


























































































































opposition	5600 Jan 03 23:22	13°☾20'42 -14°26'39	conjunction	5606 Jul 08 04:54	19°☾24'54 -12°51'34
min. Earth dist.	5600 Jan 03 13:39	13°☾21'09 48.30306 AU	minimum elong	5606 Jul 08 05:05	19°☾24'54 12°51'34
direct	5600 Mar 25 17:57	12°☾22'24	max. Earth dist.	5606 Jul 08 08:24	19°☾25'05 49.94622 AU
evening set	5600 Jun 25 17:48	13°☾39'11	morning rise	5606 Jul 16 10:44	19°☾36'03
			retrograde	5606 Oct 18 17:06	20°☾53'25
conjunction	5600 Jul 01 23:08	13°☾47'35 -13°48'15	opposition	5607 Jan 10 05:09	19°☾54'16 -13°18'06
minimum elong	5600 Jul 01 23:18	13°☾47'36 13°48'17	min. Earth dist.	5607 Jan 10 02:13	19°☾54'24 47.96725 AU
max. Earth dist.	5600 Jul 02 10:14	13°☾48'13 50.22451 AU	direct	5607 Apr 01 20:12	18°☾55'49
morning rise	5600 Jul 08 05:12	13°☾56'03	evening set	5607 Jun 30 22:20	20°☾09'53
retrograde	5600 Oct 12 09:34	15°☾15'57			
opposition	5601 Jan 04 03:35	14°☾16'48 -14°17'34	conjunction	5607 Jul 09 10:11	20°☾21'22 -12°41'22
min. Earth dist.	5601 Jan 03 17:53	14°☾17'15 48.26542 AU	minimum elong	5607 Jul 09 10:22	20°☾21'23 12°41'24
direct	5601 Mar 26 21:20	13°☾18'28	max. Earth dist.	5607 Jul 09 13:10	20°☾21'32 49.88416 AU
evening set	5601 Jun 26 14:05	14°☾34'47	morning rise	5607 Jul 17 23:05	20°☾32'55
			retrograde	5607 Oct 19 20:47	21°☾49'56
conjunction	5601 Jul 03 03:56	14°☾43'40 -13°39'23	opposition	5608 Jan 11 09:35	20°☾50'44 -13°07'26
minimum elong	5601 Jul 03 04:07	14°☾43'41 13°39'24	min. Earth dist.	5608 Jan 11 08:08	20°☾50'48 47.90115 AU
max. Earth dist.	5601 Jul 03 13:06	14°☾44'11 50.18672 AU	direct	5608 Apr 02 01:04	19°☾52'14
morning rise	5601 Jul 09 18:44	14°☾52'37	evening set	5608 Jun 30 20:36	21°☾05'59
retrograde	5601 Oct 13 17:30	16°☾12'02			
opposition	5602 Jan 05 07:47	15°☾12'52 -14°08'15	conjunction	5608 Jul 09 15:13	21°☾17'52 -12°30'58
min. Earth dist.	5602 Jan 04 23:12	15°☾13'16 48.22494 AU	minimum elong	5608 Jul 09 15:23	21°☾17'53 12°30'59
direct	5602 Mar 27 21:42	14°☾14'31	max. Earth dist.	5608 Jul 09 16:21	21°☾17'56 49.81708 AU
evening set	5602 Jun 27 10:41	15°☾30'24	morning rise	5608 Jul 18 11:01	21°☾29'48
			retrograde	5608 Oct 20 00:33	22°☾46'28
conjunction	5602 Jul 04 08:55	15°☾39'46 -13°30'16	opposition	5609 Jan 11 13:56	21°☾47'14 -12°56'33
minimum elong	5602 Jul 04 09:06	15°☾39'47 13°30'18	min. Earth dist.	5609 Jan 11 12:55	21°☾47'17 47.83021 AU
max. Earth dist.	5602 Jul 04 18:05	15°☾40'17 50.14600 AU	direct	5609 Apr 03 05:48	20°☾48'40
morning rise	5602 Jul 11 08:01	15°☾49'10	evening set	5609 Jul 01 19:02	22°☾02'07
retrograde	5602 Oct 14 20:16	17°☾08'08			
opposition	5603 Jan 06 12:02	16°☾08'59 -13°58'40	conjunction	5609 Jul 10 20:26	22°☾14'22 -12°20'22
min. Earth dist.	5603 Jan 06 04:33	16°☾09'20 48.18132 AU	minimum elong	5609 Jul 10 20:37	22°☾14'22 12°20'24
direct	5603 Mar 29 02:56	15°☾10'37	max. Earth dist.	5609 Jul 10 20:10	22°☾14'21 49.74520 AU
evening set	5603 Jun 28 07:33	16°☾26'06	morning rise	5609 Jul 19 23:06	22°☾26'41
			retrograde	5609 Oct 21 04:59	23°☾43'01
conjunction	5603 Jul 05 13:40	16°☾35'55 -13°20'55	opposition	5610 Jan 12 18:16	22°☾43'44 -12°45'26
minimum elong	5603 Jul 05 13:52	16°☾35'55 13°20'56	min. Earth dist.	5610 Jan 12 19:24	22°☾43'41 47.75485 AU
max. Earth dist.	5603 Jul 05 21:31	16°☾36'21 50.10220 AU	direct	5610 Apr 04 12:07	21°☾45'06
morning rise	5603 Jul 12 20:46	16°☾45'46	evening set	5610 Jul 02 17:45	22°☾58'15
retrograde	5603 Oct 15 22:32	18°☾04'18			
opposition	5604 Jan 07 16:14	17°☾05'09 -13°48'52	conjunction	5610 Jul 12 01:43	23°☾10'52 -12°09'32
min. Earth dist.	5604 Jan 07 08:58	17°☾05'30 48.13441 AU	minimum elong	5610 Jul 12 01:54	23°☾10'53 12°09'33
direct	5604 Mar 29 08:45	16°☾06'47	max. Earth dist.	5610 Jul 12 01:08	23°☾10'50 49.66933 AU
evening set	5604 Jun 28 04:42	17°☾21'54	morning rise	5610 Jul 21 10:50	23°☾23'35
			retrograde	5610 Oct 22 10:50	24°☾39'35
conjunction	5604 Jul 05 18:38	17°☾32'08 -13°11'21	opposition	5611 Jan 13 22:34	23°☾40'15 -12°34'06
minimum elong	5604 Jul 05 18:49	17°☾32'09 13°11'22	min. Earth dist.	5611 Jan 13 23:49	23°☾40'12 47.67568 AU
max. Earth dist.	5604 Jul 06 01:11	17°☾32'31 50.05469 AU	direct	5611 Apr 05 16:27	22°☾41'33
morning rise	5604 Jul 13 09:37	17°☾42'27	evening set	5611 Jul 03 16:26	23°☾54'26
retrograde	5604 Oct 16 03:54	19°☾00'35			
opposition	5605 Jan 07 20:34	18°☾01'26 -13°38'49	conjunction	5611 Jul 13 06:42	24°☾07'26 -11°58'29
min. Earth dist.	5605 Jan 07 15:26	18°☾01'41 48.08356 AU	minimum elong	5611 Jul 13 06:53	24°☾07'26 11°58'31
direct	5605 Mar 30 14:12	17°☾03'03	max. Earth dist.	5611 Jul 13 04:05	24°☾07'17 49.58987 AU
evening set	5605 Jun 29 02:20	18°☾17'49	morning rise	5611 Jul 22 22:22	24°☾20'30
			retrograde	5611 Oct 23 19:08	25°☾36'13
conjunction	5605 Jul 06 23:47	18°☾28'28 -13°01'34	opposition	5612 Jan 15 03:00	24°☾36'50 -12°22'31
minimum elong	5605 Jul 06 23:59	18°☾28'29 13°01'35	min. Earth dist.	5612 Jan 15 05:30	24°☾36'43 47.59329 AU
max. Earth dist.	5605 Jul 07 05:47	18°☾28'49 50.00299 AU	direct	5612 Apr 05 17:02	23°☾38'05
morning rise	5605 Jul 14 22:12	18°☾39'13	evening set	5612 Jul 03 15:20	24°☾50'42
retrograde	5605 Oct 17 09:30	19°☾56'58			
opposition	5606 Jan 09 00:49	18°☾57'49 -13°28'34	conjunction	5612 Jul 13 11:59	25°☾04'04 -11°47'12
min. Earth dist.	5606 Jan 08 20:06	18°☾58'02 48.02798 AU	minimum elong	5612 Jul 13 12:11	25°☾04'05 11°47'13
direct	5606 Mar 31 18:27	17°☾59'24	max. Earth dist.	5612 Jul 13 09:25	25°☾03'55 49.50735 AU
evening set	5606 Jun 30 00:15	19°☾13'49	morning rise	5612 Jul 23 09:54	25°☾17'30
			retrograde	5612 Oct 23 23:23	26°☾32'57

opposition	5613 Jan 15 07:23	25° $\mathring{\text{O}}$ 33'32 -12°10'42	direct	5619 Apr 13 00:07	0° $\mathring{\text{O}}$ 18'59
min. Earth dist.	5613 Jan 15 10:48	25° $\mathring{\text{O}}$ 33'22 47.50791 AU	evening set	5619 Jul 09 13:51	1° $\mathring{\text{O}}$ 30'24
direct	5613 Apr 06 21:44	24° $\mathring{\text{O}}$ 34'43			
evening set	5613 Jul 04 14:32	25° $\mathring{\text{O}}$ 47'07	conjunction	5619 Jul 21 02:47	1° $\mathring{\text{O}}$ 46'09 -10°21'38
			minimum elong	5619 Jul 21 02:57	1° $\mathring{\text{O}}$ 46'10 10°21'39
conjunction	5613 Jul 14 17:14	26° $\mathring{\text{O}}$ 00'50 -11°35'40	max. Earth dist.	5619 Jul 20 15:28	1° $\mathring{\text{O}}$ 45'30 48.83793 AU
minimum elong	5613 Jul 14 17:24	26° $\mathring{\text{O}}$ 00'50 11°35'42	morning rise	5619 Aug 01 17:19	2° $\mathring{\text{O}}$ 02'01
max. Earth dist.	5613 Jul 14 13:21	26° $\mathring{\text{O}}$ 00'36 49.42212 AU	retrograde	5619 Oct 31 12:40	3° $\mathring{\text{O}}$ 16'02
morning rise	5613 Jul 24 21:19	26° $\mathring{\text{O}}$ 14'38	opposition	5620 Jan 22 16:03	2° $\mathring{\text{O}}$ 16'21 -10°41'10
retrograde	5613 Oct 25 02:05	27° $\mathring{\text{O}}$ 29'49	min. Earth dist.	5620 Jan 23 03:25	2° $\mathring{\text{O}}$ 15'49 46.81432 AU
opposition	5614 Jan 16 11:49	26° $\mathring{\text{O}}$ 30'22 -11°58'37	direct	5620 Apr 13 07:12	1° $\mathring{\text{O}}$ 17'07
min. Earth dist.	5614 Jan 16 15:23	26° $\mathring{\text{O}}$ 30'12 47.41984 AU	evening set	5620 Jul 09 14:32	2° $\mathring{\text{O}}$ 28'22
direct	5614 Apr 08 03:42	25° $\mathring{\text{O}}$ 31'30			
evening set	5614 Jul 05 13:49	26° $\mathring{\text{O}}$ 43'42	conjunction	5620 Jul 21 08:48	2° $\mathring{\text{O}}$ 44'27 -10°08'32
			minimum elong	5620 Jul 21 08:59	2° $\mathring{\text{O}}$ 44'27 10°08'34
conjunction	5614 Jul 15 22:33	26° $\mathring{\text{O}}$ 57'46 -11°23'54	max. Earth dist.	5620 Jul 20 20:50	2° $\mathring{\text{O}}$ 43'45 48.72408 AU
minimum elong	5614 Jul 15 22:45	26° $\mathring{\text{O}}$ 57'46 11°23'55	morning rise	5620 Aug 02 04:31	3° $\mathring{\text{O}}$ 00'38
max. Earth dist.	5614 Jul 15 17:32	26° $\mathring{\text{O}}$ 57'29 49.33400 AU	retrograde	5620 Oct 31 17:50	4° $\mathring{\text{O}}$ 14'28
morning rise	5614 Jul 26 08:47	27° $\mathring{\text{O}}$ 11'55	opposition	5621 Jan 22 20:51	3° $\mathring{\text{O}}$ 14'42 -10°27'28
retrograde	5614 Oct 26 06:56	28° $\mathring{\text{O}}$ 26'53	min. Earth dist.	5621 Jan 23 08:38	3° $\mathring{\text{O}}$ 14'08 46.69650 AU
opposition	5615 Jan 17 16:21	27° $\mathring{\text{O}}$ 27'24 -11°46'18	direct	5621 Apr 14 13:38	2° $\mathring{\text{O}}$ 15'21
min. Earth dist.	5615 Jan 17 21:39	27° $\mathring{\text{O}}$ 27'09 47.32889 AU	evening set	5621 Jul 10 15:28	3° $\mathring{\text{O}}$ 26'27
direct	5615 Apr 09 09:48	26° $\mathring{\text{O}}$ 28'30			
evening set	5615 Jul 06 13:19	27° $\mathring{\text{O}}$ 40'30	conjunction	5621 Jul 22 14:47	3° $\mathring{\text{O}}$ 42'51 -9°55'13
			minimum elong	5621 Jul 22 14:57	3° $\mathring{\text{O}}$ 42'52 9°55'14
conjunction	5615 Jul 17 04:01	27° $\mathring{\text{O}}$ 54'56 -11°11'54	max. Earth dist.	5621 Jul 22 00:21	3° $\mathring{\text{O}}$ 42'01 48.60540 AU
minimum elong	5615 Jul 17 04:11	27° $\mathring{\text{O}}$ 54'56 11°11'55	morning rise	5621 Aug 03 15:50	3° $\mathring{\text{O}}$ 59'21
max. Earth dist.	5615 Jul 16 22:49	27° $\mathring{\text{O}}$ 54'38 49.24306 AU	retrograde	5621 Nov 02 03:21	5° $\mathring{\text{O}}$ 13'01
morning rise	5615 Jul 27 20:01	28° $\mathring{\text{O}}$ 09'26	opposition	5622 Jan 24 01:52	4° $\mathring{\text{O}}$ 13'09 -10°13'32
retrograde	5615 Oct 27 13:24	29° $\mathring{\text{O}}$ 24'11	min. Earth dist.	5622 Jan 24 15:20	4° $\mathring{\text{O}}$ 12'30 46.57421 AU
opposition	5616 Jan 18 20:52	28° $\mathring{\text{O}}$ 24'42 -11°33'44	direct	5622 Apr 15 15:24	3° $\mathring{\text{O}}$ 13'41
min. Earth dist.	5616 Jan 19 02:11	28° $\mathring{\text{O}}$ 24'27 47.23480 AU	evening set	5622 Jul 11 16:25	4° $\mathring{\text{O}}$ 24'38
direct	5616 Apr 09 13:53	27° $\mathring{\text{O}}$ 25'45			
evening set	5616 Jul 06 13:01	28° $\mathring{\text{O}}$ 37'35	conjunction	5622 Jul 23 20:55	4° $\mathring{\text{O}}$ 41'21 -9°41'41
			minimum elong	5622 Jul 23 21:06	4° $\mathring{\text{O}}$ 41'22 9°41'42
conjunction	5616 Jul 17 09:21	28° $\mathring{\text{O}}$ 52'21 -10°59'40	max. Earth dist.	5622 Jul 23 06:15	4° $\mathring{\text{O}}$ 40'31 48.48238 AU
minimum elong	5616 Jul 17 09:33	28° $\mathring{\text{O}}$ 52'22 10°59'41	morning rise	5622 Aug 05 02:53	4° $\mathring{\text{O}}$ 58'10
max. Earth dist.	5616 Jul 17 02:08	28° $\mathring{\text{O}}$ 51'56 49.14868 AU	retrograde	5622 Nov 03 09:31	6° $\mathring{\text{O}}$ 11'40
morning rise	5616 Jul 28 07:19	29° $\mathring{\text{O}}$ 07'13	opposition	5623 Jan 25 06:51	5° $\mathring{\text{O}}$ 11'42 -9°59'22
	5616 Sep 11 10:18	0° $\mathring{\text{O}}$	min. Earth dist.	5623 Jan 25 21:23	5° $\mathring{\text{O}}$ 11'00 46.44782 AU
retrograde	5616 Oct 27 22:04	0° $\mathring{\text{O}}$ 21'46	direct	5623 Apr 16 20:03	4° $\mathring{\text{O}}$ 12'05
	5616 Dec 13 19:38	30° $\mathring{\text{R}}$ $\mathring{\text{O}}$	evening set	5623 Jul 12 17:42	5° $\mathring{\text{O}}$ 22'57
opposition	5617 Jan 19 01:36	29° $\mathring{\text{O}}$ 22'15 -11°20'55	max. Earth dist.	5623 Jul 24 10:50	5° $\mathring{\text{O}}$ 39'02 48.35576 AU
min. Earth dist.	5617 Jan 19 08:35	29° $\mathring{\text{O}}$ 21'56 47.13702 AU			
direct	5617 Apr 10 15:28	28° $\mathring{\text{O}}$ 23'16	conjunction	5623 Jul 25 03:00	5° $\mathring{\text{O}}$ 39'58 -9°27'55
evening set	5617 Jul 07 13:02	29° $\mathring{\text{O}}$ 34'57	minimum elong	5623 Jul 25 03:10	5° $\mathring{\text{O}}$ 39'59 9°27'55
			morning rise	5623 Aug 06 13:57	5° $\mathring{\text{O}}$ 57'06
conjunction	5617 Jul 18 15:10	29° $\mathring{\text{O}}$ 50'03 -10°47'12	retrograde	5623 Nov 04 14:16	7° $\mathring{\text{O}}$ 10'26
minimum elong	5617 Jul 18 15:21	29° $\mathring{\text{O}}$ 50'04 10°47'13	opposition	5624 Jan 26 11:54	6° $\mathring{\text{O}}$ 10'21 -9°44'57
max. Earth dist.	5617 Jul 18 07:30	29° $\mathring{\text{O}}$ 49'37 49.05009 AU	min. Earth dist.	5624 Jan 27 02:47	6° $\mathring{\text{O}}$ 09'39 46.31816 AU
	5617 Jul 25 21:49	0° $\mathring{\text{O}}$	direct	5624 Apr 17 01:26	5° $\mathring{\text{O}}$ 10'37
morning rise	5617 Jul 29 18:41	0° $\mathring{\text{O}}$ 05'15	evening set	5624 Jul 12 18:57	6° $\mathring{\text{O}}$ 21'23
retrograde	5617 Oct 29 03:36	1° $\mathring{\text{O}}$ 19'37			
opposition	5618 Jan 20 06:13	0° $\mathring{\text{O}}$ 20'05 -11°07'53	conjunction	5624 Jul 25 09:06	6° $\mathring{\text{O}}$ 38'43 -9°13'54
min. Earth dist.	5618 Jan 20 14:39	0° $\mathring{\text{O}}$ 19'41 47.03461 AU	minimum elong	5624 Jul 25 09:17	6° $\mathring{\text{O}}$ 38'43 9°13'55
	5618 Feb 07 07:47	30° $\mathring{\text{R}}$ $\mathring{\text{O}}$	max. Earth dist.	5624 Jul 24 15:44	6° $\mathring{\text{O}}$ 37'42 48.22584 AU
direct	5618 Apr 11 19:24	29° $\mathring{\text{O}}$ 21'02	morning rise	5624 Aug 07 00:56	6° $\mathring{\text{O}}$ 56'09
	5618 Jun 12 20:22	0° $\mathring{\text{O}}$	retrograde	5624 Nov 04 18:18	8° $\mathring{\text{O}}$ 09'22
evening set	5618 Jul 08 13:28	0° $\mathring{\text{O}}$ 32'34	opposition	5625 Jan 26 17:12	7° $\mathring{\text{O}}$ 09'11 -9°30'17
			min. Earth dist.	5625 Jan 27 09:49	7° $\mathring{\text{O}}$ 08'23 46.18539 AU
conjunction	5618 Jul 19 20:59	0° $\mathring{\text{O}}$ 48'00 -10°34'31	direct	5625 Apr 18 08:48	6° $\mathring{\text{O}}$ 09'19
minimum elong	5618 Jul 19 21:11	0° $\mathring{\text{O}}$ 48'01 10°34'33	evening set	5625 Jul 13 20:36	7° $\mathring{\text{O}}$ 20'01
max. Earth dist.	5618 Jul 19 11:21	0° $\mathring{\text{O}}$ 47'27 48.94670 AU			
morning rise	5618 Jul 31 06:04	1° $\mathring{\text{O}}$ 03'32	conjunction	5625 Jul 26 15:32	7° $\mathring{\text{O}}$ 37'38 -8°59'38
retrograde	5618 Oct 30 08:49	2° $\mathring{\text{O}}$ 17'43	minimum elong	5625 Jul 26 15:42	7° $\mathring{\text{O}}$ 37'39 8°59'39
opposition	5619 Jan 21 11:01	1° $\mathring{\text{O}}$ 18'07 -10°54'38	max. Earth dist.	5625 Jul 25 21:59	7° $\mathring{\text{O}}$ 36'38 48.09310 AU
min. Earth dist.	5619 Jan 21 20:07	1° $\mathring{\text{O}}$ 17'41 46.92714 AU	morning rise	5625 Aug 08 11:57	7° $\mathring{\text{O}}$ 55'22

retrograde	5625 Nov 05 23:54	9°08'30		conjunction	5632 Aug 02 15:44	14°039'39	-7°13'05
opposition	5626 Jan 27 22:20	8°08'13	-9°15'21	minimum elong	5632 Aug 02 15:53	14°039'39	7°13'05
min. Earth dist.	5626 Jan 28 14:49	8°07'26	46.04984 AU	max. Earth dist.	5632 Aug 01 13:20	14°038'06	47.06615 AU
direct	5626 Apr 19 14:55	7°08'15		morning rise	5632 Aug 16 17:51	14°059'26	
evening set	5626 Jul 14 22:31	8°018'53			5632 Aug 17 03:40	15°00	
				retrograde	5632 Nov 13 05:46	16°012'25	
conjunction	5626 Jul 27 21:54	8°036'49	-8°45'08	opposition	5633 Feb 03 14:49	15°011'28	-7°23'48
minimum elong	5626 Jul 27 22:04	8°036'49	8°45'10	min. Earth dist.	5633 Feb 04 15:52	15°010'14	44.99909 AU
max. Earth dist.	5626 Jul 27 02:23	8°035'41	47.95757 AU		5633 Feb 13 10:58	15°00	
morning rise	5626 Aug 09 23:05	8°054'51		direct	5633 Apr 26 01:05	14°010'38	
retrograde	5626 Nov 07 08:43	10°07'55			5633 Jul 04 16:48	15°00	
opposition	5627 Jan 29 03:48	9°07'32	-9°00'10	evening set	5633 Jul 20 18:53	15°021'26	
min. Earth dist.	5627 Jan 29 21:48	9°06'40	45.91159 AU				
direct	5627 Apr 20 17:52	8°07'28		conjunction	5633 Aug 03 23:13	15°041'23	-6°56'56
evening set	5627 Jul 16 00:22	9°018'04		minimum elong	5633 Aug 03 23:22	15°041'24	6°56'57
max. Earth dist.	5627 Jul 28 08:52	9°035'10	47.81917 AU	max. Earth dist.	5633 Aug 02 18:53	15°039'43	46.90123 AU
				morning rise	5633 Aug 18 05:12	16°001'27	
conjunction	5627 Jul 29 04:23	9°036'18	-8°30'23	retrograde	5633 Nov 14 13:41	17°014'27	
minimum elong	5627 Jul 29 04:34	9°036'19	8°30'24	opposition	5634 Feb 04 20:54	16°013'20	-7°06'52
morning rise	5627 Aug 11 09:54	9°054'39		min. Earth dist.	5634 Feb 05 22:50	16°012'04	44.83082 AU
retrograde	5627 Nov 08 16:00	11°07'39		direct	5634 Apr 27 06:37	15°012'19	
opposition	5628 Jan 30 09:21	10°07'12	-8°44'43	evening set	5634 Jul 21 22:51	16°023'12	
min. Earth dist.	5628 Jan 31 04:08	10°06'18	45.77023 AU	max. Earth dist.	5634 Aug 04 01:10	16°041'40	46.73212 AU
direct	5628 Apr 20 22:25	9°07'01					
evening set	5628 Jul 16 02:48	10°017'38		conjunction	5634 Aug 05 06:52	16°043'26	-6°40'32
				minimum elong	5634 Aug 05 07:00	16°043'26	6°40'32
conjunction	5628 Jul 29 11:04	10°036'10	-8°15'23	morning rise	5634 Aug 19 16:26	17°003'46	
minimum elong	5628 Jul 29 11:13	10°036'11	8°15'25	retrograde	5634 Nov 15 18:24	18°016'47	
max. Earth dist.	5628 Jul 28 13:56	10°034'56	47.67761 AU	opposition	5635 Feb 06 03:21	17°015'31	-6°49'41
morning rise	5628 Aug 11 21:02	10°054'48		min. Earth dist.	5635 Feb 07 07:03	17°014'09	44.65874 AU
retrograde	5628 Nov 08 23:33	12°07'47		direct	5635 Apr 28 15:50	16°014'19	
opposition	5629 Jan 30 14:51	11°07'15	-8°29'01	evening set	5635 Jul 23 02:52	17°025'16	
min. Earth dist.	5629 Jan 31 10:16	11°06'19	45.62545 AU	max. Earth dist.	5635 Aug 05 08:29	17°043'59	46.55964 AU
direct	5629 Apr 22 03:08	10°06'58					
evening set	5629 Jul 17 05:29	11°017'37		conjunction	5635 Aug 06 14:26	17°045'46	-6°23'53
				minimum elong	5635 Aug 06 14:35	17°045'46	6°23'55
conjunction	5629 Jul 30 18:02	11°036'27	-8°00'09	morning rise	5635 Aug 21 03:26	18°006'22	
minimum elong	5629 Jul 30 18:12	11°036'27	8°00'10	retrograde	5635 Nov 16 23:49	19°019'26	
max. Earth dist.	5629 Jul 29 19:28	11°035'08	47.53199 AU	opposition	5636 Feb 07 09:46	18°018'00	-6°32'14
morning rise	5629 Aug 13 08:16	11°055'23		min. Earth dist.	5636 Feb 08 13:22	18°016'39	44.48354 AU
retrograde	5629 Nov 10 05:09	13°08'21		direct	5636 Apr 29 00:19	17°016'37	
opposition	5630 Jan 31 20:43	12°07'44	-8°13'05	evening set	5636 Jul 23 07:26	18°027'39	
min. Earth dist.	5630 Feb 01 18:20	12°06'42	45.47627 AU				
direct	5630 Apr 23 09:59	11°07'21		conjunction	5636 Aug 06 22:15	18°048'25	-6°07'00
evening set	5630 Jul 18 08:27	12°018'01		minimum elong	5636 Aug 06 22:23	18°048'26	6°07'00
max. Earth dist.	5630 Jul 31 01:49	12°035'46	47.38176 AU	max. Earth dist.	5636 Aug 05 14:19	18°046'31	46.38419 AU
				morning rise	5636 Aug 21 14:45	19°009'18	
conjunction	5630 Aug 01 01:11	12°037'08	-7°44'42	retrograde	5636 Nov 17 09:05	20°022'26	
minimum elong	5630 Aug 01 01:20	12°037'09	7°44'42	opposition	5637 Feb 07 16:22	19°020'50	-6°14'31
morning rise	5630 Aug 14 19:24	12°056'22		min. Earth dist.	5637 Feb 08 21:38	19°019'23	44.30575 AU
retrograde	5630 Nov 11 10:56	14°09'20		direct	5637 Apr 30 05:12	18°019'16	
opposition	5631 Feb 02 02:31	13°08'38	-7°56'53	evening set	5637 Jul 24 12:08	19°030'24	
min. Earth dist.	5631 Feb 03 00:32	13°07'33	45.32219 AU	max. Earth dist.	5637 Aug 06 22:29	19°049'32	46.20624 AU
direct	5631 Apr 24 17:15	12°08'06					
evening set	5631 Jul 19 11:45	13°018'49		conjunction	5637 Aug 08 06:24	19°051'26	-5°49'51
max. Earth dist.	5631 Aug 01 06:24	13°036'41	47.22645 AU	minimum elong	5637 Aug 08 06:32	19°051'27	5°49'52
				morning rise	5637 Aug 23 01:59	20°012'35	
conjunction	5631 Aug 02 08:21	13°038'13	-7°29'00	retrograde	5637 Nov 18 18:14	21°025'48	
minimum elong	5631 Aug 02 08:31	13°038'14	7°29'01	opposition	5638 Feb 08 23:09	20°024'02	-5°56'32
morning rise	5631 Aug 16 06:44	13°057'44		min. Earth dist.	5638 Feb 10 04:48	20°022'34	44.12554 AU
	5631 Oct 12 06:24	15°00		direct	5638 May 01 10:53	19°022'17	
retrograde	5631 Nov 12 21:20	15°010'42		evening set	5638 Jul 25 17:16	20°033'34	
	5631 Dec 14 15:15	15°00		max. Earth dist.	5638 Aug 08 05:05	20°052'51	46.02607 AU
opposition	5632 Feb 03 08:38	14°009'53	-7°40'28				
min. Earth dist.	5632 Feb 04 08:37	14°08'43	45.16311 AU	conjunction	5638 Aug 09 14:30	20°054'52	-5°32'26
direct	5632 Apr 24 20:17	13°09'13		minimum elong	5638 Aug 09 14:38	20°054'52	5°32'26
evening set	5632 Jul 19 15:03	14°019'58		morning rise	5638 Aug 24 13:17	21°016'15	

retrograde	5638 Nov 20 05:18	22° Ω 29'35	conjunction	5645 Aug 17 06:37	28° Ω 33'23 -3°23'27
opposition	5639 Feb 10 06:03	21° Ω 27'40 -5°38'16	minimum elong	5645 Aug 17 06:42	28° Ω 33'23 3°23'27
min. Earth dist.	5639 Feb 11 12:09	21° Ω 26'11 43.94323 AU	morning rise	5645 Sep 01 22:56	28° Ω 56'29
direct	5639 May 02 15:19	20° Ω 25'44		5645 Oct 27 13:56	0° Υ
evening set	5639 Jul 26 22:37	21° Ω 37'12	retrograde	5645 Nov 27 20:20	0° Υ 11'06
				5645 Dec 29 07:26	30° \Re Ω
conjunction	5639 Aug 10 22:55	21° Ω 58'45 -5°14'46	opposition	5646 Feb 17 12:26	29° Ω 07'58 -3°22'48
minimum elong	5639 Aug 10 23:02	21° Ω 58'45 5°14'47	min. Earth dist.	5646 Feb 19 02:14	29° Ω 06'03 42.57265 AU
max. Earth dist.	5639 Aug 09 12:40	21° Ω 56'41 45.84360 AU	direct	5646 May 09 22:20	28° Ω 04'34
morning rise	5639 Aug 26 00:36	22° Ω 20'24	evening set	5646 Aug 02 23:30	29° Ω 17'44
retrograde	5639 Nov 21 13:41	23° Ω 33'51	max. Earth dist.	5646 Aug 16 20:50	29° Ω 38'16 44.46572 AU
opposition	5640 Feb 11 13:16	22° Ω 31'48 -5°19'43			
min. Earth dist.	5640 Feb 12 20:58	22° Ω 30'13 43.75855 AU	conjunction	5646 Aug 18 16:35	29° Ω 40'59 -3°04'02
direct	5640 May 02 22:21	21° Ω 29'41	minimum elong	5646 Aug 18 16:39	29° Ω 40'59 3°04'02
evening set	5640 Jul 27 04:18	22° Ω 41'20		5646 Aug 31 12:09	0° Υ
max. Earth dist.	5640 Aug 09 20:50	23° Ω 01'02 45.65867 AU	morning rise	5646 Sep 03 10:50	0° Υ 04'18
			retrograde	5646 Nov 29 05:53	1° Υ 19'11
conjunction	5640 Aug 11 07:31	23° Ω 03'09 -4°56'50	opposition	5647 Feb 18 21:05	0° Υ 15'50 -3°02'23
minimum elong	5640 Aug 11 07:39	23° Ω 03'09 4°56'51	min. Earth dist.	5647 Feb 20 12:53	0° Υ 13'47 42.36125 AU
morning rise	5640 Aug 26 12:01	23° Ω 25'03		5647 Mar 03 21:22	30° \Re Ω
retrograde	5640 Nov 21 19:39	24° Ω 38'40	direct	5647 May 11 06:33	29° Ω 12'11
opposition	5641 Feb 11 20:32	23° Ω 36'28 -5°00'54		5647 Jul 16 19:33	0° Υ
min. Earth dist.	5641 Feb 13 04:18	23° Ω 34'52 43.57104 AU	evening set	5647 Aug 04 07:53	0° Υ 25'39
direct	5641 May 04 07:57	22° Ω 34'10	max. Earth dist.	5647 Aug 18 07:09	0° Υ 46'23 44.25350 AU
evening set	5641 Jul 28 10:39	23° Ω 46'03			
max. Earth dist.	5641 Aug 11 03:29	24° Ω 05'51 45.47037 AU	conjunction	5647 Aug 20 02:54	0° Υ 49'07 -2°44'21
			minimum elong	5647 Aug 20 02:58	0° Υ 49'07 2°44'21
conjunction	5641 Aug 12 16:27	24° Ω 08'06 -4°38'39	morning rise	5647 Sep 04 22:43	1° Υ 12'39
minimum elong	5641 Aug 12 16:33	24° Ω 08'06 4°38'40	retrograde	5647 Nov 30 15:24	2° Υ 27'49
morning rise	5641 Aug 27 23:43	24° Ω 30'16	opposition	5648 Feb 20 05:50	1° Υ 24'14 -2°41'41
retrograde	5641 Nov 23 04:48	25° Ω 44'03	min. Earth dist.	5648 Feb 21 21:48	1° Υ 22'11 42.14708 AU
opposition	5642 Feb 13 04:03	24° Ω 41'42 -4°41'49	direct	5648 May 11 15:20	0° Υ 20'20
min. Earth dist.	5642 Feb 14 13:53	24° Ω 40'00 43.37997 AU	evening set	5648 Aug 04 16:48	1° Υ 34'09
direct	5642 May 05 14:46	23° Ω 39'13	max. Earth dist.	5648 Aug 18 15:42	1° Υ 54'57 44.03877 AU
evening set	5642 Jul 29 17:15	24° Ω 51'19			
max. Earth dist.	5642 Aug 12 12:31	25° Ω 11'21 45.27810 AU	conjunction	5648 Aug 20 13:17	1° Υ 57'49 -2°24'25
			minimum elong	5648 Aug 20 13:21	1° Υ 57'49 2°24'25
conjunction	5642 Aug 14 01:45	25° Ω 13'38 -4°20'14	morning rise	5648 Sep 05 10:50	2° Υ 21'34
minimum elong	5642 Aug 14 01:52	25° Ω 13'38 4°20'14	retrograde	5648 Dec 01 05:13	3° Υ 37'03
morning rise	5642 Aug 29 11:21	25° Ω 36'02	opposition	5649 Feb 20 14:54	2° Υ 33'14 -2°20'42
retrograde	5642 Nov 24 14:29	26° Ω 50'01	min. Earth dist.	5649 Feb 22 07:48	2° Υ 31'08 41.93075 AU
opposition	5643 Feb 14 11:53	25° Ω 47'29 -4°22'28	direct	5649 May 12 21:01	1° Υ 29'04
min. Earth dist.	5643 Feb 15 22:27	25° Ω 45'45 43.18460 AU	evening set	5649 Aug 06 02:10	2° Υ 43'17
direct	5643 May 06 21:23	24° Ω 44'49	max. Earth dist.	5649 Aug 20 02:07	3° Υ 04'15 43.82182 AU
evening set	5643 Jul 31 00:12	25° Ω 57'09			
max. Earth dist.	5643 Aug 13 19:32	26° Ω 17'17 45.08145 AU	conjunction	5649 Aug 22 00:10	3° Υ 07'10 -2°04'13
			minimum elong	5649 Aug 22 00:13	3° Υ 07'10 2°04'13
conjunction	5643 Aug 15 10:58	26° Ω 19'42 -4°01'33	morning rise	5649 Sep 06 22:54	3° Υ 31'07
minimum elong	5643 Aug 15 11:04	26° Ω 19'42 4°01'33	retrograde	5649 Dec 02 17:09	4° Υ 46'56
morning rise	5643 Aug 30 23:06	26° Ω 42'20	opposition	5650 Feb 22 00:11	3° Υ 42'54 -1°59'26
retrograde	5643 Nov 26 02:21	27° Ω 56'32	min. Earth dist.	5650 Feb 23 18:13	3° Υ 40'43 41.71244 AU
opposition	5644 Feb 15 19:55	26° Ω 53'49 -4°02'51	direct	5650 May 14 05:12	2° Υ 38'29
min. Earth dist.	5644 Feb 17 07:42	26° Ω 52'00 42.98487 AU	evening set	5650 Aug 07 11:59	3° Υ 53'07
direct	5644 May 07 03:04	25° Ω 50'54	max. Earth dist.	5650 Aug 21 12:28	4° Υ 14'14 43.60322 AU
evening set	5644 Jul 31 07:34	27° Ω 03'30			
max. Earth dist.	5644 Aug 14 03:58	27° Ω 23'47 44.88022 AU	conjunction	5650 Aug 23 11:11	4° Υ 17'12 -1°43'46
			minimum elong	5650 Aug 23 11:14	4° Υ 17'12 1°43'47
conjunction	5644 Aug 15 20:42	27° Ω 26'17 -3°42'37	morning rise	5650 Sep 08 11:09	4° Υ 41'21
minimum elong	5644 Aug 15 20:48	27° Ω 26'18 3°42'39	retrograde	5650 Dec 04 03:35	5° Υ 57'32
morning rise	5644 Aug 31 10:57	27° Ω 49'10	opposition	5651 Feb 23 09:44	4° Υ 53'18 -1°37'54
retrograde	5644 Nov 26 11:38	29° Ω 03'34	min. Earth dist.	5651 Feb 25 03:38	4° Υ 51'07 41.49261 AU
opposition	5645 Feb 16 04:07	28° Ω 00'38 -3°42'58	direct	5651 May 15 15:59	3° Υ 48'38
min. Earth dist.	5645 Feb 17 17:42	27° Ω 58'44 42.78069 AU	evening set	5651 Aug 08 22:11	5° Υ 03'42
direct	5645 May 08 12:18	26° Ω 57'30	max. Earth dist.	5651 Aug 22 22:05	5° Υ 24'55 43.38288 AU
evening set	5645 Aug 01 15:21	28° Ω 10'22			
max. Earth dist.	5645 Aug 15 12:59	28° Ω 30'48 44.67489 AU	conjunction	5651 Aug 24 22:22	5° Υ 28'00 -1°23'04
			minimum elong	5651 Aug 24 22:24	5° Υ 28'00 1°23'04

