

Planetary Phenomena of Uranus from -4900 through -4398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -4900 in astronomical counting style is the year 4901 BCE in historical counting style.

retrograde	-4900 Feb 14 j 21:45	4° <u>♂</u> 30'58		opposition	-4894 May 28 j 20:48	27° <u>♂</u> 27'43	0°10'37
min. Earth dist.	-4900 May 01 j 07:42	2° <u>♂</u> 33'21	18.42450 AU	min. Earth dist.	-4894 May 27 j 16:38	27° <u>♂</u> 30'32	18.79343 AU
opposition	-4900 May 02 j 06:28	2° <u>♂</u> 31'03	0°33'17	direct	-4894 Aug 12 j 22:12	25° <u>♂</u> 30'39	
direct	-4900 Jul 17 j 21:01	0° <u>♂</u> 32'01		evening set	-4894 Nov 10 j 22:12	28° <u>♂</u> 32'57	
evening set	-4900 Oct 17 j 03:29	3° <u>♂</u> 40'47					
conjunction	-4900 Nov 01 j 16:55	4° <u>♂</u> 36'13	0°28'29	conjunction	-4894 Nov 26 j 13:43	29° <u>♂</u> 27'24	0°07'53
minimum elong	-4900 Nov 01 j 16:55	4° <u>♂</u> 36'13	0°28'29	minimum elong	-4894 Nov 26 j 13:43	29° <u>♂</u> 27'24	0°07'48
max. Earth dist.	-4900 Nov 02 j 17:31	4° <u>♂</u> 39'54	20.45872 AU	behind sun begin	-4894 Nov 26 j 07:48	29° <u>♂</u> 26'33	
morning rise	-4900 Nov 17 j 07:28	5° <u>♂</u> 31'51		behind sun end	-4894 Nov 26 j 19:38	29° <u>♂</u> 28'14	
retrograde	-4899 Feb 18 j 11:22	8° <u>♂</u> 44'01		max. Earth dist.	-4894 Nov 27 j 19:46	29° <u>♂</u> 31'47	20.81782 AU
opposition	-4899 May 06 j 22:46	6° <u>♂</u> 44'14	0°29'47		-4894 Dec 05 j 21:18	0° <u>♂</u>	
min. Earth dist.	-4899 May 05 j 22:17	6° <u>♂</u> 46'42	18.49278 AU	morning rise	-4894 Dec 12 j 07:52	0° <u>♂</u> 22'14	
direct	-4899 Jul 22 j 12:08	4° <u>♂</u> 45'37		retrograde	-4893 Mar 16 j 04:51	3° <u>♂</u> 31'29	
evening set	-4899 Oct 21 j 11:53	7° <u>♂</u> 53'11		min. Earth dist.	-4893 Jun 01 j 03:12	1° <u>♂</u> 34'58	18.84175 AU
				opposition	-4893 Jun 02 j 08:26	1° <u>♂</u> 32'02	0°06'37
conjunction	-4899 Nov 06 j 01:19	8° <u>♂</u> 48'25	0°25'17		-4893 Jul 16 j 09:12	30° <u>♂</u>	
minimum elong	-4899 Nov 06 j 01:19	8° <u>♂</u> 48'25	0°25'16	direct	-4893 Aug 17 j 08:50	29° <u>♂</u> 35'10	
max. Earth dist.	-4899 Nov 07 j 02:25	8° <u>♂</u> 52'09	20.52619 AU		-4893 Sep 17 j 11:04	0° <u>♂</u>	
morning rise	-4899 Nov 21 j 16:30	9° <u>♂</u> 43'53		evening set	-4893 Nov 15 j 03:42	2° <u>♂</u> 36'33	
retrograde	-4898 Feb 22 j 23:19	12° <u>♂</u> 55'33		conjunction	-4893 Nov 30 j 19:34	3° <u>♂</u> 30'52	0°04'18
opposition	-4898 May 11 j 14:23	10° <u>♂</u> 55'52	0°26'08	minimum elong	-4893 Nov 30 j 19:35	3° <u>♂</u> 30'52	0°04'09
min. Earth dist.	-4898 May 10 j 12:58	10° <u>♂</u> 58'26	18.55935 AU	behind sun begin	-4893 Nov 30 j 13:07	3° <u>♂</u> 29'57	
direct	-4898 Jul 27 j 00:33	8° <u>♂</u> 57'38		behind sun end	-4893 Dec 01 j 02:02	3° <u>♂</u> 31'47	
evening set	-4898 Oct 25 j 19:41	12° <u>♂</u> 04'04		max. Earth dist.	-4893 Dec 02 j 01:15	3° <u>♂</u> 35'11	20.86405 AU
				morning rise	-4893 Dec 16 j 14:38	4° <u>♂</u> 25'37	
conjunction	-4898 Nov 10 j 09:33	12° <u>♂</u> 59'07	0°21'57	retrograde	-4892 Mar 19 j 13:40	7° <u>♂</u> 34'26	
minimum elong	-4898 Nov 10 j 09:33	12° <u>♂</u> 59'07	0°21'54	opposition	-4892 Jun 05 j 19:28	5° <u>♂</u> 34'57	0°02'37
max. Earth dist.	-4898 Nov 11 j 12:50	13° <u>♂</u> 03'10	20.59148 AU	min. Earth dist.	-4892 Jun 04 j 14:39	5° <u>♂</u> 37'50	18.88610 AU
morning rise	-4898 Nov 26 j 01:04	13° <u>♂</u> 54'26		direct	-4892 Aug 20 j 16:27	3° <u>♂</u> 38'13	
retrograde	-4897 Feb 27 j 11:26	17° <u>♂</u> 05'35		evening set	-4892 Nov 18 j 08:40	6° <u>♂</u> 38'45	
min. Earth dist.	-4897 May 15 j 02:08	15° <u>♂</u> 08'42	18.62323 AU				
opposition	-4897 May 16 j 04:56	15° <u>♂</u> 06'01	0°22'23	conjunction	-4892 Dec 04 j 01:21	7° <u>♂</u> 32'59	0°00'38
direct	-4897 Jul 31 j 14:13	13° <u>♂</u> 08'09		minimum elong	-4892 Dec 04 j 01:20	7° <u>♂</u> 32'59	0°00'29
evening set	-4897 Oct 30 j 03:09	16° <u>♂</u> 13'29		behind sun begin	-4892 Dec 03 j 18:48	7° <u>♂</u> 32'04	
				behind sun end	-4892 Dec 04 j 07:52	7° <u>♂</u> 33'54	
conjunction	-4897 Nov 14 j 17:08	17° <u>♂</u> 08'21	0°18'32	max. Earth dist.	-4892 Dec 05 j 08:25	7° <u>♂</u> 37'29	20.90653 AU
minimum elong	-4897 Nov 14 j 17:08	17° <u>♂</u> 08'21	0°18'28	morning rise	-4892 Dec 19 j 21:03	8° <u>♂</u> 27'39	
max. Earth dist.	-4897 Nov 15 j 20:25	17° <u>♂</u> 12'23	20.65379 AU	desc. node	-4891 Feb 04 j 20:44	10° <u>♂</u> 43'21	
morning rise	-4897 Nov 30 j 09:23	18° <u>♂</u> 03'32		retrograde	-4891 Mar 23 j 22:40	11° <u>♂</u> 36'04	
retrograde	-4896 Mar 02 j 22:28	21° <u>♂</u> 14'12		min. Earth dist.	-4891 Jun 08 j 23:42	9° <u>♂</u> 39'32	18.92677 AU
opposition	-4896 May 19 j 19:01	19° <u>♂</u> 14'42	0°18'31	opposition	-4891 Jun 10 j 05:39	9° <u>♂</u> 36'32	-0°01'22
min. Earth dist.	-4896 May 18 j 15:56	19° <u>♂</u> 17'25	18.68395 AU	direct	-4891 Aug 25 j 01:51	7° <u>♂</u> 39'57	
direct	-4896 Aug 04 j 00:52	17° <u>♂</u> 17'09		evening set	-4891 Nov 22 j 13:26	10° <u>♂</u> 39'42	
evening set	-4896 Nov 02 j 09:52	20° <u>♂</u> 21'26					
				conjunction	-4891 Dec 08 j 06:37	11° <u>♂</u> 33'51	-0°03'03
conjunction	-4896 Nov 18 j 00:22	21° <u>♂</u> 16'08	0°15'02	minimum elong	-4891 Dec 08 j 06:37	11° <u>♂</u> 33'51	0°03'14
minimum elong	-4896 Nov 18 j 00:22	21° <u>♂</u> 16'08	0°14'57	behind sun begin	-4891 Dec 08 j 00:05	11° <u>♂</u> 32'56	
behind sun begin	-4896 Nov 17 j 21:43	21° <u>♂</u> 15'46		behind sun end	-4891 Dec 08 j 13:08	11° <u>♂</u> 34'46	
behind sun end	-4896 Nov 18 j 03:01	21° <u>♂</u> 16'31		max. Earth dist.	-4891 Dec 09 j 13:19	11° <u>♂</u> 38'17	20.94545 AU
max. Earth dist.	-4896 Nov 19 j 05:23	21° <u>♂</u> 20'25	20.71259 AU	morning rise	-4891 Dec 24 j 03:21	12° <u>♂</u> 28'29	
morning rise	-4896 Dec 03 j 17:04	22° <u>♂</u> 11'11			-4890 Feb 17 j 06:18	15° <u>♂</u>	
retrograde	-4895 Mar 07 j 09:10	25° <u>♂</u> 21'23		retrograde	-4890 Mar 28 j 06:40	15° <u>♂</u> 36'31	
min. Earth dist.	-4895 May 23 j 03:56	23° <u>♂</u> 24'47	18.74073 AU		-4890 May 07 j 08:59	15° <u>♂</u>	
opposition	-4895 May 24 j 08:17	23° <u>♂</u> 21'56	0°14'36	min. Earth dist.	-4890 Jun 13 j 09:58	13° <u>♂</u> 39'54	18.96414 AU
direct	-4895 Aug 08 j 12:59	21° <u>♂</u> 24'40		opposition	-4890 Jun 14 j 15:19	13° <u>♂</u> 36'58	-0°05'20
evening set	-4895 Nov 06 j 16:22	24° <u>♂</u> 27'56		direct	-4890 Aug 29 j 07:47	11° <u>♂</u> 40'30	
				evening set	-4890 Nov 26 j 17:53	14° <u>♂</u> 39'34	
conjunction	-4895 Nov 22 j 07:10	25° <u>♂</u> 22'29	0°11'29		-4890 Dec 02 j 17:59	15° <u>♂</u>	
minimum elong	-4895 Nov 22 j 07:10	25° <u>♂</u> 22'29	0°11'23	conjunction	-4890 Dec 12 j 11:56	15° <u>♂</u> 33'39	-0°06'37
behind sun begin	-4895 Nov 22 j 02:20	25° <u>♂</u> 21'48		minimum elong	-4890 Dec 12 j 11:56	15° <u>♂</u> 33'39	0°06'47
behind sun end	-4895 Nov 22 j 11:59	25° <u>♂</u> 23'11		behind sun begin	-4890 Dec 12 j 05:48	15° <u>♂</u> 32'48	
max. Earth dist.	-4895 Nov 23 j 11:50	25° <u>♂</u> 26'41	20.76729 AU	behind sun end	-4890 Dec 12 j 18:04	15° <u>♂</u> 34'31	
morning rise	-4895 Dec 08 j 00:43	26° <u>♂</u> 17'25		max. Earth dist.	-4890 Dec 13 j 19:49	15° <u>♂</u> 38'15	20.98113 AU
retrograde	-4894 Mar 11 j 19:16	29° <u>♂</u> 27'09					

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Attention, astronomical year style is used: The year -4890 in astronomical counting style is the year 4891 BCE in historical counting style.

morning rise	-4890 Dec 28 j 09:22	16° \mathbb{M} 28'14		morning rise	-4883 Jan 20 j 21:48	10° \mathbb{X} 15'24	
retrograde	-4889 Apr 01 j 15:18	19° \mathbb{M} 35'57		retrograde	-4883 Apr 25 j 15:56	13° \mathbb{X} 22'12	
min. Earth dist.	-4889 Jun 17 j 17:42	17° \mathbb{M} 39'26	18.99816 AU	opposition	-4883 Jul 12 j 20:13	11° \mathbb{X} 22'52	-0°31'02
opposition	-4889 Jun 19 j 00:01	17° \mathbb{M} 36'24	-0°09'15	min. Earth dist.	-4883 Jul 11 j 16:43	11° \mathbb{X} 25'38	19.12229 AU
direct	-4889 Sep 02 j 15:48	15° \mathbb{M} 40'04		direct	-4883 Sep 25 j 21:48	9° \mathbb{X} 27'08	
evening set	-4889 Nov 30 j 22:17	18° \mathbb{M} 38'33		evening set	-4883 Dec 24 j 00:28	12° \mathbb{X} 23'50	
conjunction	-4889 Dec 16 j 16:54	19° \mathbb{M} 32'35	-0°10'07	conjunction	-4882 Jan 09 j 00:22	13° \mathbb{X} 18'00	-0°29'31
minimum elong	-4889 Dec 16 j 16:54	19° \mathbb{M} 32'35	0°10'18	minimum elong	-4882 Jan 09 j 00:21	13° \mathbb{X} 18'00	0°29'45
behind sun begin	-4889 Dec 16 j 11:39	19° \mathbb{M} 31'51		max. Earth dist.	-4882 Jan 10 j 04:41	13° \mathbb{X} 22'02	21.12420 AU
behind sun end	-4889 Dec 16 j 22:08	19° \mathbb{M} 33'19		morning rise	-4882 Jan 25 j 04:40	14° \mathbb{X} 12'47	
max. Earth dist.	-4889 Dec 18 j 00:10	19° \mathbb{M} 37'05	21.01350 AU	retrograde	-4882 Apr 29 j 23:10	17° \mathbb{X} 19'33	
morning rise	-4888 Jan 01 j 15:23	20° \mathbb{M} 27'09		min. Earth dist.	-4882 Jul 16 j 01:19	15° \mathbb{X} 22'45	19.12563 AU
retrograde	-4888 Apr 04 j 22:45	23° \mathbb{M} 34'36		opposition	-4882 Jul 17 j 02:36	15° \mathbb{X} 20'12	-0°34'14
min. Earth dist.	-4888 Jun 21 j 03:03	21° \mathbb{M} 38'01	19.02896 AU	direct	-4882 Sep 30 j 01:19	13° \mathbb{X} 24'27	
opposition	-4888 Jun 22 j 08:32	21° \mathbb{M} 35'03	-0°13'06	evening set	-4882 Dec 28 j 05:30	16° \mathbb{X} 21'07	
direct	-4888 Sep 05 j 20:34	19° \mathbb{M} 38'51		conjunction	-4881 Jan 13 j 06:30	17° \mathbb{X} 15'22	-0°32'21
evening set	-4888 Dec 04 j 02:15	22° \mathbb{M} 36'50		minimum elong	-4881 Jan 13 j 06:30	17° \mathbb{X} 15'22	0°32'36
conjunction	-4888 Dec 19 j 21:50	23° \mathbb{M} 30'51	-0°13'33	max. Earth dist.	-4881 Jan 14 j 10:15	17° \mathbb{X} 19'19	21.12457 AU
minimum elong	-4888 Dec 19 j 21:50	23° \mathbb{M} 30'51	0°13'45	morning rise	-4881 Jan 29 j 11:38	18° \mathbb{X} 10'13	
behind sun begin	-4888 Dec 19 j 18:17	23° \mathbb{M} 30'21		retrograde	-4881 May 04 j 08:38	21° \mathbb{X} 16'59	
behind sun end	-4888 Dec 20 j 01:23	23° \mathbb{M} 31'21		min. Earth dist.	-4881 Jul 20 j 07:34	19° \mathbb{X} 20'06	19.12292 AU
max. Earth dist.	-4888 Dec 21 j 06:03	23° \mathbb{M} 35'28	21.04260 AU	opposition	-4881 Jul 21 j 08:30	19° \mathbb{X} 17'36	-0°37'16
morning rise	-4887 Jan 04 j 21:07	24° \mathbb{M} 25'25		direct	-4881 Oct 04 j 06:53	17° \mathbb{X} 21'46	
retrograde	-4887 Apr 09 j 07:27	27° \mathbb{M} 32'38		evening set	-4880 Jan 01 j 10:51	20° \mathbb{X} 18'27	
min. Earth dist.	-4887 Jun 25 j 10:08	25° \mathbb{M} 36'10	19.05621 AU	conjunction	-4880 Jan 17 j 12:42	21° \mathbb{X} 12'48	-0°35'01
opposition	-4887 Jun 26 j 16:25	25° \mathbb{M} 33'08	-0°16'53	minimum elong	-4880 Jan 17 j 12:42	21° \mathbb{X} 12'48	0°35'16
direct	-4887 Sep 10 j 03:13	23° \mathbb{M} 37'04		max. Earth dist.	-4880 Jan 18 j 14:19	21° \mathbb{X} 16'26	21.11894 AU
evening set	-4887 Dec 08 j 06:31	26° \mathbb{M} 34'37		morning rise	-4880 Feb 02 j 18:58	22° \mathbb{X} 07'45	
conjunction	-4887 Dec 24 j 02:48	27° \mathbb{M} 28'38	-0°16'57	retrograde	-4880 May 07 j 15:10	25° \mathbb{X} 14'31	
minimum elong	-4887 Dec 24 j 02:48	27° \mathbb{M} 28'38	0°17'08	opposition	-4880 Jul 24 j 14:26	23° \mathbb{X} 15'03	-0°40'08
max. Earth dist.	-4887 Dec 25 j 10:03	27° \mathbb{M} 33'06	21.06797 AU	min. Earth dist.	-4880 Jul 23 j 15:53	23° \mathbb{X} 17'20	19.11445 AU
morning rise	-4886 Jan 09 j 03:12	28° \mathbb{M} 23'13		direct	-4880 Oct 07 j 09:55	21° \mathbb{X} 19'06	
	-4886 Feb 09 j 17:16	0° \mathbb{X}		evening set	-4879 Jan 04 j 16:12	24° \mathbb{X} 15'51	
retrograde	-4886 Apr 13 j 14:46	1° \mathbb{X} 30'16		conjunction	-4879 Jan 20 j 19:14	25° \mathbb{X} 10'19	-0°37'31
	-4886 Jun 18 j 17:23	30° \mathbb{R} \mathbb{M}		minimum elong	-4879 Jan 20 j 19:14	25° \mathbb{X} 10'19	0°37'46
opposition	-4886 Jun 30 j 23:52	29° \mathbb{M} 30'48	-0°20'35	max. Earth dist.	-4879 Jan 21 j 20:16	25° \mathbb{X} 13'52	21.10780 AU
min. Earth dist.	-4886 Jun 29 j 18:56	29° \mathbb{M} 33'42	19.07968 AU	morning rise	-4879 Feb 06 j 02:25	26° \mathbb{X} 05'23	
direct	-4886 Sep 14 j 07:22	27° \mathbb{M} 34'51		retrograde	-4879 May 12 j 00:50	29° \mathbb{X} 12'11	
	-4886 Dec 02 j 15:39	0° \mathbb{X}		opposition	-4879 Jul 28 j 19:59	27° \mathbb{X} 12'36	-0°42'48
evening set	-4886 Dec 12 j 10:41	0° \mathbb{X} 32'05		min. Earth dist.	-4879 Jul 27 j 21:53	27° \mathbb{X} 14'50	19.10058 AU
conjunction	-4886 Dec 28 j 08:00	1° \mathbb{X} 26'07	-0°20'15	direct	-4879 Oct 11 j 15:52	25° \mathbb{X} 16'29	
minimum elong	-4886 Dec 28 j 07:59	1° \mathbb{X} 26'07	0°20'28	evening set	-4878 Jan 08 j 22:12	28° \mathbb{X} 13'23	
max. Earth dist.	-4886 Dec 29 j 15:40	1° \mathbb{X} 30'38	21.08936 AU	conjunction	-4878 Jan 25 j 02:06	29° \mathbb{X} 07'59	-0°39'51
morning rise	-4885 Jan 13 j 09:13	2° \mathbb{X} 20'43		minimum elong	-4878 Jan 25 j 02:06	29° \mathbb{X} 07'59	0°40'07
retrograde	-4885 Apr 17 j 23:30	5° \mathbb{X} 27'38		max. Earth dist.	-4878 Jan 26 j 00:55	29° \mathbb{X} 11'13	21.09144 AU
min. Earth dist.	-4885 Jul 04 j 01:35	3° \mathbb{X} 31'10	19.09880 AU		-4878 Feb 09 j 11:31	0° \mathbb{Z}	
opposition	-4885 Jul 05 j 06:53	3° \mathbb{X} 28'14	-0°24'11	morning rise	-4878 Feb 10 j 10:23	0° \mathbb{Z} 03'10	
direct	-4885 Sep 18 j 12:47	1° \mathbb{X} 32'23		retrograde	-4878 May 16 j 07:14	3° \mathbb{Z} 10'02	
evening set	-4885 Dec 16 j 15:03	4° \mathbb{X} 29'22		min. Earth dist.	-4878 Aug 01 j 05:45	1° \mathbb{Z} 12'20	19.08192 AU
conjunction	-4884 Jan 01 j 13:03	5° \mathbb{X} 23'26	-0°23'27	opposition	-4878 Aug 02 j 01:23	1° \mathbb{Z} 10'20	-0°45'16
minimum elong	-4884 Jan 01 j 13:03	5° \mathbb{X} 23'26	0°23'40		-4878 Sep 02 j 00:54	30° \mathbb{R} \mathbb{X}	
max. Earth dist.	-4884 Jan 02 j 19:21	5° \mathbb{X} 27'45	21.10613 AU	direct	-4878 Oct 15 j 18:40	29° \mathbb{X} 14'00	
morning rise	-4884 Jan 17 j 15:22	6° \mathbb{X} 18'04			-4878 Nov 27 j 12:56	0° \mathbb{Z}	
retrograde	-4884 Apr 21 j 06:52	9° \mathbb{X} 24'56		evening set	-4877 Jan 13 j 04:19	2° \mathbb{Z} 11'09	
min. Earth dist.	-4884 Jul 07 j 10:14	7° \mathbb{X} 28'19	19.11319 AU	conjunction	-4877 Jan 29 j 09:24	3° \mathbb{Z} 05'53	-0°41'59
opposition	-4884 Jul 08 j 13:48	7° \mathbb{X} 25'34	-0°27'41	minimum elong	-4877 Jan 29 j 09:24	3° \mathbb{Z} 05'53	0°42'14
direct	-4884 Sep 21 j 16:39	5° \mathbb{X} 29'47		max. Earth dist.	-4877 Jan 30 j 07:31	3° \mathbb{Z} 09'01	21.07062 AU
evening set	-4884 Dec 19 j 19:33	8° \mathbb{X} 26'36		morning rise	-4877 Feb 14 j 18:31	4° \mathbb{Z} 01'13	
conjunction	-4883 Jan 04 j 18:38	9° \mathbb{X} 20'42	-0°26'33	retrograde	-4877 May 20 j 16:28	7° \mathbb{Z} 08'11	
minimum elong	-4883 Jan 04 j 18:38	9° \mathbb{X} 20'42	0°26'47	min. Earth dist.	-4877 Aug 05 j 11:23	5° \mathbb{Z} 10'19	19.05896 AU
max. Earth dist.	-4883 Jan 06 j 00:53	9° \mathbb{X} 25'01	21.11797 AU	opposition	-4877 Aug 06 j 06:39	5° \mathbb{Z} 08'22	-0°47'31

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Attention, astronomical year style is used: The year -4877 in astronomical counting style is the year 4878 BCE in historical counting style.

direct	-4877 Oct 20 j 00:44	3°♁11'50	minimum elong	-4870 Feb 27 j 03:05	1°♁11'43	0°51'10
evening set	-4876 Jan 17 j 10:52	6°♁09'17	max. Earth dist.	-4870 Feb 27 j 11:53	1°♁12'58	20.82336 AU
			morning rise	-4870 Mar 15 j 18:23	2°♁08'21	
conjunction	-4876 Feb 02 j 16:49	7°♁04'11 -0°43'55	retrograde	-4870 Jun 18 j 09:43	5°♁17'20	
minimum elong	-4876 Feb 02 j 16:49	7°♁04'11 0°44'11	opposition	-4870 Sep 02 j 23:11	3°♁17'04	-0°56'36
max. Earth dist.	-4876 Feb 03 j 12:47	7°♁07'01 21.04567 AU	min. Earth dist.	-4870 Sep 02 j 16:47	3°♁17'44	18.79906 AU
morning rise	-4876 Feb 19 j 03:00	7°♁59'39	direct	-4870 Nov 16 j 11:40	1°♁18'57	
retrograde	-4876 May 23 j 23:47	11°♁06'47	evening set	-4869 Feb 15 j 02:27	4°♁20'58	
opposition	-4876 Aug 09 j 12:06	9°♁06'51 -0°49'33				
min. Earth dist.	-4876 Aug 08 j 19:14	9°♁08'35 19.03219 AU	conjunction	-4869 Mar 03 j 15:29	5°♁17'24	-0°51'16
direct	-4876 Oct 23 j 03:51	7°♁10'06	minimum elong	-4869 Mar 03 j 15:29	5°♁17'24	0°51'29
evening set	-4875 Jan 20 j 17:53	10°♁07'58	max. Earth dist.	-4869 Mar 03 j 22:13	5°♁18'22	20.77343 AU
			morning rise	-4869 Mar 20 j 07:26	6°♁14'16	
conjunction	-4875 Feb 06 j 01:01	11°♁03'02 -0°45'39	retrograde	-4869 Jun 22 j 22:14	9°♁23'42	
minimum elong	-4875 Feb 06 j 01:01	11°♁03'02 0°45'54	opposition	-4869 Sep 07 j 06:08	7°♁23'21	-0°56'49
max. Earth dist.	-4875 Feb 06 j 20:06	11°♁05'44 21.01718 AU	min. Earth dist.	-4869 Sep 07 j 00:55	7°♁23'54	18.74695 AU
morning rise	-4875 Feb 22 j 12:01	11°♁58'40	direct	-4869 Nov 20 j 19:44	5°♁24'56	
retrograde	-4875 May 28 j 09:06	15°♁05'59	evening set	-4868 Feb 19 j 14:35	8°♁27'52	
opposition	-4875 Aug 13 j 17:19	13°♁05'58 -0°51'21				
min. Earth dist.	-4875 Aug 13 j 00:54	13°♁07'39 19.00191 AU	conjunction	-4868 Mar 07 j 04:27	9°♁24'34	-0°51'20
direct	-4875 Oct 27 j 09:41	11°♁09'00	minimum elong	-4868 Mar 07 j 04:27	9°♁24'34	0°51'32
evening set	-4874 Jan 25 j 01:38	14°♁07'21	max. Earth dist.	-4868 Mar 07 j 08:14	9°♁25'07	20.71914 AU
			morning rise	-4868 Mar 23 j 21:08	10°♁21'41	
conjunction	-4874 Feb 10 j 09:40	15°♁02'36 -0°47'10	retrograde	-4868 Jun 26 j 08:39	13°♁31'33	
minimum elong	-4874 Feb 10 j 09:40	15°♁02'36 0°47'25	opposition	-4868 Sep 10 j 13:40	11°♁31'07	-0°56'45
max. Earth dist.	-4874 Feb 11 j 02:23	15°♁04'59 20.98518 AU	min. Earth dist.	-4868 Sep 10 j 11:40	11°♁31'20	18.69057 AU
morning rise	-4874 Feb 26 j 21:42	15°♁58'25	direct	-4868 Nov 24 j 02:05	9°♁32'21	
retrograde	-4874 Jun 01 j 17:24	19°♁05'59	evening set	-4867 Feb 23 j 03:36	12°♁36'16	
opposition	-4874 Aug 17 j 22:55	17°♁05'53 -0°52'55				
min. Earth dist.	-4874 Aug 17 j 09:02	17°♁07'19 18.96826 AU	conjunction	-4867 Mar 11 j 18:27	13°♁33'14	-0°51'07
direct	-4874 Oct 31 j 13:24	15°♁08'42	minimum elong	-4867 Mar 11 j 18:27	13°♁33'14	0°51'18
evening set	-4873 Jan 29 j 09:47	18°♁07'37	max. Earth dist.	-4867 Mar 11 j 19:51	13°♁33'26	20.66085 AU
			morning rise	-4867 Mar 28 j 11:45	14°♁30'35	
conjunction	-4873 Feb 14 j 18:57	19°♁03'05 -0°48'28		-4867 Apr 06 j 08:54	15°♁	
minimum elong	-4873 Feb 14 j 18:56	19°♁03'05 0°48'43	retrograde	-4867 Jun 30 j 22:06	17°♁40'55	
max. Earth dist.	-4873 Feb 15 j 10:33	19°♁05'18 20.94994 AU	opposition	-4867 Sep 14 j 21:20	15°♁40'21	-0°56'23
morning rise	-4873 Mar 03 j 07:44	19°♁59'05	min. Earth dist.	-4867 Sep 14 j 20:41	15°♁40'25	18.63029 AU
retrograde	-4873 Jun 06 j 03:26	23°♁06'57		-4867 Oct 01 j 06:20	15°♁	
opposition	-4873 Aug 22 j 04:29	21°♁06'48 -0°54'14	direct	-4867 Nov 28 j 12:04	13°♁41'11	
min. Earth dist.	-4873 Aug 21 j 15:12	21°♁08'10 18.93128 AU		-4866 Jan 23 j 23:01	15°♁	
direct	-4873 Nov 04 j 19:12	19°♁09'24	evening set	-4866 Feb 27 j 17:34	16°♁46'08	
evening set	-4872 Feb 02 j 18:47	22°♁08'59				
			conjunction	-4866 Mar 16 j 09:11	17°♁43'24	-0°50'38
conjunction	-4872 Feb 19 j 04:49	23°♁04'40 -0°49'32	minimum elong	-4866 Mar 16 j 09:11	17°♁43'24	0°50'49
minimum elong	-4872 Feb 19 j 04:49	23°♁04'40 0°49'47	max. Earth dist.	-4866 Mar 16 j 07:42	17°♁43'11	20.59878 AU
max. Earth dist.	-4872 Feb 19 j 17:57	23°♁06'32 20.91131 AU	morning rise	-4866 Apr 02 j 03:02	18°♁40'59	
morning rise	-4872 Mar 06 j 18:33	24°♁00'52	retrograde	-4866 Jul 05 j 08:58	21°♁51'47	
retrograde	-4872 Jun 09 j 12:31	27°♁09'04	opposition	-4866 Sep 19 j 05:42	19°♁51'04	-0°55'42
opposition	-4872 Aug 25 j 10:28	25°♁08'52 -0°55'18	min. Earth dist.	-4866 Sep 19 j 08:10	19°♁50'49	18.56663 AU
min. Earth dist.	-4872 Aug 24 j 23:57	25°♁09'58 18.89096 AU	direct	-4866 Dec 02 j 19:42	17°♁51'30	
direct	-4872 Nov 07 j 23:45	23°♁11'15	evening set	-4865 Mar 04 j 08:03	20°♁57'31	
evening set	-4871 Feb 06 j 04:23	26°♁11'34				
			conjunction	-4865 Mar 21 j 00:29	21°♁55'03	-0°49'52
conjunction	-4871 Feb 22 j 15:33	27°♁07'30 -0°50'22	minimum elong	-4865 Mar 21 j 00:29	21°♁55'03	0°50'02
minimum elong	-4871 Feb 22 j 15:33	27°♁07'30 0°50'37	max. Earth dist.	-4865 Mar 20 j 20:39	21°♁54'30	20.53382 AU
max. Earth dist.	-4871 Feb 23 j 03:11	27°♁09'09 20.86932 AU	morning rise	-4865 Apr 06 j 18:50	22°♁52'53	
morning rise	-4871 Mar 11 j 06:03	28°♁03'55	retrograde	-4865 Jul 09 j 23:10	26°♁04'11	
	-4871 Apr 19 j 08:18	0°♁	opposition	-4865 Sep 23 j 14:20	24°♁03'18	-0°54'44
retrograde	-4871 Jun 13 j 23:51	1°♁12'30	min. Earth dist.	-4865 Sep 23 j 17:59	24°♁02'55	18.50042 AU
	-4871 Aug 09 j 21:37	30°♁	direct	-4865 Dec 07 j 06:55	22°♁03'18	
opposition	-4871 Aug 29 j 16:37	29°♁12'16 -0°56'05	evening set	-4864 Mar 07 j 23:31	25°♁10'25	
min. Earth dist.	-4871 Aug 29 j 07:04	29°♁13'15 18.84701 AU				
direct	-4871 Nov 12 j 06:18	27°♁14'24	conjunction	-4864 Mar 24 j 16:39	26°♁08'16	-0°48'50
	-4870 Feb 05 j 22:30	0°♁	minimum elong	-4864 Mar 24 j 16:39	26°♁08'16	0°49'01
evening set	-4870 Feb 10 j 15:05	0°♁15'33	max. Earth dist.	-4864 Mar 24 j 10:24	26°♁07'21	20.46652 AU
			morning rise	-4864 Apr 10 j 11:24	27°♁06'21	
conjunction	-4870 Feb 27 j 03:05	1°♁11'43 -0°50'57		-4864 Jun 16 j 20:30	0°♁	

