

opposition	6600 Jan 22 15:13	3°Ω08'56 -13°19'36	conjunction	6606 Jul 28 02:26	9°Ω17'16 -11°38'04
min. Earth dist.	6600 Jan 22 11:02	3°Ω09'08 47.98036 AU	minimum elong	6606 Jul 28 02:38	9°Ω17'17 11°38'06
direct	6600 Apr 14 09:49	2°Ω10'30	max. Earth dist.	6606 Jul 27 22:28	9°Ω17'02 49.46340 AU
evening set	6600 Jul 13 08:43	3°Ω24'37	morning rise	6606 Aug 07 04:46	9°Ω30'59
			retrograde	6606 Nov 07 14:20	10°Ω46'15
conjunction	6600 Jul 21 19:02	3°Ω36'01 -12°42'53	opposition	6607 Jan 29 22:20	9°Ω46'53 -12°01'13
minimum elong	6600 Jul 21 19:13	3°Ω36'02 12°42'56	min. Earth dist.	6607 Jan 30 02:06	9°Ω46'42 47.46113 AU
max. Earth dist.	6600 Jul 22 00:03	3°Ω36'18 49.90025 AU	direct	6607 Apr 21 13:31	8°Ω48'05
morning rise	6600 Jul 30 06:22	3°Ω47'30	evening set	6607 Jul 19 00:43	10°Ω00'18
retrograde	6600 Nov 01 05:32	5°Ω04'35			
opposition	6601 Jan 23 19:29	4°Ω05'26 -13°09'03	conjunction	6607 Jul 29 07:38	10°Ω14'17 -11°26'32
min. Earth dist.	6601 Jan 23 15:52	4°Ω05'36 47.92086 AU	minimum elong	6607 Jul 29 07:49	10°Ω14'17 11°26'35
direct	6601 Apr 15 12:31	3°Ω06'59	max. Earth dist.	6607 Jul 29 03:18	10°Ω14'02 49.37454 AU
evening set	6601 Jul 14 07:03	4°Ω20'49	morning rise	6607 Aug 08 15:55	10°Ω28'20
			retrograde	6607 Nov 08 18:12	11°Ω43'20
conjunction	6601 Jul 23 00:05	4°Ω32'37 -12°32'36	opposition	6608 Jan 31 02:57	10°Ω43'53 -11°49'08
minimum elong	6601 Jul 23 00:17	4°Ω32'38 12°32'39	min. Earth dist.	6608 Jan 31 08:05	10°Ω43'38 47.36918 AU
max. Earth dist.	6601 Jul 23 02:49	4°Ω32'46 49.84005 AU	direct	6608 Apr 21 18:19	9°Ω45'00
morning rise	6601 Jul 31 18:24	4°Ω44'29	evening set	6608 Jul 19 00:18	10°Ω57'00
retrograde	6601 Nov 02 14:03	6°Ω01'15			
opposition	6602 Jan 24 23:55	5°Ω02'07 -12°58'16	conjunction	6608 Jul 29 12:58	11°Ω11'18 -11°14'45
min. Earth dist.	6602 Jan 24 21:31	5°Ω02'13 47.85698 AU	minimum elong	6608 Jul 29 13:10	11°Ω11'19 11°14'48
direct	6602 Apr 16 13:01	4°Ω03'39	max. Earth dist.	6608 Jul 29 07:43	11°Ω11'00 49.28255 AU
evening set	6602 Jul 15 05:32	5°Ω17'12	morning rise	6608 Aug 09 03:02	11°Ω25'41
			retrograde	6608 Nov 08 21:19	12°Ω40'27
conjunction	6602 Jul 24 05:21	5°Ω29'23 -12°22'06	opposition	6609 Jan 31 07:23	11°Ω40'55 -11°36'48
minimum elong	6602 Jul 24 05:32	5°Ω29'24 12°22'07	min. Earth dist.	6609 Jan 31 12:22	11°Ω40'41 47.27428 AU
max. Earth dist.	6602 Jul 24 07:18	5°Ω29'30 49.77494 AU	direct	6609 Apr 22 23:33	10°Ω41'57
morning rise	6602 Aug 02 06:22	5°Ω41'38	evening set	6609 Jul 19 23:58	11°Ω53'45
retrograde	6602 Nov 03 16:57	6°Ω58'06			
opposition	6603 Jan 26 04:22	5°Ω58'57 -12°47'17	conjunction	6609 Jul 30 18:19	12°Ω08'23 -11°02'45
min. Earth dist.	6603 Jan 26 03:51	5°Ω58'58 47.78787 AU	minimum elong	6609 Jul 30 18:30	12°Ω08'23 11°02'47
direct	6603 Apr 17 18:27	5°Ω00'27	max. Earth dist.	6609 Jul 30 11:35	12°Ω08'00 49.18759 AU
evening set	6603 Jul 16 04:22	6°Ω13'44	morning rise	6609 Aug 10 14:17	12°Ω23'07
			retrograde	6609 Nov 10 02:23	13°Ω37'38
conjunction	6603 Jul 25 10:38	6°Ω26'17 -12°11'24	opposition	6610 Feb 01 12:06	12°Ω38'03 -11°24'14
minimum elong	6603 Jul 25 10:49	6°Ω26'18 12°11'27	min. Earth dist.	6610 Feb 01 18:50	12°Ω37'44 47.17658 AU
max. Earth dist.	6603 Jul 25 11:08	6°Ω26'19 49.70467 AU	direct	6610 Apr 24 05:41	11°Ω39'00
morning rise	6603 Aug 03 18:07	6°Ω38'55	evening set	6610 Jul 20 23:46	12°Ω50'36
retrograde	6603 Nov 04 19:02	7°Ω55'04			
opposition	6604 Jan 27 08:50	6°Ω55'53 -12°36'05	conjunction	6610 Jul 31 23:49	13°Ω05'34 -10°50'30
min. Earth dist.	6604 Jan 27 08:45	6°Ω55'53 47.71347 AU	minimum elong	6610 Aug 01 00:01	13°Ω05'35 10°50'32
direct	6604 Apr 18 01:44	5°Ω57'20	max. Earth dist.	6610 Jul 31 17:14	13°Ω05'11 49.08995 AU
evening set	6604 Jul 16 03:10	7°Ω10'21	morning rise	6610 Aug 12 01:13	13°Ω20'38
			retrograde	6610 Nov 11 08:13	14°Ω34'57
conjunction	6604 Jul 25 15:47	7°Ω23'16 -12°00'30	opposition	6611 Feb 02 16:40	13°Ω35'19 -11°11'24
minimum elong	6604 Jul 25 15:58	7°Ω23'16 12°00'32	min. Earth dist.	6611 Feb 02 23:30	13°Ω34'59 47.07610 AU
max. Earth dist.	6604 Jul 25 14:14	7°Ω23'10 49.62900 AU	direct	6611 Apr 25 10:39	12°Ω36'12
morning rise	6604 Aug 04 05:47	7°Ω36'15	evening set	6611 Jul 21 23:51	13°Ω47'37
retrograde	6604 Nov 05 01:12	8°Ω52'07			
opposition	6605 Jan 27 13:28	7°Ω52'53 -12°24'41	conjunction	6611 Aug 02 05:14	14°Ω02'55 -10°38'01
min. Earth dist.	6605 Jan 27 15:34	7°Ω52'47 47.63385 AU	minimum elong	6611 Aug 02 05:24	14°Ω02'56 10°38'03
direct	6605 Apr 19 07:18	6°Ω54'16	max. Earth dist.	6611 Aug 01 20:43	14°Ω02'26 48.98961 AU
evening set	6605 Jul 17 02:17	8°Ω07'00	morning rise	6611 Aug 13 12:16	14°Ω18'19
				6611 Sep 16 08:31	15°Ω
conjunction	6605 Jul 26 21:12	8°Ω20'16 -11°49'24	retrograde	6611 Nov 12 17:15	15°Ω32'27
minimum elong	6605 Jul 26 21:23	8°Ω20'16 11°49'27		6612 Jan 09 21:44	15°RΩ
max. Earth dist.	6605 Jul 26 19:19	8°Ω20'09 49.54840 AU	opposition	6612 Feb 03 21:26	14°Ω32'46 -10°58'19
morning rise	6605 Aug 05 17:20	8°Ω33'37	min. Earth dist.	6612 Feb 04 05:10	14°Ω32'24 46.97289 AU
retrograde	6605 Nov 06 06:37	9°Ω49'11	direct	6612 Apr 25 11:35	13°Ω33'35
opposition	6606 Jan 28 17:49	8°Ω49'53 -12°13'04	evening set	6612 Jul 21 23:56	14°Ω44'52
min. Earth dist.	6606 Jan 28 20:28	8°Ω49'45 47.54948 AU			
direct	6606 Apr 20 11:55	7°Ω51'11	conjunction	6612 Aug 02 10:50	15°Ω00'30 -10°25'17
evening set	6606 Jul 18 01:36	9°Ω03'39	minimum elong	6612 Aug 02 11:02	15°Ω00'30 10°25'19
			max. Earth dist.	6612 Aug 02 02:03	15°Ω00'00 48.88616 AU

	6612 Aug 02 02:09	15°♏	direct	6619 May 02 22:45	20°♏22'12	
morning rise	6612 Aug 13 23:15	15°♏16'13	evening set	6619 Jul 28 08:19	21°♏32'50	
retrograde	6612 Nov 12 22:48	16°♏30'11	max. Earth dist.	6619 Aug 09 11:01	21°♏49'34	48.03653 AU
opposition	6613 Feb 04 02:18	15°♏30'28 -10°45'00				
min. Earth dist.	6613 Feb 04 11:32	15°♏30'01 46.86622 AU	conjunction	6619 Aug 10 05:31	21°♏50'38 -8°50'01	
	6613 Mar 04 05:23	15°♏♏	minimum elong	6619 Aug 10 05:41	21°♏50'39 8°50'02	
direct	6613 Apr 26 16:01	14°♏31'14	morning rise	6619 Aug 23 04:30	22°♏08'32	
	6613 Jun 18 06:51	15°♏	retrograde	6619 Nov 20 15:07	23°♏21'40	
evening set	6613 Jul 23 00:34	15°♏42'23	opposition	6620 Feb 11 14:12	22°♏21'22 -9°05'20	
			min. Earth dist.	6620 Feb 12 07:48	22°♏20'32 45.99114 AU	
conjunction	6613 Aug 03 16:40	15°♏58'20 -10°12'20	direct	6620 May 03 05:29	21°♏21'26	
minimum elong	6613 Aug 03 16:50	15°♏58'21 10°12'21	evening set	6620 Jul 28 10:08	22°♏32'00	
max. Earth dist.	6613 Aug 03 06:41	15°♏57'46 48.77909 AU				
morning rise	6613 Aug 15 10:19	16°♏14'24	conjunction	6620 Aug 10 11:56	22°♏50'05 -8°35'30	
retrograde	6613 Nov 14 02:27	17°♏28'12	minimum elong	6620 Aug 10 12:06	22°♏50'06 8°35'31	
opposition	6614 Feb 05 07:00	16°♏28'26 -10°31'27	max. Earth dist.	6620 Aug 09 17:27	22°♏49'01 47.89844 AU	
min. Earth dist.	6614 Feb 05 16:38	16°♏27'59 46.75555 AU	morning rise	6620 Aug 23 15:17	23°♏08'18	
direct	6614 Apr 27 22:16	15°♏29'08	retrograde	6620 Nov 20 21:07	24°♏21'21	
evening set	6614 Jul 24 01:25	16°♏40'12	opposition	6621 Feb 11 19:37	23°♏20'57 -8°50'08	
			min. Earth dist.	6621 Feb 12 13:18	23°♏20'06 45.85016 AU	
conjunction	6614 Aug 04 22:36	16°♏56'28 -9°59'09	direct	6621 May 04 11:54	22°♏20'53	
minimum elong	6614 Aug 04 22:48	16°♏56'29 9°59'12	evening set	6621 Jul 29 12:27	23°♏31'25	
max. Earth dist.	6614 Aug 04 10:34	16°♏55'47 48.66744 AU				
morning rise	6614 Aug 16 21:32	17°♏12'50	conjunction	6621 Aug 11 18:27	23°♏49'48 -8°20'44	
retrograde	6614 Nov 15 08:24	18°♏26'32	minimum elong	6621 Aug 11 18:37	23°♏49'49 8°20'46	
opposition	6615 Feb 06 12:07	17°♏26'42 -10°17'40	max. Earth dist.	6621 Aug 10 21:58	23°♏48'36 47.75742 AU	
min. Earth dist.	6615 Feb 06 23:59	17°♏26'08 46.64009 AU	morning rise	6621 Aug 25 02:18	24°♏08'18	
direct	6615 Apr 29 04:04	16°♏27'20	retrograde	6621 Nov 22 07:38	25°♏21'18	
evening set	6615 Jul 25 02:17	17°♏38'17	opposition	6622 Feb 13 01:04	24°♏20'47 -8°34'41	
			min. Earth dist.	6622 Feb 13 19:48	24°♏19'53 45.70650 AU	
conjunction	6615 Aug 06 04:36	17°♏54'52 -9°45'46	direct	6622 May 05 13:15	23°♏20'36	
minimum elong	6615 Aug 06 04:47	17°♏54'53 9°45'47	evening set	6622 Jul 30 14:48	24°♏31'08	
max. Earth dist.	6615 Aug 05 16:10	17°♏54'09 48.55086 AU	max. Earth dist.	6622 Aug 12 04:30	24°♏48'36 47.61369 AU	
morning rise	6615 Aug 18 08:24	18°♏11'33				
retrograde	6615 Nov 16 14:41	19°♏25'07	conjunction	6622 Aug 13 01:11	24°♏49'48 -8°05'44	
opposition	6616 Feb 07 17:14	18°♏25'14 -10°03'40	minimum elong	6622 Aug 13 01:20	24°♏49'49 8°05'46	
min. Earth dist.	6616 Feb 08 05:36	18°♏24'38 46.51943 AU	morning rise	6622 Aug 26 13:11	25°♏08'35	
direct	6616 Apr 29 09:09	17°♏25'46	retrograde	6622 Nov 23 15:35	26°♏21'33	
evening set	6616 Jul 25 03:36	18°♏36'37	opposition	6623 Feb 14 06:50	25°♏20'57 -8°18'58	
			min. Earth dist.	6623 Feb 15 02:38	25°♏19'59 45.56014 AU	
conjunction	6616 Aug 06 10:42	18°♏53'30 -9°32'09	direct	6623 May 06 17:19	24°♏20'38	
minimum elong	6616 Aug 06 10:53	18°♏53'31 9°32'12	evening set	6623 Jul 31 17:20	25°♏31'11	
max. Earth dist.	6616 Aug 05 19:50	18°♏52'39 48.42913 AU	max. Earth dist.	6623 Aug 13 10:12	25°♏48'52 47.46744 AU	
morning rise	6616 Aug 18 19:36	19°♏10'30				
retrograde	6616 Nov 16 23:30	20°♏23'57	conjunction	6623 Aug 14 07:47	25°♏50'08 -7°50'28	
opposition	6617 Feb 07 22:21	19°♏23'58 -9°49'26	minimum elong	6623 Aug 14 07:57	25°♏50'09 7°50'31	
min. Earth dist.	6617 Feb 08 12:18	19°♏23'18 46.39381 AU	morning rise	6623 Aug 27 23:57	26°♏09'13	
direct	6617 Apr 30 11:36	18°♏24'23	retrograde	6623 Nov 24 20:48	27°♏22'09	
evening set	6617 Jul 26 04:58	19°♏35'09	opposition	6624 Feb 15 12:37	26°♏21'27 -8°02'59	
			min. Earth dist.	6624 Feb 16 08:28	26°♏20'30 45.41115 AU	
conjunction	6617 Aug 07 17:01	19°♏52'21 -9°18'20	direct	6624 May 06 23:58	25°♏21'01	
minimum elong	6617 Aug 07 17:11	19°♏52'22 9°18'22	evening set	6624 Jul 31 20:17	26°♏31'36	
max. Earth dist.	6617 Aug 07 01:21	19°♏51'27 48.30245 AU				
morning rise	6617 Aug 20 06:39	20°♏09'40	conjunction	6624 Aug 14 14:44	26°♏50'51 -7°34'58	
retrograde	6617 Nov 18 05:08	21°♏22'59	minimum elong	6624 Aug 14 14:53	26°♏50'51 7°35'00	
opposition	6618 Feb 09 03:37	20°♏22'54 -9°34'59	max. Earth dist.	6624 Aug 13 15:31	26°♏49'29 47.31816 AU	
min. Earth dist.	6618 Feb 09 19:06	20°♏22'10 46.26343 AU	morning rise	6624 Aug 28 11:00	27°♏10'13	
direct	6618 May 01 16:49	19°♏23'12	retrograde	6624 Nov 25 02:02	28°♏23'10	
evening set	6618 Jul 27 06:34	20°♏33'54	opposition	6625 Feb 15 18:33	27°♏22'22 -7°46'44	
			min. Earth dist.	6625 Feb 16 16:23	27°♏21'18 45.25897 AU	
conjunction	6618 Aug 08 23:13	20°♏51'24 -9°04'17	direct	6625 May 08 07:38	26°♏21'49	
minimum elong	6618 Aug 08 23:24	20°♏51'25 9°04'19	evening set	6625 Aug 01 23:31	27°♏32'27	
max. Earth dist.	6618 Aug 08 06:20	20°♏50'25 48.17143 AU				
morning rise	6618 Aug 21 17:33	21°♏09'00	conjunction	6625 Aug 15 22:01	27°♏51'59 -7°19'14	
retrograde	6618 Nov 19 09:48	22°♏22'13	minimum elong	6625 Aug 15 22:10	27°♏51'59 7°19'16	
opposition	6619 Feb 10 08:46	21°♏22'02 -9°20'17	max. Earth dist.	6625 Aug 14 22:37	27°♏50'36 47.16543 AU	
min. Earth dist.	6619 Feb 11 00:27	21°♏21'17 46.12903 AU	morning rise	6625 Aug 29 22:02	28°♏11'37	

retrograde	6625 Nov 26 08:23	29°024'36	min. Earth dist.	6632 Feb 24 21:57	4°037'38	44.06828 AU
opposition	6626 Feb 17 00:34	28°023'42 -7°30'15	direct	6632 May 15 02:59	3°037'21	
min. Earth dist.	6626 Feb 17 22:47	28°022'37 45.10286 AU	evening set	6632 Aug 08 06:26	4°048'35	
direct	6626 May 09 14:46	27°023'02	max. Earth dist.	6632 Aug 21 19:57	5°008'00	45.96776 AU
evening set	6626 Aug 03 03:11	28°033'43				
max. Earth dist.	6626 Aug 16 03:28	28°052'00 47.00834 AU	conjunction	6632 Aug 23 04:48	5°009'58 -5°22'27	
			minimum elong	6632 Aug 23 04:56	5°009'59 5°22'28	
conjunction	6626 Aug 17 05:16	28°053'31 -7°03'15	morning rise	6632 Sep 07 04:35	5°031'28	
minimum elong	6626 Aug 17 05:25	28°053'32 7°03'15	retrograde	6632 Dec 03 18:44	6°044'51	
morning rise	6626 Aug 31 09:12	29°013'26	opposition	6633 Feb 23 23:07	5°042'50 -5°27'50	
	6626 Oct 08 09:23	0°00	min. Earth dist.	6633 Feb 25 05:52	5°041'18 43.88253 AU	
retrograde	6626 Nov 27 18:13	0°026'27	direct	6633 May 16 08:47	4°040'52	
	6627 Jan 17 19:14	30°00	evening set	6633 Aug 09 12:04	5°052'16	
opposition	6627 Feb 18 06:50	29°025'27 -7°13'31	max. Earth dist.	6633 Aug 23 03:09	6°011'50 45.78181 AU	
min. Earth dist.	6627 Feb 19 06:46	29°024'17 44.94221 AU				
direct	6627 May 10 18:35	28°024'38	conjunction	6633 Aug 24 13:16	6°013'54 -5°04'47	
evening set	6627 Aug 04 07:00	29°035'23	minimum elong	6633 Aug 24 13:22	6°013'54 5°04'48	
max. Earth dist.	6627 Aug 17 10:16	29°053'53 46.84634 AU	morning rise	6633 Sep 08 16:00	6°035'39	
			retrograde	6633 Dec 05 04:12	7°049'09	
conjunction	6627 Aug 18 12:53	29°055'28 -6°47'02	opposition	6634 Feb 25 06:19	6°046'58 -5°09'18	
minimum elong	6627 Aug 18 13:02	29°055'28 6°47'04	min. Earth dist.	6634 Feb 26 13:18	6°045'25 43.69439 AU	
	6627 Aug 21 17:36	0°00	direct	6634 May 17 15:01	5°044'48	
morning rise	6627 Sep 01 20:20	0°015'39	evening set	6634 Aug 10 17:54	6°056'24	
retrograde	6627 Nov 29 03:04	1°028'42	max. Earth dist.	6634 Aug 24 10:25	7°016'08 45.59337 AU	
opposition	6628 Feb 19 13:17	0°027'33 -6°56'32				
min. Earth dist.	6628 Feb 20 14:40	0°026'19 44.77647 AU	conjunction	6634 Aug 25 21:49	7°018'17 -4°46'52	
	6628 Mar 14 21:22	30°00	minimum elong	6634 Aug 25 21:56	7°018'17 4°46'53	
direct	6628 May 10 23:41	29°026'35	morning rise	6634 Sep 10 03:14	7°040'16	
	6628 Jul 06 01:25	0°00	retrograde	6634 Dec 06 11:30	8°053'57	
evening set	6628 Aug 04 11:09	0°037'24	opposition	6635 Feb 26 13:50	7°051'35 -4°50'29	
			min. Earth dist.	6635 Feb 27 22:22	7°049'58 43.50396 AU	
conjunction	6628 Aug 18 20:32	0°057'45 -6°30'36	direct	6635 May 18 23:54	6°049'14	
minimum elong	6628 Aug 18 20:41	0°057'46 6°30'36	evening set	6635 Aug 12 00:03	8°001'03	
max. Earth dist.	6628 Aug 17 16:17	0°056'04 46.67940 AU	max. Earth dist.	6635 Aug 25 19:22	8°021'02 45.40286 AU	
morning rise	6628 Sep 02 07:36	1°018'13				
retrograde	6628 Nov 29 11:58	2°031'17	conjunction	6635 Aug 27 06:41	8°023'11 -4°28'41	
opposition	6629 Feb 19 19:47	1°029'59 -6°39'18	minimum elong	6635 Aug 27 06:47	8°023'12 4°28'43	
min. Earth dist.	6629 Feb 20 21:45	1°028'43 44.60579 AU	morning rise	6635 Sep 11 14:37	8°045'25	
direct	6629 May 12 05:33	0°028'49	retrograde	6635 Dec 07 18:32	9°059'17	
evening set	6629 Aug 05 15:41	1°039'44	opposition	6636 Feb 27 21:23	8°056'47 -4°31'24	
max. Earth dist.	6629 Aug 18 22:16	1°058'33 46.50742 AU	min. Earth dist.	6636 Feb 29 05:43	8°055'09 43.31139 AU	
			direct	6636 May 19 08:57	7°054'15	
conjunction	6629 Aug 20 04:28	2°000'21 -6°13'55	evening set	6636 Aug 12 06:41	9°006'18	
minimum elong	6629 Aug 20 04:36	2°000'21 6°13'57	max. Earth dist.	6636 Aug 26 02:21	9°026'24 45.21000 AU	
morning rise	6629 Sep 03 18:57	2°021'04				
retrograde	6629 Nov 30 18:14	3°034'12	conjunction	6636 Aug 27 15:40	9°028'41 -4°10'16	
opposition	6630 Feb 21 02:24	2°032'43 -6°21'50	minimum elong	6636 Aug 27 15:46	9°028'41 4°10'17	
min. Earth dist.	6630 Feb 22 06:39	2°031'20 44.43043 AU	morning rise	6636 Sep 12 02:12	9°051'10	
direct	6630 May 13 13:15	1°031'22	retrograde	6636 Dec 08 05:23	11°005'16	
evening set	6630 Aug 06 20:20	2°042'22	opposition	6637 Feb 28 05:16	10°002'36 -4°12'02	
max. Earth dist.	6630 Aug 20 05:59	3°001'24 46.33115 AU	min. Earth dist.	6637 Mar 01 15:15	10°000'53 43.11634 AU	
			direct	6637 May 20 14:36	8°059'54	
conjunction	6630 Aug 21 12:32	3°003'14 -5°57'00	evening set	6637 Aug 13 13:43	10°012'14	
minimum elong	6630 Aug 21 12:40	3°003'15 5°57'01	max. Earth dist.	6637 Aug 27 11:34	10°032'32 45.01420 AU	
morning rise	6630 Sep 05 06:09	3°024'13				
retrograde	6630 Dec 01 23:36	4°037'24	conjunction	6637 Aug 29 01:10	10°034'51 -3°51'34	
opposition	6631 Feb 22 09:08	3°035'45 -6°04'06	minimum elong	6637 Aug 29 01:16	10°034'51 3°51'35	
min. Earth dist.	6631 Feb 23 13:32	3°034'21 44.25104 AU	morning rise	6637 Sep 13 13:48	10°057'34	
direct	6631 May 14 22:10	2°034'12	retrograde	6637 Dec 09 16:07	12°011'54	
evening set	6631 Aug 08 01:14	3°045'18	opposition	6638 Mar 01 13:14	11°009'06 -3°52'25	
max. Earth dist.	6631 Aug 21 11:43	4°004'28 46.15108 AU	min. Earth dist.	6638 Mar 03 00:10	11°007'20 42.91803 AU	
			direct	6638 May 21 21:04	10°006'12	
conjunction	6631 Aug 22 20:25	4°006'26 -5°39'51	evening set	6638 Aug 14 21:18	11°018'50	
minimum elong	6631 Aug 22 20:33	4°006'26 5°39'53	max. Earth dist.	6638 Aug 28 19:30	11°039'16 44.81491 AU	
morning rise	6631 Sep 06 17:22	4°027'40				
retrograde	6631 Dec 03 09:39	5°040'57	conjunction	6638 Aug 30 10:47	11°041'41 -3°32'38	
opposition	6632 Feb 23 16:07	4°039'07 -5°46'06	minimum elong	6638 Aug 30 10:53	11°041'42 3°32'39	

morning rise	6638 Sep 15 01:38	12° $\mathring{M}$ 04'38	conjunction	6645 Sep 07 13:18	19° $\mathring{M}$ 46'33	-1°13'10
retrograde	6638 Dec 11 05:23	13° $\mathring{M}$ 19'14	minimum elong	6645 Sep 07 13:20	19° $\mathring{M}$ 46'33	1°13'09
opposition	6639 Mar 02 21:32	12° $\mathring{M}$ 16'15 -3°32'31	morning rise	6645 Sep 23 14:08	20° $\mathring{M}$ 10'57	
min. Earth dist.	6639 Mar 04 09:12	12° $\mathring{M}$ 14'27 42.71599 AU	retrograde	6645 Dec 19 08:00	21° $\mathring{M}$ 27'44	
direct	6639 May 23 02:43	11° $\mathring{M}$ 13'10	opposition	6646 Mar 10 14:04	20° $\mathring{M}$ 23'06	-1°05'43
evening set	6639 Aug 16 05:06	12° $\mathring{M}$ 26'07	min. Earth dist.	6646 Mar 12 08:34	20° $\mathring{M}$ 20'53	41.19690 AU
max. Earth dist.	6639 Aug 30 03:47	12° $\mathring{M}$ 46'40 44.61136 AU	direct	6646 May 30 19:34	19° $\mathring{M}$ 18'07	
			evening set	6646 Aug 24 00:15	20° $\mathring{M}$ 33'41	
conjunction	6639 Aug 31 20:37	12° $\mathring{M}$ 49'12 -3°13'27	max. Earth dist.	6646 Sep 07 00:04	20° $\mathring{M}$ 55'03	43.08512 AU
minimum elong	6639 Aug 31 20:42	12° $\mathring{M}$ 49'12 3°13'28				
morning rise	6639 Sep 16 13:23	13° $\mathring{M}$ 12'23	conjunction	6646 Sep 09 00:57	20° $\mathring{M}$ 58'12	-0°52'14
retrograde	6639 Dec 12 15:50	14° $\mathring{M}$ 27'15	minimum elong	6646 Sep 09 00:59	20° $\mathring{M}$ 58'12	0°52'15
opposition	6640 Mar 03 06:14	13° $\mathring{M}$ 24'04 -3°12'21	morning rise	6646 Sep 25 02:33	21° $\mathring{M}$ 22'47	
min. Earth dist.	6640 Mar 04 19:59	13° $\mathring{M}$ 22'09 42.50958 AU	retrograde	6646 Dec 20 19:00	22° $\mathring{M}$ 40'00	
direct	6640 May 23 11:01	12° $\mathring{M}$ 20'45	opposition	6647 Mar 12 00:27	21° $\mathring{M}$ 35'06	-0°43'40
evening set	6640 Aug 16 13:26	13° $\mathring{M}$ 34'01	min. Earth dist.	6647 Mar 13 20:30	21° $\mathring{M}$ 32'47	40.97053 AU
max. Earth dist.	6640 Aug 30 13:20	13° $\mathring{M}$ 54'44 44.40351 AU	direct	6647 Jun 01 05:32	20° $\mathring{M}$ 29'51	
			evening set	6647 Aug 25 11:28	21° $\mathring{M}$ 45'54	
conjunction	6640 Sep 01 06:53	13° $\mathring{M}$ 57'20 -2°54'02	max. Earth dist.	6647 Sep 08 12:20	22° $\mathring{M}$ 07'27	42.85825 AU
minimum elong	6640 Sep 01 06:58	13° $\mathring{M}$ 57'20 2°54'03				
morning rise	6640 Sep 17 01:25	14° $\mathring{M}$ 20'44	conjunction	6647 Sep 10 12:55	22° $\mathring{M}$ 10'35	-0°31'05
retrograde	6640 Dec 12 23:02	15° $\mathring{M}$ 35'52	minimum elong	6647 Sep 10 12:56	22° $\mathring{M}$ 10'35	0°31'05
opposition	6641 Mar 04 14:52	14° $\mathring{M}$ 32'29 -2°51'55	morning rise	6647 Sep 26 14:52	22° $\mathring{M}$ 35'21	
min. Earth dist.	6641 Mar 06 04:54	14° $\mathring{M}$ 30'32 42.29887 AU	retrograde	6647 Dec 22 05:01	23° $\mathring{M}$ 53'01	
direct	6641 May 24 22:32	13° $\mathring{M}$ 28'55	opposition	6648 Mar 12 11:03	22° $\mathring{M}$ 47'53	-0°21'21
evening set	6641 Aug 17 22:18	14° $\mathring{M}$ 42'31	min. Earth dist.	6648 Mar 14 07:06	22° $\mathring{M}$ 45'33	40.74278 AU
max. Earth dist.	6641 Aug 31 21:16	15° $\mathring{M}$ 03'17 44.19136 AU	direct	6648 Jun 01 16:45	21° $\mathring{M}$ 42'21	
			evening set	6648 Aug 25 23:36	22° $\mathring{M}$ 58'56	
conjunction	6641 Sep 02 17:18	15° $\mathring{M}$ 06'02 -2°34'21	max. Earth dist.	6648 Sep 08 23:01	23° $\mathring{M}$ 20'31	42.62996 AU
minimum elong	6641 Sep 02 17:22	15° $\mathring{M}$ 06'03 2°34'22				
morning rise	6641 Sep 18 13:35	15° $\mathring{M}$ 29'40	conjunction	6648 Sep 11 01:16	23° $\mathring{M}$ 23'48	-0°09'41
retrograde	6641 Dec 14 08:46	16° $\mathring{M}$ 45'05	minimum elong	6648 Sep 11 01:16	23° $\mathring{M}$ 23'48	0°09'42
opposition	6642 Mar 05 23:56	15° $\mathring{M}$ 41'28 -2°31'13	behind sun begin	6648 Sep 10 19:58	23° $\mathring{M}$ 23'28	
min. Earth dist.	6642 Mar 07 15:53	15° $\mathring{M}$ 39'25 42.08422 AU	behind sun end	6648 Sep 11 06:35	23° $\mathring{M}$ 24'07	
direct	6642 May 26 07:21	14° $\mathring{M}$ 37'39	morning rise	6648 Sep 27 03:41	23° $\mathring{M}$ 48'43	
evening set	6642 Aug 19 07:16	15° $\mathring{M}$ 51'34	retrograde	6648 Dec 22 19:56	25° $\mathring{M}$ 06'53	
max. Earth dist.	6642 Sep 02 07:46	16° $\mathring{M}$ 12'32 43.97538 AU	asc. node	6649 Feb 21 19:52	24° $\mathring{M}$ 26'26	
			opposition	6649 Mar 13 21:50	24° $\mathring{M}$ 01'31	0°01'15
conjunction	6642 Sep 04 03:56	16° $\mathring{M}$ 15'19 -2°14'26	min. Earth dist.	6649 Mar 15 18:48	23° $\mathring{M}$ 59'08	40.51357 AU
minimum elong	6642 Sep 04 03:59	16° $\mathring{M}$ 15'19 2°14'27	direct	6649 Jun 03 00:10	22° $\mathring{M}$ 55'43	
morning rise	6642 Sep 20 01:28	16° $\mathring{M}$ 39'08	evening set	6649 Aug 27 12:16	24° $\mathring{M}$ 12'53	
retrograde	6642 Dec 15 18:50	17° $\mathring{M}$ 54'53	max. Earth dist.	6649 Sep 10 11:18	24° $\mathring{M}$ 34'34	42.39965 AU
opposition	6643 Mar 07 09:08	16° $\mathring{M}$ 51'01 -2°10'15				
min. Earth dist.	6643 Mar 09 01:42	16° $\mathring{M}$ 48'55 41.86602 AU	conjunction	6649 Sep 12 14:10	24° $\mathring{M}$ 37'54	0°12'03
direct	6643 May 27 15:46	15° $\mathring{M}$ 46'55	minimum elong	6649 Sep 12 14:10	24° $\mathring{M}$ 37'54	0°12'03
evening set	6643 Aug 20 16:50	17° $\mathring{M}$ 01'12	behind sun begin	6649 Sep 12 09:48	24° $\mathring{M}$ 37'38	
max. Earth dist.	6643 Sep 03 16:51	17° $\mathring{M}$ 22'14 43.75629 AU	behind sun end	6649 Sep 12 18:31	24° $\mathring{M}$ 38'10	
			morning rise	6649 Sep 28 16:29	25° $\mathring{M}$ 02'59	
conjunction	6643 Sep 05 14:43	17° $\mathring{M}$ 25'08 -1°54'16	retrograde	6649 Dec 24 10:00	26° $\mathring{M}$ 21'41	
minimum elong	6643 Sep 05 14:46	17° $\mathring{M}$ 25'08 1°54'15	opposition	6650 Mar 15 09:09	25° $\mathring{M}$ 16'05	0°24'06
morning rise	6643 Sep 21 13:40	17° $\mathring{M}$ 49'10	min. Earth dist.	6650 Mar 17 07:32	25° $\mathring{M}$ 13'37	40.28209 AU
retrograde	6643 Dec 17 08:11	19° $\mathring{M}$ 05'14	direct	6650 Jun 04 09:17	24° $\mathring{M}$ 10'01	
opposition	6644 Mar 07 18:30	18° $\mathring{M}$ 01'07 -1°49'01	evening set	6650 Aug 29 01:29	25° $\mathring{M}$ 27'47	
min. Earth dist.	6644 Mar 09 11:50	17° $\mathring{M}$ 58'59 41.64516 AU	max. Earth dist.	6650 Sep 11 23:30	25° $\mathring{M}$ 49'33	42.16684 AU
direct	6644 May 27 22:34	16° $\mathring{M}$ 56'43				
evening set	6644 Aug 21 02:46	18° $\mathring{M}$ 11'24	conjunction	6650 Sep 14 03:14	25° $\mathring{M}$ 52'58	0°33'55
max. Earth dist.	6644 Sep 04 03:00	18° $\mathring{M}$ 32'34 43.53449 AU	minimum elong	6650 Sep 14 03:13	25° $\mathring{M}$ 52'58	0°33'55
			morning rise	6650 Sep 30 05:25	26° $\mathring{M}$ 18'12	
conjunction	6644 Sep 06 01:52	18° $\mathring{M}$ 35'32 -1°33'50	retrograde	6650 Dec 26 00:38	27° $\mathring{M}$ 37'28	
minimum elong	6644 Sep 06 01:54	18° $\mathring{M}$ 35'32 1°33'51	opposition	6651 Mar 16 20:43	26° $\mathring{M}$ 31'37	0°47'12
morning rise	6644 Sep 22 01:50	18° $\mathring{M}$ 59'45	min. Earth dist.	6651 Mar 18 19:21	26° $\mathring{M}$ 29'07	40.04786 AU
retrograde	6644 Dec 17 20:22	20° $\mathring{M}$ 16'10	direct	6651 Jun 05 21:19	25° $\mathring{M}$ 25'16	
opposition	6645 Mar 09 04:16	19° $\mathring{M}$ 11'48 -1°27'30	evening set	6651 Aug 30 15:28	26° $\mathring{M}$ 43'41	
min. Earth dist.	6645 Mar 10 23:01	19° $\mathring{M}$ 09'34 41.42190 AU	max. Earth dist.	6651 Sep 13 10:58	27° $\mathring{M}$ 05'26	41.93075 AU
direct	6645 May 29 08:20	18° $\mathring{M}$ 07'07				
evening set	6645 Aug 22 13:13	19° $\mathring{M}$ 22'13	conjunction	6651 Sep 15 16:50	27° $\mathring{M}$ 09'00	0°56'02
max. Earth dist.	6645 Sep 05 14:11	19° $\mathring{M}$ 43'32 43.31066 AU	minimum elong	6651 Sep 15 16:48	27° $\mathring{M}$ 09'00	0°56'01

morning rise	6651 Oct 01 18:37	27° <u>0</u> 34'23	opposition	6658 Mar 25 16:26	5° <u>0</u> 47'21	3°35'47
retrograde	6651 Dec 27 14:33	28° <u>0</u> 54'14	min. Earth dist.	6658 Mar 27 21:33	5° <u>0</u> 44'23	38.32733 AU
opposition	6652 Mar 17 08:46	27° <u>0</u> 48'07 1°10'34	direct	6658 Jun 14 14:45	4° <u>0</u> 38'33	
min. Earth dist.	6652 Mar 19 09:29	27° <u>0</u> 45'30 39.81029 AU	evening set	6658 Sep 09 11:02	6° <u>0</u> 02'20	
direct	6652 Jun 06 09:40	26° <u>0</u> 41'28	max. Earth dist.	6658 Sep 22 13:50	6° <u>0</u> 24'02	40.19884 AU
evening set	6652 Aug 31 05:59	28° <u>0</u> 00'32				
max. Earth dist.	6652 Sep 14 00:49	28° <u>0</u> 22'23 41.69121 AU	conjunction	6658 Sep 25 02:55	6° <u>0</u> 28'18	3°36'54
			minimum elong	6658 Sep 25 02:48	6° <u>0</u> 28'18	3°36'55
conjunction	6652 Sep 16 06:57	28° <u>0</u> 26'00 1°18'22	morning rise	6658 Oct 10 18:38	6° <u>0</u> 54'17	
minimum elong	6652 Sep 16 06:55	28° <u>0</u> 26'00 1°18'23	retrograde	6659 Jan 06 02:57	8° <u>0</u> 19'07	
morning rise	6652 Oct 02 08:00	28° <u>0</u> 51'30	opposition	6659 Mar 27 07:15	7° <u>0</u> 10'49	4°00'45
	6652 Nov 26 22:42	0° <u>0</u>	min. Earth dist.	6659 Mar 29 13:36	7° <u>0</u> 07'46	38.07559 AU
retrograde	6652 Dec 28 03:04	0° <u>0</u> 11'58	direct	6659 Jun 16 04:32	6° <u>0</u> 01'39	
	6653 Jan 28 14:47	30° <u>0</u> 08'00	evening set	6659 Sep 11 06:18	7° <u>0</u> 26'22	
opposition	6653 Mar 18 21:07	29° <u>0</u> 05'35 1°34'10	max. Earth dist.	6659 Sep 24 07:11	7° <u>0</u> 48'06	39.94598 AU
min. Earth dist.	6653 Mar 20 22:06	29° <u>0</u> 02'56 39.56922 AU				
direct	6653 Jun 07 23:06	27° <u>0</u> 58'36	conjunction	6659 Sep 26 19:50	7° <u>0</u> 52'22	4°00'38
evening set	6653 Sep 01 21:19	29° <u>0</u> 18'22	minimum elong	6659 Sep 26 19:43	7° <u>0</u> 52'22	4°00'38
max. Earth dist.	6653 Sep 15 12:50	29° <u>0</u> 40'09 41.44820 AU	morning rise	6659 Oct 12 08:47	8° <u>0</u> 18'23	
			retrograde	6660 Jan 07 18:41	9° <u>0</u> 44'06	
conjunction	6653 Sep 17 21:18	29° <u>0</u> 43'57 1°40'56	opposition	6660 Mar 27 22:23	8° <u>0</u> 35'28	4°25'54
minimum elong	6653 Sep 17 21:15	29° <u>0</u> 43'56 1°40'56	min. Earth dist.	6660 Mar 30 04:47	8° <u>0</u> 32'24	37.82365 AU
	6653 Sep 27 20:48	0° <u>0</u>	direct	6660 Jun 16 18:59	7° <u>0</u> 25'57	
morning rise	6653 Oct 03 21:36	0° <u>0</u> 09'34	evening set	6660 Sep 12 02:34	8° <u>0</u> 51'39	
retrograde	6653 Dec 29 18:16	1° <u>0</u> 30'40	max. Earth dist.	6660 Sep 24 23:12	9° <u>0</u> 13'16	39.69298 AU
opposition	6654 Mar 20 09:48	0° <u>0</u> 24'00 1°58'02				
min. Earth dist.	6654 Mar 22 12:24	0° <u>0</u> 21'14 39.32504 AU	conjunction	6660 Sep 27 13:09	9° <u>0</u> 17'40	4°24'32
	6654 Apr 08 03:56	30° <u>0</u> 08'00	minimum elong	6660 Sep 27 13:01	9° <u>0</u> 17'39	4°24'34
direct	6654 Jun 09 09:38	29° <u>0</u> 16'40	morning rise	6660 Oct 12 23:22	9° <u>0</u> 43'41	
	6654 Aug 09 03:51	0° <u>0</u>	retrograde	6661 Jan 08 13:56	11° <u>0</u> 10'20	
evening set	6654 Sep 03 13:05	0° <u>0</u> 37'09	opposition	6661 Mar 29 14:02	10° <u>0</u> 01'24	4°51'13
max. Earth dist.	6654 Sep 17 03:10	0° <u>0</u> 58'59 41.20209 AU	min. Earth dist.	6661 Mar 31 21:00	9° <u>0</u> 58'17	37.57157 AU
			direct	6661 Jun 18 07:33	8° <u>0</u> 51'31	
conjunction	6654 Sep 19 12:09	1° <u>0</u> 02'50 2°03'44	evening set	6661 Sep 13 23:40	10° <u>0</u> 18'16	
minimum elong	6654 Sep 19 12:06	1° <u>0</u> 02'50 2°03'45	max. Earth dist.	6661 Sep 26 16:32	10° <u>0</u> 39'48	39.43932 AU
morning rise	6654 Oct 05 11:07	1° <u>0</u> 28'34				
retrograde	6654 Dec 31 09:23	2° <u>0</u> 50'20	conjunction	6661 Sep 29 07:09	10° <u>0</u> 44'16	4°48'35
opposition	6655 Mar 21 22:57	1° <u>0</u> 43'21 2°22'08	minimum elong	6661 Sep 29 07:00	10° <u>0</u> 44'16	4°48'35
min. Earth dist.	6655 Mar 24 02:29	1° <u>0</u> 40'32 39.07811 AU	morning rise	6661 Oct 14 13:57	11° <u>0</u> 10'16	
direct	6655 Jun 10 21:12	0° <u>0</u> 35'41	retrograde	6662 Jan 10 09:40	12° <u>0</u> 37'56	
evening set	6655 Sep 05 05:27	1° <u>0</u> 56'55	opposition	6662 Mar 31 06:14	11° <u>0</u> 28'40	5°16'43
max. Earth dist.	6655 Sep 18 17:01	2° <u>0</u> 18'44 40.95362 AU	min. Earth dist.	6662 Apr 02 14:31	11° <u>0</u> 25'28	37.31872 AU
			direct	6662 Jun 19 21:47	10° <u>0</u> 18'25	
conjunction	6655 Sep 21 03:07	2° <u>0</u> 22'41 2°26'44	evening set	6662 Sep 15 21:42	11° <u>0</u> 46'17	
minimum elong	6655 Sep 21 03:02	2° <u>0</u> 22'41 2°26'44	max. Earth dist.	6662 Sep 28 10:34	12° <u>0</u> 07'43	39.18474 AU
morning rise	6655 Oct 07 00:49	2° <u>0</u> 48'30				
retrograde	6656 Jan 02 03:38	4° <u>0</u> 10'59	conjunction	6662 Oct 01 01:37	12° <u>0</u> 12'15	5°12'45
opposition	6656 Mar 22 12:22	3° <u>0</u> 03'40 2°46'27	minimum elong	6662 Oct 01 01:28	12° <u>0</u> 12'15	5°12'47
min. Earth dist.	6656 Mar 24 16:10	3° <u>0</u> 00'49 38.82918 AU	morning rise	6662 Oct 16 04:51	12° <u>0</u> 38'13	
direct	6656 Jun 11 08:46	1° <u>0</u> 55'37	retrograde	6663 Jan 12 06:52	14° <u>0</u> 06'55	
evening set	6656 Sep 05 22:39	3° <u>0</u> 17'40	opposition	6663 Apr 01 22:53	12° <u>0</u> 57'19	5°42'21
max. Earth dist.	6656 Sep 19 07:18	3° <u>0</u> 39'27 40.70311 AU	min. Earth dist.	6663 Apr 04 07:04	12° <u>0</u> 54'06	37.06477 AU
			direct	6663 Jun 21 13:56	11° <u>0</u> 46'41	
conjunction	6656 Sep 21 18:43	3° <u>0</u> 43'32 2°49'56	evening set	6663 Sep 17 20:38	13° <u>0</u> 15'43	
minimum elong	6656 Sep 21 18:38	3° <u>0</u> 43'31 2°49'57	max. Earth dist.	6663 Sep 30 03:44	13° <u>0</u> 36'55	38.92849 AU
morning rise	6656 Oct 07 14:41	4° <u>0</u> 09'25				
retrograde	6657 Jan 02 19:41	5° <u>0</u> 32'38	conjunction	6663 Oct 02 20:38	13° <u>0</u> 41'37	5°37'02
opposition	6657 Mar 24 02:12	4° <u>0</u> 24'59 3°11'01	minimum elong	6663 Oct 02 20:28	13° <u>0</u> 41'37	5°37'03
min. Earth dist.	6657 Mar 26 07:41	4° <u>0</u> 22'02 38.57870 AU	morning rise	6663 Oct 17 19:57	14° <u>0</u> 07'31	
direct	6657 Jun 12 22:12	3° <u>0</u> 16'34	retrograde	6664 Jan 14 02:35	15° <u>0</u> 37'17	
evening set	6657 Sep 07 16:30	4° <u>0</u> 39'28	opposition	6664 Apr 02 16:18	14° <u>0</u> 27'21	6°08'08
max. Earth dist.	6657 Sep 20 23:24	5° <u>0</u> 01'16 40.45137 AU	min. Earth dist.	6664 Apr 05 02:22	14° <u>0</u> 24'00	36.80910 AU
			direct	6664 Jun 22 06:54	13° <u>0</u> 16'18	
conjunction	6657 Sep 23 10:44	5° <u>0</u> 05'23 3°13'19	evening set	6664 Sep 18 20:36	14° <u>0</u> 46'32	
minimum elong	6657 Sep 23 10:38	5° <u>0</u> 05'22 3°13'19	max. Earth dist.	6664 Sep 30 23:32	15° <u>0</u> 07'36	38.67038 AU
morning rise	6657 Oct 09 04:39	5° <u>0</u> 31'19				
retrograde	6658 Jan 04 10:47	6° <u>0</u> 55'19	conjunction	6664 Oct 03 16:28	15° <u>0</u> 12'22	6°01'26