morning rise	5651 Sep 09 23:21	5° \mathring{M} 52'21	direct	5658 May 23 17:58	12° \mathring{M} 23'26		
retrograde	5651 Dec 05 13:41	7° \mathring{M} 08'57	evening set	5658 Aug 17 14:38	13° \mathring{M} 42'25		
opposition	5652 Feb 24 19:44	6° \mathring{M} 04'30 -1°16'05	max. Earth dist.	5658 Aug 31 07:08	14° \mathring{M} 04'03	41.75843 AU	
min. Earth dist.	5652 Feb 26 15:18	6° \mathring{M} 02'13	41.27107 AU				
direct	5652 May 16 02:35	4° \mathring{M} 59'36	conjunction	5658 Sep 02 16:15	14° \mathring{M} 07'52	1°08'45	
evening set	5652 Aug 09 08:58	6° \mathring{M} 15'09	minimum elong	5658 Sep 02 16:13	14° \mathring{M} 07'52	1°08'45	
max. Earth dist.	5652 Aug 23 10:03	6° \mathring{M} 36'33	43.16067 AU	morning rise	5658 Sep 18 18:07	14° \mathring{M} 33'21	
			retrograde	5658 Dec 14 10:03	15° \mathring{M} 53'29		
conjunction	5652 Aug 25 10:10	6° \mathring{M} 39'38 -1°02'06	opposition	5659 Mar 05 01:55	14° \mathring{M} 47'14	1°24'05	
minimum elong	5652 Aug 25 10:12	6° \mathring{M} 39'38	1°02'08	min. Earth dist.	5659 Mar 07 04:58	14° \mathring{M} 44'29	39.63521 AU
morning rise	5652 Sep 10 11:49	7° \mathring{M} 04'11	direct	5659 May 25 04:24	13° \mathring{M} 40'15		
retrograde	5652 Dec 06 00:21	8° \mathring{M} 21'14	evening set	5659 Aug 19 05:20	14° \mathring{M} 59'52		
opposition	5653 Feb 25 05:46	7° \mathring{M} 16'35 -0°54'00	max. Earth dist.	5659 Sep 01 21:17	15° \mathring{M} 21'36	41.51336 AU	
min. Earth dist.	5653 Feb 27 01:29	7° \mathring{M} 14'17	41.04737 AU				
direct	5653 May 17 12:26	6° \mathring{M} 11'26	conjunction	5659 Sep 04 06:24	15° \mathring{M} 25'26	1°31'23	
evening set	5653 Aug 10 20:35	7° \mathring{M} 27'30	minimum elong	5659 Sep 04 06:22	15° \mathring{M} 25'26	1°31'23	
max. Earth dist.	5653 Aug 24 19:56	7° \mathring{M} 48'55	42.93589 AU	morning rise	5659 Sep 20 07:19	15° \mathring{M} 51'02	
			retrograde	5659 Dec 15 23:34	17° \mathring{M} 11'47		
conjunction	5653 Aug 26 22:15	7° \mathring{M} 52'10 -0°40'54	opposition	5660 Mar 05 14:28	16° \mathring{M} 05'13	1°48'00	
minimum elong	5653 Aug 26 22:16	7° \mathring{M} 52'10	0°40'54	min. Earth dist.	5660 Mar 07 18:06	16° \mathring{M} 02'24	39.38943 AU
morning rise	5653 Sep 12 00:37	8° \mathring{M} 16'55	direct	5660 May 25 15:49	14° \mathring{M} 57'51		
retrograde	5653 Dec 07 14:47	9° \mathring{M} 34'25	evening set	5660 Aug 19 20:58	16° \mathring{M} 18'09		
opposition	5654 Feb 26 16:18	8° \mathring{M} 29'33 -0°31'39	max. Earth dist.	5660 Sep 02 10:26	16° \mathring{M} 39'53	41.26642 AU	
min. Earth dist.	5654 Feb 28 13:37	8° \mathring{M} 27'10	40.82092 AU				
direct	5654 May 18 19:48	7° \mathring{M} 24'10	conjunction	5660 Sep 04 20:57	16° \mathring{M} 43'50	1°54'14	
evening set	5654 Aug 12 08:31	8° \mathring{M} 40'46	minimum elong	5660 Sep 04 20:54	16° \mathring{M} 43'50	1°54'14	
max. Earth dist.	5654 Aug 26 07:45	9° \mathring{M} 02'18	42.70775 AU	morning rise	5660 Sep 20 20:57	17° \mathring{M} 09'33	
			retrograde	5660 Dec 16 16:35	18° \mathring{M} 30'56		
conjunction	5654 Aug 28 10:44	9° \mathring{M} 05'37 -0°19'28	opposition	5661 Mar 07 03:12	17° \mathring{M} 24'02	2°12'09	
minimum elong	5654 Aug 28 10:45	9° \mathring{M} 05'37	0°19'28	min. Earth dist.	5661 Mar 09 07:22	17° \mathring{M} 21'10	39.14225 AU
morning rise	5654 Sep 13 13:16	9° \mathring{M} 30'31	direct	5661 May 27 02:50	16° \mathring{M} 16'17		
retrograde	5654 Dec 09 04:52	10° \mathring{M} 48'32	evening set	5661 Aug 21 13:13	17° \mathring{M} 37'21		
opposition	5655 Feb 28 03:13	9° \mathring{M} 43'26 -0°09'02	max. Earth dist.	5661 Sep 04 00:31	17° \mathring{M} 59'05	41.01803 AU	
min. Earth dist.	5655 Mar 02 01:45	9° \mathring{M} 40'58	40.59086 AU				
direct	5655 May 20 05:25	8° \mathring{M} 37'46	conjunction	5661 Sep 06 12:00	18° \mathring{M} 03'07	2°17'18	
asc. node	5655 Jul 23 03:37	9° \mathring{M} 23'48	minimum elong	5661 Sep 06 11:56	18° \mathring{M} 03'07	2°17'17	
evening set	5655 Aug 13 21:12	9° \mathring{M} 54'56	morning rise	5661 Sep 22 10:33	18° \mathring{M} 28'55		
max. Earth dist.	5655 Aug 27 19:05	10° \mathring{M} 16'31	42.47599 AU	retrograde	5661 Dec 18 08:41	19° \mathring{M} 50'59	
			opposition	5662 Mar 08 16:36	18° \mathring{M} 43'45	2°36'33	
conjunction	5655 Aug 29 23:33	10° \mathring{M} 19'57	0°02'19	min. Earth dist.	5662 Mar 10 22:02	18° \mathring{M} 40'49	38.89399 AU
minimum elong	5655 Aug 29 23:33	10° \mathring{M} 19'57	0°02'19	direct	5662 May 28 16:29	17° \mathring{M} 35'39	
behind sun begin	5655 Aug 29 17:03	10° \mathring{M} 19'33	evening set	5662 Aug 23 06:00	18° \mathring{M} 57'30		
behind sun end	5655 Aug 30 06:04	10° \mathring{M} 20'20	max. Earth dist.	5662 Sep 05 15:48	19° \mathring{M} 19'17	40.76889 AU	
morning rise	5655 Sep 15 02:20	10° \mathring{M} 45'00					
retrograde	5655 Dec 10 20:51	12° \mathring{M} 03'31	conjunction	5662 Sep 08 03:16	19° \mathring{M} 23'21	2°40'34	
opposition	5656 Feb 29 14:20	10° \mathring{M} 58'10	0°13'52	minimum elong	5662 Sep 08 03:11	19° \mathring{M} 23'21	2°40'34
min. Earth dist.	5656 Mar 02 13:27	10° \mathring{M} 55'39	40.35714 AU	morning rise	5662 Sep 24 00:11	19° \mathring{M} 49'13	
direct	5656 May 20 16:02	9° \mathring{M} 52'11	retrograde	5662 Dec 20 00:45	21° \mathring{M} 12'01		
evening set	5656 Aug 14 10:24	11° \mathring{M} 09'56	opposition	5663 Mar 10 06:14	20° \mathring{M} 04'29	3°01'10	
max. Earth dist.	5656 Aug 28 06:24	11° \mathring{M} 31'32	42.24026 AU	min. Earth dist.	5663 Mar 12 11:11	20° \mathring{M} 01'33	38.64522 AU
			direct	5663 May 30 07:23	18° \mathring{M} 56'01		
conjunction	5656 Aug 30 12:47	11° \mathring{M} 35'07	0°24'12	evening set	5663 Aug 24 23:40	20° \mathring{M} 18'42	
minimum elong	5656 Aug 30 12:46	11° \mathring{M} 35'07	0°24'12	max. Earth dist.	5663 Sep 07 05:54	20° \mathring{M} 40'25	40.51916 AU
morning rise	5656 Sep 15 15:28	12° \mathring{M} 00'20					
retrograde	5656 Dec 11 09:43	13° \mathring{M} 19'22	conjunction	5663 Sep 09 19:01	20° \mathring{M} 44'38	3°04'02	
opposition	5657 Mar 02 01:58	12° \mathring{M} 13'43	0°37'01	minimum elong	5663 Sep 09 18:56	20° \mathring{M} 44'38	3°04'01
min. Earth dist.	5657 Mar 04 03:14	12° \mathring{M} 11'05	40.11961 AU	morning rise	5663 Sep 25 14:06	21° \mathring{M} 10'35	
direct	5657 May 22 04:03	11° \mathring{M} 07'25	retrograde	5663 Dec 21 16:06	22° \mathring{M} 34'10		
evening set	5657 Aug 16 00:11	12° \mathring{M} 25'46	opposition	5664 Mar 10 20:23	21° \mathring{M} 26'19	3°26'01	
max. Earth dist.	5657 Aug 29 19:35	12° \mathring{M} 47'28	42.00093 AU	min. Earth dist.	5664 Mar 13 02:53	21° \mathring{M} 23'17	38.39607 AU
			direct	5664 May 30 20:05	20° \mathring{M} 17'31		
conjunction	5657 Sep 01 02:26	12° \mathring{M} 51'06	0°46'22	evening set	5664 Aug 25 17:58	21° \mathring{M} 41'05	
minimum elong	5657 Sep 01 02:24	12° \mathring{M} 51'05	0°46'21	max. Earth dist.	5664 Sep 07 22:35	22° \mathring{M} 02'51	40.26887 AU
morning rise	5657 Sep 17 04:43	13° \mathring{M} 16'27					
retrograde	5657 Dec 12 20:22	14° \mathring{M} 36'01	conjunction	5664 Sep 10 11:23	22° \mathring{M} 07'05	3°27'41	
opposition	5658 Mar 03 13:41	13° \mathring{M} 30'05	1°00'25	minimum elong	5664 Sep 10 11:17	22° \mathring{M} 07'04	3°27'42
min. Earth dist.	5658 Mar 05 15:07	13° \mathring{M} 27'25	39.87875 AU	morning rise	5664 Sep 26 04:10	22° \mathring{M} 33'04	

retrograde	5664 Dec 22 07:05	23°  57'30	evening set	5671 Sep 07 03:09	1°  54'33	
opposition	5665 Mar 12 10:56	22°  49'21 3°51'03	max. Earth dist.	5671 Sep 19 00:32	2°  15'21	38.46949 AU
min. Earth dist.	5665 Mar 14 17:31	22°  46'17 38.14612 AU				
direct	5665 Jun 01 10:18	21°  40'12	conjunction	5671 Sep 21 20:17	2°  20'20	6°17'37
evening set	5665 Aug 27 13:21	23°  04'44	minimum elong	5671 Sep 21 20:06	2°  20'20	6°17'37
max. Earth dist.	5665 Sep 09 13:33	23°  26'23 40.01749 AU	morning rise	5671 Oct 06 12:09	2°  46'05	
			retrograde	5672 Jan 02 20:04	4°  17'37	
conjunction	5665 Sep 12 04:09	23°  30'46 3°51'31	opposition	5672 Mar 22 06:51	3°  07'01	6°51'19
minimum elong	5665 Sep 12 04:02	23°  30'45 3°51'31	min. Earth dist.	5672 Mar 24 19:34	3°  03'28	36.35059 AU
morning rise	5665 Sep 27 18:32	23°  56'47	direct	5672 Jun 10 23:17	1°  55'04	
retrograde	5665 Dec 24 02:16	25°  22'07	evening set	5672 Sep 08 04:45	3°  27'32	
opposition	5666 Mar 14 01:53	24°  13'40 4°16'18	max. Earth dist.	5672 Sep 19 19:48	3°  48'03	38.20742 AU
min. Earth dist.	5666 Mar 16 09:30	24°  10'32 37.89501 AU				
direct	5666 Jun 02 21:41	23°  04'10	conjunction	5672 Sep 22 16:46	3°  53'11	6°42'20
evening set	5666 Aug 29 09:26	24°  29'43	minimum elong	5672 Sep 22 16:33	3°  53'10	6°42'21
max. Earth dist.	5666 Sep 11 06:28	24°  51'18 39.76437 AU	morning rise	5672 Oct 07 03:45	4°  18'47	
			retrograde	5673 Jan 03 18:30	5°  51'31	
conjunction	5666 Sep 13 21:36	24°  55'45 4°15'31	opposition	5673 Mar 24 01:27	4°  40'31	7°17'34
minimum elong	5666 Sep 13 21:28	24°  55'45 4°15'32	min. Earth dist.	5673 Mar 26 14:22	4°  36'56	36.09047 AU
morning rise	5666 Sep 29 08:59	25°  21'48	direct	5673 Jun 12 14:54	3°  28'06	
retrograde	5666 Dec 25 20:20	26°  48'03	evening set	5673 Sep 10 07:13	5°  01'55	
opposition	5667 Mar 15 17:33	25°  39'18 4°41'44	max. Earth dist.	5673 Sep 21 16:33	5°  22'12	37.94565 AU
min. Earth dist.	5667 Mar 18 02:24	25°  36'05 37.64201 AU				
direct	5667 Jun 04 11:20	24°  29'27	conjunction	5673 Sep 24 13:55	5°  27'24	7°07'06
evening set	5667 Aug 31 06:20	25°  56'02	minimum elong	5673 Sep 24 13:42	5°  27'23	7°07'06
max. Earth dist.	5667 Sep 12 23:16	26°  17'30 39.50928 AU	morning rise	5673 Oct 08 19:17	5°  52'49	
			retrograde	5674 Jan 05 16:30	7°  26'49	
conjunction	5667 Sep 15 15:21	26°  22'04 4°39'40	opposition	5674 Mar 25 20:45	6°  15'25	7°43'52
minimum elong	5667 Sep 15 15:13	26°  22'03 4°39'40	min. Earth dist.	5674 Mar 28 10:36	6°  11'45	35.83115 AU
morning rise	5667 Sep 30 23:39	26°  48'06	direct	5674 Jun 14 09:40	5°  02'33	
retrograde	5667 Dec 27 16:39	28°  15'20	evening set	5674 Sep 12 10:47	6°  37'46	
opposition	5668 Mar 16 09:35	27°  06'14 5°07'21	max. Earth dist.	5674 Sep 23 14:27	6°  57'49	37.68513 AU
min. Earth dist.	5668 Mar 18 18:41	27°  02'59 37.38697 AU				
direct	5668 Jun 05 04:17	25°  56'00	conjunction	5674 Sep 26 11:34	7°  03'03	7°31'53
evening set	5668 Sep 01 04:17	27°  23'40	minimum elong	5674 Sep 26 11:19	7°  03'02	7°31'53
max. Earth dist.	5668 Sep 13 15:53	27°  44'58 39.25181 AU	morning rise	5674 Oct 10 11:03	7°  28'16	
			retrograde	5675 Jan 07 16:48	9°  03'35	
conjunction	5668 Sep 16 09:52	27°  49'42 5°03'59	opposition	5675 Mar 27 16:33	7°  51'47	8°10'11
minimum elong	5668 Sep 16 09:43	27°  49'41 5°03'59	min. Earth dist.	5675 Mar 30 05:39	7°  48'08	35.57343 AU
morning rise	5668 Oct 01 14:39	28°  15'41	direct	5675 Jun 16 06:58	6°  38'28	
retrograde	5668 Dec 28 12:26	29°  43'56	evening set	5675 Sep 14 15:17	8°  15'11	
opposition	5669 Mar 18 02:09	28°  34'29 5°33'08	max. Earth dist.	5675 Sep 25 11:29	8°  34'52	37.42615 AU
min. Earth dist.	5669 Mar 20 13:12	28°  31'06 37.12981 AU				
direct	5669 Jun 06 21:10	27°  23'51	conjunction	5675 Sep 28 09:45	8°  40'13	7°56'38
evening set	5669 Sep 03 03:04	28°  52'39	minimum elong	5675 Sep 28 09:30	8°  40'12	7°56'38
max. Earth dist.	5669 Sep 15 10:55	29°  13'50 38.99240 AU	morning rise	5675 Oct 12 02:57	9°  05'12	
			retrograde	5676 Jan 09 16:49	10°  41'55	
conjunction	5669 Sep 18 04:56	29°  18'37 5°28'25	opposition	5676 Mar 28 13:08	9°  29'43	8°36'30
minimum elong	5669 Sep 18 04:46	29°  18'36 5°28'24	min. Earth dist.	5676 Mar 31 03:25	9°  25'59	35.31750 AU
morning rise	5669 Oct 03 05:44	29°  44'33	direct	5676 Jun 17 02:48	8°  15'58	
	5669 Oct 12 12:20	0°  13'50	evening set	5676 Sep 15 21:04	9°  54'16	
retrograde	5669 Dec 30 06:23	1°  13'50	max. Earth dist.	5676 Sep 26 11:22	10°  13'40	37.16892 AU
opposition	5670 Mar 19 19:12	0°  04'02 5°59'04				
min. Earth dist.	5670 Mar 22 06:06	0°  00'38 36.87095 AU	conjunction	5676 Sep 29 08:51	10°  19'02	8°21'20
	5670 Mar 22 17:02	30°  11'00	minimum elong	5676 Sep 29 08:35	10°  19'00	8°21'21
direct	5670 Jun 08 15:18	28°  52'58	morning rise	5676 Oct 12 19:06	10°  43'43	
	5670 Aug 22 06:03	0°  13'50	retrograde	5677 Jan 10 14:31	12°  21'54	
evening set	5670 Sep 05 02:41	0°  22'56	opposition	5677 Mar 30 10:09	11°  09'21	9°02'45
max. Earth dist.	5670 Sep 17 04:16	0°  43'51 38.73141 AU	min. Earth dist.	5677 Apr 01 23:54	11°  05'37	35.06324 AU
			direct	5677 Jun 19 00:08	9°  55'10	
conjunction	5670 Sep 20 00:13	0°  48'49 5°52'58	evening set	5677 Sep 18 04:10	11°  35'06	
minimum elong	5670 Sep 20 00:02	0°  48'49 5°52'59	max. Earth dist.	5677 Sep 28 09:41	11°  54'02	36.91315 AU
morning rise	5670 Oct 04 20:54	1°  14'41				
retrograde	5671 Jan 01 01:16	2°  45'04	conjunction	5677 Oct 01 08:31	11°  59'33	8°45'58
opposition	5671 Mar 21 12:49	1°  34'52 6°25'08	minimum elong	5677 Oct 01 08:15	11°  59'32	8°45'59
min. Earth dist.	5671 Mar 24 01:08	1°  31'22 36.61103 AU	morning rise	5677 Oct 14 11:35	12°  23'55	
direct	5671 Jun 10 06:49	0°  23'22	retrograde	5678 Jan 12 14:40	14°  03'39	

opposition	5678 Apr 01 08:01	12° <u>♂</u> 50'44	9°28'57	minimum elong	5684 Oct 14 02:44	24° <u>♂</u> 33'35	11°33'41
min. Earth dist.	5678 Apr 03 22:37	12° <u>♂</u> 46'55	34.81041 AU	morning rise	5684 Oct 24 10:43	24° <u>♂</u> 54'09	
direct	5678 Jun 20 19:13	11° <u>♂</u> 36'07		retrograde	5685 Jan 25 15:33	26° <u>♂</u> 46'45	
evening set	5678 Sep 20 12:14	13° <u>♂</u> 17'47		opposition	5685 Apr 13 13:28	25° <u>♂</u> 30'53	12°27'18
max. Earth dist.	5678 Sep 30 10:31	13° <u>♂</u> 36'20	36.65829 AU	min. Earth dist.	5685 Apr 16 06:19	25° <u>♂</u> 26'45	33.06671 AU
				direct	5685 Jul 02 17:37	24° <u>♂</u> 12'55	
conjunction	5678 Oct 03 08:55	13° <u>♂</u> 41'51	9°10'30	evening set	5685 Oct 06 12:08	26° <u>♂</u> 08'50	
minimum elong	5678 Oct 03 08:37	13° <u>♂</u> 41'50	9°10'31	max. Earth dist.	5685 Oct 13 08:30	26° <u>♂</u> 22'34	34.90086 AU
morning rise	5678 Oct 16 03:57	14° <u>♂</u> 05'51					
retrograde	5679 Jan 14 14:30	15° <u>♂</u> 47'13		conjunction	5685 Oct 16 08:49	26° <u>♂</u> 28'38	11°56'25
opposition	5679 Apr 03 06:41	14° <u>♂</u> 33'55	9°55'02	minimum elong	5685 Oct 16 08:28	26° <u>♂</u> 28'37	11°56'26
min. Earth dist.	5679 Apr 05 21:45	14° <u>♂</u> 30'03	34.55833 AU	morning rise	5685 Oct 26 03:55	26° <u>♂</u> 48'21	
direct	5679 Jun 22 15:34	13° <u>♂</u> 18'52		retrograde	5686 Jan 27 20:03	28° <u>♂</u> 43'08	
evening set	5679 Sep 22 21:53	15° <u>♂</u> 02'19		opposition	5686 Apr 15 17:24	27° <u>♂</u> 26'50	12°51'28
max. Earth dist.	5679 Oct 02 10:40	15° <u>♂</u> 20'18	36.40410 AU	min. Earth dist.	5686 Apr 18 09:53	27° <u>♂</u> 22'42	32.82638 AU
				direct	5686 Jul 04 19:59	26° <u>♂</u> 08'23	
conjunction	5679 Oct 05 10:03	15° <u>♂</u> 25'58	9°34'55	evening set	5686 Oct 09 07:38	28° <u>♂</u> 06'42	
minimum elong	5679 Oct 05 09:45	15° <u>♂</u> 25'57	9°34'55	max. Earth dist.	5686 Oct 15 14:32	28° <u>♂</u> 19'27	34.65973 AU
morning rise	5679 Oct 17 20:49	15° <u>♂</u> 49'32					
retrograde	5680 Jan 16 17:38	17° <u>♂</u> 32'36		conjunction	5686 Oct 18 14:56	28° <u>♂</u> 25'36	12°18'41
opposition	5680 Apr 04 05:50	16° <u>♂</u> 18'54	10°21'00	minimum elong	5686 Oct 18 14:34	28° <u>♂</u> 25'34	12°18'41
min. Earth dist.	5680 Apr 06 21:00	16° <u>♂</u> 15'00	34.30692 AU	morning rise	5686 Oct 27 20:55	28° <u>♂</u> 44'24	
direct	5680 Jun 23 12:40	15° <u>♂</u> 03'23			5686 Dec 08 13:25	0° <u>♂</u>	
evening set	5680 Sep 24 08:45	16° <u>♂</u> 48'42		retrograde	5687 Jan 30 03:24	0° <u>♂</u> 41'28	
max. Earth dist.	5680 Oct 03 11:57	17° <u>♂</u> 06'07	36.15023 AU		5687 Mar 25 06:56	30° <u>♂</u>	
				opposition	5687 Apr 17 22:01	29° <u>♂</u> 24'45	13°15'06
conjunction	5680 Oct 06 12:07	17° <u>♂</u> 11'53	9°59'10	min. Earth dist.	5687 Apr 20 13:44	29° <u>♂</u> 20'38	32.59050 AU
minimum elong	5680 Oct 06 11:47	17° <u>♂</u> 11'52	9°59'10	direct	5687 Jul 06 22:58	28° <u>♂</u> 05'49	
morning rise	5680 Oct 18 13:52	17° <u>♂</u> 34'59			5687 Oct 08 22:03	0° <u>♂</u>	
retrograde	5681 Jan 17 20:37	19° <u>♂</u> 19'48		evening set	5687 Oct 12 04:54	0° <u>♂</u> 06'41	
opposition	5681 Apr 06 06:01	18° <u>♂</u> 05'40	10°46'47	max. Earth dist.	5687 Oct 17 22:29	0° <u>♂</u> 18'25	34.42314 AU
min. Earth dist.	5681 Apr 08 22:25	18° <u>♂</u> 01'41	34.05594 AU				
direct	5681 Jun 25 12:16	16° <u>♂</u> 49'41		conjunction	5687 Oct 20 22:10	0° <u>♂</u> 24'34	12°40'24
evening set	5681 Sep 26 21:04	18° <u>♂</u> 36'57		minimum elong	5687 Oct 20 21:49	0° <u>♂</u> 24'32	12°40'24
max. Earth dist.	5681 Oct 05 14:45	18° <u>♂</u> 53'47	35.89702 AU	morning rise	5687 Oct 29 14:01	0° <u>♂</u> 42'21	
				retrograde	5688 Feb 01 10:32	2° <u>♂</u> 41'50	
conjunction	5681 Oct 08 14:46	18° <u>♂</u> 59'36	10°23'12	opposition	5688 Apr 19 03:29	1° <u>♂</u> 24'43	13°38'08
minimum elong	5681 Oct 08 14:27	18° <u>♂</u> 59'35	10°23'13	min. Earth dist.	5688 Apr 21 19:28	1° <u>♂</u> 20'33	32.35942 AU
morning rise	5681 Oct 20 06:55	19° <u>♂</u> 22'10		direct	5688 Jul 08 02:26	0° <u>♂</u> 05'19	
retrograde	5682 Jan 20 01:34	21° <u>♂</u> 08'48		evening set	5688 Oct 14 04:13	2° <u>♂</u> 08'53	
opposition	5682 Apr 08 06:43	19° <u>♂</u> 54'15	11°12'22	max. Earth dist.	5688 Oct 19 07:16	2° <u>♂</u> 19'29	34.19172 AU
min. Earth dist.	5682 Apr 10 22:30	19° <u>♂</u> 50'16	33.80585 AU				
direct	5682 Jun 27 13:57	18° <u>♂</u> 37'46		conjunction	5688 Oct 22 06:10	2° <u>♂</u> 25'37	13°01'30
evening set	5682 Sep 29 10:37	20° <u>♂</u> 27'04		minimum elong	5688 Oct 22 05:47	2° <u>♂</u> 25'35	13°01'31
max. Earth dist.	5682 Oct 07 16:52	20° <u>♂</u> 43'09	35.64478 AU	morning rise	5688 Oct 30 06:50	2° <u>♂</u> 42'17	
				retrograde	5689 Feb 02 20:41	4° <u>♂</u> 44'19	
conjunction	5682 Oct 10 18:09	20° <u>♂</u> 49'07	10°47'01	opposition	5689 Apr 21 09:46	3° <u>♂</u> 26'49	14°00'29
minimum elong	5682 Oct 10 17:48	20° <u>♂</u> 49'06	10°47'01	min. Earth dist.	5689 Apr 24 00:17	3° <u>♂</u> 22'44	32.13346 AU
morning rise	5682 Oct 22 00:11	21° <u>♂</u> 11'05		direct	5689 Jul 10 08:10	2° <u>♂</u> 06'59	
retrograde	5683 Jan 22 05:36	22° <u>♂</u> 59'37		evening set	5689 Oct 17 05:22	4° <u>♂</u> 13'23	
opposition	5683 Apr 10 08:17	21° <u>♂</u> 44'38	11°37'41	max. Earth dist.	5689 Oct 21 16:04	4° <u>♂</u> 22'41	33.96521 AU
min. Earth dist.	5683 Apr 13 01:21	21° <u>♂</u> 40'33	33.55720 AU				
direct	5683 Jun 29 14:02	20° <u>♂</u> 27'40		conjunction	5689 Oct 24 14:57	4° <u>♂</u> 28'52	13°21'55
evening set	5683 Oct 02 01:34	22° <u>♂</u> 19'03		minimum elong	5689 Oct 24 14:36	4° <u>♂</u> 28'50	13°21'57
max. Earth dist.	5683 Oct 09 21:56	22° <u>♂</u> 34'29	35.39426 AU	morning rise	5689 Oct 31 23:21	4° <u>♂</u> 44'17	
				retrograde	5690 Feb 05 07:17	6° <u>♂</u> 48'59	
conjunction	5683 Oct 12 22:16	22° <u>♂</u> 40'27	11°10'31	opposition	5690 Apr 23 17:03	5° <u>♂</u> 31'07	14°22'07
minimum elong	5683 Oct 12 21:56	22° <u>♂</u> 40'25	11°10'32	min. Earth dist.	5690 Apr 26 08:07	5° <u>♂</u> 26'59	31.91238 AU
morning rise	5683 Oct 23 17:19	23° <u>♂</u> 01'44		direct	5690 Jul 12 14:09	4° <u>♂</u> 10'53	
retrograde	5684 Jan 24 09:38	24° <u>♂</u> 52'15		evening set	5690 Oct 20 09:02	6° <u>♂</u> 20'16	
opposition	5684 Apr 11 10:32	23° <u>♂</u> 36'50	12°02'42	max. Earth dist.	5690 Oct 24 03:19	6° <u>♂</u> 28'13	33.74358 AU
min. Earth dist.	5684 Apr 14 02:57	23° <u>♂</u> 32'45	33.31053 AU				
direct	5684 Jun 30 17:03	22° <u>♂</u> 19'22		conjunction	5690 Oct 27 00:40	6° <u>♂</u> 34'20	13°41'37
evening set	5684 Oct 03 18:07	24° <u>♂</u> 12'58		minimum elong	5690 Oct 27 00:17	6° <u>♂</u> 34'18	13°41'38
max. Earth dist.	5684 Oct 11 01:35	24° <u>♂</u> 27'29	35.14602 AU	morning rise	5690 Nov 02 15:08	6° <u>♂</u> 48'20	
				retrograde	5691 Feb 07 19:32	8° <u>♂</u> 55'52	
conjunction	5684 Oct 14 03:06	24° <u>♂</u> 33'37	11°33'41	opposition	5691 Apr 26 01:05	7° <u>♂</u> 37'39	14°42'57

min. Earth dist.	5691 Apr 28 14:52	7° \mathbb{M} .33'34	31.69591 AU	min. Earth dist.	5698 May 13 18:44	23° \mathbb{M} .16'38	30.31685 AU
direct	5691 Jul 14 23:22	6° \mathbb{M} .17'00		direct	5698 Jul 30 00:41	21° \mathbb{M} .56'54	
evening set	5691 Oct 23 15:18	8° \mathbb{M} .29'34		max. Earth dist.	5698 Nov 11 20:17	24° \mathbb{M} .25'55	32.15028 AU
max. Earth dist.	5691 Oct 26 13:14	8° \mathbb{M} .35'47	33.52641 AU				
				conjunction	5698 Nov 14 10:52	24° \mathbb{M} .31'51	15°44'58
conjunction	5691 Oct 29 11:09	8° \mathbb{M} .42'01	14°00'31	minimum elong	5698 Nov 14 10:36	24° \mathbb{M} .31'49	15°45'00
minimum elong	5691 Oct 29 10:48	8° \mathbb{M} .41'59	14°00'32	retrograde	5699 Feb 26 07:17	27° \mathbb{M} .03'43	
morning rise	5691 Nov 04 06:01	8° \mathbb{M} .54'23		opposition	5699 May 14 00:55	25° \mathbb{M} .42'30	16°52'16
retrograde	5692 Feb 10 07:00	11° \mathbb{M} .04'58		min. Earth dist.	5699 May 16 09:01	25° \mathbb{M} .38'37	30.14618 AU
opposition	5692 Apr 27 10:08	9° \mathbb{M} .46'23	15°02'56	direct	5699 Aug 01 14:35	24° \mathbb{M} .18'29	
min. Earth dist.	5692 Apr 30 00:21	9° \mathbb{M} .42'14	31.48381 AU	max. Earth dist.	5699 Nov 14 15:25	26° \mathbb{M} .48'59	31.98224 AU
direct	5692 Jul 16 06:30	8° \mathbb{M} .25'19					
evening set	5692 Oct 26 01:21	10° \mathbb{M} .41'18		conjunction	5699 Nov 17 03:17	26° \mathbb{M} .54'42	15°54'55
max. Earth dist.	5692 Oct 28 02:19	10° \mathbb{M} .45'42	33.31356 AU	minimum elong	5699 Nov 17 03:04	26° \mathbb{M} .54'40	15°54'56
				retrograde	5700 Mar 01 00:39	29° \mathbb{M} .27'40	
conjunction	5692 Oct 30 22:41	10° \mathbb{M} .51'52	14°18'35	opposition	5700 May 16 16:29	28° \mathbb{M} .06'09	17°02'25
minimum elong	5692 Oct 30 22:20	10° \mathbb{M} .51'50	14°18'35	min. Earth dist.	5700 May 18 21:58	28° \mathbb{M} .02'26	29.98435 AU
morning rise	5692 Nov 04 19:02	11° \mathbb{M} .02'20		direct	5700 Aug 04 07:36	26° \mathbb{M} .41'48	
retrograde	5693 Feb 11 18:28	13° \mathbb{M} .16'11		max. Earth dist.	5700 Nov 17 09:33	29° \mathbb{M} .13'34	31.82353 AU
opposition	5693 Apr 29 20:02	11° \mathbb{M} .57'14	15°22'00				
min. Earth dist.	5693 May 02 09:24	11° \mathbb{M} .53'07	31.27591 AU	conjunction	5700 Nov 19 20:21	29° \mathbb{M} .19'13	16°03'22
direct	5693 Jul 18 16:24	10° \mathbb{M} .35'44		minimum elong	5700 Nov 19 20:08	29° \mathbb{M} .19'12	16°03'24
evening set	5693 Oct 29 16:39	12° \mathbb{M} .55'35			5700 Dec 07 16:57	0° \mathbb{M}	
max. Earth dist.	5693 Oct 30 14:05	12° \mathbb{M} .57'32	33.10525 AU	retrograde	5701 Mar 03 18:30	1° \mathbb{M} .53'17	
				opposition	5701 May 19 08:48	0° \mathbb{M} .31'29	17°10'55
conjunction	5693 Nov 02 10:53	13° \mathbb{M} .03'47	14°35'43	min. Earth dist.	5701 May 21 13:16	0° \mathbb{M} .27'51	29.83195 AU
minimum elong	5693 Nov 02 10:33	13° \mathbb{M} .03'46	14°35'44		5701 Jun 07 15:49	30° \mathbb{M}	
morning rise	5693 Nov 06 04:21	13° \mathbb{M} .11'55		direct	5701 Aug 06 22:17	29° \mathbb{M} .06'52	
	5694 Jan 02 17:38	15° \mathbb{M}			5701 Oct 03 20:05	0° \mathbb{M}	
retrograde	5694 Feb 14 08:30	15° \mathbb{M} .29'27		max. Earth dist.	5701 Nov 20 06:34	1° \mathbb{M} .40'04	31.67463 AU
	5694 Mar 29 21:37	15° \mathbb{M}					
opposition	5694 May 02 06:50	14° \mathbb{M} .10'08	15°40'03	conjunction	5701 Nov 22 14:06	1° \mathbb{M} .45'27	16°10'15
min. Earth dist.	5694 May 04 19:39	14° \mathbb{M} .06'02	31.07271 AU	minimum elong	5701 Nov 22 13:57	1° \mathbb{M} .45'26	16°10'16
direct	5694 Jul 21 01:02	12° \mathbb{M} .48'12		retrograde	5702 Mar 06 13:10	4° \mathbb{M} .20'32	
	5694 Oct 27 22:06	15° \mathbb{M}		opposition	5702 May 22 01:53	2° \mathbb{M} .58'31	17°17'42
evening set	5694 Nov 02 19:19	15° \mathbb{M} .12'54		min. Earth dist.	5702 May 24 04:02	2° \mathbb{M} .55'01	29.68895 AU
max. Earth dist.	5694 Nov 02 04:40	15° \mathbb{M} .11'33	32.90179 AU	direct	5702 Aug 09 16:01	1° \mathbb{M} .33'40	
				max. Earth dist.	5702 Nov 23 01:39	4° \mathbb{M} .08'02	31.53538 AU
conjunction	5694 Nov 04 23:50	15° \mathbb{M} .17'43	14°51'53				
minimum elong	5694 Nov 04 23:30	15° \mathbb{M} .17'41	14°51'54	conjunction	5702 Nov 25 08:11	4° \mathbb{M} .13'20	16°15'30
morning rise	5694 Nov 07 03:39	15° \mathbb{M} .22'28		minimum elong	5702 Nov 25 08:02	4° \mathbb{M} .13'19	16°15'32
retrograde	5695 Feb 16 20:07	17° \mathbb{M} .44'42		retrograde	5703 Mar 09 09:18	6° \mathbb{M} .49'24	
opposition	5695 May 04 18:32	16° \mathbb{M} .24'59	15°57'02	opposition	5703 May 24 19:36	5° \mathbb{M} .27'12	17°22'44
min. Earth dist.	5695 May 07 07:01	16° \mathbb{M} .20'53	30.87444 AU	min. Earth dist.	5703 May 26 20:07	5° \mathbb{M} .23'48	29.55528 AU
direct	5695 Jul 23 11:02	15° \mathbb{M} .02'38		direct	5703 Aug 12 08:35	4° \mathbb{M} .02'07	
max. Earth dist.	5695 Nov 04 18:50	17° \mathbb{M} .27'23	32.70388 AU	max. Earth dist.	5703 Nov 25 23:47	6° \mathbb{M} .37'48	31.40545 AU
conjunction	5695 Nov 07 13:33	17° \mathbb{M} .33'34	15°06'58	conjunction	5703 Nov 28 03:09	6° \mathbb{M} .42'50	16°19'06
minimum elong	5695 Nov 07 13:15	17° \mathbb{M} .33'32	15°06'59	minimum elong	5703 Nov 28 03:04	6° \mathbb{M} .42'49	16°19'07
retrograde	5696 Feb 19 10:01	20° \mathbb{M} .01'49		retrograde	5704 Mar 11 03:18	9° \mathbb{M} .19'47	
opposition	5696 May 06 06:46	18° \mathbb{M} .41'43	16°12'50	opposition	5704 May 26 13:58	7° \mathbb{M} .57'25	17°25'57
min. Earth dist.	5696 May 08 17:53	18° \mathbb{M} .37'42	30.68193 AU	min. Earth dist.	5704 May 28 12:57	7° \mathbb{M} .54'07	29.43043 AU
direct	5696 Jul 24 23:02	17° \mathbb{M} .18'55		direct	5704 Aug 14 02:47	6° \mathbb{M} .32'10	
max. Earth dist.	5696 Nov 06 10:42	19° \mathbb{M} .45'09	32.51202 AU	max. Earth dist.	5704 Nov 27 20:14	9° \mathbb{M} .08'50	31.28471 AU
conjunction	5696 Nov 09 04:07	19° \mathbb{M} .51'15	15°20'54	conjunction	5704 Nov 29 22:30	9° \mathbb{M} .13'47	16°20'59
minimum elong	5696 Nov 09 03:49	19° \mathbb{M} .51'13	15°20'56	minimum elong	5704 Nov 29 22:25	9° \mathbb{M} .13'47	16°21'01
retrograde	5697 Feb 20 23:35	22° \mathbb{M} .20'45		retrograde	5705 Mar 14 00:03	11° \mathbb{M} .51'34	
opposition	5697 May 08 20:07	21° \mathbb{M} .00'16	16°27'23	opposition	5705 May 29 09:01	10° \mathbb{M} .29'02	17°27'19
min. Earth dist.	5697 May 11 07:05	20° \mathbb{M} .56'13	30.49574 AU	min. Earth dist.	5705 May 31 05:45	10° \mathbb{M} .25'53	29.31449 AU
direct	5697 Jul 27 10:31	19° \mathbb{M} .37'02		direct	5705 Aug 16 21:03	9° \mathbb{M} .03'36	
max. Earth dist.	5697 Nov 09 03:20	22° \mathbb{M} .04'42	32.32724 AU	max. Earth dist.	5705 Nov 30 19:05	11° \mathbb{M} .41'23	31.17298 AU
conjunction	5697 Nov 11 19:06	22° \mathbb{M} .10'42	15°33'36	conjunction	5705 Dec 02 18:18	11° \mathbb{M} .46'03	16°21'09
minimum elong	5697 Nov 11 18:50	22° \mathbb{M} .10'40	15°33'38	minimum elong	5705 Dec 02 18:16	11° \mathbb{M} .46'03	16°21'10
retrograde	5698 Feb 23 15:31	24° \mathbb{M} .41'23		retrograde	5706 Mar 16 19:13	14° \mathbb{M} .24'33	
opposition	5698 May 11 10:06	23° \mathbb{M} .20'32	16°40'33	opposition	5706 Jun 01 04:46	13° \mathbb{M} .01'52	17°26'48

min. Earth dist.	5706 Jun 03 00:21	12° $\mathring{\text{A}}$ 58'47	29.20726 AU	min. Earth dist.	5714 Jun 23 03:34	3° $\mathring{\text{B}}$ 43'46	28.71483 AU
direct	5706 Aug 19 15:08	11° $\mathring{\text{A}}$ 36'17		direct	5714 Sep 09 19:01	2° $\mathring{\text{B}}$ 19'21	
max. Earth dist.	5706 Dec 03 16:50	14° $\mathring{\text{A}}$ 14'54	31.07057 AU				
conjunction	5706 Dec 05 14:25	14° $\mathring{\text{A}}$ 19'26	16°19'31	conjunction	5714 Dec 26 11:37	5° $\mathring{\text{B}}$ 03'59	15°00'07
minimum elong	5706 Dec 05 14:24	14° $\mathring{\text{A}}$ 19'26	16°19'34	minimum elong	5714 Dec 26 11:54	5° $\mathring{\text{B}}$ 04'01	15°00'09
retrograde	5707 Mar 19 15:27	16° $\mathring{\text{A}}$ 58'33		max. Earth dist.	5714 Dec 25 14:10	5° $\mathring{\text{B}}$ 01'50	30.63580 AU
opposition	5707 Jun 04 00:41	15° $\mathring{\text{A}}$ 35'43	17°24'22	retrograde	5715 Apr 09 07:37	7° $\mathring{\text{B}}$ 44'20	
min. Earth dist.	5707 Jun 05 17:23	15° $\mathring{\text{A}}$ 32'51	29.10913 AU	opposition	5715 Jun 25 02:29	6° $\mathring{\text{B}}$ 21'07	15°52'48
direct	5707 Aug 22 11:21	14° $\mathring{\text{A}}$ 09'59		min. Earth dist.	5715 Jun 25 22:31	6° $\mathring{\text{B}}$ 19'42	28.70588 AU
max. Earth dist.	5707 Dec 06 15:59	16° $\mathring{\text{A}}$ 49'27	30.97753 AU	direct	5715 Sep 12 17:41	4° $\mathring{\text{B}}$ 55'14	
				evening set	5715 Dec 26 04:21	7° $\mathring{\text{B}}$ 31'59	
conjunction	5707 Dec 08 10:59	16° $\mathring{\text{A}}$ 53'45	16°16'06	conjunction	5715 Dec 29 07:54	7° $\mathring{\text{B}}$ 39'35	14°41'56
minimum elong	5707 Dec 08 11:02	16° $\mathring{\text{A}}$ 53'45	16°16'07	minimum elong	5715 Dec 29 08:12	7° $\mathring{\text{B}}$ 39'36	14°41'57
retrograde	5708 Mar 21 10:09	19° $\mathring{\text{A}}$ 33'22		max. Earth dist.	5715 Dec 28 12:30	7° $\mathring{\text{B}}$ 37'38	30.63572 AU
opposition	5708 Jun 05 21:16	18° $\mathring{\text{A}}$ 10'24	17°19'58	morning rise	5716 Jan 01 11:57	7° $\mathring{\text{B}}$ 47'14	
min. Earth dist.	5708 Jun 07 12:52	18° $\mathring{\text{A}}$ 07'36	29.02023 AU	retrograde	5716 Apr 11 05:16	10° $\mathring{\text{B}}$ 19'40	
direct	5708 Aug 24 07:20	16° $\mathring{\text{A}}$ 44'32		opposition	5716 Jun 26 23:57	8° $\mathring{\text{B}}$ 56'33	15°32'29
max. Earth dist.	5708 Dec 08 15:01	19° $\mathring{\text{A}}$ 24'42	30.89441 AU	min. Earth dist.	5716 Jun 27 16:35	8° $\mathring{\text{B}}$ 55'23	28.70860 AU
				direct	5716 Sep 14 15:42	7° $\mathring{\text{B}}$ 30'49	
conjunction	5708 Dec 10 07:36	19° $\mathring{\text{A}}$ 28'46	16°10'51	evening set	5716 Dec 26 15:10	10° $\mathring{\text{B}}$ 03'51	
minimum elong	5708 Dec 10 07:40	19° $\mathring{\text{A}}$ 28'46	16°10'53				
retrograde	5709 Mar 24 07:11	22° $\mathring{\text{A}}$ 08'47		conjunction	5716 Dec 31 04:01	10° $\mathring{\text{B}}$ 14'47	14°22'03
opposition	5709 Jun 08 18:01	20° $\mathring{\text{A}}$ 45'42	17°13'35	minimum elong	5716 Dec 31 04:21	10° $\mathring{\text{B}}$ 14'49	14°22'05
min. Earth dist.	5709 Jun 10 06:19	20° $\mathring{\text{A}}$ 43'08	28.94109 AU	max. Earth dist.	5716 Dec 30 12:46	10° $\mathring{\text{B}}$ 13'15	30.64711 AU
direct	5709 Aug 27 04:38	19° $\mathring{\text{A}}$ 19'43		morning rise	5717 Jan 04 17:17	10° $\mathring{\text{B}}$ 25'45	
max. Earth dist.	5709 Dec 11 14:18	22° $\mathring{\text{A}}$ 00'28	30.82160 AU	retrograde	5717 Apr 14 00:22	12° $\mathring{\text{B}}$ 54'30	
				opposition	5717 Jun 29 21:29	11° $\mathring{\text{B}}$ 31'31	15°10'23
conjunction	5709 Dec 13 04:23	22° $\mathring{\text{A}}$ 04'18	16°03'45	min. Earth dist.	5717 Jun 30 12:08	11° $\mathring{\text{B}}$ 30'30	28.72231 AU
minimum elong	5709 Dec 13 04:30	22° $\mathring{\text{A}}$ 04'18	16°03'46	direct	5717 Sep 17 14:17	10° $\mathring{\text{B}}$ 05'59	
retrograde	5710 Mar 27 02:15	24° $\mathring{\text{A}}$ 44'37		evening set	5717 Dec 28 08:34	12° $\mathring{\text{B}}$ 35'52	
opposition	5710 Jun 11 15:11	23° $\mathring{\text{A}}$ 21'25	17°05'10				
min. Earth dist.	5710 Jun 13 01:58	23° $\mathring{\text{A}}$ 18'57	28.87245 AU	conjunction	5718 Jan 02 23:46	12° $\mathring{\text{B}}$ 49'25	14°00'34
direct	5710 Aug 30 01:00	21° $\mathring{\text{A}}$ 55'20		minimum elong	5718 Jan 03 00:06	12° $\mathring{\text{B}}$ 49'27	14°00'35
max. Earth dist.	5710 Dec 14 14:29	24° $\mathring{\text{A}}$ 36'39	30.76001 AU	max. Earth dist.	5718 Jan 02 10:33	12° $\mathring{\text{B}}$ 48'05	30.66961 AU
				morning rise	5718 Jan 08 15:21	13° $\mathring{\text{B}}$ 02'59	
conjunction	5710 Dec 16 01:04	24° $\mathring{\text{A}}$ 40'08	15°54'46	retrograde	5718 Apr 16 20:29	15° $\mathring{\text{B}}$ 28'42	
minimum elong	5710 Dec 16 01:13	24° $\mathring{\text{A}}$ 40'09	15°54'48	opposition	5718 Jul 02 18:38	14° $\mathring{\text{B}}$ 05'51	14°46'34
retrograde	5711 Mar 29 22:27	27° $\mathring{\text{A}}$ 20'38		min. Earth dist.	5718 Jul 03 05:30	14° $\mathring{\text{B}}$ 05'05	28.74677 AU
opposition	5711 Jun 14 12:25	25° $\mathring{\text{A}}$ 57'21	16°54'45	direct	5718 Sep 20 12:36	12° $\mathring{\text{B}}$ 40'30	
min. Earth dist.	5711 Jun 15 19:46	25° $\mathring{\text{A}}$ 55'08	28.81488 AU	evening set	5718 Dec 30 05:09	15° $\mathring{\text{B}}$ 07'32	
direct	5711 Sep 02 00:40	24° $\mathring{\text{A}}$ 31'13					
				conjunction	5719 Jan 05 19:15	15° $\mathring{\text{B}}$ 23'20	13°37'32
conjunction	5711 Dec 18 21:49	27° $\mathring{\text{A}}$ 16'08	15°43'54	minimum elong	5719 Jan 05 19:37	15° $\mathring{\text{B}}$ 23'22	13°37'34
minimum elong	5711 Dec 18 22:00	27° $\mathring{\text{A}}$ 16'09	15°43'55	max. Earth dist.	5719 Jan 05 09:37	15° $\mathring{\text{B}}$ 22'22	30.70266 AU
max. Earth dist.	5711 Dec 17 13:37	27° $\mathring{\text{A}}$ 12'53	30.71009 AU	morning rise	5719 Jan 12 09:33	15° $\mathring{\text{B}}$ 39'08	
retrograde	5712 Mar 31 18:45	29° $\mathring{\text{A}}$ 56'44		retrograde	5719 Apr 19 13:55	18° $\mathring{\text{B}}$ 02'04	
opposition	5712 Jun 16 09:47	28° $\mathring{\text{A}}$ 33'24	16°42'16	opposition	5719 Jul 05 15:42	16° $\mathring{\text{B}}$ 39'22	14°21'08
min. Earth dist.	5712 Jun 17 14:49	28° $\mathring{\text{A}}$ 31'20	28.76921 AU	min. Earth dist.	5719 Jul 06 00:56	16° $\mathring{\text{B}}$ 38'44	28.78148 AU
direct	5712 Sep 03 21:34	27° $\mathring{\text{A}}$ 07'14		direct	5719 Sep 23 09:50	15° $\mathring{\text{B}}$ 14'14	
				evening set	5720 Jan 01 03:54	17° $\mathring{\text{B}}$ 38'35	
conjunction	5712 Dec 20 18:37	29° $\mathring{\text{A}}$ 52'10	15°31'09				
minimum elong	5712 Dec 20 18:51	29° $\mathring{\text{A}}$ 52'11	15°31'11	conjunction	5720 Jan 08 14:17	17° $\mathring{\text{B}}$ 56'21	13°13'03
max. Earth dist.	5712 Dec 19 14:33	29° $\mathring{\text{A}}$ 49'20	30.67268 AU	minimum elong	5720 Jan 08 14:39	17° $\mathring{\text{B}}$ 56'23	13°13'04
	5712 Dec 24 00:21	0° $\mathring{\text{B}}$		max. Earth dist.	5720 Jan 08 06:53	17° $\mathring{\text{B}}$ 55'36	30.74606 AU
retrograde	5713 Apr 03 14:58	2° $\mathring{\text{B}}$ 32'46		morning rise	5720 Jan 16 00:49	18° $\mathring{\text{B}}$ 14'06	
opposition	5713 Jun 19 07:25	1° $\mathring{\text{B}}$ 09'26	16°27'46	retrograde	5720 Apr 21 09:08	20° $\mathring{\text{B}}$ 34'27	
min. Earth dist.	5713 Jun 20 09:04	1° $\mathring{\text{B}}$ 07'37	28.73576 AU	opposition	5720 Jul 07 12:13	19° $\mathring{\text{B}}$ 11'55	13°54'11
	5713 Aug 05 20:54	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$		min. Earth dist.	5720 Jul 07 17:46	19° $\mathring{\text{B}}$ 11'32	28.82622 AU
direct	5713 Sep 06 20:37	29° $\mathring{\text{A}}$ 43'19		direct	5720 Sep 25 07:49	17° $\mathring{\text{B}}$ 46'59	
	5713 Oct 08 05:14	0° $\mathring{\text{B}}$		evening set	5721 Jan 02 03:53	20° $\mathring{\text{B}}$ 08'47	
conjunction	5713 Dec 23 15:03	2° $\mathring{\text{B}}$ 28'09	15°16'33	conjunction	5721 Jan 10 08:55	20° $\mathring{\text{B}}$ 28'18	12°47'13
minimum elong	5713 Dec 23 15:18	2° $\mathring{\text{B}}$ 28'10	15°16'34	minimum elong	5721 Jan 10 09:19	20° $\mathring{\text{B}}$ 28'20	12°47'14
max. Earth dist.	5713 Dec 22 13:16	2° $\mathring{\text{B}}$ 25'33	30.64795 AU	max. Earth dist.	5721 Jan 10 04:37	20° $\mathring{\text{B}}$ 27'52	30.79947 AU
retrograde	5714 Apr 06 12:41	5° $\mathring{\text{B}}$ 08'40		morning rise	5721 Jan 18 14:00	20° $\mathring{\text{B}}$ 47'49	
opposition	5714 Jun 22 04:59	3° $\mathring{\text{B}}$ 45'22	16°11'15	retrograde	5721 Apr 24 01:17	23° $\mathring{\text{B}}$ 05'41	

