

retrograde	600 Feb 08 j 05:44	2°♄56'35		retrograde	606 Apr 17 j 16:39	10°♄28'49	
	600 Apr 12 j 21:27	30°♄		opposition	606 Jun 27 j 16:40	7°♄09'53	0°12'31
opposition	600 Apr 17 j 13:38	29°♄39'05	2°41'02	min. Earth dist.	606 Jun 27 j 22:44	7°♄08'46	9.03199 AU
min. Earth dist.	600 Apr 17 j 15:03	29°♄38'49	8.98977 AU	direct	606 Sep 06 j 00:54	3°♄51'58	
direct	600 Jun 27 j 20:36	26°♄17'15		desc. node	606 Nov 14 j 18:40	7°♄35'11	
	600 Sep 06 j 17:59	0°♄		evening set	606 Dec 14 j 23:04	10°♄51'00	
evening set	600 Oct 09 j 06:41	3°♄29'06					
				conjunction	606 Dec 31 j 14:33	12°♄48'38	-0°03'30
conjunction	600 Oct 25 j 23:11	5°♄26'27	2°06'44	minimum elong	606 Dec 31 j 14:33	12°♄48'38	0°03'30
minimum elong	600 Oct 25 j 23:13	5°♄26'28	2°06'44	behind sun begin	606 Dec 31 j 07:37	12°♄46'36	
max. Earth dist.	600 Oct 25 j 20:30	5°♄25'40	11.02330 AU	behind sun end	606 Dec 31 j 21:28	12°♄50'39	
morning rise	600 Nov 11 j 12:44	7°♄22'58		max. Earth dist.	606 Dec 31 j 08:03	12°♄46'44	10.99844 AU
retrograde	601 Feb 18 j 21:20	14°♄19'34		morning rise	607 Jan 17 j 07:46	14°♄46'50	
opposition	601 Apr 29 j 15:40	11°♄02'26	2°27'18	retrograde	607 Apr 29 j 22:25	21°♄57'30	
min. Earth dist.	601 Apr 29 j 18:35	11°♄01'53	9.05456 AU	opposition	607 Jul 09 j 22:15	18°♄37'30	-0°21'19
direct	601 Jul 10 j 01:10	7°♄41'40		min. Earth dist.	607 Jul 10 j 03:40	18°♄36'29	8.95939 AU
evening set	601 Oct 20 j 17:53	14°♄47'56		direct	607 Sep 17 j 19:27	15°♄19'27	
	601 Oct 22 j 11:49	15°♄		evening set	607 Dec 26 j 12:04	22°♄21'40	
conjunction	601 Nov 06 j 08:42	16°♄44'14	1°53'16	conjunction	608 Jan 12 j 04:52	24°♄20'41	-0°31'04
minimum elong	601 Nov 06 j 08:44	16°♄44'15	1°53'16	minimum elong	608 Jan 12 j 04:51	24°♄20'40	0°31'05
max. Earth dist.	601 Nov 06 j 04:34	16°♄43'01	11.07758 AU	max. Earth dist.	608 Jan 11 j 22:13	24°♄18'42	10.91615 AU
morning rise	601 Nov 22 j 21:23	18°♄39'56		morning rise	608 Jan 29 j 00:10	26°♄20'30	
retrograde	602 Mar 02 j 11:24	25°♄34'56			608 Mar 02 j 19:28	0°♄	
opposition	602 May 11 j 15:44	22°♄17'54	2°08'04	retrograde	608 May 11 j 11:59	3°♄38'45	
min. Earth dist.	602 May 11 j 19:09	22°♄17'17	9.09739 AU	opposition	608 Jul 21 j 08:07	0°♄17'31	-0°54'56
direct	602 Jul 22 j 00:43	18°♄58'07		min. Earth dist.	608 Jul 21 j 13:31	0°♄16'30	8.86803 AU
evening set	602 Nov 01 j 00:42	26°♄00'00			608 Jul 25 j 05:41	30°♄	
				direct	608 Sep 28 j 17:15	26°♄59'04	
conjunction	602 Nov 17 j 14:43	27°♄55'45	1°35'34		608 Nov 29 j 00:52	0°♄	
minimum elong	602 Nov 17 j 14:46	27°♄55'45	1°35'33	evening set	609 Jan 06 j 07:20	4°♄06'00	
max. Earth dist.	602 Nov 17 j 10:20	27°♄54'27	11.10913 AU				
morning rise	602 Dec 04 j 03:09	29°♄51'06		conjunction	609 Jan 23 j 01:39	6°♄06'42	-0°57'52
	602 Dec 05 j 10:17	0°♄		minimum elong	609 Jan 23 j 01:37	6°♄06'41	0°57'53
retrograde	603 Mar 14 j 03:53	6°♄46'06		max. Earth dist.	609 Jan 22 j 18:25	6°♄04'31	10.81647 AU
opposition	603 May 23 j 14:48	3°♄28'56	1°44'06	morning rise	609 Feb 08 j 23:25	8°♄08'27	
min. Earth dist.	603 May 23 j 18:32	3°♄28'15	9.11675 AU		609 Apr 27 j 07:50	15°♄	
direct	603 Aug 02 j 21:27	0°♄09'57		retrograde	609 May 24 j 06:58	15°♄35'29	
evening set	603 Nov 12 j 05:23	7°♄08'51			609 Jun 20 j 11:50	15°♄	
				opposition	609 Aug 02 j 23:05	12°♄12'54	-1°27'00
conjunction	603 Nov 28 j 19:06	9°♄04'28	1°14'16	min. Earth dist.	609 Aug 03 j 04:45	12°♄11'49	8.76102 AU
minimum elong	603 Nov 28 j 19:08	9°♄04'29	1°14'17	direct	609 Oct 10 j 18:26	8°♄53'46	
max. Earth dist.	603 Nov 28 j 14:01	9°♄02'59	11.11683 AU		610 Jan 08 j 23:00	15°♄	
morning rise	603 Dec 15 j 08:00	10°♄59'56		evening set	610 Jan 18 j 10:22	16°♄06'54	
retrograde	604 Mar 24 j 21:08	17°♄56'28					
opposition	604 Jun 03 j 13:47	14°♄38'58	1°16'15	conjunction	610 Feb 04 j 06:45	18°♄09'36	-1°22'43
min. Earth dist.	604 Jun 03 j 18:48	14°♄38'03	9.11203 AU	minimum elong	610 Feb 04 j 06:42	18°♄09'35	1°22'43
direct	604 Aug 13 j 13:45	11°♄20'35		max. Earth dist.	610 Feb 03 j 23:40	18°♄07'26	10.70277 AU
evening set	604 Nov 22 j 09:35	18°♄17'59		morning rise	610 Feb 21 j 07:13	20°♄13'34	
				retrograde	610 Jun 06 j 09:25	27°♄50'22	
conjunction	604 Dec 08 j 23:21	20°♄13'53	0°50'08	opposition	610 Aug 15 j 19:41	24°♄26'16	-1°56'01
minimum elong	604 Dec 08 j 23:23	20°♄13'54	0°50'09	min. Earth dist.	610 Aug 16 j 01:12	24°♄25'13	8.64202 AU
max. Earth dist.	604 Dec 08 j 16:38	20°♄11'55	11.10046 AU	direct	610 Oct 23 j 03:05	21°♄06'14	
morning rise	604 Dec 25 j 13:23	22°♄09'54		evening set	611 Jan 30 j 22:26	28°♄26'55	
retrograde	605 Apr 05 j 16:08	29°♄09'34			611 Feb 12 j 14:11	0°♄	
opposition	605 Jun 15 j 14:07	25°♄51'29	0°45'24				
min. Earth dist.	605 Jun 15 j 20:12	25°♄50'22	9.08345 AU	conjunction	611 Feb 16 j 21:30	0°♄31'58	-1°44'20
direct	605 Aug 25 j 06:50	22°♄33'26		minimum elong	611 Feb 16 j 21:27	0°♄31'58	1°44'20
evening set	605 Dec 03 j 14:48	29°♄30'53		max. Earth dist.	611 Feb 16 j 15:36	0°♄30'09	10.57902 AU
	605 Dec 07 j 19:19	0°♄		morning rise	611 Mar 06 j 00:55	2°♄38'25	
				retrograde	611 Jun 19 j 21:51	10°♄25'36	
conjunction	605 Dec 20 j 05:11	1°♄27'28	0°23'58	opposition	611 Aug 28 j 22:33	7°♄00'01	-2°20'25
minimum elong	605 Dec 20 j 05:11	1°♄27'28	0°23'58	min. Earth dist.	611 Aug 29 j 02:52	6°♄59'10	8.51561 AU
max. Earth dist.	605 Dec 19 j 21:58	1°♄25'21	11.06057 AU	direct	611 Nov 04 j 17:43	3°♄38'55	
morning rise	606 Jan 05 j 20:42	3°♄24'24		evening set	612 Feb 12 j 20:49	11°♄08'15	

conjunction	612 Feb 29 j 22:59	13° K 15'54 -2°01'27	min. Earth dist.	617 Nov 18 j 10:20	29° S 19'31 7.97842 AU
minimum elong	612 Feb 29 j 22:56	13° K 15'54 2°01'27	direct	618 Jan 23 j 23:54	25° S 49'58
max. Earth dist.	612 Feb 29 j 18:26	13° K 14'29 10.45085 AU		618 Apr 03 j 23:55	0° II
morning rise	612 Mar 18 j 05:40	15° K 25'02	evening set	618 May 08 j 05:22	4° II 05'21
retrograde	612 Jul 02 j 19:27	23° K 22'37			
opposition	612 Sep 10 j 07:57	19° K 55'36 -2°38'34	conjunction	618 May 26 j 08:24	6° II 27'01 -1°18'41
min. Earth dist.	612 Sep 10 j 10:43	19° K 55'03 8.38832 AU	minimum elong	618 May 26 j 08:27	6° II 27'02 1°18'40
direct	612 Nov 16 j 14:00	16° K 33'18	max. Earth dist.	618 May 26 j 15:03	6° II 29'12 9.97321 AU
evening set	613 Feb 25 j 06:08	24° K 11'57	morning rise	618 Jun 13 j 12:36	8° II 49'06
			retrograde	618 Sep 27 j 03:26	17° II 10'39
conjunction	613 Mar 14 j 11:53	26° K 22'22 -2°12'49	opposition	618 Dec 02 j 22:36	13° II 40'47 -1°20'02
minimum elong	613 Mar 14 j 11:52	26° K 22'22 2°12'48	min. Earth dist.	618 Dec 02 j 16:55	13° II 41'58 7.97728 AU
max. Earth dist.	613 Mar 14 j 08:37	26° K 21'20 10.32553 AU	direct	619 Feb 07 j 13:42	10° II 11'20
morning rise	613 Mar 31 j 22:22	28° K 34'19	evening set	619 May 23 j 11:55	18° II 28'34
	613 Apr 12 j 15:07	0° Y			
retrograde	613 Jul 16 j 23:26	6° Y 41'34	conjunction	619 Jun 10 j 16:53	20° II 50'31 -0°48'24
opposition	613 Sep 23 j 23:55	3° Y 13'15 -2°48'53	minimum elong	619 Jun 10 j 16:55	20° II 50'32 0°48'24
min. Earth dist.	613 Sep 24 j 01:15	3° Y 12'59 8.26752 AU	max. Earth dist.	619 Jun 11 j 00:56	20° II 53'09 9.98835 AU
	613 Nov 16 j 03:02	30° R K	morning rise	619 Jun 28 j 21:37	23° II 12'24
direct	613 Nov 29 j 19:45	29° K 49'36		619 Sep 01 j 08:26	0° S
	613 Dec 13 j 11:32	0° Y	retrograde	619 Oct 11 j 15:02	1° S 28'22
evening set	614 Mar 11 j 02:26	7° Y 37'42		619 Nov 21 j 08:11	30° R II
			opposition	619 Dec 17 j 05:08	27° II 59'21 -0°40'08
conjunction	614 Mar 28 j 12:20	9° Y 50'57 -2°17'16	min. Earth dist.	619 Dec 16 j 22:44	28° II 00'41 8.00756 AU
minimum elong	614 Mar 28 j 12:20	9° Y 50'57 2°17'16	direct	620 Feb 22 j 04:18	24° II 29'27
max. Earth dist.	614 Mar 28 j 10:17	9° Y 50'18 10.21038 AU		620 May 15 j 01:45	0° S
morning rise	614 Apr 15 j 02:59	12° Y 05'44	evening set	620 Jun 06 j 17:08	2° S 46'07
retrograde	614 Jul 31 j 09:43	20° Y 21'06			
opposition	614 Oct 07 j 21:46	16° Y 51'45 -2°50'06	conjunction	620 Jun 24 j 22:16	5° S 07'20 -0°15'21
min. Earth dist.	614 Oct 07 j 22:06	16° Y 51'41 8.16021 AU	minimum elong	620 Jun 24 j 22:16	5° S 07'21 0°15'21
direct	614 Dec 13 j 09:56	13° Y 26'42	behind sun begin	620 Jun 24 j 20:36	5° S 06'48
evening set	615 Mar 25 j 09:19	21° Y 23'46	behind sun end	620 Jun 24 j 23:57	5° S 07'53
			max. Earth dist.	620 Jun 25 j 06:53	5° S 10'08 10.03403 AU
conjunction	615 Apr 11 j 23:48	23° Y 39'48 -2°14'04	morning rise	620 Jul 13 j 01:50	7° S 28'04
minimum elong	615 Apr 11 j 23:50	23° Y 39'48 2°14'03	retrograde	620 Oct 24 j 21:00	15° S 36'25
max. Earth dist.	615 Apr 11 j 23:36	23° Y 39'44 10.11219 AU	asc. node	620 Dec 14 j 12:41	13° S 25'02
morning rise	615 Apr 29 j 18:40	25° Y 57'13	opposition	620 Dec 30 j 08:27	12° S 08'34 0°01'45
	615 Jun 02 j 23:56	0° S	min. Earth dist.	620 Dec 30 j 01:59	12° S 09'54 8.06717 AU
retrograde	615 Aug 15 j 00:38	4° S 18'29	direct	621 Mar 07 j 18:29	8° S 38'30
opposition	615 Oct 22 j 00:21	0° S 48'25 -2°41'24	evening set	621 Jun 21 j 18:25	16° S 52'26
min. Earth dist.	615 Oct 21 j 23:28	0° S 48'36 8.07285 AU			
	615 Oct 31 j 22:41	30° R Y	conjunction	621 Jul 09 j 21:53	19° S 11'59 0°18'17
direct	615 Dec 27 j 07:40	27° Y 22'00	minimum elong	621 Jul 09 j 21:52	19° S 11'59 0°18'17
	616 Feb 19 j 18:00	0° S	max. Earth dist.	621 Jul 10 j 06:13	19° S 14'40 10.10709 AU
evening set	616 Apr 08 j 01:27	5° S 26'59	morning rise	621 Jul 27 j 22:41	21° S 30'40
			retrograde	621 Nov 07 j 18:40	29° S 29'59
conjunction	616 Apr 25 j 20:39	7° S 45'29 -2°02'52	opposition	622 Jan 13 j 07:06	26° S 03'33 0°42'47
minimum elong	616 Apr 25 j 20:42	7° S 45'30 2°02'52	min. Earth dist.	622 Jan 13 j 01:03	26° S 04'47 8.15217 AU
max. Earth dist.	616 Apr 25 j 22:46	7° S 46'11 10.03705 AU	direct	622 Mar 22 j 07:00	22° S 33'43
morning rise	616 May 13 j 19:28	10° S 05'10		622 Jun 30 j 18:19	0° S
	616 Jun 25 j 03:48	15° S	evening set	622 Jul 06 j 12:57	0° S 42'58
retrograde	616 Aug 28 j 18:25	18° S 29'34			
opposition	616 Nov 04 j 06:33	14° S 59'09 -2°22'46	conjunction	622 Jul 24 j 13:09	3° S 00'05 0°50'14
min. Earth dist.	616 Nov 04 j 04:02	14° S 59'40 8.01095 AU	minimum elong	622 Jul 24 j 13:06	3° S 00'04 0°50'13
	616 Nov 04 j 02:27	15° R S	max. Earth dist.	622 Jul 24 j 20:35	3° S 02'27 10.20280 AU
direct	617 Jan 09 j 13:03	11° S 31'31	morning rise	622 Aug 11 j 09:48	5° S 16'03
	617 Mar 13 j 17:48	15° S	retrograde	622 Nov 21 j 07:04	13° S 05'41
evening set	617 Apr 23 j 00:49	19° S 42'43	opposition	623 Jan 27 j 00:25	9° S 40'47 1°20'26
			min. Earth dist.	623 Jan 26 j 18:38	9° S 41'57 8.25723 AU
conjunction	617 May 11 j 00:25	22° S 03'11 -1°44'04	direct	623 Apr 05 j 15:01	6° S 11'34
minimum elong	617 May 11 j 00:28	22° S 03'13 1°44'03	evening set	623 Jul 20 j 22:23	14° S 14'31
max. Earth dist.	617 May 11 j 04:58	22° S 04'41 9.98976 AU		623 Jul 27 j 00:40	15° S
morning rise	617 May 29 j 02:32	24° S 24'29			
	617 Jul 17 j 08:35	0° II	conjunction	623 Aug 07 j 18:10	16° S 28'40 1°18'43
retrograde	617 Sep 12 j 11:55	2° II 48'59	minimum elong	623 Aug 07 j 18:07	16° S 28'39 1°18'43
	617 Nov 10 j 06:03	30° R S	max. Earth dist.	623 Aug 08 j 00:45	16° S 30'45 10.31538 AU
opposition	617 Nov 18 j 14:35	29° S 18'38 -1°55'03	morning rise	623 Aug 25 j 09:45	18° S 41'28

retrograde	623 Dec 04 j 11:39	26°♏21'23		min. Earth dist.	630 Apr 24 j 09:57	5°♍56'35	9.03369 AU
opposition	624 Feb 09 j 11:41	22°♏58'03	1°52'43	direct	630 Jul 04 j 17:18	2°♍36'06	
min. Earth dist.	624 Feb 09 j 05:54	22°♏59'13	8.37613 AU	evening set	630 Oct 15 j 18:44	9°♍45'04	
direct	624 Apr 18 j 16:24	19°♏29'46					
evening set	624 Aug 02 j 21:37	27°♏25'15		conjunction	630 Nov 01 j 10:24	11°♍41'50	2°00'03
				minimum elong	630 Nov 01 j 10:26	11°♍41'50	2°00'02
conjunction	624 Aug 20 j 12:26	29°♏36'14	1°42'24	max. Earth dist.	630 Nov 01 j 07:45	11°♍41'03	11.06188 AU
minimum elong	624 Aug 20 j 12:23	29°♏36'13	1°42'24	morning rise	630 Nov 17 j 23:15	13°♍37'51	
max. Earth dist.	624 Aug 20 j 18:31	29°♏38'07	10.43844 AU		630 Nov 30 j 02:41	15°♍	
	624 Aug 23 j 16:38	0°♐		retrograde	631 Feb 25 j 12:14	20°♍33'35	
morning rise	624 Sep 06 j 22:31	1°♐45'44		opposition	631 May 06 j 10:07	17°♍17'01	2°17'34
retrograde	624 Dec 16 j 09:45	9°♐16'14		min. Earth dist.	631 May 06 j 13:29	17°♍16'24	9.08675 AU
opposition	625 Feb 21 j 16:37	5°♐54'26	2°18'16		631 Jun 09 j 14:59	15°♐♍	
min. Earth dist.	625 Feb 21 j 11:21	5°♐55'29	8.50230 AU	direct	631 Jul 16 j 17:39	13°♍57'16	
direct	625 May 02 j 09:32	2°♐27'18			631 Aug 22 j 05:22	15°♍	
evening set	625 Aug 16 j 10:00	10°♐14'38		evening set	631 Oct 27 j 03:58	21°♍01'17	
conjunction	625 Sep 02 j 19:39	12°♐22'25	2°00'23	conjunction	631 Nov 12 j 18:16	22°♍57'15	1°44'15
minimum elong	625 Sep 02 j 19:36	12°♐22'24	2°00'23	minimum elong	631 Nov 12 j 18:19	22°♍57'16	1°44'14
max. Earth dist.	625 Sep 03 j 01:01	12°♐24'04	10.56540 AU	max. Earth dist.	631 Nov 12 j 13:09	22°♍55'45	11.10287 AU
morning rise	625 Sep 20 j 00:17	14°♐28'42		morning rise	631 Nov 29 j 06:45	24°♍52'44	
retrograde	625 Dec 28 j 23:02	21°♐50'29			632 Jan 20 j 15:21	0°♐♑	
opposition	626 Mar 06 j 15:42	18°♐30'08	2°36'21	retrograde	632 Mar 08 j 03:09	1°♐47'44	
min. Earth dist.	626 Mar 06 j 11:41	18°♐30'55	8.62922 AU		632 Apr 26 j 11:10	30°♐♍	
direct	626 May 15 j 20:22	15°♐04'18		opposition	632 May 17 j 09:57	28°♍31'07	1°55'44
evening set	626 Aug 29 j 11:20	22°♐43'09		min. Earth dist.	632 May 17 j 15:10	28°♍30'10	9.11493 AU
				direct	632 Jul 27 j 16:49	25°♍12'08	
conjunction	626 Sep 15 j 15:57	24°♐47'55	2°12'13		632 Oct 17 j 08:13	0°♐♑	
minimum elong	626 Sep 15 j 15:56	24°♐47'54	2°12'13	evening set	632 Nov 06 j 10:04	2°♐12'36	
max. Earth dist.	626 Sep 15 j 19:59	24°♐49'08	10.69002 AU				
morning rise	626 Oct 02 j 15:42	26°♐51'14		conjunction	632 Nov 22 j 23:44	4°♐08'16	1°24'32
	626 Oct 30 j 16:26	0°♑		minimum elong	632 Nov 22 j 23:47	4°♐08'16	1°24'32
retrograde	627 Jan 10 j 05:54	4°♑05'16		max. Earth dist.	632 Nov 22 j 16:55	4°♐06'16	11.11875 AU
opposition	627 Mar 19 j 09:07	0°♑46'12	2°46'44	morning rise	632 Dec 09 j 12:28	6°♐03'40	
min. Earth dist.	627 Mar 19 j 06:57	0°♑46'37	8.75093 AU	retrograde	633 Mar 19 j 19:07	12°♐59'33	
	627 Mar 29 j 12:20	30°♐♑		opposition	633 May 29 j 09:17	9°♐42'33	1°29'35
direct	627 May 28 j 23:48	27°♐21'43		min. Earth dist.	633 May 29 j 15:08	9°♐41'28	9.11784 AU
	627 Jul 26 j 09:46	0°♑		direct	633 Aug 08 j 12:25	6°♐24'06	
evening set	627 Sep 11 j 02:14	4°♑52'11		evening set	633 Nov 17 j 14:41	13°♐22'25	
conjunction	627 Sep 28 j 02:19	6°♑54'15	2°17'49	conjunction	633 Dec 04 j 04:27	15°♐18'12	1°01'38
minimum elong	627 Sep 28 j 02:18	6°♑54'15	2°17'50	minimum elong	633 Dec 04 j 04:29	15°♐18'13	1°01'38
max. Earth dist.	627 Sep 28 j 03:58	6°♑54'45	10.80676 AU	max. Earth dist.	633 Dec 03 j 21:35	15°♐16'12	11.10957 AU
morning rise	627 Oct 14 j 22:04	8°♑55'02		morning rise	633 Dec 20 j 17:52	17°♐13'58	
retrograde	628 Jan 22 j 06:38	16°♑02'25		retrograde	634 Mar 31 j 14:18	24°♐12'20	
opposition	628 Mar 30 j 21:10	12°♑44'23	2°49'32	opposition	634 Jun 10 j 09:22	20°♐54'39	1°00'01
min. Earth dist.	628 Mar 30 j 20:23	12°♑44'32	8.86207 AU	min. Earth dist.	634 Jun 10 j 15:17	20°♐53'34	9.09597 AU
direct	628 Jun 09 j 19:19	9°♑21'14		direct	634 Aug 20 j 06:29	17°♐36'30	
evening set	628 Sep 22 j 07:30	16°♑43'43		evening set	634 Nov 28 j 19:32	24°♐34'07	
conjunction	628 Oct 09 j 03:56	18°♑43'32	2°17'23	conjunction	634 Dec 15 j 09:45	26°♐30'27	0°36'18
minimum elong	628 Oct 09 j 03:56	18°♑43'32	2°17'23	minimum elong	634 Dec 15 j 09:46	26°♐30'27	0°36'18
max. Earth dist.	628 Oct 09 j 03:43	18°♑43'28	10.91058 AU	max. Earth dist.	634 Dec 15 j 02:21	26°♐28'16	11.07600 AU
morning rise	628 Oct 25 j 20:35	20°♑42'14		morning rise	635 Jan 01 j 00:26	28°♐26'59	
retrograde	629 Feb 02 j 02:12	27°♑44'17			635 Jan 14 j 19:38	0°♑	
opposition	629 Apr 12 j 04:43	24°♑27'00	2°45'12	retrograde	635 Apr 12 j 13:30	5°♑29'22	
min. Earth dist.	629 Apr 12 j 04:49	24°♑26'59	8.95771 AU	opposition	635 Jun 22 j 11:08	2°♑10'45	0°27'57
direct	629 Jun 22 j 10:06	21°♑05'07		min. Earth dist.	635 Jun 22 j 17:44	2°♑09'32	9.05037 AU
evening set	629 Oct 04 j 04:27	28°♑20'21			635 Jul 24 j 18:36	30°♐♑	
	629 Oct 18 j 08:00	0°♒		direct	635 Aug 31 j 23:19	28°♐52'37	
					635 Oct 08 j 05:41	0°♑	
conjunction	629 Oct 20 j 22:07	0°♒18'23	2°11'17	evening set	635 Dec 10 j 02:38	5°♑51'07	
minimum elong	629 Oct 20 j 22:08	0°♒18'24	2°11'17				
max. Earth dist.	629 Oct 20 j 20:54	0°♒18'02	10.99688 AU	conjunction	635 Dec 26 j 17:33	7°♑48'20	0°09'23
morning rise	629 Nov 06 j 12:23	2°♒15'28		minimum elong	635 Dec 26 j 17:33	7°♑48'20	0°09'23
retrograde	630 Feb 13 j 20:55	9°♒13'36		behind sun begin	635 Dec 26 j 11:41	7°♑46'37	
opposition	630 Apr 24 j 08:41	5°♒56'49	2°34'19	behind sun end	635 Dec 26 j 23:26	7°♑50'03	

max. Earth dist.	635 Dec 26 j 08:55	7°♄45'47	11.01940 AU	morning rise	642 Mar 25 j 23:47	22°♄44'41	
morning rise	636 Jan 12 j 10:01	9°♄46'01			642 Jun 10 j 01:48	0°♄	
retrograde	636 Apr 23 j 15:10	16°♄53'56		retrograde	642 Jul 10 j 18:26	0°♄48'14	
desc. node	636 May 02 j 08:22	16°♄50'17			642 Aug 10 j 17:12	30°♄♄	
opposition	636 Jul 03 j 15:24	13°♄34'10	-0°05'36	opposition	642 Sep 18 j 02:33	27°♄19'57	-2°45'19
min. Earth dist.	636 Jul 03 j 22:52	13°♄32'47	8.98279 AU	min. Earth dist.	642 Sep 18 j 04:39	27°♄19'32	8.30576 AU
direct	636 Sep 11 j 17:31	10°♄15'47		direct	642 Nov 24 j 04:10	23°♄56'25	
evening set	636 Dec 20 j 13:25	17°♄16'49			643 Feb 19 j 08:55	0°♄	
				evening set	643 Mar 05 j 02:23	1°♄40'49	
conjunction	637 Jan 06 j 05:30	19°♄15'16	-0°18'20				
minimum elong	637 Jan 06 j 05:29	19°♄15'16	0°18'20	conjunction	643 Mar 22 j 10:28	3°♄52'57	-2°16'10
max. Earth dist.	637 Jan 05 j 20:52	19°♄12'43	10.94185 AU	minimum elong	643 Mar 22 j 10:28	3°♄52'57	2°16'09
morning rise	637 Jan 22 j 23:58	21°♄14'27		max. Earth dist.	643 Mar 22 j 09:19	3°♄52'35	10.24731 AU
retrograde	637 May 06 j 00:12	28°♄29'26		morning rise	643 Apr 08 j 23:11	6°♄06'37	
opposition	637 Jul 15 j 23:30	25°♄08'19	-0°39'30	retrograde	643 Jul 25 j 02:55	14°♄19'06	
min. Earth dist.	637 Jul 16 j 06:34	25°♄06'59	8.89571 AU	opposition	643 Oct 01 j 22:05	10°♄49'48	-2°50'48
direct	637 Sep 23 j 15:30	21°♄49'29		min. Earth dist.	643 Oct 01 j 22:02	10°♄49'48	8.19503 AU
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	638 Jan 10 j 09:33	0°♄		evening set	644 Mar 18 j 04:45	15°♄18'42	
conjunction	638 Jan 17 j 23:13	0°♄54'38	-0°45'39	conjunction	644 Apr 04 j 17:14	17°♄33'38	-2°16'30
minimum elong	638 Jan 17 j 23:12	0°♄54'37	0°45'40	minimum elong	644 Apr 04 j 17:15	17°♄33'39	2°16'30
max. Earth dist.	638 Jan 17 j 15:43	0°♄52'22	10.84609 AU	max. Earth dist.	644 Apr 04 j 18:26	17°♄34'02	10.14420 AU
morning rise	638 Feb 03 j 19:51	2°♄55'38		morning rise	644 Apr 22 j 10:02	19°♄50'01	
retrograde	638 May 18 j 16:54	10°♄19'01		retrograde	644 Aug 07 j 17:39	28°♄09'33	
opposition	638 Jul 28 j 12:11	6°♄56'25	-1°12'30	opposition	644 Oct 14 j 23:06	24°♄39'34	-2°46'37
min. Earth dist.	638 Jul 28 j 18:08	6°♄55'17	8.79225 AU	min. Earth dist.	644 Oct 14 j 21:02	24°♄39'59	8.10159 AU
direct	638 Oct 05 j 15:19	3°♄36'57		direct	644 Dec 20 j 07:29	21°♄13'43	
evening set	639 Jan 13 j 04:55	10°♄47'39		evening set	645 Apr 01 j 17:16	29°♄15'45	
					645 Apr 07 j 11:07	0°♄	
conjunction	639 Jan 30 j 00:32	12°♄49'38	-1°11'35				
minimum elong	639 Jan 30 j 00:29	12°♄49'37	1°11'34	conjunction	645 Apr 19 j 10:23	1°♄33'18	-2°08'55
max. Earth dist.	639 Jan 29 j 17:47	12°♄47'34	10.73566 AU	minimum elong	645 Apr 19 j 10:26	1°♄33'19	2°08'55
morning rise	639 Feb 15 j 23:39	14°♄52'44		max. Earth dist.	645 Apr 19 j 13:33	1°♄34'20	10.06179 AU
	639 Feb 17 j 00:05	15°♄		morning rise	645 May 07 j 07:21	3°♄52'08	
retrograde	639 May 31 j 17:05	22°♄25'35		retrograde	645 Aug 22 j 12:20	12°♄16'06	
opposition	639 Aug 10 j 06:10	19°♄01'28	-1°43'10	opposition	645 Oct 29 j 04:23	8°♄45'48	-2°32'23
min. Earth dist.	639 Aug 10 j 11:08	19°♄00'31	8.67634 AU	min. Earth dist.	645 Oct 29 j 00:56	8°♄46'31	8.03150 AU
direct	639 Oct 17 j 20:10	15°♄41'11		direct	646 Jan 03 j 09:21	5°♄18'52	
evening set	640 Jan 25 j 12:56	22°♄58'55		evening set	646 Apr 16 j 14:18	13°♄27'57	
					646 Apr 28 j 10:11	15°♄	
conjunction	640 Feb 11 j 10:44	25°♄03'06	-1°34'52				
minimum elong	640 Feb 11 j 10:41	25°♄03'05	1°34'52	conjunction	646 May 04 j 11:56	15°♄47'42	-1°53'25
max. Earth dist.	640 Feb 11 j 04:02	25°♄01'02	10.61498 AU	minimum elong	646 May 04 j 12:00	15°♄47'43	1°53'26
morning rise	640 Feb 28 j 12:47	27°♄08'36		max. Earth dist.	646 May 04 j 16:48	15°♄49'17	10.00548 AU
	640 Mar 24 j 09:38	0°♄		morning rise	646 May 22 j 12:38	18°♄08'26	
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opposition	640 Aug 22 j 06:27	1°♄26'01	-2°09'57	opposition	646 Nov 12 j 12:26	23°♄03'37	-2°08'33
min. Earth dist.	640 Aug 22 j 10:57	1°♄25'09	8.55278 AU	min. Earth dist.	646 Nov 12 j 07:58	23°♄04'33	7.98945 AU
	640 Sep 10 j 08:57	30°♄♄		direct	647 Jan 17 j 18:31	19°♄35'45	
direct	640 Oct 29 j 06:43	28°♄04'45		evening set	647 May 01 j 17:32	27°♄49'55	
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evening set	641 Feb 06 j 06:32	5°♄30'42					
conjunction	641 Feb 23 j 07:06	7°♄37'19	-1°54'15	conjunction	647 May 19 j 18:57	0°♄11'10	-1°30'48
minimum elong	641 Feb 23 j 07:03	7°♄37'18	1°54'15	minimum elong	647 May 19 j 19:01	0°♄11'11	1°30'47
max. Earth dist.	641 Feb 23 j 01:24	7°♄35'33	10.48930 AU	max. Earth dist.	647 May 20 j 01:15	0°♄13'14	9.97902 AU
morning rise	641 Mar 12 j 12:25	9°♄45'26		morning rise	647 Jun 06 j 22:24	2°♄33'03	
retrograde	641 Jun 26 j 18:37	17°♄38'56		retrograde	647 Sep 21 j 00:03	10°♄56'40	
opposition	641 Sep 04 j 13:19	14°♄11'54	-2°31'13	opposition	647 Nov 26 j 21:20	7°♄26'59	-1°36'29
min. Earth dist.	641 Sep 04 j 16:56	14°♄11'12	8.42718 AU	min. Earth dist.	647 Nov 26 j 16:04	7°♄28'04	7.97827 AU
direct	641 Nov 11 j 00:44	10°♄49'32		direct	648 Feb 01 j 07:57	3°♄58'20	
evening set	642 Feb 19 j 10:54	18°♄24'31		evening set	648 May 16 j 00:04	12°♄15'15	
conjunction	642 Mar 08 j 14:55	20°♄33'50	-2°08'25	conjunction	648 Jun 03 j 04:07	14°♄37'09	-1°02'27
minimum elong	642 Mar 08 j 14:53	20°♄33'49	2°08'25	minimum elong	648 Jun 03 j 04:10	14°♄37'10	1°02'26
max. Earth dist.	642 Mar 08 j 11:12	20°♄32'39	10.36458 AU	max. Earth dist.	648 Jun 03 j 11:35	14°♄39'36	9.98410 AU
				morning rise	648 Jun 21 j 08:55	16°♄59'15	



























































































































retrograde	648 Oct 04 j 13:36	25° Π 18'12		conjunction	654 Aug 28 j 09:14	7° Π 01'50	1°53'09
opposition	648 Dec 10 j 05:12	21° Π 49'18	-0°58'24	minimum elong	654 Aug 28 j 09:11	7° Π 01'49	1°53'08
min. Earth dist.	648 Dec 09 j 23:06	21° Π 50'34	7.99850 AU	max. Earth dist.	654 Aug 28 j 13:04	7° Π 03'01	10.50519 AU
direct	649 Feb 14 j 23:35	18° Π 20'08		morning rise	654 Sep 14 j 16:24	9° Π 09'38	
evening set	649 May 31 j 06:39	26° Π 37'19		retrograde	654 Dec 23 j 20:06	16° Π 35'40	
				opposition	655 Mar 01 j 08:39	13° Π 14'46	2°29'18
conjunction	649 Jun 18 j 11:48	28° Π 58'55	-0°30'20	min. Earth dist.	655 Mar 01 j 05:32	13° Π 15'22	8.56738 AU
minimum elong	649 Jun 18 j 11:50	28° Π 58'55	0°30'20	direct	655 May 10 j 08:28	9° Π 48'17	
max. Earth dist.	649 Jun 18 j 20:03	29° Π 01'36	10.01972 AU	evening set	655 Aug 24 j 03:58	17° Π 31'25	
	649 Jun 26 j 07:20	0° Ξ					
morning rise	649 Jul 06 j 16:15	1° Ξ 20'13		conjunction	655 Sep 10 j 10:46	19° Π 37'36	2°07'45
retrograde	649 Oct 18 j 21:59	9° Ξ 32'10		minimum elong	655 Sep 10 j 10:43	19° Π 37'36	2°07'45
opposition	649 Dec 24 j 10:20	6° Ξ 04'19	-0°17'03	max. Earth dist.	655 Sep 10 j 13:21	19° Π 38'24	10.62740 AU
min. Earth dist.	649 Dec 24 j 03:39	6° Ξ 05'41	8.04776 AU	morning rise	655 Sep 27 j 12:51	21° Π 42'21	
direct	650 Mar 01 j 15:11	2° Ξ 34'52		retrograde	656 Jan 05 j 06:05	29° Π 00'13	
asc. node	650 May 27 j 05:56	8° Ξ 28'54		opposition	656 Mar 13 j 04:51	25° Π 40'25	2°43'09
evening set	650 Jun 15 j 10:25	10° Ξ 50'08		min. Earth dist.	656 Mar 13 j 02:11	25° Π 40'56	8.68804 AU
				direct	656 May 22 j 16:19	22° Π 15'05	
conjunction	650 Jul 03 j 14:49	13° Ξ 10'27	0°03'23	evening set	656 Sep 04 j 23:47	29° Π 49'44	
minimum elong	650 Jul 03 j 14:49	13° Ξ 10'27	0°03'23		656 Sep 06 j 10:21	0° Ξ	
behind sun begin	650 Jul 03 j 07:30	13° Ξ 08'06					
behind sun end	650 Jul 03 j 22:07	13° Ξ 12'47		conjunction	656 Sep 22 j 02:01	1° Ξ 53'07	2°16'08
max. Earth dist.	650 Jul 03 j 23:07	13° Ξ 13'07	10.08215 AU	minimum elong	656 Sep 22 j 02:00	1° Ξ 53'07	2°16'08
morning rise	650 Jul 21 j 17:04	15° Ξ 30'03		max. Earth dist.	656 Sep 22 j 03:58	1° Ξ 53'43	10.74447 AU
retrograde	650 Nov 01 j 23:47	23° Ξ 33'29		morning rise	656 Oct 08 j 23:34	3° Ξ 55'08	
opposition	651 Jan 07 j 11:19	20° Ξ 06'56	0°24'42	retrograde	657 Jan 16 j 10:30	11° Ξ 05'48	
min. Earth dist.	651 Jan 07 j 04:40	20° Ξ 08'18	8.12164 AU	opposition	657 Mar 25 j 19:23	7° Ξ 46'58	2°49'18
direct	651 Mar 16 j 04:57	16° Ξ 37'34		min. Earth dist.	657 Mar 25 j 17:54	7° Ξ 47'15	8.80077 AU
evening set	651 Jun 30 j 08:30	24° Ξ 49'02		direct	657 Jun 04 j 15:08	4° Ξ 22'50	
				evening set	657 Sep 17 j 09:33	11° Ξ 49'17	
conjunction	651 Jul 18 j 10:25	27° Ξ 07'16	0°36'16				
minimum elong	651 Jul 18 j 10:23	27° Ξ 07'15	0°36'15	conjunction	657 Oct 04 j 07:47	13° Ξ 50'13	2°18'20
max. Earth dist.	651 Jul 18 j 18:22	27° Ξ 09'49	10.16668 AU	minimum elong	657 Oct 04 j 07:47	13° Ξ 50'13	2°18'20
morning rise	651 Aug 05 j 08:58	29° Ξ 24'27		max. Earth dist.	657 Oct 04 j 08:37	13° Ξ 50'28	10.85123 AU
	651 Aug 10 j 03:01	0° Ω		morning rise	657 Oct 21 j 01:40	15° Ξ 49'56	
retrograde	651 Nov 15 j 17:19	7° Ω 18'37		retrograde	658 Jan 28 j 08:33	22° Ξ 54'40	
opposition	652 Jan 21 j 07:27	3° Ω 53'30	1°04'09	opposition	658 Apr 07 j 05:16	19° Ξ 36'36	2°48'04
min. Earth dist.	652 Jan 21 j 01:17	3° Ω 54'46	8.21564 AU	min. Earth dist.	658 Apr 07 j 05:31	19° Ξ 36'33	8.90092 AU
direct	652 Mar 29 j 14:25	0° Ω 24'31		direct	658 Jun 17 j 07:31	16° Ξ 13'37	
evening set	652 Jul 13 j 22:37	8° Ω 30'33		evening set	658 Sep 29 j 10:15	23° Ξ 32'28	
conjunction	652 Jul 31 j 20:39	10° Ω 46'06	1°06'31	conjunction	658 Oct 16 j 05:08	25° Ξ 31'25	2°14'40
minimum elong	652 Jul 31 j 20:36	10° Ω 46'05	1°06'30	minimum elong	658 Oct 16 j 05:09	25° Ξ 31'25	2°14'41
max. Earth dist.	652 Aug 01 j 03:54	10° Ω 48'24	10.26889 AU	max. Earth dist.	658 Oct 16 j 04:01	25° Ξ 31'05	10.94350 AU
morning rise	652 Aug 18 j 14:29	13° Ω 00'21		morning rise	658 Nov 01 j 20:26	27° Ξ 29'19	
	652 Sep 04 j 02:51	15° Ω			658 Nov 24 j 10:42	0° Π	
retrograde	652 Nov 28 j 03:06	20° Ω 44'56		retrograde	659 Feb 09 j 02:55	4° Π 29'28	
opposition	653 Feb 02 j 21:59	17° Ω 21'18	1°39'04	opposition	659 Apr 19 j 11:02	1° Π 11'57	2°39'59
min. Earth dist.	653 Feb 02 j 16:59	17° Ω 22'18	8.32508 AU	min. Earth dist.	659 Apr 19 j 12:48	1° Π 11'37	8.98465 AU
	653 Mar 07 j 07:00	15° \mathbb{R} Ω			659 May 05 j 21:04	30° \mathbb{R} Ξ	
direct	653 Apr 12 j 18:26	13° Ω 52'57		direct	659 Jun 29 j 17:59	27° Ξ 50'07	
	653 May 19 j 01:31	15° Ω			659 Aug 21 j 19:33	0° Π	
evening set	653 Jul 28 j 03:22	21° Ω 52'12		evening set	659 Oct 11 j 03:29	5° Π 02'14	
conjunction	653 Aug 14 j 20:31	24° Ω 04'41	1°32'31	conjunction	659 Oct 27 j 19:56	6° Π 59'40	2°05'37
minimum elong	653 Aug 14 j 20:28	24° Ω 04'40	1°32'30	minimum elong	659 Oct 27 j 19:58	6° Π 59'41	2°05'37
max. Earth dist.	653 Aug 15 j 02:08	24° Ω 06'27	10.38366 AU	max. Earth dist.	659 Oct 27 j 17:03	6° Π 58'49	11.01791 AU
morning rise	653 Sep 01 j 09:02	26° Ω 15'43		morning rise	659 Nov 13 j 09:35	8° Π 56'17	
	653 Oct 04 j 02:28	0° Π			660 Jan 19 j 00:24	15° Π	
retrograde	653 Dec 11 j 04:29	3° Π 50'45		retrograde	660 Feb 20 j 18:10	15° Π 53'18	
opposition	654 Feb 16 j 06:21	0° Π 28'33	2°07'48		660 Mar 25 j 06:00	15° \mathbb{R} Π	
min. Earth dist.	654 Feb 16 j 02:32	0° Π 29'19	8.44436 AU	opposition	660 Apr 30 j 13:21	12° Π 36'05	2°25'42
	654 Feb 22 j 06:57	30° \mathbb{R} Ω		min. Earth dist.	660 Apr 30 j 15:41	12° Π 35'39	9.04889 AU
direct	654 Apr 26 j 16:11	27° Ω 01'03		direct	660 Jul 10 j 22:38	9° Π 15'19	
	654 Jun 27 j 00:03	0° Π			660 Oct 09 j 12:08	15° Π	
evening set	654 Aug 10 j 21:22	4° Π 52'32		evening set	660 Oct 21 j 14:49	16° Π 21'50	

conjunction	660 Nov 07 j 05:47	18° \mathbb{M} 18'14	1°51'44	conjunction	667 Jan 13 j 03:16	25° \mathfrak{Z} 58'48	-0°33'37
minimum elong	660 Nov 07 j 05:50	18° \mathbb{M} 18'15	1°51'43	minimum elong	667 Jan 13 j 03:15	25° \mathfrak{Z} 58'48	0°33'38
max. Earth dist.	660 Nov 07 j 02:28	18° \mathbb{M} 17'15	11.07170 AU	max. Earth dist.	667 Jan 12 j 20:21	25° \mathfrak{Z} 56'44	10.91157 AU
morning rise	660 Nov 23 j 18:28	20° \mathbb{M} 14'02		morning rise	667 Jan 29 j 22:48	27° \mathfrak{Z} 58'44	
retrograde	661 Mar 03 j 10:48	27° \mathbb{M} 09'27			667 Feb 16 j 19:00	0° \approx	
opposition	661 May 12 j 13:41	23° \mathbb{M} 52'21	2°05'58	retrograde	667 May 13 j 11:02	5° \approx 17'19	
min. Earth dist.	661 May 12 j 16:31	23° \mathbb{M} 51'49	9.09128 AU	opposition	667 Jul 23 j 07:38	1° \approx 56'01	-0°57'58
direct	661 Jul 22 j 23:09	20° \mathbb{M} 32'33		min. Earth dist.	667 Jul 23 j 13:14	1° \approx 54'57	8.86396 AU
evening set	661 Nov 01 j 21:57	27° \mathbb{M} 34'39			667 Aug 19 j 20:39	30° \mathfrak{R} \mathfrak{Z}	
				direct	667 Sep 30 j 14:57	28° \mathfrak{Z} 37'31	
conjunction	661 Nov 18 j 12:02	29° \mathbb{M} 30'31	1°33'39		667 Nov 10 j 05:44	0° \approx	
minimum elong	661 Nov 18 j 12:04	29° \mathbb{M} 30'32	1°33'38	evening set	668 Jan 08 j 06:05	5° \approx 44'38	
max. Earth dist.	661 Nov 18 j 08:06	29° \mathbb{M} 29'22	11.10291 AU				
	661 Nov 22 j 16:37	0° \mathfrak{A}		conjunction	668 Jan 25 j 00:29	7° \approx 45'23	-1°00'14
morning rise	661 Dec 05 j 00:29	1° \mathfrak{A} 25'58		minimum elong	668 Jan 25 j 00:27	7° \approx 45'22	1°00'15
retrograde	662 Mar 15 j 02:06	8° \mathfrak{A} 21'21		max. Earth dist.	668 Jan 24 j 17:35	7° \approx 43'18	10.81300 AU
opposition	662 May 24 j 13:07	5° \mathfrak{A} 04'08	1°41'35	morning rise	668 Feb 10 j 22:24	9° \approx 47'12	
min. Earth dist.	662 May 24 j 17:03	5° \mathfrak{A} 03'25	9.11044 AU		668 Apr 01 j 18:12	15° \approx	
direct	662 Aug 03 j 17:40	1° \mathfrak{A} 45'08		retrograde	668 May 25 j 05:17	17° \approx 14'32	
evening set	662 Nov 13 j 02:53	8° \mathfrak{A} 44'15			668 Jul 19 j 15:16	15° \mathfrak{R} \approx	
				opposition	668 Aug 03 j 22:32	13° \approx 51'51	-1°29'44
conjunction	662 Nov 29 j 16:33	10° \mathfrak{A} 39'58	1°12'03	min. Earth dist.	668 Aug 04 j 04:00	13° \approx 50'49	8.75830 AU
minimum elong	662 Nov 29 j 16:35	10° \mathfrak{A} 39'59	1°12'04	direct	668 Oct 11 j 18:43	10° \approx 32'41	
max. Earth dist.	662 Nov 29 j 10:57	10° \mathfrak{A} 38'20	11.11057 AU		668 Dec 26 j 01:12	15° \approx	
morning rise	662 Dec 16 j 05:39	12° \mathfrak{A} 35'33		evening set	669 Jan 19 j 09:21	17° \approx 45'58	
retrograde	663 Mar 26 j 18:32	19° \mathfrak{A} 32'30					
opposition	663 Jun 05 j 12:29	16° \mathfrak{A} 14'55	1°13'24	conjunction	669 Feb 05 j 05:54	19° \approx 48'43	-1°24'47
min. Earth dist.	663 Jun 05 j 17:48	16° \mathfrak{A} 13'56	9.10584 AU	minimum elong	669 Feb 05 j 05:52	19° \approx 48'43	1°24'47
direct	663 Aug 15 j 12:03	12° \mathfrak{A} 56'28		max. Earth dist.	669 Feb 05 j 00:08	19° \approx 46'58	10.70081 AU
evening set	663 Nov 24 j 07:10	19° \mathfrak{A} 54'06		morning rise	669 Feb 22 j 06:22	21° \approx 52'43	
				retrograde	669 Jun 07 j 09:41	29° \approx 29'42	
conjunction	663 Dec 10 j 21:02	21° \mathfrak{A} 50'06	0°47'42	opposition	669 Aug 16 j 19:10	26° \approx 05'33	-1°58'20
minimum elong	663 Dec 10 j 21:04	21° \mathfrak{A} 50'07	0°47'42	min. Earth dist.	669 Aug 16 j 23:37	26° \approx 04'41	8.64108 AU
max. Earth dist.	663 Dec 10 j 14:32	21° \mathfrak{A} 48'12	11.09440 AU	direct	669 Oct 24 j 02:40	22° \approx 45'31	
morning rise	663 Dec 27 j 11:16	23° \mathfrak{A} 46'14		evening set	670 Jan 31 j 21:35	0° \mathfrak{H} 06'11	
	664 Mar 06 j 14:50	0° \mathfrak{Z}			670 Jan 31 j 01:07	0° \mathfrak{H}	
retrograde	664 Apr 06 j 15:15	0° \mathfrak{Z} 46'19					
	664 May 08 j 05:06	30° \mathfrak{R} \mathfrak{A}		conjunction	670 Feb 17 j 20:45	2° \mathfrak{H} 11'15	-1°46'00
opposition	664 Jun 16 j 12:56	27° \mathfrak{A} 28'07	0°42'19	minimum elong	670 Feb 17 j 20:42	2° \mathfrak{H} 11'14	1°45'59
min. Earth dist.	664 Jun 16 j 18:26	27° \mathfrak{A} 27'07	9.07751 AU	max. Earth dist.	670 Feb 17 j 15:49	2° \mathfrak{H} 09'43	10.57897 AU
direct	664 Aug 26 j 05:52	24° \mathfrak{A} 10'02		morning rise	670 Mar 07 j 00:10	4° \mathfrak{H} 17'42	
	664 Nov 24 j 13:51	0° \mathfrak{Z}		retrograde	670 Jun 20 j 22:28	12° \mathfrak{H} 04'54	
evening set	664 Dec 04 j 12:39	1° \mathfrak{Z} 07'41		opposition	670 Aug 29 j 21:57	8° \mathfrak{H} 39'15	-2°22'10
				min. Earth dist.	670 Aug 30 j 01:22	8° \mathfrak{H} 38'36	8.51656 AU
conjunction	664 Dec 21 j 03:13	3° \mathfrak{Z} 04'22	0°21'23	direct	670 Nov 05 j 15:42	5° \mathfrak{H} 18'10	
minimum elong	664 Dec 21 j 03:14	3° \mathfrak{Z} 04'22	0°21'23	evening set	671 Feb 13 j 20:11	12° \mathfrak{H} 47'26	
max. Earth dist.	664 Dec 20 j 21:04	3° \mathfrak{Z} 02'34	11.05477 AU				
morning rise	665 Jan 06 j 18:46	5° \mathfrak{Z} 01'24		conjunction	671 Mar 02 j 22:21	14° \mathfrak{H} 55'03	-2°02'37
retrograde	665 Apr 18 j 15:31	12° \mathfrak{Z} 06'14		minimum elong	671 Mar 02 j 22:19	14° \mathfrak{H} 55'02	2°02'36
opposition	665 Jun 28 j 15:36	8° \mathfrak{Z} 47'11	0°09'19	max. Earth dist.	671 Mar 02 j 17:41	14° \mathfrak{H} 53'35	10.45256 AU
min. Earth dist.	665 Jun 28 j 20:41	8° \mathfrak{Z} 46'14	9.02639 AU	morning rise	671 Mar 20 j 05:11	17° \mathfrak{H} 04'10	
direct	665 Sep 06 j 23:11	5° \mathfrak{Z} 29'13		retrograde	671 Jul 04 j 18:32	25° \mathfrak{H} 01'36	
desc. node	665 Oct 11 j 00:22	6° \mathfrak{Z} 26'09		opposition	671 Sep 12 j 07:09	21° \mathfrak{H} 34'35	-2°39'38
evening set	665 Dec 15 j 21:14	12° \mathfrak{Z} 28'28		min. Earth dist.	671 Sep 12 j 09:52	21° \mathfrak{H} 34'03	8.39075 AU
				direct	671 Nov 18 j 13:13	18° \mathfrak{H} 12'16	
conjunction	666 Jan 01 j 12:48	14° \mathfrak{Z} 26'11	-0°06'07	evening set	672 Feb 27 j 05:32	25° \mathfrak{H} 50'49	
minimum elong	666 Jan 01 j 12:47	14° \mathfrak{Z} 26'11	0°06'07				
behind sun begin	666 Jan 01 j 06:09	14° \mathfrak{Z} 24'14		conjunction	672 Mar 15 j 11:19	28° \mathfrak{H} 01'12	-2°13'23
behind sun end	666 Jan 01 j 19:26	14° \mathfrak{Z} 28'08		minimum elong	672 Mar 15 j 11:17	28° \mathfrak{H} 01'12	2°13'22
max. Earth dist.	666 Jan 01 j 06:42	14° \mathfrak{Z} 24'24	10.99309 AU	max. Earth dist.	672 Mar 15 j 07:22	27° \mathfrak{H} 59'57	10.32852 AU
morning rise	666 Jan 18 j 06:05	16° \mathfrak{Z} 24'28			672 Mar 31 j 03:48	0° \mathfrak{Y}	
retrograde	666 Apr 30 j 22:47	23° \mathfrak{Z} 35'31		morning rise	672 Apr 01 j 22:00	0° \mathfrak{Y} 13'08	
opposition	666 Jul 10 j 21:32	20° \mathfrak{Z} 15'26	-0°24'30	retrograde	672 Jul 17 j 22:27	8° \mathfrak{Y} 20'05	
min. Earth dist.	666 Jul 11 j 02:39	20° \mathfrak{Z} 14'29	8.95437 AU	opposition	672 Sep 24 j 22:55	4° \mathfrak{Y} 51'50	-2°49'12
direct	666 Sep 18 j 18:10	16° \mathfrak{Z} 57'20		min. Earth dist.	672 Sep 25 j 00:49	4° \mathfrak{Y} 51'27	8.27099 AU
evening set	666 Dec 27 j 10:30	23° \mathfrak{Z} 59'44		direct	672 Nov 30 j 18:42	1° \mathfrak{Y} 28'11	
				evening set	673 Mar 12 j 01:40	9° \mathfrak{Y} 16'06	

