

# Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -5900 in astronomical counting style is the year 5901 BCE in historical counting style.

retrograde	-5900 Mar 24 j 00:21	6°M.53'05		conjunction	-5895 Dec 21 j 00:04	17°M.37'53	-0°03'01
min. Earth dist.	-5900 Jun 12 j 02:48	5°M.29'43	29.01587 AU	minimum elong	-5895 Dec 21 j 00:04	17°M.37'53	0°03'15
opposition	-5900 Jun 13 j 00:43	5°M.28'12	0°28'47	behind sun begin	-5895 Dec 20 j 17:38	17°M.37'18	
direct	-5900 Aug 30 j 04:08	4°M.05'34		behind sun end	-5895 Dec 21 j 06:30	17°M.38'28	
evening set	-5900 Nov 24 j 04:19	5°M.57'45		max. Earth dist.	-5895 Dec 22 j 01:57	17°M.40'19	30.96226 AU
				morning rise	-5894 Jan 05 j 18:18	18°M.13'20	
conjunction	-5900 Dec 09 j 16:02	6°M.32'36	0°24'20	retrograde	-5894 Apr 07 j 05:33	20°M.12'03	
minimum elong	-5900 Dec 09 j 16:02	6°M.32'36	0°24'08	min. Earth dist.	-5894 Jun 26 j 02:53	18°M.48'31	28.95915 AU
max. Earth dist.	-5900 Dec 10 j 14:44	6°M.34'45	31.00963 AU	opposition	-5894 Jun 27 j 03:44	18°M.46'48	-0°06'10
morning rise	-5900 Dec 25 j 07:24	7°M.07'50		direct	-5894 Sep 12 j 22:25	17°M.24'02	
retrograde	-5899 Mar 26 j 11:00	9°M.06'17		evening set	-5894 Dec 07 j 20:48	19°M.16'10	
opposition	-5899 Jun 15 j 13:28	7°M.41'18	0°23'02				
min. Earth dist.	-5899 Jun 14 j 15:43	7°M.42'48	29.00410 AU	conjunction	-5894 Dec 23 j 11:36	19°M.51'16	-0°08'29
direct	-5899 Sep 01 j 15:01	6°M.18'37		minimum elong	-5894 Dec 23 j 11:36	19°M.51'16	0°08'45
evening set	-5899 Nov 26 j 14:50	8°M.10'45		behind sun begin	-5894 Dec 23 j 06:00	19°M.50'45	
				behind sun end	-5894 Dec 23 j 17:12	19°M.51'46	
conjunction	-5899 Dec 12 j 03:06	8°M.45'39	0°18'56	max. Earth dist.	-5894 Dec 24 j 12:43	19°M.53'38	30.95559 AU
minimum elong	-5899 Dec 12 j 03:06	8°M.45'39	0°18'44	morning rise	-5893 Jan 08 j 06:33	20°M.26'46	
max. Earth dist.	-5899 Dec 13 j 02:07	8°M.47'49	30.99820 AU	retrograde	-5893 Apr 09 j 20:17	22°M.25'33	
morning rise	-5899 Dec 27 j 19:05	9°M.20'55		opposition	-5893 Jun 29 j 16:03	21°M.00'18	-0°12'02
retrograde	-5898 Mar 29 j 00:36	11°M.19'24		min. Earth dist.	-5893 Jun 28 j 15:26	21°M.02'00	28.95271 AU
min. Earth dist.	-5898 Jun 17 j 02:44	9°M.55'56	28.99303 AU	direct	-5893 Sep 15 j 09:08	19°M.37'33	
opposition	-5898 Jun 18 j 01:54	9°M.54'20	0°17'14	evening set	-5893 Dec 10 j 07:58	21°M.29'43	
direct	-5898 Sep 04 j 01:09	8°M.31'35					
evening set	-5898 Nov 29 j 01:29	10°M.23'42		conjunction	-5893 Dec 25 j 23:24	22°M.04'52	-0°13'56
				minimum elong	-5893 Dec 25 j 23:24	22°M.04'52	0°14'12
conjunction	-5898 Dec 14 j 14:13	10°M.58'38	0°13'31	behind sun begin	-5893 Dec 25 j 20:17	22°M.04'35	
minimum elong	-5898 Dec 14 j 14:13	10°M.58'38	0°13'17	behind sun end	-5893 Dec 26 j 02:32	22°M.05'09	
behind sun begin	-5898 Dec 14 j 10:26	10°M.58'17		max. Earth dist.	-5893 Dec 27 j 01:49	22°M.07'21	30.94911 AU
behind sun end	-5898 Dec 14 j 18:00	10°M.58'58		morning rise	-5892 Jan 10 j 18:44	22°M.40'24	
max. Earth dist.	-5898 Dec 15 j 13:42	11°M.00'50	30.98748 AU	retrograde	-5892 Apr 11 j 08:43	24°M.39'16	
morning rise	-5898 Dec 30 j 06:50	11°M.33'56		min. Earth dist.	-5892 Jun 30 j 03:44	23°M.15'44	28.94614 AU
retrograde	-5897 Mar 31 j 12:50	13°M.32'29		opposition	-5892 Jul 01 j 04:25	23°M.14'02	-0°17'53
opposition	-5897 Jun 20 j 14:29	12°M.07'20	0°11'24	direct	-5892 Sep 16 j 21:07	21°M.51'18	
min. Earth dist.	-5897 Jun 19 j 15:48	12°M.08'54	28.98289 AU	evening set	-5892 Dec 11 j 19:18	23°M.43'29	
direct	-5897 Sep 06 j 11:41	10°M.44'34					
evening set	-5897 Dec 01 j 12:01	12°M.36'39		conjunction	-5892 Dec 27 j 11:09	24°M.18'41	-0°19'23
				minimum elong	-5892 Dec 27 j 11:09	24°M.18'41	0°19'40
conjunction	-5897 Dec 17 j 01:23	13°M.11'37	0°08'04	max. Earth dist.	-5892 Dec 28 j 12:48	24°M.21'06	30.94241 AU
minimum elong	-5897 Dec 17 j 01:23	13°M.11'37	0°07'51	morning rise	-5891 Jan 12 j 07:08	24°M.54'16	
behind sun begin	-5897 Dec 16 j 19:34	13°M.11'06		retrograde	-5891 Apr 13 j 22:28	26°M.53'12	
behind sun end	-5897 Dec 17 j 07:12	13°M.12'09		opposition	-5891 Jul 03 j 16:51	25°M.27'57	-0°23'42
max. Earth dist.	-5897 Dec 18 j 02:01	13°M.13'56	30.97796 AU	min. Earth dist.	-5891 Jul 02 j 15:59	25°M.29'40	28.93915 AU
morning rise	-5896 Jan 01 j 18:28	13°M.46'58		direct	-5891 Sep 19 j 07:37	24°M.05'13	
	-5896 Feb 08 j 02:16	15°M.		evening set	-5891 Dec 14 j 06:56	25°M.57'27	
retrograde	-5896 Apr 02 j 02:46	15°M.45'34					
	-5896 May 28 j 04:53	15°R.M.		conjunction	-5891 Dec 29 j 23:19	26°M.32'41	-0°24'49
min. Earth dist.	-5896 Jun 21 j 02:36	14°M.22'02	28.97390 AU	minimum elong	-5891 Dec 29 j 23:19	26°M.32'41	0°25'06
opposition	-5896 Jun 22 j 02:51	14°M.20'22	0°05'34	max. Earth dist.	-5891 Dec 31 j 01:25	26°M.35'08	30.93484 AU
direct	-5896 Sep 07 j 23:55	12°M.57'35		morning rise	-5890 Jan 14 j 19:45	27°M.08'18	
evening set	-5896 Dec 02 j 22:51	14°M.49'40		retrograde	-5890 Apr 16 j 09:51	29°M.07'18	
	-5896 Dec 07 j 14:28	15°M.		min. Earth dist.	-5890 Jul 05 j 05:05	27°M.43'42	28.93113 AU
				opposition	-5890 Jul 06 j 05:07	27°M.42'02	-0°29'30
conjunction	-5896 Dec 18 j 12:36	15°M.24'41	0°02'36	direct	-5890 Sep 21 j 18:20	26°M.19'16	
minimum elong	-5896 Dec 18 j 12:35	15°M.24'41	0°02'22	evening set	-5890 Dec 16 j 18:38	28°M.11'32	
behind sun begin	-5896 Dec 18 j 06:08	15°M.24'06					
behind sun end	-5896 Dec 18 j 19:03	15°M.25'16		conjunction	-5889 Jan 01 j 11:34	28°M.46'48	-0°30'13
max. Earth dist.	-5896 Dec 19 j 13:00	15°M.26'59	30.96955 AU	minimum elong	-5889 Jan 01 j 11:34	28°M.46'48	0°30'31
morning rise	-5895 Jan 03 j 06:24	16°M.00'05		max. Earth dist.	-5889 Jan 02 j 13:08	28°M.49'13	30.92639 AU
retrograde	-5895 Apr 04 j 16:35	17°M.58'44		morning rise	-5889 Jan 17 j 08:31	29°M.22'28	
desc. node	-5895 Jun 06 j 01:02	17°M.03'39			-5889 Feb 04 j 02:59	0°X	
opposition	-5895 Jun 24 j 15:23	16°M.33'30	-0°00'18	retrograde	-5889 Apr 19 j 00:06	1°X21'29	
min. Earth dist.	-5895 Jun 23 j 15:35	16°M.35'09	28.96613 AU		-5889 Jul 06 j 10:22	30°R.M.	
direct	-5895 Sep 10 j 10:05	15°M.10'43		opposition	-5889 Jul 08 j 17:21	29°M.56'11	-0°35'15
evening set	-5895 Dec 05 j 09:36	17°M.02'49		min. Earth dist.	-5889 Jul 07 j 16:38	29°M.57'54	28.92217 AU

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

Attention, astronomical year style is used: The year -5889 in astronomical counting style is the year 5890 BCE in historical counting style.

direct	-5889 Sep 24 j 04:37	28° $\mathring{M}$ 33'22		morning rise	-5882 Feb 02 j 02:43	15° $\mathring{A}$ 01'25	
	-5889 Dec 07 j 06:50	0° $\mathring{A}$		retrograde	-5882 May 04 j 21:22	17° $\mathring{A}$ 00'29	
evening set	-5889 Dec 19 j 06:23	0° $\mathring{A}$ 25'40		min. Earth dist.	-5882 Jul 23 j 04:20	15° $\mathring{A}$ 36'38	28.86900 AU
				opposition	-5882 Jul 24 j 04:52	15° $\mathring{A}$ 34'55	-1°13'32
conjunction	-5888 Jan 03 j 23:42	1° $\mathring{A}$ 00'57	-0°35'34	direct	-5882 Oct 09 j 12:56	14° $\mathring{A}$ 11'45	
minimum elong	-5888 Jan 03 j 23:41	1° $\mathring{A}$ 00'57	0°35'52	evening set	-5881 Jan 03 j 18:51	16° $\mathring{A}$ 04'20	
max. Earth dist.	-5888 Jan 05 j 01:04	1° $\mathring{A}$ 03'21	30.91691 AU				
morning rise	-5888 Jan 19 j 21:10	1° $\mathring{A}$ 36'39		conjunction	-5881 Jan 19 j 15:26	16° $\mathring{A}$ 39'51	-1°11'06
retrograde	-5888 Apr 20 j 11:41	3° $\mathring{A}$ 35'42		minimum elong	-5881 Jan 19 j 15:25	16° $\mathring{A}$ 39'51	1°11'27
min. Earth dist.	-5888 Jul 09 j 06:02	2° $\mathring{A}$ 11'59	28.91248 AU	max. Earth dist.	-5881 Jan 20 j 17:53	16° $\mathring{A}$ 42'20	30.86654 AU
opposition	-5888 Jul 10 j 05:38	2° $\mathring{A}$ 10'20	-0°40'57	morning rise	-5881 Feb 04 j 15:55	17° $\mathring{A}$ 15'44	
direct	-5888 Sep 25 j 15:24	0° $\mathring{A}$ 47'28		retrograde	-5881 May 07 j 09:40	19° $\mathring{A}$ 14'49	
evening set	-5888 Dec 20 j 18:07	2° $\mathring{A}$ 39'47		opposition	-5881 Jul 26 j 16:40	17° $\mathring{A}$ 49'17	-1°18'38
				min. Earth dist.	-5881 Jul 25 j 16:53	17° $\mathring{A}$ 50'57	28.86589 AU
conjunction	-5887 Jan 05 j 12:02	3° $\mathring{A}$ 15'06	-0°40'52	direct	-5881 Oct 12 j 00:06	16° $\mathring{A}$ 26'07	
minimum elong	-5887 Jan 05 j 12:02	3° $\mathring{A}$ 15'06	0°41'11	evening set	-5880 Jan 06 j 07:18	18° $\mathring{A}$ 18'47	
max. Earth dist.	-5887 Jan 06 j 13:56	3° $\mathring{A}$ 17'32	30.90717 AU				
morning rise	-5887 Jan 21 j 09:55	3° $\mathring{A}$ 50'49		conjunction	-5880 Jan 22 j 04:17	18° $\mathring{A}$ 54'19	-1°15'49
retrograde	-5887 Apr 23 j 01:14	5° $\mathring{A}$ 49'53		minimum elong	-5880 Jan 22 j 04:16	18° $\mathring{A}$ 54'19	1°16'10
opposition	-5887 Jul 12 j 17:36	4° $\mathring{A}$ 24'27	-0°46'34	max. Earth dist.	-5880 Jan 23 j 06:17	18° $\mathring{A}$ 56'46	30.86381 AU
min. Earth dist.	-5887 Jul 11 j 17:06	4° $\mathring{A}$ 26'09	28.90275 AU	morning rise	-5880 Feb 07 j 05:08	19° $\mathring{A}$ 30'14	
direct	-5887 Sep 28 j 03:36	3° $\mathring{A}$ 01'30		retrograde	-5880 May 09 j 00:09	21° $\mathring{A}$ 29'19	
evening set	-5887 Dec 23 j 06:05	4° $\mathring{A}$ 53'50		min. Earth dist.	-5880 Jul 27 j 04:00	20° $\mathring{A}$ 05'32	28.86340 AU
				opposition	-5880 Jul 28 j 04:23	20° $\mathring{A}$ 03'49	-1°23'37
conjunction	-5886 Jan 08 j 00:21	5° $\mathring{A}$ 29'12	-0°46'06	direct	-5880 Oct 13 j 10:52	18° $\mathring{A}$ 40'38	
minimum elong	-5886 Jan 08 j 00:20	5° $\mathring{A}$ 29'12	0°46'25	evening set	-5879 Jan 07 j 20:09	20° $\mathring{A}$ 33'24	
max. Earth dist.	-5886 Jan 09 j 01:31	5° $\mathring{A}$ 31'34	30.89754 AU				
morning rise	-5886 Jan 23 j 22:51	6° $\mathring{A}$ 04'57		conjunction	-5879 Jan 23 j 17:27	21° $\mathring{A}$ 08'57	-1°20'25
retrograde	-5886 Apr 25 j 14:28	8° $\mathring{A}$ 04'00		minimum elong	-5879 Jan 23 j 17:27	21° $\mathring{A}$ 08'57	1°20'47
min. Earth dist.	-5886 Jul 14 j 06:06	6° $\mathring{A}$ 40'10	28.89355 AU	max. Earth dist.	-5879 Jan 24 j 19:05	21° $\mathring{A}$ 11'22	30.86125 AU
opposition	-5886 Jul 15 j 05:41	6° $\mathring{A}$ 38'31	-0°52'08	morning rise	-5879 Feb 08 j 18:41	21° $\mathring{A}$ 44'54	
direct	-5886 Sep 30 j 13:43	5° $\mathring{A}$ 15'30		retrograde	-5879 May 11 j 11:26	23° $\mathring{A}$ 44'00	
evening set	-5886 Dec 25 j 18:00	7° $\mathring{A}$ 07'52		opposition	-5879 Jul 30 j 16:09	22° $\mathring{A}$ 18'32	-1°28'29
				min. Earth dist.	-5879 Jul 29 j 17:15	22° $\mathring{A}$ 20'08	28.86087 AU
conjunction	-5885 Jan 10 j 12:53	7° $\mathring{A}$ 43'15	-0°51'16	direct	-5879 Oct 15 j 21:08	20° $\mathring{A}$ 55'19	
minimum elong	-5885 Jan 10 j 12:52	7° $\mathring{A}$ 43'15	0°51'36	evening set	-5878 Jan 10 j 09:06	22° $\mathring{A}$ 48'11	
max. Earth dist.	-5885 Jan 11 j 15:08	7° $\mathring{A}$ 45'43	30.88870 AU				
morning rise	-5885 Jan 26 j 11:38	8° $\mathring{A}$ 19'02		conjunction	-5878 Jan 26 j 06:56	23° $\mathring{A}$ 23'46	-1°24'55
retrograde	-5885 Apr 28 j 03:40	10° $\mathring{A}$ 18'05		minimum elong	-5878 Jan 26 j 06:55	23° $\mathring{A}$ 23'46	1°25'16
opposition	-5885 Jul 17 j 17:25	8° $\mathring{A}$ 52'33	-0°57'37	max. Earth dist.	-5878 Jan 27 j 08:27	23° $\mathring{A}$ 26'10	30.85848 AU
min. Earth dist.	-5885 Jul 16 j 17:00	8° $\mathring{A}$ 54'15	28.88527 AU	morning rise	-5878 Feb 11 j 08:26	23° $\mathring{A}$ 59'43	
direct	-5885 Oct 03 j 02:24	7° $\mathring{A}$ 29'28		retrograde	-5878 May 14 j 01:03	25° $\mathring{A}$ 58'49	
evening set	-5885 Dec 28 j 06:08	9° $\mathring{A}$ 21'53		min. Earth dist.	-5878 Aug 01 j 04:34	24° $\mathring{A}$ 35'00	28.85774 AU
				opposition	-5878 Aug 02 j 03:50	24° $\mathring{A}$ 33'22	-1°33'13
conjunction	-5884 Jan 13 j 01:17	9° $\mathring{A}$ 57'18	-0°56'21	direct	-5878 Oct 18 j 08:50	23° $\mathring{A}$ 10'07	
minimum elong	-5884 Jan 13 j 01:16	9° $\mathring{A}$ 57'18	0°56'41	evening set	-5877 Jan 12 j 22:20	25° $\mathring{A}$ 03'04	
max. Earth dist.	-5884 Jan 14 j 02:36	9° $\mathring{A}$ 59'41	30.88107 AU				
morning rise	-5884 Jan 29 j 00:38	10° $\mathring{A}$ 33'06		conjunction	-5877 Jan 28 j 20:22	25° $\mathring{A}$ 38'40	-1°29'16
retrograde	-5884 Apr 29 j 18:57	12° $\mathring{A}$ 32'09		minimum elong	-5877 Jan 28 j 20:22	25° $\mathring{A}$ 38'40	1°29'38
min. Earth dist.	-5884 Jul 18 j 05:10	11° $\mathring{A}$ 08'17	28.87848 AU	max. Earth dist.	-5877 Jan 29 j 20:28	25° $\mathring{A}$ 40'56	30.85478 AU
opposition	-5884 Jul 19 j 05:21	11° $\mathring{A}$ 06'36	-1°03'01	morning rise	-5877 Feb 13 j 22:18	26° $\mathring{A}$ 14'38	
direct	-5884 Oct 04 j 13:51	9° $\mathring{A}$ 43'28		retrograde	-5877 May 16 j 14:02	28° $\mathring{A}$ 13'44	
evening set	-5884 Dec 29 j 18:05	11° $\mathring{A}$ 35'56		opposition	-5877 Aug 04 j 15:34	26° $\mathring{A}$ 48'17	-1°37'48
				min. Earth dist.	-5877 Aug 03 j 17:52	26° $\mathring{A}$ 49'49	28.85371 AU
conjunction	-5883 Jan 14 j 13:50	12° $\mathring{A}$ 11'23	-1°01'21	direct	-5877 Oct 20 j 18:40	25° $\mathring{A}$ 24'58	
minimum elong	-5883 Jan 14 j 13:49	12° $\mathring{A}$ 11'23	1°01'41	evening set	-5876 Jan 15 j 11:26	27° $\mathring{A}$ 17'59	
max. Earth dist.	-5883 Jan 15 j 16:28	12° $\mathring{A}$ 13'53	30.87488 AU				
morning rise	-5883 Jan 30 j 13:28	12° $\mathring{A}$ 47'13		conjunction	-5876 Jan 31 j 10:02	27° $\mathring{A}$ 53'37	-1°33'30
retrograde	-5883 May 02 j 07:06	14° $\mathring{A}$ 46'16		minimum elong	-5876 Jan 31 j 10:01	27° $\mathring{A}$ 53'37	1°33'51
opposition	-5883 Jul 21 j 17:11	13° $\mathring{A}$ 20'42	-1°08'20	max. Earth dist.	-5876 Feb 01 j 10:24	27° $\mathring{A}$ 55'54	30.85030 AU
min. Earth dist.	-5883 Jul 20 j 16:52	13° $\mathring{A}$ 22'24	28.87301 AU	morning rise	-5876 Feb 16 j 12:06	28° $\mathring{A}$ 29'36	
direct	-5883 Oct 07 j 02:13	11° $\mathring{A}$ 57'33			-5876 Apr 05 j 20:15	0° $\mathring{B}$	
evening set	-5882 Jan 01 j 06:25	13° $\mathring{A}$ 50'04		retrograde	-5876 May 18 j 03:16	0° $\mathring{B}$ 28'38	
					-5876 Jun 30 j 06:04	30° $\mathring{R}$ $\mathring{A}$	
conjunction	-5882 Jan 17 j 02:32	14° $\mathring{A}$ 25'33	-1°06'17	min. Earth dist.	-5876 Aug 05 j 05:19	29° $\mathring{A}$ 04'44	28.84885 AU
minimum elong	-5882 Jan 17 j 02:31	14° $\mathring{A}$ 25'33	1°06'36	opposition	-5876 Aug 06 j 03:10	29° $\mathring{A}$ 03'12	-1°42'15
max. Earth dist.	-5882 Jan 18 j 04:22	14° $\mathring{A}$ 27'59	30.87015 AU	direct	-5876 Oct 22 j 07:45	27° $\mathring{A}$ 39'48	

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention, astronomical year style is used: The year -5875 in astronomical counting style is the year 5876 BCE in historical counting style.

evening set	-5875 Jan 17 j 00:40	29° $\nearrow$ 32'54		max. Earth dist.	-5869 Feb 17 j 07:23	13° $\searrow$ 39'27	30.82697 AU
	-5875 Jan 29 j 04:35	0° $\searrow$		morning rise	-5869 Mar 04 j 14:07	14° $\searrow$ 13'31	
				retrograde	-5869 Jun 04 j 00:09	16° $\searrow$ 12'11	
conjunction	-5875 Feb 01 j 23:29	0° $\searrow$ 08'32	-1°37'35	opposition	-5869 Aug 22 j 10:18	14° $\searrow$ 46'50	-2°08'37
minimum elong	-5875 Feb 01 j 23:28	0° $\searrow$ 08'32	1°37'56	min. Earth dist.	-5869 Aug 21 j 15:12	14° $\searrow$ 48'11	28.82891 AU
max. Earth dist.	-5875 Feb 02 j 22:10	0° $\searrow$ 10'40	30.84517 AU	direct	-5869 Nov 07 j 16:39	13° $\searrow$ 23'02	
morning rise	-5875 Feb 18 j 02:04	0° $\searrow$ 44'32		evening set	-5868 Feb 02 j 23:06	15° $\searrow$ 16'46	
retrograde	-5875 May 20 j 17:50	2° $\searrow$ 43'32					
opposition	-5875 Aug 08 j 14:46	1° $\searrow$ 18'03	-1°46'32	conjunction	-5868 Feb 19 j 00:13	15° $\searrow$ 52'33	-2°01'40
min. Earth dist.	-5875 Aug 07 j 17:55	1° $\searrow$ 19'31	28.84365 AU	minimum elong	-5868 Feb 19 j 00:13	15° $\searrow$ 52'33	2°02'02
	-5875 Oct 07 j 02:23	30° $\nwarrow$		max. Earth dist.	-5868 Feb 19 j 20:14	15° $\searrow$ 54'25	30.82809 AU
direct	-5875 Oct 24 j 19:23	29° $\nwarrow$ 54'35		morning rise	-5868 Mar 06 j 04:26	16° $\searrow$ 28'36	
	-5875 Nov 11 j 10:04	0° $\searrow$		retrograde	-5868 Jun 05 j 12:32	18° $\searrow$ 27'15	
evening set	-5874 Jan 19 j 13:57	1° $\searrow$ 47'44		opposition	-5868 Aug 23 j 21:31	17° $\searrow$ 01'58	-2°11'39
				min. Earth dist.	-5868 Aug 23 j 03:57	17° $\searrow$ 03'12	28.83054 AU
conjunction	-5874 Feb 04 j 13:17	2° $\searrow$ 23'24	-1°41'31	direct	-5868 Nov 09 j 01:39	15° $\searrow$ 38'09	
minimum elong	-5874 Feb 04 j 13:16	2° $\searrow$ 23'24	1°41'53	evening set	-5867 Feb 04 j 12:52	17° $\searrow$ 32'01	
max. Earth dist.	-5874 Feb 05 j 12:33	2° $\searrow$ 25'35	30.83984 AU				
morning rise	-5874 Feb 20 j 15:59	2° $\searrow$ 59'24		conjunction	-5867 Feb 20 j 14:29	18° $\searrow$ 07'48	-2°04'25
retrograde	-5874 May 23 j 06:00	4° $\searrow$ 58'20		minimum elong	-5867 Feb 20 j 14:29	18° $\searrow$ 07'48	2°04'46
min. Earth dist.	-5874 Aug 10 j 05:41	3° $\searrow$ 34'17	28.83846 AU	max. Earth dist.	-5867 Feb 21 j 10:42	18° $\searrow$ 09'42	30.82992 AU
opposition	-5874 Aug 11 j 02:05	3° $\searrow$ 32'50	-1°50'39	morning rise	-5867 Mar 08 j 18:46	18° $\searrow$ 43'52	
direct	-5874 Oct 27 j 08:06	2° $\searrow$ 09'17		retrograde	-5867 Jun 08 j 01:11	20° $\searrow$ 42'28	
evening set	-5873 Jan 22 j 03:22	4° $\searrow$ 02'31		opposition	-5867 Aug 26 j 08:37	19° $\searrow$ 17'16	-2°14'28
				min. Earth dist.	-5867 Aug 25 j 15:08	19° $\searrow$ 18'30	28.83239 AU
conjunction	-5873 Feb 07 j 02:56	4° $\searrow$ 38'12	-1°45'17	direct	-5867 Nov 11 j 14:37	17° $\searrow$ 53'26	
minimum elong	-5873 Feb 07 j 02:55	4° $\searrow$ 38'12	1°45'39	evening set	-5866 Feb 07 j 03:07	19° $\searrow$ 47'26	
max. Earth dist.	-5873 Feb 08 j 00:51	4° $\searrow$ 40'15	30.83494 AU				
morning rise	-5873 Feb 23 j 06:01	5° $\searrow$ 14'13		conjunction	-5866 Feb 23 j 04:51	20° $\searrow$ 23'14	-2°06'58
retrograde	-5873 May 25 j 20:41	7° $\searrow$ 13'04		minimum elong	-5866 Feb 23 j 04:51	20° $\searrow$ 23'14	2°07'19
opposition	-5873 Aug 13 j 13:27	5° $\searrow$ 47'34	-1°54'36	max. Earth dist.	-5866 Feb 23 j 22:59	20° $\searrow$ 24'56	30.83163 AU
min. Earth dist.	-5873 Aug 12 j 17:11	5° $\searrow$ 49'00	28.83408 AU	morning rise	-5866 Mar 11 j 09:27	20° $\searrow$ 59'18	
direct	-5873 Oct 29 j 19:36	4° $\searrow$ 23'57		retrograde	-5866 Jun 10 j 15:03	22° $\searrow$ 57'51	
evening set	-5872 Jan 24 j 16:35	6° $\searrow$ 17'15		opposition	-5866 Aug 28 j 19:44	21° $\searrow$ 32'42	-2°17'05
				min. Earth dist.	-5866 Aug 28 j 03:35	21° $\searrow$ 33'51	28.83397 AU
conjunction	-5872 Feb 09 j 16:31	6° $\searrow$ 52'57	-1°48'54	direct	-5866 Nov 14 j 01:41	20° $\searrow$ 08'50	
minimum elong	-5872 Feb 09 j 16:31	6° $\searrow$ 52'57	1°49'16	evening set	-5865 Feb 09 j 17:17	22° $\searrow$ 02'58	
max. Earth dist.	-5872 Feb 10 j 14:55	6° $\searrow$ 55'03	30.83089 AU				
morning rise	-5872 Feb 25 j 19:46	7° $\searrow$ 28'59		conjunction	-5865 Feb 25 j 19:27	22° $\searrow$ 38'47	-2°09'19
retrograde	-5872 May 27 j 09:14	9° $\searrow$ 27'47		minimum elong	-5865 Feb 25 j 19:27	22° $\searrow$ 38'47	2°09'39
min. Earth dist.	-5872 Aug 14 j 05:25	8° $\searrow$ 03'40	28.83070 AU	max. Earth dist.	-5865 Feb 26 j 13:39	22° $\searrow$ 40'29	30.83273 AU
opposition	-5872 Aug 15 j 00:48	8° $\searrow$ 02'17	-1°58'23	morning rise	-5865 Mar 14 j 00:01	23° $\searrow$ 14'51	
direct	-5872 Oct 31 j 07:35	6° $\searrow$ 38'36		retrograde	-5865 Jun 13 j 03:37	25° $\searrow$ 13'19	
evening set	-5871 Jan 26 j 06:03	8° $\searrow$ 32'00		opposition	-5865 Aug 31 j 06:55	23° $\searrow$ 48'14	-2°19'30
				min. Earth dist.	-5865 Aug 30 j 15:38	23° $\searrow$ 49'19	28.83462 AU
conjunction	-5871 Feb 11 j 06:20	9° $\searrow$ 07'43	-1°52'22	direct	-5865 Nov 16 j 14:02	22° $\searrow$ 24'19	
minimum elong	-5871 Feb 11 j 06:20	9° $\searrow$ 07'43	1°52'43	evening set	-5864 Feb 12 j 07:27	24° $\searrow$ 18'32	
max. Earth dist.	-5871 Feb 12 j 03:55	9° $\searrow$ 09'44	30.82822 AU				
morning rise	-5871 Feb 27 j 09:52	9° $\searrow$ 43'45		conjunction	-5864 Feb 28 j 09:47	24° $\searrow$ 54'22	-2°11'28
retrograde	-5871 May 29 j 23:22	11° $\searrow$ 42'30		minimum elong	-5864 Feb 28 j 09:46	24° $\searrow$ 54'22	2°11'49
opposition	-5871 Aug 17 j 11:55	10° $\searrow$ 17'02	-2°01'59	max. Earth dist.	-5864 Feb 29 j 01:53	24° $\searrow$ 55'52	30.83294 AU
min. Earth dist.	-5871 Aug 16 j 16:01	10° $\searrow$ 18'27	28.82880 AU	morning rise	-5864 Mar 15 j 14:41	25° $\searrow$ 30'26	
direct	-5871 Nov 02 j 18:59	8° $\searrow$ 53'18		retrograde	-5864 Jun 14 j 18:32	27° $\searrow$ 28'48	
evening set	-5870 Jan 28 j 19:41	10° $\searrow$ 46'48		opposition	-5864 Sep 01 j 18:05	26° $\searrow$ 03'44	-2°21'42
				min. Earth dist.	-5864 Sep 01 j 03:33	26° $\searrow$ 04'46	28.83441 AU
conjunction	-5870 Feb 13 j 20:15	11° $\searrow$ 22'32	-1°55'38	direct	-5864 Nov 18 j 02:26	24° $\searrow$ 39'44	
minimum elong	-5870 Feb 13 j 20:15	11° $\searrow$ 22'32	1°56'00	evening set	-5863 Feb 13 j 21:44	26° $\searrow$ 34'02	
max. Earth dist.	-5870 Feb 14 j 17:29	11° $\searrow$ 24'31	30.82687 AU				
morning rise	-5870 Mar 02 j 00:01	11° $\searrow$ 58'35		conjunction	-5863 Mar 02 j 00:27	27° $\searrow$ 09'53	-2°13'26
retrograde	-5870 Jun 01 j 10:32	13° $\searrow$ 57'17		minimum elong	-5863 Mar 02 j 00:27	27° $\searrow$ 09'53	2°13'45
opposition	-5870 Aug 19 j 23:14	12° $\searrow$ 31'52	-2°05'24	max. Earth dist.	-5863 Mar 02 j 16:19	27° $\searrow$ 11'22	30.83219 AU
min. Earth dist.	-5870 Aug 19 j 04:39	12° $\searrow$ 33'11	28.82823 AU	morning rise	-5863 Mar 18 j 05:23	27° $\searrow$ 45'57	
direct	-5870 Nov 05 j 05:26	11° $\searrow$ 08'06		retrograde	-5863 Jun 17 j 07:06	29° $\searrow$ 44'12	
evening set	-5869 Jan 31 j 09:16	13° $\searrow$ 01'42		opposition	-5863 Sep 04 j 05:05	28° $\searrow$ 19'08	-2°23'41
				min. Earth dist.	-5863 Sep 03 j 16:07	28° $\searrow$ 20'03	28.83333 AU
conjunction	-5869 Feb 16 j 10:14	13° $\searrow$ 37'28	-1°58'45	direct	-5863 Nov 20 j 15:38	26° $\searrow$ 55'03	
minimum elong	-5869 Feb 16 j 10:13	13° $\searrow$ 37'28	1°59'06	evening set	-5862 Feb 16 j 12:06	28° $\searrow$ 49'25	

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 4

Attention, astronomical year style is used: The year -5862 in astronomical counting style is the year 5863 BCE in historical counting style.

conjunction	-5862 Mar 04 j 15:04	29° $\approx$ 25'17	-2°15'11		-5856 May 22 j 09:52	15° $\approx$	
minimum elong	-5862 Mar 04 j 15:03	29° $\approx$ 25'17	2°15'31	retrograde	-5856 Jul 02 j 21:03	15° $\approx$ 28'09	
max. Earth dist.	-5862 Mar 05 j 05:15	29° $\approx$ 26'36	30.83097 AU		-5856 Aug 13 j 23:09	15° $\approx$	
morning rise	-5862 Mar 20 j 20:14	0° $\approx$ 01'21		opposition	-5856 Sep 19 j 08:15	14° $\approx$ 03'19	-2°31'16
	-5862 Mar 20 j 05:28	0° $\approx$		min. Earth dist.	-5856 Sep 18 j 23:42	14° $\approx$ 03'56	28.84269 AU
retrograde	-5862 Jun 19 j 20:53	1° $\approx$ 59'27		direct	-5856 Dec 06 j 01:03	12° $\approx$ 38'44	
opposition	-5862 Sep 06 j 15:59	0° $\approx$ 34'23	-2°25'26	evening set	-5855 Mar 04 j 15:57	14° $\approx$ 33'43	
min. Earth dist.	-5862 Sep 06 j 03:04	0° $\approx$ 35'19	28.83201 AU		-5855 Mar 16 j 13:15	15° $\approx$	
	-5862 Sep 27 j 10:02	30° $\approx$ 3					
direct	-5862 Nov 23 j 04:28	29° $\approx$ 10'12		conjunction	-5855 Mar 20 j 20:34	15° $\approx$ 09'38	-2°21'33
	-5861 Jan 17 j 08:18	0° $\approx$		minimum elong	-5855 Mar 20 j 20:34	15° $\approx$ 09'38	2°21'49
evening set	-5861 Feb 19 j 02:20	1° $\approx$ 04'38		max. Earth dist.	-5855 Mar 21 j 05:09	15° $\approx$ 10'26	30.84380 AU
				morning rise	-5855 Apr 06 j 02:29	15° $\approx$ 45'40	
conjunction	-5861 Mar 07 j 05:31	1° $\approx$ 40'30	-2°16'44	retrograde	-5855 Jul 05 j 11:04	17° $\approx$ 42'55	
minimum elong	-5861 Mar 07 j 05:31	1° $\approx$ 40'30	2°17'03	opposition	-5855 Sep 21 j 18:45	16° $\approx$ 18'11	-2°31'26
max. Earth dist.	-5861 Mar 07 j 19:03	1° $\approx$ 41'46	30.82956 AU	min. Earth dist.	-5855 Sep 21 j 10:51	16° $\approx$ 18'45	28.84867 AU
morning rise	-5861 Mar 23 j 10:45	2° $\approx$ 16'34			-5855 Nov 19 j 03:29	15° $\approx$	
retrograde	-5861 Jun 22 j 08:30	4° $\approx$ 14'32		direct	-5855 Dec 08 j 12:58	14° $\approx$ 53'35	
opposition	-5861 Sep 09 j 02:54	2° $\approx$ 49'28	-2°26'59		-5855 Dec 27 j 21:33	15° $\approx$	
min. Earth dist.	-5861 Sep 08 j 15:39	2° $\approx$ 50'16	28.83089 AU	evening set	-5854 Mar 07 j 06:29	16° $\approx$ 48'42	
direct	-5861 Nov 25 j 15:48	1° $\approx$ 25'11					
evening set	-5860 Feb 21 j 16:31	3° $\approx$ 19'41		conjunction	-5854 Mar 23 j 11:26	17° $\approx$ 24'38	-2°21'36
				minimum elong	-5854 Mar 23 j 11:26	17° $\approx$ 24'38	2°21'52
conjunction	-5860 Mar 08 j 20:02	3° $\approx$ 55'33	-2°18'04	max. Earth dist.	-5854 Mar 23 j 19:57	17° $\approx$ 25'26	30.84986 AU
minimum elong	-5860 Mar 08 j 20:02	3° $\approx$ 55'33	2°18'24	morning rise	-5854 Apr 08 j 17:14	18° $\approx$ 00'40	
max. Earth dist.	-5860 Mar 09 j 08:59	3° $\approx$ 56'45	30.82884 AU	retrograde	-5854 Jul 07 j 23:17	19° $\approx$ 57'49	
morning rise	-5860 Mar 25 j 01:22	4° $\approx$ 31'36		opposition	-5854 Sep 24 j 05:27	18° $\approx$ 33'11	-2°31'22
retrograde	-5860 Jun 23 j 22:11	6° $\approx$ 29'26		min. Earth dist.	-5854 Sep 23 j 23:11	18° $\approx$ 33'38	28.85473 AU
opposition	-5860 Sep 10 j 13:32	5° $\approx$ 04'23	-2°28'18	direct	-5854 Dec 11 j 01:48	17° $\approx$ 08'35	
min. Earth dist.	-5860 Sep 10 j 02:01	5° $\approx$ 05'12	28.83060 AU	evening set	-5853 Mar 09 j 21:00	19° $\approx$ 03'48	
direct	-5860 Nov 27 j 04:04	3° $\approx$ 40'00					
evening set	-5859 Feb 23 j 06:48	5° $\approx$ 34'34		conjunction	-5853 Mar 26 j 02:03	19° $\approx$ 39'45	-2°21'26
				minimum elong	-5853 Mar 26 j 02:03	19° $\approx$ 39'45	2°21'40
conjunction	-5859 Mar 11 j 10:29	6° $\approx$ 10'26	-2°19'11	max. Earth dist.	-5853 Mar 26 j 08:39	19° $\approx$ 40'22	30.85585 AU
minimum elong	-5859 Mar 11 j 10:29	6° $\approx$ 10'26	2°19'30	morning rise	-5853 Apr 11 j 08:00	20° $\approx$ 15'46	
max. Earth dist.	-5859 Mar 11 j 22:13	6° $\approx$ 11'32	30.82903 AU	retrograde	-5853 Jul 10 j 13:18	22° $\approx$ 12'49	
morning rise	-5859 Mar 27 j 16:01	6° $\approx$ 46'30		opposition	-5853 Sep 26 j 16:03	20° $\approx$ 48'17	-2°31'04
retrograde	-5859 Jun 26 j 09:15	8° $\approx$ 44'11		min. Earth dist.	-5853 Sep 26 j 09:58	20° $\approx$ 48'43	28.86045 AU
opposition	-5859 Sep 13 j 00:22	7° $\approx$ 19'10	-2°29'23	direct	-5853 Dec 13 j 14:32	19° $\approx$ 23'39	
min. Earth dist.	-5859 Sep 12 j 14:22	7° $\approx$ 19'52	28.83151 AU	evening set	-5852 Mar 11 j 11:37	21° $\approx$ 18'59	
direct	-5859 Nov 29 j 14:03	5° $\approx$ 54'42					
evening set	-5858 Feb 25 j 21:02	7° $\approx$ 49'21		conjunction	-5852 Mar 27 j 16:53	21° $\approx$ 54'56	-2°21'03
				minimum elong	-5852 Mar 27 j 16:54	21° $\approx$ 54'56	2°21'18
conjunction	-5858 Mar 14 j 01:05	8° $\approx$ 25'14	-2°20'06	max. Earth dist.	-5852 Mar 27 j 22:32	21° $\approx$ 55'28	30.86112 AU
minimum elong	-5858 Mar 14 j 01:05	8° $\approx$ 25'14	2°20'25	morning rise	-5852 Apr 12 j 22:49	22° $\approx$ 30'57	
max. Earth dist.	-5858 Mar 14 j 12:55	8° $\approx$ 26'20	30.83060 AU	retrograde	-5852 Jul 12 j 01:39	24° $\approx$ 27'52	
morning rise	-5858 Mar 30 j 06:35	9° $\approx$ 01'17		opposition	-5852 Sep 28 j 02:43	23° $\approx$ 03'24	-2°30'32
retrograde	-5858 Jun 28 j 20:41	10° $\approx$ 58'50		min. Earth dist.	-5852 Sep 27 j 22:43	23° $\approx$ 03'41	28.86535 AU
opposition	-5858 Sep 15 j 10:54	9° $\approx$ 33'52	-2°30'15	direct	-5852 Dec 15 j 02:10	21° $\approx$ 38'44	
min. Earth dist.	-5858 Sep 15 j 00:47	9° $\approx$ 34'35	28.83376 AU	evening set	-5851 Mar 14 j 02:13	23° $\approx$ 34'09	
direct	-5858 Dec 02 j 02:53	8° $\approx$ 09'20					
evening set	-5857 Feb 28 j 11:23	10° $\approx$ 04'05		conjunction	-5851 Mar 30 j 07:45	24° $\approx$ 10'07	-2°20'27
				minimum elong	-5851 Mar 30 j 07:45	24° $\approx$ 10'07	2°20'40
conjunction	-5857 Mar 16 j 15:30	10° $\approx$ 39'59	-2°20'48	max. Earth dist.	-5851 Mar 30 j 12:01	24° $\approx$ 10'30	30.86570 AU
minimum elong	-5857 Mar 16 j 15:30	10° $\approx$ 39'59	2°21'05	morning rise	-5851 Apr 15 j 13:45	24° $\approx$ 46'08	
max. Earth dist.	-5857 Mar 17 j 01:35	10° $\approx$ 40'55	30.83364 AU	retrograde	-5851 Jul 14 j 15:46	26° $\approx$ 42'53	
morning rise	-5857 Apr 01 j 21:14	11° $\approx$ 16'01		opposition	-5851 Sep 30 j 13:15	25° $\approx$ 18'29	-2°29'47
retrograde	-5857 Jul 01 j 09:15	13° $\approx$ 13'28		min. Earth dist.	-5851 Sep 30 j 09:25	25° $\approx$ 18'45	28.86942 AU
opposition	-5857 Sep 17 j 21:38	11° $\approx$ 48'34	-2°30'52	direct	-5851 Dec 17 j 15:11	23° $\approx$ 53'45	
min. Earth dist.	-5857 Sep 17 j 12:26	11° $\approx$ 49'13	28.83764 AU	evening set	-5850 Mar 16 j 16:53	25° $\approx$ 49'14	
direct	-5857 Dec 04 j 13:10	10° $\approx$ 24'00					
evening set	-5856 Mar 02 j 01:27	12° $\approx$ 18'51		conjunction	-5850 Apr 01 j 22:31	26° $\approx$ 25'12	-2°19'38
				minimum elong	-5850 Apr 01 j 22:32	26° $\approx$ 25'12	2°19'52
conjunction	-5856 Mar 18 j 06:00	12° $\approx$ 54'45	-2°21'17	max. Earth dist.	-5850 Apr 02 j 01:10	26° $\approx$ 25'27	30.86941 AU
minimum elong	-5856 Mar 18 j 06:00	12° $\approx$ 54'45	2°21'35	morning rise	-5850 Apr 18 j 04:34	27° $\approx$ 01'13	
max. Earth dist.	-5856 Mar 18 j 16:31	12° $\approx$ 55'44	30.83817 AU	retrograde	-5850 Jul 17 j 02:21	28° $\approx$ 57'48	
morning rise	-5856 Apr 03 j 11:40	13° $\approx$ 30'48		opposition	-5850 Oct 02 j 23:48	27° $\approx$ 33'27	-2°28'48

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5

Attention, astronomical year style is used: The year -5850 in astronomical counting style is the year 5851 BCE in historical counting style.

min. Earth dist.	-5850 Oct 02 j 21:57	27° $\approx$ 33'35	28.87295 AU	conjunction	-5843 Apr 18 j 03:49	12° $\approx$ 06'37	-2°08'12
direct	-5850 Dec 20 j 01:47	26° $\approx$ 08'38		minimum elong	-5843 Apr 18 j 03:50	12° $\approx$ 06'38	2°08'21
evening set	-5849 Mar 19 j 07:19	28° $\approx$ 04'11		max. Earth dist.	-5843 Apr 18 j 00:44	12° $\approx$ 06'20	30.91093 AU
				morning rise	-5843 May 04 j 09:43	12° $\approx$ 42'33	
conjunction	-5849 Apr 04 j 13:16	28° $\approx$ 40'09	-2°18'37	retrograde	-5843 Aug 01 j 11:12	14° $\approx$ 38'00	
minimum elong	-5849 Apr 04 j 13:16	28° $\approx$ 40'09	2°18'50	opposition	-5843 Oct 18 j 00:07	13° $\approx$ 14'03	-2°15'48
max. Earth dist.	-5849 Apr 04 j 15:30	28° $\approx$ 40'21	30.87293 AU	min. Earth dist.	-5843 Oct 18 j 03:33	13° $\approx$ 13'48	28.91756 AU
morning rise	-5849 Apr 20 j 19:14	29° $\approx$ 16'09		direct	-5842 Jan 04 j 14:30	11° $\approx$ 48'54	
	-5849 May 12 j 01:46	0° $\approx$		evening set	-5842 Apr 04 j 11:20	13° $\approx$ 44'52	
retrograde	-5849 Jul 19 j 13:32	1° $\approx$ 12'34					
	-5849 Sep 28 j 12:49	30° $\approx$		conjunction	-5842 Apr 20 j 18:09	14° $\approx$ 20'51	-2°05'46
opposition	-5849 Oct 05 j 10:12	29° $\approx$ 48'15	-2°27'36	minimum elong	-5842 Apr 20 j 18:10	14° $\approx$ 20'51	2°05'54
min. Earth dist.	-5849 Oct 05 j 08:35	29° $\approx$ 48'22	28.87639 AU	max. Earth dist.	-5842 Apr 20 j 13:56	14° $\approx$ 20'28	30.92142 AU
direct	-5849 Dec 22 j 14:58	28° $\approx$ 23'21		morning rise	-5842 May 07 j 00:01	14° $\approx$ 56'46	
	-5848 Mar 12 j 00:21	0° $\approx$		retrograde	-5842 Aug 04 j 00:33	16° $\approx$ 52'05	
evening set	-5848 Mar 20 j 21:42	0° $\approx$ 18'56		opposition	-5842 Oct 20 j 10:21	15° $\approx$ 28'14	-2°13'06
				min. Earth dist.	-5842 Oct 20 j 13:45	15° $\approx$ 28'00	28.92811 AU
conjunction	-5848 Apr 06 j 03:40	0° $\approx$ 54'55	-2°17'23	direct	-5841 Jan 07 j 04:03	14° $\approx$ 03'06	
minimum elong	-5848 Apr 06 j 03:41	0° $\approx$ 54'55	2°17'36	evening set	-5841 Apr 07 j 01:41	15° $\approx$ 59'09	
max. Earth dist.	-5848 Apr 06 j 03:57	0° $\approx$ 54'57	30.87656 AU				
morning rise	-5848 Apr 22 j 09:49	1° $\approx$ 30'55		conjunction	-5841 Apr 23 j 08:31	16° $\approx$ 35'08	-2°03'09
retrograde	-5848 Jul 21 j 01:16	3° $\approx$ 27'09		minimum elong	-5841 Apr 23 j 08:32	16° $\approx$ 35'08	2°03'15
opposition	-5848 Oct 06 j 20:37	2° $\approx$ 02'52	-2°26'10	max. Earth dist.	-5841 Apr 23 j 03:02	16° $\approx$ 34'38	30.93199 AU
min. Earth dist.	-5848 Oct 06 j 20:12	2° $\approx$ 02'54	28.88032 AU	morning rise	-5841 May 09 j 14:17	17° $\approx$ 11'02	
direct	-5848 Dec 24 j 01:07	0° $\approx$ 37'53		retrograde	-5841 Aug 06 j 11:45	19° $\approx$ 06'13	
evening set	-5847 Mar 23 j 12:01	2° $\approx$ 33'32		opposition	-5841 Oct 22 j 20:45	17° $\approx$ 42'29	-2°10'11
				min. Earth dist.	-5841 Oct 23 j 02:04	17° $\approx$ 42'06	28.93861 AU
conjunction	-5847 Apr 08 j 18:20	3° $\approx$ 09'30	-2°15'58	direct	-5840 Jan 09 j 14:52	16° $\approx$ 17'20	
minimum elong	-5847 Apr 08 j 18:21	3° $\approx$ 09'30	2°16'08	evening set	-5840 Apr 08 j 15:51	18° $\approx$ 13'27	
max. Earth dist.	-5847 Apr 08 j 18:45	3° $\approx$ 09'33	30.88086 AU				
morning rise	-5847 Apr 25 j 00:19	3° $\approx$ 45'29		conjunction	-5840 Apr 24 j 22:52	18° $\approx$ 49'26	-2°00'20
retrograde	-5847 Jul 23 j 11:30	5° $\approx$ 41'33		minimum elong	-5840 Apr 24 j 22:53	18° $\approx$ 49'26	2°00'26
opposition	-5847 Oct 09 j 06:52	4° $\approx$ 17'18	-2°24'32	max. Earth dist.	-5840 Apr 24 j 16:45	18° $\approx$ 48'52	30.94225 AU
min. Earth dist.	-5847 Oct 09 j 07:12	4° $\approx$ 17'17	28.88501 AU	morning rise	-5840 May 11 j 04:31	19° $\approx$ 25'20	
direct	-5847 Dec 26 j 13:09	2° $\approx$ 52'15		retrograde	-5840 Aug 07 j 23:38	21° $\approx$ 20'21	
evening set	-5846 Mar 26 j 02:28	4° $\approx$ 47'57		opposition	-5840 Oct 24 j 07:07	19° $\approx$ 56'43	-2°07'05
				min. Earth dist.	-5840 Oct 24 j 12:55	19° $\approx$ 56'18	28.94829 AU
conjunction	-5846 Apr 11 j 08:45	5° $\approx$ 23'55	-2°14'19	direct	-5839 Jan 11 j 04:04	18° $\approx$ 31'33	
minimum elong	-5846 Apr 11 j 08:46	5° $\approx$ 23'55	2°14'30	evening set	-5839 Apr 11 j 06:20	20° $\approx$ 27'43	
max. Earth dist.	-5846 Apr 11 j 07:14	5° $\approx$ 23'47	30.88623 AU				
morning rise	-5846 Apr 27 j 14:53	5° $\approx$ 59'54		conjunction	-5839 Apr 27 j 13:15	21° $\approx$ 03'43	-1°57'20
retrograde	-5846 Jul 25 j 23:33	7° $\approx$ 55'47		minimum elong	-5839 Apr 27 j 13:16	21° $\approx$ 03'43	1°57'25
opposition	-5846 Oct 11 j 17:13	6° $\approx$ 31'35	-2°22'40	max. Earth dist.	-5839 Apr 27 j 04:53	21° $\approx$ 02'56	30.95150 AU
min. Earth dist.	-5846 Oct 11 j 17:54	6° $\approx$ 31'33	28.89108 AU	morning rise	-5839 May 13 j 18:53	21° $\approx$ 39'35	
direct	-5846 Dec 29 j 01:22	5° $\approx$ 06'29		retrograde	-5839 Aug 10 j 11:25	23° $\approx$ 34'27	
evening set	-5845 Mar 28 j 16:32	7° $\approx$ 02'14		opposition	-5839 Oct 26 j 17:29	22° $\approx$ 10'53	-2°03'47
				min. Earth dist.	-5839 Oct 27 j 00:43	22° $\approx$ 10'22	28.95708 AU
conjunction	-5845 Apr 13 j 23:05	7° $\approx$ 38'13	-2°12'29	direct	-5838 Jan 13 j 14:31	20° $\approx$ 45'41	
minimum elong	-5845 Apr 13 j 23:05	7° $\approx$ 38'13	2°12'38	evening set	-5838 Apr 13 j 20:34	22° $\approx$ 41'54	
max. Earth dist.	-5845 Apr 13 j 21:57	7° $\approx$ 38'06	30.89297 AU				
morning rise	-5845 Apr 30 j 05:00	8° $\approx$ 14'10		conjunction	-5838 Apr 30 j 03:41	23° $\approx$ 17'54	-1°54'10
retrograde	-5845 Jul 28 j 10:07	10° $\approx$ 09'55		minimum elong	-5838 Apr 30 j 03:42	23° $\approx$ 17'54	1°54'15
opposition	-5845 Oct 14 j 03:36	8° $\approx$ 45'46	-2°20'36	max. Earth dist.	-5838 Apr 29 j 19:04	23° $\approx$ 17'05	30.95984 AU
min. Earth dist.	-5845 Oct 14 j 05:29	8° $\approx$ 45'38	28.89852 AU	morning rise	-5838 May 16 j 09:03	23° $\approx$ 53'45	
direct	-5845 Dec 31 j 13:59	7° $\approx$ 20'38		retrograde	-5838 Aug 12 j 21:12	25° $\approx$ 48'27	
evening set	-5844 Mar 30 j 06:48	9° $\approx$ 16'27		opposition	-5838 Oct 29 j 03:56	24° $\approx$ 24'57	-2°00'19
				min. Earth dist.	-5838 Oct 29 j 12:13	24° $\approx$ 24'22	28.96483 AU
conjunction	-5844 Apr 15 j 13:23	9° $\approx$ 52'25	-2°10'27	direct	-5837 Jan 16 j 03:05	22° $\approx$ 59'43	
minimum elong	-5844 Apr 15 j 13:23	9° $\approx$ 52'25	2°10'37	evening set	-5837 Apr 16 j 10:43	24° $\approx$ 55'57	
max. Earth dist.	-5844 Apr 15 j 10:39	9° $\approx$ 52'10	30.90133 AU				
morning rise	-5844 May 01 j 19:25	10° $\approx$ 28'22		conjunction	-5837 May 02 j 17:40	25° $\approx$ 31'56	-1°50'51
retrograde	-5844 Jul 29 j 23:18	12° $\approx$ 23'57		minimum elong	-5837 May 02 j 17:41	25° $\approx$ 31'56	1°50'54
opposition	-5844 Oct 15 j 13:44	10° $\approx$ 59'54	-2°18'19	max. Earth dist.	-5837 May 02 j 06:48	25° $\approx$ 30'55	30.96736 AU
min. Earth dist.	-5844 Oct 15 j 15:26	10° $\approx$ 59'47	28.90752 AU	morning rise	-5837 May 18 j 23:03	26° $\approx$ 07'47	
direct	-5843 Jan 02 j 02:18	9° $\approx$ 34'45		retrograde	-5837 Aug 15 j 08:27	28° $\approx$ 02'18	
evening set	-5843 Apr 01 j 21:03	11° $\approx$ 30'39		opposition	-5837 Oct 31 j 14:15	26° $\approx$ 38'52	-1°56'40
				min. Earth dist.	-5837 Oct 31 j 23:11	26° $\approx$ 38'14	28.97208 AU