minimum elong	6664 Oct 03 16:16	15° <u>♁</u> 12'21	6°01'28	max. Earth dist.	6671 Oct 13 05:21	26° <u>♁</u> 20'55	36.84415 AU
morning rise	6664 Oct 18 11:19	15° <u>♁</u> 38'10					
retrograde	6665 Jan 14 21:28	17° <u>♁</u> 09'02		conjunction	6671 Oct 16 02:16	26° <u>♁</u> 26'17	8°53'20
opposition	6665 Apr 04 10:02	15° <u>♁</u> 58'44	6°34'02	minimum elong	6671 Oct 16 02:00	26° <u>♁</u> 26'16	8°53'21
min. Earth dist.	6665 Apr 06 20:15	15° <u>♁</u> 55'21	36.55160 AU	morning rise	6671 Oct 29 02:52	26° <u>♁</u> 50'32	
direct	6665 Jun 24 02:29	14° <u>♁</u> 47'16		retrograde	6672 Jan 27 11:17	28° <u>♁</u> 30'47	
evening set	6665 Sep 20 21:40	16° <u>♁</u> 18'43		opposition	6672 Apr 15 06:59	27° <u>♁</u> 17'36	9°36'42
max. Earth dist.	6665 Oct 02 17:39	16° <u>♁</u> 39'29	38.41047 AU	min. Earth dist.	6672 Apr 17 20:16	27° <u>♁</u> 13'52	34.74114 AU
				direct	6672 Jul 04 17:33	26° <u>♁</u> 02'53	
conjunction	6665 Oct 05 12:42	16° <u>♁</u> 44'27	6°25'56	evening set	6672 Oct 04 08:44	27° <u>♁</u> 44'49	
minimum elong	6665 Oct 05 12:30	16° <u>♁</u> 44'26	6°25'56	max. Earth dist.	6672 Oct 14 04:42	28° <u>♁</u> 03'14	36.58801 AU
morning rise	6665 Oct 20 02:59	17° <u>♁</u> 10'08					
retrograde	6666 Jan 16 18:34	18° <u>♁</u> 42'10		conjunction	6672 Oct 17 02:45	28° <u>♁</u> 08'45	9°17'40
opposition	6666 Apr 06 04:27	17° <u>♁</u> 31'28	7°00'03	minimum elong	6672 Oct 17 02:27	28° <u>♁</u> 08'43	9°17'41
min. Earth dist.	6666 Apr 08 15:58	17° <u>♁</u> 27'59	36.29266 AU	morning rise	6672 Oct 29 19:36	28° <u>♁</u> 32'37	
direct	6666 Jun 25 18:52	16° <u>♁</u> 19'33			6672 Dec 27 19:36	0° <u>♁</u>	
evening set	6666 Sep 22 23:20	17° <u>♁</u> 52'18		retrograde	6673 Jan 28 13:05	0° <u>♁</u> 14'31	
max. Earth dist.	6666 Oct 04 14:19	18° <u>♁</u> 12'52	38.14911 AU		6673 Mar 01 13:58	30° <u>♁</u>	
				opposition	6673 Apr 17 05:35	29° <u>♁</u> 00'57	10°02'34
conjunction	6666 Oct 07 09:28	18° <u>♁</u> 17'52	6°50'29	min. Earth dist.	6673 Apr 19 19:18	28° <u>♁</u> 57'09	34.48866 AU
minimum elong	6666 Oct 07 09:15	18° <u>♁</u> 17'51	6°50'31	direct	6673 Jul 06 13:29	27° <u>♁</u> 45'47	
morning rise	6666 Oct 21 18:26	18° <u>♁</u> 43'24		evening set	6673 Oct 06 18:22	29° <u>♁</u> 29'33	
retrograde	6667 Jan 18 13:42	20° <u>♁</u> 16'39		max. Earth dist.	6673 Oct 16 06:34	29° <u>♁</u> 47'32	36.33408 AU
opposition	6667 Apr 07 23:28	19° <u>♁</u> 05'33	7°26'08				
min. Earth dist.	6667 Apr 10 11:36	19° <u>♁</u> 02'00	36.03260 AU	conjunction	6673 Oct 19 04:07	29° <u>♁</u> 53'03	9°41'50
direct	6667 Jun 27 13:01	17° <u>♁</u> 53'10		minimum elong	6673 Oct 19 03:50	29° <u>♁</u> 53'02	9°41'52
evening set	6667 Sep 25 02:16	19° <u>♁</u> 27'15			6673 Oct 22 19:26	0° <u>♁</u>	
max. Earth dist.	6667 Oct 06 10:41	19° <u>♁</u> 47'32	37.88703 AU	morning rise	6673 Oct 31 12:21	0° <u>♁</u> 16'30	
				retrograde	6674 Jan 30 13:21	2° <u>♁</u> 00'07	
conjunction	6667 Oct 09 06:48	19° <u>♁</u> 52'39	7°15'06	opposition	6674 Apr 19 05:07	0° <u>♁</u> 46'11	10°28'16
minimum elong	6667 Oct 09 06:34	19° <u>♁</u> 52'38	7°15'07	min. Earth dist.	6674 Apr 21 19:08	0° <u>♁</u> 42'21	34.23830 AU
morning rise	6667 Oct 23 10:20	20° <u>♁</u> 18'00			6674 May 22 17:34	30° <u>♁</u>	
retrograde	6668 Jan 20 12:42	21° <u>♁</u> 52'31		direct	6674 Jul 08 10:57	29° <u>♁</u> 30'36	
opposition	6668 Apr 08 18:47	20° <u>♁</u> 40'59	7°52'17		6674 Aug 23 08:59	0° <u>♁</u>	
min. Earth dist.	6668 Apr 11 07:07	20° <u>♁</u> 37'24	35.77231 AU	evening set	6674 Oct 09 05:20	1° <u>♁</u> 16'15	
direct	6668 Jun 28 06:45	19° <u>♁</u> 28'08		max. Earth dist.	6674 Oct 18 08:01	1° <u>♁</u> 33'41	36.08220 AU
evening set	6668 Sep 26 06:09	21° <u>♁</u> 03'38					
max. Earth dist.	6668 Oct 07 07:49	21° <u>♁</u> 23'35	37.62470 AU	conjunction	6674 Oct 21 05:55	1° <u>♁</u> 39'18	10°05'48
				minimum elong	6674 Oct 21 05:35	1° <u>♁</u> 39'16	10°05'50
conjunction	6668 Oct 10 04:50	21° <u>♁</u> 28'49	7°39'43	morning rise	6674 Nov 02 05:11	2° <u>♁</u> 02'15	
minimum elong	6668 Oct 10 04:35	21° <u>♁</u> 28'48	7°39'45	retrograde	6675 Feb 01 17:35	3° <u>♁</u> 47'41	
morning rise	6668 Oct 24 02:20	21° <u>♁</u> 53'57		opposition	6675 Apr 21 05:13	2° <u>♁</u> 33'22	10°53'45
retrograde	6669 Jan 21 11:44	23° <u>♁</u> 29'48		min. Earth dist.	6675 Apr 23 18:54	2° <u>♁</u> 29'32	33.98984 AU
opposition	6669 Apr 10 14:57	22° <u>♁</u> 17'50	8°18'27	direct	6675 Jul 10 08:51	1° <u>♁</u> 17'21	
min. Earth dist.	6669 Apr 13 04:36	22° <u>♁</u> 14'10	35.51226 AU	evening set	6675 Oct 11 17:42	3° <u>♁</u> 05'01	
direct	6669 Jun 30 01:21	21° <u>♁</u> 04'30		max. Earth dist.	6675 Oct 20 10:18	3° <u>♁</u> 21'48	35.83169 AU
evening set	6669 Sep 28 11:06	22° <u>♁</u> 41'30					
max. Earth dist.	6669 Oct 09 06:39	23° <u>♁</u> 01'10	37.36300 AU	conjunction	6675 Oct 23 08:47	3° <u>♁</u> 27'31	10°29'33
				minimum elong	6675 Oct 23 08:28	3° <u>♁</u> 27'29	10°29'35
conjunction	6669 Oct 12 03:21	23° <u>♁</u> 06'26	8°04'19	morning rise	6675 Nov 03 22:25	3° <u>♁</u> 49'56	
minimum elong	6669 Oct 12 03:06	23° <u>♁</u> 06'24	8°04'21	retrograde	6676 Feb 03 21:19	5° <u>♁</u> 37'15	
morning rise	6669 Oct 25 18:21	23° <u>♁</u> 31'18		opposition	6676 Apr 22 06:11	4° <u>♁</u> 22'32	11°19'01
retrograde	6670 Jan 23 11:24	25° <u>♁</u> 08'32		min. Earth dist.	6676 Apr 24 21:11	4° <u>♁</u> 18'36	33.74273 AU
opposition	6670 Apr 12 11:33	23° <u>♁</u> 56'10	8°44'36	direct	6676 Jul 11 07:19	3° <u>♁</u> 06'04	
min. Earth dist.	6670 Apr 15 00:26	23° <u>♁</u> 52'30	35.25328 AU	evening set	6676 Oct 13 07:43	4° <u>♁</u> 55'48	
direct	6670 Jul 01 22:50	22° <u>♁</u> 42'21		max. Earth dist.	6676 Oct 21 14:15	5° <u>♁</u> 11'57	35.58251 AU
evening set	6670 Sep 30 17:09	24° <u>♁</u> 20'54					
max. Earth dist.	6670 Oct 11 04:29	24° <u>♁</u> 40'09	37.10258 AU	conjunction	6676 Oct 24 12:29	5° <u>♁</u> 17'42	10°53'02
				minimum elong	6676 Oct 24 12:08	5° <u>♁</u> 17'40	10°53'04
conjunction	6670 Oct 14 02:27	24° <u>♁</u> 45'33	8°28'52	morning rise	6676 Nov 04 15:48	5° <u>♁</u> 39'31	
minimum elong	6670 Oct 14 02:10	24° <u>♁</u> 45'32	8°28'54	retrograde	6677 Feb 05 03:19	7° <u>♁</u> 28'45	
morning rise	6670 Oct 27 10:37	25° <u>♁</u> 10'08		opposition	6677 Apr 24 07:54	6° <u>♁</u> 13'40	11°43'59
retrograde	6671 Jan 25 11:49	26° <u>♁</u> 48'51		min. Earth dist.	6677 Apr 26 22:15	6° <u>♁</u> 09'44	33.49689 AU
opposition	6671 Apr 14 08:57	25° <u>♁</u> 36'03	9°10'42	direct	6677 Jul 13 10:19	4° <u>♁</u> 56'44	
min. Earth dist.	6671 Apr 16 22:50	25° <u>♁</u> 32'18	34.99613 AU	evening set	6677 Oct 15 22:59	6° <u>♁</u> 48'36	
direct	6671 Jul 03 19:19	24° <u>♁</u> 21'46		max. Earth dist.	6677 Oct 23 17:12	7° <u>♁</u> 03'55	35.33451 AU
evening set	6671 Oct 03 00:11	26° <u>♁</u> 01'58					

conjunction	6677 Oct 26 16:48	7°M.09'50	11°16'13	morning rise	6683 Nov 15 16:21	19°M.17'35	
minimum elong	6677 Oct 26 16:28	7°M.09'48	11°16'15	retrograde	6684 Feb 20 05:13	21°M.22'56	
morning rise	6677 Nov 06 09:18	7°M.30'58		opposition	6684 May 07 18:04	20°M.04'48	14°25'57
retrograde	6678 Feb 07 10:30	9°M.22'14		min. Earth dist.	6684 May 10 07:01	20°M.00'47	31.85160 AU
opposition	6678 Apr 26 10:29	8°M.06'42	12°08'38	direct	6684 Jul 26 13:56	18°M.44'25	
min. Earth dist.	6678 Apr 29 01:59	8°M.02'41	33.25254 AU	evening set	6684 Nov 03 08:27	20°M.54'09	
direct	6678 Jul 15 12:27	6°M.49'18		max. Earth dist.	6684 Nov 06 23:57	21°M.01'52	33.68237 AU
evening set	6678 Oct 18 15:49	8°M.43'24					
max. Earth dist.	6678 Oct 25 23:22	8°M.57'59	35.08821 AU	conjunction	6684 Nov 09 20:57	21°M.07'58	13°44'55
				minimum elong	6684 Nov 09 20:35	21°M.07'56	13°44'58
conjunction	6678 Oct 28 22:02	9°M.03'52	11°39'02	morning rise	6684 Nov 16 08:23	21°M.21'42	
minimum elong	6678 Oct 28 21:40	9°M.03'51	11°39'04	retrograde	6685 Feb 21 15:59	23°M.29'51	
morning rise	6678 Nov 08 02:44	9°M.24'15		opposition	6685 May 10 02:23	22°M.11'20	14°46'21
retrograde	6679 Feb 09 15:14	11°M.17'37		min. Earth dist.	6685 May 12 15:36	22°M.07'17	31.63564 AU
opposition	6679 Apr 28 13:45	10°M.01'40	12°32'54	direct	6685 Jul 28 20:09	20°M.50'31	
min. Earth dist.	6679 May 01 04:39	9°M.57'39	33.01011 AU	evening set	6685 Nov 06 14:59	23°M.03'25	
direct	6679 Jul 17 16:22	8°M.43'46		max. Earth dist.	6685 Nov 09 12:29	23°M.09'37	33.46665 AU
evening set	6679 Oct 21 10:09	10°M.40'10					
max. Earth dist.	6679 Oct 28 04:07	10°M.53'46	34.84414 AU	conjunction	6685 Nov 12 07:32	23°M.15'36	14°03'23
				minimum elong	6685 Nov 12 07:12	23°M.15'34	14°03'26
conjunction	6679 Oct 31 03:50	10°M.59'48	12°01'27	morning rise	6685 Nov 17 23:06	23°M.27'42	
minimum elong	6679 Oct 31 03:30	10°M.59'47	12°01'29	retrograde	6686 Feb 24 04:12	25°M.38'53	
morning rise	6679 Nov 09 20:18	11°M.19'21		opposition	6686 May 12 11:26	24°M.20'01	15°05'50
retrograde	6680 Feb 11 21:49	13°M.14'53		min. Earth dist.	6686 May 14 23:00	24°M.16'02	31.42571 AU
opposition	6680 Apr 29 17:49	11°M.58'30	12°56'42	direct	6686 Jul 31 05:44	22°M.58'47	
min. Earth dist.	6680 May 02 09:07	11°M.54'26	32.77031 AU	evening set	6686 Nov 10 00:56	25°M.15'08	
direct	6680 Jul 18 18:46	10°M.40'05		max. Earth dist.	6686 Nov 11 23:40	25°M.19'20	33.25696 AU
evening set	6680 Oct 23 06:08	12°M.38'55					
max. Earth dist.	6680 Oct 29 11:51	12°M.51'36	34.60282 AU	conjunction	6686 Nov 14 18:58	25°M.25'24	14°20'56
				minimum elong	6686 Nov 14 18:36	25°M.25'22	14°21'00
conjunction	6680 Nov 01 10:40	12°M.57'38	12°23'23	morning rise	6686 Nov 19 12:07	25°M.35'36	
minimum elong	6680 Nov 01 10:17	12°M.57'36	12°23'25	retrograde	6687 Feb 26 18:25	27°M.50'04	
morning rise	6680 Nov 10 13:44	13°M.16'14		opposition	6687 May 14 21:21	26°M.30'51	15°24'20
	6681 Jan 14 03:06	15°M.		min. Earth dist.	6687 May 17 08:53	26°M.26'52	31.22172 AU
retrograde	6681 Feb 13 03:07	15°M.14'03		direct	6687 Aug 02 14:25	25°M.09'14	
	6681 Mar 15 13:25	15°R.M.		evening set	6687 Nov 13 16:33	27°M.29'30	
opposition	6681 May 01 22:39	13°M.57'13	13°20'00	max. Earth dist.	6687 Nov 14 14:04	27°M.31'27	33.05302 AU
min. Earth dist.	6681 May 04 13:56	13°M.53'07	32.53364 AU				
direct	6681 Jul 20 22:18	12°M.38'18		conjunction	6687 Nov 17 07:23	27°M.37'23	14°37'32
evening set	6681 Oct 26 03:53	14°M.39'38		minimum elong	6687 Nov 17 07:04	27°M.37'22	14°37'36
max. Earth dist.	6681 Oct 31 19:06	14°M.51'13	34.36525 AU	morning rise	6687 Nov 20 21:28	27°M.45'13	
					6688 Feb 14 23:09	0°♂	
conjunction	6681 Nov 03 18:01	14°M.57'19	12°44'46	retrograde	6688 Feb 29 06:46	0°♂03'26	
minimum elong	6681 Nov 03 17:40	14°M.57'17	12°44'49		6688 Mar 14 15:56	30°R.M.	
	6681 Nov 05 01:16	15°M.		opposition	6688 May 16 08:16	28°M.43'53	15°41'47
morning rise	6681 Nov 12 06:59	15°M.14'53		min. Earth dist.	6688 May 18 18:52	28°M.39'56	31.02308 AU
retrograde	6682 Feb 15 11:57	17°M.15'05		direct	6688 Aug 04 01:07	27°M.21'53	
opposition	6682 May 04 04:17	15°M.57'49	13°42'41	evening set	6688 Nov 16 20:14	29°M.47'05	
min. Earth dist.	6682 May 06 18:40	15°M.53'45	32.30120 AU	max. Earth dist.	6688 Nov 16 03:02	29°M.45'31	32.85455 AU
	6682 Jun 14 14:40	15°R.M.					
direct	6682 Jul 23 01:36	14°M.38'23		conjunction	6688 Nov 18 20:33	29°M.51'32	14°53'07
	6682 Aug 29 23:58	15°M.		minimum elong	6688 Nov 18 20:13	29°M.51'30	14°53'10
evening set	6682 Oct 29 03:06	16°M.42'22		morning rise	6688 Nov 20 20:11	29°M.55'54	
max. Earth dist.	6682 Nov 03 03:51	16°M.52'48	34.13208 AU		6688 Nov 22 16:54	0°♂	
				retrograde	6689 Mar 02 21:33	2°♂18'54	
conjunction	6682 Nov 06 02:06	16°M.58'54	13°05'32	opposition	6689 May 18 19:58	0°♂59'02	15°58'08
minimum elong	6682 Nov 06 01:44	16°M.58'52	13°05'34	min. Earth dist.	6689 May 21 05:56	0°♂55'06	30.82985 AU
morning rise	6682 Nov 13 23:49	17°M.15'20			6689 Jun 28 06:47	30°R.M.	
retrograde	6683 Feb 17 18:51	19°M.18'02		direct	6689 Aug 06 11:15	29°M.36'39	
opposition	6683 May 06 10:54	18°M.00'20	14°04'42		6689 Sep 13 20:23	0°♂	
min. Earth dist.	6683 May 09 01:28	17°M.56'13	32.07357 AU	max. Earth dist.	6689 Nov 18 18:49	2°♂01'51	32.66151 AU
direct	6683 Jul 25 06:41	16°M.40'24					
evening set	6683 Nov 01 04:42	18°M.47'10		conjunction	6689 Nov 21 10:39	2°♂07'46	15°07'36
max. Earth dist.	6683 Nov 05 14:00	18°M.56'22	33.90432 AU	minimum elong	6689 Nov 21 10:22	2°♂07'44	15°07'39
				retrograde	6690 Mar 05 11:03	4°♂36'26	
conjunction	6683 Nov 08 11:04	19°M.02'25	13°25'37	opposition	6690 May 21 08:43	3°♂16'15	16°13'17
minimum elong	6683 Nov 08 10:44	19°M.02'23	13°25'39	min. Earth dist.	6690 May 23 18:19	3°♂12'19	30.64198 AU

direct	6690 Aug 08 22:16	1°♄53'29		conjunction	6698 Dec 13 21:37	23°♄52'50	16°16'26
max. Earth dist.	6690 Nov 21 09:51	4°♄20'04	32.47432 AU	minimum elong	6698 Dec 13 21:34	23°♄52'50	16°16'30
				retrograde	6699 Mar 28 01:27	26°♄30'47	
conjunction	6690 Nov 24 01:13	4°♄26'00	15°20'56	opposition	6699 Jun 12 11:46	25°♄08'09	17°22'11
minimum elong	6690 Nov 24 00:55	4°♄25'58	15°20'59	min. Earth dist.	6699 Jun 14 07:15	25°♄05'06	29.28819 AU
retrograde	6691 Mar 08 03:18	6°♄55'56		direct	6699 Aug 30 22:21	23°♄42'43	
opposition	6691 May 23 22:08	5°♄35'25	16°27'10	max. Earth dist.	6699 Dec 14 19:13	26°♄20'34	31.14964 AU
min. Earth dist.	6691 May 26 06:09	5°♄31'34	30.45995 AU				
direct	6691 Aug 11 10:04	4°♄12'16		conjunction	6699 Dec 16 17:26	26°♄25'09	16°15'55
max. Earth dist.	6691 Nov 24 02:41	6°♄40'18	32.29317 AU	minimum elong	6699 Dec 16 17:26	26°♄25'09	16°15'58
				retrograde	6700 Mar 30 22:10	29°♄03'48	
conjunction	6691 Nov 26 16:48	6°♄46'09	15°33'01	opposition	6700 Jun 15 07:08	27°♄41'02	17°20'56
minimum elong	6691 Nov 26 16:33	6°♄46'07	15°33'05	min. Earth dist.	6700 Jun 17 00:09	27°♄38'09	29.18505 AU
retrograde	6692 Mar 09 17:03	9°♄17'18		direct	6700 Sep 02 17:35	26°♄15'27	
opposition	6692 May 25 12:20	7°♄56'27	16°39'42	max. Earth dist.	6700 Dec 17 18:42	28°♄54'19	31.05159 AU
min. Earth dist.	6692 May 27 20:18	7°♄52'35	30.28408 AU				
direct	6692 Aug 12 23:06	6°♄32'55		conjunction	6700 Dec 19 13:49	28°♄58'36	16°13'37
max. Earth dist.	6692 Nov 25 20:21	9°♄02'21	32.11887 AU	minimum elong	6700 Dec 19 13:50	28°♄58'36	16°13'40
					6701 Jan 14 22:44	0°♄	
conjunction	6692 Nov 28 08:58	9°♄08'07	15°43'48	retrograde	6701 Apr 02 17:42	1°♄37'50	
minimum elong	6692 Nov 28 08:42	9°♄08'05	15°43'52	opposition	6701 Jun 18 03:19	0°♄14'58	17°17'44
retrograde	6693 Mar 12 09:58	11°♄40'25		min. Earth dist.	6701 Jun 19 19:02	0°♄12'10	29.09141 AU
opposition	6693 May 28 03:18	10°♄19'14	16°50'48		6701 Jun 27 00:10	30°♄	
min. Earth dist.	6693 May 30 09:06	10°♄15'31	30.11513 AU	direct	6701 Sep 05 13:04	28°♄49'16	
direct	6693 Aug 15 14:26	8°♄55'20			6701 Nov 11 01:27	0°♄	
max. Earth dist.	6693 Nov 28 14:13	11°♄26'06	31.95192 AU	max. Earth dist.	6701 Dec 20 16:52	1°♄28'52	30.96343 AU
conjunction	6693 Dec 01 01:38	11°♄31'47	15°53'12	conjunction	6701 Dec 22 10:12	1°♄32'59	16°09'30
minimum elong	6693 Dec 01 01:26	11°♄31'46	15°53'15	minimum elong	6701 Dec 22 10:16	1°♄33'00	16°09'32
retrograde	6694 Mar 15 02:16	14°♄05'11		retrograde	6702 Apr 05 15:42	4°♄12'43	
opposition	6694 May 30 19:07	12°♄43'41	17°00'21	opposition	6702 Jun 20 23:45	2°♄49'45	17°12'35
min. Earth dist.	6694 Jun 02 00:32	12°♄39'59	29.95386 AU	min. Earth dist.	6702 Jun 22 12:27	2°♄47'09	29.00728 AU
direct	6694 Aug 18 04:16	11°♄19'26		direct	6702 Sep 08 09:32	1°♄23'57	
max. Earth dist.	6694 Dec 01 10:10	13°♄51'35	31.79342 AU	max. Earth dist.	6702 Dec 23 16:28	4°♄04'16	30.88495 AU
conjunction	6694 Dec 03 18:59	13°♄57'03	16°01'06	conjunction	6702 Dec 25 07:07	4°♄08'08	16°03'33
minimum elong	6694 Dec 03 18:47	13°♄57'02	16°01'10	minimum elong	6702 Dec 25 07:12	4°♄08'08	16°03'37
retrograde	6695 Mar 17 20:07	16°♄31'29		retrograde	6703 Apr 08 10:15	6°♄48'14	
opposition	6695 Jun 02 11:25	15°♄09'42	17°08'18	opposition	6703 Jun 23 20:33	5°♄25'11	17°05'28
min. Earth dist.	6695 Jun 04 14:18	15°♄06'09	29.80111 AU	min. Earth dist.	6703 Jun 25 08:15	5°♄22'39	28.93259 AU
direct	6695 Aug 20 21:59	13°♄45'08		direct	6703 Sep 11 05:16	3°♄59'17	
max. Earth dist.	6695 Dec 04 05:07	16°♄18'27	31.64407 AU	max. Earth dist.	6703 Dec 26 15:50	6°♄40'10	30.81643 AU
conjunction	6695 Dec 06 12:52	16°♄23'51	16°07'27	conjunction	6703 Dec 28 04:08	6°♄43'49	15°55'47
minimum elong	6695 Dec 06 12:44	16°♄23'50	16°07'30	minimum elong	6703 Dec 28 04:16	6°♄43'50	15°55'51
retrograde	6696 Mar 19 15:01	18°♄59'16		retrograde	6704 Apr 10 06:59	9°♄24'11	
opposition	6696 Jun 04 04:35	17°♄37'12	17°14'31	opposition	6704 Jun 25 17:36	8°♄01'03	16°56'22
min. Earth dist.	6696 Jun 06 06:17	17°♄33'44	29.65777 AU	min. Earth dist.	6704 Jun 27 02:04	7°♄58'45	28.86751 AU
direct	6696 Aug 22 14:52	16°♄12'20		direct	6704 Sep 13 03:52	6°♄35'05	
max. Earth dist.	6696 Dec 06 02:54	18°♄47'00	31.50472 AU	max. Earth dist.	6704 Dec 28 15:15	9°♄16'25	30.75784 AU
conjunction	6696 Dec 08 07:21	18°♄52'06	16°12'10	conjunction	6704 Dec 30 01:10	9°♄19'49	15°46'12
minimum elong	6696 Dec 08 07:13	18°♄52'06	16°12'13	minimum elong	6704 Dec 30 01:19	9°♄19'50	15°46'16
retrograde	6697 Mar 22 09:06	21°♄28'26		retrograde	6705 Apr 13 02:44	12°♄00'22	
opposition	6697 Jun 06 22:22	20°♄06'09	17°18'56	opposition	6705 Jun 28 14:58	10°♄37'09	16°45'18
min. Earth dist.	6697 Jun 08 21:34	20°♄02'50	29.52429 AU	min. Earth dist.	6705 Jun 29 22:05	10°♄34'57	28.81238 AU
direct	6697 Aug 25 09:13	18°♄41'03		direct	6705 Sep 15 23:51	9°♄11'08	
max. Earth dist.	6697 Dec 08 23:06	21°♄16'47	31.37588 AU				
				conjunction	6706 Jan 01 22:12	11°♄55'58	15°34'46
conjunction	6697 Dec 11 02:14	21°♄21'47	16°15'10	minimum elong	6706 Jan 01 22:24	11°♄55'59	15°34'49
minimum elong	6697 Dec 11 02:09	21°♄21'47	16°15'14	max. Earth dist.	6705 Dec 31 15:26	11°♄52'52	30.70985 AU
retrograde	6698 Mar 25 06:05	23°♄58'58		retrograde	6706 Apr 15 22:29	14°♄36'33	
opposition	6698 Jun 09 16:45	22°♄36'29	17°21'30	opposition	6706 Jul 01 12:18	13°♄13'18	16°32'15
min. Earth dist.	6698 Jun 11 14:01	22°♄33'18	29.40123 AU	min. Earth dist.	6706 Jul 02 16:02	13°♄11'20	28.76766 AU
direct	6698 Aug 28 02:52	21°♄11'12		direct	6706 Sep 18 23:05	11°♄47'14	
max. Earth dist.	6698 Dec 11 22:01	23°♄48'09	31.25761 AU				
				conjunction	6707 Jan 04 18:59	14°♄32'02	15°21'31



minimum elong	6707 Jan 04 19:13	14°32'03	15°21'35	direct	6713 Oct 07 10:24	29°51'20	
max. Earth dist.	6707 Jan 03 14:24	14°32'10	30.67277 AU		6713 Oct 30 00:10	0°	
retrograde	6707 Apr 18 18:17	17°31'23		evening set	6714 Jan 14 17:57	2°14'33	
opposition	6707 Jul 04 09:44	15°34'17	16°17'14				
min. Earth dist.	6707 Jul 05 11:25	15°34'28	28.73402 AU	conjunction	6714 Jan 22 14:14	2°33'14	13°00'29
direct	6707 Sep 21 20:32	14°32'14		minimum elong	6714 Jan 22 14:37	2°33'16	13°00'31
				max. Earth dist.	6714 Jan 22 08:37	2°32'40	30.75419 AU
conjunction	6708 Jan 07 15:45	17°30'53	15°06'28	morning rise	6714 Jan 30 10:33	2°51'55	
minimum elong	6708 Jan 07 16:00	17°30'55	15°06'30	retrograde	6714 May 06 10:08	5°11'09	
max. Earth dist.	6708 Jan 06 15:07	17°30'52	30.64734 AU	opposition	6714 Jul 22 12:42	3°48'40	13°40'32
retrograde	6708 Apr 20 13:36	19°34'17		min. Earth dist.	6714 Jul 22 18:08	3°48'17	28.83488 AU
opposition	6708 Jul 06 07:08	18°32'00	16°00'17	direct	6714 Oct 10 07:05	2°23'48	
min. Earth dist.	6708 Jul 07 05:36	18°32'25	28.71194 AU	evening set	6715 Jan 16 18:46	4°44'33	
direct	6708 Sep 23 19:51	16°35'59					
evening set	6709 Jan 07 02:49	19°37'38		conjunction	6715 Jan 25 08:38	5°04'54	12°34'14
				minimum elong	6715 Jan 25 09:02	5°04'57	12°34'17
conjunction	6709 Jan 09 12:11	19°34'24	14°49'37	max. Earth dist.	6715 Jan 25 05:19	5°04'34	30.81230 AU
minimum elong	6709 Jan 09 12:29	19°34'26	14°49'41	morning rise	6715 Feb 02 22:32	5°25'15	
max. Earth dist.	6709 Jan 08 13:51	19°34'09	30.63412 AU	retrograde	6715 May 09 04:02	7°42'06	
morning rise	6709 Jan 11 22:06	19°34'13		opposition	6715 Jul 25 08:35	6°19'50	13°11'44
retrograde	6709 Apr 23 10:09	22°32'35		min. Earth dist.	6715 Jul 25 10:21	6°19'43	28.89431 AU
opposition	6709 Jul 09 04:33	21°30'20	15°41'23	direct	6715 Oct 13 04:55	4°55'14	
min. Earth dist.	6709 Jul 10 00:00	20°35'58	28.70228 AU	evening set	6716 Jan 18 20:18	7°13'36	
direct	6709 Sep 26 16:56	19°34'24					
evening set	6710 Jan 08 08:49	22°30'54		conjunction	6716 Jan 28 02:38	7°35'28	12°06'45
				minimum elong	6716 Jan 28 03:01	7°35'31	12°06'47
conjunction	6710 Jan 12 08:24	22°31'30	14°31'01	max. Earth dist.	6716 Jan 28 02:19	7°35'26	30.88038 AU
minimum elong	6710 Jan 12 08:42	22°31'32	14°31'04	morning rise	6716 Feb 06 08:49	7°57'20	
max. Earth dist.	6710 Jan 11 14:31	22°31'42	30.63367 AU	retrograde	6716 May 10 20:52	10°11'54	
morning rise	6710 Jan 16 08:25	22°32'08		opposition	6716 Jul 27 04:11	8°49'50	12°41'39
retrograde	6710 Apr 26 05:36	24°35'23		min. Earth dist.	6716 Jul 27 04:10	8°49'50	28.96367 AU
opposition	6710 Jul 12 01:53	23°35'13	15°20'38	direct	6716 Oct 15 00:08	7°25'30	
min. Earth dist.	6710 Jul 12 18:28	23°34'03	28.70505 AU	evening set	6717 Jan 19 22:39	9°41'32	
direct	6710 Sep 29 16:36	22°30'26					
evening set	6711 Jan 10 00:30	24°34'43		conjunction	6717 Jan 29 20:04	10°04'46	11°38'06
				minimum elong	6717 Jan 29 20:28	10°04'48	11°38'09
conjunction	6711 Jan 15 04:19	24°35'07	14°10'44	max. Earth dist.	6717 Jan 29 22:26	10°05'00	30.95839 AU
minimum elong	6711 Jan 15 04:39	24°35'09	14°10'47	morning rise	6717 Feb 08 17:16	10°27'59	
max. Earth dist.	6711 Jan 14 12:37	24°35'33	30.64593 AU	retrograde	6717 May 13 12:28	12°40'20	
morning rise	6711 Jan 20 08:33	25°30'53		opposition	6717 Jul 29 23:15	11°18'29	12°10'22
retrograde	6711 Apr 29 01:48	27°32'38		min. Earth dist.	6717 Jul 29 19:52	11°18'43	29.04266 AU
opposition	6711 Jul 14 22:46	26°30'36	14°58'04	direct	6717 Oct 17 21:11	9°54'25	
min. Earth dist.	6711 Jul 15 11:47	26°30'41	28.72028 AU	evening set	6718 Jan 22 01:10	12°08'09	
direct	6711 Oct 02 14:15	24°34'40					
evening set	6712 Jan 11 20:18	27°31'26		conjunction	6718 Feb 01 12:44	12°32'38	11°08'24
				minimum elong	6718 Feb 01 13:06	12°32'40	11°08'26
conjunction	6712 Jan 18 00:06	27°32'12	13°48'49	max. Earth dist.	6718 Feb 01 17:27	12°33'06	31.04592 AU
minimum elong	6712 Jan 18 00:27	27°32'14	13°48'51	morning rise	6718 Feb 12 00:02	12°57'06	
max. Earth dist.	6712 Jan 17 12:35	27°32'02	30.67048 AU		6718 Apr 25 15:52	15°	
morning rise	6712 Jan 24 04:08	27°34'59		retrograde	6718 May 16 02:55	15°07'17	
	6712 Apr 12 04:03	0°			6718 Jun 05 23:21	15°R	
retrograde	6712 Apr 30 20:28	0°06'15		opposition	6718 Aug 01 17:48	13°45'38	11°37'59
	6712 May 19 20:01	30°R3		min. Earth dist.	6718 Aug 01 12:15	13°46'00	29.13135 AU
opposition	6712 Jul 16 19:44	28°34'23	14°33'48	direct	6718 Oct 20 16:02	12°21'50	
min. Earth dist.	6712 Jul 17 06:37	28°34'28	28.74730 AU	evening set	6719 Jan 24 04:13	14°33'20	
direct	6712 Oct 04 12:07	27°31'8'01					
evening set	6713 Jan 12 18:22	29°34'37		conjunction	6719 Feb 04 04:55	14°58'56	10°37'43
				minimum elong	6719 Feb 04 05:19	14°58'59	10°37'46
conjunction	6713 Jan 19 19:16	0°00'36	13°25'22		6719 Feb 04 15:49	15°	
minimum elong	6713 Jan 19 19:38	0°00'39	13°25'25	max. Earth dist.	6719 Feb 04 12:57	14°59'43	31.14314 AU
max. Earth dist.	6713 Jan 19 09:53	29°35'40	30.70679 AU	morning rise	6719 Feb 15 05:08	15°24'30	
	6713 Jan 19 13:10	0°		retrograde	6719 May 18 16:29	17°32'35	
morning rise	6713 Jan 26 20:26	0°17'28		opposition	6719 Aug 04 11:33	16°11'09	11°04'36
retrograde	6713 May 03 17:07	2°39'08		min. Earth dist.	6719 Aug 04 03:17	16°11'42	29.22965 AU
opposition	6713 Jul 19 16:20	1°16'27	14°07'55		6719 Sep 25 12:22	15°R	
min. Earth dist.	6713 Jul 19 23:28	1°15'57	28.78570 AU	direct	6719 Oct 23 11:36	14°47'37	
	6713 Sep 14 08:35	30°R3			6719 Nov 19 22:00	15°	