conjunction	673 Mar 29 j 11:41	11°♈29'20 -2°17'13	min. Earth dist.	678 Dec 17 j 20:43	29°♊34'40 8.01262 AU
minimum elong	673 Mar 29 j 11:42	11°♈29'20 2°17'13	direct	679 Feb 23 j 01:37	26°♊03'38
max. Earth dist.	673 Mar 29 j 09:28	11°♈28'37 10.21429 AU		679 May 02 j 17:48	0°♊
morning rise	673 Apr 16 j 02:31	13°♈44'05	evening set	679 Jun 08 j 15:04	4°♊20'04
retrograde	673 Aug 01 j 08:33	21°♈59'06			
opposition	673 Oct 08 j 20:31	18°♈29'48 -2°49'37	conjunction	679 Jun 26 j 20:00	6°♊41'11 -0°12'53
min. Earth dist.	673 Oct 08 j 21:15	18°♈29'40 8.16448 AU	minimum elong	679 Jun 26 j 20:01	6°♊41'11 0°12'53
direct	673 Dec 14 j 08:52	15°♈04'47	behind sun begin	679 Jun 26 j 15:39	6°♊39'47
evening set	674 Mar 26 j 08:24	23°♈01'37	behind sun end	679 Jun 27 j 00:24	6°♊42'36
			max. Earth dist.	679 Jun 27 j 03:25	6°♊43'34 10.03882 AU
conjunction	674 Apr 12 j 23:09	25°♈17'37 -2°13'23	morning rise	679 Jul 14 j 23:33	9°♊01'49
minimum elong	674 Apr 12 j 23:11	25°♈17'38 2°13'23	retrograde	679 Oct 26 j 17:39	17°♊09'41
max. Earth dist.	674 Apr 12 j 23:23	25°♈17'42 10.11681 AU	asc. node	679 Nov 18 j 16:34	16°♊40'17
morning rise	674 Apr 30 j 18:08	27°♈35'00	opposition	680 Jan 01 j 05:13	13°♊41'57 0°04'49
	674 May 20 j 10:54	0°♊	min. Earth dist.	679 Dec 31 j 23:34	13°♊43'07 8.07167 AU
retrograde	674 Aug 15 j 23:01	5°♊55'49	direct	680 Mar 08 j 17:01	10°♊11'55
opposition	674 Oct 22 j 22:45	2°♊25'49 -2°40'09	evening set	680 Jun 22 j 15:55	18°♊25'39
min. Earth dist.	674 Oct 22 j 21:44	2°♊26'02 8.07772 AU			
	674 Nov 24 j 22:42	30°♊	conjunction	680 Jul 10 j 19:10	20°♊45'05 0°20'41
direct	674 Dec 28 j 07:11	28°♈59'28	minimum elong	680 Jul 10 j 19:09	20°♊45'04 0°20'40
	675 Jan 30 j 05:53	0°♊	max. Earth dist.	680 Jul 11 j 02:25	20°♊47'24 10.11117 AU
evening set	675 Apr 10 j 00:25	7°♊04'10	morning rise	680 Jul 28 j 19:53	23°♊03'39
				680 Oct 05 j 20:18	0°♊
conjunction	675 Apr 27 j 19:55	9°♊22'38 -2°01'36	retrograde	680 Nov 08 j 13:38	1°♊02'37
minimum elong	675 Apr 27 j 19:58	9°♊22'39 2°01'36		680 Dec 12 j 16:03	30°♊
max. Earth dist.	675 Apr 27 j 22:38	9°♊23'32 10.04213 AU	opposition	681 Jan 14 j 03:36	27°♊36'15 0°45'40
morning rise	675 May 15 j 18:47	11°♊42'14	min. Earth dist.	681 Jan 13 j 21:48	27°♊37'26 8.15586 AU
	675 Jun 11 j 22:32	15°♊	direct	681 Mar 23 j 04:56	24°♊06'27
retrograde	675 Aug 30 j 15:59	20°♊06'08		681 Jun 18 j 18:23	0°♊
opposition	675 Nov 06 j 04:35	16°♊35'49 -2°20'50	evening set	681 Jul 07 j 10:00	2°♊15'31
min. Earth dist.	675 Nov 06 j 01:40	16°♊36'25 8.01615 AU			
	675 Nov 26 j 07:05	15°♊	conjunction	681 Jul 25 j 10:03	4°♊32'32 0°52'26
direct	676 Jan 11 j 11:56	13°♊08'15	minimum elong	681 Jul 25 j 10:01	4°♊32'31 0°52'25
	676 Feb 25 j 18:28	15°♊	max. Earth dist.	681 Jul 25 j 16:57	4°♊34'44 10.20593 AU
evening set	676 Apr 23 j 23:35	21°♊19'08	morning rise	681 Aug 12 j 06:32	6°♊48'22
			retrograde	681 Nov 22 j 03:05	14°♊37'47
conjunction	676 May 11 j 23:22	23°♊39'34 -1°42'18	opposition	682 Jan 27 j 20:39	11°♊12'54 1°23'00
minimum elong	676 May 11 j 23:26	23°♊39'35 1°42'18	min. Earth dist.	682 Jan 27 j 14:35	11°♊14'08 8.25979 AU
max. Earth dist.	676 May 12 j 04:21	23°♊41'12 9.99507 AU	direct	682 Apr 06 j 11:36	7°♊43'42
morning rise	676 May 30 j 01:28	26°♊00'46		682 Jul 15 j 11:18	15°♊
	676 Jul 02 j 08:17	0°♊	evening set	682 Jul 21 j 19:13	15°♊46'31
retrograde	676 Sep 13 j 09:43	4°♊24'44			
opposition	676 Nov 19 j 12:18	0°♊54'29 -1°52'35	conjunction	682 Aug 08 j 14:53	18°♊00'36 1°20'37
min. Earth dist.	676 Nov 19 j 07:48	0°♊55'25 7.98376 AU	minimum elong	682 Aug 08 j 14:50	18°♊00'35 1°20'37
	676 Nov 30 j 14:00	30°♊	max. Earth dist.	682 Aug 08 j 21:39	18°♊02'44 10.31726 AU
direct	677 Jan 24 j 21:11	27°♊25'53	morning rise	682 Aug 26 j 06:09	20°♊13'18
	677 Mar 19 j 17:16	0°♊	retrograde	682 Dec 05 j 08:36	27°♊53'05
evening set	677 May 09 j 03:50	5°♊40'55	opposition	683 Feb 10 j 07:49	24°♊29'44 1°54'50
			min. Earth dist.	683 Feb 10 j 01:59	24°♊30'54 8.37734 AU
conjunction	677 May 27 j 06:55	8°♊02'33 -1°16'32	direct	683 Apr 20 j 12:04	21°♊01'27
minimum elong	677 May 27 j 06:59	8°♊02'34 1°16'32	evening set	683 Aug 04 j 18:13	28°♊56'52
max. Earth dist.	677 May 27 j 13:30	8°♊04'42 9.97860 AU		683 Aug 13 j 07:12	0°♊
morning rise	677 Jun 14 j 11:07	10°♊24'32			
retrograde	677 Sep 28 j 01:48	18°♊45'32	conjunction	683 Aug 22 j 08:52	1°♊07'47 1°43'55
opposition	677 Dec 03 j 20:01	15°♊15'47 -1°17'10	minimum elong	683 Aug 22 j 08:49	1°♊07'46 1°43'54
min. Earth dist.	677 Dec 03 j 14:41	15°♊16'53 7.98261 AU	max. Earth dist.	683 Aug 22 j 15:15	1°♊09'46 10.43891 AU
direct	678 Feb 08 j 10:23	11°♊46'23	morning rise	683 Sep 08 j 18:36	3°♊17'13
evening set	678 May 24 j 10:06	20°♊03'19	retrograde	683 Dec 18 j 05:32	10°♊47'41
			opposition	684 Feb 23 j 12:52	7°♊25'53 2°19'52
conjunction	678 Jun 11 j 15:01	22°♊25'11 -0°46'01	min. Earth dist.	684 Feb 23 j 08:09	7°♊26'48 8.50213 AU
minimum elong	678 Jun 11 j 15:04	22°♊25'12 0°46'01	direct	684 May 03 j 06:04	3°♊58'42
max. Earth dist.	678 Jun 11 j 22:17	22°♊27'33 9.99360 AU	evening set	684 Aug 17 j 06:19	11°♊46'02
morning rise	678 Jun 29 j 19:46	24°♊46'59			
	678 Aug 14 j 08:36	0°♊	conjunction	684 Sep 03 j 15:44	13°♊53'46 2°01'27
retrograde	678 Oct 12 j 13:13	3°♊02'25	minimum elong	684 Sep 03 j 15:42	13°♊53'46 2°01'27
	678 Dec 12 j 18:18	30°♊	max. Earth dist.	684 Sep 03 j 20:44	13°♊55'19 10.56447 AU
opposition	678 Dec 18 j 02:14	29°♊33'31 -0°37'05	morning rise	684 Sep 20 j 20:10	16°♊00'02

retrograde	684 Dec 29 j 19:27	23° \mathbb{M} 21'53	opposition	691 May 19 j 07:58	0° \mathbb{X} 05'28	1°53'25
opposition	685 Mar 07 j 12:00	20° \mathbb{M} 01'31 2°37'23	min. Earth dist.	691 May 19 j 12:31	0° \mathbb{X} 04'38	9.11003 AU
min. Earth dist.	685 Mar 07 j 08:52	20° \mathbb{M} 02'08 8.62768 AU		691 May 20 j 13:47	30° $\mathbb{R}\mathbb{M}$	
direct	685 May 16 j 16:28	16° \mathbb{M} 35'37	direct	691 Jul 29 j 14:20	26° \mathbb{M} 46'29	
evening set	685 Aug 30 j 07:37	24° \mathbb{M} 14'34		691 Oct 03 j 04:12	0° \mathbb{X}	
			evening set	691 Nov 08 j 07:03	3° \mathbb{X} 47'05	
conjunction	685 Sep 16 j 11:58	26° \mathbb{M} 19'19 2°12'48	conjunction	691 Nov 24 j 20:55	5° \mathbb{X} 42'50	1°22'28
minimum elong	685 Sep 16 j 11:56	26° \mathbb{M} 19'18 2°12'48	minimum elong	691 Nov 24 j 20:57	5° \mathbb{X} 42'51	1°22'28
max. Earth dist.	685 Sep 16 j 14:53	26° \mathbb{M} 20'12 10.68773 AU	max. Earth dist.	691 Nov 24 j 15:09	5° \mathbb{X} 41'09	11.11401 AU
morning rise	685 Oct 03 j 11:40	28° \mathbb{M} 22'39	morning rise	691 Dec 11 j 09:41	7° \mathbb{X} 38'20	
	685 Oct 17 j 10:15	0° \mathbb{L}	retrograde	692 Mar 20 j 17:39	14° \mathbb{X} 34'35	
retrograde	686 Jan 11 j 01:37	5° \mathbb{L} 36'49	opposition	692 May 30 j 07:30	11° \mathbb{X} 17'31	1°26'54
opposition	686 Mar 20 j 05:26	2° \mathbb{L} 17'43 2°47'09	min. Earth dist.	692 May 30 j 12:29	11° \mathbb{X} 16'36	9.11314 AU
min. Earth dist.	686 Mar 20 j 03:33	2° \mathbb{L} 18'04 8.74804 AU	direct	692 Aug 09 j 10:32	7° \mathbb{X} 59'06	
	686 Apr 22 j 04:43	30° $\mathbb{R}\mathbb{M}$	evening set	692 Nov 18 j 12:03	14° \mathbb{X} 57'35	
direct	686 May 29 j 19:59	28° \mathbb{M} 53'11				
	686 Jul 06 j 01:23	0° \mathbb{L}	conjunction	692 Dec 05 j 01:56	16° \mathbb{X} 53'28	0°59'18
evening set	686 Sep 11 j 22:26	6° \mathbb{L} 23'48	minimum elong	692 Dec 05 j 01:57	16° \mathbb{X} 53'29	0°59'19
conjunction	686 Sep 28 j 22:23	8° \mathbb{L} 25'53 2°17'54	max. Earth dist.	692 Dec 04 j 19:32	16° \mathbb{X} 51'36	11.10495 AU
minimum elong	686 Sep 28 j 22:23	8° \mathbb{L} 25'53 2°17'55	morning rise	692 Dec 21 j 15:25	18° \mathbb{X} 49'19	
max. Earth dist.	686 Sep 28 j 23:32	8° \mathbb{L} 26'14 10.80321 AU	retrograde	693 Apr 01 j 13:55	25° \mathbb{X} 48'03	
morning rise	686 Oct 15 j 18:07	10° \mathbb{L} 26'42	opposition	693 Jun 11 j 07:57	22° \mathbb{X} 30'21	0°57'03
retrograde	687 Jan 23 j 02:01	17° \mathbb{L} 34'22	min. Earth dist.	693 Jun 11 j 13:53	22° \mathbb{X} 29'15	9.09140 AU
opposition	687 Apr 01 j 17:47	14° \mathbb{L} 16'15 2°49'21	direct	693 Aug 21 j 03:55	19° \mathbb{X} 12'14	
min. Earth dist.	687 Apr 01 j 16:28	14° \mathbb{L} 16'30 8.85792 AU	evening set	693 Nov 29 j 17:18	26° \mathbb{X} 10'03	
direct	687 Jun 11 j 17:11	10° \mathbb{L} 53'05				
evening set	687 Sep 24 j 03:36	18° \mathbb{L} 15'45	conjunction	693 Dec 16 j 07:29	28° \mathbb{X} 06'27	0°33'47
			minimum elong	693 Dec 16 j 07:30	28° \mathbb{X} 06'27	0°33'48
conjunction	687 Oct 11 j 00:04	20° \mathbb{L} 15'37 2°16'58	max. Earth dist.	693 Dec 15 j 23:40	28° \mathbb{X} 04'09	11.07158 AU
minimum elong	687 Oct 11 j 00:05	20° \mathbb{L} 15'37 2°16'58	morning rise	694 Jan 01 j 22:22	0° \mathbb{Z} 03'06	
max. Earth dist.	687 Oct 11 j 00:30	20° \mathbb{L} 15'45 10.90595 AU		694 Jan 01 j 11:37	0° \mathbb{Z}	
morning rise	687 Oct 27 j 16:36	22° \mathbb{L} 14'21	retrograde	694 Apr 13 j 11:08	7° \mathbb{Z} 05'52	
retrograde	688 Feb 04 j 00:41	29° \mathbb{L} 16'46	opposition	694 Jun 23 j 10:06	3° \mathbb{Z} 47'15	0°24'48
opposition	688 Apr 13 j 01:41	25° \mathbb{L} 59'25 2°44'25	min. Earth dist.	694 Jun 23 j 17:02	3° \mathbb{Z} 45'58	9.04608 AU
min. Earth dist.	688 Apr 13 j 01:23	25° \mathbb{L} 59'28 8.95263 AU	direct	694 Sep 01 j 21:04	0° \mathbb{Z} 29'08	
direct	688 Jun 23 j 06:30	22° \mathbb{L} 37'32	evening set	694 Dec 11 j 00:41	7° \mathbb{Z} 27'53	
evening set	688 Oct 05 j 00:47	29° \mathbb{L} 52'58				
	688 Oct 06 j 01:03	0° \mathbb{M}	conjunction	694 Dec 27 j 15:40	9° \mathbb{Z} 25'10	0°06'47
conjunction	688 Oct 21 j 18:30	1° \mathbb{M} 51'05 2°10'24	minimum elong	694 Dec 27 j 15:41	9° \mathbb{Z} 25'10	0°06'47
minimum elong	688 Oct 21 j 18:31	1° \mathbb{M} 51'06 2°10'23	behind sun begin	694 Dec 27 j 09:10	9° \mathbb{Z} 23'16	
max. Earth dist.	688 Oct 21 j 17:47	1° \mathbb{M} 50'52 10.99156 AU	behind sun end	694 Dec 27 j 22:12	9° \mathbb{Z} 27'05	
morning rise	688 Nov 07 j 08:43	3° \mathbb{M} 48'15	max. Earth dist.	694 Dec 27 j 07:18	9° \mathbb{Z} 22'43	11.01534 AU
retrograde	689 Feb 14 j 17:40	10° \mathbb{M} 46'44	morning rise	695 Jan 13 j 08:19	11° \mathbb{Z} 22'57	
opposition	689 Apr 25 j 05:59	7° \mathbb{M} 29'54 2°32'58	desc. node	695 Mar 29 j 13:22	17° \mathbb{Z} 55'54	
min. Earth dist.	689 Apr 25 j 07:37	7° \mathbb{M} 29'35 9.02823 AU	retrograde	695 Apr 25 j 14:40	18° \mathbb{Z} 31'18	
direct	689 Jul 05 j 12:46	4° \mathbb{M} 09'09	opposition	695 Jul 05 j 14:39	15° \mathbb{Z} 11'30	-0°08'48
evening set	689 Oct 16 j 15:22	11° \mathbb{M} 18'21	min. Earth dist.	695 Jul 05 j 21:44	15° \mathbb{Z} 10'12	8.97895 AU
			direct	695 Sep 13 j 17:10	11° \mathbb{Z} 53'09	
conjunction	689 Nov 02 j 06:57	13° \mathbb{M} 15'11 1°58'43	evening set	695 Dec 22 j 11:47	18° \mathbb{Z} 54'24	
minimum elong	689 Nov 02 j 07:00	13° \mathbb{M} 15'12 1°58'42	conjunction	696 Jan 08 j 04:05	20° \mathbb{Z} 52'57	-0°20'55
max. Earth dist.	689 Nov 02 j 03:53	13° \mathbb{M} 14'17 11.05649 AU	minimum elong	696 Jan 08 j 04:04	20° \mathbb{Z} 52'57	0°20'56
	689 Nov 17 j 04:51	15° \mathbb{M}	max. Earth dist.	696 Jan 07 j 20:34	20° \mathbb{Z} 50'43	10.93822 AU
morning rise	689 Nov 18 j 19:58	15° \mathbb{M} 11'18	morning rise	696 Jan 24 j 22:35	22° \mathbb{Z} 52'13	
retrograde	690 Feb 26 j 09:16	22° \mathbb{M} 07'24		696 Apr 24 j 13:51	0° \mathbb{X}	
opposition	690 May 07 j 07:49	18° \mathbb{M} 50'47 2°15'43	retrograde	696 May 07 j 00:17	0° \mathbb{X} 07'36	
min. Earth dist.	690 May 07 j 11:23	18° \mathbb{M} 50'07 9.08149 AU		696 May 19 j 12:25	30° $\mathbb{R}\mathbb{Z}$	
direct	690 Jul 17 j 15:52	15° \mathbb{M} 31'00	opposition	696 Jul 16 j 22:53	26° \mathbb{Z} 46'26	-0°42'38
evening set	690 Oct 28 j 00:47	22° \mathbb{M} 35'12	min. Earth dist.	696 Jul 17 j 05:00	26° \mathbb{Z} 45'18	8.89238 AU
			direct	696 Sep 24 j 13:54	23° \mathbb{Z} 27'40	
conjunction	690 Nov 13 j 15:05	24° \mathbb{M} 31'15 1°42'31		696 Dec 28 j 11:37	0° \mathbb{X}	
minimum elong	690 Nov 13 j 15:07	24° \mathbb{M} 31'15 1°42'30	evening set	697 Jan 02 j 04:20	0° \mathbb{X} 32'58	
max. Earth dist.	690 Nov 13 j 10:01	24° \mathbb{M} 29'45 11.09785 AU				
morning rise	690 Nov 30 j 03:42	26° \mathbb{M} 26'49	conjunction	697 Jan 18 j 22:07	2° \mathbb{X} 33'05	-0°48'07
	691 Jan 02 j 16:40	0° \mathbb{X}	minimum elong	697 Jan 18 j 22:05	2° \mathbb{X} 33'05	0°48'08
retrograde	691 Mar 10 j 00:30	3° \mathbb{X} 22'10	max. Earth dist.	697 Jan 18 j 15:06	2° \mathbb{X} 30'59	10.84302 AU

morning rise	697 Feb 04 j 18:47	4° \approx 34'09	morning rise	703 Apr 24 j 09:52	21° Υ 29'01
retrograde	697 May 19 j 17:13	11° \approx 57'53	retrograde	703 Aug 09 j 17:01	29° Υ 48'05
opposition	697 Jul 29 j 11:48	8° \approx 35'16 -1°15'25	opposition	703 Oct 16 j 21:45	26° Υ 18'06 -2°45'45
min. Earth dist.	697 Jul 29 j 17:15	8° \approx 34'14 8.78959 AU	min. Earth dist.	703 Oct 16 j 20:05	26° Υ 18'26 8.10496 AU
direct	697 Oct 06 j 14:19	5° \approx 15'50	direct	703 Dec 22 j 06:44	22° Υ 52'11
evening set	698 Jan 14 j 04:06	12° \approx 26'44		704 Mar 26 j 13:24	0° ♄
			evening set	704 Apr 02 j 16:31	0° ♄ 53'58
conjunction	698 Jan 30 j 23:40	14° \approx 28'45 -1°13'48	conjunction	704 Apr 20 j 09:43	3° ♄ 11'28 -2°07'56
minimum elong	698 Jan 30 j 23:37	14° \approx 28'44 1°13'48	minimum elong	704 Apr 20 j 09:46	3° ♄ 11'29 2°07'56
max. Earth dist.	698 Jan 30 j 16:33	14° \approx 26'35 10.73344 AU	max. Earth dist.	704 Apr 20 j 11:55	3° ♄ 12'11 10.06550 AU
	698 Feb 04 j 06:21	15° \approx	morning rise	704 May 08 j 06:54	5° ♄ 30'15
morning rise	698 Feb 16 j 22:57	16° \approx 31'55	retrograde	704 Aug 23 j 09:52	13° ♄ 53'39
retrograde	698 Jun 01 j 17:47	24° \approx 05'01	opposition	704 Oct 30 j 02:39	10° ♄ 23'23 -2°30'47
opposition	698 Aug 11 j 06:03	20° \approx 40'55 -1°45'43	min. Earth dist.	704 Oct 29 j 23:55	10° ♄ 23'57 8.03540 AU
min. Earth dist.	698 Aug 11 j 11:15	20° \approx 39'55 8.67466 AU	direct	705 Jan 04 j 08:47	6° ♄ 56'23
direct	698 Oct 18 j 18:36	17° \approx 20'38		705 Apr 16 j 21:04	15° ♄
evening set	699 Jan 26 j 12:19	24° \approx 38'31	evening set	705 Apr 17 j 13:03	15° ♄ 05'07
conjunction	699 Feb 12 j 10:10	26° \approx 42'42 -1°36'45	conjunction	705 May 05 j 10:49	17° ♄ 24'49 -1°51'54
minimum elong	699 Feb 12 j 10:07	26° \approx 42'41 1°36'44	minimum elong	705 May 05 j 10:52	17° ♄ 24'50 1°51'54
max. Earth dist.	699 Feb 12 j 03:29	26° \approx 40'39 10.61384 AU	max. Earth dist.	705 May 05 j 14:58	17° ♄ 26'11 10.00960 AU
morning rise	699 Mar 01 j 12:24	28° \approx 48'15	morning rise	705 May 23 j 11:43	19° ♄ 45'30
	699 Mar 11 j 14:01	0° ♄	retrograde	705 Sep 07 j 03:56	28° ♄ 10'16
retrograde	699 Jun 15 j 01:13	6° ♄ 31'27	opposition	705 Nov 13 j 10:14	24° ♄ 40'06 -2°06'21
opposition	699 Aug 24 j 06:19	3° ♄ 05'50 -2°12'00	min. Earth dist.	705 Nov 13 j 06:17	24° ♄ 40'55 7.99361 AU
min. Earth dist.	699 Aug 24 j 11:02	3° ♄ 04'55 8.55223 AU	direct	706 Jan 18 j 16:48	21° ♄ 12'10
	699 Oct 14 j 04:48	30° ♄	evening set	706 May 02 j 15:56	29° ♄ 25'58
direct	699 Oct 31 j 06:17	29° \approx 44'33		706 May 07 j 01:28	0° ♄
	699 Nov 17 j 04:53	0° ♄	conjunction	706 May 20 j 17:33	1° ♄ 47'11 -1°28'51
evening set	700 Feb 08 j 06:08	7° ♄ 10'35	minimum elong	706 May 20 j 17:37	1° ♄ 47'13 1°28'50
conjunction	700 Feb 25 j 06:52	9° ♄ 17'14 -1°55'40	max. Earth dist.	706 May 20 j 23:33	1° ♄ 49'10 9.98328 AU
minimum elong	700 Feb 25 j 06:49	9° ♄ 17'13 1°55'39	morning rise	706 Jun 07 j 21:07	4° ♄ 09'00
max. Earth dist.	700 Feb 25 j 01:59	9° ♄ 15'43 10.48924 AU	retrograde	706 Sep 21 j 21:13	12° ♄ 32'01
morning rise	700 Mar 13 j 12:13	11° ♄ 25'20	opposition	706 Nov 27 j 18:35	9° ♄ 02'21 -1°33'50
retrograde	700 Jun 27 j 17:06	19° ♄ 18'53	min. Earth dist.	706 Nov 27 j 13:22	9° ♄ 03'26 7.98246 AU
opposition	700 Sep 05 j 12:55	15° ♄ 51'50 -2°32'37	direct	707 Feb 02 j 05:52	5° ♄ 33'41
min. Earth dist.	700 Sep 05 j 16:07	15° ♄ 51'12 8.42775 AU	evening set	707 May 17 j 22:08	13° ♄ 50'16
direct	700 Nov 12 j 01:45	12° ♄ 29'28	conjunction	707 Jun 05 j 02:23	16° ♄ 12'08 -1°00'11
evening set	701 Feb 20 j 10:33	20° ♄ 04'25	minimum elong	707 Jun 05 j 02:25	16° ♄ 12'09 1°00'11
conjunction	701 Mar 09 j 14:45	22° ♄ 13'45 -2°09'17	max. Earth dist.	707 Jun 05 j 10:07	16° ♄ 14'40 9.98830 AU
minimum elong	701 Mar 09 j 14:43	22° ♄ 13'44 2°09'16	morning rise	707 Jun 23 j 07:08	18° ♄ 34'08
max. Earth dist.	701 Mar 09 j 11:59	22° ♄ 12'52 10.36562 AU	retrograde	707 Oct 06 j 10:47	26° ♄ 52'33
morning rise	701 Mar 26 j 23:36	24° ♄ 24'35	opposition	707 Dec 12 j 02:09	23° ♄ 23'41 -0°55'28
	701 May 17 j 19:08	0° ♄	min. Earth dist.	707 Dec 11 j 19:35	23° ♄ 25'02 8.00264 AU
retrograde	701 Jul 11 j 18:54	2° ♄ 28'03	direct	708 Feb 16 j 21:18	19° ♄ 54'31
	701 Sep 06 j 06:58	30° ♄	evening set	708 Jun 01 j 04:20	28° ♄ 11'25
opposition	701 Sep 19 j 01:58	28° ♄ 59'43 -2°46'00		708 Jun 15 j 04:32	0° ♄
min. Earth dist.	701 Sep 19 j 03:17	28° ♄ 59'28 8.30742 AU	conjunction	708 Jun 19 j 09:34	0° ♄ 32'56 -0°27'56
direct	701 Nov 25 j 02:50	25° ♄ 36'11	minimum elong	708 Jun 19 j 09:35	0° ♄ 32'56 0°27'56
	702 Feb 05 j 18:31	0° ♄	max. Earth dist.	708 Jun 19 j 18:31	0° ♄ 35'50 10.02397 AU
evening set	702 Mar 06 j 01:58	3° ♄ 20'26	morning rise	708 Jul 07 j 13:50	2° ♄ 54'09
conjunction	702 Mar 23 j 10:10	5° ♄ 32'34 -2°16'25	retrograde	708 Oct 19 j 18:47	11° ♄ 05'37
minimum elong	702 Mar 23 j 10:10	5° ♄ 32'34 2°16'24	opposition	708 Dec 25 j 07:00	7° ♄ 37'49 -0°14'02
max. Earth dist.	702 Mar 23 j 09:18	5° ♄ 32'17 10.24943 AU	min. Earth dist.	708 Dec 24 j 23:58	7° ♄ 39'16 8.05218 AU
morning rise	702 Apr 09 j 22:58	7° ♄ 46'13	direct	709 Mar 02 j 12:41	4° ♄ 08'23
retrograde	702 Jul 26 j 03:34	15° ♄ 58'25	asc. node	709 Apr 30 j 22:17	7° ♄ 08'20
opposition	702 Oct 02 j 21:11	12° ♄ 29'06 -2°50'42	evening set	709 Jun 16 j 07:48	12° ♄ 23'20
min. Earth dist.	702 Oct 02 j 20:45	12° ♄ 29'11 8.19765 AU	conjunction	709 Jul 04 j 12:09	14° ♄ 43'32 0°05'47
direct	702 Dec 08 j 12:23	9° ♄ 04'21	minimum elong	709 Jul 04 j 12:09	14° ♄ 43'32 0°05'46
evening set	703 Mar 20 j 04:18	16° ♄ 57'46	behind sun begin	709 Jul 04 j 05:07	14° ♄ 41'17
conjunction	703 Apr 06 j 16:52	19° ♄ 12'40 -2°16'08	behind sun end	709 Jul 04 j 19:10	14° ♄ 45'47
minimum elong	703 Apr 06 j 16:53	19° ♄ 12'40 2°16'08	max. Earth dist.	709 Jul 04 j 20:59	14° ♄ 46'23 10.08689 AU
max. Earth dist.	703 Apr 06 j 17:26	19° ♄ 12'51 10.14724 AU			

morning rise	709 Jul 22 j 14:11	17°  03'01		max. Earth dist.	715 Sep 23 j 23:52	3°  24'17	10.74190 AU
retrograde	709 Nov 02 j 19:52	25°  05'57		morning rise	715 Oct 10 j 19:17	5°  25'44	
opposition	710 Jan 08 j 07:42	21°  39'26	0°27'37	retrograde	716 Jan 18 j 06:35	12°  36'44	
min. Earth dist.	710 Jan 08 j 01:17	21°  40'45	8.12664 AU	opposition	716 Mar 26 j 15:50	9°  17'57	2°49'20
direct	710 Mar 17 j 01:13	18°  10'03		min. Earth dist.	716 Mar 26 j 15:14	9°  18'04	8.79737 AU
evening set	710 Jul 01 j 05:34	26°  21'10		direct	716 Jun 05 j 11:05	5°  53'51	
				evening set	716 Sep 18 j 05:45	13°  20'36	
conjunction	710 Jul 19 j 07:16	28°  39'16	0°38'31				
minimum elong	710 Jul 19 j 07:14	28°  39'15	0°38'30	conjunction	716 Oct 05 j 03:49	15°  21'36	2°18'06
max. Earth dist.	710 Jul 19 j 14:57	28°  41'43	10.17176 AU	minimum elong	716 Oct 05 j 03:49	15°  21'36	2°18'07
	710 Jul 29 j 19:36	0°  0		max. Earth dist.	716 Oct 05 j 03:42	15°  21'34	10.84694 AU
morning rise	710 Aug 06 j 05:36	0°  56'18		morning rise	716 Oct 21 j 21:45	17°  21'24	
retrograde	710 Nov 16 j 13:54	8°  49'57		retrograde	717 Jan 29 j 05:36	24°  26'33	
opposition	711 Jan 22 j 03:34	5°  24'54	1°06'48	opposition	717 Apr 08 j 02:05	21°  08'30	2°47'30
min. Earth dist.	711 Jan 21 j 22:17	5°  25'59	8.22058 AU	min. Earth dist.	717 Apr 08 j 02:55	21°  08'21	8.89587 AU
direct	711 Mar 31 j 10:14	1°  55'54		direct	717 Jun 18 j 04:05	17°  45'34	
evening set	711 Jul 15 j 19:14	10°  01'37		evening set	717 Sep 30 j 06:44	25°  04'47	
conjunction	711 Aug 02 j 16:55	12°  01'702	1°08'30	conjunction	717 Oct 17 j 01:32	27°  03'49	2°13'57
minimum elong	711 Aug 02 j 16:52	12°  01'701	1°08'29	minimum elong	717 Oct 17 j 01:33	27°  03'49	2°13'57
max. Earth dist.	711 Aug 02 j 23:03	12°  01'8'59	10.27335 AU	max. Earth dist.	717 Oct 16 j 23:45	27°  03'17	10.93767 AU
morning rise	711 Aug 20 j 10:34	14°  03'1'09		morning rise	717 Nov 02 j 16:56	29°  01'50	
	711 Aug 24 j 08:02	15°  0			717 Nov 11 j 03:21	0°  0	
retrograde	711 Nov 29 j 22:40	22°  15'2'21		retrograde	718 Feb 09 j 23:19	6°  02'30	
opposition	712 Feb 04 j 17:51	18°  51'4'47	1°41'19	opposition	718 Apr 20 j 08:15	2°  44'57	2°38'50
min. Earth dist.	712 Feb 04 j 13:36	18°  52'3'38	8.32901 AU	min. Earth dist.	718 Apr 20 j 09:41	2°  44'41	8.97809 AU
direct	712 Apr 13 j 14:58	15°  23'2'26			718 Jun 02 j 14:21	30°  0'0	
evening set	712 Jul 28 j 23:32	23°  22'3'30		direct	718 Jun 30 j 15:03	29°  23'08	
conjunction	712 Aug 15 j 16:23	25°  34'5'2	1°34'08		718 Jul 28 j 08:30	0°  0	
minimum elong	712 Aug 15 j 16:20	25°  34'5'1	1°34'07	evening set	718 Oct 12 j 00:12	6°  03'5'40	
max. Earth dist.	712 Aug 15 j 20:49	25°  36'1'5	10.38679 AU	conjunction	718 Oct 28 j 16:45	8°  33'1'2	2°04'26
morning rise	712 Sep 02 j 04:47	27°  34'5'49		minimum elong	718 Oct 28 j 16:47	8°  33'1'3	2°04'26
	712 Sep 21 j 01:09	0°  0		max. Earth dist.	718 Oct 28 j 14:24	8°  32'3'1	11.01072 AU
retrograde	712 Dec 11 j 22:35	5°  0'20'42		morning rise	718 Nov 14 j 06:23	10°  29'5'6	
opposition	713 Feb 17 j 02:02	1°  0'58'3'33	2°09'33		718 Dec 28 j 03:32	15°  0	
min. Earth dist.	713 Feb 16 j 22:17	1°  0'59'1'7	8.44669 AU	retrograde	719 Feb 21 j 17:05	17°  0'27'3'3	
	713 Mar 15 j 17:05	30°  0'0'0			719 Apr 21 j 04:07	15°  0'0'0	
direct	713 Apr 27 j 13:43	28°  31'0'4		opposition	719 May 02 j 11:12	14°  0'10'1'6	2°24'00
	713 Jun 08 j 21:39	0°  0		min. Earth dist.	719 May 02 j 12:59	14°  0'09'5'6	9.04108 AU
evening set	713 Aug 11 j 17:17	6°  0'22'3'1		direct	719 Jul 12 j 20:41	10°  0'49'3'1	
conjunction	713 Aug 29 j 05:01	8°  0'31'4'4	1°54'21		719 Sep 26 j 09:36	15°  0	
minimum elong	713 Aug 29 j 04:58	8°  0'31'4'3	1°54'20	evening set	719 Oct 23 j 11:48	17°  0'56'2'4	
max. Earth dist.	713 Aug 29 j 08:26	8°  0'32'4'8	10.50654 AU	conjunction	719 Nov 09 j 02:53	19°  0'52'5'7	1°50'07
morning rise	713 Sep 15 j 11:59	10°  0'39'2'9		minimum elong	719 Nov 09 j 02:56	19°  0'52'5'8	1°50'06
retrograde	713 Dec 24 j 16:13	18°  0'05'3'4		max. Earth dist.	719 Nov 09 j 00:05	19°  0'52'0'8	11.06343 AU
opposition	714 Mar 02 j 04:21	14°  0'44'4'1	2°30'31	morning rise	719 Nov 25 j 15:36	21°  0'48'5'3	
min. Earth dist.	714 Mar 02 j 01:02	14°  0'45'2'0	8.56776 AU	retrograde	720 Mar 04 j 09:23	28°  0'44'5'4	
direct	714 May 11 j 04:27	11°  0'18'1'7		opposition	720 May 13 j 12:05	25°  0'27'4'3	2°03'47
evening set	714 Aug 24 j 23:53	19°  0'01'2'9		min. Earth dist.	720 May 13 j 15:09	25°  0'27'0'9	9.08258 AU
conjunction	714 Sep 11 j 06:36	21°  0'07'4'0	2°08'30	direct	720 Jul 23 j 19:15	22°  0'07'5'4	
minimum elong	714 Sep 11 j 06:34	21°  0'07'4'0	2°08'30	evening set	720 Nov 02 j 19:28	29°  0'10'2'5	
max. Earth dist.	714 Sep 11 j 09:29	21°  0'08'3'3	10.62676 AU		720 Nov 09 j 22:45	0°  0	
morning rise	714 Sep 28 j 08:24	23°  0'12'2'3		conjunction	720 Nov 19 j 09:32	1°  0'06'2'4	1°31'39
	714 Dec 13 j 03:26	0°  0		minimum elong	720 Nov 19 j 09:35	1°  0'06'2'5	1°31'39
retrograde	715 Jan 06 j 02:57	0°  0'30'2'6		max. Earth dist.	720 Nov 19 j 05:06	1°  0'05'0'6	11.09392 AU
	715 Jan 30 j 08:07	30°  0'0'0		morning rise	720 Dec 05 j 22:12	3°  0'02'0'2	
opposition	715 Mar 15 j 00:53	27°  0'10'4'2	2°43'47	retrograde	721 Mar 16 j 00:14	9°  0'05'8'01	
min. Earth dist.	715 Mar 14 j 22:27	27°  0'11'1'0	8.68643 AU	opposition	721 May 25 j 11:56	6°  0'04'0'42	1°38'58
direct	715 May 24 j 11:04	23°  0'04'5'27		min. Earth dist.	721 May 25 j 16:21	6°  0'03'9'53	9.10120 AU
	715 Aug 26 j 08:01	0°  0		direct	721 Aug 04 j 16:15	3°  0'02'1'37	
evening set	715 Sep 06 j 19:48	1°  0'20'1'7		evening set	721 Nov 14 j 00:46	10°  0'02'1'11	
conjunction	715 Sep 23 j 21:55	3°  0'23'4'2	2°16'23	conjunction	721 Nov 30 j 14:30	12°  0'07'1'02	1°09'45
minimum elong	715 Sep 23 j 21:54	3°  0'23'4'1	2°16'24	minimum elong	721 Nov 30 j 14:32	12°  0'07'1'03	1°09'45

max. Earth dist.	721 Nov 30 j 08:46	12° \mathbb{A} 15'22	11.10122 AU	conjunction	728 Feb 07 j 06:38	21° \approx 31'36	-1°26'56
morning rise	721 Dec 17 j 03:48	14° \mathbb{A} 12'47		minimum elong	728 Feb 07 j 06:35	21° \approx 31'35	1°26'56
retrograde	722 Mar 27 j 18:06	21° \mathbb{A} 10'21		max. Earth dist.	728 Feb 07 j 01:53	21° \approx 30'09	10.69602 AU
opposition	722 Jun 06 j 11:49	17° \mathbb{A} 52'38	1°10'26	morning rise	728 Feb 24 j 07:09	23° \approx 35'41	
min. Earth dist.	722 Jun 06 j 16:39	17° \mathbb{A} 51'45	9.09638 AU		728 Apr 30 j 18:03	0° \mathbb{H}	
direct	722 Aug 16 j 11:27	14° \mathbb{A} 34'07		retrograde	728 Jun 08 j 11:34	1° \mathbb{H} 13'00	
evening set	722 Nov 25 j 05:23	21° \mathbb{A} 32'08			728 Jul 17 j 19:16	30° \mathbb{R} \approx	
				opposition	728 Aug 17 j 20:18	27° \approx 48'45	-2°00'44
conjunction	722 Dec 11 j 19:27	23° \mathbb{A} 28'17	0°45'09	min. Earth dist.	728 Aug 17 j 23:44	27° \approx 48'06	8.63746 AU
minimum elong	722 Dec 11 j 19:29	23° \mathbb{A} 28'18	0°45'10	direct	728 Oct 25 j 02:33	24° \approx 28'42	
max. Earth dist.	722 Dec 11 j 13:59	23° \mathbb{A} 26'41	11.08495 AU		729 Jan 17 j 10:20	0° \mathbb{H}	
morning rise	722 Dec 28 j 09:44	25° \mathbb{A} 24'34		evening set	729 Feb 01 j 22:33	1° \mathbb{H} 49'34	
	723 Feb 11 j 15:36	0° \mathbb{B}					
retrograde	723 Apr 08 j 14:39	2° \mathbb{B} 25'18		conjunction	729 Feb 18 j 21:42	3° \mathbb{H} 54'40	-1°47'43
	723 Jun 06 j 08:41	30° \mathbb{R} \mathbb{A}		minimum elong	729 Feb 18 j 21:40	3° \mathbb{H} 54'39	1°47'42
opposition	723 Jun 18 j 12:41	29° \mathbb{A} 06'56	0°39'07	max. Earth dist.	729 Feb 18 j 16:57	3° \mathbb{H} 53'11	10.57653 AU
min. Earth dist.	723 Jun 18 j 17:13	29° \mathbb{A} 06'06	9.06811 AU	morning rise	729 Mar 08 j 01:17	6° \mathbb{H} 01'09	
direct	723 Aug 28 j 04:40	25° \mathbb{A} 48'47		retrograde	729 Jun 21 j 23:42	13° \mathbb{H} 48'30	
	723 Nov 11 j 00:20	0° \mathbb{B}		opposition	729 Aug 30 j 23:15	10° \mathbb{H} 22'48	-2°23'58
evening set	723 Dec 06 j 11:25	2° \mathbb{B} 46'49		min. Earth dist.	729 Aug 31 j 02:21	10° \mathbb{H} 22'12	8.51548 AU
				direct	729 Nov 06 j 16:47	7° \mathbb{H} 01'41	
conjunction	723 Dec 23 j 02:08	4° \mathbb{B} 43'39	0°18'42	evening set	730 Feb 14 j 21:19	14° \mathbb{H} 30'58	
minimum elong	723 Dec 23 j 02:09	4° \mathbb{B} 43'39	0°18'42				
max. Earth dist.	723 Dec 22 j 20:35	4° \mathbb{B} 42'01	11.04551 AU	conjunction	730 Mar 03 j 23:31	16° \mathbb{H} 38'36	-2°03'47
morning rise	724 Jan 08 j 17:47	6° \mathbb{B} 40'49		minimum elong	730 Mar 03 j 23:29	16° \mathbb{H} 38'35	2°03'46
retrograde	724 Apr 19 j 17:06	13° \mathbb{B} 46'14		max. Earth dist.	730 Mar 03 j 18:49	16° \mathbb{H} 37'08	10.45272 AU
opposition	724 Jun 29 j 15:40	10° \mathbb{B} 27'03	0°06'00	morning rise	730 Mar 21 j 06:34	18° \mathbb{H} 47'45	
min. Earth dist.	724 Jun 29 j 20:26	10° \mathbb{B} 26'10	9.01736 AU	retrograde	730 Jul 05 j 20:12	26° \mathbb{H} 45'06	
desc. node	724 Sep 04 j 18:11	7° \mathbb{B} 09'30		opposition	730 Sep 13 j 08:22	23° \mathbb{H} 18'04	-2°40'42
direct	724 Sep 07 j 22:32	7° \mathbb{B} 09'00		min. Earth dist.	730 Sep 13 j 11:18	23° \mathbb{H} 17'30	8.39207 AU
evening set	724 Dec 16 j 20:33	14° \mathbb{B} 08'38		direct	730 Nov 19 j 13:51	19° \mathbb{H} 55'44	
				evening set	731 Feb 28 j 06:43	27° \mathbb{H} 34'12	
conjunction	725 Jan 02 j 12:07	16° \mathbb{B} 06'28	-0°08'50				
minimum elong	725 Jan 02 j 12:06	16° \mathbb{B} 06'28	0°08'50	conjunction	731 Mar 17 j 12:41	29° \mathbb{H} 44'35	-2°13'56
behind sun begin	725 Jan 02 j 06:03	16° \mathbb{B} 04'42		minimum elong	731 Mar 17 j 12:40	29° \mathbb{H} 44'34	2°13'55
behind sun end	725 Jan 02 j 18:09	16° \mathbb{B} 08'15		max. Earth dist.	731 Mar 17 j 09:07	29° \mathbb{H} 43'27	10.33079 AU
max. Earth dist.	725 Jan 02 j 05:39	16° \mathbb{B} 04'34	10.98438 AU		731 Mar 19 j 13:17	0° \mathbb{Y}	
morning rise	725 Jan 19 j 05:38	18° \mathbb{B} 04'55		morning rise	731 Apr 03 j 23:33	1° \mathbb{Y} 56'30	
retrograde	725 May 01 j 22:43	25° \mathbb{B} 16'30		retrograde	731 Jul 19 j 23:14	10° \mathbb{Y} 03'13	
opposition	725 Jul 11 j 22:04	21° \mathbb{B} 56'17	-0°27'50	opposition	731 Sep 26 j 23:52	6° \mathbb{Y} 35'00	-2°49'27
min. Earth dist.	725 Jul 12 j 03:27	21° \mathbb{B} 55'17	8.94607 AU	min. Earth dist.	731 Sep 27 j 01:50	6° \mathbb{Y} 34'36	8.27412 AU
direct	725 Sep 19 j 16:51	18° \mathbb{B} 38'05		direct	731 Dec 02 j 20:09	3° \mathbb{Y} 11'21	
evening set	725 Dec 28 j 10:10	25° \mathbb{B} 40'53		evening set	732 Mar 13 j 02:50	10° \mathbb{Y} 59'08	
conjunction	726 Jan 14 j 03:00	27° \mathbb{B} 40'03	-0°36'17	conjunction	732 Mar 30 j 13:07	13° \mathbb{Y} 12'20	-2°17'06
minimum elong	726 Jan 14 j 02:59	27° \mathbb{B} 40'03	0°36'17	minimum elong	732 Mar 30 j 13:07	13° \mathbb{Y} 12'20	2°17'06
max. Earth dist.	726 Jan 13 j 20:23	27° \mathbb{B} 38'04	10.90378 AU	max. Earth dist.	732 Mar 30 j 11:47	13° \mathbb{Y} 11'54	10.21810 AU
morning rise	726 Jan 30 j 22:42	29° \mathbb{B} 40'06		morning rise	732 Apr 17 j 03:59	15° \mathbb{Y} 27'02	
	726 Feb 02 j 18:54	0° \approx		retrograde	732 Aug 02 j 08:25	23° \mathbb{Y} 41'41	
retrograde	726 May 14 j 10:34	6° \approx 59'14		opposition	732 Oct 09 j 21:06	20° \mathbb{Y} 12'28	-2°49'01
opposition	726 Jul 24 j 08:28	3° \approx 37'47	-1°01'09	min. Earth dist.	732 Oct 09 j 21:21	20° \mathbb{Y} 12'24	8.16896 AU
min. Earth dist.	726 Jul 24 j 13:47	3° \approx 36'47	8.85678 AU	direct	732 Dec 15 j 10:32	16° \mathbb{Y} 47'30	
direct	726 Oct 01 j 16:22	0° \approx 19'11		evening set	733 Mar 27 j 09:26	24° \mathbb{Y} 44'05	
evening set	727 Jan 09 j 06:10	7° \approx 26'39					
				conjunction	733 Apr 14 j 00:25	27° \mathbb{Y} 00'03	-2°12'36
conjunction	727 Jan 26 j 00:47	9° \approx 27'31	-1°02'42	minimum elong	733 Apr 14 j 00:27	27° \mathbb{Y} 00'04	2°12'36
minimum elong	727 Jan 26 j 00:45	9° \approx 27'31	1°02'43	max. Earth dist.	733 Apr 14 j 01:29	27° \mathbb{Y} 00'24	10.12181 AU
max. Earth dist.	727 Jan 25 j 19:08	9° \approx 25'48	10.80648 AU	morning rise	733 May 01 j 19:26	29° \mathbb{Y} 17'21	
morning rise	727 Feb 11 j 22:46	11° \approx 29'26			733 May 07 j 11:03	0° \mathbb{B}	
	727 Mar 15 j 18:36	15° \approx		retrograde	733 Aug 16 j 23:00	7° \mathbb{B} 37'43	
retrograde	727 May 27 j 07:36	18° \approx 57'14		opposition	733 Oct 23 j 22:58	4° \mathbb{B} 07'48	-2°38'45
opposition	727 Aug 05 j 23:31	15° \approx 34'26	-1°32'36	min. Earth dist.	733 Oct 23 j 21:19	4° \mathbb{B} 08'09	8.08323 AU
min. Earth dist.	727 Aug 06 j 03:57	15° \approx 33'35	8.75265 AU	direct	733 Dec 29 j 07:28	0° \mathbb{B} 41'32	
	727 Aug 13 j 14:00	15° \mathbb{R} \approx		evening set	734 Apr 11 j 01:16	8° \mathbb{B} 45'53	
direct	727 Oct 13 j 19:13	12° \approx 15'13					
	727 Dec 10 j 13:56	15° \approx		conjunction	734 Apr 28 j 20:57	11° \mathbb{B} 04'19	-2°00'12
evening set	728 Jan 21 j 09:55	19° \approx 28'46		minimum elong	734 Apr 28 j 21:00	11° \mathbb{B} 04'20	2°00'13