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Attention, astronomical year style is used: The year -4864 in astronomical counting style is the year 4865 BCE in historical counting style.

retrograde	-4864 Jul 13 j 11:13	0° ✕ 18'08	max. Earth dist.	-4857 Apr 25 j 10:57	26° ✕ 27'45	19.98426 AU
	-4864 Aug 09 j 08:04	30° ✕				
opposition	-4864 Sep 26 j 23:35	28° ✕ 17'06 -0°53'27	conjunction	-4857 Apr 26 j 08:40	26° ✕ 30'59 -0°34'15	
min. Earth dist.	-4864 Sep 27 j 06:06	28° ✕ 16'25 18.43232 AU	minimum elong	-4857 Apr 26 j 08:40	26° ✕ 30'59 0°34'17	
direct	-4864 Dec 10 j 16:03	26° ✕ 16'39	morning rise	-4857 May 13 j 04:13	27° ✕ 30'51	
evening set	-4863 Mar 12 j 15:46	29° ✕ 24'57		-4857 Jul 02 j 21:26	0° ✕	
	-4863 Mar 22 j 19:21	0° ✕	retrograde	-4857 Aug 14 j 07:13	0° ✕ 46'42	
				-4857 Sep 26 j 05:06	30° ✕	
conjunction	-4863 Mar 29 j 09:36	0° ✕ 23'05 -0°47'32	opposition	-4857 Oct 27 j 10:52	28° ✕ 45'01 -0°36'23	
minimum elong	-4863 Mar 29 j 09:36	0° ✕ 23'05 0°47'41	min. Earth dist.	-4857 Oct 28 j 05:01	28° ✕ 43'03 17.95085 AU	
max. Earth dist.	-4863 Mar 29 j 00:53	0° ✕ 21'49 20.39784 AU	direct	-4856 Jan 10 j 12:52	26° ✕ 41'49	
morning rise	-4863 Apr 15 j 04:48	1° ✕ 21'26	evening set	-4856 Apr 13 j 11:20	29° ✕ 59'19	
retrograde	-4863 Jul 18 j 02:25	4° ✕ 33'44		-4856 Apr 13 j 15:58	0° ✕	
opposition	-4863 Oct 01 j 09:17	2° ✕ 32'33 -0°51'53	max. Earth dist.	-4856 Apr 29 j 08:54	0° ✕ 56'06 19.91739 AU	
min. Earth dist.	-4863 Oct 01 j 16:53	2° ✕ 31'45 18.36309 AU				
direct	-4863 Dec 15 j 04:09	0° ✕ 31'39	conjunction	-4856 Apr 30 j 07:41	0° ✕ 59'31 -0°31'10	
evening set	-4862 Mar 17 j 08:57	3° ✕ 41'09	minimum elong	-4856 Apr 30 j 07:42	0° ✕ 59'31 0°31'11	
			morning rise	-4856 May 17 j 02:49	1° ✕ 59'35	
conjunction	-4862 Apr 03 j 03:22	4° ✕ 39'35 -0°45'58	retrograde	-4856 Aug 18 j 01:23	5° ✕ 16'02	
minimum elong	-4862 Apr 03 j 03:22	4° ✕ 39'35 0°46'06	opposition	-4856 Oct 31 j 02:00	3° ✕ 14'18 -0°32'51	
max. Earth dist.	-4862 Apr 02 j 16:38	4° ✕ 38'01 20.32813 AU	min. Earth dist.	-4856 Oct 31 j 22:14	3° ✕ 12'07 17.88429 AU	
morning rise	-4862 Apr 19 j 22:43	5° ✕ 38'11	direct	-4855 Jan 14 j 04:57	1° ✕ 10'45	
retrograde	-4862 Jul 22 j 16:04	8° ✕ 51'03	evening set	-4855 Apr 18 j 11:13	4° ✕ 29'37	
opposition	-4862 Oct 05 j 19:43	6° ✕ 49'43 -0°50'01	max. Earth dist.	-4855 May 04 j 05:26	5° ✕ 26'08 19.85116 AU	
min. Earth dist.	-4862 Oct 06 j 05:52	6° ✕ 48'38 18.29323 AU				
direct	-4862 Dec 19 j 14:40	4° ✕ 48'24	conjunction	-4855 May 05 j 07:24	5° ✕ 30'03 -0°27'53	
evening set	-4861 Mar 22 j 02:59	7° ✕ 59'10	minimum elong	-4855 May 05 j 07:24	5° ✕ 30'03 0°27'52	
			morning rise	-4855 May 22 j 02:19	6° ✕ 30'21	
conjunction	-4861 Apr 07 j 21:53	8° ✕ 57'53 -0°44'08	retrograde	-4855 Aug 22 j 21:35	9° ✕ 47'22	
minimum elong	-4861 Apr 07 j 21:53	8° ✕ 57'53 0°44'15	opposition	-4855 Nov 04 j 18:03	7° ✕ 45'33 -0°29'05	
max. Earth dist.	-4861 Apr 07 j 08:37	8° ✕ 55'57 20.25834 AU	min. Earth dist.	-4855 Nov 05 j 15:47	7° ✕ 43'12 17.81849 AU	
morning rise	-4861 Apr 24 j 17:31	9° ✕ 56'45	direct	-4854 Jan 18 j 23:47	5° ✕ 41'38	
retrograde	-4861 Jul 27 j 08:50	13° ✕ 10'11	evening set	-4854 Apr 23 j 11:39	9° ✕ 01'49	
opposition	-4861 Oct 10 j 06:44	11° ✕ 08'44 -0°47'51	max. Earth dist.	-4854 May 09 j 05:09	9° ✕ 58'28 19.78569 AU	
min. Earth dist.	-4861 Oct 10 j 17:50	11° ✕ 07'33 18.22356 AU				
direct	-4861 Dec 24 j 03:55	9° ✕ 07'00	conjunction	-4854 May 10 j 07:51	10° ✕ 02'31 -0°24'23	
evening set	-4860 Mar 25 j 21:48	12° ✕ 19'03	minimum elong	-4854 May 10 j 07:51	10° ✕ 02'31 0°24'22	
			morning rise	-4854 May 27 j 02:07	11° ✕ 02'59	
conjunction	-4860 Apr 11 j 17:14	13° ✕ 18'05 -0°42'03	retrograde	-4854 Aug 27 j 16:56	14° ✕ 20'33	
minimum elong	-4860 Apr 11 j 17:14	13° ✕ 18'05 0°42'08	opposition	-4854 Nov 09 j 10:59	12° ✕ 18'40 -0°25'07	
max. Earth dist.	-4860 Apr 11 j 02:24	13° ✕ 15'54 20.18877 AU	min. Earth dist.	-4854 Nov 10 j 10:16	12° ✕ 16'08 17.75358 AU	
morning rise	-4860 Apr 28 j 12:53	14° ✕ 17'12	direct	-4853 Jan 23 j 18:50	10° ✕ 14'22	
retrograde	-4860 Jul 31 j 00:10	17° ✕ 31'13	evening set	-4853 Apr 28 j 12:58	13° ✕ 35'50	
opposition	-4860 Oct 13 j 18:38	15° ✕ 29'41 -0°45'24	max. Earth dist.	-4853 May 14 j 03:13	14° ✕ 32'15 19.72157 AU	
min. Earth dist.	-4860 Oct 14 j 08:04	15° ✕ 28'15 18.15425 AU				
direct	-4860 Dec 27 j 15:41	13° ✕ 27'34	conjunction	-4853 May 15 j 08:47	14° ✕ 36'45 -0°20'44	
evening set	-4859 Mar 30 j 17:49	16° ✕ 40'58	minimum elong	-4853 May 15 j 08:47	14° ✕ 36'45 0°20'41	
			morning rise	-4853 Jun 01 j 02:39	15° ✕ 37'25	
conjunction	-4859 Apr 16 j 13:32	17° ✕ 40'17 -0°39'42	retrograde	-4853 Sep 01 j 13:16	18° ✕ 55'31	
minimum elong	-4859 Apr 16 j 13:32	17° ✕ 40'17 0°39'47	opposition	-4853 Nov 14 j 04:36	16° ✕ 53'31 -0°20'57	
max. Earth dist.	-4859 Apr 15 j 19:58	17° ✕ 37'41 20.11990 AU	min. Earth dist.	-4853 Nov 15 j 05:22	16° ✕ 50'49 17.69046 AU	
morning rise	-4859 May 03 j 09:20	18° ✕ 39'39	direct	-4852 Jan 28 j 15:05	14° ✕ 48'49	
retrograde	-4859 Aug 04 j 18:37	21° ✕ 54'16	evening set	-4852 May 02 j 14:43	18° ✕ 11'32	
opposition	-4859 Oct 18 j 07:06	19° ✕ 52'41 -0°42'40	max. Earth dist.	-4852 May 18 j 04:35	19° ✕ 08'07 19.65943 AU	
min. Earth dist.	-4859 Oct 18 j 21:40	19° ✕ 51'07 18.08574 AU				
direct	-4858 Jan 01 j 06:32	17° ✕ 50'11	conjunction	-4852 May 19 j 10:24	19° ✕ 12'40 -0°16'55	
evening set	-4858 Apr 04 j 14:45	21° ✕ 04'57	minimum elong	-4852 May 19 j 10:24	19° ✕ 12'40 0°16'51	
			morning rise	-4852 Jun 05 j 03:31	20° ✕ 13'29	
conjunction	-4858 Apr 21 j 10:50	22° ✕ 04'35 -0°37'06	retrograde	-4852 Sep 05 j 10:10	23° ✕ 32'05	
minimum elong	-4858 Apr 21 j 10:50	22° ✕ 04'35 0°37'08	opposition	-4852 Nov 17 j 23:06	21° ✕ 29'59 -0°16'38	
max. Earth dist.	-4858 Apr 20 j 16:00	22° ✕ 01'47 20.05168 AU	min. Earth dist.	-4852 Nov 19 j 00:49	21° ✕ 27'11 17.62950 AU	
morning rise	-4858 May 08 j 06:24	23° ✕ 04'12	direct	-4851 Feb 01 j 12:48	19° ✕ 24'56	
retrograde	-4858 Aug 09 j 11:38	26° ✕ 19'25	evening set	-4851 May 07 j 17:20	22° ✕ 48'50	
opposition	-4858 Oct 22 j 20:37	24° ✕ 17'48 -0°39'40	max. Earth dist.	-4851 May 23 j 04:17	23° ✕ 45'14 19.59990 AU	
min. Earth dist.	-4858 Oct 23 j 13:25	24° ✕ 15'59 18.01791 AU				
direct	-4857 Jan 05 j 20:05	22° ✕ 14'58	conjunction	-4851 May 24 j 12:24	23° ✕ 50'09 -0°12'58	
evening set	-4857 Apr 09 j 12:33	25° ✕ 31'05	minimum elong	-4851 May 24 j 12:24	23° ✕ 50'09 0°12'53	

Attention, astronomical year style is used: The year -4851 in astronomical counting style is the year 4852 BCE in historical counting style.

behind sun begin	-4851 May 24 j 08:21	23° Υ 49'33		behind sun begin	-4846 Jun 17 j 21:00	17° \mathcal{B} 17'07	
behind sun end	-4851 May 24 j 16:27	23° Υ 50'45		behind sun end	-4846 Jun 18 j 09:01	17° \mathcal{B} 18'57	
morning rise	-4851 Jun 10 j 04:53	24° Υ 51'07		morning rise	-4846 Jul 04 j 14:31	18° \mathcal{B} 19'24	
retrograde	-4851 Sep 10 j 06:47	28° Υ 10'11		retrograde	-4846 Oct 04 j 01:00	21° \mathcal{B} 40'28	
opposition	-4851 Nov 22 j 18:20	26° Υ 07'59	-0°12'11	opposition	-4846 Dec 16 j 06:18	19° \mathcal{B} 38'09	0°10'57
min. Earth dist.	-4851 Nov 23 j 21:24	26° Υ 05'02	17.57170 AU	min. Earth dist.	-4846 Dec 17 j 09:43	19° \mathcal{B} 35'10	17.35301 AU
direct	-4850 Feb 06 j 10:38	24° Υ 02'34		direct	-4845 Mar 02 j 13:02	17° \mathcal{B} 31'37	
evening set	-4850 May 12 j 20:14	27° Υ 27'37		evening set	-4845 Jun 06 j 16:12	21° \mathcal{B} 01'21	
max. Earth dist.	-4850 May 28 j 07:01	28° Υ 24'12	19.54387 AU	max. Earth dist.	-4845 Jun 21 j 22:18	21° \mathcal{B} 58'14	19.33851 AU
conjunction	-4850 May 29 j 14:53	28° Υ 29'06	-0°08'56	conjunction	-4845 Jun 23 j 06:35	22° \mathcal{B} 03'17	0°11'57
minimum elong	-4850 May 29 j 14:53	28° Υ 29'06	0°08'49	minimum elong	-4845 Jun 23 j 06:34	22° \mathcal{B} 03'17	0°12'08
behind sun begin	-4850 May 29 j 09:05	28° Υ 28'14		behind sun begin	-4845 Jun 23 j 02:05	22° \mathcal{B} 02'36	
behind sun end	-4850 May 29 j 20:41	28° Υ 29'58		behind sun end	-4845 Jun 23 j 11:04	22° \mathcal{B} 03'59	
morning rise	-4850 Jun 15 j 06:26	29° Υ 30'11		morning rise	-4845 Jul 09 j 16:50	23° \mathcal{B} 04'40	
	-4850 Jun 23 j 15:55	0° \mathcal{B}		retrograde	-4845 Oct 09 j 00:52	26° \mathcal{B} 26'03	
retrograde	-4850 Sep 15 j 04:59	2° \mathcal{B} 49'42		opposition	-4845 Dec 21 j 06:05	24° \mathcal{B} 23'48	0°15'33
opposition	-4850 Nov 27 j 14:25	0° \mathcal{B} 47'25	-0°07'39	min. Earth dist.	-4845 Dec 22 j 10:17	24° \mathcal{B} 20'44	17.32637 AU
min. Earth dist.	-4850 Nov 28 j 17:37	0° \mathcal{B} 44'27	17.51767 AU	direct	-4844 Mar 06 j 13:50	22° \mathcal{B} 17'12	
	-4850 Dec 16 j 03:37	30° $\mathcal{R}\Upsilon$		evening set	-4844 Jun 10 j 20:59	25° \mathcal{B} 47'38	
direct	-4849 Feb 11 j 10:31	28° Υ 41'41		max. Earth dist.	-4844 Jun 26 j 02:12	26° \mathcal{B} 44'32	19.31475 AU
	-4849 Apr 08 j 03:58	0° \mathcal{B}		conjunction	-4844 Jun 27 j 10:13	26° \mathcal{B} 49'35	0°16'01
evening set	-4849 May 17 j 23:31	2° \mathcal{B} 07'48		minimum elong	-4844 Jun 27 j 10:13	26° \mathcal{B} 49'34	0°16'13
max. Earth dist.	-4849 Jun 02 j 08:11	3° \mathcal{B} 04'17	19.49201 AU	morning rise	-4844 Jul 13 j 19:22	27° \mathcal{B} 50'57	
conjunction	-4849 Jun 03 j 17:24	3° \mathcal{B} 09'25	-0°04'50		-4844 Aug 22 j 09:00	0° \mathcal{I}	
minimum elong	-4849 Jun 03 j 17:24	3° \mathcal{B} 09'25	0°04'43	retrograde	-4844 Oct 13 j 02:19	1° \mathcal{I} 12'36	
behind sun begin	-4849 Jun 03 j 10:48	3° \mathcal{B} 08'25			-4844 Dec 05 j 18:31	30° $\mathcal{R}\mathcal{B}$	
behind sun end	-4849 Jun 04 j 00:01	3° \mathcal{B} 10'25		opposition	-4844 Dec 25 j 06:33	29° \mathcal{B} 10'27	0°20'03
morning rise	-4849 Jun 20 j 08:08	4° \mathcal{B} 10'37		min. Earth dist.	-4844 Dec 26 j 09:25	29° \mathcal{B} 07'31	17.30530 AU
retrograde	-4849 Sep 20 j 02:15	7° \mathcal{B} 30'34		direct	-4843 Mar 11 j 17:05	27° \mathcal{B} 03'49	
opposition	-4849 Dec 02 j 11:18	5° \mathcal{B} 28'13	-0°03'01		-4843 Jun 06 j 10:42	0° \mathcal{I}	
min. Earth dist.	-4849 Dec 03 j 15:35	5° \mathcal{B} 25'07	17.46831 AU	evening set	-4843 Jun 16 j 01:48	0° \mathcal{I} 34'49	
direct	-4848 Feb 16 j 09:34	3° \mathcal{B} 22'10		max. Earth dist.	-4843 Jul 01 j 07:03	1° \mathcal{I} 31'53	19.29628 AU
evening set	-4848 May 22 j 03:14	6° \mathcal{B} 49'19		conjunction	-4843 Jul 02 j 13:54	1° \mathcal{I} 36'45	0°20'00
max. Earth dist.	-4848 Jun 06 j 11:42	7° \mathcal{B} 45'59	19.44514 AU	minimum elong	-4843 Jul 02 j 13:54	1° \mathcal{I} 36'45	0°20'14
conjunction	-4848 Jun 07 j 20:26	7° \mathcal{B} 51'03	-0°00'37	morning rise	-4843 Jul 18 j 21:38	2° \mathcal{I} 38'03	
minimum elong	-4848 Jun 07 j 20:27	7° \mathcal{B} 51'03	0°00'28	retrograde	-4843 Oct 18 j 02:25	5° \mathcal{I} 59'57	
behind sun begin	-4848 Jun 07 j 13:43	7° \mathcal{B} 50'02		opposition	-4843 Dec 30 j 07:52	3° \mathcal{I} 57'53	0°24'27
behind sun end	-4848 Jun 08 j 03:11	7° \mathcal{B} 52'04		min. Earth dist.	-4843 Dec 31 j 11:17	3° \mathcal{I} 54'54	17.28951 AU
morning rise	-4848 Jun 24 j 10:09	8° \mathcal{B} 52'20		direct	-4842 Mar 16 j 19:31	1° \mathcal{I} 51'15	
asc. node	-4848 Jul 31 j 16:51	10° \mathcal{B} 53'46		evening set	-4842 Jun 21 j 06:41	5° \mathcal{I} 22'42	
retrograde	-4848 Sep 24 j 01:43	12° \mathcal{B} 12'40		max. Earth dist.	-4842 Jul 06 j 10:36	6° \mathcal{I} 19'41	19.28309 AU
opposition	-4848 Dec 06 j 08:45	10° \mathcal{B} 10'17	0°01'38	conjunction	-4842 Jul 07 j 17:25	6° \mathcal{I} 24'34	0°23'52
min. Earth dist.	-4848 Dec 07 j 12:29	10° \mathcal{B} 07'15	17.42407 AU	minimum elong	-4842 Jul 07 j 17:25	6° \mathcal{I} 24'34	0°24'05
direct	-4847 Feb 20 j 11:00	8° \mathcal{B} 04'01		morning rise	-4842 Jul 23 j 23:59	7° \mathcal{I} 25'48	
evening set	-4847 May 27 j 07:25	11° \mathcal{B} 32'07		retrograde	-4842 Oct 23 j 03:37	10° \mathcal{I} 47'52	
conjunction	-4847 Jun 12 j 23:43	12° \mathcal{B} 33'57	0°03'39	opposition	-4841 Jan 04 j 09:34	8° \mathcal{I} 45'52	0°28'40
minimum elong	-4847 Jun 12 j 23:43	12° \mathcal{B} 33'57	0°03'48	min. Earth dist.	-4841 Jan 05 j 11:26	8° \mathcal{I} 43'03	17.27885 AU
behind sun begin	-4847 Jun 12 j 17:02	12° \mathcal{B} 32'56		direct	-4841 Mar 22 j 00:11	6° \mathcal{I} 39'15	
behind sun end	-4847 Jun 13 j 06:24	12° \mathcal{B} 34'58		evening set	-4841 Jun 26 j 11:10	10° \mathcal{I} 11'00	
max. Earth dist.	-4847 Jun 11 j 14:27	12° \mathcal{B} 28'46	19.40366 AU	conjunction	-4841 Jul 12 j 20:48	11° \mathcal{I} 12'47	0°27'33
morning rise	-4847 Jun 29 j 12:19	13° \mathcal{B} 35'17		minimum elong	-4841 Jul 12 j 20:48	11° \mathcal{I} 12'47	0°27'47
	-4847 Jul 24 j 04:34	15° \mathcal{B}		max. Earth dist.	-4841 Jul 11 j 15:47	11° \mathcal{I} 08'11	19.27483 AU
retrograde	-4847 Sep 29 j 00:17	16° \mathcal{B} 56'00		morning rise	-4841 Jul 29 j 01:55	12° \mathcal{I} 13'56	
	-4847 Dec 08 j 20:52	15° $\mathcal{R}\mathcal{B}$		retrograde	-4841 Oct 28 j 03:38	15° \mathcal{I} 36'05	
opposition	-4847 Dec 11 j 07:15	14° \mathcal{B} 53'37	0°06'18	opposition	-4840 Jan 09 j 11:54	13° \mathcal{I} 34'09	0°32'41
min. Earth dist.	-4847 Dec 12 j 11:48	14° \mathcal{B} 50'30	17.38560 AU	min. Earth dist.	-4840 Jan 10 j 13:55	13° \mathcal{I} 31'20	17.27301 AU
direct	-4846 Feb 25 j 10:59	12° \mathcal{B} 47'11		direct	-4840 Mar 26 j 04:39	11° \mathcal{I} 27'35	
	-4846 May 10 j 12:56	15° \mathcal{B}		evening set	-4840 Jun 30 j 15:42	14° \mathcal{I} 59'29	
evening set	-4846 Jun 01 j 11:39	16° \mathcal{B} 16'09		conjunction	-4840 Jul 16 j 23:51	16° \mathcal{I} 01'08	0°31'03
max. Earth dist.	-4846 Jun 16 j 18:19	17° \mathcal{B} 12'56	19.36816 AU	minimum elong	-4840 Jul 16 j 23:51	16° \mathcal{I} 01'08	0°31'18
conjunction	-4846 Jun 18 j 03:01	17° \mathcal{B} 18'02	0°07'49	max. Earth dist.	-4840 Jul 15 j 18:49	15° \mathcal{I} 56'32	19.27147 AU
minimum elong	-4846 Jun 18 j 03:00	17° \mathcal{B} 18'02	0°07'59				

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Attention, astronomical year style is used: The year -4840 in astronomical counting style is the year 4841 BCE in historical counting style.

