

	600 Jan 16 j 12:02	0°♄	conjunction	605 Sep 20 j 21:55	0°♄05'24	1°09'49
evening set	600 Mar 22 j 04:49	14°♄00'26	minimum elong	605 Sep 20 j 21:56	0°♄05'24	1°09'49
				605 Sep 20 j 11:59	0°♄	
conjunction	600 Apr 04 j 17:19	17°♄13'46 -1°04'18	morning rise	605 Oct 03 j 15:58	2°♄51'41	
minimum elong	600 Apr 04 j 17:21	17°♄13'47 1°04'18	retrograde	606 Feb 01 j 00:02	19°♄43'02	
max. Earth dist.	600 Apr 06 j 19:26	17°♄43'39 5.98811 AU	opposition	606 Apr 02 j 17:28	14°♄50'59	1°36'23
morning rise	600 Apr 18 j 08:43	20°♄28'28	min. Earth dist.	606 Apr 04 j 01:54	14°♄40'38	4.41738 AU
	600 May 30 j 19:30	0°♄	direct	606 Jun 04 j 12:27	9°♄49'39	
retrograde	600 Aug 27 j 13:57	10°♄42'56	evening set	606 Oct 08 j 16:41	27°♄32'14	
min. Earth dist.	600 Oct 24 j 16:51	5°♄49'37 4.03342 AU	max. Earth dist.	606 Oct 19 j 07:41	29°♄53'03	6.37683 AU
opposition	600 Oct 26 j 03:39	5°♄37'45 -1°19'41		606 Oct 19 j 20:13	0°♄	
direct	600 Dec 23 j 05:38	0°♄40'27				
	601 Apr 06 j 19:55	15°♄	conjunction	606 Oct 21 j 09:05	0°♄20'26	0°57'58
evening set	601 Apr 28 j 11:56	19°♄54'38	minimum elong	606 Oct 21 j 09:07	0°♄20'27	0°57'59
			morning rise	606 Nov 02 j 23:32	3°♄07'51	
conjunction	601 May 12 j 05:44	23°♄05'39 -0°37'46		607 Jan 01 j 17:48	15°♄	
minimum elong	601 May 12 j 05:46	23°♄05'40 0°37'45	retrograde	607 Mar 04 j 22:30	20°♄29'17	
max. Earth dist.	601 May 14 j 10:09	23°♄36'03 6.09205 AU	opposition	607 May 04 j 21:20	15°♄37'21	1°06'39
morning rise	601 May 26 j 01:05	26°♄17'07	min. Earth dist.	607 May 06 j 08:53	15°♄26'01	4.32381 AU
	601 Jun 11 j 10:32	0°♄		607 May 09 j 18:52	15°♄	
retrograde	601 Oct 01 j 01:53	15°♄30'52	direct	607 Jul 06 j 03:37	10°♄38'11	
min. Earth dist.	601 Nov 28 j 10:10	10°♄36'44 4.15969 AU		607 Aug 30 j 17:30	15°♄	
opposition	601 Nov 29 j 15:39	10°♄26'43 -0°27'56	evening set	607 Nov 08 j 19:14	28°♄44'13	
direct	602 Jan 27 j 18:30	5°♄26'23		607 Nov 14 j 08:59	0°♄	
evening set	602 Jun 03 j 11:49	24°♄04'54	max. Earth dist.	607 Nov 19 j 12:44	1°♄10'28	6.25971 AU
asc. node	602 Jun 06 j 12:05	24°♄45'17				
			conjunction	607 Nov 21 j 10:39	1°♄36'39	0°29'11
conjunction	602 Jun 17 j 05:32	27°♄09'44 0°01'06	minimum elong	607 Nov 21 j 10:41	1°♄36'40	0°29'10
minimum elong	602 Jun 17 j 05:31	27°♄09'43 0°01'07	morning rise	607 Dec 04 j 01:17	4°♄28'59	
behind sun begin	602 Jun 16 j 21:09	27°♄05'03	retrograde	608 Apr 07 j 00:37	22°♄44'28	
behind sun end	602 Jun 17 j 13:52	27°♄14'23	opposition	608 Jun 06 j 21:43	17°♄51'08	0°15'10
max. Earth dist.	602 Jun 18 j 19:16	27°♄30'55 6.23043 AU	min. Earth dist.	608 Jun 08 j 03:09	17°♄41'42	4.18977 AU
	602 Jun 29 j 21:25	0°♄	direct	608 Aug 07 j 02:10	12°♄54'38	
morning rise	602 Jun 30 j 22:23	0°♄13'55	desc. node	608 Sep 16 j 13:41	15°♄24'06	
retrograde	602 Nov 02 j 09:08	18°♄20'10		608 Dec 03 j 10:38	0°♄	
min. Earth dist.	602 Dec 31 j 11:03	13°♄24'45 4.29682 AU	evening set	608 Dec 10 j 06:27	1°♄34'58	
opposition	603 Jan 01 j 03:15	13°♄19'19 0°29'49				
direct	603 Mar 02 j 13:55	8°♄16'58	conjunction	608 Dec 22 j 23:53	4°♄34'03	-0°10'00
evening set	603 Jul 07 j 14:50	26°♄21'40	minimum elong	608 Dec 22 j 23:52	4°♄34'02	0°10'00
			behind sun begin	608 Dec 22 j 17:20	4°♄30'13	
conjunction	603 Jul 21 j 02:42	29°♄18'48 0°37'57	behind sun end	608 Dec 23 j 06:24	4°♄37'51	
minimum elong	603 Jul 21 j 02:40	29°♄18'46 0°37'56	max. Earth dist.	608 Dec 21 j 17:14	4°♄16'02	6.12048 AU
max. Earth dist.	603 Jul 21 j 12:16	29°♄24'02 6.35578 AU	morning rise	609 Jan 04 j 18:21	7°♄33'53	
	603 Jul 24 j 05:55	0°♄	retrograde	609 May 13 j 07:42	26°♄56'34	
morning rise	603 Aug 03 j 12:32	2°♄14'40	opposition	609 Jul 12 j 22:30	22°♄00'16	-0°44'49
	603 Oct 08 j 19:50	15°♄	min. Earth dist.	609 Jul 13 j 09:25	21°♄56'43	4.05627 AU
retrograde	603 Dec 03 j 04:29	19°♄29'28	direct	609 Sep 10 j 15:10	17°♄06'04	
	604 Jan 28 j 17:37	15°♄		609 Dec 17 j 06:03	0°♄	
opposition	604 Feb 01 j 05:34	14°♄32'27 1°15'39	evening set	610 Jan 13 j 17:04	6°♄22'04	
min. Earth dist.	604 Feb 01 j 07:57	14°♄31'40 4.40165 AU				
direct	604 Apr 02 j 23:08	9°♄29'15	conjunction	610 Jan 26 j 15:32	9°♄28'19	-0°47'17
	604 Jun 05 j 18:15	15°♄	minimum elong	610 Jan 26 j 15:30	9°♄28'17	0°47'17
evening set	604 Aug 07 j 22:41	27°♄11'09	max. Earth dist.	610 Jan 26 j 15:02	9°♄28'01	6.00519 AU
max. Earth dist.	604 Aug 20 j 10:23	29°♄53'04 6.43186 AU	morning rise	610 Feb 08 j 16:15	12°♄35'58	
	604 Aug 20 j 23:11	0°♄		610 Feb 18 j 19:21	15°♄	
				610 May 07 j 10:41	0°♄	
conjunction	604 Aug 21 j 02:48	0°♄01'58 1°02'39	retrograde	610 Jun 20 j 06:11	2°♄55'59	
minimum elong	604 Aug 21 j 02:46	0°♄01'57 1°02'39		610 Aug 03 j 07:50	30°♄	
morning rise	604 Sep 03 j 03:47	2°♄51'16	opposition	610 Aug 19 j 09:49	27°♄55'46	-1°31'14
retrograde	605 Jan 01 j 08:11	19°♄40'16	min. Earth dist.	610 Aug 18 j 23:16	27°♄59'17	3.97164 AU
opposition	605 Mar 02 j 18:53	14°♄46'23 1°39'19	direct	610 Oct 16 j 20:55	23°♄02'22	
min. Earth dist.	605 Mar 03 j 13:42	14°♄40'19 4.44560 AU		610 Dec 23 j 10:47	0°♄	
direct	605 May 04 j 07:24	9°♄43'39	evening set	611 Feb 19 j 02:34	12°♄40'26	
evening set	605 Sep 08 j 01:09	27°♄17'52				
max. Earth dist.	605 Sep 19 j 07:34	29°♄44'32 6.43949 AU	conjunction	611 Mar 04 j 08:16	15°♄52'02	-1°07'45

minimum elong	611 Mar 04 j 08:15	15° X 52'02	1°07'46	minimum elong	616 Aug 25 j 10:52	4° M 22'15	1°04'45
max. Earth dist.	611 Mar 05 j 15:32	16° X 10'55	5.95862 AU	max. Earth dist.	616 Aug 24 j 13:13	4° M 10'31	6.43638 AU
morning rise	611 Mar 17 j 17:10	19° X 05'20		morning rise	616 Sep 07 j 10:57	7° M 10'59	
	611 May 05 j 06:50	0° Y		retrograde	617 Jan 05 j 14:58	23° M 59'03	
retrograde	611 Jul 28 j 04:50	9° Y 43'43		opposition	617 Mar 07 j 01:29	19° M 05'34	1°40'33
opposition	611 Sep 25 j 23:12	4° Y 39'55	-1°42'26	min. Earth dist.	617 Mar 07 j 23:46	18° M 58'22	4.44419 AU
min. Earth dist.	611 Sep 24 j 18:06	4° Y 49'46	3.97005 AU	direct	617 May 08 j 16:33	14° M 02'53	
	611 Nov 10 j 21:00	30° R X			617 Sep 04 j 17:39	0° A	
direct	611 Nov 22 j 19:37	29° X 45'06		evening set	617 Sep 12 j 08:12	1° A 38'05	
	611 Dec 04 j 19:26	0° Y		max. Earth dist.	617 Sep 23 j 11:58	4° A 03'36	6.43215 AU
evening set	612 Mar 27 j 13:26	19° Y 19'59					
				conjunction	617 Sep 25 j 04:22	4° A 25'38	1°09'17
conjunction	612 Apr 10 j 02:48	22° Y 33'08	-1°01'48	minimum elong	617 Sep 25 j 04:23	4° A 25'39	1°09'17
minimum elong	612 Apr 10 j 02:51	22° Y 33'09	1°01'48	morning rise	617 Oct 07 j 21:40	7° A 11'56	
max. Earth dist.	612 Apr 12 j 06:08	23° Y 03'39	6.00089 AU	retrograde	618 Feb 05 j 08:46	24° A 06'48	
morning rise	612 Apr 23 j 19:04	25° Y 47'36		opposition	618 Apr 07 j 03:44	19° A 14'51	1°33'45
	612 May 11 j 22:27	0° B		min. Earth dist.	618 Apr 08 j 12:27	19° A 04'25	4.40473 AU
	612 Aug 09 j 01:51	15° B		direct	618 Jun 08 j 20:25	14° A 13'46	
retrograde	612 Sep 01 j 14:12	15° B 54'10			618 Oct 03 j 21:43	0° M	
	612 Sep 24 j 22:42	15° R B		evening set	618 Oct 13 j 00:57	1° M 59'55	
min. Earth dist.	612 Oct 29 j 17:57	11° B 00'44	4.05134 AU	max. Earth dist.	618 Oct 23 j 15:39	4° M 21'09	6.35987 AU
opposition	612 Oct 31 j 04:35	10° B 48'54	-1°13'31				
direct	612 Dec 28 j 10:06	5° B 51'09		conjunction	618 Oct 25 j 17:02	4° M 48'39	0°54'49
	613 Mar 18 j 14:52	15° B		minimum elong	618 Oct 25 j 17:04	4° M 48'40	0°54'49
evening set	613 May 03 j 16:33	24° B 59'35		morning rise	618 Nov 07 j 07:19	7° M 36'41	
					618 Dec 12 j 02:41	15° M	
conjunction	613 May 17 j 10:46	28° B 09'46	-0°32'39	retrograde	619 Mar 09 j 16:43	25° M 05'31	
minimum elong	613 May 17 j 10:48	28° B 09'47	0°32'40	opposition	619 May 09 j 14:23	20° M 13'31	1°00'27
max. Earth dist.	613 May 19 j 15:31	28° B 40'12	6.11359 AU	min. Earth dist.	619 May 11 j 02:27	20° M 02'02	4.30347 AU
	613 May 25 j 10:04	0° I		direct	619 Jul 10 j 18:15	15° M 14'44	
morning rise	613 May 31 j 05:56	1° I 20'12			619 Oct 28 j 23:33	0° J	
retrograde	613 Oct 05 j 18:10	20° I 23'00		evening set	619 Nov 13 j 07:59	3° J 26'07	
min. Earth dist.	613 Dec 03 j 04:02	15° I 28'48	4.18246 AU	max. Earth dist.	619 Nov 24 j 02:16	5° J 53'34	6.23779 AU
opposition	613 Dec 04 j 08:10	15° I 19'16	-0°19'39				
direct	614 Feb 01 j 15:27	10° I 18'37		conjunction	619 Nov 25 j 23:32	6° J 19'30	0°24'00
asc. node	614 Apr 16 j 03:58	17° I 51'51		minimum elong	619 Nov 25 j 23:34	6° J 19'31	0°24'01
evening set	614 Jun 08 j 09:30	28° I 50'53		morning rise	619 Dec 08 j 14:40	9° J 12'56	
	614 Jun 13 j 13:37	0° E		retrograde	620 Apr 12 j 01:31	27° J 38'17	
				opposition	620 Jun 11 j 22:23	22° J 44'34	0°06'40
conjunction	614 Jun 22 j 02:28	1° E 54'29	0°06'42	min. Earth dist.	620 Jun 13 j 00:34	22° J 36'10	4.16796 AU
minimum elong	614 Jun 22 j 02:26	1° E 54'28	0°06'43	desc. node	620 Jul 26 j 06:34	18° J 14'39	
behind sun begin	614 Jun 21 j 18:41	1° E 50'10		direct	620 Aug 11 j 20:47	17° J 48'27	
behind sun end	614 Jun 22 j 10:11	1° E 58'47			620 Nov 16 j 00:49	0° Z	
max. Earth dist.	614 Jun 23 j 11:10	2° E 12'45	6.25242 AU	evening set	620 Dec 15 j 01:58	6° Z 34'35	
morning rise	614 Jul 05 j 18:41	4° E 57'24					
retrograde	614 Nov 06 j 18:05	22° E 54'24		conjunction	620 Dec 27 j 20:02	9° Z 34'45	-0°15'47
opposition	615 Jan 05 j 13:11	17° E 54'04	0°37'14	minimum elong	620 Dec 27 j 20:01	9° Z 34'44	0°15'48
min. Earth dist.	615 Jan 05 j 00:02	17° E 58'28	4.31623 AU	behind sun begin	620 Dec 27 j 18:01	9° Z 33'34	
direct	615 Mar 07 j 05:07	12° E 51'28		behind sun end	620 Dec 27 j 22:01	9° Z 35'54	
	615 Jul 08 j 05:41	0° O		max. Earth dist.	620 Dec 26 j 18:37	9° Z 19'44	6.10089 AU
evening set	615 Jul 12 j 05:04	0° O 51'36		morning rise	621 Jan 09 j 15:09	12° Z 35'44	
					621 Apr 11 j 09:18	0° A	
conjunction	615 Jul 25 j 16:03	3° O 47'41	0°42'17	retrograde	621 May 18 j 17:15	2° A 07'48	
minimum elong	615 Jul 25 j 16:00	3° O 47'39	0°42'17		621 Jun 25 j 04:55	30° R Z	
max. Earth dist.	615 Jul 25 j 22:34	3° O 51'15	6.37112 AU	opposition	621 Jul 18 j 05:55	27° Z 10'58	-0°52'53
morning rise	615 Aug 08 j 00:29	6° O 42'24		min. Earth dist.	621 Jul 18 j 14:18	27° Z 08'13	4.04071 AU
	615 Sep 17 j 07:48	15° O		direct	621 Sep 15 j 18:39	22° Z 16'59	
retrograde	615 Dec 07 j 09:13	23° O 51'48			621 Nov 27 j 04:58	0° A	
opposition	616 Feb 05 j 11:55	18° O 55'19	1°20'25	evening set	622 Jan 18 j 19:33	11° A 36'50	
min. Earth dist.	616 Feb 05 j 16:34	18° O 53'48	4.41205 AU				
	616 Mar 11 j 00:42	15° R O		conjunction	622 Jan 31 j 18:51	14° A 43'54	-0°51'34
direct	616 Apr 07 j 08:19	13° O 52'09		minimum elong	622 Jan 31 j 18:48	14° A 43'53	0°51'34
	616 May 05 j 00:01	15° O		max. Earth dist.	622 Jan 31 j 22:52	14° A 46'19	5.99500 AU
	616 Aug 05 j 03:37	0° M			622 Feb 01 j 21:35	15° A	
evening set	616 Aug 12 j 08:03	1° M 32'07		morning rise	622 Feb 13 j 20:43	17° A 52'29	
					622 Apr 09 j 19:20	0° X	
conjunction	616 Aug 25 j 10:54	4° M 22'16	1°04'45	retrograde	622 Jun 25 j 16:09	8° X 17'04	

opposition	622 Aug 24 j 19:05	3° H 16'16	-1°35'18		628 Jul 19 j 10:12	0° H	
min. Earth dist.	622 Aug 24 j 04:27	3° H 21'08	3.96823 AU	evening set	628 Aug 16 j 17:47	5° H 54'00	
	622 Sep 20 j 18:09	30° R					
direct	622 Oct 22 j 02:23	28° R 22'46		conjunction	628 Aug 29 j 19:47	8° H 43'41	1°06'31
	622 Nov 22 j 06:03	0° H		minimum elong	628 Aug 29 j 19:45	8° H 43'40	1°06'30
evening set	623 Feb 24 j 09:38	18° H 00'58		max. Earth dist.	628 Aug 28 j 20:03	8° H 30'50	6.43828 AU
				morning rise	628 Sep 11 j 18:37	11° H 31'54	
conjunction	623 Mar 09 j 16:19	21° H 12'52	-1°08'35	retrograde	629 Jan 09 j 21:21	28° H 19'55	
minimum elong	623 Mar 09 j 16:19	21° H 12'52	1°08'34	opposition	629 Mar 11 j 09:28	23° H 26'48	1°41'14
max. Earth dist.	623 Mar 11 j 02:57	21° H 33'45	5.96192 AU	min. Earth dist.	629 Mar 12 j 09:01	23° H 19'13	4.44092 AU
morning rise	623 Mar 23 j 02:18	24° H 26'28		direct	629 May 13 j 00:34	18° H 24'22	
	623 Apr 15 j 20:46	0° Y			629 Aug 18 j 23:43	0° A	
retrograde	623 Aug 02 j 10:26	15° Y 02'02		evening set	629 Sep 16 j 16:28	6° A 00'57	
min. Earth dist.	623 Sep 29 j 22:21	10° Y 08'08	3.97962 AU	max. Earth dist.	629 Sep 27 j 16:24	8° A 24'48	6.42383 AU
opposition	623 Oct 01 j 04:42	9° Y 57'50	-1°40'33				
direct	623 Nov 28 j 01:55	5° Y 02'37		conjunction	629 Sep 29 j 11:45	8° A 48'31	1°08'21
evening set	624 Apr 01 j 20:18	24° Y 33'53		minimum elong	629 Sep 29 j 11:46	8° A 48'32	1°08'21
				morning rise	629 Oct 12 j 04:34	11° A 34'57	
conjunction	624 Apr 15 j 10:42	27° Y 46'47	-0°58'50	retrograde	630 Feb 09 j 21:52	28° A 33'44	
minimum elong	624 Apr 15 j 10:45	27° Y 46'48	0°58'50	opposition	630 Apr 11 j 15:54	23° A 41'57	1°30'33
max. Earth dist.	624 Apr 17 j 16:38	28° Y 18'42	6.01585 AU	min. Earth dist.	630 Apr 13 j 02:20	23° A 30'59	4.39198 AU
	624 Apr 24 j 20:07	0° B		direct	630 Jun 13 j 08:12	18° A 41'12	
morning rise	624 Apr 29 j 03:31	1° B 00'48			630 Sep 16 j 21:36	0° M	
	624 Jul 04 j 17:56	15° B		evening set	630 Oct 17 j 10:28	6° M 30'48	
retrograde	624 Sep 06 j 13:30	20° B 58'39		max. Earth dist.	630 Oct 28 j 01:13	8° M 52'36	6.34383 AU
min. Earth dist.	624 Nov 03 j 16:47	16° B 05'06	4.06995 AU				
opposition	624 Nov 05 j 02:51	15° B 53'29	-1°06'54	conjunction	630 Oct 30 j 02:25	9° M 20'06	0°51'18
	624 Nov 11 j 16:36	15° R B		minimum elong	630 Oct 30 j 02:27	9° M 20'07	0°51'17
direct	625 Jan 02 j 11:24	10° B 55'20		morning rise	630 Nov 11 j 16:34	12° M 08'46	
	625 Feb 22 j 17:16	15° B			630 Nov 24 j 15:56	15° M	
evening set	625 May 08 j 19:08	29° B 58'10		retrograde	631 Mar 14 j 10:05	29° M 44'44	
	625 May 08 j 22:21	0° I		opposition	631 May 14 j 08:36	24° M 52'37	0°53'47
				min. Earth dist.	631 May 15 j 18:41	24° M 41'45	4.28537 AU
conjunction	625 May 22 j 13:21	3° I 07'29	-0°27'24	direct	631 Jul 15 j 07:28	19° M 54'18	
minimum elong	625 May 22 j 13:23	3° I 07'30	0°27'24		631 Oct 11 j 04:30	0° J	
max. Earth dist.	625 May 24 j 14:58	3° I 35'56	6.13414 AU	evening set	631 Nov 17 j 21:29	8° J 10'14	
morning rise	625 Jun 05 j 08:36	6° I 16'58		max. Earth dist.	631 Nov 28 j 19:00	10° J 40'11	6.21932 AU
retrograde	625 Oct 10 j 07:37	25° I 09'41					
opposition	625 Dec 08 j 22:51	20° I 06'20	-0°11'23	conjunction	631 Nov 30 j 13:11	11° J 04'28	0°18'39
min. Earth dist.	625 Dec 07 j 20:23	20° I 15'18	4.20297 AU	minimum elong	631 Nov 30 j 13:12	11° J 04'29	0°18'39
direct	626 Feb 06 j 10:31	15° I 05'19		morning rise	631 Dec 13 j 04:39	13° J 58'50	
asc. node	626 Feb 23 j 22:55	15° I 35'05			632 Mar 06 j 22:52	0° Z	
	626 May 28 j 00:44	0° E		retrograde	632 Apr 17 j 04:24	2° Z 32'59	
evening set	626 Jun 13 j 05:36	3° E 32'26			632 May 28 j 20:39	30° R J	
				desc. node	632 Jun 04 j 13:24	29° J 12'58	
conjunction	626 Jun 26 j 22:03	6° E 34'58	0°12'10	opposition	632 Jun 16 j 23:36	27° J 38'56	-0°01'52
minimum elong	626 Jun 26 j 22:02	6° E 34'57	0°12'10	min. Earth dist.	632 Jun 18 j 00:10	27° J 31'02	4.15045 AU
behind sun begin	626 Jun 26 j 16:35	6° E 31'56		direct	632 Aug 16 j 18:26	22° J 43'13	
behind sun end	626 Jun 27 j 03:29	6° E 37'59			632 Oct 27 j 04:20	0° Z	
max. Earth dist.	626 Jun 28 j 03:41	6° E 51'28	6.27148 AU	evening set	632 Dec 19 j 21:00	11° Z 33'33	
morning rise	626 Jul 10 j 13:14	9° E 36'40					
retrograde	626 Nov 11 j 03:18	27° E 25'42		conjunction	633 Jan 01 j 15:35	14° Z 34'35	-0°21'25
opposition	627 Jan 09 j 22:25	22° E 25'59	0°44'24	minimum elong	633 Jan 01 j 15:34	14° Z 34'34	0°21'25
min. Earth dist.	627 Jan 09 j 12:02	22° E 29'27	4.33236 AU	max. Earth dist.	632 Dec 31 j 17:52	14° Z 21'43	6.08598 AU
direct	627 Mar 11 j 18:46	17° E 23'16		morning rise	633 Jan 14 j 11:30	17° Z 36'33	
	627 Jun 21 j 13:09	0° Q			633 Mar 13 j 02:20	0° R	
evening set	627 Jul 16 j 19:16	5° Q 20'01		retrograde	633 May 23 j 22:36	7° R 16'08	
				opposition	633 Jul 23 j 11:31	2° R 18'46	-1°00'23
conjunction	627 Jul 30 j 05:05	8° Q 15'09	0°46'22	min. Earth dist.	633 Jul 23 j 15:42	2° R 17'24	4.03007 AU
minimum elong	627 Jul 30 j 05:02	8° Q 15'08	0°46'23		633 Aug 10 j 21:33	30° R Z	
max. Earth dist.	627 Jul 30 j 06:10	8° Q 15'45	6.38301 AU	direct	633 Sep 20 j 19:11	27° Z 25'01	
morning rise	627 Aug 12 j 12:29	11° Q 08'57			633 Oct 30 j 23:32	0° R	
	627 Aug 30 j 14:21	15° Q			634 Jan 16 j 08:18	15° R	
retrograde	627 Dec 11 j 15:32	28° Q 14'10		evening set	634 Jan 23 j 20:20	16° R 47'08	
opposition	628 Feb 09 j 18:52	23° Q 18'10	1°24'45				
min. Earth dist.	628 Feb 10 j 02:33	23° Q 15'39	4.41924 AU	conjunction	634 Feb 05 j 20:24	19° R 54'48	-0°55'20
direct	628 Apr 11 j 18:18	18° Q 14'58		minimum elong	634 Feb 05 j 20:22	19° R 54'47	0°55'21

max. Earth dist.	634 Feb 06 j 04:48	19° \approx 59'52	5.98942 AU	min. Earth dist.	640 Feb 14 j 11:44	27° Ω 37'07	4.42376 AU
morning rise	634 Feb 18 j 23:14	23° \approx 04'03		direct	640 Apr 16 j 03:59	22° Ω 37'16	
	634 Mar 20 j 20:46	0° \mathbb{X}			640 Jun 30 j 12:35	0° \mathbb{M}	
retrograde	634 Jun 30 j 22:48	13° \mathbb{X} 31'25		evening set	640 Aug 21 j 03:11	10° \mathbb{M} 15'44	
min. Earth dist.	634 Aug 29 j 07:54	8° \mathbb{X} 35'41	3.96842 AU	max. Earth dist.	640 Sep 02 j 00:20	12° \mathbb{M} 49'57	6.43838 AU
opposition	634 Aug 30 j 00:52	8° \mathbb{X} 30'00	-1°38'27				
direct	634 Oct 27 j 06:45	3° \mathbb{X} 36'20		conjunction	640 Sep 03 j 04:03	13° \mathbb{M} 05'00	1°07'52
evening set	635 Mar 01 j 13:22	23° \mathbb{X} 13'38		minimum elong	640 Sep 03 j 04:02	13° \mathbb{M} 04'59	1°07'52
				morning rise	640 Sep 16 j 02:03	15° \mathbb{M} 52'50	
conjunction	635 Mar 14 j 21:14	26° \mathbb{X} 25'46	-1°08'49		640 Dec 02 j 21:01	0° Ω	
minimum elong	635 Mar 14 j 21:14	26° \mathbb{X} 25'46	1°08'48	retrograde	641 Jan 14 j 05:31	2° Ω 41'13	
max. Earth dist.	635 Mar 16 j 12:18	26° \mathbb{X} 49'16	5.96773 AU		641 Feb 25 j 23:36	30° \mathbb{R} \mathbb{M}	
morning rise	635 Mar 28 j 08:07	29° \mathbb{X} 39'30		opposition	641 Mar 15 j 17:49	27° \mathbb{M} 48'18	1°41'19
	635 Mar 29 j 18:30	0° \mathbb{Y}		min. Earth dist.	641 Mar 16 j 19:15	27° \mathbb{M} 40'07	4.43688 AU
retrograde	635 Aug 07 j 13:06	20° \mathbb{Y} 11'14		direct	641 May 17 j 10:03	22° \mathbb{M} 46'00	
min. Earth dist.	635 Oct 04 j 23:06	15° \mathbb{Y} 17'17	3.99053 AU		641 Jul 31 j 00:35	0° Ω	
opposition	635 Oct 06 j 06:06	15° \mathbb{Y} 06'46	-1°37'55	evening set	641 Sep 21 j 00:20	10° Ω 23'44	
direct	635 Dec 03 j 03:54	10° \mathbb{Y} 11'12		max. Earth dist.	641 Oct 01 j 23:53	12° Ω 47'39	6.41592 AU
evening set	636 Apr 06 j 23:20	29° \mathbb{Y} 38'41					
	636 Apr 08 j 11:41	0° \mathbb{Z}		conjunction	641 Oct 03 j 19:08	13° Ω 11'22	1°07'00
conjunction	636 Apr 20 j 14:21	2° \mathbb{Z} 51'13	-0°55'31	minimum elong	641 Oct 03 j 19:09	13° Ω 11'22	1°07'00
minimum elong	636 Apr 20 j 14:24	2° \mathbb{Z} 51'15	0°55'31	morning rise	641 Oct 16 j 11:13	15° Ω 57'51	
max. Earth dist.	636 Apr 22 j 19:18	3° \mathbb{Z} 22'25	6.03055 AU		641 Dec 31 j 07:59	0° \mathbb{M}	
morning rise	636 May 04 j 07:57	6° \mathbb{Z} 04'50		retrograde	642 Feb 14 j 08:13	3° \mathbb{M} 00'11	
	636 Jun 13 j 09:43	15° \mathbb{Z}			642 Apr 01 j 04:07	30° \mathbb{R} Ω	
retrograde	636 Sep 11 j 06:57	25° \mathbb{Z} 54'25		opposition	642 Apr 16 j 04:04	28° Ω 08'24	1°26'47
min. Earth dist.	636 Nov 08 j 11:25	21° \mathbb{Z} 00'52	4.08685 AU	min. Earth dist.	642 Apr 17 j 14:12	27° Ω 57'32	4.38059 AU
opposition	636 Nov 09 j 21:10	20° \mathbb{Z} 49'22	-1°00'03	direct	642 Jun 17 j 18:03	23° Ω 07'58	
direct	637 Jan 07 j 08:34	15° \mathbb{Z} 50'45			642 Aug 28 j 13:47	0° \mathbb{M}	
	637 Apr 22 j 04:38	0° \mathbb{I}		evening set	642 Oct 21 j 19:19	11° \mathbb{M} 00'06	
evening set	637 May 13 j 18:10	4° \mathbb{I} 48'56		max. Earth dist.	642 Nov 01 j 09:33	13° \mathbb{M} 22'10	6.32966 AU
				conjunction	642 Nov 03 j 10:52	13° \mathbb{M} 49'50	0°47'28
conjunction	637 May 27 j 12:36	7° \mathbb{I} 57'30	-0°22'07	minimum elong	642 Nov 03 j 10:54	13° \mathbb{M} 49'51	0°47'28
minimum elong	637 May 27 j 12:37	7° \mathbb{I} 57'31	0°22'07		642 Nov 08 j 15:58	15° \mathbb{M}	
max. Earth dist.	637 May 29 j 12:02	8° \mathbb{I} 24'38	6.15202 AU	morning rise	642 Nov 16 j 01:05	16° \mathbb{M} 39'04	
morning rise	637 Jun 10 j 07:31	11° \mathbb{I} 06'05			643 Jan 23 j 07:07	0° \mathbb{Z}	
retrograde	637 Oct 14 j 20:40	29° \mathbb{I} 50'02		retrograde	643 Mar 19 j 04:53	4° \mathbb{Z} 21'33	
min. Earth dist.	637 Dec 12 j 11:11	24° \mathbb{I} 55'09	4.22006 AU		643 May 15 j 01:44	30° \mathbb{R} \mathbb{M}	
opposition	637 Dec 13 j 10:49	24° \mathbb{I} 47'09	-0°03'19	opposition	643 May 19 j 02:29	29° \mathbb{M} 29'13	0°46'48
asc. node	638 Jan 04 j 22:32	21° \mathbb{I} 56'21		min. Earth dist.	643 May 20 j 12:31	29° \mathbb{M} 18'21	4.26887 AU
direct	638 Feb 11 j 03:08	19° \mathbb{I} 45'50		direct	643 Jul 19 j 23:17	24° \mathbb{M} 31'11	
	638 May 10 j 08:20	0° \mathbb{E}			643 Sep 20 j 06:36	0° \mathbb{Z}	
evening set	638 Jun 17 j 23:22	8° \mathbb{E} 09'03		evening set	643 Nov 22 j 09:49	12° \mathbb{Z} 50'59	
				max. Earth dist.	643 Dec 03 j 09:47	15° \mathbb{Z} 22'55	6.20184 AU
conjunction	638 Jul 01 j 15:08	11° \mathbb{E} 10'41	0°17'25				
minimum elong	638 Jul 01 j 15:07	11° \mathbb{E} 10'40	0°17'25	conjunction	643 Dec 05 j 01:48	15° \mathbb{Z} 46'01	0°13'13
max. Earth dist.	638 Jul 02 j 16:46	11° \mathbb{E} 24'54	6.28651 AU	minimum elong	643 Dec 05 j 01:49	15° \mathbb{Z} 46'02	0°13'12
morning rise	638 Jul 15 j 05:34	14° \mathbb{E} 11'23		behind sun begin	643 Dec 04 j 20:59	15° \mathbb{Z} 43'15	
	638 Oct 11 j 12:10	0° Ω		behind sun end	643 Dec 05 j 06:38	15° \mathbb{Z} 48'48	
retrograde	638 Nov 15 j 09:35	1° Ω 54'00		morning rise	643 Dec 17 j 17:38	18° \mathbb{Z} 41'17	
	638 Dec 20 j 03:34	30° \mathbb{R} \mathbb{E}			644 Feb 09 j 04:46	0° \mathbb{Z}	
opposition	639 Jan 14 j 06:20	26° \mathbb{E} 54'47	0°51'07	desc. node	644 Apr 14 j 08:02	7° \mathbb{Z} 18'05	
min. Earth dist.	639 Jan 13 j 21:59	26° \mathbb{E} 57'34	4.34449 AU	retrograde	644 Apr 22 j 03:26	7° \mathbb{Z} 23'51	
direct	639 Mar 16 j 05:45	21° \mathbb{E} 51'55		opposition	644 Jun 21 j 23:17	2° \mathbb{Z} 29'25	-0°10'23
	639 Jun 03 j 00:08	0° Ω		min. Earth dist.	644 Jun 22 j 21:00	2° \mathbb{Z} 22'25	4.13321 AU
evening set	639 Jul 21 j 07:58	9° Ω 46'25			644 Jul 12 j 05:45	30° \mathbb{R} \mathbb{Z}	
				direct	644 Aug 21 j 12:36	27° \mathbb{Z} 34'02	
conjunction	639 Aug 03 j 16:48	12° Ω 40'47	0°50'06		644 Sep 30 j 04:43	0° \mathbb{Z}	
minimum elong	639 Aug 03 j 16:46	12° Ω 40'46	0°50'07	evening set	644 Dec 24 j 15:15	16° \mathbb{Z} 28'47	
max. Earth dist.	639 Aug 03 j 14:55	12° Ω 39'45	6.39149 AU				
	639 Aug 14 j 08:37	15° Ω		conjunction	645 Jan 06 j 10:20	19° \mathbb{Z} 30'43	-0°26'52
morning rise	639 Aug 16 j 22:58	15° Ω 33'45		minimum elong	645 Jan 06 j 10:18	19° \mathbb{Z} 30'42	0°26'51
	639 Nov 04 j 11:47	0° \mathbb{M}		max. Earth dist.	645 Jan 05 j 15:54	19° \mathbb{Z} 19'47	6.07042 AU
retrograde	639 Dec 15 j 21:49	2° \mathbb{M} 35'54		morning rise	645 Jan 19 j 07:03	22° \mathbb{Z} 33'43	
	640 Jan 26 j 11:08	30° \mathbb{R} Ω			645 Feb 20 j 23:19	0° \approx	
opposition	640 Feb 14 j 01:42	27° Ω 40'23	1°28'33	retrograde	645 May 29 j 05:05	12° \approx 21'19	

opposition	645 Jul 28 j 16:04	7° \approx 23'24	-1°07'27		651 May 09 j 20:16	0° Ω	
min. Earth dist.	645 Jul 28 j 17:47	7° \approx 22'50	4.01757 AU	evening set	651 Jul 25 j 22:23	14° Ω 17'18	
direct	645 Sep 25 j 20:22	2° \approx 29'44			651 Jul 29 j 05:22	15° Ω	
	645 Dec 30 j 01:21	15° \approx					
evening set	646 Jan 28 j 20:42	21° \approx 55'11		conjunction	651 Aug 08 j 06:05	17° Ω 10'43	0°53'39
				minimum elong	651 Aug 08 j 06:02	17° Ω 10'41	0°53'38
conjunction	646 Feb 10 j 21:52	25° \approx 03'41	-0°58'42	max. Earth dist.	651 Aug 08 j 01:12	17° Ω 08'04	6.40429 AU
minimum elong	646 Feb 10 j 21:49	25° \approx 03'40	0°58'42	morning rise	651 Aug 21 j 10:59	20° Ω 02'40	
max. Earth dist.	646 Feb 11 j 11:24	25° \approx 11'51	5.98117 AU		651 Oct 10 j 03:55	0° \mathbb{M}	
morning rise	646 Feb 24 j 01:41	28° \approx 13'46		retrograde	651 Dec 20 j 03:18	7° \mathbb{M} 00'17	
	646 Mar 03 j 12:05	0° \mathbb{H}		opposition	652 Feb 18 j 09:28	2° \mathbb{M} 05'10	1°31'53
retrograde	646 Jul 06 j 06:34	18° \mathbb{H} 44'54		min. Earth dist.	652 Feb 18 j 20:49	2° \mathbb{M} 01'29	4.43362 AU
min. Earth dist.	646 Sep 03 j 11:27	13° \mathbb{H} 49'26	3.96556 AU		652 Mar 05 j 22:47	30° $\mathbb{R}\Omega$	
opposition	646 Sep 04 j 06:32	13° \mathbb{H} 43'02	-1°40'52	direct	652 Apr 20 j 14:17	27° Ω 02'08	
direct	646 Nov 01 j 09:19	8° \mathbb{H} 49'16			652 Jun 05 j 12:11	0° \mathbb{M}	
evening set	647 Mar 06 j 18:17	28° \mathbb{H} 27'10		evening set	652 Aug 25 j 12:18	14° \mathbb{M} 38'07	
	647 Mar 13 j 05:16	0° \mathbb{Y}		max. Earth dist.	652 Sep 06 j 07:00	17° \mathbb{M} 10'55	6.44458 AU
conjunction	647 Mar 20 j 03:05	1° \mathbb{Y} 39'39	-1°08'31	conjunction	652 Sep 07 j 12:08	17° \mathbb{M} 26'42	1°08'52
minimum elong	647 Mar 20 j 03:06	1° \mathbb{Y} 39'39	1°08'31	minimum elong	652 Sep 07 j 12:07	17° \mathbb{M} 26'42	1°08'52
max. Earth dist.	647 Mar 21 j 19:33	2° \mathbb{Y} 03'57	5.97021 AU	morning rise	652 Sep 20 j 08:57	20° \mathbb{M} 13'52	
morning rise	647 Apr 02 j 15:15	4° \mathbb{Y} 53'47			652 Nov 08 j 04:25	0° Ω	
retrograde	647 Aug 12 j 15:21	25° \mathbb{Y} 22'51		retrograde	653 Jan 18 j 11:13	7° Ω 00'47	
min. Earth dist.	647 Oct 09 j 23:34	20° \mathbb{Y} 29'17	3.99813 AU	opposition	653 Mar 20 j 01:30	2° Ω 08'08	1°40'50
opposition	647 Oct 11 j 08:14	20° \mathbb{Y} 18'10	-1°34'32	min. Earth dist.	653 Mar 21 j 04:30	1° Ω 59'29	4.43900 AU
direct	647 Dec 08 j 06:16	15° \mathbb{Y} 22'13			653 Apr 06 j 06:28	30° $\mathbb{R}\mathbb{M}$	
	648 Mar 22 j 08:22	0° \mathbb{Z}		direct	653 May 21 j 19:20	27° \mathbb{M} 06'05	
evening set	648 Apr 12 j 04:36	4° \mathbb{Z} 47'27			653 Jul 06 j 05:59	0° Ω	
				evening set	653 Sep 25 j 06:11	14° Ω 42'49	
conjunction	648 Apr 25 j 20:34	7° \mathbb{Z} 59'51	-0°51'44	max. Earth dist.	653 Oct 06 j 02:04	17° Ω 04'56	6.41362 AU
minimum elong	648 Apr 25 j 20:36	7° \mathbb{Z} 59'53	0°51'43				
max. Earth dist.	648 Apr 28 j 02:13	8° \mathbb{Z} 31'23	6.04266 AU	conjunction	653 Oct 08 j 00:07	17° Ω 30'13	1°05'20
morning rise	648 May 09 j 14:37	11° \mathbb{Z} 13'08		minimum elong	653 Oct 08 j 00:08	17° Ω 30'13	1°05'19
	648 May 26 j 01:58	15° \mathbb{Z}		morning rise	653 Oct 20 j 15:46	20° Ω 16'36	
	648 Aug 23 j 08:49	0° \mathbb{I}			653 Dec 07 j 12:05	0° \mathbb{M}	
retrograde	648 Sep 16 j 05:10	0° \mathbb{I} 55'20		retrograde	654 Feb 18 j 17:15	7° \mathbb{M} 20'58	
	648 Oct 09 j 18:17	30° $\mathbb{R}\mathbb{Z}$		opposition	654 Apr 20 j 13:49	2° \mathbb{M} 29'09	1°22'37
min. Earth dist.	648 Nov 13 j 09:25	26° \mathbb{Z} 01'28	4.10193 AU	min. Earth dist.	654 Apr 22 j 01:02	2° \mathbb{M} 17'56	4.37381 AU
opposition	648 Nov 14 j 17:37	25° \mathbb{Z} 50'29	-0°52'39		654 May 11 j 00:35	30° $\mathbb{R}\Omega$	
direct	649 Jan 12 j 08:42	20° \mathbb{Z} 51'30		direct	654 Jun 22 j 03:36	27° Ω 28'56	
	649 Apr 03 j 05:43	0° \mathbb{I}			654 Aug 02 j 23:57	0° \mathbb{M}	
evening set	649 May 18 j 20:01	9° \mathbb{I} 45'47			654 Oct 24 j 08:47	15° \mathbb{M}	
				evening set	654 Oct 26 j 00:44	15° \mathbb{M} 22'14	
conjunction	649 Jun 01 j 14:29	12° \mathbb{I} 53'39	-0°16'33	max. Earth dist.	654 Nov 05 j 15:47	17° \mathbb{M} 45'05	6.31892 AU
minimum elong	649 Jun 01 j 14:30	12° \mathbb{I} 53'40	0°16'32				
max. Earth dist.	649 Jun 03 j 12:24	13° \mathbb{I} 19'48	6.16891 AU	conjunction	654 Nov 07 j 16:14	18° \mathbb{M} 12'19	0°43'30
morning rise	649 Jun 15 j 09:13	16° \mathbb{I} 01'23		minimum elong	654 Nov 07 j 16:16	18° \mathbb{M} 12'20	0°43'31
	649 Aug 24 j 18:44	0° \mathbb{E}		morning rise	654 Nov 20 j 06:15	21° \mathbb{M} 01'57	
retrograde	649 Oct 19 j 09:36	4° \mathbb{E} 36'49			655 Jan 01 j 17:29	0° \mathbb{Z}	
asc. node	649 Nov 14 j 01:39	3° \mathbb{E} 32'14		retrograde	655 Mar 23 j 17:13	8° \mathbb{Z} 49'59	
	649 Dec 14 j 21:33	30° $\mathbb{R}\mathbb{I}$		opposition	655 May 23 j 16:17	3° \mathbb{Z} 57'26	0°39'45
min. Earth dist.	649 Dec 17 j 02:23	29° \mathbb{I} 42'12	4.23741 AU	min. Earth dist.	655 May 25 j 01:38	3° \mathbb{Z} 46'48	4.25465 AU
opposition	649 Dec 18 j 01:20	29° \mathbb{I} 34'27	0°04'59		655 Jun 28 j 17:01	30° $\mathbb{R}\mathbb{M}$	
direct	650 Feb 15 j 20:36	24° \mathbb{I} 32'56		direct	655 Jul 24 j 09:41	28° \mathbb{M} 59'44	
	650 Apr 18 j 16:11	0° \mathbb{E}			655 Aug 19 j 01:14	0° \mathbb{Z}	
evening set	650 Jun 22 j 19:46	12° \mathbb{E} 52'07		evening set	655 Nov 26 j 18:22	17° \mathbb{Z} 22'57	
				max. Earth dist.	655 Dec 07 j 18:53	19° \mathbb{Z} 55'48	6.18519 AU
conjunction	650 Jul 06 j 10:43	15° \mathbb{E} 52'42	0°22'43	conjunction	655 Dec 09 j 10:27	20° \mathbb{Z} 18'44	0°07'54
minimum elong	650 Jul 06 j 10:41	15° \mathbb{E} 52'41	0°22'43	minimum elong	655 Dec 09 j 10:27	20° \mathbb{Z} 18'44	0°07'54
max. Earth dist.	650 Jul 07 j 08:47	16° \mathbb{E} 04'55	6.30334 AU	behind sun begin	655 Dec 09 j 03:16	20° \mathbb{Z} 14'36	
morning rise	650 Jul 20 j 00:08	18° \mathbb{E} 52'17		behind sun end	655 Dec 09 j 17:38	20° \mathbb{Z} 22'53	
	650 Sep 13 j 07:52	0° Ω		morning rise	655 Dec 22 j 02:51	23° \mathbb{Z} 14'55	
retrograde	650 Nov 19 j 19:47	6° Ω 27'52			656 Jan 21 j 09:15	0° \mathbb{Z}	
opposition	651 Jan 18 j 16:38	1° Ω 29'15	0°57'42	desc. node	656 Feb 25 j 06:24	6° \mathbb{Z} 37'50	
min. Earth dist.	651 Jan 18 j 10:58	1° Ω 31'08	4.35981 AU	retrograde	656 Apr 27 j 00:33	12° \mathbb{Z} 06'03	
	651 Jan 30 j 02:08	30° $\mathbb{R}\mathbb{E}$		opposition	656 Jun 26 j 19:05	7° \mathbb{Z} 11'11	-0°18'32
direct	651 Mar 20 j 21:03	26° \mathbb{E} 26'22					

