

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -1900 in astronomical counting style is the year 1901 BCE in historical counting style.

direct	-1900 Jan 04 j 09:44	8° $\Upsilon$ 18'40		max. Earth dist.	-1894 May 02 j 15:01	24° $\Upsilon$ 17'28	30.87496 AU
evening set	-1900 Apr 01 j 13:38	10° $\Upsilon$ 13'08		morning rise	-1894 May 18 j 14:40	24° $\Upsilon$ 52'53	
				retrograde	-1894 Aug 16 j 17:26	26° $\Upsilon$ 49'37	
conjunction	-1900 Apr 17 j 17:44	10° $\Upsilon$ 49'03	-2°00'34	opposition	-1894 Nov 02 j 23:10	25° $\Upsilon$ 24'57	-1°58'09
minimum elong	-1900 Apr 17 j 17:44	10° $\Upsilon$ 49'03	2°00'33	min. Earth dist.	-1894 Nov 02 j 16:34	25° $\Upsilon$ 25'25	28.88045 AU
max. Earth dist.	-1900 Apr 18 j 06:34	10° $\Upsilon$ 50'15	30.84788 AU	direct	-1893 Jan 19 j 22:02	24° $\Upsilon$ 00'23	
morning rise	-1900 May 03 j 23:26	11° $\Upsilon$ 25'08		evening set	-1893 Apr 18 j 15:32	25° $\Upsilon$ 55'11	
retrograde	-1900 Aug 02 j 14:37	13° $\Upsilon$ 22'49					
opposition	-1900 Oct 20 j 07:35	11° $\Upsilon$ 57'54	-2°08'22	conjunction	-1893 May 04 j 21:58	26° $\Upsilon$ 31'11	-1°49'26
min. Earth dist.	-1900 Oct 19 j 21:16	11° $\Upsilon$ 58'38	28.85036 AU	minimum elong	-1893 May 04 j 21:58	26° $\Upsilon$ 31'11	1°49'26
direct	-1899 Jan 05 j 20:55	10° $\Upsilon$ 33'39		max. Earth dist.	-1893 May 05 j 05:37	26° $\Upsilon$ 31'54	30.88388 AU
evening set	-1899 Apr 04 j 03:46	12° $\Upsilon$ 28'09		morning rise	-1893 May 21 j 04:58	27° $\Upsilon$ 07'17	
				retrograde	-1893 Aug 19 j 04:59	29° $\Upsilon$ 03'54	
conjunction	-1899 Apr 20 j 08:09	13° $\Upsilon$ 04'04	-1°59'30	opposition	-1893 Nov 05 j 09:40	27° $\Upsilon$ 39'20	-1°55'48
minimum elong	-1899 Apr 20 j 08:10	13° $\Upsilon$ 04'04	1°59'30	min. Earth dist.	-1893 Nov 05 j 03:34	27° $\Upsilon$ 39'46	28.88963 AU
max. Earth dist.	-1899 Apr 20 j 19:14	13° $\Upsilon$ 05'06	30.85021 AU	direct	-1892 Jan 22 j 10:37	26° $\Upsilon$ 14'47	
morning rise	-1899 May 06 j 14:14	13° $\Upsilon$ 40'10		evening set	-1892 Apr 20 j 05:48	28° $\Upsilon$ 09'40	
retrograde	-1899 Aug 05 j 03:11	15° $\Upsilon$ 37'40					
opposition	-1899 Oct 22 j 18:18	14° $\Upsilon$ 12'46	-2°07'08	conjunction	-1892 May 06 j 12:20	28° $\Upsilon$ 45'41	-1°47'09
min. Earth dist.	-1899 Oct 22 j 08:06	14° $\Upsilon$ 13'30	28.85277 AU	minimum elong	-1892 May 06 j 12:21	28° $\Upsilon$ 45'41	1°47'08
direct	-1898 Jan 08 j 08:51	12° $\Upsilon$ 48'26		max. Earth dist.	-1892 May 06 j 17:52	28° $\Upsilon$ 46'12	30.89342 AU
evening set	-1898 Apr 06 j 17:46	14° $\Upsilon$ 42'58		morning rise	-1892 May 22 j 19:39	29° $\Upsilon$ 21'47	
					-1892 Jun 10 j 04:30	0° $\mathcal{B}$	
conjunction	-1898 Apr 22 j 22:30	15° $\Upsilon$ 18'54	-1°58'16	retrograde	-1892 Aug 20 j 18:01	1° $\mathcal{B}$ 18'16	
minimum elong	-1898 Apr 22 j 22:30	15° $\Upsilon$ 18'54	1°58'15		-1892 Nov 03 j 05:05	30° $\mathcal{R}\Upsilon$	
max. Earth dist.	-1898 Apr 23 j 09:17	15° $\Upsilon$ 19'54	30.85278 AU	opposition	-1892 Nov 06 j 20:04	29° $\Upsilon$ 53'49	-1°53'16
morning rise	-1898 May 09 j 04:40	15° $\Upsilon$ 54'59		min. Earth dist.	-1892 Nov 06 j 14:53	29° $\Upsilon$ 54'11	28.89923 AU
retrograde	-1898 Aug 07 j 14:04	17° $\Upsilon$ 52'20		direct	-1891 Jan 23 j 21:01	28° $\Upsilon$ 29'16	
opposition	-1898 Oct 25 j 05:01	16° $\Upsilon$ 27'27	-2°05'43		-1891 Apr 11 j 09:15	0° $\mathcal{B}$	
min. Earth dist.	-1898 Oct 24 j 20:20	16° $\Upsilon$ 28'04	28.85573 AU	evening set	-1891 Apr 22 j 20:04	0° $\mathcal{B}$ 24'14	
direct	-1897 Jan 10 j 21:20	15° $\Upsilon$ 03'02					
evening set	-1897 Apr 09 j 07:41	16° $\Upsilon$ 57'36		conjunction	-1891 May 09 j 03:01	1° $\mathcal{B}$ 00'17	-1°44'42
				minimum elong	-1891 May 09 j 03:01	1° $\mathcal{B}$ 00'17	1°44'41
conjunction	-1897 Apr 25 j 12:47	17° $\Upsilon$ 33'32	-1°56'51	max. Earth dist.	-1891 May 09 j 08:28	1° $\mathcal{B}$ 00'47	30.90286 AU
minimum elong	-1897 Apr 25 j 12:47	17° $\Upsilon$ 33'32	1°56'51	morning rise	-1891 May 25 j 10:14	1° $\mathcal{B}$ 36'23	
max. Earth dist.	-1897 Apr 25 j 22:40	17° $\Upsilon$ 34'28	30.85636 AU	retrograde	-1891 Aug 23 j 05:07	3° $\mathcal{B}$ 32'44	
morning rise	-1897 May 11 j 19:12	18° $\Upsilon$ 09'37		opposition	-1891 Nov 09 j 06:40	2° $\mathcal{B}$ 08'24	-1°50'34
retrograde	-1897 Aug 10 j 03:12	20° $\Upsilon$ 06'49		min. Earth dist.	-1891 Nov 09 j 03:03	2° $\mathcal{B}$ 08'40	28.90832 AU
opposition	-1897 Oct 27 j 15:30	18° $\Upsilon$ 41'57	-2°04'06	direct	-1890 Jan 26 j 07:59	0° $\mathcal{B}$ 43'51	
min. Earth dist.	-1897 Oct 27 j 06:25	18° $\Upsilon$ 42'36	28.85983 AU	evening set	-1890 Apr 25 j 10:21	2° $\mathcal{B}$ 38'54	
direct	-1896 Jan 13 j 10:25	17° $\Upsilon$ 17'28					
evening set	-1896 Apr 10 j 21:39	19° $\Upsilon$ 12'05		conjunction	-1890 May 11 j 17:23	3° $\mathcal{B}$ 14'56	-1°42'06
				minimum elong	-1890 May 11 j 17:24	3° $\mathcal{B}$ 14'56	1°42'04
conjunction	-1896 Apr 27 j 03:01	19° $\Upsilon$ 48'02	-1°55'15	max. Earth dist.	-1890 May 11 j 20:42	3° $\mathcal{B}$ 15'15	30.91164 AU
minimum elong	-1896 Apr 27 j 03:02	19° $\Upsilon$ 48'02	1°55'14	morning rise	-1890 May 28 j 00:49	3° $\mathcal{B}$ 51'03	
max. Earth dist.	-1896 Apr 27 j 12:02	19° $\Upsilon$ 48'52	30.86109 AU	retrograde	-1890 Aug 25 j 17:19	5° $\mathcal{B}$ 47'16	
morning rise	-1896 May 13 j 09:40	20° $\Upsilon$ 24'07		opposition	-1890 Nov 11 j 17:10	4° $\mathcal{B}$ 23'01	-1°47'42
retrograde	-1896 May 11 j 15:19	22° $\Upsilon$ 21'09		min. Earth dist.	-1890 Nov 11 j 13:54	4° $\mathcal{B}$ 23'15	28.91661 AU
opposition	-1896 Oct 29 j 02:11	20° $\Upsilon$ 56'20	-2°02'18	direct	-1889 Jan 28 j 19:44	2° $\mathcal{B}$ 58'26	
min. Earth dist.	-1896 Oct 28 j 18:38	20° $\Upsilon$ 56'52	28.86527 AU	evening set	-1889 Apr 28 j 00:36	4° $\mathcal{B}$ 53'33	
direct	-1895 Jan 14 j 21:36	19° $\Upsilon$ 31'48					
evening set	-1895 Apr 13 j 11:37	21° $\Upsilon$ 26'27		conjunction	-1889 May 14 j 07:57	5° $\mathcal{B}$ 29'37	-1°39'21
				minimum elong	-1889 May 14 j 07:57	5° $\mathcal{B}$ 29'37	1°39'20
conjunction	-1895 Apr 29 j 17:26	22° $\Upsilon$ 02'26	-1°53'29	max. Earth dist.	-1889 May 14 j 10:34	5° $\mathcal{B}$ 29'51	30.91939 AU
minimum elong	-1895 Apr 29 j 17:26	22° $\Upsilon$ 02'26	1°53'29	morning rise	-1889 May 30 j 15:20	6° $\mathcal{B}$ 05'43	
max. Earth dist.	-1895 Apr 30 j 02:21	22° $\Upsilon$ 03'15	30.86733 AU	retrograde	-1889 Aug 28 j 03:45	8° $\mathcal{B}$ 01'46	
morning rise	-1895 May 16 j 00:09	22° $\Upsilon$ 38'31		opposition	-1889 Nov 14 j 03:42	6° $\mathcal{B}$ 37'36	-1°44'40
retrograde	-1895 Aug 14 j 04:47	24° $\Upsilon$ 35'23		min. Earth dist.	-1889 Nov 14 j 02:26	6° $\mathcal{B}$ 37'41	28.92385 AU
opposition	-1895 Oct 31 j 12:34	23° $\Upsilon$ 10'38	-2°00'19	direct	-1888 Jan 31 j 07:43	5° $\mathcal{B}$ 12'59	
min. Earth dist.	-1895 Oct 31 j 04:50	23° $\Upsilon$ 11'11	28.87213 AU	evening set	-1888 Apr 29 j 14:49	7° $\mathcal{B}$ 08'08	
direct	-1894 Jan 17 j 11:14	21° $\Upsilon$ 46'05					
evening set	-1894 Apr 16 j 01:43	23° $\Upsilon$ 40'48		conjunction	-1888 May 15 j 22:24	7° $\mathcal{B}$ 44'12	-1°36'27
				minimum elong	-1888 May 15 j 22:25	7° $\mathcal{B}$ 44'12	1°36'25
conjunction	-1894 May 02 j 07:40	24° $\Upsilon$ 16'47	-1°51'33	max. Earth dist.	-1888 May 15 j 23:22	7° $\mathcal{B}$ 44'18	30.92632 AU
minimum elong	-1894 May 02 j 07:40	24° $\Upsilon$ 16'47	1°51'32	morning rise	-1888 Jun 01 j 05:57	8° $\mathcal{B}$ 20'18	

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

Attention, astronomical year style is used: The year -1888 in astronomical counting style is the year 1889 BCE in historical counting style.

retrograde	-1888 Aug 29 j 16:27	10° <del>8</del> 16'12		evening set	-1881 May 16 j 16:45	22° <del>8</del> 46'01	
opposition	-1888 Nov 15 j 14:04	8° <del>8</del> 52'05	-1°41'30				
min. Earth dist.	-1888 Nov 15 j 12:53	8° <del>8</del> 52'10	28.93023 AU	conjunction	-1881 Jun 02 j 01:08	23° <del>8</del> 22'05	-1°12'26
direct	-1887 Feb 01 j 20:41	7° <del>8</del> 27'24		minimum elong	-1881 Jun 02 j 01:09	23° <del>8</del> 22'05	1°12'25
evening set	-1887 May 02 j 05:06	9° <del>8</del> 22'36		max. Earth dist.	-1881 Jun 01 j 19:35	23° <del>8</del> 21'35	30.97817 AU
				morning rise	-1881 Jun 18 j 08:32	23° <del>8</del> 58'06	
conjunction	-1887 May 18 j 12:50	9° <del>8</del> 58'41	-1°33'24	retrograde	-1881 Sep 15 j 01:34	25° <del>8</del> 52'47	
minimum elong	-1887 May 18 j 12:50	9° <del>8</del> 58'41	1°33'23	opposition	-1881 Dec 01 j 13:42	24° <del>8</del> 29'06	-1°15'22
max. Earth dist.	-1887 May 18 j 12:30	9° <del>8</del> 58'39	30.93239 AU	min. Earth dist.	-1881 Dec 01 j 17:52	24° <del>8</del> 28'48	28.98410 AU
morning rise	-1887 Jun 03 j 20:22	10° <del>8</del> 34'46		direct	-1880 Feb 18 j 09:59	23° <del>8</del> 04'08	
retrograde	-1887 Sep 01 j 03:45	12° <del>8</del> 30'29		evening set	-1880 May 18 j 06:36	24° <del>8</del> 59'37	
opposition	-1887 Nov 18 j 00:28	11° <del>8</del> 06'25	-1°38'10				
min. Earth dist.	-1887 Nov 18 j 01:16	11° <del>8</del> 06'21	28.93612 AU	conjunction	-1880 Jun 03 j 15:08	25° <del>8</del> 35'42	-1°08'32
direct	-1886 Feb 04 j 08:13	9° <del>8</del> 41'40		minimum elong	-1880 Jun 03 j 15:08	25° <del>8</del> 35'42	1°08'30
evening set	-1886 May 04 j 19:11	11° <del>8</del> 36'55		max. Earth dist.	-1880 Jun 03 j 09:28	25° <del>8</del> 35'11	30.98922 AU
				morning rise	-1880 Jun 19 j 22:17	26° <del>8</del> 11'42	
conjunction	-1886 May 21 j 03:10	12° <del>8</del> 12'59	-1°30'13	retrograde	-1880 Sep 16 j 11:21	28° <del>8</del> 06'15	
minimum elong	-1886 May 21 j 03:10	12° <del>8</del> 12'59	1°30'11	opposition	-1880 Dec 02 j 23:58	26° <del>8</del> 42'40	-1°11'09
max. Earth dist.	-1886 May 21 j 02:17	12° <del>8</del> 12'54	30.93832 AU	min. Earth dist.	-1880 Dec 03 j 05:53	26° <del>8</del> 42'15	28.99529 AU
morning rise	-1886 Jun 06 j 10:41	12° <del>8</del> 49'03		direct	-1879 Feb 19 j 20:47	25° <del>8</del> 17'42	
retrograde	-1886 Sep 03 j 16:34	14° <del>8</del> 44'35		evening set	-1879 May 20 j 20:33	27° <del>8</del> 13'16	
opposition	-1886 Nov 20 j 10:44	13° <del>8</del> 20'33	-1°34'42				
min. Earth dist.	-1886 Nov 20 j 11:37	13° <del>8</del> 20'30	28.94197 AU	conjunction	-1879 Jun 06 j 05:00	27° <del>8</del> 49'20	-1°04'32
direct	-1885 Feb 06 j 22:43	11° <del>8</del> 55'45		minimum elong	-1879 Jun 06 j 05:01	27° <del>8</del> 49'20	1°04'30
evening set	-1885 May 07 j 09:09	13° <del>8</del> 51'01		max. Earth dist.	-1879 Jun 05 j 21:51	27° <del>8</del> 48'40	31.00050 AU
				morning rise	-1879 Jun 22 j 12:05	28° <del>8</del> 25'19	
conjunction	-1885 May 23 j 17:10	14° <del>8</del> 27'06	-1°26'55		-1879 Aug 15 j 17:42	0° <del>II</del>	
minimum elong	-1885 May 23 j 17:10	14° <del>8</del> 27'06	1°26'53	retrograde	-1879 Sep 18 j 23:24	0° <del>II</del> 19'43	
max. Earth dist.	-1885 May 23 j 14:39	14° <del>8</del> 26'52	30.94437 AU		-1879 Oct 23 j 15:11	30° <del>R</del> <del>8</del>	
	-1885 Jun 07 j 13:54	15° <del>8</del>		opposition	-1879 Dec 05 j 10:05	28° <del>8</del> 56'15	-1°06'48
morning rise	-1885 Jun 09 j 00:48	15° <del>8</del> 03'10		min. Earth dist.	-1879 Dec 05 j 15:59	28° <del>8</del> 55'50	29.00632 AU
retrograde	-1885 Sep 06 j 04:18	16° <del>8</del> 58'31		direct	-1878 Feb 22 j 08:34	27° <del>8</del> 31'17	
opposition	-1885 Nov 22 j 21:03	15° <del>8</del> 34'31	-1°31'06	evening set	-1878 May 23 j 10:32	29° <del>8</del> 26'54	
min. Earth dist.	-1885 Nov 22 j 23:14	15° <del>8</del> 34'22	28.94833 AU		-1878 Jun 07 j 10:53	0° <del>II</del>	
	-1885 Dec 13 j 17:53	15° <del>R</del> <del>8</del>		conjunction	-1878 Jun 08 j 18:56	0° <del>II</del> 02'58	-1°00'26
direct	-1884 Feb 09 j 10:34	14° <del>8</del> 09'39		minimum elong	-1878 Jun 08 j 18:56	0° <del>II</del> 02'58	1°00'23
	-1884 Apr 05 j 18:36	15° <del>8</del>		max. Earth dist.	-1878 Jun 08 j 10:40	0° <del>II</del> 02'12	31.01121 AU
evening set	-1884 May 08 j 23:05	16° <del>8</del> 04'58		morning rise	-1878 Jun 25 j 01:47	0° <del>II</del> 38'56	
				retrograde	-1878 Sep 21 j 09:43	2° <del>II</del> 33'12	
conjunction	-1884 May 25 j 07:23	16° <del>8</del> 41'02	-1°23'28	opposition	-1878 Dec 07 j 20:26	1° <del>II</del> 09'49	-1°02'23
minimum elong	-1884 May 25 j 07:24	16° <del>8</del> 41'02	1°23'26	min. Earth dist.	-1878 Dec 08 j 04:17	1° <del>II</del> 09'16	29.01670 AU
max. Earth dist.	-1884 May 25 j 04:59	16° <del>8</del> 40'49	30.95113 AU		-1877 Jan 25 j 06:00	30° <del>R</del> <del>8</del>	
morning rise	-1884 Jun 10 j 14:52	17° <del>8</del> 17'05		direct	-1877 Feb 24 j 19:59	29° <del>8</del> 44'50	
retrograde	-1884 Sep 07 j 15:27	19° <del>8</del> 12'15			-1877 Mar 27 j 07:13	0° <del>II</del>	
opposition	-1884 Nov 24 j 07:10	17° <del>8</del> 48'19	-1°27'21	evening set	-1877 May 26 j 00:18	1° <del>II</del> 40'30	
min. Earth dist.	-1884 Nov 24 j 09:49	17° <del>8</del> 48'07	28.95543 AU				
direct	-1883 Feb 10 j 23:43	16° <del>8</del> 23'24		conjunction	-1877 Jun 11 j 08:44	2° <del>II</del> 16'33	-0°56'14
evening set	-1883 May 11 j 13:10	18° <del>8</del> 18'44		minimum elong	-1877 Jun 11 j 08:44	2° <del>II</del> 16'33	0°56'12
				max. Earth dist.	-1877 Jun 10 j 23:38	2° <del>II</del> 15'43	31.02116 AU
conjunction	-1883 May 27 j 21:23	18° <del>8</del> 54'49	-1°19'55	morning rise	-1877 Jun 27 j 15:24	2° <del>II</del> 52'29	
minimum elong	-1883 May 27 j 21:24	18° <del>8</del> 54'49	1°19'53	retrograde	-1877 Sep 23 j 21:25	4° <del>II</del> 46'37	
max. Earth dist.	-1883 May 27 j 17:04	18° <del>8</del> 54'25	30.95887 AU	opposition	-1877 Dec 10 j 06:40	3° <del>II</del> 23'18	-0°57'51
morning rise	-1883 Jun 13 j 04:58	19° <del>8</del> 30'51		min. Earth dist.	-1877 Dec 10 j 14:51	3° <del>II</del> 22'43	29.02596 AU
retrograde	-1883 Sep 10 j 04:23	21° <del>8</del> 25'51		direct	-1876 Feb 27 j 10:10	1° <del>II</del> 58'16	
opposition	-1883 Nov 26 j 17:24	20° <del>8</del> 01'58	-1°23'29	evening set	-1876 May 27 j 14:20	3° <del>II</del> 53'59	
min. Earth dist.	-1883 Nov 26 j 20:31	20° <del>8</del> 01'45	28.96382 AU				
direct	-1882 Feb 13 j 11:03	18° <del>8</del> 37'01		conjunction	-1876 Jun 12 j 22:35	4° <del>II</del> 30'01	-0°51'58
evening set	-1882 May 14 j 02:51	20° <del>8</del> 32'24		minimum elong	-1876 Jun 12 j 22:35	4° <del>II</del> 30'01	0°51'56
				max. Earth dist.	-1876 Jun 12 j 11:34	4° <del>II</del> 29'00	31.02989 AU
conjunction	-1882 May 30 j 11:18	21° <del>8</del> 08'29	-1°16'14	morning rise	-1876 Jun 29 j 05:06	5° <del>II</del> 05'56	
minimum elong	-1882 May 30 j 11:18	21° <del>8</del> 08'29	1°16'12	retrograde	-1876 Sep 25 j 08:52	6° <del>II</del> 59'54	
max. Earth dist.	-1882 May 30 j 07:26	21° <del>8</del> 08'07	30.96788 AU	opposition	-1876 Dec 11 j 16:53	5° <del>II</del> 36'38	-0°53'15
morning rise	-1882 Jun 15 j 18:37	21° <del>8</del> 44'30		min. Earth dist.	-1876 Dec 12 j 02:37	5° <del>II</del> 35'57	29.03422 AU
retrograde	-1882 Sep 12 j 14:15	23° <del>8</del> 39'20		direct	-1875 Feb 28 j 21:57	4° <del>II</del> 11'33	
opposition	-1882 Nov 29 j 03:40	22° <del>8</del> 15'33	-1°19'29	evening set	-1875 May 30 j 04:08	6° <del>II</del> 07'18	
min. Earth dist.	-1882 Nov 29 j 07:51	22° <del>8</del> 15'15	28.97337 AU				
direct	-1881 Feb 15 j 22:32	20° <del>8</del> 50'35					

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention, astronomical year style is used: The year -1875 in astronomical counting style is the year 1876 BCE in historical counting style.

conjunction	-1875 Jun 15 j 12:25	6°II43'20	-0°47'38	direct	-1868 Mar 16 j 09:15	19°II39'40	
minimum elong	-1875 Jun 15 j 12:26	6°II43'20	0°47'36	evening set	-1868 Jun 15 j 01:52	21°II35'38	
max. Earth dist.	-1875 Jun 15 j 01:12	6°II42'18	31.03772 AU				
morning rise	-1875 Jul 01 j 18:34	7°II19'13		conjunction	-1868 Jul 01 j 08:39	22°II11'32	-0°15'50
retrograde	-1875 Sep 27 j 19:52	9°II13'00		minimum elong	-1868 Jul 01 j 08:38	22°II11'32	0°15'48
opposition	-1875 Dec 14 j 03:09	7°II49'47	-0°48'35	behind sun begin	-1868 Jul 01 j 08:31	22°II11'31	
min. Earth dist.	-1875 Dec 14 j 13:37	7°II49'03	29.04156 AU	behind sun end	-1868 Jul 01 j 08:45	22°II11'32	
direct	-1874 Mar 03 j 11:37	6°II24'40		max. Earth dist.	-1868 Jun 30 j 16:32	22°II10'02	31.09790 AU
evening set	-1874 Jun 01 j 17:48	8°II20'25		morning rise	-1868 Jul 17 j 12:32	22°II47'12	
				retrograde	-1868 Oct 12 j 20:51	24°II40'02	
conjunction	-1874 Jun 18 j 01:47	8°II56'26	-0°43'14	opposition	-1868 Dec 29 j 01:51	23°II17'17	-0°14'25
minimum elong	-1874 Jun 18 j 01:47	8°II56'26	0°43'12	min. Earth dist.	-1868 Dec 29 j 16:06	23°II16'17	29.10394 AU
max. Earth dist.	-1874 Jun 17 j 12:30	8°II55'13	31.04486 AU	direct	-1867 Mar 18 j 22:17	21°II52'01	
morning rise	-1874 Jul 04 j 07:49	9°II32'17		evening set	-1867 Jun 17 j 15:10	23°II48'03	
retrograde	-1874 Sep 30 j 08:17	11°II25'55					
opposition	-1874 Dec 16 j 13:18	10°II02'44	-0°43'51	conjunction	-1867 Jul 03 j 21:30	24°II23'55	-0°11'09
min. Earth dist.	-1874 Dec 17 j 00:23	10°II01'57	29.04858 AU	minimum elong	-1867 Jul 03 j 21:31	24°II23'56	0°11'07
direct	-1873 Mar 05 j 23:53	8°II37'33		behind sun begin	-1867 Jul 03 j 16:40	24°II23'30	
evening set	-1873 Jun 04 j 07:17	10°II33'20		behind sun end	-1867 Jul 04 j 02:22	24°II24'21	
				max. Earth dist.	-1867 Jul 03 j 04:12	24°II22'20	31.10986 AU
conjunction	-1873 Jun 20 j 15:18	11°II09'20	-0°38'46	morning rise	-1867 Jul 20 j 01:01	24°II59'34	
minimum elong	-1873 Jun 20 j 15:19	11°II09'20	0°38'44	retrograde	-1867 Oct 15 j 08:11	26°II52'20	
max. Earth dist.	-1873 Jun 20 j 02:18	11°II08'08	31.05180 AU	opposition	-1867 Dec 31 j 12:08	25°II29'41	-0°09'24
morning rise	-1873 Jul 06 j 20:54	11°II45'09		min. Earth dist.	-1866 Jan 01 j 03:26	25°II28'37	29.11604 AU
retrograde	-1873 Oct 02 j 17:34	13°II38'36		direct	-1866 Mar 21 j 08:56	24°II04'27	
opposition	-1873 Dec 18 j 23:21	12°II15'28	-0°39'03	evening set	-1866 Jun 20 j 04:09	26°II00'33	
min. Earth dist.	-1873 Dec 19 j 11:47	12°II14'36	29.05553 AU				
direct	-1872 Mar 07 j 12:19	10°II50'14		conjunction	-1866 Jul 06 j 10:16	26°II36'23	-0°06'28
evening set	-1872 Jun 05 j 20:53	12°II46'02		minimum elong	-1866 Jul 06 j 10:16	26°II36'23	0°06'26
				behind sun begin	-1866 Jul 06 j 04:05	26°II35'50	
conjunction	-1872 Jun 22 j 04:34	13°II22'00	-0°34'16	behind sun end	-1866 Jul 06 j 16:27	26°II36'56	
minimum elong	-1872 Jun 22 j 04:34	13°II22'00	0°34'14	max. Earth dist.	-1866 Jul 05 j 17:09	26°II34'49	31.12179 AU
max. Earth dist.	-1872 Jun 21 j 13:50	13°II20'39	31.05903 AU	morning rise	-1866 Jul 22 j 13:14	27°II11'59	
morning rise	-1872 Jul 08 j 10:02	13°II57'48		retrograde	-1866 Oct 17 j 19:11	29°II04'41	
retrograde	-1872 Oct 04 j 04:30	15°II51'06		opposition	-1865 Jan 02 j 22:26	27°II42'08	-0°04'23
opposition	-1872 Dec 20 j 09:24	14°II28'01	-0°34'13	min. Earth dist.	-1865 Jan 03 j 14:23	27°II41'01	29.12761 AU
min. Earth dist.	-1872 Dec 20 j 21:39	14°II27'09	29.06306 AU	direct	-1865 Mar 23 j 22:18	26°II16'55	
direct	-1871 Mar 10 j 00:16	13°II02'44		evening set	-1865 Jun 22 j 17:24	28°II13'04	
evening set	-1871 Jun 08 j 10:11	14°II58'33					
				conjunction	-1865 Jul 08 j 22:58	28°II48'53	-0°01'45
conjunction	-1871 Jun 24 j 17:45	15°II34'31	-0°29'43	minimum elong	-1865 Jul 08 j 22:59	28°II48'53	0°01'43
minimum elong	-1871 Jun 24 j 17:45	15°II34'31	0°29'40	behind sun begin	-1865 Jul 08 j 16:25	28°II48'18	
max. Earth dist.	-1871 Jun 24 j 03:17	15°II33'11	31.06689 AU	behind sun end	-1865 Jul 09 j 05:34	28°II49'28	
morning rise	-1871 Jul 10 j 22:42	16°II10'16		max. Earth dist.	-1865 Jul 08 j 03:53	28°II47'07	31.13296 AU
retrograde	-1871 Oct 06 j 13:30	18°II03'26		morning rise	-1865 Jul 25 j 01:38	29°II24'27	
opposition	-1871 Dec 22 j 19:36	16°II40'24	-0°29'19		-1865 Aug 11 j 03:56	0°00'00	
min. Earth dist.	-1871 Dec 23 j 09:12	16°II39'27	29.07148 AU	retrograde	-1865 Oct 20 j 08:01	1°00'17'03	
direct	-1870 Mar 12 j 11:02	15°II15'06		asc. node	-1865 Nov 18 j 10:16	1°00'02'52	
evening set	-1870 Jun 10 j 23:29	17°II10'56			-1864 Jan 02 j 02:59	30°00'00'00	
				opposition	-1864 Jan 05 j 08:36	29°II54'34	0°00'39
conjunction	-1870 Jun 27 j 06:44	17°II46'53	-0°25'07	min. Earth dist.	-1864 Jan 06 j 01:07	29°II53'25	29.13839 AU
minimum elong	-1870 Jun 27 j 06:44	17°II46'53	0°25'05	direct	-1864 Mar 25 j 10:58	28°II29'22	
max. Earth dist.	-1870 Jun 26 j 15:16	17°II45'27	31.07603 AU		-1864 Jun 12 j 03:18	0°00'00'00	
morning rise	-1870 Jul 13 j 11:27	18°II22'37		evening set	-1864 Jun 24 j 06:30	0°00'25'34	
retrograde	-1870 Oct 09 j 00:32	20°II15'39					
opposition	-1870 Dec 25 j 05:37	18°II52'42	-0°24'23	conjunction	-1864 Jul 10 j 11:52	1°00'01'21	0°03'05
min. Earth dist.	-1870 Dec 25 j 18:34	18°II51'47	29.08122 AU	minimum elong	-1864 Jul 10 j 11:52	1°00'01'21	0°03'07
direct	-1869 Mar 14 j 22:13	17°II27'22		behind sun begin	-1864 Jul 10 j 05:20	1°00'00'46	
evening set	-1869 Jun 13 j 12:38	19°II23'16		behind sun end	-1864 Jul 10 j 18:24	1°00'01'55	
				max. Earth dist.	-1864 Jul 09 j 16:56	0°00'59'36	31.14310 AU
conjunction	-1869 Jun 29 j 19:40	19°II59'11	-0°20'29	morning rise	-1864 Jul 26 j 13:50	1°00'36'52	
minimum elong	-1869 Jun 29 j 19:40	19°II59'11	0°20'27	retrograde	-1864 Oct 21 j 17:17	3°00'29'22	
max. Earth dist.	-1869 Jun 29 j 03:49	19°II57'44	31.08639 AU	opposition	-1863 Jan 06 j 19:05	2°00'06'58	0°05'41
morning rise	-1869 Jul 15 j 23:57	20°II34'54		min. Earth dist.	-1863 Jan 07 j 13:02	2°00'05'42	29.14791 AU
retrograde	-1869 Oct 11 j 09:57	22°II27'50		direct	-1863 Mar 27 j 23:53	0°00'41'44	
opposition	-1869 Dec 27 j 15:49	21°II04'58	-0°19'25	evening set	-1863 Jun 26 j 19:36	2°00'37'58	
min. Earth dist.	-1869 Dec 28 j 06:09	21°II03'58	29.09220 AU	max. Earth dist.	-1863 Jul 12 j 03:37	3°00'11'47	31.15209 AU

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 4

Attention, astronomical year style is used: The year -1863 in astronomical counting style is the year 1864 BCE in historical counting style.

conjunction	-1863 Jul 13 j 00:21	3°☾13'42	0°07'46	retrograde	-1857 Nov 06 j 14:13	18°☾50'45	
minimum elong	-1863 Jul 13 j 00:21	3°☾13'42	0°07'48	opposition	-1856 Jan 22 j 19:37	17°☾28'34	0°40'06
behind sun begin	-1863 Jul 12 j 18:27	3°☾13'11		min. Earth dist.	-1856 Jan 23 j 16:07	17°☾27'09	29.20381 AU
behind sun end	-1863 Jul 13 j 06:14	3°☾14'14		direct	-1856 Apr 12 j 11:04	16°☾03'12	
morning rise	-1863 Jul 29 j 01:58	3°☾49'11		evening set	-1856 Jul 12 j 11:43	17°☾59'27	
retrograde	-1863 Oct 24 j 04:30	5°☾41'34					
opposition	-1862 Jan 09 j 05:23	4°☾19'13	0°10'42	conjunction	-1856 Jul 28 j 12:56	18°☾34'54	0°39'48
min. Earth dist.	-1862 Jan 09 j 23:13	4°☾17'58	29.15640 AU	minimum elong	-1856 Jul 28 j 12:56	18°☾34'54	0°39'50
direct	-1862 Mar 30 j 12:17	2°☾53'58		max. Earth dist.	-1856 Jul 27 j 13:35	18°☾32'44	31.20860 AU
evening set	-1862 Jun 29 j 08:28	4°☾50'11		morning rise	-1856 Aug 13 j 10:36	19°☾10'03	
				retrograde	-1856 Nov 08 j 02:30	21°☾01'51	
conjunction	-1862 Jul 15 j 12:55	5°☾25'54	0°12'26	opposition	-1855 Jan 24 j 06:06	19°☾39'44	0°44'49
minimum elong	-1862 Jul 15 j 12:55	5°☾25'54	0°12'27	min. Earth dist.	-1855 Jan 25 j 02:24	19°☾38'20	29.21431 AU
behind sun begin	-1862 Jul 15 j 08:43	5°☾25'32		direct	-1855 Apr 14 j 22:59	18°☾14'24	
behind sun end	-1862 Jul 15 j 17:07	5°☾26'17		evening set	-1855 Jul 14 j 23:49	20°☾10'43	
max. Earth dist.	-1862 Jul 14 j 16:17	5°☾24'00	31.16004 AU	max. Earth dist.	-1855 Jul 30 j 02:13	20°☾44'03	31.21927 AU
morning rise	-1862 Jul 31 j 13:52	6°☾01'20					
retrograde	-1862 Oct 26 j 13:49	7°☾53'37		conjunction	-1855 Jul 31 j 00:37	20°☾46'08	0°44'12
opposition	-1861 Jan 11 j 15:47	6°☾31'17	0°15'41	minimum elong	-1855 Jul 31 j 00:36	20°☾46'08	0°44'14
min. Earth dist.	-1861 Jan 12 j 11:13	6°☾29'56	29.16402 AU	morning rise	-1855 Aug 15 j 21:29	21°☾21'14	
direct	-1861 Apr 01 j 23:42	5°☾06'00		retrograde	-1855 Nov 10 j 11:51	23°☾13'01	
evening set	-1861 Jul 01 j 21:17	7°☾02'13		opposition	-1854 Jan 26 j 16:45	21°☾50'59	0°49'29
max. Earth dist.	-1861 Jul 17 j 03:24	7°☾35'53	31.16742 AU	min. Earth dist.	-1854 Jan 27 j 14:02	21°☾49'31	29.22508 AU
				direct	-1854 Apr 17 j 11:18	20°☾25'43	
conjunction	-1861 Jul 18 j 01:13	7°☾37'54	0°17'05	evening set	-1854 Jul 17 j 12:08	22°☾22'05	
minimum elong	-1861 Jul 18 j 01:13	7°☾37'54	0°17'08				
morning rise	-1861 Aug 03 j 01:47	8°☾13'17		conjunction	-1854 Aug 02 j 12:10	22°☾57'27	0°48'32
retrograde	-1861 Oct 29 j 00:03	10°☾05'26		minimum elong	-1854 Aug 02 j 12:10	22°☾57'27	0°48'34
opposition	-1860 Jan 14 j 02:03	8°☾43'08	0°20'39	max. Earth dist.	-1854 Aug 01 j 12:31	22°☾55'15	31.23001 AU
min. Earth dist.	-1860 Jan 14 j 21:03	8°☾41'49	29.17112 AU	morning rise	-1854 Aug 18 j 08:35	23°☾32'30	
direct	-1860 Apr 03 j 11:54	7°☾17'49		retrograde	-1854 Nov 12 j 23:31	25°☾24'16	
evening set	-1860 Jul 03 j 10:01	9°☾14'01		opposition	-1853 Jan 29 j 03:13	24°☾02'20	0°54'05
				min. Earth dist.	-1853 Jan 30 j 00:04	24°☾00'54	29.23566 AU
conjunction	-1860 Jul 19 j 13:28	9°☾49'39	0°21'42	direct	-1853 Apr 19 j 23:24	22°☾37'07	
minimum elong	-1860 Jul 19 j 13:28	9°☾49'39	0°21'44	evening set	-1853 Jul 20 j 00:18	24°☾33'31	
max. Earth dist.	-1860 Jul 18 j 15:18	9°☾47'36	31.17434 AU				
morning rise	-1860 Aug 04 j 13:24	10°☾25'00		conjunction	-1853 Aug 04 j 23:52	25°☾08'52	0°52'48
retrograde	-1860 Oct 30 j 08:19	12°☾17'03		minimum elong	-1853 Aug 04 j 23:52	25°☾08'52	0°52'50
opposition	-1859 Jan 15 j 12:26	10°☾54'46	0°25'35	max. Earth dist.	-1853 Aug 04 j 00:36	25°☾06'42	31.24007 AU
min. Earth dist.	-1859 Jan 16 j 08:47	10°☾53'20	29.17820 AU	morning rise	-1853 Aug 20 j 19:31	25°☾43'52	
direct	-1859 Apr 05 j 23:02	9°☾29'24		retrograde	-1853 Nov 15 j 09:28	27°☾35'38	
evening set	-1859 Jul 05 j 22:35	11°☾25'36		opposition	-1852 Jan 31 j 14:04	26°☾13'46	0°58'36
max. Earth dist.	-1859 Jul 21 j 03:22	11°☾59'08	31.18162 AU	min. Earth dist.	-1852 Feb 01 j 12:22	26°☾12'14	29.24527 AU
				direct	-1852 Apr 21 j 10:58	24°☾48'36	
conjunction	-1859 Jul 22 j 01:33	12°☾01'11	0°26'18	evening set	-1852 Jul 21 j 12:33	26°☾45'03	
minimum elong	-1859 Jul 22 j 01:33	12°☾01'11	0°26'20	max. Earth dist.	-1852 Aug 05 j 11:07	27°☾18'05	31.24904 AU
morning rise	-1859 Aug 07 j 00:55	12°☾36'28					
retrograde	-1859 Nov 01 j 17:51	14°☾28'26		conjunction	-1852 Aug 06 j 11:23	27°☾20'20	0°56'59
opposition	-1858 Jan 17 j 22:51	13°☾06'10	0°30'28	minimum elong	-1852 Aug 06 j 11:22	27°☾20'20	0°57'00
min. Earth dist.	-1858 Jan 18 j 18:45	13°☾04'46	29.18575 AU	morning rise	-1852 Aug 22 j 06:28	27°☾55'18	
direct	-1858 Apr 08 j 11:31	11°☾40'46		retrograde	-1852 Nov 16 j 19:53	29°☾47'02	
evening set	-1858 Jul 08 j 10:56	13°☾36'58		opposition	-1851 Feb 02 j 00:49	28°☾25'15	1°03'01
				min. Earth dist.	-1851 Feb 02 j 22:35	28°☾23'45	29.25356 AU
conjunction	-1858 Jul 24 j 13:18	14°☾12'31	0°30'51	direct	-1851 Apr 23 j 23:17	27°☾00'06	
minimum elong	-1858 Jul 24 j 13:17	14°☾12'31	0°30'52	evening set	-1851 Jul 24 j 00:42	28°☾56'34	
max. Earth dist.	-1858 Jul 23 j 14:26	14°☾10'24	31.18953 AU				
morning rise	-1858 Aug 09 j 12:07	14°☾47'46		conjunction	-1851 Aug 08 j 22:55	29°☾31'49	1°01'05
retrograde	-1858 Nov 04 j 04:19	16°☾39'39		minimum elong	-1851 Aug 08 j 22:55	29°☾31'49	1°01'07
opposition	-1857 Jan 20 j 09:17	15°☾17'24	0°35'18	max. Earth dist.	-1851 Aug 07 j 22:15	29°☾29'31	31.25653 AU
min. Earth dist.	-1857 Jan 21 j 05:40	15°☾15'59	29.19431 AU		-1851 Aug 21 j 15:20	0°0'0	
direct	-1857 Apr 10 j 21:47	13°☾52'00		morning rise	-1851 Aug 24 j 17:17	0°0'06'44	
evening set	-1857 Jul 10 j 23:16	15°☾48'14		retrograde	-1851 Nov 19 j 04:39	1°0'58'28	
max. Earth dist.	-1857 Jul 26 j 03:05	16°☾21'40	31.19858 AU	opposition	-1850 Feb 04 j 11:48	0°0'36'43	1°07'21
				min. Earth dist.	-1850 Feb 05 j 10:52	0°0'35'07	29.26051 AU
conjunction	-1857 Jul 27 j 01:12	16°☾23'43	0°35'21		-1850 Feb 27 j 09:51	30°0'0	
minimum elong	-1857 Jul 27 j 01:12	16°☾23'43	0°35'23	direct	-1850 Apr 26 j 10:02	29°☾11'35	
morning rise	-1857 Aug 11 j 23:20	16°☾58'55			-1850 Jun 21 j 12:33	0°0'0	

Attention, astronomical year style is used: The year -1850 in astronomical counting style is the year 1851 BCE in historical counting style.

evening set	-1850 Jul 26 j 12:33	1°Ω08'03				-1844 Aug 29 j 03:06	15°Ω	
max. Earth dist.	-1850 Aug 10 j 09:25	1°Ω40'57	31.26276 AU	morning rise		-1844 Sep 08 j 17:18	15°Ω23'26	
				retrograde		-1844 Dec 04 j 03:58	17°Ω15'05	
conjunction	-1850 Aug 11 j 10:11	1°Ω43'15	1°05'05	opposition		-1843 Feb 19 j 16:24	15°Ω53'19	1°34'32
minimum elong	-1850 Aug 11 j 10:11	1°Ω43'15	1°05'06	min. Earth dist.		-1843 Feb 20 j 15:44	15°Ω51'43	29.29241 AU
morning rise	-1850 Aug 27 j 03:57	2°Ω18'07				-1843 Mar 26 j 16:28	15°℞Ω	
retrograde	-1850 Nov 21 j 13:55	4°Ω09'50		direct		-1843 May 11 j 22:58	14°Ω28'13	
opposition	-1849 Feb 06 j 22:38	2°Ω48'06	1°11'35			-1843 Jun 25 j 22:42	15°Ω	
min. Earth dist.	-1849 Feb 07 j 21:31	2°Ω46'31	29.26599 AU	evening set		-1843 Aug 10 j 20:59	16°Ω24'35	
direct	-1849 Apr 28 j 22:03	1°Ω22'58						
evening set	-1849 Jul 29 j 00:32	3°Ω19'25		conjunction		-1843 Aug 26 j 13:57	16°Ω59'26	1°30'08
				minimum elong		-1843 Aug 26 j 13:57	16°Ω59'26	1°30'10
conjunction	-1849 Aug 13 j 21:27	3°Ω54'35	1°09'00	max. Earth dist.		-1843 Aug 25 j 13:32	16°Ω57'10	31.29458 AU
minimum elong	-1849 Aug 13 j 21:26	3°Ω54'35	1°09'02	morning rise		-1843 Sep 11 j 03:16	17°Ω33'59	
max. Earth dist.	-1849 Aug 12 j 19:43	3°Ω52'11	31.26758 AU	retrograde		-1843 Dec 06 j 14:04	19°Ω25'39	
morning rise	-1849 Aug 29 j 14:36	4°Ω29'25		opposition		-1842 Feb 22 j 03:28	18°Ω03'56	1°37'55
retrograde	-1849 Nov 24 j 00:19	6°Ω21'05		min. Earth dist.		-1842 Feb 23 j 01:34	18°Ω02'25	29.29880 AU
opposition	-1848 Feb 09 j 09:26	4°Ω59'21	1°15'42	direct		-1842 May 14 j 11:29	16°Ω38'53	
min. Earth dist.	-1848 Feb 10 j 08:58	4°Ω57'44	29.27043 AU	evening set		-1842 Aug 13 j 07:58	18°Ω35'16	
direct	-1848 Apr 30 j 08:04	3°Ω34'13		max. Earth dist.		-1842 Aug 28 j 00:11	19°Ω07'49	31.30098 AU
evening set	-1848 Jul 30 j 12:14	5°Ω30'39						
max. Earth dist.	-1848 Aug 14 j 07:39	6°Ω03'26	31.27155 AU	conjunction		-1842 Aug 29 j 00:21	19°Ω10'04	1°33'14
				minimum elong		-1842 Aug 29 j 00:20	19°Ω10'04	1°33'15
conjunction	-1848 Aug 15 j 08:38	6°Ω05'45	1°12'48	morning rise		-1842 Sep 13 j 13:01	19°Ω44'34	
minimum elong	-1848 Aug 15 j 08:38	6°Ω05'45	1°12'49	retrograde		-1842 Dec 08 j 23:01	21°Ω36'18	
morning rise	-1848 Aug 31 j 01:03	6°Ω40'32		opposition		-1841 Feb 24 j 14:44	20°Ω14'37	1°41'09
retrograde	-1848 Nov 25 j 09:46	8°Ω32'11		min. Earth dist.		-1841 Feb 25 j 13:37	20°Ω13'03	29.30525 AU
opposition	-1847 Feb 10 j 20:24	7°Ω10'27	1°19'43	direct		-1841 May 16 j 21:56	18°Ω49'38	
min. Earth dist.	-1847 Feb 11 j 20:07	7°Ω08'49	29.27408 AU	evening set		-1841 Aug 15 j 19:04	20°Ω46'00	
direct	-1847 May 02 j 21:42	5°Ω45'18		max. Earth dist.		-1841 Aug 30 j 11:06	21°Ω18'33	31.30716 AU
evening set	-1847 Aug 01 j 23:47	7°Ω41'42						
				conjunction		-1841 Aug 31 j 10:48	21°Ω20'46	1°36'11
conjunction	-1847 Aug 17 j 19:21	8°Ω16'45	1°16'30	minimum elong		-1841 Aug 31 j 10:48	21°Ω20'46	1°36'13
minimum elong	-1847 Aug 17 j 19:21	8°Ω16'45	1°16'32	morning rise		-1841 Sep 15 j 22:50	21°Ω55'13	
max. Earth dist.	-1847 Aug 16 j 17:21	8°Ω14'20	31.27504 AU	retrograde		-1841 Dec 11 j 08:14	23°Ω46'59	
morning rise	-1847 Sep 02 j 11:16	8°Ω51'29		opposition		-1840 Feb 27 j 01:56	22°Ω25'21	1°44'14
retrograde	-1847 Nov 27 j 21:32	10°Ω43'07		min. Earth dist.		-1840 Feb 28 j 00:19	22°Ω23'49	29.31102 AU
opposition	-1846 Feb 13 j 07:20	9°Ω21'21	1°23'37	direct		-1840 May 18 j 09:54	21°Ω00'25	
min. Earth dist.	-1846 Feb 14 j 06:34	9°Ω19'45	29.27772 AU	evening set		-1840 Aug 17 j 06:13	22°Ω56'47	
direct	-1846 May 05 j 09:38	7°Ω56'11						
evening set	-1846 Aug 04 j 11:08	9°Ω52'35		conjunction		-1840 Sep 01 j 21:12	23°Ω31'30	1°39'01
max. Earth dist.	-1846 Aug 19 j 05:29	10°Ω25'16	31.27874 AU	minimum elong		-1840 Sep 01 j 21:12	23°Ω31'30	1°39'01
				max. Earth dist.		-1840 Aug 31 j 20:53	23°Ω29'14	31.31242 AU
conjunction	-1846 Aug 20 j 06:13	10°Ω27'34	1°20'05	morning rise		-1840 Sep 17 j 08:40	24°Ω05'55	
minimum elong	-1846 Aug 20 j 06:12	10°Ω27'34	1°20'06	retrograde		-1840 Dec 12 j 18:59	25°Ω57'44	
morning rise	-1846 Sep 04 j 21:19	11°Ω02'15		opposition		-1839 Feb 28 j 13:25	24°Ω36'07	1°47'11
retrograde	-1846 Nov 30 j 06:17	12°Ω53'53		min. Earth dist.		-1839 Mar 01 j 12:02	24°Ω34'34	29.31589 AU
opposition	-1845 Feb 15 j 18:16	11°Ω32'06	1°27'23	direct		-1839 May 20 j 19:52	23°Ω11'13	
min. Earth dist.	-1845 Feb 16 j 18:06	11°Ω30'28	29.28175 AU	evening set		-1839 Aug 19 j 17:03	25°Ω07'34	
direct	-1845 May 07 j 21:38	10°Ω06'56		max. Earth dist.		-1839 Sep 03 j 08:12	25°Ω40'04	31.31657 AU
evening set	-1845 Aug 06 j 22:34	12°Ω03'18						
				conjunction		-1839 Sep 04 j 07:31	25°Ω42'15	1°41'41
conjunction	-1845 Aug 22 j 16:50	12°Ω38'15	1°23'34	minimum elong		-1839 Sep 04 j 07:31	25°Ω42'15	1°41'43
minimum elong	-1845 Aug 22 j 16:49	12°Ω38'15	1°23'36	morning rise		-1839 Sep 19 j 18:17	26°Ω16'38	
max. Earth dist.	-1845 Aug 21 j 15:24	12°Ω35'53	31.28316 AU	retrograde		-1839 Dec 15 j 04:09	28°Ω08'30	
morning rise	-1845 Sep 07 j 07:28	13°Ω12'53		opposition		-1838 Mar 03 j 00:58	26°Ω46'52	1°49'58
	-1845 Nov 16 j 12:42	15°Ω		min. Earth dist.		-1838 Mar 03 j 23:42	26°Ω45'19	29.31933 AU
retrograde	-1845 Dec 02 j 17:52	15°Ω04'30		direct		-1838 May 23 j 08:39	25°Ω22'01	
	-1845 Dec 19 j 00:33	15°℞Ω		evening set		-1838 Aug 22 j 04:05	27°Ω18'20	
opposition	-1844 Feb 18 j 05:13	13°Ω42'44	1°31'02					
min. Earth dist.	-1844 Feb 19 j 03:52	13°Ω41'10	29.28665 AU	conjunction		-1838 Sep 06 j 17:46	27°Ω52'59	1°44'13
direct	-1844 May 09 j 10:40	12°Ω17'35		minimum elong		-1838 Sep 06 j 17:45	27°Ω52'59	1°44'14
evening set	-1844 Aug 08 j 09:45	14°Ω13'57		max. Earth dist.		-1838 Sep 05 j 17:20	27°Ω50'42	31.31930 AU
max. Earth dist.	-1844 Aug 23 j 03:10	14°Ω46'35	31.28841 AU	morning rise		-1838 Sep 22 j 04:06	28°Ω27'19	
						-1838 Nov 13 j 23:53	0°℞	
conjunction	-1844 Aug 24 j 03:28	14°Ω48'51	1°26'55	retrograde		-1838 Dec 17 j 15:50	0°℞19'14	
minimum elong	-1844 Aug 24 j 03:28	14°Ω48'51	1°26'56			-1837 Jan 21 j 04:27	30°℞Ω	

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6

Attention, astronomical year style is used: The year -1837 in astronomical counting style is the year 1838 BCE in historical counting style.

