

Attention, astronomical year style is used: The year -12900 in astronomical counting style is the year 12901 BCE in historical counting style.

direct	-12900 Jan 14 j 23:55	4° $\approx$ 40'33		conjunction	-12894 May 14 j 21:13	20° $\approx$ 25'29	-0°32'44
evening set	-12900 Apr 15 j 07:05	6° $\approx$ 37'55		minimum elong	-12894 May 14 j 21:14	20° $\approx$ 25'29	0°33'17
max. Earth dist.	-12900 Apr 30 j 00:07	7° $\approx$ 10'41	31.11431 AU	max. Earth dist.	-12894 May 13 j 19:32	20° $\approx$ 23'05	31.17166 AU
				morning rise	-12894 May 30 j 10:20	21° $\approx$ 00'14	
conjunction	-12900 May 01 j 02:39	7° $\approx$ 13'11	-1°09'29	retrograde	-12894 Aug 24 j 15:54	22° $\approx$ 52'15	
minimum elong	-12900 May 01 j 02:40	7° $\approx$ 13'11	1°10'11	opposition	-12894 Nov 10 j 05:05	21° $\approx$ 30'30	-0°31'42
morning rise	-12900 May 16 j 18:15	7° $\approx$ 48'06		min. Earth dist.	-12894 Nov 11 j 04:56	21° $\approx$ 28'52	29.17515 AU
retrograde	-12900 Aug 10 j 22:54	9° $\approx$ 40'12		direct	-12893 Jan 30 j 16:55	20° $\approx$ 05'15	
opposition	-12900 Oct 27 j 06:43	8° $\approx$ 18'14	-1°11'13	evening set	-12893 May 01 j 15:30	22° $\approx$ 02'15	
min. Earth dist.	-12900 Oct 28 j 06:43	8° $\approx$ 16'35	29.12017 AU	max. Earth dist.	-12893 May 16 j 06:10	22° $\approx$ 34'52	31.17759 AU
direct	-12899 Jan 16 j 10:18	6° $\approx$ 52'40					
evening set	-12899 Apr 17 j 18:40	8° $\approx$ 49'59		conjunction	-12893 May 17 j 08:02	22° $\approx$ 37'18	-0°26'24
				minimum elong	-12893 May 17 j 08:02	22° $\approx$ 37'18	0°26'55
conjunction	-12899 May 03 j 14:01	9° $\approx$ 25'13	-1°03'34	morning rise	-12893 Jun 01 j 20:42	23° $\approx$ 12'00	
minimum elong	-12899 May 03 j 14:02	9° $\approx$ 25'13	1°04'13	retrograde	-12893 Aug 27 j 01:20	25° $\approx$ 04'00	
max. Earth dist.	-12899 May 02 j 12:45	9° $\approx$ 22'51	31.12469 AU	opposition	-12893 Nov 12 j 17:08	23° $\approx$ 42'14	-0°24'55
morning rise	-12899 May 19 j 05:07	10° $\approx$ 00'07		min. Earth dist.	-12893 Nov 13 j 17:34	23° $\approx$ 40'34	29.18062 AU
retrograde	-12899 Aug 13 j 09:06	11° $\approx$ 52'11		direct	-12892 Feb 02 j 04:13	22° $\approx$ 17'00	
opposition	-12899 Oct 29 j 18:09	10° $\approx$ 30'17	-1°04'50	evening set	-12892 May 03 j 02:27	24° $\approx$ 13'53	
min. Earth dist.	-12899 Oct 30 j 18:25	10° $\approx$ 28'37	29.13068 AU				
direct	-12898 Jan 18 j 23:51	9° $\approx$ 04'47		conjunction	-12892 May 18 j 18:34	24° $\approx$ 48'54	-0°20'03
evening set	-12898 Apr 20 j 06:23	11° $\approx$ 02'04		minimum elong	-12892 May 18 j 18:35	24° $\approx$ 48'54	0°20'33
max. Earth dist.	-12898 May 04 j 22:54	11° $\approx$ 34'50	31.13547 AU	max. Earth dist.	-12892 May 17 j 17:35	24° $\approx$ 46'34	31.18270 AU
				morning rise	-12892 Jun 03 j 06:47	25° $\approx$ 23'35	
conjunction	-12898 May 06 j 01:10	11° $\approx$ 37'17	-0°57'33	retrograde	-12892 Aug 28 j 10:19	27° $\approx$ 15'34	
minimum elong	-12898 May 06 j 01:10	11° $\approx$ 37'17	0°58'12	opposition	-12892 Nov 14 j 05:04	25° $\approx$ 53'46	-0°18'06
morning rise	-12898 May 21 j 16:01	12° $\approx$ 12'09		min. Earth dist.	-12892 Nov 15 j 05:00	25° $\approx$ 52'08	29.18528 AU
retrograde	-12898 Aug 15 j 21:51	14° $\approx$ 04'13		direct	-12891 Feb 03 j 17:02	24° $\approx$ 28'33	
opposition	-12898 Nov 01 j 05:43	12° $\approx$ 42'22	-0°58'22	evening set	-12891 May 05 j 13:28	26° $\approx$ 25'20	
min. Earth dist.	-12898 Nov 02 j 05:19	12° $\approx$ 40'45	29.14140 AU	max. Earth dist.	-12891 May 20 j 03:31	26° $\approx$ 57'55	31.18722 AU
direct	-12897 Jan 21 j 12:27	11° $\approx$ 16'56					
evening set	-12897 Apr 22 j 17:50	13° $\approx$ 14'12		conjunction	-12891 May 21 j 05:00	27° $\approx$ 00'18	-0°13'40
max. Earth dist.	-12897 May 07 j 11:12	13° $\approx$ 47'02	31.14601 AU	minimum elong	-12891 May 21 j 04:59	27° $\approx$ 00'18	0°14'07
				behind sun begin	-12891 May 21 j 01:46	27° $\approx$ 00'01	
conjunction	-12897 May 08 j 12:19	13° $\approx$ 49'23	-0°51'27	behind sun end	-12891 May 21 j 08:13	27° $\approx$ 00'36	
minimum elong	-12897 May 08 j 12:20	13° $\approx$ 49'23	0°52'03	morning rise	-12891 Jun 05 j 16:52	27° $\approx$ 34'57	
morning rise	-12897 May 24 j 02:36	14° $\approx$ 24'13		retrograde	-12891 Aug 30 j 21:12	29° $\approx$ 26'56	
	-12897 Jun 10 j 03:19	15° $\approx$		opposition	-12891 Nov 16 j 16:50	28° $\approx$ 05'06	-0°11'16
retrograde	-12897 Aug 18 j 07:38	16° $\approx$ 16'17		min. Earth dist.	-12891 Nov 17 j 16:26	28° $\approx$ 03'29	29.18982 AU
	-12897 Oct 31 j 09:16	15° $\approx$		direct	-12890 Feb 06 j 03:38	26° $\approx$ 39'52	
opposition	-12897 Nov 03 j 17:37	14° $\approx$ 54'29	-0°51'48	evening set	-12890 May 08 j 00:14	28° $\approx$ 36'35	
min. Earth dist.	-12897 Nov 04 j 18:11	14° $\approx$ 52'47	29.15156 AU				
direct	-12896 Jan 24 j 00:56	13° $\approx$ 29'07		conjunction	-12890 May 23 j 15:23	29° $\approx$ 11'30	-0°07'17
	-12896 Apr 11 j 20:37	15° $\approx$		minimum elong	-12890 May 23 j 15:23	29° $\approx$ 11'30	0°07'44
evening set	-12896 Apr 24 j 05:26	15° $\approx$ 26'20		behind sun begin	-12890 May 23 j 09:33	29° $\approx$ 10'59	
				behind sun end	-12890 May 23 j 21:13	29° $\approx$ 12'02	
conjunction	-12896 May 09 j 23:20	16° $\approx$ 01'29	-0°45'16	max. Earth dist.	-12890 May 22 j 15:27	29° $\approx$ 09'16	31.19183 AU
minimum elong	-12896 May 09 j 23:20	16° $\approx$ 01'29	0°45'52	morning rise	-12890 Jun 08 j 02:39	29° $\approx$ 46'07	
max. Earth dist.	-12896 May 08 j 21:25	15° $\approx$ 59'03	31.15582 AU		-12890 Jun 14 j 12:25	0° $\approx$	
morning rise	-12896 May 25 j 13:21	16° $\approx$ 36'17		retrograde	-12890 Sep 02 j 06:38	1° $\approx$ 38'06	
retrograde	-12896 Aug 19 j 19:27	18° $\approx$ 28'20		opposition	-12890 Nov 19 j 04:52	0° $\approx$ 16'14	-0°04'25
opposition	-12896 Nov 05 j 05:19	17° $\approx$ 06'34	-0°45'09	min. Earth dist.	-12890 Nov 20 j 04:17	0° $\approx$ 14'38	29.19458 AU
min. Earth dist.	-12896 Nov 06 j 04:57	17° $\approx$ 04'57	29.16079 AU		-12890 Nov 29 j 03:40	30° $\approx$	
direct	-12895 Jan 25 j 14:34	15° $\approx$ 41'16		direct	-12889 Feb 08 j 16:55	28° $\approx$ 51'03	
evening set	-12895 Apr 26 j 16:46	17° $\approx$ 38'25			-12889 Apr 17 j 07:17	0° $\approx$	
max. Earth dist.	-12895 May 11 j 08:54	18° $\approx$ 11'09	31.16439 AU	evening set	-12889 May 10 j 10:57	0° $\approx$ 47'40	
				max. Earth dist.	-12889 May 25 j 01:03	1° $\approx$ 20'16	31.19700 AU
conjunction	-12895 May 12 j 10:20	18° $\approx$ 13'32	-0°39'02				
minimum elong	-12895 May 12 j 10:21	18° $\approx$ 13'32	0°39'35	conjunction	-12889 May 26 j 01:24	1° $\approx$ 22'33	-0°00'53
morning rise	-12895 May 27 j 23:50	18° $\approx$ 48'19		minimum elong	-12889 May 26 j 01:22	1° $\approx$ 22'33	0°01'17
retrograde	-12895 Aug 22 j 06:01	20° $\approx$ 40'21		behind sun begin	-12889 May 25 j 18:56	1° $\approx$ 21'58	
opposition	-12895 Nov 07 j 17:17	19° $\approx$ 18'36	-0°38'27	behind sun end	-12889 May 26 j 07:48	1° $\approx$ 23'08	
min. Earth dist.	-12895 Nov 08 j 17:59	19° $\approx$ 16'54	29.16867 AU	morning rise	-12889 Jun 10 j 12:20	1° $\approx$ 57'08	
direct	-12894 Jan 28 j 03:13	17° $\approx$ 53'20		asc. node	-12889 Jul 14 j 05:08	3° $\approx$ 03'27	
evening set	-12894 Apr 29 j 04:11	19° $\approx$ 50'24		retrograde	-12889 Sep 04 j 18:42	3° $\approx$ 49'08	

Attention, astronomical year style is used: The year -12889 in astronomical counting style is the year 12890 BCE in historical counting style.

opposition	-12889 Nov 21 j 16:52	2° <del>✕</del> 27'15	0°02'26	evening set	-12882 May 25 j 12:00	16° <del>✕</del> 05'28	
min. Earth dist.	-12889 Nov 22 j 14:53	2° <del>✕</del> 25'45	29.20025 AU				
direct	-12888 Feb 11 j 04:34	1° <del>✕</del> 02'06		conjunction	-12882 Jun 09 j 22:29	16° <del>✕</del> 40'05	0°43'30
evening set	-12888 May 11 j 21:28	2° <del>✕</del> 58'39		minimum elong	-12882 Jun 09 j 22:28	16° <del>✕</del> 40'05	0°43'17
				max. Earth dist.	-12882 Jun 09 j 02:17	16° <del>✕</del> 38'11	31.24623 AU
conjunction	-12888 May 27 j 11:31	3° <del>✕</del> 33'30	0°05'38	morning rise	-12882 Jun 25 j 06:06	17° <del>✕</del> 14'26	
minimum elong	-12888 May 27 j 11:31	3° <del>✕</del> 33'30	0°05'14	retrograde	-12882 Sep 19 j 19:45	19° <del>✕</del> 06'57	
behind sun begin	-12888 May 27 j 05:17	3° <del>✕</del> 32'56		opposition	-12882 Dec 07 j 06:17	17° <del>✕</del> 45'08	0°49'41
behind sun end	-12888 May 27 j 17:45	3° <del>✕</del> 34'03		min. Earth dist.	-12882 Dec 08 j 01:08	17° <del>✕</del> 43'51	29.24894 AU
max. Earth dist.	-12888 May 26 j 12:54	3° <del>✕</del> 31'23	31.20313 AU	direct	-12881 Feb 26 j 17:09	16° <del>✕</del> 20'32	
morning rise	-12888 Jun 11 j 21:51	4° <del>✕</del> 08'03		evening set	-12881 May 27 j 22:06	18° <del>✕</del> 16'40	
retrograde	-12888 Sep 06 j 04:18	6° <del>✕</del> 00'06					
opposition	-12888 Nov 23 j 04:53	4° <del>✕</del> 38'13	0°09'16	conjunction	-12881 Jun 12 j 08:09	18° <del>✕</del> 51'13	0°49'38
min. Earth dist.	-12888 Nov 24 j 03:10	4° <del>✕</del> 36'42	29.20691 AU	minimum elong	-12881 Jun 12 j 08:09	18° <del>✕</del> 51'13	0°49'29
direct	-12887 Feb 12 j 16:11	3° <del>✕</del> 13'08		max. Earth dist.	-12881 Jun 11 j 13:27	18° <del>✕</del> 49'28	31.25047 AU
evening set	-12887 May 14 j 08:00	5° <del>✕</del> 09'37		morning rise	-12881 Jun 27 j 15:08	19° <del>✕</del> 25'33	
				retrograde	-12881 Sep 22 j 04:48	21° <del>✕</del> 18'08	
conjunction	-12887 May 29 j 21:23	5° <del>✕</del> 44'26	0°12'00	opposition	-12881 Dec 09 j 18:50	19° <del>✕</del> 56'16	0°56'13
minimum elong	-12887 May 29 j 21:23	5° <del>✕</del> 44'26	0°11'39	min. Earth dist.	-12881 Dec 10 j 13:34	19° <del>✕</del> 55'00	29.25255 AU
behind sun begin	-12887 May 29 j 16:47	5° <del>✕</del> 44'01		direct	-12880 Feb 29 j 05:50	18° <del>✕</del> 31'43	
behind sun end	-12887 May 30 j 02:00	5° <del>✕</del> 44'51		evening set	-12880 May 29 j 08:21	20° <del>✕</del> 27'44	
max. Earth dist.	-12887 May 28 j 22:46	5° <del>✕</del> 42'19	31.21038 AU				
morning rise	-12887 Jun 14 j 07:26	6° <del>✕</del> 18'57		conjunction	-12880 Jun 13 j 17:40	21° <del>✕</del> 02'15	0°55'43
retrograde	-12887 Sep 08 j 16:07	8° <del>✕</del> 11'03		minimum elong	-12880 Jun 13 j 17:39	21° <del>✕</del> 02'15	0°55'34
opposition	-12887 Nov 25 j 16:50	6° <del>✕</del> 49'11	0°16'05	max. Earth dist.	-12880 Jun 12 j 22:24	21° <del>✕</del> 00'26	31.25358 AU
min. Earth dist.	-12887 Nov 26 j 13:26	6° <del>✕</del> 47'47	29.21449 AU	morning rise	-12880 Jun 29 j 00:21	21° <del>✕</del> 36'32	
direct	-12886 Feb 15 j 05:30	5° <del>✕</del> 24'12		retrograde	-12880 Sep 23 j 16:36	23° <del>✕</del> 29'11	
evening set	-12886 May 16 j 18:24	7° <del>✕</del> 20'39		opposition	-12880 Dec 11 j 07:07	22° <del>✕</del> 07'16	1°02'39
max. Earth dist.	-12886 May 31 j 09:51	7° <del>✕</del> 53'24	31.21819 AU	min. Earth dist.	-12880 Dec 12 j 00:39	22° <del>✕</del> 06'04	29.25530 AU
				direct	-12879 Mar 02 j 16:24	20° <del>✕</del> 42'43	
conjunction	-12886 Jun 01 j 07:19	7° <del>✕</del> 55'25	0°18'22	evening set	-12879 May 31 j 18:16	22° <del>✕</del> 38'38	
minimum elong	-12886 Jun 01 j 07:18	7° <del>✕</del> 55'25	0°18'02	max. Earth dist.	-12879 Jun 15 j 09:26	23° <del>✕</del> 11'26	31.25585 AU
morning rise	-12886 Jun 16 j 16:45	8° <del>✕</del> 29'54					
retrograde	-12886 Sep 11 j 03:15	10° <del>✕</del> 22'05		conjunction	-12879 Jun 16 j 03:11	23° <del>✕</del> 13'07	1°01'42
opposition	-12886 Nov 28 j 05:02	9° <del>✕</del> 00'15	0°22'54	minimum elong	-12879 Jun 16 j 03:10	23° <del>✕</del> 13'06	1°01'36
min. Earth dist.	-12886 Nov 29 j 02:03	8° <del>✕</del> 58'49	29.22252 AU	morning rise	-12879 Jul 01 j 09:16	23° <del>✕</del> 47'21	
direct	-12885 Feb 17 j 17:46	7° <del>✕</del> 35'21		retrograde	-12879 Sep 26 j 02:12	25° <del>✕</del> 40'04	
evening set	-12885 May 19 j 04:51	9° <del>✕</del> 31'46		opposition	-12879 Dec 13 j 19:38	24° <del>✕</del> 18'04	1°09'00
				min. Earth dist.	-12879 Dec 14 j 13:30	24° <del>✕</del> 16'52	29.25736 AU
conjunction	-12885 Jun 03 j 17:09	10° <del>✕</del> 06'29	0°24'42	direct	-12878 Mar 05 j 04:01	22° <del>✕</del> 53'33	
minimum elong	-12885 Jun 03 j 17:09	10° <del>✕</del> 06'29	0°24'26	evening set	-12878 Jun 03 j 04:10	24° <del>✕</del> 49'22	
max. Earth dist.	-12885 Jun 02 j 20:13	10° <del>✕</del> 04'32	31.22632 AU				
morning rise	-12885 Jun 19 j 02:10	10° <del>✕</del> 40'56		conjunction	-12878 Jun 18 j 12:21	25° <del>✕</del> 23'46	1°07'35
retrograde	-12885 Sep 13 j 13:25	12° <del>✕</del> 33'13		minimum elong	-12878 Jun 18 j 12:20	25° <del>✕</del> 23'46	1°07'31
opposition	-12885 Nov 30 j 17:16	11° <del>✕</del> 11'24	0°29'40	max. Earth dist.	-12878 Jun 17 j 18:50	25° <del>✕</del> 22'07	31.25783 AU
min. Earth dist.	-12885 Dec 01 j 12:52	11° <del>✕</del> 10'04	29.23048 AU	morning rise	-12878 Jul 03 j 18:05	25° <del>✕</del> 57'59	
direct	-12884 Feb 20 j 06:54	9° <del>✕</del> 46'36		retrograde	-12878 Sep 28 j 13:59	27° <del>✕</del> 50'45	
evening set	-12884 May 20 j 15:10	11° <del>✕</del> 42'57		opposition	-12878 Dec 16 j 08:03	26° <del>✕</del> 28'41	1°15'15
max. Earth dist.	-12884 Jun 04 j 06:08	12° <del>✕</del> 15'42	31.23395 AU	min. Earth dist.	-12878 Dec 17 j 00:01	26° <del>✕</del> 27'36	29.25942 AU
				direct	-12877 Mar 07 j 17:24	25° <del>✕</del> 04'11	
conjunction	-12884 Jun 05 j 02:52	12° <del>✕</del> 17'39	0°31'01	evening set	-12877 Jun 05 j 13:56	26° <del>✕</del> 59'53	
minimum elong	-12884 Jun 05 j 02:52	12° <del>✕</del> 17'39	0°30'45				
morning rise	-12884 Jun 20 j 11:26	12° <del>✕</del> 52'04		conjunction	-12877 Jun 20 j 21:36	27° <del>✕</del> 34'15	1°13'23
retrograde	-12884 Sep 14 j 23:17	14° <del>✕</del> 44'26		minimum elong	-12877 Jun 20 j 21:35	27° <del>✕</del> 34'15	1°13'21
opposition	-12884 Dec 02 j 05:37	13° <del>✕</del> 22'38	0°36'24	max. Earth dist.	-12877 Jun 20 j 05:23	27° <del>✕</del> 32'44	31.25999 AU
min. Earth dist.	-12884 Dec 03 j 01:31	13° <del>✕</del> 21'17	29.23783 AU	morning rise	-12877 Jul 06 j 02:47	28° <del>✕</del> 08'25	
direct	-12883 Feb 21 j 17:53	11° <del>✕</del> 57'56			-12877 Sep 22 j 07:27	0° <del>°</del>	
evening set	-12883 May 23 j 01:32	13° <del>✕</del> 54'13		retrograde	-12877 Oct 01 j 01:12	0° <del>°</del> 01'17	
					-12877 Oct 09 j 17:15	30° <del>°</del> <del>°</del>	
conjunction	-12883 Jun 07 j 12:44	14° <del>✕</del> 28'52	0°37'17	opposition	-12877 Dec 18 j 20:40	28° <del>✕</del> 39'08	1°21'23
minimum elong	-12883 Jun 07 j 12:44	14° <del>✕</del> 28'52	0°37'04	min. Earth dist.	-12877 Dec 19 j 12:37	28° <del>✕</del> 38'04	29.26209 AU
max. Earth dist.	-12883 Jun 06 j 17:02	14° <del>✕</del> 27'01	31.24074 AU	direct	-12876 Mar 09 j 05:17	27° <del>✕</del> 14'41	
morning rise	-12883 Jun 22 j 20:43	15° <del>✕</del> 03'15		evening set	-12876 Jun 06 j 23:33	29° <del>✕</del> 10'17	
retrograde	-12883 Sep 17 j 08:22	16° <del>✕</del> 55'41					
opposition	-12883 Dec 04 j 17:50	15° <del>✕</del> 33'54	0°43'04	conjunction	-12876 Jun 22 j 06:39	29° <del>✕</del> 44'36	1°19'04
min. Earth dist.	-12883 Dec 05 j 13:08	15° <del>✕</del> 32'35	29.24397 AU	minimum elong	-12876 Jun 22 j 06:38	29° <del>✕</del> 44'36	1°19'03
direct	-12882 Feb 24 j 06:29	14° <del>✕</del> 09'15		max. Earth dist.	-12876 Jun 21 j 15:33	29° <del>✕</del> 43'11	31.26306 AU

Attention, astronomical year style is used: The year -12876 in astronomical counting style is the year 12877 BCE in historical counting style.

	-12876 Jun 29 j 02:01	0°♊		direct	-12869 Mar 25 j 13:16	12°♊29'19	
morning rise	-12876 Jul 07 j 11:24	0°♊18'44		evening set	-12869 Jun 22 j 18:52	14°♊24'28	
retrograde	-12876 Oct 02 j 11:07	2°♊11'41					
opposition	-12876 Dec 20 j 09:07	0°♊49'30	1°27'24	conjunction	-12869 Jul 07 j 22:03	14°♊58'30	1°55'16
min. Earth dist.	-12876 Dec 20 j 23:02	0°♊48'33	29.26562 AU	minimum elong	-12869 Jul 07 j 22:02	14°♊58'30	1°55'29
	-12875 Jan 21 j 22:52	30°♋		max. Earth dist.	-12869 Jul 07 j 12:36	14°♊57'37	31.29275 AU
direct	-12875 Mar 11 j 18:19	29°♋25'06		morning rise	-12869 Jul 22 j 23:56	15°♊32'27	
	-12875 Apr 27 j 15:20	0°♊		retrograde	-12869 Oct 18 j 15:19	17°♊26'23	
evening set	-12875 Jun 09 j 09:16	1°♊20'37		opposition	-12868 Jan 06 j 02:18	16°♊04'05	2°05'35
				min. Earth dist.	-12868 Jan 06 j 10:29	16°♊03'32	29.29453 AU
conjunction	-12875 Jun 24 j 15:43	1°♊54'53	1°24'38	direct	-12868 Mar 27 j 01:42	14°♊40'18	
minimum elong	-12875 Jun 24 j 15:42	1°♊54'53	1°24'39	evening set	-12868 Jun 24 j 04:20	16°♊35'23	
max. Earth dist.	-12875 Jun 24 j 01:10	1°♊53'31	31.26699 AU				
morning rise	-12875 Jul 09 j 20:04	2°♊28'59		conjunction	-12868 Jul 09 j 07:07	17°♊09'23	1°59'50
retrograde	-12875 Oct 04 j 21:29	4°♊22'03		minimum elong	-12868 Jul 09 j 07:05	17°♊09'23	2°00'05
opposition	-12875 Dec 22 j 21:35	2°♊59'50	1°33'18	max. Earth dist.	-12868 Jul 08 j 22:27	17°♊08'34	31.29331 AU
min. Earth dist.	-12875 Dec 23 j 11:09	2°♊58'55	29.27019 AU	morning rise	-12868 Jul 24 j 08:38	17°♊43'18	
direct	-12874 Mar 14 j 05:30	1°♊35'31		retrograde	-12868 Oct 20 j 03:26	19°♊37'22	
evening set	-12874 Jun 11 j 18:51	3°♊30'58		opposition	-12867 Jan 07 j 15:18	18°♊15'00	2°10'23
				min. Earth dist.	-12867 Jan 07 j 23:50	18°♊14'26	29.29454 AU
conjunction	-12874 Jun 27 j 00:51	4°♊05'12	1°30'05	direct	-12867 Mar 29 j 12:57	16°♊51'16	
minimum elong	-12874 Jun 27 j 00:50	4°♊05'12	1°30'07	evening set	-12867 Jun 26 j 13:48	18°♊46'16	
max. Earth dist.	-12874 Jun 26 j 12:08	4°♊04'01	31.27193 AU				
morning rise	-12874 Jul 12 j 04:39	4°♊39'16		conjunction	-12867 Jul 11 j 16:08	19°♊20'13	2°04'14
retrograde	-12874 Oct 07 j 07:01	6°♊32'27		minimum elong	-12867 Jul 11 j 16:07	19°♊20'13	2°04'31
opposition	-12874 Dec 25 j 10:14	5°♊10'15	1°39'03	max. Earth dist.	-12867 Jul 11 j 08:23	19°♊19'29	31.29265 AU
min. Earth dist.	-12874 Dec 25 j 22:29	5°♊09'25	29.27540 AU	morning rise	-12867 Jul 26 j 17:17	19°♊54'07	
direct	-12873 Mar 16 j 18:20	3°♊46'02		retrograde	-12867 Oct 22 j 13:45	21°♊48'17	
evening set	-12873 Jun 14 j 04:25	5°♊41'25		opposition	-12866 Jan 10 j 04:03	20°♊25'51	2°15'00
				min. Earth dist.	-12866 Jan 10 j 10:54	20°♊25'24	29.29334 AU
conjunction	-12873 Jun 29 j 09:43	6°♊15'37	1°35'24	direct	-12866 Apr 01 j 01:55	19°♊02'09	
minimum elong	-12873 Jun 29 j 09:42	6°♊15'37	1°35'30	evening set	-12866 Jun 28 j 23:12	20°♊57'02	
max. Earth dist.	-12873 Jun 28 j 21:05	6°♊14'25	31.27731 AU				
morning rise	-12873 Jul 14 j 13:14	6°♊49'40		conjunction	-12866 Jul 14 j 01:00	21°♊30'58	2°08'27
retrograde	-12873 Oct 09 j 18:41	8°♊43'00		minimum elong	-12866 Jul 14 j 00:59	21°♊30'58	2°08'45
opposition	-12873 Dec 27 j 22:58	7°♊20'47	1°44'40	max. Earth dist.	-12866 Jul 13 j 17:31	21°♊30'16	31.29100 AU
min. Earth dist.	-12873 Dec 28 j 10:17	7°♊20'01	29.28096 AU	morning rise	-12866 Jul 29 j 01:56	22°♊04'50	
direct	-12872 Mar 18 j 04:33	5°♊56'40		retrograde	-12866 Oct 25 j 00:58	23°♊59'08	
evening set	-12872 Jun 15 j 13:57	7°♊52'00		opposition	-12865 Jan 12 j 17:05	22°♊36'36	2°19'24
				min. Earth dist.	-12865 Jan 12 j 23:38	22°♊36'09	29.29165 AU
conjunction	-12872 Jun 30 j 18:52	8°♊26'10	1°40'35	direct	-12865 Apr 03 j 13:47	21°♊12'56	
minimum elong	-12872 Jun 30 j 18:51	8°♊26'09	1°40'42	evening set	-12865 Jul 01 j 08:19	23°♊07'42	
max. Earth dist.	-12872 Jun 30 j 08:09	8°♊25'09	31.28260 AU				
morning rise	-12872 Jul 15 j 21:49	9°♊00'11		conjunction	-12865 Jul 16 j 09:49	23°♊41'36	2°12'29
retrograde	-12872 Oct 11 j 04:01	10°♊53'40		minimum elong	-12865 Jul 16 j 09:48	23°♊41'36	2°12'50
opposition	-12872 Dec 29 j 11:38	9°♊31'27	1°50'09	max. Earth dist.	-12865 Jul 16 j 04:19	23°♊41'05	31.28913 AU
min. Earth dist.	-12872 Dec 29 j 22:37	9°♊30'42	29.28603 AU	morning rise	-12865 Jul 31 j 10:22	24°♊15'27	
direct	-12871 Mar 20 j 16:19	8°♊07'27		retrograde	-12865 Oct 27 j 10:50	26°♊09'51	
evening set	-12871 Jun 17 j 23:40	10°♊02'43		opposition	-12864 Jan 15 j 06:01	24°♊47'14	2°23'37
				min. Earth dist.	-12864 Jan 15 j 11:10	24°♊46'53	29.28986 AU
conjunction	-12871 Jul 03 j 03:52	10°♊36'51	1°45'38	direct	-12864 Apr 05 j 03:27	23°♊23'36	
minimum elong	-12871 Jul 03 j 03:51	10°♊36'50	1°45'48	evening set	-12864 Jul 02 j 17:37	25°♊18'16	
max. Earth dist.	-12871 Jul 02 j 16:48	10°♊35'48	31.28723 AU				
morning rise	-12871 Jul 18 j 06:35	11°♊10'50		conjunction	-12864 Jul 17 j 18:34	25°♊52'07	2°16'20
retrograde	-12871 Oct 13 j 16:17	13°♊04'28		minimum elong	-12864 Jul 17 j 18:33	25°♊52'07	2°16'41
opposition	-12870 Jan 01 j 00:24	11°♊42'15	1°55'27	max. Earth dist.	-12864 Jul 17 j 13:12	25°♊51'37	31.28748 AU
min. Earth dist.	-12870 Jan 01 j 09:59	11°♊41'36	29.29025 AU	morning rise	-12864 Aug 01 j 19:00	26°♊25'57	
direct	-12870 Mar 23 j 02:09	10°♊18'20		retrograde	-12864 Oct 28 j 22:05	28°♊20'29	
evening set	-12870 Jun 20 j 09:10	12°♊13'33		opposition	-12863 Jan 16 j 18:44	26°♊57'47	2°27'38
				min. Earth dist.	-12863 Jan 16 j 22:43	26°♊57'31	29.28872 AU
conjunction	-12870 Jul 05 j 12:58	12°♊47'38	1°50'32	direct	-12863 Apr 07 j 13:48	25°♊34'11	
minimum elong	-12870 Jul 05 j 12:57	12°♊47'38	1°50'42	evening set	-12863 Jul 05 j 02:42	27°♊28'46	
max. Earth dist.	-12870 Jul 05 j 03:23	12°♊46'44	31.29063 AU				
morning rise	-12870 Jul 20 j 15:07	13°♊21'36		conjunction	-12863 Jul 20 j 03:26	28°♊02'36	2°19'59
retrograde	-12870 Oct 16 j 02:41	15°♊15'24		minimum elong	-12863 Jul 20 j 03:25	28°♊02'36	2°20'23
opposition	-12869 Jan 03 j 13:27	13°♊53'09	2°00'37	max. Earth dist.	-12863 Jul 20 j 00:14	28°♊02'18	31.28656 AU
min. Earth dist.	-12869 Jan 03 j 23:19	13°♊52'29	29.29308 AU	morning rise	-12863 Aug 04 j 03:28	28°♊36'25	

Attention, astronomical year style is used: The year -12863 in astronomical counting style is the year 12864 BCE in historical counting style.

	-12863 Sep 17 j 18:07	0°8		min. Earth dist.	-12856 Feb 02 j 11:35	12°813'36	29.28665 AU
retrograde	-12863 Oct 31 j 06:43	0°831'05		direct	-12856 Apr 22 j 19:09	10°850'20	
	-12863 Dec 15 j 18:53	30°87		evening set	-12856 Jul 19 j 18:46	12°844'24	
opposition	-12862 Jan 19 j 07:42	29°808'19	2°31'25				
min. Earth dist.	-12862 Jan 19 j 10:46	29°808'07	29.28826 AU	conjunction	-12856 Aug 03 j 17:40	13°818'06	2°39'40
direct	-12862 Apr 10 j 01:58	27°844'47		minimum elong	-12856 Aug 03 j 17:38	13°818'06	2°40'14
evening set	-12862 Jul 07 j 11:49	29°839'17		max. Earth dist.	-12856 Aug 03 j 20:52	13°818'24	31.28247 AU
	-12862 Jul 16 j 17:43	0°8		morning rise	-12856 Aug 18 j 16:52	13°851'52	
					-12856 Sep 22 j 01:19	15°8	
conjunction	-12862 Jul 22 j 12:02	0°813'05	2°23'26	retrograde	-12856 Nov 15 j 17:38	15°847'36	
minimum elong	-12862 Jul 22 j 12:01	0°813'05	2°23'50		-12855 Jan 12 j 10:02	15°8	
max. Earth dist.	-12862 Jul 22 j 09:06	0°812'49	31.28652 AU	opposition	-12855 Feb 04 j 03:04	14°824'31	2°51'40
morning rise	-12862 Aug 06 j 12:00	0°846'53		min. Earth dist.	-12855 Feb 03 j 23:33	14°824'45	29.28256 AU
retrograde	-12862 Nov 02 j 18:47	2°841'43		direct	-12855 Apr 25 j 08:30	13°801'26	
opposition	-12861 Jan 21 j 20:39	1°818'55	2°35'00	evening set	-12855 Jul 22 j 04:04	14°855'25	
min. Earth dist.	-12861 Jan 21 j 21:45	1°818'50	29.28866 AU		-12855 Jul 24 j 05:35	15°8	
	-12861 Mar 26 j 15:31	30°87					
direct	-12861 Apr 12 j 11:46	29°855'27		conjunction	-12855 Aug 06 j 02:40	15°829'06	2°41'36
	-12861 Apr 29 j 02:18	0°8		minimum elong	-12855 Aug 06 j 02:39	15°829'06	2°42'12
evening set	-12861 Jul 09 j 20:52	1°849'52		max. Earth dist.	-12855 Aug 06 j 05:32	15°829'23	31.27765 AU
				morning rise	-12855 Aug 21 j 02:03	16°802'53	
conjunction	-12861 Jul 24 j 20:54	2°823'39	2°26'40	retrograde	-12855 Nov 18 j 05:35	17°858'45	
minimum elong	-12861 Jul 24 j 20:52	2°823'39	2°27'08	opposition	-12854 Feb 06 j 16:13	16°835'33	2°53'37
max. Earth dist.	-12861 Jul 24 j 19:48	2°823'33	31.28705 AU	min. Earth dist.	-12854 Feb 06 j 11:58	16°835'51	29.27720 AU
morning rise	-12861 Aug 08 j 20:35	2°857'27		direct	-12854 Apr 27 j 19:07	15°812'30	
retrograde	-12861 Nov 05 j 05:16	4°852'26		evening set	-12854 Jul 24 j 12:59	17°806'22	
opposition	-12860 Jan 24 j 09:40	3°829'36	2°38'21				
min. Earth dist.	-12860 Jan 24 j 10:40	3°829'32	29.28946 AU	conjunction	-12854 Aug 08 j 11:39	17°840'03	2°43'18
direct	-12860 Apr 13 j 22:30	2°806'13		minimum elong	-12854 Aug 08 j 11:38	17°840'02	2°43'55
evening set	-12860 Jul 11 j 05:59	4°800'34		max. Earth dist.	-12854 Aug 08 j 16:22	17°840'29	31.27163 AU
				morning rise	-12854 Aug 23 j 10:56	18°813'49	
conjunction	-12860 Jul 26 j 05:40	4°834'20	2°29'42	retrograde	-12854 Nov 20 j 14:48	20°809'48	
minimum elong	-12860 Jul 26 j 05:39	4°834'20	2°30'11	opposition	-12853 Feb 09 j 05:24	18°846'31	2°55'18
max. Earth dist.	-12860 Jul 26 j 05:16	4°834'17	31.28787 AU	min. Earth dist.	-12853 Feb 09 j 00:35	18°846'50	29.27077 AU
morning rise	-12860 Aug 10 j 05:18	5°808'07		direct	-12853 Apr 30 j 07:58	17°823'28	
retrograde	-12860 Nov 06 j 17:57	7°803'16		evening set	-12853 Jul 26 j 22:06	19°817'12	
opposition	-12859 Jan 25 j 22:36	5°840'24	2°41'29				
min. Earth dist.	-12859 Jan 25 j 21:39	5°840'28	29.29015 AU	conjunction	-12853 Aug 10 j 20:35	19°850'53	2°44'45
direct	-12859 Apr 16 j 09:31	4°817'06		minimum elong	-12853 Aug 10 j 20:35	19°850'53	2°45'25
evening set	-12859 Jul 13 j 15:08	6°811'24		max. Earth dist.	-12853 Aug 11 j 01:25	19°851'21	31.26500 AU
				morning rise	-12853 Aug 25 j 20:06	20°824'40	
conjunction	-12859 Jul 28 j 14:31	6°845'08	2°32'31	retrograde	-12853 Nov 23 j 02:59	22°820'46	
minimum elong	-12859 Jul 28 j 14:30	6°845'08	2°33'02	opposition	-12852 Feb 11 j 18:18	20°857'22	2°56'45
max. Earth dist.	-12859 Jul 28 j 15:00	6°845'11	31.28811 AU	min. Earth dist.	-12852 Feb 11 j 11:49	20°857'48	29.26412 AU
morning rise	-12859 Aug 12 j 14:00	7°818'55		direct	-12852 May 01 j 18:26	19°834'19	
retrograde	-12859 Nov 09 j 06:16	9°814'14		evening set	-12852 Jul 28 j 07:02	21°827'57	
opposition	-12858 Jan 28 j 11:43	7°851'20	2°44'23				
min. Earth dist.	-12858 Jan 28 j 10:59	7°851'23	29.29017 AU	conjunction	-12852 Aug 12 j 05:36	22°801'38	2°45'59
direct	-12858 Apr 18 j 19:18	6°828'07		minimum elong	-12852 Aug 12 j 05:35	22°801'38	2°46'39
evening set	-12858 Jul 16 j 00:19	8°822'20		max. Earth dist.	-12852 Aug 12 j 12:02	22°802'15	31.25826 AU
				morning rise	-12852 Aug 27 j 05:09	22°835'26	
conjunction	-12858 Jul 30 j 23:32	8°856'04	2°35'08	retrograde	-12852 Nov 24 j 13:05	24°831'39	
minimum elong	-12858 Jul 30 j 23:31	8°856'04	2°35'39	opposition	-12851 Feb 13 j 07:20	23°808'09	2°57'56
max. Earth dist.	-12858 Jul 31 j 01:10	8°856'13	31.28762 AU	min. Earth dist.	-12851 Feb 13 j 00:39	23°808'36	29.25767 AU
morning rise	-12858 Aug 14 j 22:51	9°829'50		direct	-12851 May 04 j 05:28	21°845'07	
retrograde	-12858 Nov 11 j 17:52	11°825'18		evening set	-12851 Jul 30 j 15:57	23°838'40	
opposition	-12857 Jan 31 j 00:51	10°802'21	2°47'03				
min. Earth dist.	-12857 Jan 30 j 22:20	10°802'31	29.28908 AU	conjunction	-12851 Aug 14 j 14:28	24°812'20	2°46'59
direct	-12857 Apr 21 j 07:46	8°839'12		minimum elong	-12851 Aug 14 j 14:28	24°812'20	2°47'40
evening set	-12857 Jul 18 j 09:33	10°833'21		max. Earth dist.	-12851 Aug 14 j 21:56	24°813'02	31.25216 AU
				morning rise	-12851 Aug 29 j 14:10	24°846'08	
conjunction	-12857 Aug 02 j 08:27	11°807'04	2°37'31	retrograde	-12851 Nov 27 j 01:15	26°842'29	
minimum elong	-12857 Aug 02 j 08:26	11°807'04	2°38'04	opposition	-12850 Feb 15 j 20:10	25°818'54	2°58'52
max. Earth dist.	-12857 Aug 02 j 10:04	11°807'13	31.28576 AU	min. Earth dist.	-12850 Feb 15 j 11:15	25°819'30	29.25202 AU
morning rise	-12857 Aug 17 j 07:50	11°840'50		direct	-12850 May 06 j 16:08	23°855'54	
retrograde	-12857 Nov 14 j 06:42	13°836'27		evening set	-12850 Aug 02 j 00:57	25°849'22	
opposition	-12856 Feb 02 j 14:06	12°813'26	2°49'29				

Attention, astronomical year style is used: The year -12850 in astronomical counting style is the year 12851 BCE in historical counting style.

conjunction	-12850 Aug 16 j 23:28	26°8'23"03	2°47'44	retrograde	-12844 Dec 12 j 16:19	12°11'01"42	
minimum elong	-12850 Aug 16 j 23:27	26°8'23"03	2°48'25	opposition	-12843 Mar 03 j 14:49	10°11'37"50	2°58'07
max. Earth dist.	-12850 Aug 17 j 07:55	26°8'23"51	31.24693 AU	min. Earth dist.	-12843 Mar 02 j 23:56	10°11'38"50	29.22211 AU
morning rise	-12850 Aug 31 j 23:24	26°8'56"53		direct	-12843 May 21 j 21:23	9°11'15"12	
retrograde	-12850 Nov 29 j 13:34	28°8'53"22		evening set	-12843 Aug 16 j 16:32	11°11'08"14	
opposition	-12849 Feb 18 j 09:13	27°8'29"44	2°59'33				
min. Earth dist.	-12849 Feb 18 j 00:06	27°8'30"20	29.24741 AU	conjunction	-12843 Aug 31 j 16:31	11°11'42"03	2°46'10
direct	-12849 May 09 j 00:59	26°8'06"46		minimum elong	-12843 Aug 31 j 16:31	11°11'42"03	2°46'59
evening set	-12849 Aug 04 j 09:45	28°8'00"11		max. Earth dist.	-12843 Sep 01 j 07:05	11°11'43"26	31.21583 AU
				morning rise	-12843 Sep 15 j 18:45	12°11'16"06	
conjunction	-12849 Aug 19 j 08:30	28°8'33"52	2°48'14	retrograde	-12843 Dec 15 j 02:18	14°11'13"30	
minimum elong	-12849 Aug 19 j 08:29	28°8'33"52	2°48'58	opposition	-12842 Mar 06 j 03:53	12°11'49"32	2°56'59
max. Earth dist.	-12849 Aug 19 j 18:38	28°8'34"50	31.24281 AU	min. Earth dist.	-12842 Mar 05 j 13:20	12°11'50"31	29.21460 AU
morning rise	-12849 Sep 03 j 08:35	29°8'07"43		direct	-12842 May 24 j 08:35	11°11'26"55	
	-12849 Sep 28 j 16:31	0°11'		evening set	-12842 Aug 19 j 01:48	13°11'19"51	
retrograde	-12849 Dec 02 j 01:33	1°11'04"20					
	-12848 Feb 08 j 21:01	30°8'8		conjunction	-12842 Sep 03 j 02:10	13°11'53"41	2°44'59
opposition	-12848 Feb 20 j 22:04	29°8'40"40	2°59'57	minimum elong	-12842 Sep 03 j 02:10	13°11'53"41	2°45'47
min. Earth dist.	-12848 Feb 20 j 10:52	29°8'41"25	29.24360 AU	max. Earth dist.	-12842 Sep 03 j 17:20	13°11'55"08	31.20790 AU
direct	-12848 May 10 j 12:48	28°8'17"46		morning rise	-12842 Sep 18 j 04:53	14°11'27"46	
	-12848 Jul 31 j 16:55	0°11'		retrograde	-12842 Dec 17 j 14:11	16°11'25"14	
evening set	-12848 Aug 05 j 18:50	0°11'11"08		opposition	-12841 Mar 08 j 16:45	15°11'01"11	2°55'35
				min. Earth dist.	-12841 Mar 08 j 00:35	15°11'02"17	29.20610 AU
conjunction	-12848 Aug 20 j 17:34	0°11'44"50	2°48'30	direct	-12841 May 26 j 19:27	13°11'38"33	
minimum elong	-12848 Aug 20 j 17:33	0°11'44"50	2°49'14	evening set	-12841 Aug 21 j 11:02	15°11'31"23	
max. Earth dist.	-12848 Aug 21 j 03:53	0°11'45"48	31.23926 AU				
morning rise	-12848 Sep 04 j 18:03	1°11'18"43		conjunction	-12841 Sep 05 j 11:45	16°11'05"15	2°43'33
retrograde	-12848 Dec 03 j 15:20	3°11'15"28		minimum elong	-12841 Sep 05 j 11:45	16°11'05"15	2°44'23
opposition	-12847 Feb 22 j 10:55	1°11'51"46	3°00'07	max. Earth dist.	-12841 Sep 06 j 03:17	16°11'06"43	31.19901 AU
min. Earth dist.	-12847 Feb 21 j 23:29	1°11'52"32	29.24029 AU	morning rise	-12841 Sep 20 j 15:04	16°11'39"22	
direct	-12847 May 12 j 23:11	0°11'28"57		retrograde	-12841 Dec 20 j 01:57	18°11'36"54	
evening set	-12847 Aug 08 j 03:46	2°11'22"15		opposition	-12840 Mar 10 j 05:41	17°11'12"45	2°53'56
				min. Earth dist.	-12840 Mar 09 j 13:53	17°11'13"49	29.19699 AU
conjunction	-12847 Aug 23 j 02:49	2°11'55"59	2°48'31	direct	-12840 May 28 j 04:37	15°11'50"05	
minimum elong	-12847 Aug 23 j 02:49	2°11'55"59	2°49'17	evening set	-12840 Aug 22 j 20:13	17°11'42"48	
max. Earth dist.	-12847 Aug 23 j 15:09	2°11'57"09	31.23598 AU				
morning rise	-12847 Sep 07 j 03:26	3°11'29"53		conjunction	-12840 Sep 06 j 21:28	18°11'16"42	2°41'54
retrograde	-12847 Dec 06 j 03:27	5°11'26"48		minimum elong	-12840 Sep 06 j 21:28	18°11'16"42	2°42'43
opposition	-12846 Feb 24 j 23:52	4°11'03"04	3°00'00	max. Earth dist.	-12840 Sep 07 j 14:26	18°11'18"18	31.18988 AU
min. Earth dist.	-12846 Feb 24 j 11:13	4°11'03"55	29.23688 AU	morning rise	-12840 Sep 22 j 01:11	18°11'50"51	
direct	-12846 May 15 j 11:42	2°11'40"19		retrograde	-12840 Dec 21 j 13:53	20°11'48"27	
evening set	-12846 Aug 10 j 12:51	4°11'33"34		opposition	-12839 Mar 12 j 18:14	19°11'24"11	2°52'03
				min. Earth dist.	-12839 Mar 12 j 00:40	19°11'25"23	29.18787 AU
conjunction	-12846 Aug 25 j 11:55	5°11'07"18	2°48'18	direct	-12839 May 30 j 16:40	18°11'01"30	
minimum elong	-12846 Aug 25 j 11:55	5°11'07"18	2°49'03	evening set	-12839 Aug 25 j 05:30	19°11'54"08	
max. Earth dist.	-12846 Aug 26 j 00:06	5°11'08"28	31.23242 AU				
morning rise	-12846 Sep 09 j 13:03	5°11'41"15		conjunction	-12839 Sep 09 j 07:02	20°11'28"04	2°40'00
retrograde	-12846 Dec 08 j 16:16	7°11'38"18		minimum elong	-12839 Sep 09 j 07:02	20°11'28"04	2°40'50
opposition	-12845 Feb 27 j 12:57	6°11'14"32	2°59'38	max. Earth dist.	-12839 Sep 10 j 00:02	20°11'29"40	31.18105 AU
min. Earth dist.	-12845 Feb 26 j 23:35	6°11'15"26	29.23307 AU	morning rise	-12839 Sep 24 j 11:28	21°11'02"16	
direct	-12845 May 17 j 21:40	4°11'51"50		retrograde	-12839 Dec 24 j 03:29	22°11'59"55	
evening set	-12845 Aug 12 j 22:01	6°11'45"02		opposition	-12838 Mar 15 j 07:02	21°11'35"34	2°49'54
				min. Earth dist.	-12838 Mar 14 j 13:12	21°11'36"47	29.17948 AU
conjunction	-12845 Aug 27 j 21:28	7°11'18"48	2°47'50	direct	-12838 Jun 02 j 02:31	20°11'12"52	
minimum elong	-12845 Aug 27 j 21:28	7°11'18"48	2°48'37	evening set	-12838 Aug 27 j 14:34	22°11'05"25	
max. Earth dist.	-12845 Aug 28 j 11:16	7°11'20"06	31.22808 AU				
morning rise	-12845 Sep 11 j 22:49	7°11'52"47		conjunction	-12838 Sep 11 j 16:45	22°11'39"23	2°37'53
retrograde	-12845 Dec 11 j 02:45	9°11'49"57		minimum elong	-12838 Sep 11 j 16:45	22°11'39"23	2°38'42
opposition	-12844 Mar 01 j 01:52	8°11'26"08	2°59'00	max. Earth dist.	-12838 Sep 12 j 11:50	22°11'41"11	31.17314 AU
min. Earth dist.	-12844 Feb 29 j 12:15	8°11'27"04	29.22818 AU	morning rise	-12838 Sep 26 j 21:38	23°11'13"38	
direct	-12844 May 19 j 10:30	7°11'03"30		retrograde	-12838 Dec 26 j 15:26	25°11'11"22	
evening set	-12844 Aug 14 j 07:20	8°11'56"37		opposition	-12837 Mar 17 j 19:42	23°11'46"56	2°47'30
				min. Earth dist.	-12837 Mar 17 j 00:32	23°11'48"15	29.17198 AU
conjunction	-12844 Aug 29 j 06:59	9°11'30"24	2°47'07	direct	-12837 Jun 04 j 14:28	22°11'24"15	
minimum elong	-12844 Aug 29 j 06:59	9°11'30"24	2°47'54	evening set	-12837 Aug 29 j 23:57	24°11'16"45	
max. Earth dist.	-12844 Aug 29 j 20:32	9°11'31"41	31.22268 AU				
morning rise	-12844 Sep 13 j 08:50	10°11'04"25		conjunction	-12837 Sep 14 j 02:31	24°11'50"45	2°35'32

Attention, astronomical year style is used: The year -12837 in astronomical counting style is the year 12838 BCE in historical counting style.

