening max el	12512 Jul 30 11:14	6° Mp 45'19	18°03'27		12513 Jun 30 06:34	$0^{\circ}\Omega$	
retrograde	12512 Aug 06 01:19	10° Mp 08'40		asc. node	12513 Jul 04 19:23	7° Ω 28′26	
evening set	12512 Aug 08 13:34	9° m 38'54		evening max el	12513 Jul 14 01:28	20° Ω 09'48	18°10'18
inferior conj	12512 Aug 15 05:02	4° m) 36'55	1°27'06	retrograde	12513 Jul 20 09:59	23° Ω 30'35	
minimum elong	12512 Aug 15 07:19	4° m) 31'18	1°25'52	evening set	12513 Jul 23 06:26	22°Ω47'31	
min. Earth dist.	12512 Aug 18 07:33	1° mp 35'17	0.61221 AU	inferior conj	12513 Jul 29 08:23	17° Ω 27'30	2°20'16
desc. node	12512 Aug 20 05:06	29° Ω 55'09	0.01221110	minimum elong	12513 Jul 29 10:56	17° Ω 20'27	2°18'56
desc. node	12512 Aug 20 02:44	30°RΩ		min. Earth dist.	12513 Jul 31 23:13	14°Ω34'26	0.63429 AU
morning rise	12512 Aug 20 02:44 12512 Aug 21 22:25	28° Ω 38'08		morning rise	12513 Aug 04 13:42	11°Ω12'55	0.03427 AO
direct	12512 Aug 21 22:25 12512 Aug 28 13:48	26° Ω 23'45		desc. node	12513 Aug 07 02:29	9° Ω 38'19	
direct	12512 Aug 28 13:48 12512 Sep 06 18:21	0°m)		direct	12513 Aug 07 02:29 12513 Aug 11 05:43	8°Ω40'25	
marning may al		ارات 4°10/21'36	27057127		-	8 8 640 23 16° Ω41'56	27946112
morning max el	12512 Sep 11 19:14	4 11√2130	21 3121	morning max el	12513 Aug 25 03:54	0° m	27 40 13
1	12512 Sep 30 21:30				12513 Sep 05 04:16	~	
asc. node	12512 Oct 14 00:05	24° ♀ 07'53			12513 Sep 23 16:06	0° ⊽	
morning set	12512 Oct 15 01:24	26° ₽ 17'53		morning set	12513 Sep 28 20:46	10° ⊆ 02'52	
The state of	12512 Oct 16 19:50	0°M,		asc. node	12513 Sep 30 20:45	14° £ 06'30	1 222 (2 1 1 1
max. Earth dist.	12512 Oct 20 19:07	8°M34'30	1.31557 AU	max. Earth dist.	12513 Oct 03 20:40	20° ≏ 22'37	1.32362 AU
superior conj	12512 Oct 22 09:04	12°MJ03'47	1°13'22	superior conj	12513 Oct 06 16:25	26° ≏ 26'42	0°53'47
minimum elong	12512 Oct 22 09:04 12512 Oct 22 06:51	11°M51'29	1°13'25	minimum elong	12513 Oct 06 14:16	26° ⊆ 2642 26° ⊆ 15'03	0°53'44
C		26°M51'27	1 13 33	minimum clong		20 = 13 03 0°M	0 33 44
evening rise	12512 Oct 29 02:17 12512 Oct 30 13:35	20 IIL3127 0° √		evening rise	12513 Oct 08 07:35 12513 Oct 13 13:33	11°ML25'22	
				evening rise			
desc. node	12512 Nov 16 01:46	29° ₹ '21'04			12513 Oct 22 21:54	0° ∡ ¹	
	12512 Nov 16 13:01	0°る	25004154	desc. node	12513 Nov 02 23:02	16° ₹ 16'50	22025122
evening max el	12512 Nov 24 11:22	9° る 15'22	25°04'54	evening max el	12513 Nov 05 21:39	19° 🗷 23'56	23°25'33
retrograde	12512 Dec 08 07:01	16°る10'52		retrograde	12513 Nov 19 07:01	26° х ¹04'03	
evening set	12512 Dec 13 23:25	14° ろ 58'19		evening set	12513 Nov 23 16:45	25° ∡ 121′52	
min. Earth dist.	12512 Dec 18 23:21		0.56790 AU	min. Earth dist.	12513 Nov 30 07:35		0.55306 AU
inferior conj	12512 Dec 21 16:07	10° る 30'04		inferior conj	12513 Dec 01 23:42	21° ∡ 15'50	
minimum elong	12512 Dec 21 23:47	10° る 17'30	5°14'22	minimum elong	12513 Dec 02 01:21	21° ∡ 13′26	5°51'34
morning rise	12512 Dec 30 02:22	6° පි 20'16		morning rise	12513 Dec 10 11:39	17° ∡ ¹23'59	
direct	12513 Jan 01 09:21	6° る 05'12		direct	12513 Dec 13 07:51	17° ∡ °04′26	
asc. node	12513 Jan 10 00:03	9° る 55'16		morning max el	12513 Dec 24 04:41	22° ҂ 14'55	20°28'00
morning max el	12513 Jan 10 17:31	10° る 35'55	19°14'33	asc. node	12513 Dec 27 21:11	26° ∡ 19'59	
	12513 Jan 23 14:16	0° ≈			12513 Dec 30 13:42	0°₹	
morning set	12513 Jan 27 14:08	7° ≈ 48'29		morning set	12514 Jan 11 20:59	22° る 27'26	
					12514 Jan 15 12:31	0° ≈	
superior conj	12513 Feb 04 19:10	24° ≈ 03′26	0°55'49				
minimum elong	12513 Feb 04 22:00	24° ≈ 17′09	0°56'00	superior conj	12514 Jan 19 09:50	7° ≈ 58'50	1°16'44
	12513 Feb 07 21:56	0°) €		minimum elong	12514 Jan 19 12:28	8° ≈ 12'07	1°17'12
max. Earth dist.	12513 Feb 11 12:06	6°) 37′19	1.38462 AU	max. Earth dist.	12514 Jan 24 19:47	18° ≈ 40'37	1.36288 AU
desc. node	12513 Feb 12 01:41	7° ¥ 38'35		evening rise	12514 Jan 28 15:44	25° ≈ 51'40	
evening rise		13°) 16′24		desc. node	12514 Jan 29 22:20	28° ≈ 10'40	
	12513 Feb 15 06:10	13 /(1024					
	12513 Feb 15 06:10 12513 Feb 25 10:13	0° Υ			12514 Jan 30 22:46	0° ∀	
					12514 Jan 30 22:46 12514 Feb 18 22:16	0° ℋ 0° Ƴ	
evening max el	12513 Feb 25 10:13	0° Υ	24°48'29	evening max el			25°59'23
evening max el retrograde	12513 Feb 25 10:13 12513 Mar 19 09:45	0₀ ႙ 0₀ Ƴ	24°48'29	•	12514 Feb 18 22:16	0° Υ	25°59'23
•	12513 Feb 25 10:13 12513 Mar 19 09:45 12513 Mar 22 14:22	ი° Υ ი° ႘ 3° ႘ 21'45	24°48'29	evening max el retrograde evening set	12514 Feb 18 22:16 12514 Mar 05 03:48	0° Υ 17° Υ 11'52	25°59'23

asc. node	12514 Mar 25 18:30	20° Ƴ 09'34		evening max el	12515 Feb 15 17:20	0° Ƴ 53'32	26°54'38
min. Earth dist.	12514 Mar 28 02:51	17° Υ 26'46	0.67211 AU	retrograde	12515 Feb 28 23:55	8° Υ 18'19	20 2 . 30
inferior conj	12514 Mar 29 17:09	15° Y 27'05	1°13'15	evening set	12515 Mar 07 12:39	5° Υ 45'27	
minimum elong	12514 Mar 29 15:29	15° Υ 32'18	1°12'30	min. Earth dist.	12515 Mar 11 12:21	1° Y 50'17	0.65842 AU
morning rise	12514 Apr 04 10:01	9° Y 39'45		asc. node	12515 Mar 12 15:54	0° Υ 31'05	
direct	12514 Apr 07 16:17	8° Υ 39'11		use. noue	12515 Mar 13 02:34	30°R ∀	
morning max el	12514 Apr 14 08:24	12° Υ 14'43	18°45'23	inferior conj	12515 Mar 13 14:46	29°) 24'31	0°18'22
morning man or	12514 Apr 27 12:21	0°8	10 10 25	minimum elong	12515 Mar 13 14:16	29° H 25'59	0°18'16
desc. node	12514 Apr 28 00:19	0° 8 45'50		morning rise	12515 Mar 19 17:14	23°) (48'51	
morning set	12514 May 06 06:11	13° 8 33'35		direct	12515 Mar 22 13:26	23°) 04'44	
	12514 May 16 19:09	0°II		morning max el	12515 Mar 28 22:40	26° ¥ 26'21	18°08'56
max. Earth dist.	12514 May 21 05:57	6°II56'59	1.45643 AU		12515 Apr 01 02:14	0° Υ	
man. Darun dibe.	120111111111111111111111111111111111111	0 2000,	1.100.0110	desc. node	12515 Apr 14 20:57	20°Υ56'15	
superior conj	12514 May 22 12:46	8° Ⅱ 57'35	-2°09'43	morning set	12515 Apr 16 19:23	24° Y '03'47	
minimum elong	12514 May 22 08:06	8° ∏ 39'18		morning sev	12515 Apr 20 11:46	0°8	
g	12514 Jun 04 19:55	0.0	2 10 23		12010 11p1 20 11.10	• •	
evening rise	12514 Jun 06 21:01	3°9516'41		superior conj	12515 May 01 20:43	18° 8 03'13	-1°47'40
greatest brilliancy	12514 Jun 13 05:52	13°529'39	-0.9m	minimum elong	12515 May 01 11:31	17° 8 27'05	
asc. node	12514 Jun 21 16:18	26°526'44	0.5111	max. Earth dist.	12515 May 04 01:37		1.45726 AU
use. Houe	12514 Jun 24 07:09	0° Ω		max. Earth dist.	12515 May 09 12:24	0°II	1.13720710
evening max el	12514 Jun 27 14:07	3°Ω46'43	18°35'10	evening rise	12515 May 17 22:53	13° I 106'04	
retrograde	12514 Jul 04 02:26	7° Ω 18'37	10 30 10	evening rise	12515 May 28 22:14	0°95	
evening set	12514 Jul 07 07:17	6°Ω20'29		greatest brilliancy	12515 May 30 00:03	1°937'20	-0.7m
inferior conj	12514 Jul 12 23:33	0°Ω44'33	2°53'33	asc. node	12515 Jun 08 13:19	14°952'04	0.7111
minimum elong	12514 Jul 13 01:26	0° Ω 38'49	2°52'24	evening max el	12515 Jun 10 22:52	17°930'27	19°17'07
g	12514 Jul 13 14:08	30°R95		retrograde	12515 Jun 17 23:20	21°925'52	1, 1, 0,
min. Earth dist.	12514 Jul 15 00:11	28°916'55	0.65366 AU	evening set	12515 Jun 21 13:02	20°9511'40	
morning rise	12514 Jul 18 18:35	24°522'34	0.00300110	inferior conj	12515 Jun 26 23:06	14°9521'25	3°10'28
desc. node	12514 Jul 24 23:49	21°5641'48		minimum elong	12515 Jun 26 23:57	14°9518'37	3°09'29
direct	12514 Jul 25 05:44	21°9641'35		min. Earth dist.	12515 Jun 28 09:04	12°930'45	0.66920 AU
morning max el	12514 Aug 07 14:53	29° © 35'16	27°01'54	morning rise	12515 Jul 02 10:20	7°958'10	0.00,20110
morning man or	12514 Aug 08 00:35	0°Ω	27 010.	direct	12515 Jul 08 12:45	5°9518'34	
	12514 Aug 30 02:13	0° m)		desc. node	12515 Jul 11 21:05	5°959'02	
morning set	12514 Sep 12 06:09	23° m) 18'15		morning max el	12515 Jul 21 01:44	12°9549'02	25°52'38
morning sec	12514 Sep 15 15:53	0° ت		morning max or	12515 Aug 03 22:18	0°Ω	23 32 30
max. Earth dist.	12514 Sep 16 13:22	ა — 1° ჲ 48'13	1.33682 AU		12515 Aug 22 19:16	0° m)	
asc. node	12514 Sep 17 17:22	4° ₽ 11'01	1.55002110	morning set	12515 Aug 26 01:56	5° Mp 54'24	
ase. noue	12011 Sep 17 17.22	. —		max. Earth dist.	12515 Aug 29 19:33	12° m/54'28	1.35493 AU
superior conj	12514 Sep 20 18:28	10° ≏ 31'08	0°28'58	max. Earth dist.	12010 1146 27 17.55	12 11/3 120	1.55 175 110
minimum elong	12514 Sep 20 17:02	10° £ 23'35		superior conj	12515 Sep 04 12:33	24° m) 09'46	-0°00'35
evening rise	12514 Sep 28 00:03	25° £ 54'58		minimum elong	12515 Sep 04 12:35	24° m) 09'58	0°00'45
	12514 Sep 29 22:52	0° M		behind sun begin	12515 Sep 04 06:28	23° m/39'03	
evening max el	12514 Oct 18 10:43	29°M30'13	21°45'52	behind sun end	12515 Sep 04 18:42	24° m) 40'57	
<i>y</i>	12514 Oct 18 23:05	0° ∡ ¹		asc. node	12515 Sep 04 14:00	24° m) 17'09	
desc. node	12514 Oct 20 20:22	1° ∡ ³38'53			12515 Sep 07 09:04	0∘ <u>⊽</u>	
retrograde	12514 Oct 30 20:56	5° ∡ 740'42		evening rise	12515 Sep 12 07:44	10° ≙ 14'00	
evening set	12514 Nov 02 20:45	5° ∡ 120'29		0.0000	12515 Sep 22 18:39	0° M	
inferior conj	12514 Nov 11 17:38	1° ∡ ¹25′07	-5°34'15	evening max el	12515 Sep 30 11:20	10°ML08'22	20°20'04
minimum elong	12514 Nov 11 10:44	1° ∡ ³34'48	5°32'29	desc. node	12515 Oct 07 17:47	14° M 57'58	
min. Earth dist.	12514 Nov 11 14:02	1° ∡ ′30′10	0.54576 AU	retrograde	12515 Oct 11 08:50	15°M33'15	
	12514 Nov 14 07:37	30°RM₊		evening set	12515 Oct 13 10:41	15°M22'19	
morning rise	12514 Nov 20 01:49	27°M37'36		inferior conj	12515 Oct 22 10:51	11°M25'45	-4°19'12
direct	12514 Nov 23 17:09	27° M L08'42		minimum elong	12515 Oct 22 00:50	11° M 40'27	4°15'43
	12514 Dec 02 07:10	0° ∡ ¹		min. Earth dist.	12515 Oct 23 21:55	10°M34'12	0.54779 AU
morning max el	12514 Dec 06 02:06	3° ∡ ¹02'50	22°02'34	morning rise	12515 Oct 30 14:15	7° M 22'12	
asc. node	12514 Dec 14 18:15	13° ∡ ¹49'16		direct	12515 Nov 04 02:42	6° M 38′04	
	12514 Dec 23 19:16	0°ರ		morning max el	12515 Nov 17 14:01	13° M .13'04	23°49'57
morning set	12514 Dec 27 07:19	7° る 13'20		Č	12515 Nov 30 09:13	0° ∡ ⊓	
Z .		*		asc. node	12515 Dec 01 15:14	2° ∡ '07'08	
superior conj	12515 Jan 03 09:42	22° る 18'49	1°30'26	morning set	12515 Dec 11 19:06	21° ₹ ′59'33	
minimum elong	12515 Jan 03 11:29		1°31'12	<i>5</i>	12515 Dec 15 11:51	0°ਰ	
	12515 Jan 07 02:37	0°≈	- 			. •	
max. Earth dist.	12515 Jan 07 08:56	0° ≈ 32'09	1.34391 AU	superior conj	12515 Dec 18 15:43	6° る 53'39	1°37'27
evening rise	12515 Jan 11 16:54	9° ≈ 06′26	1.0 .071 110	minimum elong	12515 Dec 18 16:24	6° る 57'21	1°38'21
desc. node	12515 Jan 16 19:05	18° ≈ 33'51		max. Earth dist.	12515 Dec 21 05:53	12°る28'10	1.32902 AU
Less. House	12515 Jan 23 11:48	0° ∺		evening rise	12515 Dec 26 06:05	22°る50'56	1.52702710
	12515 Feb 14 19:36	0° Υ		5,0mmg 1150	12515 Dec 29 21:52	0° ≈	
	12010100 14 17.50	V 1			12010 200 27 21.32	J . J .	

dasa mada	12516 Jan 02 15:55	8° ≈ 42'21			12516 Day 21 10:06	0° ≈	
desc. node	12516 Jan 03 15:55	8°≈42′21 0°) €			12516 Dec 21 10:06		27020107
	12516 Jan 17 04:57		25025105	evening max el	12517 Jan 10 16:21	27°≈08'04	2/°30'0/
evening max el	12516 Jan 29 06:10	14°) 16′24	27°27'05	_	12517 Jan 13 23:47	0° ∀	
retrograde	12516 Feb 11 22:29	21°) 42'08		retrograde	12517 Jan 24 13:25	4° ∺ 27'39	
evening set	12516 Feb 18 18:24	19° ∺ 12'54		evening set	12517 Jan 31 12:08	2°) 09'47	
min. Earth dist.	12516 Feb 22 14:02	15°) (48′47	0.64120 AU		12517 Feb 03 08:11	30° Ŗ ≈	
inferior conj	12516 Feb 25 03:50	13°) €06'43	-0°47'02	min. Earth dist.	12517 Feb 04 06:02	29° ≈ 11'58	0.62128 AU
minimum elong	12516 Feb 25 05:17	13°) €02'52	0°46'05	inferior conj	12517 Feb 07 05:15	26°≈25'53	-2°01'52
asc. node	12516 Feb 27 13:19	10°) 42′02		minimum elong	12517 Feb 07 09:26	26°≈16'06	1°59'36
morning rise	12516 Mar 02 18:15	7°) 45′05		asc. node	12517 Feb 13 10:44	21° ≈ 43'25	
direct	12516 Mar 05 05:58	7° ¥ 13'51		morning rise	12517 Feb 14 09:23	21°≈21'15	
	12516 Mar 11 15:58	10° ¥ 32'45	17°49'37	direct	12517 Feb 16 14:43	20°≈59'08	
morning max el		10 χ3243 0° Υ	1/493/				17047150
	12516 Mar 25 00:23			morning max el	12517 Feb 23 09:16	24°≈25'27	17°47'59
morning set	12516 Mar 28 12:46	5° Y 56′05			12517 Feb 27 22:27	0° ∀	
desc. node	12516 Mar 31 17:34	11° Ƴ 19'51		morning set	12517 Mar 11 04:56	18° ¥ 53′09	
					12517 Mar 17 12:18	0 ° $\mathbf{\Upsilon}$	
superior conj	12516 Apr 10 17:58	27° Y ′50′16	-1°11'36	desc. node	12517 Mar 18 14:07	1° Y 52'00	
minimum elong	12516 Apr 10 10:33	27° Y ′20′23	1°11'00				
	12516 Apr 12 02:13	0°B		superior conj	12517 Mar 22 14:20	8° Ƴ 43'00	-0°30'42
max. Earth dist.	12516 Apr 15 20:45	6°800'20	1.45073 AU	minimum elong	12517 Mar 22 11:23	8° Ƴ 30'30	
evening rise	12516 Apr 26 11:15	22° 8 29'13	1.10075110	max. Earth dist.	12517 Mar 29 13:26	20°Υ12'45	1.43757 AU
evening rise	*	0°Ⅱ		max. Lartii dist.		0° 8	1.43737 AO
	12516 May 01 09:40				12517 Apr 04 17:18	_	
	12516 May 22 20:54	0° ©		evening rise	12517 Apr 06 01:40	2° 8 05'59	
evening max el	12516 May 24 02:18	1° © 17'13	20°14'29		12517 Apr 24 22:02	0°II	
asc. node	12516 May 25 10:26	2° © 33'36		evening max el	12517 May 07 00:03	15° Ⅱ 04'33	21°24'27
retrograde	12516 May 31 22:01	5° 5 46'45		asc. node	12517 May 12 07:40	19° Ⅱ 16'56	
evening set	12516 Jun 04 21:20	4° © 16'02		retrograde	12517 May 15 20:32	20° Ⅱ 15'29	
	12516 Jun 08 20:22	30° Ŗ Ⅱ		evening set	12517 May 20 06:17	18° Ⅱ 28'31	
inferior conj	12516 Jun 10 04:13	28° Ⅱ 12'54	3°13'52	inferior conj	12517 May 25 12:32	12° Ⅱ 14'05	3°05'43
minimum elong	12516 Jun 10 04:00	28° Ⅱ 13'38	3°12'57	minimum elong	12517 May 25 11:23	12° Ⅱ 18′04	3°04'45
min. Earth dist.	12516 Jun 10 23:57	27° I 105'36	0.68029 AU	min. Earth dist.	12517 May 25 18:45	11° I I52'25	0.68668 AU
	12516 Jun 15 10:22	21° I I52'17	0.00029 AU		12517 May 20 16:18	5° I I58'22	0.08008 AU
morning rise				morning rise	•		
direct	12516 Jun 21 01:25	19° Ⅱ 22'49		direct	12517 Jun 04 18:37	3° Ⅱ 45′25	
desc. node	12516 Jun 27 18:15	22° ∏ 04'02		desc. node	12517 Jun 14 15:20	9° ∏ 29'12	
morning max el	12516 Jul 02 11:42	26° Ⅱ 13'59	24°28'16	morning max el	12517 Jun 14 22:17	9° Ⅱ 46'36	22°58'34
	12516 Jul 05 22:52	0 \circ ∞			12517 Jun 30 20:48	0 \circ ∞	
	12516 Jul 27 11:35	$0^{\circ}\Omega$		morning set	12517 Jul 19 06:48	28° © 24'47	
morning set	12516 Aug 07 03:46	17° Ω 40'42			12517 Jul 20 05:44	$0^{\circ}\Omega$	
max. Earth dist.	12516 Aug 10 18:18	24° Ω 04'35	1.37681 AU	max. Earth dist.	12517 Jul 23 16:26		1.40017 AU
Titali. Darui dibi.	12516 Aug 13 23:45	0° m)	1.57001110	Titali. Darin dibi.	12017 001 23 10.20	5 00 .5 .2	1.10017110
	12310 Aug 13 23.43	yıı v		superior conj	12517 Jul 31 11:12	19° Ω 37'13	1000100
	10516 4 17 10 20	70m 15100	0022120	1 3			
superior conj	12516 Aug 17 19:29	7° To 15'09		minimum elong	12517 Jul 31 16:08	19° Ω 59'46	1°08'02
minimum elong	12516 Aug 17 21:46	7° TD 26'08	0°33'40		12517 Aug 06 00:46	0°Щ	
asc. node	12516 Aug 21 10:38	14°Mp21'16		asc. node	12517 Aug 08 07:19	4° ™ 19'39	
evening rise	12516 Aug 26 10:11	24° Mp 16'37		evening rise	12517 Aug 10 04:18	7° ™ 54'35	
	12516 Aug 29 07:48	0∘ ⊽			12517 Aug 22 23:42	0∘ ⊽	
evening max el	12516 Sep 12 02:04	21° ≏ 34'00	19°14'43	evening max el	12517 Aug 26 04:28	3° £ 44'41	18°30'58
retrograde	12516 Sep 21 07:24	26° ♀ 10'19		retrograde	12517 Sep 03 00:44	7° ≏ 41'49	
evening set	12516 Sep 23 03:47	26° ჲ 00'00		evening set	12517 Sep 05 00:59	7° ≙ 27'03	
desc. node	12516 Sep 23 15:13	25° Ω 54'07		desc. node	12517 Sep 10 12:42	4° £ 41'00	
inferior conj	12516 Oct 01 17:11	21° Ω 49'46	-2°31'44	inferior conj	12517 Sep 12 20:21	2° £ 56'36	-0°43'38
-		22° ⊆ 00'42		•	-		
minimum elong	12516 Oct 01 10:36			minimum elong	12517 Sep 12 18:38	2° £ 59'56	
min. Earth dist.	12516 Oct 04 09:16	20° Ω 03'34	0.55894 AU	min. Earth dist.	12517 Sep 16 02:20	0° Ω 25'49	0.57701 AU
morning rise	12516 Oct 09 14:46	17° ≏ 13'58			12517 Sep 16 16:28	30°₽, Mp	
direct	12516 Oct 14 23:13	16° ≏ 08'20		morning rise	12517 Sep 20 08:49	27° Mp 43'11	
morning max el	12516 Oct 29 00:45	23° ≏ 16′05	25°34'21	direct	12517 Sep 26 09:38	26°Mp 10'59	
	12516 Nov 04 02:12	0° M ₊			12517 Oct 06 07:51	0∘ ⊽	
asc. node	12516 Nov 17 12:09	21°M01'29		morning max el	12517 Oct 10 17:08	3° ≏ 44'07	26°57'44
	12516 Nov 22 02:07	0° ∡ ¹		-	12517 Oct 29 18:40	0°M	
morning set	12516 Nov 25 06:37	6° х 41′23		asc. node	12517 Nov 04 08:58	10°M22'44	
		<u></u>		morning set	12517 Nov 04 06:36	21°M14'24	
superior conj	12516 Dec 02 01:31	21° ∡ ³36′23	1°38'11	morning set	12517 Nov 13 16:38	0° × 7	
					1231/ INOV 13 10.36	U ,	
minimum elong	12516 Dec 02 01:05	21° х 34'01	1°39'05		1051731 15 10 0	(0.701100	1022101
max. Earth dist.	12516 Dec 03 09:54	24° ₹ 35'07	1.31882 AU	superior conj	12517 Nov 16 13:04	6° ₹ 21'03	1°33'01
	12516 Dec 05 21:28	0°ಕ		minimum elong	12517 Nov 16 11:41	6° ≯ 13'22	1°33'44
evening rise	12516 Dec 09 04:13	6° る 57'21		max. Earth dist.	12517 Nov 16 18:07	6° х 49′13	1.31351 AU
desc. node	12516 Dec 20 12:50	28° る 29'48		evening rise	12517 Nov 23 08:44	21° ≯ 19′01	

desc. node	12517 Nov 27 13:52 12517 Dec 07 09:51	0°궁 17° 궁 47'49		evening rise	12518 Nov 05 01:20 12518 Nov 07 17:22	0° ҂ ¹ 5° ҂ ¹49'20	
dese. Hode	12517 Dec 15 17:08	0° ≈		evening rise	12518 Nov 20 06:05	0° る	
evening max el	12517 Dec 23 21:03	9° ≈ 15'42	26°59'18	desc. node	12518 Nov 24 06:59	6° පි 24'05	
retrograde	12518 Jan 06 19:33	16° ≈ 26'44		evening max el	12518 Dec 05 17:39	20° る 30'02	25°54'41
evening set	12518 Jan 13 14:26	14° ≈ 28′23		retrograde	12518 Dec 19 15:32	27° る 32'30	
min. Earth dist.	12518 Jan 17 11:19	11° ≈ 48′22	0.59985 AU	evening set	12518 Dec 25 20:55	26° る 01'32	
inferior conj	12518 Jan 20 15:34	9° ≈ 12'52		min. Earth dist.	12518 Dec 30 06:23	23° る 25'13	0.57877 AU
minimum elong	12518 Jan 20 22:38	8° ≈ 58'22	3°19'04	inferior conj	12519 Jan 02 07:06	21° පි 16'30	
morning rise	12518 Jan 28 09:47	4° ≈ 28'35		minimum elong	12519 Jan 02 15:40	21° ろ 01'18	4°36'37
direct	12518 Jan 30 11:41	4°≈12'03		morning rise	12519 Jan 10 13:08	16°る54'39	
asc. node morning max el	12518 Jan 31 08:06 12518 Feb 06 23:10	4°≈14'55 7°≈55'28	18°05'10	direct asc. node	12519 Jan 12 16:10 12519 Jan 18 05:22	16° ප් 40'14 18° ප් 25'10	
morning max er	12518 Feb 06 25.10 12518 Feb 21 04:02	/ ≈33.28 0° ∺	18 03 10	morning max el	12519 Jan 21 05:42	18 3 23 10 20° 3 50'53	18°42'52
morning set	12518 Feb 22 13:40	2° ∺ 36'17		morning max ci	12519 Jan 28 04:55	20° ≈	10 42 32
morning sec	12310100 22 13.10	2 7(3017		morning set	12519 Feb 06 09:49	16° ≈ 49'15	
superior conj	12518 Mar 04 10:46	20°) 43′17	0°07'51	3	12519 Feb 13 05:03	0° ∀	
minimum elong	12518 Mar 04 11:24	20°) 46′08	0°07'59				
behind sun begin	12518 Mar 04 04:38	20°) 15′59		superior conj	12519 Feb 15 03:14	3°) 38'36	0°40'21
behind sun end	12518 Mar 04 18:11	21° ¥ 16′14		minimum elong	12519 Feb 15 05:43	3° ¥ 50′13	0°40'27
desc. node	12518 Mar 05 10:41	22°) 29′14		desc. node	12519 Feb 20 07:15	13° 米 07′22	
	12518 Mar 09 18:37	0° Υ		max. Earth dist.	12519 Feb 22 09:25	16° ¥ 49'26	1.39752 AU
max. Earth dist.	12518 Mar 12 01:49	3° Y ′52'57	1.41916 AU	evening rise	12519 Feb 26 09:45	23°) (43′11	
evening rise	12518 Mar 17 07:19	12° Y 27'06			12519 Mar 02 04:53	0° Υ	
	12518 Mar 28 16:22	0°8	22042127		12519 Mar 22 12:37	0°8	24002125
evening max el	12518 Apr 19 17:02	28° ႘ 52'52 0° Ⅱ	22°42'37	evening max el	12519 Apr 02 07:11	12° 8 42'53	24°03'25
asc. node	12518 Apr 20 20:44 12518 Apr 29 04:57	0 H 4°∏46'07		retrograde asc. node	12519 Apr 13 11:03 12519 Apr 16 02:18	19 8 16 28	
retrograde	12518 Apr 29 17:19	4° Ⅱ 47'21		evening set	12519 Apr 18 19:33	17° 8 01'12	
evening set	12518 May 04 14:13	2° I I45'12		min. Earth dist.	12519 Apr 23 11:43	11° 8 36'31	0.68546 AU
evening sec	12518 May 07 04:49	30°R8		inferior conj	12519 Apr 24 06:44	10° 8 31'59	2°18'37
inferior conj	12518 May 09 22:01	26° 8 21'44	2°47'09	minimum elong	12519 Apr 24 04:35	10° 8 39'17	2°17'31
minimum elong	12518 May 09 20:11	26° 8 28'04	2°46'05	morning rise	12519 Apr 29 13:40	4° 8 29'54	
min. Earth dist.	12518 May 09 15:23	26° 8 44'46	0.68837 AU	direct	12519 May 03 14:06	2° 8 58'14	
morning rise	12518 May 15 02:03	20° 8 12'17		morning max el	12519 May 11 09:17	7° 8 22'06	20°15'54
direct	12518 May 19 15:13	18° 8 19'26		desc. node	12519 May 19 09:07	16° 8 59'51	
morning max el	12518 May 28 12:34	23° 8 28'46	21°32'13		12519 May 28 11:32	Π °0	
desc. node	12518 Jun 01 12:17	27° 8 53'12		morning set	12519 Jun 08 13:10	16° Ⅱ 45'12	
	12518 Jun 03 05:39	0° I I		n dr.	12519 Jun 17 00:12	0°©	1 44006 477
morning set	12518 Jun 24 04:58	0°ഇ 8° ഇ 01'07		max. Earth dist.	12519 Jun 18 04:21	/ 21/1699	1.44026 AU
morning set max. Earth dist.	12518 Jun 29 08:17 12518 Jul 05 19:12	18°926'15	1.42219 AU	superior conj	12519 Jun 24 03:47	11° © 33'36	2004122
max. Earth dist.	12518 Jul 12 15:58	0°Ω	1.42219 AU	minimum elong	12519 Jun 24 09:33	11°953'30	
	12310 Jul 12 13.30	0 00		minimum clong	12519 Jul 05 02:01	0°Ω	2 04 30
superior conj	12518 Jul 13 07:11	1° Ω 05'42	-1°40'17	evening rise	12519 Jul 06 23:06	3° Ω 14'51	
minimum elong	12518 Jul 13 14:02	1° Ω 35'22	1°40'21	asc. node	12519 Jul 13 00:49	13° Ω 42'16	
evening rise	12518 Jul 24 10:13	20° Ω 57'59		evening max el	12519 Jul 24 04:10	29° Ω 45′13	18°04'09
asc. node	12518 Jul 26 04:02	24° Ω 08'11			12519 Jul 24 10:15	0° m	
	12518 Jul 29 10:16	0° ™		retrograde	12519 Jul 30 14:52	3°M)06'03	
evening max el	12518 Aug 09 14:28		18°07'51	evening set	12519 Aug 02 06:27	2° m/31'05	
retrograde	12518 Aug 16 12:35	20° Mp 03'24			12519 Aug 05 22:58	30°R Ω	
evening set	12518 Aug 18 20:02	19° Mp 40'12	0046105	inferior conj	12519 Aug 08 15:44	27° Ω 21'22	
inferior conj	12518 Aug 25 20:57	14° m) 49'14	0°46'07	minimum elong	12519 Aug 08 18:17	27° Ω 14'44	1°50'57
minimum elong	12518 Aug 25 22:23	14° Mp 45'58	0°45'16	min. Earth dist.	12519 Aug 11 13:54	24° Ω 20'36	0.62174 AU
desc. node min. Earth dist.	12518 Aug 28 10:10 12518 Aug 29 03:28	12° Mp 30'09 11° Mp 52'19	0.59897 AU	morning rise desc. node	12519 Aug 15 03:47 12519 Aug 15 07:36	21° Ω 14'25 21° Ω 07'41	
morning rise	12518 Sep 01 21:31	9° mg 03'44	0.57677 AU	direct	12519 Aug 21 20:08	$18^{\circ}\Omega 50'59$	
direct	12518 Sep 08 09:18	7° mg 03'39		morning max el	12519 Aug 21 20:08 12519 Sep 04 23:24	26° Ω 52'42	27°57'10
morning max el	12518 Sep 22 17:10	14° m ₂ 55'27	27°46'53		12519 Sep 07 22:01	0° m)	
5	12518 Oct 04 22:22	0∘ ⊽			12519 Sep 28 14:16	0∘ ⊽	
asc. node	12518 Oct 22 05:41	0°M02'59		morning set	12519 Oct 08 21:39	19° ≙ 32'41	
	12518 Oct 22 05:06	0°M		asc. node	12519 Oct 09 02:20	19° ≏ 56'38	
morning set	12518 Oct 24 21:49	5°M33′06			12519 Oct 13 20:47	0° M ₊	
max. Earth dist.	12518 Oct 31 02:39	19° ™ 00′18	1.31329 AU	max. Earth dist.	12519 Oct 14 07:42	0° ™ 59'08	1.31828 AU
							4005:::
superior conj	12518 Nov 01 00:27	21°M01'34	1°22'09	superior conj	12519 Oct 16 09:52	5°M33'04	1°05'44
minimum elong	12518 Oct 31 22:25	20°M50'16	1-22-34	minimum elong	12519 Oct 16 07:36	5° ™ 20'39	1.02.20

evening rise	12519 Oct 23 04:13	20°M23'43		superior conj	12520 Sep 29 15:14	19° ≙ 48'58	0°43'53
	12519 Oct 27 18:37	0° ∡		minimum elong	12520 Sep 29 13:18	19° ≏ 38'36	0°43'45
desc. node	12519 Nov 11 04:11	24° ∡ *02'52			12520 Oct 04 08:17	0° M ,	
	12519 Nov 16 07:17	0°る		evening rise	12520 Oct 06 15:21	4°M56'13	
evening max el	12519 Nov 17 06:28	0° る 57'08	24°23'54		12520 Oct 19 23:12	0° ∡ ¹	
retrograde	12519 Nov 30 23:28	7° る 47'55		desc. node	12520 Oct 28 01:29	10° ∡ ′22′15	
evening set	12519 Dec 06 03:42	6° る 48'50		evening max el	12520 Oct 28 16:51	11° ∡ ′00′30	22°42'18
min. Earth dist.	12519 Dec 11 17:55		0.56081 AU	retrograde	12520 Nov 10 18:17	17° ∡ ′29'33	
inferior conj	12519 Dec 14 01:57	2° る 30'53	-5°37'21	evening set	12520 Nov 14 12:58	16° ∡ 58′25	
minimum elong	12519 Dec 14 07:45	2° る 21'50	5°35'42	min. Earth dist.	12520 Nov 22 01:09	13° ∡ ³34'43	0.54892 AU
	12519 Dec 18 10:48	30°Ŗ ⋌ ¹		inferior conj	12520 Nov 23 02:31	12° ∡ 58'42	-5°52'11
morning rise	12519 Dec 22 13:52	28° ∡ ¹29'38		minimum elong	12520 Nov 23 00:22	13° ∡ *01'46	5°51'14
direct	12519 Dec 25 01:12	28° ҂ 13′24		morning rise	12520 Dec 01 13:09	9° х 10′28	
	12519 Dec 31 03:45	0°ಕ		direct	12520 Dec 04 17:06	8° ∡ ¹47'26	
morning max el	12520 Jan 04 00:53	3° ろ 00'38	19°42'55	morning max el	12520 Dec 16 05:55	14° ∡ 16'53	21°05'51
asc. node	12520 Jan 05 02:32	4° る 05'27		asc. node	12520 Dec 21 23:38	20° ∡ 59'30	
	12520 Jan 20 21:31	0° ≈			12520 Dec 27 16:31	0°₹	
morning set	12520 Jan 21 13:37	1° ≈ 21′08		morning set	12521 Jan 04 22:14	16° る 03'48	
					12521 Jan 11 14:05	0° ≈	
superior conj	12520 Jan 29 11:03	17° ≈ 15'35	1°05'34				
minimum elong	12520 Jan 29 13:54	17° ≈ 29'40	1°05'52	superior conj	12521 Jan 12 06:01	1° ≈ 22'26	1°23'23
max. Earth dist.	12520 Feb 04 15:26	29° ≈ 06'44	1.37517 AU	minimum elong	12521 Jan 12 08:20	1° ≈ 34'23	1°23'59
	12520 Feb 05 02:57	0°) €		max. Earth dist.	12521 Jan 17 01:00	11° ≈ 02'43	1.35443 AU
desc. node	12520 Feb 07 03:53	3°) 42′54		evening rise	12521 Jan 21 01:31	18° ≈ 45'58	
evening rise	12520 Feb 08 08:50	5° ¥ 52′23		desc. node	12521 Jan 24 00:34	24° ≈ 11'57	
	12520 Feb 23 03:24	0° Y			12521 Jan 27 07:39	0°) €	
evening max el	12520 Mar 14 20:37	26° Ƴ 34'37	25°20'05		12521 Feb 16 06:59	0° Y	
	12520 Mar 18 17:20	0°8		evening max el	12521 Feb 25 10:22	10° Ƴ 23′26	26°25'19
retrograde	12520 Mar 27 00:33	3° 8 37'04		retrograde	12521 Mar 10 08:48	17° Ƴ 42'39	
evening set	12520 Apr 01 20:42	1° 8 11'42		evening set	12521 Mar 16 15:58	15° Ƴ 11'14	
asc. node	12520 Apr 01 23:40	1° 8 05'21		asc. node	12521 Mar 19 21:04	12° Ƴ 00′07	
	12520 Apr 03 03:25	30° ₹ Υ		min. Earth dist.	12521 Mar 20 18:49	10° Ƴ 56'40	0.66674 AU
min. Earth dist.	12520 Apr 06 05:35	26° Y ′22'25	0.67818 AU	inferior conj	12521 Mar 22 14:12	8° Ƴ 45'11	0°51'19
inferior conj	12520 Apr 07 12:47	24° Y 41'16	1°40'06	minimum elong	12521 Mar 22 12:56	8° Y 49'01	0°50'46
minimum elong	12520 Apr 07 10:47	24° Y '47'47	1°39'08	morning rise	12521 Mar 28 10:48	3° Y ′02′16	
morning rise	12520 Apr 13 01:16	18° Ƴ 47'50		direct	12521 Mar 31 12:40	2° Y 08'57	
direct	12520 Apr 16 13:50	17° Ƴ 36′28		morning max el	12521 Apr 07 00:49	5° Ƴ 37'04	18°27'47
morning max el	12520 Apr 23 13:36	21° Y ′26′06	19°13'44	desc. node	12521 Apr 22 02:33	26° Ƴ 38'37	
_	12520 Apr 30 14:51	0°8			12521 Apr 24 05:43	9° 8	
desc. node	12520 May 05 05:53	6° 8 37'44		morning set	12521 Apr 27 12:33	5° 8 11'18	
greatest brilliancy	12520 May 06 10:45	8° 8 24'45	-0.7m				
morning set	12520 May 17 15:19	25° 8 27'56		superior conj	12521 May 13 09:42	0° Ⅲ 07'40	-2°02'36
_	12520 May 20 13:45	Π $^{\circ}0$		minimum elong	12521 May 13 02:19	29° 8 38'50	2°02'56
max. Earth dist.	12520 May 30 19:26	15° Ⅲ 57'15	1.45254 AU		12521 May 13 07:45	Π°	
				max. Earth dist.	12521 May 13 14:43	0° Ⅲ 27'14	1.45775 AU
superior conj	12520 Jun 03 01:31	21° Ⅲ 05′10	-2°13'27	evening rise	12521 May 29 04:34	24° Ⅲ 52'57	
minimum elong	12520 Jun 03 01:20	21° Ⅱ 04'29	2°14'21		12521 Jun 01 10:23	0°9	
	12520 Jun 08 15:33	0 \circ \odot		greatest brilliancy	12521 Jun 07 08:08	9° © 16'19	-0.8m
evening rise	12520 Jun 17 13:59	14° © 33'39		asc. node	12521 Jun 15 18:40	21° 5 •41'27	
	12520 Jun 27 00:43	$\mathfrak{O}^{\circ} \mathfrak{O}$		evening max el	12521 Jun 20 05:26	26° © 57'05	18°51'00
asc. node	12520 Jun 28 21:42	2° Ω 55'37			12521 Jun 24 07:06	$0^{\circ}\Omega$	
evening max el	12520 Jul 06 18:05	13° Ω 15'57	18°18'49	retrograde	12521 Jun 26 21:46	0° Ω 37'06	
retrograde	12520 Jul 13 03:08	16° Ω 39'40			12521 Jun 29 10:38	30° ₹ॐ	
evening set	12520 Jul 16 03:08	15° Ω 50′26		evening set	12521 Jun 30 06:25	29° 5 32'04	
inferior conj	12520 Jul 22 00:32	10° Ω 23'46	2°36'36	inferior conj	12521 Jul 05 19:39	23° © 49'55	3°02'30
minimum elong	12520 Jul 22 02:52	10° Ω 17'01	2°35'19	minimum elong	12521 Jul 05 21:07	23° © 45'18	3°01'26
min. Earth dist.	12520 Jul 24 09:37	7° Ω 39'32	0.64293 AU	min. Earth dist.	12521 Jul 07 14:00	21° © 37'07	0.66086 AU
morning rise	12520 Jul 28 01:12	4° Ω 05′16		morning rise	12521 Jul 11 11:05	17° 5 27'06	
desc. node	12520 Aug 01 05:00	1° Ω 48′34		direct	12521 Jul 17 19:01	14° © 45'36	
direct	12520 Aug 03 15:54	1° Ω 27'35		desc. node	12521 Jul 19 02:19	14° © 51'43	
morning max el	12520 Aug 17 09:09	9° Ω 27'40	27°30'56	morning max el	12521 Jul 30 20:06	22° © 30'26	26°34'53
	12520 Sep 02 10:32	0° m/			12521 Aug 06 10:16	$0^{\circ}\Omega$	
	12520 Sep 19 23:03	0∘ ⊽			12521 Aug 26 17:12	0° ™	
morning set	12520 Sep 21 13:07	3° ჲ 05'47		morning set	12521 Sep 04 17:09	16°M 05'05	
asc. node	12520 Sep 24 22:57	9° م 58'07		max. Earth dist.	12521 Sep 08 17:43	23° m 52'06	1.34403 AU
max. Earth dist.	12520 Sep 26 05:32	12° ≏ 36′29	1.32857 AU	asc. node	12521 Sep 11 19:34	0° ჲ 03'34	
					12521 Sep 11 18:52	0∘ ত	

superior conj	12521 Sep 13 14:14	3° ≙ 43'07		morning set	12522 Aug 18 05:53	28° Ω 21'24	
minimum elong	12521 Sep 13 13:20	3° △ 38'25	0°16'46		12522 Aug 19 03:43	0° m)	
evening rise	12521 Sep 21 00:55	19° ≙ 21'54		max. Earth dist.	12522 Aug 21 20:33	4° Mp 58'22	1.36393 AU
	12521 Sep 26 06:44	0°M					
evening max el	12521 Oct 10 10:03	21°M16'38	21°07'04	superior conj	12522 Aug 28 04:01	17° Mp 08'36	
desc. node	12521 Oct 14 22:52	24°M55'22		minimum elong	12522 Aug 28 04:55	17° m 13'06	0°14'23
retrograde	12521 Oct 22 05:25	27°M08'39		behind sun begin	12522 Aug 28 02:01	16° Mp 58'40	
evening set	12521 Oct 24 18:06	26°M53'38	5000101	behind sun end	12522 Aug 28 07:50	17° Mp 27'34	
inferior conj	12521 Nov 02 18:12	22°M59'28		asc. node	12522 Aug 29 16:14	20° m/09'25	
minimum elong	12521 Nov 02 08:59	23°M12'28	5°05'43		12522 Sep 03 12:31	0∘ 亚	
min. Earth dist.	12521 Nov 03 07:32	22°M40'39	0.54549 AU	evening rise	12522 Sep 05 06:43	3° ₾ 35'09	
morning rise	12521 Nov 11 00:23	19°M.08'02			12522 Sep 20 15:37	0°M,	
direct	12521 Nov 15 00:59	18° M ₊33'17		evening max el	12522 Sep 22 16:37	2° M ₊13'57	19°49'33
morning max el	12521 Nov 27 22:12	24°M44'52	22°47'31	desc. node	12522 Oct 01 20:19	7° M ₊15'19	
_	12521 Dec 02 17:02	0° ∡		retrograde	12522 Oct 02 20:50	7° M ₊18'16	
asc. node	12521 Dec 08 20:40	8° ∡ 751′03		evening set	12522 Oct 04 18:38	7° M ₊08'22	
	12521 Dec 19 23:50	0°ප		inferior conj	12522 Oct 13 15:33	3°ML06'48	
morning set	12521 Dec 20 09:25	0° る 50'39		minimum elong	12522 Oct 13 06:29	3°M20'46	
				min. Earth dist.	12522 Oct 15 16:26	1°M51'37	0.55145 AU
superior conj	12521 Dec 27 08:47	15° る 49'30	1°34'12		12522 Oct 19 00:07	30° ₹ Ω	
minimum elong	12521 Dec 27 10:07	15° පි 56'36	1°35'02	morning rise	12522 Oct 21 16:48	28° ≙ 51'04	
max. Earth dist.	12521 Dec 30 17:43	22° る 56'17	1.33705 AU	direct	12522 Oct 26 13:46	27° ≙ 58'54	
	12522 Jan 03 05:00	0° ≈			12522 Nov 02 22:24	0° M	
evening rise	12522 Jan 04 08:11	2° ≈ 14'20		morning max el	12522 Nov 09 08:44	4°M48'36	24°36'01
desc. node	12522 Jan 10 21:20	14° ≈ 29'40		asc. node	12522 Nov 25 17:37	27°M26'02	
	12522 Jan 20 05:37	0° ∀			12522 Nov 27 03:22	0° ∡ ¹	
evening max el	12522 Feb 07 23:56	23°) ₹59'06	27°11'40	morning set	12522 Dec 04 21:20	15° ∡ ³36′24	
	12522 Feb 16 00:52	$0^{\circ}\mathbf{\Upsilon}$			12522 Dec 11 11:24	0°ප	
retrograde	12522 Feb 21 10:58	1° Y 24'32					
	12522 Feb 26 10:59	30° ₹ ₩		superior conj	12522 Dec 11 16:43	0° る 29'09	1°38'31
evening set	12522 Feb 28 03:19	28° ¥ 52'25		minimum elong	12522 Dec 11 16:55	0° ප 30'15	1°39'25
min. Earth dist.	12522 Mar 04 01:08	25°) 11′01	0.65152 AU	max. Earth dist.	12522 Dec 13 18:04	4° る 58'02	1.32403 AU
inferior conj	12522 Mar 06 08:32	22°) 37′10	-0°08'06	evening rise	12522 Dec 19 01:32	16° ට 09'23	
minimum elong	12522 Mar 06 08:45	22°) 36'32		C	12522 Dec 26 05:30	0° ≈	
transit middle	12522 Mar 06 08:45	22° ₩ 36'32		desc. node	12522 Dec 28 18:12	4°≈30'37	
transit begin	12522 Mar 06 06:07	22°) (43'55		***************************************	12523 Jan 14 21:58	0°) €	
transit end	12522 Mar 06 11:24	22°) 29'11		evening max el	12523 Jan 21 11:45	7°) 10′07	27°32'12
asc. node	12522 Mar 06 18:31	22° H 09'26		retrograde	12523 Feb 04 06:23	14°) 34'04	2, 32.12
morning rise	12522 Mar 12 15:48	17° ₩ 07'09		evening set	12523 Feb 11 04:21	12° ₩ 08'16	
direct	12522 Mar 15 08:18	16° ¥ 28′50		min. Earth dist.	12523 Feb 14 22:43		0.63306 AU
morning max el	12522 Mar 21 16:44	19°) 47'37	17°58'39	inferior conj	12523 Feb 17 17:02	6° ∺ 10'49	
morning max or	12522 Mar 29 12:03	0°Υ	17 3037	minimum elong	12523 Feb 17 19:34	6°) €04'27	
morning set	12522 Apr 08 14:10	16° Υ 18'21		asc. node	12523 Feb 21 15:56	2°\(\frac{1}{35}\)31	1 1014
desc. node	12522 Apr 08 14:10 12522 Apr 08 23:10	16° Υ 55'21		morning rise	12523 Feb 24 13:10	0° \ 56′20	
desc. node	12522 Apr 06 23:10 12522 Apr 16 23:39	0° 8		direct	12523 Feb 26 21:54	0° ∺ 29'27	
	12322 Apr 10 23.37	v O		morning max el	12523 Mar 05 10:32	3° ¥ 50′02	17°46'44
superior conj	12522 Apr 22 21:25	9° 8 26'00	1033133	morning set	12523 Mar 21 17:58	28°) 40'31	17 40 44
minimum elong	12522 Apr 22 12:20	8° 8 50'03		morning set	12523 Mar 21 17:38 12523 Mar 22 12:24	20 γ (4031	
max. Earth dist.	12522 Apr 26 11:06		1.45541 AU	desc. node	12523 Mar 26 19:44	7° Υ 23'15	
max. Earth dist.	12522 Apr 20 11:00 12522 May 06 01:43	0°Ⅱ	1.43341 AU	desc. node	12323 Wai 20 19.44	7 1 23 13	
evening rise	12522 May 08 01.43	0 H 4°∏27'14		superior conj	12523 Apr 03 03:55	19° Ƴ 40'02	0054120
greatest brilliancy	12522 May 08 23:00 12522 May 22 19:20	25° I 26'05	0.6m	minimum elong	12523 Apr 03 03:33 12523 Apr 02 22:21	19 γ 40 02 19° γ 17'09	
greatest offinancy	-	23 H 2603	-0.0111	_	-	29° Y 27'53	
1	12522 May 25 23:09			max. Earth dist.	12523 Apr 09 05:23		1.44589 AU
asc. node	12522 Jun 02 15:46	9°549'50	10020141		12523 Apr 09 13:28	0°8	
evening max el	12522 Jun 03 12:03	10°542'32	19°39'41	evening rise	12523 Apr 18 10:20	13° 8 51'07	
retrograde	12522 Jun 10 19:46	14°951'11			12523 Apr 29 03:23	0°II	20042152
evening set	12522 Jun 14 13:32	13°929'46	2012122	evening max el	12523 May 17 12:54	24° Ⅱ 29'03	20°42'52
inferior conj	12522 Jun 19 21:54	7°533'38		asc. node	12523 May 20 12:57	27° I 108'31	
minimum elong	12522 Jun 19 22:17	7°532'19	3°12'27	retrograde	12523 May 25 18:45	29° I I16'07	
min. Earth dist.	12522 Jun 21 01:37		0.67453 AU	evening set	12523 May 29 22:21	27° Ⅱ 38'21	2011112
morning rise	12522 Jun 25 06:39	1°511'13		inferior conj	12523 Jun 04 04:39		3°11'43
	12522 Jun 26 19:12	30°RⅡ		minimum elong	12523 Jun 04 04:01	21° II 32'06	3°10'48
direct	12522 Jul 01 04:22	28° Ⅱ 35'22		min. Earth dist.	12523 Jun 04 18:30	20° Ⅱ 42'04	0.68357 AU
desc. node	12522 Jul 05 23:33	29° ∏ 58′20		morning rise	12523 Jun 09 09:27	15° Ⅱ 10'59	
	12522 Jul 06 00:47	0ං ව		direct	12523 Jun 14 19:03	12° Ⅱ 48′06	
morning max el	12522 Jul 13 06:43	5°950'23	25°18'01	desc. node	12523 Jun 22 20:41	16° Ⅱ 40′25	
	12522 Jul 31 22:54	0 $^{\circ}$ Ω		morning max el	12523 Jun 25 16:51	19° Ⅱ 19'28	23°50'09

	10500 1 1 04 17 50	000		. ,	12524 1 07 04 22	20 T 5 515 4	22020152
	12523 Jul 04 17:53	0° ©		morning max el	12524 Jun 07 04:32	2° ∏ 55'54	22°20'53
. ,	12523 Jul 25 02:08	0°Ω		desc. node	12524 Jun 08 17:42	4° Ⅱ 33'07	
morning set	12523 Jul 30 22:35	9° Ω 42'56	1 20670 ATT	. ,	12524 Jun 27 18:07	0°©	
max. Earth dist.	12523 Aug 03 18:06	16° Ω 19'43	1.38670 AU	morning set	12524 Jul 10 14:50	19°558'48 28°524'07	1 40002 ATT
	12522 4 11 04.50	200 05(122	0040110	max. Earth dist.	12524 Jul 15 17:12		1.40983 AU
superior conj minimum elong	12523 Aug 11 04:58	29° \O 56'32 0° \O 12'34			12524 Jul 16 15:55	$0^{\circ}\Omega$	
minimum elong	12523 Aug 11 08:22 12523 Aug 11 05:42	0°Mg 0°Mg	0 48 13	superior conj	12524 Jul 23 12:53	11° Ω 57'37	102222
asc. node	12523 Aug 11 05:42 12523 Aug 16 12:53	ابات 10° ال وا11'39		minimum elong	12524 Jul 23 18:49	$12^{\circ}\Omega 24'09$	1°22'17
evening rise	12523 Aug 10 12:33 12523 Aug 20 06:04	17° Mp 28'28		asc. node	12524 Aug 02 09:35	0° My 06'43	1 22 17
evening rise	12523 Aug 20 00:04 12523 Aug 26 20:23	0° ⊽		asc. node	12524 Aug 02 09:33 12524 Aug 02 08:09	0°M)	
evening max el	12523 Aug 20 20:23 12523 Sep 05 12:44	0 = 13° £ 59'31	18°53'30	evening rise	12524 Aug 02 08:09 12524 Aug 02 19:32	0° mg 53'19	
retrograde	12523 Sep 03 12:44 12523 Sep 14 03:03	18° ⊆ 17'54	10 33 30	evening max el	12524 Aug 18 18:58	26° m) 27'46	18°18'44
evening set	12523 Sep 14 03:03 12523 Sep 16 00:09	18° ⊆ 06'21		evening max er	12524 Aug 16 16:36 12524 Aug 24 11:23	20°Ω.	10 10 44
desc. node	12523 Sep 18 17:47	17° ⊆ 11'45		retrograde	12524 Aug 26 04:21	0° ჲ 11'58	
inferior conj	12523 Sep 16 17:47 12523 Sep 24 06:18	17 ⊆ 11 43	-1°44'28	retrograde	12524 Aug 27 22:02	30°RM)	
minimum elong	12523 Sep 24 00:18 12523 Sep 24 01:53	13° ⊆ 40'00		evening set	12524 Aug 28 07:31	29° m 54'03	
min. Earth dist.	12523 Sep 27 06:14	11° ≏ 40'51	0.56588 AU	inferior conj	12524 Sep 04 18:51	25° m) 15'04	-0°02'47
morning rise	12523 Oct 02 00:22	8° £ 55'46	0.50500110	minimum elong	12524 Sep 04 18:45	-	0°02'54
direct	12523 Oct 07 16:10	7° Ω 39'13		transit middle	12524 Sep 04 18:45	25° m) 15'18	
morning max el	12523 Oct 21 21:29	14° £ 59'38	26°13'26	transit begin	12524 Sep 04 15:19	25° m/22'26	0 020.
morning man er	12523 Nov 02 22:34	0°M	20 13 20	transit end	12524 Sep 04 22:10	25° m/08'09	
asc. node	12523 Nov 12 14:28	16°M32'39		desc. node	12524 Sep 04 15:16	25° m) 22'32	
morning set	12523 Nov 19 08:11	0° ₹ 14'58		min. Earth dist.	12524 Sep 08 02:39	22° m/30'20	0.58611 AU
morning sec	12523 Nov 19 05:24	0° ⊼		morning rise	12524 Sep 12 02:29	19° m) 47'01	0.00011110
	12023 1.07 19 00.21	• ••		direct	12524 Sep 18 08:58	18° Mp 02'21	
superior conj	12523 Nov 26 03:29	15° ∡ 13'29	1°36'43	morning max el	12524 Oct 02 16:57	25° m/ 44'33	27°23'10
minimum elong	12523 Nov 26 02:38	15°× 08'43		morning mun vi	12524 Oct 06 16:32	0∘ ⊽	2, 2310
max. Earth dist.	12523 Nov 27 00:02		1.31586 AU		12524 Oct 26 08:13	0°M	
	12523 Dec 02 22:18	0°る		asc. node	12524 Oct 29 11:14	6°ML02'43	
evening rise	12523 Dec 02 22:18	0° る 22'47		morning set	12524 Nov 02 16:15	14°M42'08	
desc. node	12523 Dec 15 15:10	24°る06'40		morning sec	1202.1107 02 10.10	1. 110 12 00	
	12523 Dec 19 06:32	0° ≈		superior conj	12524 Nov 09 15:11	29°M57'01	1°29'06
evening max el	12524 Jan 03 19:42	19° ≈ 43'37	27°21'15	minimum elong	12524 Nov 09 13:29	29°ML47'33	1°29'41
retrograde	12524 Jan 17 18:02	27° ≈ 00'42	_,	max. Earth dist.	12524 Nov 09 08:38	29°M20'31	1.31279 AU
evening set	12524 Jan 24 15:59	24° ≈ 49'58			12524 Nov 09 15:43	0° ⊼ ¹	
min. Earth dist.	12524 Jan 28 10:13	22°≈01'04	0.61221 AU	evening rise	12524 Nov 16 09:08	14° ∡ °48'44	
inferior conj	12524 Jan 31 12:25	19° ≈ 17'12	-2°35'41	C	12524 Nov 23 21:55	ರ°0	
minimum elong	12524 Jan 31 17:52	19° ≈ 05'08	2°32'55	desc. node	12524 Dec 01 12:13	13° පි 08'16	
morning rise	12524 Feb 07 22:40	14° ≈ 21′07			12524 Dec 14 09:01	0° ≈	
asc. node	12524 Feb 08 13:17	14° ≈ 11'49		evening max el	12524 Dec 15 21:17	1° ≈ 29'12	26°35'44
direct	12524 Feb 10 01:57	14° ≈ 01'56		retrograde	12524 Dec 29 20:10	8° ≈ 36'32	
morning max el	12524 Feb 17 02:50	17° ≈ 34'33	17°52'55	evening set	12525 Jan 05 10:19	6° ≈ 49'23	
	12524 Feb 25 23:47	0°) €		min. Earth dist.	12525 Jan 09 11:12	4° ≈ 12'34	0.59064 AU
morning set	12524 Mar 03 17:53	11°) 59'10		inferior conj	12525 Jan 12 15:04	1° ≈ 46'42	-3°56'23
desc. node	12524 Mar 12 16:18	27° ¥ 58′04		minimum elong	12525 Jan 12 23:06	1° ≈ 31'12	3°53'00
	12524 Mar 13 20:20	0 ° Υ			12525 Jan 15 00:19	30°Ŗる	
				morning rise	12525 Jan 20 14:46	27° る 11'32	
superior conj	12524 Mar 14 10:50	1° Y ′02'39		direct	12525 Jan 22 16:20	26° る 56'23	
minimum elong	12524 Mar 14 09:36	0° Y 57′20	0°13'32	asc. node	12525 Jan 25 10:36	27° る 24'49	
behind sun begin	12524 Mar 14 05:06	0° Ƴ 37'57			12525 Jan 29 16:05	0° ≈	
behind sun end	12524 Mar 14 14:05	1° Y 16'41		morning max el	12525 Jan 30 13:59	0° ≈ 50'41	18°18'34
max. Earth dist.	12524 Mar 21 19:45	13° Y 25'59	1.43025 AU	morning set	12525 Feb 15 08:00	25° ≈ 56′29	
evening rise	12524 Mar 28 05:58	23° Y 44'05			12525 Feb 17 11:16	0° ∀	
	12524 Apr 01 06:49	0.8					
	12524 Apr 22 05:34	Π °0		superior conj	12525 Feb 24 16:16	13° ¥ 27′29	
evening max el	12524 Apr 29 08:22	8° Ⅱ 16'50	21°57'03	minimum elong	12525 Feb 24 17:54	13°) (34′54	0°22'35
asc. node	12524 May 06 10:11	13° Ⅱ 22'38		desc. node	12525 Feb 27 12:50	18°) ₹35'58	
retrograde	12524 May 08 16:45	13° Ⅱ 46'52		max. Earth dist.	12525 Mar 04 05:50	26°) (47'44	1.41020 AU
evening set	12524 May 13 07:03	11° Ⅱ 53'29			12525 Mar 06 03:21	0°Υ	
inferior conj	12524 May 18 13:42	5° Ⅱ 34'51		evening rise	12525 Mar 08 20:11	4° Υ ′28'29	
minimum elong	12524 May 18 12:14	5° Ⅱ 39'58	2°58'05		12525 Mar 25 12:21	0°8	
min. Earth dist.	12524 May 18 14:28	5° Ⅱ 32'12	0.68793 AU	evening max el	12525 Apr 12 00:01	22° 8 06'34	23°17'10
	12524 May 23 00:35	30°₹ 8		retrograde	12525 Apr 22 12:15	28° 8 18'11	
morning rise	12524 May 23 17:14	29° 8 21'23		asc. node	12525 Apr 23 07:29	28° 8 15'13	
direct	12524 May 28 13:57	27° 8 16'33		evening set	12525 Apr 27 14:01	26° 8 10'23	2026:17
	12524 Jun 03 22:08	Π °0		inferior conj	12525 May 02 23:04	19° 8 44'15	2~36'17