opposition	5721 Jul 10 08:37	21° 3 43'19	13°25'48	conjunction	5728 Jan 28 01:03	7° ~ 32'37	9°15'05
min. Earth dist.	5721 Jul 10 12:23	21° 3 43'04	28.88103 AU	minimum elong	5728 Jan 28 01:24	7° ~ 32'39	9°15'05
direct	5721 Sep 28 03:40	20° 3 18'37		max. Earth dist.	5728 Jan 28 18:20	7° ~ 34'16	31.46997 AU
evening set	5722 Jan 04 04:45	22° 3 37'55		morning rise	5728 Feb 09 05:53	8° ~ 00'30	
				retrograde	5728 May 10 11:14	10° ~ 03'30	
conjunction	5722 Jan 13 02:49	22° 3 59'01	12°20'05	opposition	5728 Jul 27 15:13	8° ~ 42'47	9°34'49
minimum elong	5722 Jan 13 03:12	22° 3 59'04	12°20'06	min. Earth dist.	5728 Jul 26 22:20	8° ~ 43'55	29.56307 AU
max. Earth dist.	5722 Jan 13 01:28	22° 3 58'53	30.86312 AU	direct	5728 Oct 15 19:50	7° ~ 20'17	
morning rise	5722 Jan 22 00:48	23° 3 20'08		evening set	5729 Jan 16 23:00	9° ~ 24'12	
retrograde	5722 Apr 26 17:33	25° 3 35'38					
opposition	5722 Jul 13 04:21	24° 3 13'26	12°56'05	conjunction	5729 Jan 29 14:20	9° ~ 52'53	8°41'26
min. Earth dist.	5722 Jul 13 04:33	24° 3 13'25	28.94590 AU	minimum elong	5729 Jan 29 14:41	9° ~ 52'55	8°41'27
direct	5722 Oct 01 02:01	22° 3 48'58		max. Earth dist.	5729 Jan 30 09:22	9° ~ 54'41	31.60785 AU
evening set	5723 Jan 06 06:16	25° 3 05'50		morning rise	5729 Feb 11 05:11	10° ~ 21'31	
				retrograde	5729 May 13 01:46	12° ~ 22'42	
conjunction	5723 Jan 15 20:12	25° 3 28'23	11°51'45	min. Earth dist.	5729 Jul 29 10:18	11° ~ 03'40	29.70219 AU
minimum elong	5723 Jan 15 20:36	25° 3 28'26	11°51'46	opposition	5729 Jul 30 06:53	11° ~ 02'18	8°58'28
max. Earth dist.	5723 Jan 15 21:29	25° 3 28'31	30.93693 AU	direct	5729 Oct 18 13:22	9° ~ 40'12	
morning rise	5723 Jan 25 10:02	25° 3 50'56		evening set	5730 Jan 19 02:23	11° ~ 42'12	
retrograde	5723 Apr 29 09:33	28° 3 04'08					
opposition	5723 Jul 15 23:31	26° 3 42'07	12°25'06	conjunction	5730 Feb 01 02:58	12° ~ 11'33	8°07'17
min. Earth dist.	5723 Jul 15 21:21	26° 3 42'16	29.02132 AU	minimum elong	5730 Feb 01 03:16	12° ~ 11'35	8°07'17
direct	5723 Oct 03 20:34	25° 3 17'54		max. Earth dist.	5730 Feb 02 01:19	12° ~ 13'39	31.75450 AU
evening set	5724 Jan 08 08:22	27° 3 32'26		morning rise	5730 Feb 14 02:51	12° ~ 40'50	
				retrograde	5730 May 15 12:13	14° ~ 40'17	
conjunction	5724 Jan 18 12:59	27° 3 56'17	11°22'17	opposition	5730 Aug 01 22:04	13° ~ 20'12	8°21'37
minimum elong	5724 Jan 18 13:22	27° 3 56'19	11°22'18	min. Earth dist.	5730 Aug 01 00:04	13° ~ 21'40	29.84992 AU
max. Earth dist.	5724 Jan 18 17:52	27° 3 56'46	31.02150 AU	direct	5730 Oct 21 05:11	11° ~ 58'31	
morning rise	5724 Jan 28 17:17	28° 3 20'08		evening set	5731 Jan 21 06:10	13° ~ 58'40	
	5724 Mar 19 09:45	0° ~					
retrograde	5724 May 01 00:33	0° ~ 31'07		conjunction	5731 Feb 03 15:00	14° ~ 28'34	7°32'42
	5724 Jun 14 12:24	30° ~ 8'3		minimum elong	5731 Feb 03 15:18	14° ~ 28'36	7°32'43
opposition	5724 Jul 17 18:15	29° 3 09'19	11°52'57	max. Earth dist.	5731 Feb 04 15:11	14° ~ 30'50	31.90926 AU
min. Earth dist.	5724 Jul 17 12:51	29° 3 09'41	29.10752 AU	morning rise	5731 Feb 16 23:10	14° ~ 58'25	
direct	5724 Oct 05 17:21	27° 3 45'22			5731 Feb 17 16:29	15° ~	
evening set	5725 Jan 09 10:43	29° 3 57'37		retrograde	5731 May 17 23:18	16° ~ 56'10	
	5725 Jan 10 11:32	0° ~		min. Earth dist.	5731 Aug 03 11:08	15° ~ 38'05	30.00545 AU
				opposition	5731 Aug 04 12:15	15° ~ 36'26	7°44'24
conjunction	5725 Jan 20 04:53	0° ~ 22'39	10°51'48		5731 Aug 28 08:41	15° ~ 8'~	
minimum elong	5725 Jan 20 05:16	0° ~ 22'42	10°51'49	direct	5731 Oct 23 21:42	14° ~ 15'08	
max. Earth dist.	5725 Jan 20 12:07	0° ~ 23'22	31.11704 AU		5731 Dec 16 14:01	15° ~	
morning rise	5725 Jan 30 22:51	0° ~ 47'41		evening set	5732 Jan 23 10:01	16° ~ 13'30	
retrograde	5725 May 03 16:45	2° ~ 56'34					
opposition	5725 Jul 20 12:28	1° ~ 34'58	11°19'44	conjunction	5732 Feb 06 02:22	16° ~ 43'53	6°57'47
min. Earth dist.	5725 Jul 20 03:46	1° ~ 35'33	29.20508 AU	minimum elong	5732 Feb 06 02:38	16° ~ 43'54	6°57'48
direct	5725 Oct 08 12:15	0° ~ 11'20		max. Earth dist.	5732 Feb 07 04:56	16° ~ 46'21	32.07124 AU
evening set	5726 Jan 11 13:25	2° ~ 21'23		morning rise	5732 Feb 19 18:05	17° ~ 14'12	
				retrograde	5732 May 19 09:32	19° ~ 10'21	
conjunction	5726 Jan 22 20:21	2° ~ 47'30	10°20'22	min. Earth dist.	5732 Aug 04 23:20	17° ~ 52'40	30.16829 AU
minimum elong	5726 Jan 22 20:43	2° ~ 47'32	10°20'23	opposition	5732 Aug 06 02:07	17° ~ 50'54	7°06'53
max. Earth dist.	5726 Jan 23 07:41	2° ~ 48'36	31.22391 AU	direct	5732 Oct 25 11:10	16° ~ 30'00	
morning rise	5726 Feb 03 02:44	3° ~ 13'35		evening set	5733 Jan 24 13:46	18° ~ 26'38	
retrograde	5726 May 06 06:33	5° ~ 20'25					
opposition	5726 Jul 23 05:59	3° ~ 59'05	10°45'34	conjunction	5733 Feb 07 12:57	18° ~ 57'24	6°22'38
min. Earth dist.	5726 Jul 22 18:43	3° ~ 59'51	29.31380 AU	minimum elong	5733 Feb 07 13:13	18° ~ 57'26	6°22'39
direct	5726 Oct 11 07:45	2° ~ 35'49		max. Earth dist.	5733 Feb 08 17:52	19° ~ 00'05	32.24011 AU
evening set	5727 Jan 13 16:25	4° ~ 43'44		morning rise	5733 Feb 21 11:20	19° ~ 28'07	
				retrograde	5733 May 21 17:35	21° ~ 22'42	
conjunction	5727 Jan 25 10:57	5° ~ 10'49	9°48'05	min. Earth dist.	5733 Aug 07 09:54	20° ~ 05'29	30.33779 AU
minimum elong	5727 Jan 25 11:19	5° ~ 10'51	9°48'07	opposition	5733 Aug 08 15:10	20° ~ 03'34	6°29'10
max. Earth dist.	5727 Jan 26 00:17	5° ~ 12'06	31.34177 AU	direct	5733 Oct 28 02:46	18° ~ 43'02	
morning rise	5727 Feb 06 05:10	5° ~ 37'52		evening set	5734 Jan 26 17:40	20° ~ 38'00	
retrograde	5727 May 08 21:55	7° ~ 42'44					
opposition	5727 Jul 25 22:51	6° ~ 21'42	10°10'33	conjunction	5734 Feb 09 22:48	21° ~ 09'04	5°47'19
min. Earth dist.	5727 Jul 25 07:50	6° ~ 22'43	29.43340 AU	minimum elong	5734 Feb 09 23:02	21° ~ 09'06	5°47'20
direct	5727 Oct 14 00:53	4° ~ 58'48		max. Earth dist.	5734 Feb 11 05:09	21° ~ 11'52	32.41527 AU
evening set	5728 Jan 15 19:32	7° ~ 04'41		morning rise	5734 Feb 24 03:23	21° ~ 40'05	

retrograde	5734 May 24 02:27	23° \approx 33'11		evening set	5741 Feb 08 17:17	5° \times 06'39	
min. Earth dist.	5734 Aug 09 19:56	22° \approx 16'22	30.51392 AU				
opposition	5734 Aug 11 03:23	22° \approx 14'20	5°51'21	conjunction	5741 Feb 23 22:27	5° \times 38'07	1°41'21
direct	5734 Oct 30 14:23	20° \approx 54'09		minimum elong	5741 Feb 23 22:31	5° \times 38'08	1°41'22
evening set	5735 Jan 28 21:18	22° \approx 47'30		max. Earth dist.	5741 Feb 25 19:59	5° \times 42'05	33.82639 AU
				morning rise	5741 Mar 11 03:14	6° \times 09'33	
conjunction	5735 Feb 12 07:59	23° \approx 18'49	5°11'55	retrograde	5741 Jun 06 20:49	7° \times 54'06	
minimum elong	5735 Feb 12 08:12	23° \approx 18'51	5°11'56	min. Earth dist.	5741 Aug 23 22:09	6° \times 40'22	31.93812 AU
max. Earth dist.	5735 Feb 13 17:11	23° \approx 21'51	32.59680 AU	opposition	5741 Aug 25 20:40	6° \times 37'28	1°29'31
morning rise	5735 Feb 26 17:47	23° \approx 50'05		direct	5741 Nov 14 16:21	5° \times 20'04	
retrograde	5735 May 26 09:22	25° \approx 41'44		evening set	5742 Feb 10 20:13	7° \times 04'12	
min. Earth dist.	5735 Aug 12 05:52	24° \approx 25'17	30.69646 AU				
opposition	5735 Aug 13 14:54	24° \approx 23'09	5°13'30	conjunction	5742 Feb 26 02:37	7° \times 35'31	1°07'07
direct	5735 Nov 02 03:23	23° \approx 03'20		minimum elong	5742 Feb 26 02:40	7° \times 35'31	1°07'07
evening set	5736 Jan 31 00:58	24° \approx 55'08		max. Earth dist.	5742 Feb 28 02:14	7° \times 39'37	34.05268 AU
				morning rise	5742 Mar 13 08:26	8° \times 06'48	
conjunction	5736 Feb 14 16:07	25° \approx 26'37	4°36'30	retrograde	5742 Jun 08 23:01	9° \times 50'25	
minimum elong	5736 Feb 14 16:18	25° \approx 26'38	4°36'30	min. Earth dist.	5742 Aug 26 03:01	8° \times 37'07	32.16611 AU
max. Earth dist.	5736 Feb 16 02:33	25° \approx 29'43	32.78466 AU	opposition	5742 Aug 28 03:03	8° \times 34'09	0°53'18
morning rise	5736 Feb 29 06:46	25° \approx 58'02		direct	5742 Nov 17 00:33	7° \times 17'12	
retrograde	5736 May 27 18:02	27° \approx 48'20		evening set	5743 Feb 12 23:14	9° \times 00'17	
min. Earth dist.	5736 Aug 13 13:30	26° \approx 32'20	30.88593 AU				
opposition	5736 Aug 15 01:38	26° \approx 30'01	4°35'41	conjunction	5743 Feb 28 06:03	9° \times 31'24	0°33'16
direct	5736 Nov 03 14:42	25° \approx 10'33		minimum elong	5743 Feb 28 06:04	9° \times 31'24	0°33'16
evening set	5737 Feb 01 04:23	27° \approx 00'52		max. Earth dist.	5743 Mar 02 06:22	9° \times 35'33	34.28312 AU
				morning rise	5743 Mar 15 12:38	10° \times 02'30	
conjunction	5737 Feb 15 23:42	27° \approx 32'28	4°01'08	retrograde	5743 Jun 11 03:19	11° \times 45'14	
minimum elong	5737 Feb 15 23:52	27° \approx 32'29	4°01'08	min. Earth dist.	5743 Aug 28 06:55	10° \times 32'24	32.39826 AU
max. Earth dist.	5737 Feb 17 13:29	27° \approx 35'51	32.97937 AU	opposition	5743 Aug 30 08:57	10° \times 29'20	0°17'32
morning rise	5737 Mar 02 18:14	28° \approx 04'00		direct	5743 Nov 19 04:52	9° \times 12'49	
retrograde	5737 May 30 00:38	29° \approx 52'59		evening set	5744 Feb 15 01:56	10° \times 54'55	
min. Earth dist.	5737 Aug 15 22:13	28° \approx 37'22	31.08260 AU	desc. node	5744 Feb 28 07:17	11° \times 21'36	
opposition	5737 Aug 17 11:46	28° \approx 34'58	3°57'58				
direct	5737 Nov 06 03:03	27° \approx 15'53		conjunction	5744 Mar 01 08:57	11° \times 25'49	-0°00'12
evening set	5738 Feb 03 07:45	29° \approx 04'49		minimum elong	5744 Mar 01 08:56	11° \times 25'49	0°00'12
				behind sun begin	5744 Mar 01 02:38	11° \times 25'18	
conjunction	5738 Feb 18 06:21	29° \approx 36'27	3°25'52	behind sun end	5744 Mar 01 15:14	11° \times 26'19	
minimum elong	5738 Feb 18 06:29	29° \approx 36'27	3°25'53	max. Earth dist.	5744 Mar 03 11:37	11° \times 30'07	34.51706 AU
max. Earth dist.	5738 Feb 19 21:22	29° \approx 39'55	33.18120 AU	morning rise	5744 Mar 16 15:27	11° \times 56'40	
	5738 Mar 01 08:17	0° \times		retrograde	5744 Jun 12 05:19	13° \times 38'35	
morning rise	5738 Mar 05 04:25	0° \times 08'02		min. Earth dist.	5744 Aug 29 11:45	12° \times 26'07	32.63362 AU
retrograde	5738 Jun 01 08:15	1° \times 55'48		opposition	5744 Aug 31 14:18	12° \times 23'01	-0°17'44
min. Earth dist.	5738 Aug 18 04:03	0° \times 40'41	31.28656 AU	direct	5744 Nov 20 10:18	11° \times 06'56	
opposition	5738 Aug 19 20:58	0° \times 38'05	3°20'26	evening set	5745 Feb 16 04:44	12° \times 48'06	
	5738 Sep 14 22:55	30° \times					
direct	5738 Nov 08 13:38	29° \approx 19'24		conjunction	5745 Mar 03 11:12	13° \times 18'43	-0°33'11
	5738 Dec 30 17:05	0° \times		minimum elong	5745 Mar 03 11:11	13° \times 18'43	0°33'10
evening set	5739 Feb 05 11:02	1° \times 07'01		max. Earth dist.	5745 Mar 05 14:04	13° \times 23'00	34.75379 AU
				morning rise	5745 Mar 18 17:31	13° \times 49'19	
conjunction	5739 Feb 20 12:28	1° \times 38'39	2°50'47	retrograde	5745 Jun 14 08:57	15° \times 30'26	
minimum elong	5739 Feb 20 12:35	1° \times 38'40	2°50'48	min. Earth dist.	5745 Aug 31 14:01	14° \times 18'25	32.87176 AU
max. Earth dist.	5739 Feb 22 06:21	1° \times 42'21	33.38992 AU	opposition	5745 Sep 02 18:55	14° \times 15'12	-0°52'28
morning rise	5739 Mar 07 13:16	2° \times 10'14		direct	5745 Nov 22 14:46	12° \times 59'30	
retrograde	5739 Jun 03 12:29	3° \times 56'51		evening set	5746 Feb 18 07:11	14° \times 39'47	
min. Earth dist.	5739 Aug 20 11:23	2° \times 42'09	31.49754 AU				
opposition	5739 Aug 22 05:29	2° \times 39'29	2°43'08	conjunction	5746 Mar 05 12:54	15° \times 10'06	-1°05'40
direct	5739 Nov 10 23:20	1° \times 21'13		minimum elong	5746 Mar 05 12:52	15° \times 10'06	1°05'41
evening set	5740 Feb 07 14:15	3° \times 07'37		max. Earth dist.	5746 Mar 07 17:50	15° \times 14'31	34.99276 AU
				morning rise	5746 Mar 20 18:21	15° \times 40'24	
conjunction	5740 Feb 22 17:53	3° \times 39'11	2°15'55	retrograde	5746 Jun 16 10:22	17° \times 20'45	
minimum elong	5740 Feb 22 17:58	3° \times 39'12	2°15'56	min. Earth dist.	5746 Sep 02 17:57	16° \times 09'03	33.11213 AU
max. Earth dist.	5740 Feb 24 13:22	3° \times 43'00	33.60528 AU	opposition	5746 Sep 04 22:59	16° \times 05'50	-1°26'39
morning rise	5740 Mar 08 20:55	4° \times 10'43		direct	5746 Nov 24 21:03	14° \times 50'31	
retrograde	5740 Jun 04 16:40	5° \times 56'15		evening set	5747 Feb 20 09:33	16° \times 29'57	
min. Earth dist.	5740 Aug 21 16:27	4° \times 42'04	31.71492 AU				
opposition	5740 Aug 23 13:21	4° \times 39'15	2°06'09	conjunction	5747 Mar 07 13:58	16° \times 59'55	-1°37'39
direct	5740 Nov 12 09:32	3° \times 21'26		minimum elong	5747 Mar 07 13:55	16° \times 59'55	1°37'39

max. Earth dist.	5747 Mar 09 19:14	17° ✕ 04'20	35.23376 AU	conjunction	5754 Mar 19 04:36	29° ✕ 06'27	-5°05'27
morning rise	5747 Mar 22 18:12	17° ✕ 29'53		minimum elong	5754 Mar 19 04:27	29° ✕ 06'27	5°05'28
retrograde	5747 Jun 18 11:43	19° ✕ 09'30		max. Earth dist.	5754 Mar 21 18:24	29° ✕ 11'19	36.99294 AU
min. Earth dist.	5747 Sep 04 19:10	17° ✕ 58'12	33.35461 AU	morning rise	5754 Apr 02 13:25	29° ✕ 33'24	
opposition	5747 Sep 07 02:09	17° ✕ 54'53	-2°00'15		5754 Apr 17 12:04	0° ✕	
direct	5747 Nov 27 02:34	16° ✕ 39'55		retrograde	5754 Jun 29 22:39	1° ✕ 09'14	
evening set	5748 Feb 22 11:44	18° ✕ 18'32		min. Earth dist.	5754 Sep 16 16:55	0° ✕ 00'26	35.13029 AU
					5754 Sep 17 00:20	30° ✕	
conjunction	5748 Mar 08 14:23	18° ✕ 48'08	-2°09'06	opposition	5754 Sep 19 08:31	29° ✕ 56'45	-5°37'20
minimum elong	5748 Mar 08 14:18	18° ✕ 48'08	2°09'07	direct	5754 Dec 09 11:52	28° ✕ 44'20	
max. Earth dist.	5748 Mar 10 21:06	18° ✕ 52'39	35.47680 AU		5755 Feb 24 11:26	0° ✕	
morning rise	5748 Mar 23 17:00	19° ✕ 17'45		evening set	5755 Mar 06 20:50	0° ✕ 18'36	
retrograde	5748 Jun 19 10:07	20° ✕ 56'41					
min. Earth dist.	5748 Sep 05 21:13	19° ✕ 45'41	33.59970 AU	conjunction	5755 Mar 21 01:13	0° ✕ 45'01	-5°32'40
opposition	5748 Sep 08 04:59	19° ✕ 42'21	-2°33'14	minimum elong	5755 Mar 21 01:03	0° ✕ 45'00	5°32'39
direct	5748 Nov 28 06:13	18° ✕ 27'44		max. Earth dist.	5755 Mar 23 15:56	0° ✕ 49'55	37.25255 AU
evening set	5749 Feb 23 13:27	20° ✕ 05'34		morning rise	5755 Apr 04 05:58	1° ✕ 11'28	
				retrograde	5755 Jul 01 18:21	2° ✕ 46'56	
conjunction	5749 Mar 10 14:06	20° ✕ 34'46	-2°40'00	min. Earth dist.	5755 Sep 18 15:28	1° ✕ 38'26	35.39186 AU
minimum elong	5749 Mar 10 14:00	20° ✕ 34'46	2°39'59	opposition	5755 Sep 21 07:17	1° ✕ 34'45	-6°05'37
max. Earth dist.	5749 Mar 12 22:25	20° ✕ 39'22	35.72250 AU	direct	5755 Dec 11 11:52	0° ✕ 22'44	
morning rise	5749 Mar 25 14:34	21° ✕ 03'59		evening set	5756 Mar 07 21:31	1° ✕ 56'33	
retrograde	5749 Jun 21 06:38	22° ✕ 42'17					
min. Earth dist.	5749 Sep 07 21:48	21° ✕ 31'39	33.84761 AU	conjunction	5756 Mar 21 21:34	2° ✕ 22'27	-5°59'14
opposition	5749 Sep 10 07:03	21° ✕ 28'14	-3°05'36	minimum elong	5756 Mar 21 21:23	2° ✕ 22'26	5°59'15
direct	5749 Nov 30 11:06	20° ✕ 13'57		max. Earth dist.	5756 Mar 24 13:11	2° ✕ 27'23	37.51256 AU
evening set	5750 Feb 25 15:14	21° ✕ 51'04		morning rise	5756 Apr 04 21:45	2° ✕ 48'22	
				retrograde	5756 Jul 02 12:20	4° ✕ 23'30	
conjunction	5750 Mar 12 13:14	22° ✕ 19'52	-3°10'19	min. Earth dist.	5756 Sep 19 13:17	3° ✕ 15'20	35.65337 AU
minimum elong	5750 Mar 12 13:07	22° ✕ 19'51	3°10'19	opposition	5756 Sep 22 05:36	3° ✕ 11'38	-6°33'12
max. Earth dist.	5750 Mar 14 22:15	22° ✕ 24'29	35.97104 AU	direct	5756 Dec 12 12:33	1° ✕ 59'59	
morning rise	5750 Mar 27 11:25	22° ✕ 48'39		evening set	5757 Mar 09 22:06	3° ✕ 33'23	
retrograde	5750 Jun 23 05:42	24° ✕ 26'22					
min. Earth dist.	5750 Sep 09 21:19	23° ✕ 16'06	34.09883 AU	conjunction	5757 Mar 23 17:16	3° ✕ 58'44	-6°25'10
opposition	5750 Sep 12 08:21	23° ✕ 12'36	-3°37'18	minimum elong	5757 Mar 23 17:04	3° ✕ 58'43	6°25'10
direct	5750 Dec 02 11:36	21° ✕ 58'41		max. Earth dist.	5757 Mar 26 08:39	4° ✕ 03'38	37.77207 AU
evening set	5751 Feb 27 16:39	23° ✕ 35'08		morning rise	5757 Apr 06 12:54	4° ✕ 24'08	
				retrograde	5757 Jul 04 08:57	5° ✕ 58'57	
conjunction	5751 Mar 14 11:58	24° ✕ 03'29	-3°40'02	min. Earth dist.	5757 Sep 21 10:08	4° ✕ 51'07	35.91433 AU
minimum elong	5751 Mar 14 11:50	24° ✕ 03'28	3°40'01	opposition	5757 Sep 24 03:27	4° ✕ 47'24	-7°00'05
max. Earth dist.	5751 Mar 16 23:07	24° ✕ 08'15	36.22273 AU	direct	5757 Dec 14 09:37	3° ✕ 36'05	
morning rise	5751 Mar 29 07:10	24° ✕ 31'51		evening set	5758 Mar 11 22:31	5° ✕ 09'05	
retrograde	5751 Jun 25 02:54	26° ✕ 09'02					
min. Earth dist.	5751 Sep 11 21:42	24° ✕ 59'05	34.35309 AU	conjunction	5758 Mar 25 12:50	5° ✕ 33'54	-6°50'29
opposition	5751 Sep 14 09:14	24° ✕ 55'34	-4°08'20	minimum elong	5758 Mar 25 12:39	5° ✕ 33'53	6°50'29
direct	5751 Dec 04 13:38	23° ✕ 42'02		max. Earth dist.	5758 Mar 28 05:28	5° ✕ 38'51	38.03060 AU
evening set	5752 Feb 29 17:57	25° ✕ 17'51		morning rise	5758 Apr 08 03:22	5° ✕ 58'45	
				retrograde	5758 Jul 06 03:28	7° ✕ 33'17	
conjunction	5752 Mar 15 09:54	25° ✕ 45'44	-4°09'08	min. Earth dist.	5758 Sep 23 08:00	6° ✕ 25'41	36.17404 AU
minimum elong	5752 Mar 15 09:46	25° ✕ 45'44	4°09'08	opposition	5758 Sep 26 00:39	6° ✕ 22'01	-7°26'18
max. Earth dist.	5752 Mar 17 21:16	25° ✕ 50'29	36.47726 AU	direct	5758 Dec 16 07:42	5° ✕ 11'01	
morning rise	5752 Mar 30 02:04	26° ✕ 13'39		evening set	5759 Mar 13 22:51	6° ✕ 43'40	
retrograde	5752 Jun 26 02:53	27° ✕ 50'21					
min. Earth dist.	5752 Sep 12 19:42	26° ✕ 40'49	34.61018 AU	conjunction	5759 Mar 27 07:47	7° ✕ 07'55	-7°15'09
opposition	5752 Sep 15 09:32	26° ✕ 37'12	-4°38'42	minimum elong	5759 Mar 27 07:36	7° ✕ 07'54	7°15'09
direct	5752 Dec 05 12:34	25° ✕ 24'02		max. Earth dist.	5759 Mar 29 23:34	7° ✕ 12'46	38.28782 AU
evening set	5753 Mar 02 19:02	26° ✕ 59'18		morning rise	5759 Apr 09 17:10	7° ✕ 32'12	
				retrograde	5759 Jul 08 00:20	9° ✕ 06'28	
conjunction	5753 Mar 17 07:32	27° ✕ 26'43	-4°37'36	min. Earth dist.	5759 Sep 25 03:26	7° ✕ 59'10	36.43249 AU
minimum elong	5753 Mar 17 07:23	27° ✕ 26'42	4°37'36	opposition	5759 Sep 27 21:25	7° ✕ 55'27	-7°51'49
max. Earth dist.	5753 Mar 19 21:01	27° ✕ 31'35	36.73418 AU	direct	5759 Dec 18 03:07	6° ✕ 44'46	
morning rise	5753 Mar 31 20:08	27° ✕ 54'09		evening set	5760 Mar 14 22:43	8° ✕ 17'04	
retrograde	5753 Jun 28 01:35	29° ✕ 30'24					
min. Earth dist.	5753 Sep 14 19:26	28° ✕ 21'11	34.86952 AU	conjunction	5760 Mar 28 02:13	8° ✕ 40'45	-7°39'12
opposition	5753 Sep 17 09:21	28° ✕ 17'34	-5°08'22	minimum elong	5760 Mar 28 02:01	8° ✕ 40'44	7°39'13
direct	5753 Dec 07 11:54	27° ✕ 04'48		max. Earth dist.	5760 Mar 30 19:14	8° ✕ 45'39	38.54375 AU
evening set	5754 Mar 04 19:57	28° ✕ 39'32		morning rise	5760 Apr 10 06:06	9° ✕ 04'28	

retrograde	5760 Jul 08 19:29	10°♈38'29		minimum elong	5767 Apr 07 23:25	19°♈00'52	10°09'43
min. Earth dist.	5760 Sep 26 00:27	9°♈31'23	36.69000 AU	max. Earth dist.	5767 Apr 10 19:43	19°♈05'48	40.32827 AU
opposition	5760 Sep 28 17:52	9°♈27'43	-8°16'40	morning rise	5767 Apr 19 06:44	19°♈20'23	
direct	5760 Dec 18 22:51	8°♈17'20		retrograde	5767 Jul 19 16:20	20°♈53'29	
evening set	5761 Mar 16 22:28	9°♈49'19		min. Earth dist.	5767 Oct 07 06:45	19°♈48'19	38.48769 AU
				opposition	5767 Oct 10 03:20	19°♈44'35	-10°51'23
conjunction	5761 Mar 29 20:14	10°♈12'25	-8°02'37	direct	5767 Dec 30 09:48	18°♈36'22	
minimum elong	5761 Mar 29 20:02	10°♈12'24	8°02'37	evening set	5768 Mar 28 15:33	20°♈07'03	
max. Earth dist.	5761 Apr 01 13:23	10°♈17'18	38.79902 AU				
morning rise	5761 Apr 11 18:18	10°♈35'33		conjunction	5768 Apr 08 14:58	20°♈25'53	-10°28'43
retrograde	5761 Jul 10 11:31	12°♈09'20		minimum elong	5768 Apr 08 14:45	20°♈25'52	10°28'43
min. Earth dist.	5761 Sep 27 18:55	11°♈02'33	36.94704 AU	max. Earth dist.	5768 Apr 11 11:18	20°♈30'48	40.58042 AU
opposition	5761 Sep 30 13:32	10°♈58'49	-8°40'49	morning rise	5768 Apr 19 14:41	20°♈44'46	
direct	5761 Dec 20 20:57	9°♈48'43		retrograde	5768 Jul 20 05:14	22°♈17'50	
evening set	5762 Mar 18 22:00	11°♈20'26		min. Earth dist.	5768 Oct 07 23:25	21°♈12'56	38.74079 AU
				opposition	5768 Oct 10 20:17	21°♈09'12	-11°10'51
conjunction	5762 Mar 31 13:42	11°♈42'56	-8°25'23	direct	5768 Dec 31 05:36	20°♈01'16	
minimum elong	5762 Mar 31 13:29	11°♈42'55	8°25'24	evening set	5769 Mar 30 14:11	21°♈31'53	
max. Earth dist.	5762 Apr 03 07:16	11°♈47'50	39.05397 AU				
morning rise	5762 Apr 13 05:58	12°♈05'29		conjunction	5769 Apr 10 06:03	21°♈50'05	-10°47'08
retrograde	5762 Jul 12 03:50	13°♈39'05		minimum elong	5769 Apr 10 05:51	21°♈50'04	10°47'09
min. Earth dist.	5762 Sep 29 13:56	12°♈32'33	37.20418 AU	max. Earth dist.	5769 Apr 13 01:40	21°♈54'55	40.83017 AU
opposition	5762 Oct 02 08:56	12°♈28'49	-9°04'17	morning rise	5769 Apr 20 22:28	22°♈08'19	
direct	5762 Dec 22 17:40	11°♈19'01		retrograde	5769 Jul 21 19:43	23°♈41'22	
evening set	5763 Mar 20 21:17	12°♈50'29		min. Earth dist.	5769 Oct 09 15:56	22°♈36'43	38.99141 AU
				opposition	5769 Oct 12 12:52	22°♈32'59	-11°29'41
conjunction	5763 Apr 02 06:53	13°♈12'24	-8°47'31	direct	5770 Jan 01 23:06	21°♈25'20	
minimum elong	5763 Apr 02 06:41	13°♈12'23	8°47'31	evening set	5770 Apr 01 12:37	22°♈55'53	
max. Earth dist.	5763 Apr 05 01:37	13°♈17'21	39.30911 AU				
morning rise	5763 Apr 14 16:45	13°♈34'20		conjunction	5770 Apr 11 21:00	23°♈13'26	-11°05'00
retrograde	5763 Jul 13 18:40	15°♈07'47		minimum elong	5770 Apr 11 20:47	23°♈13'25	11°05'00
min. Earth dist.	5763 Oct 01 08:33	14°♈01'31	37.46140 AU	max. Earth dist.	5770 Apr 14 17:14	23°♈18'17	41.07711 AU
opposition	5763 Oct 04 03:46	13°♈57'47	-9°27'03	morning rise	5770 Apr 22 05:38	23°♈31'02	
direct	5763 Dec 24 14:49	12°♈48'18		retrograde	5770 Jul 23 08:54	25°♈04'05	
evening set	5764 Mar 21 20:31	14°♈19'33		min. Earth dist.	5770 Oct 11 09:16	23°♈59'34	39.23880 AU
				opposition	5770 Oct 14 05:08	23°♈55'55	-11°47'56
conjunction	5764 Apr 02 23:33	14°♈40'51	-9°09'00	direct	5771 Jan 03 17:15	22°♈48'31	
minimum elong	5764 Apr 02 23:20	14°♈40'50	9°09'01	evening set	5771 Apr 03 11:03	24°♈19'00	
max. Earth dist.	5764 Apr 05 17:57	14°♈45'45	39.56441 AU				
morning rise	5764 Apr 15 03:09	15°♈02'12		conjunction	5771 Apr 13 11:25	24°♈35'54	-11°22'17
retrograde	5764 Jul 14 12:32	16°♈35'31		minimum elong	5771 Apr 13 11:13	24°♈35'53	11°22'19
min. Earth dist.	5764 Oct 02 01:40	15°♈29'35	37.71888 AU	max. Earth dist.	5771 Apr 16 06:22	24°♈40'38	41.32080 AU
opposition	5764 Oct 04 22:18	15°♈25'47	-9°49'09	morning rise	5771 Apr 23 12:13	24°♈52'51	
direct	5764 Dec 25 08:15	14°♈16'37		retrograde	5771 Jul 25 00:40	26°♈25'53	
evening set	5765 Mar 23 19:21	15°♈47'41		min. Earth dist.	5771 Oct 13 00:22	25°♈21'37	39.48297 AU
				opposition	5771 Oct 15 20:58	25°♈17'57	-12°05'35
conjunction	5765 Apr 04 15:54	16°♈08'23	-9°29'52	direct	5772 Jan 05 08:19	24°♈10'47	
minimum elong	5765 Apr 04 15:42	16°♈08'22	9°29'52	evening set	5772 Apr 04 09:12	25°♈41'11	
max. Earth dist.	5765 Apr 07 11:54	16°♈13'22	39.81972 AU				
morning rise	5765 Apr 16 12:49	16°♈29'08		conjunction	5772 Apr 14 01:36	25°♈57'27	-11°39'02
retrograde	5765 Jul 16 05:49	18°♈02'21		minimum elong	5772 Apr 14 01:23	25°♈57'26	11°39'03
min. Earth dist.	5765 Oct 03 20:24	16°♈56'38	37.97608 AU	max. Earth dist.	5772 Apr 16 21:13	26°♈02'11	41.56136 AU
opposition	5765 Oct 06 16:27	16°♈52'54	-10°10'33	morning rise	5772 Apr 23 18:21	26°♈13'44	
direct	5765 Dec 27 01:39	15°♈44'03		retrograde	5772 Jul 25 16:16	27°♈46'47	
evening set	5766 Mar 25 18:17	17°♈14'57		min. Earth dist.	5772 Oct 13 17:07	26°♈42'37	39.72425 AU
				opposition	5772 Oct 16 12:35	26°♈39'01	-12°22'39
conjunction	5766 Apr 06 07:56	17°♈35'03	-9°50'05	direct	5773 Jan 05 22:52	25°♈32'05	
minimum elong	5766 Apr 06 07:42	17°♈35'02	9°50'06	evening set	5773 Apr 06 07:15	27°♈02'27	
max. Earth dist.	5766 Apr 09 03:20	17°♈39'57	40.07456 AU				
morning rise	5766 Apr 17 22:00	17°♈55'11		conjunction	5773 Apr 15 15:20	27°♈18'02	-11°55'13
retrograde	5766 Jul 18 00:33	19°♈28'19		minimum elong	5773 Apr 15 15:09	27°♈18'01	11°55'15
min. Earth dist.	5766 Oct 05 12:40	18°♈22'56	38.23252 AU	max. Earth dist.	5773 Apr 18 10:31	27°♈22'44	41.79939 AU
opposition	5766 Oct 08 09:54	18°♈19'09	-10°31'18	morning rise	5773 Apr 24 23:41	27°♈33'39	
direct	5766 Dec 28 16:51	17°♈10'37		retrograde	5773 Jul 27 05:58	29°♈06'43	
evening set	5767 Mar 27 17:01	18°♈41'24		min. Earth dist.	5773 Oct 15 07:31	28°♈02'46	39.96315 AU
				opposition	5773 Oct 18 03:37	27°♈59'09	-12°39'08
conjunction	5767 Apr 07 23:37	19°♈00'53	-10°09'42	direct	5774 Jan 07 13:30	26°♈52'25	