min. Earth dist.	656 Jun 27 j 15:35	7°♄04'33	4.11513 AU	min. Earth dist.	661 Dec 21 j 19:45	4°♄28'44	4.25571 AU
direct	656 Aug 26 j 04:56	2°♄15'58			662 Jan 31 j 08:55	30°♄II	
evening set	656 Dec 29 j 05:46	21°♄15'49		direct	662 Feb 20 j 17:13	29°♄II19'57	
max. Earth dist.	657 Jan 10 j 10:56	24°♄10'03	6.05264 AU		662 Mar 13 j 06:03	0°♄	
				evening set	662 Jun 27 j 16:02	17°♄34'21	
conjunction	657 Jan 11 j 01:42	24°♄18'51	-0°31'57				
minimum elong	657 Jan 11 j 01:40	24°♄18'49	0°31'57	conjunction	662 Jul 11 j 06:14	20°♄33'51	0°27'53
morning rise	657 Jan 23 j 23:13	27°♄22'59		minimum elong	662 Jul 11 j 06:12	20°♄33'50	0°27'54
	657 Feb 04 j 02:41	0°♄		max. Earth dist.	662 Jul 12 j 02:14	20°♄44'53	6.32089 AU
	657 Apr 25 j 09:29	15°♄		morning rise	662 Jul 24 j 18:27	23°♄32'12	
retrograde	657 Jun 03 j 08:50	17°♄19'35			662 Aug 24 j 08:07	0°♄	
	657 Jul 12 j 11:05	15°♄		retrograde	662 Nov 24 j 03:20	11°♄00'26	
opposition	657 Aug 02 j 17:16	12°♄21'10	-1°13'49	opposition	663 Jan 23 j 02:45	6°♄02'16	1°03'56
min. Earth dist.	657 Aug 02 j 16:54	12°♄21'17	4.00196 AU	min. Earth dist.	663 Jan 22 j 22:25	6°♄03'41	4.37505 AU
direct	657 Sep 30 j 16:31	7°♄27'36		direct	663 Mar 25 j 10:38	0°♄59'15	
	657 Dec 10 j 17:31	15°♄			663 Jul 12 j 16:41	15°♄	
evening set	658 Feb 02 j 19:13	26°♄58'00		evening set	663 Jul 30 j 12:11	18°♄46'33	
conjunction	658 Feb 15 j 21:18	0°♄07'30	-1°01'31	conjunction	663 Aug 12 j 18:36	21°♄38'59	0°56'53
minimum elong	658 Feb 15 j 21:16	0°♄07'28	1°01'30	minimum elong	663 Aug 12 j 18:33	21°♄38'58	0°56'52
	658 Feb 15 j 08:54	0°♄		max. Earth dist.	663 Aug 12 j 09:27	21°♄34'01	6.41575 AU
max. Earth dist.	658 Feb 16 j 13:03	0°♄17'01	5.96904 AU	morning rise	663 Aug 25 j 22:19	24°♄29'58	
morning rise	658 Mar 01 j 02:31	3°♄18'42			663 Sep 21 j 03:53	0°♄	
retrograde	658 Jul 11 j 11:03	23°♄55'06		retrograde	663 Dec 24 j 10:46	11°♄23'49	
opposition	658 Sep 09 j 10:06	18°♄52'43	-1°42'28	opposition	664 Feb 22 j 17:43	6°♄29'08	1°34'45
min. Earth dist.	658 Sep 08 j 12:05	19°♄00'07	3.95850 AU	min. Earth dist.	664 Feb 23 j 08:18	6°♄24'23	4.44045 AU
direct	658 Nov 06 j 09:52	13°♄58'42		direct	664 Apr 25 j 02:31	1°♄26'10	
	659 Feb 24 j 11:36	0°♄		evening set	664 Aug 29 j 21:32	19°♄00'40	
evening set	659 Mar 11 j 22:41	3°♄39'02		max. Earth dist.	664 Sep 10 j 11:49	21°♄31'08	6.44598 AU
conjunction	659 Mar 25 j 08:54	6°♄52'12	-1°07'39	conjunction	664 Sep 11 j 20:23	21°♄48'48	1°09'31
minimum elong	659 Mar 25 j 08:55	6°♄52'13	1°07'39	minimum elong	664 Sep 11 j 20:23	21°♄48'47	1°09'31
max. Earth dist.	659 Mar 27 j 05:20	7°♄18'53	5.96900 AU	morning rise	664 Sep 24 j 16:17	24°♄35'32	
morning rise	659 Apr 07 j 22:07	10°♄06'53			664 Oct 20 j 10:41	0°♄	
	659 Jul 30 j 02:08	0°♄		retrograde	665 Jan 22 j 18:38	11°♄22'50	
retrograde	659 Aug 17 j 20:03	0°♄34'31		opposition	665 Mar 24 j 10:37	6°♄30'22	1°39'51
	659 Sep 05 j 09:16	30°♄♄		min. Earth dist.	665 Mar 25 j 14:58	6°♄21'16	4.43502 AU
min. Earth dist.	659 Oct 15 j 01:29	25°♄40'47	4.00281 AU	direct	665 May 26 j 04:31	1°♄28'30	
opposition	659 Oct 16 j 10:20	25°♄29'35	-1°30'24	evening set	665 Sep 29 j 13:54	19°♄06'23	
direct	659 Dec 13 j 09:39	20°♄33'13		max. Earth dist.	665 Oct 10 j 09:04	21°♄28'27	6.40452 AU
	660 Mar 03 j 08:27	0°♄					
evening set	660 Apr 17 j 10:29	9°♄57'06		conjunction	665 Oct 12 j 07:22	21°♄53'56	1°03'16
				minimum elong	665 Oct 12 j 07:23	21°♄53'56	1°03'16
conjunction	660 May 01 j 03:15	13°♄09'24	-0°47'30	morning rise	665 Oct 24 j 22:25	24°♄40'29	
minimum elong	660 May 01 j 03:18	13°♄09'26	0°47'31		665 Nov 18 j 21:34	0°♄	
max. Earth dist.	660 May 03 j 10:22	13°♄41'40	6.05282 AU	retrograde	666 Feb 23 j 05:46	11°♄49'21	
	660 May 09 j 00:19	15°♄		opposition	666 Apr 25 j 03:08	6°♄57'35	1°17'53
morning rise	660 May 14 j 21:59	16°♄22'29		min. Earth dist.	666 Apr 26 j 15:13	6°♄46'07	4.35998 AU
	660 Jul 19 j 08:06	0°♄		direct	666 Jun 26 j 15:30	1°♄57'44	
retrograde	660 Sep 21 j 01:28	5°♄57'30			666 Oct 07 j 22:35	15°♄	
min. Earth dist.	660 Nov 18 j 05:37	1°♄03'58	4.11633 AU	evening set	666 Oct 30 j 10:17	19°♄54'34	
opposition	660 Nov 19 j 14:31	0°♄52'45	-0°44'50	max. Earth dist.	666 Nov 09 j 23:57	22°♄17'18	6.30138 AU
	660 Nov 26 j 02:21	30°♄♄					
direct	661 Jan 17 j 07:27	25°♄53'21		conjunction	666 Nov 12 j 01:34	22°♄45'18	0°39'07
	661 Mar 10 j 05:39	0°♄		minimum elong	666 Nov 12 j 01:36	22°♄45'19	0°39'07
evening set	661 May 23 j 22:43	14°♄43'36		morning rise	666 Nov 24 j 15:52	25°♄35'45	
					666 Dec 14 j 15:10	0°♄	
conjunction	661 Jun 06 j 16:59	17°♄50'38	-0°10'50	retrograde	667 Mar 28 j 13:36	13°♄32'02	
minimum elong	661 Jun 06 j 17:00	17°♄50'38	0°10'51	opposition	667 May 28 j 12:14	8°♄39'15	0°32'06
behind sun begin	661 Jun 06 j 10:44	17°♄47'06		min. Earth dist.	667 May 29 j 20:33	8°♄28'55	4.23435 AU
behind sun end	661 Jun 06 j 23:16	17°♄54'11		direct	667 Jul 29 j 01:54	3°♄41'53	
max. Earth dist.	661 Jun 08 j 12:09	18°♄15'07	6.18628 AU	evening set	667 Dec 01 j 09:03	22°♄10'36	
morning rise	661 Jun 20 j 11:24	20°♄57'24		max. Earth dist.	667 Dec 12 j 13:31	24°♄46'25	6.16405 AU
	661 Aug 01 j 23:27	0°♄					
asc. node	661 Sep 22 j 14:47	7°♄50'00		conjunction	667 Dec 14 j 01:42	25°♄07'28	0°02'13
retrograde	661 Oct 24 j 00:23	9°♄23'51		minimum elong	667 Dec 14 j 01:40	25°♄07'27	0°02'13
opposition	661 Dec 22 j 16:16	4°♄21'49	0°13'16	behind sun begin	667 Dec 13 j 17:40	25°♄02'49	

behind sun end	667 Dec 14 j 09:40	25°♌12'06		673 Jul 14 j 14:43	0°♏
morning rise	667 Dec 26 j 18:30	28°♌04'46	asc. node	673 Aug 02 j 07:19	3°♏52'24
desc. node	668 Jan 04 j 09:58	0°♍04'08	retrograde	673 Oct 28 j 10:27	14°♏03'14
	668 Jan 04 j 02:45	0°♍	min. Earth dist.	673 Dec 26 j 09:00	9°♏08'05 4.27729 AU
retrograde	668 May 02 j 05:31	17°♍06'05	opposition	673 Dec 27 j 03:55	9°♏01'44 0°21'11
opposition	668 Jul 01 j 22:13	12°♍10'54 -0°27'07	direct	674 Feb 25 j 09:16	3°♏59'37
min. Earth dist.	668 Jul 02 j 16:33	12°♍04'58 4.09492 AU	evening set	674 Jul 02 j 08:38	22°♏08'33
direct	668 Aug 31 j 02:45	7°♍16'04			
evening set	669 Jan 03 j 04:11	26°♍21'44	conjunction	674 Jul 15 j 21:39	25°♏06'49 0°32'43
			minimum elong	674 Jul 15 j 21:37	25°♏06'48 0°32'43
conjunction	669 Jan 16 j 00:43	29°♍25'50 -0°37'08	max. Earth dist.	674 Jul 16 j 11:47	25°♏14'35 6.33929 AU
minimum elong	669 Jan 16 j 00:41	29°♍25'48 0°37'09	morning rise	674 Jul 29 j 08:51	28°♏03'57
max. Earth dist.	669 Jan 15 j 12:43	29°♍18'39 6.03519 AU		674 Aug 07 j 07:10	0°♐
	669 Jan 18 j 09:51	0°♐		674 Nov 12 j 05:24	15°♐
morning rise	669 Jan 28 j 23:22	2°♐31'13	retrograde	674 Nov 28 j 09:52	15°♐25'14
	669 Mar 27 j 07:14	15°♐		674 Dec 14 j 11:47	15°♐♌
retrograde	669 Jun 08 j 17:53	22°♐36'25	opposition	675 Jan 27 j 09:47	10°♐27'34 1°09'35
opposition	669 Aug 08 j 01:37	17°♐37'28 -1°20'03	min. Earth dist.	675 Jan 27 j 09:17	10°♐27'44 4.38909 AU
min. Earth dist.	669 Aug 07 j 21:14	17°♐38'55 3.98935 AU	direct	675 Mar 29 j 23:00	5°♐24'24
	669 Aug 29 j 01:54	15°♐		675 Jun 25 j 02:53	15°♐
direct	669 Oct 05 j 19:45	12°♐44'01	evening set	675 Aug 03 j 22:38	23°♐08'44
	669 Nov 12 j 01:46	15°♐			
	670 Jan 29 j 09:20	0°♑	conjunction	675 Aug 17 j 04:05	26°♐00'23 0°59'42
evening set	670 Feb 08 j 00:35	2°♑18'01	minimum elong	675 Aug 17 j 04:03	26°♐00'22 0°59'42
			max. Earth dist.	675 Aug 16 j 15:41	25°♐53'39 6.42425 AU
conjunction	670 Feb 21 j 03:55	5°♑28'21 -1°04'02	morning rise	675 Aug 30 j 06:29	28°♐50'32
minimum elong	670 Feb 21 j 03:53	5°♑28'20 1°04'01		675 Sep 04 j 15:59	0°♑
max. Earth dist.	670 Feb 22 j 01:54	5°♑41'38 5.96269 AU	retrograde	675 Dec 28 j 14:14	15°♑41'50
morning rise	670 Mar 06 j 10:09	8°♑40'20	opposition	676 Feb 26 j 23:27	10°♑47'31 1°37'04
retrograde	670 Jul 16 j 22:34	29°♑19'01	min. Earth dist.	676 Feb 27 j 15:50	10°♑42'12 4.44319 AU
opposition	670 Sep 14 j 18:56	24°♑16'11 -1°43'17	direct	676 Apr 29 j 09:29	5°♑44'36
min. Earth dist.	670 Sep 13 j 19:08	24°♑24'13 3.95948 AU	evening set	676 Sep 03 j 04:49	23°♑19'04
direct	670 Nov 11 j 18:13	19°♑22'00	max. Earth dist.	676 Sep 14 j 14:51	25°♑47'28 6.44261 AU
	671 Feb 05 j 16:32	0°♒			
evening set	671 Mar 17 j 07:30	9°♒01'22	conjunction	676 Sep 16 j 02:42	26°♑06'57 1°09'46
			minimum elong	676 Sep 16 j 02:42	26°♑06'57 1°09'46
conjunction	671 Mar 30 j 18:45	12°♒14'38 -1°06'15	morning rise	676 Sep 28 j 21:48	28°♑53'30
minimum elong	671 Mar 30 j 18:46	12°♒14'39 1°06'14		676 Oct 04 j 01:25	0°♓
max. Earth dist.	671 Apr 01 j 18:31	12°♒43'13 5.97716 AU	retrograde	677 Jan 27 j 03:11	15°♓42'49
morning rise	671 Apr 13 j 09:02	15°♒29'22	opposition	677 Mar 28 j 19:11	10°♓50'34 1°38'23
	671 Jun 20 j 23:33	0°♓	min. Earth dist.	677 Mar 30 j 02:14	10°♓40'39 4.42580 AU
retrograde	671 Aug 22 j 23:08	5°♓51'02	direct	677 May 30 j 14:13	5°♓48'54
min. Earth dist.	671 Oct 20 j 02:52	0°♓57'47 4.01742 AU	evening set	677 Oct 03 j 21:08	23°♓29'31
opposition	671 Oct 21 j 13:35	0°♓45'57 -1°25'31	max. Earth dist.	677 Oct 14 j 13:29	25°♓50'34 6.39002 AU
	671 Oct 27 j 05:02	30°♒♒			
direct	671 Dec 18 j 13:20	25°♒49'11	conjunction	677 Oct 16 j 14:09	26°♓17'26 1°00'52
	672 Feb 08 j 02:15	0°♓	minimum elong	677 Oct 16 j 14:10	26°♓17'27 1°00'53
evening set	672 Apr 22 j 17:07	15°♓08'06	morning rise	677 Oct 29 j 05:00	29°♓04'29
	672 Apr 22 j 03:08	15°♓		677 Nov 02 j 10:22	0°♔
				678 Jan 29 j 08:11	15°♔
conjunction	672 May 06 j 10:18	18°♔19'43 -0°42'58	retrograde	678 Feb 27 j 19:22	16°♔19'40
minimum elong	672 May 06 j 10:20	18°♔19'45 0°42'57		678 Mar 29 j 10:41	15°♔♔
max. Earth dist.	672 May 08 j 16:01	18°♔51'02 6.07238 AU	opposition	678 Apr 29 j 17:24	11°♔27'49 1°12'43
morning rise	672 May 20 j 05:19	21°♔31'59	min. Earth dist.	678 May 01 j 05:06	11°♔16'27 4.34118 AU
	672 Jun 27 j 14:30	0°♕	direct	678 Jul 01 j 02:29	6°♔28'15
retrograde	672 Sep 25 j 19:50	10°♕56'24		678 Sep 19 j 15:14	15°♔
min. Earth dist.	672 Nov 23 j 02:27	6°♕02'29 4.13847 AU	evening set	678 Nov 03 j 21:07	24°♔30'12
opposition	672 Nov 24 j 09:38	5°♕51'51 -0°36'50	max. Earth dist.	678 Nov 14 j 13:12	26°♔54'58 6.27992 AU
direct	673 Jan 22 j 07:55	0°♕51'59			
evening set	673 May 28 j 22:40	19°♕35'47	conjunction	678 Nov 16 j 12:32	27°♔21'49 0°34'28
			minimum elong	678 Nov 16 j 12:34	27°♔21'51 0°34'28
conjunction	673 Jun 11 j 16:46	22°♕41'41 -0°05'13		678 Nov 28 j 03:30	0°♕
minimum elong	673 Jun 11 j 16:46	22°♕41'42 0°05'13	morning rise	678 Nov 29 j 02:55	0°♕13'13
behind sun begin	673 Jun 11 j 08:42	22°♕37'10	retrograde	679 Apr 02 j 12:52	18°♕18'57
behind sun end	673 Jun 12 j 00:51	22°♕46'14	opposition	679 Jun 02 j 10:18	13°♕25'58 0°24'07
max. Earth dist.	673 Jun 13 j 10:24	23°♕05'11 6.20921 AU	min. Earth dist.	679 Jun 03 j 17:35	13°♕15'58 4.21171 AU
morning rise	673 Jun 25 j 10:24	25°♕47'08	direct	679 Aug 02 j 19:50	8°♕29'01

desc. node	679 Nov 13 j 05:12	21°♏53'02		minimum elong	685 Jun 16 j 14:31	27°♐27'48	0°00'28
evening set	679 Dec 06 j 02:14	27°♏03'50		behind sun begin	685 Jun 16 j 06:11	27°♐23'09	
max. Earth dist.	679 Dec 17 j 08:59	29°♏41'47	6.14222 AU	behind sun end	685 Jun 16 j 22:52	27°♐32'28	
				max. Earth dist.	685 Jun 18 j 03:14	27°♐48'25	6.22986 AU
conjunction	679 Dec 18 j 19:09	0°♐01'47	-0°03'41		685 Jun 27 j 22:04	0°♐	
minimum elong	679 Dec 18 j 19:10	0°♐01'47	0°03'41	morning rise	685 Jun 30 j 07:39	0°♐32'06	
behind sun begin	679 Dec 18 j 11:13	29°♏57'09		retrograde	685 Nov 01 j 20:19	18°♐39'14	
behind sun end	679 Dec 19 j 03:06	0°♐06'24		opposition	685 Dec 31 j 14:32	13°♐38'16	0°28'53
	679 Dec 18 j 16:03	0°♐		min. Earth dist.	685 Dec 30 j 22:33	13°♐43'38	4.29576 AU
morning rise	679 Dec 31 j 12:52	3°♐00'22		direct	686 Mar 02 j 01:03	8°♐35'55	
retrograde	680 May 07 j 11:47	22°♐11'58		evening set	686 Jul 07 j 00:17	26°♐40'44	
opposition	680 Jul 07 j 03:50	17°♐16'15	-0°35'39				
min. Earth dist.	680 Jul 07 j 18:05	17°♐11'37	4.07590 AU	conjunction	686 Jul 20 j 12:31	29°♐38'01	0°37'20
direct	680 Sep 05 j 02:29	12°♐21'42		minimum elong	686 Jul 20 j 12:28	29°♐38'00	0°37'19
	681 Jan 01 j 16:36	0°♐		max. Earth dist.	686 Jul 20 j 23:43	29°♐44'10	6.35434 AU
evening set	681 Jan 08 j 04:38	1°♐32'25			686 Jul 22 j 04:36	0°♐	
				morning rise	686 Aug 02 j 22:23	2°♐34'02	
conjunction	681 Jan 21 j 02:06	4°♐37'32	-0°42'06		686 Oct 06 j 01:52	15°♐	
minimum elong	681 Jan 21 j 02:04	4°♐37'30	0°42'06	retrograde	686 Dec 02 j 15:42	19°♐49'46	
max. Earth dist.	681 Jan 20 j 20:33	4°♐34'12	6.02082 AU		687 Jan 30 j 18:45	15°♐	
morning rise	681 Feb 03 j 01:34	7°♐43'56		opposition	687 Jan 31 j 16:57	14°♐52'42	1°14'52
	681 Mar 06 j 15:08	15°♐		min. Earth dist.	687 Jan 31 j 18:35	14°♐52'10	4.39984 AU
retrograde	681 Jun 14 j 05:48	27°♐56'03		direct	687 Apr 03 j 09:04	9°♐49'34	
opposition	681 Aug 13 j 11:17	22°♐56'30	-1°25'39		687 Jun 03 j 23:41	15°♐	
min. Earth dist.	681 Aug 13 j 04:18	22°♐58'49	3.98128 AU	evening set	687 Aug 08 j 09:15	27°♐31'58	
direct	681 Oct 11 j 02:40	18°♐03'06			687 Aug 19 j 19:09	0°♐	
	682 Jan 11 j 07:34	0°♐					
evening set	682 Feb 13 j 07:00	7°♐38'41		conjunction	687 Aug 21 j 13:27	0°♐22'56	1°02'12
				minimum elong	687 Aug 21 j 13:25	0°♐22'55	1°02'12
conjunction	682 Feb 26 j 11:17	10°♐49'32	-1°06'01	max. Earth dist.	687 Aug 20 j 19:52	0°♐13'24	6.42977 AU
minimum elong	682 Feb 26 j 11:16	10°♐49'31	1°06'01	morning rise	687 Sep 03 j 14:53	3°♐12'28	
max. Earth dist.	682 Feb 27 j 13:30	11°♐05'22	5.96135 AU	retrograde	688 Jan 01 j 21:36	20°♐02'24	
morning rise	682 Mar 11 j 18:46	14°♐02'05		opposition	688 Mar 02 j 06:44	15°♐08'30	1°38'52
	682 May 27 j 10:19	0°♐		min. Earth dist.	688 Mar 03 j 02:24	15°♐02'08	4.44337 AU
retrograde	682 Jul 22 j 06:28	4°♐40'20		direct	688 May 03 j 19:33	10°♐05'42	
	682 Sep 17 j 06:22	30°♐		evening set	688 Sep 07 j 12:48	27°♐40'44	
min. Earth dist.	682 Sep 18 j 23:33	29°♐46'07	3.96528 AU		688 Sep 18 j 05:36	0°♐	
opposition	682 Sep 20 j 02:25	29°♐37'03	-1°43'12	max. Earth dist.	688 Sep 18 j 20:19	0°♐08'00	6.43735 AU
direct	682 Nov 16 j 23:53	24°♐42'35					
	683 Jan 14 j 01:07	0°♐		conjunction	688 Sep 20 j 10:00	0°♐28'31	1°09'39
evening set	683 Mar 22 j 15:21	14°♐19'25		minimum elong	688 Sep 20 j 10:00	0°♐28'31	1°09'38
				morning rise	688 Oct 03 j 04:14	3°♐14'59	
conjunction	683 Apr 05 j 03:31	17°♐32'34	-1°04'20	retrograde	689 Jan 31 j 11:35	20°♐07'01	
minimum elong	683 Apr 05 j 03:33	17°♐32'35	1°04'20	opposition	689 Apr 02 j 05:21	15°♐14'57	1°36'20
max. Earth dist.	683 Apr 07 j 04:37	18°♐01'52	5.98919 AU	min. Earth dist.	689 Apr 03 j 12:40	15°♐04'57	4.41565 AU
morning rise	683 Apr 18 j 18:42	20°♐47'07		direct	689 Jun 03 j 22:35	10°♐13'35	
	683 May 29 j 17:31	0°♐		evening set	689 Oct 08 j 05:43	27°♐57'06	
retrograde	683 Aug 27 j 23:53	11°♐01'31			689 Oct 17 j 12:23	0°♐	
min. Earth dist.	683 Oct 25 j 04:14	6°♐08'04	4.03412 AU	max. Earth dist.	689 Oct 18 j 21:29	0°♐18'21	6.37582 AU
opposition	683 Oct 26 j 14:39	5°♐56'19	-1°20'01				
direct	683 Dec 23 j 17:27	0°♐59'07		conjunction	689 Oct 20 j 22:17	0°♐45'25	0°58'05
	684 Apr 04 j 20:39	15°♐		minimum elong	689 Oct 20 j 22:19	0°♐45'26	0°58'05
evening set	684 Apr 27 j 21:22	20°♐12'42		morning rise	689 Nov 02 j 12:53	3°♐32'56	
					689 Dec 29 j 17:36	15°♐	
conjunction	684 May 11 j 15:08	23°♐23'38	-0°38'10	retrograde	690 Mar 04 j 12:22	20°♐54'26	
minimum elong	684 May 11 j 15:11	23°♐23'40	0°38'09	opposition	690 May 04 j 09:35	16°♐02'36	1°07'00
max. Earth dist.	684 May 13 j 21:20	23°♐55'04	6.09239 AU	min. Earth dist.	690 May 05 j 21:50	15°♐51'04	4.32379 AU
morning rise	684 May 25 j 10:11	26°♐35'01			690 May 12 j 15:30	15°♐	
	684 Jun 09 j 11:36	0°♐		direct	690 Jul 05 j 16:48	11°♐03'27	
retrograde	684 Sep 30 j 12:59	15°♐49'11			690 Aug 27 j 07:33	15°♐	
min. Earth dist.	684 Nov 27 j 20:50	10°♐55'13	4.15967 AU	evening set	690 Nov 08 j 08:53	29°♐09'47	
opposition	684 Nov 29 j 02:47	10°♐45'03	-0°28'43		690 Nov 12 j 01:34	0°♐	
direct	685 Jan 27 j 04:51	5°♐44'53		max. Earth dist.	690 Nov 19 j 01:36	1°♐35'35	6.26095 AU
evening set	685 Jun 02 j 21:01	24°♐23'00					
asc. node	685 Jun 12 j 01:14	26°♐26'24		conjunction	690 Nov 21 j 00:20	2°♐02'13	0°29'33
				minimum elong	690 Nov 21 j 00:22	2°♐02'14	0°29'33
conjunction	685 Jun 16 j 14:31	27°♐27'48	0°00'28	morning rise	690 Dec 03 j 15:06	4°♐54'32	

retrograde	691 Apr 07 j 11:48	23°♄09'00		retrograde	696 Oct 05 j 01:44	20°♄33'42	
opposition	691 Jun 07 j 09:26	18°♄15'42	0°15'54	opposition	696 Dec 03 j 16:25	15°♄29'53	-0°20'42
min. Earth dist.	691 Jun 08 j 13:35	18°♄06'40	4.19262 AU	min. Earth dist.	696 Dec 02 j 12:07	15°♄39'30	4.17786 AU
direct	691 Aug 07 j 13:19	13°♄19'10		direct	697 Jan 31 j 22:37	10°♄29'19	
desc. node	691 Sep 22 j 09:55	16°♄28'15		asc. node	697 Apr 23 j 00:08	19°♄27'14	
	691 Dec 02 j 06:20	0°♄		evening set	697 Jun 07 j 16:16	29°♄02'59	
evening set	691 Dec 10 j 19:34	1°♄58'40			697 Jun 11 j 22:36	0°♄	
max. Earth dist.	691 Dec 22 j 07:49	4°♄40'24	6.12490 AU				
conjunction	691 Dec 23 j 13:00	4°♄57'33	-0°09'25	conjunction	697 Jun 21 j 09:29	2°♄06'54	0°05'57
minimum elong	691 Dec 23 j 12:59	4°♄57'32	0°09'25	minimum elong	697 Jun 21 j 09:28	2°♄06'54	0°05'58
behind sun begin	691 Dec 23 j 06:15	4°♄53'36		behind sun begin	697 Jun 21 j 01:33	2°♄02'29	
behind sun end	691 Dec 23 j 19:44	5°♄01'29		behind sun end	697 Jun 21 j 17:23	2°♄11'19	
morning rise	692 Jan 05 j 07:11	7°♄57'06		max. Earth dist.	697 Jun 22 j 19:24	2°♄25'54	6.24690 AU
retrograde	692 May 12 j 18:25	27°♄17'15		morning rise	697 Jul 05 j 01:45	5°♄10'07	
opposition	692 Jul 12 j 08:50	22°♄21'02	-0°43'50	retrograde	697 Nov 06 j 05:28	23°♄09'47	
min. Earth dist.	692 Jul 12 j 20:46	22°♄17'09	4.06189 AU	opposition	698 Jan 04 j 23:19	18°♄09'24	0°36'11
direct	692 Sep 10 j 03:46	17°♄26'46		min. Earth dist.	698 Jan 04 j 09:56	18°♄13'53	4.31033 AU
	692 Dec 15 j 06:32	0°♄		direct	698 Mar 06 j 13:55	13°♄06'54	
evening set	693 Jan 13 j 04:11	6°♄40'41			698 Jul 06 j 07:13	0°♄	
				evening set	698 Jul 11 j 14:16	1°♄08'46	
conjunction	693 Jan 26 j 02:19	9°♄46'31	-0°46'39	conjunction	698 Jul 25 j 01:24	4°♄05'11	0°41'37
minimum elong	693 Jan 26 j 02:16	9°♄46'29	0°46'39	minimum elong	698 Jul 25 j 01:22	4°♄05'09	0°41'37
max. Earth dist.	693 Jan 26 j 00:41	9°♄45'32	6.01136 AU	max. Earth dist.	698 Jul 25 j 07:34	4°♄08'33	6.36530 AU
morning rise	693 Feb 08 j 02:49	12°♄53'46		morning rise	698 Aug 07 j 10:20	7°♄00'19	
	693 Feb 16 j 23:52	15°♄			698 Sep 15 j 02:31	15°♄	
	693 May 04 j 20:13	0°♄		retrograde	698 Dec 06 j 21:43	24°♄11'56	
retrograde	693 Jun 19 j 12:40	3°♄10'28		opposition	699 Feb 04 j 23:36	19°♄15'20	1°19'37
	693 Aug 04 j 15:46	30°♄		min. Earth dist.	699 Feb 05 j 03:58	19°♄13'54	4.40690 AU
opposition	693 Aug 18 j 18:00	28°♄10'21	-1°30'22		699 Mar 15 j 22:38	15°♄	
min. Earth dist.	693 Aug 18 j 06:59	28°♄14'00	3.97770 AU	direct	699 Apr 07 j 18:48	14°♄12'10	
direct	693 Oct 16 j 05:33	23°♄16'54			699 Apr 30 j 21:06	15°♄	
	693 Dec 21 j 14:11	0°♄			699 Aug 03 j 22:28	0°♄	
evening set	694 Feb 18 j 10:39	12°♄52'35		evening set	699 Aug 12 j 19:15	1°♄53'37	
conjunction	694 Mar 03 j 15:55	16°♄03'45	-1°07'23	conjunction	699 Aug 25 j 22:33	4°♄44'05	1°04'18
minimum elong	694 Mar 03 j 15:54	16°♄03'44	1°07'23	minimum elong	699 Aug 25 j 22:32	4°♄44'04	1°04'18
max. Earth dist.	694 Mar 04 j 21:40	16°♄21'42	5.96370 AU	max. Earth dist.	699 Aug 25 j 03:18	4°♄33'38	6.43247 AU
morning rise	694 Mar 17 j 00:24	19°♄16'37		morning rise	699 Sep 07 j 22:44	7°♄33'03	
	694 May 03 j 17:00	0°♄		retrograde	700 Jan 06 j 03:15	24°♄22'20	
retrograde	694 Jul 27 j 10:23	9°♄53'01		opposition	700 Mar 06 j 13:59	19°♄28'48	1°40'06
min. Earth dist.	694 Sep 24 j 01:59	4°♄58'45	3.97330 AU	min. Earth dist.	700 Mar 07 j 10:46	19°♄22'06	4.44185 AU
opposition	694 Sep 25 j 06:03	4°♄49'15	-1°42'14	direct	700 May 08 j 03:19	14°♄26'12	
	694 Nov 14 j 21:13	30°♄			700 Sep 02 j 09:16	0°♄	
direct	694 Nov 22 j 04:01	29°♄54'26		evening set	700 Sep 11 j 20:53	2°♄02'02	
	694 Nov 29 j 10:50	0°♄		max. Earth dist.	700 Sep 23 j 00:35	4°♄27'34	6.43160 AU
evening set	695 Mar 27 j 19:17	19°♄28'02					
conjunction	695 Apr 10 j 08:30	22°♄41'01	-1°01'57	conjunction	700 Sep 24 j 17:08	4°♄49'42	1°09'06
minimum elong	695 Apr 10 j 08:32	22°♄41'02	1°01'57	minimum elong	700 Sep 24 j 17:08	4°♄49'42	1°09'06
max. Earth dist.	695 Apr 12 j 12:21	23°♄11'50	6.00206 AU	morning rise	700 Oct 07 j 10:49	7°♄36'08	
morning rise	695 Apr 24 j 00:20	25°♄55'16		retrograde	701 Feb 04 j 22:56	24°♄30'56	
	695 May 11 j 14:20	0°♄		opposition	701 Apr 06 j 16:11	19°♄38'59	1°33'42
	695 Aug 07 j 15:07	15°♄		min. Earth dist.	701 Apr 08 j 01:12	19°♄28'27	4.40601 AU
retrograde	695 Sep 01 j 21:41	16°♄02'04		direct	701 Jun 08 j 09:43	14°♄37'51	
	695 Sep 26 j 21:35	15°♄			701 Oct 01 j 14:36	0°♄	
min. Earth dist.	695 Oct 30 j 01:28	11°♄08'30	4.05039 AU	evening set	701 Oct 12 j 13:50	2°♄23'40	
opposition	695 Oct 31 j 11:30	10°♄56'53	-1°14'07	max. Earth dist.	701 Oct 23 j 05:27	4°♄45'17	6.36295 AU
direct	695 Dec 28 j 16:42	5°♄59'16		conjunction	701 Oct 25 j 06:10	5°♄12'22	0°54'57
	696 Mar 17 j 04:12	15°♄		minimum elong	701 Oct 25 j 06:12	5°♄12'23	0°54'56
evening set	696 May 02 j 22:11	25°♄07'58		morning rise	701 Nov 06 j 20:29	8°♄00'19	
					701 Dec 09 j 17:05	15°♄	
conjunction	696 May 16 j 16:05	28°♄18'11	-0°33'15	retrograde	702 Mar 09 j 02:44	25°♄27'37	
minimum elong	696 May 16 j 16:08	28°♄18'13	0°33'16	opposition	702 May 09 j 01:22	20°♄35'38	1°00'52
max. Earth dist.	696 May 18 j 19:12	28°♄47'41	6.11051 AU	min. Earth dist.	702 May 10 j 12:06	20°♄24'34	4.30832 AU
	696 May 24 j 00:40	0°♄		direct	702 Jul 10 j 04:24	15°♄36'50	
morning rise	696 May 30 j 11:23	1°♄28'48			702 Oct 26 j 21:11	0°♄	

evening set	702 Nov 12 j 20:01	3°♏46'50		evening set	708 May 08 j 01:04	0°♐08'48	
max. Earth dist.	702 Nov 23 j 15:01	6°♏14'29	6.24403 AU				
conjunction	702 Nov 25 j 11:30	6°♏39'57	0°24'28	conjunction	708 May 21 j 19:25	3°♐18'29	-0°28'00
minimum elong	702 Nov 25 j 11:31	6°♏39'58	0°24'29	minimum elong	708 May 21 j 19:27	3°♐18'30	0°28'01
morning rise	702 Dec 08 j 02:29	9°♏33'05		max. Earth dist.	708 May 23 j 21:39	3°♐47'23	6.12659 AU
retrograde	703 Apr 12 j 11:29	27°♏55'38		morning rise	708 Jun 04 j 14:35	6°♐28'20	
opposition	703 Jun 12 j 07:24	23°♏02'01	0°07'36	retrograde	708 Oct 09 j 19:15	25°♐24'45	
min. Earth dist.	703 Jun 13 j 10:47	22°♏53'13	4.17505 AU	min. Earth dist.	708 Dec 07 j 06:25	20°♐30'15	4.19491 AU
desc. node	703 Aug 02 j 03:54	18°♏15'40		opposition	708 Dec 08 j 08:36	20°♐21'22	-0°12'23
direct	703 Aug 12 j 08:07	18°♏05'48		direct	709 Feb 05 j 19:10	15°♐20'31	
	703 Nov 15 j 05:07	0°♐		asc. node	709 Mar 02 j 04:41	16°♐17'43	
evening set	703 Dec 15 j 11:46	6°♐49'45			709 May 26 j 01:13	0°♐	
max. Earth dist.	703 Dec 27 j 03:01	9°♐33'50	6.10815 AU	evening set	709 Jun 12 j 14:19	3°♐50'05	
conjunction	703 Dec 28 j 05:41	9°♐49'32	-0°15'03	conjunction	709 Jun 26 j 06:56	6°♐53'03	0°11'29
minimum elong	703 Dec 28 j 05:39	9°♐49'31	0°15'04	minimum elong	709 Jun 26 j 06:54	6°♐53'02	0°11'29
behind sun begin	703 Dec 28 j 02:30	9°♐47'41		behind sun begin	709 Jun 26 j 01:01	6°♐49'46	
behind sun end	703 Dec 28 j 08:48	9°♐51'22		behind sun end	709 Jun 26 j 12:47	6°♐56'18	
morning rise	704 Jan 10 j 00:38	12°♐50'08		max. Earth dist.	709 Jun 27 j 13:42	7°♐10'12	6.26377 AU
	704 Apr 08 j 23:07	0°♐		morning rise	709 Jul 09 j 22:29	9°♐55'13	
retrograde	704 May 17 j 21:39	2°♐18'45		retrograde	709 Nov 10 j 14:51	27°♐47'20	
	704 Jun 26 j 03:53	30°♐		opposition	710 Jan 09 j 10:30	22°♐47'29	0°43'29
opposition	704 Jul 17 j 12:06	27°♐22'03	-0°51'40	min. Earth dist.	710 Jan 08 j 22:34	22°♐51'28	4.32604 AU
min. Earth dist.	704 Jul 17 j 20:22	27°♐19'21	4.04754 AU	direct	710 Mar 11 j 04:33	17°♐44'51	
direct	704 Sep 15 j 01:20	22°♐28'02			710 Jun 19 j 03:21	0°♐	
	704 Nov 25 j 15:17	0°♐		evening set	710 Jul 16 j 06:30	5°♐43'12	
evening set	705 Jan 18 j 02:41	11°♐45'46		conjunction	710 Jul 29 j 16:38	8°♐38'38	0°45'47
conjunction	705 Jan 31 j 01:38	14°♐52'26	-0°50'51	minimum elong	710 Jul 29 j 16:35	8°♐38'37	0°45'47
minimum elong	705 Jan 31 j 01:36	14°♐52'25	0°50'50	max. Earth dist.	710 Jul 29 j 20:18	8°♐40'38	6.37909 AU
max. Earth dist.	705 Jan 31 j 04:09	14°♐53'57	6.00059 AU	morning rise	710 Aug 12 j 00:14	11°♐32'41	
	705 Jan 31 j 14:12	15°♐			710 Aug 28 j 04:25	15°♐	
morning rise	705 Feb 13 j 03:08	18°♐00'37		retrograde	710 Dec 11 j 05:18	28°♐39'06	
	705 Apr 08 j 10:29	0°♐		opposition	711 Feb 09 j 08:07	23°♐43'01	1°24'01
retrograde	705 Jun 24 j 20:18	8°♐22'50		min. Earth dist.	711 Feb 09 j 14:31	23°♐40'55	4.41812 AU
opposition	705 Aug 23 j 23:42	3°♐22'08	-1°34'26	direct	711 Apr 12 j 06:58	18°♐39'56	
min. Earth dist.	705 Aug 23 j 10:30	3°♐26'32	3.97169 AU		711 Jul 17 j 20:24	0°♐	
	705 Sep 20 j 23:34	30°♐		evening set	711 Aug 17 j 06:01	6°♐18'37	
direct	705 Oct 21 j 09:03	28°♐28'36		max. Earth dist.	711 Aug 29 j 09:05	8°♐55'50	6.44027 AU
	705 Nov 20 j 12:50	0°♐		conjunction	711 Aug 30 j 08:05	9°♐08'18	1°06'06
evening set	706 Feb 23 j 14:22	18°♐05'48		minimum elong	711 Aug 30 j 08:04	9°♐08'17	1°06'05
conjunction	706 Mar 08 j 20:53	21°♐17'32	-1°08'16	morning rise	711 Sep 12 j 07:17	11°♐56'32	
minimum elong	706 Mar 08 j 20:52	21°♐17'31	1°08'15	retrograde	712 Jan 10 j 10:07	28°♐43'34	
max. Earth dist.	706 Mar 10 j 07:13	21°♐38'14	5.96300 AU	opposition	712 Mar 10 j 21:54	23°♐50'16	1°40'46
morning rise	706 Mar 22 j 06:26	24°♐30'55		min. Earth dist.	712 Mar 11 j 20:32	23°♐42'58	4.44597 AU
	706 Apr 14 j 17:04	0°♐		direct	712 May 12 j 13:23	18°♐47'46	
retrograde	706 Aug 01 j 15:42	15°♐06'32			712 Aug 16 j 14:48	0°♐	
min. Earth dist.	706 Sep 29 j 04:16	10°♐12'24	3.97814 AU	evening set	712 Sep 16 j 03:45	6°♐22'11	
opposition	706 Sep 30 j 09:33	10°♐02'29	-1°40'31	max. Earth dist.	712 Sep 27 j 06:32	8°♐47'16	6.43174 AU
direct	706 Nov 27 j 06:33	5°♐07'22		conjunction	712 Sep 28 j 23:19	9°♐09'31	1°08'13
evening set	707 Apr 02 j 00:49	24°♐39'24		minimum elong	712 Sep 28 j 23:20	9°♐09'32	1°08'13
conjunction	707 Apr 15 j 14:50	27°♐52'22	-0°59'05	morning rise	712 Oct 11 j 16:03	11°♐55'38	
minimum elong	707 Apr 15 j 14:53	27°♐52'23	0°59'04	retrograde	713 Feb 09 j 05:31	28°♐51'18	
max. Earth dist.	707 Apr 17 j 18:27	28°♐22'56	6.01175 AU	opposition	713 Apr 11 j 01:17	23°♐59'25	1°30'35
	707 Apr 24 j 14:38	0°♐		min. Earth dist.	713 Apr 12 j 10:31	23°♐48'49	4.40207 AU
morning rise	707 Apr 29 j 07:41	1°♐06'33		direct	713 Jun 12 j 17:46	18°♐58'34	
	707 Jul 04 j 05:45	15°♐			713 Sep 15 j 00:49	0°♐	
retrograde	707 Sep 06 j 19:30	21°♐06'57		evening set	713 Oct 16 j 19:35	6°♐44'43	
min. Earth dist.	707 Nov 03 j 23:17	16°♐13'31	4.06375 AU	max. Earth dist.	713 Oct 27 j 09:30	9°♐05'44	6.35513 AU
opposition	707 Nov 05 j 09:35	16°♐01'48	-1°07'37	conjunction	713 Oct 29 j 11:21	9°♐33'32	0°51'36
	707 Nov 13 j 00:14	15°♐		minimum elong	713 Oct 29 j 11:23	9°♐33'33	0°51'35
direct	708 Jan 02 j 17:02	11°♐03'45		morning rise	713 Nov 11 j 01:34	12°♐21'44	
	708 Feb 21 j 22:56	15°♐			713 Nov 23 j 01:48	15°♐	
	708 May 07 j 09:39	0°♐		retrograde	714 Mar 13 j 15:59	29°♐53'19	

opposition	714 May 13 j 14:10	25°♄01'10	0°54'33	evening set	720 May 13 j 04:36	5°♄09'21	
min. Earth dist.	714 May 15 j 01:43	24°♄49'50	4.29671 AU				
direct	714 Jul 14 j 16:04	20°♄02'36		conjunction	720 May 26 j 23:08	8°♄18'28	-0°22'33
	714 Oct 09 j 22:12	0°♄		minimum elong	720 May 26 j 23:09	8°♄18'29	0°22'33
evening set	714 Nov 17 j 03:16	8°♄15'02		max. Earth dist.	720 May 29 j 00:48	8°♄46'55	6.14154 AU
max. Earth dist.	714 Nov 27 j 23:21	10°♄43'46	6.22961 AU	morning rise	720 Jun 09 j 18:17	11°♄27'36	
					720 Oct 01 j 21:43	0°♄	
conjunction	714 Nov 29 j 18:57	11°♄08'48	0°19'26	retrograde	720 Oct 14 j 09:46	0°♄15'29	
minimum elong	714 Nov 29 j 18:58	11°♄08'48	0°19'26		720 Oct 26 j 20:50	30°♄	
morning rise	714 Dec 12 j 10:12	14°♄02'39		min. Earth dist.	720 Dec 11 j 22:45	25°♄21'13	4.21193 AU
	715 Mar 07 j 00:40	0°♄		opposition	720 Dec 13 j 00:40	25°♄12'27	-0°03'58
retrograde	715 Apr 17 j 04:17	2°♄32'35		asc. node	721 Jan 08 j 23:52	21°♄53'21	
	715 May 28 j 21:04	30°♄		direct	721 Feb 10 j 14:20	20°♄11'15	
desc. node	715 Jun 14 j 02:25	28°♄01'20			721 May 07 j 14:37	0°♄	
opposition	715 Jun 17 j 01:15	27°♄38'36	-0°00'27	evening set	721 Jun 17 j 12:28	8°♄36'29	
min. Earth dist.	715 Jun 18 j 02:39	27°♄30'26	4.15871 AU				
direct	715 Aug 16 j 20:52	22°♄42'40		conjunction	721 Jul 01 j 04:21	11°♄38'23	0°16'58
	715 Oct 27 j 11:01	0°♄		minimum elong	721 Jul 01 j 04:20	11°♄38'22	0°16'57
evening set	715 Dec 20 j 00:11	11°♄30'54		max. Earth dist.	721 Jul 02 j 07:49	11°♄53'39	6.28137 AU
				morning rise	721 Jul 14 j 18:59	14°♄39'24	
conjunction	716 Jan 01 j 18:31	14°♄31'36	-0°20'23		721 Oct 06 j 16:01	0°♄	
minimum elong	716 Jan 01 j 18:30	14°♄31'36	0°20'23	retrograde	721 Nov 15 j 01:58	2°♄23'39	
max. Earth dist.	715 Dec 31 j 18:05	14°♄17'09	6.09127 AU		721 Dec 24 j 08:19	30°♄	
morning rise	716 Jan 14 j 14:13	17°♄33'15		opposition	722 Jan 13 j 21:47	27°♄24'16	0°50'28
	716 Mar 12 j 14:08	0°♄		min. Earth dist.	722 Jan 13 j 12:41	27°♄27'18	4.34243 AU
retrograde	716 May 22 j 23:07	7°♄10'41		direct	722 Mar 15 j 21:08	22°♄21'29	
opposition	716 Jul 22 j 11:24	2°♄13'28	-0°58'53		722 May 30 j 19:54	0°♄	
min. Earth dist.	716 Jul 22 j 18:05	2°♄11'17	4.03148 AU	evening set	722 Jul 20 j 22:00	10°♄15'50	
	716 Aug 09 j 03:16	30°♄					
direct	716 Sep 19 j 21:17	27°♄19'31		conjunction	722 Aug 03 j 07:00	13°♄10'15	0°49'40
	716 Oct 30 j 18:28	0°♄		minimum elong	722 Aug 03 j 06:58	13°♄10'13	0°49'41
	717 Jan 15 j 18:46	15°♄		max. Earth dist.	722 Aug 03 j 07:16	13°♄10'23	6.39256 AU
evening set	717 Jan 22 j 22:12	16°♄42'09			722 Aug 11 j 16:42	15°♄	
				morning rise	722 Aug 16 j 13:21	16°♄03'14	
conjunction	717 Feb 04 j 22:13	19°♄49'53	-0°54'31		722 Oct 31 j 04:29	0°♄	
minimum elong	717 Feb 04 j 22:11	19°♄49'52	0°54'32	retrograde	722 Dec 15 j 11:18	3°♄04'46	
max. Earth dist.	717 Feb 05 j 04:52	19°♄53'54	5.98697 AU		723 Jan 30 j 03:31	30°♄	
morning rise	717 Feb 18 j 00:45	22°♄59'09		opposition	723 Feb 13 j 16:20	28°♄09'05	1°27'57
	717 Mar 20 j 06:24	0°♄		min. Earth dist.	723 Feb 14 j 00:33	28°♄06'24	4.42775 AU
retrograde	717 Jun 30 j 01:30	13°♄27'50		direct	723 Apr 16 j 17:53	23°♄05'59	
min. Earth dist.	717 Aug 28 j 10:57	8°♄31'48	3.96226 AU		723 Jun 28 j 08:53	0°♄	
opposition	717 Aug 29 j 02:17	8°♄26'41	-1°37'40	evening set	723 Aug 21 j 16:24	10°♄42'36	
direct	717 Oct 26 j 07:28	3°♄33'04					
evening set	718 Feb 28 j 16:35	23°♄13'29		conjunction	723 Sep 03 j 17:24	13°♄31'38	1°07'32
				minimum elong	723 Sep 03 j 17:23	13°♄31'38	1°07'32
conjunction	718 Mar 14 j 00:10	26°♄25'57	-1°08'33	max. Earth dist.	723 Sep 02 j 15:59	13°♄17'52	6.44510 AU
minimum elong	718 Mar 14 j 00:10	26°♄25'57	1°08'33	morning rise	723 Sep 16 j 15:23	16°♄19'14	
max. Earth dist.	718 Mar 15 j 12:09	26°♄47'40	5.95847 AU		723 Nov 30 j 02:25	0°♄	
morning rise	718 Mar 27 j 11:08	29°♄40'09		retrograde	724 Jan 14 j 17:02	3°♄05'14	
	718 Mar 28 j 20:22	0°♄			724 Feb 29 j 22:10	30°♄	
retrograde	718 Aug 06 j 18:28	20°♄16'25		opposition	724 Mar 15 j 06:08	28°♄12'16	1°40'57
min. Earth dist.	718 Oct 04 j 04:12	15°♄22'43	3.97915 AU	min. Earth dist.	724 Mar 16 j 06:59	28°♄04'17	4.44564 AU
opposition	718 Oct 05 j 11:35	15°♄12'03	-1°38'03	direct	724 May 16 j 23:12	23°♄09'59	
direct	718 Dec 02 j 07:49	10°♄16'35			724 Jul 28 j 07:15	0°♄	
evening set	719 Apr 07 j 05:54	29°♄48'34		evening set	724 Sep 20 j 11:33	10°♄44'40	
	719 Apr 08 j 01:21	0°♄		max. Earth dist.	724 Oct 01 j 10:00	13°♄07'43	6.42600 AU
conjunction	719 Apr 20 j 21:04	3°♄01'43	-0°55'45	conjunction	724 Oct 03 j 06:16	13°♄31'56	1°06'57
minimum elong	719 Apr 20 j 21:07	3°♄01'45	0°55'44	minimum elong	724 Oct 03 j 06:17	13°♄31'56	1°06'57
max. Earth dist.	719 Apr 23 j 02:50	3°♄33'30	6.01838 AU	morning rise	724 Oct 15 j 22:34	16°♄18'05	
morning rise	719 May 04 j 14:35	6°♄15'55			724 Dec 28 j 11:30	0°♄	
	719 Jun 12 j 15:53	15°♄		retrograde	725 Feb 13 j 17:03	3°♄16'54	
retrograde	719 Sep 11 j 19:34	26°♄10'53			725 Apr 02 j 20:48	30°♄	
min. Earth dist.	719 Nov 08 j 22:02	21°♄17'15	4.07502 AU	opposition	725 Apr 15 j 12:52	28°♄25'04	1°26'56
opposition	719 Nov 10 j 07:35	21°♄05'48	-1°00'38	min. Earth dist.	725 Apr 16 j 23:31	28°♄14'01	4.39120 AU
direct	720 Jan 07 j 18:09	16°♄07'19		direct	725 Jun 17 j 04:36	23°♄24'28	
	720 Apr 20 j 02:52	0°♄			725 Aug 26 j 11:06	0°♄	