min. Earth dist.	12525 May 02 21:03 12525 May 02 11:13	19° 8 51'10 20° 8 25'08	2°35'11 0.68770 AU	inferior conj minimum elong	12526 Apr 17 06:54 12526 Apr 17 04:44	3° 8 54'54 4° 8 02'06	2°03'33 2°02'28
morning rise	12525 May 08 04:01	13° 8 37'42	0.08770 AC	minimum ciong	12526 Apr 20 10:13	4 002 00 30°RΥ	2 02 28
direct	12525 May 12 11:47	11° 8 53'36		morning rise	12526 Apr 22 15:53	27° Y 56'30	
morning max el	12525 May 20 21:06	16° 8 42'10	20°58'10	direct	12526 Apr 26 11:14	26° Ƴ 33'36	
desc. node	12525 May 26 14:36	23° 8 16'56			12526 May 03 03:56	0°B	
	12525 May 31 15:33	$\Pi^{\circ}0$		morning max el	12526 May 03 21:04	0° 8 40'50	19°47'37
morning set	12525 Jun 20 06:07	29° Ⅱ 08'34		desc. node	12526 May 13 11:24	12° 8 38'18	
	12525 Jun 20 19:17	0ංම		greatest brilliancy	12526 May 16 19:42	17° 8 26'42	-0.6m
max. Earth dist.	12525 Jun 27 22:44	11° 5 23'12	1.43055 AU		12526 May 25 05:25	Π °0	
				morning set	12526 May 30 07:08	7° Ⅱ 44'50	
superior conj	12525 Jul 04 23:13	23° © 01'09		max. Earth dist.	12526 Jun 10 11:12	25° Ⅱ 10′02	1.44638 AU
minimum elong	12525 Jul 05 06:08	23° © 30'25	1°52'09		12526 Jun 13 11:58	0ංම	
	12525 Jul 09 01:06	0°N			12526 I 15 00 26	20502122	2010126
evening rise	12525 Jul 16 18:46	13° Ω 38'11 19° Ω 49'44		superior conj	12526 Jun 15 09:36	3°903'33	
asc. node	12525 Jul 20 06:19 12525 Jul 26 05:32	19° 3′2 49′44 0° m)		minimum elong evening rise	12526 Jun 15 13:24 12526 Jun 28 22:50	3° © 18'55 25° © 31'50	2-11-15
evening max el	12525 Aug 02 07:02	9° Mg 27'27	18°03'59	evening rise	12526 Jul 01 14:08	23 3 31 30	
retrograde	12525 Aug 02 07:02 12525 Aug 08 22:49	12° m ₂ 727	10 03 37	asc. node	12526 Jul 07 03:08	9° Ω 15'51	
evening set	12525 Aug 11 09:50	12° Mp 24'29		evening max el	12526 Jul 16 21:10	22° Ω 49'07	18°08'06
inferior conj	12525 Aug 18 03:38	7° m/25'09	1°17'05	retrograde	12526 Jul 23 06:00	26° Ω 09'36	
minimum elong	12525 Aug 18 05:46	7° m) 20'02	1°15'55	evening set	12526 Jul 26 01:10	25° Ω 28'43	
min. Earth dist.	12525 Aug 21 07:22	4° m/24'11	0.60880 AU	inferior conj	12526 Aug 01 04:53	20° Ω 11'12	2°13'35
desc. node	12525 Aug 22 12:44	3° Mp 19'26		minimum elong	12526 Aug 01 07:28	20° Ω 04'11	2°12'13
morning rise	12525 Aug 24 22:54	1° m 29'34		min. Earth dist.	12526 Aug 03 21:41	17° Ω 15'34	0.63111 AU
	12525 Aug 27 20:16	30°R Ω		morning rise	12526 Aug 07 11:53	13° Ω 58'13	
direct	12525 Aug 31 13:33	29° Ω 18'46		desc. node	12526 Aug 09 10:10	12° Ω 43'22	
	12525 Sep 04 10:30	0° m)		direct	12526 Aug 14 04:06	11° Ω 27'52	
morning max el	12525 Sep 14 19:42	7° m 15'00	27°55'58	morning max el	12526 Aug 28 03:53	19° Ω 29'53	27°50'11
,	12525 Oct 02 02:29	0° ™			12526 Sep 06 02:35	0° m)	
asc. node	12525 Oct 16 07:56	25° Ω 49'19 28° Ω 53'10		mamina sat	12526 Sep 25 01:52	0° ჲ 12° ჲ 42'15	
morning set	12525 Oct 17 19:41 12525 Oct 18 08:31	28 ==33 10 0°ML		morning set asc. node	12526 Oct 01 16:17 12526 Oct 03 04:33	12 ≗ 42 13 15° £ 46'48	
max. Earth dist.	12525 Oct 18 08:31 12525 Oct 23 16:13		1.31482 AU	max. Earth dist.	12526 Oct 05 04:55 12526 Oct 06 18:52	23° £ 19'32	1.32204 AU
max. Lartii dist.	12323 001 23 10.13	11 1102/30	1.51402 110	max. Earth dist.	12320 001 00 10.32	23 =1732	1.32204710
superior conj	12525 Oct 25 01:56	14°ML34'21	1°15'51	superior conj	12526 Oct 09 09:52	28° ♀ 59'39	0°57'06
minimum elong	12525 Oct 24 23:45	14°ML22'13	1°16'08	minimum elong	12526 Oct 09 07:40	28° £ 47'41	0°57'05
evening rise							
evening rise	12525 Oct 31 18:57	29°M21'42		_	12526 Oct 09 20:57	0° M	
evening rise	12525 Nov 01 02:04	29° ጤ 21'42 0° ጆ		evening rise	12526 Oct 09 20:57 12526 Oct 16 06:09	0°ጤ 13°ጤ55'58	
-	12525 Nov 01 02:04 12525 Nov 17 10:36	⊼°00 る00		-	12526 Oct 16 06:09 12526 Oct 24 05:03	13° ™ 55'58 0° √	
desc. node	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23	0°♂ 0°♂ 1°♂22'26		desc. node	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39	13° M 55'58 0° √ 18° √ 30'32	
desc. node evening max el	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32	0°ダ 0°ଟ 1°ଟ22'26 12°ଟ22'46	25°18'33	desc. node evening max el	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10	13°M55'58 0° ⊀ 18° ₹30'32 22° ₹35'01	23°40'51
desc. node evening max el retrograde	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46	0°ダ 0°る 1°る22'26 12°る22'46 19°る19'59	25°18'33	desc. node evening max el retrograde	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54	13°M55'58 0° ♂ 18° ♂30'32 22° ♂35'01 29° ♂18'33	23°40′51
desc. node evening max el retrograde evening set	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01	0°ダ 0°号 1°号22'26 12°号22'46 19°号19'59 18°号02'33		desc. node evening max el retrograde evening set	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43	13° M 55'58 0° ♂ 18° ♂ 30'32 22° ♂ 35'01 29° ♂ 18'33 28° ♂ 32'07	
desc. node evening max el retrograde evening set min. Earth dist.	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39	0°ダ 0°ゼ 1°ゼ22'26 12°ゼ22'46 19°ゼ19'59 18°ゼ02'33 15°ゼ22'28	0.57058 AU	desc. node evening max el retrograde evening set min. Earth dist.	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31	13° M 55'58 0° √ 18° √ 30'32 22° √ 35'01 29° √ 18'33 28° √ 32'07 25° √ 29'34	0.55482 AU
desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55	0° ҂ 0° ♂ 1° ♂22'26 12° ♂22'46 19° ♂19'59 18° ♂02'33 15° ♂22'28 13° ♂30'18	0.57058 AU -5°07'56	desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17	13°	0.55482 AU -5°50'15
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00	0°ダ 0°ゼ 1°ゼ22'26 12°ゼ22'46 19°ゼ19'59 18°ゼ02'33 15°ゼ22'28	0.57058 AU -5°07'56	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 05 11:10	13° IL 55'58 0° ₹ 18° ₹30'32 22° ₹35'01 29° ₹18'33 28° ₹32'07 25° ₹29'34 24° ₹23'15 24° ₹18'58	0.55482 AU -5°50'15
desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55	0°ズ 0°궁 1°궁22'26 12°궁22'46 19°궁19'59 18°궁02'33 15°궁22'28 13°♂30'18 13°♂16'47	0.57058 AU -5°07'56	desc. node evening max el retrograde evening set min. Earth dist. inferior conj	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17	13°	0.55482 AU -5°50'15
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18	0°ダ 0°石 1°石22'26 12°石22'46 19°石19'59 18°石02'33 15°石22'28 13°石30'18 13°石16'47 9°石17'27	0.57058 AU -5°07'56	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 05 11:10 12526 Dec 13 20:28	13° IL 55'58 0° ₹ 18° ₹30'32 22° ₹35'01 29° ₹18'33 28° ₹32'07 25° ₹29'34 24° ₹23'15 24° ₹18'58 20° ₹29'28	0.55482 AU -5°50'15 5°49'10
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04	0°メ 0°る 1°る22'26 12°る22'46 19°る19'59 18°る02'33 15°る22'28 13°る30'18 13°る16'47 9°る17'27 9°る02'40	0.57058 AU -5°07'56 5°05'19	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 05 11:10 12526 Dec 13 20:28 12526 Dec 16 14:06	13° IL 55'58 0° ₹ 18° ₹30'32 22° ₹35'01 29° ₹18'33 28° ₹32'07 25° ₹29'34 24° ₹23'15 24° ₹18'58 20° ₹29'28 20° ₹10'58	0.55482 AU -5°50'15 5°49'10
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50	0°ズ 0°궁 1°궁22'26 12°궁22'46 19°궁19'59 18°궁02'33 15°궁22'28 13°♂30'18 13°♂16'47 9°♂17'27 9°♂02'40 12°♂15'17	0.57058 AU -5°07'56 5°05'19	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 18'58 20° 29'28 20° 10'58 25° 15'12 28° 29'02 0° 5'	0.55482 AU -5°50'15 5°49'10
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46	0.57058 AU -5°07'56 5°05'19	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 18'58 20° 10'58 20° 10'58 25° 15'12 28° 29'02 0° 24° 556'47	0.55482 AU -5°50'15 5°49'10
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50	0°ズ 0°궁 1°궁22'26 12°궁22'46 19°♂19'59 18°♂02'33 15°♂22'28 13°♂30'18 13°♂16'47 9°♂17'27 9°♂02'40 12°♂15'17 13°♂27'46 0°≈ 10°≈19'21	0.57058 AU -5°07'56 5°05'19	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 05 11:10 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 18'58 20° 29'28 20° 10'58 25° 15'12 28° 29'02 0° 5'	0.55482 AU -5°50'15 5°49'10
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51	0°ズ 0°궁 1°궁22'26 12°궁22'46 19°♂19'59 18°♂02'33 15°♂22'28 13°♂30'18 13°♂16'47 9°♂17'27 9°♂02'40 12°♂15'17 13°♂27'46 0°≈ 10°≈19'21	0.57058 AU -5°07'56 5°05'19 19°05'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 17 00:58	13° IL 55'58 0° ¾ 18° ¾30'32 22° ¾35'01 29° ¾18'33 28° ¾32'07 25° ¾29'34 24° ¾23'15 24° ¾18'58 20° ¾29'28 20° ¾10'58 25° ¾15'12 28° ¾29'02 0° ♂ 24° ♂556'47 0° ≈	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 15:51	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46	0.57058 AU -5°07'56 5°05'19	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53	13° IL 55'58 0° ♂ 18° ♂ 30'32 22° ♂ 35'01 29° ♂ 18'33 28° ♂ 32'07 25° ♂ 29'34 24° ♂ 23'15 24° ♂ 18'58 20° ♂ 29'28 20° ♂ 10'58 25° ♂ 15'12 28° ♂ 29'02 0° ♂ 24° ♂ 556'47 0° ≈ 10° ≈ 33'37	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19	0° ₹ 0° ₹ 1° ₹22'26 12° ₹22'46 19° ₹19'59 18° ₹02'33 15° ₹22'28 13° ₹30'18 13° ₹16'47 9° ₹17'27 9° ₹02'40 12° ₹15'17 13° ₹27'46 0° ≈ 10° ≈19'21 26° ≈42'26 26° ≈55'46 0° ¥	0.57058 AU -5°07'56 5°05'19 19°05'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35	13° IL 55'58 0° 🛪 18° 🛪 30'32 22° 🛪 35'01 29° 🛪 18'33 28° 🛪 32'07 25° 🛪 29'34 24° 🛪 23'15 24° 🛪 18'58 20° 🛪 29'28 20° 🛪 10'58 25° 🛪 15'12 28° 🛪 29'02 0° 云 24° ♂ 56'47 0° ≈ 10° ≈ 33'37 10° ≈ 47'14	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25	0° ₹ 0° ₹ 1° ₹22'26 12° ₹22'46 19° ₹19'59 18° ₹02'33 15° ₹22'28 13° ₹30'18 13° ₹16'47 9° ₹17'27 9° ₹02'40 12° ₹15'17 13° ₹27'46 0° ≈ 10° ≈19'21 26° ≈42'26 26° ≈55'46 0° ¥ 9° ¥13'39	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12526 Oct 16 06:09 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 27 19:50	13° \$\mathbb{\pi}\$.55'58 0° \$\mathbb{\pi}\$ 18° \$\mathbb{\pi}\$30'32 22° \$\mathbb{\pi}\$35'01 29° \$\mathbb{\pi}\$18'33 28° \$\mathbb{\pi}\$29'734 24° \$\mathbb{\pi}\$29'15 24° \$\mathbb{\pi}\$18'58 20° \$\mathbb{\pi}\$29'28 20° \$\mathbb{\pi}\$10'58 25° \$\mathbb{\pi}\$15'12 28° \$\mathbb{\pi}\$29'02 0° \$\mathbb{\pi}\$ 24° \$\mathbb{\pi}\$56'47 0° \$\mathbb{\pi}\$ 10° \$\mathbb{\pi}\$33'37 10° \$\mathbb{\pi}\$47'14 21° \$\mathbb{\pi}\$34'58	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19	0° ₹ 0° ₹ 1° ₹22'26 12° ₹22'46 19° ₹19'59 18° ₹02'33 15° ₹22'28 13° ₹30'18 13° ₹16'47 9° ₹17'27 9° ₹02'40 12° ₹15'17 13° ₹27'46 0° ≈ 10° ≈19'21 26° ≈42'26 26° ≈55'46 0° ¥	0.57058 AU -5°07'56 5°05'19 19°05'38	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35	13° IL 55'58 0° 🛪 18° 🛪 30'32 22° 🛪 35'01 29° 🛪 18'33 28° 🛪 32'07 25° 🛪 29'34 24° 🛪 23'15 24° 🛪 18'58 20° 🛪 29'28 20° 🛪 10'58 25° 🛪 15'12 28° 🛪 29'02 0° 云 24° ♂ 56'47 0° ≈ 10° ≈ 33'37 10° ≈ 47'14	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25 12526 Feb 14 12:47	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46 0°光 9°光13'39 9°光28'48	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Jan 31 14:41	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 10'58 25° 15'12 28° 29'02 0° 24° 556'47 0° 10° 33'37 10° 47'14 21° 34'58 28° 37'15	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 14 09:25 12526 Feb 14 12:47 12526 Feb 18 07:43	0° ₹ 0° ₹ 1° ₹22'26 12° ₹22'46 19° ₹19'59 18° ₹02'33 15° ₹22'28 13° ₹30'18 13° ₹16'47 9° ₹17'27 9° ₹02'40 12° ₹15'17 13° ₹27'46 0° ≈ 10° ≈19'21 26° ≈42'26 26° ≈55'46 0° ₩ 9° ¥13'39 9° ¥28'48 16° ¥08'27	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12526 Oct 16 06:09 12526 Oct 24 05:03 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Jan 31 14:41 12527 Feb 01 06:03	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 10'58 25° 15'12 28° 29'02 0° 24° 556'47 0° 10° 33'37 10° 47'14 21° 34'58 28° 37'15 29° 46'47	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist.	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 02 07:18 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25 12526 Feb 14 09:25 12526 Feb 18 07:43 12526 Feb 18 07:43 12526 Feb 26 17:25	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46 0°ዢ 9°玳13'39 9°玳28'48 16°玳08'27 0°Ƴ	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12526 Oct 16 06:09 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Jan 31 14:41 12527 Feb 01 06:03 12527 Feb 01 06:03	13° IL 55'58 0° 18° 30'32 22° 35'01 29° 18'33 28° 32'07 25° 29'34 24° 23'15 24° 18'58 20° 29'28 20° 10'58 25° 15'12 28° 29'02 0° 24° 556'47 0° 10° 33'37 10° 47'14 21° 34'58 28° 37'15 29° 46'47 0° €	0.55482 AU -5°50'15 5°49'10 20°15'37
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25 12526 Feb 14 09:25 12526 Feb 18 07:43 12526 Feb 18 07:43 12526 Feb 26 17:25 12526 Feb 27 13:47 12526 Mar 20 02:56 12526 Mar 20 02:56 12526 Mar 25 13:47 12526 Apr 06 04:10	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46 0°光 9°光13'39 9°光28'48 16°光08'27 0°Ƴ 0°엉 5°엉58'28 12°엉45'02	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12526 Oct 16 06:09 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Feb 01 06:03 12527 Feb 01 09:00 12527 Feb 01 09:00 12527 Feb 20 00:57 12527 Mar 08 03:09 12527 Mar 20 15:33	13° \$\mathbb{\chi}\$.55'58 0° \$\mathbb{\chi}\$ 18° \$\mathbb{\chi}\$30'32 22° \$\mathbb{\chi}\$35'01 29° \$\mathbb{\chi}\$18'33 28° \$\mathbb{\chi}\$29'34 24° \$\mathbb{\chi}\$23'15 24° \$\mathbb{\chi}\$18'58 20° \$\mathbb{\chi}\$29'28 20° \$\mathbb{\chi}\$10'58 25° \$\mathbb{\chi}\$15'12 28° \$\mathbb{\chi}\$29'02 0° \$\mathbb{\chi}\$ 24° \$\mathbb{\chi}\$56'47 0° \$\mathbb{\chi}\$ 210° \$\mathbb{\chi}\$3'37 10° \$\mathbb{\chi}\$47'14 21° \$\mathbb{\chi}\$34'58 28° \$\mathbb{\chi}\$37'15 29° \$\mathbb{\chi}\$46'47 0° \$\mathbb{\chi}\$ 0° \$\mathbb{\chi}\$ 19° \$\mathbb{\chi}\$49'01 27° \$\mathbb{\chi}\$00'17	0.55482 AU -5°50'15 5°49'10 20°15'37 1°14'01 1°14'26 1.36598 AU
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise evening max el retrograde asc. node	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25 12526 Feb 14 12:47 12526 Feb 15 17:25 12526 Feb 16 17:25 12526 Feb 17 12:51 12526 Feb 18 07:43 12526 Feb 18 07:43 12526 Feb 26 17:25 12526 Mar 20 02:56 12526 Apr 06 04:10 12526 Apr 10 04:50	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46 0°Ж 9°升13'39 9°升28'48 16°升08'27 0°℃ 0°℃ 5°♂58'28 12°♂45'02 11°♂32'54	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde evening set	12526 Oct 16 06:09 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 27 05:26 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Jan 31 14:41 12527 Feb 01 06:03 12527 Feb 01 09:00 12527 Feb 20 00:57 12527 Mar 08 03:09 12527 Mar 20 15:33 12527 Mar 26 16:39	13° \$\mathbb{T}_55'58 0° \$\mathbb{A}'\$ 18° \$\mathbb{A}'30'32 22° \$\mathbb{A}'35'01 29° \$\mathbb{A}'18'33 28° \$\mathbb{A}'29'15 24° \$\mathbb{A}'23'15 24° \$\mathbb{A}'29'28 20° \$\mathbb{A}'10'58 25° \$\mathbb{A}'15'12 28° \$\mathbb{A}'29'02 0° \$\mathbb{C}'\$ 24° \$\mathbb{C}'56'47 0° \$\mathbb{A}' 10° \$\mathbb{A}'114 21° \$\mathbb{A}'114 21° \$\mathbb{A}'114 21° \$\mathbb{A}'58 28° \$\mathbb{A}'115 29° \$\mathbb{A}'6'47 0° \$\mathbb{H} 0° \$\mathbb{Y}' 19° \$\mathbb{Y}'49'01 27° \$\mathbb{Y}'00'17 24° \$\mathbb{Y}'31'26	0.55482 AU -5°50'15 5°49'10 20°15'37 1°14'01 1°14'26 1.36598 AU
desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct asc. node morning max el morning set superior conj minimum elong desc. node max. Earth dist. evening rise evening max el retrograde	12525 Nov 01 02:04 12525 Nov 17 10:36 12525 Nov 18 09:23 12525 Nov 27 14:32 12525 Dec 11 10:46 12525 Dec 17 07:01 12525 Dec 22 02:39 12525 Dec 24 21:55 12525 Dec 25 06:00 12526 Jan 02 07:18 12526 Jan 04 13:04 12526 Jan 12 07:50 12526 Jan 13 16:04 12526 Jan 24 23:16 12526 Jan 30 07:50 12526 Feb 07 15:51 12526 Feb 07 18:38 12526 Feb 09 09:19 12526 Feb 14 09:25 12526 Feb 14 09:25 12526 Feb 18 07:43 12526 Feb 18 07:43 12526 Feb 26 17:25 12526 Feb 27 13:47 12526 Mar 20 02:56 12526 Mar 20 02:56 12526 Mar 25 13:47 12526 Apr 06 04:10	0°ズ 0°式 1°云22'26 12°云22'46 19°云19'59 18°云02'33 15°云22'28 13°云30'18 13°云16'47 9°云17'27 9°云02'40 12°云15'17 13°云27'46 0°≈ 10°≈19'21 26°≈42'26 26°≈55'46 0°Ж 9° ¥13'39 9°¥28'48 16°¥08'27 0°℃ 0°℃ 5°♂58'28 12°♂45'02 11°♂32'54 10°♂24'59	0.57058 AU -5°07'56 5°05'19 19°05'38 0°51'58 0°52'08	desc. node evening max el retrograde evening set min. Earth dist. inferior conj minimum elong morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12526 Oct 16 06:09 12526 Nov 05 06:39 12526 Nov 09 01:10 12526 Nov 22 12:54 12526 Nov 27 03:43 12526 Dec 03 11:31 12526 Dec 05 08:17 12526 Dec 13 20:28 12526 Dec 16 14:06 12526 Dec 30 05:00 12526 Dec 31 09:53 12527 Jan 14 13:59 12527 Jan 22 04:53 12527 Jan 22 04:53 12527 Jan 22 07:35 12527 Jan 27 19:50 12527 Feb 01 06:03 12527 Feb 01 09:00 12527 Feb 01 09:00 12527 Feb 20 00:57 12527 Mar 08 03:09 12527 Mar 20 15:33	13° \$\mathbb{\chi}\$.55'58 0° \$\mathbb{\chi}\$ 18° \$\mathbb{\chi}\$30'32 22° \$\mathbb{\chi}\$35'01 29° \$\mathbb{\chi}\$18'33 28° \$\mathbb{\chi}\$29'34 24° \$\mathbb{\chi}\$23'15 24° \$\mathbb{\chi}\$18'58 20° \$\mathbb{\chi}\$29'28 20° \$\mathbb{\chi}\$10'58 25° \$\mathbb{\chi}\$15'12 28° \$\mathbb{\chi}\$29'02 0° \$\mathbb{\chi}\$ 24° \$\mathbb{\chi}\$56'47 0° \$\mathbb{\chi}\$ 210° \$\mathbb{\chi}\$3'37 10° \$\mathbb{\chi}\$47'14 21° \$\mathbb{\chi}\$34'58 28° \$\mathbb{\chi}\$37'15 29° \$\mathbb{\chi}\$46'47 0° \$\mathbb{\chi}\$ 0° \$\mathbb{\chi}\$ 19° \$\mathbb{\chi}\$49'01 27° \$\mathbb{\chi}\$00'17	0.55482 AU -5°50'15 5°49'10 20°15'37 1°14'01 1°14'26 1.36598 AU

inferior conj	12527 Apr 01 11:13	18° Y ′02'07	1°20'41	asc. node	12528 Mar 13 23:41	3° Ƴ 42′00	
minimum elong	12527 Apr 01 09:27	18° Ƴ 07'44	1°19'51	inferior conj	12528 Mar 15 09:55	2° Y 01'16	0°27'22
morning rise	12527 Apr 07 02:52	12° Ƴ 13'13		minimum elong	12528 Mar 15 09:11	2° Y 03′25	0°27'09
direct	12527 Apr 10 10:42	11° Y ′09'59		_	12528 Mar 17 04:23	30° ₹ ₩	
morning max el	12527 Apr 17 04:37	14° Ƴ 48'52	18°52'13	morning rise	12528 Mar 21 10:46	26°) 23'37	
morning man er	12527 Apr 28 17:15	0°8	10 02 13	direct	12528 Mar 24 08:22	25°) 37'17	
desc. node	12527 Apr 30 08:06	2° 8 26'38		morning max el	12528 Mar 30 18:09		18°13'17
	-	3° 8 25'16	0.0	morning max er		29 γ (0021 0° γ	10 13 17
greatest brilliancy	12527 Apr 30 23:31	_	-0.8m		12528 Mar 31 17:23		
morning set	12527 May 09 15:16	16° 8 47'41		desc. node	12528 Apr 16 04:44	22° Y '34'32	
	12527 May 18 02:55	Π °0		morning set	12528 Apr 19 00:09	27° Y 05′11	
max. Earth dist.	12527 May 24 04:28	9°Ⅱ28'01	1.45563 AU		12528 Apr 20 19:44	0° 8	
superior conj	12527 May 25 23:51	12° Ⅱ 17'59	-2°11'22	superior conj	12528 May 04 07:16	21° 8 21'16	-1°52'07
minimum elong	12527 May 25 20:19	12° Ⅲ 04′08	2°12'08	minimum elong	12528 May 03 22:19	20° 8 46'11	1°52'04
	12527 Jun 06 03:43	0 \circ \odot		max. Earth dist.	12528 May 05 23:54	24° 8 00'10	1.45759 AU
evening rise	12527 Jun 10 03:29	6°\$25'28			12528 May 09 20:10	Π $^{\circ}0$	
asc. node	12527 Jun 24 00:03	28°9518'56		evening rise	12528 May 20 08:23	16° Ⅱ 21'43	
	12527 Jun 25 04:22	$0^{\circ}\Omega$		8 2	12528 May 29 03:22	0°ಅ	
evening max el	12527 Jun 30 10:16	6° Ω 25'09	18°30'21	greatest brilliancy	12528 May 31 16:51	3°954'41	-0.7m
•	12527 Jul 06 21:32	9° Ω 54'37	10 30 21	asc. node	12528 Jun 09 21:06	16°950'16	-0.7111
retrograde							10000151
evening set	12527 Jul 10 01:03	8° Ω 58'54		evening max el	12528 Jun 12 19:47	20°508'37	19*09'51
inferior conj	12527 Jul 15 18:33	3° Ω 25′21	2°49'35	retrograde	12528 Jun 19 17:54	23°959'38	
minimum elong	12527 Jul 15 20:34	3° Ω 19'18	2°48'25	evening set	12528 Jun 23 06:16	22° © 47'52	
min. Earth dist.	12527 Jul 17 21:26	0° Ω 52'55	0.65098 AU	inferior conj	12528 Jun 28 17:04	16° © 59'47	3°08'46
	12527 Jul 18 15:52	30° ₹ ∽		minimum elong	12528 Jun 28 18:05	16° © 56'29	3°07'47
morning rise	12527 Jul 21 14:58	27° © 03'58		min. Earth dist.	12528 Jun 30 05:14	15° © 03'03	0.66718 AU
desc. node	12527 Jul 27 07:32	24°925'50		morning rise	12528 Jul 04 05:19	10°536'32	
direct	12527 Jul 28 03:09	24° © 23'27		direct	12528 Jul 10 09:17	7° 9 56'03	
	12527 Aug 08 04:10	0°Ω		desc. node	12528 Jul 13 04:50	8°524'39	
morning max el	12527 Aug 10 14:43	2°Ω19'36	27°10'16	morning max el	12528 Jul 23 01:35	15°930'47	26°04'07
morning max ci	-	0° m)	27 10 10	morning max ci		0°Ω	20 0407
	12527 Aug 31 08:20				12528 Aug 03 23:37		
morning set	12527 Sep 15 03:24	26° TQ 02'57			12528 Aug 23 04:33	0° m)	
	12527 Sep 17 03:43	0∘ ⊽		morning set	12528 Aug 28 01:28	8° Mp 45'35	
max. Earth dist.	12527 Sep 19 12:56	4° ≏ 48'13	1.33451 AU	max. Earth dist.	12528 Aug 31 20:31	15° m 55'55	1.35200 AU
asc. node	12527 Sep 20 01:11	5° ≏ 50'52		asc. node	12528 Sep 05 21:48	25° Mp 56'59	
superior conj	12527 Sep 23 12:53	13° ≏ 07'36	0°33'04	superior conj	12528 Sep 06 08:22	26° Mp 50′42	0°04'13
minimum elong	12527 Sep 23 11:18	12° ≏ 59'12	0°32'52	minimum elong	12528 Sep 06 08:08	26° Mp49′32	0°04'01
evening rise	12527 Sep 30 16:55	28° ≏ 26'41		behind sun begin	12528 Sep 06 02:15	26° Mp 19'36	
	12527 Oct 01 10:35	0° M ₊		behind sun end	12528 Sep 06 14:01	27° m 19'31	
	12527 Oct 19 01:40	0° ∡ ¹			12528 Sep 07 21:19	0∘ ⊽	
evening max el	12527 Oct 21 13:13	2° ∡ ³39′22	22°00'07	evening rise	12528 Sep 14 01:09	12° - 47'42	
desc. node	12527 Oct 23 04:01	4° х 08'45			12528 Sep 22 22:23	0° M	
retrograde	12527 Nov 03 04:01	8° ₹ ′55'18		evening max el	12528 Oct 02 11:49	13°ML11'21	20°31'35
evening set	12527 Nov 06 08:19	8°×33'14		desc. node	12528 Oct 02 11:49 12528 Oct 09 01:27	17° M 48'11	20 31 33
•		4° ₹ 36'35	E940155			18°M43'13	
inferior conj	12527 Nov 15 03:33			retrograde	12528 Oct 13 15:06		
minimum elong	12527 Nov 14 21:45	4° ∡ ¹44'43		evening set	12528 Oct 15 19:14	18°M31'33	
min. Earth dist.	12527 Nov 14 18:12	4° ∡ ¹49'43	0.54629 AU	inferior conj	12528 Oct 24 19:53	14°M36'08	
morning rise	12527 Nov 23 12:24	0° ∡ ¹49'23		minimum elong			4°30'02
direct				•	12528 Oct 24 09:49		
	12527 Nov 27 00:37	0° ∡ ¹22'11		min. Earth dist.	12528 Oct 24 09:49 12528 Oct 26 01:40	13°ML52'58	0.54693 AU
morning max el		0° ҂ 22'11 6° ҂ 10'12	21°47'21	•			
morning max el asc. node	12527 Nov 27 00:37		21°47'21	min. Earth dist.	12528 Oct 26 01:40	13°M52'58	
_	12527 Nov 27 00:37 12527 Dec 09 04:45	6° ∡ 10′12	21°47'21	min. Earth dist. morning rise	12528 Oct 26 01:40 12528 Nov 01 24:00	13°M52'58 10°M36'18	0.54693 AU
asc. node	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05	6°₺10'12 15°₺49'33 0°ठ	21°47'21	min. Earth dist. morning rise direct	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30	13°M52'58 10°M36'18 9°M54'42	0.54693 AU
_	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40	6° х 10′12 15° х 49′33	21°47'21	min. Earth dist. morning rise direct morning max el	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°×7	0.54693 AU
asc. node morning set	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56	6°ダ10'12 15°ダ49'33 0°る 9°る41'49		min. Earth dist. morning rise direct morning max el asc. node	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0° 🗷 4° 🗷 00'53	0.54693 AU
asc. node morning set superior conj	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35	6° ₹10'12 15° ₹49'33 0° ₹50'19 24° ₹50'19	1°28'48	min. Earth dist. morning rise direct morning max el	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°\$\textstyle{A}' \textstyle{A}'00'53 24°\$\textstyle{A}'28'23	0.54693 AU
asc. node morning set	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31	6° ₹10'12 15° ₹49'33 0° ₹ 9° ₹41'49 24° ₹50'19 25° ₹00'27	1°28'48	min. Earth dist. morning rise direct morning max el asc. node	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0° 🗷 4° 🗷 00'53	0.54693 AU
asc. node morning set superior conj minimum elong	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15	6° ₹10'12 15° ₹49'33 0° ₹5 9° ₹41'49 24° ₹50'19 25° ₹00'27 0° ≈	1°28'48 1°29'30	min. Earth dist. morning rise direct morning max el asc. node morning set	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ00'53 24°ズ28'23 0°舌	0.54693 AU 23°33'43
asc. node morning set superior conj minimum elong max. Earth dist.	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48	6° ₹10'12 15° ₹49'33 0° ₹ 9° ₹41'49 24° ₹50'19 25° ₹00'27 0° ≈ 3° ≈26'10	1°28'48	min. Earth dist. morning rise direct morning max el asc. node morning set	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12	13° M.52'58 10° M.36'18 9° M.54'42 16° M.23'55 0° ⊀ 4° ₹ 00'53 24° ₹ 28'23 0° ₹ 9° ₹ 23'26	0.54693 AU 23°33'43 1°36'47
asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 14 13:46	6° 🗷 10'12 15° 🗷 49'33 0° で 9° でも1'49 24° で50'19 25° で00'27 0° ※ 3° ※ 26'10 11° ※ 46'41	1°28'48 1°29'30	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42	13° IL 52'58 10° IL 36'18 9° IL 54'42 16° IL 23'55 0° ⊀' 4° ⊀ 00'53 24° ₹ 28'23 0° ₹ 9° ₹ 23'26 9° ₹ 28'03	0.54693 AU 23°33'43 1°36'47 1°37'41
asc. node morning set superior conj minimum elong max. Earth dist.	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 14 13:46 12528 Jan 19 02:47	6° 🗷 10'12 15° 🗷 49'33 0° 云 9° 云 41'49 24° 云 50'19 25° 云 00'27 0° ≈ 3° ≈ 26'10 11° ≈ 46'41 20° ≈ 11'28	1°28'48 1°29'30	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ'00'53 24°ズ'28'23 0°云 9°云23'26 9°云28'03 15°云21'24	0.54693 AU 23°33'43 1°36'47
asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 14 13:46	6° 🗷 10'12 15° 🗷 49'33 0° 云 9° 云 41'49 24° 云 50'19 25° 云 00'27 0° ≈ 3° ≈ 26'10 11° ≈ 46'41 20° ≈ 11'28 0° 米	1°28'48 1°29'30	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ'00'53 24°ズ'28'23 0°云 9°云23'26 9°云23'26 9°云28'03 15°云21'24 25°云27'27	0.54693 AU 23°33'43 1°36'47 1°37'41
asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 10 07:48 12528 Jan 19 02:47 12528 Jan 24 19:19 12528 Feb 15 06:43	6° 🗷 10'12 15° 🗷 49'33 0° 云 9° 云 41'49 24° 云 50'19 25° 云 00'27 0° ≈ 3° ≈ 26'10 11° ≈ 46'41 20° ≈ 11'28 0° 升 0° 升	1°28'48 1°29'30 1.34651 AU	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ'00'53 24°ズ'28'23 0°云 9°云23'26 9°云28'03 15°云21'24	0.54693 AU 23°33'43 1°36'47 1°37'41
asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 14 13:46 12528 Jan 19 02:47 12528 Jan 24 19:19	6° 🗷 10'12 15° 🗷 49'33 0° 云 9° 云 41'49 24° 云 50'19 25° 云 00'27 0° ≈ 3° ≈ 26'10 11° ≈ 46'41 20° ≈ 11'28 0° 米	1°28'48 1°29'30 1.34651 AU	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41 12528 Dec 28 01:22	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ'00'53 24°ズ'28'23 0°云 9°云23'26 9°云23'26 9°云28'03 15°云21'24 25°云27'27	0.54693 AU 23°33'43 1°36'47 1°37'41
asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 08 15:15 12528 Jan 10 07:48 12528 Jan 10 07:48 12528 Jan 19 02:47 12528 Jan 24 19:19 12528 Feb 15 06:43	6° 🗷 10'12 15° 🗷 49'33 0° 云 9° 云 41'49 24° 云 50'19 25° 云 00'27 0° ≈ 3° ≈ 26'10 11° ≈ 46'41 20° ≈ 11'28 0° 升 0° 升	1°28'48 1°29'30 1.34651 AU	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41 12528 Dec 28 01:22 12528 Dec 30 08:54	13° NL 52'58 10° NL 36'18 9° NL 54'42 16° NL 23'55 0° ズ 4° ズ 00'53 24° ズ 28'23 0° 云 9° 云 23'26 9° 云 28'03 15° 云 21'24 25° 云 27'27 0° ≫	0.54693 AU 23°33'43 1°36'47 1°37'41
asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 06 05:31 12528 Jan 10 07:48 12528 Jan 14 13:46 12528 Jan 14 13:46 12528 Jan 24 19:19 12528 Feb 15 06:43 12528 Feb 18 16:44	6° 🗷 10'12 15° 🗷 49'33 0° 古 9° 古 41'49 24° 古 50'19 25° 古 00'27 0° 総 3° ※ 26'10 11° ※ 46'41 20° ※ 11'28 0° 升 0° 介 3° 介 32'34	1°28'48 1°29'30 1.34651 AU	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41 12528 Dec 28 01:22 12528 Dec 30 08:54 12529 Jan 04 23:37	13° NL52'58 10° NL36'18 9° NL54'42 16° NL23'55 0° ズ 4° ズ 00'53 24° ズ 28'23 0° 云 9° 云 23'26 9° 云 28'03 15° 云 21'24 25° 云 27'27 0° ≈ 10° ≈ 22'48	0.54693 AU 23°33'43 1°36'47 1°37'41 1.33095 AU
asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el retrograde	12527 Nov 27 00:37 12527 Dec 09 04:45 12527 Dec 17 02:05 12527 Dec 25 05:40 12527 Dec 29 23:56 12528 Jan 06 03:35 12528 Jan 06 05:31 12528 Jan 06 05:31 12528 Jan 10 07:48 12528 Jan 14 13:46 12528 Jan 14 13:46 12528 Jan 19 02:47 12528 Jan 24 19:19 12528 Feb 15 06:43 12528 Feb 18 16:44 12528 Mar 02 21:31	6° \$\times 10'12 15° \$\times 49'33 0° \$\times 9° \$\times 41'49 24° \$\times 50'19 25° \$\times 00'27 0° \$\times 3° \$\times 26'10 11° \$\times 46'41 20° \$\times 11'28 0° \$\times 0° \$\times 0° \$\times 0° \$\times 10' \$\times 1	1°28'48 1°29'30 1.34651 AU	min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12528 Oct 26 01:40 12528 Nov 01 24:00 12528 Nov 06 09:30 12528 Nov 19 17:29 12528 Nov 30 12:08 12528 Dec 02 23:04 12528 Dec 13 11:39 12528 Dec 16 01:12 12528 Dec 20 08:51 12528 Dec 20 09:42 12528 Dec 23 03:41 12528 Dec 28 01:22 12528 Dec 30 08:54 12529 Jan 04 23:37 12529 Jan 17 05:59	13°M52'58 10°M36'18 9°M54'42 16°M23'55 0°ズ 4°ズ00'53 24°ズ28'23 0°云 9°云23'26 9°云28'03 15°云21'24 25°云27'27 0°≈ 10°≈22'48 0°米	0.54693 AU 23°33'43 1°36'47 1°37'41 1.33095 AU

	12520 E-k 20 16:00	210 W 5 5 127			12520 I 27 12:05	70W 17127	
evening set	12529 Feb 20 16:09	21° X 55'27	0.64204.411	retrograde	12530 Jan 27 13:05	7° ¥ 17'37	
min. Earth dist.	12529 Feb 24 12:20	18° ¥ 26'55	0.64394 AU	evening set	12530 Feb 03 11:51	4° ¥ 57′28	0.62420.444
inferior conj	12529 Feb 27 00:28	15°) √46'41		min. Earth dist.	12530 Feb 07 05:47	1° ¥ 56′20	0.62439 AU
minimum elong	12529 Feb 27 01:35	15°) 43'43	0°35'41		12530 Feb 09 06:59	30°R≈	
asc. node	12529 Feb 28 21:08	13° ¥ 50′50		inferior conj	12530 Feb 10 03:50	29°≈09'57	
morning rise	12529 Mar 05 12:57	10°) €22'39		minimum elong	12530 Feb 10 07:34	29°≈01'04	1°47'56
direct	12529 Mar 08 01:52	9°) 49'40		asc. node	12530 Feb 15 18:31	24° ≈ 41'30	
morning max el	12529 Mar 14 11:12	13°) €08'15	17°51'23	morning rise	12530 Feb 17 05:52	24°≈02'40	
	12529 Mar 26 07:39	0° Υ		direct	12530 Feb 19 12:03	23° ≈ 39'23	
morning set	12529 Mar 31 13:38	8° Y 46'35		morning max el	12530 Feb 26 04:43	27°≈03'45	17°47'05
desc. node	12529 Apr 03 01:19	12° Y ′56'33			12530 Feb 28 19:10	0° ∀	
	12529 Apr 13 10:43	0°8		morning set	12530 Mar 14 02:48	21° ¥ 35′19	
					12530 Mar 18 21:53	0° Υ	
superior conj	12529 Apr 14 01:38	0° 8 59'55		desc. node	12530 Mar 20 21:51	3° Y 27'41	
minimum elong	12529 Apr 13 17:40	0° 8 27'56	1°17'00				
max. Earth dist.	12529 Apr 18 19:32	8° 8 32'50	1.45216 AU	superior conj	12530 Mar 25 18:20	11° Y 42'26	
evening rise	12529 Apr 29 21:52	25° 8 46'36		minimum elong	12530 Mar 25 14:42	11° Ƴ 27'14	0°36'25
	12529 May 02 16:13	Π $^{\circ}0$		max. Earth dist.	12530 Apr 01 12:55	22° Y 49'37	1.43992 AU
greatest brilliancy	12529 May 14 23:04	18° Ⅲ 21'59	-0.6m		12530 Apr 06 01:10	9° 8	
	12529 May 23 12:19	0°©		evening rise	12530 Apr 09 10:59	5° 8 18'55	
evening max el	12529 May 27 00:08	3° © 55'24	20°05'03		12530 Apr 26 00:55	Π $^{\circ}0$	
asc. node	12529 May 27 18:15	4° © 39'32		evening max el	12530 May 09 22:37	17° Ⅱ 42′20	21°13'21
retrograde	12529 Jun 03 16:27	8° © 19'03		asc. node	12530 May 14 15:28	21° Ⅲ 32'37	
evening set	12529 Jun 07 14:21	6° © 50'41		retrograde	12530 May 18 15:08	22° Ⅱ 46'54	
inferior conj	12529 Jun 12 21:32	0° ട്ട 49'24	3°14'05	evening set	12530 May 22 23:18	21° II 02'11	
minimum elong	12529 Jun 12 21:29	0° 5 49'35	3°13'10	inferior conj	12530 May 28 05:29	14° Ⅱ 49'11	3°07'38
	12529 Jun 13 12:05	30°RⅡ		minimum elong	12530 May 28 04:28	14° Ⅱ 52'42	3°06'41
min. Earth dist.	12529 Jun 13 19:19	29° Ⅲ 35'31	0.67897 AU	min. Earth dist.	12530 May 28 13:38	14° Ⅲ 20'51	0.68604 AU
morning rise	12529 Jun 18 04:17	24° Ⅲ 28'19		morning rise	12530 Jun 02 09:26	8° Ⅲ 32'40	
direct	12529 Jun 23 21:09	21° Ⅲ 56'59		direct	12530 Jun 07 13:38	6° Ⅱ 17'05	
desc. node	12529 Jun 30 01:59	24° Ⅲ 15'15		desc. node	12530 Jun 16 23:02	11° Ⅱ 29'38	
morning max el	12529 Jul 05 11:38	28° Ⅲ 54'27	24°41'23	morning max el	12530 Jun 17 22:03	12° Ⅲ 26′08	23°11'54
C	12529 Jul 06 12:55	0°ಅ		· ·	12530 Jul 01 23:56	0°ಅ	
	12529 Jul 28 18:01	$0^{\circ}\Omega$			12530 Jul 21 14:19	$0^{\circ}\Omega$	
morning set	12529 Aug 10 06:15	20° Ω 39'56		morning set	12530 Jul 22 12:58	1° Ω 34'04	
max. Earth dist.	12529 Aug 13 20:13	27° Ω 04'27	1.37345 AU	max. Earth dist.	12530 Jul 26 18:07	8°Ω43'15	1.39669 AU
	12529 Aug 15 10:27	0° m)					
		* ***		superior conj	12530 Aug 03 11:27	22° Ω 30'52	-1°02'58
superior conj	12529 Aug 20 17:12	10° m) 01'42	-0°28'28	minimum elong	12530 Aug 03 15:59	22° Ω 51'47	
minimum elong	12529 Aug 20 19:06	10° m) 10'56			12530 Aug 07 11:26	0° m)	
asc. node	12529 Aug 23 18:27	16° m) 01'52		asc. node	12530 Aug 10 15:08	6° m) 01'39	
evening rise	12529 Aug 29 04:34	26° m 53'22		evening rise	12530 Aug 13 00:10	10° m/35'53	
evening rise	12529 Aug 30 18:01	0ಂ ರ 50 1 % 32 55		evening rise	12530 Aug 23 20:53	0∘ ⊽	
evening max el	12529 Sep 15 00:29	24° ₽ 29'36	19°22'59	evening max el	12530 Aug 29 01:22	∘ – 6° ჲ 34'17	18°36'08
retrograde	12529 Sep 24 11:26	29° ♀ 12'52	1, 220,	retrograde	12530 Sep 06 02:03	10° £ 36'40	10 30 00
desc. node	12529 Sep 25 22:54	29° ₽ 06'25		evening set	12530 Sep 08 01:18	10° £ 22'53	
evening set	12529 Sep 26 07:56	29° Ω 02'46		desc. node	12530 Sep	8° £ 10′24	
inferior conj	12529 Oct 04 23:33	24° £ 54'58	-2°48'40	inferior conj	12530 Sep 15 23:30	5° £ 55'32	-0°59'07
minimum elong	12529 Oct 04 16:14	25° ₽ 06'52		minimum elong	12530 Sep 15 21:07		0°58'10
min. Earth dist.	12529 Oct 07 12:09	23° ₽ 16'37		min. Earth dist.	12530 Sep 19 04:17	3° ₽ 30'24	0.57396 AU
morning rise	12529 Oct 12 22:12	20° Ω 24'44	0.55000110	morning rise	12530 Sep 23 13:30	0° ჲ 47'26	0.57570110
direct	12529 Oct 12 22:12 12529 Oct 18 03:50	19° £ 22'49		morning rise	12530 Sep 25 11:43	30°R, M0	
morning max el	12529 Nov 01 03:51	26° £ 25'51	25°19'50	direct	12530 Sep 29 12:04	29° m) 19'27	
morning max er			25 17 50	direct	12330 Sep 27 12.04	-	
asc. node	12529 Nov 04 13:57	Oom			12530 Oct 03 13:53	ഗംഹ	
asc. node	12529 Nov 04 13:57	0°M。 22°M 50'26		morning may el	12530 Oct 03 13:53	% ರ √0,50	26°47'18
	12529 Nov 19 19:57	22°M50'26		morning max el	12530 Oct 13 19:17	6° ≏ 49'29	26°47'18
morning set	12529 Nov 19 19:57 12529 Nov 23 13:10	22°M50′26 0° √			12530 Oct 13 19:17 12530 Oct 31 00:39	6° ₽ 49'29 0° I L	26°47'18
morning set	12529 Nov 19 19:57	22°M50'26		asc. node	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44	6° £ 49'29 0° M 12° M 08'19	26°47'18
-	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18	22°M50'26 0°⊀ 9°⊀11'27	1°38'27		12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14	6° Ω 49'29 0° M 12° M 08'19 23° M 46'27	26°47'18
superior conj	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12	22°M.50'26 0° ♂ 9° ♂11'27 24° ♂05'29	1°38'27 1°39'22	asc. node	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44	6° £ 49'29 0° M 12° M 08'19	26°47'18
superior conj minimum elong	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56	22° IL 50'26 0° ₹ 11'27 9° ₹ 11'27 24° ₹ 05'29 24° ₹ 04'01	1°39'22	asc. node morning set	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04	6° Ω 49'29 0° M 12° M 08'19 23° M 46'27 0° X	
superior conj	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56	22° M 50'26 0°		asc. node morning set superior conj	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36	6° Ω 49'29 0° M 12° M 08'19 23° M 46'27 0° ✓ 8° ✓ 50'33	1°34'10
superior conj minimum elong max. Earth dist.	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56 12529 Dec 07 10:50	22°M50'26 0° ₹ 9° ₹11'27 24° ₹05'29 24° ₹04'01 27° ₹27'37 0° ₹	1°39'22	asc. node morning set superior conj minimum elong	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36 12530 Nov 19 04:21	6° ₽49'29 0° M 12° M 08'19 23° M 46'27 0° ♂ 8° ♂ 50'33 8° ♂ 43'35	1°34'10 1°34'55
superior conj minimum elong max. Earth dist.	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56 12529 Dec 07 10:50 12529 Dec 11 22:21	22°M50'26 0° ₹ 9° ₹11'27 24° ₹05'29 24° ₹04'01 27° ₹27'37 0° ₹ 9° ₹31'11	1°39'22	asc. node morning set superior conj minimum elong max. Earth dist.	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36 12530 Nov 19 04:21 12530 Nov 19 14:42	6° Ω 49'29 0° M . 12° M .08'19 23° M .46'27 0° x ⁷ 8° x ⁷ 50'33 8° x ⁷ 43'35 9° x ⁷ 41'17	1°34'10
superior conj minimum elong max. Earth dist.	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56 12529 Dec 07 10:50 12529 Dec 11 22:21 12529 Dec 22 20:32	22°M50'26 0° ₹ 9° ₹11'27 24° ₹05'29 24° ₹04'01 27° ₹27'37 0° ₹31'11 0° ₹31'11	1°39'22	asc. node morning set superior conj minimum elong	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36 12530 Nov 19 04:21 12530 Nov 19 14:42 12530 Nov 26 02:03	6° \$\textit{\Omega}\$49'29 0° \$\textit{\mathbb{m}}\$ 12° \$\textit{\mathbb{m}}\$08'19 23° \$\textit{\mathbb{m}}\$46'27 0° \$\textit{\sigma}\$ 8° \$\textit{\sigma}\$50'33 8° \$\textit{\sigma}\$43'35 9° \$\textit{\sigma}\$41'17 23° \$\textit{\sigma}\$51'06	1°34'10 1°34'55
superior conj minimum elong max. Earth dist. evening rise desc. node	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56 12529 Dec 07 10:50 12529 Dec 11 22:21 12529 Dec 22 20:32 12529 Dec 22 17:13	22°M50'26 0° ₹ 9° ₹11'27 24° ₹05'29 24° ₹04'01 27° ₹27'37 0° ₹ 9° ₹31'11 0° ≈ 14'13 0° ≈	1°39'22 1.32001 AU	asc. node morning set superior conj minimum elong max. Earth dist. evening rise	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36 12530 Nov 19 04:21 12530 Nov 19 14:42 12530 Nov 26 02:03 12530 Nov 29 01:10	6° \$\textit{\Omega}\$49'29 0° \$\textit{\mathbb{n}}\$ 12° \$\textit{\mathbb{n}}\$08'19 23° \$\textit{\mathbb{n}}\$46'27 0° \$\textit{\sigma}\$ 8° \$\textit{\sigma}\$43'35 9° \$\textit{\sigma}\$41'17 23° \$\textit{\sigma}\$51'06 0° \$\textit{\sigma}\$	1°34'10 1°34'55
superior conj minimum elong max. Earth dist.	12529 Nov 19 19:57 12529 Nov 23 13:10 12529 Nov 27 23:18 12529 Dec 04 18:12 12529 Dec 04 17:56 12529 Dec 06 06:56 12529 Dec 07 10:50 12529 Dec 11 22:21 12529 Dec 22 20:32	22°M50'26 0° ₹ 9° ₹11'27 24° ₹05'29 24° ₹04'01 27° ₹27'37 0° ₹ 9° ₹31'11 0° ≈ 14'13 0° ≈	1°39'22	asc. node morning set superior conj minimum elong max. Earth dist.	12530 Oct 13 19:17 12530 Oct 31 00:39 12530 Nov 06 16:44 12530 Nov 12 09:14 12530 Nov 15 06:04 12530 Nov 19 05:36 12530 Nov 19 04:21 12530 Nov 19 14:42 12530 Nov 26 02:03	6° \$\textit{\Omega}\$49'29 0° \$\textit{\mathbb{m}}\$ 12° \$\textit{\mathbb{m}}\$08'19 23° \$\textit{\mathbb{m}}\$46'27 0° \$\textit{\sigma}\$ 8° \$\textit{\sigma}\$50'33 8° \$\textit{\sigma}\$43'35 9° \$\textit{\sigma}\$41'17 23° \$\textit{\sigma}\$51'06	1°34'10 1°34'55

evening max el retrograde	12530 Dec 26 22:10 12531 Jan 09 20:37	12°≈11'21 19°≈24'04	27°06'01	desc. node evening max el	12531 Nov 26 14:39 12531 Dec 08 20:02	8°る20'58 23°る33'37	26°06'12
evening set	12531 Jan 16 16:38	19 ≈24 04 17°≈22'08		evening max er	12531 Dec 08 20:02 12531 Dec 18 18:59	23 ⊙ 33 37	20 00 12
min. Earth dist.	12531 Jan 20 12:32	14°≈40'18	0.60308 AU	retrograde	12531 Dec 22 18:24	0°≈37'34	
inferior conj	12531 Jan 23 16:33	12°≈02'02		renograde	12531 Dec 26 17:02	30°R₹	
minimum elong	12531 Jan 23 23:14	11°≈48'05	3°06'54	evening set	12531 Dec 29 02:20	29° පි 02'12	
morning rise	12531 Jan 31 08:47	7°≈14'44	3 000.	min. Earth dist.	12532 Jan 02 09:06		0.58179 AU
direct	12531 Feb 02 10:54	6°≈57'38		inferior conj	12532 Jan 05 11:02	24° ප 12'31	
asc. node	12531 Feb 02 15:49	6°≈57'48		minimum elong	12532 Jan 05 19:34	23° ප් 57'01	4°25'36
morning max el	12531 Feb 09 19:20	10° ≈ 37'48	18°01'21	morning rise	12532 Jan 13 15:36	19° ට 47'14	
Č	12531 Feb 22 13:30	0°) €		direct	12532 Jan 15 17:59	19° ට 32'48	
morning set	12531 Feb 25 09:23	5° 升 12'17		asc. node	12532 Jan 20 13:04	20° ප 53'00	
C				morning max el	12532 Jan 24 03:13	23° る 39'00	18°35'52
superior conj	12531 Mar 07 11:21	23°) 33′08	0°02'20	•	12532 Jan 29 06:28	0° ≈	
minimum elong	12531 Mar 07 11:33	23°) (34′04	0°02'30	morning set	12532 Feb 09 04:05	19° ≈ 21'27	
behind sun begin	12531 Mar 07 03:44	22°) 59'30			12532 Feb 14 16:25	0°) €	
behind sun end	12531 Mar 07 19:23	24°) €08'33					
desc. node	12531 Mar 07 18:28	24°) €04'30		superior conj	12532 Feb 18 01:08	6° ¥ 21′02	0°35'53
	12531 Mar 11 04:19	0° Υ		minimum elong	12532 Feb 18 03:26	6°) 31'45	0°35'58
max. Earth dist.	12531 Mar 15 01:42	6° Ƴ 34'08	1.42216 AU	desc. node	12532 Feb 22 15:00	14°) 42′32	
evening rise	12531 Mar 20 13:44	15° Ƴ 31'46		max. Earth dist.	12532 Feb 25 09:42	19° ∺ 36′27	1.40084 AU
	12531 Mar 29 22:20	9° 8		evening rise	12532 Feb 29 13:01	26°) 39′48	
	12531 Apr 21 05:34	Π $^{\circ}0$			12532 Mar 02 13:23	0 ° Υ	
evening max el	12531 Apr 22 16:04	1° Ⅱ 29'45	22°30'40		12532 Mar 22 13:33	$0^{\circ}S$	
asc. node	12531 May 01 12:43	7° Ⅱ 13'42		evening max el	12532 Apr 04 06:33	15° 8 19'52	23°51'31
retrograde	12531 May 02 12:16	7° Ⅱ 18′13		retrograde	12532 Apr 15 06:34	21° 8 48'13	
evening set	12531 May 07 07:27	5° Ⅱ 18'13		asc. node	12532 Apr 17 10:02	21° 8 27'10	
	12531 May 11 20:24	30° ₹ 8		evening set	12532 Apr 20 13:16	19° 8 34'52	
inferior conj	12531 May 12 14:52	28° 8 55'48	2°50'38	inferior conj	12532 Apr 25 23:50	13° 8 06'16	2°23'38
minimum elong	12531 May 12 13:08	29° 8 01'51	2°49'34	minimum elong	12532 Apr 25 21:42	13° 8 13'31	2°22'31
min. Earth dist.	12531 May 12 10:07	29° 8 12'20	0.68839 AU	min. Earth dist.	12532 Apr 25 06:41	14° 8 04'46	0.68616 AU
morning rise	12531 May 17 18:42	22° 8 45'13		morning rise	12532 May 01 06:10	7° 8 02'52	
direct	12531 May 22 09:45	20° 8 49'18		direct	12532 May 05 08:28	5° 8 27'58	
morning max el	12531 May 31 11:33	_	21°44'32	morning max el	12532 May 13 07:09	9° 8 58'05	20°26'25
desc. node	12531 Jun 03 20:00	29° 8 45'35		desc. node	12532 May 20 16:52	18° 8 46'48	
	12531 Jun 04 00:55	Π $^{\circ}$ 0			12532 May 28 16:18	Π °0	
	12531 Jun 25 11:40	0 \circ		morning set	12532 Jun 11 01:18	20° Ⅱ 09'30	
morning set	12531 Jul 02 18:10	11° © 20'03			12532 Jun 17 08:12	0° ©	
max. Earth dist.	12531 Jul 08 19:42		1.41904 AU	max. Earth dist.	12532 Jun 20 03:48	4°529'28	1.43790 AU
	12531 Jul 14 01:23	0 $^{\circ}$ Ω			10520 I 06 10 40	1.406.4414.4	2001122
	10501 7 1 16 10 05	40.00=100	1005140	superior conj	12532 Jun 26 10:49	14°9544'44	
superior conj	12531 Jul 16 10:35	4° Ω 07'28		minimum elong	12532 Jun 26 17:03	15°©10'31	2°02'03
minimum elong	12531 Jul 16 17:17	4° Ω 36'40	1°35'49		12532 Jul 05 10:56	0° N	
evening rise	12531 Jul 27 08:09	23° Ω 44'48		evening rise	12532 Jul 08 23:53	6° Ω 09'11	
asc. node	12531 Jul 28 11:51	25° Ω 51'52		asc. node	12532 Jul 14 08:38	15° Ω 28'25	
avanina may al	12531 Jul 30 18:17 12531 Aug 12 10:29	0°Mp 19°Mp 16′21	18°10'06	arranina marral	12532 Jul 23 19:15 12532 Jul 25 23:54	0° Mp 2° Mp 26'37	18°03'34
evening max el retrograde	12531 Aug 12 10.29 12531 Aug 19 11:16	22° m 51'03	18 10 00	evening max el retrograde	12532 Jul 23 23:34 12532 Aug 01 11:35	2 11/2037 5° Mp48'00	18 03 34
evening set	12531 Aug 19 11:10 12531 Aug 21 17:31	22° m) 29'22		evening set	12532 Aug 01 11:33 12532 Aug 04 02:00	5° M) 14'55	
inferior conj	12531 Aug 28 21:03	17° m) 41'33	0°34'00	inferior conj	12532 Aug 10 13:22	0° m ₀ 07'57	1°43'43
minimum elong	12531 Aug 28 22:09	17° m) 39'06	0°33'18	minimum elong	12532 Aug 10 15:52 12532 Aug 10 15:52	0° Mp 01'37	1°42'24
desc. node	12531 Aug 30 17:50	16° m) 01'36	0 33 10	minimum ciong	12532 Aug 10 15:32 12532 Aug 10 16:30	30°R Ω	1 72 27
min. Earth dist.	12531 Nag 50 17:50 12531 Sep 01 04:15	14° M) 46'59	0.59553 AU	min. Earth dist.	12532 Aug 13 13:12	27° Ω 06'25	0.61841 AU
morning rise	12531 Sep 04 03:28	12° Mp 00'10	0.57555 110	desc. node	12532 Aug 16 15:16	24° Ω 25'22	0.01011110
direct	12531 Sep 04 25.28 12531 Sep 11 10:01	12 mg 00 10 10° mg 03'55		morning rise	12532 Aug 10 13:10 12532 Aug 17 03:16	$24^{\circ}\Omega 03'40$	
morning max el	12531 Sep 25 18:12	17° m 53'50	27°42'00	direct	12532 Aug 23 19:28	21° Ω 43'09	
0	12531 Oct 05 21:07	0ಂ ರ		morning max el	12532 Nag 25 15:26 12532 Sep 06 23:33	29° Ω 43'50	27°58'03
	12531 Oct 23 16:13	o° m .			12532 Sep 07 06:01	0° m)	
asc. node	12531 Oct 24 13:27	1°ML46'03			12532 Sep	0∘ ⊽	
morning set	12531 Oct 27 15:35	8°ML07'35		asc. node	12532 Oct 10 10:09	21° ♀ 37'50	
max. Earth dist.	12531 Nov 02 23:20	21°ML53'03	1.31298 AU	morning set	12532 Oct 10 16:25	22° £ 09'56	
			-	5	12532 Oct 14 09:53	0° M	
superior conj	12531 Nov 03 17:07	23°MJ32'04	1°24'10	max. Earth dist.	12532 Oct 16 05:05	3°M53'38	1.31720 AU
minimum elong	12531 Nov 03 15:10	23°M21'11	1°24'38				
<u> </u>	12531 Nov 06 14:46	0° ∡ 7		superior conj	12532 Oct 18 02:57	8°ML05'01	1°08'35
evening rise	12531 Nov 10 10:11	8° ∡ ¹20′23		minimum elong	12532 Oct 18 00:41	7°M52'35	1°08'44
	12531 Nov 21 11:42	ರ°0		evening rise	12532 Oct 24 20:48	22°M54'14	