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6

Attention, astronomical year style is used: The year -5836 in astronomical counting style is the year 5837 BCE in historical counting style.

direct	-5836 Jan 18 j 15:00	25° $\mathbf{K}$ 13'34		conjunction	-5830 May 18 j 17:54	11° $\mathbf{P}$ 06'06	-1°23'18
evening set	-5836 Apr 18 j 00:43	27° $\mathbf{K}$ 09'50		minimum elong	-5830 May 18 j 17:55	11° $\mathbf{P}$ 06'06	1°23'16
				max. Earth dist.	-5830 May 18 j 01:51	11° $\mathbf{P}$ 04'37	31.02954 AU
conjunction	-5836 May 04 j 07:51	27° $\mathbf{K}$ 45'48	-1°47'21	morning rise	-5830 Jun 03 j 21:49	11° $\mathbf{P}$ 41'48	
minimum elong	-5836 May 04 j 07:52	27° $\mathbf{K}$ 45'49	1°47'24	retrograde	-5830 Aug 30 j 15:36	13° $\mathbf{P}$ 35'17	
max. Earth dist.	-5836 May 03 j 21:04	27° $\mathbf{K}$ 44'48	30.97444 AU	opposition	-5830 Nov 15 j 14:04	12° $\mathbf{P}$ 12'20	-1°26'41
morning rise	-5836 May 20 j 12:56	28° $\mathbf{K}$ 21'38		min. Earth dist.	-5830 Nov 16 j 03:56	12° $\mathbf{P}$ 11'21	29.03627 AU
	-5836 Jul 17 j 03:33	0° $\mathbf{P}$		direct	-5829 Feb 03 j 05:40	10° $\mathbf{P}$ 46'57	
retrograde	-5836 Aug 16 j 18:10	0° $\mathbf{P}$ 15'59		evening set	-5829 May 05 j 00:47	12° $\mathbf{P}$ 43'28	
	-5836 Sep 16 j 18:59	30° $\mathbf{K}$					
opposition	-5836 Nov 02 j 00:29	28° $\mathbf{K}$ 52'35	-1°52'51	conjunction	-5829 May 21 j 07:16	13° $\mathbf{P}$ 19'23	-1°18'49
min. Earth dist.	-5836 Nov 02 j 11:02	28° $\mathbf{K}$ 51'50	28.97900 AU	minimum elong	-5829 May 21 j 07:17	13° $\mathbf{P}$ 19'23	1°18'45
direct	-5835 Jan 20 j 03:18	27° $\mathbf{K}$ 27'15		max. Earth dist.	-5829 May 20 j 15:27	13° $\mathbf{P}$ 17'55	31.04156 AU
evening set	-5835 Apr 20 j 14:49	29° $\mathbf{K}$ 23'32		morning rise	-5829 Jun 06 j 10:48	13° $\mathbf{P}$ 55'04	
				retrograde	-5829 Sep 02 j 00:45	15° $\mathbf{P}$ 48'26	
conjunction	-5835 May 06 j 21:48	29° $\mathbf{K}$ 59'30	-1°43'42	opposition	-5829 Nov 18 j 00:27	14° $\mathbf{P}$ 25'36	-1°21'50
minimum elong	-5835 May 06 j 21:48	29° $\mathbf{K}$ 59'30	1°43'44	min. Earth dist.	-5829 Nov 18 j 15:12	14° $\mathbf{P}$ 24'33	29.04806 AU
max. Earth dist.	-5835 May 06 j 09:09	29° $\mathbf{K}$ 58'19	30.98155 AU	direct	-5828 Feb 05 j 18:21	13° $\mathbf{P}$ 00'15	
	-5835 May 07 j 03:16	0° $\mathbf{P}$		evening set	-5828 May 06 j 14:30	14° $\mathbf{P}$ 56'48	
morning rise	-5835 May 23 j 02:52	0° $\mathbf{P}$ 35'18					
retrograde	-5835 Aug 19 j 06:21	2° $\mathbf{P}$ 29'29		conjunction	-5828 May 22 j 20:37	15° $\mathbf{P}$ 32'42	-1°14'13
opposition	-5835 Nov 04 j 10:42	1° $\mathbf{P}$ 06'08	-1°48'52	minimum elong	-5828 May 22 j 20:38	15° $\mathbf{P}$ 32'42	1°14'10
min. Earth dist.	-5835 Nov 04 j 21:07	1° $\mathbf{P}$ 05'23	28.98621 AU	max. Earth dist.	-5828 May 22 j 02:43	15° $\mathbf{P}$ 31'02	31.05317 AU
	-5835 Dec 19 j 00:24	30° $\mathbf{K}$		morning rise	-5828 Jun 08 j 00:00	16° $\mathbf{P}$ 08'22	
direct	-5834 Jan 22 j 15:51	29° $\mathbf{K}$ 40'44		retrograde	-5828 Sep 03 j 11:33	18° $\mathbf{P}$ 01'37	
	-5834 Feb 26 j 01:51	0° $\mathbf{P}$		opposition	-5828 Nov 19 j 10:42	16° $\mathbf{P}$ 38'52	-1°16'52
evening set	-5834 Apr 23 j 04:37	1° $\mathbf{P}$ 37'03		min. Earth dist.	-5828 Nov 20 j 02:02	16° $\mathbf{P}$ 37'47	29.05931 AU
				direct	-5827 Feb 07 j 05:18	15° $\mathbf{P}$ 13'31	
conjunction	-5834 May 09 j 11:37	2° $\mathbf{P}$ 13'00	-1°39'54	evening set	-5827 May 09 j 04:04	17° $\mathbf{P}$ 10'07	
minimum elong	-5834 May 09 j 11:38	2° $\mathbf{P}$ 13'00	1°39'56				
max. Earth dist.	-5834 May 08 j 22:51	2° $\mathbf{P}$ 11'49	30.98899 AU	conjunction	-5827 May 25 j 10:09	17° $\mathbf{P}$ 46'00	-1°09'31
morning rise	-5834 May 25 j 16:21	2° $\mathbf{P}$ 48'47		minimum elong	-5827 May 25 j 10:10	17° $\mathbf{P}$ 46'00	1°09'26
retrograde	-5834 Aug 21 j 17:06	4° $\mathbf{P}$ 42'49		max. Earth dist.	-5827 May 24 j 16:20	17° $\mathbf{P}$ 44'21	31.06389 AU
opposition	-5834 Nov 06 j 21:03	3° $\mathbf{P}$ 19'30	-1°44'44	morning rise	-5827 Jun 10 j 13:01	18° $\mathbf{P}$ 21'38	
min. Earth dist.	-5834 Nov 07 j 09:01	3° $\mathbf{P}$ 18'39	28.99406 AU	retrograde	-5827 Sep 05 j 21:07	20° $\mathbf{P}$ 14'46	
direct	-5833 Jan 25 j 04:42	1° $\mathbf{P}$ 54'05		opposition	-5827 Nov 21 j 21:18	18° $\mathbf{P}$ 52'05	-1°11'47
evening set	-5833 Apr 25 j 18:23	3° $\mathbf{P}$ 50'25		min. Earth dist.	-5827 Nov 22 j 14:16	18° $\mathbf{P}$ 50'54	29.06940 AU
max. Earth dist.	-5833 May 11 j 11:30	4° $\mathbf{P}$ 25'05	30.99748 AU	direct	-5826 Feb 09 j 16:43	17° $\mathbf{P}$ 26'45	
				evening set	-5826 May 11 j 17:35	19° $\mathbf{P}$ 23'21	
conjunction	-5833 May 12 j 01:15	4° $\mathbf{P}$ 26'22	-1°35'58				
minimum elong	-5833 May 12 j 01:16	4° $\mathbf{P}$ 26'22	1°35'58	conjunction	-5826 May 27 j 23:15	19° $\mathbf{P}$ 59'12	-1°04'43
morning rise	-5833 May 28 j 05:52	5° $\mathbf{P}$ 02'07		minimum elong	-5826 May 27 j 23:16	19° $\mathbf{P}$ 59'12	1°04'38
retrograde	-5833 Aug 24 j 05:25	6° $\mathbf{P}$ 56'00		max. Earth dist.	-5826 May 27 j 03:32	19° $\mathbf{P}$ 57'22	31.07347 AU
opposition	-5833 Nov 09 j 07:11	5° $\mathbf{P}$ 32'45	-1°40'26	morning rise	-5826 Jun 13 j 01:56	20° $\mathbf{P}$ 34'49	
min. Earth dist.	-5833 Nov 09 j 18:44	5° $\mathbf{P}$ 31'56	29.00302 AU	retrograde	-5826 Sep 08 j 08:17	22° $\mathbf{P}$ 27'49	
direct	-5832 Jan 27 j 18:42	4° $\mathbf{P}$ 07'19		opposition	-5826 Nov 24 j 07:43	21° $\mathbf{P}$ 05'12	-1°06'36
evening set	-5832 Apr 27 j 08:02	6° $\mathbf{P}$ 03'42		min. Earth dist.	-5826 Nov 25 j 00:36	21° $\mathbf{P}$ 04'00	29.07836 AU
				direct	-5825 Feb 12 j 05:02	19° $\mathbf{P}$ 39'49	
conjunction	-5832 May 13 j 14:50	6° $\mathbf{P}$ 39'38	-1°31'53	evening set	-5825 May 14 j 06:55	21° $\mathbf{P}$ 36'25	
minimum elong	-5832 May 13 j 14:50	6° $\mathbf{P}$ 39'38	1°31'52				
max. Earth dist.	-5832 May 13 j 00:23	6° $\mathbf{P}$ 38'17	31.00706 AU	conjunction	-5825 May 30 j 12:28	22° $\mathbf{P}$ 12'15	-0°59'49
morning rise	-5832 May 29 j 19:12	7° $\mathbf{P}$ 15'22		minimum elong	-5825 May 30 j 12:28	22° $\mathbf{P}$ 12'16	0°59'43
retrograde	-5832 Aug 25 j 16:06	9° $\mathbf{P}$ 09'06		max. Earth dist.	-5825 May 29 j 16:28	22° $\mathbf{P}$ 10'24	31.08187 AU
opposition	-5832 Nov 10 j 17:31	7° $\mathbf{P}$ 45'56	-1°36'00	morning rise	-5825 Jun 15 j 14:38	22° $\mathbf{P}$ 47'50	
min. Earth dist.	-5832 Nov 11 j 06:28	7° $\mathbf{P}$ 45'01	29.01321 AU	retrograde	-5825 Sep 10 j 17:59	24° $\mathbf{P}$ 40'42	
direct	-5831 Jan 29 j 05:53	6° $\mathbf{P}$ 20'30		opposition	-5825 Nov 26 j 18:12	23° $\mathbf{P}$ 18'06	-1°01'19
evening set	-5831 Apr 29 j 21:41	8° $\mathbf{P}$ 16'56		min. Earth dist.	-5825 Nov 27 j 12:53	23° $\mathbf{P}$ 16'48	29.08628 AU
				direct	-5824 Feb 14 j 17:56	21° $\mathbf{P}$ 52'42	
conjunction	-5831 May 16 j 04:26	8° $\mathbf{P}$ 52'51	-1°27'39	evening set	-5824 May 15 j 20:12	23° $\mathbf{P}$ 49'17	
minimum elong	-5831 May 16 j 04:27	8° $\mathbf{P}$ 52'51	1°27'37	max. Earth dist.	-5824 May 31 j 04:11	24° $\mathbf{P}$ 23'07	31.08949 AU
max. Earth dist.	-5831 May 15 j 13:51	8° $\mathbf{P}$ 51'30	31.01790 AU				
morning rise	-5831 Jun 01 j 08:32	9° $\mathbf{P}$ 28'34		conjunction	-5824 Jun 01 j 01:26	24° $\mathbf{P}$ 25'06	-0°54'51
retrograde	-5831 Aug 28 j 03:47	11° $\mathbf{P}$ 22'10		minimum elong	-5824 Jun 01 j 01:26	24° $\mathbf{P}$ 25'06	0°54'44
opposition	-5831 Nov 13 j 03:42	9° $\mathbf{P}$ 59'07	-1°31'25	morning rise	-5824 Jun 17 j 03:22	25° $\mathbf{P}$ 00'38	
min. Earth dist.	-5831 Nov 13 j 16:39	9° $\mathbf{P}$ 58'12	29.02436 AU	retrograde	-5824 Sep 12 j 05:17	26° $\mathbf{P}$ 53'21	
direct	-5830 Jan 31 j 19:17	8° $\mathbf{P}$ 33'42		opposition	-5824 Nov 28 j 04:33	25° $\mathbf{P}$ 30'47	-0°55'58
evening set	-5830 May 02 j 11:25	10° $\mathbf{P}$ 30'11		min. Earth dist.	-5824 Nov 28 j 23:03	25° $\mathbf{P}$ 29'29	29.09343 AU

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 7

Attention, astronomical year style is used: The year -5823 in astronomical counting style is the year 5824 BCE in historical counting style.

direct	-5823 Feb 16 j 08:01	24° $\Upsilon$ 05'19		minimum elong	-5817 Jun 17 j 16:13	9° $\mathcal{B}$ 49'18	0°18'10
evening set	-5823 May 18 j 09:23	26° $\Upsilon$ 01'54		max. Earth dist.	-5817 Jun 16 j 16:20	9° $\mathcal{B}$ 47'06	31.15102 AU
				morning rise	-5817 Jul 03 j 15:00	10° $\mathcal{B}$ 24'36	
conjunction	-5823 Jun 03 j 14:18	26° $\Upsilon$ 37'41	-0°49'48	retrograde	-5817 Sep 28 j 04:23	12° $\mathcal{B}$ 16'37	
minimum elong	-5823 Jun 03 j 14:19	26° $\Upsilon$ 37'41	0°49'40	opposition	-5817 Dec 14 j 05:44	10° $\mathcal{B}$ 54'24	-0°16'47
max. Earth dist.	-5823 Jun 02 j 16:21	26° $\Upsilon$ 35'39	31.09642 AU	min. Earth dist.	-5817 Dec 15 j 02:35	10° $\mathcal{B}$ 52'57	29.15701 AU
morning rise	-5823 Jun 19 j 15:46	27° $\Upsilon$ 13'11		direct	-5816 Mar 03 j 20:01	9° $\mathcal{B}$ 28'59	
retrograde	-5823 Sep 14 j 15:35	29° $\Upsilon$ 05'46		evening set	-5816 Jun 03 j 02:13	11° $\mathcal{B}$ 25'36	
opposition	-5823 Nov 30 j 15:01	27° $\Upsilon$ 43'12	-0°50'32	max. Earth dist.	-5816 Jun 18 j 04:45	11° $\mathcal{B}$ 58'59	31.16235 AU
min. Earth dist.	-5823 Dec 01 j 10:58	27° $\Upsilon$ 41'48	29.10033 AU				
direct	-5822 Feb 18 j 19:45	26° $\Upsilon$ 17'42		conjunction	-5816 Jun 19 j 04:22	12° $\mathcal{B}$ 01'11	-0°13'01
evening set	-5822 May 20 j 22:23	28° $\Upsilon$ 14'16		minimum elong	-5816 Jun 19 j 04:22	12° $\mathcal{B}$ 01'11	0°12'47
max. Earth dist.	-5822 Jun 05 j 05:02	28° $\Upsilon$ 47'58	31.10345 AU	behind sun begin	-5816 Jun 19 j 00:20	12° $\mathcal{B}$ 00'49	
				behind sun end	-5816 Jun 19 j 08:23	12° $\mathcal{B}$ 01'32	
conjunction	-5822 Jun 06 j 03:00	28° $\Upsilon$ 50'00	-0°44'42	morning rise	-5816 Jul 05 j 02:29	12° $\mathcal{B}$ 36'26	
minimum elong	-5822 Jun 06 j 03:01	28° $\Upsilon$ 50'00	0°44'33	retrograde	-5816 Sep 29 j 14:03	14° $\mathcal{B}$ 28'25	
morning rise	-5822 Jun 22 j 04:03	29° $\Upsilon$ 25'28		opposition	-5816 Dec 15 j 16:29	13° $\mathcal{B}$ 06'17	-0°11'02
	-5822 Jul 08 j 17:23	0° $\mathcal{B}$		min. Earth dist.	-5816 Dec 16 j 14:50	13° $\mathcal{B}$ 04'44	29.16814 AU
retrograde	-5822 Sep 17 j 02:35	1° $\mathcal{B}$ 17'54		direct	-5815 Mar 06 j 07:48	11° $\mathcal{B}$ 40'56	
	-5822 Nov 30 j 07:22	30° $\mathcal{R}$ $\Upsilon$		evening set	-5815 Jun 05 j 14:46	13° $\mathcal{B}$ 37'34	
opposition	-5822 Dec 03 j 01:27	29° $\Upsilon$ 55'22	-0°45'03				
min. Earth dist.	-5822 Dec 03 j 21:14	29° $\Upsilon$ 53'59	29.10744 AU	conjunction	-5815 Jun 21 j 16:18	14° $\mathcal{B}$ 13'06	-0°07'38
direct	-5821 Feb 21 j 10:11	28° $\Upsilon$ 29'50		minimum elong	-5815 Jun 21 j 16:18	14° $\mathcal{B}$ 13'07	0°07'24
	-5821 May 10 j 22:29	0° $\mathcal{B}$		behind sun begin	-5815 Jun 21 j 10:21	14° $\mathcal{B}$ 12'35	
evening set	-5821 May 23 j 11:09	0° $\mathcal{B}$ 26'22		behind sun end	-5815 Jun 21 j 22:16	14° $\mathcal{B}$ 13'38	
				max. Earth dist.	-5815 Jun 20 j 15:47	14° $\mathcal{B}$ 10'50	31.17315 AU
conjunction	-5821 Jun 08 j 15:20	1° $\mathcal{B}$ 02'05	-0°39'32	morning rise	-5815 Jul 07 j 13:58	14° $\mathcal{B}$ 48'20	
minimum elong	-5821 Jun 08 j 15:20	1° $\mathcal{B}$ 02'05	0°39'22		-5815 Jul 13 j 00:08	15° $\mathcal{B}$	
max. Earth dist.	-5821 Jun 07 j 16:20	0° $\mathcal{B}$ 59'58	31.11090 AU	retrograde	-5815 Oct 02 j 01:12	16° $\mathcal{B}$ 40'16	
morning rise	-5821 Jun 24 j 16:01	1° $\mathcal{B}$ 37'31		opposition	-5815 Dec 18 j 03:11	15° $\mathcal{B}$ 18'13	-0°05'16
retrograde	-5821 Sep 19 j 13:28	3° $\mathcal{B}$ 29'50		min. Earth dist.	-5815 Dec 19 j 01:07	15° $\mathcal{B}$ 16'42	29.17841 AU
opposition	-5821 Dec 05 j 11:53	2° $\mathcal{B}$ 07'19	-0°39'29		-5815 Dec 29 j 03:32	15° $\mathcal{R}$ $\mathcal{B}$	
min. Earth dist.	-5821 Dec 06 j 08:09	2° $\mathcal{B}$ 05'54	29.11540 AU	direct	-5814 Mar 08 j 20:43	13° $\mathcal{B}$ 52'53	
direct	-5820 Feb 23 j 21:48	0° $\mathcal{B}$ 41'46			-5814 May 14 j 17:34	15° $\mathcal{B}$	
evening set	-5820 May 24 j 23:51	2° $\mathcal{B}$ 38'17		evening set	-5814 Jun 08 j 03:15	15° $\mathcal{B}$ 49'33	
max. Earth dist.	-5820 Jun 09 j 05:28	3° $\mathcal{B}$ 11'55	31.11935 AU	max. Earth dist.	-5814 Jun 23 j 03:12	16° $\mathcal{B}$ 22'44	31.18283 AU
conjunction	-5820 Jun 10 j 03:48	3° $\mathcal{B}$ 13'59	-0°34'18	conjunction	-5814 Jun 24 j 04:18	16° $\mathcal{B}$ 25'03	-0°02'14
minimum elong	-5820 Jun 10 j 03:48	3° $\mathcal{B}$ 13'59	0°34'08	minimum elong	-5814 Jun 24 j 04:17	16° $\mathcal{B}$ 25'03	0°02'00
morning rise	-5820 Jun 26 j 03:55	3° $\mathcal{B}$ 49'22		behind sun begin	-5814 Jun 23 j 21:45	16° $\mathcal{B}$ 24'28	
retrograde	-5820 Sep 20 j 22:02	5° $\mathcal{B}$ 41'35		behind sun end	-5814 Jun 24 j 10:48	16° $\mathcal{B}$ 25'38	
opposition	-5820 Dec 06 j 22:16	4° $\mathcal{B}$ 19'07	-0°33'53	morning rise	-5814 Jul 10 j 01:19	17° $\mathcal{B}$ 00'14	
min. Earth dist.	-5820 Dec 07 j 18:54	4° $\mathcal{B}$ 17'40	29.12431 AU	retrograde	-5814 Oct 04 j 11:53	18° $\mathcal{B}$ 52'08	
direct	-5819 Feb 25 j 10:51	2° $\mathcal{B}$ 53'34		asc. node	-5814 Nov 18 j 18:06	18° $\mathcal{B}$ 19'31	
evening set	-5819 May 27 j 12:41	4° $\mathcal{B}$ 50'06		opposition	-5814 Dec 20 j 14:04	17° $\mathcal{B}$ 30'08	0°00'30
				min. Earth dist.	-5814 Dec 21 j 13:18	17° $\mathcal{B}$ 28'31	29.18766 AU
conjunction	-5819 Jun 12 j 16:02	5° $\mathcal{B}$ 25'46	-0°29'02	direct	-5813 Mar 11 j 07:58	16° $\mathcal{B}$ 04'50	
minimum elong	-5819 Jun 12 j 16:03	5° $\mathcal{B}$ 25'46	0°28'51	evening set	-5813 Jun 10 j 15:28	18° $\mathcal{B}$ 01'30	
max. Earth dist.	-5819 Jun 11 j 16:22	5° $\mathcal{B}$ 23'34	31.12895 AU				
morning rise	-5819 Jun 28 j 15:49	6° $\mathcal{B}$ 01'07		conjunction	-5813 Jun 26 j 16:01	18° $\mathcal{B}$ 36'57	0°03'18
retrograde	-5819 Sep 23 j 08:34	7° $\mathcal{B}$ 53'14		minimum elong	-5813 Jun 26 j 16:01	18° $\mathcal{B}$ 36'57	0°03'33
opposition	-5819 Dec 09 j 08:45	6° $\mathcal{B}$ 30'51	-0°28'13	behind sun begin	-5813 Jun 26 j 09:33	18° $\mathcal{B}$ 36'23	
min. Earth dist.	-5819 Dec 10 j 05:07	6° $\mathcal{B}$ 29'26	29.13451 AU	behind sun end	-5813 Jun 26 j 22:29	18° $\mathcal{B}$ 37'32	
direct	-5818 Feb 27 j 21:41	5° $\mathcal{B}$ 05'20		max. Earth dist.	-5813 Jun 25 j 14:53	18° $\mathcal{B}$ 34'37	31.19148 AU
evening set	-5818 May 30 j 01:06	7° $\mathcal{B}$ 01'53		morning rise	-5813 Jul 12 j 12:30	19° $\mathcal{B}$ 12'05	
max. Earth dist.	-5818 Jun 14 j 05:31	7° $\mathcal{B}$ 35'25	31.13963 AU	retrograde	-5813 Oct 06 j 23:07	21° $\mathcal{B}$ 03'56	
				opposition	-5813 Dec 23 j 00:53	19° $\mathcal{B}$ 41'58	0°06'16
conjunction	-5818 Jun 15 j 04:12	7° $\mathcal{B}$ 37'31	-0°23'43	min. Earth dist.	-5813 Dec 24 j 00:05	19° $\mathcal{B}$ 40'22	29.19559 AU
minimum elong	-5818 Jun 15 j 04:12	7° $\mathcal{B}$ 37'31	0°23'32	direct	-5812 Mar 12 j 22:44	18° $\mathcal{B}$ 16'41	
morning rise	-5818 Jul 01 j 03:19	8° $\mathcal{B}$ 12'50		evening set	-5812 Jun 12 j 03:50	20° $\mathcal{B}$ 13'20	
retrograde	-5818 Sep 25 j 17:35	10° $\mathcal{B}$ 04'54		max. Earth dist.	-5812 Jun 27 j 01:23	20° $\mathcal{B}$ 46'18	31.19884 AU
opposition	-5818 Dec 11 j 19:22	8° $\mathcal{B}$ 42'36	-0°22'31				
min. Earth dist.	-5818 Dec 12 j 16:45	8° $\mathcal{B}$ 41'06	29.14553 AU	conjunction	-5812 Jun 28 j 03:44	20° $\mathcal{B}$ 48'45	0°08'40
direct	-5817 Mar 02 j 08:34	7° $\mathcal{B}$ 17'08		minimum elong	-5812 Jun 28 j 03:44	20° $\mathcal{B}$ 48'45	0°08'55
evening set	-5817 Jun 01 j 13:44	9° $\mathcal{B}$ 13'42		behind sun begin	-5812 Jun 27 j 22:09	20° $\mathcal{B}$ 48'15	
				behind sun end	-5812 Jun 28 j 09:19	20° $\mathcal{B}$ 49'15	
conjunction	-5817 Jun 17 j 16:13	9° $\mathcal{B}$ 49'18	-0°18'23	morning rise	-5812 Jul 13 j 23:41	21° $\mathcal{B}$ 23'51	

Attention, astronomical year style is used: The year -5812 in astronomical counting style is the year 5813 BCE in historical counting style.

retrograde	-5812 Oct 08 j 10:10	23° <b>8</b> 15'38		min. Earth dist.	-5805 Jan 08 j 04:12	4° <b>II</b> 58'40	29.24583 AU
opposition	-5812 Dec 24 j 11:36	21° <b>8</b> 53'41	0°12'01	direct	-5805 Mar 29 j 10:14	3° <b>II</b> 35'01	
min. Earth dist.	-5812 Dec 25 j 11:25	21° <b>8</b> 52'02	29.20256 AU	evening set	-5805 Jun 28 j 13:42	5° <b>II</b> 31'29	
direct	-5811 Mar 15 j 10:54	20° <b>8</b> 28'23		max. Earth dist.	-5805 Jul 13 j 07:52	6° <b>II</b> 04'12	31.25021 AU
evening set	-5811 Jun 14 j 15:55	22° <b>8</b> 25'01					
conjunction	-5811 Jun 30 j 15:23	23° <b>8</b> 00'24	0°14'01	conjunction	-5805 Jul 14 j 09:19	6° <b>II</b> 06'35	0°45'26
minimum elong	-5811 Jun 30 j 15:23	23° <b>8</b> 00'24	0°14'17	minimum elong	-5805 Jul 14 j 09:18	6° <b>II</b> 06'35	0°45'45
behind sun begin	-5811 Jun 30 j 12:22	23° <b>8</b> 00'07		morning rise	-5805 Jul 30 j 00:54	6° <b>II</b> 41'21	
behind sun end	-5811 Jun 30 j 18:23	23° <b>8</b> 00'40		retrograde	-5805 Oct 24 j 04:33	8° <b>II</b> 32'54	
max. Earth dist.	-5811 Jun 29 j 13:39	22° <b>8</b> 58'00	31.20539 AU	opposition	-5804 Jan 09 j 16:13	7° <b>II</b> 11'06	0°51'11
morning rise	-5811 Jul 16 j 10:38	23° <b>8</b> 35'26		min. Earth dist.	-5804 Jan 10 j 16:02	7° <b>II</b> 09'28	29.25567 AU
retrograde	-5811 Oct 10 j 18:38	25° <b>8</b> 27'09		direct	-5804 Mar 30 j 21:10	5° <b>II</b> 45'55	
opposition	-5811 Dec 26 j 22:32	24° <b>8</b> 05'13	0°17'45	evening set	-5804 Jun 30 j 01:07	7° <b>II</b> 42'23	
min. Earth dist.	-5811 Dec 27 j 22:48	24° <b>8</b> 03'32	29.20874 AU	conjunction	-5804 Jul 15 j 20:05	8° <b>II</b> 17'27	0°50'29
direct	-5810 Mar 18 j 00:21	22° <b>8</b> 39'55		minimum elong	-5804 Jul 15 j 20:04	8° <b>II</b> 17'26	0°50'48
evening set	-5810 Jun 17 j 03:50	24° <b>8</b> 36'30		max. Earth dist.	-5804 Jul 14 j 19:14	8° <b>II</b> 15'07	31.26006 AU
max. Earth dist.	-5810 Jul 01 j 23:38	25° <b>8</b> 09'20	31.21143 AU	morning rise	-5804 Jul 31 j 10:59	8° <b>II</b> 52'10	
conjunction	-5810 Jul 03 j 02:32	25° <b>8</b> 11'50	0°19'21	retrograde	-5804 Oct 25 j 15:25	10° <b>II</b> 43'44	
minimum elong	-5810 Jul 03 j 02:32	25° <b>8</b> 11'50	0°19'37	opposition	-5803 Jan 11 j 03:20	9° <b>II</b> 22'00	0°56'33
morning rise	-5810 Jul 18 j 21:21	25° <b>8</b> 46'50		min. Earth dist.	-5803 Jan 12 j 02:45	9° <b>II</b> 20'23	29.26533 AU
retrograde	-5810 Oct 13 j 04:57	27° <b>8</b> 38'28		direct	-5803 Apr 02 j 10:56	7° <b>II</b> 56'54	
opposition	-5810 Dec 29 j 09:22	26° <b>8</b> 16'33	0°23'26	evening set	-5803 Jul 02 j 12:36	9° <b>II</b> 53'22	
min. Earth dist.	-5810 Dec 30 j 09:15	26° <b>8</b> 14'54	29.21483 AU	max. Earth dist.	-5803 Jul 17 j 05:13	10° <b>II</b> 25'59	31.26941 AU
direct	-5809 Mar 20 j 12:14	24° <b>8</b> 51'13		conjunction	-5803 Jul 18 j 06:46	10° <b>II</b> 28'22	0°55'27
evening set	-5809 Jun 19 j 15:32	26° <b>8</b> 47'46		minimum elong	-5803 Jul 18 j 06:46	10° <b>II</b> 28'22	0°55'47
conjunction	-5809 Jul 05 j 13:48	27° <b>8</b> 23'03	0°24'39	morning rise	-5803 Aug 02 j 21:04	11° <b>II</b> 03'03	
minimum elong	-5809 Jul 05 j 13:48	27° <b>8</b> 23'03	0°24'56	retrograde	-5803 Oct 28 j 02:58	12° <b>II</b> 54'39	
max. Earth dist.	-5809 Jul 04 j 12:03	27° <b>8</b> 20'40	31.21753 AU	opposition	-5802 Jan 13 j 14:42	11° <b>II</b> 32'58	1°01'49
morning rise	-5809 Jul 21 j 07:50	27° <b>8</b> 58'00		min. Earth dist.	-5802 Jan 14 j 14:14	11° <b>II</b> 31'21	29.27445 AU
retrograde	-5809 Oct 15 j 13:30	29° <b>8</b> 49'36		direct	-5802 Apr 04 j 22:20	10° <b>II</b> 07'55	
opposition	-5809 Dec 31 j 20:11	28° <b>8</b> 27'40	0°29'05	evening set	-5802 Jul 04 j 23:46	12° <b>II</b> 04'24	
min. Earth dist.	-5808 Jan 01 j 20:55	28° <b>8</b> 25'57	29.22117 AU	conjunction	-5802 Jul 20 j 17:22	12° <b>II</b> 39'21	1°00'21
direct	-5808 Mar 21 j 23:58	27° <b>8</b> 02'20		minimum elong	-5802 Jul 20 j 17:22	12° <b>II</b> 39'21	1°00'41
evening set	-5808 Jun 21 j 03:18	28° <b>8</b> 58'50		max. Earth dist.	-5802 Jul 19 j 16:46	12° <b>II</b> 37'03	31.27791 AU
max. Earth dist.	-5808 Jul 05 j 22:18	29° <b>8</b> 31'37	31.22425 AU	morning rise	-5802 Aug 05 j 06:54	13° <b>II</b> 13'59	
conjunction	-5808 Jul 07 j 00:48	29° <b>8</b> 34'05	0°29'55	retrograde	-5802 Oct 30 j 12:12	15° <b>II</b> 05'37	
minimum elong	-5808 Jul 07 j 00:47	29° <b>8</b> 34'05	0°30'12	opposition	-5801 Jan 16 j 02:10	13° <b>II</b> 43'58	1°07'01
morning rise	-5808 Jul 18 j 16:04	0° <b>II</b>		min. Earth dist.	-5801 Jan 17 j 02:04	13° <b>II</b> 42'20	29.28232 AU
retrograde	-5808 Oct 16 j 23:00	2° <b>II</b> 00'32		direct	-5801 Apr 07 j 11:36	12° <b>II</b> 18'59	
opposition	-5807 Jan 02 j 07:03	0° <b>II</b> 38'37	0°34'42	evening set	-5801 Jul 07 j 11:11	14° <b>II</b> 15'26	
min. Earth dist.	-5807 Jan 03 j 06:36	0° <b>II</b> 36'59	29.22835 AU	max. Earth dist.	-5801 Jul 22 j 02:06	14° <b>II</b> 47'56	31.28507 AU
direct	-5807 Jan 26 j 12:08	30° <b>R</b> <b>8</b>		conjunction	-5801 Jul 23 j 03:55	14° <b>II</b> 50'21	1°05'10
evening set	-5807 Mar 24 j 11:53	29° <b>8</b> 13'17		minimum elong	-5801 Jul 23 j 03:55	14° <b>II</b> 50'21	1°05'30
max. Earth dist.	-5807 May 18 j 14:04	0° <b>II</b>		morning rise	-5801 Aug 07 j 16:57	15° <b>II</b> 24'56	
conjunction	-5807 Jul 09 j 11:46	1° <b>II</b> 44'58	0°35'08	retrograde	-5801 Nov 01 j 23:20	17° <b>II</b> 16'35	
minimum elong	-5807 Jul 09 j 11:46	1° <b>II</b> 44'58	0°35'26	opposition	-5800 Jan 18 j 13:25	15° <b>II</b> 54'58	1°12'06
morning rise	-5807 Jul 25 j 04:32	2° <b>II</b> 19'49		min. Earth dist.	-5800 Jan 19 j 12:55	15° <b>II</b> 53'21	29.28887 AU
retrograde	-5807 Oct 19 j 07:35	4° <b>II</b> 11'21		direct	-5800 Apr 08 j 23:44	14° <b>II</b> 30'00	
opposition	-5806 Jan 04 j 18:09	2° <b>II</b> 49'27	0°40'15	evening set	-5800 Jul 08 j 22:23	16° <b>II</b> 26'27	
min. Earth dist.	-5806 Jan 05 j 18:25	2° <b>II</b> 47'47	29.23658 AU	conjunction	-5800 Jul 24 j 14:36	17° <b>II</b> 01'19	1°09'53
direct	-5806 Mar 26 j 22:44	1° <b>II</b> 24'10		minimum elong	-5800 Jul 24 j 14:35	17° <b>II</b> 01'19	1°10'13
evening set	-5806 Jun 26 j 02:21	3° <b>II</b> 20'37		max. Earth dist.	-5800 Jul 23 j 13:43	16° <b>II</b> 58'59	31.29076 AU
conjunction	-5806 Jul 11 j 22:35	3° <b>II</b> 55'46	0°40'19	morning rise	-5800 Aug 09 j 02:48	17° <b>II</b> 35'51	
minimum elong	-5806 Jul 11 j 22:35	3° <b>II</b> 55'46	0°40'37	retrograde	-5800 Nov 03 j 08:27	19° <b>II</b> 27'32	
max. Earth dist.	-5806 Jul 10 j 20:58	3° <b>II</b> 53'23	31.24066 AU	opposition	-5799 Jan 20 j 01:02	18° <b>II</b> 05'55	1°17'05
morning rise	-5806 Jul 27 j 14:49	4° <b>II</b> 30'35		min. Earth dist.	-5799 Jan 21 j 01:30	18° <b>II</b> 04'14	29.29387 AU
retrograde	-5806 Oct 21 j 18:00	6° <b>II</b> 22'06		direct	-5799 Apr 11 j 12:10	16° <b>II</b> 40'59	
opposition	-5805 Jan 07 j 05:06	5° <b>II</b> 00'15	0°45'45	evening set	-5799 Jul 11 j 09:32	18° <b>II</b> 37'24	
				max. Earth dist.	-5799 Jul 25 j 23:14	19° <b>II</b> 09'48	31.29510 AU
				conjunction	-5799 Jul 27 j 00:53	19° <b>II</b> 12'12	1°14'30
				minimum elong	-5799 Jul 27 j 00:52	19° <b>II</b> 12'12	1°14'50



Attention, astronomical year style is used: The year -5799 in astronomical counting style is the year 5800 BCE in historical counting style.

morning rise	-5799 Aug 11 j 12:35	19°II46'42		opposition	-5792 Feb 05 j 10:16	3°☾19'43	1°48'25
retrograde	-5799 Nov 05 j 18:12	21°II38'23		min. Earth dist.	-5792 Feb 06 j 07:36	3°☾18'16	29.31861 AU
opposition	-5798 Jan 22 j 12:32	20°II16'46	1°21'57	direct	-5792 Apr 26 j 22:23	1°☾55'00	
min. Earth dist.	-5798 Jan 23 j 11:56	20°II15'10	29.29764 AU	evening set	-5792 Jul 26 j 11:36	3°☾51'09	
direct	-5798 Apr 14 j 00:21	18°II51'51					
evening set	-5798 Jul 13 j 20:27	20°II48'13		conjunction	-5792 Aug 10 j 22:09	4°☾25'37	1°43'22
max. Earth dist.	-5798 Jul 28 j 10:20	21°II20'39	31.29827 AU	minimum elong	-5792 Aug 10 j 22:08	4°☾25'37	1°43'43
				max. Earth dist.	-5792 Aug 09 j 23:53	4°☾23'32	31.32003 AU
conjunction	-5798 Jul 29 j 11:14	21°II22'59	1°19'00	morning rise	-5792 Aug 26 j 05:36	4°☾59'49	
minimum elong	-5798 Jul 29 j 11:13	21°II22'59	1°19'21	retrograde	-5792 Nov 20 j 18:38	6°☾51'54	
morning rise	-5798 Aug 13 j 22:10	21°II57'25		opposition	-5791 Feb 06 j 22:05	5°☾30'14	1°52'19
retrograde	-5798 Nov 08 j 02:55	23°II49'09		min. Earth dist.	-5791 Feb 07 j 18:20	5°☾28'52	29.32378 AU
opposition	-5797 Jan 25 j 00:07	22°II27'30	1°26'42	direct	-5791 Apr 29 j 10:48	4°☾05'36	
min. Earth dist.	-5797 Jan 26 j 00:22	22°II25'50	29.30057 AU	evening set	-5791 Jul 28 j 21:45	6°☾01'45	
direct	-5797 Apr 16 j 11:11	21°II02'36		max. Earth dist.	-5791 Aug 12 j 11:06	6°☾34'14	31.32493 AU
evening set	-5797 Jul 16 j 07:13	22°II58'53					
				conjunction	-5791 Aug 13 j 07:47	6°☾36'10	1°46'56
conjunction	-5797 Jul 31 j 21:16	23°II33'36	1°23'23	minimum elong	-5791 Aug 13 j 07:47	6°☾36'10	1°47'18
minimum elong	-5797 Jul 31 j 21:15	23°II33'36	1°23'44	morning rise	-5791 Aug 28 j 14:29	7°☾10'20	
max. Earth dist.	-5797 Jul 30 j 20:26	23°II31'17	31.30094 AU	retrograde	-5791 Nov 23 j 04:25	9°☾02'31	
morning rise	-5797 Aug 16 j 07:42	24°II08'01		opposition	-5790 Feb 09 j 10:12	7°☾40'52	1°56'04
retrograde	-5797 Nov 10 j 12:50	25°II59'45		min. Earth dist.	-5790 Feb 10 j 06:57	7°☾39'28	29.32846 AU
opposition	-5796 Jan 27 j 11:36	24°II38'05	1°31'20	direct	-5790 May 01 j 23:12	6°☾16'19	
min. Earth dist.	-5796 Jan 28 j 10:37	24°II36'30	29.30308 AU	evening set	-5790 Jul 31 j 08:07	8°☾12'26	
direct	-5796 Apr 17 j 22:43	23°II13'10					
evening set	-5796 Jul 17 j 17:53	25°II09'26		conjunction	-5790 Aug 15 j 17:22	8°☾46'49	1°50'22
max. Earth dist.	-5796 Aug 01 j 06:42	25°II41'48	31.30338 AU	minimum elong	-5790 Aug 15 j 17:21	8°☾46'49	1°50'43
				max. Earth dist.	-5790 Aug 14 j 20:23	8°☾44'51	31.32922 AU
conjunction	-5796 Aug 02 j 07:13	25°II44'05	1°27'38	morning rise	-5790 Aug 30 j 23:39	9°☾20'57	
minimum elong	-5796 Aug 02 j 07:12	25°II44'05	1°28'00	retrograde	-5790 Nov 25 j 14:19	11°☾13'13	
morning rise	-5796 Aug 17 j 16:58	26°II18'27		opposition	-5789 Feb 11 j 22:05	9°☾51'35	1°59'38
retrograde	-5796 Nov 11 j 23:06	28°II10'14		min. Earth dist.	-5789 Feb 12 j 17:29	9°☾50'16	29.33230 AU
opposition	-5795 Jan 28 j 23:14	26°II48'32	1°35'49	direct	-5789 May 04 j 11:06	8°☾27'05	
min. Earth dist.	-5795 Jan 29 j 22:31	26°II46'57	29.30587 AU	evening set	-5789 Aug 02 j 18:18	10°☾23'10	
direct	-5795 Apr 20 j 09:49	25°II23'39		max. Earth dist.	-5789 Aug 17 j 06:49	10°☾55'37	31.33229 AU
evening set	-5795 Jul 20 j 04:26	27°II19'52					
				conjunction	-5789 Aug 18 j 03:02	10°☾57'30	1°53'38
conjunction	-5795 Aug 04 j 17:08	27°II54'28	1°31'46	minimum elong	-5789 Aug 18 j 03:01	10°☾57'30	1°53'59
minimum elong	-5795 Aug 04 j 17:07	27°II54'28	1°32'07	morning rise	-5789 Sep 02 j 08:41	11°☾31'36	
max. Earth dist.	-5795 Aug 03 j 17:51	27°II52'17	31.30644 AU	retrograde	-5789 Nov 27 j 23:30	13°☾23'58	
morning rise	-5795 Aug 20 j 02:13	28°II28'47		opposition	-5788 Feb 14 j 10:18	12°☾02'19	2°03'02
	-5795 Oct 10 j 13:06	0°☾		min. Earth dist.	-5788 Feb 15 j 06:25	12°☾00'57	29.33478 AU
retrograde	-5795 Nov 14 j 09:48	0°☾20'38		direct	-5788 May 05 j 22:11	10°☾37'52	
	-5795 Dec 20 j 06:45	30°☾II		evening set	-5788 Aug 04 j 04:31	12°☾33'54	
opposition	-5794 Jan 31 j 10:56	28°II58'55	1°40'10				
min. Earth dist.	-5794 Feb 01 j 09:07	28°II57'24	29.30931 AU	conjunction	-5788 Aug 19 j 12:34	13°☾08'12	1°56'44
direct	-5794 Apr 22 j 22:58	27°II34'04		minimum elong	-5788 Aug 19 j 12:34	13°☾08'12	1°57'05
evening set	-5794 Jul 22 j 14:50	29°II30'15		max. Earth dist.	-5788 Aug 18 j 16:33	13°☾06'19	31.33400 AU
	-5794 Aug 04 j 23:25	0°☾		morning rise	-5788 Sep 03 j 17:45	13°☾42'16	
max. Earth dist.	-5794 Aug 06 j 03:21	0°☾02'37	31.31028 AU	retrograde	-5788 Nov 29 j 09:36	15°☾34'43	
				opposition	-5787 Feb 15 j 22:27	14°☾13'02	2°06'16
conjunction	-5794 Aug 07 j 02:44	0°☾04'48	1°35'47	min. Earth dist.	-5787 Feb 16 j 17:18	14°☾11'45	29.33569 AU
minimum elong	-5794 Aug 07 j 02:43	0°☾04'48	1°36'08	direct	-5787 May 08 j 10:07	12°☾48'37	
morning rise	-5794 Aug 22 j 11:19	0°☾39'05		evening set	-5787 Aug 06 j 14:42	14°☾44'35	
retrograde	-5794 Nov 16 j 21:13	2°☾31'00					
opposition	-5793 Feb 02 j 22:36	1°☾09'17	1°44'22	conjunction	-5787 Aug 21 j 22:08	15°☾18'50	1°59'40
min. Earth dist.	-5793 Feb 03 j 20:10	1°☾07'49	29.31371 AU	minimum elong	-5787 Aug 21 j 22:07	15°☾18'50	2°00'01
	-5793 Mar 24 j 15:19	30°☾II		max. Earth dist.	-5787 Aug 21 j 02:10	15°☾16'57	31.33410 AU
direct	-5793 Apr 25 j 09:32	29°II44'30		morning rise	-5787 Sep 06 j 02:49	15°☾52'52	
	-5793 May 26 j 15:14	0°☾		retrograde	-5787 Dec 01 j 20:05	17°☾45'24	
evening set	-5793 Jul 25 j 01:08	1°☾40'40		opposition	-5786 Feb 18 j 10:47	16°☾23'40	2°09'19
				min. Earth dist.	-5786 Feb 19 j 06:00	16°☾22'22	29.33525 AU
conjunction	-5793 Aug 09 j 12:32	2°☾15'10	1°39'38	direct	-5786 May 10 j 20:59	14°☾59'16	
minimum elong	-5793 Aug 09 j 12:31	2°☾15'10	1°39'59	evening set	-5786 Aug 09 j 00:34	16°☾55'08	
max. Earth dist.	-5793 Aug 08 j 14:46	2°☾13'08	31.31496 AU				
morning rise	-5793 Aug 24 j 20:24	2°☾49'25		conjunction	-5786 Aug 24 j 07:31	17°☾29'21	2°02'26
retrograde	-5793 Nov 19 j 06:39	4°☾41'24		minimum elong	-5786 Aug 24 j 07:31	17°☾29'21	2°02'47

Attention, astronomical year style is used: The year -5786 in astronomical counting style is the year 5787 BCE in historical counting style.

max. Earth dist.	-5786 Aug 23 j 12:43	17° $\Omega$ 27'35	31.33298 AU	min. Earth dist.	-5779 Mar 06 j 14:25	1° $\Omega$ 34'03	29.32556 AU
morning rise	-5786 Sep 08 j 11:42	18° $\Omega$ 03'21		direct	-5779 May 26 j 08:06	0° $\Omega$ 10'49	
retrograde	-5786 Dec 04 j 06:11	19° $\Omega$ 55'57		evening set	-5779 Aug 23 j 19:31	2° $\Omega$ 06'14	
opposition	-5785 Feb 20 j 23:00	18° $\Omega$ 34'09	2°12'11				
min. Earth dist.	-5785 Feb 21 j 17:21	18° $\Omega$ 32'55	29.33349 AU	conjunction	-5779 Sep 07 j 23:00	2° $\Omega$ 40'14	2°16'42
direct	-5785 May 13 j 09:31	17° $\Omega$ 09'46		minimum elong	-5779 Sep 07 j 23:00	2° $\Omega$ 40'14	2°17'01
evening set	-5785 Aug 11 j 10:31	19° $\Omega$ 05'33		max. Earth dist.	-5779 Sep 07 j 10:12	2° $\Omega$ 39'01	31.32408 AU
				morning rise	-5779 Sep 23 j 00:38	3° $\Omega$ 14'04	
conjunction	-5785 Aug 26 j 16:48	19° $\Omega$ 39'44	2°05'01	retrograde	-5779 Dec 19 j 07:39	5° $\Omega$ 07'25	
minimum elong	-5785 Aug 26 j 16:48	19° $\Omega$ 39'44	2°05'22	opposition	-5778 Mar 08 j 13:17	3° $\Omega$ 45'19	2°26'44
max. Earth dist.	-5785 Aug 25 j 21:40	19° $\Omega$ 37'56	31.33075 AU	min. Earth dist.	-5778 Mar 09 j 01:04	3° $\Omega$ 44'32	29.32605 AU
morning rise	-5785 Sep 10 j 20:39	20° $\Omega$ 13'41		direct	-5778 May 28 j 19:34	2° $\Omega$ 21'16	
retrograde	-5785 Dec 06 j 17:34	22° $\Omega$ 06'22		evening set	-5778 Aug 26 j 04:50	4° $\Omega$ 16'38	
opposition	-5784 Feb 23 j 11:06	20° $\Omega$ 44'29	2°14'51				
min. Earth dist.	-5784 Feb 24 j 04:55	20° $\Omega$ 43'17	29.33109 AU	conjunction	-5778 Sep 10 j 07:53	4° $\Omega$ 50'36	2°17'59
direct	-5784 May 14 j 19:49	19° $\Omega$ 20'05		minimum elong	-5778 Sep 10 j 07:53	4° $\Omega$ 50'36	2°18'17
evening set	-5784 Aug 12 j 20:12	21° $\Omega$ 15'48		max. Earth dist.	-5778 Sep 09 j 19:28	4° $\Omega$ 49'26	31.32437 AU
max. Earth dist.	-5784 Aug 27 j 08:45	21° $\Omega$ 48'18	31.32814 AU	morning rise	-5778 Sep 25 j 09:20	5° $\Omega$ 24'27	
				retrograde	-5778 Dec 21 j 18:43	7° $\Omega$ 17'57	
conjunction	-5784 Aug 28 j 02:05	21° $\Omega$ 49'56	2°07'26	opposition	-5777 Mar 11 j 01:56	5° $\Omega$ 55'51	2°28'00
minimum elong	-5784 Aug 28 j 02:05	21° $\Omega$ 49'55	2°07'46	min. Earth dist.	-5777 Mar 11 j 13:45	5° $\Omega$ 55'03	29.32618 AU
morning rise	-5784 Sep 12 j 05:22	22° $\Omega$ 23'52		direct	-5777 May 31 j 05:36	4° $\Omega$ 31'53	
retrograde	-5784 Dec 08 j 03:13	24° $\Omega$ 16'36		evening set	-5777 Aug 28 j 14:10	6° $\Omega$ 27'13	
opposition	-5783 Feb 24 j 23:28	22° $\Omega$ 54'39	2°17'20				
min. Earth dist.	-5783 Feb 25 j 16:45	22° $\Omega$ 53'29	29.32850 AU	conjunction	-5777 Sep 12 j 16:58	7° $\Omega$ 01'10	2°19'04
direct	-5783 May 17 j 09:07	21° $\Omega$ 30'16		minimum elong	-5777 Sep 12 j 16:58	7° $\Omega$ 01'10	2°19'21
evening set	-5783 Aug 15 j 05:49	23° $\Omega$ 25'53		max. Earth dist.	-5777 Sep 12 j 06:02	7° $\Omega$ 00'08	31.32405 AU
				morning rise	-5777 Sep 27 j 18:03	7° $\Omega$ 34'59	
conjunction	-5783 Aug 30 j 11:00	23° $\Omega$ 59'59	2°09'40	retrograde	-5777 Dec 24 j 05:19	9° $\Omega$ 28'38	
minimum elong	-5783 Aug 30 j 11:00	23° $\Omega$ 59'59	2°09'59	opposition	-5776 Mar 12 j 14:28	8° $\Omega$ 06'31	2°29'03
max. Earth dist.	-5783 Aug 29 j 17:36	23° $\Omega$ 58'20	31.32576 AU	min. Earth dist.	-5776 Mar 13 j 01:17	8° $\Omega$ 05'48	29.32529 AU
morning rise	-5783 Sep 14 j 14:02	24° $\Omega$ 33'53		direct	-5776 Jun 01 j 16:57	6° $\Omega$ 42'38	
retrograde	-5783 Dec 10 j 15:16	26° $\Omega$ 26'43		evening set	-5776 Aug 29 j 23:40	8° $\Omega$ 37'55	
opposition	-5782 Feb 27 j 11:46	25° $\Omega$ 04'42	2°19'37				
min. Earth dist.	-5782 Feb 28 j 03:25	25° $\Omega$ 03'38	29.32655 AU	conjunction	-5776 Sep 14 j 01:58	9° $\Omega$ 11'51	2°19'56
direct	-5782 May 19 j 21:14	23° $\Omega$ 40'20		minimum elong	-5776 Sep 14 j 01:58	9° $\Omega$ 11'51	2°20'14
evening set	-5782 Aug 17 j 15:17	25° $\Omega$ 35'54		max. Earth dist.	-5776 Sep 13 j 14:42	9° $\Omega$ 10'47	31.32261 AU
				morning rise	-5776 Sep 29 j 02:59	9° $\Omega$ 45'40	
conjunction	-5782 Sep 01 j 20:09	26° $\Omega$ 09'57	2°11'42	retrograde	-5776 Dec 25 j 17:39	11° $\Omega$ 39'28	
minimum elong	-5782 Sep 01 j 20:09	26° $\Omega$ 09'57	2°12'02	opposition	-5775 Mar 15 j 03:18	10° $\Omega$ 17'19	2°29'53
max. Earth dist.	-5782 Sep 01 j 04:40	26° $\Omega$ 08'30	31.32412 AU	min. Earth dist.	-5775 Mar 15 j 13:26	10° $\Omega$ 16'38	29.32331 AU
morning rise	-5782 Sep 16 j 22:39	26° $\Omega$ 43'50		direct	-5775 Jun 04 j 02:19	8° $\Omega$ 53'29	
retrograde	-5782 Dec 13 j 01:02	28° $\Omega$ 36'47		evening set	-5775 Sep 01 j 08:52	10° $\Omega$ 48'42	
opposition	-5781 Mar 02 j 00:02	27° $\Omega$ 14'43	2°21'42				
min. Earth dist.	-5781 Mar 02 j 15:37	27° $\Omega$ 13'39	29.32543 AU	conjunction	-5775 Sep 16 j 11:02	11° $\Omega$ 22'36	2°20'38
direct	-5781 May 22 j 09:15	25° $\Omega$ 50'24		minimum elong	-5775 Sep 16 j 11:02	11° $\Omega$ 22'37	2°20'54
evening set	-5781 Aug 20 j 00:48	27° $\Omega$ 45'54		max. Earth dist.	-5775 Sep 16 j 01:26	11° $\Omega$ 21'42	31.31988 AU
				morning rise	-5775 Oct 01 j 11:44	11° $\Omega$ 56'26	
conjunction	-5781 Sep 04 j 05:06	28° $\Omega$ 19'56	2°13'34	retrograde	-5775 Dec 28 j 04:21	13° $\Omega$ 50'22	
minimum elong	-5781 Sep 04 j 05:06	28° $\Omega$ 19'56	2°13'53	opposition	-5774 Mar 17 j 16:11	12° $\Omega$ 28'09	2°30'31
max. Earth dist.	-5781 Sep 03 j 14:00	28° $\Omega$ 18'31	31.32351 AU	min. Earth dist.	-5774 Mar 18 j 01:59	12° $\Omega$ 27'30	29.31983 AU
morning rise	-5781 Sep 19 j 07:24	28° $\Omega$ 53'48		direct	-5774 Jun 06 j 15:17	11° $\Omega$ 04'22	
	-5781 Oct 22 j 19:22	0° $\Omega$		evening set	-5774 Sep 03 j 18:17	12° $\Omega$ 59'30	
retrograde	-5781 Dec 15 j 11:22	0° $\Omega$ 46'51					
	-5780 Feb 10 j 00:50	30° $\Omega$		conjunction	-5774 Sep 18 j 20:03	13° $\Omega$ 33'24	2°21'07
opposition	-5780 Mar 03 j 12:18	29° $\Omega$ 24'47	2°23'35	minimum elong	-5774 Sep 18 j 20:03	13° $\Omega$ 33'24	2°21'23
min. Earth dist.	-5780 Mar 04 j 01:50	29° $\Omega$ 23'52	29.32521 AU	max. Earth dist.	-5774 Sep 18 j 10:03	13° $\Omega$ 32'27	31.31578 AU
direct	-5780 May 23 j 21:09	28° $\Omega$ 00'32		morning rise	-5774 Oct 03 j 20:47	14° $\Omega$ 07'12	
evening set	-5780 Aug 21 j 10:09	29° $\Omega$ 56'00			-5774 Oct 29 j 14:20	15° $\Omega$	
	-5780 Aug 23 j 05:38	0° $\Omega$		retrograde	-5774 Dec 30 j 17:33	16° $\Omega$ 01'15	
					-5773 Mar 07 j 00:41	15° $\Omega$	
conjunction	-5780 Sep 05 j 14:03	0° $\Omega$ 30'01	2°15'14	opposition	-5773 Mar 20 j 04:48	14° $\Omega$ 38'58	2°30'56
minimum elong	-5780 Sep 05 j 14:03	0° $\Omega$ 30'01	2°15'33	min. Earth dist.	-5773 Mar 20 j 13:20	14° $\Omega$ 38'23	29.31512 AU
max. Earth dist.	-5780 Sep 05 j 00:15	0° $\Omega$ 28'43	31.32354 AU	direct	-5773 Jun 09 j 03:02	13° $\Omega$ 15'12	
morning rise	-5780 Sep 20 j 15:57	1° $\Omega$ 03'52			-5773 Sep 01 j 11:09	15° $\Omega$	
retrograde	-5780 Dec 16 j 21:07	2° $\Omega$ 57'04		evening set	-5773 Sep 06 j 03:27	15° $\Omega$ 10'14	
opposition	-5779 Mar 06 j 00:50	1° $\Omega$ 34'58	2°25'16				