evening set	725 Oct 21 j 03:50	11° \mathbb{M} 13'25		conjunction	731 Apr 26 j 05:31	8° \mathcal{B} 16'33	-0°51'58
max. Earth dist.	725 Oct 31 j 18:29	13° \mathbb{M} 35'18	6.33997 AU	minimum elong	731 Apr 26 j 05:34	8° \mathcal{B} 16'35	0°51'58
				max. Earth dist.	731 Apr 28 j 12:40	8° \mathcal{B} 49'00	6.03481 AU
conjunction	725 Nov 02 j 19:33	14° \mathbb{M} 02'46	0°47'51	morning rise	731 May 09 j 23:40	11° \mathcal{B} 30'13	
minimum elong	725 Nov 02 j 19:35	14° \mathbb{M} 02'47	0°47'51		731 May 25 j 04:03	15° \mathcal{B}	
	725 Nov 07 j 01:49	15° \mathbb{M}			731 Aug 19 j 18:22	0° \mathbb{I}	
morning rise	725 Nov 15 j 09:33	16° \mathbb{M} 51'32		retrograde	731 Sep 16 j 15:58	1° \mathbb{I} 15'27	
	726 Jan 21 j 11:46	0° \mathcal{A}			731 Oct 14 j 07:25	30° $\mathcal{R}\mathcal{B}$	
retrograde	726 Mar 18 j 08:19	4° \mathcal{A} 30'10		min. Earth dist.	731 Nov 13 j 19:07	26° \mathcal{B} 22'06	4.09560 AU
	726 May 15 j 09:56	30° $\mathcal{R}\mathbb{M}$		opposition	731 Nov 15 j 05:16	26° \mathcal{B} 10'27	-0°53'14
opposition	726 May 18 j 07:26	29° \mathbb{M} 37'53	0°47'40	direct	732 Jan 12 j 18:10	21° \mathcal{B} 11'32	
min. Earth dist.	726 May 19 j 18:09	29° \mathbb{M} 26'49	4.27813 AU		732 Mar 31 j 21:40	0° \mathbb{I}	
direct	726 Jul 19 j 05:24	24° \mathbb{M} 39'43		evening set	732 May 18 j 06:49	10° \mathbb{I} 07'11	
	726 Sep 18 j 17:44	0° \mathcal{A}					
evening set	726 Nov 21 j 15:57	12° \mathcal{A} 57'04		conjunction	732 Jun 01 j 01:11	13° \mathbb{I} 15'13	-0°17'02
max. Earth dist.	726 Dec 02 j 13:01	15° \mathcal{A} 27'07	6.20913 AU	minimum elong	732 Jun 01 j 01:12	13° \mathbb{I} 15'13	0°17'01
				max. Earth dist.	732 Jun 02 j 23:39	13° \mathbb{I} 41'42	6.16443 AU
conjunction	726 Dec 04 j 07:42	15° \mathcal{A} 51'44	0°14'01	morning rise	732 Jun 14 j 20:01	16° \mathbb{I} 23'09	
minimum elong	726 Dec 04 j 07:42	15° \mathcal{A} 51'44	0°14'01		732 Aug 21 j 19:15	0° \mathcal{E}	
behind sun begin	726 Dec 04 j 03:30	15° \mathcal{A} 49'20		retrograde	732 Oct 18 j 23:04	5° \mathcal{E} 00'10	
behind sun end	726 Dec 04 j 11:54	15° \mathcal{A} 54'09		asc. node	732 Nov 18 j 18:25	3° \mathcal{E} 27'59	
morning rise	726 Dec 16 j 23:30	18° \mathcal{A} 46'39		opposition	732 Dec 17 j 14:34	29° \mathbb{I} 57'31	0°04'13
	727 Feb 08 j 01:13	0° \mathcal{B}		min. Earth dist.	732 Dec 16 j 15:29	0° \mathcal{E} 05'19	4.23469 AU
retrograde	727 Apr 22 j 06:21	7° \mathcal{B} 26'22			732 Dec 17 j 07:13	30° $\mathcal{R}\mathbb{I}$	
desc. node	727 Apr 23 j 09:38	7° \mathcal{B} 26'14		direct	733 Feb 15 j 10:19	24° \mathbb{I} 55'57	
opposition	727 Jun 22 j 01:47	2° \mathcal{B} 32'01	-0°08'59		733 Apr 15 j 17:37	0° \mathcal{E}	
min. Earth dist.	727 Jun 23 j 01:34	2° \mathcal{B} 24'21	4.13770 AU	evening set	733 Jun 22 j 07:03	13° \mathcal{E} 15'02	
	727 Jul 12 j 17:51	30° $\mathcal{R}\mathcal{A}$					
direct	727 Aug 21 j 17:34	27° \mathcal{A} 36'24		conjunction	733 Jul 05 j 22:14	16° \mathcal{E} 15'44	0°22'10
	727 Sep 30 j 00:55	0° \mathcal{B}		minimum elong	733 Jul 05 j 22:12	16° \mathcal{E} 15'43	0°22'10
evening set	727 Dec 24 j 19:35	16° \mathcal{B} 30'32		max. Earth dist.	733 Jul 06 j 22:49	16° \mathcal{E} 29'20	6.30217 AU
				morning rise	733 Jul 19 j 11:42	19° \mathcal{E} 15'23	
conjunction	728 Jan 06 j 14:44	19° \mathcal{B} 32'24	-0°25'55		733 Sep 10 j 13:59	0° \mathcal{Q}	
minimum elong	728 Jan 06 j 14:42	19° \mathcal{B} 32'23	0°25'54	retrograde	733 Nov 19 j 07:14	6° \mathcal{Q} 51'18	
max. Earth dist.	728 Jan 05 j 18:38	19° \mathcal{B} 20'29	6.07179 AU	opposition	734 Jan 18 j 05:36	1° \mathcal{Q} 52'26	0°56'55
morning rise	728 Jan 19 j 11:12	22° \mathcal{B} 35'16		min. Earth dist.	734 Jan 17 j 22:20	1° \mathcal{Q} 54'51	4.35978 AU
	728 Feb 21 j 00:38	0° \approx			734 Feb 01 j 17:42	30° $\mathcal{R}\mathcal{E}$	
retrograde	728 May 28 j 08:18	12° \approx 22'13		direct	734 Mar 20 j 08:42	26° \mathcal{E} 49'30	
opposition	728 Jul 27 j 18:13	7° \approx 24'33	-1°06'09		734 May 06 j 09:24	0° \mathcal{Q}	
min. Earth dist.	728 Jul 27 j 21:51	7° \approx 23'22	4.01567 AU	evening set	734 Jul 25 j 09:56	14° \mathcal{Q} 39'51	
direct	728 Sep 24 j 22:37	2° \approx 30'51			734 Jul 26 j 23:16	15° \mathcal{Q}	
	728 Dec 29 j 01:46	15° \approx					
evening set	729 Jan 28 j 01:19	21° \approx 58'01		conjunction	734 Aug 07 j 17:42	17° \mathcal{Q} 33'16	0°53'09
				minimum elong	734 Aug 07 j 17:39	17° \mathcal{Q} 33'14	0°53'09
conjunction	729 Feb 10 j 02:11	25° \approx 06'39	-0°58'01	max. Earth dist.	734 Aug 07 j 12:45	17° \mathcal{Q} 30'34	6.40507 AU
minimum elong	729 Feb 10 j 02:09	25° \approx 06'38	0°58'01	morning rise	734 Aug 20 j 22:52	20° \mathcal{Q} 25'16	
max. Earth dist.	729 Feb 10 j 12:22	25° \approx 12'48	5.97626 AU		734 Oct 07 j 12:59	0° \mathbb{N}	
morning rise	729 Feb 23 j 06:02	28° \approx 16'56		retrograde	734 Dec 19 j 16:30	7° \mathbb{N} 22'42	
	729 Mar 02 j 10:47	0° \mathcal{H}		opposition	735 Feb 17 j 22:00	2° \mathbb{N} 27'28	1°31'18
retrograde	729 Jul 05 j 10:43	18° \mathcal{H} 50'23		min. Earth dist.	735 Feb 18 j 09:56	2° \mathbb{N} 23'35	4.43473 AU
opposition	729 Sep 03 j 11:11	13° \mathcal{H} 48'40	-1°40'18		735 Mar 09 j 16:12	30° $\mathcal{R}\mathcal{Q}$	
min. Earth dist.	729 Sep 02 j 16:09	13° \mathcal{H} 55'03	3.95828 AU	direct	735 Apr 21 j 03:39	27° \mathcal{Q} 24'23	
direct	729 Oct 31 j 13:19	8° \mathcal{H} 54'56			735 Jun 02 j 21:04	0° \mathbb{N}	
evening set	730 Mar 06 j 00:38	28° \mathcal{H} 36'03		evening set	735 Aug 25 j 23:44	14° \mathbb{N} 59'47	
	730 Mar 11 j 20:35	0° \mathcal{Y}					
conjunction	730 Mar 19 j 09:32	1° \mathcal{Y} 48'56	-1°08'21	conjunction	735 Sep 07 j 23:48	17° \mathbb{N} 48'25	1°08'35
minimum elong	730 Mar 19 j 09:32	1° \mathcal{Y} 48'56	1°08'21	minimum elong	735 Sep 07 j 23:47	17° \mathbb{N} 48'25	1°08'35
max. Earth dist.	730 Mar 21 j 02:47	2° \mathcal{Y} 13'47	5.96181 AU	max. Earth dist.	735 Sep 06 j 18:25	17° \mathbb{N} 32'30	6.44578 AU
morning rise	730 Apr 01 j 21:26	5° \mathcal{Y} 03'24		morning rise	735 Sep 20 j 20:53	20° \mathbb{N} 35'38	
retrograde	730 Aug 12 j 01:45	25° \mathcal{Y} 36'16			735 Nov 06 j 15:39	0° \mathcal{A}	
min. Earth dist.	730 Oct 09 j 08:53	20° \mathcal{Y} 42'30	3.98956 AU	retrograde	736 Jan 18 j 22:30	7° \mathcal{A} 22'14	
opposition	730 Oct 10 j 16:56	20° \mathcal{Y} 31'35	-1°34'42	opposition	736 Mar 19 j 13:06	2° \mathcal{A} 29'29	1°40'36
direct	730 Dec 07 j 14:56	15° \mathcal{Y} 35'44		min. Earth dist.	736 Mar 20 j 15:38	2° \mathcal{A} 20'58	4.44024 AU
	731 Mar 21 j 13:10	0° \mathcal{B}			736 Apr 08 j 21:28	30° $\mathcal{R}\mathbb{N}$	
evening set	731 Apr 12 j 13:38	5° \mathcal{B} 03'49		direct	736 May 21 j 06:09	27° \mathbb{N} 27'21	
					736 Jul 02 j 16:57	0° \mathcal{A}	
				evening set	736 Sep 24 j 17:51	15° \mathcal{A} 03'52	

max. Earth dist.	736 Oct 05 j 15:04	17°♏26'38	6.41488 AU	conjunction	742 Mar 24 j 18:40	7°♑10'22	-1°07'34
				minimum elong	742 Mar 24 j 18:41	7°♑10'22	1°07'34
conjunction	736 Oct 07 j 12:04	17°♏51'19	1°05'20	max. Earth dist.	742 Mar 26 j 15:02	7°♑36'59	5.96979 AU
minimum elong	736 Oct 07 j 12:06	17°♏51'20	1°05'19	morning rise	742 Apr 07 j 07:43	10°♑24'55	
morning rise	736 Oct 20 j 03:46	20°♏37'42			742 Jul 25 j 01:31	0°♏	
	736 Dec 05 j 01:40	0°♏		retrograde	742 Aug 17 j 05:17	0°♏52'20	
retrograde	737 Feb 18 j 04:17	7°♏41'34			742 Sep 09 j 04:22	30°♑	
opposition	737 Apr 20 j 00:35	2°♏49'49	1°22'51	min. Earth dist.	742 Oct 14 j 10:42	25°♑59'01	4.00355 AU
min. Earth dist.	737 Apr 21 j 12:18	2°♏38'27	4.37500 AU	opposition	742 Oct 15 j 20:38	25°♑47'28	-1°30'36
	737 May 13 j 16:12	30°♑		direct	742 Dec 12 j 18:48	20°♑51'14	
direct	737 Jun 21 j 14:55	27°♏49'34			743 Mar 02 j 06:51	0°♏	
	737 Jul 30 j 09:11	0°♏		evening set	743 Apr 17 j 19:44	10°♏14'32	
	737 Oct 22 j 07:25	15°♏					
evening set	737 Oct 25 j 12:47	15°♏42'59		conjunction	743 May 01 j 12:10	13°♏26'41	-0°47'50
max. Earth dist.	737 Nov 05 j 01:51	18°♏04'44	6.31993 AU	minimum elong	743 May 01 j 12:13	13°♏26'43	0°47'50
				max. Earth dist.	743 May 03 j 18:14	13°♏58'21	6.05331 AU
conjunction	737 Nov 07 j 04:16	18°♏33'04	0°43'49		743 May 08 j 03:36	15°♏	
minimum elong	737 Nov 07 j 04:18	18°♏33'05	0°43'50	morning rise	743 May 15 j 06:44	16°♏39'39	
morning rise	737 Nov 19 j 18:31	21°♏22'44			743 Jul 18 j 00:29	0°♏	
	737 Dec 30 j 10:42	0°♏		retrograde	743 Sep 21 j 11:13	6°♏15'00	
retrograde	738 Mar 23 j 04:11	9°♏10'12		min. Earth dist.	743 Nov 18 j 16:35	1°♏21'15	4.11645 AU
opposition	738 May 23 j 02:38	4°♏17'43	0°40'25	opposition	743 Nov 20 j 01:00	1°♏10'12	-0°45'33
min. Earth dist.	738 May 24 j 12:18	4°♏06'57	4.25550 AU		743 Nov 28 j 17:08	30°♑	
	738 Jul 02 j 23:48	30°♑		direct	744 Jan 17 j 18:42	26°♏10'53	
direct	738 Jul 23 j 20:40	29°♏19'55			744 Mar 07 j 14:54	0°♏	
	738 Aug 13 j 16:48	0°♏		evening set	744 May 23 j 07:12	15°♏00'37	
evening set	738 Nov 26 j 06:19	17°♏43'26					
max. Earth dist.	738 Dec 07 j 07:36	20°♏16'39	6.18601 AU	conjunction	744 Jun 06 j 01:33	18°♏07'39	-0°11'27
				minimum elong	744 Jun 06 j 01:34	18°♏07'39	0°11'27
conjunction	738 Dec 08 j 22:35	20°♏39'15	0°08'27	behind sun begin	744 Jun 05 j 19:38	18°♏04'18	
minimum elong	738 Dec 08 j 22:36	20°♏39'15	0°08'26	behind sun end	744 Jun 06 j 07:30	18°♏11'00	
behind sun begin	738 Dec 08 j 15:34	20°♏35'12		max. Earth dist.	744 Jun 07 j 22:35	18°♏33'11	6.18605 AU
behind sun end	738 Dec 09 j 05:38	20°♏43'19		morning rise	744 Jun 19 j 19:47	21°♏14'23	
morning rise	738 Dec 21 j 14:48	23°♏35'22			744 Jul 30 j 21:03	0°♏	
	739 Jan 19 j 06:50	0°♏		asc. node	744 Sep 28 j 11:47	8°♏41'26	
desc. node	739 Mar 02 j 10:09	7°♏51'32		retrograde	744 Oct 23 j 10:09	9°♏41'28	
retrograde	739 Apr 27 j 11:07	12°♏25'47		min. Earth dist.	744 Dec 21 j 05:17	4°♏46'38	4.25520 AU
opposition	739 Jun 27 j 05:10	7°♏31'07	-0°17'38	opposition	744 Dec 22 j 02:50	4°♏39'23	0°12'18
min. Earth dist.	739 Jun 28 j 02:20	7°♏24'17	4.11606 AU		745 Feb 04 j 22:53	30°♑	
direct	739 Aug 26 j 15:28	2°♏35'55		direct	745 Feb 20 j 02:31	29°♏37'37	
evening set	739 Dec 29 j 17:46	21°♏35'59			745 Mar 07 j 10:17	0°♏	
				evening set	745 Jun 27 j 00:44	17°♏51'45	
conjunction	740 Jan 11 j 13:25	24°♏38'55	-0°31'20				
minimum elong	740 Jan 11 j 13:23	24°♏38'54	0°31'21	conjunction	745 Jul 10 j 14:53	20°♏51'18	0°27'13
max. Earth dist.	740 Jan 10 j 20:43	24°♏28'58	6.05353 AU	minimum elong	745 Jul 10 j 14:51	20°♏51'17	0°27'13
morning rise	740 Jan 24 j 10:57	27°♏43'00		max. Earth dist.	745 Jul 11 j 09:44	21°♏01'42	6.31996 AU
	740 Feb 03 j 03:57	0°♏		morning rise	745 Jul 24 j 03:27	23°♏49'48	
	740 Apr 22 j 02:23	15°♏			745 Aug 22 j 06:06	0°♏	
retrograde	740 Jun 02 j 17:42	17°♏38'49		retrograde	745 Nov 23 j 14:51	11°♏18'50	
	740 Jul 14 j 17:12	15°♏		opposition	746 Jan 22 j 13:30	6°♏20'33	1°03'02
opposition	740 Aug 02 j 03:08	12°♏40'33	-1°12'59	min. Earth dist.	746 Jan 22 j 09:55	6°♏21'44	4.37373 AU
min. Earth dist.	740 Aug 02 j 02:25	12°♏40'47	4.00282 AU	direct	746 Mar 24 j 21:51	1°♏17'29	
direct	740 Sep 30 j 02:35	7°♏46'59			746 Jul 10 j 14:33	15°♏	
	740 Dec 08 j 11:22	15°♏		evening set	746 Jul 29 j 21:32	19°♏04'59	
evening set	741 Feb 02 j 06:20	27°♏17'23					
	741 Feb 13 j 12:03	0°♏		conjunction	746 Aug 12 j 04:21	21°♏57'37	0°56'21
				minimum elong	746 Aug 12 j 04:18	21°♏57'35	0°56'20
conjunction	741 Feb 15 j 08:21	0°♏26'47	-1°01'04	max. Earth dist.	746 Aug 11 j 20:27	21°♏53'20	6.41410 AU
minimum elong	741 Feb 15 j 08:19	0°♏26'46	1°01'04	morning rise	746 Aug 25 j 08:12	24°♏48'45	
max. Earth dist.	741 Feb 16 j 01:12	0°♏36'58	5.96999 AU		746 Sep 19 j 00:29	0°♏	
morning rise	741 Feb 28 j 13:07	3°♏37'48		retrograde	746 Dec 23 j 20:39	11°♏43'22	
retrograde	741 Jul 10 j 22:10	24°♏13'39		opposition	747 Feb 22 j 04:27	6°♏48'34	1°34'11
opposition	741 Sep 08 j 20:21	19°♏11'24	-1°42'02	min. Earth dist.	747 Feb 22 j 18:02	6°♏44'10	4.43861 AU
min. Earth dist.	741 Sep 07 j 23:23	19°♏18'27	3.95941 AU	direct	747 Apr 25 j 11:35	1°♏45'35	
direct	741 Nov 05 j 21:44	14°♏17'30		evening set	747 Aug 30 j 08:07	19°♏20'40	
	742 Feb 22 j 14:04	0°♏		max. Earth dist.	747 Sep 10 j 22:30	21°♏51'14	6.44414 AU
evening set	742 Mar 11 j 08:48	3°♏57'22					

conjunction	747 Sep 12 j 07:08	22° \mathbb{M} 08'57	1°09'15	min. Earth dist.	753 Sep 13 j 01:31	24° \mathbb{H} 33'35	3.96404 AU
minimum elong	747 Sep 12 j 07:08	22° \mathbb{M} 08'57	1°09'15	opposition	753 Sep 14 j 01:39	24° \mathbb{H} 25'27	-1°42'51
morning rise	747 Sep 25 j 03:21	24° \mathbb{M} 55'53		direct	753 Nov 11 j 00:54	19° \mathbb{H} 31'19	
	747 Oct 19 j 05:21	0° \mathbb{L}			754 Feb 04 j 07:32	0° \mathbb{Y}	
retrograde	748 Jan 23 j 06:58	11° \mathbb{L} 43'47		evening set	754 Mar 16 j 13:31	9° \mathbb{Y} 08'53	
opposition	748 Mar 23 j 21:43	6° \mathbb{L} 51'18	1°39'43				
min. Earth dist.	748 Mar 25 j 02:53	6° \mathbb{L} 41'58	4.43329 AU	conjunction	754 Mar 30 j 00:21	12° \mathbb{Y} 21'50	-1°06'15
direct	748 May 25 j 16:24	1° \mathbb{L} 49'23		minimum elong	754 Mar 30 j 00:22	12° \mathbb{Y} 21'51	1°06'14
evening set	748 Sep 29 j 01:36	19° \mathbb{L} 28'02		max. Earth dist.	754 Mar 31 j 22:21	12° \mathbb{Y} 49'23	5.98006 AU
max. Earth dist.	748 Oct 09 j 20:02	21° \mathbb{L} 49'43	6.40304 AU	morning rise	754 Apr 12 j 14:17	15° \mathbb{Y} 36'18	
					754 Jun 19 j 13:22	0° \mathbb{B}	
conjunction	748 Oct 11 j 19:18	22° \mathbb{L} 15'44	1°03'19	retrograde	754 Aug 22 j 04:35	5° \mathbb{B} 57'28	
minimum elong	748 Oct 11 j 19:20	22° \mathbb{L} 15'45	1°03'19	min. Earth dist.	754 Oct 19 j 10:17	1° \mathbb{B} 03'52	4.01814 AU
morning rise	748 Oct 24 j 10:41	25° \mathbb{L} 02'27		opposition	754 Oct 20 j 19:53	0° \mathbb{B} 52'24	-1°25'55
	748 Nov 16 j 15:07	0° \mathbb{M}			754 Oct 27 j 06:31	30° \mathbb{R} \mathbb{Y}	
retrograde	749 Feb 22 j 16:58	12° \mathbb{M} 11'35		direct	754 Dec 17 j 20:37	25° \mathbb{Y} 55'43	
opposition	749 Apr 24 j 14:17	7° \mathbb{M} 19'48	1°18'11		755 Feb 06 j 14:51	0° \mathbb{B}	
min. Earth dist.	749 Apr 26 j 01:38	7° \mathbb{M} 08'32	4.35913 AU		755 Apr 21 j 21:10	15° \mathbb{B}	
direct	749 Jun 26 j 01:52	2° \mathbb{M} 19'52		evening set	755 Apr 22 j 21:54	15° \mathbb{B} 14'20	
	749 Oct 05 j 15:53	15° \mathbb{M}					
evening set	749 Oct 29 j 22:58	20° \mathbb{M} 17'23		conjunction	755 May 06 j 15:03	18° \mathbb{B} 25'59	-0°43'29
max. Earth dist.	749 Nov 09 j 14:19	22° \mathbb{M} 41'00	6.30152 AU	minimum elong	755 May 06 j 15:06	18° \mathbb{B} 26'00	0°43'28
				max. Earth dist.	755 May 08 j 21:41	18° \mathbb{B} 57'50	6.07101 AU
conjunction	749 Nov 11 j 14:28	23° \mathbb{M} 08'11	0°39'28	morning rise	755 May 20 j 09:49	21° \mathbb{B} 38'14	
minimum elong	749 Nov 11 j 14:30	23° \mathbb{M} 08'12	0°39'28		755 Jun 27 j 06:18	0° \mathbb{I}	
morning rise	749 Nov 24 j 04:42	25° \mathbb{M} 58'38		retrograde	755 Sep 26 j 03:22	11° \mathbb{I} 04'10	
	749 Dec 12 j 09:38	0° \mathbb{J}		min. Earth dist.	755 Nov 23 j 09:31	6° \mathbb{I} 10'21	4.13534 AU
retrograde	750 Mar 28 j 01:29	13° \mathbb{J} 54'20		opposition	755 Nov 24 j 16:49	5° \mathbb{I} 59'42	-0°37'50
opposition	750 May 27 j 23:22	9° \mathbb{J} 01'41	0°32'47	direct	756 Jan 22 j 13:41	1° \mathbb{I} 00'01	
min. Earth dist.	750 May 29 j 08:04	8° \mathbb{J} 51'15	4.23581 AU	evening set	756 May 28 j 04:16	19° \mathbb{I} 44'47	
direct	750 Jul 28 j 13:54	4° \mathbb{J} 04'20					
evening set	750 Nov 30 j 21:50	22° \mathbb{J} 32'47		conjunction	756 Jun 10 j 22:12	22° \mathbb{I} 50'53	-0°05'59
max. Earth dist.	750 Dec 12 j 01:03	25° \mathbb{J} 07'50	6.16690 AU	minimum elong	756 Jun 10 j 22:14	22° \mathbb{I} 50'54	0°06'00
				behind sun begin	756 Jun 10 j 14:17	22° \mathbb{I} 46'26	
conjunction	750 Dec 13 j 14:17	25° \mathbb{J} 29'30	0°02'47	behind sun end	756 Jun 11 j 06:10	22° \mathbb{I} 55'22	
minimum elong	750 Dec 13 j 14:17	25° \mathbb{J} 29'30	0°02'48	max. Earth dist.	756 Jun 12 j 14:27	23° \mathbb{I} 13'37	6.20455 AU
behind sun begin	750 Dec 13 j 06:19	25° \mathbb{J} 24'53		morning rise	756 Jun 24 j 16:10	25° \mathbb{I} 56'39	
behind sun end	750 Dec 13 j 22:16	25° \mathbb{J} 34'07			756 Jul 13 j 02:09	0° \mathbb{O}	
morning rise	750 Dec 26 j 07:13	28° \mathbb{J} 26'42		asc. node	756 Aug 09 j 10:39	5° \mathbb{O} 34'34	
	751 Jan 02 j 01:12	0° \mathbb{Z}		retrograde	756 Oct 27 j 19:38	14° \mathbb{O} 15'23	
desc. node	751 Jan 09 j 14:25	1° \mathbb{Z} 43'01		opposition	756 Dec 26 j 12:47	9° \mathbb{O} 13'48	0°20'03
retrograde	751 May 02 j 14:45	17° \mathbb{Z} 26'12		min. Earth dist.	756 Dec 25 j 18:03	9° \mathbb{O} 20'06	4.27177 AU
opposition	751 Jul 02 j 08:24	12° \mathbb{Z} 31'01	-0°26'09	direct	757 Feb 24 j 17:20	4° \mathbb{O} 11'46	
min. Earth dist.	751 Jul 03 j 01:48	12° \mathbb{Z} 25'23	4.09919 AU	evening set	757 Jul 01 j 16:01	22° \mathbb{O} 22'22	
direct	751 Aug 31 j 13:23	7° \mathbb{Z} 36'07					
evening set	752 Jan 03 j 15:29	26° \mathbb{Z} 40'19		conjunction	757 Jul 15 j 05:29	25° \mathbb{O} 21'03	0°31'58
				minimum elong	757 Jul 15 j 05:27	25° \mathbb{O} 21'02	0°31'58
conjunction	752 Jan 16 j 11:58	29° \mathbb{Z} 44'07	-0°36'29	max. Earth dist.	757 Jul 15 j 21:37	25° \mathbb{O} 29'55	6.33357 AU
minimum elong	752 Jan 16 j 11:55	29° \mathbb{Z} 44'06	0°36'29	morning rise	757 Jul 28 j 16:50	28° \mathbb{O} 18'31	
max. Earth dist.	752 Jan 16 j 01:19	29° \mathbb{Z} 37'46	6.04061 AU		757 Aug 05 j 11:53	0° \mathbb{Q}	
	752 Jan 17 j 14:32	0° \mathbb{A}			757 Nov 06 j 20:19	15° \mathbb{Q}	
morning rise	752 Jan 29 j 10:12	2° \mathbb{A} 49'07		retrograde	757 Nov 27 j 20:31	15° \mathbb{Q} 42'15	
	752 Mar 25 j 05:49	15° \mathbb{A}			757 Dec 18 j 18:20	15° \mathbb{R} \mathbb{Q}	
retrograde	752 Jun 08 j 02:40	22° \mathbb{A} 51'22		opposition	758 Jan 26 j 20:08	10° \mathbb{Q} 44'33	1°08'40
opposition	752 Aug 07 j 10:10	17° \mathbb{A} 52'30	-1°19'05	min. Earth dist.	758 Jan 26 j 18:32	10° \mathbb{Q} 45'05	4.38367 AU
min. Earth dist.	752 Aug 07 j 07:01	17° \mathbb{A} 53'33	3.99527 AU	direct	758 Mar 29 j 07:19	5° \mathbb{Q} 41'31	
	752 Aug 30 j 18:10	15° \mathbb{R} \mathbb{A}			758 Jun 22 j 21:49	15° \mathbb{Q}	
direct	752 Oct 05 j 06:38	12° \mathbb{A} 59'02		evening set	758 Aug 03 j 08:28	23° \mathbb{Q} 27'27	
	752 Nov 09 j 08:07	15° \mathbb{A}					
	753 Jan 27 j 20:18	0° \mathbb{H}		conjunction	758 Aug 16 j 14:04	26° \mathbb{Q} 19'24	0°59'10
evening set	753 Feb 07 j 09:16	2° \mathbb{H} 30'41		minimum elong	758 Aug 16 j 14:02	26° \mathbb{Q} 19'23	0°59'10
				max. Earth dist.	758 Aug 16 j 01:11	26° \mathbb{Q} 12'24	6.41962 AU
conjunction	753 Feb 20 j 12:09	5° \mathbb{H} 40'33	-1°03'33	morning rise	758 Aug 29 j 16:59	29° \mathbb{Q} 09'56	
minimum elong	753 Feb 20 j 12:07	5° \mathbb{H} 40'32	1°03'32		758 Sep 02 j 14:09	0° \mathbb{M}	
max. Earth dist.	753 Feb 21 j 08:41	5° \mathbb{H} 52'58	5.96828 AU	retrograde	758 Dec 28 j 03:34	16° \mathbb{M} 02'53	
morning rise	753 Mar 05 j 18:07	8° \mathbb{H} 52'08		opposition	759 Feb 26 j 11:09	11° \mathbb{M} 08'32	1°36'30
retrograde	753 Jul 16 j 03:38	29° \mathbb{H} 28'12		min. Earth dist.	759 Feb 27 j 03:46	11° \mathbb{M} 03'08	4.43970 AU




































































































































direct	759 Apr 29 j 21:13	6°♎05'38		minimum elong	765 Feb 25 j 15:33	10°♏52'57	1°05'32
evening set	759 Sep 03 j 16:07	23°♎41'05		max. Earth dist.	765 Feb 26 j 15:54	11°♏07'39	5.96456 AU
max. Earth dist.	759 Sep 15 j 04:21	26°♎10'40	6.44069 AU	morning rise	765 Mar 10 j 22:37	14°♏05'10	
					765 May 26 j 07:31	0°♐	
conjunction	759 Sep 16 j 14:27	26°♎29'12	1°09'31	retrograde	765 Jul 21 j 09:27	4°♐42'25	
minimum elong	759 Sep 16 j 14:26	26°♎29'12	1°09'30		765 Sep 16 j 16:25	30°♐♏	
morning rise	759 Sep 29 j 09:43	29°♎15'56		min. Earth dist.	765 Sep 18 j 04:40	29°♏47'46	3.96581 AU
	759 Oct 02 j 19:29	0°♑		opposition	765 Sep 19 j 06:05	29°♏39'11	-1°42'54
retrograde	760 Jan 27 j 14:14	16°♑05'44		direct	765 Nov 16 j 04:57	24°♏44'43	
opposition	760 Mar 28 j 06:57	11°♑13'27	1°38'14		766 Jan 13 j 00:13	0°♐	
min. Earth dist.	760 Mar 29 j 12:14	11°♑04'05	4.42572 AU	evening set	766 Mar 21 j 18:32	14°♐21'28	
direct	760 May 30 j 00:20	6°♑11'49					
evening set	760 Oct 03 j 09:22	23°♑52'29		conjunction	766 Apr 04 j 06:35	17°♐34'37	-1°04'26
max. Earth dist.	760 Oct 14 j 03:00	26°♑14'11	6.39189 AU	minimum elong	766 Apr 04 j 06:36	17°♐34'38	1°04'26
				max. Earth dist.	766 Apr 06 j 07:54	18°♐04'03	5.98709 AU
conjunction	760 Oct 16 j 02:30	26°♑40'25	1°00'55	morning rise	766 Apr 17 j 21:25	20°♐49'09	
minimum elong	760 Oct 16 j 02:32	26°♑40'26	1°00'56		766 May 28 j 15:35	0°♑	
morning rise	760 Oct 28 j 17:30	29°♑27'26		retrograde	766 Aug 27 j 05:40	11°♑05'10	
	760 Oct 31 j 04:56	0°♒		min. Earth dist.	766 Oct 24 j 09:47	6°♑11'36	4.02962 AU
	761 Jan 24 j 21:01	15°♒		opposition	766 Oct 25 j 19:40	6°♑00'03	-1°20'37
retrograde	761 Feb 27 j 07:24	16°♒41'35		direct	766 Dec 22 j 21:41	1°♑02'57	
	761 Apr 01 j 22:26	15°♒♒			767 Apr 04 j 15:54	15°♑	
opposition	761 Apr 29 j 04:21	11°♒49'49	1°13'01	evening set	767 Apr 28 j 01:42	20°♑18'11	
min. Earth dist.	761 Apr 30 j 16:30	11°♒38'19	4.34487 AU				
direct	761 Jun 30 j 14:54	6°♒50'14		conjunction	767 May 11 j 19:12	23°♑29'21	-0°38'45
	761 Sep 17 j 04:26	15°♒		minimum elong	767 May 11 j 19:14	23°♑29'22	0°38'44
evening set	761 Nov 03 j 08:52	24°♒51'07		max. Earth dist.	767 May 13 j 23:43	23°♑59'50	6.08573 AU
max. Earth dist.	761 Nov 14 j 00:09	27°♒15'17	6.28517 AU	morning rise	767 May 25 j 14:25	26°♑41'05	
					767 Jun 09 j 04:17	0°♒	
conjunction	761 Nov 16 j 00:17	27°♒42'33	0°34'52	retrograde	767 Sep 30 j 20:17	15°♒58'40	
minimum elong	761 Nov 16 j 00:19	27°♒42'34	0°34'51	min. Earth dist.	767 Nov 28 j 04:06	11°♒04'44	4.15172 AU
	761 Nov 26 j 02:56	0°♓		opposition	767 Nov 29 j 10:19	10°♒54'27	-0°29'46
morning rise	761 Nov 28 j 14:45	0°♓33'45		direct	768 Jan 27 j 11:08	5°♒54'21	
retrograde	762 Apr 01 j 20:57	18°♓37'02		evening set	768 Jun 02 j 03:37	24°♒35'02	
opposition	762 Jun 01 j 19:18	13°♓44'05	0°24'56				
min. Earth dist.	762 Jun 03 j 01:34	13°♓34'24	4.21827 AU	conjunction	768 Jun 15 j 21:23	27°♒40'17	-0°00'18
direct	762 Aug 02 j 04:45	8°♓47'03		minimum elong	768 Jun 15 j 21:25	27°♒40'18	0°00'18
desc. node	762 Nov 19 j 08:03	23°♓38'29		behind sun begin	768 Jun 15 j 13:06	27°♒35'38	
evening set	762 Dec 05 j 12:09	27°♓19'50		behind sun end	768 Jun 16 j 05:44	27°♒44'57	
	762 Dec 16 j 23:12	0°♔		max. Earth dist.	768 Jun 17 j 11:51	28°♒01'56	6.22154 AU
max. Earth dist.	762 Dec 16 j 19:50	29°♓58'02	6.14957 AU	asc. node	768 Jun 18 j 18:54	28°♒19'25	
					768 Jun 26 j 06:02	0°♕	
conjunction	762 Dec 18 j 05:04	0°♔17'27	-0°02'59	morning rise	768 Jun 29 j 14:36	0°♕45'01	
minimum elong	762 Dec 18 j 05:02	0°♔17'26	0°02'59	retrograde	768 Nov 01 j 08:17	18°♕55'41	
behind sun begin	762 Dec 17 j 21:04	0°♔12'48		min. Earth dist.	768 Dec 30 j 08:19	14°♕00'14	4.28799 AU
behind sun end	762 Dec 18 j 13:01	0°♔22'05		opposition	768 Dec 31 j 00:58	13°♕54'40	0°27'51
morning rise	762 Dec 30 j 22:25	3°♕15'35		direct	769 Mar 01 j 09:48	8°♕52'27	
retrograde	763 May 07 j 18:40	22°♕23'48		evening set	769 Jul 06 j 09:52	26°♕59'26	
opposition	763 Jul 07 j 10:26	17°♕28'10	-0°34'27				
min. Earth dist.	763 Jul 08 j 02:12	17°♕23'04	4.08332 AU	conjunction	769 Jul 19 j 22:16	29°♕57'05	0°36'40
direct	763 Sep 05 j 11:26	12°♕33'33		minimum elong	769 Jul 19 j 22:14	29°♕57'04	0°36'40
	764 Jan 01 j 07:45	0°♖		max. Earth dist.	769 Jul 20 j 10:06	0°♖03'35	6.34796 AU
evening set	764 Jan 08 j 12:00	1°♖41'50			769 Jul 20 j 03:35	0°♖	
				morning rise	769 Aug 02 j 08:38	2°♖53'32	
conjunction	764 Jan 21 j 09:06	4°♖46'31	-0°41'19		769 Oct 03 j 07:15	15°♖	
minimum elong	764 Jan 21 j 09:04	4°♖46'29	0°41'19	retrograde	769 Dec 02 j 04:31	20°♖11'30	
max. Earth dist.	764 Jan 21 j 01:26	4°♖41'55	6.02750 AU	opposition	770 Jan 31 j 05:13	15°♖14'17	1°14'03
morning rise	764 Feb 03 j 08:23	7°♖52'30		min. Earth dist.	770 Jan 31 j 05:52	15°♖14'05	4.39572 AU
	764 Mar 05 j 07:23	15°♖			770 Feb 02 j 00:37	15°♖♑	
retrograde	764 Jun 13 j 08:07	28°♖01'24		direct	770 Apr 02 j 20:07	10°♖11'12	
opposition	764 Aug 12 j 15:23	23°♖02'00	-1°24'35		770 Jun 01 j 00:37	15°♖	
min. Earth dist.	764 Aug 12 j 08:26	23°♖04'18	3.98653 AU	evening set	770 Aug 07 j 20:43	27°♖54'25	
direct	764 Oct 10 j 07:21	18°♖08'32			770 Aug 17 j 13:17	0°♗	
	765 Jan 10 j 04:40	0°♘		max. Earth dist.	770 Aug 20 j 11:15	0°♗37'56	6.42869 AU
evening set	765 Feb 12 j 11:39	7°♘42'27					
				conjunction	770 Aug 21 j 01:19	0°♗45'33	1°01'44
conjunction	765 Feb 25 j 15:35	10°♘52'58	-1°05'32	minimum elong	770 Aug 21 j 01:17	0°♗45'32	1°01'44

morning rise	770 Sep 03 j 02:50	3° \mathbb{M} 35'12		min. Earth dist.	776 Aug 17 j 08:10	28° \approx 04'33	3.97536 AU
retrograde	771 Jan 01 j 09:07	20° \mathbb{M} 25'10		direct	776 Oct 15 j 05:56	23° \approx 08'12	
opposition	771 Mar 02 j 19:01	15° \mathbb{M} 31'11	1°38'20		776 Dec 21 j 08:00	0° \mathbb{H}	
min. Earth dist.	771 Mar 03 j 12:34	15° \mathbb{M} 25'30	4.44553 AU	evening set	777 Feb 17 j 11:09	12° \mathbb{H} 45'45	
direct	771 May 04 j 06:44	10° \mathbb{M} 28'28					
evening set	771 Sep 08 j 00:28	28° \mathbb{M} 02'16		conjunction	777 Mar 02 j 16:21	15° \mathbb{H} 57'10	-1°06'57
	771 Sep 17 j 01:54	0° $\underline{\mathbb{A}}$		minimum elong	777 Mar 02 j 16:20	15° \mathbb{H} 57'09	1°06'57
max. Earth dist.	771 Sep 19 j 08:32	0° $\underline{\mathbb{A}}$ 29'42	6.44280 AU	max. Earth dist.	777 Mar 03 j 20:48	16° \mathbb{H} 14'21	5.95750 AU
				morning rise	777 Mar 16 j 00:35	19° \mathbb{H} 10'15	
conjunction	771 Sep 20 j 21:39	0° $\underline{\mathbb{A}}$ 49'52	1°09'26		777 May 03 j 03:18	0° \mathbb{Y}	
minimum elong	771 Sep 20 j 21:39	0° $\underline{\mathbb{A}}$ 49'52	1°09'25	retrograde	777 Jul 26 j 13:45	9° \mathbb{Y} 49'58	
morning rise	771 Oct 03 j 16:10	3° $\underline{\mathbb{A}}$ 36'12		min. Earth dist.	777 Sep 23 j 04:52	4° \mathbb{Y} 55'35	3.96391 AU
retrograde	772 Jan 31 j 22:47	20° $\underline{\mathbb{A}}$ 25'59		opposition	777 Sep 24 j 07:56	4° \mathbb{Y} 46'26	-1°42'10
opposition	772 Apr 01 j 15:48	15° $\underline{\mathbb{A}}$ 33'51	1°36'13		777 Nov 12 j 07:19	30° \mathbb{R} \mathbb{H}	
min. Earth dist.	772 Apr 02 j 23:06	15° $\underline{\mathbb{A}}$ 23'51	4.42396 AU	direct	777 Nov 21 j 04:16	29° \mathbb{H} 51'46	
direct	772 Jun 03 j 10:47	10° $\underline{\mathbb{A}}$ 32'23			777 Nov 30 j 02:15	0° \mathbb{Y}	
evening set	772 Oct 07 j 15:28	28° $\underline{\mathbb{A}}$ 12'57		evening set	778 Mar 26 j 22:27	19° \mathbb{Y} 29'26	
	772 Oct 15 j 18:01	0° \mathbb{M}					
max. Earth dist.	772 Oct 18 j 08:11	0° \mathbb{M} 34'21	6.38635 AU	conjunction	778 Apr 09 j 11:27	22° \mathbb{Y} 42'56	-1°02'08
				minimum elong	778 Apr 09 j 11:29	22° \mathbb{Y} 42'58	1°02'08
conjunction	772 Oct 20 j 08:11	1° \mathbb{M} 00'53	0°58'16	max. Earth dist.	778 Apr 11 j 13:11	23° \mathbb{Y} 12'35	5.99041 AU
minimum elong	772 Oct 20 j 08:13	1° \mathbb{M} 00'54	0°58'16	morning rise	778 Apr 23 j 03:28	25° \mathbb{Y} 57'48	
morning rise	772 Nov 01 j 22:43	3° \mathbb{M} 47'59			778 May 10 j 11:39	0° \mathbb{B}	
	772 Dec 27 j 19:53	15° \mathbb{M}			778 Aug 05 j 08:35	15° \mathbb{B}	
retrograde	773 Mar 03 j 16:55	21° \mathbb{M} 05'21		retrograde	778 Sep 01 j 04:24	16° \mathbb{B} 10'05	
opposition	773 May 03 j 16:02	16° \mathbb{M} 13'28	1°07'34		778 Sep 27 j 19:32	15° \mathbb{R} \mathbb{B}	
min. Earth dist.	773 May 05 j 03:20	16° \mathbb{M} 02'14	4.33572 AU	min. Earth dist.	778 Oct 29 j 07:24	11° \mathbb{B} 16'46	4.03775 AU
	773 May 13 j 09:16	15° \mathbb{R} \mathbb{M}		opposition	778 Oct 30 j 18:06	11° \mathbb{B} 04'54	-1°14'46
direct	773 Jul 04 j 23:33	11° \mathbb{M} 14'10		direct	778 Dec 27 j 21:34	6° \mathbb{B} 07'24	
	773 Aug 25 j 10:48	15° \mathbb{M}			779 Mar 16 j 13:25	15° \mathbb{B}	
evening set	773 Nov 07 j 15:39	29° \mathbb{M} 16'45		evening set	779 May 03 j 05:17	25° \mathbb{B} 20'38	
	773 Nov 10 j 20:18	0° \mathbb{Z}					
max. Earth dist.	773 Nov 18 j 08:04	1° \mathbb{Z} 41'58	6.27311 AU	conjunction	779 May 16 j 23:26	28° \mathbb{B} 31'31	-0°33'45
				minimum elong	779 May 16 j 23:29	28° \mathbb{B} 31'32	0°33'46
conjunction	773 Nov 20 j 06:57	2° \mathbb{Z} 08'37	0°30'13	max. Earth dist.	779 May 19 j 04:22	29° \mathbb{B} 02'09	6.09824 AU
minimum elong	773 Nov 20 j 06:58	2° \mathbb{Z} 08'38	0°30'13		779 May 23 j 08:20	0° \mathbb{I}	
morning rise	773 Dec 02 j 21:30	5° \mathbb{Z} 00'22		morning rise	779 May 30 j 18:44	1° \mathbb{I} 42'44	
retrograde	774 Apr 06 j 14:41	23° \mathbb{Z} 10'00		retrograde	779 Oct 05 j 15:15	20° \mathbb{I} 52'39	
opposition	774 Jun 06 j 11:45	18° \mathbb{Z} 16'47	0°17'13	min. Earth dist.	779 Dec 02 j 22:56	15° \mathbb{I} 58'32	4.16698 AU
min. Earth dist.	774 Jun 07 j 18:09	18° \mathbb{Z} 07'03	4.20371 AU	opposition	779 Dec 04 j 03:41	15° \mathbb{I} 48'46	-0°21'31
direct	774 Aug 06 j 18:51	13° \mathbb{Z} 20'02		direct	780 Feb 01 j 08:35	10° \mathbb{I} 48'19	
desc. node	774 Oct 01 j 06:27	17° \mathbb{Z} 50'41		asc. node	780 Apr 27 j 23:12	20° \mathbb{I} 52'19	
	774 Dec 01 j 13:13	0° \mathbb{B}		evening set	780 Jun 07 j 02:58	29° \mathbb{I} 25'06	
evening set	774 Dec 09 j 22:47	1° \mathbb{B} 56'21			780 Jun 09 j 17:30	0° \mathbb{G}	
max. Earth dist.	774 Dec 21 j 07:55	4° \mathbb{B} 35'57	6.13380 AU				
				conjunction	780 Jun 20 j 20:17	2° \mathbb{G} 29'27	0°05'24
conjunction	774 Dec 22 j 16:01	4° \mathbb{B} 54'46	-0°08'23	minimum elong	780 Jun 20 j 20:17	2° \mathbb{G} 29'27	0°05'25
minimum elong	774 Dec 22 j 16:01	4° \mathbb{B} 54'46	0°08'23	behind sun begin	780 Jun 20 j 12:15	2° \mathbb{G} 24'58	
behind sun begin	774 Dec 22 j 08:57	4° \mathbb{B} 50'38		behind sun end	780 Jun 21 j 04:19	2° \mathbb{G} 33'56	
behind sun end	774 Dec 22 j 23:06	4° \mathbb{B} 58'53		max. Earth dist.	780 Jun 22 j 08:17	2° \mathbb{G} 49'38	6.23824 AU
morning rise	775 Jan 04 j 10:03	7° \mathbb{B} 53'51		morning rise	780 Jul 04 j 12:54	5° \mathbb{G} 33'10	
retrograde	775 May 12 j 15:51	27° \mathbb{B} 10'16		retrograde	780 Nov 05 j 18:31	23° \mathbb{G} 35'48	
opposition	775 Jul 12 j 07:44	22° \mathbb{B} 14'14	-0°42'12	opposition	781 Jan 04 j 13:06	18° \mathbb{G} 35'11	0°35'27
min. Earth dist.	775 Jul 12 j 20:41	22° \mathbb{B} 10'01	4.06766 AU	min. Earth dist.	781 Jan 03 j 21:41	18° \mathbb{G} 40'21	4.30454 AU
direct	775 Sep 10 j 03:04	17° \mathbb{B} 19'50		direct	781 Mar 06 j 01:37	13° \mathbb{G} 32'44	
	775 Dec 15 j 21:24	0° \approx			781 Jul 03 j 18:00	0° \mathbb{Q}	
evening set	776 Jan 13 j 04:58	6° \approx 32'42		evening set	781 Jul 11 j 03:02	1° \mathbb{Q} 35'41	
conjunction	776 Jan 26 j 02:53	9° \approx 38'21	-0°45'41	conjunction	781 Jul 24 j 14:25	4° \mathbb{Q} 32'17	0°41'08
minimum elong	776 Jan 26 j 02:50	9° \approx 38'19	0°45'40	minimum elong	781 Jul 24 j 14:23	4° \mathbb{Q} 32'16	0°41'08
max. Earth dist.	776 Jan 25 j 22:32	9° \approx 35'44	6.01337 AU	max. Earth dist.	781 Jul 24 j 23:29	4° \mathbb{Q} 37'15	6.36291 AU
morning rise	776 Feb 08 j 03:05	12° \approx 45'23		morning rise	781 Aug 06 j 23:28	7° \mathbb{Q} 27'35	
	776 Feb 17 j 14:30	15° \approx			781 Sep 12 j 06:44	15° \mathbb{Q}	
	776 May 04 j 22:48	0° \mathbb{H}		retrograde	781 Dec 06 j 12:17	24° \mathbb{Q} 39'41	
retrograde	776 Jun 18 j 12:16	3° \mathbb{H} 01'36		opposition	782 Feb 04 j 13:50	19° \mathbb{Q} 42'57	1°18'59
	776 Aug 02 j 09:48	30° \mathbb{R} \approx		min. Earth dist.	782 Feb 04 j 16:56	19° \mathbb{Q} 41'56	4.40772 AU
opposition	776 Aug 17 j 16:44	28° \approx 01'42	-1°29'16		782 Mar 23 j 13:39	15° \mathbb{R} \mathbb{Q}	