	12532 Oct 28 05:33	0° ∡ ¹		evening rise	12533 Oct 09 08:03	7° M 27'12	
desc. node	12532 Oct 28 03.33 12532 Nov 12 11:52	26° х ¹09'29		evening rise	12533 Oct 09 08:03 12533 Oct 21 00:58	0° x ¹	
desc. node	12532 Nov 12 11:32 12532 Nov 15 13:15	20 × 09 29		desc. node	12533 Oct 21 00:38 12533 Oct 30 09:10	12° × ⁷ 42'29	
evening max el	12532 Nov 19 09:58		24°38'36	evening max el	12533 Oct 30 09:10 12533 Oct 31 20:13	14° x 11'50	22°57'29
retrograde	12532 Nov 17 07:38 12532 Dec 03 04:07	10°る59'36	24 36 30	retrograde	12533 Nov 14 00:40	20° ×7'44'59	22 312)
evening set	12532 Dec 03 04:07 12532 Dec 08 12:48	9°る55'53		evening set	12533 Nov 14 00:40 12533 Nov 18 00:43	20° 🖍 44 39 20° 🖈 10'11	
min. Earth dist.	12532 Dec 08 12:48 12532 Dec 13 21:41	. •	0.56318 AU	min. Earth dist.	12533 Nov 18 00.43 12533 Nov 25 05:13	16° x 52'38	0.55017 AU
inferior conj	12532 Dec 15 21:41 12532 Dec 16 09:01	5°る34'30		inferior conj	12533 Nov 26 11:57	16° ₹ 08'38	
minimum elong	12532 Dec 16 05:01 12532 Dec 16 15:36	5°る24'03		minimum elong	12533 Nov 26 11:37 12533 Nov 26 11:10	16° ₹ 08 38	
•	12532 Dec 10 13:30 12532 Dec 24 20:31	1°る30'16	3 20 30	•	12533 Nov 20 11:10 12533 Dec 04 23:09	10 × 09 43 12°× 19'27	3 32 42
morning rise direct	12532 Dec 24 20.31 12532 Dec 27 06:07	1°る3010		morning rise direct	12533 Dec 04 23.09 12533 Dec 08 00:19	12 x 1927 11° x 57'44	
		5° そ 55'58	19°32'28		12533 Dec 08 00.19 12533 Dec 19 07:31		20°52'08
morning max el	12533 Jan 06 00:18 12533 Jan 06 10:16	5 3 3338	19 32 28	morning max el		23° x 04'42	20 32 08
asc. node				asc. node	12533 Dec 24 07:25	23 x・04 42 0°る	
	12533 Jan 21 08:37	0°≈ 3°≈ ≈ 5 1100			12533 Dec 28 21:41	0° ろ 33'11	
morning set	12533 Jan 23 06:57	3° ≈ 51′09		morning set	12534 Jan 07 15:04	0°≈	
aumorior coni	12522 Ion 21 06:55	19° ≈ 52'26	1°02'13		12534 Jan 13 02:49	0°≈	
superior conj minimum elong	12533 Jan 31 06:55	19 ≈32 20 20°≈06'28	1°02'29		12524 I 15 00.21	290 055152	1°21'08
minimum eiong	12533 Jan 31 09:47	20° € 06′28	1-02-29	superior conj	12534 Jan 15 00:31		
E 41 E 4	12533 Feb 05 13:59	1°₩59'20	1 27046 ATT	minimum elong	12534 Jan 15 02:57	4°≈08'22	
max. Earth dist.	12533 Feb 06 15:48		1.37846 AU	max. Earth dist.	12534 Jan 20 00:51		1.35736 AU
desc. node	12533 Feb 08 11:37	5°) 18'35		evening rise	12534 Jan 23 23:34	21°≈29'31	
evening rise	12533 Feb 10 09:13	8°) 41′39		desc. node	12534 Jan 26 08:18	25°≈48'58	
	12533 Feb 23 09:09	0°Υ			12534 Jan 28 16:55	0°) €	
evening max el	12533 Mar 17 20:07	29° Y 11'59	25°09'15		12534 Feb 17 05:53	0°Υ	
	12533 Mar 18 16:01	0° 8		evening max el	12534 Feb 28 09:52	13° Y ′01'47	26°16'32
retrograde	12533 Mar 29 20:42	6° 8 10'34		retrograde	12534 Mar 13 05:45	20° Y 18'57	
asc. node	12533 Apr 04 07:25	4° 8 02'32		evening set	12534 Mar 19 11:26	17° Y ′48′03	
evening set	12533 Apr 04 15:09	3° 8 46'34		asc. node	12534 Mar 22 04:50	15° Y ′08′17	
	12533 Apr 08 03:46	30° Ŗ ♈		min. Earth dist.	12534 Mar 23 15:06	13° Y ′28′31	0.66876 AU
min. Earth dist.	12533 Apr 09 01:05	28° Y ′52'04	0.67954 AU	inferior conj	12534 Mar 25 08:42	11° Υ 21'01	0°59'24
inferior conj	12533 Apr 10 06:27	27° Y 16′07	1°46'38	minimum elong	12534 Mar 25 07:16	11° Υ 25'24	0°58'47
minimum elong	12533 Apr 10 04:23	27° Y °22'53	1°45'38	morning rise	12534 Mar 31 03:56	5° Y 36'33	
morning rise	12533 Apr 15 17:55	21° Y ′21'17		direct	12534 Apr 03 07:22	4° Υ 40'42	
direct	12533 Apr 19 08:15	20° Y ′06'55		morning max el	12534 Apr 09 20:40		18°33'34
morning max el	12533 Apr 26 10:20	24° Y ′00'40	19°22'01	desc. node	12534 Apr 24 10:19	28° Y 18′08	
	12533 May 01 13:58	0°8			12534 Apr 25 12:25	0°8	
desc. node	12533 May 07 13:37	8° 8 20'33		morning set	12534 Apr 30 19:51	8° 8 20'09	
greatest brilliancy	12533 May 09 04:18	10° 8 42'41	-0.7m		12534 May 14 15:43	Π °0	
morning set	12533 May 21 02:26	28° 8 48'30					
	12533 May 21 21:00	Π \circ 0		superior conj	12534 May 16 20:53	3° Ⅱ 27'38	
max. Earth dist.	12533 Jun 02 18:22	18° Ⅲ 30′31	1.45120 AU	minimum elong	12534 May 16 14:21	3° Ⅱ 02'08	2°06'00
				max. Earth dist.	12534 May 16 13:26	2° Ⅱ 58'30	1.45749 AU
superior conj	12533 Jun 06 11:40	24° Ⅱ 23'50		evening rise	12534 Jun 01 12:31	28° Ⅲ 05′01	
minimum elong	12533 Jun 06 12:38	24° Ⅲ 27'43	2°14'12		12534 Jun 02 17:30	0	
	12533 Jun 09 23:45	0		greatest brilliancy	12534 Jun 09 19:40	11° © 13'15	-0.8m
evening rise	12533 Jun 20 18:20	17° © 37'12		asc. node	12534 Jun 18 02:30	23° © 35'40	
	12533 Jun 28 06:06	$0^{\circ}\Omega$		evening max el	12534 Jun 23 01:54		18°45'04
asc. node	12533 Jul 01 05:31	4° Ω 45'16			12534 Jun 23 12:12	0 $^{\circ}\Omega$	
evening max el	12533 Jul 09 14:01	15° Ω 55'11	18°15'28	retrograde	12534 Jun 29 16:37	3° Ω 11'46	
retrograde	12533 Jul 15 22:39	19° Ω 17'30		evening set	12534 Jul 02 23:56	2° Ω 09'08	
evening set	12533 Jul 18 21:25	18° Ω 30′25			12534 Jul 05 13:33	30° ₹ 5	
inferior conj	12533 Jul 24 20:21	13° Ω 06′02	2°31'05	inferior conj	12534 Jul 08 14:10	26° © 29'02	2°59'34
minimum elong	12533 Jul 24 22:46	12° Ω 59'07	2°29'48	minimum elong	12534 Jul 08 15:47	26° © 24'00	2°58'28
min. Earth dist.	12533 Jul 27 07:29	10° Ω 18′25	0.64001 AU	min. Earth dist.	12534 Jul 10 10:41	24° © 10'55	0.65846 AU
morning rise	12533 Jul 30 22:37	6° Ω 48'49		morning rise	12534 Jul 14 06:49	20° © 06'23	
desc. node	12533 Aug 03 12:41	4° Ω 44'53		direct	12534 Jul 20 15:55	17° 5 24'59	
direct	12533 Aug 06 13:55	4° Ω 12'44		desc. node	12534 Jul 21 10:01	17° 5 27'01	
morning max el	12533 Aug 20 08:55	12° Ω 13′20	27°36'55	morning max el	12534 Aug 02 19:58	25° © 13'03	26°44'46
	12533 Sep 03 13:11	0° m)			12534 Aug 07 04:29	0 $^{\circ}\Omega$	
	12533 Sep 21 09:58	0∘ 亚			12534 Aug 28 01:03	0° m	
morning set	12533 Sep 24 09:19	5° ≙ 47'01		morning set	12534 Sep 07 15:18	18° m 51'46	
asc. node	12533 Sep 27 06:49	11° മ 38'13		max. Earth dist.	12534 Sep 11 18:07	26° m 53'19	1.34141 AU
max. Earth dist.	12533 Sep 29 04:15	15° ≏ 34'23	1.32669 AU		12534 Sep 13 07:12	0∘ ত	
				asc. node	12534 Sep 14 03:27	1° ≏ 43'10	
superior conj	12533 Oct 02 09:05	22° ≏ 23'18	0°47'33				
minimum elong	12533 Oct 02 07:03	22° ≏ 12'24	0°47'26	superior conj	12534 Sep 16 09:13	6° ≏ 20'52	0°21'22
	12533 Oct 05 21:18	0° M,		minimum elong	12534 Sep 16 08:06	6° ≙ 15′05	0°21'09

evening rise	12534 Sep 23 18:00	21° ≏ 54'08		max. Earth dist.	12535 Aug 24 22:07	7° m 59'33	1.36073 AU
. ,	12534 Sep 27 16:32	0°M	21020110		10505 4 21 00 25	100 m 7111 6	0000110
evening max el	12534 Oct 13 11:44	24°M23'03	21°20'18	superior conj	12535 Aug 31 00:35	19° Mp 51'16	
desc. node	12534 Oct 17 06:34	27°M33'12		minimum elong	12535 Aug 31 01:10	19° m 54'11	0°09'27
	12534 Oct 22 12:36	0° ₹		behind sun begin	12535 Aug 30 20:02	19° m 28'30	
retrograde	12534 Oct 25 12:31	0° ₹ 21'56		behind sun end	12535 Aug 31 06:18	20° m 19'54	
evening set	12534 Oct 28 04:49	0° ∡ 05'19		asc. node	12535 Sep 01 00:06	21° m 49'14	
	12534 Oct 28 14:37	30°RM	5010145		12535 Sep 05 00:27	0° ⊽	
inferior conj	12534 Nov 06 04:02	26°M10'58		evening rise	12535 Sep 08 00:32	6° Ω 09'43	
minimum elong	12534 Nov 05 19:29	26°M22'59			12535 Sep 21 07:10	0°M	
min. Earth dist.	12534 Nov 06 11:25	26°M00'36	0.54534 AU	evening max el	12535 Sep 25 16:09	5°M13'13	19°59'43
morning rise	12534 Nov 14 10:54	22°M21'29		desc. node	12535 Oct 04 04:00	10°M14'23	
direct	12534 Nov 18 08:16	21°M48'55		retrograde	12535 Oct 06 02:29	10° ™ 24'47	
morning max el	12534 Dec 01 01:26	27° M 54'27	22°31'41	evening set	12535 Oct 08 01:19	10° ™ 14'42	
	12534 Dec 03 03:05	0° √		inferior conj	12535 Oct 16 23:38	6°M15'04	
asc. node	12534 Dec 11 04:28	10° ∡ ′48′11		minimum elong	12535 Oct 16 14:06	6°M29′29	3°48'01
	12534 Dec 21 11:58	0°る		min. Earth dist.	12535 Oct 18 19:58	5°M08'01	0.54999 AU
morning set	12534 Dec 23 02:02	3° る 19'40		morning rise	12535 Oct 25 01:38	2°M03'50	
		_		direct	12535 Oct 29 19:38	1°M14'36	
superior conj	12534 Dec 30 02:20	18° る 20'27		morning max el	12535 Nov 12 12:17	7° ™ 59'27	24°20'08
minimum elong	12534 Dec 30 03:50	18° る 28'24		asc. node	12535 Nov 28 01:25	29°M16'49	
max. Earth dist.	12535 Jan 02 16:20	25° る 51'11	1.33934 AU		12535 Nov 28 11:08	0° ∡	
	12535 Jan 04 17:12	0° ≈		morning set	12535 Dec 07 13:54	18° ₹ 05'09	
evening rise	12535 Jan 07 04:21	4°≈52'59			12535 Dec 13 01:06	0°る	
desc. node	12535 Jan 13 05:04	16° ≈ 08'33					
	12535 Jan 21 11:04	0°) €		superior conj	12535 Dec 14 09:37	2° る 58'03	1°38'14
evening max el	12535 Feb 10 23:23	26°) 39'32	27°06'10	minimum elong	12535 Dec 14 10:00	3° ⋜ 00'06	1°39'10
	12535 Feb 14 19:25	$0^{\circ}\mathbf{\Upsilon}$		max. Earth dist.	12535 Dec 16 15:22	7° る 49'43	1.32563 AU
retrograde	12535 Feb 24 08:54	4° Y 04'55		evening rise	12535 Dec 21 20:15	18° る 43'53	
evening set	12535 Mar 03 00:07	1° Ƴ 32'18			12535 Dec 27 15:26	0° ≈	
	12535 Mar 04 18:47	30°Ŗ ℋ		desc. node	12535 Dec 31 01:55	6° ≈ 11'57	
min. Earth dist.	12535 Mar 06 22:33	27°) (46′14	0.65406 AU		12536 Jan 15 17:09	0° ∀	
inferior conj	12535 Mar 09 04:15	25°) 14′56	0°01'37	evening max el	12536 Jan 24 11:31	9° ∺ 54'24	27°31'05
minimum elong	12535 Mar 09 04:12	25° ∺ 15′05	0°01'46	retrograde	12536 Feb 07 05:31	17° ∺ 19'22	
transit middle	12535 Mar 09 04:12	25° ∺ 15′05	0°01'46	evening set	12536 Feb 14 02:51	14° ¥ 52'10	
transit begin	12535 Mar 09 01:13	25° ∺ 23'32		min. Earth dist.	12536 Feb 17 21:34		0.63594 AU
transit end	12535 Mar 09 07:11	25° ∺ 06'39		inferior conj	12536 Feb 20 14:24	8° ¥ 51′24	
asc. node	12535 Mar 09 02:16	25° ∺ 20'34		minimum elong	12536 Feb 20 16:32	8° ¥ 45'57	1°05'16
morning rise	12535 Mar 15 09:48	19°) 42′56		asc. node	12536 Feb 23 23:40	5°) 39'34	
direct	12535 Mar 18 03:34	19° ∺ 02'41		morning rise	12536 Feb 27 08:30	3°) 34′26	
morning max el	12535 Mar 24 12:06	22° ∺ 22'07	18°01'51	direct	12536 Feb 29 18:12	3° ∺ 06′09	
	12535 Mar 30 14:39	$0^{\circ}\mathbf{Y}$		morning max el	12536 Mar 07 05:46	6° ∺ 25'57	17°47'21
desc. node	12535 Apr 11 06:55	18° Ƴ 32'27			12536 Mar 22 21:17	0° Υ	
morning set	12535 Apr 11 17:07	19° Y 14'12		morning set	12536 Mar 23 17:23	1° Y 26′06	
	12535 Apr 18 08:05	9° 8		desc. node	12536 Mar 28 03:28	8° Y 58'38	
	10505 1 06 06 55	1001 110100	1020140		10506 1 05 10 00	2200044125	1000122
superior conj	12535 Apr 26 06:55	12° 8 40'28		superior conj	12536 Apr 05 10:00	22° Y '44'35 22° Y '19'05	
minimum elong	12535 Apr 25 21:39	12° 8 03'58		minimum elong	12536 Apr 05 03:45		0-3937
max. Earth dist.	12535 Apr 29 09:36	0°Ⅱ	1.45622 AU	Danth diet	12536 Apr 09 21:57	0°8	1.44771 AU
	12535 May 07 09:18	0° П 7° П 43'47		max. Earth dist.	12536 Apr 11 04:05	1° 8 59'59	1.44//1 AU
evening rise	12535 May 12 09:21		0.7	evening rise	12536 Apr 20 20:34	17° 8 06'11 0°Ⅱ	
greatest brilliancy	12535 May 25 15:30	27° Ⅲ 54'41 0° ©	-0.7m	avanina may al	12536 Apr 29 09:04	0°П 27°П06'08	20022142
1-	12535 May 27 01:35			evening max el	12536 May 19 10:58	27 H0008 29°H17'20	20 32 43
asc. node	12535 Jun 04 23:35	11°950'24	10021120	asc. node	12536 May 21 20:43	29° ш 1720 0° ©	
evening max el	12535 Jun 06 09:17	13° © 19'49 17° © 23'44	19°31'28		12536 May 22 19:28	1°5547'00	
retrograde	12535 Jun 13 14:20			retrograde	12536 May 27 13:14		
evening set	12535 Jun 17 06:39	16°504'51	2012125	evening set	12536 May 31 15:17	0°©11'45	
inferior conj	12535 Jun 22 15:32 12535 Jun 22 16:06	10°©10'41 10°©08'50	3°12'35 3°11'38	inforior cor:	12536 May 31 21:08 12536 Jun 05 21:45	30°ŖⅡ 24°Ⅱ05'09	3°12'44
minimum elong				inferior conj		24°П05'09 24°П06'48	3°12'44 3°11'47
min. Earth dist.	12535 Jun 23 21:25 12535 Jun 28 01:06	8°531'49 3°547'51	0.07273 AU	minimum elong min. Earth dist.	12536 Jun 05 21:16	24°Щ06'48 23°Щ10'22	0.68252 AU
morning rise direct	12535 Jul 28 01:06 12535 Jul 04 00:28	1°9510'35			12536 Jun 06 13:40 12536 Jun 11 02:57	23°Щ10′22 17°Щ45′30	0.00232 AU
direct desc. node	12535 Jul 04 00:28 12535 Jul 08 07:15	2°916'46		morning rise direct	12536 Jun 11 02:37 12536 Jun 16 14:28	17°Щ43'30 15°Щ20'10	
			25°30'24	desc. node		13° Щ 2010 18° Щ 45'46	
morning max el	12535 Jul 16 06:45 12535 Aug 02 03:09	8°931′28 0°Ω	25°30'24	morning max el	12536 Jun 24 04:22 12536 Jun 27 16:44	18°Щ45'46 21°Щ58'50	24°03'30
	12535 Aug 02 03:09 12535 Aug 20 13:51	0° m		morning max er	12536 Jul 27 16:44 12536 Jul 04 16:16	21°Щ3830	2 4 03 30
morning set	12535 Aug 20 15.51 12535 Aug 21 06:37	1°Mp15'35			12536 Jul 04 16.16 12536 Jul 25 09:50	0°Ω	
morning set	12000 Hug 21 00.3/	נכנועויי			12000 Jul 20 07.00	V 06	

. ,	12526 4 02 02 24	120 0 45146			12527 1 1 10 01 00	00.0	
morning set	12536 Aug 02 02:34	12° Ω 45'46	1 20222 411	p d r	12537 Jul 18 01:09	0°N	1 40654 433
max. Earth dist.	12536 Aug 05 19:48	19° Ω 15'45	1.38323 AU	max. Earth dist.	12537 Jul 18 18:21	1° Ω 12'38	1.40654 AU
	12536 Aug 11 16:42	0° mp			10527 I-1 26 14:21	1.40 (0.52)20	1917/22
	12526 A 12 02.40	20 m. 4511 4	0942104	superior conj	12537 Jul 26 14:21 12537 Jul 26 19:57	14° Ω 53'39 15° Ω 18'54	
superior conj	12536 Aug 13 03:40 12536 Aug 13 06:39	2° mp 45'14 2° mp 59'28		minimum elong		0°m)	1 1/10
minimum elong	Č	-•	0-43 02	aca mada	12537 Aug 03 18:25	-	
asc. node	12536 Aug 17 20:43	11° m 52'07 20° m 06'09		asc. node	12537 Aug 04 17:24	1° Mp 48'21 3° Mp 35'29	
evening rise	12536 Aug 22 00:59	0° ʊ		evening rise	12537 Aug 05 16:07		18°22'36
	12536 Aug 27 04:05		19°00'27	evening max el	12537 Aug 21 15:26	29° m 14'05 0° Ω	18 22 30
evening max el	12536 Sep 07 10:27 12536 Sep 16 05:50	16° £ 51'54 21° £ 16'14	19-00/27	ratra arada	12537 Aug 22 10:53	ე° <u>ა⊾</u> 3° ჲ 02'24	
retrograde				retrograde	12537 Aug 29 04:19		
evening set	12536 Sep 18 02:31	21° Ω 05'13		evening set	12537 Aug 31 06:28	2° 2 45'38	
desc. node	12536 Sep 20 01:27	20° £ 31'30	2001107		12537 Sep 05 12:05	30°R, Mp	
inferior conj	12536 Sep 26 11:20	16° Ω 49'56		desc. node	12537 Sep 06 22:55	28° M 53'14	0017152
minimum elong	12536 Sep 26 06:08	16° £ 58'57	1°58'55	inferior conj	12537 Sep 07 20:35	28° Mp 09'37	
min. Earth dist.	12536 Sep 29 08:54	14° Ω 49'43	0.56335 AU	minimum elong	12537 Sep 07 19:57	28° m 10'55	0°16'45
morning rise	12536 Oct 04 06:40	12° Ω 03'23		min. Earth dist.	12537 Sep 11 04:00	25° m/29'24	0.58290 AU
direct	12536 Oct 09 20:03	10° £ 50'38		morning rise	12537 Sep 15 05:57	22° m/46'36	
morning max el	12536 Oct 24 00:10	18° Ω 06'54	26°00'17	direct	12537 Sep 21 10:40	21°Mp06'17	
	12536 Nov 02 21:54	0°M		morning max el	12537 Oct 05 18:27	28° m/45'15	27°15'01
asc. node	12536 Nov 13 22:16	18°M18'58			12537 Oct 07 00:14	0∘ ⊽	
	12536 Nov 19 18:01	0°⊀			12537 Oct 27 17:13	0° M	
morning set	12536 Nov 21 00:59	2° ≯ 44'35		asc. node	12537 Oct 31 19:02	7°M45'56	
				morning set	12537 Nov 05 09:34	17° ™ 13'41	
superior conj	12536 Nov 27 20:04	17° ₹ 41'42	1°37'21		12537 Nov 11 05:38	0° ∡	
minimum elong	12536 Nov 27 19:21	17° ∡ ³37'47	1°38'13				
max. Earth dist.	12536 Nov 28 20:38	19° ₹ 57'56	1.31676 AU	superior conj	12537 Nov 12 07:43	2° ₹ 25'36	1°30'37
	12536 Dec 03 11:14	0°ප		minimum elong	12537 Nov 12 06:08	2° ∡ 16'43	1°31'15
evening rise	12536 Dec 04 20:21	2° る 54'46		max. Earth dist.	12537 Nov 12 05:11	2° ₰ 11'26	1.31295 AU
desc. node	12536 Dec 16 22:53	25° る 52'11		evening rise	12537 Nov 19 02:12	17° ∡ 19'16	
	12536 Dec 19 10:57	0° ≈			12537 Nov 25 07:42	0° ප	
evening max el	12537 Jan 05 20:20	22° ≈ 34'34	27°25'11	desc. node	12537 Dec 03 19:57	14° る 59'49	
retrograde	12537 Jan 19 18:24	29° ≈ 52'41			12537 Dec 14 17:02	0° ≈	
evening set	12537 Jan 26 16:42	27° ≈ 39′21		evening max el	12537 Dec 18 23:05	4° ≈ 27'51	26°44'43
min. Earth dist.	12537 Jan 30 10:42	24° ≈ 47′29	0.61534 AU	retrograde	12538 Jan 01 21:50	11° ≈ 36′18	
inferior conj	12537 Feb 02 11:57	22° ≈ 02'31	-2°23'31	evening set	12538 Jan 08 13:51	9° ≈ 45'12	
minimum elong	12537 Feb 02 16:57	21° ≈ 51'14	2°20'55	min. Earth dist.	12538 Jan 12 13:10	7° ≈ 07'31	0.59381 AU
morning rise	12537 Feb 09 20:03	17° ≈ 03′20		inferior conj	12538 Jan 15 17:19	4° ≈ 38'02	-3°44'26
asc. node	12537 Feb 09 21:00	17° ≈ 02'36		minimum elong	12538 Jan 16 01:03	4° ≈ 22'48	3°41'03
direct	12537 Feb 11 23:56	16° ≈ 43'14		morning rise	12538 Jan 23 15:09	29° る 59'35	
morning max el	12537 Feb 18 22:30	20° ≈ 13'34	17°50'49		12538 Jan 23 14:30	30°Ŗる	
	12537 Feb 26 05:15	0° ∀		direct	12538 Jan 25 16:46	29° る 44'00	
morning set	12537 Mar 06 14:45	14°) (37'51		asc. node	12538 Jan 27 18:19	0° ≈ 00'15	
desc. node	12537 Mar 15 00:01	29°) 32′42			12538 Jan 27 17:56	0° ≈	
	12537 Mar 15 06:18	$0^{\circ}\mathbf{Y}$		morning max el	12538 Feb 02 10:38	3° ≈ 34'19	18°13'30
				morning set	12538 Feb 18 03:05	28° ≈ 30′20	
superior conj	12537 Mar 17 13:18	3° Y 57'10	-0°19'47	Č	12538 Feb 18 22:05	0° ∀	
minimum elong	12537 Mar 17 11:29	3° Y 49'22	0°19'27				
max. Earth dist.	12537 Mar 24 19:19	16° Ƴ 03'40	1.43291 AU	superior conj	12538 Feb 27 15:40	16° ¥ 13′23	0°17'23
evening rise	12537 Mar 31 14:13	26° Ƴ 53′25		minimum elong	12538 Feb 27 16:59	16° ¥ 19'18	0°17'29
C	12537 Apr 02 14:13	0°8		desc. node	12538 Mar 01 20:36	20° ¥ 10′18	
	12537 Apr 23 04:58	0°II		max. Earth dist.	12538 Mar 07 06:14	29° ¥ 32'01	1.41338 AU
evening max el	12537 May 02 07:14	10° Ⅲ 54′03	21°45'28		12538 Mar 07 12:52	0° Υ	
asc. node	12537 May 08 17:56	15° ∏ 42'24		evening rise	12538 Mar 12 01:21	7° Y ′29'24	
retrograde	12537 May 11 11:24	16° Ⅱ 17'16		<i>5</i>	12538 Mar 26 16:59	0°8	
evening set	12537 May 16 00:05	14° Ⅲ 26′08		evening max el	12538 Apr 14 23:20	24° 8 43'20	23°05'01
inferior conj	12537 May 21 06:34	8° Д 08'58	3°01'41		12538 Apr 21 21:31	0°II	
minimum elong	12537 May 21 05:13	8° П 13'42	3°00'40	retrograde	12538 Apr 25 07:21	0°П48'54	
min. Earth dist.	12537 May 21 09:15	7° П 59'38	0.68764 AU	asc. node	12538 Apr 25 15:13	0°П48'24	
morning rise	12537 May 26 10:08	1° ∏ 54'40			12538 Apr 28 11:00	30°R₩	
	12537 May 29 17:53	30°R₩		evening set	12538 Apr 30 07:26	28° 8 43'00	
direct	12537 May 27 17:55 12537 May 31 08:50	29° 8 46'51		min. Earth dist.	12538 May 05 05:59	22° 8 52'29	0.68807 AU
direct	12537 Jun 02 01:22	0° Π		inferior conj	12538 May 05 05:39 12538 May 05 16:01	22° 8 17'47	2°40'23
morning max el	12537 Jun 10 03:55		22°33'52	minimum elong	12538 May 05 10:01 12538 May 05 14:04		2°39'18
desc. node	12537 Jun 11 01:22	6° П 28'58		morning rise	12538 May 10 20:36	16° 8 10'15	2 37 10
desc. Houc	12537 Jun 28 23:21	0°95		direct	12538 May 10 20:30 12538 May 15 06:17	14° 8 23'02	
morning set	12537 Juli 28 25.21 12537 Jul 13 22:33	0 S 23°S11'14		morning max el	12538 May 13 06.17 12538 May 23 19:38	14 8 23 02	21°00'50
morning set	1433 Jul 13 44.33	14 11 د د د د د		morning max er	12000 Iviay 20 19.08	19 01832	41 09 30

desc. node	12538 May 28 22:17	25° 8 05'54		desc. node	12539 May 15 19:07	14° 8 22'07	
dese. node	12538 Jun 01 16:55	0° Ⅱ		dese. node	12539 May 26 11:49	0°II	
	12538 Jun 22 02:54	0°©		morning set	12539 Jun 02 19:19	11° I I08'01	
morning set	12538 Jun 23 17:19	2°530'02		max. Earth dist.	12539 Jun 13 10:32	27° Ⅱ 44'53	1.44437 AU
max. Earth dist.	12538 Jun 30 23:02	14° 5 04'28	1.42775 AU		12539 Jun 14 20:26	0° ©	
superior conj	12538 Jul 08 04:10	26°506'12	-1°47'57	superior conj	12539 Jun 18 18:07	6° © 17'23	-2°08'38
minimum elong	12538 Jul 08 11:09	26° © 35'56	1°48'09	minimum elong	12539 Jun 18 22:44	6° © 36'07	2°09'22
	12538 Jul 10 10:39	$0^{\circ}\Omega$		evening rise	12539 Jul 02 01:07	28° © 29'27	
evening rise	12538 Jul 19 17:49	16° Ω 27'14			12539 Jul 02 22:20	0 $^{\circ}$ Ω	
asc. node	12538 Jul 22 14:10	21° Ω 33'38		asc. node	12539 Jul 09 11:00	11° Ω 02'50	
	12538 Jul 27 10:16	0° m		evening max el	12539 Jul 19 16:55	25° Ω 28'34	18°06'20
evening max el	12538 Aug 05 02:51	12° m 09'35	18°04'56	retrograde	12539 Jul 26 02:14	28° Ω 48'59	
retrograde	12538 Aug 11 20:38	15°M)36'45		evening set	12539 Jul 28 20:07	28° Ω 10′15	
evening set	12538 Aug 14 06:24	15° m 10'29		inferior conj	12539 Aug 04 01:43	22° Ω 55'25	2°06'21
inferior conj	12538 Aug 21 02:36	10° m 13'56	1°06'29	minimum elong	12539 Aug 04 04:18	22° Ω 48′28	2°05'00
minimum elong	12538 Aug 21 04:31	10° Mp 09'25	1°05'25	min. Earth dist.	12539 Aug 06 20:27	19° Ω 57'34	0.62786 AU
min. Earth dist.	12538 Aug 24 07:26	7° Mp 14'00	0.60535 AU	morning rise	12539 Aug 10 10:27	16° Ω 44'14	
desc. node	12538 Aug 24 20:21	6° m 45'30		desc. node	12539 Aug 11 17:48	15° Ω 51'42	
morning rise	12538 Aug 27 23:43	4° TD 21'42		direct	12539 Aug 17 02:46	14°Ω16'10 22°Ω18'29	27852122
direct morning max el	12538 Sep 03 13:29 12538 Sep 17 20:20	2° Mp 14'37 10° Mp 09'19	27952120	morning max el	12539 Aug 31 04:00 12539 Sep 06 22:32	0° m)	27°53'23
morning max er	12538 Sep 17 20.20 12538 Oct 03 06:15	0₀ ʊ 10 lli\0919	21 33 39		12539 Sep 06 22.32 12539 Sep 26 11:12	0∘ ⊽ رااا	
asc. node	12538 Oct 05 06.15	0 <u>≈</u> 27° Ω 30'45		morning set	12539 Sep 26 11.12 12539 Oct 04 11:40	0 <u>≈</u> 15° ≏ 20'46	
asc. node	12538 Oct 18 19:45 12538 Oct 19 20:55	0°M		asc. node	12539 Oct 04 11:40 12539 Oct 05 12:25	17° ⊆ 27'01	
morning set	12538 Oct 20 13:52	1°M27'56		max. Earth dist.	12539 Oct 09 16:53	26° ₽ 15'25	1.32061 AU
max. Earth dist.	12538 Oct 26 13:18		1.31419 AU	max. Larm dist.	12539 Oct 07 10:35 12539 Oct 11 10:24	0°M	1.32001 710
man. Barur diot.	12000 000 20 10.10	1. 110-21-12	1.51.117.110		1200) 000 11 10.2	0 110	
superior conj	12538 Oct 27 18:46	17° M .04'29	1°18'14	superior conj	12539 Oct 12 03:16	1°ML31'57	1°00'19
minimum elong	12538 Oct 27 16:37	16°M52'35	1°18'34	minimum elong	12539 Oct 12 01:02	1° M ₊19'45	1°00'20
S	12538 Nov 02 15:01	0° ∡ ¹		evening rise	12539 Oct 18 22:47	16°M26'01	
evening rise	12538 Nov 03 11:40	1° ∡ ′51'48		•	12539 Oct 25 13:41	0° ∡ ¹	
-	12538 Nov 18 11:15	ರ°ರ		desc. node	12539 Nov 07 14:22	20° ∡ 741'53	
desc. node	12538 Nov 20 17:07	3° る 22'25		evening max el	12539 Nov 12 04:43	25° ∡ ¹45'21	23°56'03
evening max el	12538 Nov 30 17:31	15° る 28'41	25°31'39		12539 Nov 17 13:55	ರ°0	
retrograde	12538 Dec 14 14:19	22° る 27'41		retrograde	12539 Nov 25 18:35	2° る 31'50	
evening set	12538 Dec 20 14:04	21° る 05'23		evening set	12539 Nov 30 14:16	1° る 41'02	
min. Earth dist.	12538 Dec 25 05:45	18° る 27'03	0.57339 AU		12539 Dec 04 09:06	30°R ✓	
inferior conj	12538 Dec 28 03:15	16° る 28'49		min. Earth dist.	12539 Dec 06 15:30	28° ∡ ¹42'55	0.55678 AU
minimum elong	12538 Dec 28 11:36	16° る 14'33	4°55'37	inferior conj	12539 Dec 08 16:32	27° ∡ °29′09	
morning rise	12539 Jan 05 11:37	12° る 12'53		minimum elong	12539 Dec 08 20:34	27° ∡ °23′04	5°45'27
direct	12539 Jan 07 16:18	11° ප් 58'18		morning rise	12539 Dec 17 04:48	23° ⋌ '32'59	
asc. node	12539 Jan 14 15:33	14°る36'35		direct	12539 Dec 19 20:00	23° ⋌ 15'26	
morning max el	12539 Jan 16 14:23	16° る 18'03	18°57'13	morning max el	12539 Dec 30 05:53	28° ∡ 13'35	20°03'42
	12539 Jan 26 07:08	0° ≈		1	12539 Dec 31 23:05	0°る	
morning set	12539 Feb 02 01:42	12° ≈ 49'48		asc. node	12540 Jan 01 12:45 12540 Jan 17 07:05	0°る38'45 27°る25'24	
superior conj	12539 Feb 10 12:51	29° ≈ 21'35	0°47'58	morning set	12540 Jan 18 13:21	27 3 23 24 0° ≈	
minimum elong	12539 Feb 10 12:31 12539 Feb 10 15:33	29°≈34'25	0°48'05		12340 Jan 16 13.21	0 ~	
minimum ciong	12539 Feb 10 20:56	0° ∺	0 40 05	superior conj	12540 Jan 25 00:09	13° ≈ 08'03	1°11'08
desc. node	12539 Feb 16 17:13	10° ¥ 48'10		minimum elong	12540 Jan 25 02:55	13°≈21'54	1°11'30
max. Earth dist.	12539 Feb 17 13:24	12°) 18'18	1.39130 AU	max. Earth dist.	12540 Jan 30 19:54	24°≈27'36	1.36914 AU
evening rise	12539 Feb 21 09:43	19°) €00'47			12540 Feb 02 19:42	0° ∀	
<i>y</i> 21	12539 Feb 28 01:17	0° Υ		evening rise	12540 Feb 03 14:00	1° ¥ 22'51	
	12539 Mar 20 23:24	0°8		desc. node	12540 Feb 03 13:53	1° ¥ 22'18	
evening max el	12539 Mar 28 13:12	8° 8 34'20	24°25'19		12540 Feb 21 04:55	0° Y	
retrograde	12539 Apr 08 23:56	15° 8 16'34		evening max el	12540 Mar 10 02:32	22° Y 25'19	25°39'36
asc. node	12539 Apr 12 12:34	14° 8 20'46		retrograde	12540 Mar 22 12:10	29° Y ′34'02	
evening set	12539 Apr 14 11:48	12° 8 58'02		evening set	12540 Mar 28 11:33	27° Y ′06'16	
min. Earth dist.	12539 Apr 19 01:46	7° 8 43'27	0.68391 AU	asc. node	12540 Mar 29 09:59	26° Ƴ 15'42	
inferior conj	12539 Apr 20 00:12	6° 8 28'10	2°09'09	min. Earth dist.	12540 Apr 01 18:33	22° Y ′26'53	0.67538 AU
minimum elong	12539 Apr 19 22:02	6° 8 35'26	2°08'04	inferior conj	12540 Apr 03 05:13	20° Y 36'22	1°27'53
morning rise	12539 Apr 25 08:26	0° 8 28'31		minimum elong	12540 Apr 03 03:21	20° Y 42'21	1°27'00
	12539 Apr 26 01:19	30° ₹Ŷ		morning rise	12540 Apr 08 19:41	14° Y 45'52	
direct	12539 Apr 29 05:32	29° Y ′02'36		direct	12540 Apr 12 05:08	13° Y 39'53	
	12539 May 02 14:34	0°8	1005511.4	morning max el	12540 Apr 19 00:59	17° Y 22′23	18°59'27
morning max el	12539 May 06 18:30	3° 8 15'23	19~5/14		12540 Apr 28 21:19	0°8	

desc. node	12540 May 01 15:51	4° 8 07'04			12541 Mar 31 18:41	0°℃	
greatest brilliancy	12540 May 01 13.51 12540 May 02 08:53	5° 8 11'13	-0.7m	morning max el	12541 Apr 02 13:44	1° Υ 33'39	18°17'58
morning set	12540 May 12 00:58	20° 8 02'59	-0.7111	desc. node	12541 Apr 18 12:30	24° Υ 12'29	10 17 30
morning set	12540 May 18 10:47	0°Ⅱ		morning set	12541 Apr 18 12:30	0° 8 07'55	
max. Earth dist.	12540 May 26 03:00	11° II 58'31	1.45467 AU	morning set	12541 Apr 22 03:37	0°8	
max. Darm dist.	12340 Way 20 03.00	11 11 30 31	1.43407 110		12541 Apr 22 05.57	° O	
superior conj	12540 May 28 10:49	15° Ⅱ 37'39	-2°12'33	superior conj	12541 May 07 18:04	24° 8 39'25	-1°56'12
minimum elong	12540 May 28 08:28	15° Ⅱ 28'27	2°13'23	minimum elong	12541 May 07 09:32	24° 8 06'00	1°56'18
	12540 Jun 06 11:52	0ಂಣ		max. Earth dist.	12541 May 08 22:18	26° 8 29'44	1.45779 AU
evening rise	12540 Jun 12 09:27	9° 5 32'23			12541 May 11 04:11	$\Pi^{\circ}0$	
asc. node	12540 Jun 25 07:55	0° Ω 10'04		evening rise	12541 May 23 17:34	19° Ⅱ 35'57	
	12540 Jun 25 05:12	$0^{\circ}\Omega$			12541 May 30 09:24	0ංම	
evening max el	12540 Jul 02 06:24	9° Ω 03'17	18°25'56	greatest brilliancy	12541 Jun 03 08:29	6°906'54	-0.8m
retrograde	12540 Jul 08 16:45	12° £ 30′30		asc. node	12541 Jun 12 04:56	18° 5 46'47	
evening set	12540 Jul 11 19:00	11° Ω 37'08		evening max el	12541 Jun 15 16:37	22°5946'07	19°02'56
inferior conj	12540 Jul 17 13:48	6° Ω 06'00	2°45'14	retrograde	12541 Jun 22 12:31	26° © 32'56	
minimum elong	12540 Jul 17 15:56	5° Ω 59'39	2°44'01	evening set	12541 Jun 25 23:35	25° © 23'32	
min. Earth dist.	12540 Jul 19 18:53	3° Ω 29'05	0.64826 AU	inferior conj	12541 Jul 01 11:10	19° © 37'36	3°06'47
morning rise	12540 Jul 23 11:40	29° 5 45'25		minimum elong	12541 Jul 01 12:21	19° 5 33'49	3°05'45
	12540 Jul 23 04:42	30° ₹ 5		min. Earth dist.	12541 Jul 03 01:31	17° © 35'02	0.66508 AU
desc. node	12540 Jul 28 15:09	27° © 12'34		morning rise	12541 Jul 07 00:29	13° © 14'25	
direct	12540 Jul 30 00:51	27° © 05'36		direct	12541 Jul 13 05:56	10° © 33'22	
	12540 Aug 06 17:38	0 \circ Ω		desc. node	12541 Jul 15 12:26	10° © 51'58	
morning max el	12540 Aug 12 14:32	5° Ω 03'34	27°18'01	morning max el	12541 Jul 26 01:22	18°9511'50	26°15'13
	12540 Aug 31 13:54	0° m)			12541 Aug 04 23:45	0 $^{\circ}$ Ω	
morning set	12540 Sep 17 00:22	28° Mp 46'00			12541 Aug 24 13:41	0° m)	
	12540 Sep 17 15:29	0∘ ⊽		morning set	12541 Aug 31 00:37	11° m 34'48	1 2 40 1 2 4 7 7
asc. node	12540 Sep 21 09:05	7° £ 30′26	1 22222 444	max. Earth dist.	12541 Sep 03 21:22	18° Mp 56'43	1.34913 AU
max. Earth dist.	12540 Sep 21 12:14	7° ≏ 46'36	1.33233 AU	asc. node	12541 Sep 08 05:43	27° Mp 36'37	
aumorior coni	12540 Cap. 25 07:10	15° ≏ 42'46	0°37'03	aumariar aami	12541 Sep 09 03:58	200 m 2011 1	0°08'52
superior conj minimum elong	12540 Sep 25 07:10 12540 Sep 25 05:26	15° 2 42′46 15° 2 33′35	0°36'52	superior conj	12541 Sep 09 03:38 12541 Sep 09 03:28	29° Mp 30'11 29° Mp 27'40	0°08'32 0°08'40
minimum ciong	12540 Oct 01 22:57	0° M	0 30 32	minimum elong behind sun begin	12541 Sep 09 03.28 12541 Sep 08 22:24	29° m) 01'43	0 08 40
evening rise	12540 Oct 01 22:37 12540 Oct 02 09:43	0°M57'22		behind sun end	12541 Sep 09 08:32	29° m 53'40	
evening rise	12540 Oct 02 09:43 12540 Oct 18 15:10	0° ₹		ociniia sun cha	12541 Sep 09 09:46	0₀ ರ 29 ⊯22 40	
evening max el	12540 Oct 23 15:59	5° ∡ 748′25	22°14'40	evening rise	12541 Sep 16 18:29	0 — 15° Ω 20'19	
desc. node	12540 Oct 24 11:41	6°×735'09	22 11 10	evening rise	12541 Sep 24 04:36	0°ML	
retrograde	12540 Nov 05 10:53	12° × 709'18		evening max el	12541 Oct 05 12:37	16°ML14'43	20°43'34
evening set	12540 Nov 08 20:01	11° ×7 44'03		desc. node	12541 Oct 11 09:03	20°M34'29	20 .55.
min. Earth dist.	12540 Nov 16 22:24		0.54701 AU	retrograde	12541 Oct 16 21:37	21°ML53'38	
inferior conj	12540 Nov 17 13:24	7° ∡ ¹46'57		evening set	12541 Oct 19 04:24	21°ML41'00	
minimum elong	12540 Nov 17 08:50	7° ∡ ¹53'23	5°45'00	inferior conj	12541 Oct 28 05:11	17°M46'24	-4°46'47
morning rise	12540 Nov 25 22:54	3° ∡ ¹59'42		minimum elong	12541 Oct 27 19:15	18°ML00'37	4°43'38
direct	12540 Nov 29 08:09	3° ∡ ³34′05		min. Earth dist.	12541 Oct 29 05:24	17°ML11'42	0.54622 AU
morning max el	12540 Dec 11 07:08	9° ∡ 15'49	21°32'28	morning rise	12541 Nov 05 10:00	13°M49'59	
asc. node	12540 Dec 18 09:51	17° ∡ ¹50′10		direct	12541 Nov 09 16:30	13°ML10'50	
	12540 Dec 25 15:11	0°ಕ		morning max el	12541 Nov 22 20:54	19°MJ34'03	23°17'31
morning set	12540 Dec 31 16:36	12° る 09'41			12541 Dec 01 12:21	0° ∡ ¹	
				asc. node	12541 Dec 05 06:52	5° ∡ ¹55'03	
superior conj	12541 Jan 07 21:36	27° ට 21'30	1°26'59	morning set	12541 Dec 16 04:11	26° ₹ 56'53	
minimum elong	12541 Jan 07 23:40	27° る 32'20	1°27'40		12541 Dec 17 14:22	0°₹	
	12541 Jan 09 04:09	0° ≈				_	
max. Earth dist.	12541 Jan 12 06:54	6° ≈ 19'51	1.34920 AU	superior conj	12541 Dec 23 02:03		1°35'58
evening rise	12541 Jan 16 10:55	14° ≈ 27′03		minimum elong	12541 Dec 23 03:05	11° ප 58'33	1°36'51
desc. node	12541 Jan 20 10:35	21°≈48'42		max. Earth dist.	12541 Dec 26 01:47	18°る15'12	1.33299 AU
	12541 Jan 25 03:34	0° \		evening rise	12541 Dec 30 20:53	28°る04'10	
	12541 Feb 14 22:45	0° Υ	26040122	1 1	12541 Dec 31 20:24	0°≈	
evening max el	12541 Feb 20 16:13	6° Y 10'58 13° Y 33'35	26°40'23	desc. node	12542 Jan 07 07:22	12°≈02'43	
retrograde	12541 Mar 05 18:59	13°° \(\gamma\) 33'35		avanina mar1	12542 Jan 18 08:39	0° ₩	27020110
evening set	12541 Mar 12 04:51 12541 Mar 16 07:25	6° Y 52'22		evening max el	12542 Feb 03 05:38	19°) 41′58 27°) 07′33	2/ 2018
asc. node		6° Y 52'22	0.66204.411	retrograde	12542 Feb 16 19:25	2/° K 0/'33 24° K 36'40	
min. Earth dist. inferior conj	12541 Mar 16 06:08 12541 Mar 18 04:55	6° γ 36 05 4° γ 37'18	0.66284 AU 0°36'12	evening set min. Earth dist.	12542 Feb 23 13:36 12542 Feb 27 10:21	24° X 36'40 21° X 03'40	0.64670 AU
minimum elong	12541 Mar 18 03:58	4 γ 3/18 4° Υ 40'06	0°35'50	inferior conj	12542 Feb 27 10.21 12542 Mar 01 20:50	18° H 25'31	
iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	12541 Mar 22 15:14	4 1 40 00 30° ₹	0 00 00	minimum elong	12542 Mar 01 20:30	18° H 23'24	
morning rise	12541 Mar 24 04:13	28° ¥ 57'43		asc. node	12542 Mar 03 04:48	17° H 00'20	J 25 20
direct	12541 Mar 27 03:16	28°\(\frac{1}{3}\)7\\\43\\\28\cdot\\\43\\\43\\\43\\\43\\\43\\\43\\\43\\\		morning rise	12542 Mar 08 07:27	12° H 59'14	
**** * * *		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			00 01.21	/(0/17	

direct	12542 Mar 10 21:36	12° ∺ 24′26		minimum elong	12543 Feb 13 05:19	1°) 44'30	1°36'26
morning max el	12542 Mar 17 06:25	15°) 42′49	17°53'31		12543 Feb 15 01:53	30° Ŗ ≈	
	12542 Mar 27 14:14	$0^{\circ}\mathbf{\Upsilon}$		asc. node	12543 Feb 18 02:11	27° ≈ 40'56	
morning set	12542 Apr 03 15:00	11° Y '37'43		morning rise	12543 Feb 20 01:59	26°≈42'40	
desc. node	12542 Apr 05 09:06	14° Y '32'55		direct	12543 Feb 22 09:02	26°≈18'11	
***************************************	12542 Apr 14 19:24	0°8		morning max el	12543 Mar 01 00:04	29° ≈ 40'52	17°46'35
	123+271pt 1+ 17.2+	° О		morning max cr	12543 Mar 01 07:44	0° ∀	17 4033
superior conj	12542 Apr 17 09:47	4° 8 10'04	1022125	morning set	12543 Mar 17 01:01	24°) 17'37	
	-	3° 8 36'20		morning set		24 χ(1/3/ 0° Υ	
minimum elong	12542 Apr 17 01:20	_			12543 Mar 20 07:29		
max. Earth dist.	12542 Apr 21 18:19	11° 8 04'16	1.45348 AU	desc. node	12543 Mar 23 05:40	5° Ƴ 03'06	
evening rise	12542 May 03 08:27	29° 8 03'08				• •	
	12542 May 03 23:17	Π °0		superior conj	12543 Mar 28 22:51	14° Y ′42'35	
greatest brilliancy	12542 May 18 03:01	21° Ⅱ 17'12	-0.6m	minimum elong	12543 Mar 28 18:32	14° Y 24'39	0°42'36
	12542 May 24 08:50	0 \circ		max. Earth dist.	12543 Apr 04 12:06	25° Y 24'16	1.44216 AU
evening max el	12542 May 29 21:45	6° © 32'17	19°55'54		12543 Apr 07 09:24	0°B	
asc. node	12542 May 30 02:00	6° 5 42'54		evening rise	12543 Apr 12 20:34	8° 8 31'46	
retrograde	12542 Jun 06 10:53	10°950'24			12543 Apr 27 04:54	$\Pi^{\circ}0$	
evening set	12542 Jun 10 07:20	9° 5 24'23		evening max el	12543 May 12 20:59	20° Ⅱ 19'01	21°02'29
inferior conj	12542 Jun 15 14:52	3°524'52	3°14'04	asc. node	12543 May 16 23:10	23° ∏ 45'31	
minimum elong	12542 Jun 15 14:58	3°924'31	3°13'08	retrograde	12543 May 21 09:41	25° I 17'25	
min. Earth dist.	12542 Jun 16 14:42	2°904'30	0.67753 AU	evening set	12543 May 25 16:16	23° II 35'03	
mm. Latti dist.	12542 Jun 18 05:03	30°RII	0.07733710	inferior conj	12543 May 30 22:26	17° ∏ 23'35	3°09'19
	12542 Jun 20 22:16	27° Ⅱ 03'21			•	17 П 23 33	3°08'22
morning rise				minimum elong	12543 May 30 21:33		
direct	12542 Jun 26 16:53	24° Ⅱ 30′20		min. Earth dist.	12543 May 31 08:33	16° Ⅱ 48'28	0.68526 AU
desc. node	12542 Jul 02 09:38	26° Ⅲ 27'12		morning rise	12543 Jun 05 02:38	11° Ⅱ 06'11	
	12542 Jul 06 20:58	0 \circ		direct	12543 Jun 10 08:41	8° Ⅱ 48'04	
morning max el	12542 Jul 08 11:34	1° 9 34'03	24°54'23	desc. node	12543 Jun 19 06:44	13° Ⅱ 30′39	
	12542 Jul 30 00:08	0 \circ Ω		morning max el	12543 Jun 20 21:52	15° Ⅱ 05'03	23°25'17
morning set	12542 Aug 13 08:14	23° Ω 36′57			12543 Jul 03 02:18	0	
	12542 Aug 16 21:11	0° m)			12543 Jul 22 22:48	$0^{\circ}\Omega$	
max. Earth dist.	12542 Aug 16 22:05	0° ™ 04'09	1.37008 AU	morning set	12543 Jul 25 18:32	4° Ω 41'04	
				max. Earth dist.	12543 Jul 29 19:49	11° Ω 36′56	1.39317 AU
superior conj	12542 Aug 23 14:34	12° m 46'25	-0°23'21				
minimum elong	12542 Aug 23 16:06	12° m 53'55	0°23'25	superior conj	12543 Aug 06 11:14	25° Ω 22'26	-0°57'44
asc. node	12542 Aug 26 02:20	17° m) 41'54		minimum elong	12543 Aug 06 15:22	25° Ω 41'40	0°57'39
evening rise	12542 Aug 31 22:46	29° m 28'52		C	12543 Aug 08 22:23	0° m	
8 21	12542 Sep 01 04:57	0∘ <u>⊽</u>		asc. node	12543 Aug 12 22:59	7° m/ 42'44	
evening max el	12542 Sep 17 23:10	27° ≏ 25'35	19°31'48	evening rise	12543 Aug 15 19:44	13° Mp 15'34	
evening max er	12542 Sep 21 00:17	0°M.	17 31 40	evening rise	12543 Aug 24 22:42	0° ⊽	
ratrograda	12542 Sep 27 16:01	2°M16'06		evening max el	12543 Aug 31 22:27	9° ≏ 23'56	18041148
retrograde desc. node	•	2°M15'02		•	•		10 41 40
	12542 Sep 28 06:30			retrograde	12543 Sep 09 03:46	13° Ω 31'49	
evening set	12542 Sep 29 12:44	2°M06'10		evening set	12543 Sep 11 02:07	13° Ω 18'55	
	12542 Oct 04 23:44	30° ₹ Ω		desc. node	12543 Sep 15 03:58	11° Ω 37'15	
inferior conj	12542 Oct 08 06:24	28° ♀ 00'37		inferior conj	12543 Sep 19 03:09	8° Ω 54'45	
minimum elong	12542 Oct 07 22:24	28° ≏ 13'23		minimum elong	12543 Sep 19 00:04	9° ഫ 00'28	
min. Earth dist.	12542 Oct 10 15:09	26° ≏ 30′20	0.55477 AU	min. Earth dist.	12543 Sep 22 06:30		0.57102 AU
morning rise	12542 Oct 16 06:00	23° ≏ 35'45		morning rise	12543 Sep 26 18:37	3° ჲ 52'02	
direct	12542 Oct 21 08:41	22° ≏ 37'24		direct	12543 Oct 02 14:51	2° ≏ 28'09	
morning max el	12542 Nov 04 07:07	29° ≏ 35'44	25°04'53	morning max el	12543 Oct 16 21:37	9° ჲ 55'00	26°36'04
	12542 Nov 04 17:13	0° M			12543 Nov 01 05:26	0° M $_{\circ}$	
asc. node	12542 Nov 22 03:46	24°M39'39		asc. node	12543 Nov 09 00:35	13°M53'51	
	12542 Nov 24 23:33	0° ∡ ¹		morning set	12543 Nov 15 02:13	26°M₁7'18	
morning set	12542 Nov 30 15:57	11° ∡ ′40'55			12543 Nov 16 19:27	0° ∡ ¹	
superior conj	12542 Dec 07 10:55	26° ∡ ³34'10	1°38'35	superior conj	12543 Nov 21 22:08	11° ∤ 19'08	1°35'12
minimum elong	12542 Dec 07 10:49	26° ₹ ³33'38		minimum elong	12543 Nov 21 21:01	11° √ 12'56	
max. Earth dist.	12542 Dec 09 04:03		1.32131 AU	max. Earth dist.	12543 Nov 22 11:15	12° ₹ 32'11	1.31454 AU
Zurur uist.	12542 Dec 09 00:25	0 31731 0°る	1.52151110	evening rise	12543 Nov 28 19:27	26° × 22'28	1.5.1.15.1.110
evening rise	12542 Dec 14 16:37	0 8 12° る 04'48		Croning 1150	12543 Nov 28 19.27 12543 Nov 30 13:07	20 x 22 28	
evening rise				daga mada			
4 1	12542 Dec 24 01:20	0°≈ 1°≈ ≈ 57!25		desc. node	12543 Dec 12 01:14	21° る 25'34	
desc. node	12542 Dec 25 04:14	1°≈57'35			12543 Dec 17 13:19	0°≈	0.501.500
	12543 Jan 13 23:51	0°) {		evening max el	12543 Dec 29 23:06	15°≈04'58	27°12'01
evening max el	12543 Jan 16 16:44	2°) (44'08	27°32'34	retrograde	12544 Jan 12 21:35	22°≈19'24	
retrograde	12543 Jan 30 12:31	10° 米 05'52		evening set	12544 Jan 19 18:26	20° ≈ 14′08	
evening set	12543 Feb 06 11:11	7°) 43′35		min. Earth dist.	12544 Jan 23 13:33	17° ≈ 30′07	
min. Earth dist.	12543 Feb 10 05:11	4°) 38′56	0.62749 AU	inferior conj	12544 Jan 26 17:07	14° ≈ 49′30	
inferior conj	12543 Feb 13 02:02	1°) 52′30	-1°38'18	minimum elong	12544 Jan 26 23:22	14° ≈ 36′09	2°54'47