max. Earth dist.	734 Apr 28 j 23:52	11° ♁ 05'16	10.04807 AU	opposition	740 Jan 16 j 01:19	29° ♁ 12'25	0°48'41
morning rise	734 May 16 j 19:54	13° ♁ 23'52		min. Earth dist.	740 Jan 15 j 19:18	29° ♁ 13'39	8.16098 AU
	734 May 29 j 15:12	15° ♁		direct	740 Mar 24 j 02:43	25° ♁ 42'40	
retrograde	734 Aug 31 j 16:47	21° ♁ 47'10			740 Jun 05 j 06:45	0° ♁	
opposition	734 Nov 07 j 04:23	18° ♁ 16'58	-2°18'43	evening set	740 Jul 08 j 08:24	3° ♁ 51'25	
min. Earth dist.	734 Nov 07 j 01:21	18° ♁ 17'35	8.02239 AU				
	734 Dec 29 j 20:24	15° ♁		conjunction	740 Jul 26 j 08:21	6° ♁ 08'20	0°54'43
direct	735 Jan 12 j 10:36	14° ♁ 49'28		minimum elong	740 Jul 26 j 08:18	6° ♁ 08'19	0°54'43
	735 Jan 26 j 02:01	15° ♁		max. Earth dist.	740 Jul 26 j 15:31	6° ♁ 10'37	10.21043 AU
evening set	735 Apr 26 j 00:19	23° ♁ 00'00		morning rise	740 Aug 13 j 04:30	8° ♁ 24'02	
					740 Oct 17 j 08:45	15° ♁	
conjunction	735 May 14 j 00:09	25° ♁ 20'21	-1°40'22	retrograde	740 Nov 23 j 00:55	16° ♁ 13'06	
minimum elong	735 May 14 j 00:13	25° ♁ 20'23	1°40'22		740 Dec 30 j 05:07	15° ♁	
max. Earth dist.	735 May 14 j 04:35	25° ♁ 21'48	10.00159 AU	opposition	741 Jan 28 j 18:08	12° ♁ 48'15	1°25'38
morning rise	735 Jun 01 j 02:19	27° ♁ 41'29		min. Earth dist.	741 Jan 28 j 12:09	12° ♁ 49'27	8.26363 AU
	735 Jun 19 j 16:27	0° ♁		direct	741 Apr 07 j 09:28	9° ♁ 19'03	
retrograde	735 Sep 15 j 10:42	6° ♁ 04'46			741 Jul 02 j 22:29	15° ♁	
opposition	735 Nov 21 j 11:39	2° ♁ 34'40	-1°49'53	evening set	741 Jul 22 j 17:18	17° ♁ 21'39	
min. Earth dist.	735 Nov 21 j 07:41	2° ♁ 35'30	7.99043 AU				
	735 Dec 26 j 14:19	30° ♁		conjunction	741 Aug 09 j 12:48	19° ♁ 35'38	1°22'34
direct	736 Jan 26 j 20:42	29° ♁ 06'08		minimum elong	741 Aug 09 j 12:44	19° ♁ 35'37	1°22'34
	736 Feb 26 j 23:51	0° ♁		max. Earth dist.	741 Aug 09 j 19:39	19° ♁ 37'48	10.32033 AU
evening set	736 May 10 j 04:10	7° ♁ 20'50		morning rise	741 Aug 27 j 03:43	21° ♁ 48'13	
				retrograde	741 Dec 06 j 05:36	29° ♁ 27'44	
conjunction	736 May 28 j 07:12	9° ♁ 42'20	-1°14'13	opposition	742 Feb 11 j 05:08	26° ♁ 04'26	1°57'00
minimum elong	736 May 28 j 07:16	9° ♁ 42'21	1°14'13	min. Earth dist.	742 Feb 11 j 00:06	26° ♁ 05'26	8.37968 AU
max. Earth dist.	736 May 28 j 12:41	9° ♁ 44'08	9.98543 AU	direct	742 Apr 21 j 10:00	22° ♁ 36'06	
morning rise	736 Jun 15 j 11:29	12° ♁ 04'14			742 Aug 01 j 08:34	0° ♁	
retrograde	736 Sep 29 j 01:05	20° ♁ 24'32		evening set	742 Aug 05 j 16:02	0° ♁ 31'24	
opposition	736 Dec 04 j 18:59	16° ♁ 54'57	-1°14'05				
min. Earth dist.	736 Dec 04 j 14:32	16° ♁ 55'52	7.98946 AU	conjunction	742 Aug 23 j 06:23	2° ♁ 42'13	1°45'27
direct	737 Feb 09 j 10:40	13° ♁ 25'36		minimum elong	742 Aug 23 j 06:20	2° ♁ 42'12	1°45'26
evening set	737 May 25 j 09:55	21° ♁ 42'10		max. Earth dist.	742 Aug 23 j 12:03	2° ♁ 43'59	10.44037 AU
				morning rise	742 Sep 09 j 15:52	4° ♁ 51'33	
conjunction	737 Jun 12 j 14:46	24° ♁ 03'55	-0°43'28	retrograde	742 Dec 19 j 03:00	12° ♁ 21'54	
minimum elong	737 Jun 12 j 14:48	24° ♁ 03'56	0°43'28	opposition	743 Feb 24 j 10:14	9° ♁ 00'06	2°21'29
max. Earth dist.	737 Jun 12 j 20:49	24° ♁ 05'53	10.00044 AU	min. Earth dist.	743 Feb 24 j 06:26	9° ♁ 00'50	8.50284 AU
morning rise	737 Jun 30 j 19:34	26° ♁ 25'36		direct	743 May 05 j 03:17	5° ♁ 32'52	
	737 Jul 30 j 10:51	0° ♁		evening set	743 Aug 19 j 03:45	13° ♁ 20'08	
retrograde	737 Oct 13 j 10:43	4° ♁ 40'22					
opposition	737 Dec 19 j 00:43	1° ♁ 11'39	-0°33'50	conjunction	743 Sep 05 j 12:50	15° ♁ 27'49	2°02'30
min. Earth dist.	737 Dec 18 j 19:51	1° ♁ 12'39	8.01930 AU	minimum elong	743 Sep 05 j 12:48	15° ♁ 27'48	2°02'30
	738 Jan 02 j 17:33	30° ♁		max. Earth dist.	743 Sep 05 j 16:40	15° ♁ 28'59	10.56428 AU
direct	738 Feb 24 j 01:58	27° ♁ 41'48		morning rise	743 Sep 22 j 17:10	17° ♁ 34'00	
	738 Apr 16 j 10:09	0° ♁		retrograde	743 Dec 31 j 15:39	24° ♁ 55'52	
evening set	738 Jun 09 j 14:31	5° ♁ 57'55		opposition	744 Mar 08 j 09:19	21° ♁ 35'27	2°38'23
				min. Earth dist.	744 Mar 08 j 06:31	21° ♁ 36'00	8.62676 AU
conjunction	738 Jun 27 j 19:23	8° ♁ 18'53	-0°10'17	direct	744 May 17 j 14:07	18° ♁ 09'30	
minimum elong	738 Jun 27 j 19:24	8° ♁ 18'54	0°10'17	evening set	744 Aug 31 j 04:48	25° ♁ 48'27	
behind sun begin	738 Jun 27 j 13:38	8° ♁ 17'02					
behind sun end	738 Jun 28 j 01:10	8° ♁ 20'45		conjunction	744 Sep 17 j 08:59	27° ♁ 53'11	2°13'20
max. Earth dist.	738 Jun 28 j 01:56	8° ♁ 21'00	10.04527 AU	minimum elong	744 Sep 17 j 08:57	27° ♁ 53'10	2°13'21
morning rise	738 Jul 15 j 22:53	10° ♁ 39'23		max. Earth dist.	744 Sep 17 j 11:14	27° ♁ 53'52	10.68596 AU
asc. node	738 Oct 21 j 08:35	18° ♁ 44'26		morning rise	744 Oct 04 j 08:36	29° ♁ 56'30	
retrograde	738 Oct 27 j 14:23	18° ♁ 46'40			744 Oct 04 j 20:20	0° ♁	
opposition	739 Jan 02 j 03:13	15° ♁ 19'03	0°08'02	retrograde	745 Jan 11 j 21:54	7° ♁ 10'49	
min. Earth dist.	739 Jan 01 j 21:42	15° ♁ 20'11	8.07776 AU	opposition	745 Mar 21 j 02:43	3° ♁ 51'37	2°47'31
direct	739 Mar 10 j 15:53	11° ♁ 49'05		min. Earth dist.	745 Mar 21 j 00:26	3° ♁ 52'04	8.74547 AU
evening set	739 Jun 24 j 14:54	20° ♁ 02'29		direct	745 May 30 j 18:46	0° ♁ 27'02	
				evening set	745 Sep 12 j 19:32	7° ♁ 57'44	
conjunction	739 Jul 12 j 18:04	22° ♁ 21'48	0°23'12				
minimum elong	739 Jul 12 j 18:03	22° ♁ 21'47	0°23'12	conjunction	745 Sep 29 j 19:29	9° ♁ 59'51	2°17'56
max. Earth dist.	739 Jul 13 j 01:04	22° ♁ 24'03	10.11682 AU	minimum elong	745 Sep 29 j 19:28	9° ♁ 59'51	2°17'56
morning rise	739 Jul 30 j 18:33	24° ♁ 40'13		max. Earth dist.	745 Sep 29 j 21:02	10° ♁ 00'19	10.79986 AU
	739 Sep 16 j 13:27	0° ♁		morning rise	745 Oct 16 j 15:02	12° ♁ 00'40	
retrograde	739 Nov 10 j 11:51	2° ♁ 38'43		retrograde	746 Jan 24 j 00:48	19° ♁ 08'34	
	740 Jan 06 j 06:23	30° ♁		opposition	746 Apr 02 j 15:20	15° ♁ 50'23	2°49'05

min. Earth dist.	746 Apr 02 j 13:53	15° Ω 50'39	8.85378 AU	min. Earth dist.	752 Jun 12 j 14:09	24° \mathcal{X} 07'38	9.08580 AU
direct	746 Jun 12 j 14:32	12° Ω 27'11		direct	752 Aug 22 j 02:20	20° \mathcal{X} 50'41	
evening set	746 Sep 25 j 00:46	19° Ω 49'58		evening set	752 Nov 30 j 16:07	27° \mathcal{X} 48'49	
conjunction	746 Oct 11 j 21:13	21° Ω 49'54	2°16'29	conjunction	752 Dec 17 j 06:21	29° \mathcal{X} 45'19	0°31'08
minimum elong	746 Oct 11 j 21:13	21° Ω 49'54	2°16'29	minimum elong	752 Dec 17 j 06:22	29° \mathcal{X} 45'19	0°31'08
max. Earth dist.	746 Oct 11 j 21:59	21° Ω 50'08	10.90117 AU	max. Earth dist.	752 Dec 16 j 22:34	29° \mathcal{X} 43'02	11.06605 AU
morning rise	746 Oct 28 j 13:37	23° Ω 48'42			752 Dec 19 j 08:12	0° \mathcal{Z}	
	747 Jan 04 j 00:50	0° \mathcal{M}		morning rise	753 Jan 02 j 21:27	1° \mathcal{Z} 42'05	
retrograde	747 Feb 04 j 21:53	0° \mathcal{M} 51'24		retrograde	753 Apr 14 j 11:47	8° \mathcal{Z} 45'22	
	747 Mar 09 j 09:35	30° \mathcal{R} Ω		opposition	753 Jun 24 j 10:16	5° \mathcal{Z} 26'43	0°21'30
opposition	747 Apr 14 j 23:40	27° Ω 33'59	2°43'33	min. Earth dist.	753 Jun 24 j 16:53	5° \mathcal{Z} 25'30	9.04062 AU
min. Earth dist.	747 Apr 14 j 23:53	27° Ω 33'57	8.94729 AU	direct	753 Sep 02 j 21:46	2° \mathcal{Z} 08'39	
direct	747 Jun 25 j 02:47	24° Ω 12'04		evening set	753 Dec 11 j 23:51	9° \mathcal{Z} 07'42	
	747 Sep 24 j 00:47	0° \mathcal{M}					
evening set	747 Oct 06 j 22:09	1° \mathcal{M} 27'43		conjunction	753 Dec 28 j 15:02	11° \mathcal{Z} 05'06	0°04'03
conjunction	747 Oct 23 j 15:45	3° \mathcal{M} 25'54	2°09'25	minimum elong	753 Dec 28 j 15:02	11° \mathcal{Z} 05'06	0°04'03
minimum elong	747 Oct 23 j 15:46	3° \mathcal{M} 25'54	2°09'24	behind sun begin	753 Dec 28 j 08:09	11° \mathcal{Z} 03'05	
max. Earth dist.	747 Oct 23 j 14:32	3° \mathcal{M} 25'32	10.98582 AU	behind sun end	753 Dec 28 j 21:55	11° \mathcal{Z} 07'07	
morning rise	747 Nov 09 j 06:05	5° \mathcal{M} 23'10		max. Earth dist.	753 Dec 28 j 07:41	11° \mathcal{Z} 02'57	11.00996 AU
retrograde	748 Feb 16 j 15:31	12° \mathcal{M} 22'02		morning rise	754 Jan 14 j 07:42	13° \mathcal{Z} 03'00	
opposition	748 Apr 26 j 04:17	9° \mathcal{M} 05'08	2°31'30	desc. node	754 Feb 21 j 02:40	17° \mathcal{Z} 02'17	
min. Earth dist.	748 Apr 26 j 06:22	9° \mathcal{M} 04'44	9.02220 AU	retrograde	754 Apr 26 j 15:31	20° \mathcal{Z} 11'54	
direct	748 Jul 06 j 11:19	5° \mathcal{M} 44'20		opposition	754 Jul 06 j 15:15	16° \mathcal{Z} 52'04	-0°12'10
evening set	748 Oct 17 j 12:56	12° \mathcal{M} 53'48		min. Earth dist.	754 Jul 06 j 21:19	16° \mathcal{Z} 50'57	8.97371 AU
conjunction	748 Nov 03 j 04:30	14° \mathcal{M} 50'44	1°57'16	direct	754 Sep 14 j 16:32	13° \mathcal{Z} 33'47	
minimum elong	748 Nov 03 j 04:33	14° \mathcal{M} 50'44	1°57'15	evening set	754 Dec 23 j 11:26	20° \mathcal{Z} 35'20	
max. Earth dist.	748 Nov 03 j 01:09	14° \mathcal{M} 49'44	11.05034 AU	conjunction	755 Jan 09 j 03:51	22° \mathcal{Z} 33'59	-0°23'38
	748 Nov 04 j 11:58	15° \mathcal{M}		minimum elong	755 Jan 09 j 03:50	22° \mathcal{Z} 33'59	0°23'39
morning rise	748 Nov 19 j 17:41	16° \mathcal{M} 46'57		max. Earth dist.	755 Jan 08 j 20:57	22° \mathcal{Z} 31'56	10.93311 AU
retrograde	749 Feb 27 j 07:25	23° \mathcal{M} 43'28		morning rise	755 Jan 25 j 22:25	24° \mathcal{Z} 33'22	
opposition	749 May 08 j 06:25	20° \mathcal{M} 26'45	2°13'42		755 Mar 21 j 22:13	0° \approx	
min. Earth dist.	749 May 08 j 09:27	20° \mathcal{M} 26'12	9.07529 AU	retrograde	755 May 09 j 02:02	1° \approx 49'17	
direct	749 Jul 18 j 14:18	17° \mathcal{M} 06'58			755 Jun 27 j 17:03	30° \mathcal{R} \mathcal{Z}	
evening set	749 Oct 28 j 22:34	24° \mathcal{M} 11'24		opposition	755 Jul 18 j 23:52	28° \mathcal{Z} 28'06	-0°45'54
conjunction	749 Nov 14 j 13:01	26° \mathcal{M} 07'33	1°40'40	min. Earth dist.	755 Jul 19 j 05:28	28° \mathcal{Z} 27'04	8.88750 AU
minimum elong	749 Nov 14 j 13:03	26° \mathcal{M} 07'34	1°40'39	direct	755 Sep 26 j 14:01	25° \mathcal{Z} 09'22	
max. Earth dist.	749 Nov 14 j 08:53	26° \mathcal{M} 06'20	11.09177 AU		755 Dec 15 j 07:57	0° \approx	
morning rise	749 Dec 01 j 01:39	28° \mathcal{M} 03'13		evening set	756 Jan 04 j 04:34	2° \approx 14'59	
	749 Dec 18 j 13:48	0° \mathcal{X}		conjunction	756 Jan 20 j 22:20	4° \approx 15'12	-0°50'42
retrograde	750 Mar 10 j 23:57	4° \mathcal{X} 59'01		minimum elong	756 Jan 20 j 22:18	4° \approx 15'11	0°50'43
opposition	750 May 20 j 07:00	1° \mathcal{X} 42'13	1°50'57	max. Earth dist.	756 Jan 20 j 14:59	4° \approx 12'59	10.83839 AU
min. Earth dist.	750 May 20 j 10:39	1° \mathcal{X} 41'33	9.10401 AU	morning rise	756 Feb 06 j 19:12	6° \approx 16'22	
	750 Jun 13 j 16:01	30° \mathcal{R} \mathcal{M}		retrograde	756 May 20 j 19:30	13° \approx 40'34	
direct	750 Jul 30 j 13:34	28° \mathcal{M} 23'14		opposition	756 Jul 30 j 13:01	10° \approx 17'57	-1°18'26
	750 Sep 13 j 23:50	0° \mathcal{X}		min. Earth dist.	756 Jul 30 j 18:43	10° \approx 16'52	8.78530 AU
evening set	750 Nov 09 j 05:09	5° \mathcal{X} 24'03		direct	756 Oct 07 j 13:49	6° \approx 58'32	
conjunction	750 Nov 25 j 19:07	7° \mathcal{X} 19'54	1°20'16	evening set	757 Jan 15 j 04:44	14° \approx 09'45	
minimum elong	750 Nov 25 j 19:09	7° \mathcal{X} 19'55	1°20'17		757 Jan 22 j 04:06	15° \approx	
max. Earth dist.	750 Nov 25 j 14:09	7° \mathcal{X} 18'27	11.10816 AU	conjunction	757 Feb 01 j 00:20	16° \approx 11'49	-1°16'07
morning rise	750 Dec 12 j 07:55	9° \mathcal{X} 15'30		minimum elong	757 Feb 01 j 00:17	16° \approx 11'48	1°16'08
retrograde	751 Mar 22 j 17:55	16° \mathcal{X} 12'11		max. Earth dist.	757 Jan 31 j 17:11	16° \approx 09'39	10.72951 AU
opposition	751 Jun 01 j 07:00	12° \mathcal{X} 55'04	1°24'03	morning rise	757 Feb 17 j 23:48	18° \approx 15'05	
min. Earth dist.	751 Jun 01 j 11:51	12° \mathcal{X} 54'11	9.10736 AU	retrograde	757 Jun 02 j 18:02	25° \approx 48'36	
direct	751 Aug 11 j 08:23	9° \mathcal{X} 36'40		opposition	757 Aug 12 j 07:31	22° \approx 24'28	-1°48'21
evening set	751 Nov 20 j 10:28	16° \mathcal{X} 35'22		min. Earth dist.	757 Aug 12 j 12:51	22° \approx 23'27	8.67118 AU
conjunction	751 Dec 07 j 00:21	18° \mathcal{X} 31'21	0°56'50	direct	757 Oct 19 j 19:51	19° \approx 04'11	
minimum elong	751 Dec 07 j 00:23	18° \mathcal{X} 31'22	0°56'51	evening set	758 Jan 27 j 13:12	26° \approx 22'20	
max. Earth dist.	751 Dec 06 j 17:36	18° \mathcal{X} 29'22	11.09928 AU	conjunction	758 Feb 13 j 11:14	28° \approx 26'36	-1°38'41
morning rise	751 Dec 23 j 14:04	20° \mathcal{X} 27'21		minimum elong	758 Feb 13 j 11:11	28° \approx 26'35	1°38'40
retrograde	752 Apr 02 j 12:25	27° \mathcal{X} 26'32		max. Earth dist.	758 Feb 13 j 05:31	28° \approx 24'50	10.61079 AU
opposition	752 Jun 12 j 07:49	24° \mathcal{X} 08'48	0°53'55		758 Feb 26 j 03:19	0° \mathcal{H}	
				morning rise	758 Mar 02 j 13:31	0° \mathcal{H} 32'11	

retrograde	758 Jun 16 j 02:31	8°♊15'44		max. Earth dist.	764 May 06 j 16:45	19°♏09'09	10.01268 AU
opposition	758 Aug 25 j 07:51	4°♊50'04 -2°14'06		morning rise	764 May 24 j 13:13	21°♏28'19	
min. Earth dist.	758 Aug 25 j 11:59	4°♊49'16 8.54975 AU		retrograde	764 Sep 08 j 04:05	29°♏52'31	
direct	758 Nov 01 j 08:33	1°♊28'47		opposition	764 Nov 14 j 10:19	26°♏22'20 -2°03'53	
evening set	759 Feb 09 j 07:27	8°♊54'59		min. Earth dist.	764 Nov 14 j 06:05	26°♏23'12 7.99693 AU	
				direct	765 Jan 19 j 18:12	22°♏54'19	
conjunction	759 Feb 26 j 08:24	11°♊01'42 -1°57'06			765 Apr 24 j 18:38	0°♐	
minimum elong	759 Feb 26 j 08:21	11°♊01'41 1°57'05		evening set	765 May 03 j 16:45	1°♐07'48	
max. Earth dist.	759 Feb 26 j 04:27	11°♊00'28 10.48722 AU					
morning rise	759 Mar 15 j 13:46	13°♊09'52		conjunction	765 May 21 j 18:38	3°♐28'59 -1°26'40	
retrograde	759 Jun 29 j 20:13	21°♊03'34		minimum elong	765 May 21 j 18:41	3°♐29'00 1°26'40	
opposition	759 Sep 07 j 14:19	17°♊36'28 -2°34'03		max. Earth dist.	765 May 22 j 01:15	3°♐31'09 9.98687 AU	
min. Earth dist.	759 Sep 07 j 16:42	17°♊36'00 8.42635 AU		morning rise	765 Jun 08 j 22:11	5°♐50'44	
direct	759 Nov 14 j 02:03	14°♊14'05		retrograde	765 Sep 22 j 20:35	14°♐13'09	
evening set	760 Feb 22 j 12:10	21°♊49'09		opposition	765 Nov 28 j 18:14	10°♐43'29 -1°30'52	
				min. Earth dist.	765 Nov 28 j 12:34	10°♐44'39 7.98619 AU	
conjunction	760 Mar 10 j 16:28	23°♊58'30 -2°10'08		direct	766 Feb 03 j 06:31	7°♐14'46	
minimum elong	760 Mar 10 j 16:27	23°♊58'30 2°10'07		evening set	766 May 18 j 22:43	15°♐31'03	
max. Earth dist.	760 Mar 10 j 13:49	23°♊57'40 10.36471 AU					
morning rise	760 Mar 28 j 01:26	26°♊09'23		conjunction	766 Jun 06 j 03:06	17°♐52'51 -0°57'41	
	760 Apr 30 j 09:32	0°♑		minimum elong	766 Jun 06 j 03:09	17°♐52'52 0°57'42	
retrograde	760 Jul 12 j 21:25	4°♑12'50		max. Earth dist.	766 Jun 06 j 11:16	17°♐55'31 9.99222 AU	
opposition	760 Sep 20 j 03:20	0°♑44'29 -2°46'38		morning rise	766 Jun 24 j 07:46	20°♐14'46	
min. Earth dist.	760 Sep 20 j 04:18	0°♑44'17 8.30711 AU		retrograde	766 Oct 07 j 10:00	28°♐32'36	
	760 Sep 29 j 12:15	30°♑		opposition	766 Dec 13 j 01:26	25°♐03'46 -0°52'13	
direct	760 Nov 26 j 03:24	27°♑20'53		min. Earth dist.	766 Dec 12 j 18:51	25°♐05'08 8.00663 AU	
	761 Jan 20 j 07:22	0°♑		direct	767 Feb 17 j 20:46	21°♐34'35	
evening set	761 Mar 07 j 03:38	5°♑05'10		evening set	767 Jun 03 j 04:42	29°♐51'13	
					767 Jun 04 j 08:13	0°♑	
conjunction	761 Mar 24 j 11:53	7°♑17'18 -2°16'37					
minimum elong	761 Mar 24 j 11:53	7°♑17'18 2°16'36		conjunction	767 Jun 21 j 09:52	2°♑12'39 -0°25'16	
max. Earth dist.	761 Mar 24 j 10:26	7°♑16'51 10.24970 AU		minimum elong	767 Jun 21 j 09:53	2°♑12'39 0°25'17	
morning rise	761 Apr 11 j 00:54	9°♑30'58		max. Earth dist.	767 Jun 21 j 18:47	2°♑15'32 10.02814 AU	
retrograde	761 Jul 27 j 04:35	17°♑43'01		morning rise	767 Jul 09 j 13:58	4°♑33'44	
opposition	761 Oct 03 j 22:26	14°♑13'39 -2°50'31		retrograde	767 Oct 21 j 18:14	12°♑44'41	
min. Earth dist.	761 Oct 03 j 22:20	14°♑13'40 8.19849 AU		opposition	767 Dec 27 j 06:04	9°♑16'58 -0°10'41	
direct	761 Dec 09 j 14:01	10°♑48'50		min. Earth dist.	767 Dec 26 j 23:29	9°♑18'19 8.05659 AU	
evening set	762 Mar 21 j 05:55	18°♑42'10		direct	768 Mar 03 j 11:19	5°♑47'32	
				asc. node	768 Apr 01 j 20:19	6°♑34'13	
conjunction	762 Apr 07 j 18:38	20°♑57'05 -2°15'39		evening set	768 Jun 17 j 07:49	14°♑02'13	
minimum elong	762 Apr 07 j 18:39	20°♑57'05 2°15'39					
max. Earth dist.	762 Apr 07 j 18:34	20°♑57'04 10.14868 AU		conjunction	768 Jul 05 j 11:56	16°♑22'19 0°08'25	
morning rise	762 Apr 25 j 11:55	23°♑13'27		minimum elong	768 Jul 05 j 11:56	16°♑22'19 0°08'24	
	762 Jun 29 j 13:00	0°♒		behind sun begin	768 Jul 05 j 05:30	16°♑20'15	
retrograde	762 Aug 10 j 17:29	1°♒32'09		behind sun end	768 Jul 05 j 18:21	16°♑24'22	
	762 Sep 22 j 08:07	30°♒		max. Earth dist.	768 Jul 05 j 20:19	16°♑25'00 10.09168 AU	
opposition	762 Oct 17 j 22:40	28°♑02'09 -2°44'43		morning rise	768 Jul 23 j 13:49	18°♑41'40	
min. Earth dist.	762 Oct 17 j 21:38	28°♑02'21 8.10687 AU		retrograde	768 Nov 03 j 19:20	26°♑44'04	
direct	762 Dec 23 j 08:09	24°♑36'08		opposition	769 Jan 09 j 06:29	23°♑17'39 0°30'50	
	763 Mar 14 j 07:07	0°♒		min. Earth dist.	769 Jan 09 j 00:40	23°♑18'50 8.13195 AU	
evening set	763 Apr 04 j 18:00	2°♒37'44		direct	769 Mar 18 j 00:20	19°♑48'15	
				evening set	769 Jul 02 j 05:09	27°♑59'03	
conjunction	763 Apr 22 j 11:27	4°♒55'14 -2°06'48			769 Jul 18 j 01:34	0°♒	
minimum elong	763 Apr 22 j 11:30	4°♒55'15 2°06'48					
max. Earth dist.	763 Apr 22 j 13:30	4°♒55'54 10.06788 AU		conjunction	769 Jul 20 j 06:33	0°♒16'59 0°40'59	
morning rise	763 May 10 j 08:50	7°♒14'00		minimum elong	769 Jul 20 j 06:31	0°♒16'58 0°40'59	
	763 Jul 30 j 06:34	15°♒		max. Earth dist.	769 Jul 20 j 13:27	0°♒19'11 10.17750 AU	
retrograde	763 Aug 25 j 10:06	15°♒36'54		morning rise	769 Aug 07 j 04:46	2°♒33'52	
	763 Sep 20 j 14:57	15°♒		retrograde	769 Nov 17 j 11:19	10°♒26'57	
opposition	763 Nov 01 j 03:10	12°♒06'37 -2°28'59		opposition	770 Jan 23 j 01:57	7°♒01'58 1°09'41	
min. Earth dist.	763 Nov 01 j 00:40	12°♒07'08 8.03812 AU		min. Earth dist.	770 Jan 22 j 21:03	7°♒02'58 8.22665 AU	
direct	764 Jan 06 j 09:48	8°♒39'31		direct	770 Apr 01 j 10:34	3°♒32'58	
	764 Apr 04 j 05:01	15°♒		evening set	770 Jul 16 j 18:20	11°♒38'20	
evening set	764 Apr 18 j 14:12	16°♒48'00					
				conjunction	770 Aug 03 j 15:43	13°♒53'33 1°10'40	
conjunction	764 May 06 j 12:14	19°♒07'40 -1°50'12		minimum elong	770 Aug 03 j 15:40	13°♒53'32 1°10'39	
minimum elong	764 May 06 j 12:18	19°♒07'41 1°50'12		max. Earth dist.	770 Aug 03 j 21:03	13°♒55'14 10.27939 AU	

	770 Aug 12 j 09:36	15°♈	retrograde	777 Feb 10 j 23:11	7°♊38'46	
morning rise	770 Aug 21 j 09:09	16°♈07'30	opposition	777 Apr 21 j 06:40	4°♊21'13	2°37'34
retrograde	770 Nov 30 j 19:12	23°♈51'13	min. Earth dist.	777 Apr 21 j 07:51	4°♊21'00	8.97289 AU
opposition	771 Feb 05 j 15:50	20°♈27'43 1°43'44	direct	777 Jul 01 j 14:04	0°♊59'27	
min. Earth dist.	771 Feb 05 j 11:26	20°♈28'36 8.33484 AU	evening set	777 Oct 12 j 22:04	8°♊12'14	
direct	771 Apr 15 j 14:39	16°♈59'25				
evening set	771 Jul 30 j 22:01	24°♈58'08	conjunction	777 Oct 29 j 14:44	10°♊09'54	2°03'09
			minimum elong	777 Oct 29 j 14:45	10°♊09'55	2°03'08
conjunction	771 Aug 17 j 14:39	27°♈10'21 1°35'54	max. Earth dist.	777 Oct 29 j 12:41	10°♊09'18	11.00455 AU
minimum elong	771 Aug 17 j 14:36	27°♈10'20 1°35'53	morning rise	777 Nov 15 j 04:19	12°♊06'44	
max. Earth dist.	771 Aug 17 j 18:57	27°♈11'43 10.39209 AU		777 Dec 11 j 14:02	15°♊	
morning rise	771 Sep 04 j 02:44	29°♈21'08	retrograde	778 Feb 22 j 16:30	19°♊04'49	
	771 Sep 09 j 10:21	0°♊	opposition	778 May 03 j 10:14	15°♊47'31	2°22'11
retrograde	771 Dec 13 j 20:34	6°♊55'44	min. Earth dist.	778 May 03 j 12:29	15°♊47'06	9.03389 AU
opposition	772 Feb 18 j 23:47	3°♊33'38 2°11'25		778 May 14 j 04:59	15°♊	
min. Earth dist.	772 Feb 18 j 19:44	3°♊34'25 8.45138 AU	direct	778 Jul 13 j 17:37	12°♊26'46	
direct	772 Apr 28 j 11:30	0°♊06'15		778 Sep 09 j 15:37	15°♊	
evening set	772 Aug 12 j 15:15	7°♊57'26	evening set	778 Oct 24 j 10:00	19°♊33'59	
conjunction	772 Aug 30 j 02:50	10°♊06'33 1°55'37	conjunction	778 Nov 10 j 01:03	21°♊30'39	1°48'23
minimum elong	772 Aug 30 j 02:47	10°♊06'32 1°55'37	minimum elong	778 Nov 10 j 01:05	21°♊30'40	1°48'23
max. Earth dist.	772 Aug 30 j 06:38	10°♊07'44 10.51041 AU	max. Earth dist.	778 Nov 09 j 21:36	21°♊29'38	11.05539 AU
morning rise	772 Sep 16 j 09:28	12°♊14'11	morning rise	778 Nov 26 j 13:55	23°♊26'45	
retrograde	772 Dec 25 j 14:21	19°♊40'06		779 Feb 12 j 15:27	0°♊	
opposition	773 Mar 03 j 01:59	16°♊19'19 2°31'47	retrograde	779 Mar 06 j 07:46	0°♊23'20	
min. Earth dist.	773 Mar 02 j 23:01	16°♊19'53 8.57076 AU		779 Mar 28 j 07:08	30°♊	
direct	773 May 12 j 01:16	12°♊52'59	opposition	779 May 15 j 11:41	27°♊06'05	2°01'27
evening set	773 Aug 25 j 21:42	20°♊36'06	min. Earth dist.	779 May 15 j 15:26	27°♊05'23	9.07371 AU
			direct	779 Jul 25 j 18:15	23°♊46'11	
conjunction	773 Sep 12 j 04:13	22°♊42'13 2°09'16		779 Oct 28 j 13:00	0°♊	
minimum elong	773 Sep 12 j 04:11	22°♊42'12 2°09'16	evening set	779 Nov 04 j 18:03	0°♊49'08	
max. Earth dist.	773 Sep 12 j 06:54	22°♊43'02 10.62875 AU				
morning rise	773 Sep 29 j 05:45	24°♊46'52	conjunction	779 Nov 21 j 08:10	2°♊45'15	1°29'32
	773 Nov 18 j 11:29	0°♊	minimum elong	779 Nov 21 j 08:12	2°♊45'16	1°29'32
retrograde	774 Jan 07 j 00:25	2°♊04'55	max. Earth dist.	779 Nov 21 j 03:09	2°♊43'47	11.08434 AU
	774 Feb 27 j 09:13	30°♊	morning rise	779 Dec 07 j 21:04	4°♊41'03	
opposition	774 Mar 15 j 22:35	28°♊45'17 2°44'24	retrograde	780 Mar 17 j 00:22	11°♊37'41	
min. Earth dist.	774 Mar 15 j 21:10	28°♊45'33 8.68748 AU	opposition	780 May 26 j 11:53	8°♊20'14	1°36'12
direct	774 May 25 j 08:55	25°♊20'05	min. Earth dist.	780 May 26 j 16:13	8°♊19'26	9.09090 AU
	774 Aug 12 j 20:11	0°♊	direct	780 Aug 05 j 16:11	5°♊01'04	
evening set	774 Sep 07 j 17:33	2°♊54'58	evening set	780 Nov 14 j 23:46	12°♊01'05	
conjunction	774 Sep 24 j 19:23	4°♊58'21 2°16'37	conjunction	780 Dec 01 j 13:43	13°♊57'07	1°07'19
minimum elong	774 Sep 24 j 19:22	4°♊58'21 2°16'38	minimum elong	780 Dec 01 j 13:45	13°♊57'08	1°07'19
max. Earth dist.	774 Sep 24 j 20:14	4°♊58'36 10.74188 AU	max. Earth dist.	780 Dec 01 j 08:34	13°♊55'36	11.09031 AU
morning rise	774 Oct 11 j 16:40	7°♊00'22	morning rise	780 Dec 18 j 03:06	15°♊53'02	
retrograde	775 Jan 19 j 04:28	14°♊11'32	retrograde	781 Mar 28 j 18:26	22°♊51'20	
opposition	775 Mar 28 j 13:49	10°♊52'49 2°49'18	opposition	781 Jun 07 j 12:18	19°♊33'26	1°07'19
min. Earth dist.	775 Mar 28 j 13:52	10°♊52'49 8.79640 AU	min. Earth dist.	781 Jun 07 j 16:24	19°♊32'41	9.08487 AU
direct	775 Jun 07 j 08:42	7°♊28'47	direct	781 Aug 17 j 11:12	16°♊14'50	
evening set	775 Sep 20 j 03:19	14°♊55'40	evening set	781 Nov 26 j 04:57	23°♊13'21	
conjunction	775 Oct 07 j 01:14	16°♊56'42 2°17'48	conjunction	781 Dec 12 j 19:11	25°♊09'41	0°42'29
minimum elong	775 Oct 07 j 01:14	16°♊56'42 2°17'49	minimum elong	781 Dec 12 j 19:12	25°♊09'42	0°42'29
max. Earth dist.	775 Oct 07 j 00:12	16°♊56'23 10.84491 AU	max. Earth dist.	781 Dec 12 j 14:15	25°♊08'14	11.07300 AU
morning rise	775 Oct 23 j 19:11	18°♊56'32	morning rise	781 Dec 29 j 09:33	27°♊06'08	
retrograde	776 Jan 31 j 02:30	26°♊01'59		782 Jan 25 j 01:24	0°♊	
opposition	776 Apr 09 j 00:14	22°♊43'57 2°46'50	retrograde	782 Apr 09 j 17:16	4°♊07'39	
min. Earth dist.	776 Apr 09 j 00:53	22°♊43'50 8.89280 AU	opposition	782 Jun 19 j 13:54	0°♊49'07	0°35'45
direct	776 Jun 19 j 02:18	19°♊21'05	min. Earth dist.	782 Jun 19 j 18:16	0°♊48'19	9.05579 AU
evening set	776 Oct 01 j 04:22	26°♊40'31		782 Jun 30 j 19:28	30°♊	
			direct	782 Aug 29 j 05:17	27°♊30'51	
conjunction	776 Oct 17 j 23:15	28°♊39'37 2°13'09		782 Oct 24 j 14:19	0°♊	
minimum elong	776 Oct 17 j 23:16	28°♊39'37 2°13'09	evening set	782 Dec 07 j 11:40	4°♊29'25	
max. Earth dist.	776 Oct 17 j 21:36	28°♊39'07 10.93357 AU				
	776 Oct 29 j 05:59	0°♊	conjunction	782 Dec 24 j 02:25	6°♊26'26	0°15'52
morning rise	776 Nov 03 j 14:35	0°♊37'42	minimum elong	782 Dec 24 j 02:26	6°♊26'26	0°15'53

behind sun begin	782 Dec 24 j 00:51	6° \mathfrak{Z} 25'58	direct	788 Nov 07 j 20:07	8° \mathfrak{X} 52'34	
behind sun end	782 Dec 24 j 04:00	6° \mathfrak{Z} 26'53	evening set	789 Feb 16 j 01:37	16° \mathfrak{X} 22'19	
max. Earth dist.	782 Dec 23 j 20:29	6° \mathfrak{Z} 24'41 11.03301 AU				
morning rise	783 Jan 09 j 18:20	8° \mathfrak{Z} 23'49	conjunction	789 Mar 05 j 04:01	18° \mathfrak{X} 30'03 -2°05'01	
retrograde	783 Apr 21 j 18:14	15° \mathfrak{Z} 30'01	minimum elong	789 Mar 05 j 03:59	18° \mathfrak{X} 30'02 2°05'00	
opposition	783 Jul 01 j 17:30	12° \mathfrak{Z} 10'39 0°02'30	max. Earth dist.	789 Mar 05 j 00:18	18° \mathfrak{X} 28'53 10.44781 AU	
min. Earth dist.	783 Jul 01 j 22:40	12° \mathfrak{Z} 09'42 9.00473 AU	morning rise	789 Mar 22 j 11:15	20° \mathfrak{X} 39'18	
desc. node	783 Jul 29 j 14:21	10° \mathfrak{Z} 14'51	retrograde	789 Jul 07 j 00:17	28° \mathfrak{X} 37'00	
direct	783 Sep 09 j 22:02	8° \mathfrak{Z} 52'27	opposition	789 Sep 14 j 13:02	25° \mathfrak{X} 09'55 -2°41'48	
evening set	783 Dec 18 j 21:24	15° \mathfrak{Z} 52'42	min. Earth dist.	789 Sep 14 j 15:30	25° \mathfrak{X} 09'26 8.38877 AU	
			direct	789 Nov 20 j 18:53	21° \mathfrak{X} 47'32	
conjunction	784 Jan 04 j 13:04	17° \mathfrak{Z} 50'43 -0°11'42	evening set	790 Mar 01 j 11:22	29° \mathfrak{X} 26'16	
minimum elong	784 Jan 04 j 13:04	17° \mathfrak{Z} 50'43 0°11'42		790 Mar 05 j 23:32	0° \mathfrak{Y}	
behind sun begin	784 Jan 04 j 08:03	17° \mathfrak{Z} 49'14				
behind sun end	784 Jan 04 j 18:04	17° \mathfrak{Z} 52'11	conjunction	790 Mar 18 j 17:38	1° \mathfrak{Y} 36'44 -2°14'28	
max. Earth dist.	784 Jan 04 j 06:31	17° \mathfrak{Z} 48'47 10.97175 AU	minimum elong	790 Mar 18 j 17:37	1° \mathfrak{Y} 36'43 2°14'27	
morning rise	784 Jan 21 j 06:52	19° \mathfrak{Z} 49'22	max. Earth dist.	790 Mar 18 j 15:28	1° \mathfrak{Y} 36'02 10.32885 AU	
retrograde	784 May 03 j 00:32	27° \mathfrak{Z} 01'48	morning rise	790 Apr 05 j 04:37	3° \mathfrak{Y} 48'43	
opposition	784 Jul 13 j 00:25	23° \mathfrak{Z} 41'22 -0°31'20	retrograde	790 Jul 21 j 03:27	11° \mathfrak{Y} 55'34	
min. Earth dist.	784 Jul 13 j 05:46	23° \mathfrak{Z} 40'22 8.93351 AU	opposition	790 Sep 28 j 04:28	8° \mathfrak{Y} 27'19 -2°49'38	
direct	784 Sep 20 j 19:27	20° \mathfrak{Z} 23'01	min. Earth dist.	790 Sep 28 j 05:33	8° \mathfrak{Y} 27'06 8.27360 AU	
evening set	784 Dec 29 j 11:40	27° \mathfrak{Z} 26'27	direct	790 Dec 04 j 01:08	5° \mathfrak{Y} 03'42	
			evening set	791 Mar 15 j 07:54	12° \mathfrak{Y} 51'33	
conjunction	785 Jan 15 j 04:44	29° \mathfrak{Z} 25'49 -0°39'05				
minimum elong	785 Jan 15 j 04:42	29° \mathfrak{Z} 25'49 0°39'05	conjunction	791 Apr 01 j 18:28	15° \mathfrak{Y} 04'50 -2°16'53	
max. Earth dist.	785 Jan 14 j 23:08	29° \mathfrak{Z} 24'09 10.89137 AU	minimum elong	791 Apr 01 j 18:29	15° \mathfrak{Y} 04'50 2°16'53	
	785 Jan 19 j 22:43	0° \mathfrak{Z}	max. Earth dist.	791 Apr 01 j 18:06	15° \mathfrak{Y} 04'43 10.21874 AU	
morning rise	785 Feb 01 j 00:32	1° \mathfrak{Z} 26'03	morning rise	791 Apr 19 j 09:27	17° \mathfrak{Y} 19'34	
retrograde	785 May 15 j 14:46	8° \mathfrak{Z} 46'03	retrograde	791 Aug 04 j 14:05	25° \mathfrak{Y} 34'06	
opposition	785 Jul 25 j 11:23	5° \mathfrak{Z} 24'24 -1°04'30	opposition	791 Oct 12 j 01:29	22° \mathfrak{Y} 04'55 -2°48'15	
min. Earth dist.	785 Jul 25 j 15:45	5° \mathfrak{Z} 23'35 8.84472 AU	min. Earth dist.	791 Oct 12 j 00:54	22° \mathfrak{Y} 05'02 8.17082 AU	
direct	785 Oct 02 j 18:48	2° \mathfrak{Z} 05'42	direct	791 Dec 17 j 13:53	18° \mathfrak{Y} 39'59	
evening set	786 Jan 10 j 08:24	9° \mathfrak{Z} 13'46	evening set	792 Mar 28 j 14:37	26° \mathfrak{Y} 36'32	
conjunction	786 Jan 27 j 03:12	11° \mathfrak{Z} 14'49 -1°05'19	conjunction	792 Apr 15 j 05:48	28° \mathfrak{Y} 52'31 -2°11'37	
minimum elong	786 Jan 27 j 03:10	11° \mathfrak{Z} 14'49 1°05'19	minimum elong	792 Apr 15 j 05:50	28° \mathfrak{Y} 52'32 2°11'38	
max. Earth dist.	786 Jan 26 j 22:30	11° \mathfrak{Z} 13'24 10.79482 AU	max. Earth dist.	792 Apr 15 j 07:02	28° \mathfrak{Y} 52'55 10.12477 AU	
morning rise	786 Feb 13 j 01:16	13° \mathfrak{Z} 16'56		792 Apr 23 j 22:35	0° \mathfrak{Z}	
	786 Feb 27 j 22:22	15° \mathfrak{Z}	morning rise	792 May 03 j 00:58	1° \mathfrak{Z} 09'51	
retrograde	786 May 28 j 11:41	20° \mathfrak{Z} 45'34	retrograde	792 Aug 18 j 04:58	9° \mathfrak{Z} 29'50	
opposition	786 Aug 07 j 03:05	17° \mathfrak{Z} 22'35 -1°35'39	opposition	792 Oct 25 j 03:12	6° \mathfrak{Z} 00'01 -2°37'04	
min. Earth dist.	786 Aug 07 j 06:34	17° \mathfrak{Z} 21'55 8.74169 AU	min. Earth dist.	792 Oct 25 j 01:17	6° \mathfrak{Z} 00'25 8.08727 AU	
	786 Sep 11 j 00:17	15° \mathfrak{Z}	direct	792 Dec 30 j 10:50	2° \mathfrak{Z} 33'48	
direct	786 Oct 14 j 21:08	14° \mathfrak{Z} 03'17	evening set	793 Apr 12 j 06:18	10° \mathfrak{Z} 37'59	
	786 Nov 17 j 01:01	15° \mathfrak{Z}				
evening set	787 Jan 22 j 12:58	21° \mathfrak{Z} 17'27	conjunction	793 Apr 30 j 02:06	12° \mathfrak{Z} 56'23 -1°58'32	
			minimum elong	793 Apr 30 j 02:10	12° \mathfrak{Z} 56'24 1°58'32	
conjunction	787 Feb 08 j 09:45	23° \mathfrak{Z} 20'28 -1°29'13	max. Earth dist.	793 Apr 30 j 04:34	12° \mathfrak{Z} 57'11 10.05318 AU	
minimum elong	787 Feb 08 j 09:42	23° \mathfrak{Z} 20'27 1°29'12		793 May 15 j 23:35	15° \mathfrak{Z}	
max. Earth dist.	787 Feb 08 j 05:06	23° \mathfrak{Z} 19'03 10.68583 AU	morning rise	793 May 18 j 01:17	15° \mathfrak{Z} 15'54	
morning rise	787 Feb 25 j 10:31	25° \mathfrak{Z} 24'43	retrograde	793 Sep 01 j 21:43	23° \mathfrak{Z} 38'37	
	787 Apr 09 j 00:37	0° \mathfrak{X}	opposition	793 Nov 08 j 08:17	20° \mathfrak{Z} 08'33 -2°16'13	
retrograde	787 Jun 10 j 16:35	3° \mathfrak{X} 02'47	min. Earth dist.	793 Nov 08 j 05:36	20° \mathfrak{Z} 09'06 8.02842 AU	
	787 Aug 15 j 07:57	30° \mathfrak{X}	direct	794 Jan 13 j 15:22	16° \mathfrak{Z} 41'07	
opposition	787 Aug 20 j 00:22	29° \mathfrak{Z} 38'25 -2°03'17	evening set	794 Apr 27 j 05:11	24° \mathfrak{Z} 51'21	
min. Earth dist.	787 Aug 20 j 03:32	29° \mathfrak{Z} 37'49 8.62834 AU				
direct	787 Oct 27 j 05:27	26° \mathfrak{Z} 18'16	conjunction	794 May 15 j 05:08	27° \mathfrak{Z} 11'37 -1°38'06	
	788 Jan 02 j 12:21	0° \mathfrak{X}	minimum elong	794 May 15 j 05:11	27° \mathfrak{Z} 11'39 1°38'06	
evening set	788 Feb 04 j 02:20	3° \mathfrak{X} 39'44	max. Earth dist.	794 May 15 j 08:47	27° \mathfrak{Z} 12'49 10.00857 AU	
			morning rise	794 Jun 02 j 07:31	29° \mathfrak{Z} 32'41	
conjunction	788 Feb 21 j 01:33	5° \mathfrak{X} 44'58 -1°49'32		794 Jun 05 j 21:15	0° \mathfrak{Z}	
minimum elong	788 Feb 21 j 01:31	5° \mathfrak{X} 44'57 1°49'31	retrograde	794 Sep 16 j 13:29	7° \mathfrak{Z} 55'10	
max. Earth dist.	788 Feb 20 j 20:54	5° \mathfrak{X} 43'31 10.56862 AU	opposition	794 Nov 22 j 15:00	4° \mathfrak{Z} 25'15 -1°46'44	
morning rise	788 Mar 09 j 05:24	7° \mathfrak{X} 51'38	min. Earth dist.	794 Nov 22 j 11:37	4° \mathfrak{Z} 25'58 7.99814 AU	
retrograde	788 Jun 23 j 04:47	15° \mathfrak{X} 39'32	direct	795 Jan 28 j 01:26	0° \mathfrak{Z} 56'47	
opposition	788 Sep 01 j 03:41	12° \mathfrak{X} 13'46 -2°25'52	evening set	795 May 12 j 08:37	9° \mathfrak{Z} 11'02	
min. Earth dist.	788 Sep 01 j 06:47	12° \mathfrak{X} 13'10 8.50907 AU				