evening set	6720 Jan 26 07:29	16° $\approx$ 56'56		max. Earth dist.	6726 Feb 21 04:12	1° $\mathbb{H}$ 17'43	32.10421 AU
				morning rise	6726 Mar 05 20:27	1° $\mathbb{H}$ 45'45	
conjunction	6720 Feb 06 20:16	17° $\approx$ 23'33	10°06'10	retrograde	6726 Jun 03 07:47	3° $\mathbb{H}$ 41'16	
minimum elong	6720 Feb 06 20:38	17° $\approx$ 23'35	10°06'12	opposition	6726 Aug 20 22:57	2° $\mathbb{H}$ 21'50	6°51'30
max. Earth dist.	6720 Feb 07 06:20	17° $\approx$ 24'32	31.25008 AU	min. Earth dist.	6726 Aug 19 19:06	2° $\mathbb{H}$ 23'40	30.20218 AU
morning rise	6720 Feb 18 08:42	17° $\approx$ 50'08		direct	6726 Nov 09 09:37	1° $\mathbb{H}$ 00'55	
retrograde	6720 May 20 07:11	19° $\approx$ 56'11		evening set	6727 Feb 08 09:18	2° $\mathbb{H}$ 57'04	
opposition	6720 Aug 06 04:53	18° $\approx$ 34'56	10°30'20				
min. Earth dist.	6720 Aug 05 17:32	18° $\approx$ 35'42	29.33818 AU	conjunction	6727 Feb 22 11:42	3° $\mathbb{H}$ 28'02	6°08'14
direct	6720 Oct 25 04:56	17° $\approx$ 11'42		minimum elong	6727 Feb 22 11:58	3° $\mathbb{H}$ 28'04	6°08'15
evening set	6721 Jan 27 10:45	19° $\approx$ 18'54		max. Earth dist.	6727 Feb 23 16:55	3° $\mathbb{H}$ 30'44	32.27735 AU
				morning rise	6727 Mar 08 13:23	3° $\mathbb{H}$ 58'57	
conjunction	6721 Feb 08 10:53	19° $\approx$ 46'25	9°33'48	retrograde	6727 Jun 05 16:36	5° $\mathbb{H}$ 52'58	
minimum elong	6721 Feb 08 11:15	19° $\approx$ 46'27	9°33'51	min. Earth dist.	6727 Aug 22 06:12	4° $\mathbb{H}$ 35'49	30.37650 AU
max. Earth dist.	6721 Feb 09 00:57	19° $\approx$ 47'46	31.36728 AU	opposition	6727 Aug 23 11:38	4° $\mathbb{H}$ 33'54	6°13'50
morning rise	6721 Feb 20 10:20	20° $\approx$ 13'53		direct	6727 Nov 11 22:22	3° $\mathbb{H}$ 13'24	
retrograde	6721 May 22 19:38	22° $\approx$ 17'59		evening set	6728 Feb 10 13:21	5° $\mathbb{H}$ 07'57	
opposition	6721 Aug 08 21:38	20° $\approx$ 56'59	9°55'15				
min. Earth dist.	6721 Aug 08 07:50	20° $\approx$ 57'54	29.45709 AU	conjunction	6728 Feb 24 21:34	5° $\mathbb{H}$ 39'13	5°32'58
direct	6721 Oct 28 00:21	19° $\approx$ 34'03		minimum elong	6728 Feb 24 21:47	5° $\mathbb{H}$ 39'14	5°32'59
evening set	6722 Jan 29 14:20	21° $\approx$ 39'13		max. Earth dist.	6728 Feb 26 05:01	5° $\mathbb{H}$ 42'06	32.45736 AU
				morning rise	6728 Mar 10 04:51	6° $\mathbb{H}$ 10'24	
conjunction	6722 Feb 11 00:43	22° $\approx$ 07'32	9°00'44	retrograde	6728 Jun 07 00:24	8° $\mathbb{H}$ 03'00	
minimum elong	6722 Feb 11 01:03	22° $\approx$ 07'34	9°00'47	opposition	6728 Aug 24 23:43	6° $\mathbb{H}$ 44'17	5°36'04
max. Earth dist.	6722 Feb 11 16:37	22° $\approx$ 09'03	31.49496 AU	min. Earth dist.	6728 Aug 23 16:06	6° $\mathbb{H}$ 46'20	30.55734 AU
morning rise	6722 Feb 23 10:38	22° $\approx$ 35'48		direct	6728 Nov 13 11:52	5° $\mathbb{H}$ 24'13	
retrograde	6722 May 25 09:53	24° $\approx$ 38'01		evening set	6729 Feb 11 17:22	7° $\mathbb{H}$ 17'14	
opposition	6722 Aug 11 13:28	23° $\approx$ 17'16	9°19'28				
min. Earth dist.	6722 Aug 10 19:56	23° $\approx$ 18'27	29.58675 AU	conjunction	6729 Feb 26 06:29	7° $\mathbb{H}$ 48'42	4°57'38
direct	6722 Oct 30 17:16	21° $\approx$ 54'42		minimum elong	6729 Feb 26 06:42	7° $\mathbb{H}$ 48'43	4°57'40
evening set	6723 Jan 31 17:53	23° $\approx$ 57'54		max. Earth dist.	6729 Feb 27 15:19	7° $\mathbb{H}$ 51'41	32.64332 AU
				morning rise	6729 Mar 12 18:58	8° $\mathbb{H}$ 20'07	
conjunction	6723 Feb 13 14:01	24° $\approx$ 26'56	8°27'04	retrograde	6729 Jun 09 09:00	10° $\mathbb{H}$ 11'21	
minimum elong	6723 Feb 13 14:21	24° $\approx$ 26'58	8°27'06	min. Earth dist.	6729 Aug 26 01:19	8° $\mathbb{H}$ 55'08	30.74430 AU
max. Earth dist.	6723 Feb 14 09:47	24° $\approx$ 28'48	31.63309 AU	opposition	6729 Aug 27 11:09	8° $\mathbb{H}$ 52'57	4°58'19
morning rise	6723 Feb 26 09:20	24° $\approx$ 55'54		direct	6729 Nov 15 23:00	7° $\mathbb{H}$ 33'18	
retrograde	6723 May 27 21:17	26° $\approx$ 56'19		evening set	6730 Feb 13 21:17	9° $\mathbb{H}$ 24'50	
min. Earth dist.	6723 Aug 13 09:32	25° $\approx$ 37'10	29.72671 AU				
opposition	6723 Aug 14 04:53	25° $\approx$ 35'52	8°43'06	conjunction	6730 Feb 28 14:59	9° $\mathbb{H}$ 56'27	4°22'20
direct	6723 Nov 02 09:45	24° $\approx$ 13'41		minimum elong	6730 Feb 28 15:09	9° $\mathbb{H}$ 56'28	4°22'21
evening set	6724 Feb 02 21:40	26° $\approx$ 15'01		max. Earth dist.	6730 Mar 02 02:28	9° $\mathbb{H}$ 59'40	32.83491 AU
				morning rise	6730 Mar 15 07:41	10° $\mathbb{H}$ 28'01	
conjunction	6724 Feb 16 02:24	26° $\approx$ 44'39	7°52'53	retrograde	6730 Jun 11 15:16	12° $\mathbb{H}$ 17'57	
minimum elong	6724 Feb 16 02:42	26° $\approx$ 44'41	7°52'54	min. Earth dist.	6730 Aug 28 10:35	11° $\mathbb{H}$ 02'07	30.93672 AU
max. Earth dist.	6724 Feb 16 23:58	26° $\approx$ 46'41	31.78118 AU	opposition	6730 Aug 29 21:41	10° $\mathbb{H}$ 59'52	4°20'39
morning rise	6724 Feb 29 06:31	27° $\approx$ 14'14		direct	6730 Nov 18 11:13	9° $\mathbb{H}$ 40'36	
retrograde	6724 May 29 10:33	29° $\approx$ 12'56		evening set	6731 Feb 16 01:16	11° $\mathbb{H}$ 30'43	
opposition	6724 Aug 15 19:29	27° $\approx$ 52'49	8°06'14				
min. Earth dist.	6724 Aug 14 20:22	27° $\approx$ 54'21	29.87645 AU	conjunction	6731 Mar 02 22:33	12° $\mathbb{H}$ 02'26	3°47'06
direct	6724 Nov 04 02:52	26° $\approx$ 31'03		minimum elong	6731 Mar 02 22:43	12° $\mathbb{H}$ 02'26	3°47'07
evening set	6725 Feb 04 01:26	28° $\approx$ 30'35		max. Earth dist.	6731 Mar 04 10:44	12° $\mathbb{H}$ 05'40	33.03167 AU
				morning rise	6731 Mar 17 19:13	12° $\mathbb{H}$ 34'04	
conjunction	6725 Feb 17 14:15	29° $\approx$ 00'45	7°18'17	retrograde	6731 Jun 13 23:26	14° $\mathbb{H}$ 22'44	
minimum elong	6725 Feb 17 14:33	29° $\approx$ 00'47	7°18'18	min. Earth dist.	6731 Aug 30 17:43	13° $\mathbb{H}$ 07'22	31.13461 AU
max. Earth dist.	6725 Feb 18 15:14	29° $\approx$ 03'05	31.93845 AU	opposition	6731 Sep 01 07:31	13° $\mathbb{H}$ 04'58	3°43'07
morning rise	6725 Mar 03 02:13	29° $\approx$ 30'51		direct	6731 Nov 20 20:51	11° $\mathbb{H}$ 46'04	
	6725 Mar 16 17:56	0° $\mathbb{H}$		evening set	6732 Feb 18 04:52	13° $\mathbb{H}$ 34'50	
retrograde	6725 May 31 21:48	1° $\mathbb{H}$ 27'56					
min. Earth dist.	6725 Aug 17 08:57	0° $\mathbb{H}$ 09'47	30.03526 AU	conjunction	6732 Mar 04 05:24	14° $\mathbb{H}$ 06'34	3°12'01
opposition	6725 Aug 18 09:39	0° $\mathbb{H}$ 08'09	7°29'00	minimum elong	6732 Mar 04 05:32	14° $\mathbb{H}$ 06'34	3°12'01
	6725 Aug 23 13:17	30° $\mathbb{R}$		max. Earth dist.	6732 Mar 05 20:27	14° $\mathbb{H}$ 10'01	33.23364 AU
direct	6725 Nov 06 18:04	28° $\approx$ 46'48		morning rise	6732 Mar 19 05:03	14° $\mathbb{H}$ 38'14	
	6726 Jan 15 15:28	0° $\mathbb{H}$		retrograde	6732 Jun 15 04:38	16° $\mathbb{H}$ 25'42	
evening set	6726 Feb 06 05:17	0° $\mathbb{H}$ 44'36		min. Earth dist.	6732 Sep 01 02:06	15° $\mathbb{H}$ 10'40	31.33804 AU
				opposition	6732 Sep 02 16:46	15° $\mathbb{H}$ 08'13	3°05'47
conjunction	6726 Feb 20 01:15	1° $\mathbb{H}$ 15'13	6°43'22	direct	6732 Nov 22 07:13	13° $\mathbb{H}$ 49'42	
minimum elong	6726 Feb 20 01:31	1° $\mathbb{H}$ 15'14	6°43'23	evening set	6733 Feb 19 08:28	15° $\mathbb{H}$ 37'09	

conjunction	6733 Mar 06 11:26	16° <del>✕</del> 08'51	2°37'07	retrograde	6739 Jun 29 02:42	29° <del>✕</del> 58'22	
minimum elong	6733 Mar 06 11:32	16° <del>✕</del> 08'51	2°37'08	min. Earth dist.	6739 Sep 15 09:52	28° <del>✕</del> 46'19	32.92217 AU
max. Earth dist.	6733 Mar 08 03:30	16° <del>✕</del> 12'23	33.44121 AU	opposition	6739 Sep 17 13:09	28° <del>✕</del> 43'12	-1°05'16
morning rise	6733 Mar 21 13:45	16° <del>✕</del> 40'29		direct	6739 Dec 07 12:30	27° <del>✕</del> 27'31	
retrograde	6733 Jun 17 11:28	18° <del>✕</del> 26'49		evening set	6740 Mar 04 05:16	29° <del>✕</del> 07'42	
min. Earth dist.	6733 Sep 03 07:22	17° <del>✕</del> 12'16	31.54749 AU				
opposition	6733 Sep 05 01:06	17° <del>✕</del> 09'38	2°28'43	conjunction	6740 Mar 19 11:00	29° <del>✕</del> 37'57	-1°17'37
direct	6733 Nov 24 18:28	15° <del>✕</del> 51'29		minimum elong	6740 Mar 19 10:57	29° <del>✕</del> 37'56	1°17'37
evening set	6734 Feb 21 11:46	17° <del>✕</del> 37'42		max. Earth dist.	6740 Mar 21 14:38	29° <del>✕</del> 42'15	35.04447 AU
					6740 Mar 30 12:29	0° <del>∇</del>	
conjunction	6734 Mar 08 16:44	18° <del>✕</del> 09'19	2°02'29	morning rise	6740 Apr 03 16:28	0° <del>∇</del> 08'10	
minimum elong	6734 Mar 08 16:48	18° <del>✕</del> 09'20	2°02'29	retrograde	6740 Jun 30 05:50	1° <del>∇</del> 48'17	
max. Earth dist.	6734 Mar 10 11:31	18° <del>✕</del> 13'03	33.65460 AU	min. Earth dist.	6740 Sep 16 11:27	0° <del>∇</del> 36'42	33.16522 AU
morning rise	6734 Mar 23 21:00	18° <del>✕</del> 40'53		opposition	6740 Sep 18 16:59	0° <del>∇</del> 33'28	-1°39'08
retrograde	6734 Jun 19 16:50	20° <del>✕</del> 26'08			6740 Oct 12 13:52	30° <del>℞</del> <del>✕</del>	
min. Earth dist.	6734 Sep 05 13:54	19° <del>✕</del> 11'57	31.76317 AU	direct	6740 Dec 08 15:44	29° <del>✕</del> 18'10	
opposition	6734 Sep 07 08:53	19° <del>✕</del> 09'16	1°51'59		6741 Feb 01 03:33	0° <del>∇</del>	
direct	6734 Nov 27 03:41	17° <del>✕</del> 51'30		evening set	6741 Mar 06 07:45	0° <del>∇</del> 57'32	
evening set	6735 Feb 23 15:02	19° <del>✕</del> 36'34					
				conjunction	6741 Mar 21 12:05	1° <del>∇</del> 27'26	-1°49'18
conjunction	6735 Mar 10 21:24	20° <del>✕</del> 08'03	1°28'08	minimum elong	6741 Mar 21 12:01	1° <del>∇</del> 27'26	1°49'18
minimum elong	6735 Mar 10 21:28	20° <del>✕</del> 08'03	1°28'08	max. Earth dist.	6741 Mar 23 17:36	1° <del>∇</del> 31'52	35.28803 AU
max. Earth dist.	6735 Mar 12 17:46	20° <del>✕</del> 11'54	33.87407 AU	morning rise	6741 Apr 05 16:03	1° <del>∇</del> 57'19	
morning rise	6735 Mar 26 03:05	20° <del>✕</del> 39'29		retrograde	6741 Jul 02 06:26	3° <del>∇</del> 36'45	
retrograde	6735 Jun 21 19:16	22° <del>✕</del> 23'44		min. Earth dist.	6741 Sep 18 14:42	2° <del>∇</del> 25'28	33.41034 AU
min. Earth dist.	6735 Sep 07 18:09	21° <del>✕</del> 10'02	31.98486 AU	opposition	6741 Sep 20 20:16	2° <del>∇</del> 22'15	-2°12'25
opposition	6735 Sep 09 15:42	21° <del>✕</del> 07'11	1°15'36	direct	6741 Dec 10 19:12	1° <del>∇</del> 07'21	
direct	6735 Nov 29 13:02	19° <del>✕</del> 49'50		evening set	6742 Mar 08 10:03	2° <del>∇</del> 45'56	
evening set	6736 Feb 25 18:14	21° <del>✕</del> 33'48					
				conjunction	6742 Mar 23 12:32	3° <del>∇</del> 15'27	-2°20'28
conjunction	6736 Mar 12 01:22	22° <del>✕</del> 05'07	0°54'08	minimum elong	6742 Mar 23 12:27	3° <del>∇</del> 15'27	2°20'29
minimum elong	6736 Mar 12 01:24	22° <del>✕</del> 05'07	0°54'08	max. Earth dist.	6742 Mar 25 18:27	3° <del>∇</del> 19'53	35.53325 AU
max. Earth dist.	6736 Mar 13 23:26	22° <del>✕</del> 09'05	34.09920 AU	morning rise	6742 Apr 07 14:42	3° <del>∇</del> 44'58	
morning rise	6736 Mar 27 08:02	22° <del>✕</del> 36'23		retrograde	6742 Jul 04 06:11	5° <del>∇</del> 23'44	
retrograde	6736 Jun 22 21:42	24° <del>✕</del> 19'41		min. Earth dist.	6742 Sep 20 15:33	4° <del>∇</del> 12'51	33.65684 AU
min. Earth dist.	6736 Sep 08 22:51	23° <del>✕</del> 06'25	32.21243 AU	opposition	6742 Sep 22 22:50	4° <del>∇</del> 09'32	-2°45'05
opposition	6736 Sep 10 22:08	23° <del>✕</del> 03'29	0°39'39	direct	6742 Dec 13 00:45	2° <del>∇</del> 55'00	
direct	6736 Nov 30 19:54	21° <del>✕</del> 46'33		evening set	6743 Mar 10 12:16	4° <del>∇</del> 32'50	
evening set	6737 Feb 26 21:00	23° <del>✕</del> 29'29					
				conjunction	6743 Mar 25 12:23	5° <del>∇</del> 01'58	-2°51'04
conjunction	6737 Mar 14 04:40	24° <del>✕</del> 00'36	0°20'32	minimum elong	6743 Mar 25 12:17	5° <del>∇</del> 01'57	2°51'04
minimum elong	6737 Mar 14 04:41	24° <del>✕</del> 00'36	0°20'33	max. Earth dist.	6743 Mar 27 19:13	5° <del>∇</del> 06'26	35.77948 AU
max. Earth dist.	6737 Mar 16 05:01	24° <del>✕</del> 04'43	34.32966 AU	morning rise	6743 Apr 09 12:24	5° <del>∇</del> 31'05	
morning rise	6737 Mar 29 11:37	24° <del>✕</del> 31'39		retrograde	6743 Jul 06 05:20	7° <del>∇</del> 09'14	
retrograde	6737 Jun 24 22:34	26° <del>✕</del> 14'05		min. Earth dist.	6743 Sep 22 16:56	5° <del>∇</del> 58'39	33.90466 AU
min. Earth dist.	6737 Sep 11 03:07	25° <del>✕</del> 01'14	32.44495 AU	opposition	6743 Sep 25 00:51	5° <del>∇</del> 55'19	-3°17'07
opposition	6737 Sep 13 03:49	24° <del>✕</del> 58'14	0°04'10	direct	6743 Dec 15 04:03	4° <del>∇</del> 41'08	
desc. node	6737 Oct 26 13:26	24° <del>✕</del> 01'18		evening set	6744 Mar 11 14:08	6° <del>∇</del> 18'16	
direct	6737 Dec 03 03:13	23° <del>✕</del> 41'43					
evening set	6738 Feb 28 23:58	25° <del>✕</del> 23'41		conjunction	6744 Mar 26 11:45	6° <del>∇</del> 46'58	-3°21'05
				minimum elong	6744 Mar 26 11:38	6° <del>∇</del> 46'57	3°21'06
conjunction	6738 Mar 16 07:21	25° <del>✕</del> 54'32	-0°12'42	max. Earth dist.	6744 Mar 28 19:50	6° <del>∇</del> 51'30	36.02699 AU
minimum elong	6738 Mar 16 07:20	25° <del>✕</del> 54'32	0°12'42	morning rise	6744 Apr 10 09:02	7° <del>∇</del> 15'39	
behind sun begin	6738 Mar 16 03:14	25° <del>✕</del> 54'12		retrograde	6744 Jul 07 02:04	8° <del>∇</del> 53'13	
behind sun end	6738 Mar 16 11:27	25° <del>✕</del> 54'52		min. Earth dist.	6744 Sep 23 17:33	7° <del>∇</del> 42'57	34.15382 AU
max. Earth dist.	6738 Mar 18 08:27	25° <del>✕</del> 58'42	34.56450 AU	opposition	6744 Sep 26 02:16	7° <del>∇</del> 39'35	-3°48'30
morning rise	6738 Mar 31 14:24	26° <del>✕</del> 25'22		direct	6744 Dec 16 08:00	6° <del>∇</del> 25'44	
retrograde	6738 Jun 27 01:41	28° <del>✕</del> 06'58		evening set	6745 Mar 13 15:45	8° <del>∇</del> 02'12	
min. Earth dist.	6738 Sep 13 05:48	26° <del>✕</del> 54'35	32.68187 AU				
opposition	6738 Sep 15 08:41	26° <del>✕</del> 51'28	-0°30'49	conjunction	6745 Mar 28 10:13	8° <del>∇</del> 30'26	-3°50'30
direct	6738 Dec 05 07:29	25° <del>✕</del> 35'22		minimum elong	6745 Mar 28 10:05	8° <del>∇</del> 30'26	3°50'30
evening set	6739 Mar 03 02:38	27° <del>✕</del> 16'24		max. Earth dist.	6745 Mar 30 18:36	8° <del>∇</del> 34'58	36.27590 AU
				morning rise	6745 Apr 12 04:45	8° <del>∇</del> 58'42	
conjunction	6739 Mar 18 09:34	27° <del>✕</del> 46'59	-0°45'24	retrograde	6745 Jul 09 00:12	10° <del>∇</del> 35'43	
minimum elong	6739 Mar 18 09:33	27° <del>✕</del> 46'58	0°45'23	min. Earth dist.	6745 Sep 25 16:39	9° <del>∇</del> 25'48	34.40495 AU
max. Earth dist.	6739 Mar 20 13:03	27° <del>✕</del> 51'18	34.80305 AU	opposition	6745 Sep 28 03:04	9° <del>∇</del> 22'22	-4°19'14
morning rise	6739 Apr 02 15:55	28° <del>✕</del> 17'31		direct	6745 Dec 18 08:33	8° <del>∇</del> 08'50	

evening set	6746 Mar 15 17:06	9° $\Upsilon$ 44'40	min. Earth dist.	6752 Oct 07 00:16	20° $\Upsilon$ 50'18	36.21777 AU
			opposition	6752 Oct 09 17:12	20° $\Upsilon$ 46'37	-7°34'52
conjunction	6746 Mar 30 08:23	10° $\Upsilon$ 12'27	direct	6752 Dec 30 02:05	19° $\Upsilon$ 35'39	
minimum elong	6746 Mar 30 08:15	10° $\Upsilon$ 12'27	evening set	6753 Mar 27 21:36	21° $\Upsilon$ 08'26	
max. Earth dist.	6746 Apr 01 18:56	10° $\Upsilon$ 17'08				
morning rise	6746 Apr 13 23:28	10° $\Upsilon$ 40'14	conjunction	6753 Apr 10 05:05	21° $\Upsilon$ 32'33	-7°23'09
retrograde	6746 Jul 10 21:08	12° $\Upsilon$ 16'47	minimum elong	6753 Apr 10 04:53	21° $\Upsilon$ 32'32	7°23'10
min. Earth dist.	6746 Sep 27 16:29	11° $\Upsilon$ 07'08	max. Earth dist.	6753 Apr 12 21:25	21° $\Upsilon$ 37'27	38.33229 AU
opposition	6746 Sep 30 03:08	11° $\Upsilon$ 03'42	morning rise	6753 Apr 23 12:41	21° $\Upsilon$ 56'41	
direct	6746 Dec 20 09:00	9° $\Upsilon$ 50'31	retrograde	6753 Jul 21 16:32	23° $\Upsilon$ 30'56	
evening set	6747 Mar 17 18:24	11° $\Upsilon$ 25'48	min. Earth dist.	6753 Oct 08 21:44	22° $\Upsilon$ 23'41	36.47883 AU
			opposition	6753 Oct 11 13:58	22° $\Upsilon$ 20'03	-8°00'01
conjunction	6747 Apr 01 05:53	11° $\Upsilon$ 53'06	direct	6753 Dec 31 22:49	21° $\Upsilon$ 09'26	
minimum elong	6747 Apr 01 05:43	11° $\Upsilon$ 53'05	evening set	6754 Mar 29 21:46	22° $\Upsilon$ 41'54	
max. Earth dist.	6747 Apr 03 16:31	11° $\Upsilon$ 57'44				
morning rise	6747 Apr 15 17:26	12° $\Upsilon$ 20'24	conjunction	6754 Apr 11 23:34	23° $\Upsilon$ 05'26	-7°46'51
retrograde	6747 Jul 12 19:55	13° $\Upsilon$ 56'30	minimum elong	6754 Apr 11 23:22	23° $\Upsilon$ 05'25	7°46'53
min. Earth dist.	6747 Sep 29 13:44	12° $\Upsilon$ 47'16	max. Earth dist.	6754 Apr 14 15:09	23° $\Upsilon$ 10'15	38.59076 AU
opposition	6747 Oct 02 02:42	12° $\Upsilon$ 43'43	morning rise	6754 Apr 25 01:39	23° $\Upsilon$ 29'00	
direct	6747 Dec 22 07:13	11° $\Upsilon$ 30'54	retrograde	6754 Jul 23 12:20	25° $\Upsilon$ 03'02	
evening set	6748 Mar 18 19:17	13° $\Upsilon$ 05'39	min. Earth dist.	6754 Oct 10 16:32	23° $\Upsilon$ 56'06	36.73846 AU
			opposition	6754 Oct 13 10:00	23° $\Upsilon$ 52'26	-8°24'30
conjunction	6748 Apr 02 02:49	13° $\Upsilon$ 32'27	direct	6755 Jan 02 18:04	22° $\Upsilon$ 42'07	
minimum elong	6748 Apr 02 02:39	13° $\Upsilon$ 32'26	evening set	6755 Mar 31 21:41	24° $\Upsilon$ 14'18	
max. Earth dist.	6748 Apr 04 15:24	13° $\Upsilon$ 37'13				
morning rise	6748 Apr 16 10:23	13° $\Upsilon$ 59'16	conjunction	6755 Apr 13 17:42	24° $\Upsilon$ 37'15	-8°09'56
retrograde	6748 Jul 13 16:56	15° $\Upsilon$ 34'58	minimum elong	6755 Apr 13 17:30	24° $\Upsilon$ 37'14	8°09'57
min. Earth dist.	6748 Sep 30 12:48	14° $\Upsilon$ 26'02	max. Earth dist.	6755 Apr 16 10:01	24° $\Upsilon$ 42'04	38.84751 AU
opposition	6748 Oct 03 01:55	14° $\Upsilon$ 22'30	morning rise	6755 Apr 26 14:01	25° $\Upsilon$ 00'15	
direct	6748 Dec 23 07:02	13° $\Upsilon$ 10'03	retrograde	6755 Jul 25 07:25	26° $\Upsilon$ 34'03	
evening set	6749 Mar 20 20:05	14° $\Upsilon$ 44'20	min. Earth dist.	6755 Oct 12 13:07	25° $\Upsilon$ 27'19	36.99641 AU
			opposition	6755 Oct 15 05:56	25° $\Upsilon$ 23'42	-8°48'18
conjunction	6749 Apr 03 23:22	15° $\Upsilon$ 10'37	direct	6756 Jan 04 13:47	24° $\Upsilon$ 13'41	
minimum elong	6749 Apr 03 23:12	15° $\Upsilon$ 10'37	evening set	6756 Apr 01 21:14	25° $\Upsilon$ 45'35	
max. Earth dist.	6749 Apr 06 12:29	15° $\Upsilon$ 15'24				
morning rise	6749 Apr 18 02:40	15° $\Upsilon$ 36'55	conjunction	6756 Apr 14 11:16	26° $\Upsilon$ 07'57	-8°32'23
retrograde	6749 Jul 15 13:32	17° $\Upsilon$ 12'15	minimum elong	6756 Apr 14 11:03	26° $\Upsilon$ 07'56	8°32'25
min. Earth dist.	6749 Oct 02 09:36	16° $\Upsilon$ 03'44	max. Earth dist.	6756 Apr 17 03:36	26° $\Upsilon$ 12'44	39.10263 AU
opposition	6749 Oct 05 00:20	16° $\Upsilon$ 00'07	morning rise	6756 Apr 27 01:27	26° $\Upsilon$ 30'20	
direct	6749 Dec 25 07:04	14° $\Upsilon$ 48'02	retrograde	6756 Jul 26 00:18	28° $\Upsilon$ 03'56	
evening set	6750 Mar 22 20:43	16° $\Upsilon$ 21'55	min. Earth dist.	6756 Oct 13 07:50	26° $\Upsilon$ 57'28	37.25268 AU
			opposition	6756 Oct 16 01:15	26° $\Upsilon$ 53'50	-9°11'27
conjunction	6750 Apr 05 19:22	16° $\Upsilon$ 47'41	direct	6757 Jan 05 10:32	25° $\Upsilon$ 44'05	
minimum elong	6750 Apr 05 19:11	16° $\Upsilon$ 47'40	evening set	6757 Apr 03 20:43	27° $\Upsilon$ 15'43	
max. Earth dist.	6750 Apr 08 09:23	16° $\Upsilon$ 52'29				
morning rise	6750 Apr 19 18:17	17° $\Upsilon$ 13'28	conjunction	6757 Apr 16 04:22	27° $\Upsilon$ 37'29	-8°54'13
retrograde	6750 Jul 17 09:46	18° $\Upsilon$ 48'29	minimum elong	6757 Apr 16 04:10	27° $\Upsilon$ 37'28	8°54'14
min. Earth dist.	6750 Oct 04 07:04	17° $\Upsilon$ 40'17	max. Earth dist.	6757 Apr 18 20:41	27° $\Upsilon$ 42'14	39.35621 AU
opposition	6750 Oct 06 22:28	17° $\Upsilon$ 36'39	morning rise	6757 Apr 28 12:29	27° $\Upsilon$ 59'16	
direct	6750 Dec 27 05:27	16° $\Upsilon$ 24'58	retrograde	6757 Jul 27 16:39	29° $\Upsilon$ 32'41	
evening set	6751 Mar 24 21:06	17° $\Upsilon$ 58'27	min. Earth dist.	6757 Oct 15 02:16	28° $\Upsilon$ 26'27	37.50795 AU
			opposition	6757 Oct 17 20:06	28° $\Upsilon$ 22'48	-9°33'55
conjunction	6751 Apr 07 15:03	18° $\Upsilon$ 23'40	direct	6758 Jan 07 06:05	27° $\Upsilon$ 13'19	
minimum elong	6751 Apr 07 14:52	18° $\Upsilon$ 23'39	evening set	6758 Apr 05 19:51	28° $\Upsilon$ 44'43	
max. Earth dist.	6751 Apr 10 06:17	18° $\Upsilon$ 28'32				
morning rise	6751 Apr 21 08:59	18° $\Upsilon$ 48'55	conjunction	6758 Apr 17 21:11	29° $\Upsilon$ 05'52	-9°15'25
retrograde	6751 Jul 19 02:32	20° $\Upsilon$ 23'39	minimum elong	6758 Apr 17 20:58	29° $\Upsilon$ 05'51	9°15'28
min. Earth dist.	6751 Oct 06 04:16	19° $\Upsilon$ 15'47	max. Earth dist.	6758 Apr 20 14:44	29° $\Upsilon$ 10'41	39.60900 AU
opposition	6751 Oct 08 20:00	19° $\Upsilon$ 12'09	morning rise	6758 Apr 29 22:40	29° $\Upsilon$ 27'03	
direct	6751 Dec 29 05:21	18° $\Upsilon$ 00'50		6758 May 19 19:47	0° $\mathcal{B}$	
evening set	6752 Mar 25 21:32	19° $\Upsilon$ 33'57	retrograde	6758 Jul 29 05:49	1° $\mathcal{B}$ 00'18	
				6758 Oct 12 12:36	30° $\mathcal{R}\Upsilon$	
conjunction	6752 Apr 08 10:13	19° $\Upsilon$ 58'37	min. Earth dist.	6758 Oct 16 20:49	29° $\Upsilon$ 54'16	37.76249 AU
minimum elong	6752 Apr 08 10:01	19° $\Upsilon$ 58'36	opposition	6758 Oct 19 14:30	29° $\Upsilon$ 50'38	-9°55'42
max. Earth dist.	6752 Apr 11 01:05	20° $\Upsilon$ 03'26	direct	6759 Jan 09 03:47	28° $\Upsilon$ 41'26	
morning rise	6752 Apr 21 23:15	20° $\Upsilon$ 23'19		6759 Mar 31 09:02	0° $\mathcal{B}$	
retrograde	6752 Jul 19 22:02	21° $\Upsilon$ 57'48	evening set	6759 Apr 07 18:55	0° $\mathcal{B}$ 12'37	

conjunction	6759 Apr 19 13:23	0°833'09 -9°36'00	direct	6766 Jan 19 03:00	8°832'54
minimum elong	6759 Apr 19 13:10	0°833'08 9°36'02	evening set	6766 Apr 19 08:02	10°803'30
max. Earth dist.	6759 Apr 22 06:21	0°837'54 39.86131 AU			
morning rise	6759 May 01 08:17	0°853'43	conjunction	6766 Apr 28 22:21	10°819'36 -11°42'59
retrograde	6759 Jul 30 22:37	2°826'51	minimum elong	6766 Apr 28 22:09	10°819'35 11°43'01
min. Earth dist.	6759 Oct 18 13:20	1°821'07 38.01685 AU	max. Earth dist.	6766 May 01 16:26	10°824'15 41.60518 AU
opposition	6759 Oct 21 08:28	1°817'26 -10°16'49	morning rise	6766 May 08 12:58	10°835'45
direct	6760 Jan 10 21:23	0°808'30	retrograde	6766 Aug 09 09:19	12°808'48
evening set	6760 Apr 08 17:41	1°839'30	min. Earth dist.	6766 Oct 28 08:28	11°804'48 39.76948 AU
			opposition	6766 Oct 31 04:01	11°801'13 -12°26'35
conjunction	6760 Apr 20 05:24	1°859'25 -9°55'57	direct	6767 Jan 20 16:52	9°854'20
minimum elong	6760 Apr 20 05:10	1°859'24 9°55'59	evening set	6767 Apr 21 06:03	11°824'56
max. Earth dist.	6760 Apr 22 23:48	2°804'14 40.11349 AU			
morning rise	6760 May 01 17:23	2°819'22	conjunction	6767 Apr 30 12:11	11°840'23 -11°58'51
retrograde	6760 Jul 31 14:50	3°852'25	minimum elong	6767 Apr 30 11:59	11°840'23 11°58'54
min. Earth dist.	6760 Oct 19 07:38	2°846'53 38.27108 AU	max. Earth dist.	6767 May 03 06:29	11°845'01 41.84491 AU
opposition	6760 Oct 22 02:10	2°843'14 -10°37'16	morning rise	6767 May 09 18:35	11°855'52
direct	6761 Jan 11 14:56	1°834'36	retrograde	6767 Aug 10 23:55	13°828'59
evening set	6761 Apr 10 16:20	3°805'27	min. Earth dist.	6767 Oct 30 01:07	12°825'08 40.00951 AU
			opposition	6767 Nov 01 19:19	12°821'37 -12°42'43
conjunction	6761 Apr 21 20:56	3°824'45 -10°15'17	direct	6768 Jan 22 07:18	11°815'00
minimum elong	6761 Apr 21 20:44	3°824'44 10°15'19	evening set	6768 Apr 22 04:11	12°845'37
max. Earth dist.	6761 Apr 24 15:08	3°829'32 40.36551 AU			
morning rise	6761 May 03 01:49	3°844'05	conjunction	6768 May 01 01:49	13°800'24 -12°14'11
retrograde	6761 Aug 02 07:19	5°817'03	minimum elong	6768 May 01 01:37	13°800'23 12°14'13
min. Earth dist.	6761 Oct 20 23:29	4°811'50 38.52485 AU	max. Earth dist.	6768 May 03 19:42	13°804'58 42.08122 AU
opposition	6761 Oct 23 19:18	4°808'09 -10°57'03	morning rise	6768 May 09 23:35	13°815'13
direct	6762 Jan 13 07:18	2°859'48	retrograde	6768 Aug 11 12:41	14°848'23
evening set	6762 Apr 12 14:51	4°830'33	min. Earth dist.	6768 Oct 30 15:41	13°844'44 40.24601 AU
			opposition	6768 Nov 02 10:05	13°841'14 -12°58'19
conjunction	6762 Apr 23 12:11	4°849'14 -10°34'00	direct	6769 Jan 22 22:47	12°834'50
minimum elong	6762 Apr 23 11:57	4°849'13 10°34'01	evening set	6769 Apr 24 02:01	14°805'28
max. Earth dist.	6762 Apr 26 06:50	4°854'01 40.61680 AU			
morning rise	6762 May 04 09:55	5°807'56	conjunction	6769 May 02 14:54	14°819'35 -12°28'59
retrograde	6762 Aug 03 23:41	6°840'52	minimum elong	6769 May 02 14:43	14°819'35 12°29'03
min. Earth dist.	6762 Oct 22 16:32	5°835'53 38.77784 AU	max. Earth dist.	6769 May 05 08:06	14°824'05 42.31417 AU
opposition	6762 Oct 25 12:05	5°832'14 -11°16'11	morning rise	6769 May 11 04:05	14°833'43
direct	6763 Jan 14 23:10	4°824'12		6769 May 27 14:49	15°8
evening set	6763 Apr 14 13:15	5°854'52	retrograde	6769 Aug 13 01:26	16°806'58
			min. Earth dist.	6769 Nov 01 06:23	15°803'29 40.47958 AU
conjunction	6763 Apr 25 03:13	6°812'55 -10°52'06	opposition	6769 Nov 04 00:35	15°800'00 -13°13'21
minimum elong	6763 Apr 25 03:01	6°812'54 10°52'09		6769 Nov 04 00:36	15°8
max. Earth dist.	6763 Apr 27 22:24	6°817'43 40.86711 AU	direct	6770 Jan 24 13:36	13°853'49
morning rise	6763 May 05 17:21	6°830'59		6770 Apr 10 14:24	15°8
retrograde	6763 Aug 05 12:59	8°803'55	evening set	6770 Apr 25 23:52	15°824'31
min. Earth dist.	6763 Oct 24 09:01	6°859'12 39.02935 AU			
opposition	6763 Oct 27 04:34	6°855'33 -11°34'41	conjunction	6770 May 04 03:53	15°837'56 -12°43'16
direct	6764 Jan 16 17:23	5°847'49	minimum elong	6770 May 04 03:42	15°837'56 12°43'18
evening set	6764 Apr 15 11:30	7°818'27	max. Earth dist.	6770 May 06 21:47	15°842'28 42.54450 AU
			morning rise	6770 May 12 07:59	15°851'22
conjunction	6764 Apr 25 17:41	7°835'51 -11°09'38	retrograde	6770 Aug 14 11:24	17°824'44
minimum elong	6764 Apr 25 17:28	7°835'50 11°09'40	min. Earth dist.	6770 Nov 02 21:05	16°821'24 40.71065 AU
max. Earth dist.	6764 Apr 28 12:09	7°840'35 41.11564 AU	opposition	6770 Nov 05 14:32	16°817'57 -13°27'49
morning rise	6764 May 06 00:17	7°853'17	direct	6771 Jan 26 06:16	15°811'59
retrograde	6764 Aug 06 03:29	9°826'15	evening set	6771 Apr 27 21:43	16°842'45
min. Earth dist.	6764 Oct 25 00:45	8°821'48 39.27897 AU			
opposition	6764 Oct 27 20:48	8°818'09 -11°52'35	conjunction	6771 May 05 16:22	16°855'29 -12°57'01
direct	6765 Jan 17 09:48	7°810'43	minimum elong	6771 May 05 16:10	16°855'28 12°57'04
evening set	6765 Apr 17 09:43	8°841'20	max. Earth dist.	6771 May 08 09:15	16°859'55 42.77277 AU
			morning rise	6771 May 13 11:12	17°808'13
conjunction	6765 Apr 27 08:12	8°858'05 -11°26'35	retrograde	6771 Aug 15 23:51	18°841'42
minimum elong	6765 Apr 27 08:00	8°858'04 11°26'38	min. Earth dist.	6771 Nov 04 09:54	17°838'35 40.93999 AU
max. Earth dist.	6765 Apr 30 03:39	9°802'51 41.36188 AU	opposition	6771 Nov 07 04:18	17°835'07 -13°41'44
morning rise	6765 May 07 06:53	9°814'52	direct	6772 Jan 27 20:51	16°829'22
retrograde	6765 Aug 07 17:08	10°847'53	evening set	6772 Apr 28 19:19	18°800'14
min. Earth dist.	6765 Oct 26 17:43	9°843'37 39.52586 AU			
opposition	6765 Oct 29 12:34	9°840'02 -12°09'52	conjunction	6772 May 06 04:33	18°812'15 -13°10'14

minimum elong	6772 May 06 04:23	18° <b>8</b> 12'14	13°10'16	evening set	6779 May 11 10:44	26° <b>8</b> 45'37	
max. Earth dist.	6772 May 08 22:27	18° <b>8</b> 16'44	42.99940 AU				
morning rise	6772 May 13 13:54	18° <b>8</b> 24'17		conjunction	6779 May 15 11:56	26° <b>8</b> 51'59	-14°28'43
retrograde	6772 Aug 16 13:49	19° <b>8</b> 57'56		minimum elong	6779 May 15 11:47	26° <b>8</b> 51'59	14°28'46
min. Earth dist.	6772 Nov 05 00:26	18° <b>8</b> 54'57	41.16772 AU	max. Earth dist.	6779 May 18 03:13	26° <b>8</b> 56'09	44.52462 AU
opposition	6772 Nov 07 17:53	18° <b>8</b> 51'32	-13°55'05	morning rise	6779 May 19 13:02	26° <b>8</b> 58'22	
direct	6773 Jan 28 09:55	17° <b>8</b> 46'01		retrograde	6779 Aug 25 23:21	28° <b>8</b> 34'11	
evening set	6773 Apr 30 17:15	19° <b>8</b> 17'02		min. Earth dist.	6779 Nov 14 17:40	27° <b>8</b> 32'25	42.69406 AU
				opposition	6779 Nov 17 08:34	27° <b>8</b> 29'14	-15°14'01
conjunction	6773 May 07 16:35	19° <b>8</b> 28'19	-13°22'55	direct	6780 Feb 06 22:46	26° <b>8</b> 25'15	
minimum elong	6773 May 07 16:25	19° <b>8</b> 28'18	13°22'58	evening set	6780 May 12 12:57	27° <b>8</b> 58'34	
max. Earth dist.	6773 May 10 10:01	19° <b>8</b> 32'45	43.22458 AU				
morning rise	6773 May 14 16:00	19° <b>8</b> 39'38		conjunction	6780 May 15 22:28	28° <b>8</b> 03'54	-14°38'07
retrograde	6773 Aug 18 02:59	21° <b>8</b> 13'27		minimum elong	6780 May 15 22:21	28° <b>8</b> 03'53	14°38'10
min. Earth dist.	6773 Nov 06 12:39	20° <b>8</b> 10'43	41.39378 AU	morning rise	6780 May 19 07:52	28° <b>8</b> 09'13	
opposition	6773 Nov 09 06:51	20° <b>8</b> 07'17	-14°07'53	max. Earth dist.	6780 May 18 13:30	28° <b>8</b> 08'01	44.72845 AU
direct	6774 Jan 29 21:13	19° <b>8</b> 01'59		retrograde	6780 Aug 26 08:02	29° <b>8</b> 45'37	
evening set	6774 May 02 15:08	20° <b>8</b> 33'10		min. Earth dist.	6780 Nov 15 05:34	28° <b>8</b> 43'58	42.89710 AU
				opposition	6780 Nov 17 19:57	28° <b>8</b> 40'49	-15°23'25
conjunction	6774 May 09 04:18	20° <b>8</b> 43'44	-13°35'05	direct	6781 Feb 07 11:29	27° <b>8</b> 37'00	
minimum elong	6774 May 09 04:08	20° <b>8</b> 43'43	13°35'08	evening set	6781 May 14 17:53	29° <b>8</b> 11'03	
max. Earth dist.	6774 May 11 21:29	20° <b>8</b> 48'06	43.44798 AU				
morning rise	6774 May 15 17:36	20° <b>8</b> 54'17		conjunction	6781 May 17 08:42	29° <b>8</b> 15'09	-14°47'05
retrograde	6774 Aug 19 15:11	22° <b>8</b> 28'21		minimum elong	6781 May 17 08:34	29° <b>8</b> 15'08	14°47'08
min. Earth dist.	6774 Nov 08 02:09	21° <b>8</b> 25'46	41.61804 AU	morning rise	6781 May 19 23:21	29° <b>8</b> 19'13	
opposition	6774 Nov 10 19:49	21° <b>8</b> 22'23	-14°20'09	max. Earth dist.	6781 May 19 22:14	29° <b>8</b> 19'09	44.92812 AU
direct	6775 Jan 31 09:24	20° <b>8</b> 17'19			6781 Jun 16 02:28	0° <b>II</b>	
evening set	6775 May 04 13:12	21° <b>8</b> 48'43		retrograde	6781 Aug 27 17:02	0° <b>II</b> 56'23	
					6781 Nov 12 11:18	30° <b>R</b> <b>8</b>	
conjunction	6775 May 10 15:47	21° <b>8</b> 58'32	-13°46'45	min. Earth dist.	6781 Nov 16 16:52	29° <b>8</b> 54'53	43.09639 AU
minimum elong	6775 May 10 15:37	21° <b>8</b> 58'31	13°46'49	opposition	6781 Nov 19 06:58	29° <b>8</b> 51'44	-15°32'22
max. Earth dist.	6775 May 13 09:35	22° <b>8</b> 02'56	43.66944 AU	direct	6782 Feb 08 23:16	28° <b>8</b> 48'06	
morning rise	6775 May 16 18:20	22° <b>8</b> 08'19			6782 May 02 00:47	0° <b>II</b>	
retrograde	6775 Aug 20 23:55	23° <b>8</b> 42'38		evening set	6782 May 17 06:16	0° <b>II</b> 23'23	
min. Earth dist.	6775 Nov 09 15:12	22° <b>8</b> 40'15	41.83990 AU				
opposition	6775 Nov 12 08:27	22° <b>8</b> 36'53	-14°31'53	conjunction	6782 May 18 18:47	0° <b>II</b> 25'45	-14°55'37
direct	6776 Feb 01 23:52	21° <b>8</b> 32'03		minimum elong	6782 May 18 18:41	0° <b>II</b> 25'45	14°55'41
evening set	6776 May 05 11:40	23° <b>8</b> 03'43		morning rise	6782 May 20 07:08	0° <b>II</b> 28'07	
				max. Earth dist.	6782 May 21 09:01	0° <b>II</b> 29'47	45.12430 AU
conjunction	6776 May 11 03:01	23° <b>8</b> 12'44	-13°57'56	retrograde	6782 Aug 29 01:04	2° <b>II</b> 06'32	
minimum elong	6776 May 11 02:53	23° <b>8</b> 12'44	13°57'59	min. Earth dist.	6782 Nov 18 05:01	1° <b>II</b> 05'06	43.29238 AU
max. Earth dist.	6776 May 13 19:36	23° <b>8</b> 17'02	43.88839 AU	opposition	6782 Nov 20 17:51	1° <b>II</b> 02'02	-15°40'53
morning rise	6776 May 16 18:28	23° <b>8</b> 21'45			6783 Jan 30 11:08	30° <b>R</b> <b>8</b>	
retrograde	6776 Aug 21 11:23	24° <b>8</b> 56'21		direct	6783 Feb 10 12:52	29° <b>8</b> 58'33	
min. Earth dist.	6776 Nov 10 03:14	23° <b>8</b> 54'11	42.05912 AU		6783 Feb 21 09:17	0° <b>II</b>	
opposition	6776 Nov 12 20:50	23° <b>8</b> 50'49	-14°43'07				
direct	6777 Feb 02 12:17	22° <b>8</b> 46'13		conjunction	6783 May 20 04:24	1° <b>II</b> 35'44	-15°03'44
evening set	6777 May 07 10:29	24° <b>8</b> 18'11		minimum elong	6783 May 20 04:18	1° <b>II</b> 35'44	15°03'47
				max. Earth dist.	6783 May 22 17:28	1° <b>II</b> 39'41	45.31766 AU
conjunction	6777 May 12 14:11	24° <b>8</b> 26'23	-14°08'39	retrograde	6783 Aug 30 11:42	3° <b>II</b> 16'05	
minimum elong	6777 May 12 14:01	24° <b>8</b> 26'22	14°08'42	min. Earth dist.	6783 Nov 19 14:46	2° <b>II</b> 14'51	43.48578 AU
max. Earth dist.	6777 May 15 07:18	24° <b>8</b> 30'42	44.10431 AU	opposition	6783 Nov 22 04:25	2° <b>II</b> 11'44	-15°48'57
morning rise	6777 May 17 17:49	24° <b>8</b> 34'35		direct	6784 Feb 11 23:17	1° <b>II</b> 08'26	
retrograde	6777 Aug 22 21:39	26° <b>8</b> 09'32					
min. Earth dist.	6777 Nov 11 17:03	25° <b>8</b> 07'29	42.27487 AU	conjunction	6784 May 20 13:57	2° <b>II</b> 45'10	-15°11'25
opposition	6777 Nov 14 09:01	25° <b>8</b> 04'12	-14°53'53	minimum elong	6784 May 20 13:51	2° <b>II</b> 45'09	15°11'29
direct	6778 Feb 04 02:23	23° <b>8</b> 59'50		max. Earth dist.	6784 May 23 03:11	2° <b>II</b> 49'05	45.50861 AU
evening set	6778 May 09 10:13	25° <b>8</b> 32'09		retrograde	6784 Aug 30 22:48	4° <b>II</b> 25'05	
				min. Earth dist.	6784 Nov 20 02:26	3° <b>II</b> 23'57	43.67695 AU
conjunction	6778 May 14 01:10	25° <b>8</b> 39'28	-14°18'54	opposition	6784 Nov 22 14:51	3° <b>II</b> 20'55	-15°56'33
minimum elong	6778 May 14 01:02	25° <b>8</b> 39'28	14°18'57	direct	6785 Feb 12 08:30	2° <b>II</b> 17'48	
max. Earth dist.	6778 May 16 16:58	25° <b>8</b> 43'41	44.31658 AU				
morning rise	6778 May 18 16:05	25° <b>8</b> 46'48		conjunction	6785 May 21 23:22	3° <b>II</b> 54'06	-15°18'40
retrograde	6778 Aug 24 10:04	27° <b>8</b> 22'09		minimum elong	6785 May 21 23:17	3° <b>II</b> 54'05	15°18'43
min. Earth dist.	6778 Nov 13 04:31	26° <b>8</b> 20'17	42.48660 AU	max. Earth dist.	6785 May 24 12:33	3° <b>II</b> 58'00	45.69754 AU
opposition	6778 Nov 15 20:45	26° <b>8</b> 17'01	-15°04'10	retrograde	6785 Sep 01 08:18	5° <b>II</b> 33'36	
direct	6779 Feb 05 13:25	25° <b>8</b> 12'50		min. Earth dist.	6785 Nov 21 12:16	4° <b>II</b> 32'39	43.86580 AU