morning rise	12544 Feb 03 07:18	9° ≈ 59'10		min. Earth dist.	12545 Jan 04 11:46	29° る 25'29	0.58482 AU
asc. node	12544 Feb 04 23:31	9° ≈ 42'10		inferior conj	12545 Jan 07 14:34	27° ට 07'11	-4°17'37
direct	12544 Feb 05 09:43	9° ≈ 41'26		minimum elong	12545 Jan 07 22:59	26° る 51'33	4°14'16
morning max el	12544 Feb 12 15:21	13°≈18'45	17°58'01	morning rise	12545 Jan 15 17:33	22° る 38'25	
morning max ci			17 3001	-		22°る23'52	
	12544 Feb 23 22:21	0° ∀		direct	12545 Jan 17 19:26		
morning set	12544 Feb 28 05:21	7°) 48′23		asc. node	12545 Jan 21 20:49	23° る 22'39	
desc. node	12544 Mar 09 02:13	25°) 39′07		morning max el	12545 Jan 26 00:31	26° る 25'48	18°29'23
					12545 Jan 29 03:30	0° ≈	
superior conj	12544 Mar 09 12:24	26°) €23'46	-0°03'21	morning set	12545 Feb 10 22:35	21°≈54'00	
minimum elong	12544 Mar 09 12:08	26° ¥ 22'35	0°03'09	Č	12545 Feb 15 03:46	0°) €	
	12544 Mar 09 04:12	25°) 47'50	0 03 07		12343160 13 03.40	0 X	
behind sun begin							
behind sun end	12544 Mar 09 20:03	26° ¥ 57'15		superior conj	12545 Feb 19 23:25	9° ∺ 04'15	
	12544 Mar 11 14:11	0 ° Υ		minimum elong	12545 Feb 20 01:30	9°) 13′56	0°31'18
max. Earth dist.	12544 Mar 17 01:26	9° Ƴ 13'45	1.42506 AU	desc. node	12545 Feb 23 22:49	16°) 17′36	
evening rise	12544 Mar 22 20:39	18° Ƴ 37'18		max. Earth dist.	12545 Feb 27 10:03	22° ¥ 22'50	1.40414 AU
8	12544 Mar 30 04:52	0°8		evening rise	12545 Mar 03 16:49	29°) € 37'37	
		0°II		evening rise	12545 Mar 03 22:13	0° Υ	
	12544 Apr 20 21:00						
evening max el	12544 Apr 24 15:05	4° ∏ 06'32	22°18'48		12545 Mar 23 15:47	0°8	
asc. node	12544 May 02 20:24	9° Ⅱ 38'54		evening max el	12545 Apr 07 05:59	17° 8 57'01	23°39'31
retrograde	12544 May 04 07:12	9° ∏ 48'45		retrograde	12545 Apr 18 01:59	24° 8 19'45	
evening set	12544 May 09 00:38	7° Ⅱ 51'02		asc. node	12545 Apr 19 17:44	24° 8 07'07	
inferior conj	12544 May 14 07:45	1° Ⅱ 29'48	2°53'52	evening set	12545 Apr 23 06:55	22° 8 08'21	
minimum elong	12544 May 14 06:06	1° Д 35'33	2°52'50	min. Earth dist.	12545 Apr 28 01:39	16° 8 32'52	0.68681 AU
min. Earth dist.	•	1° П 39'43	0.68832 AU		•	15° 8 40'32	
min. Earth dist.	12544 May 14 04:54		0.08832 AU	inferior conj	12545 Apr 28 16:55	_	
	12544 May 15 09:40	30° ₹ 8		minimum elong	12545 Apr 28 14:50	15° 8 47'42	2°27'16
morning rise	12544 May 19 11:25	25° 8 18'09		morning rise	12545 May 03 22:43	9° 8 35'55	
direct	12544 May 24 04:26	23° 8 19'06		direct	12545 May 08 02:55	7° 8 57'46	
morning max el	12544 Jun 02 10:41	28° 8 44'05	21°57'02	morning max el	12545 May 16 05:12	12° 8 34'10	20°37'13
•	12544 Jun 03 15:59	$\Pi^{\circ}0$		desc. node	12545 May 23 00:37	20° 8 34'21	
desc. node	12544 Jun 05 03:44	1° Ⅱ 38'45			12545 May 29 20:22	0°П	
dese. Hode	12544 Jun 25 18:07	0°95		mamina aat	12545 Jun 14 13:18	23° Ⅱ 33'19	
				morning set			
morning set	12544 Jul 05 03:33	14° © 37'15			12545 Jun 18 16:10	0° ©	
max. Earth dist.	12544 Jul 10 20:21	23° © 55'34	1.41588 AU	max. Earth dist.	12545 Jun 23 03:28	7° © 07'36	1.43550 AU
	12544 Jul 14 10:50	$0^{\circ}\Omega$					
	12544 Jul 14 10:50	0 ° Ω		superior conj	12545 Jun 29 17:21	17° 9 54'20	-1°58'22
superior conj	12544 Jul 14 10:50 12544 Jul 18 13:30	0° Ω 7° Ω 07'30	-1°31'07	superior conj minimum elong	12545 Jun 29 17:21 12545 Jun 29 23:55	17°©54'20 18°©21'44	
	12544 Jul 18 13:30	7° Ω 07'30		1 3	12545 Jun 29 23:55	18° © 21'44	
minimum elong	12544 Jul 18 13:30 12544 Jul 18 19:58	7° Ω 07'30 7° Ω 35'58		minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07	18°\$21'44 0° Ω	
minimum elong evening rise	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43	7°\O7'30 7°\O35'58 26°\O30'05		minimum elong evening rise	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13	18°€21'44 0°Ω 9°Ω02'00	
minimum elong	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41	7°\O7'30 7°\O35'58 26°\O30'05 27°\O34'38		minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28	18°\$21'44 0°\$\Omega\$ 9°\$\Omega\$02'00 17°\$\Omega\$13'39	
minimum elong evening rise asc. node	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13	7°N07'30 7°N35'58 26°N30'05 27°N34'38 0°M	1°31'07	minimum elong evening rise asc. node	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24	18°\$21'44 0°\$ 9°\$\O2'00 17°\$\O2'39 0°\$	
minimum elong evening rise	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41	7°\O7'30 7°\O35'58 26°\O30'05 27°\O34'38		minimum elong evening rise	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28	18°\$21'44 0°\$ 9°\$\O2'00 17°\$\O2'39 0°\$	
minimum elong evening rise asc. node	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13	7°N07'30 7°N35'58 26°N30'05 27°N34'38 0°M	1°31'07	minimum elong evening rise asc. node	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24	18°\$21'44 0°\$ 9°\$\O2'00 17°\$\O2'39 0°\$	1°58'47
minimum elong evening rise asc. node evening max el retrograde	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14	7° N 07'30 7° N 35'58 26° N 30'05 27° N 34'38 0° M 22° M 01'13	1°31'07	minimum elong evening rise asc. node evening max el retrograde	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{O}\$\$ 5°\$\mathcal{O}\$07'57	1°58'47
minimum elong evening rise asc. node evening max el retrograde evening set	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21	7° \$\O7'30 7° \$\O35'58 26° \$\O30'05 27° \$\O34'38 0° \$\mathref{m}\$ 22° \$\mathref{m}\$01'13 25° \$\mathref{m}\$38'58 25° \$\mathref{m}\$18'43	1°31'07 18°12'46	minimum elong evening rise asc. node evening max el retrograde evening set	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{m}\$ 5°\$\mathcal{m}\$07'57 8°\$\mathcal{m}\$30'12 7°\$\mathcal{m}\$58'57	1°58'47 18°03'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35	7° \$\O7'30 7° \$\O35'58 26° \$\O30'05 27° \$\O34'38 0° \$\mathref{m}\$ 22° \$\mathref{m}\$01'13 25° \$\mathref{m}\$38'58 25° \$\mathref{m}\$18'43 20° \$\mathref{m}\$34'03	1°31'07 18°12'46 0°21'19	evening rise asc. node evening max el retrograde evening set inferior conj	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{m}\$ 5°\$\mathcal{m}\$07'57 8°\$\mathcal{m}\$30'12 7°\$\mathcal{m}\$58'57 2°\$\mathcal{m}\$54'38	1°58'47 18°03'19 1°34'39
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18	7° \$\O7'30 7° \$\O35'58 26° \$\O30'05 27° \$\O34'38 0° \$\mathref{m} 22° \$\mathref{m}\01'13 25° \$\mathref{m}\38'58 25° \$\mathref{m}\18'43 20° \$\mathref{m}\34'03 20° \$\mathref{m}\32'30	1°31'07 18°12'46	minimum elong evening rise asc. node evening max el retrograde evening set	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{m}\$ 5°\$\mathcal{m}\$07'57 8°\$\mathcal{m}\$30'12 7°\$\mathcal{m}\$58'57 2°\$\mathcal{m}\$54'38 2°\$\mathcal{m}\$48'40	1°58'47 18°03'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27	7° \$\O2000000000000000000000000000000000000	1°31'07 18°12'46 0°21'19 0°20'49	evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{m}\$ 5°\$\mathcal{m}\$07'57 8°\$\mathcal{m}\$30'12 7°\$\mathcal{m}\$58'57 2°\$\mathcal{m}\$58'38 2°\$\mathcal{m}\$48'40 30°\$\mathcal{N}\$\mathcal{O}\$	1°58'47 18°03'19 1°34'39 1°33'22
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist.	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14	7° \$\O7'30 7° \$\O35'58 26° \$\O30'05 27° \$\O34'38 0° \$\mathbf{m}\) 22° \$\mathbf{m}\O3'13 25° \$\mathbf{m}\O3'58 25° \$\mathbf{m}\O3'4'03 20° \$\mathbf{m}\O3'12 17° \$\mathbf{m}\O3'12	1°31'07 18°12'46 0°21'19	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 12:40	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\begin{align*} 5°\$\lm\begin{align*} 00'\$\lm\begin{align*} 5°\$\lm\begin{align*} 07'57'8'\$\lm\begin{align*} 8°\$\lm\begin{align*} 20'\$\lm\begin{align*} 48'40 30°\rangle \text{\tex{\tex	1°58'47 18°03'19 1°34'39
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27	7° \$\O2000000000000000000000000000000000000	1°31'07 18°12'46 0°21'19 0°20'49	evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40	18°\$21'44 0°\$\mathcal{O}\$ 9°\$\mathcal{O}\$02'00 17°\$\mathcal{O}\$13'39 0°\$\mathcal{m}\$ 5°\$\mathcal{m}\$07'57 8°\$\mathcal{m}\$30'12 7°\$\mathcal{m}\$58'57 2°\$\mathcal{m}\$58'38 2°\$\mathcal{m}\$48'40 30°\$\mathcal{N}\$\mathcal{O}\$	1°58'47 18°03'19 1°34'39 1°33'22
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist.	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14	7° \$\O200730 7° \$\O200735'58 26° \$\O200733'58 20° \$\O200733'38 0° \$\O200733'38 20° \$\O200733'30 19° \$\O200733'12 17° \$\O200742'26	1°31'07 18°12'46 0°21'19 0°20'49	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 12:40	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\begin{align*} 5°\$\lm\begin{align*} 00'\$\lm\begin{align*} 5°\$\lm\begin{align*} 07'57'8'\$\lm\begin{align*} 8°\$\lm\begin{align*} 20'\$\lm\begin{align*} 48'40 30°\rangle \text{\tex{\tex	1°58'47 18°03'19 1°34'39 1°33'22
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 07 01:50	7° \$\O200730 7° \$\O200735'58 26° \$\O200730'05 27° \$\O200734'38 0° \$\mathref{m}\$ 22° \$\mathref{m}\$01'13 25° \$\mathref{m}\$38'58 25° \$\mathref{m}\$32'30 20° \$\mathref{m}\$32'30 19° \$\mathref{m}\$33'12 17° \$\mathref{m}\$42'26 14° \$\mathref{m}\$57'07	1°31'07 18°12'46 0°21'19 0°20'49	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 18 22:54 12545 Aug 20 03:06	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\sometimes\$5°\$\lm\sometimes\$07'57 8°\$\lm\sometimes\$07'57 2°\$\lm\s58'57 2°\$\lm\s54'38 2°\$\lm\s48'40 30°\$\lambda\$0\$\rm\sq\$\lambda\$29°\$\lambda\$52'51 27°\$\lambda\$45'12	1°58'47 18°03'19 1°34'39 1°33'22
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21	7° \$\O2000 0730 7° \$\O2000 07305 27° \$\O2000 0734'38 0° \$\mathred{m}\$ 22° \$\mathred{m}\$01'13 25° \$\mathred{m}\$38'58 25° \$\mathred{m}\$18'43 20° \$\mathred{m}\$34'03 20° \$\mathred{m}\$33'12 17° \$\mathred{m}\$42'26 14° \$\mathred{m}\$57'07 13° \$\mathred{m}\$04'46 20° \$\mathred{m}\$52'23	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 18 22:54 12545 Aug 18 22:54 12545 Aug 20 03:06 12545 Aug 26 18:58	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\text{m}\$50'\$\lm\text{m}\$07'57 8°\$\lm\text{m}\$30'12 7°\$\lm\text{m}\$58'57 2°\$\lm\text{m}\$54'38 2°\$\lm\text{m}\$48'40 30°\$\lambda\$0\$'\$\lambda\$0 29°\$\lambda\$52'51 27°\$\lambda\$45'112 26°\$\lambda\$53'15 24°\$\lambda\$35'55	1°58'47 18°03'19 1°34'39 1°33'22
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Sep 01 01:27 12544 Sep 01 01:27 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 05 17:21	7° \$\Oqual 07'30 7° \$\Oqual 33'58 26° \$\Oqual 30'05 27° \$\Oqual 34'38 0° \$\mathbf{m}\) 22° \$\mathbf{m} 01'13 25° \$\mathbf{m} 38'58 25° \$\mathbf{m} 18'43 20° \$\mathbf{m} 34'03 20° \$\mathbf{m} 33'12 17° \$\mathbf{m} 42'26 14° \$\mathbf{m} 57'07 13° \$\mathbf{m} 04'46 20° \$\mathbf{m} 52'23 0° \$\mathbf{n}\$	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 10 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\text{m}\$07'57 8°\$\lm\text{m}\$07'57 2°\$\lm\text{m}\$58'57 2°\$\lm\text{m}\$54'38 2°\$\lm\text{m}\$48'40 30°\$\lambda\$0"\$\lambda\$0"\$\lambda\$29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lm\text{m}\$	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 05 17:21 12544 Oct 05 17:21	7° \$\O200730 7° \$\O200730526 26° \$\O200730438 0° \$\mathref{m}\$ 22° \$\mathref{m}\$01'13 25° \$\mathref{m}\$38'58 25° \$\mathref{m}\$18'43 20° \$\mathref{m}\$34'03 20° \$\mathref{m}\$33'12 17° \$\mathref{m}\$42'26 14° \$\mathref{m}\$57'07 13° \$\mathref{m}\$04'46 20° \$\mathref{m}\$52'23 0° \$\O20078 0° \$\mathref{m}\$.	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\text{m}\$07'57 8°\$\lm\text{m}\$07'57 2°\$\lm\text{m}\$58'57 2°\$\lm\text{m}\$54'38 2°\$\lm\text{m}\$48'40 30°\$\lambda\$0"\$\lambda\$0\$ 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lm\text{m}\$2\$\lm\text{m}\$35'08	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 05 17:21 12544 Oct 24 02:59 12544 Oct 25 21:20	7° \$\O200730 7° \$\O200735'58 26° \$\O200730'05 27° \$\O200734'38 0° \$\mathbf{m}\$ 22° \$\mathbf{m}\$01'13 25° \$\mathbf{m}\$38'58 25° \$\mathbf{m}\$18'43 20° \$\mathbf{m}\$33'12 17° \$\mathbf{m}\$42'26 14° \$\mathbf{m}\$57'07 13° \$\mathbf{m}\$04'46 20° \$\mathbf{m}\$52'23 0° \$\mathbf{n}\$ 0° \$\mathbf{m}\$ 3° \$\mathbf{m}\$29'04	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 13 13:43 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Sep 30 04:25	18°\$21'44 0°\$\hat{O}\$\text{0}\$\text{0}\$ 9°\$\text{0}02'00 17°\$\text{0}13'39 0°\$\text{m}\$ 5°\$\text{m}\text{0}7'57 8°\$\text{m}\text{3}0'12 7°\$\text{m}\text{5}8'57 2°\$\text{m}\text{5}4'38 2°\$\text{m}\text{4}8'40 30°\$\text{R}\$\text{0} 29°\$\text{L52}51 27°\$\text{L45'12} 26°\$\text{L53'15} 24°\$\text{L35'55} 0°\$\text{m}\$ 2°\$\text{m}\text{3}5'08 0°\$\text{L}\$	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12544 Jul 18 13:30 12544 Jul 18 19:58 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 24 02:59 12544 Oct 25 21:20 12544 Nov 05 09:46 12544 Nov 05 07:54 12544 Nov 04 19:55 12544 Nov 07 04:30	7° \$\Omega 07'30 7° \$\Omega 35'58 26° \$\Omega 30'05 27° \$\Omega 34'38 0° m 22° m 01'13 25° m 38'58 25° m 18'43 20° m 32'30 19° m 33'12 17° m 42'26 14° m 57'07 13° m 04'46 20° m 52'23 0° \$\Omega 00'\text{m}\$ 0° m 3° m 29'04 10° m 40'47 26° m 01'39 25° m 51'14 24° m 44'27 0° \$\omega 1	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 18 22:54 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 19 02:21	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmp\$ 5°\$\lmp\$07'57 8°\$\lmp\$30'12 7°\$\lmp\$58'57 2°\$\lmp\$54'38 2°\$\lmp\$48'40 30°\$\lambda\$0 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmp\$ 2°\$\lmp\$35'08 0°\$\ldots\$ 23°\$\ldots\$19'00 24°\$\ldots\$46'07 0°\$\ldots\$ 6°\$\ldots\$47'15	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 29 19:21 12544 Oct 29 09:14 12544 Nov 05 07:54 12544 Nov 04 19:55 12544 Nov 07 04:30 12544 Nov 07 04:30 12544 Nov 07 04:30 12544 Nov 12 03:03	7° \$\Omega 07'30 7° \$\Omega 35'58 26° \$\Omega 30'05 27° \$\Omega 34'38 0° \$\mathbf{m}\$ 22° \$\mathbf{m} 01'13 25° \$\mathbf{m} 38'58 25° \$\mathbf{m} 18'43 20° \$\mathbf{m} 33'12 17° \$\mathbf{m} 43'30 19° \$\mathbf{m} 33'12 17° \$\mathbf{m} 42'26 14° \$\mathbf{m} 57'07 13° \$\mathbf{m} 04'46 20° \$\mathbf{m} 52'23 0° \$\mathbf{n}\$ 0° \$\mathbf{m}\$ 3° \$\mathbf{m} 29'04 10° \$\mathbf{m} 40'47 26° \$\mathbf{m} 01'39 25° \$\mathbf{m} 51'14 24° \$\mathbf{m} 44'27 0° \$\mathbf{r}\$ 10° \$\mathbf{r}\$ 50'50	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 18 22:54 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 19 02:21	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmp\$ 5°\$\lmp\$07'57 8°\$\lmp\$30'12 7°\$\lmp\$58'57 2°\$\lmp\$54'38 2°\$\lmp\$48'40 30°\$\lambda\$0 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmp\$ 2°\$\lmp\$35'08 0°\$\ldots\$ 23°\$\ldots\$19'00 24°\$\ldots\$46'07 0°\$\ldots\$ 6°\$\ldots\$46'13 10°\$\ldots\$36'13 10°\$\ldots\$23'50	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Sep 01 01:27 12544 Sep 01 01:27 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 24 02:59 12544 Oct 25 21:20 12544 Nov 05 09:46 12544 Nov 05 07:54 12544 Nov 04 19:55 12544 Nov 07 04:30 12544 Nov 12 03:03 12544 Nov 12 03:03 12544 Nov 12 03:03 12544 Nov 12 18:52	7° \$\Oqual 0.70 0.70	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 18 22:54 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 19 02:21	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmo\$ 5°\$\lmo\$07'57 8°\$\lmo\$30'12 7°\$\lmo\$58'57 2°\$\lmo\$58'57 2°\$\lmo\$52'51 27°\$\lambda\$52'51 27°\$\lambda\$52'51 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmo\$ 2°\$\lmo\$35'08 0°\$\ldo\$ 23°\$\ldo\$19'00 24°\$\ldo\$46'07 0°\$\ldo\$1 10°\$\ldo\$13 10°\$\ldo\$123'50 25°\$\ldo\$124'26	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 29 19:21 12544 Oct 29 09:14 12544 Nov 05 07:54 12544 Nov 04 19:55 12544 Nov 07 04:30 12544 Nov 07 04:30 12544 Nov 07 04:30 12544 Nov 12 03:03	7° \$\Omega 07'30 7° \$\Omega 35'58 26° \$\Omega 30'05 27° \$\Omega 34'38 0° \$\mathbf{m}\$ 22° \$\mathbf{m} 01'13 25° \$\mathbf{m} 38'58 25° \$\mathbf{m} 18'43 20° \$\mathbf{m} 33'12 17° \$\mathbf{m} 43'30 19° \$\mathbf{m} 33'12 17° \$\mathbf{m} 42'26 14° \$\mathbf{m} 57'07 13° \$\mathbf{m} 04'46 20° \$\mathbf{m} 52'23 0° \$\mathbf{n}\$ 0° \$\mathbf{m}\$ 3° \$\mathbf{m} 29'04 10° \$\mathbf{m} 40'47 26° \$\mathbf{m} 01'39 25° \$\mathbf{m} 51'14 24° \$\mathbf{m} 44'27 0° \$\mathbf{r}\$ 10° \$\mathbf{r}\$ 50'50	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 18 22:54 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 19 02:21	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmp\$ 5°\$\lmp\$07'57 8°\$\lmp\$30'12 7°\$\lmp\$58'57 2°\$\lmp\$54'38 2°\$\lmp\$48'40 30°\$\lambda\$0 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmp\$ 2°\$\lmp\$35'08 0°\$\ldots\$ 23°\$\ldots\$19'00 24°\$\ldots\$46'07 0°\$\ldots\$ 6°\$\ldots\$46'13 10°\$\ldots\$36'13 10°\$\ldots\$23'50	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist.	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Sep 01 01:27 12544 Sep 01 01:27 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 24 02:59 12544 Oct 25 21:20 12544 Nov 05 09:46 12544 Nov 05 07:54 12544 Nov 04 19:55 12544 Nov 07 04:30 12544 Nov 12 03:03 12544 Nov 12 03:03 12544 Nov 12 03:03 12544 Nov 12 18:52	7° \$\Oqual 0.70 0.70	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34 1.31280 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 20 03:06 12545 Aug 20 03:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 19 02:21 12545 Oct 20 19:59 12545 Oct 20 17:44 12545 Oct 27 13:26	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmo\$ 5°\$\lmo\$07'57 8°\$\lmo\$30'12 7°\$\lmo\$58'57 2°\$\lmo\$58'57 2°\$\lmo\$52'51 27°\$\lambda\$52'51 27°\$\lambda\$52'51 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmo\$ 2°\$\lmo\$35'08 0°\$\ldo\$ 23°\$\ldo\$19'00 24°\$\ldo\$46'07 0°\$\ldo\$1 10°\$\ldo\$13 10°\$\ldo\$123'50 25°\$\ldo\$124'26	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Sep 01 01:27 12544 Sep 01 01:27 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 24 02:59 12544 Oct 25 21:20 12544 Nov 05 09:46 12544 Nov 05 07:54 12544 Nov 07 04:30 12544 Nov 12 03:03 12544 Nov 27 22:21 12544 Oct 29 19:25	7° \$\lambda 07'30 7° \$\lambda 35'58 26° \$\lambda 30'05 27° \$\lambda 34'38 0° \$\lambda 20' \$\lambda 93'12 17° \$\lambda 33'12 17° \$\lambda 42'26 14° \$\lambda 57'07 13° \$\lambda 04'46 20° \$\lambda 52'23 0° \$\lambda 0'\lambda 20' \$\lambda 52'23 0° \$\lambda 0'\lambda 52'23 0° \$\lambda 0'\lambda 7 26° \$\lambda 01'39 25° \$\lambda 51'14 24° \$\lambda 44'27 0° \$\neq 10° \$\neq 50'50 0° \$\lambda 15'58	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34 1.31280 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set inferior conj minimum elong	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 20 03:06 12545 Aug 20 13:06 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 15 22:56 12545 Oct 20 17:44 12545 Oct 27 13:26 12545 Oct 27 13:26 12545 Oct 29 17:15	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lmo\$ 5°\$\lmo\$07'57 8°\$\lmo\$30'12 7°\$\lmo\$58'57 2°\$\lmo\$54'38 2°\$\lmo\$48'40 30°\$\lambda\$ 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lmo\$ 2°\$\lmo\$35'08 0°\$\ldo\$\left\$ 23°\$\ldo\$19'00 24°\$\ldo\$46'07 0°\$\ldo\$\ldo\$0"\ldo\$13 10°\$\ldo\$13'50 25°\$\ldo\$124'26 0°\$\ldo\$'	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong desc. node min. Earth dist. morning rise direct morning max el asc. node morning set superior conj minimum elong max. Earth dist. evening rise desc. node evening max el	12544 Jul 18 13:30 12544 Jul 29 05:43 12544 Jul 29 19:41 12544 Jul 31 03:13 12544 Aug 14 06:38 12544 Aug 21 10:14 12544 Aug 23 15:21 12544 Aug 30 21:35 12544 Aug 30 22:18 12544 Sep 01 01:27 12544 Sep 03 05:14 12544 Sep 07 01:50 12544 Sep 13 11:07 12544 Sep 27 19:21 12544 Oct 05 17:21 12544 Oct 24 02:59 12544 Oct 25 21:20 12544 Oct 29 09:14 12544 Nov 05 09:46 12544 Nov 05 07:54 12544 Nov 07 04:30 12544 Nov 12 03:03 12544 Nov 21 18:52 12544 Nov 27 22:21 12544 Dec 10 22:19 12544 Dec 15 00:31 12544 Dec 24 21:01	7° \$\lambda 07'30 7° \$\lambda 35'58 26° \$\lambda 30'05 27° \$\lambda 34'38 0° \$\lambda 20° \$\lambda 01'13 25° \$\lambda 38'58 25° \$\lambda 18'43 20° \$\lambda 34'03 20° \$\lambda 33'12 17° \$\lambda 42'26 14° \$\lambda 57'07 13° \$\lambda 04'46 20° \$\lambda 52'23 0° \$\lambda 0° \$\lambda 0° \$\lambda 10° \$\lambda 13'9 25° \$\lambda 51'14 24° \$\lambda 44'27 0° \$\lambda' 10° \$\lambda 50'50 0° \$\lambda 10'55'58 26° \$\lambda 35'46 0° \$\lambda 3° \$\lambda 41'04	1°31'07 18°12'46 0°21'19 0°20'49 0.59218 AU 27°36'12 1°26'04 1°26'34 1.31280 AU	minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. desc. node morning rise direct morning max el asc. node morning set max. Earth dist. superior conj minimum elong evening rise desc. node	12545 Jun 29 23:55 12545 Jul 06 20:07 12545 Jul 12 00:13 12545 Jul 16 16:28 12545 Jul 24 14:24 12545 Jul 28 19:40 12545 Aug 04 08:33 12545 Aug 06 21:46 12545 Aug 13 11:20 12545 Aug 16 09:40 12545 Aug 16 12:40 12545 Aug 16 12:40 12545 Aug 26 18:58 12545 Aug 26 18:58 12545 Sep 07 04:51 12545 Sep 09 23:45 12545 Oct 12 18:03 12545 Oct 12 18:03 12545 Oct 13 11:02 12545 Oct 19 02:21 12545 Oct 20 19:59 12545 Oct 20 17:44 12545 Oct 20 17:44 12545 Oct 20 17:44 12545 Oct 20 17:15 12545 Nov 14 19:33 12545 Nov 16 03:15 12545 Nov 16 03:15	18°\$21'44 0°\$\lambda\$ 9°\$\lambda\$02'00 17°\$\lambda\$13'39 0°\$\lm\text{m}\$ 5°\$\lm\text{m}\$07'57 8°\$\lm\text{m}\$30'12 7°\$\lm\text{m}\$58'57 2°\$\lm\text{m}\$54'38 2°\$\lm\text{m}\$48'40 30°\$\lambda\$0\$\text{R}\$\lambda\$ 29°\$\lambda\$52'51 27°\$\lambda\$45'12 26°\$\lambda\$53'15 24°\$\lambda\$35'55 0°\$\lm\text{m}\$ 2°\$\lm\text{m}\$35'08 0°\$\ldots\$ 23°\$\ldots\$19'00 24°\$\ldots\$46'07 0°\$\ldots\$ 6°\$\ldots\$46'07 0°\$\ldots\$ 10°\$\ldots\$45'13 10°\$\ldots\$23'50 25°\$\ldots\$25'\$\ldots\$24'26 0°\$\ldots\$7 28°\$\ldots\$14'01 0°\$\ldots\$7	1°58'47 18°03'19 1°34'39 1°33'22 0.61511 AU 27°58'06 1.31623 AU 1°11'19 1°11'30
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min. Earth dist.	12545 Dec 17 01:19	10°る17'21	0.56564 AU	min. Earth dist.	12546 Nov 28 09:10	20° ₹ 109'35	0.55162 AU
inferior conj	12545 Dec 19 15:41	8° る 36'58		inferior conj	12546 Nov 29 21:06	19° × 717'39	
minimum elong	12545 Dec 19 22:55	8° る 25'17		minimum elong	12546 Nov 29 21:40	19° ∡ 16'49	
morning rise	12545 Dec 28 02:36	4° ට 29'45		morning rise	12546 Dec 08 08:46	15° ∡ 127'12	
direct	12545 Dec 30 10:42	4° ප 14'26		direct	12546 Dec 11 07:11	15° ∡ 106'42	
asc. node	12546 Jan 08 18:05	8° ට 37'21		morning max el	12546 Dec 22 08:49	20° ∡ ¹22'49	20°38'54
morning max el	12546 Jan 08 23:26	8° る 50'07	19°22'35	asc. node	12546 Dec 26 15:14	25° ∡ 11'11	
	12546 Jan 22 19:05	0° ≈			12546 Dec 30 00:21	ರ∘ರ	
morning set	12546 Jan 26 00:29	6° ≈ 21'39		morning set	12547 Jan 10 07:58	21° る 02'30	
					12547 Jan 14 15:31	0° ≈	
superior conj	12546 Feb 03 03:07	22° ≈ 30′07	0°58'41				
minimum elong	12546 Feb 03 05:58	22° ≈ 44'01	0°58'55	superior conj	12547 Jan 17 19:12	6° ≈ 29'40	1°18'42
	12546 Feb 07 01:13	0° ∀		minimum elong	12547 Jan 17 21:44		1°19'13
max. Earth dist.	12546 Feb 09 16:24	4° ¥ 52'00	1.38178 AU	max. Earth dist.	12547 Jan 23 00:47	16° ≈ 54′02	1.36033 AU
desc. node	12546 Feb 10 19:25	6° ¥ 54'19		evening rise	12547 Jan 26 21:53	24°≈13'31	
evening rise	12546 Feb 13 10:02	11°) 32′01		desc. node	12547 Jan 28 16:05	27°≈25'52	
	12546 Feb 24 15:32	0° Υ			12547 Jan 30 02:37	0° \	
	12546 Mar 19 00:57	0°8	24050100		12547 Feb 18 06:29	0° Υ	26907125
evening max el	12546 Mar 20 19:39	1° 8 49'18 8° 8 43'44	24°58'08	evening max el	12547 Mar 03 09:15	15° Y 39'30 22° Y 54'40	26°07'25
retrograde	12546 Apr 01 16:44	6° 8 57'31		retrograde	12547 Mar 16 02:33 12547 Mar 22 06:43	20° Y 24'20	
asc. node evening set	12546 Apr 06 15:08 12546 Apr 07 09:30	6° 8 21'05		evening set asc. node	12547 Mar 24 12:33	20 1 24 20 18° Y 15'04	
min. Earth dist.	12546 Apr 11 20:28	1° 8 21'25	0.68084 AU	min. Earth dist.	12547 Mar 26 11:11	18 1 13 04 15° Y 59'48	0.67065 AU
iiiii. Eartii tist.	12546 Apr 12 21:12	30°RΥ	0.00004 AU	inferior conj	12547 Mar 28 03:02	13° Υ 56'25	1°07'16
inferior conj	12546 Apr 13 00:01	29° Υ ′50'44	1°52'55	minimum elong	12547 Mar 28 01:28	14° Υ 01'17	1°06'33
minimum elong	12546 Apr 12 21:54	29° Υ '57'41	1°51'53	morning rise	12547 Apr 02 20:57	8° Υ 10'24	1 00 55
morning rise	12546 Apr 18 10:33	23° Y '54'36	1 31 33	direct	12547 Apr 06 01:55	7° Υ 12'01	
direct	12546 Apr 22 02:39	22° Y '37'12		morning max el	12547 Apr 12 16:38		18°39'42
morning max el	12546 Apr 29 07:14	26° Y 35'19	19°30'38	desc. node	12547 Apr 26 18:05	29° Ƴ 58'07	
5 5	12546 May 02 09:44	0°8			12547 Apr 26 18:34	0°8	
desc. node	12546 May 09 21:23	10° 8 03'49		morning set	12547 May 04 03:43	11° 8 30'39	
greatest brilliancy	12546 May 11 23:28	13° 8 06'11	-0.7m	C	12547 May 15 23:37	Π°	
	12546 May 23 04:02	Π°		max. Earth dist.	12547 May 19 12:02	5° Ⅱ 29'39	1.45700 AU
morning set	12546 May 24 13:55	2° Ⅱ 10′09					
max. Earth dist.	12546 Jun 05 17:29	21° Ⅱ 04'36	1.44969 AU	superior conj	12547 May 20 08:00	6° Ⅱ 47'42	-2°08'01
				minimum elong	12547 May 20 02:27	6° Ⅱ 26′00	2°08'37
					120 17 111ay 20 02.27	0 12000	
superior conj	12546 Jun 09 21:27	27° Ⅱ 41'28	-2°12'41	C	12547 Jun 04 00:51	0°95	
superior conj minimum elong	12546 Jun 09 21:27 12546 Jun 09 23:31	27° Ⅱ 41'28 27° Ⅱ 49'44	-2°12'41 2°13'34	evening rise	•		
		27°∏49'44 0°©		evening rise greatest brilliancy	12547 Jun 04 00:51	0°ତ 1°ତ15'57 13°ତ00'48	-0.9m
	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08	27°¶49'44 0°© 20°©39'23		evening rise	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17	0°95 1°9515'57 13°9500'48 25°9529'16	-0.9m
minimum elong evening rise	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30	27°∏49'44 0°© 20°©39'23 0°Ω		evening rise greatest brilliancy asc. node	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31	0°\$ 1°\$15'57 13°\$00'48 25°\$29'16 0°\$	
minimum elong evening rise asc. node	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20	27° \$\Pi\49'44\\ 0° \$\Sigma\20° \$\Sigma\39'23\\ 0° \$\Omega\\6° \$\Omega\34'11\\	2°13'34	evening rise greatest brilliancy asc. node evening max el	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12	0°S 1°S15'57 13°S00'48 25°S29'16 0°A 2°A13'08	
minimum elong evening rise asc. node evening max el	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53	27° II 49'44 0° © 20° © 39'23 0° \(\Omega\) 6° \(\Omega\) 34'11 18° \(\Omega\) 34'36		evening rise greatest brilliancy asc. node evening max el retrograde	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34	0°S 1°S15'57 13°S00'48 25°S29'16 0°N 2°N13'08 5°N47'12	
minimum elong evening rise asc. node evening max el retrograde	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20	27° II 49'44 0° 55 20° 53 39'23 0° \$\Omega\$ 6° \$\Omega\$ 34'11 18° \$\Omega\$ 34'36 21° \$\Omega\$ 55'57	2°13'34	evening rise greatest brilliancy asc. node evening max el	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32	0°\$\text{0}\$15'57 13°\$00'48 25°\$29'16 0°\$\Omega\$2°\$\Omega\$13'08 5°\$\Omega\$47'12 4°\$\Omega\$47'00	
minimum elong evening rise asc. node evening max el retrograde evening set	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52	27° II 49'44 0° 55 20° 539'23 0° \$\Omega\$ 6° \$\Omega\$ 34'11 18° \$\Omega\$ 34'36 21° \$\Omega\$ 55'57 21° \$\Omega\$ 11'01	2°13'34 18°12'30	evening rise greatest brilliancy asc. node evening max el retrograde evening set	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10	0°\$- 1°\$15'57 13°\$00'48 25°\$29'16 0°Ω 2°Ω13'08 5°Ω47'12 4°Ω47'00 30°\$\$-	18°39'34
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24	27° II 49'44 0° © 20° © 39'23 0° \(\Omega\) 6° \(\Omega\) 34'36 21° \(\Omega\) 55'57 21° \(\Omega\) 11'01 15° \(\Omega\) 48'58	2°13'34 18°12'30 2°25'12	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49	0°\$-100048 25°\$29'16 0°\$\Omega\$-200048 25°\$13'08 5°\$\Omega\$-47'12 4°\$\Omega\$-47'00 30°\$\Omega\$-29°\$\Omega\$-90'06	18°39'34 2°56'18
evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53	27° II 49'44 0° 55 20° 5539'23 0° 10 6° 10 34'11 18° 10 334'36 21° 10 55'57 21° 11'01 15° 10 48'58 15° 10 41'57	2°13'34 18°12'30 2°25'12 2°23'52	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 10:35	0°5 1°515'57 13°500'48 25°529'16 0°\$\Omega\$ 2°\$\Omega\$13'08 5°\$\Omega\$47'12 4°\$\Omega\$47'00 30°\$\Omega\$ 29°509'06 29°503'39	18°39'34 2°56'18 2°55'10
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33	27° II 49'44 0° S 20° S39'23 0° N 6° N34'11 18° N34'36 21° N55'57 21° N11'01 15° N48'58 15° N41'57 12° N58'16	2°13'34 18°12'30 2°25'12	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 10:35 12547 Jul 13 07:32	0°5 1°515'57 13°500'48 25°529'16 0°\$\Omega\$ 2°\$\Omega\$13'08 5°\$\Omega\$47'12 4°\$\Omega\$47'00 30°\$\S\$ 29°\$\Omega\$09'06 29°\$\Omega\$3'39 26°\$\Omega\$45'48	18°39'34 2°56'18
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18	27° II 49'44 0° S 20° S39'23 0° N 6° N34'11 18° N34'36 21° N55'57 21° N11'01 15° N48'58 15° N41'57 12° N58'16 9° N33'06	2°13'34 18°12'30 2°25'12 2°23'52	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 10:35 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 17 02:44	0°\$\text{0}\$15'57 13°\$00'48 25°\$29'16 0°\$\Omega\$2°\$\Omega\$13'08 5°\$\Omega\$47'12 4°\$\Omega\$47'00 30°\$\text{0}\$29°\$\Omega\$09'06 29°\$\Omega\$03'39 26°\$\Omega\$45'48 22°\$\Omega\$46'44	18°39'34 2°56'18 2°55'10
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 05 20:18	27° II 49'44 0° © 20° © 39'23 0° N 6° N 34'11 18° N 34'36 21° N 55'57 21° N 11'01 15° N 48'58 15° N 41'57 12° N 58'16 9° N 33'06 7° N 44'34	2°13'34 18°12'30 2°25'12 2°23'52	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 00:35 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58	0°\$\text{0}\$1°\$\text{0}\$15'57 13°\$\text{0}\$00'48 25°\$\text{0}\$29'16 0°\$\text{0}\$2°\$\text{0}\$13'08 5°\$\text{0}\$47'12 4°\$\text{0}\$47'00 30°\$\text{0}\$29°\$\text{0}\$9'06 29°\$\text{0}\$3'39 26°\$\text{0}\$45'48 22°\$\text{0}\$46'44 20°\$\text{0}\$5'32	18°39'34 2°56'18 2°55'10
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 05 20:18 12546 Aug 09 12:01	27° II 49'44 0° © 20° © 39'23 0° \(\Omega\) 6° \(\Omega\) 34'11 18° \(\Omega\) 34'36 21° \(\Omega\) 55'57 21° \(\Omega\) 11'01 15° \(\Omega\) 48'58 15° \(\Omega\) 41'57 12° \(\Omega\) 58'16 9° \(\Omega\) 33'06 7° \(\Omega\) 44'34 6° \(\Omega\) 58'54	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 11 07:35 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38	0°\$\text{0}\$15'57 13°\$00'48 25°\$29'16 0°\$\Omega\$2°\$\Omega\$13'08 5°\$\Omega\$47'12 4°\$\Omega\$47'00 30°\$\text{0}\$29°\$\Omega\$09'06 29°\$\Omega\$03'39 26°\$\Omega\$45'48 22°\$\Omega\$46'44	18°39'34 2°56'18 2°55'10 0.65591 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 05 20:18 12546 Aug 09 12:01 12546 Aug 23 08:47	27° II 49'44 0° 5 20° 539'23 0° 10 6° 1.34'11 18° 1.34'36 21° 1.55'57 21° 1.1'01 15° 1.48'58 15° 1.41'57 12° 1.58'16 9° 1.33'06 7° 1.44'34 6° 1.58'54 15° 1.00'03	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Aug 05 19:50	0°\$\text{0}\$15'57 13°\$00'48 25°\$29'16 0°\$\text{0}\$2°\$\text{0}\$13'08 5°\$\text{0}\$47'12 4°\$\text{0}\$47'00 30°\$\text{0}\$29°\$\text{0}\$9'06 29°\$\text{0}\$3'39 26°\$\text{0}\$45'48 22°\$\text{0}\$46'44 20°\$\text{0}\$5'32 20°\$\text{0}\$5'40	18°39'34 2°56'18 2°55'10 0.65591 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Aug 23 08:47 12546 Sep 04 14:24	27° II 49'44 0° 5 20° 539'23 0° 0 6° 034'11 18° 034'36 21° 055'57 21° 011'01 15° 048'58 15° 041'57 12° 058'16 9° 033'06 7° 044'34 6° 058'54 15° 000'03 0° 10	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41	0°\$\text{0.00}\$ 1°\$\text{0.00}\$15'57 13°\$\text{0.00'48} 25°\$\text{0.00}\$2'\text{0.13'08} 5°\text{0.47'12} 4°\text{0.47'00} 30°\text{0.00}\$29°\$\text{0.09'06} 29°\$\text{0.09'06} 29°\$\text{0.09'06} 29°\$\text{0.09'5'32} 20°\$\text{0.05'40} 27°\$\text{0.00}\$140	18°39'34 2°56'18 2°55'10 0.65591 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 05 20:18 12546 Aug 09 12:01 12546 Aug 23 08:47 12546 Sep 04 14:24 12546 Sep 22 20:27	27° II 49'44 0° 5 20° 539'23 0° 10 6° 1.34'11 18° 1.34'36 21° 1.55'57 21° 1.1'01 15° 1.48'58 15° 1.41'57 12° 1.58'16 9° 1.33'06 7° 1.44'34 6° 1.58'54 15° 1.00'03	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41 12547 Aug 29 08:10	0°\$\text{0.55} 1 \cdot \text{9.15} 57 13 \cdot \text{9.00} 00 \text{48} 25 \cdot \text{9.29} 16 0 \cdot \text{0.6} \text{0.6} 2 \cdot \text{0.13} 08 5 \cdot \text{0.47} 12 4 \cdot \text{0.47} 00 30 \cdot \text{8.20} 29 \cdot \text{9.09} 00 06 29 \cdot \text{9.09} 03 \cdot 39 26 \cdot \text{9.45} 48 22 \cdot \text{9.46} 14 4 20 \cdot \text{9.05} 13 2 20 \cdot \text{9.05} 14 0 27 \cdot \text{9.56} 14 7 0 \cdot \text{0.6}	18°39'34 2°56'18 2°55'10 0.65591 AU
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Aug 23 08:47 12546 Sep 04 14:24	27° II 49'44 0° © 20° © 39'23 0° \(\Omega\) 6° \(\Omega\) 34'11 18° \(\Omega\) 34'36 21° \(\Omega\) 55'57 21° \(\Omega\) 11'01 15° \(\Omega\) 48'58 15° \(\Omega\) 41'57 12° \(\Omega\) 58'16 9° \(\Omega\) 33'06 7° \(\Omega\) 44'34 6° \(\Omega\) 58'54 15° \(\Omega\) 00'03 0° \(\omega\) 0° \(\Omega\)	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 11 07:32 12547 Jul 11 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41	0°\$\text{0.00}\$ 1°\$\text{0.00}\$15'57 13°\$\text{0.00'48} 25°\$\text{0.00}\$2'\text{0.13'08} 5°\text{0.47'12} 4°\text{0.47'00} 30°\text{0.00}\$29°\$\text{0.09'06} 29°\$\text{0.09'06} 29°\$\text{0.09'06} 29°\$\text{0.09'06} 20°\$\text{0.05'48} 22°\$\text{0.05'40} 27°\$\text{0.00'}\$\text{0.00'}\$\text{0.00'}\$	18°39'34 2°56'18 2°55'10 0.65591 AU
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minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Aug 02 20:18 12546 Aug 02 20:18 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Sep 04 14:24 12546 Sep 22 20:27 12546 Sep 27 05:19 12546 Sep 29 14:43 12546 Oct 05 02:49 12546 Oct 05 02:49 12546 Oct 07 10:29 12546 Oct 12 00:44 12546 Oct 12 00:44 12546 Oct 12 00:44	27° II 49'44 0° © 20° © 39'23 0° \(\Omega\) 6° \(\Omega\) 34'11 18° \(\Omega\) 34'36 21° \(\Omega\) 55'57 21° \(\Omega\) 11'01 15° \(\Omega\) 48'58 15° \(\Omega\) 41'57 12° \(\Omega\) 58'16 9° \(\Omega\) 33'06 7° \(\Omega\) 44'34 6° \(\Omega\) 58'54 15° \(\Omega\) 00'03 0° \(\Omega\) 0° \(\Omega\) 8° \(\Omega\) 27'52 13° \(\Omega\) 18'45 18° \(\Omega\) 32'32 24° \(\Omega\) 46'03 0° \(\Omega\) 9° \(\Omega\) 58'21 0° \(\nabla\)	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU 27°42'16 1.32494 AU 0°51'05	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41 12547 Aug 29 08:10 12547 Sep 10 13:07 12547 Sep 10 13:07 12547 Sep 14 19:16 12547 Sep 16 11:19	0°\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\te	18°39'34 2°56'18 2°55'10 0.65591 AU 26°54'13 1.33890 AU 0°25'39 0°25'27
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Aug 02 20:18 12546 Aug 02 20:18 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Sep 04 14:24 12546 Sep 22 20:27 12546 Sep 27 05:19 12546 Sep 29 14:43 12546 Oct 02 02:54 12546 Oct 05 02:49 12546 Oct 07 10:29 12546 Oct 12 00:44 12546 Oct 22 05:13 12546 Nov 01 16:49	27° II 49'44 0° © 20° © 39'23 0° \(\oldsymbol{O}\) 6° \(\oldsymbol{Q}\) 34'36 21° \(\oldsymbol{Q}\) 55'57 21° \(\oldsymbol{Q}\) 11'01 15° \(\oldsymbol{Q}\) 48'58 15° \(\oldsymbol{Q}\) 41'57 12° \(\oldsymbol{Q}\) 58'16 9° \(\oldsymbol{Q}\) 33'06 7° \(\oldsymbol{Q}\) 44'34 6° \(\oldsymbol{Q}\) 58'54 15° \(\oldsymbol{Q}\) 00' \(\oldsymbol{O}\) 8° \(\oldsymbol{Q}\) 27'52 13° \(\oldsymbol{Q}\) 18'45 18° \(\oldsymbol{Q}\) 32'32 24° \(\oldsymbol{Q}\) 46'03 0° \(\oldsymbol{II}\) 9° \(\oldsymbol{II}\) 58'21 0° \(\oldsymbol{Z}\) 15° \(\oldsymbol{Z}\) 00'11	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU 27°42'16 1.32494 AU 0°51'05 0°51'01	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 10:35 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41 12547 Aug 29 08:10 12547 Sep 10 13:07 12547 Sep 10 13:07 12547 Sep 14 19:16 12547 Sep 16 11:19 12547 Sep 19 03:58 12547 Sep 19 03:58 12547 Sep 20 03:06 12547 Sep 20 03:06 12547 Sep 29 03:06 12547 Sep 29 03:06	0°\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\te	18°39'34 2°56'18 2°55'10 0.65591 AU 26°54'13 1.33890 AU 0°25'39 0°25'27
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node evening max el	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Jul 30 05:33 12546 Aug 02 20:18 12546 Aug 05 20:18 12546 Aug 03 08:47 12546 Sep 04 14:24 12546 Sep 22 20:27 12546 Sep 27 05:19 12546 Sep 29 14:43 12546 Oct 02 02:54 12546 Oct 05 00:43 12546 Oct 07 10:29 12546 Oct 12 00:44 12546 Oct 22 05:13 12546 Nov 01 16:49 12546 Nov 03 23:39	27° II 49'44 0° © 20° © 39'23 0° \(\oldsymbol{O}\) 6° \(\oldsymbol{Q}\) 34'36 21° \(\oldsymbol{Q}\) 55'57 21° \(\oldsymbol{Q}\) 11'01 15° \(\oldsymbol{Q}\) 48'58 15° \(\oldsymbol{Q}\) 41'57 12° \(\oldsymbol{Q}\) 58'16 9° \(\oldsymbol{Q}\) 33'06 7° \(\oldsymbol{Q}\) 44'34 6° \(\oldsymbol{Q}\) 58'54 15° \(\oldsymbol{Q}\) 00'03 0° \(\oldsymbol{D}\) 8° \(\oldsymbol{Q}\) 27'52 13° \(\oldsymbol{Q}\) 18'45 18° \(\oldsymbol{Q}\) 32'32 24° \(\oldsymbol{Q}\) 57'25 24° \(\oldsymbol{Q}\) 46'03 0° \(\oldsymbol{I}\) 9° \(\oldsymbol{I}\) 58'21 0° \(\oldsymbol{Z}\) 15° \(\oldsymbol{Z}\) 00'11 17° \(\oldsymbol{Z}\) 23'08	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU 27°42'16 1.32494 AU 0°51'05	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise evening max el	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 12 04:46 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 08:49 12547 Jul 13 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41 12547 Aug 09 18:01 12547 Sep 10 13:07 12547 Sep 10 13:07 12547 Sep 14 19:16 12547 Sep 14 19:16 12547 Sep 16 11:19 12547 Sep 19 03:58 12547 Sep 19 03:58 12547 Sep 29 03:06 12547 Sep 29 03:06 12547 Oct 16 13:41 12547 Oct 19 09:48	0°\$\text{0.00}\$ 1°\$\text{0.00}\$15'57 13°\$\text{0.00'48} 25°\$\text{0.00'48} 25°\$\text{0.00'48} 20°\$\text{0.13'08} 5°\$\text{0.47'12} 4°\$\text{0.47'00} 30°\$\text{0.00}\$ 29°\$\text{0.00'339} 26°\$\text{0.00'339} 26°\$\text{0.00'339} 26°\$\text{0.00'339} 26°\$\text{0.00'332} 20°\$\text{0.00'332}	18°39'34 2°56'18 2°55'10 0.65591 AU 26°54'13 1.33890 AU 0°25'39 0°25'27
minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12546 Jun 09 23:31 12546 Jun 11 08:02 12546 Jun 23 22:08 12546 Jun 29 12:30 12546 Jul 03 13:20 12546 Jul 12 09:53 12546 Jul 18 18:20 12546 Jul 21 15:52 12546 Jul 27 16:24 12546 Jul 27 18:53 12546 Aug 02 20:18 12546 Aug 02 20:18 12546 Aug 09 12:01 12546 Aug 09 12:01 12546 Sep 04 14:24 12546 Sep 22 20:27 12546 Sep 27 05:19 12546 Sep 29 14:43 12546 Oct 02 02:54 12546 Oct 05 02:49 12546 Oct 07 10:29 12546 Oct 12 00:44 12546 Oct 22 05:13 12546 Nov 01 16:49	27° II 49'44 0° © 20° © 39'23 0° \(\oldsymbol{O}\) 6° \(\oldsymbol{Q}\) 34'36 21° \(\oldsymbol{Q}\) 55'57 21° \(\oldsymbol{Q}\) 11'01 15° \(\oldsymbol{Q}\) 48'58 15° \(\oldsymbol{Q}\) 41'57 12° \(\oldsymbol{Q}\) 58'16 9° \(\oldsymbol{Q}\) 33'06 7° \(\oldsymbol{Q}\) 44'34 6° \(\oldsymbol{Q}\) 58'54 15° \(\oldsymbol{Q}\) 00' \(\oldsymbol{O}\) 8° \(\oldsymbol{Q}\) 27'52 13° \(\oldsymbol{Q}\) 18'45 18° \(\oldsymbol{Q}\) 32'32 24° \(\oldsymbol{Q}\) 46'03 0° \(\oldsymbol{II}\) 9° \(\oldsymbol{II}\) 58'21 0° \(\oldsymbol{Z}\) 15° \(\oldsymbol{Z}\) 00'11	2°13'34 18°12'30 2°25'12 2°23'52 0.63696 AU 27°42'16 1.32494 AU 0°51'05 0°51'01	evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12547 Jun 04 00:51 12547 Jun 04 19:54 12547 Jun 20 10:17 12547 Jun 23 21:31 12547 Jun 25 22:12 12547 Jul 02 11:34 12547 Jul 05 17:32 12547 Jul 10 16:10 12547 Jul 11 08:49 12547 Jul 11 10:35 12547 Jul 13 07:32 12547 Jul 13 07:32 12547 Jul 17 02:44 12547 Jul 23 12:58 12547 Jul 23 17:38 12547 Jul 23 17:38 12547 Aug 05 19:50 12547 Aug 07 18:41 12547 Aug 29 08:10 12547 Sep 10 13:07 12547 Sep 10 13:07 12547 Sep 14 19:16 12547 Sep 16 11:19 12547 Sep 19 03:58 12547 Sep 19 03:58 12547 Sep 20 03:06 12547 Sep 20 03:06 12547 Sep 29 03:06 12547 Sep 29 03:06	0°\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\text{1.00}\$\text{0.00}\$\te	18°39'34 2°56'18 2°55'10 0.65591 AU 26°54'13 1.33890 AU 0°25'39 0°25'27

evening set	12547 Oct 31 15:53	3° ∡ 17'40		asc. node	12548 Sep 02 07:56	23° m 29'37	
	12547 Nov 08 11:21	30°RM₊			12548 Sep 05 12:27	0∘ ಹ	
inferior conj	12547 Nov 09 13:56	29°M22'53	-5°27'52	evening rise	12548 Sep 09 18:09	8° ≏ 44'09	
minimum elong	12547 Nov 09 06:13	29°M33'42	5°25'51		12548 Sep 21 04:55	0° M	
min. Earth dist.	12547 Nov 09 15:25	29°M20'49	0.54547 AU	evening max el	12548 Sep 27 15:58	8° M 14'09	20°10'24
morning rise	12547 Nov 17 21:30	25°M34'41		desc. node	12548 Oct 05 11:34	13°M10'32	
direct	12547 Nov 21 15:34	25°ML04'10		retrograde	12548 Oct 08 08:19	13°MJ32'53	
	12547 Dec 03 00:14	0° ∡ 7		evening set	12548 Oct 10 08:38	13°M22'25	
morning max el	12547 Dec 04 04:30	1° ∡ 103′37	22°15'57	inferior conj	12548 Oct 19 08:03	9° M 24'33	-4°07'02
asc. node	12547 Dec 13 12:17	12° х 46'34		minimum elong	12548 Oct 18 22:12	9° M ₊39'13	4°03'30
	12547 Dec 22 23:29	0°ਰ		min. Earth dist.	12548 Oct 20 23:34	8°M25'43	0.54874 AU
morning set	12547 Dec 25 18:35	5° る 48'29		morning rise	12548 Oct 27 10:47	5°M17'32	0.0 .07 .110
morning sec	123 17 BCC 23 10.33	3 3 10 27		direct	12548 Nov 01 01:51	4°M31'05	
superior conj	12548 Jan 01 19:58	20°る51'36	1°31'36	morning max el	12548 Nov 14 15:47	11°M 10'49	24°04'02
	12548 Jan 01 21:37	20 3 3130 21° る 00'22	1°32'23	morning max er	12548 Nov 28 17:15	0° 7	24 04 02
minimum elong		21 000 22 28° る 45'26		1.			
max. Earth dist.	12548 Jan 05 14:56		1.34175 AU	asc. node	12548 Nov 29 09:14	1°×709'08	
	12548 Jan 06 05:34	0° ≈		morning set	12548 Dec 09 06:25	20° ∡ ′34′11	
evening rise	12548 Jan 10 00:43	7° ≈ 32'07			12548 Dec 13 14:36	0°₹	
desc. node	12548 Jan 15 12:50	17° ≈ 47'19				_	
	12548 Jan 22 17:22	0° ∀		superior conj	12548 Dec 16 02:34	5° る 27'38	1°37'51
evening max el	12548 Feb 13 22:45	29° ∺ 19'26	27°00'13	minimum elong	12548 Dec 16 03:06	5° る 30'36	1°38'45
	12548 Feb 14 15:51	0 ° $\mathbf{\Upsilon}$		max. Earth dist.	12548 Dec 18 12:46	10° る 42'08	1.32737 AU
retrograde	12548 Feb 27 06:45	6° Ƴ 44'44		evening rise	12548 Dec 23 15:09	21° る 19'29	
evening set	12548 Mar 04 20:41	4° Ƴ 11'53			12548 Dec 28 01:46	0° ≈	
min. Earth dist.	12548 Mar 08 19:45	0° Y 21′00	0.65643 AU	desc. node	12549 Jan 01 09:39	7° ≈ 53'29	
	12548 Mar 09 03:14	30°R) €			12549 Jan 15 14:52	0° ₩	
asc. node	12548 Mar 10 09:57	28°) 32'06		evening max el	12549 Jan 26 11:16	12°) 38'47	27°29'17
inferior conj	12548 Mar 10 23:44	27° ¥ 52'30	0°11'06	retrograde	12549 Feb 09 04:29	20°\(\frac{1}{2}\)04'23	2, 2, 1,
minimum elong	12548 Mar 10 23:25	27° X 52'30	0°11'05	evening set	12549 Feb 16 01:03	17° ¥ 36′02	
transit middle	12548 Mar 10 23:25	27°\(\frac{1}{33}\)23	0°11'05	min. Earth dist.	12549 Feb 19 20:13	14° X 15'46	0.63876 AU
		27 ★33 23 27°¥59'34	0 11 03			14 X 13 46 11° X 32'13	
transit begin	12548 Mar 10 21:16			inferior conj	12549 Feb 22 11:27		
transit end	12548 Mar 11 01:34	27°) (47'13		minimum elong	12549 Feb 22 13:13	11°) €27'40	0°54'29
morning rise	12548 Mar 17 03:35	22°) 18'33		asc. node	12549 Feb 25 07:22	8°) 45′58	
direct	12548 Mar 19 22:39	21° ¥ 36′16		morning rise	12549 Mar 01 03:33	6° ¥ 12'44	
morning max el	12548 Mar 26 07:28	24° ¥ 56'43	18°05'29	direct	12549 Mar 03 14:19	5°) 42′54	
	12548 Mar 30 14:18	0 ° Υ		morning max el	12549 Mar 10 00:59	9° ∺ 02'10	17°48'25
desc. node	12548 Apr 12 14:43	20° Ƴ 10′33			12549 Mar 24 05:33	0 ° Υ	
morning set	12548 Apr 13 20:41	22° Y 12'19		morning set	12549 Mar 26 17:20	4° Υ 14'02	
	12548 Apr 18 16:15	$6^{\circ}B$		desc. node	12549 Mar 30 11:18	10° Ƴ 35′25	
	-						
superior conj	12548 Apr 28 16:47	15° 8 56'42	-1°43'49	superior conj	12549 Apr 08 16:42	25° Y ′51'42	-1°06'42
minimum elong	12548 Apr 28 07:30	15° 8 20'10	1°43'34	minimum elong	12549 Apr 08 09:47	25° Y ′23'42	1°06'06
max. Earth dist.	12548 May 01 07:56	_	1.45684 AU	g	12549 Apr 11 06:19	0°8	1 00 00
max. Latin dist.	12548 May 07 16:52	0°II	1.43004710	max. Earth dist.	12549 Apr 14 02:48	4° 8 32'46	1.44941 AU
evening rise	12548 May 14 19:22	11° Ⅱ 00′29		evening rise	12549 Apr 24 07:02	20° 8 22'56	1.44741710
evening rise	12548 May 27 05:08	0°95		evening rise	12549 Apr 30 14:59	0°Ⅱ	
	•		0.7			0 Ⅲ 29°Ⅲ44'13	20922146
greatest brilliancy	12548 May 27 10:25	0°519'43	-0.7m	evening max el	12549 May 22 08:58		20°22'46
asc. node	12548 Jun 06 07:18	13°950'16	10000104		12549 May 22 15:18	0.00	
evening max el	12548 Jun 08 06:20	15° © 57'38	19°23'34	asc. node	12549 May 24 04:25	1° © 25'30	
retrograde	12548 Jun 15 08:52	19° © 56'57		retrograde	12549 May 30 07:40	4° © 18'52	
evening set	12548 Jun 18 23:45	18° © 40'35		evening set	12549 Jun 03 08:14	2°946'05	
inferior conj	12548 Jun 24 09:15	12° © 48'30	3°11'27		12549 Jun 06 02:18	30°RⅡ	
minimum elong	12548 Jun 24 09:58	12° 5 46'07	3°10'29	inferior conj	12549 Jun 08 14:53	26° Ⅱ 41'21	3°13'24
min. Earth dist.	12548 Jun 25 17:20	11° © 03'12	0.67089 AU	minimum elong	12549 Jun 08 14:34	26° Ⅱ 42'29	3°12'29
morning rise	12548 Jun 29 19:42	6° ॐ 25′21		min. Earth dist.	12549 Jun 09 08:52	25° Ⅲ 39'45	0.68140 AU
direct	12548 Jul 05 20:41	3° 5 346'47		morning rise	12549 Jun 13 20:35	20° Ⅲ 21′06	
desc. node	12548 Jul 09 14:53	4°937'49		direct	12549 Jun 19 10:01	17° Ⅱ 53'29	
morning max el	12548 Jul 18 06:40	11° © 13'01	25°42'28	desc. node	12549 Jun 26 12:03	20° Ⅱ 53'35	
	12548 Aug 02 06:19	0°Ω		morning max el	12549 Jun 30 16:37	24° I 39'01	24°16'47
	12548 Aug 20 23:33	0° m)			12549 Jul 05 12:05	0°95	
morning set	12548 Aug 20 25:55 12548 Aug 23 06:51	رابات 4° ال 08'55			12549 Jul 26 17:00	0° U	
C	-		1 25761 ATT	momis		0° 3 ℓ 15° Ω 47'40	
max. Earth dist.	12548 Aug 26 23:24	11° m)01'05	1.35761 AU	morning set	12549 Aug 05 05:58		1 27070 444
	10540.0	220** 22:22	0004126	max. Earth dist.	12549 Aug 08 21:30	22° Ω 13'15	1.37978 AU
superior conj	12548 Sep 01 20:48	22° m/33'29			12549 Aug 13 03:29	0° m	
minimum elong	12548 Sep 01 21:05	22° m/34'53	0°04'35				
behind sun begin	12548 Sep 01 15:06	22° Mp 04'49		superior conj	12549 Aug 16 01:58	5° m 33'33	
behind sun end	12548 Sep 02 03:04	23°m/05'00		minimum elong	12549 Aug 16 04:34	5° m 45'59	0°37'50

asc. node	12549 Aug 20 04:33	13° Tp 33'08		asc. node	12550 Aug 07 01:13	3° m 30'30	
evening rise	12549 Aug 24 19:40	22° Mp 43'49		evening rise	12550 Aug 08 12:27	6° Mp 17'48	
	12549 Aug 28 12:51	0∘ 亚			12550 Aug 22 15:38	0∘ 亚	
evening max el	12549 Sep 10 08:24	19° ≏ 46'00	19°07'55	evening max el	12550 Aug 24 12:03	2° ₽ 02'04	18°26'56
retrograde	12549 Sep 19 09:02	24° ≏ 16'38		retrograde	12550 Sep 01 04:48	5° ≙ 55'00	
evening set	12549 Sep 21 05:30	24° ₽ 06'02		evening set	12550 Sep 03 05:54	5° ₽ 39'20	
desc. node	12549 Sep 22 09:01	23° ≏ 49'23		desc. node	12550 Sep 09 06:31	2° ₽ 24'30	
inferior conj	12549 Sep 29 16:49	19° ≏ 53'34	-2°18'01	inferior conj	12550 Sep 10 22:50	1° ≏ 06′17	-0°31'32
minimum elong	12549 Sep 29 10:52	20° ♀ 03'40		minimum elong	12550 Sep 10 21:37	1° ≏ 08'41	0°31'07
min. Earth dist.	12549 Oct 02 11:37		0.56090 AU	minimum ciong	12550 Sep 12 08:01	30°R.M)	0 31 07
	12549 Oct 02 11:37 12549 Oct 07 13:22	15° £ 12'52	0.30090 AU	min. Earth dist.	12550 Sep 12 08:01 12550 Sep 14 05:35	28° m) 31'00	0.57968 AU
morning rise							0.57906 AU
direct	12549 Oct 13 00:13	14° Ω 03'55	25046120	morning rise	12550 Sep 18 09:52	25° m) 48'27	
morning max el	12549 Oct 27 02:59	21° Ω 15'45	25°46'39	direct	12550 Sep 24 12:34	24° m 12'28	
	12549 Nov 03 17:40	0°M₊			12550 Oct 06 21:10	0∘ ಹ	
asc. node	12549 Nov 16 06:07	20°M07'18		morning max el	12550 Oct 08 20:12		27°06'08
	12549 Nov 21 05:58	0° ∡ 7			12550 Oct 29 01:03	0° M ₊	
morning set	12549 Nov 23 17:44	5° ∡ 15'16		asc. node	12550 Nov 03 02:54	9° ™ 31′06	
				morning set	12550 Nov 08 02:50	19° M 46'19	
superior conj	12549 Nov 30 12:41	20° х 11′10	1°37'52		12550 Nov 12 19:18	0° ∡ ¹	
minimum elong	12549 Nov 30 12:08	20° ∡ ¹08'07	1°38'45				
max. Earth dist.	12549 Dec 01 17:26	22° х 50′13	1.31778 AU	superior conj	12550 Nov 15 00:17	4° √ 55'19	1°32'01
	12549 Dec 05 00:14	0°る		minimum elong	12550 Nov 14 22:49	4° х 47′06	1°32'42
evening rise	12549 Dec 07 14:14	5°る28'25		max. Earth dist.	12550 Nov 15 01:50	5°×7'03'57	1.31318 AU
desc. node		27° る 37'57				19° х 03 37	1.51516 AU
desc. node	12549 Dec 19 06:34			evening rise	12550 Nov 21 19:22		
	12549 Dec 20 16:23	0° ≈			12550 Nov 26 17:59	0°る	
evening max el	12550 Jan 08 20:54	25°≈25'41	27°28'14	desc. node	12550 Dec 06 03:36	16° ප් 51'12	
	12550 Jan 14 14:27	0° ∀			12550 Dec 15 07:08	0° ≈	
retrograde	12550 Jan 22 18:29	2°) 44'40		evening max el	12550 Dec 22 00:42	7° ≈ 26′24	26°52'54
evening set	12550 Jan 29 17:02	0° ∺ 28'52		retrograde	12551 Jan 04 23:19	14° ≈ 36′11	
	12550 Jan 30 10:11	30° R ≈		evening set	12551 Jan 11 16:57	12° ≈ 41′10	
min. Earth dist.	12550 Feb 02 10:58	27° ≈ 33'51	0.61853 AU	min. Earth dist.	12551 Jan 15 14:54	10° ≈ 02'21	0.59705 AU
inferior conj	12550 Feb 05 11:09	24° ≈ 48′09	-2°11'26	inferior conj	12551 Jan 18 19:11	7° ≈ 29'29	-3°32'16
minimum elong	12550 Feb 05 15:42	24° ≈ 37'41	2°09'01	minimum elong	12551 Jan 19 02:34	7° ≈ 14'38	3°28'56
asc. node	12550 Feb 12 04:45	19° ≈ 56'50		morning rise	12551 Jan 26 15:07	2° ≈ 47'53	
morning rise	12550 Feb 12 17:06	19° ≈ 45'58		direct	12551 Jan 28 16:50	2° ≈ 31'48	
direct	12550 Feb 14 21:44	19° ≈ 24'49		asc. node	12551 Jan 30 02:06	2° ≈ 39'16	
morning max el	12550 Feb 21 18:04	22° ≈ 52'54	17°49'07	morning max el	12551 Feb 05 07:10	6° ≈ 18'18	18°08'49
morning man er	12550 Feb 27 08:16	0° ∀	1, 1, 0,	morning mun vi	12551 Feb 20 08:23	0° ∀	10 00 .9
morning set	12550 Mar 09 11:59	17°) 18′23		morning set	12551 Feb 20 08:23	1° ∺ 05'34	
morning set	12550 Mar 16 16:05	0° Υ		morning set	12331 1 00 20 22.24	1 /(03 34	
1 1		0 1 1° Υ 08'36			12551 M 02 15 20	1001/01/16	0012100
desc. node	12550 Mar 17 07:52	1 7 08 36		superior conj	12551 Mar 02 15:30	19° 米 01'16	
				minimum elong	12551 Mar 02 16:27	19°) €05'32	0°12'14
superior conj	12550 Mar 20 16:19	6° Y ′53'57		behind sun begin	12551 Mar 02 11:30	18°) 43′22	
minimum elong	12550 Mar 20 13:53	6° Y 43'35		behind sun end	12551 Mar 02 21:23	19° ∺ 27'39	
max. Earth dist.	12550 Mar 27 18:50	18° Ƴ 41'27	1.43551 AU	desc. node	12551 Mar 04 04:25	21° ¥ 45'40	
evening rise	12550 Apr 03 22:54	0° 8 04'41			12551 Mar 08 22:23	0° Y	
	12550 Apr 03 21:42	9° 8		max. Earth dist.	12551 Mar 10 06:33	2° Y 15′59	1.41654 AU
	12550 Apr 24 05:54	Π °0		evening rise	12551 Mar 15 07:00	10° Ƴ 32'10	
evening max el	12550 May 05 06:02	13° Ⅲ 31'58	21°34'01		12551 Mar 27 22:05	9° 8	
asc. node	12550 May 11 01:38	18° Ⅲ 01′02		evening max el	12551 Apr 17 22:37	27° 8 20'42	22°52'55
retrograde	12550 May 14 06:01	18° Ⅱ 48'27			12551 Apr 20 20:15	Π° 0	
evening set	12550 May 18 17:08	16° Ⅱ 59'31		asc. node	12551 Apr 27 22:57	3° Ⅲ 20′11	
inferior conj	12550 May 23 23:28	10° Ⅱ 43'51	3°04'00	retrograde	12551 Apr 28 02:27	3° Ⅲ 20′17	
minimum elong	12550 May 23 22:14	10° Ⅱ 48'09	3°03'01	evening set	12551 May 03 00:50	1° Ⅱ 16'20	
min. Earth dist.	12550 May 24 04:04	10° Ⅲ 27'50		evening set	12551 May 04 08:36	30°R8	
morning rise	12550 May 29 03:08	10 П 2730 4° П 28'45	0.00/23 AU	inferior conj	12551 May 04 08.58	24° 8 52'03	2011/17
•	•				•		
direct	12550 Jun 03 03:47	2° Ⅱ 18'07	22047102	minimum elong	12551 May 08 07:05	24° 8 58'34	
morning max el	12550 Jun 13 03:27		22°47'02	min. Earth dist.	12551 May 08 00:46	25° 8 20'31	0.68829 AU
desc. node	12550 Jun 13 09:08	8° Ⅱ 27'00		morning rise	12551 May 13 13:14	18° 8 43'30	
	12550 Jun 30 03:45	0ა ௐ		direct	12551 May 18 00:48	16° 8 53'16	
morning set	12550 Jul 17 05:46	26° © 23'03		morning max el	12551 May 26 18:24	21° 8 56'04	21°21'46
	12550 Jul 19 10:05	0 ° Ω		desc. node	12551 May 31 06:05	26° 8 56'56	
max. Earth dist.	12550 Jul 21 19:44	4° Ω 03′24	1.40316 AU		12551 Jun 02 16:21	Π °0	
					12551 Jun 23 10:02	0 \circ \odot	
superior conj	12550 Jul 29 15:25	17° Ω 49′20	-1°12'17	morning set	12551 Jun 27 04:10	5° 9 51'37	
minimum elong	12550 Jul 29 20:39	18° Ω 13′08	1°12'11	max. Earth dist.	12551 Jul 03 23:35	16°5548'03	1.42481 AU
J	12550 Aug 05 04:48	0° m)					
	5	7					

superior conj	12551 Jul 11 08:39	29° © 10'54	-1°43'48		12552 Jul 03 06:46	$0^{\circ}\Omega$	
minimum elong	12551 Jul 11 15:35	29° © 40'45	1°43'55	evening rise	12552 Jul 04 02:55	1° Ω 26'36	
	12551 Jul 11 20:04	0 ° Ω		asc. node	12552 Jul 10 18:47	12° Ω 49'45	
evening rise	12551 Jul 22 16:32	19° Ω 16′21		evening max el	12552 Jul 21 12:40	28° Ω 09'12	18°04'55
asc. node	12551 Jul 24 21:58	23° Ω 17′50			12552 Jul 23 17:13	0° m)	
	12551 Jul 28 16:27	0° m		retrograde	12552 Jul 27 22:40	1° m 29'43	
evening max el	12551 Aug 07 22:47	14° m 53'15	18°06'19	evening set	12552 Jul 30 15:16	0° الله 53′04	
retrograde	12551 Aug 14 18:48	18° m 22'50			12552 Aug 01 04:55	30° ₹Ω	
evening set	12551 Aug 17 03:18	17° m 58'15		inferior conj	12552 Aug 05 22:49	25° Ω 40'57	1°58'41
inferior conj	12551 Aug 24 02:01	13° m 04'38	0°55'21	minimum elong	12552 Aug 06 01:24	25° Ω 34'09	1°57'19
minimum elong	12551 Aug 24 03:41	13° m 00'47	0°54'24	min. Earth dist.	12552 Aug 08 19:26	22° Ω 41′20	0.62462 AU
desc. node	12551 Aug 27 04:00	10° m) 14'31		morning rise	12552 Aug 12 09:20	19° Ω 31'54	
min. Earth dist.	12551 Aug 27 07:49	10° m 06'08	0.60190 AU	desc. node	12552 Aug 13 01:27	19° Ω 04'01	
morning rise	12551 Aug 31 00:59	7° m) 15'55		direct	12552 Aug 19 01:43	17° Ω 06′13	
direct	12551 Sep 06 13:43	5° m 12'35		morning max el	12552 Sep 02 04:08	25° Ω 08'22	27°55'44
morning max el	12551 Sep 20 21:11	13° m 05'45	27°50'25	C	12552 Sep 06 14:58	0° m	
Ü	12551 Oct 04 08:21	0∘ ⊽			12552 Sep 26 19:50	0∘ ⊽	
asc. node	12551 Oct 20 23:38	29° ₽ 13'25		morning set	12552 Oct 06 06:49	17° £ 59'06	
	12551 Oct 21 08:49	0° M .		asc. node	12552 Oct 06 20:18	19° ≏ 07'55	
morning set	12551 Oct 23 07:55	4°ML02'59		max. Earth dist.	12552 Oct 11 14:36	29° £ 10′36	1.31929 AU
max. Earth dist.	12551 Oct 29 10:16	17°ML14'39	1.31365 AU	man. Darum dige.	12552 Oct 11 23:44	0°M	1.51,2,110
man zam ust.	12001 000 25 10.10	17 11011.37	1.51500110		12002 000 11 25	0 110	
superior conj	12551 Oct 30 11:33	19°MJ35'02	1°20'28	superior conj	12552 Oct 13 20:33	4° M L04'18	1°03'23
minimum elong	12551 Oct 30 09:28	19°ML23'27	1°20'51	minimum elong	12552 Oct 13 18:18	3°M51'57	1°03'27
	12551 Nov 04 04:11	0° ∡ ¹		evening rise	12552 Oct 20 15:23	18°M56'22	
evening rise	12551 Nov 06 04:25	4° ₹ ¹22'31		0.00000	12552 Oct 25 23:20	0° ∡ 7	
e vennig 1150	12551 Nov 19 14:05	0°ਰ		desc. node	12552 Nov 08 21:58	22° х 51'23	
desc. node	12551 Nov 23 00:45	5° る 21'20		evening max el	12552 Nov 14 08:15	28° × 755'44	24°11'08
evening max el	12551 Dec 03 20:17	18° る 34'09	25°44'16	evening max er	12552 Nov 15 12:05	0°ਰ	21 11 00
retrograde	12551 Dec 17 17:40	25° る 34'58	25 44 10	retrograde	12552 Nov 27 23:56	5°₹344'44	
evening set	12551 Dec 23 20:34	23 3 3436 24° る 07'56		evening set	12552 Dec 03 00:18	4°る49'31	
min. Earth dist.	12551 Dec 28 08:45	24° る 30'52	0.57626 AU	min. Earth dist.	12552 Dec 08 19:27		0.55883 AU
inferior conj	12551 Dec 31 08:07	19°る26'52		inferior conj	12552 Dec 11 00:21	0°る34'29	
·	12551 Dec 31 16:38	19° ろ 12'01	4°45'22	minimum elong	12552 Dec 11 05:25	0°る26'43	
minimum elong	12551 Dec 31 16.38 12552 Jan 08 15:19	19 3 1201 15° る 07'46	4 43 22	minimum elong		0 02043 30°R 🗷	3 40 38
morning rise direct	12552 Jan 10 19:02	13 3 0740 14° る 53'20		marnina rias	12552 Dec 11 22:58	30 KX. 26° ∡ 735'41	
	12552 Jan 16 23:23	14 333 20 17° る 00'52		morning rise direct	12552 Dec 19 12:32 12552 Dec 22 01:30	26° ₹ 18'56	
asc. node		17 300 32 19°る08'03	18°49'17	direct			
morning max el	12552 Jan 19 12:26		18°49'17		12552 Dec 30 22:13	0°る	10052120
. ,	12552 Jan 27 13:07	0°≈		morning max el	12553 Jan 01 05:57	1°る11'15	19°52′20
morning set	12552 Feb 04 19:42	15°≈21'14		asc. node	12553 Jan 02 20:34	2°る50'56	
	12552 Feb 12 08:24	0° ℋ		morning set	12553 Jan 19 00:15	29° る 54'56	
	10550 F. I. 12 10 00	201/02/10	00.42146		12553 Jan 19 01:15	0° ≈	
superior conj	12552 Feb 13 10:09	2°\(\frac{1}{2}\)02'18			10552 1 26 10 27	15042140	1000104
minimum elong	12552 Feb 13 12:44	2°\(\frac{1}{1}\)14'31	0°43'54	superior conj	12553 Jan 26 19:37	15°≈43'49	1°08'04
desc. node	12552 Feb 19 00:59	12° ∺ 23′20		minimum elong	12553 Jan 26 22:26	15°≈57'50	1°08'25
max. Earth dist.	12552 Feb 20 13:55	15°) €07'29	1.39464 AU	max. Earth dist.	12553 Feb 01 20:03	27°≈20'46	1.37233 AU
evening rise	12552 Feb 24 12:09	21°) 54'59			12553 Feb 03 06:26	0°)	
	12552 Feb 29 09:20	0° Υ		desc. node	12553 Feb 04 21:36	2° ¥ 58'13	
	12552 Mar 20 21:49	0°8		evening rise	12553 Feb 05 13:40	4°) 10′19	
evening max el	12552 Mar 30 12:35	11° 8 10'59	24°13'36		12553 Feb 21 09:33	0° Υ	
retrograde	12552 Apr 10 19:41	17° 8 48'47		evening max el	12553 Mar 13 01:58	25° Y 02'30	25°29'15
asc. node	12552 Apr 13 20:20	17° 8 07'19			12553 Mar 19 02:51	0° 8	
evening set	12552 Apr 16 05:45	15° 8 31'54		retrograde	12553 Mar 25 08:38	2° 8 08'06	
min. Earth dist.	12552 Apr 20 20:51		0.68478 AU		12553 Mar 30 21:16	30° Ŗ ♈	
inferior conj	12552 Apr 21 17:28	9° 8 02'20		evening set	12553 Mar 31 06:17	29° Ƴ 41'36	
minimum elong	12552 Apr 21 15:18	9° 8 09'38	2°13'28	asc. node	12553 Mar 31 17:43	29° Ƴ 16'31	
morning rise	12552 Apr 27 00:58	3° 8 01'23		min. Earth dist.	12553 Apr 04 14:16	24° Ƴ 56'53	0.67692 AU
direct	12552 Apr 30 23:51	1° 8 32'23		inferior conj	12553 Apr 05 23:04	23° Y 11′18	1°34'51
morning max el	12552 May 08 16:07	5° 8 51'05	20°07'09	minimum elong	12553 Apr 05 21:07	23° Y 17′36	1°33'55
desc. node	12552 May 17 02:55	16° 8 07'50		morning rise	12553 Apr 11 12:26	17° Y 19′12	
	12552 May 26 17:35	Π °0		direct	12553 Apr 14 23:33	16° Ƴ 10′21	
morning set	12552 Jun 05 07:34	14° Ⅱ 32'27		morning max el	12553 Apr 21 21:27	19° Ƴ 56'35	19°06'59
	12552 Jun 15 04:37	0ං ම			12553 Apr 29 23:47	9° 8	
max. Earth dist.	12552 Jun 15 09:53	0°920'57	1.44223 AU	desc. node	12553 May 03 23:38	5° 8 48'51	
				greatest brilliancy	12553 May 04 22:28	7° 8 14'04	-0.7m
superior conj	12552 Jun 21 02:11	9° 5 31'00	-2°06'26	morning set	12553 May 15 11:10	23° 8 20'25	
minimum elong	12552 Jun 21 07:29	9° 5 52'41	2°07'06		12553 May 19 18:24	Π °0	