opposition	-1837 Mar 05 j 12:18	28°05'35"	1°52'36"	conjunction	-1831 Sep 21 j 14:34	13°05'20"	1°57'37"
min. Earth dist.	-1837 Mar 06 j 10:36	28°05'04"	29.32146 AU	minimum elong	-1831 Sep 21 j 14:34	13°05'20"	1°57'37"
direct	-1837 May 25 j 19:29	27°03'24"		max. Earth dist.	-1831 Sep 20 j 17:38	13°03'22"	31.32134 AU
evening set	-1837 Aug 24 j 14:53	29°02'02"		morning rise	-1831 Oct 06 j 21:22	13°39'27"	
	-1837 Sep 07 j 13:15	0°00'		retrograde	-1830 Jan 01 j 13:33	15°31'46"	
max. Earth dist.	-1837 Sep 08 j 04:44	0°01'27"	31.32063 AU	opposition	-1830 Mar 20 j 21:56	14°09'55"	2°06'18"
				min. Earth dist.	-1830 Mar 21 j 17:19	14°08'36"	29.32396 AU
conjunction	-1837 Sep 09 j 04:07	0°03'38"	1°46'36"	direct	-1830 Jun 10 j 06:46	12°45'17"	
minimum elong	-1837 Sep 09 j 04:07	0°03'38"	1°46'38"	evening set	-1830 Sep 08 j 14:52	14°41'16"	
morning rise	-1837 Sep 24 j 13:45	0°37'56"		max. Earth dist.	-1830 Sep 23 j 04:56	15°13'48"	31.32370 AU
retrograde	-1837 Dec 20 j 01:05	2°29'53"					
opposition	-1836 Mar 06 j 23:58	1°08'13"	1°55'04"	conjunction	-1830 Sep 24 j 00:11	15°15'36"	1°58'52"
min. Earth dist.	-1836 Mar 07 j 23:02	1°06'39"	29.32214 AU	minimum elong	-1830 Sep 24 j 00:11	15°15'36"	1°58'52"
	-1836 Apr 24 j 10:33	30°08'02"		morning rise	-1830 Oct 09 j 06:26	15°49'42"	
direct	-1836 May 27 j 07:28	29°04'32"		retrograde	-1829 Jan 03 j 22:30	17°42'07"	
	-1836 Jun 28 j 15:17	0°00'		opposition	-1829 Mar 23 j 09:40	16°20'17"	2°07'34"
evening set	-1836 Aug 26 j 01:38	1°39'38"		min. Earth dist.	-1829 Mar 24 j 04:40	16°19'00"	29.32639 AU
				direct	-1829 Jun 12 j 18:34	14°55'45"	
conjunction	-1836 Sep 10 j 14:06	2°14'11"	1°48'50"	evening set	-1829 Sep 11 j 01:01	16°51'42"	
minimum elong	-1836 Sep 10 j 14:06	2°14'11"	1°48'51"				
max. Earth dist.	-1836 Sep 09 j 14:03	2°11'56"	31.32079 AU	conjunction	-1829 Sep 26 j 09:39	17°26'01"	1°59'57"
morning rise	-1836 Sep 25 j 23:20	2°48'27"		minimum elong	-1829 Sep 26 j 09:39	17°26'01"	1°59'59"
retrograde	-1836 Dec 21 j 12:43	4°40'26"		max. Earth dist.	-1829 Sep 25 j 13:53	17°24'09"	31.32620 AU
opposition	-1835 Mar 09 j 11:31	3°18'44"	1°57'22"	morning rise	-1829 Oct 11 j 15:40	18°00'05"	
min. Earth dist.	-1835 Mar 10 j 09:26	3°17'14"	29.32188 AU	retrograde	-1828 Jan 06 j 10:31	19°52'37"	
direct	-1835 May 29 j 20:37	1°53'54"		opposition	-1828 Mar 24 j 21:37	18°30'48"	2°08'38"
evening set	-1835 Aug 28 j 12:07	3°50'06"		min. Earth dist.	-1828 Mar 25 j 15:35	18°29'35"	29.32885 AU
max. Earth dist.	-1835 Sep 12 j 01:07	4°22'27"	31.32014 AU	direct	-1828 Jun 14 j 04:06	17°06'20"	
				evening set	-1828 Sep 12 j 10:53	19°02'16"	
conjunction	-1835 Sep 13 j 00:07	4°24'36"	1°50'55"				
minimum elong	-1835 Sep 13 j 00:07	4°24'36"	1°50'57"	conjunction	-1828 Sep 27 j 19:11	19°36'33"	2°00'52"
morning rise	-1835 Sep 28 j 08:42	4°58'50"		minimum elong	-1828 Sep 27 j 19:11	19°36'33"	2°00'52"
retrograde	-1835 Dec 23 j 22:58	6°50'52"		max. Earth dist.	-1828 Sep 27 j 00:58	19°34'50"	31.32831 AU
opposition	-1834 Mar 11 j 23:11	5°29'06"	1°59'30"	morning rise	-1828 Oct 13 j 00:37	20°10'37"	
min. Earth dist.	-1834 Mar 12 j 21:46	5°27'33"	29.32118 AU	retrograde	-1827 Jan 07 j 20:18	22°03'16"	
direct	-1834 Jun 01 j 09:02	4°04'17"		opposition	-1827 Mar 27 j 09:50	20°41'27"	2°09'31"
evening set	-1834 Aug 30 j 22:27	6°00'25"		min. Earth dist.	-1827 Mar 28 j 04:11	20°40'12"	29.33059 AU
max. Earth dist.	-1834 Sep 14 j 11:03	6°32'45"	31.31946 AU	direct	-1827 Jun 16 j 15:09	19°17'04"	
				evening set	-1827 Sep 14 j 20:58	21°12'57"	
conjunction	-1834 Sep 15 j 09:50	6°34'53"	1°52'50"	max. Earth dist.	-1827 Sep 29 j 10:07	21°45'28"	31.32965 AU
minimum elong	-1834 Sep 15 j 09:49	6°34'53"	1°52'50"				
morning rise	-1834 Sep 30 j 18:01	7°09'04"		conjunction	-1827 Sep 30 j 04:40	21°47'12"	2°01'37"
retrograde	-1834 Dec 26 j 08:47	9°01'09"		minimum elong	-1827 Sep 30 j 04:40	21°47'12"	2°01'38"
opposition	-1833 Mar 14 j 10:43	7°39'20"	2°01'28"	morning rise	-1827 Oct 15 j 09:53	22°21'15"	
min. Earth dist.	-1833 Mar 15 j 07:44	7°37'54"	29.32060 AU	retrograde	-1826 Jan 10 j 08:50	24°14'00"	
direct	-1833 Jun 03 j 22:02	6°14'32"		opposition	-1826 Mar 29 j 21:52	22°52'11"	2°10'14"
evening set	-1833 Sep 02 j 08:43	8°10'37"		min. Earth dist.	-1826 Mar 30 j 14:54	22°51'01"	29.33140 AU
				direct	-1826 Jun 19 j 03:47	21°27'51"	
conjunction	-1833 Sep 17 j 19:31	8°45'03"	1°54'35"	evening set	-1826 Sep 17 j 06:51	23°23'42"	
minimum elong	-1833 Sep 17 j 19:30	8°45'03"	1°54'36"				
max. Earth dist.	-1833 Sep 16 j 21:15	8°42'58"	31.31907 AU	conjunction	-1826 Oct 02 j 14:14	23°57'56"	2°02'11"
morning rise	-1833 Oct 03 j 03:09	9°19'13"		minimum elong	-1826 Oct 02 j 14:14	23°57'56"	2°02'11"
retrograde	-1833 Dec 28 j 17:44	11°11'21"		max. Earth dist.	-1826 Oct 01 j 20:35	23°56'17"	31.32972 AU
opposition	-1832 Mar 15 j 22:23	9°49'31"	2°03'15"	morning rise	-1826 Oct 17 j 19:01	24°31'57"	
min. Earth dist.	-1832 Mar 16 j 19:34	9°48'04"	29.32076 AU	retrograde	-1825 Jan 12 j 20:10	26°24'49"	
direct	-1832 Jun 05 j 08:55	8°24'45"		opposition	-1825 Apr 01 j 10:11	25°02'57"	2°10'45"
evening set	-1832 Sep 03 j 18:53	10°20'47"		min. Earth dist.	-1825 Apr 02 j 03:53	25°01'45"	29.33080 AU
max. Earth dist.	-1832 Sep 18 j 08:10	10°53'13"	31.31974 AU	direct	-1825 Jun 21 j 15:44	23°38'41"	
				evening set	-1825 Sep 19 j 16:47	25°34'28"	
conjunction	-1832 Sep 19 j 05:10	10°55'11"	1°56'11"				
minimum elong	-1832 Sep 19 j 05:10	10°55'11"	1°56'11"	conjunction	-1825 Oct 04 j 23:42	26°08'40"	2°02'35"
morning rise	-1832 Oct 04 j 12:18	11°29'19"		minimum elong	-1825 Oct 04 j 23:42	26°08'40"	2°02'36"
retrograde	-1832 Dec 30 j 02:44	13°21'31"		max. Earth dist.	-1825 Oct 04 j 06:14	26°07'02"	31.32843 AU
opposition	-1831 Mar 18 j 10:09	11°59'41"	2°04'52"	morning rise	-1825 Oct 20 j 04:13	26°42'41"	
min. Earth dist.	-1831 Mar 19 j 06:02	11°58'20"	29.32186 AU	retrograde	-1824 Jan 15 j 06:31	28°35'37"	
direct	-1831 Jun 07 j 21:02	10°34'58"		opposition	-1824 Apr 02 j 22:22	27°13'43"	2°11'05"
evening set	-1831 Sep 06 j 04:54	12°30'58"		min. Earth dist.	-1824 Apr 03 j 14:40	27°12'37"	29.32870 AU

Attention, astronomical year style is used: The year -1824 in astronomical counting style is the year 1825 BCE in historical counting style.

direct	-1824 Jun 23 j 04:45	25° <u>17</u> 49'28		minimum elong	-1818 Oct 19 j 16:06	11° <u>21</u> 20	2°00'30
evening set	-1824 Sep 21 j 02:40	27° <u>17</u> 45'11		max. Earth dist.	-1818 Oct 19 j 03:58	11° <u>20</u> 12	31.30377 AU
				morning rise	-1818 Nov 03 j 19:17	11° <u>55</u> '18	
conjunction	-1824 Oct 06 j 09:10	28° <u>17</u> 19'21	2°02'49	retrograde	-1817 Jan 30 j 06:58	13° <u>48</u> '52	
minimum elong	-1824 Oct 06 j 09:10	28° <u>17</u> 19'21	2°02'48	opposition	-1817 Apr 19 j 13:02	12° <u>26</u> 33	2°08'14
max. Earth dist.	-1824 Oct 05 j 15:51	28° <u>17</u> 17'44	31.32564 AU	min. Earth dist.	-1817 Apr 19 j 23:37	12° <u>25</u> '51	29.30417 AU
morning rise	-1824 Oct 21 j 13:24	28° <u>17</u> 53'21		direct	-1817 Jul 09 j 13:14	11° <u>02</u> '34	
	-1824 Nov 24 j 08:43	0° <u>00</u>		evening set	-1817 Oct 06 j 20:39	12° <u>57</u> '41	
retrograde	-1823 Jan 16 j 16:45	0° <u>46</u> '22					
	-1823 Mar 13 j 18:11	30° <u>08</u>		conjunction	-1817 Oct 22 j 01:10	13° <u>31</u> '46	1°59'31
opposition	-1823 Apr 05 j 10:49	29° <u>17</u> 24'24	2°11'14	minimum elong	-1817 Oct 22 j 01:10	13° <u>31</u> '46	1°59'31
min. Earth dist.	-1823 Apr 06 j 03:26	29° <u>17</u> 23'16	29.32540 AU	max. Earth dist.	-1817 Oct 21 j 14:22	13° <u>30</u> '45	31.30185 AU
direct	-1823 Jun 25 j 16:35	28° <u>17</u> 00'10		morning rise	-1817 Nov 06 j 04:10	14° <u>05</u> '44	
evening set	-1823 Sep 23 j 12:13	29° <u>17</u> 55'46		retrograde	-1816 Feb 01 j 18:44	15° <u>59</u> '27	
	-1823 Sep 25 j 10:14	0° <u>00</u>		opposition	-1816 Apr 21 j 01:43	14° <u>37</u> '07	2°07'04
				min. Earth dist.	-1816 Apr 21 j 12:29	14° <u>36</u> '24	29.30229 AU
conjunction	-1823 Oct 08 j 18:28	0° <u>29</u> '56	2°02'52	direct	-1816 Jul 11 j 00:02	13° <u>13</u> '14	
minimum elong	-1823 Oct 08 j 18:28	0° <u>29</u> '56	2°02'52	evening set	-1816 Oct 08 j 05:58	15° <u>08</u> '18	
max. Earth dist.	-1823 Oct 08 j 02:22	0° <u>28</u> '25	31.32186 AU				
morning rise	-1823 Oct 23 j 22:25	1° <u>03</u> '55		conjunction	-1816 Oct 23 j 10:16	15° <u>42</u> '23	1°58'21
retrograde	-1822 Jan 19 j 02:11	2° <u>56</u> '59		minimum elong	-1816 Oct 23 j 10:16	15° <u>42</u> '23	1°58'20
opposition	-1822 Apr 07 j 23:07	1° <u>34</u> '57	2°11'12	max. Earth dist.	-1816 Oct 23 j 00:17	15° <u>41</u> '26	31.29997 AU
min. Earth dist.	-1822 Apr 08 j 14:40	1° <u>33</u> '53	29.32108 AU	morning rise	-1816 Nov 07 j 13:12	16° <u>16</u> '21	
direct	-1822 Jun 28 j 06:09	0° <u>10</u> '44		retrograde	-1815 Feb 03 j 06:01	18° <u>10</u> '13	
evening set	-1822 Sep 25 j 21:53	2° <u>06</u> '14		opposition	-1815 Apr 23 j 14:21	16° <u>47</u> '53	2°05'44
max. Earth dist.	-1822 Oct 10 j 11:27	2° <u>38</u> '50	31.31734 AU	min. Earth dist.	-1815 Apr 23 j 23:19	16° <u>47</u> '16	29.30008 AU
				direct	-1815 Jul 13 j 12:18	15° <u>24</u> '04	
conjunction	-1822 Oct 11 j 03:40	2° <u>40</u> '22	2°02'45	evening set	-1815 Oct 10 j 15:13	17° <u>19</u> '06	
minimum elong	-1822 Oct 11 j 03:40	2° <u>40</u> '22	2°02'44				
morning rise	-1822 Oct 26 j 07:31	3° <u>14</u> '20		conjunction	-1815 Oct 25 j 19:18	17° <u>53</u> '11	1°57'00
retrograde	-1821 Jan 21 j 12:40	5° <u>07</u> '29		minimum elong	-1815 Oct 25 j 19:19	17° <u>53</u> '11	1°57'00
opposition	-1821 Apr 10 j 11:20	3° <u>45</u> '21	2°10'59	max. Earth dist.	-1815 Oct 25 j 09:39	17° <u>52</u> '16	31.29740 AU
min. Earth dist.	-1821 Apr 11 j 02:23	3° <u>44</u> '20	29.31656 AU	morning rise	-1815 Nov 09 j 22:16	18° <u>27</u> '10	
direct	-1821 Jun 30 j 16:43	2° <u>21</u> '08		retrograde	-1814 Feb 05 j 17:36	20° <u>21</u> '11	
evening set	-1821 Sep 28 j 07:20	4° <u>16</u> '32		opposition	-1814 Apr 26 j 03:12	18° <u>58</u> '49	2°04'12
				min. Earth dist.	-1814 Apr 26 j 12:20	18° <u>58</u> '12	29.29708 AU
conjunction	-1821 Oct 13 j 12:57	4° <u>50</u> '39	2°02'27	direct	-1814 Jul 15 j 23:47	17° <u>35</u> '06	
minimum elong	-1821 Oct 13 j 12:57	4° <u>50</u> '39	2°02'27	evening set	-1814 Oct 13 j 00:33	19° <u>30</u> '04	
max. Earth dist.	-1821 Oct 12 j 22:38	4° <u>49</u> '19	31.31286 AU				
morning rise	-1821 Oct 28 j 16:25	5° <u>24</u> '37		conjunction	-1814 Oct 28 j 04:35	20° <u>04</u> '09	1°55'30
retrograde	-1820 Jan 23 j 21:05	7° <u>17</u> '50		minimum elong	-1814 Oct 28 j 04:36	20° <u>04</u> '09	1°55'28
opposition	-1820 Apr 11 j 23:47	5° <u>55</u> '39	2°10'34	max. Earth dist.	-1814 Oct 27 j 20:15	20° <u>03</u> '22	31.29384 AU
min. Earth dist.	-1820 Apr 12 j 14:02	5° <u>54</u> '41	29.31224 AU	morning rise	-1814 Nov 12 j 07:25	20° <u>38</u> '09	
direct	-1820 Jul 02 j 05:04	4° <u>31</u> '27		retrograde	-1813 Feb 08 j 04:12	22° <u>32</u> '17	
evening set	-1820 Sep 29 j 16:46	6° <u>26</u> '45		opposition	-1813 Apr 28 j 15:53	21° <u>09</u> '54	2°02'30
				min. Earth dist.	-1813 Apr 28 j 23:58	21° <u>09</u> '22	29.29273 AU
conjunction	-1820 Oct 14 j 21:53	7° <u>00</u> '52	2°01'59	direct	-1813 Jul 18 j 13:13	19° <u>46</u> '16	
minimum elong	-1820 Oct 14 j 21:53	7° <u>00</u> '52	2°01'58	evening set	-1813 Oct 15 j 10:02	21° <u>41</u> '10	
max. Earth dist.	-1820 Oct 14 j 07:32	6° <u>59</u> '30	31.30896 AU				
morning rise	-1820 Oct 30 j 01:20	7° <u>34</u> '49		conjunction	-1813 Oct 30 j 13:48	22° <u>15</u> '15	1°53'49
retrograde	-1819 Jan 25 j 08:39	9° <u>28</u> '09		minimum elong	-1813 Oct 30 j 13:48	22° <u>15</u> '15	1°53'48
opposition	-1819 Apr 14 j 12:13	8° <u>05</u> '53	2°09'59	max. Earth dist.	-1813 Oct 30 j 05:06	22° <u>14</u> '25	31.28883 AU
min. Earth dist.	-1819 Apr 15 j 00:50	8° <u>05</u> '02	29.30881 AU	morning rise	-1813 Nov 14 j 16:45	22° <u>49</u> '16	
direct	-1819 Jul 04 j 14:49	6° <u>41</u> '44		retrograde	-1812 Feb 10 j 15:46	24° <u>43</u> '32	
evening set	-1819 Oct 02 j 02:04	8° <u>36</u> '58		opposition	-1812 Apr 30 j 04:52	23° <u>21</u> '06	2°00'38
				min. Earth dist.	-1812 Apr 30 j 12:32	23° <u>20</u> '35	29.28701 AU
conjunction	-1819 Oct 17 j 07:06	9° <u>11</u> '03	2°01'20	direct	-1812 Jul 19 j 23:48	21° <u>57</u> '31	
minimum elong	-1819 Oct 17 j 07:06	9° <u>11</u> '03	2°01'20	evening set	-1812 Oct 16 j 19:14	23° <u>52</u> '19	
max. Earth dist.	-1819 Oct 16 j 18:41	9° <u>09</u> '53	31.30594 AU				
morning rise	-1819 Nov 01 j 10:15	9° <u>45</u> '01		conjunction	-1812 Oct 31 j 23:04	24° <u>26</u> '25	1°51'59
retrograde	-1818 Jan 27 j 18:27	11° <u>38</u> '28		minimum elong	-1812 Oct 31 j 23:04	24° <u>26</u> '25	1°51'57
opposition	-1818 Apr 17 j 00:38	10° <u>16</u> '10	2°09'12	max. Earth dist.	-1812 Oct 31 j 16:01	24° <u>25</u> '45	31.28235 AU
min. Earth dist.	-1818 Apr 17 j 13:06	10° <u>15</u> '19	29.30618 AU	morning rise	-1812 Nov 16 j 01:53	25° <u>00</u> '27	
direct	-1818 Jul 07 j 01:45	8° <u>52</u> '05		retrograde	-1811 Feb 12 j 00:37	26° <u>54</u> '50	
evening set	-1818 Oct 04 j 11:25	10° <u>47</u> '15		opposition	-1811 May 02 j 17:53	25° <u>32</u> '20	1°58'35
				min. Earth dist.	-1811 May 03 j 01:04	25° <u>31</u> '51	29.27967 AU
conjunction	-1818 Oct 19 j 16:06	11° <u>21</u> '20	2°00'31	direct	-1811 Jul 22 j 12:31	24° <u>08</u> '46	

## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 8

Attention, astronomical year style is used: The year -1811 in astronomical counting style is the year 1812 BCE in historical counting style.

evening set	-1811 Oct 19 j 04:37	26° <u>♏</u> 03'28		max. Earth dist.	-1805 Nov 16 j 14:24	9° <u>♍</u> 43'14	31.22517 AU
				morning rise	-1805 Dec 01 j 18:28	10° <u>♍</u> 17'27	
conjunction	-1811 Nov 03 j 08:14	26° <u>♏</u> 37'34	1°49'59	retrograde	-1804 Feb 28 j 09:36	12° <u>♍</u> 12'36	
minimum elong	-1811 Nov 03 j 08:14	26° <u>♏</u> 37'34	1°49'59	opposition	-1804 May 18 j 12:12	10° <u>♍</u> 49'31	1°39'42
max. Earth dist.	-1811 Nov 03 j 00:47	26° <u>♏</u> 36'52	31.27446 AU	min. Earth dist.	-1804 May 18 j 11:53	10° <u>♍</u> 49'33	29.22283 AU
morning rise	-1811 Nov 18 j 11:19	27° <u>♏</u> 11'38		direct	-1804 Aug 06 j 20:24	9° <u>♍</u> 26'09	
retrograde	-1810 Feb 14 j 12:29	29° <u>♏</u> 06'07		evening set	-1804 Nov 02 j 19:54	11° <u>♍</u> 20'11	
opposition	-1810 May 05 j 06:38	27° <u>♏</u> 43'32	1°56'22				
min. Earth dist.	-1810 May 05 j 12:37	27° <u>♏</u> 43'07	29.27119 AU	conjunction	-1804 Nov 17 j 23:39	11° <u>♍</u> 54'21	1°31'47
direct	-1810 Jul 24 j 22:36	26° <u>♏</u> 19'58		minimum elong	-1804 Nov 17 j 23:39	11° <u>♍</u> 54'21	1°31'45
evening set	-1810 Oct 21 j 13:44	28° <u>♏</u> 14'34		max. Earth dist.	-1804 Nov 17 j 23:29	11° <u>♍</u> 54'20	31.21906 AU
				morning rise	-1804 Dec 03 j 03:50	12° <u>♍</u> 28'34	
conjunction	-1810 Nov 05 j 17:28	28° <u>♏</u> 48'40	1°47'50	retrograde	-1803 Mar 01 j 21:35	14° <u>♍</u> 23'52	
minimum elong	-1810 Nov 05 j 17:29	28° <u>♏</u> 48'40	1°47'48	opposition	-1803 May 21 j 01:18	13° <u>♍</u> 00'44	1°36'23
max. Earth dist.	-1810 Nov 05 j 11:37	28° <u>♏</u> 48'06	31.26551 AU	min. Earth dist.	-1803 May 21 j 00:15	13° <u>♍</u> 00'49	29.21677 AU
morning rise	-1810 Nov 20 j 20:31	29° <u>♏</u> 22'44		direct	-1803 Aug 09 j 06:38	11° <u>♍</u> 37'25	
	-1810 Dec 08 j 11:10	0° <u>♍</u>		evening set	-1803 Nov 05 j 04:58	13° <u>♍</u> 31'24	
retrograde	-1809 Feb 16 j 22:17	1° <u>♍</u> 17'20					
	-1809 May 04 j 11:54	30° <u>♏</u>		conjunction	-1803 Nov 20 j 08:59	14° <u>♍</u> 05'35	1°28'37
opposition	-1809 May 07 j 19:37	29° <u>♏</u> 54'38	1°53'59	minimum elong	-1803 Nov 20 j 08:59	14° <u>♍</u> 05'35	1°28'36
min. Earth dist.	-1809 May 08 j 01:35	29° <u>♏</u> 54'14	29.26188 AU	max. Earth dist.	-1803 Nov 20 j 10:45	14° <u>♍</u> 05'45	31.21291 AU
direct	-1809 Jul 27 j 10:17	28° <u>♏</u> 31'05		morning rise	-1803 Dec 05 j 13:14	14° <u>♍</u> 39'50	
	-1809 Oct 12 j 01:21	0° <u>♍</u>			-1803 Dec 14 j 20:12	15° <u>♍</u>	
evening set	-1809 Oct 23 j 22:49	0° <u>♍</u> 25'33		retrograde	-1802 Mar 04 j 07:21	16° <u>♍</u> 35'16	
				opposition	-1802 May 23 j 14:14	15° <u>♍</u> 12'06	1°32'55
conjunction	-1809 Nov 08 j 02:25	0° <u>♍</u> 59'39	1°45'32	min. Earth dist.	-1802 May 23 j 12:34	15° <u>♍</u> 12'13	29.21034 AU
minimum elong	-1809 Nov 08 j 02:25	0° <u>♍</u> 59'39	1°45'31		-1802 May 31 j 02:15	15° <u>♏</u>	
max. Earth dist.	-1809 Nov 07 j 21:01	0° <u>♍</u> 59'08	31.25622 AU	direct	-1802 Aug 11 j 19:27	13° <u>♍</u> 48'51	
morning rise	-1809 Nov 23 j 05:39	1° <u>♍</u> 33'45			-1802 Oct 18 j 04:08	15° <u>♍</u>	
retrograde	-1808 Feb 19 j 10:28	3° <u>♍</u> 28'26		evening set	-1802 Nov 07 j 14:16	15° <u>♍</u> 42'45	
opposition	-1808 May 09 j 08:29	2° <u>♍</u> 05'38	1°51'27				
min. Earth dist.	-1808 May 09 j 12:27	2° <u>♍</u> 05'22	29.25260 AU	conjunction	-1802 Nov 22 j 18:15	16° <u>♍</u> 16'58	1°25'19
direct	-1808 Jul 28 j 21:37	0° <u>♍</u> 42'05		minimum elong	-1802 Nov 22 j 18:15	16° <u>♍</u> 16'58	1°25'17
evening set	-1808 Oct 25 j 07:53	2° <u>♍</u> 36'27		max. Earth dist.	-1802 Nov 22 j 19:46	16° <u>♍</u> 17'07	31.20629 AU
				morning rise	-1802 Dec 07 j 22:54	16° <u>♍</u> 51'15	
conjunction	-1808 Nov 09 j 11:29	3° <u>♍</u> 10'33	1°43'04	retrograde	-1801 Mar 06 j 20:14	18° <u>♍</u> 46'49	
minimum elong	-1808 Nov 09 j 11:30	3° <u>♍</u> 10'33	1°43'03	opposition	-1801 May 26 j 03:19	17° <u>♍</u> 23'37	1°29'19
max. Earth dist.	-1808 Nov 09 j 07:27	3° <u>♍</u> 10'10	31.24715 AU	min. Earth dist.	-1801 May 26 j 00:22	17° <u>♍</u> 23'49	29.20328 AU
morning rise	-1808 Nov 24 j 14:48	3° <u>♍</u> 44'40		direct	-1801 Aug 14 j 05:56	16° <u>♍</u> 00'25	
retrograde	-1807 Feb 20 j 22:04	5° <u>♍</u> 39'28		evening set	-1801 Nov 09 j 23:23	17° <u>♍</u> 54'15	
opposition	-1807 May 11 j 21:29	4° <u>♍</u> 16'34	1°48'45				
min. Earth dist.	-1807 May 12 j 01:19	4° <u>♍</u> 16'18	29.24394 AU	conjunction	-1801 Nov 25 j 03:36	18° <u>♍</u> 28'29	1°21'53
direct	-1807 Jul 31 j 07:36	2° <u>♍</u> 53'02		minimum elong	-1801 Nov 25 j 03:36	18° <u>♍</u> 28'29	1°21'52
evening set	-1807 Oct 27 j 16:49	4° <u>♍</u> 47'18		max. Earth dist.	-1801 Nov 25 j 06:36	18° <u>♍</u> 28'46	31.19866 AU
				morning rise	-1801 Dec 10 j 08:23	19° <u>♍</u> 02'48	
conjunction	-1807 Nov 11 j 20:30	5° <u>♍</u> 21'25	1°40'28	retrograde	-1800 Mar 08 j 06:30	20° <u>♍</u> 58'31	
minimum elong	-1807 Nov 11 j 20:30	5° <u>♍</u> 21'25	1°40'27	opposition	-1800 May 27 j 16:37	19° <u>♍</u> 35'15	1°25'36
max. Earth dist.	-1807 Nov 11 j 17:44	5° <u>♍</u> 21'09	31.23902 AU	min. Earth dist.	-1800 May 27 j 13:45	19° <u>♍</u> 35'27	29.19505 AU
morning rise	-1807 Nov 26 j 23:59	5° <u>♍</u> 55'33		direct	-1800 Aug 15 j 17:30	18° <u>♍</u> 12'06	
retrograde	-1806 Feb 23 j 09:34	7° <u>♍</u> 50'27		evening set	-1800 Nov 11 j 08:45	20° <u>♍</u> 05'51	
opposition	-1806 May 14 j 10:18	6° <u>♍</u> 27'29	1°45'53				
min. Earth dist.	-1806 May 14 j 11:54	6° <u>♍</u> 27'22	29.23613 AU	conjunction	-1800 Nov 26 j 13:04	20° <u>♍</u> 40'06	1°18'20
direct	-1806 Aug 02 j 19:52	5° <u>♍</u> 03'59		minimum elong	-1800 Nov 26 j 13:05	20° <u>♍</u> 40'06	1°18'18
evening set	-1806 Oct 30 j 01:53	6° <u>♍</u> 58'10		max. Earth dist.	-1800 Nov 26 j 16:18	20° <u>♍</u> 40'24	31.18996 AU
				morning rise	-1800 Dec 11 j 18:14	21° <u>♍</u> 14'27	
conjunction	-1806 Nov 14 j 05:31	7° <u>♍</u> 32'18	1°37'43	retrograde	-1799 Mar 10 j 19:04	23° <u>♍</u> 10'17	
minimum elong	-1806 Nov 14 j 05:31	7° <u>♍</u> 32'18	1°37'41	opposition	-1799 May 30 j 05:44	21° <u>♍</u> 46'57	1°21'44
max. Earth dist.	-1806 Nov 14 j 03:17	7° <u>♍</u> 32'05	31.23166 AU	min. Earth dist.	-1799 May 30 j 01:15	21° <u>♍</u> 47'15	29.18563 AU
morning rise	-1806 Nov 29 j 09:14	8° <u>♍</u> 06'27		direct	-1799 Aug 18 j 04:22	20° <u>♍</u> 23'49	
retrograde	-1805 Feb 25 j 22:04	10° <u>♍</u> 01'29		evening set	-1799 Nov 13 j 18:02	22° <u>♍</u> 17'29	
opposition	-1805 May 16 j 23:12	8° <u>♍</u> 38'27	1°42'52				
min. Earth dist.	-1805 May 17 j 00:30	8° <u>♍</u> 38'22	29.22920 AU	conjunction	-1799 Nov 28 j 22:34	22° <u>♍</u> 51'46	1°14'40
direct	-1805 Aug 05 j 07:14	7° <u>♍</u> 15'00		minimum elong	-1799 Nov 28 j 22:34	22° <u>♍</u> 51'46	1°14'39
evening set	-1805 Nov 01 j 10:51	9° <u>♍</u> 09'07		max. Earth dist.	-1799 Nov 29 j 02:29	22° <u>♍</u> 52'08	31.17987 AU
				morning rise	-1799 Dec 14 j 04:03	23° <u>♍</u> 26'09	
conjunction	-1805 Nov 16 j 14:41	9° <u>♍</u> 43'16	1°34'49	retrograde	-1798 Mar 13 j 06:53	25° <u>♍</u> 22'07	
minimum elong	-1805 Nov 16 j 14:41	9° <u>♍</u> 43'16	1°34'49	opposition	-1798 Jun 01 j 18:59	23° <u>♍</u> 58'41	1°17'46



## Planetary Phenomena of Neptune from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9

Attention, astronomical year style is used: The year -1798 in astronomical counting style is the year 1799 BCE in historical counting style.

min. Earth dist.	-1798 Jun 01 j 14:54	23°M.58'57	29.17493 AU	conjunction	-1792 Dec 13 j 17:02	8°J.13'32	0°46'21
direct	-1798 Aug 20 j 14:17	22°M.35'33		minimum elong	-1792 Dec 13 j 17:02	8°J.13'32	0°46'19
evening set	-1798 Nov 16 j 03:15	24°M.29'08		max. Earth dist.	-1792 Dec 14 j 04:21	8°J.14'37	31.10961 AU
				morning rise	-1792 Dec 29 j 01:03	8°J.48'12	
conjunction	-1798 Dec 01 j 08:02	25°M.03'25	1°10'54	retrograde	-1791 Mar 28 j 19:08	10°J.44'58	
minimum elong	-1798 Dec 01 j 08:03	25°M.03'25	1°10'52	opposition	-1791 Jun 17 j 14:33	9°J.21'02	0°47'09
max. Earth dist.	-1798 Dec 01 j 12:58	25°M.03'53	31.16879 AU	min. Earth dist.	-1791 Jun 17 j 03:11	9°J.21'48	29.10636 AU
morning rise	-1798 Dec 16 j 13:48	25°M.37'51		direct	-1791 Sep 05 j 00:13	7°J.58'04	
retrograde	-1797 Mar 15 j 18:59	27°M.33'54		evening set	-1791 Nov 30 j 20:15	9°J.51'11	
opposition	-1797 Jun 04 j 08:01	26°M.10'23	1°13'42				
min. Earth dist.	-1797 Jun 04 j 02:06	26°M.10'47	29.16337 AU	conjunction	-1791 Dec 16 j 02:47	10°J.25'40	0°41'58
direct	-1797 Aug 23 j 02:42	24°M.47'14		minimum elong	-1791 Dec 16 j 02:47	10°J.25'40	0°41'56
evening set	-1797 Nov 18 j 12:34	26°M.40'44		max. Earth dist.	-1791 Dec 16 j 14:42	10°J.26'48	31.10273 AU
				morning rise	-1791 Dec 31 j 11:16	11°J.00'23	
conjunction	-1797 Dec 03 j 17:26	27°M.15'03	1°07'02	retrograde	-1790 Mar 31 j 07:36	12°J.57'18	
minimum elong	-1797 Dec 03 j 17:27	27°M.15'03	1°07'01	opposition	-1790 Jun 20 j 03:35	11°J.33'20	0°42'26
max. Earth dist.	-1797 Dec 03 j 22:37	27°M.15'32	31.15711 AU	min. Earth dist.	-1790 Jun 19 j 14:30	11°J.34'13	29.09948 AU
morning rise	-1797 Dec 18 j 23:39	27°M.49'30		direct	-1790 Sep 07 j 10:40	10°J.10'25	
retrograde	-1796 Mar 17 j 08:15	29°M.45'40		evening set	-1790 Dec 03 j 05:51	12°J.03'30	
opposition	-1796 Jun 05 j 21:16	28°M.22'02	1°09'31				
min. Earth dist.	-1796 Jun 05 j 15:12	28°M.22'26	29.15176 AU	conjunction	-1790 Dec 18 j 12:35	12°J.38'02	0°37'31
direct	-1796 Aug 24 j 13:52	26°M.58'53		minimum elong	-1790 Dec 18 j 12:36	12°J.38'02	0°37'28
evening set	-1796 Nov 19 j 21:37	28°M.52'17		max. Earth dist.	-1790 Dec 19 j 01:17	12°J.39'14	31.09573 AU
				morning rise	-1789 Jan 02 j 21:29	13°J.12'46	
conjunction	-1796 Dec 05 j 02:53	29°M.26'38	1°03'05	retrograde	-1789 Apr 02 j 19:39	15°J.09'50	
minimum elong	-1796 Dec 05 j 02:53	29°M.26'38	1°03'02	opposition	-1789 Jun 22 j 16:49	13°J.45'50	0°37'38
max. Earth dist.	-1796 Dec 05 j 10:04	29°M.27'18	31.14572 AU	min. Earth dist.	-1789 Jun 22 j 04:06	13°J.46'42	29.09236 AU
	-1796 Dec 19 j 21:15	0°J.		direct	-1789 Sep 09 j 19:49	12°J.22'59	
morning rise	-1796 Dec 20 j 09:19	0°J.01'07		evening set	-1789 Dec 05 j 15:33	14°J.16'02	
retrograde	-1795 Mar 19 j 20:14	1°J.57'23					
opposition	-1795 Jun 08 j 10:21	0°J.33'39	1°05'13	conjunction	-1789 Dec 20 j 22:41	14°J.50'35	0°33'00
min. Earth dist.	-1795 Jun 08 j 02:38	0°J.34'10	29.14060 AU	minimum elong	-1789 Dec 20 j 22:41	14°J.50'35	0°32'58
	-1795 Jun 29 j 17:33	30°R.M.		max. Earth dist.	-1789 Dec 21 j 12:25	14°J.51'53	31.08843 AU
direct	-1795 Aug 27 j 02:57	29°M.10'31		morning rise	-1788 Jan 05 j 07:55	15°J.25'22	
	-1795 Oct 21 j 07:59	0°J.		retrograde	-1788 Apr 04 j 08:43	17°J.22'34	
evening set	-1795 Nov 22 j 06:59	1°J.03'50		opposition	-1788 Jun 24 j 05:58	15°J.58'32	0°32'47
				min. Earth dist.	-1788 Jun 23 j 15:37	15°J.59'30	29.08461 AU
conjunction	-1795 Dec 07 j 12:19	1°J.38'12	0°59'01	direct	-1788 Sep 11 j 07:51	14°J.35'42	
minimum elong	-1795 Dec 07 j 12:19	1°J.38'12	0°59'00	evening set	-1788 Dec 07 j 01:26	16°J.28'43	
max. Earth dist.	-1795 Dec 07 j 19:36	1°J.38'53	31.13506 AU				
morning rise	-1795 Dec 22 j 19:17	2°J.12'44		conjunction	-1788 Dec 22 j 08:46	17°J.03'18	0°28'26
retrograde	-1794 Mar 22 j 08:36	4°J.09'07		minimum elong	-1788 Dec 22 j 08:46	17°J.03'18	0°28'24
opposition	-1794 Jun 10 j 23:17	2°J.45'18	1°00'50	max. Earth dist.	-1788 Dec 22 j 22:16	17°J.04'34	31.08017 AU
min. Earth dist.	-1794 Jun 10 j 14:45	2°J.45'53	29.13052 AU	morning rise	-1787 Jan 06 j 18:34	17°J.38'07	
direct	-1794 Aug 29 j 13:06	1°J.22'11		retrograde	-1787 Apr 06 j 22:44	19°J.35'27	
evening set	-1794 Nov 24 j 16:11	3°J.15'27		opposition	-1787 Jun 26 j 19:18	18°J.11'21	0°27'53
				min. Earth dist.	-1787 Jun 26 j 05:19	18°J.12'18	29.07582 AU
conjunction	-1794 Dec 09 j 21:56	3°J.49'51	0°54'53	direct	-1787 Sep 13 j 18:10	16°J.48'32	
minimum elong	-1794 Dec 09 j 21:56	3°J.49'51	0°54'50	evening set	-1787 Dec 09 j 11:22	18°J.41'30	
max. Earth dist.	-1794 Dec 10 j 07:21	3°J.50'44	31.12551 AU				
morning rise	-1794 Dec 25 j 05:06	4°J.24'25		conjunction	-1787 Dec 24 j 19:12	19°J.16'06	0°23'50
retrograde	-1793 Mar 24 j 19:09	6°J.20'54		minimum elong	-1787 Dec 24 j 19:12	19°J.16'06	0°23'49
opposition	-1793 Jun 13 j 12:22	4°J.57'03	0°56'22	max. Earth dist.	-1787 Dec 25 j 10:05	19°J.17'31	31.07074 AU
min. Earth dist.	-1793 Jun 13 j 02:46	4°J.57'42	29.12146 AU	morning rise	-1786 Jan 09 j 05:16	19°J.50'58	
direct	-1793 Sep 01 j 02:15	3°J.33'58		retrograde	-1786 Apr 09 j 11:14	21°J.48'23	
evening set	-1793 Nov 27 j 01:27	5°J.27'10		opposition	-1786 Jun 29 j 08:18	20°J.24'13	0°22'56
				min. Earth dist.	-1786 Jun 28 j 17:18	20°J.25'14	29.06566 AU
conjunction	-1793 Dec 12 j 07:19	6°J.01'36	0°50'39	direct	-1786 Sep 16 j 06:33	19°J.01'23	
minimum elong	-1793 Dec 12 j 07:19	6°J.01'36	0°50'38	evening set	-1786 Dec 11 j 21:27	20°J.54'18	
max. Earth dist.	-1793 Dec 12 j 16:55	6°J.02'31	31.11714 AU				
morning rise	-1793 Dec 27 j 15:01	6°J.36'13		conjunction	-1786 Dec 27 j 05:27	21°J.28'56	0°19'12
retrograde	-1792 Mar 26 j 08:54	8°J.32'51		minimum elong	-1786 Dec 27 j 05:27	21°J.28'56	0°19'10
opposition	-1792 Jun 15 j 01:28	7°J.08'56	0°51'48	max. Earth dist.	-1786 Dec 27 j 19:47	21°J.30'17	31.06008 AU
min. Earth dist.	-1792 Jun 14 j 14:15	7°J.09'42	29.11357 AU	morning rise	-1785 Jan 11 j 16:08	22°J.03'50	
direct	-1792 Sep 02 j 13:00	5°J.45'55		retrograde	-1785 Apr 12 j 00:52	24°J.01'20	
evening set	-1792 Nov 28 j 10:48	7°J.39'04		opposition	-1785 Jul 01 j 21:32	22°J.37'04	0°17'58
				min. Earth dist.	-1785 Jul 01 j 06:20	22°J.38'06	29.05456 AU

Attention, astronomical year style is used: The year -1785 in astronomical counting style is the year 1786 BCE in historical counting style.

direct	-1785 Sep 18 j 17:18	21° $\mathring{A}$ 14'13		conjunction	-1779 Jan 08 j 20:08	4° $\mathring{B}$ 45'13	-0°09'05
evening set	-1785 Dec 14 j 07:16	23° $\mathring{A}$ 07'02		minimum elong	-1779 Jan 08 j 20:08	4° $\mathring{B}$ 45'13	0°09'08
				behind sun begin	-1779 Jan 08 j 14:39	4° $\mathring{B}$ 44'44	
conjunction	-1785 Dec 29 j 15:46	23° $\mathring{A}$ 41'43	0°14'32	behind sun end	-1779 Jan 09 j 01:37	4° $\mathring{B}$ 45'43	
minimum elong	-1785 Dec 29 j 15:46	23° $\mathring{A}$ 41'43	0°14'31	max. Earth dist.	-1779 Jan 09 j 16:06	4° $\mathring{B}$ 47'07	30.99813 AU
behind sun begin	-1785 Dec 29 j 12:49	23° $\mathring{A}$ 41'26		morning rise	-1779 Jan 24 j 09:27	5° $\mathring{B}$ 20'21	
behind sun end	-1785 Dec 29 j 18:43	23° $\mathring{A}$ 41'59		retrograde	-1779 Apr 25 j 03:07	7° $\mathring{B}$ 18'23	
max. Earth dist.	-1785 Dec 30 j 07:47	23° $\mathring{A}$ 43'13	31.04860 AU	min. Earth dist.	-1779 Jul 14 j 07:03	5° $\mathring{B}$ 55'04	28.99460 AU
morning rise	-1784 Jan 14 j 02:46	24° $\mathring{A}$ 16'39		opposition	-1779 Jul 15 j 03:20	5° $\mathring{B}$ 53'41	-0°12'13
retrograde	-1784 Apr 13 j 12:55	26° $\mathring{A}$ 14'13		direct	-1779 Oct 01 j 14:38	4° $\mathring{B}$ 30'47	
opposition	-1784 Jul 03 j 10:40	24° $\mathring{A}$ 49'50	0°12'58	evening set	-1779 Dec 26 j 20:19	6° $\mathring{B}$ 23'25	
min. Earth dist.	-1784 Jul 02 j 18:55	24° $\mathring{A}$ 50'54	29.04283 AU				
direct	-1784 Sep 20 j 07:01	23° $\mathring{A}$ 26'57		conjunction	-1778 Jan 11 j 06:52	6° $\mathring{B}$ 58'16	-0°13'46
evening set	-1784 Dec 15 j 17:20	25° $\mathring{A}$ 19'43		minimum elong	-1778 Jan 11 j 06:51	6° $\mathring{B}$ 58'16	0°13'48
				behind sun begin	-1778 Jan 11 j 03:23	6° $\mathring{B}$ 57'57	
conjunction	-1784 Dec 31 j 02:05	25° $\mathring{A}$ 54'25	0°09'52	behind sun end	-1778 Jan 11 j 10:19	6° $\mathring{B}$ 58'35	
minimum elong	-1784 Dec 31 j 02:05	25° $\mathring{A}$ 54'25	0°09'49	max. Earth dist.	-1778 Jan 12 j 02:42	7° $\mathring{B}$ 00'08	30.99083 AU
behind sun begin	-1784 Dec 30 j 20:49	25° $\mathring{A}$ 53'56		morning rise	-1778 Jan 26 j 20:45	7° $\mathring{B}$ 33'26	
behind sun end	-1784 Dec 31 j 07:21	25° $\mathring{A}$ 54'53		retrograde	-1778 Apr 27 j 16:46	9° $\mathring{B}$ 31'35	
max. Earth dist.	-1784 Dec 31 j 17:57	25° $\mathring{A}$ 55'54	31.03695 AU	opposition	-1778 Jul 17 j 16:13	8° $\mathring{B}$ 06'52	-0°17'15
morning rise	-1783 Jan 15 j 13:40	26° $\mathring{A}$ 29'23		min. Earth dist.	-1778 Jul 16 j 20:13	8° $\mathring{B}$ 08'14	28.98767 AU
retrograde	-1783 Apr 16 j 02:54	28° $\mathring{A}$ 27'01		direct	-1778 Oct 03 j 23:58	6° $\mathring{B}$ 44'01	
opposition	-1783 Jul 05 j 23:34	27° $\mathring{A}$ 02'32	0°07'56	evening set	-1778 Dec 29 j 06:46	8° $\mathring{B}$ 36'40	
min. Earth dist.	-1783 Jul 05 j 06:40	27° $\mathring{A}$ 03'41	29.03139 AU				
direct	-1783 Sep 22 j 18:21	25° $\mathring{A}$ 39'37		conjunction	-1777 Jan 13 j 17:51	9° $\mathring{B}$ 11'33	-0°18'28
evening set	-1783 Dec 18 j 03:23	27° $\mathring{A}$ 32'19		minimum elong	-1777 Jan 13 j 17:51	9° $\mathring{B}$ 11'33	0°18'30
				max. Earth dist.	-1777 Jan 14 j 15:19	9° $\mathring{B}$ 13'34	30.98407 AU
conjunction	-1782 Jan 02 j 12:33	28° $\mathring{A}$ 07'03	0°05'11	morning rise	-1777 Jan 29 j 08:01	9° $\mathring{B}$ 46'45	
minimum elong	-1782 Jan 02 j 12:33	28° $\mathring{A}$ 07'03	0°05'10	retrograde	-1777 Apr 30 j 05:49	11° $\mathring{B}$ 45'02	
behind sun begin	-1782 Jan 02 j 06:19	28° $\mathring{A}$ 06'29		min. Earth dist.	-1777 Jul 19 j 08:01	10° $\mathring{B}$ 21'45	28.98093 AU
behind sun end	-1782 Jan 02 j 18:47	28° $\mathring{A}$ 07'37		opposition	-1777 Jul 20 j 05:07	10° $\mathring{B}$ 20'18	-0°22'16
max. Earth dist.	-1782 Jan 03 j 05:49	28° $\mathring{A}$ 08'41	31.02567 AU	direct	-1777 Oct 06 j 11:25	8° $\mathring{B}$ 57'29	
morning rise	-1782 Jan 18 j 00:31	28° $\mathring{A}$ 42'03		evening set	-1777 Dec 31 j 17:27	10° $\mathring{B}$ 50'09	
	-1782 Feb 27 j 10:09	0° $\mathring{B}$					
retrograde	-1782 Apr 18 j 13:26	0° $\mathring{B}$ 39'46		conjunction	-1776 Jan 16 j 04:44	11° $\mathring{B}$ 25'04	-0°23'08
	-1782 Jun 09 j 17:18	30° $\mathring{R}$ $\mathring{A}$		minimum elong	-1776 Jan 16 j 04:44	11° $\mathring{B}$ 25'04	0°23'09
opposition	-1782 Jul 08 j 12:35	29° $\mathring{A}$ 15'12	0°02'54	max. Earth dist.	-1776 Jan 17 j 01:40	11° $\mathring{B}$ 27'03	30.97729 AU
min. Earth dist.	-1782 Jul 07 j 19:35	29° $\mathring{A}$ 16'22	29.02054 AU	morning rise	-1776 Jan 31 j 19:33	12° $\mathring{B}$ 00'19	
direct	-1782 Sep 25 j 06:10	27° $\mathring{A}$ 52'16		retrograde	-1776 May 01 j 20:40	13° $\mathring{B}$ 58'44	
evening set	-1782 Dec 20 j 13:25	29° $\mathring{A}$ 44'56		opposition	-1776 Jul 21 j 18:09	12° $\mathring{B}$ 33'59	-0°27'14
	-1782 Dec 27 j 07:01	0° $\mathring{B}$		min. Earth dist.	-1776 Jul 20 j 21:08	12° $\mathring{B}$ 35'26	28.97403 AU
				direct	-1776 Oct 07 j 21:36	11° $\mathring{B}$ 11'12	
conjunction	-1781 Jan 04 j 22:54	0° $\mathring{B}$ 19'41	0°00'25	evening set	-1775 Jan 02 j 04:18	13° $\mathring{B}$ 03'53	
minimum elong	-1781 Jan 04 j 22:55	0° $\mathring{B}$ 19'41	0°00'22				
behind sun begin	-1781 Jan 04 j 16:32	0° $\mathring{B}$ 19'06		conjunction	-1775 Jan 17 j 16:07	13° $\mathring{B}$ 38'51	-0°27'46
behind sun end	-1781 Jan 05 j 05:19	0° $\mathring{B}$ 20'15		minimum elong	-1775 Jan 17 j 16:07	13° $\mathring{B}$ 38'51	0°27'48
max. Earth dist.	-1781 Jan 05 j 16:51	0° $\mathring{B}$ 21'22	31.01538 AU	max. Earth dist.	-1775 Jan 18 j 14:21	13° $\mathring{B}$ 40'57	30.96994 AU
morning rise	-1781 Jan 20 j 11:20	0° $\mathring{B}$ 54'43		morning rise	-1775 Feb 02 j 07:13	14° $\mathring{B}$ 14'08	
desc. node	-1781 Feb 05 j 08:41	1° $\mathring{B}$ 28'38		retrograde	-1775 May 04 j 10:24	16° $\mathring{B}$ 12'39	
retrograde	-1781 Apr 21 j 02:08	2° $\mathring{B}$ 52'32		min. Earth dist.	-1775 Jul 23 j 09:52	14° $\mathring{B}$ 49'19	28.96624 AU
min. Earth dist.	-1781 Jul 10 j 06:41	1° $\mathring{B}$ 29'11	29.01080 AU	opposition	-1775 Jul 24 j 06:57	14° $\mathring{B}$ 47'53	-0°32'11
opposition	-1781 Jul 11 j 01:28	1° $\mathring{B}$ 27'54	-0°02'08	direct	-1775 Oct 10 j 10:49	13° $\mathring{B}$ 25'06	
direct	-1781 Sep 27 j 17:22	0° $\mathring{B}$ 04'58		evening set	-1774 Jan 04 j 15:24	15° $\mathring{B}$ 17'49	
evening set	-1781 Dec 22 j 23:38	1° $\mathring{B}$ 57'36					
				conjunction	-1774 Jan 20 j 03:31	15° $\mathring{B}$ 52'48	-0°32'22
conjunction	-1780 Jan 07 j 09:27	2° $\mathring{B}$ 32'23	-0°04'23	minimum elong	-1774 Jan 20 j 03:31	15° $\mathring{B}$ 52'48	0°32'23
minimum elong	-1780 Jan 07 j 09:27	2° $\mathring{B}$ 32'23	0°04'25	max. Earth dist.	-1774 Jan 21 j 00:56	15° $\mathring{B}$ 54'50	30.96164 AU
behind sun begin	-1780 Jan 07 j 03:08	2° $\mathring{B}$ 31'49		morning rise	-1774 Feb 04 j 19:11	16° $\mathring{B}$ 28'07	
behind sun end	-1780 Jan 07 j 15:46	2° $\mathring{B}$ 32'57		retrograde	-1774 May 07 j 01:21	18° $\mathring{B}$ 26'44	
max. Earth dist.	-1780 Jan 08 j 04:09	2° $\mathring{B}$ 34'09	31.00614 AU	opposition	-1774 Jul 26 j 19:53	17° $\mathring{B}$ 01'55	-0°37'05
morning rise	-1780 Jan 22 j 22:22	3° $\mathring{B}$ 07'28		min. Earth dist.	-1774 Jul 25 j 22:17	17° $\mathring{B}$ 03'24	28.95739 AU
retrograde	-1780 Apr 22 j 14:15	5° $\mathring{B}$ 05'24		direct	-1774 Oct 12 j 22:09	15° $\mathring{B}$ 39'07	
opposition	-1780 Jul 12 j 14:30	3° $\mathring{B}$ 40'42	-0°07'11	evening set	-1773 Jan 07 j 02:24	17° $\mathring{B}$ 31'50	
min. Earth dist.	-1780 Jul 11 j 19:57	3° $\mathring{B}$ 41'59	29.00222 AU				
direct	-1780 Sep 29 j 02:56	2° $\mathring{B}$ 17'47		conjunction	-1773 Jan 22 j 14:56	18° $\mathring{B}$ 06'51	-0°36'55
evening set	-1780 Dec 24 j 09:49	4° $\mathring{B}$ 10'24		minimum elong	-1773 Jan 22 j 14:56	18° $\mathring{B}$ 06'51	0°36'57
				max. Earth dist.	-1773 Jan 23 j 13:04	18° $\mathring{B}$ 08'57	30.95204 AU

Attention, astronomical year style is used: The year -1773 in astronomical counting style is the year 1774 BCE in historical counting style.