minimum elong	-12837 Sep 14 j 02:32	24°II50'45	2°36'22	opposition	-12830 Apr 02 j 11:45	9°☾10'58	2°24'03
max. Earth dist.	-12837 Sep 14 j 21:32	24°II52'33	31.16629 AU	min. Earth dist.	-12830 Apr 01 j 12:48	9°☾12'32	29.12789 AU
morning rise	-12837 Sep 29 j 08:12	25°II25'03		direct	-12830 Jun 19 j 16:48	7°☾48'31	
retrograde	-12837 Dec 29 j 04:56	27°II22'52		evening set	-12830 Sep 13 j 19:34	9°☾40'44	
opposition	-12836 Mar 19 j 08:14	25°II58'23	2°44'52				
min. Earth dist.	-12836 Mar 18 j 12:17	25°II59'45	29.16563 AU	conjunction	-12830 Sep 29 j 02:30	10°☾15'05	2°12'49
direct	-12836 Jun 06 j 00:11	24°II35'44		minimum elong	-12830 Sep 29 j 02:30	10°☾15'05	2°13'39
evening set	-12836 Aug 31 j 09:14	26°II28'10		max. Earth dist.	-12830 Sep 30 j 00:57	10°☾17'13	31.12135 AU
				morning rise	-12830 Oct 14 j 13:13	10°☾49'49	
conjunction	-12836 Sep 15 j 12:29	27°II02'13	2°32'57	retrograde	-12829 Jan 13 j 21:05	12°☾48'12	
minimum elong	-12836 Sep 15 j 12:29	27°II02'13	2°33'47	min. Earth dist.	-12829 Apr 04 j 01:59	11°☾25'04	29.11829 AU
max. Earth dist.	-12836 Sep 16 j 09:14	27°II04'11	31.16033 AU	opposition	-12829 Apr 05 j 00:23	11°☾23'33	2°19'48
morning rise	-12836 Sep 30 j 18:41	27°II36'35		direct	-12829 Jun 22 j 02:22	10°☾01'04	
retrograde	-12836 Dec 30 j 16:36	29°II34'29		evening set	-12829 Sep 16 j 05:33	11°☾53'13	
opposition	-12835 Mar 21 j 20:51	28°II09'59	2°41'59				
min. Earth dist.	-12835 Mar 21 j 00:26	28°II11'22	29.15991 AU	conjunction	-12829 Oct 01 j 13:23	12°☾27'39	2°08'45
direct	-12835 Jun 08 j 12:32	26°II47'23		minimum elong	-12829 Oct 01 j 13:24	12°☾27'39	2°09'35
evening set	-12835 Sep 02 j 18:35	28°II39'46		max. Earth dist.	-12829 Oct 02 j 13:10	12°☾29'53	31.11128 AU
				morning rise	-12829 Oct 17 j 00:44	13°☾02'25	
conjunction	-12835 Sep 17 j 22:19	29°II13'52	2°30'08	retrograde	-12828 Jan 16 j 09:09	15°☾00'50	
minimum elong	-12835 Sep 17 j 22:19	29°II13'52	2°30'59	opposition	-12828 Apr 06 j 12:39	13°☾36'06	2°15'21
max. Earth dist.	-12835 Sep 18 j 19:11	29°II15'51	31.15503 AU	min. Earth dist.	-12828 Apr 05 j 13:41	13°☾37'41	29.10763 AU
morning rise	-12835 Oct 03 j 05:15	29°II48'17		direct	-12828 Jun 23 j 14:01	12°☾13'35	
	-12835 Oct 08 j 13:54	0°☾		evening set	-12828 Sep 17 j 15:41	14°☾05'41	
retrograde	-12834 Jan 02 j 06:50	1°☾46'17					
min. Earth dist.	-12834 Mar 23 j 11:41	0°☾23'15	29.15469 AU	conjunction	-12828 Oct 03 j 00:06	14°☾40'09	2°04'30
opposition	-12834 Mar 24 j 09:28	0°☾21'46	2°38'51	minimum elong	-12828 Oct 03 j 00:06	14°☾40'09	2°05'19
	-12834 Apr 06 j 20:41	30°☾II		max. Earth dist.	-12828 Oct 03 j 23:14	14°☾42'20	31.10052 AU
direct	-12834 Jun 10 j 23:09	28°II59'13		morning rise	-12828 Oct 18 j 12:25	15°☾15'00	
	-12834 Aug 11 j 01:10	0°☾		retrograde	-12827 Jan 17 j 23:10	17°☾13'26	
evening set	-12834 Sep 05 j 04:08	0°☾51'35		min. Earth dist.	-12827 Apr 08 j 01:50	15°☾50'11	29.09672 AU
				opposition	-12827 Apr 09 j 01:01	15°☾48'36	2°10'42
conjunction	-12834 Sep 20 j 08:28	1°☾25'44	2°27'06	direct	-12827 Jun 26 j 00:09	14°☾26'02	
minimum elong	-12834 Sep 20 j 08:29	1°☾25'44	2°27'56	evening set	-12827 Sep 20 j 01:34	16°☾18'04	
max. Earth dist.	-12834 Sep 21 j 06:21	1°☾27'48	31.14981 AU				
morning rise	-12834 Oct 05 j 16:06	2°☾00'12		conjunction	-12827 Oct 05 j 10:48	16°☾52'36	2°00'04
retrograde	-12833 Jan 04 j 17:38	3°☾58'19		minimum elong	-12827 Oct 05 j 10:50	16°☾52'36	2°00'52
opposition	-12833 Mar 26 j 22:06	2°☾33'47	2°35'30	max. Earth dist.	-12827 Oct 06 j 11:22	16°☾54'55	31.08966 AU
min. Earth dist.	-12833 Mar 26 j 00:46	2°☾35'15	29.14931 AU	morning rise	-12827 Oct 20 j 23:48	17°☾27'30	
direct	-12833 Jun 13 j 09:43	1°☾11'17		retrograde	-12826 Jan 20 j 11:42	19°☾25'57	
evening set	-12833 Sep 07 j 13:49	3°☾03'37		opposition	-12826 Apr 11 j 13:20	18°☾01'02	2°05'52
				min. Earth dist.	-12826 Apr 10 j 13:56	18°☾02'39	29.08599 AU
conjunction	-12833 Sep 22 j 18:51	3°☾37'49	2°23'51	direct	-12826 Jun 28 j 13:08	16°☾38'26	
minimum elong	-12833 Sep 22 j 18:52	3°☾37'49	2°24'41	evening set	-12826 Sep 22 j 11:45	18°☾30'25	
max. Earth dist.	-12833 Sep 23 j 17:16	3°☾39'56	31.14434 AU				
morning rise	-12833 Oct 08 j 03:10	4°☾12'21		conjunction	-12826 Oct 07 j 21:41	19°☾05'00	1°55'27
retrograde	-12832 Jan 07 j 06:20	6°☾10'33		minimum elong	-12826 Oct 07 j 21:42	19°☾05'00	1°56'15
opposition	-12832 Mar 28 j 10:37	4°☾46'01	2°31'54	max. Earth dist.	-12826 Oct 08 j 22:09	19°☾07'19	31.07947 AU
min. Earth dist.	-12832 Mar 27 j 12:01	4°☾47'34	29.14334 AU	morning rise	-12826 Oct 23 j 11:34	19°☾39'58	
direct	-12832 Jun 14 j 20:19	3°☾23'33		retrograde	-12825 Jan 23 j 01:55	21°☾38'25	
evening set	-12832 Sep 08 j 23:44	5°☾15'51		min. Earth dist.	-12825 Apr 13 j 00:55	20°☾15'08	29.07618 AU
				opposition	-12825 Apr 14 j 01:26	20°☾13'27	2°00'51
conjunction	-12832 Sep 24 j 05:17	5°☾50'06	2°20'22	direct	-12825 Jul 01 j 00:08	18°☾50'48	
minimum elong	-12832 Sep 24 j 05:17	5°☾50'06	2°21'12	evening set	-12825 Sep 24 j 21:59	20°☾42'45	
max. Earth dist.	-12832 Sep 25 j 03:33	5°☾52'13	31.13785 AU				
morning rise	-12832 Oct 09 j 14:24	6°☾24'42		conjunction	-12825 Oct 10 j 08:42	21°☾17'24	1°50'40
retrograde	-12831 Jan 08 j 18:37	8°☾22'59		minimum elong	-12825 Oct 10 j 08:43	21°☾17'24	1°51'28
opposition	-12831 Mar 30 j 23:13	6°☾58'26	2°28'05	max. Earth dist.	-12825 Oct 11 j 09:58	21°☾19'47	31.07011 AU
min. Earth dist.	-12831 Mar 30 j 01:27	6°☾59'55	29.13627 AU	morning rise	-12825 Oct 25 j 23:24	21°☾52'26	
direct	-12831 Jun 17 j 04:55	5°☾35'59		retrograde	-12824 Jan 25 j 12:56	23°☾50'54	
evening set	-12831 Sep 11 j 09:35	7°☾28'15		opposition	-12824 Apr 15 j 13:37	22°☾25'53	1°55'39
				min. Earth dist.	-12824 Apr 14 j 13:30	22°☾27'33	29.06727 AU
conjunction	-12831 Sep 26 j 15:57	8°☾02'33	2°16'42	direct	-12824 Jul 02 j 11:02	21°☾03'14	
minimum elong	-12831 Sep 26 j 15:58	8°☾02'33	2°17'32	evening set	-12824 Sep 26 j 08:12	22°☾55'09	
max. Earth dist.	-12831 Sep 27 j 15:10	8°☾04'45	31.13028 AU				
morning rise	-12831 Oct 12 j 01:42	8°☾37'13		conjunction	-12824 Oct 11 j 19:45	23°☾29'51	1°45'43
retrograde	-12830 Jan 11 j 07:13	10°☾35'33		minimum elong	-12824 Oct 11 j 19:46	23°☾29'51	1°46'29

Attention, astronomical year style is used: The year -12824 in astronomical counting style is the year 12825 BCE in historical counting style.

max. Earth dist.	-12824 Oct 12 j 21:40	23° $\Omega$ 32'18	31.06187 AU	retrograde	-12817 Feb 10 j 07:16	9° $\Omega$ 21'36	
morning rise	-12824 Oct 27 j 11:12	24° $\Omega$ 04'56		min. Earth dist.	-12817 May 01 j 01:07	7° $\Omega$ 58'09	29.01248 AU
retrograde	-12823 Jan 27 j 02:00	26° $\Omega$ 03'27		opposition	-12817 May 02 j 01:31	7° $\Omega$ 56'27	1°14'43
min. Earth dist.	-12823 Apr 17 j 00:05	24° $\Omega$ 40'09	29.05937 AU	direct	-12817 Jul 18 j 12:50	6° $\Omega$ 33'43	
opposition	-12823 Apr 18 j 01:34	24° $\Omega$ 38'24	1°50'16	evening set	-12817 Oct 12 j 12:09	8° $\Omega$ 25'39	
direct	-12823 Jul 04 j 22:12	23° $\Omega$ 15'45					
evening set	-12823 Sep 28 j 18:38	25° $\Omega$ 07'39		conjunction	-12817 Oct 28 j 05:07	9° $\Omega$ 00'46	1°06'58
				minimum elong	-12817 Oct 28 j 05:08	9° $\Omega$ 00'46	1°07'38
conjunction	-12823 Oct 14 j 06:50	25° $\Omega$ 42'25	1°40'37	max. Earth dist.	-12817 Oct 29 j 06:52	9° $\Omega$ 03'11	31.00652 AU
minimum elong	-12823 Oct 14 j 06:51	25° $\Omega$ 42'25	1°41'23	morning rise	-12817 Nov 13 j 02:19	9° $\Omega$ 36'17	
max. Earth dist.	-12823 Oct 15 j 08:44	25° $\Omega$ 44'51	31.05444 AU	retrograde	-12816 Feb 12 j 21:38	11° $\Omega$ 34'56	
morning rise	-12823 Oct 29 j 23:14	26° $\Omega$ 17'34		opposition	-12816 May 03 j 13:20	10° $\Omega$ 09'44	1°08'20
retrograde	-12822 Jan 29 j 14:27	28° $\Omega$ 16'07		min. Earth dist.	-12816 May 02 j 12:34	10° $\Omega$ 11'27	29.00174 AU
opposition	-12822 Apr 20 j 13:44	26° $\Omega$ 51'03	1°44'43	direct	-12816 Jul 20 j 00:07	8° $\Omega$ 46'55	
min. Earth dist.	-12822 Apr 19 j 12:58	26° $\Omega$ 52'45	29.05224 AU	evening set	-12816 Oct 13 j 23:27	10° $\Omega$ 38'51	
direct	-12822 Jul 07 j 07:12	25° $\Omega$ 28'24					
evening set	-12822 Oct 01 j 05:01	27° $\Omega$ 20'17		conjunction	-12816 Oct 29 j 17:08	11° $\Omega$ 14'02	1°00'57
				minimum elong	-12816 Oct 29 j 17:09	11° $\Omega$ 14'02	1°01'35
conjunction	-12822 Oct 16 j 18:10	27° $\Omega$ 55'07	1°35'20	max. Earth dist.	-12816 Oct 30 j 19:00	11° $\Omega$ 16'28	30.99541 AU
minimum elong	-12822 Oct 16 j 18:11	27° $\Omega$ 55'07	1°36'05	morning rise	-12816 Nov 14 j 15:03	11° $\Omega$ 49'37	
max. Earth dist.	-12822 Oct 17 j 21:09	27° $\Omega$ 57'40	31.04769 AU	retrograde	-12815 Feb 14 j 09:30	13° $\Omega$ 48'14	
morning rise	-12822 Nov 01 j 11:16	28° $\Omega$ 30'20		min. Earth dist.	-12815 May 05 j 01:19	12° $\Omega$ 24'37	28.99040 AU
	-12822 Dec 20 j 08:07	0° $\Omega$		opposition	-12815 May 06 j 01:05	12° $\Omega$ 22'58	1°01'52
retrograde	-12821 Feb 01 j 02:24	0° $\Omega$ 28'55		direct	-12815 Jul 22 j 11:27	11° $\Omega$ 00'05	
	-12821 Mar 16 j 23:53	30° $\Omega$		evening set	-12815 Oct 16 j 10:45	12° $\Omega$ 52'00	
min. Earth dist.	-12821 Apr 21 j 23:52	29° $\Omega$ 05'38	29.04542 AU				
opposition	-12821 Apr 23 j 01:42	29° $\Omega$ 03'51	1°39'00	conjunction	-12815 Nov 01 j 05:16	13° $\Omega$ 27'14	0°54'52
direct	-12821 Jul 09 j 18:43	27° $\Omega$ 41'12		minimum elong	-12815 Nov 01 j 05:17	13° $\Omega$ 27'14	0°55'28
evening set	-12821 Oct 03 j 15:52	29° $\Omega$ 33'06		max. Earth dist.	-12815 Nov 02 j 07:17	13° $\Omega$ 29'41	30.98426 AU
	-12821 Oct 15 j 16:41	0° $\Omega$		morning rise	-12815 Nov 17 j 03:54	14° $\Omega$ 02'52	
					-12815 Dec 15 j 09:12	15° $\Omega$	
conjunction	-12821 Oct 19 j 05:38	0° $\Omega$ 08'00	1°29'55	retrograde	-12814 Feb 16 j 23:27	16° $\Omega$ 01'27	
minimum elong	-12821 Oct 19 j 05:39	0° $\Omega$ 08'00	1°30'39		-12814 Apr 24 j 01:12	15° $\Omega$	
max. Earth dist.	-12821 Oct 20 j 07:43	0° $\Omega$ 10'27	31.04093 AU	min. Earth dist.	-12814 May 07 j 11:57	14° $\Omega$ 37'50	28.97933 AU
morning rise	-12821 Nov 03 j 23:43	0° $\Omega$ 43'17		opposition	-12814 May 08 j 12:36	14° $\Omega$ 36'07	0°55'18
retrograde	-12820 Feb 03 j 15:28	2° $\Omega$ 41'54		direct	-12814 Jul 24 j 23:22	13° $\Omega$ 13'11	
opposition	-12820 Apr 24 j 13:39	1° $\Omega$ 16'49	1°33'08		-12814 Oct 16 j 14:03	15° $\Omega$	
min. Earth dist.	-12820 Apr 23 j 12:36	1° $\Omega$ 18'33	29.03850 AU	evening set	-12814 Oct 18 j 22:14	15° $\Omega$ 05'06	
	-12820 Jun 22 j 16:17	30° $\Omega$					
direct	-12820 Jul 11 j 03:24	29° $\Omega$ 54'10		conjunction	-12814 Nov 03 j 17:23	15° $\Omega$ 40'24	0°48'41
	-12820 Jul 29 j 11:15	0° $\Omega$		minimum elong	-12814 Nov 03 j 17:23	15° $\Omega$ 40'24	0°49'15
evening set	-12820 Oct 05 j 02:42	1° $\Omega$ 46'05		max. Earth dist.	-12814 Nov 04 j 18:59	15° $\Omega$ 42'48	30.97349 AU
				morning rise	-12814 Nov 19 j 16:51	16° $\Omega$ 16'05	
conjunction	-12820 Oct 20 j 17:24	2° $\Omega$ 21'02	1°24'22	retrograde	-12813 Feb 19 j 11:39	18° $\Omega$ 14'39	
minimum elong	-12820 Oct 20 j 17:24	2° $\Omega$ 21'02	1°25'04	min. Earth dist.	-12813 May 10 j 00:38	16° $\Omega$ 50'55	28.96900 AU
max. Earth dist.	-12820 Oct 21 j 20:34	2° $\Omega$ 23'36	31.03378 AU	opposition	-12813 May 11 j 00:14	16° $\Omega$ 49'16	0°48'39
morning rise	-12820 Nov 05 j 12:05	2° $\Omega$ 56'23		direct	-12813 Jul 27 j 09:02	15° $\Omega$ 26'16	
retrograde	-12819 Feb 05 j 03:51	4° $\Omega$ 55'01		evening set	-12813 Oct 21 j 09:44	17° $\Omega$ 18'12	
min. Earth dist.	-12819 Apr 26 j 00:17	3° $\Omega$ 31'42	29.03085 AU				
opposition	-12819 Apr 27 j 01:36	3° $\Omega$ 29'56	1°27'07	conjunction	-12813 Nov 06 j 05:46	17° $\Omega$ 53'33	0°42'26
direct	-12819 Jul 13 j 14:22	2° $\Omega$ 07'17		minimum elong	-12813 Nov 06 j 05:46	17° $\Omega$ 53'33	0°42'59
evening set	-12819 Oct 07 j 13:40	3° $\Omega$ 59'12		max. Earth dist.	-12813 Nov 07 j 08:11	17° $\Omega$ 56'02	30.96375 AU
				morning rise	-12813 Nov 22 j 05:47	18° $\Omega$ 29'17	
conjunction	-12819 Oct 23 j 05:00	4° $\Omega$ 34'13	1°18'41	retrograde	-12812 Feb 21 j 23:09	20° $\Omega$ 27'50	
minimum elong	-12819 Oct 23 j 05:01	4° $\Omega$ 34'13	1°19'22	min. Earth dist.	-12812 May 11 j 10:56	19° $\Omega$ 04'09	28.95979 AU
max. Earth dist.	-12819 Oct 24 j 07:04	4° $\Omega$ 36'40	31.02582 AU	opposition	-12812 May 12 j 11:31	19° $\Omega$ 02'26	0°41'56
morning rise	-12819 Nov 08 j 00:38	5° $\Omega$ 09'37		direct	-12812 Jul 28 j 20:44	17° $\Omega$ 39'23	
retrograde	-12818 Feb 07 j 18:21	7° $\Omega$ 08'17		evening set	-12812 Oct 22 j 21:27	19° $\Omega$ 31'22	
opposition	-12818 Apr 29 j 13:40	5° $\Omega$ 43'10	1°20'58				
min. Earth dist.	-12818 Apr 28 j 12:40	5° $\Omega$ 44'54	29.02231 AU	conjunction	-12812 Nov 07 j 18:00	20° $\Omega$ 06'45	0°36'07
direct	-12818 Jul 16 j 00:28	4° $\Omega$ 20'29		minimum elong	-12812 Nov 07 j 18:00	20° $\Omega$ 06'45	0°36'39
evening set	-12818 Oct 10 j 00:51	6° $\Omega$ 12'25		max. Earth dist.	-12812 Nov 08 j 19:30	20° $\Omega$ 09'09	30.95525 AU
				morning rise	-12812 Nov 23 j 18:51	20° $\Omega$ 42'32	
conjunction	-12818 Oct 25 j 17:04	6° $\Omega$ 47'29	1°12'53	retrograde	-12811 Feb 23 j 11:39	22° $\Omega$ 41'05	
minimum elong	-12818 Oct 25 j 17:05	6° $\Omega$ 47'29	1°13'33	opposition	-12811 May 14 j 23:02	21° $\Omega$ 15'40	0°35'09
max. Earth dist.	-12818 Oct 26 j 19:44	6° $\Omega$ 49'59	31.01668 AU	min. Earth dist.	-12811 May 13 j 23:03	21° $\Omega$ 17'21	28.95200 AU
morning rise	-12818 Nov 10 j 13:23	7° $\Omega$ 22'56		direct	-12811 Jul 31 j 05:14	19° $\Omega$ 52'36	

Attention, astronomical year style is used: The year -12811 in astronomical counting style is the year 12812 BCE in historical counting style.

evening set	-12811 Oct 25 j 08:58	21°Ω44'37		opposition	-12805 May 28 j 19:00	4°♊38'39	-0°06'28
				min. Earth dist.	-12805 May 27 j 20:39	4°♊40'13	28.91771 AU
conjunction	-12811 Nov 10 j 06:23	22°Ω20'04	0°29'45	direct	-12805 Aug 13 j 23:58	3°♊15'26	
minimum elong	-12811 Nov 10 j 06:23	22°Ω20'04	0°30'16	evening set	-12805 Nov 08 j 11:18	5°♊07'56	
max. Earth dist.	-12811 Nov 11 j 09:06	22°Ω22'34	30.94814 AU				
morning rise	-12811 Nov 26 j 07:44	22°Ω55'54		conjunction	-12805 Nov 24 j 12:14	5°♊43'39	-0°09'18
retrograde	-12810 Feb 25 j 23:46	24°Ω54'27		minimum elong	-12805 Nov 24 j 12:13	5°♊43'39	0°08'58
min. Earth dist.	-12810 May 16 j 10:04	23°Ω30'46	28.94538 AU	behind sun begin	-12805 Nov 24 j 06:38	5°♊43'09	
opposition	-12810 May 17 j 10:25	23°Ω29'03	0°28'18	behind sun end	-12805 Nov 24 j 17:49	5°♊44'09	
direct	-12810 Aug 02 j 15:43	22°Ω05'57		max. Earth dist.	-12805 Nov 25 j 11:29	5°♊45'49	30.91378 AU
evening set	-12810 Oct 27 j 20:57	23°Ω58'03		morning rise	-12805 Dec 10 j 17:02	6°♊19'44	
				retrograde	-12804 Mar 11 j 09:21	8°♊18'13	
conjunction	-12810 Nov 12 j 18:55	24°Ω33'33	0°23'19	min. Earth dist.	-12804 May 29 j 09:39	6°♊54'21	28.91027 AU
minimum elong	-12810 Nov 12 j 18:55	24°Ω33'33	0°23'49	opposition	-12804 May 30 j 06:16	6°♊52'54	-0°13'26
max. Earth dist.	-12810 Nov 13 j 20:34	24°Ω35'57	30.94218 AU	direct	-12804 Aug 15 j 10:37	5°♊29'36	
morning rise	-12810 Nov 28 j 21:05	25°Ω09'26		evening set	-12804 Nov 10 j 00:05	7°♊22'09	
retrograde	-12809 Feb 28 j 13:37	27°Ω07'59					
opposition	-12809 May 19 j 21:43	25°Ω42'36	0°21'25	conjunction	-12804 Nov 26 j 01:41	7°♊57'54	-0°15'48
min. Earth dist.	-12809 May 18 j 21:42	25°Ω44'17	28.93985 AU	minimum elong	-12804 Nov 26 j 01:41	7°♊57'54	0°15'29
direct	-12809 Aug 05 j 01:27	24°Ω19'30		behind sun begin	-12804 Nov 26 j 00:15	7°♊57'47	
evening set	-12809 Oct 30 j 09:03	26°Ω11'41		behind sun end	-12804 Nov 26 j 03:07	7°♊58'02	
				max. Earth dist.	-12804 Nov 27 j 00:58	8°♊00'05	30.90603 AU
conjunction	-12809 Nov 15 j 07:46	26°Ω47'14	0°16'51	morning rise	-12804 Dec 12 j 06:48	8°♊34'01	
minimum elong	-12809 Nov 15 j 07:46	26°Ω47'14	0°17'19	retrograde	-12803 Mar 13 j 21:51	10°♊32'26	
max. Earth dist.	-12809 Nov 16 j 10:06	26°Ω49'41	30.93691 AU	opposition	-12803 Jun 01 j 17:24	9°♊07'05	-0°20'23
morning rise	-12809 Dec 01 j 10:23	27°Ω23'09		min. Earth dist.	-12803 May 31 j 20:28	9°♊08'33	28.90217 AU
retrograde	-12808 Mar 02 j 02:16	29°Ω21'43		direct	-12803 Aug 17 j 22:59	7°♊43'42	
min. Earth dist.	-12808 May 20 j 09:42	27°Ω58'00	28.93472 AU	evening set	-12803 Nov 12 j 12:58	9°♊36'18	
opposition	-12808 May 21 j 09:05	27°Ω56'22	0°14'28				
direct	-12808 Aug 06 j 13:09	26°Ω33'15		conjunction	-12803 Nov 28 j 14:55	10°♊12'05	-0°22'17
evening set	-12808 Oct 31 j 21:16	28°Ω25'31		minimum elong	-12803 Nov 28 j 14:54	10°♊12'05	0°22'00
				max. Earth dist.	-12803 Nov 29 j 12:38	10°♊14'06	30.89781 AU
conjunction	-12808 Nov 16 j 20:31	29°Ω01'06	0°10'22	morning rise	-12803 Dec 14 j 20:38	10°♊48'13	
minimum elong	-12808 Nov 16 j 20:31	29°Ω01'06	0°10'48	retrograde	-12802 Mar 16 j 10:44	12°♊46'34	
behind sun begin	-12808 Nov 16 j 15:33	29°Ω00'40		min. Earth dist.	-12802 Jun 03 j 08:53	11°♊22'34	28.89402 AU
behind sun end	-12808 Nov 17 j 01:29	29°Ω01'33		opposition	-12802 Jun 04 j 04:34	11°♊21'10	-0°27'19
max. Earth dist.	-12808 Nov 17 j 21:50	29°Ω03'28	30.93196 AU	direct	-12802 Aug 20 j 08:42	9°♊57'42	
morning rise	-12808 Dec 02 j 23:46	29°Ω37'04		evening set	-12802 Nov 15 j 01:56	11°♊50'21	
	-12808 Dec 13 j 17:01	0°♊					
retrograde	-12807 Mar 04 j 16:43	1°♊35'39		conjunction	-12802 Dec 01 j 04:32	12°♊26'10	-0°28'44
opposition	-12807 May 23 j 20:23	0°♊10'19	0°07'30	minimum elong	-12802 Dec 01 j 04:31	12°♊26'10	0°28'29
min. Earth dist.	-12807 May 22 j 20:49	0°♊11'58	28.92971 AU	max. Earth dist.	-12802 Dec 02 j 02:52	12°♊28'15	30.88978 AU
	-12807 May 29 j 23:48	30°♊		morning rise	-12802 Dec 17 j 10:28	13°♊02'19	
direct	-12807 Aug 08 j 23:50	28°Ω47'11		retrograde	-12801 Mar 18 j 22:03	15°♊00'36	
	-12807 Oct 15 j 10:09	0°♊		opposition	-12801 Jun 06 j 15:25	13°♊35'11	-0°34'12
evening set	-12807 Nov 03 j 09:46	0°♊39'32		min. Earth dist.	-12801 Jun 05 j 19:50	13°♊36'34	28.88626 AU
				direct	-12801 Aug 22 j 20:07	12°♊11'37	
conjunction	-12807 Nov 19 j 09:36	1°♊15'11	0°03'53	evening set	-12801 Nov 17 j 15:10	14°♊04'21	
minimum elong	-12807 Nov 19 j 09:36	1°♊15'11	0°04'17				
behind sun begin	-12807 Nov 19 j 03:09	1°♊14'36		conjunction	-12801 Dec 03 j 18:02	14°♊40'11	-0°35'09
behind sun end	-12807 Nov 19 j 16:03	1°♊15'45		minimum elong	-12801 Dec 03 j 18:02	14°♊40'11	0°34'55
max. Earth dist.	-12807 Nov 20 j 10:41	1°♊17'31	30.92668 AU	max. Earth dist.	-12801 Dec 04 j 14:53	14°♊42'07	30.88248 AU
morning rise	-12807 Dec 05 j 13:21	1°♊51'11		morning rise	-12801 Dec 20 j 00:28	15°♊16'21	
retrograde	-12806 Mar 07 j 05:50	3°♊49'45		retrograde	-12800 Mar 20 j 10:35	17°♊14'34	
min. Earth dist.	-12806 May 25 j 09:37	2°♊25'59	28.92414 AU	min. Earth dist.	-12800 Jun 07 j 07:18	15°♊50'29	28.87961 AU
opposition	-12806 May 26 j 07:43	2°♊24'26	0°00'31	opposition	-12800 Jun 08 j 02:25	15°♊49'08	-0°41'01
desc. node	-12806 Jun 22 j 06:03	1°♊41'13		direct	-12800 Aug 24 j 06:19	14°♊25'29	
direct	-12806 Aug 11 j 11:09	1°♊01'16		evening set	-12800 Nov 19 j 04:10	16°♊18'18	
evening set	-12806 Nov 05 j 22:24	2°♊53'42					
				conjunction	-12800 Dec 05 j 07:32	16°♊54'09	-0°41'30
conjunction	-12806 Nov 21 j 22:53	3°♊29'23	-0°02'48	minimum elong	-12800 Dec 05 j 07:32	16°♊54'09	0°41'18
minimum elong	-12806 Nov 21 j 22:54	3°♊29'23	0°02'25	max. Earth dist.	-12800 Dec 06 j 05:02	16°♊56'10	30.87631 AU
behind sun begin	-12806 Nov 21 j 16:21	3°♊28'48		morning rise	-12800 Dec 21 j 14:06	17°♊30'20	
behind sun end	-12806 Nov 22 j 05:27	3°♊29'58		retrograde	-12799 Mar 22 j 21:49	19°♊28'31	
max. Earth dist.	-12806 Nov 22 j 23:22	3°♊31'40	30.92080 AU	opposition	-12799 Jun 10 j 13:21	18°♊03'05	-0°47'47
morning rise	-12806 Dec 08 j 03:10	4°♊05'26		min. Earth dist.	-12799 Jun 09 j 18:51	18°♊04'24	28.87416 AU
retrograde	-12805 Mar 09 j 21:03	6°♊03'57		direct	-12799 Aug 26 j 17:40	16°♊39'23	



Attention, astronomical year style is used: The year -12799 in astronomical counting style is the year 12800 BCE in historical counting style.

evening set	-12799 Nov 21 j 17:28	18° $\mathring{M}$ 32'18		max. Earth dist.	-12793 Dec 23 j 02:13	2° $\mathring{A}$ 37'23	30.85853 AU
				morning rise	-12792 Jan 07 j 17:43	3° $\mathring{A}$ 12'08	
conjunction	-12799 Dec 07 j 21:10	19° $\mathring{M}$ 08'11	-0°47'48	retrograde	-12792 Apr 07 j 19:32	5° $\mathring{A}$ 10'05	
minimum elong	-12799 Dec 07 j 21:09	19° $\mathring{M}$ 08'11	0°47'38	opposition	-12792 Jun 25 j 17:19	3° $\mathring{A}$ 45'01	-1°32'43
max. Earth dist.	-12799 Dec 08 j 17:29	19° $\mathring{M}$ 10'04	30.87165 AU	min. Earth dist.	-12792 Jun 25 j 03:41	3° $\mathring{A}$ 46'00	28.85752 AU
morning rise	-12799 Dec 24 j 04:07	19° $\mathring{M}$ 44'22		direct	-12792 Sep 11 j 01:29	2° $\mathring{A}$ 21'06	
retrograde	-12798 Mar 25 j 11:53	21° $\mathring{M}$ 42'31		evening set	-12792 Dec 07 j 18:49	4° $\mathring{A}$ 15'00	
min. Earth dist.	-12798 Jun 12 j 05:23	20° $\mathring{M}$ 18'26	28.87026 AU				
opposition	-12798 Jun 13 j 00:08	20° $\mathring{M}$ 17'06	-0°54'29	conjunction	-12792 Dec 24 j 00:17	4° $\mathring{A}$ 51'01	-1°29'28
direct	-12798 Aug 29 j 04:16	18° $\mathring{M}$ 53'21		minimum elong	-12792 Dec 24 j 00:16	4° $\mathring{A}$ 51'01	1°29'32
evening set	-12798 Nov 24 j 06:55	20° $\mathring{M}$ 46'24		max. Earth dist.	-12792 Dec 24 j 14:15	4° $\mathring{A}$ 52'19	30.85475 AU
				morning rise	-12791 Jan 09 j 08:11	5° $\mathring{A}$ 27'16	
conjunction	-12798 Dec 10 j 11:00	21° $\mathring{M}$ 22'18	-0°54'02	retrograde	-12791 Apr 10 j 07:55	7° $\mathring{A}$ 25'09	
minimum elong	-12798 Dec 10 j 10:59	21° $\mathring{M}$ 22'18	0°53'54	opposition	-12791 Jun 28 j 04:13	6° $\mathring{A}$ 00'07	-1°38'40
max. Earth dist.	-12798 Dec 11 j 07:13	21° $\mathring{M}$ 24'11	30.86827 AU	min. Earth dist.	-12791 Jun 27 j 15:39	6° $\mathring{A}$ 01'00	28.85342 AU
morning rise	-12798 Dec 26 j 18:09	21° $\mathring{M}$ 58'31		direct	-12791 Sep 13 j 12:17	4° $\mathring{A}$ 36'06	
retrograde	-12797 Mar 28 j 00:24	23° $\mathring{M}$ 56'37		evening set	-12791 Dec 10 j 09:08	6° $\mathring{A}$ 30'06	
opposition	-12797 Jun 15 j 11:04	22° $\mathring{M}$ 31'16	-1°01'07				
min. Earth dist.	-12797 Jun 14 j 17:38	22° $\mathring{M}$ 32'30	28.86752 AU	conjunction	-12791 Dec 26 j 14:54	7° $\mathring{A}$ 06'08	-1°34'58
direct	-12797 Aug 31 j 15:39	21° $\mathring{M}$ 07'29		minimum elong	-12791 Dec 26 j 14:53	7° $\mathring{A}$ 06'08	1°35'04
evening set	-12797 Nov 26 j 20:29	23° $\mathring{M}$ 00'40		max. Earth dist.	-12791 Dec 27 j 04:49	7° $\mathring{A}$ 07'26	30.85016 AU
				morning rise	-12790 Jan 11 j 22:40	7° $\mathring{A}$ 42'23	
conjunction	-12797 Dec 13 j 00:55	23° $\mathring{M}$ 36'36	-1°00'11	retrograde	-12790 Apr 12 j 18:48	9° $\mathring{A}$ 40'10	
minimum elong	-12797 Dec 13 j 00:54	23° $\mathring{M}$ 36'36	1°00'06	opposition	-12790 Jun 30 j 14:55	8° $\mathring{A}$ 15'08	-1°44'27
max. Earth dist.	-12797 Dec 13 j 20:32	23° $\mathring{M}$ 38'26	30.86608 AU	min. Earth dist.	-12790 Jun 30 j 03:40	8° $\mathring{A}$ 15'57	28.84865 AU
morning rise	-12797 Dec 29 j 08:14	24° $\mathring{M}$ 12'49		direct	-12790 Sep 15 j 23:45	6° $\mathring{A}$ 51'02	
retrograde	-12796 Mar 29 j 15:12	26° $\mathring{M}$ 10'54		evening set	-12790 Dec 12 j 23:36	8° $\mathring{A}$ 45'09	
opposition	-12796 Jun 16 j 21:47	24° $\mathring{M}$ 45'37	-1°07'39				
min. Earth dist.	-12796 Jun 16 j 04:01	24° $\mathring{M}$ 46'52	28.86574 AU	conjunction	-12790 Dec 29 j 05:25	9° $\mathring{A}$ 21'11	-1°40'18
direct	-12796 Sep 02 j 04:21	23° $\mathring{M}$ 21'49		minimum elong	-12790 Dec 29 j 05:24	9° $\mathring{A}$ 21'10	1°40'26
evening set	-12796 Nov 28 j 10:17	25° $\mathring{M}$ 15'09		max. Earth dist.	-12790 Dec 29 j 17:26	9° $\mathring{A}$ 22'18	30.84533 AU
				morning rise	-12789 Jan 14 j 13:18	9° $\mathring{A}$ 57'25	
conjunction	-12796 Dec 14 j 14:53	25° $\mathring{M}$ 51'07	-1°06'15	retrograde	-12789 Apr 15 j 08:09	11° $\mathring{A}$ 55'07	
minimum elong	-12796 Dec 14 j 14:53	25° $\mathring{M}$ 51'07	1°06'11	opposition	-12789 Jul 03 j 01:34	10° $\mathring{A}$ 30'05	-1°50'05
max. Earth dist.	-12796 Dec 15 j 09:31	25° $\mathring{M}$ 52'51	30.86450 AU	min. Earth dist.	-12789 Jul 02 j 14:33	10° $\mathring{A}$ 30'52	28.84396 AU
morning rise	-12796 Dec 30 j 22:26	26° $\mathring{M}$ 27'21		direct	-12789 Sep 18 j 10:40	9° $\mathring{A}$ 05'51	
retrograde	-12795 Apr 01 j 03:56	28° $\mathring{M}$ 25'25		evening set	-12789 Dec 15 j 14:00	11° $\mathring{A}$ 00'05	
opposition	-12795 Jun 19 j 08:42	27° $\mathring{M}$ 00'12	-1°14'05				
min. Earth dist.	-12795 Jun 18 j 16:42	27° $\mathring{M}$ 01'20	28.86446 AU	conjunction	-12789 Dec 31 j 19:55	11° $\mathring{A}$ 36'07	-1°45'29
direct	-12795 Sep 04 j 14:55	25° $\mathring{M}$ 36'23		minimum elong	-12789 Dec 31 j 19:54	11° $\mathring{A}$ 36'07	1°45'40
evening set	-12795 Dec 01 j 00:03	27° $\mathring{M}$ 29'52		max. Earth dist.	-12788 Jan 01 j 07:35	11° $\mathring{A}$ 37'12	30.84063 AU
				morning rise	-12788 Jan 17 j 03:37	12° $\mathring{A}$ 12'20	
conjunction	-12795 Dec 17 j 05:05	28° $\mathring{M}$ 05'51	-1°12'14	retrograde	-12788 Apr 16 j 18:57	14° $\mathring{A}$ 09'57	
minimum elong	-12795 Dec 17 j 05:04	28° $\mathring{M}$ 05'51	1°12'12	opposition	-12788 Jul 04 j 12:15	12° $\mathring{A}$ 44'54	-1°55'33
max. Earth dist.	-12795 Dec 17 j 23:30	28° $\mathring{M}$ 07'34	30.86318 AU	min. Earth dist.	-12788 Jul 04 j 02:46	12° $\mathring{A}$ 45'35	28.83974 AU
morning rise	-12794 Jan 02 j 12:40	28° $\mathring{M}$ 42'06		direct	-12788 Sep 19 j 22:59	11° $\mathring{A}$ 20'36	
	-12794 Feb 12 j 09:52	0° $\mathring{A}$		evening set	-12788 Dec 17 j 04:23	13° $\mathring{A}$ 14'56	
retrograde	-12794 Apr 03 j 17:48	0° $\mathring{A}$ 40'08					
	-12794 May 24 j 21:47	30° $\mathring{R}$ $\mathring{M}$		conjunction	-12787 Jan 02 j 10:23	13° $\mathring{A}$ 50'58	-1°50'31
opposition	-12794 Jun 21 j 19:31	29° $\mathring{M}$ 14'59	-1°20'25	minimum elong	-12787 Jan 02 j 10:22	13° $\mathring{A}$ 50'57	1°50'42
min. Earth dist.	-12794 Jun 21 j 03:34	29° $\mathring{M}$ 16'07	28.86296 AU	max. Earth dist.	-12787 Jan 02 j 21:06	13° $\mathring{A}$ 51'57	30.83690 AU
direct	-12794 Sep 07 j 03:26	27° $\mathring{M}$ 51'10		morning rise	-12787 Jan 18 j 18:01	14° $\mathring{A}$ 27'09	
evening set	-12794 Dec 03 j 14:21	29° $\mathring{M}$ 44'47		retrograde	-12787 Apr 19 j 08:26	16° $\mathring{A}$ 24'41	
	-12794 Dec 10 j 12:07	0° $\mathring{A}$		opposition	-12787 Jul 06 j 22:43	14° $\mathring{A}$ 59'39	-2°00'50
conjunction	-12794 Dec 19 j 19:26	0° $\mathring{A}$ 20'48	-1°18'06	min. Earth dist.	-12787 Jul 06 j 12:56	15° $\mathring{A}$ 00'21	28.83666 AU
minimum elong	-12794 Dec 19 j 19:25	0° $\mathring{A}$ 20'47	1°18'06	direct	-12787 Sep 22 j 12:17	13° $\mathring{A}$ 35'15	
max. Earth dist.	-12794 Dec 20 j 11:44	0° $\mathring{A}$ 22'19	30.86129 AU	evening set	-12787 Dec 19 j 18:50	15° $\mathring{A}$ 29'43	
morning rise	-12793 Jan 05 j 03:15	0° $\mathring{A}$ 57'03					
retrograde	-12793 Apr 06 j 07:51	2° $\mathring{A}$ 55'03		conjunction	-12786 Jan 05 j 00:49	16° $\mathring{A}$ 05'44	-1°55'22
opposition	-12793 Jun 24 j 06:25	1° $\mathring{A}$ 29'57	-1°26'38	minimum elong	-12786 Jan 05 j 00:48	16° $\mathring{A}$ 05'44	1°55'36
min. Earth dist.	-12793 Jun 23 j 16:08	1° $\mathring{A}$ 30'58	28.86080 AU	max. Earth dist.	-12786 Jan 05 j 10:38	16° $\mathring{A}$ 06'39	30.83429 AU
direct	-12793 Sep 09 j 13:31	0° $\mathring{A}$ 06'05		morning rise	-12786 Jan 21 j 08:24	16° $\mathring{A}$ 41'55	
evening set	-12793 Dec 06 j 04:34	1° $\mathring{A}$ 59'51		retrograde	-12786 Apr 21 j 20:25	18° $\mathring{A}$ 39'22	
				opposition	-12786 Jul 09 j 09:27	17° $\mathring{A}$ 14'21	-2°05'56
conjunction	-12793 Dec 22 j 10:02	2° $\mathring{A}$ 35'53	-1°23'51	min. Earth dist.	-12786 Jul 09 j 01:16	17° $\mathring{A}$ 14'56	28.83486 AU
minimum elong	-12793 Dec 22 j 10:01	2° $\mathring{A}$ 35'53	1°23'53	direct	-12786 Sep 24 j 23:32	15° $\mathring{A}$ 49'53	
				evening set	-12786 Dec 22 j 09:22	17° $\mathring{A}$ 44'29	

Attention, astronomical year style is used: The year -12785 in astronomical counting style is the year 12786 BCE in historical counting style.

conjunction	-12785 Jan 07 j 15:30	18° <u>♂</u> 20'30	-2°00'03	retrograde	-12779 May 07 j 11:27	4° <u>♂</u> 23'45	
minimum elong	-12785 Jan 07 j 15:28	18° <u>♂</u> 20'30	2°00'18	opposition	-12779 Jul 24 j 11:28	2° <u>♂</u> 59'13	-2°35'52
max. Earth dist.	-12785 Jan 08 j 01:04	18° <u>♂</u> 21'24	30.83313 AU	min. Earth dist.	-12779 Jul 24 j 09:55	2° <u>♂</u> 59'19	28.84204 AU
morning rise	-12785 Jan 23 j 22:51	18° <u>♂</u> 56'40		direct	-12779 Oct 10 j 10:22	1° <u>♂</u> 34'25	
retrograde	-12785 Apr 24 j 10:09	20° <u>♂</u> 54'01		evening set	-12778 Jan 07 j 17:30	3° <u>♂</u> 30'03	
opposition	-12785 Jul 11 j 19:49	19° <u>♂</u> 29'04	-2°10'50				
min. Earth dist.	-12785 Jul 11 j 11:29	19° <u>♂</u> 29'39	28.83441 AU	conjunction	-12778 Jan 23 j 23:10	4° <u>♂</u> 06'02	-2°27'20
direct	-12785 Sep 27 j 12:50	18° <u>♂</u> 04'32		minimum elong	-12778 Jan 23 j 23:09	4° <u>♂</u> 06'02	2°27'49
evening set	-12785 Dec 25 j 00:05	19° <u>♂</u> 59'17		max. Earth dist.	-12778 Jan 24 j 00:18	4° <u>♂</u> 06'08	30.83990 AU
				morning rise	-12778 Feb 09 j 05:02	4° <u>♂</u> 42'03	
conjunction	-12784 Jan 10 j 06:03	20° <u>♂</u> 35'18	-2°04'33	retrograde	-12778 May 10 j 00:28	6° <u>♂</u> 38'50	
minimum elong	-12784 Jan 10 j 06:01	20° <u>♂</u> 35'18	2°04'50	opposition	-12778 Jul 26 j 22:00	5° <u>♂</u> 14'20	-2°39'14
max. Earth dist.	-12784 Jan 10 j 13:57	20° <u>♂</u> 36'02	30.83324 AU	min. Earth dist.	-12778 Jul 26 j 20:38	5° <u>♂</u> 14'26	28.84152 AU
morning rise	-12784 Jan 26 j 13:21	21° <u>♂</u> 11'27		direct	-12778 Oct 12 j 23:47	3° <u>♂</u> 49'27	
retrograde	-12784 Apr 25 j 23:50	23° <u>♂</u> 08'44		evening set	-12777 Jan 10 j 08:37	5° <u>♂</u> 45'13	
opposition	-12784 Jul 13 j 06:29	21° <u>♂</u> 43'50	-2°15'33				
min. Earth dist.	-12784 Jul 12 j 23:26	21° <u>♂</u> 44'20	28.83529 AU	conjunction	-12777 Jan 26 j 14:08	6° <u>♂</u> 21'11	-2°30'23
direct	-12784 Sep 29 j 00:04	20° <u>♂</u> 19'16		minimum elong	-12777 Jan 26 j 14:06	6° <u>♂</u> 21'11	2°30'52
evening set	-12784 Dec 26 j 14:32	22° <u>♂</u> 14'10		max. Earth dist.	-12777 Jan 26 j 14:01	6° <u>♂</u> 21'10	30.83904 AU
				morning rise	-12777 Feb 11 j 19:40	6° <u>♂</u> 57'10	
conjunction	-12783 Jan 11 j 20:39	22° <u>♂</u> 50'11	-2°08'51	retrograde	-12777 May 12 j 11:45	8° <u>♂</u> 53'50	
minimum elong	-12783 Jan 11 j 20:38	22° <u>♂</u> 50'11	2°09'10	opposition	-12777 Jul 29 j 08:34	7° <u>♂</u> 29'22	-2°42'22
max. Earth dist.	-12783 Jan 12 j 04:46	22° <u>♂</u> 50'57	30.83454 AU	min. Earth dist.	-12777 Jul 29 j 09:14	7° <u>♂</u> 29'19	28.84074 AU
morning rise	-12783 Jan 28 j 03:37	23° <u>♂</u> 26'19		direct	-12777 Oct 15 j 11:21	6° <u>♂</u> 04'23	
retrograde	-12783 Apr 28 j 11:31	25° <u>♂</u> 23'32		evening set	-12776 Jan 12 j 23:33	8° <u>♂</u> 00'16	
opposition	-12783 Jul 15 j 17:01	23° <u>♂</u> 58'43	-2°20'03				
min. Earth dist.	-12783 Jul 15 j 10:27	23° <u>♂</u> 59'11	28.83696 AU	conjunction	-12776 Jan 29 j 05:01	8° <u>♂</u> 36'13	-2°33'12
direct	-12783 Oct 01 j 12:41	22° <u>♂</u> 34'08		minimum elong	-12776 Jan 29 j 04:59	8° <u>♂</u> 36'12	2°33'43
evening set	-12783 Dec 29 j 05:27	24° <u>♂</u> 29'11		max. Earth dist.	-12776 Jan 29 j 04:16	8° <u>♂</u> 36'08	30.83833 AU
				morning rise	-12776 Feb 14 j 10:13	9° <u>♂</u> 12'10	
conjunction	-12782 Jan 14 j 11:22	25° <u>♂</u> 05'11	-2°12'58	retrograde	-12776 May 14 j 00:50	11° <u>♂</u> 08'42	
minimum elong	-12782 Jan 14 j 11:20	25° <u>♂</u> 05'11	2°13'19	opposition	-12776 Jul 30 j 19:02	9° <u>♂</u> 44'16	-2°45'15
max. Earth dist.	-12782 Jan 14 j 17:21	25° <u>♂</u> 05'45	30.83642 AU	min. Earth dist.	-12776 Jul 30 j 19:42	9° <u>♂</u> 44'13	28.84027 AU
morning rise	-12782 Jan 30 j 18:18	25° <u>♂</u> 41'19		direct	-12776 Oct 17 j 01:34	8° <u>♂</u> 19'12	
retrograde	-12782 May 01 j 00:40	27° <u>♂</u> 38'27		evening set	-12775 Jan 14 j 14:22	10° <u>♂</u> 15'11	
opposition	-12782 Jul 18 j 03:30	26° <u>♂</u> 13'43	-2°24'20				
min. Earth dist.	-12782 Jul 17 j 22:02	26° <u>♂</u> 14'06	28.83909 AU	conjunction	-12775 Jan 30 j 19:34	10° <u>♂</u> 51'07	-2°35'46
direct	-12782 Oct 03 j 23:26	24° <u>♂</u> 49'05		minimum elong	-12775 Jan 30 j 19:32	10° <u>♂</u> 51'07	2°36'18
evening set	-12782 Dec 31 j 20:25	26° <u>♂</u> 44'19		max. Earth dist.	-12775 Jan 30 j 17:11	10° <u>♂</u> 50'54	30.83812 AU
				morning rise	-12775 Feb 16 j 00:34	11° <u>♂</u> 27'03	
conjunction	-12781 Jan 17 j 02:25	27° <u>♂</u> 20'19	-2°16'53	retrograde	-12775 May 16 j 13:38	13° <u>♂</u> 23'29	
minimum elong	-12781 Jan 17 j 02:23	27° <u>♂</u> 20'19	2°17'15	opposition	-12775 Aug 02 j 05:33	11° <u>♂</u> 59'03	-2°47'53
max. Earth dist.	-12781 Jan 17 j 08:17	27° <u>♂</u> 20'52	30.83829 AU	min. Earth dist.	-12775 Aug 02 j 07:34	11° <u>♂</u> 58'54	28.84070 AU
morning rise	-12781 Feb 02 j 08:56	27° <u>♂</u> 56'25		direct	-12775 Oct 19 j 13:52	10° <u>♂</u> 33'55	
retrograde	-12781 May 03 j 12:08	29° <u>♂</u> 53'29		evening set	-12774 Jan 17 j 05:09	12° <u>♂</u> 30'01	
opposition	-12781 Jul 20 j 14:12	28° <u>♂</u> 28'50	-2°28'24				
min. Earth dist.	-12781 Jul 20 j 10:12	28° <u>♂</u> 29'07	28.84081 AU	conjunction	-12774 Feb 02 j 10:22	13° <u>♂</u> 05'56	-2°38'07
direct	-12781 Oct 06 j 10:55	27° <u>♂</u> 04'11		minimum elong	-12774 Feb 02 j 10:20	13° <u>♂</u> 05'56	2°38'41
evening set	-12780 Jan 03 j 11:27	28° <u>♂</u> 59'33		max. Earth dist.	-12774 Feb 02 j 08:03	13° <u>♂</u> 05'43	30.83903 AU
				morning rise	-12774 Feb 18 j 14:55	13° <u>♂</u> 41'50	
conjunction	-12780 Jan 19 j 17:13	29° <u>♂</u> 35'33	-2°20'35		-12774 Mar 31 j 18:29	15° <u>♂</u>	
minimum elong	-12780 Jan 19 j 17:12	29° <u>♂</u> 35'32	2°21'00	retrograde	-12774 May 19 j 00:57	15° <u>♂</u> 38'08	
max. Earth dist.	-12780 Jan 19 j 20:48	29° <u>♂</u> 35'53	30.83964 AU		-12774 Jul 07 j 02:05	15° <u>♂</u>	
	-12780 Jan 30 j 16:39	0° <u>♂</u>		opposition	-12774 Aug 04 j 15:53	14° <u>♂</u> 13'46	-2°50'15
morning rise	-12780 Feb 04 j 23:37	0° <u>♂</u> 11'37		min. Earth dist.	-12774 Aug 04 j 18:18	14° <u>♂</u> 13'36	28.84225 AU
retrograde	-12780 May 05 j 01:04	2° <u>♂</u> 08'37		direct	-12774 Oct 22 j 03:19	12° <u>♂</u> 48'34	
opposition	-12780 Jul 22 j 00:48	0° <u>♂</u> 44'01	-2°32'15	evening set	-12773 Jan 19 j 20:07	14° <u>♂</u> 44'47	
min. Earth dist.	-12780 Jul 21 j 21:16	0° <u>♂</u> 44'17	28.84188 AU		-12773 Jan 26 j 18:21	15° <u>♂</u>	
	-12780 Aug 18 j 01:40	30° <u>♂</u>					
direct	-12780 Oct 07 j 22:10	29° <u>♂</u> 19'18		conjunction	-12773 Feb 05 j 01:00	15° <u>♂</u> 20'42	-2°40'13
	-12780 Nov 26 j 23:29	0° <u>♂</u>		minimum elong	-12773 Feb 05 j 00:59	15° <u>♂</u> 20'42	2°40'47
evening set	-12779 Jan 05 j 02:28	1° <u>♂</u> 14'49		max. Earth dist.	-12773 Feb 04 j 20:46	15° <u>♂</u> 20'18	30.84126 AU
				morning rise	-12773 Feb 21 j 05:23	15° <u>♂</u> 56'34	
conjunction	-12779 Jan 21 j 08:14	1° <u>♂</u> 50'48	-2°24'04	retrograde	-12773 May 21 j 14:09	17° <u>♂</u> 52'45	
minimum elong	-12779 Jan 21 j 08:12	1° <u>♂</u> 50'48	2°24'30	opposition	-12773 Aug 07 j 02:23	16° <u>♂</u> 28'27	-2°52'22
max. Earth dist.	-12779 Jan 21 j 11:05	1° <u>♂</u> 51'04	30.84011 AU	min. Earth dist.	-12773 Aug 07 j 05:26	16° <u>♂</u> 28'14	28.84538 AU
morning rise	-12779 Feb 06 j 14:15	2° <u>♂</u> 26'51		direct	-12773 Oct 24 j 14:48	15° <u>♂</u> 03'12	

Attention, astronomical year style is used: The year -12772 in astronomical counting style is the year 12773 BCE in historical counting style.