max. Earth dist.	12553 May 29 01:32	14° Ⅱ 29'46	1.45362 AU	superior conj	12554 May 11 05:00	27° 8 58'19	-1°59'54
				minimum elong	12554 May 10 21:02	27° 8 27'11	2°00'07
superior conj	12553 May 31 21:31	18° Ⅱ 57'16	-2°13'14	max. Earth dist.	12554 May 11 20:48	29° 8 00'01	1.45786 AU
minimum elong	12553 May 31 20:23	18° Ⅱ 52'46	2°14'08		12554 May 12 12:10	Π °0	
	12553 Jun 07 20:00	0 \circ		evening rise	12554 May 27 02:16	22° Ⅱ 49'26	
evening rise	12553 Jun 15 14:49	12° © 38'13			12554 May 31 15:54	0 \circ	
	12553 Jun 26 08:14	0 \circ Ω		greatest brilliancy	12554 Jun 05 22:36	8° © 13'42	-0.8m
asc. node	12553 Jun 27 15:41	2° Ω 00'34		asc. node	12554 Jun 14 12:40	20°5542'16	
evening max el	12553 Jul 05 02:26	11° Ω 41'54	18°21'52	evening max el	12554 Jun 18 13:17	25° © 23'43	18°56'22
retrograde	12553 Jul 11 11:59	15° Ω 07'03		retrograde	12554 Jun 25 07:09	29° © 06'41	
evening set	12553 Jul 14 13:00	14° Ω 15'57		evening set	12554 Jun 28 16:55	27° © 59'38	
inferior conj	12553 Jul 20 09:11			inferior conj	12554 Jul 04 05:22	22° © 15'45	3°04'26
minimum elong	12553 Jul 20 11:26	8° Ω 40'37	2°39'14	minimum elong	12554 Jul 04 06:43	22° © 11'29	3°03'24
min. Earth dist.	12553 Jul 22 16:27	6° Ω 06'11	0.64548 AU	min. Earth dist.	12554 Jul 05 21:52	20° © 07'36	0.66285 AU
morning rise	12553 Jul 26 08:33	2° Ω 27'40		morning rise	12554 Jul 09 19:49	15°952'44	
desc. node	12553 Jul 30 22:50	0° Ω 02'46		direct	12554 Jul 16 02:38	13°5511'23	
	12553 Jul 31 03:47	30°Rூ		desc. node	12554 Jul 17 20:07	13°S22'08	
direct	12553 Aug 01 22:36	29°5548'52		morning max el	12554 Jul 29 01:09	20°\$53'24	26°25'59
	12553 Aug 03 18:48	0° Ω			12554 Aug 05 22:01	0° N	
morning max el	12553 Aug 15 14:14	7° Ω 48'03	27°25'10		12554 Aug 25 22:18	0° m)	
	12553 Sep 01 18:24	0° m)		morning set	12554 Sep 02 23:23	14° m 23'19	1 24624 477
	12553 Sep 19 02:55	0∘ ⊽		max. Earth dist.	12554 Sep 06 22:06	21° m 58'16	1.34634 AU
morning set	12553 Sep 19 21:02	1° Ω 28'29		asc. node	12554 Sep 10 13:32	29° Mp 16'07	
asc. node	12553 Sep 23 16:55	9° ₾ 10'08	1 22026 177		12554 Sep 10 22:08	0∘ ⊽	
max. Earth dist.	12553 Sep 24 11:16	10° ≏ 44'47	1.33026 AU		105540 11 00 10	20.0.00110	0012127
	10770 0 00 01 16	100017140	0040155	superior conj	12554 Sep 11 23:18	2° Ω 09'19	
superior conj	12553 Sep 28 01:16	18° 2 17'48	0°40'55	minimum elong	12554 Sep 11 22:35	2° Ω 05'34	0°13'14
minimum elong	12553 Sep 27 23:25	18° ≏ 07'56	0°40'46	behind sun begin	12554 Sep 11 19:12	1° Ω 48'09	
	12553 Oct 03 11:35	0°M		behind sun end	12554 Sep 12 01:58	2° £ 23'00	
evening rise	12553 Oct 05 02:27	3°M28'14		evening rise	12554 Sep 19 11:42	17° ≏ 53'06	
	12553 Oct 19 10:50	0° ₹ ¹			12554 Sep 25 12:24	0°M	20056102
desc. node	12553 Oct 26 19:17	8° × 759'17	22020127	evening max el	12554 Oct 08 13:46	19°M19'33	20°56'02
evening max el	12553 Oct 26 18:58		22°29'27	desc. node	12554 Oct 13 16:41	23°M18'03	
retrograde	12553 Nov 08 17:32	15° × 23'53		retrograde	12554 Oct 20 04:22	25°M05'30	
evening set	12553 Nov 12 07:45	14° 🗷 55'37	0.54700.411	evening set	12554 Oct 22 14:12	24°M51'40	40.50100
min. Earth dist.	12553 Nov 20 02:30	11° 🗷 26'25	0.54790 AU	inferior conj	12554 Oct 31 14:44	20°M57'26	
inferior conj	12553 Nov 20 23:06	10° 🗷 57'19		minimum elong	12554 Oct 31 05:07	21°M11'05	
minimum elong	12553 Nov 20 19:50	11° × ⁷ 01'57	5°49'07	min. Earth dist.	12554 Nov 01 09:09		0.54575 AU
morning rise	12553 Nov 29 09:14	7°×709'43		morning rise	12554 Nov 08 20:17	17°M03'57	
direct	12553 Dec 02 15:36	6°×745'32	21°18'01	direct	12554 Nov 12 23:40	16°M27'11	22901120
morning max el asc. node	12553 Dec 14 09:13 12553 Dec 20 17:40	12° × ⁷ 20'51	21-1801	morning max el	12554 Nov 26 00:16	22°M44'08 0°⊀	23°01'20
asc. node		19° メ *52'46 0°る			12554 Dec 02 08:45		
marning gat	12553 Dec 26 23:17 12554 Jan 03 09:18	14°る38'19		asc. node	12554 Dec 07 14:39 12554 Dec 18 20:43	7° х 50′19 29° х 25′26	
morning set	12334 Jan 03 09.18	14 036 19		morning set	12554 Dec 19 03:13	29 x ·23 26	
superior conj	12554 Jan 10 15:45	29° る 53'41	1°25'01		12334 Dec 19 03.13	0.0	
minimum elong	12554 Jan 10 17:57	0°≈05'10		superior conj	12554 Dec 25 19:20	14°る22'50	1035102
minimum ciong	12554 Jan 10 17:57	0 ≈03 10 0°≈	1 23 39	minimum elong	12554 Dec 25 20:32	14 3 22 30	1°35'52
max. Earth dist.	12554 Jan 15 06:16	0 ≈ 9°≈14'50	1.35195 AU	max. Earth dist.	12554 Dec 29 00:01	14 8 2913 21° 8 09'13	1.33514 AU
evening rise	12554 Jan 19 08:20	17°≈08'48	1.33193 AO	max. Earth dist.	12555 Jan 02 08:14	0° ≈	1.33314 AU
desc. node	12554 Jan 22 18:16	17 ≈08 48 23°≈25'53		evening rise	12555 Jan 02 16:35	0 ≈ 0°≈41'19	
desc. Hode	12554 Jan 26 12:09	0° ∺		desc. node	12555 Jan 09 15:04	13°≈41'56	
	12554 Feb 15 17:56	0°Υ		desc. node	12555 Jan 19 12:34	0°) €	
evening max el	12554 Feb 23 15:41		26°32'29	evening max el	12555 Feb 06 05:11		27°15'53
retrograde	12554 Mar 08 16:12	16° Υ 10'37	20 32 27	retrograde	12555 Feb 19 17:30	29°) 48'40	27 13 33
evening set	12554 Mar 15 00:37	13° Υ 38'47		evening set	12555 Feb 26 10:46	27°) 17'05	
asc. node	12554 Mar 18 15:08	10° Υ 02'20		min. Earth dist.	12555 Mar 02 08:05		0.64936 AU
min. Earth dist.	12554 Mar 19 02:44	9° Υ 28'31	0.66499 AU	inferior conj	12555 Mar 04 16:55	21° X 03'38	
inferior conj	12554 Mar 20 23:41	7° Υ 13'34	0°44'45	minimum elong	12555 Mar 04 17:23	21°\(\text{\tin}}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texicl{\text{\tex{\tex	0°15'30
minimum elong	12554 Mar 20 22:33	7° Υ 16'58	0°44'18	transit middle	12555 Mar 04 17:23	21° H 02'22	0°15'30
morning rise	12554 Mar 26 21:30	1° Υ 32'07	5 1110	transit initiale	12555 Mar 04 16:38	21° X 02'22	0 15 50
direct	12554 Mar 29 22:04	0° Υ 40'57		transit ocgin	12555 Mar 04 18:08	21° H 00'19	
morning max el	12554 Apr 05 09:21	4° Υ 07'21	18°23'03	asc. node	12555 Mar 05 12:32	20° H 10'09	
desc. node	12554 Apr 20 20:16	25° Υ '51'22	10 23 03	morning rise	12555 Mar 11 01:43	15° X 35'18	
acce. node	12554 Apr 23 11:02	0°8		direct	12555 Mar 13 17:08	14°) 58'37	
morning set	12554 Apr 25 11:39	3° 8 12'56		morning max el	12555 Mar 20 01:38	18°) 17'00	17°56'04
	1200 . ripi 20 11.0)	5 01230			12555 Mar 28 19:41	0°Υ	1, 5001
						- •	

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direct

12557 Feb 07 08:16

12°≈24'12

12556 Feb 21 12:37

30°R≈

	12557 F-1- 14 11.10	1500 050155	17055107	::	12550 I 10 17.44	000 000140	1005150
morning max el	12557 Feb 14 11:18	15°≈58'55 0°) €	17°55'07	inferior conj	12558 Jan 10 17:44 12558 Jan 11 01:58	0°≈00'49 29° ठ 45'12	
mamina sat	12557 Feb 24 06:18 12557 Mar 02 01:41	0 X 10° ¥ 25'15		minimum elong	12558 Jan 10 18:10	29 043 12 30°Rる	4 02 30
morning set desc. node	12557 Mar 11 10:01	10 X 23 13 27° X 13'39		morning rise	12558 Jan 18 19:00	30 KO 25° る 28'34	
desc. node	1233/ Wiai 11 10.01	21 1(1339		direct	12558 Jan 20 20:38	25° る 13'45	
superior conj	12557 Mar 12 14:00	29° ¥ 15'40	0°00'07	asc. node	12558 Jan 24 04:38	25° る 54'23	
minimum elong	12557 Mar 12 13:12	29° X 13'40		morning max el	12558 Jan 28 21:38		18°23'18
behind sun begin	12557 Mar 12 06:19	28°) 42'17	0 08 33	morning max er	12558 Jan 29 16:37	29 ⊘ 11 31 0° ≈	16 23 16
behind sun end	12557 Mar 12 20:05	29°) 42'07		morning set	12558 Feb 13 17:18	0 ∞ 24°≈26'48	
ocimia sun cha	12557 Mar 13 00:13	29 γ (4207		morning set	12558 Feb 16 15:04	0° ∺	
max. Earth dist.	12557 Mar 20 01:04	11° Υ 52'17	1.42786 AU		12336 Feb 10 13.04	0 /(
evening rise	12557 Mar 26 04:06	21° Υ '44'11	1.42780 AU	superior conj	12558 Feb 22 22:05	11° ¥ 48'02	0°26'24
evening rise	12557 Mar 31 11:51	0° 8		minimum elong	12558 Feb 22 23:55	11° X 56'31	
		0°U		desc. node	12558 Feb 26 06:34	17° X 51'49	0 2029
arranina marral	12557 Apr 21 16:27	6° П 43'29	22°07'01	max. Earth dist.	12558 Mar 02 10:25	17 ★3149 25°★08'05	1.40745 AU
evening max el asc. node	12557 Apr 27 14:06	12° П 02'03	22 0/01	max. Earm dist.		25 π 0805 0° Υ	1.40743 AU
	12557 May 05 04:11	12 П 02 03 12° П 19'13			12558 Mar 05 07:26	0 1 2° Υ 36'11	
retrograde	12557 May 07 02:05			evening rise	12558 Mar 06 21:06		
evening set	12557 May 11 17:48	10° Ⅱ 23'49	2056154		12558 Mar 24 19:14	0°8	22025125
inferior conj	12557 May 17 00:39	4° Ⅱ 03'56	2°56'54	evening max el	12558 Apr 10 05:25	20° 8 33'36	23°27'27
minimum elong	12557 May 16 23:06	4° Ⅱ 09'20	2°55'51	retrograde	12558 Apr 20 21:16	26° 8 50'21	
min. Earth dist.	12557 May 16 23:45	4° Ⅱ 07'05	0.68818 AU	asc. node	12558 Apr 22 01:31	26° 8 43'58	
	12557 May 20 02:19	30°₽ 8		evening set	12558 Apr 26 00:30	24° 8 40'54	
morning rise	12557 May 22 04:14	27° 8 51'14		inferior conj	12558 May 01 09:58	18° 8 13'58	
direct	12557 May 26 23:14	25° 8 49'02		minimum elong	12558 May 01 07:55	18° 8 21'01	2°31'48
	12557 Jun 03 23:51	0°П		min. Earth dist.	12558 Apr 30 20:33	19° 8 00'08	0.68737 AU
morning max el	12557 Jun 05 09:58	1° Ⅱ 21'48	22°09'45	morning rise	12558 May 06 15:17	12° 8 08'15	
desc. node	12557 Jun 07 11:30	3° Ⅱ 32'53		direct	12558 May 10 21:24	10° 8 26'52	
	12557 Jun 27 00:15	0		morning max el	12558 May 19 03:23	15° 8 09'40	20°48'19
morning set	12557 Jul 08 12:25	17° © 52'47		desc. node	12558 May 25 08:23	22° 8 21'56	
max. Earth dist.	12557 Jul 13 21:08	26° © 41'18	1.41269 AU		12558 May 30 23:42	$\Pi^{\circ}0$	
	12557 Jul 15 20:17	$0 {\circ} \Omega$		morning set	12558 Jun 18 01:02	26° Ⅱ 55'51	
					12558 Jun 20 00:10	0°€	
superior conj	12557 Jul 21 15:57	10° Ω 05'59	-1°26'20	max. Earth dist.	12558 Jun 26 03:22	9° 5 346'21	1.43293 AU
minimum elong	12557 Jul 21 22:09	10° Ω 33′28	1°26'16				
evening rise	12557 Aug 01 02:58	29° Ω 13'58		superior conj	12558 Jul 02 23:20	21° © 01'52	-1°54'54
asc. node	12557 Aug 01 03:31	29° Ω 16′30		minimum elong	12558 Jul 03 06:08	21° © 30'30	1°55'15
	12557 Aug 01 12:52	o° my			12558 Jul 08 05:34	$0^{\circ}\Omega$	
evening max el	12557 Aug 17 02:54	24° Mp 46'08	18°15'48	evening rise	12558 Jul 15 00:04	11° Ω 52'56	
retrograde	12557 Aug 24 09:31	28° m 27'13		asc. node	12558 Jul 19 00:17	18° Ω 57'46	
evening set	12557 Aug 26 13:33	28° Mp 08'16			12558 Jul 25 14:44	0° m y	
inferior conj	12557 Sep 02 22:31	23° Mp 26'42	0°08'10	evening max el	12558 Jul 31 15:27	7° m 49'07	18°03'28
minimum elong	12557 Sep 02 22:48	23° Mp 26'06	0°07'51	retrograde	12558 Aug 07 05:45	11° m 12'42	
transit middle	12557 Sep 02 22:48	23° Mp 26'06	0°07'51	evening set	12558 Aug 09 17:48	10° m 43'12	
transit begin	12557 Sep 02 19:46	23° m 32'31		inferior conj	12558 Aug 16 09:36	5° m 41'33	1°25'04
transit end	12557 Sep 03 01:49	23° m 19'41		minimum elong	12558 Aug 16 11:52	5° Mp 36'01	1°23'51
desc. node	12557 Sep 03 09:07	23° Mp 04'09		min. Earth dist.	12558 Aug 19 12:19	2° m 39'59	0.61173 AU
min. Earth dist.	12557 Sep 06 06:22	20° m 38'33	0.58888 AU	desc. node	12558 Aug 21 06:34	1° Mp 06'52	
morning rise	12557 Sep 10 04:35	17° m 54'29			12558 Aug 22 17:28	30° ₽ Ω	
direct	12557 Sep 16 12:28	16°M)06'10		morning rise	12558 Aug 23 03:14	29° Ω 43′13	
morning max el	12557 Sep 30 20:36	23° m 51'03	27°29'38	direct	12558 Aug 29 18:32	27° Ω 29'19	
	12557 Oct 06 10:14	0∘ ⊽			12558 Sep 06 08:25	0° m y	
	12557 Oct 25 13:15	0° M ₊		morning max el	12558 Sep 13 00:04	5° Mp 26'55	27°57'23
asc. node	12557 Oct 28 05:12	5° M ₊11'43		•	12558 Oct 01 10:14	0∘ ত	
morning set	12557 Nov 01 02:48	13°M13'12		asc. node	12558 Oct 15 01:53	24° ₽ 59'37	
max. Earth dist.	12557 Nov 07 16:29	27°M35'22	1.31268 AU	morning set	12558 Oct 16 05:28	27° ₽ 21'19	
				Č	12558 Oct 17 11:52	0° M .	
superior conj	12557 Nov 08 02:25	28°M30'46	1°27'48	max. Earth dist.	12558 Oct 21 23:33	9° M 40′25	1.31538 AU
minimum elong	12557 Nov 08 00:39	28°M20'51	1°28'23				
+	12557 Nov 08 18:25	0° ⊼	-	superior conj	12558 Oct 23 12:55	13°ML06'33	1°13'53
evening rise	12557 Nov 14 20:01	13° ∡ ′21′10		minimum elong	12558 Oct 23 10:42	12°M54'17	1°14'09
<i>3</i> - ,	12557 Nov 23 03:14	0°る		evening rise	12558 Oct 30 06:05	27°M54'11	
desc. node	12557 Nov 30 06:00	12° る 09'15		<i>5</i>	12558 Oct 31 05:33	0° ⊼	
evening max el	12557 Dec 14 00:31	29° る 36'52	26°27'34		12558 Nov 16 22:35	0°₹	
	12557 Dec 14 10:25	0° ≈	· / - ·	desc. node	12558 Nov 17 03:11	0° ರ 16'13	
retrograde	12557 Dec 27 23:24	6° ≈ 43'21		evening max el	12558 Nov 25 16:46		25°07'01
evening set	12558 Jan 03 11:50	4°≈59'41		retrograde	12558 Dec 09 12:30	17°る19'47	
min. Earth dist.	12558 Jan 07 14:16	2° ≈ 23'22	0.58792 AU	evening set	12558 Dec 15 05:30	16° පි 06'32	

	12550 D 20 04-45	120=21/126	0.56024.411	i. Danila dini	12550 D 01 12:02	229.724106	0.55227 ATT
min. Earth dist.	12558 Dec 20 04:45		0.56824 AU	min. Earth dist.	12559 Dec 01 13:02	23° x 24'06	0.55327 AU
inferior conj	12558 Dec 22 21:54	11° る 37'46		inferior conj	12559 Dec 03 05:49	22° x ⁷ 24'25	
minimum elong	12558 Dec 23 05:40	11° ට 25'00	5°12'51	minimum elong	12559 Dec 03 07:42	22° ⋌ ¹21'40	5°51'22
morning rise	12558 Dec 31 08:06	7° る 27'32		morning rise	12559 Dec 11 17:51	18° ⋌ ³32'19 –	
direct	12559 Jan 02 14:50	7° 云 12'33		direct	12559 Dec 14 13:37	18° ∡ 12'57	
asc. node	12559 Jan 11 01:53	10° ප් 55'23		morning max el	12559 Dec 25 09:43	23° ∡ ¹22'37	20°26'12
morning max el	12559 Jan 11 22:16	11° 号 42'30	19°13'12	asc. node	12559 Dec 28 23:00	27° ∡ 17'46	
	12559 Jan 24 04:48	0° ≈			12559 Dec 30 23:47	0°ಕ	
morning set	12559 Jan 28 18:06	8° ≈ 51'46		morning set	12560 Jan 13 00:52	23° る 30'37	
					12560 Jan 16 04:15	0° ≈	
superior conj	12559 Feb 05 23:34	25° ≈ 07'52	0°54'59				
minimum elong	12559 Feb 06 02:23	25° ≈ 21′29	0°55'11	superior conj	12560 Jan 20 14:01	9° ≈ 02'47	1°16'08
	12559 Feb 08 12:43	0° ℋ		minimum elong	12560 Jan 20 16:39	9° ≈ 16′08	1°16'36
max. Earth dist.	12559 Feb 12 17:07	7°) 43′41	1.38514 AU	max. Earth dist.	12560 Jan 26 00:42	19° ≈ 47'30	1.36334 AU
desc. node	12559 Feb 13 03:08	8° ∺ 28'51		evening rise	12560 Jan 29 20:28	26° ≈ 57'09	
evening rise	12559 Feb 16 11:15	14° ∺ 22'37		desc. node	12560 Jan 30 23:47	29° ≈ 01'10	
	12559 Feb 25 22:36	0 ° Υ			12560 Jan 31 12:53	0° ∀	
	12559 Mar 19 15:57	9° 8			12560 Feb 19 08:41	0 ° Υ	
evening max el	12559 Mar 23 19:09	4° 8 25'34	24°46'48	evening max el	12560 Mar 05 08:34	18° Ƴ 15'54	25°57'59
retrograde	12559 Apr 04 12:38	11° 8 15'44		retrograde	12560 Mar 17 23:16	25° Ƴ 29'08	
asc. node	12559 Apr 08 22:54	9° 8 49'17		evening set	12560 Mar 24 01:50	22° Y 59'31	
evening set	12559 Apr 10 03:43	8° 8 54'26		asc. node	12560 Mar 25 20:18	21° Y 19'33	
min. Earth dist.	12559 Apr 14 15:42	3° 8 49'35	0.68205 AU	min. Earth dist.	12560 Mar 28 07:08	18° Ƴ 29'55	0.67241 AU
inferior conj	12559 Apr 15 17:28	2° 8 24'12	1°58'58	inferior conj	12560 Mar 29 21:12	16° Ƴ 30'47	1°14'52
minimum elong	12559 Apr 15 15:20	2° 8 31'18	1°57'54	minimum elong	12560 Mar 29 19:31	16° Ƴ 36′05	1°14'06
	12559 Apr 17 14:07	30° ₹Ƴ		morning rise	12560 Apr 04 13:52	10° Ƴ 43'15	
morning rise	12559 Apr 21 03:09	26° Y 26′52		direct	12560 Apr 07 20:22	9° Ƴ 42'18	
direct	12559 Apr 24 21:00	25° Y ′06′28		morning max el	12560 Apr 14 12:43	13° Y 18'14	18°46'15
morning max el	12559 May 02 04:18	29° Ƴ 09'20	19°39'35	Č	12560 Apr 27 00:12	0°8	
Ü	12559 May 03 00:14	B_0		desc. node	12560 Apr 28 01:50	1° 8 37'43	
desc. node	12559 May 12 05:08	11° 8 46'42		morning set	12560 May 06 12:15	14° 8 42'28	
greatest brilliancy	12559 May 14 21:08	15° 8 37'54	-0.6m		12560 May 16 07:37	0°II	
8	12559 May 24 10:58	0°II		max. Earth dist.	12560 May 21 10:34		1.45634 AU
morning set	12559 May 28 01:41	5° Ⅱ 31'54				,	
max. Earth dist.	•		1 44707 411				2010104
		23° 1138'40	1 44 /9 / A I I	superior cont	12560 May 22 19:07	10° H 07'20	-7°10'04
max. Larm dist.	12559 Jun 08 16:43	23° II 38'40	1.44797 AU	superior conj	12560 May 22 19:07	10° Ⅱ 07'20 9° Ⅱ 49'50	
max. Earth dist.	12559 Jun 12 16:30	23°Щ38'40 0°©	1.44/9/ AU	minimum elong	12560 May 22 14:39	9° Ⅱ 49'50	
	12559 Jun 12 16:30	0°త		minimum elong	12560 May 22 14:39 12560 Jun 04 08:40	9°∏49'50 0°©	
superior conj	12559 Jun 12 16:30 12559 Jun 13 06:46	0°ණ 0°ණ57'18	-2°11'37	minimum elong evening rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48	9°∏49'50 0°© 4°©25'04	2°10'45
superior conj minimum elong	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50	0°957'18 1°909'38		minimum elong evening rise greatest brilliancy	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43	9°II49'50 0°© 4°©25'04 14°©18'49	
superior conj	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23	0°957'18 1°9509'38 23°939'32	-2°11'37	minimum elong evening rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22	2°10'45
superior conj minimum elong evening rise	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47	0°5 0°557'18 1°509'38 23°539'32 0°\$\Omega\$	-2°11'37	minimum elong evening rise greatest brilliancy asc. node	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°N	2°10'45 -0.9m
superior conj minimum elong evening rise asc. node	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48	-2°11'37 2°12'29	minimum elong evening rise greatest brilliancy asc. node evening max el	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°N 4°N50'37	2°10'45
superior conj minimum elong evening rise asc. node evening max el	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37	-2°11'37	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35	9° II 49'50 0° S 4° S25'04 14° S18'49 27° S21'22 0° N 4° N50'37 8° N22'09	2°10'45 -0.9m
superior conj minimum elong evening rise asc. node evening max el retrograde	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21	-2°11'37 2°12'29	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13	9° II 49'50 0° S 4° S 25'04 14° S 18'49 27° S 21'22 0° N 4° N 50'37 8° N 22'09 7° N 24'23	2°10'45 -0.9m 18°34'26
superior conj minimum elong evening rise asc. node evening max el retrograde evening set	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28	0°557'18 1°509'38 23°539'32 0°0 8°021'48 21°013'37 24°034'21 23°051'37	-2°11'37 2°12'29 18°09'56	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39	9° II 49'50 0° S 4° S25'04 14° S18'49 27° S21'22 0° N 4° N50'37 8° N22'09 7° N24'23 1° N48'47	2°10'45 -0.9m 18°34'26 2°52'38
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$31'57	-2°11'37 2°12'29 18°09'56 2°18'49	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34	9° II 49'50 0° S 4° S25'04 14° S18'49 27° S21'22 0° N 4° N50'37 8° N22'09 7° N24'23 1° N48'47 1° N42'59	2°10'45 -0.9m 18°34'26
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14	0°557'18 1°509'38 23°539'32 0°0 8°021'48 21°013'37 24°034'21 23°051'37 18°031'57	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°N 4°N50'37 8°N22'09 7°N24'23 1°N48'47 1°N42'59 30°RS	2°10'45 -0.9m -0.9m -0.95 -0.9
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29	-2°11'37 2°12'29 18°09'56 2°18'49	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist.	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°N 4°N50'37 8°N22'09 7°N24'23 1°N48'47 1°N42'59 30°RS 29°S20'28	2°10'45 -0.9m 18°34'26 2°52'38
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 05 18:14	0°557'18 1°509'38 23°539'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°A 4°A50'37 8°A22'09 7°A24'23 1°A48'47 1°A42'59 30°RS 29°S20'28 25°S26'50	2°10'45 -0.9m -0.9m -0.95 -0.9
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 05 18:14 12559 Aug 08 03:58	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54 12560 Jul 25 10:10	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°I 4°IS0'37 8°I22'09 7°I24'23 1°I48'47 1°I42'59 30°RS 29°S20'28 25°S26'50 22°S45'57	2°10'45 -0.9m -0.9m -0.95 -0.9
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 05 18:14 12559 Aug 08 03:58 12559 Aug 12 10:16	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54 12560 Jul 25 10:10 12560 Jul 25 01:20	9°II49'50 0°S 4°S25'04 14°S18'49 27°S21'22 0°I 4°IS0'37 8°I22'09 7°I24'23 1°I48'47 1°I42'59 30°RS 29°S20'28 25°S26'50 22°S45'57 22°S46'26	2°10'45 -0.9m -0.9m -0.95 -0.9
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superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 05 18:14 12559 Aug 08 03:58 12559 Aug 12 10:16 12559 Aug 26 08:43 12559 Aug 26 08:43 12559 Sep 05 14:04 12559 Sep 24 06:37 12559 Sep 30 01:00 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 08 23:54	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23 17°\$\Omega\$47'01 0°\$\Omega\$0 0°\$\Omega\$11°\$\Omega\$07'05 14°\$\Omega\$58'11 21°\$\Omega\$29'15 27°\$\Omega\$30'02 27°\$\Omega\$18'18 0°\$\Omega\$	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU 27°46'52 1.32335 AU 0°54'30	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 27 18:24 12560 Jun 07 11:13 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54 12560 Jul 25 10:10 12560 Jul 25 10:10 12560 Jul 25 01:20 12560 Aug 07 03:35 12560 Aug 07 19:39 12560 Aug 29 14:52 12560 Sep 12 10:35 12560 Sep 15 07:20 12560 Sep 16 18:04 12560 Sep 20 22:30 12560 Sep 20 21:02	9° II 49'50 0° II 4° II 25'04 14° II 8'49 27° II 22 0° II 4° II 22'09 7° II 22'23 1° II 48'47 1° II 22'59 30° II 22'09 20'28 25° II 22'09 22' II 26'50 22' II 28'51 21' II 21'53 0° II 21' II 21'53 0° II 21' II 21'53 11° II 21'55	2°10'45 -0.9m -0.9
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superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 02 03:48 12559 Aug 08 03:58 12559 Aug 08 03:58 12559 Aug 12 10:16 12559 Aug 26 08:43 12559 Sep 05 14:04 12559 Sep 24 06:37 12559 Sep 30 01:00 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 23:54 12559 Oct 07 20:21	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23 17°\$\Omega\$47'01 0°\$\Omega\$0 0°\$\Omega\$11°\$\Omega\$07'05 14°\$\Omega\$58'11 21°\$\Omega\$29'15 27°\$\Omega\$30'02 27°\$\Omega\$18'18 0°\$\Omega\$1.28'20 0°\$\omega\$1	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU 27°46'52 1.32335 AU 0°54'30	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 15 04:36 12560 Jul 25 10:10 12560 Jul 25 01:20 12560 Aug 07 03:35 12560 Aug 07 19:39 12560 Aug 07 19:39 12560 Sep 12 10:35 12560 Sep 12 10:35 12560 Sep 16 18:04 12560 Sep 20 21:02 12560 Sep 20 21:02 12560 Sep 20 21:02 12560 Sep 20 21:02 12560 Sep 28 03:52 12560 Sep 29 14:35	9° II 49'50 0° II 4° II 25'04 14° II 8'49 27° II 22 0° II 4° II 22'09 7° II 22'09 7° II 22'23 1° II 22'59 30° II 20° II 22'59 30° II 22'53 0° II 22'53 0° II 22'53 0° II 22'53 0° II 26'55 26° II 26'55 26° II 57'45 0° III	2°10'45 -0.9m -0.9
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 02 03:48 12559 Aug 02 03:58 12559 Aug 02 03:68 12559 Aug 12 10:16 12559 Aug 26 08:43 12559 Aug 26 08:43 12559 Sep 05 14:04 12559 Sep 24 06:37 12559 Sep 30 01:00 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 18:12 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 20:21 12559 Oct 07 18:12	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23 17°\$\Omega\$47'01 0°\$\Omega\$0 0°\$\Omega\$11°\$\Omega\$07'05 14°\$\Omega\$58'11 21°\$\Omega\$29'15 27°\$\Omega\$18'18 0°\$\Omega\$1.28'20 0°\$\omega\$17'\$\omega\$14'33	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU 27°46'52 1.32335 AU 0°54'30 0°54'28	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54 12560 Jul 25 10:10 12560 Jul 25 01:20 12560 Aug 07 03:35 12560 Aug 07 19:39 12560 Aug 07 19:39 12560 Aug 29 14:52 12560 Sep 12 10:35 12560 Sep 12 10:35 12560 Sep 16 18:04 12560 Sep 20 21:02 12560 Sep 20 14:35 12560 Sep 29 14:35 12560 Sep 29 14:35 12560 Sep 29 14:35	9° II 49'50 0° II 4° II 25'04 14° II 8'49 27° II 22 0° II 4° II 22'09 7° II 22'23 1° II 22'23 1° II 22'23 1° II 22'23 2° II 22'23 1° II 22'53 1° II 22'53 1° II 22'53 1° II 22'55 20° II 26'55 26° II 26'55 26° II 26'55 26° III 0° III 0° III 0° III 0° III 0° III	2°10'45 -0.9m 18°34'26 2°52'38 2°51'28 0.65330 AU 27°03'04 1.33651 AU 0°29'50 0°29'38
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node evening rise	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 05 18:14 12559 Aug 06 08:43 12559 Aug 26 08:43 12559 Sep 05 14:04 12559 Sep 24 06:37 12559 Sep 24 06:37 12559 Oct 07 12:30 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 18:12 12559 Oct 07 18:12 12559 Oct 08 23:54 12559 Oct 14 17:21 12559 Oct 23 11:35 12559 Nov 04 00:27 12559 Nov 07 03:03	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23 17°\$\Omega\$47'01 0°\$\Omega\$ 0°\$\Omega\$ 11°\$\Omega\$07'05 14°\$\Omega\$58'11 21°\$\Omega\$29'15 27°\$\Omega\$30'02 27°\$\Omega\$18'18 0°\$\Omega\$ 12°\$\Omega\$28'20 0°\$\sqrt{1}\$ 17°\$\sqrt{14'33} 20°\$\sqrt{33'01}	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU 27°46'52 1.32335 AU 0°54'30	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise evening max el	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 13 06:43 12560 Jun 21 18:03 12560 Jun 27 18:24 12560 Jun 07 11:13 12560 Jul 04 06:35 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 15 04:36 12560 Jul 25 10:10 12560 Jul 25 01:20 12560 Aug 07 03:35 12560 Aug 07 19:39 12560 Aug 07 19:39 12560 Aug 29 14:52 12560 Sep 12 10:35 12560 Sep 12 10:35 12560 Sep 16 18:04 12560 Sep 20 21:02 12560 Sep 20 14:35 12560 Sep 29 14:35 12560 Oct 18 00:42 12560 Oct 18 15:50	9° II 49'50 0° II 4° II 25'04 14° II 8'49 27° II 22 0° II 4° II 50'37 8° II 22'09 7° II 24'23 1° II 48'47 1° II 42'59 30° II 29° II 20'28 25° II 26'50 22° II 26'55 2° II 26'55 26° II 26'55	2°10'45 -0.9m -0.9
superior conj minimum elong evening rise asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise desc. node direct morning max el morning set asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12559 Jun 12 16:30 12559 Jun 13 06:46 12559 Jun 13 09:50 12559 Jun 27 01:23 12559 Jun 30 19:47 12559 Jul 05 21:08 12559 Jul 15 05:41 12559 Jul 21 14:13 12559 Jul 24 10:28 12559 Jul 30 12:41 12559 Jul 30 15:14 12559 Aug 02 03:48 12559 Aug 02 03:48 12559 Aug 02 03:58 12559 Aug 02 03:68 12559 Aug 12 10:16 12559 Aug 26 08:43 12559 Aug 26 08:43 12559 Sep 05 14:04 12559 Sep 24 06:37 12559 Sep 30 01:00 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 18:12 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 20:21 12559 Oct 07 18:12 12559 Oct 07 20:21 12559 Oct 07 18:12	0°\$57'18 1°\$09'38 23°\$39'32 0°\$\Omega\$ 8°\$\Omega\$21'48 21°\$\Omega\$13'37 24°\$\Omega\$34'21 23°\$\Omega\$51'37 18°\$\Omega\$24'54 15°\$\Omega\$38'29 12°\$\Omega\$17'32 10°\$\Omega\$46'50 9°\$\Omega\$45'23 17°\$\Omega\$47'01 0°\$\Omega\$0 0°\$\Omega\$11°\$\Omega\$07'05 14°\$\Omega\$58'11 21°\$\Omega\$29'15 27°\$\Omega\$18'18 0°\$\Omega\$1.28'20 0°\$\omega\$17'\$\omega\$14'33	-2°11'37 2°12'29 18°09'56 2°18'49 2°17'29 0.63384 AU 27°46'52 1.32335 AU 0°54'30 0°54'28	minimum elong evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12560 May 22 14:39 12560 Jun 04 08:40 12560 Jun 07 02:48 12560 Jun 21 18:03 12560 Jun 23 15:55 12560 Jun 27 18:24 12560 Jul 04 06:35 12560 Jul 07 11:13 12560 Jul 13 03:39 12560 Jul 13 05:34 12560 Jul 14 15:23 12560 Jul 15 04:36 12560 Jul 18 22:54 12560 Jul 25 10:10 12560 Jul 25 01:20 12560 Aug 07 03:35 12560 Aug 07 19:39 12560 Aug 07 19:39 12560 Aug 29 14:52 12560 Sep 12 10:35 12560 Sep 12 10:35 12560 Sep 16 18:04 12560 Sep 20 21:02 12560 Sep 20 14:35 12560 Sep 29 14:35 12560 Sep 29 14:35 12560 Sep 29 14:35	9° II 49'50 0° II 4° II 25'04 14° II 8'49 27° II 22 0° II 4° II 22'09 7° II 22'23 1° II 22'23 1° II 22'23 1° II 22'23 2° II 22'23 1° II 22'53 1° II 22'53 1° II 22'53 1° II 22'55 20° II 26'55 26° II 26'55 26° II 26'55 26° III 0° III 0° III 0° III 0° III 0° III	2°10'45 -0.9m 18°34'26 2°52'38 2°51'28 0.65330 AU 27°03'04 1.33651 AU 0°29'50 0°29'38

evening set	12560 Nov 03 03:09	6° ∡ 728'45			12561 Sep 22 06:59	0°M	
inferior conj	12560 Nov 11 23:46	2° × 33'22	5025127	evening max el	12561 Sep 30 16:10	11°ML15'33	20021126
minimum elong	12560 Nov 11 17:02	2° x ² 42'47		desc. node	12561 Oct 07 19:15	16°M02'43	20 21 30
min. Earth dist.		2° x '4247 2° x '39'25	0.54580 AU			16°M41'20	
mm. Earm dist.	12560 Nov 11 19:27	2 x·3923 30°RML	0.34380 AU	retrograde	12561 Oct 11 14:26	16°M30'17	
	12560 Nov 16 21:17	28°M45'53		evening set	12561 Oct 13 16:38		4921154
morning rise	12560 Nov 20 08:01			inferior conj	12561 Oct 22 16:50	12°M33'55	
direct	12560 Nov 23 22:54	28°M17'14		minimum elong	12561 Oct 22 06:48	12°M48'38	4°18'26
	12560 Nov 30 14:22	0° ∡ 7	22000122	min. Earth dist.	12561 Oct 24 03:15	11°M43'27	0.54766 AU
morning max el	12560 Dec 06 07:17	4° ⋌ 10'41	22°00'33	morning rise	12561 Oct 30 20:17	8°M30'55	
asc. node	12560 Dec 14 20:02	14° ∡ ¹44'47		direct	12561 Nov 04 08:25	7° IL 47'05	
	12560 Dec 23 10:30	0°る		morning max el	12561 Nov 17 19:17	14° M 21'22	23°47'49
morning set	12560 Dec 27 11:09	8° ප 16'10			12561 Nov 29 21:40	0° ∡ 7	
				asc. node	12561 Dec 01 17:00	3° ∡ 01′28	
superior conj	12561 Jan 03 13:41	23° ⋜ 22'03	1°30'05	morning set	12561 Dec 11 22:55	23° ∡ 02'31	
minimum elong	12561 Jan 03 15:30	23° る 31'36	1°30'49		12561 Dec 15 04:08	0°ප	
	12561 Jan 06 18:16	0° ≈				_	
max. Earth dist.	12561 Jan 07 13:37	1° ≈ 38'33	1.34421 AU	superior conj	12561 Dec 18 19:35	7° る 56'44	1°37'18
evening rise	12561 Jan 11 21:18	10° ≈ 10'58		minimum elong	12561 Dec 18 20:18	8°号00'38	1°38'12
desc. node	12561 Jan 16 20:32	19° ≈ 24'38		max. Earth dist.	12561 Dec 21 10:25	13° る 34'36	1.32921 AU
	12561 Jan 23 00:38	0° ∀		evening rise	12561 Dec 26 10:15	23° る 55'03	
	12561 Feb 13 23:10	0° Υ			12561 Dec 29 12:40	0° ≈	
evening max el	12561 Feb 15 22:07	1° Y 58'15	26°53'46	desc. node	12562 Jan 03 17:22	9° ≈ 33'49	
retrograde	12561 Mar 01 04:30	9° Y 23′05			12562 Jan 16 14:58	0° ∀	
evening set	12561 Mar 07 17:02	6° Ƴ 50'16		evening max el	12562 Jan 29 11:01	15° ∺ 22'01	27°26'49
min. Earth dist.	12561 Mar 11 16:48	2° Y 54′28	0.65872 AU	retrograde	12562 Feb 12 03:13	22°) 47′54	
asc. node	12561 Mar 12 17:42	1° Y '42'49		evening set	12562 Feb 18 23:00	20°) 18′35	
inferior conj	12561 Mar 13 19:01	0° Y 29′03	0°20'18	min. Earth dist.	12562 Feb 22 18:42	16°) 53′53	0.64155 AU
minimum elong	12561 Mar 13 18:27	0° Ƴ 30′39	0°20'11	inferior conj	12562 Feb 25 08:17	14° ∺ 11'59	-0°44'50
	12561 Mar 14 05:03	30°Ŗ ℋ		minimum elong	12562 Feb 25 09:41	14° ∺ 08'19	0°43'54
morning rise	12561 Mar 19 21:14	24° ¥ 53′08		asc. node	12562 Feb 27 15:07	11° ¥ 53'12	
direct	12561 Mar 22 17:38	24° ₭ 08'42		morning rise	12562 Mar 03 22:25	8° ¥ 50′01	
morning max el	12561 Mar 29 02:55	27° ∺ 30′28	18°09'32	direct	12562 Mar 06 10:18	8° 升 18'32	
	12561 Mar 31 09:42	$0^{\circ}\mathbf{\Upsilon}$		morning max el	12562 Mar 12 20:12	11° ∺ 37'22	17°49'51
desc. node	12561 Apr 14 22:28	21° Y ′47'59			12562 Mar 25 13:25	$0^{\circ}\mathbf{\Upsilon}$	
morning set	12561 Apr 17 00:56	25° Ƴ 11'41		morning set	12562 Mar 29 17:47	7° Y ′02'42	
	12561 Apr 20 00:30	0°8		desc. node	12562 Apr 01 19:03	12° Y 11'18	
	12561 M 02 02 05	100 🗸 1313 (1040122		12562 4 11 22 56	2000050122	1012146
superior conj	12561 May 02 03:05	19° 8 13'26		superior conj	12562 Apr 11 23:56	28° Y 59'32	
minimum elong	12561 May 01 17:55	18° 8 37'29		minimum elong	12562 Apr 11 16:25	28° Y 29'15	1°12'11
max. Earth dist.	12561 May 04 06:17		1.45734 AU	D. d. E.	12562 Apr 12 14:57	0°8	1 45000 411
	12561 May 09 00:44	0°II		max. Earth dist.	12562 Apr 17 01:32		1.45099 AU
evening rise	12561 May 18 05:08	14° Ⅱ 15'59		evening rise	12562 Apr 27 17:37	23° 8 39'27	
1 . 212	12561 May 28 09:54	0°©	0.7		12562 May 01 21:30	0° I I	
greatest brilliancy	12561 May 30 04:01	2°539'14	-0.7m		12562 May 23 02:30	0°©	20012105
asc. node	12561 Jun 08 15:06	15°9548'27	1001 (101	evening max el	12562 May 25 06:53		20°13'05
evening max el	12561 Jun 11 03:19	18°534'48	19°16'01	asc. node	12562 May 26 12:14	3°931'47	
retrograde	12561 Jun 18 03:25	22°529'31		retrograde	12562 Jun 02 02:06	6°950'16	
evening set	12561 Jun 21 16:56	21°55'39	2010101	evening set	12562 Jun 06 01:13	5°9519'51	
inferior conj	12561 Jun 27 03:06	15°925'44	3°10'01		12562 Jun 10 19:29	30°RⅡ	2012152
minimum elong	12561 Jun 27 04:00	15°522'50	3°09'02	inferior conj	12562 Jun 11 08:08	29° Ⅱ 17'00	
min. Earth dist.	12561 Jun 28 13:24	13°934'09	0.66897 AU	minimum elong	12562 Jun 11 07:58	29° Ⅱ 17'36	
morning rise	12561 Jul 02 14:30	9°502'25		min. Earth dist.	12562 Jun 12 04:11	28° Ⅱ 08'44	0.68018 AU
direct	12561 Jul 08 17:06	6°\$22'45		morning rise	12562 Jun 16 14:23	22° I I56'16	
desc. node	12561 Jul 11 22:36	7°500'27	2505.411.0	direct	12562 Jun 22 05:41	20° Ⅱ 26'35	
morning max el	12561 Jul 21 06:33	13°953'46	25°54'10	desc. node	12562 Jun 28 19:46	23° Ⅱ 02'34	24020100
	12561 Aug 03 08:41	0° N		morning max el	12562 Jul 03 16:33	27° Ⅱ 18'37	24°30'00
•	12561 Aug 22 09:11	0°M) 7°M-00107			12562 Jul 06 04:58	0°©	
morning set	12561 Aug 26 06:41	7° Mp 00'07	1.25456.433		12562 Jul 27 23:53	0° Ω	
max. Earth dist.	12561 Aug 30 00:28	14° Mp 01'26	1.35456 AU	morning set	12562 Aug 08 08:56	18° Ω 47'40	1 27/25 17
				max. Earth dist.	12562 Aug 11 23:19	25° Ω 11'23	1.37635 AU
·	105(1.0 04.16.10	250m. 1 4105	0000125				
superior conj	12561 Sep 04 16:48	25° m 14'07	0°00'25		12562 Aug 14 14:20	0° m	
minimum elong	12561 Sep 04 16:47	25° Mp 14'02	0°00'25 0°00'14		-	•	0022127
minimum elong behind sun begin	12561 Sep 04 16:47 12561 Sep 04 10:41	25° m/14'02 24° m/43'11		superior conj	12562 Aug 19 00:00	8° m/20'32	
minimum elong behind sun begin behind sun end	12561 Sep 04 16:47 12561 Sep 04 10:41 12561 Sep 04 22:53	25° m/14'02 24° m/43'11 25° m/44'56		minimum elong	12562 Aug 19 00:00 12562 Aug 19 02:13	8° m, 20'32 8° m, 31'11	-0°32'37 0°32'38
minimum elong behind sun begin	12561 Sep 04 16:47 12561 Sep 04 10:41 12561 Sep 04 22:53 12561 Sep 04 15:45	25° m/14'02 24° m/43'11 25° m/44'56 25° m/08'46		minimum elong asc. node	12562 Aug 19 00:00 12562 Aug 19 02:13 12562 Aug 22 12:25	8° m/20'32 8° m/31'11 15° m/13'29	
minimum elong behind sun begin behind sun end	12561 Sep 04 16:47 12561 Sep 04 10:41 12561 Sep 04 22:53	25° m/14'02 24° m/43'11 25° m/44'56		minimum elong	12562 Aug 19 00:00 12562 Aug 19 02:13	8° m, 20'32 8° m, 31'11	

	125(2.0 12.0(40	220 0 40145	10015152		12562 4 27 00 50	40.0 50122	10021140
evening max el	12562 Sep 13 06:40	22° Ω 40'45	19°15'52	evening max el	12563 Aug 27 08:50	4° £ 50'33	18°31'40
retrograde	12562 Sep 22 12:47	27° △ 18'05		retrograde	12563 Sep 04 05:45	8° ≏ 48'30	
evening set	12562 Sep 24 09:11	27° ≏ 07'48		evening set	12563 Sep 06 05:49	8° 亞 33'53	
desc. node	12562 Sep 24 16:43	27° ≏ 04'05		desc. node	12563 Sep 11 14:12	5° ≏ 54'29	
inferior conj	12562 Oct 02 22:53	22° ≏ 57'54	-2°35'00	inferior conj	12563 Sep 14 01:35	4° ≙ 03'51	-0°46'37
minimum elong	12562 Oct 02 16:10	23° ჲ 09'03	2°32'10	minimum elong	12563 Sep 13 23:45	4° ≙ 07'25	0°45'55
min. Earth dist.	12562 Oct 05 14:29	21° ≏ 12'50	0.55861 AU	min. Earth dist.	12563 Sep 17 07:24	1° ≏ 33'53	0.57657 AU
morning rise	12562 Oct 10 20:33	18° ≏ 22'59			12563 Sep 19 13:45	30° ₽, ™)	
direct	12562 Oct 16 04:42	17° ≙ 17'49		morning rise	12563 Sep 21 14:13	28° m 51'14	
morning max el	12562 Oct 30 06:00	24° ≏ 24'54	25°32'26	direct	12563 Sep 27 14:45	27° m 19'35	
· ·	12562 Nov 04 09:13	0° M			12563 Oct 05 20:25	0∘ ⊽	
asc. node	12562 Nov 18 13:54	21°M55'23		morning max el	12563 Oct 11 22:13	4° £ 52'16	26°56'23
	12562 Nov 22 17:28	0° ₹ ¹		3	12563 Oct 30 07:55	0° M	
morning set	12562 Nov 26 10:28	7° ∡ 745'07		asc. node	12563 Nov 05 10:43	11°ML15'57	
morning set	12302 1107 20 10.20	7 7 45 07		morning set	12563 Nov 10 20:01	22°M18'14	
superior conj	12562 Dec 03 05:21	22° ∡ ³39'56	1°38'14	morning set	12563 Nov 14 08:57	0° √	
		22° x 3930 22° x 37'46	1°39'09		12303 NOV 14 08.37	0 X	
minimum elong	12562 Dec 03 04:57				105/03/1 17 1/ 51	70 7 0 407	1022116
max. Earth dist.	12562 Dec 04 14:22	25° ∡ ¹42'08	1.31894 AU	superior conj	12563 Nov 17 16:51		1°33'16
	12562 Dec 06 13:35	0°₹		minimum elong	12563 Nov 17 15:30	7° ⋌ 16'55	1°34'00
evening rise	12562 Dec 10 08:16	8° පි 01'40		max. Earth dist.	12563 Nov 17 22:29	7° ∡ 55'55	1.31356 AU
desc. node	12562 Dec 21 14:18	29° る 22'30		evening rise	12563 Nov 24 12:38	22° ∡ °22'48	
	12562 Dec 21 23:05	0° ≈			12563 Nov 28 05:02	0°₹	
evening max el	12563 Jan 11 21:18	28° ≈ 14'46	27°30'26	desc. node	12563 Dec 08 11:20	18° る 41'21	
	12563 Jan 13 20:00	0° ∀			12563 Dec 16 01:50	0° ≈	
retrograde	12563 Jan 25 18:18	5°) €34'33		evening max el	12563 Dec 25 02:03	10° ≈ 22'48	27°00'17
evening set	12563 Feb 01 17:00	3° ¥ 16′26		retrograde	12564 Jan 08 00:33	17° ≈ 34'05	
min. Earth dist.	12563 Feb 05 10:55	0° ¥ 18'09	0.62171 AU	evening set	12564 Jan 14 19:33	15° ≈ 35'16	
	12563 Feb 05 18:54	30°R≈	***************************************	min. Earth dist.	12564 Jan 18 16:19	12° ≈ 54'58	0.60028 AU
inferior conj	12563 Feb 08 09:59	27° ≈ 31'57	-1°59'27	inferior conj	12564 Jan 21 20:33	10°≈19'04	
minimum elong	12563 Feb 08 14:04	27°≈22'21	1°57'14	minimum elong	12564 Jan 22 03:34	10°≈04'40	
asc. node	12563 Feb 14 12:30	27 ≈22 21 22°≈52'18	1 3/14	morning rise	12564 Jan 29 14:31	5°≈34'23	3 1040
				•			
morning rise	12563 Feb 15 13:49	22°≈26'57		direct	12564 Jan 31 16:25	5°≈17'47	
direct	12563 Feb 17 19:16	22°≈04'41		asc. node	12564 Feb 01 09:50	5°≈19'52	
morning max el	12563 Feb 24 13:32	25° ≈ 30'39	17°47'50	morning max el	12564 Feb 08 03:28	9° ≈ 00'45	18°04'38
	12563 Feb 28 08:09	0° ∀			12564 Feb 21 18:19	0° ∀	
morning set	12563 Mar 12 09:31	19° ¥ 58'46		morning set	12564 Feb 23 17:53	3°) 40′38	
	12563 Mar 18 01:58	0° Y					
desc. node	12563 Mar 19 15:37	2° Y '43'25		superior conj	12564 Mar 04 15:41	21° ¥ 49'41	0°06'44
				minimum elong	12564 Mar 04 16:14	21° ¥ 52′08	0°06'52
superior conj	12563 Mar 23 19:49	9° Ƴ 51'05	-0°31'57	behind sun begin	12564 Mar 04 09:10	21° ∺ 20'40	
minimum elong	12563 Mar 23 16:43	9° Y 38'04	0°31'31	behind sun end	12564 Mar 04 23:19	22° ∺ 23'32	
max. Earth dist.	12563 Mar 30 18:17	21° Y °17'40	1.43795 AU	desc. node	12564 Mar 05 12:10	23° ¥ 20′23	
man Bartin Gigt.	12563 Apr 05 05:37	0°8	1.10770110	4000. 11040	12564 Mar 09 08:07	0° Υ	
evening rise	12563 Apr 07 07:52	3° 8 15'50		max. Earth dist.	12564 Mar 12 06:39	4° Υ 58'13	1.41956 AU
evening rise	12563 Apr 25 08:20	0°П		evening rise	12564 Mar 17 13:01	13° Υ 35'29	1.41/30/10
evening max el	12563 May 08 04:44	16° Ⅱ 09'12	21922149	evening rise	12564 Mar 28 03:48	0° 8	
Č	12563 May 13 09:27	16 П 09 12 20° П 17'28	21 22 48			0°I	
asc. node	,				12564 Apr 19 22:42		220.4015.6
retrograde	12563 May 17 00:38	21° Ⅱ 19'09		evening max el	12564 Apr 19 21:46	29° 8 57'40	22°40'56
evening set	12563 May 21 10:10	19° ∏ 32'27		asc. node	12564 Apr 29 06:43	5° Ⅱ 49'34	
inferior conj	12563 May 26 16:24	13° Ⅱ 18'14	3°06'07	retrograde	12564 Apr 29 21:29	5° Ⅱ 51'20	
minimum elong	12563 May 26 15:18	13° Ⅱ 22'06	3°05'08	evening set	12564 May 04 18:09	3° Ⅱ 49'26	
min. Earth dist.	12563 May 26 22:54	12° Ⅱ 55'35	0.68666 AU		12564 May 08 04:51	30° ₹႘	
morning rise	12563 May 31 20:12	7° Ⅱ 02'22		inferior conj	12564 May 10 01:52	27° 8 26'08	2°47'56
direct	12563 Jun 05 22:47	4° Ⅱ 49'04		minimum elong	12564 May 10 00:04	27° 8 32'24	2°46'52
desc. node	12563 Jun 15 16:50	10° Ⅲ 25'45		min. Earth dist.	12564 May 09 19:30	27° 8 48'15	0.68838 AU
morning max el	12563 Jun 16 03:06	10° Ⅲ 51'18	23°00'20	morning rise	12564 May 15 05:53	21° 8 16'30	
	12563 Jul 01 07:32	0 \circ \mathbf{s}		direct	12564 May 19 19:19	19° 8 23'13	
morning set	12563 Jul 20 12:28	29° © 33'18		morning max el	12564 May 28 17:18	24° 8 33'42	21°33'58
morning sec	12563 Jul 20 18:54	0°Ω		desc. node	12564 Jun 01 13:47	28° 8 48'29	21 33 30
max. Earth dist.	12563 Jul 24 21:25	6° Ω 55'49	1.39971 AU	desc. Hode	12564 Jun 02 13:28	0°Ⅱ	
man. Darui uist.	12303 Jul 24 21.23	0 0633 49	1.379/1 AU		12564 Jun 23 16:55	0°©	
	105(2 4 01 16 05	200 0 42141	1007/00				
superior conj	12563 Aug 01 16:05	20° Ω 43'41		morning set	12564 Jun 29 14:35	9°511'56	1 40170 177
minimum elong	12563 Aug 01 20:56	21° Ω 05'57	1 0 7 02	max. Earth dist.	12564 Jul 06 00:12	19° © 32'13	1.42178 AU
	12563 Aug 06 15:28	0° ™			12564 Jul 12 05:30	0 ° Ω	
asc. node	12563 Aug 09 09:06	5° Mp 12'22					
evening rise	12563 Aug 11 08:34	8° m 59'20		superior conj	12564 Jul 13 12:35	2° Ω 14'03	
	12563 Aug 23 08:53	0∘ ⊽		minimum elong	12564 Jul 13 19:25	2° Ω 43'41	1°39'30