morning rise	-1773 Feb 07 j 06:58	18° $\overline{3}$ 42'13	direct	-1767 Oct 28 j 04:29	1° $\approx$ 16'37	
retrograde	-1773 May 09 j 13:06	20° $\overline{3}$ 40'54	evening set	-1766 Jan 22 j 09:33	3° $\approx$ 09'20	
min. Earth dist.	-1773 Jul 28 j 11:47	19° $\overline{3}$ 17'28 28.94725 AU				
opposition	-1773 Jul 29 j 08:52	19° $\overline{3}$ 16'01 -0°41'55	conjunction	-1766 Feb 07 j 00:58	3° $\approx$ 44'31 -1°06'51	
direct	-1773 Oct 15 j 10:26	17° $\overline{3}$ 53'12	minimum elong	-1766 Feb 07 j 00:58	3° $\approx$ 44'31 1°06'52	
evening set	-1772 Jan 09 j 13:33	19° $\overline{3}$ 45'53	max. Earth dist.	-1766 Feb 08 j 02:13	3° $\approx$ 46'54 30.88668 AU	
			morning rise	-1766 Feb 22 j 20:02	4° $\approx$ 20'05	
conjunction	-1772 Jan 25 j 02:31	20° $\overline{3}$ 20'56 -0°41'24	retrograde	-1766 May 25 j 07:14	6° $\approx$ 19'04	
minimum elong	-1772 Jan 25 j 02:30	20° $\overline{3}$ 20'56 0°41'26	min. Earth dist.	-1766 Aug 13 j 00:57	4° $\approx$ 55'24 28.88467 AU	
max. Earth dist.	-1772 Jan 26 j 00:38	20° $\overline{3}$ 23'02 30.94157 AU	opposition	-1766 Aug 14 j 00:35	4° $\approx$ 53'45 -1°13'38	
morning rise	-1772 Feb 09 j 19:02	20° $\overline{3}$ 56'19	direct	-1766 Oct 30 j 16:45	3° $\approx$ 30'38	
retrograde	-1772 May 11 j 03:08	22° $\overline{3}$ 55'03	evening set	-1765 Jan 24 j 21:09	5° $\approx$ 23'23	
opposition	-1772 Jul 30 j 21:35	21° $\overline{3}$ 30'05 -0°46'41				
min. Earth dist.	-1772 Jul 29 j 23:30	21° $\overline{3}$ 31'37 28.93646 AU	conjunction	-1765 Feb 09 j 12:51	5° $\approx$ 58'37 -1°10'47	
direct	-1772 Oct 16 j 22:42	20° $\overline{3}$ 07'13	minimum elong	-1765 Feb 09 j 12:51	5° $\approx$ 58'37 1°10'49	
evening set	-1771 Jan 11 j 00:45	21° $\overline{3}$ 59'53	max. Earth dist.	-1765 Feb 10 j 13:34	6° $\approx$ 00'57 30.88151 AU	
			morning rise	-1765 Feb 25 j 08:28	6° $\approx$ 34'12	
conjunction	-1771 Jan 26 j 14:04	22° $\overline{3}$ 34'58 -0°45'50	retrograde	-1765 May 27 j 22:04	8° $\approx$ 33'15	
minimum elong	-1771 Jan 26 j 14:04	22° $\overline{3}$ 34'58 0°45'53	opposition	-1765 Aug 16 j 13:01	7° $\approx$ 07'56 -1°17'47	
max. Earth dist.	-1771 Jan 27 j 12:22	22° $\overline{3}$ 37'04 30.93049 AU	min. Earth dist.	-1765 Aug 15 j 12:49	7° $\approx$ 09'37 28.87998 AU	
morning rise	-1771 Feb 11 j 07:06	23° $\overline{3}$ 10'23	direct	-1765 Nov 02 j 03:25	5° $\approx$ 44'49	
retrograde	-1771 May 13 j 15:24	25° $\overline{3}$ 09'09	evening set	-1764 Jan 27 j 09:00	7° $\approx$ 37'37	
opposition	-1771 Aug 02 j 10:21	23° $\overline{3}$ 44'06 -0°51'24				
min. Earth dist.	-1771 Aug 01 j 13:05	23° $\overline{3}$ 45'34 28.92545 AU	conjunction	-1764 Feb 12 j 01:09	8° $\approx$ 12'53 -1°14'37	
direct	-1771 Oct 19 j 09:26	22° $\overline{3}$ 21'10	minimum elong	-1764 Feb 12 j 01:09	8° $\approx$ 12'52 1°14'38	
evening set	-1770 Jan 13 j 11:56	24° $\overline{3}$ 13'49	max. Earth dist.	-1764 Feb 13 j 02:40	8° $\approx$ 15'17 30.87697 AU	
			morning rise	-1764 Feb 27 j 21:07	8° $\approx$ 48'30	
conjunction	-1770 Jan 29 j 01:45	24° $\overline{3}$ 48'55 -0°50'12	retrograde	-1764 May 29 j 11:14	10° $\approx$ 47'36	
minimum elong	-1770 Jan 29 j 01:44	24° $\overline{3}$ 48'55 0°50'14	min. Earth dist.	-1764 Aug 17 j 01:50	9° $\approx$ 23'56 28.87566 AU	
max. Earth dist.	-1770 Jan 30 j 00:54	24° $\overline{3}$ 51'06 30.91963 AU	opposition	-1764 Aug 18 j 01:23	9° $\approx$ 22'17 -1°21'49	
morning rise	-1770 Feb 13 j 19:06	25° $\overline{3}$ 24'22	direct	-1764 Nov 03 j 15:21	7° $\approx$ 59'11	
retrograde	-1770 May 16 j 03:04	27° $\overline{3}$ 23'09	evening set	-1763 Jan 28 j 21:03	9° $\approx$ 52'02	
opposition	-1770 Aug 04 j 22:47	25° $\overline{3}$ 58'02 -0°56'01				
min. Earth dist.	-1770 Aug 04 j 00:07	25° $\overline{3}$ 59'36 28.91492 AU	conjunction	-1763 Feb 13 j 13:38	10° $\approx$ 27'19 -1°18'20	
direct	-1770 Oct 21 j 21:37	24° $\overline{3}$ 35'02	minimum elong	-1763 Feb 13 j 13:38	10° $\approx$ 27'19 1°18'22	
evening set	-1769 Jan 15 j 23:19	26° $\overline{3}$ 27'41	max. Earth dist.	-1763 Feb 14 j 14:52	10° $\approx$ 29'43 30.87270 AU	
			morning rise	-1763 Mar 01 j 10:02	11° $\approx$ 02'58	
conjunction	-1769 Jan 31 j 13:21	27° $\overline{3}$ 02'48 -0°54'30	retrograde	-1763 Jun 01 j 02:47	13° $\approx$ 02'08	
minimum elong	-1769 Jan 31 j 13:21	27° $\overline{3}$ 02'48 0°54'32	opposition	-1763 Aug 20 j 13:42	11° $\approx$ 36'49 -1°25'44	
max. Earth dist.	-1769 Feb 01 j 12:10	27° $\overline{3}$ 04'57 30.90947 AU	min. Earth dist.	-1763 Aug 19 j 13:29	11° $\approx$ 38'30 28.87127 AU	
morning rise	-1769 Feb 16 j 07:16	27° $\overline{3}$ 38'17	direct	-1763 Nov 06 j 03:40	10° $\approx$ 13'42	
retrograde	-1769 May 18 j 15:28	29° $\overline{3}$ 37'07	evening set	-1762 Jan 31 j 09:19	12° $\approx$ 06'38	
opposition	-1769 Aug 07 j 11:24	28° $\overline{3}$ 11'55 -1°00'34				
min. Earth dist.	-1769 Aug 06 j 13:09	28° $\overline{3}$ 13'27 28.90546 AU	conjunction	-1762 Feb 16 j 02:13	12° $\approx$ 41'57 -1°21'56	
direct	-1769 Oct 24 j 06:58	26° $\overline{3}$ 48'52	minimum elong	-1762 Feb 16 j 02:12	12° $\approx$ 41'57 1°21'57	
evening set	-1768 Jan 18 j 10:28	28° $\overline{3}$ 41'31	max. Earth dist.	-1762 Feb 17 j 03:10	12° $\approx$ 44'18 30.86784 AU	
			morning rise	-1762 Mar 03 j 23:01	13° $\approx$ 17'37	
conjunction	-1768 Feb 03 j 01:05	29° $\overline{3}$ 16'40 -0°58'42		-1762 May 02 j 07:28	15° $\approx$	
minimum elong	-1768 Feb 03 j 01:05	29° $\overline{3}$ 16'40 0°58'43	retrograde	-1762 Jun 03 j 15:34	15° $\approx$ 16'50	
max. Earth dist.	-1768 Feb 04 j 01:28	29° $\overline{3}$ 18'58 30.90058 AU		-1762 Jul 06 j 09:51	15° $\approx$	
morning rise	-1768 Feb 18 j 19:17	29° $\overline{3}$ 52'10	min. Earth dist.	-1762 Aug 22 j 03:11	13° $\approx$ 53'06 28.86615 AU	
	-1768 Feb 22 j 08:54	0° $\approx$	opposition	-1762 Aug 23 j 02:06	13° $\approx$ 51'31 -1°29'31	
retrograde	-1768 May 20 j 03:58	1° $\approx$ 51'03	direct	-1762 Nov 08 j 14:36	12° $\approx$ 28'23	
opposition	-1768 Aug 08 j 23:50	0° $\approx$ 25'48 -1°05'01	evening set	-1761 Feb 02 j 21:35	14° $\approx$ 21'21	
min. Earth dist.	-1768 Aug 08 j 00:27	0° $\approx$ 27'25 28.89721 AU				
	-1768 Aug 24 j 17:46	30° $\approx$	conjunction	-1761 Feb 18 j 15:00	14° $\approx$ 56'41 -1°25'24	
direct	-1768 Oct 25 j 18:18	29° $\overline{3}$ 02'43	minimum elong	-1761 Feb 18 j 15:00	14° $\approx$ 56'41 1°25'26	
	-1768 Dec 23 j 17:47	0° $\approx$	max. Earth dist.	-1761 Feb 19 j 16:08	14° $\approx$ 59'03 30.86234 AU	
evening set	-1767 Jan 19 j 22:03	0° $\approx$ 55'23		-1761 Feb 20 j 02:07	15° $\approx$	
			morning rise	-1761 Mar 06 j 12:07	15° $\approx$ 32'23	
conjunction	-1767 Feb 04 j 12:55	1° $\approx$ 30'33 -1°02'49	retrograde	-1761 Jun 06 j 04:40	17° $\approx$ 31'37	
minimum elong	-1767 Feb 04 j 12:55	1° $\approx$ 30'33 1°02'51	opposition	-1761 Aug 25 j 14:22	16° $\approx$ 06'17 -1°33'10	
max. Earth dist.	-1767 Feb 05 j 12:43	1° $\approx$ 32'48 30.89299 AU	min. Earth dist.	-1761 Aug 24 j 14:43	16° $\approx$ 07'56 28.86020 AU	
morning rise	-1767 Feb 20 j 07:44	2° $\approx$ 06'05		-1761 Oct 10 j 05:59	15° $\approx$	
retrograde	-1767 May 22 j 18:05	4° $\approx$ 05'01	direct	-1761 Nov 11 j 02:56	14° $\approx$ 43'07	
opposition	-1767 Aug 11 j 12:12	2° $\approx$ 39'44 -1°09'23		-1761 Dec 12 j 06:46	15° $\approx$	
min. Earth dist.	-1767 Aug 10 j 12:53	2° $\approx$ 41'21 28.89039 AU	evening set	-1760 Feb 05 j 09:59	16° $\approx$ 36'07	

Attention, astronomical year style is used: The year -1760 in astronomical counting style is the year 1761 BCE in historical counting style.

conjunction	-1760 Feb 21 j 03:42	17° $\approx$ 11'29	-1°28'45	retrograde	-1754 Jun 22 j 02:25	3° $\mathbb{H}$ 14'51	
minimum elong	-1760 Feb 21 j 03:41	17° $\approx$ 11'28	1°28'46	min. Earth dist.	-1754 Sep 09 j 03:11	1° $\mathbb{H}$ 50'57	28.82481 AU
max. Earth dist.	-1760 Feb 22 j 03:44	17° $\approx$ 13'45	30.85591 AU	opposition	-1754 Sep 10 j 02:07	1° $\mathbb{H}$ 49'21	-1°54'28
morning rise	-1760 Mar 08 j 01:23	17° $\approx$ 47'12		direct	-1754 Nov 26 j 10:28	0° $\mathbb{H}$ 25'50	
retrograde	-1760 Jun 07 j 17:34	19° $\approx$ 46'27		evening set	-1753 Feb 21 j 02:02	2° $\mathbb{H}$ 19'10	
min. Earth dist.	-1760 Aug 26 j 04:15	18° $\approx$ 22'39	28.85352 AU				
opposition	-1760 Aug 27 j 02:44	18° $\approx$ 21'04	-1°36'40	conjunction	-1753 Mar 08 j 22:40	2° $\mathbb{H}$ 54'42	-1°48'10
direct	-1760 Nov 12 j 12:48	16° $\approx$ 57'51		minimum elong	-1753 Mar 08 j 22:40	2° $\mathbb{H}$ 54'42	1°48'11
evening set	-1759 Feb 06 j 22:23	18° $\approx$ 50'53		max. Earth dist.	-1753 Mar 09 j 22:54	2° $\mathbb{H}$ 56'59	30.82315 AU
				morning rise	-1753 Mar 24 j 22:57	3° $\mathbb{H}$ 30'34	
conjunction	-1759 Feb 22 j 16:42	19° $\approx$ 26'16	-1°31'58	retrograde	-1753 Jun 24 j 15:05	5° $\mathbb{H}$ 29'44	
minimum elong	-1759 Feb 22 j 16:41	19° $\approx$ 26'16	1°31'59	opposition	-1753 Sep 12 j 13:56	4° $\mathbb{H}$ 04'15	-1°56'51
max. Earth dist.	-1759 Feb 23 j 17:29	19° $\approx$ 28'36	30.84897 AU	min. Earth dist.	-1753 Sep 11 j 16:10	4° $\mathbb{H}$ 05'47	28.82453 AU
morning rise	-1759 Mar 10 j 14:37	20° $\approx$ 02'00		direct	-1753 Nov 28 j 21:32	2° $\mathbb{H}$ 40'45	
retrograde	-1759 Jun 10 j 05:59	22° $\approx$ 01'14		evening set	-1752 Feb 23 j 14:54	4° $\mathbb{H}$ 34'09	
opposition	-1759 Aug 29 j 14:41	20° $\approx$ 35'50	-1°40'02				
min. Earth dist.	-1759 Aug 28 j 15:45	20° $\approx$ 37'26	28.84647 AU	conjunction	-1752 Mar 10 j 12:06	5° $\mathbb{H}$ 09'42	-1°50'19
direct	-1759 Nov 15 j 00:29	19° $\approx$ 12'33		minimum elong	-1752 Mar 10 j 12:05	5° $\mathbb{H}$ 09'42	1°50'19
evening set	-1758 Feb 09 j 10:56	21° $\approx$ 05'36		max. Earth dist.	-1752 Mar 11 j 12:32	5° $\mathbb{H}$ 12'00	30.82344 AU
				morning rise	-1752 Mar 26 j 12:41	5° $\mathbb{H}$ 45'35	
conjunction	-1758 Feb 25 j 05:29	21° $\approx$ 41'00	-1°35'02	retrograde	-1752 Jun 26 j 05:18	7° $\mathbb{H}$ 44'44	
minimum elong	-1758 Feb 25 j 05:29	21° $\approx$ 41'00	1°35'03	min. Earth dist.	-1752 Sep 13 j 03:10	6° $\mathbb{H}$ 20'53	28.82514 AU
max. Earth dist.	-1758 Feb 26 j 05:09	21° $\approx$ 43'14	30.84200 AU	opposition	-1752 Sep 14 j 01:35	6° $\mathbb{H}$ 19'19	-1°59'03
morning rise	-1758 Mar 13 j 03:58	22° $\approx$ 16'46		direct	-1752 Nov 30 j 09:54	4° $\mathbb{H}$ 55'48	
retrograde	-1758 Jun 12 j 19:11	24° $\approx$ 16'00		evening set	-1751 Feb 25 j 04:10	6° $\mathbb{H}$ 49'17	
min. Earth dist.	-1758 Aug 31 j 04:24	22° $\approx$ 52'06	28.83985 AU				
opposition	-1758 Sep 01 j 02:47	22° $\approx$ 50'32	-1°43'15	conjunction	-1751 Mar 13 j 01:37	7° $\mathbb{H}$ 24'52	-1°52'17
direct	-1758 Nov 17 j 10:55	21° $\approx$ 27'11		minimum elong	-1751 Mar 13 j 01:37	7° $\mathbb{H}$ 24'52	1°52'18
evening set	-1757 Feb 11 j 23:14	23° $\approx$ 20'17		max. Earth dist.	-1751 Mar 14 j 00:54	7° $\mathbb{H}$ 27'04	30.82419 AU
				morning rise	-1751 Mar 29 j 02:39	8° $\mathbb{H}$ 00'47	
conjunction	-1757 Feb 27 j 18:20	23° $\approx$ 55'42	-1°37'58	retrograde	-1751 Jun 28 j 19:20	9° $\mathbb{H}$ 59'55	
minimum elong	-1757 Feb 27 j 18:20	23° $\approx$ 55'42	1°38'00	opposition	-1751 Sep 16 j 13:15	8° $\mathbb{H}$ 34'32	-2°01'05
max. Earth dist.	-1757 Feb 28 j 19:10	23° $\approx$ 58'03	30.83563 AU	min. Earth dist.	-1751 Sep 15 j 16:15	8° $\mathbb{H}$ 36'01	28.82608 AU
morning rise	-1757 Mar 15 j 17:02	24° $\approx$ 31'29		direct	-1751 Dec 02 j 20:02	7° $\mathbb{H}$ 11'02	
retrograde	-1757 Jun 15 j 07:28	26° $\approx$ 30'42		evening set	-1750 Feb 27 j 17:24	9° $\mathbb{H}$ 04'35	
opposition	-1757 Sep 03 j 14:46	25° $\approx$ 05'12	-1°46'18				
min. Earth dist.	-1757 Sep 02 j 16:20	25° $\approx$ 06'47	28.83400 AU	conjunction	-1750 Mar 15 j 15:25	9° $\mathbb{H}$ 40'12	-1°54'06
direct	-1757 Nov 19 j 23:07	23° $\approx$ 41'48		minimum elong	-1750 Mar 15 j 15:25	9° $\mathbb{H}$ 40'12	1°54'06
evening set	-1756 Feb 14 j 11:52	25° $\approx$ 34'56		max. Earth dist.	-1750 Mar 16 j 15:05	9° $\mathbb{H}$ 42'25	30.82502 AU
				morning rise	-1750 Mar 31 j 16:38	10° $\mathbb{H}$ 16'07	
conjunction	-1756 Mar 01 j 07:17	26° $\approx$ 10'23	-1°40'45	retrograde	-1750 Jul 01 j 07:51	12° $\mathbb{H}$ 15'14	
minimum elong	-1756 Mar 01 j 07:17	26° $\approx$ 10'23	1°40'45	min. Earth dist.	-1750 Sep 18 j 03:47	10° $\mathbb{H}$ 51'23	28.82666 AU
max. Earth dist.	-1756 Mar 02 j 07:11	26° $\approx$ 12'38	30.83041 AU	opposition	-1750 Sep 19 j 00:55	10° $\mathbb{H}$ 49'53	-2°02'55
morning rise	-1756 Mar 17 j 06:30	26° $\approx$ 46'11		direct	-1750 Dec 05 j 08:05	9° $\mathbb{H}$ 26'22	
retrograde	-1756 Jun 16 j 21:50	28° $\approx$ 45'23		evening set	-1749 Mar 02 j 06:47	11° $\mathbb{H}$ 19'59	
min. Earth dist.	-1756 Sep 04 j 03:51	27° $\approx$ 21'28	28.82954 AU				
opposition	-1756 Sep 05 j 02:33	27° $\approx$ 19'52	-1°49'11	conjunction	-1749 Mar 18 j 05:03	11° $\mathbb{H}$ 55'37	-1°55'43
direct	-1756 Nov 21 j 09:28	25° $\approx$ 56'24		minimum elong	-1749 Mar 18 j 05:03	11° $\mathbb{H}$ 55'37	1°55'44
evening set	-1755 Feb 16 j 00:32	27° $\approx$ 49'36		max. Earth dist.	-1749 Mar 19 j 03:00	11° $\mathbb{H}$ 57'40	30.82526 AU
				morning rise	-1749 Apr 03 j 06:48	12° $\mathbb{H}$ 31'34	
conjunction	-1755 Mar 03 j 20:25	28° $\approx$ 25'05	-1°43'23	retrograde	-1749 Jul 03 j 20:39	14° $\mathbb{H}$ 30'38	
minimum elong	-1755 Mar 03 j 20:25	28° $\approx$ 25'05	1°43'24	opposition	-1749 Sep 21 j 12:44	13° $\mathbb{H}$ 05'18	-2°04'34
max. Earth dist.	-1755 Mar 04 j 20:59	28° $\approx$ 27'24	30.82649 AU	min. Earth dist.	-1749 Sep 20 j 16:45	13° $\mathbb{H}$ 06'43	28.82655 AU
morning rise	-1755 Mar 19 j 19:56	29° $\approx$ 00'54		direct	-1749 Dec 07 j 18:33	11° $\mathbb{H}$ 41'44	
	-1755 Apr 18 j 00:22	0° $\mathbb{H}$		evening set	-1748 Mar 03 j 20:16	13° $\mathbb{H}$ 35'25	
retrograde	-1755 Jun 19 j 10:56	1° $\mathbb{H}$ 00'05					
	-1755 Aug 23 j 06:39	30° $\mathbb{R}$		conjunction	-1748 Mar 19 j 19:08	14° $\mathbb{H}$ 11'04	-1°57'11
opposition	-1755 Sep 07 j 14:26	29° $\approx$ 34'34	-1°51'55	minimum elong	-1748 Mar 19 j 19:08	14° $\mathbb{H}$ 11'04	1°57'11
min. Earth dist.	-1755 Sep 06 j 16:18	29° $\approx$ 36'07	28.82640 AU	max. Earth dist.	-1748 Mar 20 j 17:24	14° $\mathbb{H}$ 13'09	30.82462 AU
direct	-1755 Nov 23 j 21:45	28° $\approx$ 11'05		morning rise	-1748 Apr 04 j 21:04	14° $\mathbb{H}$ 47'01	
	-1754 Feb 16 j 13:42	0° $\mathbb{H}$		retrograde	-1748 Jul 05 j 08:26	16° $\mathbb{H}$ 46'01	
evening set	-1754 Feb 18 j 13:12	0° $\mathbb{H}$ 04'20		min. Earth dist.	-1748 Sep 22 j 05:00	15° $\mathbb{H}$ 22'04	28.82543 AU
				opposition	-1748 Sep 23 j 00:17	15° $\mathbb{H}$ 20'42	-2°06'01
conjunction	-1754 Mar 06 j 09:29	0° $\mathbb{H}$ 39'50	-1°45'51	direct	-1748 Dec 09 j 06:21	13° $\mathbb{H}$ 57'04	
minimum elong	-1754 Mar 06 j 09:28	0° $\mathbb{H}$ 39'50	1°45'52	evening set	-1747 Mar 06 j 09:56	15° $\mathbb{H}$ 50'48	
max. Earth dist.	-1754 Mar 07 j 09:43	0° $\mathbb{H}$ 42'07	30.82415 AU				
morning rise	-1754 Mar 22 j 09:21	1° $\mathbb{H}$ 15'40		conjunction	-1747 Mar 22 j 09:06	16° $\mathbb{H}$ 26'27	-1°58'27

Attention, astronomical year style is used: The year -1747 in astronomical counting style is the year 1748 BCE in historical counting style.

minimum elong	-1747 Mar 22 j 09:06	16° $\mathbf{\text{H}}$ 26'27	1°58'28	opposition	-1741 Oct 09 j 07:19	1° $\mathbf{\text{V}}$ 05'44	-2°10'46
max. Earth dist.	-1747 Mar 23 j 05:32	16° $\mathbf{\text{H}}$ 28'22	30.82322 AU	min. Earth dist.	-1741 Oct 08 j 15:06	1° $\mathbf{\text{V}}$ 06'53	28.82577 AU
morning rise	-1747 Apr 07 j 11:31	17° $\mathbf{\text{H}}$ 02'25			-1741 Nov 22 j 14:10	30° $\mathbf{\text{R}}$ $\mathbf{\text{H}}$	
retrograde	-1747 Jul 07 j 22:29	19° $\mathbf{\text{H}}$ 01'20		direct	-1741 Dec 25 j 18:26	29° $\mathbf{\text{H}}$ 41'43	
opposition	-1747 Sep 25 j 11:51	17° $\mathbf{\text{H}}$ 36'00	-2°07'17		-1740 Jan 27 j 10:16	0° $\mathbf{\text{V}}$	
min. Earth dist.	-1747 Sep 24 j 16:59	17° $\mathbf{\text{H}}$ 37'20	28.82378 AU	evening set	-1740 Mar 22 j 09:11	1° $\mathbf{\text{V}}$ 35'49	
direct	-1747 Dec 11 j 17:03	16° $\mathbf{\text{H}}$ 12'17					
evening set	-1746 Mar 08 j 23:22	18° $\mathbf{\text{H}}$ 06'03		conjunction	-1740 Apr 07 j 11:13	2° $\mathbf{\text{V}}$ 11'37	-2°02'16
				minimum elong	-1740 Apr 07 j 11:13	2° $\mathbf{\text{V}}$ 11'37	2°02'15
conjunction	-1746 Mar 24 j 23:01	18° $\mathbf{\text{H}}$ 41'44	-1°59'33	max. Earth dist.	-1740 Apr 08 j 04:00	2° $\mathbf{\text{V}}$ 13'11	30.82643 AU
minimum elong	-1746 Mar 24 j 23:01	18° $\mathbf{\text{H}}$ 41'44	1°59'33	morning rise	-1740 Apr 23 j 15:50	2° $\mathbf{\text{V}}$ 47'40	
max. Earth dist.	-1746 Mar 25 j 19:35	18° $\mathbf{\text{H}}$ 43'39	30.82130 AU	retrograde	-1740 Jul 23 j 17:51	4° $\mathbf{\text{V}}$ 45'55	
morning rise	-1746 Apr 10 j 01:38	19° $\mathbf{\text{H}}$ 17'42		opposition	-1740 Oct 10 j 18:23	3° $\mathbf{\text{V}}$ 20'45	-2°10'39
retrograde	-1746 Jul 10 j 10:10	21° $\mathbf{\text{H}}$ 16'31		min. Earth dist.	-1740 Oct 10 j 03:13	3° $\mathbf{\text{V}}$ 21'49	28.83027 AU
opposition	-1746 Sep 27 j 23:20	19° $\mathbf{\text{H}}$ 51'10	-2°08'22	direct	-1740 Dec 27 j 04:33	1° $\mathbf{\text{V}}$ 56'43	
min. Earth dist.	-1746 Sep 27 j 05:35	19° $\mathbf{\text{H}}$ 52'25	28.82187 AU	evening set	-1739 Mar 24 j 23:01	3° $\mathbf{\text{V}}$ 50'55	
direct	-1746 Dec 14 j 05:42	18° $\mathbf{\text{H}}$ 27'23					
evening set	-1745 Mar 11 j 12:56	20° $\mathbf{\text{H}}$ 21'11		conjunction	-1739 Apr 10 j 01:37	4° $\mathbf{\text{V}}$ 26'45	-2°02'03
				minimum elong	-1739 Apr 10 j 01:37	4° $\mathbf{\text{V}}$ 26'45	2°02'03
conjunction	-1745 Mar 27 j 12:59	20° $\mathbf{\text{H}}$ 56'52	-2°00'28	max. Earth dist.	-1739 Apr 10 j 18:52	4° $\mathbf{\text{V}}$ 28'22	30.83127 AU
minimum elong	-1745 Mar 27 j 12:59	20° $\mathbf{\text{H}}$ 56'52	2°00'29	morning rise	-1739 Apr 26 j 06:19	5° $\mathbf{\text{V}}$ 02'49	
max. Earth dist.	-1745 Mar 28 j 08:31	20° $\mathbf{\text{H}}$ 58'42	30.81965 AU	retrograde	-1739 Jul 26 j 05:50	7° $\mathbf{\text{V}}$ 01'00	
morning rise	-1745 Apr 12 j 15:59	21° $\mathbf{\text{H}}$ 32'51		opposition	-1739 Oct 13 j 05:26	5° $\mathbf{\text{V}}$ 35'54	-2°10'19
retrograde	-1745 Jul 13 j 00:33	23° $\mathbf{\text{H}}$ 31'34		min. Earth dist.	-1739 Oct 12 j 14:57	5° $\mathbf{\text{V}}$ 36'56	28.83525 AU
opposition	-1745 Sep 30 j 10:35	22° $\mathbf{\text{H}}$ 06'12	-2°09'15	direct	-1739 Dec 29 j 15:43	4° $\mathbf{\text{V}}$ 11'53	
min. Earth dist.	-1745 Sep 29 j 16:33	22° $\mathbf{\text{H}}$ 07'28	28.82049 AU	evening set	-1738 Mar 27 j 12:57	6° $\mathbf{\text{V}}$ 06'11	
direct	-1745 Dec 16 j 18:34	20° $\mathbf{\text{H}}$ 42'19					
evening set	-1744 Mar 13 j 02:32	22° $\mathbf{\text{H}}$ 36'10		conjunction	-1738 Apr 12 j 15:46	6° $\mathbf{\text{V}}$ 42'02	-2°01'39
				minimum elong	-1738 Apr 12 j 15:46	6° $\mathbf{\text{V}}$ 42'02	2°01'39
conjunction	-1744 Mar 29 j 02:59	23° $\mathbf{\text{H}}$ 11'53	-2°01'12	max. Earth dist.	-1738 Apr 13 j 07:08	6° $\mathbf{\text{V}}$ 43'28	30.83640 AU
minimum elong	-1744 Mar 29 j 02:59	23° $\mathbf{\text{H}}$ 11'53	2°01'12	morning rise	-1738 Apr 28 j 20:53	7° $\mathbf{\text{V}}$ 18'07	
max. Earth dist.	-1744 Mar 29 j 22:11	23° $\mathbf{\text{H}}$ 13'41	30.81853 AU	retrograde	-1738 Jul 28 j 19:21	9° $\mathbf{\text{V}}$ 16'13	
morning rise	-1744 Apr 14 j 06:19	23° $\mathbf{\text{H}}$ 47'53		opposition	-1738 Oct 15 j 16:30	7° $\mathbf{\text{V}}$ 51'13	-2°09'48
retrograde	-1744 Jul 14 j 12:46	25° $\mathbf{\text{H}}$ 46'30		min. Earth dist.	-1738 Oct 15 j 02:35	7° $\mathbf{\text{V}}$ 52'12	28.84033 AU
opposition	-1744 Oct 01 j 21:56	24° $\mathbf{\text{H}}$ 21'07	-2°09'55	direct	-1737 Jan 01 j 01:50	6° $\mathbf{\text{V}}$ 27'11	
min. Earth dist.	-1744 Oct 01 j 05:21	24° $\mathbf{\text{H}}$ 22'18	28.81989 AU	evening set	-1737 Mar 30 j 03:01	8° $\mathbf{\text{V}}$ 21'34	
direct	-1744 Dec 18 j 06:06	22° $\mathbf{\text{H}}$ 57'11					
evening set	-1743 Mar 15 j 16:08	24° $\mathbf{\text{H}}$ 51'05		conjunction	-1737 Apr 15 j 06:19	8° $\mathbf{\text{V}}$ 57'26	-2°01'05
				minimum elong	-1737 Apr 15 j 06:19	8° $\mathbf{\text{V}}$ 57'26	2°01'04
conjunction	-1743 Mar 31 j 17:04	25° $\mathbf{\text{H}}$ 26'49	-2°01'45	max. Earth dist.	-1737 Apr 15 j 21:31	8° $\mathbf{\text{V}}$ 58'52	30.84117 AU
minimum elong	-1743 Mar 31 j 17:04	25° $\mathbf{\text{H}}$ 26'49	2°01'45	morning rise	-1737 May 01 j 11:33	9° $\mathbf{\text{V}}$ 33'32	
max. Earth dist.	-1743 Apr 01 j 12:04	25° $\mathbf{\text{H}}$ 28'36	30.81852 AU	retrograde	-1737 Jul 31 j 06:27	11° $\mathbf{\text{V}}$ 31'32	
morning rise	-1743 Apr 16 j 20:39	26° $\mathbf{\text{H}}$ 02'49		opposition	-1737 Oct 18 j 03:32	10° $\mathbf{\text{V}}$ 06'36	-2°09'04
retrograde	-1743 Jul 17 j 03:00	28° $\mathbf{\text{H}}$ 01'19		min. Earth dist.	-1737 Oct 17 j 15:10	10° $\mathbf{\text{V}}$ 07'29	28.84473 AU
opposition	-1743 Oct 04 j 08:58	26° $\mathbf{\text{H}}$ 35'58	-2°10'24	direct	-1736 Jan 03 j 14:09	8° $\mathbf{\text{V}}$ 42'33	
min. Earth dist.	-1743 Oct 03 j 15:50	26° $\mathbf{\text{H}}$ 37'11	28.82046 AU	evening set	-1736 Mar 31 j 17:13	10° $\mathbf{\text{V}}$ 37'00	
direct	-1743 Dec 20 j 19:09	25° $\mathbf{\text{H}}$ 11'59					
evening set	-1742 Mar 18 j 05:50	27° $\mathbf{\text{H}}$ 05'57		conjunction	-1736 Apr 16 j 20:52	11° $\mathbf{\text{V}}$ 12'54	-2°00'18
				minimum elong	-1736 Apr 16 j 20:52	11° $\mathbf{\text{V}}$ 12'54	2°00'18
conjunction	-1742 Apr 03 j 07:02	27° $\mathbf{\text{H}}$ 41'43	-2°02'06	max. Earth dist.	-1736 Apr 17 j 10:13	11° $\mathbf{\text{V}}$ 14'09	30.84523 AU
minimum elong	-1742 Apr 03 j 07:02	27° $\mathbf{\text{H}}$ 41'43	2°02'06	morning rise	-1736 May 03 j 02:28	11° $\mathbf{\text{V}}$ 49'00	
max. Earth dist.	-1742 Apr 04 j 00:58	27° $\mathbf{\text{H}}$ 43'23	30.81973 AU	retrograde	-1736 Aug 01 j 20:23	13° $\mathbf{\text{V}}$ 46'54	
morning rise	-1742 Apr 19 j 11:01	28° $\mathbf{\text{H}}$ 17'44		opposition	-1736 Oct 19 j 14:30	12° $\mathbf{\text{V}}$ 22'00	-2°08'09
	-1742 Jun 18 j 06:02	0° $\mathbf{\text{V}}$		min. Earth dist.	-1736 Oct 19 j 02:20	12° $\mathbf{\text{V}}$ 22'52	28.84824 AU
retrograde	-1742 Jul 19 j 16:39	0° $\mathbf{\text{V}}$ 16'09		direct	-1735 Jan 05 j 02:49	10° $\mathbf{\text{V}}$ 57'53	
	-1742 Aug 20 j 07:07	30° $\mathbf{\text{R}}$ $\mathbf{\text{H}}$		evening set	-1735 Apr 03 j 07:28	12° $\mathbf{\text{V}}$ 52'25	
opposition	-1742 Oct 06 j 20:14	28° $\mathbf{\text{H}}$ 50'49	-2°10'41				
min. Earth dist.	-1742 Oct 06 j 04:18	28° $\mathbf{\text{H}}$ 51'57	28.82248 AU	conjunction	-1735 Apr 19 j 11:28	13° $\mathbf{\text{V}}$ 28'20	-1°59'22
direct	-1742 Dec 23 j 05:57	27° $\mathbf{\text{H}}$ 26'49		minimum elong	-1735 Apr 19 j 11:28	13° $\mathbf{\text{V}}$ 28'20	1°59'21
evening set	-1741 Mar 20 j 19:17	29° $\mathbf{\text{H}}$ 20'50		max. Earth dist.	-1735 Apr 19 j 23:56	13° $\mathbf{\text{V}}$ 29'30	30.84820 AU
				morning rise	-1735 May 05 j 17:13	14° $\mathbf{\text{V}}$ 04'26	
conjunction	-1741 Apr 05 j 21:05	29° $\mathbf{\text{H}}$ 56'37	-2°02'17	retrograde	-1735 Aug 04 j 08:03	16° $\mathbf{\text{V}}$ 02'11	
minimum elong	-1741 Apr 05 j 21:05	29° $\mathbf{\text{H}}$ 56'37	2°02'16	opposition	-1735 Oct 22 j 01:29	14° $\mathbf{\text{V}}$ 37'20	-2°07'02
max. Earth dist.	-1741 Apr 06 j 15:27	29° $\mathbf{\text{H}}$ 58'21	30.82248 AU	min. Earth dist.	-1735 Oct 21 j 15:18	14° $\mathbf{\text{V}}$ 38'03	28.85081 AU
	-1741 Apr 07 j 09:10	0° $\mathbf{\text{V}}$		direct	-1734 Jan 07 j 14:15	13° $\mathbf{\text{V}}$ 13'08	
morning rise	-1741 Apr 22 j 01:14	0° $\mathbf{\text{V}}$ 32'39		evening set	-1734 Apr 05 j 21:33	15° $\mathbf{\text{V}}$ 07'43	
retrograde	-1741 Jul 22 j 05:00	2° $\mathbf{\text{V}}$ 30'59					

Attention, astronomical year style is used: The year -1734 in astronomical counting style is the year 1735 BCE in historical counting style.

conjunction	-1734 Apr 22 j 01:59	15° $\Upsilon$ 43'38	-1°58'14	min. Earth dist.	-1728 Nov 05 j 22:21	0° $\mathcal{B}$ 20'12	28.88039 AU
minimum elong	-1734 Apr 22 j 02:00	15° $\Upsilon$ 43'38	1°58'13		-1728 Nov 17 j 20:35	30° $\mathcal{R}\Upsilon$	
max. Earth dist.	-1734 Apr 22 j 13:31	15° $\Upsilon$ 44'43	30.85062 AU	direct	-1727 Jan 23 j 03:24	28° $\Upsilon$ 55'11	
morning rise	-1734 May 08 j 07:58	16° $\Upsilon$ 19'44			-1727 Mar 28 j 08:36	0° $\mathcal{B}$	
retrograde	-1734 Aug 06 j 22:04	18° $\Upsilon$ 17'20		evening set	-1727 Apr 21 j 23:47	0° $\mathcal{B}$ 50'02	
opposition	-1734 Oct 24 j 12:14	16° $\Upsilon$ 52'29	-2°05'44				
min. Earth dist.	-1734 Oct 24 j 01:59	16° $\Upsilon$ 53'13	28.85295 AU	conjunction	-1727 May 08 j 06:25	1° $\mathcal{B}$ 26'04	-1°45'30
direct	-1733 Jan 10 j 04:18	15° $\Upsilon$ 28'14		minimum elong	-1727 May 08 j 06:25	1° $\mathcal{B}$ 26'04	1°45'28
evening set	-1733 Apr 08 j 11:38	17° $\Upsilon$ 22'49		max. Earth dist.	-1727 May 08 j 12:02	1° $\mathcal{B}$ 26'35	30.88374 AU
				morning rise	-1727 May 24 j 13:42	2° $\mathcal{B}$ 02'10	
conjunction	-1733 Apr 24 j 16:20	17° $\Upsilon$ 58'46	-1°56'56	retrograde	-1727 Aug 22 j 10:22	3° $\mathcal{B}$ 58'38	
minimum elong	-1733 Apr 24 j 16:21	17° $\Upsilon$ 58'46	1°56'55	opposition	-1727 Nov 08 j 14:10	2° $\mathcal{B}$ 34'06	-1°51'29
max. Earth dist.	-1733 Apr 25 j 02:26	17° $\Upsilon$ 59'43	30.85270 AU	min. Earth dist.	-1727 Nov 08 j 08:36	2° $\mathcal{B}$ 34'30	28.88928 AU
morning rise	-1733 May 10 j 22:39	18° $\Upsilon$ 34'52		direct	-1726 Jan 25 j 14:50	1° $\mathcal{B}$ 09'28	
retrograde	-1733 Aug 09 j 10:50	20° $\Upsilon$ 32'18		evening set	-1726 Apr 24 j 13:53	3° $\mathcal{B}$ 04'24	
opposition	-1733 Oct 26 j 23:05	19° $\Upsilon$ 07'28	-2°04'15				
min. Earth dist.	-1733 Oct 26 j 14:33	19° $\Upsilon$ 08'04	28.85511 AU	conjunction	-1726 May 10 j 20:48	3° $\mathcal{B}$ 40'27	-1°43'00
direct	-1732 Jan 12 j 16:31	17° $\Upsilon$ 43'07		minimum elong	-1726 May 10 j 20:48	3° $\mathcal{B}$ 40'27	1°43'00
evening set	-1732 Apr 10 j 01:41	19° $\Upsilon$ 37'44		max. Earth dist.	-1726 May 11 j 01:58	3° $\mathcal{B}$ 40'56	30.89296 AU
				morning rise	-1726 May 27 j 04:06	4° $\mathcal{B}$ 16'33	
conjunction	-1732 Apr 26 j 06:54	20° $\Upsilon$ 13'42	-1°55'27	retrograde	-1726 Aug 24 j 21:13	6° $\mathcal{B}$ 12'53	
minimum elong	-1732 Apr 26 j 06:54	20° $\Upsilon$ 13'42	1°55'26	opposition	-1726 Nov 11 j 00:41	4° $\mathcal{B}$ 48'28	-1°48'44
max. Earth dist.	-1732 Apr 26 j 16:50	20° $\Upsilon$ 14'38	30.85509 AU	min. Earth dist.	-1726 Nov 10 j 21:01	4° $\mathcal{B}$ 48'44	28.89867 AU
morning rise	-1732 May 12 j 13:18	20° $\Upsilon$ 49'48		direct	-1725 Jan 28 j 01:27	3° $\mathcal{B}$ 23'50	
retrograde	-1732 Aug 10 j 22:51	22° $\Upsilon$ 47'03		evening set	-1725 Apr 27 j 03:59	5° $\mathcal{B}$ 18'51	
opposition	-1732 Oct 28 j 09:35	21° $\Upsilon$ 22'14	-2°02'35				
min. Earth dist.	-1732 Oct 28 j 01:06	21° $\Upsilon$ 22'50	28.85769 AU	conjunction	-1725 May 13 j 11:11	5° $\mathcal{B}$ 54'54	-1°40'22
direct	-1731 Jan 14 j 05:57	19° $\Upsilon$ 57'48		minimum elong	-1725 May 13 j 11:12	5° $\mathcal{B}$ 54'54	1°40'20
evening set	-1731 Apr 12 j 15:52	21° $\Upsilon$ 52'27		max. Earth dist.	-1725 May 13 j 15:15	5° $\mathcal{B}$ 55'17	30.90245 AU
				morning rise	-1725 May 29 j 18:39	6° $\mathcal{B}$ 31'01	
conjunction	-1731 Apr 28 j 21:14	22° $\Upsilon$ 28'26	-1°53'48	retrograde	-1725 Aug 27 j 10:30	8° $\mathcal{B}$ 27'13	
minimum elong	-1731 Apr 28 j 21:14	22° $\Upsilon$ 28'26	1°53'47	opposition	-1725 Nov 13 j 11:06	7° $\mathcal{B}$ 02'54	-1°45'49
max. Earth dist.	-1731 Apr 29 j 05:24	22° $\Upsilon$ 29'12	30.85814 AU	min. Earth dist.	-1725 Nov 13 j 07:32	7° $\mathcal{B}$ 03'09	28.90784 AU
morning rise	-1731 May 15 j 03:57	23° $\Upsilon$ 04'32		direct	-1724 Jan 30 j 15:12	5° $\mathcal{B}$ 38'15	
retrograde	-1731 Aug 13 j 11:44	25° $\Upsilon$ 01'36		evening set	-1724 Apr 28 j 18:21	7° $\mathcal{B}$ 33'21	
opposition	-1731 Oct 30 j 20:16	23° $\Upsilon$ 36'48	-2°00'43				
min. Earth dist.	-1731 Oct 30 j 12:49	23° $\Upsilon$ 37'20	28.86132 AU	conjunction	-1724 May 15 j 01:41	8° $\mathcal{B}$ 09'25	-1°37'34
direct	-1730 Jan 16 j 16:59	22° $\Upsilon$ 12'18		minimum elong	-1724 May 15 j 01:41	8° $\mathcal{B}$ 09'25	1°37'32
evening set	-1730 Apr 15 j 05:38	24° $\Upsilon$ 06'59		max. Earth dist.	-1724 May 15 j 04:07	8° $\mathcal{B}$ 09'38	30.91127 AU
				morning rise	-1724 May 31 j 09:13	8° $\mathcal{B}$ 45'31	
conjunction	-1730 May 01 j 11:29	24° $\Upsilon$ 42'59	-1°51'58	retrograde	-1724 Aug 28 j 22:39	10° $\mathcal{B}$ 41'34	
minimum elong	-1730 May 01 j 11:29	24° $\Upsilon$ 42'59	1°51'58	opposition	-1724 Nov 14 j 21:36	9° $\mathcal{B}$ 17'20	-1°42'45
max. Earth dist.	-1730 May 01 j 20:11	24° $\Upsilon$ 43'47	30.86238 AU	min. Earth dist.	-1724 Nov 14 j 20:00	9° $\mathcal{B}$ 17'27	28.91630 AU
morning rise	-1730 May 17 j 18:12	25° $\Upsilon$ 19'05		direct	-1723 Feb 01 j 03:05	7° $\mathcal{B}$ 52'40	
retrograde	-1730 Aug 15 j 23:10	27° $\Upsilon$ 15'59		evening set	-1723 May 01 j 08:33	9° $\mathcal{B}$ 47'50	
opposition	-1730 Nov 02 j 06:50	25° $\Upsilon$ 51'13	-1°58'41				
min. Earth dist.	-1730 Nov 01 j 23:53	25° $\Upsilon$ 51'43	28.86617 AU	conjunction	-1723 May 17 j 16:13	10° $\mathcal{B}$ 23'54	-1°34'37
direct	-1729 Jan 19 j 05:07	24° $\Upsilon$ 26'40		minimum elong	-1723 May 17 j 16:14	10° $\mathcal{B}$ 23'54	1°34'35
evening set	-1729 Apr 17 j 19:43	26° $\Upsilon$ 21'23		max. Earth dist.	-1723 May 17 j 17:59	10° $\mathcal{B}$ 24'04	30.91934 AU
				morning rise	-1723 Jun 02 j 23:43	11° $\mathcal{B}$ 00'00	
conjunction	-1729 May 04 j 01:43	26° $\Upsilon$ 57'23	-1°49'59	retrograde	-1723 Aug 31 j 11:00	12° $\mathcal{B}$ 55'54	
minimum elong	-1729 May 04 j 01:44	26° $\Upsilon$ 57'23	1°49'58	opposition	-1723 Nov 17 j 08:04	11° $\mathcal{B}$ 31'44	-1°39'32
max. Earth dist.	-1729 May 04 j 08:40	26° $\Upsilon$ 58'02	30.86808 AU	min. Earth dist.	-1723 Nov 17 j 06:49	11° $\mathcal{B}$ 31'50	28.92378 AU
morning rise	-1729 May 20 j 08:47	27° $\Upsilon$ 33'30		direct	-1722 Feb 03 j 16:36	10° $\mathcal{B}$ 07'02	
retrograde	-1729 Aug 18 j 11:12	29° $\Upsilon$ 30'14		evening set	-1722 May 03 j 22:40	12° $\mathcal{B}$ 02'14	
opposition	-1729 Nov 04 j 17:15	28° $\Upsilon$ 05'32	-1°56'27				
min. Earth dist.	-1729 Nov 04 j 10:36	28° $\Upsilon$ 06'00	28.87263 AU	conjunction	-1722 May 20 j 06:22	12° $\mathcal{B}$ 38'19	-1°31'32
direct	-1728 Jan 21 j 15:49	26° $\Upsilon$ 40'56		minimum elong	-1722 May 20 j 06:22	12° $\mathcal{B}$ 38'19	1°31'32
evening set	-1728 Apr 19 j 09:43	28° $\Upsilon$ 35'42		max. Earth dist.	-1722 May 20 j 05:59	12° $\mathcal{B}$ 38'17	30.92650 AU
				morning rise	-1722 Jun 05 j 14:02	13° $\mathcal{B}$ 14'25	
conjunction	-1728 May 05 j 16:10	29° $\Upsilon$ 11'43	-1°47'49	retrograde	-1722 Aug 09 j 10:26	15° $\mathcal{B}$	
minimum elong	-1728 May 05 j 16:11	29° $\Upsilon$ 11'43	1°47'49		-1722 Sep 02 j 24:00	15° $\mathcal{B}$ 10'08	
max. Earth dist.	-1728 May 05 j 23:20	29° $\Upsilon$ 12'23	30.87525 AU		-1722 Sep 27 j 14:04	15° $\mathcal{R}\mathcal{B}$	
morning rise	-1728 May 21 j 23:14	29° $\Upsilon$ 47'50		opposition	-1722 Nov 19 j 18:31	13° $\mathcal{B}$ 46'02	-1°36'10
	-1728 May 27 j 14:59	0° $\mathcal{B}$		min. Earth dist.	-1722 Nov 19 j 18:41	13° $\mathcal{B}$ 46'01	28.93062 AU
retrograde	-1728 Aug 19 j 21:15	1° $\mathcal{B}$ 44'26		direct	-1721 Feb 06 j 04:13	12° $\mathcal{B}$ 21'17	
opposition	-1728 Nov 06 j 03:49	0° $\mathcal{B}$ 19'48	-1°54'03	evening set	-1721 May 06 j 12:43	14° $\mathcal{B}$ 16'31	

Attention, astronomical year style is used: The year -1721 in astronomical counting style is the year 1722 BCE in historical counting style.

conjunction	-1721 May 22 j 20:47	14° <b>8</b> 52'37	-1°28'20			-1715 Jul 27 j 05:01	0° <b>II</b>
minimum elong	-1721 May 22 j 20:48	14° <b>8</b> 52'37	1°28'18	retrograde		-1715 Sep 18 j 04:19	0° <b>II</b> 45'38
max. Earth dist.	-1721 May 22 j 20:22	14° <b>8</b> 52'34	30.93311 AU			-1715 Nov 11 j 12:25	30° <b>R</b> <b>8</b>
	-1721 May 26 j 04:20	15° <b>8</b>		opposition		-1715 Dec 04 j 17:52	29° <b>8</b> 22'00 -1°09'00
morning rise	-1721 Jun 08 j 04:20	15° <b>8</b> 28'42		min. Earth dist.		-1715 Dec 04 j 23:21	29° <b>8</b> 21'37 28.98961 AU
retrograde	-1721 Sep 05 j 11:15	17° <b>8</b> 24'14		direct		-1714 Feb 21 j 14:28	27° <b>8</b> 56'59
opposition	-1721 Nov 22 j 04:45	16° <b>8</b> 00'11	-1°32'40	evening set		-1714 May 22 j 13:55	29° <b>8</b> 52'31
min. Earth dist.	-1721 Nov 22 j 05:56	16° <b>8</b> 00'06	28.93692 AU			-1714 May 26 j 00:31	0° <b>II</b>
	-1721 Dec 31 j 12:09	15° <b>R</b> <b>8</b>					
direct	-1720 Feb 08 j 17:04	14° <b>8</b> 35'23		conjunction		-1714 Jun 07 j 22:30	0° <b>II</b> 28'36 -1°02'31
	-1720 Mar 18 j 08:41	15° <b>8</b>		minimum elong		-1714 Jun 07 j 22:30	0° <b>II</b> 28'36 1°02'30
evening set	-1720 May 08 j 02:57	16° <b>8</b> 30'38		max. Earth dist.		-1714 Jun 07 j 16:16	0° <b>II</b> 28'01 30.99545 AU
				morning rise		-1714 Jun 24 j 05:34	1° <b>II</b> 04'35
conjunction	-1720 May 24 j 11:00	17° <b>8</b> 06'44	-1°24'59	retrograde		-1714 Sep 20 j 16:14	2° <b>II</b> 58'59
minimum elong	-1720 May 24 j 11:00	17° <b>8</b> 06'44	1°24'59	opposition		-1714 Dec 07 j 04:00	1° <b>II</b> 35'28 -1°04'40
max. Earth dist.	-1720 May 24 j 08:25	17° <b>8</b> 06'30	30.93949 AU	min. Earth dist.		-1714 Dec 07 j 09:38	1° <b>II</b> 35'04 29.00202 AU
morning rise	-1720 Jun 09 j 18:42	17° <b>8</b> 42'49		direct		-1713 Feb 24 j 03:27	0° <b>II</b> 10'28
retrograde	-1720 Sep 06 j 22:49	19° <b>8</b> 38'10		evening set		-1713 May 25 j 03:55	2° <b>II</b> 06'04
opposition	-1720 Nov 23 j 15:00	18° <b>8</b> 14'10	-1°29'02				
min. Earth dist.	-1720 Nov 23 j 16:44	18° <b>8</b> 14'02	28.94338 AU	conjunction		-1713 Jun 10 j 12:19	2° <b>II</b> 42'09 -0°58'25
direct	-1719 Feb 10 j 04:33	16° <b>8</b> 49'17		minimum elong		-1713 Jun 10 j 12:19	2° <b>II</b> 42'09 0°58'23
evening set	-1719 May 10 j 16:49	18° <b>8</b> 44'35		max. Earth dist.		-1713 Jun 10 j 04:13	2° <b>II</b> 41'24 31.00800 AU
				morning rise		-1713 Jun 26 j 19:19	3° <b>II</b> 18'07
conjunction	-1719 May 27 j 01:06	19° <b>8</b> 20'41	-1°21'32	retrograde		-1713 Sep 23 j 05:16	5° <b>II</b> 12'23
minimum elong	-1719 May 27 j 01:07	19° <b>8</b> 20'41	1°21'30	opposition		-1713 Dec 09 j 14:07	3° <b>II</b> 48'58 -1°00'13
max. Earth dist.	-1719 May 26 j 22:41	19° <b>8</b> 20'27	30.94608 AU	min. Earth dist.		-1713 Dec 09 j 21:05	3° <b>II</b> 48'29 29.01453 AU
morning rise	-1719 Jun 12 j 08:36	19° <b>8</b> 56'44		direct		-1712 Feb 26 j 15:26	2° <b>II</b> 23'59
retrograde	-1719 Sep 09 j 08:04	21° <b>8</b> 51'55		evening set		-1712 May 26 j 17:49	4° <b>II</b> 19'39
opposition	-1719 Nov 26 j 01:16	20° <b>8</b> 27'58	-1°25'16				
min. Earth dist.	-1719 Nov 26 j 04:18	20° <b>8</b> 27'45	28.95023 AU	conjunction		-1712 Jun 12 j 02:19	4° <b>II</b> 55'44 -0°54'13
direct	-1718 Feb 12 j 16:16	19° <b>8</b> 03'02		minimum elong		-1712 Jun 12 j 02:19	4° <b>II</b> 55'44 0°54'12
evening set	-1718 May 13 j 06:45	20° <b>8</b> 58'21		max. Earth dist.		-1712 Jun 11 j 18:09	4° <b>II</b> 54'58 31.02021 AU
				morning rise		-1712 Jun 28 j 08:57	5° <b>II</b> 31'40
conjunction	-1718 May 29 j 15:02	21° <b>8</b> 34'27	-1°17'57	retrograde		-1712 Sep 24 j 16:21	7° <b>II</b> 25'48
minimum elong	-1718 May 29 j 15:03	21° <b>8</b> 34'27	1°17'56	opposition		-1712 Dec 11 j 00:26	6° <b>II</b> 02'29 -0°55'42
max. Earth dist.	-1718 May 29 j 10:57	21° <b>8</b> 34'04	30.95351 AU	min. Earth dist.		-1712 Dec 11 j 08:30	6° <b>II</b> 01'55 29.02624 AU
morning rise	-1718 Jun 14 j 22:38	22° <b>8</b> 10'30		direct		-1711 Feb 28 j 04:59	4° <b>II</b> 37'30
retrograde	-1718 Sep 11 j 20:27	24° <b>8</b> 05'30		evening set		-1711 May 29 j 07:43	6° <b>II</b> 33'13
opposition	-1718 Nov 28 j 11:18	22° <b>8</b> 41'36	-1°21'22				
min. Earth dist.	-1718 Nov 28 j 14:08	22° <b>8</b> 41'24	28.95817 AU	conjunction		-1711 Jun 14 j 15:56	7° <b>II</b> 09'16 -0°49'57
direct	-1717 Feb 15 j 03:16	21° <b>8</b> 16'37		minimum elong		-1711 Jun 14 j 15:57	7° <b>II</b> 09'16 0°49'54
evening set	-1717 May 15 j 20:34	23° <b>8</b> 11'59		max. Earth dist.		-1711 Jun 14 j 05:31	7° <b>II</b> 08'18 31.03148 AU
				morning rise		-1711 Jun 30 j 22:30	7° <b>II</b> 45'11
conjunction	-1717 Jun 01 j 05:01	23° <b>8</b> 48'04	-1°14'15	retrograde		-1711 Sep 27 j 04:16	9° <b>II</b> 39'10
minimum elong	-1717 Jun 01 j 05:01	23° <b>8</b> 48'04	1°14'13	opposition		-1711 Dec 13 j 10:43	8° <b>II</b> 15'57 -0°51'05
max. Earth dist.	-1717 Jun 01 j 00:45	23° <b>8</b> 47'41	30.96202 AU	min. Earth dist.		-1711 Dec 13 j 19:24	8° <b>II</b> 15'20 29.03701 AU
morning rise	-1717 Jun 17 j 12:26	24° <b>8</b> 24'07		direct		-1710 Mar 02 j 16:45	6° <b>II</b> 50'56
retrograde	-1717 Sep 14 j 05:38	26° <b>8</b> 18'56		evening set		-1710 May 31 j 21:29	8° <b>II</b> 46'41
opposition	-1717 Nov 30 j 21:34	24° <b>8</b> 55'07	-1°17'22				
min. Earth dist.	-1717 Dec 01 j 01:58	24° <b>8</b> 54'48	28.96731 AU	conjunction		-1710 Jun 17 j 05:46	9° <b>II</b> 22'44 -0°45'36
direct	-1716 Feb 17 j 13:48	23° <b>8</b> 30'06		minimum elong		-1710 Jun 17 j 05:47	9° <b>II</b> 22'44 0°45'35
evening set	-1716 May 17 j 10:26	25° <b>8</b> 25'31		max. Earth dist.		-1710 Jun 16 j 19:14	9° <b>II</b> 21'45 31.04164 AU
				morning rise		-1710 Jul 03 j 11:56	9° <b>II</b> 58'37
conjunction	-1716 Jun 02 j 18:55	26° <b>8</b> 01'36	-1°10'27	retrograde		-1710 Sep 29 j 14:08	11° <b>II</b> 52'26
minimum elong	-1716 Jun 02 j 18:56	26° <b>8</b> 01'36	1°10'26	opposition		-1710 Dec 15 j 20:58	10° <b>II</b> 29'17 -0°46'25
max. Earth dist.	-1716 Jun 02 j 13:47	26° <b>8</b> 01'07	30.97196 AU	min. Earth dist.		-1710 Dec 16 j 07:20	10° <b>II</b> 28'33 29.04657 AU
morning rise	-1716 Jun 19 j 02:17	26° <b>8</b> 37'37		direct		-1709 Mar 05 j 04:55	9° <b>II</b> 04'14
retrograde	-1716 Sep 15 j 17:13	28° <b>8</b> 32'17		evening set		-1709 Jun 03 j 11:19	11° <b>II</b> 00'00
opposition	-1716 Dec 02 j 07:36	27° <b>8</b> 08'34	-1°13'14				
min. Earth dist.	-1716 Dec 02 j 11:39	27° <b>8</b> 08'16	28.97782 AU	conjunction		-1709 Jun 19 j 19:23	11° <b>II</b> 36'02 -0°41'12
direct	-1715 Feb 19 j 03:24	25° <b>8</b> 43'32		minimum elong		-1709 Jun 19 j 19:23	11° <b>II</b> 36'02 0°41'10
evening set	-1715 May 20 j 00:19	27° <b>8</b> 39'00		max. Earth dist.		-1709 Jun 19 j 06:43	11° <b>II</b> 34'51 31.05078 AU
				morning rise		-1709 Jul 06 j 01:27	12° <b>II</b> 11'53
conjunction	-1715 Jun 05 j 08:46	28° <b>8</b> 15'05	-1°06'32	retrograde		-1709 Oct 02 j 02:12	14° <b>II</b> 05'32
minimum elong	-1715 Jun 05 j 08:47	28° <b>8</b> 15'05	1°06'30	opposition		-1709 Dec 18 j 07:09	12° <b>II</b> 42'26 -0°41'40
max. Earth dist.	-1715 Jun 05 j 02:45	28° <b>8</b> 14'32	30.98314 AU	min. Earth dist.		-1709 Dec 18 j 17:36	12° <b>II</b> 41'42 29.05517 AU
morning rise	-1715 Jun 21 j 16:00	28° <b>8</b> 51'05		direct		-1708 Mar 06 j 16:42	11° <b>II</b> 17'20