direct	782 Apr 07 j 08:43	14°♎39'50		minimum elong	788 Jan 31 j 03:57	14°♎48'59	0°50'00
	782 Apr 22 j 06:25	15°♎		max. Earth dist.	788 Jan 31 j 04:45	14°♎49'28	5.99894 AU
	782 Aug 01 j 08:48	0°♎			788 Jan 31 j 22:15	15°♎	
evening set	782 Aug 12 j 08:16	2°♎20'16		morning rise	788 Feb 13 j 05:13	17°♎57'10	
					788 Apr 07 j 18:39	0°♎	
conjunction	782 Aug 25 j 11:37	5°♎10'37	1°03'56	retrograde	788 Jun 23 j 22:42	8°♎20'11	
minimum elong	782 Aug 25 j 11:35	5°♎10'36	1°03'56	opposition	788 Aug 23 j 01:09	3°♎19'45	-1°33'33
max. Earth dist.	782 Aug 24 j 16:58	5°♎00'31	6.43637 AU	min. Earth dist.	788 Aug 22 j 13:19	3°♎23'42	3.96689 AU
morning rise	782 Sep 07 j 12:06	7°♎59'30			788 Sep 19 j 15:21	30°♎	
retrograde	783 Jan 05 j 16:14	24°♎47'12		direct	788 Oct 20 j 09:53	28°♎26'17	
opposition	783 Mar 07 j 02:48	19°♎53'30	1°39'39		788 Nov 19 j 23:33	0°♎	
min. Earth dist.	783 Mar 07 j 22:49	19°♎47'02	4.44844 AU	evening set	789 Feb 22 j 17:52	18°♎06'04	
direct	783 May 08 j 16:36	14°♎50'49					
	783 Sep 01 j 02:36	0°♎		conjunction	789 Mar 08 j 00:03	21°♎18'02	-1°07'57
evening set	783 Sep 12 j 08:15	2°♎24'04		minimum elong	789 Mar 08 j 00:02	21°♎18'02	1°07'56
max. Earth dist.	783 Sep 23 j 14:34	4°♎50'39	6.44049 AU	max. Earth dist.	789 Mar 09 j 07:38	21°♎37'08	5.95573 AU
				morning rise	789 Mar 21 j 09:36	24°♎31'45	
conjunction	783 Sep 25 j 04:45	5°♎11'26	1°08'58		789 Apr 13 j 17:31	0°♎	
minimum elong	783 Sep 25 j 04:46	5°♎11'27	1°08'58	retrograde	789 Jul 31 j 20:13	15°♎10'52	
morning rise	783 Oct 07 j 22:20	7°♎57'32		min. Earth dist.	789 Sep 28 j 08:45	10°♎17'01	3.96943 AU
retrograde	784 Feb 05 j 06:52	24°♎49'05		opposition	789 Sep 29 j 14:33	10°♎06'54	-1°40'34
opposition	784 Apr 06 j 01:44	19°♎57'04	1°33'42	direct	789 Nov 26 j 10:37	5°♎11'54	
min. Earth dist.	784 Apr 07 j 09:45	19°♎46'51	4.41651 AU	evening set	790 Apr 01 j 06:33	24°♎47'14	
direct	784 Jun 07 j 19:21	14°♎55'53					
	784 Sep 29 j 19:45	0°♎		conjunction	790 Apr 14 j 20:40	28°♎00'37	-0°59'18
evening set	784 Oct 11 j 22:58	2°♎38'15		minimum elong	790 Apr 14 j 20:42	28°♎00'38	0°59'18
max. Earth dist.	784 Oct 22 j 13:29	4°♎58'56	6.37418 AU	max. Earth dist.	790 Apr 17 j 01:39	28°♎32'05	6.00287 AU
					790 Apr 23 j 05:55	0°♎	
conjunction	784 Oct 24 j 15:08	5°♎26'29	0°55'13	morning rise	790 Apr 28 j 13:18	1°♎15'11	
minimum elong	784 Oct 24 j 15:10	5°♎26'30	0°55'12		790 Jul 02 j 10:51	15°♎	
morning rise	784 Nov 06 j 05:33	8°♎13'59		retrograde	790 Sep 06 j 05:58	21°♎19'30	
	784 Dec 08 j 01:06	15°♎		min. Earth dist.	790 Nov 03 j 08:16	16°♎25'59	4.05559 AU
retrograde	785 Mar 08 j 08:58	25°♎37'06		opposition	790 Nov 04 j 18:30	16°♎14'18	-1°08'16
opposition	785 May 08 j 07:03	20°♎45'08	1°01'34		790 Nov 13 j 22:36	15°♎	
min. Earth dist.	785 May 09 j 19:21	20°♎33'34	4.31933 AU	direct	791 Jan 02 j 01:37	11°♎16'21	
direct	785 Jul 09 j 12:54	15°♎46'06			791 Feb 19 j 18:27	15°♎	
	785 Oct 25 j 15:13	0°♎			791 May 06 j 15:58	0°♎	
evening set	785 Nov 12 j 02:05	3°♎52'51		evening set	791 May 08 j 09:25	0°♎23'43	
max. Earth dist.	785 Nov 22 j 19:38	6°♎19'19	6.25390 AU				
				conjunction	791 May 22 j 03:42	3°♎33'42	-0°28'32
conjunction	785 Nov 24 j 17:35	6°♎45'33	0°25'12	minimum elong	791 May 22 j 03:44	3°♎33'43	0°28'33
minimum elong	785 Nov 24 j 17:36	6°♎45'34	0°25'13	max. Earth dist.	791 May 24 j 07:51	4°♎03'43	6.11976 AU
morning rise	785 Dec 07 j 08:23	9°♎38'12		morning rise	791 Jun 04 j 23:00	6°♎43'53	
retrograde	786 Apr 11 j 11:38	27°♎56'46		retrograde	791 Oct 10 j 05:02	25°♎42'51	
opposition	786 Jun 11 j 09:25	23°♎03'13	0°08'58	opposition	791 Dec 08 j 19:43	20°♎39'16	-0°13'16
min. Earth dist.	786 Jun 12 j 13:30	22°♎54'13	4.18303 AU	min. Earth dist.	791 Dec 07 j 15:29	20°♎48'50	4.18995 AU
desc. node	786 Aug 10 j 19:00	18°♎06'52		direct	792 Feb 06 j 04:18	15°♎38'27	
direct	786 Aug 11 j 10:51	18°♎06'50		asc. node	792 Mar 07 j 19:56	17°♎07'20	
	786 Nov 14 j 09:26	0°♎			792 May 24 j 00:16	0°♎	
evening set	786 Dec 14 j 15:22	6°♎48'47		evening set	792 Jun 11 j 23:58	4°♎08'48	
max. Earth dist.	786 Dec 26 j 04:02	9°♎31'10	6.11342 AU				
				conjunction	792 Jun 25 j 16:36	7°♎11'53	0°10'51
conjunction	786 Dec 27 j 09:04	9°♎48'15	-0°14'02	minimum elong	792 Jun 25 j 16:36	7°♎11'53	0°10'51
minimum elong	786 Dec 27 j 09:03	9°♎48'15	0°14'03	behind sun begin	792 Jun 25 j 10:22	7°♎08'25	
behind sun begin	786 Dec 27 j 04:52	9°♎45'48		behind sun end	792 Jun 25 j 22:49	7°♎15'20	
behind sun end	786 Dec 27 j 13:14	9°♎50'42		max. Earth dist.	792 Jun 27 j 00:36	7°♎29'44	6.26078 AU
morning rise	787 Jan 09 j 03:50	12°♎48'32		morning rise	792 Jul 09 j 08:17	10°♎14'13	
	787 Apr 09 j 12:53	0°♎		retrograde	792 Nov 10 j 03:28	28°♎07'23	
retrograde	787 May 17 j 22:51	2°♎15'00		opposition	793 Jan 08 j 22:26	23°♎07'18	0°42'34
	787 Jun 25 j 14:29	30°♎		min. Earth dist.	793 Jan 08 j 10:22	23°♎11'20	4.32467 AU
opposition	787 Jul 17 j 12:30	27°♎18'27	-0°50'10	direct	793 Mar 10 j 16:38	18°♎04'40	
min. Earth dist.	787 Jul 17 j 23:14	27°♎14'56	4.04934 AU		793 Jun 16 j 22:41	0°♎	
direct	787 Sep 15 j 04:09	22°♎24'14		evening set	793 Jul 15 j 16:30	6°♎02'41	
	787 Nov 26 j 01:18	0°♎					
evening set	788 Jan 18 j 05:05	11°♎42'18		conjunction	793 Jul 29 j 02:50	8°♎58'11	0°45'12
				minimum elong	793 Jul 29 j 02:48	8°♎58'10	0°45'12
conjunction	788 Jan 31 j 03:59	14°♎49'01	-0°50'00	max. Earth dist.	793 Jul 29 j 07:42	9°♎00'50	6.37891 AU

morning rise	793 Aug 11 j 10:40	11°Ω52'20			799 Aug 11 j 20:36	30°℞3	
	793 Aug 26 j 01:35	15°Ω		direct	799 Sep 20 j 05:48	27°335'49	
retrograde	793 Dec 10 j 15:44	28°Ω58'51			799 Oct 28 j 22:50	0°≈	
opposition	794 Feb 08 j 19:26	24°Ω02'34	1°23'18		800 Jan 15 j 01:04	15°≈	
min. Earth dist.	794 Feb 09 j 00:47	24°Ω00'49	4.41875 AU	evening set	800 Jan 23 j 08:16	16°≈58'32	
direct	794 Apr 11 j 17:06	18°Ω59'26					
	794 Jul 15 j 15:30	0°℞		conjunction	800 Feb 05 j 07:57	20°≈06'07	-0°53'57
evening set	794 Aug 16 j 16:12	6°℞37'37		minimum elong	800 Feb 05 j 07:54	20°≈06'06	0°53'58
				max. Earth dist.	800 Feb 05 j 12:50	20°≈09'04	5.98770 AU
conjunction	794 Aug 29 j 18:30	9°℞27'20	1°05'43	morning rise	800 Feb 18 j 10:24	23°≈15'17	
minimum elong	794 Aug 29 j 18:29	9°℞27'19	1°05'43		800 Mar 18 j 10:57	0°℞	
max. Earth dist.	794 Aug 28 j 20:38	9°℞15'30	6.44151 AU	retrograde	800 Jun 29 j 08:38	13°℞43'21	
morning rise	794 Sep 11 j 17:49	12°℞15'35		opposition	800 Aug 28 j 10:49	8°℞42'17	-1°37'03
retrograde	795 Jan 09 j 20:50	29°℞02'18		min. Earth dist.	800 Aug 27 j 19:04	8°℞47'33	3.96283 AU
opposition	795 Mar 11 j 08:27	24°℞08'58	1°40'25	direct	800 Oct 25 j 16:14	3°℞48'43	
min. Earth dist.	795 Mar 12 j 07:08	24°℞01'40	4.44746 AU	evening set	801 Feb 28 j 01:32	23°℞28'54	
direct	795 May 12 j 23:53	19°℞06'29					
	795 Aug 15 j 11:31	0°Ω		conjunction	801 Mar 13 j 09:00	26°℞41'16	-1°08'21
evening set	795 Sep 16 j 14:03	6°Ω40'30		minimum elong	801 Mar 13 j 09:00	26°℞41'16	1°08'21
max. Earth dist.	795 Sep 27 j 15:27	9°Ω04'48	6.43325 AU	max. Earth dist.	801 Mar 14 j 22:17	27°℞03'45	5.95906 AU
				morning rise	801 Mar 26 j 19:30	29°℞55'15	
conjunction	795 Sep 29 j 09:43	9°Ω27'51	1°08'09		801 Mar 27 j 03:26	0°℞	
minimum elong	795 Sep 29 j 09:43	9°Ω27'52	1°08'09	retrograde	801 Aug 06 j 04:17	20°℞31'21	
morning rise	795 Oct 12 j 02:49	12°Ω14'02		opposition	801 Oct 04 j 20:41	15°℞27'01	-1°38'05
retrograde	796 Feb 09 j 16:21	29°Ω09'13		min. Earth dist.	801 Oct 03 j 14:05	15°℞37'25	3.97965 AU
opposition	796 Apr 10 j 10:58	24°Ω17'19	1°30'44	direct	801 Dec 01 j 18:06	10°℞31'40	
min. Earth dist.	796 Apr 11 j 20:44	24°Ω06'32	4.40351 AU	evening set	802 Apr 06 j 14:01	0°803'03	
direct	796 Jun 12 j 03:42	19°Ω16'22			802 Apr 06 j 08:50	0°8	
	796 Sep 12 j 23:09	0°℞					
evening set	796 Oct 16 j 05:58	7°℞02'30		conjunction	802 Apr 20 j 04:52	3°816'04	-0°56'01
max. Earth dist.	796 Oct 26 j 20:54	9°℞23'58	6.35646 AU	minimum elong	802 Apr 20 j 04:55	3°816'05	0°56'00
				max. Earth dist.	802 Apr 22 j 10:57	3°848'02	6.01868 AU
conjunction	796 Oct 28 j 22:05	9°℞51'22	0°51'53	morning rise	802 May 03 j 22:16	6°830'11	
minimum elong	796 Oct 28 j 22:07	9°℞51'23	0°51'53		802 Jun 10 j 20:06	15°8	
morning rise	796 Nov 10 j 12:16	12°℞39'33		retrograde	802 Sep 11 j 03:11	26°825'17	
	796 Nov 21 j 03:53	15°℞		min. Earth dist.	802 Nov 08 j 05:55	21°832'02	4.07522 AU
	797 Mar 02 j 10:41	0°8		opposition	802 Nov 09 j 16:44	21°820'10	-1°01'19
retrograde	797 Mar 13 j 00:27	0°810'27		direct	803 Jan 07 j 01:47	16°821'48	
	797 Mar 23 j 14:19	30°8℞			803 Apr 19 j 08:51	0°II	
opposition	797 May 12 j 22:59	25°℞18'24	0°55'12	evening set	803 May 13 j 12:05	5°II23'14	
min. Earth dist.	797 May 14 j 10:30	25°℞07'06	4.29799 AU				
direct	797 Jul 14 j 00:36	20°℞19'50		conjunction	803 May 27 j 06:25	8°II32'16	-0°23'10
	797 Oct 07 j 21:16	0°8		minimum elong	803 May 27 j 06:26	8°II32'17	0°23'09
evening set	797 Nov 16 j 13:58	8°832'28		max. Earth dist.	803 May 29 j 07:24	9°II00'21	6.14152 AU
max. Earth dist.	797 Nov 27 j 08:37	11°800'24	6.23072 AU	morning rise	803 Jun 10 j 01:31	11°II41'22	
					803 Sep 27 j 08:55	0°8	
conjunction	797 Nov 29 j 05:32	11°826'11	0°20'00	retrograde	803 Oct 14 j 19:18	0°829'50	
minimum elong	797 Nov 29 j 05:33	11°826'12	0°20'00		803 Nov 01 j 02:00	30°8II	
morning rise	797 Dec 11 j 20:53	14°820'01		min. Earth dist.	803 Dec 12 j 08:51	25°II35'15	4.21162 AU
	798 Mar 04 j 02:58	0°8		opposition	803 Dec 13 j 10:13	25°II26'40	-0°05'01
retrograde	798 Apr 16 j 13:46	2°849'14		asc. node	804 Jan 16 j 12:46	21°II28'44	
	798 May 30 j 16:14	30°88		direct	804 Feb 11 j 00:28	20°II25'30	
opposition	798 Jun 16 j 09:50	27°855'22	0°00'33		804 May 05 j 17:28	0°8	
min. Earth dist.	798 Jun 17 j 12:08	27°846'55	4.15960 AU	evening set	804 Jun 16 j 19:35	8°850'13	
desc. node	798 Jun 20 j 01:50	27°827'07					
direct	798 Aug 16 j 07:05	22°859'23		conjunction	804 Jun 30 j 11:39	11°852'12	0°16'13
	798 Oct 25 j 07:56	0°8		minimum elong	804 Jun 30 j 11:38	11°852'11	0°16'13
evening set	798 Dec 19 j 10:34	11°847'52		max. Earth dist.	804 Jul 01 j 16:48	12°808'23	6.28075 AU
max. Earth dist.	798 Dec 31 j 04:40	14°834'10	6.09207 AU	morning rise	804 Jul 14 j 02:20	14°853'16	
					804 Oct 03 j 23:35	0°Ω	
conjunction	799 Jan 01 j 05:01	14°848'34	-0°19'41	retrograde	804 Nov 14 j 09:57	2°Ω38'13	
minimum elong	799 Jan 01 j 04:59	14°848'33	0°19'41		804 Dec 25 j 20:21	30°88	
morning rise	799 Jan 14 j 00:31	17°850'07		opposition	805 Jan 13 j 07:10	27°838'41	0°49'26
	799 Mar 11 j 11:34	0°≈		min. Earth dist.	805 Jan 12 j 20:50	27°842'08	4.34158 AU
retrograde	799 May 23 j 08:06	7°≈26'43		direct	805 Mar 15 j 04:56	22°835'55	
opposition	799 Jul 22 j 19:47	2°≈29'43	-0°57'53		805 May 28 j 19:13	0°Ω	
min. Earth dist.	799 Jul 23 j 02:54	2°≈27'23	4.03232 AU	evening set	805 Jul 20 j 05:48	10°Ω30'10	

conjunction	805 Aug 02 j 14:55	13°♎24'40	0°49'02		810 Sep 26 j 22:05	0°♊	
minimum elong	805 Aug 02 j 14:53	13°♎24'39	0°49'02	evening set	810 Dec 24 j 06:19	16°♊47'14	
max. Earth dist.	805 Aug 02 j 14:39	13°♎24'32	6.39150 AU	max. Earth dist.	811 Jan 05 j 03:54	19°♊36'14	6.07598 AU
	805 Aug 09 j 22:02	15°♎					
morning rise	805 Aug 15 j 21:36	16°♎17'49		conjunction	811 Jan 06 j 01:10	19°♊48'50	-0°25'12
	805 Oct 28 j 15:08	0°♏		minimum elong	811 Jan 06 j 01:08	19°♊48'49	0°25'12
retrograde	805 Dec 14 j 21:47	3°♏20'01		morning rise	811 Jan 18 j 21:37	22°♊51'28	
	806 Jan 31 j 14:41	30°♏♎			811 Feb 19 j 05:47	0°♏	
opposition	806 Feb 13 j 01:51	28°♎24'13	1°27'13	retrograde	811 May 28 j 14:45	12°♏36'04	
min. Earth dist.	806 Feb 13 j 10:50	28°♎21'18	4.42642 AU	opposition	811 Jul 28 j 02:06	7°♏38'27	-1°05'05
direct	806 Apr 16 j 03:55	23°♎21'05		min. Earth dist.	811 Jul 28 j 05:14	7°♏37'26	4.02079 AU
	806 Jun 26 j 05:12	0°♏		direct	811 Sep 25 j 07:35	2°♏44'42	
evening set	806 Aug 21 j 01:04	10°♏57'58			811 Dec 28 j 11:36	15°♏	
max. Earth dist.	806 Sep 02 j 00:46	13°♏33'19	6.44353 AU	evening set	812 Jan 28 j 09:48	22°♏10'00	
conjunction	806 Sep 03 j 02:25	13°♏47'12	1°07'11	conjunction	812 Feb 10 j 10:31	25°♏18'16	-0°57'25
minimum elong	806 Sep 03 j 02:23	13°♏47'12	1°07'11	minimum elong	812 Feb 10 j 10:29	25°♏18'15	0°57'25
morning rise	806 Sep 16 j 00:44	16°♏34'59		max. Earth dist.	812 Feb 10 j 21:48	25°♏25'04	5.98182 AU
	806 Nov 27 j 10:39	0°♐		morning rise	812 Feb 23 j 13:49	28°♏28'06	
retrograde	807 Jan 14 j 02:26	3°♐21'36			812 Feb 29 j 23:59	0°♐	
	807 Mar 03 j 13:58	30°♏♏		retrograde	812 Jul 04 j 17:10	18°♐58'49	
opposition	807 Mar 15 j 15:41	28°♏28'30	1°40'40	opposition	812 Sep 02 j 17:28	13°♐57'14	-1°39'38
min. Earth dist.	807 Mar 16 j 15:59	28°♏20'41	4.44403 AU	min. Earth dist.	812 Sep 01 j 23:49	14°♐03'08	3.96346 AU
direct	807 May 17 j 07:32	23°♏26'08		direct	812 Oct 30 j 21:47	9°♐03'32	
	807 Jul 27 j 01:22	0°♐		evening set	813 Mar 05 j 06:23	28°♐42'34	
evening set	807 Sep 20 j 21:17	11°♐01'28			813 Mar 10 j 15:29	0°♑	
max. Earth dist.	807 Oct 01 j 21:20	13°♐25'21	6.42458 AU				
conjunction	807 Oct 03 j 16:21	13°♐48'54	1°06'56	conjunction	813 Mar 18 j 14:45	1°♑55'04	-1°08'11
minimum elong	807 Oct 03 j 16:23	13°♐48'54	1°06'56	minimum elong	813 Mar 18 j 14:46	1°♑55'05	1°08'11
morning rise	807 Oct 16 j 08:47	16°♐35'10		max. Earth dist.	813 Mar 20 j 06:44	2°♑19'07	5.96579 AU
	807 Dec 26 j 17:53	0°♒		morning rise	813 Apr 01 j 02:25	5°♑09'13	
retrograde	808 Feb 14 j 03:08	3°♒34'21		retrograde	813 Aug 11 j 05:32	25°♑40'45	
	808 Apr 04 j 16:11	30°♏♐		opposition	813 Oct 09 j 22:08	20°♑36'11	-1°34'53
opposition	808 Apr 14 j 22:29	28°♐42'33	1°27'11	min. Earth dist.	813 Oct 08 j 13:38	20°♑47'14	3.99189 AU
min. Earth dist.	808 Apr 16 j 09:20	28°♐31'27	4.39014 AU	direct	813 Dec 06 j 19:28	15°♑40'26	
direct	808 Jun 16 j 14:27	23°♐41'56			814 Mar 20 j 10:20	0°♒	
	808 Aug 24 j 03:06	0°♒		evening set	814 Apr 11 j 17:31	5°♒07'39	
evening set	808 Oct 20 j 14:49	11°♒31'36					
max. Earth dist.	808 Oct 31 j 04:01	13°♒52'45	6.33942 AU	conjunction	814 Apr 25 j 09:05	8°♒20'14	-0°52'23
				minimum elong	814 Apr 25 j 09:08	8°♒20'15	0°52'24
				max. Earth dist.	814 Apr 27 j 14:25	8°♒51'38	6.03513 AU
conjunction	808 Nov 02 j 06:34	14°♒21'02	0°48'10	morning rise	814 May 09 j 03:01	11°♒33'48	
minimum elong	808 Nov 02 j 06:36	14°♒21'03	0°48'11		814 May 24 j 00:59	15°♒	
	808 Nov 05 j 04:12	15°♒			814 Aug 18 j 03:05	0°♓	
morning rise	808 Nov 14 j 20:53	17°♒09'55		retrograde	814 Sep 15 j 21:22	1°♓19'59	
	809 Jan 18 j 22:25	0°♓			814 Oct 14 j 09:15	30°♏♓	
retrograde	809 Mar 17 j 18:43	4°♓48'24		min. Earth dist.	814 Nov 13 j 01:53	26°♓26'16	4.09385 AU
opposition	809 May 17 j 17:03	29°♒56'10	0°48'21	opposition	814 Nov 14 j 10:56	26°♓15'00	-0°54'11
	809 May 17 j 05:04	30°♏♒		direct	815 Jan 12 j 00:15	21°♓16'12	
min. Earth dist.	809 May 19 j 03:42	29°♒45'07	4.27842 AU		815 Mar 31 j 15:46	0°♓	
direct	809 Jul 18 j 15:27	24°♒57'57		evening set	815 May 18 j 10:40	10°♓12'25	
	809 Sep 16 j 05:50	0°♓					
evening set	809 Nov 21 j 03:16	13°♓15'39		conjunction	815 Jun 01 j 05:08	13°♓20'38	-0°17'49
max. Earth dist.	809 Dec 02 j 01:48	15°♓46'27	6.21058 AU	minimum elong	815 Jun 01 j 05:09	13°♓20'38	0°17'49
				max. Earth dist.	815 Jun 03 j 04:51	13°♓47'50	6.16091 AU
conjunction	809 Dec 03 j 19:13	16°♓10'19	0°14'36	morning rise	815 Jun 14 j 23:52	16°♓28'44	
minimum elong	809 Dec 03 j 19:14	16°♓10'20	0°14'35		815 Aug 21 j 06:37	0°♔	
behind sun begin	809 Dec 03 j 15:35	16°♓08'14		retrograde	815 Oct 19 j 05:48	5°♔08'01	
behind sun end	809 Dec 03 j 22:54	16°♓12'26		asc. node	815 Nov 27 j 11:49	2°♔42'27	
morning rise	809 Dec 16 j 10:51	19°♓05'09		opposition	815 Dec 17 j 21:31	0°♔05'23	0°02'59
	810 Feb 05 j 20:48	0°♔		min. Earth dist.	815 Dec 16 j 21:36	0°♔13'28	4.22999 AU
retrograde	810 Apr 21 j 15:36	7°♔43'41			815 Dec 18 j 13:29	30°♏♓	
desc. node	810 Apr 29 j 06:40	7°♔38'13		direct	816 Feb 15 j 15:04	25°♓04'01	
opposition	810 Jun 21 j 11:01	2°♔49'30	-0°07'59		816 Apr 14 j 01:10	0°♔	
min. Earth dist.	810 Jun 22 j 10:49	2°♔41'50	4.14064 AU	evening set	816 Jun 21 j 12:34	13°♔24'32	
	810 Jul 14 j 20:07	30°♏♓					
direct	810 Aug 21 j 03:24	27°♓53'55		conjunction	816 Jul 05 j 03:46	16°♔25'31	0°21'20

minimum elong	816 Jul 05 j 03:44	16°  25'30	0°21'20	conjunction	821 Dec 08 j 08:00	20°  53'43	0°09'07
max. Earth dist.	816 Jul 06 j 03:18	16°  38'33	6.29671 AU	minimum elong	821 Dec 08 j 08:00	20°  53'43	0°09'07
morning rise	816 Jul 18 j 17:40	19°  25'34		behind sun begin	821 Dec 08 j 01:11	20°  49'48	
	816 Sep 08 j 18:45	0°  ♂		behind sun end	821 Dec 08 j 14:49	20°  57'39	
retrograde	816 Nov 18 j 17:11	7°  ♂04'04		morning rise	821 Dec 21 j 00:14	23°  49'31	
opposition	817 Jan 17 j 14:18	2°  ♂05'08	0°55'50		822 Jan 17 j 14:58	0°  ♂	
min. Earth dist.	817 Jan 17 j 07:32	2°  ♂07'22	4.35415 AU	desc. node	822 Mar 09 j 01:08	9°  ♂06'27	
	817 Feb 02 j 19:45	30°  ♂ 		retrograde	822 Apr 26 j 16:07	12°  ♂36'36	
direct	817 Mar 19 j 17:07	27°  ♂02'14		opposition	822 Jun 26 j 11:09	7°  ♂41'56	-0°16'26
	817 May 03 j 22:30	0°  ♂		min. Earth dist.	822 Jun 27 j 07:55	7°  ♂35'13	4.12360 AU
evening set	817 Jul 24 j 17:29	14°  ♂54'15		direct	822 Aug 25 j 22:30	2°  ♂46'36	
	817 Jul 25 j 04:08	15°  ♂		evening set	822 Dec 29 j 00:46	21°  ♂44'13	
conjunction	817 Aug 07 j 01:46	17°  ♂48'03	0°52'31	conjunction	823 Jan 10 j 20:21	24°  ♂46'44	-0°30'30
minimum elong	817 Aug 07 j 01:43	17°  ♂48'02	0°52'30	minimum elong	823 Jan 10 j 20:19	24°  ♂46'42	0°30'30
max. Earth dist.	817 Aug 06 j 22:46	17°  ♂46'26	6.39983 AU	max. Earth dist.	823 Jan 10 j 04:11	24°  ♂37'07	6.06108 AU
morning rise	817 Aug 20 j 07:11	20°  ♂40'24		morning rise	823 Jan 23 j 17:26	27°  ♂50'18	
	817 Oct 05 j 10:11	0°  ♂			823 Feb 01 j 22:22	0°  ♂	
retrograde	817 Dec 19 j 01:44	7°  ♂39'47			823 Apr 21 j 16:21	15°  ♂	
opposition	818 Feb 17 j 07:47	2°  ♂44'29	1°30'35	retrograde	823 Jun 02 j 21:23	17°  ♂42'27	
min. Earth dist.	818 Feb 17 j 18:12	2°  ♂41'06	4.43036 AU		823 Jul 15 j 09:05	15°  ♂	
	818 Mar 11 j 15:17	30°  ♂ 		opposition	823 Aug 02 j 06:38	12°  ♂44'19	-1°11'45
direct	818 Apr 20 j 11:17	27°  ♂41'28		min. Earth dist.	823 Aug 02 j 07:45	12°  ♂43'56	4.00949 AU
	818 May 30 j 16:21	0°  ♂		direct	823 Sep 30 j 08:29	7°  ♂50'40	
evening set	818 Aug 25 j 09:29	15°  ♂18'09			823 Dec 08 j 10:22	15°  ♂	
max. Earth dist.	818 Sep 06 j 05:02	17°  ♂51'26	6.44280 AU	evening set	824 Feb 02 j 10:31	27°  ♂18'49	
					824 Feb 13 j 14:03	0°  ♂	
conjunction	818 Sep 07 j 09:46	18°  ♂07'01	1°08'14	conjunction	824 Feb 15 j 12:05	0°  ♂27'48	-1°00'26
minimum elong	818 Sep 07 j 09:45	18°  ♂07'00	1°08'14	minimum elong	824 Feb 15 j 12:03	0°  ♂27'47	1°00'25
morning rise	818 Sep 20 j 07:12	20°  ♂54'28		max. Earth dist.	824 Feb 16 j 02:17	0°  ♂36'22	5.97499 AU
	818 Nov 04 j 07:09	0°  ♂		morning rise	824 Feb 28 j 16:38	3°  ♂38'26	
retrograde	819 Jan 18 j 10:15	7°  ♂41'56		retrograde	824 Jul 09 j 22:42	24°  ♂12'01	
opposition	819 Mar 19 j 23:39	2°  ♂49'10	1°40'21	opposition	824 Sep 07 j 22:21	19°  ♂09'54	-1°41'27
min. Earth dist.	819 Mar 21 j 02:22	2°  ♂40'36	4.43884 AU	min. Earth dist.	824 Sep 07 j 01:27	19°  ♂16'55	3.96216 AU
	819 Apr 12 j 08:22	30°  ♂ 		direct	824 Nov 04 j 23:42	14°  ♂16'00	
direct	819 May 21 j 17:30	27°  ♂47'02			825 Feb 21 j 20:11	0°  ♂	
	819 Jun 30 j 03:44	0°  ♂		evening set	825 Mar 10 j 10:46	3°  ♂55'00	
evening set	819 Sep 25 j 04:39	15°  ♂23'57					
max. Earth dist.	819 Oct 06 j 02:05	17°  ♂46'49	6.41525 AU	conjunction	825 Mar 23 j 20:16	7°  ♂07'48	-1°07'30
conjunction	819 Oct 07 j 23:07	18°  ♂11'30	1°05'19	minimum elong	825 Mar 23 j 20:17	7°  ♂07'49	1°07'30
minimum elong	819 Oct 07 j 23:09	18°  ♂11'31	1°05'18	max. Earth dist.	825 Mar 25 j 14:39	7°  ♂33'16	5.96997 AU
morning rise	819 Oct 20 j 15:06	20°  ♂57'58		morning rise	825 Apr 06 j 08:57	10°  ♂22'12	
	819 Dec 03 j 16:58	0°  ♂			825 Jul 24 j 15:08	0°  ♂	
retrograde	820 Feb 18 j 13:46	8°  ♂01'19		retrograde	825 Aug 16 j 07:42	0°  ♂50'17	
opposition	820 Apr 19 j 10:30	3°  ♂09'31	1°23'04		825 Sep 07 j 19:41	30°  ♂ 	
min. Earth dist.	820 Apr 20 j 21:01	2°  ♂58'31	4.37729 AU	opposition	825 Oct 14 j 23:22	25°  ♂45'25	-1°31'01
	820 May 16 j 07:52	30°  ♂ 		min. Earth dist.	825 Oct 13 j 14:51	25°  ♂56'30	4.00091 AU
direct	820 Jun 21 j 00:26	28°  ♂09'10		direct	825 Dec 11 j 22:19	20°  ♂49'14	
	820 Jul 26 j 15:57	0°  ♂			826 Mar 01 j 12:14	0°  ♂	
	820 Oct 20 j 07:48	15°  ♂		evening set	826 Apr 16 j 21:37	10°  ♂13'32	
evening set	820 Oct 24 j 23:39	16°  ♂01'58					
max. Earth dist.	820 Nov 04 j 14:41	18°  ♂24'39	6.32410 AU	conjunction	826 Apr 30 j 14:03	13°  ♂25'53	-0°48'22
conjunction	820 Nov 06 j 15:18	18°  ♂51'57	0°44'10	minimum elong	826 Apr 30 j 14:06	13°  ♂25'55	0°48'22
minimum elong	820 Nov 06 j 15:21	18°  ♂51'58	0°44'10	max. Earth dist.	826 May 02 j 20:50	13°  ♂58'01	6.04822 AU
morning rise	820 Nov 19 j 05:28	21°  ♂41'26			826 May 07 j 06:38	15°  ♂	
	820 Dec 28 j 08:26	0°  ♂		morning rise	826 May 14 j 08:24	16°  ♂39'03	
retrograde	821 Mar 22 j 12:42	9°  ♂26'46		retrograde	826 Jul 17 j 00:40	0°  ♂	
opposition	821 May 22 j 11:03	4°  ♂34'23	0°41'10		826 Sep 20 j 16:49	6°  ♂17'17	
min. Earth dist.	821 May 23 j 21:05	4°  ♂23'32	4.26132 AU	min. Earth dist.	826 Nov 17 j 21:19	1°  ♂23'36	4.10951 AU
	821 Jul 07 j 07:34	30°  ♂ 		opposition	826 Nov 19 j 05:53	1°  ♂12'31	-0°46'38
direct	821 Jul 23 j 06:39	29°  ♂36'32			826 Nov 28 j 05:05	30°  ♂ 	
	821 Aug 08 j 04:24	0°  ♂		direct	827 Jan 16 j 21:47	26°  ♂13'20	
evening set	821 Nov 25 j 15:57	17°  ♂58'16			827 Mar 07 j 10:36	0°  ♂	
max. Earth dist.	821 Dec 06 j 15:30	20°  ♂30'17	6.19295 AU	evening set	827 May 23 j 11:17	15°  ♂05'25	
				conjunction	827 Jun 06 j 05:32	18°  ♂12'49	-0°12'16

minimum elong	827 Jun 06 j 05:32	18° Π 12'50	0°12'16	opposition	833 May 27 j 02:09	9° \mathcal{A} 04'38	0°33'57
behind sun begin	827 Jun 06 j 00:07	18° Π 09'46		min. Earth dist.	833 May 28 j 10:34	8° \mathcal{A} 54'17	4.24858 AU
behind sun end	827 Jun 06 j 10:58	18° Π 15'54		direct	833 Jul 27 j 17:43	4° \mathcal{A} 07'05	
max. Earth dist.	827 Jun 08 j 01:17	18° Π 37'41	6.17777 AU	evening set	833 Nov 30 j 01:18	22° \mathcal{A} 31'41	
morning rise	827 Jun 20 j 00:06	21° Π 20'03		max. Earth dist.	833 Dec 11 j 04:06	25° \mathcal{A} 06'02	6.17872 AU
	827 Jul 30 j 11:35	0° \mathcal{E}					
asc. node	827 Oct 07 j 01:17	9° \mathcal{E} 23'27		conjunction	833 Dec 12 j 17:37	25° \mathcal{A} 27'49	0°03'48
retrograde	827 Oct 23 j 18:36	9° \mathcal{E} 50'56		minimum elong	833 Dec 12 j 17:38	25° \mathcal{A} 27'50	0°03'49
opposition	827 Dec 22 j 10:42	4° \mathcal{E} 48'44	0°11'07	behind sun begin	833 Dec 12 j 09:44	25° \mathcal{A} 23'16	
min. Earth dist.	827 Dec 21 j 13:06	4° \mathcal{E} 56'01	4.24654 AU	behind sun end	833 Dec 13 j 01:32	25° \mathcal{A} 32'24	
	828 Feb 08 j 21:20	30° \mathcal{R} Π		morning rise	833 Dec 25 j 10:08	28° \mathcal{A} 24'22	
direct	828 Feb 20 j 09:18	29° Π 47'03			834 Jan 01 j 08:39	0° \mathcal{B}	
	828 Mar 02 j 22:37	0° \mathcal{E}		desc. node	834 Jan 18 j 23:24	3° \mathcal{B} 56'20	
evening set	828 Jun 26 j 07:32	18° \mathcal{E} 03'49		retrograde	834 May 01 j 13:55	17° \mathcal{B} 19'03	
				opposition	834 Jul 01 j 07:09	12° \mathcal{B} 24'02	-0°24'27
conjunction	828 Jul 09 j 22:08	21° \mathcal{E} 03'53	0°26'27	min. Earth dist.	834 Jul 02 j 03:11	12° \mathcal{B} 17'34	4.10879 AU
minimum elong	828 Jul 09 j 22:06	21° \mathcal{E} 03'52	0°26'27	direct	834 Aug 30 j 14:56	7° \mathcal{B} 28'59	
max. Earth dist.	828 Jul 10 j 19:41	21° \mathcal{E} 15'47	6.31195 AU	evening set	835 Jan 02 j 15:23	26° \mathcal{B} 30'35	
morning rise	828 Jul 23 j 10:51	24° \mathcal{E} 02'50					
	828 Aug 20 j 10:34	0° \mathcal{Q}		conjunction	835 Jan 15 j 11:31	29° \mathcal{B} 33'58	-0°35'22
retrograde	828 Nov 23 j 01:30	11° \mathcal{Q} 34'58		minimum elong	835 Jan 15 j 11:29	29° \mathcal{B} 33'57	0°35'23
opposition	829 Jan 21 j 23:45	6° \mathcal{Q} 36'37	1°02'05	max. Earth dist.	835 Jan 14 j 20:58	29° \mathcal{B} 25'17	6.04693 AU
min. Earth dist.	829 Jan 21 j 18:29	6° \mathcal{Q} 38'21	4.36725 AU		835 Jan 17 j 07:09	0° \mathcal{A}	
direct	829 Mar 24 j 05:49	1° \mathcal{Q} 33'43		morning rise	835 Jan 28 j 09:35	2° \mathcal{A} 38'35	
	829 Jul 08 j 13:50	15° \mathcal{Q}			835 Mar 26 j 05:45	15° \mathcal{A}	
evening set	829 Jul 29 j 07:16	19° \mathcal{Q} 22'58		retrograde	835 Jun 07 j 21:39	22° \mathcal{A} 38'17	
				opposition	835 Aug 07 j 06:37	17° \mathcal{A} 39'39	-1°17'39
conjunction	829 Aug 11 j 14:13	22° \mathcal{Q} 15'52	0°55'47	min. Earth dist.	835 Aug 07 j 04:31	17° \mathcal{A} 40'21	3.99755 AU
minimum elong	829 Aug 11 j 14:10	22° \mathcal{Q} 15'50	0°55'47		835 Aug 28 j 15:28	15° \mathcal{R} \mathcal{A}	
max. Earth dist.	829 Aug 11 j 06:50	22° \mathcal{Q} 11'51	6.40999 AU	direct	835 Oct 05 j 03:25	12° \mathcal{A} 46'06	
morning rise	829 Aug 24 j 18:35	25° \mathcal{Q} 07'21			835 Nov 11 j 03:41	15° \mathcal{A}	
	829 Sep 16 j 21:50	0° \mathcal{P}			836 Jan 28 j 16:09	0° \mathcal{H}	
retrograde	829 Dec 23 j 09:22	12° \mathcal{P} 03'13		evening set	836 Feb 07 j 07:28	2° \mathcal{H} 17'57	
opposition	830 Feb 21 j 15:51	7° \mathcal{P} 08'21	1°33'33				
min. Earth dist.	830 Feb 22 j 04:57	7° \mathcal{P} 04'05	4.43740 AU	conjunction	836 Feb 20 j 10:06	5° \mathcal{H} 27'49	-1°02'53
direct	830 Apr 24 j 23:14	2° \mathcal{P} 05'25		minimum elong	836 Feb 20 j 10:04	5° \mathcal{H} 27'47	1°02'54
evening set	830 Aug 29 j 18:51	19° \mathcal{P} 40'28		max. Earth dist.	836 Feb 21 j 03:55	5° \mathcal{H} 38'35	5.96633 AU
				morning rise	836 Mar 04 j 15:42	8° \mathcal{H} 39'20	
conjunction	830 Sep 11 j 18:14	22° \mathcal{P} 28'48	1°08'58	retrograde	836 Jul 15 j 02:29	29° \mathcal{H} 16'57	
minimum elong	830 Sep 11 j 18:14	22° \mathcal{P} 28'48	1°08'58	opposition	836 Sep 12 j 23:44	24° \mathcal{H} 14'24	-1°42'29
max. Earth dist.	830 Sep 10 j 12:25	22° \mathcal{P} 12'38	6.44631 AU	min. Earth dist.	836 Sep 12 j 01:44	24° \mathcal{H} 21'49	3.95782 AU
morning rise	830 Sep 24 j 14:32	25° \mathcal{P} 15'43		direct	836 Nov 09 j 23:54	19° \mathcal{H} 20'18	
	830 Oct 17 j 02:02	0° \mathcal{A}			837 Feb 04 j 00:24	0° \mathcal{Y}	
retrograde	831 Jan 22 j 15:56	12° \mathcal{A} 02'33		evening set	837 Mar 15 j 12:41	9° \mathcal{Y} 00'55	
opposition	831 Mar 24 j 08:06	7° \mathcal{A} 09'59	1°39'30				
min. Earth dist.	831 Mar 25 j 10:58	7° \mathcal{A} 01'23	4.43886 AU	conjunction	837 Mar 28 j 23:28	12° \mathcal{Y} 14'17	-1°06'20
direct	831 May 26 j 01:50	2° \mathcal{A} 08'07		minimum elong	837 Mar 28 j 23:30	12° \mathcal{Y} 14'17	1°06'19
evening set	831 Sep 29 j 11:31	19° \mathcal{A} 44'40		max. Earth dist.	837 Mar 30 j 21:18	12° \mathcal{Y} 41'46	5.97047 AU
max. Earth dist.	831 Oct 10 j 07:33	22° \mathcal{A} 06'58	6.41174 AU	morning rise	837 Apr 11 j 13:14	15° \mathcal{Y} 29'09	
					837 Jun 18 j 23:20	0° \mathcal{B}	
conjunction	831 Oct 12 j 05:13	22° \mathcal{A} 32'04	1°03'24	retrograde	837 Aug 21 j 08:22	5° \mathcal{B} 55'10	
minimum elong	831 Oct 12 j 05:15	22° \mathcal{A} 32'04	1°03'24	opposition	837 Oct 19 j 22:16	0° \mathcal{B} 50'14	-1°26'34
morning rise	831 Oct 24 j 20:39	25° \mathcal{A} 18'28		min. Earth dist.	837 Oct 18 j 12:52	1° \mathcal{B} 01'37	4.00634 AU
	831 Nov 15 j 19:17	0° \mathcal{M}			837 Oct 26 j 02:28	30° \mathcal{R} \mathcal{Y}	
retrograde	832 Feb 23 j 00:30	12° \mathcal{M} 24'11		direct	837 Dec 16 j 21:00	25° \mathcal{Y} 53'43	
opposition	832 Apr 23 j 21:42	7° \mathcal{M} 32'26	1°18'34		838 Feb 05 j 19:28	0° \mathcal{B}	
min. Earth dist.	832 Apr 25 j 09:26	7° \mathcal{M} 21'04	4.37023 AU		838 Apr 20 j 19:57	15° \mathcal{B}	
direct	832 Jun 25 j 11:45	2° \mathcal{M} 32'25		evening set	838 Apr 22 j 00:50	15° \mathcal{B} 16'48	
	832 Oct 04 j 04:11	15° \mathcal{M}					
evening set	832 Oct 29 j 06:12	20° \mathcal{M} 26'19		conjunction	838 May 05 j 17:52	18° \mathcal{B} 29'01	-0°44'03
max. Earth dist.	832 Nov 08 j 20:17	22° \mathcal{M} 48'50	6.31396 AU	minimum elong	838 May 05 j 17:54	18° \mathcal{B} 29'03	0°44'02
				max. Earth dist.	838 May 07 j 23:28	19° \mathcal{B} 00'22	6.05805 AU
conjunction	832 Nov 10 j 21:36	23° \mathcal{M} 16'35	0°40'01	morning rise	838 May 19 j 12:55	21° \mathcal{B} 41'59	
minimum elong	832 Nov 10 j 21:38	23° \mathcal{M} 16'37	0°40'01		838 Jun 25 j 22:59	0° \mathcal{H}	
morning rise	832 Nov 23 j 11:48	26° \mathcal{M} 06'30		retrograde	838 Sep 25 j 10:57	11° \mathcal{H} 13'34	
	832 Dec 11 j 03:23	0° \mathcal{A}		min. Earth dist.	838 Nov 22 j 16:01	6° \mathcal{H} 19'55	4.12255 AU
retrograde	833 Mar 27 j 02:37	13° \mathcal{A} 57'16		opposition	838 Nov 24 j 00:06	6° \mathcal{H} 08'58	-0°38'52

direct	839 Jan 21 j 19:24	1° Π 09'22		conjunction	844 Nov 15 j 06:17	27° \mathbb{M} 47'41	0°35'32
evening set	839 May 28 j 11:15	19° Π 58'08		minimum elong	844 Nov 15 j 06:18	27° \mathbb{M} 47'42	0°35'31
					844 Nov 25 j 00:27	0° \mathbb{X}	
conjunction	839 Jun 11 j 05:33	23° Π 04'52	-0°06'41	morning rise	844 Nov 27 j 20:35	0° \mathbb{X} 38'20	
minimum elong	839 Jun 11 j 05:33	23° Π 04'52	0°06'41	retrograde	845 Mar 31 j 23:29	18° \mathbb{X} 37'04	
behind sun begin	839 Jun 10 j 21:46	23° Π 00'28		opposition	845 May 31 j 21:14	13° \mathbb{X} 44'11	0°26'14
behind sun end	839 Jun 11 j 13:20	23° Π 09'15		min. Earth dist.	845 Jun 02 j 05:42	13° \mathbb{X} 33'49	4.22885 AU
max. Earth dist.	839 Jun 13 j 00:41	23° Π 29'17	6.19319 AU	direct	845 Aug 01 j 09:51	8° \mathbb{X} 46'57	
morning rise	839 Jun 24 j 23:33	26° Π 11'11		desc. node	845 Nov 28 j 17:13	25° \mathbb{X} 55'06	
	839 Jul 12 j 05:37	0° \mathbb{E}		evening set	845 Dec 04 j 15:03	27° \mathbb{X} 16'44	
asc. node	839 Aug 16 j 16:15	7° \mathbb{E} 07'36		max. Earth dist.	845 Dec 15 j 19:40	29° \mathbb{X} 52'50	6.15814 AU
retrograde	839 Oct 28 j 08:18	14° \mathbb{E} 34'06			845 Dec 16 j 07:56	0° \mathbb{Z}	
opposition	839 Dec 26 j 23:52	9° \mathbb{E} 32'21	0°19'06				
min. Earth dist.	839 Dec 26 j 03:50	9° \mathbb{E} 39'05	4.26267 AU	conjunction	845 Dec 17 j 07:46	0° \mathbb{Z} 13'54	-0°01'56
direct	840 Feb 25 j 02:43	4° \mathbb{E} 30'24		minimum elong	845 Dec 17 j 07:46	0° \mathbb{Z} 13'53	0°01'55
evening set	840 Jul 01 j 02:12	22° \mathbb{E} 43'10		behind sun begin	845 Dec 16 j 23:45	0° \mathbb{Z} 09'14	
				behind sun end	845 Dec 17 j 15:46	0° \mathbb{Z} 18'32	
conjunction	840 Jul 14 j 15:46	25° \mathbb{E} 42'10	0°31'22	morning rise	845 Dec 30 j 00:59	3° \mathbb{Z} 11'35	
minimum elong	840 Jul 14 j 15:44	25° \mathbb{E} 42'09	0°31'22	retrograde	846 May 06 j 15:52	22° \mathbb{Z} 16'12	
max. Earth dist.	840 Jul 15 j 09:21	25° \mathbb{E} 51'51	6.32734 AU	opposition	846 Jul 06 j 09:11	17° \mathbb{Z} 20'43	-0°32'46
morning rise	840 Jul 28 j 03:34	28° \mathbb{E} 40'02		min. Earth dist.	846 Jul 07 j 01:46	17° \mathbb{Z} 15'21	4.08909 AU
	840 Aug 03 j 06:32	0° Ω		direct	846 Sep 04 j 10:37	12° \mathbb{Z} 25'58	
	840 Nov 01 j 02:12	15° Ω			846 Dec 31 j 23:04	0° \approx	
retrograde	840 Nov 27 j 09:21	16° Ω 05'37		evening set	847 Jan 07 j 12:40	1° \approx 33'09	
	840 Dec 23 j 13:05	15° \mathbb{R} Ω					
opposition	841 Jan 26 j 08:50	11° Ω 07'39	1°07'55	conjunction	847 Jan 20 j 09:36	4° \approx 37'37	-0°40'17
min. Earth dist.	841 Jan 26 j 05:53	11° Ω 08'37	4.38063 AU	minimum elong	847 Jan 20 j 09:34	4° \approx 37'36	0°40'17
direct	841 Mar 28 j 19:02	6° Ω 04'34		max. Earth dist.	847 Jan 19 j 23:42	4° \approx 31'41	6.02996 AU
	841 Jun 20 j 07:22	15° Ω		morning rise	847 Feb 02 j 08:33	7° \approx 43'23	
evening set	841 Aug 02 j 19:53	23° Ω 50'37			847 Mar 06 j 00:28	15° \approx	
				retrograde	847 Jun 13 j 07:33	27° \approx 51'27	
conjunction	841 Aug 16 j 01:51	26° Ω 42'39	0°58'43	opposition	847 Aug 12 j 13:46	22° \approx 52'17	-1°23'21
minimum elong	841 Aug 16 j 01:49	26° Ω 42'38	0°58'43	min. Earth dist.	847 Aug 12 j 09:16	22° \approx 53'46	3.98514 AU
max. Earth dist.	841 Aug 15 j 16:38	26° Ω 37'39	6.42008 AU	direct	847 Oct 10 j 07:31	17° \approx 58'46	
morning rise	841 Aug 29 j 04:49	29° Ω 33'12			848 Jan 10 j 21:06	0° \mathbb{H}	
	841 Aug 31 j 06:39	0° \mathbb{P}		evening set	848 Feb 12 j 11:55	7° \mathbb{H} 34'11	
retrograde	841 Dec 27 j 14:40	16° \mathbb{P} 25'34					
opposition	842 Feb 25 j 23:13	11° \mathbb{P} 31'03	1°35'58	conjunction	848 Feb 25 j 15:44	10° \mathbb{H} 44'52	-1°05'01
min. Earth dist.	842 Feb 26 j 13:49	11° \mathbb{P} 26'19	4.44337 AU	minimum elong	848 Feb 25 j 15:43	10° \mathbb{H} 44'51	1°05'01
direct	842 Apr 29 j 08:25	6° \mathbb{P} 28'11		max. Earth dist.	848 Feb 26 j 14:45	10° \mathbb{H} 58'47	5.95983 AU
evening set	842 Sep 03 j 03:10	24° \mathbb{P} 01'47		morning rise	848 Mar 09 j 22:32	13° \mathbb{H} 57'14	
max. Earth dist.	842 Sep 14 j 15:36	26° \mathbb{P} 31'18	6.44730 AU		848 May 25 j 23:56	0° \mathbb{Y}	
				retrograde	848 Jul 20 j 11:39	4° \mathbb{Y} 36'57	
conjunction	842 Sep 16 j 01:25	26° \mathbb{P} 49'39	1°09'18		848 Sep 15 j 01:55	30° \mathbb{R} \mathbb{H}	
minimum elong	842 Sep 16 j 01:25	26° \mathbb{P} 49'39	1°09'17	min. Earth dist.	848 Sep 17 j 06:17	29° \mathbb{H} 42'22	3.95852 AU
morning rise	842 Sep 28 j 20:58	29° \mathbb{P} 36'11		opposition	848 Sep 18 j 07:05	29° \mathbb{H} 34'00	-1°42'42
	842 Sep 30 j 17:11	0° \mathbb{L}		direct	848 Nov 15 j 04:27	24° \mathbb{H} 39'44	
retrograde	843 Jan 27 j 00:43	16° \mathbb{L} 23'26			849 Jan 12 j 11:27	0° \mathbb{Y}	
opposition	843 Mar 28 j 16:50	11° \mathbb{L} 31'02	1°38'07	evening set	849 Mar 20 j 20:40	14° \mathbb{Y} 19'40	
min. Earth dist.	843 Mar 29 j 22:15	11° \mathbb{L} 21'37	4.43468 AU				
direct	843 May 30 j 11:58	6° \mathbb{L} 29'17		conjunction	849 Apr 03 j 08:23	17° \mathbb{Y} 33'09	-1°04'35
evening set	843 Oct 03 j 18:15	24° \mathbb{L} 06'47		minimum elong	849 Apr 03 j 08:25	17° \mathbb{Y} 33'10	1°04'35
max. Earth dist.	843 Oct 14 j 12:45	26° \mathbb{L} 28'34	6.40257 AU	max. Earth dist.	849 Apr 05 j 07:52	18° \mathbb{Y} 01'34	5.97822 AU
				morning rise	849 Apr 16 j 23:17	20° \mathbb{Y} 48'07	
conjunction	843 Oct 16 j 11:33	26° \mathbb{L} 54'20	1°01'06		849 May 27 j 16:45	0° \mathbb{B}	
minimum elong	843 Oct 16 j 11:35	26° \mathbb{L} 54'21	1°01'06	retrograde	849 Aug 26 j 10:09	11° \mathbb{B} 08'25	
morning rise	843 Oct 29 j 02:29	29° \mathbb{L} 40'56		min. Earth dist.	849 Oct 23 j 13:54	6° \mathbb{B} 15'09	4.02036 AU
	843 Oct 30 j 13:21	0° \mathbb{M}		opposition	849 Oct 25 j 00:37	6° \mathbb{B} 03'18	-1°21'17
	844 Jan 23 j 11:42	15° \mathbb{M}		direct	849 Dec 22 j 01:22	1° \mathbb{B} 06'21	
retrograde	844 Feb 27 j 11:26	16° \mathbb{M} 51'03			850 Apr 03 j 10:11	15° \mathbb{B}	
	844 Apr 02 j 18:43	15° \mathbb{R} \mathbb{M}		evening set	850 Apr 27 j 06:28	20° \mathbb{B} 24'41	
opposition	844 Apr 28 j 10:13	11° \mathbb{M} 59'13	1°13'34				
min. Earth dist.	844 Apr 29 j 21:30	11° \mathbb{M} 47'59	4.35653 AU	conjunction	850 May 11 j 00:07	23° \mathbb{B} 36'17	-0°39'21
direct	844 Jun 29 j 20:56	6° \mathbb{M} 59'28		minimum elong	850 May 11 j 00:09	23° \mathbb{B} 36'19	0°39'20
	844 Sep 15 j 18:37	15° \mathbb{M}		max. Earth dist.	850 May 13 j 06:46	24° \mathbb{B} 08'06	6.07723 AU
evening set	844 Nov 02 j 14:59	24° \mathbb{M} 56'46		morning rise	850 May 24 j 19:12	26° \mathbb{B} 48'24	
max. Earth dist.	844 Nov 13 j 05:55	27° \mathbb{M} 20'20	6.29683 AU		850 Jun 07 j 19:25	0° \mathbb{I}	