Attention, astronomical year style is used: The year -5773 in astronomical counting style is the year 5774 BCE in historical counting style.

conjunction	-5773 Sep 21 j 05:08	15°Ω44'08	2°21'24	opposition	-5766 Apr 04 j 22:52	29°Ω53'00	2°27'49
minimum elong	-5773 Sep 21 j 05:08	15°Ω44'08	2°21'40	min. Earth dist.	-5766 Apr 05 j 00:10	29°Ω52'54	29.28088 AU
max. Earth dist.	-5773 Sep 20 j 20:40	15°Ω43'20	31.31044 AU	direct	-5766 Jun 24 j 10:35	28°Ω29'31	
morning rise	-5773 Oct 06 j 05:39	16°Ω17'56			-5766 Sep 09 j 16:17	0°♊	
retrograde	-5772 Jan 02 j 03:56	18°Ω12'05		evening set	-5766 Sep 20 j 18:00	0°♊23'53	
opposition	-5772 Mar 21 j 17:43	16°Ω49'43	2°31'08				
min. Earth dist.	-5772 Mar 22 j 02:24	16°Ω49'08	29.30931 AU	conjunction	-5766 Oct 05 j 18:55	0°♊57'44	2°17'46
direct	-5772 Jun 10 j 14:52	15°Ω25'58		minimum elong	-5766 Oct 05 j 18:55	0°♊57'44	2°17'58
evening set	-5772 Sep 07 j 12:32	17°Ω20'53		max. Earth dist.	-5766 Oct 05 j 18:14	0°♊57'41	31.27755 AU
				morning rise	-5766 Oct 20 j 19:37	1°♊31'37	
conjunction	-5772 Sep 22 j 13:54	17°Ω54'46	2°21'29	retrograde	-5765 Jan 17 j 07:43	3°♊26'39	
minimum elong	-5772 Sep 22 j 13:54	17°Ω54'46	2°21'45	opposition	-5765 Apr 07 j 11:44	2°♊03'49	2°26'30
max. Earth dist.	-5772 Sep 22 j 05:54	17°Ω54'00	31.30442 AU	min. Earth dist.	-5765 Apr 07 j 12:28	2°♊03'46	29.27758 AU
morning rise	-5772 Oct 07 j 14:26	18°Ω28'34		direct	-5765 Jun 26 j 22:24	0°♊40'26	
retrograde	-5771 Jan 03 j 14:42	20°Ω22'49		evening set	-5765 Sep 23 j 03:05	2°♊34'44	
opposition	-5771 Mar 24 j 06:30	19°Ω00'20	2°31'07				
min. Earth dist.	-5771 Mar 24 j 13:10	18°Ω59'54	29.30311 AU	conjunction	-5765 Oct 08 j 03:51	3°♊08'36	2°16'26
direct	-5771 Jun 13 j 03:45	17°Ω36'36		minimum elong	-5765 Oct 08 j 03:51	3°♊08'36	2°16'37
evening set	-5771 Sep 09 j 21:32	19°Ω31'25		max. Earth dist.	-5765 Oct 08 j 03:05	3°♊08'31	31.27413 AU
				morning rise	-5765 Oct 23 j 04:50	3°♊42'30	
conjunction	-5771 Sep 24 j 22:46	20°Ω05'17	2°21'22	retrograde	-5764 Jan 19 j 21:33	5°♊37'40	
minimum elong	-5771 Sep 24 j 22:46	20°Ω05'17	2°21'37	opposition	-5764 Apr 09 j 00:46	4°♊14'49	2°24'59
max. Earth dist.	-5771 Sep 24 j 15:58	20°Ω04'38	31.29821 AU	min. Earth dist.	-5764 Apr 09 j 00:02	4°♊14'52	29.27379 AU
morning rise	-5771 Oct 09 j 23:14	20°Ω39'05		direct	-5764 Jun 28 j 08:50	2°♊51'30	
retrograde	-5770 Jan 06 j 01:07	22°Ω33'26		evening set	-5764 Sep 24 j 11:59	4°♊45'44	
opposition	-5770 Mar 26 j 19:24	21°Ω10'52	2°30'53				
min. Earth dist.	-5770 Mar 27 j 01:57	21°Ω10'25	29.29719 AU	conjunction	-5764 Oct 09 j 12:52	5°♊19'37	2°14'55
direct	-5770 Jun 15 j 15:41	19°Ω47'09		minimum elong	-5764 Oct 09 j 12:52	5°♊19'37	2°15'06
evening set	-5770 Sep 12 j 06:25	21°Ω41'51		max. Earth dist.	-5764 Oct 09 j 13:39	5°♊19'41	31.26979 AU
				morning rise	-5764 Oct 24 j 13:55	5°♊53'32	
conjunction	-5770 Sep 27 j 07:33	22°Ω15'42	2°21'03	retrograde	-5763 Jan 21 j 08:53	7°♊48'53	
minimum elong	-5770 Sep 27 j 07:33	22°Ω15'42	2°21'18	opposition	-5763 Apr 11 j 14:02	6°♊25'58	2°23'15
max. Earth dist.	-5770 Sep 27 j 02:07	22°Ω15'11	31.29264 AU	min. Earth dist.	-5763 Apr 11 j 13:28	6°♊26'01	29.26887 AU
morning rise	-5770 Oct 12 j 08:00	22°Ω49'31		direct	-5763 Jun 30 j 19:55	5°♊02'43	
retrograde	-5769 Jan 08 j 11:28	24°Ω43'58		evening set	-5763 Sep 26 j 21:08	6°♊56'53	
opposition	-5769 Mar 29 j 08:08	23°Ω21'19	2°30'27				
min. Earth dist.	-5769 Mar 29 j 12:31	23°Ω21'02	29.29192 AU	conjunction	-5763 Oct 11 j 22:03	7°♊30'47	2°13'12
direct	-5769 Jun 18 j 04:08	21°Ω57'38		minimum elong	-5763 Oct 11 j 22:03	7°♊30'47	2°13'22
evening set	-5769 Sep 14 j 15:24	23°Ω52'14		max. Earth dist.	-5763 Oct 11 j 23:10	7°♊30'53	31.26435 AU
				morning rise	-5763 Oct 26 j 23:22	8°♊04'44	
conjunction	-5769 Sep 29 j 16:18	24°Ω26'05	2°20'32	retrograde	-5762 Jan 23 j 21:23	10°♊00'12	
minimum elong	-5769 Sep 29 j 16:18	24°Ω26'05	2°20'45	opposition	-5762 Apr 14 j 03:04	8°♊37'15	2°21'19
max. Earth dist.	-5769 Sep 29 j 11:25	24°Ω25'38	31.28778 AU	min. Earth dist.	-5762 Apr 14 j 00:47	8°♊37'24	29.26266 AU
morning rise	-5769 Oct 14 j 16:50	24°Ω59'55		direct	-5762 Jul 03 j 08:20	7°♊14'02	
retrograde	-5768 Jan 10 j 21:56	26°Ω54'30		evening set	-5762 Sep 29 j 06:12	9°♊08'07	
opposition	-5768 Mar 30 j 20:58	25°Ω31'47	2°29'47				
min. Earth dist.	-5768 Mar 31 j 00:53	25°Ω31'31	29.28758 AU	conjunction	-5762 Oct 14 j 07:14	9°♊42'02	2°11'17
direct	-5768 Jun 19 j 14:05	24°Ω08'09		minimum elong	-5762 Oct 14 j 07:14	9°♊42'02	2°11'27
evening set	-5768 Sep 16 j 00:15	26°Ω02'40		max. Earth dist.	-5762 Oct 14 j 08:54	9°♊42'12	31.25735 AU
				morning rise	-5762 Oct 29 j 08:49	10°♊16'01	
conjunction	-5768 Oct 01 j 01:12	26°Ω36'31	2°19'49	retrograde	-5761 Jan 26 j 09:17	12°♊11'37	
minimum elong	-5768 Oct 01 j 01:12	26°Ω36'31	2°20'02	opposition	-5761 Apr 16 j 16:19	10°♊48'35	2°19'10
max. Earth dist.	-5768 Sep 30 j 22:24	26°Ω36'15	31.28392 AU	min. Earth dist.	-5761 Apr 16 j 14:22	10°♊48'43	29.25490 AU
morning rise	-5768 Oct 16 j 01:40	27°Ω10'22		direct	-5761 Jul 05 j 20:10	9°♊25'25	
retrograde	-5767 Jan 12 j 08:00	29°Ω05'05		evening set	-5761 Oct 01 j 15:12	11°♊19'24	
opposition	-5767 Apr 02 j 09:54	27°Ω42'20	2°28'54				
min. Earth dist.	-5767 Apr 02 j 12:13	27°Ω42'10	29.28396 AU	conjunction	-5761 Oct 16 j 16:25	11°♊53'20	2°09'12
direct	-5767 Jun 22 j 01:27	26°Ω18'46		minimum elong	-5761 Oct 16 j 16:26	11°♊53'20	2°09'20
evening set	-5767 Sep 18 j 09:08	28°Ω13'12		max. Earth dist.	-5761 Oct 16 j 19:09	11°♊53'35	31.24896 AU
				morning rise	-5761 Oct 31 j 18:13	12°♊27'20	
conjunction	-5767 Oct 03 j 09:53	28°Ω47'03	2°18'54	retrograde	-5760 Jan 28 j 20:22	14°♊23'03	
minimum elong	-5767 Oct 03 j 09:53	28°Ω47'03	2°19'06	opposition	-5760 Apr 18 j 05:22	12°♊59'56	2°16'50
max. Earth dist.	-5767 Oct 03 j 07:14	28°Ω46'48	31.28066 AU	min. Earth dist.	-5760 Apr 18 j 01:43	13°♊00'11	29.24572 AU
morning rise	-5767 Oct 18 j 10:37	29°Ω20'55		direct	-5760 Jul 07 j 08:59	11°♊36'47	
	-5767 Nov 05 j 23:05	0°♊		evening set	-5760 Oct 03 j 00:16	13°♊30'40	
retrograde	-5766 Jan 14 j 20:45	1°♊15'47					
	-5766 Mar 31 j 14:33	30°♊Ω		conjunction	-5760 Oct 18 j 01:32	14°♊04'36	2°06'55

Attention, astronomical year style is used: The year -5760 in astronomical counting style is the year 5761 BCE in historical counting style.

minimum elong	-5760 Oct 18 j 01:33	14° $\overline{04}$ '36	2°07'03	evening set	-5753 Oct 18 j 14:49	28° $\overline{04}$ '49'44	
max. Earth dist.	-5760 Oct 18 j 04:23	14° $\overline{04}$ '52	31.23937 AU				
morning rise	-5760 Nov 02 j 03:46	14° $\overline{03}$ '39		conjunction	-5753 Nov 02 j 17:59	29° $\overline{02}$ '52	1°46'01
retrograde	-5759 Jan 30 j 07:19	16° $\overline{03}$ '29		minimum elong	-5753 Nov 02 j 18:00	29° $\overline{02}$ '52	1°46'03
opposition	-5759 Apr 20 j 18:37	15° $\overline{11}$ '15	2°14'18	max. Earth dist.	-5753 Nov 03 j 04:31	29° $\overline{02}$ '52	31.18020 AU
min. Earth dist.	-5759 Apr 20 j 14:51	15° $\overline{11}$ '30	29.23582 AU	morning rise	-5753 Nov 17 j 23:00	29° $\overline{05}$ '11	
direct	-5759 Jul 09 j 19:26	13° $\overline{04}$ '07			-5753 Nov 18 j 18:38	0° $\overline{00}$ '	
evening set	-5759 Oct 05 j 09:02	15° $\overline{04}$ '52		retrograde	-5752 Feb 15 j 20:55	1° $\overline{05}$ '54'55	
				opposition	-5752 May 06 j 14:05	0° $\overline{03}$ '11'11	1°51'20
conjunction	-5759 Oct 20 j 10:41	16° $\overline{04}$ '50	2°04'27	min. Earth dist.	-5752 May 06 j 03:12	0° $\overline{03}$ '55	29.17775 AU
minimum elong	-5759 Oct 20 j 10:42	16° $\overline{04}$ '50	2°04'33		-5752 May 26 j 06:19	30° $\overline{08}$ '	
max. Earth dist.	-5759 Oct 20 j 15:31	16° $\overline{04}$ '17	31.22933 AU	direct	-5752 Jul 24 j 23:38	29° $\overline{08}$ '20	
morning rise	-5759 Nov 04 j 13:07	16° $\overline{04}$ '54			-5752 Sep 19 j 09:20	0° $\overline{00}$ '	
retrograde	-5758 Feb 01 j 17:14	18° $\overline{04}$ '51		evening set	-5752 Oct 19 j 23:58	1° $\overline{00}$ '13'1	
opposition	-5758 Apr 23 j 07:43	17° $\overline{02}$ '31	2°11'35				
min. Earth dist.	-5758 Apr 23 j 02:31	17° $\overline{02}$ '52	29.22562 AU	conjunction	-5752 Nov 04 j 03:35	1° $\overline{03}$ '54'2	1°42'22
direct	-5758 Jul 12 j 07:21	15° $\overline{05}$ '23		minimum elong	-5752 Nov 04 j 03:35	1° $\overline{03}$ '54'2	1°42'24
evening set	-5758 Oct 07 j 18:05	17° $\overline{05}$ '01		max. Earth dist.	-5752 Nov 04 j 15:25	1° $\overline{03}$ '49	31.17306 AU
				morning rise	-5752 Nov 19 j 08:59	2° $\overline{01}$ '00'4	
conjunction	-5758 Oct 22 j 19:46	18° $\overline{02}$ '01	2°01'49	retrograde	-5751 Feb 17 j 08:55	4° $\overline{00}$ '06'55	
minimum elong	-5758 Oct 22 j 19:47	18° $\overline{02}$ '01	2°01'55	opposition	-5751 May 09 j 03:10	2° $\overline{04}$ '3'08	1°47'21
max. Earth dist.	-5758 Oct 23 j 00:36	18° $\overline{02}$ '28	31.21934 AU	min. Earth dist.	-5751 May 08 j 14:36	2° $\overline{04}$ '3'59	29.17015 AU
morning rise	-5758 Nov 06 j 22:43	19° $\overline{01}$ '07		direct	-5751 Jul 27 j 12:01	1° $\overline{05}$ '20'20	
retrograde	-5757 Feb 04 j 05:52	20° $\overline{01}$ '10		evening set	-5751 Oct 22 j 09:18	3° $\overline{05}$ '13'27	
opposition	-5757 Apr 25 j 20:38	19° $\overline{03}$ '44	2°08'40				
min. Earth dist.	-5757 Apr 25 j 14:26	19° $\overline{03}$ '40'9	29.21594 AU	conjunction	-5751 Nov 06 j 13:09	3° $\overline{05}$ '47'40	1°38'34
direct	-5757 Jul 14 j 16:47	18° $\overline{03}$ '10'38		minimum elong	-5751 Nov 06 j 13:10	3° $\overline{05}$ '47'40	1°38'34
evening set	-5757 Oct 10 j 02:57	20° $\overline{03}$ '40'10		max. Earth dist.	-5751 Nov 07 j 00:52	3° $\overline{05}$ '48'46	31.16505 AU
				morning rise	-5751 Nov 21 j 19:13	4° $\overline{02}$ '22'05	
conjunction	-5757 Oct 25 j 05:01	20° $\overline{03}$ '11	1°59'00	retrograde	-5750 Feb 19 j 20:59	6° $\overline{01}$ '19'04	
minimum elong	-5757 Oct 25 j 05:02	20° $\overline{03}$ '11	1°59'05	opposition	-5750 May 11 j 16:26	4° $\overline{05}$ '55'13	1°43'12
max. Earth dist.	-5757 Oct 25 j 11:57	20° $\overline{03}$ '50	31.21000 AU	min. Earth dist.	-5750 May 11 j 04:03	4° $\overline{05}$ '56'03	29.16160 AU
morning rise	-5757 Nov 09 j 08:10	21° $\overline{01}$ '20		direct	-5750 Jul 29 j 22:40	3° $\overline{05}$ '32'27	
retrograde	-5756 Feb 06 j 16:36	23° $\overline{01}$ '08'30		evening set	-5750 Oct 24 j 18:40	5° $\overline{05}$ '25'29	
opposition	-5756 Apr 27 j 09:44	21° $\overline{01}$ '44'59	2°05'34				
min. Earth dist.	-5756 Apr 27 j 02:34	21° $\overline{01}$ '45'28	29.20696 AU	conjunction	-5750 Nov 08 j 23:04	5° $\overline{05}$ '59'44	1°34'37
direct	-5756 Jul 16 j 04:25	20° $\overline{01}$ '21'55		minimum elong	-5750 Nov 08 j 23:05	5° $\overline{05}$ '59'44	1°34'36
evening set	-5756 Oct 11 j 11:50	22° $\overline{01}$ '15'22		max. Earth dist.	-5750 Nov 09 j 12:19	6° $\overline{06}$ '00'59	31.15589 AU
				morning rise	-5750 Nov 24 j 05:28	6° $\overline{06}$ '34'11	
conjunction	-5756 Oct 26 j 14:02	22° $\overline{01}$ '49'24	1°56'01	retrograde	-5749 Feb 22 j 07:50	8° $\overline{06}$ '31'16	
minimum elong	-5756 Oct 26 j 14:03	22° $\overline{01}$ '49'24	1°56'05	opposition	-5749 May 14 j 05:25	7° $\overline{06}$ '07'21	1°38'54
max. Earth dist.	-5756 Oct 26 j 21:19	22° $\overline{01}$ '50'05	31.20164 AU	min. Earth dist.	-5749 May 13 j 16:06	7° $\overline{06}$ '08'16	29.15164 AU
morning rise	-5756 Nov 10 j 17:44	23° $\overline{01}$ '23'35		direct	-5749 Aug 01 j 11:17	5° $\overline{06}$ '44'36	
retrograde	-5755 Feb 08 j 06:27	25° $\overline{01}$ '19'54		evening set	-5749 Oct 27 j 04:12	7° $\overline{06}$ '37'33	
opposition	-5755 Apr 29 j 22:49	23° $\overline{01}$ '56'19	2°02'16				
min. Earth dist.	-5755 Apr 29 j 13:50	23° $\overline{01}$ '56'55	29.19900 AU	conjunction	-5749 Nov 11 j 08:51	8° $\overline{06}$ '11'50	1°30'31
direct	-5755 Jul 18 j 14:05	22° $\overline{01}$ '33'17		minimum elong	-5749 Nov 11 j 08:52	8° $\overline{06}$ '11'50	1°30'30
evening set	-5755 Oct 13 j 20:46	24° $\overline{01}$ '26'40		max. Earth dist.	-5749 Nov 11 j 21:34	8° $\overline{06}$ '13'02	31.14540 AU
				morning rise	-5749 Nov 26 j 15:57	8° $\overline{06}$ '46'20	
conjunction	-5755 Oct 28 j 23:22	25° $\overline{01}$ '00'44	1°52'51	retrograde	-5748 Feb 24 j 20:58	10° $\overline{06}$ '43'31	
minimum elong	-5755 Oct 28 j 23:22	25° $\overline{01}$ '00'44	1°52'55	opposition	-5748 May 15 j 18:37	9° $\overline{06}$ '19'30	1°34'28
max. Earth dist.	-5755 Oct 29 j 08:21	25° $\overline{01}$ '01'35	31.19406 AU	min. Earth dist.	-5748 May 15 j 04:49	9° $\overline{06}$ '20'26	29.14052 AU
morning rise	-5755 Nov 13 j 03:24	25° $\overline{01}$ '34'58		direct	-5748 Aug 02 j 21:26	7° $\overline{06}$ '56'45	
retrograde	-5754 Feb 10 j 17:56	27° $\overline{01}$ '31'25		evening set	-5748 Oct 28 j 13:28	9° $\overline{06}$ '49'35	
opposition	-5754 May 02 j 11:52	26° $\overline{01}$ '07'47	1°58'48				
min. Earth dist.	-5754 May 02 j 02:45	26° $\overline{01}$ '08'24	29.19171 AU	conjunction	-5748 Nov 12 j 18:42	10° $\overline{06}$ '23'54	1°26'18
direct	-5754 Jul 21 j 00:02	24° $\overline{01}$ '44'48		minimum elong	-5748 Nov 12 j 18:43	10° $\overline{06}$ '23'54	1°26'17
evening set	-5754 Oct 16 j 05:46	26° $\overline{01}$ '38'07		max. Earth dist.	-5748 Nov 13 j 09:01	10° $\overline{06}$ '25'15	31.13375 AU
				morning rise	-5748 Nov 28 j 02:14	10° $\overline{06}$ '58'27	
conjunction	-5754 Oct 31 j 08:40	27° $\overline{01}$ '12'13	1°49'31	retrograde	-5747 Feb 26 j 07:11	12° $\overline{06}$ '55'43	
minimum elong	-5754 Oct 31 j 08:41	27° $\overline{01}$ '12'13	1°49'34	opposition	-5747 May 18 j 07:46	11° $\overline{06}$ '31'35	1°29'53
max. Earth dist.	-5754 Oct 31 j 18:28	27° $\overline{01}$ '13'09	31.18715 AU	min. Earth dist.	-5747 May 17 j 17:32	11° $\overline{06}$ '32'33	29.12835 AU
morning rise	-5754 Nov 15 j 13:13	27° $\overline{01}$ '46'29		direct	-5747 Aug 05 j 09:18	10° $\overline{06}$ '08'49	
retrograde	-5753 Feb 13 j 07:34	29° $\overline{01}$ '43'04		evening set	-5747 Oct 30 j 22:56	12° $\overline{06}$ '01'32	
opposition	-5753 May 05 j 00:52	28° $\overline{01}$ '19'24	1°55'09				
min. Earth dist.	-5753 May 04 j 13:48	28° $\overline{01}$ '20'09	29.18480 AU	conjunction	-5747 Nov 15 j 04:33	12° $\overline{06}$ '35'53	1°21'58
direct	-5753 Jul 23 j 12:20	26° $\overline{01}$ '56'29		minimum elong	-5747 Nov 15 j 04:34	12° $\overline{06}$ '35'53	1°21'55

Attention, astronomical year style is used: The year -5747 in astronomical counting style is the year 5748 BCE in historical counting style.

max. Earth dist.	-5747 Nov 15 j 18:49	12° <u>♁</u> 37'14	31.12150 AU	conjunction	-5740 Nov 30 j 03:04	28° <u>♁</u> 00'36	0°48'33
morning rise	-5747 Nov 30 j 12:46	13° <u>♁</u> 10'30		minimum elong	-5740 Nov 30 j 03:04	28° <u>♁</u> 00'36	0°48'25
retrograde	-5746 Feb 28 j 20:24	15° <u>♁</u> 07'50		max. Earth dist.	-5740 Nov 30 j 23:24	28° <u>♁</u> 02'31	31.05459 AU
opposition	-5746 May 20 j 20:35	13° <u>♁</u> 43'35	1°25'11	morning rise	-5740 Dec 15 j 15:29	28° <u>♁</u> 35'35	
min. Earth dist.	-5746 May 20 j 05:04	13° <u>♁</u> 44'38	29.11597 AU		-5739 Jan 29 j 11:19	0° <u>♁</u>	
direct	-5746 Aug 07 j 19:07	12° <u>♁</u> 20'46		retrograde	-5739 Mar 16 j 14:18	0° <u>♁</u> 33'39	
evening set	-5746 Nov 02 j 08:22	14° <u>♁</u> 13'25			-5739 May 03 j 05:20	30° <u>♁</u>	
				opposition	-5739 Jun 05 j 14:36	29° <u>♁</u> 09'00	0°49'05
conjunction	-5746 Nov 17 j 14:29	14° <u>♁</u> 47'48	1°17'31	min. Earth dist.	-5739 Jun 04 j 17:46	29° <u>♁</u> 10'25	29.05140 AU
minimum elong	-5746 Nov 17 j 14:30	14° <u>♁</u> 47'48	1°17'27	direct	-5739 Aug 23 j 00:42	27° <u>♁</u> 46'23	
max. Earth dist.	-5746 Nov 18 j 06:06	14° <u>♁</u> 49'16	31.10913 AU	evening set	-5739 Nov 17 j 04:09	29° <u>♁</u> 38'44	
morning rise	-5746 Dec 02 j 23:14	15° <u>♁</u> 22'27			-5739 Nov 26 j 15:47	0° <u>♁</u>	
retrograde	-5745 Mar 03 j 07:45	17° <u>♁</u> 19'52					
opposition	-5745 May 23 j 09:34	15° <u>♁</u> 55'30	1°20'21	conjunction	-5739 Dec 02 j 13:47	0° <u>♁</u> 13'26	0°43'25
min. Earth dist.	-5745 May 22 j 18:04	15° <u>♁</u> 56'34	29.10383 AU	minimum elong	-5739 Dec 02 j 13:48	0° <u>♁</u> 13'26	0°43'15
direct	-5745 Aug 10 j 05:29	14° <u>♁</u> 32'41		max. Earth dist.	-5739 Dec 03 j 11:31	0° <u>♁</u> 15'29	31.04724 AU
evening set	-5745 Nov 04 j 17:43	16° <u>♁</u> 25'14		morning rise	-5739 Dec 18 j 02:40	0° <u>♁</u> 48'28	
				retrograde	-5738 Mar 19 j 00:55	2° <u>♁</u> 46'39	
conjunction	-5745 Nov 20 j 00:18	16° <u>♁</u> 59'39	1°12'56	min. Earth dist.	-5738 Jun 07 j 06:22	1° <u>♁</u> 23'25	29.04373 AU
minimum elong	-5745 Nov 20 j 00:19	16° <u>♁</u> 59'40	1°12'51	opposition	-5738 Jun 08 j 03:19	1° <u>♁</u> 21'59	0°43'32
max. Earth dist.	-5745 Nov 20 j 16:50	17° <u>♁</u> 01'13	31.09749 AU		-5738 Aug 19 j 11:25	30° <u>♁</u>	
morning rise	-5745 Dec 05 j 09:35	17° <u>♁</u> 34'22		direct	-5738 Aug 25 j 12:00	29° <u>♁</u> 59'24	
retrograde	-5744 Mar 04 j 21:24	19° <u>♁</u> 31'52			-5738 Aug 31 j 10:10	0° <u>♁</u>	
opposition	-5744 May 24 j 22:24	18° <u>♁</u> 07'25	1°15'24	evening set	-5738 Nov 19 j 14:28	1° <u>♁</u> 51'44	
min. Earth dist.	-5744 May 24 j 04:54	18° <u>♁</u> 08'36	29.09262 AU				
direct	-5744 Aug 11 j 17:26	16° <u>♁</u> 44'35		conjunction	-5738 Dec 05 j 00:33	2° <u>♁</u> 26'29	0°38'12
evening set	-5744 Nov 06 j 03:16	18° <u>♁</u> 37'05		minimum elong	-5738 Dec 05 j 00:33	2° <u>♁</u> 26'29	0°38'03
				max. Earth dist.	-5738 Dec 05 j 21:51	2° <u>♁</u> 28'29	31.03928 AU
conjunction	-5744 Nov 21 j 10:15	19° <u>♁</u> 11'32	1°08'15	morning rise	-5738 Dec 20 j 14:07	3° <u>♁</u> 01'34	
minimum elong	-5744 Nov 21 j 10:16	19° <u>♁</u> 11'33	1°08'11	retrograde	-5737 Mar 21 j 14:49	4° <u>♁</u> 59'51	
max. Earth dist.	-5744 Nov 22 j 03:29	19° <u>♁</u> 13'10	31.08685 AU	opposition	-5737 Jun 10 j 16:08	3° <u>♁</u> 35'09	0°37'56
morning rise	-5744 Dec 06 j 20:12	19° <u>♁</u> 46'18		min. Earth dist.	-5737 Jun 09 j 18:22	3° <u>♁</u> 36'38	29.03527 AU
retrograde	-5743 Mar 07 j 10:51	21° <u>♁</u> 43'54		direct	-5737 Aug 27 j 21:31	2° <u>♁</u> 12'34	
opposition	-5743 May 27 j 11:20	20° <u>♁</u> 19'22	1°10'21	evening set	-5737 Nov 22 j 00:44	4° <u>♁</u> 04'53	
min. Earth dist.	-5743 May 26 j 17:53	20° <u>♁</u> 20'33	29.08263 AU				
direct	-5743 Aug 14 j 04:04	18° <u>♁</u> 56'33		conjunction	-5737 Dec 07 j 11:21	4° <u>♁</u> 39'40	0°32'56
evening set	-5743 Nov 08 j 12:44	20° <u>♁</u> 49'00		minimum elong	-5737 Dec 07 j 11:21	4° <u>♁</u> 39'40	0°32'45
				max. Earth dist.	-5737 Dec 08 j 09:22	4° <u>♁</u> 41'45	31.03018 AU
conjunction	-5743 Nov 23 j 20:22	21° <u>♁</u> 23'31	1°03'28	morning rise	-5737 Dec 23 j 01:28	5° <u>♁</u> 14'48	
minimum elong	-5743 Nov 23 j 20:23	21° <u>♁</u> 23'31	1°03'22	retrograde	-5736 Mar 23 j 02:33	7° <u>♁</u> 13'12	
max. Earth dist.	-5743 Nov 24 j 15:09	21° <u>♁</u> 25'18	31.07755 AU	min. Earth dist.	-5736 Jun 11 j 07:54	5° <u>♁</u> 49'53	29.02557 AU
morning rise	-5743 Dec 09 j 06:49	21° <u>♁</u> 58'19		opposition	-5736 Jun 12 j 05:05	5° <u>♁</u> 48'25	0°32'17
retrograde	-5742 Mar 09 j 23:23	23° <u>♁</u> 56'02		direct	-5736 Aug 29 j 07:46	4° <u>♁</u> 25'51	
min. Earth dist.	-5742 May 29 j 04:44	22° <u>♁</u> 32'47	29.07377 AU	evening set	-5736 Nov 23 j 11:11	6° <u>♁</u> 18'07	
opposition	-5742 May 30 j 00:05	22° <u>♁</u> 31'28	1°05'11				
direct	-5742 Aug 16 j 16:07	21° <u>♁</u> 08'41		conjunction	-5736 Dec 08 j 22:22	6° <u>♁</u> 52'56	0°27'37
evening set	-5742 Nov 10 j 22:29	23° <u>♁</u> 01'06		minimum elong	-5736 Dec 08 j 22:23	6° <u>♁</u> 52'56	0°27'27
				max. Earth dist.	-5736 Dec 09 j 20:38	6° <u>♁</u> 55'03	31.02009 AU
conjunction	-5742 Nov 26 j 06:27	23° <u>♁</u> 35'39	0°58'35	morning rise	-5736 Dec 24 j 13:06	7° <u>♁</u> 28'07	
minimum elong	-5742 Nov 26 j 06:27	23° <u>♁</u> 35'39	0°58'29	retrograde	-5735 Mar 25 j 16:29	9° <u>♁</u> 26'34	
max. Earth dist.	-5742 Nov 27 j 01:14	23° <u>♁</u> 37'26	31.06921 AU	opposition	-5735 Jun 14 j 17:46	8° <u>♁</u> 01'43	0°26'34
morning rise	-5742 Dec 11 j 17:39	24° <u>♁</u> 10'31		min. Earth dist.	-5735 Jun 13 j 19:25	8° <u>♁</u> 03'15	29.01495 AU
retrograde	-5741 Mar 12 j 12:24	26° <u>♁</u> 08'21		direct	-5735 Aug 31 j 19:45	6° <u>♁</u> 39'06	
opposition	-5741 Jun 01 j 12:52	24° <u>♁</u> 43'44	0°59'54	evening set	-5735 Nov 25 j 21:42	8° <u>♁</u> 31'20	
min. Earth dist.	-5741 May 31 j 17:32	24° <u>♁</u> 45'03	29.06589 AU				
direct	-5741 Aug 19 j 02:28	23° <u>♁</u> 21'01		conjunction	-5735 Dec 11 j 09:22	9° <u>♁</u> 06'12	0°22'16
evening set	-5741 Nov 13 j 08:10	25° <u>♁</u> 13'24		minimum elong	-5735 Dec 11 j 09:22	9° <u>♁</u> 06'12	0°22'04
				max. Earth dist.	-5735 Dec 12 j 07:34	9° <u>♁</u> 08'18	31.00905 AU
conjunction	-5741 Nov 28 j 16:48	25° <u>♁</u> 48'00	0°53'37	morning rise	-5735 Dec 27 j 00:48	9° <u>♁</u> 41'26	
minimum elong	-5741 Nov 28 j 16:49	25° <u>♁</u> 48'00	0°53'29	retrograde	-5734 Mar 28 j 05:36	11° <u>♁</u> 39'55	
max. Earth dist.	-5741 Nov 29 j 13:29	25° <u>♁</u> 49'58	31.06172 AU	min. Earth dist.	-5734 Jun 16 j 08:56	10° <u>♁</u> 16'28	29.00368 AU
morning rise	-5741 Dec 14 j 04:26	26° <u>♁</u> 22'56		opposition	-5734 Jun 17 j 06:32	10° <u>♁</u> 14'59	0°20'49
retrograde	-5740 Mar 14 j 00:35	28° <u>♁</u> 20'52		direct	-5734 Sep 03 j 06:05	8° <u>♁</u> 52'18	
min. Earth dist.	-5740 Jun 02 j 05:12	26° <u>♁</u> 57'39	29.05854 AU	evening set	-5734 Nov 28 j 08:10	10° <u>♁</u> 44'30	
opposition	-5740 Jun 03 j 01:41	26° <u>♁</u> 56'15	0°54'32				
direct	-5740 Aug 20 j 14:51	25° <u>♁</u> 33'35		conjunction	-5734 Dec 13 j 20:28	11° <u>♁</u> 19'24	0°16'53
evening set	-5740 Nov 14 j 18:04	27° <u>♁</u> 25'56		minimum elong	-5734 Dec 13 j 20:28	11° <u>♁</u> 19'24	0°16'40

Attention, astronomical year style is used: The year -5734 in astronomical counting style is the year 5735 BCE in historical counting style.

max. Earth dist.	-5734 Dec 14 j 19:46	11° <del>M</del> 21'36	30.99775 AU	min. Earth dist.	-5728 Jun 29 j 07:51	23° <del>M</del> 35'56	28.95098 AU
morning rise	-5734 Dec 29 j 12:21	11° <del>M</del> 54'40		opposition	-5728 Jun 30 j 09:05	23° <del>M</del> 34'11	-0°14'03
retrograde	-5733 Mar 30 j 18:28	13° <del>M</del> 53'11		direct	-5728 Sep 16 j 02:34	22° <del>M</del> 11'24	
opposition	-5733 Jun 19 j 18:58	12° <del>M</del> 28'10	0°15'03	evening set	-5728 Dec 11 j 01:10	24° <del>M</del> 03'33	
min. Earth dist.	-5733 Jun 18 j 19:58	12° <del>M</del> 29'45	28.99241 AU				
direct	-5733 Sep 05 j 18:25	11° <del>M</del> 05'26		conjunction	-5728 Dec 26 j 16:30	24° <del>M</del> 38'41	-0°15'49
evening set	-5733 Nov 30 j 18:50	12° <del>M</del> 57'35		minimum elong	-5728 Dec 26 j 16:30	24° <del>M</del> 38'41	0°16'04
				max. Earth dist.	-5728 Dec 27 j 18:42	24° <del>M</del> 41'09	30.94777 AU
conjunction	-5733 Dec 16 j 07:30	13° <del>M</del> 32'32	0°11'29	morning rise	-5727 Jan 11 j 11:52	25° <del>M</del> 14'13	
minimum elong	-5733 Dec 16 j 07:30	13° <del>M</del> 32'32	0°11'15	retrograde	-5727 Apr 12 j 23:49	27° <del>M</del> 13'04	
behind sun begin	-5733 Dec 16 j 02:43	13° <del>M</del> 32'06		opposition	-5727 Jul 02 j 21:26	25° <del>M</del> 47'48	-0°19'52
behind sun end	-5733 Dec 16 j 12:16	13° <del>M</del> 32'58		min. Earth dist.	-5727 Jul 01 j 20:53	25° <del>M</del> 49'30	28.94537 AU
max. Earth dist.	-5733 Dec 17 j 06:27	13° <del>M</del> 34'42	30.98675 AU	direct	-5727 Sep 18 j 12:41	24° <del>M</del> 25'02	
morning rise	-5732 Jan 01 j 00:06	14° <del>M</del> 07'51		evening set	-5727 Dec 13 j 12:32	26° <del>M</del> 17'13	
	-5732 Jan 26 j 07:28	15° <del>M</del>					
retrograde	-5732 Apr 01 j 08:26	16° <del>M</del> 06'24		conjunction	-5727 Dec 29 j 04:26	26° <del>M</del> 52'24	-0°21'14
	-5732 Jun 09 j 21:37	15° <del>R</del> <del>M</del>		minimum elong	-5727 Dec 29 j 04:26	26° <del>M</del> 52'24	0°21'31
min. Earth dist.	-5732 Jun 20 j 08:50	14° <del>M</del> 42'51	28.98190 AU	max. Earth dist.	-5727 Dec 30 j 06:46	26° <del>M</del> 54'53	30.94231 AU
opposition	-5732 Jun 21 j 07:35	14° <del>M</del> 41'17	0°09'15	morning rise	-5726 Jan 14 j 00:18	27° <del>M</del> 27'58	
direct	-5732 Sep 07 j 05:32	13° <del>M</del> 18'31		retrograde	-5726 Apr 15 j 13:39	29° <del>M</del> 26'53	
	-5732 Nov 27 j 08:38	15° <del>M</del>		min. Earth dist.	-5726 Jul 04 j 08:17	28° <del>M</del> 03'24	28.93980 AU
evening set	-5732 Dec 02 j 05:20	15° <del>M</del> 10'38		opposition	-5726 Jul 05 j 09:42	28° <del>M</del> 01'38	-0°25'39
				direct	-5726 Sep 20 j 23:51	26° <del>M</del> 38'52	
conjunction	-5732 Dec 17 j 18:42	15° <del>M</del> 45'37	0°06'04	evening set	-5726 Dec 16 j 00:09	28° <del>M</del> 31'07	
minimum elong	-5732 Dec 17 j 18:42	15° <del>M</del> 45'37	0°05'51				
behind sun begin	-5732 Dec 17 j 12:31	15° <del>M</del> 45'04		conjunction	-5726 Dec 31 j 16:24	29° <del>M</del> 06'20	-0°26'37
behind sun end	-5732 Dec 18 j 00:53	15° <del>M</del> 46'11		minimum elong	-5726 Dec 31 j 16:23	29° <del>M</del> 06'20	0°26'54
max. Earth dist.	-5732 Dec 18 j 19:24	15° <del>M</del> 47'57	30.97670 AU	max. Earth dist.	-5725 Jan 01 j 18:21	29° <del>M</del> 08'47	30.93637 AU
morning rise	-5731 Jan 02 j 11:44	16° <del>M</del> 20'58		morning rise	-5725 Jan 16 j 12:49	29° <del>M</del> 41'57	
retrograde	-5731 Apr 03 j 21:23	18° <del>M</del> 19'34			-5725 Jan 24 j 20:29	0° <del>X</del>	
opposition	-5731 Jun 23 j 20:00	16° <del>M</del> 54'23	0°03'26	retrograde	-5725 Apr 18 j 02:38	1° <del>X</del> 40'56	
min. Earth dist.	-5731 Jun 22 j 20:15	16° <del>M</del> 56'01	28.97237 AU	opposition	-5725 Jul 07 j 22:07	0° <del>X</del> 15'41	-0°31'24
direct	-5731 Sep 09 j 18:40	15° <del>M</del> 31'36		min. Earth dist.	-5725 Jul 06 j 21:52	0° <del>X</del> 17'22	28.93362 AU
evening set	-5731 Dec 04 j 16:15	17° <del>M</del> 23'42			-5725 Jul 17 j 09:23	30° <del>R</del> <del>M</del>	
				direct	-5725 Sep 23 j 09:27	28° <del>M</del> 52'55	
conjunction	-5731 Dec 20 j 06:00	17° <del>M</del> 58'43	0°00'34		-5725 Nov 26 j 17:11	0° <del>X</del>	
minimum elong	-5731 Dec 20 j 06:00	17° <del>M</del> 58'43	0°00'20	evening set	-5725 Dec 18 j 11:49	0° <del>X</del> 45'13	
behind sun begin	-5731 Dec 19 j 23:33	17° <del>M</del> 58'08					
behind sun end	-5731 Dec 20 j 12:26	17° <del>M</del> 59'18		conjunction	-5724 Jan 03 j 04:42	1° <del>X</del> 20'28	-0°31'59
max. Earth dist.	-5731 Dec 21 j 06:10	18° <del>M</del> 01'00	30.96781 AU	minimum elong	-5724 Jan 03 j 04:41	1° <del>X</del> 20'28	0°32'17
morning rise	-5730 Jan 04 j 23:46	18° <del>M</del> 34'07		max. Earth dist.	-5724 Jan 04 j 07:08	1° <del>X</del> 22'58	30.92976 AU
desc. node	-5730 Jan 27 j 07:20	19° <del>M</del> 20'35		morning rise	-5724 Jan 19 j 01:29	1° <del>X</del> 56'07	
retrograde	-5730 Apr 06 j 10:36	20° <del>M</del> 32'46		retrograde	-5724 Apr 19 j 16:38	3° <del>X</del> 55'10	
min. Earth dist.	-5730 Jun 25 j 08:17	19° <del>M</del> 09'11	28.96417 AU	min. Earth dist.	-5724 Jul 08 j 09:21	2° <del>X</del> 31'38	28.92647 AU
opposition	-5730 Jun 26 j 08:18	19° <del>M</del> 07'32	-0°02'24	opposition	-5724 Jul 09 j 10:23	2° <del>X</del> 29'54	-0°37'07
direct	-5730 Sep 12 j 04:44	17° <del>M</del> 44'43		direct	-5724 Sep 24 j 21:34	1° <del>X</del> 07'07	
evening set	-5730 Dec 07 j 03:05	19° <del>M</del> 36'50		evening set	-5724 Dec 19 j 23:44	2° <del>X</del> 59'27	
conjunction	-5730 Dec 22 j 17:26	20° <del>M</del> 11'53	-0°04'58	conjunction	-5723 Jan 04 j 16:57	3° <del>X</del> 34'44	-0°37'18
minimum elong	-5730 Dec 22 j 17:27	20° <del>M</del> 11'53	0°05'12	minimum elong	-5723 Jan 04 j 16:57	3° <del>X</del> 34'44	0°37'35
behind sun begin	-5730 Dec 22 j 11:10	20° <del>M</del> 11'19		max. Earth dist.	-5723 Jan 05 j 18:13	3° <del>X</del> 37'07	30.92201 AU
behind sun end	-5730 Dec 22 j 23:43	20° <del>M</del> 12'27		morning rise	-5723 Jan 20 j 14:25	4° <del>X</del> 10'26	
max. Earth dist.	-5730 Dec 23 j 19:04	20° <del>M</del> 14'18	30.96013 AU	retrograde	-5723 Apr 22 j 07:18	6° <del>X</del> 09'30	
morning rise	-5729 Jan 07 j 11:38	20° <del>M</del> 47'20		opposition	-5723 Jul 11 j 22:49	4° <del>X</del> 44'12	-0°42'46
retrograde	-5729 Apr 08 j 21:53	22° <del>M</del> 46'02		min. Earth dist.	-5723 Jul 10 j 22:51	4° <del>X</del> 45'52	28.91821 AU
opposition	-5729 Jun 28 j 20:41	21° <del>M</del> 20'46	-0°08'14	direct	-5723 Sep 27 j 08:46	3° <del>X</del> 21'22	
min. Earth dist.	-5729 Jun 27 j 20:21	21° <del>M</del> 22'27	28.95704 AU	evening set	-5723 Dec 22 j 11:39	5° <del>X</del> 13'44	
direct	-5729 Sep 14 j 16:31	19° <del>M</del> 57'59					
evening set	-5729 Dec 09 j 13:59	21° <del>M</del> 50'06		conjunction	-5722 Jan 07 j 05:32	5° <del>X</del> 49'04	-0°42'33
				minimum elong	-5722 Jan 07 j 05:32	5° <del>X</del> 49'04	0°42'52
conjunction	-5729 Dec 25 j 04:48	22° <del>M</del> 25'12	-0°10'23	max. Earth dist.	-5722 Jan 08 j 07:39	5° <del>X</del> 51'32	30.91320 AU
minimum elong	-5729 Dec 25 j 04:47	22° <del>M</del> 25'12	0°10'39	morning rise	-5722 Jan 23 j 03:19	6° <del>X</del> 24'47	
behind sun begin	-5729 Dec 24 j 23:47	22° <del>M</del> 24'44		retrograde	-5722 Apr 24 j 20:48	8° <del>X</del> 23'52	
behind sun end	-5729 Dec 25 j 09:48	22° <del>M</del> 25'39		min. Earth dist.	-5722 Jul 13 j 10:39	7° <del>X</del> 00'12	28.90895 AU
max. Earth dist.	-5729 Dec 26 j 06:12	22° <del>M</del> 27'35	30.95362 AU	opposition	-5722 Jul 14 j 10:50	6° <del>X</del> 58'31	-0°48'21
morning rise	-5728 Jan 09 j 23:38	23° <del>M</del> 00'41		direct	-5722 Sep 29 j 22:10	5° <del>X</del> 35'38	
retrograde	-5728 Apr 10 j 12:13	24° <del>M</del> 59'27		evening set	-5722 Dec 24 j 23:43	7° <del>X</del> 28'02	

Attention, astronomical year style is used: The year -5721 in astronomical counting style is the year 5722 BCE in historical counting style.

conjunction	-5721 Jan 09 j 17:55	8°♂03'23	-0°47'45	direct	-5715 Oct 15 j 03:14	21°♂15'32	
minimum elong	-5721 Jan 09 j 17:55	8°♂03'23	0°48'03	evening set	-5714 Jan 09 j 13:57	23°♂08'19	
max. Earth dist.	-5721 Jan 10 j 18:50	8°♂05'44	30.90372 AU				
morning rise	-5721 Jan 25 j 16:19	8°♂39'09		conjunction	-5714 Jan 25 j 11:08	23°♂43'52	-1°21'40
retrograde	-5721 Apr 27 j 10:30	10°♂38'14		minimum elong	-5714 Jan 25 j 11:08	23°♂43'52	1°22'01
opposition	-5721 Jul 16 j 23:00	9°♂12'49	-0°53'52	max. Earth dist.	-5714 Jan 26 j 12:08	23°♂46'13	30.85750 AU
min. Earth dist.	-5721 Jul 15 j 23:11	9°♂14'29	28.89946 AU	morning rise	-5714 Feb 10 j 12:21	24°♂19'48	
direct	-5721 Oct 02 j 08:47	7°♂49'52		retrograde	-5714 May 13 j 04:41	26°♂18'55	
evening set	-5721 Dec 27 j 11:35	9°♂42'17		min. Earth dist.	-5714 Jul 31 j 10:41	24°♂55'03	28.85691 AU
				opposition	-5714 Aug 01 j 09:42	24°♂53'26	-1°29'46
conjunction	-5720 Jan 12 j 06:21	10°♂17'40	-0°52'52	direct	-5714 Oct 17 j 13:45	23°♂30'12	
minimum elong	-5720 Jan 12 j 06:20	10°♂17'40	0°53'11	evening set	-5713 Jan 12 j 02:48	25°♂23'05	
max. Earth dist.	-5720 Jan 13 j 08:17	10°♂20'07	30.89416 AU				
morning rise	-5720 Jan 28 j 05:04	10°♂53'27		conjunction	-5713 Jan 28 j 00:32	25°♂58'40	-1°26'05
retrograde	-5720 Apr 28 j 22:45	12°♂52'32		minimum elong	-5713 Jan 28 j 00:31	25°♂58'40	1°26'25
min. Earth dist.	-5720 Jul 17 j 11:22	11°♂28'44	28.89014 AU	max. Earth dist.	-5713 Jan 29 j 02:17	26°♂01'05	30.85442 AU
opposition	-5720 Jul 18 j 11:03	11°♂27'04	-0°59'18	morning rise	-5713 Feb 13 j 01:53	26°♂34'36	
direct	-5720 Oct 03 j 21:34	10°♂04'04		retrograde	-5713 May 15 j 18:06	28°♂33'43	
evening set	-5720 Dec 28 j 23:46	11°♂56'30		opposition	-5713 Aug 03 j 21:21	27°♂08'16	-1°34'26
				min. Earth dist.	-5713 Aug 02 j 22:17	27°♂09'54	28.85377 AU
conjunction	-5719 Jan 13 j 18:55	12°♂31'55	-0°57'54	direct	-5713 Oct 20 j 02:25	25°♂45'00	
minimum elong	-5719 Jan 13 j 18:55	12°♂31'55	0°58'13	evening set	-5712 Jan 14 j 15:50	27°♂37'59	
max. Earth dist.	-5719 Jan 14 j 20:08	12°♂34'18	30.88523 AU				
morning rise	-5719 Jan 29 j 18:10	13°♂07'44		conjunction	-5712 Jan 30 j 13:47	28°♂13'35	-1°30'22
retrograde	-5719 May 01 j 13:26	15°♂06'48		minimum elong	-5712 Jan 30 j 13:47	28°♂13'35	1°30'43
opposition	-5719 Jul 20 j 22:52	13°♂41'18	-1°04'39	max. Earth dist.	-5712 Jan 31 j 13:57	28°♂15'51	30.85107 AU
min. Earth dist.	-5719 Jul 19 j 22:41	13°♂42'59	28.88175 AU	morning rise	-5712 Feb 15 j 15:39	28°♂49'33	
direct	-5719 Oct 06 j 08:30	12°♂18'13			-5712 Mar 22 j 11:54	0°♂	
evening set	-5719 Dec 31 j 12:01	14°♂10'43		retrograde	-5712 May 17 j 08:45	0°♂48'40	
					-5712 Jul 13 j 19:52	30°♂	
conjunction	-5718 Jan 16 j 07:38	14°♂46'10	-1°02'51	min. Earth dist.	-5712 Aug 04 j 10:55	29°♂24'47	28.85023 AU
minimum elong	-5718 Jan 16 j 07:37	14°♂46'10	1°03'11	opposition	-5712 Aug 05 j 09:07	29°♂23'14	-1°38'56
max. Earth dist.	-5718 Jan 17 j 09:22	14°♂48'35	30.87720 AU	direct	-5712 Oct 21 j 13:01	27°♂59'55	
morning rise	-5718 Feb 01 j 07:15	15°♂22'00		evening set	-5711 Jan 16 j 05:04	29°♂52'59	
retrograde	-5718 May 04 j 00:16	17°♂21'04			-5711 Jan 19 j 09:27	0°♂	
min. Earth dist.	-5718 Jul 22 j 11:20	15°♂57'11	28.87440 AU				
opposition	-5718 Jul 23 j 10:47	15°♂55'33	-1°09'54	conjunction	-5711 Feb 01 j 03:32	0°♂28'37	-1°34'31
direct	-5718 Oct 08 j 19:17	14°♂32'25		minimum elong	-5711 Feb 01 j 03:32	0°♂28'37	1°34'51
evening set	-5717 Jan 03 j 00:13	16°♂24'57		max. Earth dist.	-5711 Feb 02 j 04:00	0°♂30'54	30.84698 AU
				morning rise	-5711 Feb 17 j 05:34	1°♂04'36	
conjunction	-5717 Jan 18 j 20:16	17°♂00'26	-1°07'43	retrograde	-5711 May 19 j 22:15	3°♂03'40	
minimum elong	-5717 Jan 18 j 20:16	17°♂00'26	1°08'02	opposition	-5711 Aug 07 j 20:42	1°♂38'14	-1°43'18
max. Earth dist.	-5717 Jan 19 j 22:05	17°♂02'52	30.87051 AU	min. Earth dist.	-5711 Aug 06 j 23:19	1°♂39'44	28.84571 AU
morning rise	-5717 Feb 03 j 20:15	17°♂36'18		direct	-5711 Oct 24 j 02:21	0°♂14'52	
retrograde	-5717 May 06 j 13:10	19°♂35'22		evening set	-5710 Jan 18 j 18:28	2°♂08'00	
opposition	-5717 Jul 25 j 22:31	18°♂09'50	-1°15'02				
min. Earth dist.	-5717 Jul 24 j 22:06	18°♂11'33	28.86841 AU	conjunction	-5710 Feb 03 j 17:14	2°♂43'39	-1°38'32
direct	-5717 Oct 11 j 06:23	16°♂46'40		minimum elong	-5710 Feb 03 j 17:14	2°♂43'39	1°38'53
evening set	-5716 Jan 05 j 12:39	18°♂39'17		max. Earth dist.	-5710 Feb 04 j 16:04	2°♂45'48	30.84206 AU
				morning rise	-5710 Feb 19 j 19:40	3°♂19'39	
conjunction	-5716 Jan 21 j 09:03	19°♂14'47	-1°12'28	retrograde	-5710 May 22 j 12:58	5°♂18'40	
minimum elong	-5716 Jan 21 j 09:02	19°♂14'47	1°12'49	min. Earth dist.	-5710 Aug 09 j 11:05	3°♂54'43	28.84046 AU
max. Earth dist.	-5716 Jan 22 j 10:37	19°♂17'11	30.86508 AU	opposition	-5710 Aug 10 j 08:19	3°♂53'13	-1°47'30
morning rise	-5716 Feb 06 j 09:29	19°♂50'40		direct	-5710 Oct 26 j 14:19	2°♂29'46	
retrograde	-5716 May 08 j 01:37	21°♂49'46		evening set	-5709 Jan 21 j 07:43	4°♂22'58	
min. Earth dist.	-5716 Jul 26 j 11:00	20°♂25'52	28.86372 AU				
opposition	-5716 Jul 27 j 10:22	20°♂24'14	-1°20'04	conjunction	-5709 Feb 06 j 06:51	4°♂58'38	-1°42'23
direct	-5716 Oct 12 j 15:14	19°♂01'02		minimum elong	-5709 Feb 06 j 06:51	4°♂58'38	1°42'44
evening set	-5715 Jan 07 j 01:06	20°♂53'43		max. Earth dist.	-5709 Feb 07 j 05:38	5°♂00'46	30.83637 AU
				morning rise	-5709 Feb 22 j 09:30	5°♂34'39	
conjunction	-5715 Jan 22 j 22:04	21°♂29'15	-1°17'08	retrograde	-5709 May 25 j 00:26	7°♂33'37	
minimum elong	-5715 Jan 22 j 22:04	21°♂29'15	1°17'28	opposition	-5709 Aug 12 j 19:53	6°♂08'08	-1°51'33
max. Earth dist.	-5715 Jan 24 j 00:12	21°♂31'42	30.86095 AU	min. Earth dist.	-5709 Aug 11 j 23:58	6°♂09'32	28.83468 AU
morning rise	-5715 Feb 07 j 22:48	22°♂05'09		direct	-5709 Oct 29 j 01:57	4°♂44'36	
retrograde	-5715 May 10 j 14:58	24°♂04'16		evening set	-5708 Jan 23 j 21:04	6°♂37'51	
opposition	-5715 Jul 29 j 22:02	22°♂38'45	-1°24'59				
min. Earth dist.	-5715 Jul 28 j 21:51	22°♂40'27	28.86001 AU	conjunction	-5708 Feb 08 j 20:37	7°♂13'32	-1°46'05