Attention, astronomical year style is used: The year -1708 in astronomical counting style is the year 1709 BCE in historical counting style.

evening set	-1708 Jun 05 j 01:01	13°II13'07		behind sun end	-1702 Jul 05 j 20:42	27°II04'28	
				max. Earth dist.	-1702 Jul 04 j 21:44	27°II02'22	31.11401 AU
conjunction	-1708 Jun 21 j 08:59	13°II49'08	-0°36'44	morning rise	-1702 Jul 21 j 18:45	27°II39'36	
minimum elong	-1708 Jun 21 j 08:59	13°II49'08	0°36'43	retrograde	-1702 Oct 17 j 04:00	29°II32'20	
max. Earth dist.	-1708 Jun 20 j 19:54	13°II47'55	31.05895 AU	opposition	-1701 Jan 02 j 06:13	28°II09'40	-0°07'20
morning rise	-1708 Jul 07 j 14:37	14°II24'58		min. Earth dist.	-1701 Jan 02 j 20:59	28°II08'38	29.12009 AU
retrograde	-1708 Oct 03 j 10:40	16°II18'27		direct	-1701 Mar 23 j 05:33	26°II44'25	
opposition	-1708 Dec 19 j 17:24	14°II55'23	-0°36'53	evening set	-1701 Jun 21 j 21:58	28°II40'28	
min. Earth dist.	-1708 Dec 20 j 05:45	14°II54'31	29.06308 AU	max. Earth dist.	-1701 Jul 07 j 11:08	29°II14'44	31.12592 AU
direct	-1707 Mar 09 j 03:49	13°II30'14					
evening set	-1707 Jun 07 j 14:35	15°II26'02		conjunction	-1701 Jul 08 j 04:08	29°II16'18	-0°04'34
				minimum elong	-1701 Jul 08 j 04:07	29°II16'18	0°04'31
conjunction	-1707 Jun 23 j 22:20	16°II02'01	-0°32'14	behind sun begin	-1701 Jul 07 j 21:40	29°II15'44	
minimum elong	-1707 Jun 23 j 22:20	16°II02'01	0°32'11	behind sun end	-1701 Jul 08 j 10:34	29°II16'52	
max. Earth dist.	-1707 Jun 23 j 08:08	16°II00'42	31.06680 AU	morning rise	-1701 Jul 24 j 07:04	29°II51'54	
morning rise	-1707 Jul 10 j 03:45	16°II37'48			-1701 Jul 28 j 01:35	0°00'	
retrograde	-1707 Oct 05 j 21:13	18°II31'08		retrograde	-1701 Oct 19 j 14:08	1°00'44'32	
opposition	-1707 Dec 22 j 03:30	17°II08'07	-0°32'02	opposition	-1700 Jan 04 j 16:32	0°00'21'59	-0°02'20
min. Earth dist.	-1707 Dec 22 j 15:38	17°II07'15	29.07082 AU	min. Earth dist.	-1700 Jan 05 j 08:42	0°00'20'51	29.13197 AU
direct	-1706 Mar 11 j 16:56	15°II42'54			-1700 Jan 17 j 22:01	30°00'00'	
evening set	-1706 Jun 10 j 03:54	17°II38'42		direct	-1700 Mar 24 j 17:49	28°II56'46	
					-1700 May 28 j 03:52	0°00'	
conjunction	-1706 Jun 26 j 11:26	18°II14'40	-0°27'41	evening set	-1700 Jun 23 j 11:12	0°00'52'53	
minimum elong	-1706 Jun 26 j 11:26	18°II14'40	0°27'39	asc. node	-1700 Jun 24 j 10:57	0°00'55'02	
max. Earth dist.	-1706 Jun 25 j 20:28	18°II13'17	31.07459 AU				
morning rise	-1706 Jul 12 j 16:31	18°II50'26		conjunction	-1700 Jul 09 j 16:47	1°00'28'42	0°00'12
retrograde	-1706 Oct 08 j 07:14	20°II43'37		minimum elong	-1700 Jul 09 j 16:47	1°00'28'42	0°00'14
opposition	-1706 Dec 24 j 13:44	19°II20'38	-0°27'10	behind sun begin	-1700 Jul 09 j 10:17	1°00'28'08	
min. Earth dist.	-1706 Dec 25 j 03:17	19°II19'41	29.07888 AU	behind sun end	-1700 Jul 09 j 23:17	1°00'29'16	
direct	-1705 Mar 14 j 03:43	17°II55'22		max. Earth dist.	-1700 Jul 08 j 22:06	1°00'26'59	31.13767 AU
evening set	-1705 Jun 12 j 17:14	19°II51'12		morning rise	-1700 Jul 25 j 19:24	2°00'04'15	
max. Earth dist.	-1705 Jun 28 j 09:28	20°II25'44	31.08298 AU	retrograde	-1700 Oct 21 j 02:19	3°00'56'49	
				opposition	-1699 Jan 06 j 02:46	2°00'34'22	0°02'40
conjunction	-1705 Jun 29 j 00:36	20°II27'08	-0°23'06	min. Earth dist.	-1699 Jan 06 j 18:44	2°00'33'15	29.14344 AU
minimum elong	-1705 Jun 29 j 00:36	20°II27'08	0°23'04	direct	-1699 Mar 27 j 05:27	1°00'09'11	
morning rise	-1705 Jul 15 j 05:17	21°II02'52		evening set	-1699 Jun 26 j 00:18	3°00'05'21	
retrograde	-1705 Oct 10 j 17:50	22°II55'54		max. Earth dist.	-1699 Jul 11 j 10:42	3°00'39'24	31.14862 AU
opposition	-1705 Dec 26 j 23:45	21°II32'58	-0°22'15				
min. Earth dist.	-1705 Dec 27 j 13:13	21°II32'02	29.08757 AU	conjunction	-1699 Jul 12 j 05:35	3°00'41'08	0°04'57
direct	-1704 Mar 15 j 16:54	20°II07'41		minimum elong	-1699 Jul 12 j 05:34	3°00'41'08	0°04'59
evening set	-1704 Jun 14 j 06:38	22°II03'33		behind sun begin	-1699 Jul 11 j 23:11	3°00'40'34	
				behind sun end	-1699 Jul 12 j 11:58	3°00'41'42	
conjunction	-1704 Jun 30 j 13:35	22°II39'28	-0°18'29	morning rise	-1699 Jul 28 j 07:33	4°00'16'39	
minimum elong	-1704 Jun 30 j 13:35	22°II39'28	0°18'28	retrograde	-1699 Oct 23 j 10:38	6°00'09'08	
max. Earth dist.	-1704 Jun 29 j 21:05	22°II37'56	31.09218 AU	opposition	-1698 Jan 08 j 13:14	4°00'46'47	0°07'40
morning rise	-1704 Jul 16 j 17:56	23°II15'09		min. Earth dist.	-1698 Jan 09 j 07:00	4°00'45'32	29.15397 AU
retrograde	-1704 Oct 12 j 05:55	25°II08'04		direct	-1698 Mar 29 j 16:19	3°00'21'36	
opposition	-1704 Dec 28 j 09:59	23°II45'12	-0°17'18	evening set	-1698 Jun 28 j 13:18	5°00'17'48	
min. Earth dist.	-1704 Dec 29 j 00:06	23°II44'13	29.09743 AU				
direct	-1703 Mar 18 j 04:51	22°II19'54		conjunction	-1698 Jul 14 j 18:06	5°00'53'33	0°09'35
evening set	-1703 Jun 16 j 19:38	24°II15'50		minimum elong	-1698 Jul 14 j 18:07	5°00'53'33	0°09'37
max. Earth dist.	-1703 Jul 02 j 10:33	24°II50'15	31.10260 AU	behind sun begin	-1698 Jul 14 j 12:43	5°00'53'04	
				behind sun end	-1698 Jul 14 j 23:30	5°00'54'02	
conjunction	-1703 Jul 03 j 02:26	24°II51'43	-0°13'51	max. Earth dist.	-1698 Jul 13 j 22:05	5°00'51'42	31.15859 AU
minimum elong	-1703 Jul 03 j 02:26	24°II51'43	0°13'49	morning rise	-1698 Jul 30 j 19:42	6°00'29'02	
behind sun begin	-1703 Jul 02 j 23:08	24°II51'25		retrograde	-1698 Oct 25 j 20:49	8°00'21'25	
behind sun end	-1703 Jul 03 j 05:44	24°II52'00		opposition	-1697 Jan 10 j 23:34	6°00'59'07	0°12'38
morning rise	-1703 Jul 19 j 06:15	25°II27'22		min. Earth dist.	-1697 Jan 11 j 17:13	6°00'57'53	29.16324 AU
retrograde	-1703 Oct 14 j 16:10	27°II20'11		direct	-1697 Apr 01 j 04:50	5°00'33'56	
opposition	-1703 Dec 30 j 20:12	25°II57'25	-0°12'19	evening set	-1697 Jul 01 j 02:23	7°00'30'09	
min. Earth dist.	-1703 Dec 31 j 10:51	25°II56'23	29.10830 AU	max. Earth dist.	-1697 Jul 16 j 09:46	8°00'03'56	31.16716 AU
direct	-1702 Mar 20 j 18:14	24°II32'08					
evening set	-1702 Jun 19 j 08:52	26°II28'07		conjunction	-1697 Jul 17 j 06:45	8°00'05'52	0°14'13
				minimum elong	-1697 Jul 17 j 06:44	8°00'05'52	0°14'16
conjunction	-1702 Jul 05 j 15:10	27°II03'59	-0°09'13	behind sun begin	-1697 Jul 17 j 03:46	8°00'05'36	
minimum elong	-1702 Jul 05 j 15:11	27°II03'59	0°09'12	behind sun end	-1697 Jul 17 j 09:43	8°00'06'08	
behind sun begin	-1702 Jul 05 j 09:39	27°II03'29		morning rise	-1697 Aug 02 j 07:45	8°00'41'18	



Attention, astronomical year style is used: The year -1697 in astronomical counting style is the year 1698 BCE in historical counting style.

retrograde	-1697 Oct 28 j 06:32	10° $\overline{53}$ '36		minimum elong	-1690 Aug 01 j 18:26	23° $\overline{26}$ '33	0°45'40
opposition	-1696 Jan 13 j 09:58	9° $\overline{11}$ '21	0°17'35	max. Earth dist.	-1690 Jul 31 j 19:31	23° $\overline{24}$ '26	31.21808 AU
min. Earth dist.	-1696 Jan 14 j 05:10	9° $\overline{10}$ '01	29.17131 AU	morning rise	-1690 Aug 17 j 15:21	24° $\overline{01}$ '38	
direct	-1696 Apr 02 j 14:38	7° $\overline{46}$ '07		retrograde	-1690 Nov 12 j 05:31	25° $\overline{53}$ '22	
evening set	-1696 Jul 02 j 15:17	9° $\overline{42}$ '22		opposition	-1689 Jan 28 j 10:49	24° $\overline{31}$ '17	0°51'00
				min. Earth dist.	-1689 Jan 29 j 08:16	24° $\overline{29}$ '47	29.22347 AU
conjunction	-1696 Jul 18 j 19:14	10° $\overline{18}$ '02	0°18'50	direct	-1689 Apr 19 j 05:47	23° $\overline{05}$ '56	
minimum elong	-1696 Jul 18 j 19:14	10° $\overline{18}$ '02	0°18'51	evening set	-1689 Jul 19 j 05:50	25° $\overline{02}$ '12	
max. Earth dist.	-1696 Jul 17 j 21:58	10° $\overline{16}$ '04	31.17470 AU	max. Earth dist.	-1689 Aug 03 j 06:37	25° $\overline{35}$ '24	31.22809 AU
morning rise	-1696 Aug 03 j 19:41	10° $\overline{53}$ '26					
retrograde	-1696 Oct 29 j 16:19	12° $\overline{45}$ '38		conjunction	-1689 Aug 04 j 05:56	25° $\overline{37}$ '34	0°49'55
opposition	-1695 Jan 14 j 20:24	11° $\overline{23}$ '24	0°22'31	minimum elong	-1689 Aug 04 j 05:56	25° $\overline{37}$ '34	0°49'57
min. Earth dist.	-1695 Jan 15 j 15:40	11° $\overline{22}$ '03	29.17831 AU	morning rise	-1689 Aug 20 j 02:19	26° $\overline{12}$ '37	
direct	-1695 Apr 05 j 04:12	9° $\overline{58}$ '08		retrograde	-1689 Nov 14 j 15:32	28° $\overline{04}$ '18	
evening set	-1695 Jul 05 j 03:59	11° $\overline{54}$ '22		opposition	-1688 Jan 30 j 21:15	26° $\overline{42}$ '18	0°55'31
max. Earth dist.	-1695 Jul 20 j 08:41	12° $\overline{27}$ '54	31.18131 AU	min. Earth dist.	-1688 Jan 31 j 18:03	26° $\overline{40}$ '52	29.23361 AU
				direct	-1688 Apr 20 j 17:46	25° $\overline{17}$ '00	
conjunction	-1695 Jul 21 j 07:20	12° $\overline{30}$ '00	0°23'25	evening set	-1688 Jul 20 j 17:59	27° $\overline{13}$ '19	
minimum elong	-1695 Jul 21 j 07:20	12° $\overline{30}$ '00	0°23'27				
morning rise	-1695 Aug 06 j 07:19	13° $\overline{05}$ '21		conjunction	-1688 Aug 05 j 17:27	27° $\overline{48}$ '39	0°54'07
retrograde	-1695 Nov 01 j 03:28	14° $\overline{57}$ '27		minimum elong	-1688 Aug 05 j 17:27	27° $\overline{48}$ '39	0°54'08
opposition	-1694 Jan 17 j 06:47	13° $\overline{35}$ '13	0°27'24	max. Earth dist.	-1688 Aug 04 j 17:53	27° $\overline{46}$ '27	31.23820 AU
min. Earth dist.	-1694 Jan 18 j 02:48	13° $\overline{33}$ '49	29.18478 AU	morning rise	-1688 Aug 21 j 13:09	28° $\overline{23}$ '39	
direct	-1694 Apr 07 j 16:04	12° $\overline{09}$ '55			-1688 Oct 17 j 03:23	0° $\Omega$	
evening set	-1694 Jul 07 j 16:30	14° $\overline{06}$ '08		retrograde	-1688 Nov 16 j 01:27	0° $\Omega$ 15'20	
					-1688 Dec 16 j 12:58	30° $\overline{R}$ $\overline{28}$	
conjunction	-1694 Jul 23 j 19:31	14° $\overline{41}$ '44	0°27'58	opposition	-1687 Feb 01 j 07:59	28° $\overline{53}$ '24	0°59'58
minimum elong	-1694 Jul 23 j 19:31	14° $\overline{41}$ '44	0°27'59	min. Earth dist.	-1687 Feb 02 j 05:48	28° $\overline{51}$ '54	29.24378 AU
max. Earth dist.	-1694 Jul 22 j 21:25	14° $\overline{39}$ '41	31.18759 AU	direct	-1687 Apr 23 j 03:00	27° $\overline{28}$ '10	
morning rise	-1694 Aug 08 j 18:49	15° $\overline{17}$ '01		evening set	-1687 Jul 23 j 05:52	29° $\overline{24}$ '30	
retrograde	-1694 Nov 03 j 12:42	17° $\overline{09}$ '01		max. Earth dist.	-1687 Aug 07 j 05:25	29° $\overline{57}$ '37	31.24805 AU
opposition	-1693 Jan 19 j 17:04	15° $\overline{46}$ '47	0°32'14				
min. Earth dist.	-1693 Jan 20 j 13:44	15° $\overline{45}$ '21	29.19100 AU	conjunction	-1687 Aug 08 j 04:46	29° $\overline{59}$ '47	0°58'14
direct	-1693 Apr 10 j 05:27	14° $\overline{21}$ '26		minimum elong	-1687 Aug 08 j 04:46	29° $\overline{59}$ '47	0°58'16
evening set	-1693 Jul 10 j 05:07	16° $\overline{17}$ '40			-1687 Aug 08 j 07:05	0° $\Omega$	
max. Earth dist.	-1693 Jul 25 j 07:57	16° $\overline{51}$ '02	31.19394 AU	morning rise	-1687 Aug 23 j 23:48	0° $\Omega$ 34'45	
				retrograde	-1687 Nov 18 j 11:00	2° $\Omega$ 26'26	
conjunction	-1693 Jul 26 j 07:26	16° $\overline{53}$ '12	0°32'28	opposition	-1686 Feb 03 j 18:42	1° $\Omega$ 04'34	1°04'19
minimum elong	-1693 Jul 26 j 07:26	16° $\overline{53}$ '12	0°32'30	min. Earth dist.	-1686 Feb 04 j 16:24	1° $\Omega$ 03'04	29.25318 AU
morning rise	-1693 Aug 11 j 06:18	17° $\overline{28}$ '27			-1686 Mar 20 j 00:27	30° $\overline{R}$ $\overline{28}$	
retrograde	-1693 Nov 06 j 00:09	19° $\overline{20}$ '20		direct	-1686 Apr 25 j 15:54	29° $\overline{39}$ '22	
opposition	-1692 Jan 22 j 03:25	17° $\overline{58}$ '07	0°37'01		-1686 May 31 j 17:24	0° $\Omega$	
min. Earth dist.	-1692 Jan 22 j 23:50	17° $\overline{56}$ '42	29.19769 AU	evening set	-1686 Jul 25 j 17:58	1° $\Omega$ 35'45	
direct	-1692 Apr 11 j 17:16	16° $\overline{32}$ '44					
evening set	-1692 Jul 11 j 17:20	18° $\overline{28}$ '58		conjunction	-1686 Aug 10 j 16:08	2° $\Omega$ 10'59	1°02'16
				minimum elong	-1686 Aug 10 j 16:08	2° $\Omega$ 10'59	1°02'16
conjunction	-1692 Jul 27 j 19:14	19° $\overline{04}$ '27	0°36'55	max. Earth dist.	-1686 Aug 09 j 15:31	2° $\Omega$ 08'42	31.25690 AU
minimum elong	-1692 Jul 27 j 19:14	19° $\overline{04}$ '27	0°36'56	morning rise	-1686 Aug 26 j 10:36	2° $\Omega$ 45'54	
max. Earth dist.	-1692 Jul 26 j 20:45	19° $\overline{02}$ '22	31.20087 AU	retrograde	-1686 Nov 20 j 22:17	4° $\Omega$ 37'35	
morning rise	-1692 Aug 12 j 17:19	19° $\overline{39}$ '38		opposition	-1685 Feb 06 j 05:22	3° $\Omega$ 15'46	1°08'35
retrograde	-1692 Nov 07 j 09:46	21° $\overline{31}$ '27		min. Earth dist.	-1685 Feb 07 j 03:39	3° $\Omega$ 14'14	29.26161 AU
opposition	-1691 Jan 23 j 13:56	20° $\overline{09}$ '16	0°41'44	direct	-1685 Apr 28 j 02:33	1° $\Omega$ 50'36	
min. Earth dist.	-1691 Jan 24 j 11:10	20° $\overline{07}$ '47	29.20514 AU	evening set	-1685 Jul 28 j 05:55	3° $\Omega$ 47'01	
direct	-1691 Apr 14 j 06:37	18° $\overline{43}$ '52		max. Earth dist.	-1685 Aug 12 j 03:33	4° $\Omega$ 19'58	31.26460 AU
evening set	-1691 Jul 14 j 05:39	20° $\overline{40}$ '06					
max. Earth dist.	-1691 Jul 29 j 07:21	21° $\overline{13}$ '22	31.20893 AU	conjunction	-1685 Aug 13 j 03:35	4° $\Omega$ 22'12	1°06'12
				minimum elong	-1685 Aug 13 j 03:35	4° $\Omega$ 22'12	1°06'13
conjunction	-1691 Jul 30 j 06:50	21° $\overline{15}$ '32	0°41'19	morning rise	-1685 Aug 28 j 21:16	4° $\Omega$ 57'04	
minimum elong	-1691 Jul 30 j 06:50	21° $\overline{15}$ '32	0°41'21	retrograde	-1685 Nov 23 j 07:42	6° $\Omega$ 48'45	
morning rise	-1691 Aug 15 j 04:29	21° $\overline{50}$ '41		opposition	-1684 Feb 08 j 16:18	5° $\Omega$ 26'58	1°12'44
retrograde	-1691 Nov 09 j 21:07	23° $\overline{42}$ '26		min. Earth dist.	-1684 Feb 09 j 15:16	5° $\Omega$ 25'23	29.26863 AU
opposition	-1690 Jan 26 j 00:16	22° $\overline{20}$ '17	0°46'24	direct	-1684 Apr 29 j 15:12	4° $\Omega$ 01'50	
min. Earth dist.	-1690 Jan 26 j 20:34	22° $\overline{18}$ '52	29.21383 AU	evening set	-1684 Jul 29 j 17:51	5° $\Omega$ 58'15	
direct	-1690 Apr 16 j 18:53	20° $\overline{54}$ '54					
evening set	-1690 Jul 16 j 17:40	22° $\overline{51}$ '09		conjunction	-1684 Aug 14 j 14:40	6° $\Omega$ 33'23	1°10'03
				minimum elong	-1684 Aug 14 j 14:40	6° $\Omega$ 33'23	1°10'03
conjunction	-1690 Aug 01 j 18:26	23° $\overline{26}$ '33	0°45'39	max. Earth dist.	-1684 Aug 13 j 13:15	6° $\Omega$ 31'01	31.27098 AU

Attention, astronomical year style is used: The year -1684 in astronomical counting style is the year 1685 BCE in historical counting style.

morning rise	-1684 Aug 30 j 07:51	7°Ω08'12		opposition	-1677 Feb 23 j 20:52	20°Ω42'26	1°38'32
retrograde	-1684 Nov 24 j 19:28	8°Ω59'52		min. Earth dist.	-1677 Feb 24 j 19:17	20°Ω40'54	29.30367 AU
opposition	-1683 Feb 10 j 03:11	7°Ω38'07	1°16'47	direct	-1677 May 16 j 04:02	19°Ω17'22	
min. Earth dist.	-1683 Feb 11 j 01:52	7°Ω36'33	29.27451 AU	evening set	-1677 Aug 15 j 01:19	21°Ω13'41	
direct	-1683 May 02 j 02:55	6°Ω12'59					
evening set	-1683 Aug 01 j 05:31	8°Ω09'24		conjunction	-1677 Aug 30 j 17:37	21°Ω48'29	1°33'47
max. Earth dist.	-1683 Aug 16 j 01:17	8°Ω42'12	31.27621 AU	minimum elong	-1677 Aug 30 j 17:37	21°Ω48'29	1°33'48
				max. Earth dist.	-1677 Aug 29 j 17:10	21°Ω46'12	31.30603 AU
conjunction	-1683 Aug 17 j 01:53	8°Ω44'29	1°13'47	morning rise	-1677 Sep 15 j 06:21	22°Ω22'59	
minimum elong	-1683 Aug 17 j 01:53	8°Ω44'29	1°13'49	retrograde	-1677 Dec 10 j 15:17	24°Ω14'40	
morning rise	-1683 Sep 01 j 18:15	9°Ω19'15		opposition	-1676 Feb 26 j 08:02	22°Ω52'58	1°41'42
retrograde	-1683 Nov 27 j 05:26	11°Ω10'54		min. Earth dist.	-1676 Feb 27 j 06:15	22°Ω51'27	29.31065 AU
opposition	-1682 Feb 12 j 14:04	9°Ω49'10	1°20'43	direct	-1676 May 17 j 13:28	21°Ω27'58	
min. Earth dist.	-1682 Feb 13 j 13:50	9°Ω47'31	29.27933 AU	evening set	-1676 Aug 16 j 12:10	23°Ω24'17	
direct	-1682 May 04 j 16:31	8°Ω24'02		max. Earth dist.	-1676 Aug 31 j 04:51	23°Ω56'53	31.31307 AU
evening set	-1682 Aug 03 j 17:10	10°Ω20'26					
max. Earth dist.	-1682 Aug 18 j 11:06	10°Ω53'05	31.28067 AU	conjunction	-1676 Sep 01 j 03:57	23°Ω59'03	1°36'40
				minimum elong	-1676 Sep 01 j 03:57	23°Ω59'03	1°36'41
conjunction	-1682 Aug 19 j 12:46	10°Ω55'28	1°17'25	morning rise	-1676 Sep 16 j 15:56	24°Ω33'30	
minimum elong	-1682 Aug 19 j 12:45	10°Ω55'28	1°17'26	retrograde	-1676 Dec 12 j 00:33	26°Ω25'14	
morning rise	-1682 Sep 04 j 04:41	11°Ω30'11		opposition	-1675 Feb 27 j 19:22	25°Ω03'35	1°44'42
retrograde	-1682 Nov 29 j 16:48	13°Ω21'49		min. Earth dist.	-1675 Feb 28 j 17:47	25°Ω02'03	29.31762 AU
opposition	-1681 Feb 15 j 00:53	12°Ω00'04	1°24'33	direct	-1675 May 20 j 00:55	23°Ω38'39	
min. Earth dist.	-1681 Feb 15 j 23:48	11°Ω58'29	29.28351 AU	evening set	-1675 Aug 18 j 23:12	25°Ω34'58	
direct	-1681 May 07 j 05:29	10°Ω34'55					
evening set	-1681 Aug 06 j 04:36	12°Ω31'18		conjunction	-1675 Sep 03 j 14:11	26°Ω09'41	1°39'25
				minimum elong	-1675 Sep 03 j 14:10	26°Ω09'41	1°39'26
conjunction	-1681 Aug 21 j 23:38	13°Ω06'18	1°20'56	max. Earth dist.	-1675 Sep 02 j 14:14	26°Ω07'27	31.31987 AU
minimum elong	-1681 Aug 21 j 23:38	13°Ω06'18	1°20'58	morning rise	-1675 Sep 19 j 01:44	26°Ω44'06	
max. Earth dist.	-1681 Aug 20 j 22:34	13°Ω03'58	31.28458 AU	retrograde	-1675 Dec 14 j 12:31	28°Ω35'53	
morning rise	-1681 Sep 06 j 14:46	13°Ω40'58		opposition	-1674 Mar 02 j 06:31	27°Ω14'16	1°47'34
	-1681 Oct 18 j 22:28	15°Ω		min. Earth dist.	-1674 Mar 03 j 04:18	27°Ω12'47	29.32421 AU
retrograde	-1681 Dec 02 j 00:54	15°Ω32'34		direct	-1674 May 22 j 12:05	25°Ω49'24	
	-1680 Jan 16 j 12:33	15°RΩ		evening set	-1674 Aug 21 j 10:03	27°Ω45'43	
opposition	-1680 Feb 17 j 11:54	14°Ω10'49	1°28'14	max. Earth dist.	-1674 Sep 05 j 01:41	28°Ω18'15	31.32585 AU
min. Earth dist.	-1680 Feb 18 j 11:49	14°Ω09'10	29.28754 AU				
direct	-1680 May 08 j 17:05	12°Ω45'40		conjunction	-1674 Sep 06 j 00:34	28°Ω20'23	1°42'01
evening set	-1680 Aug 07 j 15:58	14°Ω42'01		minimum elong	-1674 Sep 06 j 00:34	28°Ω20'23	1°42'02
	-1680 Aug 15 j 20:05	15°Ω		morning rise	-1674 Sep 21 j 11:23	28°Ω54'46	
max. Earth dist.	-1680 Aug 22 j 09:15	15°Ω14'38	31.28878 AU		-1674 Oct 24 j 17:01	0°R	
				retrograde	-1674 Dec 16 j 22:57	0°R46'37	
conjunction	-1680 Aug 23 j 10:16	15°Ω16'58	1°24'20		-1673 Feb 10 j 16:17	30°RΩ	
minimum elong	-1680 Aug 23 j 10:16	15°Ω16'58	1°24'21	opposition	-1673 Mar 04 j 18:04	29°Ω25'00	1°50'16
morning rise	-1680 Sep 08 j 00:51	15°Ω51'35		min. Earth dist.	-1673 Mar 05 j 16:43	29°Ω23'28	29.32963 AU
retrograde	-1680 Dec 03 j 10:31	17°Ω43'11		direct	-1673 May 25 j 01:05	28°Ω00'12	
opposition	-1679 Feb 18 j 22:53	16°Ω21'25	1°31'48	evening set	-1673 Aug 23 j 21:01	29°Ω56'30	
min. Earth dist.	-1679 Feb 19 j 21:38	16°Ω19'51	29.29203 AU		-1673 Aug 25 j 11:28	0°R	
	-1679 Apr 25 j 20:42	15°RΩ		max. Earth dist.	-1673 Sep 07 j 11:04	0°R28'55	31.33060 AU
direct	-1679 May 11 j 05:41	14°Ω56'17					
	-1679 May 26 j 08:29	15°Ω		conjunction	-1673 Sep 08 j 10:45	0°R31'07	1°44'29
evening set	-1679 Aug 10 j 03:03	16°Ω52'37		minimum elong	-1673 Sep 08 j 10:45	0°R31'07	1°44'30
				morning rise	-1673 Sep 23 j 21:07	1°R05'27	
conjunction	-1679 Aug 25 j 20:42	17°Ω27'30	1°27'36	retrograde	-1673 Dec 19 j 10:30	2°R57'21	
minimum elong	-1679 Aug 25 j 20:42	17°Ω27'30	1°27'38	opposition	-1672 Mar 06 j 05:32	1°R35'45	1°52'49
max. Earth dist.	-1679 Aug 24 j 19:55	17°Ω25'12	31.29358 AU	min. Earth dist.	-1672 Mar 07 j 03:10	1°R34'17	29.33369 AU
morning rise	-1679 Sep 10 j 10:37	18°Ω02'05		direct	-1672 May 26 j 13:37	0°R10'59	
retrograde	-1679 Dec 05 j 20:01	19°Ω53'42		evening set	-1672 Aug 25 j 07:51	2°R07'16	
opposition	-1678 Feb 21 j 09:57	18°Ω31'57	1°35'14				
min. Earth dist.	-1678 Feb 22 j 09:05	18°Ω30'21	29.29745 AU	conjunction	-1672 Sep 09 j 21:03	2°R41'51	1°46'47
direct	-1678 May 13 j 15:16	17°Ω06'50		minimum elong	-1672 Sep 09 j 21:02	2°R41'51	1°46'48
evening set	-1678 Aug 12 j 14:10	19°Ω03'09		max. Earth dist.	-1672 Sep 08 j 21:49	2°R39'41	31.33380 AU
max. Earth dist.	-1678 Aug 27 j 07:19	19°Ω35'46	31.29944 AU	morning rise	-1672 Sep 25 j 06:44	3°R16'08	
				retrograde	-1672 Dec 20 j 19:53	5°R08'05	
conjunction	-1678 Aug 28 j 07:14	19°Ω37'59	1°30'45	opposition	-1671 Mar 08 j 17:16	3°R46'29	1°55'12
minimum elong	-1678 Aug 28 j 07:13	19°Ω37'59	1°30'46	min. Earth dist.	-1671 Mar 09 j 15:54	3°R44'56	29.33625 AU
morning rise	-1678 Sep 12 j 20:29	20°Ω12'31		direct	-1671 May 29 j 01:30	2°R21'44	
retrograde	-1678 Dec 08 j 04:31	22°Ω04'09		evening set	-1671 Aug 27 j 18:30	4°R17'58	

Attention, astronomical year style is used: The year -1671 in astronomical counting style is the year 1672 BCE in historical counting style.

max. Earth dist.	-1671 Sep 11 j 07:51	4° $\mathring{M}$ 50'20	31.33563 AU	min. Earth dist.	-1664 Mar 24 j 22:43	18° $\mathring{M}$ 57'24	29.33622 AU
				direct	-1664 Jun 13 j 10:56	17° $\mathring{M}$ 34'11	
conjunction	-1671 Sep 12 j 07:05	4° $\mathring{M}$ 52'30	1°48'56	evening set	-1664 Sep 11 j 18:16	19° $\mathring{M}$ 30'04	
minimum elong	-1671 Sep 12 j 07:05	4° $\mathring{M}$ 52'30	1°48'57	max. Earth dist.	-1664 Sep 26 j 07:20	20° $\mathring{M}$ 02'31	31.33553 AU
morning rise	-1671 Sep 27 j 16:19	5° $\mathring{M}$ 26'46					
retrograde	-1671 Dec 23 j 06:03	7° $\mathring{M}$ 18'44		conjunction	-1664 Sep 27 j 02:59	20° $\mathring{M}$ 04'21	1°59'32
opposition	-1670 Mar 11 j 04:49	5° $\mathring{M}$ 57'07	1°57'26	minimum elong	-1664 Sep 27 j 02:59	20° $\mathring{M}$ 04'21	1°59'33
min. Earth dist.	-1670 Mar 12 j 02:33	5° $\mathring{M}$ 55'38	29.33727 AU	morning rise	-1664 Oct 12 j 09:01	20° $\mathring{M}$ 38'25	
direct	-1670 May 31 j 14:57	4° $\mathring{M}$ 32'23		retrograde	-1663 Jan 07 j 05:38	22° $\mathring{M}$ 30'53	
evening set	-1670 Aug 30 j 05:10	6° $\mathring{M}$ 28'33		opposition	-1663 Mar 26 j 15:01	21° $\mathring{M}$ 09'03	2°08'09
				min. Earth dist.	-1663 Mar 27 j 08:51	21° $\mathring{M}$ 07'51	29.33777 AU
conjunction	-1670 Sep 14 j 17:09	7° $\mathring{M}$ 03'03	1°50'57	direct	-1663 Jun 15 j 22:22	19° $\mathring{M}$ 44'35	
minimum elong	-1670 Sep 14 j 17:08	7° $\mathring{M}$ 03'03	1°50'57	evening set	-1663 Sep 14 j 04:04	21° $\mathring{M}$ 40'27	
max. Earth dist.	-1670 Sep 13 j 17:46	7° $\mathring{M}$ 00'52	31.33593 AU				
morning rise	-1670 Sep 30 j 01:51	7° $\mathring{M}$ 37'17		conjunction	-1663 Sep 29 j 12:25	22° $\mathring{M}$ 14'44	2°00'23
retrograde	-1670 Dec 25 j 15:48	9° $\mathring{M}$ 29'18		minimum elong	-1663 Sep 29 j 12:25	22° $\mathring{M}$ 14'44	2°00'23
opposition	-1669 Mar 13 j 16:24	8° $\mathring{M}$ 07'37	1°59'29	max. Earth dist.	-1663 Sep 28 j 17:44	22° $\mathring{M}$ 12'58	31.33701 AU
min. Earth dist.	-1669 Mar 14 j 14:42	8° $\mathring{M}$ 06'06	29.33713 AU	morning rise	-1663 Oct 14 j 18:00	22° $\mathring{M}$ 48'46	
direct	-1669 Jun 03 j 01:38	6° $\mathring{M}$ 42'54		retrograde	-1662 Jan 09 j 15:39	24° $\mathring{M}$ 41'22	
evening set	-1669 Sep 01 j 15:39	8° $\mathring{M}$ 39'01		opposition	-1662 Mar 29 j 03:04	23° $\mathring{M}$ 19'32	2°08'57
max. Earth dist.	-1669 Sep 16 j 04:43	9° $\mathring{M}$ 11'22	31.33535 AU	min. Earth dist.	-1662 Mar 29 j 21:29	23° $\mathring{M}$ 18'17	29.33916 AU
				direct	-1662 Jun 18 j 10:02	21° $\mathring{M}$ 55'10	
conjunction	-1669 Sep 17 j 03:07	9° $\mathring{M}$ 13'28	1°52'47	evening set	-1662 Sep 16 j 14:01	23° $\mathring{M}$ 51'00	
minimum elong	-1669 Sep 17 j 03:07	9° $\mathring{M}$ 13'28	1°52'48				
morning rise	-1669 Oct 02 j 11:16	9° $\mathring{M}$ 47'40		conjunction	-1662 Oct 01 j 21:52	24° $\mathring{M}$ 25'14	2°01'03
retrograde	-1669 Dec 28 j 00:11	11° $\mathring{M}$ 39'43		minimum elong	-1662 Oct 01 j 21:52	24° $\mathring{M}$ 25'14	2°01'03
opposition	-1668 Mar 15 j 04:07	10° $\mathring{M}$ 18'00	2°01'22	max. Earth dist.	-1662 Oct 01 j 03:44	24° $\mathring{M}$ 23'32	31.33815 AU
min. Earth dist.	-1668 Mar 16 j 01:40	10° $\mathring{M}$ 16'32	29.33619 AU	morning rise	-1662 Oct 17 j 03:07	24° $\mathring{M}$ 59'16	
direct	-1668 Jun 04 j 14:44	8° $\mathring{M}$ 53'17		retrograde	-1661 Jan 12 j 02:40	26° $\mathring{M}$ 51'58	
evening set	-1668 Sep 03 j 01:56	10° $\mathring{M}$ 49'19		opposition	-1661 Mar 31 j 15:02	25° $\mathring{M}$ 30'09	2°09'35
				min. Earth dist.	-1661 Apr 01 j 08:11	25° $\mathring{M}$ 28'59	29.33982 AU
conjunction	-1668 Sep 18 j 12:43	11° $\mathring{M}$ 23'45	1°54'28	direct	-1661 Jun 20 j 23:32	24° $\mathring{M}$ 05'51	
minimum elong	-1668 Sep 18 j 12:42	11° $\mathring{M}$ 23'45	1°54'28	evening set	-1661 Sep 18 j 24:00	26° $\mathring{M}$ 01'39	
max. Earth dist.	-1668 Sep 17 j 13:56	11° $\mathring{M}$ 21'36	31.33428 AU				
morning rise	-1668 Oct 03 j 20:29	11° $\mathring{M}$ 57'54		conjunction	-1661 Oct 04 j 07:22	26° $\mathring{M}$ 35'53	2°01'33
retrograde	-1668 Dec 29 j 10:37	13° $\mathring{M}$ 50'01		minimum elong	-1661 Oct 04 j 07:22	26° $\mathring{M}$ 35'53	2°01'33
opposition	-1667 Mar 17 j 15:51	12° $\mathring{M}$ 28'14	2°03'05	max. Earth dist.	-1661 Oct 03 j 13:18	26° $\mathring{M}$ 34'11	31.33829 AU
min. Earth dist.	-1667 Mar 18 j 12:52	12° $\mathring{M}$ 26'48	29.33529 AU	morning rise	-1661 Oct 19 j 12:17	27° $\mathring{M}$ 09'54	
direct	-1667 Jun 07 j 00:30	11° $\mathring{M}$ 03'32		retrograde	-1660 Jan 14 j 13:25	29° $\mathring{M}$ 02'42	
evening set	-1667 Sep 05 j 12:03	12° $\mathring{M}$ 59'30		opposition	-1660 Apr 02 j 03:19	27° $\mathring{M}$ 40'52	2°10'01
				min. Earth dist.	-1660 Apr 02 j 20:42	27° $\mathring{M}$ 39'41	29.33951 AU
conjunction	-1667 Sep 20 j 22:27	13° $\mathring{M}$ 33'54	1°55'59	direct	-1660 Jun 22 j 10:22	26° $\mathring{M}$ 16'38	
minimum elong	-1667 Sep 20 j 22:27	13° $\mathring{M}$ 33'54	1°56'00	evening set	-1660 Sep 20 j 09:43	28° $\mathring{M}$ 12'23	
max. Earth dist.	-1667 Sep 20 j 01:23	13° $\mathring{M}$ 31'55	31.33349 AU				
morning rise	-1667 Oct 06 j 05:37	14° $\mathring{M}$ 08'01		conjunction	-1660 Oct 05 j 16:46	28° $\mathring{M}$ 46'35	2°01'52
retrograde	-1667 Dec 31 j 19:25	16° $\mathring{M}$ 00'12		minimum elong	-1660 Oct 05 j 16:46	28° $\mathring{M}$ 46'35	2°01'52
opposition	-1666 Mar 20 j 03:30	14° $\mathring{M}$ 38'23	2°04'37	max. Earth dist.	-1660 Oct 04 j 23:53	28° $\mathring{M}$ 45'00	31.33731 AU
min. Earth dist.	-1666 Mar 21 j 00:17	14° $\mathring{M}$ 36'58	29.33479 AU	morning rise	-1660 Oct 20 j 21:19	29° $\mathring{M}$ 20'35	
direct	-1666 Jun 09 j 11:53	13° $\mathring{M}$ 13'42			-1660 Nov 08 j 16:53	0° $\mathring{A}$	
evening set	-1666 Sep 07 j 22:17	15° $\mathring{M}$ 09'39		retrograde	-1659 Jan 15 j 21:56	1° $\mathring{A}$ 13'30	
max. Earth dist.	-1666 Sep 22 j 10:35	15° $\mathring{M}$ 41'59	31.33340 AU		-1659 Mar 30 j 11:45	30° $\mathring{R}$ $\mathring{M}$	
				opposition	-1659 Apr 04 j 15:36	29° $\mathring{M}$ 51'38	2°10'17
conjunction	-1666 Sep 23 j 07:59	15° $\mathring{M}$ 44'00	1°57'20	min. Earth dist.	-1659 Apr 05 j 08:12	29° $\mathring{M}$ 50'31	29.33773 AU
minimum elong	-1666 Sep 23 j 07:59	15° $\mathring{M}$ 44'00	1°57'20	direct	-1659 Jun 24 j 23:18	28° $\mathring{M}$ 27'27	
morning rise	-1666 Oct 08 j 14:52	16° $\mathring{M}$ 18'06			-1659 Sep 12 j 00:38	0° $\mathring{A}$	
retrograde	-1665 Jan 03 j 07:14	18° $\mathring{M}$ 10'21		evening set	-1659 Sep 22 j 19:39	0° $\mathring{A}$ 23'07	
opposition	-1665 Mar 22 j 15:14	16° $\mathring{M}$ 48'31	2°05'58	max. Earth dist.	-1659 Oct 07 j 08:39	0° $\mathring{A}$ 55'39	31.33482 AU
min. Earth dist.	-1665 Mar 23 j 10:37	16° $\mathring{M}$ 47'13	29.33517 AU				
direct	-1665 Jun 11 j 22:48	15° $\mathring{M}$ 23'54		conjunction	-1659 Oct 08 j 02:12	0° $\mathring{A}$ 57'18	2°02'01
evening set	-1665 Sep 10 j 08:13	17° $\mathring{M}$ 19'48		minimum elong	-1659 Oct 08 j 02:12	0° $\mathring{A}$ 57'18	2°02'01
				morning rise	-1659 Oct 23 j 06:36	1° $\mathring{A}$ 31'18	
conjunction	-1665 Sep 25 j 17:33	17° $\mathring{M}$ 54'08	1°58'31	retrograde	-1658 Jan 18 j 08:29	3° $\mathring{A}$ 24'18	
minimum elong	-1665 Sep 25 j 17:33	17° $\mathring{M}$ 54'08	1°58'32	opposition	-1658 Apr 07 j 03:44	2° $\mathring{A}$ 02'23	2°10'21
max. Earth dist.	-1665 Sep 24 j 21:53	17° $\mathring{M}$ 52'17	31.33410 AU	min. Earth dist.	-1658 Apr 07 j 19:59	2° $\mathring{A}$ 01'17	29.33458 AU
morning rise	-1665 Oct 10 j 23:50	18° $\mathring{M}$ 28'12		direct	-1658 Jun 27 j 09:19	0° $\mathring{A}$ 38'13	
retrograde	-1664 Jan 05 j 17:45	20° $\mathring{M}$ 20'34		evening set	-1658 Sep 25 j 05:21	2° $\mathring{A}$ 33'49	
opposition	-1664 Mar 24 j 03:12	18° $\mathring{M}$ 58'44	2°07'09				

Attention, astronomical year style is used: The year -1658 in astronomical counting style is the year 1659 BCE in historical counting style.

conjunction	-1658 Oct 10 j 11:43	3° <u>♁</u> 07'59	2°02'00	direct	-1651 Jul 12 j 18:45	15° <u>♁</u> 50'47	
minimum elong	-1658 Oct 10 j 11:43	3° <u>♁</u> 07'59	2°02'00	evening set	-1651 Oct 09 j 22:39	17° <u>♁</u> 45'46	
max. Earth dist.	-1658 Oct 09 j 19:37	3° <u>♁</u> 06'28	31.33092 AU				
morning rise	-1658 Oct 25 j 15:42	3° <u>♁</u> 41'58		conjunction	-1651 Oct 25 j 03:09	18° <u>♁</u> 19'50	1°57'04
retrograde	-1657 Jan 20 j 17:39	5° <u>♁</u> 35'02		minimum elong	-1651 Oct 25 j 03:10	18° <u>♁</u> 19'50	1°57'03
opposition	-1657 Apr 09 j 16:08	4° <u>♁</u> 13'04	2°10'14	max. Earth dist.	-1651 Oct 24 j 17:26	18° <u>♁</u> 18'55	31.29895 AU
min. Earth dist.	-1657 Apr 10 j 08:20	4° <u>♁</u> 11'58	29.32993 AU	morning rise	-1651 Nov 09 j 06:10	18° <u>♁</u> 53'49	
direct	-1657 Jun 29 j 21:21	2° <u>♁</u> 48'55		retrograde	-1650 Feb 04 j 20:46	20° <u>♁</u> 47'34	
evening set	-1657 Sep 27 j 15:00	4° <u>♁</u> 44'24		opposition	-1650 Apr 25 j 06:58	19° <u>♁</u> 25'09	2°04'20
				min. Earth dist.	-1650 Apr 25 j 16:25	19° <u>♁</u> 24'31	29.29894 AU
conjunction	-1657 Oct 12 j 20:51	5° <u>♁</u> 18'32	2°01'49	direct	-1650 Jul 15 j 07:22	18° <u>♁</u> 01'16	
minimum elong	-1657 Oct 12 j 20:51	5° <u>♁</u> 18'33	2°01'49	evening set	-1650 Oct 12 j 07:58	19° <u>♁</u> 56'11	
max. Earth dist.	-1657 Oct 12 j 04:24	5° <u>♁</u> 17'00	31.32582 AU				
morning rise	-1657 Oct 28 j 00:47	5° <u>♁</u> 52'32		conjunction	-1650 Oct 27 j 12:09	20° <u>♁</u> 30'16	1°55'40
retrograde	-1656 Jan 23 j 05:01	7° <u>♁</u> 45'40		minimum elong	-1650 Oct 27 j 12:09	20° <u>♁</u> 30'16	1°55'39
opposition	-1656 Apr 11 j 04:29	6° <u>♁</u> 23'36	2°09'57	max. Earth dist.	-1650 Oct 27 j 02:14	20° <u>♁</u> 29'20	31.29645 AU
min. Earth dist.	-1656 Apr 11 j 19:23	6° <u>♁</u> 22'36	29.32441 AU	morning rise	-1650 Nov 11 j 15:15	21° <u>♁</u> 04'16	
direct	-1656 Jul 01 j 08:25	4° <u>♁</u> 59'27		retrograde	-1649 Feb 07 j 08:15	22° <u>♁</u> 58'09	
evening set	-1656 Sep 29 j 00:26	6° <u>♁</u> 54'50		opposition	-1649 Apr 27 j 19:39	21° <u>♁</u> 35'44	2°02'45
				min. Earth dist.	-1649 Apr 28 j 04:14	21° <u>♁</u> 35'09	29.29635 AU
conjunction	-1656 Oct 14 j 06:07	7° <u>♁</u> 28'57	2°01'27	direct	-1649 Jul 17 j 17:27	20° <u>♁</u> 11'56	
minimum elong	-1656 Oct 14 j 06:07	7° <u>♁</u> 28'57	2°01'27	evening set	-1649 Oct 14 j 17:03	22° <u>♁</u> 06'48	
max. Earth dist.	-1656 Oct 13 j 15:17	7° <u>♁</u> 27'33	31.32000 AU				
morning rise	-1656 Oct 29 j 09:44	8° <u>♁</u> 02'55		conjunction	-1649 Oct 29 j 21:14	22° <u>♁</u> 40'53	1°54'07
retrograde	-1655 Jan 24 j 15:08	9° <u>♁</u> 56'09		minimum elong	-1649 Oct 29 j 21:14	22° <u>♁</u> 40'53	1°54'06
opposition	-1655 Apr 13 j 16:53	8° <u>♁</u> 33'59	2°09'28	max. Earth dist.	-1649 Oct 29 j 13:12	22° <u>♁</u> 40'08	31.29359 AU
min. Earth dist.	-1655 Apr 14 j 07:55	8° <u>♁</u> 32'58	29.31853 AU	morning rise	-1649 Nov 14 j 00:08	23° <u>♁</u> 14'53	
direct	-1655 Jul 03 j 19:50	7° <u>♁</u> 09'49		retrograde	-1648 Feb 09 j 18:10	25° <u>♁</u> 08'57	
evening set	-1655 Oct 01 j 09:47	9° <u>♁</u> 05'06		opposition	-1648 Apr 29 j 08:30	23° <u>♁</u> 46'30	2°01'00
				min. Earth dist.	-1648 Apr 29 j 16:46	23° <u>♁</u> 45'56	29.29306 AU
conjunction	-1655 Oct 16 j 15:06	9° <u>♁</u> 39'12	2°00'55	direct	-1648 Jul 19 j 05:14	22° <u>♁</u> 22'48	
minimum elong	-1655 Oct 16 j 15:07	9° <u>♁</u> 39'12	2°00'54	evening set	-1648 Oct 16 j 02:26	24° <u>♁</u> 17'36	
max. Earth dist.	-1655 Oct 16 j 00:36	9° <u>♁</u> 37'50	31.31427 AU				
morning rise	-1655 Oct 31 j 18:40	10° <u>♁</u> 13'10		conjunction	-1648 Oct 31 j 06:19	24° <u>♁</u> 51'41	1°52'23
retrograde	-1654 Jan 27 j 02:32	12° <u>♁</u> 06'28		minimum elong	-1648 Oct 31 j 06:19	24° <u>♁</u> 51'41	1°52'22
opposition	-1654 Apr 16 j 05:10	10° <u>♁</u> 44'12	2°08'48	max. Earth dist.	-1648 Oct 30 j 22:05	24° <u>♁</u> 50'54	31.28996 AU
min. Earth dist.	-1654 Apr 16 j 18:10	10° <u>♁</u> 43'20	29.31296 AU	morning rise	-1648 Nov 15 j 09:24	25° <u>♁</u> 25'42	
direct	-1654 Jul 06 j 07:07	9° <u>♁</u> 20'03		retrograde	-1647 Feb 11 j 06:16	27° <u>♁</u> 19'54	
evening set	-1654 Oct 03 j 19:05	11° <u>♁</u> 15'15		opposition	-1647 May 01 j 21:11	25° <u>♁</u> 57'26	1°59'04
max. Earth dist.	-1654 Oct 18 j 10:48	11° <u>♁</u> 48'05	31.30899 AU	min. Earth dist.	-1647 May 02 j 04:08	25° <u>♁</u> 56'58	29.28889 AU
				direct	-1647 Jul 21 j 15:29	24° <u>♁</u> 33'47	
conjunction	-1654 Oct 19 j 00:09	11° <u>♁</u> 49'20	2°00'12	evening set	-1647 Oct 18 j 11:38	26° <u>♁</u> 28'32	
minimum elong	-1654 Oct 19 j 00:09	11° <u>♁</u> 49'20	2°00'11				
morning rise	-1654 Nov 03 j 03:29	12° <u>♁</u> 23'18		conjunction	-1647 Nov 02 j 15:34	27° <u>♁</u> 02'38	1°50'30
retrograde	-1653 Jan 29 j 13:02	14° <u>♁</u> 16'42		minimum elong	-1647 Nov 02 j 15:35	27° <u>♁</u> 02'38	1°50'29
opposition	-1653 Apr 18 j 17:37	12° <u>♁</u> 54'22	2°07'58	max. Earth dist.	-1647 Nov 02 j 08:39	27° <u>♁</u> 01'58	31.28508 AU
min. Earth dist.	-1653 Apr 19 j 06:36	12° <u>♁</u> 53'29	29.30818 AU	morning rise	-1647 Nov 17 j 18:34	27° <u>♁</u> 36'40	
direct	-1653 Jul 08 j 19:01	11° <u>♁</u> 30'15		retrograde	-1646 Feb 13 j 17:11	29° <u>♁</u> 31'00	
evening set	-1653 Oct 06 j 04:21	13° <u>♁</u> 25'21		opposition	-1646 May 04 j 10:07	28° <u>♁</u> 08'29	1°56'58
				min. Earth dist.	-1646 May 04 j 17:23	28° <u>♁</u> 08'00	29.28328 AU
conjunction	-1653 Oct 21 j 09:11	13° <u>♁</u> 59'26	1°59'20	direct	-1646 Jul 24 j 02:12	26° <u>♁</u> 44'55	
minimum elong	-1653 Oct 21 j 09:12	13° <u>♁</u> 59'26	1°59'19	evening set	-1646 Oct 20 j 20:57	28° <u>♁</u> 39'35	
max. Earth dist.	-1653 Oct 20 j 21:08	13° <u>♁</u> 58'18	31.30483 AU				
morning rise	-1653 Nov 05 j 12:23	14° <u>♁</u> 33'23		conjunction	-1646 Nov 05 j 00:43	29° <u>♁</u> 13'40	1°48'27
retrograde	-1652 Feb 01 j 00:24	16° <u>♁</u> 26'53		minimum elong	-1646 Nov 05 j 00:43	29° <u>♁</u> 13'40	1°48'26
opposition	-1652 Apr 20 j 06:02	15° <u>♁</u> 04'31	2°06'56	max. Earth dist.	-1646 Nov 04 j 17:56	29° <u>♁</u> 13'02	31.27886 AU
min. Earth dist.	-1652 Apr 20 j 17:02	15° <u>♁</u> 03'46	29.30441 AU	morning rise	-1646 Nov 20 j 03:49	29° <u>♁</u> 47'44	
direct	-1652 Jul 10 j 08:10	13° <u>♁</u> 40'28			-1646 Nov 25 j 18:26	0° <u>♁</u>	
evening set	-1652 Oct 07 j 13:30	15° <u>♁</u> 35'30		retrograde	-1645 Feb 16 j 05:19	1° <u>♁</u> 42'11	
				opposition	-1645 May 06 j 22:56	0° <u>♁</u> 19'37	1°54'43
conjunction	-1652 Oct 22 j 18:04	16° <u>♁</u> 09'34	1°58'17	min. Earth dist.	-1645 May 07 j 04:27	0° <u>♁</u> 19'14	29.27624 AU
minimum elong	-1652 Oct 22 j 18:04	16° <u>♁</u> 09'34	1°58'16		-1645 May 19 j 04:45	30° <u>♁</u>	
max. Earth dist.	-1652 Oct 22 j 06:34	16° <u>♁</u> 08'29	31.30154 AU	direct	-1645 Jul 26 j 13:02	28° <u>♁</u> 56'04	
morning rise	-1652 Nov 06 j 21:15	16° <u>♁</u> 43'32			-1645 Sep 28 j 15:17	0° <u>♁</u>	
retrograde	-1651 Feb 02 j 11:34	18° <u>♁</u> 37'10		evening set	-1645 Oct 23 j 06:11	0° <u>♁</u> 50'39	
opposition	-1651 Apr 22 j 18:35	17° <u>♁</u> 14'45	2°05'43				
min. Earth dist.	-1651 Apr 23 j 05:15	17° <u>♁</u> 14'02	29.30154 AU	conjunction	-1645 Nov 07 j 09:56	1° <u>♁</u> 24'45	1°46'16