conjunction	795 May 30 j 11:44	11° Π 32'26	-1°11'31	retrograde	800 Dec 07 j 05:32	1° Π 08'41	
minimum elong	795 May 30 j 11:47	11° Π 32'27	1°11'32		801 Jan 12 j 10:52	30° \mathbb{R} 0	
max. Earth dist.	795 May 30 j 16:35	11° Π 34'01	9.99387 AU	opposition	801 Feb 12 j 05:05	27° Ω 45'25	1°59'19
morning rise	795 Jun 17 j 16:06	13° Π 54'11		min. Earth dist.	801 Feb 12 j 01:05	27° Ω 46'13	8.38656 AU
retrograde	795 Oct 01 j 02:52	22° Π 13'36		direct	801 Apr 22 j 10:08	24° Ω 17'05	
opposition	795 Dec 06 j 21:47	18° Π 44'12	-1°10'32		801 Jul 19 j 01:36	0° Π	
min. Earth dist.	795 Dec 06 j 17:35	18° Π 45'05	7.99842 AU	evening set	801 Aug 06 j 16:24	2° Π 11'55	
direct	796 Feb 11 j 14:23	15° Π 14'56					
evening set	796 May 26 j 13:40	23° Π 30'56		conjunction	801 Aug 24 j 06:21	4° Π 22'33	1°47'04
				minimum elong	801 Aug 24 j 06:18	4° Π 22'32	1°47'04
conjunction	796 Jun 13 j 18:33	25° Π 52'32	-0°40'32	max. Earth dist.	801 Aug 24 j 10:35	4° Π 23'52	10.44624 AU
minimum elong	796 Jun 13 j 18:35	25° Π 52'32	0°40'32	morning rise	801 Sep 10 j 15:38	6° Π 31'43	
max. Earth dist.	796 Jun 14 j 00:30	25° Π 54'28	10.00989 AU	retrograde	801 Dec 20 j 01:10	14° Π 01'35	
morning rise	796 Jul 01 j 23:17	28° Π 14'01		opposition	802 Feb 25 j 09:46	10° Π 39'48	2°23'09
	796 Jul 16 j 02:40	0° \mathfrak{S}		min. Earth dist.	802 Feb 25 j 06:25	10° Π 40'27	8.50779 AU
retrograde	796 Oct 14 j 12:32	6° \mathfrak{S} 27'53		direct	802 May 06 j 04:12	7° Π 12'33	
opposition	796 Dec 20 j 02:51	2° \mathfrak{S} 59'19	-0°30'07	evening set	802 Aug 20 j 03:31	14° Π 59'28	
min. Earth dist.	796 Dec 19 j 21:44	3° \mathfrak{S} 00'22	8.02901 AU				
	797 Feb 01 j 15:39	30° \mathbb{R} Π		conjunction	802 Sep 06 j 12:18	17° Π 06'59	2°03'35
direct	797 Feb 25 j 04:47	29° Π 29'34		minimum elong	802 Sep 06 j 12:15	17° Π 06'58	2°03'35
	797 Mar 20 j 16:47	0° \mathfrak{S}		max. Earth dist.	802 Sep 06 j 15:19	17° Π 07'55	10.56809 AU
evening set	797 Jun 10 j 17:40	7° \mathfrak{S} 45'01		morning rise	802 Sep 23 j 16:23	19° Π 13'03	
				retrograde	803 Jan 01 j 13:43	26° Π 34'39	
conjunction	797 Jun 28 j 22:31	10° \mathfrak{S} 05'49	-0°07'19	opposition	803 Mar 10 j 08:37	23° Π 14'12	2°39'23
minimum elong	797 Jun 28 j 22:32	10° \mathfrak{S} 05'49	0°07'20	min. Earth dist.	803 Mar 10 j 05:38	23° Π 14'47	8.62949 AU
behind sun begin	797 Jun 28 j 15:50	10° \mathfrak{S} 03'40		direct	803 May 19 j 15:28	19° Π 48'14	
behind sun end	797 Jun 29 j 05:15	10° \mathfrak{S} 07'59		evening set	803 Sep 02 j 04:00	27° Π 26'55	
max. Earth dist.	797 Jun 29 j 05:22	10° \mathfrak{S} 08'01	10.05517 AU				
morning rise	797 Jul 17 j 01:47	12° \mathfrak{S} 26'05		conjunction	803 Sep 19 j 08:04	29° Π 31'33	2°13'52
asc. node	797 Sep 19 j 02:50	19° \mathfrak{S} 07'09		minimum elong	803 Sep 19 j 08:02	29° Π 31'33	2°13'53
retrograde	797 Oct 28 j 16:12	20° \mathfrak{S} 32'28		max. Earth dist.	803 Sep 19 j 10:28	29° Π 32'17	10.68753 AU
opposition	798 Jan 03 j 04:39	17° \mathfrak{S} 04'59	0°11'40		803 Sep 23 j 05:26	0° \mathfrak{L}	
min. Earth dist.	798 Jan 02 j 22:50	17° \mathfrak{S} 06'11	8.08761 AU	morning rise	803 Oct 06 j 07:25	1° \mathfrak{L} 34'47	
direct	798 Mar 11 j 18:11	13° \mathfrak{S} 35'05		retrograde	804 Jan 13 j 21:58	8° \mathfrak{L} 49'00	
evening set	798 Jun 25 j 17:24	21° \mathfrak{S} 47'51		opposition	804 Mar 22 j 01:55	5° \mathfrak{L} 29'46	2°47'50
				min. Earth dist.	804 Mar 21 j 23:43	5° \mathfrak{L} 30'11	8.74589 AU
conjunction	798 Jul 13 j 20:27	24° \mathfrak{S} 06'57	0°26'02	direct	804 May 31 j 17:23	2° \mathfrak{L} 05'09	
minimum elong	798 Jul 13 j 20:26	24° \mathfrak{S} 06'57	0°26'01	evening set	804 Sep 13 j 18:27	9° \mathfrak{L} 35'43	
max. Earth dist.	798 Jul 14 j 03:48	24° \mathfrak{S} 09'19	10.12651 AU				
morning rise	798 Jul 31 j 20:34	26° \mathfrak{S} 25'08		conjunction	804 Sep 30 j 18:19	11° \mathfrak{L} 37'48	2°17'54
	798 Aug 31 j 02:30	0° Ω		minimum elong	804 Sep 30 j 18:19	11° \mathfrak{L} 37'48	2°17'54
retrograde	798 Nov 11 j 12:33	4° Ω 22'48		max. Earth dist.	804 Sep 30 j 19:58	11° \mathfrak{L} 38'18	10.79911 AU
opposition	799 Jan 17 j 02:15	0° Ω 56'37	0°52'01	morning rise	804 Oct 17 j 13:40	13° \mathfrak{L} 38'36	
min. Earth dist.	799 Jan 16 j 20:26	0° Ω 57'48	8.17033 AU	retrograde	805 Jan 24 j 23:32	20° \mathfrak{L} 46'32	
	799 Jan 28 j 19:14	30° \mathbb{R} \mathfrak{S}		opposition	805 Apr 03 j 14:36	17° \mathfrak{L} 28'18	2°48'44
direct	799 Mar 26 j 04:50	27° \mathfrak{S} 26'55		min. Earth dist.	805 Apr 03 j 14:01	17° \mathfrak{L} 28'25	8.85190 AU
	799 May 20 j 08:49	0° Ω		direct	805 Jun 13 j 12:52	14° \mathfrak{L} 05'04	
evening set	799 Jul 10 j 10:09	5° Ω 35'04		evening set	805 Sep 25 j 23:41	21° \mathfrak{L} 27'54	
conjunction	799 Jul 28 j 09:48	7° Ω 51'44	0°57'15	conjunction	805 Oct 12 j 19:56	23° \mathfrak{L} 27'50	2°15'54
minimum elong	799 Jul 28 j 09:46	7° Ω 51'43	0°57'14	minimum elong	805 Oct 12 j 19:57	23° \mathfrak{L} 27'50	2°15'54
max. Earth dist.	799 Jul 28 j 16:54	7° Ω 53'59	10.21931 AU	max. Earth dist.	805 Oct 12 j 19:50	23° \mathfrak{L} 27'48	10.89816 AU
morning rise	799 Aug 15 j 05:33	10° Ω 07'11		morning rise	805 Oct 29 j 12:20	25° \mathfrak{L} 26'40	
	799 Sep 27 j 20:01	15° Ω			805 Dec 12 j 09:38	0° \mathbb{M}	
retrograde	799 Nov 25 j 01:05	17° Ω 55'32		retrograde	806 Feb 05 j 20:56	2° \mathbb{M} 29'36	
	800 Jan 24 j 17:30	15° \mathbb{R} Ω			806 Apr 05 j 04:57	30° \mathbb{R} \mathfrak{L}	
opposition	800 Jan 30 j 18:36	14° Ω 30'47	1°28'32	opposition	806 Apr 15 j 23:11	29° \mathfrak{L} 12'08	2°42'32
min. Earth dist.	800 Jan 30 j 13:28	14° Ω 31'49	8.27198 AU	min. Earth dist.	806 Apr 16 j 00:10	29° \mathfrak{L} 11'57	8.94327 AU
direct	800 Apr 08 j 10:10	11° Ω 01'36		direct	806 Jun 26 j 02:52	25° \mathfrak{L} 50'10	
	800 Jun 18 j 05:41	15° Ω			806 Sep 09 j 11:23	0° \mathbb{M}	
evening set	800 Jul 23 j 18:19	19° Ω 03'38		evening set	806 Oct 07 j 21:03	3° \mathbb{M} 05'59	
conjunction	800 Aug 10 j 13:25	21° Ω 17'24	1°24'42	conjunction	806 Oct 24 j 14:32	5° \mathbb{M} 04'13	2°08'18
minimum elong	800 Aug 10 j 13:22	21° Ω 17'23	1°24'41	minimum elong	806 Oct 24 j 14:34	5° \mathbb{M} 04'14	2°08'18
max. Earth dist.	800 Aug 10 j 19:23	21° Ω 19'17	10.32792 AU	max. Earth dist.	806 Oct 24 j 12:32	5° \mathbb{M} 03'38	10.98087 AU
morning rise	800 Aug 28 j 04:03	23° Ω 29'46		morning rise	806 Nov 10 j 04:59	7° \mathbb{M} 01'34	
	800 Nov 01 j 12:12	0° Π		retrograde	807 Feb 17 j 14:32	14° \mathbb{M} 00'49	

opposition	807 Apr 28 j 04:07	10° \mathbb{M} 43'50	2°29'52	min. Earth dist.	813 Jul 07 j 23:34	18° \mathfrak{Z} 37'16	8.96504 AU
min. Earth dist.	807 Apr 28 j 06:02	10° \mathbb{M} 43'29	9.01642 AU	direct	813 Sep 15 j 18:29	15° \mathfrak{Z} 20'02	
direct	807 Jul 08 j 10:39	7° \mathbb{M} 23'03		evening set	813 Dec 24 j 13:21	22° \mathfrak{Z} 22'07	
evening set	807 Oct 19 j 11:51	14° \mathbb{M} 32'45					
	807 Oct 23 j 09:53	15° \mathbb{M}		conjunction	814 Jan 10 j 05:47	24° \mathfrak{Z} 20'55	-0°26'34
				minimum elong	814 Jan 10 j 05:46	24° \mathfrak{Z} 20'55	0°26'35
conjunction	807 Nov 05 j 03:33	16° \mathbb{M} 29'47	1°55'41	max. Earth dist.	814 Jan 09 j 22:36	24° \mathfrak{Z} 18'47	10.92455 AU
minimum elong	807 Nov 05 j 03:35	16° \mathbb{M} 29'48	1°55'40	morning rise	814 Jan 27 j 00:35	26° \mathfrak{Z} 20'28	
max. Earth dist.	807 Nov 05 j 00:38	16° \mathbb{M} 28'56	11.04388 AU		814 Mar 01 j 21:12	0° \approx	
morning rise	807 Nov 21 j 16:46	18° \mathbb{M} 26'08		retrograde	814 May 10 j 06:21	3° \approx 37'09	
retrograde	808 Feb 29 j 07:49	25° \mathbb{M} 23'10		opposition	814 Jul 20 j 03:21	0° \approx 15'57	-0°49'26
opposition	808 May 09 j 06:36	22° \mathbb{M} 06'22	2°11'31	min. Earth dist.	814 Jul 20 j 09:10	0° \approx 14'52	8.87911 AU
min. Earth dist.	808 May 09 j 08:55	22° \mathbb{M} 05'57	9.06821 AU		814 Jul 23 j 16:35	30° \mathbb{R} \mathfrak{Z}	
direct	808 Jul 19 j 14:38	18° \mathbb{M} 46'35		direct	814 Sep 27 j 15:17	26° \mathfrak{Z} 57'13	
evening set	808 Oct 29 j 21:51	25° \mathbb{M} 51'21			814 Nov 28 j 10:09	0° \approx	
				evening set	815 Jan 05 j 07:13	4° \approx 03'23	
conjunction	808 Nov 15 j 12:26	27° \mathbb{M} 47'38	1°38'38				
minimum elong	808 Nov 15 j 12:29	27° \mathbb{M} 47'38	1°38'38	conjunction	815 Jan 22 j 01:04	6° \approx 03'44	-0°53'29
max. Earth dist.	808 Nov 15 j 09:00	27° \mathbb{M} 46'37	11.08434 AU	minimum elong	815 Jan 22 j 01:02	6° \approx 03'43	0°53'30
morning rise	808 Dec 02 j 01:06	29° \mathbb{M} 43'25		max. Earth dist.	815 Jan 21 j 17:38	6° \approx 01'29	10.83029 AU
	808 Dec 04 j 10:59	0° \mathfrak{A}		morning rise	815 Feb 07 j 22:12	8° \approx 05'05	
retrograde	809 Mar 12 j 01:41	6° \mathfrak{A} 39'46			815 Apr 28 j 04:46	15° \approx	
opposition	809 May 21 j 07:39	3° \mathfrak{A} 22'55	1°48'16	retrograde	815 May 22 j 22:06	15° \approx 30'00	
min. Earth dist.	809 May 21 j 11:17	3° \mathfrak{A} 22'15	9.09629 AU		815 Jun 16 j 22:25	15° \mathbb{R} \approx	
direct	809 Jul 31 j 12:51	0° \mathfrak{A} 03'57		opposition	815 Aug 01 j 16:54	12° \approx 07'19	-1°21'43
evening set	809 Nov 10 j 04:52	7° \mathfrak{A} 05'06		min. Earth dist.	815 Aug 01 j 22:43	12° \approx 06'13	8.77756 AU
				direct	815 Oct 09 j 16:56	8° \approx 47'53	
conjunction	809 Nov 26 j 18:50	9° \mathfrak{A} 01'05	1°17'53		816 Jan 08 j 21:12	15° \approx	
minimum elong	809 Nov 26 j 18:52	9° \mathfrak{A} 01'06	1°17'54	evening set	816 Jan 17 j 08:00	15° \approx 59'38	
max. Earth dist.	809 Nov 26 j 13:35	8° \mathfrak{A} 59'32	11.10031 AU				
morning rise	809 Dec 13 j 07:49	10° \mathfrak{A} 56'50		conjunction	816 Feb 03 j 03:49	18° \approx 01'52	-1°18'37
retrograde	810 Mar 23 j 18:07	17° \mathfrak{A} 54'06		minimum elong	816 Feb 03 j 03:46	18° \approx 01'51	1°18'37
opposition	810 Jun 02 j 08:18	14° \mathfrak{A} 36'56	1°20'58	max. Earth dist.	816 Feb 02 j 21:35	17° \approx 59'58	10.72215 AU
min. Earth dist.	810 Jun 02 j 13:34	14° \mathfrak{A} 35'58	9.09935 AU	morning rise	816 Feb 20 j 03:25	20° \approx 05'16	
direct	810 Aug 12 j 08:13	11° \mathfrak{A} 18'31		retrograde	816 Jun 03 j 23:10	27° \approx 39'28	
evening set	810 Nov 21 j 10:32	18° \mathfrak{A} 17'38		opposition	816 Aug 13 j 11:48	24° \approx 15'14	-1°51'12
				min. Earth dist.	816 Aug 13 j 16:27	24° \approx 14'21	8.66437 AU
conjunction	810 Dec 08 j 00:26	20° \mathfrak{A} 13'45	0°54'10	direct	816 Oct 21 j 00:29	20° \approx 54'57	
minimum elong	810 Dec 08 j 00:28	20° \mathfrak{A} 13'45	0°54'11	evening set	817 Jan 28 j 17:04	28° \approx 13'32	
max. Earth dist.	810 Dec 07 j 17:30	20° \mathfrak{A} 11'42	11.09117 AU		817 Feb 12 j 05:11	0° \mathfrak{H}	
morning rise	810 Dec 24 j 14:25	22° \mathfrak{A} 09'54					
retrograde	811 Apr 04 j 14:25	29° \mathfrak{A} 09'46		conjunction	817 Feb 14 j 15:18	0° \mathfrak{H} 17'56	-1°40'46
opposition	811 Jun 14 j 09:32	25° \mathfrak{A} 51'58	0°50'32	minimum elong	817 Feb 14 j 15:15	0° \mathfrak{H} 17'55	1°40'45
min. Earth dist.	811 Jun 14 j 15:39	25° \mathfrak{A} 50'51	9.07751 AU	max. Earth dist.	817 Feb 14 j 10:41	0° \mathfrak{H} 16'31	10.60448 AU
direct	811 Aug 24 j 04:13	22° \mathfrak{A} 33'52		morning rise	817 Mar 03 j 17:39	2° \mathfrak{H} 23'39	
evening set	811 Dec 02 j 16:42	29° \mathfrak{A} 32'27		retrograde	817 Jun 17 j 08:51	10° \mathfrak{H} 07'45	
	811 Dec 06 j 15:48	0° \mathfrak{Z}		opposition	817 Aug 26 j 12:29	6° \mathfrak{H} 42'00	-2°16'21
				min. Earth dist.	817 Aug 26 j 15:36	6° \mathfrak{H} 41'24	8.54420 AU
conjunction	811 Dec 19 j 07:09	1° \mathfrak{Z} 29'06	0°28'16	direct	817 Nov 02 j 11:31	3° \mathfrak{H} 20'42	
minimum elong	811 Dec 19 j 07:09	1° \mathfrak{Z} 29'06	0°28'16	evening set	818 Feb 10 j 11:54	10° \mathfrak{H} 47'16	
max. Earth dist.	811 Dec 19 j 00:11	1° \mathfrak{Z} 27'03	11.05762 AU				
morning rise	812 Jan 04 j 22:20	3° \mathfrak{Z} 26'02		conjunction	818 Feb 27 j 12:58	12° \mathfrak{H} 54'04	-1°58'38
retrograde	812 Apr 15 j 14:03	10° \mathfrak{Z} 30'03		minimum elong	818 Feb 27 j 12:56	12° \mathfrak{H} 54'03	1°58'37
opposition	812 Jun 25 j 12:22	7° \mathfrak{Z} 11'20	0°17'55	max. Earth dist.	818 Feb 27 j 09:19	12° \mathfrak{H} 52'56	10.48238 AU
min. Earth dist.	812 Jun 25 j 18:08	7° \mathfrak{Z} 10'16	9.03205 AU	morning rise	818 Mar 16 j 18:33	15° \mathfrak{H} 02'21	
direct	812 Sep 03 j 22:33	3° \mathfrak{Z} 53'18		retrograde	818 Jul 01 j 01:46	22° \mathfrak{H} 56'25	
evening set	812 Dec 13 j 01:05	10° \mathfrak{Z} 52'52		opposition	818 Sep 08 j 19:11	19° \mathfrak{H} 29'15	-2°35'33
				min. Earth dist.	818 Sep 08 j 21:09	19° \mathfrak{H} 28'51	8.42240 AU
conjunction	812 Dec 29 j 16:26	12° \mathfrak{Z} 50'26	0°01'04	direct	818 Nov 15 j 06:00	16° \mathfrak{H} 06'48	
minimum elong	812 Dec 29 j 16:26	12° \mathfrak{Z} 50'26	0°01'04	evening set	819 Feb 23 j 17:07	23° \mathfrak{H} 42'08	
behind sun begin	812 Dec 29 j 09:28	12° \mathfrak{Z} 48'23					
behind sun end	812 Dec 29 j 23:25	12° \mathfrak{Z} 52'28		conjunction	819 Mar 12 j 21:32	25° \mathfrak{H} 51'35	-2°11'00
max. Earth dist.	812 Dec 29 j 09:45	12° \mathfrak{Z} 48'28	11.00130 AU	minimum elong	819 Mar 12 j 21:30	25° \mathfrak{H} 51'34	2°11'00
desc. node	813 Jan 12 j 19:31	14° \mathfrak{Z} 30'32		max. Earth dist.	819 Mar 12 j 18:32	25° \mathfrak{H} 50'38	10.36162 AU
morning rise	813 Jan 15 j 09:11	14° \mathfrak{Z} 48'29		morning rise	819 Mar 30 j 06:48	28° \mathfrak{H} 02'33	
retrograde	813 Apr 27 j 19:48	21° \mathfrak{Z} 58'09			819 Apr 15 j 12:54	0° \mathfrak{Y}	
opposition	813 Jul 07 j 18:03	18° \mathfrak{Z} 38'17	-0°15'47	retrograde	819 Jul 15 j 02:15	6° \mathfrak{Y} 06'08	

opposition	819 Sep 22 j 08:16	2°♊37'43 -2°47'17	minimum elong	825 Jun 07 j 07:15	19°♊41'46 0°54'52
min. Earth dist.	819 Sep 22 j 09:29	2°♊37'29 8.30495 AU	max. Earth dist.	825 Jun 07 j 14:53	19°♊44'15 9.99783 AU
	819 Oct 30 j 01:28	30°♋	morning rise	825 Jun 25 j 11:52	22°♊03'33
direct	819 Nov 28 j 08:25	29°♋14'03		825 Sep 19 j 08:27	0°♋
	819 Dec 27 j 06:41	0°♊	retrograde	825 Oct 08 j 13:38	0°♋20'37
evening set	820 Mar 08 j 08:46	6°♊58'28		825 Oct 27 j 17:24	30°♋♊
			opposition	825 Dec 14 j 03:58	26°♊51'51 -0°48'33
conjunction	820 Mar 25 j 17:12	9°♊10'39 -2°16'45	min. Earth dist.	825 Dec 13 j 22:04	26°♊53'04 8.01248 AU
minimum elong	820 Mar 25 j 17:12	9°♊10'39 2°16'45	direct	826 Feb 18 j 23:35	23°♊22'36
max. Earth dist.	820 Mar 25 j 15:39	9°♊10'10 10.24846 AU		826 May 22 j 03:33	0°♋
morning rise	820 Apr 12 j 06:30	11°♊24'23	evening set	826 Jun 04 j 08:26	1°♋38'53
retrograde	820 Jul 28 j 09:51	19°♊36'20			
opposition	820 Oct 05 j 03:15	16°♊06'56 -2°50'13	conjunction	826 Jun 22 j 13:26	4°♋00'10 -0°22'18
min. Earth dist.	820 Oct 05 j 03:26	16°♊06'54 8.19820 AU	minimum elong	826 Jun 22 j 13:27	4°♋00'10 0°22'18
direct	820 Dec 10 j 18:37	12°♊42'01	max. Earth dist.	826 Jun 22 j 21:18	4°♋02'43 10.03424 AU
evening set	821 Mar 22 j 11:06	20°♊35'19	morning rise	826 Jul 10 j 17:29	6°♋21'08
			retrograde	826 Oct 22 j 20:27	14°♋31'20
conjunction	821 Apr 09 j 00:07	22°♊50'16 -2°15'02	opposition	826 Dec 28 j 08:06	11°♋03'44 -0°06'58
minimum elong	821 Apr 09 j 00:08	22°♊50'16 2°15'02	min. Earth dist.	826 Dec 28 j 02:19	11°♋04'55 8.06289 AU
max. Earth dist.	821 Apr 09 j 00:35	22°♊50'25 10.14932 AU	asc. node	827 Mar 01 j 10:03	7°♋35'18
morning rise	821 Apr 26 j 17:36	25°♊06'39	direct	827 Mar 05 j 14:51	7°♋34'18
	821 Jun 08 j 10:21	0°♋	evening set	827 Jun 19 j 11:00	15°♋48'40
retrograde	821 Aug 11 j 22:05	3°♋25'03			
	821 Oct 18 j 02:40	30°♋♊	conjunction	827 Jul 07 j 14:52	18°♋08'35 0°11'20
opposition	821 Oct 19 j 03:13	29°♊55'00 -2°43'28	minimum elong	827 Jul 07 j 14:51	18°♋08'34 0°11'20
min. Earth dist.	821 Oct 19 j 02:01	29°♊55'14 8.10840 AU	behind sun begin	827 Jul 07 j 09:34	18°♋06'53
direct	821 Dec 24 j 13:29	26°♊28'53	behind sun end	827 Jul 07 j 20:09	18°♋10'16
	822 Feb 26 j 06:51	0°♋	max. Earth dist.	827 Jul 07 j 22:15	18°♋10'57 10.09822 AU
evening set	822 Apr 05 j 23:07	4°♋30'19	morning rise	827 Jul 25 j 16:38	20°♋27'46
			retrograde	827 Nov 05 j 19:38	28°♋29'32
conjunction	822 Apr 23 j 16:56	6°♋47'49 -2°05'27	opposition	828 Jan 11 j 08:08	25°♋03'15 0°34'22
minimum elong	822 Apr 23 j 16:59	6°♋47'50 2°05'27	min. Earth dist.	828 Jan 11 j 02:28	25°♋04'24 8.13884 AU
max. Earth dist.	822 Apr 23 j 19:51	6°♋48'46 10.07023 AU	direct	828 Mar 19 j 04:11	21°♋33'55
morning rise	822 May 11 j 14:27	9°♋06'34	evening set	828 Jul 03 j 07:39	29°♋44'18
	822 Jul 03 j 16:46	15°♋		828 Jul 05 j 09:38	0°♌
retrograde	822 Aug 26 j 13:51	17°♋28'57			
	822 Oct 20 j 16:38	15°♋♋	conjunction	828 Jul 21 j 08:49	2°♌02'03 0°43'43
opposition	822 Nov 02 j 07:14	13°♋58'37 -2°26'52	minimum elong	828 Jul 21 j 08:47	2°♌02'02 0°43'43
min. Earth dist.	822 Nov 02 j 04:12	13°♋59'14 8.04121 AU	max. Earth dist.	828 Jul 21 j 15:25	2°♌04'10 10.18477 AU
direct	823 Jan 07 j 15:14	10°♋31'27	morning rise	828 Aug 08 j 06:48	4°♌18'44
	823 Mar 21 j 08:53	15°♋	retrograde	828 Nov 18 j 11:21	12°♌11'14
evening set	823 Apr 20 j 19:12	18°♋39'37	opposition	829 Jan 24 j 03:08	8°♌46'21 1°12'52
			min. Earth dist.	829 Jan 23 j 21:47	8°♌47'25 8.23431 AU
conjunction	823 May 08 j 17:30	20°♋59'16 -1°48'12	direct	829 Apr 02 j 12:40	5°♌17'25
minimum elong	823 May 08 j 17:33	20°♋59'17 1°48'13	evening set	829 Jul 17 j 20:16	13°♌22'16
max. Earth dist.	823 May 08 j 22:39	21°♋00'57 10.01641 AU		829 Jul 30 j 19:44	15°♌
morning rise	823 May 26 j 18:30	23°♋19'50			
	823 Jul 28 j 03:58	0°♊	conjunction	829 Aug 04 j 17:26	15°♌37'18 1°13'02
retrograde	823 Sep 10 j 07:11	1°♊43'22	minimum elong	829 Aug 04 j 17:23	15°♌37'17 1°13'01
	823 Oct 24 j 23:39	30°♋♋	max. Earth dist.	829 Aug 04 j 23:03	15°♌39'04 10.28723 AU
opposition	823 Nov 16 j 13:51	28°♋13'10 -2°01'02	morning rise	829 Aug 22 j 10:30	17°♌51'01
min. Earth dist.	823 Nov 16 j 09:11	28°♋14'08 8.00122 AU	retrograde	829 Dec 01 j 20:21	25°♌34'09
direct	824 Jan 21 j 22:12	24°♋45'06	opposition	830 Feb 06 j 16:30	22°♌10'43 1°46'23
	824 Apr 10 j 15:55	0°♊	min. Earth dist.	830 Feb 06 j 11:46	22°♌11'40 8.34261 AU
evening set	824 May 04 j 21:21	2°♊58'11	direct	830 Apr 16 j 15:25	18°♌42'29
			evening set	830 Jul 31 j 23:18	26°♌40'43
conjunction	824 May 22 j 23:20	5°♊19'18 -1°24'10			
minimum elong	824 May 22 j 23:24	5°♊19'19 1°24'10	conjunction	830 Aug 18 j 15:41	28°♌52'45 1°37'47
max. Earth dist.	824 May 23 j 06:07	5°♊21'31 9.99170 AU	minimum elong	830 Aug 18 j 15:38	28°♌52'44 1°37'47
morning rise	824 Jun 10 j 02:53	7°♊40'57	max. Earth dist.	830 Aug 18 j 20:25	28°♌54'14 10.39948 AU
retrograde	824 Sep 24 j 00:05	16°♊02'38		830 Aug 27 j 14:36	0°♎
opposition	824 Nov 29 j 21:18	12°♊32'58 -1°27'30	morning rise	830 Sep 05 j 03:18	1°♎03'20
min. Earth dist.	824 Nov 29 j 15:42	12°♊34'07 7.99141 AU	retrograde	830 Dec 14 j 20:53	8°♎37'26
direct	825 Feb 04 j 08:58	9°♊04'11	opposition	831 Feb 20 j 00:14	5°♎15'26 2°13'26
evening set	825 May 20 j 02:49	17°♊20'02	min. Earth dist.	831 Feb 19 j 20:34	5°♎16'10 8.45819 AU
			direct	831 Apr 30 j 12:10	1°♎48'08
conjunction	825 Jun 07 j 07:12	19°♊41'45 -0°54'51	evening set	831 Aug 14 j 15:52	9°♎38'55

conjunction	831 Sep 01 j 03:07	11° \mathring{M} 47'52	1°56'59	conjunction	837 Nov 11 j 01:14	23° \mathring{M} 13'17	1°46'28
minimum elong	831 Sep 01 j 03:05	11° \mathring{M} 47'52	1°56'59	minimum elong	837 Nov 11 j 01:16	23° \mathring{M} 13'18	1°46'28
max. Earth dist.	831 Sep 01 j 06:43	11° \mathring{M} 48'59	10.51639 AU	max. Earth dist.	837 Nov 10 j 20:53	23° \mathring{M} 12'00	11.04785 AU
morning rise	831 Sep 18 j 09:23	13° \mathring{M} 55'21		morning rise	837 Nov 27 j 14:17	25° \mathring{M} 09'30	
retrograde	831 Dec 27 j 13:58	21° \mathring{M} 20'59			838 Jan 14 j 21:13	0° \mathring{A}	
opposition	832 Mar 04 j 02:14	18° \mathring{M} 00'17	2°33'05	retrograde	838 Mar 07 j 09:22	2° \mathring{A} 06'39	
min. Earth dist.	832 Mar 04 j 00:13	18° \mathring{M} 00'41	8.57591 AU		838 Apr 30 j 05:15	30° \mathring{R} \mathring{M}	
direct	832 May 13 j 02:08	14° \mathring{M} 34'02		opposition	838 May 16 j 13:14	28° \mathring{M} 49'18	1°58'52
evening set	832 Aug 26 j 21:56	22° \mathring{M} 16'54		min. Earth dist.	838 May 16 j 17:04	28° \mathring{M} 48'35	9.06513 AU
				direct	838 Jul 26 j 20:05	25° \mathring{M} 29'22	
conjunction	832 Sep 13 j 04:05	24° \mathring{M} 22'54	2°10'03		838 Oct 13 j 13:29	0° \mathring{A}	
minimum elong	832 Sep 13 j 04:03	24° \mathring{M} 22'53	2°10'03	evening set	838 Nov 05 j 18:34	2° \mathring{A} 32'40	
max. Earth dist.	832 Sep 13 j 05:37	24° \mathring{M} 23'22	10.63281 AU				
morning rise	832 Sep 30 j 05:27	26° \mathring{M} 27'27		conjunction	838 Nov 22 j 08:51	4° \mathring{A} 28'57	1°27'13
	832 Oct 31 j 22:48	0° \mathring{A}		minimum elong	838 Nov 22 j 08:53	4° \mathring{A} 28'57	1°27'13
retrograde	833 Jan 08 j 00:23	3° \mathring{A} 45'21		max. Earth dist.	838 Nov 22 j 04:11	4° \mathring{A} 27'34	11.07487 AU
opposition	833 Mar 16 j 22:37	0° \mathring{A} 25'49	2°45'00	morning rise	838 Dec 08 j 21:52	6° \mathring{A} 24'54	
min. Earth dist.	833 Mar 16 j 21:58	0° \mathring{A} 25'56	8.69052 AU	retrograde	839 Mar 19 j 02:02	13° \mathring{A} 22'11	
	833 Mar 22 j 12:53	30° \mathring{R} \mathring{M}		opposition	839 May 28 j 13:55	10° \mathring{A} 04'34	1°33'10
direct	833 May 26 j 08:32	27° \mathring{M} 00'41		min. Earth dist.	839 May 28 j 17:42	10° \mathring{A} 03'53	9.08053 AU
	833 Jul 27 j 15:10	0° \mathring{A}		direct	839 Aug 07 j 17:30	6° \mathring{A} 45'20	
evening set	833 Sep 08 j 17:29	4° \mathring{A} 35'28		evening set	839 Nov 17 j 00:46	13° \mathring{A} 45'48	
conjunction	833 Sep 25 j 19:03	6° \mathring{A} 38'47	2°16'49	conjunction	839 Dec 03 j 14:54	15° \mathring{A} 42'00	1°04'39
minimum elong	833 Sep 25 j 19:02	6° \mathring{A} 38'47	2°16'50	minimum elong	839 Dec 03 j 14:56	15° \mathring{A} 42'01	1°04'40
max. Earth dist.	833 Sep 25 j 18:48	6° \mathring{A} 38'43	10.74370 AU	max. Earth dist.	839 Dec 03 j 10:18	15° \mathring{A} 40'39	11.07916 AU
morning rise	833 Oct 12 j 16:15	8° \mathring{A} 40'47		morning rise	839 Dec 20 j 04:23	17° \mathring{A} 38'06	
retrograde	834 Jan 20 j 03:08	15° \mathring{A} 51'59		retrograde	840 Mar 29 j 22:30	24° \mathring{A} 37'07	
opposition	834 Mar 29 j 13:54	12° \mathring{A} 33'19	2°49'12	opposition	840 Jun 08 j 14:55	21° \mathring{A} 19'04	1°03'55
min. Earth dist.	834 Mar 29 j 13:53	12° \mathring{A} 33'20	8.79705 AU	min. Earth dist.	840 Jun 08 j 18:56	21° \mathring{A} 18'19	9.07298 AU
direct	834 Jun 08 j 09:40	9° \mathring{A} 09'22		direct	840 Aug 18 j 13:08	18° \mathring{A} 00'21	
evening set	834 Sep 21 j 03:00	16° \mathring{A} 36'15		evening set	840 Nov 27 j 06:36	24° \mathring{A} 59'23	
conjunction	834 Oct 08 j 00:51	18° \mathring{A} 37'16	2°17'26	conjunction	840 Dec 13 j 20:52	26° \mathring{A} 55'55	0°39'34
minimum elong	834 Oct 08 j 00:51	18° \mathring{A} 37'16	2°17'26	minimum elong	840 Dec 13 j 20:53	26° \mathring{A} 55'55	0°39'35
max. Earth dist.	834 Oct 07 j 23:49	18° \mathring{A} 36'57	10.84434 AU	max. Earth dist.	840 Dec 13 j 15:29	26° \mathring{A} 54'19	11.06053 AU
morning rise	834 Oct 24 j 18:38	20° \mathring{A} 37'06		morning rise	840 Dec 30 j 11:28	28° \mathring{A} 52'35	
retrograde	835 Feb 01 j 03:27	27° \mathring{A} 42'47			841 Jan 09 j 09:16	0° \mathring{B}	
opposition	835 Apr 11 j 00:32	24° \mathring{A} 24'46	2°46'03	retrograde	841 Apr 10 j 20:03	5° \mathring{B} 54'52	
min. Earth dist.	835 Apr 11 j 00:59	24° \mathring{A} 24'42	8.89098 AU	opposition	841 Jun 20 j 17:12	2° \mathring{B} 36'09	0°32'05
direct	835 Jun 21 j 03:24	21° \mathring{A} 01'59		min. Earth dist.	841 Jun 20 j 22:07	2° \mathring{B} 35'15	9.04280 AU
evening set	835 Oct 03 j 04:04	28° \mathring{A} 21'30			841 Jul 31 j 09:20	30° \mathring{R} \mathring{A}	
	835 Oct 17 j 01:42	0° \mathring{M}		direct	841 Aug 30 j 06:28	29° \mathring{A} 17'45	
conjunction	835 Oct 19 j 22:59	0° \mathring{M} 20'39	2°12'13		841 Sep 28 j 16:23	0° \mathring{B}	
minimum elong	835 Oct 19 j 23:00	0° \mathring{M} 20'39	2°12'13	evening set	841 Dec 08 j 13:54	6° \mathring{B} 16'56	
max. Earth dist.	835 Oct 19 j 21:36	0° \mathring{M} 20'14	10.93057 AU				
morning rise	835 Nov 05 j 14:13	2° \mathring{M} 18'47		conjunction	841 Dec 25 j 04:44	8° \mathring{B} 14'07	0°12'49
retrograde	836 Feb 13 j 00:04	9° \mathring{M} 20'10		minimum elong	841 Dec 25 j 04:44	8° \mathring{B} 14'07	0°12'50
opposition	836 Apr 22 j 07:17	6° \mathring{M} 02'37	2°36'07	behind sun begin	841 Dec 25 j 00:18	8° \mathring{B} 12'50	
min. Earth dist.	836 Apr 22 j 09:00	6° \mathring{M} 02'18	8.96867 AU	behind sun end	841 Dec 25 j 09:10	8° \mathring{B} 15'25	
direct	836 Jul 02 j 12:28	2° \mathring{M} 40'53		max. Earth dist.	841 Dec 24 j 22:27	8° \mathring{B} 12'17	11.01967 AU
evening set	836 Oct 13 j 22:02	9° \mathring{M} 53'53		morning rise	842 Jan 10 j 20:55	10° \mathring{B} 11'44	
				retrograde	842 Apr 22 j 21:41	17° \mathring{B} 18'50	
conjunction	836 Oct 30 j 14:38	11° \mathring{M} 51'38	2°01'42	desc. node	842 Jun 18 j 11:27	15° \mathring{B} 02'11	
minimum elong	836 Oct 30 j 14:40	11° \mathring{M} 51'38	2°01'41	opposition	842 Jul 02 j 21:31	13° \mathring{B} 59'15	-0°01'17
max. Earth dist.	836 Oct 30 j 11:54	11° \mathring{M} 50'49	10.99918 AU	min. Earth dist.	842 Jul 03 j 02:43	13° \mathring{B} 58'17	8.99111 AU
morning rise	836 Nov 16 j 04:18	13° \mathring{M} 48'34		direct	842 Sep 11 j 02:06	10° \mathring{B} 40'54	
	836 Nov 26 j 15:17	15° \mathring{M}		evening set	842 Dec 20 j 00:14	17° \mathring{B} 41'48	
retrograde	837 Feb 23 j 16:40	20° \mathring{M} 47'05					
opposition	837 May 04 j 11:17	17° \mathring{M} 29'45	2°20'08	conjunction	843 Jan 05 j 16:08	19° \mathring{B} 40'02	-0°14'47
min. Earth dist.	837 May 04 j 14:28	17° \mathring{M} 29'09	9.02739 AU	minimum elong	843 Jan 05 j 16:08	19° \mathring{B} 40'02	0°14'47
	837 Jun 11 j 13:02	15° \mathring{R} \mathring{M}		behind sun begin	843 Jan 05 j 13:08	19° \mathring{B} 39'09	
direct	837 Jul 14 j 18:25	14° \mathring{M} 08'58		behind sun end	843 Jan 05 j 19:08	19° \mathring{B} 40'55	
	837 Aug 16 j 12:01	15° \mathring{M}		max. Earth dist.	843 Jan 05 j 10:23	19° \mathring{B} 38'20	10.95793 AU
evening set	837 Oct 25 j 10:14	21° \mathring{M} 16'31		morning rise	843 Jan 22 j 10:07	21° \mathring{B} 38'55	
				retrograde	843 May 05 j 06:04	28° \mathring{B} 52'18	
				opposition	843 Jul 15 j 04:58	25° \mathring{B} 31'39	-0°35'06

min. Earth dist.	843 Jul 15 j 09:31	25° Z 30'48	8.91962 AU	opposition	849 Sep 29 j 12:02	10° Y 27'18	-2°49'45
direct	843 Sep 22 j 23:05	22° Z 13'10		min. Earth dist.	849 Sep 29 j 12:09	10° Y 27'17	8.27047 AU
evening set	843 Dec 31 j 15:21	29° Z 17'18		direct	849 Dec 05 j 06:51	7° Y 03'39	
	844 Jan 06 j 15:48	0° \approx		evening set	850 Mar 16 j 16:02	14° Y 51'49	
conjunction	844 Jan 17 j 08:38	1° \approx 16'53	-0°42'05	conjunction	850 Apr 03 j 02:50	17° Y 05'11	-2°16'34
minimum elong	844 Jan 17 j 08:37	1° \approx 16'53	0°42'06	minimum elong	850 Apr 03 j 02:51	17° Y 05'11	2°16'33
max. Earth dist.	844 Jan 17 j 03:51	1° \approx 15'27	10.87741 AU	max. Earth dist.	850 Apr 03 j 02:36	17° Y 05'06	10.21700 AU
morning rise	844 Feb 03 j 04:32	3° \approx 17'20		morning rise	850 Apr 20 j 18:07	19° Y 20'01	
retrograde	844 May 16 j 20:31	10° \approx 38'19		retrograde	850 Aug 05 j 23:13	27° Y 34'32	
opposition	844 Jul 26 j 16:33	7° \approx 16'27	-1°08'05	opposition	850 Oct 13 j 09:01	24° Y 05'24	-2°47'19
min. Earth dist.	844 Jul 26 j 20:08	7° \approx 15'47	8.83095 AU	min. Earth dist.	850 Oct 13 j 08:13	24° Y 05'33	8.17040 AU
direct	844 Oct 03 j 22:28	3° \approx 57'38		direct	850 Dec 18 j 21:00	20° Y 40'27	
evening set	845 Jan 11 j 12:58	11° \approx 06'29		evening set	851 Mar 30 j 23:03	28° Y 37'10	
					851 Apr 10 j 17:48	0° Z	
conjunction	845 Jan 28 j 07:51	13° \approx 07'44	-1°08'06	conjunction	851 Apr 17 j 14:26	0° Z 53'13	-2°10'28
minimum elong	845 Jan 28 j 07:48	13° \approx 07'44	1°08'06	minimum elong	851 Apr 17 j 14:28	0° Z 53'14	2°10'28
max. Earth dist.	845 Jan 28 j 03:05	13° \approx 06'18	10.78131 AU	max. Earth dist.	851 Apr 17 j 15:09	0° Z 53'27	10.12564 AU
	845 Feb 12 j 20:15	15° \approx		morning rise	851 May 05 j 09:58	3° Z 10'36	
morning rise	845 Feb 14 j 06:09	15° \approx 10'05		retrograde	851 Aug 20 j 12:39	11° Z 30'19	
retrograde	845 May 29 j 18:52	22° \approx 39'42		opposition	851 Oct 27 j 10:40	8° Z 00'37	-2°35'07
opposition	845 Aug 08 j 09:04	19° \approx 16'32	-1°38'53	min. Earth dist.	851 Oct 27 j 09:06	8° Z 00'56	8.08932 AU
min. Earth dist.	845 Aug 08 j 12:26	19° \approx 15'54	8.72868 AU	direct	852 Jan 01 j 18:57	4° Z 34'23	
direct	845 Oct 16 j 01:51	15° \approx 57'07		evening set	852 Apr 13 j 14:40	12° Z 38'34	
evening set	846 Jan 23 j 18:19	23° \approx 12'03					
conjunction	846 Feb 09 j 15:13	25° \approx 15'16	-1°31'37	conjunction	852 May 01 j 10:42	14° Z 56'59	-1°56'36
minimum elong	846 Feb 09 j 15:10	25° \approx 15'15	1°31'37	minimum elong	852 May 01 j 10:45	14° Z 57'00	1°56'36
max. Earth dist.	846 Feb 09 j 10:30	25° \approx 13'50	10.67345 AU		852 May 01 j 19:58	15° Z	
morning rise	846 Feb 26 j 16:19	27° \approx 19'46		max. Earth dist.	852 May 01 j 12:47	14° Z 57'40	10.05645 AU
	846 Mar 21 j 23:18	0° X		morning rise	852 May 19 j 10:12	17° Z 16'30	
retrograde	846 Jun 11 j 23:44	4° X 58'46		retrograde	852 Sep 03 j 04:17	25° Z 38'45	
opposition	846 Aug 21 j 07:02	1° X 34'16	-2°05'59	opposition	852 Nov 09 j 15:29	22° Z 08'49	-2°13'22
min. Earth dist.	846 Aug 21 j 10:15	1° X 33'39	8.61683 AU	min. Earth dist.	852 Nov 09 j 13:09	22° Z 09'18	8.03278 AU
	846 Sep 11 j 13:01	30° X		direct	853 Jan 14 j 23:21	18° Z 41'24	
direct	846 Oct 28 j 10:26	28° \approx 14'00		evening set	853 Apr 28 j 13:26	26° Z 51'25	
	846 Dec 12 j 19:40	0° X					
evening set	847 Feb 05 j 08:36	5° X 36'14		conjunction	853 May 16 j 13:39	29° Z 11'41	-1°35'32
				minimum elong	853 May 16 j 13:43	29° Z 11'43	1°35'32
conjunction	847 Feb 22 j 08:05	7° X 41'40	-1°51'25	max. Earth dist.	853 May 16 j 17:21	29° Z 12'54	10.01407 AU
minimum elong	847 Feb 22 j 08:03	7° X 41'40	1°51'25		853 May 22 j 17:36	0° Z	
max. Earth dist.	847 Feb 22 j 04:16	7° X 40'29	10.55809 AU	morning rise	853 Jun 03 j 16:15	1° Z 32'42	
morning rise	847 Mar 11 j 12:10	9° X 48'32		retrograde	853 Sep 17 j 19:57	9° Z 54'30	
retrograde	847 Jun 25 j 11:20	17° X 37'15		opposition	853 Nov 23 j 21:45	6° Z 24'43	-1°43'11
opposition	847 Sep 03 j 10:42	14° X 11'23	-2°27'51	min. Earth dist.	853 Nov 23 j 18:17	6° Z 25'26	8.00458 AU
min. Earth dist.	847 Sep 03 j 13:18	14° X 10'52	8.49987 AU	direct	854 Jan 29 j 08:36	2° Z 56'18	
direct	847 Nov 10 j 03:21	10° X 50'07		evening set	854 May 13 j 16:39	11° Z 10'11	
evening set	848 Feb 18 j 08:38	18° X 20'31					
conjunction	848 Mar 06 j 11:22	20° X 28'27	-2°06'15	conjunction	854 May 31 j 20:00	13° Z 31'31	-1°08'28
minimum elong	848 Mar 06 j 11:21	20° X 28'26	2°06'15	minimum elong	854 May 31 j 20:03	13° Z 31'32	1°08'29
max. Earth dist.	848 Mar 06 j 09:11	20° X 27'45	10.43997 AU	max. Earth dist.	854 Jun 01 j 01:16	13° Z 33'14	10.00127 AU
morning rise	848 Mar 23 j 18:45	22° X 37'51		morning rise	854 Jun 19 j 00:22	15° Z 53'09	
	848 Jun 11 j 17:19	0° Y		retrograde	854 Oct 02 j 09:34	24° Z 11'44	
retrograde	848 Jul 08 j 08:06	0° Y 36'09		opposition	854 Dec 08 j 04:01	20° Z 42'28	-1°06'31
	848 Aug 04 j 03:41	30° X		min. Earth dist.	854 Dec 07 j 23:22	20° Z 43'26	8.00655 AU
opposition	848 Sep 15 j 20:25	27° X 08'58	-2°42'54	direct	855 Feb 12 j 21:47	17° Z 13'16	
min. Earth dist.	848 Sep 15 j 21:43	27° X 08'43	8.38260 AU	evening set	855 May 28 j 21:15	25° Z 28'46	
direct	848 Nov 22 j 02:09	23° X 46'34					
	849 Feb 19 j 01:39	0° Y		conjunction	855 Jun 16 j 02:12	27° Z 50'13	-0°37'14
evening set	849 Mar 02 j 18:59	1° Y 25'43		minimum elong	855 Jun 16 j 02:14	27° Z 50'13	0°37'14
				max. Earth dist.	855 Jun 16 j 08:49	27° Z 52'22	10.01875 AU
conjunction	849 Mar 20 j 01:32	3° Y 36'19	-2°14'57		855 Jul 02 j 18:40	0° Z	
minimum elong	849 Mar 20 j 01:31	3° Y 36'19	2°14'57	morning rise	855 Jul 04 j 06:44	0° Z 11'32	
max. Earth dist.	849 Mar 20 j 00:27	3° Y 35'59	10.32417 AU	retrograde	855 Oct 16 j 18:14	8° Z 24'29	
morning rise	849 Apr 06 j 12:41	5° Y 48'27		opposition	855 Dec 22 j 08:33	4° Z 56'02	-0°25'55
retrograde	849 Jul 22 j 13:11	13° Y 55'36		min. Earth dist.	855 Dec 22 j 03:00	4° Z 57'11	8.03842 AU
				direct	856 Feb 27 j 11:44	1° Z 26'22	