Attention, astronomical year style is used: The year -5708 in astronomical counting style is the year 5709 BCE in historical counting style.

minimum elong	-5708 Feb 08 j 20:36	7° $\overline{3}$ 13'32	1°46'27	evening set	-5701 Feb 08 j 20:24	22° $\overline{3}$ 21'46	
max. Earth dist.	-5708 Feb 09 j 18:43	7° $\overline{3}$ 15'37	30.83065 AU				
morning rise	-5708 Feb 24 j 23:33	7° $\overline{3}$ 49'33		conjunction	-5701 Feb 24 j 22:07	22° $\overline{3}$ 57'35	-2°07'11
retrograde	-5708 May 26 j 14:02	9° $\overline{3}$ 48'27		minimum elong	-5701 Feb 24 j 22:07	22° $\overline{3}$ 57'35	2°07'31
min. Earth dist.	-5708 Aug 13 j 10:54	8° $\overline{3}$ 24'23	28.82914 AU	max. Earth dist.	-5701 Feb 25 j 16:43	22° $\overline{3}$ 59'19	30.81934 AU
opposition	-5708 Aug 14 j 07:10	8° $\overline{3}$ 22'57	-1°55'25	morning rise	-5701 Mar 13 j 02:39	23° $\overline{3}$ 33'39	
direct	-5708 Oct 30 j 13:46	6° $\overline{3}$ 59'18		retrograde	-5701 Jun 12 j 10:01	25° $\overline{3}$ 32'11	
evening set	-5707 Jan 25 j 10:34	8° $\overline{3}$ 52'38		opposition	-5701 Aug 30 j 13:21	24° $\overline{3}$ 06'56	-2°17'17
				min. Earth dist.	-5701 Aug 29 j 20:22	24° $\overline{3}$ 08'09	28.82215 AU
conjunction	-5707 Feb 10 j 10:23	9° $\overline{3}$ 28'20	-1°49'38	direct	-5701 Nov 15 j 21:45	22° $\overline{3}$ 43'00	
minimum elong	-5707 Feb 10 j 10:23	9° $\overline{3}$ 28'20	1°49'58	evening set	-5700 Feb 11 j 10:29	24° $\overline{3}$ 37'07	
max. Earth dist.	-5707 Feb 11 j 07:51	9° $\overline{3}$ 30'21	30.82524 AU				
morning rise	-5707 Feb 26 j 13:39	10° $\overline{3}$ 04'22		conjunction	-5700 Feb 27 j 12:33	25° $\overline{3}$ 12'57	-2°09'27
retrograde	-5707 May 29 j 02:07	12° $\overline{3}$ 03'12		minimum elong	-5700 Feb 27 j 12:33	25° $\overline{3}$ 12'57	2°09'47
opposition	-5707 Aug 16 j 18:34	10° $\overline{3}$ 37'41	-1°59'07	max. Earth dist.	-5700 Feb 28 j 06:56	25° $\overline{3}$ 14'40	30.82159 AU
min. Earth dist.	-5707 Aug 15 j 23:45	10° $\overline{3}$ 39'01	28.82423 AU	morning rise	-5700 Mar 14 j 17:09	25° $\overline{3}$ 49'01	
direct	-5707 Nov 01 j 23:27	9° $\overline{3}$ 13'57		retrograde	-5700 Jun 13 j 22:37	27° $\overline{3}$ 47'29	
evening set	-5706 Jan 28 j 00:01	11° $\overline{3}$ 07'22		min. Earth dist.	-5700 Aug 31 j 09:06	26° $\overline{3}$ 23'25	28.82435 AU
				opposition	-5700 Sep 01 j 00:25	26° $\overline{3}$ 22'20	-2°19'36
conjunction	-5706 Feb 13 j 00:17	11° $\overline{3}$ 43'05	-1°53'00	direct	-5700 Nov 17 j 09:19	24° $\overline{3}$ 58'22	
minimum elong	-5706 Feb 13 j 00:16	11° $\overline{3}$ 43'05	1°53'21	evening set	-5699 Feb 13 j 00:45	26° $\overline{3}$ 52'36	
max. Earth dist.	-5706 Feb 13 j 21:51	11° $\overline{3}$ 45'06	30.82081 AU				
morning rise	-5706 Mar 01 j 03:39	12° $\overline{3}$ 19'07		conjunction	-5699 Mar 01 j 03:07	27° $\overline{3}$ 28'27	-2°11'32
retrograde	-5706 May 31 j 14:23	14° $\overline{3}$ 17'52		minimum elong	-5699 Mar 01 j 03:07	27° $\overline{3}$ 28'27	2°11'50
min. Earth dist.	-5706 Aug 18 j 10:12	12° $\overline{3}$ 53'44	28.82043 AU	max. Earth dist.	-5699 Mar 01 j 20:06	27° $\overline{3}$ 30'02	30.82358 AU
opposition	-5706 Aug 19 j 05:39	12° $\overline{3}$ 52'22	-2°02'38	morning rise	-5699 Mar 17 j 07:55	28° $\overline{3}$ 04'31	
direct	-5706 Nov 04 j 11:47	11° $\overline{3}$ 28'34			-5699 Jun 03 j 05:47	0° $\approx$	
evening set	-5705 Jan 30 j 13:36	13° $\overline{3}$ 22'04		retrograde	-5699 Jun 16 j 13:37	0° $\approx$ 02'55	
					-5699 Jun 29 j 18:18	30° $\overline{R}$ $\overline{3}$	
conjunction	-5705 Feb 15 j 14:02	13° $\overline{3}$ 57'48	-1°56'12	opposition	-5699 Sep 03 j 11:28	28° $\overline{3}$ 37'49	-2°21'43
minimum elong	-5705 Feb 15 j 14:01	13° $\overline{3}$ 57'48	1°56'32	min. Earth dist.	-5699 Sep 02 j 20:15	28° $\overline{3}$ 38'54	28.82597 AU
max. Earth dist.	-5705 Feb 16 j 10:24	13° $\overline{3}$ 59'42	30.81764 AU	direct	-5699 Nov 19 j 21:42	27° $\overline{3}$ 13'48	
morning rise	-5705 Mar 03 j 17:46	14° $\overline{3}$ 33'50		evening set	-5698 Feb 15 j 15:07	29° $\overline{3}$ 08'09	
retrograde	-5705 Jun 03 j 02:55	16° $\overline{3}$ 32'33					
opposition	-5705 Aug 21 j 16:56	15° $\overline{3}$ 07'03	-2°05'57	conjunction	-5698 Mar 03 j 17:41	29° $\overline{3}$ 44'00	-2°13'24
min. Earth dist.	-5705 Aug 20 j 22:32	15° $\overline{3}$ 08'21	28.81818 AU	minimum elong	-5698 Mar 03 j 17:41	29° $\overline{3}$ 44'00	2°13'43
direct	-5705 Nov 06 j 21:59	13° $\overline{3}$ 43'12		max. Earth dist.	-5698 Mar 04 j 09:30	29° $\overline{3}$ 45'29	30.82464 AU
evening set	-5704 Feb 02 j 02:59	15° $\overline{3}$ 36'48			-5698 Mar 10 j 20:56	0° $\approx$	
				morning rise	-5698 Mar 19 j 22:37	0° $\approx$ 20'05	
conjunction	-5704 Feb 18 j 03:55	16° $\overline{3}$ 12'33	-1°59'13	retrograde	-5698 Jun 19 j 01:51	2° $\approx$ 18'23	
minimum elong	-5704 Feb 18 j 03:55	16° $\overline{3}$ 12'33	1°59'34	opposition	-5698 Sep 05 j 22:35	0° $\approx$ 53'20	-2°23'36
max. Earth dist.	-5704 Feb 19 j 01:03	16° $\overline{3}$ 14'32	30.81610 AU	min. Earth dist.	-5698 Sep 05 j 09:22	0° $\approx$ 54'16	28.82670 AU
morning rise	-5704 Mar 05 j 07:44	16° $\overline{3}$ 48'36			-5698 Oct 09 j 19:14	30° $\overline{R}$ $\overline{3}$	
retrograde	-5704 Jun 04 j 15:37	18° $\overline{3}$ 47'15		direct	-5698 Nov 22 j 07:58	29° $\overline{3}$ 29'15	
min. Earth dist.	-5704 Aug 22 j 09:28	17° $\overline{3}$ 23'08	28.81737 AU		-5697 Jan 04 j 02:58	0° $\approx$	
opposition	-5704 Aug 23 j 04:03	17° $\overline{3}$ 21'48	-2°09'05	evening set	-5697 Feb 18 j 05:21	1° $\approx$ 23'40	
direct	-5704 Nov 08 j 10:16	15° $\overline{3}$ 57'55					
evening set	-5703 Feb 03 j 16:47	17° $\overline{3}$ 51'38		conjunction	-5697 Mar 06 j 08:19	1° $\approx$ 59'32	-2°15'04
				minimum elong	-5697 Mar 06 j 08:19	1° $\approx$ 59'32	2°15'22
conjunction	-5703 Feb 19 j 17:54	18° $\overline{3}$ 27'24	-2°02'04	max. Earth dist.	-5697 Mar 06 j 23:25	2° $\approx$ 00'57	30.82507 AU
minimum elong	-5703 Feb 19 j 17:54	18° $\overline{3}$ 27'24	2°02'23	morning rise	-5697 Mar 22 j 13:20	2° $\approx$ 35'37	
max. Earth dist.	-5703 Feb 20 j 13:30	18° $\overline{3}$ 29'14	30.81604 AU	retrograde	-5697 Jun 21 j 13:50	4° $\approx$ 33'48	
morning rise	-5703 Mar 07 j 22:06	19° $\overline{3}$ 03'27		opposition	-5697 Sep 08 j 09:29	3° $\approx$ 08'46	-2°25'16
retrograde	-5703 Jun 07 j 05:49	21° $\overline{3}$ 02'04		min. Earth dist.	-5697 Sep 07 j 20:13	3° $\approx$ 09'43	28.82679 AU
opposition	-5703 Aug 25 j 15:08	19° $\overline{3}$ 36'41	-2°12'01	direct	-5697 Nov 24 j 20:57	1° $\approx$ 44'37	
min. Earth dist.	-5703 Aug 24 j 21:16	19° $\overline{3}$ 37'57	28.81810 AU	evening set	-5696 Feb 20 j 19:41	3° $\approx$ 39'06	
direct	-5703 Nov 10 j 20:32	18° $\overline{3}$ 12'45					
evening set	-5702 Feb 06 j 06:34	20° $\overline{3}$ 06'37		conjunction	-5696 Mar 07 j 22:48	4° $\approx$ 14'59	-2°16'32
				minimum elong	-5696 Mar 07 j 22:48	4° $\approx$ 14'59	2°16'50
conjunction	-5702 Feb 22 j 08:07	20° $\overline{3}$ 42'24	-2°04'43	max. Earth dist.	-5696 Mar 08 j 12:07	4° $\approx$ 16'13	30.82493 AU
minimum elong	-5702 Feb 22 j 08:06	20° $\overline{3}$ 42'24	2°05'04	morning rise	-5696 Mar 24 j 04:06	4° $\approx$ 51'03	
max. Earth dist.	-5702 Feb 23 j 04:16	20° $\overline{3}$ 44'17	30.81725 AU	retrograde	-5696 Jun 23 j 01:42	6° $\approx$ 49'06	
morning rise	-5702 Mar 10 j 12:20	21° $\overline{3}$ 18'28		opposition	-5696 Sep 09 j 20:29	5° $\approx$ 24'05	-2°26'43
retrograde	-5702 Jun 09 j 19:25	23° $\overline{3}$ 17'02		min. Earth dist.	-5696 Sep 09 j 08:53	5° $\approx$ 24'55	28.82665 AU
min. Earth dist.	-5702 Aug 27 j 09:04	21° $\overline{3}$ 52'56	28.81979 AU	direct	-5696 Nov 26 j 07:17	3° $\approx$ 59'50	
opposition	-5702 Aug 28 j 02:15	21° $\overline{3}$ 51'43	-2°14'45	evening set	-5695 Feb 22 j 09:59	5° $\approx$ 54'23	
direct	-5702 Nov 13 j 09:48	20° $\overline{3}$ 27'48					



Attention, astronomical year style is used: The year -5695 in astronomical counting style is the year 5696 BCE in historical counting style.

conjunction	-5695 Mar 10 j 13:33	6°30'17"	-2°17'47"	retrograde	-5689 Jul 09 j 18:14	22°33'06"	
minimum elong	-5695 Mar 10 j 13:32	6°30'17"	2°18'04"	opposition	-5689 Sep 25 j 23:17	21°08'26"	-2°30'31"
max. Earth dist.	-5695 Mar 11 j 02:54	6°31'31"	30.82481 AU	min. Earth dist.	-5689 Sep 25 j 16:49	21°08'54"	28.85022 AU
morning rise	-5695 Mar 26 j 18:49	7°06'20"		direct	-5689 Dec 12 j 19:30	19°43'48"	
retrograde	-5695 Jun 25 j 13:31	9°04'15"		evening set	-5688 Mar 10 j 14:29	21°39'01"	
opposition	-5695 Sep 12 j 07:10	7°39'14"	-2°27'57"				
min. Earth dist.	-5695 Sep 11 j 19:52	7°40'03"	28.82664 AU	conjunction	-5688 Mar 26 j 19:41	22°14'58"	-2°20'36"
direct	-5695 Nov 28 j 19:30	6°14'53"		minimum elong	-5688 Mar 26 j 19:42	22°14'58"	2°20'50"
evening set	-5694 Feb 25 j 00:26	8°09'31"		max. Earth dist.	-5688 Mar 27 j 03:09	22°15'40"	30.85193 AU
				morning rise	-5688 Apr 12 j 01:38	22°51'00"	
conjunction	-5694 Mar 13 j 04:03	8°45'24"	-2°18'50"	retrograde	-5688 Jul 11 j 07:10	24°48'02"	
minimum elong	-5694 Mar 13 j 04:04	8°45'24"	2°19'07"	opposition	-5688 Sep 27 j 09:52	23°23'29"	-2°30'08"
max. Earth dist.	-5694 Mar 13 j 15:32	8°46'29"	30.82513 AU	min. Earth dist.	-5688 Sep 27 j 03:29	23°23'56"	28.85712 AU
morning rise	-5694 Mar 29 j 09:36	9°21'28"		direct	-5688 Dec 14 j 08:20	21°58'51"	
retrograde	-5694 Jun 28 j 02:01	11°19'14"		evening set	-5687 Mar 13 j 05:15	23°54'10"	
opposition	-5694 Sep 14 j 17:59	9°54'15"	-2°28'57"				
min. Earth dist.	-5694 Sep 14 j 07:38	9°54'59"	28.82748 AU	conjunction	-5687 Mar 29 j 10:31	24°30'08"	-2°20'08"
direct	-5694 Dec 01 j 06:32	8°29'48"		minimum elong	-5687 Mar 29 j 10:31	24°30'08"	2°20'21"
evening set	-5693 Feb 27 j 14:30	10°24'30"		max. Earth dist.	-5687 Mar 29 j 16:03	24°30'39"	30.85860 AU
				morning rise	-5687 Apr 14 j 16:35	25°06'10"	
conjunction	-5693 Mar 15 j 18:32	11°00'24"	-2°19'40"	retrograde	-5687 Jul 13 j 19:33	27°03'06"	
minimum elong	-5693 Mar 15 j 18:32	11°00'24"	2°19'56"	opposition	-5687 Sep 29 j 20:32	25°38'38"	-2°29'31"
max. Earth dist.	-5693 Mar 16 j 06:28	11°01'31"	30.82641 AU	min. Earth dist.	-5687 Sep 29 j 16:03	25°38'57"	28.86355 AU
morning rise	-5693 Apr 01 j 00:01	11°36'27"		direct	-5687 Dec 16 j 18:24	24°13'59"	
retrograde	-5693 Jun 30 j 13:42	13°34'05"		evening set	-5686 Mar 15 j 19:52	26°09'24"	
opposition	-5693 Sep 17 j 04:44	12°09'07"	-2°29'44"				
min. Earth dist.	-5693 Sep 16 j 19:05	12°09'48"	28.82936 AU	conjunction	-5686 Apr 01 j 01:29	26°45'23"	-2°19'27"
direct	-5693 Dec 03 j 19:56	10°44'36"		minimum elong	-5686 Apr 01 j 01:29	26°45'23"	2°19'40"
evening set	-5692 Mar 01 j 04:53	12°39'23"		max. Earth dist.	-5686 Apr 01 j 06:33	26°45'51"	30.86462 AU
				morning rise	-5686 Apr 17 j 07:26	27°21'24"	
conjunction	-5692 Mar 17 j 09:02	13°15'17"	-2°20'17"	retrograde	-5686 Jul 16 j 07:24	29°18'12"	
minimum elong	-5692 Mar 17 j 09:02	13°15'17"	2°20'33"	opposition	-5686 Oct 02 j 07:14	27°53'50"	-2°28'40"
max. Earth dist.	-5692 Mar 17 j 19:13	13°16'14"	30.82904 AU	min. Earth dist.	-5686 Oct 02 j 03:20	27°54'06"	28.86899 AU
morning rise	-5692 Apr 02 j 14:47	13°51'20"		direct	-5686 Dec 19 j 06:27	26°29'08"	
	-5692 May 07 j 16:10	15°		evening set	-5685 Mar 18 j 10:27	28°24'38"	
retrograde	-5692 Jul 02 j 03:24	15°48'50"					
	-5692 Aug 27 j 19:49	15°		conjunction	-5685 Apr 03 j 16:05	29°00'37"	-2°18'34"
opposition	-5692 Sep 18 j 15:18	14°23'54"	-2°30'16"	minimum elong	-5685 Apr 03 j 16:06	29°00'37"	2°18'45"
min. Earth dist.	-5692 Sep 18 j 05:48	14°24'35"	28.83274 AU	max. Earth dist.	-5685 Apr 03 j 18:48	29°00'52"	30.86962 AU
direct	-5692 Dec 05 j 07:57	12°59'19"		morning rise	-5685 Apr 19 j 22:15	29°36'39"	
evening set	-5691 Mar 03 j 19:15	14°54'13"			-5685 Apr 30 j 21:55	0°	
	-5691 Mar 06 j 10:45	15°		retrograde	-5685 Jul 18 j 19:10	1°33'18"	
				opposition	-5685 Oct 04 j 17:55	0°08'59"	-2°27'37"
conjunction	-5691 Mar 19 j 23:45	15°30'07"	-2°20'41"	min. Earth dist.	-5685 Oct 04 j 15:24	0°09'10"	28.87356 AU
minimum elong	-5691 Mar 19 j 23:45	15°30'07"	2°20'56"		-5685 Oct 10 j 00:08	30°	
max. Earth dist.	-5691 Mar 20 j 09:56	15°31'04"	30.83304 AU	direct	-5685 Dec 21 j 17:39	28°44'13"	
morning rise	-5691 Apr 05 j 05:27	16°06'10"			-5684 Feb 29 j 20:07	0°	
retrograde	-5691 Jul 04 j 15:38	18°03'32"		evening set	-5684 Mar 20 j 01:00	0°39'48"	
opposition	-5691 Sep 21 j 02:04	16°38'41"	-2°30'35"				
min. Earth dist.	-5691 Sep 20 j 17:54	16°39'16"	28.83744 AU	conjunction	-5684 Apr 05 j 07:01	1°15'47"	-2°17'28"
direct	-5691 Dec 07 j 19:59	15°14'05"		minimum elong	-5684 Apr 05 j 07:02	1°15'47"	2°17'40"
evening set	-5690 Mar 06 j 09:36	17°09'03"		max. Earth dist.	-5684 Apr 05 j 09:35	1°16'01"	30.87376 AU
				morning rise	-5684 Apr 21 j 13:03	1°51'48"	
conjunction	-5690 Mar 22 j 14:16	17°44'59"	-2°20'52"	retrograde	-5684 Jul 20 j 06:00	3°48'17"	
minimum elong	-5690 Mar 22 j 14:17	17°44'59"	2°21'08"	opposition	-5684 Oct 06 j 04:25	2°24'01"	-2°26'20"
max. Earth dist.	-5690 Mar 22 j 23:14	17°45'49"	30.83849 AU	min. Earth dist.	-5684 Oct 06 j 03:11	2°24'07"	28.87726 AU
morning rise	-5690 Apr 07 j 20:07	18°21'01"		direct	-5684 Dec 23 j 07:00	0°59'11"	
retrograde	-5690 Jul 07 j 06:13	20°18'16"		evening set	-5683 Mar 22 j 15:42	2°54'50"	
opposition	-5690 Sep 23 j 12:37	18°53'30"	-2°30'40"				
min. Earth dist.	-5690 Sep 23 j 04:16	18°54'06"	28.84342 AU	conjunction	-5683 Apr 07 j 21:45	3°30'49"	-2°16'10"
direct	-5690 Dec 10 j 08:49	17°28'53"		minimum elong	-5683 Apr 07 j 21:45	3°30'49"	2°16'21"
evening set	-5689 Mar 09 j 00:03	19°23'58"		max. Earth dist.	-5683 Apr 07 j 21:58	3°30'50"	30.87738 AU
				morning rise	-5683 Apr 24 j 03:58	4°06'49"	
conjunction	-5689 Mar 25 j 04:56	19°59'55"	-2°20'51"	retrograde	-5683 Jul 22 j 18:59	6°03'09"	
minimum elong	-5689 Mar 25 j 04:56	19°59'55"	2°21'05"	opposition	-5683 Oct 08 j 14:53	4°38'55"	-2°24'49"
max. Earth dist.	-5689 Mar 25 j 13:12	20°00'41"	30.84490 AU	min. Earth dist.	-5683 Oct 08 j 14:09	4°38'58"	28.88078 AU
morning rise	-5689 Apr 10 j 10:49	20°35'57"		direct	-5683 Dec 25 j 19:01	3°14'00"	

Attention, astronomical year style is used: The year -5682 in astronomical counting style is the year 5683 BCE in historical counting style.

evening set	-5682 Mar 25 j 06:03	5° $\text{H}$ 09'42		opposition	-5676 Oct 23 j 15:11	20° $\text{H}$ 19'19	-2°08'22
				min. Earth dist.	-5676 Oct 23 j 20:03	20° $\text{H}$ 18'58	28.92927 AU
conjunction	-5682 Apr 10 j 12:21	5° $\text{H}$ 45'41	-2°14'40	direct	-5675 Jan 10 j 08:31	18° $\text{H}$ 54'08	
minimum elong	-5682 Apr 10 j 12:22	5° $\text{H}$ 45'41	2°14'50	evening set	-5675 Apr 10 j 10:05	20° $\text{H}$ 50'14	
max. Earth dist.	-5682 Apr 10 j 12:26	5° $\text{H}$ 45'41	30.88087 AU				
morning rise	-5682 Apr 26 j 18:23	6° $\text{H}$ 21'40		conjunction	-5675 Apr 26 j 17:13	21° $\text{H}$ 26'15	-1°58'36
retrograde	-5682 Jul 25 j 06:10	8° $\text{H}$ 17'49		minimum elong	-5675 Apr 26 j 17:14	21° $\text{H}$ 26'15	1°58'41
opposition	-5682 Oct 11 j 01:22	6° $\text{H}$ 53'37	-2°23'06	max. Earth dist.	-5675 Apr 26 j 11:23	21° $\text{H}$ 25'43	30.93301 AU
min. Earth dist.	-5682 Oct 11 j 02:13	6° $\text{H}$ 53'33	28.88442 AU	morning rise	-5675 May 12 j 22:55	22° $\text{H}$ 02'10	
direct	-5682 Dec 28 j 07:47	5° $\text{H}$ 28'38		retrograde	-5675 Aug 09 j 15:58	23° $\text{H}$ 57'12	
evening set	-5681 Mar 27 j 20:27	7° $\text{H}$ 24'22		opposition	-5675 Oct 26 j 01:37	22° $\text{H}$ 33'32	-2°05'12
				min. Earth dist.	-5675 Oct 26 j 07:43	22° $\text{H}$ 33'06	28.93919 AU
conjunction	-5681 Apr 13 j 02:50	8° $\text{H}$ 00'21	-2°12'57	direct	-5674 Jan 12 j 20:37	21° $\text{H}$ 08'21	
minimum elong	-5681 Apr 13 j 02:51	8° $\text{H}$ 00'21	2°13'07	evening set	-5674 Apr 13 j 00:22	23° $\text{H}$ 04'31	
max. Earth dist.	-5681 Apr 13 j 01:22	8° $\text{H}$ 00'13	30.88496 AU				
morning rise	-5681 Apr 29 j 09:00	8° $\text{H}$ 36'20		conjunction	-5674 Apr 29 j 07:22	23° $\text{H}$ 40'31	-1°55'33
retrograde	-5681 Jul 27 j 19:49	10° $\text{H}$ 32'19		minimum elong	-5674 Apr 29 j 07:22	23° $\text{H}$ 40'31	1°55'37
opposition	-5681 Oct 13 j 11:36	9° $\text{H}$ 08'08	-2°21'10	max. Earth dist.	-5674 Apr 28 j 23:15	23° $\text{H}$ 39'46	30.94276 AU
min. Earth dist.	-5681 Oct 13 j 12:20	9° $\text{H}$ 08'05	28.88889 AU	morning rise	-5674 May 15 j 13:06	24° $\text{H}$ 16'26	
direct	-5681 Dec 30 j 21:43	7° $\text{H}$ 43'04		retrograde	-5674 Aug 12 j 04:27	26° $\text{H}$ 11'19	
evening set	-5680 Mar 29 j 10:47	9° $\text{H}$ 38'52		opposition	-5674 Oct 28 j 12:00	24° $\text{H}$ 47'44	-2°01'51
				min. Earth dist.	-5674 Oct 28 j 18:35	24° $\text{H}$ 47'16	28.94859 AU
conjunction	-5680 Apr 14 j 17:21	10° $\text{H}$ 14'52	-2°11'03	direct	-5673 Jan 15 j 07:51	23° $\text{H}$ 22'31	
minimum elong	-5680 Apr 14 j 17:22	10° $\text{H}$ 14'52	2°11'11	evening set	-5673 Apr 15 j 14:35	25° $\text{H}$ 18'45	
max. Earth dist.	-5680 Apr 14 j 15:21	10° $\text{H}$ 14'41	30.88990 AU				
morning rise	-5680 Apr 30 j 23:26	10° $\text{H}$ 50'50		conjunction	-5673 May 01 j 21:45	25° $\text{H}$ 54'45	-1°52'20
retrograde	-5680 Jul 29 j 06:47	12° $\text{H}$ 46'38		minimum elong	-5673 May 01 j 21:46	25° $\text{H}$ 54'45	1°52'23
opposition	-5680 Oct 14 j 22:02	11° $\text{H}$ 22'30	-2°19'01	max. Earth dist.	-5673 May 01 j 13:19	25° $\text{H}$ 53'58	30.95169 AU
min. Earth dist.	-5680 Oct 15 j 00:28	11° $\text{H}$ 22'20	28.89443 AU	morning rise	-5673 May 18 j 03:13	26° $\text{H}$ 30'38	
direct	-5679 Jan 01 j 09:40	9° $\text{H}$ 57'23		retrograde	-5673 Aug 14 j 14:35	28° $\text{H}$ 25'22	
evening set	-5679 Apr 01 j 01:05	11° $\text{H}$ 53'14		opposition	-5673 Oct 30 j 22:23	27° $\text{H}$ 01'51	-1°58'19
				min. Earth dist.	-5673 Oct 31 j 06:51	27° $\text{H}$ 01'15	28.95700 AU
conjunction	-5679 Apr 17 j 07:48	12° $\text{H}$ 29'14	-2°08'56	direct	-5672 Jan 17 j 20:37	25° $\text{H}$ 36'36	
minimum elong	-5679 Apr 17 j 07:48	12° $\text{H}$ 29'14	2°09'04	evening set	-5672 Apr 17 j 04:53	27° $\text{H}$ 32'52	
max. Earth dist.	-5679 Apr 17 j 05:05	12° $\text{H}$ 28'58	30.89619 AU				
morning rise	-5679 May 03 j 13:50	13° $\text{H}$ 05'11		conjunction	-5672 May 03 j 11:59	28° $\text{H}$ 08'52	-1°48'57
retrograde	-5679 Jul 31 j 19:22	15° $\text{H}$ 00'48		minimum elong	-5672 May 03 j 12:00	28° $\text{H}$ 08'52	1°48'59
opposition	-5679 Oct 17 j 08:15	13° $\text{H}$ 36'45	-2°16'40	max. Earth dist.	-5672 May 03 j 01:29	28° $\text{H}$ 07'53	30.95977 AU
min. Earth dist.	-5679 Oct 17 j 10:22	13° $\text{H}$ 36'36	28.90132 AU	morning rise	-5672 May 19 j 17:28	28° $\text{H}$ 44'44	
direct	-5678 Jan 03 j 22:52	12° $\text{H}$ 11'36			-5672 Jun 28 j 06:16	0° $\text{Y}$	
evening set	-5678 Apr 03 j 15:24	14° $\text{H}$ 07'30		retrograde	-5672 Aug 16 j 03:18	0° $\text{Y}$ 39'17	
					-5672 Oct 04 j 23:45	30° $\text{R}$ $\text{H}$	
conjunction	-5678 Apr 19 j 22:08	14° $\text{H}$ 43'30	-2°06'38	opposition	-5672 Nov 01 j 08:42	29° $\text{H}$ 15'49	-1°54'37
minimum elong	-5678 Apr 19 j 22:08	14° $\text{H}$ 43'30	2°06'46	min. Earth dist.	-5672 Nov 01 j 17:19	29° $\text{H}$ 15'13	28.96453 AU
max. Earth dist.	-5678 Apr 19 j 18:10	14° $\text{H}$ 43'08	30.90384 AU	direct	-5671 Jan 19 j 10:34	27° $\text{H}$ 50'32	
morning rise	-5678 May 06 j 04:09	15° $\text{H}$ 19'26		evening set	-5671 Apr 19 j 19:02	29° $\text{H}$ 46'49	
retrograde	-5678 Aug 03 j 07:46	17° $\text{H}$ 14'55			-5671 Apr 25 j 19:40	0° $\text{Y}$	
opposition	-5678 Oct 19 j 18:39	15° $\text{H}$ 50'56	-2°14'06				
min. Earth dist.	-5678 Oct 19 j 22:06	15° $\text{H}$ 50'41	28.90971 AU	conjunction	-5671 May 06 j 02:11	0° $\text{Y}$ 22'48	-1°45'25
direct	-5677 Jan 06 j 09:25	14° $\text{H}$ 25'46		minimum elong	-5671 May 06 j 02:11	0° $\text{Y}$ 22'49	1°45'27
evening set	-5677 Apr 06 j 05:24	16° $\text{H}$ 21'43		max. Earth dist.	-5671 May 05 j 14:58	0° $\text{Y}$ 21'46	30.96692 AU
				morning rise	-5671 May 22 j 07:22	0° $\text{Y}$ 58'39	
conjunction	-5677 Apr 22 j 12:23	16° $\text{H}$ 57'44	-2°04'09	retrograde	-5671 Aug 18 j 13:47	2° $\text{Y}$ 53'03	
minimum elong	-5677 Apr 22 j 12:24	16° $\text{H}$ 57'44	2°04'15	opposition	-5671 Nov 03 j 19:06	1° $\text{Y}$ 29'37	-1°50'45
max. Earth dist.	-5677 Apr 22 j 08:25	16° $\text{H}$ 57'22	30.91295 AU	min. Earth dist.	-5671 Nov 04 j 05:42	1° $\text{Y}$ 28'52	28.97142 AU
morning rise	-5677 May 08 j 18:17	17° $\text{H}$ 33'40		direct	-5670 Jan 21 j 22:47	0° $\text{Y}$ 04'16	
retrograde	-5677 Aug 05 j 18:35	19° $\text{H}$ 28'59		evening set	-5670 Apr 22 j 09:02	2° $\text{Y}$ 00'35	
opposition	-5677 Oct 22 j 04:56	18° $\text{H}$ 05'06	-2°11'20				
min. Earth dist.	-5677 Oct 22 j 08:40	18° $\text{H}$ 04'50	28.91914 AU	conjunction	-5670 May 08 j 16:09	2° $\text{Y}$ 36'33	-1°41'43
direct	-5676 Jan 08 j 21:42	16° $\text{H}$ 39'56		minimum elong	-5670 May 08 j 16:10	2° $\text{Y}$ 36'33	1°41'44
evening set	-5676 Apr 07 j 19:48	18° $\text{H}$ 35'58		max. Earth dist.	-5670 May 08 j 03:55	2° $\text{Y}$ 35'25	30.97380 AU
				morning rise	-5670 May 24 j 21:14	3° $\text{Y}$ 12'23	
conjunction	-5676 Apr 24 j 02:42	19° $\text{H}$ 11'58	-2°01'28	retrograde	-5670 Aug 21 j 02:00	5° $\text{Y}$ 06'35	
minimum elong	-5676 Apr 24 j 02:43	19° $\text{H}$ 11'58	2°01'33	opposition	-5670 Nov 06 j 05:18	3° $\text{Y}$ 43'12	-1°46'44
max. Earth dist.	-5676 Apr 23 j 20:49	19° $\text{H}$ 11'26	30.92285 AU	min. Earth dist.	-5670 Nov 06 j 15:48	3° $\text{Y}$ 42'27	28.97814 AU
morning rise	-5676 May 10 j 08:40	19° $\text{H}$ 47'54		direct	-5669 Jan 24 j 12:36	2° $\text{Y}$ 17'48	
retrograde	-5676 Aug 07 j 05:43	21° $\text{H}$ 43'05		evening set	-5669 Apr 24 j 22:50	4° $\text{Y}$ 14'07	

Attention, astronomical year style is used: The year -5669 in astronomical counting style is the year 5670 BCE in historical counting style.

conjunction	-5669 May 11 j 05:53	4°♈50'06	-1°37'53	direct	-5662 Feb 08 j 23:31	17°♈49'32	
minimum elong	-5669 May 11 j 05:53	4°♈50'06	1°37'53	evening set	-5662 May 10 j 21:55	19°♈46'07	
max. Earth dist.	-5669 May 10 j 16:27	4°♈48'51	30.98064 AU	max. Earth dist.	-5662 May 26 j 10:27	20°♈20'22	31.05463 AU
morning rise	-5669 May 27 j 10:49	5°♈25'54					
retrograde	-5669 Aug 23 j 13:43	7°♈19'56		conjunction	-5662 May 27 j 04:00	20°♈22'00	-1°07'21
opposition	-5669 Nov 08 j 15:37	5°♈56'35	-1°42'33	minimum elong	-5662 May 27 j 04:01	20°♈22'00	1°07'15
min. Earth dist.	-5669 Nov 09 j 03:33	5°♈55'44	28.98520 AU	morning rise	-5662 Jun 12 j 06:59	20°♈57'39	
direct	-5668 Jan 27 j 00:14	4°♈31'08		retrograde	-5662 Sep 07 j 15:00	22°♈50'48	
evening set	-5668 Apr 26 j 12:34	6°♈27'28		opposition	-5662 Nov 23 j 15:33	21°♈28'04	-1°09'27
				min. Earth dist.	-5662 Nov 24 j 08:00	21°♈26'55	29.06128 AU
conjunction	-5668 May 12 j 19:39	7°♈03'26	-1°33'54	direct	-5661 Feb 11 j 10:47	20°♈02'42	
minimum elong	-5668 May 12 j 19:40	7°♈03'26	1°33'53	evening set	-5661 May 13 j 11:20	21°♈59'19	
max. Earth dist.	-5668 May 12 j 06:07	7°♈02'11	30.98807 AU				
morning rise	-5668 May 29 j 00:19	7°♈39'12		conjunction	-5661 May 29 j 17:11	22°♈35'11	-1°02'32
retrograde	-5668 Aug 24 j 23:44	9°♈33'04		minimum elong	-5661 May 29 j 17:11	22°♈35'11	1°02'26
opposition	-5668 Nov 10 j 01:44	8°♈09'47	-1°38'13	max. Earth dist.	-5661 May 28 j 22:34	22°♈33'27	31.06659 AU
min. Earth dist.	-5668 Nov 10 j 13:52	8°♈08'55	28.99291 AU	morning rise	-5661 Jun 14 j 19:55	23°♈10'48	
direct	-5667 Jan 28 j 13:24	6°♈44'18		retrograde	-5661 Sep 10 j 03:16	25°♈03'50	
evening set	-5667 Apr 29 j 02:23	8°♈40'39		opposition	-5661 Nov 26 j 01:58	23°♈41'12	-1°04'16
				min. Earth dist.	-5661 Nov 26 j 18:24	23°♈40'03	29.07260 AU
conjunction	-5667 May 15 j 09:12	9°♈16'36	-1°29'48	direct	-5660 Feb 14 j 01:01	22°♈15'50	
minimum elong	-5667 May 15 j 09:13	9°♈16'36	1°29'46	evening set	-5660 May 15 j 00:52	24°♈12'28	
max. Earth dist.	-5667 May 14 j 18:07	9°♈15'12	30.99640 AU	max. Earth dist.	-5660 May 30 j 10:31	24°♈46'28	31.07733 AU
morning rise	-5667 May 31 j 13:44	9°♈52'22					
retrograde	-5667 Aug 27 j 10:19	11°♈46'05		conjunction	-5660 May 31 j 06:25	24°♈48'19	-0°57'38
opposition	-5667 Nov 12 j 12:03	10°♈22'51	-1°33'45	minimum elong	-5660 May 31 j 06:25	24°♈48'19	0°57'30
min. Earth dist.	-5667 Nov 13 j 00:47	10°♈21'57	29.00191 AU	morning rise	-5660 Jun 16 j 08:44	25°♈23'54	
direct	-5666 Jan 31 j 00:21	8°♈57'21		retrograde	-5660 Sep 11 j 15:09	27°♈16'49	
evening set	-5666 May 01 j 15:45	10°♈53'43		opposition	-5660 Nov 27 j 12:29	25°♈54'14	-0°58'58
				min. Earth dist.	-5660 Nov 28 j 06:26	25°♈52'58	29.08282 AU
conjunction	-5666 May 17 j 22:37	11°♈29'40	-1°25'33	direct	-5659 Feb 15 j 13:33	24°♈28'52	
minimum elong	-5666 May 17 j 22:37	11°♈29'40	1°25'30	evening set	-5659 May 17 j 14:13	26°♈25'30	
max. Earth dist.	-5666 May 17 j 08:11	11°♈28'19	31.00609 AU				
morning rise	-5666 Jun 03 j 02:45	12°♈05'24		conjunction	-5659 Jun 02 j 19:34	27°♈01'20	-0°52'39
retrograde	-5666 Aug 29 j 19:38	13°♈58'59		minimum elong	-5659 Jun 02 j 19:34	27°♈01'20	0°52'32
opposition	-5666 Nov 14 j 22:21	12°♈35'50	-1°29'09	max. Earth dist.	-5659 Jun 01 j 23:19	26°♈59'27	31.08706 AU
min. Earth dist.	-5666 Nov 15 j 11:45	12°♈34'53	29.01218 AU	morning rise	-5659 Jun 18 j 21:28	27°♈36'53	
direct	-5665 Feb 02 j 12:00	11°♈10'20		retrograde	-5659 Sep 14 j 01:02	29°♈29'40	
evening set	-5665 May 04 j 05:22	13°♈06'45		opposition	-5659 Nov 29 j 23:02	28°♈07'07	-0°53'37
				min. Earth dist.	-5659 Nov 30 j 17:22	28°♈05'50	29.09191 AU
conjunction	-5665 May 20 j 11:56	13°♈42'41	-1°21'10	direct	-5658 Feb 18 j 03:30	26°♈41'44	
minimum elong	-5665 May 20 j 11:56	13°♈42'41	1°21'08	evening set	-5658 May 20 j 03:24	28°♈38'22	
max. Earth dist.	-5665 May 19 j 19:52	13°♈41'11	31.01718 AU	max. Earth dist.	-5658 Jun 04 j 10:24	29°♈12'08	31.09577 AU
morning rise	-5665 Jun 05 j 15:59	14°♈18'24					
retrograde	-5665 Sep 01 j 07:15	16°♈11'51		conjunction	-5658 Jun 05 j 08:18	29°♈14'09	-0°47'36
opposition	-5665 Nov 17 j 08:26	14°♈48'49	-1°24'24	minimum elong	-5658 Jun 05 j 08:18	29°♈14'09	0°47'27
min. Earth dist.	-5665 Nov 17 j 21:46	14°♈47'52	29.02386 AU	morning rise	-5658 Jun 21 j 09:54	29°♈49'40	
direct	-5664 Feb 04 j 22:18	13°♈23'20			-5658 Jun 26 j 05:06	0°♈	
evening set	-5664 May 05 j 18:52	15°♈19'48		retrograde	-5658 Sep 16 j 11:51	1°♈42'19	
max. Earth dist.	-5664 May 21 j 09:44	15°♈54'16	31.02936 AU	opposition	-5658 Dec 02 j 09:31	0°♈19'49	-0°48'10
				min. Earth dist.	-5658 Dec 03 j 04:38	0°♈18'28	29.10032 AU
conjunction	-5664 May 22 j 01:27	15°♈55'43	-1°16'41		-5658 Dec 14 j 06:55	30°♈	
minimum elong	-5664 May 22 j 01:27	15°♈55'43	1°16'37	direct	-5657 Feb 20 j 15:05	28°♈54'23	
morning rise	-5664 Jun 07 j 05:03	16°♈31'25			-5657 Apr 27 j 11:10	0°♈	
retrograde	-5664 Sep 02 j 16:31	18°♈24'46		evening set	-5657 May 22 j 16:25	0°♈50'59	
opposition	-5664 Nov 18 j 18:49	17°♈01'50	-1°19'32				
min. Earth dist.	-5664 Nov 19 j 09:36	17°♈00'48	29.03629 AU	conjunction	-5657 Jun 07 j 21:10	1°♈26'45	-0°42'29
direct	-5663 Feb 06 j 10:36	15°♈36'24		minimum elong	-5657 Jun 07 j 21:10	1°♈26'45	0°42'20
evening set	-5663 May 08 j 08:26	17°♈32'56		max. Earth dist.	-5657 Jun 06 j 23:42	1°♈24'46	31.10393 AU
				morning rise	-5657 Jun 23 j 22:13	2°♈02'14	
conjunction	-5663 May 24 j 14:40	18°♈08'50	-1°12'04	retrograde	-5657 Sep 18 j 20:53	3°♈54'43	
minimum elong	-5663 May 24 j 14:40	18°♈08'50	1°12'00	opposition	-5657 Dec 04 j 19:53	2°♈32'15	-0°42'40
max. Earth dist.	-5663 May 23 j 21:24	18°♈07'14	31.04210 AU	min. Earth dist.	-5657 Dec 05 j 16:00	2°♈30'51	29.10822 AU
morning rise	-5663 Jun 09 j 18:06	18°♈44'30		direct	-5656 Feb 23 j 03:46	1°♈06'47	
retrograde	-5663 Sep 05 j 04:35	20°♈37'45		evening set	-5656 May 24 j 05:32	3°♈03'22	
opposition	-5663 Nov 21 j 05:05	19°♈14'56	-1°14'33	max. Earth dist.	-5656 Jun 08 j 10:39	3°♈36'58	31.11188 AU
min. Earth dist.	-5663 Nov 21 j 19:41	19°♈13'54	29.04898 AU				

Attention, astronomical year style is used: The year -5656 in astronomical counting style is the year 5657 BCE in historical counting style.

conjunction	-5656 Jun 09 j 09:45	3° <b>8</b> 39'06	-0°37'18	behind sun begin	-5650 Jun 23 j 04:17	16° <b>8</b> 49'39	
minimum elong	-5656 Jun 09 j 09:45	3° <b>8</b> 39'06	0°37'08	behind sun end	-5650 Jun 23 j 16:55	16° <b>8</b> 50'46	
morning rise	-5656 Jun 25 j 10:32	4° <b>8</b> 14'33		morning rise	-5650 Jul 09 j 08:15	17° <b>8</b> 25'26	
retrograde	-5656 Sep 20 j 07:28	6° <b>8</b> 06'54		retrograde	-5650 Oct 03 j 20:41	19° <b>8</b> 17'21	
opposition	-5656 Dec 06 j 06:19	4° <b>8</b> 44'27	-0°37'07	opposition	-5650 Dec 19 j 21:54	17° <b>8</b> 55'17	-0°02'59
min. Earth dist.	-5656 Dec 07 j 02:13	4° <b>8</b> 43'03	29.11630 AU	min. Earth dist.	-5650 Dec 20 j 19:48	17° <b>8</b> 53'46	29.17977 AU
direct	-5655 Feb 24 j 15:12	3° <b>8</b> 18'57		direct	-5649 Mar 10 j 17:06	16° <b>8</b> 29'58	
evening set	-5655 May 26 j 18:13	5° <b>8</b> 15'30		evening set	-5649 Jun 09 j 21:28	18° <b>8</b> 26'36	
conjunction	-5655 Jun 11 j 22:11	5° <b>8</b> 51'12	-0°32'05	conjunction	-5649 Jun 25 j 22:28	19° <b>8</b> 02'07	-0°00'03
minimum elong	-5655 Jun 11 j 22:12	5° <b>8</b> 51'12	0°31'55	minimum elong	-5649 Jun 25 j 22:29	19° <b>8</b> 02'06	0°00'11
max. Earth dist.	-5655 Jun 10 j 23:48	5° <b>8</b> 49'08	31.12012 AU	behind sun begin	-5649 Jun 25 j 16:02	19° <b>8</b> 01'32	
morning rise	-5655 Jun 27 j 22:19	6° <b>8</b> 26'37		behind sun end	-5649 Jun 26 j 04:57	19° <b>8</b> 02'41	
retrograde	-5655 Sep 22 j 15:21	8° <b>8</b> 18'51		max. Earth dist.	-5649 Jun 24 j 21:24	18° <b>8</b> 59'47	31.18491 AU
opposition	-5655 Dec 08 j 16:56	6° <b>8</b> 56'25	-0°31'31	asc. node	-5649 Jun 29 j 22:14	19° <b>8</b> 11'01	
min. Earth dist.	-5655 Dec 09 j 13:56	6° <b>8</b> 54'57	29.12487 AU	morning rise	-5649 Jul 11 j 19:40	19° <b>8</b> 37'17	
direct	-5654 Feb 27 j 03:19	5° <b>8</b> 30'55		retrograde	-5649 Oct 06 j 08:01	21° <b>8</b> 29'10	
evening set	-5654 May 29 j 06:59	7° <b>8</b> 27'26		opposition	-5649 Dec 22 j 08:35	20° <b>8</b> 07'11	0°02'46
max. Earth dist.	-5654 Jun 13 j 10:56	8° <b>8</b> 00'56	31.12924 AU	min. Earth dist.	-5649 Dec 23 j 07:04	20° <b>8</b> 05'37	29.19036 AU
				direct	-5648 Mar 12 j 04:37	18° <b>8</b> 41'54	
conjunction	-5654 Jun 14 j 10:24	8° <b>8</b> 03'07	-0°26'49	evening set	-5648 Jun 11 j 09:52	20° <b>8</b> 38'34	
minimum elong	-5654 Jun 14 j 10:24	8° <b>8</b> 03'07	0°26'38	max. Earth dist.	-5648 Jun 26 j 09:56	21° <b>8</b> 11'45	31.19483 AU
morning rise	-5654 Jun 30 j 10:13	8° <b>8</b> 38'28					
retrograde	-5654 Sep 25 j 02:12	10° <b>8</b> 30'37		conjunction	-5648 Jun 27 j 10:29	21° <b>8</b> 14'02	0°05'23
opposition	-5654 Dec 11 j 03:18	9° <b>8</b> 08'14	-0°25'52	minimum elong	-5648 Jun 27 j 10:29	21° <b>8</b> 14'02	0°05'38
min. Earth dist.	-5654 Dec 11 j 23:32	9° <b>8</b> 06'49	29.13449 AU	behind sun begin	-5648 Jun 27 j 04:13	21° <b>8</b> 13'29	
direct	-5653 Mar 01 j 15:15	7° <b>8</b> 42'43		behind sun end	-5648 Jun 27 j 16:45	21° <b>8</b> 14'35	
evening set	-5653 May 31 j 19:30	9° <b>8</b> 39'15		morning rise	-5648 Jul 13 j 06:56	21° <b>8</b> 49'10	
				retrograde	-5648 Oct 07 j 17:30	23° <b>8</b> 41'00	
conjunction	-5653 Jun 16 j 22:37	10° <b>8</b> 14'53	-0°21'31	opposition	-5648 Dec 23 j 19:34	22° <b>8</b> 19'05	0°08'30
minimum elong	-5653 Jun 16 j 22:37	10° <b>8</b> 14'53	0°21'20	min. Earth dist.	-5648 Dec 24 j 18:58	22° <b>8</b> 17'28	29.19958 AU
max. Earth dist.	-5653 Jun 15 j 23:29	10° <b>8</b> 12'44	31.13935 AU	direct	-5647 Mar 14 j 17:37	20° <b>8</b> 53'50	
morning rise	-5653 Jul 02 j 21:50	10° <b>8</b> 50'13		evening set	-5647 Jun 13 j 22:14	22° <b>8</b> 50'30	
retrograde	-5653 Sep 27 j 11:46	12° <b>8</b> 42'17					
opposition	-5653 Dec 13 j 13:55	11° <b>8</b> 19'57	-0°20'11	conjunction	-5647 Jun 29 j 22:05	23° <b>8</b> 25'55	0°10'44
min. Earth dist.	-5653 Dec 14 j 11:22	11° <b>8</b> 18'27	29.14514 AU	minimum elong	-5647 Jun 29 j 22:05	23° <b>8</b> 25'55	0°10'58
direct	-5652 Mar 03 j 02:02	9° <b>8</b> 54'28		behind sun begin	-5647 Jun 29 j 17:11	23° <b>8</b> 25'29	
evening set	-5652 Jun 02 j 08:06	11° <b>8</b> 51'01		behind sun end	-5647 Jun 30 j 02:59	23° <b>8</b> 26'21	
max. Earth dist.	-5652 Jun 17 j 11:14	12° <b>8</b> 24'26	31.15053 AU	max. Earth dist.	-5647 Jun 28 j 20:00	23° <b>8</b> 23'30	31.20340 AU
				morning rise	-5647 Jul 15 j 18:05	24° <b>8</b> 01'01	
conjunction	-5652 Jun 18 j 10:42	12° <b>8</b> 26'37	-0°16'12	retrograde	-5647 Oct 10 j 04:12	25° <b>8</b> 52'49	
minimum elong	-5652 Jun 18 j 10:42	12° <b>8</b> 26'37	0°15'59	opposition	-5647 Dec 26 j 06:28	24° <b>8</b> 30'56	0°14'13
morning rise	-5652 Jul 04 j 09:28	13° <b>8</b> 01'54		min. Earth dist.	-5647 Dec 27 j 05:35	24° <b>8</b> 29'20	29.20755 AU
retrograde	-5652 Sep 28 j 23:06	14° <b>8</b> 53'54		direct	-5646 Mar 17 j 05:19	23° <b>8</b> 05'41	
opposition	-5652 Dec 15 j 00:25	13° <b>8</b> 31'40	-0°14'28	evening set	-5646 Jun 16 j 10:22	25° <b>8</b> 02'20	
min. Earth dist.	-5652 Dec 15 j 21:15	13° <b>8</b> 30'13	29.15655 AU	max. Earth dist.	-5646 Jul 01 j 08:18	25° <b>8</b> 35'21	31.21067 AU
direct	-5651 Mar 05 j 15:54	12° <b>8</b> 06'14					
evening set	-5651 Jun 04 j 20:39	14° <b>8</b> 02'49		conjunction	-5646 Jul 02 j 09:50	25° <b>8</b> 37'43	0°16'03
				minimum elong	-5646 Jul 02 j 09:49	25° <b>8</b> 37'43	0°16'19
conjunction	-5651 Jun 20 j 22:45	14° <b>8</b> 38'23	-0°10'51	morning rise	-5646 Jul 18 j 05:04	26° <b>8</b> 12'46	
minimum elong	-5651 Jun 20 j 22:45	14° <b>8</b> 38'23	0°10'39	retrograde	-5646 Oct 12 j 11:53	28° <b>8</b> 04'31	
behind sun begin	-5651 Jun 20 j 17:43	14° <b>8</b> 37'56		opposition	-5646 Dec 28 j 17:22	26° <b>8</b> 42'39	0°19'55
behind sun end	-5651 Jun 21 j 03:47	14° <b>8</b> 38'50		min. Earth dist.	-5646 Dec 29 j 17:49	26° <b>8</b> 40'58	29.21428 AU
max. Earth dist.	-5651 Jun 19 j 22:49	14° <b>8</b> 36'10	31.16218 AU	direct	-5645 Mar 19 j 17:12	25° <b>8</b> 17'25	
				evening set	-5645 Jun 18 j 22:31	27° <b>8</b> 14'02	
morning rise	-5651 Jul 06 j 20:58	15° <b>8</b> 13'38					
retrograde	-5651 Oct 01 j 10:46	17° <b>8</b> 05'36		conjunction	-5645 Jul 04 j 21:15	27° <b>8</b> 49'22	0°21'22
opposition	-5651 Dec 17 j 11:09	15° <b>8</b> 43'26	-0°08'44	minimum elong	-5645 Jul 04 j 21:15	27° <b>8</b> 49'22	0°21'38
min. Earth dist.	-5651 Dec 18 j 08:55	15° <b>8</b> 41'56	29.16838 AU	max. Earth dist.	-5645 Jul 03 j 18:31	27° <b>8</b> 46'53	31.21695 AU
				morning rise	-5645 Jul 20 j 16:04	28° <b>8</b> 24'23	
direct	-5650 Mar 08 j 03:38	14° <b>8</b> 18'04					
				retrograde	-5645 Sep 14 j 09:02	0° <b>II</b>	
evening set	-5650 Apr 29 j 03:55	15° <b>8</b>					
max. Earth dist.	-5650 Jun 07 j 08:55	16° <b>8</b> 14'41		opposition	-5645 Nov 15 j 03:15	30° <b>8</b>	
				min. Earth dist.	-5645 Dec 31 j 04:13	28° <b>8</b> 54'12	0°25'35
conjunction	-5650 Jun 23 j 10:36	16° <b>8</b> 50'13	-0°05'30	direct	-5644 Jan 01 j 04:00	28° <b>8</b> 52'34	29.22010 AU
minimum elong	-5650 Jun 23 j 10:36	16° <b>8</b> 50'13	0°05'16	evening set	-5644 Jun 20 j 10:25	29° <b>8</b> 25'32	