evening set	-12772 Jan 22 j 10:44	16°M.59'33		max. Earth dist.	-12766 Feb 20 j 20:15	1°♂04'16	30.88093 AU
				morning rise	-12766 Mar 09 j 09:29	1°♂41'00	
conjunction	-12772 Feb 07 j 15:35	17°M.35'27	-2°42'04	retrograde	-12766 Jun 05 j 23:13	3°♂36'26	
minimum elong	-12772 Feb 07 j 15:34	17°M.35'27	2°42'41	opposition	-12766 Aug 22 j 04:17	2°♂12'45	-2°59'39
max. Earth dist.	-12772 Feb 07 j 11:48	17°M.35'06	30.84502 AU	min. Earth dist.	-12766 Aug 22 j 14:15	2°♂12'03	28.88586 AU
morning rise	-12772 Feb 23 j 19:27	18°M.11'18		direct	-12766 Nov 09 j 04:18	0°♂47'18	
retrograde	-12772 May 23 j 01:19	20°M.07'22		evening set	-12765 Feb 07 j 18:43	2°♂44'27	
opposition	-12772 Aug 08 j 12:53	18°M.43'09	-2°54'13				
min. Earth dist.	-12772 Aug 08 j 16:58	18°M.42'52	28.84989 AU	conjunction	-12765 Feb 23 j 22:15	3°♂20'14	-2°48'00
direct	-12772 Oct 26 j 02:39	17°M.17'54		minimum elong	-12765 Feb 23 j 22:15	3°♂20'14	2°48'44
evening set	-12771 Jan 24 j 01:34	19°M.14'21		max. Earth dist.	-12765 Feb 23 j 10:35	3°♂19'09	30.88530 AU
				morning rise	-12765 Mar 11 j 23:45	3°♂55'54	
conjunction	-12771 Feb 09 j 06:06	19°M.50'14	-2°43'40	retrograde	-12765 Jun 08 j 10:44	5°♂51'10	
minimum elong	-12771 Feb 09 j 06:05	19°M.50'14	2°44'17	opposition	-12765 Aug 24 j 14:58	4°♂27'32	-2°59'37
max. Earth dist.	-12771 Feb 09 j 00:30	19°M.49'43	30.85027 AU	min. Earth dist.	-12765 Aug 25 j 01:36	4°♂26'47	28.88988 AU
morning rise	-12771 Feb 25 j 09:49	20°M.26'04		direct	-12765 Nov 11 j 18:21	3°♂02'01	
retrograde	-12771 May 25 j 13:32	22°M.22'03		evening set	-12764 Feb 10 j 09:21	4°♂59'12	
opposition	-12771 Aug 10 j 23:13	20°M.57'56	-2°55'48				
min. Earth dist.	-12771 Aug 11 j 03:22	20°M.57'38	28.85580 AU	conjunction	-12764 Feb 26 j 12:31	5°♂34'59	-2°47'50
direct	-12771 Oct 28 j 13:54	19°M.32'39		minimum elong	-12764 Feb 26 j 12:31	5°♂34'59	2°48'36
evening set	-12770 Jan 26 j 16:21	21°M.29'15		max. Earth dist.	-12764 Feb 25 j 22:48	5°♂33'42	30.88922 AU
				morning rise	-12764 Mar 13 j 13:49	6°♂10'36	
conjunction	-12770 Feb 11 j 20:50	22°M.05'07	-2°45'01	retrograde	-12764 Jun 09 j 23:44	8°♂05'43	
minimum elong	-12770 Feb 11 j 20:50	22°M.05'07	2°45'41	opposition	-12764 Aug 26 j 01:35	6°♂42'07	-2°59'18
max. Earth dist.	-12770 Feb 11 j 15:06	22°M.04'35	30.85654 AU	min. Earth dist.	-12764 Aug 26 j 13:04	6°♂41'18	28.89387 AU
morning rise	-12770 Feb 28 j 00:05	22°M.40'56		direct	-12764 Nov 13 j 07:11	5°♂16'32	
retrograde	-12770 May 27 j 23:23	24°M.36'49		evening set	-12763 Feb 11 j 23:47	7°♂13'46	
opposition	-12770 Aug 13 j 09:49	23°M.12'49	-2°57'07				
min. Earth dist.	-12770 Aug 13 j 15:42	23°M.12'23	28.86241 AU	conjunction	-12763 Feb 28 j 02:57	7°♂49'32	-2°47'25
direct	-12770 Oct 31 j 01:36	21°M.47'31		minimum elong	-12763 Feb 28 j 02:57	7°♂49'32	2°48'11
evening set	-12769 Jan 29 j 07:17	23°M.44'15		max. Earth dist.	-12763 Feb 27 j 13:31	7°♂48'17	30.89327 AU
				morning rise	-12763 Mar 16 j 03:46	8°♂25'07	
conjunction	-12769 Feb 14 j 11:29	24°M.20'07	-2°46'07	retrograde	-12763 Jun 12 j 10:20	10°♂20'05	
minimum elong	-12769 Feb 14 j 11:28	24°M.20'07	2°46'47	opposition	-12763 Aug 28 j 12:06	8°♂56'31	-2°58'44
max. Earth dist.	-12769 Feb 14 j 04:07	24°M.19'26	30.86332 AU	min. Earth dist.	-12763 Aug 29 j 00:48	8°♂55'37	28.89810 AU
morning rise	-12769 Mar 02 j 14:29	24°M.55'53		direct	-12763 Nov 15 j 20:37	7°♂30'52	
retrograde	-12769 May 30 j 12:19	26°M.51'40		evening set	-12762 Feb 14 j 14:20	9°♂28'09	
opposition	-12769 Aug 15 j 20:17	25°M.27'47	-2°58'09				
min. Earth dist.	-12769 Aug 16 j 02:14	25°M.27'21	28.86919 AU	conjunction	-12762 Mar 02 j 17:09	10°♂03'53	-2°46'45
direct	-12769 Nov 02 j 13:50	24°M.02'28		minimum elong	-12762 Mar 02 j 17:09	10°♂03'53	2°47'32
evening set	-12768 Jan 31 j 22:13	25°M.59'20		max. Earth dist.	-12762 Mar 02 j 01:51	10°♂02'28	30.89790 AU
				morning rise	-12762 Mar 18 j 17:49	10°♂39'27	
conjunction	-12768 Feb 17 j 02:14	26°M.35'11	-2°46'58	retrograde	-12762 Jun 14 j 22:13	12°♂34'15	
minimum elong	-12768 Feb 17 j 02:14	26°M.35'11	2°47'40	opposition	-12762 Aug 30 j 22:40	11°♂10'44	-2°57'53
max. Earth dist.	-12768 Feb 16 j 17:52	26°M.34'24	30.86985 AU	min. Earth dist.	-12762 Aug 31 j 11:19	11°♂09'50	28.90318 AU
morning rise	-12768 Mar 04 j 04:48	27°M.10'56		direct	-12762 Nov 18 j 09:10	9°♂45'02	
retrograde	-12768 May 31 j 22:57	29°M.06'37		evening set	-12761 Feb 17 j 04:36	11°♂42'22	
opposition	-12768 Aug 17 j 07:02	27°M.42'49	-2°58'56				
min. Earth dist.	-12768 Aug 17 j 15:02	27°M.42'15	28.87560 AU	conjunction	-12761 Mar 05 j 07:19	12°♂18'06	-2°45'50
direct	-12768 Nov 04 j 00:49	26°M.17'29		minimum elong	-12761 Mar 05 j 07:19	12°♂18'06	2°46'36
evening set	-12767 Feb 02 j 12:57	28°M.14'27		max. Earth dist.	-12761 Mar 04 j 16:17	12°♂16'42	30.90342 AU
				morning rise	-12761 Mar 21 j 07:28	12°♂53'38	
conjunction	-12767 Feb 18 j 16:51	28°M.50'16	-2°47'34	retrograde	-12761 Jun 17 j 07:46	14°♂48'17	
minimum elong	-12767 Feb 18 j 16:50	28°M.50'16	2°48'16	opposition	-12761 Sep 02 j 09:23	13°♂24'50	-2°56'46
max. Earth dist.	-12767 Feb 18 j 07:29	28°M.49'24	30.87589 AU	min. Earth dist.	-12761 Sep 02 j 23:25	13°♂23'50	28.90931 AU
morning rise	-12767 Mar 06 j 19:05	29°M.26'00		direct	-12761 Nov 20 j 21:08	11°♂59'06	
	-12767 Mar 22 j 23:41	0°♂		evening set	-12760 Feb 19 j 18:53	13°♂56'29	
retrograde	-12767 Jun 03 j 11:12	1°♂21'34					
	-12767 Aug 18 j 11:08	30°R.M.		conjunction	-12760 Mar 06 j 21:17	14°♂32'12	-2°44'40
opposition	-12767 Aug 19 j 17:39	29°M.57'50	-2°59'26	minimum elong	-12760 Mar 06 j 21:17	14°♂32'12	2°45'28
min. Earth dist.	-12767 Aug 20 j 01:55	29°M.57'14	28.88113 AU	max. Earth dist.	-12760 Mar 06 j 04:59	14°♂30'41	30.91032 AU
direct	-12767 Nov 06 j 15:37	28°M.32'27		morning rise	-12760 Mar 22 j 21:14	15°♂07'43	
	-12766 Jan 22 j 03:58	0°♂		retrograde	-12760 Jun 18 j 20:03	17°♂02'14	
evening set	-12766 Feb 05 j 03:56	0°♂29'30		opposition	-12760 Sep 03 j 19:56	15°♂38'52	-2°55'23
				min. Earth dist.	-12760 Sep 04 j 09:28	15°♂37'55	28.91685 AU
conjunction	-12766 Feb 21 j 07:32	1°♂05'19	-2°47'55	direct	-12760 Nov 22 j 09:06	14°♂13'07	
minimum elong	-12766 Feb 21 j 07:32	1°♂05'19	2°48'38	evening set	-12759 Feb 21 j 08:55	16°♂10'34	

Attention, astronomical year style is used: The year -12759 in astronomical counting style is the year 12760 BCE in historical counting style.

conjunction	-12759 Mar 09 j 11:12	16° $\mathring{A}$ 46'17	-2°43'14	retrograde	-12753 Jul 05 j 04:35	2° $\mathring{B}$ 41'03	
minimum elong	-12759 Mar 09 j 11:12	16° $\mathring{A}$ 46'17	2°44'02	opposition	-12753 Sep 19 j 23:46	1° $\mathring{B}$ 18'20	-2°38'26
max. Earth dist.	-12759 Mar 08 j 18:38	16° $\mathring{A}$ 44'44	30.91851 AU	min. Earth dist.	-12753 Sep 20 j 18:51	1° $\mathring{B}$ 16'59	28.97786 AU
morning rise	-12759 Mar 25 j 10:45	17° $\mathring{A}$ 21'46			-12753 Nov 17 j 16:47	30° $\mathring{R}$ $\mathring{A}$	
retrograde	-12759 Jun 21 j 05:46	19° $\mathring{A}$ 16'11		direct	-12753 Dec 09 j 03:34	29° $\mathring{A}$ 52'37	
opposition	-12759 Sep 06 j 06:41	17° $\mathring{A}$ 52'55	-2°53'44		-12753 Dec 30 j 08:25	0° $\mathring{B}$	
min. Earth dist.	-12759 Sep 06 j 21:45	17° $\mathring{A}$ 51'51	28.92563 AU	evening set	-12752 Mar 09 j 10:44	1° $\mathring{B}$ 50'27	
direct	-12759 Nov 24 j 19:58	16° $\mathring{A}$ 27'10					
evening set	-12758 Feb 23 j 23:04	18° $\mathring{A}$ 24'42		conjunction	-12752 Mar 25 j 11:33	2° $\mathring{B}$ 26'04	-2°26'34
max. Earth dist.	-12758 Mar 11 j 08:02	18° $\mathring{A}$ 58'48	30.92789 AU	minimum elong	-12752 Mar 25 j 11:34	2° $\mathring{B}$ 26'04	2°27'24
				max. Earth dist.	-12752 Mar 24 j 13:29	2° $\mathring{B}$ 24'00	30.97861 AU
conjunction	-12758 Mar 12 j 01:09	19° $\mathring{A}$ 00'24	-2°41'34	morning rise	-12752 Apr 10 j 08:47	3° $\mathring{B}$ 01'23	
minimum elong	-12758 Mar 12 j 01:09	19° $\mathring{A}$ 00'24	2°42'23	retrograde	-12752 Jul 06 j 14:23	4° $\mathring{B}$ 55'00	
morning rise	-12758 Mar 28 j 00:25	19° $\mathring{A}$ 35'52		opposition	-12752 Sep 21 j 10:45	3° $\mathring{B}$ 32'19	-2°35'02
retrograde	-12758 Jun 23 j 17:14	21° $\mathring{A}$ 30'10		min. Earth dist.	-12752 Sep 22 j 07:26	3° $\mathring{B}$ 30'52	28.98368 AU
opposition	-12758 Sep 08 j 17:15	20° $\mathring{A}$ 07'02	-2°51'49	direct	-12752 Dec 10 j 16:20	2° $\mathring{B}$ 06'35	
min. Earth dist.	-12758 Sep 09 j 08:11	20° $\mathring{A}$ 05'58	28.93524 AU	evening set	-12751 Mar 12 j 00:16	4° $\mathring{B}$ 04'23	
direct	-12758 Nov 27 j 09:56	18° $\mathring{A}$ 41'18		max. Earth dist.	-12751 Mar 27 j 01:16	4° $\mathring{B}$ 37'47	30.98437 AU
evening set	-12757 Feb 26 j 13:15	20° $\mathring{A}$ 38'55					
conjunction	-12757 Mar 14 j 15:03	21° $\mathring{A}$ 14'36	-2°39'40	conjunction	-12751 Mar 28 j 00:47	4° $\mathring{B}$ 39'59	-2°23'17
minimum elong	-12757 Mar 14 j 15:03	21° $\mathring{A}$ 14'36	2°40'28	minimum elong	-12751 Mar 28 j 00:47	4° $\mathring{B}$ 39'59	2°24'06
max. Earth dist.	-12757 Mar 13 j 20:47	21° $\mathring{A}$ 12'54	30.93777 AU	morning rise	-12751 Apr 12 j 21:53	5° $\mathring{B}$ 15'17	
morning rise	-12757 Mar 30 j 14:00	21° $\mathring{A}$ 50'03		retrograde	-12751 Jul 09 j 02:23	7° $\mathring{B}$ 08'45	
retrograde	-12757 Jun 26 j 05:00	23° $\mathring{A}$ 44'17		opposition	-12751 Sep 23 j 21:35	5° $\mathring{B}$ 46'06	-2°31'25
opposition	-12757 Sep 11 j 04:07	22° $\mathring{A}$ 21'14	-2°49'38	min. Earth dist.	-12751 Sep 24 j 17:54	5° $\mathring{B}$ 44'40	28.98920 AU
min. Earth dist.	-12757 Sep 11 j 20:20	22° $\mathring{A}$ 20'06	28.94527 AU	direct	-12751 Dec 13 j 05:09	4° $\mathring{B}$ 20'18	
direct	-12757 Nov 29 j 21:35	20° $\mathring{A}$ 55'33		evening set	-12750 Mar 14 j 13:40	6° $\mathring{B}$ 18'05	
evening set	-12756 Feb 29 j 03:06	22° $\mathring{A}$ 53'14					
max. Earth dist.	-12756 Mar 15 j 10:29	23° $\mathring{A}$ 27'12	30.94775 AU	conjunction	-12750 Mar 30 j 14:01	6° $\mathring{B}$ 53'40	-2°19'47
				minimum elong	-12750 Mar 30 j 14:02	6° $\mathring{B}$ 53'40	2°20'36
conjunction	-12756 Mar 16 j 04:48	23° $\mathring{A}$ 28'55	-2°37'30	max. Earth dist.	-12750 Mar 29 j 14:22	6° $\mathring{B}$ 51'27	30.98993 AU
minimum elong	-12756 Mar 16 j 04:48	23° $\mathring{A}$ 28'55	2°38'19	morning rise	-12750 Apr 15 j 10:41	7° $\mathring{B}$ 28'56	
morning rise	-12756 Apr 01 j 03:21	24° $\mathring{A}$ 04'20		retrograde	-12750 Jul 11 j 10:45	9° $\mathring{B}$ 22'16	
retrograde	-12756 Jun 27 j 16:28	25° $\mathring{A}$ 58'28		opposition	-12750 Sep 26 j 08:34	7° $\mathring{B}$ 59'38	-2°27'34
opposition	-12756 Sep 12 j 14:59	24° $\mathring{A}$ 35'32	-2°47'12	min. Earth dist.	-12750 Sep 27 j 06:20	7° $\mathring{B}$ 58'06	28.99492 AU
min. Earth dist.	-12756 Sep 13 j 07:46	24° $\mathring{A}$ 34'21	28.95487 AU	direct	-12750 Dec 15 j 16:50	6° $\mathring{B}$ 33'47	
direct	-12756 Dec 01 j 11:06	23° $\mathring{A}$ 09'52		evening set	-12749 Mar 17 j 02:57	8° $\mathring{B}$ 31'33	
evening set	-12755 Mar 02 j 17:13	25° $\mathring{A}$ 07'37		max. Earth dist.	-12749 Apr 01 j 03:04	9° $\mathring{B}$ 04'52	30.99608 AU
conjunction	-12755 Mar 18 j 18:33	25° $\mathring{A}$ 43'17	-2°35'07	conjunction	-12749 Apr 02 j 03:01	9° $\mathring{B}$ 07'06	-2°16'05
minimum elong	-12755 Mar 18 j 18:33	25° $\mathring{A}$ 43'17	2°35'55	minimum elong	-12749 Apr 02 j 03:01	9° $\mathring{B}$ 07'06	2°16'54
max. Earth dist.	-12755 Mar 17 j 22:13	25° $\mathring{A}$ 41'23	30.95703 AU	morning rise	-12749 Apr 17 j 23:25	9° $\mathring{B}$ 42'21	
morning rise	-12755 Apr 03 j 16:54	26° $\mathring{A}$ 18'41		retrograde	-12749 Jul 13 j 20:48	11° $\mathring{B}$ 35'32	
retrograde	-12755 Jun 30 j 05:51	28° $\mathring{A}$ 12'42		opposition	-12749 Sep 28 j 19:31	10° $\mathring{B}$ 12'56	-2°23'30
opposition	-12755 Sep 15 j 01:46	26° $\mathring{A}$ 49'52	-2°44'31	min. Earth dist.	-12749 Sep 29 j 16:44	10° $\mathring{B}$ 11'27	29.00133 AU
min. Earth dist.	-12755 Sep 15 j 19:26	26° $\mathring{A}$ 48'37	28.96371 AU	direct	-12749 Dec 18 j 06:26	8° $\mathring{B}$ 47'04	
direct	-12755 Dec 04 j 00:12	25° $\mathring{A}$ 24'11		evening set	-12748 Mar 18 j 15:55	10° $\mathring{B}$ 44'47	
evening set	-12754 Mar 05 j 07:09	27° $\mathring{A}$ 22'00					
conjunction	-12754 Mar 21 j 08:27	27° $\mathring{A}$ 57'39	-2°32'29	conjunction	-12748 Apr 03 j 15:42	11° $\mathring{B}$ 20'20	-2°12'11
minimum elong	-12754 Mar 21 j 08:27	27° $\mathring{A}$ 57'39	2°33'18	minimum elong	-12748 Apr 03 j 15:43	11° $\mathring{B}$ 20'20	2°13'00
max. Earth dist.	-12754 Mar 20 j 12:12	27° $\mathring{A}$ 55'46	30.96530 AU	max. Earth dist.	-12748 Apr 02 j 15:16	11° $\mathring{B}$ 18'03	31.00305 AU
morning rise	-12754 Apr 06 j 06:19	28° $\mathring{A}$ 33'01		morning rise	-12748 Apr 19 j 11:48	11° $\mathring{B}$ 55'34	
	-12754 May 23 j 20:14	0° $\mathring{B}$		retrograde	-12748 Jul 15 j 07:18	13° $\mathring{B}$ 48'38	
retrograde	-12754 Jul 02 j 16:35	0° $\mathring{B}$ 26'55		opposition	-12748 Sep 30 j 06:32	12° $\mathring{B}$ 26'04	-2°19'14
	-12754 Aug 12 j 06:12	30° $\mathring{R}$ $\mathring{A}$		min. Earth dist.	-12748 Oct 01 j 04:29	12° $\mathring{B}$ 24'31	29.00890 AU
opposition	-12754 Sep 17 j 12:50	29° $\mathring{A}$ 04'09	-2°41'36	direct	-12748 Dec 19 j 17:08	11° $\mathring{B}$ 00'10	
min. Earth dist.	-12754 Sep 18 j 07:51	29° $\mathring{A}$ 02'49	28.97127 AU	evening set	-12747 Mar 21 j 04:51	12° $\mathring{B}$ 57'53	
direct	-12754 Dec 06 j 14:29	27° $\mathring{A}$ 38'29		max. Earth dist.	-12747 Apr 05 j 04:31	13° $\mathring{B}$ 31'10	31.01131 AU
evening set	-12753 Mar 07 j 21:05	29° $\mathring{A}$ 36'18					
	-12753 Mar 18 j 14:11	0° $\mathring{B}$		conjunction	-12747 Apr 06 j 04:29	13° $\mathring{B}$ 33'24	-2°08'06
conjunction	-12753 Mar 23 j 21:58	0° $\mathring{B}$ 11'56	-2°29'38	minimum elong	-12747 Apr 06 j 04:30	13° $\mathring{B}$ 33'24	2°08'54
minimum elong	-12753 Mar 23 j 21:58	0° $\mathring{B}$ 11'56	2°30'27	morning rise	-12747 Apr 22 j 00:13	14° $\mathring{B}$ 08'37	
max. Earth dist.	-12753 Mar 22 j 23:44	0° $\mathring{B}$ 09'51	30.97242 AU	retrograde	-12747 Jul 17 j 17:30	16° $\mathring{B}$ 01'34	
morning rise	-12753 Apr 08 j 19:40	0° $\mathring{B}$ 47'17		opposition	-12747 Oct 02 j 17:24	14° $\mathring{B}$ 39'03	-2°14'46
				min. Earth dist.	-12747 Oct 03 j 15:16	14° $\mathring{B}$ 37'31	29.01757 AU
				direct	-12747 Dec 22 j 06:49	13° $\mathring{B}$ 13'10	
				evening set	-12746 Mar 23 j 17:53	15° $\mathring{B}$ 10'53	

Attention, astronomical year style is used: The year -12746 in astronomical counting style is the year 12747 BCE in historical counting style.

conjunction	-12746 Apr 08 j 17:08	15°34'23	-2°03'49	min. Earth dist.	-12740 Oct 19 j 00:24	0°07'47	29.08172 AU
minimum elong	-12746 Apr 08 j 17:09	15°34'23	2°04'37		-12740 Oct 23 j 16:41	30°08'30	
max. Earth dist.	-12746 Apr 07 j 16:00	15°34'42	31.02070 AU	direct	-12739 Jan 07 j 00:52	28°03'48	
morning rise	-12746 Apr 24 j 12:38	16°32'13			-12739 Mar 19 j 11:50	0°00'00	
retrograde	-12746 Jul 20 j 05:56	18°31'42		evening set	-12739 Apr 08 j 10:01	0°04'12	
opposition	-12746 Oct 05 j 04:27	16°35'19	-2°10'05	max. Earth dist.	-12739 Apr 23 j 03:53	1°04'12	31.08374 AU
min. Earth dist.	-12746 Oct 06 j 02:27	16°35'07	29.02744 AU				
direct	-12746 Dec 24 j 19:18	15°32'08		conjunction	-12739 Apr 24 j 07:11	1°06'46	-1°29'06
evening set	-12745 Mar 26 j 06:34	17°32'51		minimum elong	-12739 Apr 24 j 07:12	1°06'46	1°29'48
max. Earth dist.	-12745 Apr 10 j 05:31	17°35'05	31.03103 AU	morning rise	-12739 May 10 j 00:17	1°05'14	
				retrograde	-12739 Aug 04 j 07:54	3°04'40	
conjunction	-12745 Apr 11 j 05:41	17°35'21	-1°59'21	opposition	-12739 Oct 20 j 11:21	2°02'03	-1°32'24
minimum elong	-12745 Apr 11 j 05:42	17°35'21	2°00'08	min. Earth dist.	-12739 Oct 21 j 12:32	2°02'01	29.08784 AU
morning rise	-12745 Apr 27 j 00:43	18°33'43		direct	-12738 Jan 09 j 11:12	0°05'21	
retrograde	-12745 Jul 22 j 16:05	20°32'17		evening set	-12738 Apr 10 j 22:08	2°05'53	
opposition	-12745 Oct 07 j 15:39	19°30'56	-2°05'13				
min. Earth dist.	-12745 Oct 08 j 14:25	19°30'21	29.03786 AU	conjunction	-12738 Apr 26 j 19:02	3°02'29	-1°23'34
direct	-12745 Dec 27 j 08:56	17°33'08		minimum elong	-12738 Apr 26 j 19:03	3°02'29	1°24'16
evening set	-12744 Mar 27 j 19:26	19°33'51		max. Earth dist.	-12738 Apr 25 j 16:17	3°02'44	31.08978 AU
				morning rise	-12738 May 12 j 11:43	4°04'14	
conjunction	-12744 Apr 12 j 18:05	20°31'19	-1°54'42	retrograde	-12738 Aug 06 j 17:27	5°05'28	
minimum elong	-12744 Apr 12 j 18:06	20°31'19	1°55'29	opposition	-12738 Oct 22 j 22:46	4°03'42	-1°26'26
max. Earth dist.	-12744 Apr 11 j 16:36	20°30'56	31.04171 AU	min. Earth dist.	-12738 Oct 23 j 23:48	4°03'41	29.09365 AU
morning rise	-12744 Apr 28 j 12:58	20°34'28		direct	-12737 Jan 12 j 01:10	3°08'44	
retrograde	-12744 Jul 24 j 04:29	22°34'01		evening set	-12737 Apr 13 j 10:03	5°06'11	
opposition	-12744 Oct 09 j 02:40	21°31'54	-2°00'09	max. Earth dist.	-12737 Apr 28 j 02:52	5°03'55	31.09580 AU
min. Earth dist.	-12744 Oct 10 j 01:07	21°31'62	29.04845 AU				
direct	-12744 Dec 28 j 21:22	19°35'09		conjunction	-12737 Apr 29 j 06:27	5°04'13	-1°17'56
evening set	-12743 Mar 30 j 08:03	21°34'52		minimum elong	-12737 Apr 29 j 06:28	5°04'13	1°18'36
max. Earth dist.	-12743 Apr 14 j 05:39	22°32'00	31.05207 AU	morning rise	-12737 May 14 j 22:52	6°06'29	
				retrograde	-12737 Aug 09 j 05:12	8°08'39	
conjunction	-12743 Apr 15 j 06:36	22°32'50	-1°49'53	opposition	-12737 Oct 25 j 10:12	6°04'36	-1°20'21
minimum elong	-12743 Apr 15 j 06:37	22°32'50	1°50'38	min. Earth dist.	-12737 Oct 26 j 11:01	6°04'45	29.09992 AU
morning rise	-12743 May 01 j 00:59	23°30'27		direct	-12736 Jan 14 j 13:07	5°02'54	
retrograde	-12743 Jul 26 j 14:51	24°35'05		evening set	-12736 Apr 14 j 21:46	7°08'18	
opposition	-12743 Oct 11 j 14:01	23°30'53	-1°54'55				
min. Earth dist.	-12743 Oct 12 j 13:52	23°32'14	29.05833 AU	conjunction	-12736 Apr 30 j 17:57	7°05'36	-1°12'11
direct	-12743 Dec 31 j 10:36	22°30'51		minimum elong	-12736 Apr 30 j 17:57	7°05'36	1°12'50
evening set	-12742 Apr 01 j 20:47	24°30'25		max. Earth dist.	-12736 Apr 29 j 15:41	7°05'08	31.10247 AU
				morning rise	-12736 May 16 j 09:51	8°08'32	
conjunction	-12742 Apr 17 j 18:53	24°33'19	-1°44'54	retrograde	-12736 Aug 10 j 14:33	10°02'03	
minimum elong	-12742 Apr 17 j 18:54	24°33'19	1°45'39	opposition	-12736 Oct 26 j 21:34	8°05'58	-1°14'09
max. Earth dist.	-12742 Apr 16 j 16:39	24°33'52	31.06160 AU	min. Earth dist.	-12736 Oct 27 j 22:43	8°05'56	29.10695 AU
morning rise	-12742 May 03 j 13:03	25°31'25		direct	-12735 Jan 16 j 02:08	7°03'25	
retrograde	-12742 Jul 29 j 02:52	27°30'55		evening set	-12735 Apr 17 j 09:31	9°03'01	
opposition	-12742 Oct 14 j 01:17	25°34'51	-1°49'30	max. Earth dist.	-12735 May 02 j 02:09	10°03'00	31.11016 AU
min. Earth dist.	-12742 Oct 15 j 00:36	25°34'21	29.06720 AU				
direct	-12741 Jan 02 j 23:53	24°31'09		conjunction	-12735 May 03 j 05:09	10°05'32	-1°06'20
evening set	-12741 Apr 04 j 09:22	26°31'50		minimum elong	-12735 May 03 j 05:10	10°05'32	1°06'58
max. Earth dist.	-12741 Apr 19 j 04:56	26°34'48	31.06994 AU	morning rise	-12735 May 18 j 20:51	10°04'07	
				retrograde	-12735 Aug 13 j 02:35	12°03'31	
conjunction	-12741 Apr 20 j 07:14	26°35'16	-1°39'46	opposition	-12735 Oct 29 j 08:57	11°01'02	-1°07'51
minimum elong	-12741 Apr 20 j 07:15	26°35'16	1°40'30	min. Earth dist.	-12735 Oct 30 j 09:01	11°00'50	29.11518 AU
morning rise	-12741 May 06 j 00:56	27°32'20		direct	-12734 Jan 18 j 14:29	9°04'45	
retrograde	-12741 Jul 31 j 11:49	29°31'49		evening set	-12734 Apr 19 j 21:01	11°04'20	
opposition	-12741 Oct 16 j 12:46	27°35'44	-1°43'57				
min. Earth dist.	-12741 Oct 17 j 13:31	27°35'01	29.07500 AU	conjunction	-12734 May 05 j 16:23	12°01'23	-1°00'24
direct	-12740 Jan 05 j 11:36	26°33'03		minimum elong	-12734 May 05 j 16:24	12°01'23	1°01'00
evening set	-12740 Apr 05 j 21:41	28°32'41		max. Earth dist.	-12734 May 04 j 14:45	12°01'59	31.11902 AU
				morning rise	-12734 May 21 j 07:30	12°02'16	
conjunction	-12740 Apr 21 j 19:12	29°30'05	-1°34'30	retrograde	-12734 Aug 15 j 13:00	14°04'48	
minimum elong	-12740 Apr 21 j 19:13	29°30'06	1°35'13	opposition	-12734 Oct 31 j 20:34	13°02'21	-1°01'27
max. Earth dist.	-12740 Apr 20 j 16:31	29°30'13	31.07734 AU	min. Earth dist.	-12734 Nov 01 j 21:13	13°02'07	29.12455 AU
morning rise	-12740 May 07 j 12:39	29°33'08		direct	-12733 Jan 21 j 04:13	11°05'45	
	-12740 May 17 j 06:17	0°00'00		evening set	-12733 Apr 22 j 08:36	13°05'40	
retrograde	-12740 Aug 01 j 21:41	1°03'31		max. Earth dist.	-12733 May 07 j 01:23	14°02'46	31.12910 AU
opposition	-12740 Oct 18 j 00:04	0°09'29	-1°38'15				

Attention, astronomical year style is used: The year -12733 in astronomical counting style is the year 12734 BCE in historical counting style.

conjunction	-12733 May 08 j 03:25	14° $\approx$ 29'12	-0°54'22	retrograde	-12727 Aug 30 j 12:22	0° $\approx$ 07'07	
minimum elong	-12733 May 08 j 03:26	14° $\approx$ 29'12	0°54'58		-12727 Sep 20 j 04:22	30° $\approx$	
	-12733 May 21 j 21:52	15° $\approx$		opposition	-12727 Nov 16 j 07:03	28° $\approx$ 45'21	-0°14'40
morning rise	-12733 May 23 j 18:17	15° $\approx$ 04'04		min. Earth dist.	-12727 Nov 17 j 07:12	28° $\approx$ 43'42	29.18755 AU
retrograde	-12733 Aug 18 j 00:57	16° $\approx$ 56'05		direct	-12726 Feb 05 j 17:11	27° $\approx$ 20'10	
opposition	-12733 Nov 03 j 08:04	15° $\approx$ 34'10	-0°54'57	evening set	-12726 May 07 j 15:35	29° $\approx$ 16'59	
min. Earth dist.	-12733 Nov 04 j 07:25	15° $\approx$ 32'34	29.13495 AU	max. Earth dist.	-12726 May 22 j 05:42	29° $\approx$ 49'35	31.18997 AU
	-12733 Nov 24 j 14:21	15° $\approx$					
direct	-12732 Jan 23 j 17:23	14° $\approx$ 08'40		conjunction	-12726 May 23 j 07:02	29° $\approx$ 51'57	-0°10'28
	-12732 Mar 21 j 10:27	15° $\approx$		minimum elong	-12726 May 23 j 07:02	29° $\approx$ 51'57	0°10'53
evening set	-12732 Apr 23 j 19:53	16° $\approx$ 05'53		behind sun begin	-12726 May 23 j 02:07	29° $\approx$ 51'31	
				behind sun end	-12726 May 23 j 11:57	29° $\approx$ 52'24	
conjunction	-12732 May 09 j 14:23	16° $\approx$ 41'04	-0°48'15		-12726 May 26 j 20:36	0° $\approx$	
minimum elong	-12732 May 09 j 14:24	16° $\approx$ 41'04	0°48'49	morning rise	-12726 Jun 07 j 18:52	0° $\approx$ 26'37	
max. Earth dist.	-12732 May 08 j 13:03	16° $\approx$ 38'42	31.13979 AU	retrograde	-12726 Sep 02 j 00:16	2° $\approx$ 18'37	
morning rise	-12732 May 25 j 04:46	17° $\approx$ 15'54		opposition	-12726 Nov 18 j 19:00	0° $\approx$ 56'49	-0°07'50
retrograde	-12732 Aug 19 j 09:58	19° $\approx$ 07'56		min. Earth dist.	-12726 Nov 19 j 18:07	0° $\approx$ 55'15	29.19284 AU
opposition	-12732 Nov 04 j 19:46	17° $\approx$ 46'04	-0°48'23		-12726 Dec 26 j 16:57	30° $\approx$	
min. Earth dist.	-12732 Nov 05 j 20:01	17° $\approx$ 44'24	29.14573 AU	direct	-12725 Feb 08 j 05:40	29° $\approx$ 31'39	
direct	-12731 Jan 25 j 04:50	16° $\approx$ 20'39			-12725 Mar 22 j 16:06	0° $\approx$	
evening set	-12731 Apr 26 j 07:20	18° $\approx$ 17'50		evening set	-12725 May 10 j 02:22	1° $\approx$ 28'23	
max. Earth dist.	-12731 May 11 j 00:08	18° $\approx$ 50'37	31.15059 AU				
				conjunction	-12725 May 25 j 17:27	2° $\approx$ 03'18	-0°04'07
conjunction	-12731 May 12 j 01:20	18° $\approx$ 52'59	-0°42'04	minimum elong	-12725 May 25 j 17:28	2° $\approx$ 03'18	0°04'31
minimum elong	-12731 May 12 j 01:21	18° $\approx$ 52'59	0°42'37	behind sun begin	-12725 May 25 j 11:08	2° $\approx$ 02'44	
morning rise	-12731 May 27 j 15:20	19° $\approx$ 27'47		behind sun end	-12725 May 25 j 23:47	2° $\approx$ 03'52	
retrograde	-12731 Aug 21 j 20:01	21° $\approx$ 19'48		max. Earth dist.	-12725 May 24 j 17:29	2° $\approx$ 01'03	31.19501 AU
opposition	-12731 Nov 07 j 07:21	19° $\approx$ 58'01	-0°41'44	morning rise	-12725 Jun 10 j 04:41	2° $\approx$ 37'55	
min. Earth dist.	-12731 Nov 08 j 06:51	19° $\approx$ 56'24	29.15616 AU	retrograde	-12725 Sep 04 j 10:32	4° $\approx$ 29'56	
direct	-12730 Jan 27 j 17:55	18° $\approx$ 32'40		opposition	-12725 Nov 21 j 07:03	3° $\approx$ 08'05	-0°01'01
evening set	-12730 Apr 28 j 18:49	20° $\approx$ 29'48		min. Earth dist.	-12725 Nov 22 j 06:43	3° $\approx$ 06'28	29.19781 AU
max. Earth dist.	-12730 May 13 j 10:51	21° $\approx$ 02'32	31.16068 AU	asc. node	-12724 Jan 13 j 09:01	1° $\approx$ 55'26	
				direct	-12724 Feb 10 j 19:05	1° $\approx$ 42'56	
conjunction	-12730 May 14 j 12:18	21° $\approx$ 04'56	-0°35'50	evening set	-12724 May 11 j 13:03	3° $\approx$ 39'34	
minimum elong	-12730 May 14 j 12:19	21° $\approx$ 04'56	0°36'20	max. Earth dist.	-12724 May 26 j 03:23	4° $\approx$ 12'11	31.20010 AU
morning rise	-12730 May 30 j 01:51	21° $\approx$ 39'42					
retrograde	-12730 Aug 24 j 06:41	23° $\approx$ 31'44		conjunction	-12724 May 27 j 03:31	4° $\approx$ 14'27	0°02'24
opposition	-12730 Nov 09 j 19:18	22° $\approx$ 09'58	-0°35'01	minimum elong	-12724 May 27 j 03:30	4° $\approx$ 14'27	0°02'03
min. Earth dist.	-12730 Nov 10 j 19:19	22° $\approx$ 08'19	29.16586 AU	behind sun begin	-12724 May 26 j 21:04	4° $\approx$ 13'52	
direct	-12729 Jan 30 j 04:14	20° $\approx$ 44'41		behind sun end	-12724 May 27 j 09:56	4° $\approx$ 15'01	
evening set	-12729 May 01 j 06:02	22° $\approx$ 41'46		morning rise	-12724 Jun 11 j 14:26	4° $\approx$ 49'01	
				retrograde	-12724 Sep 05 j 21:55	6° $\approx$ 41'02	
conjunction	-12729 May 16 j 23:07	23° $\approx$ 16'51	-0°29'32	opposition	-12724 Nov 22 j 18:57	5° $\approx$ 19'10	0°05'49
minimum elong	-12729 May 16 j 23:07	23° $\approx$ 16'51	0°30'02	min. Earth dist.	-12724 Nov 23 j 17:02	5° $\approx$ 17'40	29.20300 AU
max. Earth dist.	-12729 May 15 j 22:24	23° $\approx$ 14'32	31.16985 AU	direct	-12723 Feb 12 j 08:16	3° $\approx$ 54'02	
morning rise	-12729 Jun 01 j 12:10	23° $\approx$ 51'36		evening set	-12723 May 13 j 23:37	5° $\approx$ 50'36	
retrograde	-12729 Aug 26 j 15:48	25° $\approx$ 43'38					
opposition	-12729 Nov 12 j 07:16	24° $\approx$ 21'53	-0°28'16	conjunction	-12723 May 29 j 13:35	6° $\approx$ 25'26	0°08'46
min. Earth dist.	-12729 Nov 13 j 07:02	24° $\approx$ 20'15	29.17428 AU	minimum elong	-12723 May 29 j 13:34	6° $\approx$ 25'26	0°08'27
direct	-12728 Feb 01 j 17:57	22° $\approx$ 56'39		behind sun begin	-12723 May 29 j 07:55	6° $\approx$ 24'55	
evening set	-12728 May 02 j 17:24	24° $\approx$ 53'39		behind sun end	-12723 May 29 j 19:14	6° $\approx$ 25'56	
max. Earth dist.	-12728 May 17 j 08:11	25° $\approx$ 26'17	31.17769 AU	max. Earth dist.	-12723 May 28 j 14:25	6° $\approx$ 23'16	31.20549 AU
				morning rise	-12723 Jun 13 j 23:55	6° $\approx$ 59'58	
conjunction	-12728 May 18 j 09:52	25° $\approx$ 28'42	-0°23'12	retrograde	-12723 Sep 08 j 07:06	8° $\approx$ 52'01	
minimum elong	-12728 May 18 j 09:52	25° $\approx$ 28'42	0°23'40	opposition	-12723 Nov 25 j 07:00	7° $\approx$ 30'08	0°12'38
morning rise	-12728 Jun 02 j 22:36	26° $\approx$ 03'25		min. Earth dist.	-12723 Nov 26 j 05:26	7° $\approx$ 28'36	29.20887 AU
retrograde	-12728 Aug 28 j 03:02	27° $\approx$ 55'26		direct	-12722 Feb 14 j 20:11	6° $\approx$ 05'03	
opposition	-12728 Nov 13 j 19:01	26° $\approx$ 33'42	-0°21'29	evening set	-12722 May 16 j 10:10	8° $\approx$ 01'31	
min. Earth dist.	-12728 Nov 14 j 18:42	26° $\approx$ 32'04	29.18156 AU				
direct	-12727 Feb 03 j 04:37	25° $\approx$ 08'29		conjunction	-12722 May 31 j 23:33	8° $\approx$ 36'19	0°15'07
evening set	-12727 May 05 j 04:30	27° $\approx$ 05'24		minimum elong	-12722 May 31 j 23:32	8° $\approx$ 36'19	0°14'49
				behind sun begin	-12722 May 31 j 20:53	8° $\approx$ 36'05	
conjunction	-12727 May 20 j 20:39	27° $\approx$ 40'25	-0°16'50	behind sun end	-12722 Jun 01 j 02:12	8° $\approx$ 36'34	
minimum elong	-12727 May 20 j 20:39	27° $\approx$ 40'25	0°17'18	max. Earth dist.	-12722 May 31 j 01:13	8° $\approx$ 34'14	31.21189 AU
max. Earth dist.	-12727 May 19 j 20:05	27° $\approx$ 38'07	31.18434 AU	morning rise	-12722 Jun 16 j 09:26	9° $\approx$ 10'49	
morning rise	-12727 Jun 05 j 08:47	28° $\approx$ 15'06		retrograde	-12722 Sep 10 j 17:06	11° $\approx$ 02'55	
	-12727 Aug 10 j 06:47	0° $\approx$		opposition	-12722 Nov 27 j 19:07	9° $\approx$ 41'02	0°19'25

Attention, astronomical year style is used: The year -12722 in astronomical counting style is the year 12723 BCE in historical counting style.

min. Earth dist.	-12722 Nov 28 j 15:59	9° $\text{H}$ 39'37	29.21566 AU	morning rise	-12715 Jul 01 j 02:16	24° $\text{H}$ 28'19	
direct	-12721 Feb 17 j 09:36	8° $\text{H}$ 16'01		retrograde	-12715 Sep 25 j 20:59	26° $\text{H}$ 21'02	
evening set	-12721 May 18 j 20:33	10° $\text{H}$ 12'26		opposition	-12715 Dec 13 j 09:34	24° $\text{H}$ 59'11	1°05'39
max. Earth dist.	-12721 Jun 02 j 11:25	10° $\text{H}$ 45'08	31.21916 AU	min. Earth dist.	-12715 Dec 14 j 02:50	24° $\text{H}$ 58'01	29.26116 AU
				direct	-12714 Mar 04 j 18:37	23° $\text{H}$ 34'44	
conjunction	-12721 Jun 03 j 09:19	10° $\text{H}$ 47'11	0°21'27	evening set	-12714 Jun 02 j 20:40	25° $\text{H}$ 30'43	
minimum elong	-12721 Jun 03 j 09:19	10° $\text{H}$ 47'11	0°21'10	max. Earth dist.	-12714 Jun 17 j 11:16	26° $\text{H}$ 03'29	31.26175 AU
morning rise	-12721 Jun 18 j 18:46	11° $\text{H}$ 21'40					
retrograde	-12721 Sep 13 j 03:46	13° $\text{H}$ 13'50		conjunction	-12714 Jun 18 j 05:21	26° $\text{H}$ 05'11	1°04'29
opposition	-12721 Nov 30 j 07:18	11° $\text{H}$ 51'58	0°26'11	minimum elong	-12714 Jun 18 j 05:20	26° $\text{H}$ 05'11	1°04'25
min. Earth dist.	-12721 Dec 01 j 03:59	11° $\text{H}$ 50'33	29.22344 AU	morning rise	-12714 Jul 03 j 11:20	26° $\text{H}$ 39'25	
direct	-12720 Feb 19 j 19:57	10° $\text{H}$ 27'03		retrograde	-12714 Sep 28 j 07:07	28° $\text{H}$ 32'13	
evening set	-12720 May 20 j 06:54	12° $\text{H}$ 23'24		opposition	-12714 Dec 15 j 22:16	27° $\text{H}$ 10'18	1°11'57
				min. Earth dist.	-12714 Dec 16 j 16:02	27° $\text{H}$ 09'06	29.26323 AU
conjunction	-12720 Jun 04 j 19:13	12° $\text{H}$ 58'07	0°27'45	direct	-12713 Mar 07 j 07:08	25° $\text{H}$ 45'53	
minimum elong	-12720 Jun 04 j 19:12	12° $\text{H}$ 58'07	0°27'31	evening set	-12713 Jun 05 j 06:34	27° $\text{H}$ 41'46	
max. Earth dist.	-12720 Jun 03 j 22:45	12° $\text{H}$ 56'12	31.22722 AU				
morning rise	-12720 Jun 20 j 04:07	13° $\text{H}$ 32'34		conjunction	-12713 Jun 20 j 14:42	28° $\text{H}$ 16'10	1°10'19
retrograde	-12720 Sep 14 j 12:42	15° $\text{H}$ 24'48		minimum elong	-12713 Jun 20 j 14:41	28° $\text{H}$ 16'10	1°10'17
opposition	-12720 Dec 01 j 19:21	14° $\text{H}$ 02'59	0°32'55	max. Earth dist.	-12713 Jun 19 j 21:30	28° $\text{H}$ 14'33	31.26336 AU
min. Earth dist.	-12720 Dec 02 j 15:16	14° $\text{H}$ 01'37	29.23156 AU	morning rise	-12713 Jul 05 j 20:15	28° $\text{H}$ 50'22	
direct	-12719 Feb 21 j 08:47	12° $\text{H}$ 38'10			-12713 Aug 10 j 09:58	0° $\text{Y}$	
evening set	-12719 May 22 j 17:22	14° $\text{H}$ 34'28		retrograde	-12713 Sep 30 j 17:42	0° $\text{Y}$ 43'14	
max. Earth dist.	-12719 Jun 06 j 08:06	15° $\text{H}$ 07'12	31.23537 AU		-12713 Nov 23 j 14:01	30° $\text{R}$ $\text{H}$	
				opposition	-12713 Dec 18 j 10:48	29° $\text{H}$ 21'15	1°18'08
conjunction	-12719 Jun 07 j 04:57	15° $\text{H}$ 09'09	0°34'02	min. Earth dist.	-12713 Dec 19 j 03:07	29° $\text{H}$ 20'08	29.26443 AU
minimum elong	-12719 Jun 07 j 04:57	15° $\text{H}$ 09'09	0°33'49	direct	-12712 Mar 08 j 21:28	27° $\text{H}$ 56'51	
morning rise	-12719 Jun 22 j 13:30	15° $\text{H}$ 43'34		evening set	-12712 Jun 06 j 16:31	29° $\text{H}$ 52'37	
retrograde	-12719 Sep 17 j 00:11	17° $\text{H}$ 35'55			-12712 Jun 10 j 00:36	0° $\text{Y}$	
opposition	-12719 Dec 04 j 07:39	16° $\text{H}$ 14'06	0°39'36	max. Earth dist.	-12712 Jun 21 j 07:02	0° $\text{Y}$ 25'23	31.26426 AU
min. Earth dist.	-12719 Dec 05 j 02:54	16° $\text{H}$ 12'48	29.23967 AU				
direct	-12718 Feb 23 j 18:25	14° $\text{H}$ 49'24		conjunction	-12712 Jun 22 j 00:00	0° $\text{Y}$ 26'59	1°16'02
evening set	-12718 May 25 j 03:35	16° $\text{H}$ 45'40		minimum elong	-12712 Jun 21 j 23:59	0° $\text{Y}$ 26'58	1°16'03
				morning rise	-12712 Jul 07 j 05:09	1° $\text{Y}$ 01'09	
conjunction	-12718 Jun 09 j 14:43	17° $\text{H}$ 20'18	0°40'15	retrograde	-12712 Oct 02 j 04:09	2° $\text{Y}$ 54'04	
minimum elong	-12718 Jun 09 j 14:43	17° $\text{H}$ 20'18	0°40'05	opposition	-12712 Dec 19 j 23:13	1° $\text{Y}$ 32'00	1°24'12
max. Earth dist.	-12718 Jun 08 j 19:29	17° $\text{H}$ 18'30	31.24309 AU	min. Earth dist.	-12712 Dec 20 j 15:21	1° $\text{Y}$ 30'55	29.26545 AU
morning rise	-12718 Jun 24 j 22:35	17° $\text{H}$ 54'41		direct	-12711 Mar 11 j 08:47	0° $\text{Y}$ 07'37	
retrograde	-12718 Sep 19 j 09:50	19° $\text{H}$ 47'08		evening set	-12711 Jun 09 j 02:16	2° $\text{Y}$ 03'16	
opposition	-12718 Dec 06 j 20:11	18° $\text{H}$ 25'21	0°46'13				
min. Earth dist.	-12718 Dec 07 j 15:32	18° $\text{H}$ 24'02	29.24695 AU	conjunction	-12711 Jun 24 j 09:16	2° $\text{Y}$ 37'35	1°21'39
direct	-12717 Feb 26 j 05:58	17° $\text{H}$ 00'44		minimum elong	-12711 Jun 24 j 09:15	2° $\text{Y}$ 37'35	1°21'41
evening set	-12717 May 27 j 14:01	18° $\text{H}$ 56'56		max. Earth dist.	-12711 Jun 23 j 18:03	2° $\text{Y}$ 36'09	31.26528 AU
max. Earth dist.	-12717 Jun 11 j 04:38	19° $\text{H}$ 29'40	31.24986 AU	morning rise	-12711 Jul 09 j 13:50	3° $\text{Y}$ 11'43	
				retrograde	-12711 Oct 04 j 12:23	5° $\text{Y}$ 04'43	
conjunction	-12717 Jun 12 j 00:24	19° $\text{H}$ 31'32	0°46'25	opposition	-12711 Dec 22 j 11:49	3° $\text{Y}$ 42'35	1°30'09
minimum elong	-12717 Jun 12 j 00:23	19° $\text{H}$ 31'32	0°46'16	min. Earth dist.	-12711 Dec 23 j 02:43	3° $\text{Y}$ 41'34	29.26668 AU
morning rise	-12717 Jun 27 j 07:57	20° $\text{H}$ 05'53		direct	-12710 Mar 13 j 22:01	2° $\text{Y}$ 18'14	
retrograde	-12717 Sep 21 j 22:17	21° $\text{H}$ 58'26		evening set	-12710 Jun 11 j 11:57	4° $\text{Y}$ 13'47	
opposition	-12717 Dec 09 j 08:32	20° $\text{H}$ 36'39	0°52'47				
min. Earth dist.	-12717 Dec 10 j 02:43	20° $\text{H}$ 35'25	29.25320 AU	conjunction	-12710 Jun 26 j 18:12	4° $\text{Y}$ 48'03	1°27'09
direct	-12716 Feb 28 j 17:33	19° $\text{H}$ 12'06		minimum elong	-12710 Jun 26 j 18:11	4° $\text{Y}$ 48'03	1°27'13
evening set	-12716 May 29 j 00:13	21° $\text{H}$ 08'15		max. Earth dist.	-12710 Jun 26 j 03:01	4° $\text{Y}$ 46'37	31.26681 AU
				morning rise	-12710 Jul 11 j 22:27	5° $\text{Y}$ 22'09	
conjunction	-12716 Jun 13 j 10:10	21° $\text{H}$ 42'48	0°52'31	retrograde	-12710 Oct 06 j 23:05	7° $\text{Y}$ 15'15	
minimum elong	-12716 Jun 13 j 10:09	21° $\text{H}$ 42'48	0°52'24	opposition	-12710 Dec 25 j 00:26	5° $\text{Y}$ 53'03	1°35'57
max. Earth dist.	-12716 Jun 12 j 15:37	21° $\text{H}$ 41'04	31.25527 AU	min. Earth dist.	-12710 Dec 25 j 14:02	5° $\text{Y}$ 52'07	29.26881 AU
morning rise	-12716 Jun 28 j 17:05	22° $\text{H}$ 17'07		direct	-12709 Mar 16 j 08:20	4° $\text{Y}$ 28'44	
retrograde	-12716 Sep 23 j 09:19	24° $\text{H}$ 09'46		evening set	-12709 Jun 13 j 21:31	6° $\text{Y}$ 24'11	
opposition	-12716 Dec 10 j 21:07	22° $\text{H}$ 47'56	0°59'16				
min. Earth dist.	-12716 Dec 11 j 15:54	22° $\text{H}$ 46'40	29.25791 AU	conjunction	-12709 Jun 29 j 03:23	6° $\text{Y}$ 58'25	1°32'31
direct	-12715 Mar 02 j 06:10	21° $\text{H}$ 23'28		minimum elong	-12709 Jun 29 j 03:22	6° $\text{Y}$ 58'25	1°32'36
evening set	-12715 May 31 j 10:30	23° $\text{H}$ 19'32		max. Earth dist.	-12709 Jun 28 j 14:20	6° $\text{Y}$ 57'11	31.26929 AU
				morning rise	-12709 Jul 14 j 07:02	7° $\text{Y}$ 32'29	
conjunction	-12715 Jun 15 j 19:44	23° $\text{H}$ 54'02	0°58'33	retrograde	-12709 Oct 09 j 08:28	9° $\text{Y}$ 25'42	
minimum elong	-12715 Jun 15 j 19:43	23° $\text{H}$ 54'02	0°58'27	opposition	-12709 Dec 27 j 13:00	8° $\text{Y}$ 03'27	1°41'37
max. Earth dist.	-12715 Jun 15 j 00:59	23° $\text{H}$ 52'16	31.25924 AU	min. Earth dist.	-12709 Dec 28 j 02:05	8° $\text{Y}$ 02'34	29.27180 AU

Attention, astronomical year style is used: The year -12708 in astronomical counting style is the year 12709 BCE in historical counting style.