evening set	856 Jun 12 j 00:35	9°♏41'13		morning rise	861 Sep 24 j 18:42	20°♏59'46	
				retrograde	862 Jan 02 j 16:48	28°♏20'56	
conjunction	856 Jun 30 j 05:24	12°♏01'49 -0°03'59		opposition	862 Mar 11 j 11:04	25°♏00'29	2°40'26
minimum elong	856 Jun 30 j 05:23	12°♏01'49 0°04'00		min. Earth dist.	862 Mar 11 j 08:12	25°♏01'02	8.63499 AU
behind sun begin	856 Jun 29 j 22:07	11°♏59'29		direct	862 May 20 j 17:32	21°♏34'32	
behind sun end	856 Jun 30 j 12:39	12°♏04'09		evening set	862 Sep 03 j 06:22	29°♏12'45	
max. Earth dist.	856 Jun 30 j 12:43	12°♏04'10 10.06507 AU			862 Sep 09 j 19:46	0°♏	
morning rise	856 Jul 18 j 08:20	14°♏21'51					
asc. node	856 Aug 13 j 13:36	17°♏31'37		conjunction	862 Sep 20 j 10:11	1°♏17'16	2°14'25
retrograde	856 Oct 29 j 20:59	22°♏27'17		minimum elong	862 Sep 20 j 10:09	1°♏17'15	2°14'26
opposition	857 Jan 04 j 09:45	18°♏59'57 0°15'46		max. Earth dist.	862 Sep 20 j 12:39	1°♏18'01	10.69193 AU
min. Earth dist.	857 Jan 04 j 04:07	19°♏01'06 8.09782 AU		morning rise	862 Oct 07 j 09:09	3°♏20'21	
direct	857 Mar 13 j 00:11	15°♏30'07		retrograde	863 Jan 14 j 23:21	10°♏34'18	
evening set	857 Jun 26 j 23:40	23°♏42'13		opposition	863 Mar 24 j 04:15	7°♏15'03	2°48'07
				min. Earth dist.	863 Mar 24 j 02:51	7°♏15'19	8.74923 AU
conjunction	857 Jul 15 j 02:27	26°♏01'04 0°29'13		direct	863 Jun 02 j 19:39	3°♏50'26	
minimum elong	857 Jul 15 j 02:25	26°♏01'04 0°29'13		evening set	863 Sep 15 j 20:16	11°♏20'41	
max. Earth dist.	857 Jul 15 j 09:34	26°♏03'21 10.13690 AU					
morning rise	857 Aug 02 j 02:13	28°♏18'59		conjunction	863 Oct 02 j 19:51	13°♏22'40	2°17'49
	857 Aug 15 j 18:32	0°♏		minimum elong	863 Oct 02 j 19:51	13°♏22'40	2°17'50
retrograde	857 Nov 12 j 16:57	6°♏15'43		max. Earth dist.	863 Oct 02 j 20:41	13°♏22'55	10.80126 AU
opposition	858 Jan 18 j 06:46	2°♏49'40 0°55'47		morning rise	863 Oct 19 j 15:05	15°♏23'24	
min. Earth dist.	858 Jan 18 j 01:44	2°♏50'42 8.18075 AU		retrograde	864 Jan 27 j 00:56	22°♏31'15	
	858 Feb 27 j 21:42	30°♏		opposition	864 Apr 04 j 16:46	19°♏13'00	2°48'15
direct	858 Mar 27 j 09:30	29°♏20'01		min. Earth dist.	864 Apr 04 j 17:04	19°♏12'57	8.85294 AU
	858 Apr 23 j 21:54	0°♏		direct	864 Jun 14 j 15:30	15°♏49'44	
evening set	858 Jul 11 j 15:42	7°♏27'29		evening set	864 Sep 27 j 01:11	23°♏12'25	
conjunction	858 Jul 29 j 14:53	9°♏43'53 1°00'06		conjunction	864 Oct 13 j 21:15	25°♏12'19	2°15'13
minimum elong	858 Jul 29 j 14:50	9°♏43'52 1°00'05		minimum elong	864 Oct 13 j 21:15	25°♏12'19	2°15'13
max. Earth dist.	858 Jul 29 j 21:03	9°♏45'51 10.22954 AU		max. Earth dist.	864 Oct 13 j 20:01	25°♏11'57	10.89797 AU
morning rise	858 Aug 16 j 10:17	11°♏59'04		morning rise	864 Oct 30 j 13:39	27°♏11'08	
	858 Sep 10 j 20:33	15°♏			864 Nov 24 j 22:53	0°♏	
retrograde	858 Nov 26 j 05:00	19°♏46'33		retrograde	865 Feb 06 j 21:49	4°♏14'08	
opposition	859 Jan 31 j 22:32	16°♏21'55 1°31'46		opposition	865 Apr 17 j 01:12	0°♏56'38	2°41'21
min. Earth dist.	859 Jan 31 j 18:13	16°♏22'47 8.28199 AU		min. Earth dist.	865 Apr 17 j 02:16	0°♏56'26	8.94189 AU
	859 Feb 18 j 08:00	15°♏			865 Apr 29 j 19:43	30°♏	
direct	859 Apr 10 j 15:03	12°♏52'46		direct	865 Jun 27 j 04:55	27°♏34'40	
	859 May 31 j 03:28	15°♏			865 Aug 22 j 10:08	0°♏	
evening set	859 Jul 25 j 22:55	20°♏54'08		evening set	865 Oct 08 j 22:19	4°♏50'28	
conjunction	859 Aug 12 j 17:32	23°♏07'38 1°27'04		conjunction	865 Oct 25 j 15:49	6°♏48'44	2°07'03
minimum elong	859 Aug 12 j 17:29	23°♏07'37 1°27'03		minimum elong	865 Oct 25 j 15:50	6°♏48'44	2°07'03
max. Earth dist.	859 Aug 12 j 22:23	23°♏09'09 10.33744 AU		max. Earth dist.	865 Oct 25 j 13:47	6°♏48'08	10.97832 AU
morning rise	859 Aug 30 j 07:52	25°♏19'45		morning rise	865 Nov 11 j 06:13	8°♏46'07	
	859 Oct 11 j 09:32	0°♏			866 Jan 19 j 12:27	15°♏	
retrograde	859 Dec 09 j 07:01	2°♏57'54		retrograde	866 Feb 18 j 16:56	15°♏45'38	
	860 Feb 09 j 01:14	30°♏			866 Mar 21 j 11:38	15°♏	
opposition	860 Feb 14 j 08:25	29°♏34'43 2°01'54		opposition	866 Apr 29 j 06:23	12°♏28'36	2°28'02
min. Earth dist.	860 Feb 14 j 04:40	29°♏35'28 8.39560 AU		min. Earth dist.	866 Apr 29 j 07:51	12°♏28'20	9.01269 AU
direct	860 Apr 23 j 15:42	26°♏06'24		direct	866 Jul 09 j 13:46	9°♏07'50	
	860 Jul 03 j 06:24	0°♏			866 Oct 09 j 02:47	15°♏	
evening set	860 Aug 07 j 20:05	4°♏00'36		evening set	866 Oct 20 j 13:01	16°♏17'38	
conjunction	860 Aug 25 j 09:40	6°♏11'00 1°48'53		conjunction	866 Nov 06 j 04:49	18°♏14'45	1°53'55
minimum elong	860 Aug 25 j 09:37	6°♏10'59 1°48'52		minimum elong	866 Nov 06 j 04:51	18°♏14'45	1°53'54
max. Earth dist.	860 Aug 25 j 13:16	6°♏12'07 10.45452 AU		max. Earth dist.	866 Nov 06 j 02:25	18°♏14'02	11.03914 AU
morning rise	860 Sep 11 j 18:37	8°♏19'56		morning rise	866 Nov 22 j 17:59	20°♏11'10	
retrograde	860 Dec 21 j 02:45	15°♏49'14		retrograde	867 Mar 02 j 11:16	27°♏08'36	
opposition	861 Feb 26 j 12:33	12°♏27'27 2°24'59		opposition	867 May 11 j 09:11	23°♏51'47	2°09'05
min. Earth dist.	861 Feb 26 j 08:58	12°♏28'09 8.51528 AU		min. Earth dist.	867 May 11 j 11:38	23°♏51'20	9.06249 AU
direct	861 May 07 j 08:51	9°♏00'13		direct	867 Jul 21 j 15:44	20°♏32'01	
evening set	861 Aug 21 j 06:30	16°♏46'34		evening set	867 Oct 31 j 23:18	27°♏36'59	
conjunction	861 Sep 07 j 15:02	18°♏53'54 2°04'47		conjunction	867 Nov 17 j 13:54	29°♏33'23	1°36'25
minimum elong	861 Sep 07 j 15:00	18°♏53'54 2°04'47		minimum elong	867 Nov 17 j 13:57	29°♏33'23	1°36'24
max. Earth dist.	861 Sep 07 j 18:12	18°♏54'53 10.57460 AU		max. Earth dist.	867 Nov 17 j 10:05	29°♏32'15	11.07787 AU

	867 Nov 21 j 08:24	0°♊	conjunction	874 Jan 23 j 06:16	7°♊58'37 -0°56'28
morning rise	867 Dec 04 j 02:43	1°♊29'19	minimum elong	874 Jan 23 j 06:14	7°♊58'36 0°56'28
retrograde	868 Mar 13 j 03:14	8°♊26'09	max. Earth dist.	874 Jan 22 j 23:33	7°♊56'35 10.81857 AU
opposition	868 May 22 j 10:34	5°♊09'15 1°45'19	morning rise	874 Feb 09 j 03:34	10°♊00'09
min. Earth dist.	868 May 22 j 14:49	5°♊08'28 9.08915 AU		874 Mar 29 j 09:13	15°♊
direct	868 Aug 01 j 14:10	1°♊50'16	retrograde	874 May 24 j 05:36	17°♊26'06
evening set	868 Nov 11 j 06:39	8°♊51'46		874 Jul 21 j 07:47	15°♊
			opposition	874 Aug 02 j 23:26	14°♊03'18 -1°25'13
conjunction	868 Nov 27 j 20:37	10°♊47'52 1°15'17	min. Earth dist.	874 Aug 03 j 04:40	14°♊02'19 8.76589 AU
minimum elong	868 Nov 27 j 20:39	10°♊47'53 1°15'18	direct	874 Oct 10 j 23:33	10°♊43'49
max. Earth dist.	868 Nov 27 j 14:50	10°♊46'10 11.09269 AU		874 Dec 23 j 13:21	15°♊
morning rise	868 Dec 14 j 09:51	12°♊43'46	evening set	875 Jan 18 j 13:55	17°♊56'19
retrograde	869 Mar 24 j 21:44	19°♊41'38			
opposition	869 Jun 03 j 11:40	16°♊24'24 1°17'37	conjunction	875 Feb 04 j 10:00	19°♊58'46 -1°21'17
min. Earth dist.	869 Jun 03 j 16:57	16°♊23'25 9.09119 AU	minimum elong	875 Feb 04 j 09:58	19°♊58'45 1°21'17
direct	869 Aug 13 j 11:57	13°♊05'58	max. Earth dist.	875 Feb 04 j 04:41	19°♊57'09 10.71053 AU
evening set	869 Nov 22 j 12:35	20°♊05'26	morning rise	875 Feb 21 j 09:44	22°♊02'23
			retrograde	875 Jun 06 j 08:12	29°♊37'33
conjunction	869 Dec 09 j 02:40	22°♊01'43 0°51'17	opposition	875 Aug 15 j 18:57	26°♊13'13 -1°54'15
minimum elong	869 Dec 09 j 02:41	22°♊01'43 0°51'17	min. Earth dist.	875 Aug 15 j 22:47	26°♊12'28 8.65308 AU
max. Earth dist.	869 Dec 08 j 20:17	21°♊59'50 11.08254 AU	direct	875 Oct 23 j 05:33	22°♊52'52
morning rise	869 Dec 25 j 16:45	23°♊58'01		876 Jan 29 j 07:28	0°♊
	870 Mar 01 j 20:49	0°♊	evening set	876 Jan 31 j 00:01	0°♊12'13
retrograde	870 Apr 05 j 18:06	0°♊58'35			
	870 May 11 j 10:42	30°♊	conjunction	876 Feb 16 j 22:24	2°♊16'49 -1°42'58
opposition	870 Jun 15 j 13:24	27°♊40'41 0°46'52	minimum elong	876 Feb 16 j 22:21	2°♊16'48 1°42'57
min. Earth dist.	870 Jun 15 j 18:45	27°♊39'42 9.06831 AU	max. Earth dist.	876 Feb 16 j 17:56	2°♊15'26 10.59351 AU
direct	870 Aug 25 j 06:51	24°♊22'36	morning rise	876 Mar 05 j 00:58	4°♊22'45
	870 Nov 21 j 18:30	0°♊	retrograde	876 Jun 18 j 17:27	12°♊07'43
evening set	870 Dec 03 j 19:20	1°♊21'38	opposition	876 Aug 27 j 20:21	8°♊41'51 -2°18'45
			min. Earth dist.	876 Aug 27 j 23:06	8°♊41'19 8.53384 AU
conjunction	870 Dec 20 j 10:00	3°♊18'28 0°25'11	direct	876 Nov 03 j 18:15	5°♊20'28
minimum elong	870 Dec 20 j 10:00	3°♊18'28 0°25'11	evening set	877 Feb 11 j 19:45	12°♊47'46
max. Earth dist.	870 Dec 20 j 03:42	3°♊16'37 11.04790 AU			
morning rise	871 Jan 06 j 01:16	5°♊15'33	conjunction	877 Feb 28 j 20:57	14°♊54'46 -2°00'14
retrograde	871 Apr 17 j 19:30	12°♊20'23	minimum elong	877 Feb 28 j 20:54	14°♊54'46 2°00'14
opposition	871 Jun 27 j 16:45	9°♊01'35 0°14'05	max. Earth dist.	877 Feb 28 j 16:57	14°♊53'32 10.47271 AU
min. Earth dist.	871 Jun 27 j 22:10	9°♊00'36 9.02181 AU	morning rise	877 Mar 18 j 02:52	17°♊03'15
direct	871 Sep 06 j 02:08	5°♊43'33	retrograde	877 Jul 02 j 11:05	24°♊58'04
desc. node	871 Dec 02 j 15:49	11°♊18'20	opposition	877 Sep 10 j 03:42	21°♊30'47 -2°37'07
evening set	871 Dec 15 j 04:31	12°♊43'41	min. Earth dist.	877 Sep 10 j 05:53	21°♊30'21 8.41362 AU
			direct	877 Nov 16 j 13:36	18°♊08'13
conjunction	871 Dec 31 j 19:54	14°♊41'26 -0°02'12	evening set	878 Feb 25 j 01:43	25°♊44'12
minimum elong	871 Dec 31 j 19:55	14°♊41'26 0°02'12			
behind sun begin	871 Dec 31 j 12:56	14°♊39'24	conjunction	878 Mar 14 j 06:25	27°♊53'49 -2°11'53
behind sun end	872 Jan 01 j 02:54	14°♊43'29	minimum elong	878 Mar 14 j 06:24	27°♊53'49 2°11'52
max. Earth dist.	871 Dec 31 j 12:50	14°♊39'22 10.99059 AU	max. Earth dist.	878 Mar 14 j 03:38	27°♊52'56 10.35381 AU
morning rise	872 Jan 17 j 12:54	16°♊39'42		878 Mar 30 j 23:57	0°♊
retrograde	872 Apr 29 j 01:44	23°♊50'14	morning rise	878 Mar 31 j 16:03	0°♊04'59
opposition	872 Jul 08 j 23:09	20°♊30'19 -0°19'41	retrograde	878 Jul 16 j 11:59	8°♊09'05
min. Earth dist.	872 Jul 09 j 05:04	20°♊29'13 8.95392 AU	opposition	878 Sep 23 j 17:10	4°♊40'35 -2°47'53
direct	872 Sep 16 j 21:04	17°♊12'02	min. Earth dist.	878 Sep 23 j 18:29	4°♊40'19 8.29825 AU
evening set	872 Dec 25 j 17:32	24°♊14'48	direct	878 Nov 29 j 16:38	1°♊16'47
			evening set	879 Mar 10 j 18:07	9°♊01'43
conjunction	873 Jan 11 j 10:01	26°♊13'47 -0°29'42			
minimum elong	873 Jan 11 j 10:00	26°♊13'47 0°29'43	conjunction	879 Mar 28 j 02:56	11°♊14'04 -2°16'48
max. Earth dist.	873 Jan 11 j 02:27	26°♊11'31 10.91314 AU	minimum elong	879 Mar 28 j 02:57	11°♊14'04 2°16'48
morning rise	873 Jan 28 j 05:06	28°♊13'33	max. Earth dist.	879 Mar 28 j 02:15	11°♊13'51 10.24287 AU
	873 Feb 12 j 18:59	0°♊	morning rise	879 Apr 14 j 16:30	13°♊27'57
retrograde	873 May 11 j 11:16	5°♊31'11	retrograde	879 Jul 30 j 18:46	21°♊40'09
opposition	873 Jul 21 j 09:11	2°♊09'54 -0°53'13	opposition	879 Oct 07 j 12:15	18°♊10'39 -2°49'45
min. Earth dist.	873 Jul 21 j 15:16	2°♊08'46 8.86750 AU	min. Earth dist.	879 Oct 07 j 11:59	18°♊10'43 8.19387 AU
	873 Aug 21 j 20:55	30°♊	direct	879 Dec 13 j 04:30	14°♊45'38
direct	873 Sep 28 j 20:18	28°♊51'08	evening set	880 Mar 23 j 20:52	22°♊39'16
	873 Nov 04 j 20:54	0°♊			
evening set	874 Jan 06 j 12:11	5°♊58'03	conjunction	880 Apr 10 j 10:18	24°♊54'21 -2°14'13
			minimum elong	880 Apr 10 j 10:20	24°♊54'22 2°14'14

max. Earth dist.	880 Apr 10 j 11:55	24° Υ 54'52	10.14622 AU	asc. node	886 Jan 22 j 17:06	11° Θ 09'49	
morning rise	880 Apr 28 j 03:59	27° Υ 10'50		direct	886 Mar 06 j 23:05	9° Θ 33'03	
	880 May 21 j 10:07	0° \mathcal{B}		evening set	886 Jun 20 j 18:55	17° Θ 46'52	
retrograde	880 Aug 13 j 06:58	5° \mathcal{B} 29'14					
opposition	880 Oct 20 j 12:15	1° \mathcal{B} 59'05	-2°41'56	conjunction	886 Jul 08 j 22:38	20° Θ 06'34	0°14'44
min. Earth dist.	880 Oct 20 j 10:11	1° \mathcal{B} 59'30	8.10666 AU	minimum elong	886 Jul 08 j 22:38	20° Θ 06'34	0°14'43
	880 Nov 15 j 09:59	30° $\mathcal{R}\Upsilon$		behind sun begin	886 Jul 08 j 19:55	20° Θ 05'42	
direct	880 Dec 25 j 22:50	28° Υ 32'54		behind sun end	886 Jul 09 j 01:21	20° Θ 07'26	
	881 Feb 03 j 18:08	0° \mathcal{B}		max. Earth dist.	886 Jul 09 j 05:56	20° Θ 08'55	10.10752 AU
evening set	881 Apr 07 j 09:05	6° \mathcal{B} 34'25		morning rise	886 Jul 27 j 00:09	22° Θ 25'31	
					886 Oct 16 j 08:00	0° \mathcal{Q}	
conjunction	881 Apr 25 j 03:17	8° \mathcal{B} 52'01	-2°03'48	retrograde	886 Nov 07 j 01:06	0° \mathcal{Q} 26'25	
minimum elong	881 Apr 25 j 03:20	8° \mathcal{B} 52'02	2°03'49		886 Nov 28 j 21:30	30° $\mathcal{R}\Theta$	
max. Earth dist.	881 Apr 25 j 06:59	8° \mathcal{B} 53'14	10.06980 AU	opposition	887 Jan 12 j 14:08	27° Θ 00'14	0°38'27
morning rise	881 May 13 j 01:00	11° \mathcal{B} 10'49		min. Earth dist.	887 Jan 12 j 07:57	27° Θ 01'30	8.14865 AU
	881 Jun 14 j 00:57	15° \mathcal{B}		direct	887 Mar 21 j 10:53	23° Θ 31'00	
retrograde	881 Aug 27 j 23:25	19° \mathcal{B} 32'54			887 Jun 21 j 21:45	0° \mathcal{Q}	
opposition	881 Nov 03 j 16:04	16° \mathcal{B} 02'31	-2°24'20	evening set	887 Jul 05 j 14:39	1° \mathcal{Q} 40'45	
min. Earth dist.	881 Nov 03 j 12:24	16° \mathcal{B} 03'16	8.04207 AU				
	881 Nov 16 j 12:24	15° $\mathcal{R}\mathcal{B}$		conjunction	887 Jul 23 j 15:37	3° \mathcal{Q} 58'16	0°46'50
direct	882 Jan 08 j 23:30	12° \mathcal{B} 35'15		minimum elong	887 Jul 23 j 15:34	3° \mathcal{Q} 58'15	0°46'49
	882 Mar 01 j 23:06	15° \mathcal{B}		max. Earth dist.	887 Jul 23 j 22:52	4° \mathcal{Q} 00'35	10.19514 AU
evening set	882 Apr 22 j 05:17	20° \mathcal{B} 43'20		morning rise	887 Aug 10 j 13:09	6° \mathcal{Q} 14'41	
				retrograde	887 Nov 20 j 17:10	14° \mathcal{Q} 06'20	
conjunction	882 May 10 j 03:50	23° \mathcal{B} 03'01	-1°45'49	opposition	888 Jan 26 j 08:30	10° \mathcal{Q} 41'33	1°16'28
minimum elong	882 May 10 j 03:54	23° \mathcal{B} 03'02	1°45'50	min. Earth dist.	888 Jan 26 j 02:39	10° \mathcal{Q} 42'44	8.24524 AU
max. Earth dist.	882 May 10 j 09:01	23° \mathcal{B} 04'42	10.01856 AU	direct	888 Apr 03 j 18:35	7° \mathcal{Q} 12'44	
morning rise	882 May 28 j 05:02	25° \mathcal{B} 23'35			888 Jul 16 j 19:50	15° \mathcal{Q}	
	882 Jul 06 j 11:54	0° \mathcal{I}		evening set	888 Jul 19 j 02:24	15° \mathcal{Q} 16'51	
retrograde	882 Sep 11 j 16:56	3° \mathcal{I} 46'30					
opposition	882 Nov 17 j 22:16	0° \mathcal{I} 16'18	-1°57'40	conjunction	888 Aug 05 j 23:17	17° \mathcal{Q} 31'36	1°15'42
min. Earth dist.	882 Nov 17 j 17:39	0° \mathcal{I} 17'15	8.00453 AU	minimum elong	888 Aug 05 j 23:14	17° \mathcal{Q} 31'35	1°15'42
	882 Nov 21 j 05:03	30° $\mathcal{R}\mathcal{B}$		max. Earth dist.	888 Aug 06 j 05:38	17° \mathcal{Q} 33'37	10.29870 AU
direct	883 Jan 23 j 06:15	26° \mathcal{B} 48'08		morning rise	888 Aug 23 j 15:51	19° \mathcal{Q} 45'02	
	883 Mar 24 j 20:52	0° \mathcal{I}		retrograde	888 Dec 03 j 00:19	27° \mathcal{Q} 27'15	
evening set	883 May 07 j 07:10	5° \mathcal{I} 00'59		opposition	889 Feb 07 j 21:11	24° \mathcal{Q} 03'57	1°49'20
				min. Earth dist.	889 Feb 07 j 16:38	24° \mathcal{Q} 04'52	8.35444 AU
conjunction	883 May 25 j 09:16	7° \mathcal{I} 22'03	-1°21'12	direct	889 Apr 17 j 21:15	20° \mathcal{Q} 35'48	
minimum elong	883 May 25 j 09:19	7° \mathcal{I} 22'04	1°21'13	evening set	889 Aug 02 j 04:32	28° \mathcal{Q} 33'13	
max. Earth dist.	883 May 25 j 15:29	7° \mathcal{I} 24'05	9.99619 AU		889 Aug 13 j 20:42	0° \mathcal{P}	
morning rise	883 Jun 12 j 12:57	9° \mathcal{I} 43'39					
retrograde	883 Sep 26 j 09:00	18° \mathcal{I} 04'31		conjunction	889 Aug 19 j 20:29	0° \mathcal{P} 44'57	1°39'54
opposition	883 Dec 02 j 05:15	14° \mathcal{I} 34'54	-1°23'32	minimum elong	889 Aug 19 j 20:26	0° \mathcal{P} 44'56	1°39'53
min. Earth dist.	883 Dec 02 j 00:08	14° \mathcal{I} 35'58	7.99691 AU	max. Earth dist.	889 Aug 20 j 01:09	0° \mathcal{P} 46'25	10.41131 AU
direct	884 Feb 06 j 18:13	11° \mathcal{I} 06'03		morning rise	889 Sep 06 j 07:39	2° \mathcal{P} 55'14	
evening set	884 May 21 j 12:01	19° \mathcal{I} 21'31		retrograde	889 Dec 16 j 00:24	10° \mathcal{P} 28'29	
				opposition	890 Feb 21 j 04:18	7° \mathcal{P} 06'37	2°15'38
conjunction	884 Jun 08 j 16:23	21° \mathcal{I} 43'06	-0°51'32	min. Earth dist.	890 Feb 21 j 01:32	7° \mathcal{P} 07'10	8.46979 AU
minimum elong	884 Jun 08 j 16:26	21° \mathcal{I} 43'06	0°51'32	direct	890 May 01 j 16:51	3° \mathcal{P} 39'23	
max. Earth dist.	884 Jun 08 j 23:18	21° \mathcal{I} 45'21	10.00434 AU	evening set	890 Aug 15 j 20:05	11° \mathcal{P} 29'24	
morning rise	884 Jun 26 j 21:08	24° \mathcal{I} 04'47					
	884 Aug 19 j 05:28	0° Θ		conjunction	890 Sep 02 j 06:50	13° \mathcal{P} 38'05	1°58'28
retrograde	884 Oct 09 j 20:14	2° Θ 20'56		minimum elong	890 Sep 02 j 06:47	13° \mathcal{P} 38'04	1°58'27
	884 Dec 01 j 13:52	30° $\mathcal{R}\mathcal{I}$		max. Earth dist.	890 Sep 02 j 09:21	13° \mathcal{P} 38'52	10.52733 AU
opposition	884 Dec 15 j 11:18	28° \mathcal{I} 52'16	-0°44'16	morning rise	890 Sep 19 j 12:46	15° \mathcal{P} 45'17	
min. Earth dist.	884 Dec 15 j 05:53	28° \mathcal{I} 53'23	8.01981 AU	retrograde	890 Dec 28 j 16:45	23° \mathcal{P} 10'13	
direct	885 Feb 20 j 08:54	25° \mathcal{I} 23'00		opposition	891 Mar 06 j 05:44	19° \mathcal{P} 49'39	2°34'29
	885 May 06 j 06:38	0° Θ		min. Earth dist.	891 Mar 06 j 04:21	19° \mathcal{P} 49'55	8.58612 AU
evening set	885 Jun 05 j 17:03	3° Θ 38'46		direct	891 May 15 j 05:58	16° \mathcal{P} 23'30	
				evening set	891 Aug 29 j 01:12	24° \mathcal{P} 05'41	
conjunction	885 Jun 23 j 21:59	5° Θ 59'54	-0°18'50				
minimum elong	885 Jun 23 j 22:00	5° Θ 59'54	0°18'50	conjunction	891 Sep 15 j 06:58	26° \mathcal{P} 11'28	2°10'52
max. Earth dist.	885 Jun 24 j 05:10	6° Θ 02'13	10.04234 AU	minimum elong	891 Sep 15 j 06:56	26° \mathcal{P} 11'27	2°10'52
morning rise	885 Jul 12 j 01:59	8° Θ 20'40		max. Earth dist.	891 Sep 15 j 07:28	26° \mathcal{P} 11'37	10.64194 AU
retrograde	885 Oct 24 j 01:42	16° Θ 29'57		morning rise	891 Oct 02 j 08:07	28° \mathcal{P} 15'50	
opposition	885 Dec 29 j 14:40	13° Θ 02'27	-0°02'39		891 Oct 17 j 04:58	0° \mathcal{Q}	
min. Earth dist.	885 Dec 29 j 08:57	13° Θ 03'38	8.07161 AU	retrograde	892 Jan 10 j 01:11	5° \mathcal{Q} 33'15	

opposition	892 Mar 18 j 01:34	2°♎13'47	2°45'35	opposition	898 May 29 j 18:05	11°♊53'31	1°29'51
min. Earth dist.	892 Mar 18 j 00:56	2°♎13'55	8.69851 AU	min. Earth dist.	898 May 29 j 21:56	11°♊52'48	9.07037 AU
	892 Apr 18 j 17:14	30°♏♏		direct	898 Aug 08 j 21:15	8°♊34'14	
direct	892 May 27 j 13:19	28°♏48'46		evening set	898 Nov 18 j 03:38	15°♊35'06	
	892 Jul 04 j 21:14	0°♎					
evening set	892 Sep 09 j 20:03	6°♎23'03		conjunction	898 Dec 04 j 17:51	17°♊31'30	1°01'46
				minimum elong	898 Dec 04 j 17:53	17°♊31'30	1°01'47
conjunction	892 Sep 26 j 21:27	8°♎26'13	2°16'59	max. Earth dist.	898 Dec 04 j 12:45	17°♊30'00	11.06776 AU
minimum elong	892 Sep 26 j 21:26	8°♎26'12	2°17'00	morning rise	898 Dec 21 j 07:32	19°♊27'48	
max. Earth dist.	892 Sep 26 j 21:00	8°♎26'04	10.75033 AU	retrograde	899 Apr 01 j 02:40	26°♊27'35	
morning rise	892 Oct 13 j 18:23	10°♎28'03		opposition	899 Jun 10 j 19:42	23°♊09'24	1°00'14
retrograde	893 Jan 21 j 06:19	17°♎39'00		min. Earth dist.	899 Jun 11 j 00:26	23°♊08'31	9.06038 AU
opposition	893 Mar 30 j 16:37	14°♎20'24	2°49'00	direct	899 Aug 20 j 15:25	19°♊50'35	
min. Earth dist.	893 Mar 30 j 16:33	14°♎20'25	8.80222 AU	evening set	899 Nov 29 j 10:08	26°♊50'14	
direct	893 Jun 09 j 13:10	10°♎56'34					
evening set	893 Sep 22 j 05:13	18°♎23'05		conjunction	899 Dec 16 j 00:28	28°♊46'57	0°36'26
				minimum elong	899 Dec 16 j 00:29	28°♊46'57	0°36'26
conjunction	893 Oct 09 j 02:57	20°♎24'02	2°16'57	max. Earth dist.	899 Dec 15 j 18:16	28°♊45'07	11.04690 AU
minimum elong	893 Oct 09 j 02:58	20°♎24'02	2°16'58		899 Dec 26 j 08:38	0°♊	
max. Earth dist.	893 Oct 09 j 02:05	20°♎23'46	10.84800 AU	morning rise	900 Jan 01 j 15:22	0°♊43'51	
morning rise	893 Oct 25 j 20:29	22°♎23'46		retrograde	900 Apr 12 j 00:54	7°♊47'05	
retrograde	894 Feb 02 j 06:27	29°♎29'23		opposition	900 Jun 21 j 22:34	4°♊28'12	0°28'09
opposition	894 Apr 12 j 03:22	26°♎11'26	2°45'06	min. Earth dist.	900 Jun 22 j 03:52	4°♊27'13	9.02820 AU
min. Earth dist.	894 Apr 12 j 04:28	26°♎11'13	8.89307 AU	direct	900 Aug 31 j 11:39	1°♊09'39	
direct	894 Jun 22 j 04:48	22°♎48'43		evening set	900 Dec 09 j 18:07	8°♊09'35	
	894 Oct 03 j 02:28	0°♏					
evening set	894 Oct 04 j 06:07	0°♏08'03		conjunction	900 Dec 26 j 09:09	10°♊07'01	0°09'32
				minimum elong	900 Dec 26 j 09:09	10°♊07'01	0°09'32
conjunction	894 Oct 21 j 00:52	2°♏07'11	2°11'09	behind sun begin	900 Dec 26 j 03:19	10°♊05'19	
minimum elong	894 Oct 21 j 00:53	2°♏07'11	2°11'09	behind sun end	900 Dec 26 j 14:58	10°♊08'43	
max. Earth dist.	894 Oct 20 j 22:46	2°♏06'33	10.93110 AU	max. Earth dist.	900 Dec 26 j 03:13	10°♊05'17	11.00425 AU
morning rise	894 Nov 06 j 16:03	4°♏05'19		morning rise	901 Jan 12 j 01:31	12°♊04'52	
retrograde	895 Feb 14 j 01:45	11°♏06'49		retrograde	901 Apr 24 j 04:48	19°♊13'05	
opposition	895 Apr 24 j 10:16	7°♏49'18	2°34'29	desc. node	901 May 05 j 08:44	19°♊07'02	
min. Earth dist.	895 Apr 24 j 13:02	7°♏48'47	8.96766 AU	opposition	901 Jul 04 j 03:41	15°♊53'16	-0°05'22
direct	895 Jul 04 j 15:26	4°♏27'36		min. Earth dist.	901 Jul 04 j 08:19	15°♊52'25	8.97496 AU
evening set	895 Oct 16 j 00:02	11°♏40'36		direct	901 Sep 12 j 07:34	12°♊34'48	
				evening set	901 Dec 21 j 05:15	19°♊36'32	
conjunction	895 Nov 01 j 16:31	13°♏38'22	2°00'05				
minimum elong	895 Nov 01 j 16:33	13°♏38'23	2°00'04	conjunction	902 Jan 06 j 21:25	21°♊35'02	-0°18'06
max. Earth dist.	895 Nov 01 j 12:36	13°♏37'13	10.99660 AU	minimum elong	902 Jan 06 j 21:24	21°♊35'02	0°18'07
	895 Nov 13 j 05:02	15°♏		max. Earth dist.	902 Jan 06 j 16:23	21°♊33'32	10.94118 AU
morning rise	895 Nov 18 j 06:21	15°♏35'23		morning rise	902 Jan 23 j 15:30	23°♊34'11	
retrograde	896 Feb 25 j 19:33	22°♏34'11			902 Apr 04 j 19:02	0°♏	
opposition	896 May 05 j 14:27	19°♏16'50	2°17'51	retrograde	902 May 06 j 13:50	0°♏48'46	
min. Earth dist.	896 May 05 j 18:06	19°♏16'09	9.02321 AU		902 Jun 07 j 20:37	30°♏♊	
direct	896 Jul 15 j 21:36	15°♏56'03		opposition	902 Jul 16 j 12:00	27°♊27'54	-0°39'09
evening set	896 Oct 26 j 12:21	23°♏03'45		min. Earth dist.	902 Jul 16 j 15:53	27°♊27'10	8.90245 AU
				direct	902 Sep 24 j 04:35	24°♊09'17	
conjunction	896 Nov 12 j 03:26	25°♏00'37	1°44'22		902 Dec 22 j 03:59	0°♏	
minimum elong	896 Nov 12 j 03:28	25°♏00'38	1°44'21	evening set	903 Jan 01 j 21:31	1°♏14'22	
max. Earth dist.	896 Nov 11 j 22:51	24°♏59'16	11.04213 AU				
morning rise	896 Nov 28 j 16:34	26°♏56'57		conjunction	903 Jan 18 j 14:56	3°♏14'14	-0°45'18
	896 Dec 26 j 19:50	0°♊		minimum elong	903 Jan 18 j 14:54	3°♏14'14	0°45'19
retrograde	897 Mar 08 j 12:19	3°♊54'35		max. Earth dist.	903 Jan 18 j 09:59	3°♏12'45	10.85995 AU
opposition	897 May 17 j 16:44	0°♊37'08	1°56'02	morning rise	903 Feb 04 j 11:06	5°♏14'59	
min. Earth dist.	897 May 17 j 20:16	0°♊36'28	9.05782 AU	retrograde	903 May 19 j 05:58	12°♏37'12	
	897 May 26 j 03:08	30°♏♏		opposition	903 Jul 29 j 00:24	9°♏15'09	-1°11'56
direct	897 Jul 27 j 23:14	27°♏17'11		min. Earth dist.	903 Jul 29 j 04:03	9°♏14'27	8.81341 AU
	897 Sep 25 j 14:56	0°♊		direct	903 Oct 06 j 04:32	5°♏56'09	
evening set	897 Nov 06 j 20:59	4°♊20'47		evening set	904 Jan 13 j 20:12	13°♏06'03	
					904 Jan 29 j 14:12	15°♏	
conjunction	897 Nov 23 j 11:25	6°♊17'12	1°24'41				
minimum elong	897 Nov 23 j 11:28	6°♊17'13	1°24'41	conjunction	904 Jan 30 j 15:11	15°♏07'35	-1°11'04
max. Earth dist.	897 Nov 23 j 07:08	6°♊15'56	11.06613 AU	minimum elong	904 Jan 30 j 15:09	15°♏07'34	1°11'04
morning rise	897 Dec 10 j 00:27	8°♊13'17		max. Earth dist.	904 Jan 30 j 10:01	15°♏06'01	10.76383 AU
retrograde	898 Mar 20 j 07:33	15°♊11'15		morning rise	904 Feb 16 j 13:50	17°♏10'14	

retrograde	904 May 31 j 04:03	24° \approx 41'08	min. Earth dist.	910 Oct 28 j 20:52	10° \mathcal{B} 12'26	8.08969 AU
opposition	904 Aug 09 j 17:51	21° \approx 17'47 -1°42'21	direct	911 Jan 03 j 06:42	6° \mathcal{B} 45'53	
min. Earth dist.	904 Aug 09 j 21:29	21° \approx 17'06 8.71148 AU	evening set	911 Apr 16 j 03:36	14° \mathcal{B} 50'08	
direct	904 Oct 17 j 08:36	17° \approx 58'12		911 Apr 17 j 10:34	15° \mathcal{B}	
evening set	905 Jan 25 j 02:32	25° \approx 14'14				
			conjunction	911 May 04 j 00:02	17° \mathcal{B} 08'37 -1°54'21	
conjunction	905 Feb 10 j 23:41	27° \approx 17'44 -1°34'11	minimum elong	911 May 04 j 00:06	17° \mathcal{B} 08'38 1°54'21	
minimum elong	905 Feb 10 j 23:38	27° \approx 17'43 1°34'11	max. Earth dist.	911 May 04 j 02:43	17° \mathcal{B} 09'30 10.05848 AU	
max. Earth dist.	905 Feb 10 j 19:37	27° \approx 16'29 10.65669 AU	morning rise	911 May 21 j 23:47	19° \mathcal{B} 28'10	
morning rise	905 Feb 28 j 01:02	29° \approx 22'32	retrograde	911 Sep 05 j 16:18	27° \mathcal{B} 49'56	
	905 Mar 05 j 06:40	0° \mathcal{H}	opposition	911 Nov 12 j 02:57	24° \mathcal{B} 20'05 -2°10'03	
retrograde	905 Jun 13 j 08:55	7° \mathcal{H} 02'49	min. Earth dist.	911 Nov 12 j 00:12	24° \mathcal{B} 20'39 8.03635 AU	
opposition	905 Aug 22 j 16:40	3° \mathcal{H} 38'07 -2°08'52	direct	912 Jan 17 j 11:29	20° \mathcal{B} 52'41	
min. Earth dist.	905 Aug 22 j 19:27	3° \mathcal{H} 37'35 8.60080 AU	evening set	912 Apr 30 j 02:18	29° \mathcal{B} 02'33	
direct	905 Oct 29 j 20:09	0° \mathcal{H} 17'44		912 May 07 j 12:45	0° \mathcal{H}	
evening set	906 Feb 06 j 17:57	7° \mathcal{H} 41'02				
			conjunction	912 May 18 j 02:53	1° \mathcal{H} 22'47 -1°32'33	
conjunction	906 Feb 23 j 17:50	9° \mathcal{H} 46'46 -1°53'25	minimum elong	912 May 18 j 02:56	1° \mathcal{H} 22'49 1°32'34	
minimum elong	906 Feb 23 j 17:48	9° \mathcal{H} 46'46 1°53'25	max. Earth dist.	912 May 18 j 07:32	1° \mathcal{H} 24'19 10.01919 AU	
max. Earth dist.	906 Feb 23 j 15:23	9° \mathcal{H} 46'01 10.54292 AU	morning rise	912 Jun 05 j 05:34	3° \mathcal{H} 43'45	
morning rise	906 Mar 12 j 22:07	11° \mathcal{H} 53'55	retrograde	912 Sep 19 j 07:24	12° \mathcal{H} 04'49	
retrograde	906 Jun 26 j 23:28	19° \mathcal{H} 43'48	opposition	912 Nov 25 j 08:49	8° \mathcal{H} 35'09 -1°39'05	
opposition	906 Sep 04 j 21:01	16° \mathcal{H} 17'46 -2°29'56	min. Earth dist.	912 Nov 25 j 04:39	8° \mathcal{H} 36'01 8.01109 AU	
min. Earth dist.	906 Sep 04 j 22:30	16° \mathcal{H} 17'29 8.48597 AU	direct	913 Jan 30 j 21:01	5° \mathcal{H} 06'46	
direct	906 Nov 11 j 12:26	12° \mathcal{H} 56'24	evening set	913 May 15 j 05:16	13° \mathcal{H} 20'16	
evening set	907 Feb 19 j 19:11	20° \mathcal{H} 27'47				
			conjunction	913 Jun 02 j 08:51	15° \mathcal{H} 41'30 -1°04'59	
conjunction	907 Mar 08 j 22:15	22° \mathcal{H} 35'59 -2°07'33	minimum elong	913 Jun 02 j 08:54	15° \mathcal{H} 41'31 1°05'00	
minimum elong	907 Mar 08 j 22:14	22° \mathcal{H} 35'59 2°07'32	max. Earth dist.	913 Jun 02 j 14:57	15° \mathcal{H} 43'29 10.00915 AU	
max. Earth dist.	907 Mar 08 j 21:07	22° \mathcal{H} 35'38 10.42744 AU	morning rise	913 Jun 20 j 13:11	18° \mathcal{H} 03'00	
morning rise	907 Mar 26 j 05:53	24° \mathcal{H} 45'40	retrograde	913 Oct 03 j 19:56	26° \mathcal{H} 20'37	
	907 May 13 j 10:12	0° \mathcal{Y}	opposition	913 Dec 09 j 14:31	22° \mathcal{H} 51'30 -1°01'56	
retrograde	907 Jul 10 j 21:26	2° \mathcal{Y} 44'52	min. Earth dist.	913 Dec 09 j 09:27	22° \mathcal{H} 52'33 8.01559 AU	
	907 Sep 09 j 07:27	30° \mathcal{R} \mathcal{H}	direct	914 Feb 14 j 09:10	19° \mathcal{H} 22'22	
opposition	907 Sep 18 j 07:24	29° \mathcal{H} 17'35 -2°44'01	evening set	914 May 30 j 09:29	27° \mathcal{H} 37'18	
min. Earth dist.	907 Sep 18 j 07:36	29° \mathcal{H} 17'32 8.37189 AU				
direct	907 Nov 24 j 11:04	25° \mathcal{H} 55'05	conjunction	914 Jun 17 j 14:27	29° \mathcal{H} 58'34 -0°33'28	
	908 Feb 02 j 10:50	0° \mathcal{Y}	minimum elong	914 Jun 17 j 14:28	29° \mathcal{H} 58'35 0°33'28	
evening set	908 Mar 04 j 06:29	3° \mathcal{Y} 35'02		914 Jun 17 j 18:51	0° \mathcal{E}	
			max. Earth dist.	914 Jun 17 j 21:22	0° \mathcal{E} 00'49 10.02888 AU	
conjunction	908 Mar 21 j 13:17	5° \mathcal{Y} 45'51 -2°15'24	morning rise	914 Jul 05 j 18:46	2° \mathcal{E} 19'39	
minimum elong	908 Mar 21 j 13:16	5° \mathcal{Y} 45'51 2°15'24	retrograde	914 Oct 18 j 04:19	10° \mathcal{E} 31'31	
max. Earth dist.	908 Mar 21 j 12:36	5° \mathcal{Y} 45'38 10.31533 AU	opposition	914 Dec 23 j 18:26	7° \mathcal{E} 03'15 -0°21'10	
morning rise	908 Apr 08 j 00:48	7° \mathcal{Y} 58'11	min. Earth dist.	914 Dec 23 j 13:03	7° \mathcal{E} 04'22 8.04945 AU	
retrograde	908 Jul 24 j 01:42	16° \mathcal{Y} 05'53	direct	915 Feb 28 j 21:41	3° \mathcal{E} 33'38	
opposition	908 Sep 30 j 23:32	12° \mathcal{Y} 37'31 -2°49'46	evening set	915 Jun 14 j 12:06	11° \mathcal{E} 47'47	
min. Earth dist.	908 Sep 30 j 23:13	12° \mathcal{Y} 37'34 8.26364 AU				
direct	908 Dec 06 j 17:58	9° \mathcal{Y} 13'47	conjunction	915 Jul 02 j 16:37	14° \mathcal{E} 08'08 -0°00'08	
evening set	909 Mar 18 j 04:13	17° \mathcal{Y} 02'29	minimum elong	915 Jul 02 j 16:38	14° \mathcal{E} 08'08 0°00'09	
			behind sun begin	915 Jul 02 j 09:22	14° \mathcal{E} 05'49	
conjunction	909 Apr 04 j 15:19	19° \mathcal{Y} 16'01 -2°16'06	behind sun end	915 Jul 02 j 23:53	14° \mathcal{E} 10'28	
minimum elong	909 Apr 04 j 15:20	19° \mathcal{Y} 16'01 2°16'05	max. Earth dist.	915 Jul 02 j 23:37	14° \mathcal{E} 10'22 10.07691 AU	
max. Earth dist.	909 Apr 04 j 15:07	19° \mathcal{Y} 15'57 10.21209 AU	asc. node	915 Jul 04 j 03:50	14° \mathcal{E} 19'32	
morning rise	909 Apr 22 j 07:03	21° \mathcal{Y} 31'01	morning rise	915 Jul 20 j 19:18	16° \mathcal{E} 27'53	
retrograde	909 Aug 07 j 11:03	29° \mathcal{Y} 45'43	retrograde	915 Nov 01 j 06:42	24° \mathcal{E} 32'09	
opposition	909 Oct 14 j 20:44	26° \mathcal{Y} 16'34 -2°46'10	opposition	916 Jan 06 j 18:58	21° \mathcal{E} 05'00 0°20'23	
min. Earth dist.	909 Oct 14 j 20:02	26° \mathcal{Y} 16'42 8.16734 AU	min. Earth dist.	916 Jan 06 j 14:01	21° \mathcal{E} 06'01 8.11031 AU	
direct	909 Dec 20 j 08:43	22° \mathcal{Y} 51'33	direct	916 Mar 14 j 09:51	17° \mathcal{E} 35'14	
	910 Mar 26 j 00:49	0° \mathcal{B}	evening set	916 Jun 28 j 10:11	25° \mathcal{E} 46'33	
evening set	910 Apr 01 j 11:44	0° \mathcal{B} 48'35				
			conjunction	916 Jul 16 j 12:34	28° \mathcal{E} 05'06 0°32'47	
conjunction	910 Apr 19 j 03:31	3° \mathcal{B} 04'46 -2°09'04	minimum elong	916 Jul 16 j 12:33	28° \mathcal{E} 05'05 0°32'47	
minimum elong	910 Apr 19 j 03:33	3° \mathcal{B} 04'46 2°09'05	max. Earth dist.	916 Jul 16 j 18:44	28° \mathcal{E} 07'04 10.14980 AU	
max. Earth dist.	910 Apr 19 j 04:24	3° \mathcal{B} 05'03 10.12436 AU		916 Jul 31 j 12:04	0° \mathcal{Q}	
morning rise	910 May 06 j 23:27	5° \mathcal{B} 22'15	morning rise	916 Aug 03 j 12:04	0° \mathcal{Q} 22'42	
retrograde	910 Aug 22 j 00:49	13° \mathcal{B} 41'48	retrograde	916 Nov 14 j 00:59	8° \mathcal{Q} 18'16	
opposition	910 Oct 28 j 22:21	10° \mathcal{B} 12'08 -2°32'49	opposition	917 Jan 19 j 15:10	4° \mathcal{Q} 52'25 0°59'59	