morning rise	-4840 Aug 02 j 03:48	17° Π 02'10	direct	-4833 Apr 30 j 14:20	14° \mathfrak{D} 54'39	
retrograde	-4840 Nov 01 j 04:04	20° Π 24'22	evening set	-4833 Aug 04 j 06:20	18° \mathfrak{D} 23'59	
opposition	-4839 Jan 13 j 14:24	18° Π 22'28	0°36'29			
min. Earth dist.	-4839 Jan 14 j 14:45	18° Π 19'50	17.27210 AU	conjunction	-4833 Aug 20 j 05:27	19° \mathfrak{D} 24'12
direct	-4839 Mar 31 j 10:32	16° Π 15'56		minimum elong	-4833 Aug 20 j 05:27	19° \mathfrak{D} 24'12
evening set	-4839 Jul 05 j 19:42	19° Π 47'52		max. Earth dist.	-4833 Aug 19 j 15:16	19° \mathfrak{D} 21'57
max. Earth dist.	-4839 Jul 21 j 00:03	20° Π 45'09	19.27303 AU	morning rise	-4833 Sep 05 j 00:57	20° \mathfrak{D} 23'53
				retrograde	-4833 Dec 05 j 02:51	23° \mathfrak{D} 44'48
conjunction	-4839 Jul 22 j 02:41	20° Π 49'23	0°34'20	opposition	-4832 Feb 17 j 12:14	21° \mathfrak{D} 43'17
minimum elong	-4839 Jul 22 j 02:40	20° Π 49'23	0°34'34	min. Earth dist.	-4832 Feb 17 j 23:53	21° \mathfrak{D} 42'03
morning rise	-4839 Aug 07 j 05:09	21° Π 50'16		direct	-4832 May 04 j 18:45	19° \mathfrak{D} 37'53
retrograde	-4839 Nov 06 j 03:57	25° Π 12'26		evening set	-4832 Aug 08 j 05:30	23° \mathfrak{D} 06'26
opposition	-4838 Jan 18 j 17:29	23° Π 10'35	0°40'01			
min. Earth dist.	-4838 Jan 19 j 17:16	23° Π 08'01	17.27614 AU	conjunction	-4832 Aug 24 j 03:22	24° \mathfrak{D} 06'22
direct	-4838 Apr 05 j 15:48	21° Π 04'06		minimum elong	-4832 Aug 24 j 03:22	24° \mathfrak{D} 06'22
evening set	-4838 Jul 10 j 23:10	24° Π 35'54		max. Earth dist.	-4832 Aug 23 j 15:23	24° \mathfrak{D} 04'29
max. Earth dist.	-4838 Jul 26 j 02:29	25° Π 33'05	19.27973 AU	morning rise	-4832 Sep 08 j 21:53	25° \mathfrak{D} 05'49
				retrograde	-4832 Dec 09 j 00:43	28° \mathfrak{D} 26'26
conjunction	-4838 Jul 27 j 04:39	25° Π 37'14	0°37'22	opposition	-4831 Feb 21 j 15:04	26° \mathfrak{D} 25'03
minimum elong	-4838 Jul 27 j 04:39	25° Π 37'14	0°37'38	min. Earth dist.	-4831 Feb 22 j 01:03	26° \mathfrak{D} 24'00
morning rise	-4838 Aug 12 j 06:01	26° Π 37'59		direct	-4831 May 09 j 20:33	24° \mathfrak{D} 20'02
	-4838 Nov 09 j 17:45	0° \mathfrak{D}		evening set	-4831 Aug 13 j 03:47	27° \mathfrak{D} 47'43
retrograde	-4838 Nov 11 j 04:17	0° \mathfrak{D} 00'04				
	-4838 Nov 12 j 14:58	30° \mathfrak{R} Π		conjunction	-4831 Aug 29 j 00:32	28° \mathfrak{D} 47'22
opposition	-4837 Jan 23 j 20:33	27° Π 58'13	0°43'15	minimum elong	-4831 Aug 29 j 00:33	28° \mathfrak{D} 47'22
min. Earth dist.	-4837 Jan 24 j 18:32	27° Π 55'51	17.28553 AU	max. Earth dist.	-4831 Aug 28 j 15:21	28° \mathfrak{D} 45'55
direct	-4837 Apr 10 j 21:21	25° Π 51'49		morning rise	-4831 Sep 13 j 18:10	29° \mathfrak{D} 46'34
evening set	-4837 Jul 16 j 02:00	29° Π 23'21			-4831 Sep 17 j 10:00	0° \mathcal{O}
	-4837 Jul 25 j 19:52	0° \mathfrak{D}		retrograde	-4831 Dec 14 j 00:36	3° \mathcal{O} 06'50
max. Earth dist.	-4837 Jul 31 j 07:03	0° \mathfrak{D} 20'49	19.29183 AU	opposition	-4830 Feb 26 j 17:35	1° \mathcal{O} 05'37
				min. Earth dist.	-4830 Feb 27 j 00:20	1° \mathcal{O} 04'54
conjunction	-4837 Aug 01 j 06:19	0° \mathfrak{D} 24'30	0°40'08		-4830 Mar 26 j 00:28	30° \mathfrak{R} \mathfrak{D}
minimum elong	-4837 Aug 01 j 06:19	0° \mathfrak{D} 24'30	0°40'23	direct	-4830 May 15 j 00:25	29° \mathfrak{D} 01'00
morning rise	-4837 Aug 17 j 06:18	1° \mathfrak{D} 25'04			-4830 Jul 02 j 01:50	0° \mathcal{O}
retrograde	-4837 Nov 16 j 04:02	4° \mathfrak{D} 46'58		evening set	-4830 Aug 18 j 01:08	2° \mathcal{O} 27'44
opposition	-4836 Jan 28 j 23:40	2° \mathfrak{D} 45'11	0°46'11			
min. Earth dist.	-4836 Jan 29 j 20:22	2° \mathfrak{D} 42'57	17.30030 AU	conjunction	-4830 Sep 02 j 20:51	3° \mathcal{O} 27'06
direct	-4836 Apr 15 j 02:17	0° \mathfrak{D} 38'52		minimum elong	-4830 Sep 02 j 20:51	3° \mathcal{O} 27'06
evening set	-4836 Jul 20 j 04:21	4° \mathfrak{D} 10'01		max. Earth dist.	-4830 Sep 02 j 14:15	3° \mathcal{O} 26'04
max. Earth dist.	-4836 Aug 04 j 08:55	5° \mathfrak{D} 07'26	19.30954 AU	morning rise	-4830 Sep 18 j 13:39	4° \mathcal{O} 26'02
				retrograde	-4830 Dec 18 j 21:07	7° \mathcal{O} 45'56
conjunction	-4836 Aug 05 j 07:12	5° \mathfrak{D} 10'58	0°42'37	opposition	-4829 Mar 03 j 19:54	5° \mathcal{O} 44'53
minimum elong	-4836 Aug 05 j 07:11	5° \mathfrak{D} 10'58	0°42'52	min. Earth dist.	-4829 Mar 04 j 01:18	5° \mathcal{O} 44'19
morning rise	-4836 Aug 21 j 06:05	6° \mathfrak{D} 11'19		direct	-4829 May 20 j 01:29	3° \mathcal{O} 40'42
retrograde	-4836 Nov 20 j 03:57	9° \mathfrak{D} 33'03		evening set	-4829 Aug 22 j 21:47	7° \mathcal{O} 06'24
opposition	-4835 Feb 02 j 02:56	7° \mathfrak{D} 31'16	0°48'47			
min. Earth dist.	-4835 Feb 02 j 21:44	7° \mathfrak{D} 29'15	17.32101 AU	conjunction	-4829 Sep 07 j 16:28	8° \mathcal{O} 05'27
direct	-4835 Apr 20 j 06:43	5° \mathfrak{D} 25'05		minimum elong	-4829 Sep 07 j 16:28	8° \mathcal{O} 05'27
evening set	-4835 Jul 25 j 05:42	8° \mathfrak{D} 55'44		max. Earth dist.	-4829 Sep 07 j 12:03	8° \mathcal{O} 04'46
				morning rise	-4829 Sep 23 j 08:34	9° \mathcal{O} 04'08
conjunction	-4835 Aug 10 j 07:20	9° \mathfrak{D} 56'27	0°44'48	retrograde	-4829 Dec 23 j 19:44	12° \mathcal{O} 23'36
minimum elong	-4835 Aug 10 j 07:20	9° \mathfrak{D} 56'27	0°45'04	opposition	-4828 Mar 07 j 21:33	10° \mathcal{O} 22'43
max. Earth dist.	-4835 Aug 09 j 12:19	9° \mathfrak{D} 53'26	19.33326 AU	min. Earth dist.	-4828 Mar 07 j 23:45	10° \mathcal{O} 22'29
morning rise	-4835 Aug 26 j 04:56	10° \mathfrak{D} 56'36		direct	-4828 May 24 j 04:51	8° \mathcal{O} 18'58
retrograde	-4835 Nov 25 j 03:50	14° \mathfrak{D} 18'05		evening set	-4828 Aug 26 j 17:34	11° \mathcal{O} 43'33
opposition	-4834 Feb 07 j 06:15	12° \mathfrak{D} 16'22	0°51'03			
min. Earth dist.	-4834 Feb 07 j 22:43	12° \mathfrak{D} 14'36	17.34771 AU	conjunction	-4828 Sep 11 j 11:21	12° \mathcal{O} 42'19
direct	-4834 Apr 25 j 11:27	10° \mathfrak{D} 10'23		minimum elong	-4828 Sep 11 j 11:21	12° \mathcal{O} 42'19
evening set	-4834 Jul 30 j 06:30	13° \mathfrak{D} 40'25		max. Earth dist.	-4828 Sep 11 j 09:42	12° \mathcal{O} 42'03
				morning rise	-4828 Sep 27 j 02:43	13° \mathcal{O} 40'44
conjunction	-4834 Aug 15 j 06:45	14° \mathfrak{D} 40'53	0°46'40		-4828 Oct 19 j 23:47	15° \mathcal{O}
minimum elong	-4834 Aug 15 j 06:45	14° \mathfrak{D} 40'53	0°46'55	retrograde	-4828 Dec 27 j 14:45	16° \mathcal{O} 59'45
max. Earth dist.	-4834 Aug 14 j 13:26	14° \mathfrak{D} 38'08	19.36313 AU	opposition	-4827 Mar 12 j 23:08	14° \mathcal{O} 59'01
morning rise	-4834 Aug 31 j 03:19	15° \mathfrak{D} 40'48			-4827 Mar 12 j 13:40	15° \mathfrak{R} \mathcal{O}
retrograde	-4834 Nov 30 j 02:52	19° \mathfrak{D} 02'01		min. Earth dist.	-4827 Mar 13 j 00:07	14° \mathcal{O} 58'55
opposition	-4833 Feb 12 j 09:19	17° \mathfrak{D} 00'23	0°52'57	direct	-4827 May 29 j 04:53	12° \mathcal{O} 55'41
min. Earth dist.	-4833 Feb 12 j 23:52	16° \mathfrak{D} 58'49	17.38078 AU		-4827 Aug 08 j 15:07	15° \mathcal{O}

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Attention, astronomical year style is used: The year -4827 in astronomical counting style is the year 4828 BCE in historical counting style.

evening set	-4827 Aug 31 j 12:22	16°Ω19'05		max. Earth dist.	-4821 Oct 13 j 11:57	14°♊09'41	20.10839 AU
				morning rise	-4821 Oct 28 j 11:58	15°♊04'16	
conjunction	-4827 Sep 16 j 05:14	17°Ω17'32	0°50'35	retrograde	-4820 Jan 28 j 21:01	18°♊19'16	
minimum elong	-4827 Sep 16 j 05:14	17°Ω17'32	0°50'45	opposition	-4820 Apr 14 j 14:07	16°♊18'58	0°45'02
max. Earth dist.	-4827 Sep 16 j 05:22	17°Ω17'33	19.71521 AU	min. Earth dist.	-4820 Apr 13 j 22:51	16°♊20'32	18.14309 AU
morning rise	-4827 Oct 01 j 20:08	18°Ω15'41		direct	-4820 Jun 30 j 12:22	14°♊18'14	
retrograde	-4826 Jan 01 j 12:08	21°Ω34'13		evening set	-4820 Sep 30 j 20:50	17°♊32'13	
opposition	-4826 Mar 17 j 24:00	19°Ω33'36	0°55'55				
min. Earth dist.	-4826 Mar 17 j 21:43	19°Ω33'50	17.74637 AU	conjunction	-4820 Oct 16 j 10:22	18°♊28'37	0°39'22
direct	-4826 Jun 03 j 06:41	17°Ω30'40		minimum elong	-4820 Oct 16 j 10:22	18°♊28'37	0°39'25
evening set	-4826 Sep 05 j 06:16	20°Ω52'50		max. Earth dist.	-4820 Oct 17 j 03:12	18°♊31'11	20.17791 AU
				morning rise	-4820 Oct 31 j 23:48	19°♊25'02	
conjunction	-4826 Sep 20 j 22:29	21°Ω50'59	0°49'49	retrograde	-4819 Feb 01 j 11:26	22°♊39'25	
minimum elong	-4826 Sep 20 j 22:29	21°Ω50'59	0°49'59	opposition	-4819 Apr 19 j 09:45	20°♊39'13	0°42'17
max. Earth dist.	-4826 Sep 21 j 01:32	21°Ω51'27	19.77779 AU	min. Earth dist.	-4819 Apr 18 j 16:43	20°♊40'57	18.21305 AU
morning rise	-4826 Oct 06 j 12:48	22°Ω48'52		direct	-4819 Jul 05 j 06:43	18°♊38'55	
retrograde	-4825 Jan 06 j 05:39	26°Ω06'52		evening set	-4819 Oct 05 j 08:04	21°♊51'32	
opposition	-4825 Mar 23 j 00:13	24°Ω06'21	0°54'53				
min. Earth dist.	-4825 Mar 22 j 20:53	24°Ω06'42	17.80968 AU	conjunction	-4819 Oct 20 j 21:18	22°♊47'41	0°36'48
direct	-4825 Jun 08 j 05:20	22°Ω03'49		minimum elong	-4819 Oct 20 j 21:18	22°♊47'41	0°36'51
evening set	-4825 Sep 09 j 23:16	25°Ω24'40		max. Earth dist.	-4819 Oct 21 j 15:13	22°♊50'23	20.24827 AU
				morning rise	-4819 Nov 05 j 11:04	23°♊43'53	
conjunction	-4825 Sep 25 j 14:44	26°Ω22'31	0°48'45	retrograde	-4818 Feb 06 j 03:30	26°♊57'42	
minimum elong	-4825 Sep 25 j 14:44	26°Ω22'31	0°48'55	min. Earth dist.	-4818 Apr 23 j 09:03	24°♊59'33	18.28365 AU
max. Earth dist.	-4825 Sep 25 j 19:09	26°Ω23'12	19.84177 AU	opposition	-4818 Apr 24 j 04:28	24°♊57'34	0°39'19
morning rise	-4825 Oct 11 j 04:49	27°Ω20'09		direct	-4818 Jul 09 j 23:13	22°♊57'41	
	-4825 Dec 04 j 08:14	0°♊		evening set	-4818 Oct 09 j 18:28	26°♊09'01	
retrograde	-4824 Jan 11 j 01:29	0°♊37'34					
	-4824 Feb 19 j 03:55	30°♋Ω		conjunction	-4818 Oct 25 j 07:49	27°♊04'55	0°34'03
opposition	-4824 Mar 26 j 23:44	28°Ω37'08	0°53'30	minimum elong	-4818 Oct 25 j 07:49	27°♊04'55	0°34'05
min. Earth dist.	-4824 Mar 26 j 17:16	28°Ω37'48	17.87415 AU	max. Earth dist.	-4818 Oct 26 j 04:45	27°♊08'04	20.31883 AU
direct	-4824 Jun 12 j 04:22	26°Ω34'57		morning rise	-4818 Nov 09 j 21:39	28°♊00'55	
evening set	-4824 Sep 13 j 15:04	29°Ω54'28			-4818 Dec 17 j 21:25	0°♋	
	-4824 Sep 15 j 03:40	0°♊		retrograde	-4817 Feb 10 j 16:47	1°♋14'09	
conjunction	-4824 Sep 29 j 06:04	0°♊52'01	0°47'23		-4817 Apr 09 j 14:13	30°♋♊	
minimum elong	-4824 Sep 29 j 06:04	0°♊52'01	0°47'32	opposition	-4817 Apr 28 j 22:14	29°♊14'09	0°36'09
max. Earth dist.	-4824 Sep 29 j 13:38	0°♊53'11	19.90672 AU	min. Earth dist.	-4817 Apr 28 j 01:18	29°♊16'17	18.35401 AU
morning rise	-4824 Oct 14 j 19:44	1°♊49'23		direct	-4817 Jul 14 j 15:37	27°♊14'42	
retrograde	-4823 Jan 14 j 18:06	5°♊06'13		evening set	-4817 Oct 07 j 00:55	0°♋	
opposition	-4823 Mar 31 j 22:42	3°♊05'49	0°51'49		-4817 Oct 14 j 04:20	0°♋24'46	
min. Earth dist.	-4823 Mar 31 j 14:55	3°♊06'37	17.93961 AU	conjunction	-4817 Oct 29 j 17:31	1°♋20'25	0°31'08
direct	-4823 Jun 17 j 01:44	1°♊04'01		minimum elong	-4817 Oct 29 j 17:32	1°♋20'26	0°31'08
evening set	-4823 Sep 18 j 06:02	4°♊22'08		max. Earth dist.	-4817 Oct 30 j 15:07	1°♋23'40	20.38889 AU
				morning rise	-4817 Nov 14 j 07:50	2°♋16'14	
conjunction	-4823 Oct 03 j 20:24	5°♊19'23	0°45'45	retrograde	-4816 Feb 15 j 07:31	5°♋28'56	
minimum elong	-4823 Oct 03 j 20:24	5°♊19'23	0°45'53	opposition	-4816 May 02 j 15:25	3°♋29'03	0°32'48
max. Earth dist.	-4823 Oct 04 j 05:20	5°♊20'45	19.97281 AU	min. Earth dist.	-4816 May 01 j 16:45	3°♋31'21	18.42363 AU
morning rise	-4823 Oct 19 j 10:03	6°♊16'30		direct	-4816 Jul 18 j 06:10	1°♋30'01	
retrograde	-4822 Jan 19 j 12:24	9°♊32'44		evening set	-4816 Oct 17 j 13:15	4°♋38'52	
opposition	-4822 Apr 05 j 20:39	7°♊32'21	0°49'49				
min. Earth dist.	-4822 Apr 05 j 09:49	7°♊33'28	18.00629 AU	conjunction	-4816 Nov 02 j 02:41	5°♋34'19	0°28'03
direct	-4822 Jun 21 j 22:04	5°♊30'53		minimum elong	-4816 Nov 02 j 02:41	5°♋34'19	0°28'04
evening set	-4822 Sep 22 j 19:47	8°♊47'37		max. Earth dist.	-4816 Nov 03 j 03:00	5°♋37'57	20.45773 AU
				morning rise	-4816 Nov 17 j 17:12	6°♋29'57	
conjunction	-4822 Oct 08 j 09:55	9°♊44'34	0°43'51	retrograde	-4815 Feb 18 j 19:56	9°♋42'07	
minimum elong	-4822 Oct 08 j 09:55	9°♊44'35	0°43'57	min. Earth dist.	-4815 May 06 j 07:48	7°♋44'48	18.49155 AU
max. Earth dist.	-4822 Oct 08 j 22:12	9°♊46'27	20.04000 AU	opposition	-4815 May 07 j 07:52	7°♋42'22	0°29'17
morning rise	-4822 Oct 23 j 23:20	10°♊41'27		direct	-4815 Jul 22 j 20:57	5°♋43'45	
retrograde	-4821 Jan 24 j 03:54	13°♊57'03		evening set	-4815 Oct 21 j 21:54	8°♋51'25	
opposition	-4821 Apr 10 j 17:52	11°♊56'43	0°47'34				
min. Earth dist.	-4821 Apr 10 j 05:28	11°♊57'59	18.07406 AU	conjunction	-4815 Nov 06 j 11:20	9°♋46'39	0°24'51
direct	-4821 Jun 26 j 18:06	9°♊55'37		minimum elong	-4815 Nov 06 j 11:20	9°♋46'39	0°24'49
evening set	-4821 Sep 27 j 08:49	13°♊10'57		max. Earth dist.	-4815 Nov 07 j 11:56	9°♋50'19	20.52459 AU
				morning rise	-4815 Nov 22 j 02:28	10°♋42'08	
conjunction	-4821 Oct 12 j 22:26	14°♊07'38	0°41'43	retrograde	-4814 Feb 23 j 09:14	13°♋53'48	
minimum elong	-4821 Oct 12 j 22:26	14°♊07'38	0°41'48	opposition	-4814 May 11 j 23:28	11°♋54'09	0°25'39

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Attention, astronomical year style is used: The year -4814 in astronomical counting style is the year 4815 BCE in historical counting style.

min. Earth dist.	-4814 May 10 j 22:24	11° <u>♏</u> 56'40	18.55727 AU	max. Earth dist.	-4809 Dec 02 j 11:24	4° <u>♏</u> 34'16	20.85373 AU
direct	-4814 Jul 27 j 09:47	9° <u>♏</u> 55'55		morning rise	-4809 Dec 17 j 01:01	5° <u>♏</u> 24'46	
evening set	-4814 Oct 26 j 05:49	13° <u>♏</u> 02'26		retrograde	-4808 Mar 19 j 23:59	8° <u>♏</u> 33'41	
conjunction	-4814 Nov 10 j 19:39	13° <u>♏</u> 57'30	0°21'31	min. Earth dist.	-4808 Jun 05 j 00:41	6° <u>♏</u> 37'02	18.87557 AU
minimum elong	-4814 Nov 10 j 19:39	13° <u>♏</u> 57'30	0°21'28	opposition	-4808 Jun 06 j 05:19	6° <u>♏</u> 34'11	0°02'10
max. Earth dist.	-4814 Nov 11 j 22:24	14° <u>♏</u> 01'28	20.58875 AU	direct	-4808 Aug 21 j 02:56	4° <u>♏</u> 37'25	
morning rise	-4814 Nov 26 j 11:07	14° <u>♏</u> 52'49		evening set	-4808 Nov 18 j 19:05	7° <u>♏</u> 38'07	
retrograde	-4813 Feb 27 j 21:03	18° <u>♏</u> 04'00		conjunction	-4808 Dec 04 j 11:42	8° <u>♏</u> 32'22	0°00'13
opposition	-4813 May 16 j 14:18	16° <u>♏</u> 04'27	0°21'53	minimum elong	-4808 Dec 04 j 11:42	8° <u>♏</u> 32'22	0°00'04
min. Earth dist.	-4813 May 15 j 12:06	16° <u>♏</u> 07'05	18.61977 AU	behind sun begin	-4808 Dec 04 j 05:44	8° <u>♏</u> 31'32	
direct	-4813 Jul 31 j 23:02	14° <u>♏</u> 06'34		behind sun end	-4808 Dec 04 j 17:40	8° <u>♏</u> 33'12	
evening set	-4813 Oct 30 j 13:20	17° <u>♏</u> 12'00		max. Earth dist.	-4808 Dec 05 j 18:45	8° <u>♏</u> 36'52	20.89590 AU
conjunction	-4813 Nov 15 j 03:17	18° <u>♏</u> 06'52	0°18'05	morning rise	-4808 Dec 20 j 07:22	9° <u>♏</u> 27'05	
minimum elong	-4813 Nov 15 j 03:17	18° <u>♏</u> 06'52	0°18'01	desc. node	-4808 Dec 26 j 13:07	9° <u>♏</u> 48'01	
max. Earth dist.	-4813 Nov 16 j 05:54	18° <u>♏</u> 10'48	20.64947 AU	retrograde	-4807 Mar 24 j 09:11	12° <u>♏</u> 35'37	
morning rise	-4813 Nov 30 j 19:28	19° <u>♏</u> 02'04		min. Earth dist.	-4807 Jun 09 j 09:52	10° <u>♏</u> 39'04	18.91616 AU
retrograde	-4812 Mar 03 j 08:32	22° <u>♏</u> 12'47		opposition	-4807 Jun 10 j 15:38	10° <u>♏</u> 36'06	-0°01'48
min. Earth dist.	-4812 May 19 j 01:52	20° <u>♏</u> 15'57	18.67872 AU	direct	-4807 Aug 25 j 11:52	8° <u>♏</u> 39'29	
opposition	-4812 May 20 j 04:31	20° <u>♏</u> 13'17	0°18'02	evening set	-4807 Nov 23 j 00:01	11° <u>♏</u> 39'27	
direct	-4812 Aug 04 j 10:31	18° <u>♏</u> 15'42		conjunction	-4807 Dec 08 j 17:08	12° <u>♏</u> 33'37	-0°03'27
evening set	-4812 Nov 02 j 20:13	21° <u>♏</u> 20'05		minimum elong	-4807 Dec 08 j 17:09	12° <u>♏</u> 33'37	0°03'35
conjunction	-4812 Nov 18 j 10:43	22° <u>♏</u> 14'49	0°14'35	behind sun begin	-4807 Dec 08 j 10:38	12° <u>♏</u> 32'42	
minimum elong	-4812 Nov 18 j 10:43	22° <u>♏</u> 14'49	0°14'31	behind sun end	-4807 Dec 08 j 23:39	12° <u>♏</u> 34'32	
behind sun begin	-4812 Nov 18 j 07:40	22° <u>♏</u> 14'22		max. Earth dist.	-4807 Dec 09 j 23:41	12° <u>♏</u> 38'02	20.93493 AU
behind sun end	-4812 Nov 18 j 13:46	22° <u>♏</u> 15'15		morning rise	-4807 Dec 24 j 13:49	13° <u>♏</u> 28'17	
max. Earth dist.	-4812 Nov 19 j 15:09	22° <u>♏</u> 19'00	20.70643 AU		-4806 Jan 22 j 22:22	15° <u>♏</u>	
morning rise	-4812 Dec 04 j 03:22	23° <u>♏</u> 09'52		retrograde	-4806 Mar 28 j 17:15	16° <u>♏</u> 36'29	
retrograde	-4811 Mar 07 j 19:50	26° <u>♏</u> 20'07			-4806 Jun 05 j 09:32	15° <u>♏</u>	
opposition	-4811 May 24 j 17:52	24° <u>♏</u> 20'39	0°14'07	min. Earth dist.	-4806 Jun 13 j 19:56	14° <u>♏</u> 39'53	18.95378 AU
min. Earth dist.	-4811 May 23 j 14:11	24° <u>♏</u> 23'26	18.73364 AU	opposition	-4806 Jun 15 j 01:17	14° <u>♏</u> 36'57	-0°05'45
direct	-4811 Aug 08 j 22:34	22° <u>♏</u> 23'20		direct	-4806 Aug 29 j 18:20	12° <u>♏</u> 40'30	
evening set	-4811 Nov 07 j 02:41	25° <u>♏</u> 26'42			-4806 Nov 15 j 02:16	15° <u>♏</u>	
conjunction	-4811 Nov 22 j 17:29	26° <u>♏</u> 21'17	0°11'03	evening set	-4806 Nov 27 j 04:32	15° <u>♏</u> 39'48	
minimum elong	-4811 Nov 22 j 17:30	26° <u>♏</u> 21'17	0°10'57	conjunction	-4806 Dec 12 j 22:32	16° <u>♏</u> 33'55	-0°06'59
behind sun begin	-4811 Nov 22 j 12:30	26° <u>♏</u> 20'35		minimum elong	-4806 Dec 12 j 22:32	16° <u>♏</u> 33'55	0°07'09
behind sun end	-4811 Nov 22 j 22:29	26° <u>♏</u> 22'00		behind sun begin	-4806 Dec 12 j 16:28	16° <u>♏</u> 33'04	
max. Earth dist.	-4811 Nov 23 j 21:36	26° <u>♏</u> 25'25	20.75936 AU	behind sun end	-4806 Dec 13 j 04:36	16° <u>♏</u> 34'46	
morning rise	-4811 Dec 08 j 11:02	27° <u>♏</u> 16'15		max. Earth dist.	-4806 Dec 14 j 06:22	16° <u>♏</u> 38'31	20.97095 AU
	-4810 Feb 07 j 14:39	0° <u>♏</u>		morning rise	-4806 Dec 28 j 19:55	17° <u>♏</u> 28'33	
retrograde	-4810 Mar 12 j 05:28	0° <u>♏</u> 26'02		retrograde	-4805 Apr 02 j 01:54	20° <u>♏</u> 36'27	
	-4810 Apr 14 j 14:30	30° <u>♏</u>		min. Earth dist.	-4805 Jun 18 j 04:00	18° <u>♏</u> 39'58	18.98815 AU
min. Earth dist.	-4810 May 28 j 02:50	28° <u>♏</u> 29'20	18.78465 AU	opposition	-4805 Jun 19 j 10:18	18° <u>♏</u> 36'56	-0°09'39
opposition	-4810 May 29 j 06:33	28° <u>♏</u> 26'34	0°10'09	direct	-4805 Sep 03 j 01:44	16° <u>♏</u> 40'38	
direct	-4810 Aug 13 j 08:18	26° <u>♏</u> 29'27		evening set	-4805 Dec 01 j 08:56	19° <u>♏</u> 39'21	
evening set	-4810 Nov 11 j 08:34	29° <u>♏</u> 31'52		conjunction	-4805 Dec 17 j 03:30	20° <u>♏</u> 33'26	-0°10'28
	-4810 Nov 19 j 11:45	0° <u>♏</u>		minimum elong	-4805 Dec 17 j 03:29	20° <u>♏</u> 33'26	0°10'39
conjunction	-4810 Nov 27 j 00:03	0° <u>♏</u> 26'20	0°07'28	behind sun begin	-4805 Dec 16 j 22:23	20° <u>♏</u> 32'43	
minimum elong	-4810 Nov 27 j 00:03	0° <u>♏</u> 26'20	0°07'21	behind sun end	-4805 Dec 17 j 08:36	20° <u>♏</u> 34'09	
behind sun begin	-4810 Nov 26 j 18:03	0° <u>♏</u> 25'29		max. Earth dist.	-4805 Dec 18 j 10:37	20° <u>♏</u> 37'54	21.00366 AU
behind sun end	-4810 Nov 27 j 06:04	0° <u>♏</u> 27'11		morning rise	-4804 Jan 02 j 01:55	21° <u>♏</u> 28'02	
max. Earth dist.	-4810 Nov 28 j 05:48	0° <u>♏</u> 30'41	20.80837 AU	retrograde	-4804 Apr 05 j 09:50	24° <u>♏</u> 35'42	
morning rise	-4810 Dec 12 j 18:08	1° <u>♏</u> 21'11		opposition	-4804 Jun 22 j 19:02	22° <u>♏</u> 36'12	-0°13'30
retrograde	-4809 Mar 16 j 15:34	4° <u>♏</u> 30'31		min. Earth dist.	-4804 Jun 21 j 13:27	22° <u>♏</u> 39'10	19.01921 AU
opposition	-4809 Jun 02 j 18:09	2° <u>♏</u> 31'02	0°06'10	direct	-4804 Sep 06 j 06:55	20° <u>♏</u> 40'03	
min. Earth dist.	-4809 Jun 01 j 13:25	2° <u>♏</u> 33'55	18.83176 AU	evening set	-4804 Dec 04 j 13:11	23° <u>♏</u> 38'16	
direct	-4809 Aug 17 j 18:59	0° <u>♏</u> 34'07		conjunction	-4804 Dec 20 j 08:43	24° <u>♏</u> 32'20	-0°13'55
evening set	-4809 Nov 15 j 14:09	3° <u>♏</u> 35'38		minimum elong	-4804 Dec 20 j 08:43	24° <u>♏</u> 32'20	0°14'06
conjunction	-4809 Dec 01 j 06:01	4° <u>♏</u> 29'59	0°03'53	behind sun begin	-4804 Dec 20 j 05:24	24° <u>♏</u> 31'52	
minimum elong	-4809 Dec 01 j 06:00	4° <u>♏</u> 29'59	0°03'46	behind sun end	-4804 Dec 20 j 12:02	24° <u>♏</u> 32'47	
behind sun begin	-4809 Nov 30 j 23:31	4° <u>♏</u> 29'04		max. Earth dist.	-4804 Dec 21 j 16:52	24° <u>♏</u> 36'56	21.03292 AU
behind sun end	-4809 Dec 01 j 12:29	4° <u>♏</u> 30'55		morning rise	-4803 Jan 05 j 07:55	25° <u>♏</u> 26'55	
				retrograde	-4803 Apr 09 j 18:32	28° <u>♏</u> 34'22	


















































































































































Planetary Phenomena of Uranus from -4900 through -4398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9

Attention, astronomical year style is used: The year -4803 in astronomical counting style is the year 4804 BCE in historical counting style.