evening set	5774 Apr 08 05:12	28° Υ 22'47	conjunction	5780 Apr 24 07:20	6° \mathcal{B} 20'05 -13°33'10
			minimum elong	5780 Apr 24 07:11	6° \mathcal{B} 20'04 13°33'11
conjunction	5774 Apr 17 04:44	28° Υ 37'42 -12°10'51	max. Earth dist.	5780 Apr 27 03:00	6° \mathcal{B} 24'38 43.42077 AU
minimum elong	5774 Apr 17 04:32	28° Υ 37'41 12°10'52	morning rise	5780 Apr 30 22:19	6° \mathcal{B} 30'46
max. Earth dist.	5774 Apr 19 23:44	28° Υ 42'21 42.03531 AU	retrograde	5780 Aug 04 20:16	8° \mathcal{B} 04'54
morning rise	5774 Apr 26 04:39	28° Υ 52'38	min. Earth dist.	5780 Oct 24 08:47	7° \mathcal{B} 02'22 41.59151 AU
	5774 Jun 12 10:25	0° \mathcal{B}	opposition	5780 Oct 27 04:05	6° \mathcal{B} 58'53 -14°18'18
retrograde	5774 Jul 28 18:20	0° \mathcal{B} 25'46	direct	5781 Jan 16 15:36	5° \mathcal{B} 53'53
	5774 Sep 14 11:32	30° $\mathcal{K}\Upsilon$	evening set	5781 Apr 19 14:42	7° \mathcal{B} 25'11
min. Earth dist.	5774 Oct 16 22:26	29° Υ 21'58 40.20041 AU			
opposition	5774 Oct 19 18:17	29° Υ 18'23 -12°55'01	conjunction	5781 Apr 25 18:53	7° \mathcal{B} 35'06 -13°45'05
direct	5775 Jan 09 05:12	28° Υ 11'52	minimum elong	5781 Apr 25 18:43	7° \mathcal{B} 35'05 13°45'07
evening set	5775 Apr 10 03:05	29° Υ 42'16	max. Earth dist.	5781 Apr 28 13:17	7° \mathcal{B} 39'33 43.64381 AU
			morning rise	5781 May 01 23:11	7° \mathcal{B} 45'01
conjunction	5775 Apr 18 17:57	29° Υ 56'30 -12°25'56	retrograde	5781 Aug 06 07:15	9° \mathcal{B} 19'26
minimum elong	5775 Apr 18 17:46	29° Υ 56'29 12°25'57	min. Earth dist.	5781 Oct 25 21:44	8° \mathcal{B} 17'06 41.81456 AU
	5775 Apr 20 20:40	0° \mathcal{B}	opposition	5781 Oct 28 16:50	8° \mathcal{B} 13'38 -14°30'18
max. Earth dist.	5775 Apr 21 13:51	0° \mathcal{B} 01'11 42.26987 AU	direct	5782 Jan 18 05:20	7° \mathcal{B} 08'53
morning rise	5775 Apr 27 08:59	0° \mathcal{B} 10'45	evening set	5782 Apr 21 13:29	8° \mathcal{B} 40'28
retrograde	5775 Jul 30 04:19	1° \mathcal{B} 43'57			
min. Earth dist.	5775 Oct 18 12:57	0° \mathcal{B} 40'21 40.43625 AU	conjunction	5782 Apr 27 06:30	8° \mathcal{B} 49'35 -13°56'32
opposition	5775 Oct 21 08:39	0° \mathcal{B} 36'46 -13°10'19	minimum elong	5782 Apr 27 06:21	8° \mathcal{B} 49'35 13°56'33
	5775 Nov 21 01:37	30° $\mathcal{K}\Upsilon$	max. Earth dist.	5782 Apr 30 01:21	8° \mathcal{B} 54'03 43.86311 AU
direct	5776 Jan 10 22:30	29° Υ 30'30	morning rise	5782 May 02 23:31	8° \mathcal{B} 58'43
	5776 Feb 28 21:05	0° \mathcal{B}	retrograde	5782 Aug 07 18:10	10° \mathcal{B} 33'27
evening set	5776 Apr 11 00:49	1° \mathcal{B} 00'57	min. Earth dist.	5782 Oct 27 11:37	9° \mathcal{B} 31'14 42.03345 AU
			opposition	5782 Oct 30 05:12	9° \mathcal{B} 27'52 -14°41'50
conjunction	5776 Apr 19 06:34	1° \mathcal{B} 14'30 -12°40'27	direct	5783 Jan 19 19:36	8° \mathcal{B} 23'20
minimum elong	5776 Apr 19 06:22	1° \mathcal{B} 14'29 12°40'27	evening set	5783 Apr 23 12:46	9° \mathcal{B} 55'14
max. Earth dist.	5776 Apr 22 01:37	1° \mathcal{B} 19'06 42.50319 AU			
morning rise	5776 Apr 27 12:37	1° \mathcal{B} 28'04	conjunction	5783 Apr 28 17:45	10° \mathcal{B} 03'30 -14°07'32
retrograde	5776 Jul 30 17:56	3° \mathcal{B} 01'23	minimum elong	5783 Apr 28 17:36	10° \mathcal{B} 03'30 14°07'33
min. Earth dist.	5776 Oct 19 02:06	1° \mathcal{B} 58'02 40.67096 AU	max. Earth dist.	5783 May 01 10:59	10° \mathcal{B} 07'50 44.07830 AU
opposition	5776 Oct 21 22:45	1° \mathcal{B} 54'25 -13°25'01	morning rise	5783 May 03 22:44	10° \mathcal{B} 11'48
direct	5777 Jan 11 12:10	0° \mathcal{B} 48'23	retrograde	5783 Aug 09 07:33	11° \mathcal{B} 46'52
evening set	5777 Apr 12 22:34	2° \mathcal{B} 18'57	min. Earth dist.	5783 Oct 28 23:22	10° \mathcal{B} 44'52 42.24815 AU
			opposition	5783 Oct 31 17:23	10° \mathcal{B} 41'29 -14°52'54
conjunction	5777 Apr 20 19:11	2° \mathcal{B} 31'47 -12°54'25	direct	5784 Jan 21 06:28	9° \mathcal{B} 37'09
minimum elong	5777 Apr 20 19:00	2° \mathcal{B} 31'47 12°54'27	evening set	5784 Apr 24 12:27	11° \mathcal{B} 09'24
max. Earth dist.	5777 Apr 23 15:19	2° \mathcal{B} 36'27 42.73530 AU			
morning rise	5777 Apr 28 16:00	2° \mathcal{B} 44'40	conjunction	5784 Apr 29 04:38	11° \mathcal{B} 16'48 -14°18'05
retrograde	5777 Aug 01 06:55	4° \mathcal{B} 18'09	minimum elong	5784 Apr 29 04:31	11° \mathcal{B} 16'47 14°18'06
min. Earth dist.	5777 Oct 20 16:56	3° \mathcal{B} 14'56 40.90425 AU	max. Earth dist.	5784 May 01 21:48	11° \mathcal{B} 21'05 44.28929 AU
opposition	5777 Oct 23 12:28	3° \mathcal{B} 11'24 -13°39'10	morning rise	5784 May 03 20:50	11° \mathcal{B} 24'12
direct	5778 Jan 13 02:09	2° \mathcal{B} 05'38	retrograde	5784 Aug 09 19:20	12° \mathcal{B} 59'40
evening set	5778 Apr 14 20:29	3° \mathcal{B} 36'19	min. Earth dist.	5784 Oct 29 12:58	11° \mathcal{B} 57'44 42.45884 AU
			opposition	5784 Nov 01 05:26	11° \mathcal{B} 54'26 -15°03'30
conjunction	5778 Apr 22 07:29	3° \mathcal{B} 48'27 -13°07'51	direct	5785 Jan 21 17:19	10° \mathcal{B} 50'18
minimum elong	5778 Apr 22 07:19	3° \mathcal{B} 48'26 13°07'52	evening set	5785 Apr 26 13:21	12° \mathcal{B} 22'58
max. Earth dist.	5778 Apr 25 02:52	3° \mathcal{B} 53'02 42.96596 AU			
morning rise	5778 Apr 29 18:38	4° \mathcal{B} 00'37	conjunction	5785 Apr 30 15:27	12° \mathcal{B} 29'25 -14°28'11
retrograde	5778 Aug 02 20:46	5° \mathcal{B} 34'16	minimum elong	5785 Apr 30 15:18	12° \mathcal{B} 29'24 14°28'12
min. Earth dist.	5778 Oct 22 05:26	4° \mathcal{B} 31'20 41.13576 AU	max. Earth dist.	5785 May 03 08:16	12° \mathcal{B} 33'40 44.49666 AU
opposition	5778 Oct 25 01:51	4° \mathcal{B} 27'46 -13°52'44	morning rise	5785 May 04 17:26	12° \mathcal{B} 35'51
direct	5779 Jan 14 13:38	3° \mathcal{B} 22'15	retrograde	5785 Aug 11 04:51	14° \mathcal{B} 11'46
evening set	5779 Apr 16 18:15	4° \mathcal{B} 53'07	min. Earth dist.	5785 Oct 31 00:23	13° \mathcal{B} 10'00 42.66602 AU
			opposition	5785 Nov 02 16:51	13° \mathcal{B} 06'43 -15°13'37
conjunction	5779 Apr 23 19:24	5° \mathcal{B} 04'32 -13°20'46	direct	5786 Jan 23 04:50	12° \mathcal{B} 02'44
minimum elong	5779 Apr 23 19:14	5° \mathcal{B} 04'31 13°20'48	evening set	5786 Apr 28 15:42	13° \mathcal{B} 35'59
max. Earth dist.	5779 Apr 26 14:58	5° \mathcal{B} 09'06 43.19454 AU			
morning rise	5779 Apr 30 20:45	5° \mathcal{B} 15'58	conjunction	5786 May 02 01:50	13° \mathcal{B} 41'21 -14°37'50
retrograde	5779 Aug 04 10:15	6° \mathcal{B} 49'51	minimum elong	5786 May 02 01:43	13° \mathcal{B} 41'21 14°37'51
min. Earth dist.	5779 Oct 23 19:36	5° \mathcal{B} 47'06 41.36508 AU	morning rise	5786 May 05 11:55	13° \mathcal{B} 46'43
opposition	5779 Oct 26 15:10	5° \mathcal{B} 43'35 -14°05'47	max. Earth dist.	5786 May 04 17:43	13° \mathcal{B} 45'32 44.70084 AU
direct	5780 Jan 16 01:01	4° \mathcal{B} 38'20		5786 Jun 28 09:31	15° \mathcal{B}
evening set	5780 Apr 17 16:25	6° \mathcal{B} 09'24	retrograde	5786 Aug 12 14:45	15° \mathcal{B} 23'13
				5786 Sep 28 00:43	15° $\mathcal{R}\mathcal{B}$

min. Earth dist.	5786 Nov 01 12:01	14° 8 21'34	42.87044 AU	conjunction	5794 May 11 06:24	22° 8 57'02	-15°39'14
opposition	5786 Nov 04 04:13	14° 8 18'19	-15°23'16	minimum elong	5794 May 11 06:19	22° 8 57'02	15°39'15
direct	5787 Jan 24 16:16	13° 8 14'31		max. Earth dist.	5794 May 13 19:28	23° 8 00'54	46.24311 AU
evening set	5787 Apr 30 20:56	14° 8 48'31		retrograde	5794 Aug 21 18:23	24° 8 35'36	
				min. Earth dist.	5794 Nov 11 03:30	23° 8 35'03	44.41001 AU
conjunction	5787 May 03 12:02	14° 8 52'38	-14°47'01	opposition	5794 Nov 13 14:40	23° 8 32'07	-16°24'10
minimum elong	5787 May 03 11:54	14° 8 52'37	14°47'02	direct	5795 Feb 03 06:04	22° 8 29'49	
morning rise	5787 May 06 02:57	14° 8 56'44					
max. Earth dist.	5787 May 06 04:37	14° 8 56'50	44.90253 AU	conjunction	5795 May 12 15:16	24° 8 04'31	-15°45'07
	5787 May 08 05:20	15° 8		minimum elong	5795 May 12 15:13	24° 8 04'30	15°45'08
retrograde	5787 Aug 13 22:00	16° 8 34'02		max. Earth dist.	5795 May 15 03:04	24° 8 08'17	46.41947 AU
min. Earth dist.	5787 Nov 02 23:56	15° 8 32'30	43.07237 AU	retrograde	5795 Aug 23 04:35	25° 8 42'41	
opposition	5787 Nov 05 15:19	15° 8 29'17	-15°32'27	min. Earth dist.	5795 Nov 12 12:57	24° 8 42'17	44.58476 AU
	5787 Nov 30 15:24	15° 8		opposition	5795 Nov 15 00:07	24° 8 39'21	-16°29'58
direct	5788 Jan 26 06:13	14° 8 25'40		direct	5796 Feb 04 14:02	23° 8 37'13	
	5788 Mar 20 15:56	15° 8					
evening set	5788 May 02 09:56	16° 8 00'57		conjunction	5796 May 12 23:58	25° 8 11'31	-15°50'39
				minimum elong	5796 May 12 23:54	25° 8 11'31	15°50'42
conjunction	5788 May 03 21:59	16° 8 03'17	-14°55'46	max. Earth dist.	5796 May 15 10:36	25° 8 15'12	46.59083 AU
minimum elong	5788 May 03 21:53	16° 8 03'17	14°55'48	retrograde	5796 Aug 23 14:36	26° 8 49'18	
morning rise	5788 May 05 09:54	16° 8 05'37		min. Earth dist.	5796 Nov 12 23:43	25° 8 48'58	44.75480 AU
max. Earth dist.	5788 May 06 13:24	16° 8 07'24	45.10207 AU	opposition	5796 Nov 15 09:26	25° 8 46'07	-16°35'24
retrograde	5788 Aug 14 08:43	17° 8 44'15		direct	5797 Feb 04 21:04	24° 8 44'07	
min. Earth dist.	5788 Nov 03 10:04	16° 8 42'55	43.27224 AU				
opposition	5788 Nov 06 02:07	16° 8 39'40	-15°41'09	conjunction	5797 May 14 08:34	26° 8 18'02	-15°55'51
direct	5789 Jan 26 17:35	15° 8 36'14		minimum elong	5797 May 14 08:32	26° 8 18'02	15°55'52
				max. Earth dist.	5797 May 16 19:11	26° 8 21'42	46.75776 AU
conjunction	5789 May 05 07:46	17° 8 13'24	-15°04'03	retrograde	5797 Aug 24 20:18	27° 8 55'26	
minimum elong	5789 May 05 07:39	17° 8 13'23	15°04'04	min. Earth dist.	5797 Nov 14 09:30	26° 8 55'10	44.92042 AU
max. Earth dist.	5789 May 07 23:40	17° 8 17'31	45.29945 AU	opposition	5797 Nov 16 18:24	26° 8 52'22	-16°40'28
retrograde	5789 Aug 15 21:05	18° 8 53'56		direct	5798 Feb 06 08:29	25° 8 50'31	
min. Earth dist.	5789 Nov 04 22:01	17° 8 52'41	43.46983 AU				
opposition	5789 Nov 07 12:48	17° 8 49'32	-15°49'23	conjunction	5798 May 15 16:48	27° 8 24'02	-16°00'40
direct	5790 Jan 28 03:10	16° 8 46'17		minimum elong	5798 May 15 16:44	27° 8 24'02	16°00'42
				max. Earth dist.	5798 May 18 01:42	27° 8 27'35	46.92069 AU
conjunction	5790 May 06 17:26	18° 8 23'00	-15°11'54	retrograde	5798 Aug 26 03:11	29° 8 01'04	
minimum elong	5790 May 06 17:20	18° 8 23'00	15°11'56	min. Earth dist.	5798 Nov 15 18:19	28° 8 00'56	45.08250 AU
max. Earth dist.	5790 May 09 08:49	18° 8 27'04	45.49460 AU	opposition	5798 Nov 18 03:06	27° 8 58'08	-16°45'09
retrograde	5790 Aug 17 06:55	20° 8 03'06		direct	5799 Feb 07 18:44	26° 8 56'25	
min. Earth dist.	5790 Nov 06 07:52	19° 8 02'03	43.66483 AU				
opposition	5790 Nov 08 22:59	18° 8 58'53	-15°57'11	conjunction	5799 May 17 00:57	28° 8 29'34	-16°05'08
direct	5791 Jan 29 12:03	17° 8 55'51		minimum elong	5799 May 17 00:55	28° 8 29'34	16°05'10
				max. Earth dist.	5799 May 19 10:21	28° 8 33'08	47.08035 AU
conjunction	5791 May 08 02:47	19° 8 32'08	-15°19'20		5799 Aug 03 18:26	0° II	
minimum elong	5791 May 08 02:41	19° 8 32'08	15°19'21	retrograde	5799 Aug 27 11:42	20° II 06'15	
max. Earth dist.	5791 May 10 17:17	19° 8 36'08	45.68702 AU		5799 Sep 20 13:15	30° R	
retrograde	5791 Aug 18 16:28	21° 8 11'50		min. Earth dist.	5799 Nov 17 04:25	29° 8 06'10	45.24146 AU
min. Earth dist.	5791 Nov 07 18:57	20° 8 10'55	43.85703 AU	opposition	5799 Nov 19 11:47	29° 8 03'27	-16°49'28
opposition	5791 Nov 10 09:16	20° 8 07'48	-16°04'32	direct	5800 Feb 09 05:00	28° 8 01'52	
direct	5792 Jan 30 21:34	19° 8 04'58					
				conjunction	5800 May 18 08:48	29° 8 34'40	-16°09'14
conjunction	5792 May 08 12:05	20° 8 40'51	-15°26'21	minimum elong	5800 May 18 08:45	29° 8 34'40	16°09'15
minimum elong	5792 May 08 11:59	20° 8 40'50	15°26'23	max. Earth dist.	5800 May 20 17:13	29° 8 38'09	47.23728 AU
max. Earth dist.	5792 May 11 03:04	20° 8 44'51	45.87639 AU		5800 Jun 04 15:26	0° II	
retrograde	5792 Aug 18 22:57	22° 8 20'09		retrograde	5800 Aug 28 21:24	1° II 11'01	
min. Earth dist.	5792 Nov 08 06:00	21° 8 19'22	44.04564 AU	min. Earth dist.	5800 Nov 18 12:13	0° II 11'05	45.39767 AU
opposition	5792 Nov 10 19:17	21° 8 16'18	-16°11'28	opposition	5800 Nov 20 20:09	0° II 08'21	-16°53'23
direct	5793 Jan 31 09:51	20° 8 13'40			5800 Nov 27 23:18	30° R	
				direct	5801 Feb 10 12:05	29° 8 06'55	
conjunction	5793 May 09 21:14	21° 8 49'09	-15°32'58		5801 Apr 22 04:21	0° II	
minimum elong	5793 May 09 21:10	21° 8 49'08	15°32'59				
max. Earth dist.	5793 May 12 10:27	21° 8 53'02	46.06197 AU	conjunction	5801 May 19 16:34	0° II 39'23	-16°12'58
retrograde	5793 Aug 20 08:37	23° 8 28'04		minimum elong	5801 May 19 16:34	0° II 39'22	16°13'00
min. Earth dist.	5793 Nov 09 15:43	22° 8 27'28	44.23022 AU	max. Earth dist.	5801 May 22 00:23	0° II 42'49	47.39146 AU
opposition	5793 Nov 12 04:57	22° 8 24'25	-16°18'00	retrograde	5801 Aug 30 06:23	2° II 15'24	
direct	5794 Feb 01 19:29	21° 8 21'57		min. Earth dist.	5801 Nov 19 21:44	1° II 15'33	45.55121 AU
				opposition	5801 Nov 22 04:20	1° II 12'53	-16°56'56

direct	5802 Feb 11 18:15	0°II11'36		minimum elong	5810 May 29 09:40	10°II07'28	16°31'44
				max. Earth dist.	5810 May 31 09:51	10°II10'22	48.61466 AU
conjunction	5802 May 21 00:19	1°II43'45 -16°16'20		retrograde	5810 Sep 08 19:18	11°II40'49	
minimum elong	5802 May 21 00:18	1°II43'45 16°16'21		min. Earth dist.	5810 Nov 30 00:15	10°II41'41	46.75887 AU
max. Earth dist.	5802 May 23 08:19	1°II47'11 47.54305 AU		opposition	5810 Dec 01 23:36	10°II39'25	-17°13'53
retrograde	5802 Aug 31 11:49	3°II19'27		direct	5811 Feb 21 17:32	9°II39'13	
min. Earth dist.	5802 Nov 21 06:07	2°II19'43 45.70183 AU					
opposition	5802 Nov 23 12:22	2°II17'05 -17°00'07		conjunction	5811 May 30 16:01	11°II08'42	-16°32'17
direct	5803 Feb 13 02:14	1°II15'57		minimum elong	5811 May 30 16:03	11°II08'42	16°32'19
				max. Earth dist.	5811 Jun 01 15:40	11°II11'33	48.72917 AU
conjunction	5803 May 22 07:38	2°II47'48 -16°19'21		retrograde	5811 Sep 10 03:21	12°II41'47	
minimum elong	5803 May 22 07:37	2°II47'48 16°19'23		min. Earth dist.	5811 Dec 01 08:42	11°II42'39	46.87200 AU
max. Earth dist.	5803 May 24 14:07	2°II51'08 47.69168 AU		opposition	5811 Dec 03 06:28	11°II40'27	-17°14'13
retrograde	5803 Sep 01 19:05	4°II23'13		direct	5812 Feb 22 23:45	10°II40'21	
min. Earth dist.	5803 Nov 22 14:19	3°II23'37 45.84942 AU					
opposition	5803 Nov 24 20:21	3°II21'00 -17°02'57		conjunction	5812 May 30 22:34	12°II09'34	-16°32'34
direct	5804 Feb 14 10:02	2°II20'02		minimum elong	5812 May 30 22:38	12°II09'34	16°32'36
				max. Earth dist.	5812 Jun 01 22:15	12°II12'24	48.84080 AU
conjunction	5804 May 22 15:07	3°II51'34 -16°22'01		retrograde	5812 Sep 10 09:32	13°II42'22	
minimum elong	5804 May 22 15:07	3°II51'34 16°22'03		min. Earth dist.	5812 Dec 01 15:16	12°II43'20	46.98221 AU
max. Earth dist.	5804 May 24 21:51	3°II54'55 47.83702 AU		opposition	5812 Dec 03 12:56	12°II41'09	-17°14'15
retrograde	5804 Sep 02 01:01	5°II26'42		direct	5813 Feb 23 05:08	11°II41'08	
min. Earth dist.	5804 Nov 22 23:48	4°II27'11 45.99333 AU					
opposition	5804 Nov 25 04:09	4°II24'39 -17°05'26		conjunction	5813 Jun 01 04:50	13°II10'07	-16°32'31
direct	5805 Feb 14 20:32	3°II23'50		minimum elong	5813 Jun 01 04:52	13°II10'07	16°32'33
				max. Earth dist.	5813 Jun 03 02:53	13°II12'51	48.94965 AU
conjunction	5805 May 23 22:29	4°II55'05 -16°24'22		retrograde	5813 Sep 11 16:05	14°II42'40	
minimum elong	5805 May 23 22:29	4°II55'05 16°24'25		min. Earth dist.	5813 Dec 02 22:15	13°II43'42	47.08974 AU
max. Earth dist.	5805 May 26 03:47	4°II58'19 47.97856 AU		opposition	5813 Dec 04 19:26	13°II41'33	-17°13'56
retrograde	5805 Sep 03 10:09	6°II29'56		direct	5814 Feb 24 10:14	12°II41'39	
min. Earth dist.	5805 Nov 24 07:26	5°II30'33 46.13303 AU					
opposition	5805 Nov 26 11:42	5°II28'01 -17°07'35		conjunction	5814 Jun 02 11:06	14°II10'24	-16°32'11
direct	5806 Feb 16 04:09	4°II27'20		minimum elong	5814 Jun 02 11:10	14°II10'25	16°32'13
				max. Earth dist.	5814 Jun 04 09:32	14°II13'09	49.05576 AU
conjunction	5806 May 25 05:43	5°II58'18 -16°26'25		retrograde	5814 Sep 12 19:55	15°II42'45	
minimum elong	5806 May 25 05:44	5°II58'18 16°26'26		min. Earth dist.	5814 Dec 04 05:52	14°II43'50	47.19431 AU
max. Earth dist.	5806 May 27 09:59	6°II01'28 48.11545 AU		opposition	5814 Dec 06 01:45	14°II41'44	-17°13'20
retrograde	5806 Sep 04 21:00	7°II32'52		direct	5815 Feb 25 18:46	13°II41'57	
min. Earth dist.	5806 Nov 25 16:51	6°II33'31 46.26790 AU					
opposition	5806 Nov 27 19:14	6°II31'05 -17°09'26		conjunction	5815 Jun 03 17:12	15°II10'30	-16°31'32
direct	5807 Feb 17 08:51	5°II30'32		minimum elong	5815 Jun 03 17:16	15°II10'30	16°31'33
				max. Earth dist.	5815 Jun 05 14:19	15°II13'10	49.15908 AU
conjunction	5807 May 26 13:01	7°II01'12 -16°28'10		retrograde	5815 Sep 14 02:39	16°II42'38	
minimum elong	5807 May 26 13:02	7°II01'12 16°28'12		min. Earth dist.	5815 Dec 05 11:52	15°II43'52	47.29590 AU
max. Earth dist.	5807 May 28 16:42	7°II04'20 48.24748 AU		opposition	5815 Dec 07 07:58	15°II41'46	-17°12'24
retrograde	5807 Sep 06 02:50	8°II35'28		direct	5816 Feb 27 01:47	14°II42'06	
min. Earth dist.	5807 Nov 27 00:54	7°II36'11 46.39758 AU					
opposition	5807 Nov 29 02:36	7°II33'48 -17°11'00		conjunction	5816 Jun 03 23:12	16°II10'27	-16°30'35
direct	5808 Feb 18 16:23	6°II33'21		minimum elong	5816 Jun 03 23:16	16°II10'27	16°30'37
				max. Earth dist.	5816 Jun 05 19:42	16°II13'05	49.25906 AU
conjunction	5808 May 26 19:54	8°II03'43 -16°29'39		retrograde	5816 Sep 14 12:14	17°II42'24	
minimum elong	5808 May 26 19:56	8°II03'44 16°29'40		min. Earth dist.	5816 Dec 05 20:00	16°II43'40	47.39389 AU
max. Earth dist.	5808 May 28 21:35	8°II06'43 48.37441 AU		opposition	5816 Dec 07 14:14	16°II41'40	-17°11'12
retrograde	5808 Sep 06 08:11	9°II37'41		direct	5817 Feb 27 06:23	15°II42'08	
min. Earth dist.	5808 Nov 27 09:03	8°II38'27 46.52234 AU					
opposition	5808 Nov 29 09:52	8°II36'06 -17°12'15		conjunction	5817 Jun 05 05:23	17°II10'18	-16°29'22
direct	5809 Feb 18 23:54	7°II35'45		minimum elong	5817 Jun 05 05:27	17°II10'18	16°29'23
				max. Earth dist.	5817 Jun 07 01:21	17°II12'53	49.35526 AU
conjunction	5809 May 28 02:55	9°II05'49 -16°30'49		retrograde	5817 Sep 15 18:44	18°II42'03	
minimum elong	5809 May 28 02:55	9°II05'49 16°30'51		min. Earth dist.	5817 Dec 07 02:19	17°II43'26	47.48759 AU
max. Earth dist.	5809 May 30 04:38	9°II08'48 48.49657 AU		opposition	5817 Dec 08 20:06	17°II41'27	-17°09'43
retrograde	5809 Sep 07 12:12	10°II39'28		direct	5818 Feb 28 10:41	16°II42'02	
min. Earth dist.	5809 Nov 28 17:43	9°II40'14 46.64250 AU					
opposition	5809 Nov 30 16:47	9°II37'58 -17°13'14		conjunction	5818 Jun 06 11:23	18°II10'02	-16°27'54
direct	5810 Feb 20 10:10	8°II37'42		minimum elong	5818 Jun 06 11:27	18°II10'03	16°27'56
				max. Earth dist.	5818 Jun 08 05:18	18°II12'30	49.44685 AU
conjunction	5810 May 29 09:37	10°II07'28 -16°31'43		retrograde	5818 Sep 17 00:41	19°II41'36	

min. Earth dist.	5818 Dec 08 09:44	18°II43'02	47.57650 AU	conjunction	5827 Jun 15 13:45	26°II57'43	-16°03'22
opposition	5818 Dec 10 02:10	18°II41'07	-17°07'58	minimum elong	5827 Jun 15 13:52	26°II57'44	16°03'24
direct	5819 Mar 01 15:41	17°II41'49		max. Earth dist.	5827 Jun 17 00:05	26°II59'42	50.06938 AU
				retrograde	5827 Sep 26 01:24	28°II27'39	
conjunction	5819 Jun 07 17:20	19°II09'38	-16°26'10	min. Earth dist.	5827 Dec 17 19:04	27°II29'19	48.17695 AU
minimum elong	5819 Jun 07 17:26	19°II09'38	16°26'12	opposition	5827 Dec 19 03:27	27°II27'48	-16°40'44
max. Earth dist.	5819 Jun 09 11:06	19°II12'05	49.53335 AU	direct	5828 Mar 09 20:39	26°II29'03	
retrograde	5819 Sep 18 03:09	20°II41'01					
min. Earth dist.	5819 Dec 09 17:24	19°II42'27	47.65999 AU	conjunction	5828 Jun 15 18:58	27°II55'21	-15°59'20
opposition	5819 Dec 11 08:12	19°II40'37	-17°05'58	minimum elong	5828 Jun 15 19:06	27°II55'21	15°59'22
direct	5820 Mar 02 00:35	18°II41'24		max. Earth dist.	5828 Jun 17 03:32	27°II57'13	50.12121 AU
				retrograde	5828 Sep 26 08:04	29°II25'08	
conjunction	5820 Jun 07 23:16	20°II09'02	-16°24'13	min. Earth dist.	5828 Dec 18 01:27	28°II26'49	48.22625 AU
minimum elong	5820 Jun 07 23:21	20°II09'02	16°24'15	opposition	5828 Dec 19 08:31	28°II25'22	-16°36'22
max. Earth dist.	5820 Jun 09 15:00	20°II11'22	49.61462 AU	direct	5829 Mar 10 23:34	27°II26'42	
retrograde	5820 Sep 18 08:57	21°II40'13					
min. Earth dist.	5820 Dec 09 23:25	20°II41'43	47.73828 AU	conjunction	5829 Jun 17 00:22	28°II52'53	-15°55'04
opposition	5820 Dec 11 13:54	20°II39'54	-17°03'44	minimum elong	5829 Jun 17 00:30	28°II52'54	15°55'07
direct	5821 Mar 03 07:16	19°II40'45		max. Earth dist.	5829 Jun 18 08:53	28°II54'45	50.16908 AU
					5829 Aug 11 02:22	0°☾	
conjunction	5821 Jun 09 05:05	21°II08'11	-16°22'01	retrograde	5829 Sep 27 10:34	0°☾22'32	
minimum elong	5821 Jun 09 05:11	21°II08'12	16°22'02		5829 Nov 14 16:49	30°☾II	
max. Earth dist.	5821 Jun 10 19:49	21°II10'27	49.69073 AU	min. Earth dist.	5829 Dec 19 07:59	29°II24'14	48.27110 AU
retrograde	5821 Sep 19 16:19	22°II39'11		opposition	5829 Dec 20 13:33	29°II22'51	-16°31'46
min. Earth dist.	5821 Dec 11 07:17	21°II40'39	47.81167 AU	direct	5830 Mar 12 05:48	28°II24'15	
opposition	5821 Dec 12 19:40	21°II38'56	-17°01'15				
direct	5822 Mar 04 13:40	20°II39'50		conjunction	5830 Jun 18 05:35	29°II50'21	-15°50'34
				minimum elong	5830 Jun 18 05:43	29°II50'21	15°50'35
conjunction	5822 Jun 10 10:46	22°II07'04	-16°19'34	max. Earth dist.	5830 Jun 19 12:05	29°II52'06	50.21232 AU
minimum elong	5822 Jun 10 10:51	22°II07'05	16°19'35		5830 Jun 25 06:24	0°☾	
max. Earth dist.	5822 Jun 12 01:02	22°II09'18	49.76236 AU	retrograde	5830 Sep 28 14:54	1°☾19'53	
retrograde	5822 Sep 20 22:51	23°II37'51		opposition	5830 Dec 21 18:29	0°☾20'16	-16°26'57
min. Earth dist.	5822 Dec 12 12:57	22°II39'22	47.88077 AU	min. Earth dist.	5830 Dec 20 13:19	0°☾21'38	48.31102 AU
opposition	5822 Dec 14 01:05	22°II37'40	-16°58'31		5831 Jan 09 05:55	30°☾II	
direct	5823 Mar 05 17:46	21°II38'37		direct	5831 Mar 13 11:25	29°II21'43	
					5831 May 13 15:50	0°☾	
conjunction	5823 Jun 11 16:14	23°II05'40	-16°16'51				
minimum elong	5823 Jun 11 16:21	23°II05'41	16°16'53	conjunction	5831 Jun 19 10:53	0°☾47'42	-15°45'51
max. Earth dist.	5823 Jun 13 04:42	23°II07'47	49.83008 AU	minimum elong	5831 Jun 19 11:01	0°☾47'43	15°45'54
retrograde	5823 Sep 22 05:25	24°II36'14		max. Earth dist.	5831 Jun 20 16:11	0°☾49'23	50.25026 AU
min. Earth dist.	5823 Dec 13 19:22	23°II37'46	47.94637 AU	retrograde	5831 Sep 29 21:05	2°☾17'08	
opposition	5823 Dec 15 06:34	23°II36'07	-16°55'30	opposition	5831 Dec 22 23:33	1°☾17'34	-16°21'54
direct	5824 Mar 05 20:10	22°II37'07		min. Earth dist.	5831 Dec 21 20:45	1°☾18'49	48.34548 AU
				direct	5832 Mar 13 17:34	0°☾19'04	
conjunction	5824 Jun 11 21:45	24°II04'00	-16°13'53				
minimum elong	5824 Jun 11 21:51	24°II04'01	16°13'54	conjunction	5832 Jun 19 16:10	1°☾44'56	-15°40'56
max. Earth dist.	5824 Jun 13 10:27	24°II06'08	49.89447 AU	minimum elong	5832 Jun 19 16:19	1°☾44'57	15°40'57
retrograde	5824 Sep 22 08:12	25°II34'23		max. Earth dist.	5832 Jun 20 20:38	1°☾46'34	50.28285 AU
min. Earth dist.	5824 Dec 14 01:55	24°II35'55	48.00861 AU	retrograde	5832 Sep 30 02:59	3°☾14'15	
opposition	5824 Dec 15 11:56	24°II34'19	-16°52'13	min. Earth dist.	5832 Dec 22 02:02	2°☾15'57	48.37442 AU
direct	5825 Mar 07 03:20	23°II35'23		opposition	5832 Dec 23 04:23	2°☾14'44	-16°16'39
				direct	5833 Mar 14 22:02	1°☾16'15	
conjunction	5825 Jun 13 03:11	25°II02'06	-16°10'39				
minimum elong	5825 Jun 13 03:18	25°II02'06	16°10'40	conjunction	5833 Jun 20 21:18	2°☾42'01	-15°35'48
max. Earth dist.	5825 Jun 14 14:26	25°II04'08	49.95580 AU	minimum elong	5833 Jun 20 21:26	2°☾42'01	15°35'49
retrograde	5825 Sep 23 11:29	26°II32'18		max. Earth dist.	5833 Jun 21 23:26	2°☾43'30	50.31005 AU
min. Earth dist.	5825 Dec 15 06:56	25°II33'54	48.06787 AU	retrograde	5833 Oct 01 09:43	4°☾11'11	
opposition	5825 Dec 16 17:00	25°II32'18	-16°48'40	min. Earth dist.	5833 Dec 23 08:19	3°☾12'51	48.39836 AU
direct	5826 Mar 08 10:45	24°II33'25		opposition	5833 Dec 24 09:06	3°☾11'42	-16°11'10
				direct	5834 Mar 15 23:55	2°☾13'15	
conjunction	5826 Jun 14 08:31	25°II59'59	-16°07'08				
minimum elong	5826 Jun 14 08:38	25°II59'59	16°07'09	conjunction	5834 Jun 22 02:28	3°☾38'55	-15°30'26
max. Earth dist.	5826 Jun 15 19:06	26°II01'59	50.01407 AU	minimum elong	5834 Jun 22 02:37	3°☾38'55	15°30'28
retrograde	5826 Sep 24 18:36	27°II30'03		max. Earth dist.	5834 Jun 23 04:33	3°☾40'24	50.33254 AU
opposition	5826 Dec 17 22:19	26°II30'07	-16°44'50	retrograde	5834 Oct 02 12:45	5°☾07'57	
min. Earth dist.	5826 Dec 16 13:54	26°II31'38	48.12405 AU	opposition	5834 Dec 25 13:50	4°☾08'30	-16°05'28
direct	5827 Mar 09 16:55	25°II31'18		min. Earth dist.	5834 Dec 24 14:19	4°☾09'35	48.41780 AU

direct	5835 Mar 17 05:42	3°☾10'03		retrograde	5842 Oct 10 03:13	12°☾39'08	
				min. Earth dist.	5843 Jan 01 08:40	11°☾40'47	48.45257 AU
conjunction	5835 Jun 23 07:16	4°☾35'37 -15°24'51		opposition	5843 Jan 02 01:29	11°☾40'01	-15°10'57
minimum elong	5835 Jun 23 07:24	4°☾35'38 15°24'53		direct	5843 Mar 24 19:56	10°☾41'48	
max. Earth dist.	5835 Jun 24 07:46	4°☾37'01 50.35103 AU		evening set	5843 Jun 26 23:17	12°☾01'40	
retrograde	5835 Oct 03 15:37	6°☾04'34					
opposition	5835 Dec 26 18:28	5°☾05'08 -15°59'31		conjunction	5843 Jun 30 22:16	12°☾07'02	-14°31'31
min. Earth dist.	5835 Dec 25 19:05	5°☾06'13 48.43355 AU		minimum elong	5843 Jun 30 22:27	12°☾07'03	14°31'32
direct	5836 Mar 17 11:56	4°☾06'42		max. Earth dist.	5843 Jul 01 14:37	12°☾07'58	50.37965 AU
				morning rise	5843 Jul 04 21:51	12°☾12'26	
conjunction	5836 Jun 23 12:14	5°☾32'11 -15°19'02		retrograde	5843 Oct 11 11:33	13°☾35'32	
minimum elong	5836 Jun 23 12:24	5°☾32'12 15°19'04		opposition	5844 Jan 03 06:02	12°☾36'26	-15°03'05
max. Earth dist.	5836 Jun 24 11:58	5°☾33'32 50.36592 AU		min. Earth dist.	5844 Jan 02 14:54	12°☾37'08	48.43871 AU
retrograde	5836 Oct 03 21:13	7°☾01'02		direct	5844 Mar 24 20:47	11°☾38'14	
opposition	5836 Dec 26 23:02	6°☾01'38 -15°53'20		evening set	5844 Jun 26 16:32	12°☾57'25	
min. Earth dist.	5836 Dec 26 01:24	6°☾02'39 48.44595 AU					
direct	5837 Mar 18 18:19	5°☾03'14		conjunction	5844 Jul 01 03:24	13°☾03'27	-14°23'52
				minimum elong	5844 Jul 01 03:34	13°☾03'27	14°23'54
conjunction	5837 Jun 24 17:12	6°☾28'38 -15°12'57		max. Earth dist.	5844 Jul 01 19:22	13°☾04'21	50.36424 AU
minimum elong	5837 Jun 24 17:21	6°☾28'39 15°12'59		morning rise	5844 Jul 05 14:49	13°☾09'30	
max. Earth dist.	5837 Jun 25 16:36	6°☾29'58 50.37781 AU		retrograde	5844 Oct 11 15:40	14°☾31'53	
retrograde	5837 Oct 05 04:14	7°☾57'25		opposition	5845 Jan 03 10:21	13°☾32'47	-14°55'02
min. Earth dist.	5837 Dec 27 05:44	6°☾59'04 48.45530 AU		min. Earth dist.	5845 Jan 02 20:45	13°☾33'25	48.41943 AU
opposition	5837 Dec 28 03:27	6°☾58'03 -15°46'53		direct	5845 Mar 26 01:02	12°☾34'34	
direct	5838 Mar 19 21:19	5°☾59'40		evening set	5845 Jun 27 10:43	13°☾53'06	
conjunction	5838 Jun 25 21:53	7°☾25'02 -15°06'38		conjunction	5845 Jul 02 08:20	13°☾59'45	-14°16'00
minimum elong	5838 Jun 25 22:03	7°☾25'02 15°06'40		minimum elong	5845 Jul 02 08:31	13°☾59'46	14°16'02
max. Earth dist.	5838 Jun 26 19:37	7°☾26'16 50.38669 AU		max. Earth dist.	5845 Jul 02 22:17	14°☾00'32	50.34371 AU
retrograde	5838 Oct 06 10:57	8°☾53'44		morning rise	5845 Jul 07 06:38	14°☾06'25	
min. Earth dist.	5838 Dec 28 11:25	7°☾55'22 48.46179 AU		retrograde	5845 Oct 12 18:18	15°☾28'08	
opposition	5838 Dec 29 07:59	7°☾54'25 -15°40'11		opposition	5846 Jan 04 14:39	14°☾29'02	-14°46'46
direct	5839 Mar 20 23:11	6°☾56'05		min. Earth dist.	5846 Jan 04 01:33	14°☾29'38	48.39523 AU
				direct	5846 Mar 27 06:07	13°☾30'46	
conjunction	5839 Jun 27 02:47	8°☾21'23 -15°00'05		evening set	5846 Jun 28 05:19	14°☾48'43	
minimum elong	5839 Jun 27 02:57	8°☾21'24 15°00'06					
max. Earth dist.	5839 Jun 28 00:42	8°☾22'38 50.39272 AU		conjunction	5846 Jul 03 13:06	14°☾55'55	-14°07'56
retrograde	5839 Oct 07 12:57	9°☾50'02		minimum elong	5846 Jul 03 13:16	14°☾55'56	14°07'57
opposition	5839 Dec 30 12:24	8°☾50'46 -15°33'13		max. Earth dist.	5846 Jul 04 01:54	14°☾56'39	50.31835 AU
min. Earth dist.	5839 Dec 29 16:47	8°☾51'41 48.46519 AU		morning rise	5846 Jul 08 21:35	15°☾03'10	
direct	5840 Mar 21 04:13	7°☾52'28		retrograde	5846 Oct 13 21:22	16°☾24'16	
evening set	5840 Jun 25 09:19	9°☾15'08		opposition	5847 Jan 05 19:01	15°☾25'08	-14°38'16
				min. Earth dist.	5847 Jan 05 07:54	15°☾25'39	48.36658 AU
conjunction	5840 Jun 27 07:33	9°☾17'45 -14°53'16		direct	5847 Mar 28 13:35	14°☾26'51	
minimum elong	5840 Jun 27 07:43	9°☾17'46 14°53'19		evening set	5847 Jun 29 00:44	15°☾44'15	
max. Earth dist.	5840 Jun 28 03:53	9°☾18'55 50.39568 AU					
morning rise	5840 Jun 29 06:12	9°☾20'24		conjunction	5847 Jul 04 18:00	15°☾51'58	-13°59'38
retrograde	5840 Oct 07 16:03	10°☾46'21		minimum elong	5847 Jul 04 18:11	15°☾51'59	13°59'40
opposition	5840 Dec 30 16:46	9°☾47'08 -15°26'01		max. Earth dist.	5847 Jul 05 06:26	15°☾52'40	50.28905 AU
min. Earth dist.	5840 Dec 29 21:25	9°☾48'02 48.46527 AU		morning rise	5847 Jul 10 11:58	15°☾59'46	
direct	5841 Mar 22 09:35	8°☾48'53		retrograde	5847 Oct 15 03:01	17°☾20'17	
evening set	5841 Jun 25 18:14	10°☾10'24		opposition	5848 Jan 06 23:11	16°☾21'07	-14°29'33
				min. Earth dist.	5848 Jan 06 12:06	16°☾21'38	48.33416 AU
conjunction	5841 Jun 28 12:29	10°☾14'09 -14°46'14		direct	5848 Mar 28 18:12	15°☾22'48	
minimum elong	5841 Jun 28 12:39	10°☾14'10 14°46'15		evening set	5848 Jun 28 20:26	16°☾39'41	
max. Earth dist.	5841 Jun 29 07:52	10°☾15'15 50.39484 AU					
morning rise	5841 Jul 01 07:12	10°☾17'56		conjunction	5848 Jul 04 22:44	16°☾47'55	-13°51'07
retrograde	5841 Oct 08 21:21	11°☾42'44		minimum elong	5848 Jul 04 22:54	16°☾47'55	13°51'08
opposition	5841 Dec 31 21:08	10°☾43'34 -15°18'36		max. Earth dist.	5848 Jul 05 09:15	16°☾48'30	50.25617 AU
min. Earth dist.	5841 Dec 31 03:57	10°☾44'22 48.46127 AU		morning rise	5848 Jul 11 01:51	16°☾56'12	
direct	5842 Mar 23 15:28	9°☾45'20		retrograde	5848 Oct 15 10:14	18°☾16'12	
evening set	5842 Jun 26 07:46	11°☾05'58		opposition	5849 Jan 07 03:28	17°☾17'02	-14°20'36
				min. Earth dist.	5849 Jan 06 17:46	17°☾17'29	48.29847 AU
conjunction	5842 Jun 29 17:29	11°☾10'35 -14°38'59		direct	5849 Mar 29 19:56	16°☾18'41	
minimum elong	5842 Jun 29 17:39	11°☾10'36 14°39'01		evening set	5849 Jun 29 16:39	17°☾35'04	
max. Earth dist.	5842 Jun 30 12:10	11°☾11'39 50.38976 AU					
morning rise	5842 Jul 03 03:41	11°☾15'14		conjunction	5849 Jul 06 03:39	17°☾43'48	-13°42'22