opposition	6785 Nov 24 00:53	4°II29'37 -16°03'43	conjunction	6794 Jun 01 04:46	13°II57'01 -16°06'26
direct	6786 Feb 13 17:05	3°II26'42	minimum elong	6794 Jun 01 04:43	13°II57'00 16°06'29
			max. Earth dist.	6794 Jun 03 11:42	14°II00'24 47.24857 AU
conjunction	6786 May 23 08:26	5°II02'35 -15°25'29	retrograde	6794 Sep 11 11:41	15°II33'15
minimum elong	6786 May 23 08:21	5°II02'35 15°25'33	min. Earth dist.	6794 Dec 02 06:34	14°II33'18 45.40715 AU
max. Earth dist.	6786 May 25 20:35	5°II06'25 45.88411 AU	opposition	6794 Dec 04 11:46	14°II30'42 -16°50'22
retrograde	6786 Sep 02 18:08	6°II41'43	direct	6795 Feb 24 07:45	13°II29'15
min. Earth dist.	6786 Nov 22 22:25	5°II40'55 44.05235 AU			
opposition	6786 Nov 25 10:45	5°II37'55 -16°10'26	conjunction	6795 Jun 02 12:35	15°II01'46 -16°09'59
direct	6787 Feb 15 01:35	4°II35'11	minimum elong	6795 Jun 02 12:34	15°II01'46 16°10'03
			max. Earth dist.	6795 Jun 04 18:54	15°II05'07 47.40005 AU
conjunction	6787 May 24 17:32	6°II10'42 -15°31'54	retrograde	6795 Sep 12 20:52	16°II37'39
minimum elong	6787 May 24 17:27	6°II10'41 15°31'57	min. Earth dist.	6795 Dec 03 14:32	15°II37'49 45.55756 AU
max. Earth dist.	6787 May 27 06:18	6°II14'33 46.06831 AU	opposition	6795 Dec 05 19:59	15°II35'12 -16°53'45
retrograde	6787 Sep 04 00:19	7°II49'27	direct	6796 Feb 25 15:22	14°II33'53
min. Earth dist.	6787 Nov 24 09:15	6°II48'48 44.23613 AU			
opposition	6787 Nov 26 20:32	6°II45'51 -16°16'45	conjunction	6796 Jun 02 20:04	16°II06'02 -16°13'12
direct	6788 Feb 16 13:53	5°II43'19	minimum elong	6796 Jun 02 20:02	16°II06'02 16°13'15
			max. Earth dist.	6796 Jun 05 01:24	16°II09'18 47.54838 AU
conjunction	6788 May 25 02:15	7°II18'27 -15°37'54	retrograde	6796 Sep 13 06:50	17°II41'34
minimum elong	6788 May 25 02:10	7°II18'26 15°37'58	min. Earth dist.	6796 Dec 03 23:36	16°II41'48 45.70511 AU
max. Earth dist.	6788 May 27 13:37	7°II22'12 46.24964 AU	opposition	6796 Dec 06 04:10	16°II39'15 -16°56'46
retrograde	6788 Sep 04 09:27	8°II56'51	direct	6797 Feb 25 20:29	15°II38'03
min. Earth dist.	6788 Nov 24 18:32	7°II56'23 44.41677 AU			
opposition	6788 Nov 27 06:05	7°II53'26 -16°22'38	conjunction	6797 Jun 04 03:41	17°II09'52 -16°16'03
direct	6789 Feb 17 00:36	6°II51'07	minimum elong	6797 Jun 04 03:40	17°II09'52 16°16'07
			max. Earth dist.	6797 Jun 06 09:23	17°II13'09 47.69398 AU
conjunction	6789 May 26 11:03	8°II25'52 -15°43'31	retrograde	6797 Sep 14 12:01	18°II45'04
minimum elong	6789 May 26 11:00	8°II25'52 15°43'35	min. Earth dist.	6797 Dec 05 08:06	17°II45'23 45.84973 AU
max. Earth dist.	6789 May 28 22:23	8°II29'36 46.42744 AU	opposition	6797 Dec 07 11:55	17°II42'53 -16°59'26
retrograde	6789 Sep 05 21:08	10°II03'55	direct	6798 Feb 27 05:48	16°II41'48
min. Earth dist.	6789 Nov 26 05:42	9°II03'33 44.59357 AU			
opposition	6789 Nov 28 15:26	9°II00'42 -16°28'09	conjunction	6798 Jun 05 10:58	18°II13'19 -16°18'34
direct	6790 Feb 18 09:27	7°II58'34	minimum elong	6798 Jun 05 10:58	18°II13'19 16°18'37
			max. Earth dist.	6798 Jun 07 15:06	18°II16'29 47.83685 AU
conjunction	6790 May 27 19:48	9°II32'57 -15°48'47	retrograde	6798 Sep 15 17:49	19°II48'12
minimum elong	6790 May 27 19:43	9°II32'57 15°48'51	min. Earth dist.	6798 Dec 06 15:44	18°II48'40 45.99162 AU
max. Earth dist.	6790 May 30 06:13	9°II36'37 46.60121 AU	opposition	6798 Dec 08 19:41	18°II46'09 -17°01'44
retrograde	6790 Sep 07 06:23	11°II10'39	direct	6799 Feb 28 14:08	17°II45'13
min. Earth dist.	6790 Nov 27 15:04	10°II10'26 44.76584 AU			
opposition	6790 Nov 30 00:36	10°II07'36 -16°33'17	conjunction	6799 Jun 06 18:04	19°II16'26 -16°20'44
direct	6791 Feb 19 17:14	9°II05'39	minimum elong	6799 Jun 06 18:05	19°II16'26 16°20'49
			max. Earth dist.	6799 Jun 08 22:32	19°II19'37 47.97679 AU
conjunction	6791 May 29 04:09	10°II39'40 -15°53'42	retrograde	6799 Sep 17 01:02	20°II51'03
minimum elong	6791 May 29 04:07	10°II39'40 15°53'46	min. Earth dist.	6799 Dec 08 01:06	19°II51'34 46.13036 AU
max. Earth dist.	6791 May 31 13:04	10°II43'13 46.77019 AU	opposition	6799 Dec 10 03:27	19°II49'08 -17°03'42
retrograde	6791 Sep 08 15:42	12°II17'00	direct	6800 Feb 29 23:29	18°II48'21
min. Earth dist.	6791 Nov 29 01:28	11°II16'52 44.93326 AU			
opposition	6791 Dec 01 09:49	11°II14'06 -16°38'04	conjunction	6800 Jun 07 01:14	20°II19'17 -16°22'35
direct	6792 Feb 21 00:43	10°II12'18	minimum elong	6800 Jun 07 01:15	20°II19'17 16°22'38
			max. Earth dist.	6800 Jun 09 04:45	20°II22'24 48.11362 AU
conjunction	6792 May 29 12:40	11°II45'57 -15°58'17	retrograde	6800 Sep 17 09:24	21°II53'38
minimum elong	6792 May 29 12:37	11°II45'57 15°58'20	min. Earth dist.	6800 Dec 08 08:15	20°II54'19 46.26563 AU
max. Earth dist.	6792 May 31 21:36	11°II49'30 46.93430 AU	opposition	6800 Dec 10 10:48	20°II51'53 -17°05'19
retrograde	6792 Sep 08 20:46	13°II22'55	direct	6801 Mar 02 06:22	19°II51'14
min. Earth dist.	6792 Nov 29 11:42	12°II22'51 45.09561 AU			
opposition	6792 Dec 01 18:40	12°II20'09 -16°42'31	conjunction	6801 Jun 08 08:14	21°II21'54 -16°24'06
direct	6793 Feb 21 11:33	11°II18'28	minimum elong	6801 Jun 08 08:14	21°II21'54 16°24'11
			max. Earth dist.	6801 Jun 10 10:30	21°II24'56 48.24662 AU
conjunction	6793 May 30 20:48	12°II51'44 -16°02'31	retrograde	6801 Sep 18 18:39	22°II56'00
minimum elong	6793 May 30 20:47	12°II51'44 16°02'35	min. Earth dist.	6801 Dec 09 17:19	21°II56'44 46.39685 AU
max. Earth dist.	6793 Jun 02 03:51	12°II55'10 47.09362 AU	opposition	6801 Dec 11 18:14	21°II54'23 -17°06'38
retrograde	6793 Sep 10 04:04	14°II28'20	direct	6802 Mar 03 11:33	20°II53'54
min. Earth dist.	6793 Nov 30 20:20	13°II28'23 45.25340 AU			
opposition	6793 Dec 03 03:18	13°II25'41 -16°46'37	conjunction	6802 Jun 09 15:17	22°II24'19 -16°25'20
direct	6794 Feb 22 20:43	12°II24'07	minimum elong	6802 Jun 09 15:20	22°II24'19 16°25'23
			max. Earth dist.	6802 Jun 11 17:29	22°II27'20 48.37528 AU

retrograde	6802 Sep 20 00:07	23°II58'09		minimum elong	6810 Jun 17 18:52	0°☾32'54	16°25'08
min. Earth dist.	6802 Dec 11 01:33	22°II58'59	46.52322 AU	max. Earth dist.	6810 Jun 19 13:30	0°☾35'25	49.24033 AU
opposition	6802 Dec 13 01:24	22°II56'41	-17°07'39	retrograde	6810 Sep 28 00:58	2°☾04'44	
direct	6803 Mar 04 18:25	21°II56'20		min. Earth dist.	6810 Dec 19 12:32	1°☾06'01	47.37239 AU
				opposition	6810 Dec 21 06:15	1°☾04'02	-17°05'24
conjunction	6803 Jun 10 22:09	23°II26'30	-16°26'17	direct	6811 Mar 13 03:20	0°☾04'26	
minimum elong	6803 Jun 10 22:10	23°II26'30	16°26'20				
max. Earth dist.	6803 Jun 12 22:08	23°II29'23	48.49899 AU	conjunction	6811 Jun 19 00:39	1°☾32'37	-16°23'43
retrograde	6803 Sep 21 06:49	25°II00'05		minimum elong	6811 Jun 19 00:44	1°☾32'38	16°23'47
min. Earth dist.	6803 Dec 12 09:14	24°II01'00	46.64454 AU	max. Earth dist.	6811 Jun 20 18:27	1°☾35'05	49.33330 AU
opposition	6803 Dec 14 08:34	23°II58'44	-17°08'22	retrograde	6811 Sep 29 09:22	3°☾04'15	
direct	6804 Mar 05 01:01	22°II58'31		min. Earth dist.	6811 Dec 20 20:11	2°☾05'34	47.46371 AU
				opposition	6811 Dec 22 12:25	2°☾03'40	-17°03'47
conjunction	6804 Jun 11 04:59	24°II28'25	-16°26'57	direct	6812 Mar 13 08:24	1°☾04'10	
minimum elong	6804 Jun 11 05:02	24°II28'25	16°27'00				
max. Earth dist.	6804 Jun 13 04:38	24°II31'16	48.61745 AU	conjunction	6812 Jun 19 06:32	2°☾32'09	-16°22'05
retrograde	6804 Sep 21 11:57	26°II01'44		minimum elong	6812 Jun 19 06:37	2°☾32'10	16°22'10
min. Earth dist.	6804 Dec 12 18:25	25°II02'40	46.76046 AU	max. Earth dist.	6812 Jun 21 00:31	2°☾34'37	49.42331 AU
opposition	6804 Dec 14 15:39	25°II00'30	-17°08'50	retrograde	6812 Sep 29 16:01	4°☾03'35	
direct	6805 Mar 06 11:05	24°II00'23		min. Earth dist.	6812 Dec 21 02:40	3°☾04'59	47.55160 AU
				opposition	6812 Dec 22 18:21	3°☾03'06	-17°01'52
conjunction	6805 Jun 12 11:44	25°II30'01	-16°27'21	direct	6813 Mar 14 12:29	2°☾03'42	
minimum elong	6805 Jun 12 11:45	25°II30'01	16°27'24				
max. Earth dist.	6805 Jun 14 09:57	25°II32'47	48.73084 AU	conjunction	6813 Jun 20 12:20	3°☾31'31	-16°20'11
retrograde	6805 Sep 22 19:31	27°II03'04		minimum elong	6813 Jun 20 12:26	3°☾31'32	16°20'14
min. Earth dist.	6805 Dec 14 01:11	26°II04'05	46.87143 AU	max. Earth dist.	6813 Jun 22 04:20	3°☾33'52	49.50971 AU
opposition	6805 Dec 15 22:16	26°II01'56	-17°09'00	retrograde	6813 Sep 30 22:40	5°☾02'45	
direct	6806 Mar 07 18:38	25°II01'54		min. Earth dist.	6813 Dec 22 09:04	4°☾04'13	47.63568 AU
				opposition	6813 Dec 24 00:05	4°☾02'23	-16°59'40
conjunction	6806 Jun 13 18:11	26°II31'16	-16°27'29	direct	6814 Mar 15 16:04	3°☾03'05	
minimum elong	6806 Jun 13 18:15	26°II31'16	16°27'33				
max. Earth dist.	6806 Jun 15 15:13	26°II33'57	48.83952 AU	conjunction	6814 Jun 21 18:13	4°☾30'44	-16°18'02
retrograde	6806 Sep 24 05:35	28°II04'03		minimum elong	6814 Jun 21 18:17	4°☾30'44	16°18'06
min. Earth dist.	6806 Dec 15 09:31	27°II05'05	46.97815 AU	max. Earth dist.	6814 Jun 23 10:01	4°☾33'03	49.59189 AU
opposition	6806 Dec 17 05:03	27°II03'00	-17°08'53	retrograde	6814 Oct 02 01:51	6°☾01'47	
direct	6807 Mar 08 22:23	26°II03'03		min. Earth dist.	6814 Dec 23 16:55	5°☾03'15	47.71515 AU
				opposition	6814 Dec 25 05:58	5°☾01'30	-16°57'13
conjunction	6807 Jun 15 00:29	27°II32'09	-16°27'19	direct	6815 Mar 16 23:58	4°☾02'18	
minimum elong	6807 Jun 15 00:32	27°II32'09	16°27'23				
max. Earth dist.	6807 Jun 16 21:35	27°II34'50	48.94437 AU	conjunction	6815 Jun 22 23:54	5°☾29'45	-16°15'37
retrograde	6807 Sep 25 10:44	29°II04'41		minimum elong	6815 Jun 23 00:00	5°☾29'46	16°15'41
min. Earth dist.	6807 Dec 16 16:32	28°II05'46	47.08117 AU	max. Earth dist.	6815 Jun 24 14:13	5°☾32'00	49.66934 AU
opposition	6807 Dec 18 11:35	28°II03'43	-17°08'29	retrograde	6815 Oct 03 06:44	7°☾00'38	
direct	6808 Mar 09 05:09	27°II03'50		min. Earth dist.	6815 Dec 24 22:50	6°☾02'10	47.78954 AU
				opposition	6815 Dec 26 11:43	6°☾00'26	-16°54'32
conjunction	6808 Jun 15 06:40	28°II32'42	-16°26'52	direct	6816 Mar 17 07:44	5°☾01'18	
minimum elong	6808 Jun 15 06:44	28°II32'42	16°26'56				
max. Earth dist.	6808 Jun 17 02:09	28°II35'17	49.04590 AU	conjunction	6816 Jun 23 05:38	6°☾28'35	-16°12'59
	6808 Sep 03 23:25	0°☾		minimum elong	6816 Jun 23 05:43	6°☾28'35	16°13'03
retrograde	6808 Sep 25 14:58	0°☾04'59		max. Earth dist.	6816 Jun 24 18:23	6°☾30'43	49.74147 AU
	6808 Oct 17 10:39	30°☾II		retrograde	6816 Oct 03 15:16	7°☾59'16	
min. Earth dist.	6808 Dec 16 23:11	29°II06'07	47.18117 AU	min. Earth dist.	6816 Dec 25 06:35	7°☾00'47	47.85865 AU
opposition	6808 Dec 18 17:54	29°II04'06	-17°07'46	opposition	6816 Dec 26 17:23	6°☾59'09	-16°51'36
direct	6809 Mar 10 11:09	28°II04'18		direct	6817 Mar 18 12:48	6°☾00'04	
conjunction	6809 Jun 16 12:51	29°II32'56	-16°26'07	conjunction	6817 Jun 24 11:24	7°☾27'10	-16°10'07
minimum elong	6809 Jun 16 12:54	29°II32'56	16°26'10	minimum elong	6817 Jun 24 11:31	7°☾27'10	16°10'11
max. Earth dist.	6809 Jun 18 08:33	29°II35'31	49.14448 AU	max. Earth dist.	6817 Jun 25 23:43	7°☾29'16	49.80851 AU
	6809 Jul 05 21:37	0°☾		retrograde	6817 Oct 04 20:47	8°☾57'39	
retrograde	6809 Sep 26 18:34	1°☾04'59		opposition	6817 Dec 27 22:51	7°☾57'35	-16°48'27
min. Earth dist.	6809 Dec 18 06:55	0°☾06'09	47.27819 AU	min. Earth dist.	6817 Dec 26 12:46	7°☾59'11	47.92261 AU
opposition	6809 Dec 20 00:12	0°☾04'11	-17°06'44	direct	6818 Mar 19 17:51	6°☾58'33	
	6809 Dec 23 16:34	30°☾II					
direct	6810 Mar 11 20:20	29°II04'29		conjunction	6818 Jun 25 16:44	8°☾25'28	-16°07'00
	6810 May 24 23:00	0°☾		minimum elong	6818 Jun 25 16:50	8°☾25'29	16°07'04
				max. Earth dist.	6818 Jun 27 03:02	8°☾27'27	49.87073 AU
conjunction	6810 Jun 17 18:47	0°☾32'54	-16°25'04	retrograde	6818 Oct 06 02:06	9°☾55'46	



min. Earth dist.	6818 Dec 27 19:00	8°☾57'19 47.98221 AU	conjunction	6827 Jul 04 15:35	17°☾03'11 -15°27'39
opposition	6818 Dec 29 04:15	8°☾55'45 -16°45'02	minimum elong	6827 Jul 04 15:43	17°☾03'12 15°27'43
direct	6819 Mar 20 21:55	7°☾56'46	max. Earth dist.	6827 Jul 05 18:51	17°☾04'45 50.27495 AU
			retrograde	6827 Oct 15 02:39	18°☾32'24
conjunction	6819 Jun 26 22:12	9°☾23'31 -16°03'39	min. Earth dist.	6828 Jan 06 00:38	17°☾34'12 48.36291 AU
minimum elong	6819 Jun 26 22:20	9°☾23'31 16°03'43	opposition	6828 Jan 07 01:37	17°☾33'03 -16°02'38
max. Earth dist.	6819 Jun 28 08:32	9°☾25'30 49.92885 AU	direct	6828 Mar 28 19:40	16°☾34'38
retrograde	6819 Oct 07 04:33	10°☾53'38			
min. Earth dist.	6819 Dec 29 01:53	9°☾55'09 48.03794 AU	conjunction	6828 Jul 04 20:40	18°☾00'27 -15°22'06
opposition	6819 Dec 30 09:36	9°☾53'40 -16°41'22	minimum elong	6828 Jul 04 20:50	18°☾00'27 15°22'10
direct	6820 Mar 21 05:32	8°☾54'44	max. Earth dist.	6828 Jul 05 21:34	18°☾01'52 50.29919 AU
			retrograde	6828 Oct 15 09:06	19°☾29'33
conjunction	6820 Jun 27 03:29	10°☾21'19 -16°00'02	min. Earth dist.	6829 Jan 06 06:51	18°☾31'20 48.38349 AU
minimum elong	6820 Jun 27 03:35	10°☾21'20 16°00'06	opposition	6829 Jan 07 06:31	18°☾30'14 -15°56'45
max. Earth dist.	6820 Jun 28 12:35	10°☾23'14 49.98357 AU	direct	6829 Mar 29 22:24	17°☾31'51
retrograde	6820 Oct 07 09:23	11°☾51'17			
min. Earth dist.	6820 Dec 29 06:45	10°☾52'53 48.09038 AU	conjunction	6829 Jul 06 01:52	18°☾57'34 -15°16'21
opposition	6820 Dec 30 14:45	10°☾51'23 -16°37'26	minimum elong	6829 Jul 06 02:00	18°☾57'34 15°16'25
direct	6821 Mar 22 11:42	9°☾52'29	max. Earth dist.	6829 Jul 07 02:12	18°☾58'57 50.31789 AU
			retrograde	6829 Oct 16 10:31	20°☾26'33
conjunction	6821 Jun 28 08:44	11°☾18'57 -15°56'10	opposition	6830 Jan 08 11:13	19°☾27'15 -15°50'39
minimum elong	6821 Jun 28 08:52	11°☾18'57 15°56'14	min. Earth dist.	6830 Jan 07 13:22	19°☾28'16 48.39861 AU
max. Earth dist.	6821 Jun 29 16:51	11°☾20'48 50.03502 AU	direct	6830 Mar 31 04:46	18°☾28'52
retrograde	6821 Oct 08 16:29	12°☾48'46			
opposition	6821 Dec 31 19:51	11°☾48'56 -16°33'14	conjunction	6830 Jul 07 06:52	19°☾54'29 -15°10'24
min. Earth dist.	6821 Dec 30 13:34	11°☾50'21 48.13976 AU	minimum elong	6830 Jul 07 07:02	19°☾54'30 15°10'27
direct	6822 Mar 23 16:44	10°☾50'06	max. Earth dist.	6830 Jul 08 05:40	19°☾55'47 50.33164 AU
			retrograde	6830 Oct 17 13:17	21°☾23'22
conjunction	6822 Jun 29 14:01	12°☾16'26 -15°52'02	opposition	6831 Jan 09 15:51	20°☾24'04 -15°44'19
minimum elong	6822 Jun 29 14:08	12°☾16'26 15°52'05	min. Earth dist.	6831 Jan 08 18:07	20°☾25'05 48.40905 AU
max. Earth dist.	6822 Jun 30 22:13	12°☾18'17 50.08364 AU	direct	6831 Apr 01 10:52	19°☾25'42
retrograde	6822 Oct 09 22:41	13°☾46'07			
min. Earth dist.	6822 Dec 31 18:45	12°☾47'46 48.18613 AU	conjunction	6831 Jul 08 11:39	20°☾51'13 -15°04'13
opposition	6823 Jan 02 00:54	12°☾46'22 -16°28'45	minimum elong	6831 Jul 08 11:48	20°☾51'13 15°04'16
direct	6823 Mar 24 20:14	11°☾47'37	max. Earth dist.	6831 Jul 09 09:13	20°☾52'26 50.34087 AU
			retrograde	6831 Oct 18 19:05	22°☾20'00
conjunction	6823 Jun 30 18:56	13°☾13'50 -15°47'39	opposition	6832 Jan 10 20:35	21°☾20'42 -15°37'46
minimum elong	6823 Jun 30 19:04	13°☾13'50 15°47'43	min. Earth dist.	6832 Jan 10 00:49	21°☾21'37 48.41536 AU
max. Earth dist.	6823 Jul 02 01:23	13°☾15'35 50.12932 AU	direct	6832 Apr 01 16:58	20°☾22'19
retrograde	6823 Oct 11 05:07	14°☾43'24	evening set	6832 Jul 07 14:43	21°☾46'16
min. Earth dist.	6824 Jan 02 00:29	13°☾45'06 48.22956 AU			
opposition	6824 Jan 03 06:00	13°☾43'44 -16°24'01	conjunction	6832 Jul 08 16:39	21°☾47'44 -14°57'48
direct	6824 Mar 24 22:03	12°☾45'03	minimum elong	6832 Jul 08 16:49	21°☾47'45 14°57'53
			morning rise	6832 Jul 09 18:58	21°☾49'14
conjunction	6824 Jul 01 00:10	14°☾11'11 -15°43'00	max. Earth dist.	6832 Jul 09 14:08	21°☾48'58 50.34634 AU
minimum elong	6824 Jul 01 00:18	14°☾11'12 15°43'04	retrograde	6832 Oct 19 00:34	23°☾16'25
max. Earth dist.	6824 Jul 02 06:41	14°☾12'56 50.17181 AU	min. Earth dist.	6833 Jan 10 05:27	22°☾18'03 48.41800 AU
retrograde	6824 Oct 11 08:14	15°☾40'40	opposition	6833 Jan 11 00:57	22°☾17'08 -15°30'59
min. Earth dist.	6825 Jan 02 07:00	14°☾42'22 48.26950 AU	direct	6833 Apr 02 21:35	21°☾18'45
opposition	6825 Jan 03 10:56	14°☾41'04 -16°19'01	evening set	6833 Jul 07 16:36	22°☾41'07
direct	6825 Mar 26 03:58	13°☾42'29			
			conjunction	6833 Jul 09 21:27	22°☾44'06 -14°51'10
conjunction	6825 Jul 02 05:19	15°☾08'32 -15°38'07	minimum elong	6833 Jul 09 21:36	22°☾44'07 14°51'13
minimum elong	6825 Jul 02 05:27	15°☾08'32 15°38'11	max. Earth dist.	6833 Jul 10 16:56	22°☾45'13 50.34839 AU
max. Earth dist.	6825 Jul 03 10:30	15°☾10'12 50.21075 AU	morning rise	6833 Jul 12 02:42	22°☾47'07
retrograde	6825 Oct 12 11:52	16°☾37'55	retrograde	6833 Oct 20 07:37	24°☾12'41
opposition	6826 Jan 04 15:47	15°☾38'25 -16°13'47	min. Earth dist.	6834 Jan 11 10:45	23°☾14'17 48.41748 AU
min. Earth dist.	6826 Jan 03 12:00	15°☾39'43 48.30551 AU	opposition	6834 Jan 12 05:28	23°☾13'25 -15°23'57
direct	6826 Mar 27 11:14	14°☾39'54	direct	6834 Apr 03 22:41	22°☾15'03
			evening set	6834 Jul 08 03:42	23°☾36'21
conjunction	6826 Jul 03 10:19	16°☾05'52 -15°32'59			
minimum elong	6826 Jul 03 10:29	16°☾05'52 15°33'03	conjunction	6834 Jul 11 02:13	23°☾40'20 -14°44'17
max. Earth dist.	6826 Jul 04 14:06	16°☾07'27 50.24527 AU	minimum elong	6834 Jul 11 02:23	23°☾40'21 14°44'21
retrograde	6826 Oct 13 19:49	17°☾35'11	max. Earth dist.	6834 Jul 11 21:51	23°☾41'27 50.34730 AU
opposition	6827 Jan 05 20:47	16°☾35'45 -16°08'19	morning rise	6834 Jul 14 01:11	23°☾44'21
min. Earth dist.	6827 Jan 04 19:02	16°☾36'57 48.33686 AU	retrograde	6834 Oct 21 11:10	25°☾08'51
direct	6827 Mar 28 16:22	15°☾37'18	opposition	6835 Jan 13 09:59	24°☾09'36 -15°16'40

min. Earth dist.	6835 Jan 12 16:35	24°☾10'25	48.41378 AU	conjunction	6841 Jul 17 12:25	0°♈14'00	-13°49'43
direct	6835 Apr 05 03:24	23°☾11'14		minimum elong	6841 Jul 17 12:37	0°♈14'00	13°49'47
evening set	6835 Jul 08 18:06	24°☾31'41		max. Earth dist.	6841 Jul 17 23:26	0°♈14'37	50.23605 AU
				morning rise	6841 Jul 23 16:38	0°♈22'22	
conjunction	6835 Jul 12 07:00	24°☾36'29	-14°37'09	retrograde	6841 Oct 27 20:26	1°♈42'23	
minimum elong	6835 Jul 12 07:10	24°☾36'30	14°37'13	opposition	6842 Jan 19 16:54	0°♈43'19	-14°19'13
max. Earth dist.	6835 Jul 13 01:29	24°☾37'32	50.34334 AU	min. Earth dist.	6842 Jan 19 07:24	0°♈43'46	48.27878 AU
morning rise	6835 Jul 15 20:24	24°☾41'20			6842 Mar 04 09:56	30°♈☾	
retrograde	6835 Oct 22 13:40	26°☾04'57		direct	6842 Apr 11 12:28	29°☾45'03	
opposition	6836 Jan 14 14:21	25°☾05'44	-15°09'08		6842 May 18 22:42	0°♈	
min. Earth dist.	6836 Jan 13 20:47	25°☾06'33	48.40715 AU	evening set	6842 Jul 12 05:28	1°♈01'31	
direct	6836 Apr 05 09:13	24°☾07'23					
evening set	6836 Jul 08 10:14	25°☾27'06		conjunction	6842 Jul 18 17:17	1°♈10'18	-13°41'06
				minimum elong	6842 Jul 18 17:27	1°♈10'19	13°41'09
conjunction	6836 Jul 12 11:46	25°☾32'37	-14°29'48	max. Earth dist.	6842 Jul 19 03:55	1°♈10'54	50.20090 AU
minimum elong	6836 Jul 12 11:56	25°☾32'38	14°29'52	morning rise	6842 Jul 25 05:51	1°♈19'09	
max. Earth dist.	6836 Jul 13 05:00	25°☾33'36	50.33616 AU	retrograde	6842 Oct 29 01:40	2°♈38'41	
morning rise	6836 Jul 16 13:53	25°☾38'10		opposition	6843 Jan 20 21:14	1°♈39'36	-14°10'10
retrograde	6836 Oct 22 19:26	27°☾01'04		min. Earth dist.	6843 Jan 20 12:03	1°♈40'02	48.24003 AU
opposition	6837 Jan 14 18:52	26°☾01'52	-15°01'22	direct	6843 Apr 12 17:05	0°♈41'18	
min. Earth dist.	6837 Jan 14 03:09	26°☾02'36	48.39715 AU	evening set	6843 Jul 13 02:14	1°♈57'19	
direct	6837 Apr 06 14:44	25°☾03'34					
evening set	6837 Jul 09 03:45	26°☾22'38		conjunction	6843 Jul 19 22:04	2°♈06'34	-13°32'16
				minimum elong	6843 Jul 19 22:15	2°♈06'35	13°32'20
conjunction	6837 Jul 13 16:42	26°☾28'47	-14°22'12	max. Earth dist.	6843 Jul 20 06:37	2°♈07'03	50.16139 AU
minimum elong	6837 Jul 13 16:53	26°☾28'47	14°22'15	morning rise	6843 Jul 26 18:52	2°♈15'52	
max. Earth dist.	6837 Jul 14 09:49	26°☾29'45	50.32551 AU	retrograde	6843 Oct 30 09:20	3°♈34'56	
morning rise	6837 Jul 18 06:13	26°☾34'59		opposition	6844 Jan 22 01:32	2°♈35'50	-14°00'54
retrograde	6837 Oct 24 01:46	27°☾57'12		min. Earth dist.	6844 Jan 21 17:30	2°♈36'12	48.19735 AU
opposition	6838 Jan 15 23:08	26°☾58'04	-14°53'21	direct	6844 Apr 12 17:37	1°♈37'29	
min. Earth dist.	6838 Jan 15 07:50	26°☾58'46	48.38326 AU	evening set	6844 Jul 12 23:11	2°♈53'05	
direct	6838 Apr 07 18:06	25°☾59'47					
evening set	6838 Jul 09 22:05	27°☾18'16		conjunction	6844 Jul 20 02:59	3°♈02'47	-13°23'13
				minimum elong	6844 Jul 20 03:10	3°♈02'48	13°23'15
conjunction	6838 Jul 14 21:30	27°☾25'01	-14°14'23	max. Earth dist.	6844 Jul 20 11:26	3°♈03'16	50.11810 AU
minimum elong	6838 Jul 14 21:40	27°☾25'01	14°14'27	morning rise	6844 Jul 27 07:41	3°♈12'31	
max. Earth dist.	6838 Jul 15 12:27	27°☾25'51	50.31071 AU	retrograde	6844 Oct 30 13:26	4°♈31'09	
morning rise	6838 Jul 19 21:34	27°☾31'47		opposition	6845 Jan 22 05:52	3°♈32'01	-13°51'23
retrograde	6838 Oct 25 09:02	28°☾53'25		min. Earth dist.	6845 Jan 21 23:10	3°♈32'20	48.15106 AU
opposition	6839 Jan 17 03:36	27°☾54'20	-14°45'08	direct	6845 Apr 13 21:34	2°♈33'39	
min. Earth dist.	6839 Jan 16 13:39	27°☾54'58	48.36502 AU	evening set	6845 Jul 13 20:31	3°♈48'51	
direct	6839 Apr 08 19:51	26°☾56'04					
evening set	6839 Jul 10 17:07	28°☾14'00		conjunction	6845 Jul 21 07:48	3°♈58'58	-13°13'55
				minimum elong	6845 Jul 21 08:00	3°♈58'58	13°13'59
conjunction	6839 Jul 16 02:25	28°☾21'19	-14°06'22	max. Earth dist.	6845 Jul 21 15:04	3°♈59'22	50.07160 AU
minimum elong	6839 Jul 16 02:36	28°☾21'19	14°06'25	morning rise	6845 Jul 28 20:05	4°♈09'07	
max. Earth dist.	6839 Jul 16 16:54	28°☾22'08	50.29110 AU	retrograde	6845 Oct 31 15:21	5°♈27'20	
morning rise	6839 Jul 21 12:25	28°☾28'39		opposition	6846 Jan 23 10:00	4°♈28'12	-13°41'38
retrograde	6839 Oct 26 11:39	29°☾49'43		min. Earth dist.	6846 Jan 23 03:13	4°♈28'31	48.10172 AU
opposition	6840 Jan 18 08:08	28°☾50'39	-14°36'42	direct	6846 Apr 15 03:01	3°♈29'47	
min. Earth dist.	6840 Jan 17 19:53	28°☾51'13	48.34158 AU	evening set	6846 Jul 14 17:54	4°♈44'37	
direct	6840 Apr 09 01:08	27°☾52'24					
evening set	6840 Jul 10 12:57	29°☾09'50		conjunction	6846 Jul 22 12:36	4°♈55'08	-13°04'24
				minimum elong	6846 Jul 22 12:47	4°♈55'09	13°04'27
conjunction	6840 Jul 16 07:27	29°☾17'39	-13°58'08	max. Earth dist.	6846 Jul 22 18:39	4°♈55'29	50.02209 AU
minimum elong	6840 Jul 16 07:37	29°☾17'40	13°58'12	morning rise	6846 Jul 30 08:25	5°♈05'44	
max. Earth dist.	6840 Jul 16 20:10	29°☾18'22	50.26630 AU	retrograde	6846 Nov 01 19:34	6°♈23'33	
morning rise	6840 Jul 22 02:41	29°☾25'31		opposition	6847 Jan 24 14:26	5°♈24'23	-13°31'38
	6840 Aug 17 20:21	0°♈		min. Earth dist.	6847 Jan 24 09:14	5°♈24'38	48.04957 AU
retrograde	6840 Oct 26 14:39	0°♈46'03		direct	6847 Apr 16 09:49	4°♈25'58	
	6841 Jan 06 17:38	30°♈☾		evening set	6847 Jul 15 15:29	5°♈40'26	
opposition	6841 Jan 18 12:24	29°☾46'59	-14°28'04				
min. Earth dist.	6841 Jan 18 00:39	29°☾47'32	48.31281 AU	conjunction	6847 Jul 23 17:26	5°♈51'22	-12°54'39
direct	6841 Apr 10 06:53	28°☾48'44		minimum elong	6847 Jul 23 17:37	5°♈51'22	12°54'42
	6841 Jul 07 03:38	0°♈		max. Earth dist.	6847 Jul 23 23:39	5°♈51'43	49.96992 AU
evening set	6841 Jul 11 09:05	0°♈05'41		morning rise	6847 Jul 31 20:23	6°♈02'22	
				retrograde	6847 Nov 03 02:04	7°♈19'49	

opposition	6848 Jan 25 18:43	6°Ω20'39 -13°21'24	max. Earth dist.	6854 Jul 30 02:56	12°Ω27'48 49.49596 AU
min. Earth dist.	6848 Jan 25 13:37	6°Ω20'53 47.99454 AU	morning rise	6854 Aug 09 06:32	12°Ω41'35
direct	6848 Apr 16 14:00	5°Ω22'12	retrograde	6854 Nov 09 16:30	13°Ω56'52
evening set	6848 Jul 15 13:27	6°Ω36'20	opposition	6855 Feb 01 01:53	12°Ω57'31 -12°03'23
			min. Earth dist.	6855 Feb 01 05:31	12°Ω57'21 47.49505 AU
conjunction	6848 Jul 23 22:19	6°Ω47'40 -12°44'39	direct	6855 Apr 23 17:19	11°Ω58'45
minimum elong	6848 Jul 23 22:31	6°Ω47'41 12°44'42	evening set	6855 Jul 21 05:08	13°Ω10'59
max. Earth dist.	6848 Jul 24 02:36	6°Ω47'55 49.91484 AU			
morning rise	6848 Aug 01 08:25	6°Ω59'04	conjunction	6855 Jul 31 10:43	13°Ω24'53 -11°28'40
retrograde	6848 Nov 03 10:15	8°Ω16'10	minimum elong	6855 Jul 31 10:54	13°Ω24'54 11°28'42
opposition	6849 Jan 25 22:59	7°Ω17'00 -13°10'55	max. Earth dist.	6855 Jul 31 06:43	13°Ω24'39 49.40923 AU
min. Earth dist.	6849 Jan 25 18:58	7°Ω17'11 47.93657 AU	morning rise	6855 Aug 10 17:43	13°Ω38'51
direct	6849 Apr 17 14:57	6°Ω18'32	retrograde	6855 Nov 10 20:23	14°Ω53'53
evening set	6849 Jul 16 11:33	7°Ω32'22	opposition	6856 Feb 02 06:24	13°Ω54'28 -11°51'23
			min. Earth dist.	6856 Feb 02 10:15	13°Ω54'17 47.40482 AU
conjunction	6849 Jul 25 03:24	7°Ω44'05 -12°34'26	direct	6856 Apr 23 21:53	12°Ω55'37
minimum elong	6849 Jul 25 03:35	7°Ω44'06 12°34'29	evening set	6856 Jul 21 04:40	14°Ω07'38
max. Earth dist.	6849 Jul 25 07:27	7°Ω44'19 49.85647 AU			
morning rise	6849 Aug 02 20:22	7°Ω55'53	conjunction	6856 Jul 31 16:06	14°Ω21'52 -11°16'58
retrograde	6849 Nov 04 14:14	9°Ω12'39	minimum elong	6856 Jul 31 16:18	14°Ω21'52 11°17'01
opposition	6850 Jan 27 03:23	8°Ω13'29 -13°00'12	max. Earth dist.	6856 Jul 31 10:37	14°Ω21'33 49.31843 AU
min. Earth dist.	6850 Jan 27 00:46	8°Ω13'36 47.87495 AU	morning rise	6856 Aug 11 05:05	14°Ω36'11
direct	6850 Apr 18 18:59	7°Ω15'00		6856 Aug 29 12:55	15°Ω
evening set	6850 Jul 17 09:54	8°Ω28'33	retrograde	6856 Nov 11 00:13	15°Ω50'58
				6857 Jan 25 20:55	15°RΩ
conjunction	6850 Jul 26 08:19	8°Ω40'39 -12°23'59	opposition	6857 Feb 02 10:57	14°Ω51'28 -11°39'08
minimum elong	6850 Jul 26 08:31	8°Ω40'40 12°24'02	min. Earth dist.	6857 Feb 02 16:45	14°Ω51'12 47.31089 AU
max. Earth dist.	6850 Jul 26 11:05	8°Ω40'48 49.79432 AU	direct	6857 Apr 25 04:42	13°Ω52'33
morning rise	6850 Aug 04 07:57	8°Ω52'49		6857 Jul 18 22:26	15°Ω
retrograde	6850 Nov 05 17:14	10°Ω09'17	evening set	6857 Jul 22 04:23	15°Ω04'21
opposition	6851 Jan 28 07:45	9°Ω10'06 -12°49'15			
min. Earth dist.	6851 Jan 28 05:28	9°Ω10'13 47.80918 AU	conjunction	6857 Aug 01 21:35	15°Ω18'55 -11°05'03
direct	6851 Apr 20 00:07	8°Ω11'36	minimum elong	6857 Aug 01 21:47	15°Ω18'56 11°05'05
evening set	6851 Jul 18 08:32	9°Ω24'53	max. Earth dist.	6857 Aug 01 16:05	15°Ω18'36 49.22427 AU
			morning rise	6857 Aug 12 16:09	15°Ω33'35
conjunction	6851 Jul 27 13:31	9°Ω37'21 -12°13'20	retrograde	6857 Nov 12 05:51	16°Ω48'08
minimum elong	6851 Jul 27 13:41	9°Ω37'22 12°13'23	opposition	6858 Feb 03 15:32	15°Ω48'36 -11°26'39
max. Earth dist.	6851 Jul 27 14:31	9°Ω37'24 49.72749 AU	min. Earth dist.	6858 Feb 03 21:23	15°Ω48'19 47.21369 AU
morning rise	6851 Aug 05 19:49	9°Ω49'54		6858 Mar 26 01:18	15°RΩ
retrograde	6851 Nov 06 22:03	11°Ω06'04	direct	6858 Apr 26 09:55	14°Ω49'36
opposition	6852 Jan 29 12:17	10°Ω06'52 -12°38'06		6858 May 27 08:53	15°Ω
min. Earth dist.	6852 Jan 29 12:20	10°Ω06'52 47.73850 AU	evening set	6858 Jul 23 04:08	16°Ω01'12
direct	6852 Apr 20 05:48	9°Ω08'19			
evening set	6852 Jul 18 07:30	10°Ω21'19	conjunction	6858 Aug 03 02:48	16°Ω16'06 -10°52'53
			minimum elong	6858 Aug 03 02:59	16°Ω16'07 10°52'56
conjunction	6852 Jul 27 18:54	10°Ω34'09 -12°02'28	max. Earth dist.	6858 Aug 02 19:22	16°Ω15'41 49.12702 AU
minimum elong	6852 Jul 27 19:06	10°Ω34'10 12°02'31	morning rise	6858 Aug 14 03:06	16°Ω31'06
max. Earth dist.	6852 Jul 27 19:17	10°Ω34'11 49.65559 AU	retrograde	6858 Nov 13 14:39	17°Ω45'28
morning rise	6852 Aug 06 07:30	10°Ω47'04	opposition	6859 Feb 04 20:17	16°Ω45'52 -11°13'55
retrograde	6852 Nov 07 03:00	12°Ω02'57	min. Earth dist.	6859 Feb 05 03:11	16°Ω45'32 47.11364 AU
opposition	6853 Jan 29 16:46	11°Ω03'43 -12°26'44	direct	6859 Apr 27 11:02	15°Ω46'48
min. Earth dist.	6853 Jan 29 17:19	11°Ω03'41 47.66242 AU	evening set	6859 Jul 24 04:05	16°Ω58'15
direct	6853 Apr 21 11:25	10°Ω05'06			
evening set	6853 Jul 19 06:38	11°Ω17'50	conjunction	6859 Aug 04 08:23	17°Ω13'29 -10°40'29
			minimum elong	6859 Aug 04 08:34	17°Ω13'29 10°40'31
conjunction	6853 Jul 29 00:08	11°Ω31'02 -11°51'25	max. Earth dist.	6859 Aug 04 00:52	17°Ω13'03 49.02691 AU
minimum elong	6853 Jul 29 00:19	11°Ω31'02 11°51'27	morning rise	6859 Aug 15 14:08	17°Ω28'49
max. Earth dist.	6853 Jul 28 22:01	11°Ω30'55 49.57831 AU	retrograde	6859 Nov 14 19:56	18°Ω42'59
morning rise	6853 Aug 07 19:06	11°Ω44'19	opposition	6860 Feb 06 01:01	17°Ω43'20 -11°00'56
retrograde	6853 Nov 08 11:14	12°Ω59'53	min. Earth dist.	6860 Feb 06 08:56	17°Ω42'58 47.01066 AU
opposition	6854 Jan 30 21:17	12°Ω00'36 -12°15'10	direct	6860 Apr 27 15:18	16°Ω44'13
min. Earth dist.	6854 Jan 30 23:25	12°Ω00'30 47.58116 AU	evening set	6860 Jul 24 04:23	17°Ω55'32
direct	6854 Apr 22 13:18	11°Ω01'55			
evening set	6854 Jul 20 05:47	12°Ω14'23	conjunction	6860 Aug 04 13:59	18°Ω11'05 -10°27'51
			minimum elong	6860 Aug 04 14:10	18°Ω11'06 10°27'54
conjunction	6854 Jul 30 05:30	12°Ω27'57 -11°40'09	max. Earth dist.	6860 Aug 04 05:19	18°Ω10'35 48.92401 AU
minimum elong	6854 Jul 30 05:42	12°Ω27'57 11°40'12	morning rise	6860 Aug 16 01:09	18°Ω26'44