direct	-12708 Mar 17 j 19:59	6° $\Upsilon$ 39'13		retrograde	-12702 Oct 24 j 14:44	24° $\Upsilon$ 40'48	
evening set	-12708 Jun 15 j 07:07	8° $\Upsilon$ 34'36		opposition	-12701 Jan 12 j 06:52	23° $\Upsilon$ 18'20	2°16'51
				min. Earth dist.	-12701 Jan 12 j 13:57	23° $\Upsilon$ 17'51	29.28764 AU
conjunction	-12708 Jun 30 j 12:18	9° $\Upsilon$ 08'46	1°37'46	direct	-12701 Apr 03 j 06:26	21° $\Upsilon$ 54'38	
minimum elong	-12708 Jun 30 j 12:17	9° $\Upsilon$ 08'46	1°37'53	evening set	-12701 Jul 01 j 01:40	23° $\Upsilon$ 49'32	
max. Earth dist.	-12708 Jun 29 j 23:22	9° $\Upsilon$ 07'33	31.27269 AU				
morning rise	-12708 Jul 15 j 15:42	9° $\Upsilon$ 42'49		conjunction	-12701 Jul 16 j 03:19	24° $\Upsilon$ 23'28	2°10'08
retrograde	-12708 Oct 10 j 20:21	11° $\Upsilon$ 36'09		minimum elong	-12701 Jul 16 j 03:18	24° $\Upsilon$ 23'27	2°10'27
opposition	-12708 Dec 29 j 01:32	10° $\Upsilon$ 13'53	1°47'09	max. Earth dist.	-12701 Jul 15 j 19:46	24° $\Upsilon$ 22'45	31.28527 AU
min. Earth dist.	-12708 Dec 29 j 12:49	10° $\Upsilon$ 13'08	29.27557 AU	morning rise	-12701 Jul 31 j 04:11	24° $\Upsilon$ 57'20	
direct	-12707 Mar 20 j 06:33	8° $\Upsilon$ 49'44		retrograde	-12701 Oct 27 j 01:54	26° $\Upsilon$ 51'40	
evening set	-12707 Jun 17 j 16:33	10° $\Upsilon$ 45'03		opposition	-12700 Jan 14 j 19:41	25° $\Upsilon$ 29'07	2°21'09
				min. Earth dist.	-12700 Jan 15 j 01:49	25° $\Upsilon$ 28'42	29.28582 AU
conjunction	-12707 Jul 02 j 21:18	11° $\Upsilon$ 19'12	1°42'51	direct	-12700 Apr 04 j 17:05	24° $\Upsilon$ 05'27	
minimum elong	-12707 Jul 02 j 21:17	11° $\Upsilon$ 19'12	1°43'01	evening set	-12700 Jul 02 j 10:52	26° $\Upsilon$ 00'14	
max. Earth dist.	-12707 Jul 02 j 10:08	11° $\Upsilon$ 18'09	31.27651 AU				
morning rise	-12707 Jul 18 j 00:08	11° $\Upsilon$ 53'12		conjunction	-12700 Jul 17 j 12:17	26° $\Upsilon$ 34'09	2°14'03
retrograde	-12707 Oct 13 j 07:15	13° $\Upsilon$ 46'42		minimum elong	-12700 Jul 17 j 12:16	26° $\Upsilon$ 34'08	2°14'25
opposition	-12707 Dec 31 j 14:21	12° $\Upsilon$ 24'25	1°52'32	max. Earth dist.	-12700 Jul 17 j 06:37	26° $\Upsilon$ 33'36	31.28294 AU
min. Earth dist.	-12706 Jan 01 j 01:40	12° $\Upsilon$ 23'39	29.27955 AU	morning rise	-12700 Aug 01 j 12:44	27° $\Upsilon$ 07'59	
direct	-12706 Mar 22 j 17:35	11° $\Upsilon$ 00'21		retrograde	-12700 Oct 28 j 11:24	29° $\Upsilon$ 02'27	
evening set	-12706 Jun 20 j 02:08	12° $\Upsilon$ 55'37		opposition	-12699 Jan 16 j 08:38	27° $\Upsilon$ 39'49	2°25'15
				min. Earth dist.	-12699 Jan 16 j 14:24	27° $\Upsilon$ 39'26	29.28330 AU
conjunction	-12706 Jul 05 j 06:15	13° $\Upsilon$ 29'43	1°47'49	direct	-12699 Apr 07 j 05:17	26° $\Upsilon$ 16'10	
minimum elong	-12706 Jul 05 j 06:14	13° $\Upsilon$ 29'43	1°48'00	evening set	-12699 Jul 04 j 20:04	28° $\Upsilon$ 10'51	
max. Earth dist.	-12706 Jul 04 j 19:32	13° $\Upsilon$ 28'43	31.28043 AU				
morning rise	-12706 Jul 20 j 08:47	14° $\Upsilon$ 03'42		conjunction	-12699 Jul 19 j 20:56	28° $\Upsilon$ 44'43	2°17'47
retrograde	-12706 Oct 15 j 19:22	15° $\Upsilon$ 57'21		minimum elong	-12699 Jul 19 j 20:55	28° $\Upsilon$ 44'43	2°18'11
opposition	-12705 Jan 03 j 03:07	14° $\Upsilon$ 35'03	1°57'44	max. Earth dist.	-12699 Jul 19 j 15:31	28° $\Upsilon$ 44'12	31.28035 AU
min. Earth dist.	-12705 Jan 03 j 12:29	14° $\Upsilon$ 34'25	29.28333 AU	morning rise	-12699 Aug 03 j 21:15	29° $\Upsilon$ 18'33	
direct	-12705 Mar 25 j 04:48	13° $\Upsilon$ 11'05			-12699 Aug 23 j 14:17	0° $\mathcal{B}$	
evening set	-12705 Jun 22 j 11:35	15° $\Upsilon$ 06'17		retrograde	-12699 Oct 30 j 22:53	1° $\mathcal{B}$ 13'08	
					-12698 Jan 12 j 22:41	30° $\mathcal{R}$ $\Upsilon$	
conjunction	-12705 Jul 07 j 15:13	15° $\Upsilon$ 40'21	1°52'37	opposition	-12698 Jan 18 j 21:32	29° $\Upsilon$ 50'25	2°29'08
minimum elong	-12705 Jul 07 j 15:12	15° $\Upsilon$ 40'21	1°52'50	min. Earth dist.	-12698 Jan 19 j 01:22	29° $\Upsilon$ 50'09	29.28091 AU
max. Earth dist.	-12705 Jul 07 j 05:21	15° $\Upsilon$ 39'26	31.28372 AU	direct	-12698 Apr 09 j 15:56	28° $\Upsilon$ 26'47	
morning rise	-12705 Jul 22 j 17:21	16° $\Upsilon$ 14'19			-12698 Jun 27 j 07:53	0° $\mathcal{B}$	
retrograde	-12705 Oct 18 j 06:40	18° $\Upsilon$ 08'07		evening set	-12698 Jul 07 j 05:11	0° $\mathcal{B}$ 21'22	
opposition	-12704 Jan 05 j 16:05	16° $\Upsilon$ 45'48	2°02'47				
min. Earth dist.	-12704 Jan 06 j 01:46	16° $\Upsilon$ 45'09	29.28632 AU	conjunction	-12698 Jul 22 j 05:45	0° $\mathcal{B}$ 55'12	2°21'20
direct	-12704 Mar 26 j 16:34	15° $\Upsilon$ 21'55		minimum elong	-12698 Jul 22 j 05:44	0° $\mathcal{B}$ 55'12	2°21'45
evening set	-12704 Jun 23 j 21:10	17° $\Upsilon$ 17'04		max. Earth dist.	-12698 Jul 22 j 02:09	0° $\mathcal{B}$ 54'52	31.27804 AU
				morning rise	-12698 Aug 06 j 05:44	1° $\mathcal{B}$ 29'01	
conjunction	-12704 Jul 09 j 00:20	17° $\Upsilon$ 51'06	1°57'15	retrograde	-12698 Nov 02 j 09:36	3° $\mathcal{B}$ 23'45	
minimum elong	-12704 Jul 09 j 00:18	17° $\Upsilon$ 51'05	1°57'30	opposition	-12697 Jan 21 j 10:33	2° $\mathcal{B}$ 00'56	2°32'48
max. Earth dist.	-12704 Jul 08 j 15:28	17° $\Upsilon$ 50'15	31.28608 AU	min. Earth dist.	-12697 Jan 21 j 14:05	2° $\mathcal{B}$ 00'42	29.27913 AU
morning rise	-12704 Jul 24 j 02:02	18° $\Upsilon$ 25'02		direct	-12697 Apr 12 j 02:16	0° $\mathcal{B}$ 37'21	
retrograde	-12704 Oct 19 j 18:06	20° $\Upsilon$ 18'58		evening set	-12697 Jul 09 j 14:15	2° $\mathcal{B}$ 31'51	
opposition	-12703 Jan 07 j 04:48	18° $\Upsilon$ 56'37	2°07'40				
min. Earth dist.	-12703 Jan 07 j 13:03	18° $\Upsilon$ 56'03	29.28807 AU	conjunction	-12697 Jul 24 j 14:27	3° $\mathcal{B}$ 05'39	2°24'40
direct	-12703 Mar 29 j 06:05	17° $\Upsilon$ 32'48		minimum elong	-12697 Jul 24 j 14:26	3° $\mathcal{B}$ 05'39	2°25'05
evening set	-12703 Jun 26 j 06:48	19° $\Upsilon$ 27'53		max. Earth dist.	-12697 Jul 24 j 11:46	3° $\mathcal{B}$ 05'24	31.27669 AU
				morning rise	-12697 Aug 08 j 14:18	3° $\mathcal{B}$ 39'27	
conjunction	-12703 Jul 11 j 09:22	20° $\Upsilon$ 01'53	2°01'43	retrograde	-12697 Nov 04 j 21:30	5° $\mathcal{B}$ 34'19	
minimum elong	-12703 Jul 11 j 09:21	20° $\Upsilon$ 01'53	2°01'59	opposition	-12696 Jan 23 j 23:23	4° $\mathcal{B}$ 11'27	2°36'16
max. Earth dist.	-12703 Jul 11 j 00:31	20° $\Upsilon$ 01'03	31.28706 AU	min. Earth dist.	-12696 Jan 24 j 00:32	4° $\mathcal{B}$ 11'22	29.27828 AU
morning rise	-12703 Jul 26 j 10:49	20° $\Upsilon$ 35'48		direct	-12696 Apr 13 j 12:46	2° $\mathcal{B}$ 47'55	
retrograde	-12703 Oct 22 j 05:41	22° $\Upsilon$ 29'53		evening set	-12696 Jul 10 j 23:21	4° $\mathcal{B}$ 42'21	
opposition	-12702 Jan 09 j 17:51	21° $\Upsilon$ 07'29	2°12'21				
min. Earth dist.	-12702 Jan 10 j 01:56	21° $\Upsilon$ 06'56	29.28856 AU	conjunction	-12696 Jul 25 j 23:12	5° $\mathcal{B}$ 16'07	2°27'47
direct	-12702 Mar 31 j 17:08	19° $\Upsilon$ 43'44		minimum elong	-12696 Jul 25 j 23:11	5° $\mathcal{B}$ 16'07	2°28'15
evening set	-12702 Jun 28 j 16:09	21° $\Upsilon$ 38'44		max. Earth dist.	-12696 Jul 25 j 21:34	5° $\mathcal{B}$ 15'58	31.27616 AU
				morning rise	-12696 Aug 09 j 22:53	5° $\mathcal{B}$ 49'55	
conjunction	-12702 Jul 13 j 18:23	22° $\Upsilon$ 12'42	2°06'01	retrograde	-12696 Nov 06 j 09:20	7° $\mathcal{B}$ 44'56	
minimum elong	-12702 Jul 13 j 18:22	22° $\Upsilon$ 12'41	2°06'19	opposition	-12695 Jan 25 j 12:16	6° $\mathcal{B}$ 22'01	2°39'30
max. Earth dist.	-12702 Jul 13 j 11:09	22° $\Upsilon$ 12'00	31.28678 AU	min. Earth dist.	-12695 Jan 25 j 13:15	6° $\mathcal{B}$ 21'57	29.27834 AU
morning rise	-12702 Jul 28 j 19:23	22° $\Upsilon$ 46'35		direct	-12695 Apr 16 j 00:03	4° $\mathcal{B}$ 58'34	



Attention, astronomical year style is used: The year -12695 in astronomical counting style is the year 12696 BCE in historical counting style.

evening set	-12695 Jul 13 j 08:22	6°8'52"56		max. Earth dist.	-12689 Aug 10 j 18:40	20°8'32"55	31.26957 AU
				morning rise	-12689 Aug 25 j 13:10	21°8'06"15	
conjunction	-12695 Jul 28 j 08:01	7°8'26"41	2°30'42	retrograde	-12689 Nov 22 j 17:09	23°8'02"18	
minimum elong	-12695 Jul 28 j 08:00	7°8'26"41	2°31'11	opposition	-12688 Feb 11 j 07:55	21°8'39"03	2°55'32
max. Earth dist.	-12695 Jul 28 j 08:05	7°8'26"41	31.27658 AU	min. Earth dist.	-12688 Feb 11 j 03:01	21°8'39"23	29.26950 AU
morning rise	-12695 Aug 12 j 07:29	8°8'00"28		direct	-12688 May 01 j 08:22	20°8'16"02	
retrograde	-12695 Nov 08 j 21:53	9°8'55"38		evening set	-12688 Jul 28 j 00:21	22°8'09"50	
opposition	-12694 Jan 28 j 01:14	8°8'32"41	2°42'30				
min. Earth dist.	-12694 Jan 28 j 00:14	8°8'32"45	29.27898 AU	conjunction	-12688 Aug 11 j 22:53	22°8'43"31	2°44'54
direct	-12694 Apr 18 j 12:36	7°8'09"20		minimum elong	-12688 Aug 11 j 22:52	22°8'43"31	2°45'33
evening set	-12694 Jul 15 j 17:25	9°8'03"38		max. Earth dist.	-12688 Aug 12 j 04:20	22°8'44"02	31.26422 AU
				morning rise	-12688 Aug 26 j 22:19	23°8'17"18	
conjunction	-12694 Jul 30 j 16:41	9°8'37"23	2°33'24	retrograde	-12688 Nov 24 j 05:10	25°8'13"28	
minimum elong	-12694 Jul 30 j 16:40	9°8'37"22	2°33'56	opposition	-12687 Feb 12 j 20:52	23°8'50"07	2°56'50
max. Earth dist.	-12694 Jul 30 j 17:06	9°8'37"25	31.27729 AU	min. Earth dist.	-12687 Feb 12 j 14:03	23°8'50"34	29.26367 AU
morning rise	-12694 Aug 14 j 16:10	10°8'11"09		direct	-12687 May 03 j 19:23	22°8'27"06	
retrograde	-12694 Nov 11 j 10:00	12°8'06"29		evening set	-12687 Jul 30 j 09:26	24°8'20"48	
opposition	-12693 Jan 30 j 14:21	10°8'43"31	2°45'16				
min. Earth dist.	-12693 Jan 30 j 12:55	10°8'43"37	29.27984 AU	conjunction	-12687 Aug 14 j 07:54	24°8'54"28	2°46'01
direct	-12693 Apr 20 j 22:49	9°8'20"15		minimum elong	-12687 Aug 14 j 07:54	24°8'54"28	2°46'40
evening set	-12693 Jul 18 j 02:28	11°8'14"29		max. Earth dist.	-12687 Aug 14 j 14:00	24°8'55"03	31.25802 AU
				morning rise	-12687 Aug 29 j 07:32	25°8'28"17	
conjunction	-12693 Aug 02 j 01:41	11°8'48"13	2°35'53	retrograde	-12687 Nov 26 j 17:16	27°8'24"33	
minimum elong	-12693 Aug 02 j 01:40	11°8'48"13	2°36'25	opposition	-12686 Feb 15 j 10:04	26°8'01"05	2°57'54
max. Earth dist.	-12693 Aug 02 j 04:00	11°8'48"26	31.27788 AU	min. Earth dist.	-12686 Feb 15 j 03:17	26°8'01"33	29.25743 AU
morning rise	-12693 Aug 17 j 00:56	12°8'21"59		direct	-12686 May 06 j 06:17	24°8'38"05	
retrograde	-12693 Nov 13 j 20:07	14°8'17"29		evening set	-12686 Aug 01 j 18:18	26°8'31"40	
opposition	-12692 Feb 02 j 03:14	12°8'54"29	2°47'48				
min. Earth dist.	-12692 Feb 02 j 00:45	12°8'54"39	29.28014 AU	conjunction	-12686 Aug 16 j 16:55	27°8'05"21	2°46'53
direct	-12692 Apr 22 j 11:50	11°8'31"18		minimum elong	-12686 Aug 16 j 16:54	27°8'05"21	2°47'33
evening set	-12692 Jul 19 j 11:45	13°8'25"28		max. Earth dist.	-12686 Aug 17 j 00:47	27°8'06"05	31.25179 AU
				morning rise	-12686 Aug 31 j 16:37	27°8'39"10	
conjunction	-12692 Aug 03 j 10:36	13°8'59"11	2°38'09	retrograde	-12686 Nov 29 j 05:42	29°8'35"32	
minimum elong	-12692 Aug 03 j 10:34	13°8'59"11	2°38'43	opposition	-12685 Feb 17 j 23:03	28°8'11"59	2°58'42
max. Earth dist.	-12692 Aug 03 j 12:36	13°8'59"22	31.27772 AU	min. Earth dist.	-12685 Feb 17 j 14:22	28°8'12"34	29.25132 AU
morning rise	-12692 Aug 18 j 09:58	14°8'32"58		direct	-12685 May 08 j 18:29	26°8'49"00	
	-12692 Aug 30 j 23:07	15°8'		evening set	-12685 Aug 04 j 03:26	28°8'42"29	
retrograde	-12692 Nov 15 j 08:33	16°8'28"36					
opposition	-12691 Feb 03 j 16:20	15°8'05"33	2°50'06	conjunction	-12685 Aug 19 j 01:57	29°8'16"10	2°47'30
min. Earth dist.	-12691 Feb 03 j 12:54	15°8'05"47	29.27958 AU	minimum elong	-12685 Aug 19 j 01:57	29°8'16"10	2°48'11
	-12691 Feb 07 j 03:07	15°8'8'		max. Earth dist.	-12685 Aug 19 j 10:03	29°8'16"56	31.24592 AU
direct	-12691 Apr 24 j 22:54	13°8'42"27		morning rise	-12685 Sep 03 j 01:59	29°8'50"01	
	-12691 Jul 04 j 14:51	15°8'			-12685 Sep 07 j 15:07	0°8'11"59	
evening set	-12691 Jul 21 j 20:47	15°8'36"32		retrograde	-12685 Dec 01 j 18:02	1°8'46"30	
				opposition	-12684 Feb 20 j 11:56	0°8'22"52	2°59'14
conjunction	-12691 Aug 05 j 19:36	16°8'10"15	2°40'11	min. Earth dist.	-12684 Feb 20 j 02:43	0°8'23"29	29.24596 AU
minimum elong	-12691 Aug 05 j 19:35	16°8'10"15	2°40'45		-12684 Mar 05 j 18:58	30°8'8'	
max. Earth dist.	-12691 Aug 05 j 23:21	16°8'10"36	31.27639 AU	direct	-12684 May 10 j 04:21	28°8'59"54	
morning rise	-12691 Aug 20 j 18:47	16°8'44"01			-12684 Jul 10 j 12:03	0°8'11"59	
retrograde	-12691 Nov 17 j 18:47	18°8'39"49		evening set	-12684 Aug 05 j 12:20	0°8'53"19	
opposition	-12690 Feb 06 j 05:35	17°8'16"43	2°52'09				
min. Earth dist.	-12690 Feb 06 j 01:55	17°8'16"58	29.27760 AU	conjunction	-12684 Aug 20 j 11:08	1°8'27"01	2°47'54
direct	-12690 Apr 27 j 11:06	15°8'53"40		minimum elong	-12684 Aug 20 j 11:07	1°8'27"01	2°48'36
evening set	-12690 Jul 24 j 06:06	17°8'47"40		max. Earth dist.	-12684 Aug 20 j 21:20	1°8'27"59	31.24091 AU
				morning rise	-12684 Sep 04 j 11:14	2°8'00"53	
conjunction	-12690 Aug 08 j 04:41	18°8'21"21	2°41'59	retrograde	-12684 Dec 03 j 04:58	3°8'57"29	
minimum elong	-12690 Aug 08 j 04:40	18°8'21"21	2°42'36	opposition	-12683 Feb 22 j 00:52	2°8'33"48	2°59'32
max. Earth dist.	-12690 Aug 08 j 08:22	18°8'21"42	31.27374 AU	min. Earth dist.	-12683 Feb 21 j 14:12	2°8'34"31	29.24135 AU
morning rise	-12690 Aug 23 j 04:00	18°8'55"09		direct	-12683 May 12 j 17:13	1°8'10"54	
retrograde	-12690 Nov 20 j 06:27	20°8'51"04		evening set	-12683 Aug 07 j 21:17	3°8'04"15	
opposition	-12689 Feb 08 j 18:41	19°8'27"54	2°53'58				
min. Earth dist.	-12689 Feb 08 j 13:33	19°8'28"15	29.27429 AU	conjunction	-12683 Aug 22 j 20:03	3°8'37"57	2°48'02
direct	-12689 Apr 29 j 21:46	18°8'04"52		minimum elong	-12683 Aug 22 j 20:03	3°8'37"57	2°48'45
evening set	-12689 Jul 26 j 15:13	19°8'58"46		max. Earth dist.	-12683 Aug 23 j 06:22	3°8'38"56	31.23677 AU
				morning rise	-12683 Sep 06 j 20:35	4°8'11"50	
conjunction	-12689 Aug 10 j 13:49	20°8'32"28	2°43'34	retrograde	-12683 Dec 05 j 18:18	6°8'08"36	
minimum elong	-12689 Aug 10 j 13:49	20°8'32"28	2°44'11	opposition	-12682 Feb 24 j 13:55	4°8'44"52	2°59'33

Attention, astronomical year style is used: The year -12682 in astronomical counting style is the year 12683 BCE in historical counting style.

min. Earth dist.	-12682 Feb 24 j 01:57	4°II45'41	29.23762 AU	morning rise	-12676 Sep 21 j 18:04	19°II33'11	
direct	-12682 May 15 j 04:06	3°II22'02		retrograde	-12676 Dec 21 j 07:07	21°II30'48	
evening set	-12682 Aug 10 j 06:15	5°II15'19		opposition	-12675 Mar 12 j 08:45	20°II06'43	2°52'28
				min. Earth dist.	-12675 Mar 11 j 16:44	20°II07'48	29.19750 AU
conjunction	-12682 Aug 25 j 05:20	5°II49'03	2°47'56	direct	-12675 May 30 j 06:05	18°II44'07	
minimum elong	-12682 Aug 25 j 05:20	5°II49'03	2°48'41	evening set	-12675 Aug 24 j 22:57	20°II36'55	
max. Earth dist.	-12682 Aug 25 j 17:38	5°II50'13	31.23322 AU				
morning rise	-12682 Sep 09 j 06:04	6°II22'58		conjunction	-12675 Sep 09 j 00:20	21°II10'50	2°40'28
retrograde	-12682 Dec 08 j 05:04	8°II19'53		minimum elong	-12675 Sep 09 j 00:20	21°II10'50	2°41'16
opposition	-12681 Feb 27 j 02:53	6°II56'07	2°59'19	max. Earth dist.	-12675 Sep 09 j 17:19	21°II12'26	31.19004 AU
min. Earth dist.	-12681 Feb 26 j 14:30	6°II56'58	29.23420 AU	morning rise	-12675 Sep 24 j 04:11	21°II45'01	
direct	-12681 May 17 j 15:41	5°II33'22		retrograde	-12675 Dec 23 j 19:08	23°II42'40	
evening set	-12681 Aug 12 j 15:22	7°II26'36		opposition	-12674 Mar 14 j 21:38	22°II18'29	2°50'27
				min. Earth dist.	-12674 Mar 14 j 04:38	22°II19'38	29.18739 AU
conjunction	-12681 Aug 27 j 14:35	8°II00'21	2°47'36	direct	-12674 Jun 01 j 19:24	20°II55'52	
minimum elong	-12681 Aug 27 j 14:35	8°II00'21	2°48'21	evening set	-12674 Aug 27 j 08:21	22°II48'33	
max. Earth dist.	-12681 Aug 28 j 03:10	8°II01'32	31.22991 AU				
morning rise	-12681 Sep 11 j 15:46	8°II34'18		conjunction	-12674 Sep 11 j 10:03	23°II22'30	2°38'28
retrograde	-12681 Dec 10 j 17:04	10°II31'21		minimum elong	-12674 Sep 11 j 10:03	23°II22'30	2°39'16
opposition	-12680 Feb 29 j 15:50	9°II07'34	2°58'49	max. Earth dist.	-12674 Sep 12 j 02:46	23°II24'05	31.17991 AU
min. Earth dist.	-12680 Feb 29 j 01:54	9°II08'31	29.23074 AU	morning rise	-12674 Sep 26 j 14:39	23°II56'43	
direct	-12680 May 19 j 02:06	7°II44'53		retrograde	-12674 Dec 26 j 09:07	25°II54'26	
evening set	-12680 Aug 14 j 00:29	9°II38'04		opposition	-12673 Mar 17 j 10:18	24°II30'07	2°48'11
				min. Earth dist.	-12673 Mar 16 j 16:28	24°II31'20	29.17732 AU
conjunction	-12680 Aug 28 j 23:57	10°II11'50	2°47'00	direct	-12673 Jun 04 j 06:35	23°II07'28	
minimum elong	-12680 Aug 28 j 23:57	10°II11'50	2°47'46	evening set	-12673 Aug 29 j 17:36	25°II00'03	
max. Earth dist.	-12680 Aug 29 j 13:38	10°II13'08	31.22607 AU				
morning rise	-12680 Sep 13 j 01:27	10°II45'50		conjunction	-12673 Sep 13 j 19:55	25°II34'03	2°36'14
retrograde	-12680 Dec 12 j 04:09	12°II43'01		minimum elong	-12673 Sep 13 j 19:56	25°II34'03	2°37'02
opposition	-12679 Mar 03 j 04:53	11°II19'13	2°58'04	max. Earth dist.	-12673 Sep 14 j 14:23	25°II35'48	31.16997 AU
min. Earth dist.	-12679 Mar 02 j 15:15	11°II20'09	29.22656 AU	morning rise	-12673 Sep 29 j 01:01	26°II08'19	
direct	-12679 May 21 j 12:08	9°II56'36		retrograde	-12673 Dec 28 j 19:35	28°II06'05	
evening set	-12679 Aug 16 j 09:44	11°II49'43		opposition	-12672 Mar 18 j 23:00	26°II41'40	2°45'41
				min. Earth dist.	-12672 Mar 18 j 04:46	26°II42'55	29.16765 AU
conjunction	-12679 Aug 31 j 09:30	12°II23'31	2°46'11	direct	-12672 Jun 05 j 18:17	25°II19'00	
minimum elong	-12679 Aug 31 j 09:31	12°II23'31	2°46'56	evening set	-12672 Aug 31 j 02:53	27°II11'30	
max. Earth dist.	-12679 Aug 31 j 23:52	12°II24'52	31.22153 AU				
morning rise	-12679 Sep 15 j 11:23	12°II57'32		conjunction	-12672 Sep 15 j 05:39	27°II45'31	2°33'46
retrograde	-12679 Dec 14 j 16:54	14°II54'52		minimum elong	-12672 Sep 15 j 05:39	27°II45'31	2°34'34
opposition	-12678 Mar 05 j 17:52	13°II31'01	2°57'03	max. Earth dist.	-12672 Sep 16 j 00:30	27°II47'18	31.16086 AU
min. Earth dist.	-12678 Mar 05 j 02:31	13°II32'04	29.22140 AU	morning rise	-12672 Sep 30 j 11:25	28°II19'50	
direct	-12678 May 23 j 22:44	12°II08'26			-12672 Nov 27 j 03:02	0°☾	
evening set	-12678 Aug 18 j 19:03	14°II01'29		retrograde	-12672 Dec 30 j 07:53	0°☾17'40	
					-12671 Feb 02 j 06:23	30°☾II	
conjunction	-12678 Sep 02 j 19:04	14°II35'19	2°45'06	opposition	-12671 Mar 21 j 11:36	28°II53'11	2°42'55
minimum elong	-12678 Sep 02 j 19:04	14°II35'19	2°45'53	min. Earth dist.	-12671 Mar 20 j 15:42	28°II54'32	29.15901 AU
max. Earth dist.	-12678 Sep 03 j 09:33	14°II36'41	31.21567 AU	direct	-12671 Jun 08 j 05:28	27°II30'30	
morning rise	-12678 Sep 17 j 21:30	15°II09'23		evening set	-12671 Sep 02 j 12:14	29°II22'55	
retrograde	-12678 Dec 17 j 05:28	17°II06'50					
opposition	-12677 Mar 08 j 07:00	15°II42'55	2°55'46	conjunction	-12671 Sep 17 j 15:33	29°II57'00	2°31'05
min. Earth dist.	-12677 Mar 07 j 16:11	15°II43'55	29.21486 AU	minimum elong	-12671 Sep 17 j 15:33	29°II57'00	2°31'53
direct	-12677 May 26 j 08:59	14°II20'21		max. Earth dist.	-12671 Sep 18 j 11:34	29°II58'53	31.15275 AU
evening set	-12677 Aug 21 j 04:25	16°II13'20			-12671 Sep 18 j 23:18	0°☾	
				morning rise	-12671 Oct 02 j 21:58	0°☾31'22	
conjunction	-12677 Sep 05 j 04:57	16°II47'11	2°43'48	retrograde	-12670 Jan 01 j 19:17	2°☾29'16	
minimum elong	-12677 Sep 05 j 04:57	16°II47'11	2°44'34	min. Earth dist.	-12670 Mar 23 j 04:26	1°☾06'04	29.15143 AU
max. Earth dist.	-12677 Sep 05 j 20:38	16°II48'40	31.20843 AU	opposition	-12670 Mar 24 j 00:17	1°☾04'43	2°39'56
morning rise	-12677 Sep 20 j 07:43	17°II21'17			-12670 May 08 j 07:05	30°☾II	
retrograde	-12677 Dec 19 j 18:13	19°II18'49		direct	-12670 Jun 10 j 15:53	29°II42'04	
opposition	-12676 Mar 09 j 19:45	17°II54'50	2°54'15		-12670 Jul 13 j 01:40	0°☾	
min. Earth dist.	-12676 Mar 09 j 03:39	17°II55'56	29.20677 AU	evening set	-12670 Sep 04 j 21:33	1°☾34'25	
direct	-12676 May 27 j 20:15	16°II32'16					
evening set	-12676 Aug 22 j 13:50	18°II25'10		conjunction	-12670 Sep 20 j 01:32	2°☾08'33	2°28'10
				minimum elong	-12670 Sep 20 j 01:33	2°☾08'33	2°28'59
conjunction	-12676 Sep 06 j 14:36	18°II59'03	2°42'15	max. Earth dist.	-12670 Sep 20 j 22:34	2°☾10'32	31.14582 AU
minimum elong	-12676 Sep 06 j 14:37	18°II59'03	2°43'03	morning rise	-12670 Oct 05 j 08:37	2°☾42'58	
max. Earth dist.	-12676 Sep 07 j 05:53	19°II00'30	31.19973 AU	retrograde	-12669 Jan 04 j 07:45	4°☾40'57	

Attention, astronomical year style is used: The year -12669 in astronomical counting style is the year 12670 BCE in historical counting style.

opposition	-12669 Mar 26 j 12:48	3°☾16'22	2°36'42	max. Earth dist.	-12663 Oct 06 j 02:35	17°☾36'09	31.09357 AU
min. Earth dist.	-12669 Mar 25 j 15:07	3°☾17'51	29.14477 AU	morning rise	-12663 Oct 20 j 15:24	18°☾08'47	
direct	-12669 Jun 13 j 02:36	1°☾53'45		retrograde	-12662 Jan 20 j 03:19	20°☾07'14	
evening set	-12669 Sep 07 j 07:08	3°☾46'04		min. Earth dist.	-12662 Apr 10 j 04:31	18°☾44'01	29.08982 AU
				opposition	-12662 Apr 11 j 04:13	18°☾42'24	2°07'52
conjunction	-12669 Sep 22 j 11:36	4°☾20'14	2°25'02	direct	-12662 Jun 28 j 05:46	17°☾19'50	
minimum elong	-12669 Sep 22 j 11:37	4°☾20'14	2°25'50	evening set	-12662 Sep 22 j 04:25	19°☾11'52	
max. Earth dist.	-12669 Sep 23 j 08:51	4°☾22'14	31.13948 AU				
morning rise	-12669 Oct 07 j 19:30	4°☾54'43		conjunction	-12662 Oct 07 j 13:49	19°☾46'26	1°57'23
retrograde	-12668 Jan 06 j 19:46	6°☾52'47		minimum elong	-12662 Oct 07 j 13:49	19°☾46'26	1°58'09
min. Earth dist.	-12668 Mar 27 j 04:02	5°☾29'38	29.13863 AU	max. Earth dist.	-12662 Oct 08 j 13:55	19°☾48'43	31.08280 AU
opposition	-12668 Mar 28 j 01:18	5°☾28'11	2°33'14	morning rise	-12662 Oct 23 j 03:06	20°☾21'22	
direct	-12668 Jun 14 j 11:49	4°☾05'36		retrograde	-12661 Jan 22 j 15:27	22°☾19'50	
evening set	-12668 Sep 08 j 16:39	5°☾57'53		opposition	-12661 Apr 13 j 16:32	20°☾54'54	2°02'57
				min. Earth dist.	-12661 Apr 12 j 17:31	20°☾56'29	29.07890 AU
conjunction	-12668 Sep 23 j 21:53	6°☾32'06	2°21'41	direct	-12661 Jun 30 j 16:48	19°☾32'18	
minimum elong	-12668 Sep 23 j 21:54	6°☾32'06	2°22'29	evening set	-12661 Sep 24 j 14:33	21°☾24'17	
max. Earth dist.	-12668 Sep 24 j 20:39	6°☾34'15	31.13355 AU				
morning rise	-12668 Oct 09 j 06:21	7°☾06'39		conjunction	-12661 Oct 10 j 00:45	21°☾58'54	1°52'41
retrograde	-12667 Jan 08 j 08:26	9°☾04'48		minimum elong	-12661 Oct 10 j 00:46	21°☾58'54	1°53'25
opposition	-12667 Mar 30 j 13:48	7°☾40'12	2°29'32	max. Earth dist.	-12661 Oct 11 j 01:30	22°☾01'14	31.07210 AU
min. Earth dist.	-12667 Mar 29 j 15:11	7°☾41'44	29.13253 AU	morning rise	-12661 Oct 25 j 14:46	22°☾33'53	
direct	-12667 Jun 16 j 22:19	6°☾17'38		retrograde	-12660 Jan 25 j 03:20	24°☾32'21	
evening set	-12667 Sep 11 j 02:21	8°☾09'54		min. Earth dist.	-12660 Apr 14 j 04:02	23°☾09'03	29.06832 AU
				opposition	-12660 Apr 15 j 04:30	23°☾07'22	1°57'51
conjunction	-12667 Sep 26 j 08:05	8°☾44'10	2°18'07	direct	-12660 Jul 02 j 04:06	21°☾44'42	
minimum elong	-12667 Sep 26 j 08:06	8°☾44'10	2°18'54	evening set	-12660 Sep 26 j 00:49	23°☾36'39	
max. Earth dist.	-12667 Sep 27 j 06:23	8°☾46'17	31.12740 AU				
morning rise	-12667 Oct 11 j 17:28	9°☾18'47		conjunction	-12660 Oct 11 j 11:39	24°☾11'19	1°47'50
retrograde	-12666 Jan 10 j 22:14	11°☾17'02		minimum elong	-12660 Oct 11 j 11:39	24°☾11'19	1°48'35
min. Earth dist.	-12666 Apr 01 j 04:09	9°☾53'56	29.12609 AU	max. Earth dist.	-12660 Oct 12 j 12:20	24°☾13'39	31.06195 AU
opposition	-12666 Apr 02 j 02:28	9°☾52'24	2°25'37	morning rise	-12660 Oct 27 j 02:35	24°☾46'22	
direct	-12666 Jun 19 j 07:27	8°☾29'53		retrograde	-12659 Jan 26 j 14:31	26°☾44'52	
evening set	-12666 Sep 13 j 12:12	10°☾22'07		opposition	-12659 Apr 17 j 16:41	25°☾19'48	1°52'35
				min. Earth dist.	-12659 Apr 16 j 16:42	25°☾21'28	29.05867 AU
conjunction	-12666 Sep 28 j 18:46	10°☾56'27	2°14'21	direct	-12659 Jul 04 j 13:24	23°☾57'07	
minimum elong	-12666 Sep 28 j 18:47	10°☾56'27	2°15'09	evening set	-12659 Sep 28 j 10:54	25°☾49'02	
max. Earth dist.	-12666 Sep 29 j 18:27	10°☾58'41	31.12059 AU				
morning rise	-12666 Oct 14 j 04:45	11°☾31'07		conjunction	-12659 Oct 13 j 22:40	26°☾23'45	1°42'50
retrograde	-12665 Jan 13 j 11:16	13°☾29'26		minimum elong	-12659 Oct 13 j 22:41	26°☾23'45	1°43'32
opposition	-12665 Apr 04 j 14:51	12°☾04'47	2°21'29	max. Earth dist.	-12659 Oct 15 j 00:51	26°☾26'13	31.05297 AU
min. Earth dist.	-12665 Apr 03 j 16:04	12°☾06'20	29.11868 AU	morning rise	-12659 Oct 29 j 14:18	26°☾58'51	
direct	-12665 Jun 21 j 19:45	10°☾42'16		retrograde	-12658 Jan 29 j 02:34	28°☾57'22	
evening set	-12665 Sep 15 j 22:18	12°☾34'29		min. Earth dist.	-12658 Apr 19 j 03:22	27°☾34'02	29.05013 AU
				opposition	-12658 Apr 20 j 04:40	27°☾32'17	1°47'08
conjunction	-12665 Oct 01 j 05:26	13°☾08'52	2°10'23	direct	-12658 Jul 06 j 23:40	26°☾09'35	
minimum elong	-12665 Oct 01 j 05:27	13°☾08'52	2°11'10	evening set	-12658 Sep 30 j 21:25	28°☾01'28	
max. Earth dist.	-12665 Oct 02 j 04:15	13°☾11'01	31.11276 AU				
morning rise	-12665 Oct 16 j 16:20	13°☾43'36		conjunction	-12658 Oct 16 j 09:48	28°☾36'15	1°37'39
retrograde	-12664 Jan 16 j 02:16	15°☾41'59		minimum elong	-12658 Oct 16 j 09:49	28°☾36'15	1°38'23
min. Earth dist.	-12664 Apr 05 j 04:20	14°☾18'51	29.11018 AU	max. Earth dist.	-12658 Oct 17 j 11:27	28°☾38'40	31.04513 AU
opposition	-12664 Apr 06 j 03:23	14°☾17'17	2°17'09	morning rise	-12658 Nov 01 j 02:26	29°☾11'25	
direct	-12664 Jun 23 j 06:30	12°☾54'46			-12658 Nov 24 j 14:32	0°♈	
evening set	-12664 Sep 17 j 08:13	14°☾46'56		retrograde	-12657 Jan 31 j 15:55	1°♏09'58	
					-12657 Apr 13 j 11:43	30°♏	
conjunction	-12664 Oct 02 j 16:09	15°☾21'23	2°06'14	opposition	-12657 Apr 22 j 16:38	29°☾44'51	1°41'32
minimum elong	-12664 Oct 02 j 16:09	15°☾21'23	2°07'01	min. Earth dist.	-12657 Apr 21 j 15:38	29°☾46'34	29.04282 AU
max. Earth dist.	-12664 Oct 03 j 16:00	15°☾23'38	31.10363 AU	direct	-12657 Jul 09 j 08:37	28°☾22'08	
morning rise	-12664 Oct 18 j 03:43	15°☾56'11			-12657 Sep 26 j 20:52	0°♏	
retrograde	-12663 Jan 17 j 13:40	17°☾54'37		evening set	-12657 Oct 03 j 07:51	0°♏14'01	
opposition	-12663 Apr 08 j 15:54	16°☾29'51	2°12'36				
min. Earth dist.	-12663 Apr 07 j 17:04	16°☾31'25	29.10036 AU	conjunction	-12657 Oct 18 j 21:11	0°♏48'52	1°32'20
direct	-12663 Jun 25 j 18:02	15°☾07'19		minimum elong	-12657 Oct 18 j 21:12	0°♏48'52	1°33'02
evening set	-12663 Sep 19 j 18:19	16°☾59'25		max. Earth dist.	-12657 Oct 20 j 00:17	0°♏51'25	31.03836 AU
				morning rise	-12657 Nov 03 j 14:27	1°♏24'06	
conjunction	-12663 Oct 05 j 02:57	17°☾33'55	2°01'53	retrograde	-12656 Feb 03 j 04:30	3°♏22'40	
minimum elong	-12663 Oct 05 j 02:58	17°☾33'55	2°02'40	min. Earth dist.	-12656 Apr 23 j 02:59	1°♏59'19	29.03633 AU

Attention, astronomical year style is used: The year -12656 in astronomical counting style is the year 12657 BCE in historical counting style.

opposition	-12656 Apr 24 j 04:34	1°Ω57'33	1°35'46	conjunction	-12650 Nov 03 j 08:21	16°Ω21'17	0°51'35
direct	-12656 Jul 10 j 20:11	0°Ω34'51		minimum elong	-12650 Nov 03 j 08:22	16°Ω21'17	0°52'09
evening set	-12656 Oct 04 j 18:25	2°Ω26'44		max. Earth dist.	-12650 Nov 04 j 10:50	16°Ω23'46	30.98738 AU
				morning rise	-12650 Nov 19 j 07:06	16°Ω56'55	
conjunction	-12656 Oct 20 j 08:23	3°Ω01'38	1°26'53	retrograde	-12649 Feb 19 j 01:16	18°Ω55'33	
minimum elong	-12656 Oct 20 j 08:24	3°Ω01'38	1°27'34	opposition	-12649 May 10 j 15:36	17°Ω30'17	0°51'47
max. Earth dist.	-12656 Oct 21 j 10:49	3°Ω04'08	31.03235 AU	min. Earth dist.	-12649 May 09 j 15:00	17°Ω32'00	28.98273 AU
morning rise	-12656 Nov 05 j 02:36	3°Ω36'56		direct	-12649 Jul 27 j 00:48	16°Ω07'24	
retrograde	-12655 Feb 04 j 19:12	5°Ω35'33		evening set	-12649 Oct 21 j 01:17	17°Ω59'21	
opposition	-12655 Apr 26 j 16:35	4°Ω10'25	1°29'51				
min. Earth dist.	-12655 Apr 25 j 14:43	4°Ω12'12	29.03049 AU	conjunction	-12649 Nov 05 j 20:34	18°Ω34'39	0°45'23
direct	-12655 Jul 13 j 06:06	2°Ω47'43		minimum elong	-12649 Nov 05 j 20:34	18°Ω34'39	0°45'54
evening set	-12655 Oct 07 j 05:13	4°Ω39'38		max. Earth dist.	-12649 Nov 06 j 21:54	18°Ω37'01	30.97710 AU
				morning rise	-12649 Nov 21 j 20:11	19°Ω10'21	
conjunction	-12655 Oct 22 j 20:02	5°Ω14'36	1°21'17	retrograde	-12648 Feb 21 j 13:44	21°Ω08'57	
minimum elong	-12655 Oct 22 j 20:03	5°Ω14'36	1°21'56	min. Earth dist.	-12648 May 11 j 03:30	19°Ω45'17	28.97252 AU
max. Earth dist.	-12655 Oct 23 j 23:28	5°Ω17'10	31.02660 AU	opposition	-12648 May 12 j 03:18	19°Ω43'37	0°45'06
morning rise	-12655 Nov 07 j 14:58	5°Ω49'57		direct	-12648 Jul 28 j 10:20	18°Ω20'40	
retrograde	-12654 Feb 07 j 07:32	7°Ω48'36		evening set	-12648 Oct 22 j 12:42	20°Ω12'37	
min. Earth dist.	-12654 Apr 28 j 03:06	6°Ω25'14	29.02460 AU				
opposition	-12654 Apr 29 j 04:29	6°Ω23'28	1°23'48	conjunction	-12648 Nov 07 j 08:49	20°Ω47'58	0°39'06
direct	-12654 Jul 15 j 16:57	5°Ω00'47		minimum elong	-12648 Nov 07 j 08:50	20°Ω47'58	0°39'38
evening set	-12654 Oct 09 j 16:15	6°Ω52'42		max. Earth dist.	-12648 Nov 08 j 11:17	20°Ω50'27	30.96709 AU
				morning rise	-12648 Nov 23 j 08:58	21°Ω23'43	
conjunction	-12654 Oct 25 j 07:51	7°Ω27'44	1°15'33	retrograde	-12647 Feb 23 j 01:20	23°Ω22'17	
minimum elong	-12654 Oct 25 j 07:51	7°Ω27'44	1°16'12	opposition	-12647 May 14 j 14:50	21°Ω56'55	0°38'22
max. Earth dist.	-12654 Oct 26 j 10:45	7°Ω30'16	31.02072 AU	min. Earth dist.	-12647 May 13 j 14:45	21°Ω58'36	28.96277 AU
morning rise	-12654 Nov 10 j 03:37	8°Ω03'09		direct	-12647 Jul 30 j 21:58	20°Ω33'54	
retrograde	-12653 Feb 09 j 22:50	10°Ω01'49		evening set	-12647 Oct 25 j 00:29	22°Ω25'54	
opposition	-12653 May 01 j 16:23	8°Ω36'41	1°17'36				
min. Earth dist.	-12653 Apr 30 j 14:33	8°Ω38'29	29.01830 AU	conjunction	-12647 Nov 09 j 21:11	23°Ω01'17	0°32'47
direct	-12653 Jul 18 j 04:51	7°Ω13'59		minimum elong	-12647 Nov 09 j 21:12	23°Ω01'17	0°33'16
evening set	-12653 Oct 12 j 03:30	9°Ω05'56		max. Earth dist.	-12647 Nov 10 j 22:37	23°Ω03'40	30.95790 AU
				morning rise	-12647 Nov 25 j 22:09	23°Ω37'05	
conjunction	-12653 Oct 27 j 19:47	9°Ω41'02	1°09'42	retrograde	-12646 Feb 25 j 15:20	25°Ω35'38	
minimum elong	-12653 Oct 27 j 19:48	9°Ω41'02	1°10'19	min. Earth dist.	-12646 May 16 j 02:07	24°Ω11'55	28.95413 AU
max. Earth dist.	-12653 Oct 28 j 22:36	9°Ω43'33	31.01392 AU	opposition	-12646 May 17 j 02:14	24°Ω10'14	0°31'34
morning rise	-12653 Nov 12 j 16:19	10°Ω16'30		direct	-12646 Aug 02 j 07:45	22°Ω47'10	
retrograde	-12652 Feb 12 j 11:40	12°Ω15'11		evening set	-12646 Oct 27 j 12:19	24°Ω39'12	
min. Earth dist.	-12652 May 02 j 03:41	10°Ω51'45	29.01096 AU				
opposition	-12652 May 03 j 04:19	10°Ω50'02	1°11'18	conjunction	-12646 Nov 12 j 09:47	25°Ω14'39	0°26'24
direct	-12652 Jul 19 j 15:56	9°Ω27'20		minimum elong	-12646 Nov 12 j 09:48	25°Ω14'39	0°26'53
evening set	-12652 Oct 13 j 14:45	11°Ω19'16		max. Earth dist.	-12646 Nov 13 j 12:01	25°Ω17'06	30.94976 AU
				morning rise	-12646 Nov 28 j 11:18	25°Ω50'29	
conjunction	-12652 Oct 29 j 07:54	11°Ω54'25	1°03'45	retrograde	-12645 Feb 28 j 03:32	27°Ω49'02	
minimum elong	-12652 Oct 29 j 07:55	11°Ω54'25	1°04'22	opposition	-12645 May 19 j 13:41	26°Ω23'38	0°24'43
max. Earth dist.	-12652 Oct 30 j 10:39	11°Ω56'56	31.00618 AU	min. Earth dist.	-12645 Aug 18 j 14:00	26°Ω25'17	28.94652 AU
morning rise	-12652 Nov 14 j 05:08	12°Ω29'58		direct	-12645 Aug 04 j 18:34	25°Ω00'32	
retrograde	-12651 Feb 14 j 00:50	14°Ω28'38		evening set	-12645 Oct 30 j 00:14	26°Ω52'38	
opposition	-12651 May 05 j 16:08	13°Ω03'28	1°04'53				
min. Earth dist.	-12651 May 04 j 14:46	13°Ω05'13	29.00251 AU	conjunction	-12645 Nov 14 j 22:19	27°Ω28'07	0°19'59
direct	-12651 Jul 22 j 03:41	11°Ω40'42		minimum elong	-12645 Nov 14 j 22:19	27°Ω28'07	0°20'24
evening set	-12651 Oct 16 j 02:10	13°Ω32'39		max. Earth dist.	-12645 Nov 16 j 00:01	27°Ω30'32	30.94284 AU
				morning rise	-12645 Dec 01 j 00:28	28°Ω04'00	
conjunction	-12651 Oct 31 j 19:57	14°Ω07'51	0°57'43		-12644 Feb 18 j 05:30	0°Ω	
minimum elong	-12651 Oct 31 j 19:58	14°Ω07'51	0°58'17	retrograde	-12644 Mar 01 j 18:46	0°Ω02'33	
max. Earth dist.	-12651 Nov 01 j 21:48	14°Ω10'17	30.99721 AU		-12644 Mar 14 j 07:33	30°Ω	
morning rise	-12651 Nov 16 j 18:06	14°Ω43'27		min. Earth dist.	-12644 May 20 j 00:43	28°Ω38'51	28.94011 AU
	-12651 Nov 24 j 09:54	15°Ω		opposition	-12644 May 21 j 00:58	28°Ω37'09	0°17'50
retrograde	-12650 Feb 16 j 12:55	16°Ω42'07		direct	-12644 Aug 06 j 06:34	27°Ω14'02	
min. Earth dist.	-12650 May 07 j 04:01	15°Ω18'34	28.99298 AU	evening set	-12644 Oct 31 j 12:18	29°Ω06'12	
opposition	-12650 May 08 j 04:05	15°Ω16'54	0°58'22				
	-12650 May 18 j 08:33	15°Ω		conjunction	-12644 Nov 16 j 10:59	29°Ω41'45	0°13'31
direct	-12650 Jul 24 j 13:40	13°Ω54'05		minimum elong	-12644 Nov 16 j 10:59	29°Ω41'45	0°13'57
	-12650 Sep 26 j 06:05	15°Ω		behind sun begin	-12644 Nov 16 j 07:44	29°Ω41'28	
evening set	-12650 Oct 18 j 13:38	15°Ω46'02		behind sun end	-12644 Nov 16 j 14:14	29°Ω42'03	
				max. Earth dist.	-12644 Nov 17 j 12:46	29°Ω44'10	30.93688 AU

Attention, astronomical year style is used: The year -12644 in astronomical counting style is the year 12645 BCE in historical counting style.