minimum elong	5849 Jul 06 03:51	17°☾43'48	13°42'23	evening set	5856 Jul 03 22:19	24°☾05'39	
max. Earth dist.	5849 Jul 06 14:15	17°☾44'24	50.22013 AU				
morning rise	5849 Jul 12 15:29	17°☾52'34		conjunction	5856 Jul 12 14:27	24°☾17'23	-12°34'40
retrograde	5849 Oct 16 13:25	19°☾12'03		minimum elong	5856 Jul 12 14:39	24°☾17'23	12°34'42
opposition	5850 Jan 08 07:35	18°☾12'53	-14°11'23	max. Earth dist.	5856 Jul 12 16:31	24°☾17'30	49.87239 AU
min. Earth dist.	5850 Jan 07 22:43	18°☾13'18	48.25963 AU	morning rise	5856 Jul 21 07:48	24°☾29'11	
direct	5850 Mar 31 00:29	17°☾14'31		retrograde	5856 Oct 22 23:29	25°☾46'00	
evening set	5850 Jun 30 13:11	18°☾30'28		opposition	5857 Jan 14 13:50	24°☾46'52	-13°00'24
				min. Earth dist.	5857 Jan 14 12:56	24°☾46'55	47.88784 AU
conjunction	5850 Jul 07 08:26	18°☾39'40	-13°33'22	direct	5857 Apr 06 06:52	23°☾48'26	
minimum elong	5850 Jul 07 08:36	18°☾39'40	13°33'24	evening set	5857 Jul 04 20:50	25°☾02'01	
max. Earth dist.	5850 Jul 07 17:33	18°☾40'11	50.18127 AU				
morning rise	5850 Jul 14 04:35	18°☾48'54		conjunction	5857 Jul 13 19:44	25°☾14'07	-12°24'10
retrograde	5850 Oct 17 16:41	20°☾07'56		minimum elong	5857 Jul 13 19:55	25°☾14'08	12°24'11
opposition	5851 Jan 09 11:49	19°☾08'45	-14°01'57	max. Earth dist.	5857 Jul 13 21:00	25°☾14'12	49.80386 AU
min. Earth dist.	5851 Jan 09 03:03	19°☾09'10	48.21805 AU	morning rise	5857 Jul 22 19:44	25°☾26'19	
direct	5851 Apr 01 05:01	18°☾10'23		retrograde	5857 Oct 24 05:18	26°☾42'48	
evening set	5851 Jul 01 09:46	19°☾25'56		opposition	5858 Jan 15 18:04	25°☾43'38	-12°49'25
				min. Earth dist.	5858 Jan 15 17:37	25°☾43'40	47.81529 AU
conjunction	5851 Jul 08 13:09	19°☾35'35	-13°24'09	direct	5858 Apr 07 12:01	24°☾45'08	
minimum elong	5851 Jul 08 13:20	19°☾35'35	13°24'11	evening set	5858 Jul 05 19:29	25°☾58'25	
max. Earth dist.	5851 Jul 08 21:33	19°☾36'03	50.13947 AU				
morning rise	5851 Jul 15 17:31	19°☾45'17		conjunction	5858 Jul 15 00:52	26°☾10'54	-12°13'27
retrograde	5851 Oct 18 21:21	21°☾03'53		minimum elong	5858 Jul 15 01:04	26°☾10'55	12°13'28
opposition	5852 Jan 10 16:13	20°☾04'43	-13°52'15	max. Earth dist.	5858 Jul 14 23:50	26°☾10'51	49.73037 AU
min. Earth dist.	5852 Jan 10 09:15	20°☾05'03	48.17344 AU	morning rise	5858 Jul 24 07:38	26°☾23'29	
direct	5852 Apr 01 10:32	19°☾06'21		retrograde	5858 Oct 25 13:53	27°☾39'38	
evening set	5852 Jul 01 06:58	20°☾21'32		opposition	5859 Jan 16 22:32	26°☾40'26	-12°38'12
				min. Earth dist.	5859 Jan 16 23:46	26°☾40'22	47.73820 AU
conjunction	5852 Jul 08 18:08	20°☾31'36	-13°14'41	direct	5859 Apr 08 12:54	25°☾41'52	
minimum elong	5852 Jul 08 18:19	20°☾31'37	13°14'42	evening set	5859 Jul 06 18:06	26°☾54'51	
max. Earth dist.	5852 Jul 09 02:08	20°☾32'03	50.09467 AU				
morning rise	5852 Jul 16 06:14	20°☾41'45		conjunction	5859 Jul 16 06:03	27°☾07'43	-12°02'31
retrograde	5852 Oct 19 02:45	21°☾59'58		minimum elong	5859 Jul 16 06:14	27°☾07'43	12°02'33
opposition	5853 Jan 10 20:18	21°☾00'50	-13°42'19	max. Earth dist.	5859 Jul 16 04:52	27°☾07'39	49.65256 AU
min. Earth dist.	5853 Jan 10 13:23	21°☾01'09	48.12549 AU	morning rise	5859 Jul 25 19:12	27°☾20'39	
direct	5853 Apr 02 14:49	20°☾02'27		retrograde	5859 Oct 26 18:18	28°☾36'29	
evening set	5853 Jul 02 04:23	21°☾17'17		opposition	5860 Jan 18 02:58	27°☾37'14	-12°26'45
				min. Earth dist.	5860 Jan 18 05:09	27°☾37'08	47.65697 AU
conjunction	5853 Jul 09 23:04	21°☾27'48	-13°05'00	direct	5860 Apr 08 17:37	26°☾38'36	
minimum elong	5853 Jul 09 23:15	21°☾27'48	13°05'02	evening set	5860 Jul 06 17:11	27°☾51'19	
max. Earth dist.	5853 Jul 10 04:59	21°☾28'08	50.04619 AU				
morning rise	5853 Jul 17 18:53	21°☾38'22		conjunction	5860 Jul 16 11:18	28°☾04'32	-11°51'22
retrograde	5853 Oct 20 11:13	22°☾56'13		minimum elong	5860 Jul 16 11:30	28°☾04'33	11°51'24
opposition	5854 Jan 12 00:40	21°☾57'06	-13°32'09	max. Earth dist.	5860 Jul 16 08:31	28°☾04'22	49.57102 AU
min. Earth dist.	5854 Jan 11 19:27	21°☾57'21	48.07364 AU	morning rise	5860 Jul 26 06:48	28°☾17'50	
direct	5854 Apr 03 15:45	20°☾58'44		retrograde	5860 Oct 26 21:27	29°☾33'22	
evening set	5854 Jul 03 01:59	22°☾13'14		opposition	5861 Jan 18 07:14	28°☾34'03	-12°15'05
				min. Earth dist.	5861 Jan 18 09:52	28°☾33'56	47.57230 AU
conjunction	5854 Jul 11 04:06	22°☾24'10	-12°55'06	direct	5861 Apr 09 22:23	27°☾35'20	
minimum elong	5854 Jul 11 04:17	22°☾24'11	12°55'06	evening set	5861 Jul 07 16:16	28°☾47'49	
max. Earth dist.	5854 Jul 11 09:50	22°☾24'30	49.99337 AU				
morning rise	5854 Jul 19 07:13	22°☾35'10		conjunction	5861 Jul 17 16:36	29°☾01'23	-11°39'59
retrograde	5854 Oct 21 16:00	23°☾52'39		minimum elong	5861 Jul 17 16:47	29°☾01'24	11°40'00
opposition	5855 Jan 13 05:01	22°☾53'33	-13°21'47	max. Earth dist.	5861 Jul 17 12:48	29°☾01'10	49.48603 AU
min. Earth dist.	5855 Jan 13 01:07	22°☾53'44	48.01698 AU	morning rise	5861 Jul 27 18:21	29°☾15'02	
direct	5855 Apr 04 19:17	21°☾55'11			5861 Sep 02 15:54	0°♂	
evening set	5855 Jul 04 00:05	23°☾09'22		retrograde	5861 Oct 28 00:42	0°♂30'19	
					5861 Dec 23 11:20	30°♂☾	
conjunction	5855 Jul 12 09:12	23°☾20'43	-12°44'59	opposition	5862 Jan 19 11:47	29°☾30'56	-12°03'09
minimum elong	5855 Jul 12 09:23	23°☾20'43	12°45'01	min. Earth dist.	5862 Jan 19 16:11	29°☾30'44	47.48440 AU
max. Earth dist.	5855 Jul 12 12:48	23°☾20'55	49.93562 AU	direct	5862 Apr 11 04:51	28°☾32'09	
morning rise	5855 Jul 20 19:28	23°☾32'06		evening set	5862 Jul 08 15:27	29°☾44'24	
retrograde	5855 Oct 22 20:21	24°☾49'16					
opposition	5856 Jan 14 09:19	23°☾50'10	-13°11'12	conjunction	5862 Jul 18 21:49	29°☾58'19	-11°28'22
min. Earth dist.	5856 Jan 14 06:11	23°☾50'19	47.95519 AU	minimum elong	5862 Jul 18 22:01	29°☾58'19	11°28'24
direct	5856 Apr 04 23:09	22°☾51'46		max. Earth dist.	5862 Jul 18 17:45	29°☾58'05	49.39812 AU

	5862 Jul 20 03:33	0°♏	direct	5869 Apr 17 10:45	5°♏14'12	
morning rise	5862 Jul 29 05:29	0°♏12'19	evening set	5869 Jul 13 16:25	6°♏25'17	
retrograde	5862 Oct 29 05:22	1°♏27'20				
opposition	5863 Jan 20 16:15	0°♏27'54 -11°50'59	conjunction	5869 Jul 25 13:39	6°♏41'32 -10°00'38	
min. Earth dist.	5863 Jan 20 20:24	0°♏27'43 47.39356 AU	minimum elong	5869 Jul 25 13:51	6°♏41'33 10°00'39	
	5863 Feb 15 10:08	30°♏☿	max. Earth dist.	5869 Jul 25 00:53	6°♏40'48 48.68034 AU	
direct	5863 Apr 12 10:40	29°♏29'03	morning rise	5869 Aug 06 12:20	6°♏57'54	
	5863 Jun 06 03:54	0°♏	retrograde	5869 Nov 05 01:22	8°♏11'33	
evening set	5863 Jul 09 14:56	0°♏41'04	opposition	5870 Jan 27 01:35	7°♏11'44 -10°19'12	
			min. Earth dist.	5870 Jan 27 14:24	7°♏11'08 46.65053 AU	
conjunction	5863 Jul 20 03:06	0°♏55'20 -11°16'31	direct	5870 Apr 18 15:44	6°♏12'20	
minimum elong	5863 Jul 20 03:17	0°♏55'21 11°16'32	evening set	5870 Jul 14 17:18	7°♏23'17	
max. Earth dist.	5863 Jul 19 21:10	0°♏55'00 49.30729 AU				
morning rise	5863 Jul 30 16:52	1°♏09'42	conjunction	5870 Jul 26 19:28	7°♏39'51 -9°47'14	
retrograde	5863 Oct 30 13:48	2°♏24'29	minimum elong	5870 Jul 26 19:38	7°♏39'52 9°47'15	
opposition	5864 Jan 21 20:50	1°♏25'01 -11°38'34	max. Earth dist.	5870 Jul 26 04:52	7°♏39'01 48.55895 AU	
min. Earth dist.	5864 Jan 22 02:28	1°♏24'45 47.29987 AU	morning rise	5870 Aug 07 23:17	7°♏56'31	
direct	5864 Apr 12 12:54	0°♏26'06	retrograde	5870 Nov 06 06:49	9°♏10'01	
evening set	5864 Jul 09 14:31	1°♏37'55	opposition	5871 Jan 28 06:35	8°♏10'06 -10°05'11	
			min. Earth dist.	5871 Jan 28 20:08	8°♏09'28 46.52554 AU	
conjunction	5864 Jul 20 08:39	1°♏52'32 -11°04'25	direct	5871 Apr 19 20:21	7°♏10'35	
minimum elong	5864 Jul 20 08:50	1°♏52'33 11°04'27	evening set	5871 Jul 15 18:23	8°♏21'26	
max. Earth dist.	5864 Jul 20 02:46	1°♏52'12 49.21345 AU	max. Earth dist.	5871 Jul 27 09:46	8°♏37'24 48.43328 AU	
morning rise	5864 Jul 31 04:08	2°♏07'14				
retrograde	5864 Oct 30 20:19	3°♏21'48	conjunction	5871 Jul 28 01:33	8°♏38'18 -9°33'36	
opposition	5865 Jan 22 01:28	2°♏22'17 -11°25'55	minimum elong	5871 Jul 28 01:45	8°♏38'19 9°33'37	
min. Earth dist.	5865 Jan 22 08:01	2°♏21'59 47.20285 AU	morning rise	5871 Aug 09 10:23	8°♏55'17	
direct	5865 Apr 13 15:55	1°♏23'18	retrograde	5871 Nov 07 10:45	10°♏08'39	
evening set	5865 Jul 10 14:31	2°♏34'58	opposition	5872 Jan 29 11:38	9°♏08'38 -9°50'55	
			min. Earth dist.	5872 Jan 30 03:03	9°♏07'54 46.39665 AU	
conjunction	5865 Jul 21 14:09	2°♏49'55 -10°52'06	direct	5872 Apr 20 03:23	8°♏08'59	
minimum elong	5865 Jul 21 14:20	2°♏49'56 10°52'06	evening set	5872 Jul 15 19:41	9°♏19'44	
max. Earth dist.	5865 Jul 21 06:29	2°♏49'29 49.11616 AU				
morning rise	5865 Aug 01 15:21	3°♏04'58	conjunction	5872 Jul 28 07:45	9°♏36'55 -9°19'44	
retrograde	5865 Nov 01 02:44	4°♏19'19	minimum elong	5872 Jul 28 07:55	9°♏36'56 9°19'45	
opposition	5866 Jan 23 06:01	3°♏19'46 -11°13'01	max. Earth dist.	5872 Jul 27 15:29	9°♏35'59 48.30413 AU	
min. Earth dist.	5866 Jan 23 13:10	3°♏19'26 47.10214 AU	morning rise	5872 Aug 09 21:19	9°♏54'12	
direct	5866 Apr 14 18:56	2°♏20'44	retrograde	5872 Nov 07 15:43	11°♏07'28	
evening set	5866 Jul 11 14:36	3°♏32'14	opposition	5873 Jan 29 16:40	10°♏07'20 -9°36'25	
			min. Earth dist.	5873 Jan 30 07:58	10°♏06'36 46.26443 AU	
conjunction	5866 Jul 22 19:51	3°♏47'31 -10°39'33	direct	5873 Apr 21 09:56	9°♏07'34	
minimum elong	5866 Jul 22 20:02	3°♏47'32 10°39'35	evening set	5873 Jul 16 21:13	10°♏18'14	
max. Earth dist.	5866 Jul 22 10:55	3°♏47'01 49.01466 AU				
morning rise	5866 Aug 03 02:39	4°♏02'54	conjunction	5873 Jul 29 13:53	10°♏35'44 -9°05'38	
retrograde	5866 Nov 02 05:53	5°♏17'05	minimum elong	5873 Jul 29 14:03	10°♏35'44 9°05'39	
opposition	5867 Jan 24 10:53	4°♏17'29 -10°59'54	max. Earth dist.	5873 Jul 28 19:43	10°♏34'41 48.17176 AU	
min. Earth dist.	5867 Jan 24 20:11	4°♏17'02 46.99693 AU	morning rise	5873 Aug 11 08:20	10°♏53'20	
direct	5867 Apr 16 02:00	3°♏18'23	retrograde	5873 Nov 09 00:06	12°♏06'29	
evening set	5867 Jul 12 14:56	4°♏29'44	opposition	5874 Jan 30 21:52	11°♏06'16 -9°21'39	
			min. Earth dist.	5874 Jan 31 14:45	11°♏05'27 46.12936 AU	
conjunction	5867 Jul 24 01:38	4°♏45'20 -10°26'47	direct	5874 Apr 22 13:14	10°♏06'23	
minimum elong	5867 Jul 24 01:50	4°♏45'21 10°26'48	evening set	5874 Jul 17 22:49	11°♏17'00	
max. Earth dist.	5867 Jul 23 15:58	4°♏44'47 48.90849 AU				
morning rise	5867 Aug 04 13:46	5°♏01'03	conjunction	5874 Jul 30 20:15	11°♏34'47 -8°51'17	
retrograde	5867 Nov 03 10:39	6°♏15'04	minimum elong	5874 Jul 30 20:25	11°♏34'48 8°51'18	
opposition	5868 Jan 25 15:43	5°♏15'24 -10°46'33	max. Earth dist.	5874 Jul 30 02:13	11°♏33'45 48.03672 AU	
min. Earth dist.	5868 Jan 26 01:26	5°♏14'56 46.88665 AU	morning rise	5874 Aug 12 19:10	11°♏52'41	
direct	5868 Apr 16 08:28	4°♏16'12	retrograde	5874 Nov 10 07:51	13°♏05'45	
evening set	5868 Jul 12 15:40	5°♏27'25	opposition	5875 Feb 01 03:10	12°♏05'27 -9°06'37	
			min. Earth dist.	5875 Feb 01 20:32	12°♏04'37 45.99166 AU	
conjunction	5868 Jul 24 07:34	5°♏43'21 -10°13'49	direct	5875 Apr 23 16:37	11°♏05'27	
minimum elong	5868 Jul 24 07:44	5°♏43'22 10°13'51	evening set	5875 Jul 19 00:42	12°♏16'02	
max. Earth dist.	5868 Jul 23 19:15	5°♏42'39 48.79701 AU	max. Earth dist.	5875 Jul 31 06:58	12°♏33'00 47.89926 AU	
morning rise	5868 Aug 05 01:11	5°♏59'24				
retrograde	5868 Nov 03 19:31	7°♏13'14	conjunction	5875 Aug 01 02:31	12°♏34'08 -8°36'41	
opposition	5869 Jan 25 20:37	6°♏13'30 -10°32'59	minimum elong	5875 Aug 01 02:42	12°♏34'09 8°36'43	
min. Earth dist.	5869 Jan 26 08:23	6°♏12'56 46.77115 AU	morning rise	5875 Aug 14 06:06	12°♏52'20	

retrograde	5875 Nov 11 16:28	14° Ω 05'20	min. Earth dist.	5882 Feb 08 21:23	19° Ω 08'44	44.93291 AU
opposition	5876 Feb 02 08:35	13° Ω 04'57 -8°51'20	direct	5882 Apr 30 07:21	18° Ω 09'06	
min. Earth dist.	5876 Feb 03 02:20	13° Ω 04'06 45.85155 AU	evening set	5882 Jul 24 21:52	19° Ω 19'53	
direct	5876 Apr 23 19:44	12° Ω 04'51	max. Earth dist.	5882 Aug 07 00:14	19° Ω 38'20	46.83538 AU
evening set	5876 Jul 19 02:52	13° Ω 15'26				
			conjunction	5882 Aug 08 04:08	19° Ω 39'59	-6°47'46
conjunction	5876 Aug 01 09:10	13° Ω 33'49 -8°21'50	minimum elong	5882 Aug 08 04:17	19° Ω 39'59	6°47'47
minimum elong	5876 Aug 01 09:20	13° Ω 33'50 8°21'51	morning rise	5882 Aug 22 11:54	20° Ω 00'11	
max. Earth dist.	5876 Jul 31 12:43	13° Ω 32'38 47.75907 AU	retrograde	5882 Nov 18 14:44	21° Ω 13'09	
morning rise	5876 Aug 14 17:08	13° Ω 52'19	opposition	5883 Feb 09 02:00	20° Ω 11'58	-6°57'17
	5876 Oct 20 14:52	15° Ω	min. Earth dist.	5883 Feb 10 03:44	20° Ω 10'43	44.76397 AU
retrograde	5876 Nov 11 20:30	15° Ω 05'17	direct	5883 May 01 15:38	19° Ω 10'54	
	5876 Dec 04 03:55	15° $\mathcal{R}\Omega$	evening set	5883 Jul 26 01:56	20° Ω 21'44	
opposition	5877 Feb 02 14:05	14° Ω 04'49 -8°35'47	max. Earth dist.	5883 Aug 08 05:38	20° Ω 40'19	46.66565 AU
min. Earth dist.	5877 Feb 03 09:34	14° Ω 03'53 45.70860 AU				
direct	5877 Apr 25 02:51	13° Ω 04'37	conjunction	5883 Aug 09 11:40	20° Ω 42'06	-6°31'16
evening set	5877 Jul 20 05:20	14° Ω 15'13	minimum elong	5883 Aug 09 11:48	20° Ω 42'06	6°31'17
			morning rise	5883 Aug 23 23:08	21° Ω 02'34	
conjunction	5877 Aug 02 15:58	14° Ω 33'54 -8°06'45	retrograde	5883 Nov 19 22:38	22° Ω 15'34	
minimum elong	5877 Aug 02 16:08	14° Ω 33'54 8°06'47	opposition	5884 Feb 10 08:31	21° Ω 14'13	-6°39'59
max. Earth dist.	5877 Aug 01 19:04	14° Ω 32'40 47.61600 AU	min. Earth dist.	5884 Feb 11 12:13	21° Ω 12'52	44.59126 AU
morning rise	5877 Aug 16 04:07	14° Ω 52'41	direct	5884 May 01 21:45	20° Ω 12'57	
	5877 Aug 21 13:20	15° Ω	evening set	5884 Jul 26 06:15	21° Ω 23'52	
retrograde	5877 Nov 13 01:04	16° Ω 05'39				
opposition	5878 Feb 03 19:40	15° Ω 05'06 -8°19'59	conjunction	5884 Aug 09 19:36	21° Ω 44'29	-6°14'31
min. Earth dist.	5878 Feb 04 15:17	15° Ω 04'09 45.56241 AU	minimum elong	5884 Aug 09 19:44	21° Ω 44'30	6°14'32
	5878 Feb 08 05:10	15° $\mathcal{R}\Omega$	max. Earth dist.	5884 Aug 08 13:28	21° Ω 42'42	46.49236 AU
direct	5878 Apr 26 10:48	14° Ω 04'47	morning rise	5884 Aug 24 10:19	22° Ω 05'13	
	5878 Jul 09 19:49	15° Ω	retrograde	5884 Nov 20 06:49	23° Ω 18'16	
evening set	5878 Jul 21 08:01	15° Ω 15'24	opposition	5885 Feb 10 14:56	22° Ω 16'46	-6°22'26
			min. Earth dist.	5885 Feb 11 19:09	22° Ω 15'22	44.41521 AU
conjunction	5878 Aug 03 22:40	15° Ω 34'23 -7°51'25	direct	5885 May 03 03:48	21° Ω 15'18	
minimum elong	5878 Aug 03 22:50	15° Ω 34'23 7°51'26	evening set	5885 Jul 27 10:59	22° Ω 26'18	
max. Earth dist.	5878 Aug 02 23:33	15° Ω 33'02 47.46919 AU	max. Earth dist.	5885 Aug 09 19:33	22° Ω 45'17	46.31607 AU
morning rise	5878 Aug 17 15:08	15° Ω 53'28				
retrograde	5878 Nov 14 10:40	17° Ω 06'26	conjunction	5885 Aug 11 03:28	22° Ω 47'12	-5°57'32
opposition	5879 Feb 05 01:33	16° Ω 05'47 -8°03'56	minimum elong	5885 Aug 11 03:36	22° Ω 47'12	5°57'32
min. Earth dist.	5879 Feb 05 23:07	16° Ω 04'45 45.41226 AU	morning rise	5885 Aug 25 21:36	23° Ω 08'11	
direct	5879 Apr 27 14:24	15° Ω 05'22	retrograde	5885 Nov 21 17:41	24° Ω 21'18	
evening set	5879 Jul 22 11:02	16° Ω 16'01	opposition	5886 Feb 11 21:40	23° Ω 19'37	-6°04'36
max. Earth dist.	5879 Aug 04 06:25	16° Ω 33'54 47.31802 AU	min. Earth dist.	5886 Feb 13 02:31	23° Ω 18'12	44.23651 AU
			direct	5886 May 04 07:36	22° Ω 17'58	
conjunction	5879 Aug 05 05:54	16° Ω 35'17 -7°35'51	evening set	5886 Jul 28 15:42	23° Ω 29'06	
minimum elong	5879 Aug 05 06:03	16° Ω 35'17 7°35'53	max. Earth dist.	5886 Aug 11 02:55	23° Ω 48'18	46.13708 AU
morning rise	5879 Aug 19 02:14	16° Ω 54'39				
retrograde	5879 Nov 15 18:30	18° Ω 07'37	conjunction	5886 Aug 12 11:26	23° Ω 50'15	-5°40'16
opposition	5880 Feb 06 07:27	17° Ω 06'52 -7°47'38	minimum elong	5886 Aug 12 11:34	23° Ω 50'15	5°40'18
min. Earth dist.	5880 Feb 07 05:59	17° Ω 05'47 45.25737 AU	morning rise	5886 Aug 27 08:38	24° Ω 11'30	
direct	5880 Apr 27 19:22	16° Ω 06'19	retrograde	5886 Nov 23 01:10	25° Ω 24'43	
evening set	5880 Jul 22 14:30	17° Ω 17'00	opposition	5887 Feb 13 04:39	24° Ω 22'52	-5°46'30
max. Earth dist.	5880 Aug 04 11:30	17° Ω 35'02 47.16203 AU	min. Earth dist.	5887 Feb 14 10:52	24° Ω 21'22	44.05530 AU
			direct	5887 May 05 14:36	23° Ω 21'02	
conjunction	5880 Aug 05 13:11	17° Ω 36'33 -7°20'03	evening set	5887 Jul 29 20:55	24° Ω 32'19	
minimum elong	5880 Aug 05 13:20	17° Ω 36'33 7°20'04	max. Earth dist.	5887 Aug 12 10:46	24° Ω 51'44	45.95588 AU
morning rise	5880 Aug 19 13:35	17° Ω 56'12				
retrograde	5880 Nov 16 03:45	19° Ω 09'09	conjunction	5887 Aug 13 19:44	24° Ω 53'44	-5°22'46
opposition	5881 Feb 06 13:32	18° Ω 08'17 -7°31'06	minimum elong	5887 Aug 13 19:51	24° Ω 53'44	5°22'47
min. Earth dist.	5881 Feb 07 13:10	18° Ω 07'08 45.09760 AU	morning rise	5887 Aug 28 19:57	25° Ω 15'14	
direct	5881 Apr 28 23:30	17° Ω 07'34	retrograde	5887 Nov 24 07:18	26° Ω 28'34	
evening set	5881 Jul 23 18:03	18° Ω 18'18	opposition	5888 Feb 14 11:33	25° Ω 26'34	-5°28'07
			min. Earth dist.	5888 Feb 15 17:40	25° Ω 25'04	43.87188 AU
conjunction	5881 Aug 06 20:36	18° Ω 38'07 -7°04'02	direct	5888 May 05 23:37	24° Ω 24'34	
minimum elong	5881 Aug 06 20:45	18° Ω 38'08 7°04'03	evening set	5888 Jul 30 02:36	25° Ω 36'02	
max. Earth dist.	5881 Aug 05 17:28	18° Ω 36'31 47.00094 AU	max. Earth dist.	5888 Aug 12 17:19	25° Ω 55'35	45.77224 AU
morning rise	5881 Aug 21 00:44	18° Ω 58'03				
retrograde	5881 Nov 17 09:37	20° Ω 11'01	conjunction	5888 Aug 14 04:15	25° Ω 57'42	-5°05'00
opposition	5882 Feb 07 19:46	19° Ω 09'59 -7°14'19	minimum elong	5888 Aug 14 04:22	25° Ω 57'42	5°05'01

morning rise	5888 Aug 29 07:27	26°019'28	opposition	5895 Feb 21 18:53	3°09'11 -3°11'57
retrograde	5888 Nov 24 16:14	27°032'57	min. Earth dist.	5895 Feb 23 09:18	3°07'13 42.49038 AU
opposition	5889 Feb 14 18:53	26°030'49 -5°09'28	direct	5895 May 14 04:25	2°05'47
min. Earth dist.	5889 Feb 16 02:45	26°029'14 43.68600 AU	evening set	5895 Aug 07 04:51	3°19'06
direct	5889 May 07 06:09	25°028'39	max. Earth dist.	5895 Aug 21 02:39	3°39'41 44.38280 AU
evening set	5889 Jul 31 08:27	26°040'20			
max. Earth dist.	5889 Aug 14 02:11	27°000'08 45.58591 AU	conjunction	5895 Aug 22 22:44	3°42'26 -2°53'36
			minimum elong	5895 Aug 22 22:49	3°42'27 2°53'36
conjunction	5889 Aug 15 13:00	27°002'15 -4°46'58	morning rise	5895 Sep 07 17:50	4°05'52
minimum elong	5889 Aug 15 13:07	27°002'15 4°46'58	retrograde	5895 Dec 03 15:03	5°20'57
morning rise	5889 Aug 30 18:45	27°024'16	opposition	5896 Feb 23 03:31	4°17'33 -2°51'26
retrograde	5889 Nov 26 01:10	28°037'57	min. Earth dist.	5896 Feb 24 19:16	4°15'31 42.27683 AU
opposition	5890 Feb 16 02:16	27°035'41 -4°50'33	direct	5896 May 14 09:15	3°13'53
min. Earth dist.	5890 Feb 17 10:32	27°034'03 43.49711 AU	evening set	5896 Aug 07 13:35	4°27'32
direct	5890 May 08 12:36	26°033'20	max. Earth dist.	5896 Aug 21 12:37	4°48'18 44.16818 AU
evening set	5890 Aug 01 14:56	27°045'16			
max. Earth dist.	5890 Aug 15 09:04	28°005'11 45.39632 AU	conjunction	5896 Aug 23 09:17	4°51'05 -2°33'50
			minimum elong	5896 Aug 23 09:20	4°51'06 2°33'51
conjunction	5890 Aug 16 21:56	28°007'25 -4°28'42	morning rise	5896 Sep 08 05:51	5°14'44
minimum elong	5890 Aug 16 22:02	28°007'26 4°28'43	retrograde	5896 Dec 04 02:10	6°30'06
morning rise	5890 Sep 01 06:26	28°029'42	opposition	5897 Feb 23 12:31	5°26'28 -2°30'38
retrograde	5890 Nov 27 13:22	29°043'35	min. Earth dist.	5897 Feb 25 05:29	5°24'22 42.06020 AU
opposition	5891 Feb 17 09:54	28°041'10 -4°31'22	direct	5897 May 15 17:00	4°22'31
min. Earth dist.	5891 Feb 18 19:29	28°039'29 43.30473 AU	evening set	5897 Aug 08 22:40	5°36'32
direct	5891 May 09 17:13	27°038'39	max. Earth dist.	5897 Aug 22 22:17	5°57'26 43.95091 AU
evening set	5891 Aug 02 21:39	28°050'50			
max. Earth dist.	5891 Aug 16 17:17	29°010'56 45.20261 AU	conjunction	5897 Aug 24 19:48	6°00'17 -2°13'48
			minimum elong	5897 Aug 24 19:52	6°00'18 2°13'49
conjunction	5891 Aug 18 07:16	29°013'15 -4°10'10	morning rise	5897 Sep 09 17:52	6°24'08
minimum elong	5891 Aug 18 07:22	29°013'15 4°10'10	retrograde	5897 Dec 05 12:40	7°39'48
morning rise	5891 Sep 02 18:05	29°035'46	opposition	5898 Feb 24 21:37	6°35'56 -2°09'33
	5891 Sep 20 11:01	0°00	min. Earth dist.	5898 Feb 26 14:39	6°33'49 41.84129 AU
retrograde	5891 Nov 28 23:13	0°049'52	direct	5898 May 17 03:44	5°31'43
	5892 Feb 08 03:55	30°00	evening set	5898 Aug 10 08:15	6°46'06
opposition	5892 Feb 18 17:55	29°047'18 -4°11'54	max. Earth dist.	5898 Aug 24 07:32	7°07'05 43.73139 AU
min. Earth dist.	5892 Feb 20 05:15	29°045'31 43.10791 AU			
direct	5892 May 10 01:31	28°044'35	conjunction	5898 Aug 26 06:39	7°10'04 -1°53'32
evening set	5892 Aug 03 04:58	29°057'03	minimum elong	5898 Aug 26 06:42	7°10'05 1°53'32
	5892 Aug 05 06:14	0°00	morning rise	5898 Sep 11 05:59	7°34'07
max. Earth dist.	5892 Aug 17 01:38	0°17'17 45.00439 AU	retrograde	5898 Dec 06 22:20	8°50'07
			opposition	5899 Feb 26 07:07	7°46'00 -1°48'12
conjunction	5892 Aug 18 16:54	0°19'42 -3°51'24	min. Earth dist.	5899 Feb 28 01:47	7°43'47 41.62051 AU
minimum elong	5892 Aug 18 16:59	0°19'43 3°51'25	direct	5899 May 18 14:29	6°41'31
morning rise	5892 Sep 03 06:01	0°42'27	evening set	5899 Aug 11 18:09	7°56'18
retrograde	5892 Nov 29 08:22	1°56'46	max. Earth dist.	5899 Aug 25 18:58	8°17'30 43.51019 AU
opposition	5893 Feb 19 01:54	0°54'02 -3°52'11			
min. Earth dist.	5893 Feb 20 13:41	0°52'13 42.90648 AU	conjunction	5899 Aug 27 17:51	8°20'29 -1°33'00
	5893 Apr 13 12:48	30°00	minimum elong	5899 Aug 27 17:54	8°20'29 1°33'00
direct	5893 May 11 10:47	29°051'06	morning rise	5899 Sep 12 18:11	8°44'44
	5893 Jun 08 03:28	0°00	retrograde	5899 Dec 08 07:40	10°01'06
evening set	5893 Aug 04 12:40	1°03'50	opposition	5900 Feb 27 16:50	8°56'45 -1°26'35
max. Earth dist.	5893 Aug 18 09:08	1°24'10 44.80138 AU	min. Earth dist.	5900 Mar 01 11:14	8°54'32 41.39808 AU
			direct	5900 May 20 01:18	7°51'59
conjunction	5893 Aug 20 02:40	1°26'44 -3°32'23	evening set	5900 Aug 13 04:49	9°07'13
minimum elong	5893 Aug 20 02:46	1°26'45 3°32'23	max. Earth dist.	5900 Aug 27 04:31	9°28'28 43.28732 AU
morning rise	5893 Sep 04 17:58	1°49'44			
retrograde	5893 Nov 30 16:54	3°04'17	conjunction	5900 Aug 29 05:18	9°31'35 -1°12'13
opposition	5894 Feb 20 10:22	2°01'20 -3°32'12	minimum elong	5900 Aug 29 05:20	9°31'35 1°12'13
min. Earth dist.	5894 Feb 22 00:22	1°59'24 42.70050 AU	morning rise	5900 Sep 14 06:39	9°56'02
direct	5894 May 12 19:26	0°58'11	retrograde	5900 Dec 09 20:34	11°12'48
evening set	5894 Aug 05 20:24	2°11'12	opposition	5901 Mar 01 02:47	10°08'14 -1°04'41
max. Earth dist.	5894 Aug 19 18:45	2°31'43 44.59403 AU	min. Earth dist.	5901 Mar 02 22:32	10°05'56 41.17411 AU
			direct	5901 May 21 08:46	9°03'12
conjunction	5894 Aug 21 12:35	2°34'19 -3°13'07	evening set	5901 Aug 14 15:49	10°18'55
minimum elong	5894 Aug 21 12:40	2°34'19 3°13'08	max. Earth dist.	5901 Aug 28 16:14	10°40'19 43.06262 AU
morning rise	5894 Sep 06 05:43	2°57'32			
retrograde	5894 Dec 02 01:39	4°12'21	conjunction	5901 Aug 30 17:11	10°43'28 -0°51'11

minimum elong	5901 Aug 30 17:13	10° 11 43'28	0°51'11	retrograde	5907 Dec 19 19:44	19° 11 58'30	
morning rise	5901 Sep 15 19:02	11° 11 08'05		opposition	5908 Mar 09 09:56	18° 11 52'04	1°36'05
retrograde	5901 Dec 11 09:47	12° 11 25'19		min. Earth dist.	5908 Mar 11 12:39	18° 11 49'19	39.52727 AU
opposition	5902 Mar 02 13:09	11° 11 20'30	-0°42'30	direct	5908 May 29 10:09	17° 11 44'54	
min. Earth dist.	5902 Mar 04 09:44	11° 11 18'09	40.94811 AU	evening set	5908 Aug 23 13:48	19° 11 04'48	
direct	5902 May 22 17:15	10° 11 15'13		max. Earth dist.	5908 Sep 06 04:20	19° 11 26'31	41.40480 AU
evening set	5902 Aug 16 03:20	11° 11 31'27					
max. Earth dist.	5902 Aug 30 02:59	11° 11 52'56	42.83571 AU	conjunction	5908 Sep 08 14:13	19° 11 30'24	1°42'50
				minimum elong	5908 Sep 08 14:10	19° 11 30'24	1°42'50
conjunction	5902 Sep 01 05:09	11° 11 56'11	-0°29'54	morning rise	5908 Sep 24 14:34	19° 11 56'02	
minimum elong	5902 Sep 01 05:10	11° 11 56'11	0°29'54	retrograde	5908 Dec 20 11:16	21° 11 17'05	
morning rise	5902 Sep 17 07:36	12° 11 20'59		opposition	5909 Mar 10 22:36	20° 11 10'19	2°00'04
retrograde	5902 Dec 13 01:11	13° 11 38'40		min. Earth dist.	5909 Mar 13 02:49	20° 11 07'29	39.28070 AU
opposition	5903 Mar 03 23:44	12° 11 33'38	-0°20'04	direct	5909 May 30 23:04	19° 11 02'48	
min. Earth dist.	5903 Mar 05 20:47	12° 11 31'15	40.71965 AU	evening set	5909 Aug 25 05:36	20° 11 23'25	
direct	5903 May 24 02:00	11° 11 28'04		max. Earth dist.	5909 Sep 07 18:49	20° 11 45'12	41.15710 AU
evening set	5903 Aug 17 15:40	12° 11 44'51					
max. Earth dist.	5903 Aug 31 14:01	13° 11 06'23	42.60567 AU	conjunction	5909 Sep 10 04:56	20° 11 49'08	2°05'44
				minimum elong	5909 Sep 10 04:52	20° 11 49'08	2°05'44
conjunction	5903 Sep 02 17:48	13° 11 09'46	-0°08'24	morning rise	5909 Sep 26 04:07	21° 11 14'52	
minimum elong	5903 Sep 02 17:49	13° 11 09'46	0°08'25	retrograde	5909 Dec 22 02:24	22° 11 36'35	
behind sun begin	5903 Sep 02 12:07	13° 11 09'25		opposition	5910 Mar 12 11:35	21° 11 29'31	2°24'18
behind sun end	5903 Sep 02 23:31	13° 11 10'06		min. Earth dist.	5910 Mar 14 15:27	21° 11 26'40	39.03287 AU
morning rise	5903 Sep 18 20:27	13° 11 34'43		direct	5910 Jun 01 13:20	20° 11 21'38	
retrograde	5903 Dec 14 13:27	14° 11 52'55		evening set	5910 Aug 26 22:00	21° 11 43'02	
asc. node	5904 Jan 21 21:52	14° 11 35'42		max. Earth dist.	5910 Sep 09 08:07	22° 11 04'45	40.90819 AU
opposition	5904 Mar 04 10:43	13° 11 47'38	0°02'39				
min. Earth dist.	5904 Mar 06 09:51	13° 11 45'08	40.48789 AU	conjunction	5910 Sep 11 19:51	22° 11 08'50	2°28'52
direct	5904 May 24 13:14	12° 11 41'47		minimum elong	5910 Sep 11 19:47	22° 11 08'50	2°28'52
evening set	5904 Aug 18 04:32	13° 11 59'08		morning rise	5910 Sep 27 17:39	22° 11 34'40	
max. Earth dist.	5904 Sep 01 02:33	14° 11 20'46	42.37219 AU	retrograde	5910 Dec 23 16:22	23° 11 57'05	
				opposition	5911 Mar 14 01:07	22° 11 49'42	2°48'46
conjunction	5904 Sep 03 06:54	14° 11 24'12	0°13'27	min. Earth dist.	5911 Mar 16 06:30	22° 11 46'46	38.78425 AU
minimum elong	5904 Sep 03 06:53	14° 11 24'12	0°13'27	direct	5911 Jun 03 02:00	21° 11 41'29	
behind sun begin	5904 Sep 03 03:22	14° 11 23'59		evening set	5911 Aug 28 15:09	23° 11 03'40	
behind sun end	5904 Sep 03 10:24	14° 11 24'25		max. Earth dist.	5911 Sep 11 00:11	23° 11 25'29	40.65862 AU
morning rise	5904 Sep 19 09:29	14° 11 49'19					
retrograde	5904 Dec 15 00:38	16° 11 08'01		conjunction	5911 Sep 13 11:31	23° 11 29'34	2°52'11
opposition	5905 Mar 05 22:00	15° 11 02'29	0°25'37	minimum elong	5911 Sep 13 11:26	23° 11 29'33	2°52'10
min. Earth dist.	5905 Mar 07 21:23	14° 11 59'57	40.25255 AU	morning rise	5911 Sep 29 07:25	23° 11 55'28	
direct	5905 May 26 02:31	13° 11 56'19		retrograde	5911 Dec 25 06:13	25° 11 18'39	
evening set	5905 Aug 19 18:00	15° 11 14'16		opposition	5912 Mar 14 14:53	24° 11 10'58	3°13'26
max. Earth dist.	5905 Sep 02 13:15	15° 11 35'52	42.13498 AU	min. Earth dist.	5912 Mar 16 20:08	24° 11 08'00	38.53518 AU
				direct	5912 Jun 03 15:31	23° 11 02'23	
conjunction	5905 Sep 04 20:04	15° 11 39'29	0°35'26	evening set	5912 Aug 29 09:14	24° 11 25'27	
minimum elong	5905 Sep 04 20:03	15° 11 39'29	0°35'25	max. Earth dist.	5912 Sep 11 14:31	24° 11 47'11	40.40872 AU
morning rise	5905 Sep 20 22:34	16° 11 04'45					
retrograde	5905 Dec 16 14:08	17° 11 24'00		conjunction	5912 Sep 14 03:28	24° 11 51'24	3°15'41
opposition	5906 Mar 07 09:43	16° 11 18'10	0°48'51	minimum elong	5912 Sep 14 03:22	24° 11 51'24	3°15'41
min. Earth dist.	5906 Mar 09 10:56	16° 11 15'31	40.01374 AU	morning rise	5912 Sep 29 21:29	25° 11 17'22	
direct	5906 May 27 12:27	15° 11 11'42		retrograde	5912 Dec 26 00:24	26° 11 41'23	
evening set	5906 Aug 21 07:55	16° 11 30'14		opposition	5913 Mar 16 05:12	25° 11 33'24	3°38'20
max. Earth dist.	5906 Sep 04 02:45	16° 11 51'57	41.89435 AU	min. Earth dist.	5913 Mar 18 11:11	25° 11 30'23	38.28596 AU
				direct	5913 Jun 05 01:41	24° 11 24'29	
conjunction	5906 Sep 06 09:49	16° 11 55'36	0°57'40	evening set	5913 Aug 31 03:48	25° 11 48'28	
minimum elong	5906 Sep 06 09:48	16° 11 55'36	0°57'40	max. Earth dist.	5913 Sep 13 06:48	26° 11 10'12	40.15832 AU
morning rise	5906 Sep 22 11:44	17° 11 21'01					
retrograde	5906 Dec 18 03:06	18° 11 40'49		conjunction	5913 Sep 15 19:54	26° 11 14'28	3°39'23
opposition	5907 Mar 08 21:40	17° 11 34'42	1°12'20	minimum elong	5913 Sep 15 19:48	26° 11 14'27	3°39'23
min. Earth dist.	5907 Mar 10 23:34	17° 11 32'00	39.77176 AU	morning rise	5913 Oct 01 11:24	26° 11 40'28	
direct	5907 May 28 23:46	16° 11 27'53		retrograde	5913 Dec 27 17:48	28° 11 05'21	
evening set	5907 Aug 22 22:34	17° 11 47'05		opposition	5914 Mar 17 20:02	26° 11 57'04	4°03'25
max. Earth dist.	5907 Sep 05 15:01	18° 11 08'46	41.65085 AU	min. Earth dist.	5914 Mar 20 02:54	26° 11 54'00	38.03615 AU
				direct	5914 Jun 06 14:40	25° 11 47'49	
conjunction	5907 Sep 07 23:46	18° 11 12'34	1°20'08	evening set	5914 Sep 01 23:24	27° 11 12'47	
minimum elong	5907 Sep 07 23:44	18° 11 12'34	1°20'08	max. Earth dist.	5914 Sep 14 23:07	27° 11 34'28	39.90722 AU
morning rise	5907 Sep 24 01:11	18° 11 38'06					