Attention, astronomical year style is used: The year -5644 in astronomical counting style is the year 5645 BCE in historical counting style.

max. Earth dist.	-5644 Jul 05 j 06:15	29° <b>8</b> 58'22	31.22239 AU	morning rise	-5638 Aug 04 j 15:48	13° <b>II</b> 41'03	
	-5644 Jul 05 j 23:39	0° <b>II</b>		retrograde	-5638 Oct 29 j 21:43	15° <b>II</b> 32'38	
				opposition	-5637 Jan 15 j 09:24	14° <b>II</b> 10'54	1°03'35
conjunction	-5644 Jul 06 j 08:38	0° <b>II</b> 00'50	0°26'38	min. Earth dist.	-5637 Jan 16 j 08:31	14° <b>II</b> 09'19	29.27026 AU
minimum elong	-5644 Jul 06 j 08:37	0° <b>II</b> 00'50	0°26'56	direct	-5637 Apr 06 j 18:49	12° <b>II</b> 45'48	
morning rise	-5644 Jul 22 j 02:41	0° <b>II</b> 35'48		evening set	-5637 Jul 06 j 18:31	14° <b>II</b> 42'16	
retrograde	-5644 Oct 16 j 07:16	2° <b>II</b> 27'26		max. Earth dist.	-5637 Jul 21 j 11:31	15° <b>II</b> 14'56	31.27383 AU
opposition	-5643 Jan 01 j 15:13	1° <b>II</b> 05'34	0°31'11				
min. Earth dist.	-5643 Jan 02 j 16:12	1° <b>II</b> 03'51	29.22549 AU	conjunction	-5637 Jul 22 j 12:08	15° <b>II</b> 17'13	1°01'58
	-5643 Feb 15 j 20:41	30° <b>K</b> 8		minimum elong	-5637 Jul 22 j 12:08	15° <b>II</b> 17'13	1°02'17
direct	-5643 Mar 23 j 15:27	29° <b>8</b> 40'18		morning rise	-5637 Aug 07 j 01:40	15° <b>II</b> 51'51	
	-5643 Apr 28 j 00:22	0° <b>II</b>		retrograde	-5637 Nov 01 j 05:54	17° <b>II</b> 43'27	
evening set	-5643 Jun 22 j 22:13	1° <b>II</b> 36'50		opposition	-5636 Jan 17 j 20:49	16° <b>II</b> 21'46	1°08'42
				min. Earth dist.	-5636 Jan 18 j 20:54	16° <b>II</b> 20'07	29.27853 AU
conjunction	-5643 Jul 08 j 19:45	2° <b>II</b> 12'05	0°31'52	direct	-5636 Apr 08 j 06:39	14° <b>II</b> 56'44	
minimum elong	-5643 Jul 08 j 19:44	2° <b>II</b> 12'05	0°32'09	evening set	-5636 Jul 08 j 05:47	16° <b>II</b> 53'11	
max. Earth dist.	-5643 Jul 07 j 17:20	2° <b>II</b> 09'37	31.22781 AU				
morning rise	-5643 Jul 24 j 13:15	2° <b>II</b> 46'59		conjunction	-5636 Jul 23 j 22:33	17° <b>II</b> 28'05	1°06'43
retrograde	-5643 Oct 18 j 17:42	4° <b>II</b> 38'35		minimum elong	-5636 Jul 23 j 22:32	17° <b>II</b> 28'05	1°07'03
opposition	-5642 Jan 04 j 02:10	3° <b>II</b> 16'42	0°36'45	max. Earth dist.	-5636 Jul 22 j 21:10	17° <b>II</b> 25'43	31.28162 AU
min. Earth dist.	-5642 Jan 05 j 02:12	3° <b>II</b> 15'03	29.23102 AU	morning rise	-5636 Aug 08 j 11:32	18° <b>II</b> 02'40	
direct	-5642 Mar 26 j 05:33	1° <b>II</b> 51'25		retrograde	-5636 Nov 02 j 16:32	19° <b>II</b> 54'18	
evening set	-5642 Jun 25 j 09:43	3° <b>II</b> 47'56		opposition	-5635 Jan 19 j 08:10	18° <b>II</b> 32'39	1°13'43
max. Earth dist.	-5642 Jul 10 j 04:10	4° <b>II</b> 20'40	31.23355 AU	min. Earth dist.	-5635 Jan 20 j 07:17	18° <b>II</b> 31'04	29.28580 AU
				direct	-5635 Apr 10 j 18:11	17° <b>II</b> 07'40	
conjunction	-5642 Jul 11 j 06:36	4° <b>II</b> 23'07	0°37'02	evening set	-5635 Jul 10 j 16:56	19° <b>II</b> 04'05	
minimum elong	-5642 Jul 11 j 06:36	4° <b>II</b> 23'07	0°37'21	max. Earth dist.	-5635 Jul 25 j 08:08	19° <b>II</b> 36'37	31.28817 AU
morning rise	-5642 Jul 26 j 23:28	4° <b>II</b> 57'59					
retrograde	-5642 Oct 21 j 04:41	6° <b>II</b> 49'33		conjunction	-5635 Jul 26 j 09:05	19° <b>II</b> 38'57	1°11'22
opposition	-5641 Jan 06 j 13:11	5° <b>II</b> 27'40	0°42'16	minimum elong	-5635 Jul 26 j 09:04	19° <b>II</b> 38'57	1°11'41
min. Earth dist.	-5641 Jan 07 j 13:37	5° <b>II</b> 25'59	29.23729 AU	morning rise	-5635 Aug 10 j 21:18	20° <b>II</b> 13'29	
direct	-5641 Mar 28 j 16:57	4° <b>II</b> 02'23		retrograde	-5635 Nov 05 j 01:47	22° <b>II</b> 05'09	
evening set	-5641 Jun 27 j 21:13	5° <b>II</b> 58'52		opposition	-5634 Jan 21 j 19:46	20° <b>II</b> 43'31	1°18'38
				min. Earth dist.	-5634 Jan 22 j 19:55	20° <b>II</b> 41'52	29.29187 AU
conjunction	-5641 Jul 13 j 17:31	6° <b>II</b> 34'00	0°42'10	direct	-5634 Apr 13 j 04:44	19° <b>II</b> 18'34	
minimum elong	-5641 Jul 13 j 17:31	6° <b>II</b> 34'00	0°42'27	evening set	-5634 Jul 13 j 03:57	21° <b>II</b> 14'57	
max. Earth dist.	-5641 Jul 12 j 15:54	6° <b>II</b> 31'37	31.24023 AU				
morning rise	-5641 Jul 29 j 09:41	7° <b>II</b> 08'49		conjunction	-5634 Jul 28 j 19:22	21° <b>II</b> 49'45	1°15'54
retrograde	-5641 Oct 23 j 13:54	9° <b>II</b> 00'22		minimum elong	-5634 Jul 28 j 19:22	21° <b>II</b> 49'45	1°16'14
opposition	-5640 Jan 09 j 00:05	7° <b>II</b> 38'30	0°47'42	max. Earth dist.	-5634 Jul 27 j 18:27	21° <b>II</b> 47'25	31.29355 AU
min. Earth dist.	-5640 Jan 10 j 00:01	7° <b>II</b> 36'51	29.24439 AU	morning rise	-5634 Aug 13 j 07:02	22° <b>II</b> 24'15	
direct	-5640 Mar 30 j 06:06	6° <b>II</b> 13'15		retrograde	-5634 Nov 07 j 11:55	24° <b>II</b> 15'56	
evening set	-5640 Jun 29 j 08:46	8° <b>II</b> 09'43		opposition	-5633 Jan 24 j 07:12	22° <b>II</b> 54'18	1°23'26
max. Earth dist.	-5640 Jul 14 j 02:02	8° <b>II</b> 42'22	31.24786 AU	min. Earth dist.	-5633 Jan 25 j 06:33	22° <b>II</b> 52'42	29.29653 AU
				direct	-5633 Apr 15 j 17:54	21° <b>II</b> 29'22	
conjunction	-5640 Jul 15 j 04:16	8° <b>II</b> 44'48	0°47'13	evening set	-5633 Jul 15 j 14:59	23° <b>II</b> 25'43	
minimum elong	-5640 Jul 15 j 04:16	8° <b>II</b> 44'48	0°47'32	max. Earth dist.	-5633 Jul 30 j 04:25	23° <b>II</b> 58'07	31.29750 AU
morning rise	-5640 Jul 30 j 19:53	9° <b>II</b> 19'34					
retrograde	-5640 Oct 25 j 01:32	11° <b>II</b> 11'07		conjunction	-5633 Jul 31 j 05:41	24° <b>II</b> 00'28	1°20'20
opposition	-5639 Jan 10 j 11:11	9° <b>II</b> 49'17	0°53'04	minimum elong	-5633 Jul 31 j 05:40	24° <b>II</b> 00'28	1°20'39
min. Earth dist.	-5639 Jan 11 j 10:48	9° <b>II</b> 47'40	29.25261 AU	morning rise	-5633 Aug 15 j 16:41	24° <b>II</b> 34'55	
direct	-5639 Apr 01 j 18:03	8° <b>II</b> 24'04		retrograde	-5633 Nov 09 j 22:54	26° <b>II</b> 26'39	
evening set	-5639 Jul 01 j 19:57	10° <b>II</b> 20'32		opposition	-5632 Jan 26 j 18:42	25° <b>II</b> 04'59	1°28'06
				min. Earth dist.	-5632 Jan 27 j 18:33	25° <b>II</b> 03'21	29.30007 AU
conjunction	-5639 Jul 17 j 14:56	10° <b>II</b> 55'35	0°52'13	direct	-5632 Apr 17 j 04:34	23° <b>II</b> 40'03	
minimum elong	-5639 Jul 17 j 14:55	10° <b>II</b> 55'35	0°52'31	evening set	-5632 Jul 17 j 01:49	25° <b>II</b> 36'22	
max. Earth dist.	-5639 Jul 16 j 14:08	10° <b>II</b> 53'16	31.25639 AU				
morning rise	-5639 Aug 02 j 05:45	11° <b>II</b> 30'18		conjunction	-5632 Aug 01 j 15:54	26° <b>II</b> 11'04	1°24'39
retrograde	-5639 Oct 27 j 11:03	13° <b>II</b> 21'51		minimum elong	-5632 Aug 01 j 15:54	26° <b>II</b> 11'04	1°24'59
opposition	-5638 Jan 12 j 22:24	12° <b>II</b> 00'04	0°58'22	max. Earth dist.	-5632 Jul 31 j 15:32	26° <b>II</b> 08'47	31.30055 AU
min. Earth dist.	-5638 Jan 13 j 22:18	11° <b>II</b> 58'26	29.26135 AU	morning rise	-5632 Aug 17 j 02:13	26° <b>II</b> 45'28	
direct	-5638 Apr 04 j 07:28	10° <b>II</b> 34'56		retrograde	-5632 Nov 11 j 08:17	28° <b>II</b> 37'13	
evening set	-5638 Jul 04 j 07:19	12° <b>II</b> 31'23		opposition	-5631 Jan 28 j 06:20	27° <b>II</b> 15'31	1°32'39
max. Earth dist.	-5638 Jul 18 j 23:49	13° <b>II</b> 03'59	31.26526 AU	min. Earth dist.	-5631 Jan 29 j 05:42	27° <b>II</b> 13'56	29.30272 AU
				direct	-5631 Apr 19 j 17:45	25° <b>II</b> 50'37	
conjunction	-5638 Jul 20 j 01:27	13° <b>II</b> 06'23	0°57'08	evening set	-5631 Jul 19 j 12:27	27° <b>II</b> 46'52	
minimum elong	-5638 Jul 20 j 01:26	13° <b>II</b> 06'23	0°57'27	max. Earth dist.	-5631 Aug 03 j 00:50	28° <b>II</b> 19'11	31.30298 AU

Attention, astronomical year style is used: The year -5631 in astronomical counting style is the year 5632 BCE in historical counting style.

conjunction	-5631 Aug 04 j 01:43	28° $\Pi$ 21'31	1°28'50	opposition	-5624 Feb 13 j 16:22	12° $\Theta$ 27'51	2°00'22
minimum elong	-5631 Aug 04 j 01:42	28° $\Pi$ 21'31	1°29'10	min. Earth dist.	-5624 Feb 14 j 11:33	12° $\Theta$ 26'33	29.33246 AU
morning rise	-5631 Aug 19 j 11:32	28° $\Pi$ 55'52		direct	-5624 May 05 j 04:30	11° $\Theta$ 03'19	
	-5631 Sep 20 j 23:17	0° $\Theta$		evening set	-5624 Aug 03 j 12:36	12° $\Theta$ 59'22	
retrograde	-5631 Nov 13 j 19:57	0° $\Theta$ 47'39					
	-5630 Jan 09 j 06:16	30° $\kappa$ $\Pi$		conjunction	-5624 Aug 18 j 21:14	13° $\Theta$ 33'43	1°54'16
opposition	-5630 Jan 30 j 17:56	29° $\Pi$ 25'55	1°37'03	minimum elong	-5624 Aug 18 j 21:13	13° $\Theta$ 33'43	1°54'37
min. Earth dist.	-5630 Jan 31 j 16:48	29° $\Pi$ 24'22	29.30524 AU	max. Earth dist.	-5624 Aug 18 j 01:02	13° $\Theta$ 31'49	31.33349 AU
direct	-5630 Apr 22 j 05:49	28° $\Pi$ 01'01		morning rise	-5624 Sep 03 j 02:57	14° $\Theta$ 07'48	
evening set	-5630 Jul 21 j 22:55	29° $\Pi$ 57'13		retrograde	-5624 Nov 28 j 17:49	16° $\Theta$ 00'09	
	-5630 Jul 23 j 05:19	0° $\Theta$		opposition	-5623 Feb 15 j 04:32	14° $\Theta$ 38'29	2°03'41
				min. Earth dist.	-5623 Feb 15 j 23:49	14° $\Theta$ 37'11	29.33708 AU
conjunction	-5630 Aug 06 j 11:39	0° $\Theta$ 31'50	1°32'54	direct	-5623 May 07 j 13:37	13° $\Theta$ 14'03	
minimum elong	-5630 Aug 06 j 11:38	0° $\Theta$ 31'50	1°33'14	evening set	-5623 Aug 05 j 22:35	15° $\Theta$ 10'03	
max. Earth dist.	-5630 Aug 05 j 12:25	0° $\Theta$ 29'39	31.30547 AU	max. Earth dist.	-5623 Aug 20 j 11:41	15° $\Theta$ 42'34	31.33746 AU
morning rise	-5630 Aug 21 j 20:42	1° $\Theta$ 06'08					
retrograde	-5630 Nov 16 j 05:21	2° $\Theta$ 57'57		conjunction	-5623 Aug 21 j 06:42	15° $\Theta$ 44'21	1°57'17
opposition	-5629 Feb 02 j 05:27	1° $\Theta$ 36'12	1°41'19	minimum elong	-5623 Aug 21 j 06:42	15° $\Theta$ 44'21	1°57'37
min. Earth dist.	-5629 Feb 03 j 04:21	1° $\Theta$ 34'38	29.30798 AU	morning rise	-5623 Sep 05 j 11:50	16° $\Theta$ 18'25	
direct	-5629 Apr 24 j 19:21	0° $\Theta$ 11'19		retrograde	-5623 Dec 01 j 03:46	18° $\Theta$ 10'52	
evening set	-5629 Jul 24 j 09:28	2° $\Theta$ 07'29		opposition	-5622 Feb 17 j 16:43	16° $\Theta$ 49'12	2°06'49
				min. Earth dist.	-5622 Feb 18 j 11:27	16° $\Theta$ 47'56	29.34035 AU
conjunction	-5629 Aug 08 j 21:21	2° $\Theta$ 42'02	1°36'49	direct	-5622 May 10 j 02:26	15° $\Theta$ 24'49	
minimum elong	-5629 Aug 08 j 21:20	2° $\Theta$ 42'02	1°37'09	evening set	-5622 Aug 08 j 08:49	17° $\Theta$ 20'47	
max. Earth dist.	-5629 Aug 07 j 21:45	2° $\Theta$ 39'49	31.30854 AU				
morning rise	-5629 Aug 24 j 05:57	3° $\Theta$ 16'18		conjunction	-5622 Aug 23 j 16:12	17° $\Theta$ 55'02	2°00'09
retrograde	-5629 Nov 18 j 16:01	5° $\Theta$ 08'10		minimum elong	-5622 Aug 23 j 16:12	17° $\Theta$ 55'02	2°00'29
opposition	-5628 Feb 04 j 17:04	3° $\Theta$ 46'24	1°45'26	max. Earth dist.	-5622 Aug 27 j 20:29	17° $\Theta$ 53'11	31.33996 AU
min. Earth dist.	-5628 Feb 05 j 14:28	3° $\Theta$ 44'57	29.31158 AU	morning rise	-5622 Sep 02 j 20:58	18° $\Theta$ 29'03	
direct	-5628 Apr 26 j 06:51	2° $\Theta$ 21'34		retrograde	-5622 Dec 03 j 16:22	20° $\Theta$ 21'36	
evening set	-5628 Jul 25 j 19:42	4° $\Theta$ 17'42		opposition	-5621 Feb 20 j 04:45	18° $\Theta$ 59'55	2°09'47
max. Earth dist.	-5628 Aug 09 j 09:05	4° $\Theta$ 50'09	31.31249 AU	min. Earth dist.	-5621 Feb 20 j 23:05	18° $\Theta$ 58'40	29.34222 AU
				direct	-5621 May 12 j 13:53	17° $\Theta$ 35'34	
conjunction	-5628 Aug 10 j 07:02	4° $\Theta$ 52'12	1°40'36	evening set	-5621 Aug 10 j 18:49	19° $\Theta$ 31'29	
minimum elong	-5628 Aug 10 j 07:02	4° $\Theta$ 52'12	1°40'57	max. Earth dist.	-5621 Aug 25 j 07:30	20° $\Theta$ 03'58	31.34095 AU
morning rise	-5628 Aug 25 j 14:52	5° $\Theta$ 26'25					
retrograde	-5628 Nov 20 j 00:09	7° $\Theta$ 18'22		conjunction	-5621 Aug 26 j 01:48	20° $\Theta$ 05'41	2°02'50
opposition	-5627 Feb 06 j 04:56	5° $\Theta$ 56'37	1°49'25	minimum elong	-5621 Aug 26 j 01:47	20° $\Theta$ 05'41	2°03'08
min. Earth dist.	-5627 Feb 07 j 02:31	5° $\Theta$ 55'09	29.31608 AU	morning rise	-5621 Sep 10 j 05:55	20° $\Theta$ 39'41	
direct	-5627 Apr 28 j 18:59	4° $\Theta$ 31'51		retrograde	-5621 Dec 06 j 02:28	22° $\Theta$ 32'18	
evening set	-5627 Jul 28 j 06:02	6° $\Theta$ 27'57		opposition	-5620 Feb 22 j 17:06	21° $\Theta$ 10'34	2°12'33
				min. Earth dist.	-5620 Feb 23 j 11:35	21° $\Theta$ 09'19	29.34244 AU
conjunction	-5627 Aug 12 j 16:36	7° $\Theta$ 02'25	1°44'15	direct	-5620 May 14 j 03:07	19° $\Theta$ 46'15	
minimum elong	-5627 Aug 12 j 16:35	7° $\Theta$ 02'25	1°44'35	evening set	-5620 Aug 12 j 04:46	21° $\Theta$ 42'05	
max. Earth dist.	-5627 Aug 11 j 18:43	7° $\Theta$ 00'22	31.31750 AU				
morning rise	-5627 Aug 27 j 24:00	7° $\Theta$ 36'36		conjunction	-5620 Aug 27 j 11:02	22° $\Theta$ 16'15	2°05'20
retrograde	-5627 Nov 22 j 10:54	9° $\Theta$ 28'38		minimum elong	-5620 Aug 27 j 11:02	22° $\Theta$ 16'15	2°05'40
opposition	-5626 Feb 08 j 16:35	8° $\Theta$ 06'54	1°53'13	max. Earth dist.	-5620 Aug 26 j 16:15	22° $\Theta$ 14'29	31.34050 AU
min. Earth dist.	-5626 Feb 09 j 12:30	8° $\Theta$ 05'33	29.32146 AU	morning rise	-5620 Sep 11 j 14:53	22° $\Theta$ 50'13	
direct	-5626 May 01 j 06:16	6° $\Theta$ 42'12		retrograde	-5620 Dec 07 j 13:41	24° $\Theta$ 42'55	
evening set	-5626 Jul 30 j 16:08	8° $\Theta$ 38'18		opposition	-5619 Feb 24 j 05:24	23° $\Theta$ 21'07	2°15'08
max. Earth dist.	-5626 Aug 14 j 05:15	9° $\Theta$ 10'45	31.32300 AU	min. Earth dist.	-5619 Feb 24 j 22:34	23° $\Theta$ 19'58	29.34143 AU
				direct	-5619 May 16 j 14:53	21° $\Theta$ 56'49	
conjunction	-5626 Aug 15 j 02:09	9° $\Theta$ 12'43	1°47'45	evening set	-5619 Aug 14 j 14:31	23° $\Theta$ 52'34	
minimum elong	-5626 Aug 15 j 02:09	9° $\Theta$ 12'43	1°48'06				
morning rise	-5626 Aug 30 j 08:55	9° $\Theta$ 46'53		conjunction	-5619 Aug 29 j 20:24	24° $\Theta$ 26'42	2°07'40
retrograde	-5626 Nov 24 j 20:16	11° $\Theta$ 39'00		minimum elong	-5619 Aug 29 j 20:24	24° $\Theta$ 26'41	2°07'59
opposition	-5625 Feb 11 j 04:30	10° $\Theta$ 17'19	1°56'53	max. Earth dist.	-5619 Aug 29 j 03:00	24° $\Theta$ 25'03	31.33888 AU
min. Earth dist.	-5625 Feb 12 j 00:55	10° $\Theta$ 15'56	29.32714 AU	morning rise	-5619 Sep 13 j 23:43	25° $\Theta$ 00'37	
direct	-5625 May 03 j 16:28	8° $\Theta$ 52'42		retrograde	-5619 Dec 09 j 22:40	26° $\Theta$ 53'23	
evening set	-5625 Aug 02 j 02:21	10° $\Theta$ 48'46		opposition	-5618 Feb 26 j 17:43	25° $\Theta$ 31'31	2°17'32
				min. Earth dist.	-5618 Feb 27 j 11:15	25° $\Theta$ 30'20	29.33952 AU
conjunction	-5625 Aug 17 j 11:41	11° $\Theta$ 23'09	1°51'05	direct	-5618 May 19 j 04:01	24° $\Theta$ 07'13	
minimum elong	-5625 Aug 17 j 11:40	11° $\Theta$ 23'09	1°51'25	evening set	-5618 Aug 17 j 00:10	26° $\Theta$ 02'52	
max. Earth dist.	-5625 Aug 16 j 15:28	11° $\Theta$ 21'15	31.32858 AU				
morning rise	-5625 Sep 01 j 17:55	11° $\Theta$ 57'16		conjunction	-5618 Sep 01 j 05:28	26° $\Theta$ 36'57	2°09'49
retrograde	-5625 Nov 27 j 06:17	13° $\Theta$ 49'31		minimum elong	-5618 Sep 01 j 05:28	26° $\Theta$ 36'57	2°10'08

Attention, astronomical year style is used: The year -5618 in astronomical counting style is the year 5619 BCE in historical counting style.

max. Earth dist.	-5618 Aug 31 j 12:17	26° $\overline{53}$ 5'20	31.33678 AU	min. Earth dist.	-5611 Mar 14 j 20:02	10° $\Omega$ 42'21	29.33386 AU
morning rise	-5618 Sep 16 j 08:32	27° $\overline{51}$ 0'52		direct	-5611 Jun 03 j 10:50	9° $\Omega$ 19'12	
retrograde	-5618 Dec 12 j 09:29	29° $\overline{50}$ 3'41		evening set	-5611 Aug 31 j 17:55	11° $\Omega$ 14'26	
opposition	-5617 Mar 01 j 05:57	27° $\overline{54}$ 1'45	2°19'44				
min. Earth dist.	-5617 Mar 01 j 21:40	27° $\overline{54}$ 0'41	29.33732 AU	conjunction	-5611 Sep 15 j 20:17	11° $\Omega$ 48'22	2°19'31
direct	-5617 May 21 j 16:38	26° $\overline{51}$ 7'27		minimum elong	-5611 Sep 15 j 20:18	11° $\Omega$ 48'22	2°19'47
evening set	-5617 Aug 19 j 09:42	28° $\overline{51}$ 3'01		max. Earth dist.	-5611 Sep 15 j 09:21	11° $\Omega$ 47'20	31.33158 AU
				morning rise	-5611 Sep 30 j 21:23	12° $\Omega$ 22'10	
conjunction	-5617 Sep 03 j 14:31	28° $\overline{54}$ 7'04	2°11'46	retrograde	-5611 Dec 27 j 13:44	14° $\Omega$ 15'55	
minimum elong	-5617 Sep 03 j 14:31	28° $\overline{54}$ 7'04	2°12'04	opposition	-5610 Mar 16 j 21:29	12° $\Omega$ 53'47	2°29'23
max. Earth dist.	-5617 Sep 02 j 22:24	28° $\overline{54}$ 5'33	31.33455 AU	min. Earth dist.	-5610 Mar 17 j 07:09	12° $\Omega$ 53'08	29.33261 AU
morning rise	-5617 Sep 18 j 17:08	29° $\overline{52}$ 0'57		direct	-5610 Jun 05 j 21:46	11° $\Omega$ 29'58	
	-5617 Oct 07 j 07:48	0° $\Omega$		evening set	-5610 Sep 03 j 03:12	13° $\Omega$ 25'09	
retrograde	-5617 Dec 14 j 18:30	1° $\Omega$ 13'52					
	-5616 Feb 26 j 17:29	30° $\overline{R}$ $\overline{5}$		conjunction	-5610 Sep 18 j 05:25	13° $\Omega$ 59'04	2°20'07
opposition	-5616 Mar 02 j 18:22	29° $\overline{51}$ 5'52	2°21'44	minimum elong	-5610 Sep 18 j 05:25	13° $\Omega$ 59'04	2°20'23
min. Earth dist.	-5616 Mar 03 j 10:10	29° $\overline{50}$ 4'47	29.33544 AU	max. Earth dist.	-5610 Sep 17 j 19:43	13° $\Omega$ 58'09	31.32957 AU
direct	-5616 May 23 j 03:31	28° $\overline{52}$ 7'35		morning rise	-5610 Oct 03 j 06:13	14° $\Omega$ 32'52	
	-5616 Aug 10 j 01:25	0° $\Omega$			-5610 Oct 15 j 21:48	15° $\Omega$	
evening set	-5616 Aug 20 j 19:11	0° $\Omega$ 23'04		retrograde	-5610 Dec 30 j 00:05	16° $\Omega$ 26'46	
				opposition	-5609 Mar 19 j 10:22	15° $\Omega$ 04'35	2°29'55
conjunction	-5616 Sep 04 j 23:34	0° $\Omega$ 57'05	2°13'33	min. Earth dist.	-5609 Mar 19 j 20:23	15° $\Omega$ 03'55	29.32992 AU
minimum elong	-5616 Sep 04 j 23:34	0° $\Omega$ 57'05	2°13'51		-5609 Mar 22 j 06:36	15° $\overline{R}$ $\overline{5}$	
max. Earth dist.	-5616 Sep 04 j 08:45	0° $\Omega$ 55'41	31.33303 AU	direct	-5609 Jun 08 j 10:46	13° $\Omega$ 40'51	
morning rise	-5616 Sep 20 j 01:48	1° $\Omega$ 30'57			-5609 Aug 19 j 12:23	15° $\Omega$	
retrograde	-5616 Dec 16 j 04:05	3° $\Omega$ 23'58		evening set	-5609 Sep 05 j 12:32	15° $\Omega$ 35'58	
opposition	-5615 Mar 05 j 06:46	2° $\Omega$ 01'55	2°23'32				
min. Earth dist.	-5615 Mar 05 j 20:40	2° $\Omega$ 00'58	29.33428 AU	conjunction	-5609 Sep 20 j 14:24	16° $\Omega$ 09'51	2°20'31
direct	-5615 May 25 j 15:29	0° $\Omega$ 37'41		minimum elong	-5609 Sep 20 j 14:24	16° $\Omega$ 09'51	2°20'46
evening set	-5615 Aug 23 j 04:32	2° $\Omega$ 33'06		max. Earth dist.	-5609 Sep 20 j 04:54	16° $\Omega$ 08'58	31.32617 AU
				morning rise	-5609 Oct 05 j 15:07	16° $\Omega$ 43'40	
conjunction	-5615 Sep 07 j 08:25	3° $\Omega$ 07'06	2°15'08	retrograde	-5608 Jan 01 j 12:05	18° $\Omega$ 37'41	
minimum elong	-5615 Sep 07 j 08:25	3° $\Omega$ 07'06	2°15'25	opposition	-5608 Mar 20 j 23:09	17° $\Omega$ 15'27	2°30'15
max. Earth dist.	-5615 Sep 06 j 18:03	3° $\Omega$ 05'45	31.33225 AU	min. Earth dist.	-5608 Mar 21 j 07:27	17° $\Omega$ 14'54	29.32569 AU
morning rise	-5615 Sep 22 j 10:27	3° $\Omega$ 40'56		direct	-5608 Jun 09 j 23:30	15° $\Omega$ 51'45	
retrograde	-5615 Dec 18 j 15:27	5° $\Omega$ 34'06		evening set	-5608 Sep 06 j 21:50	17° $\Omega$ 46'47	
opposition	-5614 Mar 07 j 19:14	4° $\Omega$ 12'00	2°25'07				
min. Earth dist.	-5614 Mar 08 j 08:37	4° $\Omega$ 11'06	29.33398 AU	conjunction	-5608 Sep 21 j 23:29	18° $\Omega$ 20'41	2°20'43
direct	-5614 May 28 j 00:26	2° $\Omega$ 47'51		minimum elong	-5608 Sep 21 j 23:29	18° $\Omega$ 20'41	2°20'59
evening set	-5614 Aug 25 j 13:51	4° $\Omega$ 43'12		max. Earth dist.	-5608 Sep 21 j 14:35	18° $\Omega$ 19'50	31.32115 AU
				morning rise	-5608 Oct 07 j 00:06	18° $\Omega$ 54'29	
conjunction	-5614 Sep 09 j 17:28	5° $\Omega$ 17'11	2°16'32	retrograde	-5607 Jan 02 j 21:40	20° $\Omega$ 48'37	
minimum elong	-5614 Sep 09 j 17:28	5° $\Omega$ 17'11	2°16'49	opposition	-5607 Mar 23 j 12:07	19° $\Omega$ 26'19	2°30'22
max. Earth dist.	-5614 Sep 09 j 04:52	5° $\Omega$ 16'00	31.33221 AU	min. Earth dist.	-5607 Mar 23 j 20:47	19° $\Omega$ 25'44	29.32004 AU
morning rise	-5614 Sep 24 j 19:05	5° $\Omega$ 51'01		direct	-5607 Jun 12 j 10:34	18° $\Omega$ 02'39	
retrograde	-5614 Dec 21 j 01:30	7° $\Omega$ 44'18		evening set	-5607 Sep 09 j 06:55	19° $\Omega$ 57'35	
opposition	-5613 Mar 10 j 07:33	6° $\Omega$ 22'12	2°26'30				
min. Earth dist.	-5613 Mar 10 j 19:51	6° $\Omega$ 21'22	29.33404 AU	conjunction	-5607 Sep 24 j 08:27	20° $\Omega$ 31'27	2°20'44
direct	-5613 May 30 j 12:37	4° $\Omega$ 58'08		minimum elong	-5607 Sep 24 j 08:27	20° $\Omega$ 31'27	2°20'57
evening set	-5613 Aug 27 j 23:18	6° $\Omega$ 53'27		max. Earth dist.	-5607 Sep 24 j 00:44	20° $\Omega$ 30'43	31.31493 AU
				morning rise	-5607 Oct 09 j 08:59	21° $\Omega$ 05'16	
conjunction	-5613 Sep 12 j 02:22	7° $\Omega$ 27'24	2°17'43	retrograde	-5606 Jan 05 j 07:06	22° $\Omega$ 59'30	
minimum elong	-5613 Sep 12 j 02:22	7° $\Omega$ 27'24	2°18'00	opposition	-5606 Mar 26 j 00:53	21° $\Omega$ 37'07	2°30'16
max. Earth dist.	-5613 Sep 11 j 13:39	7° $\Omega$ 26'12	31.33240 AU	min. Earth dist.	-5606 Mar 26 j 07:59	21° $\Omega$ 36'38	29.31317 AU
morning rise	-5613 Sep 27 j 03:53	8° $\Omega$ 01'14		direct	-5606 Jun 14 j 23:06	20° $\Omega$ 13'27	
retrograde	-5613 Dec 23 j 14:37	9° $\Omega$ 54'40		evening set	-5606 Sep 11 j 16:03	22° $\Omega$ 08'16	
opposition	-5612 Mar 11 j 20:08	8° $\Omega$ 32'34	2°27'41				
min. Earth dist.	-5612 Mar 12 j 07:27	8° $\Omega$ 31'48	29.33425 AU	conjunction	-5606 Sep 26 j 17:18	22° $\Omega$ 42'08	2°20'32
direct	-5612 May 31 j 22:49	7° $\Omega$ 08'35		minimum elong	-5606 Sep 26 j 17:18	22° $\Omega$ 42'08	2°20'46
evening set	-5612 Aug 29 j 08:28	9° $\Omega$ 03'51		max. Earth dist.	-5606 Sep 26 j 09:39	22° $\Omega$ 41'24	31.30767 AU
				morning rise	-5606 Oct 11 j 17:55	23° $\Omega$ 15'57	
conjunction	-5612 Sep 13 j 11:20	9° $\Omega$ 37'48	2°18'43	retrograde	-5605 Jan 07 j 18:14	25° $\Omega$ 10'17	
minimum elong	-5612 Sep 13 j 11:20	9° $\Omega$ 37'48	2°19'00	opposition	-5605 Mar 28 j 13:36	23° $\Omega$ 47'48	2°29'57
max. Earth dist.	-5612 Sep 13 j 00:34	9° $\Omega$ 36'47	31.33234 AU	min. Earth dist.	-5605 Mar 28 j 20:23	23° $\Omega$ 47'20	29.30576 AU
morning rise	-5612 Sep 28 j 12:28	10° $\Omega$ 11'37		direct	-5605 Jun 17 j 08:31	22° $\Omega$ 24'08	
retrograde	-5612 Dec 25 j 01:27	12° $\Omega$ 05'13		evening set	-5605 Sep 14 j 00:59	24° $\Omega$ 18'49	
opposition	-5611 Mar 14 j 08:56	10° $\Omega$ 43'05	2°28'38				

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -5605 in astronomical counting style is the year 5606 BCE in historical counting style.

conjunction	-5605 Sep 29 j 02:14	24°Ω52'41	2°20'08	retrograde	-5598 Jan 23 j 02:49	10°♊25'01	
minimum elong	-5605 Sep 29 j 02:14	24°Ω52'41	2°20'20	opposition	-5598 Apr 13 j 07:54	9°♊02'03	2°21'48
max. Earth dist.	-5605 Sep 28 j 20:32	24°Ω52'09	31.30023 AU	min. Earth dist.	-5598 Apr 13 j 07:13	9°♊02'06	29.26822 AU
morning rise	-5605 Oct 14 j 02:42	25°Ω26'30		direct	-5598 Jul 02 j 15:29	7°♊38'45	
retrograde	-5604 Jan 10 j 04:05	27°Ω20'57		evening set	-5598 Sep 28 j 14:59	9°♊32'51	
opposition	-5604 Mar 30 j 02:28	25°Ω58'21	2°29'25				
min. Earth dist.	-5604 Mar 30 j 07:52	25°Ω57'59	29.29836 AU	conjunction	-5598 Oct 13 j 16:05	10°♊06'45	2°11'48
direct	-5604 Jun 18 j 21:15	24°Ω34'42		minimum elong	-5598 Oct 13 j 16:05	10°♊06'45	2°11'57
evening set	-5604 Sep 15 j 09:53	26°Ω29'17		max. Earth dist.	-5598 Oct 13 j 17:47	10°♊06'54	31.26407 AU
				morning rise	-5598 Oct 28 j 17:26	10°♊40'42	
conjunction	-5604 Sep 30 j 10:50	27°Ω03'08	2°19'33	retrograde	-5597 Jan 25 j 13:19	12°♊36'05	
minimum elong	-5604 Sep 30 j 10:51	27°Ω03'08	2°19'45	opposition	-5597 Apr 15 j 20:49	11°♊13'06	2°19'47
max. Earth dist.	-5604 Sep 30 j 05:18	27°Ω02'36	31.29318 AU	min. Earth dist.	-5597 Apr 15 j 18:35	11°♊13'15	29.26277 AU
morning rise	-5604 Oct 15 j 11:30	27°Ω36'57		direct	-5597 Jul 05 j 04:02	9°♊49'51	
retrograde	-5603 Jan 11 j 16:46	29°Ω31'31		evening set	-5597 Oct 01 j 00:06	11°♊43'52	
opposition	-5603 Apr 01 j 15:20	28°Ω08'49	2°28'41				
min. Earth dist.	-5603 Apr 01 j 19:21	28°Ω08'33	29.29177 AU	conjunction	-5597 Oct 16 j 01:09	12°♊17'47	2°09'50
direct	-5603 Jun 21 j 06:49	26°Ω45'11		minimum elong	-5597 Oct 16 j 01:09	12°♊17'47	2°09'57
evening set	-5603 Sep 17 j 18:42	28°Ω39'41		max. Earth dist.	-5597 Oct 16 j 02:43	12°♊17'56	31.25812 AU
				morning rise	-5597 Oct 31 j 02:52	12°♊51'46	
conjunction	-5603 Oct 02 j 19:45	29°Ω13'32	2°18'45	retrograde	-5596 Jan 28 j 01:34	14°♊47'19	
minimum elong	-5603 Oct 02 j 19:45	29°Ω13'32	2°18'56	opposition	-5596 Apr 17 j 10:03	13°♊24'15	2°17'35
max. Earth dist.	-5603 Oct 02 j 16:26	29°Ω13'13	31.28698 AU	min. Earth dist.	-5596 Apr 17 j 07:35	13°♊24'25	29.25626 AU
morning rise	-5603 Oct 17 j 20:19	29°Ω47'22		direct	-5596 Jul 06 j 13:48	12°♊01'04	
	-5603 Oct 23 j 14:56	0°♊		evening set	-5596 Oct 02 j 08:58	13°♊55'00	
retrograde	-5602 Jan 14 j 03:14	1°♊42'03					
opposition	-5602 Apr 04 j 04:05	0°♊19'17	2°27'44	conjunction	-5596 Oct 17 j 10:20	14°♊28'55	2°07'41
min. Earth dist.	-5602 Apr 04 j 07:27	0°♊19'03	29.28602 AU	minimum elong	-5596 Oct 17 j 10:21	14°♊28'55	2°07'48
	-5602 Apr 16 j 04:45	30°♊		max. Earth dist.	-5596 Oct 17 j 13:35	14°♊29'14	31.25095 AU
direct	-5602 Jun 23 j 17:48	28°Ω55'41		morning rise	-5596 Nov 01 j 12:11	15°♊02'56	
	-5602 Aug 26 j 20:37	0°♊		retrograde	-5595 Jan 29 j 11:56	16°♊58'37	
evening set	-5602 Sep 20 j 03:36	0°♊50'06		opposition	-5595 Apr 19 j 23:14	15°♊35'29	2°15'11
				min. Earth dist.	-5595 Apr 19 j 19:47	15°♊35'43	29.24828 AU
conjunction	-5602 Oct 05 j 04:30	1°♊23'57	2°17'46	direct	-5595 Jul 09 j 02:15	14°♊12'20	
minimum elong	-5602 Oct 05 j 04:30	1°♊23'57	2°17'57	evening set	-5595 Oct 04 j 18:08	16°♊06'09	
max. Earth dist.	-5602 Oct 05 j 01:31	1°♊23'40	31.28181 AU				
morning rise	-5602 Oct 20 j 05:18	1°♊57'48		conjunction	-5595 Oct 19 j 19:30	16°♊40'06	2°05'20
retrograde	-5601 Jan 16 j 15:59	3°♊52'37		minimum elong	-5595 Oct 19 j 19:31	16°♊40'06	2°05'26
opposition	-5601 Apr 06 j 16:52	2°♊29'47	2°26'34	max. Earth dist.	-5595 Oct 19 j 22:23	16°♊40'23	31.24245 AU
min. Earth dist.	-5601 Apr 06 j 18:14	2°♊29'42	29.28120 AU	morning rise	-5595 Nov 03 j 21:51	17°♊14'09	
direct	-5601 Jun 26 j 04:30	1°♊06'15		retrograde	-5594 Feb 01 j 00:48	19°♊09'57	
evening set	-5601 Sep 22 j 12:18	3°♊00'35		opposition	-5594 Apr 22 j 12:12	17°♊46'43	2°12'35
				min. Earth dist.	-5594 Apr 22 j 07:56	17°♊47'00	29.23918 AU
conjunction	-5601 Oct 07 j 13:15	3°♊34'26	2°16'34	direct	-5594 Jul 11 j 11:43	16°♊23'35	
minimum elong	-5601 Oct 07 j 13:16	3°♊34'26	2°16'44	evening set	-5594 Oct 07 j 03:02	18°♊17'18	
max. Earth dist.	-5601 Oct 07 j 11:58	3°♊34'19	31.27726 AU				
morning rise	-5601 Oct 22 j 14:05	4°♊08'19		conjunction	-5594 Oct 22 j 04:46	18°♊51'17	2°02'49
retrograde	-5600 Jan 19 j 03:26	6°♊03'17		minimum elong	-5594 Oct 22 j 04:47	18°♊51'17	2°02'56
opposition	-5600 Apr 08 j 05:55	4°♊40'24	2°25'11	max. Earth dist.	-5594 Oct 22 j 09:24	18°♊51'43	31.23285 AU
min. Earth dist.	-5600 Apr 08 j 07:05	4°♊40'19	29.27687 AU	morning rise	-5594 Nov 06 j 07:18	19°♊25'21	
direct	-5600 Jun 27 j 16:48	3°♊16'57		retrograde	-5593 Feb 03 j 11:29	21°♊21'16	
evening set	-5600 Sep 23 j 21:11	5°♊11'12		opposition	-5593 Apr 25 j 01:20	19°♊57'56	2°09'48
				min. Earth dist.	-5593 Apr 24 j 20:45	19°♊58'14	29.22914 AU
conjunction	-5600 Oct 08 j 22:07	5°♊45'04	2°15'11	direct	-5593 Jul 13 j 22:42	18°♊34'48	
minimum elong	-5600 Oct 08 j 22:08	5°♊45'04	2°15'21	evening set	-5593 Oct 09 j 11:54	20°♊28'25	
max. Earth dist.	-5600 Oct 08 j 21:41	5°♊45'01	31.27320 AU				
morning rise	-5600 Oct 23 j 23:09	6°♊18'57		conjunction	-5593 Oct 24 j 13:44	21°♊02'24	2°00'08
retrograde	-5599 Jan 20 j 16:13	8°♊14'04		minimum elong	-5593 Oct 24 j 13:45	21°♊02'24	2°00'12
opposition	-5599 Apr 10 j 18:48	6°♊51'09	2°23'36	max. Earth dist.	-5593 Oct 24 j 18:40	21°♊02'52	31.22279 AU
min. Earth dist.	-5599 Apr 10 j 17:56	6°♊51'12	29.27274 AU	morning rise	-5593 Nov 08 j 16:44	21°♊36'31	
direct	-5599 Jun 30 j 04:45	5°♊27'46		retrograde	-5592 Feb 06 j 00:39	23°♊32'32	
evening set	-5599 Sep 26 j 06:02	7°♊21'57		opposition	-5592 Apr 26 j 14:23	22°♊09'06	2°06'50
				min. Earth dist.	-5592 Apr 26 j 07:59	22°♊09'32	29.21903 AU
conjunction	-5599 Oct 11 j 07:00	7°♊55'50	2°13'35	direct	-5592 Jul 15 j 09:36	20°♊45'59	
minimum elong	-5599 Oct 11 j 07:01	7°♊55'50	2°13'44	evening set	-5592 Oct 10 j 20:47	22°♊39'29	
max. Earth dist.	-5599 Oct 11 j 07:20	7°♊55'51	31.26891 AU				
morning rise	-5599 Oct 26 j 08:16	8°♊29'45		conjunction	-5592 Oct 25 j 22:54	23°♊13'30	1°57'16



Attention, astronomical year style is used: The year -5592 in astronomical counting style is the year 5593 BCE in historical counting style.

minimum elong	-5592 Oct 25 j 22:55	23° $\overline{13}$ '30	1°57'21	morning rise	-5586 Nov 23 j 12:56	6° $\underline{56}$ '26	
max. Earth dist.	-5592 Oct 26 j 05:19	23° $\overline{14}$ '06	31.21280 AU	retrograde	-5585 Feb 21 j 12:25	8° $\underline{53}$ '22	
morning rise	-5592 Nov 10 j 02:13	23° $\overline{14}$ '38		opposition	-5585 May 13 j 09:28	7° $\underline{29}$ '32	1°41'06
retrograde	-5591 Feb 07 j 12:43	25° $\overline{14}$ '47		min. Earth dist.	-5585 May 12 j 20:20	7° $\underline{30}$ '25	29.16613 AU
opposition	-5591 Apr 29 j 03:27	24° $\overline{14}$ '14	2°03'41	direct	-5585 Jul 31 j 15:42	6° $\underline{06}$ '47	
min. Earth dist.	-5591 Apr 28 j 20:51	24° $\overline{14}$ '41	29.20937 AU	evening set	-5585 Oct 26 j 12:01	7° $\underline{59}$ '47	
direct	-5591 Jul 17 j 21:32	22° $\overline{15}$ '08					
evening set	-5591 Oct 13 j 05:39	24° $\overline{15}$ '33		conjunction	-5585 Nov 10 j 16:28	8° $\underline{34}$ '02	1°32'38
				minimum elong	-5585 Nov 10 j 16:29	8° $\underline{34}$ '02	1°32'36
conjunction	-5591 Oct 28 j 08:03	25° $\overline{15}$ '36	1°54'14	max. Earth dist.	-5585 Nov 11 j 06:01	8° $\underline{35}$ '19	31.16144 AU
minimum elong	-5591 Oct 28 j 08:03	25° $\overline{15}$ '36	1°54'17	morning rise	-5585 Nov 25 j 22:59	9° $\underline{08}$ '30	
max. Earth dist.	-5591 Oct 28 j 15:32	25° $\overline{15}$ '18	31.20367 AU	retrograde	-5584 Feb 23 j 23:43	11° $\underline{05}$ '35	
morning rise	-5591 Nov 12 j 11:46	25° $\overline{15}$ '46		opposition	-5584 May 14 j 22:43	9° $\underline{41}$ '42	1°36'46
retrograde	-5590 Feb 10 j 01:55	27° $\overline{15}$ '01		min. Earth dist.	-5584 May 14 j 09:28	9° $\underline{42}$ '36	29.15824 AU
opposition	-5590 May 01 j 16:20	26° $\overline{15}$ '25	2°00'21	direct	-5584 Aug 02 j 02:22	8° $\underline{19}$ '00	
min. Earth dist.	-5590 May 01 j 07:29	26° $\overline{15}$ '00	29.20059 AU	evening set	-5584 Oct 27 j 21:31	10° $\underline{11}$ '56	
direct	-5590 Jul 20 j 09:17	25° $\overline{15}$ '08					
evening set	-5590 Oct 15 j 14:36	27° $\overline{15}$ '41		conjunction	-5584 Nov 12 j 02:19	10° $\underline{46}$ '12	1°28'31
				minimum elong	-5584 Nov 12 j 02:20	10° $\underline{46}$ '13	1°28'30
conjunction	-5590 Oct 30 j 17:12	27° $\overline{15}$ '45	1°51'02	max. Earth dist.	-5584 Nov 12 j 15:48	10° $\underline{47}$ '29	31.15310 AU
minimum elong	-5590 Oct 30 j 17:12	27° $\overline{15}$ '45	1°51'05	morning rise	-5584 Nov 27 j 09:27	11° $\underline{20}$ '44	
max. Earth dist.	-5590 Oct 31 j 01:29	27° $\overline{15}$ '32	31.19535 AU	retrograde	-5583 Feb 25 j 13:32	13° $\underline{17}$ '55	
morning rise	-5590 Nov 14 j 21:23	28° $\overline{15}$ '09		opposition	-5583 May 17 j 11:46	11° $\underline{53}$ '58	1°32'18
	-5589 Jan 23 j 18:49	0° $\underline{06}$ '21		min. Earth dist.	-5583 May 16 j 21:16	11° $\underline{54}$ '57	29.14920 AU
retrograde	-5589 Feb 12 j 12:52	0° $\underline{06}$ '21		direct	-5583 Aug 04 j 13:01	10° $\underline{31}$ '16	
	-5589 Mar 04 j 12:07	30° $\overline{16}$ ' $\overline{11}$		evening set	-5583 Oct 30 j 07:01	12° $\underline{24}$ '08	
opposition	-5589 May 04 j 05:21	28° $\overline{16}$ '42	1°56'51				
min. Earth dist.	-5589 May 03 j 20:22	28° $\overline{16}$ '43	29.19278 AU	conjunction	-5583 Nov 14 j 12:17	12° $\underline{58}$ '27	1°24'16
direct	-5589 Jul 22 j 19:56	27° $\overline{16}$ '40		minimum elong	-5583 Nov 14 j 12:18	12° $\underline{58}$ '27	1°24'13
evening set	-5589 Oct 17 j 23:28	29° $\overline{16}$ '56		max. Earth dist.	-5583 Nov 15 j 02:28	12° $\underline{59}$ '47	31.14332 AU
				morning rise	-5583 Nov 29 j 19:57	13° $\underline{33}$ '01	
conjunction	-5589 Nov 02 j 02:30	29° $\overline{16}$ '47	1°47'40	retrograde	-5582 Feb 28 j 02:06	15° $\underline{30}$ '18	
minimum elong	-5589 Nov 02 j 02:31	29° $\overline{16}$ '47	1°47'41	min. Earth dist.	-5582 May 19 j 10:54	14° $\underline{07}$ '12	29.13868 AU
max. Earth dist.	-5589 Nov 02 j 12:39	29° $\overline{16}$ '48	31.18813 AU	opposition	-5582 May 20 j 00:59	14° $\underline{06}$ '15	1°27'41
	-5589 Nov 07 j 19:22	0° $\underline{06}$ '21		direct	-5582 Aug 07 j 00:16	12° $\underline{43}$ '33	
morning rise	-5589 Nov 17 j 07:01	0° $\underline{21}$ '19		evening set	-5582 Nov 01 j 16:28	14° $\underline{36}$ '19	
retrograde	-5588 Feb 15 j 00:19	2° $\underline{17}$ '49					
opposition	-5588 May 05 j 18:19	0° $\underline{54}$ '06	1°53'09	conjunction	-5582 Nov 16 j 22:12	15° $\underline{10}$ '41	1°19'54
min. Earth dist.	-5588 May 05 j 07:24	0° $\underline{54}$ '50	29.18582 AU	minimum elong	-5582 Nov 16 j 22:13	15° $\underline{10}$ '41	1°19'51
	-5588 Jun 10 j 23:48	30° $\overline{16}$ ' $\overline{11}$		max. Earth dist.	-5582 Nov 17 j 13:01	15° $\underline{12}$ '05	31.13232 AU
direct	-5588 Jul 24 j 08:40	29° $\overline{16}$ '31	1°10'	morning rise	-5582 Dec 02 j 06:23	15° $\underline{45}$ '17	
	-5588 Sep 03 j 22:40	0° $\underline{06}$ '21		retrograde	-5581 Mar 02 j 15:22	17° $\underline{42}$ '39	
evening set	-5588 Oct 19 j 08:28	1° $\underline{24}$ '21		opposition	-5581 May 22 j 13:58	16° $\underline{18}$ '30	1°22'57
				min. Earth dist.	-5581 May 21 j 22:14	16° $\underline{19}$ '34	29.12704 AU
conjunction	-5588 Nov 03 j 11:42	1° $\underline{58}$ '30	1°44'08	direct	-5581 Aug 09 j 11:53	14° $\underline{55}$ '47	
minimum elong	-5588 Nov 03 j 11:43	1° $\underline{58}$ '30	1°44'10	evening set	-5581 Nov 04 j 02:02	16° $\underline{48}$ '27	
max. Earth dist.	-5588 Nov 03 j 21:59	1° $\underline{59}$ '28	31.18156 AU				
morning rise	-5588 Nov 18 j 16:52	2° $\underline{32}$ '49		conjunction	-5581 Nov 19 j 08:08	17° $\underline{22}$ '51	1°15'25
retrograde	-5587 Feb 16 j 13:17	4° $\underline{29}$ '28		minimum elong	-5581 Nov 19 j 08:08	17° $\underline{22}$ '51	1°15'20
opposition	-5587 May 08 j 07:27	3° $\underline{05}$ '43	1°49'18	max. Earth dist.	-5581 Nov 19 j 23:11	17° $\underline{24}$ '16	31.12036 AU
min. Earth dist.	-5587 May 07 j 20:09	3° $\underline{06}$ '29	29.17944 AU	morning rise	-5581 Dec 04 j 16:59	17° $\underline{57}$ '30	
direct	-5587 Jul 26 j 18:36	1° $\underline{42}$ '51		retrograde	-5580 Mar 04 j 03:39	19° $\underline{54}$ '56	
evening set	-5587 Oct 21 j 17:32	3° $\underline{35}$ '58		min. Earth dist.	-5580 May 23 j 11:43	18° $\underline{31}$ '43	29.11492 AU
				opposition	-5580 May 24 j 03:06	18° $\underline{30}$ '40	1°18'06
conjunction	-5587 Nov 05 j 21:17	4° $\underline{10}$ '09	1°40'27	direct	-5580 Aug 10 j 23:08	17° $\underline{07}$ '55	
minimum elong	-5587 Nov 05 j 21:18	4° $\underline{10}$ '09	1°40'27	evening set	-5580 Nov 05 j 11:25	19° $\underline{00}$ '30	
max. Earth dist.	-5587 Nov 06 j 09:27	4° $\underline{11}$ '18	31.17526 AU				
morning rise	-5587 Nov 21 j 02:46	4° $\underline{44}$ '31		conjunction	-5580 Nov 20 j 18:09	19° $\underline{34}$ '56	1°10'49
retrograde	-5586 Feb 18 j 23:34	6° $\underline{41}$ '19		minimum elong	-5580 Nov 20 j 18:09	19° $\underline{34}$ '56	1°10'44
opposition	-5586 May 10 j 20:20	5° $\underline{17}$ '32	1°45'17	max. Earth dist.	-5580 Nov 21 j 10:51	19° $\underline{36}$ '30	31.10829 AU
min. Earth dist.	-5586 May 10 j 08:00	5° $\underline{18}$ '22	29.17296 AU	morning rise	-5580 Dec 06 j 03:28	20° $\underline{09}$ '38	
direct	-5586 Jul 29 j 06:29	3° $\underline{54}$ '43		retrograde	-5579 Mar 06 j 16:13	22° $\underline{07}$ '08	
evening set	-5586 Oct 24 j 02:50	5° $\underline{47}$ '48		opposition	-5579 May 26 j 15:59	20° $\underline{42}$ '45	1°13'08
				min. Earth dist.	-5579 May 25 j 22:59	20° $\underline{43}$ '54	29.10285 AU
conjunction	-5586 Nov 08 j 06:48	6° $\underline{22}$ '00	1°36'37	direct	-5579 Aug 13 j 12:26	19° $\underline{19}$ '59	
minimum elong	-5586 Nov 08 j 06:49	6° $\underline{22}$ '00	1°36'37	evening set	-5579 Nov 07 j 21:07	21° $\underline{12}$ '29	
max. Earth dist.	-5586 Nov 08 j 18:43	6° $\underline{23}$ '08	31.16874 AU				