	-12644 Nov 24 j 14:10	0° $\mathring{\text{M}}$		evening set	-12638 Nov 14 j 16:36	12° $\mathring{\text{M}}$ 31'16	
morning rise	-12644 Dec 02 j 13:44	0° $\mathring{\text{M}}$ 17'41					
retrograde	-12643 Mar 04 j 07:34	2° $\mathring{\text{M}}$ 16'14		conjunction	-12638 Nov 30 j 18:36	13° $\mathring{\text{M}}$ 07'03	-0°25'31
opposition	-12643 May 23 j 12:21	0° $\mathring{\text{M}}$ 50'51	0°10'54	minimum elong	-12638 Nov 30 j 18:36	13° $\mathring{\text{M}}$ 07'03	0°25'15
min. Earth dist.	-12643 May 22 j 13:15	0° $\mathring{\text{M}}$ 52'28	28.93457 AU	max. Earth dist.	-12638 Dec 01 j 16:13	13° $\mathring{\text{M}}$ 09'04	30.90039 AU
	-12643 Jun 24 j 23:29	30° $\mathring{\text{R}}$ 2		morning rise	-12638 Dec 17 j 00:19	13° $\mathring{\text{M}}$ 43'11	
direct	-12643 Aug 08 j 17:32	29° $\mathring{\text{O}}$ 27'43		retrograde	-12637 Mar 18 j 13:21	15° $\mathring{\text{M}}$ 41'36	
	-12643 Sep 21 j 07:45	0° $\mathring{\text{M}}$		min. Earth dist.	-12637 Jun 05 j 11:58	14° $\mathring{\text{M}}$ 17'41	28.89644 AU
evening set	-12643 Nov 03 j 00:28	1° $\mathring{\text{M}}$ 19'58		opposition	-12637 Jun 06 j 07:53	14° $\mathring{\text{M}}$ 16'17	-0°30'45
				direct	-12637 Aug 22 j 10:08	12° $\mathring{\text{M}}$ 52'52	
conjunction	-12643 Nov 18 j 23:53	1° $\mathring{\text{M}}$ 55'35	0°07'03	evening set	-12637 Nov 17 j 05:37	14° $\mathring{\text{M}}$ 45'35	
minimum elong	-12643 Nov 18 j 23:53	1° $\mathring{\text{M}}$ 55'35	0°07'26				
behind sun begin	-12643 Nov 18 j 17:55	1° $\mathring{\text{M}}$ 55'02		conjunction	-12637 Dec 03 j 08:08	15° $\mathring{\text{M}}$ 21'24	-0°31'56
behind sun end	-12643 Nov 19 j 05:51	1° $\mathring{\text{M}}$ 56'07		minimum elong	-12637 Dec 03 j 08:08	15° $\mathring{\text{M}}$ 21'24	0°31'44
max. Earth dist.	-12643 Nov 20 j 01:37	1° $\mathring{\text{M}}$ 57'59	30.93177 AU	max. Earth dist.	-12637 Dec 04 j 05:59	15° $\mathring{\text{M}}$ 23'26	30.89179 AU
morning rise	-12643 Dec 05 j 03:10	2° $\mathring{\text{M}}$ 31'33		morning rise	-12637 Dec 19 j 14:04	15° $\mathring{\text{M}}$ 57'33	
retrograde	-12642 Mar 06 j 21:36	4° $\mathring{\text{M}}$ 30'06		retrograde	-12636 Mar 20 j 00:24	17° $\mathring{\text{M}}$ 55'54	
opposition	-12642 May 25 j 23:36	3° $\mathring{\text{M}}$ 04'46	0°03'57	opposition	-12636 Jun 07 j 18:56	16° $\mathring{\text{M}}$ 30'32	-0°37'36
min. Earth dist.	-12642 May 24 j 23:53	3° $\mathring{\text{M}}$ 06'25	28.92953 AU	min. Earth dist.	-12636 Jun 07 j 00:00	16° $\mathring{\text{M}}$ 31'52	28.88781 AU
direct	-12642 Aug 11 j 05:20	1° $\mathring{\text{M}}$ 41'37		direct	-12636 Aug 23 j 21:32	15° $\mathring{\text{M}}$ 07'01	
evening set	-12642 Nov 05 j 13:05	3° $\mathring{\text{M}}$ 33'58		evening set	-12636 Nov 18 j 18:46	16° $\mathring{\text{M}}$ 59'48	
conjunction	-12642 Nov 21 j 12:56	4° $\mathring{\text{M}}$ 09'36	0°00'31	conjunction	-12636 Dec 04 j 21:41	17° $\mathring{\text{M}}$ 35'38	-0°38'18
minimum elong	-12642 Nov 21 j 12:56	4° $\mathring{\text{M}}$ 09'36	0°00'53	minimum elong	-12636 Dec 04 j 21:41	17° $\mathring{\text{M}}$ 35'38	0°38'07
behind sun begin	-12642 Nov 21 j 06:24	4° $\mathring{\text{M}}$ 09'01		max. Earth dist.	-12636 Dec 05 j 18:26	17° $\mathring{\text{M}}$ 37'34	30.88340 AU
behind sun end	-12642 Nov 21 j 19:29	4° $\mathring{\text{M}}$ 10'11		morning rise	-12636 Dec 21 j 04:03	18° $\mathring{\text{M}}$ 11'48	
max. Earth dist.	-12642 Nov 22 j 13:36	4° $\mathring{\text{M}}$ 11'55	30.92672 AU	retrograde	-12635 Mar 22 j 14:27	20° $\mathring{\text{M}}$ 10'04	
morning rise	-12642 Dec 07 j 16:50	4° $\mathring{\text{M}}$ 45'37		min. Earth dist.	-12635 Jun 09 j 10:44	18° $\mathring{\text{M}}$ 46'01	28.87974 AU
desc. node	-12642 Dec 19 j 17:37	5° $\mathring{\text{M}}$ 11'15		opposition	-12635 Aug 10 j 05:48	18° $\mathring{\text{M}}$ 44'40	-0°44'23
retrograde	-12641 Mar 09 j 10:49	6° $\mathring{\text{M}}$ 44'10		direct	-12635 Aug 26 j 09:58	17° $\mathring{\text{M}}$ 21'02	
opposition	-12641 May 28 j 10:52	5° $\mathring{\text{M}}$ 18'52	-0°03'01	evening set	-12635 Nov 21 j 08:01	19° $\mathring{\text{M}}$ 13'54	
min. Earth dist.	-12641 May 27 j 12:41	5° $\mathring{\text{M}}$ 20'25	28.92446 AU				
direct	-12641 Aug 13 j 15:20	3° $\mathring{\text{M}}$ 55'42		conjunction	-12635 Dec 07 j 11:20	19° $\mathring{\text{M}}$ 49'46	-0°44'37
evening set	-12641 Nov 08 j 01:42	5° $\mathring{\text{M}}$ 48'08		minimum elong	-12635 Dec 07 j 11:20	19° $\mathring{\text{M}}$ 49'46	0°44'29
				max. Earth dist.	-12635 Dec 08 j 07:53	19° $\mathring{\text{M}}$ 51'41	30.87559 AU
conjunction	-12641 Nov 24 j 02:17	6° $\mathring{\text{M}}$ 23'50	-0°06'06	morning rise	-12635 Dec 23 j 17:59	20° $\mathring{\text{M}}$ 25'57	
minimum elong	-12641 Nov 24 j 02:16	6° $\mathring{\text{M}}$ 23'50	0°05'47	retrograde	-12634 Mar 25 j 02:12	22° $\mathring{\text{M}}$ 24'09	
behind sun begin	-12641 Nov 23 j 20:00	6° $\mathring{\text{M}}$ 23'16		opposition	-12634 Jun 12 j 16:48	20° $\mathring{\text{M}}$ 58'43	-0°51'05
behind sun end	-12641 Nov 24 j 08:33	6° $\mathring{\text{M}}$ 24'24		min. Earth dist.	-12634 Jun 11 j 23:05	20° $\mathring{\text{M}}$ 59'58	28.87253 AU
max. Earth dist.	-12641 Nov 25 j 03:14	6° $\mathring{\text{M}}$ 26'10	30.92147 AU	direct	-12634 Aug 28 j 21:16	19° $\mathring{\text{M}}$ 35'00	
morning rise	-12641 Dec 10 j 06:30	6° $\mathring{\text{M}}$ 59'53		evening set	-12634 Nov 23 j 21:20	21° $\mathring{\text{M}}$ 27'57	
retrograde	-12640 Mar 11 j 00:20	8° $\mathring{\text{M}}$ 58'25					
opposition	-12640 May 29 j 22:08	7° $\mathring{\text{M}}$ 33'08	-0°09'59	conjunction	-12634 Dec 10 j 01:06	22° $\mathring{\text{M}}$ 03'50	-0°50'51
min. Earth dist.	-12640 May 28 j 23:45	7° $\mathring{\text{M}}$ 34'43	28.91881 AU	minimum elong	-12634 Dec 10 j 01:05	22° $\mathring{\text{M}}$ 03'50	0°50'44
direct	-12640 Aug 15 j 02:42	6° $\mathring{\text{M}}$ 09'57		max. Earth dist.	-12634 Dec 10 j 21:17	22° $\mathring{\text{M}}$ 05'43	30.86899 AU
evening set	-12640 Nov 09 j 14:29	8° $\mathring{\text{M}}$ 02'28		morning rise	-12634 Dec 26 j 07:57	22° $\mathring{\text{M}}$ 40'01	
				retrograde	-12633 Mar 27 j 16:17	24° $\mathring{\text{M}}$ 38'09	
conjunction	-12640 Nov 25 j 15:25	8° $\mathring{\text{M}}$ 38'12	-0°12'35	min. Earth dist.	-12633 Mar 14 j 09:10	23° $\mathring{\text{M}}$ 14'01	28.86662 AU
minimum elong	-12640 Nov 25 j 15:25	8° $\mathring{\text{M}}$ 38'12	0°12'16	opposition	-12633 Jun 15 j 03:29	23° $\mathring{\text{M}}$ 12'44	-0°57'44
behind sun begin	-12640 Nov 25 j 11:07	8° $\mathring{\text{M}}$ 37'48		direct	-12633 Aug 31 j 09:42	21° $\mathring{\text{M}}$ 48'56	
behind sun end	-12640 Nov 25 j 19:44	8° $\mathring{\text{M}}$ 38'35		evening set	-12633 Nov 26 j 10:49	23° $\mathring{\text{M}}$ 41'59	
max. Earth dist.	-12640 Nov 26 j 14:41	8° $\mathring{\text{M}}$ 40'22	30.91541 AU				
morning rise	-12640 Dec 11 j 20:18	9° $\mathring{\text{M}}$ 14'17		conjunction	-12633 Dec 12 j 14:47	24° $\mathring{\text{M}}$ 17'53	-0°57'01
retrograde	-12639 Mar 13 j 12:23	11° $\mathring{\text{M}}$ 12'48		minimum elong	-12633 Dec 12 j 14:46	24° $\mathring{\text{M}}$ 17'53	0°56'56
opposition	-12639 Jun 01 j 09:33	9° $\mathring{\text{M}}$ 47'31	-0°16'56	max. Earth dist.	-12633 Dec 13 j 10:01	24° $\mathring{\text{M}}$ 19'41	30.86371 AU
min. Earth dist.	-12639 May 31 j 12:31	9° $\mathring{\text{M}}$ 49'00	28.91233 AU	morning rise	-12633 Dec 28 j 21:56	24° $\mathring{\text{M}}$ 54'06	
direct	-12639 Aug 17 j 12:39	8° $\mathring{\text{M}}$ 24'17		retrograde	-12632 Mar 29 j 05:33	26° $\mathring{\text{M}}$ 52'11	
evening set	-12639 Nov 12 j 03:25	10° $\mathring{\text{M}}$ 16'52		opposition	-12632 Jun 16 j 14:26	25° $\mathring{\text{M}}$ 26'46	-1°04'17
				min. Earth dist.	-12632 Jun 15 j 21:23	25° $\mathring{\text{M}}$ 27'58	28.86221 AU
conjunction	-12639 Nov 28 j 05:03	10° $\mathring{\text{M}}$ 52'38	-0°19'03	direct	-12632 Sep 01 j 20:26	24° $\mathring{\text{M}}$ 02'55	
minimum elong	-12639 Nov 28 j 05:03	10° $\mathring{\text{M}}$ 52'38	0°18'47	evening set	-12632 Nov 28 j 00:05	25° $\mathring{\text{M}}$ 56'05	
max. Earth dist.	-12639 Nov 29 j 04:36	10° $\mathring{\text{M}}$ 54'50	30.90836 AU				
morning rise	-12639 Dec 14 j 10:12	11° $\mathring{\text{M}}$ 28'45		conjunction	-12632 Dec 14 j 04:32	26° $\mathring{\text{M}}$ 32'01	-1°03'06
retrograde	-12638 Mar 15 j 23:38	13° $\mathring{\text{M}}$ 27'13		minimum elong	-12632 Dec 14 j 04:31	26° $\mathring{\text{M}}$ 32'01	1°03'02
opposition	-12638 Jun 03 j 20:41	12° $\mathring{\text{M}}$ 01'56	-0°23'52	max. Earth dist.	-12632 Dec 15 j 00:10	26° $\mathring{\text{M}}$ 33'51	30.86000 AU
min. Earth dist.	-12638 Jun 03 j 00:09	12° $\mathring{\text{M}}$ 03'23	28.90472 AU	morning rise	-12632 Dec 30 j 11:47	27° $\mathring{\text{M}}$ 08'14	
direct	-12638 Aug 20 j 00:12	10° $\mathring{\text{M}}$ 38'36		retrograde	-12631 Mar 31 j 18:49	29° $\mathring{\text{M}}$ 06'16	

Attention, astronomical year style is used: The year -12631 in astronomical counting style is the year 12632 BCE in historical counting style.

min. Earth dist.	-12631 Jun 18 j 07:47	27° <u>17</u> 42'08	28.85912 AU	conjunction	-12625 Dec 31 j 08:44	12° <u>15</u> 15'17	-1°42'37
opposition	-12631 Jun 19 j 01:11	27° <u>17</u> 40'54	-1°10'44	minimum elong	-12625 Dec 31 j 08:42	12° <u>15</u> 15'16	1°42'48
direct	-12631 Sep 04 j 08:37	26° <u>17</u> 17'02		max. Earth dist.	-12625 Dec 31 j 21:17	12° <u>16</u> 16'27	30.84356 AU
evening set	-12631 Nov 30 j 13:52	28° <u>17</u> 10'19		morning rise	-12624 Jan 16 j 16:24	12° <u>15</u> 51'30	
				retrograde	-12624 Apr 16 j 11:18	14° <u>15</u> 49'14	
conjunction	-12631 Dec 16 j 18:27	28° <u>17</u> 46'16	-1°09'06	opposition	-12624 Jul 04 j 04:31	13° <u>15</u> 24'11	-1°52'31
minimum elong	-12631 Dec 16 j 18:26	28° <u>17</u> 46'16	1°09'05	min. Earth dist.	-12624 Jul 03 j 17:17	13° <u>15</u> 24'59	28.84258 AU
max. Earth dist.	-12631 Dec 17 j 12:32	28° <u>17</u> 47'57	30.85746 AU	direct	-12624 Sep 19 j 15:34	11° <u>15</u> 59'58	
morning rise	-12630 Jan 02 j 02:01	29° <u>17</u> 22'30		evening set	-12624 Dec 16 j 17:20	13° <u>15</u> 54'14	
	-12630 Jan 20 j 01:04	0° <u>15</u>					
retrograde	-12630 Apr 03 j 07:15	1° <u>15</u> 20'31		conjunction	-12623 Jan 01 j 23:08	14° <u>15</u> 30'16	-1°47'43
	-12630 Jun 18 j 16:12	30° <u>15</u>		minimum elong	-12623 Jan 01 j 23:06	14° <u>15</u> 30'16	1°47'54
opposition	-12630 Jun 21 j 11:58	29° <u>15</u> 55'12	-1°17'06	max. Earth dist.	-12623 Jan 02 j 10:18	14° <u>15</u> 31'18	30.83949 AU
min. Earth dist.	-12630 Jun 20 j 19:49	29° <u>15</u> 56'20	28.85719 AU	morning rise	-12623 Jan 18 j 06:50	15° <u>15</u> 06'28	
direct	-12630 Sep 06 j 18:30	28° <u>15</u> 31'18		retrograde	-12623 Apr 19 j 00:19	17° <u>15</u> 04'07	
	-12630 Nov 21 j 12:01	0° <u>15</u>		opposition	-12623 Jul 06 j 15:15	15° <u>15</u> 39'04	-1°57'52
evening set	-12630 Dec 03 j 03:40	0° <u>15</u> 24'44		min. Earth dist.	-12623 Jul 06 j 05:48	15° <u>15</u> 39'44	28.83874 AU
				direct	-12623 Sep 22 j 03:37	14° <u>15</u> 14'45	
conjunction	-12630 Dec 19 j 08:40	1° <u>15</u> 00'42	-1°15'00	evening set	-12623 Dec 19 j 07:48	16° <u>15</u> 09'08	
minimum elong	-12630 Dec 19 j 08:39	1° <u>15</u> 00'42	1°14'59				
max. Earth dist.	-12630 Dec 20 j 03:09	1° <u>15</u> 02'26	30.85580 AU	conjunction	-12622 Jan 04 j 13:48	16° <u>15</u> 45'10	-1°52'38
morning rise	-12629 Jan 04 j 16:10	1° <u>15</u> 36'56		minimum elong	-12622 Jan 04 j 13:47	16° <u>15</u> 45'10	1°52'52
retrograde	-12629 Apr 05 j 19:11	3° <u>15</u> 34'55		max. Earth dist.	-12622 Jan 05 j 00:45	16° <u>15</u> 46'11	30.83584 AU
opposition	-12629 Jun 23 j 22:43	2° <u>15</u> 09'41	-1°23'21	morning rise	-12622 Jan 20 j 21:19	17° <u>15</u> 21'21	
min. Earth dist.	-12629 Jun 23 j 07:04	2° <u>15</u> 10'48	28.85576 AU	retrograde	-12622 Apr 21 j 13:09	19° <u>15</u> 18'53	
direct	-12629 Sep 09 j 05:49	0° <u>15</u> 45'47		opposition	-12622 Jul 09 j 01:40	17° <u>15</u> 53'52	-2°03'03
evening set	-12629 Dec 05 j 17:38	2° <u>15</u> 39'22		min. Earth dist.	-12622 Jul 08 j 16:12	17° <u>15</u> 54'32	28.83549 AU
				direct	-12622 Sep 24 j 17:11	16° <u>15</u> 29'28	
conjunction	-12629 Dec 21 j 22:40	3° <u>15</u> 15'21	-1°20'47	evening set	-12622 Dec 21 j 22:26	18° <u>15</u> 23'58	
minimum elong	-12629 Dec 21 j 22:39	3° <u>15</u> 15'21	1°20'50				
max. Earth dist.	-12629 Dec 22 j 15:11	3° <u>15</u> 16'53	30.85444 AU	conjunction	-12621 Jan 07 j 04:18	18° <u>15</u> 59'59	-1°57'23
morning rise	-12628 Jan 07 j 06:24	3° <u>15</u> 51'35		minimum elong	-12621 Jan 07 j 04:17	18° <u>15</u> 59'59	1°57'38
retrograde	-12628 Apr 07 j 08:54	5° <u>15</u> 49'33		max. Earth dist.	-12621 Jan 07 j 13:33	19° <u>15</u> 00'51	30.83298 AU
opposition	-12628 Jun 25 j 09:31	4° <u>15</u> 24'23	-1°29'28	morning rise	-12621 Jan 23 j 11:50	19° <u>15</u> 36'10	
min. Earth dist.	-12628 Jun 24 j 18:37	4° <u>15</u> 25'26	28.85449 AU	retrograde	-12621 Apr 24 j 01:41	21° <u>15</u> 33'36	
direct	-12628 Sep 10 j 15:27	3° <u>15</u> 00'26		opposition	-12621 Jul 11 j 12:19	20° <u>15</u> 08'35	-2°08'02
evening set	-12628 Dec 07 j 07:46	4° <u>15</u> 54'11		min. Earth dist.	-12621 Jul 11 j 04:05	20° <u>15</u> 09'10	28.83342 AU
				direct	-12621 Sep 27 j 03:56	18° <u>15</u> 44'07	
conjunction	-12628 Dec 23 j 13:06	5° <u>15</u> 30'11	-1°26'27	evening set	-12621 Dec 24 j 12:44	20° <u>15</u> 38'44	
minimum elong	-12628 Dec 23 j 13:05	5° <u>15</u> 30'11	1°26'30				
max. Earth dist.	-12628 Dec 24 j 05:30	5° <u>15</u> 31'43	30.85282 AU	conjunction	-12620 Jan 09 j 18:47	21° <u>15</u> 14'45	-2°01'58
morning rise	-12627 Jan 08 j 20:44	6° <u>15</u> 06'26		minimum elong	-12620 Jan 09 j 18:46	21° <u>15</u> 14'45	2°02'15
retrograde	-12627 Apr 09 j 19:57	8° <u>15</u> 04'22		max. Earth dist.	-12620 Jan 10 j 04:28	21° <u>15</u> 15'39	30.83144 AU
opposition	-12627 Jun 27 j 20:18	6° <u>15</u> 39'15	-1°35'27	morning rise	-12620 Jan 26 j 01:59	21° <u>15</u> 50'54	
min. Earth dist.	-12627 Jun 27 j 06:48	6° <u>15</u> 40'12	28.85264 AU	retrograde	-12620 Apr 25 j 14:02	23° <u>15</u> 48'15	
direct	-12627 Sep 13 j 02:37	5° <u>15</u> 15'16		opposition	-12620 Jul 12 j 22:50	22° <u>15</u> 23'17	-2°12'49
evening set	-12627 Dec 09 j 22:07	7° <u>15</u> 09'10		min. Earth dist.	-12620 Jul 12 j 14:58	22° <u>15</u> 23'51	28.83264 AU
				direct	-12620 Sep 28 j 16:17	20° <u>15</u> 58'45	
conjunction	-12627 Dec 26 j 03:35	7° <u>15</u> 45'10	-1°31'59	evening set	-12620 Dec 26 j 03:22	22° <u>15</u> 53'30	
minimum elong	-12627 Dec 26 j 03:34	7° <u>15</u> 45'10	1°32'05				
max. Earth dist.	-12627 Dec 26 j 18:04	7° <u>15</u> 46'31	30.85060 AU	conjunction	-12619 Jan 11 j 09:16	23° <u>15</u> 29'31	-2°06'21
morning rise	-12626 Jan 11 j 11:22	8° <u>15</u> 21'25		minimum elong	-12619 Jan 11 j 09:14	23° <u>15</u> 29'31	2°06'39
retrograde	-12626 Apr 12 j 09:46	10° <u>15</u> 19'18		max. Earth dist.	-12619 Jan 11 j 17:03	23° <u>15</u> 30'14	30.83139 AU
opposition	-12626 Jun 30 j 07:05	8° <u>15</u> 54'13	-1°41'18	morning rise	-12619 Jan 27 j 16:29	24° <u>15</u> 05'39	
min. Earth dist.	-12626 Jun 29 j 17:58	8° <u>15</u> 55'09	28.85002 AU	retrograde	-12619 Apr 28 j 02:49	26° <u>15</u> 02'55	
direct	-12626 Sep 15 j 15:07	7° <u>15</u> 30'10		opposition	-12619 Jul 15 j 09:16	24° <u>15</u> 38'00	-2°17'25
evening set	-12626 Dec 12 j 12:34	9° <u>15</u> 24'13		min. Earth dist.	-12619 Jul 15 j 01:55	24° <u>15</u> 38'32	28.83349 AU
				direct	-12619 Oct 01 j 02:30	23° <u>15</u> 13'25	
conjunction	-12626 Dec 28 j 18:10	10° <u>15</u> 00'14	-1°37'23	evening set	-12619 Dec 28 j 18:00	25° <u>15</u> 08'18	
minimum elong	-12626 Dec 28 j 18:09	10° <u>15</u> 00'13	1°37'30				
max. Earth dist.	-12626 Dec 29 j 07:51	10° <u>15</u> 01'30	30.84734 AU	conjunction	-12618 Jan 14 j 00:02	25° <u>15</u> 44'19	-2°10'33
morning rise	-12625 Jan 14 j 01:52	10° <u>15</u> 36'27		minimum elong	-12618 Jan 14 j 00:01	25° <u>15</u> 44'19	2°10'53
retrograde	-12625 Apr 14 j 21:16	12° <u>15</u> 34'17		max. Earth dist.	-12618 Jan 14 j 07:59	25° <u>15</u> 45'04	30.83276 AU
opposition	-12625 Jul 02 j 17:54	11° <u>15</u> 09'14	-1°47'00	morning rise	-12618 Jan 30 j 06:55	26° <u>15</u> 20'27	
min. Earth dist.	-12625 Jul 02 j 06:44	11° <u>15</u> 10'01	28.84649 AU	retrograde	-12618 Apr 30 j 13:09	28° <u>15</u> 17'38	
direct	-12625 Sep 18 j 02:26	9° <u>15</u> 45'06		opposition	-12618 Jul 17 j 19:51	26° <u>15</u> 52'48	-2°21'48
evening set	-12625 Dec 15 j 02:57	11° <u>15</u> 39'15		min. Earth dist.	-12618 Jul 17 j 13:39	26° <u>15</u> 53'14	28.83552 AU

Attention, astronomical year style is used: The year -12618 in astronomical counting style is the year 12619 BCE in historical counting style.

direct	-12618 Oct 03 j 14:06	25° <u>♂</u> 28'10		conjunction	-12611 Jan 30 j 08:08	11° <u>♂</u> 30'30	-2°34'03
evening set	-12618 Dec 31 j 08:48	27° <u>♂</u> 23'13		minimum elong	-12611 Jan 30 j 08:07	11° <u>♂</u> 30'30	2°34'34
				max. Earth dist.	-12611 Jan 30 j 07:44	11° <u>♂</u> 30'28	30.84758 AU
conjunction	-12617 Jan 16 j 14:39	27° <u>♂</u> 59'13	-2°14'33	morning rise	-12611 Feb 15 j 13:14	12° <u>♂</u> 06'27	
minimum elong	-12617 Jan 16 j 14:38	27° <u>♂</u> 59'13	2°14'55	retrograde	-12611 May 16 j 05:20	14° <u>♂</u> 03'00	
max. Earth dist.	-12617 Jan 16 j 20:54	27° <u>♂</u> 59'48	30.83533 AU	opposition	-12611 Aug 01 j 21:57	12° <u>♂</u> 38'38	-2°46'06
morning rise	-12617 Feb 01 j 21:27	28° <u>♂</u> 35'20		min. Earth dist.	-12611 Aug 01 j 23:02	12° <u>♂</u> 38'33	28.84971 AU
	-12617 Mar 19 j 11:40	0° <u>♂</u>		direct	-12611 Oct 19 j 05:04	11° <u>♂</u> 13'39	
retrograde	-12617 May 03 j 02:09	0° <u>♂</u> 32'27		evening set	-12610 Jan 16 j 17:51	13° <u>♂</u> 09'39	
	-12617 Jun 17 j 07:03	30° <u>♂</u>					
opposition	-12617 Jul 20 j 06:18	29° <u>♂</u> 07'42	-2°25'58	conjunction	-12610 Feb 01 j 23:00	13° <u>♂</u> 45'35	-2°36'30
min. Earth dist.	-12617 Jul 20 j 00:15	29° <u>♂</u> 08'08	28.83859 AU	minimum elong	-12610 Feb 01 j 22:59	13° <u>♂</u> 45'35	2°37'03
direct	-12617 Oct 06 j 01:39	27° <u>♂</u> 43'03		max. Earth dist.	-12610 Feb 01 j 20:17	13° <u>♂</u> 45'20	30.84756 AU
evening set	-12616 Jan 02 j 23:37	29° <u>♂</u> 38'16		morning rise	-12610 Feb 18 j 03:58	14° <u>♂</u> 21'31	
	-12616 Jan 12 j 20:10	0° <u>♂</u>			-12610 Mar 08 j 15:22	15° <u>♂</u>	
				retrograde	-12610 May 18 j 17:43	16° <u>♂</u> 17'55	
conjunction	-12616 Jan 19 j 05:28	0° <u>♂</u> 14'15	-2°18'20		-12610 Jul 31 j 14:29	15° <u>♂</u>	
minimum elong	-12616 Jan 19 j 05:27	0° <u>♂</u> 14'15	2°18'44	opposition	-12610 Aug 04 j 08:29	14° <u>♂</u> 53'35	-2°48'36
max. Earth dist.	-12616 Jan 19 j 11:18	0° <u>♂</u> 14'48	30.83853 AU	min. Earth dist.	-12610 Aug 04 j 10:22	14° <u>♂</u> 53'27	28.84991 AU
morning rise	-12616 Feb 04 j 11:56	0° <u>♂</u> 50'21		direct	-12610 Oct 21 j 16:41	13° <u>♂</u> 28'30	
retrograde	-12616 May 04 j 13:29	2° <u>♂</u> 47'24			-12609 Jan 07 j 18:03	15° <u>♂</u>	
opposition	-12616 Jul 21 j 16:55	1° <u>♂</u> 22'44	-2°29'54	evening set	-12609 Jan 19 j 08:41	15° <u>♂</u> 24'37	
min. Earth dist.	-12616 Jul 21 j 12:47	1° <u>♂</u> 23'02	28.84206 AU				
	-12616 Sep 26 j 22:07	30° <u>♂</u>		conjunction	-12609 Feb 04 j 13:49	16° <u>♂</u> 00'32	-2°38'43
direct	-12616 Oct 07 j 12:03	29° <u>♂</u> 58'04		minimum elong	-12609 Feb 04 j 13:47	16° <u>♂</u> 00'32	2°39'17
	-12616 Oct 18 j 05:18	0° <u>♂</u>		max. Earth dist.	-12609 Feb 04 j 11:11	16° <u>♂</u> 00'17	30.84782 AU
evening set	-12615 Jan 04 j 14:29	1° <u>♂</u> 53'26		morning rise	-12609 Feb 20 j 18:16	16° <u>♂</u> 36'26	
				retrograde	-12609 May 21 j 03:49	18° <u>♂</u> 32'43	
conjunction	-12615 Jan 20 j 20:17	2° <u>♂</u> 29'25	-2°21'55	opposition	-12609 Aug 06 j 19:01	17° <u>♂</u> 08'25	-2°50'50
minimum elong	-12615 Jan 20 j 20:16	2° <u>♂</u> 29'25	2°22'20	min. Earth dist.	-12609 Aug 06 j 22:08	17° <u>♂</u> 08'12	28.85058 AU
max. Earth dist.	-12615 Jan 21 j 00:45	2° <u>♂</u> 29'50	30.84194 AU	direct	-12609 Oct 24 j 05:09	15° <u>♂</u> 43'16	
morning rise	-12615 Feb 06 j 02:35	3° <u>♂</u> 05'29		evening set	-12608 Jan 21 j 23:36	17° <u>♂</u> 39'29	
retrograde	-12615 May 07 j 02:46	5° <u>♂</u> 02'28					
opposition	-12615 Jul 24 j 03:29	3° <u>♂</u> 37'54	-2°33'37	conjunction	-12608 Feb 07 j 04:26	18° <u>♂</u> 15'23	-2°40'41
min. Earth dist.	-12615 Jul 23 j 23:29	3° <u>♂</u> 38'11	28.84528 AU	minimum elong	-12608 Feb 07 j 04:25	18° <u>♂</u> 15'23	2°41'16
direct	-12615 Oct 10 j 01:30	2° <u>♂</u> 13'11		max. Earth dist.	-12608 Feb 06 j 23:59	18° <u>♂</u> 14'58	30.84900 AU
evening set	-12614 Jan 07 j 05:39	4° <u>♂</u> 08'43		morning rise	-12608 Feb 23 j 08:45	18° <u>♂</u> 51'15	
				retrograde	-12608 May 22 j 16:21	20° <u>♂</u> 47'25	
conjunction	-12614 Jan 23 j 11:17	4° <u>♂</u> 44'42	-2°25'17	opposition	-12608 Aug 08 j 05:23	19° <u>♂</u> 23'10	-2°52'49
minimum elong	-12614 Jan 23 j 11:16	4° <u>♂</u> 44'42	2°25'44	min. Earth dist.	-12608 Aug 08 j 08:30	19° <u>♂</u> 22'56	28.85244 AU
max. Earth dist.	-12614 Jan 23 j 14:07	4° <u>♂</u> 44'58	30.84464 AU	direct	-12608 Oct 25 j 16:46	17° <u>♂</u> 57'56	
morning rise	-12614 Feb 08 j 17:20	5° <u>♂</u> 20'44		evening set	-12607 Jan 23 j 14:21	19° <u>♂</u> 54'16	
retrograde	-12614 May 09 j 15:04	7° <u>♂</u> 17'38					
opposition	-12614 Jul 26 j 14:09	5° <u>♂</u> 53'08	-2°37'06	conjunction	-12607 Feb 08 j 19:09	20° <u>♂</u> 30'10	-2°42'25
min. Earth dist.	-12614 Jul 26 j 12:17	5° <u>♂</u> 53'16	28.84771 AU	minimum elong	-12607 Feb 08 j 19:07	20° <u>♂</u> 30'10	2°43'01
direct	-12614 Oct 12 j 13:38	4° <u>♂</u> 28'22		max. Earth dist.	-12607 Feb 08 j 14:34	20° <u>♂</u> 29'44	30.85134 AU
evening set	-12613 Jan 09 j 20:43	6° <u>♂</u> 24'03		morning rise	-12607 Feb 24 j 23:01	21° <u>♂</u> 06'00	
				retrograde	-12607 May 25 j 02:42	23° <u>♂</u> 02'03	
conjunction	-12613 Jan 26 j 02:22	7° <u>♂</u> 00'01	-2°28'26	opposition	-12607 Aug 10 j 15:58	21° <u>♂</u> 37'52	-2°54'32
minimum elong	-12613 Jan 26 j 02:21	7° <u>♂</u> 00'01	2°28'54	min. Earth dist.	-12607 Aug 10 j 20:43	21° <u>♂</u> 37'32	28.85552 AU
max. Earth dist.	-12613 Jan 26 j 04:18	7° <u>♂</u> 00'12	30.84652 AU	direct	-12607 Oct 28 j 03:09	20° <u>♂</u> 12'36	
morning rise	-12613 Feb 11 j 08:04	7° <u>♂</u> 36'01		evening set	-12606 Jan 26 j 05:13	22° <u>♂</u> 09'03	
retrograde	-12613 May 12 j 04:04	9° <u>♂</u> 32'49					
opposition	-12613 Jul 29 j 00:50	8° <u>♂</u> 08'22	-2°40'21	conjunction	-12606 Feb 11 j 09:48	22° <u>♂</u> 44'55	-2°43'53
min. Earth dist.	-12613 Jul 28 j 23:19	8° <u>♂</u> 08'29	28.84908 AU	minimum elong	-12606 Feb 11 j 09:47	22° <u>♂</u> 44'55	2°44'31
direct	-12613 Oct 15 j 03:46	6° <u>♂</u> 43'33		max. Earth dist.	-12606 Feb 11 j 04:04	22° <u>♂</u> 44'23	30.85513 AU
evening set	-12612 Jan 12 j 11:44	8° <u>♂</u> 39'21		morning rise	-12606 Feb 27 j 13:25	23° <u>♂</u> 20'45	
				retrograde	-12606 May 27 j 14:35	25° <u>♂</u> 16'41	
conjunction	-12612 Jan 28 j 17:07	9° <u>♂</u> 15'18	-2°31'21	opposition	-12606 Aug 13 j 02:20	23° <u>♂</u> 52'35	-2°55'58
minimum elong	-12612 Jan 28 j 17:06	9° <u>♂</u> 15'18	2°31'51	min. Earth dist.	-12606 Aug 13 j 06:47	23° <u>♂</u> 52'16	28.85997 AU
max. Earth dist.	-12612 Jan 28 j 16:54	9° <u>♂</u> 15'17	30.84736 AU	direct	-12606 Oct 30 j 16:47	22° <u>♂</u> 27'16	
morning rise	-12612 Feb 13 j 22:38	9° <u>♂</u> 51'17		evening set	-12605 Jan 28 j 20:04	24° <u>♂</u> 23'52	
retrograde	-12612 May 13 j 16:54	11° <u>♂</u> 47'58					
opposition	-12612 Jul 30 j 11:31	10° <u>♂</u> 23'33	-2°43'21	conjunction	-12605 Feb 14 j 00:27	24° <u>♂</u> 59'43	-2°45'07
min. Earth dist.	-12612 Jul 30 j 11:41	10° <u>♂</u> 23'33	28.84968 AU	minimum elong	-12605 Feb 14 j 00:26	24° <u>♂</u> 59'43	2°45'46
direct	-12612 Oct 16 j 15:22	8° <u>♂</u> 58'39		max. Earth dist.	-12605 Feb 13 j 17:52	24° <u>♂</u> 59'07	30.86015 AU
evening set	-12611 Jan 14 j 02:41	10° <u>♂</u> 54'33		morning rise	-12605 Mar 02 j 03:43	25° <u>♂</u> 35'31	

Attention, astronomical year style is used: The year -12605 in astronomical counting style is the year 12606 BCE in historical counting style.

retrograde	-12605 May 30 j 01:55	27° $\overline{\text{M}}$ 31'22		evening set	-12598 Feb 14 j 03:24	10° $\overline{\text{A}}$ 08'39	
opposition	-12605 Aug 15 j 12:59	26° $\overline{\text{M}}$ 07'21	-2°57'09				
min. Earth dist.	-12605 Aug 15 j 19:01	26° $\overline{\text{M}}$ 06'55	28.86568 AU	conjunction	-12598 Mar 02 j 06:34	10° $\overline{\text{A}}$ 44'25	-2°46'36
direct	-12605 Nov 02 j 04:28	24° $\overline{\text{M}}$ 42'02		minimum elong	-12598 Mar 02 j 06:34	10° $\overline{\text{A}}$ 44'25	2°47'21
evening set	-12604 Jan 31 j 10:40	26° $\overline{\text{M}}$ 38'45		max. Earth dist.	-12598 Mar 01 j 16:29	10° $\overline{\text{A}}$ 43'07	30.89721 AU
				morning rise	-12598 Mar 18 j 07:25	11° $\overline{\text{A}}$ 20'01	
conjunction	-12604 Feb 16 j 14:57	27° $\overline{\text{M}}$ 14'36	-2°46'06	retrograde	-12598 Jun 14 j 13:25	13° $\overline{\text{A}}$ 14'59	
minimum elong	-12604 Feb 16 j 14:57	27° $\overline{\text{M}}$ 14'36	2°46'45	opposition	-12598 Aug 30 j 15:18	11° $\overline{\text{A}}$ 51'29	-2°57'47
max. Earth dist.	-12604 Feb 16 j 07:54	27° $\overline{\text{M}}$ 13'57	30.86634 AU	min. Earth dist.	-12598 Aug 31 j 04:32	11° $\overline{\text{A}}$ 50'32	28.90152 AU
morning rise	-12604 Mar 03 j 17:52	27° $\overline{\text{M}}$ 50'22		direct	-12598 Nov 17 j 21:57	10° $\overline{\text{A}}$ 25'52	
retrograde	-12604 May 31 j 14:23	29° $\overline{\text{M}}$ 46'08		evening set	-12597 Feb 16 j 17:53	12° $\overline{\text{A}}$ 23'10	
opposition	-12604 Aug 16 j 23:27	28° $\overline{\text{M}}$ 22'14	-2°58'03				
min. Earth dist.	-12604 Aug 17 j 05:35	28° $\overline{\text{M}}$ 21'47	28.87210 AU	conjunction	-12597 Mar 04 j 20:47	12° $\overline{\text{A}}$ 58'55	-2°45'48
direct	-12604 Nov 03 j 18:07	26° $\overline{\text{M}}$ 56'54		minimum elong	-12597 Mar 04 j 20:46	12° $\overline{\text{A}}$ 58'55	2°46'34
evening set	-12603 Feb 02 j 01:35	28° $\overline{\text{M}}$ 53'45		max. Earth dist.	-12597 Mar 04 j 05:21	12° $\overline{\text{A}}$ 57'28	30.90071 AU
				morning rise	-12597 Mar 20 j 21:25	13° $\overline{\text{A}}$ 34'29	
conjunction	-12603 Feb 18 j 05:35	29° $\overline{\text{M}}$ 29'36	-2°46'49	retrograde	-12597 Jun 17 j 00:14	15° $\overline{\text{A}}$ 29'16	
minimum elong	-12603 Feb 18 j 05:34	29° $\overline{\text{M}}$ 29'35	2°47'30	opposition	-12597 Sep 02 j 01:51	14° $\overline{\text{A}}$ 05'48	-2°56'48
max. Earth dist.	-12603 Feb 17 j 20:45	29° $\overline{\text{M}}$ 28'46	30.87287 AU	min. Earth dist.	-12597 Sep 02 j 14:48	14° $\overline{\text{A}}$ 04'53	28.90518 AU
	-12603 Mar 03 j 21:43	0° $\overline{\text{A}}$		direct	-12597 Nov 20 j 11:41	12° $\overline{\text{A}}$ 40'07	
morning rise	-12603 Mar 06 j 08:15	0° $\overline{\text{A}}$ 05'20		evening set	-12596 Feb 19 j 08:01	14° $\overline{\text{A}}$ 37'26	
retrograde	-12603 Jun 03 j 03:16	2° $\overline{\text{A}}$ 01'00					
opposition	-12603 Aug 19 j 09:58	0° $\overline{\text{A}}$ 37'11	-2°58'41	conjunction	-12596 Mar 06 j 10:45	15° $\overline{\text{A}}$ 13'11	-2°44'46
min. Earth dist.	-12603 Aug 19 j 17:42	0° $\overline{\text{A}}$ 36'38	28.87875 AU	minimum elong	-12596 Mar 06 j 10:45	15° $\overline{\text{A}}$ 13'11	2°45'31
	-12603 Sep 10 j 22:45	30° $\overline{\text{A}}$		max. Earth dist.	-12596 Mar 05 j 18:47	15° $\overline{\text{A}}$ 11'42	30.90464 AU
direct	-12603 Nov 06 j 05:46	29° $\overline{\text{M}}$ 11'51		morning rise	-12596 Mar 22 j 11:02	15° $\overline{\text{A}}$ 48'43	
	-12603 Dec 31 j 09:51	0° $\overline{\text{A}}$		retrograde	-12596 Jun 18 j 10:21	17° $\overline{\text{A}}$ 43'22	
evening set	-12602 Feb 04 j 16:28	1° $\overline{\text{A}}$ 08'50		opposition	-12596 Sep 03 j 12:31	16° $\overline{\text{A}}$ 19'55	-2°55'34
				min. Earth dist.	-12596 Sep 04 j 03:00	16° $\overline{\text{A}}$ 18'53	28.90959 AU
conjunction	-12602 Feb 20 j 20:25	1° $\overline{\text{A}}$ 44'40	-2°47'17	direct	-12596 Nov 21 j 23:01	14° $\overline{\text{A}}$ 54'10	
minimum elong	-12602 Feb 20 j 20:24	1° $\overline{\text{A}}$ 44'40	2°47'58	evening set	-12595 Feb 20 j 22:11	16° $\overline{\text{A}}$ 51'32	
max. Earth dist.	-12602 Feb 20 j 11:22	1° $\overline{\text{A}}$ 43'49	30.87930 AU	max. Earth dist.	-12595 Mar 08 j 08:22	17° $\overline{\text{A}}$ 25'43	30.90963 AU
morning rise	-12602 Mar 08 j 22:36	2° $\overline{\text{A}}$ 20'23					
retrograde	-12602 Jun 05 j 16:04	4° $\overline{\text{A}}$ 15'55		conjunction	-12595 Mar 09 j 00:47	17° $\overline{\text{A}}$ 27'15	-2°43'28
opposition	-12602 Aug 21 j 20:39	2° $\overline{\text{A}}$ 52'13	-2°59'03	minimum elong	-12595 Mar 09 j 00:46	17° $\overline{\text{A}}$ 27'15	2°44'15
min. Earth dist.	-12602 Aug 22 j 05:19	2° $\overline{\text{A}}$ 51'36	28.88483 AU	morning rise	-12595 Mar 25 j 00:45	18° $\overline{\text{A}}$ 02'46	
direct	-12602 Nov 08 j 20:27	1° $\overline{\text{A}}$ 26'52		retrograde	-12595 Jun 20 j 21:27	19° $\overline{\text{A}}$ 57'15	
evening set	-12601 Feb 07 j 07:20	3° $\overline{\text{A}}$ 23'57		opposition	-12595 Sep 05 j 22:59	18° $\overline{\text{A}}$ 33'52	-2°54'03
				min. Earth dist.	-12595 Sep 06 j 13:14	18° $\overline{\text{A}}$ 32'51	28.91508 AU
conjunction	-12601 Feb 23 j 10:54	3° $\overline{\text{A}}$ 59'45	-2°47'29	direct	-12595 Nov 24 j 12:33	17° $\overline{\text{A}}$ 08'03	
minimum elong	-12601 Feb 23 j 10:54	3° $\overline{\text{A}}$ 59'45	2°48'12	evening set	-12594 Feb 23 j 12:24	19° $\overline{\text{A}}$ 05'29	
max. Earth dist.	-12601 Feb 22 j 23:31	3° $\overline{\text{A}}$ 58'42	30.88498 AU				
morning rise	-12601 Mar 11 j 12:53	4° $\overline{\text{A}}$ 35'27		conjunction	-12594 Mar 11 j 14:41	19° $\overline{\text{A}}$ 41'11	-2°41'56
retrograde	-12601 Jun 08 j 04:19	6° $\overline{\text{A}}$ 30'52		minimum elong	-12594 Mar 11 j 14:41	19° $\overline{\text{A}}$ 41'11	2°42'42
opposition	-12601 Aug 24 j 07:21	5° $\overline{\text{A}}$ 07'14	-2°59'08	max. Earth dist.	-12594 Mar 10 j 21:06	19° $\overline{\text{A}}$ 39'33	30.91582 AU
min. Earth dist.	-12601 Aug 24 j 16:53	5° $\overline{\text{A}}$ 06'33	28.89016 AU	morning rise	-12594 Mar 27 j 14:21	20° $\overline{\text{A}}$ 16'41	
direct	-12601 Nov 11 j 08:50	3° $\overline{\text{A}}$ 41'50		retrograde	-12594 Jun 23 j 09:06	22° $\overline{\text{A}}$ 11'02	
evening set	-12600 Feb 09 j 22:03	5° $\overline{\text{A}}$ 39'00		opposition	-12594 Sep 08 j 09:42	20° $\overline{\text{A}}$ 47'42	-2°52'16
				min. Earth dist.	-12594 Sep 09 j 00:54	20° $\overline{\text{A}}$ 46'38	28.92205 AU
conjunction	-12600 Feb 26 j 01:37	6° $\overline{\text{A}}$ 14'48	-2°47'27	direct	-12594 Nov 27 j 00:33	19° $\overline{\text{A}}$ 21'53	
minimum elong	-12600 Feb 26 j 01:36	6° $\overline{\text{A}}$ 14'48	2°48'10	evening set	-12593 Feb 26 j 02:14	21° $\overline{\text{A}}$ 19'21	
max. Earth dist.	-12600 Feb 25 j 14:03	6° $\overline{\text{A}}$ 13'43	30.88977 AU	max. Earth dist.	-12593 Mar 13 j 11:19	21° $\overline{\text{A}}$ 53'27	30.92354 AU
morning rise	-12600 Mar 13 j 03:05	6° $\overline{\text{A}}$ 50'27					
retrograde	-12600 Jun 09 j 15:10	8° $\overline{\text{A}}$ 45'44		conjunction	-12593 Mar 14 j 04:26	21° $\overline{\text{A}}$ 55'03	-2°40'09
opposition	-12600 Aug 25 j 18:01	7° $\overline{\text{A}}$ 22'10	-2°58'57	minimum elong	-12593 Mar 14 j 04:26	21° $\overline{\text{A}}$ 55'03	2°40'57
min. Earth dist.	-12600 Aug 26 j 05:06	7° $\overline{\text{A}}$ 21'22	28.89450 AU	morning rise	-12593 Mar 30 j 03:41	22° $\overline{\text{A}}$ 30'30	
direct	-12600 Nov 12 j 21:59	5° $\overline{\text{A}}$ 56'42		retrograde	-12593 Jun 25 j 20:36	24° $\overline{\text{A}}$ 24'45	
evening set	-12599 Feb 11 j 12:49	7° $\overline{\text{A}}$ 53'55		opposition	-12593 Sep 10 j 20:23	23° $\overline{\text{A}}$ 01'30	-2°50'14
				min. Earth dist.	-12593 Sep 11 j 11:53	23° $\overline{\text{A}}$ 00'25	28.93032 AU
conjunction	-12599 Feb 27 j 16:04	8° $\overline{\text{A}}$ 29'43	-2°47'09	direct	-12593 Nov 29 j 14:59	21° $\overline{\text{A}}$ 35'42	
minimum elong	-12599 Feb 27 j 16:04	8° $\overline{\text{A}}$ 29'43	2°47'54	evening set	-12592 Feb 28 j 16:16	23° $\overline{\text{A}}$ 33'14	
max. Earth dist.	-12599 Feb 27 j 02:12	8° $\overline{\text{A}}$ 28'25	30.89380 AU				
morning rise	-12599 Mar 15 j 17:25	9° $\overline{\text{A}}$ 05'20		conjunction	-12592 Mar 15 j 18:07	24° $\overline{\text{A}}$ 08'55	-2°38'08
retrograde	-12599 Jun 12 j 03:57	11° $\overline{\text{A}}$ 00'27		minimum elong	-12592 Mar 15 j 18:07	24° $\overline{\text{A}}$ 08'55	2°38'55
opposition	-12599 Aug 28 j 04:36	9° $\overline{\text{A}}$ 36'55	-2°58'30	max. Earth dist.	-12592 Mar 14 j 23:26	24° $\overline{\text{A}}$ 07'10	30.93254 AU
min. Earth dist.	-12599 Aug 28 j 15:59	9° $\overline{\text{A}}$ 36'07	28.89818 AU	morning rise	-12592 Mar 31 j 17:12	24° $\overline{\text{A}}$ 44'21	
direct	-12599 Nov 15 j 10:30	8° $\overline{\text{A}}$ 11'23		retrograde	-12592 Jun 27 j 08:47	26° $\overline{\text{A}}$ 38'29	



Attention, astronomical year style is used: The year -12592 in astronomical counting style is the year 12593 BCE in historical counting style.

opposition	-12592 Sep 12 j 06:54	25° $\mathring{A}$ 15'21	-2°47'57	conjunction	-12585 Apr 01 j 16:47	9° $\mathring{B}$ 46'47	-2°17'32
min. Earth dist.	-12592 Sep 12 j 22:46	25° $\mathring{A}$ 14'14	28.93985 AU	minimum elong	-12585 Apr 01 j 16:48	9° $\mathring{B}$ 46'48	2°18'19
direct	-12592 Dec 01 j 02:53	23° $\mathring{A}$ 49'33		max. Earth dist.	-12585 Mar 31 j 16:49	9° $\mathring{B}$ 44'33	30.99267 AU
evening set	-12591 Mar 02 j 06:08	25° $\mathring{A}$ 47'11		morning rise	-12585 Apr 17 j 13:37	10° $\mathring{B}$ 22'05	
				retrograde	-12585 Jul 13 j 13:00	12° $\mathring{B}$ 15'24	
conjunction	-12591 Mar 18 j 07:58	26° $\mathring{A}$ 22'51	-2°35'52	opposition	-12585 Sep 28 j 11:15	10° $\mathring{B}$ 52'49	-2°25'06
minimum elong	-12591 Mar 18 j 07:59	26° $\mathring{A}$ 22'51	2°36'40	min. Earth dist.	-12585 Sep 29 j 08:36	10° $\mathring{B}$ 51'19	28.99791 AU
max. Earth dist.	-12591 Mar 17 j 13:44	26° $\mathring{A}$ 21'09	30.94244 AU	direct	-12585 Dec 17 j 18:13	9° $\mathring{B}$ 27'00	
morning rise	-12591 Apr 03 j 06:35	26° $\mathring{A}$ 58'16		evening set	-12584 Mar 18 j 05:36	11° $\mathring{B}$ 24'45	
retrograde	-12591 Jun 29 j 19:55	28° $\mathring{A}$ 52'18		max. Earth dist.	-12584 Apr 02 j 06:16	11° $\mathring{B}$ 58'08	30.99927 AU
opposition	-12591 Sep 14 j 17:43	27° $\mathring{A}$ 29'17	-2°45'24				
min. Earth dist.	-12591 Sep 15 j 10:48	27° $\mathring{A}$ 28'05	28.94981 AU	conjunction	-12584 Apr 03 j 05:51	12° $\mathring{B}$ 00'20	-2°13'44
direct	-12591 Dec 03 j 16:13	26° $\mathring{A}$ 03'32		minimum elong	-12584 Apr 03 j 05:52	12° $\mathring{B}$ 00'20	2°14'30
evening set	-12590 Mar 04 j 20:09	28° $\mathring{A}$ 01'13		morning rise	-12584 Apr 19 j 02:19	12° $\mathring{B}$ 35'36	
				retrograde	-12584 Jul 14 j 23:24	14° $\mathring{B}$ 28'46	
conjunction	-12590 Mar 20 j 21:34	28° $\mathring{A}$ 36'53	-2°33'22	opposition	-12584 Sep 29 j 22:04	13° $\mathring{B}$ 06'12	-2°20'57
minimum elong	-12590 Mar 20 j 21:35	28° $\mathring{A}$ 36'53	2°34'09	min. Earth dist.	-12584 Sep 30 j 19:47	13° $\mathring{B}$ 04'41	29.00448 AU
max. Earth dist.	-12590 Mar 20 j 01:29	28° $\mathring{A}$ 35'00	30.95253 AU	direct	-12584 Dec 19 j 08:34	11° $\mathring{B}$ 40'21	
morning rise	-12590 Apr 05 j 20:01	29° $\mathring{A}$ 12'17		evening set	-12583 Mar 20 j 18:50	13° $\mathring{B}$ 38'06	
	-12590 Apr 29 j 02:07	0° $\mathring{B}$					
retrograde	-12590 Jul 02 j 09:00	1° $\mathring{B}$ 06'12		conjunction	-12583 Apr 05 j 18:42	14° $\mathring{B}$ 13'39	-2°09'45
	-12590 Sep 07 j 06:12	30° $\mathring{R}$ $\mathring{A}$		minimum elong	-12583 Apr 05 j 18:43	14° $\mathring{B}$ 13'39	2°10'32
opposition	-12590 Sep 17 j 04:29	29° $\mathring{A}$ 43'18	-2°42'36	max. Earth dist.	-12583 Apr 04 j 17:47	14° $\mathring{B}$ 11'19	31.00623 AU
min. Earth dist.	-12590 Sep 17 j 21:34	29° $\mathring{A}$ 42'06	28.95975 AU	morning rise	-12583 Apr 21 j 14:58	14° $\mathring{B}$ 48'54	
direct	-12590 Dec 06 j 04:46	28° $\mathring{A}$ 17'34		retrograde	-12583 Jul 17 j 11:02	16° $\mathring{B}$ 41'57	
	-12589 Feb 28 j 06:56	0° $\mathring{B}$		opposition	-12583 Oct 02 j 09:01	15° $\mathring{B}$ 19'24	-2°16'35
evening set	-12589 Mar 07 j 09:58	0° $\mathring{B}$ 15'19		min. Earth dist.	-12583 Oct 03 j 06:46	15° $\mathring{B}$ 17'53	29.01182 AU
				direct	-12583 Dec 21 j 20:24	13° $\mathring{B}$ 53'32	
conjunction	-12589 Mar 23 j 11:19	0° $\mathring{B}$ 50'58	-2°30'38	evening set	-12582 Mar 23 j 07:41	15° $\mathring{B}$ 51'15	
minimum elong	-12589 Mar 23 j 11:20	0° $\mathring{B}$ 50'58	2°31'26	max. Earth dist.	-12582 Apr 07 j 07:28	16° $\mathring{B}$ 24'33	31.01405 AU
max. Earth dist.	-12589 Mar 22 j 15:15	0° $\mathring{B}$ 49'06	30.96220 AU				
morning rise	-12589 Apr 08 j 09:17	1° $\mathring{B}$ 26'21		conjunction	-12582 Apr 08 j 07:26	16° $\mathring{B}$ 26'47	-2°05'35
retrograde	-12589 Jul 04 j 18:48	3° $\mathring{B}$ 20'11		minimum elong	-12582 Apr 08 j 07:27	16° $\mathring{B}$ 26'47	2°06'20
opposition	-12589 Sep 19 j 15:30	1° $\mathring{B}$ 57'23	-2°39'33	morning rise	-12582 Apr 24 j 03:12	17° $\mathring{B}$ 02'00	
min. Earth dist.	-12589 Sep 20 j 10:22	1° $\mathring{B}$ 56'03	28.96905 AU	retrograde	-12582 Jul 19 j 21:41	18° $\mathring{B}$ 54'55	
direct	-12589 Dec 08 j 16:25	0° $\mathring{B}$ 31'40		opposition	-12582 Oct 04 j 20:06	17° $\mathring{B}$ 32'26	-2°12'02
evening set	-12588 Mar 08 j 23:42	2° $\mathring{B}$ 29'26		min. Earth dist.	-12582 Oct 05 j 18:31	17° $\mathring{B}$ 30'52	29.02007 AU
max. Earth dist.	-12588 Mar 24 j 03:14	3° $\mathring{B}$ 03'04	30.97116 AU	direct	-12582 Dec 24 j 10:49	16° $\mathring{B}$ 06'34	
				evening set	-12581 Mar 25 j 20:36	18° $\mathring{B}$ 04'15	
conjunction	-12588 Mar 25 j 00:45	3° $\mathring{B}$ 05'05	-2°27'41				
minimum elong	-12588 Mar 25 j 00:46	3° $\mathring{B}$ 05'05	2°28'27	conjunction	-12581 Apr 10 j 19:56	18° $\mathring{B}$ 39'46	-2°01'13
morning rise	-12588 Apr 09 j 22:33	3° $\mathring{B}$ 40'26		minimum elong	-12581 Apr 10 j 19:57	18° $\mathring{B}$ 39'46	2°01'59
retrograde	-12588 Jul 06 j 05:40	5° $\mathring{B}$ 34'09		max. Earth dist.	-12581 Apr 09 j 18:45	18° $\mathring{B}$ 37'25	31.02307 AU
opposition	-12588 Sep 21 j 02:22	4° $\mathring{B}$ 11'26	-2°36'17	morning rise	-12581 Apr 26 j 15:33	19° $\mathring{B}$ 14'57	
min. Earth dist.	-12588 Sep 21 j 21:04	4° $\mathring{B}$ 10'07	28.97739 AU	retrograde	-12581 Jul 22 j 10:13	21° $\mathring{B}$ 07'47	
direct	-12588 Dec 10 j 05:50	2° $\mathring{B}$ 45'42		opposition	-12581 Oct 07 j 07:03	19° $\mathring{B}$ 45'20	-2°07'17
evening set	-12587 Mar 11 j 13:27	4° $\mathring{B}$ 43'30		min. Earth dist.	-12581 Oct 08 j 04:45	19° $\mathring{B}$ 43'49	29.02965 AU
				direct	-12581 Dec 27 j 00:07	18° $\mathring{B}$ 19'29	
conjunction	-12587 Mar 27 j 14:20	5° $\mathring{B}$ 19'08	-2°24'30	evening set	-12580 Mar 27 j 09:11	20° $\mathring{B}$ 17'10	
minimum elong	-12587 Mar 27 j 14:21	5° $\mathring{B}$ 19'08	2°25'18	max. Earth dist.	-12580 Apr 11 j 08:03	20° $\mathring{B}$ 50'23	31.03327 AU
max. Earth dist.	-12587 Mar 26 j 16:08	5° $\mathring{B}$ 17'03	30.97901 AU				
morning rise	-12587 Apr 12 j 11:43	5° $\mathring{B}$ 54'28		conjunction	-12580 Apr 12 j 08:26	20° $\mathring{B}$ 52'40	-1°56'41
retrograde	-12587 Jul 08 j 15:46	7° $\mathring{B}$ 48'03		minimum elong	-12580 Apr 12 j 08:26	20° $\mathring{B}$ 52'40	1°57'25
opposition	-12587 Sep 23 j 13:18	6° $\mathring{B}$ 25'23	-2°32'46	morning rise	-12580 Apr 28 j 03:35	21° $\mathring{B}$ 27'50	
min. Earth dist.	-12587 Sep 24 j 09:43	6° $\mathring{B}$ 23'57	28.98478 AU	retrograde	-12580 Jul 23 j 19:39	23° $\mathring{B}$ 20'34	
direct	-12587 Dec 12 j 16:34	4° $\mathring{B}$ 59'38		opposition	-12580 Oct 08 j 18:11	21° $\mathring{B}$ 58'12	-2°02'20
evening set	-12586 Mar 14 j 03:05	6° $\mathring{B}$ 57'26		min. Earth dist.	-12580 Oct 09 j 17:04	21° $\mathring{B}$ 56'36	29.04022 AU
max. Earth dist.	-12586 Mar 29 j 04:52	7° $\mathring{B}$ 30'55	30.98614 AU	direct	-12580 Dec 28 j 12:25	20° $\mathring{B}$ 32'23	
				evening set	-12579 Mar 29 j 21:57	22° $\mathring{B}$ 30'04	
conjunction	-12586 Mar 30 j 03:44	7° $\mathring{B}$ 33'03	-2°21'07				
minimum elong	-12586 Mar 30 j 03:45	7° $\mathring{B}$ 33'03	2°21'54	conjunction	-12579 Apr 14 j 20:47	23° $\mathring{B}$ 05'33	-1°51'58
morning rise	-12586 Apr 15 j 00:51	8° $\mathring{B}$ 08'22		minimum elong	-12579 Apr 14 j 20:48	23° $\mathring{B}$ 05'33	1°52'43
retrograde	-12586 Jul 11 j 02:16	10° $\mathring{B}$ 01'49		max. Earth dist.	-12579 Apr 13 j 19:37	23° $\mathring{B}$ 03'12	31.04439 AU
opposition	-12586 Sep 26 j 00:16	8° $\mathring{B}$ 39'12	-2°29'03	morning rise	-12579 Apr 30 j 15:45	23° $\mathring{B}$ 40'41	
min. Earth dist.	-12586 Sep 26 j 20:35	8° $\mathring{B}$ 37'46	28.99143 AU	retrograde	-12579 Jul 26 j 06:39	25° $\mathring{B}$ 33'20	
direct	-12586 Dec 15 j 05:56	7° $\mathring{B}$ 13'25		opposition	-12579 Oct 11 j 05:11	24° $\mathring{B}$ 11'04	-1°57'12
evening set	-12585 Mar 16 j 16:25	9° $\mathring{B}$ 11'12		min. Earth dist.	-12579 Oct 12 j 03:22	24° $\mathring{B}$ 09'31	29.05142 AU