min. Earth dist.	-4803 Jun 25 j 20:52	26° \mathbb{M} 37'57	19.04651 AU	conjunction	-4796 Jan 18 j 00:35	22° \mathbb{A} 16'54	-0°35'12
opposition	-4803 Jun 27 j 03:03	26° \mathbb{M} 34'56	-0°17'16	minimum elong	-4796 Jan 18 j 00:35	22° \mathbb{A} 16'54	0°35'27
direct	-4803 Sep 10 j 13:43	24° \mathbb{M} 38'54		max. Earth dist.	-4796 Jan 19 j 01:55	22° \mathbb{A} 20'30	21.10183 AU
evening set	-4803 Dec 08 j 17:38	27° \mathbb{M} 36'42		morning rise	-4796 Feb 03 j 06:49	23° \mathbb{A} 11'54	
				retrograde	-4796 May 08 j 02:53	26° \mathbb{A} 18'46	
conjunction	-4803 Dec 24 j 13:50	28° \mathbb{M} 30'45	-0°17'17	min. Earth dist.	-4796 Jul 24 j 03:59	24° \mathbb{A} 21'24	19.09695 AU
minimum elong	-4803 Dec 24 j 13:50	28° \mathbb{M} 30'45	0°17'30	opposition	-4796 Jul 25 j 02:21	24° \mathbb{A} 19'08	-0°40'19
max. Earth dist.	-4803 Dec 25 j 20:52	28° \mathbb{M} 35'11	21.05818 AU	direct	-4796 Oct 07 j 23:01	22° \mathbb{A} 23'01	
morning rise	-4802 Jan 09 j 14:10	29° \mathbb{M} 25'22		evening set	-4795 Jan 05 j 04:18	25° \mathbb{A} 19'53	
	-4802 Jan 20 j 03:28	0° \mathbb{A}					
retrograde	-4802 Apr 14 j 02:20	2° \mathbb{A} 32'39		conjunction	-4795 Jan 21 j 07:17	26° \mathbb{A} 14'22	-0°37'40
min. Earth dist.	-4802 Jun 30 j 05:59	0° \mathbb{A} 36'08	19.06967 AU	minimum elong	-4795 Jan 21 j 07:16	26° \mathbb{A} 14'22	0°37'55
opposition	-4802 Jul 01 j 10:51	0° \mathbb{A} 33'14	-0°20'57	max. Earth dist.	-4795 Jan 22 j 08:15	26° \mathbb{A} 17'55	21.09009 AU
	-4802 Jul 15 j 11:03	30° \mathbb{R} \mathbb{M}		morning rise	-4795 Feb 06 j 14:22	27° \mathbb{A} 09'28	
direct	-4802 Sep 14 j 17:36	28° \mathbb{M} 37'20			-4795 Apr 16 j 08:41	0° \mathbb{B}	
	-4802 Nov 11 j 21:27	0° \mathbb{A}		retrograde	-4795 May 12 j 11:19	0° \mathbb{B} 16'22	
evening set	-4802 Dec 12 j 22:00	1° \mathbb{A} 34'46			-4795 Jun 07 j 19:13	30° \mathbb{R} \mathbb{A}	
				min. Earth dist.	-4795 Jul 28 j 09:50	28° \mathbb{A} 18'52	19.08283 AU
conjunction	-4802 Dec 28 j 19:12	2° \mathbb{A} 28'51	-0°20'34	opposition	-4795 Jul 29 j 07:53	28° \mathbb{A} 16'38	-0°42'57
minimum elong	-4802 Dec 28 j 19:12	2° \mathbb{A} 28'51	0°20'47	direct	-4795 Oct 12 j 04:09	26° \mathbb{A} 20'21	
max. Earth dist.	-4802 Dec 30 j 02:45	2° \mathbb{A} 33'21	21.07901 AU	evening set	-4794 Jan 09 j 10:18	29° \mathbb{A} 17'22	
morning rise	-4801 Jan 13 j 20:18	3° \mathbb{A} 23'29			-4794 Jan 22 j 01:39	0° \mathbb{B}	
retrograde	-4801 Apr 18 j 11:09	6° \mathbb{A} 30'37					
opposition	-4801 Jul 05 j 18:01	4° \mathbb{A} 31'15	-0°24'32	conjunction	-4794 Jan 25 j 14:08	0° \mathbb{B} 12'00	-0°39'57
min. Earth dist.	-4801 Jul 04 j 13:00	4° \mathbb{A} 34'09	19.08803 AU	minimum elong	-4794 Jan 25 j 14:08	0° \mathbb{B} 11'59	0°40'12
direct	-4801 Sep 19 j 00:10	2° \mathbb{A} 35'25		max. Earth dist.	-4794 Jan 26 j 12:54	0° \mathbb{B} 15'13	21.07378 AU
evening set	-4801 Dec 17 j 02:41	5° \mathbb{A} 32'37		morning rise	-4794 Feb 10 j 22:22	1° \mathbb{B} 07'13	
				retrograde	-4794 May 16 j 18:43	4° \mathbb{B} 14'11	
conjunction	-4800 Jan 02 j 00:36	6° \mathbb{A} 26'42	-0°23'45	opposition	-4794 Aug 02 j 13:30	2° \mathbb{B} 14'21	-0°45'22
minimum elong	-4800 Jan 02 j 00:36	6° \mathbb{A} 26'42	0°24'00	min. Earth dist.	-4794 Aug 01 j 17:41	2° \mathbb{B} 16'22	19.06451 AU
max. Earth dist.	-4800 Jan 03 j 06:32	6° \mathbb{A} 30'58	21.09484 AU	direct	-4794 Oct 16 j 07:41	0° \mathbb{B} 17'53	
morning rise	-4800 Jan 18 j 02:49	7° \mathbb{A} 21'23		evening set	-4793 Jan 13 j 16:23	3° \mathbb{B} 15'09	
retrograde	-4800 Apr 21 j 18:45	10° \mathbb{A} 28'26					
min. Earth dist.	-4800 Jul 07 j 21:55	8° \mathbb{A} 31'48	19.10128 AU	conjunction	-4793 Jan 29 j 21:23	4° \mathbb{B} 09'56	-0°42'03
opposition	-4800 Jul 09 j 01:09	8° \mathbb{A} 29'04	-0°28'00	minimum elong	-4793 Jan 29 j 21:23	4° \mathbb{B} 09'56	0°42'19
direct	-4800 Sep 22 j 03:35	6° \mathbb{A} 33'16		max. Earth dist.	-4793 Jan 30 j 19:44	4° \mathbb{B} 13'06	21.05349 AU
evening set	-4800 Dec 20 j 07:20	9° \mathbb{A} 30'16		morning rise	-4793 Feb 15 j 06:25	5° \mathbb{B} 05'17	
				retrograde	-4793 May 21 j 04:00	8° \mathbb{B} 12'23	
conjunction	-4799 Jan 05 j 06:22	10° \mathbb{A} 24'24	-0°26'50	opposition	-4793 Aug 06 j 18:52	6° \mathbb{B} 12'27	-0°47'35
minimum elong	-4799 Jan 05 j 06:21	10° \mathbb{A} 24'24	0°27'03	min. Earth dist.	-4793 Aug 05 j 23:19	6° \mathbb{B} 14'27	19.04229 AU
max. Earth dist.	-4799 Jan 06 j 12:18	10° \mathbb{A} 28'40	21.10530 AU	direct	-4793 Oct 20 j 12:52	4° \mathbb{B} 15'49	
morning rise	-4799 Jan 21 j 09:26	11° \mathbb{A} 19'08		evening set	-4792 Jan 17 j 23:07	7° \mathbb{B} 13'25	
retrograde	-4799 Apr 26 j 03:37	14° \mathbb{A} 26'06					
min. Earth dist.	-4799 Jul 12 j 04:47	12° \mathbb{A} 29'26	19.10879 AU	conjunction	-4792 Feb 03 j 04:59	8° \mathbb{B} 08'21	-0°43'57
opposition	-4799 Jul 13 j 07:49	12° \mathbb{A} 26'43	-0°31'20	minimum elong	-4792 Feb 03 j 04:59	8° \mathbb{B} 08'21	0°44'11
direct	-4799 Sep 26 j 09:53	10° \mathbb{A} 30'56		max. Earth dist.	-4792 Feb 04 j 01:06	8° \mathbb{B} 11'12	21.02949 AU
evening set	-4799 Dec 24 j 12:27	13° \mathbb{A} 27'47		morning rise	-4792 Feb 19 j 15:06	9° \mathbb{B} 03'52	
				retrograde	-4792 May 24 j 11:26	12° \mathbb{B} 11'09	
conjunction	-4798 Jan 09 j 12:16	14° \mathbb{A} 21'59	-0°29'46	min. Earth dist.	-4792 Aug 09 j 07:11	10° \mathbb{B} 12'54	19.01660 AU
minimum elong	-4798 Jan 09 j 12:16	14° \mathbb{A} 21'59	0°30'00	opposition	-4792 Aug 10 j 00:24	10° \mathbb{B} 11'09	-0°49'34
max. Earth dist.	-4798 Jan 10 j 16:04	14° \mathbb{A} 25'56	21.10986 AU	direct	-4792 Oct 23 j 16:01	8° \mathbb{B} 14'19	
morning rise	-4798 Jan 25 j 16:29	15° \mathbb{A} 16'48		evening set	-4791 Jan 21 j 06:10	11° \mathbb{B} 12'21	
retrograde	-4798 Apr 30 j 11:02	18° \mathbb{A} 23'42					
opposition	-4798 Jul 17 j 14:13	16° \mathbb{A} 24'16	-0°34'30	conjunction	-4791 Feb 06 j 13:15	12° \mathbb{B} 07'27	-0°45'39
min. Earth dist.	-4798 Jul 16 j 13:22	16° \mathbb{A} 26'46	19.11044 AU	minimum elong	-4791 Feb 06 j 13:15	12° \mathbb{B} 07'27	0°45'54
direct	-4798 Sep 30 j 13:33	14° \mathbb{A} 28'24		max. Earth dist.	-4791 Feb 07 j 08:43	12° \mathbb{B} 10'13	21.00214 AU
evening set	-4798 Dec 28 j 17:32	17° \mathbb{A} 25'11		morning rise	-4791 Feb 23 j 00:12	13° \mathbb{B} 03'08	
				retrograde	-4791 May 28 j 22:10	16° \mathbb{B} 10'39	
conjunction	-4797 Jan 13 j 18:30	18° \mathbb{A} 19'29	-0°32'34	opposition	-4791 Aug 14 j 05:51	14° \mathbb{B} 10'35	-0°51'20
minimum elong	-4797 Jan 13 j 18:30	18° \mathbb{A} 19'29	0°32'48	min. Earth dist.	-4791 Aug 13 j 13:06	14° \mathbb{B} 12'18	18.98743 AU
max. Earth dist.	-4797 Jan 14 j 21:56	18° \mathbb{A} 23'23	21.10865 AU	direct	-4791 Oct 27 j 21:42	12° \mathbb{B} 13'35	
morning rise	-4797 Jan 29 j 23:34	19° \mathbb{A} 14'22		evening set	-4790 Jan 25 j 14:02	15° \mathbb{B} 12'07	
retrograde	-4797 May 04 j 19:28	22° \mathbb{A} 21'13					
opposition	-4797 Jul 21 j 20:19	20° \mathbb{A} 21'43	-0°37'30	conjunction	-4790 Feb 10 j 22:00	16° \mathbb{B} 07'25	-0°47'08
min. Earth dist.	-4797 Jul 20 j 19:45	20° \mathbb{A} 24'11	19.10631 AU	minimum elong	-4790 Feb 10 j 21:59	16° \mathbb{B} 07'25	0°47'22
direct	-4797 Oct 04 j 19:14	18° \mathbb{A} 25'45		max. Earth dist.	-4790 Feb 11 j 14:59	16° \mathbb{B} 09'50	20.97125 AU
evening set	-4796 Jan 01 j 22:48	21° \mathbb{A} 22'32		morning rise	-4790 Feb 27 j 09:58	17° \mathbb{B} 03'17	

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Attention, astronomical year style is used: The year -4790 in astronomical counting style is the year 4791 BCE in historical counting style.

retrograde	-4790 Jun 02 j 05:53	20°  11'03	evening set	-4783 Feb 23 j 16:45	13°  44'17	
opposition	-4790 Aug 18 j 11:29	18°  10'57 -0°52'52				
min. Earth dist.	-4790 Aug 17 j 21:20	18°  12'24 18.95485 AU	conjunction	-4783 Mar 12 j 07:35	14°  41'17 -0°50'48	
direct	-4790 Nov 01 j 00:50	16°  13'46	minimum elong	-4783 Mar 12 j 07:35	14°  41'17 0°51'00	
evening set	-4789 Jan 29 j 22:20	19°  12'54	max. Earth dist.	-4783 Mar 12 j 09:02	14°  41'30 20.64636 AU	
				-4783 Mar 17 j 17:24	15° 	
conjunction	-4789 Feb 15 j 07:27	20°  08'24 -0°48'24	morning rise	-4783 Mar 29 j 00:51	15°  38'40	
minimum elong	-4789 Feb 15 j 07:27	20°  08'24 0°48'38	retrograde	-4783 Jul 01 j 10:51	18°  49'08	
max. Earth dist.	-4789 Feb 15 j 23:28	20°  10'41 20.93701 AU	opposition	-4783 Sep 15 j 10:53	16°  48'26 -0°56'01	
morning rise	-4789 Mar 03 j 20:12	21°  04'27	min. Earth dist.	-4783 Sep 15 j 10:06	16°  48'31 18.61573 AU	
retrograde	-4789 Jun 06 j 17:20	24°  12'33		-4783 Nov 08 j 14:17	15°  R 	
opposition	-4789 Aug 22 j 17:15	22°  12'25 -0°54'08	direct	-4783 Nov 29 j 01:22	14°  49'10	
min. Earth dist.	-4789 Aug 22 j 03:48	22°  13'48 18.91872 AU		-4783 Dec 19 j 08:13	15° 	
direct	-4789 Nov 05 j 07:25	20°  15'03	evening set	-4782 Feb 28 j 06:40	17°  54'11	
evening set	-4788 Feb 03 j 07:23	23°  14'50				
			conjunction	-4782 Mar 16 j 22:12	18°  51'28 -0°50'17	
conjunction	-4788 Feb 19 j 17:23	24°  10'34 -0°49'25	minimum elong	-4782 Mar 16 j 22:12	18°  51'28 0°50'27	
minimum elong	-4788 Feb 19 j 17:23	24°  10'34 0°49'40	max. Earth dist.	-4782 Mar 16 j 20:48	18°  51'16 20.58431 AU	
max. Earth dist.	-4788 Feb 20 j 06:42	24°  12'28 20.89903 AU	morning rise	-4782 Apr 02 j 16:02	19°  49'05	
morning rise	-4788 Mar 07 j 07:06	25°  06'50	retrograde	-4782 Jul 05 j 22:15	22°  59'59	
retrograde	-4788 Jun 10 j 02:01	28°  15'17	opposition	-4782 Sep 19 j 19:10	20°  59'08 -0°55'18	
opposition	-4788 Aug 25 j 23:27	26°  15'07 -0°55'09	min. Earth dist.	-4782 Sep 19 j 21:24	20°  58'54 18.55243 AU	
min. Earth dist.	-4788 Aug 25 j 12:55	26°  16'12 18.87880 AU	direct	-4782 Dec 03 j 09:44	18°  59'26	
direct	-4788 Nov 08 j 11:21	24°  17'31	evening set	-4781 Mar 04 j 21:11	22°  05'30	
evening set	-4787 Feb 06 j 17:17	27°  18'03				
			conjunction	-4781 Mar 21 j 13:35	23°  03'04 -0°49'29	
conjunction	-4787 Feb 23 j 04:24	28°  14'02 -0°50'13	minimum elong	-4781 Mar 21 j 13:36	23°  03'04 0°49'40	
minimum elong	-4787 Feb 23 j 04:24	28°  14'02 0°50'26	max. Earth dist.	-4781 Mar 21 j 10:10	23°  02'34 20.52002 AU	
max. Earth dist.	-4787 Feb 23 j 16:11	28°  15'43 20.85714 AU	morning rise	-4781 Apr 07 j 07:55	24°  00'55	
morning rise	-4787 Mar 11 j 18:50	29°  10'30	retrograde	-4781 Jul 10 j 11:58	27°  12'18	
	-4787 Mar 27 j 02:17	0° 	opposition	-4781 Sep 24 j 03:47	25°  11'16 -0°54'17	
retrograde	-4787 Jun 14 j 13:49	2°  19'19	min. Earth dist.	-4781 Sep 24 j 06:59	25°  10'56 18.48720 AU	
opposition	-4787 Aug 30 j 05:41	0°  19'07 -0°55'54	direct	-4781 Dec 07 j 20:15	23°  11'08	
min. Earth dist.	-4787 Aug 29 j 20:15	0°  20'05 18.83472 AU	evening set	-4780 Mar 08 j 12:35	26°  18'17	
	-4787 Sep 06 j 23:18	30°  R 				
direct	-4787 Nov 12 j 19:00	28°  21'16	conjunction	-4780 Mar 25 j 05:40	27°  16'09 -0°48'26	
	-4786 Jan 15 j 17:03	0° 	minimum elong	-4780 Mar 25 j 05:41	27°  16'09 0°48'34	
evening set	-4786 Feb 11 j 04:08	1°  22'37	max. Earth dist.	-4780 Mar 24 j 23:48	27°  15'18 20.45398 AU	
			morning rise	-4780 Apr 11 j 00:27	28°  14'16	
conjunction	-4786 Feb 27 j 16:05	2°  18'50 -0°50'45		-4780 May 15 j 04:25	0° 	
minimum elong	-4786 Feb 27 j 16:05	2°  18'50 0°50'59	retrograde	-4780 Jul 14 j 00:30	1°  H  26'07	
max. Earth dist.	-4786 Feb 28 j 00:42	2°  20'04 20.81082 AU		-4780 Sep 13 j 13:08	30°  R 	
morning rise	-4786 Mar 16 j 07:21	3°  15'31	opposition	-4780 Sep 27 j 13:07	29°  24'57 -0°52'59	
retrograde	-4786 Jun 18 j 23:30	6°  24'44	min. Earth dist.	-4780 Sep 27 j 19:09	29°  24'18 18.42058 AU	
opposition	-4786 Sep 03 j 12:32	4°  24'27 -0°56'22	direct	-4780 Dec 11 j 05:30	27°  24'22	
min. Earth dist.	-4786 Sep 03 j 06:16	4°  25'06 18.78620 AU		-4779 Mar 03 j 10:30	0° 	
direct	-4786 Nov 17 j 00:21	2°  26'19	evening set	-4779 Mar 13 j 04:54	0°  H  32'41	
evening set	-4785 Feb 15 j 15:26	5°  28'30				
			conjunction	-4779 Mar 29 j 22:42	1°  H  30'50 -0°47'06	
conjunction	-4785 Mar 04 j 04:26	6°  24'59 -0°51'02	minimum elong	-4779 Mar 29 j 22:42	1°  H  30'50 0°47'14	
minimum elong	-4785 Mar 04 j 04:26	6°  24'59 0°51'14	max. Earth dist.	-4779 Mar 29 j 14:39	1°  H  29'40 20.38700 AU	
max. Earth dist.	-4785 Mar 04 j 11:09	6°  25'56 20.76014 AU	morning rise	-4779 Apr 15 j 17:51	2°  H  29'12	
morning rise	-4785 Mar 20 j 20:21	7°  21'53	retrograde	-4779 Jul 18 j 15:43	5°  H  41'34	
retrograde	-4785 Jun 23 j 11:41	10°  31'31	opposition	-4779 Oct 01 j 22:47	3°  H  40'16 -0°51'23	
opposition	-4785 Sep 07 j 19:38	8°  31'07 -0°56'32	min. Earth dist.	-4779 Oct 02 j 05:45	3°  H  39'31 18.35327 AU	
min. Earth dist.	-4785 Sep 07 j 14:29	8°  31'39 18.73325 AU	direct	-4779 Dec 15 j 17:28	1°  H  39'16	
direct	-4785 Nov 21 j 08:53	6°  32'39	evening set	-4778 Mar 17 j 22:08	4°  H  48'48	
evening set	-4784 Feb 20 j 03:46	9°  35'44				
			conjunction	-4778 Apr 03 j 16:31	5°  H  47'15 -0°45'31	
conjunction	-4784 Mar 07 j 17:35	10°  32'28 -0°51'03	minimum elong	-4778 Apr 03 j 16:31	5°  H  47'15 0°45'37	
minimum elong	-4784 Mar 07 j 17:35	10°  32'28 0°51'15	max. Earth dist.	-4778 Apr 03 j 06:21	5°  H  45'46 20.31943 AU	
max. Earth dist.	-4784 Mar 07 j 21:08	10°  32'58 20.70509 AU	morning rise	-4778 Apr 20 j 11:53	6°  H  45'52	
morning rise	-4784 Mar 24 j 10:15	11°  29'36	retrograde	-4778 Jul 23 j 05:36	9°  H  58'47	
retrograde	-4784 Jun 26 j 22:10	14°  39'39	opposition	-4778 Oct 06 j 09:23	7°  H  57'23 -0°49'29	
opposition	-4784 Sep 11 j 03:07	12°  39'07 -0°56'25	min. Earth dist.	-4778 Oct 06 j 18:57	7°  H  56'21 18.28569 AU	
min. Earth dist.	-4784 Sep 11 j 01:10	12°  39'19 18.67624 AU	direct	-4778 Dec 20 j 03:54	5°  H  56'00	
direct	-4784 Nov 24 j 15:58	10°  40'16	evening set	-4777 Mar 22 j 16:03	9°  H  06'47	

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Attention, astronomical year style is used: The year -4777 in astronomical counting style is the year 4778 BCE in historical counting style.

conjunction	-4777 Apr 08 j 10:57	10° H 05'31	-0°43'39	retrograde	-4771 Aug 23 j 11:31	10° Y 56'13	
minimum elong	-4777 Apr 08 j 10:58	10° H 05'31	0°43'45	opposition	-4771 Nov 05 j 08:14	8° Y 54'26	-0°28'24
max. Earth dist.	-4777 Apr 07 j 22:34	10° H 03'42	20.25199 AU	min. Earth dist.	-4771 Nov 06 j 05:51	8° Y 52'05	17.81820 AU
morning rise	-4777 Apr 25 j 06:36	11° H 04'24		direct	-4770 Jan 19 j 13:49	6° Y 50'32	
retrograde	-4777 Jul 27 j 22:15	14° H 17'54		evening set	-4770 Apr 24 j 01:28	10° Y 10'44	
opposition	-4777 Oct 10 j 20:31	12° H 16'24	-0°47'18				
min. Earth dist.	-4777 Oct 11 j 06:58	12° H 15'17	18.21834 AU	conjunction	-4770 May 10 j 21:41	11° Y 11'25	-0°23'46
direct	-4777 Dec 24 j 17:15	10° H 14'39		minimum elong	-4770 May 10 j 21:41	11° Y 11'26	0°23'44
evening set	-4776 Mar 26 j 11:07	13° H 26'44		max. Earth dist.	-4770 May 09 j 18:59	11° Y 07'23	19.78528 AU
				morning rise	-4770 May 27 j 15:59	12° Y 11'55	
conjunction	-4776 Apr 12 j 06:32	14° H 25'47	-0°41'32	retrograde	-4770 Aug 28 j 07:38	15° Y 29'32	
minimum elong	-4776 Apr 12 j 06:32	14° H 25'47	0°41'38	opposition	-4770 Nov 10 j 01:10	13° Y 27'39	-0°24'25
max. Earth dist.	-4776 Apr 11 j 16:21	14° H 23'42	20.18470 AU	min. Earth dist.	-4770 Nov 11 j 00:27	13° Y 25'07	17.75308 AU
morning rise	-4776 Apr 29 j 02:12	15° H 24'55		direct	-4769 Jan 24 j 08:13	11° Y 23'22	
retrograde	-4776 Jul 31 j 13:56	18° H 39'00		evening set	-4769 Apr 29 j 02:35	14° Y 44'49	
opposition	-4776 Oct 14 j 08:24	16° H 37'28	-0°44'49				
min. Earth dist.	-4776 Oct 14 j 21:28	16° H 36'04	18.15121 AU	conjunction	-4769 May 15 j 22:26	15° Y 45'45	-0°20'06
direct	-4776 Dec 28 j 05:25	14° H 35'22		minimum elong	-4769 May 15 j 22:26	15° Y 45'45	0°20'03
evening set	-4775 Mar 31 j 07:15	17° H 48'49		max. Earth dist.	-4769 May 14 j 16:59	15° Y 41'16	19.72104 AU
max. Earth dist.	-4775 Apr 16 j 10:08	18° H 45'40	20.11781 AU	morning rise	-4769 Jun 01 j 16:23	16° Y 46'25	
				retrograde	-4769 Sep 02 j 03:35	20° Y 04'34	
conjunction	-4775 Apr 17 j 02:58	18° H 48'09	-0°39'10	opposition	-4769 Nov 14 j 18:46	18° Y 02'33	-0°20'16
minimum elong	-4775 Apr 17 j 02:59	18° H 48'09	0°39'13	min. Earth dist.	-4769 Nov 15 j 19:18	17° Y 59'53	17.68991 AU
morning rise	-4775 May 03 j 22:47	19° H 47'32		direct	-4768 Jan 29 j 05:08	15° Y 57'53	
retrograde	-4775 Aug 05 j 07:58	23° H 02'14		evening set	-4768 May 03 j 04:21	19° Y 20'34	
opposition	-4775 Oct 18 j 21:03	21° H 00'40	-0°42'04	max. Earth dist.	-4768 May 18 j 18:25	20° Y 17'11	19.65900 AU
min. Earth dist.	-4775 Oct 19 j 11:16	20° H 59'09	18.08442 AU				
direct	-4774 Jan 01 j 20:15	18° H 58'14		conjunction	-4768 May 20 j 00:04	20° Y 21'43	-0°16'17
evening set	-4774 Apr 05 j 04:14	22° H 13'03		minimum elong	-4768 May 20 j 00:04	20° Y 21'43	0°16'13
max. Earth dist.	-4774 Apr 21 j 05:54	23° H 09'57	20.05096 AU	morning rise	-4768 Jun 05 j 17:13	21° Y 22'33	
				retrograde	-4768 Sep 06 j 00:09	24° Y 41'09	
conjunction	-4774 Apr 22 j 00:17	23° H 12'41	-0°36'32	opposition	-4768 Nov 18 j 13:08	22° Y 39'03	-0°15'57
minimum elong	-4774 Apr 22 j 00:17	23° H 12'41	0°36'35	min. Earth dist.	-4768 Nov 19 j 14:44	22° Y 36'16	17.62925 AU
morning rise	-4774 May 08 j 19:51	24° H 12'18		direct	-4767 Feb 02 j 01:58	20° Y 34'00	
retrograde	-4774 Aug 10 j 01:34	27° H 27'37		evening set	-4767 May 08 j 06:54	23° Y 57'53	
opposition	-4774 Oct 23 j 10:39	25° H 26'02	-0°39'01	max. Earth dist.	-4767 May 23 j 18:07	24° Y 54'19	19.59996 AU
min. Earth dist.	-4774 Oct 24 j 03:21	25° H 24'14	18.01765 AU				
direct	-4773 Jan 06 j 10:24	23° H 23'16		conjunction	-4767 May 25 j 01:59	24° Y 59'12	-0°12'22
evening set	-4773 Apr 10 j 02:17	26° H 39'26		minimum elong	-4767 May 25 j 01:59	24° Y 59'12	0°12'16
				behind sun begin	-4767 May 24 j 21:34	24° Y 58'33	
conjunction	-4773 Apr 26 j 22:23	27° H 39'21	-0°33'40	behind sun end	-4767 May 25 j 06:24	24° Y 59'52	
minimum elong	-4773 Apr 26 j 22:23	27° H 39'21	0°33'41	morning rise	-4767 Jun 10 j 18:32	26° Y 00'10	
max. Earth dist.	-4773 Apr 26 j 01:00	27° H 36'09	19.98427 AU	retrograde	-4767 Sep 10 j 20:46	29° Y 19'16	
morning rise	-4773 May 13 j 17:57	28° H 39'13		opposition	-4767 Nov 23 j 08:24	27° Y 17'03	-0°11'31
	-4773 Jun 07 j 05:45	0° Y		min. Earth dist.	-4767 Nov 24 j 11:03	27° Y 14'08	17.57215 AU
retrograde	-4773 Aug 14 j 20:44	1° Y 55'09		direct	-4766 Feb 07 j 00:44	25° Y 11'38	
	-4773 Oct 25 j 12:44	30° R H		evening set	-4766 May 13 j 09:34	28° Y 36'39	
opposition	-4773 Oct 28 j 00:56	29° H 53'31	-0°35'43	max. Earth dist.	-4766 May 28 j 20:49	29° Y 33'17	19.54478 AU
min. Earth dist.	-4773 Oct 28 j 18:58	29° H 51'34	17.95102 AU				
direct	-4772 Jan 11 j 02:55	27° H 50'22		conjunction	-4766 May 30 j 04:15	29° Y 38'08	-0°08'20
	-4772 Mar 24 j 18:26	0° Y		minimum elong	-4766 May 30 j 04:14	29° Y 38'07	0°08'14
evening set	-4772 Apr 14 j 01:07	1° Y 07'55		behind sun begin	-4766 May 29 j 22:17	29° Y 37'14	
				behind sun end	-4766 May 30 j 10:12	29° Y 39'01	
conjunction	-4772 Apr 30 j 21:29	2° Y 08'06	-0°30'34		-4766 Jun 05 j 02:18	0° B	
minimum elong	-4772 Apr 30 j 21:29	2° Y 08'07	0°30'34	morning rise	-4766 Jun 15 j 19:50	0° B 39'13	
max. Earth dist.	-4772 Apr 29 j 22:44	2° Y 04'42	19.91753 AU	retrograde	-4766 Sep 15 j 18:33	3° B 58'44	
morning rise	-4772 May 17 j 16:38	3° Y 08'12		opposition	-4766 Nov 28 j 04:26	1° B 56'27	-0°06'59
retrograde	-4772 Aug 18 j 15:56	6° Y 24'42		min. Earth dist.	-4766 Nov 29 j 07:16	1° B 53'31	17.51914 AU
opposition	-4772 Oct 31 j 16:15	4° Y 23'01	-0°32'10		-4765 Jan 24 j 05:10	30° R Y	
min. Earth dist.	-4772 Nov 01 j 12:31	4° Y 20'49	17.88434 AU	direct	-4765 Feb 11 j 23:59	29° Y 50'44	
direct	-4771 Jan 14 j 19:12	2° Y 19'31			-4765 Mar 02 j 16:11	0° B	
evening set	-4771 Apr 19 j 01:00	5° Y 38'23		evening set	-4765 May 18 j 12:58	3° B 16'49	
				max. Earth dist.	-4765 Jun 02 j 21:58	4° B 13'20	19.49413 AU
conjunction	-4771 May 05 j 21:11	6° Y 38'50	-0°27'16				
minimum elong	-4771 May 05 j 21:11	6° Y 38'50	0°27'15	conjunction	-4765 Jun 04 j 06:52	4° B 18'25	-0°04'15
max. Earth dist.	-4771 May 04 j 19:16	6° Y 34'56	19.85105 AU	minimum elong	-4765 Jun 04 j 06:52	4° B 18'25	0°04'08
morning rise	-4771 May 22 j 16:07	7° Y 39'08		behind sun begin	-4765 Jun 04 j 00:11	4° B 17'25	