retrograde	6860 Nov 14 23:54	19°Ω40'44	minimum elong	6867 Aug 12 08:38	25°Ω02'02	8°53'11
opposition	6861 Feb 06 05:47	18°Ω41'04 -10°47'42	max. Earth dist.	6867 Aug 11 15:07	25°Ω01'01	48.08388 AU
min. Earth dist.	6861 Feb 06 13:53	18°Ω40'41 46.90473 AU	morning rise	6867 Aug 25 06:10	25°Ω19'52	
direct	6861 Apr 28 20:41	17°Ω41'54	retrograde	6867 Nov 22 17:22	26°Ω33'01	
evening set	6861 Jul 25 04:47	18°Ω53'05	opposition	6868 Feb 13 17:48	25°Ω32'47	-9°08'37
			min. Earth dist.	6868 Feb 14 10:31	25°Ω31'59	46.03856 AU
conjunction	6861 Aug 05 19:38	19°Ω08'58 -10°14'59	direct	6868 May 05 10:17	24°Ω32'55	
minimum elong	6861 Aug 05 19:50	19°Ω08'59 10°15'00	evening set	6868 Jul 30 14:21	25°Ω43'28	
max. Earth dist.	6861 Aug 05 09:32	19°Ω08'23 48.81774 AU				
morning rise	6861 Aug 17 12:11	19°Ω24'57	conjunction	6868 Aug 12 14:50	26°Ω01'29	-8°38'43
retrograde	6861 Nov 16 04:41	20°Ω38'49	minimum elong	6868 Aug 12 15:00	26°Ω01'30	8°38'45
opposition	6862 Feb 07 10:43	19°Ω39'06 -10°34'14	max. Earth dist.	6868 Aug 11 19:15	26°Ω00'21	47.94532 AU
min. Earth dist.	6862 Feb 07 20:49	19°Ω38'37 46.79526 AU	morning rise	6868 Aug 25 17:13	26°Ω19'37	
direct	6862 Apr 30 02:50	18°Ω39'53	retrograde	6868 Nov 23 02:34	27°Ω32'41	
evening set	6862 Jul 26 05:26	19°Ω50'58	opposition	6869 Feb 13 23:16	26°Ω32'19	-8°53'32
			min. Earth dist.	6869 Feb 14 17:24	26°Ω31'27	45.89692 AU
conjunction	6862 Aug 07 01:32	20°Ω07'10 -10°01'52	direct	6869 May 06 13:14	25°Ω32'18	
minimum elong	6862 Aug 07 01:42	20°Ω07'11 10°01'55	evening set	6869 Jul 31 16:22	26°Ω42'48	
max. Earth dist.	6862 Aug 06 15:08	20°Ω06'34 48.70778 AU				
morning rise	6862 Aug 18 23:05	20°Ω23'28	conjunction	6869 Aug 13 21:22	27°Ω01'06	-8°24'04
retrograde	6862 Nov 17 10:20	21°Ω37'13	minimum elong	6869 Aug 13 21:32	27°Ω01'07	8°24'06
opposition	6863 Feb 08 15:39	20°Ω37'28 -10°20'31	max. Earth dist.	6869 Aug 13 01:39	26°Ω59'58	47.80329 AU
min. Earth dist.	6863 Feb 09 02:03	20°Ω36'58 46.68167 AU	morning rise	6869 Aug 27 03:57	27°Ω19'31	
direct	6863 May 01 08:36	19°Ω38'11	retrograde	6869 Nov 24 09:25	28°Ω32'30	
evening set	6863 Jul 27 06:25	20°Ω49'10	opposition	6870 Feb 15 04:46	27°Ω32'01	-8°38'11
			min. Earth dist.	6870 Feb 15 23:48	27°Ω31'06	45.75205 AU
conjunction	6863 Aug 08 07:23	21°Ω05'41 -9°48'33	direct	6870 May 07 18:20	26°Ω31'51	
minimum elong	6863 Aug 08 07:35	21°Ω05'42 9°48'35	evening set	6870 Aug 01 18:46	27°Ω42'19	
max. Earth dist.	6863 Aug 07 18:39	21°Ω04'57 48.59328 AU	max. Earth dist.	6870 Aug 14 07:03	27°Ω59'41	47.65847 AU
morning rise	6863 Aug 20 10:11	21°Ω22'18				
retrograde	6863 Nov 18 19:57	22°Ω35'56	conjunction	6870 Aug 15 03:55	28°Ω00'54	-8°09'10
opposition	6864 Feb 09 20:49	21°Ω36'08 -10°06'35	minimum elong	6870 Aug 15 04:05	28°Ω00'55	8°09'11
min. Earth dist.	6864 Feb 10 08:58	21°Ω35'33 46.56327 AU	morning rise	6870 Aug 28 14:49	28°Ω19'37	
direct	6864 May 01 10:45	20°Ω36'46	retrograde	6870 Nov 25 16:09	29°Ω32'31	
evening set	6864 Jul 27 07:37	21°Ω47'39	opposition	6871 Feb 16 10:21	28°Ω31'55	-8°22'35
			min. Earth dist.	6871 Feb 17 05:30	28°Ω30'59	45.60460 AU
conjunction	6864 Aug 08 13:40	22°Ω04'29 -9°35'01	direct	6871 May 08 22:59	27°Ω31'36	
minimum elong	6864 Aug 08 13:51	22°Ω04'30 9°35'03	evening set	6871 Aug 02 21:14	28°Ω42'04	
max. Earth dist.	6864 Aug 08 00:09	22°Ω03'42 48.47357 AU				
morning rise	6864 Aug 20 21:17	22°Ω21'25	conjunction	6871 Aug 16 10:34	29°Ω00'56	-7°54'01
retrograde	6864 Nov 19 03:25	23°Ω34'55	minimum elong	6871 Aug 16 10:44	29°Ω00'57	7°54'04
opposition	6865 Feb 10 01:56	22°Ω35'02 -9°52'26	max. Earth dist.	6871 Aug 15 12:26	28°Ω59'38	47.51096 AU
min. Earth dist.	6865 Feb 10 15:42	22°Ω34'23 46.43945 AU	morning rise	6871 Aug 30 01:41	29°Ω19'55	
direct	6865 May 02 14:13	21°Ω35'34		6871 Oct 01 02:31	0°൬	
evening set	6865 Jul 28 09:07	22°Ω46'23	retrograde	6871 Nov 26 21:35	0°൬32'48	
				6872 Jan 23 15:11	30°℞Ω	
conjunction	6865 Aug 09 19:53	23°Ω03'30 -9°21'17	opposition	6872 Feb 17 16:13	29°Ω32'04	-8°06'43
minimum elong	6865 Aug 09 20:04	23°Ω03'31 9°21'19	min. Earth dist.	6872 Feb 18 13:03	29°Ω31'04	45.45457 AU
max. Earth dist.	6865 Aug 09 04:35	23°Ω02'38 48.34862 AU	direct	6872 May 09 05:48	28°Ω31'37	
morning rise	6865 Aug 22 08:21	23°Ω20'45	evening set	6872 Aug 03 00:05	29°Ω42'06	
retrograde	6865 Nov 20 10:02	24°Ω34'07		6872 Aug 15 20:06	0°൬	
opposition	6866 Feb 11 07:09	23°Ω34'08 -9°38'04				
min. Earth dist.	6866 Feb 11 21:27	23°Ω33'27 46.31046 AU	conjunction	6872 Aug 16 17:33	0°൬01'16	-7°38'38
direct	6866 May 03 18:17	22°Ω34'33	minimum elong	6872 Aug 16 17:42	0°൬01'16	7°38'39
evening set	6866 Jul 29 10:33	23°Ω45'16	max. Earth dist.	6872 Aug 15 19:22	29°Ω59'57	47.36100 AU
max. Earth dist.	6866 Aug 10 08:59	24°Ω01'43 48.21848 AU	morning rise	6872 Aug 30 12:34	0°൬20'32	
			retrograde	6872 Nov 27 02:49	1°൬33'24	
conjunction	6866 Aug 11 02:01	24°Ω02'42 -9°07'19	opposition	6873 Feb 17 21:55	0°൬32'34	-7°50'36
minimum elong	6866 Aug 11 02:11	24°Ω02'42 9°07'21	min. Earth dist.	6873 Feb 18 18:38	0°൬31'33	45.30194 AU
morning rise	6866 Aug 23 19:16	24°Ω20'14		6873 Mar 19 09:44	30°℞Ω	
retrograde	6866 Nov 21 13:08	25°Ω33'30	direct	6873 May 10 13:08	29°Ω31'59	
opposition	6867 Feb 12 12:35	24°Ω33'23 -9°23'28		6873 Jun 30 16:21	0°൬	
min. Earth dist.	6867 Feb 13 05:01	24°Ω32'36 46.17662 AU	evening set	6873 Aug 04 03:16	0°൬42'30	
direct	6867 May 05 02:28	23°Ω33'40	max. Earth dist.	6873 Aug 17 00:22	1°൬00'31	47.20827 AU
evening set	6867 Jul 30 12:17	24°Ω44'18				
			conjunction	6873 Aug 18 00:30	1°൬01'56	-7°22'59
conjunction	6867 Aug 12 08:27	25°Ω02'01 -8°53'08	minimum elong	6873 Aug 18 00:39	1°൬01'57	7°23'02

morning rise	6873 Aug 31 23:36	1° 21'30"	conjunction	6880 Aug 25 06:44	8° 18'43"	-5°26'50"
retrograde	6873 Nov 28 11:58	2° 34'24"	minimum elong	6880 Aug 25 06:52	8° 18'44"	5°26'51"
opposition	6874 Feb 19 04:00	1° 33'27"	morning rise	6880 Sep 09 05:44	8° 40'09"	
min. Earth dist.	6874 Feb 20 02:15	1° 32'22"	retrograde	6880 Dec 05 22:15	9° 53'33"	
direct	6874 May 11 17:11	0° 32'46"	opposition	6881 Feb 26 02:06	8° 51'37"	-5°32'27"
evening set	6874 Aug 05 06:27	1° 43'20"	min. Earth dist.	6881 Feb 27 07:57	8° 50'08"	43.93929 AU
max. Earth dist.	6874 Aug 18 07:19	2° 01'37"	direct	6881 May 18 10:34	7° 49'46"	
			evening set	6881 Aug 11 14:51	9° 01'08"	
conjunction	6874 Aug 19 07:38	2° 03'03"	max. Earth dist.	6881 Aug 25 05:11	9° 20'39"	45.83863 AU
minimum elong	6874 Aug 19 07:48	2° 03'04"				
morning rise	6874 Sep 02 10:23	2° 22'53"	conjunction	6881 Aug 26 15:08	9° 22'42"	-5°09'16"
retrograde	6874 Nov 29 20:44	3° 35'50"	minimum elong	6881 Aug 26 15:15	9° 22'43"	5°09'17"
opposition	6875 Feb 20 10:12	2° 34'47"	morning rise	6881 Sep 10 16:58	9° 44'23"	
min. Earth dist.	6875 Feb 21 09:32	2° 33'39"	retrograde	6881 Dec 07 06:06	10° 57'54"	
direct	6875 May 12 21:45	1° 33'58"	opposition	6882 Feb 27 09:23	9° 55'47"	-5°14'01"
evening set	6875 Aug 06 10:18	2° 44'38"	min. Earth dist.	6882 Feb 28 16:49	9° 54'13"	43.75182 AU
			direct	6882 May 19 18:42	8° 53'44"	
conjunction	6875 Aug 20 15:04	3° 04'38"	evening set	6882 Aug 12 20:24	10° 05'17"	
minimum elong	6875 Aug 20 15:12	3° 04'38"				
max. Earth dist.	6875 Aug 19 13:02	3° 03'05"	conjunction	6882 Aug 27 23:32	10° 27'06"	-4°51'27"
morning rise	6875 Sep 03 21:35	3° 24'44"	minimum elong	6882 Aug 27 23:39	10° 27'07"	4°51'29"
retrograde	6875 Dec 01 06:33	4° 37'44"	max. Earth dist.	6882 Aug 26 13:32	10° 25'02"	45.65097 AU
opposition	6876 Feb 21 16:24	3° 36'34"	morning rise	6882 Sep 12 04:05	10° 49'02"	
min. Earth dist.	6876 Feb 22 16:26	3° 35'24"	retrograde	6882 Dec 08 12:20	12° 02'41"	
direct	6876 May 13 01:52	2° 35'37"	opposition	6883 Feb 28 16:42	11° 00'24"	-4°55'19"
evening set	6876 Aug 06 14:26	3° 46'23"	min. Earth dist.	6883 Mar 01 23:51	10° 58'51"	43.56202 AU
			direct	6883 May 21 04:06	9° 58'09"	
conjunction	6876 Aug 20 22:47	4° 06'39"	evening set	6883 Aug 14 02:37	11° 09'54"	
minimum elong	6876 Aug 20 22:56	4° 06'39"	max. Earth dist.	6883 Aug 27 20:23	11° 29'46"	45.46100 AU
max. Earth dist.	6876 Aug 19 19:00	4° 05'00"				
morning rise	6876 Sep 04 08:51	4° 27'02"	conjunction	6883 Aug 29 08:16	11° 31'58"	-4°33'23"
retrograde	6876 Dec 01 12:35	5° 40'05"	minimum elong	6883 Aug 29 08:22	11° 31'58"	4°33'24"
opposition	6877 Feb 21 23:00	4° 38'48"	morning rise	6883 Sep 13 15:33	11° 54'08"	
min. Earth dist.	6877 Feb 23 01:14	4° 37'31"	retrograde	6883 Dec 09 21:14	13° 07'58"	
direct	6877 May 14 09:35	3° 37'42"	opposition	6884 Mar 01 00:14	12° 05'31"	-4°36'20"
evening set	6877 Aug 07 18:43	4° 48'33"	min. Earth dist.	6884 Mar 02 08:56	12° 03'52"	43.37016 AU
max. Earth dist.	6877 Aug 21 02:10	5° 07'24"	direct	6884 May 21 10:54	11° 03'04"	
			evening set	6884 Aug 14 09:02	12° 15'02"	
conjunction	6877 Aug 22 06:34	5° 09'05"	max. Earth dist.	6884 Aug 28 05:34	12° 35'09"	45.26893 AU
minimum elong	6877 Aug 22 06:42	5° 09'06"				
morning rise	6877 Sep 05 19:56	5° 29'45"	conjunction	6884 Aug 29 17:23	12° 37'20"	-4°15'03"
retrograde	6877 Dec 02 17:48	6° 42'52"	minimum elong	6884 Aug 29 17:29	12° 37'20"	4°15'05"
opposition	6878 Feb 23 05:33	5° 41'26"	morning rise	6884 Sep 14 02:58	12° 59'45"	
min. Earth dist.	6878 Feb 24 08:07	5° 40'08"	retrograde	6884 Dec 10 06:55	14° 13'47"	
direct	6878 May 15 18:36	4° 40'10"	opposition	6885 Mar 02 08:01	13° 11'10"	-4°17'05"
evening set	6878 Aug 08 23:23	5° 51'07"	min. Earth dist.	6885 Mar 03 17:10	13° 09'30"	43.17610 AU
max. Earth dist.	6878 Aug 22 07:33	6° 10'05"	direct	6885 May 22 17:35	12° 08'32"	
			evening set	6885 Aug 15 15:54	13° 20'45"	
conjunction	6878 Aug 23 14:25	6° 11'55"	max. Earth dist.	6885 Aug 29 13:08	13° 41'00"	45.07466 AU
minimum elong	6878 Aug 23 14:34	6° 11'56"				
morning rise	6878 Sep 07 07:15	6° 32'50"	conjunction	6885 Aug 31 02:27	13° 43'17"	-3°56'28"
retrograde	6878 Dec 04 03:38	7° 46'02"	minimum elong	6885 Aug 31 02:32	13° 43'18"	3°56'28"
opposition	6879 Feb 24 12:20	6° 44'28"	morning rise	6885 Sep 15 14:28	14° 05'56"	
min. Earth dist.	6879 Feb 25 16:42	6° 43'04"	retrograde	6885 Dec 11 19:58	15° 20'12"	
direct	6879 May 16 23:19	5° 43'00"	opposition	6886 Mar 03 15:57	14° 17'25"	-3°57'33"
evening set	6879 Aug 10 04:07	6° 54'04"	min. Earth dist.	6886 Mar 05 01:40	14° 15'43"	42.97974 AU
			direct	6886 May 23 21:37	13° 14'35"	
conjunction	6879 Aug 24 22:32	7° 15'08"	evening set	6886 Aug 16 23:11	14° 27'06"	
minimum elong	6879 Aug 24 22:40	7° 15'08"	max. Earth dist.	6886 Aug 30 21:38	14° 47'31"	44.87756 AU
max. Earth dist.	6879 Aug 23 15:22	7° 13'16"				
morning rise	6879 Sep 08 18:23	7° 36'18"	conjunction	6886 Sep 01 11:58	14° 49'52"	-3°37'37"
retrograde	6879 Dec 05 12:05	8° 49'36"	minimum elong	6886 Sep 01 12:03	14° 49'53"	3°37'38"
opposition	6880 Feb 25 19:14	7° 47'51"	morning rise	6886 Sep 17 02:05	15° 12'45"	
min. Earth dist.	6880 Feb 27 00:28	7° 46'24"	retrograde	6886 Dec 13 06:10	15° 27'16"	
direct	6880 May 17 05:29	6° 46'12"	opposition	6887 Mar 05 00:13	15° 24'19"	-3°37'45"
evening set	6880 Aug 10 09:23	7° 57'25"	min. Earth dist.	6887 Mar 06 11:44	15° 22'31"	42.78030 AU
max. Earth dist.	6880 Aug 23 22:01	8° 16'45"	direct	6887 May 25 04:56	14° 21'17"	
























































































































evening set	6887 Aug 18 06:54	15° $\mathring{M}$ 34'06		opposition	6894 Mar 12 16:39	23° $\mathring{M}$ 29'40	-1°11'41
max. Earth dist.	6887 Sep 01 06:49	15° $\mathring{M}$ 54'41	44.67713 AU	min. Earth dist.	6894 Mar 14 11:54	23° $\mathring{M}$ 27'24	41.27382 AU
				direct	6894 Jun 01 21:51	22° $\mathring{M}$ 24'49	
conjunction	6887 Sep 02 21:49	15° $\mathring{M}$ 57'06	-3°18'32	evening set	6894 Aug 26 01:21	23° $\mathring{M}$ 40'12	
minimum elong	6887 Sep 02 21:54	15° $\mathring{M}$ 57'07	3°18'32	max. Earth dist.	6894 Sep 09 02:22	24° $\mathring{M}$ 01'36	43.16166 AU
morning rise	6887 Sep 18 13:55	16° $\mathring{M}$ 20'13					
retrograde	6887 Dec 14 14:31	17° $\mathring{M}$ 34'59		conjunction	6894 Sep 11 01:52	24° $\mathring{M}$ 04'39	-0°58'00
opposition	6888 Mar 05 08:38	16° $\mathring{M}$ 31'51	-3°17'41	minimum elong	6894 Sep 11 01:54	24° $\mathring{M}$ 04'39	0°57'59
min. Earth dist.	6888 Mar 06 20:27	16° $\mathring{M}$ 30'02	42.57710 AU	morning rise	6894 Sep 27 03:03	24° $\mathring{M}$ 29'11	
direct	6888 May 25 15:49	15° $\mathring{M}$ 28'37		retrograde	6894 Dec 22 17:48	25° $\mathring{M}$ 46'17	
evening set	6888 Aug 18 15:17	16° $\mathring{M}$ 41'45		opposition	6895 Mar 14 02:46	24° $\mathring{M}$ 41'29	-0°49'45
max. Earth dist.	6888 Sep 01 14:24	17° $\mathring{M}$ 02'23	44.47242 AU	min. Earth dist.	6895 Mar 15 22:02	24° $\mathring{M}$ 39'12	41.04660 AU
				direct	6895 Jun 03 09:01	23° $\mathring{M}$ 36'21	
conjunction	6888 Sep 03 07:56	17° $\mathring{M}$ 04'59	-2°59'11	evening set	6895 Aug 27 12:43	24° $\mathring{M}$ 52'14	
minimum elong	6888 Sep 03 08:01	17° $\mathring{M}$ 04'59	2°59'12	max. Earth dist.	6895 Sep 10 12:24	25° $\mathring{M}$ 13'40	42.93386 AU
morning rise	6888 Sep 19 01:57	17° $\mathring{M}$ 28'19					
retrograde	6888 Dec 14 23:56	18° $\mathring{M}$ 43'22		conjunction	6895 Sep 12 13:44	25° $\mathring{M}$ 16'51	-0°36'56
opposition	6889 Mar 06 17:22	17° $\mathring{M}$ 40'02	-2°57'21	minimum elong	6895 Sep 12 13:45	25° $\mathring{M}$ 16'51	0°36'56
min. Earth dist.	6889 Mar 08 07:20	17° $\mathring{M}$ 38'05	42.36957 AU	morning rise	6895 Sep 28 15:38	25° $\mathring{M}$ 41'33	
direct	6889 May 27 00:48	16° $\mathring{M}$ 36'33		retrograde	6895 Dec 24 08:00	26° $\mathring{M}$ 59'07	
evening set	6889 Aug 19 23:53	17° $\mathring{M}$ 50'00		opposition	6896 Mar 14 13:19	25° $\mathring{M}$ 54'04	-0°27'32
max. Earth dist.	6889 Sep 03 00:32	18° $\mathring{M}$ 10'50	44.26328 AU	min. Earth dist.	6896 Mar 16 09:29	25° $\mathring{M}$ 51'44	40.81787 AU
				direct	6896 Jun 03 16:03	24° $\mathring{M}$ 48'39	
conjunction	6889 Sep 04 18:26	18° $\mathring{M}$ 13'28	-2°39'36	evening set	6896 Aug 28 00:34	26° $\mathring{M}$ 05'04	
minimum elong	6889 Sep 04 18:30	18° $\mathring{M}$ 13'28	2°39'37	max. Earth dist.	6896 Sep 11 00:27	26° $\mathring{M}$ 26'38	42.70438 AU
morning rise	6889 Sep 20 13:57	18° $\mathring{M}$ 37'00					
retrograde	6889 Dec 16 09:12	19° $\mathring{M}$ 52'21		conjunction	6896 Sep 13 02:06	26° $\mathring{M}$ 29'51	-0°15'38
opposition	6890 Mar 08 02:24	18° $\mathring{M}$ 48'48	-2°36'45	minimum elong	6896 Sep 13 02:06	26° $\mathring{M}$ 29'51	0°15'38
min. Earth dist.	6890 Mar 09 16:59	18° $\mathring{M}$ 46'49	42.15758 AU	behind sun begin	6896 Sep 13 01:11	26° $\mathring{M}$ 29'48	
direct	6890 May 28 10:09	17° $\mathring{M}$ 45'04		behind sun end	6896 Sep 13 03:01	26° $\mathring{M}$ 29'55	
evening set	6890 Aug 21 08:53	18° $\mathring{M}$ 58'51		morning rise	6896 Sep 29 04:09	26° $\mathring{M}$ 54'44	
max. Earth dist.	6890 Sep 04 08:53	19° $\mathring{M}$ 19'45	44.04984 AU	retrograde	6896 Dec 24 21:06	28° $\mathring{M}$ 12'47	
				opposition	6897 Mar 16 00:08	27° $\mathring{M}$ 07'30	-0°05'04
conjunction	6890 Sep 06 04:51	19° $\mathring{M}$ 22'31	-2°19'47	min. Earth dist.	6897 Mar 17 21:14	27° $\mathring{M}$ 05'06	40.58758 AU
minimum elong	6890 Sep 06 04:54	19° $\mathring{M}$ 22'31	2°19'47	direct	6897 Jun 05 00:59	26° $\mathring{M}$ 01'49	
morning rise	6890 Sep 22 02:02	19° $\mathring{M}$ 46'17		asc. node	6897 Jun 05 22:48	26° $\mathring{M}$ 01'50	
retrograde	6890 Dec 17 22:08	21° $\mathring{M}$ 01'55		evening set	6897 Aug 29 12:59	27° $\mathring{M}$ 18'47	
opposition	6891 Mar 09 11:37	19° $\mathring{M}$ 58'08	-2°15'54	max. Earth dist.	6897 Sep 12 12:21	27° $\mathring{M}$ 40'28	42.47351 AU
min. Earth dist.	6891 Mar 11 03:25	19° $\mathring{M}$ 56'05	41.94157 AU				
direct	6891 May 29 16:47	18° $\mathring{M}$ 54'08		conjunction	6897 Sep 14 14:40	27° $\mathring{M}$ 43'45	0°06'00
evening set	6891 Aug 22 18:22	20° $\mathring{M}$ 08'17		minimum elong	6897 Sep 14 14:40	27° $\mathring{M}$ 43'45	0°06'00
max. Earth dist.	6891 Sep 05 18:42	20° $\mathring{M}$ 29'18	43.83233 AU	behind sun begin	6897 Sep 14 08:29	27° $\mathring{M}$ 43'22	
				behind sun end	6897 Sep 14 20:51	27° $\mathring{M}$ 44'08	
conjunction	6891 Sep 07 15:49	20° $\mathring{M}$ 32'09	-1°59'42	morning rise	6897 Sep 30 16:56	28° $\mathring{M}$ 08'47	
minimum elong	6891 Sep 07 15:52	20° $\mathring{M}$ 32'09	1°59'43	retrograde	6897 Dec 26 11:57	29° $\mathring{M}$ 27'21	
morning rise	6891 Sep 23 14:14	20° $\mathring{M}$ 56'06		opposition	6898 Mar 17 11:14	28° $\mathring{M}$ 21'50	0°17'40
retrograde	6891 Dec 19 10:15	22° $\mathring{M}$ 12'04		min. Earth dist.	6898 Mar 19 08:23	28° $\mathring{M}$ 19'26	40.35582 AU
opposition	6892 Mar 09 21:01	21° $\mathring{M}$ 08'02	-1°54'46	direct	6898 Jun 06 12:02	27° $\mathring{M}$ 15'54	
min. Earth dist.	6892 Mar 11 14:28	21° $\mathring{M}$ 05'53	41.72182 AU	evening set	6898 Aug 31 01:56	28° $\mathring{M}$ 33'28	
direct	6892 May 30 01:28	20° $\mathring{M}$ 03'46		max. Earth dist.	6898 Sep 13 23:36	28° $\mathring{M}$ 55'11	42.24067 AU
evening set	6892 Aug 23 04:18	21° $\mathring{M}$ 18'18					
max. Earth dist.	6892 Sep 06 05:06	21° $\mathring{M}$ 39'27	43.61150 AU	conjunction	6898 Sep 16 03:33	28° $\mathring{M}$ 58'36	0°27'45
				minimum elong	6898 Sep 16 03:32	28° $\mathring{M}$ 58'36	0°27'45
conjunction	6892 Sep 08 02:58	21° $\mathring{M}$ 42'22	-1°39'23	morning rise	6898 Oct 02 05:45	29° $\mathring{M}$ 23'48	
minimum elong	6892 Sep 08 03:01	21° $\mathring{M}$ 42'22	1°39'23		6898 Oct 27 13:57	0° $\mathring{A}$	
morning rise	6892 Sep 24 02:33	22° $\mathring{M}$ 06'31		retrograde	6898 Dec 28 02:06	0° $\mathring{A}$ 42'56	
retrograde	6892 Dec 19 22:09	23° $\mathring{M}$ 22'49			6899 Feb 28 18:37	30° $\mathring{R}$ $\mathring{M}$	
opposition	6893 Mar 11 06:37	22° $\mathring{M}$ 18'32	-1°33'22	opposition	6899 Mar 18 22:50	29° $\mathring{M}$ 37'10	0°40'40
min. Earth dist.	6893 Mar 13 00:06	22° $\mathring{M}$ 16'23	41.49907 AU	min. Earth dist.	6899 Mar 20 21:53	29° $\mathring{M}$ 34'39	40.12192 AU
direct	6893 May 31 11:35	21° $\mathring{M}$ 13'58		direct	6899 Jun 07 23:53	28° $\mathring{M}$ 30'58	
evening set	6893 Aug 24 14:38	22° $\mathring{M}$ 28'55		evening set	6899 Sep 01 15:37	29° $\mathring{M}$ 49'11	
max. Earth dist.	6893 Sep 07 14:30	22° $\mathring{M}$ 50'08	43.38769 AU		6899 Sep 08 14:11	0° $\mathring{A}$	
				max. Earth dist.	6899 Sep 15 13:03	0° $\mathring{A}$ 11'01	42.00534 AU
conjunction	6893 Sep 09 14:11	22° $\mathring{M}$ 53'11	-1°18'49				
minimum elong	6893 Sep 09 14:13	22° $\mathring{M}$ 53'11	1°18'49	conjunction	6899 Sep 17 17:07	0° $\mathring{A}$ 14'28	0°49'45
morning rise	6893 Sep 25 14:45	23° $\mathring{M}$ 17'31		minimum elong	6899 Sep 17 17:05	0° $\mathring{A}$ 14'28	0°49'45
retrograde	6893 Dec 21 08:13	24° $\mathring{M}$ 34'13		morning rise	6899 Oct 03 18:52	0° $\mathring{A}$ 39'48	


























































































































retrograde	6899 Dec 29 14:09	1° <u>♁</u> 59'31		max. Earth dist.	6906 Sep 25 14:34	9° <u>♁</u> 28'11	40.27421 AU
opposition	6900 Mar 20 10:34	0° <u>♁</u> 53'31	1°03'55				
min. Earth dist.	6900 Mar 22 09:47	0° <u>♁</u> 50'59	39.88522 AU	conjunction	6906 Sep 28 02:24	9° <u>♁</u> 32'21	3°29'58
	6900 May 07 15:35	30° <u>♁</u> 17		minimum elong	6906 Sep 28 02:17	9° <u>♁</u> 32'21	3°29'59
direct	6900 Jun 09 13:03	29° <u>♁</u> 47'01		morning rise	6906 Oct 13 18:36	9° <u>♁</u> 58'19	
	6900 Jul 11 23:45	0° <u>♁</u>		retrograde	6907 Jan 09 01:09	11° <u>♁</u> 22'54	
evening set	6900 Sep 03 06:10	1° <u>♁</u> 05'54		opposition	6907 Mar 30 08:20	10° <u>♁</u> 14'38	3°53'23
max. Earth dist.	6900 Sep 17 00:34	1° <u>♁</u> 27'41	41.76683 AU	min. Earth dist.	6907 Apr 01 14:06	10° <u>♁</u> 11'38	38.14991 AU
				direct	6907 Jun 19 06:54	9° <u>♁</u> 05'34	
conjunction	6900 Sep 19 06:59	1° <u>♁</u> 31'19	1°12'00	evening set	6907 Sep 14 05:00	10° <u>♁</u> 29'55	
minimum elong	6900 Sep 19 06:57	1° <u>♁</u> 31'19	1°12'01	max. Earth dist.	6907 Sep 27 05:54	10° <u>♁</u> 51'36	40.02004 AU
morning rise	6900 Oct 05 08:18	1° <u>♁</u> 56'48					
retrograde	6900 Dec 31 04:06	3° <u>♁</u> 17'08		conjunction	6907 Sep 29 19:03	10° <u>♁</u> 55'54	3°53'37
opposition	6901 Mar 21 22:54	2° <u>♁</u> 10'52	1°27'25	minimum elong	6907 Sep 29 18:56	10° <u>♁</u> 55'53	3°53'38
min. Earth dist.	6901 Mar 23 23:53	2° <u>♁</u> 08'13	39.64531 AU	morning rise	6907 Oct 15 08:55	11° <u>♁</u> 21'53	
direct	6901 Jun 10 23:26	1° <u>♁</u> 04'03		retrograde	6908 Jan 10 18:46	12° <u>♁</u> 47'19	
evening set	6901 Sep 04 21:01	2° <u>♁</u> 23'37		opposition	6908 Mar 30 23:14	11° <u>♁</u> 38'43	4°18'27
max. Earth dist.	6901 Sep 18 14:18	2° <u>♁</u> 45'28	41.52479 AU	min. Earth dist.	6908 Apr 02 05:32	11° <u>♁</u> 35'39	37.89668 AU
				direct	6908 Jun 19 19:06	10° <u>♁</u> 29'15	
conjunction	6901 Sep 20 21:15	2° <u>♁</u> 49'10	1°34'28	evening set	6908 Sep 15 00:53	11° <u>♁</u> 54'33	
minimum elong	6901 Sep 20 21:12	2° <u>♁</u> 49'09	1°34'28	max. Earth dist.	6908 Sep 27 22:45	12° <u>♁</u> 16'12	39.76567 AU
morning rise	6901 Oct 06 21:33	3° <u>♁</u> 14'45					
retrograde	6902 Jan 01 18:18	4° <u>♁</u> 35'44		conjunction	6908 Sep 30 12:19	12° <u>♁</u> 20'33	4°17'27
opposition	6902 Mar 23 11:37	3° <u>♁</u> 29'11	1°51'10	minimum elong	6908 Sep 30 12:11	12° <u>♁</u> 20'32	4°17'27
min. Earth dist.	6902 Mar 25 13:35	3° <u>♁</u> 26'28	39.40190 AU	morning rise	6908 Oct 15 23:13	12° <u>♁</u> 46'33	
direct	6902 Jun 12 10:22	2° <u>♁</u> 22'02		retrograde	6909 Jan 11 12:57	14° <u>♁</u> 12'53	
evening set	6902 Sep 06 12:42	3° <u>♁</u> 42'18		opposition	6909 Apr 01 14:51	13° <u>♁</u> 03'56	4°43'41
max. Earth dist.	6902 Sep 20 03:20	4° <u>♁</u> 04'08	41.27951 AU	min. Earth dist.	6909 Apr 03 22:05	13° <u>♁</u> 00'48	37.64348 AU
				direct	6909 Jun 21 08:21	11° <u>♁</u> 54'06	
conjunction	6902 Sep 22 11:52	4° <u>♁</u> 07'57	1°57'09	evening set	6909 Sep 16 21:29	13° <u>♁</u> 20'26	
minimum elong	6902 Sep 22 11:48	4° <u>♁</u> 07'57	1°57'10	max. Earth dist.	6909 Sep 29 16:06	13° <u>♁</u> 42'01	39.51150 AU
morning rise	6902 Oct 08 11:14	4° <u>♁</u> 33'39					
retrograde	6903 Jan 03 11:37	5° <u>♁</u> 55'17		conjunction	6909 Oct 02 05:49	13° <u>♁</u> 46'25	4°41'25
opposition	6903 Mar 25 00:29	4° <u>♁</u> 48'25	2°15'10	minimum elong	6909 Oct 02 05:40	13° <u>♁</u> 46'24	4°41'26
min. Earth dist.	6903 Mar 27 03:04	4° <u>♁</u> 45'39	39.15553 AU	morning rise	6909 Oct 17 13:38	14° <u>♁</u> 12'24	
direct	6903 Jun 13 20:14	3° <u>♁</u> 40'54		retrograde	6910 Jan 13 08:49	15° <u>♁</u> 39'42	
evening set	6903 Sep 08 05:01	5° <u>♁</u> 01'55		opposition	6910 Apr 03 06:47	14° <u>♁</u> 30'26	5°09'06
max. Earth dist.	6903 Sep 21 16:58	5° <u>♁</u> 23'43	41.03115 AU	min. Earth dist.	6910 Apr 05 13:35	14° <u>♁</u> 27'18	37.39050 AU
				direct	6910 Jun 22 23:25	13° <u>♁</u> 20'13	
conjunction	6903 Sep 24 02:58	5° <u>♁</u> 27'40	2°20'04	evening set	6910 Sep 18 19:08	14° <u>♁</u> 47'38	
minimum elong	6903 Sep 24 02:54	5° <u>♁</u> 27'39	2°20'04	max. Earth dist.	6910 Oct 01 08:52	15° <u>♁</u> 09'04	39.25715 AU
morning rise	6903 Oct 10 00:58	5° <u>♁</u> 53'27					
retrograde	6904 Jan 05 03:29	7° <u>♁</u> 15'46		conjunction	6910 Oct 04 00:01	15° <u>♁</u> 13'36	5°05'30
opposition	6904 Mar 25 13:57	6° <u>♁</u> 08'33	2°39'23	minimum elong	6910 Oct 03 23:51	15° <u>♁</u> 13'35	5°05'31
min. Earth dist.	6904 Mar 27 18:18	6° <u>♁</u> 05'41	38.90645 AU	morning rise	6910 Oct 19 04:23	15° <u>♁</u> 39'34	
direct	6904 Jun 14 09:39	5° <u>♁</u> 00'40		retrograde	6911 Jan 15 04:17	17° <u>♁</u> 07'53	
evening set	6904 Sep 08 21:58	6° <u>♁</u> 22'28		opposition	6911 Apr 04 23:18	15° <u>♁</u> 58'17	5°34'39
max. Earth dist.	6904 Sep 22 08:14	6° <u>♁</u> 44'18	40.78042 AU	min. Earth dist.	6911 Apr 07 07:43	15° <u>♁</u> 55'03	37.13729 AU
				direct	6911 Jun 24 15:31	14° <u>♁</u> 47'42	
conjunction	6904 Sep 24 18:27	6° <u>♁</u> 48'17	2°43'10	evening set	6911 Sep 20 17:41	16° <u>♁</u> 16'16	
minimum elong	6904 Sep 24 18:22	6° <u>♁</u> 48'17	2°43'11	max. Earth dist.	6911 Oct 03 04:05	16° <u>♁</u> 37'39	39.00220 AU
morning rise	6904 Oct 10 14:47	7° <u>♁</u> 14'09					
retrograde	6905 Jan 05 19:02	8° <u>♁</u> 37'10		conjunction	6911 Oct 05 18:56	16° <u>♁</u> 42'12	5°29'43
opposition	6905 Mar 27 03:33	7° <u>♁</u> 29'37	3°03'50	minimum elong	6911 Oct 05 18:46	16° <u>♁</u> 42'11	5°29'45
min. Earth dist.	6905 Mar 29 07:49	7° <u>♁</u> 26'44	38.65537 AU	morning rise	6911 Oct 20 19:21	17° <u>♁</u> 08'06	
direct	6905 Jun 16 01:53	6° <u>♁</u> 21'20		retrograde	6912 Jan 16 22:57	18° <u>♁</u> 37'30	
evening set	6905 Sep 10 15:39	7° <u>♁</u> 43'57		opposition	6912 Apr 05 16:19	17° <u>♁</u> 27'34	6°00'20
max. Earth dist.	6905 Sep 23 22:01	8° <u>♁</u> 05'41	40.52786 AU	min. Earth dist.	6912 Apr 08 00:42	17° <u>♁</u> 24'19	36.88319 AU
				direct	6912 Jun 25 09:45	16° <u>♁</u> 16'37	
conjunction	6905 Sep 26 10:12	8° <u>♁</u> 09'50	3°06'28	evening set	6912 Sep 21 17:21	17° <u>♁</u> 46'23	
minimum elong	6905 Sep 26 10:06	8° <u>♁</u> 09'50	3°06'29	max. Earth dist.	6912 Oct 03 21:22	18° <u>♁</u> 07'30	38.74598 AU
morning rise	6905 Oct 12 04:44	8° <u>♁</u> 35'45					
retrograde	6906 Jan 07 10:58	9° <u>♁</u> 59'32		conjunction	6912 Oct 06 14:17	18° <u>♁</u> 12'14	5°54'02
opposition	6906 Mar 28 17:45	8° <u>♁</u> 51'38	3°28'30	minimum elong	6912 Oct 06 14:06	18° <u>♁</u> 12'13	5°54'04
min. Earth dist.	6906 Mar 30 23:32	8° <u>♁</u> 48'38	38.40304 AU	morning rise	6912 Oct 21 10:36	18° <u>♁</u> 38'04	
direct	6906 Jun 17 15:50	7° <u>♁</u> 42'57		retrograde	6913 Jan 17 19:35	20° <u>♁</u> 08'36	
evening set	6906 Sep 12 09:46	9° <u>♁</u> 06'24		opposition	6913 Apr 07 09:56	18° <u>♁</u> 58'20	6°26'09