conjunction	5914 Sep 17 12:52	27° <u>0</u> 38'49	4°03'14	opposition	5921 Mar 27 17:41	7° <u>0</u> 19'24	7°03'45
minimum elong	5914 Sep 17 12:44	27° <u>0</u> 38'48	4°03'15	min. Earth dist.	5921 Mar 30 06:39	7° <u>0</u> 15'50	36.24447 AU
morning rise	5914 Oct 03 01:48	28° <u>0</u> 04'50		direct	5921 Jun 16 07:45	6° <u>0</u> 07'18	
retrograde	5914 Dec 29 13:57	29° <u>0</u> 30'38		evening set	5921 Sep 13 17:43	7° <u>0</u> 40'19	
opposition	5915 Mar 19 11:08	28° <u>0</u> 22'03	4°28'42	max. Earth dist.	5921 Sep 25 07:03	8° <u>0</u> 00'47	38.10058 AU
min. Earth dist.	5915 Mar 21 18:09	28° <u>0</u> 18'57	37.78546 AU				
direct	5915 Jun 08 06:19	27° <u>0</u> 12'27		conjunction	5921 Sep 28 03:13	8° <u>0</u> 05'52	6°54'03
evening set	5915 Sep 03 19:54	28° <u>0</u> 38'27		minimum elong	5921 Sep 28 03:00	8° <u>0</u> 05'51	6°54'04
max. Earth dist.	5915 Sep 16 15:01	29° <u>0</u> 00'00	39.65457 AU	morning rise	5921 Oct 12 11:33	8° <u>0</u> 31'23	
				retrograde	5922 Jan 09 08:13	10° <u>0</u> 04'41	
conjunction	5915 Sep 19 06:28	29° <u>0</u> 04'29	4°27'16	opposition	5922 Mar 29 12:35	8° <u>0</u> 53'30	7°29'59
minimum elong	5915 Sep 19 06:20	29° <u>0</u> 04'29	4°27'16	min. Earth dist.	5922 Apr 01 01:05	8° <u>0</u> 49'56	35.98459 AU
morning rise	5915 Oct 04 16:25	29° <u>0</u> 30'31		direct	5922 Jun 18 03:57	7° <u>0</u> 40'55	
	5915 Oct 23 06:38	0° <u>0</u>		evening set	5922 Sep 15 20:43	9° <u>0</u> 15'19	
retrograde	5915 Dec 31 09:47	0° <u>0</u> 57'16		max. Earth dist.	5922 Sep 27 03:00	9° <u>0</u> 35'27	37.83903 AU
	5916 Mar 11 13:04	30° <u>0</u> 8'00					
opposition	5916 Mar 20 03:01	29° <u>0</u> 48'22	4°54'10	conjunction	5922 Sep 30 00:35	9° <u>0</u> 40'41	7°18'47
min. Earth dist.	5916 Mar 22 11:58	29° <u>0</u> 45'09	37.53304 AU	minimum elong	5922 Sep 30 00:21	9° <u>0</u> 40'40	7°18'47
direct	5916 Jun 08 22:08	28° <u>0</u> 38'24		morning rise	5922 Oct 14 03:18	10° <u>0</u> 06'00	
	5916 Sep 01 10:15	0° <u>0</u>		retrograde	5923 Jan 11 06:23	11° <u>0</u> 40'35	
evening set	5916 Sep 04 17:17	0° <u>0</u> 05'28		opposition	5923 Mar 31 08:06	10° <u>0</u> 29'00	7°56'15
max. Earth dist.	5916 Sep 17 09:04	0° <u>0</u> 26'57	39.39994 AU	min. Earth dist.	5923 Apr 02 21:59	10° <u>0</u> 25'20	35.72551 AU
				direct	5923 Jun 19 22:40	9° <u>0</u> 15'57	
conjunction	5916 Sep 20 00:40	0° <u>0</u> 31'30	4°51'26	evening set	5923 Sep 18 00:45	10° <u>0</u> 51'47	
minimum elong	5916 Sep 20 00:31	0° <u>0</u> 31'29	4°51'26	max. Earth dist.	5923 Sep 29 01:47	11° <u>0</u> 11'42	37.57851 AU
morning rise	5916 Oct 05 07:10	0° <u>0</u> 57'30					
retrograde	5917 Jan 01 02:31	2° <u>0</u> 25'14		conjunction	5923 Oct 01 22:41	11° <u>0</u> 16'56	7°43'30
opposition	5917 Mar 21 19:14	1° <u>0</u> 16'01	5°19'48	minimum elong	5923 Oct 01 22:26	11° <u>0</u> 16'55	7°43'32
min. Earth dist.	5917 Mar 24 04:09	1° <u>0</u> 12'46	37.27855 AU	morning rise	5923 Oct 15 19:11	11° <u>0</u> 42'02	
direct	5917 Jun 10 15:30	0° <u>0</u> 05'39		retrograde	5924 Jan 13 03:03	13° <u>0</u> 17'58	
evening set	5917 Sep 06 15:38	1° <u>0</u> 33'49		opposition	5924 Apr 01 04:17	12° <u>0</u> 05'59	8°22'31
max. Earth dist.	5917 Sep 19 01:30	1° <u>0</u> 55'04	39.14313 AU	min. Earth dist.	5924 Apr 03 17:33	12° <u>0</u> 02'18	35.46772 AU
				direct	5924 Jun 20 19:21	10° <u>0</u> 52'29	
conjunction	5917 Sep 21 19:16	1° <u>0</u> 59'48	5°15'45	evening set	5924 Sep 19 06:00	12° <u>0</u> 29'50	
minimum elong	5917 Sep 21 19:07	1° <u>0</u> 59'48	5°15'46	max. Earth dist.	5924 Sep 29 23:02	12° <u>0</u> 49'21	37.31944 AU
morning rise	5917 Oct 06 22:14	2° <u>0</u> 25'47					
retrograde	5918 Jan 02 20:38	3° <u>0</u> 54'32		conjunction	5924 Oct 02 21:15	12° <u>0</u> 54'44	8°08'12
opposition	5918 Mar 23 12:08	2° <u>0</u> 44'57	5°45'36	minimum elong	5924 Oct 02 20:59	12° <u>0</u> 54'42	8°08'12
min. Earth dist.	5918 Mar 25 22:37	2° <u>0</u> 41'35	37.02213 AU	morning rise	5924 Oct 16 11:19	13° <u>0</u> 19'34	
direct	5918 Jun 12 06:30	1° <u>0</u> 34'11		retrograde	5925 Jan 14 02:17	14° <u>0</u> 56'56	
evening set	5918 Sep 08 14:35	3° <u>0</u> 03'28		opposition	5925 Apr 03 01:04	13° <u>0</u> 44'33	8°48'46
max. Earth dist.	5918 Sep 20 20:36	3° <u>0</u> 24'37	38.88430 AU	min. Earth dist.	5925 Apr 05 14:55	13° <u>0</u> 40'50	35.21171 AU
				direct	5925 Jun 22 13:20	12° <u>0</u> 30'37	
conjunction	5918 Sep 23 14:27	3° <u>0</u> 29'24	5°40'11	evening set	5925 Sep 21 12:14	14° <u>0</u> 09'34	
minimum elong	5918 Sep 23 14:16	3° <u>0</u> 29'23	5°40'11	max. Earth dist.	5925 Oct 01 22:59	14° <u>0</u> 28'47	37.06200 AU
morning rise	5918 Oct 08 13:12	3° <u>0</u> 55'18					
retrograde	5919 Jan 04 14:31	5° <u>0</u> 25'07		conjunction	5925 Oct 04 20:39	14° <u>0</u> 34'11	8°32'50
opposition	5919 Mar 25 05:31	4° <u>0</u> 15'09	6°11'32	minimum elong	5925 Oct 04 20:22	14° <u>0</u> 34'09	8°32'52
min. Earth dist.	5919 Mar 27 16:38	4° <u>0</u> 11'44	36.76388 AU	morning rise	5925 Oct 18 03:30	14° <u>0</u> 58'42	
direct	5919 Jun 13 22:25	3° <u>0</u> 03'57		retrograde	5926 Jan 16 01:13	16° <u>0</u> 37'36	
evening set	5919 Sep 10 14:47	4° <u>0</u> 34'26		opposition	5926 Apr 04 22:37	15° <u>0</u> 24'51	9°14'57
max. Earth dist.	5919 Sep 22 14:47	4° <u>0</u> 55'19	38.62392 AU	min. Earth dist.	5926 Apr 07 12:46	15° <u>0</u> 21'05	34.95736 AU
				direct	5926 Jun 24 08:23	14° <u>0</u> 10'30	
conjunction	5919 Sep 25 10:09	5° <u>0</u> 00'16	6°04'44	evening set	5926 Sep 23 19:45	15° <u>0</u> 51'08	
minimum elong	5919 Sep 25 09:58	5° <u>0</u> 00'15	6°04'45	max. Earth dist.	5926 Oct 03 22:15	16° <u>0</u> 09'54	36.80618 AU
morning rise	5919 Oct 10 04:39	5° <u>0</u> 26'04					
retrograde	5920 Jan 06 11:57	6° <u>0</u> 57'00		conjunction	5926 Oct 06 20:31	16° <u>0</u> 15'24	8°57'23
opposition	5920 Mar 25 23:12	5° <u>0</u> 46'38	6°37'36	minimum elong	5926 Oct 06 20:14	16° <u>0</u> 15'22	8°57'23
min. Earth dist.	5920 Mar 28 10:54	5° <u>0</u> 43'10	36.50452 AU	morning rise	5926 Oct 19 19:58	16° <u>0</u> 39'35	
direct	5920 Jun 14 13:29	4° <u>0</u> 34'59		retrograde	5927 Jan 18 03:42	18° <u>0</u> 20'04	
evening set	5920 Sep 11 15:50	6° <u>0</u> 06'42		opposition	5927 Apr 06 20:43	17° <u>0</u> 06'58	9°41'03
max. Earth dist.	5920 Sep 23 10:20	6° <u>0</u> 27'23	38.36239 AU	min. Earth dist.	5927 Apr 09 10:48	17° <u>0</u> 03'11	34.70448 AU
				direct	5927 Jun 26 04:42	15° <u>0</u> 52'11	
conjunction	5920 Sep 26 06:33	6° <u>0</u> 32'25	6°29'22	evening set	5927 Sep 26 04:34	17° <u>0</u> 34'35	
minimum elong	5920 Sep 26 06:20	6° <u>0</u> 32'24	6°29'22	max. Earth dist.	5927 Oct 05 22:23	17° <u>0</u> 52'53	36.55122 AU
morning rise	5920 Oct 10 20:06	6° <u>0</u> 58'05					
retrograde	5921 Jan 07 09:10	8° <u>0</u> 30'11		conjunction	5927 Oct 08 21:24	17° <u>0</u> 58'28	9°21'48

minimum elong	5927 Oct 08 21:07	17° <u>♁</u> 58'27	9°21'50	direct	5934 Jul 08 06:24	28° <u>♁</u> 35'50	
morning rise	5927 Oct 21 12:44	18° <u>♁</u> 22'17			5934 Sep 25 12:29	0° <u>♁</u>	
retrograde	5928 Jan 20 06:15	20° <u>♁</u> 04'26		evening set	5934 Oct 12 08:43	0° <u>♁</u> 32'48	
opposition	5928 Apr 07 19:37	18° <u>♁</u> 50'56	10°07'01	max. Earth dist.	5934 Oct 18 22:59	0° <u>♁</u> 46'06	34.79438 AU
min. Earth dist.	5928 Apr 10 11:03	18° <u>♁</u> 47'03	34.45238 AU				
direct	5928 Jun 27 02:56	17° <u>♁</u> 35'44		conjunction	5934 Oct 21 23:36	0° <u>♁</u> 52'14	12°06'27
evening set	5928 Sep 27 14:51	19° <u>♁</u> 20'00		minimum elong	5934 Oct 21 23:14	0° <u>♁</u> 52'12	12°06'28
max. Earth dist.	5928 Oct 07 00:08	19° <u>♁</u> 37'48	36.29696 AU	morning rise	5934 Oct 31 13:00	1° <u>♁</u> 11'33	
				retrograde	5935 Feb 02 11:39	3° <u>♁</u> 07'25	
conjunction	5928 Oct 09 23:00	19° <u>♁</u> 43'26	9°46'05	opposition	5935 Apr 21 08:54	1° <u>♁</u> 50'56	13°02'06
minimum elong	5928 Oct 09 22:42	19° <u>♁</u> 43'25	9°46'06	min. Earth dist.	5935 Apr 24 01:40	1° <u>♁</u> 46'46	32.72140 AU
morning rise	5928 Oct 22 05:39	20° <u>♁</u> 06'48		direct	5935 Jul 10 08:41	0° <u>♁</u> 32'17	
retrograde	5929 Jan 21 10:23	21° <u>♁</u> 50'41		evening set	5935 Oct 15 05:10	2° <u>♁</u> 31'43	
opposition	5929 Apr 09 19:16	20° <u>♁</u> 36'49	10°32'51	max. Earth dist.	5935 Oct 21 06:31	2° <u>♁</u> 44'03	34.55366 AU
min. Earth dist.	5929 Apr 12 10:09	20° <u>♁</u> 32'56	34.20090 AU				
direct	5929 Jun 29 03:28	19° <u>♁</u> 21'09		conjunction	5935 Oct 24 06:19	2° <u>♁</u> 50'10	12°28'27
evening set	5929 Sep 30 02:11	21° <u>♁</u> 07'20		minimum elong	5935 Oct 24 05:57	2° <u>♁</u> 50'08	12°28'28
max. Earth dist.	5929 Oct 09 00:48	21° <u>♁</u> 24'28	36.04308 AU	morning rise	5935 Nov 02 06:05	3° <u>♁</u> 08'32	
				retrograde	5936 Feb 04 20:06	5° <u>♁</u> 06'43	
conjunction	5929 Oct 12 01:09	21° <u>♁</u> 30'17	10°10'12	opposition	5936 Apr 22 13:45	3° <u>♁</u> 49'48	13°25'27
minimum elong	5929 Oct 12 00:49	21° <u>♁</u> 30'16	10°10'13	min. Earth dist.	5936 Apr 25 05:07	3° <u>♁</u> 45'41	32.48597 AU
morning rise	5929 Oct 23 22:40	21° <u>♁</u> 53'09		direct	5936 Jul 11 13:50	2° <u>♁</u> 30'39	
retrograde	5930 Jan 23 13:11	23° <u>♁</u> 38'50		evening set	5936 Oct 17 03:12	4° <u>♁</u> 32'40	
opposition	5930 Apr 11 19:46	22° <u>♁</u> 24'33	10°58'30	max. Earth dist.	5936 Oct 22 13:50	4° <u>♁</u> 43'52	34.31768 AU
min. Earth dist.	5930 Apr 14 12:05	22° <u>♁</u> 20'34	33.95002 AU				
direct	5930 Jul 01 02:13	21° <u>♁</u> 08'26		conjunction	5936 Oct 25 13:48	4° <u>♁</u> 50'03	12°49'52
evening set	5930 Oct 02 15:04	22° <u>♁</u> 56'36		minimum elong	5936 Oct 25 13:27	4° <u>♁</u> 50'01	12°49'52
max. Earth dist.	5930 Oct 11 04:34	23° <u>♁</u> 13'10	35.78989 AU	morning rise	5936 Nov 02 23:07	5° <u>♁</u> 07'22	
				retrograde	5937 Feb 06 05:31	7° <u>♁</u> 07'59	
conjunction	5930 Oct 14 04:16	23° <u>♁</u> 19'00	10°34'05	opposition	5937 Apr 24 19:43	5° <u>♁</u> 50'38	13°48'09
minimum elong	5930 Oct 14 03:57	23° <u>♁</u> 18'58	10°34'05	min. Earth dist.	5937 Apr 27 11:24	5° <u>♁</u> 46'29	32.25567 AU
morning rise	5930 Oct 25 15:50	23° <u>♁</u> 41'18		direct	5937 Jul 13 18:50	4° <u>♁</u> 31'02	
retrograde	5931 Jan 25 15:50	25° <u>♁</u> 28'51		evening set	5937 Oct 20 03:07	6° <u>♁</u> 35'45	
opposition	5931 Apr 13 20:48	24° <u>♁</u> 14'09	11°23'55	max. Earth dist.	5937 Oct 24 23:52	6° <u>♁</u> 45'52	34.08711 AU
min. Earth dist.	5931 Apr 16 12:48	24° <u>♁</u> 10'09	33.70000 AU				
direct	5931 Jul 03 03:54	22° <u>♁</u> 57'33		conjunction	5937 Oct 27 22:00	6° <u>♁</u> 51'58	13°10'38
evening set	5931 Oct 05 05:24	24° <u>♁</u> 47'47		minimum elong	5937 Oct 27 21:38	6° <u>♁</u> 51'56	13°10'40
max. Earth dist.	5931 Oct 13 06:48	25° <u>♁</u> 03'33	35.53778 AU	morning rise	5937 Nov 04 15:36	7° <u>♁</u> 08'05	
				retrograde	5938 Feb 08 15:32	9° <u>♁</u> 11'17	
conjunction	5931 Oct 16 08:02	25° <u>♁</u> 09'33	10°57'43	opposition	5938 Apr 27 02:24	7° <u>♁</u> 53'32	14°10'09
minimum elong	5931 Oct 16 07:41	25° <u>♁</u> 09'32	10°57'44	min. Earth dist.	5938 Apr 29 16:39	7° <u>♁</u> 49'27	32.03072 AU
morning rise	5931 Oct 27 09:17	25° <u>♁</u> 31'13		direct	5938 Jul 16 02:36	6° <u>♁</u> 33'30	
retrograde	5932 Jan 27 20:51	27° <u>♁</u> 20'43		evening set	5938 Oct 23 05:13	8° <u>♁</u> 41'05	
opposition	5932 Apr 14 22:40	26° <u>♁</u> 05'35	11°49'03	max. Earth dist.	5938 Oct 27 08:35	8° <u>♁</u> 49'47	33.86195 AU
min. Earth dist.	5932 Apr 17 15:19	26° <u>♁</u> 01'31	33.45146 AU				
direct	5932 Jul 04 03:05	24° <u>♁</u> 48'29		conjunction	5938 Oct 30 07:06	8° <u>♁</u> 55'58	13°30'42
evening set	5932 Oct 06 21:01	26° <u>♁</u> 40'53		minimum elong	5938 Oct 30 06:45	8° <u>♁</u> 55'56	13°30'42
max. Earth dist.	5932 Oct 14 12:02	26° <u>♁</u> 55'56	35.28724 AU	morning rise	5938 Nov 06 07:54	9° <u>♁</u> 10'46	
				retrograde	5939 Feb 11 01:36	11° <u>♁</u> 16'42	
conjunction	5932 Oct 17 12:35	27° <u>♁</u> 01'56	11°21'01	opposition	5939 Apr 29 09:49	9° <u>♁</u> 58'35	14°31'23
minimum elong	5932 Oct 17 12:14	27° <u>♁</u> 01'55	11°21'02	min. Earth dist.	5939 May 02 00:12	9° <u>♁</u> 54'28	31.81116 AU
morning rise	5932 Oct 28 02:30	27° <u>♁</u> 22'54		direct	5939 Jul 18 07:58	8° <u>♁</u> 38'06	
retrograde	5933 Jan 28 23:41	29° <u>♁</u> 14'26		evening set	5939 Oct 26 09:58	10° <u>♁</u> 48'44	
opposition	5933 Apr 17 01:21	27° <u>♁</u> 58'52	12°13'50	max. Earth dist.	5939 Oct 29 20:23	10° <u>♁</u> 56'02	33.64194 AU
min. Earth dist.	5933 Apr 19 18:06	27° <u>♁</u> 54'45	33.20488 AU				
direct	5933 Jul 06 04:20	26° <u>♁</u> 41'15		conjunction	5939 Nov 01 17:16	11° <u>♁</u> 02'08	13°49'59
evening set	5933 Oct 09 14:13	28° <u>♁</u> 35'53		minimum elong	5939 Nov 01 16:55	11° <u>♁</u> 02'06	13°50'01
max. Earth dist.	5933 Oct 16 16:48	28° <u>♁</u> 50'04	35.03923 AU	morning rise	5939 Nov 07 23:25	11° <u>♁</u> 15'26	
				retrograde	5940 Feb 13 11:24	13° <u>♁</u> 24'15	
conjunction	5933 Oct 19 17:41	28° <u>♁</u> 56'10	11°43'57	opposition	5940 Apr 30 18:19	12° <u>♁</u> 05'47	14°51'47
minimum elong	5933 Oct 19 17:19	28° <u>♁</u> 56'08	11°43'59	min. Earth dist.	5940 May 03 08:03	12° <u>♁</u> 01'41	31.59647 AU
morning rise	5933 Oct 29 19:48	29° <u>♁</u> 16'21		direct	5940 Jul 19 15:48	10° <u>♁</u> 44'54	
				evening set	5940 Oct 28 17:34	12° <u>♁</u> 58'47	
retrograde	5933 Nov 21 18:46	0° <u>♁</u>		max. Earth dist.	5940 Oct 31 06:53	13° <u>♁</u> 04'17	33.42683 AU
	5934 Apr 15 06:08	30° <u>♁</u>					
opposition	5934 Apr 19 04:38	29° <u>♁</u> 53'58	12°38'13	conjunction	5940 Nov 03 04:01	13° <u>♁</u> 10'28	14°08'27
min. Earth dist.	5934 Apr 21 20:52	29° <u>♁</u> 49'52	32.96135 AU	minimum elong	5940 Nov 03 03:40	13° <u>♁</u> 10'26	14°08'28

morning rise	5940 Nov 08 13:33	13° \mathbb{M} 22'03		retrograde	5948 Mar 03 05:23	1° \mathbb{X} 37'26	
	5940 Dec 30 18:58	15° \mathbb{M}		opposition	5948 May 18 20:40	0° \mathbb{X} 16'05	16°56'08
retrograde	5941 Feb 15 00:11	15° \mathbb{M} 33'59		min. Earth dist.	5948 May 21 03:32	0° \mathbb{X} 12'17	30.07247 AU
	5941 Apr 03 08:53	15° $\mathbb{R}\mathbb{M}$			5948 May 28 14:18	30° $\mathbb{R}\mathbb{M}$	
opposition	5941 May 03 03:38	14° \mathbb{M} 15'08	15°11'17	direct	5948 Aug 06 11:23	28° \mathbb{M} 51'57	
min. Earth dist.	5941 May 05 16:40	14° \mathbb{M} 11'04	31.38659 AU		5948 Oct 11 20:32	0° \mathbb{X}	
direct	5941 Jul 21 22:46	12° \mathbb{M} 53'49		max. Earth dist.	5948 Nov 19 12:08	1° \mathbb{X} 23'06	31.90995 AU
	5941 Oct 26 23:21	15° \mathbb{M}					
evening set	5941 Nov 01 05:21	15° \mathbb{M} 11'19		conjunction	5948 Nov 21 22:41	1° \mathbb{X} 28'42	15°58'03
max. Earth dist.	5941 Nov 02 19:55	15° \mathbb{M} 14'47	33.21642 AU	minimum elong	5948 Nov 21 22:28	1° \mathbb{X} 28'41	15°58'04
				retrograde	5949 Mar 05 22:28	4° \mathbb{X} 02'12	
conjunction	5941 Nov 05 15:50	15° \mathbb{M} 20'55	14°26'02	opposition	5949 May 21 12:37	2° \mathbb{X} 40'34	17°05'30
minimum elong	5941 Nov 05 15:29	15° \mathbb{M} 20'54	14°26'04	min. Earth dist.	5949 May 23 17:27	2° \mathbb{X} 36'54	29.91471 AU
morning rise	5941 Nov 10 01:24	15° \mathbb{M} 30'28		direct	5949 Aug 09 03:32	1° \mathbb{X} 16'08	
retrograde	5942 Feb 17 10:47	17° \mathbb{M} 45'49		max. Earth dist.	5949 Nov 22 06:23	3° \mathbb{X} 48'32	31.75565 AU
opposition	5942 May 05 13:55	16° \mathbb{M} 26'36	15°29'49				
min. Earth dist.	5942 May 08 03:00	16° \mathbb{M} 22'30	31.18134 AU	conjunction	5949 Nov 24 15:55	3° \mathbb{X} 54'04	16°05'45
direct	5942 Jul 24 06:45	15° \mathbb{M} 04'52		minimum elong	5949 Nov 24 15:44	3° \mathbb{X} 54'03	16°05'47
evening set	5942 Nov 04 23:53	17° \mathbb{M} 26'29		retrograde	5950 Mar 08 17:37	6° \mathbb{X} 28'38	
max. Earth dist.	5942 Nov 05 08:53	17° \mathbb{M} 27'18	33.01100 AU	opposition	5950 May 24 05:06	5° \mathbb{X} 06'45	17°13'11
				min. Earth dist.	5950 May 26 07:55	5° \mathbb{X} 03'13	29.76669 AU
conjunction	5942 Nov 08 04:18	17° \mathbb{M} 33'27	14°42'40	direct	5950 Aug 11 18:33	3° \mathbb{X} 42'03	
minimum elong	5942 Nov 08 03:58	17° \mathbb{M} 33'26	14°42'41	max. Earth dist.	5950 Nov 25 03:29	6° \mathbb{X} 15'51	31.61127 AU
morning rise	5942 Nov 11 07:59	17° \mathbb{M} 40'22					
retrograde	5943 Feb 20 00:17	19° \mathbb{M} 59'42		conjunction	5950 Nov 27 09:57	6° \mathbb{X} 21'08	16°11'51
opposition	5943 May 08 00:58	18° \mathbb{M} 40'07	15°47'19	minimum elong	5950 Nov 27 09:48	6° \mathbb{X} 21'07	16°11'52
min. Earth dist.	5943 May 10 12:41	18° \mathbb{M} 36'05	30.98103 AU	retrograde	5951 Mar 11 10:18	8° \mathbb{X} 56'42	
direct	5943 Jul 26 17:47	17° \mathbb{M} 17'57		opposition	5951 May 26 22:29	7° \mathbb{X} 34'37	17°19'07
max. Earth dist.	5943 Nov 07 22:55	19° \mathbb{M} 41'52	32.81061 AU	min. Earth dist.	5951 May 28 23:54	7° \mathbb{X} 31'10	29.62817 AU
evening set	5943 Nov 09 17:34	19° \mathbb{M} 45'47		direct	5951 Aug 14 10:47	6° \mathbb{X} 09'42	
				max. Earth dist.	5951 Nov 27 23:27	8° \mathbb{X} 44'40	31.47677 AU
conjunction	5943 Nov 10 17:44	19° \mathbb{M} 48'01	14°58'17				
minimum elong	5943 Nov 10 17:25	19° \mathbb{M} 47'59	14°58'19	conjunction	5951 Nov 30 04:24	8° \mathbb{X} 49'50	16°16'17
morning rise	5943 Nov 11 17:17	19° \mathbb{M} 50'11		minimum elong	5951 Nov 30 04:17	8° \mathbb{X} 49'50	16°16'20
retrograde	5944 Feb 22 13:15	22° \mathbb{M} 15'34		retrograde	5952 Mar 13 05:54	11° \mathbb{X} 26'21	
opposition	5944 May 09 12:57	20° \mathbb{M} 55'36	16°03'42	opposition	5952 May 28 16:24	10° \mathbb{X} 04'06	17°23'15
min. Earth dist.	5944 May 12 00:59	20° \mathbb{M} 51'32	30.78595 AU	min. Earth dist.	5952 May 30 15:21	10° \mathbb{X} 00'48	29.49915 AU
direct	5944 Jul 28 04:01	19° \mathbb{M} 33'01		direct	5952 Aug 16 04:05	8° \mathbb{X} 38'58	
max. Earth dist.	5944 Nov 09 14:30	21° \mathbb{M} 58'27	32.61607 AU	max. Earth dist.	5952 Nov 29 21:15	11° \mathbb{X} 15'09	31.35174 AU
conjunction	5944 Nov 12 07:49	22° \mathbb{M} 04'30	15°12'47	conjunction	5952 Dec 01 23:33	11° \mathbb{X} 20'06	16°19'03
minimum elong	5944 Nov 12 07:31	22° \mathbb{M} 04'29	15°12'48	minimum elong	5952 Dec 01 23:28	11° \mathbb{X} 20'06	16°19'04
retrograde	5945 Feb 24 04:32	24° \mathbb{M} 33'20		retrograde	5953 Mar 16 00:41	13° \mathbb{X} 57'28	
opposition	5945 May 12 01:42	23° \mathbb{M} 13'01	16°18'52	opposition	5953 May 31 11:12	12° \mathbb{X} 35'03	17°25'34
min. Earth dist.	5945 May 14 11:43	23° \mathbb{M} 09'03	30.59681 AU	min. Earth dist.	5953 Jun 02 09:13	12° \mathbb{X} 31'49	29.37925 AU
direct	5945 Jul 30 17:16	21° \mathbb{M} 50'01		direct	5953 Aug 18 20:04	11° \mathbb{X} 09'46	
max. Earth dist.	5945 Nov 12 05:35	24° \mathbb{M} 16'49	32.42785 AU	max. Earth dist.	5953 Dec 02 18:41	13° \mathbb{X} 46'59	31.23616 AU
conjunction	5945 Nov 14 22:27	24° \mathbb{M} 22'53	15°26'06	conjunction	5953 Dec 04 18:58	13° \mathbb{X} 51'46	16°20'05
minimum elong	5945 Nov 14 22:09	24° \mathbb{M} 22'51	15°26'08	minimum elong	5953 Dec 04 18:56	13° \mathbb{X} 51'45	16°20'07
retrograde	5946 Feb 26 20:19	26° \mathbb{M} 52'57		retrograde	5954 Mar 18 20:14	16° \mathbb{X} 29'54	
opposition	5946 May 14 15:18	25° \mathbb{M} 32'16	16°32'43	opposition	5954 Jun 03 06:25	15° \mathbb{X} 07'20	17°26'00
min. Earth dist.	5946 May 17 01:13	25° \mathbb{M} 28'18	30.41432 AU	min. Earth dist.	5954 Jun 05 01:37	15° \mathbb{X} 04'18	29.26827 AU
direct	5946 Aug 02 05:55	24° \mathbb{M} 08'52		direct	5954 Aug 21 15:55	13° \mathbb{X} 41'53	
max. Earth dist.	5946 Nov 14 23:36	26° \mathbb{M} 37'12	32.24690 AU	max. Earth dist.	5954 Dec 05 16:42	16° \mathbb{X} 20'03	31.12962 AU
conjunction	5946 Nov 17 13:56	26° \mathbb{M} 43'05	15°38'08	conjunction	5954 Dec 07 15:04	16° \mathbb{X} 24'39	16°19'22
minimum elong	5946 Nov 17 13:40	26° \mathbb{M} 43'03	15°38'09	minimum elong	5954 Dec 07 15:02	16° \mathbb{X} 24'39	16°19'23
retrograde	5947 Mar 01 12:33	29° \mathbb{M} 14'20		retrograde	5955 Mar 21 15:10	19° \mathbb{X} 03'28	
opposition	5947 May 17 05:30	27° \mathbb{M} 53'18	16°45'11	opposition	5955 Jun 06 02:13	17° \mathbb{X} 40'45	17°24'32
min. Earth dist.	5947 May 19 13:22	27° \mathbb{M} 49'27	30.23919 AU	min. Earth dist.	5955 Jun 07 20:33	17° \mathbb{X} 37'46	29.16615 AU
direct	5947 Aug 04 21:41	26° \mathbb{M} 29'31		direct	5955 Aug 24 10:52	16° \mathbb{X} 15'09	
max. Earth dist.	5947 Nov 17 16:19	28° \mathbb{M} 59'10	32.07395 AU	max. Earth dist.	5955 Dec 08 15:45	18° \mathbb{X} 54'13	31.03241 AU
conjunction	5947 Nov 20 06:01	29° \mathbb{M} 05'02	15°48'49	conjunction	5955 Dec 10 11:29	18° \mathbb{X} 58'34	16°16'51
minimum elong	5947 Nov 20 05:46	29° \mathbb{M} 05'00	15°48'52	minimum elong	5955 Dec 10 11:31	18° \mathbb{X} 58'34	16°16'53
	5947 Dec 14 20:20	0° \mathbb{X}		retrograde	5956 Mar 23 11:49	21° \mathbb{X} 37'56	

opposition	5956 Jun 07 22:31	20° \nearrow 15'05	17°21'08	morning rise	5964 Jan 02 16:28	9° \searrow 49'18	
min. Earth dist.	5956 Jun 09 13:56	20° \nearrow 12'18	29.07297 AU	retrograde	5964 Apr 13 06:58	12° \searrow 23'57	
direct	5956 Aug 26 08:09	18° \nearrow 49'20		opposition	5964 Jun 29 00:56	11° \searrow 00'47	15°42'14
max. Earth dist.	5956 Dec 10 13:59	21° \nearrow 29'06	30.94454 AU	min. Earth dist.	5964 Jun 29 20:07	10° \searrow 59'26	28.70601 AU
				direct	5964 Sep 16 15:48	9° \searrow 34'58	
conjunction	5956 Dec 12 08:00	21° \nearrow 33'18	16°12'33	evening set	5964 Dec 29 06:58	12° \searrow 09'37	
minimum elong	5956 Dec 12 08:02	21° \nearrow 33'18	16°12'34	max. Earth dist.	5965 Jan 01 11:32	12° \searrow 17'19	30.63956 AU
retrograde	5957 Mar 26 07:55	24° \nearrow 13'08					
opposition	5957 Jun 10 19:17	22° \nearrow 50'09	17°15'46	conjunction	5965 Jan 02 05:23	12° \searrow 19'07	14°31'38
min. Earth dist.	5957 Jun 12 09:21	22° \nearrow 47'27	28.98913 AU	minimum elong	5965 Jan 02 05:41	12° \searrow 19'08	14°31'40
direct	5957 Aug 29 04:03	21° \nearrow 24'16		morning rise	5965 Jan 06 04:15	12° \searrow 28'38	
max. Earth dist.	5957 Dec 13 14:15	24° \nearrow 04'46	30.86655 AU	retrograde	5965 Apr 16 03:19	14° \searrow 59'02	
				opposition	5965 Jul 01 22:19	13° \searrow 35'59	15°21'06
conjunction	5957 Dec 15 04:51	24° \nearrow 08'38	16°06'24	min. Earth dist.	5965 Jul 02 13:34	13° \searrow 34'55	28.71284 AU
minimum elong	5957 Dec 15 04:58	24° \nearrow 08'39	16°06'27	direct	5965 Sep 19 14:03	12° \searrow 10'20	
retrograde	5958 Mar 29 04:16	26° \nearrow 48'48		evening set	5965 Dec 30 22:05	14° \searrow 41'42	
opposition	5958 Jun 13 16:07	25° \nearrow 25'42	17°08'26	max. Earth dist.	5966 Jan 04 10:58	14° \searrow 52'37	30.65516 AU
min. Earth dist.	5958 Jun 15 03:30	25° \nearrow 23'11	28.91491 AU				
direct	5958 Sep 01 03:28	23° \nearrow 59'43		conjunction	5966 Jan 05 01:24	14° \searrow 54'04	14°11'01
max. Earth dist.	5958 Dec 16 12:43	26° \nearrow 40'39	30.79877 AU	minimum elong	5966 Jan 05 01:46	14° \searrow 54'06	14°11'03
				morning rise	5966 Jan 10 05:07	15° \searrow 06'28	
conjunction	5958 Dec 18 01:44	26° \nearrow 44'22	15°58'25	retrograde	5966 Apr 18 21:10	17° \searrow 33'36	
minimum elong	5958 Dec 18 01:51	26° \nearrow 44'23	15°58'27	opposition	5966 Jul 04 19:33	16° \searrow 10'42	14°58'12
retrograde	5959 Apr 01 01:08	29° \nearrow 24'46		min. Earth dist.	5966 Jul 05 09:06	16° \searrow 09'45	28.73074 AU
opposition	5959 Jun 16 13:20	28° \nearrow 01'33	16°59'04	direct	5966 Sep 22 10:59	14° \searrow 45'16	
min. Earth dist.	5959 Jun 17 22:32	27° \nearrow 59'12	28.85103 AU	evening set	5967 Jan 01 17:39	17° \searrow 13'42	
direct	5959 Sep 04 00:42	26° \nearrow 35'29					
				conjunction	5967 Jan 07 21:06	17° \searrow 28'27	13°48'49
conjunction	5959 Dec 20 22:40	29° \nearrow 20'18	15°48'33	minimum elong	5967 Jan 07 21:27	17° \searrow 28'30	13°48'51
minimum elong	5959 Dec 20 22:51	29° \nearrow 20'20	15°48'35	max. Earth dist.	5967 Jan 07 09:24	17° \searrow 27'17	30.68184 AU
max. Earth dist.	5959 Dec 19 13:38	29° \nearrow 16'59	30.74189 AU	morning rise	5967 Jan 14 00:50	17° \searrow 43'14	
	5960 Jan 06 13:02	0° \searrow		retrograde	5967 Apr 21 16:48	20° \searrow 07'31	
retrograde	5960 Apr 02 21:13	2° \searrow 00'50		opposition	5967 Jul 07 16:37	18° \searrow 44'47	14°33'39
opposition	5960 Jun 18 10:46	0° \searrow 37'33	16°47'42	min. Earth dist.	5967 Jul 08 02:34	18° \searrow 44'05	28.75919 AU
min. Earth dist.	5960 Jun 19 17:19	0° \searrow 35'23	28.79797 AU	direct	5967 Sep 25 08:55	17° \searrow 19'33	
	5960 Jul 11 07:16	30° \nwarrow		evening set	5968 Jan 03 15:28	19° \searrow 45'16	
direct	5960 Sep 05 23:42	29° \nearrow 11'26					
	5960 Oct 30 06:07	0° \searrow		conjunction	5968 Jan 10 16:22	20° \searrow 02'06	13°25'07
				minimum elong	5968 Jan 10 16:44	20° \searrow 02'08	13°25'09
conjunction	5960 Dec 22 19:25	1° \searrow 56'19	15°36'50	max. Earth dist.	5968 Jan 10 07:25	20° \searrow 01'13	30.71894 AU
minimum elong	5960 Dec 22 19:36	1° \searrow 56'20	15°36'52	morning rise	5968 Jan 17 17:29	20° \searrow 18'57	
max. Earth dist.	5960 Dec 21 12:20	1° \searrow 53'11	30.69664 AU	retrograde	5968 Apr 23 10:23	22° \searrow 40'37	
retrograde	5961 Apr 05 19:10	4° \searrow 36'53		opposition	5968 Jul 09 13:32	21° \searrow 18'02	14°07'31
opposition	5961 Jun 21 08:14	3° \searrow 13'33	16°34'18	min. Earth dist.	5968 Jul 09 21:31	21° \searrow 17'29	28.79796 AU
min. Earth dist.	5961 Jun 22 11:32	3° \searrow 11'37	28.75675 AU	direct	5968 Sep 27 05:00	19° \searrow 53'01	
direct	5961 Sep 08 22:01	1° \searrow 47'25		evening set	5969 Jan 04 15:04	22° \searrow 16'09	
conjunction	5961 Dec 25 16:11	4° \searrow 32'16	15°23'15	conjunction	5969 Jan 12 11:17	22° \searrow 34'50	13°00'00
minimum elong	5961 Dec 25 16:25	4° \searrow 32'17	15°23'16	minimum elong	5969 Jan 12 11:39	22° \searrow 34'52	13°00'03
max. Earth dist.	5961 Dec 24 13:25	4° \searrow 29'34	30.66368 AU	max. Earth dist.	5969 Jan 12 05:35	22° \searrow 34'16	30.76642 AU
retrograde	5962 Apr 08 14:04	7° \searrow 12'48		morning rise	5969 Jan 20 07:32	22° \searrow 53'32	
opposition	5962 Jun 24 05:52	5° \searrow 49'28	16°18'54	retrograde	5969 Apr 26 03:39	25° \searrow 12'41	
min. Earth dist.	5962 Jun 25 06:50	5° \searrow 47'42	28.72759 AU	opposition	5969 Jul 12 09:56	23° \searrow 50'17	13°39'54
direct	5962 Sep 11 20:25	4° \searrow 23'24		min. Earth dist.	5969 Jul 12 14:44	23° \searrow 49'57	28.84672 AU
				direct	5969 Sep 30 04:03	22° \searrow 25'29	
conjunction	5962 Dec 28 12:46	7° \searrow 08'06	15°07'49	evening set	5970 Jan 06 15:36	24° \searrow 46'06	
minimum elong	5962 Dec 28 13:01	7° \searrow 08'07	15°07'50				
max. Earth dist.	5962 Dec 27 12:15	7° \searrow 05'38	30.64332 AU	conjunction	5970 Jan 15 05:34	25° \searrow 06'28	12°33'34
retrograde	5963 Apr 11 11:27	9° \searrow 48'30		minimum elong	5970 Jan 15 05:58	25° \searrow 06'30	12°33'35
opposition	5963 Jun 27 03:16	8° \searrow 25'14	16°01'31	max. Earth dist.	5970 Jan 15 01:59	25° \searrow 06'07	30.82386 AU
min. Earth dist.	5963 Jun 28 00:27	8° \searrow 23'44	28.71080 AU	morning rise	5970 Jan 23 19:37	25° \searrow 26'50	
direct	5963 Sep 14 18:36	6° \searrow 59'15		retrograde	5970 Apr 28 21:24	27° \searrow 43'35	
evening set	5963 Dec 29 02:44	9° \searrow 38'15		opposition	5970 Jul 15 05:58	26° \searrow 21'20	13°10'54
				min. Earth dist.	5970 Jul 15 08:13	26° \searrow 21'11	28.90548 AU
conjunction	5963 Dec 31 09:19	9° \searrow 43'45	14°50'35	direct	5970 Oct 03 00:00	24° \searrow 56'46	
minimum elong	5963 Dec 31 09:38	9° \searrow 43'47	14°50'37	evening set	5971 Jan 08 17:01	27° \searrow 14'57	
max. Earth dist.	5963 Dec 30 12:55	9° \searrow 41'42	30.63537 AU				