	1056171 011151	222 02 412			105/5 1 1 00 10 50	000	
evening rise	12564 Jul 24 14:51	22° Ω 04'13			12565 Jul 23 12:59	0° m/y	10000150
asc. node	12564 Jul 26 05:51	25° Ω 01'50		evening max el	12565 Jul 24 08:24	0° Mp 50'15	18°03'58
	12564 Jul 28 23:54	0° Т р	1000000	retrograde	12565 Jul 30 19:13	4° M) 11'07	
evening max el	12564 Aug 09 18:45	17° Mp 37'13	18°08'06	evening set	12565 Aug 02 10:37	3° M) 36'26	
retrograde	12564 Aug 16 17:14 12564 Aug 19 00:29	21° Mp 09'25 20° Mp 46'27		infarior aoni	12565 Aug 07 07:23 12565 Aug 08 20:12	30°R Ω 28° Ω 27'04	1°50'28
evening set	•		0°43'40	inferior conj minimum elong	•	$28^{\circ}\Omega 20'30$	1°49'08
inferior conj minimum elong	12564 Aug 26 01:47 12564 Aug 26 03:09	15° Mp 55'55 15° Mp 52'50	0°42'51	min. Earth dist.	12565 Aug 08 22:45 12565 Aug 11 18:36	28 δι 20 30 25° Ω 26'12	0.62133 AU
desc. node	12564 Aug 28 11:39	13° Mp 44'42	0 42 31	morning rise	12565 Aug 15 08:32	$23^{\circ} \Omega 20^{\circ} 12$ $22^{\circ} \Omega 20^{\circ} 29$	0.02133 AU
min. Earth dist.	12564 Aug 29 08:23	13 m/44 42 12° m/59'20	0.59850 AU	desc. node	12565 Aug 15 09:05	$22^{\circ}\Omega 19'30$	
morning rise	12564 Sep 02 02:36	12 m/3920 10° m/11'00	0.39630 AO	direct	12565 Aug 22 00:52	$19^{\circ}\Omega 57'26$	
direct	12564 Sep 08 14:14	8° Mp 11'26		morning max el	12565 Sep 05 04:14	$27^{\circ} \Omega 58'56$	27°57'18
morning max el	12564 Sep 22 22:10	-	27°46'16	morning max cr	12565 Sep 07 02:48	0° m	27 37 10
morning max or	12564 Oct 04 08:37	0° ⊡	27 1010		12565 Sep 28 03:43	0∘ ⊽	
	12564 Oct 21 20:19	o° m.		morning set	12565 Oct 09 01:46	ა — 20° ჲ 37'06	
asc. node	12564 Oct 22 07:28	0°M55'57		asc. node	12565 Oct 09 04:08	20° ⊆ 49'12	
morning set	12564 Oct 25 01:48	6°M37'22		use. Hour	12565 Oct 13 12:53	0°M	
max. Earth dist.	12564 Oct 31 07:01	20°M07'05	1.31322 AU	max. Earth dist.	12565 Oct 14 12:07	2°ML05'37	1.31808 AU
superior conj	12564 Nov 01 04:16	22°M05'11	1°22'35	superior conj	12565 Oct 16 13:44	6°M36'43	1°06'20
minimum elong	12564 Nov 01 02:15	21°M53'58	1°23'01	minimum elong	12565 Oct 16 11:28	6°M24'17	1°06'27
	12564 Nov 04 17:37	0° ∡ ¹		evening rise	12565 Oct 23 07:59	21°M27'07	
evening rise	12564 Nov 07 21:11	6° ₹ 153'00			12565 Oct 27 09:48	0° ∡ ¹	
	12564 Nov 19 18:49	5°0		desc. node	12565 Nov 11 05:39	24° ₹ 759'49	
desc. node	12564 Nov 24 08:26	7° る 19'01			12565 Nov 15 10:06	ರ°0	
evening max el	12564 Dec 05 22:49	21° る 38'19	25°56'22	evening max el	12565 Nov 17 11:50	2° る 06'32	24°26'06
retrograde	12564 Dec 19 20:47	28° ප් 40'58		retrograde	12565 Dec 01 05:02	8° る 57'38	
evening set	12564 Dec 26 02:30	27° る 09'24		evening set	12565 Dec 06 09:55	7° る 57'55	
min. Earth dist.	12564 Dec 30 11:37	24° පි 33'06	0.57917 AU	min. Earth dist.	12565 Dec 11 23:21	5° ට 07'31	0.56106 AU
inferior conj	12565 Jan 02 12:29	22° る 23'43	-4°37'52	inferior conj	12565 Dec 14 07:50	3° る 39'34	-5°36'25
minimum elong	12565 Jan 02 21:04	22° る 08'27	4°34'42	minimum elong	12565 Dec 14 13:48	3° ⋜ 30′16	5°34'42
morning rise	12565 Jan 10 18:22	18° ට 01'23			12565 Dec 21 10:53	30°₹ ⋌ 7	
direct	12565 Jan 12 21:15	17° る 47'00		morning rise	12565 Dec 22 19:45	29° ∡ ³37′56	
asc. node	12565 Jan 18 07:06	19° පි 27'02		direct	12565 Dec 25 06:46	29° ∡ ¹21'49	
morning max el	12565 Jan 21 10:11	21° る 57'03	18°41'51		12565 Dec 28 22:48	0°ಕ	
	12565 Jan 27 16:39	0° ≈		morning max el	12566 Jan 04 05:43	4° る 08'22	19°41'25
morning set	12565 Feb 06 13:49	17°≈53'02		asc. node	12566 Jan 05 04:18	5° ට 05'08	
	12565 Feb 12 19:49	0° ℋ			12566 Jan 20 12:37	0° ≈	
				morning set	12566 Jan 21 17:32	2° ≈ 25'14	
superior conj	12565 Feb 15 07:45	4°) 43′54			105667 00 15 10	100 20120	100.4151
minimum elong	12565 Feb 15 10:11	4° ₩ 55'20	0°39'32	superior conj	12566 Jan 29 15:19	18°≈20'39	1°04'51
desc. node	12565 Feb 20 08:43	13° ¥ 58′27	1 2070 C ATT	minimum elong	12566 Jan 29 18:10	18°≈34'43	1°05'08
max. Earth dist.	12565 Feb 22 14:16	17° H 55'25	1.39796 AU	max. Earth dist.	12566 Feb 04 17:18	0° ∺ 0° ∺ 14'13	1 275(2 AII
evening rise	12565 Feb 26 14:59 12565 Mar 01 17:42	24°¥50′25 0° Y		desc. node	12566 Feb 04 20:22 12566 Feb 07 05:20	4°\(\frac{14}{34}\)'25	1.37562 AU
	12565 Mar 21 21:53	0°8		evening rise	12566 Feb 08 13:44	4 1 (34 23 6° 1 (59′14	
evening max el	12565 Apr 02 11:55	13° 8 47'45	2400147	evening rise	12566 Feb 22 14:51	0 γ (3914	
retrograde	12565 Apr 13 15:17	20° 8 20'43	24 0147	evening max el	12566 Mar 16 01:25	27° Υ 39'53	25°18'33
asc. node	12565 Apr 16 04:04	19° 8 51'30		evening max er	12566 Mar 18 14:12	0°8	23 1033
evening set	12565 Apr 18 23:32	18° 8 05'40		retrograde	12566 Mar 28 04:54	4° 8 41'48	
min. Earth dist.	12565 Apr 23 15:52	12° 8 40'14	0.68556 AU	evening set	12566 Apr 03 00:49	2° 8 16'38	
inferior conj	12565 Apr 24 10:37	11° 8 36'33	2°19'44	asc. node	12566 Apr 03 01:26	2° 8 15'19	
minimum elong	12565 Apr 24 08:28	11° 8 43'50	2°18'38		12566 Apr 05 07:35	30° R Υ	
morning rise	12565 Apr 29 17:28	5° 8 34'16		min. Earth dist.	12566 Apr 07 09:50	27° Y 26'37	0.67841 AU
direct	12565 May 03 18:09	4° 8 02'07		inferior conj	12566 Apr 08 16:47	25° Ƴ 46′08	1°41'33
morning max el	12565 May 11 13:51	8° 8 26'54	20°17'23	minimum elong	12566 Apr 08 14:46	25° Y 52'43	1°40'34
desc. node	12565 May 19 10:36	17° 8 54'00		morning rise	12566 Apr 14 05:06	19° Ƴ 52'31	
	12565 May 27 22:44	$\Pi^{\circ}0$		direct	12566 Apr 17 17:56	18° Ƴ 40'42	
morning set	12565 Jun 08 19:46	17° Ⅱ 56'54		morning max el	12566 Apr 24 18:00	22° Ƴ 30'51	19°14'51
	12565 Jun 16 12:40	0ಂತ			12566 May 01 00:21	9° 8	
max. Earth dist.	12565 Jun 18 09:10	2° © 57'19	1.43998 AU	desc. node	12566 May 06 07:20	7° 8 31'03	
				greatest brilliancy	12566 May 07 14:27	9° 8 26'11	-0.7m
superior conj	12565 Jun 24 09:40	12° 5 43'18	-2°03'52	morning set	12566 May 18 21:45	26° 8 39'07	
minimum elong	12565 Jun 24 15:32	13° © 07'27	2°04'27		12566 May 21 01:47	Π °0	
	12565 Jul 04 15:29	0 $^{\circ}\Omega$		max. Earth dist.	12566 Jun 01 00:10	17° Ⅱ 01'43	1.45240 AU
evening rise	12565 Jul 07 04:08	4° Ω 22'14					
asc. node	12565 Jul 13 02:38	14° Ω 36′29		superior conj	12566 Jun 04 07:49	22° Ⅱ 15'59	-2°13'28

minimum elong	12566 Jun 04 07:51	22° Ⅱ 16'10	2°14'22		12567 Jun 01 22:41	0ං ම	
	12566 Jun 09 04:09	0ಂಣ		greatest brilliancy	12567 Jun 08 11:25	10°916'02	-0.8m
evening rise	12566 Jun 18 19:31	15° 5 42'27		asc. node	12567 Jun 16 20:28	22° © 37'28	
	12566 Jun 27 12:49	$0^{\circ}\Omega$		evening max el	12567 Jun 21 09:48	28° © 01'51	18°50'11
asc. node	12566 Jun 29 23:30	3° Ω 50'44			12567 Jun 23 16:15	$0^{\circ}\Omega$	
evening max el	12566 Jul 07 22:22	14° Ω 20'57	18°18'17	retrograde	12567 Jun 28 01:54	1° Ω 41'25	
retrograde	12566 Jul 14 07:20	17° Ω 44'24		evening set	12567 Jul 01 10:21	0° Ω 36'43	
evening set	12566 Jul 17 07:09	16° Ω 55'29 11° Ω 29'07	2025120	: <i>c</i> :	12567 Jul 02 06:54	30°R≌	2901140
inferior conj minimum elong	12566 Jul 23 04:47 12566 Jul 23 07:08	$11^{\circ} \Omega 22'19$	2°35'20 2°34'04	inferior conj minimum elong	12567 Jul 06 23:43 12567 Jul 07 01:13	24° © 54'52 24° © 50'09	3°01'49 3°00'44
min. Earth dist.	12566 Jul 25 14:09	8°Ω44'23	0.64256 AU	min. Earth dist.	12567 Jul 08 18:22	22°9541'18	0.66049 AU
morning rise	12566 Jul 29 05:42	5° Ω 10'45	0.0.200110	morning rise	12567 Jul 12 15:20	18°932'02	0.000 17 110
desc. node	12566 Aug 02 06:28	2° Ω 56'33		direct	12567 Jul 18 23:25	15° © 50'37	
direct	12566 Aug 04 20:28	2° Ω 33′20		desc. node	12567 Jul 20 03:48	15° © 55'38	
morning max el	12566 Aug 18 13:57	10° Ω 33'24	27°31'46	morning max el	12567 Aug 01 00:57	23° © 35'59	26°36'21
	12566 Sep 02 21:41	0° m)			12567 Aug 06 17:49	0 $^{\circ}$ Ω	
	12566 Sep 20 13:54	0∘ ⊽			12567 Aug 27 06:17	0° ™	
morning set	12566 Sep 22 17:27	4° £ 10'54		morning set	12567 Sep 05 21:48	17° m) 11'27	
asc. node	12566 Sep 26 00:46	10° Ω 50'38		max. Earth dist.	12567 Sep 09 22:41	25° m 00'29	1.34365 AU
max. Earth dist.	12566 Sep 27 10:10	13° ≏ 43'41	1.32828 AU		12567 Sep 12 10:20	0° ⊽	
	12566 9 20 10 14	200 0 52100	0044141	asc. node	12567 Sep 12 21:24	0° ≏ 56′22	
superior conj	12566 Sep 30 19:14 12566 Sep 30 17:17	20° £ 53'09 20° £ 42'40	0°44'41 0°44'33	aumorior coni	12567 Sep 14 18:27	4° Ω 48'19	0017155
minimum elong	12566 Oct 05 00:22	0°M	0-44-33	superior conj minimum elong	12567 Sep 14 18:27 12567 Sep 14 17:30	4° <u>22</u> 48°19 4° <u>2</u> 43'24	0°17'33 0°17'43
evening rise	12566 Oct 07 19:11	5°M59'52		evening rise	12567 Sep 22 04:50	20° £ 26'15	0 1743
e vennig rise	12566 Oct 20 10:30	0° ∡ 7		evening rise	12567 Sep 26 21:25	0°M	
desc. node	12566 Oct 29 02:58	11° ∡ ′21'58		evening max el	12567 Oct 11 15:12	22°M25'48	21°08'54
evening max el	12566 Oct 29 22:13	12° ∡ 10′05	22°44'28	desc. node	12567 Oct 16 00:22	25°M58'58	
retrograde	12566 Nov 12 00:05	18° ∡ ³39'41		retrograde	12567 Oct 23 11:17	28°M18'45	
evening set	12566 Nov 15 19:34	18° ₹ ′08′01		evening set	12567 Oct 26 00:32	28°ML03'29	
min. Earth dist.	12566 Nov 23 06:37	14° ∡ ¹45′15	0.54904 AU	inferior conj	12567 Nov 04 00:28	24°M09'16	-5°10'28
inferior conj	12566 Nov 24 08:42	14° ₹ ′08′10		minimum elong	12567 Nov 03 15:21	24°M22'07	
minimum elong	12566 Nov 24 06:48	14° ⋌ 10'53	5°51'45	min. Earth dist.	12567 Nov 04 12:58	23°M51'37	0.54549 AU
morning rise	12566 Dec 02 19:27	10° √ 19'51		morning rise	12567 Nov 12 06:43	20°M18'08	
direct	12566 Dec 05 22:58	9° × 757'01	21002155	direct	12567 Nov 16 06:54	19°M43'40	22045117
morning max el asc. node	12566 Dec 17 11:03	15° х 25'40 21° х 57'06	21°03'55	morning max el	12567 Nov 29 03:34	25°M.54'24 0° ⊀7	22°45'17
asc. node	12566 Dec 23 01:24 12566 Dec 28 05:36	21 x ·3/00		asc. node	12567 Dec 02 23:35 12567 Dec 09 22:27	0 x · 9° ₹ ¹46'55	
morning set	12567 Jan 06 02:06	0 0 17° る 07'50		asc. node	12567 Dec 20 15:34	0°る	
morning sec	12567 Jan 12 05:43	0° ≈		morning set	12567 Dec 21 13:17	1°る54'30	
				3			
superior conj	12567 Jan 13 10:07	2° ≈ 27'00	1°22'53	superior conj	12567 Dec 28 12:46	16° る 53'33	1°33'55
minimum elong	12567 Jan 13 12:27	2° ≈ 39'05	1°23'28	minimum elong	12567 Dec 28 14:08	17° ට 00'50	1°34'45
max. Earth dist.	12567 Jan 18 05:55	12° ≈ 10'49	1.35484 AU	max. Earth dist.	12567 Dec 31 22:26	24° る 03'45	1.33738 AU
evening rise	12567 Jan 22 06:08	19° ≈ 52'01			12568 Jan 03 20:17	0° ≈	
desc. node	12567 Jan 25 02:03	25° ≈ 03'35		evening rise	12568 Jan 05 12:33	3° ≈ 19'31	
	12567 Jan 27 21:07	0° ∀		desc. node	12568 Jan 11 22:50	15° ≈ 21'28	
	12567 Feb 16 15:32	0°Υ 110 W 20124	26024102		12568 Jan 20 17:26	0° ∺ 25° ∺ 04'20	27010154
evening max el	12567 Feb 26 15:10 12567 Mar 11 13:14	11° Y 28'34 18° Y 47'27	26°24'03	evening max el	12568 Feb 09 04:42 12568 Feb 15 07:12	25°π04'20 0°Υ	2/*10/54
retrograde evening set	12567 Mar 17 13:14 12567 Mar 17 20:12	16° Y 16'06		retrograde	12568 Feb 15 07:12 12568 Feb 22 15:33	0° γ 2° Υ 29'49	
asc. node	12567 Mar 20 22:50	13° Υ 11'45		evening set	12568 Feb 29 07:44	29°)(57'39	
min. Earth dist.	12567 Mar 21 23:09	12° Υ '00'51	0.66709 AU	evening set	12568 Feb 29 06:30	30° R ₩	
inferior conj	12567 Mar 23 18:18	9° Y 49'51	0°53'04	min. Earth dist.	12568 Mar 04 05:38	26° ¥ 15'37	0.65191 AU
minimum elong	12567 Mar 23 17:00	9° Υ 53'49	0°52'30	inferior conj	12568 Mar 06 12:49	23°) 42′02	-0°06'02
morning rise	12567 Mar 29 14:42	4° Y 06'43		minimum elong	12568 Mar 06 12:59	23°) 41′34	0°05'46
direct	12567 Apr 01 16:49	3° Y 13'02		transit middle	12568 Mar 06 12:59	23°) 41′34	0°05'46
morning max el	12567 Apr 08 05:05	6° Ƴ 41'22	18°28'30	transit begin	12568 Mar 06 10:10	23° ¥ 49′27	
desc. node	12567 Apr 23 04:02	27° Y ′30′52		transit end	12568 Mar 06 15:48	23°) 33′42	
	12567 Apr 24 17:59	0°8		asc. node	12568 Mar 06 20:15	23°) €21'19	
morning set	12567 Apr 28 18:22	6° 8 20'12		morning rise	12568 Mar 12 19:50	18°) 11'46	
	12567 May 13 20:04	Π $^{\circ}$ 0		direct	12568 Mar 15 12:32	17° ¥ 33'10	17050102
superior core	12567 May 14 16:02	1° Ⅱ 18'03	2002!11	morning max el	12568 Mar 21 20:56	20° ¥ 51'56 0° Ƴ	17°59'02
superior conj minimum elong	12567 May 14 16:03 12567 May 14 08:50			morning set	12568 Mar 28 23:25 12568 Apr 08 19:23	17° Y 25′23	
max. Earth dist.	12567 May 14 08:30 12567 May 14 19:21	1° П 30'56	1.45774 AU	desc. node	12568 Apr 09 00:39	17° Y 47'03	
evening rise	12567 May 30 10:32	26° Ⅱ 02'27	1.15,77110	acso. Hode	12568 Apr 16 12:25	0° 8	
	114, 114, 50 10.52						

superior conj	12568 Apr 23 03:32	10° 8 35'33	-1°34'32	morning set	12569 Mar 21 22:46	29°){ 46'32	
minimum elong	12568 Apr 22 18:25	9° 8 59'29	1°34'07	morning set	12569 Mar 22 01:54	29 γ (40 32	
max. Earth dist.	12568 Apr 26 15:42	16° 8 07'01	1.45555 AU	desc. node	12569 Mar 26 21:14	8° Υ 14'41	
max. Darm dist.	12568 May 05 13:54	0°II	1.43333710	dese. Hode	1230) With 20 21.14	0 1441	
evening rise	12568 May 09 05:21	5° Ⅱ 37'03		superior conj	12569 Apr 03 09:41	20° Ƴ 48'50	-0°55'34
greatest brilliancy	12568 May 22 23:47	26° ∏ 29'45	-0.7m	minimum elong	12569 Apr 03 03:59	20°Υ25'26	
greatest similare	12568 May 25 09:39	0.8e	0.7111	mmmum vieng	12569 Apr 09 02:03	0°8	0 22 00
asc. node	12568 Jun 02 17:32	10°5946'57		max. Earth dist.	12569 Apr 09 10:10	0° 8 32'22	1.44615 AU
evening max el	12568 Jun 03 16:31	11°5946'52	19°38'32	evening rise	12569 Apr 18 16:40	15° 8 01'19	
retrograde	12568 Jun 10 23:50	15°954'51		<i>y</i>	12569 Apr 28 14:45	0°II	
evening set	12568 Jun 14 17:25	14° © 33'45		evening max el	12569 May 17 17:30	25° Ⅲ 33'42	20°41'20
inferior conj	12568 Jun 20 01:50	8° © 37'55	3°13'12	asc. node	12569 May 20 14:42	28° Ⅱ 07'39	
minimum elong	12568 Jun 20 02:16	8° 5 36'29	3°12'14		12569 May 23 23:38	0°ಲಾ	
min. Earth dist.	12568 Jun 21 05:52	7° © 04'33	0.67427 AU	retrograde	12569 May 25 22:49	0° © 19'46	
morning rise	12568 Jun 25 10:43	2° © 15'24		-	12569 May 27 20:05	30°RⅡ	
	12568 Jun 29 03:46	30°Ŗ Ⅱ		evening set	12569 May 30 02:12	28° ∏ 42'22	
direct	12568 Jul 01 08:38	29° Ⅱ 39′23		inferior conj	12569 Jun 04 08:32	22° Ⅲ 34'11	3°11'55
	12568 Jul 03 16:16	0 \circ \odot		minimum elong	12569 Jun 04 07:56	22° Ⅱ 36′15	3°10'58
desc. node	12568 Jul 06 01:02	0°\$58'32		min. Earth dist.	12569 Jun 04 22:41	21° Ⅱ 45'19	0.68348 AU
morning max el	12568 Jul 13 11:33	6° © 55'18	25°19'47	morning rise	12569 Jun 09 13:24	16° Ⅱ 15′06	
	12568 Jul 31 10:14	$0^{\circ}\Omega$		direct	12569 Jun 14 23:16	13° Ⅲ 51'52	
morning set	12568 Aug 18 10:50	29° Ω 28′15		desc. node	12569 Jun 22 22:09	17° Ⅲ 38′03	
	12568 Aug 18 17:53	0° ™		morning max el	12569 Jun 25 21:41	20° Ⅲ 24′16	23°51'57
max. Earth dist.	12568 Aug 22 01:38	6°Mp06'14	1.36347 AU		12569 Jul 04 02:49	0 \circ \odot	
					12569 Jul 24 14:52	0 $^{\circ}\Omega$	
superior conj	12568 Aug 28 08:24	18° m 13'55	-0°13'15	morning set	12569 Jul 31 03:57	10° Ω 50'35	
minimum elong	12568 Aug 28 09:14	18°M) 18'06	0°13'22	max. Earth dist.	12569 Aug 03 23:07	17° Ω 26'14	1.38624 AU
behind sun begin	12568 Aug 28 05:38	18°Mp00'14			12569 Aug 10 20:24	0° ™	
behind sun end	12568 Aug 28 12:50	18° m 35'59					
asc. node	12568 Aug 29 18:01	21° m 01'54		superior conj	12569 Aug 11 09:37	1°Mp02'16	
	12568 Sep 03 03:59	0∘ ⊽		minimum elong	12569 Aug 11 12:56	1° m) 17'57	0°47'13
evening rise	12568 Sep 05 10:42	4° Ω 39'17		asc. node	12569 Aug 16 14:41	11° m)04'03	
	12568 Sep 19 22:21	0° M ₊		evening rise	12569 Aug 20 10:10	18° m 32'35	
evening max el	12568 Sep 22 21:23		19°50'57		12569 Aug 26 10:11	0∘ ⊽	
desc. node	12568 Oct 01 21:49	8°M22'52		evening max el	12569 Sep 05 17:13	15° ≏ 05'42	18°54'28
retrograde	12568 Oct 03 02:27	8°M26'53		retrograde	12569 Sep 14 08:15	19° £ 24'55	
evening set	12568 Oct 05 00:25	8°M16'56	2020120	evening set	12569 Sep 16 05:17	19° £ 13'27	
inferior conj	12568 Oct 13 21:32	4°M15'37		desc. node	12569 Sep 18 19:16	18° Ω 23'11	1045120
minimum elong	12568 Oct 13 12:21	4°M29'42		inferior conj	12569 Sep 24 11:49	14° £ 55'37	
min. Earth dist.	12568 Oct 15 21:47		0.55127 AU	minimum elong	12569 Sep 24 07:15	15° Ω 03'42	1°45'42
morning rise	12568 Oct 21 22:48	0°M00'32		min. Earth dist.	12569 Sep 27 11:25	12° Ω 49'22 10° Ω 04'09	0.56551 AU
direct	12568 Oct 21 23:25 12568 Oct 26 19:26	30° R		morning rise direct	12569 Oct 02 06:00 12569 Oct 07 21:33	8° £ 48'03	
direct	12568 Oct 31 13:51	0°M		morning max el	12569 Oct 07 21.33 12569 Oct 22 02:40	8 2 48 03 16° 2 07'54	26°11'41
morning max el	12568 Nov 09 14:06	5°M57'42	24033140	morning max er	12569 Nov 02 09:26	0°M	20 1141
asc. node	12568 Nov 25 19:24	28°M20'17	24 33 47	asc. node	12569 Nov 12 16:15	17°M25'59	
asc. node	12568 Nov 26 17:27	0° √		asc. node	12569 Nov 18 21:22	0° √	
morning set	12568 Dec 05 01:11	16° ∡ 739'43		morning set	12569 Nov 19 12:02	1°×718'20	
	12568 Dec 11 03:44	0°る		og sot	1200, 1101 17 12.02	. 7 1020	
		• •		superior conj	12569 Nov 26 07:17	16° ∡ 16'35	1°36'50
superior conj	12568 Dec 11 20:35	1° る 32'26	1°38'26	minimum elong	12569 Nov 26 06:28	16° ₹ 12'00	1°37'42
minimum elong	12568 Dec 11 20:49	1° る 33'44		max. Earth dist.	12569 Nov 27 04:25	18° х 13′53	1.31595 AU
max. Earth dist.	12568 Dec 13 22:33	6° る 04'27	1.32423 AU		12569 Dec 02 14:12	0°ਰ	
evening rise	12568 Dec 19 05:40	17° る 13'29		evening rise	12569 Dec 03 06:36	1° る 26'28	
C	12568 Dec 25 19:44	0° ≈		desc. node	12569 Dec 15 16:40	24° る 59'26	
desc. node	12568 Dec 28 19:43	5° ≈ 22'37			12569 Dec 18 18:23	0° ≈	
	12569 Jan 14 05:29	0°) {		evening max el	12570 Jan 04 00:41	20°≈50'15	27°21'56
evening max el	12569 Jan 21 16:36	8°) 15'48	27°32'09	retrograde	12570 Jan 17 23:01	28° ≈ 07'33	
retrograde	12569 Feb 04 11:12	15°) 40′01		evening set	12570 Jan 24 20:59	25° ≈ 56'30	
evening set	12569 Feb 11 09:02	13°) 14′04		min. Earth dist.	12570 Jan 28 15:12	23° ≈ 07'10	0.61262 AU
min. Earth dist.	12569 Feb 15 03:26	10°) €01'44	0.63341 AU	inferior conj	12570 Jan 31 17:17	20° ≈ 23'05	-2°33'18
inferior conj	12569 Feb 17 21:35	7°) 16′06	-1°15'25	minimum elong	12570 Jan 31 22:39	20° ≈ 11'10	2°30'34
minimum elong	12569 Feb 18 00:02	7°) €09'56	1°13'58	morning rise	12570 Feb 08 03:13	15° ≈ 26'34	
asc. node	12569 Feb 21 17:40	3°) 45′37		asc. node	12570 Feb 08 15:03	15° ≈ 18'47	
morning rise	12569 Feb 24 17:24	2° ∺ 01′18		direct	12570 Feb 10 06:34	15° ≈ 07'17	
direct	12569 Feb 27 02:16	1°) 34′14		morning max el	12570 Feb 17 07:07	18° ≈ 39'32	17°52'35
morning max el	12569 Mar 05 14:44	4°) (54'41	17°46'50		12570 Feb 25 12:37	0°) €	

morning set	12570 Mar 04 22:17	13° 米 03′55		inferior conj	12571 Jan 13 20:21	2°≈53'40	
desc. node	12570 Mar 13 17:47	28°) (49'01		minimum elong	12571 Jan 14 04:20	2° ≈ 38'13	3°50'45
	12570 Mar 14 10:04	$0^{\circ}\mathbf{Y}$			12571 Jan 17 22:10	30°₽₹	
				morning rise	12571 Jan 21 19:49	28° る 18'01	
superior conj	12570 Mar 15 16:03	2° Y 09'43	-0°15'01	direct	12571 Jan 23 21:22	28° る 02'49	
minimum elong	12570 Mar 15 14:42	2° Y 03'55	0°14'43	asc. node	12571 Jan 26 12:20	28° る 28'34	
behind sun begin	12570 Mar 15 11:25	1° Y 49'43			12571 Jan 29 11:05	0° ≈	
behind sun end	12570 Mar 15 18:00	2° Y 18′06		morning max el	12571 Jan 31 18:27	1° ≈ 56'31	18°17'46
max. Earth dist.	12570 Mar 23 00:36	14° Y 30'47	1.43065 AU	morning set	12571 Feb 16 12:10	27° ≈ 00'34	
evening rise	12570 Mar 29 11:59	24° Y 53'09			12571 Feb 18 01:59	0° ∀	
•	12570 Apr 01 18:56	0°8					
	12570 Apr 22 14:24	$\Pi^{\circ}0$		superior conj	12571 Feb 25 21:05	14° ¥ 33'17	0°21'26
evening max el	12570 Apr 30 13:04	9° Ⅱ 21'12	21°55'19	minimum elong	12571 Feb 25 22:38	14° ¥ 40′24	0°21'31
asc. node	12570 May 07 11:57	14° Ⅱ 23'53		desc. node	12571 Feb 28 14:21	19° ¥ 26'47	
retrograde	12570 May 09 20:50	14° ∏ 50'12		max. Earth dist.	12571 Mar 05 10:47	27° ¥ 53'17	1.41071 AU
evening set	12570 May 14 10:55	12° I 57'06		man. Darin diot.	12571 Mar 06 16:44	0° Υ	1.11071110
inferior conj	12570 May 19 17:33	6° ∏ 38'41	2°59'38	evening rise	12571 Mar 10 01:48	5° Υ 36'18	
minimum elong	12570 May 19 16:06	6° ∏ 43'43	2°58'37	evening rise	12571 Mar 25 23:20	0°8	
min. Earth dist.	12570 May 19 18:35	6° П 35'03	0.68798 AU	evening max el	12571 Mai 23 23:20 12571 Apr 13 04:47	23° 8 10'41	23°15'22
morning rise	12570 May 19 18:35 12570 May 24 21:06	0°П25'03	0.08798 AU	retrograde	12571 Apr 13 04.47 12571 Apr 23 16:25	29° 8 21'21	23 13 22
morning rise	•	0 H23 03 30°R ႘		asc. node	-	29° 8 19'04	
T' 4	12570 May 25 09:15				12571 Apr 24 09:14		
direct	12570 May 29 18:04	28° 8 19'48		evening set	12571 Apr 28 17:58	27° 8 13'47	0.60702.444
	12570 Jun 03 14:39	0°II	222222	min. Earth dist.	12571 May 03 15:20	21° 8 27'46	0.68782 AU
morning max el	12570 Jun 08 09:16	4° Ⅱ 00'09	22°22'36	inferior conj	12571 May 04 02:56	20° 8 47'46	2°37'09
desc. node	12570 Jun 09 19:09	5° ∏ 28′26		minimum elong	12571 May 04 00:56	20° 8 54'39	2°36'04
	12570 Jun 28 05:39	0 \circ \odot		morning rise	12571 May 09 07:50	14° 8 41'04	
morning set	12570 Jul 11 20:42	21° © 07'24		direct	12571 May 13 15:53	12° 8 56'31	
max. Earth dist.	12570 Jul 16 22:04	29° © 29'00	1.40942 AU	morning max el	12571 May 22 01:44	17° 8 46'01	20°59'43
	12570 Jul 17 05:25	$0 {\circ} \Omega$		desc. node	12571 May 27 16:03	24° 8 10'36	
					12571 Jun 01 01:46	$\Pi^{\circ}0$	
superior conj	12570 Jul 24 17:54	13° Ω 04'00			12571 Jun 21 07:46	0° ©	
minimum elong	12570 Jul 24 23:47	13° Ω 30′20	1°21'20	morning set	12571 Jun 21 12:30	0° © 18'31	
	12570 Aug 02 22:46	0° m ⁄		max. Earth dist.	12571 Jun 29 03:35	12° © 27'28	1.43020 AU
asc. node	12570 Aug 03 11:23	0° ™ 59'11					
evening rise	12570 Aug 03 23:52	1° m 57'44		superior conj	12571 Jul 06 04:46	24° © 08'49	-1°51'10
evening max el	12570 Aug 19 23:15	27° m/32'40	18°19'15	minimum elong	12571 Jul 06 11:42	24° © 38'14	1°51'26
	12570 Aug 23 01:06	0∘ ত			12571 Jul 09 14:53	$0^{\circ}\Omega$	
retrograde	12570 Aug 27 09:08	1° ≏ 17'28		evening rise	12571 Jul 17 23:30	14° Ω 43'39	
evening set	12570 Aug 29 12:07	0° £ 59'44		asc. node	12571 Jul 21 08:08	20° Ω 42'38	
C	12570 Aug 31 22:09	30°R.₩			12571 Jul 26 17:56	0° m/	
inferior conj	12570 Sep 05 23:51	26° m/21'10	-0°05'32	evening max el	12571 Aug 03 11:15	10° m 31'39	18°04'03
minimum elong	12570 Sep 05 23:39	26° m) 21'36		retrograde	12571 Aug 10 03:17	13° m) 57'00	
transit middle	12570 Sep 05 23:39	26° m) 21'36	0°05'37	evening set	12571 Aug 12 14:07	13° m) 29'16	
transit begin	12570 Sep 05 20:22	26° m 28'23		inferior conj	12571 Aug 19 08:16	8° mp 30'17	1°14'54
transit end	12570 Sep 06 02:55	26° Mp 14'48		minimum elong	12571 Aug 19 10:20	8° m/25'18	1°13'46
desc. node	12570 Sep 05 16:42	26° m) 35'57		min. Earth dist.	12571 Aug 22 12:09	5° m) 29'27	0.60831 AU
min. Earth dist.	12570 Sep 09 07:37	23° m 37'03	0.58562 AU	desc. node	12571 Aug 22 12:09	4° m) 31'59	0.00031710
morning rise	12570 Sep	20° m 53'53	0.50502710	morning rise	12571 Aug 26 03:46	2° m/35'10	
direct	12570 Sep 19 13:58	19° Mp 09'47		direct	12571 Sep 01 18:18	0° m) 24'53	
	12570 Oct 03 21:55	26° My 51'33	27022114		=	-	27°55'46
morning max el	12570 Oct 05 21:55 12570 Oct 06 21:56	0° ⊡	21 22 1 4	morning max el	12571 Sep 16 00:34 12571 Oct 02 14:39	8° ™ 20'53 0° ⊆	41 JJ 40
		0°M		1-		0 <u>≈</u> 26° ≏ 41'22	
1-	12570 Oct 26 22:36			asc. node	12571 Oct 17 09:43		
asc. node	12570 Oct 30 13:01	6°M55'28		morning set	12571 Oct 18 23:44	29° £ 56'45	
morning set	12570 Nov 03 20:12	15°M45'51		D. d. F.	12571 Oct 19 00:21	0°M	1 21 460 411
	12570 Nov 10 08:11	0° ∡ 7		max. Earth dist.	12571 Oct 24 20:40	12°M34'08	1.31468 AU
	1257031 12 12 52	10 70011	1020/27		10571 0 + 05 05 15	1.50 m 2511 :	1017/22
superior conj	12570 Nov 10 18:59	1° ∡ 700′17		superior conj	12571 Oct 26 05:46	15°M37'14	
minimum elong	12570 Nov 10 17:18	0° ₹ 50'56	1°30'03	minimum elong	12571 Oct 26 03:35	15°M25'09	1°16'40
max. Earth dist.	12570 Nov 10 13:02	0° ₹ 27'03	1.31273 AU	evening rise	12571 Nov 01 22:44	0° ∡ ¹24'35	
evening rise	12570 Nov 17 13:00	15° ∡ 52'18			12571 Nov 01 18:11	0° ∡	
	12570 Nov 24 12:22	0°る			12571 Nov 17 21:23	0°る	
desc. node	12570 Dec 02 13:43	14° る 02'20		desc. node	12571 Nov 19 10:52	2° る 17'31	
	12570 Dec 14 12:15	0° ≈		evening max el	12571 Nov 28 19:50	13° る 30'58	25°20'29
evening max el	12570 Dec 17 02:28	2° ≈ 37'14	26°37'10	retrograde	12571 Dec 12 16:08	20° る 28'24	
retrograde	12570 Dec 31 01:21	9° ≈ 44'44		evening set	12571 Dec 18 12:54	19° る 10'15	
evening set							
- · · · · · · · · · · · · · · · · · · ·	12571 Jan 06 15:46	7° ≈ 57'03		min. Earth dist.	12571 Dec 23 07:57	16° る 30'27	0.57095 AU
min. Earth dist.	12571 Jan 06 15:46 12571 Jan 10 16:25	7°≈57'03 5°≈20'08	0.59108 AU	min. Earth dist. inferior conj	12571 Dec 23 07:57 12571 Dec 26 03:33	16°ප330'27 14°ප37'26	

	12571 D 26 11.41	140 3 22146	5902140	i. Darda dia	12572 D 02 16.57	260.720111	0 55505 ATT
minimum elong morning rise	12571 Dec 26 11:41 12572 Jan 03 12:51	14°る23'46 10°る24'09	5 05 40	min. Earth dist. inferior conj	12572 Dec 03 16:57 12572 Dec 05 14:16	25° x '38'11	0.55505 AU
direct	12572 Jan 05 18:24	10 82409 10°809'25		minimum elong	12572 Dec 05 17:22	25° x 30'34'26'17	
asc. node	12572 Jan 13 09:34	10 3 0923		morning rise	12572 Dec 14 02:31	21° x 36'47	3 46 42
morning max el	12572 Jan 14 20:43	13 3 1317	19°04'25	direct	12572 Dec 14 02:31 12572 Dec 16 19:45	21° х 30 ч 7	
morning max ci	12572 Jan 25 13:23	0°≈	17 0425	morning max el	12572 Dec 27 10:22		20°13'58
morning set	12572 Jan 31 11:49	0 ~ 11° ≈ 22'25		asc. node	12572 Dec 30 06:44	29° ×726'19	20 13 30
morning set	12372 Juli 31 11.47	11 70.22 23		ase. node	12572 Dec 30 17:48	0°る	
superior conj	12572 Feb 08 20:17	27° ≈ 46'44	0°51'08	morning set	12573 Jan 14 17:52	25° る 59'24	
minimum elong	12572 Feb 08 23:02	27°≈59'58	0°51'16		12573 Jan 16 16:43	0° ≈	
	12572 Feb 10 00:13	0° ∀					
desc. node	12572 Feb 15 10:57	10°) 04'09		superior conj	12573 Jan 22 09:04	11° ≈ 37'02	1°13'23
max. Earth dist.	12572 Feb 15 17:45	10°) 34'40	1.38844 AU	minimum elong	12573 Jan 22 11:47	11° ≈ 50'42	1°13'48
evening rise	12572 Feb 19 12:51	17° ¥ 14'32		max. Earth dist.	12573 Jan 28 00:41	22° ≈ 40'59	1.36639 AU
	12572 Feb 27 06:02	$0^{\circ}\Upsilon$		evening rise	12573 Jan 31 19:26	29° ≈ 42'15	
	12572 Mar 19 10:28	9° 8			12573 Jan 31 23:21	0°)	
evening max el	12572 Mar 25 18:34	7° 8 02'16	24°35'20	desc. node	12573 Feb 01 07:36	0° ∺ 37'18	
retrograde	12572 Apr 06 08:26	13° 8 48'15			12573 Feb 19 11:53	0° Υ	
asc. node	12572 Apr 10 06:34	12° 8 39'47		evening max el	12573 Mar 08 07:55	20° Y 52'53	25°48'15
evening set	12572 Apr 11 21:49	11° 8 28'22		retrograde	12573 Mar 20 19:58	28° Ƴ 03'54	
min. Earth dist.	12572 Apr 16 10:51	6° 8 18'20	0.68311 AU	evening set	12573 Mar 26 20:51	25° Ƴ 35′10	
inferior conj	12572 Apr 17 10:50	4° 8 58'18	2°04'47	asc. node	12573 Mar 28 03:58	24° Y 23'33	
minimum elong	12572 Apr 17 08:41	5° 8 05'31	2°03'42	min. Earth dist.	12573 Mar 31 03:01	21° Y 00'23	0.67405 AU
	12572 Apr 21 14:55	30° Ŗ ♈		inferior conj	12573 Apr 01 15:17	19° Ƴ 05'43	1°22'17
morning rise	12572 Apr 22 19:42	28° Y ′59'44		minimum elong	12573 Apr 01 13:29	19° Ƴ 11'25	1°21'26
direct	12572 Apr 26 15:18	27° Y 36′23		morning rise	12573 Apr 07 06:44	13° Y 16'37	
	12572 May 02 02:59	0° 8		direct	12573 Apr 10 14:49	12° Y 13′00	
morning max el	12572 May 04 01:34	1° 8 44'24	19°48'56	morning max el	12573 Apr 17 08:59		18°53'11
desc. node	12572 May 13 12:52	13° 8 30'48	0.6		12573 Apr 28 04:49	0°8	
greatest brilliancy	12572 May 17 02:04	18° 8 36'25	-0.6m	desc. node	12573 Apr 30 09:37	3° 8 18'23	0.0
	12572 May 24 17:25	0°II		greatest brilliancy	12573 May 01 01:49	4° 8 19'56	-0.8m
morning set max. Earth dist.	12572 May 30 13:43 12572 Jun 10 16:01	8°Ⅲ55'17 26°Ⅲ13'49	1.44611 AU	morning set	12573 May 09 21:28	17° 8 56'50 0° Ⅱ	
max. Earm dist.	12572 Jun 10 10:01 12572 Jun 13 00:49	20 ш 13 49	1.44011 AU	max. Earth dist.	12573 May 17 15:26 12573 May 24 09:08		1.45555 AU
	123/2 Juli 13 00.49	0 39		max. Earth dist.	12373 May 24 09.08	10 Д3034	1.43333 AU
superior conj	12572 Jun 15 15:41	4° © 12'40	-2°10'09	superior conj	12573 May 26 06:13	13° Ⅱ 27'36	-2°11'38
minimum elong	12572 Jun 15 19:39	4° © 28'43	2°10'56	minimum elong	12573 May 26 02:54	13° Ⅱ 14'36	2°12'25
evening rise	12572 Jun 29 04:06	26° © 38'52		C	12573 Jun 05 16:35	0ං ම	
•	12572 Jul 01 03:31	$0^{\circ}\Omega$		evening rise	12573 Jun 10 09:13	7° 5 33'26	
asc. node	12572 Jul 07 04:57	10° Ω 09'34		asc. node	12573 Jun 24 01:52	29° © 13'11	
evening max el	12572 Jul 17 01:26	23° Ω 53′17	18°07'48		12573 Jun 24 14:48	$0^{\circ}\Omega$	
retrograde	12572 Jul 23 10:19	27° Ω 13'44		evening max el	12573 Jun 30 14:35	7° Ω 28'44	18°29'41
evening set	12572 Jul 26 05:17	26° £ 33′11		retrograde	12573 Jul 07 01:43	10° Ω 57'51	
inferior conj	12572 Aug 01 09:17	21° Ω 16′02	2°11'59	evening set	12573 Jul 10 05:03	10° Ω 02'29	
minimum elong	12572 Aug 01 11:51	21° Ω 09'01	2°10'38	inferior conj	12573 Jul 15 22:44	4° Ω 29'16	2°48'36
min. Earth dist.	12572 Aug 04 02:20	18° Ω 20'07	0.63067 AU	minimum elong	12573 Jul 16 00:46	4° Ω 23′08	2°47'24
morning rise	12572 Aug 07 16:32	15° Ω 03'16		min. Earth dist.	12573 Jul 18 01:55	1° Ω 56′09	0.65065 AU
desc. node	12572 Aug 09 11:35	13° £ 52′59			12573 Jul 19 19:44	30°R∽	
direct	12572 Aug 14 08:45	12° Ω 33'15	27050120	morning rise	12573 Jul 21 19:22	28°507'55	
morning max el	12572 Aug 28 08:45	20° Ω 35'17	27°50'39	desc. node	12573 Jul 27 08:58	25°530'43	
	10570 0 05 11 05	00 -		11 4	12573 Jul 28 07:40	25° 5 27'32	
	12572 Sep 05 11:32	0° m/		direct	12572 4 07 02 05		
	12572 Sep 24 16:11	0∘ ⊽			12573 Aug 07 03:05	$0^{\circ}\Omega$	27011110
morning set	12572 Sep 24 16:11 12572 Oct 01 20:30	0° ჲ 13° ჲ 46'08		morning max el	12573 Aug 10 19:31	0° Ω 3° Ω 23'54	27°11'18
asc. node	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24	0° ჲ 13° ჲ 46'08 16° ჲ 38'36	1 22104 ATT	morning max el	12573 Aug 10 19:31 12573 Aug 30 20:50	0° Ω 3° Ω 23'54 0° m	27°11'18
•	12572 Sep 24 16:11 12572 Oct 01 20:30	0° ჲ 13° ჲ 46'08	1.32184 AU		12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48	0° N 3° N23'54 0° M 27° M 06'59	27°11'18
asc. node max. Earth dist.	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25	0° ჲ 13° ჲ 46'08 16° ჲ 38'36 24° ჲ 25'39		morning max el	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10	0° N 3° N23'54 0° M 27° M 06'59 0° Ω	
asc. node max. Earth dist.	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48	0° Ω 13° Ω 46'08 16° Ω 38'36 24° Ω 25'39 0° M 02'38	0°57'47	morning max el morning set max. Earth dist.	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38	0° N 3° N23'54 0° M 27° M 06'59 0° Ω 5° Ω 54'07	27°11'18 1.33420 AU
asc. node max. Earth dist.	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35	0° Ω 13° Ω 46'08 16° Ω 38'36 24° Ω 25'39 0° M .02'38 29° Ω 50'37	0°57'47	morning max el	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10	0° N 3° N23'54 0° M 27° M 06'59 0° Ω	
asc. node max. Earth dist. superior conj minimum elong	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19	0° Ω 13° Ω46′08 16° Ω38′36 24° Ω25′39 0° M02′38 29° Ω50′37 0° M	0°57'47	morning max el morning set max. Earth dist. asc. node	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02	0° Ω 3° Ω23'54 0° M 27° M 06'59 0° Ω 5° Ω 54'07 6° Ω 42'20	1.33420 AU
asc. node max. Earth dist.	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57	0° \(\Omega\) 13° \(\Omega\) 46'08 16° \(\Omega\) 38'36 24° \(\Omega\) 25'39 0° \(\Omega\) 50'37 0° \(\Omega\) 14° \(\Omega\) 58'33	0°57'47	morning max el morning set max. Earth dist. asc. node superior conj	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02	0° Ω 3° Ω23'54 0° m 27° m 06'59 0° Ω 5° Ω54'07 6° Ω42'20 14° Ω10'35	1.33420 AU 0°33'54
asc. node max. Earth dist. superior conj minimum elong	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19	0° Ω 13° Ω46′08 16° Ω38′36 24° Ω25′39 0° M02′38 29° Ω50′37 0° M	0°57'47	morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02 12573 Sep 23 16:56 12573 Sep 23 15:19	0° Ω 3° Ω23'54 0° M 27° M 06'59 0° Ω 5° Ω 54'07 6° Ω 42'20	1.33420 AU
asc. node max. Earth dist. superior conj minimum elong evening rise	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57 12572 Oct 23 19:24	0° \(\oldsymbol{\Omega}\) 13° \(\oldsymbol{\Omega}\) 46' \(\oldsymbol{\Omega}\) 24° \(\oldsymbol{\Omega}\) 25'39 0° \(\oldsymbol{\Omega}\) 29° \(\oldsymbol{\Omega}\) 50'37 0° \(\oldsymbol{\Omega}\) 14° \(\oldsymbol{\Omega}\) 33 0° \(\script{\oldsymbol{\Omega}}\)	0°57'47 0°57'48	morning max el morning set max. Earth dist. asc. node superior conj	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02	0° Ω 3° Ω23'54 0° m 27° m 06'59 0° Ω 5° Ω 54'07 6° Ω 42'20 14° Ω 10'35 14° Ω 02'00	1.33420 AU 0°33'54
asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57 12572 Oct 23 19:24 12572 Nov 05 08:07	0° \(\Omega\) 13° \(\Omega\) 46'08 16° \(\Omega\) 38'36 24° \(\Omega\) 25'39 0° \(\Omega\) 02'38 29° \(\Omega\) 50'37 0° \(\Omega\) 14° \(\Omega\) 58'33 0° \(\nabla\) 19° \(\nabla\) 27'22	0°57'47 0°57'48	morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02 12573 Sep 23 16:56 12573 Sep 23 15:19 12573 Sep 30 20:44	0° Ω 3° Ω23'54 0° m 27° m 06'59 0° Ω 5° Ω54'07 6° Ω42'20 14° Ω10'35 14° Ω02'00 29° Ω28'59	1.33420 AU 0°33'54
asc. node max. Earth dist. superior conj minimum elong evening rise desc. node	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57 12572 Oct 23 19:24 12572 Nov 05 08:07 12572 Nov 09 06:30	0° \(\oldsymbol{\Omega}\) 13° \(\oldsymbol{\Omega}\) 46° \(\oldsymbol{\Omega}\) 38'36 24° \(\oldsymbol{\Omega}\) 0° \(\oldsymbol{\Omega}\) 29° \(\oldsymbol{\Omega}\) 50' \(\oldsymbol{\Omega}\) 14° \(\oldsymbol{\Omega}\) 19° \(\oldsymbol{\Z}\) 27'22 23° \(\oldsymbol{\Z}\) 43'16	0°57'47 0°57'48	morning max el morning set max. Earth dist. asc. node superior conj minimum elong	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02 12573 Sep 23 16:56 12573 Sep 23 15:19 12573 Sep 30 20:44 12573 Oct 01 02:36	0° N 3° N23'54 0° M 27° M 06'59 0° Ω 5° Ω 54'07 6° Ω 42'20 14° Ω 10'35 14° Ω 02'00 29° Ω 28'59 0° M	1.33420 AU 0°33'54 0°33'44
asc. node max. Earth dist. superior conj minimum elong evening rise desc. node evening max el	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57 12572 Oct 23 19:24 12572 Nov 05 08:07 12572 Nov 09 06:30 12572 Nov 19 07:43	0° \(\Omega\) 13° \(\Omega\) 46'08 16° \(\Omega\) 38'36 24° \(\Omega\) 25'39 0° \(\Omega\) 02'38 29° \(\Omega\) 50'37 0° \(\Omega\) 14° \(\Omega\) 58'33 0° \(\Zama\) 19° \(\Zama\) 27'22 23° \(\Zama\) 43'16 0° \(\Toldo\)	0°57'47 0°57'48	morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02 12573 Sep 23 16:56 12573 Sep 23 15:19 12573 Sep 30 20:44 12573 Oct 01 02:36 12573 Oct 18 08:05	0° Ω 3° Ω23'54 0° m 27° m 06'59 0° Ω 5° Ω54'07 6° Ω42'20 14° Ω10'35 14° Ω02'00 29° Ω28'59 0° m 0° ズ	1.33420 AU 0°33'54 0°33'44
asc. node max. Earth dist. superior conj minimum elong evening rise desc. node evening max el	12572 Sep 24 16:11 12572 Oct 01 20:30 12572 Oct 03 06:24 12572 Oct 06 23:25 12572 Oct 09 13:48 12572 Oct 09 11:35 12572 Oct 09 13:19 12572 Oct 16 09:57 12572 Oct 23 19:24 12572 Nov 05 08:07 12572 Nov 09 06:30 12572 Nov 19 07:43 12572 Nov 22 18:32	0° \(\Omega\) 13° \(\Omega\) 46'08 16° \(\Omega\) 38'36 24° \(\Omega\) 25'39 0° \(\Omega\) 00'37 0° \(\Omega\) 14° \(\Omega\) 50'37 0° \(\Omega\) 19° \(\Z^2\) 22'22 23° \(\Z^4\) 43'16 0° \(\Omega\) 0° \(\Z^2\) 7'11	0°57'47 0°57'48	morning max el morning set max. Earth dist. asc. node superior conj minimum elong evening rise evening max el	12573 Aug 10 19:31 12573 Aug 30 20:50 12573 Sep 15 07:48 12573 Sep 16 19:10 12573 Sep 19 17:38 12573 Sep 20 03:02 12573 Sep 23 16:56 12573 Sep 23 15:19 12573 Sep 30 20:44 12573 Oct 01 02:36 12573 Oct 18 08:05 12573 Oct 21 18:26	0° Ω 3° Ω23'54 0° m 27° m 06'59 0° Ω 5° Ω 54'07 6° Ω 42'20 14° Ω 10'35 14° Ω 02'00 29° Ω 28'59 0° m 0° 3° ₹ 47'11	1.33420 AU 0°33'54 0°33'44

	12572 N 06 14.50	00.740153		J J.	10574 0-4 10 00-50	100 m 51150	
evening set inferior conj	12573 Nov 06 14:50	9° ⋌ ¹40'52 5° ⋌ ¹44'41	5942100	desc. node	12574 Oct 10 02:52	18°M51'52 19°M51'13	
•	12573 Nov 15 09:45 12573 Nov 15 04:09	5° 🖈 52'32		retrograde	12574 Oct 14 20:51	19 IIL31 13	
minimum elong min. Earth dist.	12573 Nov 13 04.09 12573 Nov 14 23:39		0.54632 AU	evening set inferior conj	12574 Oct 17 01:22 12574 Oct 26 01:59	19 1163924 15°M44'09	1026100
morning rise	12573 Nov 14 25:39 12573 Nov 23 18:40	1° x ⁷ 57'31	0.54052 AU	minimum elong	12574 Oct 25 15:56	15°M58'41	4°32'41
direct	12573 Nov 27 06:29	1° x ³ /31'33		min. Earth dist.	12574 Oct 27 07:01	15°ML02'08	0.54679 AU
morning max el	12573 Dec 09 09:58	7° × 717'53	21°45'20	morning rise	12574 Nov 03 06:09	13 11602 08 11°ML44'52	0.54079 AO
asc. node	12573 Dec 17 03:51	16° х 45'04	21 43 20	direct	12574 Nov 07 15:17	11°ML03'34	
asc. node	12573 Dec 24 20:34	0°중		morning max el	12574 Nov 20 22:48	17°MJ32'01	23°31'32
morning set	12573 Dec 30 03:48	10°る44'33		morning max ci	12574 Nov 30 23:41	0° ∡ ¹	23 31 32
morning set	123/3 DCC 30 03.46	10 044 33		asc. node	12574 Dec 04 00:52	4° ∡ 755'09	
superior conj	12574 Jan 06 07:37	25° る 53'32	1°28'23	morning set	12574 Dec 14 15:28	25° ∡ 33'09	
minimum elong	12574 Jan 06 09:34		1°29'06	morning set	12574 Dec 14 13:28 12574 Dec 16 17:29	0°る	
minimum clong	12574 Jan 08 07:02	20° ∞	1 2700		123/4 DCC 10 17.2)	٠ ن	
max. Earth dist.	12574 Jan 10 12:35	0 ~ 4° ≈ 32'47	1.34683 AU	superior conj	12574 Dec 21 12:44	10° පි 26'10	1°36'35
evening rise	12574 Jan 14 18:15	12°≈51'18	1.54005 AC	minimum elong	12574 Dec 21 12:44 12574 Dec 21 13:38	10 3 2010	1°37'30
desc. node	12574 Jan 19 04:20	21°≈02'27		max. Earth dist.	12574 Dec 24 08:19	16° ろ 27'48	1.33120 AU
desc. node	12574 Jan 24 08:29	0°¥		evening rise	12574 Dec 29 05:37	10 3 2/48 26° る 31'18	1.55120 AC
	12574 Feb 14 12:28	0° Υ		evening rise	12574 Dec 30 24:00	20 ⊘ 31 18	
evening max el	12574 Feb 18 21:34	4° Υ 37'10	26°46'45	desc. node	12575 Jan 06 01:07	0 ~ 11° ≈ 13'55	
retrograde	12574 Mar 04 02:06	12° Υ '01'00	20 40 43	desc. flode	12575 Jan 17 16:49	0° \	
evening set	12574 Mar 10 13:12	9° Υ 28'25		evening max el	12575 Feb 01 10:45	18° ₩ 04'29	27022125
min. Earth dist.	12574 Mar 14 13:46	5° Υ 27'32	0.66099 AU	retrograde	12575 Feb 15 01:44	25°30'16	21 23 33
asc. node	12574 Mar 15 01:23	4° Υ 53'52	0.00099 AU	evening set	12575 Feb 21 20:40	23°\(\frac{1}{30}\)10	
inferior conj	12574 Mar 16 14:08	3° Υ 05'33	0°29'21	min. Earth dist.	12575 Feb 25 16:55	19° ¥ 30′57	0.64435 AU
minimum elong	12574 Mar 16 13:22	3° Υ 07'50	0°29'04	inferior conj	12575 Feb 28 04:51	16° ¥ 50'57	
minimum ciong	12574 Mar 19 09:00	30°R ∺	0 2904	minimum elong	12575 Feb 28 05:54	16° X 48'10	
morning rise	12574 Mar 22 14:45	27° ₩ 27'37		asc. node	12575 Mar 01 22:49	15° H 01'32	0 33 32
direct	12574 Mar 25 12:34	26°\(\frac{1}{40}\)'55		morning rise	12575 Mar 06 17:03	13 X 01 32	
direct	12574 Mar 31 20:44	20 γ (40 33		direct	12575 Mar 09 06:10	11 X 20 30 10° ¥ 53′21	
morning may al	12574 Mar 31 20:44 12574 Mar 31 22:26	0° Υ 04'09	18°13'54	morning max el	12575 Mar 15 15:23	10 X 33 21 14° X 11'49	17°51'39
morning max el desc. node	12574 Mai 31 22.20 12574 Apr 17 06:17	23° Υ 26'03	16 13 34	morning max er	12575 Mar 26 20:36	0° Υ	17 31 39
morning set	12574 Apr 17 00:17 12574 Apr 20 05:49	28°Υ12'56		morning set	12575 Apr 01 18:41	9° Υ 52'20	
morning set	12574 Apr 20 03.49 12574 Apr 21 08:32	0°8		desc. node	12575 Apr 04 02:53	9 1 32 20 13° Υ 47'29	
	12374 Apr 21 06.32	0.0		desc. node	-	0° 8	
superior coni	12574 May 05 13:41	220\\31'03	-1°52'54		12575 Apr 13 23:43	0.0	
superior conj	12574 May 05 13:41	22° 8 31'03		superior coni	•		_1018'//3
minimum elong	12574 May 05 04:48	21° 8 56'15	1°52'54	superior conj	12575 Apr 15 07:38	2° 8 08'18	
	12574 May 05 04:48 12574 May 07 04:37	21° 8 56'15 25° 8 03'14		minimum elong	12575 Apr 15 07:38 12575 Apr 14 23:35	2° 8 08'18 1° 8 35'59	1°18'08
minimum elong max. Earth dist.	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41	21° 8 56'15 25° 8 03'14 0°П	1°52'54	minimum elong max. Earth dist.	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13	2° 8 08'18 1° 8 35'59 9° 8 35'44	
minimum elong	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37	21° 8 56'15 25° 8 03'14 0°П 17°П30'52	1°52'54	minimum elong	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13	2°808'18 1°835'59 9°835'44 26°855'48	1°18'08
minimum elong max. Earth dist. evening rise	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30	21° 8 56'15 25° 8 03'14 0°П 17°П30'52 0°©	1°52'54 1.45770 AU	minimum elong max. Earth dist. evening rise	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24	2°႘08'18 1°႘35'59 9°႘35'44 26°႘55'48 0°Ⅱ	1°18'08 1.45240 AU
minimum elong max. Earth dist. evening rise greatest brilliancy	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31	21°♂56'15 25°♂803'14 0°Ⅲ 17°Ⅲ30'52 0°孪 4°ℱ54'42	1°52'54	minimum elong max. Earth dist.	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43	2°႘08'18 1°႘35'59 9°႘35'44 26°႘55'48 0°Ⅲ 19°Ⅲ28'57	1°18'08
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52	21°♂56'15 25°♂03'14 0°Ⅲ 17°Ⅲ30'52 0°ℱ 4°ℱ54'42 17°ℱ45'35	1°52'54 1.45770 AU -0.7m	minimum elong max. Earth dist. evening rise greatest brilliancy	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26	2°႘08'18 1°႘35'59 9°႘35'44 26°႘55'48 0°Ⅲ 19°Ⅲ28'57	1°18'08 1.45240 AU -0.6m
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14	21°♥56'15 25°♥03'14 0°Ⅲ 17°Ⅲ30'52 0°☞ 4°©54'42 17°©45'35 21°©12'08	1°52'54 1.45770 AU	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39	2°808'18 1°835'59 9°835'44 26°855'48 0°II 19°II28'57 0°\$ 4°\$58'50	1°18'08 1.45240 AU
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00	21°\delta56'15 25°\delta03'14 0°\pi 17°\pi30'52 0°\delta 4°\delta54'42 17°\delta45'35 21°\delta12'08 25°\delta02'26	1°52'54 1.45770 AU -0.7m	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 May 28 19:58	2°808'18 1°835'59 9°835'44 26°855'48 0°II 19°II28'57 0°9 4°958'50 5°936'18	1°18'08 1.45240 AU -0.6m
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde evening set	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00 12574 Jun 24 10:10	21°\delta56'15 25°\delta03'14 0°\pi 17°\pi30'52 0°\delta 4°\delta5'35 21°\delta5'35 21°\delta12'08 25°\delta02'26 23°\delta51'00	1°52'54 1.45770 AU -0.7m 19°08'48	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node retrograde	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 May 28 19:58 12575 Jun 04 20:30	2°808'18 1°835'59 9°835'44 26°855'48 0°11 19°1128'57 0°9 4°958'50 5°936'18 9°921'38	1°18'08 1.45240 AU -0.6m
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minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00 12574 Jun 24 10:10 12574 Jun 29 21:06 12574 Jun 29 22:09 12574 Jul 01 09:34 12574 Jul 05 09:31 12574 Jul 11 13:40	21°\delta56'15 25°\delta03'14 0°\pi 17°\pi 30'52 0°\delta 4°\delta535 21°\delta535 21°\delta12'08 25°\delta02'26 23°\delta51'00 18°\delta03'14 17°\delta59'49 16°\delta05'37 11°\delta39'54 8°\delta59'24	1°52'54 1.45770 AU -0.7m 19°08'48 3°08'17 3°07'16	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist.	12575 Apr 15 07:38 12575 Apr 14 23:35 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 Jun 04 20:30 12575 Jun 04 20:30 12575 Jun 14 01:26 12575 Jun 14 01:25 12575 Jun 14 23:31 12575 Jun 15 10:47	2°808'18 1°835'59 9°835'44 26°855'48 0°II 19°II28'57 0°\$ 4°\$58'50 5°\$36'18 9°\$21'38 7°\$53'34 1°\$52'33 1°\$52'37 0°\$37'42 30°RII	1°18'08 1.45240 AU -0.6m 20°03'43 3°14'03 3°13'07
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minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong behind sun begin behind sun end	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00 12574 Jun 24 10:10 12574 Jun 29 21:06 12574 Jun 29 22:09 12574 Jul 01 09:34 12574 Jul 01 09:34 12574 Jul 11 13:40 12574 Jul 11 3:40 12574 Jul 14 06:16 12574 Jul 14 06:16 12574 Jul 24 06:24 12574 Aug 23 18:31 12574 Aug 29 06:11 12574 Sep 02 01:24 12574 Sep 06 23:40 12574 Sep 07 12:37 12574 Sep 07 12:37 12574 Sep 07 12:19 12574 Sep 07 18:05 12574 Sep 07 18:05	21° 856'15 25° 803'14 0° II 17° II 30'52 0° 9 4° 9554'42 17° 945'35 21° 912'08 25° 902'26 23° 9551'00 18° 903'14 17° 959'49 16° 905'37 11° 939'54 8° 959'24 9° 925'35 16° 934'37 0° \$\mathfrak{Q}\$ 0° ID 9° ID 50'23 17° ID 02'00 26° ID 48'27 27° ID 52'49 27° ID 52'49 27° ID 23'26 28° ID 22'16 0° \$\mathfrak{Q}\$	1°52'54 1.45770 AU -0.7m 19°08'48 3°08'17 3°07'16 0.66695 AU 26°05'36 1.35159 AU	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist.	12575 Apr 15 07:38 12575 Apr 20 00:13 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 May 28 19:58 12575 Jun 04 20:30 12575 Jun 04 18:12 12575 Jun 14 01:25 12575 Jun 14 01:25 12575 Jun 14 01:25 12575 Jun 15 10:47 12575 Jun 19 08:17 12575 Jun 25 01:23 12575 Jul 06 16:28 12575 Jul 06 17:11 12575 Jul 29 06:19 12575 Aug 11 11:23 12575 Aug 11 01:07 12575 Aug 21 21:42 12575 Aug 21 21:42 12575 Aug 21 21:42 12575 Aug 21 21:42	2°808'18 1°835'59 9°835'44 26°855'48 0°11 19°1128'57 0°9 4°958'50 5°936'18 9°921'38 7°953'34 1°952'33 1°952'37 0°937'42 30°R11 25°113'13 29°1158'11 0°9 0°0 21°046'04 28°010'41 0°10 11°1006'15 11°1006'15 11°1006'15	1°18'08 1.45240 AU -0.6m 20°03'43 3°14'03 3°13'07 0.67880 AU 24°43'11 1.37297 AU
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong behind sun begin	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00 12574 Jun 24 10:10 12574 Jun 29 21:06 12574 Jun 29 22:09 12574 Jul 01 09:34 12574 Jul 05 09:31 12574 Jul 11 13:40 12574 Jul 14 06:16 12574 Jul 14 06:16 12574 Jul 24 06:24 12574 Aug 23 18:31 12574 Aug 29 06:11 12574 Sep 02 01:24 12574 Sep 07 12:37 12574 Sep 07 12:37 12574 Sep 07 12:19 12574 Sep 07 18:05 12574 Sep 07 18:05 12574 Sep 08 13:10 12574 Sep 08 13:10 12574 Sep 08 13:10	21° 856'15 25° 803'14 0° II 17° II 30'52 0° 99 4° 9554'42 17° 945'35 21° 912'08 25° 902'26 23° 9551'00 18° 903'14 17° 959'49 16° 905'37 11° 939'54 8° 959'24 9° 925'35 16° 934'37 0° Ω 0° ID 9° ID 50'23 17° ID 02'00 26° ID 48'27 27° ID 52'49 27° ID 52'16 0° 91 13° 950'15	1°52'54 1.45770 AU -0.7m 19°08'48 3°08'17 3°07'16 0.66695 AU 26°05'36 1.35159 AU	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist.	12575 Apr 15 07:38 12575 Apr 20 00:13 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 May 28 19:58 12575 Jun 04 20:30 12575 Jun 04 20:30 12575 Jun 14 01:25 12575 Jun 14 01:25 12575 Jun 14 23:31 12575 Jun 15 10:47 12575 Jun 25 01:23 12575 Jun 25 01:23 12575 Jul 06 16:28 12575 Jul 06 17:11 12575 Jul 29 06:19 12575 Aug 11 11:23 12575 Aug 11 11:23 12575 Aug 11 01:07 12575 Aug 21 21:42 12575 Aug 21 21:42 12575 Aug 24 20:17 12575 Aug 24 20:17	2°808'18 1°835'59 9°835'44 26°855'48 0°11 19°128'57 0°9 4°958'50 5°936'18 9°921'38 7°953'34 1°952'37 0°937'42 30°R11 25°113'13 29°158'11 0°9 0°0 21°046'04 28°010'41 0°15 11°10'06'15 11°10'06'15 11°10'06'15 11°10'06'15 11°10'06'15	1°18'08 1.45240 AU -0.6m 20°03'43 3°14'03 3°13'07 0.67880 AU 24°43'11 1.37297 AU
minimum elong max. Earth dist. evening rise greatest brilliancy asc. node evening max el retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist. asc. node superior conj minimum elong behind sun begin behind sun end	12574 May 05 04:48 12574 May 07 04:37 12574 May 10 08:41 12574 May 21 14:37 12574 May 29 15:30 12574 Jun 01 20:31 12574 Jun 10 22:52 12574 Jun 14 00:14 12574 Jun 20 22:00 12574 Jun 24 10:10 12574 Jun 29 21:06 12574 Jun 29 22:09 12574 Jul 01 09:34 12574 Jul 01 09:34 12574 Jul 11 13:40 12574 Jul 11 3:40 12574 Jul 14 06:16 12574 Jul 14 06:16 12574 Jul 24 06:24 12574 Aug 23 18:31 12574 Aug 29 06:11 12574 Sep 02 01:24 12574 Sep 06 23:40 12574 Sep 07 12:37 12574 Sep 07 12:37 12574 Sep 07 12:19 12574 Sep 07 18:05 12574 Sep 07 18:05	21° 856'15 25° 803'14 0° II 17° II 30'52 0° 9 4° 9554'42 17° 945'35 21° 912'08 25° 902'26 23° 9551'00 18° 903'14 17° 959'49 16° 905'37 11° 939'54 8° 959'24 9° 925'35 16° 934'37 0° \$\mathfrak{Q}\$ 0° ID 9° ID 50'23 17° ID 02'00 26° ID 48'27 27° ID 52'49 27° ID 52'49 27° ID 23'26 28° ID 22'16 0° \$\mathfrak{Q}\$	1°52'54 1.45770 AU -0.7m 19°08'48 3°08'17 3°07'16 0.66695 AU 26°05'36 1.35159 AU 0°05'10 0°04'59	minimum elong max. Earth dist. evening rise greatest brilliancy evening max el asc. node retrograde evening set inferior conj minimum elong min. Earth dist. morning rise direct desc. node morning max el morning set max. Earth dist.	12575 Apr 15 07:38 12575 Apr 20 00:13 12575 Apr 20 00:13 12575 May 01 04:13 12575 May 03 04:24 12575 May 16 04:43 12575 May 23 20:26 12575 May 28 04:39 12575 May 28 19:58 12575 Jun 04 20:30 12575 Jun 04 18:12 12575 Jun 14 01:25 12575 Jun 14 01:25 12575 Jun 14 01:25 12575 Jun 15 10:47 12575 Jun 19 08:17 12575 Jun 25 01:23 12575 Jul 06 16:28 12575 Jul 06 17:11 12575 Jul 29 06:19 12575 Aug 11 11:23 12575 Aug 11 01:07 12575 Aug 21 21:42 12575 Aug 21 21:42 12575 Aug 21 21:42 12575 Aug 21 21:42	2°808'18 1°835'59 9°835'44 26°855'48 0°11 19°1128'57 0°9 4°958'50 5°936'18 9°921'38 7°953'34 1°952'33 1°952'37 0°937'42 30°R11 25°113'13 29°1158'11 0°9 0°0 21°046'04 28°010'41 0°10 11°1006'15 11°1006'15 11°1006'15	1°18'08 1.45240 AU -0.6m 20°03'43 3°14'03 3°13'07 0.67880 AU 24°43'11 1.37297 AU -0°27'26 0°27'29