min. Earth dist.	6913 Apr 09 19:44	18° <u>0</u> 54'59	36.62782 AU	morning rise	6919 Nov 01 02:06	29° <u>0</u> 48'08	
direct	6913 Jun 27 01:02	17° <u>0</u> 46'59			6919 Nov 07 15:15	0° <u>0</u>	
evening set	6913 Sep 23 17:50	19° <u>0</u> 18'00		retrograde	6920 Jan 30 09:09	1° <u>0</u> 27'58	
max. Earth dist.	6913 Oct 05 17:16	19° <u>0</u> 38'57	38.48818 AU	opposition	6920 Apr 18 05:34	0° <u>0</u> 14'56	9°28'27
				min. Earth dist.	6920 Apr 20 18:56	0° <u>0</u> 11'12	34.82232 AU
conjunction	6913 Oct 08 10:25	19° <u>0</u> 43'45	6°18'27		6920 Apr 28 12:48	30° <u>0</u> 48'08	
minimum elong	6913 Oct 08 10:13	19° <u>0</u> 43'44	6°18'29	direct	6920 Jul 07 15:01	29° <u>0</u> 00'25	
morning rise	6913 Oct 23 01:57	20° <u>0</u> 09'28			6920 Sep 13 03:34	0° <u>0</u>	
retrograde	6914 Jan 19 14:23	21° <u>0</u> 41'10		evening set	6920 Oct 07 02:35	0° <u>0</u> 41'47	
opposition	6914 Apr 09 04:12	20° <u>0</u> 30'33	6°52'05	max. Earth dist.	6920 Oct 17 02:14	1° <u>0</u> 00'26	36.66936 AU
min. Earth dist.	6914 Apr 11 14:40	20° <u>0</u> 27'08	36.37091 AU				
direct	6914 Jun 28 18:07	19° <u>0</u> 18'47		conjunction	6920 Oct 19 23:16	1° <u>0</u> 05'51	9°09'56
evening set	6914 Sep 25 19:21	20° <u>0</u> 51'05		minimum elong	6920 Oct 19 22:59	1° <u>0</u> 05'50	9°09'57
max. Earth dist.	6914 Oct 07 12:31	21° <u>0</u> 11'46	38.22899 AU	morning rise	6920 Nov 01 18:31	1° <u>0</u> 29'51	
				retrograde	6921 Jan 31 07:50	3° <u>0</u> 11'18	
conjunction	6914 Oct 10 06:53	21° <u>0</u> 16'42	6°42'56	opposition	6921 Apr 20 04:08	1° <u>0</u> 57'52	9°54'19
minimum elong	6914 Oct 10 06:41	21° <u>0</u> 16'41	6°42'57	min. Earth dist.	6921 Apr 22 17:38	1° <u>0</u> 54'06	34.56875 AU
morning rise	6914 Oct 24 17:36	21° <u>0</u> 42'18		direct	6921 Jul 09 11:33	0° <u>0</u> 42'54	
retrograde	6915 Jan 21 13:15	23° <u>0</u> 15'13		evening set	6921 Oct 09 11:54	2° <u>0</u> 26'02	
opposition	6915 Apr 10 22:56	22° <u>0</u> 04'13	7°18'05	max. Earth dist.	6921 Oct 19 02:56	2° <u>0</u> 44'12	36.41472 AU
min. Earth dist.	6915 Apr 13 09:46	22° <u>0</u> 00'46	36.11280 AU				
direct	6915 Jun 30 10:39	20° <u>0</u> 52'01		conjunction	6921 Oct 22 00:13	2° <u>0</u> 49'42	9°34'06
evening set	6915 Sep 27 21:56	22° <u>0</u> 25'40		minimum elong	6921 Oct 21 23:55	2° <u>0</u> 49'40	9°34'09
max. Earth dist.	6915 Oct 09 08:43	22° <u>0</u> 46'05	37.96845 AU	morning rise	6921 Nov 03 11:17	3° <u>0</u> 13'17	
				retrograde	6922 Feb 02 10:45	4° <u>0</u> 56'24	
conjunction	6915 Oct 12 04:14	22° <u>0</u> 51'08	7°07'29	opposition	6922 Apr 22 03:15	3° <u>0</u> 42'35	10°20'02
minimum elong	6915 Oct 12 04:01	22° <u>0</u> 51'07	7°07'31	min. Earth dist.	6922 Apr 24 16:10	3° <u>0</u> 38'49	34.31788 AU
morning rise	6915 Oct 26 09:27	23° <u>0</u> 16'33		direct	6922 Jul 11 07:48	2° <u>0</u> 27'10	
retrograde	6916 Jan 23 11:31	24° <u>0</u> 50'44		evening set	6922 Oct 11 22:19	4° <u>0</u> 12'10	
opposition	6916 Apr 11 18:16	23° <u>0</u> 39'21	7°44'10	max. Earth dist.	6922 Oct 21 04:19	4° <u>0</u> 29'48	36.16244 AU
min. Earth dist.	6916 Apr 14 06:41	23° <u>0</u> 35'47	35.85375 AU				
direct	6916 Jul 01 04:01	22° <u>0</u> 26'42		conjunction	6922 Oct 24 01:58	4° <u>0</u> 35'22	9°58'06
evening set	6916 Sep 29 01:34	24° <u>0</u> 01'46		minimum elong	6922 Oct 24 01:39	4° <u>0</u> 35'21	9°58'08
max. Earth dist.	6916 Oct 10 06:31	24° <u>0</u> 21'55	37.70733 AU	morning rise	6922 Nov 05 04:12	4° <u>0</u> 58'30	
				retrograde	6923 Feb 04 13:35	6° <u>0</u> 43'23	
conjunction	6916 Oct 13 02:04	24° <u>0</u> 27'01	7°32'03	opposition	6923 Apr 24 03:17	5° <u>0</u> 29'10	10°45'32
minimum elong	6916 Oct 13 01:49	24° <u>0</u> 27'00	7°32'04	min. Earth dist.	6923 Apr 26 17:16	5° <u>0</u> 25'20	34.06929 AU
morning rise	6916 Oct 27 01:25	24° <u>0</u> 52'14		direct	6923 Jul 13 05:23	4° <u>0</u> 13'19	
retrograde	6917 Jan 24 10:42	26° <u>0</u> 27'44		evening set	6923 Oct 14 10:23	6° <u>0</u> 00'17	
opposition	6917 Apr 13 14:08	25° <u>0</u> 15'57	8°10'17	max. Earth dist.	6923 Oct 23 07:28	6° <u>0</u> 17'23	35.91228 AU
min. Earth dist.	6917 Apr 16 02:06	25° <u>0</u> 12'23	35.59452 AU				
direct	6917 Jul 03 01:04	24° <u>0</u> 02'50		conjunction	6923 Oct 26 04:35	6° <u>0</u> 22'58	10°21'52
evening set	6917 Oct 01 06:04	25° <u>0</u> 39'23		minimum elong	6923 Oct 26 04:16	6° <u>0</u> 22'56	10°21'55
max. Earth dist.	6917 Oct 12 03:11	25° <u>0</u> 59'08	37.44613 AU	morning rise	6923 Nov 06 21:23	6° <u>0</u> 45'34	
				retrograde	6924 Feb 06 18:47	8° <u>0</u> 32'17	
conjunction	6917 Oct 15 00:15	26° <u>0</u> 04'24	7°56'37	opposition	6924 Apr 25 03:51	7° <u>0</u> 17'42	11°10'48
minimum elong	6917 Oct 15 00:00	26° <u>0</u> 04'23	7°56'39	min. Earth dist.	6924 Apr 27 17:13	7° <u>0</u> 13'52	33.82264 AU
morning rise	6917 Oct 28 17:25	26° <u>0</u> 29'22		direct	6924 Jul 14 07:17	6° <u>0</u> 01'24	
retrograde	6918 Jan 26 10:40	28° <u>0</u> 06'15		evening set	6924 Oct 15 23:47	7° <u>0</u> 50'24	
opposition	6918 Apr 15 10:43	26° <u>0</u> 54'02	8°36'23	max. Earth dist.	6924 Oct 24 09:28	8° <u>0</u> 06'46	35.66368 AU
min. Earth dist.	6918 Apr 18 00:01	26° <u>0</u> 50'22	35.33575 AU				
direct	6918 Jul 04 21:31	25° <u>0</u> 40'28		conjunction	6924 Oct 27 07:57	8° <u>0</u> 12'31	10°45'22
evening set	6918 Oct 03 11:42	27° <u>0</u> 18'33		minimum elong	6924 Oct 27 07:38	8° <u>0</u> 12'29	10°45'24
max. Earth dist.	6918 Oct 14 03:03	27° <u>0</u> 38'02	37.18564 AU	morning rise	6924 Nov 07 14:50	8° <u>0</u> 34'32	
				retrograde	6925 Feb 08 01:00	10° <u>0</u> 23'10	
conjunction	6918 Oct 16 23:19	27° <u>0</u> 43'18	8°21'08	opposition	6925 Apr 27 05:28	9° <u>0</u> 08'11	11°35'48
minimum elong	6918 Oct 16 23:03	27° <u>0</u> 43'16	8°21'10	min. Earth dist.	6925 Apr 29 20:02	9° <u>0</u> 04'16	33.57755 AU
morning rise	6918 Oct 30 09:34	28° <u>0</u> 07'59		direct	6925 Jul 16 07:57	7° <u>0</u> 51'26	
retrograde	6919 Jan 28 09:09	29° <u>0</u> 46'18		evening set	6925 Oct 18 14:29	9° <u>0</u> 42'33	
opposition	6919 Apr 17 07:46	28° <u>0</u> 33'41	9°02'27	max. Earth dist.	6925 Oct 26 14:22	9° <u>0</u> 58'16	35.41644 AU
min. Earth dist.	6919 Apr 19 20:37	28° <u>0</u> 30'00	35.07809 AU				
direct	6919 Jul 06 19:22	27° <u>0</u> 19'38		conjunction	6925 Oct 29 12:04	10° <u>0</u> 04'01	11°08'35
evening set	6919 Oct 05 18:39	28° <u>0</u> 59'19		minimum elong	6925 Oct 29 11:44	10° <u>0</u> 03'59	11°08'38
max. Earth dist.	6919 Oct 16 01:24	29° <u>0</u> 18'21	36.92655 AU	morning rise	6925 Nov 09 08:08	10° <u>0</u> 25'23	
				retrograde	6926 Feb 10 04:46	12° <u>0</u> 16'01	
conjunction	6919 Oct 18 22:55	29° <u>0</u> 23'45	8°45'35	opposition	6926 Apr 29 07:50	11° <u>0</u> 00'37	12°00'29
minimum elong	6919 Oct 18 22:39	29° <u>0</u> 23'44	8°45'38	min. Earth dist.	6926 May 01 21:59	10° <u>0</u> 56'41	33.33374 AU



direct	6926 Jul 18 10:38	9° <del>ℳ</del> 43'24		conjunction	6932 Nov 12 14:59	23° <del>ℳ</del> 58'03	13°38'15
evening set	6926 Oct 21 06:53	11° <del>ℳ</del> 36'42		minimum elong	6932 Nov 12 14:38	23° <del>ℳ</del> 58'01	13°38'18
max. Earth dist.	6926 Oct 28 17:59	11° <del>ℳ</del> 51'32	35.17058 AU	morning rise	6932 Nov 19 08:46	24° <del>ℳ</del> 12'19	
				retrograde	6933 Feb 24 11:53	26° <del>ℳ</del> 19'33	
conjunction	6926 Oct 31 16:59	11° <del>ℳ</del> 57'26	11°31'27	opposition	6933 May 12 22:13	25° <del>ℳ</del> 01'08	14°39'19
minimum elong	6926 Oct 31 16:38	11° <del>ℳ</del> 57'25	11°31'29	min. Earth dist.	6933 May 15 10:52	24° <del>ℳ</del> 57'07	31.70278 AU
morning rise	6926 Nov 11 01:50	12° <del>ℳ</del> 18'05		direct	6933 Jul 31 18:03	23° <del>ℳ</del> 40'29	
retrograde	6927 Feb 12 10:48	14° <del>ℳ</del> 10'46		evening set	6933 Nov 09 01:18	25° <del>ℳ</del> 52'15	
opposition	6927 May 01 10:49	12° <del>ℳ</del> 54'58	12°24'48	max. Earth dist.	6933 Nov 12 04:34	25° <del>ℳ</del> 58'56	33.53289 AU
min. Earth dist.	6927 May 04 01:34	12° <del>ℳ</del> 50'58	33.09153 AU				
direct	6927 Jul 20 11:59	11° <del>ℳ</del> 37'15		conjunction	6933 Nov 15 01:09	26° <del>ℳ</del> 05'03	13°56'59
evening set	6927 Oct 24 00:46	13° <del>ℳ</del> 32'51		minimum elong	6933 Nov 15 00:48	26° <del>ℳ</del> 05'01	13°57'03
max. Earth dist.	6927 Oct 31 00:23	13° <del>ℳ</del> 46'51	34.92628 AU	morning rise	6933 Nov 21 00:02	26° <del>ℳ</del> 17'45	
				retrograde	6934 Feb 27 00:53	28° <del>ℳ</del> 27'56	
conjunction	6927 Nov 02 22:53	13° <del>ℳ</del> 52'47	11°53'56	opposition	6934 May 15 07:02	27° <del>ℳ</del> 09'09	14°59'05
minimum elong	6927 Nov 02 22:32	13° <del>ℳ</del> 52'45	11°54'00	min. Earth dist.	6934 May 17 19:26	27° <del>ℳ</del> 05'07	31.48917 AU
morning rise	6927 Nov 12 19:31	14° <del>ℳ</del> 12'37		direct	6934 Aug 03 01:34	25° <del>ℳ</del> 48'04	
	6927 Dec 07 17:33	15° <del>ℳ</del>		evening set	6934 Nov 12 10:03	28° <del>ℳ</del> 03'11	
retrograde	6928 Feb 14 15:40	16° <del>ℳ</del> 07'27		max. Earth dist.	6934 Nov 14 17:58	28° <del>ℳ</del> 08'12	33.31963 AU
	6928 Apr 26 21:21	15° <del>ℳ</del>					
opposition	6928 May 02 14:49	14° <del>ℳ</del> 51'13	12°48'42	conjunction	6934 Nov 17 12:28	28° <del>ℳ</del> 14'10	14°14'50
min. Earth dist.	6928 May 05 05:54	14° <del>ℳ</del> 47'10	32.85110 AU	minimum elong	6934 Nov 17 12:08	28° <del>ℳ</del> 14'08	14°14'52
direct	6928 Jul 21 14:27	13° <del>ℳ</del> 33'00		morning rise	6934 Nov 22 13:58	28° <del>ℳ</del> 25'05	
	6928 Oct 10 01:41	15° <del>ℳ</del>			6935 Jan 11 06:26	0° <del>♂</del>	
evening set	6928 Oct 25 20:16	15° <del>ℳ</del> 30'58		retrograde	6935 Mar 01 11:38	0° <del>♂</del> 38'26	
max. Earth dist.	6928 Nov 01 06:20	15° <del>ℳ</del> 43'59	34.68422 AU		6935 Apr 21 02:37	30° <del>ℳ</del>	
				opposition	6935 May 17 16:37	29° <del>ℳ</del> 19'19	15°17'53
conjunction	6928 Nov 04 05:15	15° <del>ℳ</del> 50'00	12°15'58	min. Earth dist.	6935 May 20 04:00	29° <del>ℳ</del> 15'20	31.28178 AU
minimum elong	6928 Nov 04 04:54	15° <del>ℳ</del> 49'58	12°16'01	direct	6935 Aug 05 10:43	27° <del>ℳ</del> 57'50	
morning rise	6928 Nov 13 13:01	16° <del>ℳ</del> 08'56			6935 Nov 08 06:11	0° <del>♂</del>	
retrograde	6929 Feb 15 23:12	18° <del>ℳ</del> 06'02		evening set	6935 Nov 15 23:12	0° <del>♂</del> 16'39	
opposition	6929 May 04 19:25	16° <del>ℳ</del> 49'21	13°12'07	max. Earth dist.	6935 Nov 17 06:05	0° <del>♂</del> 19'27	33.11275 AU
min. Earth dist.	6929 May 07 09:56	16° <del>ℳ</del> 45'19	32.61331 AU				
direct	6929 Jul 23 17:13	15° <del>ℳ</del> 30'38		conjunction	6935 Nov 20 00:30	0° <del>♂</del> 25'29	14°31'43
evening set	6929 Oct 28 17:17	17° <del>ℳ</del> 31'05		minimum elong	6935 Nov 20 00:09	0° <del>♂</del> 25'27	14°31'47
max. Earth dist.	6929 Nov 03 13:41	17° <del>ℳ</del> 43'03	34.44493 AU	morning rise	6935 Nov 24 01:00	0° <del>♂</del> 34'14	
				retrograde	6936 Mar 03 01:14	2° <del>♂</del> 51'08	
conjunction	6929 Nov 06 12:33	17° <del>ℳ</del> 49'07	12°37'30	opposition	6936 May 19 03:08	1° <del>♂</del> 31'41	15°35'39
minimum elong	6929 Nov 06 12:11	17° <del>ℳ</del> 49'06	12°37'34	min. Earth dist.	6936 May 21 13:42	1° <del>♂</del> 27'45	31.08063 AU
morning rise	6929 Nov 15 06:29	18° <del>ℳ</del> 07'05		direct	6936 Aug 06 19:19	0° <del>♂</del> 09'49	
retrograde	6930 Feb 18 05:44	20° <del>ℳ</del> 06'31		evening set	6936 Nov 18 20:37	2° <del>♂</del> 33'04	
opposition	6930 May 07 00:55	18° <del>ℳ</del> 49'23	13°34'57	max. Earth dist.	6936 Nov 18 20:37	2° <del>♂</del> 33'04	32.91186 AU
min. Earth dist.	6930 May 09 16:05	18° <del>ℳ</del> 45'17	32.37874 AU				
direct	6930 Jul 25 21:23	17° <del>ℳ</del> 30'10		conjunction	6936 Nov 21 13:23	2° <del>♂</del> 39'00	14°47'35
evening set	6930 Oct 31 16:15	19° <del>ℳ</del> 33'13		minimum elong	6936 Nov 21 13:04	2° <del>♂</del> 38'58	14°47'38
max. Earth dist.	6930 Nov 05 22:34	19° <del>ℳ</del> 44'06	34.20943 AU	morning rise	6936 Nov 24 05:26	2° <del>♂</del> 44'52	
				retrograde	6937 Mar 05 13:55	5° <del>♂</del> 06'01	
conjunction	6930 Nov 08 20:32	19° <del>ℳ</del> 50'09	12°58'26	opposition	6937 May 21 14:41	3° <del>♂</del> 46'14	15°52'18
minimum elong	6930 Nov 08 20:11	19° <del>ℳ</del> 50'07	12°58'29	min. Earth dist.	6937 May 24 01:00	3° <del>♂</del> 42'17	30.88522 AU
morning rise	6930 Nov 16 23:37	20° <del>ℳ</del> 07'00		direct	6937 Aug 09 04:23	2° <del>♂</del> 24'00	
retrograde	6931 Feb 20 15:13	22° <del>ℳ</del> 08'54		max. Earth dist.	6937 Nov 21 10:51	4° <del>♂</del> 48'43	32.71695 AU
opposition	6931 May 09 07:07	20° <del>ℳ</del> 51'20	13°57'10				
min. Earth dist.	6931 May 11 20:57	20° <del>ℳ</del> 47'17	32.14826 AU	conjunction	6937 Nov 24 03:02	4° <del>♂</del> 54'39	15°02'22
direct	6931 Jul 28 03:55	19° <del>ℳ</del> 31'36		minimum elong	6937 Nov 24 02:43	4° <del>♂</del> 54'37	15°02'27
evening set	6931 Nov 03 17:00	21° <del>ℳ</del> 37'24		retrograde	6938 Mar 08 04:53	7° <del>♂</del> 22'59	
max. Earth dist.	6931 Nov 08 07:08	21° <del>ℳ</del> 46'59	33.97827 AU	opposition	6938 May 24 02:51	6° <del>♂</del> 02'54	16°07'47
				min. Earth dist.	6938 May 26 11:40	5° <del>♂</del> 59'02	30.69562 AU
conjunction	6931 Nov 11 05:21	21° <del>ℳ</del> 53'06	13°18'43	direct	6938 Aug 11 14:47	4° <del>♂</del> 40'16	
minimum elong	6931 Nov 11 04:59	21° <del>ℳ</del> 53'05	13°18'47	max. Earth dist.	6938 Nov 24 02:17	7° <del>♂</del> 06'27	32.52781 AU
morning rise	6931 Nov 18 16:34	22° <del>ℳ</del> 08'45					
retrograde	6932 Feb 23 00:50	24° <del>ℳ</del> 13'14		conjunction	6938 Nov 26 17:38	7° <del>♂</del> 12'22	15°16'02
opposition	6932 May 10 14:13	22° <del>ℳ</del> 55'14	14°18'39	minimum elong	6938 Nov 26 17:21	7° <del>♂</del> 12'20	15°16'05
min. Earth dist.	6932 May 13 04:34	22° <del>ℳ</del> 51'08	31.92268 AU	retrograde	6939 Mar 10 18:09	9° <del>♂</del> 41'59	
direct	6932 Jul 29 09:17	21° <del>ℳ</del> 35'01		opposition	6939 May 26 16:07	8° <del>♂</del> 21'34	16°22'02
evening set	6932 Nov 05 20:04	23° <del>ℳ</del> 43'42		min. Earth dist.	6939 May 29 01:02	8° <del>♂</del> 17'40	30.51170 AU
max. Earth dist.	6932 Nov 09 18:36	23° <del>ℳ</del> 52'01	33.75255 AU	direct	6939 Aug 14 02:49	6° <del>♂</del> 58'33	
				max. Earth dist.	6939 Nov 26 19:02	9° <del>♂</del> 26'12	32.34480 AU

conjunction	6939 Nov 29 08:54	9°  32'01	15°28'28	retrograde	6948 Apr 01 11:42	1°  44'38	
minimum elong	6939 Nov 29 08:38	9°  32'00	15°28'32	opposition	6948 Jun 16 22:57	0°  21'49	17°20'23
retrograde	6940 Mar 12 10:14	12°  02'52		min. Earth dist.	6948 Jun 18 17:00	0°  18'51	29.20734 AU
opposition	6940 May 28 06:01	10°  42'07	16°34'57		6948 Jun 29 23:05	30°  R 	
min. Earth dist.	6940 May 30 13:01	10°  38'20	30.33385 AU	direct	6948 Sep 04 08:15	28°  35'11	
direct	6940 Aug 15 17:02	9°  18'43			6948 Nov 06 10:20	0° 	
max. Earth dist.	6940 Nov 28 11:35	11°  47'43	32.16821 AU	max. Earth dist.	6948 Dec 19 08:17	1°  34'38	31.07279 AU
conjunction	6940 Dec 01 00:53	11°  53'31	15°39'37	conjunction	6948 Dec 21 04:13	1°  39'00	16°13'24
minimum elong	6940 Dec 01 00:39	11°  53'30	15°39'41	minimum elong	6948 Dec 21 04:12	1°  39'00	16°13'28
retrograde	6941 Mar 15 02:14	14°  25'32		retrograde	6949 Apr 04 09:17	4°  318'01	
opposition	6941 May 30 20:51	13°  04'27	16°46'28	opposition	6949 Jun 19 18:39	2°  55'05	17°17'44
min. Earth dist.	6941 Jun 02 03:43	13°  00'40	30.16264 AU	min. Earth dist.	6949 Jun 21 09:33	2°  52'20	29.11146 AU
direct	6941 Aug 18 05:50	11°  40'41		direct	6949 Sep 07 03:29	1°  329'20	
max. Earth dist.	6941 Dec 01 06:30	14°  11'06	31.99882 AU	max. Earth dist.	6949 Dec 22 07:12	4°  308'41	30.98242 AU
conjunction	6941 Dec 03 17:25	14°  16'43	15°49'25	conjunction	6949 Dec 24 00:36	4°  312'49	16°09'48
minimum elong	6941 Dec 03 17:11	14°  16'42	15°49'29	minimum elong	6949 Dec 24 00:40	4°  312'49	16°09'53
retrograde	6942 Mar 17 19:23	16°  49'50		retrograde	6950 Apr 07 03:57	6°  352'22	
opposition	6942 Jun 02 12:17	15°  28'25	16°56'28	opposition	6950 Jun 22 14:59	5°  329'22	17°13'08
min. Earth dist.	6942 Jun 04 17:07	15°  24'46	29.99856 AU	min. Earth dist.	6950 Jun 24 04:54	5°  326'41	29.02546 AU
direct	6942 Aug 20 23:00	14°  04'17		direct	6950 Sep 09 22:13	4°  303'32	
max. Earth dist.	6942 Dec 04 00:13	16°  35'55	31.83714 AU	max. Earth dist.	6950 Dec 25 06:34	6°  343'39	30.90224 AU
conjunction	6942 Dec 06 10:36	16°  41'31	15°57'46	conjunction	6950 Dec 26 21:21	6°  347'32	16°04'22
minimum elong	6942 Dec 06 10:24	16°  41'30	15°57'49	minimum elong	6950 Dec 26 21:25	6°  347'32	16°04'26
retrograde	6943 Mar 20 13:33	19°  15'40		retrograde	6951 Apr 10 00:36	9°  327'31	
opposition	6943 Jun 05 04:22	17°  53'56	17°04'54	opposition	6951 Jun 25 11:31	8°  304'28	17°06'34
min. Earth dist.	6943 Jun 07 08:18	17°  50'19	29.84251 AU	min. Earth dist.	6951 Jun 26 22:22	8°  302'00	28.94913 AU
direct	6943 Aug 23 15:04	16°  29'27		direct	6951 Sep 12 20:04	6°  338'34	
max. Earth dist.	6943 Dec 06 21:05	19°  02'27	31.68408 AU	max. Earth dist.	6951 Dec 28 05:32	9°  319'18	30.83195 AU
conjunction	6943 Dec 09 04:26	19°  07'48	16°04'36	conjunction	6951 Dec 29 18:20	9°  322'59	15°57'07
minimum elong	6943 Dec 09 04:17	19°  07'47	16°04'40	minimum elong	6951 Dec 29 18:28	9°  323'00	15°57'11
retrograde	6944 Mar 22 06:43	21°  42'55		retrograde	6952 Apr 11 20:52	12°  303'19	
opposition	6944 Jun 06 21:17	20°  20'53	17°11'39	opposition	6952 Jun 27 08:37	10°  340'12	16°58'01
min. Earth dist.	6944 Jun 08 23:13	20°  17'23	29.69515 AU	min. Earth dist.	6952 Jun 28 18:09	10°  337'50	28.88256 AU
direct	6944 Aug 25 08:29	18°  56'04		direct	6952 Sep 14 15:34	9°  314'16	
max. Earth dist.	6944 Dec 08 16:17	21°  30'11	31.54053 AU	max. Earth dist.	6952 Dec 30 05:43	11°  355'35	30.77182 AU
conjunction	6944 Dec 10 22:27	21°  35'27	16°09'49	conjunction	6952 Dec 31 15:18	11°  358'57	15°48'01
minimum elong	6944 Dec 10 22:19	21°  35'26	16°09'53	minimum elong	6952 Dec 31 15:27	11°  358'58	15°48'05
retrograde	6945 Mar 25 02:48	24°  11'29		retrograde	6953 Apr 14 17:09	14°  339'31	
opposition	6945 Jun 09 14:49	22°  49'11	17°16'39	opposition	6953 Jun 30 05:51	13°  316'22	16°47'29
min. Earth dist.	6945 Jun 11 14:41	22°  45'49	29.55756 AU	min. Earth dist.	6953 Jul 01 12:23	13°  314'12	28.82572 AU
direct	6945 Aug 28 01:48	21°  24'05		direct	6953 Sep 17 14:14	11°  350'24	
max. Earth dist.	6945 Dec 11 14:31	23°  59'29	31.40728 AU	max. Earth dist.	6954 Jan 02 04:27	14°  332'02	30.72181 AU
conjunction	6945 Dec 13 17:17	24°  04'26	16°13'22	conjunction	6954 Jan 03 12:23	14°  335'15	15°37'06
minimum elong	6945 Dec 13 17:12	24°  04'26	16°13'26	minimum elong	6954 Jan 03 12:35	14°  335'16	15°37'11
retrograde	6946 Mar 27 20:47	26°  41'19		retrograde	6954 Apr 17 14:02	17°  315'55	
opposition	6946 Jun 12 08:56	25°  18'47	17°19'48	opposition	6954 Jul 03 03:06	15°  352'43	16°35'00
min. Earth dist.	6946 Jun 14 07:07	25°  15'32	29.43022 AU	min. Earth dist.	6954 Jul 04 07:44	15°  350'42	28.77899 AU
direct	6946 Aug 30 19:45	23°  53'28		direct	6954 Sep 20 11:57	14°  326'44	
max. Earth dist.	6946 Dec 14 11:18	26°  29'53	31.28496 AU	max. Earth dist.	6955 Jan 05 05:16	17°  308'47	30.68235 AU
conjunction	6946 Dec 16 12:28	26°  34'43	16°15'10	conjunction	6955 Jan 06 09:34	17°  311'38	15°24'23
minimum elong	6946 Dec 16 12:24	26°  34'43	16°15'14	minimum elong	6955 Jan 06 09:46	17°  311'39	15°24'27
retrograde	6947 Mar 30 17:01	29°  12'23		retrograde	6955 Apr 20 09:38	19°  352'18	
opposition	6947 Jun 15 03:35	27°  49'41	17°21'03	opposition	6955 Jul 06 00:35	18°  329'05	16°20'33
min. Earth dist.	6947 Jun 16 22:56	27°  46'38	29.31356 AU	min. Earth dist.	6955 Jul 07 02:39	18°  327'15	28.74255 AU
direct	6947 Sep 02 14:11	26°  24'10		direct	6955 Sep 23 11:04	17°  303'06	
max. Earth dist.	6947 Dec 17 10:08	29°  01'43	31.17346 AU	max. Earth dist.	6956 Jan 08 03:55	19°  345'15	30.65375 AU
conjunction	6947 Dec 19 08:12	29°  06'16	16°15'11	conjunction	6956 Jan 09 06:19	19°  347'54	15°09'51
minimum elong	6947 Dec 19 08:11	29°  06'16	16°15'16	minimum elong	6956 Jan 09 06:35	19°  347'56	15°09'55
	6948 Jan 11 10:06	0° 		retrograde	6956 Apr 22 06:58	22°  328'28	

opposition	6956 Jul 07 22:02	21°  05'15	16°04'10	direct	6962 Oct 11 22:09	5°  05'53	
min. Earth dist.	6956 Jul 08 21:15	21°  03'36	28.71717 AU	evening set	6963 Jan 18 14:44	7°  27'17	
direct	6956 Sep 25 08:53	19°  39'17					
evening set	6957 Jan 09 05:54	22°  19'20		conjunction	6963 Jan 27 00:27	7°  47'15	12°41'03
max. Earth dist.	6957 Jan 10 04:51	22°  21'39	30.63671 AU	minimum elong	6963 Jan 27 00:50	7°  47'17	12°41'06
				max. Earth dist.	6963 Jan 26 20:29	7°  46'51	30.79153 AU
conjunction	6957 Jan 11 03:04	22°  23'53	14°53'33	morning rise	6963 Feb 04 10:11	8°  07'11	
minimum elong	6957 Jan 11 03:20	22°  23'54	14°53'37	retrograde	6963 May 10 20:05	10°  24'39	
morning rise	6957 Jan 13 00:43	22°  28'28		opposition	6963 Jul 26 23:57	9°  02'19	13°19'15
retrograde	6957 Apr 25 02:36	25°  04'14		min. Earth dist.	6963 Jul 27 03:16	9°  02'05	28.87321 AU
opposition	6957 Jul 10 19:28	23°  41'01	15°45'52	direct	6963 Oct 14 17:20	7°  37'37	
min. Earth dist.	6957 Jul 11 16:16	23°  39'33	28.70334 AU	evening set	6964 Jan 20 16:16	9°  56'37	
direct	6957 Sep 28 08:39	22°  15'08					
evening set	6958 Jan 10 07:19	24°  50'34		conjunction	6964 Jan 29 18:34	10°  18'07	12°13'55
				minimum elong	6964 Jan 29 18:57	10°  18'09	12°13'58
conjunction	6958 Jan 13 23:21	24°  59'24	14°35'30	max. Earth dist.	6964 Jan 29 17:40	10°  18'01	30.85706 AU
minimum elong	6958 Jan 13 23:40	24°  59'26	14°35'33	morning rise	6964 Feb 07 20:44	10°  39'36	
max. Earth dist.	6958 Jan 13 03:19	24°  57'24	30.63186 AU	retrograde	6964 May 12 12:19	12°  54'46	
morning rise	6958 Jan 17 15:53	25°  08'17		opposition	6964 Jul 28 19:40	11°  32'38	12°49'32
retrograde	6958 Apr 27 22:59	27°  39'28		min. Earth dist.	6964 Jul 28 19:44	11°  32'38	28.93992 AU
opposition	6958 Jul 13 16:41	26°  16'19	15°25'42	direct	6964 Oct 16 15:07	10°  08'12	
min. Earth dist.	6958 Jul 14 09:42	26°  15'07	28.70174 AU	evening set	6965 Jan 21 18:26	12°  24'52	
direct	6958 Oct 01 07:02	24°  50'31					
evening set	6959 Jan 11 21:52	27°  22'36		conjunction	6965 Jan 31 12:11	12°  47'46	11°45'37
				minimum elong	6965 Jan 31 12:34	12°  47'48	11°45'41
conjunction	6959 Jan 16 19:34	27°  34'23	14°15'44	max. Earth dist.	6965 Jan 31 13:23	12°  47'53	30.93240 AU
minimum elong	6959 Jan 16 19:53	27°  34'25	14°15'47	morning rise	6965 Feb 10 05:50	13°  10'40	
max. Earth dist.	6959 Jan 16 03:39	27°  32'48	30.63949 AU		6965 Apr 08 06:30	15°  00'00	
morning rise	6959 Jan 21 17:36	27°  34'6'13		retrograde	6965 May 15 04:24	15°  23'36	
	6959 Apr 02 16:08	0°  00'00			6965 Jun 22 08:53	15°  00'00	
retrograde	6959 Apr 30 17:48	0°  00'14'04		opposition	6965 Jul 31 14:52	14°  01'41	12°18'36
	6959 May 29 10:22	30°  00'00		min. Earth dist.	6965 Jul 31 12:40	14°  01'50	29.01646 AU
opposition	6959 Jul 16 13:51	28°  35'1'01	15°03'42	direct	6965 Oct 19 10:15	12°  37'31	
min. Earth dist.	6959 Jul 17 04:42	28°  34'9'59	28.71247 AU	evening set	6966 Jan 23 21:09	14°  51'54	
direct	6959 Oct 04 04:57	27°  32'5'23			6966 Jan 27 08:41	15°  00'00	
evening set	6960 Jan 13 17:07	29°  35'4'32					
	6960 Jan 15 23:46	0°  00'00		conjunction	6966 Feb 03 05:20	15°  16'05	11°16'14
				minimum elong	6966 Feb 03 05:43	15°  16'07	11°16'16
conjunction	6960 Jan 19 15:19	0°  08'8'46	13°54'19	max. Earth dist.	6966 Feb 03 09:53	15°  16'32	31.01735 AU
minimum elong	6960 Jan 19 15:41	0°  08'8'48	13°54'22	morning rise	6966 Feb 13 13:06	15°  40'15	
max. Earth dist.	6960 Jan 19 01:55	0°  07'7'25	30.65981 AU	retrograde	6966 May 17 19:18	17°  51'01	
morning rise	6960 Jan 25 13:55	0°  23'0'1		opposition	6966 Aug 03 09:35	16°  29'19	11°46'33
retrograde	6960 May 02 14:45	2°  47'5'59		min. Earth dist.	6966 Aug 03 04:56	16°  29'38	29.10222 AU
opposition	6960 Jul 18 10:47	1°  25'0'5	14°39'57	direct	6966 Oct 22 06:49	15°  05'26	
min. Earth dist.	6960 Jul 18 21:34	1°  24'1'9	28.73556 AU	evening set	6967 Jan 26 00:16	17°  17'35	
	6960 Oct 01 12:15	30°  00'00					
direct	6960 Oct 06 03:25	29°  35'9'38		conjunction	6967 Feb 05 21:41	17°  42'55	10°45'51
	6960 Oct 10 16:48	0°  00'00		minimum elong	6967 Feb 05 22:04	17°  42'57	10°45'54
evening set	6961 Jan 14 14:39	2°  26'0'5		max. Earth dist.	6967 Feb 06 03:54	17°  43'31	31.11146 AU
				morning rise	6967 Feb 16 18:51	18°  08'13	
conjunction	6961 Jan 21 10:42	2°  42'2'6	13°31'20	retrograde	6967 May 20 11:13	20°  16'54	
minimum elong	6961 Jan 21 11:03	2°  42'2'8	13°31'24	opposition	6967 Aug 06 03:43	18°  55'24	11°13'29
max. Earth dist.	6961 Jan 21 01:04	2°  41'2'8	30.69230 AU	min. Earth dist.	6967 Aug 05 20:07	18°  55'55	29.19733 AU
morning rise	6961 Jan 28 06:55	2°  58'4'7		direct	6967 Oct 25 01:16	17°  31'48	
retrograde	6961 May 05 08:03	5°  21'0'8		evening set	6968 Jan 28 03:36	19°  41'46	
opposition	6961 Jul 21 07:33	3°  58'2'4	14°14'34				
min. Earth dist.	6961 Jul 21 16:30	3°  57'4'6	28.77045 AU	conjunction	6968 Feb 08 13:32	20°  08'09	10°14'34
direct	6961 Oct 08 23:58	2°  33'1'1		minimum elong	6968 Feb 08 13:55	20°  08'11	10°14'36
evening set	6962 Jan 16 14:09	4°  57'0'3		max. Earth dist.	6968 Feb 08 23:29	20°  09'07	31.21486 AU
				morning rise	6968 Feb 19 22:50	20°  34'29	
conjunction	6962 Jan 24 05:45	5°  15'1'8	13°06'53	retrograde	6968 May 22 01:07	22°  41'08	
minimum elong	6962 Jan 24 06:08	5°  15'2'0	13°06'56	opposition	6968 Aug 07 21:20	21°  19'51	10°39'30
max. Earth dist.	6962 Jan 23 22:53	5°  14'3'7	30.73649 AU	min. Earth dist.	6968 Aug 07 11:43	21°  20'30	29.30178 AU
morning rise	6962 Jan 31 21:29	5°  33'3'3		direct	6968 Oct 26 21:42	19°  56'32	
retrograde	6962 May 08 02:22	7°  53'2'4		evening set	6969 Jan 29 07:03	22°  04'22	
opposition	6962 Jul 24 03:45	6°  30'5'1	13°47'37				
min. Earth dist.	6962 Jul 24 09:00	6°  30'2'9	28.81650 AU	conjunction	6969 Feb 10 04:19	22°  31'41	9°42'29

minimum elong	6969 Feb 10 04:41	22° $\approx$ 31'43	9°42'32	min. Earth dist.	6975 Aug 24 00:45	7° $\times$ 25'02	30.30881 AU
max. Earth dist.	6969 Feb 10 15:57	22° $\approx$ 32'48	31.32771 AU	opposition	6975 Aug 25 05:19	7° $\times$ 23'09	6°24'16
morning rise	6969 Feb 22 01:11	22° $\approx$ 58'57		direct	6975 Nov 13 15:42	6° $\times$ 02'30	
retrograde	6969 May 24 16:11	25° $\approx$ 03'37		evening set	6976 Feb 12 09:59	7° $\times$ 57'35	
opposition	6969 Aug 10 14:10	23° $\approx$ 42'33	10°04'42				
min. Earth dist.	6969 Aug 10 00:56	23° $\approx$ 43'27	29.41601 AU	conjunction	6976 Feb 26 16:43	8° $\times$ 28'48	5°42'43
direct	6969 Oct 29 16:18	22° $\approx$ 19'32		minimum elong	6976 Feb 26 16:57	8° $\times$ 28'49	5°42'44
evening set	6970 Jan 31 10:37	24° $\approx$ 25'20		max. Earth dist.	6976 Feb 27 22:44	8° $\times$ 31'33	32.38789 AU
				morning rise	6976 Mar 11 22:48	8° $\times$ 59'57	
conjunction	6970 Feb 12 18:39	24° $\approx$ 53'29	9°09'40	retrograde	6976 Jun 08 20:06	10° $\times$ 53'00	
minimum elong	6970 Feb 12 19:00	24° $\approx$ 53'31	9°09'42	min. Earth dist.	6976 Aug 25 10:26	9° $\times$ 36'10	30.48754 AU
max. Earth dist.	6970 Feb 13 10:03	24° $\approx$ 54'57	31.45031 AU	opposition	6976 Aug 26 17:32	9° $\times$ 34'09	5°46'32
morning rise	6970 Feb 25 01:56	25° $\approx$ 21'34		direct	6976 Nov 15 03:43	8° $\times$ 13'54	
retrograde	6970 May 27 04:20	27° $\approx$ 24'20		evening set	6977 Feb 13 13:50	10° $\times$ 07'26	
opposition	6970 Aug 13 06:21	26° $\approx$ 03'31	9°29'11				
min. Earth dist.	6970 Aug 12 15:22	26° $\approx$ 04'31	29.54029 AU	conjunction	6977 Feb 28 02:00	10° $\times$ 38'53	5°07'25
direct	6970 Nov 01 09:59	24° $\approx$ 40'50		minimum elong	6977 Feb 28 02:12	10° $\times$ 38'54	5°07'27
evening set	6971 Feb 02 14:29	26° $\approx$ 44'39		max. Earth dist.	6977 Mar 01 11:01	10° $\times$ 41'54	32.57205 AU
				morning rise	6977 Mar 14 13:10	11° $\times$ 10'16	
conjunction	6971 Feb 15 08:07	27° $\approx$ 13'31	8°36'13	retrograde	6977 Jun 11 03:29	13° $\times$ 01'57	
minimum elong	6971 Feb 15 08:27	27° $\approx$ 13'33	8°36'16	min. Earth dist.	6977 Aug 27 20:39	11° $\times$ 45'31	30.67268 AU
max. Earth dist.	6971 Feb 16 01:32	27° $\approx$ 15'11	31.58309 AU	opposition	6977 Aug 29 05:06	11° $\times$ 43'26	5°08'48
morning rise	6971 Feb 28 01:11	27° $\approx$ 42'20		direct	6977 Nov 17 16:33	10° $\times$ 23'36	
retrograde	6971 May 29 18:12	29° $\approx$ 43'17		evening set	6978 Feb 15 17:59	12° $\times$ 15'38	
opposition	6971 Aug 15 21:53	28° $\approx$ 22'45	8°53'02				
min. Earth dist.	6971 Aug 15 02:59	28° $\approx$ 24'01	29.67491 AU	conjunction	6978 Mar 02 10:32	12° $\times$ 47'16	4°32'07
direct	6971 Nov 04 04:17	27° $\approx$ 00'26		minimum elong	6978 Mar 02 10:43	12° $\times$ 47'17	4°32'07
evening set	6972 Feb 04 18:09	29° $\approx$ 02'22		max. Earth dist.	6978 Mar 03 20:18	12° $\times$ 50'19	32.76210 AU
				morning rise	6978 Mar 17 02:24	13° $\times$ 18'48	
conjunction	6972 Feb 17 20:50	29° $\approx$ 31'52	8°02'13	retrograde	6978 Jun 13 12:24	15° $\times$ 09'09	
minimum elong	6972 Feb 17 21:09	29° $\approx$ 31'54	8°02'15	min. Earth dist.	6978 Aug 30 04:30	13° $\times$ 53'13	30.86374 AU
max. Earth dist.	6972 Feb 18 17:44	29° $\approx$ 33'50	31.72595 AU	opposition	6978 Aug 31 15:46	13° $\times$ 50'57	4°31'06
morning rise	6972 Mar 01 22:45	0° $\times$ 01'19		direct	6978 Nov 20 03:03	12° $\times$ 31'31	
	6972 Mar 01 08:38	0° $\times$		evening set	6979 Feb 17 21:55	14° $\times$ 22'08	
retrograde	6972 May 31 06:05	2° $\times$ 00'33					
opposition	6972 Aug 17 12:54	0° $\times$ 40'18	8°16'21	conjunction	6979 Mar 04 18:31	14° $\times$ 53'51	3°56'52
min. Earth dist.	6972 Aug 16 16:03	0° $\times$ 41'42	29.81974 AU	minimum elong	6979 Mar 04 18:41	14° $\times$ 53'52	3°56'54
	6972 Sep 12 21:44	30° $\approx$		max. Earth dist.	6979 Mar 06 07:02	14° $\times$ 57'08	32.95755 AU
direct	6972 Nov 05 20:11	29° $\approx$ 18'23		morning rise	6979 Mar 19 14:11	15° $\times$ 25'30	
	6972 Dec 27 08:19	0° $\times$		retrograde	6979 Jun 15 18:58	17° $\times$ 14'35	
evening set	6973 Feb 05 22:03	1° $\times$ 18'30		min. Earth dist.	6979 Sep 01 14:00	15° $\times$ 58'59	31.06022 AU
				opposition	6979 Sep 03 02:02	15° $\times$ 56'41	3°53'32
conjunction	6973 Feb 19 08:53	1° $\times$ 48'33	7°27'47	direct	6979 Nov 22 14:53	14° $\times$ 37'38	
minimum elong	6973 Feb 19 09:11	1° $\times$ 48'35	7°27'50	evening set	6980 Feb 20 01:44	16° $\times$ 26'52	
max. Earth dist.	6973 Feb 20 08:13	1° $\times$ 50'44	31.87870 AU				
morning rise	6973 Mar 04 18:56	2° $\times$ 18'32		conjunction	6980 Mar 06 01:32	16° $\times$ 58'37	3°21'45
retrograde	6973 Jun 02 16:11	4° $\times$ 16'07		minimum elong	6980 Mar 06 01:40	16° $\times$ 58'38	3°21'46
min. Earth dist.	6973 Aug 19 02:41	2° $\times$ 57'49	29.97416 AU	max. Earth dist.	6980 Mar 07 14:55	17° $\times$ 01'56	33.15817 AU
opposition	6973 Aug 20 02:53	2° $\times$ 56'13	7°39'16	morning rise	6980 Mar 21 00:37	17° $\times$ 30'18	
direct	6973 Nov 08 12:26	1° $\times$ 34'42		retrograde	6980 Jun 17 02:48	19° $\times$ 18'09	
evening set	6974 Feb 08 01:58	3° $\times$ 33'05		min. Earth dist.	6980 Sep 02 20:31	18° $\times$ 03'01	31.26199 AU
				opposition	6980 Sep 04 11:22	18° $\times$ 00'33	3°16'10
conjunction	6974 Feb 21 20:12	4° $\times$ 03'36	6°52'59	direct	6980 Nov 24 03:17	16° $\times$ 41'52	
minimum elong	6974 Feb 21 20:29	4° $\times$ 03'38	6°53'01	evening set	6981 Feb 21 05:24	18° $\times$ 29'46	
max. Earth dist.	6974 Feb 22 21:57	4° $\times$ 06'00	32.04043 AU				
morning rise	6974 Mar 07 13:42	4° $\times$ 34'04		conjunction	6981 Mar 08 07:57	19° $\times$ 01'30	2°46'49
retrograde	6974 Jun 05 01:59	6° $\times$ 30'03		minimum elong	6981 Mar 08 08:04	19° $\times$ 01'31	2°46'50
opposition	6974 Aug 22 16:28	5° $\times$ 10'30	7°01'52	max. Earth dist.	6981 Mar 09 23:46	19° $\times$ 05'01	33.36378 AU
min. Earth dist.	6974 Aug 21 14:12	5° $\times$ 12'14	30.13752 AU	morning rise	6981 Mar 23 09:44	19° $\times$ 33'10	
direct	6974 Nov 11 01:39	3° $\times$ 49'25		retrograde	6981 Jun 19 08:30	21° $\times$ 19'51	
evening set	6975 Feb 10 05:53	5° $\times$ 46'07		min. Earth dist.	6981 Sep 05 04:05	20° $\times$ 05'02	31.46923 AU
				opposition	6981 Sep 06 19:57	20° $\times$ 02'31	2°39'02
conjunction	6975 Feb 24 06:51	6° $\times$ 17'02	6°17'56	direct	6981 Nov 26 13:20	18° $\times$ 44'12	
minimum elong	6975 Feb 24 07:06	6° $\times$ 17'03	6°17'58	evening set	6982 Feb 23 08:53	20° $\times$ 30'49	
max. Earth dist.	6975 Feb 25 11:22	6° $\times$ 19'40	32.21048 AU				
morning rise	6975 Mar 10 06:51	6° $\times$ 47'52		conjunction	6982 Mar 10 13:35	21° $\times$ 02'29	2°12'07
retrograde	6975 Jun 07 10:39	8° $\times$ 42'21		minimum elong	6982 Mar 10 13:41	21° $\times$ 02'30	2°12'07