Attention, astronomical year style is used: The year -4765 in astronomical counting style is the year 4766 BCE in historical counting style.

behind sun end	-4765 Jun 04 j 13:32	4° 8 19'26	min. Earth dist.	-4760 Dec 26 j 23:33	0° II 16'42	17.31246 AU
morning rise	-4765 Jun 20 j 21:38	5° 8 19'37		-4759 Jan 02 j 09:28	30° R 8	
retrograde	-4765 Sep 20 j 15:59	8° 8 39'34	direct	-4759 Mar 12 j 07:32	28° 8 13'04	
opposition	-4765 Dec 03 j 01:10	6° 8 37'13 -0°02'23		-4759 May 17 j 00:47	0° II	
min. Earth dist.	-4765 Dec 04 j 04:54	6° 8 34'11 17.47115 AU	evening set	-4759 Jun 16 j 15:45	1° II 44'00	
direct	-4764 Feb 16 j 23:29	4° 8 31'13	max. Earth dist.	-4759 Jul 01 j 20:47	2° II 41'00	19.30322 AU
evening set	-4764 May 22 j 16:41	7° 8 58'19				
max. Earth dist.	-4764 Jun 07 j 01:39	8° 8 55'02 19.44872 AU	conjunction	-4759 Jul 03 j 03:53	2° II 45'54	0°20'28
			minimum elong	-4759 Jul 03 j 03:53	2° II 45'54	0°20'41
conjunction	-4764 Jun 08 j 09:57	9° 8 00'03 -0°00'01	morning rise	-4759 Jul 19 j 11:39	3° II 47'12	
minimum elong	-4764 Jun 08 j 09:57	9° 8 00'03 0°00'06	retrograde	-4759 Oct 18 j 15:59	7° II 09'01	
behind sun begin	-4764 Jun 08 j 03:27	8° 8 59'04	opposition	-4759 Dec 30 j 22:02	5° II 07'00	0°24'56
behind sun end	-4764 Jun 08 j 16:28	9° 8 01'02	min. Earth dist.	-4758 Jan 01 j 01:33	5° II 04'00	17.29617 AU
asc. node	-4764 Jun 11 j 08:17	9° 8 10'58	direct	-4758 Mar 17 j 09:33	3° II 00'25	
morning rise	-4764 Jun 24 j 23:41	10° 8 01'19	evening set	-4758 Jun 21 j 20:31	6° II 31'46	
retrograde	-4764 Sep 24 j 15:41	13° 8 21'39	max. Earth dist.	-4758 Jul 07 j 00:22	7° II 28'43	19.28935 AU
opposition	-4764 Dec 06 j 22:45	11° 8 19'18 0°02'16				
min. Earth dist.	-4764 Dec 08 j 02:01	11° 8 16'19 17.42839 AU	conjunction	-4758 Jul 08 j 07:19	7° II 33'36	0°24'17
direct	-4763 Feb 21 j 00:25	9° 8 13'06	minimum elong	-4758 Jul 08 j 07:19	7° II 33'36	0°24'31
evening set	-4763 May 27 j 20:52	12° 8 41'09	morning rise	-4758 Jul 24 j 13:56	8° II 34'50	
max. Earth dist.	-4763 Jun 12 j 04:14	13° 8 37'50 19.40872 AU	retrograde	-4758 Oct 23 j 18:04	11° II 56'49	
			opposition	-4757 Jan 04 j 23:43	9° II 54'50	0°29'07
conjunction	-4763 Jun 13 j 13:11	13° 8 42'58 0°04'13	min. Earth dist.	-4757 Jan 06 j 01:43	9° II 52'01	17.28465 AU
minimum elong	-4763 Jun 13 j 13:11	13° 8 42'58 0°04'22	direct	-4757 Mar 22 j 14:55	7° II 48'15	
behind sun begin	-4763 Jun 13 j 06:33	13° 8 41'57	evening set	-4757 Jun 27 j 01:09	11° II 19'53	
behind sun end	-4763 Jun 13 j 19:49	13° 8 43'58	max. Earth dist.	-4757 Jul 12 j 05:29	12° II 17'00	19.28017 AU
morning rise	-4763 Jun 30 j 01:50	14° 8 44'17				
	-4763 Jul 04 j 09:56	15° 8	conjunction	-4757 Jul 13 j 10:50	12° II 21'39	0°27'56
retrograde	-4763 Sep 29 j 14:06	18° 8 05'00	minimum elong	-4757 Jul 13 j 10:49	12° II 21'39	0°28'10
opposition	-4763 Dec 11 j 21:11	16° 8 02'41 0°06'55	morning rise	-4757 Jul 29 j 15:59	13° II 22'47	
min. Earth dist.	-4763 Dec 13 j 01:17	15° 8 59'37 17.39131 AU	retrograde	-4757 Oct 28 j 17:13	16° II 44'50	
	-4762 Jan 05 j 21:32	15° 8	opposition	-4756 Jan 10 j 01:52	14° II 42'55	0°33'06
direct	-4762 Feb 26 j 00:18	13° 8 56'19	min. Earth dist.	-4756 Jan 11 j 04:09	14° II 40'04	17.27790 AU
	-4762 Apr 16 j 22:44	15° 8	direct	-4756 Mar 26 j 18:07	12° II 36'20	
evening set	-4762 Jun 02 j 01:16	17° 8 25'15	evening set	-4756 Jul 01 j 05:39	16° II 08'08	
max. Earth dist.	-4762 Jun 17 j 08:22	18° 8 22'05 19.37449 AU	max. Earth dist.	-4756 Jul 16 j 08:40	17° II 05'09	19.27596 AU
conjunction	-4762 Jun 18 j 16:40	18° 8 27'07 0°08'21	conjunction	-4756 Jul 17 j 13:52	17° II 09'46	0°31'24
minimum elong	-4762 Jun 18 j 16:40	18° 8 27'07 0°08'32	minimum elong	-4756 Jul 17 j 13:52	17° II 09'46	0°31'37
behind sun begin	-4762 Jun 18 j 10:48	18° 8 26'14	morning rise	-4756 Aug 02 j 17:52	18° II 10'47	
behind sun end	-4762 Jun 18 j 22:33	18° 8 28'01	retrograde	-4756 Nov 01 j 18:48	21° II 32'53	
morning rise	-4762 Jul 05 j 04:14	19° 8 28'29	opposition	-4755 Jan 14 j 04:22	19° II 30'59	0°36'50
retrograde	-4762 Oct 04 j 15:33	22° 8 49'32	min. Earth dist.	-4755 Jan 15 j 04:52	19° II 28'20	17.27620 AU
opposition	-4762 Dec 16 j 20:14	20° 8 47'17 0°11'33	direct	-4755 Apr 01 j 00:29	17° II 24'26	
min. Earth dist.	-4762 Dec 17 j 23:26	20° 8 44'19 17.35980 AU	evening set	-4755 Jul 06 j 09:27	20° II 56'15	
direct	-4761 Mar 03 j 02:46	18° 8 40'50				
evening set	-4761 Jun 07 j 05:53	22° 8 10'31	conjunction	-4755 Jul 22 j 16:29	21° II 57'45	0°34'37
			minimum elong	-4755 Jul 22 j 16:29	21° II 57'45	0°34'53
conjunction	-4761 Jun 23 j 20:17	23° 8 12'26 0°12'28	max. Earth dist.	-4755 Jul 21 j 13:45	21° II 53'31	19.27682 AU
minimum elong	-4761 Jun 23 j 20:17	23° 8 12'26 0°12'39	morning rise	-4755 Aug 07 j 19:01	22° II 58'37	
behind sun begin	-4761 Jun 23 j 16:04	23° 8 11'48	retrograde	-4755 Nov 06 j 17:44	26° II 20'41	
behind sun end	-4761 Jun 24 j 00:30	23° 8 13'05	opposition	-4754 Jan 19 j 07:17	24° II 18'49	0°40'18
max. Earth dist.	-4761 Jun 22 j 12:05	23° 8 07'24 19.34563 AU	min. Earth dist.	-4754 Jan 20 j 07:19	24° II 16'13	17.27970 AU
morning rise	-4761 Jul 10 j 06:38	24° 8 13'49	direct	-4754 Apr 06 j 05:10	22° II 12'19	
retrograde	-4761 Oct 09 j 14:30	27° 8 35'10	evening set	-4754 Jul 11 j 12:55	25° II 44'00	
opposition	-4761 Dec 21 j 20:11	25° 8 33'00 0°16'07				
min. Earth dist.	-4761 Dec 23 j 00:15	25° 8 29'56 17.33364 AU	conjunction	-4754 Jul 27 j 18:27	26° II 45'20	0°37'36
direct	-4760 Mar 07 j 03:26	23° 8 26'28	minimum elong	-4754 Jul 27 j 18:27	26° II 45'20	0°37'51
evening set	-4760 Jun 11 j 10:48	26° 8 56'51	max. Earth dist.	-4754 Jul 26 j 16:15	26° II 41'11	19.28317 AU
max. Earth dist.	-4760 Jun 26 j 16:07	27° 8 53'45 19.32202 AU	morning rise	-4754 Aug 12 j 19:53	27° II 46'03	
				-4754 Sep 22 j 21:51	0° 8	
conjunction	-4760 Jun 28 j 00:03	27° 8 58'46 0°16'31	retrograde	-4754 Nov 11 j 18:09	1° 8 08'02	
minimum elong	-4760 Jun 28 j 00:03	27° 8 58'46 0°16'44				
morning rise	-4760 Jul 14 j 09:13	29° 8 00'07	opposition	-4753 Jan 24 j 10:06	29° II 06'11	0°43'29
	-4760 Jul 31 j 06:12	0° II	min. Earth dist.	-4753 Jan 25 j 08:07	29° II 03'48	17.28893 AU
retrograde	-4760 Oct 13 j 16:38	2° II 21'44	direct	-4753 Apr 11 j 11:08	26° II 59'44	
opposition	-4760 Dec 25 j 20:39	0° II 19'38 0°20'36		-4753 Jul 08 j 02:47	0° 8	

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Attention, astronomical year style is used: The year -4753 in astronomical counting style is the year 4754 BCE in historical counting style.

evening set	-4753 Jul 16 j 15:34	0° $\mathring{\text{E}}$ 31'11		retrograde	-4747 Dec 14 j 13:25	4° $\mathring{\text{N}}$ 14'22	
				opposition	-4746 Feb 27 j 06:38	2° $\mathring{\text{N}}$ 13'14	0°56'17
conjunction	-4753 Aug 01 j 19:58	1° $\mathring{\text{E}}$ 32'20	0°40'19	min. Earth dist.	-4746 Feb 27 j 13:36	2° $\mathring{\text{N}}$ 12'30	17.52116 AU
minimum elong	-4753 Aug 01 j 19:58	1° $\mathring{\text{E}}$ 32'20	0°40'35	direct	-4746 May 15 j 13:19	0° $\mathring{\text{N}}$ 08'41	
max. Earth dist.	-4753 Jul 31 j 20:48	1° $\mathring{\text{E}}$ 28'39	19.29530 AU	evening set	-4746 Aug 18 j 14:24	3° $\mathring{\text{N}}$ 35'21	
morning rise	-4753 Aug 17 j 20:01	2° $\mathring{\text{E}}$ 32'52					
retrograde	-4753 Nov 16 j 17:20	5° $\mathring{\text{E}}$ 54'42		conjunction	-4746 Sep 03 j 10:08	4° $\mathring{\text{N}}$ 34'42	0°50'44
opposition	-4752 Jan 29 j 13:14	3° $\mathring{\text{E}}$ 52'53	0°46'22	minimum elong	-4746 Sep 03 j 10:08	4° $\mathring{\text{N}}$ 34'42	0°50'56
min. Earth dist.	-4752 Jan 30 j 09:58	3° $\mathring{\text{E}}$ 50'39	17.30397 AU	max. Earth dist.	-4746 Sep 03 j 03:16	4° $\mathring{\text{N}}$ 33'38	19.54714 AU
direct	-4752 Apr 15 j 16:02	1° $\mathring{\text{E}}$ 46'33		morning rise	-4746 Sep 19 j 02:59	5° $\mathring{\text{N}}$ 33'38	
evening set	-4752 Jul 20 j 17:44	5° $\mathring{\text{E}}$ 17'37		retrograde	-4746 Dec 19 j 10:39	8° $\mathring{\text{N}}$ 53'26	
				opposition	-4745 Mar 04 j 08:44	6° $\mathring{\text{N}}$ 52'27	0°56'39
conjunction	-4752 Aug 05 j 20:37	6° $\mathring{\text{E}}$ 18'33	0°42'45	min. Earth dist.	-4745 Mar 04 j 14:24	6° $\mathring{\text{N}}$ 51'51	17.57426 AU
minimum elong	-4752 Aug 05 j 20:37	6° $\mathring{\text{E}}$ 18'33	0°43'00	direct	-4745 May 20 j 14:43	4° $\mathring{\text{N}}$ 48'17	
max. Earth dist.	-4752 Aug 04 j 22:31	6° $\mathring{\text{E}}$ 15'03	19.31347 AU	evening set	-4745 Aug 23 j 11:03	8° $\mathring{\text{N}}$ 13'55	
morning rise	-4752 Aug 21 j 19:34	7° $\mathring{\text{E}}$ 18'54					
retrograde	-4752 Nov 20 j 17:07	10° $\mathring{\text{E}}$ 40'33		conjunction	-4745 Sep 08 j 05:47	9° $\mathring{\text{N}}$ 12'58	0°50'54
opposition	-4751 Feb 02 j 16:20	8° $\mathring{\text{E}}$ 38'46	0°48'54	minimum elong	-4745 Sep 08 j 05:47	9° $\mathring{\text{N}}$ 12'58	0°51'06
min. Earth dist.	-4751 Feb 03 j 10:53	8° $\mathring{\text{E}}$ 36'47	17.32536 AU	max. Earth dist.	-4745 Sep 08 j 01:10	9° $\mathring{\text{N}}$ 12'14	19.60184 AU
direct	-4751 Apr 20 j 20:29	6° $\mathring{\text{E}}$ 32'36		morning rise	-4745 Sep 23 j 21:55	10° $\mathring{\text{N}}$ 11'37	
evening set	-4751 Jul 25 j 19:04	10° $\mathring{\text{E}}$ 03'11		retrograde	-4745 Dec 24 j 08:15	13° $\mathring{\text{N}}$ 30'59	
				opposition	-4744 Mar 08 j 10:28	11° $\mathring{\text{N}}$ 30'07	0°56'39
conjunction	-4751 Aug 10 j 20:46	11° $\mathring{\text{E}}$ 03'53	0°44'53	min. Earth dist.	-4744 Mar 08 j 13:00	11° $\mathring{\text{N}}$ 29'52	17.63026 AU
minimum elong	-4751 Aug 10 j 20:46	11° $\mathring{\text{E}}$ 03'53	0°45'07	direct	-4744 May 24 j 17:52	9° $\mathring{\text{N}}$ 26'21	
max. Earth dist.	-4751 Aug 10 j 02:03	11° $\mathring{\text{E}}$ 00'55	19.33807 AU	evening set	-4744 Aug 27 j 06:43	12° $\mathring{\text{N}}$ 50'51	
morning rise	-4751 Aug 26 j 18:25	12° $\mathring{\text{E}}$ 04'01					
retrograde	-4751 Nov 25 j 16:45	15° $\mathring{\text{E}}$ 25'27		conjunction	-4744 Sep 12 j 00:32	13° $\mathring{\text{N}}$ 49'36	0°50'44
opposition	-4750 Feb 07 j 19:32	13° $\mathring{\text{E}}$ 23'46	0°51'06	minimum elong	-4744 Sep 12 j 00:32	13° $\mathring{\text{N}}$ 49'36	0°50'55
min. Earth dist.	-4750 Feb 08 j 11:52	13° $\mathring{\text{E}}$ 22'01	17.35307 AU	max. Earth dist.	-4744 Sep 11 j 22:26	13° $\mathring{\text{N}}$ 49'16	19.65907 AU
direct	-4750 Apr 26 j 00:39	11° $\mathring{\text{E}}$ 17'49		morning rise	-4744 Sep 27 j 15:56	14° $\mathring{\text{N}}$ 47'59	
evening set	-4750 Jul 30 j 19:40	14° $\mathring{\text{E}}$ 47'48			-4744 Sep 30 j 22:59	15° $\mathring{\text{N}}$	
				retrograde	-4744 Dec 28 j 03:50	18° $\mathring{\text{N}}$ 06'53	
conjunction	-4750 Aug 15 j 19:59	15° $\mathring{\text{E}}$ 48'16	0°46'42	opposition	-4743 Mar 13 j 11:58	16° $\mathring{\text{N}}$ 06'08	0°56'16
minimum elong	-4750 Aug 15 j 19:59	15° $\mathring{\text{E}}$ 48'16	0°46'57	min. Earth dist.	-4743 Mar 13 j 13:17	16° $\mathring{\text{N}}$ 05'59	17.68867 AU
max. Earth dist.	-4750 Aug 15 j 02:52	15° $\mathring{\text{E}}$ 45'34	19.36902 AU		-4743 Apr 10 j 08:37	15° $\mathring{\text{R}}$ $\mathring{\text{N}}$	
morning rise	-4750 Aug 31 j 16:39	16° $\mathring{\text{E}}$ 48'11		direct	-4743 May 29 j 18:18	14° $\mathring{\text{N}}$ 02'45	
retrograde	-4750 Nov 30 j 16:19	20° $\mathring{\text{E}}$ 09'22			-4743 Jul 16 j 03:55	15° $\mathring{\text{N}}$	
opposition	-4749 Feb 12 j 22:32	18° $\mathring{\text{E}}$ 07'47	0°52'57	evening set	-4743 Sep 01 j 01:33	17° $\mathring{\text{N}}$ 26'02	
min. Earth dist.	-4749 Feb 13 j 12:50	18° $\mathring{\text{E}}$ 06'16	17.38713 AU				
direct	-4749 May 01 j 03:32	16° $\mathring{\text{E}}$ 02'07		conjunction	-4743 Sep 16 j 18:29	18° $\mathring{\text{N}}$ 24'28	0°50'15
evening set	-4749 Aug 04 j 19:31	19° $\mathring{\text{E}}$ 31'26		minimum elong	-4743 Sep 16 j 18:29	18° $\mathring{\text{N}}$ 24'28	0°50'26
				max. Earth dist.	-4743 Sep 16 j 18:14	18° $\mathring{\text{N}}$ 24'26	19.71857 AU
conjunction	-4749 Aug 20 j 18:42	20° $\mathring{\text{E}}$ 31'38	0°48'12	morning rise	-4743 Oct 02 j 09:25	19° $\mathring{\text{N}}$ 22'36	
minimum elong	-4749 Aug 20 j 18:42	20° $\mathring{\text{E}}$ 31'38	0°48'25	retrograde	-4742 Jan 02 j 00:19	22° $\mathring{\text{N}}$ 40'59	
max. Earth dist.	-4749 Aug 20 j 04:47	20° $\mathring{\text{E}}$ 29'26	19.40608 AU	opposition	-4742 Mar 18 j 12:37	20° $\mathring{\text{N}}$ 40'18	0°55'32
morning rise	-4749 Sep 05 j 14:14	21° $\mathring{\text{E}}$ 31'19		min. Earth dist.	-4742 Mar 18 j 10:43	20° $\mathring{\text{N}}$ 40'30	17.74902 AU
retrograde	-4749 Dec 05 j 15:52	24° $\mathring{\text{E}}$ 52'11		direct	-4742 Jun 03 j 19:44	18° $\mathring{\text{N}}$ 37'17	
opposition	-4748 Feb 18 j 01:18	22° $\mathring{\text{E}}$ 50'46	0°54'26	evening set	-4742 Sep 05 j 19:17	21° $\mathring{\text{N}}$ 59'20	
min. Earth dist.	-4748 Feb 18 j 12:59	22° $\mathring{\text{E}}$ 49'31	17.42684 AU				
direct	-4748 May 05 j 07:12	20° $\mathring{\text{E}}$ 45'27		conjunction	-4742 Sep 21 j 11:33	22° $\mathring{\text{N}}$ 57'27	0°49'27
evening set	-4748 Aug 08 j 18:43	24° $\mathring{\text{E}}$ 13'58		minimum elong	-4742 Sep 21 j 11:33	22° $\mathring{\text{N}}$ 57'27	0°49'37
				max. Earth dist.	-4742 Sep 21 j 14:02	22° $\mathring{\text{N}}$ 57'51	19.77972 AU
conjunction	-4748 Aug 24 j 16:37	25° $\mathring{\text{E}}$ 13'55	0°49'23	morning rise	-4742 Oct 07 j 01:57	23° $\mathring{\text{N}}$ 55'19	
minimum elong	-4748 Aug 24 j 16:37	25° $\mathring{\text{E}}$ 13'55	0°49'37	retrograde	-4741 Jan 06 j 18:26	27° $\mathring{\text{N}}$ 13'09	
max. Earth dist.	-4748 Aug 24 j 04:39	25° $\mathring{\text{E}}$ 12'01	19.44853 AU	opposition	-4741 Mar 23 j 12:47	25° $\mathring{\text{N}}$ 12'33	0°54'27
morning rise	-4748 Sep 09 j 11:13	26° $\mathring{\text{E}}$ 13'21		min. Earth dist.	-4741 Mar 23 j 09:47	25° $\mathring{\text{N}}$ 12'52	17.81094 AU
retrograde	-4748 Dec 09 j 14:45	29° $\mathring{\text{E}}$ 33'55		direct	-4741 Jun 08 j 18:20	23° $\mathring{\text{N}}$ 09'54	
opposition	-4747 Feb 22 j 04:08	27° $\mathring{\text{E}}$ 32'37	0°55'33	evening set	-4741 Sep 10 j 12:05	26° $\mathring{\text{N}}$ 30'37	
min. Earth dist.	-4747 Feb 22 j 14:06	27° $\mathring{\text{E}}$ 31'34	17.47183 AU				
direct	-4747 May 10 j 09:28	25° $\mathring{\text{E}}$ 27'40		conjunction	-4741 Sep 26 j 03:36	27° $\mathring{\text{N}}$ 28'26	0°48'21
evening set	-4747 Aug 13 j 16:52	28° $\mathring{\text{E}}$ 55'20		minimum elong	-4741 Sep 26 j 03:36	27° $\mathring{\text{N}}$ 28'26	0°48'29
				max. Earth dist.	-4741 Sep 26 j 07:41	27° $\mathring{\text{N}}$ 29'04	19.84246 AU
conjunction	-4747 Aug 29 j 13:42	29° $\mathring{\text{E}}$ 54'58	0°50'13	morning rise	-4741 Oct 11 j 17:43	28° $\mathring{\text{N}}$ 26'03	
minimum elong	-4747 Aug 29 j 13:42	29° $\mathring{\text{E}}$ 54'58	0°50'26		-4741 Nov 08 j 15:37	0° $\mathring{\text{N}}$	
max. Earth dist.	-4747 Aug 29 j 04:36	29° $\mathring{\text{E}}$ 53'32	19.49587 AU	retrograde	-4740 Jan 11 j 13:36	1° $\mathring{\text{N}}$ 43'18	
	-4747 Aug 30 j 21:33	0° $\mathring{\text{N}}$			-4740 Mar 20 j 12:38	30° $\mathring{\text{R}}$ $\mathring{\text{N}}$	
morning rise	-4747 Sep 14 j 07:23	0° $\mathring{\text{N}}$ 54'09		opposition	-4740 Mar 27 j 12:04	29° $\mathring{\text{N}}$ 42'44	0°53'02

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Attention, astronomical year style is used: The year -4740 in astronomical counting style is the year 4741 BCE in historical counting style.