retrograde	850 Sep 30 j 06:08	16°♊09'35			856 Aug 23 j 04:54	15°♎	
min. Earth dist.	850 Nov 27 j 11:56	11°♊15'42	4.14463 AU	evening set	856 Nov 07 j 00:09	29°♎29'32	
opposition	850 Nov 28 j 18:35	11°♊05'16	-0°30'49		856 Nov 09 j 06:10	0°♏	
direct	851 Jan 26 j 18:41	6°♊05'18		max. Earth dist.	856 Nov 17 j 16:04	1°♏54'23	6.27443 AU
evening set	851 Jun 02 j 10:36	24°♊47'38					
				conjunction	856 Nov 19 j 15:40	2°♏21'26	0°30'49
conjunction	851 Jun 16 j 04:24	27°♊53'09	-0°01'05	minimum elong	856 Nov 19 j 15:41	2°♏21'27	0°30'50
minimum elong	851 Jun 16 j 04:23	27°♊53'09	0°01'04	morning rise	856 Dec 02 j 06:13	5°♏13'07	
behind sun begin	851 Jun 15 j 20:01	27°♊48'28		retrograde	857 Apr 05 j 20:01	23°♏21'50	
behind sun end	851 Jun 16 j 12:45	27°♊57'50		opposition	857 Jun 05 j 18:01	18°♏28'42	0°18'18
max. Earth dist.	851 Jun 17 j 20:26	28°♊15'42	6.21619 AU	min. Earth dist.	857 Jun 07 j 00:07	18°♏19'04	4.20491 AU
	851 Jun 25 j 13:54	0°♋		direct	857 Aug 06 j 00:33	13°♏31'54	
asc. node	851 Jun 26 j 16:37	0°♋14'59		desc. node	857 Oct 08 j 07:57	19°♏16'39	
morning rise	851 Jun 29 j 21:49	0°♋58'10			857 Nov 30 j 00:30	0°♌	
retrograde	851 Nov 01 j 16:48	19°♋10'48		evening set	857 Dec 09 j 07:19	2°♌08'26	
opposition	851 Dec 31 j 10:40	14°♋09'31	0°26'46	max. Earth dist.	857 Dec 20 j 15:48	4°♌47'38	6.13479 AU
min. Earth dist.	851 Dec 30 j 16:21	14°♋15'40	4.28460 AU				
direct	852 Feb 29 j 17:51	9°♋07'19		conjunction	857 Dec 22 j 00:27	5°♌06'47	-0°07'36
evening set	852 Jul 05 j 17:40	27°♋14'33		minimum elong	857 Dec 22 j 00:27	5°♌06'47	0°07'36
	852 Jul 18 j 07:50	0°♌		behind sun begin	857 Dec 21 j 17:09	5°♌02'32	
				behind sun end	857 Dec 22 j 07:44	5°♌11'02	
conjunction	852 Jul 19 j 06:18	0°♌12'20	0°35'58	morning rise	858 Jan 03 j 18:23	8°♌05'47	
minimum elong	852 Jul 19 j 06:15	0°♌12'19	0°35'57	retrograde	858 May 11 j 23:09	27°♌21'22	
max. Earth dist.	852 Jul 19 j 20:11	0°♌19'57	6.34645 AU	opposition	858 Jul 11 j 14:03	22°♌25'27	-0°41'00
morning rise	852 Aug 01 j 16:47	3°♌08'54		min. Earth dist.	858 Jul 12 j 04:14	22°♌20'50	4.06836 AU
	852 Oct 01 j 00:39	15°♌		direct	858 Sep 09 j 11:34	17°♌30'57	
retrograde	852 Dec 01 j 14:41	20°♌27'25			858 Dec 14 j 08:53	0°♍	
opposition	853 Jan 30 j 14:58	15°♌30'01	1°13'09	evening set	859 Jan 12 j 12:58	6°♍43'59	
min. Earth dist.	853 Jan 30 j 15:02	15°♌30'00	4.39555 AU				
	853 Feb 03 j 10:19	15°♍		conjunction	859 Jan 25 j 10:51	9°♍49'35	-0°44'58
direct	853 Apr 02 j 05:22	10°♍26'56		minimum elong	859 Jan 25 j 10:49	9°♍49'33	0°44'57
	853 May 29 j 14:43	15°♍		max. Earth dist.	859 Jan 25 j 06:23	9°♍46'54	6.01387 AU
evening set	853 Aug 07 j 04:58	28°♍09'39		morning rise	859 Feb 07 j 10:51	12°♍56'31	
	853 Aug 15 j 17:23	0°♎			859 Feb 16 j 03:15	15°♍	
					859 May 03 j 21:00	0°♎	
conjunction	853 Aug 20 j 09:41	1°♎00'51	1°01'13	retrograde	859 Jun 18 j 18:45	3°♎11'59	
minimum elong	853 Aug 20 j 09:39	1°♎00'50	1°01'14		859 Aug 04 j 02:31	30°♎	
max. Earth dist.	853 Aug 19 j 19:06	0°♎52'57	6.42941 AU	opposition	859 Aug 17 j 23:08	28°♎12'14	-1°28'25
morning rise	853 Sep 02 j 11:37	3°♎50'35		min. Earth dist.	859 Aug 17 j 14:44	28°♎15'01	3.97580 AU
retrograde	853 Dec 31 j 18:54	20°♎40'22		direct	859 Oct 15 j 12:07	23°♎18'47	
opposition	854 Mar 02 j 03:58	15°♎46'13	1°37'49		859 Dec 20 j 16:33	0°♏	
min. Earth dist.	854 Mar 02 j 21:33	15°♎40'32	4.44679 AU	evening set	860 Feb 17 j 18:36	12°♏56'17	
direct	854 May 03 j 15:22	10°♎43'23					
evening set	854 Sep 07 j 08:43	28°♎16'45		conjunction	860 Mar 01 j 23:23	16°♏07'31	-1°06'36
	854 Sep 15 j 07:43	0°♐		minimum elong	860 Mar 01 j 23:22	16°♏07'31	1°06'36
max. Earth dist.	854 Sep 18 j 18:37	0°♐45'01	6.44442 AU	max. Earth dist.	860 Mar 03 j 02:15	16°♏23'46	5.95777 AU
				morning rise	860 Mar 15 j 07:28	19°♏20'30	
conjunction	854 Sep 20 j 06:17	1°♐04'25	1°09'16		860 May 01 j 13:46	0°♑	
minimum elong	854 Sep 20 j 06:17	1°♐04'25	1°09'16	retrograde	860 Jul 25 j 18:51	9°♑59'57	
morning rise	854 Oct 03 j 00:52	3°♐50'44		min. Earth dist.	860 Sep 22 j 11:10	5°♑05'47	3.96399 AU
retrograde	855 Jan 31 j 06:17	20°♐39'58		opposition	860 Sep 23 j 14:48	4°♑56'26	-1°42'01
opposition	855 Apr 01 j 23:44	15°♐47'47	1°36'16	direct	860 Nov 20 j 11:42	0°♑01'49	
min. Earth dist.	855 Apr 03 j 06:26	15°♐37'59	4.42577 AU	evening set	861 Mar 26 j 04:49	19°♑39'08	
direct	855 Jun 03 j 17:32	10°♐46'17					
evening set	855 Oct 07 j 23:57	28°♐26'33		conjunction	861 Apr 08 j 17:42	22°♑52'31	-1°02'18
	855 Oct 15 j 01:54	0°♒		minimum elong	861 Apr 08 j 17:44	22°♑52'33	1°02'18
max. Earth dist.	855 Oct 18 j 15:35	0°♒47'19	6.38814 AU	max. Earth dist.	861 Apr 10 j 20:47	23°♑22'59	5.99052 AU
				morning rise	861 Apr 22 j 09:17	26°♑07'13	
conjunction	855 Oct 20 j 16:42	1°♒14'29	0°58'30		861 May 09 j 01:01	0°♓	
minimum elong	855 Oct 20 j 16:44	1°♒14'30	0°58'30		861 Aug 02 j 18:47	15°♓	
morning rise	855 Nov 02 j 07:32	4°♒01'36		retrograde	861 Aug 31 j 12:29	16°♓19'45	
	855 Dec 26 j 21:13	15°♒			861 Sep 28 j 22:33	15°♓	
retrograde	856 Mar 03 j 01:55	21°♒18'11		min. Earth dist.	861 Oct 28 j 15:25	11°♓26'14	4.03779 AU
opposition	856 May 02 j 23:09	16°♒26'21	1°08'12	opposition	861 Oct 30 j 01:39	11°♓14'33	-1°15'23
min. Earth dist.	856 May 04 j 11:46	16°♒14'41	4.33731 AU	direct	861 Dec 27 j 05:46	6°♓17'09	
	856 May 14 j 10:05	15°♒♎			862 Mar 15 j 00:28	15°♓	
direct	856 Jul 04 j 07:52	11°♒26'55		evening set	862 May 02 j 11:06	25°♓29'46	

conjunction	862 May 16 j 05:01	28°♄40'33	-0°34'22	retrograde	868 Mar 07 j 16:19	25°♎50'13	
minimum elong	862 May 16 j 05:03	28°♄40'35	0°34'23	opposition	868 May 07 j 14:24	20°♎58'20	1°02'16
max. Earth dist.	862 May 18 j 10:31	29°♄11'31	6.09807 AU	min. Earth dist.	868 May 09 j 02:17	20°♎46'55	4.31906 AU
	862 May 21 j 22:19	0°♊		direct	868 Jul 08 j 19:35	15°♎59'21	
morning rise	862 May 30 j 00:18	1°♊51'45			868 Oct 23 j 22:50	0°♌	
retrograde	862 Oct 04 j 21:01	21°♊02'10		evening set	868 Nov 11 j 11:33	4°♌06'48	
min. Earth dist.	862 Dec 02 j 05:18	16°♊08'22	4.16673 AU	max. Earth dist.	868 Nov 22 j 04:16	6°♌32'50	6.25438 AU
opposition	862 Dec 03 j 11:21	15°♊58'10	-0°22'38				
direct	863 Jan 31 j 14:48	10°♊57'48		conjunction	868 Nov 24 j 02:59	6°♌59'31	0°25'49
asc. node	863 May 06 j 09:31	22°♊40'18		minimum elong	868 Nov 24 j 03:01	6°♌59'32	0°25'50
evening set	863 Jun 07 j 08:29	29°♊34'03		morning rise	868 Dec 06 j 17:57	9°♌52'12	
	863 Jun 09 j 07:00	0°♉		retrograde	869 Apr 10 j 20:08	28°♌10'10	
				opposition	869 Jun 10 j 16:48	23°♌16'45	0°10'03
conjunction	863 Jun 21 j 01:48	2°♉38'25	0°04'35	min. Earth dist.	869 Jun 11 j 21:21	23°♌07'35	4.18449 AU
minimum elong	863 Jun 21 j 01:46	2°♉38'24	0°04'35	direct	869 Aug 10 j 19:40	18°♌20'21	
behind sun begin	863 Jun 20 j 17:37	2°♉33'51		desc. node	869 Aug 17 j 14:30	18°♌24'45	
behind sun end	863 Jun 21 j 09:55	2°♉42'57			869 Nov 12 j 16:55	0°♋	
max. Earth dist.	863 Jun 22 j 13:54	2°♉58'40	6.23789 AU	evening set	869 Dec 14 j 00:30	7°♋02'14	
morning rise	863 Jul 04 j 18:26	5°♉42'09					
retrograde	863 Nov 06 j 03:02	23°♉45'28		conjunction	869 Dec 26 j 18:16	10°♋01'37	-0°13'15
opposition	864 Jan 04 j 21:02	18°♉44'44	0°34'15	minimum elong	869 Dec 26 j 18:15	10°♋01'37	0°13'16
min. Earth dist.	864 Jan 04 j 06:01	18°♉49'45	4.30402 AU	behind sun begin	869 Dec 26 j 13:27	9°♋58'48	
direct	864 Mar 05 j 09:43	13°♉42'20		behind sun end	869 Dec 26 j 23:04	10°♋04'26	
	864 Jul 02 j 06:32	0°♏		max. Earth dist.	869 Dec 25 j 13:55	9°♋44'57	6.11609 AU
evening set	864 Jul 10 j 08:41	1°♏44'55		morning rise	870 Jan 08 j 12:50	13°♋01'44	
					870 Apr 07 j 03:02	0°♎	
conjunction	864 Jul 23 j 20:19	4°♏41'38	0°40'22	retrograde	870 May 17 j 05:10	2°♎26'25	
minimum elong	864 Jul 23 j 20:16	4°♏41'37	0°40'21		870 Jun 26 j 15:07	30°♎	
max. Earth dist.	864 Jul 24 j 06:03	4°♏46'58	6.36214 AU	opposition	870 Jul 16 j 19:06	27°♋30'03	-0°48'58
morning rise	864 Aug 06 j 05:39	7°♏37'05		min. Earth dist.	870 Jul 17 j 05:41	27°♋26'37	4.05333 AU
	864 Sep 10 j 17:16	15°♏		direct	870 Sep 14 j 11:15	22°♋35'54	
retrograde	864 Dec 05 j 19:09	24°♏49'50			870 Nov 24 j 09:43	0°♎	
opposition	865 Feb 03 j 21:27	19°♏52'56	1°18'02	evening set	871 Jan 17 j 13:00	11°♎52'40	
min. Earth dist.	865 Feb 03 j 23:42	19°♏52'11	4.40678 AU				
	865 Mar 27 j 03:34	15°♎♏		conjunction	871 Jan 30 j 11:30	14°♎59'01	-0°49'16
direct	865 Apr 06 j 14:50	14°♏49'47		minimum elong	871 Jan 30 j 11:27	14°♎59'00	0°49'16
	865 Apr 17 j 04:52	15°♏		max. Earth dist.	871 Jan 30 j 10:57	14°♎58'42	6.00378 AU
	865 Jul 30 j 20:06	0°♎			871 Jan 30 j 13:07	15°♎	
evening set	865 Aug 11 j 14:45	2°♎30'21		morning rise	871 Feb 12 j 12:33	18°♎06'51	
					871 Apr 07 j 07:28	0°♎	
conjunction	865 Aug 24 j 18:26	5°♎20'51	1°03'26	retrograde	871 Jun 24 j 02:05	8°♎27'17	
minimum elong	865 Aug 24 j 18:24	5°♎20'50	1°03'25	opposition	871 Aug 23 j 06:13	3°♎26'55	-1°32'40
max. Earth dist.	865 Aug 24 j 00:35	5°♎11'12	6.43538 AU	min. Earth dist.	871 Aug 22 j 18:12	3°♎30'55	3.97192 AU
morning rise	865 Sep 06 j 19:09	8°♎09'54			871 Sep 21 j 03:15	30°♎	
retrograde	866 Jan 05 j 00:19	24°♎58'07		direct	871 Oct 20 j 16:02	28°♎33'27	
opposition	866 Mar 06 j 10:22	20°♎04'22	1°39'12		871 Nov 19 j 01:08	0°♎	
min. Earth dist.	866 Mar 07 j 06:31	19°♎57'52	4.44730 AU	evening set	872 Feb 22 j 22:57	18°♎11'16	
direct	866 May 07 j 23:48	15°♎01'42					
	866 Aug 30 j 12:34	0°♎		conjunction	872 Mar 07 j 04:55	21°♎22'53	-1°07'37
evening set	866 Sep 11 j 15:46	2°♎35'24		minimum elong	872 Mar 07 j 04:55	21°♎22'52	1°07'36
max. Earth dist.	866 Sep 22 j 20:48	5°♎01'21	6.43925 AU	max. Earth dist.	872 Mar 08 j 13:22	21°♎42'29	5.96040 AU
				morning rise	872 Mar 20 j 13:52	24°♎36'09	
conjunction	866 Sep 24 j 12:27	5°♎22'56	1°08'52		872 Apr 12 j 14:35	0°♎	
minimum elong	866 Sep 24 j 12:27	5°♎22'56	1°08'52	retrograde	872 Jul 31 j 00:37	15°♎13'22	
morning rise	866 Oct 07 j 06:28	8°♎09'13		opposition	872 Sep 28 j 18:36	10°♎09'30	-1°40'30
retrograde	867 Feb 04 j 15:45	25°♎01'12		min. Earth dist.	872 Sep 27 j 14:06	10°♎19'09	3.97292 AU
opposition	867 Apr 06 j 09:19	20°♎09'09	1°33'51	direct	872 Nov 25 j 16:13	5°♎14'36	
min. Earth dist.	867 Apr 07 j 17:41	19°♎58'48	4.41533 AU	evening set	873 Mar 31 j 09:18	24°♎48'26	
direct	867 Jun 08 j 02:41	15°♎07'52					
	867 Sep 29 j 04:26	0°♎		conjunction	873 Apr 13 j 22:57	28°♎01'33	-0°59'35
evening set	867 Oct 12 j 07:26	2°♎51'03		minimum elong	873 Apr 13 j 22:59	28°♎01'34	0°59'35
max. Earth dist.	867 Oct 22 j 23:23	5°♎12'28	6.37330 AU	max. Earth dist.	873 Apr 16 j 02:55	28°♎32'23	6.00457 AU
					873 Apr 22 j 06:44	0°♎	
conjunction	867 Oct 25 j 00:01	5°♎39'27	0°55'31	morning rise	873 Apr 27 j 15:24	1°♎15'56	
minimum elong	867 Oct 25 j 00:03	5°♎39'28	0°55'30		873 Jul 01 j 11:22	15°♎	
morning rise	867 Nov 06 j 14:28	8°♎27'03		retrograde	873 Sep 05 j 08:20	21°♎20'19	
	867 Dec 07 j 07:57	15°♎		min. Earth dist.	873 Nov 02 j 11:21	16°♎27'04	4.05543 AU

opposition	873 Nov 03 j 22:15	16°♄15'10 -1°09'07	conjunction	879 Oct 29 j 07:34	10°♍06'32 0°52'10
	873 Nov 13 j 05:22	15°♄♄	minimum elong	879 Oct 29 j 07:36	10°♍06'33 0°52'10
direct	874 Jan 01 j 03:53	11°♄17'21	morning rise	879 Nov 10 j 22:02	12°♍54'40
	874 Feb 18 j 18:58	15°♄		879 Nov 20 j 09:58	15°♍
	874 May 05 j 16:24	0°♄		880 Feb 25 j 07:11	0°♄
evening set	874 May 07 j 11:31	0°♄24'40	retrograde	880 Mar 12 j 08:02	0°♄24'02
				880 Mar 28 j 09:01	30°♍♍
conjunction	874 May 21 j 05:37	3°♄34'40 -0°29'20	opposition	880 May 12 j 06:24	25°♍31'57 0°55'54
minimum elong	874 May 21 j 05:39	3°♄34'42 0°29'19	min. Earth dist.	880 May 13 j 17:39	25°♍20'43 4.30254 AU
max. Earth dist.	874 May 23 j 08:23	4°♄03'56 6.11770 AU	direct	880 Jul 13 j 09:08	20°♍33'14
morning rise	874 Jun 04 j 00:51	6°♄44'56		880 Oct 06 j 03:49	0°♄
retrograde	874 Oct 09 j 10:22	25°♄45'45	evening set	880 Nov 15 j 22:33	8°♄44'33
min. Earth dist.	874 Dec 06 j 21:20	20°♄51'22 4.18627 AU	max. Earth dist.	880 Nov 26 j 18:33	11°♄12'59 6.23678 AU
opposition	874 Dec 08 j 00:34	20°♄42'07 -0°14'36			
direct	875 Feb 05 j 09:10	15°♄41'26	conjunction	880 Nov 28 j 14:16	11°♄38'02 0°20'40
asc. node	875 Mar 17 j 08:05	18°♄09'35	minimum elong	880 Nov 28 j 14:17	11°♄38'03 0°20'40
	875 May 23 j 20:15	0°♄	morning rise	880 Dec 11 j 05:22	14°♄31'33
evening set	875 Jun 12 j 02:58	4°♄12'49		881 Mar 02 j 04:10	0°♄
			retrograde	881 Apr 15 j 18:15	2°♄57'41
conjunction	875 Jun 25 j 19:50	7°♄16'12 0°09'55		881 May 31 j 02:38	30°♍♄
minimum elong	875 Jun 25 j 19:50	7°♄16'12 0°09'55	opposition	881 Jun 15 j 15:00	28°♄03'55 0°01'45
behind sun begin	875 Jun 25 j 13:09	7°♄12'29	min. Earth dist.	881 Jun 16 j 17:31	27°♄55'24 4.16690 AU
behind sun end	875 Jun 26 j 02:31	7°♄19'55	desc. node	881 Jun 27 j 09:26	26°♄34'36
max. Earth dist.	875 Jun 27 j 05:09	7°♄34'48 6.25588 AU	direct	881 Aug 15 j 13:36	23°♄07'52
morning rise	875 Jul 09 j 11:39	10°♄18'50		881 Oct 23 j 21:57	0°♄
retrograde	875 Nov 10 j 08:56	28°♄14'28	evening set	881 Dec 18 j 17:06	11°♄54'01
opposition	876 Jan 09 j 04:42	23°♄14'18 0°41'18	max. Earth dist.	881 Dec 30 j 09:03	14°♄38'50 6.09985 AU
min. Earth dist.	876 Jan 08 j 15:22	23°♄18'45 4.31925 AU			
direct	876 Mar 09 j 20:30	18°♄11'45	conjunction	881 Dec 31 j 11:10	14°♄54'15 -0°18'48
	876 Jun 15 j 11:27	0°♄	minimum elong	881 Dec 31 j 11:08	14°♄54'14 0°18'47
evening set	876 Jul 14 j 21:36	6°♄11'18	morning rise	882 Jan 13 j 06:33	17°♄55'22
				882 Mar 10 j 09:15	0°♄
conjunction	876 Jul 28 j 08:09	9°♄07'08 0°44'25	retrograde	882 May 22 j 09:09	7°♄28'12
minimum elong	876 Jul 28 j 08:06	9°♄07'07 0°44'26	opposition	882 Jul 21 j 22:20	2°♄31'14 -0°56'30
max. Earth dist.	876 Jul 28 j 12:50	9°♄09'42 6.37351 AU	min. Earth dist.	882 Jul 22 j 05:42	2°♄28'50 4.03981 AU
morning rise	876 Aug 10 j 16:25	12°♄01'40		882 Aug 11 j 05:17	30°♍♄
	876 Aug 24 j 13:12	15°♄	direct	882 Sep 19 j 10:07	27°♄37'12
retrograde	876 Dec 10 j 00:57	29°♄10'21		882 Oct 27 j 23:19	0°♄
opposition	877 Feb 08 j 03:16	24°♄13'59 1°22'24		883 Jan 14 j 06:03	15°♄
min. Earth dist.	877 Feb 08 j 08:59	24°♄12'06 4.41380 AU	evening set	883 Jan 22 j 11:35	16°♄57'25
direct	877 Apr 11 j 00:55	19°♄10'51			
	877 Jul 13 j 21:13	0°♄	conjunction	883 Feb 04 j 11:06	20°♄04'36 -0°53'10
evening set	877 Aug 15 j 23:29	6°♄50'26	minimum elong	883 Feb 04 j 11:04	20°♄04'34 0°53'10
max. Earth dist.	877 Aug 28 j 04:59	9°♄28'59 6.43744 AU	max. Earth dist.	883 Feb 04 j 16:08	20°♄07'37 5.99424 AU
			morning rise	883 Feb 17 j 13:00	23°♄13'15
conjunction	877 Aug 29 j 02:12	9°♄40'28 1°05'16		883 Mar 18 j 18:11	0°♄
minimum elong	877 Aug 29 j 02:10	9°♄40'27 1°05'15	retrograde	883 Jun 29 j 09:30	13°♄38'17
morning rise	877 Sep 11 j 01:53	12°♄29'02	opposition	883 Aug 28 j 11:25	8°♄37'24 -1°36'10
retrograde	878 Jan 09 j 05:14	29°♄17'00	min. Earth dist.	883 Aug 27 j 21:38	8°♄42'00 3.96756 AU
opposition	878 Mar 10 j 17:00	24°♄23'32 1°40'01	direct	883 Oct 25 j 19:02	3°♄43'50
min. Earth dist.	878 Mar 11 j 14:32	24°♄16'35 4.44472 AU	evening set	884 Feb 28 j 02:12	23°♄22'25
direct	878 May 12 j 07:04	19°♄21'00			
	878 Aug 13 j 13:07	0°♄	conjunction	884 Mar 12 j 09:08	26°♄34'27 -1°08'06
evening set	878 Sep 15 j 22:58	6°♄55'50	minimum elong	884 Mar 12 j 09:08	26°♄34'27 1°08'06
max. Earth dist.	878 Sep 27 j 02:46	9°♄21'24 6.43226 AU	max. Earth dist.	884 Mar 13 j 20:00	26°♄55'28 5.96135 AU
			morning rise	884 Mar 25 j 19:23	29°♄48'11
conjunction	878 Sep 28 j 18:57	9°♄43'20 1°08'03		884 Mar 26 j 15:09	0°♄
minimum elong	878 Sep 28 j 18:58	9°♄43'21 1°08'03	retrograde	884 Aug 05 j 03:09	20°♄23'43
morning rise	878 Oct 11 j 12:11	12°♄29'37	opposition	884 Oct 03 j 20:55	15°♄19'32 -1°38'15
retrograde	879 Feb 09 j 01:05	29°♄24'44	min. Earth dist.	884 Oct 02 j 14:12	15°♄29'57 3.97928 AU
opposition	879 Apr 10 j 19:33	24°♄32'49 1°30'52	direct	884 Nov 30 j 17:36	10°♄24'15
min. Earth dist.	879 Apr 12 j 04:55	24°♄22'11 4.40443 AU	evening set	885 Apr 05 j 13:35	29°♄55'54
direct	879 Jun 12 j 12:51	19°♄31'51		885 Apr 05 j 20:33	0°♄
	879 Sep 12 j 01:12	0°♄			
evening set	879 Oct 16 j 15:26	7°♄17'44	conjunction	885 Apr 19 j 04:09	3°♄08'55 -0°56'27
max. Earth dist.	879 Oct 27 j 05:34	9°♄38'42 6.35923 AU	minimum elong	885 Apr 19 j 04:12	3°♄08'57 0°56'26
			max. Earth dist.	885 Apr 21 j 08:27	3°♄39'53 6.01565 AU






























































































































morning rise	885 May 02 j 21:18	6°♄23'05		minimum elong	890 Oct 03 j 01:35	14°♄04'33	1°06'54
	885 Jun 10 j 07:45	15°♄		morning rise	890 Oct 15 j 18:11	16°♄50'41	
retrograde	885 Sep 10 j 05:32	26°♄20'33			890 Dec 24 j 10:06	0°♄	
min. Earth dist.	885 Nov 07 j 09:13	21°♄26'53	4.06971 AU	retrograde	891 Feb 13 j 09:23	3°♄47'33	
opposition	885 Nov 08 j 18:47	21°♄15'25	-1°02'24		891 Apr 06 j 18:21	30°♄	
direct	886 Jan 06 j 03:59	16°♄17'09		opposition	891 Apr 15 j 05:57	28°♄55'41	1°27'25
	886 Apr 18 j 15:40	0°♄		min. Earth dist.	891 Apr 16 j 15:08	28°♄45'06	4.39890 AU
evening set	886 May 12 j 12:52	5°♄20'32		direct	891 Jun 16 j 22:12	23°♄55'01	
					891 Aug 23 j 05:30	0°♄	
conjunction	886 May 26 j 07:20	8°♄29'56	-0°24'02	evening set	891 Oct 20 j 22:02	11°♄41'42	
minimum elong	886 May 26 j 07:22	8°♄29'57	0°24'02	max. Earth dist.	891 Oct 31 j 13:19	14°♄03'36	6.35078 AU
max. Earth dist.	886 May 28 j 09:35	8°♄58'46	6.13411 AU				
morning rise	886 Jun 09 j 02:26	11°♄39'25		conjunction	891 Nov 02 j 13:52	14°♄30'42	0°48'38
	886 Sep 26 j 01:42	0°♄		minimum elong	891 Nov 02 j 13:55	14°♄30'43	0°48'38
retrograde	886 Oct 14 j 00:12	0°♄31'36			891 Nov 04 j 18:21	15°♄	
	886 Oct 31 j 19:55	30°♄		morning rise	891 Nov 15 j 03:59	17°♄19'06	
opposition	886 Dec 12 j 14:56	25°♄28'25	-0°06'23		892 Jan 18 j 11:52	0°♄	
min. Earth dist.	886 Dec 11 j 12:35	25°♄37'20	4.20314 AU	retrograde	892 Mar 16 j 21:12	4°♄52'59	
asc. node	887 Jan 25 j 02:30	20°♄52'49		opposition	892 May 16 j 20:27	0°♄00'49	0°49'21
direct	887 Feb 10 j 02:23	20°♄27'27			892 May 16 j 22:59	30°♄	
	887 May 05 j 13:44	0°♄		min. Earth dist.	892 May 18 j 07:34	29°♄49'38	4.29142 AU
evening set	887 Jun 16 j 23:17	8°♄54'53		direct	892 Jul 17 j 21:24	25°♄02'29	
					892 Sep 15 j 01:53	0°♄	
conjunction	887 Jun 30 j 15:25	11°♄57'19	0°15'18	evening set	892 Nov 20 j 07:06	13°♄16'01	
minimum elong	887 Jun 30 j 15:24	11°♄57'18	0°15'18	max. Earth dist.	892 Dec 01 j 03:01	15°♄44'55	6.22388 AU
behind sun begin	887 Jun 30 j 13:21	11°♄56'10					
behind sun end	887 Jun 30 j 17:26	11°♄58'26		conjunction	892 Dec 02 j 22:44	16°♄10'02	0°15'33
max. Earth dist.	887 Jul 01 j 19:54	12°♄13'10	6.27193 AU	minimum elong	892 Dec 02 j 22:45	16°♄10'03	0°15'32
morning rise	887 Jul 14 j 06:33	14°♄58'56		behind sun begin	892 Dec 02 j 20:17	16°♄08'38	
	887 Oct 03 j 01:53	0°♄		behind sun end	892 Dec 03 j 01:12	16°♄11'27	
retrograde	887 Nov 14 j 19:05	2°♄47'38		morning rise	892 Dec 15 j 14:17	19°♄04'15	
	887 Dec 27 j 11:44	30°♄			893 Feb 05 j 06:46	0°♄	
opposition	888 Jan 13 j 14:50	27°♄48'01	0°48'16	retrograde	893 Apr 20 j 12:59	7°♄37'16	
min. Earth dist.	888 Jan 13 j 04:35	27°♄51'26	4.33334 AU	desc. node	893 May 09 j 06:35	7°♄04'30	
direct	888 Mar 14 j 11:52	22°♄45'22		opposition	893 Jun 20 j 09:41	2°♄43'08	-0°06'17
	888 May 27 j 01:03	0°♄		min. Earth dist.	893 Jun 21 j 10:04	2°♄35'17	4.15293 AU
evening set	888 Jul 19 j 12:25	10°♄42'01			893 Jul 12 j 19:27	30°♄	
				direct	893 Aug 20 j 04:03	27°♄47'20	
conjunction	888 Aug 01 j 22:04	13°♄37'00	0°48'20		893 Sep 26 j 23:54	0°♄	
minimum elong	888 Aug 01 j 22:02	13°♄36'59	0°48'20	evening set	893 Dec 23 j 05:49	16°♄36'55	
max. Earth dist.	888 Aug 02 j 00:41	13°♄38'26	6.38483 AU	max. Earth dist.	894 Jan 04 j 02:24	19°♄24'52	6.08612 AU
	888 Aug 08 j 06:17	15°♄					
morning rise	888 Aug 15 j 05:01	16°♄30'35		conjunction	894 Jan 05 j 00:32	19°♄37'58	-0°24'00
	888 Oct 26 j 04:50	0°♄		minimum elong	894 Jan 05 j 00:30	19°♄37'57	0°24'00
retrograde	888 Dec 14 j 06:30	3°♄35'07		morning rise	894 Jan 17 j 20:26	22°♄39'57	
	889 Feb 02 j 00:48	30°♄			894 Feb 19 j 03:40	0°♄	
opposition	889 Feb 12 j 11:06	28°♄39'16	1°26'26	retrograde	894 May 27 j 10:16	12°♄20'18	
min. Earth dist.	889 Feb 12 j 17:52	28°♄37'04	4.42211 AU	opposition	894 Jul 26 j 21:23	7°♄22'54	-1°03'21
direct	889 Apr 15 j 10:46	23°♄36'17		min. Earth dist.	894 Jul 27 j 03:20	7°♄20'57	4.02755 AU
	889 Jun 23 j 23:46	0°♄		direct	894 Sep 24 j 05:07	2°♄29'02	
evening set	889 Aug 20 j 10:02	11°♄14'14			894 Dec 28 j 15:05	15°♄	
max. Earth dist.	889 Sep 01 j 11:32	13°♄50'37	6.44236 AU	evening set	895 Jan 27 j 06:22	21°♄52'41	
conjunction	889 Sep 02 j 11:33	14°♄03'38	1°06'47	conjunction	895 Feb 09 j 06:38	25°♄00'39	-0°56'32
minimum elong	889 Sep 02 j 11:32	14°♄03'37	1°06'47	minimum elong	895 Feb 09 j 06:36	25°♄00'38	0°56'32
morning rise	889 Sep 15 j 10:14	16°♄51'36		max. Earth dist.	895 Feb 09 j 13:31	25°♄04'48	5.98446 AU
	889 Nov 24 j 18:31	0°♄		morning rise	895 Feb 22 j 09:45	28°♄10'15	
retrograde	890 Jan 13 j 12:51	3°♄38'20			895 Mar 02 j 02:02	0°♄	
	890 Mar 05 j 05:51	30°♄		retrograde	895 Jul 04 j 10:56	18°♄40'10	
opposition	890 Mar 15 j 01:16	28°♄45'15	1°40'20	opposition	895 Sep 02 j 12:08	13°♄38'49	-1°38'51
min. Earth dist.	890 Mar 16 j 01:01	28°♄37'37	4.44618 AU	min. Earth dist.	895 Sep 01 j 19:21	13°♄44'25	3.96160 AU
direct	890 May 16 j 18:13	23°♄42'58		direct	895 Oct 30 j 16:10	8°♄45'07	
	890 Jul 24 j 18:29	0°♄		evening set	896 Mar 04 j 02:19	28°♄25'40	
evening set	890 Sep 20 j 06:20	11°♄17'15			896 Mar 10 j 15:21	0°♄	
max. Earth dist.	890 Oct 01 j 07:31	13°♄41'35	6.43015 AU				
				conjunction	896 Mar 17 j 10:28	1°♄38'19	-1°08'04
conjunction	890 Oct 03 j 01:34	14°♄04'33	1°06'55	minimum elong	896 Mar 17 j 10:28	1°♄38'20	1°08'04

max. Earth dist.	896 Mar 19 j 00:03	2° Υ 00'59	5.95979 AU	morning rise	901 Sep 19 j 17:06	21° \mathbb{M} 11'40	
morning rise	896 Mar 30 j 21:47	4° Υ 52'38			901 Nov 02 j 04:36	0° $\underline{\mathfrak{A}}$	
retrograde	896 Aug 10 j 04:27	25° Υ 27'43		retrograde	902 Jan 17 j 17:43	7° $\underline{\mathfrak{A}}$ 57'35	
opposition	896 Oct 08 j 20:08	20° Υ 23'14	-1°35'23	opposition	902 Mar 19 j 08:45	3° $\underline{\mathfrak{A}}$ 04'40	1°40'06
min. Earth dist.	896 Oct 07 j 13:19	20° Υ 33'43	3.98228 AU	min. Earth dist.	902 Mar 20 j 09:19	2° $\underline{\mathfrak{A}}$ 56'47	4.44529 AU
direct	896 Dec 05 j 17:26	15° Υ 27'34			902 Apr 14 j 05:45	30° \mathbb{R} \mathbb{M}	
	897 Mar 20 j 02:15	0° \mathfrak{B}		direct	902 May 21 j 01:48	28° \mathbb{M} 02'31	
evening set	897 Apr 10 j 15:46	4° \mathfrak{B} 58'36			902 Jun 27 j 02:36	0° $\underline{\mathfrak{A}}$	
				evening set	902 Sep 24 j 13:06	15° $\underline{\mathfrak{A}}$ 37'00	
conjunction	897 Apr 24 j 07:24	8° \mathfrak{B} 11'46	-0°52'58	max. Earth dist.	902 Oct 05 j 11:46	18° $\underline{\mathfrak{A}}$ 00'15	6.42434 AU
minimum elong	897 Apr 24 j 07:27	8° \mathfrak{B} 11'47	0°52'59				
max. Earth dist.	897 Apr 26 j 13:46	8° \mathfrak{B} 43'51	6.02309 AU	conjunction	902 Oct 07 j 07:33	18° $\underline{\mathfrak{A}}$ 24'13	1°05'24
morning rise	897 May 08 j 01:16	11° \mathfrak{B} 25'54		minimum elong	902 Oct 07 j 07:34	18° $\underline{\mathfrak{A}}$ 24'14	1°05'23
	897 May 23 j 12:07	15° \mathfrak{B}		morning rise	902 Oct 19 j 23:35	21° $\underline{\mathfrak{A}}$ 10'21	
	897 Aug 17 j 17:29	0° \mathbb{I}			902 Dec 02 j 01:17	0° \mathbb{M}	
retrograde	897 Sep 15 j 01:22	1° \mathbb{I} 17'43		retrograde	903 Feb 17 j 20:01	8° \mathbb{M} 10'16	
	897 Oct 13 j 02:30	30° \mathbb{R} \mathfrak{B}		opposition	903 Apr 19 j 16:36	3° \mathbb{M} 18'27	1°23'28
min. Earth dist.	897 Nov 12 j 03:59	26° \mathfrak{B} 24'14	4.08079 AU	min. Earth dist.	903 Apr 21 j 03:39	3° \mathbb{M} 07'18	4.38827 AU
opposition	897 Nov 13 j 13:46	26° \mathfrak{B} 12'43	-0°55'23		903 May 18 j 03:23	30° \mathbb{R} $\underline{\mathfrak{A}}$	
direct	898 Jan 11 j 00:26	21° \mathfrak{B} 14'05		direct	903 Jun 21 j 08:53	28° $\underline{\mathfrak{A}}$ 18'02	
	898 Mar 30 j 17:53	0° \mathbb{I}			903 Jul 25 j 12:21	0° \mathbb{M}	
evening set	898 May 17 j 13:22	10° \mathbb{I} 14'39			903 Oct 20 j 03:40	15° \mathbb{M}	
				evening set	903 Oct 25 j 05:25	16° \mathbb{M} 07'17	
conjunction	898 May 31 j 07:50	13° \mathbb{I} 23'28	-0°18'40	max. Earth dist.	903 Nov 04 j 19:10	18° \mathbb{M} 28'51	6.33604 AU
minimum elong	898 May 31 j 07:51	13° \mathbb{I} 23'29	0°18'39				
max. Earth dist.	898 Jun 02 j 07:14	13° \mathbb{I} 50'36	6.14788 AU	conjunction	903 Nov 06 j 21:02	18° \mathbb{M} 56'47	0°44'44
morning rise	898 Jun 14 j 02:58	16° \mathbb{I} 32'18		minimum elong	903 Nov 06 j 21:04	18° \mathbb{M} 56'48	0°44'45
	898 Aug 19 j 18:05	0° $\underline{\mathfrak{B}}$		morning rise	903 Nov 19 j 11:13	21° \mathbb{M} 45'47	
retrograde	898 Oct 18 j 13:50	5° $\underline{\mathfrak{B}}$ 16'47			903 Dec 28 j 08:06	0° \mathfrak{A}	
asc. node	898 Dec 05 j 05:14	1° $\underline{\mathfrak{B}}$ 49'29		retrograde	904 Mar 21 j 12:57	9° \mathfrak{A} 26'31	
min. Earth dist.	898 Dec 16 j 04:13	0° $\underline{\mathfrak{B}}$ 22'14	4.21819 AU	opposition	904 May 21 j 12:43	4° \mathfrak{A} 34'08	0°42'22
opposition	898 Dec 17 j 04:47	0° $\underline{\mathfrak{B}}$ 13'56	0°01'46	min. Earth dist.	904 May 22 j 22:34	4° \mathfrak{A} 23'20	4.27337 AU
	898 Dec 18 j 21:59	30° \mathbb{R} \mathbb{I}			904 Jul 06 j 07:55	30° \mathbb{R} \mathbb{M}	
direct	899 Feb 14 j 21:13	25° \mathbb{I} 12'35		direct	904 Jul 22 j 09:16	29° \mathbb{M} 36'06	
	899 Apr 13 j 06:04	0° $\underline{\mathfrak{B}}$			904 Aug 07 j 11:43	0° \mathfrak{A}	
evening set	899 Jun 21 j 18:59	13° $\underline{\mathfrak{B}}$ 36'21		evening set	904 Nov 24 j 18:25	17° \mathfrak{A} 54'20	
				max. Earth dist.	904 Dec 05 j 17:44	20° \mathfrak{A} 25'47	6.20408 AU
conjunction	899 Jul 05 j 10:38	16° $\underline{\mathfrak{B}}$ 37'52	0°20'33				
minimum elong	899 Jul 05 j 10:36	16° $\underline{\mathfrak{B}}$ 37'51	0°20'33	conjunction	904 Dec 07 j 10:24	20° \mathfrak{A} 49'17	0°10'10
max. Earth dist.	899 Jul 06 j 13:51	16° $\underline{\mathfrak{B}}$ 52'59	6.28721 AU	minimum elong	904 Dec 07 j 10:24	20° \mathfrak{A} 49'17	0°10'10
morning rise	899 Jul 19 j 00:41	19° $\underline{\mathfrak{B}}$ 38'24		behind sun begin	904 Dec 07 j 03:59	20° \mathfrak{A} 45'35	
	899 Sep 07 j 18:02	0° Ω		behind sun end	904 Dec 07 j 16:50	20° \mathfrak{A} 52'58	
retrograde	899 Nov 19 j 03:22	7° Ω 20'03		morning rise	904 Dec 20 j 02:16	23° \mathfrak{A} 44'28	
opposition	900 Jan 18 j 00:18	2° Ω 20'54	0°54'52		905 Jan 17 j 04:07	0° \mathfrak{B}	
min. Earth dist.	900 Jan 17 j 15:23	2° Ω 23'52	4.34754 AU	desc. node	905 Mar 19 j 06:24	10° \mathfrak{B} 20'34	
	900 Feb 05 j 10:43	30° \mathbb{R} $\underline{\mathfrak{B}}$		retrograde	905 Apr 25 j 14:32	12° \mathfrak{B} 27'01	
direct	900 Mar 19 j 00:58	27° $\underline{\mathfrak{B}}$ 18'05		opposition	905 Jun 25 j 09:01	7° \mathfrak{B} 32'33	-0°14'39
	900 May 01 j 01:55	0° Ω		min. Earth dist.	905 Jun 26 j 08:20	7° \mathfrak{B} 25'02	4.13274 AU
	900 Jul 23 j 05:29	15° Ω		direct	905 Aug 24 j 23:07	2° \mathfrak{B} 37'05	
evening set	900 Jul 24 j 02:30	15° Ω 11'21		evening set	905 Dec 28 j 00:06	21° \mathfrak{B} 32'20	
conjunction	900 Aug 06 j 10:52	18° Ω 05'21	0°51'56	conjunction	906 Jan 09 j 19:21	24° \mathfrak{B} 34'27	-0°29'19
minimum elong	900 Aug 06 j 10:50	18° Ω 05'20	0°51'55	minimum elong	906 Jan 09 j 19:19	24° \mathfrak{B} 34'26	0°29'19
max. Earth dist.	900 Aug 06 j 08:53	18° Ω 04'17	6.39654 AU	max. Earth dist.	906 Jan 08 j 23:26	24° \mathfrak{B} 22'37	6.06733 AU
morning rise	900 Aug 19 j 16:47	20° Ω 57'59		morning rise	906 Jan 22 j 16:17	27° \mathfrak{B} 37'40	
	900 Oct 03 j 04:26	0° \mathbb{M}			906 Feb 01 j 19:07	0° \approx	
retrograde	900 Dec 18 j 13:21	7° \mathbb{M} 58'06			906 Apr 22 j 14:28	15° \approx	
opposition	901 Feb 16 j 18:30	3° \mathbb{M} 02'35	1°29'56	retrograde	906 Jun 01 j 15:43	17° \approx 27'15	
min. Earth dist.	901 Feb 17 j 04:18	2° \mathbb{M} 59'24	4.43041 AU		906 Jul 12 j 00:17	15° \mathbb{R} \approx	
	901 Mar 13 j 22:15	30° \mathbb{R} Ω		opposition	906 Aug 01 j 02:21	12° \approx 29'21	-1°10'10
direct	901 Apr 19 j 22:28	27° Ω 59'31		min. Earth dist.	906 Aug 01 j 04:21	12° \approx 28'42	4.01217 AU
	901 May 27 j 06:16	0° \mathbb{M}		direct	906 Sep 29 j 04:23	7° \approx 35'39	
evening set	901 Aug 24 j 18:58	15° \mathbb{M} 35'28			906 Dec 08 j 16:03	15° \approx	
				evening set	907 Feb 01 j 08:07	27° \approx 03'54	
conjunction	901 Sep 06 j 19:36	18° \mathbb{M} 24'18	1°07'56		907 Feb 13 j 12:14	0° \mathfrak{H}	
minimum elong	901 Sep 06 j 19:35	18° \mathbb{M} 24'17	1°07'56				
max. Earth dist.	901 Sep 05 j 17:46	18° \mathbb{M} 10'18	6.44620 AU	conjunction	907 Feb 14 j 09:30	0° \mathfrak{H} 12'51	-0°59'40