Attention, astronomical year style is used: The year -12578 in astronomical counting style is the year 12579 BCE in historical counting style.

direct	-12579 Dec 31 j 01:25	22° $\overline{3}$ 45'18		conjunction	-12572 Apr 30 j 09:19	8° $\approx$ 34'56	-1°14'48
evening set	-12578 Apr 01 j 10:37	24° $\overline{3}$ 42'59		minimum elong	-12572 Apr 30 j 09:20	8° $\approx$ 34'56	1°15'25
max. Earth dist.	-12578 Apr 16 j 08:08	25° $\overline{3}$ 16'06	31.05575 AU	morning rise	-12572 May 16 j 01:50	9° $\approx$ 09'55	
				retrograde	-12572 Aug 10 j 10:01	11° $\approx$ 02'05	
conjunction	-12578 Apr 17 j 09:13	25° $\overline{3}$ 18'27	-1°47'06	opposition	-12572 Oct 26 j 12:54	9° $\approx$ 40'06	-1°16'59
minimum elong	-12578 Apr 17 j 09:13	25° $\overline{3}$ 18'27	1°47'48	min. Earth dist.	-12572 Oct 27 j 13:36	9° $\approx$ 38'23	29.11019 AU
morning rise	-12578 May 03 j 03:44	25° $\overline{3}$ 53'34		direct	-12571 Jan 15 j 17:35	8° $\approx$ 14'28	
retrograde	-12578 Jul 28 j 17:09	27° $\overline{3}$ 46'09		evening set	-12571 Apr 17 j 00:40	10° $\approx$ 11'52	
opposition	-12578 Oct 13 j 16:33	26° $\overline{3}$ 23'58	-1°51'54				
min. Earth dist.	-12578 Oct 14 j 15:58	26° $\overline{3}$ 22'20	29.06271 AU	conjunction	-12571 May 02 j 20:53	10° $\approx$ 47'10	-1°09'01
direct	-12577 Jan 02 j 12:08	24° $\overline{3}$ 58'15		minimum elong	-12571 May 02 j 20:54	10° $\approx$ 47'10	1°09'37
evening set	-12577 Apr 03 j 23:05	26° $\overline{3}$ 55'55		max. Earth dist.	-12571 May 01 j 18:06	10° $\approx$ 44'40	31.11224 AU
				morning rise	-12571 May 18 j 12:50	11° $\approx$ 22'06	
conjunction	-12577 Apr 19 j 21:21	27° $\overline{3}$ 31'22	-1°42'03	retrograde	-12571 Aug 12 j 19:12	13° $\approx$ 14'13	
minimum elong	-12577 Apr 19 j 21:22	27° $\overline{3}$ 31'22	1°42'46	opposition	-12571 Oct 29 j 00:26	11° $\approx$ 52'14	-1°10'44
max. Earth dist.	-12577 Apr 18 j 20:02	27° $\overline{3}$ 29'00	31.06691 AU	min. Earth dist.	-12571 Oct 30 j 02:08	11° $\approx$ 50'27	29.11599 AU
morning rise	-12577 May 05 j 15:35	28° $\overline{3}$ 06'28		direct	-12570 Jan 18 j 06:24	10° $\approx$ 26'37	
retrograde	-12577 Jul 31 j 03:13	29° $\overline{3}$ 58'59		evening set	-12570 Apr 19 j 12:29	12° $\approx$ 23'57	
opposition	-12577 Oct 16 j 03:51	28° $\overline{3}$ 36'53	-1°46'26	max. Earth dist.	-12570 May 04 j 05:01	12° $\approx$ 56'40	31.11842 AU
min. Earth dist.	-12577 Oct 17 j 02:58	28° $\overline{3}$ 35'16	29.07332 AU				
direct	-12576 Jan 05 j 01:21	27° $\overline{3}$ 11'13		conjunction	-12570 May 05 j 08:10	12° $\approx$ 59'12	-1°03'08
evening set	-12576 Apr 05 j 11:42	29° $\overline{3}$ 08'51		minimum elong	-12570 May 05 j 08:11	12° $\approx$ 59'12	1°03'42
max. Earth dist.	-12576 Apr 20 j 07:18	29° $\overline{3}$ 41'49	31.07706 AU	morning rise	-12570 May 20 j 23:52	13° $\approx$ 34'07	
					-12570 Jul 07 j 00:10	15° $\approx$	
conjunction	-12576 Apr 21 j 09:36	29° $\overline{3}$ 44'17	-1°36'52	retrograde	-12570 Aug 15 j 05:55	15° $\approx$ 26'09	
minimum elong	-12576 Apr 21 j 09:37	29° $\overline{3}$ 44'17	1°37'32		-12570 Sep 24 j 11:46	15° $\approx$	
	-12576 Apr 28 j 09:48	0° $\approx$		opposition	-12570 Oct 31 j 11:55	14° $\approx$ 04'11	-1°04'24
morning rise	-12576 May 07 j 03:29	0° $\approx$ 19'22		min. Earth dist.	-12570 Nov 01 j 12:21	14° $\approx$ 02'30	29.12244 AU
retrograde	-12576 Aug 01 j 13:42	2° $\approx$ 11'49		direct	-12569 Jan 20 j 19:59	12° $\approx$ 38'35	
opposition	-12576 Oct 17 j 15:08	0° $\approx$ 49'46	-1°40'48	evening set	-12569 Apr 21 j 23:56	14° $\approx$ 35'51	
min. Earth dist.	-12576 Oct 18 j 15:14	0° $\approx$ 48'05	29.08292 AU		-12569 May 02 j 20:51	15° $\approx$	
	-12576 Nov 18 j 12:07	30° $\approx$					
direct	-12575 Jan 06 j 12:37	29° $\overline{3}$ 24'07		conjunction	-12569 May 07 j 19:17	15° $\approx$ 11'06	-0°57'10
	-12575 Feb 23 j 10:33	0° $\approx$		minimum elong	-12569 May 07 j 19:17	15° $\approx$ 11'06	0°57'44
evening set	-12575 Apr 08 j 00:12	1° $\approx$ 21'44		max. Earth dist.	-12569 May 06 j 16:49	15° $\approx$ 08'37	31.12534 AU
				morning rise	-12569 May 23 j 10:29	15° $\approx$ 45'59	
conjunction	-12575 Apr 23 j 21:52	1° $\approx$ 57'09	-1°31'32	retrograde	-12569 Aug 17 j 16:06	17° $\approx$ 37'59	
minimum elong	-12575 Apr 23 j 21:53	1° $\approx$ 57'09	1°32'13	opposition	-12569 Nov 02 j 23:31	16° $\approx$ 16'02	-0°57'58
max. Earth dist.	-12575 Apr 22 j 19:51	1° $\approx$ 54'43	31.08609 AU	min. Earth dist.	-12569 Nov 04 j 00:32	16° $\approx$ 14'18	29.12989 AU
morning rise	-12575 May 09 j 15:19	2° $\approx$ 32'12			-12569 Dec 29 j 14:37	15° $\approx$	
retrograde	-12575 Aug 03 j 23:47	4° $\approx$ 24'35		direct	-12568 Jan 23 j 07:17	14° $\approx$ 50'28	
opposition	-12575 Oct 20 j 02:38	3° $\approx$ 02'34	-1°35'02		-12568 Feb 16 j 15:37	15° $\approx$	
min. Earth dist.	-12575 Oct 21 j 03:08	3° $\approx$ 00'52	29.09111 AU	evening set	-12568 Apr 23 j 11:27	16° $\approx$ 47'41	
direct	-12574 Jan 09 j 02:05	1° $\approx$ 36'57		max. Earth dist.	-12568 May 08 j 04:20	17° $\approx$ 20'27	31.13343 AU
evening set	-12574 Apr 10 j 12:37	3° $\approx$ 34'32					
max. Earth dist.	-12574 Apr 25 j 06:27	4° $\approx$ 07'21	31.09377 AU	conjunction	-12568 May 09 j 06:23	17° $\approx$ 22'53	-0°51'07
				minimum elong	-12568 May 09 j 06:23	17° $\approx$ 22'53	0°51'39
conjunction	-12574 Apr 26 j 09:47	4° $\approx$ 09'54	-1°26'04	morning rise	-12568 May 24 j 21:13	17° $\approx$ 57'45	
minimum elong	-12574 Apr 26 j 09:47	4° $\approx$ 09'54	1°26'44	retrograde	-12568 Aug 19 j 01:12	19° $\approx$ 49'43	
morning rise	-12574 May 12 j 02:58	4° $\approx$ 44'56		opposition	-12568 Nov 04 j 10:53	18° $\approx$ 27'49	-0°51'28
retrograde	-12574 Aug 06 j 11:26	6° $\approx$ 37'15		min. Earth dist.	-12568 Nov 05 j 10:52	18° $\approx$ 26'10	29.13832 AU
opposition	-12574 Oct 22 j 14:06	5° $\approx$ 15'15	-1°29'08	direct	-12567 Jan 24 j 20:25	17° $\approx$ 02'18	
min. Earth dist.	-12574 Oct 23 j 14:40	5° $\approx$ 13'33	29.09823 AU	evening set	-12567 Apr 25 j 22:57	18° $\approx$ 59'29	
direct	-12573 Jan 11 j 13:41	3° $\approx$ 49'38					
evening set	-12573 Apr 13 j 00:46	5° $\approx$ 47'10		conjunction	-12567 May 11 j 17:23	19° $\approx$ 34'40	-0°44'59
				minimum elong	-12567 May 11 j 17:24	19° $\approx$ 34'40	0°45'31
conjunction	-12573 Apr 28 j 21:45	6° $\approx$ 22'31	-1°20'30	max. Earth dist.	-12567 May 10 j 15:11	19° $\approx$ 32'12	31.14241 AU
minimum elong	-12573 Apr 28 j 21:45	6° $\approx$ 22'31	1°21'09	morning rise	-12567 May 27 j 07:49	20° $\approx$ 09'30	
max. Earth dist.	-12573 Apr 27 j 19:15	6° $\approx$ 20'02	31.10045 AU	retrograde	-12567 Aug 21 j 11:13	22° $\approx$ 01'28	
morning rise	-12573 May 14 j 14:26	6° $\approx$ 57'31		opposition	-12567 Nov 06 j 22:33	20° $\approx$ 39'37	-0°44'52
retrograde	-12573 Aug 08 j 21:49	8° $\approx$ 49'45		min. Earth dist.	-12567 Nov 07 j 22:44	20° $\approx$ 37'57	29.14771 AU
opposition	-12573 Oct 25 j 01:33	7° $\approx$ 27'46	-1°23'07	direct	-12566 Jan 27 j 06:47	19° $\approx$ 14'10	
min. Earth dist.	-12573 Oct 26 j 02:57	7° $\approx$ 26'01	29.10441 AU	evening set	-12566 Apr 28 j 10:11	21° $\approx$ 11'18	
direct	-12572 Jan 14 j 04:04	6° $\approx$ 02'09		max. Earth dist.	-12566 May 13 j 03:14	21° $\approx$ 44'07	31.15211 AU
evening set	-12572 Apr 14 j 12:51	7° $\approx$ 59'37					
max. Earth dist.	-12572 Apr 29 j 05:35	8° $\approx$ 32'21	31.10649 AU	conjunction	-12566 May 14 j 04:15	21° $\approx$ 46'28	-0°38'47
				minimum elong	-12566 May 14 j 04:15	21° $\approx$ 46'28	0°39'17

Attention, astronomical year style is used: The year -12566 in astronomical counting style is the year 12567 BCE in historical counting style.

morning rise	-12566 May 29 j 18:11	22° $\approx$ 21'16		behind sun end	-12560 May 27 j 02:32	4° $\mathbb{H}$ 57'31	
retrograde	-12566 Aug 23 j 20:47	24° $\approx$ 13'16		max. Earth dist.	-12560 May 25 j 19:30	4° $\mathbb{H}$ 54'38	31.19576 AU
opposition	-12566 Nov 09 j 10:20	22° $\approx$ 51'27	-0°38'13	morning rise	-12560 Jun 11 j 07:20	5° $\mathbb{H}$ 31'33	
min. Earth dist.	-12566 Nov 10 j 10:16	22° $\approx$ 49'48	29.15734 AU	asc. node	-12560 Jul 11 j 17:33	6° $\mathbb{H}$ 32'21	
direct	-12565 Jan 29 j 18:43	21° $\approx$ 26'05		retrograde	-12560 Sep 05 j 14:35	7° $\mathbb{H}$ 23'35	
evening set	-12565 Apr 30 j 21:34	23° $\approx$ 23'11		opposition	-12560 Nov 22 j 09:49	6° $\mathbb{H}$ 01'46	0°02'29
				min. Earth dist.	-12560 Nov 23 j 09:37	6° $\mathbb{H}$ 00'09	29.19812 AU
conjunction	-12565 May 16 j 15:01	23° $\approx$ 58'18	-0°32'32	direct	-12559 Feb 11 j 22:36	4° $\mathbb{H}$ 36'39	
minimum elong	-12565 May 16 j 15:02	23° $\approx$ 58'18	0°33'01	evening set	-12559 May 13 j 15:54	6° $\mathbb{H}$ 33'18	
max. Earth dist.	-12565 May 15 j 13:17	23° $\approx$ 55'54	31.16177 AU	max. Earth dist.	-12559 May 28 j 06:21	7° $\mathbb{H}$ 05'56	31.19980 AU
morning rise	-12565 Jun 01 j 04:39	24° $\approx$ 33'05					
retrograde	-12565 Aug 26 j 08:30	26° $\approx$ 25'06		conjunction	-12559 May 29 j 06:21	7° $\mathbb{H}$ 08'11	0°05'40
opposition	-12565 Nov 11 j 21:58	25° $\approx$ 03'20	-0°31'30	minimum elong	-12559 May 29 j 06:21	7° $\mathbb{H}$ 08'11	0°05'20
min. Earth dist.	-12565 Nov 12 j 21:34	25° $\approx$ 01'43	29.16686 AU	behind sun begin	-12559 May 29 j 00:07	7° $\mathbb{H}$ 07'37	
direct	-12564 Feb 01 j 05:23	23° $\approx$ 38'02		behind sun end	-12559 May 29 j 12:34	7° $\mathbb{H}$ 08'44	
evening set	-12564 May 02 j 08:44	25° $\approx$ 35'06		morning rise	-12559 Jun 13 j 17:08	7° $\mathbb{H}$ 42'45	
max. Earth dist.	-12564 May 17 j 01:19	26° $\approx$ 07'53	31.17088 AU	retrograde	-12559 Sep 07 j 23:25	9° $\mathbb{H}$ 34'47	
				opposition	-12559 Nov 24 j 21:51	8° $\mathbb{H}$ 12'56	0°09'17
conjunction	-12564 May 18 j 01:53	26° $\approx$ 10'11	-0°26'14	min. Earth dist.	-12559 Nov 25 j 20:28	8° $\mathbb{H}$ 11'23	29.20196 AU
minimum elong	-12564 May 18 j 01:53	26° $\approx$ 10'11	0°26'41	direct	-12558 Feb 14 j 12:17	6° $\mathbb{H}$ 47'49	
morning rise	-12564 Jun 02 j 14:55	26° $\approx$ 44'56		evening set	-12558 May 16 j 02:27	8° $\mathbb{H}$ 44'21	
retrograde	-12564 Aug 27 j 18:54	28° $\approx$ 36'58					
opposition	-12564 Nov 13 j 09:55	27° $\approx$ 15'13	-0°24'45	conjunction	-12558 May 31 j 16:16	9° $\mathbb{H}$ 19'12	0°11'59
min. Earth dist.	-12564 Nov 14 j 10:06	27° $\approx$ 13'34	29.17540 AU	minimum elong	-12558 May 31 j 16:16	9° $\mathbb{H}$ 19'12	0°11'43
direct	-12563 Feb 02 j 18:56	25° $\approx$ 50'00		behind sun begin	-12558 May 31 j 11:41	9° $\mathbb{H}$ 18'47	
evening set	-12563 May 04 j 20:04	27° $\approx$ 47'00		behind sun end	-12558 May 31 j 20:52	9° $\mathbb{H}$ 19'36	
max. Earth dist.	-12563 May 19 j 10:55	28° $\approx$ 19'39	31.17891 AU	max. Earth dist.	-12558 May 30 j 16:22	9° $\mathbb{H}$ 16'57	31.20371 AU
				morning rise	-12558 Jun 16 j 02:38	9° $\mathbb{H}$ 53'44	
conjunction	-12563 May 20 j 12:30	28° $\approx$ 22'03	-0°19'55	retrograde	-12558 Sep 10 j 09:07	11° $\mathbb{H}$ 45'47	
minimum elong	-12563 May 20 j 12:31	28° $\approx$ 22'03	0°20'20	opposition	-12558 Nov 27 j 09:58	10° $\mathbb{H}$ 23'53	0°16'04
morning rise	-12563 Jun 05 j 01:14	28° $\approx$ 56'46		min. Earth dist.	-12558 Nov 28 j 08:24	10° $\mathbb{H}$ 22'21	29.20620 AU
	-12563 Jul 06 j 21:55	0° $\mathbb{H}$		direct	-12557 Feb 16 j 23:15	8° $\mathbb{H}$ 58'47	
retrograde	-12563 Aug 30 j 07:03	0° $\mathbb{H}$ 48'49		evening set	-12557 May 18 j 12:54	10° $\mathbb{H}$ 55'14	
	-12563 Oct 26 j 06:56	30° $\mathbb{R}$		max. Earth dist.	-12557 Jun 02 j 03:57	11° $\mathbb{H}$ 27'56	31.20825 AU
opposition	-12563 Nov 15 j 21:49	29° $\approx$ 27'04	-0°17'58				
min. Earth dist.	-12563 Nov 16 j 21:06	29° $\approx$ 25'29	29.18280 AU	conjunction	-12557 Jun 03 j 02:16	11° $\mathbb{H}$ 30'01	0°18'18
direct	-12562 Feb 05 j 07:25	28° $\approx$ 01'53		minimum elong	-12557 Jun 03 j 02:16	11° $\mathbb{H}$ 30'01	0°18'02
evening set	-12562 May 07 j 07:11	29° $\approx$ 58'49		morning rise	-12557 Jun 18 j 12:03	12° $\mathbb{H}$ 04'31	
	-12562 May 07 j 20:03	0° $\mathbb{H}$		retrograde	-12557 Sep 12 j 17:55	13° $\mathbb{H}$ 56'36	
conjunction	-12562 May 22 j 23:15	0° $\mathbb{H}$ 33'50	-0°13'34	opposition	-12557 Nov 29 j 21:55	12° $\mathbb{H}$ 34'40	0°22'49
minimum elong	-12562 May 22 j 23:16	0° $\mathbb{H}$ 33'50	0°13'57	min. Earth dist.	-12557 Nov 30 j 19:37	12° $\mathbb{H}$ 33'12	29.21112 AU
behind sun begin	-12562 May 22 j 19:55	0° $\mathbb{H}$ 33'32		direct	-12556 Feb 19 j 11:28	11° $\mathbb{H}$ 09'37	
behind sun end	-12562 May 23 j 02:36	0° $\mathbb{H}$ 34'08		evening set	-12556 May 19 j 23:23	13° $\mathbb{H}$ 05'59	
max. Earth dist.	-12562 May 21 j 22:35	0° $\mathbb{H}$ 31'31	31.18565 AU				
morning rise	-12562 Jun 07 j 11:22	1° $\mathbb{H}$ 08'31		conjunction	-12556 Jun 04 j 12:03	13° $\mathbb{H}$ 40'43	0°24'36
retrograde	-12562 Sep 01 j 16:54	3° $\mathbb{H}$ 00'34		minimum elong	-12556 Jun 04 j 12:02	13° $\mathbb{H}$ 40'43	0°24'22
opposition	-12562 Nov 18 j 09:57	1° $\mathbb{H}$ 38'49	-0°11'09	max. Earth dist.	-12556 Jun 03 j 13:31	13° $\mathbb{H}$ 38'37	31.21371 AU
min. Earth dist.	-12562 Nov 19 j 10:10	1° $\mathbb{H}$ 37'10	29.18893 AU	morning rise	-12556 Jun 19 j 21:28	14° $\mathbb{H}$ 15'12	
direct	-12561 Feb 07 j 19:55	0° $\mathbb{H}$ 13'40		retrograde	-12556 Sep 14 j 05:08	16° $\mathbb{H}$ 07'20	
evening set	-12561 May 09 j 18:11	2° $\mathbb{H}$ 10'31		opposition	-12556 Dec 01 j 09:58	14° $\mathbb{H}$ 45'23	0°29'32
max. Earth dist.	-12561 May 24 j 08:36	2° $\mathbb{H}$ 43'08	31.19127 AU	min. Earth dist.	-12556 Dec 02 j 06:33	14° $\mathbb{H}$ 43'59	29.21722 AU
				direct	-12555 Feb 20 j 22:02	13° $\mathbb{H}$ 20'23	
conjunction	-12561 May 25 j 09:39	2° $\mathbb{H}$ 45'29	-0°07'13	evening set	-12555 May 22 j 09:36	15° $\mathbb{H}$ 16'41	
minimum elong	-12561 May 25 j 09:39	2° $\mathbb{H}$ 45'29	0°07'35				
behind sun begin	-12561 May 25 j 03:47	2° $\mathbb{H}$ 44'57		conjunction	-12555 Jun 06 j 21:49	15° $\mathbb{H}$ 51'24	0°30'52
behind sun end	-12561 May 25 j 15:30	2° $\mathbb{H}$ 46'00		minimum elong	-12555 Jun 06 j 21:49	15° $\mathbb{H}$ 51'24	0°30'39
morning rise	-12561 Jun 09 j 21:27	3° $\mathbb{H}$ 20'08		max. Earth dist.	-12555 Jun 06 j 01:15	15° $\mathbb{H}$ 49'28	31.22028 AU
retrograde	-12561 Sep 04 j 04:12	5° $\mathbb{H}$ 12'10		morning rise	-12555 Jun 22 j 06:35	16° $\mathbb{H}$ 25'50	
opposition	-12561 Nov 20 j 21:52	3° $\mathbb{H}$ 50'24	-0°04'20	retrograde	-12555 Sep 16 j 15:00	18° $\mathbb{H}$ 18'03	
min. Earth dist.	-12561 Nov 21 j 20:57	3° $\mathbb{H}$ 48'49	29.19392 AU	opposition	-12555 Dec 03 j 22:13	16° $\mathbb{H}$ 56'06	0°36'12
direct	-12560 Feb 10 j 10:16	2° $\mathbb{H}$ 25'15		min. Earth dist.	-12555 Dec 04 j 18:35	16° $\mathbb{H}$ 54'43	29.22425 AU
evening set	-12560 May 11 j 05:06	4° $\mathbb{H}$ 22'01		direct	-12554 Feb 23 j 10:14	15° $\mathbb{H}$ 31'12	
				evening set	-12554 May 24 j 19:58	17° $\mathbb{H}$ 27'27	
conjunction	-12560 May 26 j 20:05	4° $\mathbb{H}$ 56'56	-0°00'49	max. Earth dist.	-12554 Jun 08 j 10:40	18° $\mathbb{H}$ 00'10	31.22782 AU
minimum elong	-12560 May 26 j 20:06	4° $\mathbb{H}$ 56'56	0°01'09				
behind sun begin	-12560 May 26 j 13:39	4° $\mathbb{H}$ 56'22		conjunction	-12554 Jun 09 j 07:27	18° $\mathbb{H}$ 02'07	0°37'05
				minimum elong	-12554 Jun 09 j 07:26	18° $\mathbb{H}$ 02'07	0°36'55

Attention, astronomical year style is used: The year -12554 in astronomical counting style is the year 12555 BCE in historical counting style.

morning rise	-12554 Jun 24 j 15:53	18° $\mathbf{\text{H}}$ 36'31		direct	-12547 Mar 10 j 23:33	0° $\mathbf{\text{Y}}$ 49'09	
retrograde	-12554 Sep 19 j 03:15	20° $\mathbf{\text{H}}$ 28'50		evening set	-12547 Jun 08 j 18:57	2° $\mathbf{\text{Y}}$ 44'58	
opposition	-12554 Dec 06 j 10:21	19° $\mathbf{\text{H}}$ 06'55	0°42'50	max. Earth dist.	-12547 Jun 23 j 09:17	3° $\mathbf{\text{Y}}$ 17'43	31.26537 AU
min. Earth dist.	-12554 Dec 07 j 05:06	19° $\mathbf{\text{H}}$ 05'38	29.23212 AU				
direct	-12553 Feb 25 j 21:03	17° $\mathbf{\text{H}}$ 42'06		conjunction	-12547 Jun 24 j 02:15	3° $\mathbf{\text{Y}}$ 19'19	1°18'39
evening set	-12553 May 27 j 06:03	19° $\mathbf{\text{H}}$ 38'19		minimum elong	-12547 Jun 24 j 02:14	3° $\mathbf{\text{Y}}$ 19'19	1°18'41
				morning rise	-12547 Jul 09 j 07:18	3° $\mathbf{\text{Y}}$ 53'30	
conjunction	-12553 Jun 11 j 17:06	20° $\mathbf{\text{H}}$ 12'57	0°43'15	retrograde	-12547 Oct 04 j 04:57	5° $\mathbf{\text{Y}}$ 46'29	
minimum elong	-12553 Jun 11 j 17:06	20° $\mathbf{\text{H}}$ 12'57	0°43'06	opposition	-12547 Dec 22 j 01:49	4° $\mathbf{\text{Y}}$ 24'28	1°26'57
max. Earth dist.	-12553 Jun 10 j 21:49	20° $\mathbf{\text{H}}$ 11'08	31.23572 AU	min. Earth dist.	-12547 Dec 22 j 17:19	4° $\mathbf{\text{Y}}$ 23'25	29.26681 AU
morning rise	-12553 Jun 27 j 00:56	20° $\mathbf{\text{H}}$ 47'19		direct	-12546 Mar 13 j 10:37	3° $\mathbf{\text{Y}}$ 00'08	
retrograde	-12553 Sep 21 j 13:36	22° $\mathbf{\text{H}}$ 39'44		evening set	-12546 Jun 11 j 04:41	4° $\mathbf{\text{Y}}$ 55'49	
opposition	-12553 Dec 08 j 22:43	21° $\mathbf{\text{H}}$ 17'51	0°49'24				
min. Earth dist.	-12553 Dec 09 j 17:58	21° $\mathbf{\text{H}}$ 16'32	29.24003 AU	conjunction	-12546 Jun 26 j 11:35	5° $\mathbf{\text{Y}}$ 30'08	1°24'12
direct	-12552 Feb 28 j 08:37	19° $\mathbf{\text{H}}$ 53'09		minimum elong	-12546 Jun 26 j 11:34	5° $\mathbf{\text{Y}}$ 30'08	1°24'16
evening set	-12552 May 28 j 16:21	21° $\mathbf{\text{H}}$ 49'19		max. Earth dist.	-12546 Jun 25 j 20:29	5° $\mathbf{\text{Y}}$ 28'43	31.26669 AU
max. Earth dist.	-12552 Jun 12 j 07:31	22° $\mathbf{\text{H}}$ 22'06	31.24345 AU	morning rise	-12546 Jul 11 j 16:01	6° $\mathbf{\text{Y}}$ 04'16	
				retrograde	-12546 Oct 06 j 14:08	7° $\mathbf{\text{Y}}$ 57'21	
conjunction	-12552 Jun 13 j 02:41	22° $\mathbf{\text{H}}$ 23'54	0°49'21	opposition	-12546 Dec 24 j 14:28	6° $\mathbf{\text{Y}}$ 35'15	1°32'49
minimum elong	-12552 Jun 13 j 02:41	22° $\mathbf{\text{H}}$ 23'54	0°49'15	min. Earth dist.	-12546 Dec 25 j 05:45	6° $\mathbf{\text{Y}}$ 34'13	29.26811 AU
morning rise	-12552 Jun 28 j 10:06	22° $\mathbf{\text{H}}$ 58'14		direct	-12545 Mar 15 j 22:25	5° $\mathbf{\text{Y}}$ 10'57	
retrograde	-12552 Sep 23 j 01:33	24° $\mathbf{\text{H}}$ 50'46		evening set	-12545 Jun 13 j 14:25	7° $\mathbf{\text{Y}}$ 06'31	
opposition	-12552 Dec 10 j 10:56	23° $\mathbf{\text{H}}$ 28'54	0°55'54				
min. Earth dist.	-12552 Dec 11 j 04:44	23° $\mathbf{\text{H}}$ 27'42	29.24741 AU	conjunction	-12545 Jun 28 j 20:35	7° $\mathbf{\text{Y}}$ 40'48	1°29'37
direct	-12551 Mar 01 j 22:14	22° $\mathbf{\text{H}}$ 04'18		minimum elong	-12545 Jun 28 j 20:34	7° $\mathbf{\text{Y}}$ 40'47	1°29'42
evening set	-12551 May 31 j 02:38	24° $\mathbf{\text{H}}$ 00'26		max. Earth dist.	-12545 Jun 28 j 05:29	7° $\mathbf{\text{Y}}$ 39'22	31.26803 AU
				morning rise	-12545 Jul 14 j 00:45	8° $\mathbf{\text{Y}}$ 14'53	
conjunction	-12551 Jun 15 j 12:23	24° $\mathbf{\text{H}}$ 34'59	0°55'24	retrograde	-12545 Oct 09 j 01:43	10° $\mathbf{\text{Y}}$ 08'03	
minimum elong	-12551 Jun 15 j 12:23	24° $\mathbf{\text{H}}$ 34'59	0°55'18	opposition	-12545 Dec 27 j 02:59	8° $\mathbf{\text{Y}}$ 45'53	1°38'33
max. Earth dist.	-12551 Jun 14 j 17:51	24° $\mathbf{\text{H}}$ 33'14	31.25029 AU	min. Earth dist.	-12545 Dec 27 j 16:23	8° $\mathbf{\text{Y}}$ 44'58	29.26971 AU
morning rise	-12551 Jun 30 j 19:15	25° $\mathbf{\text{H}}$ 09'17		direct	-12544 Mar 17 j 08:50	7° $\mathbf{\text{Y}}$ 21'36	
retrograde	-12551 Sep 25 j 13:10	27° $\mathbf{\text{H}}$ 01'55		evening set	-12544 Jun 14 j 24:00	9° $\mathbf{\text{Y}}$ 17'05	
opposition	-12551 Dec 12 j 23:33	25° $\mathbf{\text{H}}$ 40'03	1°02'18				
min. Earth dist.	-12551 Dec 13 j 17:48	25° $\mathbf{\text{H}}$ 38'49	29.25386 AU	conjunction	-12544 Jun 30 j 05:42	9° $\mathbf{\text{Y}}$ 51'18	1°34'54
direct	-12550 Mar 04 j 10:08	24° $\mathbf{\text{H}}$ 15'33		minimum elong	-12544 Jun 30 j 05:41	9° $\mathbf{\text{Y}}$ 51'18	1°35'02
evening set	-12550 Jun 02 j 12:44	26° $\mathbf{\text{H}}$ 11'37		max. Earth dist.	-12544 Jun 29 j 16:16	9° $\mathbf{\text{Y}}$ 50'03	31.26974 AU
				morning rise	-12544 Jul 15 j 09:15	10° $\mathbf{\text{Y}}$ 25'22	
conjunction	-12550 Jun 17 j 21:55	26° $\mathbf{\text{H}}$ 46'07	1°01'21	retrograde	-12544 Oct 10 j 11:56	12° $\mathbf{\text{Y}}$ 18'38	
minimum elong	-12550 Jun 17 j 21:54	26° $\mathbf{\text{H}}$ 46'07	1°01'18	opposition	-12544 Dec 28 j 15:40	10° $\mathbf{\text{Y}}$ 56'24	1°44'08
max. Earth dist.	-12550 Jun 17 j 04:08	26° $\mathbf{\text{H}}$ 44'27	31.25608 AU	min. Earth dist.	-12544 Dec 29 j 05:02	10° $\mathbf{\text{Y}}$ 55'30	29.27193 AU
morning rise	-12550 Jul 03 j 04:16	27° $\mathbf{\text{H}}$ 20'23		direct	-12543 Mar 19 j 20:27	9° $\mathbf{\text{Y}}$ 32'11	
retrograde	-12550 Sep 27 j 22:30	29° $\mathbf{\text{H}}$ 13'07		evening set	-12543 Jun 17 j 09:39	11° $\mathbf{\text{Y}}$ 27'35	
opposition	-12550 Dec 15 j 12:06	27° $\mathbf{\text{H}}$ 51'15	1°08'38				
min. Earth dist.	-12550 Dec 16 j 05:08	27° $\mathbf{\text{H}}$ 50'06	29.25893 AU	conjunction	-12543 Jul 02 j 14:43	12° $\mathbf{\text{Y}}$ 01'45	1°40'03
direct	-12549 Mar 06 j 23:28	26° $\mathbf{\text{H}}$ 26'49		minimum elong	-12543 Jul 02 j 14:42	12° $\mathbf{\text{Y}}$ 01'45	1°40'12
evening set	-12549 Jun 04 j 22:58	28° $\mathbf{\text{H}}$ 22'49		max. Earth dist.	-12543 Jul 02 j 02:05	12° $\mathbf{\text{Y}}$ 00'34	31.27243 AU
				morning rise	-12543 Jul 17 j 17:55	12° $\mathbf{\text{Y}}$ 35'47	
conjunction	-12549 Jun 20 j 07:29	28° $\mathbf{\text{H}}$ 57'16	1°07'13	retrograde	-12543 Oct 13 j 00:06	14° $\mathbf{\text{Y}}$ 29'10	
minimum elong	-12549 Jun 20 j 07:28	28° $\mathbf{\text{H}}$ 57'16	1°07'11	opposition	-12543 Dec 31 j 04:20	13° $\mathbf{\text{Y}}$ 06'53	1°49'34
max. Earth dist.	-12549 Jun 19 j 13:27	28° $\mathbf{\text{H}}$ 55'34	31.26040 AU	min. Earth dist.	-12543 Dec 31 j 15:31	13° $\mathbf{\text{Y}}$ 06'08	29.27509 AU
morning rise	-12549 Jul 05 j 13:26	29° $\mathbf{\text{H}}$ 31'30		direct	-12542 Mar 22 j 09:16	11° $\mathbf{\text{Y}}$ 42'44	
	-12549 Jul 18 j 21:25	0° $\mathbf{\text{Y}}$		evening set	-12542 Jun 19 j 19:05	13° $\mathbf{\text{Y}}$ 38'03	
retrograde	-12549 Sep 30 j 08:48	1° $\mathbf{\text{Y}}$ 24'19					
opposition	-12549 Dec 18 j 00:33	0° $\mathbf{\text{Y}}$ 02'25	1°14'51	conjunction	-12542 Jul 04 j 23:38	14° $\mathbf{\text{Y}}$ 12'11	1°45'04
min. Earth dist.	-12549 Dec 18 j 17:36	0° $\mathbf{\text{Y}}$ 01'16	29.26273 AU	minimum elong	-12542 Jul 04 j 23:37	14° $\mathbf{\text{Y}}$ 12'11	1°45'15
	-12549 Dec 19 j 12:18	30° $\mathbf{\text{H}}$		max. Earth dist.	-12542 Jul 04 j 12:06	14° $\mathbf{\text{Y}}$ 11'06	31.27589 AU
direct	-12548 Mar 08 j 10:43	28° $\mathbf{\text{H}}$ 38'02		morning rise	-12542 Jul 20 j 02:26	14° $\mathbf{\text{Y}}$ 46'11	
	-12548 May 21 j 08:10	0° $\mathbf{\text{Y}}$		retrograde	-12542 Oct 15 j 11:54	16° $\mathbf{\text{Y}}$ 39'43	
evening set	-12548 Jun 06 j 08:59	0° $\mathbf{\text{Y}}$ 33'56		opposition	-12541 Jan 02 j 17:10	15° $\mathbf{\text{Y}}$ 17'24	1°54'50
				min. Earth dist.	-12541 Jan 03 j 04:14	15° $\mathbf{\text{Y}}$ 16'39	29.27902 AU
conjunction	-12548 Jun 21 j 17:03	1° $\mathbf{\text{Y}}$ 08'21	1°13'00	direct	-12541 Mar 24 j 20:13	13° $\mathbf{\text{Y}}$ 53'21	
minimum elong	-12548 Jun 21 j 17:02	1° $\mathbf{\text{Y}}$ 08'21	1°13'00	evening set	-12541 Jun 22 j 04:36	15° $\mathbf{\text{Y}}$ 48'36	
max. Earth dist.	-12548 Jun 21 j 00:23	1° $\mathbf{\text{Y}}$ 06'47	31.26345 AU				
morning rise	-12548 Jul 06 j 22:24	1° $\mathbf{\text{Y}}$ 42'33		conjunction	-12541 Jul 07 j 08:41	16° $\mathbf{\text{Y}}$ 22'42	1°49'56
retrograde	-12548 Oct 01 j 17:56	3° $\mathbf{\text{Y}}$ 35'27		minimum elong	-12541 Jul 07 j 08:40	16° $\mathbf{\text{Y}}$ 22'42	1°50'08
opposition	-12548 Dec 19 j 13:10	2° $\mathbf{\text{Y}}$ 13'30	1°20'58	max. Earth dist.	-12541 Jul 06 j 22:32	16° $\mathbf{\text{Y}}$ 21'44	31.27997 AU
min. Earth dist.	-12548 Dec 20 j 05:40	2° $\mathbf{\text{Y}}$ 12'23	29.26514 AU	morning rise	-12541 Jul 22 j 11:02	16° $\mathbf{\text{Y}}$ 56'40	

Attention, astronomical year style is used: The year -12541 in astronomical counting style is the year 12542 BCE in historical counting style.

retrograde	-12541 Oct 17 j 21:49	18° $\Upsilon$ 50'19		evening set	-12534 Jul 06 j 22:53	1° $\mathcal{B}$ 04'29	
opposition	-12540 Jan 05 j 05:44	17° $\Upsilon$ 28'01	1°59'57				
min. Earth dist.	-12540 Jan 05 j 15:10	17° $\Upsilon$ 27'22	29.28314 AU	conjunction	-12534 Jul 21 j 23:43	1° $\mathcal{B}$ 38'20	2°19'12
direct	-12540 Mar 26 j 09:08	16° $\Upsilon$ 04'03		minimum elong	-12534 Jul 21 j 23:41	1° $\mathcal{B}$ 38'20	2°19'37
evening set	-12540 Jun 23 j 14:11	17° $\Upsilon$ 59'15		max. Earth dist.	-12534 Jul 21 j 18:33	1° $\mathcal{B}$ 37'51	31.28490 AU
				morning rise	-12534 Aug 05 j 23:53	2° $\mathcal{B}$ 12'10	
conjunction	-12540 Jul 08 j 17:38	18° $\Upsilon$ 33'18	1°54'38	retrograde	-12534 Nov 02 j 03:36	4° $\mathcal{B}$ 06'49	
minimum elong	-12540 Jul 08 j 17:37	18° $\Upsilon$ 33'18	1°54'53	opposition	-12533 Jan 21 j 00:41	2° $\mathcal{B}$ 44'08	2°30'35
max. Earth dist.	-12540 Jul 08 j 07:36	18° $\Upsilon$ 32'22	31.28392 AU	min. Earth dist.	-12533 Jan 21 j 04:39	2° $\mathcal{B}$ 43'52	29.28489 AU
morning rise	-12540 Jul 23 j 19:42	19° $\Upsilon$ 07'15		direct	-12533 Apr 11 j 17:46	1° $\mathcal{B}$ 20'35	
retrograde	-12540 Oct 19 j 09:21	21° $\Upsilon$ 01'04		evening set	-12533 Jul 09 j 08:09	3° $\mathcal{B}$ 15'13	
opposition	-12539 Jan 06 j 18:39	19° $\Upsilon$ 38'44	2°04'54				
min. Earth dist.	-12539 Jan 07 j 03:41	19° $\Upsilon$ 38'07	29.28704 AU	conjunction	-12533 Jul 24 j 08:35	3° $\mathcal{B}$ 49'02	2°22'38
direct	-12539 Mar 28 j 20:25	18° $\Upsilon$ 14'52		minimum elong	-12533 Jul 24 j 08:33	3° $\mathcal{B}$ 49'02	2°23'03
evening set	-12539 Jun 25 j 23:34	20° $\Upsilon$ 10'00		max. Earth dist.	-12533 Jul 24 j 04:10	3° $\mathcal{B}$ 48'37	31.28124 AU
				morning rise	-12533 Aug 08 j 08:33	4° $\mathcal{B}$ 22'51	
conjunction	-12539 Jul 11 j 02:38	20° $\Upsilon$ 44'02	1°59'10	retrograde	-12533 Nov 04 j 15:30	6° $\mathcal{B}$ 17'37	
minimum elong	-12539 Jul 11 j 02:37	20° $\Upsilon$ 44'02	1°59'26	opposition	-12532 Jan 23 j 13:34	4° $\mathcal{B}$ 54'51	2°34'09
max. Earth dist.	-12539 Jul 10 j 18:25	20° $\Upsilon$ 43'15	31.28734 AU	min. Earth dist.	-12532 Jan 23 j 17:30	4° $\mathcal{B}$ 54'35	29.28140 AU
morning rise	-12539 Jul 26 j 04:11	21° $\Upsilon$ 17'57		direct	-12532 Apr 13 j 04:15	3° $\mathcal{B}$ 31'19	
retrograde	-12539 Oct 21 j 19:15	23° $\Upsilon$ 11'55		evening set	-12532 Jul 10 j 17:16	5° $\mathcal{B}$ 25'51	
opposition	-12538 Jan 09 j 07:40	21° $\Upsilon$ 49'34	2°09'40				
min. Earth dist.	-12538 Jan 09 j 15:55	21° $\Upsilon$ 49'01	29.29000 AU	conjunction	-12532 Jul 25 j 17:26	5° $\mathcal{B}$ 59'39	2°25'51
direct	-12538 Mar 31 j 09:21	20° $\Upsilon$ 25'48		minimum elong	-12532 Jul 25 j 17:25	5° $\mathcal{B}$ 59'39	2°26'19
evening set	-12538 Jun 28 j 09:14	22° $\Upsilon$ 20'52		max. Earth dist.	-12532 Jul 25 j 14:43	5° $\mathcal{B}$ 59'23	31.27782 AU
				morning rise	-12532 Aug 09 j 17:07	6° $\mathcal{B}$ 33'27	
conjunction	-12538 Jul 13 j 11:38	22° $\Upsilon$ 54'51	2°03'33	retrograde	-12532 Nov 06 j 01:42	8° $\mathcal{B}$ 28'20	
minimum elong	-12538 Jul 13 j 11:37	22° $\Upsilon$ 54'51	2°03'51	opposition	-12531 Jan 25 j 02:31	7° $\mathcal{B}$ 05'29	2°37'29
max. Earth dist.	-12538 Jul 13 j 03:07	22° $\Upsilon$ 54'03	31.28966 AU	min. Earth dist.	-12531 Jan 25 j 04:26	7° $\mathcal{B}$ 05'21	29.27825 AU
morning rise	-12538 Jul 28 j 13:01	23° $\Upsilon$ 28'46		direct	-12531 Apr 15 j 17:23	5° $\mathcal{B}$ 41'59	
retrograde	-12538 Oct 24 j 06:52	25° $\Upsilon$ 22'52		evening set	-12531 Jul 13 j 02:21	7° $\mathcal{B}$ 36'26	
opposition	-12537 Jan 11 j 20:34	24° $\Upsilon$ 00'29	2°14'15				
min. Earth dist.	-12537 Jan 12 j 03:52	24° $\Upsilon$ 00'00	29.29184 AU	conjunction	-12531 Jul 28 j 02:03	8° $\mathcal{B}$ 10'12	2°28'52
direct	-12537 Apr 02 j 19:51	22° $\Upsilon$ 36'47		minimum elong	-12531 Jul 28 j 02:02	8° $\mathcal{B}$ 10'12	2°29'20
evening set	-12537 Jun 30 j 18:40	24° $\Upsilon$ 31'47		max. Earth dist.	-12531 Jul 27 j 23:42	8° $\mathcal{B}$ 09'59	31.27498 AU
				morning rise	-12531 Aug 12 j 01:43	8° $\mathcal{B}$ 43'59	
conjunction	-12537 Jul 15 j 20:48	25° $\Upsilon$ 05'45	2°07'45	retrograde	-12531 Nov 08 j 13:52	10° $\mathcal{B}$ 39'02	
minimum elong	-12537 Jul 15 j 20:47	25° $\Upsilon$ 05'45	2°08'03	opposition	-12530 Jan 27 j 15:36	9° $\mathcal{B}$ 16'06	2°40'35
max. Earth dist.	-12537 Jul 15 j 13:53	25° $\Upsilon$ 05'05	31.29058 AU	min. Earth dist.	-12530 Jan 27 j 16:37	9° $\mathcal{B}$ 16'02	29.27603 AU
morning rise	-12537 Jul 30 j 21:41	25° $\Upsilon$ 39'38		direct	-12530 Apr 18 j 04:54	7° $\mathcal{B}$ 52'39	
retrograde	-12537 Oct 26 j 16:27	27° $\Upsilon$ 33'53		evening set	-12530 Jul 15 j 11:21	9° $\mathcal{B}$ 47'01	
opposition	-12536 Jan 14 j 09:39	26° $\Upsilon$ 11'28	2°18'38				
min. Earth dist.	-12536 Jan 14 j 16:53	26° $\Upsilon$ 10'58	29.29203 AU	conjunction	-12530 Jul 30 j 10:57	10° $\mathcal{B}$ 20'47	2°31'40
direct	-12536 Apr 04 j 07:34	24° $\Upsilon$ 47'49		minimum elong	-12530 Jul 30 j 10:56	10° $\mathcal{B}$ 20'46	2°32'10
evening set	-12536 Jul 02 j 04:14	26° $\Upsilon$ 42'44		max. Earth dist.	-12530 Jul 30 j 10:51	10° $\mathcal{B}$ 20'46	31.27310 AU
				morning rise	-12530 Aug 14 j 10:20	10° $\mathcal{B}$ 54'33	
conjunction	-12536 Jul 17 j 05:46	27° $\Upsilon$ 16'39	2°11'45	retrograde	-12530 Nov 11 j 00:09	12° $\mathcal{B}$ 49'44	
minimum elong	-12536 Jul 17 j 05:44	27° $\Upsilon$ 16'39	2°12'07	opposition	-12529 Jan 30 j 04:28	11° $\mathcal{B}$ 26'45	2°43'28
max. Earth dist.	-12536 Jul 16 j 22:37	27° $\Upsilon$ 15'59	31.28997 AU	min. Earth dist.	-12529 Jan 30 j 04:15	11° $\mathcal{B}$ 26'46	29.27458 AU
morning rise	-12536 Aug 01 j 06:28	27° $\Upsilon$ 50'31		direct	-12529 Apr 20 j 17:40	10° $\mathcal{B}$ 03'23	
retrograde	-12536 Oct 28 j 04:26	29° $\Upsilon$ 44'55		evening set	-12529 Jul 17 j 20:27	11° $\mathcal{B}$ 57'40	
opposition	-12535 Jan 15 j 22:35	28° $\Upsilon$ 22'25	2°22'50				
min. Earth dist.	-12535 Jan 16 j 04:12	28° $\Upsilon$ 22'03	29.29076 AU	conjunction	-12529 Aug 01 j 19:41	12° $\mathcal{B}$ 31'25	2°34'15
direct	-12535 Apr 06 j 17:55	26° $\Upsilon$ 58'49		minimum elong	-12529 Aug 01 j 19:39	12° $\mathcal{B}$ 31'25	2°34'46
evening set	-12535 Jul 04 j 13:37	28° $\Upsilon$ 53'39		max. Earth dist.	-12529 Aug 01 j 19:42	12° $\mathcal{B}$ 31'25	31.27201 AU
				morning rise	-12529 Aug 16 j 19:08	13° $\mathcal{B}$ 05'12	
conjunction	-12535 Jul 19 j 14:50	29° $\Upsilon$ 27'32	2°15'35		-12529 Nov 07 j 18:24	15° $\mathcal{B}$	
minimum elong	-12535 Jul 19 j 14:49	29° $\Upsilon$ 27'32	2°15'57	retrograde	-12529 Nov 13 j 11:41	15° $\mathcal{B}$ 00'32	
max. Earth dist.	-12535 Jul 19 j 08:56	29° $\Upsilon$ 26'58	31.28790 AU		-12529 Nov 19 j 05:03	15° $\mathcal{R}$ $\mathcal{B}$	
morning rise	-12535 Aug 03 j 15:11	0° $\mathcal{B}$ 01'23		opposition	-12528 Feb 01 j 17:26	13° $\mathcal{B}$ 37'31	2°46'07
	-12535 Aug 03 j 00:17	0° $\mathcal{B}$		min. Earth dist.	-12528 Feb 01 j 15:48	13° $\mathcal{B}$ 37'38	29.27385 AU
retrograde	-12535 Oct 30 j 15:13	1° $\mathcal{B}$ 55'55		direct	-12528 Apr 22 j 03:54	12° $\mathcal{B}$ 14'13	
opposition	-12534 Jan 18 j 11:45	0° $\mathcal{B}$ 33'20	2°26'49	evening set	-12528 Jul 19 j 05:21	14° $\mathcal{B}$ 08'27	
min. Earth dist.	-12534 Jan 18 j 17:37	0° $\mathcal{B}$ 32'56	29.28822 AU				
	-12534 Feb 08 j 16:58	30° $\mathcal{R}$ $\Upsilon$		conjunction	-12528 Aug 03 j 04:29	14° $\mathcal{B}$ 42'11	2°36'37
direct	-12534 Apr 09 j 05:23	29° $\Upsilon$ 09'45		minimum elong	-12528 Aug 03 j 04:28	14° $\mathcal{B}$ 42'10	2°37'10
	-12534 Jun 04 j 14:07	0° $\mathcal{B}$		max. Earth dist.	-12528 Aug 03 j 06:35	14° $\mathcal{B}$ 42'22	31.27126 AU

Attention, astronomical year style is used: The year -12528 in astronomical counting style is the year 12529 BCE in historical counting style.