conjunction	5971 Jan 17 23:26	27° $\overline{3}$ 36'49	12°05'53	max. Earth dist.	5977 Feb 01 13:44	12° \approx 07'58	31.51963 AU
minimum elong	5971 Jan 17 23:49	27° $\overline{3}$ 36'51	12°05'55	morning rise	5977 Feb 13 05:51	12° \approx 34'32	
max. Earth dist.	5971 Jan 17 23:28	27° $\overline{3}$ 36'49	30.89132 AU	retrograde	5977 May 15 05:09	14° \approx 36'36	
morning rise	5971 Jan 27 05:38	27° $\overline{3}$ 58'42		opposition	5977 Aug 01 10:32	13° \approx 15'56	9°16'59
	5971 Apr 04 05:59	0° \approx		min. Earth dist.	5977 Jul 31 16:37	13° \approx 17'08	29.61300 AU
retrograde	5971 May 01 13:17	0° \approx 13'07		direct	5977 Oct 20 16:23	11° \approx 53'30	
	5971 May 29 15:38	30° \overline{R} $\overline{3}$		evening set	5978 Jan 21 12:39	13° \approx 56'28	
opposition	5971 Jul 18 01:29	28° $\overline{3}$ 51'02	12°40'37				
min. Earth dist.	5971 Jul 18 01:08	28° $\overline{3}$ 51'03	28.97411 AU	conjunction	5978 Feb 03 08:50	14° \approx 25'30	8°24'40
direct	5971 Oct 05 21:29	27° $\overline{3}$ 26'42		minimum elong	5978 Feb 03 09:09	14° \approx 25'32	8°24'41
evening set	5972 Jan 10 18:59	29° $\overline{3}$ 42'29		max. Earth dist.	5978 Feb 04 05:15	14° \approx 27'26	31.66123 AU
	5972 Jan 18 06:04	0° \approx		morning rise	5978 Feb 16 04:21	14° \approx 54'28	
					5978 Feb 18 16:02	15° \approx	
conjunction	5972 Jan 20 16:30	0° \approx 05'44	11°37'03	retrograde	5978 May 17 16:58	16° \approx 54'45	
minimum elong	5972 Jan 20 16:54	0° \approx 05'47	11°37'04	min. Earth dist.	5978 Aug 03 04:34	15° \approx 35'50	29.75583 AU
max. Earth dist.	5972 Jan 20 18:27	0° \approx 05'56	30.96892 AU	opposition	5978 Aug 04 01:47	15° \approx 34'25	8°40'24
morning rise	5972 Jan 30 13:58	0° \approx 28'59			5978 Aug 26 06:35	15° \overline{R} \approx	
retrograde	5972 May 03 07:03	2° \approx 41'09		direct	5978 Oct 23 09:32	14° \approx 12'23	
opposition	5972 Jul 19 20:31	1° \approx 19'14	12°09'07		5978 Dec 17 13:16	15° \approx	
min. Earth dist.	5972 Jul 19 16:50	1° \approx 19'29	29.05324 AU	evening set	5979 Jan 23 16:16	16° \approx 13'28	
	5972 Sep 20 12:39	30° \overline{R} $\overline{3}$					
direct	5972 Oct 07 18:24	29° $\overline{3}$ 55'08		conjunction	5979 Feb 05 21:07	16° \approx 43'07	7°50'19
	5972 Oct 24 20:51	0° \approx		minimum elong	5979 Feb 05 21:26	16° \approx 43'08	7°50'20
evening set	5973 Jan 11 21:08	2° \approx 08'36		max. Earth dist.	5979 Feb 06 20:00	16° \approx 45'16	31.81155 AU
				morning rise	5979 Feb 19 01:24	17° \approx 12'41	
conjunction	5973 Jan 22 08:55	2° \approx 33'06	11°07'08	retrograde	5979 May 20 04:22	19° \approx 11'17	
minimum elong	5973 Jan 22 09:18	2° \approx 33'08	11°07'10	opposition	5979 Aug 06 16:31	17° \approx 51'15	8°03'23
max. Earth dist.	5973 Jan 22 15:03	2° \approx 33'42	31.05709 AU	min. Earth dist.	5979 Aug 05 17:10	17° \approx 52'48	29.90743 AU
morning rise	5973 Feb 01 20:16	2° \approx 57'34		direct	5979 Oct 25 23:17	16° \approx 29'38	
retrograde	5973 May 05 21:17	5° \approx 07'34		evening set	5980 Jan 25 20:02	18° \approx 28'55	
opposition	5973 Jul 22 15:02	3° \approx 45'50	11°36'30				
min. Earth dist.	5973 Jul 22 09:06	3° \approx 46'14	29.14308 AU	conjunction	5980 Feb 08 08:53	18° \approx 59'04	7°15'34
direct	5973 Oct 10 15:07	2° \approx 22'00		minimum elong	5980 Feb 08 09:11	18° \approx 59'06	7°15'34
evening set	5974 Jan 13 23:52	4° \approx 33'13		max. Earth dist.	5980 Feb 09 10:36	19° \approx 01'28	31.97013 AU
				morning rise	5980 Feb 21 20:55	19° \approx 29'10	
conjunction	5974 Jan 25 00:36	4° \approx 58'50	10°36'14	retrograde	5980 May 21 14:02	21° \approx 26'07	
minimum elong	5974 Jan 25 00:59	4° \approx 58'52	10°36'15	min. Earth dist.	5980 Aug 07 04:49	20° \approx 08'07	30.06691 AU
max. Earth dist.	5974 Jan 25 08:49	4° \approx 59'38	31.15623 AU	opposition	5980 Aug 08 06:35	20° \approx 06'25	7°26'00
morning rise	5974 Feb 05 01:05	5° \approx 24'25		direct	5980 Oct 27 15:34	18° \approx 45'12	
retrograde	5974 May 08 13:18	7° \approx 32'18		evening set	5981 Jan 26 23:49	20° \approx 42'44	
opposition	5974 Jul 25 08:39	6° \approx 10'47	11°02'52				
min. Earth dist.	5974 Jul 24 22:42	6° \approx 11'28	29.24415 AU	conjunction	5981 Feb 09 19:43	21° \approx 13'20	6°40'32
direct	5974 Oct 13 10:13	4° \approx 47'15		minimum elong	5981 Feb 09 19:59	21° \approx 13'21	6°40'34
evening set	5975 Jan 16 02:45	6° \approx 56'18		max. Earth dist.	5981 Feb 10 22:52	21° \approx 15'51	32.13603 AU
				morning rise	5981 Feb 23 15:04	21° \approx 43'52	
conjunction	5975 Jan 27 15:48	7° \approx 22'56	10°04'26	retrograde	5981 May 24 01:10	23° \approx 39'15	
minimum elong	5975 Jan 27 16:10	7° \approx 22'58	10°04'28	opposition	5981 Aug 10 19:56	22° \approx 19'53	6°48'23
max. Earth dist.	5975 Jan 28 04:04	7° \approx 24'06	31.26650 AU	min. Earth dist.	5981 Aug 09 15:38	22° \approx 21'44	30.23377 AU
morning rise	5975 Feb 08 04:17	7° \approx 49'31		direct	5981 Oct 30 04:23	20° \approx 59'03	
retrograde	5975 May 11 03:09	9° \approx 55'23		evening set	5982 Jan 29 03:39	22° \approx 54'55	
opposition	5975 Jul 28 02:00	8° \approx 34'07	10°28'20				
min. Earth dist.	5975 Jul 27 13:58	8° \approx 34'56	29.35639 AU	conjunction	5982 Feb 12 06:08	23° \approx 25'52	6°05'18
direct	5975 Oct 16 05:35	7° \approx 10'56		minimum elong	5982 Feb 12 06:23	23° \approx 25'53	6°05'18
evening set	5976 Jan 18 05:54	9° \approx 17'52		max. Earth dist.	5982 Feb 13 12:16	23° \approx 28'39	32.30876 AU
				morning rise	5982 Feb 26 07:42	23° \approx 56'45	
conjunction	5976 Jan 30 06:04	9° \approx 45'24	9°31'50	retrograde	5982 May 26 09:29	25° \approx 50'38	
minimum elong	5976 Jan 30 06:25	9° \approx 45'26	9°31'51	min. Earth dist.	5982 Aug 12 02:51	24° \approx 33'30	30.40724 AU
max. Earth dist.	5976 Jan 30 20:35	9° \approx 46'47	31.38787 AU	opposition	5982 Aug 13 08:31	24° \approx 31'34	6°10'37
morning rise	5976 Feb 11 05:47	10° \approx 12'52		direct	5982 Nov 01 18:19	23° \approx 11'08	
retrograde	5976 May 12 17:54	12° \approx 16'48		evening set	5983 Jan 31 07:38	25° \approx 05'23	
opposition	5976 Jul 29 18:34	10° \approx 55'49	9°53'00				
min. Earth dist.	5976 Jul 29 02:29	10° \approx 56'54	29.47953 AU	conjunction	5983 Feb 14 15:39	25° \approx 36'37	5°29'56
direct	5976 Oct 18 00:19	9° \approx 33'00		minimum elong	5983 Feb 14 15:53	25° \approx 36'38	5°29'58
evening set	5977 Jan 19 09:09	11° \approx 37'55		max. Earth dist.	5983 Feb 15 22:45	25° \approx 39'27	32.48780 AU
				morning rise	5983 Feb 28 23:06	26° \approx 07'47	
conjunction	5977 Jan 31 19:48	12° \approx 06'15	8°58'33	retrograde	5983 May 28 19:53	28° \approx 00'12	
minimum elong	5977 Jan 31 20:09	12° \approx 06'17	8°58'35	min. Earth dist.	5983 Aug 14 11:43	26° \approx 43'34	30.58722 AU

opposition	5983 Aug 15 20:26	26° 41 '27	5°32'47	evening set	5990 Feb 13 07:24	9° 4 '29'50	
direct	5983 Nov 04 07:17	25° 21 '24					
evening set	5984 Feb 02 11:14	27° 14 '05		conjunction	5990 Feb 28 13:19	10° 4 '01'16	1°24'33
				minimum elong	5990 Feb 28 13:22	10° 4 '01'16	1°24'33
conjunction	5984 Feb 17 00:25	27° 45 '32	4°54'32	max. Earth dist.	5990 Mar 02 10:59	10° 4 '05'13	33.92157 AU
minimum elong	5984 Feb 17 00:37	27° 45 '33	4°54'32	morning rise	5990 Mar 15 18:53	10° 4 '32'39	
max. Earth dist.	5984 Feb 18 10:40	27° 48 '38	32.67299 AU	retrograde	5990 Jun 11 10:59	12° 4 '16'48	
morning rise	5984 Mar 02 12:45	28° 16 '54		min. Earth dist.	5990 Aug 28 11:50	11° 4 '03'19	32.03432 AU
	5984 May 07 21:24	0° 4		opposition	5990 Aug 30 11:22	11° 4 '00'22	1°11'45
retrograde	5984 May 30 03:48	0° 4 '07'56		direct	5990 Nov 19 05:53	9° 4 '43'11	
	5984 Jun 21 18:47	30° 4		evening set	5991 Feb 15 10:22	11° 4 '26'54	
min. Earth dist.	5984 Aug 15 21:54	28° 51 '40	30.77360 AU				
opposition	5984 Aug 17 07:46	28° 49 '29	4°54'56	conjunction	5991 Mar 02 17:15	11° 4 '58'10	0°50'30
direct	5984 Nov 05 21:10	27° 29 '49		minimum elong	5991 Mar 02 17:17	11° 4 '58'10	0°50'31
evening set	5985 Feb 03 14:55	29° 21 '00		max. Earth dist.	5991 Mar 04 17:38	12° 4 '02'19	34.15039 AU
				morning rise	5991 Mar 17 23:31	12° 4 '29'22	
conjunction	5985 Feb 18 08:22	29° 52 '35	4°19'08	retrograde	5991 Jun 13 13:51	14° 4 '12'37	
minimum elong	5985 Feb 18 08:32	29° 52 '36	4°19'10	min. Earth dist.	5991 Aug 30 17:31	12° 4 '59'31	32.26491 AU
max. Earth dist.	5985 Feb 19 19:50	29° 55 '46	32.86454 AU	opposition	5991 Sep 01 17:46	12° 4 '56'32	0°35'45
	5985 Feb 21 18:51	0° 4		direct	5991 Nov 21 12:10	11° 4 '39'47	
morning rise	5985 Mar 05 01:10	0° 4 '24'05		evening set	5992 Feb 17 13:15	13° 4 '22'30	
retrograde	5985 Jun 01 12:09	2° 4 '13'48					
min. Earth dist.	5985 Aug 18 04:58	0° 4 '58'00	30.96668 AU	conjunction	5992 Mar 03 20:20	13° 4 '53'32	0°16'52
opposition	5985 Aug 19 17:59	0° 4 '55'38	4°17'11	minimum elong	5992 Mar 03 20:20	13° 4 '53'32	0°16'52
	5985 Sep 28 19:57	30° 4		max. Earth dist.	5992 Mar 05 21:15	13° 4 '57'42	34.38327 AU
direct	5985 Nov 08 09:35	29° 36 '21		morning rise	5992 Mar 19 03:07	14° 4 '24'32	
	5985 Dec 17 14:54	0° 4		retrograde	5992 Jun 14 18:33	16° 4 '06'55	
evening set	5986 Feb 05 18:25	1° 4 '26'07		min. Earth dist.	5992 Aug 31 20:35	14° 4 '54'18	32.49941 AU
				opposition	5992 Sep 02 23:24	14° 4 '51'11	0°00'14
conjunction	5986 Feb 20 15:36	1° 4 '57'46	3°43'50	desc. node	5992 Sep 05 09:53	14° 4 '47'36	
minimum elong	5986 Feb 20 15:45	1° 4 '57'47	3°43'50	direct	5992 Nov 22 18:26	13° 4 '34'52	
max. Earth dist.	5986 Feb 22 05:48	2° 4 '01'11	33.06262 AU	evening set	5993 Feb 18 16:06	15° 4 '16'36	
morning rise	5986 Mar 07 12:06	2° 4 '29'22					
retrograde	5986 Jun 03 16:54	4° 4 '17'49		conjunction	5993 Mar 05 23:04	15° 4 '47'23	-0°16'24
min. Earth dist.	5986 Aug 20 13:21	3° 4 '02'25	31.16679 AU	minimum elong	5993 Mar 05 23:03	15° 4 '47'23	0°16'23
opposition	5986 Aug 22 03:46	2° 4 '59'58	3°39'33	max. Earth dist.	5993 Mar 08 02:11	15° 4 '51'43	34.61935 AU
direct	5986 Nov 10 20:25	1° 4 '41'04		morning rise	5993 Mar 21 05:39	16° 4 '18'09	
evening set	5987 Feb 07 21:47	3° 4 '29'29		retrograde	5993 Jun 16 21:19	17° 4 '59'42	
				min. Earth dist.	5993 Sep 03 01:18	16° 4 '47'26	32.73701 AU
conjunction	5987 Feb 22 22:03	4° 4 '01'09	3°08'39	opposition	5993 Sep 05 04:23	16° 4 '44'19	-0°34'46
minimum elong	5987 Feb 22 22:10	4° 4 '01'10	3°08'40	direct	5993 Nov 25 01:12	15° 4 '28'24	
max. Earth dist.	5987 Feb 24 14:13	4° 4 '04'43	33.26764 AU	evening set	5994 Feb 20 18:51	17° 4 '09'14	
morning rise	5987 Mar 09 21:36	4° 4 '32'46					
retrograde	5987 Jun 05 21:27	6° 4 '20'02		conjunction	5994 Mar 08 01:11	17° 4 '39'43	-0°49'07
min. Earth dist.	5987 Aug 22 19:26	5° 4 '05'08	31.37391 AU	minimum elong	5994 Mar 08 01:09	17° 4 '39'43	0°49'07
opposition	5987 Aug 24 12:42	5° 4 '02'31	3°02'09	max. Earth dist.	5994 Mar 10 04:45	17° 4 '44'03	34.85804 AU
direct	5987 Nov 13 07:51	3° 4 '44'02		morning rise	5994 Mar 23 07:12	18° 4 '10'11	
evening set	5988 Feb 10 01:09	5° 4 '31'10		retrograde	5994 Jun 18 23:28	19° 4 '50'58	
				min. Earth dist.	5994 Sep 05 03:45	18° 4 '39'07	32.97692 AU
conjunction	5988 Feb 25 03:48	6° 4 '02'49	2°33'41	opposition	5994 Sep 07 08:43	18° 4 '35'54	-1°09'14
minimum elong	5988 Feb 25 03:55	6° 4 '02'49	2°33'41	direct	5994 Nov 27 07:45	17° 4 '20'22	
max. Earth dist.	5988 Feb 26 22:00	6° 4 '06'32	33.47941 AU	evening set	5995 Feb 22 21:27	19° 4 '00'19	
morning rise	5988 Mar 11 05:58	6° 4 '34'24					
retrograde	5988 Jun 07 02:40	8° 4 '20'34		conjunction	5995 Mar 10 02:37	19° 4 '30'29	-1°21'21
min. Earth dist.	5988 Aug 24 01:39	7° 4 '06'08	31.58808 AU	minimum elong	5995 Mar 10 02:34	19° 4 '30'29	1°21'21
opposition	5988 Aug 25 21:02	7° 4 '03'24	2°25'00	max. Earth dist.	5995 Mar 12 07:20	19° 4 '34'53	35.09853 AU
direct	5988 Nov 14 15:20	5° 4 '45'20		morning rise	5995 Mar 25 07:38	20° 4 '00'39	
evening set	5989 Feb 11 04:11	7° 4 '31'16		retrograde	5995 Jun 20 23:02	21° 4 '40'40	
				min. Earth dist.	5995 Sep 07 06:54	20° 4 '29'09	33.21884 AU
conjunction	5989 Feb 26 08:55	8° 4 '02'50	1°58'58	opposition	5995 Sep 09 12:36	20° 4 '25'54	-1°43'07
minimum elong	5989 Feb 26 09:00	8° 4 '02'50	1°58'59	direct	5995 Nov 29 12:20	19° 4 '10'45	
max. Earth dist.	5989 Feb 28 05:41	8° 4 '06'44	33.69771 AU	evening set	5996 Feb 24 23:46	20° 4 '49'51	
morning rise	5989 Mar 13 12:56	8° 4 '34'21					
retrograde	5989 Jun 09 05:36	10° 4 '19'28		conjunction	5996 Mar 11 03:34	21° 4 '19'40	-1°53'04
min. Earth dist.	5989 Aug 26 07:27	9° 4 '05'29	31.80840 AU	minimum elong	5996 Mar 11 03:30	21° 4 '19'40	1°53'05
opposition	5989 Aug 28 04:35	9° 4 '02'40	1°48'11	max. Earth dist.	5996 Mar 13 09:39	21° 4 '24'08	35.34083 AU
direct	5989 Nov 17 00:41	7° 4 '45'03		morning rise	5996 Mar 26 07:02	21° 4 '49'28	

retrograde	5996 Jun 21 20:53	23° H 28'47		opposition	6002 Sep 21 21:21	2° Y 33'15	-5°22'35
min. Earth dist.	5996 Sep 08 08:55	22° H 17'36	33.46251 AU	direct	6002 Dec 12 02:18	1° Y 20'37	
opposition	5996 Sep 10 15:39	22° H 14'19	-2°16'25	evening set	6003 Mar 09 10:06	2° Y 55'12	
direct	5996 Nov 30 18:07	20° H 59'30					
evening set	5997 Feb 26 01:55	22° H 37'48		conjunction	6003 Mar 23 16:52	3° Y 21'54	-5°18'48
				minimum elong	6003 Mar 23 16:43	3° Y 21'53	5°18'48
conjunction	5997 Mar 13 03:41	23° H 07'14	-2°24'15	max. Earth dist.	6003 Mar 26 06:54	3° Y 26'46	37.09928 AU
minimum elong	5997 Mar 13 03:36	23° H 07'13	2°24'15	morning rise	6003 Apr 06 23:40	3° Y 48'37	
max. Earth dist.	5997 Mar 15 10:10	23° H 11'42	35.58479 AU	retrograde	6003 Jul 04 06:46	5° Y 24'18	
morning rise	5997 Mar 28 05:29	23° H 36'40		min. Earth dist.	6003 Sep 21 05:36	4° Y 15'35	35.23698 AU
retrograde	5997 Jun 23 21:06	25° H 15'18		opposition	6003 Sep 23 20:24	4° Y 11'57	-5°51'13
min. Earth dist.	5997 Sep 10 09:40	24° H 04'29	33.70835 AU	direct	6003 Dec 14 03:29	2° Y 59'42	
opposition	5997 Sep 12 18:06	24° H 01'06	-2°49'06	evening set	6004 Mar 10 10:59	4° Y 33'50	
direct	5997 Dec 02 19:55	22° H 46'38					
evening set	5998 Feb 28 03:44	24° H 24'10		conjunction	6004 Mar 24 13:17	5° Y 00'01	-5°45'42
				minimum elong	6004 Mar 24 13:06	5° Y 00'00	5°45'42
conjunction	5998 Mar 15 03:20	24° H 53'11	-2°54'51	max. Earth dist.	6004 Mar 27 03:22	5° Y 04'52	37.35810 AU
minimum elong	5998 Mar 15 03:14	24° H 53'11	2°54'52	morning rise	6004 Apr 07 15:59	5° Y 26'14	
max. Earth dist.	5998 Mar 17 11:55	24° H 57'48	35.83088 AU	retrograde	6004 Jul 05 04:12	7° Y 01'35	
morning rise	5998 Mar 30 02:42	25° H 22'13		min. Earth dist.	6004 Sep 22 02:48	5° Y 53'15	35.49779 AU
retrograde	5998 Jun 25 18:56	27° H 00'15		opposition	6004 Sep 24 18:55	5° Y 49'33	-6°19'09
min. Earth dist.	5998 Sep 12 11:06	25° H 49'42	33.95657 AU	direct	6004 Dec 15 00:59	4° Y 37'41	
opposition	5998 Sep 14 19:52	25° H 46'19	-3°21'08	evening set	6005 Mar 12 11:31	6° Y 11'23	
direct	5998 Dec 04 23:11	24° H 32'11					
evening set	5999 Mar 02 05:30	26° H 09'01		conjunction	6005 Mar 26 09:24	6° Y 37'03	-6°11'57
				minimum elong	6005 Mar 26 09:14	6° Y 37'02	6°11'58
conjunction	5999 Mar 17 02:16	26° H 37'37	-3°24'53	max. Earth dist.	6005 Mar 29 01:05	6° Y 41'59	37.61721 AU
minimum elong	5999 Mar 17 02:10	26° H 37'36	3°24'52	morning rise	6005 Apr 09 07:24	7° Y 02'44	
max. Earth dist.	5999 Mar 19 11:03	26° H 42'12	36.07953 AU	retrograde	6005 Jul 06 23:57	8° Y 37'47	
morning rise	5999 Mar 31 23:08	27° H 06'13		min. Earth dist.	6005 Sep 24 01:19	7° Y 29'43	35.75845 AU
retrograde	5999 Jun 27 19:27	28° H 43'41		opposition	6005 Sep 26 17:00	7° Y 26'04	-6°46'23
min. Earth dist.	5999 Sep 14 09:57	27° H 33'32	34.20774 AU	direct	6005 Dec 16 23:16	6° Y 14'34	
opposition	5999 Sep 16 21:07	27° H 30'03	-3°52'31	evening set	6006 Mar 14 12:08	7° Y 47'53	
direct	5999 Dec 06 23:39	26° H 16'15					
evening set	6000 Mar 03 06:51	27° H 52'27		conjunction	6006 Mar 28 04:59	8° Y 13'00	-6°37'34
				minimum elong	6006 Mar 28 04:47	8° Y 12'59	6°37'35
conjunction	6000 Mar 18 00:40	28° H 20'36	-3°54'18	max. Earth dist.	6006 Mar 30 19:58	8° Y 17'51	37.87580 AU
minimum elong	6000 Mar 18 00:32	28° H 20'36	3°54'18	morning rise	6006 Apr 10 22:12	8° Y 38'09	
max. Earth dist.	6000 Mar 20 11:41	28° H 25'20	36.33095 AU	retrograde	6006 Jul 08 22:03	10° Y 12'54	
morning rise	6000 Apr 01 18:29	28° H 48'45		min. Earth dist.	6006 Sep 25 21:24	9° Y 05'11	36.01842 AU
	6000 May 16 18:14	0° Y		opposition	6006 Sep 28 14:29	9° Y 01'30	-7°12'56
retrograde	6000 Jun 28 18:30	0° Y 25'43		direct	6006 Dec 18 18:55	7° Y 50'19	
	6000 Aug 12 04:52	30° R H		evening set	6007 Mar 16 12:30	9° Y 23'17	
min. Earth dist.	6000 Sep 15 10:23	29° H 15'52	34.46178 AU				
opposition	6000 Sep 17 21:52	29° H 12'22	-4°23'14	conjunction	6007 Mar 30 00:17	9° Y 47'51	-7°02'34
direct	6000 Dec 08 00:15	27° H 58'58		minimum elong	6007 Mar 30 00:06	9° Y 47'50	7°02'35
evening set	6001 Mar 05 08:09	29° H 34'35		max. Earth dist.	6007 Apr 01 16:23	9° Y 52'44	38.13335 AU
	6001 Mar 18 18:19	0° Y		morning rise	6007 Apr 12 12:22	10° Y 12'26	
				retrograde	6007 Jul 10 17:49	11° Y 46'56	
conjunction	6001 Mar 19 22:36	0° Y 02'15	-4°23'05	min. Earth dist.	6007 Sep 27 19:18	10° Y 39'26	36.27729 AU
minimum elong	6001 Mar 19 22:28	0° Y 02'15	4°23'05	opposition	6007 Sep 30 11:45	10° Y 35'48	-7°38'48
max. Earth dist.	6001 Mar 22 10:11	0° Y 07'00	36.58509 AU	direct	6007 Dec 20 15:22	9° Y 24'57	
morning rise	6001 Apr 03 13:06	0° Y 29'57		evening set	6008 Mar 17 12:36	10° Y 57'33	
retrograde	6001 Jun 30 15:34	2° Y 06'25					
min. Earth dist.	6001 Sep 17 08:17	0° Y 57'00	34.71834 AU	conjunction	6008 Mar 30 19:02	11° Y 21'33	-7°26'56
opposition	6001 Sep 19 21:43	0° Y 53'25	-4°53'15	minimum elong	6008 Mar 30 18:49	11° Y 21'32	7°26'56
	6001 Nov 01 12:15	30° R H		max. Earth dist.	6008 Apr 02 11:03	11° Y 26'24	38.38968 AU
direct	6001 Dec 10 01:39	29° H 40'23		morning rise	6008 Apr 13 01:42	11° Y 45'35	
	6002 Jan 16 13:11	0° Y		retrograde	6008 Jul 11 10:53	13° Y 19'47	
evening set	6002 Mar 07 09:18	1° Y 15'28		min. Earth dist.	6008 Sep 28 14:52	12° Y 12'36	36.53478 AU
				opposition	6008 Oct 01 08:19	12° Y 08'55	-8°04'00
conjunction	6002 Mar 21 19:59	1° Y 42'40	-4°51'16	direct	6008 Dec 21 14:53	10° Y 58'22	
minimum elong	6002 Mar 21 19:50	1° Y 42'39	4°51'16	evening set	6009 Mar 19 12:36	12° Y 30'38	
max. Earth dist.	6002 Mar 24 08:43	1° Y 47'28	36.84133 AU				
morning rise	6002 Apr 05 06:55	2° Y 09'53		conjunction	6009 Apr 01 13:19	12° Y 54'03	-7°50'39
retrograde	6002 Jul 02 12:03	3° Y 45'56		minimum elong	6009 Apr 01 13:07	12° Y 54'03	7°50'40
min. Earth dist.	6002 Sep 19 07:18	2° Y 36'52	34.97702 AU	max. Earth dist.	6009 Apr 04 05:31	12° Y 58'54	38.64463 AU

morning rise	6009 Apr 14 14:32	13° Υ 17'31	conjunction	6016 Apr 11 09:20	23° Υ 10'35 -10°18'58
retrograde	6009 Jul 13 03:51	14° Υ 51'28	minimum elong	6016 Apr 11 09:08	23° Υ 10'34 10°18'58
min. Earth dist.	6009 Sep 30 10:45	13° Υ 44'31 36.79134 AU	max. Earth dist.	6016 Apr 14 04:50	23° Υ 15'27 40.42361 AU
opposition	6009 Oct 03 04:19	13° Υ 40'50 -8°28'30	morning rise	6016 Apr 22 12:59	23° Υ 29'47
direct	6009 Dec 23 12:30	12° Υ 30'34	retrograde	6016 Jul 22 22:01	25° Υ 02'50
evening set	6010 Mar 21 12:15	14° Υ 02'31	min. Earth dist.	6016 Oct 10 15:26	23° Υ 57'44 38.58391 AU
			opposition	6016 Oct 13 12:29	23° Υ 53'58 -11°00'52
conjunction	6010 Apr 03 07:14	14° Υ 25'22 -8°13'45	direct	6017 Jan 02 23:11	22° Υ 45'46
minimum elong	6010 Apr 03 07:01	14° Υ 25'21 8°13'46	evening set	6017 Apr 02 04:46	24° Υ 16'26
max. Earth dist.	6010 Apr 06 00:27	14° Υ 30'15 38.89885 AU			
morning rise	6010 Apr 16 02:25	14° Υ 48'13	conjunction	6017 Apr 13 00:42	24° Υ 34'59 -10°37'39
retrograde	6010 Jul 14 19:05	16° Υ 21'58	minimum elong	6017 Apr 13 00:29	24° Υ 34'58 10°37'41
min. Earth dist.	6010 Oct 02 06:14	15° Υ 15'14 37.04730 AU	max. Earth dist.	6017 Apr 15 21:09	24° Υ 39'53 40.67554 AU
opposition	6010 Oct 04 23:55	15° Υ 11'33 -8°52'19	morning rise	6017 Apr 23 20:53	24° Υ 53'33
direct	6010 Dec 25 10:43	14° Υ 01'34	retrograde	6017 Jul 24 11:43	26° Υ 26'35
evening set	6011 Mar 23 11:41	15° Υ 33'14	min. Earth dist.	6017 Oct 12 08:58	25° Υ 21'41 38.83688 AU
			opposition	6017 Oct 15 05:07	25° Υ 17'59 -11°20'00
conjunction	6011 Apr 05 00:24	15° Υ 55'28 -8°36'13	direct	6018 Jan 04 17:29	24° Υ 10'05
minimum elong	6011 Apr 05 00:11	15° Υ 55'27 8°36'14	evening set	6018 Apr 04 03:23	25° Υ 40'41
max. Earth dist.	6011 Apr 07 17:21	16° Υ 00'18 39.15276 AU			
morning rise	6011 Apr 17 13:38	16° Υ 17'44	conjunction	6018 Apr 14 15:38	25° Υ 58'35 -10°55'46
retrograde	6011 Jul 16 12:34	17° Υ 51'17	minimum elong	6018 Apr 14 15:25	25° Υ 58'34 10°55'47
min. Earth dist.	6011 Oct 03 23:59	16° Υ 44'51 37.30343 AU	max. Earth dist.	6018 Apr 17 10:55	26° Υ 03'23 40.92527 AU
opposition	6011 Oct 06 19:06	16° Υ 41'07 -9°15'27	morning rise	6018 Apr 25 04:18	26° Υ 16'32
direct	6011 Dec 27 05:33	15° Υ 31'24	retrograde	6018 Jul 26 04:24	27° Υ 49'34
evening set	6012 Mar 24 10:55	17° Υ 02'49	min. Earth dist.	6018 Oct 14 00:33	26° Υ 44'57 39.08742 AU
			opposition	6018 Oct 16 21:34	26° Υ 41'14 -11°38'30
conjunction	6012 Apr 05 17:26	17° Υ 24'27 -8°58'02	direct	6019 Jan 06 08:34	25° Υ 33'37
minimum elong	6012 Apr 05 17:13	17° Υ 24'26 8°58'02	evening set	6019 Apr 06 01:38	27° Υ 04'10
max. Earth dist.	6012 Apr 08 12:05	17° Υ 29'23 39.40692 AU			
morning rise	6012 Apr 18 00:16	17° Υ 46'07	conjunction	6019 Apr 16 06:15	27° Υ 21'25 -11°13'19
retrograde	6012 Jul 17 05:46	19° Υ 19'31	minimum elong	6019 Apr 16 06:02	27° Υ 21'24 11°13'20
min. Earth dist.	6012 Oct 04 19:01	18° Υ 13'17 37.55983 AU	max. Earth dist.	6019 Apr 19 02:17	27° Υ 26'15 41.17218 AU
opposition	6012 Oct 07 13:46	18° Υ 09'35 -9°37'53	morning rise	6019 Apr 26 11:13	27° Υ 38'43
direct	6012 Dec 27 23:59	17° Υ 00'09	retrograde	6019 Jul 27 20:52	29° Υ 11'46
evening set	6013 Mar 26 10:01	18° Υ 31'21	min. Earth dist.	6019 Oct 15 18:02	28° Υ 07'19 39.33493 AU
			opposition	6019 Oct 18 13:49	28° Υ 03'41 -11°56'25
conjunction	6013 Apr 07 09:57	18° Υ 52'23 -9°19'12	direct	6020 Jan 07 23:24	26° Υ 56'21
minimum elong	6013 Apr 07 09:44	18° Υ 52'22 9°19'14	evening set	6020 Apr 07 00:04	28° Υ 26'51
max. Earth dist.	6013 Apr 10 04:14	18° Υ 57'15 39.66143 AU			
morning rise	6013 Apr 19 10:17	19° Υ 13'27	conjunction	6020 Apr 16 20:42	28° Υ 43'28 -11°30'18
retrograde	6013 Jul 19 00:17	20° Υ 46'42	minimum elong	6020 Apr 16 20:30	28° Υ 43'27 11°30'19
min. Earth dist.	6013 Oct 06 11:38	19° Υ 40'47 37.81645 AU	max. Earth dist.	6020 Apr 19 15:58	28° Υ 48'12 41.41603 AU
opposition	6013 Oct 09 07:55	19° Υ 37'02 -9°59'38	morning rise	6020 Apr 26 17:37	29° Υ 00'06
direct	6013 Dec 29 16:19	18° Υ 27'54		6020 Jun 05 23:56	0° \mathcal{B}
evening set	6014 Mar 28 08:52	19° Υ 58'55	retrograde	6020 Jul 28 11:06	0° \mathcal{B} 33'10
				6020 Sep 20 20:26	30° $\mathcal{R}\Upsilon$
conjunction	6014 Apr 09 02:04	20° Υ 19'20 -9°39'45	min. Earth dist.	6020 Oct 16 09:09	29° Υ 28'57 39.57915 AU
minimum elong	6014 Apr 09 01:51	20° Υ 19'19 9°39'45	opposition	6020 Oct 19 05:24	29° Υ 25'18 -12°13'44
max. Earth dist.	6014 Apr 11 21:19	20° Υ 24'14 39.91592 AU	direct	6021 Jan 08 14:46	28° Υ 18'13
morning rise	6014 Apr 20 19:45	20° Υ 39'47	evening set	6021 Apr 08 22:13	29° Υ 48'42
retrograde	6014 Jul 20 16:18	22° Υ 12'57		6021 Apr 15 16:13	0° \mathcal{B}
min. Earth dist.	6014 Oct 08 05:51	21° Υ 07'16 38.07302 AU			
opposition	6014 Oct 11 01:50	21° Υ 03'32 -10°20'42	conjunction	6021 Apr 18 10:42	0° \mathcal{B} 04'40 -11°46'44
direct	6014 Dec 31 10:18	19° Υ 54'43	minimum elong	6021 Apr 18 10:29	0° \mathcal{B} 04'39 11°46'46
evening set	6015 Mar 30 07:38	21° Υ 25'36	max. Earth dist.	6021 Apr 21 05:32	0° \mathcal{B} 09'20 41.65660 AU
			morning rise	6021 Apr 27 23:34	0° \mathcal{B} 20'38
conjunction	6015 Apr 10 17:58	21° Υ 45'23 -9°59'40	retrograde	6021 Jul 30 00:11	1° \mathcal{B} 53'44
minimum elong	6015 Apr 10 17:46	21° Υ 45'22 9°59'41	min. Earth dist.	6021 Oct 18 01:13	0° \mathcal{B} 49'41 39.82038 AU
max. Earth dist.	6015 Apr 13 13:44	21° Υ 50'18 40.17023 AU	opposition	6021 Oct 20 20:50	0° \mathcal{B} 46'05 -12°30'29
morning rise	6015 Apr 22 04:35	22° Υ 05'13		6021 Nov 29 12:51	30° $\mathcal{R}\Upsilon$
retrograde	6015 Jul 22 06:24	23° Υ 38'18	direct	6022 Jan 10 07:22	29° Υ 39'14
min. Earth dist.	6015 Oct 09 22:41	22° Υ 32'55 38.32899 AU		6022 Feb 19 23:06	0° \mathcal{B}
opposition	6015 Oct 12 19:18	22° Υ 29'10 -10°41'07	evening set	6022 Apr 10 20:13	1° \mathcal{B} 09'43
direct	6016 Jan 02 05:46	21° Υ 20'39			
evening set	6016 Mar 31 06:15	22° Υ 51'25	conjunction	6022 Apr 20 00:22	1° \mathcal{B} 25'00 -12°02'37
			minimum elong	6022 Apr 20 00:11	1° \mathcal{B} 24'59 12°02'39

max. Earth dist.	6022 Apr 22 19:49	1°829'42	41.89444 AU	conjunction	6029 Apr 28 15:48	10°826'35	-13°38'37
morning rise	6022 Apr 29 04:42	1°840'18		minimum elong	6029 Apr 28 15:38	10°826'35	13°38'38
retrograde	6022 Jul 31 10:33	3°813'27		max. Earth dist.	6029 May 01 11:09	10°831'07	43.51012 AU
min. Earth dist.	6022 Oct 19 16:29	2°809'35	40.05898 AU	morning rise	6029 May 05 02:00	10°836'56	
opposition	6022 Oct 22 11:48	2°806'01	-12°46'39	retrograde	6029 Aug 09 01:59	12°811'13	
direct	6023 Jan 12 01:35	0°859'24		min. Earth dist.	6029 Oct 28 17:23	11°808'45	41.68092 AU
evening set	6023 Apr 12 18:12	2°829'54		opposition	6029 Oct 31 11:40	11°805'19	-14°23'46
				direct	6030 Jan 21 02:33	10°800'26	
conjunction	6023 Apr 21 13:37	2°844'30	-12°17'58	evening set	6030 Apr 24 04:06	11°831'55	
minimum elong	6023 Apr 21 13:25	2°844'29	12°18'00				
max. Earth dist.	6023 Apr 24 08:09	2°849'07	42.13009 AU	conjunction	6030 Apr 30 03:16	11°841'29	-13°50'17
morning rise	6023 Apr 30 09:24	2°859'08		minimum elong	6030 Apr 30 03:07	11°841'28	13°50'19
retrograde	6023 Aug 02 00:25	4°832'22		max. Earth dist.	6030 May 02 21:15	11°845'54	43.73169 AU
min. Earth dist.	6023 Oct 21 06:20	3°828'43	40.29586 AU	morning rise	6030 May 06 02:30	11°851'03	
opposition	6023 Oct 24 02:28	3°825'07	-13°02'13	retrograde	6030 Aug 10 15:06	13°825'38	
direct	6024 Jan 13 16:02	2°818'44		min. Earth dist.	6030 Oct 30 05:29	12°823'23	41.90232 AU
evening set	6024 Apr 13 15:57	3°849'17		opposition	6030 Nov 02 00:15	12°819'57	-14°35'31
				direct	6031 Jan 22 14:23	11°815'17	
conjunction	6024 Apr 22 02:39	4°803'12	-12°32'45	evening set	6031 Apr 26 02:56	12°847'03	
minimum elong	6024 Apr 22 02:28	4°803'11	12°32'46				
max. Earth dist.	6024 Apr 24 22:18	4°807'52	42.36415 AU	conjunction	6031 May 01 14:43	12°855'48	-14°01'28
morning rise	6024 Apr 30 13:34	4°817'09		minimum elong	6031 May 01 14:33	12°855'47	14°01'30
retrograde	6024 Aug 02 13:34	5°850'29		max. Earth dist.	6031 May 04 08:36	13°800'11	43.94933 AU
min. Earth dist.	6024 Oct 21 21:40	4°846'59	40.53116 AU	morning rise	6031 May 07 02:30	13°804'34	
opposition	6024 Oct 24 16:50	4°843'27	-13°17'13	retrograde	6031 Aug 12 04:09	14°839'27	
direct	6025 Jan 14 07:03	3°837'19		min. Earth dist.	6031 Oct 31 19:37	13°837'18	42.11959 AU
evening set	6025 Apr 15 13:53	5°807'55		opposition	6031 Nov 03 12:46	13°833'58	-14°46'47
				direct	6032 Jan 24 01:33	12°829'30	
conjunction	6025 Apr 23 15:25	5°821'09	-12°46'59	evening set	6032 Apr 27 02:29	14°801'35	
minimum elong	6025 Apr 23 15:13	5°821'08	12°47'00				
max. Earth dist.	6025 Apr 26 10:17	5°825'45	42.59686 AU	conjunction	6032 May 02 01:58	14°809'30	-14°12'13
morning rise	6025 May 01 17:07	5°834'25		minimum elong	6032 May 02 01:49	14°809'29	14°12'15
retrograde	6025 Aug 04 04:23	7°807'52		max. Earth dist.	6032 May 04 19:08	14°813'48	44.16279 AU
min. Earth dist.	6025 Oct 23 10:26	6°804'38	40.76503 AU	morning rise	6032 May 07 01:22	14°817'24	
opposition	6025 Oct 26 06:35	6°801'04	-13°31'38		6032 Jun 04 06:57	15°8	
direct	6026 Jan 15 18:41	4°855'10		retrograde	6032 Aug 12 15:27	15°852'38	
evening set	6026 Apr 17 11:40	6°825'54			6032 Oct 24 15:41	15°8	
				min. Earth dist.	6032 Nov 01 07:53	14°850'38	42.33231 AU
conjunction	6026 Apr 25 03:51	6°838'26	-13°00'40	opposition	6032 Nov 04 00:50	14°847'19	-14°57'36
minimum elong	6026 Apr 25 03:41	6°838'25	13°00'42	direct	6033 Jan 24 12:49	13°843'03	
max. Earth dist.	6026 Apr 27 23:08	6°843'01	42.82807 AU		6033 Apr 19 04:28	15°8	
morning rise	6026 May 02 20:17	6°850'59		evening set	6033 Apr 29 02:41	15°815'31	
retrograde	6026 Aug 05 18:59	8°824'36					
min. Earth dist.	6026 Oct 25 00:55	7°821'33	40.99740 AU	conjunction	6033 May 03 12:53	15°822'31	-14°22'32
opposition	6026 Oct 27 20:23	7°818'02	-13°45'29	minimum elong	6033 May 03 12:44	15°822'30	14°22'33
direct	6027 Jan 17 05:46	6°812'23		max. Earth dist.	6033 May 06 04:49	15°826'43	44.37173 AU
evening set	6027 Apr 19 09:27	7°843'15		morning rise	6033 May 07 23:02	15°829'30	
				retrograde	6033 Aug 14 02:22	17°805'08	
conjunction	6027 Apr 26 16:00	7°855'04	-13°13'50	min. Earth dist.	6033 Nov 02 20:21	16°803'15	42.54082 AU
minimum elong	6027 Apr 26 15:49	7°855'04	13°13'51	opposition	6033 Nov 05 12:36	15°859'59	-15°07'57
max. Earth dist.	6027 Apr 29 11:34	7°859'39	43.05774 AU		6034 Jan 07 13:31	15°8	
morning rise	6027 May 03 22:37	8°806'54		direct	6034 Jan 26 00:27	14°855'53	
retrograde	6027 Aug 07 04:45	9°840'43			6034 Feb 13 10:36	15°8	
min. Earth dist.	6027 Oct 26 14:09	8°837'53	41.22779 AU	evening set	6034 May 01 04:08	16°828'49	
opposition	6027 Oct 29 09:45	8°834'22	-13°58'46				
direct	6028 Jan 18 21:15	7°828'59		conjunction	6034 May 04 23:37	16°834'49	-14°32'24
evening set	6028 Apr 20 07:26	9°800'01		minimum elong	6034 May 04 23:29	16°834'48	14°32'26
				morning rise	6034 May 08 18:59	16°840'48	
conjunction	6028 Apr 27 03:55	9°811'07	-13°26'28	max. Earth dist.	6034 May 07 15:58	16°839'02	44.57677 AU
minimum elong	6028 Apr 27 03:45	9°811'06	13°26'30	retrograde	6034 Aug 15 09:28	18°816'57	
max. Earth dist.	6028 Apr 29 22:33	9°815'37	43.28523 AU	min. Earth dist.	6034 Nov 04 08:56	17°815'09	42.74555 AU
morning rise	6028 May 04 00:35	9°822'13		opposition	6034 Nov 07 00:10	17°811'56	-15°17'50
retrograde	6028 Aug 07 15:26	10°856'15		direct	6035 Jan 27 15:16	16°808'00	
min. Earth dist.	6028 Oct 27 03:14	9°853'38	41.45591 AU	evening set	6035 May 03 07:24	17°841'33	
opposition	6028 Oct 29 22:48	9°850'07	-14°11'32				
direct	6029 Jan 19 11:29	8°844'59		conjunction	6035 May 06 09:50	17°846'24	-14°41'50
evening set	6029 Apr 22 05:37	10°816'15		minimum elong	6035 May 06 09:43	17°846'24	14°41'51