minimum elong	907 Feb 14 j 09:27	0° H 12'49	0°59'39	max. Earth dist.	912 Aug 10 j 15:36	22° Ω 23'41	6.40988 AU
max. Earth dist.	907 Feb 14 j 21:37	0° H 20'10	5.97400 AU	morning rise	912 Aug 24 j 00:53	25° Ω 17'50	
morning rise	907 Feb 27 j 13:39	3° H 23'24			912 Sep 15 j 07:48	0° H	
retrograde	907 Jul 09 j 20:45	23° H 58'00		retrograde	912 Dec 22 j 15:46	12° H 13'39	
opposition	907 Sep 07 j 19:22	18° H 56'10	-1°40'54	opposition	913 Feb 20 j 22:48	7° H 18'37	1°32'49
min. Earth dist.	907 Sep 07 j 00:35	19° H 02'28	3.95747 AU	min. Earth dist.	913 Feb 21 j 10:42	7° H 14'44	4.43835 AU
direct	907 Nov 04 j 21:54	14° H 02'22		direct	913 Apr 24 j 04:53	2° H 15'36	
	908 Feb 22 j 14:21	0° Y		evening set	913 Aug 29 j 01:00	19° H 50'02	
evening set	908 Mar 09 j 08:58	3° Y 43'53		max. Earth dist.	913 Sep 09 j 17:36	22° H 21'38	6.44792 AU
conjunction	908 Mar 22 j 18:22	6° Y 57'00	-1°07'30	conjunction	913 Sep 11 j 00:29	22° H 38'23	1°08'40
minimum elong	908 Mar 22 j 18:23	6° Y 57'00	1°07'29	minimum elong	913 Sep 11 j 00:28	22° H 38'22	1°08'40
max. Earth dist.	908 Mar 24 j 12:32	7° Y 22'22	5.96253 AU	morning rise	913 Sep 23 j 21:12	25° H 25'21	
morning rise	908 Apr 05 j 06:49	10° Y 11'41			913 Oct 15 j 14:11	0° Ω	
	908 Jul 25 j 06:20	0° B		retrograde	914 Jan 21 j 23:36	12° Ω 11'32	
retrograde	908 Aug 15 j 09:15	0° B 43'39		opposition	914 Mar 23 j 14:10	7° Ω 18'53	1°39'22
	908 Sep 05 j 07:29	30° R Y		min. Earth dist.	914 Mar 24 j 17:54	7° Ω 10'00	4.44075 AU
min. Earth dist.	908 Oct 12 j 15:18	25° Y 50'07	3.99195 AU	direct	914 May 25 j 08:41	2° Ω 16'50	
opposition	908 Oct 14 j 00:02	25° Y 38'59	-1°31'36	evening set	914 Sep 28 j 17:30	19° Ω 52'53	
direct	908 Dec 10 j 20:58	20° Y 43'03		max. Earth dist.	914 Oct 09 j 13:57	22° Ω 15'16	6.41371 AU
	909 Feb 28 j 21:49	0° B		conjunction	914 Oct 11 j 11:34	22° Ω 40'18	1°03'34
evening set	909 Apr 15 j 22:30	10° B 10'42		minimum elong	914 Oct 11 j 11:35	22° Ω 40'19	1°03'34
conjunction	909 Apr 29 j 14:41	13° B 23'26	-0°48'59	morning rise	914 Oct 24 j 03:06	25° Ω 26'42	
minimum elong	909 Apr 29 j 14:44	13° B 23'28	0°48'59		914 Nov 14 j 10:20	0° M	
max. Earth dist.	909 May 01 j 20:42	13° B 55'11	6.03877 AU	retrograde	915 Feb 22 j 04:46	12° M 31'32	
	909 May 06 j 11:07	15° B		opposition	915 Apr 24 j 02:29	7° M 39'43	1°19'08
morning rise	909 May 13 j 09:13	16° B 37'05		min. Earth dist.	915 Apr 25 j 13:32	7° M 28'33	4.37221 AU
	909 Jul 16 j 01:16	0° II		direct	915 Jun 25 j 15:18	2° M 39'33	
retrograde	909 Sep 19 j 21:04	6° II 19'39			915 Oct 03 j 20:40	15° M	
min. Earth dist.	909 Nov 17 j 00:56	1° II 26'11	4.10066 AU	evening set	915 Oct 29 j 12:24	20° M 33'17	
opposition	909 Nov 18 j 10:22	1° II 14'47	-0°47'51	max. Earth dist.	915 Nov 09 j 02:30	22° M 55'43	6.31578 AU
	909 Nov 27 j 16:17	30° R B		conjunction	915 Nov 11 j 03:54	23° M 23'32	0°40'38
direct	910 Jan 16 j 01:15	26° B 15'42		minimum elong	915 Nov 11 j 03:56	23° M 23'33	0°40'37
	910 Mar 06 j 05:28	0° II		morning rise	915 Nov 23 j 18:10	26° M 13'23	
evening set	910 May 22 j 14:45	15° II 10'18			915 Dec 10 j 21:12	0° J	
conjunction	910 Jun 05 j 09:15	18° II 18'07	-0°13'09	retrograde	916 Mar 26 j 08:27	14° J 03'04	
minimum elong	910 Jun 05 j 09:16	18° II 18'07	0°13'09	opposition	916 May 26 j 06:06	9° J 10'31	0°35'06
behind sun begin	910 Jun 05 j 04:31	18° II 15'25		min. Earth dist.	916 May 27 j 16:13	8° J 59'37	4.25006 AU
behind sun end	910 Jun 05 j 14:01	18° II 20'49		direct	916 Jul 26 j 23:22	4° J 12'49	
max. Earth dist.	910 Jun 07 j 08:00	18° II 44'43	6.17043 AU	evening set	916 Nov 29 j 07:24	22° J 37'33	
morning rise	910 Jun 19 j 03:47	21° II 25'41		max. Earth dist.	916 Dec 10 j 08:22	25° J 10'48	6.17978 AU
	910 Jul 29 j 02:18	0° E		conjunction	916 Dec 11 j 23:44	25° J 33'39	0°04'42
asc. node	910 Oct 15 j 09:19	9° E 53'35		minimum elong	916 Dec 11 j 23:45	25° J 33'39	0°04'42
retrograde	910 Oct 23 j 02:44	9° E 59'27		behind sun begin	916 Dec 11 j 15:56	25° J 29'09	
opposition	910 Dec 21 j 17:44	4° E 57'05	0°09'47	behind sun end	916 Dec 12 j 07:33	25° J 38'10	
min. Earth dist.	910 Dec 20 j 18:58	5° E 04'46	4.24107 AU	morning rise	916 Dec 24 j 16:18	28° J 30'09	
	911 Feb 12 j 19:47	30° R II			916 Dec 31 j 04:40	0° B	
direct	911 Feb 19 j 15:07	29° II 55'29		desc. node	917 Jan 27 j 06:26	5° B 57'45	
	911 Feb 26 j 10:40	0° E		retrograde	917 Apr 30 j 16:23	17° B 23'49	
evening set	911 Jun 26 j 12:46	18° E 13'07		opposition	917 Jun 30 j 10:40	12° B 28'54	-0°23'03
conjunction	911 Jul 10 j 03:23	21° E 13'21	0°25'34	min. Earth dist.	917 Jul 01 j 06:21	12° B 22'32	4.10953 AU
minimum elong	911 Jul 10 j 03:21	21° E 13'20	0°25'35	direct	917 Aug 29 j 18:02	7° B 33'45	
max. Earth dist.	911 Jul 11 j 01:47	21° E 25'44	6.30842 AU	evening set	918 Jan 01 j 21:14	26° B 35'39	
morning rise	911 Jul 23 j 16:31	24° E 12'34		conjunction	918 Jan 14 j 17:17	29° B 38'59	-0°34'29
	911 Aug 19 j 20:48	0° Ω		minimum elong	918 Jan 14 j 17:15	29° B 38'57	0°34'30
retrograde	911 Nov 23 j 09:02	11° Ω 45'54		max. Earth dist.	918 Jan 14 j 02:43	29° B 30'17	6.04738 AU
opposition	912 Jan 22 j 07:26	6° Ω 47'15	1°00'57		918 Jan 16 j 04:30	0° \approx	
min. Earth dist.	912 Jan 22 j 01:22	6° Ω 49'15	4.36553 AU	morning rise	918 Jan 27 j 15:06	2° \approx 43'28	
direct	912 Mar 23 j 12:47	1° Ω 44'16			918 Mar 25 j 00:46	15° \approx	
	912 Jul 06 j 23:31	15° Ω		retrograde	918 Jun 07 j 02:37	22° \approx 42'31	
evening set	912 Jul 28 j 13:02	19° Ω 33'16		opposition	918 Aug 06 j 10:34	17° \approx 44'01	-1°16'31
conjunction	912 Aug 10 j 20:24	22° Ω 26'17	0°55'07	min. Earth dist.	918 Aug 06 j 09:44	17° \approx 44'18	3.99759 AU
minimum elong	912 Aug 10 j 20:22	22° Ω 26'16	0°55'07		918 Aug 28 j 11:36	15° R \approx	

direct	918 Oct 04 j 09:19	12°≈50'25	evening set	924 Aug 02 j 00:02	23°Ω55'43	
	918 Nov 09 j 17:44	15°≈				
	919 Jan 27 j 13:57	0°✕	conjunction	924 Aug 15 j 06:11	26°Ω47'54	0°58'03
evening set	919 Feb 06 j 12:49	2°✕22'30	minimum elong	924 Aug 15 j 06:09	26°Ω47'52	0°58'04
			max. Earth dist.	924 Aug 14 j 20:06	26°Ω42'25	6.41951 AU
conjunction	919 Feb 19 j 15:17	5°✕32'17 -1°02'21	morning rise	924 Aug 28 j 09:37	29°Ω38'37	
minimum elong	919 Feb 19 j 15:15	5°✕32'15 1°02'21		924 Aug 30 j 01:21	0°൬	
max. Earth dist.	919 Feb 20 j 09:04	5°✕43'02 5.96612 AU	retrograde	924 Dec 26 j 21:10	16°൬31'31	
morning rise	919 Mar 04 j 20:38	8°✕43'42	opposition	925 Feb 25 j 04:43	11°൬36'53	1°35'18
retrograde	919 Jul 15 j 06:50	29°✕21'00	min. Earth dist.	925 Feb 25 j 19:30	11°൬32'05	4.44265 AU
min. Earth dist.	919 Sep 12 j 05:58	24°✕26'05 3.95754 AU	direct	925 Apr 28 j 13:13	6°൬33'56	
opposition	919 Sep 13 j 04:12	24°✕18'36 -1°42'05	evening set	925 Sep 02 j 08:09	24°൬07'54	
direct	919 Nov 10 j 03:43	19°✕24'36	max. Earth dist.	925 Sep 13 j 22:21	26°൬38'18	6.44653 AU
	920 Feb 03 j 21:14	0°൬				
evening set	920 Mar 14 j 17:27	9°൬05'12	conjunction	925 Sep 15 j 06:52	26°൬55'57	1°09'04
			minimum elong	925 Sep 15 j 06:52	26°൬55'57	1°09'03
conjunction	920 Mar 28 j 03:46	12°൬18'24 -1°06'21	morning rise	925 Sep 28 j 02:32	29°൬42'37	
minimum elong	920 Mar 28 j 03:47	12°൬18'25 1°06'21		925 Sep 29 j 10:49	0°♠	
max. Earth dist.	920 Mar 30 j 00:06	12°൬45'01 5.97005 AU	retrograde	926 Jan 26 j 05:50	16°♠30'10	
morning rise	920 Apr 10 j 17:21	15°൬33'10	opposition	926 Mar 27 j 21:59	11°♠37'47	1°38'06
	920 Jun 17 j 17:22	0°♠	min. Earth dist.	926 Mar 29 j 02:52	11°♠28'33	4.43389 AU
retrograde	920 Aug 20 j 12:01	5°♠59'32	direct	926 May 29 j 15:41	6°♠36'02	
min. Earth dist.	920 Oct 17 j 17:33	1°♠06'10 4.00585 AU	evening set	926 Oct 03 j 00:22	24°♠14'12	
opposition	920 Oct 19 j 03:32	0°♠54'34 -1°27'03	max. Earth dist.	926 Oct 13 j 17:53	26°♠35'29	6.40182 AU
	920 Oct 25 j 20:44	30°♠൬				
direct	920 Dec 16 j 02:31	25°൬58'09	conjunction	926 Oct 15 j 17:46	27°♠01'51	1°01'20
	921 Feb 04 j 12:40	0°♠	minimum elong	926 Oct 15 j 17:47	27°♠01'52	1°01'20
	921 Apr 19 j 16:45	15°♠	morning rise	926 Oct 28 j 09:03	29°♠48'36	
evening set	921 Apr 21 j 04:41	15°♠20'53		926 Oct 29 j 05:53	0°൬	
				927 Jan 21 j 12:11	15°൬	
conjunction	921 May 04 j 21:39	18°♠33'03 -0°44'37	retrograde	927 Feb 26 j 18:49	16°൬58'51	
minimum elong	921 May 04 j 21:41	18°♠33'05 0°44'37		927 Apr 04 j 07:32	15°൬൬	
max. Earth dist.	921 May 07 j 04:57	19°♠05'25 6.05766 AU	opposition	927 Apr 28 j 15:24	12°൬07'06	1°14'14
morning rise	921 May 18 j 16:20	21°♠45'55	min. Earth dist.	927 Apr 30 j 03:51	11°൬55'30	4.35593 AU
	921 Jun 24 j 18:43	0°൬	direct	927 Jun 30 j 02:49	7°൬07'17	
retrograde	921 Sep 24 j 17:26	11°൬18'11		927 Sep 15 j 06:38	15°൬	
min. Earth dist.	921 Nov 21 j 21:58	6°൬24'26 4.12223 AU	evening set	927 Nov 02 j 21:51	25°൬05'25	
opposition	921 Nov 23 j 05:59	6°൬13'32 -0°40'00	max. Earth dist.	927 Nov 13 j 12:46	27°൬28'57	6.29656 AU
direct	922 Jan 21 j 01:23	1°൬14'04				
evening set	922 May 27 j 14:57	20°൬02'20	conjunction	927 Nov 15 j 13:26	27°൬56'27	0°36'10
			minimum elong	927 Nov 15 j 13:28	27°൬56'29	0°36'09
conjunction	922 Jun 10 j 09:04	23°൬09'01 -0°07'34		927 Nov 24 j 16:03	0°♠	
minimum elong	922 Jun 10 j 09:04	23°൬09'01 0°07'34	morning rise	927 Nov 28 j 03:48	0°♠47'10	
behind sun begin	922 Jun 10 j 01:31	23°൬04'46	retrograde	928 Mar 31 j 03:54	18°♠45'32	
behind sun end	922 Jun 10 j 16:38	23°൬13'17	opposition	928 May 31 j 02:06	13°♠52'48	0°27'24
max. Earth dist.	922 Jun 12 j 04:32	23°൬33'38 6.19274 AU	min. Earth dist.	928 Jun 01 j 09:53	13°♠42'39	4.22933 AU
morning rise	922 Jun 24 j 03:12	26°൬15'23	direct	928 Jul 31 j 13:46	8°♠55'35	
	922 Jul 11 j 01:26	0°♠	evening set	928 Dec 03 j 22:25	27°♠25'52	
asc. node	922 Aug 25 j 01:35	8°♠48'03	desc. node	928 Dec 06 j 14:32	28°♠02'59	
retrograde	922 Oct 27 j 12:40	14°♠39'01		928 Dec 14 j 23:40	0°♠	
min. Earth dist.	922 Dec 25 j 08:44	9°♠44'11 4.26224 AU	max. Earth dist.	928 Dec 15 j 03:07	0°♠02'01	6.15951 AU
opposition	922 Dec 26 j 05:44	9°♠37'08 0°17'43				
direct	923 Feb 24 j 07:23	4°♠35'15	conjunction	928 Dec 16 j 15:03	0°♠22'58	-0°01'02
evening set	923 Jul 01 j 05:48	22°♠47'39	minimum elong	928 Dec 16 j 15:03	0°♠22'58	0°01'02
			behind sun begin	928 Dec 16 j 07:03	0°♠18'20	
conjunction	923 Jul 14 j 19:35	25°♠46'43 0°30'27	behind sun end	928 Dec 16 j 23:03	0°♠27'37	
minimum elong	923 Jul 14 j 19:33	25°♠46'42 0°30'27	morning rise	928 Dec 29 j 08:10	3°♠20'35	
max. Earth dist.	923 Jul 15 j 14:19	25°♠57'03 6.32698 AU	retrograde	929 May 05 j 21:37	22°♠24'03	
morning rise	923 Jul 28 j 07:27	28°♠44'40	opposition	929 Jul 05 j 13:59	17°♠28'44	-0°31'24
	923 Aug 03 j 01:57	0°♠	min. Earth dist.	929 Jul 06 j 07:27	17°♠23'04	4.09146 AU
	923 Oct 31 j 06:16	15°♠	direct	929 Sep 03 j 17:42	12°♠33'58	
retrograde	923 Nov 27 j 15:42	16°♠10'53		929 Dec 30 j 16:51	0°≈	
	923 Dec 24 j 20:15	15°♠♠	evening set	930 Jan 06 j 19:07	1°≈40'34	
opposition	924 Jan 26 j 14:38	11°♠12'51 1°06'44				
min. Earth dist.	924 Jan 26 j 11:34	11°♠13'52 4.38024 AU	conjunction	930 Jan 19 j 15:56	4°≈44'50	-0°39'26
direct	924 Mar 28 j 00:11	6°♠09'50	minimum elong	930 Jan 19 j 15:53	4°≈44'49	0°39'25
	924 Jun 19 j 00:19	15°♠	max. Earth dist.	930 Jan 19 j 06:13	4°≈39'02	6.03335 AU

morning rise	930 Feb 01 j 14:38	7°≈50'21	min. Earth dist.	936 Jan 30 j 19:24	15°Ω35'15	4.39030 AU
	930 Mar 04 j 18:18	15°≈		936 Feb 04 j 06:37	15°RΩ	
retrograde	930 Jun 12 j 10:49	27°≈56'12	direct	936 Apr 01 j 08:42	10°Ω31'50	
opposition	930 Aug 11 j 17:31	22°≈57'11 -1°22'13		936 May 28 j 04:10	15°Ω	
min. Earth dist.	930 Aug 11 j 12:48	22°≈58'44 3.98943 AU	evening set	936 Aug 06 j 09:34	28°Ω16'00	
direct	930 Oct 09 j 11:39	18°≈03'43		936 Aug 14 j 10:10	0°η	
	931 Jan 09 j 18:46	0°✕				
evening set	931 Feb 11 j 16:22	7°✕37'27	conjunction	936 Aug 19 j 14:42	1°η07'32 1°00'37	
			minimum elong	936 Aug 19 j 14:41	1°η07'31 1°00'37	
conjunction	931 Feb 24 j 19:42	10°✕47'43 -1°04'30	max. Earth dist.	936 Aug 19 j 01:30	1°η00'22 6.42484 AU	
minimum elong	931 Feb 24 j 19:40	10°✕47'43 1°04'30	morning rise	936 Sep 01 j 16:57	3°η57'36	
max. Earth dist.	931 Feb 25 j 17:12	11°✕00'44 5.96433 AU	retrograde	936 Dec 31 j 02:07	20°η48'56	
morning rise	931 Mar 10 j 02:12	13°✕59'43	opposition	937 Mar 01 j 10:27	15°η54'43 1°37'15	
	931 May 25 j 23:57	0°Υ	min. Earth dist.	937 Mar 02 j 03:38	15°η49'09 4.44320 AU	
retrograde	931 Jul 20 j 11:54	4°Υ37'13	direct	937 May 02 j 21:11	10°η51'55	
	931 Sep 15 j 05:20	30°R✕	evening set	937 Sep 06 j 15:20	28°η26'18	
min. Earth dist.	931 Sep 17 j 08:46	29°✕42'40 3.96244 AU		937 Sep 13 j 20:35	0°Ω	
opposition	931 Sep 18 j 09:36	29°✕34'17 -1°42'21	max. Earth dist.	937 Sep 18 j 00:53	0°Ω54'28 6.44217 AU	
direct	931 Nov 15 j 08:15	24°✕40'02				
	932 Jan 12 j 15:03	0°Υ	conjunction	937 Sep 19 j 13:07	1°Ω14'10 1°09'04	
evening set	932 Mar 19 j 22:19	14°Υ18'12	minimum elong	937 Sep 19 j 13:07	1°Ω14'10 1°09'04	
			morning rise	937 Oct 02 j 08:10	4°Ω00'44	
conjunction	932 Apr 02 j 09:48	17°Υ31'23 -1°04'42	retrograde	938 Jan 30 j 14:16	20°Ω50'27	
minimum elong	932 Apr 02 j 09:50	17°Υ31'24 1°04'42	opposition	938 Apr 01 j 06:39	15°Ω58'12 1°36'16	
max. Earth dist.	932 Apr 04 j 09:59	18°Υ00'12 5.98108 AU	min. Earth dist.	938 Apr 02 j 13:02	15°Ω48'28 4.42513 AU	
morning rise	932 Apr 16 j 00:07	20°Υ45'59	direct	938 Jun 03 j 00:17	10°Ω56'37	
	932 May 26 j 22:14	0°✕	evening set	938 Oct 07 j 07:22	28°Ω37'07	
retrograde	932 Aug 25 j 12:45	11°✕05'37		938 Oct 13 j 14:17	0°η	
min. Earth dist.	932 Oct 22 j 17:06	6°✕12'02 4.02163 AU	max. Earth dist.	938 Oct 18 j 01:21	0°η59'04 6.38937 AU	
opposition	932 Oct 24 j 02:49	6°✕00'32 -1°21'57				
direct	932 Dec 21 j 04:25	1°✕03'43	conjunction	938 Oct 20 j 00:30	1°η25'08 0°58'44	
	933 Apr 02 j 16:50	15°✕	minimum elong	938 Oct 20 j 00:32	1°η25'09 0°58'43	
evening set	933 Apr 26 j 06:47	20°✕21'14	morning rise	938 Nov 01 j 15:20	4°η12'14	
				938 Dec 25 j 04:52	15°η	
conjunction	933 May 10 j 00:06	23°✕32'44 -0°40'05	retrograde	939 Mar 03 j 07:19	21°η27'54	
minimum elong	933 May 10 j 00:08	23°✕32'45 0°40'04	opposition	939 May 03 j 05:13	16°η36'04 1°08'49	
max. Earth dist.	933 May 12 j 06:01	24°✕04'07 6.07656 AU	min. Earth dist.	939 May 04 j 16:49	16°η24'44 4.34054 AU	
morning rise	933 May 23 j 19:09	26°✕44'50		939 May 16 j 00:26	15°Rη	
	933 Jun 07 j 01:31	0°Π	direct	939 Jul 04 j 13:45	11°η36'37	
retrograde	933 Sep 29 j 07:10	16°Π07'12		939 Aug 22 j 07:02	15°η	
opposition	933 Nov 27 j 21:10	11°Π02'49 -0°32'11	evening set	939 Nov 07 j 07:34	29°η38'24	
min. Earth dist.	933 Nov 26 j 13:44	11°Π13'31 4.14229 AU		939 Nov 08 j 21:57	0°✕	
direct	934 Jan 25 j 19:30	6°Π02'56	max. Earth dist.	939 Nov 17 j 23:00	2°✕02'51 6.27939 AU	
evening set	934 Jun 01 j 11:20	24°Π45'50				
			conjunction	939 Nov 19 j 22:58	2°✕30'04 0°31'27	
conjunction	934 Jun 15 j 05:11	27°Π51'32 -0°02'07	minimum elong	939 Nov 19 j 22:59	2°✕30'05 0°31'27	
minimum elong	934 Jun 15 j 05:10	27°Π51'32 0°02'06	morning rise	939 Dec 02 j 13:37	5°✕21'35	
behind sun begin	934 Jun 14 j 20:49	27°Π46'50	retrograde	940 Apr 05 j 00:54	23°✕27'50	
behind sun end	934 Jun 15 j 13:32	27°Π56'13	opposition	940 Jun 04 j 22:20	18°✕34'45 0°19'29	
max. Earth dist.	934 Jun 16 j 20:53	28°Π13'56 6.21245 AU	min. Earth dist.	940 Jun 06 j 05:01	18°✕24'56 4.21128 AU	
	934 Jun 24 j 17:19	0°Ω	direct	940 Aug 05 j 07:04	13°✕37'51	
morning rise	934 Jun 28 j 22:41	0°Ω56'46	desc. node	940 Oct 16 j 09:34	20°✕54'26	
asc. node	934 Jul 06 j 00:15	2°Ω31'02		940 Nov 28 j 22:44	0°Ω	
retrograde	934 Oct 31 j 22:04	19°Ω11'38	evening set	940 Dec 08 j 12:54	2°Ω12'29	
opposition	934 Dec 30 j 14:51	14°Ω10'16 0°25'18	max. Earth dist.	940 Dec 19 j 21:29	4°Ω51'27 6.14213 AU	
min. Earth dist.	934 Dec 29 j 21:06	14°Ω16'14 4.27984 AU				
direct	935 Feb 28 j 21:31	9°Ω08'10	conjunction	940 Dec 21 j 06:02	5°Ω10'30 -0°06'40	
evening set	935 Jul 05 j 19:59	27°Ω16'35	minimum elong	940 Dec 21 j 06:01	5°Ω10'29 0°06'41	
	935 Jul 18 j 06:06	0°Ω	behind sun begin	940 Dec 20 j 22:31	5°Ω06'07	
			behind sun end	940 Dec 21 j 13:31	5°Ω14'51	
conjunction	935 Jul 19 j 08:55	0°Ω14'44 0°35'02	morning rise	941 Jan 02 j 23:40	8°Ω09'05	
minimum elong	935 Jul 19 j 08:52	0°Ω14'42 0°35'01	retrograde	941 May 10 j 23:41	27°Ω21'01	
max. Earth dist.	935 Jul 19 j 23:32	0°Ω22'45 6.34112 AU	opposition	941 Jul 10 j 15:49	22°Ω25'15 -0°39'31	
morning rise	935 Aug 01 j 19:47	3°Ω11'40	min. Earth dist.	941 Jul 11 j 06:09	22°Ω20'36 4.07621 AU	
	935 Sep 30 j 18:32	15°Ω	direct	941 Sep 08 j 14:22	17°Ω30'45	
retrograde	935 Dec 01 j 19:45	20°Ω32'29		941 Dec 13 j 15:33	0°≈	
opposition	936 Jan 30 j 20:25	15°Ω34'55 1°12'02	evening set	942 Jan 11 j 15:48	6°≈41'12	

conjunction	942 Jan 24 j 13:13	9°  46'17 -0°44'03	conjunction	947 Jul 23 j 23:59	4°  47'03 0°39'30
minimum elong	942 Jan 24 j 13:10	9°  46'16 0°44'02	minimum elong	947 Jul 23 j 23:57	4°  47'02 0°39'30
max. Earth dist.	942 Jan 24 j 06:45	9°  42'25 6.02136 AU	max. Earth dist.	947 Jul 24 j 10:10	4°  52'38 6.35393 AU
morning rise	942 Feb 06 j 12:56	12°  52'45	morning rise	947 Aug 06 j 09:47	7°  43'01
	942 Feb 15 j 12:04	15° 		947 Sep 10 j 07:40	15° 
	942 May 03 j 17:00	0° 	retrograde	947 Dec 06 j 03:41	24°  58'55
retrograde	942 Jun 17 j 16:37	3°  04'47	opposition	948 Feb 04 j 04:22	20°  01'56 1°17'03
	942 Aug 02 j 02:27	30° 	min. Earth dist.	948 Feb 04 j 06:28	20°  01'15 4.40007 AU
opposition	942 Aug 16 j 22:32	28°  05'09 -1°27'15		948 Apr 02 j 10:50	15°  
min. Earth dist.	942 Aug 16 j 14:46	28°  07'43 3.98199 AU	direct	948 Apr 05 j 21:13	14°  58'55
direct	942 Oct 14 j 13:18	23°  11'39		948 Apr 09 j 07:39	15° 
	942 Dec 20 j 10:20	0° 		948 Jul 29 j 05:45	0° 
evening set	943 Feb 16 j 18:12	12°  47'05	evening set	948 Aug 10 j 20:55	2°  41'17
			max. Earth dist.	948 Aug 23 j 08:58	5°  23'28 6.43099 AU
conjunction	943 Mar 01 j 22:44	15°  57'58 -1°06'08	conjunction	948 Aug 24 j 01:01	5°  32'10 1°02'55
minimum elong	943 Mar 01 j 22:43	15°  57'57 1°06'08	minimum elong	948 Aug 24 j 00:59	5°  32'09 1°02'54
max. Earth dist.	943 Mar 03 j 01:37	16°  14'13 5.96213 AU	morning rise	948 Sep 06 j 02:09	8°  21'33
morning rise	943 Mar 15 j 06:11	19°  10'30	retrograde	949 Jan 04 j 07:45	25°  21'05
	943 May 02 j 09:12	0° 	opposition	949 Mar 05 j 18:09	20°  17'14 1°38'44
retrograde	943 Jul 25 j 17:50	9°  48'24	min. Earth dist.	949 Mar 06 j 12:25	20°  11'19 4.44588 AU
min. Earth dist.	943 Sep 22 j 11:22	4°  53'50 3.96590 AU	direct	949 May 07 j 06:04	15°  21'37
opposition	943 Sep 23 j 13:15	4°  45'05 -1°41'52		949 Aug 28 j 19:14	0° 
	943 Nov 10 j 22:51	30° 	evening set	949 Sep 10 j 23:25	2°  48'28
direct	943 Nov 20 j 11:24	29°  50'35	max. Earth dist.	949 Sep 22 j 07:48	5°  16'08 6.44137 AU
	943 Nov 29 j 23:56	0° 			
evening set	944 Mar 25 j 02:33	19°  27'18	conjunction	949 Sep 23 j 20:22	5°  36'01 1°08'44
conjunction	944 Apr 07 j 14:55	22°  40'32 -1°02'35	minimum elong	949 Sep 23 j 20:22	5°  36'02 1°08'44
minimum elong	944 Apr 07 j 14:58	22°  40'33 1°02'35	morning rise	949 Oct 06 j 14:29	8°  22'18
max. Earth dist.	944 Apr 09 j 16:07	23°  09'51 5.98961 AU	retrograde	950 Feb 03 j 22:22	25°  13'05
morning rise	944 Apr 21 j 06:19	25°  55'10	opposition	950 Apr 05 j 16:16	20°  21'01 1°33'57
	944 May 08 j 18:51	0° 	min. Earth dist.	950 Apr 06 j 23:35	20°  11'02 4.42097 AU
	944 Aug 03 j 19:05	15° 	direct	950 Jun 07 j 10:45	15°  19'48
retrograde	944 Aug 30 j 10:42	16°  09'01		950 Sep 27 j 16:14	0° 
	944 Sep 25 j 20:56	15° 	evening set	950 Oct 11 j 14:22	3°  00'52
min. Earth dist.	944 Oct 27 j 14:15	11°  15'44 4.03430 AU	max. Earth dist.	950 Oct 22 j 06:08	5°  21'57 6.38215 AU
opposition	944 Oct 29 j 00:57	11°  03'54 -1°16'20			
direct	944 Dec 26 j 03:28	6°  06'38	conjunction	950 Oct 24 j 06:52	5°  48'56 0°55'52
	945 Mar 14 j 19:17	15° 	minimum elong	950 Oct 24 j 06:54	5°  48'57 0°55'51
evening set	945 May 01 j 09:01	25°  20'32	morning rise	950 Nov 05 j 21:31	8°  36'13
				950 Dec 05 j 22:36	15° 
conjunction	945 May 15 j 02:49	28°  31'32 -0°35'15	retrograde	951 Mar 07 j 19:32	25°  35'41
minimum elong	945 May 15 j 02:51	28°  31'33 0°35'16	opposition	951 May 07 j 18:15	21°  03'44 1°03'06
max. Earth dist.	945 May 17 j 07:07	29°  01'52 6.09227 AU	min. Earth dist.	951 May 09 j 05:41	20°  35'27 4.33052 AU
	945 May 21 j 11:27	0° 	direct	951 Jul 09 j 01:27	16°  04'34
morning rise	945 May 28 j 22:02	1°  42'59		951 Oct 23 j 22:53	0° 
retrograde	945 Oct 03 j 23:49	20°  56'54	evening set	951 Nov 11 j 15:32	4°  08'13
min. Earth dist.	945 Dec 01 j 08:02	16°  02'43 4.15914 AU	max. Earth dist.	951 Nov 22 j 09:20	6°  34'22 6.26751 AU
opposition	945 Dec 02 j 13:08	15°  52'50 -0°24'08			
direct	946 Jan 30 j 16:00	10°  52'36	conjunction	951 Nov 24 j 07:03	7°  00'23 0°26'41
asc. node	946 May 16 j 00:22	24°  50'23	minimum elong	951 Nov 24 j 07:04	7°  00'24 0°26'42
evening set	946 Jun 06 j 08:40	29°  31'19	morning rise	951 Dec 06 j 21:40	9°  52'25
	946 Jun 08 j 11:58	0° 	retrograde	952 Apr 09 j 17:32	28°  04'45
			opposition	952 Jun 09 j 15:51	23°  11'25 0°11'41
conjunction	946 Jun 20 j 02:16	2°  36'10 0°03'32	min. Earth dist.	952 Jun 10 j 21:01	23°  02'05 4.19816 AU
minimum elong	946 Jun 20 j 02:14	2°  36'09 0°03'32	direct	952 Aug 09 j 21:05	18°  14'51
behind sun begin	946 Jun 19 j 17:57	2°  31'32	desc. node	952 Aug 28 j 05:05	18°  46'29
behind sun end	946 Jun 20 j 10:31	2°  40'47		952 Nov 12 j 09:07	0° 
max. Earth dist.	946 Jun 21 j 15:49	2°  57'16 6.22914 AU	evening set	952 Dec 13 j 00:28	6°  52'21
morning rise	946 Jul 03 j 19:06	5°  40'25	max. Earth dist.	952 Dec 24 j 10:37	9°  32'44 6.12881 AU
retrograde	946 Nov 05 j 07:03	23°  47'38			
min. Earth dist.	947 Jan 03 j 08:56	18°  52'21 4.29510 AU	conjunction	952 Dec 25 j 17:46	9°  51'00 -0°12'01
opposition	947 Jan 04 j 01:26	18°  46'49 0°32'50	minimum elong	952 Dec 25 j 17:45	9°  51'00 0°12'01
direct	947 Mar 05 j 10:59	13°  44'35	behind sun begin	952 Dec 25 j 12:11	9°  47'45
	947 Jul 02 j 01:02	0° 	behind sun end	952 Dec 25 j 23:20	9°  54'16
evening set	947 Jul 10 j 12:07	1°  49'51	morning rise	953 Jan 07 j 12:06	12°  50'26
				953 Apr 08 j 07:04	0° 

retrograde	953 May 15 j 22:29	2°≈09'38	opposition	959 Jan 08 j 11:37	23°≈21'30	0°40'03
	953 Jun 22 j 19:39	30°≈3	min. Earth dist.	959 Jan 07 j 21:50	23°≈26'06	4.30945 AU
opposition	953 Jul 15 j 13:44	27°≈13'21 -0°47'02	direct	959 Mar 10 j 02:41	18°≈19'00	
min. Earth dist.	953 Jul 16 j 01:45	27°≈09'26 4.06365 AU		959 Jun 14 j 23:07	0°≈	
direct	953 Sep 13 j 08:28	22°≈18'58	evening set	959 Jul 15 j 03:22	6°≈20'58	
	953 Nov 24 j 20:50	0°≈				
evening set	954 Jan 16 j 08:38	11°≈32'39	conjunction	959 Jul 28 j 14:25	9°≈17'16	0°43'40
			minimum elong	959 Jul 28 j 14:23	9°≈17'14	0°43'41
conjunction	954 Jan 29 j 06:58	14°≈38'33 -0°48'10	max. Earth dist.	959 Jul 28 j 22:46	9°≈21'50	6.36660 AU
minimum elong	954 Jan 29 j 06:55	14°≈38'32 0°48'10	morning rise	959 Aug 10 j 22:56	12°≈12'12	
max. Earth dist.	954 Jan 29 j 04:57	14°≈37'20 6.01083 AU		959 Aug 23 j 23:30	15°≈	
	954 Jan 30 j 18:40	15°≈	retrograde	959 Dec 10 j 08:34	29°≈22'58	
morning rise	954 Feb 11 j 07:26	17°≈45'50	opposition	960 Feb 08 j 11:43	24°≈26'24	1°21'33
	954 Apr 08 j 00:32	0°≈	min. Earth dist.	960 Feb 08 j 14:55	24°≈25'21	4.41014 AU
retrograde	954 Jun 22 j 19:09	8°≈03'23	direct	960 Apr 10 j 07:05	19°≈23'19	
opposition	954 Aug 21 j 22:47	3°≈03'17 -1°31'26		960 Jul 12 j 02:09	0°≈	
min. Earth dist.	954 Aug 21 j 13:36	3°≈06'19 3.97474 AU	evening set	960 Aug 15 j 07:11	7°≈03'23	
	954 Sep 15 j 20:04	30°≈				
direct	954 Oct 19 j 10:28	28°≈09'45	conjunction	960 Aug 28 j 10:03	9°≈53'31	1°04'49
	954 Nov 21 j 17:08	0°≈	minimum elong	960 Aug 28 j 10:01	9°≈53'30	1°04'49
evening set	955 Feb 21 j 16:36	17°≈47'18	max. Earth dist.	960 Aug 27 j 14:32	9°≈42'57	6.43736 AU
			morning rise	960 Sep 10 j 10:06	12°≈42'12	
conjunction	955 Mar 06 j 22:04	20°≈58'48 -1°07'14	retrograde	961 Jan 08 j 14:03	29°≈29'47	
minimum elong	955 Mar 06 j 22:03	20°≈58'47 1°07'13	opposition	961 Mar 10 j 01:07	24°≈36'15	1°39'38
max. Earth dist.	955 Mar 08 j 02:28	21°≈15'57 5.95868 AU	min. Earth dist.	961 Mar 10 j 22:10	24°≈29'28	4.44796 AU
morning rise	955 Mar 20 j 06:51	24°≈12'02	direct	961 May 11 j 16:24	19°≈33'44	
	955 Apr 14 j 01:33	0°≈		961 Aug 11 j 20:06	0°≈	
retrograde	955 Jul 30 j 17:49	14°≈50'42	evening set	961 Sep 15 j 06:22	7°≈07'06	
min. Earth dist.	955 Sep 27 j 08:25	9°≈56'33 3.96690 AU	max. Earth dist.	961 Sep 26 j 11:08	9°≈32'59	6.43858 AU
opposition	955 Sep 28 j 12:30	9°≈47'02 -1°40'40				
direct	955 Nov 25 j 08:57	4°≈52'12	conjunction	961 Sep 28 j 02:32	9°≈54'27	1°08'01
evening set	956 Mar 30 j 03:44	24°≈28'49	minimum elong	961 Sep 28 j 02:33	9°≈54'27	1°08'01
			morning rise	961 Oct 10 j 19:58	12°≈40'33	
conjunction	956 Apr 12 j 17:14	27°≈42'18 -1°00'05	retrograde	962 Feb 08 j 05:44	29°≈33'11	
minimum elong	956 Apr 12 j 17:17	27°≈42'20 1°00'04	opposition	962 Apr 10 j 01:18	24°≈41'10	1°31'06
max. Earth dist.	956 Apr 14 j 19:35	28°≈12'16 5.99505 AU	min. Earth dist.	962 Apr 11 j 09:13	24°≈30'59	4.41341 AU
	956 Apr 22 j 08:55	0°≈	direct	962 Jun 11 j 18:48	19°≈40'09	
morning rise	956 Apr 26 j 09:29	0°≈57'04		962 Sep 10 j 17:24	0°≈	
	956 Jul 01 j 19:50	15°≈	evening set	962 Oct 15 j 20:50	7°≈23'04	
retrograde	956 Sep 04 j 07:56	21°≈06'33	max. Earth dist.	962 Oct 26 j 12:49	9°≈44'40	6.37026 AU
min. Earth dist.	956 Nov 01 j 10:52	16°≈12'54 4.04340 AU				
opposition	956 Nov 02 j 20:36	16°≈01'23 -1°10'22	conjunction	962 Oct 28 j 13:04	10°≈11'28	0°52'39
	956 Nov 10 j 09:45	15°≈	minimum elong	962 Oct 28 j 13:06	10°≈11'29	0°52'38
direct	956 Dec 31 j 01:39	11°≈03'41	morning rise	962 Nov 10 j 03:22	12°≈59'08	
	957 Feb 19 j 03:35	15°≈		962 Nov 19 j 07:46	15°≈	
	957 May 05 j 06:55	0°≈		963 Feb 24 j 05:38	0°≈	
evening set	957 May 06 j 09:32	0°≈15'18	retrograde	963 Mar 12 j 09:05	0°≈24'15	
				963 Mar 28 j 12:44	30°≈	
conjunction	957 May 20 j 03:52	3°≈25'59 -0°30'18	opposition	963 May 12 j 08:13	25°≈32'15	0°56'56
minimum elong	957 May 20 j 03:54	3°≈26'00 0°30'17	min. Earth dist.	963 May 13 j 19:59	25°≈20'52	4.31480 AU
max. Earth dist.	957 May 22 j 08:25	3°≈56'21 6.10445 AU	direct	963 Jul 13 j 13:12	20°≈33'27	
morning rise	957 Jun 02 j 23:13	6°≈36'56		963 Oct 06 j 10:07	0°≈	
retrograde	957 Oct 08 j 13:59	25°≈43'26	evening set	963 Nov 16 j 00:56	8°≈41'04	
min. Earth dist.	957 Dec 05 j 22:48	20°≈49'29 4.17318 AU	max. Earth dist.	963 Nov 26 j 18:20	11°≈07'40	6.24913 AU
opposition	957 Dec 07 j 03:35	20°≈39'43 -0°16'06				
direct	958 Feb 04 j 08:51	15°≈39'09	conjunction	963 Nov 28 j 16:22	11°≈33'59	0°21'39
asc. node	958 Mar 26 j 14:00	19°≈26'48	minimum elong	963 Nov 28 j 16:24	11°≈34'00	0°21'39
	958 May 22 j 20:51	0°≈	morning rise	963 Dec 11 j 07:28	14°≈26'57	
evening set	958 Jun 11 j 05:35	4°≈14'34		964 Mar 02 j 07:00	0°≈	
			retrograde	964 Apr 14 j 14:39	2°≈48'06	
conjunction	958 Jun 24 j 22:34	7°≈18'33 0°08'57		964 May 28 j 14:55	30°≈	
minimum elong	958 Jun 24 j 22:34	7°≈18'33 0°08'56	opposition	964 Jun 14 j 12:21	27°≈54'26	0°03'32
behind sun begin	958 Jun 24 j 15:29	7°≈14'36	min. Earth dist.	964 Jun 15 j 15:34	27°≈45'42	4.17828 AU
behind sun end	958 Jun 25 j 05:38	7°≈22'30	desc. node	964 Jul 08 j 09:50	25°≈02'12	
max. Earth dist.	958 Jun 26 j 08:10	7°≈37'22 6.24400 AU	direct	964 Aug 14 j 12:56	22°≈58'10	
morning rise	958 Jul 08 j 14:52	10°≈21'52		964 Oct 23 j 21:20	0°≈	
retrograde	958 Nov 09 j 17:18	28°≈21'53	evening set	964 Dec 17 j 15:44	11°≈41'09	

max. Earth dist.	964 Dec 29 j 06:49	14° ♁ 25'03	6.10929 AU	behind sun end	970 Jun 29 j 21:34	12° ♁ 01'51	
				max. Earth dist.	970 Jul 01 j 01:55	12° ♁ 17'40	6.26638 AU
conjunction	964 Dec 30 j 09:43	14° ♁ 40'54	-0°17'31	morning rise	970 Jul 13 j 09:07	15° ♁ 01'44	
minimum elong	964 Dec 30 j 09:42	14° ♁ 40'54	0°17'31		970 Oct 01 j 15:54	0° ♁	
morning rise	965 Jan 12 j 04:37	17° ♁ 41'27		retrograde	970 Nov 14 j 00:03	2° ♁ 52'20	
	965 Mar 10 j 17:10	0° ♁			970 Dec 27 j 08:31	30° ♁	
retrograde	965 May 21 j 03:53	7° ♁ 10'18		opposition	971 Jan 12 j 20:08	27° ♁ 52'28	0°46'52
opposition	965 Jul 20 j 16:37	2° ♁ 13'37	-0°54'37	min. Earth dist.	971 Jan 12 j 08:03	27° ♁ 56'30	4.32989 AU
min. Earth dist.	965 Jul 21 j 02:35	2° ♁ 10'22	4.04630 AU	direct	971 Mar 14 j 15:32	22° ♁ 49'49	
	965 Aug 07 j 09:46	30° ♁			971 May 26 j 18:20	0° ♁	
direct	965 Sep 18 j 06:22	27° ♁ 19'30		evening set	971 Jul 19 j 15:55	10° ♁ 46'35	
	965 Oct 29 j 06:39	0° ♁					
	966 Jan 14 j 10:11	15° ♁		conjunction	971 Aug 02 j 01:37	13° ♁ 41'40	0°47'29
evening set	966 Jan 21 j 07:27	16° ♁ 38'17		minimum elong	971 Aug 02 j 01:35	13° ♁ 41'39	0°47'29
				max. Earth dist.	971 Aug 02 j 04:28	13° ♁ 43'13	6.38336 AU
conjunction	966 Feb 03 j 06:32	19° ♁ 45'11	-0°52'09		971 Aug 08 j 01:17	15° ♁	
minimum elong	966 Feb 03 j 06:30	19° ♁ 45'09	0°52'09	morning rise	971 Aug 15 j 09:03	16° ♁ 35'26	
max. Earth dist.	966 Feb 03 j 07:20	19° ♁ 45'40	5.99712 AU		971 Oct 25 j 18:29	0° ♁	
morning rise	966 Feb 16 j 08:17	22° ♁ 53'37		retrograde	971 Dec 14 j 12:32	3° ♁ 40'20	
	966 Mar 19 j 01:08	0° ♁			972 Feb 02 j 21:44	30° ♁	
retrograde	966 Jun 28 j 02:00	13° ♁ 17'43		opposition	972 Feb 12 j 16:22	28° ♁ 44'12	1°25'27
opposition	966 Aug 27 j 05:08	8° ♁ 17'07	-1°35'11	min. Earth dist.	972 Feb 12 j 23:13	28° ♁ 41'57	4.42218 AU
min. Earth dist.	966 Aug 26 j 16:02	8° ♁ 21'28	3.96649 AU	direct	972 Apr 14 j 16:37	23° ♁ 41'02	
direct	966 Oct 24 j 12:36	3° ♁ 23'34			972 Jun 22 j 16:33	0° ♁	
evening set	967 Feb 26 j 21:24	23° ♁ 03'30		evening set	972 Aug 19 j 13:44	11° ♁ 18'22	
conjunction	967 Mar 12 j 04:08	26° ♁ 15'40	-1°07'51	conjunction	972 Sep 01 j 15:42	14° ♁ 07'50	1°06'19
minimum elong	967 Mar 12 j 04:08	26° ♁ 15'39	1°07'51	minimum elong	972 Sep 01 j 15:41	14° ♁ 07'49	1°06'19
max. Earth dist.	967 Mar 13 j 13:16	26° ♁ 35'40	5.95675 AU	max. Earth dist.	972 Aug 31 j 17:23	13° ♁ 55'45	6.44358 AU
morning rise	967 Mar 25 j 13:58	29° ♁ 29'29		morning rise	972 Sep 14 j 14:33	16° ♁ 55'50	
	967 Mar 27 j 17:01	0° ♁			972 Nov 23 j 12:03	0° ♁	
retrograde	967 Aug 05 j 00:55	20° ♁ 07'53		retrograde	973 Jan 12 j 15:46	3° ♁ 41'58	
opposition	967 Oct 03 j 17:30	15° ♁ 03'52	-1°38'37		973 Mar 04 j 21:19	30° ♁	
min. Earth dist.	967 Oct 02 j 12:22	15° ♁ 13'46	3.97173 AU	opposition	973 Mar 14 j 05:16	28° ♁ 48'41	1°40'00
direct	967 Nov 30 j 14:36	10° ♁ 08'46		min. Earth dist.	973 Mar 15 j 03:46	28° ♁ 41'27	4.44813 AU
evening set	968 Apr 04 j 10:29	29° ♁ 43'31		direct	973 May 15 j 20:54	23° ♁ 46'16	
	968 Apr 05 j 14:23	0° ♁			973 Jul 23 j 14:47	0° ♁	
				evening set	973 Sep 19 j 10:17	11° ♁ 19'52	
conjunction	968 Apr 18 j 00:59	2° ♁ 56'57	-0°57'00	max. Earth dist.	973 Sep 30 j 11:35	13° ♁ 44'10	6.43252 AU
minimum elong	968 Apr 18 j 01:02	2° ♁ 56'58	0°57'00				
max. Earth dist.	968 Apr 20 j 06:29	3° ♁ 28'41	6.00640 AU	conjunction	973 Oct 02 j 05:39	14° ♁ 07'08	1°06'57
morning rise	968 May 01 j 18:00	6° ♁ 11'31		minimum elong	973 Oct 02 j 05:40	14° ♁ 07'08	1°06'57
	968 Jun 10 j 00:06	15° ♁		morning rise	973 Oct 14 j 22:29	16° ♁ 53'14	
retrograde	968 Sep 09 j 06:37	26° ♁ 13'28			973 Dec 23 j 08:47	0° ♁	
min. Earth dist.	968 Nov 06 j 08:47	21° ♁ 20'10	4.06017 AU	retrograde	974 Feb 12 j 13:27	3° ♁ 49'05	
opposition	968 Nov 07 j 19:25	21° ♁ 08'22	-1°03'40		974 Apr 06 j 01:58	30° ♁	
direct	969 Jan 05 j 02:13	16° ♁ 10'18		opposition	974 Apr 14 j 08:51	28° ♁ 57'11	1°27'51
	969 Apr 18 j 00:03	0° ♁		min. Earth dist.	974 Apr 15 j 19:11	28° ♁ 46'15	4.40131 AU
evening set	969 May 11 j 12:48	5° ♁ 16'39		direct	974 Jun 16 j 02:25	23° ♁ 56'22	
					974 Aug 22 j 06:03	0° ♁	
conjunction	969 May 25 j 07:08	8° ♁ 26'26	-0°25'02	evening set	974 Oct 20 j 01:53	11° ♁ 42'37	
minimum elong	969 May 25 j 07:10	8° ♁ 26'27	0°25'01	max. Earth dist.	974 Oct 30 j 15:37	14° ♁ 03'34	6.35295 AU
max. Earth dist.	969 May 27 j 09:21	8° ♁ 55'19	6.12516 AU				
morning rise	969 Jun 08 j 02:31	11° ♁ 36'24		conjunction	974 Nov 01 j 17:52	14° ♁ 31'35	0°49'12
	969 Sep 25 j 01:10	0° ♁		minimum elong	974 Nov 01 j 17:54	14° ♁ 31'36	0°49'12
retrograde	969 Oct 13 j 04:14	0° ♁			974 Nov 03 j 20:49	15° ♁	
	969 Oct 31 j 04:33	30° ♁		morning rise	974 Nov 14 j 08:12	17° ♁ 19'57	
opposition	969 Dec 11 j 18:49	25° ♁ 28'56	-0°07'56		975 Jan 17 j 15:04	0° ♁	
min. Earth dist.	969 Dec 10 j 15:53	25° ♁ 38'05	4.19559 AU	retrograde	975 Mar 16 j 22:48	4° ♁ 52'41	
asc. node	970 Feb 03 j 20:18	20° ♁ 30'54		opposition	975 May 16 j 22:03	0° ♁ 00'30	0°50'31
direct	970 Feb 09 j 05:55	20° ♁ 28'00			975 May 16 j 23:37	30° ♁	
	970 May 04 j 12:58	0° ♁		min. Earth dist.	975 May 18 j 09:01	29° ♁ 49'21	4.29329 AU
evening set	970 Jun 16 j 01:27	8° ♁ 57'04		direct	975 Jul 17 j 22:38	25° ♁ 01'59	
					975 Sep 15 j 05:59	0° ♁	
conjunction	970 Jun 29 j 17:56	11° ♁ 59'50	0°14'16	evening set	975 Nov 20 j 10:52	13° ♁ 15'36	
minimum elong	970 Jun 29 j 17:55	11° ♁ 59'49	0°14'15	max. Earth dist.	975 Dec 01 j 07:20	15° ♁ 44'42	6.22531 AU
behind sun begin	970 Jun 29 j 14:16	11° ♁ 57'48					