Attention, astronomical year style is used: The year -1645 in astronomical counting style is the year 1646 BCE in historical counting style.

minimum elong	-1645 Nov 07 j 09:56	1°M.24'45	1°46'15			-1638 Jun 15 j 07:31	15°R.M.	
max. Earth dist.	-1645 Nov 07 j 03:48	1°M.24'10	31.27119 AU	direct		-1638 Aug 10 j 23:55	14°M.13'35	
morning rise	-1645 Nov 22 j 13:07	1°M.58'50				-1638 Oct 03 j 16:31	15°M.	
retrograde	-1644 Feb 18 j 16:58	3°M.53'24		evening set		-1638 Nov 06 j 21:20	16°M.07'31	
opposition	-1644 May 08 j 11:58	2°M.30'44	1°52'17					
min. Earth dist.	-1644 May 08 j 17:49	2°M.30'21	29.26804 AU	conjunction		-1638 Nov 22 j 01:24	16°M.41'43	1°26'49
direct	-1644 Jul 28 j 01:02	1°M.07'13		minimum elong		-1638 Nov 22 j 01:24	16°M.41'43	1°26'48
evening set	-1644 Oct 24 j 15:13	3°M.01'42		max. Earth dist.		-1638 Nov 22 j 02:54	16°M.41'51	31.21757 AU
				morning rise		-1638 Dec 07 j 05:47	17°M.15'58	
conjunction	-1644 Nov 08 j 19:02	3°M.35'48	1°43'55	retrograde		-1637 Mar 05 j 22:27	19°M.11'21	
minimum elong	-1644 Nov 08 j 19:02	3°M.35'48	1°43'53	opposition		-1637 May 25 j 06:25	17°M.48'13	1°31'00
max. Earth dist.	-1644 Nov 08 j 14:06	3°M.35'20	31.26266 AU	min. Earth dist.		-1637 May 25 j 04:57	17°M.48'19	29.21534 AU
morning rise	-1644 Nov 23 j 22:19	4°M.09'53		direct		-1637 Aug 13 j 10:14	16°M.24'58	
retrograde	-1643 Feb 20 j 05:18	6°M.04'33		evening set		-1637 Nov 09 j 06:28	18°M.18'50	
opposition	-1643 May 11 j 00:47	4°M.41'48	1°49'42					
min. Earth dist.	-1643 May 11 j 04:56	4°M.41'31	29.25905 AU	conjunction		-1637 Nov 24 j 10:38	18°M.53'03	1°23'30
direct	-1643 Jul 30 j 14:20	3°M.18'17		minimum elong		-1637 Nov 24 j 10:38	18°M.53'03	1°23'28
evening set	-1643 Oct 27 j 00:22	5°M.12'40		max. Earth dist.		-1637 Nov 24 j 12:46	18°M.53'15	31.21179 AU
				morning rise		-1637 Dec 09 j 15:19	19°M.27'20	
conjunction	-1643 Nov 11 j 04:03	5°M.46'47	1°41'25	retrograde		-1636 Mar 07 j 11:09	21°M.22'52	
minimum elong	-1643 Nov 11 j 04:03	5°M.46'47	1°41'24	opposition		-1636 May 26 j 19:28	19°M.59'41	1°27'22
max. Earth dist.	-1643 Nov 10 j 23:23	5°M.46'20	31.25356 AU	min. Earth dist.		-1636 May 26 j 16:03	19°M.59'55	29.20931 AU
morning rise	-1643 Nov 26 j 07:34	6°M.20'54		direct		-1636 Aug 14 j 20:45	18°M.36'30	
retrograde	-1642 Feb 22 j 16:38	8°M.15'39		evening set		-1636 Nov 10 j 15:38	20°M.30'19	
opposition	-1642 May 13 j 13:34	6°M.52'48	1°46'58					
min. Earth dist.	-1642 May 13 j 17:27	6°M.52'32	29.25004 AU	conjunction		-1636 Nov 25 j 19:55	21°M.04'32	1°20'03
direct	-1642 Aug 02 j 01:06	5°M.29'17		minimum elong		-1636 Nov 25 j 19:55	21°M.04'32	1°20'01
evening set	-1642 Oct 29 j 09:21	7°M.23'34		max. Earth dist.		-1636 Nov 25 j 22:42	21°M.04'48	31.20542 AU
				morning rise		-1636 Dec 11 j 00:54	21°M.38'52	
conjunction	-1642 Nov 13 j 13:11	7°M.57'41	1°38'47	retrograde		-1635 Mar 09 j 23:35	23°M.34'33	
minimum elong	-1642 Nov 13 j 13:12	7°M.57'42	1°38'45	opposition		-1635 May 29 j 08:43	22°M.11'19	1°23'37
max. Earth dist.	-1642 Nov 13 j 10:30	7°M.57'26	31.24479 AU	min. Earth dist.		-1635 May 29 j 05:38	22°M.11'31	29.20253 AU
morning rise	-1642 Nov 28 j 16:42	8°M.31'50		direct		-1635 Aug 17 j 07:43	20°M.48'11	
retrograde	-1641 Feb 25 j 02:16	10°M.26'41		evening set		-1635 Nov 13 j 00:55	22°M.41'56	
opposition	-1641 May 16 j 02:30	9°M.03'45	1°44'04					
min. Earth dist.	-1641 May 16 j 04:49	9°M.03'36	29.24150 AU	conjunction		-1635 Nov 28 j 05:25	23°M.16'11	1°16'28
direct	-1641 Aug 04 j 14:29	7°M.40'16		minimum elong		-1635 Nov 28 j 05:26	23°M.16'11	1°16'27
evening set	-1641 Oct 31 j 18:21	9°M.34'27		max. Earth dist.		-1635 Nov 28 j 09:22	23°M.16'33	31.19817 AU
				morning rise		-1635 Dec 13 j 10:36	23°M.50'32	
conjunction	-1641 Nov 15 j 22:03	10°M.08'35	1°36'00	retrograde		-1634 Mar 12 j 12:29	25°M.46'21	
minimum elong	-1641 Nov 15 j 22:04	10°M.08'35	1°35'59	opposition		-1634 May 31 j 21:44	24°M.23'04	1°19'44
max. Earth dist.	-1641 Nov 15 j 19:30	10°M.08'20	31.23677 AU	min. Earth dist.		-1634 May 31 j 17:10	24°M.23'23	29.19452 AU
morning rise	-1641 Dec 01 j 01:54	10°M.42'45		direct		-1634 Aug 19 j 19:56	22°M.59'59	
retrograde	-1640 Feb 27 j 14:11	12°M.37'43		evening set		-1634 Nov 15 j 10:24	24°M.53'40	
opposition	-1640 May 17 j 15:29	11°M.14'43	1°41'01					
min. Earth dist.	-1640 May 17 j 16:31	11°M.14'38	29.23397 AU	conjunction		-1634 Nov 30 j 14:56	25°M.27'56	1°12'47
direct	-1640 Aug 06 j 01:38	9°M.51'16		minimum elong		-1634 Nov 30 j 14:56	25°M.27'56	1°12'46
evening set	-1640 Nov 02 j 03:18	11°M.45'21		max. Earth dist.		-1634 Nov 30 j 18:42	25°M.28'18	31.18953 AU
				morning rise		-1634 Dec 15 j 20:31	26°M.02'20	
conjunction	-1640 Nov 17 j 07:14	12°M.19'31	1°33'05	retrograde		-1633 Mar 15 j 01:11	27°M.58'16	
minimum elong	-1640 Nov 17 j 07:15	12°M.19'31	1°33'03	opposition		-1633 Jun 03 j 11:06	26°M.34'55	1°15'45
max. Earth dist.	-1640 Nov 17 j 06:51	12°M.19'29	31.22970 AU	min. Earth dist.		-1633 Jun 03 j 06:36	26°M.35'13	29.18521 AU
morning rise	-1640 Dec 02 j 11:08	12°M.53'42		direct		-1633 Aug 22 j 06:27	25°M.11'51	
retrograde	-1639 Mar 01 j 00:15	14°M.48'49		evening set		-1633 Nov 17 j 19:37	27°M.05'27	
opposition	-1639 May 20 j 04:21	13°M.25'45	1°37'49					
min. Earth dist.	-1639 May 20 j 04:41	13°M.25'43	29.22725 AU	conjunction		-1633 Dec 03 j 00:31	27°M.39'45	1°09'00
direct	-1639 Aug 08 j 13:39	12°M.02'22		minimum elong		-1633 Dec 03 j 00:31	27°M.39'45	1°08'59
evening set	-1639 Nov 04 j 12:23	13°M.56'22		max. Earth dist.		-1633 Dec 03 j 05:52	27°M.40'15	31.17954 AU
				morning rise		-1633 Dec 18 j 06:17	28°M.14'10	
conjunction	-1639 Nov 19 j 16:17	14°M.30'32	1°30'01			-1632 Feb 20 j 13:22	0°X	
minimum elong	-1639 Nov 19 j 16:17	14°M.30'32	1°30'00	retrograde		-1632 Mar 16 j 12:28	0°X 10'13	
max. Earth dist.	-1639 Nov 19 j 16:07	14°M.30'32	31.22348 AU			-1632 Apr 10 j 23:15	30°R.M.	
	-1639 Dec 02 j 17:06	15°M.		opposition		-1632 Jun 05 j 00:22	28°M.46'47	1°11'39
morning rise	-1639 Dec 04 j 20:33	15°M.04'46		min. Earth dist.		-1632 Jun 04 j 18:48	28°M.47'09	29.17441 AU
retrograde	-1638 Mar 03 j 11:47	17°M.00'00		direct		-1632 Aug 23 j 20:07	27°M.23'44	
opposition	-1638 May 22 j 17:16	15°M.36'54	1°34'29	evening set		-1632 Nov 19 j 05:06	29°M.17'14	
min. Earth dist.	-1638 May 22 j 15:52	15°M.37'00	29.22123 AU					

Attention, astronomical year style is used: The year -1632 in astronomical counting style is the year 1633 BCE in historical counting style.

conjunction	-1632 Dec 04 j 10:04	29° $\mathbb{M}$ 51'33	1°05'07	retrograde	-1625 Apr 02 j 00:32	15° $\mathbb{A}$ 33'55	
minimum elong	-1632 Dec 04 j 10:04	29° $\mathbb{M}$ 51'33	1°05'06	opposition	-1625 Jun 21 j 19:58	14° $\mathbb{A}$ 09'56	0°40'22
max. Earth dist.	-1632 Dec 04 j 15:00	29° $\mathbb{M}$ 52'01	31.16826 AU	min. Earth dist.	-1625 Jun 21 j 07:18	14° $\mathbb{A}$ 10'48	29.09952 AU
	-1632 Dec 08 j 03:07	0° $\mathbb{A}$		direct	-1625 Sep 09 j 01:45	12° $\mathbb{A}$ 46'59	
morning rise	-1632 Dec 19 j 16:22	0° $\mathbb{A}$ 26'01		evening set	-1625 Dec 04 j 22:35	14° $\mathbb{A}$ 40'03	
retrograde	-1631 Mar 19 j 01:34	2° $\mathbb{A}$ 22'09					
opposition	-1631 Jun 07 j 13:27	0° $\mathbb{A}$ 58'37	1°07'26	conjunction	-1625 Dec 20 j 05:21	15° $\mathbb{A}$ 14'35	0°35'35
min. Earth dist.	-1631 Jun 07 j 07:12	0° $\mathbb{A}$ 59'02	29.16267 AU	minimum elong	-1625 Dec 20 j 05:21	15° $\mathbb{A}$ 14'35	0°35'33
	-1631 Jul 17 j 13:42	30° $\mathbb{K}$ $\mathbb{M}$		max. Earth dist.	-1625 Dec 20 j 17:21	15° $\mathbb{A}$ 15'43	31.09531 AU
direct	-1631 Aug 26 j 07:37	29° $\mathbb{M}$ 35'33		morning rise	-1624 Jan 04 j 14:21	15° $\mathbb{A}$ 49'19	
	-1631 Oct 03 j 15:49	0° $\mathbb{A}$		retrograde	-1624 Apr 03 j 13:52	17° $\mathbb{A}$ 46'21	
evening set	-1631 Nov 21 j 14:22	1° $\mathbb{A}$ 28'58		opposition	-1624 Jun 23 j 09:13	16° $\mathbb{A}$ 22'19	0°35'35
				min. Earth dist.	-1624 Jun 22 j 20:29	16° $\mathbb{A}$ 23'11	29.09150 AU
conjunction	-1631 Dec 06 j 19:42	2° $\mathbb{A}$ 03'19	1°01'08	direct	-1624 Sep 10 j 11:24	14° $\mathbb{A}$ 59'25	
minimum elong	-1631 Dec 06 j 19:42	2° $\mathbb{A}$ 03'19	1°01'07	evening set	-1624 Dec 06 j 08:13	16° $\mathbb{A}$ 52'28	
max. Earth dist.	-1631 Dec 07 j 02:25	2° $\mathbb{A}$ 03'57	31.15618 AU				
morning rise	-1631 Dec 22 j 02:13	2° $\mathbb{A}$ 37'49		conjunction	-1624 Dec 21 j 15:27	17° $\mathbb{A}$ 27'01	0°31'05
retrograde	-1630 Mar 21 j 11:54	4° $\mathbb{A}$ 34'03		minimum elong	-1624 Dec 21 j 15:27	17° $\mathbb{A}$ 27'01	0°31'03
opposition	-1630 Jun 10 j 02:37	3° $\mathbb{A}$ 10'24	1°03'08	max. Earth dist.	-1624 Dec 22 j 05:13	17° $\mathbb{A}$ 28'19	31.08727 AU
min. Earth dist.	-1630 Jun 09 j 19:52	3° $\mathbb{A}$ 10'52	29.15037 AU	morning rise	-1623 Jan 06 j 00:43	18° $\mathbb{A}$ 01'48	
direct	-1630 Aug 28 j 20:13	1° $\mathbb{A}$ 47'20		retrograde	-1623 Apr 06 j 02:40	19° $\mathbb{A}$ 58'57	
evening set	-1630 Nov 23 j 23:38	3° $\mathbb{A}$ 40'39		opposition	-1623 Jun 25 j 22:09	18° $\mathbb{A}$ 34'54	0°30'45
				min. Earth dist.	-1623 Jun 25 j 08:23	18° $\mathbb{A}$ 35'50	29.08326 AU
conjunction	-1630 Dec 09 j 05:04	4° $\mathbb{A}$ 15'01	0°57'04	direct	-1623 Sep 13 j 00:32	17° $\mathbb{A}$ 12'03	
minimum elong	-1630 Dec 09 j 05:04	4° $\mathbb{A}$ 15'01	0°57'02	evening set	-1623 Dec 08 j 18:07	19° $\mathbb{A}$ 05'04	
max. Earth dist.	-1630 Dec 09 j 12:03	4° $\mathbb{A}$ 15'41	31.14405 AU				
morning rise	-1630 Dec 24 j 12:03	4° $\mathbb{A}$ 49'34		conjunction	-1623 Dec 24 j 01:29	19° $\mathbb{A}$ 39'39	0°26'33
retrograde	-1629 Mar 23 j 23:36	6° $\mathbb{A}$ 45'54		minimum elong	-1623 Dec 24 j 01:30	19° $\mathbb{A}$ 39'39	0°26'31
opposition	-1629 Jun 12 j 15:44	5° $\mathbb{A}$ 22'10	0°58'45	max. Earth dist.	-1623 Dec 24 j 14:48	19° $\mathbb{A}$ 40'55	31.07886 AU
min. Earth dist.	-1629 Jun 12 j 07:18	5° $\mathbb{A}$ 22'44	29.13846 AU	morning rise	-1622 Jan 08 j 11:20	20° $\mathbb{A}$ 14'29	
direct	-1629 Aug 31 j 07:12	3° $\mathbb{A}$ 59'05		retrograde	-1622 Apr 08 j 17:35	22° $\mathbb{A}$ 11'46	
evening set	-1629 Nov 26 j 08:57	5° $\mathbb{A}$ 52'19		opposition	-1622 Jun 28 j 11:22	20° $\mathbb{A}$ 47'40	0°25'52
				min. Earth dist.	-1622 Jun 27 j 21:03	20° $\mathbb{A}$ 48'38	29.07456 AU
conjunction	-1629 Dec 11 j 14:41	6° $\mathbb{A}$ 26'43	0°52'55	direct	-1622 Sep 15 j 11:53	19° $\mathbb{A}$ 24'50	
minimum elong	-1629 Dec 11 j 14:41	6° $\mathbb{A}$ 26'43	0°52'54	evening set	-1622 Dec 11 j 03:53	21° $\mathbb{A}$ 17'50	
max. Earth dist.	-1629 Dec 11 j 23:15	6° $\mathbb{A}$ 27'32	31.13241 AU				
morning rise	-1629 Dec 26 j 21:57	7° $\mathbb{A}$ 01'18		conjunction	-1622 Dec 26 j 11:42	21° $\mathbb{A}$ 52'27	0°21'57
retrograde	-1628 Mar 25 j 10:16	8° $\mathbb{A}$ 57'46		minimum elong	-1622 Dec 26 j 11:42	21° $\mathbb{A}$ 52'27	0°21'56
opposition	-1628 Jun 14 j 04:52	7° $\mathbb{A}$ 33'56	0°54'16	max. Earth dist.	-1622 Dec 27 j 02:33	21° $\mathbb{A}$ 53'51	31.06962 AU
min. Earth dist.	-1628 Jun 13 j 20:14	7° $\mathbb{A}$ 34'31	29.12730 AU	morning rise	-1621 Jan 10 j 21:48	22° $\mathbb{A}$ 27'19	
direct	-1628 Sep 01 j 17:45	6° $\mathbb{A}$ 10'52		retrograde	-1621 Apr 11 j 04:45	24° $\mathbb{A}$ 24'44	
evening set	-1628 Nov 27 j 18:14	8° $\mathbb{A}$ 04'02		min. Earth dist.	-1621 Jun 30 j 10:07	23° $\mathbb{A}$ 01'33	29.06477 AU
				opposition	-1621 Jul 01 j 00:38	23° $\mathbb{A}$ 00'34	0°20'56
conjunction	-1628 Dec 13 j 00:15	8° $\mathbb{A}$ 38'28	0°48'42	direct	-1621 Sep 18 j 00:08	21° $\mathbb{A}$ 37'46	
minimum elong	-1628 Dec 13 j 00:15	8° $\mathbb{A}$ 38'28	0°48'40	evening set	-1621 Dec 13 j 13:58	23° $\mathbb{A}$ 30'42	
max. Earth dist.	-1628 Dec 13 j 09:43	8° $\mathbb{A}$ 39'22	31.12187 AU				
morning rise	-1628 Dec 28 j 07:56	9° $\mathbb{A}$ 13'05		conjunction	-1621 Dec 28 j 22:02	24° $\mathbb{A}$ 05'21	0°17'21
retrograde	-1627 Mar 27 j 22:53	11° $\mathbb{A}$ 09'40		minimum elong	-1621 Dec 28 j 22:02	24° $\mathbb{A}$ 05'21	0°17'19
opposition	-1627 Jun 16 j 17:50	9° $\mathbb{A}$ 45'47	0°49'43	max. Earth dist.	-1621 Dec 29 j 12:38	24° $\mathbb{A}$ 06'43	31.05937 AU
min. Earth dist.	-1627 Jun 16 j 07:02	9° $\mathbb{A}$ 46'31	29.11718 AU	morning rise	-1620 Jan 13 j 08:42	24° $\mathbb{A}$ 40'15	
direct	-1627 Sep 04 j 04:21	8° $\mathbb{A}$ 22'44		retrograde	-1620 Apr 12 j 17:44	26° $\mathbb{A}$ 37'46	
evening set	-1627 Nov 30 j 03:40	10° $\mathbb{A}$ 15'52		opposition	-1620 Jul 02 j 13:45	25° $\mathbb{A}$ 13'32	0°15'59
				min. Earth dist.	-1620 Jul 01 j 22:12	25° $\mathbb{A}$ 14'35	29.05395 AU
conjunction	-1627 Dec 15 j 09:53	10° $\mathbb{A}$ 50'20	0°44'23	direct	-1620 Sep 19 j 11:55	23° $\mathbb{A}$ 50'42	
minimum elong	-1627 Dec 15 j 09:53	10° $\mathbb{A}$ 50'20	0°44'22	evening set	-1620 Dec 15 j 00:00	25° $\mathbb{A}$ 43'35	
max. Earth dist.	-1627 Dec 15 j 20:06	10° $\mathbb{A}$ 51'18	31.11218 AU				
morning rise	-1627 Dec 30 j 18:00	11° $\mathbb{A}$ 24'59		conjunction	-1620 Dec 30 j 08:29	26° $\mathbb{A}$ 18'16	0°12'42
retrograde	-1626 Mar 30 j 11:13	13° $\mathbb{A}$ 21'43		minimum elong	-1620 Dec 30 j 08:29	26° $\mathbb{A}$ 18'16	0°12'41
opposition	-1626 Jun 19 j 06:54	11° $\mathbb{A}$ 57'46	0°45'04	behind sun begin	-1620 Dec 30 j 04:20	26° $\mathbb{A}$ 17'54	
min. Earth dist.	-1626 Jun 18 j 20:07	11° $\mathbb{A}$ 58'30	29.10798 AU	behind sun end	-1620 Dec 30 j 12:37	26° $\mathbb{A}$ 18'39	
direct	-1626 Sep 06 j 14:40	10° $\mathbb{A}$ 34'47		max. Earth dist.	-1620 Dec 30 j 23:57	26° $\mathbb{A}$ 19'44	31.04792 AU
evening set	-1626 Dec 02 j 13:03	12° $\mathbb{A}$ 27'52		morning rise	-1619 Jan 14 j 19:33	26° $\mathbb{A}$ 53'13	
				retrograde	-1619 Apr 15 j 05:18	28° $\mathbb{A}$ 50'48	
conjunction	-1626 Dec 17 j 19:40	13° $\mathbb{A}$ 02'21	0°40'01	min. Earth dist.	-1619 Jul 04 j 11:49	27° $\mathbb{A}$ 27'30	29.04201 AU
minimum elong	-1626 Dec 17 j 19:40	13° $\mathbb{A}$ 02'21	0°39'59	opposition	-1619 Jul 05 j 02:57	27° $\mathbb{A}$ 26'28	0°11'00
max. Earth dist.	-1626 Dec 18 j 07:32	13° $\mathbb{A}$ 03'29	31.10350 AU	direct	-1619 Sep 21 j 23:38	26° $\mathbb{A}$ 03'37	
morning rise	-1625 Jan 02 j 04:05	13° $\mathbb{A}$ 37'03		evening set	-1619 Dec 17 j 10:01	27° $\mathbb{A}$ 56'25	

Attention, astronomical year style is used: The year -1618 in astronomical counting style is the year 1619 BCE in historical counting style.

conjunction	-1618 Jan 01 j 18:51	28° $\text{R}$ 31'08	0°08'04	behind sun end	-1613 Jan 13 j 01:25	9° $\text{S}$ 35'01	
minimum elong	-1618 Jan 01 j 18:51	28° $\text{R}$ 31'08	0°08'02	max. Earth dist.	-1613 Jan 13 j 18:58	9° $\text{S}$ 36'41	30.98249 AU
behind sun begin	-1618 Jan 01 j 13:07	28° $\text{R}$ 30'37		morning rise	-1613 Jan 28 j 13:17	10° $\text{S}$ 10'00	
behind sun end	-1618 Jan 02 j 00:36	28° $\text{R}$ 31'39		retrograde	-1613 Apr 29 j 10:41	12° $\text{S}$ 08'07	
max. Earth dist.	-1618 Jan 02 j 10:49	28° $\text{R}$ 32'38	31.03573 AU	opposition	-1613 Jul 19 j 08:29	10° $\text{S}$ 43'18	-0°18'58
morning rise	-1618 Jan 17 j 06:21	29° $\text{R}$ 06'07		min. Earth dist.	-1613 Jul 18 j 12:13	10° $\text{S}$ 44'41	28.97899 AU
	-1618 Feb 12 j 10:26	0° $\text{S}$		direct	-1613 Oct 05 j 17:39	9° $\text{S}$ 20'20	
retrograde	-1618 Apr 17 j 17:37	1° $\text{S}$ 03'47		evening set	-1613 Dec 30 j 23:18	11° $\text{S}$ 12'58	
	-1618 Jun 24 j 22:06	30° $\text{R}$ $\text{R}$					
opposition	-1618 Jul 07 j 15:54	29° $\text{R}$ 39'20	0°06'01	conjunction	-1612 Jan 15 j 10:20	11° $\text{S}$ 47'51	-0°20'02
min. Earth dist.	-1618 Jul 06 j 23:07	29° $\text{R}$ 40'29	29.02958 AU	minimum elong	-1612 Jan 15 j 10:20	11° $\text{S}$ 47'51	0°20'03
direct	-1618 Sep 24 j 11:18	28° $\text{R}$ 16'26		max. Earth dist.	-1612 Jan 16 j 07:34	11° $\text{S}$ 49'52	30.97518 AU
	-1618 Dec 15 j 15:47	0° $\text{S}$		morning rise	-1612 Jan 31 j 00:31	12° $\text{S}$ 23'03	
evening set	-1618 Dec 19 j 20:09	0° $\text{S}$ 09'11		retrograde	-1612 Apr 30 j 22:43	14° $\text{S}$ 21'16	
				opposition	-1612 Jul 20 j 21:14	12° $\text{S}$ 56'27	-0°23'55
conjunction	-1617 Jan 04 j 05:15	0° $\text{S}$ 43'55	0°03'24	min. Earth dist.	-1612 Jul 20 j 00:41	12° $\text{S}$ 57'51	28.97208 AU
minimum elong	-1617 Jan 04 j 05:14	0° $\text{S}$ 43'55	0°03'22	direct	-1612 Oct 07 j 05:16	11° $\text{S}$ 33'31	
behind sun begin	-1617 Jan 03 j 22:51	0° $\text{S}$ 43'20		evening set	-1611 Jan 01 j 09:57	13° $\text{S}$ 26'10	
behind sun end	-1617 Jan 04 j 11:37	0° $\text{S}$ 44'30					
max. Earth dist.	-1617 Jan 04 j 21:36	0° $\text{S}$ 45'27	31.02326 AU	conjunction	-1611 Jan 16 j 21:18	14° $\text{S}$ 01'05	-0°24'39
morning rise	-1617 Jan 19 j 17:16	1° $\text{S}$ 18'56		minimum elong	-1611 Jan 16 j 21:18	14° $\text{S}$ 01'05	0°24'41
retrograde	-1617 Apr 20 j 05:01	3° $\text{S}$ 16'41		max. Earth dist.	-1611 Jan 17 j 18:27	14° $\text{S}$ 03'05	30.96864 AU
opposition	-1617 Jul 10 j 05:01	1° $\text{S}$ 52'07	0°01'01	morning rise	-1611 Feb 01 j 12:02	14° $\text{S}$ 36'19	
min. Earth dist.	-1617 Jul 09 j 12:32	1° $\text{S}$ 53'15	29.01739 AU	retrograde	-1611 May 03 j 13:20	16° $\text{S}$ 34'40	
desc. node	-1617 Sep 22 j 18:19	0° $\text{S}$ 29'28		opposition	-1611 Jul 23 j 10:02	15° $\text{S}$ 09'50	-0°28'51
direct	-1617 Sep 26 j 21:39	0° $\text{S}$ 29'11		min. Earth dist.	-1611 Jul 22 j 12:29	15° $\text{S}$ 11'19	28.96574 AU
evening set	-1617 Dec 22 j 06:08	2° $\text{S}$ 21'52		direct	-1611 Oct 09 j 16:47	13° $\text{S}$ 46'56	
				evening set	-1610 Jan 03 j 20:39	15° $\text{S}$ 39'37	
conjunction	-1616 Jan 06 j 15:43	2° $\text{S}$ 56'37	-0°01'24				
minimum elong	-1616 Jan 06 j 15:43	2° $\text{S}$ 56'37	0°01'26	conjunction	-1610 Jan 19 j 08:21	16° $\text{S}$ 14'34	-0°29'14
behind sun begin	-1616 Jan 06 j 09:18	2° $\text{S}$ 56'02		minimum elong	-1610 Jan 19 j 08:21	16° $\text{S}$ 14'34	0°29'16
behind sun end	-1616 Jan 06 j 22:09	2° $\text{S}$ 57'12		max. Earth dist.	-1610 Jan 20 j 06:23	16° $\text{S}$ 16'39	30.96218 AU
max. Earth dist.	-1616 Jan 07 j 09:39	2° $\text{S}$ 58'19	31.01142 AU	morning rise	-1610 Feb 03 j 23:28	16° $\text{S}$ 49'51	
morning rise	-1616 Jan 22 j 04:05	3° $\text{S}$ 31'40		retrograde	-1610 May 06 j 02:11	18° $\text{S}$ 48'19	
retrograde	-1616 Apr 21 j 17:24	5° $\text{S}$ 29'29		opposition	-1610 Jul 25 j 22:57	17° $\text{S}$ 23'28	-0°33'44
opposition	-1616 Jul 11 j 17:54	4° $\text{S}$ 04'50	-0°03'59	min. Earth dist.	-1610 Jul 25 j 01:56	17° $\text{S}$ 24'55	28.95925 AU
min. Earth dist.	-1616 Jul 10 j 23:40	4° $\text{S}$ 06'05	29.00595 AU	direct	-1610 Oct 12 j 04:10	16° $\text{S}$ 00'37	
direct	-1616 Sep 28 j 08:52	2° $\text{S}$ 41'52		evening set	-1609 Jan 06 j 07:35	17° $\text{S}$ 53'19	
evening set	-1616 Dec 23 j 16:27	4° $\text{S}$ 34'31					
				conjunction	-1609 Jan 21 j 19:42	18° $\text{S}$ 28'18	-0°33'47
conjunction	-1615 Jan 08 j 02:15	5° $\text{S}$ 09'18	-0°06'05	minimum elong	-1609 Jan 21 j 19:42	18° $\text{S}$ 28'18	0°33'49
minimum elong	-1615 Jan 08 j 02:14	5° $\text{S}$ 09'18	0°06'07	max. Earth dist.	-1609 Jan 22 j 18:00	18° $\text{S}$ 30'25	30.95555 AU
behind sun begin	-1615 Jan 07 j 20:07	5° $\text{S}$ 08'45		morning rise	-1609 Feb 06 j 11:14	19° $\text{S}$ 03'37	
behind sun end	-1615 Jan 08 j 08:21	5° $\text{S}$ 09'51		retrograde	-1609 May 08 j 15:39	21° $\text{S}$ 02'12	
max. Earth dist.	-1615 Jan 08 j 20:06	5° $\text{S}$ 10'59	31.00048 AU	opposition	-1609 Jul 28 j 11:46	19° $\text{S}$ 37'21	-0°38'34
morning rise	-1615 Jan 23 j 15:12	5° $\text{S}$ 44'23		min. Earth dist.	-1609 Jul 27 j 13:34	19° $\text{S}$ 38'53	28.95230 AU
retrograde	-1615 Apr 24 j 06:44	7° $\text{S}$ 42'17		direct	-1609 Oct 14 j 15:41	18° $\text{S}$ 14'31	
opposition	-1615 Jul 14 j 06:43	6° $\text{S}$ 17'34	-0°08'59	evening set	-1608 Jan 08 j 18:43	20° $\text{S}$ 07'14	
min. Earth dist.	-1615 Jul 13 j 12:28	6° $\text{S}$ 18'49	28.99573 AU				
direct	-1615 Sep 30 j 18:31	4° $\text{S}$ 54'34		conjunction	-1608 Jan 24 j 07:09	20° $\text{S}$ 42'15	-0°38'17
evening set	-1615 Dec 26 j 02:38	6° $\text{S}$ 47'12		minimum elong	-1608 Jan 24 j 07:08	20° $\text{S}$ 42'15	0°38'19
				max. Earth dist.	-1608 Jan 25 j 05:12	20° $\text{S}$ 44'20	30.94804 AU
conjunction	-1614 Jan 10 j 12:56	7° $\text{S}$ 22'01	-0°10'45	morning rise	-1608 Feb 08 j 23:13	21° $\text{S}$ 17'37	
minimum elong	-1614 Jan 10 j 12:56	7° $\text{S}$ 22'01	0°10'46	retrograde	-1608 May 10 j 03:37	23° $\text{S}$ 16'17	
behind sun begin	-1614 Jan 10 j 07:59	7° $\text{S}$ 21'34		min. Earth dist.	-1608 Jul 29 j 03:29	21° $\text{S}$ 52'52	28.94434 AU
behind sun end	-1614 Jan 10 j 17:54	7° $\text{S}$ 22'28		opposition	-1608 Jul 30 j 00:46	21° $\text{S}$ 51'24	-0°43'21
max. Earth dist.	-1614 Jan 11 j 08:41	7° $\text{S}$ 23'53	30.99084 AU	direct	-1608 Oct 16 j 01:55	20° $\text{S}$ 28'34	
morning rise	-1614 Jan 26 j 02:10	7° $\text{S}$ 57'08		evening set	-1607 Jan 10 j 05:55	22° $\text{S}$ 21'18	
retrograde	-1614 Apr 26 j 19:40	9° $\text{S}$ 55'08					
opposition	-1614 Jul 16 j 19:33	8° $\text{S}$ 30'22	-0°13'59	conjunction	-1607 Jan 25 j 18:53	22° $\text{S}$ 56'20	-0°42'44
min. Earth dist.	-1614 Jul 16 j 00:00	8° $\text{S}$ 31'42	28.98670 AU	minimum elong	-1607 Jan 25 j 18:53	22° $\text{S}$ 56'20	0°42'45
direct	-1614 Oct 03 j 07:04	7° $\text{S}$ 07'23		max. Earth dist.	-1607 Jan 26 j 17:41	22° $\text{S}$ 58'30	30.93952 AU
evening set	-1614 Dec 28 j 12:54	9° $\text{S}$ 00'00		morning rise	-1607 Feb 10 j 11:15	23° $\text{S}$ 31'44	
				retrograde	-1607 May 12 j 16:28	25° $\text{S}$ 30'28	
conjunction	-1613 Jan 12 j 23:26	9° $\text{S}$ 34'51	-0°15'24	opposition	-1607 Aug 01 j 13:24	24° $\text{S}$ 05'33	-0°48'05
minimum elong	-1613 Jan 12 j 23:26	9° $\text{S}$ 34'51	0°15'25	min. Earth dist.	-1607 Jul 31 j 15:09	24° $\text{S}$ 07'05	28.93524 AU
behind sun begin	-1613 Jan 12 j 21:26	9° $\text{S}$ 34'40		direct	-1607 Oct 18 j 12:57	22° $\text{S}$ 42'41	

Attention, astronomical year style is used: The year -1606 in astronomical counting style is the year 1607 BCE in historical counting style.

evening set	-1606 Jan 12 j 17:16	24° $\overline{35}$ '25		max. Earth dist.	-1600 Feb 12 j 06:34	8° $\approx$ 37'24	30.88028 AU
				morning rise	-1600 Feb 27 j 01:02	9° $\approx$ 10'38	
conjunction	-1606 Jan 28 j 06:28	25° $\overline{31}$ '0'29 -0°47'07		retrograde	-1600 May 28 j 15:39	11° $\approx$ 09'41	
minimum elong	-1606 Jan 28 j 06:27	25° $\overline{31}$ '0'29 0°47'08		min. Earth dist.	-1600 Aug 16 j 04:56	9° $\approx$ 46'04	28.87866 AU
max. Earth dist.	-1606 Jan 29 j 04:30	25° $\overline{31}$ '2'34 30.92995 AU		opposition	-1600 Aug 17 j 05:17	9° $\approx$ 44'22	-1°18'45
morning rise	-1606 Feb 12 j 23:27	25° $\overline{34}$ '5'54		direct	-1600 Nov 02 j 21:57	8° $\approx$ 21'15	
retrograde	-1606 May 15 j 05:49	27° $\overline{34}$ '4'43		evening set	-1599 Jan 28 j 01:43	10° $\approx$ 14'05	
min. Earth dist.	-1606 Aug 03 j 04:42	26° $\overline{32}$ '1'12 28.92544 AU					
opposition	-1606 Aug 04 j 02:17	26° $\overline{31}$ '9'42 -0°52'44		conjunction	-1599 Feb 12 j 17:45	10° $\approx$ 49'20	-1°15'29
direct	-1606 Oct 20 j 22:59	24° $\overline{35}$ '6'48		minimum elong	-1599 Feb 12 j 17:45	10° $\approx$ 49'20	1°15'30
evening set	-1605 Jan 15 j 04:20	26° $\overline{34}$ '9'31		max. Earth dist.	-1599 Feb 13 j 18:39	10° $\approx$ 51'41	30.87565 AU
				morning rise	-1599 Feb 28 j 13:42	11° $\approx$ 24'57	
conjunction	-1605 Jan 30 j 18:07	27° $\overline{32}$ '4'37 -0°51'26		retrograde	-1599 May 31 j 04:15	13° $\approx$ 24'04	
minimum elong	-1605 Jan 30 j 18:06	27° $\overline{32}$ '4'37 0°51'27		opposition	-1599 Aug 19 j 17:40	11° $\approx$ 58'45	-1°22'43
max. Earth dist.	-1605 Jan 31 j 17:32	27° $\overline{32}$ '6'50 30.91993 AU		min. Earth dist.	-1599 Aug 18 j 18:12	12° $\approx$ 00'23	28.87451 AU
morning rise	-1605 Feb 15 j 11:23	28° $\overline{30}$ '0'04		direct	-1599 Nov 05 j 08:23	10° $\approx$ 35'39	
retrograde	-1605 May 17 j 18:33	29° $\overline{35}$ '8'55		evening set	-1598 Jan 30 j 13:37	12° $\approx$ 28'31	
opposition	-1605 Aug 06 j 14:57	28° $\overline{33}$ '3'50 -0°57'18					
min. Earth dist.	-1605 Aug 05 j 16:38	28° $\overline{33}$ '5'22 28.91538 AU		conjunction	-1598 Feb 15 j 06:11	13° $\approx$ 03'48	-1°19'08
direct	-1605 Oct 23 j 11:40	27° $\overline{31}$ '0'52		minimum elong	-1598 Feb 15 j 06:10	13° $\approx$ 03'48	1°19'09
evening set	-1604 Jan 17 j 15:47	29° $\overline{30}$ '3'35		max. Earth dist.	-1598 Feb 16 j 07:55	13° $\approx$ 06'14	30.87179 AU
				morning rise	-1598 Mar 03 j 02:25	13° $\approx$ 39'27	
conjunction	-1604 Feb 02 j 05:49	29° $\overline{33}$ '8'42 -0°55'40			-1598 Apr 14 j 05:18	15° $\approx$	
minimum elong	-1604 Feb 02 j 05:48	29° $\overline{33}$ '8'42 0°55'41		retrograde	-1598 Jun 02 j 18:03	15° $\approx$ 38'37	
max. Earth dist.	-1604 Feb 03 j 04:30	29° $\overline{34}$ '0'51 30.91002 AU			-1598 Jul 23 j 15:28	15° $\approx$	
	-1604 Feb 11 j 15:19	0° $\approx$		min. Earth dist.	-1598 Aug 21 j 05:35	14° $\approx$ 15'01	28.87077 AU
morning rise	-1604 Feb 17 j 23:42	0° $\approx$ 14'10		opposition	-1598 Aug 22 j 05:58	14° $\approx$ 13'19	-1°26'33
retrograde	-1604 May 19 j 09:05	2° $\approx$ 13'04		direct	-1598 Nov 07 j 19:50	12° $\approx$ 50'13	
min. Earth dist.	-1604 Aug 07 j 05:00	0° $\approx$ 49'28 28.90588 AU		evening set	-1597 Feb 02 j 01:45	14° $\approx$ 43'08	
opposition	-1604 Aug 08 j 03:28	0° $\approx$ 47'54 -1°01'47			-1597 Feb 09 j 14:56	15° $\approx$	
	-1604 Sep 07 j 19:26	30° $\approx$					
direct	-1604 Oct 24 j 22:05	29° $\overline{32}$ '4'52		conjunction	-1597 Feb 17 j 18:34	15° $\approx$ 18'27	-1°22'40
	-1604 Dec 09 j 12:11	0° $\approx$		minimum elong	-1597 Feb 17 j 18:34	15° $\approx$ 18'27	1°22'40
evening set	-1603 Jan 19 j 03:10	1° $\approx$ 17'36		max. Earth dist.	-1597 Feb 18 j 19:26	15° $\approx$ 20'48	30.86796 AU
				morning rise	-1597 Mar 05 j 15:22	15° $\approx$ 54'07	
conjunction	-1603 Feb 03 j 17:43	1° $\approx$ 52'45 -0°59'49		retrograde	-1597 Jun 05 j 06:56	17° $\approx$ 53'21	
minimum elong	-1603 Feb 03 j 17:43	1° $\approx$ 52'45 0°59'50		opposition	-1597 Aug 24 j 18:28	16° $\approx$ 28'03	-1°30'16
max. Earth dist.	-1603 Feb 04 j 17:45	1° $\approx$ 55'01 30.90076 AU		min. Earth dist.	-1597 Aug 23 j 19:07	16° $\approx$ 29'41	28.86689 AU
morning rise	-1603 Feb 19 j 11:53	2° $\approx$ 28'15		direct	-1597 Nov 10 j 05:46	15° $\approx$ 04'57	
retrograde	-1603 May 21 j 21:22	4° $\approx$ 27'10		evening set	-1596 Feb 04 j 14:05	16° $\approx$ 57'56	
opposition	-1603 Aug 10 j 15:58	3° $\approx$ 01'57 -1°06'11					
min. Earth dist.	-1603 Aug 09 j 17:20	3° $\approx$ 03'31 28.89716 AU		conjunction	-1596 Feb 20 j 07:28	17° $\approx$ 33'16	-1°26'04
direct	-1603 Oct 27 j 09:50	1° $\approx$ 38'53		minimum elong	-1596 Feb 20 j 07:28	17° $\approx$ 33'16	1°26'05
evening set	-1602 Jan 21 j 14:36	3° $\approx$ 31'37		max. Earth dist.	-1596 Feb 21 j 09:08	17° $\approx$ 35'41	30.86369 AU
				morning rise	-1596 Mar 07 j 04:30	18° $\approx$ 08'58	
conjunction	-1602 Feb 06 j 05:26	4° $\approx$ 06'47 -1°03'52		retrograde	-1596 Jun 06 j 19:23	20° $\approx$ 08'13	
minimum elong	-1602 Feb 06 j 05:26	4° $\approx$ 06'47 1°03'54		min. Earth dist.	-1596 Aug 25 j 07:10	18° $\approx$ 44'34	28.86220 AU
max. Earth dist.	-1602 Feb 07 j 05:17	4° $\approx$ 09'03 30.89266 AU		opposition	-1596 Aug 26 j 06:38	18° $\approx$ 42'56	-1°33'50
morning rise	-1602 Feb 22 j 00:06	4° $\approx$ 42'19		direct	-1596 Nov 11 j 17:43	17° $\approx$ 19'48	
retrograde	-1602 May 24 j 12:47	6° $\approx$ 41'17		evening set	-1595 Feb 06 j 02:40	19° $\approx$ 12'51	
min. Earth dist.	-1602 Aug 12 j 04:51	5° $\approx$ 17'39 28.88976 AU					
opposition	-1602 Aug 13 j 04:26	5° $\approx$ 16'01 -1°10'28		conjunction	-1595 Feb 21 j 20:19	19° $\approx$ 48'12	-1°29'21
direct	-1602 Oct 29 j 22:16	3° $\approx$ 52'55		minimum elong	-1595 Feb 21 j 20:18	19° $\approx$ 48'12	1°29'21
evening set	-1601 Jan 24 j 02:10	5° $\approx$ 45'40		max. Earth dist.	-1595 Feb 22 j 20:26	19° $\approx$ 50'29	30.85848 AU
				morning rise	-1595 Mar 09 j 17:54	20° $\approx$ 23'55	
conjunction	-1601 Feb 08 j 17:26	6° $\approx$ 20'52 -1°07'51		retrograde	-1595 Jun 09 j 09:53	22° $\approx$ 23'13	
minimum elong	-1601 Feb 08 j 17:26	6° $\approx$ 20'52 1°07'52		opposition	-1595 Aug 28 j 19:01	20° $\approx$ 57'54	-1°37'16
max. Earth dist.	-1601 Feb 09 j 18:09	6° $\approx$ 23'13 30.88577 AU		min. Earth dist.	-1595 Aug 27 j 20:04	20° $\approx$ 59'30	28.85654 AU
morning rise	-1601 Feb 24 j 12:30	6° $\approx$ 56'26		direct	-1595 Nov 14 j 03:52	19° $\approx$ 34'43	
retrograde	-1601 May 27 j 01:47	8° $\approx$ 55'27		evening set	-1594 Feb 08 j 15:04	21° $\approx$ 27'48	
opposition	-1601 Aug 15 j 16:56	7° $\approx$ 30'08 -1°14'40					
min. Earth dist.	-1601 Aug 14 j 17:49	7° $\approx$ 31'45 28.88361 AU		conjunction	-1594 Feb 24 j 09:14	22° $\approx$ 03'11	-1°32'30
direct	-1601 Nov 01 j 10:04	6° $\approx$ 07'02		minimum elong	-1594 Feb 24 j 09:14	22° $\approx$ 03'11	1°32'31
evening set	-1600 Jan 26 j 13:48	7° $\approx$ 59'48		max. Earth dist.	-1594 Feb 25 j 10:00	22° $\approx$ 05'31	30.85219 AU
				morning rise	-1594 Mar 12 j 07:04	22° $\approx$ 38'56	
conjunction	-1600 Feb 11 j 05:33	8° $\approx$ 35'02 -1°11'43		retrograde	-1594 Jun 11 j 22:25	24° $\approx$ 38'13	
minimum elong	-1600 Feb 11 j 05:32	8° $\approx$ 35'02 1°11'44		min. Earth dist.	-1594 Aug 30 j 08:50	23° $\approx$ 14'26	28.84981 AU



Attention, astronomical year style is used: The year -1594 in astronomical counting style is the year 1595 BCE in historical counting style.

opposition	-1594 Aug 31 j 07:19	23° $\approx$ 12'52	-1°40'34	conjunction	-1587 Mar 12 j 05:19	7° $\mathbf{H}$ 47'15	-1°50'19
direct	-1594 Nov 16 j 15:58	21° $\approx$ 49'38		minimum elong	-1587 Mar 12 j 05:19	7° $\mathbf{H}$ 47'15	1°50'19
evening set	-1593 Feb 11 j 03:41	23° $\approx$ 42'45		max. Earth dist.	-1587 Mar 13 j 05:32	7° $\mathbf{H}$ 49'32	30.81586 AU
				morning rise	-1587 Mar 28 j 05:48	8° $\mathbf{H}$ 23'08	
conjunction	-1593 Feb 26 j 22:13	24° $\approx$ 18'09	-1°35'30	retrograde	-1587 Jun 27 j 19:45	10° $\mathbf{H}$ 22'17	
minimum elong	-1593 Feb 26 j 22:13	24° $\approx$ 18'09	1°35'31	opposition	-1587 Sep 15 j 18:26	8° $\mathbf{H}$ 56'48	-1°59'01
max. Earth dist.	-1593 Feb 27 j 21:57	24° $\approx$ 20'23	30.84524 AU	min. Earth dist.	-1587 Sep 14 j 20:38	8° $\mathbf{H}$ 58'21	28.81684 AU
morning rise	-1593 Mar 14 j 20:34	24° $\approx$ 53'55		direct	-1587 Dec 02 j 01:52	7° $\mathbf{H}$ 33'15	
retrograde	-1593 Jun 14 j 13:49	26° $\approx$ 53'11		evening set	-1586 Feb 26 j 21:07	9° $\mathbf{H}$ 26'44	
opposition	-1593 Sep 02 j 19:24	25° $\approx$ 27'47	-1°43'42				
min. Earth dist.	-1593 Sep 01 j 20:46	25° $\approx$ 29'22	28.84273 AU	conjunction	-1586 Mar 14 j 18:32	10° $\mathbf{H}$ 02'18	-1°52'13
direct	-1593 Nov 19 j 04:27	24° $\approx$ 04'28		minimum elong	-1586 Mar 14 j 18:32	10° $\mathbf{H}$ 02'18	1°52'14
evening set	-1592 Feb 13 j 16:20	25° $\approx$ 57'37		max. Earth dist.	-1586 Mar 15 j 17:29	10° $\mathbf{H}$ 04'28	30.81540 AU
				morning rise	-1586 Mar 30 j 19:33	10° $\mathbf{H}$ 38'13	
conjunction	-1592 Feb 29 j 11:19	26° $\approx$ 33'03	-1°38'21	retrograde	-1586 Jun 30 j 09:52	12° $\mathbf{H}$ 37'22	
minimum elong	-1592 Feb 29 j 11:19	26° $\approx$ 33'03	1°38'23	min. Earth dist.	-1586 Sep 17 j 08:53	11° $\mathbf{H}$ 13'25	28.81690 AU
max. Earth dist.	-1592 Mar 01 j 11:21	26° $\approx$ 35'19	30.83798 AU	opposition	-1586 Sep 18 j 06:13	11° $\mathbf{H}$ 11'55	-2°00'58
morning rise	-1592 Mar 16 j 10:02	27° $\approx$ 08'50		direct	-1586 Dec 04 j 11:09	9° $\mathbf{H}$ 48'21	
retrograde	-1592 Jun 16 j 02:21	29° $\approx$ 08'05		evening set	-1585 Mar 01 j 10:16	11° $\mathbf{H}$ 41'55	
min. Earth dist.	-1592 Sep 03 j 09:54	27° $\approx$ 44'09	28.83564 AU				
opposition	-1592 Sep 04 j 07:30	27° $\approx$ 42'38	-1°46'40	conjunction	-1585 Mar 17 j 08:15	12° $\mathbf{H}$ 17'31	-1°53'56
direct	-1592 Nov 20 j 16:38	26° $\approx$ 19'16		minimum elong	-1585 Mar 17 j 08:15	12° $\mathbf{H}$ 17'31	1°53'57
evening set	-1591 Feb 15 j 04:58	28° $\approx$ 12'26		max. Earth dist.	-1585 Mar 18 j 07:53	12° $\mathbf{H}$ 19'45	30.81568 AU
				morning rise	-1585 Apr 02 j 09:28	12° $\mathbf{H}$ 53'27	
conjunction	-1591 Mar 03 j 00:24	28° $\approx$ 47'54	-1°41'04	retrograde	-1585 Jul 02 j 21:50	14° $\mathbf{H}$ 52'35	
minimum elong	-1591 Mar 03 j 00:24	28° $\approx$ 47'54	1°41'04	opposition	-1585 Sep 20 j 17:48	13° $\mathbf{H}$ 27'11	-2°02'43
max. Earth dist.	-1591 Mar 04 j 00:13	28° $\approx$ 50'08	30.83118 AU	min. Earth dist.	-1585 Sep 19 j 21:06	13° $\mathbf{H}$ 28'39	28.81734 AU
morning rise	-1591 Mar 18 j 23:27	29° $\approx$ 23'42		direct	-1585 Dec 06 j 22:47	12° $\mathbf{H}$ 03'37	
	-1591 Apr 05 j 03:43	0° $\mathbf{H}$		evening set	-1584 Mar 02 j 23:44	13° $\mathbf{H}$ 57'16	
retrograde	-1591 Jun 18 j 16:40	1° $\mathbf{H}$ 22'55					
	-1591 Sep 05 j 06:38	30° $\mathbf{R}$		conjunction	-1584 Mar 18 j 22:02	14° $\mathbf{H}$ 32'54	-1°55'30
opposition	-1591 Sep 06 j 19:18	29° $\approx$ 57'26	-1°49'29	minimum elong	-1584 Mar 18 j 22:02	14° $\mathbf{H}$ 32'54	1°55'31
min. Earth dist.	-1591 Sep 05 j 20:51	29° $\approx$ 59'00	28.82927 AU	max. Earth dist.	-1584 Mar 19 j 20:13	14° $\mathbf{H}$ 34'59	30.81618 AU
direct	-1591 Nov 23 j 05:05	28° $\approx$ 33'59		morning rise	-1584 Apr 03 j 23:44	15° $\mathbf{H}$ 08'50	
	-1590 Feb 04 j 23:57	0° $\mathbf{H}$		retrograde	-1584 Jul 04 j 12:39	17° $\mathbf{H}$ 07'56	
evening set	-1590 Feb 17 j 17:43	0° $\mathbf{H}$ 27'13		min. Earth dist.	-1584 Sep 21 j 08:58	15° $\mathbf{H}$ 44'02	28.81772 AU
				opposition	-1584 Sep 22 j 05:28	15° $\mathbf{H}$ 42'35	-2°04'17
conjunction	-1590 Mar 05 j 13:27	1° $\mathbf{H}$ 02'41	-1°43'37	direct	-1584 Dec 08 j 10:47	14° $\mathbf{H}$ 18'59	
minimum elong	-1590 Mar 05 j 13:27	1° $\mathbf{H}$ 02'41	1°43'38	evening set	-1583 Mar 05 j 13:12	16° $\mathbf{H}$ 12'43	
max. Earth dist.	-1590 Mar 06 j 12:57	1° $\mathbf{H}$ 04'54	30.82521 AU				
morning rise	-1590 Mar 21 j 12:57	1° $\mathbf{H}$ 38'31		conjunction	-1583 Mar 21 j 11:56	16° $\mathbf{H}$ 48'22	-1°56'52
retrograde	-1590 Jun 21 j 05:49	3° $\mathbf{H}$ 37'43		minimum elong	-1583 Mar 21 j 11:56	16° $\mathbf{H}$ 48'22	1°56'52
min. Earth dist.	-1590 Sep 08 j 09:49	2° $\mathbf{H}$ 13'42	28.82406 AU	max. Earth dist.	-1583 Mar 22 j 10:01	16° $\mathbf{H}$ 50'27	30.81609 AU
opposition	-1590 Sep 09 j 07:16	2° $\mathbf{H}$ 12'12	-1°52'08	morning rise	-1583 Apr 06 j 13:51	17° $\mathbf{H}$ 24'20	
direct	-1590 Nov 25 j 16:13	0° $\mathbf{H}$ 48'43		retrograde	-1583 Jul 07 j 00:52	19° $\mathbf{H}$ 23'23	
evening set	-1589 Feb 20 j 06:19	2° $\mathbf{H}$ 41'59		opposition	-1583 Sep 24 j 17:08	17° $\mathbf{H}$ 58'03	-2°05'39
				min. Earth dist.	-1583 Sep 23 j 22:07	17° $\mathbf{H}$ 59'24	28.81730 AU
conjunction	-1589 Mar 08 j 02:37	3° $\mathbf{H}$ 17'29	-1°46'01	direct	-1583 Dec 10 j 22:22	16° $\mathbf{H}$ 34'24	
minimum elong	-1589 Mar 08 j 02:37	3° $\mathbf{H}$ 17'29	1°46'01	evening set	-1582 Mar 08 j 02:44	18° $\mathbf{H}$ 28'12	
max. Earth dist.	-1589 Mar 09 j 02:47	3° $\mathbf{H}$ 19'46	30.82069 AU				
morning rise	-1589 Mar 24 j 02:24	3° $\mathbf{H}$ 53'20		conjunction	-1582 Mar 24 j 01:55	19° $\mathbf{H}$ 03'52	-1°58'04
retrograde	-1589 Jun 23 j 19:47	5° $\mathbf{H}$ 52'31		minimum elong	-1582 Mar 24 j 01:55	19° $\mathbf{H}$ 03'52	1°58'05
opposition	-1589 Sep 11 j 19:01	4° $\mathbf{H}$ 26'59	-1°54'36	max. Earth dist.	-1582 Mar 24 j 22:57	19° $\mathbf{H}$ 05'51	30.81538 AU
min. Earth dist.	-1589 Sep 10 j 20:38	4° $\mathbf{H}$ 28'34	28.82022 AU	morning rise	-1582 Apr 09 j 04:12	19° $\mathbf{H}$ 39'51	
direct	-1589 Nov 28 j 04:19	3° $\mathbf{H}$ 03'28		retrograde	-1582 Jul 09 j 15:53	21° $\mathbf{H}$ 38'49	
evening set	-1588 Feb 22 j 19:17	4° $\mathbf{H}$ 56'48		min. Earth dist.	-1582 Sep 26 j 09:26	20° $\mathbf{H}$ 14'51	28.81619 AU
				opposition	-1582 Sep 27 j 04:41	20° $\mathbf{H}$ 13'29	-2°06'50
conjunction	-1588 Mar 09 j 15:52	5° $\mathbf{H}$ 32'19	-1°48'15	direct	-1582 Dec 13 j 11:16	18° $\mathbf{H}$ 49'47	
minimum elong	-1588 Mar 09 j 15:51	5° $\mathbf{H}$ 32'19	1°48'15	evening set	-1581 Mar 10 j 16:18	20° $\mathbf{H}$ 43'37	
max. Earth dist.	-1588 Mar 10 j 15:06	5° $\mathbf{H}$ 34'31	30.81753 AU				
morning rise	-1588 Mar 25 j 16:09	6° $\mathbf{H}$ 08'12		conjunction	-1581 Mar 26 j 15:52	21° $\mathbf{H}$ 19'18	-1°59'05
retrograde	-1588 Jun 25 j 07:41	8° $\mathbf{H}$ 07'21		minimum elong	-1581 Mar 26 j 15:52	21° $\mathbf{H}$ 19'18	1°59'05
min. Earth dist.	-1588 Sep 12 j 09:19	6° $\mathbf{H}$ 43'21	28.81790 AU	max. Earth dist.	-1581 Mar 27 j 11:57	21° $\mathbf{H}$ 21'11	30.81386 AU
opposition	-1588 Sep 13 j 06:45	6° $\mathbf{H}$ 41'50	-1°56'54	morning rise	-1581 Apr 11 j 18:33	21° $\mathbf{H}$ 55'18	
direct	-1588 Nov 29 j 14:22	5° $\mathbf{H}$ 18'18		retrograde	-1581 Jul 12 j 05:16	23° $\mathbf{H}$ 54'11	
evening set	-1587 Feb 24 j 08:09	7° $\mathbf{H}$ 11'42		opposition	-1581 Sep 29 j 16:16	22° $\mathbf{H}$ 28'50	-2°07'50
				min. Earth dist.	-1581 Sep 28 j 22:42	22° $\mathbf{H}$ 30'04	28.81444 AU