	12575 8 22 02-26	00 m			10576 A 22 00-21	000	
	12575 Sep 23 03:36	0°M			12576 Aug 23 08:21	0° ⊽	1002/151
retrograde	12575 Sep 25 16:55	0°M20'06		evening max el	12576 Aug 29 05:45	7° Ω 39'06	18°36'51
desc. node	12575 Sep 27 00:19	0°M15'03		retrograde	12576 Sep 06 07:04	11° Ω 42'16	
evening set	12575 Sep 27 13:26	0°M10'02		evening set	12576 Sep 08 06:10	11° £ 28'37	
	12575 Sep 28 08:13	30° ₹ Ω	2051154	desc. node	12576 Sep 12 21:47	9° Ω 22'20	1000110
inferior conj	12575 Oct 06 05:21	26° ♀ 02'32		inferior conj	12576 Sep 16 04:47	7° ≏ 01'42	
minimum elong	12575 Oct 05 21:54	26° ≙ 14'37		minimum elong	12576 Sep 16 02:17	7° ≏ 06'27	
min. Earth dist.	12575 Oct 08 17:25	24° £ 25'21	0.55649 AU	min. Earth dist.	12576 Sep 19 09:23	4° △ 37'22	0.57357 AU
morning rise	12575 Oct 14 04:04	21° △ 33'09		morning rise	12576 Sep 23 18:57	1° ≏ 54'22	
direct	12575 Oct 19 09:20	20° ≙ 31'41		direct	12576 Sep 29 17:14	0° ჲ 26'54	
morning max el	12575 Nov 02 09:09	27° ≙ 34'01	25°17'47	morning max el	12576 Oct 14 00:24	7° ≏ 56'28	26°45'49
	12575 Nov 04 18:37	0° M ₊			12576 Oct 30 13:41	0° M	
asc. node	12575 Nov 20 21:47	23°M43'55		asc. node	12576 Nov 06 18:35	13°M00'48	
	12575 Nov 24 04:25	0° ∡ ¹		morning set	12576 Nov 12 13:05	24°M48'55	
morning set	12575 Nov 29 03:08	10° ∡ 14'10			12576 Nov 14 22:33	0° ∡ ¹	
	12575 D 05 22 01	250 70000	1020120		1257(N) 10 00 22	00.750126	1024124
superior conj	12575 Dec 05 22:01	25° ₹ '08'00	1°38'28	superior conj	12576 Nov 19 09:22	9° ₹ 52'36	1°34'24
minimum elong	12575 Dec 05 21:48	25° ₹ 06'44	1°39'23	minimum elong	12576 Nov 19 08:09	9° ⋌ ¹45'49	1°35'09
max. Earth dist.	12575 Dec 07 11:24	28° ∡ ³33'36	1.32018 AU	max. Earth dist.	12576 Nov 19 19:03	10° ∡ 46′32	1.31401 AU
	12575 Dec 08 03:12	0°ਰ		evening rise	12576 Nov 26 05:56	24° ∡ ′53'34	
evening rise	12575 Dec 13 02:24	10° පි 34'26			12576 Nov 28 16:48	0°る	
	12575 Dec 23 06:50	0° ≈		desc. node	12576 Dec 09 19:00	20° る 29'42	
desc. node	12575 Dec 23 22:00	1° ≈ 05'43			12576 Dec 15 23:53	0° ≈	
	12576 Jan 13 20:01	0° ∀		evening max el	12576 Dec 27 03:09	13° ≈ 17'17	27°07'00
evening max el	12576 Jan 14 21:31	1°) 02′10	27°31'55	retrograde	12577 Jan 10 01:39	20° ≈ 30′21	
retrograde	12576 Jan 28 17:52	8° ¥ 22'55		evening set	12577 Jan 16 21:45	18° ≈ 27'59	
evening set	12576 Feb 04 16:36	6° ∺ 02'31		min. Earth dist.	12577 Jan 20 17:32	15° ≈ 45'51	0.60347 AU
min. Earth dist.	12576 Feb 08 10:32	3°) €00'53	0.62483 AU	inferior conj	12577 Jan 23 21:31	13° ≈ 07'13	-3°07'47
inferior conj	12576 Feb 11 08:27	0°) 14′26	-1°47'41	minimum elong	12577 Jan 24 04:07	12° ≈ 53'22	3°04'37
minimum elong	12576 Feb 11 12:06	0°) €05'43	1°45'39	morning rise	12577 Jan 31 13:28	8° ≈ 19'32	
	12576 Feb 11 14:30	30° R ≈		direct	12577 Feb 02 15:35	8° ≈ 02'22	
asc. node	12576 Feb 16 20:14	25° ≈ 49′22		asc. node	12577 Feb 02 17:35	8° ≈ 02'23	
morning rise	12576 Feb 18 10:11	25° ≈ 06'48		morning max el	12577 Feb 09 23:38	11° ≈ 42′08	18°00'53
direct	12576 Feb 20 16:29	24° ≈ 43′21			12577 Feb 22 03:42	0° ∀	
morning max el	12576 Feb 27 08:54	28° ≈ 07'26	17°46'59	morning set	12577 Feb 25 13:38	6°) 15′53	
	12576 Feb 29 02:32	0°) €					
morning set	12576 Mar 14 07:21	22°) 39′34		superior conj	12577 Mar 07 16:20	24°) €38'58	0°01'12
	12576 Mar 18 11:47	$0^{\circ}\mathbf{\Upsilon}$		minimum elong	12577 Mar 07 16:27	24°) 39′26	0°01'21
desc. node	12576 Mar 20 23:24	4° Υ 18'15		behind sun begin	12577 Mar 07 08:33	24°) €04'35	
				behind sun end	12577 Mar 08 00:21	25°) 14′12	
superior conj	12576 Mar 25 23:47	12° Ƴ 49'15	-0°38'06	desc. node	12577 Mar 07 19:57	24° ¥ 54'53	
minimum elong	12576 Mar 25 20:02	12° Ƴ 33'31	0°37'38		12577 Mar 10 18:03	0° Y	
max. Earth dist.	12576 Apr 01 17:39	23° Y 52'56	1.44024 AU	max. Earth dist.	12577 Mar 15 06:34	7° Ƴ 38'40	1.42254 AU
	12576 Apr 05 13:51	0°8		evening rise	12577 Mar 20 19:32	16° Ƴ 39'38	
evening rise	12576 Apr 09 17:07	6° 8 27'25		<i>y</i>	12577 Mar 29 10:10	0°8	
Ü	12576 Apr 25 11:52	0° I I			12577 Apr 20 10:56	0°II	
evening max el	12576 May 10 03:14	18° Ⅱ 45'52	21°11'47	evening max el	12577 Apr 22 20:48	2° Ⅲ 33'53	22°28'57
asc. node	12576 May 14 17:09	22° I I31'36		asc. node	12577 May 01 14:25	8° Ⅱ 16′00	
retrograde	12576 May 18 19:11	23° Ⅱ 49'31		retrograde	12577 May 02 16:26	8° Ⅱ 21'30	
evening set	12576 May 23 03:09	22° I I05'06		evening set	12577 May 07 11:22	6° Ⅱ 21'47	
inferior conj	12576 May 28 09:19	15° Ⅱ 52'19	3°07'59	inferior conj	12577 May 12 18:44	29° 8 59'33	2°51'20
minimum elong	12576 May 28 08:20	15° I 55'44	3°07'01	minimum elong	12577 May 12 17:01	0°П05'32	2°50'17
min. Earth dist.	12576 May 28 17:45	15° Ⅲ 23'01	0.68595 AU	min. Earth dist.	12577 May 12 14:15	0° I 15'08	0.68841 AU
morning rise	12576 Jun 02 13:19	9° I 35'38	0.00030110	min zarur dige.	12577 May 12 18:36	30°R₩	0.000 11 110
direct	12576 Jun 07 17:46	7° Ⅱ 19'45		morning rise	12577 May 17 22:32	23° 8 48'48	
desc. node	12576 Jun 17 00:32	12° II 25'32		direct	12577 May 22 13:52	21° 8 52'25	
morning max el	12576 Jun 18 02:51	13° Ⅱ 29'55	23°13'45	morning max el	12577 May 31 16:18	27° 8 10'42	21°46'17
morning max or	12576 Jul 01 10:33	0°9	23 13 13	morning max cr	12577 Jun 03 07:27	0°Ⅱ	21 1017
	12576 Jul 21 03:35	0° U		desc. node	12577 Jun 03 07.27 12577 Jun 03 21:29	0°П40'20	
morning set	12576 Jul 22 18:33	2° Ω 41'31		acse. Houc	12577 Jun 24 23:41	0°95	
max. Earth dist.	12576 Jul 26 23:12	9° Ω 48'57	1.39624 AU	morning set	12577 Jul	12° © 29'42	
max. Earth dist.	12310 Jul 20 23.12) 06+03/	1.37024 AU	max. Earth dist.	12577 Jul 09 00:41	12 3 29 42 22° 3 15'41	1.41867 AU
superior conj	12576 Aug 03 16:16	23° Ω 36'13	-1°01'56	max. Earth dist.	12577 Jul 13 15:04	0°Ω	1.7100/ AU
minimum elong	12576 Aug 03 10:16 12576 Aug 03 20:43	$23^{\circ} \Omega 56'50$			123//Jul 13 13.04	0 06	
minimum clong	12576 Aug 03 20:43 12576 Aug 07 02:21	0° m	1 01 31	superior conj	12577 Jul 16 15:53	5° Ω 14'36	_1°3/!5/
asc. node	12576 Aug 07 02:21 12576 Aug 10 16:55	-•		minimum elong	12577 Jul 16 15:53 12577 Jul 16 22:33	5° Ω 43'42	
evening rise	12576 Aug 10 16:55 12576 Aug 13 04:23	6° Mp 53'20 11° Mp 39'31		evening rise	12577 Jul 16 22:33 12577 Jul 27 12:42	24°Ω49'50	1 24 23
evening 1180	12310 Aug 13 04.23	ונ לכעוו וו		evening 1180	14311 Jul 41 14.44	44 0649 30	

,	10577 1 1 20 12 20	260 0 4411 5		1	12570 1 1 15 10 25	160 001100	
asc. node	12577 Jul 28 13:38	26° Ω 44'15		asc. node	12578 Jul 15 10:25	16° Ω 21'29	
	12577 Jul 30 08:27	0° m)			12578 Jul 24 03:17	0° ™	
evening max el	12577 Aug 12 14:45	20° m 20'49	18°10'22	evening max el	12578 Jul 27 04:08	3°m/30'51	18°03'29
retrograde	12577 Aug 19 15:55	23° Mp 55'54		retrograde	12578 Aug 02 15:58	6° Mp 52′20	
evening set	12577 Aug 21 21:58	23° Mp 34'28		evening set	12578 Aug 05 06:11	6° Mp 19′32	
inferior conj	12577 Aug 29 01:55	18° Mp 47′02	0°31'27	inferior conj	12578 Aug 11 17:54	1° Mp 12'56	1°41'49
minimum elong	12577 Aug 29 02:56	18° m 44'46	0°30'48	minimum elong	12578 Aug 11 20:21	1° Mp 06'40	1°40'30
desc. node	12577 Aug 30 19:15	17° m 15'01			12578 Aug 12 22:28	30° ₽ Ω	
min. Earth dist.	12577 Sep 01 09:10	15° m 52'53	0.59512 AU	min. Earth dist.	12578 Aug 14 17:56	28° Ω 11'21	0.61796 AU
morning rise	12577 Sep 05 04:34	13° Mp 06'17		desc. node	12578 Aug 17 16:41	25°Ω37'00	
direct	12577 Sep 03 04:54 12577 Sep 11 15:00	11° mg 10'29		morning rise	12578 Aug 18 08:03	25° Ω 09'04	
	-	19° Mp 00'02	27°41'15	direct	_	23° Ω 48'58	
morning max el	12577 Sep 25 23:10		27 41 13	direct	12578 Aug 25 00:13		
	12577 Oct 05 06:49	0∘ ⊽			12578 Sep 07 08:09	0° ™	
	12577 Oct 23 07:29	0° M		morning max el	12578 Sep 08 04:23	0° ™ 49'26	27°58'08
asc. node	12577 Oct 24 15:19	2°M38'08			12578 Sep 29 11:00	0∘ ⊽	
morning set	12577 Oct 27 19:33	9° ™ 10'27		asc. node	12578 Oct 11 12:00	22° ≏ 29'57	
max. Earth dist.	12577 Nov 03 03:39	22°M58'13	1.31291 AU	morning set	12578 Oct 11 20:33	23° ≏ 13'49	
					12578 Oct 15 02:02	0° M ₊	
superior conj	12577 Nov 03 20:56	24°MJ34'24	1°24'35	max. Earth dist.	12578 Oct 17 09:33	4° M 59'47	1.31702 AU
minimum elong	12577 Nov 03 18:59	24°M23'36	1°25'03				
minimum viong	12577 Nov 06 07:21	0° ∡ 7	1 20 00	superior conj	12578 Oct 19 06:51	9°ML08'12	1°09'10
ovanina rias	12577 Nov 10 14:00	0 ^ 9° ₹ ¹22'49		minimum elong	12578 Oct 19 04:36	8°M55'45	1°09'21
evening rise				Č			1 09 21
	12577 Nov 21 01:16	0° ろ		evening rise	12578 Oct 26 00:38	23°M57'14	
desc. node	12577 Nov 26 16:06	9° ට 14'31			12578 Oct 28 21:10	0° ∡	
evening max el	12577 Dec 09 01:14	24° る 40'55	26°07'54	desc. node	12578 Nov 13 13:19	27° ∡ 05′23	
	12577 Dec 16 06:31	0° ≈			12578 Nov 15 19:39	0° ろ	
retrograde	12577 Dec 22 23:41	1° ≈ 45'10		evening max el	12578 Nov 20 15:23	5°る15'57	24°40'43
evening set	12577 Dec 29 07:56	0° ≈ 09'15		retrograde	12578 Dec 04 09:42	12° る 08'42	
	12577 Dec 29 15:21	30°Ŗ₹		evening set	12578 Dec 09 18:59	11° る 04'20	
min. Earth dist.	12578 Jan 02 14:22	27° 云 33'19	0.58214 AU	min. Earth dist.	12578 Dec 15 03:07	8°る17'12	0.56347 AU
inferior conj	12578 Jan 05 16:26	25° පි 18'56		inferior conj	12578 Dec 17 14:53	6° る 42'31	
minimum elong	12578 Jan 06 00:58	25°る03'24		minimum elong	12578 Dec 17 14:33	6° る 31'50	
Č			4 23 30	-			3 2/44
morning rise	12578 Jan 13 20:49	20°る53'12		morning rise	12578 Dec 26 02:21	2° る 37'53	
direct	12578 Jan 15 23:04	20° る 38'48		direct	12578 Dec 28 11:40	2° る 22'15	
asc. node	12578 Jan 20 14:52	21° る 54'44		morning max el	12579 Jan 07 05:07		19°31'04
morning max el	12578 Jan 24 07:44	24° る 44'27	18°34'56	asc. node	12579 Jan 07 12:05	7° る 20'00	
	12578 Jan 28 16:48	0° ≈			12579 Jan 21 23:40	0° ≈	
morning set	12578 Feb 09 08:10	20° ≈ 24'46		morning set	12579 Jan 24 10:57	4° ≈ 54'44	
-	12578 Feb 14 07:22	0° ∀					
				superior conj	12579 Feb 01 11:18	20°≈57'03	1°01'27
superior conj	12578 Feb 18 05:44	7° ¥ 25'54	0°34'54	minimum elong	12579 Feb 01 14:09	21°≈11'03	1°01'42
minimum elong	12578 Feb 18 08:00	7° ¥ 36′24	0°34'59	minimum ciong	12579 Feb 06 04:38	0° ∀	1 01 42
desc. node	12578 Feb 22 16:31	15° X 33'03	0 3439	max. Earth dist.	12579 Feb 07 20:50	3° ¥ 06'16	1.37895 AU
			1 40120 411				1.37893 AU
max. Earth dist.	12578 Feb 25 14:37	20°) (41′53	1.40130 AU	desc. node	12579 Feb 09 13:09	6°) €09'33	
evening rise	12578 Mar 01 18:23	27°) 46'39		evening rise	12579 Feb 11 14:14	9°) 48′02	
	12578 Mar 03 02:32	0° Y			12579 Feb 23 21:07	0° Y	
	12578 Mar 22 23:36	9° 8			12579 Mar 18 18:21	9° 8	
evening max el	12578 Apr 05 11:19	16° 8 23'54	23°49'48	evening max el	12579 Mar 19 00:56	0° 8 16'17	25°07'39
retrograde	12578 Apr 16 10:47	22° 8 51'28		retrograde	12579 Mar 31 01:00	7° 8 14'13	
asc. node	12578 Apr 18 11:46	22° 8 32'24		asc. node	12579 Apr 05 09:09	5° 8 11'01	
evening set	12578 Apr 21 17:15	20° 8 38'22		evening set	12579 Apr 05 19:14	4° 8 50'22	
min. Earth dist.	12578 Apr 26 10:51	15° 8 07'30	0.68630 AU	min. Earth dist.	12579 Apr 10 05:19	29° Y ′55'09	0.67980 AU
inferior conj	12578 Apr 27 03:43	14° 8 09'52	2°24'40	mm. Bartin diot.	12579 Apr 10 03:49	30°RY	0.07500110
minimum elong	12578 Apr 27 01:36	14° 8 17'06	2°23'33	inferior conj	12579 Apr 11 10:25	28° Υ 19'55	1°48'02
_	-		2 23 33	-	-		
morning rise	12578 May 02 09:58	8° 8 06'18		minimum elong	12579 Apr 11 08:21	28° Y 26'44	1°47'00
direct	12578 May 06 12:33	6° 8 30'56		morning rise	12579 Apr 16 21:45	22° Y 24'53	
morning max el	12578 May 14 11:43	11° 8 01'53	20°27'52	direct	12579 Apr 20 12:21	21° Y °10'04	
desc. node	12578 May 21 18:21	19° 8 40'10		morning max el	12579 Apr 27 14:45	25° Y ′04′22	19°23'08
	12578 May 29 03:31	Π °0			12579 May 01 22:36	9° 8	
morning set	12578 Jun 12 07:49	21° Ⅱ 19′54		desc. node	12579 May 08 15:09	9° 8 13'09	
	12578 Jun 17 20:52	0 \circ \odot		greatest brilliancy	12579 May 10 08:24	11° 8 44'28	-0.7m
max. Earth dist.	12578 Jun 21 08:33	5° © 33'17	1.43761 AU	morning set	12579 May 22 08:51	29° 8 58'34	
				<i>5</i>	12579 May 22 09:13	0°Ⅱ	
superior conj	12578 Jun 27 16:35	15° © 53'07	-2°00'59	max. Earth dist.	12579 Jun 03 23:04		1.45100 AU
	12578 Jun 27 22:54	16° © 19'16		max. Larm dist.	12017 Jun 03 23.04	1, 11,3331	1.72100 AU
minimum elong			2 01 28		12570 1 07 17 51	050T22H2	2012112
	12578 Jul 06 00:40	0°Ω		superior conj	12579 Jun 07 17:51	25° Ⅱ 33'19	
evening rise	12578 Jul 10 04:49	7° Ω 15'19		minimum elong	12579 Jun 07 19:02	25° ∏ 38′02	2~14'08

	12579 Jun 10 12:35	0°9		greatest brilliancy	12580 Jun 09 22:37	12° © 11'20	-0.8m
evening rise	12579 Jun 21 23:44	18°9544'44		asc. node	12580 Jun 18 04:14	24°931'00	
asc. node	12579 Jun 28 18:48 12579 Jul 02 07:17	0° Ω 5° Ω 39'16		evening max el	12580 Jun 22 14:55 12580 Jun 23 06:14	0°Ω 0°Ω39'22	18°44'17
evening max el	12579 Jul 10 18:17	16° Ω 59'30	18°15'03	retrograde	12580 Jun 29 20:46	4° Ω 15'49	10 44 17
retrograde	12579 Jul 17 02:53	20°Ω21'40	10 13 03	evening set	12580 Jul 03 03:53	3°Ω13'32	
evening set	12579 Jul 20 01:29	19° Ω 34'54			12580 Jul 06 17:29	30°Rூ	
inferior conj	12579 Jul 26 00:37	14° Ω 10'51	2°29'49	inferior conj	12580 Jul 08 18:15	27° © 33'46	2°58'48
minimum elong	12579 Jul 26 03:04	14° Ω 03'55	2°28'30	minimum elong	12580 Jul 08 19:54	27° 5 28'38	2°57'42
min. Earth dist.	12579 Jul 28 12:02	11° Ω 22'48	0.63954 AU	min. Earth dist.	12580 Jul 10 15:06	25° © 14'54	0.65808 AU
morning rise	12579 Aug 01 03:08	7° Ω 53'48		morning rise	12580 Jul 14 11:06	21° © 11'08	
desc. node	12579 Aug 04 14:07	5° Ω 52'57		direct	12580 Jul 20 20:20	18° 5 29'48	
direct	12579 Aug 07 18:28	5° Ω 18'03		desc. node	12580 Jul 21 11:28	18° © 31'13	
morning max el	12579 Aug 21 13:44	13° Ω 18'46	27°37'46	morning max el	12580 Aug 03 00:47	26°9518'22	26°46'09
	12579 Sep 03 23:54	0∘ ರ 0∘⊯			12580 Aug 06 10:49	0° Ω	
morning set	12579 Sep 22 00:42 12579 Sep 25 13:38	0° ჲ 51'51		morning set	12580 Aug 27 13:57 12580 Sep 07 19:51	0° Mp 19° Mp 57'35	
asc. node	12579 Sep 28 08:38	12° ⊆ 30′28		max. Earth dist.	12580 Sep 07 13:31 12580 Sep 11 23:01	28° My 01'19	1.34105 AU
max. Earth dist.	12579 Sep 28 08:56 12579 Sep 30 08:57	16° £ 41'40	1.32643 AU	max. Lartii dist.	12580 Sep 11 25:01 12580 Sep 12 22:38	0° ⊽	1.54105 AC
man. Baran dige.	12077 Sep 30 00.07		1.520.5110	asc. node	12580 Sep 14 05:16	ა — 2° ჲ 35'37	
superior conj	12579 Oct 03 13:05	23° ≏ 27'14	0°48'19		· · · · · ·		
minimum elong	12579 Oct 03 11:02	23° ≙ 16'14	0°48'13	superior conj	12580 Sep 16 13:21	7° ≙ 25'29	0°22'16
	12579 Oct 06 13:31	0°M		minimum elong	12580 Sep 16 12:11	7° ≏ 19'29	0°22'04
evening rise	12579 Oct 10 11:53	8°M30'39		evening rise	12580 Sep 23 21:52	22° ≏ 57'58	
	12579 Oct 21 13:25	0° ∡ ¹			12580 Sep 27 07:38	0°M₊	
desc. node	12579 Oct 31 10:37	13° ∡ ¹41′08		evening max el	12580 Oct 13 16:52	25°M31'50	21°22'12
evening max el	12579 Nov 02 01:35	15° ∡ 20'57	22°59'36	desc. node	12580 Oct 17 07:58	28°M35'35	
retrograde	12579 Nov 15 06:23	21° 🖈 54'32		. 1	12580 Oct 19 16:06	0° ∡ 7	
evening set	12579 Nov 19 07:15	21°×19'08	0.55020 ATT	retrograde	12580 Oct 25 18:21	1° ⋌ ³31'35 1° ⋌ ³14'41	
min. Earth dist.	12579 Nov 26 10:40 12579 Nov 27 18:06	18° ⋌ 102'22 17° ⋌ 17'20	0.55038 AU -5°53'49	evening set	12580 Oct 28 11:17 12580 Nov 01 06:52	30°RM	
minimum elong	12579 Nov 27 17:34	17° 🖈 17'20'	5°52'56	inferior conj	12580 Nov 06 10:17	27°M20'17	-5°20'36
morning rise	12579 Dec 06 05:24	13° × ⁷ 27'58	3 32 30	minimum elong	12580 Nov 06 01:51		5°18'19
direct	12579 Dec 09 06:09	13° ∡ ¹06'26		min. Earth dist.	12580 Nov 06 16:51	27°ML11'03	0.54538 AU
morning max el	12579 Dec 20 12:36	18° ∡ ¹28'17	20°50'16	morning rise	12580 Nov 14 17:14	23°M30'57	
asc. node	12579 Dec 25 09:14	24° ∡ ¹01'53		direct	12580 Nov 18 14:09	22°M58'41	
	12579 Dec 29 10:03	0°ප		morning max el	12580 Dec 01 06:45	29°M03'21	22°29'26
morning set	12580 Jan 08 18:57	19° ට 36'20			12580 Dec 02 06:00	0° ∡ ¹	
	12580 Jan 13 18:38	0° ≈		asc. node	12580 Dec 11 06:17	11° ∡ ⁴43'55	
	10500 1 16 01 20	40 50105	1000106		12580 Dec 21 03:33	0°る	
superior conj	12580 Jan 16 04:39		1°20'36	morning set	12580 Dec 23 05:50	4° る 22'50	
minimum elong max. Earth dist.	12580 Jan 16 07:06 12580 Jan 21 05:42	5°≈12'12 15°≈05'24	1°21'08 1.35777 AU	aymariar aani	12580 Dec 30 06:17	19° る 23'54	1°32'40
evening rise	12580 Jan 21 05:42 12580 Jan 25 04:12	13°≈03°24 22°≈34'44	1.33/// AU	superior conj minimum elong	12580 Dec 30 06:17 12580 Dec 30 07:49	19° る 23°34	1°32'40 1°33'28
desc. node	12580 Jan 27 09:51	26°≈40'00		max. Earth dist.	12581 Jan 02 20:58	26°る57'47	1.33968 AU
dese. Hode	12580 Jan 29 06:46	0° ∀		max. Burth dist.	12581 Jan 04 08:40	0°≈	1.55700110
	12580 Feb 17 15:22	0°Υ		evening rise	12581 Jan 07 08:42	5°≈57'36	
evening max el	12580 Feb 29 14:38	14° Y 06′12	26°15'18	desc. node	12581 Jan 13 06:35	16° ≈ 59'58	
retrograde	12580 Mar 13 10:11	21° Y 23'11			12581 Jan 20 23:22	0° ∀	
evening set	12580 Mar 19 15:40	18° Ƴ 52'21		evening max el	12581 Feb 11 04:10	27°) ⊀ 44′25	27°05'24
asc. node	12580 Mar 22 06:34	16° Ƴ 19′20			12581 Feb 13 16:03	0° Υ	
min. Earth dist.	12580 Mar 23 19:25	14° Ƴ 32'09	0.66904 AU	retrograde	12581 Feb 24 13:31	5° Y 09'55	
inferior conj	12580 Mar 25 12:48	12° Y 25'11	1°01'10	evening set	12581 Mar 03 04:31	2° Y 37'17	
minimum elong	12580 Mar 25 11:21	12° Y 29'39	1°00'30	· F d F d	12581 Mar 06 01:08	30° ₹ ₩	0.65427.411
morning rise direct	12580 Mar 31 07:50 12580 Apr 03 11:30	6° Y 40'30 5° Y 44'17		min. Earth dist. inferior conj	12581 Mar 07 03:01 12581 Mar 09 08:31	28° ¥ 50'36 26° ¥ 19'35	0.65437 AU 0°03'39
morning max el	12580 Apr 03 11:30 12580 Apr 10 00:58	9° Υ 14'54	18°34'23	minimum elong	12581 Mar 09 08:24	26° X 19'53	0°03'45
desc. node	12580 Apr 10 00:38	29° Υ 10'23	10 5125	transit middle	12581 Mar 09 08:24 12581 Mar 09 08:24	26°\(\)19'53	0°03'45
2227	12580 Apr 25 00:37	0°8		transit begin	12581 Mar 09 05:29	26° ∺ 28'10	
morning set	12580 May 01 01:48	9° 8 29'06		transit end	12581 Mar 09 11:19	26° ∺ 11'38	
-	12580 May 14 04:08	0°II		asc. node	12581 Mar 09 04:00	26° ∺ 32'22	
				morning rise	12581 Mar 15 13:48	20°) 47′22	
superior conj	12580 May 17 03:16	4° Ⅱ 37'51	-2°06'02	direct	12581 Mar 18 07:45	20°) €06'48	
minimum elong	12580 May 16 20:55	4° Ⅱ 13'01	2°06'32	morning max el	12581 Mar 24 16:19	23° ¥ 26′21	18°02'22
max. Earth dist.	12580 May 16 18:05	4° Ⅱ 01'58	1.45743 AU		12581 Mar 30 01:01	0° Υ	
evening rise	12580 Jun 01 18:26	29° Ⅱ 14'09		desc. node	12581 Apr 11 08:29	19° Y 24'33	
	12580 Jun 02 05:59	0ං ව		morning set	12581 Apr 11 22:29	20° Y 21'46	

	12581 Apr 17 20:49	0° ∀		desc. node	12582 Mar 29 05:02	9° Ƴ 50'46	
superior conj	12581 Apr 26 13:10	13° 8 50'34	-1°39'47	superior conj	12582 Apr 06 15:52	23° Y ′53'59	-1°01'45
minimum elong	12581 Apr 26 03:54	13° 8 14'03	1°39'27	minimum elong	12582 Apr 06 09:29	23° Y °28'00	1°01'11
max. Earth dist.	12581 Apr 29 14:19	18° 8 37'54	1.45633 AU	-	12582 Apr 10 10:32	0°8	
	12581 May 06 21:31	$\Pi^{\circ}0$		max. Earth dist.	12582 Apr 12 08:50	3° 8 04'33	1.44800 AU
evening rise	12581 May 12 15:39	8° Ⅱ 53'59		evening rise	12582 Apr 22 02:58	18° 8 16'51	
greatest brilliancy	12581 May 25 19:40	28° ∏ 57′33	-0.7m		12582 Apr 29 20:33	$\Pi^{\circ}0$	
	12581 May 26 12:35	0 \circ \odot		evening max el	12582 May 20 15:34	28° Ⅱ 10′58	20°31'11
asc. node	12581 Jun 05 01:18	12° 5 47'12		asc. node	12582 May 22 22:26	0°9316'16	
evening max el	12581 Jun 06 13:43	14° 5 24'13	19°30'16		12582 May 22 14:33	0 \circ 50	
retrograde	12581 Jun 13 18:23	18° © 27'24		retrograde	12582 May 28 17:17	2° 9 50'51	
evening set	12581 Jun 17 10:30	17° © 08'51		evening set	12582 Jun 01 19:08	1° © 15'57	
inferior conj	12581 Jun 22 19:29	11° © 15'00	3°12'16		12582 Jun 03 04:40	30°R∏	
minimum elong	12581 Jun 22 20:04	11° © 13'01	3°11'18	inferior conj	12582 Jun 07 01:37	25° Ⅱ 09'37	3°12'48
min. Earth dist.	12581 Jun 24 01:41	9°535'10	0.67254 AU	minimum elong	12582 Jun 07 01:10	25° I I11'09	3°11'52
morning rise	12581 Jun 28 05:11	4°952'02		min. Earth dist.	12582 Jun 07 17:51	24° Ⅱ 13'49	0.68244 AU
direct	12581 Jul 04 04:45	2°514'38		morning rise	12582 Jun 12 06:55	18° Ⅱ 49'49	
desc. node	12581 Jul 08 08:43	3°517'20	25922101	direct	12582 Jun 17 18:42	16° Ⅲ 24'11 19° Ⅲ 44'00	
morning max el	12581 Jul 16 11:34	9° © 36'17	25°32'01	desc. node	12582 Jun 25 05:52	19°Щ44'00 23°Щ03'47	24905!16
	12581 Aug 01 14:11	0° Ω 0° m		morning max el	12582 Jun 28 21:34 12582 Jul 05 00:17	23°Щ03°47 0° ©	24°05'16
morning set	12581 Aug 20 03:55 12581 Aug 21 11:27	رابا 0 2°Mp21'47			12582 Jul 05 00.17 12582 Jul 25 22:22	0°Ω	
max. Earth dist.	12581 Aug 25 03:02	9° Mp 06'38	1.36029 AU	morning set	12582 Aug 03 07:50	13°Ω53'17	
max. Lattii uist.	12361 Aug 23 03.02	9 IIJ0038	1.30029 AU	max. Earth dist.	12582 Aug 03 07:30 12582 Aug 07 00:44	20°Ω22'08	1.38277 AU
superior conj	12581 Aug 31 04:52	20° m 56'02	-0°08'19	max. Dartii dist.	12582 Aug 12 07:19	0° m	1.50277110
minimum elong	12581 Aug 31 05:23	20° m 58'38	0°08'27		120021148 12 07:17	v y	
behind sun begin	12581 Aug 31 00:00	20° mp 31'41		superior conj	12582 Aug 14 08:15	3° m 50'57	-0°42'01
behind sun end	12581 Aug 31 10:47	21°m/25'38		minimum elong	12582 Aug 14 11:10	4° m 04'50	
asc. node	12581 Sep 01 01:53	22° m/41'30		asc. node	12582 Aug 18 22:30	12° m 44'35	
	12581 Sep 04 16:00	0∘ ⊽		evening rise	12582 Aug 23 05:03	21°m/10'19	
evening rise	12581 Sep 08 04:26	7° ≏ 13′20			12582 Aug 27 18:22	0∘ ⊽	
	12581 Sep 20 16:47	0° M		evening max el	12582 Sep 08 14:56	17° ≏ 58'21	19°01'28
evening max el	12581 Sep 25 20:55	6° ™ 20'46	20°01'14	retrograde	12582 Sep 17 11:04	22° ჲ 23'36	
desc. node	12581 Oct 04 05:23	11°M21'02		evening set	12582 Sep 19 07:41	22° ≏ 12'39	
retrograde	12581 Oct 06 08:08	11°M33'25		desc. node	12582 Sep 21 02:51	21° ≏ 42'34	
evening set	12581 Oct 08 07:10	11°M23'16		inferior conj	12582 Sep 27 16:51	17° ≏ 57'48	
inferior conj	12581 Oct 17 05:37	7°M23'57		minimum elong	12582 Sep 27 11:31	18° ≏ 07'01	2°02'05
minimum elong	12581 Oct 16 20:01	7°M38'27		min. Earth dist.	12582 Sep 30 14:04		0.56296 AU
min. Earth dist.	12581 Oct 19 01:17	6°M18'04	0.54976 AU	morning rise	12582 Oct 05 12:18	13° Ω 12'11	
morning rise	12581 Oct 25 07:39	3°M13'24		direct	12582 Oct 11 01:23	11° Ω 59'53	25050122
direct morning max el	12581 Oct 30 01:18 12581 Nov 12 17:37	2°M24'32 9°M08'47	24°17'58	morning max el	12582 Oct 25 05:20 12582 Nov 03 07:30	19° £ 15'35 0° I L	25 56 55
asc. node	12581 Nov 28 03:14	0° √ 11'49	24 1/36	asc. node	12582 Nov 15 00:05	19°ML13'17	
use. Hode	12581 Nov 28 00:33	0° ⊼ 1145		use. Houe	12582 Nov 20 09:41	0° × 7⊓	
morning set	12581 Dec 07 17:44	19° ∡ *08'58		morning set	12582 Nov 22 04:50	3° х¹ 48'41	
3	12581 Dec 12 17:18	0°ెవ		5 5 5			
				superior conj	12582 Nov 28 23:52	18° ∡ ¹45'34	1°37'28
superior conj	12581 Dec 14 13:29	4° る 01'54	1°38'09	minimum elong	12582 Nov 28 23:12	18° ∡ ′41′50	1°38'20
minimum elong	12581 Dec 14 13:54	4° る 04'09	1°39'04	max. Earth dist.	12582 Nov 30 01:04	21° ₹ 05'14	1.31684 AU
max. Earth dist.	12581 Dec 16 19:55	8° る 57'04	1.32583 AU		12582 Dec 04 03:07	0°ප	
evening rise	12581 Dec 22 00:24	19° る 48'41		evening rise	12582 Dec 06 00:20	3° る 59'17	
	12581 Dec 27 05:47	0° ≈		desc. node	12582 Dec 18 00:18	26° る 45'13	
desc. node	12581 Dec 31 03:23	7° ≈ 04'16			12582 Dec 19 23:09	0° ≈	
	12582 Jan 15 01:38	0° ∀		evening max el	12583 Jan 07 01:18		27°25'42
evening max el	12582 Jan 24 16:23	11°) (00'38	27°30'54	. 1	12583 Jan 16 03:14	0°) {	
retrograde	12582 Feb 07 10:18	18°) 25'48 15°) 58'28		retrograde	12583 Jan 20 23:20	1° ∺ 00'03	
evening set min. Earth dist.	12582 Feb 14 07:30 12582 Feb 18 02:17		0.63634 AU	evening set	12583 Jan 25 14:42 12583 Jan 27 21:37	30°R≈ 28°≈46'25	
inferior conj	12582 Feb 18 02:17 12582 Feb 20 18:55	9° X 57'11		min. Earth dist.	12583 Jan 27 21:37 12583 Jan 31 15:38	28°≈46°23 25°≈54'07	0.61582 AU
minimum elong	12582 Feb 20 18.55 12582 Feb 20 20:58	9° X 5711		inferior conj	12583 Feb 03 16:46	23°≈08'57	
asc. node	12582 Feb 24 01:24	6° ¥ 50'37	1 05 01	minimum elong	12583 Feb 03 21:40	23 ≈ 08 37 22° ≈ 57'49	
morning rise	12582 Feb 27 12:43	4°) (30'57'		asc. node	12583 Feb 10 22:47	18°≈10'43	
direct	12582 Mar 01 22:34	4°) 11'21		morning rise	12583 Feb 11 00:34	18° ≈ 09'20	
morning max el	12582 Mar 08 10:00		17°47'28	direct	12583 Feb 13 04:33	17° ≈ 49'05	
-	12582 Mar 23 10:35	0° Υ		morning max el	12583 Feb 20 02:45	21° ≈ 19′02	17°50'29
morning set	12582 Mar 24 22:16	2° Y 32'42		-	12583 Feb 26 17:09	0°)	

morning set	12583 Mar 07 19:11 12583 Mar 15 19:59	15°) 43'07 0° γ			12584 Feb 19 12:34	0° ℋ	
desc. node	12583 Mar 16 01:34	0° Υ 24'20		superior conj	12584 Feb 28 20:29	17° ∺ 19'45	0°16'18
				minimum elong	12584 Feb 28 21:43	17° ¥ 25′20	0°16'24
superior conj	12583 Mar 18 18:34	5° Y ′04'43	-0°20'58	desc. node	12584 Mar 01 22:06	21°) €01'44	
minimum elong	12583 Mar 18 16:38	4° Y 56'25	0°20'39		12584 Mar 07 02:12	0° Y	
max. Earth dist.	12583 Mar 26 00:03	17° Y ′08′21	1.43333 AU	max. Earth dist.	12584 Mar 07 11:09	0° Ƴ 37'55	1.41387 AU
evening rise	12583 Apr 01 20:15	28° Y ′02'49		evening rise	12584 Mar 12 06:58	8° Y 37'43	
	12583 Apr 03 02:21	$0^{\circ}S$			12584 Mar 26 04:03	0° 8	
	12583 Apr 23 14:26	Π °0		evening max el	12584 Apr 15 04:06	25° 8 48'04	23°03'19
evening max el	12583 May 03 11:56	11° Ⅱ 58'46	21°43'49		12584 Apr 20 03:50	0°Щ	
asc. node	12583 May 09 19:39	16° Ⅱ 43'36		retrograde	12584 Apr 25 11:31	1° Ⅱ 52'46	
retrograde	12583 May 12 15:29	17° Ⅱ 20'59		asc. node	12584 Apr 25 16:58	1°Ⅲ52'31	
evening set	12583 May 17 03:59	15° Ⅱ 30'08	2002110	evening set	12584 Apr 30 11:23	29° 8 47'04	
inferior conj	12583 May 22 10:25	9° Ⅱ 13'13	3°02'10		12584 Apr 30 05:10	30°₹ ႘	204111.5
minimum elong	12583 May 22 09:06	9° Ⅱ 17'51	3°01'09	inferior conj	12584 May 05 19:53	23° 8 21'59	
min. Earth dist.	12583 May 22 13:23	9° Ⅱ 02'53	0.68762 AU	minimum elong	12584 May 05 17:57	23° 8 28'41	2°40'09
morning rise	12583 May 27 14:00	2° П 58'46 0° П 50'34		min. Earth dist.	12584 May 05 10:07	23° 8 55'49	0.68814 AU
direct	12583 Jun 01 12:58 12583 Jun 11 08:41	6° Д 38'32	22°35'41	morning rise direct	12584 May 11 00:26	17° 8 14'19 15° 8 26'41	
morning max el desc. node	12583 Jun 12 02:55	0 Щ3832 7°Щ25'17	22 33 41	morning max el	12584 May 15 10:23 12584 May 24 00:19	20° 8 23'12	2101127
desc. node	12583 Jun 29 10:28	0°95		desc. node	12584 May 28 23:51	26° 8 00'50	21 112/
morning set	12583 Jul 15 04:25	24°\$20'39		desc. node	12584 Jun 01 02:18	0°Ⅱ	
morning set	12583 Jul 18 14:24	0°Ω			12584 Jun 21 15:03	0ಂ ತಾ	
max. Earth dist.	12583 Jul 19 23:22	2°Ω18'56	1.40608 AU	morning set	12584 Jun 23 23:40	3°9540'46	
max. Darm dist.	12303 341 17 23.22	2 001030	1.10000710	max. Earth dist.	12584 Jul 01 04:00		1.42737 AU
superior conj	12583 Jul 27 19:23	16° Ω 00'55	-1°16'23	max. Dartii dist.	12301341 01 01.00	15 - 10 00	1.12/3/110
minimum elong	12583 Jul 28 00:55	16° Ω 25'55		superior conj	12584 Jul 08 09:39	27° © 14'37	-1°47'12
mmmum viong	12583 Aug 04 08:58	0° m)	1 10 17	minimum elong	12584 Jul 08 16:38	27°5944'26	
asc. node	12583 Aug 05 19:10	2° m) 41'22			12584 Jul 10 00:14	$0^{\circ}\Omega$	
evening rise	12583 Aug 06 20:29	4° mp 40'51		evening rise	12584 Jul 19 22:31	17° Ω 33'35	
S	12583 Aug 22 11:50	0∘ <u>v</u>		asc. node	12584 Jul 22 15:55	22° Ω 27'02	
evening max el	12583 Aug 22 19:46	0° ₽ 20'06	18°23'09		12584 Jul 26 23:10	0° m	
retrograde	12583 Aug 30 09:12	4° ي 09'07		evening max el	12584 Aug 05 07:08	13° m 14'55	18°05'04
evening set	12583 Sep 01 11:10	3° ჲ 52'31		retrograde	12584 Aug 12 01:13	16° Mp 42'26	
desc. node	12583 Sep 08 00:20	0° ≏ 07'40		evening set	12584 Aug 14 10:46	16° Mp 16'25	
	12583 Sep 08 04:13	30°₽,₩)		inferior conj	12584 Aug 21 07:21	11°Mp20'14	1°04'14
inferior conj	12583 Sep 09 01:42	29° m 16'54	-0°19'47	minimum elong	12584 Aug 21 09:12	11° m 15'51	1°03'10
minimum elong	12583 Sep 09 00:58	29° Mp 18'25	0°19'35	min. Earth dist.	12584 Aug 24 12:17	8° m 20'33	0.60489 AU
min. Earth dist.	12583 Sep 12 09:02	26° Mp 37'23	0.58243 AU	desc. node	12584 Aug 24 21:50	7° m 59'26	
morning rise	12583 Sep 16 11:16	23° m 54'40		morning rise	12584 Aug 28 04:42	5° Mp 28'29	
direct	12583 Sep 22 15:44	22° m 14'54		direct	12584 Sep 03 18:20	3°m/21'54	
morning max el	12583 Oct 06 23:30	29° m 53'25	27°13'54	morning max el	12584 Sep 18 01:16	11° m)16'19	27°53'14
	12583 Oct 07 02:12	0∘ ⊽		_	12584 Oct 02 17:42	0∘ ⊽	
_	12583 Oct 28 07:06	0° M ,		asc. node	12584 Oct 18 17:34	28° Ω 23'34	
asc. node	12583 Nov 01 20:52	8°M39'42			12584 Oct 19 12:29	0°M,	
morning set	12583 Nov 06 13:30	18°M 18'04		morning set	12584 Oct 20 17:53	2°M32'01	1 21 400 411
	12583 Nov 11 21:58	0° ∡ ¹		max. Earth dist.	12584 Oct 26 17:41	15°M27'39	1.31408 AU
gunariar agni	12502 Nov. 12 11-22	2°.720120	1°30'55	superior coni	12594 Oat 27 22:26	18° M .07'53	1°18'42
superior conj minimum elong	12583 Nov 13 11:32 12583 Nov 13 09:58	3° х ⁷ 29'29 3° х ⁷ 20'45	1°30'55 1°31'35	superior conj minimum elong	12584 Oct 27 22:36 12584 Oct 27 20:28	18°11607'53	1°18'42 1°19'04
max. Earth dist.	12583 Nov 13 09:36	3° ₹ 2043	1.31293 AU	minimum ciong	12584 Nov 02 07:11	0° √	1 1904
evening rise	12583 Nov 20 06:05	18°×723'31	1.51275 AU	evening rise	12584 Nov 03 15:28	2° х 55'14	
evening rise	12583 Nov 25 22:21	0°る		evening rise	12584 Nov 17 22:52	0°る	
desc. node	12583 Dec 04 21:21	0 3 15° る 53'49		desc. node	12584 Nov 20 18:31	4°る17'29	
dese. node	12583 Dec 14 22:51	0° ≈		evening max el	12584 Nov 30 22:46	16° る 37'14	25°33'31
evening max el	12583 Dec 20 04:13	5° ≈ 36'05	26°45'58	retrograde	12584 Dec 14 19:39	23° る 36'33	
retrograde	12584 Jan 03 02:57	12° ≈ 44'43		evening set	12584 Dec 20 19:51	22° る 13'37	
evening set	12584 Jan 09 19:10	10°≈53'05		min. Earth dist.	12584 Dec 25 11:03	19° る 35'29	0.57371 AU
min. Earth dist.	12584 Jan 13 18:18	8° ≈ 15'15	0.59426 AU	inferior conj	12584 Dec 28 08:48	17° る 36'29	
inferior conj	12584 Jan 16 22:30	5° ≈ 45'15		minimum elong	12584 Dec 28 17:12	17° ප් 22'06	4°53'53
minimum elong	12584 Jan 17 06:11	5° ≈ 30'05	3°38'46	morning rise	12585 Jan 05 17:03	13° る 20'10	
morning rise	12584 Jan 24 20:06	1° ≈ 06'21		direct	12585 Jan 07 21:31	13° る 05'38	
direct	12584 Jan 26 21:41	0° ≈ 50'43		asc. node	12585 Jan 14 17:22	15° ⋜ 38′01	
asc. node	12584 Jan 28 20:07	1° ≈ 05'01		morning max el	12585 Jan 16 18:59	17° る 24'46	18°56'08
morning max el	12584 Feb 03 15:02	4° ≈ 40′28	18°12'46		12585 Jan 25 20:24	0° ≈	
morning set	12584 Feb 19 07:15	29° ≈ 34'55		morning set	12585 Feb 02 05:43	13° ≈ 54′00	

	12585 Feb 10 11:39	0° ∀		superior conj minimum elong	12586 Jan 25 04:23 12586 Jan 25 07:10	14°≈12'51 14°≈26'44	1°10'28 1°10'50
superior conj	12585 Feb 10 17:21	0°) €27'10	0°47'04	max. Earth dist.	12586 Jan 31 00:50	25° ≈ 35'07	1.36954 AU
minimum elong	12585 Feb 10 20:01	0°) 39′52	0°47'12		12586 Feb 02 09:55	0°)	
desc. node	12585 Feb 16 18:42	11°) 39′35		evening rise	12586 Feb 03 18:49	2°) 29′21	
max. Earth dist.	12585 Feb 17 18:24	13°) €25′20	1.39175 AU	desc. node	12586 Feb 03 15:20	2°) 13′38	
evening rise	12585 Feb 21 14:56	20°) €08'16			12586 Feb 20 15:54	0° Υ	
	12585 Feb 27 13:48	0 ° Υ		evening max el	12586 Mar 11 07:19	23° Y 30'29	25°38'07
	12585 Mar 20 07:30	9° 8			12586 Mar 20 08:40	9° 8	
evening max el	12585 Mar 28 17:59	9° 8 39'27	24°23'39	retrograde	12586 Mar 23 16:34	0° 8 38'48	
retrograde	12585 Apr 09 04:13	16° 8 21'08			12586 Mar 26 19:09	30° ŖƳ	
asc. node	12585 Apr 12 14:19	15° 8 28'35		evening set	12586 Mar 29 15:42	28° Υ 11'11	
evening set	12585 Apr 14 15:51	14° 8 02'48		asc. node	12586 Mar 30 11:44	27° Y 26′17	
min. Earth dist.	12585 Apr 19 05:58	8° 8 47'27	0.68408 AU	min. Earth dist.	12586 Apr 02 22:49	23° Ƴ 31'06	0.67566 AU
inferior conj	12585 Apr 20 04:09	7° 8 32'57	2°10'24	inferior conj	12586 Apr 04 09:14	21° Ƴ 41'11	1°29'27
minimum elong	12585 Apr 20 01:59	7° 8 40'13	2°09'17	minimum elong	12586 Apr 04 07:21	21° Y 47'15	1°28'32
morning rise	12585 Apr 25 12:16	1° 8 33'06		morning rise	12586 Apr 09 23:32	15° Y 50′28	
direct	12585 Apr 29 09:37	0° 8 06'45		direct	12586 Apr 13 09:14	14° Ƴ 44'03	
morning max el	12585 May 06 23:03	4° 8 20'19	19°58'35	morning max el	12586 Apr 20 05:22	18° Ƴ 27'01	19°00'26
desc. node	12585 May 15 20:41	15° 8 16'17			12586 Apr 29 08:05	0° 8	
	12585 May 25 23:22	Π $^{\circ}0$		desc. node	12586 May 02 17:24	5° 8 00'12	
morning set	12585 Jun 03 01:54	12° Ⅱ 19'36		greatest brilliancy	12586 May 03 12:16	6° 8 11'14	-0.7m
max. Earth dist.	12585 Jun 13 15:19	28° Ⅱ 49'38	1.44413 AU	morning set	12586 May 13 07:14	21° 8 13'20	
	12585 Jun 14 09:00	0 \circ \odot			12586 May 18 23:00	Π $\circ 0$	
				max. Earth dist.	12586 May 27 07:38	13° Ⅱ 02'16	1.45461 AU
superior conj	12585 Jun 19 00:07	7° 5 27'17	-2°08'15				
minimum elong	12585 Jun 19 04:53	7° 5 46'38	2°08'59	superior conj	12586 May 29 17:08	16° Ⅱ 48′05	
evening rise	12585 Jul 02 06:18	29° 5 37'09		minimum elong	12586 May 29 15:01	16° Ⅱ 39'44	2°13'34
	12585 Jul 02 11:39	$0 ^{\circ} \Omega$			12586 Jun 07 00:32	0 \circ	
asc. node	12585 Jul 09 12:45	11° Ω 56'57		evening rise	12586 Jun 13 15:05	10° © 40'55	
evening max el	12585 Jul 19 21:10	26° Ω 33'31	18°06'04		12586 Jun 25 16:23	0 $^{\circ}\Omega$	
retrograde	12585 Jul 26 06:35	29° Ω 53'56		asc. node	12586 Jun 26 09:39	1° Ω 04'47	
evening set	12585 Jul 29 00:16	29° Ω 15'31		evening max el	12586 Jul 03 10:40	10° Ω 07'39	18°25'20
inferior conj	12585 Aug 04 06:09	24° Ω 01'01	2°04'43	retrograde	12586 Jul 09 20:54	13° Ω 34'31	
minimum elong	12585 Aug 04 08:44	23° Ω 54'06	2°03'21	evening set	12586 Jul 12 22:58	12° Ω 41'30	
min. Earth dist.	12585 Aug 07 01:08	21° Ω 02'56	0.62745 AU	inferior conj	12586 Jul 18 17:58	7° Ω 10'42	2°44'10
morning rise	12585 Aug 10 15:08	17° Ω 50′06		minimum elong	12586 Jul 18 20:08		2°42'57
desc. node	12585 Aug 11 19:17	17° Ω 02'31		min. Earth dist.	12586 Jul 20 23:22	4° Ω 33'10	0.64788 AU
direct	12585 Aug 17 07:27	15° Ω 22'21		morning rise	12586 Jul 24 16:03	0° Ω 50'14	
morning max el	12585 Aug 31 08:50	23° Ω 24'35	27°53'42		12586 Jul 25 18:47	30° ₹	
	12585 Sep 06 06:07	0° mp		desc. node	12586 Jul 29 16:40	28° © 18'50	
	12585 Sep 26 01:08	0∘ ⊽		direct	12586 Jul 31 05:20	28° © 10'35	
morning set	12585 Oct 04 15:51	16° £ 25′14			12586 Aug 06 05:09	$0 ^{\circ} \Omega$	
asc. node	12585 Oct 05 14:14	18° ≏ 19'25		morning max el	12586 Aug 13 19:19	6° Ω 08'46	27°19'03
max. Earth dist.	12585 Oct 09 21:22	27° £ 21'57	1.32040 AU		12586 Sep 01 01:47	0° m/	
	12585 Oct 11 02:37	0°M₊		morning set	12586 Sep 18 04:46	29° m 51'09	
					12586 Sep 18 06:35	0∘ ⊽	
superior conj	12585 Oct 12 07:11	2°M35'34	1°00'57	asc. node	12586 Sep 22 10:52	8° ≏ 22'40	
minimum elong	12585 Oct 12 04:56	2°M23'19	1°01'01	max. Earth dist.	12586 Sep 22 16:55	8° ≏ 53'45	1.33199 AU
evening rise	12585 Oct 19 02:35	17°M29'19					
	12585 Oct 25 04:21	0° ∡ ¹		superior conj	12586 Sep 26 11:12	16° ≏ 46'57	
desc. node	12585 Nov 07 15:47	21° ≯ 38'58		minimum elong	12586 Sep 26 09:27	16° ≏ 37'37	0°37'43
evening max el	12585 Nov 12 10:04	26° ≯ 54′23	23°58'12		12586 Oct 02 14:53	0°M₊	
	12585 Nov 16 01:54	0°ප		evening rise	12586 Oct 03 13:33	2°ML00'53	
retrograde	12585 Nov 26 00:12	3° ප් 41'13			12586 Oct 18 23:52	0° ∡ ¹	
evening set	12585 Nov 30 20:33	2° る 49'49		evening max el	12586 Oct 24 21:17	6° ∡ 757'49	22°16'48
	12585 Dec 06 15:42	30°Ŗ ⋌ ¹		desc. node	12586 Oct 25 13:07	7° ∡ ³35'36	
min. Earth dist.	12585 Dec 06 20:55	29° ₹ 52'17		retrograde	12586 Nov 06 16:44	13° ≯ 19'19	
inferior conj	12585 Dec 08 22:27	28° ∡ 37'34		evening set	12586 Nov 10 02:38	12° ≯ 53'37	
minimum elong	12585 Dec 09 02:41	28° ≯ 31'10	5°44'51	min. Earth dist.	12586 Nov 18 03:52	9° ∡ 18'39	0.54708 AU
morning rise	12585 Dec 17 10:45	24° ∡ ¹41'05		inferior conj	12586 Nov 18 19:39	8° ≯ 56'26	
direct	12585 Dec 20 01:35	24° х 23'40		minimum elong	12586 Nov 18 15:18	9° ∡ 02'34	5°46'00
morning max el	12585 Dec 30 10:46	29° х 21'12	20°02'10	morning rise	12586 Nov 27 05:14	5° ₹ 09'10	
	12585 Dec 31 02:30	0°⋜		direct	12586 Nov 30 14:03	4° ∡ ¹43'45	
asc. node	12586 Jan 01 14:34	1° る 37'38		morning max el	12586 Dec 12 12:21	10° х 24′43	21°30'26
morning set	12586 Jan 17 11:00	28° පි 29'17		asc. node	12586 Dec 19 11:40	18° ∡ ¹47'16	
	12586 Jan 18 04:47	0° ≈			12586 Dec 26 05:22	0°₹	

morning set	12587 Jan 01 20:28	13° る 13'31			12587 Dec 01 22:24	0° ∡ ¹	
C				asc. node	12587 Dec 06 08:39	6° ₹ '50'12	
superior conj	12587 Jan 09 01:39	28° る 25'49	1°26'33	morning set	12587 Dec 17 07:59	28° ∡ °00'02	
minimum elong	12587 Jan 09 03:45	28° る 36'47	1°27'12	-	12587 Dec 18 06:26	ರ°ರ	
	12587 Jan 09 19:46	0° ≈					
max. Earth dist.	12587 Jan 13 11:43	7° ≈ 27'37	1.34957 AU	superior conj	12587 Dec 24 05:56	12° る 56'16	1°35'46
evening rise	12587 Jan 17 15:26	15° ≈ 32'48		minimum elong	12587 Dec 24 07:00	13° る 01'59	1°36'38
desc. node	12587 Jan 21 12:02	22° ≈ 40′11		max. Earth dist.	12587 Dec 27 06:21	19° る 21'51	1.33328 AU
	12587 Jan 25 16:44	0°) €		evening rise	12588 Jan 01 01:07	29° る 08'29	
	12587 Feb 15 05:41	$0^{\circ}\mathbf{\Upsilon}$			12588 Jan 01 11:32	0° ≈	
evening max el	12587 Feb 21 21:00	7° Y 16'14	26°39'16	desc. node	12588 Jan 08 08:49	12° ≈ 54'02	
retrograde	12587 Mar 06 23:28	14° Ƴ 38'39			12588 Jan 18 19:53	0°) €	
evening set	12587 Mar 13 09:08	12° Y ′06'27		evening max el	12588 Feb 04 10:25	20°) 46′58	27°19'45
asc. node	12587 Mar 17 09:10	8° Y 04'29		retrograde	12588 Feb 18 00:01	28°) 12'36	
min. Earth dist.	12587 Mar 17 10:32	8° Y 00'30	0.66319 AU	evening set	12588 Feb 24 18:03	25°) 41′40	
inferior conj	12587 Mar 19 09:04	5° Ƴ 42'12	0°38'03	min. Earth dist.	12588 Feb 28 14:53	22°) €08'04	0.64705 AU
minimum elong	12587 Mar 19 08:05	5° Ƴ 45′08	0°37'41	inferior conj	12588 Mar 02 01:10	19°) 30′08	-0°23'57
morning rise	12587 Mar 25 08:08	0° Y ′02′20		minimum elong	12588 Mar 02 01:52	19° ¥ 28'12	0°23'23
	12587 Mar 25 09:52	30° Ŗ ₩		asc. node	12588 Mar 03 06:34	18°) 11′26	
direct	12587 Mar 28 07:25	29° ∺ 13'16		morning rise	12588 Mar 08 11:29	14°) €03'36	
	12587 Mar 31 06:32	0° Y		direct	12588 Mar 11 01:50	13° ¥ 28'30	
morning max el	12587 Apr 03 17:58	2° Y 38'05	18°18'38	morning max el	12588 Mar 17 10:35	16°) 46′51	17°53'52
desc. node	12587 Apr 19 14:02	25° Ƴ 04'52			12588 Mar 27 02:37	0° Y	
	12587 Apr 22 16:05	$_{0\circ}$ 8		morning set	12588 Apr 03 20:06	12° Y ′44'23	
morning set	12587 Apr 23 11:17	1° 8 16'32		desc. node	12588 Apr 05 10:37	15° Y ′24'30	
					12588 Apr 14 08:12	9° 8	
superior conj	12587 May 09 00:27	25° 8 49'51	-1°56'56				
minimum elong	12587 May 08 16:00	25° 8 16'49	1°57'03	superior conj	12588 Apr 17 15:50	5° 8 19'29	-1°24'31
max. Earth dist.	12587 May 10 02:56	27° 8 33'22	1.45787 AU	minimum elong	12588 Apr 17 07:19	4° 8 45'28	1°23'59
	12587 May 11 16:30	$\Pi^{\circ}0$		max. Earth dist.	12588 Apr 21 23:02	12° 8 08'09	1.45364 AU
evening rise	12587 May 24 23:39	20° Ⅱ 45'37			12588 May 03 11:19	Π $^{\circ}0$	
	12587 May 30 21:30	0 \circ \odot		evening rise	12588 May 03 14:48	0° Ⅱ 13′20	
greatest brilliancy	12587 Jun 04 11:52	7° 5 06'45	-0.8m	greatest brilliancy	12588 May 18 08:03	22° II 23'01	-0.6m
asc. node	12587 Jun 13 06:39	19° 5 42'36			12588 May 23 17:59	0 \circ \odot	
evening max el	12587 Jun 16 20:59	23° © 50'22	19°01'57	evening max el	12588 May 30 02:15	7° 9 36'50	19°54'35
retrograde	12587 Jun 23 16:34	27° © 36'33		asc. node	12588 May 30 03:44	7° 5 40'33	
evening set	12587 Jun 27 03:27	26° 5 27'29		retrograde	12588 Jun 06 14:55	11° 9 54'07	
inferior conj	12587 Jul 02 15:10	20°5641'50	3°06'12	evening set	12588 Jun 10 11:11	10° © 28'27	
minimum elong	12587 Jul 02 16:23	20° © 37'56	3°05'10	inferior conj	12588 Jun 15 18:46	4° 5 29'12	3°13'56
min. Earth dist.	12587 Jul 04 05:49	18° © 38'27	0.66480 AU	minimum elong	12588 Jun 15 18:55	4° 5 28'43	3°13'00
morning rise	12587 Jul 08 04:39	14° © 18'38		min. Earth dist.	12588 Jun 16 18:55	3° © 07'52	0.67733 AU
direct	12587 Jul 14 10:17	11° © 37'35			12588 Jun 19 06:31	30°Ŗ Ⅱ	
desc. node	12587 Jul 16 13:58	11° 9 54'19		morning rise	12588 Jun 21 02:18	28° Ⅱ 07'33	
morning max el	12587 Jul 27 06:09	19° © 16'32	26°16'43	direct	12588 Jun 26 21:07	25° Ⅲ 34'22	
	12587 Aug 05 08:55	0 $^{\circ}$ Ω		desc. node	12588 Jul 02 11:09	27° Ⅲ 26'45	
	12587 Aug 25 03:13	0° ™			12588 Jul 05 20:58	0 \circ \mathfrak{s}	
morning set	12587 Sep 01 05:15	12°M/40'28		morning max el	12588 Jul 08 16:24	2° © 38'55	24°56'10
max. Earth dist.	12587 Sep 05 02:14	20° m 03'59	1.34873 AU		12588 Jul 29 11:56	$0^{\circ}\Omega$	
asc. node	12587 Sep 09 07:28	28° m 28'34		morning set	12588 Aug 13 13:16	24° Ω 43'43	
					12588 Aug 16 11:34	0° m	
superior conj	12587 Sep 10 08:08	0° ჲ 34'39	0°09'49	max. Earth dist.	12588 Aug 17 03:11	1° Mp 11'36	1.36965 AU
minimum elong	12587 Sep 10 07:36	0° ჲ 31'52	0°09'37				
behind sun begin	12587 Sep 10 02:47	0° ჲ 07'11		superior conj	12588 Aug 23 19:01	13° m 51'35	-0°22'19
behind sun end	12587 Sep 10 12:25	0° ჲ 56'36		minimum elong	12588 Aug 23 20:28	13° m 58'45	0°22'23
	12587 Sep 10 01:23	0∘ ⊽		asc. node	12588 Aug 26 04:05	18° m 33'56	
evening rise	12587 Sep 17 22:21	16° ≏ 23'50			12588 Aug 31 20:16	0∘ ⊽	
	12587 Sep 24 18:32	0° M		evening rise	12588 Sep 01 02:45	0° م 32'42	
evening max el	12587 Oct 06 17:37	17° M 22'54	20°45'20	evening max el	12588 Sep 18 03:49	28° ≏ 32'21	19°33'02
desc. node	12587 Oct 12 10:31	21°M38'36			12588 Sep 19 17:57	0° M	
retrograde	12587 Oct 18 03:23	23°M02'49		retrograde	12588 Sep 27 21:30	3°M23'55	
evening set	12587 Oct 20 10:39	22°M49'58		desc. node	12588 Sep 28 07:57	3°M23'22	
inferior conj	12587 Oct 29 11:21	18°M55'27		evening set	12588 Sep 29 18:18	3°M13′59	
minimum elong	12587 Oct 29 01:27	19° M 09'36	4°46'04		12588 Oct 07 03:38	30° ₽ Ω	
min. Earth dist.	12587 Oct 30 10:46	18° M 21'57	0.54614 AU	inferior conj	12588 Oct 08 12:13	29° ჲ 08'43	-3°08'44
morning rise	12587 Nov 06 16:14	14°M59'29		minimum elong	12588 Oct 08 04:06	29° ჲ 21'39	
direct	12587 Nov 10 22:20	14° M 20'39		min. Earth dist.	12588 Oct 10 20:25	27° ≏ 39'33	0.55452 AU
morning max el	12587 Nov 24 02:13	20°M42'58	23°15'15	morning rise	12588 Oct 16 11:53	24° ≏ 44'35	