min. Earth dist.	-4740 Mar 27 j 05:48	29° <u>0</u> 43'23	17.87436 AU	max. Earth dist.	-4734 Oct 26 j 17:03	28° <u>0</u> 12'08	20.32171 AU
direct	-4740 Jun 12 j 17:54	27° <u>0</u> 40'26		morning rise	-4734 Nov 10 j 10:02	29° <u>0</u> 04'59	
	-4740 Aug 27 j 23:00	0° <u>0</u>			-4734 Nov 26 j 13:48	0° <u>0</u>	
evening set	-4740 Sep 14 j 03:48	0° <u>0</u> 59'49		retrograde	-4733 Feb 11 j 05:10	2° <u>0</u> 18'15	
				opposition	-4733 Apr 29 j 10:02	0° <u>0</u> 18'21	0°35'32
conjunction	-4740 Sep 29 j 18:50	1° <u>0</u> 57'20	0°46'57	min. Earth dist.	-4733 Apr 28 j 13:22	0° <u>0</u> 20'27	18.35698 AU
minimum elong	-4740 Sep 29 j 18:50	1° <u>0</u> 57'20	0°47'05		-4733 May 06 j 23:43	30° <u>0</u> 18'00	
max. Earth dist.	-4740 Sep 30 j 02:03	1° <u>0</u> 58'27	19.90664 AU	direct	-4733 Jul 15 j 02:44	28° <u>0</u> 18'58	
morning rise	-4740 Oct 15 j 08:33	2° <u>0</u> 54'41			-4733 Sep 17 j 09:22	0° <u>0</u>	
retrograde	-4739 Jan 15 j 06:09	6° <u>0</u> 11'21		evening set	-4733 Oct 14 j 16:38	1° <u>0</u> 29'07	
opposition	-4739 Apr 01 j 10:51	4° <u>0</u> 10'50	0°51'19				
min. Earth dist.	-4739 Apr 01 j 03:14	4° <u>0</u> 11'37	17.93938 AU	conjunction	-4733 Oct 30 j 05:49	2° <u>0</u> 24'47	0°30'34
direct	-4739 Jun 17 j 14:33	2° <u>0</u> 08'54		minimum elong	-4733 Oct 30 j 05:49	2° <u>0</u> 24'47	0°30'35
evening set	-4739 Sep 18 j 18:29	5° <u>0</u> 26'54		max. Earth dist.	-4733 Oct 31 j 03:22	2° <u>0</u> 28'01	20.39188 AU
				morning rise	-4733 Nov 14 j 20:07	3° <u>0</u> 20'36	
conjunction	-4739 Oct 04 j 08:55	6° <u>0</u> 24'07	0°45'18	retrograde	-4732 Feb 15 j 19:34	6° <u>0</u> 33'20	
minimum elong	-4739 Oct 04 j 08:55	6° <u>0</u> 24'08	0°45'24	min. Earth dist.	-4732 May 02 j 04:45	4° <u>0</u> 35'50	18.42654 AU
max. Earth dist.	-4739 Oct 04 j 17:45	6° <u>0</u> 25'29	19.97256 AU	opposition	-4732 May 03 j 03:17	4° <u>0</u> 33'34	0°32'10
morning rise	-4739 Oct 19 j 22:35	7° <u>0</u> 21'14		direct	-4732 Jul 18 j 17:12	2° <u>0</u> 34'37	
retrograde	-4738 Jan 20 j 00:12	10° <u>0</u> 37'19		evening set	-4732 Oct 18 j 01:45	5° <u>0</u> 43'32	
opposition	-4738 Apr 06 j 08:40	8° <u>0</u> 36'50	0°49'18				
min. Earth dist.	-4738 Apr 05 j 21:46	8° <u>0</u> 37'57	18.00614 AU	conjunction	-4732 Nov 02 j 15:11	6° <u>0</u> 38'59	0°27'29
direct	-4738 Jun 22 j 11:45	6° <u>0</u> 35'15		minimum elong	-4732 Nov 02 j 15:11	6° <u>0</u> 38'59	0°27'28
evening set	-4738 Sep 23 j 08:16	9° <u>0</u> 51'54		max. Earth dist.	-4732 Nov 03 j 15:20	6° <u>0</u> 42'36	20.46048 AU
				morning rise	-4732 Nov 18 j 05:40	7° <u>0</u> 34'38	
conjunction	-4738 Oct 08 j 22:24	10° <u>0</u> 48'51	0°43'23	retrograde	-4731 Feb 19 j 08:45	10° <u>0</u> 46'51	
minimum elong	-4738 Oct 08 j 22:24	10° <u>0</u> 48'51	0°43'28	opposition	-4731 May 07 j 19:45	8° <u>0</u> 47'11	0°28'39
max. Earth dist.	-4738 Oct 09 j 10:32	10° <u>0</u> 50'42	20.04008 AU	min. Earth dist.	-4731 May 06 j 20:05	8° <u>0</u> 49'35	18.49408 AU
morning rise	-4738 Oct 24 j 11:49	11° <u>0</u> 45'43		direct	-4731 Jul 23 j 08:34	6° <u>0</u> 48'39	
retrograde	-4737 Jan 24 j 15:28	15° <u>0</u> 01'11		evening set	-4731 Oct 22 j 10:24	9° <u>0</u> 56'22	
opposition	-4737 Apr 11 j 05:37	13° <u>0</u> 00'48	0°47'01				
min. Earth dist.	-4737 Apr 10 j 17:16	13° <u>0</u> 02'04	18.07449 AU	conjunction	-4731 Nov 06 j 23:50	10° <u>0</u> 51'38	0°24'16
direct	-4737 Jun 27 j 06:17	10° <u>0</u> 59'37		minimum elong	-4731 Nov 06 j 23:50	10° <u>0</u> 51'38	0°24'14
evening set	-4737 Sep 27 j 21:14	14° <u>0</u> 14'56		max. Earth dist.	-4731 Nov 08 j 00:08	10° <u>0</u> 55'15	20.52679 AU
				morning rise	-4731 Nov 22 j 14:57	11° <u>0</u> 47'06	
conjunction	-4737 Oct 13 j 10:53	15° <u>0</u> 11'35	0°41'14	retrograde	-4730 Feb 23 j 21:49	14° <u>0</u> 58'49	
minimum elong	-4737 Oct 13 j 10:54	15° <u>0</u> 11'35	0°41'18	min. Earth dist.	-4730 May 11 j 10:39	13° <u>0</u> 01'44	18.55906 AU
max. Earth dist.	-4737 Oct 14 j 00:24	15° <u>0</u> 13'39	20.10925 AU	opposition	-4730 May 12 j 11:28	12° <u>0</u> 59'14	0°25'00
morning rise	-4737 Oct 29 j 00:25	16° <u>0</u> 08'13		direct	-4730 Jul 27 j 21:26	11° <u>0</u> 01'03	
retrograde	-4736 Jan 29 j 08:18	19° <u>0</u> 23'08		evening set	-4730 Oct 26 j 18:23	14° <u>0</u> 07'38	
min. Earth dist.	-4736 Apr 14 j 10:28	17° <u>0</u> 24'24	18.14436 AU				
opposition	-4736 Apr 15 j 01:51	17° <u>0</u> 22'50	0°44'29	conjunction	-4730 Nov 11 j 08:12	15° <u>0</u> 02'42	0°20'56
direct	-4736 Jul 01 j 00:59	15° <u>0</u> 22'05		minimum elong	-4730 Nov 11 j 08:12	15° <u>0</u> 02'42	0°20'52
evening set	-4736 Oct 01 j 09:05	18° <u>0</u> 36'03		max. Earth dist.	-4730 Nov 12 j 10:36	15° <u>0</u> 06'37	20.59006 AU
				morning rise	-4730 Nov 26 j 23:37	15° <u>0</u> 58'01	
conjunction	-4736 Oct 16 j 22:40	19° <u>0</u> 32'28	0°38'51	retrograde	-4729 Feb 28 j 09:20	19° <u>0</u> 09'12	
minimum elong	-4736 Oct 16 j 22:40	19° <u>0</u> 32'28	0°38'55	min. Earth dist.	-4729 May 16 j 00:30	17° <u>0</u> 12'17	18.62060 AU
max. Earth dist.	-4736 Oct 17 j 15:30	19° <u>0</u> 35'01	20.17963 AU	opposition	-4729 May 17 j 02:16	17° <u>0</u> 09'42	0°21'14
morning rise	-4736 Nov 01 j 12:07	20° <u>0</u> 28'52		direct	-4729 Aug 01 j 11:33	15° <u>0</u> 11'50	
retrograde	-4735 Feb 01 j 23:15	23° <u>0</u> 43'13		evening set	-4729 Oct 31 j 01:57	18° <u>0</u> 17'18	
opposition	-4735 Apr 19 j 21:28	21° <u>0</u> 43'03	0°41'42				
min. Earth dist.	-4735 Apr 19 j 04:34	21° <u>0</u> 44'46	18.21513 AU	conjunction	-4729 Nov 15 j 15:54	19° <u>0</u> 12'11	0°17'30
direct	-4735 Jul 05 j 18:10	19° <u>0</u> 42'45		minimum elong	-4729 Nov 15 j 15:54	19° <u>0</u> 12'11	0°17'26
evening set	-4735 Oct 05 j 20:24	22° <u>0</u> 55'25		max. Earth dist.	-4729 Nov 16 j 18:06	19° <u>0</u> 16'03	20.64986 AU
				morning rise	-4729 Dec 01 j 08:04	20° <u>0</u> 07'22	
conjunction	-4735 Oct 21 j 09:41	23° <u>0</u> 51'34	0°36'17	retrograde	-4728 Mar 03 j 21:14	23° <u>0</u> 18'03	
minimum elong	-4735 Oct 21 j 09:41	23° <u>0</u> 51'34	0°36'19	opposition	-4728 May 20 j 16:29	21° <u>0</u> 18'34	0°17'23
max. Earth dist.	-4735 Oct 22 j 03:36	23° <u>0</u> 54'17	20.25071 AU	min. Earth dist.	-4728 May 19 j 14:01	21° <u>0</u> 21'13	18.67866 AU
morning rise	-4735 Nov 05 j 23:28	24° <u>0</u> 47'46		direct	-4728 Aug 04 j 22:46	19° <u>0</u> 20'57	
retrograde	-4734 Feb 06 j 14:55	28° <u>0</u> 01'34		evening set	-4728 Nov 03 j 08:40	22° <u>0</u> 25'20	
opposition	-4734 Apr 24 j 16:03	26° <u>0</u> 01'31	0°38'43				
min. Earth dist.	-4734 Apr 23 j 20:42	26° <u>0</u> 03'29	18.28634 AU	conjunction	-4728 Nov 18 j 23:10	23° <u>0</u> 20'04	0°14'01
direct	-4734 Jul 10 j 10:25	24° <u>0</u> 01'41		minimum elong	-4728 Nov 18 j 23:11	23° <u>0</u> 20'04	0°13'56
evening set	-4734 Oct 10 j 06:48	27° <u>0</u> 13'05		behind sun begin	-4728 Nov 18 j 19:41	23° <u>0</u> 19'34	
				behind sun end	-4728 Nov 19 j 02:40	23° <u>0</u> 20'34	
conjunction	-4734 Oct 25 j 20:10	28° <u>0</u> 08'59	0°33'31	max. Earth dist.	-4728 Nov 20 j 03:19	23° <u>0</u> 24'12	20.70602 AU
minimum elong	-4734 Oct 25 j 20:10	28° <u>0</u> 08'59	0°33'32	morning rise	-4728 Dec 04 j 15:48	24° <u>0</u> 15'07	

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Attention, astronomical year style is used: The year -4727 in astronomical counting style is the year 4728 BCE in historical counting style.

retrograde	-4727 Mar 08 j 07:06	27° <u>♏</u> 25'18		opposition	-4722 Jun 15 j 13:00	15° <u>♏</u> 40'51	-0°06'18
min. Earth dist.	-4727 May 24 j 02:25	25° <u>♏</u> 28'34	18.73292 AU		-4722 Jul 02 j 21:46	15° <u>♏</u>	
opposition	-4727 May 25 j 05:49	25° <u>♏</u> 25'49	0°13'28	direct	-4722 Aug 30 j 06:04	13° <u>♏</u> 44'24	
direct	-4727 Aug 09 j 11:14	23° <u>♏</u> 28'27			-4722 Oct 24 j 14:41	15° <u>♏</u>	
evening set	-4727 Nov 07 j 15:07	26° <u>♏</u> 31'47		evening set	-4722 Nov 27 j 16:35	16° <u>♏</u> 43'40	
conjunction	-4727 Nov 23 j 05:55	27° <u>♏</u> 26'21	0°10'28	conjunction	-4722 Dec 13 j 10:30	17° <u>♏</u> 37'47	-0°07'28
minimum elong	-4727 Nov 23 j 05:54	27° <u>♏</u> 26'21	0°10'22	minimum elong	-4722 Dec 13 j 10:30	17° <u>♏</u> 37'47	0°07'38
behind sun begin	-4727 Nov 23 j 00:42	27° <u>♏</u> 25'37		behind sun begin	-4722 Dec 13 j 04:32	17° <u>♏</u> 36'57	
behind sun end	-4727 Nov 23 j 11:06	27° <u>♏</u> 27'06		behind sun end	-4722 Dec 13 j 16:28	17° <u>♏</u> 38'37	
max. Earth dist.	-4727 Nov 24 j 09:45	27° <u>♏</u> 30'26	20.75852 AU	max. Earth dist.	-4722 Dec 14 j 18:32	17° <u>♏</u> 42'24	20.97383 AU
morning rise	-4727 Dec 08 j 23:24	28° <u>♏</u> 21'18		morning rise	-4722 Dec 29 j 07:46	18° <u>♏</u> 32'24	
	-4726 Jan 09 j 10:02	0° <u>♏</u>		retrograde	-4721 Apr 02 j 14:02	21° <u>♏</u> 40'15	
retrograde	-4726 Mar 12 j 17:42	1° <u>♏</u> 31'00		opposition	-4721 Jun 19 j 22:03	19° <u>♏</u> 40'47	-0°10'11
	-4726 May 17 j 18:47	30° <u>♏</u>		min. Earth dist.	-4721 Jun 18 j 15:46	19° <u>♏</u> 43'48	18.99139 AU
opposition	-4726 May 29 j 18:14	29° <u>♏</u> 31'29	0°09'31	direct	-4721 Sep 03 j 13:54	17° <u>♏</u> 44'31	
min. Earth dist.	-4726 May 28 j 14:32	29° <u>♏</u> 34'15	18.78380 AU	evening set	-4721 Dec 01 j 21:08	20° <u>♏</u> 43'13	
direct	-4726 Aug 13 j 20:41	27° <u>♏</u> 34'17					
	-4726 Oct 31 j 21:36	0° <u>♏</u>		conjunction	-4721 Dec 17 j 15:38	21° <u>♏</u> 37'18	-0°10'57
evening set	-4726 Nov 11 j 20:53	0° <u>♏</u> 36'40		minimum elong	-4721 Dec 17 j 15:38	21° <u>♏</u> 37'18	0°11'07
				behind sun begin	-4721 Dec 17 j 10:42	21° <u>♏</u> 36'36	
conjunction	-4726 Nov 27 j 12:20	1° <u>♏</u> 31'07	0°06'55	behind sun end	-4721 Dec 17 j 20:34	21° <u>♏</u> 37'59	
minimum elong	-4726 Nov 27 j 12:20	1° <u>♏</u> 31'07	0°06'49	max. Earth dist.	-4721 Dec 18 j 22:48	21° <u>♏</u> 41'47	21.00721 AU
behind sun begin	-4726 Nov 27 j 06:13	1° <u>♏</u> 30'15		morning rise	-4720 Jan 02 j 13:59	22° <u>♏</u> 31'54	
behind sun end	-4726 Nov 27 j 18:26	1° <u>♏</u> 31'59		retrograde	-4720 Apr 05 j 22:07	25° <u>♏</u> 39'32	
max. Earth dist.	-4726 Nov 28 j 18:02	1° <u>♏</u> 35'27	20.80767 AU	min. Earth dist.	-4720 Jun 22 j 01:16	23° <u>♏</u> 43'04	19.02294 AU
morning rise	-4726 Dec 13 j 06:22	2° <u>♏</u> 25'57		opposition	-4720 Jun 23 j 06:49	23° <u>♏</u> 40'06	-0°14'01
retrograde	-4725 Mar 17 j 02:28	5° <u>♏</u> 35'11		direct	-4720 Sep 06 j 19:05	21° <u>♏</u> 44'00	
min. Earth dist.	-4725 Jun 02 j 01:11	3° <u>♏</u> 38'32	18.83133 AU	evening set	-4720 Dec 05 j 01:25	24° <u>♏</u> 42'14	
opposition	-4725 Jun 03 j 05:55	3° <u>♏</u> 35'39	0°05'33				
direct	-4725 Aug 18 j 07:11	1° <u>♏</u> 38'39		conjunction	-4720 Dec 20 j 20:53	25° <u>♏</u> 36'18	-0°14'22
evening set	-4725 Nov 16 j 02:16	4° <u>♏</u> 40'07		minimum elong	-4720 Dec 20 j 20:53	25° <u>♏</u> 36'18	0°14'34
				behind sun begin	-4720 Dec 20 j 17:57	25° <u>♏</u> 35'53	
conjunction	-4725 Dec 01 j 18:03	5° <u>♏</u> 34'27	0°03'21	behind sun end	-4720 Dec 20 j 23:49	25° <u>♏</u> 36'42	
minimum elong	-4725 Dec 01 j 18:03	5° <u>♏</u> 34'27	0°03'12	max. Earth dist.	-4720 Dec 22 j 05:03	25° <u>♏</u> 40'55	21.03669 AU
behind sun begin	-4725 Dec 01 j 11:32	5° <u>♏</u> 33'32		morning rise	-4719 Jan 05 j 20:01	26° <u>♏</u> 30'53	
behind sun end	-4725 Dec 02 j 00:34	5° <u>♏</u> 35'22		retrograde	-4719 Apr 10 j 06:59	29° <u>♏</u> 38'20	
max. Earth dist.	-4725 Dec 02 j 23:31	5° <u>♏</u> 38'44	20.85368 AU	min. Earth dist.	-4719 Jun 26 j 09:05	27° <u>♏</u> 41'58	19.05019 AU
morning rise	-4725 Dec 17 j 13:00	6° <u>♏</u> 29'13		opposition	-4719 Jun 27 j 15:00	27° <u>♏</u> 38'58	-0°17'46
retrograde	-4724 Mar 20 j 11:53	9° <u>♏</u> 38'03		direct	-4719 Sep 11 j 01:46	25° <u>♏</u> 43'02	
opposition	-4724 Jun 06 j 17:01	7° <u>♏</u> 38'29	0°01'35	evening set	-4719 Dec 09 j 06:04	28° <u>♏</u> 40'52	
min. Earth dist.	-4724 Jun 05 j 12:08	7° <u>♏</u> 41'22	18.87599 AU				
direct	-4724 Aug 21 j 14:57	5° <u>♏</u> 41'40		conjunction	-4719 Dec 25 j 02:11	29° <u>♏</u> 34'55	-0°17'43
desc. node	-4724 Nov 02 j 05:03	7° <u>♏</u> 46'32		minimum elong	-4719 Dec 25 j 02:10	29° <u>♏</u> 34'55	0°17'55
evening set	-4724 Nov 19 j 07:15	8° <u>♏</u> 42'19		max. Earth dist.	-4719 Dec 26 j 08:56	29° <u>♏</u> 39'19	21.06163 AU
					-4718 Jan 01 j 09:27	0° <u>♏</u>	
conjunction	-4724 Dec 04 j 23:49	9° <u>♏</u> 36'33	-0°00'20	morning rise	-4718 Jan 10 j 02:24	0° <u>♏</u> 29'32	
minimum elong	-4724 Dec 04 j 23:49	9° <u>♏</u> 36'33	0°00'28	retrograde	-4718 Apr 14 j 14:44	3° <u>♏</u> 36'50	
behind sun begin	-4724 Dec 04 j 17:17	9° <u>♏</u> 35'38		opposition	-4718 Jul 01 j 22:45	1° <u>♏</u> 37'31	-0°21'26
behind sun end	-4724 Dec 05 j 06:21	9° <u>♏</u> 37'28		min. Earth dist.	-4718 Jun 30 j 18:12	1° <u>♏</u> 40'22	19.07276 AU
max. Earth dist.	-4724 Dec 06 j 07:00	9° <u>♏</u> 41'05	20.89680 AU		-4718 Aug 19 j 01:41	30° <u>♏</u>	
morning rise	-4724 Dec 20 j 19:24	10° <u>♏</u> 31'15		direct	-4718 Sep 15 j 06:28	29° <u>♏</u> 41'41	
retrograde	-4723 Mar 24 j 20:39	13° <u>♏</u> 39'42			-4718 Oct 11 j 23:12	0° <u>♏</u>	
min. Earth dist.	-4723 Jun 09 j 21:24	11° <u>♏</u> 43'08	18.91762 AU	evening set	-4718 Dec 13 j 10:35	2° <u>♏</u> 39'12	
opposition	-4723 Jun 11 j 03:15	11° <u>♏</u> 40'09	-0°02'22				
direct	-4723 Aug 25 j 23:55	9° <u>♏</u> 43'31		conjunction	-4718 Dec 29 j 07:43	3° <u>♏</u> 33'16	-0°21'00
evening set	-4723 Nov 23 j 12:07	12° <u>♏</u> 43'26		minimum elong	-4718 Dec 29 j 07:43	3° <u>♏</u> 33'16	0°21'13
				max. Earth dist.	-4718 Dec 30 j 14:53	3° <u>♏</u> 37'44	21.08160 AU
conjunction	-4723 Dec 09 j 05:12	13° <u>♏</u> 37'36	-0°03'57	morning rise	-4717 Jan 14 j 08:43	4° <u>♏</u> 27'54	
minimum elong	-4723 Dec 09 j 05:11	13° <u>♏</u> 37'36	0°04'07	retrograde	-4717 Apr 18 j 23:27	7° <u>♏</u> 35'05	
behind sun begin	-4723 Dec 08 j 22:43	13° <u>♏</u> 36'41		min. Earth dist.	-4717 Jul 05 j 01:35	5° <u>♏</u> 38'40	19.08999 AU
behind sun end	-4723 Dec 09 j 11:39	13° <u>♏</u> 38'30		opposition	-4717 Jul 06 j 06:10	5° <u>♏</u> 35'48	-0°25'00
max. Earth dist.	-4723 Dec 10 j 11:49	13° <u>♏</u> 42'02	20.93692 AU	direct	-4717 Sep 19 j 12:15	3° <u>♏</u> 40'03	
morning rise	-4723 Dec 25 j 01:47	14° <u>♏</u> 32'15		evening set	-4717 Dec 17 j 15:16	6° <u>♏</u> 37'19	
	-4722 Jan 02 j 09:41	15° <u>♏</u>					
retrograde	-4722 Mar 29 j 05:15	17° <u>♏</u> 40'23		conjunction	-4716 Jan 02 j 13:06	7° <u>♏</u> 31'25	-0°24'10
min. Earth dist.	-4722 Jun 14 j 07:27	15° <u>♏</u> 43'49	18.95625 AU	minimum elong	-4716 Jan 02 j 13:06	7° <u>♏</u> 31'24	0°24'22

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Attention, astronomical year style is used: The year -4716 in astronomical counting style is the year 4717 BCE in historical counting style.

max. Earth dist.	-4716 Jan 03 j 18:28	7° $\overline{\text{A}}$ 35'36	21.09604 AU	opposition	-4710 Aug 03 j 01:56	3° $\overline{\text{S}}$ 20'05	-0°45'33
morning rise	-4716 Jan 18 j 15:15	8° $\overline{\text{A}}$ 26'06		direct	-4710 Oct 16 j 19:45	1° $\overline{\text{S}}$ 23'37	
retrograde	-4716 Apr 22 j 07:10	11° $\overline{\text{A}}$ 33'12		evening set	-4709 Jan 14 j 04:56	4° $\overline{\text{S}}$ 20'57	
min. Earth dist.	-4716 Jul 08 j 10:35	9° $\overline{\text{A}}$ 36'35	19.10160 AU				
opposition	-4716 Jul 09 j 13:28	9° $\overline{\text{A}}$ 33'54	-0°28'26	conjunction	-4709 Jan 30 j 09:51	5° $\overline{\text{S}}$ 15'44	-0°42'12
direct	-4716 Sep 22 j 16:40	7° $\overline{\text{A}}$ 38'09		minimum elong	-4709 Jan 30 j 09:51	5° $\overline{\text{S}}$ 15'44	0°42'26
evening set	-4716 Dec 20 j 20:03	10° $\overline{\text{A}}$ 35'13		max. Earth dist.	-4709 Jan 31 j 08:24	5° $\overline{\text{S}}$ 18'56	21.04856 AU
				morning rise	-4709 Feb 15 j 18:48	6° $\overline{\text{S}}$ 11'06	
conjunction	-4715 Jan 05 j 19:00	11° $\overline{\text{A}}$ 29'22	-0°27'12	retrograde	-4709 May 21 j 16:13	9° $\overline{\text{S}}$ 18'17	
minimum elong	-4715 Jan 05 j 19:00	11° $\overline{\text{A}}$ 29'22	0°27'26	min. Earth dist.	-4709 Aug 06 j 11:47	7° $\overline{\text{S}}$ 20'21	19.03762 AU
max. Earth dist.	-4715 Jan 07 j 00:23	11° $\overline{\text{A}}$ 33'33	21.10469 AU	opposition	-4709 Aug 07 j 07:24	7° $\overline{\text{S}}$ 18'21	-0°47'43
morning rise	-4715 Jan 21 j 22:00	12° $\overline{\text{A}}$ 24'07		direct	-4709 Oct 21 j 01:18	5° $\overline{\text{S}}$ 21'43	
retrograde	-4715 Apr 26 j 15:49	15° $\overline{\text{A}}$ 31'07		evening set	-4708 Jan 18 j 11:34	8° $\overline{\text{S}}$ 19'23	
opposition	-4715 Jul 13 j 20:07	13° $\overline{\text{A}}$ 31'47	-0°31'43				
min. Earth dist.	-4715 Jul 12 j 17:31	13° $\overline{\text{A}}$ 34'28	19.10723 AU	conjunction	-4708 Feb 03 j 17:22	9° $\overline{\text{S}}$ 14'19	-0°44'04
direct	-4715 Sep 26 j 22:25	11° $\overline{\text{A}}$ 36'01		minimum elong	-4708 Feb 03 j 17:22	9° $\overline{\text{S}}$ 14'19	0°44'18
evening set	-4715 Dec 25 j 01:07	14° $\overline{\text{A}}$ 32'57		max. Earth dist.	-4708 Feb 04 j 13:36	9° $\overline{\text{S}}$ 17'11	21.02508 AU
				morning rise	-4708 Feb 20 j 03:27	10° $\overline{\text{S}}$ 09'51	
conjunction	-4714 Jan 10 j 00:53	15° $\overline{\text{A}}$ 27'09	-0°30'07	retrograde	-4708 May 25 j 00:37	13° $\overline{\text{S}}$ 17'13	
minimum elong	-4714 Jan 10 j 00:52	15° $\overline{\text{A}}$ 27'09	0°30'20	opposition	-4708 Aug 10 j 13:04	11° $\overline{\text{S}}$ 17'13	-0°49'40
max. Earth dist.	-4714 Jan 11 j 04:06	15° $\overline{\text{A}}$ 31'02	21.10745 AU	min. Earth dist.	-4708 Aug 09 j 19:43	11° $\overline{\text{S}}$ 18'59	19.01240 AU
morning rise	-4714 Jan 26 j 05:03	16° $\overline{\text{A}}$ 21'58		direct	-4708 Oct 24 j 04:44	9° $\overline{\text{S}}$ 20'24	
retrograde	-4714 Apr 30 j 23:07	19° $\overline{\text{A}}$ 28'56		evening set	-4707 Jan 21 j 18:43	12° $\overline{\text{S}}$ 18'29	
min. Earth dist.	-4714 Jul 17 j 02:04	17° $\overline{\text{A}}$ 31'59	19.10719 AU				
opposition	-4714 Jul 18 j 02:41	17° $\overline{\text{A}}$ 29'31	-0°34'51	conjunction	-4707 Feb 07 j 01:45	13° $\overline{\text{S}}$ 13'37	-0°45'43
direct	-4714 Oct 01 j 02:02	15° $\overline{\text{A}}$ 33'39		minimum elong	-4707 Feb 07 j 01:45	13° $\overline{\text{S}}$ 13'37	0°45'57
evening set	-4714 Dec 29 j 06:02	18° $\overline{\text{A}}$ 30'30		max. Earth dist.	-4707 Feb 07 j 21:22	13° $\overline{\text{S}}$ 16'24	20.99814 AU
				morning rise	-4707 Feb 23 j 12:38	14° $\overline{\text{S}}$ 09'18	
conjunction	-4713 Jan 14 j 06:55	19° $\overline{\text{A}}$ 24'48	-0°32'52	retrograde	-4707 May 29 j 09:59	17° $\overline{\text{S}}$ 16'53	
minimum elong	-4713 Jan 14 j 06:55	19° $\overline{\text{A}}$ 24'48	0°33'07	opposition	-4707 Aug 14 j 18:29	15° $\overline{\text{S}}$ 16'50	-0°51'24
max. Earth dist.	-4713 Jan 15 j 10:07	19° $\overline{\text{A}}$ 28'40	21.10470 AU	min. Earth dist.	-4707 Aug 14 j 01:42	15° $\overline{\text{S}}$ 18'33	18.98358 AU
morning rise	-4713 Jan 30 j 11:54	20° $\overline{\text{A}}$ 19'41		direct	-4707 Oct 28 j 10:08	13° $\overline{\text{S}}$ 19'51	
retrograde	-4713 May 05 j 07:52	23° $\overline{\text{A}}$ 26'37		evening set	-4706 Jan 26 j 02:40	16° $\overline{\text{S}}$ 18'27	
min. Earth dist.	-4713 Jul 21 j 08:26	21° $\overline{\text{A}}$ 29'33	19.10179 AU				
opposition	-4713 Jul 22 j 08:47	21° $\overline{\text{A}}$ 27'05	-0°37'49	conjunction	-4706 Feb 11 j 10:33	17° $\overline{\text{S}}$ 13'46	-0°47'10
direct	-4713 Oct 05 j 08:04	19° $\overline{\text{A}}$ 31'06		minimum elong	-4706 Feb 11 j 10:33	17° $\overline{\text{S}}$ 13'46	0°47'24
evening set	-4712 Jan 02 j 11:23	22° $\overline{\text{A}}$ 27'57		max. Earth dist.	-4706 Feb 12 j 03:30	17° $\overline{\text{S}}$ 16'10	20.96751 AU
				morning rise	-4706 Feb 27 j 22:29	18° $\overline{\text{S}}$ 09'38	
conjunction	-4712 Jan 18 j 13:06	23° $\overline{\text{A}}$ 22'21	-0°35'28	retrograde	-4706 Jun 02 j 19:08	21° $\overline{\text{S}}$ 17'30	
minimum elong	-4712 Jan 18 j 13:06	23° $\overline{\text{A}}$ 22'21	0°35'43	min. Earth dist.	-4706 Aug 18 j 10:09	19° $\overline{\text{S}}$ 18'52	18.95107 AU
max. Earth dist.	-4712 Jan 19 j 14:15	23° $\overline{\text{A}}$ 25'55	21.09692 AU	opposition	-4706 Aug 19 j 00:21	19° $\overline{\text{S}}$ 17'24	-0°52'52
morning rise	-4712 Feb 03 j 19:15	24° $\overline{\text{A}}$ 17'20		direct	-4706 Nov 01 j 14:11	17° $\overline{\text{S}}$ 20'14	
retrograde	-4712 May 08 j 14:48	27° $\overline{\text{A}}$ 24'16		evening set	-4705 Jan 30 j 10:57	20° $\overline{\text{S}}$ 19'25	
opposition	-4712 Jul 25 j 14:45	25° $\overline{\text{A}}$ 24'38	-0°40'35				
min. Earth dist.	-4712 Jul 24 j 16:26	25° $\overline{\text{A}}$ 26'53	19.09179 AU	conjunction	-4705 Feb 15 j 19:59	21° $\overline{\text{S}}$ 14'57	-0°48'23
direct	-4712 Oct 08 j 10:54	23° $\overline{\text{A}}$ 28'29		minimum elong	-4705 Feb 15 j 19:59	21° $\overline{\text{S}}$ 14'57	0°48'37
evening set	-4711 Jan 05 j 16:49	26° $\overline{\text{A}}$ 25'25		max. Earth dist.	-4705 Feb 16 j 12:02	21° $\overline{\text{S}}$ 17'14	20.93309 AU
				morning rise	-4705 Mar 04 j 08:40	22° $\overline{\text{S}}$ 11'00	
conjunction	-4711 Jan 21 j 19:44	27° $\overline{\text{A}}$ 19'55	-0°37'53	retrograde	-4705 Jun 07 j 05:29	25° $\overline{\text{S}}$ 19'12	
minimum elong	-4711 Jan 21 j 19:44	27° $\overline{\text{A}}$ 19'55	0°38'08	opposition	-4705 Aug 23 j 06:15	23° $\overline{\text{S}}$ 19'04	-0°54'06
max. Earth dist.	-4711 Jan 22 j 20:47	27° $\overline{\text{A}}$ 23'28	21.08477 AU	min. Earth dist.	-4705 Aug 22 j 16:53	23° $\overline{\text{S}}$ 20'26	18.91453 AU
morning rise	-4711 Feb 07 j 02:45	28° $\overline{\text{A}}$ 15'01		direct	-4705 Nov 05 j 20:08	21° $\overline{\text{S}}$ 21'41	
	-4711 Mar 14 j 01:39	0° $\overline{\text{S}}$		evening set	-4704 Feb 03 j 20:18	24° $\overline{\text{S}}$ 21'32	
retrograde	-4711 May 12 j 23:54	1° $\overline{\text{S}}$ 21'59					
	-4711 Jul 14 j 01:13	30° $\overline{\text{R}}$ $\overline{\text{A}}$		conjunction	-4704 Feb 20 j 06:11	25° $\overline{\text{S}}$ 17'17	-0°49'22
opposition	-4711 Jul 29 j 20:23	29° $\overline{\text{A}}$ 22'14	-0°43'10	minimum elong	-4704 Feb 20 j 06:11	25° $\overline{\text{S}}$ 17'17	0°49'35
min. Earth dist.	-4711 Jul 28 j 22:22	29° $\overline{\text{A}}$ 24'28	19.07749 AU	max. Earth dist.	-4704 Feb 20 j 19:14	25° $\overline{\text{S}}$ 19'08	20.89444 AU
direct	-4711 Oct 12 j 16:51	27° $\overline{\text{A}}$ 25'56		morning rise	-4704 Mar 07 j 19:50	26° $\overline{\text{S}}$ 13'33	
	-4710 Jan 02 j 22:05	0° $\overline{\text{S}}$		retrograde	-4704 Jun 10 j 14:59	29° $\overline{\text{S}}$ 22'05	
evening set	-4710 Jan 09 j 22:49	0° $\overline{\text{S}}$ 23'02		opposition	-4704 Aug 26 j 12:29	27° $\overline{\text{S}}$ 21'54	-0°55'04
				min. Earth dist.	-4704 Aug 26 j 02:07	27° $\overline{\text{S}}$ 22'58	18.87370 AU
conjunction	-4710 Jan 26 j 02:32	1° $\overline{\text{S}}$ 17'39	-0°40'08	direct	-4704 Nov 09 j 00:56	25° $\overline{\text{S}}$ 24'17	
minimum elong	-4710 Jan 26 j 02:32	1° $\overline{\text{S}}$ 17'39	0°40'23	evening set	-4703 Feb 07 j 06:19	28° $\overline{\text{S}}$ 24'52	
max. Earth dist.	-4710 Jan 27 j 01:22	1° $\overline{\text{S}}$ 20'54	21.06847 AU				
morning rise	-4710 Feb 11 j 10:40	2° $\overline{\text{S}}$ 12'53		conjunction	-4703 Feb 23 j 17:22	29° $\overline{\text{S}}$ 20'51	-0°50'07
retrograde	-4710 May 17 j 07:07	5° $\overline{\text{S}}$ 19'56		minimum elong	-4703 Feb 23 j 17:22	29° $\overline{\text{S}}$ 20'51	0°50'20
min. Earth dist.	-4710 Aug 02 j 06:02	3° $\overline{\text{S}}$ 22'07	19.05937 AU	max. Earth dist.	-4703 Feb 24 j 04:53	29° $\overline{\text{S}}$ 22'30	20.85135 AU

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Attention, astronomical year style is used: The year -4703 in astronomical counting style is the year 4704 BCE in historical counting style.