Attention, astronomical year style is used: The year -1581 in astronomical counting style is the year 1582 BCE in historical counting style.

direct	-1581 Dec 15 j 23:32	21° $\text{H}$ 05'03		minimum elong	-1574 Apr 11 j 18:19	7° $\text{V}$ 04'13	2°01'07
evening set	-1580 Mar 12 j 05:53	22° $\text{H}$ 58'54		max. Earth dist.	-1574 Apr 12 j 11:20	7° $\text{V}$ 05'48	30.81846 AU
				morning rise	-1574 Apr 27 j 23:03	7° $\text{V}$ 40'17	
conjunction	-1580 Mar 28 j 06:00	23° $\text{H}$ 34'37	-1°59'56	retrograde	-1574 Jul 27 j 20:36	9° $\text{V}$ 38'26	
minimum elong	-1580 Mar 28 j 06:00	23° $\text{H}$ 34'37	1°59'56	opposition	-1574 Oct 14 j 22:18	8° $\text{V}$ 13'14	-2°09'16
max. Earth dist.	-1580 Mar 29 j 01:51	23° $\text{H}$ 36'29	30.81203 AU	min. Earth dist.	-1574 Oct 14 j 08:00	8° $\text{V}$ 14'15	28.82267 AU
morning rise	-1580 Apr 13 j 08:55	24° $\text{H}$ 10'37		direct	-1574 Dec 31 j 07:52	6° $\text{V}$ 49'07	
retrograde	-1580 Jul 13 j 18:51	26° $\text{H}$ 09'23		evening set	-1573 Mar 29 j 05:39	8° $\text{V}$ 43'23	
min. Earth dist.	-1580 Sep 30 j 09:36	24° $\text{H}$ 45'17	28.81253 AU				
opposition	-1580 Oct 01 j 03:28	24° $\text{H}$ 44'01	-2°08'38	conjunction	-1573 Apr 14 j 08:35	9° $\text{V}$ 19'14	-2°00'38
direct	-1580 Dec 17 j 12:59	23° $\text{H}$ 20'09		minimum elong	-1573 Apr 14 j 08:35	9° $\text{V}$ 19'14	2°00'38
evening set	-1579 Mar 14 j 19:36	25° $\text{H}$ 14'03		max. Earth dist.	-1573 Apr 15 j 00:34	9° $\text{V}$ 20'44	30.82425 AU
				morning rise	-1573 Apr 30 j 13:40	9° $\text{V}$ 55'19	
conjunction	-1579 Mar 30 j 19:58	25° $\text{H}$ 49'47	-2°00'35	retrograde	-1573 Jul 30 j 11:09	11° $\text{V}$ 53'23	
minimum elong	-1579 Mar 30 j 19:58	25° $\text{H}$ 49'47	2°00'34	opposition	-1573 Oct 17 j 09:14	10° $\text{V}$ 28'17	-2°08'41
max. Earth dist.	-1579 Mar 31 j 14:28	25° $\text{H}$ 51'31	30.81025 AU	min. Earth dist.	-1573 Oct 16 j 18:44	10° $\text{V}$ 29'19	28.82872 AU
morning rise	-1579 Apr 15 j 23:19	26° $\text{H}$ 25'47		direct	-1572 Jan 02 j 20:28	9° $\text{V}$ 04'10	
retrograde	-1579 Jul 16 j 07:07	28° $\text{H}$ 24'27		evening set	-1572 Mar 30 j 19:45	10° $\text{V}$ 58'32	
opposition	-1579 Oct 03 j 14:51	26° $\text{H}$ 59'03	-2°09'14				
min. Earth dist.	-1579 Oct 02 j 22:18	27° $\text{H}$ 00'14	28.81113 AU	conjunction	-1572 Apr 15 j 23:00	11° $\text{V}$ 34'25	-2°00'00
direct	-1579 Dec 19 j 23:40	25° $\text{H}$ 35'07		minimum elong	-1572 Apr 15 j 23:00	11° $\text{V}$ 34'25	2°00'00
evening set	-1578 Mar 17 j 08:57	27° $\text{H}$ 29'02		max. Earth dist.	-1572 Apr 16 j 14:07	11° $\text{V}$ 35'49	30.83041 AU
				morning rise	-1572 May 02 j 04:20	12° $\text{V}$ 10'30	
conjunction	-1578 Apr 02 j 09:54	28° $\text{H}$ 04'47	-2°01'04	retrograde	-1572 Aug 01 j 00:15	14° $\text{V}$ 08'30	
minimum elong	-1578 Apr 02 j 09:54	28° $\text{H}$ 04'47	2°01'04	opposition	-1572 Oct 18 j 20:14	12° $\text{V}$ 43'29	-2°07'53
max. Earth dist.	-1578 Apr 03 j 05:02	28° $\text{H}$ 06'35	30.80924 AU	min. Earth dist.	-1572 Oct 18 j 07:35	12° $\text{V}$ 44'23	28.83493 AU
morning rise	-1578 Apr 18 j 13:26	28° $\text{H}$ 40'48		direct	-1571 Jan 04 j 08:23	11° $\text{V}$ 19'22	
	-1578 May 30 j 01:54	0° $\text{V}$		evening set	-1571 Apr 02 j 09:49	13° $\text{V}$ 13'50	
retrograde	-1578 Jul 18 j 19:32	0° $\text{V}$ 39'21					
	-1578 Sep 07 j 11:23	30° $\text{H}$		conjunction	-1571 Apr 18 j 13:32	13° $\text{V}$ 49'44	-1°59'10
min. Earth dist.	-1578 Oct 05 j 09:23	29° $\text{H}$ 15'08	28.81057 AU	minimum elong	-1571 Apr 18 j 13:32	13° $\text{V}$ 49'44	1°59'09
opposition	-1578 Oct 06 j 02:01	29° $\text{H}$ 13'57	-2°09'38	max. Earth dist.	-1571 Apr 19 j 03:58	13° $\text{V}$ 51'05	30.83656 AU
direct	-1578 Dec 22 j 12:10	27° $\text{H}$ 49'57		morning rise	-1571 May 04 j 19:03	14° $\text{V}$ 25'50	
evening set	-1577 Mar 19 j 22:42	29° $\text{H}$ 43'54		retrograde	-1571 Aug 03 j 14:11	16° $\text{V}$ 23'44	
	-1577 Mar 27 j 05:22	0° $\text{V}$		opposition	-1571 Oct 21 j 07:11	14° $\text{V}$ 58'48	-2°06'54
				min. Earth dist.	-1571 Oct 20 j 18:30	14° $\text{V}$ 59'42	28.84072 AU
conjunction	-1577 Apr 04 j 23:55	0° $\text{V}$ 19'41	-2°01'21	direct	-1570 Jan 06 j 21:51	13° $\text{V}$ 34'41	
minimum elong	-1577 Apr 04 j 23:55	0° $\text{V}$ 19'41	2°01'20	evening set	-1570 Apr 04 j 23:57	15° $\text{V}$ 29'13	
max. Earth dist.	-1577 Apr 05 j 17:27	0° $\text{V}$ 21'19	30.80933 AU				
morning rise	-1577 Apr 21 j 03:56	0° $\text{V}$ 55'42		conjunction	-1570 Apr 21 j 03:55	16° $\text{V}$ 05'09	-1°58'09
retrograde	-1577 Jul 21 j 08:31	2° $\text{V}$ 54'08		minimum elong	-1570 Apr 21 j 03:55	16° $\text{V}$ 05'09	1°58'09
opposition	-1577 Oct 08 j 13:07	1° $\text{V}$ 28'46	-2°09'51	max. Earth dist.	-1570 Apr 21 j 16:34	16° $\text{V}$ 06'19	30.84196 AU
min. Earth dist.	-1577 Oct 07 j 21:07	1° $\text{V}$ 29'54	28.81143 AU	morning rise	-1570 May 07 j 09:47	16° $\text{V}$ 41'15	
direct	-1577 Dec 24 j 22:05	0° $\text{V}$ 04'42		retrograde	-1570 Aug 06 j 03:16	18° $\text{V}$ 39'03	
evening set	-1576 Mar 21 j 12:22	1° $\text{V}$ 58'43		opposition	-1570 Oct 23 j 18:18	17° $\text{V}$ 14'10	-2°05'43
				min. Earth dist.	-1570 Oct 23 j 07:26	17° $\text{V}$ 14'57	28.84572 AU
conjunction	-1576 Apr 06 j 14:08	2° $\text{V}$ 34'30	-2°01'27	direct	-1569 Jan 09 j 08:50	15° $\text{V}$ 50'01	
minimum elong	-1576 Apr 06 j 14:08	2° $\text{V}$ 34'30	2°01'27	evening set	-1569 Apr 07 j 14:08	17° $\text{V}$ 44'36	
max. Earth dist.	-1576 Apr 07 j 08:16	2° $\text{V}$ 36'12	30.81084 AU				
morning rise	-1576 Apr 22 j 18:17	3° $\text{V}$ 10'33		conjunction	-1569 Apr 23 j 18:39	18° $\text{V}$ 20'33	-1°56'58
retrograde	-1576 Jul 22 j 19:25	5° $\text{V}$ 08'52		minimum elong	-1569 Apr 23 j 18:39	18° $\text{V}$ 20'33	1°56'57
min. Earth dist.	-1576 Oct 09 j 08:42	3° $\text{V}$ 44'38	28.81365 AU	max. Earth dist.	-1569 Apr 24 j 07:05	18° $\text{V}$ 21'43	30.84655 AU
opposition	-1576 Oct 10 j 00:13	3° $\text{V}$ 43'32	-2°09'51	morning rise	-1569 May 10 j 00:37	18° $\text{V}$ 56'41	
direct	-1576 Dec 26 j 09:58	2° $\text{V}$ 19'26		retrograde	-1569 Aug 08 j 16:46	20° $\text{V}$ 54'19	
evening set	-1575 Mar 24 j 02:04	4° $\text{V}$ 13'31		opposition	-1569 Oct 26 j 05:06	19° $\text{V}$ 29'30	-2°04'21
				min. Earth dist.	-1569 Oct 25 j 18:46	19° $\text{V}$ 30'14	28.84977 AU
conjunction	-1575 Apr 09 j 04:07	4° $\text{V}$ 49'19	-2°01'22	direct	-1568 Jan 11 j 22:04	18° $\text{V}$ 05'17	
minimum elong	-1575 Apr 09 j 04:07	4° $\text{V}$ 49'19	2°01'21	evening set	-1568 Apr 09 j 04:29	19° $\text{V}$ 59'55	
max. Earth dist.	-1575 Apr 09 j 20:51	4° $\text{V}$ 50'53	30.81393 AU				
morning rise	-1575 Apr 25 j 08:40	5° $\text{V}$ 25'22		conjunction	-1568 Apr 25 j 09:12	20° $\text{V}$ 35'53	-1°55'36
retrograde	-1575 Jul 25 j 08:52	7° $\text{V}$ 23'37		minimum elong	-1568 Apr 25 j 09:12	20° $\text{V}$ 35'54	1°55'36
opposition	-1575 Oct 12 j 11:15	5° $\text{V}$ 58'20	-2°09'40	max. Earth dist.	-1568 Apr 25 j 19:22	20° $\text{V}$ 36'50	30.85035 AU
min. Earth dist.	-1575 Oct 11 j 19:40	5° $\text{V}$ 59'27	28.81752 AU	morning rise	-1568 May 11 j 15:33	21° $\text{V}$ 12'01	
direct	-1575 Dec 28 j 21:09	4° $\text{V}$ 34'13		retrograde	-1568 Aug 10 j 05:10	23° $\text{V}$ 09'30	
evening set	-1574 Mar 26 j 15:48	6° $\text{V}$ 28'23		opposition	-1568 Oct 27 j 16:01	21° $\text{V}$ 44'42	-2°02'48
				min. Earth dist.	-1568 Oct 27 j 06:51	21° $\text{V}$ 45'22	28.85335 AU
conjunction	-1574 Apr 11 j 18:19	7° $\text{V}$ 04'13	-2°01'06	direct	-1567 Jan 13 j 08:51	20° $\text{V}$ 20'26	

Attention, astronomical year style is used: The year -1567 in astronomical counting style is the year 1568 BCE in historical counting style.

evening set	-1567 Apr 11 j 18:28	22° $\Upsilon$ 15'06		max. Earth dist.	-1561 May 12 j 18:31	6° $\mathcal{B}$ 19'29	30.88969 AU
				morning rise	-1561 May 28 j 21:19	6° $\mathcal{B}$ 55'10	
conjunction	-1567 Apr 27 j 23:41	22° $\Upsilon$ 51'05	-1°54'04	retrograde	-1561 Aug 26 j 15:44	8° $\mathcal{B}$ 51'31	
minimum elong	-1567 Apr 27 j 23:41	22° $\Upsilon$ 51'05	1°54'03	opposition	-1561 Nov 12 j 18:01	7° $\mathcal{B}$ 27'04	-1°46'55
max. Earth dist.	-1567 Apr 28 j 09:59	22° $\Upsilon$ 52'02	30.85377 AU	min. Earth dist.	-1561 Nov 12 j 14:03	7° $\mathcal{B}$ 27'21	28.89540 AU
morning rise	-1567 May 14 j 06:04	23° $\Upsilon$ 27'13		direct	-1560 Jan 29 j 20:12	6° $\mathcal{B}$ 02'27	
retrograde	-1567 Aug 12 j 15:28	25° $\Upsilon$ 24'31		evening set	-1560 Apr 27 j 21:06	7° $\mathcal{B}$ 57'27	
opposition	-1567 Oct 30 j 02:47	23° $\Upsilon$ 59'46	-2°01'04				
min. Earth dist.	-1567 Oct 29 j 18:32	24° $\Upsilon$ 00'21	28.85668 AU	conjunction	-1560 May 14 j 04:23	8° $\mathcal{B}$ 33'31	-1°38'38
direct	-1566 Jan 15 j 21:25	22° $\Upsilon$ 35'25		minimum elong	-1560 May 14 j 04:24	8° $\mathcal{B}$ 33'31	1°38'38
evening set	-1566 Apr 14 j 08:38	24° $\Upsilon$ 30'06		max. Earth dist.	-1560 May 14 j 09:01	8° $\mathcal{B}$ 33'57	30.89939 AU
				morning rise	-1560 May 30 j 11:49	9° $\mathcal{B}$ 09'38	
conjunction	-1566 Apr 30 j 14:03	25° $\Upsilon$ 06'06	-1°52'21	retrograde	-1560 Aug 28 j 04:55	11° $\mathcal{B}$ 05'50	
minimum elong	-1566 Apr 30 j 14:03	25° $\Upsilon$ 06'06	1°52'21	opposition	-1560 Nov 14 j 04:29	9° $\mathcal{B}$ 41'30	-1°43'57
max. Earth dist.	-1566 Apr 30 j 22:25	25° $\Upsilon$ 06'53	30.85737 AU	min. Earth dist.	-1560 Nov 14 j 00:58	9° $\mathcal{B}$ 41'45	28.90508 AU
morning rise	-1566 May 16 j 20:48	25° $\Upsilon$ 42'14		direct	-1559 Jan 31 j 09:53	8° $\mathcal{B}$ 16'53	
retrograde	-1566 Aug 15 j 04:01	27° $\Upsilon$ 39'22		evening set	-1559 Apr 30 j 11:18	10° $\mathcal{B}$ 11'58	
opposition	-1566 Nov 01 j 13:21	26° $\Upsilon$ 14'38	-1°59'09				
min. Earth dist.	-1566 Nov 01 j 05:26	26° $\Upsilon$ 15'12	28.86052 AU	conjunction	-1559 May 16 j 18:37	10° $\mathcal{B}$ 48'02	-1°35'48
direct	-1565 Jan 18 j 08:24	24° $\Upsilon$ 50'12		minimum elong	-1559 May 16 j 18:38	10° $\mathcal{B}$ 48'02	1°35'46
evening set	-1565 Apr 16 j 22:42	26° $\Upsilon$ 44'56		max. Earth dist.	-1559 May 16 j 21:10	10° $\mathcal{B}$ 48'17	30.90909 AU
				morning rise	-1559 Jun 02 j 02:15	11° $\mathcal{B}$ 24'09	
conjunction	-1565 May 03 j 04:33	27° $\Upsilon$ 20'56	-1°50'29	retrograde	-1559 Aug 30 j 17:18	13° $\mathcal{B}$ 20'14	
minimum elong	-1565 May 03 j 04:33	27° $\Upsilon$ 20'56	1°50'27	opposition	-1559 Nov 16 j 15:02	11° $\mathcal{B}$ 55'59	-1°40'50
max. Earth dist.	-1565 May 03 j 12:57	27° $\Upsilon$ 21'43	30.86150 AU	min. Earth dist.	-1559 Nov 16 j 12:42	11° $\mathcal{B}$ 56'09	28.91463 AU
morning rise	-1565 May 19 j 11:22	27° $\Upsilon$ 57'04		direct	-1558 Feb 02 j 21:01	10° $\mathcal{B}$ 31'21	
retrograde	-1565 Aug 17 j 14:35	29° $\Upsilon$ 54'02		evening set	-1558 May 03 j 01:30	12° $\mathcal{B}$ 26'30	
opposition	-1565 Nov 04 j 00:02	28° $\Upsilon$ 29'20	-1°57'03				
min. Earth dist.	-1565 Nov 03 j 17:35	28° $\Upsilon$ 29'48	28.86503 AU	conjunction	-1558 May 19 j 09:13	13° $\mathcal{B}$ 02'35	-1°32'49
direct	-1564 Jan 20 j 19:00	27° $\Upsilon$ 04'50		minimum elong	-1558 May 19 j 09:13	13° $\mathcal{B}$ 02'35	1°32'48
evening set	-1564 Apr 18 j 12:48	28° $\Upsilon$ 59'36		max. Earth dist.	-1558 May 19 j 11:35	13° $\mathcal{B}$ 02'49	30.91827 AU
				morning rise	-1558 Jun 04 j 16:44	13° $\mathcal{B}$ 38'42	
conjunction	-1564 May 04 j 18:53	29° $\Upsilon$ 35'36	-1°48'26		-1558 Jul 18 j 03:41	15° $\mathcal{B}$	
minimum elong	-1564 May 04 j 18:54	29° $\Upsilon$ 35'36	1°48'25	retrograde	-1558 Sep 02 j 04:24	15° $\mathcal{B}$ 34'37	
max. Earth dist.	-1564 May 05 j 02:01	29° $\Upsilon$ 36'16	30.86663 AU		-1558 Oct 18 j 22:54	15° $\mathcal{B}$	
	-1564 May 15 j 17:34	0° $\mathcal{B}$		opposition	-1558 Nov 19 j 01:29	14° $\mathcal{B}$ 10'29	-1°37'35
morning rise	-1564 May 21 j 01:56	0° $\mathcal{B}$ 11'44		min. Earth dist.	-1558 Nov 19 j 00:25	14° $\mathcal{B}$ 10'33	28.92328 AU
retrograde	-1564 Aug 19 j 02:48	2° $\mathcal{B}$ 08'32		direct	-1557 Feb 05 j 09:34	12° $\mathcal{B}$ 45'49	
opposition	-1564 Nov 05 j 10:28	0° $\mathcal{B}$ 43'52	-1°54'46	evening set	-1557 May 05 j 15:55	14° $\mathcal{B}$ 41'01	
min. Earth dist.	-1564 Nov 05 j 03:43	0° $\mathcal{B}$ 44'21	28.87071 AU		-1557 May 14 j 07:22	15° $\mathcal{B}$	
	-1564 Dec 02 j 10:41	30° $\mathcal{R}$ $\Upsilon$					
direct	-1563 Jan 22 j 08:05	29° $\Upsilon$ 19'18		conjunction	-1557 May 21 j 23:40	15° $\mathcal{B}$ 17'07	-1°29'42
	-1563 Mar 13 j 08:10	0° $\mathcal{B}$		minimum elong	-1557 May 21 j 23:41	15° $\mathcal{B}$ 17'07	1°29'40
evening set	-1563 Apr 21 j 02:50	1° $\mathcal{B}$ 14'07		max. Earth dist.	-1557 May 21 j 23:33	15° $\mathcal{B}$ 17'06	30.92654 AU
				morning rise	-1557 Jun 07 j 07:24	15° $\mathcal{B}$ 53'13	
conjunction	-1563 May 07 j 09:13	1° $\mathcal{B}$ 50'09	-1°46'13	retrograde	-1557 Sep 04 j 17:16	17° $\mathcal{B}$ 48'58	
minimum elong	-1563 May 07 j 09:13	1° $\mathcal{B}$ 50'09	1°46'12	opposition	-1557 Nov 21 j 11:57	16° $\mathcal{B}$ 24'54	-1°34'10
max. Earth dist.	-1563 May 07 j 15:48	1° $\mathcal{B}$ 50'46	30.87295 AU	min. Earth dist.	-1557 Nov 21 j 11:31	16° $\mathcal{B}$ 24'56	28.93100 AU
morning rise	-1563 May 23 j 16:21	2° $\mathcal{B}$ 26'16		direct	-1556 Feb 07 j 20:48	15° $\mathcal{B}$ 00'11	
retrograde	-1563 Aug 21 j 14:02	4° $\mathcal{B}$ 22'55		evening set	-1556 May 07 j 06:07	16° $\mathcal{B}$ 55'26	
opposition	-1563 Nov 07 j 21:06	2° $\mathcal{B}$ 58'18	-1°52'19				
min. Earth dist.	-1563 Nov 07 j 15:51	2° $\mathcal{B}$ 58'41	28.87774 AU	conjunction	-1556 May 23 j 14:09	17° $\mathcal{B}$ 31'33	-1°26'27
direct	-1562 Jan 24 j 19:48	1° $\mathcal{B}$ 33'42		minimum elong	-1556 May 23 j 14:10	17° $\mathcal{B}$ 31'33	1°26'26
evening set	-1562 Apr 23 j 16:43	3° $\mathcal{B}$ 28'34		max. Earth dist.	-1556 May 23 j 13:41	17° $\mathcal{B}$ 31'30	30.93372 AU
				morning rise	-1556 Jun 08 j 21:43	18° $\mathcal{B}$ 07'39	
conjunction	-1562 May 09 j 23:28	4° $\mathcal{B}$ 04'36	-1°43'51	retrograde	-1556 Sep 06 j 03:12	20° $\mathcal{B}$ 03'13	
minimum elong	-1562 May 09 j 23:29	4° $\mathcal{B}$ 04'36	1°43'50	opposition	-1556 Nov 22 j 22:26	18° $\mathcal{B}$ 39'13	-1°30'38
max. Earth dist.	-1562 May 10 j 05:32	4° $\mathcal{B}$ 05'10	30.88079 AU	min. Earth dist.	-1556 Nov 22 j 23:51	18° $\mathcal{B}$ 39'07	28.93769 AU
morning rise	-1562 May 26 j 06:45	4° $\mathcal{B}$ 40'43		direct	-1555 Feb 09 j 07:40	17° $\mathcal{B}$ 14'27	
retrograde	-1562 Aug 24 j 03:02	6° $\mathcal{B}$ 37'13		evening set	-1555 May 09 j 20:19	19° $\mathcal{B}$ 09'44	
opposition	-1562 Nov 10 j 07:33	5° $\mathcal{B}$ 12'41	-1°49'42				
min. Earth dist.	-1562 Nov 10 j 01:59	5° $\mathcal{B}$ 13'05	28.88606 AU	conjunction	-1555 May 26 j 04:25	19° $\mathcal{B}$ 45'50	-1°23'04
direct	-1561 Jan 27 j 09:08	3° $\mathcal{B}$ 48'04		minimum elong	-1555 May 26 j 04:26	19° $\mathcal{B}$ 45'50	1°23'03
evening set	-1561 Apr 26 j 06:56	5° $\mathcal{B}$ 43'00		max. Earth dist.	-1555 May 26 j 02:09	19° $\mathcal{B}$ 45'37	30.94026 AU
				morning rise	-1555 Jun 11 j 12:06	20° $\mathcal{B}$ 21'56	
conjunction	-1561 May 12 j 13:51	6° $\mathcal{B}$ 19'03	-1°41'19	retrograde	-1555 Sep 08 j 14:43	22° $\mathcal{B}$ 17'19	
minimum elong	-1561 May 12 j 13:51	6° $\mathcal{B}$ 19'03	1°41'18	opposition	-1555 Nov 25 j 08:41	20° $\mathcal{B}$ 53'22	-1°26'57

Attention, astronomical year style is used: The year -1555 in astronomical counting style is the year 1556 BCE in historical counting style.

min. Earth dist.	-1555 Nov 25 j 10:10	20° <b>8</b> 53'15	28.94394 AU	conjunction	-1548 Jun 11 j 05:49	5° <b>II</b> 21'28	-0°56'23
direct	-1554 Feb 11 j 20:41	19° <b>8</b> 28'32		minimum elong	-1548 Jun 11 j 05:49	5° <b>II</b> 21'28	0°56'22
evening set	-1554 May 12 j 10:18	21° <b>8</b> 23'51		max. Earth dist.	-1548 Jun 10 j 21:38	5° <b>II</b> 20'42	30.99884 AU
				morning rise	-1548 Jun 27 j 12:51	5° <b>II</b> 57'26	
conjunction	-1554 May 28 j 18:36	21° <b>8</b> 59'57	-1°19'35	retrograde	-1548 Sep 24 j 00:00	7° <b>II</b> 51'41	
minimum elong	-1554 May 28 j 18:37	21° <b>8</b> 59'57	1°19'33	opposition	-1548 Dec 10 j 07:58	6° <b>II</b> 28'13	-0°58'03
max. Earth dist.	-1554 May 28 j 15:36	21° <b>8</b> 59'40	30.94638 AU	min. Earth dist.	-1548 Dec 10 j 14:22	6° <b>II</b> 27'46	29.00519 AU
morning rise	-1554 Jun 14 j 02:13	22° <b>8</b> 36'02		direct	-1547 Feb 27 j 10:33	5° <b>II</b> 03'11	
retrograde	-1554 Sep 11 j 00:55	24° <b>8</b> 31'15		evening set	-1547 May 28 j 11:07	6° <b>II</b> 58'49	
opposition	-1554 Nov 27 j 19:04	23° <b>8</b> 07'19	-1°23'10				
min. Earth dist.	-1554 Nov 27 j 22:25	23° <b>8</b> 07'05	28.95003 AU	conjunction	-1547 Jun 13 j 19:36	7° <b>II</b> 34'54	-0°52'12
direct	-1553 Feb 14 j 08:14	21° <b>8</b> 42'25		minimum elong	-1547 Jun 13 j 19:37	7° <b>II</b> 34'54	0°52'10
evening set	-1553 May 15 j 00:21	23° <b>8</b> 37'46		max. Earth dist.	-1547 Jun 13 j 11:32	7° <b>II</b> 34'09	31.01097 AU
				morning rise	-1547 Jun 30 j 02:17	8° <b>II</b> 10'51	
conjunction	-1553 May 31 j 08:46	24° <b>8</b> 13'53	-1°15'58	retrograde	-1547 Sep 26 j 09:29	10° <b>II</b> 04'59	
minimum elong	-1553 May 31 j 08:47	24° <b>8</b> 13'53	1°15'56	opposition	-1547 Dec 12 j 18:10	8° <b>II</b> 41'38	-0°53'32
max. Earth dist.	-1553 May 31 j 04:50	24° <b>8</b> 13'31	30.95268 AU	min. Earth dist.	-1547 Dec 13 j 02:17	8° <b>II</b> 41'03	29.01730 AU
morning rise	-1553 Jun 16 j 16:21	24° <b>8</b> 49'56		direct	-1546 Mar 01 j 21:22	7° <b>II</b> 16'36	
retrograde	-1553 Sep 13 j 12:46	26° <b>8</b> 44'58		evening set	-1546 May 31 j 00:55	9° <b>II</b> 12'18	
opposition	-1553 Nov 30 j 05:08	25° <b>8</b> 21'06	-1°19'15				
min. Earth dist.	-1553 Nov 30 j 08:21	25° <b>8</b> 20'52	28.95645 AU	conjunction	-1546 Jun 16 j 09:15	9° <b>II</b> 48'22	-0°47'55
direct	-1552 Feb 16 j 21:27	23° <b>8</b> 56'08		minimum elong	-1546 Jun 16 j 09:15	9° <b>II</b> 48'22	0°47'54
evening set	-1552 May 16 j 14:22	25° <b>8</b> 51'31		max. Earth dist.	-1546 Jun 15 j 23:25	9° <b>II</b> 47'27	31.02301 AU
				morning rise	-1546 Jul 02 j 15:52	10° <b>II</b> 24'18	
conjunction	-1552 Jun 01 j 22:46	26° <b>8</b> 27'37	-1°12'15	retrograde	-1546 Sep 28 j 20:30	12° <b>II</b> 18'17	
minimum elong	-1552 Jun 01 j 22:47	26° <b>8</b> 27'37	1°12'14	opposition	-1546 Dec 15 j 04:20	10° <b>II</b> 55'02	-0°48'56
max. Earth dist.	-1552 Jun 01 j 17:34	26° <b>8</b> 27'08	30.95946 AU	min. Earth dist.	-1546 Dec 15 j 12:31	10° <b>II</b> 54'27	29.02894 AU
morning rise	-1552 Jun 18 j 06:18	27° <b>8</b> 03'39		direct	-1545 Mar 04 j 09:45	9° <b>II</b> 29'59	
retrograde	-1552 Sep 15 j 00:26	28° <b>8</b> 58'31		evening set	-1545 Jun 02 j 14:48	11° <b>II</b> 25'45	
opposition	-1552 Dec 01 j 15:27	27° <b>8</b> 34'41	-1°15'13				
min. Earth dist.	-1552 Dec 01 j 20:03	27° <b>8</b> 34'22	28.96377 AU	conjunction	-1545 Jun 18 j 23:03	12° <b>II</b> 01'48	-0°43'35
direct	-1551 Feb 18 j 09:01	26° <b>8</b> 09'41		minimum elong	-1545 Jun 18 j 23:03	12° <b>II</b> 01'48	0°43'33
evening set	-1551 May 19 j 03:59	28° <b>8</b> 05'06		max. Earth dist.	-1545 Jun 18 j 12:28	12° <b>II</b> 00'49	31.03414 AU
				morning rise	-1545 Jul 05 j 05:18	12° <b>II</b> 37'42	
conjunction	-1551 Jun 04 j 12:33	28° <b>8</b> 41'11	-1°08'26	retrograde	-1545 Oct 01 j 06:27	14° <b>II</b> 31'33	
minimum elong	-1551 Jun 04 j 12:34	28° <b>8</b> 41'11	1°08'24	opposition	-1545 Dec 17 j 14:38	13° <b>II</b> 08'23	-0°44'15
max. Earth dist.	-1551 Jun 04 j 07:31	28° <b>8</b> 40'43	30.96739 AU	min. Earth dist.	-1545 Dec 18 j 00:48	13° <b>II</b> 07'40	29.03963 AU
morning rise	-1551 Jun 20 j 19:54	29° <b>8</b> 17'12		direct	-1544 Mar 05 j 20:12	11° <b>II</b> 43'18	
	-1551 Jul 11 j 14:58	0° <b>II</b>		evening set	-1544 Jun 04 j 04:36	13° <b>II</b> 39'06	
retrograde	-1551 Sep 17 j 12:33	1° <b>II</b> 11'54					
	-1551 Nov 27 j 01:52	30° <b>8</b>		conjunction	-1544 Jun 20 j 12:43	14° <b>II</b> 15'08	-0°39'11
opposition	-1551 Dec 04 j 01:37	29° <b>8</b> 48'08	-1°11'05	minimum elong	-1544 Jun 20 j 12:43	14° <b>II</b> 15'08	0°39'10
min. Earth dist.	-1551 Dec 04 j 06:19	29° <b>8</b> 47'48	28.97221 AU	max. Earth dist.	-1544 Jun 20 j 00:55	14° <b>II</b> 14'03	31.04439 AU
direct	-1550 Feb 20 j 23:20	28° <b>8</b> 23'06		morning rise	-1544 Jul 06 j 18:44	14° <b>II</b> 51'01	
	-1550 May 13 j 00:15	0° <b>II</b>		retrograde	-1544 Oct 02 j 17:28	16° <b>II</b> 44'42	
evening set	-1550 May 21 j 17:52	0° <b>II</b> 18'34		opposition	-1544 Dec 19 j 00:53	15° <b>II</b> 21'36	-0°39'32
				min. Earth dist.	-1544 Dec 19 j 11:03	15° <b>II</b> 20'53	29.04928 AU
conjunction	-1550 Jun 07 j 02:19	0° <b>II</b> 54'39	-1°04'31	direct	-1543 Mar 08 j 08:56	13° <b>II</b> 56'29	
minimum elong	-1550 Jun 07 j 02:19	0° <b>II</b> 54'39	1°04'30	evening set	-1543 Jun 06 j 18:12	15° <b>II</b> 52'18	
max. Earth dist.	-1550 Jun 06 j 19:38	0° <b>II</b> 54'02	30.97659 AU				
morning rise	-1550 Jun 23 j 09:41	1° <b>II</b> 30'39		conjunction	-1543 Jun 23 j 02:06	16° <b>II</b> 28'19	-0°34'44
retrograde	-1550 Sep 20 j 00:07	3° <b>II</b> 25'12		minimum elong	-1543 Jun 23 j 02:06	16° <b>II</b> 28'19	0°34'43
opposition	-1550 Dec 06 j 11:41	2° <b>II</b> 01'30	-1°06'50	max. Earth dist.	-1543 Jun 22 j 12:52	16° <b>II</b> 27'06	31.05357 AU
min. Earth dist.	-1550 Dec 06 j 17:06	2° <b>II</b> 01'07	28.98215 AU	morning rise	-1543 Jul 09 j 07:51	17° <b>II</b> 04'10	
direct	-1549 Feb 23 j 10:36	0° <b>II</b> 36'27		retrograde	-1543 Oct 05 j 04:00	18° <b>II</b> 57'42	
evening set	-1549 May 24 j 07:35	2° <b>II</b> 31'58		opposition	-1543 Dec 21 j 11:11	17° <b>II</b> 34'38	-0°34'45
				min. Earth dist.	-1543 Dec 21 j 22:59	17° <b>II</b> 33'48	29.05811 AU
conjunction	-1549 Jun 09 j 16:14	3° <b>II</b> 08'03	-1°00'30	direct	-1542 Mar 10 j 20:48	16° <b>II</b> 09'28	
minimum elong	-1549 Jun 09 j 16:14	3° <b>II</b> 08'03	1°00'28	evening set	-1542 Jun 09 j 07:46	18° <b>II</b> 05'18	
max. Earth dist.	-1549 Jun 09 j 09:55	3° <b>II</b> 07'28	30.98719 AU				
morning rise	-1549 Jun 25 j 23:17	3° <b>II</b> 44'03		conjunction	-1542 Jun 25 j 15:36	18° <b>II</b> 41'17	-0°30'14
retrograde	-1549 Sep 22 j 11:10	5° <b>II</b> 38'26		minimum elong	-1542 Jun 25 j 15:36	18° <b>II</b> 41'17	0°30'13
opposition	-1549 Dec 08 j 21:52	4° <b>II</b> 14'51	-1°02'30	max. Earth dist.	-1542 Jun 25 j 02:06	18° <b>II</b> 40'03	31.06211 AU
min. Earth dist.	-1549 Dec 09 j 04:05	4° <b>II</b> 14'25	28.99321 AU	morning rise	-1542 Jul 11 j 20:59	19° <b>II</b> 17'06	
direct	-1548 Feb 25 j 23:19	2° <b>II</b> 49'48		retrograde	-1542 Oct 07 j 14:48	21° <b>II</b> 10'28	
evening set	-1548 May 25 j 21:24	4° <b>II</b> 45'23		opposition	-1542 Dec 23 j 21:13	19° <b>II</b> 47'26	-0°29'55
				min. Earth dist.	-1542 Dec 24 j 09:32	19° <b>II</b> 46'34	29.06628 AU

Attention, astronomical year style is used: The year -1541 in astronomical counting style is the year 1542 BCE in historical counting style.

direct	-1541 Mar 13 j 10:59	18°II22'13		opposition	-1535 Jan 05 j 10:09	3°☾00'38	-0°00'23
evening set	-1541 Jun 11 j 21:25	20°II18'04		min. Earth dist.	-1535 Jan 06 j 01:58	2°☾59'31	29.12690 AU
				asc. node	-1535 Feb 03 j 04:16	2°☾14'51	
conjunction	-1541 Jun 28 j 04:53	20°II54'02	-0°25'43	direct	-1535 Mar 26 j 09:14	1°☾35'20	
minimum elong	-1541 Jun 28 j 04:53	20°II54'02	0°25'41	evening set	-1535 Jun 25 j 04:13	3°☾31'23	
max. Earth dist.	-1541 Jun 27 j 13:35	20°II52'37	31.07019 AU				
morning rise	-1541 Jul 14 j 10:02	21°II29'48		conjunction	-1535 Jul 11 j 09:54	4°☾07'12	0°02'04
retrograde	-1541 Oct 10 j 02:06	23°II23'01		minimum elong	-1535 Jul 11 j 09:54	4°☾07'12	0°02'05
opposition	-1541 Dec 26 j 07:23	22°II00'01	-0°25'03	behind sun begin	-1535 Jul 11 j 03:20	4°☾06'37	
min. Earth dist.	-1541 Dec 26 j 20:30	21°II59'06	29.07442 AU	behind sun end	-1535 Jul 11 j 16:28	4°☾07'47	
direct	-1540 Mar 14 j 22:33	20°II34'44		max. Earth dist.	-1535 Jul 10 j 16:10	4°☾05'34	31.13331 AU
evening set	-1540 Jun 13 j 10:38	22°II30'36		morning rise	-1535 Jul 27 j 12:30	4°☾42'45	
				retrograde	-1535 Oct 22 j 16:20	6°☾35'17	
conjunction	-1540 Jun 29 j 18:00	23°II06'32	-0°21'09	opposition	-1534 Jan 07 j 20:19	5°☾12'46	0°04'34
minimum elong	-1540 Jun 29 j 18:00	23°II06'32	0°21'07	min. Earth dist.	-1534 Jan 08 j 11:51	5°☾11'41	29.13987 AU
max. Earth dist.	-1540 Jun 29 j 03:09	23°II05'10	31.07839 AU	direct	-1534 Mar 28 j 21:06	3°☾47'31	
morning rise	-1540 Jul 15 j 22:37	23°II42'16		evening set	-1534 Jun 27 j 17:19	5°☾43'38	
retrograde	-1540 Oct 11 j 12:26	25°II35'19					
opposition	-1540 Dec 27 j 17:33	24°II12'22	-0°20'10	conjunction	-1534 Jul 13 j 22:33	6°☾19'25	0°06'42
min. Earth dist.	-1540 Dec 28 j 07:28	24°II11'23	29.08280 AU	minimum elong	-1534 Jul 13 j 22:34	6°☾19'25	0°06'44
direct	-1539 Mar 17 j 12:08	22°II47'03		behind sun begin	-1534 Jul 13 j 16:26	6°☾18'52	
evening set	-1539 Jun 15 j 23:57	24°II42'55		behind sun end	-1534 Jul 14 j 04:41	6°☾19'58	
				max. Earth dist.	-1534 Jul 13 j 03:47	6°☾17'41	31.14613 AU
conjunction	-1539 Jul 02 j 06:53	25°II18'50	-0°16'34	morning rise	-1534 Jul 30 j 00:40	6°☾54'56	
minimum elong	-1539 Jul 02 j 06:53	25°II18'50	0°16'32	retrograde	-1534 Oct 25 j 02:45	8°☾47'24	
max. Earth dist.	-1539 Jul 01 j 14:21	25°II17'18	31.08721 AU	opposition	-1533 Jan 10 j 06:34	7°☾25'00	0°09'32
morning rise	-1539 Jul 18 j 11:17	25°II54'31		min. Earth dist.	-1533 Jan 10 j 23:32	7°☾23'49	29.15256 AU
retrograde	-1539 Oct 14 j 00:29	27°II47'26		direct	-1533 Mar 31 j 08:03	5°☾59'47	
opposition	-1539 Dec 30 j 03:32	26°II24'32	-0°15'15	evening set	-1533 Jun 30 j 06:22	7°☾55'58	
min. Earth dist.	-1539 Dec 30 j 17:18	26°II23'34	29.09216 AU				
direct	-1538 Mar 20 j 00:09	24°II59'11		conjunction	-1533 Jul 16 j 11:16	8°☾31'43	0°11'19
evening set	-1538 Jun 18 j 13:02	26°II55'05		minimum elong	-1533 Jul 16 j 11:15	8°☾31'43	0°11'20
				behind sun begin	-1533 Jul 16 j 06:31	8°☾31'18	
conjunction	-1538 Jul 04 j 19:50	27°II30'58	-0°11'57	behind sun end	-1533 Jul 16 j 16:00	8°☾32'08	
minimum elong	-1538 Jul 04 j 19:51	27°II30'58	0°11'56	max. Earth dist.	-1533 Jul 15 j 16:21	8°☾29'58	31.15838 AU
behind sun begin	-1538 Jul 04 j 15:22	27°II30'34		morning rise	-1533 Aug 01 j 12:47	9°☾07'11	
behind sun end	-1538 Jul 05 j 00:19	27°II31'22		retrograde	-1533 Oct 27 j 13:25	10°☾59'35	
max. Earth dist.	-1538 Jul 04 j 03:50	27°II29'29	31.09704 AU	opposition	-1532 Jan 12 j 17:01	9°☾37'17	0°14'28
morning rise	-1538 Jul 20 j 23:41	28°II06'37		min. Earth dist.	-1532 Jan 13 j 10:26	9°☾36'04	29.16422 AU
retrograde	-1538 Oct 16 j 09:28	29°II59'24		direct	-1532 Apr 01 j 21:23	8°☾12'06	
opposition	-1537 Jan 01 j 13:47	28°II36'34	-0°10'18	evening set	-1532 Jul 01 j 19:21	10°☾08'19	
min. Earth dist.	-1537 Jan 02 j 04:48	28°II35'31	29.10258 AU				
direct	-1537 Mar 22 j 11:46	27°II11'13		conjunction	-1532 Jul 17 j 23:37	10°☾44'02	0°15'55
evening set	-1537 Jun 21 j 02:15	29°II07'09		minimum elong	-1532 Jul 17 j 23:37	10°☾44'02	0°15'57
				max. Earth dist.	-1532 Jul 17 j 03:02	10°☾42'07	31.16942 AU
conjunction	-1537 Jul 07 j 08:36	29°II43'01	-0°07'21	morning rise	-1532 Aug 03 j 00:42	11°☾19'28	
minimum elong	-1537 Jul 07 j 08:36	29°II43'01	0°07'19	retrograde	-1532 Oct 29 j 00:50	13°☾11'48	
behind sun begin	-1537 Jul 07 j 02:35	29°II42'29		opposition	-1531 Jan 14 j 03:28	11°☾49'33	0°19'23
behind sun end	-1537 Jul 07 j 14:36	29°II43'33		min. Earth dist.	-1531 Jan 14 j 21:35	11°☾48'17	29.17477 AU
max. Earth dist.	-1537 Jul 06 j 15:23	29°II41'26	31.10815 AU	direct	-1531 Apr 04 j 08:13	10°☾24'22	
	-1537 Jul 15 j 00:07	0°☾		evening set	-1531 Jul 04 j 08:11	12°☾20'38	
morning rise	-1537 Jul 23 j 12:08	0°☾18'38					
retrograde	-1537 Oct 18 j 20:04	2°☾11'19		conjunction	-1531 Jul 20 j 12:09	12°☾56'18	0°20'30
opposition	-1536 Jan 03 j 23:50	0°☾48'35	-0°05'21	minimum elong	-1531 Jul 20 j 12:09	12°☾56'18	0°20'31
min. Earth dist.	-1536 Jan 04 j 14:16	0°☾47'34	29.11424 AU	max. Earth dist.	-1531 Jul 19 j 15:50	12°☾54'25	31.17924 AU
	-1536 Feb 03 j 17:01	30°☾II		morning rise	-1531 Aug 05 j 12:33	13°☾31'41	
direct	-1536 Mar 23 j 23:39	29°II23'15		retrograde	-1531 Oct 31 j 11:29	15°☾23'55	
	-1536 May 11 j 05:50	0°☾		opposition	-1530 Jan 16 j 13:52	14°☾01'44	0°24'16
evening set	-1536 Jun 22 j 15:19	1°☾19'14		min. Earth dist.	-1530 Jan 17 j 09:04	14°☾00'24	29.18391 AU
				direct	-1530 Apr 06 j 22:17	12°☾36'33	
conjunction	-1536 Jul 08 j 21:22	1°☾55'04	-0°02'43	evening set	-1530 Jul 06 j 21:08	14°☾32'49	
minimum elong	-1536 Jul 08 j 21:23	1°☾55'04	0°02'41	max. Earth dist.	-1530 Jul 22 j 02:12	15°☾06'23	31.18780 AU
behind sun begin	-1536 Jul 08 j 14:49	1°☾54'30					
behind sun end	-1536 Jul 09 j 03:57	1°☾55'39		conjunction	-1530 Jul 23 j 00:28	15°☾08'27	0°25'02
max. Earth dist.	-1536 Jul 08 j 04:15	1°☾53'30	31.12032 AU	minimum elong	-1530 Jul 23 j 00:28	15°☾08'27	0°25'04
morning rise	-1536 Jul 25 j 00:22	2°☾30'40		morning rise	-1530 Aug 08 j 00:29	15°☾43'47	
retrograde	-1536 Oct 20 j 05:49	4°☾23'15		retrograde	-1530 Nov 02 j 23:40	17°☾35'56	

Attention, astronomical year style is used: The year -1529 in astronomical counting style is the year 1530 BCE in historical counting style.

opposition	-1529 Jan 19 j 00:15	16°☾13'46	0°29'06	max. Earth dist.	-1523 Aug 06 j 10:56	0°♌26'01	31.24298 AU
min. Earth dist.	-1529 Jan 19 j 19:29	16°☾12'26	29.19196 AU				
direct	-1529 Apr 09 j 11:18	14°☾48'33		conjunction	-1523 Aug 07 j 10:48	0°♌28'13	0°55'23
evening set	-1529 Jul 09 j 09:47	16°☾44'51		minimum elong	-1523 Aug 07 j 10:48	0°♌28'13	0°55'24
				morning rise	-1523 Aug 23 j 06:34	1°♌03'13	
conjunction	-1529 Jul 25 j 12:45	17°☾20'26	0°29'33	retrograde	-1523 Nov 17 j 19:05	2°♌54'54	
minimum elong	-1529 Jul 25 j 12:45	17°☾20'26	0°29'34	opposition	-1522 Feb 03 j 01:39	1°♌32'57	1°01'18
max. Earth dist.	-1529 Jul 24 j 14:50	17°☾18'24	31.19527 AU	min. Earth dist.	-1522 Feb 03 j 22:54	1°♌31'29	29.24855 AU
morning rise	-1529 Aug 10 j 12:01	17°☾55'43		direct	-1522 Apr 24 j 20:13	0°♌07'42	
retrograde	-1529 Nov 05 j 08:21	19°☾47'46		evening set	-1522 Jul 24 j 23:23	2°♌04'01	
opposition	-1528 Jan 21 j 10:47	18°☾25'38	0°33'54				
min. Earth dist.	-1528 Jan 22 j 07:30	18°☾24'11	29.19909 AU	conjunction	-1522 Aug 09 j 22:20	2°♌39'17	0°59'26
direct	-1528 Apr 10 j 23:46	17°☾00'23		minimum elong	-1522 Aug 09 j 22:20	2°♌39'17	0°59'28
evening set	-1528 Jul 10 j 22:26	18°☾56'39		max. Earth dist.	-1522 Aug 08 j 23:19	2°♌37'09	31.25294 AU
max. Earth dist.	-1528 Jul 26 j 01:38	19°☾30'03	31.20221 AU	morning rise	-1522 Aug 25 j 17:20	3°♌14'14	
				retrograde	-1522 Nov 20 j 05:19	5°♌05'54	
conjunction	-1528 Jul 27 j 00:45	19°☾32'12	0°34'00	opposition	-1521 Feb 05 j 12:24	3°♌44'02	1°05'35
minimum elong	-1528 Jul 27 j 00:44	19°☾32'11	0°34'02	min. Earth dist.	-1521 Feb 06 j 10:23	3°♌42'31	29.25833 AU
morning rise	-1528 Aug 11 j 23:35	20°☾07'26		direct	-1521 Apr 27 j 09:34	2°♌18'50	
retrograde	-1528 Nov 06 j 18:47	21°☾59'23		evening set	-1521 Jul 27 j 11:28	4°♌15'12	
opposition	-1527 Jan 22 j 21:10	20°☾37'15	0°38'38	max. Earth dist.	-1521 Aug 11 j 09:10	4°♌48'09	31.26240 AU
min. Earth dist.	-1527 Jan 23 j 17:18	20°☾35'51	29.20593 AU				
direct	-1527 Apr 13 j 12:24	19°☾11'58		conjunction	-1521 Aug 12 j 09:35	4°♌50'25	1°03'25
evening set	-1527 Jul 13 j 10:42	21°☾08'13		minimum elong	-1521 Aug 12 j 09:35	4°♌50'25	1°03'26
				morning rise	-1521 Aug 28 j 04:04	5°♌25'18	
conjunction	-1527 Jul 29 j 12:34	21°☾43'43	0°38'25	retrograde	-1521 Nov 22 j 17:26	7°♌16'59	
minimum elong	-1527 Jul 29 j 12:34	21°☾43'43	0°38'26	opposition	-1520 Feb 07 j 23:08	5°♌55'10	1°09'46
max. Earth dist.	-1527 Jul 28 j 13:40	21°☾41'36	31.20896 AU	min. Earth dist.	-1520 Feb 08 j 20:44	5°♌53'40	29.26747 AU
morning rise	-1527 Aug 14 j 10:43	22°☾18'54		direct	-1520 Apr 28 j 21:52	4°♌30'01	
retrograde	-1527 Nov 09 j 04:09	24°☾10'46		evening set	-1520 Jul 28 j 23:22	6°♌26'24	
opposition	-1526 Jan 25 j 07:41	22°☾48'39	0°43'18				
min. Earth dist.	-1526 Jan 26 j 05:04	22°☾47'10	29.21292 AU	conjunction	-1520 Aug 13 j 21:00	7°♌01'34	1°07'17
direct	-1526 Apr 15 j 23:01	21°☾23'20		minimum elong	-1520 Aug 13 j 20:59	7°♌01'34	1°07'19
evening set	-1526 Jul 15 j 23:03	23°☾19'35		max. Earth dist.	-1520 Aug 12 j 21:11	6°♌59'21	31.27089 AU
max. Earth dist.	-1526 Jul 31 j 01:08	23°☾52'53	31.21620 AU	morning rise	-1520 Aug 29 j 14:39	7°♌36'25	
				retrograde	-1520 Nov 24 j 02:47	9°♌28'05	
conjunction	-1526 Aug 01 j 00:18	23°☾55'02	0°42'45	opposition	-1519 Feb 09 j 10:04	8°♌06'20	1°13'52
minimum elong	-1526 Aug 01 j 00:18	23°☾55'02	0°42'47	min. Earth dist.	-1519 Feb 10 j 09:01	8°♌04'45	29.27545 AU
morning rise	-1526 Aug 16 j 21:54	24°☾30'10		direct	-1519 May 01 j 09:54	6°♌41'13	
retrograde	-1526 Nov 11 j 13:07	26°☾21'56		evening set	-1519 Jul 31 j 11:13	8°♌37'36	
opposition	-1525 Jan 27 j 18:02	24°☾59'51	0°47'55	max. Earth dist.	-1519 Aug 15 j 07:11	9°♌10'25	31.27820 AU
min. Earth dist.	-1525 Jan 28 j 14:40	24°☾58'25	29.22048 AU				
direct	-1525 Apr 18 j 11:35	23°☾34'31		conjunction	-1519 Aug 16 j 08:06	9°♌12'44	1°11'04
evening set	-1525 Jul 18 j 11:20	25°☾30'46		minimum elong	-1519 Aug 16 j 08:06	9°♌12'44	1°11'05
				morning rise	-1519 Sep 01 j 01:17	9°♌47'32	
conjunction	-1525 Aug 03 j 11:58	26°☾06'10	0°47'02	retrograde	-1519 Nov 26 j 13:40	11°♌39'11	
minimum elong	-1525 Aug 03 j 11:58	26°☾06'10	0°47'03	opposition	-1518 Feb 11 j 20:53	10°♌17'28	1°17'51
max. Earth dist.	-1525 Aug 02 j 12:22	26°☾03'58	31.22416 AU	min. Earth dist.	-1518 Feb 12 j 19:14	10°♌15'55	29.28205 AU
morning rise	-1525 Aug 19 j 08:55	26°☾41'15		direct	-1518 May 03 j 22:48	8°♌52'22	
retrograde	-1525 Nov 13 j 22:26	28°☾32'59		evening set	-1518 Aug 02 j 23:02	10°♌48'46	
opposition	-1524 Jan 30 j 04:39	27°☾10'55	0°52'27				
min. Earth dist.	-1524 Jan 31 j 01:56	27°☾09'26	29.22909 AU	conjunction	-1518 Aug 18 j 19:21	11°♌23'51	1°14'44
direct	-1524 Apr 19 j 21:57	25°☾45'36		minimum elong	-1518 Aug 18 j 19:21	11°♌23'51	1°14'46
evening set	-1524 Jul 19 j 23:17	27°☾41'51		max. Earth dist.	-1518 Aug 17 j 18:28	11°♌21'32	31.28396 AU
				morning rise	-1518 Sep 03 j 11:46	11°♌58'36	
conjunction	-1524 Aug 04 j 23:24	28°☾17'12	0°51'15	retrograde	-1518 Nov 28 j 23:26	13°♌50'15	
minimum elong	-1524 Aug 04 j 23:24	28°☾17'12	0°51'16	opposition	-1517 Feb 14 j 07:50	12°♌28'33	1°21'43
max. Earth dist.	-1524 Aug 04 j 00:29	28°☾15'04	31.23324 AU	min. Earth dist.	-1517 Feb 15 j 07:31	12°♌26'55	29.28725 AU
morning rise	-1524 Aug 20 j 19:41	28°☾52'14		direct	-1517 May 06 j 09:50	11°♌03'27	
	-1524 Sep 24 j 19:18	0°♌		evening set	-1517 Aug 05 j 10:45	12°♌59'51	
retrograde	-1524 Nov 15 j 07:51	0°♌43'56		max. Earth dist.	-1517 Aug 20 j 05:12	13°♌32'32	31.28854 AU
	-1523 Jan 07 j 19:33	30°♌☾					
opposition	-1523 Jan 31 j 15:13	29°☾21'56	0°56'55	conjunction	-1517 Aug 21 j 06:23	13°♌34'53	1°18'18
min. Earth dist.	-1523 Feb 01 j 12:18	29°☾20'28	29.23851 AU	minimum elong	-1517 Aug 21 j 06:22	13°♌34'53	1°18'19
direct	-1523 Apr 22 j 10:02	27°☾56'38		morning rise	-1517 Sep 05 j 22:12	14°♌09'35	
evening set	-1523 Jul 22 j 11:24	29°☾52'55			-1517 Sep 30 j 18:23	15°♌	
	-1523 Jul 25 j 17:22	0°♌		retrograde	-1517 Dec 01 j 08:25	16°♌01'13	

Attention, astronomical year style is used: The year -1516 in astronomical counting style is the year 1517 BCE in historical counting style.