	-12528 Aug 11 j 00:56	15° <b>8</b>		opposition	-12521 Feb 17 j 13:13	28° <b>8</b> 55'18	2°57'48
morning rise	-12528 Aug 18 j 03:43	15° <b>8</b> 15'57		min. Earth dist.	-12521 Feb 17 j 06:10	28° <b>8</b> 55'46	29.25117 AU
retrograde	-12528 Nov 14 j 21:05	17° <b>8</b> 11'28		direct	-12521 May 08 j 09:42	27° <b>8</b> 32'18	
opposition	-12527 Feb 03 j 06:34	15° <b>8</b> 48'25	2°48'31	evening set	-12521 Aug 03 j 21:14	29° <b>8</b> 25'55	
min. Earth dist.	-12527 Feb 03 j 04:29	15° <b>8</b> 48'33	29.27315 AU				
	-12527 Mar 07 j 05:25	15° <b>8</b>		conjunction	-12521 Aug 18 j 19:54	29° <b>8</b> 59'37	2°46'43
direct	-12527 Apr 24 j 15:36	14° <b>8</b> 25'12		minimum elong	-12521 Aug 18 j 19:53	29° <b>8</b> 59'37	2°47'23
	-12527 Jun 09 j 20:19	15° <b>8</b>		max. Earth dist.	-12521 Aug 19 j 03:42	0° <b>II</b> 00'21	31.24513 AU
evening set	-12527 Jul 21 j 14:31	16° <b>8</b> 19'21			-12521 Aug 19 j 00:00	0° <b>II</b>	
				morning rise	-12521 Sep 02 j 19:36	0° <b>II</b> 33'26	
conjunction	-12527 Aug 05 j 13:21	16° <b>8</b> 53'04	2°38'45	retrograde	-12521 Dec 01 j 08:52	2° <b>II</b> 29'51	
minimum elong	-12527 Aug 05 j 13:20	16° <b>8</b> 53'04	2°39'19	opposition	-12520 Feb 20 j 02:12	1° <b>II</b> 06'17	2°58'28
max. Earth dist.	-12527 Aug 05 j 15:41	16° <b>8</b> 53'18	31.27052 AU	min. Earth dist.	-12520 Feb 19 j 18:07	1° <b>II</b> 06'49	29.24415 AU
morning rise	-12527 Aug 20 j 12:38	17° <b>8</b> 26'51			-12520 Apr 07 j 08:40	30° <b>R</b> 8	
retrograde	-12527 Nov 17 j 09:43	19° <b>8</b> 22'31		direct	-12520 May 09 j 22:36	29° <b>8</b> 43'17	
opposition	-12526 Feb 05 j 19:37	17° <b>8</b> 59'27	2°50'41		-12520 Jun 10 j 13:04	0° <b>II</b>	
min. Earth dist.	-12526 Feb 05 j 15:42	17° <b>8</b> 59'43	29.27227 AU	evening set	-12520 Aug 05 j 06:12	1° <b>II</b> 36'47	
direct	-12526 Apr 27 j 01:45	16° <b>8</b> 36'18					
evening set	-12526 Jul 23 j 23:34	18° <b>8</b> 30'23		conjunction	-12520 Aug 20 j 04:45	2° <b>II</b> 10'29	2°47'13
				minimum elong	-12520 Aug 20 j 04:45	2° <b>II</b> 10'29	2°47'55
conjunction	-12526 Aug 07 j 22:19	19° <b>8</b> 04'06	2°40'40	max. Earth dist.	-12520 Aug 20 j 12:41	2° <b>II</b> 11'14	31.23818 AU
minimum elong	-12526 Aug 07 j 22:18	19° <b>8</b> 04'06	2°41'15	morning rise	-12520 Sep 04 j 04:49	2° <b>II</b> 44'20	
max. Earth dist.	-12526 Aug 08 j 01:53	19° <b>8</b> 04'26	31.26912 AU	retrograde	-12520 Dec 02 j 20:46	4° <b>II</b> 40'51	
morning rise	-12526 Aug 22 j 21:34	19° <b>8</b> 37'53		opposition	-12519 Feb 21 j 15:14	3° <b>II</b> 17'10	2°58'52
retrograde	-12526 Nov 19 j 20:40	21° <b>8</b> 33'43		min. Earth dist.	-12519 Feb 21 j 05:47	3° <b>II</b> 17'48	29.23748 AU
opposition	-12525 Feb 08 j 08:51	20° <b>8</b> 10'35	2°52'36	direct	-12519 May 12 j 09:21	1° <b>II</b> 54'11	
min. Earth dist.	-12525 Feb 08 j 05:11	20° <b>8</b> 10'50	29.27050 AU	evening set	-12519 Aug 07 j 15:08	3° <b>II</b> 47'35	
direct	-12525 Apr 29 j 12:31	18° <b>8</b> 47'31					
evening set	-12525 Jul 26 j 08:48	20° <b>8</b> 41'31		conjunction	-12519 Aug 22 j 13:55	4° <b>II</b> 21'17	2°47'29
				minimum elong	-12519 Aug 22 j 13:55	4° <b>II</b> 21'17	2°48'10
conjunction	-12525 Aug 10 j 07:25	21° <b>8</b> 15'13	2°42'20	max. Earth dist.	-12519 Aug 22 j 23:51	4° <b>II</b> 22'14	31.23173 AU
minimum elong	-12525 Aug 10 j 07:25	21° <b>8</b> 15'13	2°42'56	morning rise	-12519 Sep 06 j 14:06	4° <b>II</b> 55'09	
max. Earth dist.	-12525 Aug 10 j 11:44	21° <b>8</b> 15'38	31.26679 AU	retrograde	-12519 Dec 05 j 06:33	6° <b>II</b> 51'47	
morning rise	-12525 Aug 25 j 06:40	21° <b>8</b> 49'01		opposition	-12518 Feb 24 j 04:12	5° <b>II</b> 28'02	2°59'02
retrograde	-12525 Nov 22 j 09:12	23° <b>8</b> 44'59		min. Earth dist.	-12518 Feb 23 j 18:08	5° <b>II</b> 28'42	29.23152 AU
opposition	-12524 Feb 10 j 21:47	22° <b>8</b> 21'48	2°54'17	direct	-12518 May 14 j 21:21	4° <b>II</b> 05'04	
min. Earth dist.	-12524 Feb 10 j 16:24	22° <b>8</b> 22'09	29.26753 AU	evening set	-12518 Aug 10 j 00:06	5° <b>II</b> 58'23	
direct	-12524 Apr 30 j 23:39	20° <b>8</b> 58'45					
evening set	-12524 Jul 27 j 18:03	22° <b>8</b> 52'41		conjunction	-12518 Aug 24 j 22:58	6° <b>II</b> 32'06	2°47'30
				minimum elong	-12518 Aug 24 j 22:58	6° <b>II</b> 32'06	2°48'13
conjunction	-12524 Aug 11 j 16:32	23° <b>8</b> 26'23	2°43'47	max. Earth dist.	-12518 Aug 25 j 09:26	6° <b>II</b> 33'05	31.22634 AU
minimum elong	-12524 Aug 11 j 16:31	23° <b>8</b> 26'23	2°44'25	morning rise	-12518 Sep 08 j 23:32	7° <b>II</b> 05'59	
max. Earth dist.	-12524 Aug 11 j 21:09	23° <b>8</b> 26'49	31.26306 AU	retrograde	-12518 Dec 07 j 19:16	9° <b>II</b> 02'44	
morning rise	-12524 Aug 26 j 15:54	24° <b>8</b> 00'11		opposition	-12517 Feb 26 j 17:03	7° <b>II</b> 38'55	2°58'55
retrograde	-12524 Nov 23 j 21:40	25° <b>8</b> 56'17		min. Earth dist.	-12517 Feb 26 j 04:54	7° <b>II</b> 39'45	29.22662 AU
opposition	-12523 Feb 12 j 11:04	24° <b>8</b> 33'01	2°55'42	direct	-12517 May 17 j 07:43	6° <b>II</b> 16'00	
min. Earth dist.	-12523 Feb 12 j 05:54	24° <b>8</b> 33'22	29.26326 AU	evening set	-12517 Aug 12 j 09:05	8° <b>II</b> 09'15	
direct	-12523 May 03 j 09:17	23° <b>8</b> 10'01					
evening set	-12523 Jul 30 j 03:04	25° <b>8</b> 03'51		conjunction	-12517 Aug 27 j 08:09	8° <b>II</b> 42'59	2°47'17
				minimum elong	-12517 Aug 27 j 08:09	8° <b>II</b> 42'59	2°48'00
conjunction	-12523 Aug 14 j 01:38	25° <b>8</b> 37'32	2°45'00	max. Earth dist.	-12517 Aug 27 j 19:56	8° <b>II</b> 44'06	31.22181 AU
minimum elong	-12523 Aug 14 j 01:37	25° <b>8</b> 37'32	2°45'37	morning rise	-12517 Sep 11 j 09:00	9° <b>II</b> 16'55	
max. Earth dist.	-12523 Aug 14 j 07:41	25° <b>8</b> 38'07	31.25812 AU	retrograde	-12517 Dec 10 j 05:56	11° <b>II</b> 13'48	
morning rise	-12523 Aug 29 j 01:01	26° <b>8</b> 11'21		opposition	-12516 Feb 29 j 05:57	9° <b>II</b> 49'57	2°58'33
retrograde	-12523 Nov 26 j 09:08	28° <b>8</b> 07'34		min. Earth dist.	-12516 Feb 28 j 17:45	9° <b>II</b> 50'46	29.22256 AU
opposition	-12522 Feb 15 j 00:12	26° <b>8</b> 44'12	2°56'52	direct	-12516 May 18 j 17:54	8° <b>II</b> 27'06	
min. Earth dist.	-12522 Feb 14 j 17:28	26° <b>8</b> 44'40	29.25764 AU	evening set	-12516 Aug 13 j 18:03	10° <b>II</b> 20'17	
direct	-12522 May 05 j 22:33	25° <b>8</b> 21'13					
evening set	-12522 Aug 01 j 12:17	27° <b>8</b> 14'56		conjunction	-12516 Aug 28 j 17:24	10° <b>II</b> 54'02	2°46'49
				minimum elong	-12516 Aug 28 j 17:24	10° <b>II</b> 54'02	2°47'34
conjunction	-12522 Aug 16 j 10:43	27° <b>8</b> 48'38	2°45'59	max. Earth dist.	-12516 Aug 29 j 06:28	10° <b>II</b> 55'16	31.21822 AU
minimum elong	-12522 Aug 16 j 10:43	27° <b>8</b> 48'38	2°46'38	morning rise	-12516 Sep 12 j 18:34	11° <b>II</b> 28'00	
max. Earth dist.	-12522 Aug 16 j 16:35	27° <b>8</b> 49'11	31.25196 AU	retrograde	-12516 Dec 11 j 18:37	13° <b>II</b> 25'01	
morning rise	-12522 Aug 31 j 10:25	28° <b>8</b> 22'27		opposition	-12515 Mar 02 j 18:50	12° <b>II</b> 01'09	2°57'56
	-12522 Oct 25 j 22:25	0° <b>II</b>		min. Earth dist.	-12515 Mar 02 j 04:36	12° <b>II</b> 02'07	29.21914 AU
retrograde	-12522 Nov 28 j 22:22	0° <b>II</b> 18'46		direct	-12515 May 21 j 04:10	10° <b>II</b> 38'22	
	-12521 Jan 02 j 19:19	30° <b>R</b> 8		evening set	-12515 Aug 16 j 03:04	12° <b>II</b> 31'30	

Attention, astronomical year style is used: The year -12515 in astronomical counting style is the year 12516 BCE in historical counting style.

conjunction	-12515 Aug 31 j 02:35	13°II05'17	2°46'07	direct	-12508 Jun 05 j 10:34	26°II01'16	
minimum elong	-12515 Aug 31 j 02:35	13°II05'17	2°46'51	evening set	-12508 Aug 30 j 20:18	27°II53'54	
max. Earth dist.	-12515 Aug 31 j 16:08	13°II06'34	31.21491 AU				
morning rise	-12515 Sep 15 j 04:16	13°II39'17		conjunction	-12508 Sep 14 j 22:41	28°II27'55	2°34'31
retrograde	-12515 Dec 14 j 07:32	15°II36'28		minimum elong	-12508 Sep 14 j 22:42	28°II27'55	2°35'18
opposition	-12514 Mar 05 j 07:55	14°II12'34	2°57'03	max. Earth dist.	-12508 Sep 15 j 16:50	28°II29'38	31.16953 AU
min. Earth dist.	-12514 Mar 04 j 17:51	14°II13'31	29.21588 AU	morning rise	-12508 Sep 30 j 04:00	29°II02'13	
direct	-12514 May 23 j 12:44	12°II49'51			-12508 Oct 28 j 12:24	0°☾	
evening set	-12514 Aug 18 j 12:12	14°II42'57		retrograde	-12508 Dec 29 j 21:48	1°☾00'03	
					-12507 Mar 05 j 23:26	30°☿II	
conjunction	-12514 Sep 02 j 12:10	15°II16'45	2°45'10	min. Earth dist.	-12507 Mar 20 j 08:09	29°II36'56	29.16716 AU
minimum elong	-12514 Sep 02 j 12:10	15°II16'45	2°45'55	opposition	-12507 Mar 21 j 02:16	29°II35'42	2°43'47
max. Earth dist.	-12514 Sep 03 j 03:17	15°II18'11	31.21153 AU	direct	-12507 Jun 07 j 21:16	28°II13'05	
morning rise	-12514 Sep 17 j 14:08	15°II50'47			-12507 Aug 30 j 16:21	0°☾	
retrograde	-12514 Dec 16 j 20:02	17°II48'06		evening set	-12507 Sep 02 j 05:34	0°☾05'37	
opposition	-12513 Mar 07 j 20:40	16°II24'11	2°55'54				
min. Earth dist.	-12513 Mar 07 j 05:10	16°II25'14	29.21214 AU	conjunction	-12507 Sep 17 j 08:35	0°☾39'39	2°31'56
direct	-12513 May 26 j 01:04	15°II01'32		minimum elong	-12507 Sep 17 j 08:35	0°☾39'40	2°32'42
evening set	-12513 Aug 20 j 21:34	16°II54'35		max. Earth dist.	-12507 Sep 18 j 03:55	0°☾41'29	31.16031 AU
				morning rise	-12507 Oct 02 j 14:29	1°☾14'00	
conjunction	-12513 Sep 04 j 21:41	17°II28'26	2°43'58	retrograde	-12506 Jan 01 j 09:40	3°☾11'53	
minimum elong	-12513 Sep 04 j 21:41	17°II28'26	2°44'43	opposition	-12506 Mar 23 j 14:54	1°☾47'26	2°40'55
max. Earth dist.	-12513 Sep 05 j 12:25	17°II29'49	31.20742 AU	min. Earth dist.	-12506 Mar 22 j 18:58	1°☾48'48	29.15812 AU
morning rise	-12513 Sep 20 j 00:16	18°II02'30		direct	-12506 Jun 10 j 08:05	0°☾24'48	
retrograde	-12513 Dec 19 j 10:52	19°II59'56		evening set	-12506 Sep 04 j 15:06	2°☾17'15	
opposition	-12512 Mar 09 j 09:43	18°II36'00	2°54'30				
min. Earth dist.	-12512 Mar 08 j 18:05	18°II37'03	29.20759 AU	conjunction	-12506 Sep 19 j 18:32	2°☾51'21	2°29'09
direct	-12512 May 27 j 11:25	17°II13'24		minimum elong	-12506 Sep 19 j 18:33	2°☾51'21	2°29'55
evening set	-12512 Aug 22 j 06:43	19°II06'23		max. Earth dist.	-12506 Sep 20 j 14:06	2°☾53'12	31.15164 AU
				morning rise	-12506 Oct 05 j 01:13	3°☾25'44	
conjunction	-12512 Sep 06 j 07:21	19°II40'16	2°42'33	retrograde	-12505 Jan 03 j 21:54	5°☾23'40	
minimum elong	-12512 Sep 06 j 07:22	19°II40'16	2°43'19	min. Earth dist.	-12505 Mar 25 j 07:43	4°☾00'30	29.14993 AU
max. Earth dist.	-12512 Sep 06 j 23:46	19°II41'49	31.20224 AU	opposition	-12505 Mar 26 j 03:28	3°☾59'10	2°37'49
morning rise	-12512 Sep 21 j 10:15	20°II14'23		direct	-12505 Jun 12 j 16:44	2°☾36'31	
retrograde	-12512 Dec 20 j 22:25	22°II11'56		evening set	-12505 Sep 07 j 00:28	4°☾28'54	
opposition	-12511 Mar 11 j 22:46	20°II47'56	2°52'51				
min. Earth dist.	-12511 Mar 11 j 06:27	20°II49'03	29.20167 AU	conjunction	-12505 Sep 22 j 04:39	5°☾03'02	2°26'08
direct	-12511 May 29 j 23:40	19°II25'22		minimum elong	-12505 Sep 22 j 04:40	5°☾03'02	2°26'54
evening set	-12511 Aug 24 j 16:13	21°II18'18		max. Earth dist.	-12505 Sep 23 j 01:55	5°☾05'03	31.14401 AU
				morning rise	-12505 Oct 07 j 11:51	5°☾37'29	
conjunction	-12511 Sep 08 j 17:07	21°II52'12	2°40'53	retrograde	-12504 Jan 06 j 10:09	7°☾35'29	
minimum elong	-12511 Sep 08 j 17:07	21°II52'12	2°41'39	opposition	-12504 Mar 27 j 16:00	6°☾10'55	2°34'28
max. Earth dist.	-12511 Sep 09 j 09:05	21°II53'43	31.19577 AU	min. Earth dist.	-12504 Mar 26 j 18:36	6°☾12'22	29.14266 AU
morning rise	-12511 Sep 23 j 20:42	22°II26'22		direct	-12504 Jun 14 j 04:44	4°☾48'17	
retrograde	-12511 Dec 23 j 11:46	24°II24'00		evening set	-12504 Sep 08 j 09:55	6°☾40'36	
opposition	-12510 Mar 14 j 11:43	22°II59'57	2°50'57				
min. Earth dist.	-12510 Mar 13 j 18:44	23°II01'06	29.19452 AU	conjunction	-12504 Sep 23 j 14:33	7°☾14'47	2°22'54
direct	-12510 Jun 01 j 10:31	21°II37'23		minimum elong	-12504 Sep 23 j 14:33	7°☾14'47	2°23'41
evening set	-12510 Aug 27 j 01:33	23°II30'13		max. Earth dist.	-12504 Sep 24 j 11:38	7°☾16'47	31.13729 AU
				morning rise	-12504 Oct 08 j 22:38	7°☾49'18	
conjunction	-12510 Sep 11 j 03:03	24°II04'10	2°38'59	retrograde	-12503 Jan 08 j 00:34	9°☾47'22	
minimum elong	-12510 Sep 11 j 03:03	24°II04'10	2°39'46	min. Earth dist.	-12503 Mar 29 j 07:00	8°☾24'15	29.13630 AU
max. Earth dist.	-12510 Sep 11 j 20:16	24°II05'48	31.18791 AU	opposition	-12503 Mar 30 j 04:41	8°☾22'46	2°30'54
morning rise	-12510 Sep 26 j 07:06	24°II38'22		direct	-12503 Jun 16 j 14:03	7°☾00'10	
retrograde	-12510 Dec 25 j 22:47	26°II36'05		evening set	-12503 Sep 10 j 19:27	8°☾52'26	
min. Earth dist.	-12509 Mar 16 j 07:46	25°II13'05	29.18597 AU				
opposition	-12509 Mar 17 j 00:41	25°II11'56	2°48'48	conjunction	-12503 Sep 26 j 00:52	9°☾26'41	2°19'28
direct	-12509 Jun 03 j 23:18	23°II49'23		minimum elong	-12503 Sep 26 j 00:53	9°☾26'41	2°20'14
evening set	-12509 Aug 29 j 10:57	25°II42'06		max. Earth dist.	-12503 Sep 26 j 23:47	9°☾28'51	31.13126 AU
				morning rise	-12503 Oct 11 j 09:33	10°☾01'14	
conjunction	-12509 Sep 13 j 12:51	26°II16'05	2°36'52	retrograde	-12502 Jan 10 j 12:27	11°☾59'24	
minimum elong	-12509 Sep 13 j 12:51	26°II16'05	2°37'38	opposition	-12502 Apr 01 j 17:08	10°☾34'46	2°27'07
max. Earth dist.	-12509 Sep 14 j 06:08	26°II17'44	31.17902 AU	min. Earth dist.	-12502 Mar 31 j 18:46	10°☾36'18	29.13032 AU
morning rise	-12509 Sep 28 j 17:32	26°II50'20		direct	-12502 Jun 19 j 01:24	9°☾12'12	
retrograde	-12509 Dec 28 j 11:58	28°II48'06		evening set	-12502 Sep 13 j 05:15	11°☾04'27	
opposition	-12508 Mar 18 j 13:24	27°II23'52	2°46'25				
min. Earth dist.	-12508 Mar 17 j 19:02	27°II25'07	29.17666 AU	conjunction	-12502 Sep 28 j 11:14	11°☾38'44	2°15'48

Attention, astronomical year style is used: The year -12502 in astronomical counting style is the year 12503 BCE in historical counting style.

minimum elong	-12502 Sep 28 j 11:15	11° $\overline{038}$ '44	2°16'35	evening set	-12495 Sep 28 j 04:09	26° $\overline{031}$ '58	
max. Earth dist.	-12502 Sep 29 j 09:47	11° $\overline{040}$ '52	31.12549 AU				
morning rise	-12502 Oct 13 j 20:48	12° $\overline{013}$ '22		conjunction	-12495 Oct 13 j 15:12	27° $\overline{006}$ '39	1°44'56
retrograde	-12501 Jan 13 j 03:04	14° $\overline{011}$ '36		minimum elong	-12495 Oct 13 j 15:13	27° $\overline{006}$ '39	1°45'37
min. Earth dist.	-12501 Apr 03 j 06:44	12° $\overline{048}$ '31	29.12442 AU	max. Earth dist.	-12495 Oct 14 j 15:24	27° $\overline{008}$ '56	31.06187 AU
opposition	-12501 Apr 04 j 05:40	12° $\overline{046}$ '57	2°23'06	morning rise	-12495 Oct 29 j 06:24	27° $\overline{041}$ '43	
direct	-12501 Jun 21 j 11:50	11° $\overline{024}$ '25		retrograde	-12494 Jan 28 j 19:04	29° $\overline{040}$ '15	
evening set	-12501 Sep 15 j 15:02	13° $\overline{016}$ '38		opposition	-12494 Apr 19 j 20:21	28° $\overline{015}$ '13	1°49'26
				min. Earth dist.	-12494 Apr 18 j 20:32	28° $\overline{016}$ '52	29.05758 AU
conjunction	-12501 Sep 30 j 21:43	13° $\overline{050}$ '59	2°11'57	direct	-12494 Jul 06 j 15:00	26° $\overline{052}$ '32	
minimum elong	-12501 Sep 30 j 21:44	13° $\overline{050}$ '59	2°12'42	evening set	-12494 Sep 30 j 14:28	28° $\overline{044}$ '28	
max. Earth dist.	-12501 Oct 01 j 21:27	13° $\overline{053}$ '14	31.11933 AU				
morning rise	-12501 Oct 16 j 07:56	14° $\overline{025}$ '41		conjunction	-12494 Oct 16 j 02:26	29° $\overline{019}$ '13	1°39'51
retrograde	-12500 Jan 15 j 15:25	16° $\overline{023}$ '59		minimum elong	-12494 Oct 16 j 02:27	29° $\overline{019}$ '13	1°40'32
opposition	-12500 Apr 05 j 18:12	14° $\overline{059}$ '20	2°18'52	max. Earth dist.	-12494 Oct 17 j 04:10	29° $\overline{021}$ '38	31.05091 AU
min. Earth dist.	-12500 Apr 04 j 19:32	15° $\overline{000}$ '53	29.11785 AU	morning rise	-12494 Oct 31 j 18:17	29° $\overline{054}$ '21	
direct	-12500 Jun 22 j 23:55	13° $\overline{036}$ '50			-12494 Nov 03 j 08:15	0° $\Omega$	
evening set	-12500 Sep 17 j 01:03	15° $\overline{029}$ '01		retrograde	-12493 Jan 31 j 06:43	1° $\Omega$ 52'52	
				min. Earth dist.	-12493 Apr 21 j 07:59	0° $\Omega$ 29'28	29.04696 AU
conjunction	-12500 Oct 02 j 08:25	16° $\overline{003}$ '25	2°07'54	opposition	-12493 Apr 22 j 08:23	0° $\Omega$ 27'47	1°43'55
minimum elong	-12500 Oct 02 j 08:26	16° $\overline{003}$ '25	2°08'39		-12493 May 09 j 10:38	30° $\overline{R0}$	
max. Earth dist.	-12500 Oct 03 j 07:59	16° $\overline{005}$ '39	31.11255 AU	direct	-12493 Jul 09 j 02:04	29° $\overline{005}$ '04	
morning rise	-12500 Oct 17 j 19:26	16° $\overline{038}$ '11			-12493 Sep 04 j 20:00	0° $\Omega$	
retrograde	-12499 Jan 17 j 05:36	18° $\overline{036}$ '33		evening set	-12493 Oct 03 j 00:51	0° $\Omega$ 56'58	
min. Earth dist.	-12499 Apr 07 j 07:00	17° $\overline{013}$ '29	29.11046 AU				
opposition	-12499 Apr 08 j 06:41	17° $\overline{011}$ '52	2°14'25	conjunction	-12493 Oct 18 j 13:27	1° $\Omega$ 31'46	1°34'37
direct	-12499 Jun 25 j 10:57	15° $\overline{049}$ '23		minimum elong	-12493 Oct 18 j 13:28	1° $\Omega$ 31'46	1°35'17
evening set	-12499 Sep 19 j 11:10	17° $\overline{041}$ '32		max. Earth dist.	-12493 Oct 19 j 14:48	1° $\Omega$ 34'09	31.04096 AU
				morning rise	-12493 Nov 03 j 06:13	2° $\Omega$ 06'57	
conjunction	-12499 Oct 04 j 19:14	18° $\overline{016}$ '00	2°03'39	retrograde	-12492 Feb 02 j 21:27	4° $\Omega$ 05'30	
minimum elong	-12499 Oct 04 j 19:15	18° $\overline{016}$ '00	2°04'23	opposition	-12492 Apr 23 j 20:24	2° $\Omega$ 40'22	1°38'15
max. Earth dist.	-12499 Oct 05 j 18:58	18° $\overline{018}$ '15	31.10452 AU	min. Earth dist.	-12492 Apr 22 j 19:23	2° $\Omega$ 42'06	29.03756 AU
morning rise	-12499 Oct 20 j 07:05	18° $\overline{050}$ '50		direct	-12492 Jul 10 j 12:45	1° $\Omega$ 17'37	
retrograde	-12498 Jan 19 j 16:39	20° $\overline{049}$ '16		evening set	-12492 Oct 04 j 11:19	3° $\Omega$ 09'31	
opposition	-12498 Apr 10 j 19:18	19° $\overline{024}$ '32	2°09'47				
min. Earth dist.	-12498 Apr 09 j 20:30	19° $\overline{026}$ '06	29.10169 AU	conjunction	-12492 Oct 20 j 00:45	3° $\Omega$ 44'23	1°29'15
direct	-12498 Jun 27 j 21:36	18° $\overline{002}$ '03		minimum elong	-12492 Oct 20 j 00:46	3° $\Omega$ 44'23	1°29'54
evening set	-12498 Sep 21 j 21:23	19° $\overline{054}$ '09		max. Earth dist.	-12492 Oct 21 j 03:18	3° $\Omega$ 46'52	31.03218 AU
				morning rise	-12492 Nov 04 j 18:16	4° $\Omega$ 19'37	
conjunction	-12498 Oct 07 j 06:17	20° $\overline{028}$ '41	1°59'13	retrograde	-12491 Feb 04 j 10:20	6° $\Omega$ 18'12	
minimum elong	-12498 Oct 07 j 06:18	20° $\overline{028}$ '41	1°59'57	min. Earth dist.	-12491 Apr 25 j 07:30	4° $\Omega$ 54'44	29.02931 AU
max. Earth dist.	-12498 Oct 08 j 06:29	20° $\overline{030}$ '58	31.09524 AU	opposition	-12491 Apr 26 j 08:23	4° $\Omega$ 53'01	1°32'26
morning rise	-12498 Oct 22 j 18:52	21° $\overline{003}$ '34		direct	-12491 Jul 13 j 00:45	3° $\Omega$ 30'16	
retrograde	-12497 Jan 22 j 05:17	23° $\overline{002}$ '02		evening set	-12491 Oct 06 j 21:53	5° $\Omega$ 22'09	
min. Earth dist.	-12497 Apr 12 j 07:42	21° $\overline{038}$ '53	29.09159 AU				
opposition	-12497 Apr 13 j 07:32	21° $\overline{037}$ '15	2°04'58	conjunction	-12491 Oct 22 j 12:08	5° $\Omega$ 57'05	1°23'44
direct	-12497 Jun 30 j 08:39	20° $\overline{014}$ '44		minimum elong	-12491 Oct 22 j 12:08	5° $\Omega$ 57'05	1°24'22
evening set	-12497 Sep 24 j 07:42	22° $\overline{006}$ '48		max. Earth dist.	-12491 Oct 23 j 14:40	5° $\Omega$ 59'35	31.02467 AU
				morning rise	-12491 Nov 07 j 06:30	6° $\Omega$ 32'24	
conjunction	-12497 Oct 09 j 17:13	22° $\overline{041}$ '23	1°54'37	retrograde	-12490 Feb 07 j 00:28	8° $\Omega$ 30'59	
minimum elong	-12497 Oct 09 j 17:14	22° $\overline{041}$ '23	1°55'20	opposition	-12490 Apr 28 j 20:16	7° $\Omega$ 05'48	1°26'28
max. Earth dist.	-12497 Oct 10 j 16:52	22° $\overline{043}$ '37	31.08463 AU	min. Earth dist.	-12490 Apr 27 j 18:18	7° $\Omega$ 07'36	29.02215 AU
morning rise	-12497 Oct 25 j 06:44	23° $\overline{016}$ '19		direct	-12490 Jul 15 j 11:41	5° $\Omega$ 43'03	
retrograde	-12496 Jan 24 j 17:32	25° $\overline{014}$ '49		evening set	-12490 Oct 09 j 08:43	7° $\Omega$ 34'57	
opposition	-12496 Apr 14 j 20:00	23° $\overline{049}$ '58	1°59'57				
min. Earth dist.	-12496 Apr 13 j 21:02	23° $\overline{051}$ '33	29.08048 AU	conjunction	-12490 Oct 24 j 23:39	8° $\Omega$ 09'56	1°18'06
direct	-12496 Jul 01 j 17:37	22° $\overline{027}$ '24		minimum elong	-12490 Oct 24 j 23:40	8° $\Omega$ 09'56	1°18'43
evening set	-12496 Sep 25 j 17:44	24° $\overline{019}$ '25		max. Earth dist.	-12490 Oct 26 j 02:26	8° $\Omega$ 12'27	31.01786 AU
				morning rise	-12490 Nov 09 j 18:50	8° $\Omega$ 45'19	
conjunction	-12496 Oct 11 j 04:11	24° $\overline{054}$ '03	1°49'51	retrograde	-12489 Feb 09 j 12:20	10° $\Omega$ 43'56	
minimum elong	-12496 Oct 11 j 04:12	24° $\overline{054}$ '03	1°50'34	min. Earth dist.	-12489 Apr 30 j 07:00	9° $\Omega$ 20'29	29.01557 AU
max. Earth dist.	-12496 Oct 12 j 05:04	24° $\overline{056}$ '24	31.07334 AU	opposition	-12489 May 01 j 08:07	9° $\Omega$ 18'45	1°20'22
morning rise	-12496 Oct 26 j 18:23	25° $\overline{029}$ '03		direct	-12489 Jul 17 j 22:15	7° $\Omega$ 56'00	
retrograde	-12495 Jan 26 j 05:22	27° $\overline{027}$ '34		evening set	-12489 Oct 11 j 19:34	9° $\Omega$ 47'54	
min. Earth dist.	-12495 Apr 16 j 08:13	26° $\overline{004}$ '17	29.06887 AU				
opposition	-12495 Apr 17 j 08:14	26° $\overline{002}$ '37	1°54'46	conjunction	-12489 Oct 27 j 11:22	10° $\Omega$ 22'57	1°12'20
direct	-12495 Jul 04 j 05:52	24° $\overline{040}$ '00		minimum elong	-12489 Oct 27 j 11:23	10° $\Omega$ 22'57	1°12'56



Attention, astronomical year style is used: The year -12489 in astronomical counting style is the year 12490 BCE in historical counting style.

max. Earth dist.	-12489 Oct 28 j 14:44	10°Ω25'32	31.01162 AU	retrograde	-12482 Feb 25 j 05:58	26°Ω17'36	
morning rise	-12489 Nov 12 j 07:14	10°Ω58'24		opposition	-12482 May 16 j 18:16	24°Ω52'13	0°34'46
retrograde	-12488 Feb 12 j 02:25	12°Ω57'02		min. Earth dist.	-12482 May 15 j 18:47	24°Ω53'51	28.95702 AU
opposition	-12488 May 02 j 19:53	11°Ω31'51	1°14'09	direct	-12482 Aug 02 j 01:30	23°Ω29'10	
min. Earth dist.	-12488 May 01 j 17:48	11°Ω33'40	29.00924 AU	evening set	-12482 Oct 27 j 03:56	25°Ω21'10	
direct	-12488 Jul 19 j 09:36	10°Ω09'07					
evening set	-12488 Oct 13 j 06:37	12°Ω01'03		conjunction	-12482 Nov 12 j 00:49	25°Ω56'35	0°29'24
				minimum elong	-12482 Nov 12 j 00:49	25°Ω56'35	0°29'51
conjunction	-12488 Oct 28 j 23:03	12°Ω36'09	1°06'27	max. Earth dist.	-12482 Nov 13 j 02:24	25°Ω58'59	30.95184 AU
minimum elong	-12488 Oct 28 j 23:03	12°Ω36'09	1°07'02	morning rise	-12482 Nov 28 j 01:48	26°Ω32'23	
max. Earth dist.	-12488 Oct 30 j 01:44	12°Ω38'40	31.00523 AU	retrograde	-12481 Feb 27 j 19:59	28°Ω30'56	
morning rise	-12488 Nov 13 j 19:50	13°Ω11'39		min. Earth dist.	-12481 May 18 j 05:22	27°Ω07'11	28.94762 AU
	-12487 Jan 19 j 05:58	15°Ω		opposition	-12481 May 19 j 05:34	27°Ω05'30	0°27'58
retrograde	-12487 Feb 13 j 14:36	15°Ω10'20		direct	-12481 Aug 04 j 12:49	25°Ω42'22	
	-12487 Mar 11 j 05:08	15°Ω		evening set	-12481 Oct 29 j 15:48	27°Ω34'25	
min. Earth dist.	-12487 May 04 j 06:58	13°Ω46'52	29.00261 AU				
opposition	-12487 May 05 j 07:52	13°Ω45'08	1°07'48	conjunction	-12481 Nov 14 j 13:16	28°Ω09'52	0°23'02
direct	-12487 Jul 21 j 18:49	12°Ω22'24		minimum elong	-12481 Nov 14 j 13:16	28°Ω09'52	0°23'26
evening set	-12487 Oct 15 j 17:54	14°Ω14'20		max. Earth dist.	-12481 Nov 15 j 14:51	28°Ω12'16	30.94288 AU
				morning rise	-12481 Nov 30 j 14:55	28°Ω45'43	
conjunction	-12487 Oct 31 j 11:15	14°Ω49'30	1°00'29		-12480 Jan 08 j 00:56	0°Ω	
minimum elong	-12487 Oct 31 j 11:16	14°Ω49'30	1°01'02	retrograde	-12480 Mar 01 j 08:30	0°Ω44'15	
max. Earth dist.	-12487 Nov 01 j 14:38	14°Ω52'04	30.99833 AU		-12480 Apr 25 j 01:50	30°Ω	
	-12487 Nov 05 j 02:55	15°Ω		opposition	-12480 May 20 j 17:01	29°Ω18'46	0°21'07
morning rise	-12487 Nov 16 j 08:38	15°Ω25'03		min. Earth dist.	-12480 May 19 j 17:45	29°Ω20'24	28.93929 AU
retrograde	-12486 Feb 16 j 02:20	17°Ω23'44		direct	-12480 Aug 05 j 23:46	27°Ω55'37	
opposition	-12486 May 07 j 19:31	15°Ω58'32	1°01'22	evening set	-12480 Oct 31 j 03:34	29°Ω47'41	
min. Earth dist.	-12486 May 06 j 18:10	16°Ω00'18	28.99514 AU		-12480 Nov 05 j 17:27	0°Ω	
	-12486 Jun 15 j 16:59	15°Ω					
direct	-12486 Jul 24 j 06:29	14°Ω35'46		conjunction	-12480 Nov 16 j 01:50	0°Ω23'12	0°16'37
	-12486 Aug 30 j 19:32	15°Ω		minimum elong	-12480 Nov 16 j 01:50	0°Ω23'12	0°17'01
evening set	-12486 Oct 18 j 05:29	16°Ω27'44		max. Earth dist.	-12480 Nov 17 j 03:51	0°Ω25'38	30.93532 AU
				morning rise	-12480 Dec 02 j 04:01	0°Ω59'05	
conjunction	-12486 Nov 02 j 23:24	17°Ω02'57	0°54'24	retrograde	-12479 Mar 03 j 22:59	2°Ω57'36	
minimum elong	-12486 Nov 02 j 23:25	17°Ω02'57	0°54'57	min. Earth dist.	-12479 May 22 j 04:05	1°Ω33'49	28.93231 AU
max. Earth dist.	-12486 Nov 04 j 01:19	17°Ω05'23	30.99042 AU	opposition	-12479 May 23 j 04:18	1°Ω32'07	0°14'14
morning rise	-12486 Nov 18 j 21:42	17°Ω38'33		direct	-12479 Aug 08 j 11:42	0°Ω08'56	
retrograde	-12485 Feb 18 j 15:37	19°Ω37'14		evening set	-12479 Nov 02 j 15:46	2°Ω01'04	
min. Earth dist.	-12485 May 09 j 06:52	18°Ω13'43	28.98668 AU				
opposition	-12485 May 10 j 07:23	18°Ω12'01	0°54'49	conjunction	-12479 Nov 18 j 14:31	2°Ω36'37	0°10'11
direct	-12485 Jul 26 j 15:26	16°Ω49'11		minimum elong	-12479 Nov 18 j 14:31	2°Ω36'37	0°10'33
evening set	-12485 Oct 20 j 16:51	18°Ω41'10		behind sun begin	-12479 Nov 18 j 09:27	2°Ω36'10	
				behind sun end	-12479 Nov 18 j 19:35	2°Ω37'05	
conjunction	-12485 Nov 05 j 11:39	19°Ω16'26	0°48'15	max. Earth dist.	-12479 Nov 19 j 15:48	2°Ω38'59	30.92897 AU
minimum elong	-12485 Nov 05 j 11:39	19°Ω16'26	0°48'46	morning rise	-12479 Dec 04 j 17:26	3°Ω12'33	
max. Earth dist.	-12485 Nov 06 j 14:21	19°Ω18'56	30.98144 AU	retrograde	-12478 Mar 06 j 10:57	5°Ω11'04	
morning rise	-12485 Nov 21 j 10:29	19°Ω52'05		opposition	-12478 May 25 j 15:35	3°Ω45'36	0°07'20
retrograde	-12484 Feb 21 j 03:30	21°Ω50'45		min. Earth dist.	-12478 May 24 j 16:30	3°Ω47'13	28.92663 AU
opposition	-12484 May 11 j 19:07	20°Ω25'28	0°48'12	direct	-12478 Aug 10 j 21:03	2°Ω22'24	
min. Earth dist.	-12484 May 10 j 18:43	20°Ω27'11	28.97711 AU	evening set	-12478 Nov 05 j 03:56	4°Ω14'37	
direct	-12484 Jul 28 j 02:44	19°Ω02'35					
evening set	-12484 Oct 22 j 04:30	20°Ω54'34		conjunction	-12478 Nov 21 j 03:28	4°Ω50'13	0°03'45
				minimum elong	-12478 Nov 21 j 03:27	4°Ω50'13	0°04'06
conjunction	-12484 Nov 06 j 23:55	21°Ω29'53	0°42'01	behind sun begin	-12478 Nov 20 j 21:00	4°Ω49'38	
minimum elong	-12484 Nov 06 j 23:56	21°Ω29'53	0°42'32	behind sun end	-12478 Nov 21 j 09:54	4°Ω50'47	
max. Earth dist.	-12484 Nov 08 j 01:28	21°Ω32'16	30.97171 AU	max. Earth dist.	-12478 Nov 22 j 05:31	4°Ω52'39	30.92391 AU
morning rise	-12484 Nov 22 j 23:38	22°Ω05'35		morning rise	-12478 Dec 07 j 06:45	5°Ω26'11	
retrograde	-12483 Feb 22 j 17:42	24°Ω04'13		retrograde	-12477 Mar 08 j 23:03	7°Ω24'41	
min. Earth dist.	-12483 May 13 j 06:29	22°Ω40'34	28.96712 AU	min. Earth dist.	-12477 May 27 j 03:10	6°Ω00'56	28.92199 AU
opposition	-12483 May 14 j 06:43	22°Ω38'53	0°41'31	opposition	-12477 May 28 j 02:48	5°Ω59'16	0°00'24
direct	-12483 Jul 30 j 13:33	21°Ω15'54		desc. node	-12477 Jun 17 j 22:30	5°Ω25'11	
evening set	-12483 Oct 24 j 16:10	23°Ω07'54		direct	-12477 Aug 13 j 08:33	4°Ω36'04	
				evening set	-12477 Nov 07 j 16:15	6°Ω28'22	
conjunction	-12483 Nov 09 j 12:23	23°Ω43'16	0°35'44				
minimum elong	-12483 Nov 09 j 12:23	23°Ω43'16	0°36'12	conjunction	-12477 Nov 23 j 16:10	7°Ω04'00	-0°02'53
max. Earth dist.	-12483 Nov 10 j 14:28	23°Ω45'42	30.96159 AU	minimum elong	-12477 Nov 23 j 16:10	7°Ω04'00	0°02'34
morning rise	-12483 Nov 25 j 12:43	24°Ω19'01		behind sun begin	-12477 Nov 23 j 09:37	7°Ω03'25	

Attention, astronomical year style is used: The year -12477 in astronomical counting style is the year 12478 BCE in historical counting style.

behind sun end	-12477 Nov 23 j 22:42	7° $\mathring{\text{N}}$ 04'35		retrograde	-12470 Mar 24 j 20:09	23° $\mathring{\text{N}}$ 04'53	
max. Earth dist.	-12477 Nov 24 j 16:56	7° $\mathring{\text{N}}$ 06'19	30.91971 AU	opposition	-12470 Jun 12 j 09:03	21° $\mathring{\text{N}}$ 39'33	-0°47'40
morning rise	-12477 Dec 09 j 20:09	7° $\mathring{\text{N}}$ 40'01		min. Earth dist.	-12470 Jun 11 j 13:51	21° $\mathring{\text{N}}$ 40'55	28.88478 AU
retrograde	-12476 Mar 10 j 12:24	9° $\mathring{\text{N}}$ 38'32		direct	-12470 Aug 28 j 14:36	20° $\mathring{\text{N}}$ 16'00	
opposition	-12476 May 29 j 14:08	8° $\mathring{\text{N}}$ 13'10	-0°06'32	evening set	-12470 Nov 23 j 11:40	22° $\mathring{\text{N}}$ 08'56	
min. Earth dist.	-12476 May 28 j 15:18	8° $\mathring{\text{N}}$ 14'46	28.91812 AU				
direct	-12476 Aug 14 j 17:02	6° $\mathring{\text{N}}$ 49'57		conjunction	-12470 Dec 09 j 14:55	22° $\mathring{\text{N}}$ 44'49	-0°47'40
evening set	-12476 Nov 09 j 04:47	8° $\mathring{\text{N}}$ 42'21		minimum elong	-12470 Dec 09 j 14:54	22° $\mathring{\text{N}}$ 44'49	0°47'33
				max. Earth dist.	-12470 Dec 10 j 10:57	22° $\mathring{\text{N}}$ 46'41	30.88076 AU
conjunction	-12476 Nov 25 j 05:24	9° $\mathring{\text{N}}$ 18'02	-0°09'21	morning rise	-12470 Dec 25 j 21:35	23° $\mathring{\text{N}}$ 21'00	
minimum elong	-12476 Nov 25 j 05:24	9° $\mathring{\text{N}}$ 18'02	0°09'04	retrograde	-12469 Mar 27 j 08:10	25° $\mathring{\text{N}}$ 19'15	
behind sun begin	-12476 Nov 24 j 23:50	9° $\mathring{\text{N}}$ 17'32		opposition	-12469 Jun 14 j 20:07	23° $\mathring{\text{N}}$ 53'54	-0°54'20
behind sun end	-12476 Nov 25 j 10:58	9° $\mathring{\text{N}}$ 18'32		min. Earth dist.	-12469 Jun 14 j 02:27	23° $\mathring{\text{N}}$ 55'09	28.87768 AU
max. Earth dist.	-12476 Nov 26 j 06:53	9° $\mathring{\text{N}}$ 20'25	30.91595 AU	direct	-12469 Aug 31 j 01:09	22° $\mathring{\text{N}}$ 30'16	
morning rise	-12476 Dec 11 j 09:42	9° $\mathring{\text{N}}$ 54'05		evening set	-12469 Nov 26 j 00:50	24° $\mathring{\text{N}}$ 23'15	
retrograde	-12475 Mar 13 j 00:22	11° $\mathring{\text{N}}$ 52'37					
min. Earth dist.	-12475 May 31 j 02:51	10° $\mathring{\text{N}}$ 28'52	28.91433 AU	conjunction	-12469 Dec 12 j 04:36	24° $\mathring{\text{N}}$ 59'09	-0°53'51
opposition	-12475 Jun 01 j 01:17	10° $\mathring{\text{N}}$ 27'17	-0°13'28	minimum elong	-12469 Dec 12 j 04:36	24° $\mathring{\text{N}}$ 59'09	0°53'46
direct	-12475 Aug 17 j 03:43	9° $\mathring{\text{N}}$ 04'03		max. Earth dist.	-12469 Dec 13 j 01:04	25° $\mathring{\text{N}}$ 01'03	30.87394 AU
evening set	-12475 Nov 11 j 17:41	10° $\mathring{\text{N}}$ 56'34		morning rise	-12469 Dec 28 j 11:23	25° $\mathring{\text{N}}$ 35'20	
				retrograde	-12468 Mar 28 j 20:54	27° $\mathring{\text{N}}$ 33'31	
conjunction	-12475 Nov 27 j 18:44	11° $\mathring{\text{N}}$ 32'17	-0°15'48	opposition	-12468 Jun 16 j 06:58	26° $\mathring{\text{N}}$ 08'09	-1°00'54
minimum elong	-12475 Nov 27 j 18:44	11° $\mathring{\text{N}}$ 32'17	0°15'33	min. Earth dist.	-12468 Jun 15 j 13:01	26° $\mathring{\text{N}}$ 09'25	28.87129 AU
behind sun begin	-12475 Nov 27 j 17:25	11° $\mathring{\text{N}}$ 32'10		direct	-12468 Sep 01 j 13:41	24° $\mathring{\text{N}}$ 44'26	
behind sun end	-12475 Nov 27 j 20:02	11° $\mathring{\text{N}}$ 32'24		evening set	-12468 Nov 27 j 14:27	26° $\mathring{\text{N}}$ 37'30	
max. Earth dist.	-12475 Nov 28 j 18:36	11° $\mathring{\text{N}}$ 34'31	30.91209 AU				
morning rise	-12475 Dec 13 j 23:38	12° $\mathring{\text{N}}$ 08'23		conjunction	-12468 Dec 13 j 18:23	27° $\mathring{\text{N}}$ 13'25	-0°59'58
retrograde	-12474 Mar 15 j 14:18	14° $\mathring{\text{N}}$ 06'54		minimum elong	-12468 Dec 13 j 18:22	27° $\mathring{\text{N}}$ 13'25	0°59'55
opposition	-12474 Jun 03 j 12:33	12° $\mathring{\text{N}}$ 41'36	-0°20'23	max. Earth dist.	-12468 Dec 14 j 13:13	27° $\mathring{\text{N}}$ 15'10	30.86803 AU
min. Earth dist.	-12474 Jun 02 j 14:40	12° $\mathring{\text{N}}$ 43'09	28.91021 AU	morning rise	-12468 Dec 30 j 01:33	27° $\mathring{\text{N}}$ 49'37	
direct	-12474 Aug 19 j 14:22	11° $\mathring{\text{N}}$ 18'21		retrograde	-12467 Mar 31 j 10:08	29° $\mathring{\text{N}}$ 47'44	
evening set	-12474 Nov 14 j 06:39	13° $\mathring{\text{N}}$ 10'58		opposition	-12467 Jun 18 j 17:47	28° $\mathring{\text{N}}$ 22'22	-1°07'24
				min. Earth dist.	-12467 Jun 18 j 00:48	28° $\mathring{\text{N}}$ 23'34	28.86610 AU
conjunction	-12474 Nov 30 j 08:14	13° $\mathring{\text{N}}$ 46'44	-0°22'16	direct	-12467 Sep 03 j 23:19	26° $\mathring{\text{N}}$ 58'33	
minimum elong	-12474 Nov 30 j 08:13	13° $\mathring{\text{N}}$ 46'44	0°22'02	evening set	-12467 Nov 30 j 04:01	28° $\mathring{\text{N}}$ 51'44	
max. Earth dist.	-12474 Dec 01 j 08:07	13° $\mathring{\text{N}}$ 48'58	30.90742 AU				
morning rise	-12474 Dec 16 j 13:24	14° $\mathring{\text{N}}$ 22'50		conjunction	-12467 Dec 16 j 08:26	29° $\mathring{\text{N}}$ 27'40	-1°05'59
retrograde	-12473 Mar 18 j 02:21	16° $\mathring{\text{N}}$ 21'21		minimum elong	-12467 Dec 16 j 08:25	29° $\mathring{\text{N}}$ 27'40	1°05'57
opposition	-12473 Jun 05 j 23:47	14° $\mathring{\text{N}}$ 56'04	-0°27'17	max. Earth dist.	-12467 Dec 17 j 03:49	29° $\mathring{\text{N}}$ 29'29	30.86335 AU
min. Earth dist.	-12473 Jun 05 j 03:12	14° $\mathring{\text{N}}$ 57'32	28.90509 AU		-12467 Dec 30 j 21:00	0° $\mathring{\text{A}}$	
direct	-12473 Aug 22 j 01:50	13° $\mathring{\text{N}}$ 32'47		morning rise	-12466 Jan 01 j 15:36	0° $\mathring{\text{A}}$ 03'53	
evening set	-12473 Nov 16 j 19:45	15° $\mathring{\text{N}}$ 25'29		retrograde	-12466 Apr 02 j 21:05	2° $\mathring{\text{A}}$ 01'56	
				min. Earth dist.	-12466 Jun 20 j 11:55	0° $\mathring{\text{A}}$ 37'46	28.86207 AU
conjunction	-12473 Dec 02 j 21:47	16° $\mathring{\text{N}}$ 01'17	-0°28'41	opposition	-12466 Jun 21 j 04:37	0° $\mathring{\text{A}}$ 36'35	-1°13'47
minimum elong	-12473 Dec 02 j 21:47	16° $\mathring{\text{N}}$ 01'17	0°28'29		-12466 Jul 13 j 10:00	30° $\mathring{\text{R}}$ $\mathring{\text{N}}$	
max. Earth dist.	-12473 Dec 03 j 20:19	16° $\mathring{\text{N}}$ 03'23	30.90191 AU	direct	-12466 Sep 06 j 10:52	29° $\mathring{\text{N}}$ 12'44	
morning rise	-12473 Dec 19 j 03:25	16° $\mathring{\text{N}}$ 37'25			-12466 Oct 30 j 00:35	0° $\mathring{\text{A}}$	
retrograde	-12472 Mar 19 j 16:51	18° $\mathring{\text{N}}$ 35'53		evening set	-12466 Dec 02 j 17:44	1° $\mathring{\text{A}}$ 06'02	
opposition	-12472 Jun 07 j 10:58	17° $\mathring{\text{N}}$ 10'36	-0°34'08				
min. Earth dist.	-12472 Jun 06 j 14:19	17° $\mathring{\text{N}}$ 12'04	28.89907 AU	conjunction	-12466 Dec 18 j 22:16	1° $\mathring{\text{A}}$ 41'58	-1°11'55
direct	-12472 Aug 23 j 13:15	15° $\mathring{\text{N}}$ 47'14		minimum elong	-12466 Dec 18 j 22:15	1° $\mathring{\text{A}}$ 41'58	1°11'55
evening set	-12472 Nov 18 j 08:55	17° $\mathring{\text{N}}$ 40'02		max. Earth dist.	-12466 Dec 19 j 16:06	1° $\mathring{\text{A}}$ 43'38	30.85996 AU
				morning rise	-12465 Jan 04 j 05:43	2° $\mathring{\text{A}}$ 18'11	
conjunction	-12472 Dec 04 j 11:24	18° $\mathring{\text{N}}$ 15'51	-0°35'04	retrograde	-12465 Apr 05 j 09:52	4° $\mathring{\text{A}}$ 16'12	
minimum elong	-12472 Dec 04 j 11:23	18° $\mathring{\text{N}}$ 15'51	0°34'54	opposition	-12465 Jun 23 j 15:24	2° $\mathring{\text{A}}$ 50'53	-1°20'04
max. Earth dist.	-12472 Dec 05 j 09:09	18° $\mathring{\text{N}}$ 17'53	30.89532 AU	min. Earth dist.	-12465 Jun 22 j 23:01	2° $\mathring{\text{A}}$ 52'03	28.85939 AU
morning rise	-12472 Dec 20 j 17:25	18° $\mathring{\text{N}}$ 52'00		direct	-12465 Sep 08 j 21:12	1° $\mathring{\text{A}}$ 26'59	
retrograde	-12471 Mar 22 j 05:51	20° $\mathring{\text{N}}$ 50'25		evening set	-12465 Dec 05 j 07:29	3° $\mathring{\text{A}}$ 20'25	
opposition	-12471 Jun 09 j 22:11	19° $\mathring{\text{N}}$ 25'07	-0°40'56				
min. Earth dist.	-12471 Jun 09 j 03:14	19° $\mathring{\text{N}}$ 26'27	28.89212 AU	conjunction	-12465 Dec 21 j 12:21	3° $\mathring{\text{A}}$ 56'22	-1°17'44
direct	-12471 Aug 26 j 01:19	18° $\mathring{\text{N}}$ 01'40		minimum elong	-12465 Dec 21 j 12:21	3° $\mathring{\text{A}}$ 56'22	1°17'46
evening set	-12471 Nov 20 j 22:12	19° $\mathring{\text{N}}$ 54'31		max. Earth dist.	-12465 Dec 22 j 06:30	3° $\mathring{\text{A}}$ 58'04	30.85769 AU
				morning rise	-12464 Jan 06 j 19:48	4° $\mathring{\text{A}}$ 32'36	
conjunction	-12471 Dec 07 j 01:12	20° $\mathring{\text{N}}$ 30'23	-0°41'24	retrograde	-12464 Apr 06 j 21:23	6° $\mathring{\text{A}}$ 30'34	
minimum elong	-12471 Dec 07 j 01:12	20° $\mathring{\text{N}}$ 30'23	0°41'15	min. Earth dist.	-12464 Jun 24 j 10:59	5° $\mathring{\text{A}}$ 06'24	28.85764 AU
max. Earth dist.	-12471 Dec 07 j 22:29	20° $\mathring{\text{N}}$ 32'22	30.88816 AU	opposition	-12464 Jun 25 j 02:11	5° $\mathring{\text{A}}$ 05'19	-1°26'14
morning rise	-12471 Dec 23 j 07:29	21° $\mathring{\text{N}}$ 06'33		direct	-12464 Sep 10 j 07:57	3° $\mathring{\text{A}}$ 41'23	

Attention, astronomical year style is used: The year -12464 in astronomical counting style is the year 12465 BCE in historical counting style.