## Planetary Phenomena of Neptune from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -5579 in astronomical counting style is the year 5580 BCE in historical counting style.

conjunction	-5579 Nov 23 j 04:09	21° <u>♏</u> 46'57	1°06'07	retrograde	-5572 Mar 22 j 08:28	7° <u>♍</u> 34'42	
minimum elong	-5579 Nov 23 j 04:09	21° <u>♏</u> 46'57	1°06'01	min. Earth dist.	-5572 Jun 10 j 11:40	6° <u>♍</u> 11'29	29.03891 AU
max. Earth dist.	-5579 Nov 23 j 20:42	21° <u>♏</u> 48'31	31.09652 AU	opposition	-5572 Jun 11 j 09:39	6° <u>♍</u> 09'59	0°35'39
morning rise	-5579 Dec 08 j 14:12	22° <u>♏</u> 21'42		direct	-5572 Aug 28 j 14:08	4° <u>♍</u> 47'24	
retrograde	-5578 Mar 09 j 05:06	24° <u>♏</u> 19'17		evening set	-5572 Nov 22 j 18:28	6° <u>♍</u> 39'43	
min. Earth dist.	-5578 May 28 j 11:34	22° <u>♏</u> 55'59	29.09152 AU				
opposition	-5578 May 29 j 04:47	22° <u>♏</u> 54'48	1°08'03	conjunction	-5572 Dec 08 j 05:02	7° <u>♍</u> 14'30	0°30'48
direct	-5578 Aug 15 j 22:52	21° <u>♏</u> 32'02		minimum elong	-5572 Dec 08 j 05:03	7° <u>♍</u> 14'30	0°30'37
evening set	-5578 Nov 10 j 06:40	23° <u>♏</u> 24'28		max. Earth dist.	-5572 Dec 09 j 02:39	7° <u>♍</u> 16'32	31.03406 AU
				morning rise	-5572 Dec 23 j 19:15	7° <u>♍</u> 49'37	
conjunction	-5578 Nov 25 j 14:20	23° <u>♏</u> 58'59	1°01'20	retrograde	-5571 Mar 24 j 22:03	9° <u>♍</u> 47'59	
minimum elong	-5578 Nov 25 j 14:21	23° <u>♏</u> 58'59	1°01'14	opposition	-5571 Jun 13 j 22:34	8° <u>♍</u> 23'14	0°29'59
max. Earth dist.	-5578 Nov 26 j 08:49	24° <u>♏</u> 00'44	31.08564 AU	min. Earth dist.	-5571 Jun 13 j 01:25	8° <u>♍</u> 24'41	29.02966 AU
morning rise	-5578 Dec 11 j 00:47	24° <u>♏</u> 33'47		direct	-5571 Aug 31 j 01:07	7° <u>♍</u> 00'40	
retrograde	-5577 Mar 11 j 15:39	26° <u>♏</u> 31'27		evening set	-5571 Nov 25 j 04:57	8° <u>♍</u> 52'57	
opposition	-5577 May 31 j 17:38	25° <u>♏</u> 06'54	1°02'53				
min. Earth dist.	-5577 May 30 j 23:09	25° <u>♏</u> 08'10	29.08106 AU	conjunction	-5571 Dec 10 j 16:11	9° <u>♍</u> 27'47	0°25'29
direct	-5577 Aug 18 j 11:00	23° <u>♏</u> 44'09		minimum elong	-5571 Dec 10 j 16:11	9° <u>♍</u> 27'47	0°25'17
evening set	-5577 Nov 12 j 16:18	25° <u>♏</u> 36'31		max. Earth dist.	-5571 Dec 11 j 14:48	9° <u>♍</u> 29'55	31.02426 AU
				morning rise	-5571 Dec 26 j 06:50	10° <u>♍</u> 02'58	
conjunction	-5577 Nov 28 j 00:19	26° <u>♏</u> 11'04	0°56'26	retrograde	-5570 Mar 27 j 12:18	12° <u>♍</u> 01'23	
minimum elong	-5577 Nov 28 j 00:19	26° <u>♏</u> 11'04	0°56'19	opposition	-5570 Jun 16 j 11:10	10° <u>♍</u> 36'35	0°24'18
max. Earth dist.	-5577 Nov 28 j 18:45	26° <u>♏</u> 12'49	31.07584 AU	min. Earth dist.	-5570 Jun 15 j 13:03	10° <u>♍</u> 38'06	29.01917 AU
morning rise	-5577 Dec 13 j 11:32	26° <u>♏</u> 45'56		direct	-5570 Sep 02 j 14:25	9° <u>♍</u> 14'00	
retrograde	-5576 Mar 13 j 04:37	28° <u>♏</u> 43'43		evening set	-5570 Nov 27 j 15:37	11° <u>♍</u> 06'16	
min. Earth dist.	-5576 Jun 01 j 11:05	27° <u>♏</u> 20'26	29.07177 AU				
opposition	-5576 Jun 02 j 06:32	27° <u>♏</u> 19'07	0°57'36	conjunction	-5570 Dec 13 j 03:12	11° <u>♍</u> 41'09	0°20'09
direct	-5576 Aug 19 j 20:39	25° <u>♏</u> 56'23		minimum elong	-5570 Dec 13 j 03:12	11° <u>♍</u> 41'09	0°19'57
evening set	-5576 Nov 14 j 02:02	27° <u>♏</u> 48'43		max. Earth dist.	-5570 Dec 14 j 00:59	11° <u>♍</u> 43'12	31.01326 AU
				morning rise	-5570 Dec 28 j 18:37	12° <u>♍</u> 16'23	
conjunction	-5576 Nov 29 j 10:41	28° <u>♏</u> 23'19	0°51'27	retrograde	-5569 Mar 30 j 01:50	14° <u>♍</u> 14'52	
minimum elong	-5576 Nov 29 j 10:41	28° <u>♏</u> 23'19	0°51'20	min. Earth dist.	-5569 Jun 18 j 02:20	12° <u>♍</u> 51'29	29.00771 AU
max. Earth dist.	-5576 Nov 30 j 06:51	28° <u>♏</u> 25'14	31.06696 AU	opposition	-5569 Jun 19 j 00:01	12° <u>♍</u> 49'59	0°18'34
morning rise	-5576 Dec 14 j 22:24	28° <u>♏</u> 58'14		direct	-5569 Sep 05 j 01:13	11° <u>♍</u> 27'22	
	-5575 Jan 14 j 12:39	0° <u>♍</u>		evening set	-5569 Nov 30 j 02:01	13° <u>♍</u> 19'36	
retrograde	-5575 Mar 15 j 16:04	0° <u>♍</u> 56'08					
	-5575 May 18 j 01:36	30° <u>♏</u>		conjunction	-5569 Dec 15 j 14:19	13° <u>♍</u> 54'30	0°14'47
opposition	-5575 Jun 04 j 19:17	29° <u>♏</u> 31'29	0°52'14	minimum elong	-5569 Dec 15 j 14:19	13° <u>♍</u> 54'30	0°14'33
min. Earth dist.	-5575 Jun 03 j 23:36	29° <u>♏</u> 32'50	29.06323 AU	behind sun begin	-5569 Dec 15 j 11:28	13° <u>♍</u> 54'15	
direct	-5575 Aug 22 j 07:06	28° <u>♏</u> 08'48		behind sun end	-5569 Dec 15 j 17:11	13° <u>♍</u> 54'46	
	-5575 Nov 15 j 23:45	0° <u>♍</u>		max. Earth dist.	-5569 Dec 16 j 13:28	13° <u>♍</u> 56'41	31.00140 AU
evening set	-5575 Nov 16 j 11:57	0° <u>♍</u> 01'07		morning rise	-5569 Dec 31 j 06:11	14° <u>♍</u> 29'47	
					-5568 Jan 14 j 09:09	15° <u>♍</u>	
conjunction	-5575 Dec 01 j 21:04	0° <u>♍</u> 35'46	0°46'24	retrograde	-5568 Mar 31 j 13:16	16° <u>♍</u> 28'19	
minimum elong	-5575 Dec 01 j 21:04	0° <u>♍</u> 35'46	0°46'15	opposition	-5568 Jun 20 j 12:41	15° <u>♍</u> 03'21	0°12'48
max. Earth dist.	-5575 Dec 02 j 17:24	0° <u>♍</u> 37'41	31.05885 AU	min. Earth dist.	-5568 Jun 19 j 14:23	15° <u>♍</u> 04'53	28.99551 AU
morning rise	-5575 Dec 17 j 09:27	1° <u>♍</u> 10'44			-5568 Jun 22 j 13:20	15° <u>♍</u>	
retrograde	-5574 Mar 18 j 05:49	3° <u>♍</u> 08'45		direct	-5568 Sep 06 j 14:00	13° <u>♍</u> 40'41	
min. Earth dist.	-5574 Jun 06 j 11:01	1° <u>♍</u> 45'32	29.05526 AU		-5568 Nov 16 j 01:37	15° <u>♍</u>	
opposition	-5574 Jun 07 j 08:02	1° <u>♍</u> 44'05	0°46'46	evening set	-5568 Dec 01 j 12:46	15° <u>♍</u> 32'51	
direct	-5574 Aug 24 j 17:14	0° <u>♍</u> 21'27					
evening set	-5574 Nov 18 j 21:54	2° <u>♍</u> 13'45		conjunction	-5568 Dec 17 j 01:29	16° <u>♍</u> 07'48	0°09'24
				minimum elong	-5568 Dec 17 j 01:29	16° <u>♍</u> 07'48	0°09'11
conjunction	-5574 Dec 04 j 07:28	2° <u>♍</u> 48'26	0°41'15	behind sun begin	-5568 Dec 16 j 20:00	16° <u>♍</u> 07'19	
minimum elong	-5574 Dec 04 j 07:29	2° <u>♍</u> 48'26	0°41'06	behind sun end	-5568 Dec 17 j 06:57	16° <u>♍</u> 08'18	
max. Earth dist.	-5574 Dec 05 j 04:38	2° <u>♍</u> 50'26	31.05088 AU	max. Earth dist.	-5568 Dec 18 j 00:01	16° <u>♍</u> 09'56	30.98920 AU
morning rise	-5574 Dec 19 j 20:26	3° <u>♍</u> 23'28		morning rise	-5567 Jan 01 j 18:05	16° <u>♍</u> 43'08	
retrograde	-5573 Mar 20 j 18:24	5° <u>♍</u> 21'37		retrograde	-5567 Apr 03 j 02:46	18° <u>♍</u> 41'42	
opposition	-5573 Jun 09 j 20:55	3° <u>♍</u> 56'55	0°41'15	min. Earth dist.	-5567 Jun 22 j 02:29	17° <u>♍</u> 18'11	28.98343 AU
min. Earth dist.	-5573 Jun 09 j 00:20	3° <u>♍</u> 58'20	29.04726 AU	opposition	-5567 Jun 23 j 01:07	17° <u>♍</u> 16'38	0°07'01
direct	-5573 Aug 27 j 03:28	2° <u>♍</u> 34'19		direct	-5567 Sep 09 j 00:55	15° <u>♍</u> 53'54	
evening set	-5573 Nov 21 j 08:04	4° <u>♍</u> 26'37		evening set	-5567 Dec 03 j 23:28	17° <u>♍</u> 46'03	
conjunction	-5573 Dec 06 j 18:14	5° <u>♍</u> 01'22	0°36'03	conjunction	-5567 Dec 19 j 12:46	18° <u>♍</u> 21'02	0°04'01
minimum elong	-5573 Dec 06 j 18:14	5° <u>♍</u> 01'22	0°35'53	minimum elong	-5567 Dec 19 j 12:46	18° <u>♍</u> 21'02	0°03'46
max. Earth dist.	-5573 Dec 07 j 16:02	5° <u>♍</u> 03'25	31.04285 AU	behind sun begin	-5567 Dec 19 j 06:22	18° <u>♍</u> 20'28	
morning rise	-5573 Dec 22 j 07:44	5° <u>♍</u> 36'26		behind sun end	-5567 Dec 19 j 19:10	18° <u>♍</u> 21'37	

Attention, astronomical year style is used: The year -5567 in astronomical counting style is the year 5568 BCE in historical counting style.

max. Earth dist.	-5567 Dec 20 j 12:39	18° <u>M</u> 23'17	30.97724 AU	conjunction	-5560 Jan 02 j 09:52	1° <u>♂</u> 41'08	-0°28'27
morning rise	-5566 Jan 04 j 05:50	18° <u>M</u> 56'24		minimum elong	-5560 Jan 02 j 09:52	1° <u>♂</u> 41'08	0°28'44
retrograde	-5566 Apr 05 j 14:05	20° <u>M</u> 55'00		max. Earth dist.	-5560 Jan 03 j 11:40	1° <u>♂</u> 43'34	30.92886 AU
opposition	-5566 Jun 25 j 13:36	19° <u>M</u> 29'51	0°01'14	morning rise	-5560 Jan 18 j 06:18	2° <u>♂</u> 16'44	
min. Earth dist.	-5566 Jun 24 j 14:55	19° <u>M</u> 31'25	28.97184 AU	retrograde	-5560 Apr 18 j 21:18	4° <u>♂</u> 15'41	
direct	-5566 Sep 11 j 12:24	18° <u>M</u> 07'04		opposition	-5560 Jul 08 j 15:33	2° <u>♂</u> 50'21	-0°33'19
desc. node	-5566 Sep 11 j 19:00	18° <u>M</u> 07'05		min. Earth dist.	-5560 Jul 07 j 14:52	2° <u>♂</u> 52'04	28.92644 AU
evening set	-5566 Dec 06 j 10:08	19° <u>M</u> 59'11		direct	-5560 Sep 24 j 04:16	1° <u>♂</u> 27'31	
				evening set	-5560 Dec 19 j 05:17	3° <u>♂</u> 19'47	
conjunction	-5566 Dec 21 j 23:54	20° <u>M</u> 34'12	-0°01'32				
minimum elong	-5566 Dec 21 j 23:54	20° <u>M</u> 34'12	0°01'46	conjunction	-5559 Jan 03 j 22:08	3° <u>♂</u> 55'02	-0°33'45
behind sun begin	-5566 Dec 21 j 17:26	20° <u>M</u> 33'37		minimum elong	-5559 Jan 03 j 22:08	3° <u>♂</u> 55'02	0°34'02
behind sun end	-5566 Dec 22 j 06:22	20° <u>M</u> 34'47		max. Earth dist.	-5559 Jan 05 j 00:58	3° <u>♂</u> 57'34	30.92305 AU
max. Earth dist.	-5566 Dec 22 j 23:53	20° <u>M</u> 36'28	30.96623 AU	morning rise	-5559 Jan 19 j 18:53	4° <u>♂</u> 30'41	
morning rise	-5565 Jan 06 j 17:34	21° <u>M</u> 09'37		retrograde	-5559 Apr 21 j 10:28	6° <u>♂</u> 29'41	
retrograde	-5565 Apr 08 j 02:32	23° <u>M</u> 08'16		min. Earth dist.	-5559 Jul 10 j 02:47	5° <u>♂</u> 06'05	28.92039 AU
min. Earth dist.	-5565 Jun 27 j 02:05	21° <u>M</u> 44'41	28.96146 AU	opposition	-5559 Jul 11 j 03:38	5° <u>♂</u> 04'21	-0°38'59
opposition	-5565 Jun 28 j 02:00	21° <u>M</u> 43'02	-0°04'34	direct	-5559 Sep 26 j 16:48	3° <u>♂</u> 41'31	
direct	-5565 Sep 13 j 22:58	20° <u>M</u> 20'13		evening set	-5559 Dec 21 j 17:12	5° <u>♂</u> 33'50	
evening set	-5565 Dec 08 j 21:01	22° <u>M</u> 12'19					
conjunction	-5565 Dec 24 j 11:16	22° <u>M</u> 47'23	-0°06'57	conjunction	-5558 Jan 06 j 10:23	6° <u>♂</u> 09'08	-0°39'01
minimum elong	-5565 Dec 24 j 11:16	22° <u>M</u> 47'23	0°07'12	minimum elong	-5558 Jan 06 j 10:23	6° <u>♂</u> 09'08	0°39'18
behind sun begin	-5565 Dec 24 j 05:18	22° <u>M</u> 46'50		max. Earth dist.	-5558 Jan 07 j 11:58	6° <u>♂</u> 11'33	30.91667 AU
behind sun end	-5565 Dec 24 j 17:13	22° <u>M</u> 47'55		morning rise	-5558 Jan 22 j 07:45	6° <u>♂</u> 44'49	
max. Earth dist.	-5565 Dec 25 j 12:00	22° <u>M</u> 49'42	30.95639 AU	retrograde	-5558 Apr 24 j 01:37	8° <u>♂</u> 43'52	
morning rise	-5564 Jan 09 j 05:30	23° <u>M</u> 22'49		opposition	-5558 Jul 13 j 15:55	7° <u>♂</u> 18'31	-0°44'35
retrograde	-5564 Apr 09 j 14:04	25° <u>M</u> 21'31		min. Earth dist.	-5558 Jul 12 j 15:17	7° <u>♂</u> 20'14	28.91364 AU
opposition	-5564 Jun 29 j 14:24	23° <u>M</u> 56'14	-0°10'21	direct	-5558 Sep 29 j 03:57	5° <u>♂</u> 55'40	
min. Earth dist.	-5564 Jun 28 j 14:52	23° <u>M</u> 57'52	28.95238 AU	evening set	-5558 Dec 24 j 05:00	7° <u>♂</u> 48'02	
direct	-5564 Sep 15 j 08:46	22° <u>M</u> 33'24					
evening set	-5564 Dec 10 j 07:55	24° <u>M</u> 25'30		conjunction	-5557 Jan 08 j 22:44	8° <u>♂</u> 23'22	-0°44'13
conjunction	-5564 Dec 25 j 22:47	25° <u>M</u> 00'36	-0°12'20	minimum elong	-5557 Jan 08 j 22:43	8° <u>♂</u> 23'21	0°44'30
minimum elong	-5564 Dec 25 j 22:47	25° <u>M</u> 00'36	0°12'35	max. Earth dist.	-5557 Jan 10 j 00:59	8° <u>♂</u> 25'50	30.90929 AU
behind sun begin	-5564 Dec 25 j 18:37	25° <u>M</u> 00'14		morning rise	-5557 Jan 24 j 20:26	8° <u>♂</u> 59'05	
behind sun end	-5564 Dec 26 j 02:57	25° <u>M</u> 00'59		retrograde	-5557 Apr 26 j 13:31	10° <u>♂</u> 58'09	
max. Earth dist.	-5564 Dec 27 j 00:13	25° <u>M</u> 03'00	30.94806 AU	min. Earth dist.	-5557 Jul 15 j 04:10	9° <u>♂</u> 34'28	28.90579 AU
morning rise	-5563 Jan 10 j 17:32	25° <u>M</u> 36'05		opposition	-5557 Jul 16 j 04:12	9° <u>♂</u> 32'47	-0°50'07
retrograde	-5563 Apr 12 j 03:48	27° <u>M</u> 34'50		direct	-5557 Oct 01 j 15:50	8° <u>♂</u> 09'54	
min. Earth dist.	-5563 Jul 01 j 01:38	26° <u>M</u> 11'15	28.94464 AU	evening set	-5557 Dec 26 j 17:02	10° <u>♂</u> 02'18	
opposition	-5563 Jul 02 j 02:39	26° <u>M</u> 09'31	-0°16'08	conjunction	-5556 Jan 11 j 11:13	10° <u>♂</u> 37'39	-0°49'21
direct	-5563 Sep 17 j 19:16	24° <u>M</u> 46'40		minimum elong	-5556 Jan 11 j 11:13	10° <u>♂</u> 37'39	0°49'40
evening set	-5563 Dec 12 j 19:06	26° <u>M</u> 38'48		max. Earth dist.	-5556 Jan 12 j 12:43	10° <u>♂</u> 40'03	30.90111 AU
conjunction	-5563 Dec 28 j 10:19	27° <u>M</u> 13'56	-0°17'44	morning rise	-5556 Jan 27 j 09:28	11° <u>♂</u> 13'25	
minimum elong	-5563 Dec 28 j 10:19	27° <u>M</u> 13'56	0°18'00	retrograde	-5556 Apr 28 j 02:50	13° <u>♂</u> 12'30	
max. Earth dist.	-5563 Dec 29 j 11:39	27° <u>M</u> 16'19	30.94080 AU	opposition	-5556 Jul 17 j 16:15	11° <u>♂</u> 47'06	-0°55'34
morning rise	-5562 Jan 13 j 05:41	27° <u>M</u> 49'28		min. Earth dist.	-5556 Jul 16 j 15:52	11° <u>♂</u> 48'47	28.89728 AU
retrograde	-5562 Apr 14 j 16:58	29° <u>M</u> 48'17		direct	-5556 Oct 03 j 02:54	10° <u>♂</u> 24'08	
opposition	-5562 Jul 04 j 14:57	28° <u>M</u> 22'57	-0°21'53	evening set	-5556 Dec 28 j 05:11	12° <u>♂</u> 16'34	
min. Earth dist.	-5562 Jul 03 j 14:38	28° <u>M</u> 24'38	28.93797 AU	conjunction	-5555 Jan 12 j 23:49	12° <u>♂</u> 51'57	-0°54'25
direct	-5562 Sep 20 j 05:44	27° <u>M</u> 00'06		minimum elong	-5555 Jan 12 j 23:49	12° <u>♂</u> 51'57	0°54'44
evening set	-5562 Dec 15 j 06:14	28° <u>M</u> 52'16		max. Earth dist.	-5555 Jan 14 j 01:19	12° <u>♂</u> 54'22	30.89224 AU
conjunction	-5562 Dec 30 j 22:07	29° <u>M</u> 27'26	-0°23'06	morning rise	-5555 Jan 28 j 22:32	13° <u>♂</u> 27'45	
minimum elong	-5562 Dec 30 j 22:07	29° <u>M</u> 27'26	0°23'22	retrograde	-5555 Apr 30 j 14:31	15° <u>♂</u> 26'50	
max. Earth dist.	-5561 Jan 01 j 00:43	29° <u>M</u> 29'57	30.93460 AU	min. Earth dist.	-5555 Jul 19 j 05:03	14° <u>♂</u> 03'01	28.88838 AU
morning rise	-5561 Jan 14 j 09:14	0° <u>♂</u>		opposition	-5555 Jul 20 j 04:21	14° <u>♂</u> 01'23	-1°00'57
retrograde	-5561 Jan 15 j 17:51	0° <u>♂</u> 03'00		direct	-5555 Oct 05 j 13:11	12° <u>♂</u> 38'22	
min. Earth dist.	-5561 Apr 17 j 07:09	2° <u>♂</u> 01'53		evening set	-5555 Dec 30 j 17:17	14° <u>♂</u> 30'50	
opposition	-5561 Jul 06 j 01:49	0° <u>♂</u> 38'18	28.93205 AU	conjunction	-5554 Jan 15 j 12:25	15° <u>♂</u> 06'14	-0°59'24
direct	-5561 Jul 07 j 03:10	0° <u>♂</u> 36'33	-0°27'38	minimum elong	-5554 Jan 15 j 12:25	15° <u>♂</u> 06'14	0°59'44
evening set	-5561 Jul 29 j 20:18	30° <u>♂</u>		max. Earth dist.	-5554 Jan 16 j 14:01	15° <u>♂</u> 08'39	30.88342 AU
morning rise	-5561 Sep 22 j 18:04	29° <u>M</u> 13'42		morning rise	-5554 Jan 31 j 11:29	15° <u>♂</u> 42'03	
retrograde	-5561 Nov 14 j 09:22	0° <u>♂</u>		retrograde	-5554 May 03 j 03:52	17° <u>♂</u> 41'08	
opposition	-5561 Dec 17 j 17:40	1° <u>♂</u> 05'55		opposition	-5554 Jul 22 j 16:09	16° <u>♂</u> 15'38	-1°06'13
min. Earth dist.				min. Earth dist.	-5554 Jul 21 j 15:53	16° <u>♂</u> 17'20	28.87981 AU

Attention, astronomical year style is used: The year -5554 in astronomical counting style is the year 5555 BCE in historical counting style.

direct	-5554 Oct 08 j 00:01	14° $\nearrow$ 52'33		minimum elong	-5547 Jan 31 j 07:11	0° $\searrow$ 47'43	1°31'45
evening set	-5553 Jan 02 j 05:35	16° $\nearrow$ 45'04		max. Earth dist.	-5547 Feb 01 j 08:01	0° $\searrow$ 50'03	30.85024 AU
				morning rise	-5547 Feb 16 j 08:56	1° $\searrow$ 23'41	
conjunction	-5553 Jan 18 j 01:01	17° $\nearrow$ 20'30	-1°04'18	retrograde	-5547 May 19 j 03:34	3° $\searrow$ 22'48	
minimum elong	-5553 Jan 18 j 01:00	17° $\nearrow$ 20'30	1°04'37	min. Earth dist.	-5547 Aug 06 j 03:22	1° $\searrow$ 58'59	28.85025 AU
max. Earth dist.	-5553 Jan 19 j 02:09	17° $\nearrow$ 22'52	30.87513 AU	opposition	-5547 Aug 07 j 02:20	1° $\searrow$ 57'23	-1°40'01
morning rise	-5553 Feb 03 j 00:35	17° $\nearrow$ 56'20		direct	-5547 Oct 23 j 08:27	0° $\searrow$ 34'05	
retrograde	-5553 May 05 j 16:06	19° $\nearrow$ 55'25		evening set	-5546 Jan 17 j 22:25	2° $\searrow$ 27'11	
min. Earth dist.	-5553 Jul 24 j 04:49	18° $\nearrow$ 31'31	28.87216 AU				
opposition	-5553 Jul 25 j 04:06	18° $\nearrow$ 29'53	-1°11'24	conjunction	-5546 Feb 02 j 20:43	3° $\searrow$ 02'49	-1°35'30
direct	-5553 Oct 10 j 10:43	17° $\nearrow$ 06'45		minimum elong	-5546 Feb 02 j 20:42	3° $\searrow$ 02'49	1°35'50
evening set	-5552 Jan 04 j 17:45	18° $\nearrow$ 59'18		max. Earth dist.	-5546 Feb 03 j 21:14	3° $\searrow$ 05'07	30.84789 AU
				morning rise	-5546 Feb 18 j 22:42	3° $\searrow$ 38'48	
conjunction	-5552 Jan 20 j 13:47	19° $\nearrow$ 34'46	-1°09'06	retrograde	-5546 May 21 j 16:22	5° $\searrow$ 37'54	
minimum elong	-5552 Jan 20 j 13:47	19° $\nearrow$ 34'46	1°09'25	opposition	-5546 Aug 09 j 14:04	4° $\searrow$ 12'30	-1°44'18
max. Earth dist.	-5552 Jan 21 j 15:54	19° $\nearrow$ 37'14	30.86803 AU	min. Earth dist.	-5546 Aug 08 j 16:36	4° $\searrow$ 14'01	28.84767 AU
morning rise	-5552 Feb 05 j 13:38	20° $\nearrow$ 10'37		direct	-5546 Oct 25 j 19:10	2° $\searrow$ 49'11	
retrograde	-5552 May 07 j 05:33	22° $\nearrow$ 09'43		evening set	-5545 Jan 20 j 11:44	4° $\searrow$ 42'22	
opposition	-5552 Jul 26 j 15:51	20° $\nearrow$ 44'10	-1°16'29				
min. Earth dist.	-5552 Jul 25 j 15:42	20° $\nearrow$ 45'51	28.86568 AU	conjunction	-5545 Feb 05 j 10:28	5° $\searrow$ 18'01	-1°39'26
direct	-5552 Oct 11 j 22:56	19° $\nearrow$ 20'58		minimum elong	-5545 Feb 05 j 10:27	5° $\searrow$ 18'01	1°39'46
evening set	-5551 Jan 06 j 06:18	21° $\nearrow$ 13'36		max. Earth dist.	-5545 Feb 06 j 10:17	5° $\searrow$ 20'15	30.84492 AU
				morning rise	-5545 Feb 21 j 12:43	5° $\searrow$ 54'01	
conjunction	-5551 Jan 22 j 02:36	21° $\nearrow$ 49'05	-1°13'48	retrograde	-5545 May 24 j 05:56	7° $\searrow$ 53'06	
minimum elong	-5551 Jan 22 j 02:36	21° $\nearrow$ 49'05	1°14'06	min. Earth dist.	-5545 Aug 11 j 03:53	6° $\searrow$ 29'15	28.84423 AU
max. Earth dist.	-5551 Jan 23 j 03:43	21° $\nearrow$ 51'27	30.86216 AU	opposition	-5545 Aug 12 j 01:40	6° $\searrow$ 27'43	-1°48'26
morning rise	-5551 Feb 07 j 03:00	22° $\nearrow$ 24'58		direct	-5545 Oct 28 j 06:46	5° $\searrow$ 04'20	
retrograde	-5551 May 09 j 19:18	24° $\nearrow$ 24'04		evening set	-5544 Jan 23 j 01:13	6° $\searrow$ 57'35	
min. Earth dist.	-5551 Jul 28 j 04:08	23° $\nearrow$ 00'09	28.86064 AU				
opposition	-5551 Jul 29 j 03:34	22° $\nearrow$ 58'31	-1°21'27	conjunction	-5544 Feb 08 j 00:13	7° $\searrow$ 33'15	-1°43'13
direct	-5551 Oct 14 j 08:48	21° $\nearrow$ 35'16		minimum elong	-5544 Feb 08 j 00:13	7° $\searrow$ 33'15	1°43'33
evening set	-5550 Jan 08 j 18:46	23° $\nearrow$ 27'59		max. Earth dist.	-5544 Feb 08 j 22:47	7° $\searrow$ 35'22	30.84086 AU
				morning rise	-5544 Feb 24 j 02:52	8° $\searrow$ 09'16	
conjunction	-5550 Jan 24 j 15:38	24° $\nearrow$ 03'30	-1°18'23	retrograde	-5544 May 25 j 17:31	10° $\searrow$ 08'18	
minimum elong	-5550 Jan 24 j 15:37	24° $\nearrow$ 03'30	1°18'42	opposition	-5544 Aug 13 j 13:24	8° $\searrow$ 42'55	-1°52'24
max. Earth dist.	-5550 Jan 25 j 17:49	24° $\nearrow$ 05'58	30.85770 AU	min. Earth dist.	-5544 Aug 12 j 17:20	8° $\searrow$ 44'20	28.83976 AU
morning rise	-5550 Feb 09 j 16:13	24° $\nearrow$ 39'24		direct	-5544 Oct 29 j 17:32	7° $\searrow$ 19'27	
retrograde	-5550 May 12 j 09:00	26° $\nearrow$ 38'30		evening set	-5543 Jan 24 j 14:42	9° $\searrow$ 12'46	
opposition	-5550 Jul 31 j 15:17	25° $\nearrow$ 12'58	-1°26'17				
min. Earth dist.	-5550 Jul 30 j 15:29	25° $\nearrow$ 14'38	28.85684 AU	conjunction	-5543 Feb 09 j 14:13	9° $\searrow$ 48'27	-1°46'51
direct	-5550 Oct 16 j 21:35	23° $\nearrow$ 49'43		minimum elong	-5543 Feb 09 j 14:12	9° $\searrow$ 48'27	1°47'10
evening set	-5549 Jan 11 j 07:20	25° $\nearrow$ 42'31		max. Earth dist.	-5543 Feb 10 j 12:48	9° $\searrow$ 50'35	30.83597 AU
				morning rise	-5543 Feb 25 j 17:00	10° $\searrow$ 24'28	
conjunction	-5549 Jan 27 j 04:27	26° $\nearrow$ 18'04	-1°22'51	retrograde	-5543 May 28 j 06:20	12° $\searrow$ 23'26	
minimum elong	-5549 Jan 27 j 04:27	26° $\nearrow$ 18'04	1°23'10	min. Earth dist.	-5543 Aug 15 j 04:33	10° $\searrow$ 59'27	28.83455 AU
max. Earth dist.	-5549 Jan 28 j 05:34	26° $\nearrow$ 20'25	30.85452 AU	opposition	-5543 Aug 16 j 00:44	10° $\searrow$ 58'02	-1°56'11
morning rise	-5549 Feb 12 j 05:34	26° $\nearrow$ 53'59		direct	-5543 Nov 01 j 05:42	9° $\searrow$ 34'28	
retrograde	-5549 May 15 j 00:39	28° $\nearrow$ 53'06		evening set	-5542 Jan 27 j 04:19	11° $\searrow$ 27'52	
min. Earth dist.	-5549 Aug 02 j 03:24	27° $\nearrow$ 29'15	28.85424 AU				
opposition	-5549 Aug 03 j 03:03	27° $\nearrow$ 27'35	-1°31'00	conjunction	-5542 Feb 12 j 04:00	12° $\searrow$ 03'34	-1°50'19
direct	-5549 Oct 19 j 09:15	26° $\nearrow$ 04'19		minimum elong	-5542 Feb 12 j 04:00	12° $\searrow$ 03'34	1°50'39
evening set	-5548 Jan 13 j 20:09	27° $\nearrow$ 57'13		max. Earth dist.	-5542 Feb 13 j 01:00	12° $\searrow$ 05'32	30.83058 AU
				morning rise	-5542 Feb 28 j 07:12	12° $\searrow$ 39'35	
conjunction	-5548 Jan 29 j 17:46	28° $\nearrow$ 32'48	-1°27'12	retrograde	-5542 May 30 j 19:22	14° $\searrow$ 38'29	
minimum elong	-5548 Jan 29 j 17:45	28° $\nearrow$ 32'48	1°27'32	opposition	-5542 Aug 18 j 12:13	13° $\searrow$ 13'03	-1°59'48
max. Earth dist.	-5548 Jan 30 j 19:37	28° $\nearrow$ 35'14	30.85217 AU	min. Earth dist.	-5542 Aug 17 j 17:17	13° $\searrow$ 14'23	28.82930 AU
morning rise	-5548 Feb 14 j 19:06	29° $\nearrow$ 08'45		direct	-5542 Nov 03 j 15:59	11° $\searrow$ 49'23	
	-5548 Mar 10 j 17:38	0° $\searrow$		evening set	-5541 Jan 29 j 17:38	13° $\searrow$ 42'51	
retrograde	-5548 May 16 j 12:46	1° $\searrow$ 07'52					
	-5548 Jul 25 j 02:14	30° $\nearrow$		conjunction	-5541 Feb 14 j 17:50	14° $\searrow$ 18'34	-1°53'37
opposition	-5548 Aug 04 j 14:40	29° $\nearrow$ 42'24	-1°35'35	minimum elong	-5541 Feb 14 j 17:50	14° $\searrow$ 18'34	1°53'56
min. Earth dist.	-5548 Aug 03 j 15:47	29° $\nearrow$ 44'00	28.85218 AU	max. Earth dist.	-5541 Feb 15 j 15:26	14° $\searrow$ 20'35	30.82540 AU
direct	-5548 Oct 20 j 21:02	28° $\nearrow$ 19'07		morning rise	-5541 Mar 02 j 21:07	14° $\searrow$ 54'35	
	-5547 Jan 09 j 19:19	0° $\searrow$		retrograde	-5541 Jun 02 j 08:02	16° $\searrow$ 53'24	
evening set	-5547 Jan 15 j 09:14	0° $\searrow$ 12'07		opposition	-5541 Aug 20 j 23:31	15° $\searrow$ 27'57	-2°03'14
				min. Earth dist.	-5541 Aug 20 j 04:40	15° $\searrow$ 29'17	28.82440 AU
conjunction	-5547 Jan 31 j 07:12	0° $\searrow$ 47'43	-1°31'25	direct	-5541 Nov 06 j 05:19	14° $\searrow$ 04'12	

Attention, astronomical year style is used: The year -5540 in astronomical counting style is the year 5541 BCE in historical counting style.

evening set	-5540 Feb 01 j 07:21	15° $\text{♁}$ 57'44		max. Earth dist.	-5534 Mar 03 j 14:27	0° $\text{♁}$ 05'24	30.81901 AU
				morning rise	-5534 Mar 19 j 01:35	0° $\text{♁}$ 39'50	
conjunction	-5540 Feb 17 j 07:45	16° $\text{♁}$ 33'28	-1°56'44	retrograde	-5534 Jun 18 j 05:11	2° $\text{♁}$ 38'13	
minimum elong	-5540 Feb 17 j 07:45	16° $\text{♁}$ 33'28	1°57'03	opposition	-5534 Sep 05 j 05:17	1° $\text{♁}$ 13'06	-2°21'42
max. Earth dist.	-5540 Feb 18 j 03:45	16° $\text{♁}$ 35'20	30.82091 AU	min. Earth dist.	-5534 Sep 04 j 14:02	1° $\text{♁}$ 14'11	28.82153 AU
morning rise	-5540 Mar 04 j 11:26	17° $\text{♁}$ 09'30			-5534 Oct 27 j 04:52	30° $\text{♁}$	
retrograde	-5540 Jun 03 j 22:31	19° $\text{♁}$ 08'14		direct	-5534 Nov 21 j 13:36	29° $\text{♁}$ 49'05	
opposition	-5540 Aug 22 j 10:41	17° $\text{♁}$ 42'47	-2°06'28		-5534 Dec 16 j 17:51	0° $\text{♁}$	
min. Earth dist.	-5540 Aug 21 j 16:18	17° $\text{♁}$ 44'05	28.82054 AU	evening set	-5533 Feb 17 j 08:48	1° $\text{♁}$ 43'25	
direct	-5540 Nov 07 j 17:08	16° $\text{♁}$ 18'56					
evening set	-5539 Feb 02 j 21:01	18° $\text{♁}$ 12'34		conjunction	-5533 Mar 05 j 11:18	2° $\text{♁}$ 19'16	-2°13'21
				minimum elong	-5533 Mar 05 j 11:17	2° $\text{♁}$ 19'16	2°13'38
conjunction	-5539 Feb 18 j 21:51	18° $\text{♁}$ 48'19	-1°59'40	max. Earth dist.	-5533 Mar 06 j 02:56	2° $\text{♁}$ 20'44	30.82051 AU
minimum elong	-5539 Feb 18 j 21:51	18° $\text{♁}$ 48'19	1°59'59	morning rise	-5533 Mar 21 j 16:17	2° $\text{♁}$ 55'22	
max. Earth dist.	-5539 Feb 19 j 18:23	18° $\text{♁}$ 50'15	30.81748 AU	retrograde	-5533 Jun 20 j 17:36	4° $\text{♁}$ 53'41	
morning rise	-5539 Mar 07 j 01:37	19° $\text{♁}$ 24'22		opposition	-5533 Sep 07 j 16:28	3° $\text{♁}$ 28'38	-2°23'30
retrograde	-5539 Jun 06 j 10:36	21° $\text{♁}$ 23'01		min. Earth dist.	-5533 Sep 07 j 02:54	3° $\text{♁}$ 29'36	28.82281 AU
opposition	-5539 Aug 24 j 21:54	19° $\text{♁}$ 57'35	-2°09'31	direct	-5533 Nov 23 j 23:37	2° $\text{♁}$ 04'33	
min. Earth dist.	-5539 Aug 24 j 04:14	19° $\text{♁}$ 58'50	28.81781 AU	evening set	-5532 Feb 19 j 23:08	3° $\text{♁}$ 59'00	
direct	-5539 Nov 10 j 05:16	18° $\text{♁}$ 33'41					
evening set	-5538 Feb 05 j 10:41	20° $\text{♁}$ 27'25		conjunction	-5532 Mar 07 j 02:06	4° $\text{♁}$ 34'53	-2°14'56
				minimum elong	-5532 Mar 07 j 02:06	4° $\text{♁}$ 34'53	2°15'12
conjunction	-5538 Feb 21 j 11:44	21° $\text{♁}$ 03'11	-2°02'26	max. Earth dist.	-5532 Mar 07 j 17:37	4° $\text{♁}$ 36'20	30.82131 AU
minimum elong	-5538 Feb 21 j 11:44	21° $\text{♁}$ 03'11	2°02'45	morning rise	-5532 Mar 23 j 07:05	5° $\text{♁}$ 10'58	
max. Earth dist.	-5538 Feb 22 j 07:10	21° $\text{♁}$ 05'00	30.81548 AU	retrograde	-5532 Jun 22 j 05:37	7° $\text{♁}$ 09'11	
morning rise	-5538 Mar 09 j 15:47	21° $\text{♁}$ 39'13		opposition	-5532 Sep 09 j 03:24	5° $\text{♁}$ 44'10	-2°25'04
retrograde	-5538 Jun 09 j 01:32	23° $\text{♁}$ 37'50		min. Earth dist.	-5532 Sep 08 j 14:29	5° $\text{♁}$ 45'06	28.82314 AU
opposition	-5538 Aug 27 j 09:02	22° $\text{♁}$ 12'25	-2°12'22	direct	-5532 Nov 25 j 13:00	4° $\text{♁}$ 20'02	
min. Earth dist.	-5538 Aug 26 j 15:07	22° $\text{♁}$ 13'41	28.81659 AU	evening set	-5531 Feb 21 j 13:39	6° $\text{♁}$ 14'35	
direct	-5538 Nov 12 j 17:16	20° $\text{♁}$ 48'29					
evening set	-5537 Feb 08 j 00:27	22° $\text{♁}$ 42'19		conjunction	-5531 Mar 09 j 16:45	6° $\text{♁}$ 50'28	-2°16'18
				minimum elong	-5531 Mar 09 j 16:45	6° $\text{♁}$ 50'28	2°16'35
conjunction	-5537 Feb 24 j 01:51	23° $\text{♁}$ 18'06	-2°05'00	max. Earth dist.	-5531 Mar 10 j 05:54	6° $\text{♁}$ 51'41	30.82129 AU
minimum elong	-5537 Feb 24 j 01:50	23° $\text{♁}$ 18'06	2°05'19	morning rise	-5531 Mar 25 j 22:02	7° $\text{♁}$ 26'32	
max. Earth dist.	-5537 Feb 24 j 21:17	23° $\text{♁}$ 19'55	30.81486 AU	retrograde	-5531 Jun 24 j 19:21	9° $\text{♁}$ 24'39	
morning rise	-5537 Mar 12 j 06:03	23° $\text{♁}$ 54'09		opposition	-5531 Sep 11 j 14:25	7° $\text{♁}$ 59'40	-2°26'26
retrograde	-5537 Jun 11 j 14:20	25° $\text{♁}$ 52'42		min. Earth dist.	-5531 Sep 11 j 02:29	8° $\text{♁}$ 00'30	28.82286 AU
opposition	-5537 Aug 29 j 20:10	24° $\text{♁}$ 27'21	-2°15'01	direct	-5531 Nov 28 j 00:56	6° $\text{♁}$ 35'25	
min. Earth dist.	-5537 Aug 29 j 03:35	24° $\text{♁}$ 28'32	28.81673 AU	evening set	-5530 Feb 24 j 03:51	8° $\text{♁}$ 30'03	
direct	-5537 Nov 15 j 04:16	23° $\text{♁}$ 03'23					
evening set	-5536 Feb 10 j 14:18	24° $\text{♁}$ 57'20		conjunction	-5530 Mar 12 j 07:20	9° $\text{♁}$ 05'57	-2°17'28
				minimum elong	-5530 Mar 12 j 07:20	9° $\text{♁}$ 05'57	2°17'44
conjunction	-5536 Feb 26 j 16:05	25° $\text{♁}$ 33'09	-2°07'23	max. Earth dist.	-5530 Mar 12 j 20:33	9° $\text{♁}$ 07'11	30.82070 AU
minimum elong	-5536 Feb 26 j 16:05	25° $\text{♁}$ 33'09	2°07'42	morning rise	-5530 Mar 28 j 12:35	9° $\text{♁}$ 42'01	
max. Earth dist.	-5536 Feb 27 j 10:51	25° $\text{♁}$ 34'54	30.81565 AU	retrograde	-5530 Jun 27 j 07:08	11° $\text{♁}$ 40'00	
morning rise	-5536 Mar 13 j 20:30	26° $\text{♁}$ 09'13		opposition	-5530 Sep 14 j 01:21	10° $\text{♁}$ 15'01	-2°27'34
retrograde	-5536 Jun 13 j 04:00	28° $\text{♁}$ 07'43		min. Earth dist.	-5530 Sep 13 j 14:36	10° $\text{♁}$ 15'47	28.82215 AU
opposition	-5536 Aug 31 j 07:12	26° $\text{♁}$ 42'26	-2°17'27	direct	-5530 Nov 30 j 13:13	8° $\text{♁}$ 50'41	
min. Earth dist.	-5536 Aug 30 j 14:12	26° $\text{♁}$ 43'38	28.81796 AU	evening set	-5529 Feb 26 j 18:14	10° $\text{♁}$ 45'23	
direct	-5536 Nov 16 j 16:03	25° $\text{♁}$ 18'27					
evening set	-5535 Feb 12 j 04:27	27° $\text{♁}$ 12'32		conjunction	-5529 Mar 14 j 21:54	11° $\text{♁}$ 21'17	-2°18'26
				minimum elong	-5529 Mar 14 j 21:54	11° $\text{♁}$ 21'17	2°18'42
conjunction	-5535 Feb 28 j 06:24	27° $\text{♁}$ 48'21	-2°09'34	max. Earth dist.	-5529 Mar 15 j 09:21	11° $\text{♁}$ 22'21	30.82014 AU
minimum elong	-5535 Feb 28 j 06:24	27° $\text{♁}$ 48'21	2°09'53	morning rise	-5529 Mar 31 j 03:25	11° $\text{♁}$ 57'21	
max. Earth dist.	-5535 Mar 01 j 00:07	27° $\text{♁}$ 50'01	30.81713 AU	retrograde	-5529 Jun 29 j 21:48	13° $\text{♁}$ 55'11	
morning rise	-5535 Mar 16 j 11:02	28° $\text{♁}$ 24'26		opposition	-5529 Sep 16 j 12:02	12° $\text{♁}$ 30'12	-2°28'29
	-5535 May 09 j 03:32	0° $\text{♁}$		min. Earth dist.	-5529 Sep 16 j 01:32	12° $\text{♁}$ 30'57	28.82178 AU
retrograde	-5535 Jun 15 j 15:44	0° $\text{♁}$ 22'53		direct	-5529 Dec 03 j 02:32	11° $\text{♁}$ 05'46	
	-5535 Jul 23 j 14:18	30° $\text{♁}$		evening set	-5528 Feb 29 j 08:35	13° $\text{♁}$ 00'32	
opposition	-5535 Sep 02 j 18:17	28° $\text{♁}$ 57'41	-2°19'41				
min. Earth dist.	-5535 Sep 02 j 03:01	28° $\text{♁}$ 58'46	28.81976 AU	conjunction	-5528 Mar 16 j 12:35	13° $\text{♁}$ 36'27	-2°19'11
direct	-5535 Nov 19 j 02:15	27° $\text{♁}$ 33'41		minimum elong	-5528 Mar 16 j 12:35	13° $\text{♁}$ 36'27	2°19'26
evening set	-5534 Feb 14 j 18:33	29° $\text{♁}$ 27'54		max. Earth dist.	-5528 Mar 16 j 23:47	13° $\text{♁}$ 37'30	30.81995 AU
	-5534 Mar 01 j 04:53	0° $\text{♁}$		morning rise	-5528 Apr 01 j 18:08	14° $\text{♁}$ 12'31	
					-5528 Apr 24 j 20:37	15° $\text{♁}$	
conjunction	-5534 Mar 02 j 20:55	0° $\text{♁}$ 03'45	-2°11'34	retrograde	-5528 Jul 01 j 09:36	16° $\text{♁}$ 10'12	
minimum elong	-5534 Mar 02 j 20:55	0° $\text{♁}$ 03'45	2°11'51		-5528 Sep 09 j 06:30	15° $\text{♁}$	

Attention, astronomical year style is used: The year -5528 in astronomical counting style is the year 5529 BCE in historical counting style.