	-1516 Feb 04 j 05:39	15° $\mathbb{R}$ 8 $\mathbb{Q}$		conjunction	-1510 Sep 05 j 07:36	28° $\mathbb{Q}$ 48'38	1°39'46
opposition	-1516 Feb 16 j 18:47	14° $\mathbb{Q}$ 39'31	1°25'27	minimum elong	-1510 Sep 05 j 07:35	28° $\mathbb{Q}$ 48'38	1°39'48
min. Earth dist.	-1516 Feb 17 j 17:49	14° $\mathbb{Q}$ 37'56	29.29124 AU	morning rise	-1510 Sep 20 j 19:09	29° $\mathbb{Q}$ 23'02	
direct	-1516 May 07 j 22:43	13° $\mathbb{Q}$ 14'25			-1510 Oct 08 j 12:03	0° $\mathbb{N}$	
	-1516 Aug 01 j 21:54	15° $\mathbb{Q}$		retrograde	-1510 Dec 16 j 07:08	1° $\mathbb{N}$ 14'47	
evening set	-1516 Aug 06 j 22:09	15° $\mathbb{Q}$ 10'47			-1509 Feb 27 j 19:19	30° $\mathbb{R}$ 8 $\mathbb{Q}$	
				opposition	-1509 Mar 04 j 00:07	29° $\mathbb{Q}$ 53'07	1°47'55
conjunction	-1516 Aug 22 j 17:06	15° $\mathbb{Q}$ 45'46	1°21'45	min. Earth dist.	-1509 Mar 04 j 21:40	29° $\mathbb{Q}$ 51'38	29.32230 AU
minimum elong	-1516 Aug 22 j 17:06	15° $\mathbb{Q}$ 45'46	1°21'46	direct	-1509 May 24 j 08:31	28° $\mathbb{Q}$ 28'12	
max. Earth dist.	-1516 Aug 21 j 15:27	15° $\mathbb{Q}$ 43'23	31.29202 AU		-1509 Aug 11 j 15:02	0° $\mathbb{N}$	
morning rise	-1516 Sep 07 j 08:19	16° $\mathbb{Q}$ 20'26		evening set	-1509 Aug 23 j 03:22	0° $\mathbb{N}$ 24'28	
retrograde	-1516 Dec 02 j 17:32	18° $\mathbb{Q}$ 12'04					
opposition	-1515 Feb 18 j 05:48	16° $\mathbb{Q}$ 50'20	1°29'04	conjunction	-1509 Sep 07 j 17:51	0° $\mathbb{N}$ 59'08	1°42'18
min. Earth dist.	-1515 Feb 19 j 05:32	16° $\mathbb{Q}$ 48'43	29.29453 AU	minimum elong	-1509 Sep 07 j 17:50	0° $\mathbb{N}$ 59'08	1°42'18
direct	-1515 May 10 j 09:03	15° $\mathbb{Q}$ 25'14		max. Earth dist.	-1509 Sep 06 j 18:42	0° $\mathbb{N}$ 56'58	31.32412 AU
evening set	-1515 Aug 09 j 09:27	17° $\mathbb{Q}$ 21'34		morning rise	-1509 Sep 23 j 04:43	1° $\mathbb{N}$ 33'29	
max. Earth dist.	-1515 Aug 24 j 02:58	17° $\mathbb{Q}$ 54'11	31.29507 AU	retrograde	-1509 Dec 18 j 17:46	3° $\mathbb{N}$ 25'18	
				opposition	-1508 Mar 05 j 11:35	2° $\mathbb{N}$ 03'39	1°50'32
conjunction	-1515 Aug 25 j 03:51	17° $\mathbb{Q}$ 56'31	1°25'04	min. Earth dist.	-1508 Mar 06 j 09:56	2° $\mathbb{N}$ 02'08	29.32827 AU
minimum elong	-1515 Aug 25 j 03:51	17° $\mathbb{Q}$ 56'31	1°25'05	direct	-1508 May 25 j 19:56	0° $\mathbb{N}$ 38'49	
morning rise	-1515 Sep 09 j 18:23	18° $\mathbb{Q}$ 31'08		evening set	-1508 Aug 24 j 14:02	2° $\mathbb{N}$ 35'04	
retrograde	-1515 Dec 05 j 02:14	20° $\mathbb{Q}$ 22'44		max. Earth dist.	-1508 Sep 08 j 05:00	3° $\mathbb{N}$ 07'33	31.32973 AU
opposition	-1514 Feb 20 j 16:38	19° $\mathbb{Q}$ 01'00	1°32'34				
min. Earth dist.	-1514 Feb 21 j 16:10	18° $\mathbb{Q}$ 59'23	29.29746 AU	conjunction	-1508 Sep 09 j 03:52	3° $\mathbb{N}$ 09'41	1°44'41
direct	-1514 May 12 j 20:48	17° $\mathbb{Q}$ 35'53		minimum elong	-1508 Sep 09 j 03:52	3° $\mathbb{N}$ 09'41	1°44'42
evening set	-1514 Aug 11 j 20:46	19° $\mathbb{Q}$ 32'11		morning rise	-1508 Sep 24 j 14:14	3° $\mathbb{N}$ 44'01	
				retrograde	-1508 Dec 20 j 02:42	5° $\mathbb{N}$ 35'53	
conjunction	-1514 Aug 27 j 14:23	20° $\mathbb{Q}$ 07'04	1°28'17	opposition	-1507 Mar 07 j 22:58	4° $\mathbb{N}$ 14'15	1°53'00
minimum elong	-1514 Aug 27 j 14:23	20° $\mathbb{Q}$ 07'04	1°28'18	min. Earth dist.	-1507 Mar 08 j 20:26	4° $\mathbb{N}$ 12'47	29.33337 AU
max. Earth dist.	-1514 Aug 26 j 12:48	20° $\mathbb{Q}$ 04'41	31.29806 AU	direct	-1507 May 28 j 08:41	2° $\mathbb{N}$ 49'28	
morning rise	-1514 Sep 12 j 04:24	20° $\mathbb{Q}$ 41'39		evening set	-1507 Aug 27 j 00:50	4° $\mathbb{N}$ 45'42	
retrograde	-1514 Dec 07 j 13:01	22° $\mathbb{Q}$ 33'16					
opposition	-1513 Feb 23 j 03:39	21° $\mathbb{Q}$ 11'30	1°35'55	conjunction	-1507 Sep 11 j 14:01	5° $\mathbb{N}$ 20'16	1°46'55
min. Earth dist.	-1513 Feb 24 j 02:49	21° $\mathbb{Q}$ 09'55	29.30084 AU	minimum elong	-1507 Sep 11 j 14:01	5° $\mathbb{N}$ 20'16	1°46'54
direct	-1513 May 15 j 07:06	19° $\mathbb{Q}$ 46'23		max. Earth dist.	-1507 Sep 10 j 14:42	5° $\mathbb{N}$ 18'06	31.33420 AU
evening set	-1513 Aug 14 j 07:45	21° $\mathbb{Q}$ 42'40		morning rise	-1507 Sep 26 j 23:50	5° $\mathbb{N}$ 54'34	
max. Earth dist.	-1513 Aug 29 j 00:44	22° $\mathbb{Q}$ 15'16	31.30169 AU	retrograde	-1507 Dec 22 j 12:13	7° $\mathbb{N}$ 46'29	
				opposition	-1506 Mar 10 j 10:23	6° $\mathbb{N}$ 24'52	1°55'18
conjunction	-1513 Aug 30 j 00:50	22° $\mathbb{Q}$ 17'30	1°31'21	min. Earth dist.	-1506 Mar 11 j 08:22	6° $\mathbb{N}$ 23'22	29.33736 AU
minimum elong	-1513 Aug 30 j 00:50	22° $\mathbb{Q}$ 17'30	1°31'22	direct	-1506 May 30 j 18:56	5° $\mathbb{N}$ 00'07	
morning rise	-1513 Sep 14 j 14:03	22° $\mathbb{Q}$ 52'02		evening set	-1506 Aug 29 j 11:33	6° $\mathbb{N}$ 56'19	
retrograde	-1513 Dec 09 j 22:42	24° $\mathbb{Q}$ 43'40		max. Earth dist.	-1506 Sep 13 j 01:44	7° $\mathbb{N}$ 28'45	31.33746 AU
opposition	-1512 Feb 25 j 14:49	23° $\mathbb{Q}$ 21'54	1°39'08				
min. Earth dist.	-1512 Feb 26 j 14:02	23° $\mathbb{Q}$ 20'18	29.30494 AU	conjunction	-1506 Sep 14 j 00:13	7° $\mathbb{N}$ 30'51	1°48'59
direct	-1512 May 16 j 20:16	21° $\mathbb{Q}$ 56'49		minimum elong	-1506 Sep 14 j 00:13	7° $\mathbb{N}$ 30'51	1°49'00
evening set	-1512 Aug 15 j 18:50	23° $\mathbb{Q}$ 53'05		morning rise	-1506 Sep 29 j 09:24	8° $\mathbb{N}$ 05'07	
max. Earth dist.	-1512 Aug 30 j 10:21	24° $\mathbb{Q}$ 25'33	31.30633 AU	retrograde	-1506 Dec 24 j 21:08	9° $\mathbb{N}$ 57'05	
				opposition	-1505 Mar 12 j 22:01	8° $\mathbb{N}$ 35'27	1°57'26
conjunction	-1512 Aug 31 j 11:06	24° $\mathbb{Q}$ 27'52	1°34'18	min. Earth dist.	-1505 Mar 13 j 19:49	8° $\mathbb{N}$ 33'58	29.33985 AU
minimum elong	-1512 Aug 31 j 11:06	24° $\mathbb{Q}$ 27'52	1°34'19	direct	-1505 Jun 02 j 06:57	7° $\mathbb{N}$ 10'44	
morning rise	-1512 Sep 15 j 23:52	25° $\mathbb{Q}$ 02'21		evening set	-1505 Aug 31 j 22:11	9° $\mathbb{N}$ 06'53	
retrograde	-1512 Dec 11 j 10:27	26° $\mathbb{Q}$ 54'01		max. Earth dist.	-1505 Sep 15 j 10:50	9° $\mathbb{N}$ 39'12	31.33926 AU
opposition	-1511 Feb 27 j 01:47	25° $\mathbb{Q}$ 32'15	1°42'13				
min. Earth dist.	-1511 Feb 27 j 23:49	25° $\mathbb{Q}$ 30'45	29.31018 AU	conjunction	-1505 Sep 16 j 10:07	9° $\mathbb{N}$ 41'22	1°50'55
direct	-1511 May 19 j 07:45	24° $\mathbb{Q}$ 07'12		minimum elong	-1505 Sep 16 j 10:06	9° $\mathbb{N}$ 41'22	1°50'55
evening set	-1511 Aug 18 j 05:37	26° $\mathbb{Q}$ 03'29		morning rise	-1505 Oct 01 j 18:54	10° $\mathbb{N}$ 15'36	
				retrograde	-1505 Dec 27 j 08:02	12° $\mathbb{N}$ 07'37	
conjunction	-1511 Sep 02 j 21:26	26° $\mathbb{Q}$ 38'13	1°37'06	opposition	-1504 Mar 14 j 09:40	10° $\mathbb{N}$ 45'57	1°59'25
minimum elong	-1511 Sep 02 j 21:26	26° $\mathbb{Q}$ 38'13	1°37'07	min. Earth dist.	-1504 Mar 15 j 07:07	10° $\mathbb{N}$ 44'30	29.34112 AU
max. Earth dist.	-1511 Sep 01 j 21:58	26° $\mathbb{Q}$ 36'02	31.31192 AU	direct	-1504 Jun 03 j 17:32	9° $\mathbb{N}$ 21'15	
morning rise	-1511 Sep 18 j 09:28	27° $\mathbb{Q}$ 12'40		evening set	-1504 Sep 02 j 08:36	11° $\mathbb{N}$ 17'20	
retrograde	-1511 Dec 13 j 19:51	29° $\mathbb{Q}$ 04'22					
opposition	-1510 Mar 01 j 13:00	27° $\mathbb{Q}$ 42'39	1°45'08	conjunction	-1504 Sep 17 j 20:09	11° $\mathbb{N}$ 51'48	1°52'41
min. Earth dist.	-1510 Mar 02 j 11:45	27° $\mathbb{Q}$ 41'06	29.31610 AU	minimum elong	-1504 Sep 17 j 20:08	11° $\mathbb{N}$ 51'48	1°52'42
direct	-1510 May 21 j 19:17	26° $\mathbb{Q}$ 17'40		max. Earth dist.	-1504 Sep 16 j 22:10	11° $\mathbb{N}$ 49'44	31.33986 AU
evening set	-1510 Aug 20 j 16:33	28° $\mathbb{Q}$ 13'56		morning rise	-1504 Oct 03 j 04:17	12° $\mathbb{N}$ 25'59	
max. Earth dist.	-1510 Sep 04 j 07:50	28° $\mathbb{Q}$ 46'25	31.31808 AU	retrograde	-1504 Dec 28 j 17:15	14° $\mathbb{N}$ 18'03	

Attention, astronomical year style is used: The year -1503 in astronomical counting style is the year 1504 BCE in historical counting style.

opposition	-1503 Mar 16 j 21:17	12° $\mathring{M}$ 56'20	2°01'13	max. Earth dist.	-1497 Oct 02 j 21:11	27° $\mathring{M}$ 00'53	31.34345 AU
min. Earth dist.	-1503 Mar 17 j 19:04	12° $\mathring{M}$ 54'51	29.34119 AU	morning rise	-1497 Oct 18 j 19:56	27° $\mathring{M}$ 36'33	
direct	-1503 Jun 06 j 05:52	11° $\mathring{M}$ 31'38		retrograde	-1496 Jan 13 j 16:29	29° $\mathring{M}$ 29'10	
evening set	-1503 Sep 04 j 19:01	13° $\mathring{M}$ 27'39		opposition	-1496 Apr 01 j 07:59	28° $\mathring{M}$ 07'19	2°08'53
max. Earth dist.	-1503 Sep 19 j 07:09	13° $\mathring{M}$ 59'57	31.33957 AU	min. Earth dist.	-1496 Apr 02 j 01:09	28° $\mathring{M}$ 06'09	29.34577 AU
				direct	-1496 Jun 21 j 15:57	26° $\mathring{M}$ 43'00	
conjunction	-1503 Sep 20 j 05:52	14° $\mathring{M}$ 02'05	1°54'17	evening set	-1496 Sep 19 j 16:34	28° $\mathring{M}$ 38'43	
minimum elong	-1503 Sep 20 j 05:52	14° $\mathring{M}$ 02'05	1°54'17	max. Earth dist.	-1496 Oct 04 j 06:07	29° $\mathring{M}$ 11'15	31.34510 AU
morning rise	-1503 Oct 05 j 13:44	14° $\mathring{M}$ 36'14					
retrograde	-1503 Dec 31 j 04:44	16° $\mathring{M}$ 28'20		conjunction	-1496 Oct 05 j 00:00	29° $\mathring{M}$ 12'56	2°00'52
opposition	-1502 Mar 19 j 08:51	15° $\mathring{M}$ 06'34	2°02'51	minimum elong	-1496 Oct 05 j 00:00	29° $\mathring{M}$ 12'56	2°00'53
min. Earth dist.	-1502 Mar 20 j 05:29	15° $\mathring{M}$ 05'10	29.34063 AU	morning rise	-1496 Oct 20 j 05:06	29° $\mathring{M}$ 46'57	
direct	-1502 Jun 08 j 17:03	13° $\mathring{M}$ 41'52			-1496 Oct 26 j 05:22	0° $\mathring{A}$	
evening set	-1502 Sep 07 j 05:08	15° $\mathring{M}$ 37'50		retrograde	-1495 Jan 15 j 03:54	1° $\mathring{A}$ 39'42	
				opposition	-1495 Apr 03 j 19:57	0° $\mathring{A}$ 17'52	2°09'16
conjunction	-1502 Sep 22 j 15:34	16° $\mathring{M}$ 12'13	1°55'44	min. Earth dist.	-1495 Apr 04 j 12:28	0° $\mathring{A}$ 16'45	29.34715 AU
minimum elong	-1502 Sep 22 j 15:34	16° $\mathring{M}$ 12'13	1°55'44		-1495 Apr 14 j 21:59	30° $\mathring{R}$ $\mathring{M}$	
max. Earth dist.	-1502 Sep 21 j 18:12	16° $\mathring{M}$ 10'13	31.33877 AU	direct	-1495 Jun 24 j 01:59	28° $\mathring{M}$ 53'38	
morning rise	-1502 Oct 07 j 22:48	16° $\mathring{M}$ 46'20			-1495 Aug 29 j 01:29	0° $\mathring{A}$	
retrograde	-1501 Jan 02 j 14:09	18° $\mathring{M}$ 38'29		evening set	-1495 Sep 22 j 02:19	0° $\mathring{A}$ 49'19	
opposition	-1501 Mar 21 j 20:38	17° $\mathring{M}$ 16'40	2°04'18				
min. Earth dist.	-1501 Mar 22 j 17:45	17° $\mathring{M}$ 15'14	29.33991 AU	conjunction	-1495 Oct 07 j 09:32	1° $\mathring{A}$ 23'31	2°01'08
direct	-1501 Jun 11 j 04:52	15° $\mathring{M}$ 51'59		minimum elong	-1495 Oct 07 j 09:32	1° $\mathring{A}$ 23'31	2°01'07
evening set	-1501 Sep 09 j 15:16	17° $\mathring{M}$ 47'53		max. Earth dist.	-1495 Oct 06 j 17:08	1° $\mathring{A}$ 21'58	31.34591 AU
max. Earth dist.	-1501 Sep 24 j 03:55	18° $\mathring{M}$ 20'15	31.33831 AU	morning rise	-1495 Oct 22 j 14:09	1° $\mathring{A}$ 57'31	
				retrograde	-1494 Jan 17 j 13:37	3° $\mathring{A}$ 50'23	
conjunction	-1501 Sep 25 j 01:04	18° $\mathring{M}$ 22'13	1°57'00	opposition	-1494 Apr 06 j 08:15	2° $\mathring{A}$ 28'32	2°09'26
minimum elong	-1501 Sep 25 j 01:04	18° $\mathring{M}$ 22'13	1°57'00	min. Earth dist.	-1494 Apr 07 j 00:55	2° $\mathring{A}$ 27'25	29.34731 AU
morning rise	-1501 Oct 10 j 07:59	18° $\mathring{M}$ 56'19		direct	-1494 Jun 26 j 13:26	1° $\mathring{A}$ 04'23	
retrograde	-1500 Jan 05 j 01:23	20° $\mathring{M}$ 48'32		evening set	-1494 Sep 24 j 12:12	3° $\mathring{A}$ 00'01	
opposition	-1500 Mar 23 j 08:21	19° $\mathring{M}$ 26'40	2°05'35				
min. Earth dist.	-1500 Mar 24 j 03:42	19° $\mathring{M}$ 25'21	29.33977 AU	conjunction	-1494 Oct 09 j 18:49	3° $\mathring{A}$ 34'12	2°01'13
direct	-1500 Jun 12 j 18:06	18° $\mathring{M}$ 02'02		minimum elong	-1494 Oct 09 j 18:49	3° $\mathring{A}$ 34'12	2°01'13
evening set	-1500 Sep 11 j 01:07	19° $\mathring{M}$ 57'52		max. Earth dist.	-1494 Oct 09 j 01:51	3° $\mathring{A}$ 32'36	31.34544 AU
				morning rise	-1494 Oct 24 j 23:19	4° $\mathring{A}$ 08'11	
conjunction	-1500 Sep 26 j 10:29	20° $\mathring{M}$ 32'11	1°58'07	retrograde	-1493 Jan 20 j 01:35	6° $\mathring{A}$ 01'10	
minimum elong	-1500 Sep 26 j 10:28	20° $\mathring{M}$ 32'11	1°58'08	opposition	-1493 Apr 08 j 20:31	4° $\mathring{A}$ 39'18	2°09'26
max. Earth dist.	-1500 Sep 25 j 14:19	20° $\mathring{M}$ 30'18	31.33849 AU	min. Earth dist.	-1493 Apr 09 j 11:55	4° $\mathring{A}$ 38'16	29.34611 AU
morning rise	-1500 Oct 11 j 16:55	21° $\mathring{M}$ 06'15		direct	-1493 Jun 28 j 23:38	3° $\mathring{A}$ 15'12	
retrograde	-1499 Jan 06 j 12:03	22° $\mathring{M}$ 58'33		evening set	-1493 Sep 26 j 21:56	5° $\mathring{A}$ 10'46	
opposition	-1499 Mar 25 j 20:12	21° $\mathring{M}$ 36'40	2°06'41				
min. Earth dist.	-1499 Mar 26 j 15:44	21° $\mathring{M}$ 35'20	29.34048 AU	conjunction	-1493 Oct 12 j 04:20	5° $\mathring{A}$ 44'56	2°01'07
direct	-1499 Jun 15 j 05:31	20° $\mathring{M}$ 12'05		minimum elong	-1493 Oct 12 j 04:20	5° $\mathring{A}$ 44'56	2°01'07
evening set	-1499 Sep 13 j 11:02	22° $\mathring{M}$ 07'53		max. Earth dist.	-1493 Oct 11 j 12:28	5° $\mathring{A}$ 43'27	31.34341 AU
				morning rise	-1493 Oct 27 j 08:25	6° $\mathring{A}$ 18'56	
conjunction	-1499 Sep 28 j 19:55	22° $\mathring{M}$ 42'10	1°59'04	retrograde	-1492 Jan 22 j 11:59	8° $\mathring{A}$ 12'00	
minimum elong	-1499 Sep 28 j 19:55	22° $\mathring{M}$ 42'10	1°59'03	opposition	-1492 Apr 10 j 08:59	6° $\mathring{A}$ 50'06	2°09'15
max. Earth dist.	-1499 Sep 28 j 00:43	22° $\mathring{M}$ 40'22	31.33967 AU	min. Earth dist.	-1492 Apr 11 j 01:00	6° $\mathring{A}$ 49'01	29.34335 AU
morning rise	-1499 Oct 14 j 01:58	23° $\mathring{M}$ 16'13		direct	-1492 Jun 30 j 11:10	5° $\mathring{A}$ 26'02	
retrograde	-1498 Jan 08 j 21:05	25° $\mathring{M}$ 08'36		evening set	-1492 Sep 28 j 07:35	7° $\mathring{A}$ 21'32	
opposition	-1498 Mar 28 j 07:53	23° $\mathring{M}$ 46'44	2°07'36				
min. Earth dist.	-1498 Mar 29 j 01:54	23° $\mathring{M}$ 45'31	29.34192 AU	conjunction	-1492 Oct 13 j 13:36	7° $\mathring{A}$ 55'40	2°00'52
direct	-1498 Jun 17 j 18:05	22° $\mathring{M}$ 22'14		minimum elong	-1492 Oct 13 j 13:36	7° $\mathring{A}$ 55'40	2°00'52
evening set	-1498 Sep 15 j 20:59	24° $\mathring{M}$ 18'00		max. Earth dist.	-1492 Oct 12 j 21:47	7° $\mathring{A}$ 54'11	31.33996 AU
max. Earth dist.	-1498 Sep 30 j 10:14	24° $\mathring{M}$ 50'29	31.34141 AU	morning rise	-1492 Oct 28 j 17:36	8° $\mathring{A}$ 29'39	
				retrograde	-1491 Jan 24 j 00:04	10° $\mathring{A}$ 22'49	
conjunction	-1498 Oct 01 j 05:20	24° $\mathring{M}$ 52'16	1°59'50	opposition	-1491 Apr 12 j 21:16	9° $\mathring{A}$ 00'50	2°08'53
minimum elong	-1498 Oct 01 j 05:19	24° $\mathring{M}$ 52'16	1°59'51	min. Earth dist.	-1491 Apr 13 j 11:50	8° $\mathring{A}$ 59'51	29.33905 AU
morning rise	-1498 Oct 16 j 11:03	25° $\mathring{M}$ 26'18		direct	-1491 Jul 03 j 00:40	7° $\mathring{A}$ 36'47	
retrograde	-1497 Jan 11 j 07:13	27° $\mathring{M}$ 18'48		evening set	-1491 Sep 30 j 17:12	9° $\mathring{A}$ 32'12	
opposition	-1497 Mar 30 j 19:53	25° $\mathring{M}$ 56'57	2°08'20				
min. Earth dist.	-1497 Mar 31 j 13:43	25° $\mathring{M}$ 55'44	29.34393 AU	conjunction	-1491 Oct 15 j 22:56	10° $\mathring{A}$ 06'19	2°00'26
direct	-1497 Jun 20 j 04:17	24° $\mathring{M}$ 32'32		minimum elong	-1491 Oct 15 j 22:56	10° $\mathring{A}$ 06'19	2°00'25
evening set	-1497 Sep 18 j 06:39	26° $\mathring{M}$ 28'16		max. Earth dist.	-1491 Oct 15 j 07:38	10° $\mathring{A}$ 04'53	31.33498 AU
				morning rise	-1491 Oct 31 j 02:41	10° $\mathring{A}$ 40'17	
conjunction	-1497 Oct 03 j 14:40	27° $\mathring{M}$ 02'31	2°00'27	retrograde	-1490 Jan 26 j 11:21	12° $\mathring{A}$ 33'32	
minimum elong	-1497 Oct 03 j 14:40	27° $\mathring{M}$ 02'31	2°00'26	opposition	-1490 Apr 15 j 09:39	11° $\mathring{A}$ 11'28	2°08'20



Attention, astronomical year style is used: The year -1490 in astronomical counting style is the year 1491 BCE in historical counting style.

min. Earth dist.	-1490 Apr 16 j 00:40	11° <u>♂</u> 10'27	29.33358 AU	morning rise	-1484 Nov 14 j 17:17	25° <u>♂</u> 52'40	
direct	-1490 Jul 05 j 12:18	9° <u>♂</u> 47'26		retrograde	-1483 Feb 10 j 11:22	27° <u>♂</u> 46'39	
evening set	-1490 Oct 03 j 02:41	11° <u>♂</u> 42'44		opposition	-1483 May 01 j 01:11	26° <u>♂</u> 24'11	1°59'27
				min. Earth dist.	-1483 May 01 j 09:47	26° <u>♂</u> 23'36	29.30059 AU
conjunction	-1490 Oct 18 j 08:10	12° <u>♂</u> 16'51	1°59'50	direct	-1483 Jul 20 j 20:02	25° <u>♂</u> 00'28	
minimum elong	-1490 Oct 18 j 08:10	12° <u>♂</u> 16'51	1°59'50	evening set	-1483 Oct 17 j 19:07	26° <u>♂</u> 55'12	
max. Earth dist.	-1490 Oct 17 j 17:55	12° <u>♂</u> 15'30	31.32921 AU				
morning rise	-1490 Nov 02 j 11:43	12° <u>♂</u> 50'49		conjunction	-1483 Nov 01 j 23:13	27° <u>♂</u> 29'17	1°50'55
retrograde	-1489 Jan 28 j 20:34	14° <u>♂</u> 44'07		minimum elong	-1483 Nov 01 j 23:13	27° <u>♂</u> 29'17	1°50'53
opposition	-1489 Apr 17 j 22:04	13° <u>♂</u> 21'58	2°07'37	max. Earth dist.	-1483 Nov 01 j 15:15	27° <u>♂</u> 28'32	31.29741 AU
min. Earth dist.	-1489 Apr 18 j 11:30	13° <u>♂</u> 21'04	29.32747 AU	morning rise	-1483 Nov 17 j 02:21	28° <u>♂</u> 03'18	
direct	-1489 Jul 08 j 01:36	11° <u>♂</u> 57'56		retrograde	-1482 Feb 12 j 23:54	29° <u>♂</u> 57'25	
evening set	-1489 Oct 05 j 11:59	13° <u>♂</u> 53'08		opposition	-1482 May 03 j 13:47	28° <u>♂</u> 34'56	1°57'28
				min. Earth dist.	-1482 May 03 j 20:41	28° <u>♂</u> 34'28	29.29624 AU
conjunction	-1489 Oct 20 j 17:06	14° <u>♂</u> 27'13	1°59'04	direct	-1482 Jul 23 j 08:10	27° <u>♂</u> 11'18	
minimum elong	-1489 Oct 20 j 17:06	14° <u>♂</u> 27'13	1°59'02	evening set	-1482 Oct 20 j 04:23	29° <u>♂</u> 05'59	
max. Earth dist.	-1489 Oct 20 j 03:03	14° <u>♂</u> 25'54	31.32308 AU				
morning rise	-1489 Nov 04 j 20:37	15° <u>♂</u> 01'11		conjunction	-1482 Nov 04 j 08:21	29° <u>♂</u> 40'04	1°48'59
retrograde	-1488 Jan 31 j 07:07	16° <u>♂</u> 54'34		minimum elong	-1482 Nov 04 j 08:21	29° <u>♂</u> 40'04	1°48'58
opposition	-1488 Apr 19 j 10:34	15° <u>♂</u> 32'19	2°06'42	max. Earth dist.	-1482 Nov 04 j 00:57	29° <u>♂</u> 39'22	31.29259 AU
min. Earth dist.	-1488 Apr 19 j 23:33	15° <u>♂</u> 31'27	29.32156 AU		-1482 Nov 13 j 03:50	0° <u>♂</u>	
direct	-1488 Jul 09 j 13:10	14° <u>♂</u> 08'18		morning rise	-1482 Nov 19 j 11:31	0° <u>♂</u> 14'06	
evening set	-1488 Oct 06 j 21:14	16° <u>♂</u> 03'23		retrograde	-1481 Feb 15 j 12:14	2° <u>♂</u> 08'22	
				opposition	-1481 May 06 j 02:47	0° <u>♂</u> 45'51	1°55'19
conjunction	-1488 Oct 22 j 02:15	16° <u>♂</u> 37'28	1°58'07	min. Earth dist.	-1481 May 06 j 09:56	0° <u>♂</u> 45'22	29.29092 AU
minimum elong	-1488 Oct 22 j 02:15	16° <u>♂</u> 37'28	1°58'07		-1481 Jun 05 j 02:41	30° <u>♂</u>	
max. Earth dist.	-1488 Oct 21 j 14:08	16° <u>♂</u> 36'20	31.31740 AU	direct	-1481 Jul 25 j 18:51	29° <u>♂</u> 22'16	
morning rise	-1488 Nov 06 j 05:30	17° <u>♂</u> 11'26			-1481 Sep 12 j 08:37	0° <u>♂</u>	
retrograde	-1487 Feb 01 j 16:13	19° <u>♂</u> 04'54		evening set	-1481 Oct 22 j 13:31	1° <u>♂</u> 16'54	
opposition	-1487 Apr 21 j 22:52	17° <u>♂</u> 42'35	2°05'37				
min. Earth dist.	-1487 Apr 22 j 10:47	17° <u>♂</u> 41'47	29.31614 AU	conjunction	-1481 Nov 06 j 17:29	1° <u>♂</u> 50'59	1°46'53
direct	-1487 Jul 12 j 01:55	16° <u>♂</u> 18'35		minimum elong	-1481 Nov 06 j 17:30	1° <u>♂</u> 50'59	1°46'52
evening set	-1487 Oct 09 j 06:34	18° <u>♂</u> 13'36		max. Earth dist.	-1481 Nov 06 j 11:15	1° <u>♂</u> 50'24	31.28669 AU
				morning rise	-1481 Nov 21 j 20:40	2° <u>♂</u> 25'02	
conjunction	-1487 Oct 24 j 11:13	18° <u>♂</u> 47'40	1°57'01	retrograde	-1480 Feb 17 j 22:48	4° <u>♂</u> 19'26	
minimum elong	-1487 Oct 24 j 11:13	18° <u>♂</u> 47'40	1°57'00	opposition	-1480 May 07 j 15:39	2° <u>♂</u> 56'52	1°53'00
max. Earth dist.	-1487 Oct 23 j 23:05	18° <u>♂</u> 46'31	31.31247 AU	min. Earth dist.	-1480 May 07 j 21:22	2° <u>♂</u> 56'29	29.28418 AU
morning rise	-1487 Nov 08 j 14:32	19° <u>♂</u> 21'38		direct	-1480 Jul 27 j 07:54	1° <u>♂</u> 33'20	
retrograde	-1486 Feb 04 j 03:13	21° <u>♂</u> 15'13		evening set	-1480 Oct 23 j 22:52	3° <u>♂</u> 27'53	
opposition	-1486 Apr 24 j 11:19	19° <u>♂</u> 52'50	2°04'21				
min. Earth dist.	-1486 Apr 24 j 21:56	19° <u>♂</u> 52'07	29.31164 AU	conjunction	-1480 Nov 08 j 02:41	4° <u>♂</u> 01'59	1°44'39
direct	-1486 Jul 14 j 12:09	18° <u>♂</u> 28'54		minimum elong	-1480 Nov 08 j 02:41	4° <u>♂</u> 01'59	1°44'38
evening set	-1486 Oct 11 j 15:38	20° <u>♂</u> 23'49		max. Earth dist.	-1480 Nov 07 j 20:08	4° <u>♂</u> 01'22	31.27927 AU
				morning rise	-1480 Nov 23 j 06:04	4° <u>♂</u> 36'04	
conjunction	-1486 Oct 26 j 20:14	20° <u>♂</u> 57'53	1°55'44	retrograde	-1479 Feb 19 j 10:41	6° <u>♂</u> 30'35	
minimum elong	-1486 Oct 26 j 20:14	20° <u>♂</u> 57'53	1°55'44	opposition	-1479 May 10 j 04:27	5° <u>♂</u> 07'57	1°50'32
max. Earth dist.	-1486 Oct 26 j 10:11	20° <u>♂</u> 56'56	31.30832 AU	min. Earth dist.	-1479 May 10 j 10:04	5° <u>♂</u> 07'34	29.27607 AU
morning rise	-1486 Nov 10 j 23:19	21° <u>♂</u> 31'52		direct	-1479 Jul 29 j 19:28	3° <u>♂</u> 44'27	
retrograde	-1485 Feb 06 j 12:25	23° <u>♂</u> 25'34		evening set	-1479 Oct 26 j 08:02	5° <u>♂</u> 38'55	
opposition	-1485 Apr 26 j 23:57	22° <u>♂</u> 03'09	2°02'53				
min. Earth dist.	-1485 Apr 27 j 10:05	22° <u>♂</u> 02'28	29.30773 AU	conjunction	-1479 Nov 10 j 12:00	6° <u>♂</u> 13'02	1°42'15
direct	-1485 Jul 16 j 23:26	20° <u>♂</u> 39'17		minimum elong	-1479 Nov 10 j 12:00	6° <u>♂</u> 13'02	1°42'14
evening set	-1485 Oct 14 j 00:51	22° <u>♂</u> 34'08		max. Earth dist.	-1479 Nov 10 j 07:04	6° <u>♂</u> 12'34	31.27050 AU
				morning rise	-1479 Nov 25 j 15:19	6° <u>♂</u> 47'07	
conjunction	-1485 Oct 29 j 05:09	23° <u>♂</u> 08'12	1°54'18	retrograde	-1478 Feb 21 j 20:47	8° <u>♂</u> 41'45	
minimum elong	-1485 Oct 29 j 05:09	23° <u>♂</u> 08'12	1°54'17	opposition	-1478 May 12 j 17:23	7° <u>♂</u> 19'02	1°47'54
max. Earth dist.	-1485 Oct 28 j 19:11	23° <u>♂</u> 07'16	31.30478 AU	min. Earth dist.	-1478 May 12 j 22:13	7° <u>♂</u> 18'42	29.26655 AU
morning rise	-1485 Nov 13 j 08:21	23° <u>♂</u> 42'12		direct	-1478 Aug 01 j 08:45	5° <u>♂</u> 55'33	
retrograde	-1484 Feb 09 j 00:31	25° <u>♂</u> 36'02		evening set	-1478 Oct 28 j 17:10	7° <u>♂</u> 49'54	
opposition	-1484 Apr 28 j 12:26	24° <u>♂</u> 13'36	2°01'16				
min. Earth dist.	-1484 Apr 28 j 20:46	24° <u>♂</u> 13'02	29.30428 AU	conjunction	-1478 Nov 12 j 20:57	8° <u>♂</u> 24'01	1°39'43
direct	-1484 Jul 18 j 09:08	22° <u>♂</u> 49'47		minimum elong	-1478 Nov 12 j 20:57	8° <u>♂</u> 24'01	1°39'43
evening set	-1484 Oct 15 j 09:53	24° <u>♂</u> 44'35		max. Earth dist.	-1478 Nov 12 j 15:50	8° <u>♂</u> 23'32	31.26065 AU
				morning rise	-1478 Nov 28 j 00:35	8° <u>♂</u> 58'09	
conjunction	-1484 Oct 30 j 14:11	25° <u>♂</u> 18'40	1°52'41	retrograde	-1477 Feb 24 j 08:00	10° <u>♂</u> 52'52	
minimum elong	-1484 Oct 30 j 14:11	25° <u>♂</u> 18'40	1°52'41	opposition	-1477 May 15 j 06:21	9° <u>♂</u> 30'03	1°45'07
max. Earth dist.	-1484 Oct 30 j 05:40	25° <u>♂</u> 17'51	31.30128 AU	min. Earth dist.	-1477 May 15 j 10:05	9° <u>♂</u> 29'48	29.25638 AU

Attention, astronomical year style is used: The year -1477 in astronomical counting style is the year 1478 BCE in historical counting style.

direct	-1477 Aug 03 j 19:33	8°M06'35		conjunction	-1471 Nov 27 j 12:30	23°M40'53	1°18'11
evening set	-1477 Oct 31 j 02:08	10°M00'49		minimum elong	-1471 Nov 27 j 12:31	23°M40'53	1°18'09
				max. Earth dist.	-1471 Nov 27 j 14:52	23°M41'07	31.20280 AU
conjunction	-1477 Nov 15 j 06:06	10°M34'57	1°37'03	morning rise	-1471 Dec 12 j 17:37	24°M15'13	
minimum elong	-1477 Nov 15 j 06:06	10°M34'57	1°37'01	retrograde	-1470 Mar 11 j 17:48	26°M10'49	
max. Earth dist.	-1477 Nov 15 j 02:56	10°M34'39	31.25032 AU	opposition	-1470 May 31 j 00:42	24°M47'33	1°21'38
morning rise	-1477 Nov 30 j 09:44	11°M09'06		min. Earth dist.	-1470 May 30 j 21:14	24°M47'47	29.20014 AU
retrograde	-1476 Feb 26 j 16:58	13°M03'56		direct	-1470 Aug 19 j 00:46	23°M24'22	
opposition	-1476 May 16 j 19:14	11°M41'00	1°42'11	evening set	-1470 Nov 14 j 17:10	25°M18'05	
min. Earth dist.	-1476 May 16 j 22:31	11°M40'47	29.24605 AU				
direct	-1476 Aug 05 j 07:18	10°M17'32		conjunction	-1470 Nov 29 j 21:47	25°M52'21	1°14'36
evening set	-1476 Nov 01 j 11:09	12°M11'40		minimum elong	-1470 Nov 29 j 21:48	25°M52'21	1°14'36
				max. Earth dist.	-1470 Nov 30 j 02:06	25°M52'45	31.19625 AU
conjunction	-1476 Nov 16 j 15:02	12°M45'49	1°34'14	morning rise	-1470 Dec 15 j 03:01	26°M26'42	
minimum elong	-1476 Nov 16 j 15:03	12°M45'49	1°34'13	retrograde	-1469 Mar 14 j 04:55	28°M22'27	
max. Earth dist.	-1476 Nov 16 j 12:09	12°M45'32	31.24031 AU	opposition	-1469 Jun 02 j 13:51	26°M59'08	1°17'44
morning rise	-1476 Dec 01 j 19:00	13°M19'59		min. Earth dist.	-1469 Jun 02 j 09:29	26°M59'26	29.19318 AU
	-1475 Jan 29 j 04:36	15°M		direct	-1469 Aug 21 j 13:39	25°M36'01	
retrograde	-1475 Feb 28 j 04:56	15°M14'55		evening set	-1469 Nov 17 j 02:33	27°M29'40	
	-1475 Mar 31 j 02:00	15°RM					
opposition	-1475 May 19 j 08:00	13°M51'54	1°39'07	conjunction	-1469 Dec 02 j 07:11	28°M03'57	1°10'55
min. Earth dist.	-1475 May 19 j 09:17	13°M51'49	29.23634 AU	minimum elong	-1469 Dec 02 j 07:11	28°M03'57	1°10'53
direct	-1475 Aug 07 j 17:23	12°M28'27		max. Earth dist.	-1469 Dec 02 j 11:13	28°M04'20	31.18898 AU
evening set	-1475 Nov 03 j 20:05	14°M22'29		morning rise	-1469 Dec 17 j 12:53	28°M38'21	
					-1468 Jan 29 j 14:22	0°Z	
conjunction	-1475 Nov 19 j 00:04	14°M56'39	1°31'17	retrograde	-1468 Mar 15 j 17:16	0°Z34'14	
minimum elong	-1475 Nov 19 j 00:04	14°M56'39	1°31'15		-1468 May 02 j 16:49	30°RM	
max. Earth dist.	-1475 Nov 18 j 22:46	14°M56'31	31.23098 AU	opposition	-1468 Jun 04 j 02:55	29°M10'52	1°13'44
	-1475 Nov 20 j 11:30	15°M		min. Earth dist.	-1468 Jun 03 j 21:41	29°M11'13	29.18543 AU
morning rise	-1475 Dec 04 j 04:06	15°M30'51		direct	-1468 Aug 23 j 00:15	27°M47'47	
retrograde	-1474 Mar 02 j 15:29	17°M25'54		evening set	-1468 Nov 18 j 11:50	29°M41'22	
opposition	-1474 May 21 j 20:56	16°M02'49	1°35'54		-1468 Nov 26 j 19:13	0°Z	
min. Earth dist.	-1474 May 21 j 22:01	16°M02'44	29.22752 AU				
	-1474 Jul 04 j 16:23	15°RM		conjunction	-1468 Dec 03 j 16:48	0°Z15'41	1°07'07
direct	-1474 Aug 10 j 04:16	14°M39'23		minimum elong	-1468 Dec 03 j 16:48	0°Z15'41	1°07'06
	-1474 Sep 14 j 14:35	15°M		max. Earth dist.	-1468 Dec 03 j 22:18	0°Z16'12	31.18056 AU
evening set	-1474 Nov 06 j 05:04	16°M33'21		morning rise	-1468 Dec 18 j 22:41	0°Z50'07	
				retrograde	-1467 Mar 18 j 03:21	2°Z46'07	
conjunction	-1474 Nov 21 j 09:07	17°M07'31	1°28'12	opposition	-1467 Jun 06 j 16:08	1°Z22'41	1°09'37
minimum elong	-1474 Nov 21 j 09:07	17°M07'31	1°28'11	min. Earth dist.	-1467 Jun 06 j 10:49	1°Z23'03	29.17627 AU
max. Earth dist.	-1474 Nov 21 j 08:57	17°M07'30	31.22286 AU		-1467 Aug 20 j 19:57	30°RM	
morning rise	-1474 Dec 06 j 13:23	17°M41'44		direct	-1467 Aug 25 j 12:42	29°M59'38	
retrograde	-1473 Mar 05 j 04:12	19°M36'56			-1467 Aug 30 j 03:59	0°Z	
opposition	-1473 May 24 j 09:48	18°M13'47	1°32'32	evening set	-1467 Nov 20 j 21:13	1°Z53'08	
min. Earth dist.	-1473 May 24 j 08:38	18°M13'52	29.21981 AU				
direct	-1473 Aug 12 j 15:27	16°M50'24		conjunction	-1467 Dec 06 j 02:16	2°Z27'28	1°03'13
evening set	-1473 Nov 08 j 13:59	18°M44'18		minimum elong	-1467 Dec 06 j 02:17	2°Z27'28	1°03'11
				max. Earth dist.	-1467 Dec 06 j 07:41	2°Z27'59	31.17086 AU
conjunction	-1473 Nov 23 j 18:06	19°M18'29	1°24'59	morning rise	-1467 Dec 21 j 08:34	3°Z01'56	
minimum elong	-1473 Nov 23 j 18:07	19°M18'29	1°24'58	retrograde	-1466 Mar 20 j 16:12	4°Z58'04	
max. Earth dist.	-1473 Nov 23 j 18:49	19°M18'33	31.21563 AU	opposition	-1466 Jun 09 j 05:17	3°Z34'33	1°05'25
morning rise	-1473 Dec 08 j 22:40	19°M52'44		min. Earth dist.	-1466 Jun 08 j 22:27	3°Z35'01	29.16587 AU
retrograde	-1472 Mar 06 j 16:42	21°M48'05		direct	-1466 Aug 27 j 23:44	2°Z11'30	
opposition	-1472 May 25 j 22:50	20°M24'53	1°29'02	evening set	-1466 Nov 23 j 06:35	4°Z04'55	
min. Earth dist.	-1472 May 25 j 21:32	20°M24'58	29.21298 AU				
direct	-1472 Aug 14 j 00:50	19°M01'34		conjunction	-1466 Dec 08 j 11:55	4°Z39'16	0°59'14
evening set	-1472 Nov 09 j 22:59	20°M55'24		minimum elong	-1466 Dec 08 j 11:55	4°Z39'16	0°59'13
				max. Earth dist.	-1466 Dec 08 j 18:19	4°Z39'52	31.15989 AU
conjunction	-1472 Nov 25 j 03:20	21°M29'36	1°21'39	morning rise	-1466 Dec 23 j 18:31	5°Z13'46	
minimum elong	-1472 Nov 25 j 03:20	21°M29'36	1°21'38	retrograde	-1465 Mar 23 j 02:48	7°Z10'00	
max. Earth dist.	-1472 Nov 25 j 05:41	21°M29'50	31.20915 AU	opposition	-1465 Jun 11 j 18:35	5°Z46'23	1°01'06
morning rise	-1472 Dec 10 j 08:03	22°M03'53		min. Earth dist.	-1465 Jun 11 j 12:01	5°Z46'50	29.15445 AU
retrograde	-1471 Mar 09 j 04:09	23°M59'21		direct	-1465 Aug 30 j 10:48	4°Z23'20	
opposition	-1471 May 28 j 11:35	22°M36'08	1°25'23	evening set	-1465 Nov 25 j 15:50	6°Z16'39	
min. Earth dist.	-1471 May 28 j 08:32	22°M36'20	29.20651 AU				
direct	-1471 Aug 16 j 13:37	21°M12'53		conjunction	-1465 Dec 10 j 21:27	6°Z51'01	0°55'10
evening set	-1471 Nov 12 j 08:11	23°M06'39		minimum elong	-1465 Dec 10 j 21:27	6°Z51'01	0°55'08

Attention, astronomical year style is used: The year -1465 in astronomical counting style is the year 1466 BCE in historical counting style.