morning rise	6035 May 09 12:11	17° 8 51'16	conjunction	6043 May 15 13:36	27° 8 00'09 -15°41'34
max. Earth dist.	6035 May 09 00:49	17° 8 50'31 44.77850 AU	minimum elong	6043 May 15 13:33	27° 8 00'09 15°41'36
retrograde	6035 Aug 16 20:01	19° 8 28'03	max. Earth dist.	6043 May 18 01:35	27° 8 03'56 46.29962 AU
min. Earth dist.	6035 Nov 05 19:42	18° 8 26'26 42.94734 AU	retrograde	6043 Aug 26 05:03	28° 8 38'35
opposition	6035 Nov 08 11:27	18° 8 23'12 -15°27'16	min. Earth dist.	6043 Nov 15 10:24	27° 8 38'06 44.46588 AU
direct	6036 Jan 29 03:12	17° 8 19'25	opposition	6043 Nov 17 21:17	27° 8 35'11 -16°26'27
evening set	6036 May 04 14:55	18° 8 53'53	direct	6044 Feb 07 08:32	26° 8 32'57
conjunction	6036 May 06 20:03	18° 8 57'20 -14°50'48	conjunction	6044 May 15 22:37	28° 8 07'34 -15°47'16
minimum elong	6036 May 06 19:55	18° 8 57'19 14°50'50	minimum elong	6044 May 15 22:32	28° 8 07'34 15°47'17
morning rise	6036 May 09 01:00	19° 8 00'47	max. Earth dist.	6044 May 18 10:14	28° 8 11'19 46.47397 AU
max. Earth dist.	6036 May 09 11:36	19° 8 01'28 44.97749 AU	retrograde	6044 Aug 26 10:50	29° 8 45'37
retrograde	6036 Aug 17 07:39	20° 8 38'31	min. Earth dist.	6044 Nov 15 20:25	28° 8 45'14 44.63866 AU
min. Earth dist.	6036 Nov 06 08:02	19° 8 36'58 43.14658 AU	opposition	6044 Nov 18 06:27	28° 8 42'23 -16°32'02
opposition	6036 Nov 08 22:24	19° 8 33'49 -15°36'13	direct	6045 Feb 07 20:04	27° 8 40'18
direct	6037 Jan 29 13:59	18° 8 30'13	conjunction	6045 May 17 07:12	29° 8 14'32 -15°52'36
evening set	6037 May 07 15:54	20° 8 06'45	minimum elong	6045 May 17 07:09	29° 8 14'31 15°52'38
conjunction	6037 May 08 06:01	20° 8 07'39 -14°59'20	max. Earth dist.	6045 May 19 16:52	29° 8 18'09 46.64350 AU
minimum elong	6037 May 08 05:55	20° 8 07'39 14°59'22	retrograde	6045 Jun 17 17:50	0° II
evening rise	6037 May 08 19:58	20° 8 08'33	retrograde	6045 Aug 27 17:29	0° II 52'12
max. Earth dist.	6037 May 10 21:01	20° 8 11'44 45.17427 AU	min. Earth dist.	6045 Nov 10 09:05	30° R 8
retrograde	6037 Aug 18 17:35	21° 8 48'24	opposition	6045 Nov 17 06:02	29° 8 51'55 44.80682 AU
min. Earth dist.	6037 Nov 07 18:03	20° 8 47'02 43.34350 AU	opposition	6045 Nov 19 15:36	29° 8 49'05 -16°37'16
opposition	6037 Nov 10 09:04	20° 8 43'52 -15°44'42	direct	6046 Feb 09 06:43	28° 8 47'08
direct	6038 Jan 30 23:35	19° 8 40'27	direct	6046 May 04 12:54	0° II
conjunction	6038 May 09 15:33	21° 8 17'26 -15°07'25	conjunction	6046 May 18 15:34	0° II 20'58 -15°57'35
minimum elong	6038 May 09 15:26	21° 8 17'26 15°07'27	minimum elong	6046 May 18 15:31	0° II 20'58 15°57'37
max. Earth dist.	6038 May 12 05:58	21° 8 21'27 45.36874 AU	max. Earth dist.	6046 May 21 01:31	0° II 24'36 46.80858 AU
retrograde	6038 Aug 20 03:37	22° 8 57'45	retrograde	6046 Aug 29 00:48	1° II 58'16
min. Earth dist.	6038 Nov 09 05:21	21° 8 56'32 43.53823 AU	min. Earth dist.	6046 Nov 18 16:40	0° II 58'01 44.97072 AU
opposition	6038 Nov 11 19:42	21° 8 53'24 -15°52'44	opposition	6046 Nov 21 00:37	0° II 55'16 -16°42'07
direct	6039 Feb 01 09:07	20° 8 50'12	direct	6047 Jan 17 16:50	30° R 8
conjunction	6039 May 11 01:10	22° 8 26'45 -15°15'04	direct	6047 Feb 10 18:13	29° 8 53'27
minimum elong	6039 May 11 01:05	22° 8 26'45 15°15'06	direct	6047 Mar 06 07:17	0° II
max. Earth dist.	6039 May 13 16:10	22° 8 30'48 45.56108 AU	conjunction	6047 May 19 23:47	1° II 26'53 -16°02'12
retrograde	6039 Aug 21 10:33	24° 8 06'40	minimum elong	6047 May 19 23:44	1° II 26'53 16°02'15
min. Earth dist.	6039 Nov 10 16:14	23° 8 05'36 43.73045 AU	max. Earth dist.	6047 May 22 08:33	1° II 30'25 46.96996 AU
opposition	6039 Nov 13 05:59	23° 8 02'30 -16°00'19	retrograde	6047 Aug 30 10:05	3° II 03'48
direct	6040 Feb 02 21:22	21° 8 59'30	min. Earth dist.	6047 Nov 20 00:51	2° II 03'42 45.13119 AU
conjunction	6040 May 11 10:26	23° 8 35'39 -15°22'18	opposition	6047 Nov 22 09:13	2° II 00'56 -16°46'36
minimum elong	6040 May 11 10:19	23° 8 35'39 15°22'20	direct	6048 Feb 12 02:46	0° II 59'14
max. Earth dist.	6040 May 14 00:02	23° 8 39'35 45.75084 AU	conjunction	6048 May 20 07:46	2° II 32'17 -16°06'28
retrograde	6040 Aug 21 20:24	25° 8 15'11	minimum elong	6048 May 20 07:44	2° II 32'17 16°06'30
min. Earth dist.	6040 Nov 11 02:05	24° 8 14'19 43.91994 AU	max. Earth dist.	6048 May 22 16:01	2° II 35'46 47.12809 AU
opposition	6040 Nov 13 16:04	24° 8 11'13 -16°07'27	retrograde	6048 Aug 30 20:11	4° II 08'51
direct	6041 Feb 03 07:15	23° 8 08'25	min. Earth dist.	6048 Nov 20 10:45	3° II 08'47 45.28869 AU
conjunction	6041 May 12 19:41	24° 8 44'10 -15°29'06	opposition	6048 Nov 22 17:49	3° II 06'05 -16°50'42
minimum elong	6041 May 12 19:37	24° 8 44'10 15°29'08	direct	6049 Feb 12 09:29	2° II 04'31
max. Earth dist.	6041 May 15 09:40	24° 8 48'07 45.93751 AU	conjunction	6049 May 21 15:42	3° II 37'13 -16°10'22
retrograde	6041 Aug 23 06:11	26° 8 23'20	minimum elong	6049 May 21 15:40	3° II 37'12 16°10'24
min. Earth dist.	6041 Nov 12 13:39	25° 8 22'35 44.10600 AU	max. Earth dist.	6049 May 24 00:03	3° II 40'41 47.28356 AU
opposition	6041 Nov 15 01:56	25° 8 19'34 -16°14'11	retrograde	6049 Sep 01 02:59	5° II 13'24
direct	6042 Feb 04 18:26	24° 8 16'58	min. Earth dist.	6049 Nov 21 19:08	4° II 13'27 45.44343 AU
conjunction	6042 May 14 04:47	25° 8 52'21 -15°35'32	opposition	6049 Nov 24 01:59	4° II 10'46 -16°54'25
minimum elong	6042 May 14 04:41	25° 8 52'20 15°35'33	direct	6050 Feb 13 16:38	3° II 09'20
max. Earth dist.	6042 May 16 17:34	25° 8 56'12 46.12070 AU	conjunction	6050 May 22 23:19	4° II 41'41 -16°13'54
retrograde	6042 Aug 24 17:56	27° 8 31'09	minimum elong	6050 May 22 23:18	4° II 41'41 16°13'55
min. Earth dist.	6042 Nov 13 23:10	26° 8 30'34 44.28816 AU	max. Earth dist.	6050 May 25 06:20	4° II 45'04 47.43647 AU
opposition	6042 Nov 16 11:36	26° 8 27'34 -16°20'30	retrograde	6050 Sep 02 10:47	6° II 17'32
direct	6043 Feb 06 01:49	25° 8 25'10	min. Earth dist.	6050 Nov 23 03:27	5° II 17'43 45.59575 AU
			opposition	6050 Nov 25 10:13	5° II 15'03 -16°57'46

direct	6051 Feb 15 00:19	4°II13'45		minimum elong	6059 Jun 01 15:54	14°II07'49	16°30'54
				max. Earth dist.	6059 Jun 03 16:08	14°II10'42	48.65046 AU
conjunction	6051 May 24 06:51	5°II45'46 -16°17'04		retrograde	6059 Sep 12 03:54	15°II41'06	
minimum elong	6051 May 24 06:50	5°II45'46 16°17'06		min. Earth dist.	6059 Dec 03 06:48	14°II42'00	46.79368 AU
max. Earth dist.	6051 May 26 14:25	5°II49'11 47.58687 AU		opposition	6059 Dec 05 05:17	14°II39'47	-17°12'54
retrograde	6051 Sep 03 15:26	7°II21'19		direct	6060 Feb 24 20:37	13°II39'39	
min. Earth dist.	6051 Nov 24 12:50	6°II21'34 45.74527 AU					
opposition	6051 Nov 26 18:17	6°II18'58 -17°00'44		conjunction	6060 Jun 01 22:23	15°II09'08	-16°31'17
direct	6052 Feb 16 11:31	5°II17'49		minimum elong	6060 Jun 01 22:25	15°II09'08	16°31'20
				max. Earth dist.	6060 Jun 03 21:02	15°II11'54	48.76332 AU
conjunction	6052 May 24 14:20	6°II49'31 -16°19'52		retrograde	6060 Sep 12 11:11	16°II42'08	
minimum elong	6052 May 24 14:21	6°II49'31 16°19'54		min. Earth dist.	6060 Dec 03 14:17	15°II43'06	46.90503 AU
max. Earth dist.	6052 May 26 20:36	6°II52'51 47.73455 AU		opposition	6060 Dec 05 11:52	15°II40'55	-17°13'04
retrograde	6052 Sep 03 23:55	8°II24'46		direct	6061 Feb 25 01:36	14°II40'53	
min. Earth dist.	6052 Nov 24 20:14	7°II25'10 45.89181 AU					
opposition	6052 Nov 27 01:56	7°II22'33 -17°03'21		conjunction	6061 Jun 03 04:55	16°II10'07	-16°31'24
direct	6053 Feb 16 19:33	6°II21'34		minimum elong	6061 Jun 03 04:59	16°II10'07	16°31'25
				max. Earth dist.	6061 Jun 05 03:53	16°II12'54	48.87298 AU
conjunction	6053 May 25 21:41	7°II52'59 -16°22'21		retrograde	6061 Sep 13 13:44	17°II42'53	
minimum elong	6053 May 25 21:40	7°II52'58 16°22'23		min. Earth dist.	6061 Dec 04 21:57	16°II43'53	47.01313 AU
max. Earth dist.	6053 May 28 03:28	7°II56'15 47.87890 AU		opposition	6061 Dec 06 18:27	16°II41'46	-17°12'55
retrograde	6053 Sep 05 10:17	9°II27'56		direct	6062 Feb 26 11:07	15°II41'50	
min. Earth dist.	6053 Nov 26 05:47	8°II28'24 46.03482 AU					
opposition	6053 Nov 28 09:45	8°II25'53 -17°05'37		conjunction	6062 Jun 04 11:04	17°II10'49	-16°31'11
direct	6054 Feb 18 01:36	7°II25'03		minimum elong	6062 Jun 04 11:07	17°II10'49	16°31'14
				max. Earth dist.	6062 Jun 06 08:37	17°II13'31	48.97972 AU
conjunction	6054 May 27 04:55	8°II56'10 -16°24'30		retrograde	6062 Sep 14 19:30	18°II43'21	
minimum elong	6054 May 27 04:56	8°II56'10 16°24'33		min. Earth dist.	6062 Dec 06 04:10	17°II44'28	47.11837 AU
max. Earth dist.	6054 May 29 10:22	8°II59'25 48.01955 AU		opposition	6062 Dec 08 00:55	17°II42'20	-17°12'27
retrograde	6054 Sep 06 16:50	10°II30'51		direct	6063 Feb 27 19:18	16°II42'31	
min. Earth dist.	6054 Nov 27 13:46	9°II31'26 46.17359 AU					
opposition	6054 Nov 29 17:21	9°II28'57 -17°07'35		conjunction	6063 Jun 05 17:19	18°II11'17	-16°30'41
direct	6055 Feb 19 08:47	8°II28'16		minimum elong	6063 Jun 05 17:23	18°II11'17	16°30'43
				max. Earth dist.	6063 Jun 07 14:35	18°II13'58	49.08351 AU
conjunction	6055 May 28 12:06	9°II59'07 -16°26'21		retrograde	6063 Sep 16 04:42	19°II43'36	
minimum elong	6055 May 28 12:06	9°II59'07 16°26'23		min. Earth dist.	6063 Dec 07 12:14	18°II44'45	47.22061 AU
max. Earth dist.	6055 May 30 15:34	10°II02'13 48.15569 AU		opposition	6063 Dec 09 07:18	18°II42'42	-17°11'40
retrograde	6055 Sep 07 23:49	11°II33'30		direct	6064 Feb 29 01:36	17°II43'00	
min. Earth dist.	6055 Nov 28 22:20	10°II34'11 46.30770 AU					
opposition	6055 Dec 01 00:51	10°II31'45 -17°09'13		conjunction	6064 Jun 05 23:32	19°II11'33	-16°29'53
direct	6056 Feb 20 15:20	9°II31'12		minimum elong	6064 Jun 05 23:35	19°II11'33	16°29'56
				max. Earth dist.	6064 Jun 07 20:21	19°II14'11	49.18437 AU
conjunction	6056 May 28 19:22	11°II01'47 -16°27'54		retrograde	6064 Sep 16 11:20	20°II43'39	
minimum elong	6056 May 28 19:24	11°II01'47 16°27'57		min. Earth dist.	6064 Dec 07 18:24	19°II44'55	47.31955 AU
max. Earth dist.	6056 May 30 22:47	11°II04'53 48.28686 AU		opposition	6064 Dec 09 13:28	19°II42'53	-17°10'36
retrograde	6056 Sep 08 04:46	12°II35'54		direct	6065 Mar 01 06:24	18°II43'17	
min. Earth dist.	6056 Nov 29 07:32	11°II36'37 46.43644 AU					
opposition	6056 Dec 01 08:15	11°II34'16 -17°10'35		conjunction	6065 Jun 07 05:29	20°II11'38	-16°28'48
direct	6057 Feb 21 01:12	10°II33'50		minimum elong	6065 Jun 07 05:34	20°II11'38	16°28'50
				max. Earth dist.	6065 Jun 09 00:41	20°II14'10	49.28170 AU
conjunction	6057 May 30 02:21	12°II04'08 -16°29'11		retrograde	6065 Sep 17 18:31	21°II43'32	
minimum elong	6057 May 30 02:22	12°II04'08 16°29'12		min. Earth dist.	6065 Dec 09 01:45	20°II44'51	47.41485 AU
max. Earth dist.	6057 Jun 01 03:48	12°II07'07 48.41281 AU		opposition	6065 Dec 10 19:38	20°II42'52	-17°09'14
retrograde	6057 Sep 09 12:01	13°II37'59		direct	6066 Mar 02 09:54	19°II43'23	
min. Earth dist.	6057 Nov 30 14:42	12°II38'48 46.56002 AU					
opposition	6057 Dec 02 15:20	12°II36'28 -17°11'39		conjunction	6066 Jun 08 11:36	21°II11'33	-16°27'26
direct	6058 Feb 22 08:52	11°II36'08		minimum elong	6066 Jun 08 11:40	21°II11'34	16°27'28
				max. Earth dist.	6066 Jun 10 06:55	21°II14'06	49.37515 AU
conjunction	6058 May 31 09:11	13°II06'09 -16°30'11		retrograde	6066 Sep 18 21:42	22°II43'15	
minimum elong	6058 May 31 09:13	13°II06'09 16°30'13		min. Earth dist.	6066 Dec 10 09:17	21°II44'37	47.50581 AU
max. Earth dist.	6058 Jun 02 09:51	13°II09'04 48.53375 AU		opposition	6066 Dec 12 01:43	21°II42'43	-17°07'36
retrograde	6058 Sep 10 20:35	14°II39'43		direct	6067 Mar 03 17:21	20°II43'20	
min. Earth dist.	6058 Dec 01 23:49	13°II40'32 46.67892 AU					
opposition	6058 Dec 03 22:29	13°II38'18 -17°12'25		conjunction	6067 Jun 09 17:32	22°II11'19	-16°25'49
direct	6059 Feb 23 15:44	12°II38'05		minimum elong	6067 Jun 09 17:38	22°II11'19	16°25'51
				max. Earth dist.	6067 Jun 11 10:54	22°II13'44	49.46408 AU
conjunction	6059 Jun 01 15:52	14°II07'49 -16°30'53		retrograde	6067 Sep 20 02:55	23°II42'49	

min. Earth dist.	6067 Dec 11 15:36	22° Π 44'16	47.59191 AU	min. Earth dist.	6075 Dec 19 19:37	0° \mathfrak{S} 31'13	48.11617 AU
opposition	6067 Dec 13 07:42	22° Π 42'22	-17°05'43	opposition	6075 Dec 21 03:42	0° \mathfrak{S} 29'43	-16°41'29
direct	6068 Mar 03 23:44	21° Π 43'04		direct	6076 Jan 17 19:49	30° \mathfrak{R} Π	
conjunction	6068 Jun 09 23:36	23° Π 10'51	-16°23'57		6076 Mar 11 20:14	29° Π 30'52	
minimum elong	6068 Jun 09 23:41	23° Π 10'52	16°23'58		6076 May 03 13:51	0° \mathfrak{S}	
max. Earth dist.	6068 Jun 11 15:54	23° Π 13'13	49.54774 AU	conjunction	6076 Jun 17 19:45	0° \mathfrak{S} 57'15	-16°00'05
retrograde	6068 Sep 20 09:23	24° Π 42'10		minimum elong	6076 Jun 17 19:53	0° \mathfrak{S} 57'15	16°00'07
min. Earth dist.	6068 Dec 11 23:47	23° Π 43'35	47.67258 AU	max. Earth dist.	6076 Jun 19 05:30	0° \mathfrak{S} 59'11	50.06075 AU
opposition	6068 Dec 13 13:34	23° Π 41'48	-17°03'35	retrograde	6076 Sep 28 04:40	2° \mathfrak{S} 27'05	
direct	6069 Mar 05 07:54	22° Π 42'35		min. Earth dist.	6076 Dec 20 01:32	1° \mathfrak{S} 28'41	48.16660 AU
conjunction	6069 Jun 11 05:35	24° Π 10'09	-16°21'51	opposition	6076 Dec 21 08:39	1° \mathfrak{S} 27'13	-16°37'15
minimum elong	6069 Jun 11 05:42	24° Π 10'10	16°21'54	direct	6077 Mar 13 01:40	0° \mathfrak{S} 28'27	
max. Earth dist.	6069 Jun 12 20:59	24° Π 12'27	49.62612 AU	conjunction	6077 Jun 19 00:54	1° \mathfrak{S} 54'44	-15°55'55
retrograde	6069 Sep 21 16:46	25° Π 41'15		minimum elong	6077 Jun 19 01:01	1° \mathfrak{S} 54'45	15°55'57
min. Earth dist.	6069 Dec 13 05:57	24° Π 42'43	47.74785 AU	max. Earth dist.	6077 Jun 20 08:54	1° \mathfrak{S} 56'35	50.11034 AU
opposition	6069 Dec 14 19:19	24° Π 40'57	-17°01'12	retrograde	6077 Sep 29 09:14	3° \mathfrak{S} 24'28	
direct	6070 Mar 06 12:58	23° Π 41'47		min. Earth dist.	6077 Dec 21 06:42	2° \mathfrak{S} 26'08	48.21371 AU
conjunction	6070 Jun 12 11:09	25° Π 09'09	-16°19'31	opposition	6077 Dec 22 13:39	2° \mathfrak{S} 24'42	-16°32'45
minimum elong	6070 Jun 12 11:14	25° Π 09'09	16°19'33	direct	6078 Mar 14 06:24	1° \mathfrak{S} 26'00	
max. Earth dist.	6070 Jun 14 00:35	25° Π 11'19	49.69928 AU	conjunction	6078 Jun 20 06:00	2° \mathfrak{S} 52'12	-15°51'31
retrograde	6070 Sep 23 00:30	26° Π 40'01		minimum elong	6078 Jun 20 06:09	2° \mathfrak{S} 52'12	15°51'33
min. Earth dist.	6070 Dec 14 13:06	25° Π 41'28	47.81829 AU	max. Earth dist.	6078 Jun 21 13:28	2° \mathfrak{S} 54'00	50.15618 AU
opposition	6070 Dec 16 01:06	25° Π 39'46	-16°58'35	retrograde	6078 Sep 30 14:46	4° \mathfrak{S} 21'50	
direct	6071 Mar 07 15:51	24° Π 40'39		opposition	6078 Dec 23 18:46	3° \mathfrak{S} 22'09	-16°28'00
conjunction	6071 Jun 13 16:55	26° Π 07'49	-16°16'56	min. Earth dist.	6078 Dec 22 13:53	3° \mathfrak{S} 23'30	48.25675 AU
minimum elong	6071 Jun 13 17:01	26° Π 07'49	16°16'59	direct	6079 Mar 15 13:33	2° \mathfrak{S} 23'33	
max. Earth dist.	6071 Jun 15 06:23	26° Π 09'59	49.76791 AU	conjunction	6079 Jun 21 11:21	3° \mathfrak{S} 49'39	-15°46'52
retrograde	6071 Sep 24 03:14	27° Π 38'28		minimum elong	6079 Jun 21 11:29	3° \mathfrak{S} 49'39	15°46'54
min. Earth dist.	6071 Dec 15 19:47	26° Π 39'54	47.88438 AU	max. Earth dist.	6079 Jun 22 17:58	3° \mathfrak{S} 51'24	50.19778 AU
opposition	6071 Dec 17 06:34	26° Π 38'16	-16°55'43	retrograde	6079 Oct 01 21:53	5° \mathfrak{S} 19'11	
direct	6072 Mar 07 23:16	25° Π 39'11		opposition	6079 Dec 24 23:34	4° \mathfrak{S} 19'36	-16°23'02
conjunction	6072 Jun 13 22:26	27° Π 06'09	-16°14'06	min. Earth dist.	6079 Dec 23 19:05	4° \mathfrak{S} 20'56	48.29508 AU
minimum elong	6072 Jun 13 22:32	27° Π 06'10	16°14'07	direct	6080 Mar 15 17:51	3° \mathfrak{S} 21'03	
max. Earth dist.	6072 Jun 15 10:11	27° Π 08'14	49.83268 AU	conjunction	6080 Jun 21 16:36	4° \mathfrak{S} 47'04	-15°42'00
retrograde	6072 Sep 24 06:38	28° Π 36'37		minimum elong	6080 Jun 21 16:45	4° \mathfrak{S} 47'05	15°42'03
min. Earth dist.	6072 Dec 16 01:14	27° Π 38'05	47.94691 AU	max. Earth dist.	6080 Jun 22 21:00	4° \mathfrak{S} 48'42	50.23431 AU
opposition	6072 Dec 17 11:56	27° Π 36'27	-16°52'34	retrograde	6080 Oct 02 06:39	6° \mathfrak{S} 16'30	
direct	6073 Mar 09 06:07	26° Π 37'24		min. Earth dist.	6080 Dec 24 01:51	5° \mathfrak{S} 18'14	48.32821 AU
conjunction	6073 Jun 15 03:49	28° Π 04'13	-16°11'00	opposition	6080 Dec 25 04:35	5° \mathfrak{S} 16'59	-16°17'50
minimum elong	6073 Jun 15 03:55	28° Π 04'13	16°11'02	direct	6081 Mar 16 18:34	4° \mathfrak{S} 18'30	
max. Earth dist.	6073 Jun 16 15:11	28° Π 06'16	49.89397 AU	conjunction	6081 Jun 22 21:50	5° \mathfrak{S} 44'25	-15°36'56
retrograde	6073 Sep 25 12:37	29° Π 34'30		minimum elong	6081 Jun 22 21:58	5° \mathfrak{S} 44'25	15°36'57
min. Earth dist.	6073 Dec 17 08:19	28° Π 35'57	48.00619 AU	max. Earth dist.	6081 Jun 24 01:53	5° \mathfrak{S} 46'01	50.26553 AU
opposition	6073 Dec 18 17:19	28° Π 34'23	-16°49'09	retrograde	6081 Oct 03 10:14	7° \mathfrak{S} 13'44	
direct	6074 Mar 10 12:55	27° Π 35'24		min. Earth dist.	6081 Dec 25 07:59	6° \mathfrak{S} 15'26	48.35587 AU
conjunction	6074 Jun 16 09:12	29° Π 02'02	-16°07'37	opposition	6081 Dec 26 09:26	6° \mathfrak{S} 14'15	-16°12'25
minimum elong	6074 Jun 16 09:20	29° Π 02'03	16°07'39	direct	6082 Mar 18 00:21	5° \mathfrak{S} 15'48	
max. Earth dist.	6074 Jun 17 20:08	29° Π 04'03	49.95243 AU	conjunction	6082 Jun 24 02:55	6° \mathfrak{S} 41'37	-15°31'38
retrograde	6074 Jul 31 19:41	0° \mathfrak{S}		minimum elong	6082 Jun 24 03:04	6° \mathfrak{S} 41'37	15°31'41
opposition	6074 Sep 26 18:39	0° \mathfrak{S} 32'10		max. Earth dist.	6082 Jun 25 04:56	6° \mathfrak{S} 43'06	50.29164 AU
min. Earth dist.	6074 Nov 24 03:25	30° \mathfrak{R} Π		retrograde	6082 Oct 04 12:12	8° \mathfrak{S} 10'48	
opposition	6074 Dec 19 22:28	29° Π 32'08	-16°45'28	opposition	6082 Dec 27 14:11	7° \mathfrak{S} 11'21	-16°06'47
min. Earth dist.	6074 Dec 18 13:10	29° Π 33'42	48.06258 AU	min. Earth dist.	6082 Dec 26 13:19	7° \mathfrak{S} 12'31	48.37870 AU
direct	6075 Mar 11 17:30	28° Π 33'12		direct	6083 Mar 19 06:33	6° \mathfrak{S} 12'55	
conjunction	6075 Jun 17 14:22	29° Π 59'42	-16°03'59	conjunction	6083 Jun 25 07:57	7° \mathfrak{S} 38'37	-15°26'08
minimum elong	6075 Jun 17 14:28	29° Π 59'42	16°04'01	minimum elong	6083 Jun 25 08:05	7° \mathfrak{S} 38'38	15°26'09
max. Earth dist.	6075 Jun 17 19:35	0° \mathfrak{S}		max. Earth dist.	6083 Jun 26 09:11	7° \mathfrak{S} 40'04	50.31303 AU
retrograde	6075 Jun 18 23:48	0° \mathfrak{S} 01'37	50.00803 AU	retrograde	6083 Oct 05 16:16	9° \mathfrak{S} 07'42	
opposition	6075 Sep 28 01:46	1° \mathfrak{S} 29'40		opposition	6083 Dec 28 18:58	8° \mathfrak{S} 08'16	-16°00'56

min. Earth dist.	6083 Dec 27 20:02	8°09'20	48.39708 AU	minimum elong	6091 Jul 02 23:13	15°10'10	14°33'32
direct	6084 Mar 19 14:10	7°09'51		max. Earth dist.	6091 Jul 03 17:25	15°11'11	50.36062 AU
				morning rise	6091 Jul 06 19:12	15°15'22	
conjunction	6084 Jun 25 13:00	8°35'27	-15°20'24	retrograde	6091 Oct 13 10:53	16°38'40	
minimum elong	6084 Jun 25 13:09	8°35'27	15°20'26	opposition	6092 Jan 05 06:48	15°39'31	-15°05'12
max. Earth dist.	6084 Jun 26 13:33	8°36'51	50.33043 AU	min. Earth dist.	6092 Jan 04 14:54	15°40'15	48.42185 AU
retrograde	6084 Oct 05 22:09	10°04'25		direct	6092 Mar 26 22:30	14°41'16	
opposition	6084 Dec 28 23:23	9°05'00	-15°54'50	evening set	6092 Jun 28 20:17	16°00'38	
min. Earth dist.	6084 Dec 28 00:26	9°06'04	48.41164 AU				
direct	6085 Mar 20 19:15	8°06'35		conjunction	6092 Jul 03 04:01	16°06'30	-14°25'54
				minimum elong	6092 Jul 03 04:11	16°06'31	14°25'55
conjunction	6085 Jun 26 17:51	9°32'06	-15°14'25	max. Earth dist.	6092 Jul 03 20:07	16°07'25	50.34902 AU
minimum elong	6085 Jun 26 18:01	9°32'06	15°14'26	morning rise	6092 Jul 07 12:21	16°12'24	
max. Earth dist.	6085 Jun 27 16:44	9°33'24	50.34423 AU	retrograde	6092 Oct 13 14:22	17°34'59	
retrograde	6085 Oct 07 05:14	11°00'57		opposition	6093 Jan 05 11:07	16°35'52	-14°57'12
min. Earth dist.	6085 Dec 29 06:27	10°02'34	48.42295 AU	min. Earth dist.	6093 Jan 04 20:06	16°36'33	48.40636 AU
opposition	6085 Dec 30 04:02	10°01'34	-15°48'28	direct	6093 Mar 28 02:50	15°37'37	
direct	6086 Mar 21 21:33	9°03'10		evening set	6093 Jun 29 14:15	16°56'22	
conjunction	6086 Jun 27 22:41	10°28'35	-15°08'12	conjunction	6093 Jul 04 09:04	17°02'51	-14°18'06
minimum elong	6086 Jun 27 22:49	10°28'36	15°08'14	minimum elong	6093 Jul 04 09:15	17°02'52	14°18'09
max. Earth dist.	6086 Jun 28 21:52	10°29'54	50.35496 AU	max. Earth dist.	6093 Jul 04 23:56	17°03'42	50.33186 AU
retrograde	6086 Oct 08 08:53	11°57'21		morning rise	6093 Jul 09 04:32	17°09'23	
min. Earth dist.	6086 Dec 30 11:45	10°58'57	48.43114 AU	retrograde	6093 Oct 14 17:43	18°31'18	
opposition	6086 Dec 31 08:36	10°57'59	-15°41'52	opposition	6094 Jan 06 15:40	17°32'11	-14°49'00
direct	6087 Mar 23 01:16	9°59'36		min. Earth dist.	6094 Jan 06 02:48	17°32'47	48.38528 AU
				direct	6094 Mar 29 09:52	16°33'57	
conjunction	6087 Jun 29 03:31	11°24'58	-15°01'44	evening set	6094 Jun 30 08:56	17°52'06	
minimum elong	6087 Jun 29 03:41	11°24'59	15°01'46				
max. Earth dist.	6087 Jun 30 01:02	11°26'11	50.36279 AU	conjunction	6094 Jul 05 13:58	17°59'10	-14°10'06
retrograde	6087 Oct 09 12:46	12°53'38		minimum elong	6094 Jul 05 14:08	17°59'10	14°10'08
opposition	6088 Jan 01 12:58	11°54'19	-15°35'01	max. Earth dist.	6094 Jul 06 03:52	17°59'57	50.30944 AU
min. Earth dist.	6087 Dec 31 16:16	11°55'16	48.43648 AU	morning rise	6094 Jul 10 19:38	18°06'16	
direct	6088 Mar 23 05:04	10°55'56		retrograde	6094 Oct 15 23:18	19°27'35	
evening set	6088 Jun 27 16:43	12°19'01		opposition	6095 Jan 07 20:01	18°28'28	-14°40'35
				min. Earth dist.	6095 Jan 07 07:25	18°29'03	48.35900 AU
conjunction	6088 Jun 29 08:25	12°21'16	-14°55'02	direct	6095 Mar 30 14:57	17°30'12	
minimum elong	6088 Jun 29 08:34	12°21'16	14°55'04	evening set	6095 Jul 01 04:15	18°47'49	
max. Earth dist.	6088 Jun 30 05:24	12°22'27	50.36758 AU				
morning rise	6088 Jul 01 00:28	12°23'32		conjunction	6095 Jul 06 18:52	18°55'24	-14°01'54
retrograde	6088 Oct 09 16:16	13°49'53		minimum elong	6095 Jul 06 19:03	18°55'25	14°01'57
opposition	6089 Jan 01 17:32	12°50'36	-15°27'55	max. Earth dist.	6095 Jul 07 06:42	18°56'04	50.28197 AU
min. Earth dist.	6088 Dec 31 22:40	12°51'28	48.43863 AU	morning rise	6095 Jul 12 10:17	19°03'03	
direct	6089 Mar 24 11:39	11°52'15		retrograde	6095 Oct 17 06:20	20°23'47	
evening set	6089 Jun 27 23:38	13°14'03		opposition	6096 Jan 09 00:19	19°24'41	-14°31'58
				min. Earth dist.	6096 Jan 08 13:38	19°25'10	48.32811 AU
conjunction	6089 Jun 30 13:12	13°17'32	-14°48'05	direct	6096 Mar 30 17:16	18°26'23	
minimum elong	6089 Jun 30 13:23	13°17'33	14°48'07	evening set	6096 Jul 01 00:04	19°43'29	
max. Earth dist.	6089 Jul 01 09:42	13°18'42	50.36923 AU				
morning rise	6089 Jul 03 03:12	13°21'03		conjunction	6096 Jul 06 23:54	19°51'35	-13°53'29
retrograde	6089 Oct 10 21:25	14°46'07		minimum elong	6096 Jul 07 00:05	19°51'36	13°53'31
opposition	6090 Jan 02 21:54	13°46'52	-15°20'34	max. Earth dist.	6096 Jul 07 11:38	19°52'15	50.25018 AU
min. Earth dist.	6090 Jan 02 03:01	13°47'45	48.43731 AU	morning rise	6096 Jul 13 00:26	19°59'44	
direct	6090 Mar 25 17:06	12°48'34		retrograde	6096 Oct 17 10:23	21°19'57	
evening set	6090 Jun 28 12:07	14°09'25		opposition	6097 Jan 09 04:36	20°20'49	-14°23'07
				min. Earth dist.	6097 Jan 08 18:44	20°21'17	48.29306 AU
conjunction	6090 Jul 01 18:00	14°13'49	-14°40'54	direct	6097 Mar 31 20:59	19°22'30	
minimum elong	6090 Jul 01 18:09	14°13'50	14°40'56	evening set	6097 Jul 01 20:10	20°39'07	
max. Earth dist.	6090 Jul 02 12:32	14°14'52	50.36710 AU				
morning rise	6090 Jul 05 00:22	14°18'16		conjunction	6097 Jul 08 04:35	20°47'43	-13°44'51
retrograde	6090 Oct 12 06:01	15°42'22		minimum elong	6097 Jul 08 04:45	20°47'44	13°44'53
min. Earth dist.	6091 Jan 03 09:13	14°43'58	48.43204 AU	max. Earth dist.	6097 Jul 08 14:32	20°48'17	50.21463 AU
opposition	6091 Jan 04 02:23	14°43'11	-15°12'59	morning rise	6097 Jul 14 13:52	20°56'21	
direct	6091 Mar 26 18:23	13°44'54		retrograde	6097 Oct 18 13:57	22°16'03	
evening set	6091 Jun 29 03:24	15°04'58		opposition	6098 Jan 10 08:52	21°16'55	-14°14'03
				min. Earth dist.	6098 Jan 09 23:21	21°17'22	48.25456 AU
conjunction	6091 Jul 02 23:02	15°10'09	-14°33'30	direct	6098 Apr 02 00:53	20°18'35	

evening set	6098 Jul 02 16:35	21° $\overline{53}$ 34'46	
conjunction	6098 Jul 09 09:27	21° $\overline{53}$ 43'50	-13°35'59
minimum elong	6098 Jul 09 09:39	21° $\overline{53}$ 43'50	13°36'00
max. Earth dist.	6098 Jul 09 18:51	21° $\overline{54}$ 44'21	50.17571 AU
morning rise	6098 Jul 16 03:13	21° $\overline{55}$ 52'56	
retrograde	6098 Oct 19 17:02	23° $\overline{56}$ 12'11	
opposition	6099 Jan 11 13:11	22° $\overline{56}$ 13'02	-14°04'43
min. Earth dist.	6099 Jan 11 05:23	22° $\overline{56}$ 13'24	48.21286 AU
direct	6099 Apr 03 06:55	21° $\overline{56}$ 14'41	
evening set	6099 Jul 03 13:25	22° $\overline{56}$ 30'26	
conjunction	6099 Jul 10 14:21	22° $\overline{56}$ 39'57	-13°26'52
minimum elong	6099 Jul 10 14:31	22° $\overline{56}$ 39'57	13°26'54
max. Earth dist.	6099 Jul 10 23:14	22° $\overline{56}$ 40'27	50.13389 AU
morning rise	6099 Jul 17 16:09	22° $\overline{56}$ 49'31	
retrograde	6099 Oct 20 21:46	24° $\overline{56}$ 08'19	
opposition	6100 Jan 12 17:23	23° $\overline{56}$ 09'11	-13°55'09
min. Earth dist.	6100 Jan 12 09:26	23° $\overline{56}$ 09'33	48.16816 AU
direct	6100 Apr 04 12:50	22° $\overline{56}$ 10'49	
evening set	6100 Jul 04 10:28	23° $\overline{56}$ 26'10	
conjunction	6100 Jul 11 19:10	23° $\overline{56}$ 36'07	-13°17'32
minimum elong	6100 Jul 11 19:22	23° $\overline{56}$ 36'08	13°17'34
max. Earth dist.	6100 Jul 12 02:15	23° $\overline{56}$ 36'31	50.08899 AU
morning rise	6100 Jul 19 04:57	23° $\overline{56}$ 46'09	
retrograde	6100 Oct 22 06:39	25° $\overline{56}$ 04'32	
opposition	6101 Jan 13 21:39	24° $\overline{56}$ 05'24	-13°45'21
min. Earth dist.	6101 Jan 13 15:10	24° $\overline{56}$ 05'42	48.12046 AU
direct	6101 Apr 05 14:05	23° $\overline{56}$ 07'01	
evening set	6101 Jul 05 07:45	24° $\overline{56}$ 22'00	
conjunction	6101 Jul 13 00:09	24° $\overline{56}$ 32'24	-13°07'58
minimum elong	6101 Jul 13 00:20	24° $\overline{56}$ 32'24	13°08'00
max. Earth dist.	6101 Jul 13 07:23	24° $\overline{56}$ 32'48	50.04102 AU
morning rise	6101 Jul 20 17:29	24° $\overline{56}$ 42'51	
retrograde	6101 Oct 23 12:46	26° $\overline{56}$ 00'51	