min. Earth dist.	917 Jan 19 j 10:47	4°Ω53'18	8.19395 AU	retrograde	923 Jan 28 j 04:23	24°Ω23'24	
direct	917 Mar 28 j 19:44	1°Ω22'50		opposition	923 Apr 06 j 21:52	21°Ω05'09	2°47'38
evening set	917 Jul 13 j 01:17	9°Ω29'29		min. Earth dist.	923 Apr 06 j 22:19	21°Ω05'04	8.85659 AU
				direct	923 Jun 16 j 20:55	17°Ω41'56	
conjunction	917 Jul 31 j 00:01	11°Ω45'33	1°03'16	evening set	923 Sep 29 j 05:19	25°Ω04'15	
minimum elong	917 Jul 30 j 23:58	11°Ω45'32	1°03'15				
max. Earth dist.	917 Jul 31 j 05:07	11°Ω47'10	10.24273 AU	conjunction	923 Oct 16 j 01:16	27°Ω04'05	2°14'23
morning rise	917 Aug 17 j 19:04	14°Ω00'25		minimum elong	923 Oct 16 j 01:17	27°Ω04'06	2°14'23
	917 Aug 25 j 20:53	15°Ω		max. Earth dist.	923 Oct 15 j 23:45	27°Ω03'38	10.90025 AU
retrograde	917 Nov 27 j 10:27	21°Ω46'48		morning rise	923 Nov 01 j 17:34	29°Ω02'52	
opposition	918 Feb 02 j 06:06	18°Ω22'20	1°35'20		923 Nov 09 j 23:34	0°ℳ	
min. Earth dist.	918 Feb 02 j 01:56	18°Ω23'10	8.29508 AU	retrograde	924 Feb 09 j 01:58	6°ℳ05'50	
	918 Mar 31 j 18:02	15°℞Ω		opposition	924 Apr 18 j 06:01	2°ℳ48'18	2°39'57
direct	918 Apr 12 j 01:26	14°Ω53'16		min. Earth dist.	924 Apr 18 j 06:49	2°ℳ48'09	8.94271 AU
	918 Apr 23 j 07:22	15°Ω			924 Jun 01 j 17:27	30°℞Ω	
evening set	918 Jul 27 j 07:24	22°Ω53'48		direct	924 Jun 28 j 10:57	29°Ω26'22	
					924 Jul 24 j 20:27	0°ℳ	
conjunction	918 Aug 14 j 01:35	25°Ω06'57	1°29'40	evening set	924 Oct 10 j 02:07	6°ℳ41'58	
minimum elong	918 Aug 14 j 01:32	25°Ω06'56	1°29'40				
max. Earth dist.	918 Aug 14 j 05:58	25°Ω08'20	10.35013 AU	conjunction	924 Oct 26 j 19:39	8°ℳ40'15	2°05'37
morning rise	918 Aug 31 j 15:27	27°Ω18'45		minimum elong	924 Oct 26 j 19:40	8°ℳ40'15	2°05'36
	918 Sep 23 j 10:39	0°ℳ		max. Earth dist.	924 Oct 26 j 17:57	8°ℳ39'44	10.97776 AU
retrograde	918 Dec 10 j 13:16	4°ℳ56'00		morning rise	924 Nov 12 j 09:55	10°ℳ37'37	
opposition	919 Feb 15 j 15:20	1°ℳ32'55	2°04'42		924 Dec 24 j 13:28	15°ℳ	
min. Earth dist.	919 Feb 15 j 11:18	1°ℳ33'43	8.40783 AU	retrograde	925 Feb 19 j 22:44	17°ℳ37'17	
	919 Mar 07 j 19:45	30°℞Ω			925 Apr 21 j 11:46	15°℞ℳ	
direct	919 Apr 25 j 23:45	28°Ω04'42		opposition	925 Apr 30 j 11:21	14°ℳ20'13	2°25'56
	919 Jun 13 j 08:36	0°ℳ		min. Earth dist.	925 Apr 30 j 13:05	14°ℳ19'54	9.01068 AU
evening set	919 Aug 10 j 03:20	5°ℳ58'02		direct	925 Jul 10 j 17:39	10°ℳ59'30	
					925 Sep 22 j 13:38	15°ℳ	
conjunction	919 Aug 27 j 16:35	8°ℳ08'09	1°50'50	evening set	925 Oct 21 j 16:48	18°ℳ09'15	
minimum elong	919 Aug 27 j 16:32	8°ℳ08'08	1°50'49				
max. Earth dist.	919 Aug 27 j 20:27	8°ℳ09'21	10.46602 AU	conjunction	925 Nov 07 j 08:32	20°ℳ06'25	1°51'55
morning rise	919 Sep 14 j 01:01	10°ℳ16'47		minimum elong	925 Nov 07 j 08:34	20°ℳ06'25	1°51'54
retrograde	919 Dec 23 j 09:09	17°ℳ45'19		max. Earth dist.	925 Nov 07 j 05:46	20°ℳ05'36	11.03586 AU
opposition	920 Feb 28 j 18:51	14°ℳ23'37	2°26'56	morning rise	925 Nov 23 j 21:44	22°ℳ02'54	
min. Earth dist.	920 Feb 28 j 15:23	14°ℳ24'18	8.52599 AU	retrograde	926 Mar 03 j 15:09	29°ℳ00'39	
direct	920 May 08 j 15:10	10°ℳ56'28		opposition	926 May 12 j 14:29	25°ℳ43'48	2°06'22
evening set	920 Aug 22 j 12:51	18°ℳ42'03		min. Earth dist.	926 May 12 j 17:45	25°ℳ43'11	9.05797 AU
				direct	926 Jul 22 j 19:43	22°ℳ24'02	
conjunction	920 Sep 08 j 21:03	20°ℳ49'09	2°06'02	evening set	926 Nov 02 j 03:11	29°ℳ29'09	
minimum elong	920 Sep 08 j 21:01	20°ℳ49'08	2°06'02		926 Nov 06 j 13:50	0°♁	
max. Earth dist.	920 Sep 09 j 00:15	20°ℳ50'08	10.58430 AU				
morning rise	920 Sep 26 j 00:15	22°ℳ54'47		conjunction	926 Nov 18 j 17:45	1°♁25'37	1°33'57
	920 Dec 17 j 23:32	0°Ω		minimum elong	926 Nov 18 j 17:47	1°♁25'38	1°33'57
retrograde	921 Jan 03 j 21:27	0°Ω15'18		max. Earth dist.	926 Nov 18 j 13:05	1°♁24'15	11.07234 AU
	921 Jan 20 j 21:24	30°℞ℳ		morning rise	926 Dec 05 j 06:47	3°♁21'40	
opposition	921 Mar 12 j 16:48	26°ℳ54'56	2°41'31	retrograde	927 Mar 15 j 08:35	10°♁18'59	
min. Earth dist.	921 Mar 12 j 14:49	26°ℳ55'19	8.64368 AU	opposition	927 May 24 j 16:05	7°♁02'02	1°42'04
direct	921 May 21 j 23:54	23°ℳ29'01		min. Earth dist.	927 May 24 j 20:34	7°♁01'13	9.08264 AU
	921 Aug 26 j 00:48	0°Ω		direct	927 Aug 03 j 20:09	3°♁43'02	
evening set	921 Sep 04 j 11:55	1°Ω06'38		evening set	927 Nov 13 j 10:45	10°♁44'47	
conjunction	921 Sep 21 j 15:19	3°Ω10'56	2°14'57	conjunction	927 Nov 30 j 00:52	12°♁41'01	1°12'25
minimum elong	921 Sep 21 j 15:18	3°Ω10'55	2°14'58	minimum elong	927 Nov 30 j 00:54	12°♁41'01	1°12'26
max. Earth dist.	921 Sep 21 j 16:53	3°Ω11'24	10.69939 AU	max. Earth dist.	927 Nov 29 j 19:22	12°♁39'23	11.08542 AU
morning rise	921 Oct 08 j 14:01	5°Ω13'51		morning rise	927 Dec 16 j 14:15	14°♁37'03	
retrograde	922 Jan 16 j 04:14	12°Ω27'21		retrograde	928 Mar 26 j 03:05	21°♁35'30	
opposition	922 Mar 25 j 09:41	9°Ω08'09	2°48'20	opposition	928 Jun 04 j 17:31	18°♁18'09	1°13'56
min. Earth dist.	922 Mar 25 j 09:11	9°Ω08'15	8.75553 AU	min. Earth dist.	928 Jun 04 j 22:13	18°♁17'18	9.08317 AU
direct	922 Jun 04 j 01:36	5°Ω43'35		direct	928 Aug 14 j 16:46	14°♁59'44	
evening set	922 Sep 17 j 00:59	13°Ω13'19		evening set	928 Nov 23 j 17:06	21°♁59'31	
conjunction	922 Oct 04 j 00:14	15°Ω15'10	2°17'39	conjunction	928 Dec 10 j 07:21	23°♁55'56	0°48'07
minimum elong	922 Oct 04 j 00:13	15°Ω15'10	2°17'40	minimum elong	928 Dec 10 j 07:23	23°♁55'56	0°48'07
max. Earth dist.	922 Oct 03 j 23:54	15°Ω15'05	10.80622 AU	max. Earth dist.	928 Dec 10 j 01:45	23°♁54'17	11.07390 AU
morning rise	922 Oct 20 j 19:21	17°Ω15'48		morning rise	928 Dec 26 j 21:29	25°♁52'23	

	929 Feb 04 j 14:04	0°♄	evening set	935 Feb 01 j 09:40	2°♄17'20	
retrograde	929 Apr 07 j 01:30	2°♄53'39				
	929 Jun 11 j 07:03	30°♄♂	conjunction	935 Feb 18 j 08:11	4°♄22'09	-1°45'17
opposition	929 Jun 16 j 19:48	29°♄35'38 0°42'53	minimum elong	935 Feb 18 j 08:08	4°♄22'09	1°45'16
min. Earth dist.	929 Jun 17 j 00:43	29°♄34'44 9.05902 AU	max. Earth dist.	935 Feb 18 j 03:18	4°♄20'39	10.58119 AU
direct	929 Aug 26 j 12:47	26°♄17'32	morning rise	935 Mar 07 j 11:05	6°♄28'21	
	929 Nov 04 j 12:34	0°♄	retrograde	935 Jun 21 j 05:37	14°♄14'18	
evening set	929 Dec 05 j 00:26	3°♄16'59	opposition	935 Aug 30 j 07:01	10°♄48'20	-2°21'14
			min. Earth dist.	935 Aug 30 j 10:03	10°♄47'44	8.52201 AU
conjunction	929 Dec 21 j 15:08	5°♄13'58 0°21'50	direct	935 Nov 06 j 03:19	7°♄26'50	
minimum elong	929 Dec 21 j 15:09	5°♄13'58 0°21'50	evening set	936 Feb 14 j 06:23	14°♄55'01	
max. Earth dist.	929 Dec 21 j 08:42	5°♄12'05 11.03801 AU				
morning rise	930 Jan 07 j 06:37	7°♄11'15	conjunction	936 Mar 02 j 07:49	17°♄02'14	-2°01'53
retrograde	930 Apr 19 j 03:18	14°♄16'51	minimum elong	936 Mar 02 j 07:47	17°♄02'14	2°01'53
opposition	930 Jun 28 j 23:50	10°♄57'58 0°09'55	max. Earth dist.	936 Mar 02 j 03:58	17°♄01'02	10.46147 AU
min. Earth dist.	930 Jun 29 j 05:36	10°♄56'54 9.01133 AU	morning rise	936 Mar 19 j 14:04	19°♄10'58	
direct	930 Sep 07 j 07:04	7°♄39'53	retrograde	936 Jul 03 j 23:01	27°♄06'39	
desc. node	930 Oct 18 j 00:41	9°♄00'30	opposition	936 Sep 11 j 15:04	23°♄39'16	-2°38'43
evening set	930 Dec 16 j 10:15	14°♄40'34	min. Earth dist.	936 Sep 11 j 17:18	23°♄38'50	8.40319 AU
			direct	936 Nov 18 j 00:10	20°♄16'36	
conjunction	931 Jan 02 j 01:43	16°♄38'29 -0°05'38	evening set	937 Feb 26 j 13:11	27°♄53'22	
minimum elong	931 Jan 02 j 01:42	16°♄38'29 0°05'38				
behind sun begin	931 Jan 01 j 18:59	16°♄36'31	conjunction	937 Mar 15 j 18:17	0°♄03'13	-2°12'44
behind sun end	931 Jan 02 j 08:25	16°♄40'27	minimum elong	937 Mar 15 j 18:16	0°♄03'13	2°12'43
max. Earth dist.	931 Jan 01 j 18:06	16°♄36'15 10.97958 AU		937 Mar 15 j 08:08	0°♄	
morning rise	931 Jan 18 j 19:00	18°♄36'58	max. Earth dist.	937 Mar 15 j 16:29	0°♄02'39	10.34424 AU
retrograde	931 May 01 j 08:01	25°♄48'24	morning rise	937 Apr 02 j 04:11	2°♄14'36	
opposition	931 Jul 11 j 06:48	22°♄28'22 -0°23'52	retrograde	937 Jul 17 j 23:44	10°♄19'25	
min. Earth dist.	931 Jul 11 j 13:05	22°♄27'12 8.94241 AU	opposition	937 Sep 25 j 04:58	6°♄50'48	-2°48'24
direct	931 Sep 19 j 03:32	19°♄10'03	min. Earth dist.	937 Sep 25 j 05:43	6°♄50'39	8.28976 AU
evening set	931 Dec 28 j 00:03	26°♄13'30	direct	937 Dec 01 j 04:53	3°♄26'54	
			evening set	938 Mar 12 j 06:33	11°♄12'31	
conjunction	932 Jan 13 j 16:43	28°♄12'41 -0°33'05				
minimum elong	932 Jan 13 j 16:42	28°♄12'41 0°33'06	conjunction	938 Mar 29 j 15:50	13°♄25'05	-2°16'45
max. Earth dist.	932 Jan 13 j 09:35	28°♄10'33 10.90115 AU	minimum elong	938 Mar 29 j 15:50	13°♄25'05	2°16'45
	932 Jan 28 j 16:52	0°♄	max. Earth dist.	938 Mar 29 j 16:11	13°♄25'12	10.23545 AU
morning rise	932 Jan 30 j 11:59	0°♄12'40	morning rise	938 Apr 16 j 05:38	15°♄39'09	
retrograde	932 May 12 j 20:43	7°♄31'20	retrograde	938 Aug 01 j 07:26	23°♄51'47	
opposition	932 Jul 22 j 17:30	4°♄09'55 -0°57'17	opposition	938 Oct 09 j 00:14	20°♄22'13	-2°49'07
min. Earth dist.	932 Jul 22 j 23:09	4°♄08'52 8.85516 AU	min. Earth dist.	938 Oct 08 j 23:09	20°♄22'26	8.18772 AU
direct	932 Sep 30 j 04:24	0°♄51'06	direct	938 Dec 14 j 16:00	16°♄57'06	
evening set	933 Jan 07 j 19:36	7°♄58'46	evening set	939 Mar 26 j 10:00	24°♄51'15	
conjunction	933 Jan 24 j 13:56	9°♄59'34 -0°59'38	conjunction	939 Apr 12 j 23:49	27°♄06'31	-2°13'14
minimum elong	933 Jan 24 j 13:54	9°♄59'33 0°59'39	minimum elong	939 Apr 12 j 23:51	27°♄06'31	2°13'14
max. Earth dist.	933 Jan 24 j 08:07	9°♄57'48 10.80591 AU	max. Earth dist.	939 Apr 13 j 01:59	27°♄07'13	10.14134 AU
morning rise	933 Feb 10 j 11:20	12°♄01'20	morning rise	939 Apr 30 j 17:47	29°♄23'09	
	933 Mar 09 j 01:22	15°♄		939 May 05 j 15:09	0°♄	
retrograde	933 May 25 j 16:09	19°♄28'21	retrograde	939 Aug 15 j 21:19	7°♄41'39	
opposition	933 Aug 04 j 08:36	16°♄05'26 -1°28'57	opposition	939 Oct 23 j 00:24	4°♄11'29	-2°40'08
min. Earth dist.	933 Aug 04 j 12:58	16°♄04'36 8.75316 AU	min. Earth dist.	939 Oct 22 j 21:48	4°♄12'00	8.10314 AU
	933 Aug 19 j 00:12	15°♄	direct	939 Dec 28 j 09:39	0°♄45'11	
direct	933 Oct 12 j 06:40	12°♄45'55	evening set	940 Apr 08 j 22:33	8°♄47'01	
	933 Dec 03 j 02:50	15°♄				
evening set	934 Jan 19 j 22:24	19°♄59'14	conjunction	940 Apr 26 j 17:03	11°♄04'45	-2°01'55
			minimum elong	940 Apr 26 j 17:06	11°♄04'46	2°01'55
conjunction	934 Feb 05 j 18:39	22°♄01'54 -1°24'07	max. Earth dist.	940 Apr 26 j 20:40	11°♄05'55	10.06771 AU
minimum elong	934 Feb 05 j 18:36	22°♄01'53 1°24'07	morning rise	940 May 14 j 15:07	13°♄23'40	
max. Earth dist.	934 Feb 05 j 13:26	22°♄00'18 10.69775 AU		940 May 27 j 11:51	15°♄	
morning rise	934 Feb 22 j 18:36	24°♄05'45	retrograde	940 Aug 29 j 13:21	21°♄45'32	
	934 Apr 22 j 17:40	0°♄	opposition	940 Nov 05 j 04:13	18°♄15'08	-2°21'26
retrograde	934 Jun 07 j 18:50	1°♄41'59	min. Earth dist.	940 Nov 05 j 00:38	18°♄15'53	8.04136 AU
	934 Jul 24 j 20:39	30°♄		940 Dec 26 j 19:41	15°♄	
opposition	934 Aug 17 j 04:57	28°♄17'32 -1°57'28	direct	941 Jan 10 j 11:42	14°♄47'46	
min. Earth dist.	934 Aug 17 j 08:30	28°♄16'50 8.64049 AU		941 Jan 25 j 04:02	15°♄	
direct	934 Oct 24 j 14:09	24°♄57'06	evening set	941 Apr 23 j 18:56	22°♄55'59	
	935 Jan 12 j 18:07	0°♄				

conjunction	941 May 11 j 17:45	25°♄15'43	-1°43'07	retrograde	946 Nov 22 j 01:27	16°♄10'41	
minimum elong	941 May 11 j 17:49	25°♄15'44	1°43'08		946 Dec 28 j 14:05	15°♄♄	
max. Earth dist.	941 May 11 j 22:19	25°♄17'12	10.01933 AU	opposition	947 Jan 27 j 17:31	12°♄46'04	1°20'26
morning rise	941 May 29 j 19:18	27°♄36'20		min. Earth dist.	947 Jan 27 j 11:52	12°♄47'13	8.25632 AU
	941 Jun 18 j 03:46	0°♄		direct	947 Apr 06 j 04:52	9°♄17'20	
retrograde	941 Sep 13 j 05:17	5°♄58'43			947 Jul 01 j 21:33	15°♄	
opposition	941 Nov 19 j 10:08	2°♄28'34	-1°53'52	evening set	947 Jul 21 j 12:24	17°♄20'43	
min. Earth dist.	941 Nov 19 j 06:02	2°♄29'25	8.00660 AU				
	941 Dec 22 j 18:56	30°♄♄		conjunction	947 Aug 08 j 08:48	19°♄35'10	1°18'39
direct	942 Jan 24 j 19:34	29°♄00'17		minimum elong	947 Aug 08 j 08:45	19°♄35'09	1°18'38
	942 Feb 26 j 14:39	0°♄		max. Earth dist.	947 Aug 08 j 15:13	19°♄37'12	10.31041 AU
evening set	942 May 08 j 20:44	7°♄13'04		morning rise	947 Aug 26 j 00:53	21°♄48'17	
				retrograde	947 Dec 05 j 08:25	29°♄29'34	
conjunction	942 May 26 j 23:01	9°♄34'07	-1°17'53	opposition	948 Feb 10 j 05:33	26°♄06'24	1°52'35
minimum elong	942 May 26 j 23:05	9°♄34'08	1°17'54	min. Earth dist.	948 Feb 10 j 01:29	26°♄07'13	8.36686 AU
max. Earth dist.	942 May 27 j 04:37	9°♄35'56	9.99963 AU	direct	948 Apr 19 j 05:54	22°♄38'20	
morning rise	942 Jun 14 j 02:57	11°♄55'40			948 Jul 29 j 18:37	0°♄	
retrograde	942 Sep 27 j 19:31	20°♄15'47		evening set	948 Aug 03 j 13:29	0°♄34'53	
opposition	942 Dec 03 j 16:43	16°♄46'14	-1°19'05				
min. Earth dist.	942 Dec 03 j 11:56	16°♄47'14	8.00150 AU	conjunction	948 Aug 21 j 04:53	2°♄46'18	1°42'13
direct	943 Feb 08 j 07:20	13°♄17'19		minimum elong	948 Aug 21 j 04:50	2°♄46'17	1°42'12
evening set	943 May 24 j 01:06	21°♄32'28		max. Earth dist.	948 Aug 21 j 08:54	2°♄47'33	10.42414 AU
				morning rise	948 Sep 07 j 15:40	4°♄56'15	
conjunction	943 Jun 11 j 05:33	23°♄53'58	-0°47'48	retrograde	948 Dec 17 j 06:56	12°♄28'31	
minimum elong	943 Jun 11 j 05:36	23°♄53'59	0°47'49	opposition	949 Feb 22 j 11:53	9°♄06'46	2°18'01
max. Earth dist.	943 Jun 11 j 12:16	23°♄56'09	10.01011 AU	min. Earth dist.	949 Feb 22 j 09:28	9°♄07'14	8.48290 AU
morning rise	943 Jun 29 j 10:20	26°♄15'31		direct	949 May 03 j 01:39	5°♄39'36	
	943 Jul 30 j 14:53	0°♄		evening set	949 Aug 17 j 03:58	13°♄28'42	
retrograde	943 Oct 12 j 06:17	4°♄30'49					
opposition	943 Dec 17 j 22:11	1°♄02'12	-0°39'29	conjunction	949 Sep 03 j 14:11	15°♄37'04	2°00'04
min. Earth dist.	943 Dec 17 j 16:35	1°♄03'22	8.02657 AU	minimum elong	949 Sep 03 j 14:08	15°♄37'03	2°00'04
	943 Dec 30 j 15:22	30°♄♄		max. Earth dist.	949 Sep 03 j 15:57	15°♄37'37	10.54022 AU
direct	944 Feb 22 j 20:36	27°♄32'54		morning rise	949 Sep 20 j 19:45	17°♄43'59	
	944 Apr 15 j 21:53	0°♄		retrograde	949 Dec 29 j 21:21	25°♄08'02	
evening set	944 Jun 07 j 05:29	5°♄48'12		opposition	950 Mar 07 j 12:36	21°♄47'33	2°35'59
				min. Earth dist.	950 Mar 07 j 11:01	21°♄47'52	8.59861 AU
conjunction	944 Jun 25 j 10:26	8°♄09'11	-0°14'58	direct	950 May 16 j 15:14	18°♄21'30	
minimum elong	944 Jun 25 j 10:27	8°♄09'12	0°14'59	evening set	950 Aug 30 j 07:56	26°♄02'49	
behind sun begin	944 Jun 25 j 08:06	8°♄08'26					
behind sun end	944 Jun 25 j 12:48	8°♄09'57		conjunction	950 Sep 16 j 13:21	28°♄08'19	2°11'44
max. Earth dist.	944 Jun 25 j 17:55	8°♄11'36	10.05009 AU	minimum elong	950 Sep 16 j 13:19	28°♄08'19	2°11'44
morning rise	944 Jul 13 j 14:16	10°♄29'46		max. Earth dist.	950 Sep 16 j 13:52	28°♄08'29	10.65367 AU
retrograde	944 Oct 25 j 12:11	18°♄38'06			950 Oct 01 j 20:41	0°♄	
asc. node	944 Dec 11 j 16:25	16°♄42'54		morning rise	950 Oct 03 j 14:06	0°♄12'25	
opposition	944 Dec 31 j 00:51	15°♄10'42	0°02'08	retrograde	951 Jan 11 j 07:20	7°♄29'10	
min. Earth dist.	944 Dec 30 j 18:37	15°♄11'59	8.08013 AU	opposition	951 Mar 20 j 07:53	4°♄09'46	2°46'10
direct	945 Mar 08 j 10:15	11°♄41'19		min. Earth dist.	951 Mar 20 j 07:02	4°♄09'56	8.70934 AU
evening set	945 Jun 22 j 06:39	19°♄54'33		direct	951 May 29 j 20:49	0°♄44'53	
				evening set	951 Sep 12 j 01:50	8°♄18'22	
conjunction	945 Jul 10 j 10:17	22°♄14'04	0°18'29				
minimum elong	945 Jul 10 j 10:16	22°♄14'03	0°18'29	conjunction	951 Sep 29 j 03:01	10°♄21'20	2°17'07
max. Earth dist.	945 Jul 10 j 18:12	22°♄16'37	10.11677 AU	minimum elong	951 Sep 29 j 03:00	10°♄21'20	2°17'08
morning rise	945 Jul 28 j 11:24	24°♄32'46		max. Earth dist.	951 Sep 29 j 02:51	10°♄21'17	10.76003 AU
	945 Sep 15 j 14:27	0°♄		morning rise	951 Oct 15 j 23:36	12°♄22'59	
retrograde	945 Nov 08 j 10:46	2°♄32'42		retrograde	952 Jan 23 j 11:57	19°♄33'25	
	946 Jan 02 j 23:29	30°♄♄		opposition	952 Mar 31 j 22:32	16°♄14'54	2°48'42
opposition	946 Jan 13 j 23:40	29°♄06'38	0°42'57	min. Earth dist.	952 Mar 31 j 23:00	16°♄14'49	8.81067 AU
min. Earth dist.	946 Jan 13 j 17:13	29°♄07'58	8.15850 AU	direct	952 Jun 10 j 18:00	12°♄51'11	
direct	946 Mar 22 j 21:41	25°♄37'28		evening set	952 Sep 23 j 10:28	20°♄17'06	
	946 Jun 04 j 19:09	0°♄					
evening set	946 Jul 07 j 01:36	3°♄46'36		conjunction	952 Oct 10 j 07:57	22°♄17'54	2°16'23
				minimum elong	952 Oct 10 j 07:57	22°♄17'54	2°16'24
conjunction	946 Jul 25 j 02:14	6°♄03'50	0°50'16	max. Earth dist.	952 Oct 10 j 06:30	22°♄17'28	10.85504 AU
minimum elong	946 Jul 25 j 02:12	6°♄03'49	0°50'16	morning rise	952 Oct 27 j 01:17	24°♄17'31	
max. Earth dist.	946 Jul 25 j 10:04	6°♄06'20	10.20558 AU		952 Dec 24 j 20:55	0°♄	
morning rise	946 Aug 11 j 23:16	8°♄19'57		retrograde	953 Feb 03 j 10:45	1°♄22'49	
	946 Oct 17 j 00:17	15°♄			953 Mar 17 j 04:17	30°♄♄	

opposition	953 Apr 13 j 09:03	28° <u>♄</u> 04'57	2°43'59	min. Earth dist.	959 Jun 24 j 11:02	6° <u>♄</u> 24'14	9.01482 AU
min. Earth dist.	953 Apr 13 j 11:15	28° <u>♄</u> 04'32	8.89870 AU	direct	959 Sep 02 j 18:10	3° <u>♄</u> 06'33	
direct	953 Jun 23 j 10:50	24° <u>♄</u> 42'19		evening set	959 Dec 12 j 00:11	10° <u>♄</u> 07'09	
	953 Sep 17 j 12:37	0° <u>♄</u>					
evening set	953 Oct 05 j 10:56	2° <u>♄</u> 01'15		conjunction	959 Dec 28 j 15:28	12° <u>♄</u> 04'48	0°06'04
				minimum elong	959 Dec 28 j 15:28	12° <u>♄</u> 04'49	0°06'04
conjunction	953 Oct 22 j 05:26	4° <u>♄</u> 00'18	2°09'56	behind sun begin	959 Dec 28 j 08:49	12° <u>♄</u> 02'52	
minimum elong	953 Oct 22 j 05:27	4° <u>♄</u> 00'18	2°09'56	behind sun end	959 Dec 28 j 22:06	12° <u>♄</u> 06'45	
max. Earth dist.	953 Oct 22 j 02:01	3° <u>♄</u> 59'17	10.93520 AU	max. Earth dist.	959 Dec 28 j 10:03	12° <u>♄</u> 03'14	10.98956 AU
morning rise	953 Nov 07 j 20:37	5° <u>♄</u> 58'23		morning rise	960 Jan 14 j 07:56	14° <u>♄</u> 02'54	
retrograde	954 Feb 15 j 06:46	12° <u>♄</u> 59'48		desc. node	960 Mar 19 j 16:59	20° <u>♄</u> 07'03	
opposition	954 Apr 25 j 15:58	9° <u>♄</u> 42'19	2°32'37	retrograde	960 Apr 25 j 13:14	21° <u>♄</u> 12'12	
min. Earth dist.	954 Apr 25 j 19:11	9° <u>♄</u> 41'43	8.97019 AU	opposition	960 Jul 05 j 11:47	17° <u>♄</u> 52'12	-0°09'40
direct	954 Jul 05 j 21:35	6° <u>♄</u> 20'42		min. Earth dist.	960 Jul 05 j 16:01	17° <u>♄</u> 51'25	8.95908 AU
evening set	954 Oct 17 j 04:24	13° <u>♄</u> 33'27		direct	960 Sep 13 j 14:14	14° <u>♄</u> 33'38	
	954 Oct 29 j 11:30	15° <u>♄</u>		evening set	960 Dec 22 j 12:13	21° <u>♄</u> 36'12	
conjunction	954 Nov 02 j 20:53	15° <u>♄</u> 31'13	1°58'16	conjunction	961 Jan 08 j 04:29	23° <u>♄</u> 34'57	-0°21'36
minimum elong	954 Nov 02 j 20:55	15° <u>♄</u> 31'13	1°58'15	minimum elong	961 Jan 08 j 04:28	23° <u>♄</u> 34'57	0°21'37
max. Earth dist.	954 Nov 02 j 16:33	15° <u>♄</u> 29'56	10.99752 AU	max. Earth dist.	961 Jan 07 j 23:10	23° <u>♄</u> 33'22	10.92425 AU
morning rise	954 Nov 19 j 10:44	17° <u>♄</u> 28'14		morning rise	961 Jan 24 j 22:47	25° <u>♄</u> 34'22	
retrograde	955 Feb 27 j 00:18	24° <u>♄</u> 27'11			961 Mar 08 j 04:55	0° <u>♄</u>	
opposition	955 May 07 j 20:09	21° <u>♄</u> 09'48	2°15'19	retrograde	961 May 08 j 00:37	2° <u>♄</u> 50'13	
min. Earth dist.	955 May 07 j 23:35	21° <u>♄</u> 09'10	9.02240 AU		961 Jul 10 j 23:21	30° <u>♄</u>	
direct	955 Jul 18 j 03:19	17° <u>♄</u> 49'06		opposition	961 Jul 17 j 21:03	29° <u>♄</u> 29'08	-0°43'24
evening set	955 Oct 28 j 16:42	24° <u>♄</u> 56'43		min. Earth dist.	961 Jul 18 j 01:11	29° <u>♄</u> 28'21	8.88463 AU
				direct	961 Sep 25 j 11:57	26° <u>♄</u> 10'22	
conjunction	955 Nov 14 j 07:54	26° <u>♄</u> 53'39	1°42'02		961 Dec 04 j 11:58	0° <u>♄</u>	
minimum elong	955 Nov 14 j 07:57	26° <u>♄</u> 53'40	1°42'01	evening set	962 Jan 03 j 05:31	3° <u>♄</u> 16'27	
max. Earth dist.	955 Nov 14 j 03:35	26° <u>♄</u> 52'22	11.03965 AU				
morning rise	955 Nov 30 j 21:01	28° <u>♄</u> 50'02		conjunction	962 Jan 19 j 23:02	5° <u>♄</u> 16'36	-0°48'41
	955 Dec 11 j 03:35	0° <u>♄</u>		minimum elong	962 Jan 19 j 23:00	5° <u>♄</u> 16'36	0°48'41
retrograde	956 Mar 09 j 19:12	5° <u>♄</u> 48'00		max. Earth dist.	962 Jan 19 j 17:23	5° <u>♄</u> 14'54	10.84142 AU
opposition	956 May 18 j 22:36	2° <u>♄</u> 30'31	1°52'55	morning rise	962 Feb 05 j 19:34	7° <u>♄</u> 17'40	
min. Earth dist.	956 May 19 j 02:17	2° <u>♄</u> 29'50	9.05357 AU	retrograde	962 May 20 j 15:51	14° <u>♄</u> 41'14	
	956 Jun 26 j 11:47	30° <u>♄</u>		opposition	962 Jul 30 j 10:19	11° <u>♄</u> 18'58	-1°15'58
direct	956 Jul 29 j 04:49	29° <u>♄</u> 10'35		min. Earth dist.	962 Jul 30 j 14:32	11° <u>♄</u> 18'10	8.79431 AU
	956 Aug 30 j 07:33	0° <u>♄</u>		direct	962 Oct 07 j 12:14	7° <u>♄</u> 59'47	
evening set	956 Nov 08 j 01:32	6° <u>♄</u> 14'18			963 Jan 13 j 16:44	15° <u>♄</u>	
				evening set	963 Jan 15 j 05:17	15° <u>♄</u> 10'51	
conjunction	956 Nov 24 j 16:01	8° <u>♄</u> 10'50	1°21'55				
minimum elong	956 Nov 24 j 16:03	8° <u>♄</u> 10'51	1°21'55	conjunction	963 Feb 01 j 00:32	17° <u>♄</u> 12'42	-1°14'10
max. Earth dist.	956 Nov 24 j 11:14	8° <u>♄</u> 09'25	11.06024 AU	minimum elong	963 Feb 01 j 00:29	17° <u>♄</u> 12'41	1°14'09
morning rise	956 Dec 11 j 05:10	10° <u>♄</u> 07'03		max. Earth dist.	963 Jan 31 j 19:32	17° <u>♄</u> 11'11	10.74430 AU
retrograde	957 Mar 21 j 13:24	17° <u>♄</u> 05'31		morning rise	963 Feb 17 j 23:28	19° <u>♄</u> 15'40	
opposition	957 May 31 j 00:31	13° <u>♄</u> 47'43	1°26'16	retrograde	963 Jun 02 j 14:36	26° <u>♄</u> 48'02	
min. Earth dist.	957 May 31 j 05:12	13° <u>♄</u> 46'51	9.06281 AU	opposition	963 Aug 12 j 04:39	23° <u>♄</u> 24'26	-1°45'57
direct	957 Aug 10 j 01:32	10° <u>♄</u> 28'25		min. Earth dist.	963 Aug 12 j 08:11	23° <u>♄</u> 23'46	8.69174 AU
evening set	957 Nov 19 j 08:31	17° <u>♄</u> 29'36		direct	963 Oct 19 j 19:17	20° <u>♄</u> 04'40	
				evening set	964 Jan 27 j 12:50	27° <u>♄</u> 21'57	
conjunction	957 Dec 05 j 22:43	19° <u>♄</u> 26'07	0°58'39				
minimum elong	957 Dec 05 j 22:45	19° <u>♄</u> 26'07	0°58'40	conjunction	964 Feb 13 j 10:20	29° <u>♄</u> 25'48	-1°36'50
max. Earth dist.	957 Dec 05 j 16:38	19° <u>♄</u> 24'19	11.05869 AU	minimum elong	964 Feb 13 j 10:17	29° <u>♄</u> 25'47	1°36'50
morning rise	957 Dec 22 j 12:40	21° <u>♄</u> 22'35		max. Earth dist.	964 Feb 13 j 07:11	29° <u>♄</u> 24'50	10.63684 AU
retrograde	958 Apr 02 j 09:06	28° <u>♄</u> 23'08			964 Feb 18 j 01:30	0° <u>♄</u>	
opposition	958 Jun 12 j 02:39	25° <u>♄</u> 04'48	0°56'17	morning rise	964 Mar 01 j 11:52	1° <u>♄</u> 30'56	
min. Earth dist.	958 Jun 12 j 08:01	25° <u>♄</u> 03'49	9.04979 AU	retrograde	964 Jun 14 j 22:52	9° <u>♄</u> 12'44	
direct	958 Aug 21 j 22:17	21° <u>♄</u> 45'55		opposition	964 Aug 24 j 04:28	5° <u>♄</u> 47'47	-2°11'50
evening set	958 Nov 30 j 15:31	28° <u>♄</u> 46'04		min. Earth dist.	964 Aug 24 j 06:25	5° <u>♄</u> 47'24	8.58123 AU
	958 Dec 11 j 04:33	0° <u>♄</u>		direct	964 Oct 31 j 06:36	2° <u>♄</u> 27'13	
				evening set	965 Feb 08 j 05:38	9° <u>♄</u> 51'48	
conjunction	958 Dec 17 j 06:00	0° <u>♄</u> 42'59	0°33'04				
minimum elong	958 Dec 17 j 06:02	0° <u>♄</u> 42'59	0°33'05	conjunction	965 Feb 25 j 05:49	11° <u>♄</u> 57'54	-1°55'28
max. Earth dist.	958 Dec 16 j 23:41	0° <u>♄</u> 41'07	11.03491 AU	minimum elong	965 Feb 25 j 05:47	11° <u>♄</u> 57'53	1°55'27
morning rise	959 Jan 02 j 21:06	2° <u>♄</u> 40'05		max. Earth dist.	965 Feb 25 j 04:06	11° <u>♄</u> 57'21	10.52374 AU
retrograde	959 Apr 14 j 08:45	9° <u>♄</u> 44'14		morning rise	965 Mar 14 j 10:23	14° <u>♄</u> 05'24	
opposition	959 Jun 24 j 05:57	6° <u>♄</u> 25'10	0°23'57	retrograde	965 Jun 28 j 14:33	21° <u>♄</u> 56'44	

opposition	965 Sep 06 j 09:54	18° K 30'29 -2°32'03	conjunction	971 May 20 j 20:34	3° II 44'14 -1°29'10
min. Earth dist.	965 Sep 06 j 10:34	18° K 30'21 8.46764 AU	minimum elong	971 May 20 j 20:37	3° II 44'16 1°29'11
direct	965 Nov 12 j 22:54	15° K 08'57	max. Earth dist.	971 May 21 j 02:06	3° II 46'03 10.02118 AU
evening set	966 Feb 21 j 08:19	22° K 41'38	morning rise	971 Jun 07 j 23:21	6° II 05'11
			retrograde	971 Sep 21 j 23:05	14° II 25'43
conjunction	966 Mar 10 j 11:41	24° K 50'11 -2°08'49	opposition	971 Nov 28 j 00:05	10° II 56'09 -1°34'28
minimum elong	966 Mar 10 j 11:39	24° K 50'10 2°08'48	min. Earth dist.	971 Nov 27 j 19:22	10° II 57'07 8.01493 AU
max. Earth dist.	966 Mar 10 j 10:38	24° K 49'51 10.41014 AU	direct	972 Feb 02 j 12:22	7° II 27'46
morning rise	966 Mar 27 j 19:46	27° K 00'13	evening set	972 May 16 j 22:33	15° II 41'07
	966 Apr 22 j 08:47	0° Y			
retrograde	966 Jul 12 j 12:26	5° Y 00'41	conjunction	972 Jun 04 j 02:17	18° II 02'18 -1°01'02
opposition	966 Sep 19 j 21:16	1° Y 33'13 -2°45'05	minimum elong	972 Jun 04 j 02:20	18° II 02'19 1°01'02
min. Earth dist.	966 Sep 19 j 21:11	1° Y 33'14 8.35606 AU	max. Earth dist.	972 Jun 04 j 08:41	18° II 04'24 10.01487 AU
	966 Oct 10 j 06:16	30° K	morning rise	972 Jun 22 j 06:38	20° II 23'43
direct	966 Nov 25 j 23:54	28° K 10'34	retrograde	972 Oct 05 j 11:46	28° II 40'30
	967 Jan 10 j 09:06	0° Y	opposition	972 Dec 11 j 05:29	25° II 11'31 -0°56'46
evening set	967 Mar 06 j 20:59	5° Y 51'42	min. Earth dist.	972 Dec 11 j 00:27	25° II 12'34 8.02301 AU
			direct	973 Feb 15 j 23:53	21° II 42'25
conjunction	967 Mar 24 j 04:06	8° Y 02'50 -2°15'46	evening set	973 Jun 01 j 02:34	29° II 56'58
minimum elong	967 Mar 24 j 04:06	8° Y 02'50 2°15'46		973 Jun 01 j 12:05	0° E
max. Earth dist.	967 Mar 24 j 03:33	8° Y 02'40 10.30123 AU			
morning rise	967 Apr 10 j 16:06	10° Y 15'30	conjunction	973 Jun 19 j 07:26	2° E 18'05 -0°29'13
retrograde	967 Jul 26 j 17:03	18° Y 24'07	minimum elong	973 Jun 19 j 07:28	2° E 18'06 0°29'13
opposition	967 Oct 03 j 14:11	14° Y 55'38 -2°49'38	max. Earth dist.	973 Jun 19 j 14:00	2° E 20'13 10.03799 AU
min. Earth dist.	967 Oct 03 j 13:51	14° Y 55'42 8.25158 AU	morning rise	973 Jul 07 j 11:40	4° E 38'59
direct	967 Dec 09 j 08:03	11° Y 31'44	retrograde	973 Oct 19 j 19:38	12° E 49'45
evening set	968 Mar 19 j 19:45	19° Y 21'21	opposition	973 Dec 25 j 08:48	9° E 21'41 -0°15'49
			min. Earth dist.	973 Dec 25 j 03:54	9° E 22'42 8.06004 AU
conjunction	968 Apr 06 j 07:17	21° Y 35'09 -2°15'28	direct	974 Mar 02 j 13:23	5° E 52'08
minimum elong	968 Apr 06 j 07:18	21° Y 35'10 2°15'28	asc. node	974 May 18 j 09:00	10° E 38'54
max. Earth dist.	968 Apr 06 j 07:46	21° Y 35'19 10.20213 AU	evening set	974 Jun 16 j 04:33	14° E 05'43
morning rise	968 Apr 23 j 23:28	23° Y 50'26			
	968 Jun 20 j 08:02	0° E	conjunction	974 Jul 04 j 08:48	16° E 25'48 0°04'12
retrograde	968 Aug 09 j 03:20	2° E 05'39	minimum elong	974 Jul 04 j 08:47	16° E 25'47 0°04'11
	968 Sep 28 j 19:35	30° K Y	behind sun begin	974 Jul 04 j 01:33	16° E 23'28
opposition	968 Oct 16 j 11:56	28° Y 36'24 -2°44'46	behind sun end	974 Jul 04 j 16:02	16° E 28'06
min. Earth dist.	968 Oct 16 j 10:58	28° Y 36'36 8.15949 AU	max. Earth dist.	974 Jul 04 j 15:03	16° E 27'47 10.08887 AU
direct	968 Dec 21 j 23:21	25° Y 11'16	morning rise	974 Jul 22 j 11:14	18° E 45'16
	969 Mar 08 j 00:23	0° E	retrograde	974 Nov 02 j 19:39	26° E 48'19
evening set	969 Apr 03 j 04:03	3° E 08'56	opposition	975 Jan 08 j 08:42	23° E 21'24 0°25'33
			min. Earth dist.	975 Jan 08 j 04:03	23° E 22'21 8.12347 AU
conjunction	969 Apr 20 j 20:22	5° E 25'20 -2°07'26	direct	975 Mar 17 j 02:03	19° E 51'44
minimum elong	969 Apr 20 j 20:25	5° E 25'21 2°07'26	evening set	975 Jul 01 j 01:33	28° E 02'15
max. Earth dist.	969 Apr 20 j 22:23	5° E 25'59 10.11855 AU		975 Jul 16 j 11:44	0° E
morning rise	969 May 08 j 16:41	7° E 43'01			
	969 Jul 20 j 06:55	15° E	conjunction	975 Jul 19 j 03:33	0° E 20'28 0°36'47
retrograde	969 Aug 23 j 17:00	16° E 02'43	minimum elong	975 Jul 19 j 03:31	0° E 20'27 0°36'47
	969 Sep 27 j 07:21	15° K E	max. Earth dist.	975 Jul 19 j 09:10	0° E 22'16 10.16395 AU
opposition	969 Oct 30 j 13:46	12° E 33'02 -2°30'10	morning rise	975 Aug 06 j 02:41	2° E 37'43
min. Earth dist.	969 Oct 30 j 11:36	12° E 33'28 8.08588 AU	retrograde	975 Nov 16 j 12:09	10° E 32'04
direct	970 Jan 04 j 22:52	9° E 06'41	opposition	976 Jan 22 j 04:02	7° E 06'25 1°04'40
	970 Mar 31 j 03:51	15° E	min. Earth dist.	976 Jan 21 j 23:27	7° E 07'21 8.20890 AU
evening set	970 Apr 17 j 20:39	17° E 11'20	direct	976 Mar 30 j 11:03	3° E 36'58
			evening set	976 Jul 14 j 15:30	11° E 42'41
conjunction	970 May 05 j 17:35	19° E 29'59 -1°51'45			
minimum elong	970 May 05 j 17:39	19° E 30'00 1°51'46	conjunction	976 Aug 01 j 13:51	13° E 58'23 1°06'47
max. Earth dist.	970 May 05 j 21:28	19° E 31'15 10.05661 AU	minimum elong	976 Aug 01 j 13:48	13° E 58'22 1°06'46
morning rise	970 May 23 j 17:33	21° E 49'38	max. Earth dist.	976 Aug 01 j 18:55	13° E 59'59 10.25823 AU
	970 Aug 24 j 02:58	0° II		976 Aug 09 j 16:09	15° E
retrograde	970 Sep 07 j 08:00	0° II 11'10	morning rise	976 Aug 19 j 08:23	16° E 12'51
	970 Sep 21 j 14:23	30° K E	retrograde	976 Nov 28 j 21:50	23° E 58'02
opposition	970 Nov 13 j 18:19	26° E 41'22 -2°06'18	opposition	977 Feb 03 j 18:00	20° E 33'44 1°39'17
min. Earth dist.	970 Nov 13 j 14:40	26° E 42'07 8.03640 AU	min. Earth dist.	977 Feb 03 j 13:27	20° E 34'39 8.31091 AU
direct	971 Jan 19 j 03:37	23° E 13'56	direct	977 Apr 13 j 14:25	17° E 04'50
	971 Apr 21 j 16:29	0° II	evening set	977 Jul 28 j 20:22	25° E 04'20
evening set	971 May 02 j 19:38	1° II 23'56			
			conjunction	977 Aug 15 j 14:08	27° E 17'08 1°32'32