max. Earth dist.	-1465 Dec 11 j 04:48	6°♌51'43	31.14831 AU	conjunction	-1458 Dec 25 j 17:37	22°♌14'54	0°24'42
morning rise	-1465 Dec 26 j 04:27	7°♌25'34		minimum elong	-1458 Dec 25 j 17:37	22°♌14'54	0°24'41
retrograde	-1464 Mar 24 j 15:11	9°♌21'53		max. Earth dist.	-1458 Dec 26 j 07:27	22°♌16'12	31.08235 AU
opposition	-1464 Jun 13 j 07:38	7°♌58'10	0°56'43	morning rise	-1457 Jan 10 j 03:25	22°♌49'43	
min. Earth dist.	-1464 Jun 12 j 23:13	7°♌58'44	29.14261 AU	retrograde	-1457 Apr 10 j 08:13	24°♌46'57	
direct	-1464 Aug 31 j 22:09	6°♌35'06		opposition	-1457 Jun 30 j 03:11	23°♌22'52	0°23'55
evening set	-1464 Nov 27 j 01:16	8°♌28'20		min. Earth dist.	-1457 Jun 29 j 12:13	23°♌23'53	29.07864 AU
				direct	-1457 Sep 17 j 05:20	22°♌00'03	
conjunction	-1464 Dec 12 j 07:01	9°♌02'44	0°51'01	evening set	-1457 Dec 12 j 20:00	23°♌53'01	
minimum elong	-1464 Dec 12 j 07:01	9°♌02'44	0°51'00				
max. Earth dist.	-1464 Dec 12 j 14:52	9°♌03'29	31.13646 AU	conjunction	-1457 Dec 28 j 03:48	24°♌27'38	0°20'08
morning rise	-1464 Dec 27 j 14:26	9°♌37'18		minimum elong	-1457 Dec 28 j 03:48	24°♌27'38	0°20'06
retrograde	-1463 Mar 27 j 03:29	11°♌33'44		max. Earth dist.	-1457 Dec 28 j 18:29	24°♌29'02	31.07445 AU
opposition	-1463 Jun 15 j 20:41	10°♌09'55	0°52'14	morning rise	-1456 Jan 12 j 14:01	25°♌02'31	
min. Earth dist.	-1463 Jun 15 j 12:20	10°♌10'29	29.13103 AU	retrograde	-1456 Apr 11 j 18:53	26°♌59'53	
direct	-1463 Sep 03 j 07:37	8°♌46'51		opposition	-1456 Jul 01 j 16:26	25°♌35'46	0°19'00
evening set	-1463 Nov 29 j 10:34	10°♌40'01		min. Earth dist.	-1456 Jul 01 j 01:57	25°♌36'46	29.07040 AU
				direct	-1456 Sep 18 j 16:07	24°♌13'00	
conjunction	-1463 Dec 14 j 16:42	11°♌14'26	0°46'47	evening set	-1456 Dec 14 j 06:02	26°♌05'56	
minimum elong	-1463 Dec 14 j 16:42	11°♌14'26	0°46'45				
max. Earth dist.	-1463 Dec 15 j 02:19	11°♌15'21	31.12527 AU	conjunction	-1456 Dec 29 j 14:11	26°♌40'35	0°15'32
morning rise	-1463 Dec 30 j 00:22	11°♌49'02		minimum elong	-1456 Dec 29 j 14:11	26°♌40'35	0°15'31
retrograde	-1462 Mar 29 j 15:37	13°♌45'35		behind sun begin	-1456 Dec 29 j 12:16	26°♌40'25	
opposition	-1462 Jun 18 j 09:44	12°♌21'41	0°47'41	behind sun end	-1456 Dec 29 j 16:07	26°♌40'46	
min. Earth dist.	-1462 Jun 17 j 23:25	12°♌22'23	29.12020 AU	max. Earth dist.	-1456 Dec 30 j 05:31	26°♌42'02	31.06578 AU
direct	-1462 Sep 05 j 20:24	10°♌58'37		morning rise	-1455 Jan 14 j 00:45	27°♌15'30	
evening set	-1462 Dec 01 j 19:57	12°♌51'44		retrograde	-1455 Apr 14 j 07:31	29°♌13'00	
				opposition	-1455 Jul 04 j 05:26	27°♌48'51	0°14'04
conjunction	-1462 Dec 17 j 02:10	13°♌26'11	0°42'30	min. Earth dist.	-1455 Jul 03 j 13:32	27°♌49'56	29.06111 AU
minimum elong	-1462 Dec 17 j 02:11	13°♌26'11	0°42'29	direct	-1455 Sep 21 j 03:02	26°♌26'05	
max. Earth dist.	-1462 Dec 17 j 11:55	13°♌27'06	31.11499 AU	evening set	-1455 Dec 16 j 16:15	28°♌19'00	
morning rise	-1461 Jan 01 j 10:23	14°♌00'50					
retrograde	-1461 Apr 01 j 05:56	15°♌57'30		conjunction	-1454 Jan 01 j 00:37	28°♌53'41	0°10'55
opposition	-1461 Jun 20 j 22:54	14°♌33'32	0°43'03	minimum elong	-1454 Jan 01 j 00:37	28°♌53'41	0°10'53
min. Earth dist.	-1461 Jun 20 j 11:59	14°♌34'16	29.11052 AU	behind sun begin	-1455 Dec 31 j 19:42	28°♌53'14	
direct	-1461 Sep 08 j 07:08	13°♌10'30		behind sun end	-1454 Jan 01 j 05:32	28°♌54'08	
evening set	-1461 Dec 04 j 05:20	15°♌03'34		max. Earth dist.	-1454 Jan 01 j 15:50	28°♌55'07	31.05583 AU
				morning rise	-1454 Jan 16 j 11:43	29°♌28'37	
conjunction	-1461 Dec 19 j 12:01	15°♌38'03	0°38'08		-1454 Jan 31 j 02:58	0°♊	
minimum elong	-1461 Dec 19 j 12:01	15°♌38'03	0°38'06	retrograde	-1454 Apr 16 j 20:21	1°♊26'15	
max. Earth dist.	-1461 Dec 19 j 23:54	15°♌39'11	31.10582 AU	opposition	-1454 Jul 06 j 18:47	0°♊02'01	0°09'06
morning rise	-1460 Jan 03 j 20:29	16°♌12'45		min. Earth dist.	-1454 Jul 06 j 03:28	0°♊03'04	29.05058 AU
retrograde	-1460 Apr 02 j 17:35	18°♌09'33			-1454 Jul 08 j 00:25	30°♌♌	
opposition	-1460 Jun 22 j 11:50	16°♌45'32	0°38'21	direct	-1454 Sep 23 j 12:14	28°♌39'15	
min. Earth dist.	-1460 Jun 21 j 23:45	16°♌46'21	29.10176 AU		-1454 Dec 04 j 01:20	0°♊	
direct	-1460 Sep 09 j 19:26	15°♌22'33		evening set	-1454 Dec 19 j 02:17	0°♊32'07	
evening set	-1460 Dec 05 j 14:55	17°♌15'35					
				conjunction	-1453 Jan 03 j 11:10	1°♊06'50	0°06'18
conjunction	-1460 Dec 20 j 21:45	17°♌50'06	0°33'43	minimum elong	-1453 Jan 03 j 11:10	1°♊06'50	0°06'17
minimum elong	-1460 Dec 20 j 21:45	17°♌50'06	0°33'42	behind sun begin	-1453 Jan 03 j 05:05	1°♊06'17	
max. Earth dist.	-1460 Dec 21 j 09:37	17°♌51'14	31.09757 AU	behind sun end	-1453 Jan 03 j 17:15	1°♊07'23	
morning rise	-1459 Jan 05 j 06:47	18°♌24'51		max. Earth dist.	-1453 Jan 04 j 03:36	1°♊08'23	31.04471 AU
retrograde	-1459 Apr 05 j 06:54	20°♌21'47		morning rise	-1453 Jan 18 j 22:35	1°♊41'49	
min. Earth dist.	-1459 Jun 24 j 11:45	18°♌58'38	29.09385 AU	retrograde	-1453 Apr 19 j 09:05	3°♊39'31	
opposition	-1459 Jun 25 j 00:54	18°♌57'45	0°33'36	opposition	-1453 Jul 09 j 07:54	2°♊15'12	0°04'08
direct	-1459 Sep 12 j 05:58	17°♌34'49		min. Earth dist.	-1453 Jul 08 j 15:19	2°♊16'20	29.03879 AU
evening set	-1459 Dec 08 j 00:23	19°♌27'49		direct	-1453 Sep 26 j 01:23	0°♊52'24	
				evening set	-1453 Dec 21 j 12:36	2°♊45'13	
conjunction	-1459 Dec 23 j 07:37	20°♌02'23	0°29'14				
minimum elong	-1459 Dec 23 j 07:37	20°♌02'23	0°29'12	conjunction	-1452 Jan 05 j 21:39	3°♊19'57	0°01'38
max. Earth dist.	-1459 Dec 23 j 21:16	20°♌03'40	31.08982 AU	minimum elong	-1452 Jan 05 j 21:41	3°♊19'57	0°01'36
morning rise	-1458 Jan 07 j 16:55	20°♌37'09		behind sun begin	-1452 Jan 05 j 15:15	3°♊19'22	
retrograde	-1458 Apr 07 j 18:06	22°♌34'15		behind sun end	-1452 Jan 06 j 04:06	3°♊20'32	
opposition	-1458 Jun 27 j 14:06	21°♌10'11	0°28'46	max. Earth dist.	-1452 Jan 06 j 13:33	3°♊21'27	31.03251 AU
min. Earth dist.	-1458 Jun 27 j 00:38	21°♌11'06	29.08621 AU	morning rise	-1452 Jan 21 j 09:44	3°♊54'58	
direct	-1458 Sep 14 j 18:26	19°♌47'19		retrograde	-1452 Apr 20 j 23:29	5°♊52'45	
evening set	-1458 Dec 10 j 10:09	21°♌40'18		desc. node	-1452 May 09 j 18:42	5°♊47'07	

Attention, astronomical year style is used: The year -1452 in astronomical counting style is the year 1453 BCE in historical counting style.

opposition	-1452 Jul	10 j 20:53	4° $\overline{3}$ 28'19	-0°00'50	opposition	-1446 Jul	25 j 02:16	17° $\overline{3}$ 46'36	-0°30'27
min. Earth dist.	-1452 Jul	10 j 04:25	4° $\overline{3}$ 29'27	29.02636 AU	direct	-1446 Oct	11 j 09:42	16° $\overline{3}$ 23'40	
direct	-1452 Sep	27 j 11:43	3° $\overline{3}$ 05'28		evening set	-1445 Jan	05 j 13:18	18° $\overline{3}$ 16'18	
evening set	-1452 Dec	22 j 22:45	4° $\overline{3}$ 58'14						
					conjunction	-1445 Jan	21 j 00:56	18° $\overline{3}$ 51'15	-0°30'43
conjunction	-1451 Jan	07 j 08:21	5° $\overline{3}$ 33'00	-0°03'09	minimum elong	-1445 Jan	21 j 00:56	18° $\overline{3}$ 51'15	0°30'44
minimum elong	-1451 Jan	07 j 08:21	5° $\overline{3}$ 33'00	0°03'09	max. Earth dist.	-1445 Jan	21 j 22:13	18° $\overline{3}$ 53'16	30.96035 AU
behind sun begin	-1451 Jan	07 j 01:57	5° $\overline{3}$ 32'25		morning rise	-1445 Feb	05 j 16:06	19° $\overline{3}$ 26'31	
behind sun end	-1451 Jan	07 j 14:45	5° $\overline{3}$ 33'35		retrograde	-1445 May	07 j 16:41	21° $\overline{3}$ 24'57	
max. Earth dist.	-1451 Jan	08 j 01:56	5° $\overline{3}$ 34'39	31.01988 AU	opposition	-1445 Jul	27 j 15:14	20° $\overline{3}$ 00'04	-0°35'17
morning rise	-1451 Jan	22 j 20:41	6° $\overline{3}$ 08'03		min. Earth dist.	-1445 Jul	26 j 18:24	20° $\overline{3}$ 01'30	28.95708 AU
retrograde	-1451 Apr	23 j 11:07	8° $\overline{3}$ 05'54		direct	-1445 Oct	13 j 18:52	18° $\overline{3}$ 37'09	
opposition	-1451 Jul	13 j 09:52	6° $\overline{3}$ 41'22	-0°05'49	evening set	-1444 Jan	08 j 00:08	20° $\overline{3}$ 29'50	
min. Earth dist.	-1451 Jul	12 j 16:32	6° $\overline{3}$ 42'33	29.01372 AU					
direct	-1451 Sep	30 j 00:06	5° $\overline{3}$ 18'28		conjunction	-1444 Jan	23 j 12:19	21° $\overline{3}$ 04'48	-0°35'13
evening set	-1451 Dec	25 j 08:58	7° $\overline{3}$ 11'10		minimum elong	-1444 Jan	23 j 12:19	21° $\overline{3}$ 04'48	0°35'15
					max. Earth dist.	-1444 Jan	24 j 10:50	21° $\overline{3}$ 06'56	30.95316 AU
conjunction	-1450 Jan	09 j 18:45	7° $\overline{3}$ 45'57	-0°07'46	morning rise	-1444 Feb	08 j 03:46	21° $\overline{3}$ 40'07	
minimum elong	-1450 Jan	09 j 18:45	7° $\overline{3}$ 45'57	0°07'49	retrograde	-1444 May	09 j 05:32	23° $\overline{3}$ 38'38	
behind sun begin	-1450 Jan	09 j 12:57	7° $\overline{3}$ 45'26		min. Earth dist.	-1444 Jul	28 j 05:56	22° $\overline{3}$ 15'16	28.94982 AU
behind sun end	-1450 Jan	10 j 00:33	7° $\overline{3}$ 46'29		opposition	-1444 Jul	29 j 03:51	22° $\overline{3}$ 13'45	-0°40'04
max. Earth dist.	-1450 Jan	10 j 12:11	7° $\overline{3}$ 47'36	31.00749 AU	direct	-1444 Oct	15 j 07:00	20° $\overline{3}$ 50'52	
morning rise	-1450 Jan	25 j 07:40	8° $\overline{3}$ 21'03		evening set	-1443 Jan	09 j 11:18	22° $\overline{3}$ 43'35	
retrograde	-1450 Apr	26 j 01:20	10° $\overline{3}$ 18'58						
opposition	-1450 Jul	15 j 22:53	8° $\overline{3}$ 54'19	-0°10'47	conjunction	-1443 Jan	24 j 23:39	23° $\overline{3}$ 18'35	-0°39'40
min. Earth dist.	-1450 Jul	15 j 04:41	8° $\overline{3}$ 55'34	29.00176 AU	minimum elong	-1443 Jan	24 j 23:39	23° $\overline{3}$ 18'35	0°39'40
direct	-1450 Oct	02 j 11:24	7° $\overline{3}$ 31'23		max. Earth dist.	-1443 Jan	25 j 21:24	23° $\overline{3}$ 20'38	30.94568 AU
evening set	-1450 Dec	27 j 19:14	9° $\overline{3}$ 24'03		morning rise	-1443 Feb	09 j 15:42	23° $\overline{3}$ 53'55	
					retrograde	-1443 May	11 j 20:07	25° $\overline{3}$ 52'34	
conjunction	-1449 Jan	12 j 05:29	9° $\overline{3}$ 58'53	-0°12'24	opposition	-1443 Jul	31 j 16:46	24° $\overline{3}$ 27'40	-0°44'48
minimum elong	-1449 Jan	12 j 05:29	9° $\overline{3}$ 58'52	0°12'25	min. Earth dist.	-1443 Jul	30 j 19:16	24° $\overline{3}$ 29'08	28.94216 AU
behind sun begin	-1449 Jan	12 j 01:13	9° $\overline{3}$ 58'29		direct	-1443 Oct	17 j 16:31	23° $\overline{3}$ 04'47	
behind sun end	-1449 Jan	12 j 09:45	9° $\overline{3}$ 59'16		evening set	-1442 Jan	11 j 22:18	24° $\overline{3}$ 57'31	
max. Earth dist.	-1449 Jan	13 j 00:33	10° $\overline{3}$ 00'41	30.99588 AU					
morning rise	-1449 Jan	27 j 18:44	10° $\overline{3}$ 34'00		conjunction	-1442 Jan	27 j 11:12	25° $\overline{3}$ 32'34	-0°44'03
retrograde	-1449 Apr	28 j 13:33	12° $\overline{3}$ 32'00		minimum elong	-1442 Jan	27 j 11:11	25° $\overline{3}$ 32'34	0°44'05
opposition	-1449 Jul	18 j 11:47	11° $\overline{3}$ 07'16	-0°15'44	max. Earth dist.	-1442 Jan	28 j 10:13	25° $\overline{3}$ 34'44	30.93753 AU
min. Earth dist.	-1449 Jul	17 j 17:17	11° $\overline{3}$ 08'32	28.99073 AU	morning rise	-1442 Feb	12 j 03:30	26° $\overline{3}$ 07'56	
direct	-1449 Oct	05 j 00:16	9° $\overline{3}$ 44'18		retrograde	-1442 May	14 j 08:43	28° $\overline{3}$ 06'41	
evening set	-1449 Dec	30 j 05:37	11° $\overline{3}$ 36'57		min. Earth dist.	-1442 Aug	02 j 07:44	26° $\overline{3}$ 43'15	28.93352 AU
					opposition	-1442 Aug	03 j 05:39	26° $\overline{3}$ 41'44	-0°49'28
conjunction	-1448 Jan	14 j 16:13	12° $\overline{3}$ 11'48	-0°17'01	direct	-1442 Oct	20 j 04:22	25° $\overline{3}$ 18'51	
minimum elong	-1448 Jan	14 j 16:13	12° $\overline{3}$ 11'48	0°17'03	evening set	-1441 Jan	14 j 09:41	27° $\overline{3}$ 11'37	
max. Earth dist.	-1448 Jan	15 j 11:30	12° $\overline{3}$ 13'37	30.98548 AU					
morning rise	-1448 Jan	30 j 06:00	12° $\overline{3}$ 46'57		conjunction	-1441 Jan	29 j 22:52	27° $\overline{3}$ 46'40	-0°48'23
retrograde	-1448 Apr	30 j 03:34	14° $\overline{3}$ 45'02		minimum elong	-1441 Jan	29 j 22:51	27° $\overline{3}$ 46'40	0°48'23
min. Earth dist.	-1448 Jul	19 j 04:33	13° $\overline{3}$ 21'37	28.98092 AU	max. Earth dist.	-1441 Jan	30 j 20:59	27° $\overline{3}$ 48'46	30.92843 AU
opposition	-1448 Jul	20 j 00:36	13° $\overline{3}$ 20'15	-0°20'40	morning rise	-1441 Feb	14 j 15:46	28° $\overline{3}$ 22'05	
direct	-1448 Oct	06 j 11:37	11° $\overline{3}$ 57'17			-1441 Apr	10 j 21:24	0° $\approx$	
evening set	-1448 Dec	31 j 16:05	13° $\overline{3}$ 49'55		retrograde	-1441 May	17 j 00:05	0° $\approx$ 20'54	
						-1441 Jun	22 j 20:13	30° $\overline{R}$ $\overline{3}$	
conjunction	-1447 Jan	16 j 03:01	14° $\overline{3}$ 24'47	-0°21'36	opposition	-1441 Aug	05 j 18:25	28° $\overline{3}$ 55'54	-0°54'03
minimum elong	-1447 Jan	16 j 03:01	14° $\overline{3}$ 24'47	0°21'37	min. Earth dist.	-1441 Aug	04 j 20:27	28° $\overline{3}$ 57'25	28.92401 AU
max. Earth dist.	-1447 Jan	16 j 23:13	14° $\overline{3}$ 26'42	30.97610 AU	direct	-1441 Oct	22 j 15:39	27° $\overline{3}$ 32'59	
morning rise	-1447 Jan	31 j 17:12	14° $\overline{3}$ 59'59		evening set	-1440 Jan	16 j 21:01	29° $\overline{3}$ 25'45	
retrograde	-1447 May	02 j 14:34	16° $\overline{3}$ 58'11						
opposition	-1447 Jul	22 j 13:28	15° $\overline{3}$ 33'20	-0°25'35	conjunction	-1440 Feb	01 j 10:42	0° $\approx$ 00'51	-0°52'38
min. Earth dist.	-1447 Jul	21 j 17:39	15° $\overline{3}$ 34'42	28.97214 AU	minimum elong	-1440 Feb	01 j 10:41	0° $\approx$ 00'51	0°52'40
direct	-1447 Oct	08 j 22:34	14° $\overline{3}$ 10'23			-1440 Feb	01 j 01:41	0° $\approx$	
evening set	-1446 Jan	03 j 02:37	16° $\overline{3}$ 03'01		max. Earth dist.	-1440 Feb	02 j 09:44	0° $\approx$ 03'02	30.91835 AU
					morning rise	-1440 Feb	17 j 03:57	0° $\approx$ 36'18	
conjunction	-1446 Jan	18 j 13:59	16° $\overline{3}$ 37'56	-0°26'11	retrograde	-1440 May	18 j 13:18	2° $\approx$ 35'09	
minimum elong	-1446 Jan	18 j 13:59	16° $\overline{3}$ 37'56	0°26'13	min. Earth dist.	-1440 Aug	06 j 09:32	1° $\approx$ 11'35	28.91360 AU
max. Earth dist.	-1446 Jan	19 j 11:10	16° $\overline{3}$ 39'56	30.96790 AU	opposition	-1440 Aug	07 j 07:09	1° $\approx$ 10'05	-0°58'33
morning rise	-1446 Feb	03 j 04:35	17° $\overline{3}$ 13'10			-1440 Sep	26 j 09:30	30° $\overline{R}$ $\overline{3}$	
retrograde	-1446 May	05 j 03:49	19° $\overline{3}$ 11'27		direct	-1440 Oct	24 j 04:49	29° $\overline{3}$ 47'07	
min. Earth dist.	-1446 Jul	24 j 04:50	17° $\overline{3}$ 48'04	28.96434 AU		-1440 Nov	20 j 10:27	0° $\approx$	

Attention, astronomical year style is used: The year -1439 in astronomical counting style is the year 1440 BCE in historical counting style.

evening set	-1439 Jan 18 j 08:21	1° $\approx$ 39'53		max. Earth dist.	-1433 Feb 18 j 00:16	15° $\approx$ 42'21	30.86206 AU
				morning rise	-1433 Mar 04 j 18:41	16° $\approx$ 15'33	
conjunction	-1439 Feb 02 j 22:23	2° $\approx$ 15'01 -0°56'48		retrograde	-1433 Jun 04 j 07:20	18° $\approx$ 14'42	
minimum elong	-1439 Feb 02 j 22:23	2° $\approx$ 15'01 0°56'49		opposition	-1433 Aug 23 j 21:56	16° $\approx$ 49'20	-1°27'18
max. Earth dist.	-1439 Feb 03 j 21:05	2° $\approx$ 17'09 30.90782 AU		min. Earth dist.	-1433 Aug 22 j 21:57	16° $\approx$ 51'01	28.86107 AU
morning rise	-1439 Feb 18 j 16:07	2° $\approx$ 50'29		direct	-1433 Nov 09 j 10:28	15° $\approx$ 26'10	
retrograde	-1439 May 21 j 03:29	4° $\approx$ 49'23		evening set	-1432 Feb 03 j 18:07	17° $\approx$ 19'06	
opposition	-1439 Aug 09 j 19:42	3° $\approx$ 24'15 -1°02'58					
min. Earth dist.	-1439 Aug 08 j 21:09	3° $\approx$ 25'48 28.90309 AU		conjunction	-1432 Feb 19 j 10:55	17° $\approx$ 54'24	-1°23'20
direct	-1439 Oct 26 j 16:38	2° $\approx$ 01'13		minimum elong	-1432 Feb 19 j 10:55	17° $\approx$ 54'24	1°23'21
evening set	-1438 Jan 20 j 19:49	3° $\approx$ 53'59		max. Earth dist.	-1432 Feb 20 j 11:48	17° $\approx$ 56'45	30.85852 AU
				morning rise	-1432 Mar 06 j 07:39	18° $\approx$ 30'04	
conjunction	-1438 Feb 05 j 10:12	4° $\approx$ 29'08 -1°00'54		retrograde	-1432 Jun 05 j 22:18	20° $\approx$ 29'17	
minimum elong	-1438 Feb 05 j 10:11	4° $\approx$ 29'08 1°00'56		min. Earth dist.	-1432 Aug 24 j 10:19	19° $\approx$ 05'35	28.85784 AU
max. Earth dist.	-1438 Feb 06 j 09:24	4° $\approx$ 31'19 30.89734 AU		opposition	-1432 Aug 25 j 10:15	19° $\approx$ 03'55	-1°30'56
morning rise	-1438 Feb 21 j 04:21	5° $\approx$ 04'38		direct	-1432 Nov 10 j 21:12	17° $\approx$ 40'44	
retrograde	-1438 May 23 j 15:14	7° $\approx$ 03'34		evening set	-1431 Feb 05 j 06:14	19° $\approx$ 33'45	
min. Earth dist.	-1438 Aug 11 j 10:20	5° $\approx$ 39'52 28.89304 AU					
opposition	-1438 Aug 12 j 08:18	5° $\approx$ 38'21 -1°07'18		conjunction	-1431 Feb 20 j 23:30	20° $\approx$ 09'04	-1°26'40
direct	-1438 Oct 29 j 04:20	4° $\approx$ 15'17		minimum elong	-1431 Feb 20 j 23:29	20° $\approx$ 09'04	1°26'40
evening set	-1437 Jan 23 j 07:11	6° $\approx$ 08'02		max. Earth dist.	-1431 Feb 22 j 01:16	20° $\approx$ 11'30	30.85521 AU
				morning rise	-1431 Mar 08 j 20:29	20° $\approx$ 44'46	
conjunction	-1437 Feb 07 j 22:04	6° $\approx$ 43'12 -1°04'53		retrograde	-1431 Jun 08 j 11:24	22° $\approx$ 44'01	
minimum elong	-1437 Feb 07 j 22:04	6° $\approx$ 43'12 1°04'54		opposition	-1431 Aug 27 j 22:35	21° $\approx$ 18'40	-1°34'26
max. Earth dist.	-1437 Feb 08 j 21:58	6° $\approx$ 45'28 30.88776 AU		min. Earth dist.	-1431 Aug 26 j 23:13	21° $\approx$ 20'18	28.85453 AU
morning rise	-1437 Feb 23 j 16:36	7° $\approx$ 18'44		direct	-1431 Nov 13 j 09:25	19° $\approx$ 55'30	
retrograde	-1437 May 26 j 05:24	9° $\approx$ 17'42		evening set	-1430 Feb 07 j 18:39	21° $\approx$ 48'33	
opposition	-1437 Aug 14 j 20:40	7° $\approx$ 52'25 -1°11'31					
min. Earth dist.	-1437 Aug 13 j 21:22	7° $\approx$ 54'03 28.88400 AU		conjunction	-1430 Feb 23 j 12:17	22° $\approx$ 23'55	-1°29'52
direct	-1437 Oct 31 j 16:26	6° $\approx$ 29'18		minimum elong	-1430 Feb 23 j 12:17	22° $\approx$ 23'55	1°29'54
evening set	-1436 Jan 25 j 18:54	8° $\approx$ 22'05		max. Earth dist.	-1430 Feb 24 j 13:14	22° $\approx$ 26'16	30.85176 AU
				morning rise	-1430 Mar 11 j 09:45	22° $\approx$ 59'38	
conjunction	-1436 Feb 10 j 10:02	8° $\approx$ 57'17 -1°08'47		retrograde	-1430 Jun 11 j 02:34	24° $\approx$ 58'55	
minimum elong	-1436 Feb 10 j 10:02	8° $\approx$ 57'17 1°08'49		min. Earth dist.	-1430 Aug 29 j 11:05	23° $\approx$ 35'14	28.85084 AU
max. Earth dist.	-1436 Feb 11 j 09:47	8° $\approx$ 59'32 30.87920 AU		opposition	-1430 Aug 30 j 10:50	23° $\approx$ 33'35	-1°37'47
morning rise	-1436 Feb 26 j 05:06	9° $\approx$ 32'50		direct	-1430 Nov 15 j 20:52	22° $\approx$ 10'22	
retrograde	-1436 May 27 j 17:18	11° $\approx$ 31'51		evening set	-1429 Feb 10 j 07:13	24° $\approx$ 03'29	
min. Earth dist.	-1436 Aug 15 j 10:24	10° $\approx$ 08'06 28.87626 AU					
opposition	-1436 Aug 16 j 09:01	10° $\approx$ 06'31 -1°15'38		conjunction	-1429 Feb 26 j 01:16	24° $\approx$ 38'53	-1°32'57
direct	-1436 Nov 02 j 02:12	8° $\approx$ 43'22		minimum elong	-1429 Feb 26 j 01:16	24° $\approx$ 38'53	1°32'57
evening set	-1435 Jan 27 j 06:27	10° $\approx$ 36'10		max. Earth dist.	-1429 Feb 27 j 02:02	24° $\approx$ 41'13	30.84749 AU
				morning rise	-1429 Mar 13 j 23:07	25° $\approx$ 14'37	
conjunction	-1435 Feb 11 j 22:09	11° $\approx$ 11'23 -1°12'36		retrograde	-1429 Jun 13 j 16:00	27° $\approx$ 13'55	
minimum elong	-1435 Feb 11 j 22:09	11° $\approx$ 11'23 1°12'36		opposition	-1429 Sep 01 j 23:13	25° $\approx$ 48'34	-1°41'00
max. Earth dist.	-1435 Feb 12 j 23:09	11° $\approx$ 13'45 30.87214 AU		min. Earth dist.	-1429 Sep 01 j 00:43	25° $\approx$ 50'08	28.84615 AU
morning rise	-1435 Feb 27 j 17:29	11° $\approx$ 46'59		direct	-1429 Nov 18 j 09:04	24° $\approx$ 25'19	
retrograde	-1435 May 30 j 05:12	13° $\approx$ 46'02		evening set	-1428 Feb 12 j 19:52	26° $\approx$ 18'29	
opposition	-1435 Aug 18 j 21:18	12° $\approx$ 20'40 -1°19'39					
min. Earth dist.	-1435 Aug 17 j 21:26	12° $\approx$ 22'20 28.86992 AU		conjunction	-1428 Feb 28 j 14:25	26° $\approx$ 53'53	-1°35'52
direct	-1435 Nov 04 j 14:13	10° $\approx$ 57'30		minimum elong	-1428 Feb 28 j 14:24	26° $\approx$ 53'53	1°35'53
evening set	-1434 Jan 29 j 18:09	12° $\approx$ 50'20		max. Earth dist.	-1428 Feb 29 j 14:54	26° $\approx$ 56'12	30.84236 AU
				morning rise	-1428 Mar 15 j 12:36	27° $\approx$ 29'39	
conjunction	-1434 Feb 14 j 10:05	13° $\approx$ 25'35 -1°16'17		retrograde	-1428 Jun 15 j 07:02	29° $\approx$ 28'57	
minimum elong	-1434 Feb 14 j 10:05	13° $\approx$ 25'35 1°16'18		opposition	-1428 Sep 03 j 11:14	28° $\approx$ 03'33	-1°44'03
max. Earth dist.	-1434 Feb 15 j 10:27	13° $\approx$ 27'53 30.86647 AU		min. Earth dist.	-1428 Sep 02 j 12:11	28° $\approx$ 05'10	28.84058 AU
morning rise	-1434 Mar 02 j 06:01	14° $\approx$ 01'12		direct	-1428 Nov 19 j 21:58	26° $\approx$ 40'16	
	-1434 Mar 31 j 04:25	15° $\approx$		evening set	-1427 Feb 14 j 08:36	28° $\approx$ 33'27	
retrograde	-1434 Jun 01 j 18:39	16° $\approx$ 00'19					
	-1434 Aug 06 j 04:14	15° $\approx$		conjunction	-1427 Mar 02 j 03:26	29° $\approx$ 08'53	-1°38'40
min. Earth dist.	-1434 Aug 20 j 10:12	14° $\approx$ 36'35 28.86501 AU		minimum elong	-1427 Mar 02 j 03:26	29° $\approx$ 08'53	1°38'40
opposition	-1434 Aug 21 j 09:45	14° $\approx$ 34'56 -1°23'32		max. Earth dist.	-1427 Mar 03 j 03:08	29° $\approx$ 11'07	30.83642 AU
direct	-1434 Nov 06 j 23:07	13° $\approx$ 11'45		morning rise	-1427 Mar 18 j 02:07	29° $\approx$ 44'40	
	-1433 Jan 30 j 03:24	15° $\approx$			-1427 Mar 25 j 03:27	0° $\approx$	
evening set	-1433 Feb 01 j 05:59	15° $\approx$ 04'38		retrograde	-1427 Jun 17 j 19:14	1° $\approx$ 43'57	
				opposition	-1427 Sep 05 j 23:28	0° $\approx$ 18'31	-1°46'57
conjunction	-1433 Feb 16 j 22:30	15° $\approx$ 39'55 -1°19'52		min. Earth dist.	-1427 Sep 05 j 01:44	0° $\approx$ 20'02	28.83455 AU
minimum elong	-1433 Feb 16 j 22:30	15° $\approx$ 39'55 1°19'52			-1427 Sep 17 j 01:30	30° $\approx$	

Attention, astronomical year style is used: The year -1427 in astronomical counting style is the year 1428 BCE in historical counting style.

direct	-1427 Nov 22 j 08:39	28° $\approx$ 55'10		morning rise	-1420 Apr 03 j 01:45	15° $\mathbb{H}$ 29'26	
	-1426 Jan 24 j 10:34	0° $\mathbb{H}$		retrograde	-1420 Jul 03 j 15:20	17° $\mathbb{H}$ 28'34	
evening set	-1426 Feb 16 j 21:06	0° $\mathbb{H}$ 48'22		opposition	-1420 Sep 21 j 10:01	16° $\mathbb{H}$ 03'09	-2°02'28
				min. Earth dist.	-1420 Sep 20 j 13:30	16° $\mathbb{H}$ 04'36	28.81509 AU
conjunction	-1426 Mar 04 j 16:31	1° $\mathbb{H}$ 23'49	-1°41'18	direct	-1420 Dec 07 j 16:06	14° $\mathbb{H}$ 39'34	
minimum elong	-1426 Mar 04 j 16:31	1° $\mathbb{H}$ 23'49	1°41'19	evening set	-1419 Mar 04 j 15:56	16° $\mathbb{H}$ 33'14	
max. Earth dist.	-1426 Mar 05 j 16:52	1° $\mathbb{H}$ 26'07	30.83036 AU				
morning rise	-1426 Mar 20 j 15:29	1° $\mathbb{H}$ 59'38		conjunction	-1419 Mar 20 j 14:16	17° $\mathbb{H}$ 08'52	-1°55'14
retrograde	-1426 Jun 20 j 07:46	3° $\mathbb{H}$ 58'52		minimum elong	-1419 Mar 20 j 14:16	17° $\mathbb{H}$ 08'52	1°55'14
opposition	-1426 Sep 08 j 11:26	2° $\mathbb{H}$ 33'24	-1°49'41	max. Earth dist.	-1419 Mar 21 j 13:07	17° $\mathbb{H}$ 11'01	30.81427 AU
min. Earth dist.	-1426 Sep 07 j 13:04	2° $\mathbb{H}$ 34'59	28.82858 AU	morning rise	-1419 Apr 05 j 15:48	17° $\mathbb{H}$ 44'48	
direct	-1426 Nov 24 j 21:17	1° $\mathbb{H}$ 10'00		retrograde	-1419 Jul 06 j 06:45	19° $\mathbb{H}$ 43'55	
evening set	-1425 Feb 19 j 09:58	3° $\mathbb{H}$ 03'14		opposition	-1419 Sep 23 j 21:36	18° $\mathbb{H}$ 18'33	-2°03'57
				min. Earth dist.	-1419 Sep 23 j 00:37	18° $\mathbb{H}$ 20'02	28.81627 AU
conjunction	-1425 Mar 07 j 05:39	3° $\mathbb{H}$ 38'42	-1°43'47	direct	-1419 Dec 10 j 05:09	16° $\mathbb{H}$ 54'58	
minimum elong	-1425 Mar 07 j 05:39	3° $\mathbb{H}$ 38'42	1°43'47	evening set	-1418 Mar 07 j 05:22	18° $\mathbb{H}$ 48'43	
max. Earth dist.	-1425 Mar 08 j 04:48	3° $\mathbb{H}$ 40'53	30.82460 AU				
morning rise	-1425 Mar 23 j 05:10	4° $\mathbb{H}$ 14'32		conjunction	-1418 Mar 23 j 04:01	19° $\mathbb{H}$ 24'23	-1°56'32
retrograde	-1425 Jun 22 j 20:54	6° $\mathbb{H}$ 13'45		minimum elong	-1418 Mar 23 j 04:01	19° $\mathbb{H}$ 24'23	1°56'32
opposition	-1425 Sep 10 j 23:18	4° $\mathbb{H}$ 48'15	-1°52'16	max. Earth dist.	-1418 Mar 24 j 01:56	19° $\mathbb{H}$ 26'26	30.81534 AU
min. Earth dist.	-1425 Sep 10 j 01:46	4° $\mathbb{H}$ 49'46	28.82331 AU	morning rise	-1418 Apr 08 j 06:00	20° $\mathbb{H}$ 00'21	
direct	-1425 Nov 27 j 06:43	3° $\mathbb{H}$ 24'46		retrograde	-1418 Jul 08 j 19:39	21° $\mathbb{H}$ 59'26	
evening set	-1424 Feb 21 j 22:44	5° $\mathbb{H}$ 18'04		opposition	-1418 Sep 26 j 09:22	20° $\mathbb{H}$ 34'07	-2°05'15
				min. Earth dist.	-1418 Sep 25 j 14:07	20° $\mathbb{H}$ 35'28	28.81722 AU
conjunction	-1424 Mar 08 j 19:00	5° $\mathbb{H}$ 53'34	-1°46'06	direct	-1418 Dec 12 j 16:03	19° $\mathbb{H}$ 10'31	
minimum elong	-1424 Mar 08 j 19:00	5° $\mathbb{H}$ 53'34	1°46'07	evening set	-1417 Mar 09 j 18:58	21° $\mathbb{H}$ 04'20	
max. Earth dist.	-1424 Mar 09 j 19:09	5° $\mathbb{H}$ 55'50	30.81971 AU				
morning rise	-1424 Mar 24 j 18:42	6° $\mathbb{H}$ 29'24		conjunction	-1417 Mar 25 j 18:12	21° $\mathbb{H}$ 40'01	-1°57'39
retrograde	-1424 Jun 24 j 08:53	8° $\mathbb{H}$ 28'36		minimum elong	-1417 Mar 25 j 18:12	21° $\mathbb{H}$ 40'01	1°57'38
opposition	-1424 Sep 12 j 11:07	7° $\mathbb{H}$ 03'05	-1°54'40	max. Earth dist.	-1417 Mar 26 j 16:01	21° $\mathbb{H}$ 42'04	30.81596 AU
min. Earth dist.	-1424 Sep 11 j 13:18	7° $\mathbb{H}$ 04'37	28.81899 AU	morning rise	-1417 Apr 10 j 20:24	22° $\mathbb{H}$ 16'00	
direct	-1424 Nov 28 j 18:29	5° $\mathbb{H}$ 39'33		retrograde	-1417 Jul 11 j 09:43	24° $\mathbb{H}$ 15'02	
evening set	-1423 Feb 23 j 11:33	7° $\mathbb{H}$ 32'54		opposition	-1417 Sep 28 j 20:51	22° $\mathbb{H}$ 49'45	-2°06'21
				min. Earth dist.	-1417 Sep 28 j 01:33	22° $\mathbb{H}$ 51'07	28.81735 AU
conjunction	-1423 Mar 11 j 08:04	8° $\mathbb{H}$ 08'25	-1°48'16	direct	-1417 Dec 15 j 05:01	21° $\mathbb{H}$ 26'07	
minimum elong	-1423 Mar 11 j 08:04	8° $\mathbb{H}$ 08'25	1°48'16	evening set	-1416 Mar 11 j 08:48	23° $\mathbb{H}$ 20'00	
max. Earth dist.	-1423 Mar 12 j 07:11	8° $\mathbb{H}$ 10'35	30.81605 AU				
morning rise	-1423 Mar 27 j 08:16	8° $\mathbb{H}$ 44'16		conjunction	-1416 Mar 27 j 08:17	23° $\mathbb{H}$ 55'43	-1°58'36
retrograde	-1423 Jun 26 j 22:34	10° $\mathbb{H}$ 43'27		minimum elong	-1416 Mar 27 j 08:17	23° $\mathbb{H}$ 55'43	1°58'36
opposition	-1423 Sep 14 j 22:57	9° $\mathbb{H}$ 17'56	-1°56'53	max. Earth dist.	-1416 Mar 28 j 04:12	23° $\mathbb{H}$ 57'35	30.81558 AU
min. Earth dist.	-1423 Sep 14 j 01:11	9° $\mathbb{H}$ 19'28	28.81612 AU	morning rise	-1416 Apr 12 j 10:58	24° $\mathbb{H}$ 31'43	
direct	-1423 Dec 01 j 05:08	7° $\mathbb{H}$ 54'22		retrograde	-1416 Jul 12 j 23:36	26° $\mathbb{H}$ 30'40	
evening set	-1422 Feb 26 j 00:25	9° $\mathbb{H}$ 47'47		opposition	-1416 Sep 30 j 08:33	25° $\mathbb{H}$ 05'23	-2°07'16
				min. Earth dist.	-1416 Sep 29 j 14:40	25° $\mathbb{H}$ 06'39	28.81656 AU
conjunction	-1422 Mar 13 j 21:29	10° $\mathbb{H}$ 23'20	-1°50'16	direct	-1416 Dec 16 j 15:21	23° $\mathbb{H}$ 41'42	
minimum elong	-1422 Mar 13 j 21:29	10° $\mathbb{H}$ 23'20	1°50'16	evening set	-1415 Mar 13 j 22:18	25° $\mathbb{H}$ 35'37	
max. Earth dist.	-1422 Mar 14 j 21:29	10° $\mathbb{H}$ 25'35	30.81378 AU				
morning rise	-1422 Mar 29 j 21:56	10° $\mathbb{H}$ 59'12		conjunction	-1415 Mar 29 j 22:23	26° $\mathbb{H}$ 11'21	-1°59'22
retrograde	-1422 Jun 29 j 10:51	12° $\mathbb{H}$ 58'22		minimum elong	-1415 Mar 29 j 22:23	26° $\mathbb{H}$ 11'21	1°59'21
opposition	-1422 Sep 17 j 10:40	11° $\mathbb{H}$ 32'52	-1°58'56	max. Earth dist.	-1415 Mar 30 j 18:33	26° $\mathbb{H}$ 13'15	30.81432 AU
min. Earth dist.	-1422 Sep 16 j 13:25	11° $\mathbb{H}$ 34'22	28.81458 AU	morning rise	-1415 Apr 15 j 01:13	26° $\mathbb{H}$ 47'22	
direct	-1422 Dec 03 j 16:49	10° $\mathbb{H}$ 09'17		retrograde	-1415 Jul 15 j 10:50	28° $\mathbb{H}$ 46'13	
evening set	-1421 Feb 28 j 13:29	12° $\mathbb{H}$ 02'46		opposition	-1415 Oct 02 j 20:05	27° $\mathbb{H}$ 20'56	-2°07'59
				min. Earth dist.	-1415 Oct 02 j 02:31	27° $\mathbb{H}$ 22'11	28.81488 AU
conjunction	-1421 Mar 16 j 10:56	12° $\mathbb{H}$ 38'21	-1°52'05	direct	-1415 Dec 19 j 04:09	25° $\mathbb{H}$ 57'11	
minimum elong	-1421 Mar 16 j 10:56	12° $\mathbb{H}$ 38'21	1°52'05	evening set	-1414 Mar 16 j 12:06	27° $\mathbb{H}$ 51'08	
max. Earth dist.	-1421 Mar 17 j 10:05	12° $\mathbb{H}$ 40'31	30.81300 AU				
morning rise	-1421 Apr 01 j 11:52	13° $\mathbb{H}$ 14'15		conjunction	-1414 Apr 01 j 12:28	28° $\mathbb{H}$ 26'52	-1°59'56
retrograde	-1421 Jul 02 j 01:48	15° $\mathbb{H}$ 13'24		minimum elong	-1414 Apr 01 j 12:28	28° $\mathbb{H}$ 26'52	1°59'57
opposition	-1421 Sep 19 j 22:21	13° $\mathbb{H}$ 47'56	-2°00'47	max. Earth dist.	-1414 Apr 02 j 06:48	28° $\mathbb{H}$ 28'36	30.81251 AU
min. Earth dist.	-1421 Sep 19 j 00:39	13° $\mathbb{H}$ 49'28	28.81442 AU	morning rise	-1414 Apr 17 j 15:50	29° $\mathbb{H}$ 02'54	
direct	-1421 Dec 06 j 03:51	12° $\mathbb{H}$ 24'20			-1414 May 15 j 20:02	0° $\mathbb{Y}$	
evening set	-1420 Mar 02 j 02:41	14° $\mathbb{H}$ 17'55		retrograde	-1414 Jul 17 j 23:29	1° $\mathbb{Y}$ 01'38	
					-1414 Sep 21 j 04:51	30° $\mathbb{R}$ $\mathbb{H}$	
conjunction	-1420 Mar 18 j 00:31	14° $\mathbb{H}$ 53'31	-1°53'45	opposition	-1414 Oct 05 j 07:27	29° $\mathbb{H}$ 36'21	-2°08'30
minimum elong	-1420 Mar 18 j 00:31	14° $\mathbb{H}$ 53'31	1°53'45	min. Earth dist.	-1414 Oct 04 j 14:39	29° $\mathbb{H}$ 37'32	28.81301 AU
max. Earth dist.	-1420 Mar 18 j 23:43	14° $\mathbb{H}$ 55'42	30.81321 AU	direct	-1414 Dec 21 j 14:54	28° $\mathbb{H}$ 12'29	

Attention, astronomical year style is used: The year -1413 in astronomical counting style is the year 1414 BCE in historical counting style.

	-1413 Mar 16 j 02:26	0°♊		retrograde	-1407 Aug 02 j 18:28	16°♊46'12	
evening set	-1413 Mar 19 j 01:49	0°♊06'28		opposition	-1407 Oct 20 j 13:11	15°♊21'06	-2°06'40
				min. Earth dist.	-1407 Oct 20 j 00:17	15°♊22'01	28.82528 AU
conjunction	-1413 Apr 04 j 02:45	0°♊42'14	-2°00'20	direct	-1406 Jan 06 j 02:10	13°♊56'55	
minimum elong	-1413 Apr 04 j 02:44	0°♊42'14	2°00'21	evening set	-1406 Apr 04 j 02:19	15°♊51'20	
max. Earth dist.	-1413 Apr 04 j 21:26	0°♊43'59	30.81060 AU				
morning rise	-1413 Apr 20 j 06:17	1°♊18'16		conjunction	-1406 Apr 20 j 06:06	16°♊27'15	-1°57'59
retrograde	-1413 Jul 20 j 10:53	3°♊16'53		minimum elong	-1406 Apr 20 j 06:07	16°♊27'15	1°57'59
opposition	-1413 Oct 07 j 18:46	1°♊51'34	-2°08'50	max. Earth dist.	-1406 Apr 20 j 20:57	16°♊28'38	30.82684 AU
min. Earth dist.	-1413 Oct 07 j 02:56	1°♊52'42	28.81124 AU	morning rise	-1406 May 06 j 11:38	17°♊03'22	
direct	-1413 Dec 24 j 02:31	0°♊27'37		retrograde	-1406 Aug 05 j 06:16	19°♊01'14	
evening set	-1412 Mar 20 j 15:33	2°♊21'39		min. Earth dist.	-1406 Oct 22 j 11:36	17°♊37'07	28.83105 AU
				opposition	-1406 Oct 23 j 00:00	17°♊36'14	-2°05'36
conjunction	-1412 Apr 05 j 16:48	2°♊57'25	-2°00'33	direct	-1405 Jan 08 j 14:42	16°♊12'03	
minimum elong	-1412 Apr 05 j 16:48	2°♊57'25	2°00'33	evening set	-1405 Apr 06 j 16:36	18°♊06'33	
max. Earth dist.	-1412 Apr 06 j 10:08	2°♊59'02	30.80920 AU				
morning rise	-1412 Apr 21 j 20:45	3°♊33'27		conjunction	-1405 Apr 22 j 20:36	18°♊42'30	-1°56'55
retrograde	-1412 Jul 22 j 00:18	5°♊31'57		minimum elong	-1405 Apr 22 j 20:36	18°♊42'30	1°56'54
opposition	-1412 Oct 09 j 05:54	4°♊06'38	-2°08'58	max. Earth dist.	-1405 Apr 23 j 09:15	18°♊43'41	30.83259 AU
min. Earth dist.	-1412 Oct 08 j 13:55	4°♊07'46	28.81028 AU	morning rise	-1405 May 09 j 02:32	19°♊18'37	
direct	-1412 Dec 25 j 13:58	2°♊42'36		retrograde	-1405 Aug 07 j 19:27	21°♊16'24	
evening set	-1411 Mar 23 j 05:16	4°♊36'39		opposition	-1405 Oct 25 j 11:00	19°♊51'28	-2°04'22
				min. Earth dist.	-1405 Oct 24 j 23:36	19°♊52'17	28.83659 AU
conjunction	-1411 Apr 08 j 06:56	5°♊12'27	-2°00'36	direct	-1404 Jan 11 j 01:09	18°♊27'16	
minimum elong	-1411 Apr 08 j 06:56	5°♊12'27	2°00'35	evening set	-1404 Apr 08 j 06:44	20°♊21'52	
max. Earth dist.	-1411 Apr 09 j 00:14	5°♊14'04	30.80871 AU				
morning rise	-1411 Apr 24 j 11:07	5°♊48'30		conjunction	-1404 Apr 24 j 11:13	20°♊57'49	-1°55'40
retrograde	-1411 Jul 24 j 12:07	7°♊46'53		minimum elong	-1404 Apr 24 j 11:13	20°♊57'49	1°55'39
opposition	-1411 Oct 11 j 17:05	6°♊21'33	-2°08'54	max. Earth dist.	-1404 Apr 24 j 23:51	20°♊59'00	30.83770 AU
min. Earth dist.	-1411 Oct 11 j 02:20	6°♊22'36	28.81047 AU	morning rise	-1404 May 10 j 17:10	21°♊33'57	
direct	-1411 Dec 28 j 02:22	4°♊57'27		retrograde	-1404 Aug 09 j 06:56	23°♊31'37	
evening set	-1410 Mar 25 j 18:53	6°♊51'34		opposition	-1404 Oct 26 j 21:58	22°♊06'46	-2°02'56
				min. Earth dist.	-1404 Oct 26 j 11:55	22°♊07'29	28.84124 AU
conjunction	-1410 Apr 10 j 21:01	7°♊27'23	-2°00'26	direct	-1403 Jan 12 j 12:19	20°♊42'32	
minimum elong	-1410 Apr 10 j 21:02	7°♊27'23	2°00'26	evening set	-1403 Apr 10 j 20:59	22°♊37'10	
max. Earth dist.	-1410 Apr 11 j 13:45	7°♊28'56	30.80970 AU				
morning rise	-1410 Apr 27 j 01:32	8°♊03'26		conjunction	-1403 Apr 27 j 01:43	23°♊13'09	-1°54'14
retrograde	-1410 Jul 27 j 02:07	10°♊01'42		minimum elong	-1403 Apr 27 j 01:43	23°♊13'09	1°54'14
opposition	-1410 Oct 14 j 04:07	8°♊36'24	-2°08'38	max. Earth dist.	-1403 Apr 27 j 12:18	23°♊14'08	30.84210 AU
min. Earth dist.	-1410 Oct 13 j 12:48	8°♊37'29	28.81213 AU	morning rise	-1403 May 13 j 08:03	23°♊49'18	
direct	-1410 Dec 30 j 15:31	7°♊12'15		retrograde	-1403 Aug 11 j 19:42	25°♊46'49	
evening set	-1409 Mar 28 j 08:46	9°♊06'25		opposition	-1403 Oct 29 j 08:47	24°♊22'01	-2°01'19
				min. Earth dist.	-1403 Oct 28 j 23:05	24°♊22'42	28.84525 AU
conjunction	-1409 Apr 13 j 11:14	9°♊42'15	-2°00'06	direct	-1402 Jan 14 j 23:40	22°♊57'43	
minimum elong	-1409 Apr 13 j 11:14	9°♊42'15	2°00'05	evening set	-1402 Apr 13 j 11:08	24°♊52'25	
max. Earth dist.	-1409 Apr 14 j 03:12	9°♊43'45	30.81204 AU				
morning rise	-1409 Apr 29 j 16:04	10°♊18'19		conjunction	-1402 Apr 29 j 16:19	25°♊28'24	-1°52'38
retrograde	-1409 Jul 29 j 14:42	12°♊16'29		minimum elong	-1402 Apr 29 j 16:19	25°♊28'24	1°52'38
opposition	-1409 Oct 16 j 15:09	10°♊51'14	-2°08'11	max. Earth dist.	-1402 Apr 30 j 02:21	25°♊29'21	30.84575 AU
min. Earth dist.	-1409 Oct 16 j 01:19	10°♊52'13	28.81527 AU	morning rise	-1402 May 15 j 22:47	26°♊04'33	
direct	-1408 Jan 02 j 02:29	9°♊27'03		retrograde	-1402 Aug 14 j 06:30	28°♊01'55	
evening set	-1408 Mar 29 j 22:32	11°♊21'17		opposition	-1402 Oct 31 j 19:41	26°♊37'09	-1°59'31
				min. Earth dist.	-1402 Oct 31 j 11:45	26°♊37'43	28.84861 AU
conjunction	-1408 Apr 15 j 01:32	11°♊57'09	-1°59'35	direct	-1401 Jan 17 j 12:17	25°♊12'47	
minimum elong	-1408 Apr 15 j 01:32	11°♊57'09	1°59'35	evening set	-1401 Apr 16 j 01:21	27°♊07'32	
max. Earth dist.	-1408 Apr 15 j 17:37	11°♊58'39	30.81599 AU				
morning rise	-1408 May 01 j 06:33	12°♊33'14		conjunction	-1401 May 02 j 06:53	27°♊43'32	-1°50'53
retrograde	-1408 Jul 31 j 04:51	14°♊31'17		minimum elong	-1401 May 02 j 06:53	27°♊43'32	1°50'52
min. Earth dist.	-1408 Oct 17 j 11:54	13°♊07'07	28.81976 AU	max. Earth dist.	-1401 May 02 j 15:33	27°♊44'20	30.84914 AU
opposition	-1408 Oct 18 j 02:06	13°♊06'06	-2°07'31	morning rise	-1401 May 18 j 13:35	28°♊19'40	
direct	-1407 Jan 03 j 15:38	11°♊41'56			-1401 Jul 15 j 23:07	0°♊	
evening set	-1407 Apr 01 j 12:22	13°♊36'15		retrograde	-1401 Aug 16 j 19:34	0°♊16'52	
					-1401 Sep 18 j 00:25	30°♊	
conjunction	-1407 Apr 17 j 15:35	14°♊12'08	-1°58'53	opposition	-1401 Nov 03 j 06:13	28°♊52'08	-1°57'32
minimum elong	-1407 Apr 17 j 15:35	14°♊12'08	1°58'52	min. Earth dist.	-1401 Nov 02 j 22:13	28°♊52'42	28.85190 AU
max. Earth dist.	-1407 Apr 18 j 06:13	14°♊13'30	30.82106 AU	direct	-1400 Jan 20 j 01:19	27°♊27'41	
morning rise	-1407 May 03 j 21:01	14°♊48'14		evening set	-1400 Apr 17 j 15:33	29°♊22'28	

Attention, astronomical year style is used: The year -1400 in astronomical counting style is the year 1401 BCE in historical counting style.

conjunction	-1400 May 03 j 21:20	29° $\Upsilon$ 58'29	-1°48'57
minimum elong	-1400 May 03 j 21:20	29° $\Upsilon$ 58'29	1°48'56
max. Earth dist.	-1400 May 04 j 05:02	29° $\Upsilon$ 59'12	30.85255 AU
	-1400 May 04 j 13:34	0° $\mathcal{B}$	
morning rise	-1400 May 20 j 04:13	0° $\mathcal{B}$ 34'38	
retrograde	-1400 Aug 18 j 07:20	2° $\mathcal{B}$ 31'40	
opposition	-1400 Nov 04 j 16:58	1° $\mathcal{B}$ 06'56	-1°55'23
min. Earth dist.	-1400 Nov 04 j 10:41	1° $\mathcal{B}$ 07'23	28.85562 AU
	-1400 Dec 19 j 23:16	30° $\mathcal{R}\Upsilon$	
direct	-1399 Jan 21 j 12:40	29° $\Upsilon$ 42'25	
	-1399 Feb 22 j 20:55	0° $\mathcal{B}$	
evening set	-1399 Apr 20 j 05:24	1° $\mathcal{B}$ 37'14	

conjunction	-1399 May 06 j 11:37	2° $\mathcal{B}$ 13'16	-1°46'52
minimum elong	-1399 May 06 j 11:37	2° $\mathcal{B}$ 13'16	1°46'50
max. Earth dist.	-1399 May 06 j 19:05	2° $\mathcal{B}$ 13'57	30.85674 AU
morning rise	-1399 May 22 j 18:38	2° $\mathcal{B}$ 49'24	
retrograde	-1399 Aug 20 j 20:46	4° $\mathcal{B}$ 46'15	
opposition	-1399 Nov 07 j 03:28	3° $\mathcal{B}$ 21'34	-1°53'04
min. Earth dist.	-1399 Nov 06 j 21:02	3° $\mathcal{B}$ 22'01	28.86017 AU