evening set	-12464 Dec 06 j 21:26	5° <u>♁</u> 34'58		opposition	-12457 Jul 11 j 05:26	20° <u>♁</u> 49'42	-2°05'16
				min. Earth dist.	-12457 Jul 10 j 20:39	20° <u>♁</u> 50'19	28.83924 AU
conjunction	-12464 Dec 23 j 02:31	6° <u>♁</u> 10'56	-1°23'26	direct	-12457 Sep 26 j 19:54	19° <u>♁</u> 25'21	
minimum elong	-12464 Dec 23 j 02:30	6° <u>♁</u> 10'56	1°23'31	evening set	-12457 Dec 24 j 02:29	21° <u>♁</u> 19'52	
max. Earth dist.	-12464 Dec 23 j 19:18	6° <u>♁</u> 12'30	30.85634 AU				
morning rise	-12463 Jan 08 j 10:10	6° <u>♁</u> 47'09		conjunction	-12456 Jan 09 j 08:17	21° <u>♁</u> 55'53	-1°59'24
retrograde	-12463 Apr 09 j 11:30	8° <u>♁</u> 45'06		minimum elong	-12456 Jan 09 j 08:16	21° <u>♁</u> 55'53	1°59'41
opposition	-12463 Jun 27 j 12:55	7° <u>♁</u> 19'55	-1°32'16	max. Earth dist.	-12456 Jan 09 j 17:06	21° <u>♁</u> 56'42	30.83606 AU
min. Earth dist.	-12463 Jun 26 j 21:43	7° <u>♁</u> 20'59	28.85652 AU	morning rise	-12456 Jan 25 j 15:43	22° <u>♁</u> 32'04	
direct	-12463 Sep 12 j 19:16	5° <u>♁</u> 55'57		retrograde	-12456 Apr 25 j 05:07	24° <u>♁</u> 29'31	
evening set	-12463 Dec 09 j 11:42	7° <u>♁</u> 49'41		opposition	-12456 Jul 12 j 15:54	23° <u>♁</u> 04'32	-2°10'08
				min. Earth dist.	-12456 Jul 12 j 07:43	23° <u>♁</u> 05'07	28.83572 AU
conjunction	-12463 Dec 25 j 16:55	8° <u>♁</u> 25'41	-1°29'01	direct	-12456 Sep 28 j 06:40	21° <u>♁</u> 40'05	
minimum elong	-12463 Dec 25 j 16:54	8° <u>♁</u> 25'41	1°29'07	evening set	-12456 Dec 25 j 17:00	23° <u>♁</u> 34'44	
max. Earth dist.	-12463 Dec 26 j 08:56	8° <u>♁</u> 27'10	30.85509 AU				
morning rise	-12462 Jan 11 j 00:34	9° <u>♁</u> 01'54		conjunction	-12455 Jan 10 j 22:57	24° <u>♁</u> 10'44	-2°03'52
retrograde	-12462 Apr 12 j 00:01	10° <u>♁</u> 59'49		minimum elong	-12455 Jan 10 j 22:56	24° <u>♁</u> 10'44	2°04'11
opposition	-12462 Jun 29 j 23:42	9° <u>♁</u> 34'42	-1°38'10	max. Earth dist.	-12455 Jan 11 j 07:54	24° <u>♁</u> 11'35	30.83281 AU
min. Earth dist.	-12462 Jun 29 j 10:23	9° <u>♁</u> 35'38	28.85532 AU	morning rise	-12455 Jan 27 j 06:07	24° <u>♁</u> 46'54	
direct	-12462 Sep 15 j 07:01	8° <u>♁</u> 10'42		retrograde	-12455 Apr 27 j 16:06	26° <u>♁</u> 44'15	
evening set	-12462 Dec 12 j 02:00	10° <u>♁</u> 04'36		opposition	-12455 Jul 15 j 02:30	25° <u>♁</u> 19'18	-2°14'49
				min. Earth dist.	-12455 Jul 14 j 19:35	25° <u>♁</u> 19'48	28.83309 AU
conjunction	-12462 Dec 28 j 07:27	10° <u>♁</u> 40'36	-1°34'28	direct	-12455 Sep 30 j 17:33	23° <u>♁</u> 54'45	
minimum elong	-12462 Dec 28 j 07:25	10° <u>♁</u> 40'36	1°34'36	evening set	-12455 Dec 28 j 07:39	25° <u>♁</u> 49'32	
max. Earth dist.	-12462 Dec 28 j 22:31	10° <u>♁</u> 42'01	30.85368 AU				
morning rise	-12461 Jan 13 j 15:04	11° <u>♁</u> 16'49		conjunction	-12454 Jan 13 j 13:30	26° <u>♁</u> 25'32	-2°08'09
retrograde	-12461 Apr 14 j 14:20	13° <u>♁</u> 14'42		minimum elong	-12454 Jan 13 j 13:29	26° <u>♁</u> 25'32	2°08'28
opposition	-12461 Jul 02 j 10:29	11° <u>♁</u> 49'38	-1°43'55	max. Earth dist.	-12454 Jan 13 j 20:57	26° <u>♁</u> 26'13	30.83079 AU
min. Earth dist.	-12461 Jul 01 j 21:10	11° <u>♁</u> 50'35	28.85362 AU	morning rise	-12454 Jan 29 j 20:35	27° <u>♁</u> 01'40	
direct	-12461 Sep 17 j 20:19	10° <u>♁</u> 25'36		retrograde	-12454 Apr 30 j 04:32	28° <u>♁</u> 58'56	
evening set	-12461 Dec 14 j 16:21	12° <u>♁</u> 19'39		opposition	-12454 Jul 17 j 12:53	27° <u>♁</u> 34'01	-2°19'17
				min. Earth dist.	-12454 Jul 17 j 05:48	27° <u>♁</u> 34'31	28.83189 AU
conjunction	-12461 Dec 30 j 21:49	12° <u>♁</u> 55'39	-1°39'47	direct	-12454 Oct 03 j 05:00	26° <u>♁</u> 09'23	
minimum elong	-12461 Dec 30 j 21:48	12° <u>♁</u> 55'39	1°39'56	evening set	-12454 Dec 30 j 22:15	28° <u>♁</u> 04'18	
max. Earth dist.	-12461 Dec 31 j 11:15	12° <u>♁</u> 56'55	30.85143 AU				
morning rise	-12460 Jan 16 j 05:31	13° <u>♁</u> 31'53		conjunction	-12453 Jan 16 j 04:06	28° <u>♁</u> 40'18	-2°12'14
retrograde	-12460 Apr 16 j 03:04	15° <u>♁</u> 29'42		minimum elong	-12453 Jan 16 j 04:05	28° <u>♁</u> 40'18	2°12'35
opposition	-12460 Jul 03 j 21:25	14° <u>♁</u> 04'40	-1°49'31	max. Earth dist.	-12453 Jan 16 j 11:09	28° <u>♁</u> 40'57	30.83016 AU
min. Earth dist.	-12460 Jul 03 j 10:06	14° <u>♁</u> 05'29	28.85106 AU	morning rise	-12453 Feb 01 j 10:55	29° <u>♁</u> 16'25	
direct	-12460 Sep 19 j 07:17	12° <u>♁</u> 40'35			-12453 Feb 22 j 13:17	0° <u>♁</u>	
evening set	-12460 Dec 16 j 06:49	14° <u>♁</u> 34'46		retrograde	-12453 May 02 j 15:28	1° <u>♁</u> 13'36	
					-12453 Jul 13 j 08:59	30° <u>♁</u>	
conjunction	-12459 Jan 01 j 12:35	15° <u>♁</u> 10'47	-1°44'56	opposition	-12453 Jul 19 j 23:28	29° <u>♁</u> 48'44	-2°23'32
minimum elong	-12459 Jan 01 j 12:34	15° <u>♁</u> 10'47	1°45'07	min. Earth dist.	-12453 Jul 19 j 17:53	29° <u>♁</u> 49'07	28.83217 AU
max. Earth dist.	-12459 Jan 02 j 01:34	15° <u>♁</u> 12'00	30.84833 AU	direct	-12453 Oct 05 j 17:01	28° <u>♁</u> 24'03	
morning rise	-12459 Jan 17 j 20:08	15° <u>♁</u> 47'00			-12453 Dec 24 j 13:57	0° <u>♁</u>	
retrograde	-12459 Apr 18 j 16:45	17° <u>♁</u> 44'44		evening set	-12452 Jan 02 j 12:44	0° <u>♁</u> 19'06	
opposition	-12459 Jul 06 j 08:03	16° <u>♁</u> 19'44	-1°54'57				
min. Earth dist.	-12459 Jul 05 j 21:07	16° <u>♁</u> 20'31	28.84751 AU	conjunction	-12452 Jan 18 j 18:36	0° <u>♁</u> 55'06	-2°16'06
direct	-12459 Sep 21 j 20:36	14° <u>♁</u> 55'34		minimum elong	-12452 Jan 18 j 18:35	0° <u>♁</u> 55'05	2°16'29
evening set	-12459 Dec 18 j 21:31	16° <u>♁</u> 49'52		max. Earth dist.	-12452 Jan 19 j 00:54	0° <u>♁</u> 55'41	30.83118 AU
				morning rise	-12452 Feb 04 j 01:16	1° <u>♁</u> 31'11	
conjunction	-12458 Jan 04 j 03:13	17° <u>♁</u> 25'54	-1°49'56	retrograde	-12452 May 04 j 04:42	3° <u>♁</u> 28'17	
minimum elong	-12458 Jan 04 j 03:11	17° <u>♁</u> 25'54	1°50'08	opposition	-12452 Jul 21 j 09:54	2° <u>♁</u> 03'29	-2°27'34
max. Earth dist.	-12458 Jan 04 j 13:55	17° <u>♁</u> 26'54	30.84437 AU	min. Earth dist.	-12452 Jul 21 j 04:02	2° <u>♁</u> 03'54	28.83386 AU
morning rise	-12458 Jan 20 j 10:51	18° <u>♁</u> 02'06		direct	-12452 Oct 07 j 06:11	0° <u>♁</u> 38'46	
retrograde	-12458 Apr 21 j 06:09	19° <u>♁</u> 59'45		evening set	-12451 Jan 04 j 03:35	2° <u>♁</u> 33'59	
opposition	-12458 Jul 08 j 18:49	18° <u>♁</u> 34'45	-2°00'12				
min. Earth dist.	-12458 Jul 08 j 09:20	18° <u>♁</u> 35'26	28.84345 AU	conjunction	-12451 Jan 20 j 09:19	3° <u>♁</u> 09'58	-2°19'47
direct	-12458 Sep 24 j 07:20	17° <u>♁</u> 10'30		minimum elong	-12451 Jan 20 j 09:18	3° <u>♁</u> 09'58	2°20'12
evening set	-12458 Dec 21 j 11:54	19° <u>♁</u> 04'55		max. Earth dist.	-12451 Jan 20 j 14:22	3° <u>♁</u> 10'26	30.83335 AU
				morning rise	-12451 Feb 05 j 15:48	3° <u>♁</u> 46'02	
conjunction	-12457 Jan 06 j 17:48	19° <u>♁</u> 40'56	-1°54'45	retrograde	-12451 May 06 j 17:06	5° <u>♁</u> 43'04	
minimum elong	-12457 Jan 06 j 17:47	19° <u>♁</u> 40'56	1°55'01	opposition	-12451 Jul 23 j 20:22	4° <u>♁</u> 18'21	-2°31'23
max. Earth dist.	-12457 Jan 07 j 04:36	19° <u>♁</u> 41'56	30.84007 AU	min. Earth dist.	-12451 Jul 23 j 16:19	4° <u>♁</u> 18'38	28.83667 AU
morning rise	-12457 Jan 23 j 01:10	20° <u>♁</u> 17'08		direct	-12451 Oct 09 j 17:04	2° <u>♁</u> 53'36	
retrograde	-12457 Apr 23 j 16:48	22° <u>♁</u> 14'41		evening set	-12450 Jan 06 j 18:25	4° <u>♁</u> 48'58	

Attention, astronomical year style is used: The year -12450 in astronomical counting style is the year 12451 BCE in historical counting style.

conjunction	-12450 Jan 23 j 00:13	5° <b>ℳ</b> 24'57	-2°23'14	retrograde	-12444 May 22 j 05:53	21° <b>ℳ</b> 27'48	
minimum elong	-12450 Jan 23 j 00:11	5° <b>ℳ</b> 24'57	2°23'40	opposition	-12444 Aug 07 j 22:14	20° <b>ℳ</b> 03'30	-2°51'20
max. Earth dist.	-12450 Jan 23 j 05:00	5° <b>ℳ</b> 25'24	30.83646 AU	min. Earth dist.	-12444 Aug 08 j 01:39	20° <b>ℳ</b> 03'15	28.85077 AU
morning rise	-12450 Feb 08 j 06:21	6° <b>ℳ</b> 01'00		direct	-12444 Oct 25 j 07:04	18° <b>ℳ</b> 38'19	
retrograde	-12450 May 09 j 06:52	7° <b>ℳ</b> 57'57		evening set	-12443 Jan 23 j 03:16	20° <b>ℳ</b> 34'32	
opposition	-12450 Jul 26 j 06:52	6° <b>ℳ</b> 33'19	-2°34'58				
min. Earth dist.	-12450 Jul 26 j 03:04	6° <b>ℳ</b> 33'35	28.83997 AU	conjunction	-12443 Feb 08 j 08:11	21° <b>ℳ</b> 10'26	-2°41'06
direct	-12450 Oct 12 j 06:59	5° <b>ℳ</b> 08'33		minimum elong	-12443 Feb 08 j 08:10	21° <b>ℳ</b> 10'26	2°41'41
evening set	-12449 Jan 09 j 09:20	7° <b>ℳ</b> 04'04		max. Earth dist.	-12443 Feb 08 j 03:56	21° <b>ℳ</b> 10'02	30.84911 AU
				morning rise	-12443 Feb 24 j 12:25	21° <b>ℳ</b> 46'18	
conjunction	-12449 Jan 25 j 14:51	7° <b>ℳ</b> 40'03	-2°26'29	retrograde	-12443 May 24 j 18:15	23° <b>ℳ</b> 42'26	
minimum elong	-12449 Jan 25 j 14:50	7° <b>ℳ</b> 40'03	2°26'57	opposition	-12443 Aug 10 j 08:33	22° <b>ℳ</b> 18'10	-2°53'11
max. Earth dist.	-12449 Jan 25 j 17:33	7° <b>ℳ</b> 40'18	30.83972 AU	min. Earth dist.	-12443 Aug 10 j 11:50	22° <b>ℳ</b> 17'56	28.85234 AU
morning rise	-12449 Feb 10 j 20:51	8° <b>ℳ</b> 16'04		direct	-12443 Oct 27 j 20:14	20° <b>ℳ</b> 52'55	
retrograde	-12449 May 11 j 20:05	10° <b>ℳ</b> 12'57		evening set	-12442 Jan 25 j 18:11	22° <b>ℳ</b> 49'15	
opposition	-12449 Jul 28 j 17:28	8° <b>ℳ</b> 48'24	-2°38'19				
min. Earth dist.	-12449 Jul 28 j 15:07	8° <b>ℳ</b> 48'34	28.84334 AU	conjunction	-12442 Feb 10 j 22:52	23° <b>ℳ</b> 25'08	-2°42'41
direct	-12449 Oct 14 j 18:36	7° <b>ℳ</b> 23'36		minimum elong	-12442 Feb 10 j 22:51	23° <b>ℳ</b> 25'08	2°43'17
evening set	-12448 Jan 12 j 00:16	9° <b>ℳ</b> 19'16		max. Earth dist.	-12442 Feb 10 j 17:35	23° <b>ℳ</b> 24'38	30.85108 AU
				morning rise	-12442 Feb 27 j 02:46	24° <b>ℳ</b> 00'58	
conjunction	-12448 Jan 28 j 05:52	9° <b>ℳ</b> 55'14	-2°29'30	retrograde	-12442 May 27 j 05:34	25° <b>ℳ</b> 56'59	
minimum elong	-12448 Jan 28 j 05:51	9° <b>ℳ</b> 55'14	2°29'58	opposition	-12442 Aug 12 j 19:08	24° <b>ℳ</b> 32'46	-2°54'45
max. Earth dist.	-12448 Jan 28 j 08:19	9° <b>ℳ</b> 55'28	30.84272 AU	min. Earth dist.	-12442 Aug 12 j 24:00	24° <b>ℳ</b> 32'25	28.85506 AU
morning rise	-12448 Feb 13 j 11:26	10° <b>ℳ</b> 31'14		direct	-12442 Oct 30 j 07:34	23° <b>ℳ</b> 07'27	
retrograde	-12448 May 13 j 07:42	12° <b>ℳ</b> 28'01		evening set	-12441 Jan 28 j 08:43	25° <b>ℳ</b> 03'53	
opposition	-12448 Jul 30 j 03:58	11° <b>ℳ</b> 03'32	-2°41'25				
min. Earth dist.	-12448 Jul 30 j 02:42	11° <b>ℳ</b> 03'38	28.84602 AU	conjunction	-12441 Feb 13 j 13:20	25° <b>ℳ</b> 39'45	-2°44'02
direct	-12448 Oct 16 j 07:34	9° <b>ℳ</b> 38'41		minimum elong	-12441 Feb 13 j 13:19	25° <b>ℳ</b> 39'45	2°44'40
evening set	-12447 Jan 13 j 15:28	11° <b>ℳ</b> 34'29		max. Earth dist.	-12441 Feb 13 j 07:56	25° <b>ℳ</b> 39'15	30.85444 AU
				morning rise	-12441 Mar 01 j 16:52	26° <b>ℳ</b> 15'34	
conjunction	-12447 Jan 29 j 20:48	12° <b>ℳ</b> 10'27	-2°32'17	retrograde	-12441 May 29 j 18:12	28° <b>ℳ</b> 11'27	
minimum elong	-12447 Jan 29 j 20:47	12° <b>ℳ</b> 10'26	2°32'48	opposition	-12441 Aug 15 j 05:33	26° <b>ℳ</b> 47'19	-2°56'03
max. Earth dist.	-12447 Jan 29 j 20:41	12° <b>ℳ</b> 10'26	30.84498 AU	min. Earth dist.	-12441 Aug 15 j 10:21	26° <b>ℳ</b> 46'58	28.85911 AU
morning rise	-12447 Feb 15 j 02:17	12° <b>ℳ</b> 46'26		direct	-12441 Nov 01 j 22:00	25° <b>ℳ</b> 21'58	
retrograde	-12447 May 15 j 21:03	14° <b>ℳ</b> 43'05		evening set	-12440 Jan 30 j 23:30	27° <b>ℳ</b> 18'31	
opposition	-12447 Aug 01 j 14:36	13° <b>ℳ</b> 18'40	-2°44'16				
min. Earth dist.	-12447 Aug 01 j 14:16	13° <b>ℳ</b> 18'42	28.84796 AU	conjunction	-12440 Feb 16 j 03:50	27° <b>ℳ</b> 54'22	-2°45'08
direct	-12447 Oct 18 j 19:10	11° <b>ℳ</b> 53'45		minimum elong	-12440 Feb 16 j 03:49	27° <b>ℳ</b> 54'22	2°45'46
evening set	-12446 Jan 16 j 06:30	13° <b>ℳ</b> 49'40		max. Earth dist.	-12440 Feb 15 j 20:48	27° <b>ℳ</b> 53'43	30.85921 AU
				morning rise	-12440 Mar 03 j 07:09	28° <b>ℳ</b> 30'09	
conjunction	-12446 Feb 01 j 11:50	14° <b>ℳ</b> 25'37	-2°34'51		-12440 Apr 21 j 21:35	0° <b>♂</b>	
minimum elong	-12446 Feb 01 j 11:49	14° <b>ℳ</b> 25'37	2°35'22	retrograde	-12440 May 31 j 06:43	0° <b>♂</b> 25'57	
max. Earth dist.	-12446 Feb 01 j 11:26	14° <b>ℳ</b> 25'35	30.84634 AU		-12440 Jul 10 j 02:40	30° <b>♀</b> <b>ℳ</b>	
	-12446 Feb 16 j 23:34	15° <b>ℳ</b>		opposition	-12440 Aug 16 j 15:57	29° <b>ℳ</b> 01'53	-2°57'06
morning rise	-12446 Feb 17 j 16:50	15° <b>ℳ</b> 01'34		min. Earth dist.	-12440 Aug 16 j 21:48	29° <b>ℳ</b> 01'28	28.86474 AU
retrograde	-12446 May 18 j 07:48	16° <b>ℳ</b> 58'06		direct	-12440 Nov 03 j 10:00	27° <b>ℳ</b> 36'30	
opposition	-12446 Aug 04 j 01:13	15° <b>ℳ</b> 33'44	-2°46'53	evening set	-12439 Feb 01 j 14:10	29° <b>ℳ</b> 33'11	
min. Earth dist.	-12446 Aug 04 j 02:36	15° <b>ℳ</b> 33'38	28.84901 AU		-12439 Feb 13 j 17:28	0° <b>♂</b>	
	-12446 Aug 24 j 07:21	15° <b>♀</b> <b>ℳ</b>					
direct	-12446 Oct 21 j 06:48	14° <b>ℳ</b> 08'45		conjunction	-12439 Feb 17 j 18:31	0° <b>♂</b> 09'02	-2°45'59
	-12446 Dec 17 j 00:10	15° <b>ℳ</b>		minimum elong	-12439 Feb 17 j 18:31	0° <b>♂</b> 09'02	2°46'39
evening set	-12445 Jan 18 j 21:33	16° <b>ℳ</b> 04'46		max. Earth dist.	-12439 Feb 17 j 11:40	0° <b>♂</b> 08'24	30.86546 AU
				morning rise	-12439 Mar 05 j 21:23	0° <b>♂</b> 44'47	
conjunction	-12445 Feb 04 j 02:39	16° <b>ℳ</b> 40'41	-2°37'10	retrograde	-12439 Jun 02 j 18:25	2° <b>♂</b> 40'28	
minimum elong	-12445 Feb 04 j 02:38	16° <b>ℳ</b> 40'41	2°37'44	opposition	-12439 Aug 19 j 02:27	1° <b>♂</b> 16'32	-2°57'52
max. Earth dist.	-12445 Feb 04 j 00:12	16° <b>ℳ</b> 40'27	30.84722 AU	min. Earth dist.	-12439 Aug 19 j 08:57	1° <b>♂</b> 16'04	28.87151 AU
morning rise	-12445 Feb 20 j 07:31	17° <b>ℳ</b> 16'37			-12439 Oct 13 j 18:14	30° <b>♀</b> <b>ℳ</b>	
retrograde	-12445 May 20 j 19:49	19° <b>ℳ</b> 13'01		direct	-12439 Nov 05 j 23:09	29° <b>ℳ</b> 51'09	
opposition	-12445 Aug 06 j 11:40	17° <b>ℳ</b> 48'41	-2°49'14		-12439 Nov 28 j 22:04	0° <b>♂</b>	
min. Earth dist.	-12445 Aug 06 j 13:15	17° <b>ℳ</b> 48'34	28.84985 AU	evening set	-12438 Feb 04 j 04:58	1° <b>♂</b> 47'58	
direct	-12445 Oct 23 j 19:01	16° <b>ℳ</b> 23'36					
evening set	-12444 Jan 21 j 12:21	18° <b>ℳ</b> 19'43		conjunction	-12438 Feb 20 j 08:56	2° <b>♂</b> 23'48	-2°46'34
				minimum elong	-12438 Feb 20 j 08:56	2° <b>♂</b> 23'48	2°47'14
conjunction	-12444 Feb 06 j 17:25	18° <b>ℳ</b> 55'38	-2°39'15	max. Earth dist.	-12438 Feb 20 j 00:05	2° <b>♂</b> 22'59	30.87275 AU
minimum elong	-12444 Feb 06 j 17:24	18° <b>ℳ</b> 55'37	2°39'49	morning rise	-12438 Mar 08 j 11:37	2° <b>♂</b> 59'32	
max. Earth dist.	-12444 Feb 06 j 14:24	18° <b>ℳ</b> 55'21	30.84792 AU	retrograde	-12438 Jun 05 j 08:09	4° <b>♂</b> 55'07	
morning rise	-12444 Feb 22 j 21:54	19° <b>ℳ</b> 31'31		opposition	-12438 Aug 21 j 12:57	3° <b>♂</b> 31'17	-2°58'21

Attention, astronomical year style is used: The year -12438 in astronomical counting style is the year 12439 BCE in historical counting style.

min. Earth dist.	-12438 Aug 21 j 20:01	3°♂30'47	28.87922 AU	morning rise	-12431 Mar 24 j 14:45	18°♂43'33	
direct	-12438 Nov 08 j 11:02	2°♂05'55		retrograde	-12431 Jun 20 j 14:32	20°♂38'12	
evening set	-12437 Feb 06 j 19:39	4°♂02'51		opposition	-12431 Sep 05 j 15:37	19°♂14'52	-2°54'16
				min. Earth dist.	-12431 Sep 06 j 06:03	19°♂13'51	28.91949 AU
conjunction	-12437 Feb 22 j 23:36	4°♂38'42	-2°46'54	direct	-12431 Nov 24 j 02:33	17°♂49'11	
minimum elong	-12437 Feb 22 j 23:35	4°♂38'42	2°47'36	evening set	-12430 Feb 23 j 01:45	19°♂46'36	
max. Earth dist.	-12437 Feb 22 j 14:54	4°♂37'53	30.88059 AU				
morning rise	-12437 Mar 11 j 01:46	5°♂14'24		conjunction	-12430 Mar 11 j 04:26	20°♂22'19	-2°42'13
retrograde	-12437 Jun 07 j 19:04	7°♂09'53		minimum elong	-12430 Mar 11 j 04:26	20°♂22'19	2°42'57
opposition	-12437 Aug 23 j 23:34	5°♂46'11	-2°58'35	max. Earth dist.	-12430 Mar 10 j 12:04	20°♂20'48	30.91917 AU
min. Earth dist.	-12437 Aug 24 j 08:14	5°♂45'34	28.88711 AU	morning rise	-12430 Mar 27 j 04:22	20°♂57'50	
direct	-12437 Nov 10 j 22:47	4°♂20'49		retrograde	-12430 Jun 23 j 01:33	22°♂52'20	
evening set	-12436 Feb 09 j 10:25	6°♂17'52		opposition	-12430 Sep 08 j 02:18	21°♂29'01	-2°52'38
				min. Earth dist.	-12430 Sep 08 j 17:16	21°♂27'58	28.92409 AU
conjunction	-12436 Feb 25 j 14:04	6°♂53'41	-2°46'59	direct	-12430 Nov 26 j 16:33	20°♂03'17	
minimum elong	-12436 Feb 25 j 14:04	6°♂53'41	2°47'41	evening set	-12429 Feb 25 j 15:58	22°♂00'44	
max. Earth dist.	-12436 Feb 25 j 03:18	6°♂52'41	30.88838 AU				
morning rise	-12436 Mar 12 j 16:06	7°♂29'23		conjunction	-12429 Mar 13 j 18:17	22°♂36'26	-2°40'33
retrograde	-12436 Jun 09 j 07:10	9°♂24'45		minimum elong	-12429 Mar 13 j 18:17	22°♂36'26	2°41'19
opposition	-12436 Aug 25 j 10:09	8°♂01'10	-2°58'32	max. Earth dist.	-12429 Mar 13 j 00:09	22°♂34'44	30.92430 AU
min. Earth dist.	-12436 Aug 25 j 19:04	8°♂00'31	28.89460 AU	morning rise	-12429 Mar 29 j 18:03	23°♂11'55	
direct	-12436 Nov 12 j 11:12	6°♂35'47		retrograde	-12429 Jun 25 j 14:35	25°♂06'15	
evening set	-12435 Feb 11 j 01:14	8°♂32'56		opposition	-12429 Sep 10 j 12:51	23°♂42'59	-2°50'44
				min. Earth dist.	-12429 Sep 11 j 04:03	23°♂41'54	28.92982 AU
conjunction	-12435 Feb 27 j 04:48	9°♂08'45	-2°46'49	direct	-12429 Nov 29 j 05:41	22°♂17'12	
minimum elong	-12435 Feb 27 j 04:48	9°♂08'45	2°47'31	evening set	-12428 Feb 28 j 05:52	24°♂14'41	
max. Earth dist.	-12435 Feb 26 j 17:24	9°♂07'41	30.89533 AU				
morning rise	-12435 Mar 15 j 06:21	9°♂44'25		conjunction	-12428 Mar 15 j 08:11	24°♂50'22	-2°38'40
retrograde	-12435 Jun 11 j 17:14	11°♂39'40		minimum elong	-12428 Mar 15 j 08:11	24°♂50'22	2°39'25
opposition	-12435 Aug 27 j 20:56	10°♂16'10	-2°58'13	max. Earth dist.	-12428 Mar 14 j 14:37	24°♂48'44	30.93060 AU
min. Earth dist.	-12435 Aug 28 j 07:54	10°♂15'23	28.90110 AU	morning rise	-12428 Mar 31 j 07:30	25°♂25'50	
direct	-12435 Nov 14 j 22:48	8°♂50'45		retrograde	-12428 Jun 27 j 00:34	27°♂20'02	
evening set	-12434 Feb 13 j 16:02	10°♂47'59		opposition	-12428 Sep 11 j 23:36	25°♂56'49	-2°48'35
				min. Earth dist.	-12428 Sep 12 j 15:55	25°♂55'40	28.93665 AU
conjunction	-12434 Mar 01 j 19:22	11°♂23'47	-2°46'23	direct	-12428 Nov 30 j 18:49	24°♂31'01	
minimum elong	-12434 Mar 01 j 19:21	11°♂23'47	2°47'06	evening set	-12427 Mar 01 j 19:56	26°♂28'32	
max. Earth dist.	-12434 Mar 01 j 06:17	11°♂22'34	30.90138 AU				
morning rise	-12434 Mar 17 j 20:40	11°♂59'25		conjunction	-12427 Mar 17 j 21:53	27°♂04'13	-2°36'31
retrograde	-12434 Jun 14 j 05:33	13°♂54'32		minimum elong	-12427 Mar 17 j 21:53	27°♂04'13	2°37'17
opposition	-12434 Aug 30 j 07:38	12°♂31'06	-2°57'37	max. Earth dist.	-12427 Mar 17 j 02:50	27°♂02'26	30.93820 AU
min. Earth dist.	-12434 Aug 30 j 18:39	12°♂30'19	28.90657 AU	morning rise	-12427 Apr 02 j 21:02	27°♂39'39	
direct	-12434 Nov 17 j 11:19	11°♂05'38		retrograde	-12427 Jun 29 j 12:32	29°♂33'43	
evening set	-12433 Feb 16 j 06:34	13°♂02'56		opposition	-12427 Sep 14 j 10:11	28°♂10'36	-2°46'10
				min. Earth dist.	-12427 Sep 15 j 02:08	28°♂09'28	28.94481 AU
conjunction	-12433 Mar 04 j 09:42	13°♂38'42	-2°45'43	direct	-12427 Dec 03 j 07:26	26°♂44'47	
minimum elong	-12433 Mar 04 j 09:42	13°♂38'42	2°46'27	evening set	-12426 Mar 04 j 09:46	28°♂42'22	
max. Earth dist.	-12433 Mar 03 j 19:26	13°♂37'23	30.90634 AU				
morning rise	-12433 Mar 20 j 10:39	14°♂14'19		conjunction	-12426 Mar 20 j 11:39	29°♂18'02	-2°34'09
retrograde	-12433 Jun 16 j 15:33	16°♂09'18		minimum elong	-12426 Mar 20 j 11:39	29°♂18'02	2°34'55
opposition	-12433 Sep 01 j 18:25	14°♂45'54	-2°56'46	max. Earth dist.	-12426 Mar 19 j 16:52	29°♂16'17	30.94695 AU
min. Earth dist.	-12433 Sep 02 j 07:22	14°♂44'59	28.91121 AU	morning rise	-12426 Apr 05 j 10:20	29°♂53'27	
direct	-12433 Nov 19 j 23:20	13°♂20'22			-12426 Apr 08 j 10:47	0°♂	
evening set	-12432 Feb 18 j 21:04	15°♂17'42		retrograde	-12426 Jul 01 j 22:39	1°♂47'24	
max. Earth dist.	-12432 Mar 05 j 09:12	15°♂52'04	30.91075 AU	opposition	-12426 Sep 16 j 21:03	0°♂24'23	-2°43'30
				min. Earth dist.	-12426 Sep 17 j 14:25	0°♂23'10	28.95401 AU
conjunction	-12432 Mar 06 j 00:06	15°♂53'28	-2°44'48		-12426 Oct 01 j 11:11	30°♂	
minimum elong	-12432 Mar 06 j 00:06	15°♂53'28	2°45'32	direct	-12426 Dec 05 j 18:45	28°♂58'36	
morning rise	-12432 Mar 22 j 00:44	16°♂29'03			-12425 Feb 07 j 01:19	0°♂	
retrograde	-12432 Jun 18 j 02:51	18°♂23'51		evening set	-12425 Mar 06 j 23:28	0°♂56'14	
opposition	-12432 Sep 03 j 04:55	17°♂00'29	-2°55'39	max. Earth dist.	-12425 Mar 22 j 05:16	1°♂30'03	30.95663 AU
min. Earth dist.	-12432 Sep 03 j 18:11	16°♂59'33	28.91530 AU				
direct	-12432 Nov 21 j 14:07	15°♂34'53		conjunction	-12425 Mar 23 j 01:04	1°♂31'54	-2°31'32
evening set	-12431 Feb 20 j 11:37	17°♂32'16		minimum elong	-12425 Mar 23 j 01:05	1°♂31'54	2°32'19
				morning rise	-12425 Apr 07 j 23:36	2°♂07'18	
conjunction	-12431 Mar 08 j 14:22	18°♂08'01	-2°43'37	retrograde	-12425 Jul 04 j 10:31	4°♂01'08	
minimum elong	-12431 Mar 08 j 14:22	18°♂08'01	2°44'23	opposition	-12425 Sep 19 j 07:45	2°♂38'15	-2°40'35
max. Earth dist.	-12431 Mar 07 j 21:46	18°♂06'28	30.91479 AU	min. Earth dist.	-12425 Sep 20 j 00:48	2°♂37'02	28.96373 AU

Attention, astronomical year style is used: The year -12425 in astronomical counting style is the year 12426 BCE in historical counting style.

direct	-12425 Dec 08 j 06:49	1° $\overline{3}$ 12'29		retrograde	-12418 Jul 19 j 16:12	19° $\overline{3}$ 36'51	
evening set	-12424 Mar 08 j 13:16	3° $\overline{3}$ 10'10		opposition	-12418 Oct 04 j 12:24	18° $\overline{3}$ 14'21	-2°13'51
				min. Earth dist.	-12418 Oct 05 j 10:16	18° $\overline{3}$ 12'49	29.01431 AU
conjunction	-12424 Mar 24 j 14:42	3° $\overline{3}$ 45'49	-2°28'42	direct	-12418 Dec 24 j 02:29	16° $\overline{3}$ 48'30	
minimum elong	-12424 Mar 24 j 14:42	3° $\overline{3}$ 45'49	2°29'27	evening set	-12417 Mar 25 j 11:03	18° $\overline{3}$ 46'13	
max. Earth dist.	-12424 Mar 23 j 18:11	3° $\overline{3}$ 43'54	30.96636 AU	max. Earth dist.	-12417 Apr 09 j 10:18	19° $\overline{3}$ 19'28	31.01569 AU
morning rise	-12424 Apr 09 j 12:50	4° $\overline{3}$ 21'12					
retrograde	-12424 Jul 05 j 20:20	6° $\overline{3}$ 14'57		conjunction	-12417 Apr 10 j 10:56	19° $\overline{3}$ 21'46	-2°02'58
opposition	-12424 Sep 20 j 18:33	4° $\overline{3}$ 52'10	-2°37'26	minimum elong	-12417 Apr 10 j 10:56	19° $\overline{3}$ 21'46	2°03'41
min. Earth dist.	-12424 Sep 21 j 13:19	4° $\overline{3}$ 50'50	28.97334 AU	morning rise	-12417 Apr 26 j 06:50	19° $\overline{3}$ 56'59	
direct	-12424 Dec 09 j 18:14	3° $\overline{3}$ 26'25		retrograde	-12417 Jul 22 j 02:04	21° $\overline{3}$ 49'53	
evening set	-12423 Mar 11 j 03:04	5° $\overline{3}$ 24'10		opposition	-12417 Oct 06 j 23:27	20° $\overline{3}$ 27'25	-2°09'12
max. Earth dist.	-12423 Mar 26 j 07:16	5° $\overline{3}$ 57'50	30.97576 AU	min. Earth dist.	-12417 Oct 07 j 22:32	20° $\overline{3}$ 25'48	29.02069 AU
				direct	-12417 Dec 26 j 14:59	19° $\overline{3}$ 01'33	
conjunction	-12423 Mar 27 j 04:18	5° $\overline{3}$ 59'48	-2°25'38	evening set	-12416 Mar 26 j 23:57	20° $\overline{3}$ 59'13	
minimum elong	-12423 Mar 27 j 04:19	5° $\overline{3}$ 59'48	2°26'24				
morning rise	-12423 Apr 12 j 02:08	6° $\overline{3}$ 35'10		conjunction	-12416 Apr 11 j 23:26	21° $\overline{3}$ 34'45	-1°58'32
retrograde	-12423 Jul 08 j 07:25	8° $\overline{3}$ 28'49		minimum elong	-12416 Apr 11 j 23:27	21° $\overline{3}$ 34'45	1°59'15
opposition	-12423 Sep 23 j 05:32	7° $\overline{3}$ 06'07	-2°34'03	max. Earth dist.	-12416 Apr 10 j 22:04	21° $\overline{3}$ 32'23	31.02267 AU
min. Earth dist.	-12423 Sep 24 j 00:29	7° $\overline{3}$ 04'47	28.98217 AU	morning rise	-12416 Apr 27 j 19:08	22° $\overline{3}$ 09'56	
direct	-12423 Dec 12 j 08:01	5° $\overline{3}$ 40'24		retrograde	-12416 Jul 23 j 12:55	24° $\overline{3}$ 02'43	
evening set	-12422 Mar 13 j 16:45	7° $\overline{3}$ 38'10		opposition	-12416 Oct 08 j 10:17	22° $\overline{3}$ 40'17	-2°04'22
				min. Earth dist.	-12416 Oct 09 j 08:31	22° $\overline{3}$ 38'44	29.02808 AU
conjunction	-12422 Mar 29 j 17:39	8° $\overline{3}$ 13'48	-2°22'22	direct	-12416 Dec 28 j 03:53	21° $\overline{3}$ 14'24	
minimum elong	-12422 Mar 29 j 17:39	8° $\overline{3}$ 13'48	2°23'07	evening set	-12415 Mar 29 j 12:42	23° $\overline{3}$ 12'03	
max. Earth dist.	-12422 Mar 28 j 19:09	8° $\overline{3}$ 11'42	30.98414 AU	max. Earth dist.	-12415 Apr 13 j 10:39	23° $\overline{3}$ 45'12	31.03075 AU
morning rise	-12422 Apr 14 j 15:11	8° $\overline{3}$ 49'09					
retrograde	-12422 Jul 10 j 18:57	10° $\overline{3}$ 42'42		conjunction	-12415 Apr 14 j 11:57	23° $\overline{3}$ 47'34	-1°53'56
opposition	-12422 Sep 25 j 16:34	9° $\overline{3}$ 20'03	-2°30'26	minimum elong	-12415 Apr 14 j 11:58	23° $\overline{3}$ 47'34	1°54'38
min. Earth dist.	-12422 Sep 26 j 12:37	9° $\overline{3}$ 18'39	28.99009 AU	morning rise	-12415 Apr 30 j 07:13	24° $\overline{3}$ 22'44	
direct	-12422 Dec 14 j 19:35	7° $\overline{3}$ 54'19		retrograde	-12415 Jul 25 j 21:39	26° $\overline{3}$ 15'25	
evening set	-12421 Mar 16 j 06:16	9° $\overline{3}$ 52'07		opposition	-12415 Oct 10 j 21:27	24° $\overline{3}$ 53'01	-1°59'21
max. Earth dist.	-12421 Mar 31 j 08:38	10° $\overline{3}$ 25'38	30.99159 AU	min. Earth dist.	-12415 Oct 11 j 20:37	24° $\overline{3}$ 51'24	29.03681 AU
				direct	-12415 Dec 30 j 15:14	23° $\overline{3}$ 27'10	
conjunction	-12421 Apr 01 j 07:05	10° $\overline{3}$ 27'44	-2°18'53	evening set	-12414 Apr 01 j 01:11	25° $\overline{3}$ 24'47	
minimum elong	-12421 Apr 01 j 07:06	10° $\overline{3}$ 27'44	2°19'38	max. Earth dist.	-12414 Apr 15 j 23:08	25° $\overline{3}$ 57'56	31.04026 AU
morning rise	-12421 Apr 17 j 04:13	11° $\overline{3}$ 03'03					
retrograde	-12421 Jul 13 j 05:48	12° $\overline{3}$ 56'29		conjunction	-12414 Apr 17 j 00:09	26° $\overline{3}$ 00'17	-1°49'09
opposition	-12421 Sep 28 j 03:29	11° $\overline{3}$ 33'54	-2°26'36	minimum elong	-12414 Apr 17 j 00:10	26° $\overline{3}$ 00'17	1°49'51
min. Earth dist.	-12421 Sep 29 j 00:17	11° $\overline{3}$ 32'26	28.99687 AU	morning rise	-12414 May 02 j 19:07	26° $\overline{3}$ 35'25	
direct	-12421 Dec 17 j 09:40	10° $\overline{3}$ 08'09		retrograde	-12414 Jul 28 j 07:30	28° $\overline{3}$ 28'01	
evening set	-12420 Mar 17 j 19:50	12° $\overline{3}$ 05'56		opposition	-12414 Oct 13 j 08:31	27° $\overline{3}$ 05'42	-1°54'10
				min. Earth dist.	-12414 Oct 14 j 07:07	27° $\overline{3}$ 04'07	29.04671 AU
conjunction	-12420 Apr 02 j 20:17	12° $\overline{3}$ 41'32	-2°15'11	direct	-12413 Jan 02 j 03:49	25° $\overline{3}$ 39'52	
minimum elong	-12420 Apr 02 j 20:18	12° $\overline{3}$ 41'32	2°15'56	evening set	-12413 Apr 03 j 13:45	27° $\overline{3}$ 37'29	
max. Earth dist.	-12420 Apr 01 j 19:55	12° $\overline{3}$ 39'16	30.99806 AU	max. Earth dist.	-12413 Apr 18 j 10:45	28° $\overline{3}$ 10'33	31.05077 AU
morning rise	-12420 Apr 18 j 17:17	13° $\overline{3}$ 16'50					
retrograde	-12420 Jul 14 j 18:50	15° $\overline{3}$ 10'08		conjunction	-12413 Apr 19 j 12:22	28° $\overline{3}$ 12'57	-1°44'13
opposition	-12420 Sep 29 j 14:25	13° $\overline{3}$ 47'35	-2°22'33	minimum elong	-12413 Apr 19 j 12:23	28° $\overline{3}$ 12'57	1°44'54
min. Earth dist.	-12420 Sep 30 j 11:35	13° $\overline{3}$ 46'06	29.00294 AU	morning rise	-12413 May 05 j 07:03	28° $\overline{3}$ 48'05	
direct	-12420 Dec 18 j 23:26	12° $\overline{3}$ 21'48			-12413 Jun 11 j 13:32	0° $\approx$	
evening set	-12419 Mar 20 j 09:04	14° $\overline{3}$ 19'35		retrograde	-12413 Jul 30 j 18:33	0° $\approx$ 40'36	
max. Earth dist.	-12419 Apr 04 j 09:35	14° $\overline{3}$ 52'56	31.00389 AU		-12413 Sep 19 j 16:44	30° $\overline{3}$	
				opposition	-12413 Oct 15 j 19:30	29° $\overline{3}$ 18'21	-1°48'48
conjunction	-12419 Apr 05 j 09:27	14° $\overline{3}$ 55'10	-2°11'18	min. Earth dist.	-12413 Oct 16 j 18:38	29° $\overline{3}$ 16'45	29.05760 AU
minimum elong	-12419 Apr 05 j 09:28	14° $\overline{3}$ 55'10	2°12'03	direct	-12412 Jan 04 j 14:01	27° $\overline{3}$ 52'34	
morning rise	-12419 Apr 21 j 05:57	15° $\overline{3}$ 30'26		evening set	-12412 Apr 05 j 02:12	29° $\overline{3}$ 50'11	
retrograde	-12419 Jul 17 j 04:20	17° $\overline{3}$ 23'36			-12412 Apr 09 j 13:20	0° $\approx$	
opposition	-12419 Oct 02 j 01:28	16° $\overline{3}$ 01'05	-2°18'18	max. Earth dist.	-12412 Apr 19 j 23:41	0° $\approx$ 23'18	31.06194 AU
min. Earth dist.	-12419 Oct 02 j 23:52	15° $\overline{3}$ 59'31	29.00850 AU				
direct	-12419 Dec 21 j 13:14	14° $\overline{3}$ 35'16		conjunction	-12412 Apr 21 j 00:38	0° $\approx$ 25'38	-1°39'08
evening set	-12418 Mar 22 j 22:18	16° $\overline{3}$ 33'01		minimum elong	-12412 Apr 21 j 00:39	0° $\approx$ 25'38	1°39'47
				morning rise	-12412 May 06 j 18:54	1° $\approx$ 00'44	
conjunction	-12418 Apr 07 j 22:16	17° $\overline{3}$ 08'35	-2°07'14	retrograde	-12412 Aug 01 j 04:44	2° $\approx$ 53'12	
minimum elong	-12418 Apr 07 j 22:17	17° $\overline{3}$ 08'35	2°07'58	opposition	-12412 Oct 17 j 06:44	1° $\approx$ 31'02	-1°43'16
max. Earth dist.	-12418 Apr 06 j 21:01	17° $\overline{3}$ 06'13	31.00962 AU	min. Earth dist.	-12412 Oct 18 j 06:11	1° $\approx$ 29'24	29.06860 AU
morning rise	-12418 Apr 23 j 18:38	17° $\overline{3}$ 43'50		direct	-12411 Jan 06 j 03:48	0° $\approx$ 05'18	

Attention, astronomical year style is used: The year -12411 in astronomical counting style is the year 12412 BCE in historical counting style.

evening set	-12411 Apr 07 j 14:43	2°02'54		minimum elong	-12405 May 07 j 11:00	15°52'51	1°00'27
max. Earth dist.	-12411 Apr 22 j 10:22	2°35'52	31.07293 AU	morning rise	-12405 May 23 j 02:41	16°27'46	
				retrograde	-12405 Aug 17 j 06:36	18°19'47	
conjunction	-12411 Apr 23 j 12:38	2°38'20	-1°33'53	opposition	-12405 Nov 02 j 14:38	16°57'50	-1°00'56
minimum elong	-12411 Apr 23 j 12:39	2°38'20	1°34'32	min. Earth dist.	-12405 Nov 03 j 15:27	16°56'07	29.12514 AU
morning rise	-12411 May 09 j 06:39	3°13'25		direct	-12404 Jan 22 j 21:50	15°32'14	
retrograde	-12411 Aug 03 j 17:17	5°05'49		evening set	-12404 Apr 23 j 02:51	17°29'28	
opposition	-12411 Oct 19 j 18:02	3°43'43	-1°37'35				
min. Earth dist.	-12411 Oct 20 j 17:27	3°42'06	29.07933 AU	conjunction	-12404 May 08 j 22:11	18°04'42	-0°53'55
direct	-12410 Jan 08 j 16:16	2°18'02		minimum elong	-12404 May 08 j 22:12	18°04'42	0°54'26
evening set	-12410 Apr 10 j 03:03	4°15'37		max. Earth dist.	-12404 May 07 j 19:09	18°02'11	31.12794 AU
max. Earth dist.	-12410 Apr 24 j 23:16	4°48'38	31.08330 AU	morning rise	-12404 May 24 j 13:30	18°39'36	
				retrograde	-12404 Aug 18 j 17:08	20°31'34	
conjunction	-12410 Apr 26 j 00:48	4°51'02	-1°28'30	opposition	-12404 Nov 04 j 02:12	19°09'37	-0°54'29
minimum elong	-12410 Apr 26 j 00:49	4°51'02	1°29'08	min. Earth dist.	-12404 Nov 05 j 03:04	19°07'54	29.13220 AU
morning rise	-12410 May 11 j 18:17	5°26'05		direct	-12403 Jan 24 j 08:10	17°44'02	
retrograde	-12410 Aug 06 j 03:05	7°18'26		evening set	-12403 Apr 25 j 14:14	19°41'13	
opposition	-12410 Oct 22 j 05:30	5°56'23	-1°31'46	max. Earth dist.	-12403 May 10 j 07:29	20°14'00	31.13545 AU
min. Earth dist.	-12410 Oct 23 j 06:00	5°54'41	29.08915 AU				
direct	-12409 Jan 11 j 05:13	4°30'44		conjunction	-12403 May 11 j 09:14	20°16'25	-0°47'51
evening set	-12409 Apr 12 j 15:20	6°28'18		minimum elong	-12403 May 11 j 09:14	20°16'25	0°48'21
max. Earth dist.	-12409 Apr 27 j 09:43	7°01'09	31.09271 AU	morning rise	-12403 May 27 j 00:00	20°51'16	
				retrograde	-12403 Aug 21 j 02:27	22°43'14	
conjunction	-12409 Apr 28 j 12:35	7°03'40	-1°23'00	opposition	-12403 Nov 06 j 13:51	21°21'18	-0°47'58
minimum elong	-12409 Apr 28 j 12:36	7°03'40	1°23'37	min. Earth dist.	-12403 Nov 07 j 14:21	21°19'36	29.14008 AU
morning rise	-12409 May 14 j 05:54	7°38'42		direct	-12402 Jan 26 j 21:42	19°55'46	
retrograde	-12409 Aug 08 j 15:21	9°30'59		evening set	-12402 Apr 28 j 01:43	21°52'53	
opposition	-12409 Oct 24 j 16:49	8°08'59	-1°25'49				
min. Earth dist.	-12409 Oct 25 j 16:49	8°07'19	29.09790 AU	conjunction	-12402 May 13 j 20:06	22°28'03	-0°41'43
direct	-12408 Jan 13 j 18:41	6°43'21		minimum elong	-12402 May 13 j 20:07	22°28'03	0°42'12
evening set	-12408 Apr 14 j 03:30	8°40'52		max. Earth dist.	-12402 May 12 j 17:43	22°25'35	31.14399 AU
max. Earth dist.	-12408 Apr 28 j 22:08	9°13'45	31.10090 AU	morning rise	-12402 May 29 j 10:36	23°02'53	
				retrograde	-12402 Aug 23 j 14:32	24°54'50	
conjunction	-12408 Apr 30 j 00:32	9°16'13	-1°17'23	opposition	-12402 Nov 09 j 01:22	23°32'55	-0°41'22
minimum elong	-12408 Apr 30 j 00:33	9°16'13	1°17'59	min. Earth dist.	-12402 Nov 10 j 01:05	23°31'18	29.14919 AU
morning rise	-12408 May 15 j 17:18	9°51'13		direct	-12401 Jan 29 j 08:48	22°07'27	
retrograde	-12408 Aug 10 j 01:35	11°43'26		evening set	-12401 Apr 30 j 12:52	24°04'32	
opposition	-12408 Oct 26 j 04:18	10°21'27	-1°19'45	max. Earth dist.	-12401 May 15 j 06:05	24°37'21	31.15359 AU
min. Earth dist.	-12408 Oct 27 j 05:37	10°19'42	29.10551 AU				
direct	-12407 Jan 15 j 07:52	8°55'50		conjunction	-12401 May 16 j 07:00	24°39'41	-0°35'31
evening set	-12407 Apr 16 j 15:40	10°53'17		minimum elong	-12401 May 16 j 07:00	24°39'41	0°35'58
max. Earth dist.	-12407 May 01 j 09:03	11°26'04	31.10821 AU	morning rise	-12401 May 31 j 20:55	25°14'29	
				retrograde	-12401 Aug 26 j 00:04	27°06'27	
conjunction	-12407 May 02 j 12:13	11°28'37	-1°11'39	opposition	-12401 Nov 11 j 13:05	25°44'35	-0°34'43
minimum elong	-12407 May 02 j 12:13	11°28'37	1°12'14	min. Earth dist.	-12401 Nov 12 j 13:15	25°42'56	29.15903 AU
morning rise	-12407 May 18 j 04:43	12°03'35		direct	-12400 Jan 31 j 20:39	24°19'12	
retrograde	-12407 Aug 12 j 12:26	13°55'43		evening set	-12400 May 02 j 00:13	26°16'16	
opposition	-12407 Oct 28 j 15:45	12°33'46	-1°13'35				
min. Earth dist.	-12407 Oct 29 j 16:13	12°32'04	29.11230 AU	conjunction	-12400 May 17 j 17:41	26°51'22	-0°29'16
direct	-12406 Jan 17 j 21:30	11°08'09		minimum elong	-12400 May 17 j 17:41	26°51'22	0°29'41
evening set	-12406 Apr 19 j 03:25	13°05'32		max. Earth dist.	-12400 May 16 j 16:10	26°48'59	31.16379 AU
				morning rise	-12400 Jun 02 j 07:19	27°26'08	
conjunction	-12406 May 04 j 23:38	13°40'50	-1°05'49	retrograde	-12400 Aug 27 j 12:35	29°18'07	
minimum elong	-12406 May 04 j 23:39	13°40'50	1°06'23	opposition	-12400 Nov 13 j 00:42	27°56'19	-0°28'00
max. Earth dist.	-12406 May 03 j 20:35	13°38'18	31.11477 AU	min. Earth dist.	-12400 Nov 13 j 23:46	27°54'44	29.16927 AU
morning rise	-12406 May 20 j 15:41	14°15'46		direct	-12399 Feb 02 j 09:48	26°31'01	
	-12406 Jun 11 j 01:04	15°		evening set	-12399 May 04 j 11:25	28°28'03	
retrograde	-12406 Aug 14 j 21:19	16°07'51		max. Earth dist.	-12399 May 19 j 04:05	29°00'51	31.17397 AU
	-12406 Oct 22 j 13:55	15°					
opposition	-12406 Oct 31 j 03:19	14°45'53	-1°07'18	conjunction	-12399 May 20 j 04:30	29°03'08	-0°22'58
min. Earth dist.	-12406 Nov 01 j 04:46	14°44'08	29.11872 AU	minimum elong	-12399 May 20 j 04:30	29°03'08	0°23'22
direct	-12405 Jan 20 j 09:05	13°20'17		morning rise	-12399 Jun 04 j 17:32	29°37'52	
	-12405 Apr 13 j 10:45	15°			-12399 Jun 15 j 01:11	0°	
evening set	-12405 Apr 21 j 15:10	15°17'35		retrograde	-12399 Aug 29 j 23:43	1°29'53	
max. Earth dist.	-12405 May 06 j 08:18	15°50'21	31.12126 AU	opposition	-12399 Nov 15 j 12:43	0°08'08	-0°21'15
				min. Earth dist.	-12399 Nov 16 j 12:37	0°06'30	29.17926 AU
conjunction	-12405 May 07 j 10:59	15°52'51	-0°59'55		-12399 Nov 20 j 11:38	30°	