opposition	-5528 Sep 17 j 22:51	14°45'14"	-2°29'10"	minimum elong	-5521 Apr 02 j 18:49	29°20'40"	2°18'37"
min. Earth dist.	-5528 Sep 17 j 13:56	14°45'52"	28.82203 AU	max. Earth dist.	-5521 Apr 03 j 00:28	29°21'12"	30.85280 AU
direct	-5528 Dec 04 j 15:01	13°20'43"		morning rise	-5521 Apr 19 j 00:50	29°56'43"	
	-5527 Feb 23 j 17:15	15°			-5521 Apr 20 j 13:08	0°	
evening set	-5527 Mar 02 j 22:53	15°15'32"		retrograde	-5521 Jul 17 j 23:10	1°53'31"	
				opposition	-5521 Oct 04 j 00:58	0°29'03"	-2°27'32"
conjunction	-5527 Mar 19 j 03:07	15°51'27"	-2°19'43"	min. Earth dist.	-5521 Oct 03 j 21:08	0°29'20"	28.85802 AU
minimum elong	-5527 Mar 19 j 03:07	15°51'27"	2°19'58"		-5521 Oct 21 j 08:52	30°	
max. Earth dist.	-5527 Mar 19 j 13:18	15°52'24"	30.82077 AU	direct	-5521 Dec 20 j 23:52	29°04'17"	
morning rise	-5527 Apr 04 j 08:48	16°27'31"			-5520 Feb 18 j 03:47	0°	
retrograde	-5527 Jul 03 j 22:56	18°25'03"		evening set	-5520 Mar 19 j 03:56	0°59'48"	
opposition	-5527 Sep 20 j 09:23	17°00'06"	-2°29'37"				
min. Earth dist.	-5527 Sep 20 j 00:06	17°00'46"	28.82345 AU	conjunction	-5520 Apr 04 j 09:39	1°35'47"	-2°17'28"
direct	-5527 Dec 07 j 03:52	15°35'30"		minimum elong	-5520 Apr 04 j 09:40	1°35'47"	2°17'38"
evening set	-5526 Mar 05 j 13:13	17°30'24"		max. Earth dist.	-5520 Apr 04 j 13:00	1°36'05"	30.85963 AU
				morning rise	-5520 Apr 20 j 15:52	2°11'49"	
conjunction	-5526 Mar 21 j 17:37	18°06'20"	-2°20'02"	retrograde	-5520 Jul 19 j 13:22	4°08'29"	
minimum elong	-5526 Mar 21 j 17:37	18°06'20"	2°20'16"	opposition	-5520 Oct 05 j 11:35	2°44'06"	-2°26'24"
max. Earth dist.	-5526 Mar 22 j 02:55	18°07'12"	30.82283 AU	min. Earth dist.	-5520 Oct 05 j 08:17	2°44'20"	28.86444 AU
morning rise	-5526 Apr 06 j 23:23	18°42'23"		direct	-5520 Dec 22 j 13:10	1°19'18"	
retrograde	-5526 Jul 06 j 10:52	20°39'47"		evening set	-5519 Mar 21 j 18:32	3°14'54"	
opposition	-5526 Sep 22 j 20:07	19°14'52"	-2°29'51"				
min. Earth dist.	-5526 Sep 22 j 12:18	19°15'25"	28.82637 AU	conjunction	-5519 Apr 07 j 00:31	3°50'54"	-2°16'18"
direct	-5526 Dec 09 j 14:33	17°50'13"		minimum elong	-5519 Apr 07 j 00:31	3°50'54"	2°16'28"
evening set	-5525 Mar 08 j 03:20	19°45'11"		max. Earth dist.	-5519 Apr 07 j 03:16	3°51'09"	30.86553 AU
				morning rise	-5519 Apr 23 j 06:36	4°26'55"	
conjunction	-5525 Mar 24 j 08:07	20°21'07"	-2°20'09"	retrograde	-5519 Jul 22 j 00:44	6°23'27"	
minimum elong	-5525 Mar 24 j 08:07	20°21'07"	2°20'23"	opposition	-5519 Oct 07 j 22:16	4°59'08"	-2°25'02"
max. Earth dist.	-5525 Mar 24 j 17:17	20°21'58"	30.82660 AU	min. Earth dist.	-5519 Oct 07 j 20:56	4°59'14"	28.86991 AU
morning rise	-5525 Apr 09 j 13:56	20°57'10"		direct	-5519 Dec 25 j 01:50	3°34'17"	
retrograde	-5525 Jul 08 j 23:56	22°54'26"		evening set	-5518 Mar 24 j 09:08	5°29'57"	
opposition	-5525 Sep 25 j 06:39	21°29'35"	-2°29'51"				
min. Earth dist.	-5525 Sep 24 j 22:36	21°30'09"	28.83081 AU	conjunction	-5518 Apr 09 j 15:16	6°05'57"	-2°14'55"
direct	-5525 Dec 12 j 02:34	20°04'53"		minimum elong	-5518 Apr 09 j 15:16	6°05'57"	2°15'04"
evening set	-5524 Mar 09 j 17:49	21°59'57"		max. Earth dist.	-5518 Apr 09 j 16:19	6°06'03"	30.87079 AU
				morning rise	-5518 Apr 25 j 21:27	6°41'58"	
conjunction	-5524 Mar 25 j 22:41	22°35'54"	-2°20'02"	retrograde	-5518 Jul 24 j 14:20	8°38'20"	
minimum elong	-5524 Mar 25 j 22:41	22°35'54"	2°20'15"	opposition	-5518 Oct 10 j 08:42	7°14'05"	-2°23'27"
max. Earth dist.	-5524 Mar 26 j 06:18	22°36'36"	30.83178 AU	min. Earth dist.	-5518 Oct 10 j 07:26	7°14'10"	28.87481 AU
morning rise	-5524 Apr 11 j 04:42	23°11'57"		direct	-5518 Dec 27 j 15:11	5°49'10"	
retrograde	-5524 Jul 10 j 11:08	25°09'05"		evening set	-5517 Mar 26 j 23:37	7°44'54"	
opposition	-5524 Sep 26 j 17:13	23°44'19"	-2°29'37"				
min. Earth dist.	-5524 Sep 26 j 10:33	23°44'48"	28.83673 AU	conjunction	-5517 Apr 12 j 05:56	8°20'54"	-2°13'20"
direct	-5524 Dec 13 j 12:42	22°19'36"		minimum elong	-5517 Apr 12 j 05:57	8°20'54"	2°13'30"
evening set	-5523 Mar 12 j 08:12	24°14'46"		max. Earth dist.	-5517 Apr 12 j 05:48	8°20'53"	30.87548 AU
				morning rise	-5517 Apr 28 j 12:08	8°56'54"	
conjunction	-5523 Mar 28 j 13:27	24°50'43"	-2°19'43"	retrograde	-5517 Jul 27 j 02:26	10°53'06"	
minimum elong	-5523 Mar 28 j 13:27	24°50'43"	2°19'56"	opposition	-5517 Oct 12 j 19:16	9°28'53"	-2°21'39"
max. Earth dist.	-5523 Mar 28 j 21:17	24°51'27"	30.83829 AU	min. Earth dist.	-5517 Oct 12 j 19:57	9°28'50"	28.87941 AU
morning rise	-5523 Apr 13 j 19:22	25°26'46"		direct	-5517 Dec 30 j 02:49	8°03'55"	
retrograde	-5523 Jul 12 j 22:30	27°23'47"		evening set	-5516 Mar 28 j 14:06	9°59'41"	
opposition	-5523 Sep 29 j 03:48	25°59'08"	-2°29'09"				
min. Earth dist.	-5523 Sep 28 j 21:35	25°59'34"	28.84358 AU	conjunction	-5516 Apr 13 j 20:39	10°35'42"	-2°11'34"
direct	-5523 Dec 16 j 01:08	24°34'24"		minimum elong	-5516 Apr 13 j 20:40	10°35'42"	2°11'41"
evening set	-5522 Mar 14 j 22:38	26°29'41"		max. Earth dist.	-5516 Apr 13 j 19:45	10°35'37"	30.88020 AU
				morning rise	-5516 Apr 30 j 02:49	11°11'42"	
conjunction	-5522 Mar 31 j 03:55	27°05'39"	-2°19'11"	retrograde	-5516 Jul 28 j 15:08	13°07'42"	
minimum elong	-5522 Mar 31 j 03:55	27°05'39"	2°19'22"	opposition	-5516 Oct 14 j 05:33	11°43'33"	-2°19'39"
max. Earth dist.	-5522 Mar 31 j 09:39	27°06'11"	30.84551 AU	min. Earth dist.	-5516 Oct 14 j 06:20	11°43'29"	28.88414 AU
morning rise	-5522 Apr 16 j 10:03	27°41'41"		direct	-5516 Dec 31 j 15:43	10°18'31"	
retrograde	-5522 Jul 15 j 11:39	29°38'36"		evening set	-5515 Mar 31 j 04:36	12°14'20"	
opposition	-5522 Oct 01 j 14:25	28°14'03"	-2°28'27"				
min. Earth dist.	-5522 Oct 01 j 09:05	28°14'26"	28.85097 AU	conjunction	-5515 Apr 16 j 11:10	12°50'20"	-2°09'35"
direct	-5522 Dec 18 j 11:58	26°49'18"		minimum elong	-5515 Apr 16 j 11:10	12°50'21"	2°09'43"
evening set	-5521 Mar 17 j 13:10	28°44'42"		max. Earth dist.	-5515 Apr 16 j 08:41	12°50'07"	30.88523 AU
				morning rise	-5515 May 02 j 17:23	13°26'20"	
conjunction	-5521 Apr 02 j 18:49	29°20'40"	-2°18'26"	retrograde	-5515 Jul 31 j 01:33	15°22'10"	

Attention, astronomical year style is used: The year -5515 in astronomical counting style is the year 5516 BCE in historical counting style.

opposition	-5515 Oct 16 j 16:02	13° $\mathbf{H}$ 58'03	-2°17'26	max. Earth dist.	-5508 May 02 j 07:05	28° $\mathbf{H}$ 30'00	30.94891 AU
min. Earth dist.	-5515 Oct 16 j 18:12	13° $\mathbf{H}$ 57'54	28.88963 AU	morning rise	-5508 May 18 j 21:08	29° $\mathbf{H}$ 06'41	
direct	-5514 Jan 03 j 02:35	12° $\mathbf{H}$ 32'57			-5508 Jun 14 j 06:55	0° $\mathbf{Y}$	
evening set	-5514 Apr 02 j 18:41	14° $\mathbf{H}$ 28'49		retrograde	-5508 Aug 15 j 10:38	1° $\mathbf{Y}$ 01'29	
					-5508 Oct 18 j 14:08	30° $\mathbf{R}$ $\mathbf{H}$	
conjunction	-5514 Apr 19 j 01:31	15° $\mathbf{H}$ 04'50	-2°07'26	opposition	-5508 Oct 31 j 16:31	29° $\mathbf{H}$ 37'58	-1°56'20
minimum elong	-5514 Apr 19 j 01:32	15° $\mathbf{H}$ 04'50	2°07'31	min. Earth dist.	-5508 Nov 01 j 00:37	29° $\mathbf{H}$ 37'24	28.95498 AU
max. Earth dist.	-5514 Apr 18 j 23:15	15° $\mathbf{H}$ 04'37	30.89124 AU	direct	-5507 Jan 18 j 15:35	28° $\mathbf{H}$ 12'47	
morning rise	-5514 May 05 j 07:36	15° $\mathbf{H}$ 40'48			-5507 Apr 14 j 17:12	0° $\mathbf{Y}$	
retrograde	-5514 Aug 02 j 12:02	17° $\mathbf{H}$ 36'28		evening set	-5507 Apr 18 j 22:36	0° $\mathbf{Y}$ 09'05	
opposition	-5514 Oct 19 j 02:23	16° $\mathbf{H}$ 12'25	-2°15'01				
min. Earth dist.	-5514 Oct 19 j 04:54	16° $\mathbf{H}$ 12'14	28.89609 AU	conjunction	-5507 May 05 j 05:51	0° $\mathbf{Y}$ 45'06	-1°47'04
direct	-5513 Jan 05 j 15:07	14° $\mathbf{H}$ 47'16		minimum elong	-5507 May 05 j 05:52	0° $\mathbf{Y}$ 45'06	1°47'05
evening set	-5513 Apr 05 j 09:03	16° $\mathbf{H}$ 43'11		max. Earth dist.	-5507 May 04 j 20:19	0° $\mathbf{Y}$ 44'13	30.95852 AU
				morning rise	-5507 May 21 j 11:20	1° $\mathbf{Y}$ 20'59	
conjunction	-5513 Apr 21 j 15:51	17° $\mathbf{H}$ 19'12	-2°05'04	retrograde	-5507 Aug 17 j 23:01	3° $\mathbf{Y}$ 15'37	
minimum elong	-5513 Apr 21 j 15:52	17° $\mathbf{H}$ 19'12	2°05'10	opposition	-5507 Nov 03 j 02:58	1° $\mathbf{Y}$ 52'11	-1°52'34
max. Earth dist.	-5513 Apr 21 j 11:40	17° $\mathbf{H}$ 18'49	30.89842 AU	min. Earth dist.	-5507 Nov 03 j 11:19	1° $\mathbf{Y}$ 51'36	28.96391 AU
morning rise	-5513 May 07 j 22:03	17° $\mathbf{H}$ 55'10		direct	-5506 Jan 21 j 05:35	0° $\mathbf{Y}$ 26'58	
retrograde	-5513 Aug 05 j 00:06	19° $\mathbf{H}$ 50'40		evening set	-5506 Apr 21 j 12:46	2° $\mathbf{Y}$ 23'18	
opposition	-5513 Oct 21 j 12:38	18° $\mathbf{H}$ 26'41	-2°12'23				
min. Earth dist.	-5513 Oct 21 j 15:46	18° $\mathbf{H}$ 26'27	28.90398 AU	conjunction	-5506 May 07 j 19:55	2° $\mathbf{Y}$ 59'19	-1°43'28
direct	-5512 Jan 08 j 01:21	17° $\mathbf{H}$ 01'30		minimum elong	-5506 May 07 j 19:55	2° $\mathbf{Y}$ 59'19	1°43'28
evening set	-5512 Apr 06 j 23:17	18° $\mathbf{H}$ 57'28		max. Earth dist.	-5506 May 07 j 08:36	2° $\mathbf{Y}$ 58'16	30.96695 AU
				morning rise	-5506 May 24 j 01:18	3° $\mathbf{Y}$ 35'10	
conjunction	-5512 Apr 23 j 06:22	19° $\mathbf{H}$ 33'29	-2°02'31	retrograde	-5506 Aug 20 j 09:54	5° $\mathbf{Y}$ 29'38	
minimum elong	-5512 Apr 23 j 06:22	19° $\mathbf{H}$ 33'30	2°02'36	opposition	-5506 Nov 05 j 13:29	4° $\mathbf{Y}$ 06'16	-1°48'39
max. Earth dist.	-5512 Apr 23 j 02:27	19° $\mathbf{H}$ 33'08	30.90699 AU	min. Earth dist.	-5506 Nov 05 j 23:31	4° $\mathbf{Y}$ 05'33	28.97187 AU
morning rise	-5512 May 09 j 12:19	20° $\mathbf{H}$ 09'27		direct	-5505 Jan 23 j 16:58	2° $\mathbf{Y}$ 41'00	
retrograde	-5512 Aug 06 j 10:02	22° $\mathbf{H}$ 04'48		evening set	-5505 Apr 24 j 02:52	4° $\mathbf{Y}$ 37'21	
opposition	-5512 Oct 22 j 23:03	20° $\mathbf{H}$ 40'54	-2°09'34				
min. Earth dist.	-5512 Oct 23 j 03:12	20° $\mathbf{H}$ 40'36	28.91309 AU	conjunction	-5505 May 10 j 10:09	5° $\mathbf{Y}$ 13'21	-1°39'44
direct	-5511 Jan 09 j 13:10	19° $\mathbf{H}$ 15'43		minimum elong	-5505 May 10 j 10:10	5° $\mathbf{Y}$ 13'21	1°39'44
evening set	-5511 Apr 09 j 13:32	21° $\mathbf{H}$ 11'45		max. Earth dist.	-5505 May 09 j 22:32	5° $\mathbf{Y}$ 12'16	30.97451 AU
				morning rise	-5505 May 26 j 15:17	5° $\mathbf{Y}$ 49'11	
conjunction	-5511 Apr 25 j 20:31	21° $\mathbf{H}$ 47'46	-1°59'47	retrograde	-5505 Aug 22 j 20:33	7° $\mathbf{Y}$ 43'28	
minimum elong	-5511 Apr 25 j 20:32	21° $\mathbf{H}$ 47'46	1°59'52	opposition	-5505 Nov 07 j 23:45	6° $\mathbf{Y}$ 20'08	-1°44'35
max. Earth dist.	-5511 Apr 25 j 14:48	21° $\mathbf{H}$ 47'14	30.91684 AU	min. Earth dist.	-5505 Nov 08 j 10:34	6° $\mathbf{Y}$ 19'22	28.97888 AU
morning rise	-5511 May 12 j 02:33	22° $\mathbf{H}$ 23'43		direct	-5504 Jan 26 j 06:11	4° $\mathbf{Y}$ 54'49	
retrograde	-5511 Aug 08 j 22:37	24° $\mathbf{H}$ 18'55		evening set	-5504 Apr 25 j 17:05	6° $\mathbf{Y}$ 51'11	
opposition	-5511 Oct 25 j 09:21	22° $\mathbf{H}$ 55'08	-2°06'32	max. Earth dist.	-5504 May 11 j 10:23	7° $\mathbf{Y}$ 25'54	30.98137 AU
min. Earth dist.	-5511 Oct 25 j 13:34	22° $\mathbf{H}$ 54'49	28.92339 AU				
direct	-5510 Jan 12 j 02:05	21° $\mathbf{H}$ 29'56		conjunction	-5504 May 12 j 00:09	7° $\mathbf{Y}$ 27'10	-1°35'51
evening set	-5510 Apr 12 j 03:42	23° $\mathbf{H}$ 26'03		minimum elong	-5504 May 12 j 00:10	7° $\mathbf{Y}$ 27'10	1°35'50
				morning rise	-5504 May 28 j 05:13	8° $\mathbf{Y}$ 03'00	
conjunction	-5510 Apr 28 j 10:52	24° $\mathbf{H}$ 02'04	-1°56'52	retrograde	-5504 Aug 24 j 07:54	9° $\mathbf{Y}$ 57'05	
minimum elong	-5510 Apr 28 j 10:53	24° $\mathbf{H}$ 02'04	1°56'55	opposition	-5504 Nov 09 j 10:08	8° $\mathbf{Y}$ 33'48	-1°40'21
max. Earth dist.	-5510 Apr 28 j 05:09	24° $\mathbf{H}$ 01'32	30.92751 AU	min. Earth dist.	-5504 Nov 09 j 21:43	8° $\mathbf{Y}$ 32'59	28.98560 AU
morning rise	-5510 May 14 j 16:40	24° $\mathbf{H}$ 38'00		direct	-5503 Jan 27 j 17:04	7° $\mathbf{Y}$ 08'25	
retrograde	-5510 Aug 11 j 09:16	26° $\mathbf{H}$ 33'05		evening set	-5503 Apr 28 j 06:50	9° $\mathbf{Y}$ 04'47	
opposition	-5510 Oct 27 j 19:42	25° $\mathbf{H}$ 09'23	-2°03'19				
min. Earth dist.	-5510 Oct 28 j 01:44	25° $\mathbf{H}$ 08'58	28.93424 AU	conjunction	-5503 May 14 j 13:59	9° $\mathbf{Y}$ 40'45	-1°31'50
direct	-5509 Jan 14 j 13:56	23° $\mathbf{H}$ 44'12		minimum elong	-5503 May 14 j 13:59	9° $\mathbf{Y}$ 40'45	1°31'49
evening set	-5509 Apr 14 j 17:57	25° $\mathbf{H}$ 40'24		max. Earth dist.	-5503 May 14 j 00:27	9° $\mathbf{Y}$ 39'30	30.98806 AU
				morning rise	-5503 May 30 j 18:40	10° $\mathbf{Y}$ 16'33	
conjunction	-5509 May 01 j 01:08	26° $\mathbf{H}$ 16'25	-1°53'46	retrograde	-5503 Aug 26 j 16:41	12° $\mathbf{Y}$ 10'29	
minimum elong	-5509 May 01 j 01:08	26° $\mathbf{H}$ 16'25	1°53'49	opposition	-5503 Nov 11 j 20:30	10° $\mathbf{Y}$ 47'14	-1°35'59
max. Earth dist.	-5509 Apr 30 j 17:47	26° $\mathbf{H}$ 15'44	30.93852 AU	min. Earth dist.	-5503 Nov 12 j 09:14	10° $\mathbf{Y}$ 46'20	28.99230 AU
morning rise	-5509 May 17 j 06:58	26° $\mathbf{H}$ 52'20		direct	-5502 Jan 30 j 05:34	9° $\mathbf{Y}$ 21'48	
retrograde	-5509 Aug 13 j 22:38	28° $\mathbf{H}$ 47'16		evening set	-5502 Apr 30 j 20:40	11° $\mathbf{Y}$ 18'10	
opposition	-5509 Oct 30 j 06:01	27° $\mathbf{H}$ 23'41	-1°59'55				
min. Earth dist.	-5509 Oct 30 j 12:06	27° $\mathbf{H}$ 23'15	28.94498 AU	conjunction	-5502 May 17 j 03:34	11° $\mathbf{Y}$ 54'07	-1°27'41
direct	-5508 Jan 17 j 03:15	25° $\mathbf{H}$ 58'30		minimum elong	-5502 May 17 j 03:35	11° $\mathbf{Y}$ 54'08	1°27'38
evening set	-5508 Apr 16 j 08:20	27° $\mathbf{H}$ 54'46		max. Earth dist.	-5502 May 16 j 12:13	11° $\mathbf{Y}$ 52'42	30.99513 AU
				morning rise	-5502 Jun 02 j 08:13	12° $\mathbf{Y}$ 29'54	
conjunction	-5508 May 02 j 15:31	28° $\mathbf{H}$ 30'47	-1°50'30	retrograde	-5502 Aug 29 j 03:56	14° $\mathbf{Y}$ 23'39	
minimum elong	-5508 May 02 j 15:32	28° $\mathbf{H}$ 30'47	1°50'31	opposition	-5502 Nov 14 j 06:38	13° $\mathbf{Y}$ 00'27	-1°31'29

Attention, astronomical year style is used: The year -5502 in astronomical counting style is the year 5503 BCE in historical counting style.

min. Earth dist.	-5502 Nov 14 j 19:20	12° $\Upsilon$ 59'33	28.99972 AU	morning rise	-5495 Jun 18 j 03:11	28° $\Upsilon$ 01'08	
direct	-5501 Feb 01 j 17:52	11° $\Upsilon$ 34'58		retrograde	-5495 Sep 13 j 10:02	29° $\Upsilon$ 54'05	
evening set	-5501 May 03 j 10:17	13° $\Upsilon$ 31'21		opposition	-5495 Nov 29 j 07:13	28° $\Upsilon$ 31'29	-0°56'34
				min. Earth dist.	-5495 Nov 30 j 00:31	28° $\Upsilon$ 30'16	29.07477 AU
conjunction	-5501 May 19 j 17:14	14° $\Upsilon$ 07'18	-1°23'24	direct	-5494 Feb 17 j 07:58	27° $\Upsilon$ 06'06	
minimum elong	-5501 May 19 j 17:14	14° $\Upsilon$ 07'18	1°23'21	evening set	-5494 May 19 j 08:26	29° $\Upsilon$ 02'45	
max. Earth dist.	-5501 May 19 j 02:10	14° $\Upsilon$ 05'54	31.00297 AU				
morning rise	-5501 Jun 04 j 21:29	14° $\Upsilon$ 43'03		conjunction	-5494 Jun 04 j 13:51	29° $\Upsilon$ 38'36	-0°50'24
retrograde	-5501 Aug 31 j 13:29	16° $\Upsilon$ 36'40		minimum elong	-5494 Jun 04 j 13:52	29° $\Upsilon$ 38'36	0°50'15
opposition	-5501 Nov 16 j 17:01	15° $\Upsilon$ 13'30	-1°26'50	max. Earth dist.	-5494 Jun 03 j 18:06	29° $\Upsilon$ 36'46	31.07929 AU
min. Earth dist.	-5501 Nov 17 j 07:10	15° $\Upsilon$ 12'30	29.00805 AU		-5494 Jun 14 j 04:43	0° $\mathcal{B}$	
direct	-5500 Feb 04 j 05:27	13° $\Upsilon$ 47'59		morning rise	-5494 Jun 20 j 15:47	0° $\mathcal{B}$ 14'10	
evening set	-5500 May 04 j 23:57	15° $\Upsilon$ 44'24		retrograde	-5494 Sep 15 j 18:23	2° $\mathcal{B}$ 06'59	
				opposition	-5494 Dec 01 j 17:42	0° $\mathcal{B}$ 44'27	-0°51'12
conjunction	-5500 May 21 j 06:37	16° $\Upsilon$ 20'20	-1°19'00	min. Earth dist.	-5494 Dec 02 j 12:19	0° $\mathcal{B}$ 43'09	29.08443 AU
minimum elong	-5500 May 21 j 06:38	16° $\Upsilon$ 20'20	1°18'56		-5494 Dec 29 j 12:59	30° $\mathcal{R}\Upsilon$	
max. Earth dist.	-5500 May 20 j 14:24	16° $\Upsilon$ 18'50	31.01201 AU	direct	-5493 Feb 19 j 20:37	29° $\Upsilon$ 19'04	
morning rise	-5500 Jun 06 j 10:43	16° $\Upsilon$ 56'04			-5493 Apr 12 j 00:15	0° $\mathcal{B}$	
retrograde	-5500 Sep 02 j 01:32	18° $\Upsilon$ 49'32		evening set	-5493 May 21 j 21:49	1° $\mathcal{B}$ 15'43	
opposition	-5500 Nov 18 j 03:13	17° $\Upsilon$ 26'27	-1°22'05	max. Earth dist.	-5493 Jun 06 j 04:59	1° $\mathcal{B}$ 49'31	31.08851 AU
min. Earth dist.	-5500 Nov 18 j 16:48	17° $\Upsilon$ 25'29	29.01765 AU				
direct	-5499 Feb 05 j 18:39	16° $\Upsilon$ 00'56		conjunction	-5493 Jun 07 j 02:47	1° $\mathcal{B}$ 51'33	-0°45'20
evening set	-5499 May 07 j 13:28	17° $\Upsilon$ 57'24		minimum elong	-5493 Jun 07 j 02:47	1° $\mathcal{B}$ 51'33	0°45'12
				morning rise	-5493 Jun 23 j 04:29	2° $\mathcal{B}$ 27'05	
conjunction	-5499 May 23 j 20:01	18° $\Upsilon$ 33'19	-1°14'29	retrograde	-5493 Sep 18 j 05:03	4° $\mathcal{B}$ 19'46	
minimum elong	-5499 May 23 j 20:02	18° $\Upsilon$ 33'19	1°14'25	opposition	-5493 Dec 04 j 04:10	2° $\mathcal{B}$ 57'17	-0°45'45
max. Earth dist.	-5499 May 23 j 03:33	18° $\Upsilon$ 31'48	31.02229 AU	min. Earth dist.	-5493 Dec 04 j 22:51	2° $\mathcal{B}$ 55'58	29.09311 AU
morning rise	-5499 Jun 08 j 23:44	19° $\Upsilon$ 09'01		direct	-5492 Feb 22 j 08:17	1° $\mathcal{B}$ 31'52	
retrograde	-5499 Sep 04 j 12:50	21° $\Upsilon$ 02'23		evening set	-5492 May 23 j 10:55	3° $\mathcal{B}$ 28'30	
opposition	-5499 Nov 20 j 13:38	19° $\Upsilon$ 39'22	-1°17'11				
min. Earth dist.	-5499 Nov 21 j 04:34	19° $\Upsilon$ 38'19	29.02856 AU	conjunction	-5492 Jun 08 j 15:40	4° $\mathcal{B}$ 04'18	-0°40'13
direct	-5498 Feb 08 j 06:51	18° $\Upsilon$ 13'54		minimum elong	-5492 Jun 08 j 15:40	4° $\mathcal{B}$ 04'18	0°40'03
evening set	-5498 May 10 j 02:47	20° $\Upsilon$ 10'23		max. Earth dist.	-5492 Jun 07 j 18:04	4° $\mathcal{B}$ 02'18	31.09670 AU
				morning rise	-5492 Jun 24 j 16:45	4° $\mathcal{B}$ 39'48	
conjunction	-5498 May 26 j 09:11	20° $\Upsilon$ 46'18	-1°09'52	retrograde	-5492 Sep 19 j 14:01	6° $\mathcal{B}$ 32'22	
minimum elong	-5498 May 26 j 09:12	20° $\Upsilon$ 46'18	1°09'46	opposition	-5492 Dec 05 j 14:46	5° $\mathcal{B}$ 09'54	-0°40'15
max. Earth dist.	-5498 May 25 j 16:16	20° $\Upsilon$ 44'44	31.03383 AU	min. Earth dist.	-5492 Dec 06 j 11:05	5° $\mathcal{B}$ 08'29	29.10093 AU
morning rise	-5498 Jun 11 j 12:40	21° $\Upsilon$ 21'59		direct	-5491 Feb 23 j 19:12	3° $\mathcal{B}$ 44'27	
retrograde	-5498 Sep 07 j 00:36	23° $\Upsilon$ 15'14		evening set	-5491 May 25 j 23:59	5° $\mathcal{B}$ 41'04	
opposition	-5498 Nov 22 j 23:54	21° $\Upsilon$ 52'20	-1°12'11	max. Earth dist.	-5491 Jun 10 j 05:26	6° $\mathcal{B}$ 14'42	31.10441 AU
min. Earth dist.	-5498 Nov 23 j 14:39	21° $\Upsilon$ 51'17	29.04028 AU				
direct	-5497 Feb 10 j 20:45	20° $\Upsilon$ 26'53		conjunction	-5491 Jun 11 j 04:16	6° $\mathcal{B}$ 16'50	-0°35'03
evening set	-5497 May 12 j 16:19	22° $\Upsilon$ 23'26		minimum elong	-5491 Jun 11 j 04:16	6° $\mathcal{B}$ 16'50	0°34'53
				morning rise	-5491 Jun 27 j 05:04	6° $\mathcal{B}$ 52'18	
conjunction	-5497 May 28 j 22:27	22° $\Upsilon$ 59'20	-1°05'08	retrograde	-5491 Sep 22 j 00:42	8° $\mathcal{B}$ 44'43	
minimum elong	-5497 May 28 j 22:28	22° $\Upsilon$ 59'20	1°05'02	opposition	-5491 Dec 08 j 01:10	7° $\mathcal{B}$ 22'16	-0°34'42
max. Earth dist.	-5497 May 28 j 04:22	22° $\Upsilon$ 57'40	31.04580 AU	min. Earth dist.	-5491 Dec 08 j 21:00	7° $\mathcal{B}$ 20'53	29.10848 AU
morning rise	-5497 Jun 14 j 01:37	23° $\Upsilon$ 35'00		direct	-5490 Feb 26 j 08:45	5° $\mathcal{B}$ 56'47	
retrograde	-5497 Sep 09 j 11:37	25° $\Upsilon$ 28'09		evening set	-5490 May 28 j 12:43	7° $\mathcal{B}$ 53'23	
opposition	-5497 Nov 25 j 10:13	24° $\Upsilon$ 05'21	-1°07'05				
min. Earth dist.	-5497 Nov 26 j 02:19	24° $\Upsilon$ 04'13	29.05234 AU	conjunction	-5490 Jun 13 j 16:42	8° $\mathcal{B}$ 29'06	-0°29'50
direct	-5496 Feb 13 j 07:41	22° $\Upsilon$ 39'56		minimum elong	-5490 Jun 13 j 16:42	8° $\mathcal{B}$ 29'06	0°29'39
evening set	-5496 May 14 j 05:47	24° $\Upsilon$ 36'33		max. Earth dist.	-5490 Jun 12 j 17:44	8° $\mathcal{B}$ 26'58	31.11192 AU
				morning rise	-5490 Jun 29 j 16:58	9° $\mathcal{B}$ 04'32	
conjunction	-5496 May 30 j 11:46	25° $\Upsilon$ 12'26	-1°00'18	retrograde	-5490 Sep 24 j 10:43	10° $\mathcal{B}$ 56'50	
minimum elong	-5496 May 30 j 11:46	25° $\Upsilon$ 12'26	1°00'11	opposition	-5490 Dec 10 j 11:43	9° $\mathcal{B}$ 34'23	-0°29'07
max. Earth dist.	-5496 May 29 j 17:42	25° $\Upsilon$ 10'45	31.05777 AU	min. Earth dist.	-5490 Dec 11 j 08:52	9° $\mathcal{B}$ 32'54	29.11615 AU
morning rise	-5496 Jun 15 j 14:30	25° $\Upsilon$ 48'04		direct	-5489 Feb 28 j 21:06	8° $\mathcal{B}$ 08'52	
retrograde	-5496 Sep 10 j 22:45	27° $\Upsilon$ 41'06		evening set	-5489 May 31 j 01:28	10° $\mathcal{B}$ 05'26	
opposition	-5496 Nov 26 j 20:43	26° $\Upsilon$ 18'25	-1°01'52	max. Earth dist.	-5489 Jun 15 j 05:47	10° $\mathcal{B}$ 38'58	31.11988 AU
min. Earth dist.	-5496 Nov 27 j 13:24	26° $\Upsilon$ 17'15	29.06393 AU				
direct	-5495 Feb 14 j 21:04	24° $\Upsilon$ 53'02		conjunction	-5489 Jun 16 j 05:02	10° $\mathcal{B}$ 41'07	-0°24'35
evening set	-5495 May 16 j 19:10	26° $\Upsilon$ 49'40		minimum elong	-5489 Jun 16 j 05:02	10° $\mathcal{B}$ 41'07	0°24'24
max. Earth dist.	-5495 Jun 01 j 04:48	27° $\Upsilon$ 23'42	31.06901 AU	morning rise	-5489 Jul 02 j 04:51	11° $\mathcal{B}$ 16'30	
				retrograde	-5489 Sep 26 j 21:15	13° $\mathcal{B}$ 08'41	
conjunction	-5495 Jun 02 j 00:43	27° $\Upsilon$ 25'32	-0°55'23	opposition	-5489 Dec 12 j 22:07	11° $\mathcal{B}$ 46'16	-0°23'29
minimum elong	-5495 Jun 02 j 00:43	27° $\Upsilon$ 25'32	0°55'16	min. Earth dist.	-5489 Dec 13 j 18:47	11° $\mathcal{B}$ 44'49	29.12438 AU



Attention, astronomical year style is used: The year -5488 in astronomical counting style is the year 5489 BCE in historical counting style.

direct	-5488 Mar 02 j 11:05	10° <del>8</del> 20'43	conjunction	-5483 Jun 29 j 04:44	23° <del>8</del> 51'06	0°07'26
evening set	-5488 Jun 01 j 14:11	12° <del>8</del> 17'16	minimum elong	-5483 Jun 29 j 04:43	23° <del>8</del> 51'06	0°07'41
			behind sun begin	-5483 Jun 28 j 22:50	23° <del>8</del> 50'34	
conjunction	-5488 Jun 17 j 17:13	12° <del>8</del> 52'55 -0°19'19	behind sun end	-5483 Jun 29 j 10:37	23° <del>8</del> 51'37	
minimum elong	-5488 Jun 17 j 17:13	12° <del>8</del> 52'55 0°19'06	morning rise	-5483 Jul 15 j 01:11	24° <del>8</del> 26'14	
max. Earth dist.	-5488 Jun 16 j 17:22	12° <del>8</del> 50'42 31.12861 AU	retrograde	-5483 Oct 09 j 09:55	26° <del>8</del> 18'04	
morning rise	-5488 Jul 03 j 16:32	13° <del>8</del> 28'15	opposition	-5483 Dec 25 j 14:03	24° <del>8</del> 56'05	0°10'42
	-5488 Aug 24 j 19:45	15° <del>8</del>	min. Earth dist.	-5483 Dec 26 j 13:07	24° <del>8</del> 54'29	29.19183 AU
retrograde	-5488 Sep 28 j 08:00	15° <del>8</del> 20'21	direct	-5482 Mar 16 j 09:21	23° <del>8</del> 30'47	
	-5488 Nov 02 j 10:24	15° <del>8</del>	evening set	-5482 Jun 15 j 16:25	25° <del>8</del> 27'25	
opposition	-5488 Dec 14 j 08:44	13° <del>8</del> 57'57 -0°17'50				
min. Earth dist.	-5488 Dec 15 j 06:02	13° <del>8</del> 56'28 29.13379 AU	conjunction	-5482 Jul 01 j 16:21	26° <del>8</del> 02'51	0°12'45
direct	-5487 Mar 04 j 22:27	12° <del>8</del> 32'24	minimum elong	-5482 Jul 01 j 16:21	26° <del>8</del> 02'51	0°13'01
evening set	-5487 Jun 04 j 02:30	14° <del>8</del> 28'57	behind sun begin	-5482 Jul 01 j 12:27	26° <del>8</del> 02'30	
	-5487 Jun 18 j 04:07	15° <del>8</del>	behind sun end	-5482 Jul 01 j 20:15	26° <del>8</del> 03'12	
max. Earth dist.	-5487 Jun 19 j 06:05	15° <del>8</del> 02'25 31.13865 AU	max. Earth dist.	-5482 Jun 30 j 15:10	26° <del>8</del> 00'31	31.19686 AU
			morning rise	-5482 Jul 17 j 12:23	26° <del>8</del> 37'58	
conjunction	-5487 Jun 20 j 05:11	15° <del>8</del> 04'33 -0°14'01	retrograde	-5482 Oct 11 j 20:36	28° <del>8</del> 29'45	
minimum elong	-5487 Jun 20 j 05:11	15° <del>8</del> 04'33 0°13'49	opposition	-5482 Dec 28 j 00:53	27° <del>8</del> 07'50	0°16'23
behind sun begin	-5487 Jun 20 j 01:50	15° <del>8</del> 04'16	min. Earth dist.	-5482 Dec 28 j 23:24	27° <del>8</del> 06'17	29.20213 AU
behind sun end	-5487 Jun 20 j 08:32	15° <del>8</del> 04'51	direct	-5481 Mar 18 j 22:20	25° <del>8</del> 42'34	
morning rise	-5487 Jul 06 j 03:55	15° <del>8</del> 39'51	evening set	-5481 Jun 18 j 04:41	27° <del>8</del> 39'13	
retrograde	-5487 Sep 30 j 18:24	17° <del>8</del> 31'51	max. Earth dist.	-5481 Jul 03 j 02:42	28° <del>8</del> 12'15	31.20641 AU
opposition	-5487 Dec 16 j 19:19	16° <del>8</del> 09'32 -0°12'08				
min. Earth dist.	-5487 Dec 17 j 16:33	16° <del>8</del> 08'03 29.14434 AU	conjunction	-5481 Jul 04 j 04:06	28° <del>8</del> 14'37	0°18'03
	-5486 Feb 03 j 11:11	15° <del>8</del>	minimum elong	-5481 Jul 04 j 04:05	28° <del>8</del> 14'37	0°18'19
direct	-5486 Mar 07 j 12:29	14° <del>8</del> 44'01	morning rise	-5481 Jul 19 j 23:23	28° <del>8</del> 49'40	
	-5486 Apr 08 j 02:07	15° <del>8</del>		-5481 Aug 25 j 10:37	0° <del>II</del>	
evening set	-5486 Jun 06 j 15:02	16° <del>8</del> 40'34	retrograde	-5481 Oct 14 j 06:45	0° <del>II</del> 41'26	
				-5481 Dec 05 j 00:04	30° <del>8</del>	
conjunction	-5486 Jun 22 j 17:06	17° <del>8</del> 16'08 -0°08'42	opposition	-5481 Dec 30 j 11:52	29° <del>8</del> 19'33	0°22'02
minimum elong	-5486 Jun 22 j 17:06	17° <del>8</del> 16'08 0°08'29	min. Earth dist.	-5481 Dec 31 j 11:46	29° <del>8</del> 17'54	29.21114 AU
behind sun begin	-5486 Jun 22 j 11:23	17° <del>8</del> 15'38	direct	-5480 Mar 20 j 09:47	27° <del>8</del> 54'19	
behind sun end	-5486 Jun 22 j 22:49	17° <del>8</del> 16'39	evening set	-5480 Jun 19 j 16:51	29° <del>8</del> 50'57	
max. Earth dist.	-5486 Jun 21 j 16:55	17° <del>8</del> 13'54 31.14983 AU		-5480 Jun 23 j 20:00	0° <del>II</del>	
morning rise	-5486 Jul 08 j 15:26	17° <del>8</del> 51'24				
retrograde	-5486 Oct 03 j 05:20	19° <del>8</del> 43'20	conjunction	-5480 Jul 05 j 15:39	0° <del>II</del> 26'18	0°23'20
opposition	-5486 Dec 19 j 05:44	18° <del>8</del> 21'05 -0°06'26	minimum elong	-5480 Jul 05 j 15:39	0° <del>II</del> 26'18	0°23'36
min. Earth dist.	-5486 Dec 20 j 02:55	18° <del>8</del> 19'36 29.15608 AU	max. Earth dist.	-5480 Jul 04 j 13:54	0° <del>II</del> 23'54	31.21480 AU
direct	-5485 Mar 09 j 23:37	16° <del>8</del> 55'36	morning rise	-5480 Jul 21 j 10:23	1° <del>II</del> 01'19	
evening set	-5485 Jun 09 j 03:24	18° <del>8</del> 52'11	retrograde	-5480 Oct 15 j 17:15	2° <del>II</del> 53'03	
max. Earth dist.	-5485 Jun 24 j 05:49	19° <del>8</del> 25'34 31.16188 AU	opposition	-5480 Dec 31 j 22:52	1° <del>II</del> 31'12	0°27'39
			min. Earth dist.	-5479 Jan 01 j 22:22	1° <del>II</del> 29'34	29.21887 AU
conjunction	-5485 Jun 25 j 05:09	19° <del>8</del> 27'44 -0°03'23	direct	-5479 Mar 22 j 23:10	0° <del>II</del> 05'58	
minimum elong	-5485 Jun 25 j 05:08	19° <del>8</del> 27'44 0°03'10	evening set	-5479 Jun 22 j 04:46	2° <del>II</del> 02'35	
behind sun begin	-5485 Jun 24 j 22:38	19° <del>8</del> 27'09	max. Earth dist.	-5479 Jul 07 j 00:27	2° <del>II</del> 35'25	31.22198 AU
behind sun end	-5485 Jun 25 j 11:38	19° <del>8</del> 28'18				
morning rise	-5485 Jul 11 j 02:46	20° <del>8</del> 02'57	conjunction	-5479 Jul 08 j 02:54	2° <del>II</del> 37'53	0°28'34
retrograde	-5485 Oct 05 j 13:55	21° <del>8</del> 54'50	minimum elong	-5479 Jul 08 j 02:54	2° <del>II</del> 37'53	0°28'50
opposition	-5485 Dec 21 j 16:27	20° <del>8</del> 32'41 -0°00'44	morning rise	-5479 Jul 23 j 21:03	3° <del>II</del> 12'51	
min. Earth dist.	-5485 Dec 22 j 14:29	20° <del>8</del> 31'09 29.16824 AU	retrograde	-5479 Oct 18 j 04:11	5° <del>II</del> 04'33	
asc. node	-5484 Feb 06 j 04:49	19° <del>8</del> 25'26	opposition	-5478 Jan 03 j 09:54	3° <del>II</del> 42'42	0°33'14
direct	-5484 Mar 11 j 12:00	19° <del>8</del> 07'16	min. Earth dist.	-5478 Jan 04 j 10:10	3° <del>II</del> 41'02	29.22573 AU
evening set	-5484 Jun 10 j 15:50	21° <del>8</del> 03'52	direct	-5478 Mar 25 j 10:48	2° <del>II</del> 17'28	
			evening set	-5478 Jun 24 j 16:34	4° <del>II</del> 14'04	
conjunction	-5484 Jun 26 j 16:50	21° <del>8</del> 39'23 0°02'06				
minimum elong	-5484 Jun 26 j 16:50	21° <del>8</del> 39'23 0°02'21	conjunction	-5478 Jul 10 j 14:11	4° <del>II</del> 49'19	0°33'45
behind sun begin	-5484 Jun 26 j 10:19	21° <del>8</del> 38'48	minimum elong	-5478 Jul 10 j 14:11	4° <del>II</del> 49'19	0°34'02
behind sun end	-5484 Jun 26 j 23:22	21° <del>8</del> 39'57	max. Earth dist.	-5478 Jul 09 j 12:23	4° <del>II</del> 46'55	31.22846 AU
max. Earth dist.	-5484 Jun 25 j 16:10	21° <del>8</del> 37'05 31.17412 AU	morning rise	-5478 Jul 26 j 07:38	5° <del>II</del> 24'13	
morning rise	-5484 Jul 12 j 14:03	22° <del>8</del> 14'34	retrograde	-5478 Oct 20 j 14:35	7° <del>II</del> 15'52	
retrograde	-5484 Oct 07 j 00:46	24° <del>8</del> 06'25	opposition	-5477 Jan 05 j 20:45	5° <del>II</del> 54'02	0°38'45
opposition	-5484 Dec 23 j 03:10	22° <del>8</del> 44'21 0°04'59	min. Earth dist.	-5477 Jan 06 j 21:08	5° <del>II</del> 52'21	29.23191 AU
min. Earth dist.	-5484 Dec 24 j 00:47	22° <del>8</del> 42'51 29.18039 AU	direct	-5477 Mar 28 j 01:32	4° <del>II</del> 28'48	
direct	-5483 Mar 13 j 23:03	21° <del>8</del> 19'00	evening set	-5477 Jun 27 j 04:23	6° <del>II</del> 25'21	
evening set	-5483 Jun 13 j 04:07	23° <del>8</del> 15'37	max. Earth dist.	-5477 Jul 11 j 22:27	6° <del>II</del> 58'04	31.23455 AU
max. Earth dist.	-5483 Jun 28 j 04:38	23° <del>8</del> 48'52 31.18591 AU				

Attention, astronomical year style is used: The year -5477 in astronomical counting style is the year 5478 BCE in historical counting style.

conjunction	-5477 Jul	13 j 01:13	7°II00'33	0°38'53	evening set	-5470 Jul	12 j 11:33	21°II42'04	
minimum elong	-5477 Jul	13 j 01:13	7°II00'33	0°39'10	max. Earth dist.	-5470 Jul	27 j 02:33	22°II14'34	31.29069 AU
morning rise	-5477 Jul	28 j 18:09	7°II35'25						
retrograde	-5477 Oct	23 j 01:16	9°II27'01		conjunction	-5470 Jul	28 j 03:37	22°II16'55	1°12'49
opposition	-5476 Jan	08 j 07:47	8°II05'11	0°44'12	minimum elong	-5470 Jul	28 j 03:36	22°II16'55	1°13'08
min. Earth dist.	-5476 Jan	09 j 07:51	8°II03'32	29.23818 AU	morning rise	-5470 Aug	12 j 15:55	22°II51'28	
direct	-5476 Mar	29 j 13:24	6°II39'57		retrograde	-5470 Nov	06 j 21:43	24°II43'09	
evening set	-5476 Jun	28 j 15:48	8°II36'28		opposition	-5469 Jan	23 j 14:27	23°II21'33	1°20'09
max. Earth dist.	-5476 Jul	13 j 10:39	9°II09'15	31.24090 AU	min. Earth dist.	-5469 Jan	24 j 13:57	23°II19'56	29.29506 AU
					direct	-5469 Apr	14 j 22:37	21°II56'38	
					evening set	-5469 Jul	14 j 22:41	23°II53'03	
conjunction	-5476 Jul	14 j 12:07	9°II11'37	0°43'58					
minimum elong	-5476 Jul	14 j 12:07	9°II11'37	0°44'15					
morning rise	-5476 Jul	30 j 04:14	9°II46'26		conjunction	-5469 Jul	30 j 14:08	24°II27'52	1°17'18
retrograde	-5476 Oct	24 j 09:21	11°II38'00		minimum elong	-5469 Jul	30 j 14:08	24°II27'51	1°17'37
opposition	-5475 Jan	09 j 18:58	10°II16'11	0°49'36	max. Earth dist.	-5469 Jul	29 j 13:55	24°II25'36	31.29739 AU
min. Earth dist.	-5475 Jan	10 j 19:23	10°II14'30	29.24485 AU	morning rise	-5469 Aug	15 j 01:41	25°II02'21	
direct	-5475 Apr	01 j 02:29	8°II50'57		retrograde	-5469 Nov	09 j 08:16	26°II54'05	
evening set	-5475 Jul	01 j 03:20	10°II47'26		opposition	-5468 Jan	26 j 02:06	25°II32'29	1°24'53
					min. Earth dist.	-5468 Jan	27 j 01:36	25°II30'53	29.30101 AU
conjunction	-5475 Jul	16 j 22:49	11°II22'32	0°48'58	direct	-5468 Apr	16 j 12:39	24°II07'36	
minimum elong	-5475 Jul	16 j 22:48	11°II22'32	0°49'16	evening set	-5468 Jul	16 j 09:45	26°II04'00	
max. Earth dist.	-5475 Jul	15 j 20:34	11°II20'06	31.24801 AU	max. Earth dist.	-5468 Jul	30 j 23:10	26°II36'24	31.30256 AU
morning rise	-5475 Aug	01 j 14:27	11°II57'18						
retrograde	-5475 Oct	26 j 19:48	13°II48'51		conjunction	-5468 Aug	01 j 00:21	26°II38'45	1°21'40
opposition	-5474 Jan	12 j 05:55	12°II27'03	0°54'55	minimum elong	-5468 Aug	01 j 00:20	26°II38'45	1°21'59
min. Earth dist.	-5474 Jan	13 j 05:14	12°II25'27	29.25251 AU	morning rise	-5468 Aug	16 j 11:23	27°II13'12	
direct	-5474 Apr	03 j 14:01	11°II01'51		retrograde	-5468 Nov	10 j 19:27	29°II04'57	
evening set	-5474 Jul	03 j 14:36	12°II58'19		opposition	-5467 Jan	27 j 13:43	27°II43'21	1°29'29
max. Earth dist.	-5474 Jul	18 j 08:32	13°II31'03	31.25604 AU	min. Earth dist.	-5467 Jan	28 j 12:50	27°II41'46	29.30560 AU
					direct	-5467 Apr	19 j 00:14	26°II18'29	
conjunction	-5474 Jul	19 j 09:35	13°II33'23	0°53'55	evening set	-5467 Jul	18 j 20:38	28°II14'50	
minimum elong	-5474 Jul	19 j 09:35	13°II33'23	0°54'13	max. Earth dist.	-5467 Aug	02 j 10:38	28°II47'17	31.30634 AU
morning rise	-5474 Aug	04 j 00:25	14°II08'06						
retrograde	-5474 Oct	29 j 04:36	15°II59'40		conjunction	-5467 Aug	03 j 10:42	28°II49'33	1°25'55
opposition	-5473 Jan	14 j 17:09	14°II37'53	1°00'09	minimum elong	-5467 Aug	03 j 10:42	28°II49'32	1°26'14
min. Earth dist.	-5473 Jan	15 j 17:15	14°II36'14	29.26099 AU	morning rise	-5467 Aug	18 j 20:57	29°II23'56	
direct	-5473 Apr	06 j 00:52	13°II12'45			-5467 Sep	05 j 01:48	0°II	
evening set	-5473 Jul	06 j 01:58	15°II09'12		retrograde	-5467 Nov	13 j 04:16	1°II15'43	
						-5466 Jan	26 j 10:41	30°RII	
conjunction	-5473 Jul	21 j 20:08	15°II44'12	0°58'46	opposition	-5466 Jan	30 j 01:18	29°II54'06	1°33'57
minimum elong	-5473 Jul	21 j 20:08	15°II44'12	0°59'05	min. Earth dist.	-5466 Jan	31 j 01:02	29°II52'29	29.30875 AU
max. Earth dist.	-5473 Jul	20 j 18:50	15°II41'50	31.26488 AU	direct	-5466 Apr	21 j 13:40	28°II29'15	
morning rise	-5473 Aug	06 j 10:26	16°II18'53			-5466 Jul	09 j 07:07	0°II	
retrograde	-5473 Oct	31 j 14:13	18°II10'27		evening set	-5466 Jul	21 j 07:32	0°II25'33	
opposition	-5472 Jan	17 j 04:16	16°II48'44	1°05'18					
min. Earth dist.	-5472 Jan	18 j 03:09	16°II47'10	29.27001 AU	conjunction	-5466 Aug	05 j 20:46	1°II00'12	1°30'02
direct	-5472 Apr	07 j 13:04	15°II23'39		minimum elong	-5466 Aug	05 j 20:46	1°II00'12	1°30'21
evening set	-5472 Jul	07 j 13:14	17°II20'06		max. Earth dist.	-5466 Aug	04 j 19:49	0°II57'52	31.30894 AU
max. Earth dist.	-5472 Jul	22 j 05:57	17°II52'45	31.27392 AU	morning rise	-5466 Aug	21 j 06:35	1°II34'33	
					retrograde	-5466 Nov	15 j 15:06	3°II26'21	
conjunction	-5472 Jul	23 j 06:45	17°II55'04	1°03'33	opposition	-5465 Feb	01 j 12:52	2°II04'42	1°38'18
minimum elong	-5472 Jul	23 j 06:45	17°II55'04	1°03'52	min. Earth dist.	-5465 Feb	02 j 11:34	2°II03'09	29.31092 AU
morning rise	-5472 Aug	07 j 20:18	18°II29'42		direct	-5465 Apr	24 j 02:07	0°II39'51	
retrograde	-5472 Nov	02 j 00:07	20°II21'19		evening set	-5465 Jul	23 j 18:05	2°II36'05	
opposition	-5471 Jan	18 j 15:42	18°II59'38	1°10'21	max. Earth dist.	-5465 Aug	07 j 07:00	3°II08'28	31.31064 AU
min. Earth dist.	-5471 Jan	19 j 15:21	18°II58'01	29.27914 AU					
direct	-5471 Apr	09 j 23:01	17°II34'37		conjunction	-5465 Aug	08 j 06:46	3°II10'41	1°34'01
evening set	-5471 Jul	10 j 00:18	19°II31'04		minimum elong	-5465 Aug	08 j 06:46	3°II10'41	1°34'21
					morning rise	-5465 Aug	23 j 15:48	3°II45'00	
conjunction	-5471 Jul	25 j 17:08	20°II05'58	1°08'14	retrograde	-5465 Nov	17 j 23:44	5°II36'50	
minimum elong	-5471 Jul	25 j 17:08	20°II05'58	1°08'33	opposition	-5464 Feb	04 j 00:39	4°II15'08	1°42'29
max. Earth dist.	-5471 Jul	24 j 16:37	20°II03'41	31.28281 AU	min. Earth dist.	-5464 Feb	05 j 00:03	4°II13'33	29.31254 AU
morning rise	-5471 Aug	10 j 06:05	20°II40'34		direct	-5464 Apr	25 j 13:57	2°II50'18	
retrograde	-5471 Nov	04 j 10:25	22°II32'13		evening set	-5464 Jul	25 j 04:39	4°II46'28	
opposition	-5470 Jan	21 j 03:04	21°II10'35	1°15'19					
min. Earth dist.	-5470 Jan	22 j 02:01	21°II09'01	29.28761 AU	conjunction	-5464 Aug	09 j 16:33	5°II21'01	1°37'52
direct	-5470 Apr	12 j 11:15	19°II45'37		minimum elong	-5464 Aug	09 j 16:32	5°II21'01	1°38'12

Attention, astronomical year style is used: The year -5464 in astronomical counting style is the year 5465 BCE in historical counting style.