minimum elong	977 Aug 15 j 14:05	27°♏17'07	1°32'32	morning rise	983 Nov 14 j 16:14	12°♐35'50	
max. Earth dist.	977 Aug 15 j 18:55	27°♏18'38	10.36603 AU		983 Dec 06 j 07:00	15°♐	
morning rise	977 Sep 02 j 03:22	29°♏28'31		retrograde	984 Feb 22 j 04:28	19°♐35'20	
	977 Sep 06 j 10:29	0°♐		opposition	984 May 01 j 18:54	16°♐18'15	2°23'36
retrograde	977 Dec 12 j 00:20	7°♐04'36		min. Earth dist.	984 May 01 j 21:38	16°♐17'45	9.01278 AU
opposition	978 Feb 17 j 02:26	3°♐41'42	2°07'46		984 May 19 j 20:16	15°♐	
min. Earth dist.	978 Feb 16 j 22:25	3°♐42'30	8.42360 AU	direct	984 Jul 12 j 00:11	12°♐57'32	
direct	978 Apr 27 j 11:32	0°♐13'38			984 Sep 01 j 11:01	15°♐	
evening set	978 Aug 11 j 14:54	8°♐05'55		evening set	984 Oct 22 j 23:00	20°♐07'00	
conjunction	978 Aug 29 j 03:39	10°♐15'39	1°52'57	conjunction	984 Nov 08 j 14:35	22°♐04'07	1°49'44
minimum elong	978 Aug 29 j 03:37	10°♐15'38	1°52'57	minimum elong	984 Nov 08 j 14:37	22°♐04'08	1°49'43
max. Earth dist.	978 Aug 29 j 07:44	10°♐16'55	10.48142 AU	max. Earth dist.	984 Nov 08 j 10:41	22°♐02'58	11.03636 AU
morning rise	978 Sep 15 j 11:28	12°♐23'55		morning rise	984 Nov 25 j 03:55	24°♐00'37	
retrograde	978 Dec 24 j 18:19	19°♐51'24			985 Jan 29 j 10:36	0°♐	
opposition	979 Mar 02 j 05:10	16°♐29'52	2°29'02	retrograde	985 Mar 04 j 22:12	0°♐58'27	
min. Earth dist.	979 Mar 02 j 02:26	16°♐30'24	8.54093 AU		985 Apr 09 j 04:50	30°♐	
direct	979 May 11 j 02:42	13°♐02'50		opposition	985 May 13 j 22:01	27°♐41'33	2°03'22
evening set	979 Aug 24 j 23:07	20°♐47'23		min. Earth dist.	985 May 14 j 01:54	27°♐40'50	9.05686 AU
				direct	985 Jul 24 j 04:01	24°♐21'47	
conjunction	979 Sep 11 j 06:47	22°♐54'08	2°07'21		985 Oct 21 j 12:46	0°♐	
minimum elong	979 Sep 11 j 06:45	22°♐54'08	2°07'21	evening set	985 Nov 03 j 09:10	1°♐26'47	
max. Earth dist.	979 Sep 11 j 09:17	22°♐54'54	10.59847 AU				
morning rise	979 Sep 28 j 09:34	24°♐59'26		conjunction	985 Nov 19 j 23:45	3°♐23'18	1°31'16
	979 Nov 14 j 21:38	0°♐		minimum elong	985 Nov 19 j 23:48	3°♐23'18	1°31'16
retrograde	980 Jan 06 j 05:57	2°♐19'03		max. Earth dist.	985 Nov 19 j 18:48	3°♐21'50	11.06974 AU
	980 Feb 29 j 16:56	30°♐		morning rise	985 Dec 06 j 12:55	5°♐19'24	
opposition	980 Mar 14 j 02:14	28°♐58'47	2°42'37	retrograde	986 Mar 16 j 15:31	12°♐17'02	
min. Earth dist.	980 Mar 14 j 01:08	28°♐59'00	8.65707 AU	opposition	986 May 25 j 23:47	8°♐59'59	1°38'32
direct	980 May 23 j 10:17	25°♐32'59		min. Earth dist.	986 May 26 j 03:55	8°♐59'13	9.07857 AU
	980 Aug 08 j 17:05	0°♐		direct	986 Aug 05 j 03:11	5°♐41'00	
evening set	980 Sep 05 j 20:59	3°♐09'38		evening set	986 Nov 14 j 16:44	12°♐42'47	
conjunction	980 Sep 22 j 23:55	5°♐13'39	2°15'29	conjunction	986 Dec 01 j 07:02	14°♐39'06	1°09'20
minimum elong	980 Sep 22 j 23:54	5°♐13'39	2°15'29	minimum elong	986 Dec 01 j 07:05	14°♐39'07	1°09'20
max. Earth dist.	980 Sep 23 j 00:16	5°♐13'46	10.71167 AU	max. Earth dist.	986 Dec 01 j 02:09	14°♐37'40	11.08008 AU
morning rise	980 Oct 09 j 22:22	7°♐16'19		morning rise	986 Dec 17 j 20:30	16°♐35'16	
retrograde	981 Jan 17 j 10:50	14°♐29'04		retrograde	987 Mar 28 j 11:30	23°♐34'13	
opposition	981 Mar 26 j 18:23	11°♐09'55	2°48'28	opposition	987 Jun 07 j 01:29	20°♐16'45	1°09'58
min. Earth dist.	981 Mar 26 j 18:08	11°♐09'58	8.76667 AU	min. Earth dist.	987 Jun 07 j 05:51	20°♐15'57	9.07661 AU
direct	981 Jun 05 j 11:08	7°♐45'26		direct	987 Aug 17 j 00:27	16°♐58'18	
evening set	981 Sep 18 j 08:57	15°♐14'20		evening set	987 Nov 25 j 23:31	23°♐58'19	
conjunction	981 Oct 05 j 07:54	17°♐15'58	2°17'25	conjunction	987 Dec 12 j 13:51	25°♐54'51	0°44'43
minimum elong	981 Oct 05 j 07:54	17°♐15'58	2°17'25	minimum elong	987 Dec 12 j 13:53	25°♐54'51	0°44'44
max. Earth dist.	981 Oct 05 j 07:09	17°♐15'44	10.81603 AU	max. Earth dist.	987 Dec 12 j 08:09	25°♐53'10	11.06632 AU
morning rise	981 Oct 22 j 02:46	19°♐16'24		morning rise	987 Dec 29 j 04:09	27°♐51'27	
retrograde	982 Jan 29 j 11:31	26°♐23'29			988 Jan 17 j 11:10	0°♐	
opposition	982 Apr 08 j 06:01	23°♐05'14	2°46'52	retrograde	988 Apr 08 j 10:18	4°♐53'18	
min. Earth dist.	982 Apr 08 j 06:13	23°♐05'12	8.86498 AU	opposition	988 Jun 18 j 04:14	1°♐35'11	0°38'36
direct	982 Jun 18 j 07:01	19°♐42'06		min. Earth dist.	988 Jun 18 j 09:34	1°♐34'12	9.05044 AU
evening set	982 Sep 30 j 12:22	27°♐03'42			988 Jul 10 j 16:00	30°♐	
				direct	988 Aug 27 j 19:04	28°♐17'02	
conjunction	982 Oct 17 j 08:13	29°♐03'24	2°13'25		988 Oct 13 j 06:43	0°♐	
minimum elong	982 Oct 17 j 08:14	29°♐03'24	2°13'26	evening set	988 Dec 06 j 07:21	5°♐16'50	
max. Earth dist.	982 Oct 17 j 07:02	29°♐03'02	10.90717 AU				
	982 Oct 25 j 06:00	0°♐		conjunction	988 Dec 22 j 22:03	7°♐13'58	0°18'16
morning rise	982 Nov 03 j 00:17	1°♐02'01		minimum elong	988 Dec 22 j 22:04	7°♐13'58	0°18'16
retrograde	983 Feb 10 j 10:08	8°♐04'39		max. Earth dist.	988 Dec 22 j 14:52	7°♐11'51	11.02853 AU
opposition	983 Apr 20 j 13:46	4°♐47'07	2°38'21	morning rise	989 Jan 08 j 13:49	9°♐11'26	
min. Earth dist.	983 Apr 20 j 14:54	4°♐46'54	8.94805 AU	retrograde	989 Apr 20 j 11:01	16°♐17'49	
direct	983 Jun 30 j 18:15	1°♐25'15		opposition	989 Jun 30 j 08:56	12°♐58'48	0°05'29
evening set	983 Oct 12 j 08:37	8°♐40'18		min. Earth dist.	989 Jun 30 j 15:13	12°♐57'38	9.00090 AU
				desc. node	989 Aug 30 j 17:26	9°♐44'36	
conjunction	983 Oct 29 j 02:02	10°♐38'30	2°04'00	direct	989 Sep 08 j 14:55	9°♐40'39	
minimum elong	983 Oct 29 j 02:04	10°♐38'31	2°04'00	evening set	989 Dec 17 j 17:44	16°♐41'53	
max. Earth dist.	983 Oct 28 j 23:54	10°♐37'52	10.98151 AU				

conjunction	990 Jan 03 j 09:21	18° Z 39'59 -0°09'15		996 Feb 27 j 20:14	0° Y	
minimum elong	990 Jan 03 j 09:21	18° Z 39'59 0°09'15	evening set	996 Feb 29 j 03:32	0° Y 09'42	
behind sun begin	990 Jan 03 j 03:25	18° Z 38'14				
behind sun end	990 Jan 03 j 15:16	18° Z 41'43	conjunction	996 Mar 17 j 09:05	2° Y 19'51 -2°13'31	
max. Earth dist.	990 Jan 03 j 01:55	18° Z 37'47 10.96824 AU	minimum elong	996 Mar 17 j 09:04	2° Y 19'51 2°13'31	
morning rise	990 Jan 20 j 02:52	20° Z 38'40	max. Earth dist.	996 Mar 17 j 08:21	2° Y 19'37 10.33138 AU	
retrograde	990 May 02 j 18:29	27° Z 51'05	morning rise	996 Apr 03 j 19:15	4° Y 31'32	
opposition	990 Jul 12 j 16:31	24° Z 30'55 -0°28'18	retrograde	996 Jul 19 j 16:19	12° Y 37'21	
min. Earth dist.	990 Jul 12 j 22:32	24° Z 29'47 8.93018 AU	opposition	996 Sep 26 j 19:41	9° Y 08'38 -2°48'50	
direct	990 Sep 20 j 13:20	21° Z 12'32	min. Earth dist.	996 Sep 26 j 19:29	9° Y 08'40 8.27802 AU	
evening set	990 Dec 29 j 08:27	28° Z 16'41	direct	996 Dec 02 j 18:07	5° Y 44'40	
	991 Jan 12 j 19:44	0° \approx	evening set	997 Mar 13 j 22:03	13° Y 31'12	
conjunction	991 Jan 15 j 01:24	0° \approx 16'06 -0°36'38	conjunction	997 Mar 31 j 07:46	15° Y 44'04 -2°16'35	
minimum elong	991 Jan 15 j 01:22	0° \approx 16'06 0°36'39	minimum elong	997 Mar 31 j 07:47	15° Y 44'04 2°16'34	
max. Earth dist.	991 Jan 14 j 18:54	0° \approx 14'10 10.88804 AU	max. Earth dist.	997 Mar 31 j 08:36	15° Y 44'20 10.22493 AU	
morning rise	991 Jan 31 j 20:45	2° \approx 16'19	morning rise	997 Apr 17 j 21:59	17° Y 58'25	
retrograde	991 May 15 j 08:09	9° \approx 36'06	retrograde	997 Aug 03 j 01:20	26° Y 11'44	
opposition	991 Jul 25 j 03:53	6° \approx 14'34 -1°01'33	opposition	997 Oct 10 j 15:31	22° Y 42'06 -2°48'17	
min. Earth dist.	991 Jul 25 j 08:55	6° \approx 13'37 8.84136 AU	min. Earth dist.	997 Oct 10 j 13:55	22° Y 42'25 8.17862 AU	
direct	991 Oct 02 j 12:42	2° \approx 55'43	direct	997 Dec 16 j 05:30	19° Y 16'53	
evening set	992 Jan 10 j 05:09	10° \approx 04'16	evening set	998 Mar 28 j 02:31	27° Y 11'49	
conjunction	992 Jan 26 j 23:37	12° \approx 05'18 -1°02'58	conjunction	998 Apr 14 j 16:44	29° Y 27'20 -2°12'02	
minimum elong	992 Jan 26 j 23:35	12° \approx 05'17 1°02'59	minimum elong	998 Apr 14 j 16:46	29° Y 27'20 2°12'02	
max. Earth dist.	992 Jan 26 j 17:48	12° \approx 03'32 10.79145 AU	max. Earth dist.	998 Apr 14 j 18:45	29° Y 27'59 10.13378 AU	
morning rise	992 Feb 12 j 21:13	14° \approx 07'20		998 Apr 18 j 21:53	0° Z	
	992 Feb 20 j 09:00	15° \approx	morning rise	998 May 02 j 11:10	1° Z 44'13	
retrograde	992 May 27 j 04:43	21° \approx 35'35	retrograde	998 Aug 17 j 14:31	10° Z 03'01	
opposition	992 Aug 05 j 19:59	18° \approx 12'33 -1°32'52	opposition	998 Oct 24 j 16:04	6° Z 32'49 -2°38'02	
min. Earth dist.	992 Aug 06 j 00:11	18° \approx 11'45 8.73828 AU	min. Earth dist.	998 Oct 24 j 13:32	6° Z 33'20 8.09717 AU	
	992 Oct 02 j 00:22	15° \approx	direct	998 Dec 30 j 01:30	3° Z 06'24	
direct	992 Oct 13 j 16:23	14° \approx 52'59	evening set	999 Apr 11 j 15:41	11° Z 08'48	
	992 Oct 25 j 06:28	15° \approx				
evening set	993 Jan 21 j 09:03	22° \approx 07'18	conjunction	999 Apr 29 j 10:32	13° Z 26'43 -1°59'44	
conjunction	993 Feb 07 j 05:24	24° \approx 10'14 -1°27'03	minimum elong	999 Apr 29 j 10:35	13° Z 26'44 1°59'44	
minimum elong	993 Feb 07 j 05:22	24° \approx 10'13 1°27'03	max. Earth dist.	999 Apr 29 j 13:50	13° Z 27'47 10.06350 AU	
max. Earth dist.	993 Feb 06 j 23:38	24° \approx 08'28 10.68259 AU		999 May 11 j 10:12	15° Z	
morning rise	993 Feb 24 j 05:43	26° \approx 14'24	morning rise	999 May 17 j 09:02	15° Z 45'47	
	993 Mar 30 j 02:04	0° H	retrograde	999 Sep 01 j 05:13	24° Z 07'35	
retrograde	993 Jun 09 j 08:44	3° H 51'55	opposition	999 Nov 07 j 20:01	20° Z 37'12 -2°18'09	
opposition	993 Aug 18 j 17:21	0° H 27'21 -2°00'48	min. Earth dist.	999 Nov 07 j 16:42	20° Z 37'53 8.03888 AU	
min. Earth dist.	993 Aug 18 j 21:17	0° H 26'36 8.62527 AU	direct	1000 Jan 13 j 04:15	17° Z 09'43	
	993 Aug 24 j 15:59	30° \approx	evening set	1000 Apr 25 j 12:20	25° Z 18'11	
direct	993 Oct 26 j 00:33	27° \approx 06'51	conjunction	1000 May 13 j 11:30	27° Z 38'01 -1°40'04	
	993 Dec 23 j 21:27	0° H	minimum elong	1000 May 13 j 11:34	27° Z 38'03 1°40'05	
evening set	994 Feb 02 j 21:37	4° H 28'11	max. Earth dist.	1000 May 13 j 16:04	27° Z 39'31 10.01871 AU	
conjunction	994 Feb 19 j 20:23	6° H 33'17 -1°47'40	morning rise	1000 May 31 j 13:24	29° Z 58'42	
minimum elong	994 Feb 19 j 20:20	6° H 33'17 1°47'39		1000 May 31 j 17:27	0° II	
max. Earth dist.	994 Feb 19 j 15:30	6° H 31'47 10.56606 AU	retrograde	1000 Sep 14 j 20:39	8° II 20'40	
morning rise	994 Mar 08 j 23:40	8° H 39'47	opposition	1000 Nov 21 j 01:44	4° II 50'32 -1°49'36	
retrograde	994 Jun 22 j 19:09	16° H 27'01	min. Earth dist.	1000 Nov 20 j 21:39	4° II 51'23 8.00770 AU	
opposition	994 Aug 31 j 20:12	13° H 00'56 -2°23'48	direct	1001 Jan 26 j 11:59	1° II 22'09	
min. Earth dist.	994 Aug 31 j 23:24	13° H 00'19 8.50721 AU	evening set	1001 May 10 j 14:08	9° II 34'52	
direct	994 Nov 07 j 15:17	9° H 39'21	conjunction	1001 May 28 j 16:44	11° II 55'57 -1°14'10	
evening set	995 Feb 15 j 19:33	17° H 08'40	minimum elong	1001 May 28 j 16:48	11° II 55'58 1°14'11	
conjunction	995 Mar 04 j 21:24	19° H 16'12 -2°03'33	max. Earth dist.	1001 May 28 j 22:41	11° II 57'54 10.00248 AU	
minimum elong	995 Mar 04 j 21:22	19° H 16'12 2°03'32	morning rise	1001 Jun 15 j 20:49	14° II 17'28	
max. Earth dist.	995 Mar 04 j 18:25	19° H 15'16 10.44708 AU	retrograde	1001 Sep 29 j 10:44	22° II 36'50	
morning rise	995 Mar 22 j 03:55	21° H 25'13	opposition	1001 Dec 05 j 07:52	19° II 07'19 -1°14'08	
retrograde	995 Jul 06 j 13:25	29° H 22'06	min. Earth dist.	1001 Dec 05 j 02:40	19° II 08'23 8.00591 AU	
opposition	995 Sep 14 j 05:03	25° H 54'36 -2°40'18	direct	1002 Feb 09 j 23:26	15° II 38'18	
min. Earth dist.	995 Sep 14 j 06:43	25° H 54'16 8.38954 AU	evening set	1002 May 25 j 18:12	23° II 53'10	
direct	995 Nov 20 j 14:01	22° H 31'51	conjunction	1002 Jun 12 j 22:49	26° II 14'34 -0°43'41	

minimum elong	1002 Jun 12 j 22:52	26° Π 14'35	0°43'41	morning rise	1007 Sep 10 j 03:01	7° Π 05'06	
max. Earth dist.	1002 Jun 13 j 06:13	26° Π 16'59	10.01605 AU	retrograde	1007 Dec 19 j 15:25	14° Π 36'17	
morning rise	1002 Jul 01 j 03:28	28° Π 35'59		opposition	1008 Feb 24 j 22:41	11° Π 14'38	2°20'33
	1002 Jul 12 j 07:14	0° \mathfrak{C}		min. Earth dist.	1008 Feb 24 j 19:47	11° Π 15'13	8.49787 AU
retrograde	1002 Oct 13 j 21:11	6° \mathfrak{C} 50'18		direct	1008 May 04 j 15:15	7° Π 47'36	
opposition	1002 Dec 19 j 12:42	3° \mathfrak{C} 21'44	-0°34'13	evening set	1008 Aug 18 j 15:04	15° Π 35'37	
min. Earth dist.	1002 Dec 19 j 06:30	3° \mathfrak{C} 23'01	8.03384 AU				
	1003 Feb 12 j 19:58	30° \mathfrak{R} Π		conjunction	1008 Sep 05 j 00:52	17° Π 43'37	2°01'45
direct	1003 Feb 24 j 12:43	29° Π 52'24		minimum elong	1008 Sep 05 j 00:50	17° Π 43'36	2°01'45
	1003 Mar 08 j 05:00	0° \mathfrak{C}		max. Earth dist.	1008 Sep 05 j 02:51	17° Π 44'14	10.55528 AU
evening set	1003 Jun 09 j 21:54	8° \mathfrak{C} 07'10		morning rise	1008 Sep 22 j 05:55	19° Π 50'10	
				retrograde	1008 Dec 31 j 06:55	27° Π 13'12	
conjunction	1003 Jun 28 j 02:50	10° \mathfrak{C} 27'57	-0°10'43	opposition	1009 Mar 08 j 22:32	23° Π 52'49	2°37'30
minimum elong	1003 Jun 28 j 02:50	10° \mathfrak{C} 27'57	0°10'44	min. Earth dist.	1009 Mar 08 j 20:35	23° Π 53'12	8.61345 AU
behind sun begin	1003 Jun 27 j 21:16	10° \mathfrak{C} 26'10		direct	1009 May 18 j 02:15	20° Π 26'54	
behind sun end	1003 Jun 28 j 08:24	10° \mathfrak{C} 29'45		evening set	1009 Aug 31 j 17:48	28° Π 07'08	
max. Earth dist.	1003 Jun 28 j 11:03	10° \mathfrak{C} 30'37	10.05865 AU		1009 Sep 16 j 06:30	0° \mathfrak{A}	
morning rise	1003 Jul 16 j 06:19	12° \mathfrak{C} 48'18					
asc. node	1003 Oct 27 j 07:09	20° \mathfrak{C} 55'31		conjunction	1009 Sep 17 j 22:52	0° \mathfrak{A} 12'20	2°12'36
retrograde	1003 Oct 28 j 01:44	20° \mathfrak{C} 55'33		minimum elong	1009 Sep 17 j 22:50	0° \mathfrak{A} 12'19	2°12'37
opposition	1004 Jan 02 j 14:40	17° \mathfrak{C} 28'13	0°07'23	max. Earth dist.	1009 Sep 17 j 23:50	0° \mathfrak{A} 12'38	10.66796 AU
min. Earth dist.	1004 Jan 02 j 08:09	17° \mathfrak{C} 29'33	8.08977 AU	morning rise	1009 Oct 04 j 23:04	2° \mathfrak{A} 16'06	
direct	1004 Mar 10 j 01:35	13° \mathfrak{C} 58'49		retrograde	1010 Jan 12 j 16:12	9° \mathfrak{A} 31'58	
evening set	1004 Jun 23 j 22:15	22° \mathfrak{C} 11'23		opposition	1010 Mar 21 j 17:15	6° \mathfrak{A} 12'41	2°46'42
				min. Earth dist.	1010 Mar 21 j 16:48	6° \mathfrak{A} 12'46	8.72284 AU
conjunction	1004 Jul 12 j 01:38	24° \mathfrak{C} 30'37	0°22'36	direct	1010 May 31 j 05:46	2° \mathfrak{A} 47'57	
minimum elong	1004 Jul 12 j 01:37	24° \mathfrak{C} 30'37	0°22'35	evening set	1010 Sep 13 j 10:31	10° \mathfrak{A} 20'28	
max. Earth dist.	1004 Jul 12 j 09:54	24° \mathfrak{C} 33'16	10.12740 AU				
morning rise	1004 Jul 30 j 02:19	26° \mathfrak{C} 49'01		conjunction	1010 Sep 30 j 11:19	12° \mathfrak{A} 23'10	2°17'11
	1004 Aug 25 j 16:46	0° \mathfrak{Q}		minimum elong	1010 Sep 30 j 11:19	12° \mathfrak{A} 23'10	2°17'12
retrograde	1004 Nov 09 j 23:32	4° \mathfrak{Q} 47'49		max. Earth dist.	1010 Sep 30 j 10:48	12° \mathfrak{A} 23'00	10.77247 AU
opposition	1005 Jan 15 j 12:46	1° \mathfrak{Q} 21'53	0°47'51	morning rise	1010 Oct 17 j 07:34	14° \mathfrak{A} 24'34	
min. Earth dist.	1005 Jan 15 j 06:41	1° \mathfrak{Q} 23'08	8.16995 AU	retrograde	1011 Jan 24 j 19:15	21° \mathfrak{A} 34'20	
	1005 Feb 01 j 17:38	30° \mathfrak{R} \mathfrak{C}		opposition	1011 Apr 03 j 07:21	18° \mathfrak{A} 15'57	2°48'17
direct	1005 Mar 24 j 11:38	27° \mathfrak{C} 52'42		min. Earth dist.	1011 Apr 03 j 08:44	18° \mathfrak{A} 15'41	8.82198 AU
	1005 May 13 j 11:26	0° \mathfrak{Q}		direct	1011 Jun 13 j 03:44	14° \mathfrak{A} 52'21	
evening set	1005 Jul 08 j 16:21	6° \mathfrak{Q} 01'05		evening set	1011 Sep 25 j 18:20	22° \mathfrak{A} 17'30	
conjunction	1005 Jul 26 j 16:31	8° \mathfrak{Q} 18'01	0°54'00	conjunction	1011 Oct 12 j 15:27	24° \mathfrak{A} 18'06	2°15'42
minimum elong	1005 Jul 26 j 16:29	8° \mathfrak{Q} 18'00	0°54'00	minimum elong	1011 Oct 12 j 15:28	24° \mathfrak{A} 18'06	2°15'42
max. Earth dist.	1005 Jul 27 j 00:00	8° \mathfrak{Q} 20'24	10.21770 AU	max. Earth dist.	1011 Oct 12 j 12:49	24° \mathfrak{A} 17'19	10.86497 AU
morning rise	1005 Aug 13 j 13:03	10° \mathfrak{Q} 33'47		morning rise	1011 Oct 29 j 08:42	26° \mathfrak{A} 17'34	
	1005 Sep 21 j 11:25	15° \mathfrak{Q}			1011 Dec 02 j 15:27	0° \mathfrak{M}	
retrograde	1005 Nov 23 j 13:43	18° \mathfrak{Q} 23'23		retrograde	1012 Feb 05 j 18:00	3° \mathfrak{M} 22'23	
opposition	1006 Jan 29 j 05:53	14° \mathfrak{Q} 58'55	1°24'43	opposition	1012 Apr 14 j 17:19	0° \mathfrak{M} 04'38	2°42'41
min. Earth dist.	1006 Jan 29 j 00:54	14° \mathfrak{Q} 59'56	8.26913 AU	min. Earth dist.	1012 Apr 14 j 20:05	0° \mathfrak{M} 04'07	8.90719 AU
	1006 Jan 29 j 00:32	15° \mathfrak{R} \mathfrak{Q}			1012 Apr 15 j 17:59	30° \mathfrak{R} \mathfrak{A}	
direct	1006 Apr 07 j 17:57	11° \mathfrak{Q} 30'14		direct	1012 Jun 24 j 19:26	26° \mathfrak{A} 42'09	
	1006 Jun 12 j 16:55	15° \mathfrak{Q}			1012 Aug 30 j 00:47	0° \mathfrak{M}	
evening set	1006 Jul 23 j 02:04	19° \mathfrak{Q} 32'48		evening set	1012 Oct 06 j 18:06	4° \mathfrak{M} 00'30	
conjunction	1006 Aug 09 j 21:51	21° \mathfrak{Q} 46'54	1°21'49	conjunction	1012 Oct 23 j 12:26	5° \mathfrak{M} 59'26	2°08'33
minimum elong	1006 Aug 09 j 21:48	21° \mathfrak{Q} 46'53	1°21'48	minimum elong	1012 Oct 23 j 12:28	5° \mathfrak{M} 59'27	2°08'32
max. Earth dist.	1006 Aug 10 j 03:32	21° \mathfrak{Q} 48'41	10.32376 AU	max. Earth dist.	1012 Oct 23 j 08:21	5° \mathfrak{M} 58'13	10.94210 AU
morning rise	1006 Aug 27 j 13:28	23° \mathfrak{Q} 59'39		morning rise	1012 Nov 09 j 03:34	7° \mathfrak{M} 57'25	
	1006 Oct 24 j 10:12	0° \mathfrak{M}		retrograde	1013 Feb 16 j 13:25	14° \mathfrak{M} 58'38	
retrograde	1006 Dec 06 j 19:02	1° \mathfrak{M} 39'51		opposition	1013 Apr 27 j 00:02	11° \mathfrak{M} 41'13	2°30'31
	1007 Jan 20 j 02:25	30° \mathfrak{R} \mathfrak{Q}		min. Earth dist.	1013 Apr 27 j 03:05	11° \mathfrak{M} 40'39	8.97537 AU
opposition	1007 Feb 11 j 17:12	28° \mathfrak{Q} 16'50	1°56'03	direct	1013 Jul 07 j 06:05	8° \mathfrak{M} 19'45	
min. Earth dist.	1007 Feb 11 j 13:18	28° \mathfrak{Q} 17'37	8.38089 AU		1013 Oct 13 j 19:25	15° \mathfrak{M}	
direct	1007 Apr 21 j 19:21	24° \mathfrak{Q} 48'51		evening set	1013 Oct 18 j 11:05	15° \mathfrak{M} 32'06	
	1007 Jul 13 j 15:07	0° \mathfrak{M}					
evening set	1007 Aug 06 j 01:51	2° \mathfrak{M} 44'28		conjunction	1013 Nov 04 j 03:34	17° \mathfrak{M} 29'49	1°56'16
				minimum elong	1013 Nov 04 j 03:37	17° \mathfrak{M} 29'50	1°56'15
conjunction	1007 Aug 23 j 16:41	4° \mathfrak{M} 55'29	1°44'40	max. Earth dist.	1013 Nov 03 j 23:29	17° \mathfrak{M} 28'37	11.00101 AU
minimum elong	1007 Aug 23 j 16:38	4° \mathfrak{M} 55'29	1°44'40	morning rise	1013 Nov 20 j 17:19	19° \mathfrak{M} 26'48	
max. Earth dist.	1007 Aug 23 j 20:19	4° \mathfrak{M} 56'37	10.43867 AU	retrograde	1014 Feb 28 j 09:21	26° \mathfrak{M} 25'48	
































































































































opposition	1014 May 09 j 04:14	23° \mathbb{M} 08'28	2°12'31	retrograde	1020 May 09 j 11:08	4° \approx 56'26
min. Earth dist.	1014 May 09 j 07:43	23° \mathbb{M} 07'49	9.02405 AU	opposition	1020 Jul 19 j 07:56	1° \approx 35'09 -0°47'52
direct	1014 Jul 19 j 11:38	19° \mathbb{M} 47'53		min. Earth dist.	1020 Jul 19 j 12:45	1° \approx 34'15 8.86781 AU
evening set	1014 Oct 29 j 23:16	26° \mathbb{M} 55'18			1020 Aug 10 j 09:36	30° \mathbb{R} \mathcal{Z}
				direct	1020 Sep 26 j 20:27	28° \mathcal{Z} 16'14
conjunction	1014 Nov 15 j 14:30	28° \mathbb{M} 52'15	1°39'29		1020 Nov 11 j 16:30	0° \approx
minimum elong	1014 Nov 15 j 14:33	28° \mathbb{M} 52'16	1°39'28	evening set	1021 Jan 04 j 15:12	5° \approx 23'15
max. Earth dist.	1014 Nov 15 j 09:52	28° \mathbb{M} 50'53	11.03956 AU			
	1014 Nov 25 j 04:29	0° \mathcal{Z}		conjunction	1021 Jan 21 j 08:54	7° \approx 23'41 -0°52'13
morning rise	1014 Dec 02 j 03:39	0° \mathcal{Z} 48'41		minimum elong	1021 Jan 21 j 08:52	7° \approx 23'40 0°52'12
retrograde	1015 Mar 12 j 02:42	7° \mathcal{Z} 46'51		max. Earth dist.	1021 Jan 21 j 03:11	7° \approx 21'57 10.82373 AU
opposition	1015 May 21 j 06:47	4° \mathcal{Z} 29'24	1°49'31	morning rise	1021 Feb 07 j 05:43	9° \approx 25'02
min. Earth dist.	1015 May 21 j 11:22	4° \mathcal{Z} 28'33	9.05164 AU		1021 Apr 04 j 01:37	15° \approx
direct	1015 Jul 31 j 10:46	1° \mathcal{Z} 09'32		retrograde	1021 May 22 j 03:34	16° \approx 49'58
evening set	1015 Nov 10 j 08:13	8° \mathcal{Z} 13'17			1021 Jul 10 j 16:50	15° \mathbb{R} \approx
				opposition	1021 Jul 31 j 22:08	13° \approx 27'26 -1°20'09
conjunction	1015 Nov 26 j 22:39	10° \mathcal{Z} 09'52	1°18'55	min. Earth dist.	1021 Aug 01 j 02:24	13° \approx 26'37 8.77593 AU
minimum elong	1015 Nov 26 j 22:42	10° \mathcal{Z} 09'53	1°18'55	direct	1021 Oct 08 j 23:56	10° \approx 08'04
max. Earth dist.	1015 Nov 26 j 16:40	10° \mathcal{Z} 08'06	11.05658 AU		1021 Dec 27 j 06:41	15° \approx
morning rise	1015 Dec 13 j 12:03	12° \mathcal{Z} 06'12		evening set	1022 Jan 16 j 16:04	17° \approx 20'12
retrograde	1016 Mar 22 j 20:49	19° \mathcal{Z} 05'06				
opposition	1016 Jun 01 j 08:58	15° \mathcal{Z} 47'16	1°22'23	conjunction	1022 Feb 02 j 11:39	19° \approx 22'22 -1°17'22
min. Earth dist.	1016 Jun 01 j 14:31	15° \mathcal{Z} 46'15	9.05734 AU	minimum elong	1022 Feb 02 j 11:36	19° \approx 22'21 1°17'22
direct	1016 Aug 11 j 09:51	12° \mathcal{Z} 27'58		max. Earth dist.	1022 Feb 02 j 07:28	19° \approx 21'06 10.72528 AU
evening set	1016 Nov 20 j 15:23	19° \mathcal{Z} 29'24		morning rise	1022 Feb 19 j 10:47	21° \approx 25'40
				retrograde	1022 Jun 04 j 05:14	28° \approx 59'28
conjunction	1016 Dec 07 j 05:40	21° \mathcal{Z} 26'02	0°55'19	opposition	1022 Aug 13 j 17:20	25° \approx 35'35 -1°49'39
minimum elong	1016 Dec 07 j 05:42	21° \mathcal{Z} 26'03	0°55'19	min. Earth dist.	1022 Aug 13 j 20:11	25° \approx 35'03 8.67239 AU
max. Earth dist.	1016 Dec 06 j 23:11	21° \mathcal{Z} 24'07	11.05156 AU	direct	1022 Oct 21 j 06:32	22° \approx 15'37
morning rise	1016 Dec 23 j 19:49	23° \mathcal{Z} 22'39		evening set	1023 Jan 29 j 00:58	29° \approx 34'05
	1017 Mar 12 j 16:06	0° \mathcal{Z}			1023 Feb 01 j 14:32	0° \mathcal{H}
retrograde	1017 Apr 03 j 18:12	0° \mathcal{Z} 23'52				
	1017 Apr 26 j 02:54	30° \mathbb{R} \mathcal{Z}		conjunction	1023 Feb 14 j 22:45	1° \mathcal{H} 38'16 -1°39'33
opposition	1017 Jun 13 j 11:31	27° \mathcal{Z} 05'26	0°52'02	minimum elong	1023 Feb 14 j 22:43	1° \mathcal{H} 38'15 1°39'32
min. Earth dist.	1017 Jun 13 j 16:50	27° \mathcal{Z} 04'27	9.04094 AU	max. Earth dist.	1023 Feb 14 j 20:02	1° \mathcal{H} 37'26 10.61718 AU
direct	1017 Aug 23 j 06:47	23° \mathcal{Z} 46'32		morning rise	1023 Mar 04 j 00:32	3° \mathcal{H} 43'45
	1017 Nov 25 j 02:13	0° \mathcal{Z}		retrograde	1023 Jun 17 j 14:11	11° \mathcal{H} 27'00
evening set	1017 Dec 01 j 22:46	0° \mathcal{Z} 47'04		opposition	1023 Aug 26 j 18:08	8° \mathcal{H} 01'47 -2°14'50
				min. Earth dist.	1023 Aug 26 j 19:31	8° \mathcal{H} 01'31 8.56166 AU
conjunction	1017 Dec 18 j 13:30	2° \mathcal{Z} 44'09	0°29'29	direct	1023 Nov 02 j 17:50	4° \mathcal{H} 41'02
minimum elong	1017 Dec 18 j 13:31	2° \mathcal{Z} 44'09	0°29'30	evening set	1024 Feb 10 j 19:10	12° \mathcal{H} 06'53
max. Earth dist.	1017 Dec 18 j 07:38	2° \mathcal{Z} 42'25	11.02451 AU			
morning rise	1018 Jan 04 j 04:43	4° \mathcal{Z} 41'27		conjunction	1024 Feb 27 j 19:35	14° \mathcal{H} 13'19 -1°57'30
retrograde	1018 Apr 15 j 18:27	11° \mathcal{Z} 46'28		minimum elong	1024 Feb 27 j 19:32	14° \mathcal{H} 13'19 1°57'30
opposition	1018 Jun 25 j 15:19	8° \mathcal{Z} 27'14	0°19'28	max. Earth dist.	1024 Feb 27 j 17:37	14° \mathcal{H} 12'43 10.50440 AU
min. Earth dist.	1018 Jun 25 j 20:04	8° \mathcal{Z} 26'22	9.00289 AU	morning rise	1024 Mar 16 j 00:32	16° \mathcal{H} 21'12
direct	1018 Sep 04 j 02:25	5° \mathcal{Z} 08'33		retrograde	1024 Jun 30 j 06:13	24° \mathcal{H} 13'57
evening set	1018 Dec 13 j 08:08	12° \mathcal{Z} 09'44		opposition	1024 Sep 08 j 00:43	20° \mathcal{H} 47'28 -2°34'09
				min. Earth dist.	1024 Sep 08 j 01:18	20° \mathcal{H} 47'21 8.44890 AU
conjunction	1018 Dec 29 j 23:33	14° \mathcal{Z} 07'37	0°02'22	direct	1024 Nov 14 j 12:33	17° \mathcal{H} 25'44
minimum elong	1018 Dec 29 j 23:34	14° \mathcal{Z} 07'37	0°02'22	evening set	1025 Feb 22 j 23:10	24° \mathcal{H} 59'42
behind sun begin	1018 Dec 29 j 16:35	14° \mathcal{Z} 05'34				
behind sun end	1018 Dec 30 j 06:32	14° \mathcal{Z} 09'40		conjunction	1025 Mar 12 j 02:51	27° \mathcal{H} 08'36 -2°10'01
max. Earth dist.	1018 Dec 29 j 17:56	14° \mathcal{Z} 05'59	10.97623 AU	minimum elong	1025 Mar 12 j 02:49	27° \mathcal{H} 08'35 2°10'01
morning rise	1019 Jan 15 j 16:15	16° \mathcal{Z} 05'56		max. Earth dist.	1025 Mar 12 j 01:41	27° \mathcal{H} 08'14 10.39224 AU
desc. node	1019 Jan 30 j 09:00	17° \mathcal{Z} 45'51		morning rise	1025 Mar 29 j 11:26	29° \mathcal{H} 19'01
retrograde	1019 Apr 28 j 00:48	23° \mathcal{Z} 16'15			1025 Apr 04 j 01:16	0° \mathcal{Y}
opposition	1019 Jul 07 j 21:51	19° \mathcal{Z} 56'05	-0°14'13	retrograde	1025 Jul 14 j 05:43	7° \mathcal{Y} 20'46
min. Earth dist.	1019 Jul 08 j 02:27	19° \mathcal{Z} 55'14	8.94445 AU	opposition	1025 Sep 21 j 13:03	3° \mathcal{Y} 53'08 -2°46'04
direct	1019 Sep 15 j 22:53	16° \mathcal{Z} 37'24		min. Earth dist.	1025 Sep 21 j 13:04	3° \mathcal{Y} 53'07 8.33936 AU
evening set	1019 Dec 24 j 21:02	23° \mathcal{Z} 40'44		direct	1025 Nov 27 j 14:14	0° \mathcal{Y} 30'16
				evening set	1026 Mar 08 j 13:19	8° \mathcal{Y} 12'39
conjunction	1020 Jan 10 j 13:21	25° \mathcal{Z} 39'43	-0°25'17			
minimum elong	1020 Jan 10 j 13:20	25° \mathcal{Z} 39'43	0°25'18	conjunction	1026 Mar 25 j 20:54	10° \mathcal{Y} 24'08 -2°16'01
max. Earth dist.	1020 Jan 10 j 07:10	25° \mathcal{Z} 37'53	10.90846 AU	minimum elong	1026 Mar 25 j 20:54	10° \mathcal{Y} 24'08 2°16'01
morning rise	1020 Jan 27 j 07:59	27° \mathcal{Z} 39'26		max. Earth dist.	1026 Mar 25 j 21:02	10° \mathcal{Y} 24'10 10.28601 AU
	1020 Feb 17 j 03:54	0° \approx		morning rise	1026 Apr 12 j 09:22	12° \mathcal{Y} 37'08

retrograde	1026 Jul 28 j 10:48	20° Υ 46'45	conjunction	1032 Jun 21 j 02:39	4° Θ 43'12	-0°24'43
opposition	1026 Oct 05 j 06:40	17° Υ 18'08 -2°49'21	minimum elong	1032 Jun 21 j 02:41	4° Θ 43'12	0°24'43
min. Earth dist.	1026 Oct 05 j 05:57	17° Υ 18'16 8.23825 AU	max. Earth dist.	1032 Jun 21 j 08:39	4° Θ 45'08	10.04606 AU
direct	1026 Dec 10 j 23:56	13° Υ 54'03	morning rise	1032 Jul 09 j 06:51	7° Θ 03'56	
evening set	1027 Mar 22 j 13:15	21° Υ 44'43	retrograde	1032 Oct 21 j 11:26	15° Θ 13'44	
			opposition	1032 Dec 27 j 01:26	11° Θ 45'54	-0°10'10
conjunction	1027 Apr 09 j 01:21	23° Υ 58'49 -2°14'40	min. Earth dist.	1032 Dec 26 j 20:42	11° Θ 46'53	8.06960 AU
minimum elong	1027 Apr 09 j 01:23	23° Υ 58'50 2°14'40	direct	1033 Mar 04 j 08:15	8° Θ 16'25	
max. Earth dist.	1027 Apr 09 j 03:13	23° Υ 59'25 10.19084 AU	asc. node	1033 Mar 29 j 17:18	8° Θ 51'36	
morning rise	1027 Apr 26 j 17:54	26° Υ 14'22	evening set	1033 Jun 17 j 23:18	16° Θ 29'33	
	1027 May 28 j 14:45	0° Θ				
retrograde	1027 Aug 11 j 20:54	4° Θ 30'11	conjunction	1033 Jul 06 j 03:21	18° Θ 49'24	0°08'40
opposition	1027 Oct 19 j 04:58	1° Θ 00'50 -2°43'09	minimum elong	1033 Jul 06 j 03:20	18° Θ 49'24	0°08'40
min. Earth dist.	1027 Oct 19 j 03:04	1° Θ 01'13 8.15042 AU	behind sun begin	1033 Jul 05 j 21:00	18° Θ 47'22	
	1027 Oct 31 j 20:55	30° κ Υ	behind sun end	1033 Jul 06 j 09:41	18° Θ 51'25	
direct	1027 Dec 24 j 17:00	27° Υ 35'34	max. Earth dist.	1033 Jul 06 j 09:20	18° Θ 51'19	10.09984 AU
	1028 Feb 14 j 17:30	0° Θ	morning rise	1033 Jul 24 j 05:31	21° Θ 08'36	
evening set	1028 Apr 04 j 22:24	5° Θ 33'57	retrograde	1033 Nov 04 j 10:40	29° Θ 10'36	
			opposition	1034 Jan 10 j 00:46	25° Θ 43'55	0°31'00
conjunction	1028 Apr 22 j 15:18	7° Θ 50'36 -2°05'35	min. Earth dist.	1034 Jan 09 j 19:47	25° Θ 44'56	8.13564 AU
minimum elong	1028 Apr 22 j 15:20	7° Θ 50'37 2°05'35	direct	1034 Mar 18 j 19:30	22° Θ 14'23	
max. Earth dist.	1028 Apr 22 j 18:38	7° Θ 51'41 10.11161 AU		1034 Jun 29 j 13:49	0° Ω	
morning rise	1028 May 10 j 11:55	10° Θ 08'29	evening set	1034 Jul 02 j 19:25	0° Ω 24'12	
	1028 Jun 21 j 16:52	15° Θ				
retrograde	1028 Aug 25 j 10:46	18° Θ 28'23	conjunction	1034 Jul 20 j 21:04	2° Ω 42'07	0°41'00
opposition	1028 Nov 01 j 07:06	14° Θ 58'39 -2°27'15	minimum elong	1034 Jul 20 j 21:02	2° Ω 42'07	0°40'59
min. Earth dist.	1028 Nov 01 j 03:58	14° Θ 59'17 8.08100 AU	max. Earth dist.	1034 Jul 21 j 03:01	2° Ω 44'01	10.17720 AU
	1028 Nov 01 j 00:30	15° κ Θ	morning rise	1034 Aug 07 j 19:41	4° Ω 59'02	
direct	1029 Jan 06 j 16:00	11° Θ 32'13	retrograde	1034 Nov 18 j 03:30	12° Ω 52'16	
	1029 Mar 10 j 21:40	15° Θ	opposition	1035 Jan 23 j 19:22	9° Ω 26'50	1°09'35
evening set	1029 Apr 19 j 15:47	19° Θ 37'20	min. Earth dist.	1035 Jan 23 j 14:11	9° Ω 27'53	8.22305 AU
			direct	1035 Apr 02 j 03:15	5° Ω 57'34	
conjunction	1029 May 07 j 13:11	21° Θ 56'10 -1°48'56	evening set	1035 Jul 17 j 08:15	14° Ω 02'24	
minimum elong	1029 May 07 j 13:15	21° Θ 56'11 1°48'56		1035 Jul 25 j 00:26	15° Ω	
max. Earth dist.	1029 May 07 j 17:46	21° Θ 57'39 10.05377 AU				
morning rise	1029 May 25 j 13:26	24° Θ 15'56	conjunction	1035 Aug 04 j 06:11	16° Ω 17'45	1°10'28
	1029 Jul 15 j 19:51	0° Π	minimum elong	1035 Aug 04 j 06:08	16° Ω 17'45	1°10'27
retrograde	1029 Sep 09 j 02:59	2° Π 37'18	max. Earth dist.	1035 Aug 04 j 11:59	16° Ω 19'36	10.27309 AU
	1029 Nov 04 j 18:43	30° κ Θ	morning rise	1035 Aug 22 j 00:05	18° Ω 31'50	
opposition	1029 Nov 15 j 11:43	29° Θ 07'32 -2°02'14	retrograde	1035 Dec 01 j 12:15	26° Ω 15'53	
min. Earth dist.	1029 Nov 15 j 07:36	29° Θ 08'23 8.03545 AU	opposition	1036 Feb 06 j 08:31	22° Ω 51'49	1°43'25
direct	1030 Jan 20 j 20:08	25° Θ 40'03	min. Earth dist.	1036 Feb 06 j 03:53	22° Ω 52'45	8.32630 AU
	1030 Apr 02 j 12:44	0° Π	direct	1036 Apr 15 j 06:00	19° Ω 23'05	
evening set	1030 May 04 j 15:12	3° Π 50'17	evening set	1036 Jul 30 j 11:59	27° Ω 21'37	
conjunction	1030 May 22 j 16:25	6° Π 10'41 -1°25'32	conjunction	1036 Aug 17 j 05:14	29° Ω 34'01	1°35'32
minimum elong	1030 May 22 j 16:28	6° Π 10'42 1°25'32	minimum elong	1036 Aug 17 j 05:11	29° Ω 34'00	1°35'32
max. Earth dist.	1030 May 22 j 21:58	6° Π 12'30 10.02218 AU	max. Earth dist.	1036 Aug 17 j 10:19	29° Ω 35'37	10.38170 AU
morning rise	1030 Jun 09 j 19:25	8° Π 31'41		1036 Aug 20 j 16:02	0° Π	
retrograde	1030 Sep 23 j 18:18	16° Π 51'42	morning rise	1036 Sep 03 j 17:48	1° Π 45'01	
opposition	1030 Nov 29 j 17:29	13° Π 22'15 -1°29'31	retrograde	1036 Dec 13 j 12:55	9° Π 19'59	
min. Earth dist.	1030 Nov 29 j 12:52	13° Π 23'13 8.01773 AU	opposition	1037 Feb 18 j 16:11	5° Π 57'18	2°10'56
direct	1031 Feb 04 j 05:43	9° Π 53'51	min. Earth dist.	1037 Feb 18 j 12:47	5° Π 57'58	8.43942 AU
evening set	1031 May 19 j 18:04	18° Π 07'13	direct	1037 Apr 29 j 02:51	2° Π 29'22	
			evening set	1037 Aug 13 j 05:19	10° Π 20'38	
conjunction	1031 Jun 06 j 21:53	20° Π 28'22 -0°56'49	conjunction	1037 Aug 30 j 17:24	12° Π 29'59	1°55'08
minimum elong	1031 Jun 06 j 21:56	20° Π 28'23 0°56'49	minimum elong	1037 Aug 30 j 17:22	12° Π 29'58	1°55'08
max. Earth dist.	1031 Jun 07 j 03:51	20° Π 30'19 10.01954 AU	max. Earth dist.	1037 Aug 30 j 20:57	12° Π 31'05	10.49707 AU
morning rise	1031 Jun 25 j 02:21	22° Π 49'44	morning rise	1037 Sep 17 j 00:39	14° Π 37'52	
	1031 Sep 03 j 12:23	0° Θ	retrograde	1037 Dec 26 j 06:40	22° Π 04'17	
retrograde	1031 Oct 08 j 05:48	1° Θ 05'45	opposition	1038 Mar 03 j 18:07	18° Π 42'55	2°31'10
	1031 Nov 12 j 02:58	30° κ Π	min. Earth dist.	1038 Mar 03 j 16:06	18° Π 43'19	8.55641 AU
opposition	1031 Dec 13 j 22:39	27° Π 36'58 -0°51'16	direct	1038 May 12 j 16:21	15° Π 16'01	
min. Earth dist.	1031 Dec 13 j 18:00	27° Π 37'56 8.02937 AU	evening set	1038 Aug 26 j 12:10	22° Π 59'30	
direct	1032 Feb 18 j 18:33	24° Π 07'53				
	1032 May 14 j 15:37	0° Θ				
evening set	1032 Jun 02 j 21:51	2° Θ 22'13	conjunction	1038 Sep 12 j 19:12	25° Π 05'54	2°08'41