conjunction	975 Dec 03 j 02:40	16° \mathbb{A} 09'36 0°16'30	retrograde	981 Oct 17 j 18:33	5° \mathbb{D} 17'59	
minimum elong	975 Dec 03 j 02:41	16° \mathbb{A} 09'36 0°16'30	asc. node	981 Dec 14 j 11:10	0° \mathbb{D} 30'35	
morning rise	975 Dec 15 j 18:03	19° \mathbb{A} 03'42	min. Earth dist.	981 Dec 15 j 07:57	0° \mathbb{D} 23'34	4.21787 AU
	976 Feb 05 j 12:12	0° \mathbb{B}	opposition	981 Dec 16 j 09:05	0° \mathbb{D} 15'05	0°00'17
retrograde	976 Apr 19 j 15:36	7° \mathbb{B} 35'37		981 Dec 18 j 05:45	30° \mathbb{R} II	
desc. node	976 May 18 j 19:28	6° \mathbb{B} 17'35	direct	982 Feb 14 j 00:54	25° \mathbb{II} 13'53	
opposition	976 Jun 19 j 10:46	2° \mathbb{B} 41'40 -0°04'42		982 Apr 12 j 05:47	0° \mathbb{D}	
min. Earth dist.	976 Jun 20 j 12:51	2° \mathbb{B} 33'16 4.15382 AU	evening set	982 Jun 20 j 20:57	13° \mathbb{D} 37'10	
	976 Jul 11 j 14:54	30° \mathbb{R} \mathbb{A}				
direct	976 Aug 19 j 06:36	27° \mathbb{A} 45'46	conjunction	982 Jul 04 j 12:30	16° \mathbb{D} 38'42	0°19'31
	976 Sep 26 j 08:00	0° \mathbb{B}	minimum elong	982 Jul 04 j 12:29	16° \mathbb{D} 38'41	0°19'32
evening set	976 Dec 22 j 09:28	16° \mathbb{B} 35'44	max. Earth dist.	982 Jul 05 j 15:28	16° \mathbb{D} 53'40	6.28697 AU
max. Earth dist.	977 Jan 03 j 03:32	19° \mathbb{B} 22'15 6.08640 AU	morning rise	982 Jul 18 j 02:52	19° \mathbb{D} 39'21	
				982 Sep 06 j 18:07	0° \mathbb{Q}	
conjunction	977 Jan 04 j 03:59	19° \mathbb{B} 36'43 -0°22'57	retrograde	982 Nov 18 j 07:20	7° \mathbb{Q} 21'40	
minimum elong	977 Jan 04 j 03:57	19° \mathbb{B} 36'42 0°22'57	opposition	983 Jan 17 j 04:32	2° \mathbb{Q} 22'22	0°53'28
morning rise	977 Jan 16 j 23:55	22° \mathbb{B} 38'40	min. Earth dist.	983 Jan 16 j 19:23	2° \mathbb{Q} 25'24	4.34741 AU
	977 Feb 18 j 09:25	0° \mathbb{W}		983 Feb 04 j 19:55	30° \mathbb{R} \mathbb{D}	
retrograde	977 May 26 j 10:26	12° \mathbb{W} 18'19	direct	983 Mar 19 j 04:38	27° \mathbb{D} 19'33	
opposition	977 Jul 25 j 22:32	7° \mathbb{W} 21'04 -1°01'55		983 Apr 30 j 23:41	0° \mathbb{Q}	
min. Earth dist.	977 Jul 26 j 04:04	7° \mathbb{W} 19'15 4.02731 AU		983 Jul 23 j 05:24	15° \mathbb{Q}	
direct	977 Sep 23 j 06:00	2° \mathbb{W} 27'11	evening set	983 Jul 24 j 04:28	15° \mathbb{Q} 12'27	
	977 Dec 27 j 20:49	15° \mathbb{W}				
evening set	978 Jan 26 j 09:36	21° \mathbb{W} 51'24	conjunction	983 Aug 06 j 13:15	18° \mathbb{Q} 06'35	0°51'06
			minimum elong	983 Aug 06 j 13:13	18° \mathbb{Q} 06'34	0°51'06
conjunction	978 Feb 08 j 09:46	24° \mathbb{W} 59'21 -0°55'46	max. Earth dist.	983 Aug 06 j 13:15	18° \mathbb{Q} 06'35	6.39655 AU
minimum elong	978 Feb 08 j 09:44	24° \mathbb{W} 59'20 0°55'46	morning rise	983 Aug 19 j 19:17	20° \mathbb{Q} 59'18	
max. Earth dist.	978 Feb 08 j 16:54	25° \mathbb{W} 03'39 5.98388 AU		983 Oct 03 j 04:18	0° \mathbb{R}	
morning rise	978 Feb 21 j 12:30	28° \mathbb{W} 08'50	retrograde	983 Dec 18 j 16:43	7° \mathbb{R} 59'49	
	978 Mar 01 j 07:12	0° \mathbb{X}	opposition	984 Feb 16 j 22:12	3° \mathbb{R} 04'14	1°29'00
retrograde	978 Jul 03 j 13:42	18° \mathbb{X} 38'43	min. Earth dist.	984 Feb 17 j 07:05	3° \mathbb{R} 01'20	4.43043 AU
opposition	978 Sep 01 j 14:11	13° \mathbb{X} 37'30 -1°38'08		984 Mar 13 j 07:57	30° \mathbb{R} \mathbb{Q}	
min. Earth dist.	978 Aug 31 j 22:31	13° \mathbb{X} 42'44 3.96062 AU	direct	984 Apr 19 j 00:37	28° \mathbb{Q} 01'11	
direct	978 Oct 29 j 19:52	8° \mathbb{X} 43'51		984 May 26 j 02:42	0° \mathbb{R}	
evening set	979 Mar 04 j 05:07	28° \mathbb{X} 24'51	evening set	984 Aug 23 j 21:49	15° \mathbb{R} 37'03	
	979 Mar 10 j 19:22	0° \mathbb{Y}				
			conjunction	984 Sep 05 j 22:35	18° \mathbb{R} 26'00	1°07'31
conjunction	979 Mar 17 j 13:01	1° \mathbb{Y} 37'27 -1°07'54	minimum elong	984 Sep 05 j 22:34	18° \mathbb{R} 25'59	1°07'32
minimum elong	979 Mar 17 j 13:01	1° \mathbb{Y} 37'27 1°07'54	max. Earth dist.	984 Sep 04 j 19:22	18° \mathbb{R} 11'15	6.44613 AU
max. Earth dist.	979 Mar 19 j 03:04	2° \mathbb{Y} 00'24 5.95861 AU	morning rise	984 Sep 18 j 20:35	21° \mathbb{R} 13'32	
morning rise	979 Mar 31 j 00:02	4° \mathbb{Y} 51'42		984 Nov 01 j 04:03	0° \mathbb{U}	
retrograde	979 Aug 10 j 07:13	25° \mathbb{Y} 27'15	retrograde	985 Jan 16 j 22:54	7° \mathbb{U} 59'36	
opposition	979 Oct 08 j 23:14	20° \mathbb{Y} 22'53 -1°35'39	opposition	985 Mar 18 j 12:02	3° \mathbb{U} 06'39	1°39'53
min. Earth dist.	979 Oct 07 j 15:40	20° \mathbb{Y} 33'36 3.98118 AU	min. Earth dist.	985 Mar 19 j 13:36	2° \mathbb{U} 58'27	4.44505 AU
direct	979 Dec 05 j 19:29	15° \mathbb{Y} 27'25		985 Apr 13 j 16:34	30° \mathbb{R} \mathbb{R}	
	980 Mar 19 j 05:04	0° \mathbb{Z}	direct	985 May 20 j 05:30	28° \mathbb{R} 04'23	
evening set	980 Apr 09 j 18:05	4° \mathbb{Z} 58'29		985 Jun 25 j 21:51	0° \mathbb{U}	
			evening set	985 Sep 23 j 16:37	15° \mathbb{U} 39'15	
conjunction	980 Apr 23 j 09:15	8° \mathbb{Z} 11'31 -0°53'27	max. Earth dist.	985 Oct 04 j 15:47	18° \mathbb{U} 02'42	6.42393 AU
minimum elong	980 Apr 23 j 09:17	8° \mathbb{Z} 11'32 0°53'27				
max. Earth dist.	980 Apr 25 j 14:39	8° \mathbb{Z} 43'03 6.02204 AU	conjunction	985 Oct 06 j 11:30	18° \mathbb{U} 26'37	1°05'31
morning rise	980 May 07 j 03:00	11° \mathbb{Z} 25'37	minimum elong	985 Oct 06 j 11:31	18° \mathbb{U} 26'38	1°05'31
	980 May 22 j 14:04	15° \mathbb{Z}	morning rise	985 Oct 19 j 03:42	21° \mathbb{U} 12'51	
	980 Aug 16 j 17:43	0° \mathbb{II}		985 Dec 01 j 00:06	0° \mathbb{II}	
retrograde	980 Sep 14 j 04:00	1° \mathbb{II} 18'22	retrograde	986 Feb 16 j 22:41	8° \mathbb{II} 12'47	
	980 Oct 12 j 08:58	30° \mathbb{R} \mathbb{Z}	opposition	986 Apr 18 j 19:27	3° \mathbb{II} 20'58	1°24'01
min. Earth dist.	980 Nov 11 j 07:29	26° \mathbb{Z} 24'58 4.07990 AU	min. Earth dist.	986 Apr 20 j 05:45	3° \mathbb{II} 10'02	4.38787 AU
opposition	980 Nov 12 j 17:42	26° \mathbb{Z} 13'18 -0°56'28		986 May 17 j 16:29	30° \mathbb{R} \mathbb{U}	
direct	981 Jan 10 j 04:28	21° \mathbb{Z} 14'46	direct	986 Jun 20 j 10:06	28° \mathbb{U} 20'27	
	981 Mar 29 j 19:17	0° \mathbb{II}		986 Jul 24 j 04:44	0° \mathbb{II}	
evening set	981 May 16 j 15:13	10° \mathbb{II} 15'03		986 Oct 19 j 02:21	15° \mathbb{II}	
			evening set	986 Oct 24 j 09:52	16° \mathbb{II} 10'25	
conjunction	981 May 30 j 09:44	13° \mathbb{II} 23'53 -0°19'35	max. Earth dist.	986 Nov 03 j 23:55	18° \mathbb{II} 32'08	6.33571 AU
minimum elong	981 May 30 j 09:45	13° \mathbb{II} 23'54 0°19'34				
max. Earth dist.	981 Jun 01 j 11:21	13° \mathbb{II} 52'17 6.14730 AU	conjunction	986 Nov 06 j 01:39	19° \mathbb{II} 00'00	0°45'21
morning rise	981 Jun 13 j 04:38	16° \mathbb{II} 32'41	minimum elong	986 Nov 06 j 01:41	19° \mathbb{II} 00'01	0°45'21
	981 Aug 18 j 18:26	0° \mathbb{D}	morning rise	986 Nov 18 j 15:57	21° \mathbb{II} 49'04	

	986 Dec 27 j 06:09	0°♏			992 Jul 15 j 16:46	0°♊
retrograde	987 Mar 21 j 17:53	9°♏29'34		retrograde	992 Sep 18 j 22:48	6°♊12'54
opposition	987 May 21 j 15:31	4°♏37'19	0°43'33	min. Earth dist.	992 Nov 16 j 02:41	1°♊19'13 4.09980 AU
min. Earth dist.	987 May 23 j 02:45	4°♏26'05	4.27323 AU	opposition	992 Nov 17 j 11:37	1°♊08'00 -0°49'09
	987 Jul 07 j 12:29	30°♏			992 Nov 25 j 20:59	30°♏
direct	987 Jul 22 j 13:13	29°♏39'12		direct	993 Jan 15 j 02:25	26°♏09'03
	987 Aug 06 j 12:45	0°♏			993 Mar 06 j 00:25	0°♊
evening set	987 Nov 24 j 23:31	17°♏58'09		evening set	993 May 21 j 13:39	15°♊03'32
max. Earth dist.	987 Dec 05 j 21:26	20°♏28'50	6.20428 AU			
				conjunction	993 Jun 04 j 07:58	18°♊11'24 -0°14'11
conjunction	987 Dec 07 j 15:31	20°♏53'08	0°11'06	minimum elong	993 Jun 04 j 07:59	18°♊11'24 0°14'12
minimum elong	987 Dec 07 j 15:32	20°♏53'08	0°11'06	behind sun begin	993 Jun 04 j 04:15	18°♊09'17
behind sun begin	987 Dec 07 j 09:30	20°♏49'40		behind sun end	993 Jun 04 j 11:43	18°♊13'31
behind sun end	987 Dec 07 j 21:34	20°♏56'36		max. Earth dist.	993 Jun 06 j 06:05	18°♊37'39 6.16787 AU
morning rise	987 Dec 20 j 07:29	23°♏48'20		morning rise	993 Jun 18 j 02:42	21°♊19'09
	988 Jan 17 j 02:07	0°♏			993 Jul 28 j 13:38	0°♏
desc. node	988 Mar 28 j 05:05	11°♏20'14		retrograde	993 Oct 22 j 03:40	9°♏54'48
retrograde	988 Apr 24 j 16:09	12°♏30'08		asc. node	993 Oct 25 j 09:41	9°♏53'45
opposition	988 Jun 24 j 11:33	7°♏35'47	-0°13'09	opposition	993 Dec 20 j 19:49	4°♏52'19 0°08'11
min. Earth dist.	988 Jun 25 j 10:04	7°♏28'31	4.13369 AU	min. Earth dist.	993 Dec 19 j 20:30	5°♏00'11 4.23726 AU
direct	988 Aug 24 j 01:05	2°♏40'17			994 Feb 08 j 23:28	30°♏
evening set	988 Dec 27 j 05:02	21°♏35'40		direct	994 Feb 18 j 15:34	29°♊50'47
max. Earth dist.	989 Jan 08 j 05:06	24°♏26'19	6.06919 AU		994 Feb 28 j 09:14	0°♏
				evening set	994 Jun 25 j 12:48	18°♏09'22
conjunction	989 Jan 09 j 00:13	24°♏37'40	-0°28'20			
minimum elong	989 Jan 09 j 00:11	24°♏37'39	0°28'20	conjunction	994 Jul 09 j 03:43	21°♏09'53 0°24'30
morning rise	989 Jan 21 j 20:51	27°♏40'42		minimum elong	994 Jul 09 j 03:41	21°♏09'52 0°24'31
	989 Jan 31 j 18:38	0°♏		max. Earth dist.	994 Jul 10 j 03:08	21°♏22'50 6.30385 AU
	989 Apr 21 j 11:24	15°♏		morning rise	994 Jul 22 j 16:59	24°♏09'23
retrograde	989 May 31 j 18:54	17°♏28'48			994 Aug 19 j 02:50	0°♏
	989 Jul 11 j 08:01	15°♏		retrograde	994 Nov 22 j 13:29	11°♏44'59
opposition	989 Jul 31 j 04:51	12°♏31'00	-1°08'48	opposition	995 Jan 21 j 10:55	6°♏46'16 0°59'36
min. Earth dist.	989 Jul 31 j 07:49	12°♏30'01	4.01489 AU	min. Earth dist.	995 Jan 21 j 04:38	6°♏48'21 4.36061 AU
direct	989 Sep 28 j 09:22	7°♏37'16		direct	995 Mar 23 j 14:57	1°♏43'23
	989 Dec 07 j 17:13	15°♏			995 Jul 07 j 01:14	15°♏
evening set	990 Jan 31 j 11:37	27°♏04'27		evening set	995 Jul 28 j 15:06	19°♏33'40
	990 Feb 12 j 14:59	0°♏				
conjunction	990 Feb 13 j 12:43	0°♏13'07	-0°58'58	conjunction	995 Aug 10 j 22:45	22°♏27'02 0°54'21
minimum elong	990 Feb 13 j 12:41	0°♏13'06	0°58'57	minimum elong	995 Aug 10 j 22:42	22°♏27'00 0°54'20
max. Earth dist.	990 Feb 14 j 00:51	0°♏20'27	5.97735 AU	max. Earth dist.	995 Aug 10 j 17:31	22°♏24'11 6.40503 AU
morning rise	990 Feb 26 j 16:36	3°♏23'23		morning rise	995 Aug 24 j 03:48	25°♏18'59
retrograde	990 Jul 08 j 21:21	23°♏55'53			995 Sep 15 j 08:02	0°♏
opposition	990 Sep 06 j 20:56	18°♏54'07	-1°40'14	retrograde	995 Dec 22 j 21:31	12°♏16'42
min. Earth dist.	990 Sep 06 j 01:46	19°♏00'32	3.96113 AU	opposition	996 Feb 21 j 03:21	7°♏21'32 1°32'01
direct	990 Nov 03 j 23:25	14°♏00'20		min. Earth dist.	996 Feb 21 j 15:00	7°♏17'44 4.43408 AU
	991 Feb 21 j 21:49	0°♏		direct	996 Apr 23 j 08:13	2°♏18'29
evening set	991 Mar 09 j 10:18	3°♏40'09		evening set	996 Aug 28 j 05:06	19°♏54'13
				max. Earth dist.	996 Sep 09 j 00:25	22°♏27'18 6.44476 AU
conjunction	991 Mar 22 j 19:07	6°♏52'51	-1°07'24	conjunction	996 Sep 10 j 05:08	22°♏42'52 1°08'20
minimum elong	991 Mar 22 j 19:08	6°♏52'52	1°07'24	minimum elong	996 Sep 10 j 05:07	22°♏42'52 1°08'19
max. Earth dist.	991 Mar 24 j 11:30	7°♏17'09	5.96574 AU	morning rise	996 Sep 23 j 02:03	25°♏30'05
morning rise	991 Apr 05 j 07:14	10°♏07'12			996 Oct 14 j 09:36	0°♏
	991 Jul 26 j 17:00	0°♏		retrograde	997 Jan 21 j 04:32	12°♏17'13
retrograde	991 Aug 15 j 08:09	0°♏37'57		opposition	997 Mar 22 j 19:10	7°♏24'33 1°39'13
	991 Sep 03 j 21:22	30°♏		min. Earth dist.	997 Mar 23 j 21:41	7°♏16'03 4.43897 AU
min. Earth dist.	991 Oct 12 j 16:18	25°♏44'22	3.99405 AU	direct	997 May 24 j 12:05	2°♏22'33
opposition	991 Oct 14 j 00:58	25°♏33'15	-1°32'00	evening set	997 Sep 27 j 23:14	19°♏59'16
direct	991 Dec 10 j 22:57	20°♏37'20		max. Earth dist.	997 Oct 08 j 19:37	22°♏21'39 6.41358 AU
	992 Feb 29 j 10:44	0°♏				
evening set	992 Apr 14 j 21:37	10°♏03'45		conjunction	997 Oct 10 j 17:23	22°♏46'47 1°03'41
				minimum elong	997 Oct 10 j 17:25	22°♏46'48 1°03'41
conjunction	992 Apr 28 j 13:39	13°♏16'19	-0°49'36	morning rise	997 Oct 23 j 09:18	25°♏33'18
minimum elong	992 Apr 28 j 13:42	13°♏16'21	0°49'36		997 Nov 13 j 03:49	0°♏
max. Earth dist.	992 Apr 30 j 20:38	13°♏48'38	6.03947 AU	retrograde	998 Feb 21 j 11:23	12°♏37'50
	992 May 05 j 22:09	15°♏		opposition	998 Apr 23 j 07:24	7°♏46'04 1°19'39
morning rise	992 May 12 j 07:42	16°♏29'46		min. Earth dist.	998 Apr 24 j 18:56	7°♏34'45 4.37382 AU

direct	998 Jun 24 j 21:09	2°♄45'52		evening set	1004 Apr 20 j 00:37	15°♄06'41	
	998 Oct 02 j 14:24	15°♄					
evening set	998 Oct 28 j 18:20	20°♄39'19		conjunction	1004 May 03 j 17:11	18°♄18'53	-0°45'26
max. Earth dist.	998 Nov 08 j 09:08	23°♄02'01	6.31916 AU	minimum elong	1004 May 03 j 17:14	18°♄18'55	0°45'25
				max. Earth dist.	1004 May 05 j 23:05	18°♄50'26	6.05378 AU
conjunction	998 Nov 10 j 10:04	23°♄29'32	0°41'12	morning rise	1004 May 17 j 11:53	21°♄31'54	
minimum elong	998 Nov 10 j 10:06	23°♄29'33	0°41'12		1004 Jun 24 j 16:03	0°♄	
morning rise	998 Nov 23 j 00:22	26°♄19'16		retrograde	1004 Sep 23 j 15:29	11°♄06'50	
	998 Dec 09 j 16:54	0°♄		min. Earth dist.	1004 Nov 20 j 20:18	6°♄13'17	4.11621 AU
retrograde	999 Mar 26 j 10:48	14°♄07'08		opposition	1004 Nov 22 j 05:00	6°♄02'09	-0°41'32
opposition	999 May 26 j 09:25	9°♄14'39	0°36'14	direct	1005 Jan 19 j 22:14	1°♄02'47	
min. Earth dist.	999 May 27 j 18:26	9°♄04'07	4.25524 AU	evening set	1005 May 26 j 12:24	19°♄53'00	
direct	999 Jul 27 j 02:20	4°♄16'57					
evening set	999 Nov 29 j 12:27	22°♄40'20		conjunction	1005 Jun 09 j 06:39	23°♄00'05	-0°08'42
max. Earth dist.	999 Dec 10 j 13:35	25°♄13'29	6.18632 AU	minimum elong	1005 Jun 09 j 06:39	23°♄00'05	0°08'42
				behind sun begin	1005 Jun 08 j 23:28	22°♄56'01	
conjunction	999 Dec 12 j 04:40	25°♄36'09	0°05'37	behind sun end	1005 Jun 09 j 13:50	23°♄04'08	
minimum elong	999 Dec 12 j 04:40	25°♄36'08	0°05'38	max. Earth dist.	1005 Jun 11 j 01:58	23°♄24'39	6.18512 AU
behind sun begin	999 Dec 11 j 20:59	25°♄31'43		morning rise	1005 Jun 23 j 00:53	26°♄06'51	
behind sun end	999 Dec 12 j 12:20	25°♄40'34			1005 Jul 10 j 14:06	0°♄	
morning rise	999 Dec 24 j 21:03	28°♄32'18		asc. node	1005 Sep 04 j 14:27	10°♄29'56	
	999 Dec 31 j 05:57	0°♄		retrograde	1005 Oct 26 j 15:57	14°♄34'15	
desc. node	1000 Feb 06 j 00:02	7°♄55'31		min. Earth dist.	1005 Dec 24 j 10:58	9°♄39'09	4.25367 AU
retrograde	1000 Apr 29 j 18:14	17°♄22'46		opposition	1005 Dec 25 j 07:28	9°♄32'15	0°16'05
opposition	1000 Jun 29 j 11:57	12°♄28'01	-0°21'30	direct	1006 Feb 23 j 07:58	4°♄30'29	
min. Earth dist.	1000 Jun 30 j 08:52	12°♄21'15	4.11688 AU	evening set	1006 Jun 30 j 06:12	22°♄45'27	
direct	1000 Aug 28 j 22:08	7°♄32'50					
evening set	1000 Dec 31 j 23:41	26°♄32'25		conjunction	1006 Jul 13 j 20:19	25°♄45'03	0°29'25
				minimum elong	1006 Jul 13 j 20:17	25°♄45'02	0°29'25
conjunction	1001 Jan 13 j 19:31	29°♄35'19	-0°33'28	max. Earth dist.	1006 Jul 14 j 16:01	25°♄55'55	6.31812 AU
minimum elong	1001 Jan 13 j 19:29	29°♄35'18	0°33'28	morning rise	1006 Jul 27 j 08:38	28°♄43'33	
max. Earth dist.	1001 Jan 13 j 04:07	29°♄26'09	6.05495 AU		1006 Aug 02 j 04:53	0°♄	
	1001 Jan 15 j 12:57	0°♄			1006 Oct 30 j 00:32	15°♄	
morning rise	1001 Jan 26 j 17:01	2°♄39'21		retrograde	1006 Nov 26 j 19:52	16°♄13'16	
	1001 Mar 24 j 14:25	15°♄			1006 Dec 24 j 12:08	15°♄	
retrograde	1001 Jun 06 j 00:11	22°♄34'40		opposition	1007 Jan 25 j 18:52	11°♄15'03	1°05'30
opposition	1001 Aug 05 j 09:17	17°♄36'22	-1°15'06	min. Earth dist.	1007 Jan 25 j 14:23	11°♄16'32	4.37205 AU
min. Earth dist.	1001 Aug 05 j 08:40	17°♄36'34	4.00476 AU	direct	1007 Mar 28 j 01:43	6°♄12'06	
	1001 Aug 26 j 06:59	15°♄			1007 Jun 18 j 19:37	15°♄	
direct	1001 Oct 03 j 08:53	12°♄42'48		evening set	1007 Aug 02 j 03:31	24°♄00'19	
	1001 Nov 09 j 21:27	15°♄					
	1002 Jan 27 j 05:55	0°♄		conjunction	1007 Aug 15 j 10:07	26°♄52'56	0°57'22
evening set	1002 Feb 05 j 12:14	2°♄12'29		minimum elong	1007 Aug 15 j 10:05	26°♄52'55	0°57'22
				max. Earth dist.	1007 Aug 15 j 02:08	26°♄48'36	6.41296 AU
conjunction	1002 Feb 18 j 14:11	5°♄21'47	-1°01'40	morning rise	1007 Aug 28 j 13:55	29°♄44'05	
minimum elong	1002 Feb 18 j 14:09	5°♄21'46	1°01'40		1007 Aug 29 j 19:27	0°♄	
max. Earth dist.	1002 Feb 19 j 05:43	5°♄31'10	5.97205 AU	retrograde	1007 Dec 27 j 04:01	16°♄39'09	
morning rise	1002 Mar 03 j 19:09	8°♄32'45		opposition	1008 Feb 25 j 10:40	11°♄44'27	1°34'38
retrograde	1002 Jul 14 j 02:14	29°♄07'36		min. Earth dist.	1008 Feb 26 j 00:27	11°♄39'59	4.43836 AU
min. Earth dist.	1002 Sep 11 j 03:48	24°♄12'31	3.96135 AU	direct	1008 Apr 27 j 18:13	6°♄41'36	
opposition	1002 Sep 12 j 01:13	24°♄05'19	-1°41'33	evening set	1008 Sep 01 j 14:02	24°♄16'36	
direct	1002 Nov 09 j 02:07	19°♄11'21		max. Earth dist.	1008 Sep 13 j 04:57	26°♄47'28	6.44514 AU
	1003 Feb 03 j 21:08	0°♄					
evening set	1003 Mar 14 j 14:04	8°♄50'40		conjunction	1008 Sep 14 j 12:59	27°♄04'50	1°08'49
				minimum elong	1008 Sep 14 j 12:59	27°♄04'50	1°08'48
conjunction	1003 Mar 28 j 00:08	12°♄03'39	-1°06'25	morning rise	1008 Sep 27 j 09:08	29°♄51'43	
minimum elong	1003 Mar 28 j 00:09	12°♄03'40	1°06'24		1008 Sep 28 j 00:30	0°♄	
max. Earth dist.	1003 Mar 29 j 20:33	12°♄30'19	5.97149 AU	retrograde	1009 Jan 25 j 12:40	16°♄39'18	
morning rise	1003 Apr 10 j 13:07	15°♄18'08		opposition	1009 Mar 27 j 04:04	11°♄46'49	1°38'03
	1003 Jun 19 j 00:50	0°♄		min. Earth dist.	1009 Mar 28 j 07:58	11°♄37'52	4.43582 AU
retrograde	1003 Aug 20 j 10:06	5°♄44'41		direct	1009 May 28 j 21:45	6°♄45'01	
min. Earth dist.	1003 Oct 17 j 16:08	0°♄51'00	4.00466 AU	evening set	1009 Oct 02 j 06:33	24°♄22'19	
opposition	1003 Oct 19 j 00:54	0°♄39'51	-1°27'45	max. Earth dist.	1009 Oct 13 j 03:15	26°♄45'06	6.40728 AU
	1003 Oct 23 j 22:17	30°♄					
direct	1003 Dec 16 j 00:12	25°♄43'34		conjunction	1009 Oct 15 j 00:16	27°♄09'52	1°01'33
	1004 Feb 06 j 00:15	0°♄		minimum elong	1009 Oct 15 j 00:18	27°♄09'52	1°01'34
	1004 Apr 19 j 13:09	15°♄		morning rise	1009 Oct 27 j 15:30	29°♄56'24	

	1009 Oct 27 j 22:05	0°♄		min. Earth dist.	1015 Oct 22 j 11:20	5°♄49'07	4.01213 AU
	1010 Jan 19 j 19:40	15°♄		opposition	1015 Oct 23 j 21:13	5°♄37'34	-1°23'04
retrograde	1010 Feb 25 j 21:27	17°♄04'05		direct	1015 Dec 20 j 20:50	0°♄40'53	
	1010 Apr 04 j 07:47	15°♄			1016 Apr 02 j 23:13	15°♄	
opposition	1010 Apr 27 j 19:24	12°♄12'16	1°14'53	evening set	1016 Apr 25 j 00:59	20°♄02'09	
min. Earth dist.	1010 Apr 29 j 06:17	12°♄01'11	4.36478 AU				
direct	1010 Jun 29 j 07:20	7°♄12'26		conjunction	1016 May 08 j 18:18	23°♄14'12	-0°41'04
	1010 Sep 14 j 02:53	15°♄		minimum elong	1016 May 08 j 18:20	23°♄14'13	0°41'04
evening set	1010 Nov 02 j 02:17	25°♄07'31		max. Earth dist.	1016 May 10 j 23:38	23°♄45'21	6.06469 AU
max. Earth dist.	1010 Nov 12 j 16:59	27°♄30'36	6.30805 AU	morning rise	1016 May 22 j 13:20	26°♄26'52	
					1016 Jun 07 j 02:38	0°♄	
conjunction	1010 Nov 14 j 17:40	27°♄58'03	0°36'55	retrograde	1016 Sep 28 j 08:14	15°♄55'04	
minimum elong	1010 Nov 14 j 17:42	27°♄58'04	0°36'54	opposition	1016 Nov 26 j 20:27	10°♄50'37	-0°33'53
	1010 Nov 23 j 18:05	0°♄		min. Earth dist.	1016 Nov 25 j 13:39	11°♄01'07	4.12922 AU
morning rise	1010 Nov 27 j 08:04	0°♄48'16		direct	1017 Jan 24 j 17:36	5°♄50'54	
retrograde	1011 Mar 31 j 03:42	18°♄41'43		evening set	1017 May 31 j 09:46	24°♄38'05	
opposition	1011 May 31 j 02:09	13°♄48'58	0°28'52				
min. Earth dist.	1011 Jun 01 j 10:40	13°♄38'34	4.24249 AU	conjunction	1017 Jun 14 j 03:57	27°♄44'30	-0°03'17
direct	1011 Jul 31 j 17:06	8°♄51'32		minimum elong	1017 Jun 14 j 03:56	27°♄44'29	0°03'17
evening set	1011 Dec 03 j 23:00	27°♄17'29		behind sun begin	1017 Jun 13 j 19:37	27°♄39'48	
max. Earth dist.	1011 Dec 15 j 02:55	29°♄52'40	6.17309 AU	behind sun end	1017 Jun 14 j 12:15	27°♄49'10	
	1011 Dec 15 j 15:33	0°♄		max. Earth dist.	1017 Jun 15 j 21:47	28°♄08'09	6.19937 AU
					1017 Jun 24 j 03:57	0°♄	
conjunction	1011 Dec 16 j 15:31	0°♄13'56	0°00'13	morning rise	1017 Jun 27 j 21:45	0°♄50'27	
minimum elong	1011 Dec 16 j 15:31	0°♄13'56	0°00'13	asc. node	1017 Jul 16 j 14:36	4°♄57'45	
behind sun begin	1011 Dec 16 j 07:36	0°♄09'21		retrograde	1017 Oct 31 j 01:20	19°♄10'33	
behind sun end	1011 Dec 16 j 23:27	0°♄18'31		opposition	1017 Dec 29 j 18:12	14°♄09'00	0°23'44
desc. node	1011 Dec 18 j 15:52	0°♄42'02		min. Earth dist.	1017 Dec 28 j 22:26	14°♄15'39	4.26794 AU
morning rise	1011 Dec 29 j 08:17	3°♄10'49		direct	1018 Feb 27 j 21:19	9°♄07'02	
retrograde	1012 May 04 j 14:35	22°♄08'13		evening set	1018 Jul 04 j 22:38	27°♄18'51	
opposition	1012 Jul 04 j 08:59	17°♄13'02	-0°29'25		1018 Jul 17 j 04:00	0°♄	
min. Earth dist.	1012 Jul 05 j 03:14	17°♄07'08	4.10423 AU				
direct	1012 Sep 02 j 14:36	12°♄18'06		conjunction	1018 Jul 18 j 11:48	0°♄17'31	0°34'05
	1012 Dec 30 j 22:26	0°♄		minimum elong	1018 Jul 18 j 11:46	0°♄17'30	0°34'04
evening set	1013 Jan 05 j 15:14	1°♄20'40		max. Earth dist.	1018 Jul 19 j 03:43	0°♄26'17	6.33140 AU
				morning rise	1018 Jul 31 j 23:07	3°♄15'02	
conjunction	1013 Jan 18 j 11:32	4°♄24'15	-0°38'10		1018 Sep 29 j 09:57	15°♄	
minimum elong	1013 Jan 18 j 11:30	4°♄24'14	0°38'09	retrograde	1018 Dec 01 j 03:34	20°♄39'11	
max. Earth dist.	1013 Jan 17 j 22:42	4°♄16'36	6.04389 AU	opposition	1019 Jan 30 j 02:41	15°♄41'27	1°10'55
morning rise	1013 Jan 31 j 09:52	7°♄29'06		min. Earth dist.	1019 Jan 30 j 01:03	15°♄41'59	4.38329 AU
	1013 Mar 05 j 06:26	15°♄			1019 Feb 04 j 08:43	15°♄	
retrograde	1013 Jun 11 j 01:10	27°♄30'30		direct	1019 Apr 01 j 14:25	10°♄38'27	
opposition	1013 Aug 10 j 09:11	22°♄31'38	-1°20'36		1019 May 27 j 13:09	15°♄	
min. Earth dist.	1013 Aug 10 j 06:22	22°♄32'33	3.99637 AU	evening set	1019 Aug 06 j 14:46	28°♄24'09	
direct	1013 Oct 08 j 05:48	17°♄38'01			1019 Aug 14 j 00:10	0°♄	
	1014 Jan 10 j 12:44	0°♄					
evening set	1014 Feb 10 j 08:48	7°♄09'55		conjunction	1019 Aug 19 j 20:19	1°♄16'00	1°00'01
				minimum elong	1019 Aug 19 j 20:17	1°♄15'59	1°00'01
conjunction	1014 Feb 23 j 11:54	10°♄19'55	-1°03'49	max. Earth dist.	1019 Aug 19 j 09:24	1°♄10'05	6.42104 AU
minimum elong	1014 Feb 23 j 11:53	10°♄19'54	1°03'49	morning rise	1019 Sep 01 j 22:57	4°♄06'22	
max. Earth dist.	1014 Feb 24 j 07:55	10°♄32'00	5.96718 AU	retrograde	1019 Dec 31 j 08:14	20°♄58'38	
morning rise	1014 Mar 08 j 17:50	13°♄31'33		opposition	1020 Feb 29 j 17:09	16°♄04'14	1°36'40
	1014 May 27 j 19:06	0°♄		min. Earth dist.	1020 Mar 01 j 08:21	15°♄59'19	4.44278 AU
retrograde	1014 Jul 19 j 04:22	4°♄08'28		direct	1020 May 02 j 02:22	11°♄01'27	
	1014 Sep 10 j 07:14	30°♄		evening set	1020 Sep 05 j 21:29	28°♄35'30	
min. Earth dist.	1014 Sep 16 j 02:40	29°♄13'21	3.96076 AU		1020 Sep 12 j 09:58	0°♄	
opposition	1014 Sep 17 j 01:04	29°♄05'49	-1°42'04	max. Earth dist.	1020 Sep 17 j 10:13	1°♄05'15	6.44527 AU
direct	1014 Nov 14 j 00:27	24°♄11'38					
	1015 Jan 14 j 01:15	0°♄		conjunction	1020 Sep 18 j 19:33	1°♄23'21	1°08'54
evening set	1015 Mar 19 j 14:12	13°♄51'06		minimum elong	1020 Sep 18 j 19:33	1°♄23'21	1°08'53
				morning rise	1020 Oct 01 j 14:43	4°♄09'52	
conjunction	1015 Apr 02 j 01:13	17°♄04'23	-1°04'59	retrograde	1021 Jan 29 j 19:19	20°♄58'06	
minimum elong	1015 Apr 02 j 01:14	17°♄04'24	1°04'59	opposition	1021 Mar 31 j 12:00	16°♄05'49	1°36'20
max. Earth dist.	1015 Apr 03 j 22:20	17°♄31'25	5.97506 AU	min. Earth dist.	1021 Apr 01 j 17:29	15°♄56'24	4.43136 AU
morning rise	1015 Apr 15 j 15:26	20°♄19'13		direct	1021 Jun 02 j 06:41	11°♄04'17	
	1015 May 28 j 14:53	0°♄		evening set	1021 Oct 06 j 12:34	28°♄42'34	
retrograde	1015 Aug 25 j 06:40	10°♄42'31			1021 Oct 12 j 09:48	0°♄	




























































































































max. Earth dist.	1021 Oct 17 j 06:00	1°♍04'00	6.39823 AU	conjunction	1027 Apr 07 j 08:43	22°♊20'09	-1°02'58
				minimum elong	1027 Apr 07 j 08:45	22°♊20'10	1°02'58
conjunction	1021 Oct 19 j 05:38	1°♍30'15	0°59'04	max. Earth dist.	1027 Apr 09 j 09:03	22°♊49'02	5.98199 AU
minimum elong	1021 Oct 19 j 05:40	1°♍30'16	0°59'04	morning rise	1027 Apr 20 j 23:47	25°♊35'02	
morning rise	1021 Oct 31 j 20:40	4°♍17'03			1027 May 09 j 22:38	0°♋	
	1021 Dec 24 j 02:28	15°♍			1027 Aug 07 j 01:33	15°♋	
retrograde	1022 Mar 02 j 09:19	21°♍29'13		retrograde	1027 Aug 30 j 08:59	15°♋53'03	
opposition	1022 May 02 j 07:28	16°♍37'22	1°09'40		1027 Sep 22 j 10:19	15°♋♋	
min. Earth dist.	1022 May 03 j 18:53	16°♍26'05	4.35142 AU	opposition	1027 Oct 28 j 22:03	10°♋47'58	-1°17'31
	1022 May 15 j 06:58	15°♋♍		min. Earth dist.	1027 Oct 27 j 12:18	10°♋59'29	4.02500 AU
direct	1022 Jul 03 j 17:48	11°♍37'47		direct	1027 Dec 26 j 00:17	5°♋50'53	
	1022 Aug 21 j 08:30	15°♍			1028 Mar 14 j 20:32	15°♋	
evening set	1022 Nov 06 j 10:02	29°♍36'09		evening set	1028 Apr 30 j 05:30	25°♋07'55	
	1022 Nov 08 j 04:32	0°♌					
max. Earth dist.	1022 Nov 17 j 02:21	2°♌00'39	6.29147 AU	conjunction	1028 May 13 j 23:19	28°♌19'22	-0°36'16
				minimum elong	1028 May 13 j 23:22	28°♌19'23	0°36'16
conjunction	1022 Nov 19 j 01:31	2°♌27'21	0°32'21	max. Earth dist.	1028 May 16 j 05:45	28°♌51'00	6.08254 AU
minimum elong	1022 Nov 19 j 01:33	2°♌27'22	0°32'21		1028 May 21 j 04:37	0°♍	
morning rise	1022 Dec 01 j 15:53	5°♌18'17		morning rise	1028 May 27 j 18:33	1°♍31'18	
retrograde	1023 Apr 04 j 21:08	23°♌19'32		retrograde	1028 Oct 03 j 00:24	20°♍49'29	
opposition	1023 Jun 04 j 20:04	18°♌26'34	0°21'09	min. Earth dist.	1028 Nov 30 j 07:00	15°♍55'49	4.15024 AU
min. Earth dist.	1023 Jun 06 j 03:16	18°♌16'37	4.22367 AU	opposition	1028 Dec 01 j 13:55	15°♍45'18	-0°25'50
direct	1023 Aug 05 j 06:49	13°♌29'33		direct	1029 Jan 29 j 14:04	10°♍45'13	
desc. node	1023 Oct 29 j 00:29	23°♌09'16		asc. node	1029 May 26 j 22:09	27°♍20'36	
	1023 Nov 29 j 18:09	0°♎		evening set	1029 Jun 05 j 08:13	29°♍26'14	
evening set	1023 Dec 08 j 11:57	2°♎00'30			1029 Jun 07 j 20:33	0°♏	
max. Earth dist.	1023 Dec 19 j 17:29	4°♎37'20	6.15358 AU				
				conjunction	1029 Jun 19 j 01:48	2°♎31'25	0°02'21
conjunction	1023 Dec 21 j 04:42	4°♎57'53	-0°05'23	minimum elong	1029 Jun 19 j 01:46	2°♎31'24	0°02'21
minimum elong	1023 Dec 21 j 04:41	4°♎57'53	0°05'23	behind sun begin	1029 Jun 18 j 17:25	2°♏26'44	
behind sun begin	1023 Dec 20 j 20:57	4°♎53'23		behind sun end	1029 Jun 19 j 10:07	2°♏36'05	
behind sun end	1023 Dec 21 j 12:25	5°♎02'22		max. Earth dist.	1029 Jun 20 j 15:51	2°♏52'50	6.22178 AU
morning rise	1024 Jan 02 j 22:09	7°♎55'52		morning rise	1029 Jul 02 j 18:58	5°♏36'04	
retrograde	1024 May 09 j 16:57	27°♎02'54		retrograde	1029 Nov 04 j 10:58	23°♏46'04	
opposition	1024 Jul 09 j 09:38	22°♎07'16	-0°37'28	min. Earth dist.	1030 Jan 02 j 11:47	18°♏50'37	4.28970 AU
min. Earth dist.	1024 Jul 10 j 01:29	22°♎02'08	4.08550 AU	opposition	1030 Jan 03 j 04:36	18°♏44'58	0°31'11
direct	1024 Sep 07 j 10:50	17°♎12'34		direct	1030 Mar 04 j 14:15	13°♏42'43	
	1024 Dec 13 j 23:22	0°♏			1030 Jul 01 j 04:29	0°♐	
evening set	1025 Jan 10 j 11:00	6°♏20'27		evening set	1030 Jul 09 j 13:19	1°♐48'45	
conjunction	1025 Jan 23 j 08:16	9°♏25'08	-0°42'49	conjunction	1030 Jul 23 j 01:35	4°♐46'11	0°38'28
minimum elong	1025 Jan 23 j 08:13	9°♏25'07	0°42'48	minimum elong	1030 Jul 23 j 01:32	4°♐46'10	0°38'28
max. Earth dist.	1025 Jan 23 j 00:27	9°♏20'27	6.02776 AU	max. Earth dist.	1030 Jul 23 j 14:58	4°♐53'31	6.35074 AU
morning rise	1025 Feb 05 j 07:26	12°♏31'06		morning rise	1030 Aug 05 j 11:33	7°♐42'22	
	1025 Feb 15 j 19:51	15°♏			1030 Sep 09 j 10:27	15°♐	
	1025 May 05 j 13:12	0°♑		retrograde	1030 Dec 05 j 05:53	24°♐59'11	
retrograde	1025 Jun 16 j 09:04	2°♑40'26		opposition	1031 Feb 03 j 07:53	20°♐01'55	1°15'47
	1025 Jul 28 j 09:12	30°♑♑		min. Earth dist.	1031 Feb 03 j 07:57	20°♐01'53	4.39894 AU
opposition	1025 Aug 15 j 14:33	27°♑41'05	-1°25'48		1031 Apr 02 j 09:16	15°♑♐	
min. Earth dist.	1025 Aug 15 j 09:16	27°♑42'50	3.98472 AU	direct	1031 Apr 05 j 22:56	14°♐58'49	
direct	1025 Oct 13 j 06:37	22°♑47'34			1031 Apr 09 j 12:54	15°♐	
	1025 Dec 21 j 08:24	0°♒			1031 Jul 29 j 08:30	0°♑	
evening set	1026 Feb 15 j 11:40	12°♒22'50		evening set	1031 Aug 10 j 22:52	2°♑40'45	
				max. Earth dist.	1031 Aug 23 j 11:45	5°♑23'20	6.43165 AU
conjunction	1026 Feb 28 j 15:41	15°♒33'35	-1°05'36	conjunction	1031 Aug 24 j 03:09	5°♑31'40	1°02'15
minimum elong	1026 Feb 28 j 15:40	15°♒33'34	1°05'35	minimum elong	1031 Aug 24 j 03:08	5°♑31'39	1°02'15
max. Earth dist.	1026 Mar 01 j 14:31	15°♒47'23	5.96093 AU	morning rise	1031 Sep 06 j 04:40	8°♑21'09	
morning rise	1026 Mar 13 j 22:58	18°♒46'03		retrograde	1032 Jan 04 j 11:18	25°♑10'17	
	1026 May 03 j 01:38	0°♓		opposition	1032 Mar 04 j 20:55	20°♑16'15	1°38'07
retrograde	1026 Jul 24 j 10:12	9°♓25'02		min. Earth dist.	1032 Mar 05 j 15:32	20°♑10'14	4.44771 AU
min. Earth dist.	1026 Sep 21 j 04:47	4°♓30'35	3.96102 AU	direct	1032 May 06 j 09:57	15°♑13'30	
opposition	1026 Sep 22 j 06:23	4°♓21'56	-1°41'49		1032 Aug 28 j 00:45	0°♔	
	1026 Nov 01 j 11:28	30°♒♒			1032 Sep 10 j 01:25	2°♔46'30	
direct	1026 Nov 19 j 03:49	29°♒27'32		evening set	1032 Sep 21 j 09:36	5°♔13'55	6.44384 AU
	1026 Dec 06 j 21:46	0°♓		max. Earth dist.			
evening set	1027 Mar 24 j 20:32	19°♓06'39					
				conjunction	1032 Sep 22 j 22:40	5°♔34'04	1°08'36

minimum elong	1032 Sep 22 j 22:41	5°♌34'04	1°08'37	retrograde	1038 Jul 29 j 19:54	14°♏46'46	
morning rise	1032 Oct 05 j 17:06	8°♌20'21		min. Earth dist.	1038 Sep 26 j 10:40	9°♏52'25	3.96483 AU
retrograde	1033 Feb 02 j 23:17	25°♌10'06		opposition	1038 Sep 27 j 13:53	9°♏43'13	-1°40'38
opposition	1033 Apr 04 j 17:28	20°♌17'54	1°34'10	direct	1038 Nov 24 j 11:38	4°♏48'31	
min. Earth dist.	1033 Apr 06 j 00:17	20°♌08'04	4.42374 AU	evening set	1039 Mar 30 j 04:43	24°♏25'38	
direct	1033 Jun 06 j 11:28	15°♌16'30					
	1033 Sep 27 j 01:09	0°♌		conjunction	1039 Apr 12 j 17:56	27°♏39'05	-1°00'23
evening set	1033 Oct 10 j 16:16	2°♌57'00		minimum elong	1039 Apr 12 j 17:58	27°♏39'07	1°00'23
max. Earth dist.	1033 Oct 21 j 08:59	5°♌18'27	6.38493 AU	max. Earth dist.	1039 Apr 14 j 21:41	28°♏09'55	5.99306 AU
					1039 Apr 22 j 14:54	0°♏	
conjunction	1033 Oct 23 j 09:02	5°♌45'02	0°56'19	morning rise	1039 Apr 26 j 09:55	0°♏53'51	
minimum elong	1033 Oct 23 j 09:04	5°♌45'03	0°56'19		1039 Jul 02 j 02:30	15°♏	
morning rise	1033 Nov 04 j 23:41	8°♌32'15		retrograde	1039 Sep 04 j 09:39	21°♏04'26	
	1033 Dec 05 j 09:15	15°♌		opposition	1039 Nov 02 j 23:11	15°♏59'17	-1°11'18
retrograde	1034 Mar 06 j 19:49	25°♌50'27		min. Earth dist.	1039 Nov 01 j 12:13	16°♏11'13	4.04185 AU
opposition	1034 May 06 j 18:09	20°♌58'34	1°04'10		1039 Nov 10 j 06:21	15°♏	
min. Earth dist.	1034 May 08 j 06:28	20°♌47'01	4.33306 AU	direct	1039 Dec 31 j 02:46	11°♏01'48	
direct	1034 Jul 08 j 02:11	15°♌59'18			1040 Feb 19 j 10:42	15°♏	
	1034 Oct 23 j 10:23	0°♏			1040 May 04 j 11:09	0°♏	
evening set	1034 Nov 10 j 17:18	4°♏02'46		evening set	1040 May 05 j 10:20	0°♏13'20	
max. Earth dist.	1034 Nov 21 j 08:37	6°♏27'30	6.26943 AU				
				conjunction	1040 May 19 j 04:19	3°♏23'56	-0°31'09
conjunction	1034 Nov 23 j 08:46	6°♏54'52	0°27'39	minimum elong	1040 May 19 j 04:22	3°♏23'58	0°31'09
minimum elong	1034 Nov 23 j 08:47	6°♏54'53	0°27'40	max. Earth dist.	1040 May 21 j 08:28	3°♏54'06	6.10332 AU
morning rise	1034 Dec 05 j 23:36	9°♏46'53		morning rise	1040 Jun 01 j 23:42	6°♏34'56	
retrograde	1035 Apr 09 j 17:01	27°♏58'07		retrograde	1040 Oct 07 j 16:33	25°♏42'29	
opposition	1035 Jun 09 j 14:47	23°♏04'51	0°13'21	min. Earth dist.	1040 Dec 05 j 01:58	20°♏48'25	4.17250 AU
min. Earth dist.	1035 Jun 10 j 20:28	22°♏55'20	4.19932 AU	opposition	1040 Dec 06 j 06:52	20°♏38'36	-0°17'36
direct	1035 Aug 09 j 20:41	18°♏08'07		direct	1041 Feb 03 j 12:35	15°♏38'08	
desc. node	1035 Sep 08 j 19:29	19°♏31'13		asc. node	1041 Apr 05 j 10:04	21°♏03'04	
	1035 Nov 12 j 22:18	0°♏			1041 May 22 j 00:20	0°♏	
evening set	1035 Dec 13 j 01:58	6°♏46'06		evening set	1041 Jun 10 j 06:07	4°♏13'02	
conjunction	1035 Dec 25 j 19:25	9°♏44'47	-0°10'51	conjunction	1041 Jun 23 j 23:19	7°♏17'04	0°07'51
minimum elong	1035 Dec 25 j 19:24	9°♏44'46	0°10'51	minimum elong	1041 Jun 23 j 23:19	7°♏17'04	0°07'51
behind sun begin	1035 Dec 25 j 13:14	9°♏41'10		behind sun begin	1041 Jun 23 j 15:52	7°♏12'55	
behind sun end	1035 Dec 26 j 01:34	9°♏48'23		behind sun end	1041 Jun 24 j 06:45	7°♏21'13	
max. Earth dist.	1035 Dec 24 j 12:25	9°♏26'36	6.12920 AU	max. Earth dist.	1041 Jun 25 j 11:33	7°♏37'21	6.24384 AU
morning rise	1036 Jan 07 j 13:29	12°♏44'07		morning rise	1041 Jul 07 j 15:33	10°♏20'24	
	1036 Apr 08 j 08:15	0°♏		retrograde	1041 Nov 08 j 19:44	28°♏21'00	
retrograde	1036 May 14 j 22:41	2°♏02'37		opposition	1042 Jan 07 j 14:46	23°♏20'30	0°38'29
	1036 Jun 20 j 16:41	30°♏		min. Earth dist.	1042 Jan 06 j 23:43	23°♏25'32	4.30970 AU
opposition	1036 Jul 14 j 12:41	27°♏06'35	-0°45'20	direct	1042 Mar 09 j 04:32	18°♏18'06	
min. Earth dist.	1036 Jul 15 j 02:06	27°♏02'13	4.06331 AU		1042 Jun 14 j 02:52	0°♏	
direct	1036 Sep 12 j 08:14	22°♏12'12		evening set	1042 Jul 14 j 04:04	6°♏19'21	
	1036 Nov 24 j 11:19	0°♏					
evening set	1037 Jan 15 j 10:04	11°♏26'42		conjunction	1042 Jul 27 j 15:07	9°♏15'39	0°42'41
				minimum elong	1042 Jul 27 j 15:05	9°♏15'38	0°42'42
conjunction	1037 Jan 28 j 08:04	14°♏32'33	-0°47'11	max. Earth dist.	1042 Jul 27 j 22:51	9°♏19'53	6.36711 AU
minimum elong	1037 Jan 28 j 08:02	14°♏32'32	0°47'11	morning rise	1042 Aug 10 j 00:04	12°♏10'43	
max. Earth dist.	1037 Jan 28 j 03:43	14°♏29'57	6.00975 AU		1042 Aug 23 j 03:26	15°♏	
	1037 Jan 30 j 05:45	15°♏		retrograde	1042 Dec 09 j 12:04	29°♏21'46	
morning rise	1037 Feb 10 j 08:32	17°♏39'51		opposition	1043 Feb 07 j 14:28	24°♏25'01	1°20'22
	1037 Apr 07 j 13:36	0°♏		min. Earth dist.	1043 Feb 07 j 18:09	24°♏23'49	4.41079 AU
retrograde	1037 Jun 21 j 17:39	7°♏57'29		direct	1043 Apr 10 j 10:22	19°♏21'54	
opposition	1037 Aug 20 j 22:35	2°♏57'33	-1°30'23		1043 Jul 12 j 06:47	0°♏	
min. Earth dist.	1037 Aug 20 j 12:48	3°♏00'48	3.97310 AU	evening set	1043 Aug 15 j 07:59	7°♏01'24	
	1037 Sep 13 j 22:13	30°♏					
direct	1037 Oct 18 j 09:57	28°♏04'05		conjunction	1043 Aug 28 j 11:21	9°♏51'39	1°04'14
	1037 Nov 21 j 14:21	0°♏		minimum elong	1043 Aug 28 j 11:20	9°♏51'39	1°04'13
evening set	1038 Feb 20 j 17:46	17°♏42'33		max. Earth dist.	1043 Aug 27 j 17:10	9°♏41'49	6.43806 AU
				morning rise	1043 Sep 10 j 11:37	12°♏40'26	
conjunction	1038 Mar 05 j 23:06	20°♏54'03	-1°06'50	retrograde	1044 Jan 08 j 14:54	29°♏27'58	
minimum elong	1038 Mar 05 j 23:05	20°♏54'03	1°06'49	opposition	1044 Mar 09 j 02:50	24°♏34'17	1°39'09
max. Earth dist.	1038 Mar 07 j 03:57	21°♏11'30	5.95680 AU	min. Earth dist.	1044 Mar 09 j 22:50	24°♏27'50	4.44861 AU
morning rise	1038 Mar 19 j 07:28	24°♏07'14		direct	1044 May 10 j 16:30	19°♏31'41	
	1038 Apr 13 j 10:09	0°♏			1044 Aug 11 j 01:44	0°♏	