max. Earth dist.	6982 Mar 12 07:02	21° <del>✕</del> 06'07	33.57485 AU	morning rise	6988 Apr 05 14:45	3° <del>Υ</del> 03'12	
morning rise	6982 Mar 25 17:29	21° <del>✕</del> 34'06		retrograde	6988 Jul 02 03:25	4° <del>Υ</del> 43'32	
retrograde	6982 Jun 21 11:36	23° <del>✕</del> 19'39		min. Earth dist.	6988 Sep 18 09:00	3° <del>Υ</del> 31'43	33.07633 AU
min. Earth dist.	6982 Sep 07 09:25	22° <del>✕</del> 05'17	31.68213 AU	opposition	6988 Sep 20 13:13	3° <del>Υ</del> 28'33	-1°29'40
opposition	6982 Sep 09 03:47	22° <del>✕</del> 02'37	2°02'13	direct	6988 Dec 10 11:38	2° <del>Υ</del> 13'05	
direct	6982 Nov 29 00:04	20° <del>✕</del> 44'39		evening set	6989 Mar 08 05:11	3° <del>Υ</del> 52'45	
evening set	6983 Feb 25 12:14	22° <del>✕</del> 30'05					
conjunction	6983 Mar 12 18:20	23° <del>✕</del> 01'38	1°37'42	conjunction	6989 Mar 23 10:08	4° <del>Υ</del> 22'47	-1°40'26
minimum elong	6983 Mar 12 18:24	23° <del>✕</del> 01'38	1°37'42	minimum elong	6989 Mar 23 10:04	4° <del>Υ</del> 22'46	1°40'26
max. Earth dist.	6983 Mar 14 13:33	23° <del>✕</del> 05'23	33.79148 AU	max. Earth dist.	6989 Mar 25 14:56	4° <del>Υ</del> 27'09	35.19983 AU
morning rise	6983 Mar 27 23:53	23° <del>✕</del> 33'07		morning rise	6989 Apr 07 14:40	4° <del>Υ</del> 52'47	
retrograde	6983 Jun 23 14:55	25° <del>✕</del> 17'38		retrograde	6989 Jul 04 04:11	6° <del>Υ</del> 32'25	
min. Earth dist.	6983 Sep 09 14:45	24° <del>✕</del> 03'41	31.90121 AU	min. Earth dist.	6989 Sep 20 10:22	5° <del>Υ</del> 21'04	33.32237 AU
opposition	6983 Sep 11 11:05	24° <del>✕</del> 00'55	1°25'45	opposition	6989 Sep 22 16:23	5° <del>Υ</del> 17'48	-2°03'06
direct	6983 Dec 01 08:03	22° <del>✕</del> 43'20		direct	6989 Dec 12 17:39	4° <del>Υ</del> 02'45	
evening set	6984 Feb 27 15:21	24° <del>✕</del> 27'37		evening set	6990 Mar 10 07:43	5° <del>Υ</del> 41'39	
conjunction	6984 Mar 13 22:37	24° <del>✕</del> 59'01	1°03'37	conjunction	6990 Mar 25 10:48	6° <del>Υ</del> 11'19	-2°11'44
minimum elong	6984 Mar 13 22:39	24° <del>✕</del> 59'01	1°03'36	minimum elong	6990 Mar 25 10:43	6° <del>Υ</del> 11'19	2°11'45
max. Earth dist.	6984 Mar 15 20:18	25° <del>✕</del> 02'57	34.01415 AU	max. Earth dist.	6990 Mar 27 16:39	6° <del>Υ</del> 15'45	35.44618 AU
morning rise	6984 Mar 29 05:04	25° <del>✕</del> 30'21		morning rise	6990 Apr 09 13:40	6° <del>Υ</del> 40'58	
retrograde	6984 Jun 24 16:39	27° <del>✕</del> 13'53		retrograde	6990 Jul 06 04:39	8° <del>Υ</del> 19'58	
min. Earth dist.	6984 Sep 10 19:35	26° <del>✕</del> 00'21	32.12628 AU	min. Earth dist.	6990 Sep 22 12:30	7° <del>Υ</del> 08'59	33.57035 AU
opposition	6984 Sep 12 17:34	25° <del>✕</del> 57'29	0°49'41	opposition	6990 Sep 24 19:16	7° <del>Υ</del> 05'42	-2°35'55
direct	6984 Dec 02 16:14	24° <del>✕</del> 40'18		direct	6990 Dec 14 21:21	5° <del>Υ</del> 51'03	
evening set	6985 Feb 28 18:24	26° <del>✕</del> 23'32		evening set	6991 Mar 12 09:51	7° <del>Υ</del> 29'13	
conjunction	6985 Mar 16 02:01	26° <del>✕</del> 54'43	0°29'54	conjunction	6991 Mar 27 10:53	7° <del>Υ</del> 58'29	-2°42'28
minimum elong	6985 Mar 16 02:02	26° <del>✕</del> 54'44	0°29'55	minimum elong	6991 Mar 27 10:48	7° <del>Υ</del> 58'29	2°42'28
max. Earth dist.	6985 Mar 18 00:42	26° <del>✕</del> 58'43	34.24248 AU	max. Earth dist.	6991 Mar 29 17:59	8° <del>Υ</del> 03'00	35.69402 AU
morning rise	6985 Mar 31 09:12	27° <del>✕</del> 25'52		morning rise	6991 Apr 11 11:29	8° <del>Υ</del> 27'45	
retrograde	6985 Jun 26 20:20	29° <del>✕</del> 08'31		retrograde	6991 Jul 08 02:12	10° <del>Υ</del> 06'09	
min. Earth dist.	6985 Sep 12 22:47	27° <del>✕</del> 55'28	32.35709 AU	min. Earth dist.	6991 Sep 24 14:01	8° <del>Υ</del> 55'31	33.81950 AU
opposition	6985 Sep 14 23:22	27° <del>✕</del> 52'28	0°14'04	opposition	6991 Sep 26 21:32	8° <del>Υ</del> 52'12	-3°08'07
direct	6985 Dec 04 21:29	26° <del>✕</del> 35'42		direct	6991 Dec 17 01:53	7° <del>Υ</del> 37'56	
desc. node	6986 Feb 08 10:18	27° <del>✕</del> 36'09		evening set	6992 Mar 13 12:03	9° <del>Υ</del> 15'25	
evening set	6986 Mar 02 21:14	28° <del>✕</del> 17'57		conjunction	6992 Mar 28 10:23	9° <del>Υ</del> 44'15	-3°12'38
conjunction	6986 Mar 18 05:01	28° <del>✕</del> 48'54	-0°03'29	minimum elong	6992 Mar 28 10:17	9° <del>Υ</del> 44'15	3°12'39
minimum elong	6986 Mar 18 05:00	28° <del>✕</del> 48'54	0°03'29	max. Earth dist.	6992 Mar 30 17:27	9° <del>Υ</del> 48'44	35.94275 AU
behind sun begin	6986 Mar 17 22:40	28° <del>✕</del> 48'23		morning rise	6992 Apr 12 08:41	10° <del>Υ</del> 13'06	
behind sun end	6986 Mar 18 11:20	28° <del>✕</del> 49'24		retrograde	6992 Jul 09 01:07	11° <del>Υ</del> 50'56	
max. Earth dist.	6986 Mar 20 06:25	28° <del>✕</del> 53'05	34.47595 AU	min. Earth dist.	6992 Sep 25 14:11	10° <del>Υ</del> 40'40	34.06978 AU
morning rise	6986 Apr 02 12:03	29° <del>✕</del> 19'48		opposition	6992 Sep 27 23:07	10° <del>Υ</del> 37'18	-3°39'40
retrograde	6986 Apr 24 00:17	0° <del>Υ</del>		direct	6992 Dec 18 03:08	9° <del>Υ</del> 23'23	
min. Earth dist.	6986 Jun 28 22:14	1° <del>Υ</del> 01'37		evening set	6993 Mar 15 13:46	11° <del>Υ</del> 00'11	
opposition	6986 Sep 07 13:43	30° <del>✕</del>		conjunction	6993 Mar 30 09:24	11° <del>Υ</del> 28'36	-3°42'13
direct	6986 Sep 15 03:13	29° <del>✕</del> 48'57	32.59281 AU	minimum elong	6993 Mar 30 09:17	11° <del>Υ</del> 28'35	3°42'14
evening set	6986 Sep 17 04:32	29° <del>✕</del> 45'55	-0°21'03	max. Earth dist.	6993 Apr 01 18:19	11° <del>Υ</del> 33'11	36.19238 AU
conjunction	6986 Dec 07 03:10	28° <del>✕</del> 29'35		morning rise	6993 Apr 14 04:43	11° <del>Υ</del> 57'00	
direct	6987 Feb 27 09:13	0° <del>Υ</del>		retrograde	6993 Jul 10 22:41	13° <del>Υ</del> 34'18	
evening set	6987 Mar 05 00:05	0° <del>Υ</del> 10'55		min. Earth dist.	6993 Sep 27 15:16	12° <del>Υ</del> 24'17	34.32099 AU
conjunction	6987 Mar 20 07:15	0° <del>Υ</del> 41'35	-0°36'15	opposition	6993 Sep 30 00:10	12° <del>Υ</del> 20'56	-4°10'34
minimum elong	6987 Mar 20 07:14	0° <del>Υ</del> 41'35	0°36'15	direct	6993 Dec 20 04:31	11° <del>Υ</del> 07'22	
max. Earth dist.	6987 Mar 22 09:10	0° <del>Υ</del> 45'48	34.71388 AU	evening set	6994 Mar 17 15:25	12° <del>Υ</del> 43'32	
morning rise	6987 Apr 04 14:01	1° <del>Υ</del> 12'13		conjunction	6994 Apr 01 07:39	13° <del>Υ</del> 11'28	-4°11'11
retrograde	6987 Jul 01 02:06	2° <del>Υ</del> 53'16		minimum elong	6994 Apr 01 07:31	13° <del>Υ</del> 11'28	4°11'13
min. Earth dist.	6987 Sep 17 05:13	1° <del>Υ</del> 41'06	32.83285 AU	max. Earth dist.	6994 Apr 03 16:29	13° <del>Υ</del> 16'01	36.44302 AU
opposition	6987 Sep 19 09:07	1° <del>Υ</del> 37'56	-0°55'38	morning rise	6994 Apr 15 23:53	13° <del>Υ</del> 39'25	
direct	6987 Dec 09 07:05	0° <del>Υ</del> 22'02		retrograde	6994 Jul 12 21:49	15° <del>Υ</del> 16'12	
evening set	6988 Mar 06 02:37	2° <del>Υ</del> 02'30		min. Earth dist.	6994 Sep 29 13:30	14° <del>Υ</del> 06'34	34.57365 AU
conjunction	6988 Mar 21 08:55	2° <del>Υ</del> 32'52	-1°08'36	opposition	6994 Oct 02 00:30	14° <del>Υ</del> 03'07	-4°40'48
minimum elong	6988 Mar 21 08:52	2° <del>Υ</del> 32'52	1°08'37	direct	6994 Dec 22 04:14	12° <del>Υ</del> 49'52	
max. Earth dist.	6988 Mar 23 13:04	2° <del>Υ</del> 37'14	34.95540 AU	evening set	6995 Mar 19 16:45	14° <del>Υ</del> 25'27	

conjunction	6995 Apr 03 05:28	14° $\Upsilon$ 52'54	-4°39'32	direct	7002 Jan 03 21:14	24° $\Upsilon$ 11'50
minimum elong	6995 Apr 03 05:19	14° $\Upsilon$ 52'54	4°39'34	evening set	7002 Apr 01 20:48	25° $\Upsilon$ 44'26
max. Earth dist.	6995 Apr 05 16:12	14° $\Upsilon$ 57'34	36.69521 AU			
morning rise	6995 Apr 17 18:06	15° $\Upsilon$ 20'23		conjunction	7002 Apr 15 00:20	26° $\Upsilon$ 08'08 -7°40'05
retrograde	6995 Jul 14 19:51	16° $\Upsilon$ 56'41		minimum elong	7002 Apr 15 00:07	26° $\Upsilon$ 08'08 7°40'07
min. Earth dist.	6995 Oct 01 13:22	15° $\Upsilon$ 47'19	34.82828 AU	max. Earth dist.	7002 Apr 17 16:15	26° $\Upsilon$ 12'59 38.50102 AU
opposition	6995 Oct 04 00:30	15° $\Upsilon$ 43'52	-5°10'21	morning rise	7002 Apr 28 04:05	26° $\Upsilon$ 31'53
direct	6995 Dec 24 04:57	14° $\Upsilon$ 30'58		retrograde	7002 Jul 26 13:27	28° $\Upsilon$ 05'57
evening set	6996 Mar 20 17:48	16° $\Upsilon$ 06'00		min. Earth dist.	7002 Oct 13 16:49	26° $\Upsilon$ 58'51 36.64852 AU
				opposition	7002 Oct 16 09:06	26° $\Upsilon$ 55'14 -8°17'30
conjunction	6996 Apr 04 02:38	16° $\Upsilon$ 32'58	-5°07'16	direct	7003 Jan 05 17:00	25° $\Upsilon$ 44'47
minimum elong	6996 Apr 04 02:28	16° $\Upsilon$ 32'57	5°07'17	evening set	7003 Apr 03 20:49	27° $\Upsilon$ 17'05
max. Earth dist.	6996 Apr 06 13:55	16° $\Upsilon$ 37'38	36.94946 AU			
morning rise	6996 Apr 18 11:23	16° $\Upsilon$ 59'56		conjunction	7003 Apr 16 18:37	27° $\Upsilon$ 40'13 -8°03'19
retrograde	6996 Jul 15 17:42	18° $\Upsilon$ 35'48		minimum elong	7003 Apr 16 18:25	27° $\Upsilon$ 40'12 8°03'21
min. Earth dist.	6996 Oct 02 10:51	17° $\Upsilon$ 26'49	35.08497 AU	max. Earth dist.	7003 Apr 19 10:27	27° $\Upsilon$ 45'01 38.75855 AU
opposition	6996 Oct 04 23:45	17° $\Upsilon$ 23'17	-5°39'11	morning rise	7003 Apr 29 16:33	28° $\Upsilon$ 03'23
direct	6996 Dec 25 05:31	16° $\Upsilon$ 10'43		retrograde	7003 Jul 28 07:19	29° $\Upsilon$ 37'14
evening set	6997 Mar 22 18:49	17° $\Upsilon$ 45'16		min. Earth dist.	7003 Oct 15 12:12	28° $\Upsilon$ 30'26 36.90708 AU
				opposition	7003 Oct 18 05:05	28° $\Upsilon$ 26'48 -8°41'29
conjunction	6997 Apr 05 23:22	18° $\Upsilon$ 11'43	-5°34'21	direct	7004 Jan 07 13:57	27° $\Upsilon$ 16'39
minimum elong	6997 Apr 05 23:12	18° $\Upsilon$ 11'42	5°34'22	evening set	7004 Apr 04 20:37	28° $\Upsilon$ 48'41
max. Earth dist.	6997 Apr 08 11:41	18° $\Upsilon$ 16'26	37.20560 AU			
morning rise	6997 Apr 20 04:05	18° $\Upsilon$ 38'11		conjunction	7004 Apr 17 12:21	29° $\Upsilon$ 11'14 -8°25'55
retrograde	6997 Jul 17 13:55	20° $\Upsilon$ 13'39		minimum elong	7004 Apr 17 12:08	29° $\Upsilon$ 11'13 8°25'57
min. Earth dist.	6997 Oct 04 08:44	19° $\Upsilon$ 04'59	35.34373 AU	max. Earth dist.	7004 Apr 20 03:57	29° $\Upsilon$ 15'58 39.01412 AU
opposition	6997 Oct 06 22:25	19° $\Upsilon$ 01'26	-6°07'20	morning rise	7004 Apr 30 04:29	29° $\Upsilon$ 33'48
direct	6997 Dec 27 04:33	17° $\Upsilon$ 49'14			7004 May 15 14:02	0° $\mathcal{B}$
evening set	6998 Mar 24 19:31	19° $\Upsilon$ 23'19		retrograde	7004 Jul 29 00:24	1° $\mathcal{B}$ 07'28
				min. Earth dist.	7004 Oct 16 07:41	0° $\mathcal{B}$ 00'54 37.16378 AU
conjunction	6998 Apr 07 19:44	19° $\Upsilon$ 49'14	-6°00'47		7004 Oct 16 23:49	30° $\mathcal{R}\Upsilon$
minimum elong	6998 Apr 07 19:33	19° $\Upsilon$ 49'13	6°00'49	opposition	7004 Oct 19 00:42	29° $\Upsilon$ 57'17 -9°04'47
max. Earth dist.	6998 Apr 10 09:27	19° $\Upsilon$ 54'02	37.46357 AU	direct	7005 Jan 08 10:24	28° $\Upsilon$ 47'25
morning rise	6998 Apr 21 19:50	20° $\Upsilon$ 15'11			7005 Mar 26 14:36	0° $\mathcal{B}$
retrograde	6998 Jul 19 06:55	21° $\Upsilon$ 50'18		evening set	7005 Apr 06 20:12	0° $\mathcal{B}$ 19'12
min. Earth dist.	6998 Oct 06 06:18	20° $\Upsilon$ 41'58	35.60397 AU			
opposition	6998 Oct 08 20:40	20° $\Upsilon$ 38'23	-6°34'46	conjunction	7005 Apr 19 05:54	0° $\mathcal{B}$ 41'09 -8°47'55
direct	6998 Dec 29 05:46	19° $\Upsilon$ 26'33		minimum elong	7005 Apr 19 05:42	0° $\mathcal{B}$ 41'08 8°47'58
evening set	6999 Mar 26 20:04	21° $\Upsilon$ 00'12		max. Earth dist.	7005 Apr 21 22:22	0° $\mathcal{B}$ 45'56 39.26776 AU
				morning rise	7005 May 01 15:42	1° $\mathcal{B}$ 03'07
conjunction	6999 Apr 09 15:20	21° $\Upsilon$ 25'36	-6°26'35	retrograde	7005 Jul 30 14:36	2° $\mathcal{B}$ 36'36
minimum elong	6999 Apr 09 15:10	21° $\Upsilon$ 25'35	6°26'36	min. Earth dist.	7005 Oct 18 03:02	1° $\mathcal{B}$ 30'14 37.41846 AU
max. Earth dist.	6999 Apr 12 05:02	21° $\Upsilon$ 30'22	37.72269 AU	opposition	7005 Oct 20 19:37	1° $\mathcal{B}$ 26'39 -9°27'26
morning rise	6999 Apr 23 10:53	21° $\Upsilon$ 51'00		direct	7006 Jan 10 08:32	0° $\mathcal{B}$ 17'04
retrograde	6999 Jul 21 02:34	23° $\Upsilon$ 25'49		evening set	7006 Apr 08 19:40	1° $\mathcal{B}$ 48'36
min. Earth dist.	6999 Oct 08 02:40	22° $\Upsilon$ 17'52	35.86532 AU			
opposition	6999 Oct 10 18:30	22° $\Upsilon$ 14'13	-7°01'30	conjunction	7006 Apr 20 22:47	2° $\mathcal{B}$ 09'57 -9°09'18
direct	6999 Dec 31 03:32	21° $\Upsilon$ 02'44		minimum elong	7006 Apr 20 22:34	2° $\mathcal{B}$ 09'56 9°09'20
evening set	7000 Mar 28 20:24	22° $\Upsilon$ 36'00		max. Earth dist.	7006 Apr 23 14:25	2° $\mathcal{B}$ 14'39 39.51964 AU
				morning rise	7006 May 03 02:17	2° $\mathcal{B}$ 31'19
conjunction	7000 Apr 11 10:49	23° $\Upsilon$ 00'51	-6°51'43	retrograde	7006 Aug 01 07:57	4° $\mathcal{B}$ 04'39
minimum elong	7000 Apr 11 10:37	23° $\Upsilon$ 00'50	6°51'45	min. Earth dist.	7006 Oct 19 20:26	2° $\mathcal{B}$ 58'34 37.67182 AU
max. Earth dist.	7000 Apr 14 02:11	23° $\Upsilon$ 05'42	37.98248 AU	opposition	7006 Oct 22 14:12	2° $\mathcal{B}$ 54'56 -9°49'25
morning rise	7000 Apr 25 01:14	23° $\Upsilon$ 25'42		direct	7007 Jan 12 02:46	1° $\mathcal{B}$ 45'37
retrograde	7000 Jul 22 20:59	25° $\Upsilon$ 00'15		evening set	7007 Apr 10 18:37	3° $\mathcal{B}$ 16'56
min. Earth dist.	7000 Oct 10 00:26	23° $\Upsilon$ 52'33	36.12700 AU			
opposition	7000 Oct 12 15:48	23° $\Upsilon$ 48'57	-7°27'31	conjunction	7007 Apr 22 15:14	3° $\mathcal{B}$ 37'39 -9°30'03
direct	7001 Jan 02 01:29	22° $\Upsilon$ 37'49		minimum elong	7007 Apr 22 15:01	3° $\mathcal{B}$ 37'38 9°30'06
evening set	7001 Mar 30 20:42	24° $\Upsilon$ 10'44		max. Earth dist.	7007 Apr 25 08:17	3° $\mathcal{B}$ 42'25 39.77038 AU
				morning rise	7007 May 04 12:05	3° $\mathcal{B}$ 58'25
conjunction	7001 Apr 13 05:45	24° $\Upsilon$ 35'01	-7°16'13	retrograde	7007 Aug 03 00:11	5° $\mathcal{B}$ 31'38
minimum elong	7001 Apr 13 05:33	24° $\Upsilon$ 35'00	7°16'15	min. Earth dist.	7007 Oct 21 15:25	4° $\mathcal{B}$ 25'43 37.92435 AU
max. Earth dist.	7001 Apr 15 20:39	24° $\Upsilon$ 39'49	38.24220 AU	opposition	7007 Oct 24 08:29	4° $\mathcal{B}$ 22'08 -10°10'44
morning rise	7001 Apr 26 15:01	24° $\Upsilon$ 59'20		direct	7008 Jan 13 21:26	3° $\mathcal{B}$ 13'06
retrograde	7001 Jul 24 17:30	26° $\Upsilon$ 33'37		evening set	7008 Apr 11 17:37	4° $\mathcal{B}$ 44'13
min. Earth dist.	7001 Oct 11 19:45	25° $\Upsilon$ 26'17	36.38828 AU			
opposition	7001 Oct 14 12:35	25° $\Upsilon$ 22'37	-7°52'51	conjunction	7008 Apr 23 07:20	5° $\mathcal{B}$ 04'20 -9°50'11























































































































minimum elong	7008 Apr 23 07:07	5°804'19 9°50'13	opposition	7014 Nov 03 04:37	14°808'09 -12°21'41
max. Earth dist.	7008 Apr 26 00:05	5°809'03 40.02064 AU	direct	7015 Jan 23 17:53	13°801'09
morning rise	7008 May 04 21:19	5°824'29	evening set	7015 Apr 24 05:55	14°831'49
retrograde	7008 Aug 03 17:24	6°857'35			
min. Earth dist.	7008 Oct 22 07:34	5°851'58 38.17653 AU	conjunction	7015 May 03 14:32	14°847'29 -11°54'10
opposition	7008 Oct 25 02:01	5°848'20 -10°31'23	minimum elong	7015 May 03 14:19	14°847'28 11°54'14
direct	7009 Jan 14 14:02	4°839'34	max. Earth dist.	7015 May 06 08:43	14°852'07 41.75013 AU
evening set	7009 Apr 13 16:19	6°810'33		7015 May 11 01:37	15°8
			morning rise	7015 May 12 23:17	15°803'10
conjunction	7009 Apr 24 23:02	6°830'03 -10°09'42	retrograde	7015 Aug 14 01:31	16°836'17
minimum elong	7009 Apr 24 22:49	6°830'02 10°09'45	min. Earth dist.	7015 Nov 02 01:05	15°832'23 39.91504 AU
max. Earth dist.	7009 Apr 27 16:32	6°834'47 40.27056 AU	opposition	7015 Nov 04 19:52	15°828'50 -12°37'57
morning rise	7009 May 06 06:07	6°849'35		7015 Nov 28 04:11	15°88
retrograde	7009 Aug 05 10:38	8°822'36	direct	7016 Jan 25 08:20	14°822'05
min. Earth dist.	7009 Oct 24 01:05	7°817'13 38.42850 AU		7016 Mar 21 02:36	15°8
opposition	7009 Oct 26 19:24	7°813'36 -10°51'22	evening set	7016 Apr 25 04:01	15°852'47
direct	7010 Jan 16 06:00	6°805'08			
evening set	7010 Apr 15 14:50	7°836'01	conjunction	7016 May 04 04:11	16°807'47 -12°09'37
			minimum elong	7016 May 04 03:59	16°807'46 12°09'40
conjunction	7010 Apr 26 14:23	7°854'53 -10°28'36	max. Earth dist.	7016 May 06 21:41	16°812'20 41.98842 AU
minimum elong	7010 Apr 26 14:10	7°854'52 10°28'38	morning rise	7016 May 13 04:40	16°822'48
max. Earth dist.	7010 Apr 29 08:30	7°859'38 40.52026 AU	retrograde	7016 Aug 14 15:46	17°855'58
morning rise	7010 May 07 14:06	8°813'47	min. Earth dist.	7016 Nov 02 16:24	16°852'14 40.15370 AU
retrograde	7010 Aug 06 23:54	9°846'46	opposition	7016 Nov 05 10:45	16°848'44 -12°53'40
min. Earth dist.	7010 Oct 25 17:30	8°841'39 38.67994 AU	direct	7017 Jan 25 22:36	15°842'13
opposition	7010 Oct 28 12:18	8°838'02 -11°10'41	evening set	7017 Apr 27 01:59	17°812'56
direct	7011 Jan 18 00:53	7°829'52			
evening set	7011 Apr 17 13:17	9°800'39	conjunction	7017 May 05 17:39	17°827'15 -12°24'32
			minimum elong	7017 May 05 17:27	17°827'15 12°24'36
conjunction	7011 Apr 28 05:20	9°818'54 -10°46'52	max. Earth dist.	7017 May 08 11:31	17°831'49 42.22333 AU
minimum elong	7011 Apr 28 05:07	9°818'53 10°46'56	morning rise	7017 May 14 09:24	17°841'35
max. Earth dist.	7011 Apr 30 23:03	9°823'36 40.76935 AU	retrograde	7017 Aug 16 01:34	19°814'50
morning rise	7011 May 08 21:47	9°837'10	min. Earth dist.	7017 Nov 04 07:50	18°811'15 40.38877 AU
retrograde	7011 Aug 08 13:55	11°810'08	opposition	7017 Nov 07 01:20	18°807'48 -13°08'49
min. Earth dist.	7011 Oct 27 09:27	10°805'19 38.93078 AU	direct	7018 Jan 27 16:27	17°801'30
opposition	7011 Oct 30 04:56	10°801'40 -11°29'22	evening set	7018 Apr 28 23:51	18°832'14
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evening set	7012 Apr 18 11:27	10°824'32	conjunction	7018 May 07 06:30	18°845'52 -12°38'56
			minimum elong	7018 May 07 06:19	18°845'52 12°39'00
conjunction	7012 Apr 28 20:04	10°842'08 -11°04'34	max. Earth dist.	7018 May 09 23:05	18°850'19 42.45494 AU
minimum elong	7012 Apr 28 19:52	10°842'07 11°04'36	morning rise	7018 May 15 13:24	18°859'32
max. Earth dist.	7012 May 01 15:05	10°846'55 41.01752 AU	retrograde	7018 Aug 17 13:32	20°832'51
morning rise	7012 May 09 04:51	10°859'46	min. Earth dist.	7018 Nov 05 21:27	19°829'28 40.62093 AU
retrograde	7012 Aug 09 03:14	12°832'46	opposition	7018 Nov 08 15:35	19°825'59 -13°23'25
min. Earth dist.	7012 Oct 28 02:27	11°828'09 39.18025 AU	direct	7019 Jan 29 08:09	18°819'54
opposition	7012 Oct 30 21:12	11°824'33 -11°47'25	evening set	7019 Apr 30 21:34	19°850'41
direct	7013 Jan 20 12:40	10°816'59			
evening set	7013 Apr 20 09:46	11°847'41	conjunction	7019 May 08 19:13	20°803'37 -12°52'48
			minimum elong	7019 May 08 19:01	20°803'37 12°52'52
conjunction	7013 Apr 30 10:28	12°804'38 -11°21'40	max. Earth dist.	7019 May 11 12:43	20°808'07 42.68391 AU
minimum elong	7013 Apr 30 10:15	12°804'38 11°21'43	morning rise	7019 May 16 16:58	20°816'35
max. Earth dist.	7013 May 03 04:31	12°809'19 41.26410 AU	retrograde	7019 Aug 19 02:26	21°850'01
morning rise	7013 May 10 11:29	12°821'38	min. Earth dist.	7019 Nov 07 12:33	20°846'44 40.85075 AU
retrograde	7013 Aug 10 19:07	13°854'39	opposition	7019 Nov 10 05:33	20°843'19 -13°37'28
min. Earth dist.	7013 Oct 29 17:12	12°850'21 39.42787 AU	direct	7020 Jan 30 22:54	19°837'26
opposition	7013 Nov 01 12:54	12°846'43 -12°04'51	evening set	7020 May 01 19:23	21°808'18
direct	7014 Jan 22 03:27	11°839'26			
evening set	7014 Apr 22 07:52	13°810'07	conjunction	7020 May 09 07:32	21°820'32 -13°06'09
			minimum elong	7020 May 09 07:22	21°820'31 13°06'13
conjunction	7014 May 02 00:40	13°826'26 -11°38'12	max. Earth dist.	7020 May 12 00:30	21°824'57 42.91095 AU
minimum elong	7014 May 02 00:28	13°826'25 11°38'14	morning rise	7020 May 16 19:48	21°832'47
max. Earth dist.	7014 May 04 19:18	13°831'07 41.50846 AU	retrograde	7020 Aug 19 15:24	23°806'21
morning rise	7014 May 11 17:45	13°842'46	min. Earth dist.	7020 Nov 08 01:07	22°803'17 41.07870 AU
	7014 Jul 07 15:32	15°8	opposition	7020 Nov 10 19:02	21°859'51 -13°50'57
retrograde	7014 Aug 12 10:43	15°815'50	direct	7021 Jan 31 11:36	20°854'10
	7014 Sep 18 01:50	15°88	evening set	7021 May 03 17:07	22°825'09
min. Earth dist.	7014 Oct 31 10:05	14°811'42 39.67302 AU			

conjunction	7021 May 10 19:35	22° <b>8</b> 36'40 -13°18'58	retrograde	7027 Aug 29 00:54	1° <b>II</b> 43'19
minimum elong	7021 May 10 19:24	22° <b>8</b> 36'39 13°19'01	min. Earth dist.	7027 Nov 17 18:53	0° <b>II</b> 41'34 42.61605 AU
max. Earth dist.	7021 May 13 12:30	22° <b>8</b> 41'04 43.13622 AU	opposition	7027 Nov 20 10:18	0° <b>II</b> 38'20 -15°10'37
morning rise	7021 May 17 22:13	22° <b>8</b> 48'12		7027 Dec 23 23:55	30° <b>R</b> <b>8</b>
retrograde	7021 Aug 21 04:33	24° <b>8</b> 21'56	direct	7028 Feb 10 01:26	29° <b>8</b> 34'19
min. Earth dist.	7021 Nov 09 14:53	23° <b>8</b> 19'01 41.30511 AU		7028 Mar 27 16:17	0° <b>II</b>
opposition	7021 Nov 12 08:15	23° <b>8</b> 15'38 -14°03'54	evening set	7028 May 15 10:36	1° <b>II</b> 07'30
direct	7022 Feb 01 23:34	22° <b>8</b> 10'10			
evening set	7022 May 05 15:03	23° <b>8</b> 41'18	conjunction	7028 May 19 01:53	1° <b>II</b> 13'14 -14°34'49
			minimum elong	7028 May 19 01:44	1° <b>II</b> 13'13 14°34'54
conjunction	7022 May 12 07:30	23° <b>8</b> 52'06 -13°31'16	morning rise	7028 May 22 17:04	1° <b>II</b> 18'56
minimum elong	7022 May 12 07:21	23° <b>8</b> 52'06 13°31'20	max. Earth dist.	7028 May 21 16:15	1° <b>II</b> 17'19 44.65240 AU
max. Earth dist.	7022 May 15 00:59	23° <b>8</b> 56'31 43.36010 AU	retrograde	7028 Aug 29 10:45	2° <b>II</b> 55'09
morning rise	7022 May 18 23:58	24° <b>8</b> 02'54	min. Earth dist.	7028 Nov 18 07:05	1° <b>II</b> 53'34 42.82193 AU
retrograde	7022 Aug 22 14:27	25° <b>8</b> 36'50	opposition	7028 Nov 20 21:54	1° <b>II</b> 50'23 -15°20'05
min. Earth dist.	7022 Nov 11 03:55	24° <b>8</b> 34'07 41.52983 AU	direct	7029 Feb 10 13:09	0° <b>II</b> 46'33
opposition	7022 Nov 13 21:13	24° <b>8</b> 30'44 -14°16'17	evening set	7029 May 17 14:19	2° <b>II</b> 20'25
direct	7023 Feb 03 13:35	23° <b>8</b> 25'31			
evening set	7023 May 07 12:55	24° <b>8</b> 56'51	conjunction	7029 May 20 12:25	2° <b>II</b> 25'00 -14°43'52
			minimum elong	7029 May 20 12:19	2° <b>II</b> 24'59 14°43'55
conjunction	7023 May 13 18:53	25° <b>8</b> 06'54 -13°43'03	morning rise	7029 May 23 10:24	2° <b>II</b> 29'34
minimum elong	7023 May 13 18:43	25° <b>8</b> 06'54 13°43'06	max. Earth dist.	7029 May 23 03:03	2° <b>II</b> 29'05 44.85448 AU
max. Earth dist.	7023 May 16 11:28	25° <b>8</b> 11'14 43.58229 AU	retrograde	7029 Aug 30 18:39	4° <b>II</b> 06'28
morning rise	7023 May 20 00:55	25° <b>8</b> 16'57	min. Earth dist.	7029 Nov 19 19:49	3° <b>II</b> 04'58 43.02310 AU
retrograde	7023 Aug 24 02:23	26° <b>8</b> 51'08	opposition	7029 Nov 22 09:07	3° <b>II</b> 01'52 -15°29'08
min. Earth dist.	7023 Nov 12 16:07	25° <b>8</b> 48'40 41.75282 AU	direct	7030 Feb 12 03:12	1° <b>II</b> 58'13
opposition	7023 Nov 15 09:58	25° <b>8</b> 45'16 -14°28'09	evening set	7030 May 19 22:44	3° <b>II</b> 33'04
direct	7024 Feb 05 02:01	24° <b>8</b> 40'17			
evening set	7024 May 08 11:12	26° <b>8</b> 11'52	conjunction	7030 May 21 22:34	3° <b>II</b> 36'10 -14°52'30
			minimum elong	7030 May 21 22:26	3° <b>II</b> 36'10 14°52'34
conjunction	7024 May 14 06:20	26° <b>8</b> 21'09 -13°54'20	morning rise	7030 May 23 22:12	3° <b>II</b> 39'16
minimum elong	7024 May 14 06:11	26° <b>8</b> 21'08 13°54'25	max. Earth dist.	7030 May 24 11:37	3° <b>II</b> 40'08 45.05224 AU
max. Earth dist.	7024 May 16 23:49	26° <b>8</b> 25'31 43.80250 AU	retrograde	7030 Sep 01 05:05	5° <b>II</b> 17'11
morning rise	7024 May 20 01:28	26° <b>8</b> 30'25	min. Earth dist.	7030 Nov 21 06:25	4° <b>II</b> 15'51 43.22020 AU
retrograde	7024 Aug 24 12:25	28° <b>8</b> 04'54	opposition	7030 Nov 23 20:08	4° <b>II</b> 12'44 -15°37'44
min. Earth dist.	7024 Nov 13 05:47	27° <b>8</b> 02'34 41.97347 AU	direct	7031 Feb 13 14:43	3° <b>II</b> 09'16
opposition	7024 Nov 15 22:19	26° <b>8</b> 59'15 -14°39'29			
direct	7025 Feb 05 16:35	25° <b>8</b> 54'31	conjunction	7031 May 23 08:22	4° <b>II</b> 46'44 -15°00'43
evening set	7025 May 10 09:56	27° <b>8</b> 26'25	minimum elong	7031 May 23 08:17	4° <b>II</b> 46'43 15°00'46
			max. Earth dist.	7031 May 25 21:33	4° <b>II</b> 50'41 45.24614 AU
conjunction	7025 May 15 17:30	27° <b>8</b> 34'52 -14°05'08	retrograde	7031 Sep 02 16:38	6° <b>II</b> 27'18
minimum elong	7025 May 15 17:21	27° <b>8</b> 34'52 14°05'12	min. Earth dist.	7031 Nov 22 18:45	5° <b>II</b> 26'02 43.41380 AU
max. Earth dist.	7025 May 18 09:47	27° <b>8</b> 39'09 44.02026 AU	opposition	7031 Nov 25 07:00	5° <b>II</b> 23'00 -15°45'55
morning rise	7025 May 21 01:03	27° <b>8</b> 43'21	direct	7032 Feb 15 01:25	4° <b>II</b> 19'41
retrograde	7025 Aug 26 01:34	29° <b>8</b> 18'10			
min. Earth dist.	7025 Nov 14 17:22	28° <b>8</b> 16'05 42.19131 AU	conjunction	7032 May 23 18:09	5° <b>II</b> 56'40 -15°08'30
opposition	7025 Nov 17 10:28	28° <b>8</b> 12'45 -14°50'20	minimum elong	7032 May 23 18:02	5° <b>II</b> 56'40 15°08'34
direct	7026 Feb 07 03:29	27° <b>8</b> 08'16	max. Earth dist.	7032 May 26 06:54	6° <b>II</b> 00'35 45.43700 AU
evening set	7026 May 12 09:00	28° <b>8</b> 40'31	retrograde	7032 Sep 03 03:44	7° <b>II</b> 36'48
			min. Earth dist.	7032 Nov 23 04:52	6° <b>II</b> 35'40 43.60442 AU
conjunction	7026 May 17 04:22	28° <b>8</b> 48'08 -14°15'29	opposition	7032 Nov 25 17:16	6° <b>II</b> 32'39 -15°53'39
minimum elong	7026 May 17 04:13	28° <b>8</b> 48'07 14°15'33	direct	7033 Feb 15 09:38	5° <b>II</b> 29'29
max. Earth dist.	7026 May 19 20:40	28° <b>8</b> 52'23 44.23482 AU			
morning rise	7026 May 21 23:42	28° <b>8</b> 55'45	conjunction	7033 May 25 03:33	7° <b>II</b> 06'02 -15°15'52
	7026 Jul 06 08:27	0° <b>II</b>	minimum elong	7033 May 25 03:28	7° <b>II</b> 06'02 15°15'56
retrograde	7026 Aug 27 15:16	0° <b>II</b> 30'58	max. Earth dist.	7033 May 27 15:28	7° <b>II</b> 09'53 45.62510 AU
	7026 Oct 20 13:13	30° <b>R</b> <b>8</b>	retrograde	7033 Sep 04 14:07	8° <b>II</b> 45'44
min. Earth dist.	7026 Nov 16 06:52	29° <b>8</b> 29'02 42.40574 AU	min. Earth dist.	7033 Nov 24 15:35	7° <b>II</b> 44'44 43.79259 AU
opposition	7026 Nov 18 22:36	29° <b>8</b> 25'47 -15°00'42	opposition	7033 Nov 27 03:35	7° <b>II</b> 41'44 -16°00'56
direct	7027 Feb 08 13:02	28° <b>8</b> 21'32	direct	7034 Feb 16 18:26	6° <b>II</b> 38'45
evening set	7027 May 14 09:12	29° <b>8</b> 54'12			
			conjunction	7034 May 26 12:47	8° <b>II</b> 14'51 -15°22'49
conjunction	7027 May 18 15:17	0° <b>II</b> 00'55 -14°25'22	minimum elong	7034 May 26 12:41	8° <b>II</b> 14'51 15°22'53
minimum elong	7027 May 18 15:10	0° <b>II</b> 00'55 14°25'26	max. Earth dist.	7034 May 29 01:21	8° <b>II</b> 18'43 45.81087 AU
	7027 May 18 01:15	0° <b>II</b>	retrograde	7034 Sep 05 19:27	9° <b>II</b> 54'08
max. Earth dist.	7027 May 21 07:14	0° <b>II</b> 05'08 44.44578 AU	min. Earth dist.	7034 Nov 26 02:24	8° <b>II</b> 53'15 43.97821 AU
morning rise	7027 May 22 21:17	0° <b>II</b> 07'38	opposition	7034 Nov 28 13:41	8° <b>II</b> 50'18 -16°07'47