	-4703 Mar 07 j 04:13	0° \approx	retrograde	-4697 Jul 11 j 01:34	28° \approx 18'57	
morning rise	-4703 Mar 12 j 07:43	0° \approx 17'20	opposition	-4697 Sep 24 j 17:09	26° \approx 17'50	-0°53'52
retrograde	-4703 Jun 15 j 02:43	3° \approx 26'13	min. Earth dist.	-4697 Sep 24 j 20:09	26° \approx 17'31	18.47634 AU
opposition	-4703 Aug 30 j 18:57	1° \approx 25'58 -0°55'46	direct	-4697 Dec 08 j 09:28	24° \approx 17'38	
min. Earth dist.	-4703 Aug 30 j 09:43	1° \approx 26'55 18.82818 AU	evening set	-4696 Mar 09 j 01:31	27° \approx 24'52	
	-4703 Oct 08 j 13:39	30° \approx 3				
direct	-4703 Nov 13 j 08:04	29° \approx 28'04	conjunction	-4696 Mar 25 j 18:34	28° \approx 22'46	-0°48'02
	-4703 Dec 18 j 14:10	0° \approx	minimum elong	-4696 Mar 25 j 18:34	28° \approx 22'46	0°48'10
evening set	-4702 Feb 11 j 17:11	2° \approx 29'27	max. Earth dist.	-4696 Mar 25 j 12:55	28° \approx 21'57	20.44349 AU
			morning rise	-4696 Apr 11 j 13:21	29° \approx 20'55	
conjunction	-4702 Feb 28 j 05:02	3° \approx 25'41 -0°50'36		-4696 Apr 23 j 07:24	0° \approx	
minimum elong	-4702 Feb 28 j 05:02	3° \approx 25'41 0°50'48	retrograde	-4696 Jul 14 j 13:35	2° \approx 32'54	
max. Earth dist.	-4702 Feb 28 j 13:15	3° \approx 26'51 20.80345 AU	opposition	-4696 Sep 28 j 02:26	0° \approx 31'39	-0°52'32
morning rise	-4702 Mar 16 j 20:14	4° \approx 22'22	min. Earth dist.	-4696 Sep 28 j 08:14	0° \approx 31'03	18.41056 AU
retrograde	-4702 Jun 19 j 12:27	7° \approx 31'39		-4696 Oct 10 j 16:25	30° \approx	
opposition	-4702 Sep 04 j 01:50	5° \approx 31'17 -0°56'10	direct	-4696 Dec 11 j 18:30	28° \approx 31'03	
min. Earth dist.	-4702 Sep 03 j 19:45	5° \approx 31'55 18.77800 AU		-4695 Feb 09 j 22:09	0° \approx	
direct	-4702 Nov 17 j 13:41	3° \approx 33'05	evening set	-4695 Mar 13 j 17:50	1° \approx 39'29	
evening set	-4701 Feb 16 j 04:36	6° \approx 35'17				
			conjunction	-4695 Mar 30 j 11:38	2° \approx 37'40	-0°46'40
conjunction	-4701 Mar 04 j 17:33	7° \approx 31'46 -0°50'50	minimum elong	-4695 Mar 30 j 11:38	2° \approx 37'40	0°46'47
minimum elong	-4701 Mar 04 j 17:33	7° \approx 31'46 0°51'03	max. Earth dist.	-4695 Mar 30 j 04:02	2° \approx 36'34	20.37748 AU
max. Earth dist.	-4701 Mar 05 j 00:04	7° \approx 32'42 20.75119 AU	morning rise	-4695 Apr 16 j 06:46	3° \approx 36'04	
morning rise	-4701 Mar 21 j 09:24	8° \approx 28'42	retrograde	-4695 Jul 19 j 05:02	6° \approx 48'36	
retrograde	-4701 Jun 24 j 01:06	11° \approx 38'22	opposition	-4695 Oct 02 j 12:17	4° \approx 47'15	-0°50'54
opposition	-4701 Sep 08 j 08:53	9° \approx 37'52 -0°56'18	min. Earth dist.	-4695 Oct 02 j 18:52	4° \approx 46'33	18.34431 AU
min. Earth dist.	-4701 Sep 08 j 03:57	9° \approx 38'23 18.72358 AU	direct	-4695 Dec 16 j 06:32	2° \approx 46'16	
direct	-4701 Nov 21 j 22:14	7° \approx 39'18	evening set	-4694 Mar 18 j 11:00	5° \approx 55'55	
evening set	-4700 Feb 20 j 16:50	10° \approx 42'24				
			conjunction	-4694 Apr 04 j 05:21	6° \approx 54'24	-0°45'03
conjunction	-4700 Mar 08 j 06:37	11° \approx 39'09 -0°50'48	minimum elong	-4694 Apr 04 j 05:21	6° \approx 54'24	0°45'10
minimum elong	-4700 Mar 08 j 06:37	11° \approx 39'09 0°51'00	max. Earth dist.	-4694 Apr 03 j 19:30	6° \approx 52'58	20.31104 AU
max. Earth dist.	-4700 Mar 08 j 09:57	11° \approx 39'38 20.69485 AU	morning rise	-4694 Apr 21 j 00:43	7° \approx 53'03	
morning rise	-4700 Mar 24 j 23:17	12° \approx 36'19	retrograde	-4694 Jul 23 j 18:51	11° \approx 06'09	
	-4700 May 14 j 19:25	15° \approx	opposition	-4694 Oct 06 j 22:56	9° \approx 04'44	-0°48'58
retrograde	-4700 Jun 27 j 11:13	15° \approx 46'25	min. Earth dist.	-4694 Oct 07 j 08:09	9° \approx 03'45	18.27788 AU
	-4700 Aug 10 j 17:26	15° \approx	direct	-4694 Dec 20 j 17:09	7° \approx 03'24	
opposition	-4700 Sep 11 j 16:27	13° \approx 45'46 -0°56'08	evening set	-4693 Mar 23 j 05:08	10° \approx 14'18	
min. Earth dist.	-4700 Sep 11 j 14:38	13° \approx 45'57 18.66548 AU				
direct	-4700 Nov 25 j 04:39	11° \approx 46'47	conjunction	-4693 Apr 09 j 00:02	11° \approx 13'05	-0°43'10
evening set	-4699 Feb 24 j 05:50	14° \approx 50'51	minimum elong	-4693 Apr 09 j 00:02	11° \approx 13'05	0°43'16
	-4699 Feb 26 j 22:44	15° \approx	max. Earth dist.	-4693 Apr 08 j 12:05	11° \approx 11'20	20.24474 AU
			morning rise	-4693 Apr 25 j 19:40	12° \approx 12'00	
conjunction	-4699 Mar 12 j 20:37	15° \approx 47'52 -0°50'31	retrograde	-4693 Jul 28 j 11:55	15° \approx 25'41	
minimum elong	-4699 Mar 12 j 20:37	15° \approx 47'52 0°50'41	opposition	-4693 Oct 11 j 10:03	13° \approx 24'13	-0°46'45
max. Earth dist.	-4699 Mar 12 j 22:10	15° \approx 48'06 20.63525 AU	min. Earth dist.	-4693 Oct 11 j 20:09	13° \approx 23'08	18.21157 AU
morning rise	-4699 Mar 29 j 13:50	16° \approx 45'16	direct	-4693 Dec 25 j 06:31	11° \approx 22'31	
retrograde	-4699 Jul 02 j 00:34	19° \approx 55'47	evening set	-4692 Mar 27 j 00:19	14° \approx 34'45	
opposition	-4699 Sep 16 j 00:06	17° \approx 54'59 -0°55'40				
min. Earth dist.	-4699 Sep 15 j 23:21	17° \approx 55'04 18.60441 AU	conjunction	-4692 Apr 12 j 19:42	15° \approx 33'50	-0°41'01
direct	-4699 Nov 29 j 14:47	15° \approx 55'37	minimum elong	-4692 Apr 12 j 19:42	15° \approx 33'50	0°41'06
evening set	-4698 Feb 28 j 19:41	19° \approx 00'40	max. Earth dist.	-4692 Apr 12 j 05:41	15° \approx 31'46	20.17835 AU
			morning rise	-4692 Apr 29 j 15:25	16° \approx 33'00	
conjunction	-4698 Mar 17 j 11:12	19° \approx 57'59 -0°49'57	retrograde	-4692 Aug 01 j 03:27	19° \approx 47'17	
minimum elong	-4698 Mar 17 j 11:12	19° \approx 57'59 0°50'07	opposition	-4692 Oct 14 j 22:09	17° \approx 45'47	-0°44'14
max. Earth dist.	-4698 Mar 17 j 09:51	19° \approx 57'47 20.57295 AU	min. Earth dist.	-4692 Oct 15 j 11:00	17° \approx 44'24	18.14516 AU
morning rise	-4698 Apr 03 j 05:02	20° \approx 55'38	direct	-4692 Dec 28 j 18:32	15° \approx 43'44	
retrograde	-4698 Jul 06 j 11:16	24° \approx 06'37	evening set	-4691 Mar 31 j 20:34	18° \approx 57'19	
opposition	-4698 Sep 20 j 08:28	22° \approx 05'39 -0°54'55				
min. Earth dist.	-4698 Sep 20 j 10:37	22° \approx 05'25 18.54114 AU	conjunction	-4691 Apr 17 j 16:16	19° \approx 56'41	-0°38'37
direct	-4698 Dec 03 j 22:15	20° \approx 05'51	minimum elong	-4691 Apr 17 j 16:16	19° \approx 56'41	0°38'41
evening set	-4697 Mar 05 j 10:01	23° \approx 11'59	max. Earth dist.	-4691 Apr 16 j 23:40	19° \approx 54'13	20.11192 AU
			morning rise	-4691 May 04 j 12:04	20° \approx 56'06	
conjunction	-4697 Mar 22 j 02:25	24° \approx 09'34 -0°49'07	retrograde	-4691 Aug 05 j 22:20	24° \approx 10'59	
minimum elong	-4697 Mar 22 j 02:25	24° \approx 09'34 0°49'16	opposition	-4691 Oct 19 j 10:51	22° \approx 09'26	-0°41'26
max. Earth dist.	-4697 Mar 21 j 23:22	24° \approx 09'08 20.50890 AU	min. Earth dist.	-4691 Oct 20 j 00:51	22° \approx 07'56	18.07862 AU
morning rise	-4697 Apr 07 j 20:44	25° \approx 07'28	direct	-4690 Jan 02 j 09:47	20° \approx 07'02	

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Attention, astronomical year style is used: The year -4690 in astronomical counting style is the year 4691 BCE in historical counting style.

evening set	-4690 Apr 05 j 17:44	23° H 21'57		minimum elong	-4684 May 20 j 13:39	21° Y 30'17	0°15'36
				behind sun begin	-4684 May 20 j 12:43	21° Y 30'09	
conjunction	-4690 Apr 22 j 13:46	24° H 21'37	-0°35'58	behind sun end	-4684 May 20 j 14:35	21° Y 30'25	
minimum elong	-4690 Apr 22 j 13:46	24° H 21'37	0°35'59	morning rise	-4684 Jun 06 j 06:50	22° Y 31'07	
max. Earth dist.	-4690 Apr 21 j 19:19	24° H 18'53	20.04514 AU	retrograde	-4684 Sep 06 j 13:53	25° Y 49'41	
morning rise	-4690 May 09 j 09:22	25° H 21'17		opposition	-4684 Nov 19 j 03:10	23° Y 47'29	-0°15'16
retrograde	-4690 Aug 10 j 15:19	28° H 36'44		min. Earth dist.	-4684 Nov 20 j 04:25	23° Y 44'44	17.62656 AU
opposition	-4690 Oct 24 j 00:36	26° H 35'09	-0°38'23	direct	-4683 Feb 02 j 16:29	21° Y 42'21	
min. Earth dist.	-4690 Oct 24 j 17:13	26° H 33'21	18.01178 AU	evening set	-4683 May 08 j 20:20	25° Y 06'09	
direct	-4689 Jan 06 j 23:41	24° H 32'23		max. Earth dist.	-4683 May 24 j 08:14	26° Y 02'40	19.59818 AU
evening set	-4689 Apr 10 j 15:44	27° H 48'38					
				conjunction	-4683 May 25 j 15:25	26° Y 07'27	-0°11'45
conjunction	-4689 Apr 27 j 11:53	28° H 48'34	-0°33'04	minimum elong	-4683 May 25 j 15:25	26° Y 07'27	0°11'40
minimum elong	-4689 Apr 27 j 11:53	28° H 48'34	0°33'05	behind sun begin	-4683 May 25 j 10:41	26° Y 06'45	
max. Earth dist.	-4689 Apr 26 j 14:34	28° H 45'23	19.97826 AU	behind sun end	-4683 May 25 j 20:08	26° Y 08'10	
morning rise	-4689 May 14 j 07:29	29° H 48'28		morning rise	-4683 Jun 11 j 07:59	27° Y 08'26	
	-4689 May 17 j 15:00	0° Y			-4683 Aug 10 j 19:08	0° H	
retrograde	-4689 Aug 15 j 11:11	3° Y 04'30		retrograde	-4683 Sep 11 j 10:35	0° H 27'28	
opposition	-4689 Oct 28 j 15:04	1° Y 02'49	-0°35'03		-4683 Oct 13 j 11:16	30° R Y	
min. Earth dist.	-4689 Oct 29 j 08:53	1° Y 00'54	17.94484 AU	opposition	-4683 Nov 23 j 22:21	28° Y 25'11	-0°10'51
	-4689 Nov 23 j 01:50	30° R H		min. Earth dist.	-4683 Nov 25 j 00:25	28° Y 22'20	17.57138 AU
direct	-4688 Jan 11 j 16:51	28° H 59'39		direct	-4682 Feb 07 j 14:08	26° Y 19'43	
	-4688 Feb 29 j 09:52	0° Y		evening set	-4682 May 13 j 23:05	29° Y 44'40	
evening set	-4688 Apr 14 j 14:44	2° Y 17'14			-4682 May 18 j 04:47	0° H	
				max. Earth dist.	-4682 May 29 j 11:05	0° H 41'25	19.54507 AU
conjunction	-4688 May 01 j 11:06	3° Y 17'27	-0°29'58				
minimum elong	-4688 May 01 j 11:06	3° Y 17'27	0°29'58	conjunction	-4682 May 30 j 17:46	0° H 46'08	-0°07'45
max. Earth dist.	-4688 Apr 30 j 12:19	3° Y 14'02	19.91125 AU	minimum elong	-4682 May 30 j 17:47	0° H 46'08	0°07'38
morning rise	-4688 May 18 j 06:16	4° Y 17'33		behind sun begin	-4682 May 30 j 11:40	0° H 45'13	
retrograde	-4688 Aug 19 j 05:16	7° Y 34'08		behind sun end	-4682 May 30 j 23:53	0° H 47'03	
opposition	-4688 Nov 01 j 06:20	5° Y 32'22	-0°31'29	morning rise	-4682 Jun 16 j 09:23	1° H 47'13	
min. Earth dist.	-4688 Nov 02 j 02:32	5° Y 30'10	17.87800 AU	retrograde	-4682 Sep 16 j 08:38	5° H 06'43	
direct	-4687 Jan 15 j 09:14	3° Y 28'48		opposition	-4682 Nov 28 j 18:19	3° H 04'23	-0°06'20
evening set	-4687 Apr 19 j 14:38	6° Y 47'41		min. Earth dist.	-4682 Nov 29 j 20:42	3° H 01'30	17.52057 AU
max. Earth dist.	-4687 May 05 j 09:10	7° Y 44'16	19.84480 AU	direct	-4681 Feb 12 j 13:30	0° H 58'40	
				evening set	-4681 May 19 j 02:25	4° H 24'41	
conjunction	-4687 May 06 j 10:51	7° Y 48'08	-0°26'39				
minimum elong	-4687 May 06 j 10:51	7° Y 48'08	0°26'37	conjunction	-4681 Jun 04 j 20:20	5° H 26'17	-0°03'41
morning rise	-4687 May 23 j 05:49	8° Y 48'27		minimum elong	-4681 Jun 04 j 20:21	5° H 26'17	0°03'34
retrograde	-4687 Aug 24 j 01:32	12° Y 05'34		behind sun begin	-4681 Jun 04 j 13:38	5° H 25'17	
opposition	-4687 Nov 05 j 22:23	10° Y 03'41	-0°27'42	behind sun end	-4681 Jun 05 j 03:04	5° H 27'18	
min. Earth dist.	-4687 Nov 06 j 19:44	10° Y 01'22	17.81208 AU	max. Earth dist.	-4681 Jun 03 j 12:05	5° H 21'18	19.49667 AU
direct	-4686 Jan 20 j 04:09	7° Y 59'42		morning rise	-4681 Jun 21 j 11:11	6° H 27'29	
evening set	-4686 Apr 24 j 14:57	11° Y 19'51		retrograde	-4681 Sep 21 j 06:05	9° H 47'25	
max. Earth dist.	-4686 May 10 j 08:50	12° Y 16'34	19.77947 AU	opposition	-4681 Dec 03 j 15:08	7° H 45'05	-0°01'45
				min. Earth dist.	-4681 Dec 04 j 18:17	7° H 42'07	17.47475 AU
conjunction	-4686 May 11 j 11:11	12° Y 20'34	-0°23'09	direct	-4680 Feb 17 j 12:35	5° H 39'08	
minimum elong	-4686 May 11 j 11:11	12° Y 20'34	0°23'07	asc. node	-4680 Apr 21 j 20:28	7° H 21'29	
morning rise	-4686 May 28 j 05:32	13° Y 21'03		evening set	-4680 May 23 j 06:11	9° H 06'12	
retrograde	-4686 Aug 28 j 20:42	16° Y 38'41					
opposition	-4686 Nov 10 j 15:17	14° Y 36'41	-0°23'44	conjunction	-4680 Jun 08 j 23:28	10° H 07'55	0°00'33
min. Earth dist.	-4686 Nov 11 j 14:23	14° Y 34'10	17.74763 AU	minimum elong	-4680 Jun 08 j 23:29	10° H 07'55	0°00'43
direct	-4685 Jan 24 j 22:59	12° Y 32'19		behind sun begin	-4680 Jun 08 j 16:44	10° H 06'54	
evening set	-4685 Apr 29 j 16:11	15° Y 53'42		behind sun end	-4680 Jun 09 j 06:14	10° H 08'56	
max. Earth dist.	-4685 May 15 j 07:06	16° Y 50'13	19.71614 AU	max. Earth dist.	-4680 Jun 07 j 15:53	10° H 03'01	19.45335 AU
				morning rise	-4680 Jun 25 j 13:14	11° H 09'11	
conjunction	-4685 May 16 j 12:03	16° Y 54'37	-0°19'29	retrograde	-4680 Sep 25 j 05:32	14° H 29'31	
minimum elong	-4685 May 16 j 12:03	16° Y 54'37	0°19'25	opposition	-4680 Dec 07 j 12:39	12° H 27'15	0°02'53
morning rise	-4685 Jun 02 j 06:02	17° Y 55'18		min. Earth dist.	-4680 Dec 08 j 15:36	12° H 24'18	17.43392 AU
retrograde	-4685 Sep 02 j 17:10	21° Y 13'25		direct	-4679 Feb 21 j 13:53	10° H 21'09	
opposition	-4685 Nov 15 j 08:44	19° Y 11'18	-0°19'34	evening set	-4679 May 28 j 10:28	13° H 49'11	
min. Earth dist.	-4685 Nov 16 j 08:53	19° Y 08'40	17.68563 AU	max. Earth dist.	-4679 Jun 12 j 18:18	14° H 45'56	19.41511 AU
direct	-4684 Jan 29 j 19:12	17° Y 06'31					
evening set	-4684 May 03 j 17:55	20° Y 29'09		conjunction	-4679 Jun 14 j 02:50	14° H 51'00	0°04'45
max. Earth dist.	-4684 May 19 j 08:35	21° Y 25'51	19.65546 AU	minimum elong	-4679 Jun 14 j 02:49	14° H 51'00	0°04'54
				behind sun begin	-4679 Jun 13 j 20:14	14° H 50'00	
conjunction	-4684 May 20 j 13:39	21° Y 30'17	-0°15'40	behind sun end	-4679 Jun 14 j 09:23	14° H 52'00	

Attention, astronomical year style is used: The year -4679 in astronomical counting style is the year 4680 BCE in historical counting style.

	-4679 Jun 16 j 12:38	15°♄		minimum elong	-4673 Jul 14 j 00:37	13°♊30'49	0°28'32
morning rise	-4679 Jun 30 j 15:32	15°♄52'19		morning rise	-4673 Jul 30 j 05:51	14°♊31'56	
retrograde	-4679 Sep 30 j 04:16	19°♄13'03		retrograde	-4673 Oct 29 j 07:30	17°♊53'55	
opposition	-4679 Dec 12 j 11:08	17°♄10'51	0°07'31	opposition	-4672 Jan 10 j 15:42	15°♊52'02	0°33'28
min. Earth dist.	-4679 Dec 13 j 14:54	17°♄07'49	17.39835 AU	min. Earth dist.	-4672 Jan 11 j 18:01	15°♊49'11	17.28382 AU
direct	-4678 Feb 26 j 14:00	15°♄04'37		direct	-4672 Mar 27 j 08:05	13°♊45'29	
evening set	-4678 Jun 02 j 14:47	18°♄33'32		evening set	-4672 Jul 01 j 19:13	17°♊17'11	
max. Earth dist.	-4678 Jun 17 j 22:24	19°♄30'26	19.38202 AU	max. Earth dist.	-4672 Jul 16 j 22:18	18°♊14'11	19.28170 AU
conjunction	-4678 Jun 19 j 06:16	19°♄35'25	0°08'53	conjunction	-4672 Jul 18 j 03:29	18°♊18'48	0°31'43
minimum elong	-4678 Jun 19 j 06:16	19°♄35'25	0°09'03	minimum elong	-4672 Jul 18 j 03:29	18°♊18'48	0°31'57
behind sun begin	-4678 Jun 19 j 00:33	19°♄34'33		morning rise	-4672 Aug 03 j 07:33	19°♊19'48	
behind sun end	-4678 Jun 19 j 11:59	19°♄36'17		retrograde	-4672 Nov 02 j 08:02	22°♊41'48	
morning rise	-4678 Jul 05 j 17:52	20°♄36'46		opposition	-4671 Jan 14 j 18:04	20°♊39'55	0°37'09
retrograde	-4678 Oct 05 j 05:07	23°♄57'51		min. Earth dist.	-4671 Jan 15 j 18:26	20°♊37'16	17.28184 AU
opposition	-4678 Dec 17 j 10:16	21°♄55'44	0°12'07	direct	-4671 Apr 01 j 14:12	18°♊33'21	
min. Earth dist.	-4678 Dec 18 j 13:21	21°♄52'47	17.36762 AU	evening set	-4671 Jul 06 j 22:58	22°♊05'03	
direct	-4677 Mar 03 j 16:21	19°♄49'26		max. Earth dist.	-4671 Jul 22 j 03:20	23°♊02'17	19.28249 AU
evening set	-4677 Jun 07 j 19:37	23°♄19'07		conjunction	-4671 Jul 23 j 06:05	23°♊06'31	0°34'53
max. Earth dist.	-4677 Jun 23 j 01:53	24°♄16'00	19.35360 AU	minimum elong	-4671 Jul 23 j 06:05	23°♊06'31	0°35'07
conjunction	-4677 Jun 24 j 10:02	24°♄21'02	0°12'58	morning rise	-4671 Aug 08 j 08:41	24°♊07'23	
minimum elong	-4677 Jun 24 j 10:02	24°♄21'02	0°13'10	retrograde	-4671 Nov 07 j 07:15	27°♊29'19	
behind sun begin	-4677 Jun 24 j 06:08	24°♄20'27		opposition	-4670 Jan 19 j 20:51	25°♊27'26	0°40'34
behind sun end	-4677 Jun 24 j 13:56	24°♄21'38		min. Earth dist.	-4670 Jan 20 j 20:45	25°♊24'51	17.28553 AU
morning rise	-4677 Jul 10 j 20:26	25°♄22'24		direct	-4670 Apr 06 j 18:51	23°♊20'54	
retrograde	-4677 Oct 10 j 05:04	28°♄43'47		evening set	-4670 Jul 12 j 02:12	26°♊52'26	
opposition	-4677 Dec 22 j 10:08	26°♄41'44	0°16'40	max. Earth dist.	-4670 Jul 27 j 05:47	27°♊49'37	19.28923 AU
min. Earth dist.	-4677 Dec 23 j 14:10	26°♄38'41	17.34164 AU	conjunction	-4670 Jul 28 j 07:49	27°♊53'45	0°37'49
direct	-4676 Mar 07 j 17:29	24°♄35'21		minimum elong	-4670 Jul 28 j 07:49	27°♊53'45	0°38'04
evening set	-4676 Jun 12 j 00:37	28°♄05'44		morning rise	-4670 Aug 13 j 09:21	28°♊54'27	
max. Earth dist.	-4676 Jun 27 j 06:04	29°♄02'38	19.32991 AU		-4670 Aug 31 j 18:55	0°♄	
conjunction	-4676 Jun 28 j 13:55	29°♄07'39	0°17'00	retrograde	-4670 Nov 12 j 07:29	2°♄16'17	
minimum elong	-4676 Jun 28 j 13:54	29°♄07'39	0°17'11	opposition	-4669 Jan 24 j 23:37	0°♄14'24	0°43'42
	-4676 Jul 12 j 12:44	0°♊		min. Earth dist.	-4669 Jan 25 j 21:18	0°♄12'04	17.29532 AU
morning rise	-4676 Jul 14 j 23:07	0°♊08'59			-4669 Jan 30 j 13:31	30°♄♊	
retrograde	-4676 Oct 14 j 06:37	3°♊30'36		direct	-4669 Apr 12 j 00:46	28°♊07'56	
opposition	-4676 Dec 26 j 10:43	1°♊28'38	0°21'07		-4669 Jun 18 j 08:33	0°♄	
min. Earth dist.	-4676 Dec 27 j 13:39	1°♊25'42	17.32017 AU	evening set	-4669 Jul 17 j 04:49	1°♄39'13	
	-4675 Feb 02 j 02:12	30°♄♄		max. Earth dist.	-4669 Aug 01 j 10:19	2°♄36'42	19.30212 AU
direct	-4675 Mar 12 j 21:06	29°♄22'11		conjunction	-4669 Aug 02 j 09:15	2°♄40'20	0°40'29
	-4675 Apr 19 j 23:45	0°♊		minimum elong	-4669 Aug 02 j 09:15	2°♄40'20	0°40'43
evening set	-4675 Jun 17 j 05:28	2°♊53'05		morning rise	-4669 Aug 18 j 09:20	3°♄40'51	
max. Earth dist.	-4675 Jul 02 j 10:24	3°♊50'04	19.31063 AU	retrograde	-4669 Nov 17 j 06:30	7°♄02'31	
conjunction	-4675 Jul 03 j 17:37	3°♊54'59	0°20'55	opposition	-4668 Jan 30 j 02:34	5°♄00'42	0°46'31
minimum elong	-4675 Jul 03 j 17:37	3°♊54'59	0°21'08	min. Earth dist.	-4668 Jan 30 j 23:03	4°♄58'30	17.31136 AU
morning rise	-4675 Jul 20 j 01:26	4°♊56'16		direct	-4668 Apr 16 j 05:19	2°♄54'21	
retrograde	-4675 Oct 19 j 06:37	8°♊18'05		evening set	-4668 Jul 21 j 06:59	6°♄25'16	
opposition	-4675 Dec 31 j 12:01	6°♊16'09	0°25'25	conjunction	-4668 Aug 06 j 09:54	7°♄26'10	0°42'52
min. Earth dist.	-4674 Jan 01 j 15:36	6°♊13'09	17.30328 AU	minimum elong	-4668 Aug 06 j 09:54	7°♄26'10	0°43'06
direct	-4674 Mar 17 j 23:18	4°♊09'39		max. Earth dist.	-4668 Aug 05 j 12:01	7°♄22'42	19.32151 AU
evening set	-4674 Jun 22 j 10:20	7°♊40'57		morning rise	-4668 Aug 22 j 08:54	8°♄26'29	
conjunction	-4674 Jul 08 j 21:11	8°♊42'47	0°24'42	retrograde	-4668 Nov 21 j 06:31	11°♄47'59	
minimum elong	-4674 Jul 08 j 21:11	8°♊42'47	0°24'54	opposition	-4667 Feb 03 j 05:38	9°♄46'13	0°49'00
max. Earth dist.	-4674 Jul 07 j 14:12	8°♊37'54	19.29612 AU	min. Earth dist.	-4667 Feb 03 j 23:42	9°♄44'17	17.33407 AU
morning rise	-4674 Jul 25 j 03:51	9°♊44'00		direct	-4667 Apr 21 j 09:47	7°♄40'04	
retrograde	-4674 Oct 24 j 07:57	13°♊05'57		evening set	-4667 Jul 26 j 08:08	11°♄10'30	
opposition	-4673 Jan 05 j 13:32	11°♊04'02	0°29'33	conjunction	-4667 Aug 11 j 09:55	12°♄11'11	0°44'57
min. Earth dist.	-4673 Jan 06 j 15:35	11°♊01'12	17.29110 AU	minimum elong	-4667 Aug 11 j 09:55	12°♄11'11	0°45'11
direct	-4673 Mar 23 j 04:15	8°♊57'29		max. Earth dist.	-4667 Aug 10 j 15:28	12°♄08'15	19.34747 AU
evening set	-4673 Jun 27 j 14:53	12°♊29'04		morning rise	-4667 Aug 27 j 07:37	13°♄11'17	
max. Earth dist.	-4673 Jul 12 j 19:05	13°♊26'09	19.28633 AU	retrograde	-4667 Nov 26 j 05:59	16°♄32'34	
conjunction	-4673 Jul 14 j 00:37	13°♊30'49	0°28'18	opposition	-4666 Feb 08 j 08:43	14°♄30'55	0°51'09