max. Earth dist.	-5464 Aug 08 j 16:54	5° $\overline{00}$ 18'48	31.31226 AU	conjunction	-5457 Aug 25 j 11:00	20° $\overline{00}$ 33'06	2°00'37
morning rise	-5464 Aug 25 j 01:06	5° $\overline{00}$ 55'17		minimum elong	-5457 Aug 25 j 11:00	20° $\overline{00}$ 33'06	2°00'56
retrograde	-5464 Nov 19 j 09:06	7° $\overline{00}$ 47'09		max. Earth dist.	-5457 Aug 24 j 15:36	20° $\overline{00}$ 31'16	31.33662 AU
opposition	-5463 Feb 05 j 12:17	6° $\overline{00}$ 25'25	1°46'31	morning rise	-5457 Sep 09 j 15:47	21° $\overline{00}$ 07'07	
min. Earth dist.	-5463 Feb 06 j 10:04	6° $\overline{00}$ 23'56	29.31432 AU	retrograde	-5457 Dec 05 j 12:11	22° $\overline{00}$ 59'39	
direct	-5463 Apr 28 j 02:09	5° $\overline{00}$ 00'35		opposition	-5456 Feb 21 j 23:42	21° $\overline{00}$ 37'56	2°10'14
evening set	-5463 Jul 27 j 14:52	6° $\overline{00}$ 56'42		min. Earth dist.	-5456 Feb 22 j 17:27	21° $\overline{00}$ 36'44	29.33926 AU
max. Earth dist.	-5463 Aug 11 j 03:19	7° $\overline{00}$ 29'04	31.31419 AU	direct	-5456 May 13 j 11:18	20° $\overline{00}$ 13'34	
				evening set	-5456 Aug 11 j 13:35	22° $\overline{00}$ 09'29	
conjunction	-5463 Aug 12 j 02:09	7° $\overline{00}$ 31'13	1°41'35				
minimum elong	-5463 Aug 12 j 02:08	7° $\overline{00}$ 31'13	1°41'54	conjunction	-5456 Aug 26 j 20:32	22° $\overline{00}$ 43'42	2°03'13
morning rise	-5463 Aug 27 j 10:04	8° $\overline{00}$ 05'26		minimum elong	-5456 Aug 26 j 20:31	22° $\overline{00}$ 43'42	2°03'31
retrograde	-5463 Nov 21 j 18:38	9° $\overline{00}$ 57'22		max. Earth dist.	-5456 Aug 26 j 02:15	22° $\overline{00}$ 41'59	31.33846 AU
opposition	-5462 Feb 08 j 00:04	8° $\overline{00}$ 35'37	1°50'25	morning rise	-5456 Sep 11 j 00:42	23° $\overline{00}$ 17'41	
min. Earth dist.	-5462 Feb 08 j 22:03	8° $\overline{00}$ 34'07	29.31676 AU	retrograde	-5456 Dec 06 j 21:39	25° $\overline{00}$ 10'19	
direct	-5462 Apr 30 j 11:56	7° $\overline{00}$ 10'49		opposition	-5455 Feb 23 j 12:03	23° $\overline{00}$ 48'35	2°12'55
evening set	-5462 Jul 30 j 01:08	9° $\overline{00}$ 06'53		min. Earth dist.	-5455 Feb 24 j 06:27	23° $\overline{00}$ 47'20	29.34053 AU
				direct	-5455 May 15 j 23:10	22° $\overline{00}$ 24'15	
conjunction	-5462 Aug 14 j 11:46	9° $\overline{00}$ 41'21	1°45'09	evening set	-5455 Aug 13 j 23:29	24° $\overline{00}$ 20'07	
minimum elong	-5462 Aug 14 j 11:45	9° $\overline{00}$ 41'21	1°45'28	max. Earth dist.	-5455 Aug 28 j 11:39	24° $\overline{00}$ 52'34	31.33903 AU
max. Earth dist.	-5462 Aug 13 j 13:53	9° $\overline{00}$ 39'17	31.31702 AU				
morning rise	-5462 Aug 29 j 19:05	10° $\overline{00}$ 15'32		conjunction	-5455 Aug 29 j 05:50	24° $\overline{00}$ 54'17	2°05'38
retrograde	-5462 Nov 24 j 04:24	12° $\overline{00}$ 07'32		minimum elong	-5455 Aug 29 j 05:49	24° $\overline{00}$ 54'17	2°05'56
opposition	-5461 Feb 10 j 11:42	10° $\overline{00}$ 45'46	1°54'08	morning rise	-5455 Sep 13 j 09:40	25° $\overline{00}$ 28'15	
min. Earth dist.	-5461 Feb 11 j 08:17	10° $\overline{00}$ 44'23	29.31999 AU	retrograde	-5455 Dec 09 j 06:56	27° $\overline{00}$ 20'57	
direct	-5461 May 02 j 23:36	9° $\overline{00}$ 21'01		opposition	-5454 Feb 26 j 00:14	25° $\overline{00}$ 59'11	2°15'25
evening set	-5461 Aug 01 j 11:23	11° $\overline{00}$ 17'05		min. Earth dist.	-5454 Feb 26 j 17:11	25° $\overline{00}$ 58'02	29.34035 AU
				direct	-5454 May 18 j 11:38	24° $\overline{00}$ 34'53	
conjunction	-5461 Aug 16 j 21:18	11° $\overline{00}$ 51'29	1°48'34	evening set	-5454 Aug 16 j 09:20	26° $\overline{00}$ 30'39	
minimum elong	-5461 Aug 16 j 21:17	11° $\overline{00}$ 51'29	1°48'52				
max. Earth dist.	-5461 Aug 15 j 23:32	11° $\overline{00}$ 49'27	31.32066 AU	conjunction	-5454 Aug 31 j 15:10	27° $\overline{00}$ 04'48	2°07'53
morning rise	-5461 Sep 01 j 04:07	12° $\overline{00}$ 25'38		minimum elong	-5454 Aug 31 j 15:10	27° $\overline{00}$ 04'48	2°08'10
retrograde	-5461 Nov 26 j 15:57	14° $\overline{00}$ 17'45		max. Earth dist.	-5454 Aug 30 j 21:23	27° $\overline{00}$ 03'07	31.33810 AU
opposition	-5460 Feb 12 j 23:35	12° $\overline{00}$ 55'59	1°57'42	morning rise	-5454 Sep 15 j 18:33	27° $\overline{00}$ 38'44	
min. Earth dist.	-5460 Feb 13 j 19:52	12° $\overline{00}$ 54'37	29.32414 AU	retrograde	-5454 Dec 11 j 16:33	29° $\overline{00}$ 31'31	
direct	-5460 May 04 j 10:13	11° $\overline{00}$ 31'19		opposition	-5453 Feb 28 j 12:31	28° $\overline{00}$ 09'40	2°17'43
evening set	-5460 Aug 02 j 21:20	13° $\overline{00}$ 27'21		min. Earth dist.	-5453 Mar 01 j 05:53	28° $\overline{00}$ 08'30	29.33895 AU
max. Earth dist.	-5460 Aug 17 j 10:41	13° $\overline{00}$ 59'50	31.32503 AU	direct	-5453 May 20 j 22:03	26° $\overline{00}$ 45'23	
				evening set	-5453 Aug 18 j 19:02	28° $\overline{00}$ 41'04	
conjunction	-5460 Aug 18 j 06:44	14° $\overline{00}$ 01'43	1°51'49	max. Earth dist.	-5453 Sep 02 j 07:38	29° $\overline{00}$ 13'35	31.33626 AU
minimum elong	-5460 Aug 18 j 06:43	14° $\overline{00}$ 01'43	1°52'08				
morning rise	-5460 Sep 02 j 12:54	14° $\overline{00}$ 35'50		conjunction	-5453 Sep 03 j 00:25	29° $\overline{00}$ 15'10	2°09'56
retrograde	-5460 Nov 28 j 02:49	16° $\overline{00}$ 28'03		minimum elong	-5453 Sep 03 j 00:24	29° $\overline{00}$ 15'10	2°10'14
opposition	-5459 Feb 14 j 11:34	15° $\overline{00}$ 06'18	2°01'06	morning rise	-5453 Sep 18 j 03:23	29° $\overline{00}$ 49'05	
min. Earth dist.	-5459 Feb 15 j 07:13	15° $\overline{00}$ 04'59	29.32859 AU		-5453 Sep 23 j 03:42	0° $\overline{00}$	
direct	-5459 May 06 j 23:02	13° $\overline{00}$ 41'43		retrograde	-5453 Dec 14 j 02:13	1° $\overline{00}$ 41'56	
evening set	-5459 Aug 05 j 07:30	15° $\overline{00}$ 37'44		opposition	-5452 Mar 02 j 00:52	0° $\overline{00}$ 20'01	2°19'49
				min. Earth dist.	-5452 Mar 02 j 16:50	0° $\overline{00}$ 18'56	29.33670 AU
conjunction	-5459 Aug 20 j 16:08	16° $\overline{00}$ 12'04	1°54'55		-5452 Mar 14 j 12:13	30° $\overline{00}$ R $\overline{00}$	
minimum elong	-5459 Aug 20 j 16:07	16° $\overline{00}$ 12'04	1°55'14	direct	-5452 May 22 j 10:26	28° $\overline{00}$ 55'44	
max. Earth dist.	-5459 Aug 19 j 19:42	16° $\overline{00}$ 10'09	31.32948 AU		-5452 Jul 26 j 03:08	0° $\overline{00}$	
morning rise	-5459 Sep 04 j 21:56	16° $\overline{00}$ 46'09		evening set	-5452 Aug 20 j 04:33	0° $\overline{00}$ 51'19	
retrograde	-5459 Nov 30 j 14:28	18° $\overline{00}$ 38'28					
opposition	-5458 Feb 16 j 23:22	17° $\overline{00}$ 16'45	2°04'20	conjunction	-5452 Sep 04 j 09:21	1° $\overline{00}$ 25'23	2°11'49
min. Earth dist.	-5458 Feb 17 j 18:11	17° $\overline{00}$ 15'29	29.33303 AU	minimum elong	-5452 Sep 04 j 09:21	1° $\overline{00}$ 25'23	2°12'06
direct	-5458 May 09 j 09:16	15° $\overline{00}$ 52'15		max. Earth dist.	-5452 Sep 03 j 16:41	1° $\overline{00}$ 23'48	31.33381 AU
evening set	-5458 Aug 07 j 17:30	17° $\overline{00}$ 48'15		morning rise	-5452 Sep 19 j 12:04	1° $\overline{00}$ 59'16	
max. Earth dist.	-5458 Aug 22 j 06:46	18° $\overline{00}$ 20'46	31.33350 AU	retrograde	-5452 Dec 15 j 13:18	3° $\overline{00}$ 52'13	
				opposition	-5451 Mar 04 j 13:15	2° $\overline{00}$ 30'12	2°21'43
conjunction	-5458 Aug 23 j 01:41	18° $\overline{00}$ 22'32	1°57'51	min. Earth dist.	-5451 Mar 05 j 04:48	2° $\overline{00}$ 29'09	29.33436 AU
minimum elong	-5458 Aug 23 j 01:41	18° $\overline{00}$ 22'32	1°58'10	direct	-5451 May 24 j 20:54	1° $\overline{00}$ 05'56	
morning rise	-5458 Sep 07 j 06:49	18° $\overline{00}$ 56'35		evening set	-5451 Aug 22 j 13:57	3° $\overline{00}$ 01'24	
retrograde	-5458 Dec 03 j 00:13	20° $\overline{00}$ 49'01					
opposition	-5457 Feb 19 j 11:32	19° $\overline{00}$ 27'18	2°07'23	conjunction	-5451 Sep 06 j 18:26	3° $\overline{00}$ 35'26	2°13'30
min. Earth dist.	-5457 Feb 20 j 06:36	19° $\overline{00}$ 26'01	29.33666 AU	minimum elong	-5451 Sep 06 j 18:26	3° $\overline{00}$ 35'26	2°13'47
direct	-5457 May 11 j 22:36	18° $\overline{00}$ 02'53		max. Earth dist.	-5451 Sep 06 j 03:42	3° $\overline{00}$ 34'03	31.33151 AU
evening set	-5457 Aug 10 j 03:36	19° $\overline{00}$ 58'51		morning rise	-5451 Sep 21 j 20:41	4° $\overline{00}$ 09'17	

Attention, astronomical year style is used: The year -5451 in astronomical counting style is the year 5452 BCE in historical counting style.

retrograde	-5451 Dec 17 j 23:19	6°♈02'19		evening set	-5444 Sep 06 j 06:45	18°♈12'51	
opposition	-5450 Mar 07 j 01:27	4°♈40'14	2°23'26				
min. Earth dist.	-5450 Mar 07 j 16:06	4°♈39'15	29.33229 AU	conjunction	-5444 Sep 21 j 08:46	18°♈46'45	2°19'54
direct	-5450 May 27 j 08:53	3°♈15'59		minimum elong	-5444 Sep 21 j 08:47	18°♈46'45	2°20'07
evening set	-5450 Aug 24 j 23:27	5°♈11'23		max. Earth dist.	-5444 Sep 21 j 00:16	18°♈45'56	31.32896 AU
				morning rise	-5444 Oct 06 j 09:31	19°♈20'33	
conjunction	-5450 Sep 09 j 03:20	5°♈45'23	2°15'00	retrograde	-5443 Jan 02 j 03:21	21°♈14'31	
minimum elong	-5450 Sep 09 j 03:20	5°♈45'23	2°15'16	opposition	-5443 Mar 22 j 17:29	19°♈52'18	2°29'32
max. Earth dist.	-5450 Sep 08 j 12:34	5°♈43'59	31.32984 AU	min. Earth dist.	-5443 Mar 23 j 01:32	19°♈51'45	29.32964 AU
morning rise	-5450 Sep 24 j 05:25	6°♈19'13		direct	-5443 Jun 11 j 17:17	18°♈28'36	
retrograde	-5450 Dec 20 j 11:05	8°♈12'21		evening set	-5443 Sep 08 j 16:07	20°♈23'36	
opposition	-5449 Mar 09 j 13:48	6°♈50'13	2°24'56				
min. Earth dist.	-5449 Mar 10 j 02:58	6°♈49'20	29.33115 AU	conjunction	-5443 Sep 23 j 17:47	20°♈57'28	2°20'01
direct	-5449 May 29 j 18:57	5°♈26'00		minimum elong	-5443 Sep 23 j 17:47	20°♈57'28	2°20'14
evening set	-5449 Aug 27 j 08:38	7°♈21'20		max. Earth dist.	-5443 Sep 23 j 09:00	20°♈56'39	31.32632 AU
				morning rise	-5443 Oct 08 j 18:33	21°♈31'17	
conjunction	-5449 Sep 11 j 12:16	7°♈55'18	2°16'18	retrograde	-5442 Jan 04 j 15:07	23°♈25'24	
minimum elong	-5449 Sep 11 j 12:16	7°♈55'18	2°16'34	opposition	-5442 Mar 25 j 06:14	22°♈03'08	2°29'33
max. Earth dist.	-5449 Sep 10 j 23:34	7°♈54'06	31.32907 AU	min. Earth dist.	-5442 Mar 25 j 14:06	22°♈02'36	29.32631 AU
morning rise	-5449 Sep 26 j 13:54	8°♈29'08		direct	-5442 Jun 14 j 03:09	20°♈39'29	
retrograde	-5449 Dec 22 j 21:17	10°♈22'22		evening set	-5442 Sep 11 j 01:19	22°♈34'24	
opposition	-5448 Mar 11 j 02:20	9°♈00'12	2°26'14				
min. Earth dist.	-5448 Mar 11 j 15:04	8°♈59'21	29.33082 AU	conjunction	-5442 Sep 26 j 02:57	23°♈08'16	2°19'56
direct	-5448 May 31 j 07:47	7°♈36'04		minimum elong	-5442 Sep 26 j 02:57	23°♈08'16	2°20'09
evening set	-5448 Aug 28 j 17:58	9°♈31'20		max. Earth dist.	-5442 Sep 25 j 19:47	23°♈07'36	31.32220 AU
				morning rise	-5442 Oct 11 j 03:30	23°♈42'05	
conjunction	-5448 Sep 12 j 21:05	10°♈05'17	2°17'25	retrograde	-5441 Jan 07 j 01:47	25°♈36'20	
minimum elong	-5448 Sep 12 j 21:05	10°♈05'17	2°17'41	opposition	-5441 Mar 27 j 19:10	24°♈13'59	2°29'22
max. Earth dist.	-5448 Sep 12 j 08:35	10°♈04'06	31.32922 AU	min. Earth dist.	-5441 Mar 28 j 02:24	24°♈13'30	29.32134 AU
morning rise	-5448 Sep 27 j 22:38	10°♈39'06		direct	-5441 Jun 16 j 14:39	22°♈50'22	
retrograde	-5448 Dec 24 j 09:45	12°♈32'28		evening set	-5441 Sep 13 j 10:28	24°♈45'12	
opposition	-5447 Mar 13 j 14:41	11°♈10'18	2°27'19				
min. Earth dist.	-5447 Mar 14 j 01:31	11°♈09'34	29.33129 AU	conjunction	-5441 Sep 28 j 11:46	25°♈19'04	2°19'40
direct	-5447 Jun 02 j 19:32	9°♈46'14		minimum elong	-5441 Sep 28 j 11:46	25°♈19'04	2°19'52
evening set	-5447 Aug 31 j 03:06	11°♈41'28		max. Earth dist.	-5441 Sep 28 j 04:19	25°♈18'21	31.31664 AU
				morning rise	-5441 Oct 13 j 12:28	25°♈52'53	
conjunction	-5447 Sep 15 j 06:00	12°♈15'24	2°18'20	retrograde	-5440 Jan 09 j 14:06	27°♈47'14	
minimum elong	-5447 Sep 15 j 06:00	12°♈15'24	2°18'36	opposition	-5440 Mar 29 j 08:06	26°♈24'48	2°28'58
max. Earth dist.	-5447 Sep 14 j 19:01	12°♈14'22	31.32977 AU	min. Earth dist.	-5440 Mar 29 j 14:09	26°♈24'24	29.31522 AU
morning rise	-5447 Sep 30 j 07:15	12°♈49'12		direct	-5440 Jun 18 j 00:39	25°♈01'13	
retrograde	-5447 Dec 26 j 19:55	14°♈42'44		evening set	-5440 Sep 14 j 19:28	26°♈55'56	
opposition	-5446 Mar 16 j 03:18	13°♈20'32	2°28'11				
min. Earth dist.	-5446 Mar 16 j 14:21	13°♈19'48	29.33188 AU	conjunction	-5440 Sep 29 j 20:48	27°♈29'47	2°19'11
direct	-5446 Jun 05 j 06:50	11°♈56'35		minimum elong	-5440 Sep 29 j 20:48	27°♈29'47	2°19'23
evening set	-5446 Sep 02 j 12:20	13°♈51'46		max. Earth dist.	-5440 Sep 29 j 15:06	27°♈29'15	31.31003 AU
				morning rise	-5440 Oct 14 j 21:22	28°♈03'37	
conjunction	-5446 Sep 17 j 14:51	14°♈25'40	2°19'03	retrograde	-5439 Jan 11 j 01:00	29°♈58'05	
minimum elong	-5446 Sep 17 j 14:51	14°♈25'41	2°19'18	opposition	-5439 Mar 31 j 20:57	28°♈35'33	2°28'22
max. Earth dist.	-5446 Sep 17 j 04:34	14°♈24'42	31.33029 AU	min. Earth dist.	-5439 Apr 01 j 02:49	28°♈35'09	29.30830 AU
morning rise	-5446 Oct 02 j 15:57	14°♈59'29		direct	-5439 Jun 20 j 13:34	27°♈11'58	
	-5446 Oct 02 j 21:37	15°♈		evening set	-5439 Sep 17 j 04:27	29°♈06'34	
retrograde	-5446 Dec 29 j 06:08	16°♈53'09					
opposition	-5445 Mar 18 j 15:49	15°♈30'58	2°28'51	conjunction	-5439 Oct 02 j 05:34	29°♈40'25	2°18'31
min. Earth dist.	-5445 Mar 19 j 01:04	15°♈30'20	29.33209 AU	minimum elong	-5439 Oct 02 j 05:35	29°♈40'25	2°18'42
	-5445 Apr 07 j 06:47	15°♈		max. Earth dist.	-5439 Oct 02 j 00:06	29°♈39'54	31.30308 AU
direct	-5445 Jun 07 j 18:59	14°♈07'06			-5439 Oct 10 j 21:03	0°♈	
	-5445 Aug 04 j 19:23	15°♈		morning rise	-5439 Oct 17 j 06:19	0°♈14'15	
evening set	-5445 Sep 04 j 21:36	16°♈02'13		retrograde	-5438 Jan 13 j 14:03	2°♈08'49	
				opposition	-5438 Apr 03 j 09:43	0°♈46'11	2°27'33
conjunction	-5445 Sep 19 j 23:48	16°♈36'08	2°19'34	min. Earth dist.	-5438 Apr 03 j 13:37	0°♈45'55	29.30133 AU
minimum elong	-5445 Sep 19 j 23:48	16°♈36'08	2°19'49		-5438 May 03 j 15:58	30°♈	
max. Earth dist.	-5445 Sep 19 j 14:05	16°♈35'13	31.33009 AU	direct	-5438 Jun 23 j 01:29	29°♈22'37	
morning rise	-5445 Oct 05 j 00:45	17°♈09'56			-5438 Aug 10 j 06:09	0°♈	
retrograde	-5445 Dec 31 j 16:57	19°♈03'46		evening set	-5438 Sep 19 j 13:17	1°♈17'07	
opposition	-5444 Mar 20 j 04:42	17°♈41'33	2°29'18				
min. Earth dist.	-5444 Mar 20 j 14:05	17°♈40'56	29.33153 AU	conjunction	-5438 Oct 04 j 14:22	1°♈50'58	2°17'39
direct	-5444 Jun 09 j 05:10	16°♈17'47		minimum elong	-5438 Oct 04 j 14:22	1°♈50'58	2°17'49

Attention, astronomical year style is used: The year -5438 in astronomical counting style is the year 5439 BCE in historical counting style.

max. Earth dist.	-5438 Oct 04 j 10:27	1° $\mathring{M}$ 50'36	31.29619 AU	conjunction	-5431 Oct 19 j 04:58	17° $\mathring{M}$ 06'28	2°06'07
morning rise	-5438 Oct 19 j 15:04	2° $\mathring{M}$ 24'48		minimum elong	-5431 Oct 19 j 04:58	17° $\mathring{M}$ 06'28	2°06'12
retrograde	-5437 Jan 16 j 00:15	4° $\mathring{M}$ 19'29		max. Earth dist.	-5431 Oct 19 j 08:09	17° $\mathring{M}$ 06'46	31.25971 AU
opposition	-5437 Apr 05 j 22:40	2° $\mathring{M}$ 56'46	2°26'31	morning rise	-5431 Nov 03 j 06:57	17° $\mathring{M}$ 40'28	
min. Earth dist.	-5437 Apr 06 j 02:27	2° $\mathring{M}$ 56'31	29.29479 AU	retrograde	-5430 Jan 31 j 07:18	19° $\mathring{M}$ 36'08	
direct	-5437 Jun 25 j 12:46	1° $\mathring{M}$ 33'14		opposition	-5430 Apr 21 j 17:29	18° $\mathring{M}$ 13'02	2°13'28
evening set	-5437 Sep 21 j 22:10	3° $\mathring{M}$ 27'38		min. Earth dist.	-5430 Apr 21 j 14:27	18° $\mathring{M}$ 13'15	29.25743 AU
				direct	-5430 Jul 10 j 18:40	16° $\mathring{M}$ 49'56	
				evening set	-5430 Oct 06 j 12:33	18° $\mathring{M}$ 43'45	
conjunction	-5437 Oct 06 j 23:12	4° $\mathring{M}$ 01'29	2°16'35				
minimum elong	-5437 Oct 06 j 23:12	4° $\mathring{M}$ 01'29	2°16'45				
max. Earth dist.	-5437 Oct 06 j 20:28	4° $\mathring{M}$ 01'13	31.29015 AU	conjunction	-5430 Oct 21 j 14:04	19° $\mathring{M}$ 17'42	2°03'42
morning rise	-5437 Oct 22 j 00:00	4° $\mathring{M}$ 35'20		minimum elong	-5430 Oct 21 j 14:05	19° $\mathring{M}$ 17'42	2°03'47
retrograde	-5436 Jan 18 j 10:53	6° $\mathring{M}$ 30'08		max. Earth dist.	-5430 Oct 21 j 17:19	19° $\mathring{M}$ 18'00	31.25193 AU
opposition	-5436 Apr 07 j 11:30	5° $\mathring{M}$ 07'20	2°25'16	morning rise	-5430 Nov 05 j 16:26	19° $\mathring{M}$ 51'44	
min. Earth dist.	-5436 Apr 07 j 12:59	5° $\mathring{M}$ 07'14	29.28910 AU	retrograde	-5429 Feb 02 j 20:55	21° $\mathring{M}$ 47'31	
direct	-5436 Jun 27 j 01:37	3° $\mathring{M}$ 43'51		opposition	-5429 Apr 24 j 06:37	20° $\mathring{M}$ 24'21	2°10'48
evening set	-5436 Sep 23 j 06:57	5° $\mathring{M}$ 38'09		min. Earth dist.	-5429 Apr 24 j 01:56	20° $\mathring{M}$ 24'40	29.24882 AU
				direct	-5429 Jul 13 j 05:53	19° $\mathring{M}$ 01'16	
				evening set	-5429 Oct 08 j 21:37	20° $\mathring{M}$ 54'59	
conjunction	-5436 Oct 08 j 07:56	6° $\mathring{M}$ 12'01	2°15'20				
minimum elong	-5436 Oct 08 j 07:57	6° $\mathring{M}$ 12'01	2°15'28				
max. Earth dist.	-5436 Oct 08 j 06:01	6° $\mathring{M}$ 11'50	31.28486 AU	conjunction	-5429 Oct 23 j 23:21	21° $\mathring{M}$ 28'58	2°01'08
morning rise	-5436 Oct 23 j 08:57	6° $\mathring{M}$ 45'53		minimum elong	-5429 Oct 23 j 23:22	21° $\mathring{M}$ 28'58	2°01'12
retrograde	-5435 Jan 19 j 22:17	8° $\mathring{M}$ 40'49		max. Earth dist.	-5429 Oct 24 j 03:31	21° $\mathring{M}$ 29'21	31.24261 AU
opposition	-5435 Apr 10 j 00:28	7° $\mathring{M}$ 17'58	2°23'49	morning rise	-5429 Nov 08 j 02:02	22° $\mathring{M}$ 03'02	
min. Earth dist.	-5435 Apr 10 j 01:41	7° $\mathring{M}$ 17'53	29.28420 AU	retrograde	-5428 Feb 05 j 08:14	23° $\mathring{M}$ 58'56	
direct	-5435 Jun 29 j 12:29	5° $\mathring{M}$ 54'33		opposition	-5428 Apr 25 j 19:51	22° $\mathring{M}$ 35'39	2°07'57
evening set	-5435 Sep 25 j 15:46	7° $\mathring{M}$ 48'46		min. Earth dist.	-5428 Apr 25 j 15:33	22° $\mathring{M}$ 35'57	29.23884 AU
				direct	-5428 Jul 14 j 17:01	21° $\mathring{M}$ 12'35	
				evening set	-5428 Oct 10 j 06:32	23° $\mathring{M}$ 06'12	
conjunction	-5435 Oct 10 j 16:53	8° $\mathring{M}$ 22'38	2°13'52				
minimum elong	-5435 Oct 10 j 16:53	8° $\mathring{M}$ 22'38	2°14'00				
max. Earth dist.	-5435 Oct 10 j 16:40	8° $\mathring{M}$ 22'37	31.28030 AU	conjunction	-5428 Oct 25 j 08:34	23° $\mathring{M}$ 40'11	1°58'22
morning rise	-5435 Oct 25 j 17:56	8° $\mathring{M}$ 56'32		minimum elong	-5428 Oct 25 j 08:34	23° $\mathring{M}$ 40'11	1°58'26
retrograde	-5434 Jan 22 j 08:28	10° $\mathring{M}$ 51'36		max. Earth dist.	-5428 Oct 25 j 13:40	23° $\mathring{M}$ 40'40	31.23221 AU
opposition	-5434 Apr 12 j 13:12	9° $\mathring{M}$ 28'43	2°22'10	morning rise	-5428 Nov 09 j 11:36	24° $\mathring{M}$ 14'18	
min. Earth dist.	-5434 Apr 12 j 12:41	9° $\mathring{M}$ 28'45	29.27967 AU	retrograde	-5427 Feb 06 j 20:04	26° $\mathring{M}$ 10'18	
direct	-5434 Jul 02 j 00:35	8° $\mathring{M}$ 05'21		opposition	-5427 Apr 28 j 08:52	24° $\mathring{M}$ 46'55	2°04'55
evening set	-5434 Sep 28 j 00:43	9° $\mathring{M}$ 59'30		min. Earth dist.	-5427 Apr 28 j 02:44	24° $\mathring{M}$ 47'19	29.22785 AU
				direct	-5427 Jul 17 j 06:11	23° $\mathring{M}$ 23'50	
				evening set	-5427 Oct 12 j 15:32	25° $\mathring{M}$ 17'20	
conjunction	-5434 Oct 13 j 01:43	10° $\mathring{M}$ 33'23	2°12'13				
minimum elong	-5434 Oct 13 j 01:44	10° $\mathring{M}$ 33'23	2°12'21				
max. Earth dist.	-5434 Oct 13 j 01:38	10° $\mathring{M}$ 33'22	31.27592 AU	conjunction	-5427 Oct 27 j 17:43	25° $\mathring{M}$ 51'21	1°55'27
morning rise	-5434 Oct 28 j 03:07	11° $\mathring{M}$ 07'19		minimum elong	-5427 Oct 27 j 17:43	25° $\mathring{M}$ 51'21	1°55'30
retrograde	-5433 Jan 24 j 20:05	13° $\mathring{M}$ 02'31		max. Earth dist.	-5427 Oct 27 j 23:09	25° $\mathring{M}$ 51'52	31.22096 AU
opposition	-5433 Apr 15 j 02:16	11° $\mathring{M}$ 39'36	2°20'17	morning rise	-5427 Nov 11 j 21:13	26° $\mathring{M}$ 25'30	
min. Earth dist.	-5433 Apr 15 j 01:09	11° $\mathring{M}$ 39'40	29.27528 AU	retrograde	-5426 Feb 09 j 08:04	28° $\mathring{M}$ 21'36	
direct	-5433 Jul 04 j 10:07	10° $\mathring{M}$ 16'19		opposition	-5426 Apr 30 j 21:53	26° $\mathring{M}$ 58'06	2°01'43
evening set	-5433 Sep 30 j 09:27	12° $\mathring{M}$ 10'22		min. Earth dist.	-5426 Apr 30 j 15:45	26° $\mathring{M}$ 58'31	29.21655 AU
				direct	-5426 Jul 19 j 17:26	25° $\mathring{M}$ 35'02	
				evening set	-5426 Oct 15 j 00:23	27° $\mathring{M}$ 28'25	
conjunction	-5433 Oct 15 j 10:41	12° $\mathring{M}$ 44'16	2°10'22				
minimum elong	-5433 Oct 15 j 10:41	12° $\mathring{M}$ 44'16	2°10'29				
max. Earth dist.	-5433 Oct 15 j 12:38	12° $\mathring{M}$ 44'28	31.27137 AU	conjunction	-5426 Oct 30 j 02:57	28° $\mathring{M}$ 02'27	1°52'22
morning rise	-5433 Oct 30 j 12:07	13° $\mathring{M}$ 18'13		minimum elong	-5426 Oct 30 j 02:58	28° $\mathring{M}$ 02'28	1°52'24
retrograde	-5432 Jan 27 j 06:37	15° $\mathring{M}$ 13'36		max. Earth dist.	-5426 Oct 30 j 10:15	28° $\mathring{M}$ 03'09	31.20982 AU
opposition	-5432 Apr 16 j 15:23	13° $\mathring{M}$ 50'37	2°18'13	morning rise	-5426 Nov 14 j 06:42	28° $\mathring{M}$ 36'39	
min. Earth dist.	-5432 Apr 16 j 13:27	13° $\mathring{M}$ 50'45	29.27034 AU		-5426 Dec 28 j 13:20	0° $\mathring{A}$	
direct	-5432 Jul 05 j 21:14	12° $\mathring{M}$ 27'25		retrograde	-5425 Feb 11 j 18:22	0° $\mathring{A}$ 32'50	
evening set	-5432 Oct 01 j 18:33	14° $\mathring{M}$ 21'24			-5425 Mar 30 j 19:42	30° $\mathring{R}$ $\mathring{M}$	
				opposition	-5425 May 03 j 10:53	29° $\mathring{M}$ 09'14	1°58'20
conjunction	-5432 Oct 16 j 19:44	14° $\mathring{M}$ 55'18	2°08'20	min. Earth dist.	-5425 May 03 j 02:52	29° $\mathring{M}$ 09'47	29.20555 AU
minimum elong	-5432 Oct 16 j 19:44	14° $\mathring{M}$ 55'18	2°08'26	direct	-5425 Jul 22 j 05:56	27° $\mathring{M}$ 46'11	
max. Earth dist.	-5432 Oct 16 j 21:28	14° $\mathring{M}$ 55'28	31.26613 AU	evening set	-5425 Oct 17 j 09:18	29° $\mathring{M}$ 39'28	
morning rise	-5432 Oct 31 j 21:35	15° $\mathring{M}$ 29'17			-5425 Oct 26 j 13:03	0° $\mathring{A}$	
retrograde	-5431 Jan 28 j 19:46	17° $\mathring{M}$ 24'48					
opposition	-5431 Apr 19 j 04:19	16° $\mathring{M}$ 01'47	2°15'56	conjunction	-5425 Nov 01 j 11:59	0° $\mathring{A}$ 13'32	1°49'08
min. Earth dist.	-5431 Apr 19 j 01:19	16° $\mathring{M}$ 01'59	29.26460 AU	minimum elong	-5425 Nov 01 j 11:59	0° $\mathring{A}$ 13'32	1°49'09
direct	-5431 Jul 08 j 06:52	14° $\mathring{M}$ 38'38		max. Earth dist.	-5425 Nov 01 j 19:29	0° $\mathring{A}$ 14'14	31.19929 AU
evening set	-5431 Oct 04 j 03:30	16° $\mathring{M}$ 32'32		morning rise	-5425 Nov 16 j 16:20	0° $\mathring{A}$ 47'46	

Attention, astronomical year style is used: The year -5424 in astronomical counting style is the year 5425 BCE in historical counting style.

retrograde	-5424 Feb 14 j 05:55	2° <u>♂</u> 44'05		conjunction	-5418 Nov 16 j 06:27	15° <u>♂</u> 34'48	1°22'09
opposition	-5424 May 04 j 23:58	1° <u>♂</u> 20'23	1°54'47	minimum elong	-5418 Nov 16 j 06:28	15° <u>♂</u> 34'48	1°22'05
min. Earth dist.	-5424 May 04 j 15:10	1° <u>♂</u> 20'59	29.19552 AU	max. Earth dist.	-5418 Nov 16 j 20:26	15° <u>♂</u> 36'07	31.14282 AU
	-5424 Jul 10 j 23:28	30° <u>♂</u> 17		morning rise	-5418 Dec 01 j 14:13	16° <u>♂</u> 09'22	
direct	-5424 Jul 23 j 15:48	29° <u>♂</u> 57'21		retrograde	-5417 Mar 01 j 22:50	18° <u>♂</u> 06'37	
	-5424 Aug 05 j 03:24	0° <u>♂</u>		opposition	-5417 May 21 j 18:59	16° <u>♂</u> 42'34	1°25'25
evening set	-5424 Oct 18 j 18:11	1° <u>♂</u> 50'33		min. Earth dist.	-5417 May 21 j 04:36	16° <u>♂</u> 43'32	29.13880 AU
				direct	-5417 Aug 08 j 19:13	15° <u>♂</u> 19'52	
conjunction	-5424 Nov 02 j 21:21	2° <u>♂</u> 24'39	1°45'43	evening set	-5417 Nov 03 j 10:35	17° <u>♂</u> 12'39	
minimum elong	-5424 Nov 02 j 21:22	2° <u>♂</u> 24'39	1°45'44				
max. Earth dist.	-5424 Nov 03 j 07:04	2° <u>♂</u> 25'35	31.18977 AU	conjunction	-5417 Nov 18 j 16:26	17° <u>♂</u> 47'01	1°17'46
morning rise	-5424 Nov 18 j 01:59	2° <u>♂</u> 58'56		minimum elong	-5417 Nov 18 j 16:27	17° <u>♂</u> 47'01	1°17'42
retrograde	-5423 Feb 15 j 16:14	4° <u>♂</u> 55'22		max. Earth dist.	-5417 Nov 19 j 07:48	17° <u>♂</u> 48'28	31.13302 AU
opposition	-5423 May 07 j 12:47	3° <u>♂</u> 31'37	1°51'03	morning rise	-5417 Dec 04 j 00:38	18° <u>♂</u> 21'38	
min. Earth dist.	-5423 May 07 j 02:52	3° <u>♂</u> 32'17	29.18642 AU	retrograde	-5416 Mar 03 j 09:49	20° <u>♂</u> 18'59	
direct	-5423 Jul 26 j 02:41	2° <u>♂</u> 08'37		opposition	-5416 May 23 j 08:01	18° <u>♂</u> 54'51	1°20'40
evening set	-5423 Oct 21 j 03:13	4° <u>♂</u> 01'45		min. Earth dist.	-5416 May 22 j 16:21	18° <u>♂</u> 55'55	29.12823 AU
				direct	-5416 Aug 10 j 07:51	17° <u>♂</u> 32'10	
conjunction	-5423 Nov 05 j 06:34	4° <u>♂</u> 35'53	1°42'09	evening set	-5416 Nov 04 j 20:15	19° <u>♂</u> 24'51	
minimum elong	-5423 Nov 05 j 06:35	4° <u>♂</u> 35'53	1°42'10				
max. Earth dist.	-5423 Nov 05 j 16:25	4° <u>♂</u> 36'49	31.18131 AU	conjunction	-5416 Nov 20 j 02:24	19° <u>♂</u> 59'15	1°13'16
morning rise	-5423 Nov 20 j 11:49	5° <u>♂</u> 10'12		minimum elong	-5416 Nov 20 j 02:25	19° <u>♂</u> 59'15	1°13'11
retrograde	-5422 Feb 18 j 05:31	7° <u>♂</u> 06'47		max. Earth dist.	-5416 Nov 20 j 17:16	20° <u>♂</u> 00'39	31.12198 AU
opposition	-5422 May 10 j 01:44	5° <u>♂</u> 42'59	1°47'10	morning rise	-5416 Dec 05 j 11:21	20° <u>♂</u> 33'55	
min. Earth dist.	-5422 May 09 j 14:23	5° <u>♂</u> 43'45	29.17838 AU	retrograde	-5415 Mar 05 j 22:09	22° <u>♂</u> 31'21	
direct	-5422 Jul 28 j 12:09	4° <u>♂</u> 20'03		opposition	-5415 May 25 j 20:55	21° <u>♂</u> 07'06	1°15'47
evening set	-5422 Oct 23 j 12:04	6° <u>♂</u> 13'06		min. Earth dist.	-5415 May 25 j 05:13	21° <u>♂</u> 08'10	29.11671 AU
				direct	-5415 Aug 12 j 18:37	19° <u>♂</u> 44'24	
conjunction	-5422 Nov 07 j 15:52	6° <u>♂</u> 47'16	1°38'27	evening set	-5415 Nov 07 j 05:45	21° <u>♂</u> 36'59	
minimum elong	-5422 Nov 07 j 15:53	6° <u>♂</u> 47'16	1°38'26				
max. Earth dist.	-5422 Nov 08 j 03:33	6° <u>♂</u> 48'23	31.17360 AU	conjunction	-5415 Nov 22 j 12:32	22° <u>♂</u> 11'26	1°08'39
morning rise	-5422 Nov 22 j 21:28	7° <u>♂</u> 21'39		minimum elong	-5415 Nov 22 j 12:32	22° <u>♂</u> 11'26	1°08'34
retrograde	-5421 Feb 20 j 17:08	9° <u>♂</u> 18'23		max. Earth dist.	-5415 Nov 23 j 05:05	22° <u>♂</u> 13'00	31.11012 AU
opposition	-5421 May 12 j 14:50	7° <u>♂</u> 54'31	1°43'07	morning rise	-5415 Dec 07 j 21:53	22° <u>♂</u> 46'09	
min. Earth dist.	-5421 May 12 j 03:04	7° <u>♂</u> 55'19	29.17088 AU	retrograde	-5414 Mar 08 j 08:52	24° <u>♂</u> 43'38	
direct	-5421 Jul 30 j 23:01	6° <u>♂</u> 31'39		opposition	-5414 May 28 j 09:51	23° <u>♂</u> 19'17	1°10'48
evening set	-5421 Oct 25 j 21:11	8° <u>♂</u> 24'40		min. Earth dist.	-5414 May 27 j 17:27	23° <u>♂</u> 20'24	29.10455 AU
				direct	-5414 Aug 15 j 06:48	21° <u>♂</u> 56'34	
conjunction	-5421 Nov 10 j 01:18	8° <u>♂</u> 58'52	1°34'35	evening set	-5414 Nov 09 j 15:14	23° <u>♂</u> 49'03	
minimum elong	-5421 Nov 10 j 01:19	8° <u>♂</u> 58'52	1°34'34				
max. Earth dist.	-5421 Nov 10 j 13:28	9° <u>♂</u> 00'01	31.16647 AU	conjunction	-5414 Nov 24 j 22:21	24° <u>♂</u> 23'32	1°03'56
morning rise	-5421 Nov 25 j 07:29	9° <u>♂</u> 33'17		minimum elong	-5414 Nov 24 j 22:22	24° <u>♂</u> 23'32	1°03'50
retrograde	-5420 Feb 23 j 07:11	11° <u>♂</u> 30'10		max. Earth dist.	-5414 Nov 25 j 14:50	24° <u>♂</u> 25'05	31.09807 AU
opposition	-5420 May 14 j 03:45	10° <u>♂</u> 06'16	1°38'54	morning rise	-5414 Dec 10 j 08:25	24° <u>♂</u> 58'17	
min. Earth dist.	-5420 May 13 j 14:14	10° <u>♂</u> 07'11	29.16374 AU	retrograde	-5413 Mar 10 j 21:41	26° <u>♂</u> 55'52	
direct	-5420 Aug 01 j 08:52	8° <u>♂</u> 43'27		opposition	-5413 May 30 j 22:46	25° <u>♂</u> 31'24	1°05'43
evening set	-5420 Oct 27 j 06:22	10° <u>♂</u> 36'25		min. Earth dist.	-5413 May 30 j 05:16	25° <u>♂</u> 32'35	29.09266 AU
				direct	-5413 Aug 17 j 17:05	24° <u>♂</u> 08'38	
conjunction	-5420 Nov 11 j 10:53	11° <u>♂</u> 10'40	1°30'34	evening set	-5413 Nov 12 j 00:49	26° <u>♂</u> 01'03	
minimum elong	-5420 Nov 11 j 10:54	11° <u>♂</u> 10'40	1°30'32				
max. Earth dist.	-5420 Nov 12 j 00:00	11° <u>♂</u> 11'54	31.15922 AU	conjunction	-5413 Nov 27 j 08:30	26° <u>♂</u> 35'34	0°59'08
morning rise	-5420 Nov 26 j 17:35	11° <u>♂</u> 45'08		minimum elong	-5413 Nov 27 j 08:30	26° <u>♂</u> 35'34	0°59'01
retrograde	-5419 Feb 24 j 19:25	13° <u>♂</u> 42'09		max. Earth dist.	-5413 Nov 28 j 02:32	26° <u>♂</u> 37'16	31.08642 AU
opposition	-5419 May 16 j 16:52	12° <u>♂</u> 18'13	1°34'33	morning rise	-5413 Dec 12 j 19:04	27° <u>♂</u> 10'22	
min. Earth dist.	-5419 May 16 j 03:44	12° <u>♂</u> 19'06	29.15628 AU	retrograde	-5412 Mar 12 j 08:19	29° <u>♂</u> 08'01	
direct	-5419 Aug 03 j 19:07	10° <u>♂</u> 55'28		opposition	-5412 Jun 01 j 11:34	27° <u>♂</u> 43'28	1°00'32
evening set	-5419 Oct 29 j 15:41	12° <u>♂</u> 48'22		min. Earth dist.	-5412 May 31 j 17:49	27° <u>♂</u> 44'40	29.08143 AU
				direct	-5412 Aug 19 j 03:53	26° <u>♂</u> 20'41	
conjunction	-5419 Nov 13 j 20:38	13° <u>♂</u> 22'39	1°26'26	evening set	-5412 Nov 13 j 10:29	28° <u>♂</u> 13'02	
minimum elong	-5419 Nov 13 j 20:39	13° <u>♂</u> 22'39	1°26'22				
max. Earth dist.	-5419 Nov 14 j 10:43	13° <u>♂</u> 23'59	31.15153 AU	conjunction	-5412 Nov 28 j 18:39	28° <u>♂</u> 47'35	0°54'15
morning rise	-5419 Nov 29 j 03:46	13° <u>♂</u> 57'10		minimum elong	-5412 Nov 28 j 18:39	28° <u>♂</u> 47'35	0°54'07
retrograde	-5418 Feb 27 j 08:57	15° <u>♂</u> 54'18		max. Earth dist.	-5412 Nov 29 j 13:11	28° <u>♂</u> 49'20	31.07581 AU
opposition	-5418 May 19 j 05:46	14° <u>♂</u> 30'20	1°30'03	morning rise	-5412 Dec 14 j 05:51	29° <u>♂</u> 22'26	
min. Earth dist.	-5418 May 18 j 15:01	14° <u>♂</u> 31'20	29.14805 AU		-5412 Dec 31 j 23:23	0° <u>♂</u>	
direct	-5418 Aug 06 j 08:06	13° <u>♂</u> 07'37		retrograde	-5411 Mar 14 j 21:49	1° <u>♂</u> 20'11	
evening set	-5418 Nov 01 j 01:12	15° <u>♂</u> 00'28			-5411 Jun 01 j 06:59	30° <u>♂</u>	

Attention, astronomical year style is used: The year -5411 in astronomical counting style is the year 5412 BCE in historical counting style.

min. Earth dist.	-5411 Jun 03 j 04:45	29° <u>25</u> '56"53	29.07132 AU	minimum elong	-5405 Dec 14 j 20:58	14° <u>16</u> '16"20	0°17'50
opposition	-5411 Jun 04 j 00:17	29° <u>25</u> '55"33	0°55'16	max. Earth dist.	-5405 Dec 15 j 19:23	14° <u>16</u> '18"28	31.01927 AU
direct	-5411 Aug 21 j 13:47	28° <u>25</u> '32"46		morning rise	-5405 Dec 30 j 12:21	14° <u>16</u> '51"35	
	-5411 Nov 04 j 04:26	0° <u>16</u> '			-5404 Jan 03 j 08:25	15° <u>16</u> '	
evening set	-5411 Nov 15 j 20:13	0° <u>16</u> '25"04		retrograde	-5404 Mar 30 j 18:29	16° <u>16</u> '50"03	
				opposition	-5404 Jun 19 j 17:36	15° <u>16</u> '25"13	0°16'18
conjunction	-5411 Dec 01 j 04:49	0° <u>16</u> '59"40	0°49'16	min. Earth dist.	-5404 Jun 18 j 19:07	15° <u>16</u> '26"46	29.01472 AU
minimum elong	-5411 Dec 01 j 04:49	0° <u>16</u> '59"40	0°49'08		-5404 Jul 05 j 06:38	15° <u>16</u> ' <u>16</u> '	
max. Earth dist.	-5411 Dec 02 j 00:16	1° <u>16</u> '01"30	31.06618 AU	direct	-5404 Sep 05 j 19:36	14° <u>16</u> '02"39	
morning rise	-5411 Dec 16 j 16:36	1° <u>16</u> '34"34			-5404 Nov 03 j 21:23	15° <u>16</u> '	
retrograde	-5410 Mar 17 j 10:03	3° <u>16</u> '32"25		evening set	-5404 Nov 30 j 20:01	15° <u>16</u> '54"54	
opposition	-5410 Jun 06 j 13:05	2° <u>16</u> '07"43	0°49'54				
min. Earth dist.	-5410 Jun 05 j 17:44	2° <u>16</u> '09"03	29.06227 AU	conjunction	-5404 Dec 16 j 08:15	16° <u>16</u> '29"48	0°12'41
direct	-5410 Aug 23 j 23:49	0° <u>16</u> '44"59		minimum elong	-5404 Dec 16 j 08:15	16° <u>16</u> '29"48	0°12'28
evening set	-5410 Nov 18 j 05:59	2° <u>16</u> '37"15		behind sun begin	-5404 Dec 16 j 04:01	16° <u>16</u> '29"25	
				behind sun end	-5404 Dec 16 j 12:29	16° <u>16</u> '30"11	
conjunction	-5410 Dec 03 j 15:11	3° <u>16</u> '11"53	0°44'13	max. Earth dist.	-5404 Dec 17 j 07:24	16° <u>16</u> '31"59	31.00921 AU
minimum elong	-5410 Dec 03 j 15:11	3° <u>16</u> '11"53	0°44'04	morning rise	-5403 Jan 01 j 00:09	17° <u>16</u> '05"05	
max. Earth dist.	-5410 Dec 04 j 11:55	3° <u>16</u> '13"50	31.05781 AU	retrograde	-5403 Apr 02 j 05:14	19° <u>16</u> '03"38	
morning rise	-5410 Dec 19 j 03:29	3° <u>16</u> '46"51		min. Earth dist.	-5403 Jun 21 j 08:19	17° <u>16</u> '40"15	29.00405 AU
retrograde	-5409 Mar 20 j 00:09	5° <u>16</u> '44"47		opposition	-5403 Jun 22 j 06:22	17° <u>16</u> '38"44	0°10'33
min. Earth dist.	-5409 Jun 08 j 04:39	4° <u>16</u> '21"31	29.05428 AU	direct	-5403 Sep 08 j 06:37	16° <u>16</u> '16"09	
opposition	-5409 Jun 09 j 01:48	4° <u>16</u> '20"04	0°44'27	evening set	-5403 Dec 03 j 06:41	18° <u>16</u> '08"22	
direct	-5409 Aug 26 j 11:59	2° <u>16</u> '57"21					
evening set	-5409 Nov 20 j 15:56	4° <u>16</u> '49"36		conjunction	-5403 Dec 18 j 19:25	18° <u>16</u> '43"18	0°07'19
				minimum elong	-5403 Dec 18 j 19:26	18° <u>16</u> '43"18	0°07'06
conjunction	-5409 Dec 06 j 01:31	5° <u>16</u> '24"18	0°39'05	behind sun begin	-5403 Dec 18 j 13:28	18° <u>16</u> '42"46	
minimum elong	-5409 Dec 06 j 01:31	5° <u>16</u> '24"18	0°38'56	behind sun end	-5403 Dec 19 j 01:24	18° <u>16</u> '43"51	
max. Earth dist.	-5409 Dec 06 j 22:19	5° <u>16</u> '26"15	31.05021 AU	max. Earth dist.	-5403 Dec 19 j 18:26	18° <u>16</u> '45"29	30.99817 AU
morning rise	-5409 Dec 21 j 14:35	5° <u>16</u> '59"19		morning rise	-5402 Jan 03 j 11:55	19° <u>16</u> '18"38	
retrograde	-5408 Mar 21 j 14:23	7° <u>16</u> '57"22		retrograde	-5402 Apr 04 j 18:56	21° <u>16</u> '17"14	
opposition	-5408 Jun 10 j 14:40	6° <u>16</u> '32"38	0°38'56	opposition	-5402 Jun 24 j 18:57	19° <u>16</u> '52"16	0°04'48
min. Earth dist.	-5408 Jun 09 j 17:52	6° <u>16</u> '34"03	29.04698 AU	min. Earth dist.	-5402 Jun 23 j 19:51	19° <u>16</u> '53"51	28.99261 AU
direct	-5408 Aug 27 j 22:21	5° <u>16</u> '09"58		direct	-5402 Sep 10 j 16:46	18° <u>16</u> '29"37	
evening set	-5408 Nov 22 j 02:00	7° <u>16</u> '02"13		evening set	-5402 Dec 05 j 17:30	20° <u>16</u> '21"48	
conjunction	-5408 Dec 07 j 12:15	7° <u>16</u> '36"57	0°33'54	conjunction	-5402 Dec 21 j 06:43	20° <u>16</u> '56"47	0°01'55
minimum elong	-5408 Dec 07 j 12:16	7° <u>16</u> '36"57	0°33'43	minimum elong	-5402 Dec 21 j 06:42	20° <u>16</u> '56"47	0°01'41
max. Earth dist.	-5408 Dec 08 j 10:33	7° <u>16</u> '39"03	31.04309 AU	behind sun begin	-5402 Dec 21 j 00:14	20° <u>16</u> '56"12	
morning rise	-5408 Dec 23 j 01:45	8° <u>16</u> '12"01		behind sun end	-5402 Dec 21 j 13:10	20° <u>16</u> '57"22	
retrograde	-5407 Mar 24 j 02:38	10° <u>16</u> '10"11		max. Earth dist.	-5402 Dec 22 j 06:03	20° <u>16</u> '58"59	30.98648 AU
min. Earth dist.	-5407 Jun 12 j 05:14	8° <u>16</u> '46"56	29.03980 AU	morning rise	-5401 Jan 05 j 23:47	21° <u>16</u> '32"09	
opposition	-5407 Jun 13 j 03:13	8° <u>16</u> '45"26	0°33'21	retrograde	-5401 Apr 07 j 06:43	23° <u>16</u> '30"48	
direct	-5407 Aug 30 j 10:24	7° <u>16</u> '22"49		desc. node	-5401 Apr 27 j 02:02	23° <u>16</u> '24"38	
evening set	-5407 Nov 24 j 12:23	9° <u>16</u> '15"04		min. Earth dist.	-5401 Jun 26 j 09:12	22° <u>16</u> '07"17	28.98095 AU
				opposition	-5401 Jun 27 j 07:34	22° <u>16</u> '05"44	-0°00'58
conjunction	-5407 Dec 09 j 22:57	9° <u>16</u> '49"51	0°28'39	direct	-5401 Sep 13 j 03:10	20° <u>16</u> '43"03	
minimum elong	-5407 Dec 09 j 22:57	9° <u>16</u> '49"51	0°28'28	evening set	-5401 Dec 08 j 04:15	22° <u>16</u> '35"12	
max. Earth dist.	-5407 Dec 10 j 20:40	9° <u>16</u> '51"54	31.03586 AU				
morning rise	-5407 Dec 25 j 13:12	10° <u>16</u> '24"59		conjunction	-5401 Dec 23 j 18:05	23° <u>16</u> '10"13	-0°03'36
retrograde	-5406 Mar 26 j 16:43	12° <u>16</u> '23"16		minimum elong	-5401 Dec 23 j 18:05	23° <u>16</u> '10"13	0°03'50
opposition	-5406 Jun 15 j 16:04	10° <u>16</u> '58"30	0°27'42	behind sun begin	-5401 Dec 23 j 11:42	23° <u>16</u> '09"39	
min. Earth dist.	-5406 Jun 14 j 18:12	11° <u>16</u> '00"00	29.03239 AU	behind sun end	-5401 Dec 24 j 00:29	23° <u>16</u> '10"48	
direct	-5406 Sep 01 j 21:01	9° <u>16</u> '35"55		max. Earth dist.	-5401 Dec 24 j 18:19	23° <u>16</u> '12"30	30.97500 AU
evening set	-5406 Nov 26 j 22:38	11° <u>16</u> '28"10		morning rise	-5400 Jan 08 j 11:41	23° <u>16</u> '45"37	
				retrograde	-5400 Apr 08 j 20:25	25° <u>16</u> '44"18	
conjunction	-5406 Dec 12 j 09:52	12° <u>16</u> '03"00	0°23'21	opposition	-5400 Jun 28 j 19:57	24° <u>16</u> '19"10	-0°06'44
minimum elong	-5406 Dec 12 j 09:52	12° <u>16</u> '03"00	0°23'10	min. Earth dist.	-5400 Jun 27 j 20:15	24° <u>16</u> '20"48	28.96968 AU
max. Earth dist.	-5406 Dec 13 j 09:02	12° <u>16</u> '05"11	31.02805 AU	direct	-5400 Sep 14 j 15:32	22° <u>16</u> '56"25	
morning rise	-5406 Dec 28 j 00:31	12° <u>16</u> '38"11		evening set	-5400 Dec 09 j 15:21	24° <u>16</u> '48"34	
retrograde	-5405 Mar 29 j 05:00	14° <u>16</u> '36"34					
min. Earth dist.	-5405 Jun 17 j 06:45	13° <u>16</u> '13"18	29.02407 AU	conjunction	-5400 Dec 25 j 05:31	25° <u>16</u> '23"37	-0°08'58
opposition	-5405 Jun 18 j 04:54	13° <u>16</u> '11"47	0°22'01	minimum elong	-5400 Dec 25 j 05:31	25° <u>16</u> '23"37	0°09'13
direct	-5405 Sep 04 j 09:12	11° <u>16</u> '49"14		behind sun begin	-5400 Dec 25 j 00:02	25° <u>16</u> '23"07	
evening set	-5405 Nov 29 j 09:19	13° <u>16</u> '41"28		behind sun end	-5400 Dec 25 j 10:59	25° <u>16</u> '24"07	
				max. Earth dist.	-5400 Dec 26 j 05:25	25° <u>16</u> '25"52	30.96403 AU
conjunction	-5405 Dec 14 j 20:58	14° <u>16</u> '16"20	0°18'02	morning rise	-5399 Jan 09 j 23:45	25° <u>16</u> '59"04	

Attention, astronomical year style is used: The year -5399 in astronomical counting style is the year 5400 BCE in historical counting style.

retrograde	-5399 Apr 11 j 09:48	27° <del>11</del> 57'47	
min. Earth dist.	-5399 Jun 30 j 09:09	26° <del>11</del> 34'10	28.95930 AU
opposition	-5399 Jul 01 j 08:17	26° <del>11</del> 32'34	-0°12'30
direct	-5399 Sep 17 j 01:31	25° <del>11</del> 09'46	
evening set	-5399 Dec 12 j 02:16	27° <del>11</del> 01'55	
conjunction	-5399 Dec 27 j 17:05	27° <del>11</del> 37'01	-0°14'20
minimum elong	-5399 Dec 27 j 17:06	27° <del>11</del> 37'01	0°14'34
behind sun begin	-5399 Dec 27 j 14:16	27° <del>11</del> 36'46	
behind sun end	-5399 Dec 27 j 19:55	27° <del>11</del> 37'16	
max. Earth dist.	-5399 Dec 28 j 18:26	27° <del>11</del> 39'24	30.95418 AU