direct	7035 Feb 18 07:19	7°II47'29		minimum elong	7043 Jun 05 17:16	18°II14'33	16°08'12
				max. Earth dist.	7043 Jun 07 22:48	18°II17'51	47.33047 AU
conjunction	7035 May 27 21:50	9°II23'11 -15°29'20		retrograde	7043 Sep 16 03:05	19°II50'33	
minimum elong	7035 May 27 21:46	9°II23'10 15°29'25		min. Earth dist.	7043 Dec 06 19:04	18°II50'37	45.48756 AU
max. Earth dist.	7035 May 30 09:02	9°II26'57 45.99428 AU		opposition	7043 Dec 08 23:34	18°II48'04	-16°51'55
retrograde	7035 Sep 07 03:36	11°II02'03		direct	7044 Feb 28 17:05	17°II46'38	
min. Earth dist.	7035 Nov 27 11:44	10°II01'21 44.16142 AU					
opposition	7035 Nov 29 23:27	9°II58'23 -16°14'12		conjunction	7044 Jun 06 01:05	19°II18'58	-16°11'25
direct	7036 Feb 19 18:25	8°II55'45		minimum elong	7044 Jun 06 01:05	19°II18'58	16°11'30
				max. Earth dist.	7044 Jun 08 06:46	19°II22'16	47.47838 AU
conjunction	7036 May 28 06:45	10°II31'02 -15°35'28		retrograde	7044 Sep 16 08:36	20°II54'36	
minimum elong	7036 May 28 06:40	10°II31'02 15°35'32		min. Earth dist.	7044 Dec 07 03:40	19°II54'46	45.63436 AU
max. Earth dist.	7036 May 30 18:19	10°II34'49 46.17505 AU		opposition	7044 Dec 09 07:39	19°II52'14	-16°55'02
retrograde	7036 Sep 07 13:34	12°II09'33		direct	7045 Mar 01 02:14	18°II50'57	
min. Earth dist.	7036 Nov 27 23:00	11°II08'56 44.34174 AU					
opposition	7036 Nov 30 09:10	11°II06'03 -16°20'13		conjunction	7045 Jun 07 08:29	20°II22'56	-16°14'23
direct	7037 Feb 20 05:05	10°II03'36		minimum elong	7045 Jun 07 08:28	20°II22'56	16°14'27
				max. Earth dist.	7045 Jun 09 12:35	20°II26'08	47.62322 AU
conjunction	7037 May 29 15:33	11°II38'29 -15°41'11		retrograde	7045 Sep 17 14:30	21°II58'15	
minimum elong	7037 May 29 15:29	11°II38'29 15°41'16		min. Earth dist.	7045 Dec 08 11:34	20°II58'32	45.77838 AU
max. Earth dist.	7037 Jun 01 02:25	11°II42'12 46.35287 AU		opposition	7045 Dec 10 15:34	20°II56'01	-16°57'48
retrograde	7037 Sep 08 23:06	13°II16'37		direct	7046 Mar 02 10:31	19°II54'51	
min. Earth dist.	7037 Nov 29 08:05	12°II16'11 44.51871 AU					
opposition	7037 Dec 01 18:28	12°II13'18 -16°25'49		conjunction	7046 Jun 08 15:53	21°II26'32	-16°17'00
direct	7038 Feb 21 13:36	11°II11'02		minimum elong	7046 Jun 08 15:54	21°II26'32	16°17'04
				max. Earth dist.	7046 Jun 10 20:31	21°II29'45	47.76541 AU
conjunction	7038 May 31 00:06	12°II45'32 -15°46'32		retrograde	7046 Sep 18 20:49	23°II01'33	
minimum elong	7038 May 31 00:02	12°II45'32 15°46'36		min. Earth dist.	7046 Dec 09 20:50	22°II01'54	45.91975 AU
max. Earth dist.	7038 Jun 02 09:51	12°II49'10 46.52711 AU		opposition	7046 Dec 11 23:28	21°II59'26	-17°00'13
retrograde	7038 Sep 10 10:01	14°II23'19		direct	7047 Mar 03 20:18	20°II58'25	
min. Earth dist.	7038 Nov 30 18:37	13°II22'59 44.69196 AU					
opposition	7038 Dec 03 03:51	13°II20'09 -16°31'02		conjunction	7047 Jun 09 23:03	22°II29'47	-16°19'15
direct	7039 Feb 22 20:17	12°II18'04		minimum elong	7047 Jun 09 23:02	22°II29'47	16°19'19
				max. Earth dist.	7047 Jun 12 02:45	22°II32'56	47.90517 AU
conjunction	7039 Jun 01 08:41	13°II52'13 -15°51'31		retrograde	7047 Sep 20 05:01	24°II04'32	
minimum elong	7039 Jun 01 08:38	13°II52'12 15°51'36		min. Earth dist.	7047 Dec 11 03:54	23°II05'03	46.05849 AU
max. Earth dist.	7039 Jun 03 18:34	13°II55'50 46.69733 AU		opposition	7047 Dec 13 07:04	23°II02'34	-17°02'16
retrograde	7039 Sep 11 16:55	15°II29'37		direct	7048 Mar 04 04:15	22°II01'41	
min. Earth dist.	7039 Dec 02 04:58	14°II29'23 44.86064 AU					
opposition	7039 Dec 04 12:58	14°II26'38 -16°35'54		conjunction	7048 Jun 10 06:09	23°II32'47	-16°21'10
direct	7040 Feb 24 06:03	13°II24'42		minimum elong	7048 Jun 10 06:10	23°II32'47	16°21'15
				max. Earth dist.	7048 Jun 12 09:07	23°II35'52	48.04215 AU
conjunction	7040 Jun 01 17:07	14°II58'29 -15°56'10		retrograde	7048 Sep 20 15:13	25°II07'15	
minimum elong	7040 Jun 01 17:05	14°II58'29 15°56'13		min. Earth dist.	7048 Dec 11 12:45	24°II07'50	46.19440 AU
max. Earth dist.	7040 Jun 04 00:58	15°II01'58 46.86283 AU		opposition	7048 Dec 13 14:32	24°II05'26	-17°03'58
retrograde	7040 Sep 12 00:44	16°II35'32		direct	7049 Mar 05 09:31	23°II04'43	
min. Earth dist.	7040 Dec 02 14:01	15°II35'25 45.02447 AU					
opposition	7040 Dec 04 21:47	15°II32'41 -16°40'25		conjunction	7049 Jun 11 13:14	24°II35'32	-16°22'46
direct	7041 Feb 24 15:06	14°II30'54		minimum elong	7049 Jun 11 13:15	24°II35'32	16°22'50
				max. Earth dist.	7049 Jun 13 16:19	24°II38'37	48.17623 AU
conjunction	7041 Jun 03 01:29	16°II04'19 -16°00'29		retrograde	7049 Sep 21 22:28	26°II09'44	
minimum elong	7041 Jun 03 01:27	16°II04'19 16°00'33		min. Earth dist.	7049 Dec 12 20:39	25°II10'26	46.32696 AU
max. Earth dist.	7041 Jun 05 09:07	16°II07'46 47.02332 AU		opposition	7049 Dec 14 21:53	25°II08'04	-17°05'20
retrograde	7041 Sep 13 07:51	17°II41'01		direct	7050 Mar 06 14:41	24°II07'30	
min. Earth dist.	7041 Dec 04 00:53	16°II40'56 45.18321 AU					
opposition	7041 Dec 06 06:38	16°II38'18 -16°44'35		conjunction	7050 Jun 12 19:57	25°II38'04	-16°24'02
direct	7042 Feb 26 02:41	15°II36'38		minimum elong	7050 Jun 12 19:59	25°II38'04	16°24'07
				max. Earth dist.	7050 Jun 14 21:23	25°II41'03	48.30678 AU
conjunction	7042 Jun 04 09:28	17°II09'40 -16°04'28		retrograde	7050 Sep 23 06:00	27°II12'01	
minimum elong	7042 Jun 04 09:27	17°II09'40 16°04'32		min. Earth dist.	7050 Dec 14 04:27	26°II12'50	46.45582 AU
max. Earth dist.	7042 Jun 06 15:54	17°II13'03 47.17907 AU		opposition	7050 Dec 16 05:14	26°II10'30	-17°06'23
retrograde	7042 Sep 14 17:11	18°II46'01		direct	7051 Mar 07 20:50	25°II10'04	
min. Earth dist.	7042 Dec 05 09:20	17°II46'03 45.33732 AU					
opposition	7042 Dec 07 15:11	17°II43'25 -16°48'26		conjunction	7051 Jun 14 02:56	26°II40'23	-16°25'01
direct	7043 Feb 27 10:56	16°II41'53		minimum elong	7051 Jun 14 02:57	26°II40'23	16°25'05
				max. Earth dist.	7051 Jun 16 04:19	26°II43'22	48.43323 AU
conjunction	7043 Jun 05 17:18	18°II14'33 -16°08'07		retrograde	7051 Sep 24 09:22	28°II14'05	

min. Earth dist.	7051 Dec 15 13:29	27° $\Pi$ 14'57	46.58015 AU	max. Earth dist.	7059 Jun 24 00:30	4° $\mathfrak{D}$ 49'52	49.28266 AU
opposition	7051 Dec 17 12:22	27° $\Pi$ 12'42	-17°07'08	retrograde	7059 Oct 02 13:47	6° $\mathfrak{D}$ 19'01	
direct	7052 Mar 08 07:23	26° $\Pi$ 12'24		min. Earth dist.	7059 Dec 24 00:05	5° $\mathfrak{D}$ 20'16	47.41317 AU
				opposition	7059 Dec 25 16:38	5° $\mathfrak{D}$ 18'21	-17°02'53
conjunction	7052 Jun 14 09:48	27° $\Pi$ 42'28	-16°25'42	direct	7060 Mar 16 12:24	4° $\mathfrak{D}$ 18'45	
minimum elong	7052 Jun 14 09:51	27° $\Pi$ 42'28	16°25'47				
max. Earth dist.	7052 Jun 16 09:33	27° $\Pi$ 45'20	48.55503 AU	conjunction	7060 Jun 22 11:50	5° $\mathfrak{D}$ 46'50	-16°21'13
retrograde	7052 Sep 24 16:28	29° $\Pi$ 15'54		minimum elong	7060 Jun 22 11:53	5° $\mathfrak{D}$ 46'50	16°21'18
min. Earth dist.	7052 Dec 15 20:39	28° $\Pi$ 16'53	46.69944 AU	max. Earth dist.	7060 Jun 24 04:37	5° $\mathfrak{D}$ 49'13	49.37338 AU
opposition	7052 Dec 17 19:21	28° $\Pi$ 14'39	-17°07'36	retrograde	7060 Oct 02 21:26	7° $\mathfrak{D}$ 18'17	
direct	7053 Mar 09 15:53	27° $\Pi$ 14'28		min. Earth dist.	7060 Dec 24 06:44	6° $\mathfrak{D}$ 19'37	47.50209 AU
				opposition	7060 Dec 25 22:42	6° $\mathfrak{D}$ 17'44	-17°01'01
conjunction	7053 Jun 15 16:28	28° $\Pi$ 44'15	-16°26'08	direct	7061 Mar 17 15:59	5° $\mathfrak{D}$ 18'15	
minimum elong	7053 Jun 15 16:30	28° $\Pi$ 44'16	16°26'11				
max. Earth dist.	7053 Jun 17 14:58	28° $\Pi$ 47'03	48.67155 AU	conjunction	7061 Jun 23 17:39	6° $\mathfrak{D}$ 46'08	-16°19'22
	7053 Aug 16 08:18	0° $\mathfrak{D}$		minimum elong	7061 Jun 23 17:45	6° $\mathfrak{D}$ 46'09	16°19'27
retrograde	7053 Sep 26 02:05	0° $\mathfrak{D}$ 17'26		max. Earth dist.	7061 Jun 25 10:41	6° $\mathfrak{D}$ 48'33	49.46086 AU
	7053 Nov 06 11:54	30° $\mathfrak{K}$ $\Pi$		retrograde	7061 Oct 04 00:19	8° $\mathfrak{D}$ 17'25	
min. Earth dist.	7053 Dec 17 05:34	29° $\Pi$ 18'25	46.81351 AU	min. Earth dist.	7061 Dec 25 14:08	7° $\mathfrak{D}$ 18'48	47.58744 AU
opposition	7053 Dec 19 02:20	29° $\Pi$ 16'17	-17°07'47	opposition	7061 Dec 27 04:38	7° $\mathfrak{D}$ 16'59	-16°58'53
direct	7054 Mar 10 22:04	28° $\Pi$ 16'12		direct	7062 Mar 18 23:44	6° $\mathfrak{D}$ 17'36	
conjunction	7054 Jun 16 23:09	29° $\Pi$ 45'42	-16°26'17	conjunction	7062 Jun 24 23:25	7° $\mathfrak{D}$ 45'20	-16°17'14
minimum elong	7054 Jun 16 23:11	29° $\Pi$ 45'43	16°26'22	minimum elong	7062 Jun 24 23:30	7° $\mathfrak{D}$ 45'20	16°17'19
max. Earth dist.	7054 Jun 18 21:14	29° $\Pi$ 48'27	48.78311 AU	max. Earth dist.	7062 Jun 26 14:59	7° $\mathfrak{D}$ 47'39	49.54479 AU
	7054 Jun 26 23:27	0° $\mathfrak{D}$		retrograde	7062 Oct 05 05:31	9° $\mathfrak{D}$ 16'27	
retrograde	7054 Sep 27 08:05	1° $\mathfrak{D}$ 18'37		min. Earth dist.	7062 Dec 26 20:01	8° $\mathfrak{D}$ 17'56	47.66892 AU
min. Earth dist.	7054 Dec 18 12:54	0° $\mathfrak{D}$ 19'38	46.92260 AU	opposition	7062 Dec 28 10:27	8° $\mathfrak{D}$ 16'08	-16°56'28
opposition	7054 Dec 20 09:03	0° $\mathfrak{D}$ 17'32	-17°07'42	direct	7063 Mar 20 06:48	7° $\mathfrak{D}$ 16'52	
	7055 Jan 04 22:02	30° $\mathfrak{K}$ $\Pi$					
direct	7055 Mar 12 04:28	29° $\Pi$ 17'32		conjunction	7063 Jun 26 05:09	8° $\mathfrak{D}$ 44'26	-16°14'52
	7055 May 14 18:37	0° $\mathfrak{D}$		minimum elong	7063 Jun 26 05:15	8° $\mathfrak{D}$ 44'27	16°14'57
				max. Earth dist.	7063 Jun 27 19:43	8° $\mathfrak{D}$ 46'41	49.62435 AU
conjunction	7055 Jun 18 05:26	0° $\mathfrak{D}$ 46'46	-16°26'09	retrograde	7063 Oct 06 14:09	10° $\mathfrak{D}$ 15'24	
minimum elong	7055 Jun 18 05:30	0° $\mathfrak{D}$ 46'46	16°26'13	min. Earth dist.	7063 Dec 28 04:03	9° $\mathfrak{D}$ 16'54	47.74572 AU
max. Earth dist.	7055 Jun 20 01:36	0° $\mathfrak{D}$ 49'24	48.89004 AU	opposition	7063 Dec 29 16:20	9° $\mathfrak{D}$ 15'12	-16°53'48
retrograde	7055 Sep 28 14:17	2° $\mathfrak{D}$ 19'23		direct	7064 Mar 20 12:33	8° $\mathfrak{D}$ 16'02	
min. Earth dist.	7055 Dec 19 20:13	1° $\mathfrak{D}$ 20'27	47.02746 AU				
opposition	7055 Dec 21 15:40	1° $\mathfrak{D}$ 18'23	-17°07'20	conjunction	7064 Jun 26 11:03	9° $\mathfrak{D}$ 43'27	-16°12'15
direct	7056 Mar 12 09:13	0° $\mathfrak{D}$ 18'27		minimum elong	7064 Jun 26 11:09	9° $\mathfrak{D}$ 43'27	16°12'18
				max. Earth dist.	7064 Jun 28 00:53	9° $\mathfrak{D}$ 45'39	49.69902 AU
conjunction	7056 Jun 18 11:50	1° $\mathfrak{D}$ 47'26	-16°25'45	retrograde	7064 Oct 06 20:12	11° $\mathfrak{D}$ 14'15	
minimum elong	7056 Jun 18 11:53	1° $\mathfrak{D}$ 47'26	16°25'50	min. Earth dist.	7064 Dec 28 10:13	10° $\mathfrak{D}$ 15'49	47.81717 AU
max. Earth dist.	7056 Jun 20 08:13	1° $\mathfrak{D}$ 50'04	48.99294 AU	opposition	7064 Dec 29 21:53	10° $\mathfrak{D}$ 14'09	-16°50'53
retrograde	7056 Sep 28 17:49	3° $\mathfrak{D}$ 19'47		direct	7065 Mar 21 17:29	9° $\mathfrak{D}$ 15'04	
min. Earth dist.	7056 Dec 20 04:10	2° $\mathfrak{D}$ 20'50	47.12849 AU				
opposition	7056 Dec 21 22:01	2° $\mathfrak{D}$ 18'51	-17°06'41	conjunction	7065 Jun 27 16:44	10° $\mathfrak{D}$ 42'20	-16°09'24
direct	7057 Mar 13 17:32	1° $\mathfrak{D}$ 18'59		minimum elong	7065 Jun 27 16:50	10° $\mathfrak{D}$ 42'20	16°09'29
				max. Earth dist.	7065 Jun 29 04:15	10° $\mathfrak{D}$ 44'24	49.76823 AU
conjunction	7057 Jun 19 18:00	2° $\mathfrak{D}$ 47'43	-16°25'03	retrograde	7065 Oct 08 03:09	12° $\mathfrak{D}$ 12'57	
minimum elong	7057 Jun 19 18:05	2° $\mathfrak{D}$ 47'43	16°25'07	min. Earth dist.	7065 Dec 29 17:16	11° $\mathfrak{D}$ 14'33	47.88320 AU
max. Earth dist.	7057 Jun 21 13:07	2° $\mathfrak{D}$ 50'16	49.09250 AU	opposition	7065 Dec 31 03:37	11° $\mathfrak{D}$ 12'56	-16°47'45
retrograde	7057 Sep 29 22:58	4° $\mathfrak{D}$ 19'49		direct	7066 Mar 22 20:22	10° $\mathfrak{D}$ 13'56	
min. Earth dist.	7057 Dec 21 10:01	3° $\mathfrak{D}$ 20'59	47.22634 AU				
opposition	7057 Dec 23 04:18	3° $\mathfrak{D}$ 18'58	-17°05'43	conjunction	7066 Jun 28 22:18	11° $\mathfrak{D}$ 41'02	-16°06'20
direct	7058 Mar 15 01:01	2° $\mathfrak{D}$ 19'11		minimum elong	7066 Jun 28 22:25	11° $\mathfrak{D}$ 41'02	16°06'24
				max. Earth dist.	7066 Jun 30 09:41	11° $\mathfrak{D}$ 43'05	49.83205 AU
conjunction	7058 Jun 20 23:54	3° $\mathfrak{D}$ 47'40	-16°24'04	retrograde	7066 Oct 09 05:56	13° $\mathfrak{D}$ 11'29	
minimum elong	7058 Jun 20 23:57	3° $\mathfrak{D}$ 47'40	16°24'09	min. Earth dist.	7066 Dec 31 00:35	12° $\mathfrak{D}$ 13'03	47.94386 AU
max. Earth dist.	7058 Jun 22 18:20	3° $\mathfrak{D}$ 50'10	49.18896 AU	opposition	7067 Jan 01 09:15	12° $\mathfrak{D}$ 11'31	-16°44'23
retrograde	7058 Oct 01 06:43	5° $\mathfrak{D}$ 19'33		direct	7067 Mar 24 03:20	11° $\mathfrak{D}$ 12'34	
min. Earth dist.	7058 Dec 22 17:54	4° $\mathfrak{D}$ 20'43	47.32125 AU				
opposition	7058 Dec 24 10:40	4° $\mathfrak{D}$ 18'47	-17°04'27	conjunction	7067 Jun 30 03:50	12° $\mathfrak{D}$ 39'30	-16°03'01
direct	7059 Mar 16 07:52	3° $\mathfrak{D}$ 19'05		minimum elong	7067 Jun 30 03:56	12° $\mathfrak{D}$ 39'30	16°03'07
				max. Earth dist.	7067 Jul 01 13:28	12° $\mathfrak{D}$ 41'27	49.89095 AU
conjunction	7059 Jun 22 05:59	4° $\mathfrak{D}$ 47'21	-16°22'47	retrograde	7067 Oct 10 09:45	14° $\mathfrak{D}$ 09'46	
minimum elong	7059 Jun 22 06:05	4° $\mathfrak{D}$ 47'22	16°22'52	min. Earth dist.	7068 Jan 01 05:59	13° $\mathfrak{D}$ 11'22	47.99991 AU

opposition	7068 Jan 02 14:31	13°  09'51	-16°40'47	conjunction	7076 Jul 08 02:25	21°  17'03	-15°22'05
direct	7068 Mar 24 09:34	12°  10'56		minimum elong	7076 Jul 08 02:34	21°  17'04	15°22'10
				max. Earth dist.	7076 Jul 09 04:39	21°  18'33	50.26015 AU
conjunction	7068 Jun 30 09:14	13°  37'42	-15°59'29	retrograde	7076 Oct 18 11:04	22°  20'46'09	
minimum elong	7068 Jun 30 09:22	13°  37'42	15°59'33	opposition	7077 Jan 10 11:40	21°  20'46'45	-15°56'46
max. Earth dist.	7068 Jul 01 17:53	13°  39'35	49.94541 AU	min. Earth dist.	7077 Jan 09 12:12	21°  20'47'51	48.34549 AU
retrograde	7068 Oct 10 15:53	15°  20'7'49		direct	7077 Apr 02 05:45	20°  20'48'17	
opposition	7069 Jan 02 19:54	14°  20'7'56	-16°36'55				
min. Earth dist.	7069 Jan 01 13:14	14°  20'09'23	48.05187 AU	conjunction	7077 Jul 09 07:25	22°  20'14'01	-15°16'21
direct	7069 Mar 25 17:13	13°  20'09'04		minimum elong	7077 Jul 09 07:34	22°  20'14'02	15°16'25
				max. Earth dist.	7077 Jul 10 07:39	22°  20'15'24	50.28100 AU
conjunction	7069 Jul 01 14:31	14°  20'35'40	-15°55'42	retrograde	7077 Oct 19 14:41	23°  20'43'01	
minimum elong	7069 Jul 01 14:37	14°  20'35'40	15°55'46	opposition	7078 Jan 11 16:27	22°  20'43'39	-15°50'41
max. Earth dist.	7069 Jul 02 23:01	14°  20'37'33	49.99620 AU	min. Earth dist.	7078 Jan 10 17:17	22°  20'44'44	48.36270 AU
retrograde	7069 Oct 11 22:54	16°  20'05'37		direct	7078 Apr 03 10:31	21°  20'45'12	
min. Earth dist.	7070 Jan 02 18:29	15°  20'07'13	48.10026 AU				
opposition	7070 Jan 04 01:01	15°  20'05'48	-16°32'48	conjunction	7078 Jul 10 12:28	23°  20'10'51	-15°10'26
direct	7070 Mar 26 21:38	14°  20'06'58		minimum elong	7078 Jul 10 12:37	23°  20'10'52	15°10'31
				max. Earth dist.	7078 Jul 11 11:24	23°  20'12'10	50.29649 AU
conjunction	7070 Jul 02 19:38	15°  20'33'25	-15°51'39	retrograde	7078 Oct 20 19:17	24°  20'39'45	
minimum elong	7070 Jul 02 19:47	15°  20'33'26	15°51'43	opposition	7079 Jan 12 21:16	23°  20'40'24	-15°44'24
max. Earth dist.	7070 Jul 04 02:25	15°  20'35'11	50.04371 AU	min. Earth dist.	7079 Jan 12 00:20	23°  20'41'23	48.37475 AU
retrograde	7070 Oct 13 06:58	17°  20'03'12		direct	7079 Apr 04 17:35	22°  20'41'58	
min. Earth dist.	7071 Jan 04 00:23	16°  20'04'50	48.14565 AU				
opposition	7071 Jan 05 06:09	16°  20'03'26	-16°28'25	conjunction	7079 Jul 11 17:30	24°  20'07'31	-15°04'17
direct	7071 Mar 27 22:57	15°  20'04'39		minimum elong	7079 Jul 11 17:40	24°  20'07'32	15°04'21
				max. Earth dist.	7079 Jul 12 15:58	24°  20'08'48	50.30719 AU
conjunction	7071 Jul 04 00:52	16°  20'30'59	-15°47'20	retrograde	7079 Oct 22 00:49	25°  20'36'19	
minimum elong	7071 Jul 04 00:59	16°  20'30'59	15°47'24	min. Earth dist.	7080 Jan 13 05:14	24°  20'37'57	48.38211 AU
max. Earth dist.	7071 Jul 05 07:50	16°  20'32'45	50.08824 AU	opposition	7080 Jan 14 01:51	24°  20'36'59	-15°37'54
retrograde	7071 Oct 14 09:37	18°  20'00'37		direct	7080 Apr 04 22:50	23°  20'38'33	
min. Earth dist.	7072 Jan 05 06:39	17°  20'02'14	48.18791 AU	evening set	7080 Jul 10 21:08	25°  20'02'36	
opposition	7072 Jan 06 11:13	17°  20'00'54	-16°23'46				
direct	7072 Mar 28 05:06	16°  20'02'11		conjunction	7080 Jul 11 22:21	25°  20'04'02	-14°57'55
				minimum elong	7080 Jul 11 22:30	25°  20'04'02	14°58'00
conjunction	7072 Jul 04 06:00	17°  20'28'22	-15°42'46	morning rise	7080 Jul 12 23:54	25°  20'05'29	
minimum elong	7072 Jul 04 06:09	17°  20'28'23	15°42'51	max. Earth dist.	7080 Jul 12 18:43	25°  20'05'11	50.31347 AU
max. Earth dist.	7072 Jul 05 11:38	17°  20'30'05	50.12984 AU	retrograde	7080 Oct 22 08:29	26°  20'32'44	
retrograde	7072 Oct 14 11:49	18°  20'57'53		min. Earth dist.	7081 Jan 13 10:57	25°  20'34'19	48.38551 AU
min. Earth dist.	7073 Jan 05 11:24	17°  20'59'34	48.22717 AU	opposition	7081 Jan 14 06:21	25°  20'33'25	-15°31'09
opposition	7073 Jan 06 16:02	17°  20'58'14	-16°18'51	direct	7081 Apr 05 23:59	24°  20'34'59	
direct	7073 Mar 29 11:38	16°  20'59'33		evening set	7081 Jul 10 22:57	25°  20'57'26	
conjunction	7073 Jul 05 11:04	18°  20'25'39	-15°37'57	conjunction	7081 Jul 13 03:16	26°  20'00'24	-14°51'20
minimum elong	7073 Jul 05 11:11	18°  20'25'40	15°38'01	minimum elong	7081 Jul 13 03:26	26°  20'00'24	14°51'24
max. Earth dist.	7073 Jul 06 15:52	18°  20'27'18	50.16823 AU	max. Earth dist.	7081 Jul 13 23:46	26°  20'01'33	50.31607 AU
retrograde	7073 Oct 15 17:47	19°  20'55'04		morning rise	7081 Jul 15 08:00	26°  20'03'23	
opposition	7074 Jan 07 21:06	18°  20'55'28	-16°13'41	retrograde	7081 Oct 23 12:06	27°  20'29'01	
min. Earth dist.	7074 Jan 06 18:15	18°  20'56'43	48.26312 AU	opposition	7082 Jan 15 10:55	26°  20'29'43	-15°24'11
direct	7074 Mar 30 18:00	17°  20'56'51		min. Earth dist.	7082 Jan 14 16:36	26°  20'30'34	48.38538 AU
				direct	7082 Apr 07 04:54	25°  20'31'18	
conjunction	7074 Jul 06 16:05	19°  20'22'51	-15°32'53	evening set	7082 Jul 11 09:59	26°  20'52'41	
minimum elong	7074 Jul 06 16:14	19°  20'22'51	15°32'58				
max. Earth dist.	7074 Jul 07 20:39	19°  20'24'29	50.20324 AU	conjunction	7082 Jul 14 07:55	26°  20'56'39	-14°44'30
retrograde	7074 Oct 16 23:33	20°  20'52'09		minimum elong	7082 Jul 14 08:04	26°  20'56'40	14°44'34
min. Earth dist.	7075 Jan 07 23:22	19°  20'53'53	48.29522 AU	max. Earth dist.	7082 Jul 15 03:07	26°  20'57'45	50.31553 AU
opposition	7075 Jan 09 01:59	19°  20'52'38	-16°08'16	morning rise	7082 Jul 17 06:18	27°  20'00'39	
direct	7075 Mar 31 23:01	18°  20'54'05		retrograde	7082 Oct 24 14:14	28°  20'25'13	
				opposition	7083 Jan 16 15:23	27°  20'25'57	-15°16'57
conjunction	7075 Jul 07 21:09	20°  20'19'59	-15°27'36	min. Earth dist.	7083 Jan 15 21:03	27°  20'26'48	48.38227 AU
minimum elong	7075 Jul 07 21:18	20°  20'20'00	15°27'39	direct	7083 Apr 08 10:31	26°  20'27'32	
max. Earth dist.	7075 Jul 08 23:40	20°  20'21'30	50.23409 AU	evening set	7083 Jul 12 00:22	27°  20'48'05	
retrograde	7075 Oct 18 07:20	21°  20'49'11					
min. Earth dist.	7076 Jan 09 05:38	20°  20'50'54	48.32296 AU	conjunction	7083 Jul 15 12:44	27°  20'52'52	-14°37'26
opposition	7076 Jan 10 06:47	20°  20'49'44	-16°02'37	minimum elong	7083 Jul 15 12:55	27°  20'52'52	14°37'30
direct	7076 Apr 01 01:01	19°  20'51'14		max. Earth dist.	7083 Jul 16 07:05	27°  20'53'54	50.31196 AU
				morning rise	7083 Jul 19 01:38	27°  20'57'41	

retrograde	7083 Oct 25 19:03	29° $\Omega$ 21'24	min. Earth dist.	7090 Jan 22 11:16	4° $\Omega$ 01'00	48.26335 AU
opposition	7084 Jan 17 19:50	28° $\Omega$ 22'08 -15°09'28	direct	7090 Apr 14 18:23	3° $\Omega$ 02'14	
min. Earth dist.	7084 Jan 17 03:11	28° $\Omega$ 22'55 48.37622 AU	evening set	7090 Jul 15 11:31	4° $\Omega$ 18'49	
direct	7084 Apr 08 16:47	27° $\Omega$ 23'46				
evening set	7084 Jul 11 16:40	28° $\Omega$ 43'35	conjunction	7090 Jul 21 22:45	4° $\Omega$ 27'34 -13°41'31	
			minimum elong	7090 Jul 21 22:56	4° $\Omega$ 27'35 13°41'34	
conjunction	7084 Jul 15 17:36	28° $\Omega$ 49'04 -14°30'07	max. Earth dist.	7090 Jul 22 08:56	4° $\Omega$ 28'09 50.18689 AU	
minimum elong	7084 Jul 15 17:46	28° $\Omega$ 49'04 14°30'11	morning rise	7090 Jul 28 10:54	4° $\Omega$ 36'24	
max. Earth dist.	7084 Jul 16 11:45	28° $\Omega$ 50'06 50.30564 AU	retrograde	7090 Nov 01 10:20	5° $\Omega$ 56'02	
morning rise	7084 Jul 19 19:03	28° $\Omega$ 54'35	opposition	7091 Jan 24 02:51	4° $\Omega$ 56'58 -14°10'38	
	7084 Sep 14 06:04	0° $\Omega$	min. Earth dist.	7091 Jan 23 17:23	4° $\Omega$ 57'25 48.22745 AU	
retrograde	7084 Oct 26 00:59	0° $\Omega$ 17'34	direct	7091 Apr 15 19:32	3° $\Omega$ 58'41	
	7084 Dec 07 10:23	30° $\mathcal{R}\Omega$	evening set	7091 Jul 16 08:23	5° $\Omega$ 14'48	
min. Earth dist.	7085 Jan 17 07:28	29° $\Omega$ 19'08 48.36721 AU				
opposition	7085 Jan 18 00:12	29° $\Omega$ 18'22 -15°01'45	conjunction	7091 Jul 23 03:50	5° $\Omega$ 24'01 -13°32'42	
direct	7085 Apr 09 21:14	28° $\Omega$ 20'01	minimum elong	7091 Jul 23 04:00	5° $\Omega$ 24'02 13°32'47	
evening set	7085 Jul 12 09:53	29° $\Omega$ 39'11	max. Earth dist.	7091 Jul 23 13:43	5° $\Omega$ 24'35 50.14972 AU	
			morning rise	7091 Jul 30 00:07	5° $\Omega$ 33'18	
conjunction	7085 Jul 16 22:10	29° $\Omega$ 45'18 -14°22'34	retrograde	7091 Nov 02 15:32	6° $\Omega$ 52'27	
minimum elong	7085 Jul 16 22:21	29° $\Omega$ 45'19 14°22'38	opposition	7092 Jan 25 07:08	5° $\Omega$ 53'22 -14°01'23	
max. Earth dist.	7085 Jul 17 14:37	29° $\Omega$ 46'14 50.29628 AU	min. Earth dist.	7092 Jan 24 23:10	5° $\Omega$ 53'44 48.18658 AU	
morning rise	7085 Jul 21 11:06	29° $\Omega$ 51'28	direct	7092 Apr 15 23:26	4° $\Omega$ 55'02	
	7085 Jul 27 18:47	0° $\Omega$	evening set	7092 Jul 16 05:35	6° $\Omega$ 10'43	
retrograde	7085 Oct 27 08:40	1° $\Omega$ 13'48				
opposition	7086 Jan 19 04:42	0° $\Omega$ 14'38 -14°53'46	conjunction	7092 Jul 23 08:45	6° $\Omega$ 20'23 -13°23'41	
min. Earth dist.	7086 Jan 18 13:09	0° $\Omega$ 15'21 48.35512 AU	minimum elong	7092 Jul 23 08:57	6° $\Omega$ 20'23 13°23'45	
	7086 Feb 01 11:05	30° $\mathcal{R}\Omega$	max. Earth dist.	7092 Jul 23 16:59	6° $\Omega$ 20'51 50.10804 AU	
direct	7086 Apr 10 22:40	29° $\Omega$ 16'20	morning rise	7092 Jul 30 12:53	6° $\Omega$ 30'05	
	7086 Jun 16 03:44	0° $\Omega$	retrograde	7092 Nov 02 17:54	7° $\Omega$ 48'47	
evening set	7086 Jul 13 04:09	0° $\Omega$ 34'54	opposition	7093 Jan 25 11:28	6° $\Omega$ 49'40 -13°51'55	
			min. Earth dist.	7093 Jan 25 03:46	6° $\Omega$ 50'01 48.14153 AU	
conjunction	7086 Jul 18 03:03	0° $\Omega$ 41'37 -14°14'47	direct	7093 Apr 17 04:03	5° $\Omega$ 51'17	
minimum elong	7086 Jul 18 03:13	0° $\Omega$ 41'38 14°14'51	evening set	7093 Jul 17 02:40	7° $\Omega$ 06'33	
max. Earth dist.	7086 Jul 18 19:31	0° $\Omega$ 42'33 50.28357 AU				
morning rise	7086 Jul 23 02:33	0° $\Omega$ 48'23	conjunction	7093 Jul 24 13:29	7° $\Omega$ 16'38 -13°14'27	
retrograde	7086 Oct 28 12:44	2° $\Omega$ 10'06	minimum elong	7093 Jul 24 13:40	7° $\Omega$ 16'39 13°14'30	
opposition	7087 Jan 20 09:05	1° $\Omega$ 10'59 -14°45'34	max. Earth dist.	7093 Jul 24 20:36	7° $\Omega$ 17'02 50.06226 AU	
min. Earth dist.	7087 Jan 19 18:49	1° $\Omega$ 11'39 48.33930 AU	morning rise	7093 Aug 01 01:19	7° $\Omega$ 26'47	
direct	7087 Apr 12 01:48	0° $\Omega$ 12'43	retrograde	7093 Nov 03 20:32	8° $\Omega$ 45'02	
evening set	7087 Jul 13 23:14	1° $\Omega$ 30'45	opposition	7094 Jan 26 15:56	7° $\Omega$ 45'53 -13°42'13	
			min. Earth dist.	7094 Jan 26 10:02	7° $\Omega$ 46'09 48.09271 AU	
conjunction	7087 Jul 19 07:53	1° $\Omega$ 38'02 -14°06'46	direct	7094 Apr 18 10:58	6° $\Omega$ 47'28	
minimum elong	7087 Jul 19 08:04	1° $\Omega$ 38'03 14°06'50	evening set	7094 Jul 18 00:16	8° $\Omega$ 02'20	
max. Earth dist.	7087 Jul 19 22:39	1° $\Omega$ 38'52 50.26698 AU				
morning rise	7087 Jul 24 17:16	1° $\Omega$ 45'21	conjunction	7094 Jul 25 18:27	8° $\Omega$ 12'50 -13°04'59	
retrograde	7087 Oct 29 16:26	3° $\Omega$ 06'30	minimum elong	7094 Jul 25 18:39	8° $\Omega$ 12'50 13°05'02	
opposition	7088 Jan 21 13:26	2° $\Omega$ 07'26 -14°37'08	max. Earth dist.	7094 Jul 26 01:25	8° $\Omega$ 13'13 50.01313 AU	
min. Earth dist.	7088 Jan 20 23:36	2° $\Omega$ 08'05 48.31920 AU	morning rise	7094 Aug 02 13:36	8° $\Omega$ 23'23	
direct	7088 Apr 12 05:36	1° $\Omega$ 09'11	retrograde	7094 Nov 05 01:08	9° $\Omega$ 41'14	
evening set	7088 Jul 13 18:51	2° $\Omega$ 26'43	opposition	7095 Jan 27 20:10	8° $\Omega$ 42'03 -13°32'16	
			min. Earth dist.	7095 Jan 27 14:14	8° $\Omega$ 42'20 48.04061 AU	
conjunction	7088 Jul 19 12:52	2° $\Omega$ 34'32 -13°58'33	direct	7095 Apr 19 16:42	7° $\Omega$ 43'35	
minimum elong	7088 Jul 19 13:03	2° $\Omega$ 34'32 13°58'36	evening set	7095 Jul 18 21:59	8° $\Omega$ 58'06	
max. Earth dist.	7088 Jul 20 02:13	2° $\Omega$ 35'17 50.24553 AU				
morning rise	7088 Jul 25 07:40	2° $\Omega$ 42'22	conjunction	7095 Jul 26 23:17	9° $\Omega$ 08'59 -12°55'17	
retrograde	7088 Oct 29 20:22	4° $\Omega$ 03'00	minimum elong	7095 Jul 26 23:28	9° $\Omega$ 09'00 12°55'20	
opposition	7089 Jan 21 17:53	3° $\Omega$ 03'57 -14°28'30	max. Earth dist.	7095 Jul 27 04:22	9° $\Omega$ 09'16 49.96083 AU	
min. Earth dist.	7089 Jan 21 06:23	3° $\Omega$ 04'29 48.29398 AU	morning rise	7095 Aug 04 01:45	9° $\Omega$ 19'58	
direct	7089 Apr 13 12:17	2° $\Omega$ 05'43	retrograde	7095 Nov 06 08:30	10° $\Omega$ 37'26	
evening set	7089 Jul 14 15:06	3° $\Omega$ 22'46	opposition	7096 Jan 29 00:35	9° $\Omega$ 38'13 -13°22'06	
			min. Earth dist.	7096 Jan 28 19:54	9° $\Omega$ 38'26 47.98550 AU	
conjunction	7089 Jul 20 17:56	3° $\Omega$ 31'03 -13°50'08	direct	7096 Apr 19 19:03	8° $\Omega$ 39'43	
minimum elong	7089 Jul 20 18:07	3° $\Omega$ 31'04 13°50'12	evening set	7096 Jul 18 19:53	9° $\Omega$ 53'53	
max. Earth dist.	7089 Jul 21 06:33	3° $\Omega$ 31'46 50.21892 AU				
morning rise	7089 Jul 26 21:30	3° $\Omega$ 39'24	conjunction	7096 Jul 27 04:17	10° $\Omega$ 05'11 -12°45'21	
retrograde	7089 Oct 31 01:27	4° $\Omega$ 59'32	minimum elong	7096 Jul 27 04:29	10° $\Omega$ 05'11 12°45'24	
opposition	7090 Jan 22 22:19	4° $\Omega$ 00'29 -14°19'40	max. Earth dist.	7096 Jul 27 09:24	10° $\Omega$ 05'28 49.90547 AU	

morning rise	7096 Aug 04 13:45	10°Ω16'33
retrograde	7096 Nov 06 13:28	11°Ω33'39
opposition	7097 Jan 29 04:55	10°Ω34'26 -13°11'40
min. Earth dist.	7097 Jan 29 01:09	10°Ω34'37 47.92725 AU
direct	7097 Apr 20 22:25	9°Ω35'55
evening set	7097 Jul 19 18:05	10°Ω49'46
conjunction	7097 Jul 28 09:12	11°Ω01'27 -12°35'11
minimum elong	7097 Jul 28 09:23	11°Ω01'28 12°35'14
max. Earth dist.	7097 Jul 28 12:55	11°Ω01'40 49.84719 AU
morning rise	7097 Aug 06 01:30	11°Ω13'12
retrograde	7097 Nov 07 18:02	12°Ω29'59
opposition	7098 Jan 30 09:18	11°Ω30'45 -13°01'01
min. Earth dist.	7098 Jan 30 05:40	11°Ω30'56 47.86596 AU
direct	7098 Apr 22 01:46	10°Ω32'13
evening set	7098 Jul 20 16:17	11°Ω45'47
conjunction	7098 Jul 29 14:08	11°Ω57'51 -12°24'47
minimum elong	7098 Jul 29 14:20	11°Ω57'52 12°24'51
max. Earth dist.	7098 Jul 29 16:50	11°Ω58'01 49.78547 AU
morning rise	7098 Aug 07 13:17	12°Ω09'59
retrograde	7098 Nov 08 22:15	13°Ω26'29
opposition	7099 Jan 31 13:52	12°Ω27'15 -12°50'07
min. Earth dist.	7099 Jan 31 12:18	12°Ω27'19 47.80097 AU
direct	7099 Apr 23 07:18	11°Ω28'43
evening set	7099 Jul 21 15:00	12°Ω42'01
conjunction	7099 Jul 30 19:24	12°Ω54'27 -12°14'10
minimum elong	7099 Jul 30 19:35	12°Ω54'27 12°14'13
max. Earth dist.	7099 Jul 30 21:36	12°Ω54'34 49.71987 AU
morning rise	7099 Aug 09 00:56	13°Ω06'58
retrograde	7099 Nov 10 02:59	14°Ω23'10
opposition	7100 Feb 01 18:09	13°Ω23'56 -12°39'00
min. Earth dist.	7100 Feb 01 16:57	13°Ω24'00 47.73166 AU
direct	7100 Apr 24 13:06	12°Ω25'23
evening set	7100 Jul 22 13:56	13°Ω38'26
conjunction	7100 Aug 01 00:36	13°Ω51'14 -12°03'21
minimum elong	7100 Aug 01 00:47	13°Ω51'15 12°03'24
max. Earth dist.	7100 Aug 01 00:21	13°Ω51'13 49.64953 AU
morning rise	7100 Aug 10 12:41	14°Ω04'08
	7100 Sep 27 18:40	15°Ω
retrograde	7100 Nov 11 12:00	15°Ω20'03
	7100 Dec 26 15:47	15°Ω
opposition	7101 Feb 02 22:46	14°Ω20'49 -12°27'40
min. Earth dist.	7101 Feb 02 23:20	14°Ω20'48 47.65740 AU
direct	7101 Apr 25 14:36	13°Ω22'14
evening set	7101 Jul 23 12:52	14°Ω35'02
conjunction	7101 Aug 02 05:52	14°Ω48'12 -11°52'19
minimum elong	7101 Aug 02 06:04	14°Ω48'13 11°52'22
max. Earth dist.	7101 Aug 02 05:12	14°Ω48'10 49.57391 AU
	7101 Aug 10 22:20	15°Ω
morning rise	7101 Aug 12 00:07	15°Ω01'27
retrograde	7101 Nov 12 18:26	16°Ω17'07