minimum elong	1038 Sep 12 j 19:10	25° 0 05'54	2°08'41	conjunction	1044 Nov 21 j 07:40	5° 2 25'26	1°28'22
max. Earth dist.	1038 Sep 12 j 20:44	25° 0 06'23	10.61343 AU	minimum elong	1044 Nov 21 j 07:43	5° 2 25'27	1°28'22
morning rise	1038 Sep 29 j 21:34	27° 0 10'52		max. Earth dist.	1044 Nov 21 j 03:05	5° 2 24'05	11.06996 AU
	1038 Oct 24 j 14:07	0° 0		morning rise	1044 Dec 07 j 20:50	7° 2 21'33	
retrograde	1039 Jan 07 j 16:00	4° 0 29'31		retrograde	1045 Mar 18 j 01:02	14° 2 19'18	
opposition	1039 Mar 16 j 14:20	1° 0 09'21	2°43'42	opposition	1045 May 27 j 09:22	11° 2 02'10	1°34'44
min. Earth dist.	1039 Mar 16 j 13:21	1° 0 09'33	8.67150 AU	min. Earth dist.	1045 May 27 j 13:11	11° 2 01'28	9.07721 AU
	1039 Mar 31 j 20:15	30° 8		direct	1045 Aug 06 j 12:54	7° 2 43'12	
direct	1039 May 25 j 23:51	27° 0 43'39		evening set	1045 Nov 16 j 00:27	14° 2 44'49	
	1039 Jul 18 j 17:21	0° 0					
evening set	1039 Sep 08 j 08:40	5° 0 19'16		conjunction	1045 Dec 02 j 14:50	16° 2 41'12	1°06'02
				minimum elong	1045 Dec 02 j 14:52	16° 2 41'13	1°06'03
conjunction	1039 Sep 25 j 11:12	7° 0 22'59	2°15'58	max. Earth dist.	1045 Dec 02 j 09:57	16° 2 39'46	11.07735 AU
minimum elong	1039 Sep 25 j 11:10	7° 0 22'59	2°15'58	morning rise	1045 Dec 19 j 04:23	18° 2 37'25	
max. Earth dist.	1039 Sep 25 j 11:10	7° 0 22'58	10.72527 AU	retrograde	1046 Mar 29 j 21:40	25° 2 36'40	
morning rise	1039 Oct 12 j 09:16	9° 0 25'21		opposition	1046 Jun 08 j 11:17	22° 2 19'08	1°05'45
retrograde	1040 Jan 19 j 20:20	16° 0 37'16		min. Earth dist.	1046 Jun 08 j 16:03	22° 2 18'15	9.07254 AU
opposition	1040 Mar 28 j 05:38	13° 0 18'11	2°48'30	direct	1046 Aug 18 j 08:49	19° 2 00'42	
min. Earth dist.	1040 Mar 28 j 05:06	13° 0 18'17	8.77933 AU	evening set	1046 Nov 27 j 07:31	26° 2 00'44	
direct	1040 Jun 07 j 00:54	9° 0 53'47					
evening set	1040 Sep 19 j 19:30	17° 0 21'43		conjunction	1046 Dec 13 j 21:51	27° 2 57'21	0°41'09
				minimum elong	1046 Dec 13 j 21:52	27° 2 57'21	0°41'09
conjunction	1040 Oct 06 j 18:14	19° 0 23'06	2°17'04	max. Earth dist.	1046 Dec 13 j 15:22	27° 2 55'26	11.06115 AU
minimum elong	1040 Oct 06 j 18:14	19° 0 23'06	2°17'04	morning rise	1046 Dec 30 j 12:25	29° 2 54'04	
max. Earth dist.	1040 Oct 06 j 17:46	19° 0 22'58	10.82760 AU		1046 Dec 31 j 09:00	0° 0	
morning rise	1040 Oct 23 j 12:42	21° 0 23'17		retrograde	1047 Apr 10 j 18:40	6° 0 56'23	
retrograde	1041 Jan 30 j 22:29	28° 0 29'40		opposition	1047 Jun 20 j 14:12	3° 0 38'11	0°34'07
opposition	1041 Apr 09 j 16:40	25° 0 11'28	2°45'57	min. Earth dist.	1047 Jun 20 j 20:09	3° 0 37'05	9.04419 AU
min. Earth dist.	1041 Apr 09 j 17:01	25° 0 11'24	8.87534 AU	direct	1047 Aug 30 j 03:54	0° 0 19'59	
direct	1041 Jun 19 j 17:31	21° 0 48'24		evening set	1047 Dec 08 j 15:39	7° 0 20'01	
evening set	1041 Oct 01 j 21:58	29° 0 09'07					
	1041 Oct 09 j 02:56	0° 0		conjunction	1047 Dec 25 j 06:28	9° 0 17'16	0°14'32
				minimum elong	1047 Dec 25 j 06:28	9° 0 17'16	0°14'32
conjunction	1041 Oct 18 j 17:36	1° 0 08'38	2°12'19	behind sun begin	1047 Dec 25 j 03:13	9° 0 16'19	
minimum elong	1041 Oct 18 j 17:37	1° 0 08'39	2°12'19	behind sun end	1047 Dec 25 j 09:43	9° 0 18'13	
max. Earth dist.	1041 Oct 18 j 16:17	1° 0 08'15	10.91624 AU	max. Earth dist.	1047 Dec 24 j 23:07	9° 0 15'07	11.02131 AU
morning rise	1041 Nov 04 j 09:25	3° 0 07'06		morning rise	1048 Jan 10 j 22:26	11° 0 14'52	
retrograde	1042 Feb 11 j 18:31	10° 0 09'11		retrograde	1048 Apr 21 j 21:39	18° 0 21'54	
opposition	1042 Apr 22 j 00:02	6° 0 51'39	2°36'33	opposition	1048 Jul 01 j 19:17	15° 0 02'46	0°00'52
min. Earth dist.	1042 Apr 22 j 02:01	6° 0 51'17	8.95579 AU	min. Earth dist.	1048 Jul 02 j 01:29	15° 0 01'37	8.99263 AU
direct	1042 Jul 02 j 04:01	3° 0 29'50		desc. node	1048 Jul 11 j 12:25	14° 0 19'58	
evening set	1042 Oct 13 j 17:22	10° 0 44'10		direct	1048 Sep 10 j 01:17	11° 0 34'35	
				evening set	1048 Dec 19 j 02:29	18° 0 34'12	
conjunction	1042 Oct 30 j 10:34	12° 0 42'14	2°02'13				
minimum elong	1042 Oct 30 j 10:36	12° 0 42'15	2°02'12	conjunction	1049 Jan 04 j 18:19	20° 0 34'28	-0°13'00
max. Earth dist.	1042 Oct 30 j 07:22	12° 0 41'17	10.98783 AU	minimum elong	1049 Jan 04 j 18:18	20° 0 34'27	0°13'01
morning rise	1042 Nov 16 j 00:48	14° 0 39'28		behind sun begin	1049 Jan 04 j 13:59	20° 0 34'11	
	1042 Nov 18 j 23:51	15° 0		behind sun end	1049 Jan 04 j 22:38	20° 0 34'54	
retrograde	1043 Feb 23 j 13:00	21° 0 38'39		max. Earth dist.	1049 Jan 04 j 11:34	20° 0 34'28	10.95890 AU
opposition	1043 May 04 j 04:43	18° 0 21'32	2°21'01	morning rise	1049 Jan 21 j 11:55	22° 0 34'19	
min. Earth dist.	1043 May 04 j 08:06	18° 0 20'55	9.01762 AU	retrograde	1049 May 04 j 05:58	29° 0 35'35	
direct	1043 Jul 14 j 11:10	15° 0 00'50		opposition	1049 Jul 14 j 03:24	26° 0 36'17	-0°32'53
evening set	1043 Oct 25 j 07:11	22° 0 09'45		min. Earth dist.	1049 Jul 14 j 08:50	26° 0 35'16	8.91978 AU
				direct	1049 Sep 21 j 22:34	23° 0 17'54	
conjunction	1043 Nov 10 j 22:42	24° 0 06'49	1°47'20		1049 Dec 27 j 12:35	0° 0	
minimum elong	1043 Nov 10 j 22:45	24° 0 06'50	1°47'19	evening set	1049 Dec 30 j 18:04	0° 0 22'40	
max. Earth dist.	1043 Nov 10 j 18:12	24° 0 05'30	11.03969 AU				
morning rise	1043 Nov 27 j 12:07	26° 0 03'17		conjunction	1050 Jan 16 j 11:10	2° 0 22'16	-0°40'17
	1044 Jan 04 j 01:41	0° 0		minimum elong	1050 Jan 16 j 11:08	2° 0 22'16	0°40'18
retrograde	1044 Mar 06 j 06:20	3° 0 01'00		max. Earth dist.	1050 Jan 16 j 04:39	2° 0 20'19	10.87659 AU
	1044 May 11 j 16:42	30° 0		morning rise	1050 Feb 02 j 06:43	4° 0 22'41	
opposition	1044 May 15 j 07:30	29° 0 44'01	2°00'08	retrograde	1050 May 16 j 20:49	11° 0 43'30	
min. Earth dist.	1044 May 15 j 11:14	29° 0 43'19	9.05858 AU	opposition	1050 Jul 26 j 15:23	8° 0 21'52	-1°05'54
direct	1044 Jul 25 j 13:18	26° 0 24'17		min. Earth dist.	1050 Jul 26 j 20:26	8° 0 20'55	8.82895 AU
	1044 Oct 03 j 01:09	0° 0		direct	1050 Oct 03 j 22:46	5° 0 02'59	
evening set	1044 Nov 04 j 16:59	3° 0 28'55		evening set	1051 Jan 11 j 15:46	12° 0 22'22	

conjunction	1051 Jan 28 j 10:20	14° \approx 13'38	-1°06'21	conjunction	1057 Apr 16 j 11:14	1° \mathfrak{S} 52'22	-2°10'40
minimum elong	1051 Jan 28 j 10:18	14° \approx 13'37	1°06'21	minimum elong	1057 Apr 16 j 11:16	1° \mathfrak{S} 52'23	2°10'40
max. Earth dist.	1051 Jan 28 j 03:40	14° \approx 11'36	10.77814 AU	max. Earth dist.	1057 Apr 16 j 13:00	1° \mathfrak{S} 52'57	10.12341 AU
	1051 Feb 03 j 19:20	15° \approx		morning rise	1057 May 04 j 06:15	4° \mathfrak{S} 09'33	
morning rise	1051 Feb 14 j 08:16	16° \approx 15'56		retrograde	1057 Aug 19 j 08:19	12° \mathfrak{S} 28'55	
retrograde	1051 May 29 j 18:30	23° \approx 45'21		opposition	1057 Oct 26 j 09:30	8° \mathfrak{S} 58'41	-2°35'41
opposition	1051 Aug 08 j 08:22	20° \approx 22'15	-1°36'49	min. Earth dist.	1057 Oct 26 j 07:16	8° \mathfrak{S} 59'08	8.08829 AU
min. Earth dist.	1051 Aug 08 j 13:11	20° \approx 21'20	8.72420 AU	direct	1057 Dec 31 j 18:53	5° \mathfrak{S} 32'07	
direct	1051 Oct 16 j 02:16	17° \approx 02'37		evening set	1058 Apr 13 j 10:42	13° \mathfrak{S} 35'18	
evening set	1052 Jan 23 j 20:43	24° \approx 17'58			1058 Apr 24 j 09:42	15° \mathfrak{S}	
conjunction	1052 Feb 09 j 17:16	26° \approx 21'09	-1°30'01	conjunction	1058 May 01 j 06:03	15° \mathfrak{S} 53'28	-1°57'19
minimum elong	1052 Feb 09 j 17:13	26° \approx 21'09	1°30'00	minimum elong	1058 May 01 j 06:06	15° \mathfrak{S} 53'29	1°57'20
max. Earth dist.	1052 Feb 09 j 11:10	26° \approx 19'17	10.66788 AU	max. Earth dist.	1058 May 01 j 09:33	15° \mathfrak{S} 54'37	10.05629 AU
morning rise	1052 Feb 26 j 17:54	28° \approx 25'36		morning rise	1058 May 19 j 04:59	18° \mathfrak{S} 12'46	
	1052 Mar 11 j 03:27	0° \mathfrak{H}		retrograde	1058 Sep 02 j 23:44	26° \mathfrak{S} 34'45	
retrograde	1052 Jun 10 j 22:03	6° \mathfrak{H} 04'27		opposition	1058 Nov 09 j 13:42	23° \mathfrak{S} 04'20	-2°14'35
opposition	1052 Aug 20 j 06:40	2° \mathfrak{H} 39'48	-2°04'09	min. Earth dist.	1058 Nov 09 j 10:17	23° \mathfrak{S} 05'03	8.03338 AU
min. Earth dist.	1052 Aug 20 j 10:56	2° \mathfrak{H} 38'58	8.61010 AU	direct	1059 Jan 14 j 21:52	19° \mathfrak{S} 36'42	
	1052 Sep 29 j 07:26	30° \mathfrak{R}		evening set	1059 Apr 28 j 07:52	27° \mathfrak{S} 45'40	
direct	1052 Oct 27 j 12:37	29° \approx 19'13			1059 May 15 j 14:06	0° \mathfrak{I}	
	1052 Nov 24 j 07:19	0° \mathfrak{H}		conjunction	1059 May 16 j 07:31	0° \mathfrak{I} 05'42	-1°36'46
evening set	1053 Feb 04 j 10:27	6° \mathfrak{H} 41'42		minimum elong	1059 May 16 j 07:35	0° \mathfrak{I} 05'43	1°36'47
conjunction	1053 Feb 21 j 09:36	8° \mathfrak{H} 47'08	-1°50'02	max. Earth dist.	1059 May 16 j 12:51	0° \mathfrak{I} 07'26	10.01507 AU
minimum elong	1053 Feb 21 j 09:33	8° \mathfrak{H} 47'07	1°50'01	morning rise	1059 Jun 03 j 09:40	2° \mathfrak{I} 26'31	
max. Earth dist.	1053 Feb 21 j 05:22	8° \mathfrak{H} 45'49	10.55057 AU	retrograde	1059 Sep 17 j 15:19	10° \mathfrak{I} 48'17	
morning rise	1053 Mar 10 j 13:09	10° \mathfrak{H} 53'56		opposition	1059 Nov 23 j 19:28	7° \mathfrak{I} 18'07	-1°45'00
retrograde	1053 Jun 24 j 10:00	18° \mathfrak{H} 42'32		min. Earth dist.	1059 Nov 23 j 14:45	7° \mathfrak{I} 19'05	8.00589 AU
opposition	1053 Sep 02 j 10:26	15° \mathfrak{H} 16'21	-2°26'19	direct	1060 Jan 29 j 06:37	3° \mathfrak{I} 49'36	
min. Earth dist.	1053 Sep 02 j 13:15	15° \mathfrak{H} 15'48	8.49167 AU	evening set	1060 May 12 j 09:53	12° \mathfrak{I} 02'31	
direct	1053 Nov 09 j 05:19	11° \mathfrak{H} 54'41		conjunction	1060 May 30 j 12:52	14° \mathfrak{I} 23'40	-1°10'10
evening set	1054 Feb 17 j 09:47	19° \mathfrak{H} 25'12		minimum elong	1060 May 30 j 12:55	14° \mathfrak{I} 23'41	1°10'10
conjunction	1054 Mar 06 j 12:05	21° \mathfrak{H} 33'05	-2°05'09	max. Earth dist.	1060 May 30 j 19:52	14° \mathfrak{I} 25'57	10.00258 AU
minimum elong	1054 Mar 06 j 12:03	21° \mathfrak{H} 33'05	2°05'08	morning rise	1060 Jun 17 j 17:01	16° \mathfrak{I} 45'12	
max. Earth dist.	1054 Mar 06 j 09:49	21° \mathfrak{H} 32'23	10.43155 AU	retrograde	1060 Oct 01 j 04:40	25° \mathfrak{I} 04'01	
morning rise	1054 Mar 23 j 18:53	23° \mathfrak{H} 42'27		opposition	1060 Dec 07 j 01:23	21° \mathfrak{I} 34'29	-1°08'50
	1054 May 24 j 05:42	0° \mathfrak{Y}		min. Earth dist.	1060 Dec 06 j 19:25	21° \mathfrak{I} 35'43	8.00779 AU
retrograde	1054 Jul 08 j 07:23	1° \mathfrak{Y} 40'38		direct	1061 Feb 11 j 18:21	18° \mathfrak{I} 05'22	
	1054 Aug 23 j 02:41	30° \mathfrak{R}		evening set	1061 May 27 j 14:00	26° \mathfrak{I} 20'08	
opposition	1054 Sep 15 j 20:11	28° \mathfrak{H} 13'02	-2°41'47	conjunction	1061 Jun 14 j 18:46	28° \mathfrak{I} 41'29	-0°39'15
min. Earth dist.	1054 Sep 15 j 21:11	28° \mathfrak{H} 12'50	8.37435 AU	minimum elong	1061 Jun 14 j 18:48	28° \mathfrak{I} 41'30	0°39'16
direct	1054 Nov 22 j 02:50	24° \mathfrak{H} 50'12		max. Earth dist.	1061 Jun 15 j 02:57	28° \mathfrak{I} 44'09	10.01973 AU
	1055 Feb 09 j 23:37	0° \mathfrak{Y}			1061 Jun 24 j 20:01	0° \mathfrak{S}	
evening set	1055 Mar 02 j 19:10	2° \mathfrak{Y} 29'15		morning rise	1061 Jul 02 j 23:16	1° \mathfrak{S} 02'47	
conjunction	1055 Mar 20 j 01:06	4° \mathfrak{Y} 39'45	-2°14'13	retrograde	1061 Oct 15 j 14:10	9° \mathfrak{S} 16'16	
minimum elong	1055 Mar 20 j 01:05	4° \mathfrak{Y} 39'45	2°14'13	opposition	1061 Dec 21 j 05:47	5° \mathfrak{S} 47'44	-0°28'34
max. Earth dist.	1055 Mar 20 j 00:31	4° \mathfrak{Y} 39'34	10.31665 AU	min. Earth dist.	1061 Dec 20 j 23:17	5° \mathfrak{S} 49'05	8.03917 AU
morning rise	1055 Apr 06 j 11:39	6° \mathfrak{Y} 51'46		direct	1062 Feb 26 j 06:59	2° \mathfrak{S} 18'18	
retrograde	1055 Jul 22 j 10:52	14° \mathfrak{Y} 58'44		evening set	1062 Jun 11 j 17:16	10° \mathfrak{S} 32'43	
opposition	1055 Sep 29 j 11:45	11° \mathfrak{Y} 29'56	-2°49'07	conjunction	1062 Jun 29 j 22:01	12° \mathfrak{S} 53'20	-0°06'11
min. Earth dist.	1055 Sep 29 j 11:12	11° \mathfrak{Y} 30'03	8.26408 AU	minimum elong	1062 Jun 29 j 22:02	12° \mathfrak{S} 53'20	0°06'12
direct	1055 Dec 05 j 08:22	8° \mathfrak{Y} 05'51		behind sun begin	1062 Jun 29 j 15:05	12° \mathfrak{S} 51'06	
evening set	1056 Mar 15 j 14:58	15° \mathfrak{Y} 53'34		behind sun end	1062 Jun 30 j 05:00	12° \mathfrak{S} 55'34	
conjunction	1056 Apr 02 j 01:04	18° \mathfrak{Y} 06'45	-2°16'15	max. Earth dist.	1062 Jun 30 j 06:32	12° \mathfrak{S} 56'04	10.06559 AU
minimum elong	1056 Apr 02 j 01:05	18° \mathfrak{Y} 06'46	2°16'15	morning rise	1062 Jul 18 j 01:13	15° \mathfrak{S} 13'27	
max. Earth dist.	1056 Apr 02 j 01:35	18° \mathfrak{Y} 06'55	10.21197 AU	asc. node	1062 Sep 07 j 13:36	20° \mathfrak{S} 55'34	
morning rise	1056 Apr 19 j 15:48	20° \mathfrak{Y} 21'26		retrograde	1062 Oct 29 j 18:21	23° \mathfrak{S} 19'41	
retrograde	1056 Aug 04 j 19:30	28° \mathfrak{Y} 35'40		opposition	1063 Jan 04 j 07:18	19° \mathfrak{S} 52'25	0°12'59
opposition	1056 Oct 12 j 08:25	25° \mathfrak{Y} 05'57	-2°47'16	min. Earth dist.	1063 Jan 04 j 01:00	19° \mathfrak{S} 53'43	8.09818 AU
min. Earth dist.	1056 Oct 12 j 06:58	25° \mathfrak{Y} 06'15	8.16684 AU	direct	1063 Mar 12 j 18:28	16° \mathfrak{S} 22'57	
direct	1056 Dec 17 j 22:03	21° \mathfrak{Y} 40'36		evening set	1063 Jun 26 j 16:45	24° \mathfrak{S} 34'55	
evening set	1057 Mar 29 j 20:33	29° \mathfrak{Y} 36'33		conjunction	1063 Jul 14 j 19:45	26° \mathfrak{S} 53'54	0°26'58
	1057 Apr 01 j 22:19	0° \mathfrak{S}					

minimum elong	1063 Jul 14 j 19:44	26° \mathfrak{D} 53'54	0°26'58	conjunction	1069 Oct 01 j 21:56	14° \mathfrak{D} 30'51	2°17'11
max. Earth dist.	1063 Jul 15 j 03:43	26° \mathfrak{D} 56'28	10.13715 AU	minimum elong	1069 Oct 01 j 21:55	14° \mathfrak{D} 30'51	2°17'11
morning rise	1063 Aug 01 j 20:04	29° \mathfrak{D} 12'00		max. Earth dist.	1069 Oct 01 j 20:32	14° \mathfrak{D} 30'26	10.78824 AU
	1063 Aug 08 j 05:59	0° \mathfrak{Q}		morning rise	1069 Oct 18 j 17:53	16° \mathfrak{D} 31'57	
retrograde	1063 Nov 12 j 15:42	7° \mathfrak{Q} 09'41		retrograde	1070 Jan 26 j 05:00	23° \mathfrak{D} 40'50	
opposition	1064 Jan 18 j 04:42	3° \mathfrak{Q} 43'51	0°53'03	opposition	1070 Apr 04 j 18:26	20° \mathfrak{D} 22'36	2°47'44
min. Earth dist.	1064 Jan 17 j 23:05	3° \mathfrak{Q} 45'00	8.18092 AU	min. Earth dist.	1070 Apr 04 j 20:13	20° \mathfrak{D} 22'15	8.83691 AU
direct	1064 Mar 26 j 04:46	0° \mathfrak{Q} 14'39		direct	1070 Jun 14 j 15:32	16° \mathfrak{D} 59'12	
evening set	1064 Jul 10 j 09:57	8° \mathfrak{Q} 22'18		evening set	1070 Sep 27 j 04:15	24° \mathfrak{D} 23'19	
conjunction	1064 Jul 28 j 09:35	10° \mathfrak{Q} 38'54	0°57'58	conjunction	1070 Oct 14 j 01:04	26° \mathfrak{D} 23'39	2°14'54
minimum elong	1064 Jul 28 j 09:32	10° \mathfrak{Q} 38'53	0°57'57	minimum elong	1070 Oct 14 j 01:04	26° \mathfrak{D} 23'39	2°14'54
max. Earth dist.	1064 Jul 28 j 16:20	10° \mathfrak{Q} 41'03	10.22970 AU	max. Earth dist.	1070 Oct 13 j 21:49	26° \mathfrak{D} 22'41	10.87880 AU
morning rise	1064 Aug 15 j 05:42	12° \mathfrak{Q} 54'20		morning rise	1070 Oct 30 j 18:08	28° \mathfrak{D} 22'54	
	1064 Sep 01 j 13:11	15° \mathfrak{Q}			1070 Nov 13 j 21:52	0° \mathfrak{M}	
retrograde	1064 Nov 25 j 03:32	20° \mathfrak{Q} 42'46		retrograde	1071 Feb 07 j 02:22	5° \mathfrak{M} 27'03	
opposition	1065 Jan 30 j 20:59	17° \mathfrak{Q} 18'26	1°29'14	opposition	1071 Apr 17 j 03:36	2° \mathfrak{M} 09'25	2°41'13
min. Earth dist.	1065 Jan 30 j 16:07	17° \mathfrak{Q} 19'25	8.28209 AU	min. Earth dist.	1071 Apr 17 j 06:09	2° \mathfrak{M} 08'56	8.91972 AU
	1065 Mar 03 j 06:30	15° \mathfrak{R} \mathfrak{Q}			1071 May 18 j 09:30	30° \mathfrak{R} \mathfrak{D}	
direct	1065 Apr 09 j 11:34	13° \mathfrak{Q} 49'47		direct	1071 Jun 27 j 06:52	28° \mathfrak{D} 47'07	
	1065 May 16 j 11:08	15° \mathfrak{Q}			1071 Aug 05 j 10:53	0° \mathfrak{M}	
evening set	1065 Jul 24 j 18:31	21° \mathfrak{Q} 51'31		evening set	1071 Oct 09 j 03:05	6° \mathfrak{M} 04'38	
conjunction	1065 Aug 11 j 13:45	24° \mathfrak{Q} 05'14	1°25'08	conjunction	1071 Oct 25 j 21:20	8° \mathfrak{M} 03'23	2°07'01
minimum elong	1065 Aug 11 j 13:42	24° \mathfrak{Q} 05'13	1°25'08	minimum elong	1071 Oct 25 j 21:21	8° \mathfrak{M} 03'23	2°07'01
max. Earth dist.	1065 Aug 11 j 19:04	24° \mathfrak{Q} 06'54	10.33749 AU	max. Earth dist.	1071 Oct 25 j 17:27	8° \mathfrak{M} 02'14	10.95319 AU
morning rise	1065 Aug 29 j 04:50	26° \mathfrak{Q} 17'37		morning rise	1071 Nov 11 j 12:15	10° \mathfrak{M} 01'12	
	1065 Sep 30 j 10:34	0° \mathfrak{M}			1071 Dec 30 j 22:41	15° \mathfrak{M}	
retrograde	1065 Dec 08 j 07:17	3° \mathfrak{M} 56'43		retrograde	1072 Feb 18 j 23:27	17° \mathfrak{M} 01'58	
opposition	1066 Feb 13 j 07:36	0° \mathfrak{M} 33'50	1°59'41		1072 Apr 11 j 02:47	15° \mathfrak{R} \mathfrak{M}	
min. Earth dist.	1066 Feb 13 j 03:08	0° \mathfrak{M} 34'44	8.39541 AU	opposition	1072 Apr 28 j 09:50	13° \mathfrak{M} 44'40	2°28'14
	1066 Feb 20 j 10:16	30° \mathfrak{R} \mathfrak{Q}		min. Earth dist.	1072 Apr 28 j 12:53	13° \mathfrak{M} 44'06	8.98480 AU
direct	1066 Apr 23 j 12:29	27° \mathfrak{Q} 05'59		direct	1072 Jul 08 j 16:35	10° \mathfrak{M} 23'24	
	1066 Jun 22 j 15:11	0° \mathfrak{M}			1072 Sep 26 j 09:21	15° \mathfrak{M}	
evening set	1066 Aug 07 j 16:54	5° \mathfrak{M} 00'35		evening set	1072 Oct 19 j 19:28	17° \mathfrak{M} 35'04	
conjunction	1066 Aug 25 j 07:15	7° \mathfrak{M} 11'14	1°47'14	conjunction	1072 Nov 05 j 11:53	19° \mathfrak{M} 32'41	1°54'06
minimum elong	1066 Aug 25 j 07:12	7° \mathfrak{M} 11'13	1°47'14	minimum elong	1072 Nov 05 j 11:55	19° \mathfrak{M} 32'42	1°54'06
max. Earth dist.	1066 Aug 25 j 11:28	7° \mathfrak{M} 12'33	10.45390 AU	max. Earth dist.	1072 Nov 05 j 07:39	19° \mathfrak{M} 31'26	11.00878 AU
morning rise	1066 Sep 11 j 16:58	9° \mathfrak{M} 20'27		morning rise	1072 Nov 22 j 01:30	21° \mathfrak{M} 29'34	
retrograde	1066 Dec 21 j 04:45	16° \mathfrak{M} 50'34		retrograde	1073 Mar 01 j 18:13	28° \mathfrak{M} 28'19	
opposition	1067 Feb 26 j 12:16	13° \mathfrak{M} 29'03	2°23'10	opposition	1073 May 10 j 13:52	25° \mathfrak{M} 11'05	2°09'32
min. Earth dist.	1067 Feb 26 j 08:40	13° \mathfrak{M} 29'45	8.51380 AU	min. Earth dist.	1073 May 10 j 18:10	25° \mathfrak{M} 10'17	9.03002 AU
direct	1067 May 07 j 05:33	10° \mathfrak{M} 02'10		direct	1073 Jul 20 j 19:34	21° \mathfrak{M} 50'40	
evening set	1067 Aug 21 j 04:49	17° \mathfrak{M} 49'02		evening set	1073 Oct 31 j 07:16	28° \mathfrak{M} 57'37	
					1073 Nov 09 j 05:18	0° \mathfrak{J}	
conjunction	1067 Sep 07 j 14:10	19° \mathfrak{M} 56'40	2°03'28	conjunction	1073 Nov 16 j 22:23	0° \mathfrak{J} 54'31	1°36'47
minimum elong	1067 Sep 07 j 14:08	19° \mathfrak{M} 56'39	2°03'28	minimum elong	1073 Nov 16 j 22:25	0° \mathfrak{J} 54'32	1°36'47
max. Earth dist.	1067 Sep 07 j 17:03	19° \mathfrak{M} 57'33	10.57176 AU	max. Earth dist.	1073 Nov 16 j 16:40	0° \mathfrak{J} 52'50	11.04376 AU
morning rise	1067 Sep 24 j 18:35	22° \mathfrak{M} 02'49		morning rise	1073 Dec 03 j 11:39	2° \mathfrak{J} 50'56	
retrograde	1068 Jan 02 j 18:46	29° \mathfrak{M} 24'43		retrograde	1074 Mar 13 j 11:07	9° \mathfrak{J} 49'05	
opposition	1068 Mar 10 j 11:11	26° \mathfrak{M} 04'29	2°39'02	opposition	1074 May 22 j 16:17	6° \mathfrak{J} 31'41	1°45'56
min. Earth dist.	1068 Mar 10 j 09:16	26° \mathfrak{M} 04'51	8.63025 AU	min. Earth dist.	1074 May 22 j 21:50	6° \mathfrak{J} 30'39	9.05394 AU
direct	1068 May 19 j 15:23	22° \mathfrak{M} 38'43		direct	1074 Aug 01 j 20:32	3° \mathfrak{J} 11'55	
	1068 Aug 30 j 18:32	0° \mathfrak{D}		evening set	1074 Nov 11 j 15:57	10° \mathfrak{J} 15'25	
evening set	1068 Sep 02 j 06:15	0° \mathfrak{D} 17'45					
conjunction	1068 Sep 19 j 10:49	2° \mathfrak{D} 22'34	2°13'27	conjunction	1074 Nov 28 j 06:24	12° \mathfrak{J} 12'02	1°15'47
minimum elong	1068 Sep 19 j 10:47	2° \mathfrak{D} 22'34	2°13'27	minimum elong	1074 Nov 28 j 06:27	12° \mathfrak{J} 12'03	1°15'47
max. Earth dist.	1068 Sep 19 j 11:53	2° \mathfrak{D} 22'54	10.68471 AU	max. Earth dist.	1074 Nov 27 j 23:37	12° \mathfrak{J} 10'02	11.05702 AU
morning rise	1068 Oct 06 j 10:32	4° \mathfrak{D} 26'00		morning rise	1074 Dec 14 j 19:59	14° \mathfrak{J} 08'23	
retrograde	1069 Jan 14 j 02:22	11° \mathfrak{D} 40'48		retrograde	1075 Mar 25 j 06:06	21° \mathfrak{J} 07'30	
opposition	1069 Mar 23 j 05:08	8° \mathfrak{D} 21'41	2°47'10	opposition	1075 Jun 03 j 18:24	17° \mathfrak{J} 49'40	1°18'20
min. Earth dist.	1069 Mar 23 j 05:24	8° \mathfrak{D} 21'38	8.73928 AU	min. Earth dist.	1075 Jun 04 j 00:10	17° \mathfrak{J} 48'36	9.05577 AU
direct	1069 Jun 01 j 18:56	4° \mathfrak{D} 57'06		direct	1075 Aug 13 j 19:12	14° \mathfrak{J} 30'25	
evening set	1069 Sep 14 j 21:39	12° \mathfrak{D} 28'28		evening set	1075 Nov 22 j 23:08	21° \mathfrak{J} 31'48	

conjunction	1075 Dec 09 j 13:35	23°  28'31	0°51'51	opposition	1081 Aug 15 j 06:28	27°  47'38	-1°53'20
minimum elong	1075 Dec 09 j 13:37	23°  28'32	0°51'51	min. Earth dist.	1081 Aug 15 j 08:58	27°  47'09	8.65278 AU
max. Earth dist.	1075 Dec 09 j 07:17	23°  26'39	11.04805 AU	direct	1081 Oct 22 j 17:30	24°  27'27	
morning rise	1075 Dec 26 j 03:48	25°  25'14			1082 Jan 15 j 09:18	0° 	
	1076 Feb 09 j 01:20	0° 		evening set	1082 Jan 30 j 13:41	1°  47'08	
retrograde	1076 Apr 05 j 03:19	2°  32'53					
	1076 Jun 03 j 01:59	30°  R 		conjunction	1082 Feb 16 j 11:41	3°  51'40	-1°42'13
opposition	1076 Jun 14 j 21:08	29°  08'22	0°47'39	minimum elong	1082 Feb 16 j 11:38	3°  51'39	1°42'12
min. Earth dist.	1076 Jun 15 j 02:16	29°  07'25	9.03545 AU	max. Earth dist.	1082 Feb 16 j 08:21	3°  50'38	10.59696 AU
direct	1076 Aug 24 j 15:32	25°  49'29		morning rise	1082 Mar 05 j 13:51	5°  57'30	
	1076 Nov 07 j 08:29	0° 		retrograde	1082 Jun 19 j 05:24	13°  42'14	
evening set	1076 Dec 03 j 06:50	2°  35'012		opposition	1082 Aug 28 j 08:14	10°  16'46	-2°17'47
				min. Earth dist.	1082 Aug 28 j 09:54	10°  16'26	8.54114 AU
conjunction	1076 Dec 19 j 21:40	4°  34'24	0°25'48	direct	1082 Nov 04 j 06:36	6°  55'45	
minimum elong	1076 Dec 19 j 21:41	4°  34'25	0°25'49	evening set	1083 Feb 12 j 09:16	14°  22'59	
max. Earth dist.	1076 Dec 19 j 15:37	4°  34'537	11.01716 AU				
morning rise	1077 Jan 05 j 13:00	6°  34'450		conjunction	1083 Mar 01 j 09:58	16°  29'48	-1°59'29
retrograde	1077 Apr 17 j 06:01	13°  35'031		minimum elong	1083 Mar 01 j 09:56	16°  29'47	1°59'28
opposition	1077 Jun 27 j 01:28	10°  31'11	0°14'53	max. Earth dist.	1083 Mar 01 j 07:26	16°  29'01	10.48377 AU
min. Earth dist.	1077 Jun 27 j 06:38	10°  30'13	8.99372 AU	morning rise	1083 Mar 18 j 15:23	18°  38'04	
direct	1077 Sep 05 j 11:33	7°  31'226		retrograde	1083 Jul 02 j 23:10	26°  32'20	
desc. node	1077 Dec 11 j 04:00	13°  34'930		opposition	1083 Sep 10 j 16:01	23°  05'37	-2°36'08
evening set	1077 Dec 14 j 16:42	14°  31'401		min. Earth dist.	1083 Sep 10 j 17:00	23°  05'25	8.42847 AU
				direct	1083 Nov 17 j 02:04	19°  43'38	
conjunction	1077 Dec 31 j 08:10	16°  31'204	-0°01'31	evening set	1084 Feb 25 j 14:39	27°  19'02	
minimum elong	1077 Dec 31 j 08:10	16°  31'204	0°01'32				
behind sun begin	1077 Dec 31 j 01:11	16°  31'000		conjunction	1084 Mar 13 j 18:48	29°  28'20	-2°11'08
behind sun end	1077 Dec 31 j 15:09	16°  31'407		minimum elong	1084 Mar 13 j 18:46	29°  28'20	2°11'08
max. Earth dist.	1077 Dec 31 j 01:28	16°  31'006	10.96538 AU	max. Earth dist.	1084 Mar 17 j 18:00	29°  28'05	10.37229 AU
morning rise	1078 Jan 17 j 01:09	18°  31'035			1084 Mar 17 j 23:01	0° 	
retrograde	1078 Apr 29 j 10:53	25°  32'146		morning rise	1084 Mar 31 j 03:50	1°  39'10	
opposition	1078 Jul 09 j 08:32	22°  30'125	-0°18'51	retrograde	1084 Jul 15 j 23:02	9°  42'23	
min. Earth dist.	1078 Jul 09 j 14:05	22°  30'023	8.93196 AU	opposition	1084 Sep 23 j 05:28	6°  14'32	-2°46'55
direct	1078 Sep 17 j 07:16	18°  34'236		min. Earth dist.	1084 Sep 23 j 05:19	6°  14'33	8.32024 AU
evening set	1078 Dec 26 j 06:20	25°  34'636		direct	1084 Nov 29 j 05:52	2°  51'27	
				evening set	1085 Mar 10 j 06:21	10°  35'16	
conjunction	1079 Jan 11 j 22:47	27°  34'548	-0°29'01				
minimum elong	1079 Jan 11 j 22:46	27°  34'548	0°29'02	conjunction	1085 Mar 27 j 14:34	12°  47'10	-2°16'09
max. Earth dist.	1079 Jan 11 j 16:02	27°  34'347	10.89444 AU	minimum elong	1085 Mar 27 j 14:34	12°  47'11	2°16'08
morning rise	1079 Jan 28 j 17:41	29°  34'544		max. Earth dist.	1085 Mar 27 j 15:52	12°  47'35	10.26804 AU
	1079 Jan 30 j 18:27	0° 		morning rise	1085 Apr 14 j 03:27	15°  40'35	
retrograde	1079 May 11 j 21:43	7°  33'50		retrograde	1085 Jul 30 j 04:53	23°  41'28	
opposition	1079 Jul 21 j 19:12	3°  32'19	-0°52'22	opposition	1085 Oct 06 j 23:59	19°  42'40	-2°48'54
min. Earth dist.	1079 Jul 22 j 00:24	3°  31'21	8.85238 AU	min. Earth dist.	1085 Oct 06 j 22:23	19°  43'00	8.22184 AU
direct	1079 Sep 29 j 07:43	0°  31'14		direct	1085 Dec 12 j 17:02	16°  41'27	
evening set	1080 Jan 07 j 01:22	7°  31'07		evening set	1086 Mar 24 j 07:50	24°  41'024	
conjunction	1080 Jan 23 j 19:20	9°  31'49	-0°55'45	conjunction	1086 Apr 10 j 20:33	26°  42'54	-2°13'43
minimum elong	1080 Jan 23 j 19:18	9°  31'48	0°55'45	minimum elong	1086 Apr 10 j 20:35	26°  42'55	2°13'43
max. Earth dist.	1080 Jan 23 j 13:59	9°  30'12	10.80697 AU	max. Earth dist.	1086 Apr 10 j 23:44	26°  42'56	10.17631 AU
morning rise	1080 Feb 09 j 16:18	11°  33'27		morning rise	1086 Apr 28 j 13:30	28°  40'48	
	1080 Mar 11 j 20:16	15° 			1086 May 09 j 04:48	0° 	
retrograde	1080 May 23 j 17:30	18°  35'40		retrograde	1086 Aug 13 j 16:29	6°  57'31	
opposition	1080 Aug 02 j 10:16	15°  36'51	-1°24'20	opposition	1086 Oct 20 j 23:08	3°  28'03	-2°41'20
min. Earth dist.	1080 Aug 02 j 14:08	15°  36'07	8.75807 AU	min. Earth dist.	1086 Oct 20 j 20:06	3°  28'41	8.13812 AU
	1080 Aug 10 j 13:57	15°  R 		direct	1086 Dec 26 j 10:06	0° 	
direct	1080 Oct 10 j 10:50	12°  31'19		evening set	1087 Apr 07 j 18:08	8°  02'01	
	1080 Dec 06 j 22:19	15° 					
evening set	1081 Jan 18 j 03:20	19°  30'28		conjunction	1087 Apr 25 j 11:32	10°  18'59	-2°03'34
				minimum elong	1087 Apr 25 j 11:35	10°  19'00	2°03'34
conjunction	1081 Feb 03 j 23:10	21°  32'56	-1°20'33	max. Earth dist.	1087 Apr 25 j 15:42	10°  20'20	10.10167 AU
minimum elong	1081 Feb 03 j 23:08	21°  32'56	1°20'33	morning rise	1087 May 13 j 08:35	12°  37'09	
max. Earth dist.	1081 Feb 03 j 19:13	21°  31'44	10.70639 AU		1087 Jun 01 j 17:47	15° 	
morning rise	1081 Feb 20 j 22:32	23°  36'33		retrograde	1087 Aug 28 j 07:48	20°  57'29	
	1081 Apr 28 j 09:56	0° 		opposition	1087 Nov 04 j 01:51	17°  27'42	-2°24'06
retrograde	1081 Jun 05 j 19:35	1°  11'47		min. Earth dist.	1087 Nov 03 j 22:07	17°  28'28	8.07340 AU
	1081 Jul 14 j 20:00	30°  R 			1087 Dec 07 j 13:33	15°  R 	

direct	1088 Jan 09 j 09:13	14°♄01'09		minimum elong	1093 Jul 22 j 16:31	5°♄08'42	0°45'20
	1088 Feb 10 j 23:04	15°♄		max. Earth dist.	1093 Jul 22 j 23:17	5°♄10'52	10.19042 AU
evening set	1088 Apr 21 j 12:22	22°♄06'58		morning rise	1093 Aug 09 j 14:32	7°♄25'16	
					1093 Nov 02 j 05:12	15°♄	
conjunction	1088 May 09 j 10:11	24°♄26'01	-1°45'55	retrograde	1093 Nov 19 j 20:24	15°♄17'22	
minimum elong	1088 May 09 j 10:15	24°♄26'02	1°45'55		1093 Dec 07 j 13:06	15°♄♄	
max. Earth dist.	1088 May 09 j 14:54	24°♄27'33	10.04852 AU	opposition	1094 Jan 25 j 12:31	11°♄52'10	1°14'39
morning rise	1088 May 27 j 10:52	26°♄46'00		min. Earth dist.	1094 Jan 25 j 07:08	11°♄53'15	8.23737 AU
	1088 Jun 23 j 02:37	0°♄		direct	1094 Apr 03 j 21:55	8°♄23'03	
retrograde	1088 Sep 11 j 00:05	5°♄07'21			1094 Jul 07 j 04:48	15°♄	
opposition	1088 Nov 17 j 06:44	1°♄37'38	-1°57'55	evening set	1094 Jul 19 j 02:59	16°♄27'02	
min. Earth dist.	1088 Nov 17 j 02:40	1°♄38'28	8.03238 AU				
	1088 Dec 07 j 19:47	30°♄♄		conjunction	1094 Aug 06 j 00:23	18°♄42'00	1°14'15
direct	1089 Jan 22 j 15:25	28°♄10'03		minimum elong	1094 Aug 06 j 00:20	18°♄41'59	1°14'14
	1089 Mar 08 j 17:17	0°♄		max. Earth dist.	1094 Aug 06 j 06:35	18°♄43'58	10.28831 AU
evening set	1089 May 06 j 12:22	6°♄20'45		morning rise	1094 Aug 23 j 17:35	20°♄55'41	
				retrograde	1094 Dec 03 j 03:53	28°♄38'33	
conjunction	1089 May 24 j 13:51	8°♄41'16	-1°21'41	opposition	1095 Feb 08 j 00:57	25°♄14'43	1°47'38
minimum elong	1089 May 24 j 13:55	8°♄41'17	1°21'41	min. Earth dist.	1095 Feb 07 j 20:44	25°♄15'34	8.34229 AU
max. Earth dist.	1089 May 24 j 19:05	8°♄42'58	10.02133 AU	direct	1095 Apr 17 j 23:45	21°♄46'08	
morning rise	1089 Jun 11 j 17:12	11°♄02'22		evening set	1095 Aug 02 j 05:26	29°♄43'40	
retrograde	1089 Sep 25 j 13:50	19°♄22'00			1095 Aug 04 j 10:36	0°♄	
opposition	1089 Dec 01 j 12:33	15°♄52'42	-1°24'18				
min. Earth dist.	1089 Dec 01 j 08:13	15°♄53'36	8.01891 AU	conjunction	1095 Aug 19 j 22:02	1°♄55'40	1°38'35
direct	1090 Feb 06 j 02:12	12°♄24'16		minimum elong	1095 Aug 19 j 21:59	1°♄55'39	1°38'35
evening set	1090 May 21 j 15:24	20°♄37'48		max. Earth dist.	1095 Aug 20 j 02:43	1°♄57'08	10.39814 AU
				morning rise	1095 Sep 06 j 10:01	4°♄06'15	
conjunction	1090 Jun 08 j 19:20	22°♄58'58	-0°52'23	retrograde	1095 Dec 16 j 03:56	11°♄40'02	
minimum elong	1090 Jun 08 j 19:22	22°♄58'58	0°52'24	opposition	1096 Feb 21 j 07:46	8°♄17'33	2°14'09
max. Earth dist.	1090 Jun 09 j 01:05	23°♄00'50	10.02281 AU	min. Earth dist.	1096 Feb 21 j 04:56	8°♄18'06	8.45623 AU
morning rise	1090 Jun 26 j 23:54	25°♄20'16		direct	1096 Apr 30 j 19:18	4°♄49'46	
	1090 Aug 05 j 23:43	0°♄		evening set	1096 Aug 14 j 21:30	12°♄39'56	
retrograde	1090 Oct 10 j 00:00	3°♄35'40					
opposition	1090 Dec 15 j 17:29	0°♄07'03	-0°45'31	conjunction	1096 Sep 01 j 08:55	14°♄48'53	1°57'20
min. Earth dist.	1090 Dec 15 j 12:46	0°♄08'02	8.03457 AU	minimum elong	1096 Sep 01 j 08:52	14°♄48'52	1°57'20
	1090 Dec 17 j 03:36	30°♄♄		max. Earth dist.	1096 Sep 01 j 11:34	14°♄49'42	10.51387 AU
direct	1091 Feb 20 j 15:00	26°♄38'01		morning rise	1096 Sep 18 j 15:39	16°♄56'22	
	1091 Apr 24 j 12:32	0°♄		retrograde	1096 Dec 27 j 19:07	24°♄21'38	
evening set	1091 Jun 05 j 18:54	4°♄52'12		opposition	1097 Mar 05 j 08:47	21°♄00'26	2°33'17
				min. Earth dist.	1097 Mar 05 j 06:51	21°♄00'48	8.57312 AU
conjunction	1091 Jun 23 j 23:42	7°♄13'04	-0°20'00	direct	1097 May 14 j 08:57	17°♄33'40	
minimum elong	1091 Jun 23 j 23:43	7°♄13'04	0°20'01	evening set	1097 Aug 28 j 02:53	25°♄16'01	
max. Earth dist.	1091 Jun 24 j 05:58	7°♄15'06	10.05318 AU				
morning rise	1091 Jul 12 j 03:46	9°♄33'39		conjunction	1097 Sep 14 j 09:23	27°♄22'01	2°09'59
retrograde	1091 Oct 24 j 05:23	17°♄42'35		minimum elong	1097 Sep 14 j 09:21	27°♄22'01	2°10'00
opposition	1091 Dec 29 j 19:50	14°♄14'57	-0°04'16	max. Earth dist.	1097 Sep 14 j 10:35	27°♄22'23	10.62975 AU
min. Earth dist.	1091 Dec 29 j 14:33	14°♄16'02	8.07847 AU	morning rise	1097 Oct 01 j 11:15	29°♄26'38	
asc. node	1092 Feb 06 j 19:45	11°♄28'50			1097 Oct 06 j 03:23	0°♄	
direct	1092 Mar 06 j 03:33	10°♄45'34		retrograde	1098 Jan 09 j 04:06	6°♄44'14	
evening set	1092 Jun 19 j 19:50	18°♄58'16		opposition	1098 Mar 18 j 04:12	3°♄24'11	2°44'41
				min. Earth dist.	1098 Mar 18 j 02:46	3°♄24'28	8.68732 AU
conjunction	1092 Jul 07 j 23:45	21°♄17'54	0°13'20		1098 May 22 j 09:42	30°♄♄	
minimum elong	1092 Jul 07 j 23:45	21°♄17'54	0°13'19	direct	1098 May 27 j 16:10	29°♄58'37	
behind sun begin	1092 Jul 07 j 19:41	21°♄16'36			1098 Jun 01 j 21:39	0°♄	
behind sun end	1092 Jul 08 j 03:48	21°♄19'12		evening set	1098 Sep 09 j 21:55	7°♄33'02	
max. Earth dist.	1092 Jul 08 j 06:24	21°♄20'02	10.11035 AU				
morning rise	1092 Jul 26 j 01:32	23°♄36'51		conjunction	1098 Sep 27 j 00:05	9°♄36'25	2°16'22
	1092 Sep 24 j 15:26	0°♄		minimum elong	1098 Sep 27 j 00:04	9°♄36'25	2°16'22
retrograde	1092 Nov 06 j 05:00	1°♄37'49		max. Earth dist.	1098 Sep 27 j 00:32	9°♄36'34	10.74037 AU
	1092 Dec 19 j 10:44	30°♄♄		morning rise	1098 Oct 13 j 21:40	11°♄38'28	
opposition	1093 Jan 11 j 18:33	28°♄11'20	0°36'39	retrograde	1099 Jan 21 j 09:21	18°♄49'28	
min. Earth dist.	1093 Jan 11 j 12:57	28°♄12'28	8.14758 AU	opposition	1099 Mar 30 j 18:43	15°♄30'26	2°48'26
direct	1093 Mar 20 j 14:21	24°♄41'55		min. Earth dist.	1099 Mar 30 j 18:10	15°♄30'32	8.79357 AU
	1093 Jun 10 j 20:04	0°♄		direct	1099 Jun 09 j 14:23	12°♄06'10	
evening set	1093 Jul 04 j 15:14	2°♄51'06		evening set	1099 Sep 22 j 07:37	19°♄32'56	
conjunction	1093 Jul 22 j 16:33	5°♄08'42	0°45'21	conjunction	1099 Oct 09 j 06:01	21°♄34'04	2°16'37

minimum elong	1099 Oct 09 j 06:01	21° <u>♌</u> 34'04	2°16'37
max. Earth dist.	1099 Oct 09 j 05:38	21° <u>♌</u> 33'57	10.84081 AU
morning rise	1099 Oct 26 j 00:07	23° <u>♌</u> 33'59	
	1100 Jan 05 j 14:06	0° <u>♌</u>	
retrograde	1100 Feb 02 j 08:49	0° <u>♌</u> 39'33	
	1100 Mar 01 j 13:17	30° <u>♏</u> <u>♏</u>	
opposition	1100 Apr 11 j 05:00	27° <u>♏</u> 21'23	2°44'52
min. Earth dist.	1100 Apr 11 j 06:07	27° <u>♏</u> 21'11	8.88744 AU
direct	1100 Jun 21 j 05:41	23° <u>♏</u> 58'24	
	1100 Sep 21 j 23:48	0° <u>♌</u>	
evening set	1100 Oct 03 j 09:05	1° <u>♌</u> 18'08	
conjunction	1100 Oct 20 j 04:21	3° <u>♌</u> 17'25	2°11'05
minimum elong	1100 Oct 20 j 04:22	3° <u>♌</u> 17'25	2°11'05
max. Earth dist.	1100 Oct 20 j 02:09	3° <u>♌</u> 16'46	10.92711 AU
morning rise	1100 Nov 05 j 20:03	5° <u>♌</u> 15'42	
retrograde	1101 Feb 13 j 04:51	12° <u>♌</u> 17'09	
opposition	1101 Apr 23 j 11:52	8° <u>♌</u> 59'38	2°34'34
min. Earth dist.	1101 Apr 23 j 14:30	8° <u>♌</u> 59'09	8.96535 AU
direct	1101 Jul 03 j 17:05	5° <u>♌</u> 37'52	
evening set	1101 Oct 15 j 03:28	12° <u>♌</u> 51'20	
conjunction	1101 Oct 31 j 20:27	14° <u>♌</u> 49'15	2°00'16
minimum elong	1101 Oct 31 j 20:29	14° <u>♌</u> 49'16	2°00'16
max. Earth dist.	1101 Oct 31 j 16:33	14° <u>♌</u> 48'06	10.99602 AU
	1101 Nov 02 j 08:46	15° <u>♌</u>	
morning rise	1101 Nov 17 j 10:41	16° <u>♌</u> 46'21	