evening set	1044 Sep 14 j 07:58	7° <u>♄</u> 04'56		minimum elong	1050 Mar 11 j 04:58	26° <u>♄</u> 10'18	1°07'32
max. Earth dist.	1044 Sep 25 j 12:39	9° <u>♄</u> 30'44	6.43911 AU	max. Earth dist.	1050 Mar 12 j 14:10	26° <u>♄</u> 30'20	5.95924 AU
				morning rise	1050 Mar 24 j 14:29	29° <u>♄</u> 23'51	
conjunction	1044 Sep 27 j 04:21	9° <u>♄</u> 52'22	1°07'58		1050 Mar 27 j 02:58	0° <u>♄</u>	
minimum elong	1044 Sep 27 j 04:22	9° <u>♄</u> 52'22	1°07'58	retrograde	1050 Aug 04 j 00:08	20° <u>♄</u> 00'51	
morning rise	1044 Oct 09 j 22:06	12° <u>♄</u> 38'33		opposition	1050 Oct 02 j 17:50	14° <u>♄</u> 56'53	-1°38'40
retrograde	1045 Feb 07 j 08:20	29° <u>♄</u> 30'56		min. Earth dist.	1050 Oct 01 j 12:05	15° <u>♄</u> 06'58	3.97405 AU
opposition	1045 Apr 09 j 02:31	24° <u>♄</u> 38'55	1°31'27	direct	1050 Nov 29 j 14:25	10° <u>♄</u> 01'51	
min. Earth dist.	1045 Apr 10 j 11:37	24° <u>♄</u> 28'22	4.41365 AU	evening set	1051 Apr 04 j 09:45	29° <u>♄</u> 35'18	
direct	1045 Jun 10 j 20:57	19° <u>♄</u> 37'46			1051 Apr 06 j 03:35	0° <u>♄</u>	
	1045 Sep 09 j 23:43	0° <u>♄</u>					
evening set	1045 Oct 14 j 23:05	7° <u>♄</u> 21'01		conjunction	1051 Apr 17 j 23:42	2° <u>♄</u> 48'25	-0°57'25
max. Earth dist.	1045 Oct 25 j 13:39	9° <u>♄</u> 41'49	6.37016 AU	minimum elong	1051 Apr 17 j 23:44	2° <u>♄</u> 48'27	0°57'25
				max. Earth dist.	1051 Apr 20 j 03:26	3° <u>♄</u> 19'07	6.00785 AU
conjunction	1045 Oct 27 j 15:31	10° <u>♄</u> 09'30	0°53'10	morning rise	1051 May 01 j 16:27	6° <u>♄</u> 02'46	
minimum elong	1045 Oct 27 j 15:33	10° <u>♄</u> 09'31	0°53'10		1051 Jun 10 j 15:29	15° <u>♄</u>	
morning rise	1045 Nov 09 j 06:06	12° <u>♄</u> 57'16		retrograde	1051 Sep 09 j 05:33	26° <u>♄</u> 04'44	
	1045 Nov 18 j 13:54	15° <u>♄</u>		min. Earth dist.	1051 Nov 06 j 09:24	21° <u>♄</u> 11'17	4.06036 AU
	1046 Feb 24 j 01:39	0° <u>♄</u>		opposition	1051 Nov 07 j 19:47	20° <u>♄</u> 59'33	-1°04'46
retrograde	1046 Mar 11 j 10:11	0° <u>♄</u> 22'06		direct	1052 Jan 05 j 03:04	16° <u>♄</u> 01'34	
	1046 Mar 26 j 19:56	30° <u>♄</u>			1052 Apr 17 j 15:14	0° <u>♄</u>	
opposition	1046 May 11 j 09:00	25° <u>♄</u> 30'05	0°58'04	evening set	1052 May 10 j 10:45	5° <u>♄</u> 07'23	
min. Earth dist.	1046 May 12 j 20:29	25° <u>♄</u> 18'47	4.31453 AU				
direct	1046 Jul 12 j 13:16	20° <u>♄</u> 31'08		conjunction	1052 May 24 j 05:06	8° <u>♄</u> 17'10	-0°26'01
	1046 Oct 05 j 16:20	0° <u>♄</u>		minimum elong	1052 May 24 j 05:08	8° <u>♄</u> 17'11	0°26'00
evening set	1046 Nov 15 j 03:56	8° <u>♄</u> 39'31		max. Earth dist.	1052 May 26 j 08:49	8° <u>♄</u> 46'55	6.12401 AU
max. Earth dist.	1046 Nov 25 j 22:17	11° <u>♄</u> 06'36	6.24884 AU	morning rise	1052 Jun 07 j 00:12	11° <u>♄</u> 27'07	
					1052 Sep 26 j 10:32	0° <u>♄</u>	
conjunction	1046 Nov 27 j 19:37	11° <u>♄</u> 32'31	0°22'36	retrograde	1052 Oct 12 j 05:38	0° <u>♄</u> 24'29	
minimum elong	1046 Nov 27 j 19:38	11° <u>♄</u> 32'32	0°22'36		1052 Oct 27 j 21:05	30° <u>♄</u>	
morning rise	1046 Dec 10 j 10:36	14° <u>♄</u> 25'29		opposition	1052 Dec 10 j 19:49	25° <u>♄</u> 21'03	-0°09'34
	1047 Mar 02 j 14:59	0° <u>♄</u>		min. Earth dist.	1052 Dec 09 j 16:39	25° <u>♄</u> 30'15	4.19321 AU
retrograde	1047 Apr 14 j 17:06	2° <u>♄</u> 46'08		direct	1053 Feb 08 j 05:50	20° <u>♄</u> 20'16	
	1047 May 28 j 09:21	30° <u>♄</u>		asc. node	1053 Feb 14 j 06:16	20° <u>♄</u> 23'50	
opposition	1047 Jun 14 j 13:06	27° <u>♄</u> 52'38	0°05'07		1053 May 04 j 03:30	0° <u>♄</u>	
min. Earth dist.	1047 Jun 15 j 17:36	27° <u>♄</u> 43'30	4.17819 AU	evening set	1053 Jun 15 j 00:14	8° <u>♄</u> 49'49	
desc. node	1047 Jul 19 j 05:51	24° <u>♄</u> 00'45					
direct	1047 Aug 14 j 14:44	22° <u>♄</u> 56'19		conjunction	1053 Jun 28 j 16:40	11° <u>♄</u> 52'45	0°13'07
	1047 Oct 24 j 03:30	0° <u>♄</u>		minimum elong	1053 Jun 28 j 16:39	11° <u>♄</u> 52'44	0°13'07
evening set	1047 Dec 17 j 19:13	11° <u>♄</u> 39'57		behind sun begin	1053 Jun 28 j 11:54	11° <u>♄</u> 50'06	
max. Earth dist.	1047 Dec 29 j 08:20	14° <u>♄</u> 22'46	6.10955 AU	behind sun end	1053 Jun 28 j 21:24	11° <u>♄</u> 55'23	
				max. Earth dist.	1053 Jun 29 j 23:46	12° <u>♄</u> 10'06	6.26280 AU
conjunction	1047 Dec 30 j 13:02	14° <u>♄</u> 39'40	-0°16'26	morning rise	1053 Jul 12 j 08:15	14° <u>♄</u> 54'57	
minimum elong	1047 Dec 30 j 13:00	14° <u>♄</u> 39'39	0°16'25		1053 Oct 01 j 09:36	0° <u>♄</u>	
morning rise	1048 Jan 12 j 07:59	17° <u>♄</u> 40'11		retrograde	1053 Nov 13 j 02:14	2° <u>♄</u> 47'39	
	1048 Mar 09 j 23:28	0° <u>♄</u>			1053 Dec 25 j 18:32	30° <u>♄</u>	
retrograde	1048 May 20 j 03:41	7° <u>♄</u> 08'09		opposition	1054 Jan 11 j 22:07	27° <u>♄</u> 47'40	0°45'20
opposition	1048 Jul 19 j 17:30	2° <u>♄</u> 11'33	-0°53'04	min. Earth dist.	1054 Jan 11 j 10:03	27° <u>♄</u> 51'42	4.32561 AU
min. Earth dist.	1048 Jul 20 j 02:40	2° <u>♄</u> 08'34	4.04722 AU	direct	1054 Mar 13 j 16:30	22° <u>♄</u> 45'04	
	1048 Aug 06 j 04:07	30° <u>♄</u>			1054 May 26 j 04:15	0° <u>♄</u>	
direct	1048 Sep 17 j 07:12	27° <u>♄</u> 17'25		evening set	1054 Jul 18 j 16:10	10° <u>♄</u> 43'02	
	1048 Oct 28 j 15:29	0° <u>♄</u>					
	1049 Jan 13 j 16:38	15° <u>♄</u>		conjunction	1054 Aug 01 j 02:23	13° <u>♄</u> 38'28	0°46'34
evening set	1049 Jan 20 j 10:13	16° <u>♄</u> 36'05		minimum elong	1054 Aug 01 j 02:20	13° <u>♄</u> 38'27	0°46'34
				max. Earth dist.	1054 Aug 01 j 07:13	13° <u>♄</u> 41'07	6.37888 AU
conjunction	1049 Feb 02 j 09:11	19° <u>♄</u> 42'49	-0°51'16		1054 Aug 07 j 07:44	15° <u>♄</u>	
minimum elong	1049 Feb 02 j 09:09	19° <u>♄</u> 42'48	0°51'16	morning rise	1054 Aug 14 j 09:59	16° <u>♄</u> 32'33	
max. Earth dist.	1049 Feb 02 j 11:09	19° <u>♄</u> 44'00	5.99885 AU		1054 Oct 25 j 01:13	0° <u>♄</u>	
morning rise	1049 Feb 15 j 10:30	22° <u>♄</u> 51'00		retrograde	1054 Dec 13 j 15:38	3° <u>♄</u> 39'25	
	1049 Mar 18 j 08:19	0° <u>♄</u>			1055 Feb 01 j 21:56	30° <u>♄</u>	
retrograde	1049 Jun 27 j 03:27	13° <u>♄</u> 13'45		opposition	1055 Feb 11 j 19:20	28° <u>♄</u> 43'14	1°24'25
opposition	1049 Aug 26 j 06:06	8° <u>♄</u> 13'12	-1°34'12	min. Earth dist.	1055 Feb 12 j 01:03	28° <u>♄</u> 41'22	4.41793 AU
min. Earth dist.	1049 Aug 25 j 17:56	8° <u>♄</u> 17'16	3.96878 AU	direct	1055 Apr 14 j 17:24	23° <u>♄</u> 40'10	
direct	1049 Oct 23 j 15:43	3° <u>♄</u> 19'40			1055 Jun 22 j 19:20	0° <u>♄</u>	
evening set	1050 Feb 25 j 22:38	22° <u>♄</u> 58'27		evening set	1055 Aug 19 j 16:09	11° <u>♄</u> 18'47	
conjunction	1050 Mar 11 j 04:58	26° <u>♄</u> 10'18	-1°07'32	conjunction	1055 Sep 01 j 18:20	14° <u>♄</u> 08'33	1°05'49

minimum elong	1055 Sep 01 j 18:19	14° 10 08'32	1°05'50	max. Earth dist.	1061 Feb 07 j 14:52	24° 33 53'11	5.99045 AU
max. Earth dist.	1055 Aug 31 j 19:16	13° 10 56'03	6.43996 AU	morning rise	1061 Feb 20 j 11:27	27° 33 58'42	
morning rise	1055 Sep 14 j 17:46	16° 10 56'53			1061 Feb 28 j 23:27	0° 34	
	1055 Nov 23 j 10:12	0° 05		retrograde	1061 Jul 02 j 09:12	18° 34 25'24	
retrograde	1056 Jan 12 j 21:36	3° 05 44'20		opposition	1061 Aug 31 j 10:52	13° 34 24'22	-1°37'15
	1056 Mar 04 j 08:30	30° 08		min. Earth dist.	1061 Aug 30 j 19:22	13° 34 29'32	3.96594 AU
opposition	1056 Mar 13 j 09:01	28° 10 51'01	1°39'38	direct	1061 Oct 28 j 16:53	8° 34 30'45	
min. Earth dist.	1056 Mar 14 j 07:59	28° 10 43'37	4.44545 AU	evening set	1062 Mar 03 j 01:52	28° 34 09'52	
direct	1056 May 15 j 00:37	23° 10 48'34			1062 Mar 10 j 17:06	0° 35	
	1056 Jul 22 j 11:19	0° 05					
evening set	1056 Sep 18 j 14:19	11° 05 23'12		conjunction	1062 Mar 16 j 09:13	1° 35 22'04	-1°07'43
max. Earth dist.	1056 Sep 29 j 17:08	13° 05 48'17	6.43110 AU	minimum elong	1062 Mar 16 j 09:13	1° 35 22'04	1°07'43
				max. Earth dist.	1062 Mar 17 j 20:49	1° 35 43'32	5.96201 AU
conjunction	1056 Oct 01 j 10:10	14° 05 10'41	1°06'57	morning rise	1062 Mar 29 j 19:51	4° 35 35'57	
minimum elong	1056 Oct 01 j 10:11	14° 05 10'41	1°06'57	retrograde	1062 Aug 09 j 01:38	25° 35 10'33	
morning rise	1056 Oct 14 j 03:12	16° 05 56'58		opposition	1062 Oct 07 j 19:24	20° 35 06'14	-1°36'00
	1056 Dec 22 j 02:32	0° 06		min. Earth dist.	1062 Oct 06 j 12:40	20° 35 16'41	3.98207 AU
retrograde	1057 Feb 11 j 16:44	3° 06 53'01		direct	1062 Dec 04 j 16:46	15° 35 10'49	
	1057 Apr 05 j 18:27	30° 08			1063 Mar 20 j 06:28	0° 36	
opposition	1057 Apr 13 j 12:25	29° 08 01'07	1°28'12	evening set	1063 Apr 09 j 13:01	4° 36 41'28	
min. Earth dist.	1057 Apr 14 j 21:21	28° 08 50'37	4.40149 AU				
direct	1057 Jun 15 j 04:27	24° 08 00'17		conjunction	1063 Apr 23 j 04:01	7° 36 54'26	-0°54'05
	1057 Aug 21 j 00:09	0° 09		minimum elong	1063 Apr 23 j 04:04	7° 36 54'28	0°54'05
evening set	1057 Oct 19 j 06:51	11° 09 46'50		max. Earth dist.	1063 Apr 25 j 09:55	8° 36 26'17	6.02047 AU
max. Earth dist.	1057 Oct 29 j 21:47	14° 09 48'23	6.35487 AU	morning rise	1063 May 06 j 21:18	11° 36 08'28	
					1063 May 23 j 14:29	15° 36	
conjunction	1057 Oct 31 j 22:58	14° 09 35'48	0°49'40		1063 Aug 19 j 15:51	0° 37	
minimum elong	1057 Oct 31 j 23:00	14° 09 35'49	0°49'41	retrograde	1063 Sep 14 j 02:15	1° 37 02'51	
	1057 Nov 02 j 18:20	15° 09			1063 Oct 09 j 05:41	30° 37	
morning rise	1057 Nov 13 j 13:24	17° 09 24'09		min. Earth dist.	1063 Nov 11 j 05:33	26° 37 09'16	4.07602 AU
	1058 Jan 16 j 10:43	0° 10		opposition	1063 Nov 12 j 15:10	25° 37 57'48	-0°57'54
retrograde	1058 Mar 16 j 03:11	4° 10 55'42		direct	1064 Jan 10 j 01:29	20° 37 59'25	
opposition	1058 May 16 j 00:58	0° 10 03'39	0°51'32		1064 Mar 29 j 22:00	0° 38	
	1058 May 16 j 12:24	30° 10		evening set	1064 May 15 j 10:51	10° 38 00'47	
min. Earth dist.	1058 May 17 j 12:44	29° 10 52'15	4.29692 AU				
direct	1058 Jul 17 j 03:02	25° 10 05'05		conjunction	1064 May 29 j 05:11	13° 38 09'51	-0°20'43
	1058 Sep 14 j 02:25	0° 11		minimum elong	1064 May 29 j 05:12	13° 38 09'51	0°20'43
evening set	1058 Nov 19 j 15:21	13° 11 17'53		max. Earth dist.	1064 May 31 j 05:44	13° 38 27'40	6.14125 AU
max. Earth dist.	1058 Nov 30 j 10:47	15° 11 46'15	6.23039 AU	morning rise	1064 Jun 12 j 00:20	16° 38 28'59	
					1064 Aug 18 j 20:50	0° 39	
conjunction	1058 Dec 02 j 07:08	16° 11 11'42	0°17'23	retrograde	1064 Oct 16 j 17:26	5° 39 07'34	
minimum elong	1058 Dec 02 j 07:09	16° 11 11'42	0°17'23	min. Earth dist.	1064 Dec 14 j 06:59	0° 39 13'10	4.21037 AU
morning rise	1058 Dec 14 j 22:35	19° 11 05'36		opposition	1064 Dec 15 j 08:37	0° 39 04'29	-0°01'29
	1059 Feb 04 j 14:29	0° 12			1064 Dec 15 j 21:53	30° 39	
retrograde	1059 Apr 19 j 15:11	7° 12 34'52		asc. node	1064 Dec 25 j 14:39	28° 39 42'26	
desc. node	1059 May 28 j 23:15	5° 12 17'45		direct	1065 Feb 12 j 22:27	25° 39 03'20	
opposition	1059 Jun 19 j 11:37	2° 12 40'59	-0°03'11		1065 Apr 12 j 05:36	0° 40	
min. Earth dist.	1059 Jun 20 j 12:54	2° 12 32'52	4.16019 AU	evening set	1065 Jun 19 j 18:54	13° 40 28'51	
	1059 Jul 11 j 13:45	30° 12					
direct	1059 Aug 19 j 07:36	27° 12 45'02		conjunction	1065 Jul 03 j 10:51	16° 40 30'52	0°18'21
	1059 Sep 26 j 13:40	0° 13		minimum elong	1065 Jul 03 j 10:50	16° 40 30'51	0°18'22
evening set	1059 Dec 22 j 12:06	16° 13 33'13		max. Earth dist.	1065 Jul 04 j 14:59	16° 40 46'31	6.27870 AU
max. Earth dist.	1060 Jan 03 j 06:37	19° 13 19'43	6.09352 AU	morning rise	1065 Jul 17 j 01:26	19° 40 31'59	
					1065 Sep 06 j 06:28	0° 41	
conjunction	1060 Jan 04 j 06:29	19° 13 33'49	-0°21'53	retrograde	1065 Nov 17 j 10:49	7° 41 17'48	
minimum elong	1060 Jan 04 j 06:27	19° 13 33'48	0°21'52	opposition	1066 Jan 16 j 06:42	2° 41 18'23	0°51'59
morning rise	1060 Jan 17 j 02:01	22° 13 35'19		min. Earth dist.	1066 Jan 15 j 21:08	2° 41 21'34	4.33902 AU
	1060 Feb 18 j 19:06	0° 14			1066 Feb 03 j 07:49	30° 41	
retrograde	1060 May 25 j 09:24	12° 14 11'24		direct	1066 Mar 18 j 04:58	27° 41 15'40	
opposition	1060 Jul 24 j 21:16	7° 14 14'19	-1°00'20		1066 Apr 30 j 12:02	0° 42	
min. Earth dist.	1060 Jul 25 j 04:25	7° 14 11'58	4.03449 AU		1066 Jul 22 j 09:23	15° 42	
direct	1060 Sep 22 j 07:54	2° 14 20'23		evening set	1066 Jul 23 j 05:34	15° 42 10'55	
	1060 Dec 27 j 12:04	15° 14					
evening set	1061 Jan 25 j 09:15	21° 14 42'12		conjunction	1066 Aug 05 j 14:39	18° 42 05'32	0°50'14
				minimum elong	1066 Aug 05 j 14:37	18° 42 05'30	0°50'14
conjunction	1061 Feb 07 j 09:02	24° 14 49'41	-0°54'55	max. Earth dist.	1066 Aug 05 j 14:38	18° 42 05'31	6.38873 AU
minimum elong	1061 Feb 07 j 09:00	24° 14 49'39	0°54'54	morning rise	1066 Aug 18 j 21:17	20° 42 58'46	

	1066 Oct 02 j 05:33	0°♎			1072 Feb 01 j 23:12	0°♏	
retrograde	1066 Dec 17 j 22:14	8°♎02'05			1072 Apr 23 j 12:39	15°♏	
opposition	1067 Feb 16 j 02:26	3°♎06'20	1°28'06	retrograde	1072 May 30 j 09:10	17°♏05'10	
min. Earth dist.	1067 Feb 16 j 10:38	3°♎03'39	4.42399 AU		1072 Jul 06 j 09:59	15°♏	
	1067 Mar 13 j 19:55	30°♎		opposition	1072 Jul 29 j 21:04	12°♏07'36	-1°06'55
direct	1067 Apr 19 j 03:16	28°♎03'17		min. Earth dist.	1072 Jul 30 j 01:00	12°♏06'19	4.02504 AU
	1067 May 25 j 20:04	0°♎		direct	1072 Sep 27 j 02:56	7°♏13'49	
evening set	1067 Aug 24 j 01:37	15°♎40'56			1072 Dec 08 j 15:34	15°♏	
max. Earth dist.	1067 Sep 05 j 02:44	18°♎17'06	6.44198 AU	evening set	1073 Jan 30 j 04:43	26°♏37'55	
conjunction	1067 Sep 06 j 02:58	18°♎30'14	1°07'07	conjunction	1073 Feb 12 j 05:17	29°♏46'02	-0°58'01
minimum elong	1067 Sep 06 j 02:57	18°♎30'14	1°07'07	minimum elong	1073 Feb 12 j 05:15	29°♏46'01	0°58'01
morning rise	1067 Sep 19 j 01:11	21°♎18'04		max. Earth dist.	1073 Feb 12 j 14:09	29°♏51'23	5.98420 AU
	1067 Oct 31 j 22:06	0°♏			1073 Feb 13 j 04:26	0°♏	
retrograde	1068 Jan 17 j 03:44	8°♏05'14		morning rise	1073 Feb 25 j 08:41	2°♏55'46	
opposition	1068 Mar 17 j 16:59	3°♏12'14	1°39'39	retrograde	1073 Jul 07 j 10:56	23°♏25'50	
min. Earth dist.	1068 Mar 18 j 16:42	3°♏04'37	4.44371 AU	opposition	1073 Sep 05 j 11:23	18°♏24'17	-1°39'27
	1068 Apr 13 j 19:42	30°♏		min. Earth dist.	1073 Sep 04 j 18:11	18°♏30'03	3.96365 AU
direct	1068 May 19 j 08:50	28°♏10'02		direct	1073 Nov 02 j 15:38	13°♏30'31	
	1068 Jun 24 j 03:28	0°♏			1074 Feb 22 j 16:21	0°♏	
evening set	1068 Sep 22 j 22:05	15°♏45'08		evening set	1074 Mar 08 j 01:03	3°♏10'07	
max. Earth dist.	1068 Oct 03 j 22:03	18°♏09'00	6.42587 AU				
conjunction	1068 Oct 05 j 17:03	18°♏32'31	1°05'36	conjunction	1074 Mar 21 j 09:37	6°♏22'46	-1°07'23
minimum elong	1068 Oct 05 j 17:04	18°♏32'31	1°05'35	minimum elong	1074 Mar 21 j 09:38	6°♏22'46	1°07'23
morning rise	1068 Oct 18 j 09:37	21°♏18'48		max. Earth dist.	1074 Mar 23 j 01:03	6°♏46'30	5.96393 AU
	1068 Nov 29 j 17:56	0°♏		morning rise	1074 Apr 03 j 21:11	9°♏37'00	
retrograde	1069 Feb 16 j 04:09	8°♏17'29			1074 Aug 04 j 04:50	0°♏	
opposition	1069 Apr 17 j 23:45	3°♏25'39	1°24'29	retrograde	1074 Aug 14 j 01:26	0°♏09'38	
min. Earth dist.	1069 Apr 19 j 09:55	3°♏14'46	4.39313 AU		1074 Aug 23 j 20:41	30°♏	
	1069 May 17 j 17:04	30°♏		min. Earth dist.	1074 Oct 11 j 09:55	25°♏15'44	3.98817 AU
direct	1069 Jun 19 j 15:48	28°♏25'06		opposition	1074 Oct 12 j 16:59	25°♏05'11	-1°32'47
	1069 Jul 22 j 14:20	0°♏		direct	1074 Dec 09 j 14:24	20°♏09'28	
	1069 Oct 18 j 01:42	15°♏			1075 Mar 02 j 07:04	0°♏	
evening set	1069 Oct 23 j 14:29	16°♏13'13		evening set	1075 Apr 14 j 13:25	9°♏38'29	
max. Earth dist.	1069 Nov 03 j 05:52	18°♏35'23	6.34412 AU				
conjunction	1069 Nov 05 j 06:24	19°♏02'31	0°45'58	conjunction	1075 Apr 28 j 05:05	12°♏51'23	-0°50'29
minimum elong	1069 Nov 05 j 06:27	19°♏02'32	0°45'57	minimum elong	1075 Apr 28 j 05:08	12°♏51'25	0°50'29
morning rise	1069 Nov 17 j 20:39	21°♏51'14		max. Earth dist.	1075 Apr 30 j 09:58	13°♏22'32	6.03008 AU
	1069 Dec 26 j 08:35	0°♏		morning rise	1075 May 07 j 07:41	15°♏	
retrograde	1070 Mar 20 j 17:10	9°♏27'58			1075 May 11 j 23:13	16°♏05'18	
opposition	1070 May 20 j 16:38	4°♏35'42	0°44'48	retrograde	1075 Jul 17 j 12:13	0°♏	
min. Earth dist.	1070 May 22 j 02:26	4°♏24'56	4.28441 AU	min. Earth dist.	1075 Sep 18 j 18:34	5°♏53'30	
	1070 Jul 06 j 00:37	30°♏		opposition	1075 Nov 15 j 21:57	1°♏00'04	4.08817 AU
direct	1070 Jul 21 j 14:52	29°♏37'31			1075 Nov 17 j 07:34	0°♏48'36	-0°50'53
	1070 Aug 06 j 06:45	0°♏		direct	1075 Nov 23 j 06:49	30°♏	
evening set	1070 Nov 24 j 01:27	17°♏52'48			1076 Jan 14 j 19:48	25°♏49'50	
max. Earth dist.	1070 Dec 04 j 23:30	20°♏23'06	6.21717 AU	evening set	1076 Mar 06 j 21:23	0°♏	
					1076 May 20 j 08:46	14°♏48'23	
conjunction	1070 Dec 06 j 17:15	20°♏47'09	0°12'12	conjunction	1076 Jun 03 j 03:18	17°♏56'54	-0°15'27
minimum elong	1070 Dec 06 j 17:16	20°♏47'09	0°12'12	minimum elong	1076 Jun 03 j 03:19	17°♏56'54	0°15'27
behind sun begin	1070 Dec 06 j 11:49	20°♏44'02		behind sun begin	1076 Jun 03 j 01:40	17°♏55'58	
behind sun end	1070 Dec 06 j 22:43	20°♏50'17		behind sun end	1076 Jun 03 j 04:58	17°♏57'51	
morning rise	1070 Dec 19 j 08:56	23°♏41'43		max. Earth dist.	1076 Jun 05 j 02:08	18°♏23'39	6.15519 AU
	1071 Jan 16 j 18:07	0°♏		morning rise	1076 Jun 16 j 22:11	21°♏05'19	
desc. node	1071 Apr 09 j 10:11	11°♏56'29			1076 Jul 28 j 09:53	0°♏	
retrograde	1071 Apr 24 j 12:44	12°♏17'50		retrograde	1076 Oct 21 j 06:15	9°♏46'36	
opposition	1071 Jun 24 j 08:09	7°♏23'35	-0°11'14	asc. node	1076 Nov 05 j 23:01	9°♏21'55	
min. Earth dist.	1071 Jun 25 j 08:24	7°♏15'47	4.14700 AU	opposition	1076 Dec 19 j 20:20	4°♏43'59	0°06'23
direct	1071 Aug 24 j 01:25	2°♏27'55		min. Earth dist.	1076 Dec 18 j 20:57	4°♏51'53	4.22466 AU
evening set	1071 Dec 27 j 02:28	21°♏18'59			1077 Feb 04 j 06:33	30°♏	
				direct	1077 Feb 17 j 14:22	29°♏42'36	
					1077 Mar 02 j 23:47	0°♏	
conjunction	1072 Jan 08 j 21:19	24°♏20'18	-0°27'00	evening set	1077 Jun 24 j 12:20	18°♏04'59	
minimum elong	1072 Jan 08 j 21:17	24°♏20'17	0°27'00				
max. Earth dist.	1072 Jan 08 j 00:03	24°♏07'42	6.08156 AU	conjunction	1077 Jul 08 j 03:35	21°♏06'08	0°23'22
morning rise	1072 Jan 21 j 17:34	27°♏22'37		minimum elong	1077 Jul 08 j 03:33	21°♏06'08	0°23'23

max. Earth dist.	1077 Jul 09 j 04:43	21°  20'05	6.29228 AU	evening set	1083 Dec 31 j 19:41	26°  12'37	
morning rise	1077 Jul 21 j 17:20	24°  06'20					
	1077 Aug 18 j 07:30	0°  0		conjunction	1084 Jan 13 j 15:05	29°  14'57	-0°32'07
retrograde	1077 Nov 21 j 17:16	11°  046'08		minimum elong	1084 Jan 13 j 15:03	29°  14'56	0°32'07
opposition	1078 Jan 20 j 14:40	6°  047'11	0°58'13	max. Earth dist.	1084 Jan 12 j 20:58	29°  04'10	6.06402 AU
min. Earth dist.	1078 Jan 20 j 06:31	6°  049'53	4.35103 AU		1084 Jan 16 j 18:51	0°  0	
direct	1078 Mar 22 j 15:46	1°  044'22		morning rise	1084 Jan 26 j 12:14	2°  18'23	
	1078 Jul 05 j 22:20	15°  0			1084 Mar 25 j 10:48	15°  0	
evening set	1078 Jul 27 j 18:05	19°  037'08		retrograde	1084 Jun 04 j 15:04	22°  09'45	
				opposition	1084 Aug 04 j 00:54	17°  11'36	-1°13'18
conjunction	1078 Aug 10 j 02:08	22°  030'55	0°53'34	min. Earth dist.	1084 Aug 04 j 02:16	17°  11'09	4.01064 AU
minimum elong	1078 Aug 10 j 02:05	22°  030'54	0°53'34		1084 Aug 21 j 08:22	15°  0	
max. Earth dist.	1078 Aug 09 j 23:40	22°  029'35	6.39829 AU	direct	1084 Oct 02 j 03:05	12°  17'52	
morning rise	1078 Aug 23 j 07:29	25°  023'17			1084 Nov 12 j 01:33	15°  0	
	1078 Sep 14 j 02:41	0°  0			1085 Jan 27 j 19:16	0°  0	
retrograde	1078 Dec 22 j 03:45	12°  023'01		evening set	1085 Feb 04 j 05:01	1°  046'06	
opposition	1079 Feb 20 j 08:46	7°  027'41	1°31'13				
min. Earth dist.	1079 Feb 20 j 19:08	7°  024'19	4.43044 AU	conjunction	1085 Feb 17 j 06:46	4°  55'09	-1°00'50
direct	1079 Apr 23 j 12:43	2°  024'43		minimum elong	1085 Feb 17 j 06:44	4°  55'08	1°00'50
evening set	1079 Aug 28 j 09:56	20°  001'00		max. Earth dist.	1085 Feb 17 j 20:55	5°  03'42	5.97438 AU
max. Earth dist.	1079 Sep 09 j 06:10	22°  034'36	6.44442 AU	morning rise	1085 Mar 02 j 11:13	8°  05'49	
				retrograde	1085 Jul 12 j 18:33	28°  040'01	
conjunction	1079 Sep 10 j 10:10	22°  049'46	1°08'00	opposition	1085 Sep 10 j 16:48	23°  038'01	-1°41'00
minimum elong	1079 Sep 10 j 10:09	22°  049'46	1°07'59	min. Earth dist.	1085 Sep 09 j 21:26	23°  044'31	3.95983 AU
morning rise	1079 Sep 23 j 07:34	25°  037'09		direct	1085 Nov 07 j 18:18	18°  044'07	
	1079 Oct 14 j 01:29	0°  0			1086 Feb 04 j 15:25	0°  0	
retrograde	1080 Jan 21 j 10:08	12°  023'57		evening set	1086 Mar 13 j 06:25	8°  024'38	
opposition	1080 Mar 22 j 00:11	7°  031'07	1°39'04				
min. Earth dist.	1080 Mar 23 j 01:49	7°  022'53	4.44187 AU	conjunction	1086 Mar 26 j 16:00	11°  037'41	-1°06'32
direct	1080 May 23 j 17:05	2°  029'02		minimum elong	1086 Mar 26 j 16:01	11°  037'42	1°06'31
evening set	1080 Sep 27 j 04:00	20°  004'31		max. Earth dist.	1086 Mar 28 j 09:24	12°  02'34	5.96635 AU
max. Earth dist.	1080 Oct 08 j 03:19	22°  028'15	6.41960 AU	morning rise	1086 Apr 09 j 04:53	14°  052'21	
					1086 Jun 20 j 02:58	0°  0	
conjunction	1080 Oct 09 j 22:28	22°  051'53	1°03'52	retrograde	1086 Aug 19 j 03:42	5°  021'57	
minimum elong	1080 Oct 09 j 22:30	22°  051'54	1°03'53	min. Earth dist.	1086 Oct 16 j 10:06	0°  028'32	3.99681 AU
morning rise	1080 Oct 22 j 14:19	25°  038'10		opposition	1086 Oct 17 j 19:13	0°  017'15	-1°28'40
	1080 Nov 12 j 00:23	0°  0			1086 Oct 19 j 21:56	30°  000'00	
retrograde	1081 Feb 20 j 12:43	12°  040'05		direct	1086 Dec 14 j 17:00	25°  021'10	
opposition	1081 Apr 22 j 10:00	7°  048'15	1°20'16		1087 Feb 07 j 02:22	0°  0	
min. Earth dist.	1081 Apr 23 j 20:11	7°  037'22	4.38255 AU	evening set	1087 Apr 19 j 18:41	14°  047'16	
direct	1081 Jun 24 j 00:10	2°  048'01			1087 Apr 20 j 16:30	15°  0	
	1081 Oct 01 j 17:17	15°  0					
evening set	1081 Oct 27 j 21:25	20°  038'36		conjunction	1087 May 03 j 11:13	17°  059'52	-0°46'21
max. Earth dist.	1081 Nov 07 j 11:42	23°  000'42	6.32989 AU	minimum elong	1087 May 03 j 11:15	17°  059'54	0°46'20
				max. Earth dist.	1087 May 05 j 17:26	18°  031'42	6.04449 AU
conjunction	1081 Nov 09 j 12:59	23°  028'20	0°41'57	morning rise	1087 May 17 j 05:44	21°  013'17	
minimum elong	1081 Nov 09 j 13:01	23°  028'21	0°41'57		1087 Jun 25 j 19:39	0°  0	
morning rise	1081 Nov 22 j 03:18	26°  017'38		retrograde	1087 Sep 23 j 15:17	10°  052'53	
	1081 Dec 08 j 23:50	0°  0		min. Earth dist.	1087 Nov 20 j 19:05	5°  059'11	4.10668 AU
retrograde	1082 Mar 25 j 09:48	14°  001'04		opposition	1087 Nov 22 j 03:32	5°  048'07	-0°43'15
opposition	1082 May 25 j 08:23	9°  008'35	0°37'43	direct	1088 Jan 19 j 20:03	0°  048'57	
min. Earth dist.	1082 May 26 j 18:23	8°  005'74	4.26709 AU	evening set	1088 May 25 j 09:26	19°  041'54	
direct	1082 Jul 26 j 04:18	4°  010'40					
evening set	1082 Nov 28 j 12:08	22°  000'21		conjunction	1088 Jun 08 j 03:50	22°  049'25	-0°09'57
max. Earth dist.	1082 Dec 09 j 12:19	25°  002'31	6.19828 AU	minimum elong	1088 Jun 08 j 03:50	22°  049'25	0°09'57
				behind sun begin	1088 Jun 07 j 21:08	22°  045'37	
conjunction	1082 Dec 11 j 04:19	25°  002'53	0°06'51	behind sun end	1088 Jun 08 j 10:32	22°  053'12	
minimum elong	1082 Dec 11 j 04:18	25°  002'53	0°06'52	max. Earth dist.	1088 Jun 10 j 01:35	23°  015'24	6.17640 AU
behind sun begin	1082 Dec 10 j 20:52	25°  002'12		morning rise	1088 Jun 21 j 22:17	25°  056'40	
behind sun end	1082 Dec 11 j 11:44	25°  002'54			1088 Jul 10 j 05:30	0°  0	
morning rise	1082 Dec 23 j 20:24	28°  002'10		asc. node	1088 Sep 16 j 05:49	12°  002'09	
	1082 Dec 31 j 01:17	0°  0		retrograde	1088 Oct 25 j 16:22	14°  027'37	
desc. node	1083 Feb 17 j 21:45	10°  008'29		min. Earth dist.	1088 Dec 23 j 10:02	9°  033'03	4.24665 AU
retrograde	1083 Apr 29 j 10:43	17°  006'20		opposition	1088 Dec 24 j 08:43	9°  025'24	0°14'16
opposition	1083 Jun 29 j 06:24	12°  003'14	-0°19'26	direct	1089 Feb 22 j 06:23	4°  023'44	
min. Earth dist.	1083 Jun 30 j 03:56	12°  004'46	4.12798 AU	evening set	1089 Jun 29 j 05:44	22°  040'09	
direct	1083 Aug 28 j 18:15	7°  016'21					

conjunction	1089 Jul 12 j 20:00	25°♄40'02	0°28'15	morning rise	1094 Dec 28 j 08:16	3°♂01'08
minimum elong	1089 Jul 12 j 19:58	25°♄40'01	0°28'14	desc. node	1094 Dec 30 j 00:58	3°♂24'36
max. Earth dist.	1089 Jul 13 j 17:01	25°♄51'38	6.31334 AU	retrograde	1095 May 04 j 12:37	21°♂57'46
morning rise	1089 Jul 26 j 08:40	28°♄38'51		opposition	1095 Jul 04 j 06:04	17°♂02'44 -0°27'32
	1089 Aug 01 j 13:32	0°♂		min. Earth dist.	1095 Jul 05 j 01:27	16°♂56'28 4.10386 AU
	1089 Oct 29 j 17:24	15°♂		direct	1095 Sep 02 j 13:06	12°♂07'40
retrograde	1089 Nov 25 j 23:25	16°♂10'15			1095 Dec 31 j 14:25	0°♂
	1089 Dec 23 j 00:09	15°♂♂		evening set	1096 Jan 05 j 15:03	1°♂11'14
opposition	1090 Jan 24 j 21:30	11°♂11'48	1°04'00			
min. Earth dist.	1090 Jan 24 j 16:37	11°♂13'25	4.36947 AU	conjunction	1096 Jan 18 j 11:25	4°♂14'53 -0°37'01
direct	1090 Mar 27 j 04:26	6°♂08'51		minimum elong	1096 Jan 18 j 11:23	4°♂14'52 0°37'00
	1090 Jun 18 j 03:18	15°♂		max. Earth dist.	1096 Jan 17 j 22:24	4°♂07'07 6.04248 AU
evening set	1090 Aug 01 j 03:59	23°♂56'58		morning rise	1096 Jan 31 j 09:28	7°♂19'43
					1096 Mar 04 j 22:53	15°♂
conjunction	1090 Aug 14 j 10:56	26°♂49'43	0°56'31	retrograde	1096 Jun 10 j 00:22	27°♂21'13
minimum elong	1090 Aug 14 j 10:53	26°♂49'42	0°56'31	opposition	1096 Aug 09 j 07:17	22°♂22'35 -1°19'12
max. Earth dist.	1090 Aug 14 j 04:38	26°♂46'18	6.41249 AU	min. Earth dist.	1096 Aug 09 j 05:30	22°♂23'10 3.99414 AU
morning rise	1090 Aug 27 j 15:05	29°♂41'01		direct	1096 Oct 07 j 03:54	17°♂29'03
	1090 Aug 29 j 02:19	0°♂			1097 Jan 10 j 03:26	0°♂
retrograde	1090 Dec 26 j 05:00	16°♂36'08		evening set	1097 Feb 09 j 08:53	7°♂02'13
opposition	1091 Feb 24 j 12:37	11°♂41'09	1°33'44			
min. Earth dist.	1091 Feb 25 j 01:03	11°♂37'07	4.43964 AU	conjunction	1097 Feb 22 j 11:35	10°♂12'13 -1°03'10
direct	1091 Apr 27 j 18:53	6°♂38'11		minimum elong	1097 Feb 22 j 11:34	10°♂12'12 1°03'11
evening set	1091 Sep 01 j 14:43	24°♂12'21		max. Earth dist.	1097 Feb 23 j 05:30	10°♂23'03 5.96428 AU
max. Earth dist.	1091 Sep 13 j 07:37	26°♂44'07	6.44779 AU	morning rise	1097 Mar 07 j 17:28	13°♂23'56
					1097 May 27 j 13:09	0°♂
conjunction	1091 Sep 14 j 14:01	27°♂00'36	1°08'29	retrograde	1097 Jul 18 j 02:59	4°♂01'55
minimum elong	1091 Sep 14 j 14:01	27°♂00'35	1°08'28		1097 Sep 08 j 11:38	30°♂
morning rise	1091 Sep 27 j 10:21	29°♂47'27		min. Earth dist.	1097 Sep 15 j 01:36	29°♂07'11 3.95753 AU
	1091 Sep 28 j 09:40	0°♂		opposition	1097 Sep 16 j 00:50	28°♂59'22 -1°41'41
retrograde	1092 Jan 25 j 13:06	16°♂34'00		direct	1097 Nov 12 j 23:51	24°♂05'16
opposition	1092 Mar 26 j 04:24	11°♂41'26	1°37'59		1098 Jan 13 j 15:23	0°♂
min. Earth dist.	1092 Mar 27 j 08:19	11°♂32'30	4.43916 AU	evening set	1098 Mar 18 j 14:30	13°♂45'54
direct	1092 May 27 j 22:40	6°♂39'33				
evening set	1092 Oct 01 j 07:06	24°♂15'56		conjunction	1098 Apr 01 j 01:21	16°♂59'14 -1°05'04
max. Earth dist.	1092 Oct 12 j 01:59	26°♂37'38	6.41074 AU	minimum elong	1098 Apr 01 j 01:22	16°♂59'15 1°05'04
				max. Earth dist.	1098 Apr 02 j 23:21	17°♂26'50 5.97193 AU
conjunction	1092 Oct 14 j 00:54	27°♂03'25	1°01'51	morning rise	1098 Apr 14 j 15:08	20°♂14'03
minimum elong	1092 Oct 14 j 00:55	27°♂03'25	1°01'51		1098 May 27 j 23:37	0°♂
morning rise	1092 Oct 26 j 16:30	29°♂49'55		retrograde	1098 Aug 24 j 09:07	10°♂38'52
	1092 Oct 27 j 10:58	0°♂		opposition	1098 Oct 22 j 22:57	5°♂33'54 -1°23'44
	1093 Jan 20 j 00:49	15°♂		min. Earth dist.	1098 Oct 21 j 13:33	5°♂45'17 4.00933 AU
retrograde	1093 Feb 24 j 21:18	16°♂56'15		direct	1098 Dec 19 j 23:13	0°♂37'22
	1093 Apr 01 j 23:48	15°♂♂			1099 Apr 03 j 05:36	15°♂
opposition	1093 Apr 26 j 18:12	12°♂04'25	1°15'45	evening set	1099 Apr 25 j 01:22	19°♂59'00
min. Earth dist.	1093 Apr 28 j 05:47	11°♂53'05	4.36795 AU			
direct	1093 Jun 28 j 06:55	7°♂04'22		conjunction	1099 May 08 j 18:28	23°♂11'03 -0°41'47
	1093 Sep 13 j 20:40	15°♂		minimum elong	1099 May 08 j 18:31	23°♂11'05 0°41'47
evening set	1093 Nov 01 j 02:19	24°♂59'02		max. Earth dist.	1099 May 11 j 01:48	23°♂43'22 6.06244 AU
max. Earth dist.	1093 Nov 11 j 17:20	27°♂22'08	6.31066 AU	morning rise	1099 May 22 j 13:21	26°♂23'46
					1099 Jun 07 j 07:59	0°♂
conjunction	1093 Nov 13 j 18:00	27°♂49'33	0°37'48	retrograde	1099 Sep 28 j 09:34	15°♂53'09
minimum elong	1093 Nov 13 j 18:02	27°♂49'34	0°37'47	opposition	1099 Nov 26 j 23:10	10°♂48'35 -0°35'16
	1093 Nov 23 j 09:36	0°♂		min. Earth dist.	1099 Nov 25 j 14:40	10°♂59'39 4.12787 AU
morning rise	1093 Nov 26 j 08:19	0°♂39'41		direct	1100 Jan 24 j 18:30	5°♂49'00
retrograde	1094 Mar 30 j 00:55	18°♂31'49		evening set	1100 May 30 j 10:09	24°♂35'47
opposition	1094 May 29 j 23:33	13°♂39'11	0°30'30			
min. Earth dist.	1094 May 31 j 08:37	13°♂28'38	4.24438 AU	conjunction	1100 Jun 13 j 04:09	27°♂42'10 -0°04'21
direct	1094 Jul 30 j 14:40	8°♂41'40		minimum elong	1100 Jun 13 j 04:09	27°♂42'09 0°04'21
evening set	1094 Dec 02 j 23:03	27°♂07'52		behind sun begin	1100 Jun 12 j 19:56	27°♂37'32
max. Earth dist.	1094 Dec 14 j 00:36	29°♂41'42	6.17393 AU	behind sun end	1100 Jun 13 j 12:21	27°♂46'47
				max. Earth dist.	1100 Jun 14 j 22:00	28°♂05'50 6.19885 AU
conjunction	1094 Dec 15 j 15:26	0°♂04'16	0°01'28		1100 Jun 23 j 08:18	0°♂
minimum elong	1094 Dec 15 j 15:26	0°♂04'16	0°01'28	morning rise	1100 Jun 26 j 22:06	0°♂48'11
behind sun begin	1094 Dec 15 j 07:26	29°♂59'39		asc. node	1100 Jul 26 j 14:15	7°♂14'41
behind sun end	1094 Dec 15 j 23:26	0°♂08'54		retrograde	1100 Oct 30 j 04:23	19°♂08'55
	1094 Dec 15 j 08:02	0°♂		opposition	1100 Dec 28 j 21:11	14°♂07'11 0°22'07

min. Earth dist.	1100 Dec 28 j 01:39	14°♊13'45	4.26815 AU
direct	1101 Feb 27 j 01:09	9°♊05'13	
evening set	1101 Jul 03 j 22:49	27°♊16'09	
	1101 Jul 16 j 09:16	0°♊	
conjunction	1101 Jul 17 j 12:17	0°♊14'52	0°33'00
minimum elong	1101 Jul 17 j 12:15	0°♊14'51	0°33'00
max. Earth dist.	1101 Jul 18 j 06:31	0°♊24'54	6.33222 AU
morning rise	1101 Jul 30 j 23:42	3°♊12'24	
	1101 Sep 28 j 17:35	15°♊	
retrograde	1101 Nov 30 j 04:08	20°♊36'35	