direct	12588 Oct 21 14:13	23° £ 46'40		direct	12589 Oct 02 20:05	3° ჲ 36'01	
direct	12588 Nov 03 17:16	0°M		morning max el	12589 Oct 02 20:05 12589 Oct 17 02:45	11° ⊆ 02'27	26°34'34
morning max el	12588 Nov 04 12:25	0°M44'18	25°02'47	morning max or	12589 Oct 31 17:45	0°M	20 3131
asc. node	12588 Nov 22 05:33	25°M33'26	20 02 .,	asc. node	12589 Nov 09 02:23	14°ML46'38	
	12588 Nov 24 14:23	0° ⊼		morning set	12589 Nov 15 06:07	27°M20'26	
morning set	12588 Nov 30 19:46	12° ∡ ⁴43'53			12589 Nov 16 11:44	0° ∡ 7	
		-					
superior conj	12588 Dec 07 14:44	27° 🖈 36'59		superior conj	12589 Nov 22 01:57	-	1°35'23
minimum elong	12588 Dec 07 14:40	27° ∡ 36'39	1°39'30	minimum elong	12589 Nov 22 00:52	12° 🗷 15'53	1°36'11
D. d. F.	12588 Dec 08 16:46	0°る	1 221 40 4 11	max. Earth dist.	12589 Nov 22 15:38	13° 🗷 38'05	1.31455 AU
max. Earth dist.	12588 Dec 09 08:31	1°る26'02	1.32149 AU	evening rise	12589 Nov 28 23:23	27° ₹ 25'43	
evening rise	12588 Dec 14 20:40	13° る 08'23		11-	12589 Nov 30 04:51	0°궁 22°중18'06	
JJ.	12588 Dec 23 15:12	0°≈ 2°≈49'13		desc. node	12589 Dec 12 02:41	0°≈	
desc. node	12588 Dec 25 05:42 12589 Jan 13 04:44	2 ≈4913 0°) (evening max el	12589 Dec 17 00:08 12589 Dec 30 04:07	0 ≈ 16°≈11'42	27912156
evening max el	12589 Jan 16 21:36	3°) 49'33	27°32'42	retrograde	12590 Jan 13 02:39	23°≈26'29	27 12 30
retrograde	12589 Jan 30 17:18	11°) 11'32	21 32 42	evening set	12590 Jan 19 23:34	21°≈20'51	
evening set	12589 Feb 06 15:55	8° H 48'59		min. Earth dist.	12590 Jan 23 18:36	18°≈36'29	0.60667 AU
min. Earth dist.	12589 Feb 10 09:56	5° ¥ 43′50	0.62786 AU	inferior conj	12590 Jan 26 22:06	15°≈55'30	
inferior conj	12589 Feb 13 06:37	2° H 57'22		minimum elong	12590 Jan 27 04:17	15° ≈ 42'18	
minimum elong	12589 Feb 13 09:50	2°) (49'33		morning rise	12590 Feb 03 12:00	11° ≈ 04'47	
	12589 Feb 16 12:51	30°R≈		asc. node	12590 Feb 05 01:20	10° ≈ 48'11	
asc. node	12589 Feb 18 03:59	28° ≈ 49'36		direct	12590 Feb 05 14:28	10° ≈ 46'57	
morning rise	12589 Feb 20 06:16	27° ≈ 47'12		morning max el	12590 Feb 12 19:43	14° ≈ 23'53	17°57'35
direct	12589 Feb 22 13:26	27° ≈ 22'33		C	12590 Feb 23 12:07	0° ∀	
	12589 Feb 28 08:51	0°) €		morning set	12590 Feb 28 09:43	8° ¥ 52'51	
morning max el	12589 Mar 01 04:16	0°) 45′02	17°46'34	desc. node	12590 Mar 10 03:43	26° ¥ 29'54	
morning set	12589 Mar 17 05:39	25°) 22'42					
	12589 Mar 19 21:13	0° Y		superior conj	12590 Mar 10 17:32	27° ¥ 30′26	-0°04'32
desc. node	12589 Mar 23 07:09	5° Y 54'03		minimum elong	12590 Mar 10 17:09	27° ¥ 28'47	0°04'20
				behind sun begin	12590 Mar 10 09:20	26°) 54'34	
superior conj	12589 Mar 29 04:25	15° Y 50′23		behind sun end	12590 Mar 11 00:58	28° ∺ 02'57	
minimum elong	12589 Mar 28 23:58	15° Y 31'55			12590 Mar 12 03:55	0° Υ	
max. Earth dist.	12589 Apr 04 16:55	26° Y 28'31	1.44242 AU	max. Earth dist.	12590 Mar 18 06:18	10° Y 18'32	1.42547 AU
	12589 Apr 06 22:00	0° 8		evening rise	12590 Mar 24 02:34	19° Y 45'55	
evening rise	12589 Apr 13 02:47	9° 8 41'16			12590 Mar 30 16:49	0° B	
	12589 Apr 26 15:58 12589 May 13 01:38	0° П 21° П 23'26	21900154		12590 Apr 21 04:08	0°Ⅱ 5°Ⅱ10'53	22017104
evening max el asc. node	12589 May 13 01:38 12589 May 17 00:56	21°Щ23′26 24°Щ45′06	21°00'54	evening max el	12590 Apr 25 19:50 12590 May 03 22:11	5°Щ10′53 10°Щ40′55	22°17'04
retrograde	12589 May 17 00:30 12589 May 21 13:46	24 Π 43 00 26° Π 20'55		asc. node retrograde	12590 May 05 22.11 12590 May 05 11:22	10 Ⅱ 40 33	
evening set	12589 May 25 20:08	24° П 38'53		evening set	12590 May 10 04:34	8° П 54'44	
inferior conj	12589 May 31 02:17	18° Ⅲ 27'38	3°09'36	inferior conj	12590 May 15 11:37	2° Д 33'43	2°54'33
minimum elong	12589 May 31 01:27	18° ∏ 30'34	3°08'38	minimum elong	12590 May 15 10:00	2° Д 39'22	
min. Earth dist.	12589 May 31 12:41	17° ∏ 51'32	0.68518 AU	min. Earth dist.	12590 May 15 09:05	2° I I42'36	0.68836 AU
morning rise	12589 Jun 05 06:33	12° Ⅱ 10′04			12590 May 17 08:35	30°R₩	
direct	12589 Jun 10 12:52	9° Ⅱ 51'36		morning rise	12590 May 20 15:17	26° 8 21'51	
desc. node	12589 Jun 19 08:14	14° Ⅱ 27'40		direct	12590 May 25 08:34	24° 8 22'21	
morning max el	12589 Jun 21 02:43	16° Ⅱ 09'43	23°27'08	morning max el	12590 Jun 03 15:28	29° 8 48'26	21°58'47
	12589 Jul 02 12:16	0oo			12590 Jun 03 20:03	Π °0	
	12589 Jul 22 11:48	$0^{\circ}\Omega$		desc. node	12590 Jun 06 05:14	2° Ⅲ 33'50	
morning set	12589 Jul 26 00:03	5° Ω 48'54			12590 Jun 26 05:59	0ංම	
max. Earth dist.	12589 Jul 30 00:53	12° Ω 43'10	1.39276 AU	morning set	12590 Jul 06 09:39	15° © 46'41	
				max. Earth dist.	12590 Jul 12 01:17	25°900'36	1.41548 AU
superior conj	12589 Aug 06 16:00	26° Ω 28'11			12590 Jul 15 00:26	0 $^{\circ}$ Ω	
minimum elong	12589 Aug 06 20:04	26° Ω 47'05	0°56'3'/		12500 1 1 10 10 44	00 01 4121	1020112
asa nada	12589 Aug 08 13:11	0°Mp 8°mn 3.4'43		superior conj	12590 Jul 19 18:44	8° Ω 14'31 8° Ω 42'51	
asc. node	12589 Aug 13 00:45	8° Mp 34'43 14° Mp 19'36		minimum elong	12590 Jul 20 01:09 12590 Jul 30 10:13	$8^{\circ} \mathcal{U}^{42'51}$ $27^{\circ} \Omega^{35'02}$	1°30'11
evening rise	12589 Aug 15 23:56 12589 Aug 24 11:20	14° II) 19′36		evening rise asc. node	12590 Jul 30 10:13	$28^{\circ}\Omega 27'01$	
evening max el	12589 Sep 01 02:50	0 <u>≈</u> 10° Ω 29'13	18°42'33	ase. Houc	12590 Jul 30 21.28 12590 Jul 31 17:35	0° m)	
retrograde	12589 Sep 01 02.30 12589 Sep 09 08:48	10 = 2913 14° = 37'51	10 72 33	evening max el	12590 Jul 31 17:35 12590 Aug 15 10:55	23° My 05'57	18°13'07
evening set	12589 Sep 07 08:48 12589 Sep 11 07:02	14° ⊆ 25'05		retrograde	12590 Aug 13 10:55 12590 Aug 22 14:56	26° m/ 44'10	10 10 01
desc. node	12589 Sep 15 05:25	12° Ω 48'57		evening set	12590 Aug 24 19:52	26° m) 24'07	
inferior conj	12589 Sep 19 08:28	10° ⊆ 01'21	-1°18'06	inferior conj	12590 Sep 01 02:31	21° m ₂ 39'51	0°18'43
minimum elong	12589 Sep 19 05:15	10° ⊆ 07'19		minimum elong	12590 Sep 01 03:09	21° m/38'29	0°18'14
min. Earth dist.	12589 Sep 22 11:36	7° ≙ 42'59		desc. node	12590 Sep 02 02:56	20° m/46'43	
morning rise	12589 Sep 27 00:05	4° ≏ 59'27		min. Earth dist.	12590 Sep 04 10:12	18° m) 48'42	0.59174 AU

morning rise	12590 Sep 08 07:00	16° Mp 03′36		desc. node	12591 Aug 20 00:24	28° Ω 57'34	
direct	12590 Sep 14 16:07	14° m y 11'45		morning rise	12591 Aug 21 07:58	27° Ω 59'04	
morning max el	12590 Sep 29 00:20	21° m 58'55	27°35'23	direct	12591 Aug 27 23:45	25° Ω 42'14	
	12590 Oct 06 01:47	0∘ ত			12591 Sep 07 01:29	0° m)	
	12590 Oct 24 17:57	o° m ₊		morning max el	12591 Sep 11 04:39	3°Mp41'12	27°58'04
asc. node	12590 Oct 26 23:08	4°M21'09		Č	12591 Sep 30 17:17	0∘ ⊽	
morning set	12590 Oct 30 13:12	11°ML44'02		asc. node	12591 Oct 13 19:49	24° ≙ 10'53	
max. Earth dist.	12590 Nov 06 00:17	25°M50'10	1.31273 AU	morning set	12591 Oct 14 15:08	25° Ω 49'59	
man. Bartin alot.	120,0110, 00 00.17	20 1100010	1.51275110	morning sec	12591 Oct 16 14:59	0°M	
superior conj	12590 Nov 06 13:36	27°ML04'23	1°26'26	max. Earth dist.	12591 Oct 20 06:51	7°ML53'41	1.31611 AU
minimum elong	12590 Nov 06 11:45	26°M54'04	1°26'58	max. Lartii dist.	12371 Oct 20 00.31	/ 11033 41	1.51011 AC
minimum ciong	12590 Nov 07 21:04	20 11 6 34 04	1 20 36	gunariar agni	12501 Oct. 21, 22:52	11° M .39'21	1°11'52
				superior conj	12591 Oct 21 23:52		
evening rise	12590 Nov 13 06:55	11° ∡ 753'45		minimum elong	12591 Oct 21 21:38	11°M26'59	1°12'06
	12590 Nov 22 08:51	0°る		evening rise	12591 Oct 28 17:16	26°M27'27	
desc. node	12590 Nov 28 23:47	11° る 09'32			12591 Oct 30 09:06	0° ∡ ¹	
evening max el	12590 Dec 12 03:32	27° る 43'22	26°18'47	desc. node	12591 Nov 15 21:00	29° ∡ ¹09'17	
	12590 Dec 14 18:01	0° ≈			12591 Nov 16 11:53	0°₹	
retrograde	12590 Dec 26 02:19	4° ≈ 48'52		evening max el	12591 Nov 23 18:48	8° る 24'33	24°54'58
evening set	12591 Jan 01 12:52	3° ≈ 08'45		retrograde	12591 Dec 07 13:54	15° る 18'48	
min. Earth dist.	12591 Jan 05 17:02	0° ≈ 32'44	0.58521 AU	evening set	12591 Dec 13 03:27	14° る 09'41	
	12591 Jan 06 11:04	30°₽₹		min. Earth dist.	12591 Dec 18 06:43	11° る 25'26	0.56601 AU
inferior conj	12591 Jan 08 19:57	28° る 13'48	-4°15'30	inferior conj	12591 Dec 20 21:26	9° ට 44'13	-5°22'10
minimum elong	12591 Jan 09 04:21	27° る 58'10	4°12'09	minimum elong	12591 Dec 21 04:47	9° ට 32'19	5°19'55
morning rise	12591 Jan 16 22:43	23° る 44'33		morning rise	12591 Dec 29 08:19	5° る 36'32	
direct	12591 Jan 19 00:31	23° る 29'59		direct	12591 Dec 31 16:10	5° ට 21'18	
asc. node	12591 Jan 22 22:38	24° පි 25'05		asc. node	12592 Jan 09 19:51	9° ට 36'29	
morning max el	12591 Jan 27 05:02	27° ට 31'23	18°28'29	morning max el	12592 Jan 10 04:10	9° ප 56'12	19°21'14
morning max cr	12591 Jan 29 11:10	0°≈	10 202)	morning max cr	12592 Jan 23 09:56	0°≈	1) 21 14
morning set	12591 Feb 12 02:43	22°≈57'30		morning set	12592 Jan 27 04:27	0 ~ 7° ≈ 24'28	
morning set		0° \		morning set	12392 Jan 27 04.27	/ ~24 28	
	12591 Feb 15 18:43	0°π			12502 F 1 04 07 20	22024100	0057154
	10501 F.L. 01. 04.06	1001/00110	0020112	superior conj	12592 Feb 04 07:29	23°≈34'00	0°57'54
superior conj	12591 Feb 21 04:06	10° ₩ 09'18	0°30'13	minimum elong	12592 Feb 04 10:20	23°≈47'50	0°58'07
minimum elong	12591 Feb 21 06:09	10°) 18'43	0°30'18		12592 Feb 07 16:05	0° ∺	
desc. node	12591 Feb 25 00:17	17°) € 07'49		max. Earth dist.	12592 Feb 10 21:22	5° ∺ 57'52	1.38226 AU
max. Earth dist.	12591 Feb 28 14:59	23° ∺ 28′07	1.40464 AU	desc. node	12592 Feb 11 20:54	7°) 44′20	
	12591 Mar 04 11:32	0 ° $\mathbf{\gamma}$		evening rise	12592 Feb 14 15:04	12°) 37′42	
evening rise	12591 Mar 04 22:16	0° Ƴ 44'35			12592 Feb 25 03:53	$0^{\circ}\Upsilon$	
	12591 Mar 24 02:20	9° 8			12592 Mar 18 06:09	8° 0	
evening max el	12591 Apr 08 10:46	19° 8 00'47	23°37'49	evening max el	12592 Mar 21 00:26	2° 8 52'56	24°56'33
retrograde	12591 Apr 19 06:11	25° 8 22'37		retrograde	12592 Apr 01 21:01	9° 8 46'46	
asc. node	12591 Apr 20 19:32	25° 8 11'30		asc. node	12592 Apr 06 16:55	8° 8 04'54	
evening set	12591 Apr 24 10:54	23° 8 11'28		evening set	12592 Apr 07 13:34	7° 8 24'16	
min. Earth dist.	12591 Apr 29 05:49	17° 8 35'15	0.68692 AU	min. Earth dist.	12592 Apr 12 00:40	2° 8 23'53	0.68105 AU
inferior conj	12591 Apr 29 20:49	16° 8 43'46	2°29'24	inferior conj	12592 Apr 13 03:58	0° 8 53'55	1°54'16
minimum elong	12591 Apr 29 18:44	16° 8 50'55		minimum elong	12592 Apr 13 01:51	1° 8 00'54	1°53'13
morning rise	12591 May 05 02:32	10° 8 39'00		Č	12592 Apr 13 20:24	30° R Υ	
direct	12591 May 09 07:01	9° 8 00'22		morning rise	12592 Apr 18 14:23	24° Υ 57'37	
morning max el	12591 May 17 09:48	13° 8 37'39	20°38'43	direct	12592 Apr 22 06:44	23° Y 39'47	
desc. node	12591 May 17 03:16	21° 8 27'36	20 30 13	morning max el	12592 Apr 29 11:40	27° Υ 38'30	19°31'49
desc. Hode	12591 May 30 07:21	0°Ⅱ		morning max ci	12592 May 01 16:39	0°8	1) 31 4)
marning sat	•	24° ∏ 43'25		desc. node		10° 8 55'59	
morning set	12591 Jun 15 19:47				12592 May 09 22:55		0.7
F 41 F 4	12591 Jun 19 04:49	0.ee	1 42512 ATT	greatest brilliancy	12592 May 12 03:52	14° 8 08'35	-0./m
max. Earth dist.	12591 Jun 24 08:17	8°201131	1.43512 AU		12592 May 22 16:17	0°II	
		_		morning set	12592 May 24 20:24	3° Ⅱ 19'54	
superior conj	12591 Jun 30 23:04	19° © 02'25		max. Earth dist.	12592 Jun 05 22:13	22° Ⅱ 07'41	1.44946 AU
minimum elong	12591 Jul 01 05:42	19° © 30'08	1°58'09				
	12591 Jul 07 09:54	$0^{\circ}\Omega$		superior conj	12592 Jun 10 03:34	28° Ⅱ 50′20	-2°12'31
evening rise	12591 Jul 13 05:06	10° Ω 07'54		minimum elong	12592 Jun 10 05:50	28° Ⅲ 59'22	2°13'25
asc. node	12591 Jul 17 18:15	18° Ω 06'34			12592 Jun 10 20:59	0ංම	
	12591 Jul 25 00:46	0° m)		evening rise	12592 Jun 24 03:28	21°5946'15	
evening max el	12591 Jul 29 23:57	6° Mp 12′28	18°03'20		12592 Jun 29 01:37	$0^{\circ}\Omega$	
retrograde	12591 Aug 05 13:01	9° m 34'56		asc. node	12592 Jul 03 15:06	7° Ω 27'32	
evening set	12591 Aug 08 02:03	9° m 03'56		evening max el	12592 Jul 12 14:08	19° £ 38′21	18°12'07
inferior conj	12591 Aug 14 15:57	4° m 00'00	1°32'37	retrograde	12592 Jul 18 22:36	22° Ω 59'36	
minimum elong	12591 Aug 14 18:18	3° m) 54'08	1°31'22	evening set	12592 Jul 21 19:56	22° Ω 15'01	
min. Earth dist.	12591 Aug 17 17:28		0.61460 AU	inferior conj	12592 Jul 27 20:42	16°Ω53'15	2°23'48
Lartii dist.	12591 Aug 17 17:28 12591 Aug 18 18:49	30°R Ω	3.01 100 710	minimum elong	12592 Jul 27 23:12	16° Ω 46'14	
	12371 Aug 10 10.49	20 1/00		mmmum clong	12372 Jul 21 23.12	10 06-10 14	2 22 20

min. Earth dist.	12592 Jul 30 10:07	14° Ω 02′12	0.63652 AU	min. Earth dist.	12593 Jul 13 11:58	27° © 48'46	0.65559 AU
morning rise	12592 Aug 03 00:50	10° Ω 37'36		morning rise	12593 Jul 17 07:02	23° © 50'26	
desc. node	12592 Aug 05 21:49	8° Ω 52'34		direct	12593 Jul 23 17:23	21° © 09'19	
direct	12592 Aug 09 16:35	8° Ω 03'42		desc. node	12593 Jul 23 19:09	21° © 09'20	
morning max el	12592 Aug 23 13:35	16° Ω 04'54	27°42'58	morning max el	12593 Aug 06 00:38	29° © 00'57	26°55'26
	12592 Sep 04 00:41	0° m)			12593 Aug 06 23:32	0 \circ Ω	
	12592 Sep 22 11:08	0∘ 亚			12593 Aug 28 21:07	0° m)	
morning set	12592 Sep 27 09:33	9° ≏ 31'41		morning set	12593 Sep 10 17:35	22° Mp 42'32	
asc. node	12592 Sep 29 16:28	14° ≙ 10′00			12593 Sep 14 10:51	0∘ ত	
max. Earth dist.	12592 Oct 02 07:30	19° ≙ 38'47	1.32472 AU	max. Earth dist.	12593 Sep 14 23:02	1° ≏ 01'08	1.33854 AU
				asc. node	12593 Sep 16 13:05	4° ≏ 14'28	
superior conj	12592 Oct 05 06:45	26° ჲ 00'19	0°51'49				
minimum elong	12592 Oct 05 04:38	25° ≏ 48'52	0°51'46	superior conj	12593 Sep 19 08:02	10° ≏ 01'42	0°26'32
	12592 Oct 07 02:51	0° M ₊		minimum elong	12593 Sep 19 06:42	9° ≙ 54'42	0°26'20
evening rise	12592 Oct 12 04:31	11°M00'50		evening rise	12593 Sep 26 14:48	25° ≏ 28'59	
	12592 Oct 21 18:39	0° ∡ ¹			12593 Sep 28 18:44	0° M ₊	
desc. node	12592 Nov 01 18:17	15° ₹ 57'32		evening max el	12593 Oct 16 18:47	28°M38'22	21°35'52
evening max el	12592 Nov 04 04:57	18° ∡ "31′09	23°14'46		12593 Oct 18 05:56	0° ∡ ¹	
retrograde	12592 Nov 17 12:29	25° ₰ ¹08'36		desc. node	12593 Oct 19 15:38	1° ≯ 08'56	
evening set	12592 Nov 21 18:37	24° ∡ °29′17		retrograde	12593 Oct 29 01:29	4° ≯ ⁴44'32	
min. Earth dist.	12592 Nov 28 14:33	21° ₮ 18'08	0.55185 AU	evening set	12593 Oct 31 22:20	4° ₹ 25'46	
inferior conj	12592 Nov 30 03:07	20° ∡ ¹25'11	-5°53'37	inferior conj	12593 Nov 09 20:07	0° ∡ ³30′58	-5°29'29
minimum elong	12592 Nov 30 03:56	20° ҂ ¹24′00	5°52'42	minimum elong	12593 Nov 09 12:34	0° ∡ '41'33	5°27'32
morning rise	12592 Dec 08 14:53	16° ∡ ³34'31		min. Earth dist.	12593 Nov 09 20:48	0° ₮ 30'01	0.54547 AU
direct	12592 Dec 11 12:55	16° ∡ 14'12			12593 Nov 10 18:16	30°RML	
morning max el	12592 Dec 22 13:48	21° ₹ ′29′28	20°37'07	morning rise	12593 Nov 18 03:46	26°M42'55	
asc. node	12592 Dec 26 16:59	26° ₹ '07'39		direct	12593 Nov 21 21:24	26°M12'39	
	12592 Dec 29 11:40	8°0			12593 Dec 01 19:56	0° ∡ ¹	
morning set	12593 Jan 10 11:48	22° る 04'46		morning max el	12593 Dec 04 09:44	2° ∡ 11′23	22°13'48
	12593 Jan 14 07:25	0° ≈		asc. node	12593 Dec 13 14:02	13° ∡ ¹41'32	
					12593 Dec 22 14:57	0°ප	
superior conj	12593 Jan 17 23:18	7° ≈ 32'38	1°18'09	morning set	12593 Dec 25 22:23	6° る 50'52	
minimum elong	12593 Jan 18 01:52	7° ≈ 45'41	1°18'39				
max. Earth dist.	12593 Jan 23 05:35	17° ≈ 59'49	1.36073 AU	superior conj	12594 Jan 01 23:54	21° る 54'21	1°31'15
evening rise	12593 Jan 27 02:31	25° ≈ 18′02		minimum elong	12594 Jan 02 01:35	22° る 03'17	1°32'02
desc. node	12593 Jan 28 17:33	28° ≈ 15'52			12594 Jan 05 21:15	0° ≈	
	12593 Jan 29 16:47	0° ∀		max. Earth dist.	12594 Jan 05 19:37	29° る 51'38	1.34207 AU
	12593 Feb 17 16:43	0° Y		evening rise	12594 Jan 10 05:04	8° ≈ 36′07	
evening max el	12593 Mar 03 14:01	16° Ƴ 43'17	26°06'09	desc. node	12594 Jan 15 14:16	18° ≈ 37'42	
retrograde	12593 Mar 16 06:59	23° Y 58'19			12594 Jan 22 06:09	0° ∀	
evening set	12593 Mar 22 10:55	21° Y ′28'04			12594 Feb 13 17:51	0 ° Υ	
asc. node	12593 Mar 24 14:18	19° Ƴ 25′13		evening max el	12594 Feb 14 03:30	0° Y 23'31	26°59'20
min. Earth dist.	12593 Mar 26 15:29	17° Y ′02'53	0.67089 AU	retrograde	12594 Feb 27 11:19	7° Ƴ 48'50	
inferior conj	12593 Mar 28 07:06	15° Y '00'00	1°08'56	evening set	12594 Mar 06 01:02	5° Ƴ 15'59	
minimum elong	12593 Mar 28 05:30	15° Ƴ 04'58	1°08'13	min. Earth dist.	12594 Mar 10 00:11	1° Y 24'26	0.65678 AU
morning rise	12593 Apr 03 00:49	9° Ƴ 13'49		asc. node	12594 Mar 11 11:43	29° ∺ 43′01	
direct	12593 Apr 06 06:01	8° Y 15'03			12594 Mar 11 05:50	30° ₹ ₩	
morning max el	12593 Apr 12 20:57	11° Y 48'21	18°40'38	inferior conj	12594 Mar 12 03:57	28° ∺ 56′17	0°13'03
	12593 Apr 26 06:40	0°B		minimum elong	12594 Mar 12 03:35	28° ∺ 57′20	0°13'01
desc. node	12593 Apr 26 19:35	0° 8 49'45		transit middle	12594 Mar 12 03:35	28° ¥ 57′20	0°13'01
morning set	12593 May 04 09:50	12° 8 39'36		transit begin	12594 Mar 12 01:51	29° ∺ 02'19	
	12593 May 15 12:10	Π $^{\circ}0$		transit end	12594 Mar 12 05:19	28° ∺ 52'21	
max. Earth dist.	12593 May 19 16:46	6° Ⅲ 32'49	1.45695 AU	morning rise	12594 Mar 18 07:33	23° ∺ 22′04	
				direct	12594 Mar 21 02:49	22° ∺ 39′28	
superior conj	12593 May 20 14:28	7° Ⅱ 57'37	-2°08'27	morning max el	12594 Mar 27 11:41	26° ∺ 00′05	18°06'01
minimum elong	12593 May 20 09:07	7° Ⅱ 36'41	2°09'04		12594 Mar 30 23:22	0 ° Υ	
	12593 Jun 03 13:36	0 \circ		desc. node	12594 Apr 13 16:11	21° Y ′01'23	
evening rise	12593 Jun 05 01:49	2° 5 24'28		morning set	12594 Apr 15 02:07	23° Y 19'07	
greatest brilliancy	12593 Jun 12 07:07	13° © 55'44	-0.9m		12594 Apr 19 05:12	9° 8	
asc. node	12593 Jun 20 12:03	26° 5 23'42					
	12593 Jun 23 04:59	$0^{\circ}\Omega$		superior conj	12594 Apr 29 23:05	17° 8 05'55	-1°44'44
evening max el	12593 Jun 26 02:31	3° £ 16′38	18°38'45	minimum elong	12594 Apr 29 13:49	16° 8 29'29	1°44'30
retrograde	12593 Jul 02 15:41	6° £ 50′16		max. Earth dist.	12594 May 02 12:36	21° 8 07'03	1.45696 AU
evening set	12593 Jul 05 21:28	5° Ω 50′25			12594 May 08 05:22	Π °0	
inferior conj	12593 Jul 11 12:55	0° £ 12′50	2°55'26	evening rise	12594 May 16 01:37	12° Ⅱ 09'32	
minimum elong	12593 Jul 11 14:43	0° Ω 07'18	2°54'18		12594 May 27 16:48	0 \circ \odot	
	12593 Jul 11 17:05	30°Rூ		greatest brilliancy	12594 May 28 14:22	1°520'46	-0.7m

	12504 I 07 00:06	1.496-1.6100			12505 M 22 12-22	00677140	20021122
asc. node	12594 Jun 07 09:06 12594 Jun 09 10:46	14°5946'00 17°5901'01	19°22'27	evening max el asc. node	12595 May 23 13:32 12595 May 25 06:14	0°547'42 2°523'01	20-21-22
evening max el retrograde	12594 Jun 16 12:56	20°©59'36	19 22 27	retrograde	12595 May 31 11:42	5°\$21'26	
evening set	12594 Jun 20 03:37	20 \$3936 19°\$43'36		evening set	12595 Jun 04 12:05	3°9548'57	
inferior conj	12594 Jun 25 13:13	13°951'50	3°11'05	evening set	12595 Jun 08 02:21	30°RⅡ	
minimum elong	12594 Jun 25 13:58	13°551'30	3°10'06	inferior conj	12595 Jun 09 18:47	27° ∏ 44'31	2012/20
min. Earth dist.	12594 Jun 26 21:37	13 949 19 12°905'35	0.67066 AU	minimum elong	12595 Jun 09 18:29	27° I I44'31	
morning rise	12594 Jun 30 23:49	7°\$28'35	0.07000 AU	min. Earth dist.	12595 Jun 10 13:04	27 ∏ 43 32 26° ∏ 41'56	0.68126 AU
direct	12594 Jul 07 01:01	4°9549'53		morning rise	12595 Jun 15 00:34	20 H 41 30 21° H 24'10	0.08120 AU
desc. node	12594 Jul 10 16:23	5°937'50		direct	12595 Jun 20 14:15	18° Ⅱ 56'17	
morning max el	12594 Jul 19 11:30	12° © 16'51	25°44'05	desc. node	12595 Jun 27 13:32	18 Ⅲ 5017 21° Ⅲ 50'54	
morning max ci	12594 Aug 02 17:14	0°Ω	23 44 03	morning max el	12595 Jul 01 21:26	25° I I42'43	24°18'36
	12594 Aug 02 17:14 12594 Aug 21 13:42	0° m)		morning max er	12595 Jul 05 19:21	0°95	24 16 30
morning set	12594 Aug 24 11:40	5° Mg 14'09			12595 Jul 27 05:36	0°Ω	
max. Earth dist.	12594 Aug 28 04:18	12° Mg 07'07	1.35715 AU	morning set	12595 Aug 06 11:13	16° Ω 54'11	
max. Earm dist.	12394 Aug 20 04.10	12 110/0/	1.55/15 AU	max. Earth dist.	12595 Aug 00 11:15 12595 Aug 10 02:32	23°Ω19'17	1.37931 AU
superior conj	12594 Sep 03 01:06	23° m 37'22	0°03'26	max. Earth dist.	12595 Aug 10 02:32 12595 Aug 13 18:15	0°m)	1.57951 AU
minimum elong	12594 Sep 03 01:19	23° m) 38'26	0°03'35		12393 Aug 13 16.13	V III	
behind sun begin	12594 Sep 02 19:16	23° m 07'56	0 03 33	superior conj	12595 Aug 17 06:34	6° Mg 38′24	0026149
behind sun begin	12594 Sep 02 19:10 12594 Sep 03 07:23	24° mg 09'00		minimum elong	12595 Aug 17 00:34 12595 Aug 17 09:05	6° Mg 50'29	0°36'47
asc. node	12594 Sep 03 09:44	24° m/20'54		asc. node	12595 Aug 17 09:03 12595 Aug 21 06:22	14° Mg 24'45	0 3047
asc. Houc	12594 Sep 06 04:15	ე∘ <u>ი</u>		evening rise	12595 Aug 25 23:46	23° Mp 47'10	
evening rise	12594 Sep 10 22:03	0 = 9° £ 46'53		evening rise	12595 Aug 29 03:44	ე∘ <u>ი</u>	
evening rise	12594 Sep 21 16:33	9 <u>=</u> 4033		evening max el	12595 Sep 11 12:59	0 = 20° £ 51'51	19°09'00
evening max el	12594 Sep 28 20:50	9°M21'10	20°12'01	retrograde	12595 Sep 20 14:22	25° ⊆ 23'26	17 07 00
desc. node	12594 Oct 06 13:03	14°M 15'48	20 12 01	evening set	12595 Sep 20 14:22 12595 Sep 22 10:49	25° ⊆ 12'53	
retrograde	12594 Oct 09 14:04	14°M40'57		desc. node	12595 Sep 23 10:32	23 ≅ 12 33 24° £ 59'01	
evening set	12594 Oct 11 14:38	14°M30'24		inferior conj	12595 Sep 30 22:28	21° ⊆ 00'46	2021/14
inferior conj	12594 Oct 20 14:08	10°M32'49	-4°00'50	minimum elong	12595 Sep 30 22:28 12595 Sep 30 16:22	21° ⊆ 11'05	
minimum elong	12594 Oct 20 04:14	10°M47'32	4°06'25	min. Earth dist.	12595 Oct 03 16:50		0.56057 AU
min. Earth dist.	12594 Oct 22 04:57	9°M35'11	0.54851 AU	morning rise	12595 Oct 08 19:07	19 ⊆ 09 02 16° ⊆ 20'57	0.30037 AU
morning rise	12594 Oct 28 16:54	6°M26'29	0.54651 AU	direct	12595 Oct 14 05:39	16 ≥ 2037 15° ♀ 12'28	
direct	12594 Nov 02 07:36	5°M40'22		morning max el	12595 Oct 28 08:13	22° ⊆ 23'36	25°44'46
morning max el	12594 Nov 15 21:09	12°M19'26	24°01'48	morning max cr	12595 Nov 04 02:10	0°M	23 44 40
morning max ci	12594 Nov 29 06:11	0° √	24 01 48	asc. node	12595 Nov 17 07:52	21°ML00'11	
asc. node	12594 Nov 30 11:00	2° × ⁷ 03'13		asc. Houc	12595 Nov 21 21:39	21 11 0 00 11 0° √ 1	
morning set	12594 Dec 10 10:14	21° × ⁷ 37'12		morning set	12595 Nov 24 21:36	6° ∡ 18'03	
morning set	12594 Dec 14 06:56	0°る		morning set	12373 1101 24 21.30	0 × 1003	
	12394 DCC 14 00.30	0.0		superior conj	12595 Dec 01 16:31	21° ҳ¹ 13'44	1°37'56
superior conj	12594 Dec 17 06:27	6° ට 30'41	1°37'42	minimum elong	12595 Dec 01 16:00		1°38'50
minimum elong	12594 Dec 17 00:27	6°る33'52	1°38'38	max. Earth dist.	12595 Dec 02 21:53	23°×756'08	1.31791 AU
max. Earth dist.	12594 Dec 19 17:22	11°る48'49	1.32760 AU	max. Earth dist.	12595 Dec 05 16:28	0°る。	1.51771710
evening rise	12594 Dec 24 19:20	22°る23'33	1.32700 AU	evening rise	12595 Dec 08 18:15	6° る 31'39	
evening rise	12594 Dec 28 16:31	0° ≈		desc. node	12595 Dec 20 08:04	28°る29'48	
desc. node	12595 Jan 02 11:07	8° ≈ 44'47		dese. Hode	12595 Dec 21 05:24	0°≈	
dese. Hode	12595 Jan 16 00:34	0° ∺		evening max el	12596 Jan 10 01:50	26°≈31'15	27°28'37
evening max el	12595 Jan 27 16:06		27°28'56	evening max er	12596 Jan 14 04:53	0° \	27 20 37
retrograde	12595 Feb 10 09:12	21°) (09'29	27 20 30	retrograde	12596 Jan 23 23:22	3° ¥ 50′22	
evening set	12595 Feb 17 05:39	18°) 41'03		evening set	12596 Jan 30 21:53	1°) 34'18	
min. Earth dist.	12595 Feb 21 00:53	15° ¥ 20′08	0.63921 AU	evening set	12596 Feb 02 01:36	30°R≈	
inferior conj	12595 Feb 23 15:55	13 X 2008		min. Earth dist.	12596 Feb 03 15:50	28°≈38'50	0.61897 AU
minimum elong	12595 Feb 23 17:36	12 X 30 44 12° X 32'22		inferior conj	12596 Feb 06 15:53	25°≈53'00	
asc. node	12595 Feb 26 09:07	9° X 56'07	0 32 17	minimum elong	12596 Feb 06 20:20	25°≈42'42	
morning rise	12595 Mar 02 07:44	7° ∺ 16'53		asc. node	12596 Feb 13 06:29	23 ≈42 42 21°≈03'59	2 00 70
direct	12595 Mar 04 18:39	6° ¥ 46'50		morning rise	12596 Feb 13 21:32	20°≈50'25	
morning max el	12595 Mar 11 05:11	10° X 05'55	17°48'31	direct	12596 Feb 16 02:16	20°≈29'08	
morning max er	12595 Mar 24 18:57	0° Υ	17 4031	morning max el	12596 Feb 22 22:17	23°≈56'53	17°48'53
morning set	12595 Mar 27 22:11	5° Υ 19'15			12596 Feb 27 19:18	0° ∺	1, 1000
desc. node	12595 Mar 31 12:45	11° Υ 25'52		morning set	12596 Mar 09 16:27	18° ∺ 22'30	
acse. Houe	12070 IVIGI 51 12.43	11 1 43 34		morning set	12596 Mar 16 06:01	16 γ (22 30	
superior conj	12595 Apr 09 22:31	26° Y ′59'34	-1°07'52	desc. node	12596 Mar 17 09:20	1° Υ 58'52	
minimum elong	12595 Apr 09 22:31 12595 Apr 09 15:30	26° Υ 31'08		desc. Houc	12570 IVIGI 1/ U7.20	1 1 30 32	
mmmum ciong	12595 Apr 11 19:16	0° 8	1 0/1/	superior conj	12596 Mar 20 21:38	8° Y ′00'27	-0°27'02
max. Earth dist.	12595 Apr 15 07:24	5° 8 35'25	1.44969 AU	minimum elong	12596 Mar 20 19:04	8 1 00 27 7° Υ 49'34	0°26'40
evening rise	12595 Apr 15 07:24 12595 Apr 25 13:20	21° 8 31'55	1. 11 707 AU	max. Earth dist.	12596 Mar 20 19:04 12596 Mar 27 23:37	19° Υ 45'08	1.43587 AU
evening lise		0° Ⅱ		max. Eattii ülst.		0° 8	1. 4 338/ AU
	12595 May 01 02:59	0ം © 0∘п		avaning rise	12596 Apr 03 10:13	1° 8 13'01	
	12595 May 22 19:04	υ Ξ υ		evening rise	12596 Apr 04 04:57	1 01301	

	12596 Apr 23 16:12	0°Ⅲ		evening rise	12597 Mar 15 12:40	11° Ƴ 39'51	
evening max el	12596 May 05 10:44		21°32'26	evening rise	12597 Mar 27 09:34	0°8	
asc. node	12596 May 11 03:26	19° Ⅱ 01'03		evening max el	12597 Apr 18 03:21	28° 8 24'43	22°51'12
retrograde	12596 May 14 10:07	19° Ⅱ 51'18		Č	12597 Apr 19 19:17	0°II	
evening set	12596 May 18 21:01	18° Ⅱ 02'39		retrograde	12597 Apr 28 06:35	4° Ⅱ 23'28	
inferior conj	12596 May 24 03:20	11° Ⅱ 47'12	3°04'28	asc. node	12597 Apr 28 00:43	4° Ⅱ 23'11	
minimum elong	12596 May 24 02:08	11° Ⅲ 51'25	3°03'28	evening set	12597 May 03 04:46	2° Ⅱ 19'46	
min. Earth dist.	12596 May 24 08:12	11° Ⅲ 30′14	0.68717 AU	•	12597 May 05 10:58	30° ₹ 8	
morning rise	12596 May 29 07:01	5° Ⅲ 32′00		min. Earth dist.	12597 May 08 04:53	26° 8 23'11	0.68836 AU
direct	12596 Jun 03 07:56	3° Ⅲ 21′00		inferior conj	12597 May 08 12:49	25° 8 55'38	2°45'04
desc. node	12596 Jun 13 10:35	9° Ⅲ 22'31		minimum elong	12597 May 08 10:58	26° 8 02'05	2°43'59
morning max el	12596 Jun 13 08:15	9° Ⅱ 16'37	22°48'53	morning rise	12597 May 13 17:04	19° 8 46'54	
-	12596 Jun 29 14:50	0°99		direct	12597 May 18 04:53	17° 8 56'15	
morning set	12596 Jul 17 11:35	27° 5 31'31		morning max el	12597 May 26 23:06	23° 8 00'06	21°23'25
	12596 Jul 18 23:27	$0^{\circ}\Omega$		desc. node	12597 May 31 07:33	27° 8 51'04	
max. Earth dist.	12596 Jul 22 00:53	5° Ω 09'32	1.40270 AU		12597 Jun 02 01:06	Π $^{\circ}0$	
					12597 Jun 22 22:17	0ංම	
superior conj	12596 Jul 29 20:25	18° Ω 55'42	-1°11'17	morning set	12597 Jun 27 10:26	7° 5 01'16	
minimum elong	12596 Jul 30 01:35	19° Ω 19'14	1°11'10	max. Earth dist.	12597 Jul 04 04:29	17° © 52'39	1.42445 AU
	12596 Aug 04 19:35	0° m y			12597 Jul 11 09:48	$0^{\circ}\Omega$	
asc. node	12596 Aug 07 03:04	4° M 22'55					
evening rise	12596 Aug 08 16:49	7° Mp 22'21		superior conj	12597 Jul 11 14:01	0° Ω 18′08	-1°42'59
	12596 Aug 21 23:05	0∘ ⊽		minimum elong	12597 Jul 11 20:58	0° Ω 48′00	1°43'06
evening max el	12596 Aug 24 16:27	3° ჲ 07'22	18°27'31	evening rise	12597 Jul 22 21:09	20° Ω 21'32	
retrograde	12596 Sep 01 09:45	7° ≙ 01'01		asc. node	12597 Jul 24 23:47	24° Ω 10′36	
evening set	12596 Sep 03 10:42	6° ₽ 45'30			12597 Jul 28 06:04	o° m p	
desc. node	12596 Sep 09 08:00	3° ₽ 37'45		evening max el	12597 Aug 08 03:01	15° m 57'38	18°06'31
inferior conj	12596 Sep 11 04:03	2° ₽ 12'49	-0°34'29	retrograde	12597 Aug 14 23:24	19° m 27'36	
minimum elong	12596 Sep 11 02:43	2° ≏ 15′28	0°34'01	evening set	12597 Aug 17 07:41	19° m 03'17	
	12596 Sep 13 23:15	30°R, MD		inferior conj	12597 Aug 24 06:47	14° m 10'03	0°52'58
min. Earth dist.	12596 Sep 14 10:39	29° m 38'19	0.57928 AU	minimum elong	12597 Aug 24 08:23	14° Mp 06'22	0°52'03
morning rise	12596 Sep 18 15:16	26° m 55'45		desc. node	12597 Aug 27 05:28	11° m 27'43	
direct	12596 Sep 24 17:44	25° m 20'19		min. Earth dist.	12597 Aug 27 12:41	11° m)11'51	0.60144 AU
	12596 Oct 05 17:51	0∘ ত		morning rise	12597 Aug 31 05:59	8° ™ 21'53	
morning max el	12596 Oct 09 01:19	2° ₽ 55'34	27°04'51	direct	12597 Sep 06 18:35	6° Mp 19′02	
	12596 Oct 28 14:48	0° M		morning max el	12597 Sep 21 02:08	14° m 11'59	27°49'56
asc. node	12596 Nov 03 04:42	10° M23'28			12597 Oct 03 19:21	0∘ ⊽	
morning set	12596 Nov 08 06:46	20°M49'23		asc. node	12597 Oct 21 01:27	0°ML05'33	
	12596 Nov 12 11:51	0° ∡ ¹			12597 Oct 21 00:21	0° M.	
				morning set	12597 Oct 23 11:56	5°ML06'28	
superior conj	12596 Nov 15 04:07	5° ∡ ¹57'55	1°32'17	max. Earth dist.	12597 Oct 29 14:39	18°M20'29	1.31352 AU
minimum elong	12596 Nov 15 02:40	5° ∡ ¹49'51	1°32'59				
max. Earth dist.	12596 Nov 15 06:13	6° ₺ 09'43	1.31321 AU	superior conj	12597 Oct 30 15:23	20°M37'54	1°20'56
evening rise	12596 Nov 21 23:17	20° ₹ 54'12		minimum elong	12597 Oct 30 13:19	20° M26'23	1°21'20
	12596 Nov 26 09:12	8°0			12597 Nov 03 20:35	0° ∡ ¹	
desc. node	12596 Dec 06 05:07	17° る 44'08		evening rise	12597 Nov 06 08:15	5° ∡ ¹25'25	
	12596 Dec 14 15:14	0° ≈			12597 Nov 19 02:35	0°₹	
evening max el	12596 Dec 22 05:46	8° ≈ 33'02	26°54'02	desc. node	12597 Nov 23 02:14	6° る 15'59	
retrograde	12597 Jan 05 04:22	15° ≈ 43'04		evening max el	12597 Dec 04 01:33	19° ප් 42'17	25°46'07
evening set	12597 Jan 11 22:11	13° ≈ 47'34		retrograde	12597 Dec 17 23:03	26° る 43'29	
min. Earth dist.	12597 Jan 15 19:58	11° ≈ 08'33	0.59745 AU	evening set	12597 Dec 24 02:21	25° る 15'50	
inferior conj	12597 Jan 19 00:16	8° ≈ 35'16		min. Earth dist.	12597 Dec 28 14:04	22° る 38'55	0.57658 AU
minimum elong	12597 Jan 19 07:36	8° ≈ 20'28	3°26'39	inferior conj	12597 Dec 31 13:39	20°る34'09	
morning rise	12597 Jan 26 19:56	3° ≈ 53'14		minimum elong	12597 Dec 31 22:12	20° ට 19'12	4°43'31
direct	12597 Jan 28 21:39	3° ≈ 37'07		morning rise	12598 Jan 08 20:43	16° ප 14'39	
asc. node	12597 Jan 30 03:50	3° ≈ 43'17		direct	12598 Jan 11 00:14	16° පි 00'16	
morning max el	12597 Feb 05 11:31	7°≈23'07	18°08'14	asc. node	12598 Jan 17 01:07	18° る 02'16	
	12597 Feb 19 22:56	0° ∀		morning max el	12598 Jan 19 17:02	20°る14'25	18°48'15
morning set	12597 Feb 21 02:37	2° ∺ 09'18			12598 Jan 27 01:36	0° ≈	
				morning set	12598 Feb 04 23:46	16°≈25′10	
superior conj	12597 Mar 02 20:22	20° 米 06′56	0°11'01		12598 Feb 11 23:14	0° ℋ	
minimum elong	12597 Mar 02 21:15	20°) 10′50	0°11'08			>-	
behind sun begin	12597 Mar 02 15:43	19°) 46′04		superior conj	12598 Feb 13 14:43	3°) €07'43	0°42'52
behind sun end	12597 Mar 03 02:47	20°) ₹35'34		minimum elong	12598 Feb 13 17:16	3°) 19'45	0°42'57
desc. node	12597 Mar 04 05:54	22°) ₹36′08		desc. node	12598 Feb 19 02:30	13°) 14′23	
	12597 Mar 08 12:01	0°Υ •••••••		max. Earth dist.	12598 Feb 20 18:55	16°) 14'01	1.39510 AU
max. Earth dist.	12597 Mar 10 11:28	3~\\'21'02	1.41696 AU	evening rise	12598 Feb 24 17:27	23°) €02'20	

	12598 Feb 28 22:08	0°Υ		desc. node	12599 Feb 05 23:07	3°) 49′22	
	12598 Mar 21 06:48	0°8		evening rise	12599 Feb 06 18:33	5°\(\frac{4922}{16'36}\)	
ovening may al	12598 Mar 31 17:22	12° 8 15'33	24°11'51	evening rise	12599 Feb 06 18.33 12599 Feb 21 21:00	5 Υ 1030	
evening max el		12 8 13 33	24 11 31	avaning may al		26° Υ 07'02	25027142
retrograde asc. node	12598 Apr 11 23:56 12598 Apr 14 22:03	18° 8 14'00		evening max el	12599 Mar 14 06:44 12599 Mar 18 18:00	0° 8	23 2142
	*	16° 8 35'59		ratra ara da		3° 8 12'09	
evening set	12598 Apr 17 09:45		0.60400 ATT	retrograde	12599 Mar 26 12:58	0° 8 45'49	
min. Earth dist.	12598 Apr 22 01:01	11° 8 15'15	0.68498 AU	evening set	12599 Apr 01 10:22	_	
inferior conj	12598 Apr 22 21:22	10° 8 06'27	2°15'44	asc. node	12599 Apr 01 19:26	0° 8 26'06	
minimum elong	12598 Apr 22 19:13	10° 8 13'45	2°14'37		12599 Apr 02 06:41	30°₹ Υ	0.65510.477
morning rise	12598 Apr 28 04:47	4° 8 05'17		min. Earth dist.	12599 Apr 05 18:30	26° Y ′00′22	0.67718 AU
direct	12598 May 02 03:56	2° 8 35'51		inferior conj	12599 Apr 07 03:03	24°Υ15'27	1°36'20
morning max el	12598 May 09 20:40	6° 8 55'20	20°08'29	minimum elong	12599 Apr 07 01:05	24° Y °21'49	1°35'23
desc. node	12598 May 18 04:23	17° 8 01'12		morning rise	12599 Apr 12 16:15	18° Y ′23'09	
	12598 May 27 05:07	Π $^{\circ}0$		direct	12599 Apr 16 03:37	17° Y 13'51	
morning set	12598 Jun 06 14:05	15° Ⅱ 43'01		morning max el	12599 Apr 23 01:49	21° Y ′00'36	19°08'01
	12598 Jun 15 17:18	0ංම			12599 Apr 30 10:00	0° 8	
max. Earth dist.	12598 Jun 16 14:34	1° © 24'42	1.44200 AU	desc. node	12599 May 05 01:07	6° 8 41'28	
				greatest brilliancy	12599 May 06 02:09	8° 8 14'46	-0.7m
superior conj	12598 Jun 22 08:01	10° 5 39'41	-2°05'59	morning set	12599 May 16 17:28	24° 8 30'29	
minimum elong	12598 Jun 22 13:27	11° © 01'52	2°06'39		12599 May 20 06:39	Π \circ 0	
	12598 Jul 03 20:20	$0^{\circ}\Omega$		max. Earth dist.	12599 May 30 06:10	15° Ⅱ 33'14	1.45349 AU
evening rise	12598 Jul 05 07:56	2° £ 33′02					
asc. node	12598 Jul 11 20:35	13° Ω 43'14		superior conj	12599 Jun 02 03:47	20° Ⅲ 07'16	-2°13'20
evening max el	12598 Jul 22 16:52	29° Ω 13'17	18°04'46	minimum elong	12599 Jun 02 02:52	20° Ⅲ 03′38	2°14'13
	12598 Jul 23 12:51	0° m)			12599 Jun 08 08:44	0°99	
retrograde	12598 Jul 29 02:58	2° mp 33'51		evening rise	12599 Jun 16 20:21	13° © 46'18	
evening set	12598 Jul 31 19:24	1° m/ 57'30		C	12599 Jun 26 20:08	$0^{\circ}\Omega$	
Z .	12598 Aug 03 19:07	30°R Ω		asc. node	12599 Jun 28 17:27	2° Ω 55'08	
inferior conj	12598 Aug 07 03:15	26° Ω 45'46	1°56'55	evening max el	12599 Jul 06 06:40	12° Ω 46'11	18°21'20
minimum elong	12598 Aug 07 05:49	26° Ω 39'01	1°55'35	retrograde	12599 Jul 12 16:08	16° Ω 11'04	
min. Earth dist.	12598 Aug 10 00:07	23° Ω 45'57	0.62416 AU	evening set	12599 Jul 15 16:58	15° Ω 20'17	
morning rise	12598 Aug 13 14:01	20°Ω37'03	0.02110110	inferior conj	12599 Jul 21 13:22	9° Ω 51'54	2°39'21
desc. node	12598 Aug 14 02:54	20°Ω14'34		minimum elong	12599 Jul 21 15:38		2°38'05
direct	12598 Aug 20 06:23	18°Ω11'44		min. Earth dist.	12599 Jul 23 20:56	7° Ω 10'19	0.64507 AU
morning max el	12598 Sep 03 08:56	26°Ω13'51	27056102	morning rise	12599 Jul 23 20:50 12599 Jul 27 12:58	3°Ω32'29	0.04307 AU
morning max er		0°m)	27 30 02	desc. node	12599 Aug 01 00:16	1° Ω 09'39	
	12598 Sep 06 21:13	0∘ ⊽ ० ॥⁄।				0° Ω 53'55	
	12598 Sep 27 09:34			direct	12599 Aug 03 03:07		27027100
morning set	12598 Oct 07 10:58	19° ₽ 03'12		morning max el	12599 Aug 16 19:00	8° Ω 53'15	27°26'09
asc. node	12598 Oct 07 22:06	20° ₽ 00'05			12599 Sep 02 05:52	0° m)	
E d E	12598 Oct 12 15:56	0°M	1 21007 411		12599 Sep 19 17:51	0∘ ⊽	
max. Earth dist.	12598 Oct 12 19:05	0°11L1/02	1.31906 AU	morning set	12599 Sep 21 01:22	2° £ 33'32	
				asc. node	12599 Sep 24 18:43	10° ≏ 02'35	
superior conj	12598 Oct 15 00:26		1°04'01	max. Earth dist.	12599 Sep 25 15:55	11° ≏ 52'01	1.32995 AU
minimum elong	12598 Oct 14 22:10	4°M55'16	1°04'07				
evening rise	12598 Oct 21 19:10	19°M59'28		superior conj	12599 Sep 29 05:16	19° ≏ 21'55	0°41'43
	12598 Oct 26 14:25	0° ∡ ¹		minimum elong	12599 Sep 29 03:23	19° ≙ 11'55	0°41'35
desc. node	12598 Nov 09 23:28	23° ҂ ′48′21			12599 Oct 04 03:37	0° M	
	12598 Nov 15 11:36	0°ಕ		evening rise	12599 Oct 06 06:15	4°M31'47	
evening max el	12598 Nov 15 13:40	0° る 04'57	24°13'22		12599 Oct 19 21:18	0° ∡	
retrograde	12598 Nov 29 05:35	6° る 54'15		desc. node	12599 Oct 27 20:46	9° ∡ ′59'18	
evening set	12598 Dec 04 06:37	5° る 58'22		evening max el	12599 Oct 28 00:18	10° ∡ ¹07'58	22°31'37
min. Earth dist.	12598 Dec 10 00:54	3° ⋜ 04'50	0.55910 AU	retrograde	12599 Nov 09 23:19	16° ∡ ³33'54	
inferior conj	12598 Dec 12 06:18	1° る 42'56	-5°41'17	evening set	12599 Nov 13 14:22	16° ₰ 05'06	
minimum elong	12598 Dec 12 11:33	1° る 34'53	5°39'45	min. Earth dist.	12599 Nov 21 07:59	12° ∡ ³36′50	0.54806 AU
	12598 Dec 15 03:51	30°₽ ⋌ 7		inferior conj	12599 Nov 22 05:19	12° ∡ ¹06'40	-5°50'52
morning rise	12598 Dec 20 18:30	27° ∡ ¹43'44		minimum elong	12599 Nov 22 02:18	12° ∡ 10'57	5°49'50
direct	12598 Dec 23 07:06	27° ∡ ¹27′07		morning rise	12599 Nov 30 15:34	8° ∡ 18'56	
	12598 Dec 30 15:57	ರ°0		direct	12599 Dec 03 21:31	7° ∡ 754'58	
morning max el	12599 Jan 02 10:50	2° ට 18'43	19°50'47	morning max el	12599 Dec 15 14:22	13° ∡ ¹29'23	21°15'59
asc. node	12599 Jan 03 22:19	3°₹49'50		asc. node	12599 Dec 21 19:25	20° х 49′45	
	12599 Jan 19 16:36	0° ≈			12599 Dec 27 12:54	7°0	
morning set	12599 Jan 20 04:10	0° ≈ 58'32		morning set	12600 Jan 04 13:09	15° ⋜ 41'46	
-				-	12600 Jan 11 08:42	0° ≈	
superior conj	12599 Jan 27 23:53	16° ≈ 48′22	1°07'23				
minimum elong	12599 Jan 28 02:42	17° ≈ 02'23	1°07'42	superior conj	12600 Jan 11 19:48	0° ≈ 57'39	1°24'32
max. Earth dist.	12599 Feb 03 01:00	28° ≈ 27'51	1.37279 AU	minimum elong	12600 Jan 11 22:03	1° ≈ 09'15	1°25'10
	12599 Feb 03 20:51	0°)		max. Earth dist.	12600 Jan 16 11:03	10° ≈ 21'57	1.35237 AU

evening rise desc. node	12600 Jan 20 12:53 12600 Jan 23 19:48 12600 Jan 27 01:37	18°≈14'13 24°≈17'17 0°¥		minimum elong max. Earth dist.	12600 Dec 27 00:29 12600 Dec 30 04:39 12601 Jan 02 23:29	15°ප32'57 22°ප16'10 0°≈	1°35'38 1.33540 AU
	12600 Feb 16 02:05	0 ° Υ		evening rise	12601 Jan 03 20:51	1° ≈ 45'57	
evening max el	12600 Feb 24 20:28 12600 Mar 09 20:39	9° Υ 54'32 17° Υ 15'09	26°31'20	desc. node	12601 Jan 10 16:34 12601 Jan 20 00:11	14° ≈ 33'44 0° ¥	
retrograde evening set	12600 Mar 16 04:52	1/ 11309 14° Υ 43'25		evening max el	12601 Jan 20 00.11 12601 Feb 07 10:01	1 1 1	27°15'18
asc. node	12600 Mar 19 16:51	11° Y 13'57		<i>y</i>	12601 Feb 16 14:36	0° Υ	
min. Earth dist.	12600 Mar 20 07:05	10° Ƴ 32′29	0.66530 AU	retrograde	12601 Feb 20 22:09	0° Ƴ 54'16	
inferior conj	12600 Mar 22 03:48	8° Υ 18'01 8° Υ 21'32	0°46'34 0°46'04		12601 Feb 24 23:15	30°₹¥ 28°¥22'36	
minimum elong morning rise	12600 Mar 22 02:38 12600 Mar 28 01:24	8° γ 21'32 2° γ '36'21	0-4604	evening set min. Earth dist.	12601 Feb 27 15:14 12601 Mar 03 12:38	24° X 44'32	0.64968 AU
direct	12600 Mar 31 02:12	1° Υ 44'48		inferior conj	12601 Mar 05 21:16	22°) (08'50	
morning max el	12600 Apr 06 13:35	5° Y 11′24	18°23'47	minimum elong	12601 Mar 05 21:40	22°) €07'44	0°13'26
desc. node	12600 Apr 21 21:47	26° Y 43'34		transit middle	12601 Mar 05 21:40	22°)(07'44	0°13'26
morning set	12600 Apr 23 23:26 12600 Apr 26 17:26	0° と 4° と 21'42		transit begin transit end	12601 Mar 05 20:01 12601 Mar 05 23:19	22° 升 12'17 22° 升 03'11	
morning set	12000 Apr 20 17.20	4 02142		asc. node	12601 Mar 06 14:17	21°\(\frac{1}{2}\)21'15	
superior conj	12600 May 12 11:24	29° 8 08'51	-2°00'32	morning rise	12601 Mar 12 05:46	16° ¥ 40′15	
minimum elong	12600 May 12 03:34	. •	2°00'49	direct	12601 Mar 14 21:24	16°) €03'17	
max. Earth dist.	12600 May 13 01:28	0° Ⅱ 03'44	1.45786 AU	morning max el	12601 Mar 21 05:51	19°) €21'42	17°56'30
evening rise	12600 May 13 00:30 12600 May 28 08:20	0° П 23° П 59'10		morning set	12601 Mar 29 07:24 12601 Apr 07 22:07	0° Υ 15° Υ 37'54	
evening rise	12600 Jun 01 04:08	0°95		desc. node	12601 Apr 08 18:23	17° Υ 01'37	
greatest brilliancy	12600 Jun 07 01:58	9°513'39	-0.8m		12601 Apr 16 16:43	0°8	
asc. node	12600 Jun 15 14:26	21° © 38'12					
evening max el	12600 Jun 19 17:38	26°528'13	18°55'25	superior conj	12601 Apr 22 00:35	8° 8 31'57	
retrograde	12600 Jun 25 02:03 12600 Jun 26 11:13	0° Ω 0° Ω 10'38		minimum elong max. Earth dist.	12601 Apr 21 15:41 12601 Apr 25 21:50	7° 8 56'38 14° 8 40'04	1°29'40 1.45474 AU
retrograde	12600 Jun 27 19:50	30° ₹ 5		max. Earth dist.	12601 May 05 18:34	0° П	1.43474710
evening set	12600 Jun 29 20:48	29° © 03'54		evening rise	12601 May 08 01:20	3° Ⅱ 30′35	
inferior conj	12600 Jul 05 09:23	23° © 20'19	3°03'50	greatest brilliancy	12601 May 22 07:04	25° Ⅱ 01'33	-0.6m
minimum elong	12600 Jul 05 10:45	23°5015'57	3°02'46	1	12601 May 25 18:14	0°©	
min. Earth dist. morning rise	12600 Jul 07 02:11 12600 Jul 11 00:00	21° © 11'22 16° © 57'16	0.66256 AU	asc. node evening max el	12601 Jun 02 11:31 12601 Jun 02 23:43	9° 5 43'02 10° 5 14'17	19°45'46
direct	12600 Jul 17 06:58	14° © 15'58		retrograde	12601 Jun 10 09:25	14°526'25	17 43 40
desc. node	12600 Jul 18 21:35	14° © 25'17		evening set	12601 Jun 14 04:14	13° © 03'11	
morning max el	12600 Jul 30 05:55	21°958'23	26°27'24	inferior conj	12601 Jun 19 12:14		3°13'35
	12600 Aug 06 06:18 12600 Aug 26 11:35	0° N 0° N		minimum elong min. Earth dist.	12601 Jun 19 12:33 12601 Jun 20 14:28	7° © 04'42 5° © 37'55	3°12'38 0.67576 AU
morning set	12600 Aug 20 11:33 12600 Sep 04 03:57	15° Mp 28'50		morning rise	12601 Jun 24 20:29	0° © 43'34	0.07370 AU
max. Earth dist.	12600 Sep 08 02:57	23° m 05'36	1.34599 AU	<i>5 5 1</i>	12601 Jun 25 17:29	30° Ŗ Ⅱ	
asc. node	12600 Sep 11 15:20	0° ჲ 08'25		direct	12601 Jun 30 16:59	28° Ⅱ 08'52	
	12600 Sep 11 13:41	0∘ ⊽		desc. node	12601 Jul 05 18:48	29° Ⅱ 41'50	
superior conj	12600 Sep 13 03:26	3° ≏ 13'38	0°14'22	morning max el	12601 Jul 06 07:06 12601 Jul 12 16:25	0° © 5° © 19'35	25°08'55
minimum elong	12600 Sep 13 02:40	3° ⊆ 09'38	0°14'10	morning max ci	12601 Jul 31 17:03	0°Ω	25 00 55
behind sun begin	12600 Sep 12 23:51	2° £ 55'06		morning set	12601 Aug 17 14:44	27° Ω 39'47	
behind sun end	12600 Sep 13 05:29	3° ≏ 24'09			12601 Aug 18 21:55	0° m	
evening rise	12600 Sep 20 15:32	18° £ 56'31 0° M		max. Earth dist.	12601 Aug 21 04:59	4° Mp 12′25	1.36634 AU
evening max el	12600 Sep 26 02:54 12600 Oct 09 18:43	20°M27'30	20°57'46	superior conj	12601 Aug 27 16:02	16° m 35'39	-0°17'15
desc. node	12600 Oct 14 18:08	24°M21'15		minimum elong	12601 Aug 27 17:09		0°17'20
retrograde	12600 Oct 21 10:05	26°M14′27		asc. node	12601 Aug 29 11:58	20° m 14'09	
evening set	12600 Oct 23 20:26	26°M00'24	5001100		12601 Sep 03 07:44	0∘ ⊽	
inferior conj minimum elong	12600 Nov 01 20:50 12600 Nov 01 11:17	22°M06'13 22°M19'45		evening rise	12601 Sep 04 20:47 12601 Sep 20 17:05	3° ჲ 08'06 0°��	
min. Earth dist.	12600 Nov 02 14:29		0.54569 AU	evening max el	12601 Sep 22 02:48	1°M29'50	19°42'24
morning rise	12600 Nov 10 02:27	18° ™ 13'07		desc. node	12601 Oct 01 15:35	6°M28'11	
direct	12600 Nov 14 05:27	17°M36'39	22050110	retrograde	12601 Oct 02 02:35	6°M28'47	
morning max el	12600 Nov 27 05:32	23°M.52'51 0°⊀	22°59'10	evening set	12601 Oct 03 23:52	6°M18'54	3°25'10
asc. node	12600 Dec 02 17:01 12600 Dec 08 16:26	0°×' 8° <i>×</i> 745'38		inferior conj minimum elong	12601 Oct 12 19:36 12601 Oct 12 10:51	2°M15'48 2°M29'26	
	12600 Dec 19 19:06	0°ප		min. Earth dist.	12601 Oct 14 23:39	0°M54'43	0.55270 AU
morning set	12600 Dec 20 00:31	0° 궁 28'45			12601 Oct 16 12:27	30° ₽ Ω	
	12(00 D 2(22 12	150=2000	1924146	morning rise	12601 Oct 20 20:07	27° 2 56'41	
superior conj	12600 Dec 26 23:15	15° る 26'21	1*34'46	direct	12601 Oct 25 19:25	27° ≏ 02'06	

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	12601 Nov 03 18:12	0°M	
morning max el	12601 Nov 08 15:50	3°M55'08	24°47'25
asc. node	12601 Nov 25 13:22	27°M23'43	
	12601 Nov 26 23:25	0° ∡ ¹	
morning set	12601 Dec 04 12:23	15° ∡ 13'36	
superior conj	12601 Dec 11 07:33	0° ප 06'20	1°38'32
minimum elong	12601 Dec 11 07:39	0° ප 06'55	1°39'29
	12601 Dec 11 06:24	0°ರ	
max. Earth dist.	12601 Dec 13 05:43	4° ප 18'37	1.32288 AU
evening rise	12601 Dec 18 15:07	15° ⋜ 42'51	
	12601 Dec 26 00:17	0° ≈	
desc. node	12601 Dec 28 13:27	4° ≈ 32'23	
	12602 Jan 14 19:05	0° ∀	