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Attention, astronomical year style is used: The year -4666 in astronomical counting style is the year 4667 BCE in historical counting style.

min. Earth dist.	-4666 Feb 09 j 00:51	14° $\mathring{\text{U}}$ 29'12	17.36306 AU	conjunction	-4660 Sep 12 j 13:49	14° $\mathring{\text{U}}$ 55'55	0°50'28
direct	-4666 Apr 26 j 13:55	12° $\mathring{\text{U}}$ 25'02		minimum elong	-4660 Sep 12 j 13:49	14° $\mathring{\text{U}}$ 55'55	0°50'39
evening set	-4666 Jul 31 j 08:51	15° $\mathring{\text{U}}$ 54'53		max. Earth dist.	-4660 Sep 12 j 11:08	14° $\mathring{\text{U}}$ 55'30	19.66689 AU
					-4660 Sep 13 j 15:54	15° $\mathring{\text{U}}$	
conjunction	-4666 Aug 16 j 09:14	16° $\mathring{\text{U}}$ 55'19	0°46'43	morning rise	-4660 Sep 28 j 05:16	15° $\mathring{\text{U}}$ 54'17	
minimum elong	-4666 Aug 16 j 09:14	16° $\mathring{\text{U}}$ 55'19	0°46'57	retrograde	-4660 Dec 28 j 16:53	19° $\mathring{\text{U}}$ 13'04	
max. Earth dist.	-4666 Aug 15 j 16:10	16° $\mathring{\text{U}}$ 52'37	19.37959 AU	opposition	-4659 Mar 14 j 00:41	17° $\mathring{\text{U}}$ 12'21	0°55'56
morning rise	-4666 Sep 01 j 05:57	17° $\mathring{\text{U}}$ 55'12		min. Earth dist.	-4659 Mar 14 j 02:26	17° $\mathring{\text{U}}$ 12'10	17.69579 AU
retrograde	-4666 Dec 01 j 05:16	21° $\mathring{\text{U}}$ 16'15		direct	-4659 May 30 j 06:29	15° $\mathring{\text{U}}$ 08'58	
opposition	-4665 Feb 13 j 11:31	19° $\mathring{\text{U}}$ 14'44	0°52'57	evening set	-4659 Sep 01 j 14:33	18° $\mathring{\text{U}}$ 32'11	
min. Earth dist.	-4665 Feb 14 j 01:37	19° $\mathring{\text{U}}$ 13'14	17.39811 AU				
direct	-4665 May 01 j 16:43	17° $\mathring{\text{U}}$ 09'09		conjunction	-4659 Sep 17 j 07:34	19° $\mathring{\text{U}}$ 30'36	0°49'56
evening set	-4665 Aug 05 j 08:44	20° $\mathring{\text{U}}$ 38'21		minimum elong	-4659 Sep 17 j 07:34	19° $\mathring{\text{U}}$ 30'36	0°50'05
				max. Earth dist.	-4659 Sep 17 j 06:59	19° $\mathring{\text{U}}$ 30'30	19.72501 AU
conjunction	-4665 Aug 21 j 08:00	21° $\mathring{\text{U}}$ 38'32	0°48'11	morning rise	-4659 Oct 02 j 22:32	20° $\mathring{\text{U}}$ 28'42	
minimum elong	-4665 Aug 21 j 08:00	21° $\mathring{\text{U}}$ 38'32	0°48'25	retrograde	-4658 Jan 02 j 13:38	23° $\mathring{\text{U}}$ 46'57	
max. Earth dist.	-4665 Aug 20 j 18:09	21° $\mathring{\text{U}}$ 36'20	19.41741 AU	opposition	-4658 Mar 19 j 01:10	21° $\mathring{\text{U}}$ 46'18	0°55'08
morning rise	-4665 Sep 06 j 03:34	22° $\mathring{\text{U}}$ 38'10		min. Earth dist.	-4658 Mar 18 j 23:43	21° $\mathring{\text{U}}$ 46'27	17.75478 AU
retrograde	-4665 Dec 06 j 05:04	25° $\mathring{\text{U}}$ 58'55		direct	-4658 Jun 04 j 08:48	19° $\mathring{\text{U}}$ 43'16	
opposition	-4664 Feb 18 j 14:24	23° $\mathring{\text{U}}$ 57'35	0°54'23	evening set	-4658 Sep 06 j 08:10	23° $\mathring{\text{U}}$ 05'13	
min. Earth dist.	-4664 Feb 19 j 02:10	23° $\mathring{\text{U}}$ 56'20	17.43834 AU				
direct	-4664 May 05 j 20:46	21° $\mathring{\text{U}}$ 52'21		conjunction	-4658 Sep 22 j 00:29	24° $\mathring{\text{U}}$ 03'20	0°49'05
evening set	-4664 Aug 09 j 07:53	25° $\mathring{\text{U}}$ 20'47		minimum elong	-4658 Sep 22 j 00:30	24° $\mathring{\text{U}}$ 03'20	0°49'14
				max. Earth dist.	-4658 Sep 22 j 02:33	24° $\mathring{\text{U}}$ 03'39	19.78494 AU
conjunction	-4664 Aug 25 j 05:50	26° $\mathring{\text{U}}$ 20'40	0°49'18	morning rise	-4658 Oct 07 j 14:55	25° $\mathring{\text{U}}$ 01'10	
minimum elong	-4664 Aug 25 j 05:49	26° $\mathring{\text{U}}$ 20'40	0°49'31	retrograde	-4657 Jan 07 j 06:34	28° $\mathring{\text{U}}$ 18'52	
max. Earth dist.	-4664 Aug 24 j 17:42	26° $\mathring{\text{U}}$ 18'46	19.46007 AU	opposition	-4657 Mar 24 j 01:01	26° $\mathring{\text{U}}$ 18'15	0°54'01
morning rise	-4664 Sep 10 j 00:28	27° $\mathring{\text{U}}$ 20'05		min. Earth dist.	-4657 Mar 23 j 22:24	26° $\mathring{\text{U}}$ 18'31	17.81571 AU
	-4664 Nov 01 j 16:00	0° $\mathring{\text{U}}$		direct	-4657 Jun 09 j 07:08	24° $\mathring{\text{U}}$ 15'34	
retrograde	-4664 Dec 10 j 03:19	0° $\mathring{\text{U}}$ 40'32		evening set	-4657 Sep 11 j 00:48	27° $\mathring{\text{U}}$ 36'13	
	-4663 Jan 18 j 23:41	30° $\mathring{\text{R}}$ $\mathring{\text{U}}$					
opposition	-4663 Feb 22 j 17:13	28° $\mathring{\text{U}}$ 39'21	0°55'26	conjunction	-4657 Sep 26 j 16:23	28° $\mathring{\text{U}}$ 34'01	0°47'57
min. Earth dist.	-4663 Feb 23 j 03:14	28° $\mathring{\text{U}}$ 38'17	17.48328 AU	minimum elong	-4657 Sep 26 j 16:23	28° $\mathring{\text{U}}$ 34'01	0°48'05
direct	-4663 May 10 j 22:22	26° $\mathring{\text{U}}$ 34'29		max. Earth dist.	-4657 Sep 26 j 20:22	28° $\mathring{\text{U}}$ 34'38	19.84696 AU
	-4663 Aug 13 j 16:57	0° $\mathring{\text{U}}$		morning rise	-4657 Oct 12 j 06:32	29° $\mathring{\text{U}}$ 31'36	
evening set	-4663 Aug 14 j 06:11	0° $\mathring{\text{U}}$ 02'02			-4657 Oct 20 j 05:09	0° $\mathring{\text{U}}$ $\mathring{\text{U}}$	
				retrograde	-4656 Jan 12 j 01:49	2° $\mathring{\text{U}}$ 48'43	
conjunction	-4663 Aug 30 j 03:05	1° $\mathring{\text{U}}$ 01'39	0°50'06	opposition	-4656 Mar 28 j 00:11	0° $\mathring{\text{U}}$ 48'08	0°52'34
minimum elong	-4663 Aug 30 j 03:05	1° $\mathring{\text{U}}$ 01'39	0°50'19	min. Earth dist.	-4656 Mar 27 j 18:09	0° $\mathring{\text{U}}$ 48'45	17.87869 AU
max. Earth dist.	-4663 Aug 29 j 17:50	1° $\mathring{\text{U}}$ 00'12	19.50708 AU		-4656 Apr 16 j 22:32	30° $\mathring{\text{R}}$ $\mathring{\text{U}}$	
morning rise	-4663 Sep 14 j 20:46	2° $\mathring{\text{U}}$ 00'48		direct	-4656 Jun 13 j 06:38	28° $\mathring{\text{U}}$ 45'47	
retrograde	-4663 Dec 15 j 03:03	5° $\mathring{\text{U}}$ 20'53			-4656 Aug 06 j 13:18	0° $\mathring{\text{U}}$ $\mathring{\text{U}}$	
opposition	-4662 Feb 27 j 19:35	3° $\mathring{\text{U}}$ 19'51	0°56'07	evening set	-4656 Sep 14 j 16:14	2° $\mathring{\text{U}}$ 05'05	
min. Earth dist.	-4662 Feb 28 j 02:55	3° $\mathring{\text{U}}$ 19'05	17.53206 AU				
direct	-4662 May 16 j 02:13	1° $\mathring{\text{U}}$ 15'22		conjunction	-4656 Sep 30 j 07:18	3° $\mathring{\text{U}}$ 02'35	0°46'31
evening set	-4662 Aug 19 j 03:40	4° $\mathring{\text{U}}$ 41'58		minimum elong	-4656 Sep 30 j 07:18	3° $\mathring{\text{U}}$ 02'35	0°46'38
				max. Earth dist.	-4656 Sep 30 j 14:28	3° $\mathring{\text{U}}$ 03'41	19.91095 AU
conjunction	-4662 Sep 03 j 23:27	5° $\mathring{\text{U}}$ 41'17	0°50'33	morning rise	-4656 Oct 15 j 21:03	3° $\mathring{\text{U}}$ 59'55	
minimum elong	-4662 Sep 03 j 23:27	5° $\mathring{\text{U}}$ 41'17	0°50'46	retrograde	-4655 Jan 15 j 17:48	7° $\mathring{\text{U}}$ 16'27	
max. Earth dist.	-4662 Sep 03 j 16:08	5° $\mathring{\text{U}}$ 40'08	19.55756 AU	opposition	-4655 Apr 01 j 22:48	5° $\mathring{\text{U}}$ 15'55	0°50'49
morning rise	-4662 Sep 19 j 16:21	6° $\mathring{\text{U}}$ 40'11		min. Earth dist.	-4655 Apr 01 j 15:20	5° $\mathring{\text{U}}$ 16'41	17.94381 AU
retrograde	-4662 Dec 19 j 23:37	9° $\mathring{\text{U}}$ 59'53		direct	-4655 Jun 18 j 03:13	3° $\mathring{\text{U}}$ 13'56	
opposition	-4661 Mar 04 j 21:45	7° $\mathring{\text{U}}$ 58'58	0°56'26	evening set	-4655 Sep 19 j 06:53	6° $\mathring{\text{U}}$ 31'52	
min. Earth dist.	-4661 Mar 05 j 03:44	7° $\mathring{\text{U}}$ 58'20	17.58414 AU				
direct	-4661 May 21 j 03:03	5° $\mathring{\text{U}}$ 54'51		conjunction	-4655 Oct 04 j 21:21	7° $\mathring{\text{U}}$ 29'04	0°44'50
evening set	-4661 Aug 24 j 00:16	9° $\mathring{\text{U}}$ 20'24		minimum elong	-4655 Oct 04 j 21:21	7° $\mathring{\text{U}}$ 29'04	0°44'57
				max. Earth dist.	-4655 Oct 05 j 06:17	7° $\mathring{\text{U}}$ 30'27	19.97719 AU
conjunction	-4661 Sep 08 j 19:03	10° $\mathring{\text{U}}$ 19'26	0°50'40	morning rise	-4655 Oct 20 j 11:02	8° $\mathring{\text{U}}$ 26'09	
minimum elong	-4661 Sep 08 j 19:03	10° $\mathring{\text{U}}$ 19'26	0°50'51	retrograde	-4654 Jan 20 j 11:46	11° $\mathring{\text{U}}$ 42'06	
max. Earth dist.	-4661 Sep 08 j 14:06	10° $\mathring{\text{U}}$ 18'39	19.61105 AU	opposition	-4654 Apr 06 j 20:18	9° $\mathring{\text{U}}$ 41'38	0°48'46
morning rise	-4661 Sep 24 j 11:11	11° $\mathring{\text{U}}$ 18'04		min. Earth dist.	-4654 Apr 06 j 09:25	9° $\mathring{\text{U}}$ 42'45	18.01110 AU
retrograde	-4661 Dec 24 j 22:04	14° $\mathring{\text{U}}$ 37'19		direct	-4654 Jun 22 j 23:41	7° $\mathring{\text{U}}$ 40'02	
opposition	-4660 Mar 08 j 23:21	12° $\mathring{\text{U}}$ 36'31	0°56'22	evening set	-4654 Sep 23 j 20:30	10° $\mathring{\text{U}}$ 56'37	
min. Earth dist.	-4660 Mar 09 j 02:21	12° $\mathring{\text{U}}$ 36'12	17.63878 AU				
direct	-4660 May 25 j 06:42	10° $\mathring{\text{U}}$ 32'47		conjunction	-4654 Oct 09 j 10:41	11° $\mathring{\text{U}}$ 53'33	0°42'54
evening set	-4660 Aug 27 j 19:58	13° $\mathring{\text{U}}$ 57'12		minimum elong	-4654 Oct 09 j 10:41	11° $\mathring{\text{U}}$ 53'33	0°42'59
				max. Earth dist.	-4654 Oct 09 j 22:49	11° $\mathring{\text{U}}$ 55'24	20.04538 AU

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Attention, astronomical year style is used: The year -4654 in astronomical counting style is the year 4655 BCE in historical counting style.

morning rise	-4654 Oct 25 j 00:08	12° <u>♏</u> 50'23	direct	-4647 Jul 23 j 19:58	7° <u>♊</u> 52'09	
retrograde	-4653 Jan 25 j 02:57	16° <u>♏</u> 05'45	evening set	-4647 Oct 22 j 22:32	10° <u>♊</u> 59'49	
opposition	-4653 Apr 11 j 17:18	14° <u>♏</u> 05'22 0°46'28				
min. Earth dist.	-4653 Apr 11 j 04:58	14° <u>♏</u> 06'38 18.08016 AU	conjunction	-4647 Nov 07 j 11:58	11° <u>♊</u> 55'03 0°23'41	
direct	-4653 Jun 27 j 18:24	12° <u>♏</u> 04'13	minimum elong	-4647 Nov 07 j 11:58	11° <u>♊</u> 55'03 0°23'39	
evening set	-4653 Sep 28 j 09:17	15° <u>♏</u> 19'27	max. Earth dist.	-4647 Nov 08 j 11:40	11° <u>♊</u> 58'35 20.52975 AU	
			morning rise	-4647 Nov 23 j 03:02	12° <u>♊</u> 50'30	
conjunction	-4653 Oct 13 j 22:59	16° <u>♏</u> 16'06 0°40'44	retrograde	-4646 Feb 24 j 08:49	16° <u>♊</u> 02'05	
minimum elong	-4653 Oct 13 j 23:00	16° <u>♏</u> 16'06 0°40'48	opposition	-4646 May 12 j 22:45	14° <u>♊</u> 02'29 0°24'22	
max. Earth dist.	-4653 Oct 14 j 12:34	16° <u>♏</u> 18'10 20.11525 AU	min. Earth dist.	-4646 May 11 j 22:21	14° <u>♊</u> 04'57 18.56121 AU	
morning rise	-4653 Oct 29 j 12:32	17° <u>♏</u> 12'42	direct	-4646 Jul 28 j 09:31	12° <u>♊</u> 04'14	
retrograde	-4652 Jan 29 j 20:17	20° <u>♏</u> 27'31	evening set	-4646 Oct 27 j 06:27	15° <u>♊</u> 10'46	
opposition	-4652 Apr 15 j 13:28	18° <u>♏</u> 27'14 0°43'55				
min. Earth dist.	-4652 Apr 14 j 21:58	18° <u>♏</u> 28'49 18.15062 AU	conjunction	-4646 Nov 11 j 20:16	16° <u>♊</u> 05'49 0°20'21	
direct	-4652 Jul 01 j 12:49	16° <u>♏</u> 26'31	minimum elong	-4646 Nov 11 j 20:16	16° <u>♊</u> 05'49 0°20'19	
evening set	-4652 Oct 01 j 21:11	19° <u>♏</u> 40'26	max. Earth dist.	-4646 Nov 12 j 22:07	16° <u>♊</u> 09'39 20.59145 AU	
			morning rise	-4646 Nov 27 j 11:40	17° <u>♊</u> 01'07	
conjunction	-4652 Oct 17 j 10:47	20° <u>♏</u> 36'49 0°38'20	retrograde	-4645 Feb 28 j 20:23	20° <u>♊</u> 12'11	
minimum elong	-4652 Oct 17 j 10:47	20° <u>♏</u> 36'49 0°38'23	opposition	-4645 May 17 j 13:37	18° <u>♊</u> 12'38 0°20'36	
max. Earth dist.	-4652 Oct 18 j 03:31	20° <u>♏</u> 39'22 20.18611 AU	min. Earth dist.	-4645 May 16 j 12:25	18° <u>♊</u> 15'10 18.62122 AU	
morning rise	-4652 Nov 02 j 00:16	21° <u>♏</u> 33'13	direct	-4645 Aug 01 j 22:36	16° <u>♊</u> 14'41	
retrograde	-4651 Feb 02 j 10:32	24° <u>♏</u> 47'27	evening set	-4645 Oct 31 j 13:47	19° <u>♊</u> 20'05	
opposition	-4651 Apr 20 j 08:58	22° <u>♏</u> 47'19 0°41'07				
min. Earth dist.	-4651 Apr 19 j 16:11	22° <u>♏</u> 49'02 18.22174 AU	conjunction	-4645 Nov 16 j 03:44	20° <u>♊</u> 14'57 0°16'56	
direct	-4651 Jul 06 j 05:56	20° <u>♏</u> 47'03	minimum elong	-4645 Nov 16 j 03:44	20° <u>♊</u> 14'57 0°16'52	
evening set	-4651 Oct 06 j 08:23	23° <u>♏</u> 59'39	max. Earth dist.	-4645 Nov 17 j 05:32	20° <u>♊</u> 18'46 20.64985 AU	
			morning rise	-4645 Dec 01 j 19:52	21° <u>♊</u> 10'07	
conjunction	-4651 Oct 21 j 21:42	24° <u>♏</u> 55'47 0°35'44	retrograde	-4644 Mar 04 j 07:53	24° <u>♊</u> 20'42	
minimum elong	-4651 Oct 21 j 21:43	24° <u>♏</u> 55'47 0°35'47	min. Earth dist.	-4644 May 20 j 01:34	22° <u>♊</u> 23'46 18.67806 AU	
max. Earth dist.	-4651 Oct 22 j 15:28	24° <u>♏</u> 58'28 20.25734 AU	opposition	-4644 May 21 j 03:44	22° <u>♊</u> 21'09 0°16'46	
morning rise	-4651 Nov 06 j 11:30	25° <u>♏</u> 51'58	direct	-4644 Aug 05 j 10:30	20° <u>♊</u> 23'28	
retrograde	-4650 Feb 07 j 02:58	29° <u>♏</u> 05'40	evening set	-4644 Nov 03 j 20:28	23° <u>♊</u> 27'47	
min. Earth dist.	-4650 Apr 24 j 08:17	27° <u>♏</u> 07'37 18.29285 AU				
opposition	-4650 Apr 25 j 03:36	27° <u>♏</u> 05'39 0°38'07	conjunction	-4644 Nov 19 j 10:57	24° <u>♊</u> 22'30 0°13'28	
direct	-4650 Jul 10 j 22:48	25° <u>♏</u> 05'50	minimum elong	-4644 Nov 19 j 10:57	24° <u>♊</u> 22'30 0°13'23	
evening set	-4650 Oct 10 j 18:49	28° <u>♏</u> 17'10	behind sun begin	-4644 Nov 19 j 07:07	24° <u>♊</u> 21'57	
			behind sun end	-4644 Nov 19 j 14:47	24° <u>♊</u> 23'03	
conjunction	-4650 Oct 26 j 08:11	29° <u>♏</u> 13'03 0°32'58	max. Earth dist.	-4644 Nov 20 j 14:53	24° <u>♊</u> 26'36 20.70504 AU	
minimum elong	-4650 Oct 26 j 08:11	29° <u>♏</u> 13'03 0°32'59	morning rise	-4644 Dec 05 j 03:33	25° <u>♊</u> 17'32	
max. Earth dist.	-4650 Oct 27 j 04:44	29° <u>♏</u> 16'09 20.32800 AU	retrograde	-4643 Mar 08 j 18:37	28° <u>♊</u> 27'37	
	-4650 Nov 08 j 08:51	0° <u>♊</u>	opposition	-4643 May 25 j 16:51	26° <u>♊</u> 28'04 0°12'52	
morning rise	-4650 Nov 10 j 22:00	0° <u>♊</u> 09'02	min. Earth dist.	-4643 May 24 j 13:50	26° <u>♊</u> 30'47 18.73173 AU	
retrograde	-4649 Feb 11 j 16:10	3° <u>♊</u> 22'11	direct	-4643 Aug 09 j 22:15	24° <u>♊</u> 30'37	
opposition	-4649 Apr 29 j 21:29	1° <u>♊</u> 22'19 0°34'55	evening set	-4643 Nov 08 j 02:43	27° <u>♊</u> 33'55	
min. Earth dist.	-4649 Apr 29 j 01:10	1° <u>♊</u> 24'23 18.36296 AU				
	-4649 Jun 06 j 05:02	30° <u>♏</u> 12'	conjunction	-4643 Nov 23 j 17:29	28° <u>♊</u> 28'29 0°09'57	
direct	-4649 Jul 15 j 14:22	29° <u>♏</u> 22'57	minimum elong	-4643 Nov 23 j 17:29	28° <u>♊</u> 28'29 0°09'51	
	-4649 Aug 22 j 17:29	0° <u>♊</u>	behind sun begin	-4643 Nov 23 j 12:07	28° <u>♊</u> 27'43	
evening set	-4649 Oct 15 j 04:45	2° <u>♊</u> 33'02	behind sun end	-4643 Nov 23 j 22:51	28° <u>♊</u> 29'15	
			max. Earth dist.	-4643 Nov 24 j 21:16	28° <u>♊</u> 32'34 20.75729 AU	
conjunction	-4649 Oct 30 j 17:56	3° <u>♊</u> 28'40 0°30'01	morning rise	-4643 Dec 09 j 10:56	29° <u>♊</u> 23'25	
minimum elong	-4649 Oct 30 j 17:56	3° <u>♊</u> 28'41 0°30'00		-4643 Dec 20 j 08:26	0° <u>♌</u>	
max. Earth dist.	-4649 Oct 31 j 15:03	3° <u>♊</u> 31'51 20.39746 AU	retrograde	-4642 Mar 13 j 04:23	2° <u>♌</u> 33'03	
morning rise	-4649 Nov 15 j 08:12	4° <u>♊</u> 24'28	min. Earth dist.	-4642 May 29 j 01:33	0° <u>♌</u> 36'15 18.78270 AU	
retrograde	-4648 Feb 16 j 07:07	7° <u>♊</u> 37'06	opposition	-4642 May 30 j 05:15	0° <u>♌</u> 33'29 0°08'57	
opposition	-4648 May 03 j 14:44	5° <u>♊</u> 37'20 0°31'32		-4642 Jun 13 j 07:49	30° <u>♏</u>	
min. Earth dist.	-4648 May 02 j 16:28	5° <u>♊</u> 39'35 18.43160 AU	direct	-4642 Aug 14 j 08:02	28° <u>♊</u> 36'15	
direct	-4648 Jul 19 j 05:42	3° <u>♊</u> 38'22		-4642 Oct 11 j 16:37	0° <u>♌</u>	
evening set	-4648 Oct 18 j 13:48	6° <u>♊</u> 47'14	evening set	-4642 Nov 12 j 08:22	1° <u>♌</u> 38'37	
conjunction	-4648 Nov 03 j 03:13	7° <u>♊</u> 42'40 0°26'55	conjunction	-4642 Nov 27 j 23:44	2° <u>♌</u> 33'03 0°06'24	
minimum elong	-4648 Nov 03 j 03:14	7° <u>♊</u> 42'40 0°26'54	minimum elong	-4642 Nov 27 j 23:44	2° <u>♌</u> 33'03 0°06'16	
max. Earth dist.	-4648 Nov 04 j 02:52	7° <u>♊</u> 46'12 20.46492 AU	behind sun begin	-4642 Nov 27 j 17:32	2° <u>♌</u> 32'10	
morning rise	-4648 Nov 18 j 17:42	8° <u>♊</u> 38'17	behind sun end	-4642 Nov 28 j 05:56	2° <u>♌</u> 33'56	
retrograde	-4647 Feb 19 j 19:34	11° <u>♊</u> 50'23	max. Earth dist.	-4642 Nov 29 j 05:33	2° <u>♌</u> 37'24 20.80679 AU	
min. Earth dist.	-4647 May 07 j 08:06	9° <u>♊</u> 53'04 18.49781 AU	morning rise	-4642 Dec 13 j 17:41	3° <u>♌</u> 27'53	
opposition	-4647 May 08 j 07:14	9° <u>♊</u> 50'44 0°28'01	retrograde	-4641 Mar 17 j 14:06	6° <u>♌</u> 37'04	

Attention, astronomical year style is used: The year -4641 in astronomical counting style is the year 4642 BCE in historical counting style.

opposition	-4641 Jun 03 j 16:50	4°M37'31	0°05'00	evening set	-4636 Dec 05 j 13:03	25°M45'18	
min. Earth dist.	-4641 Jun 02 j 12:09	4°M40'24	18.83090 AU				
direct	-4641 Aug 18 j 18:26	2°M40'31		conjunction	-4636 Dec 21 j 08:26	26°M39'22	-0°14'47
evening set	-4641 Nov 16 j 13:47	5°M42'00		minimum elong	-4636 Dec 21 j 08:26	26°M39'22	0°14'58
				behind sun begin	-4636 Dec 21 j 05:54	26°M39'01	
conjunction	-4641 Dec 02 j 05:32	6°M36'20	0°02'50	behind sun end	-4636 Dec 21 j 10:59	26°M39'43	
minimum elong	-4641 Dec 02 j 05:31	6°M36'20	0°02'43	max. Earth dist.	-4636 Dec 22 j 16:31	26°M43'58	21.04149 AU
behind sun begin	-4641 Dec 01 j 22:59	6°M35'25		morning rise	-4635 Jan 06 j 07:28	27°M33'57	
behind sun end	-4641 Dec 02 j 12:04	6°M37'16			-4635 Feb 27 j 23:06	0°X	
max. Earth dist.	-4641 Dec 03 j 11:04	6°M40'38	20.85376 AU	retrograde	-4635 Apr 10 j 18:11	0°X41'25	
morning rise	-4641 Dec 18 j 00:24	7°M31'06			-4635 May 23 j 16:57	30°RM	
retrograde	-4640 Mar 20 j 23:14	10°M39'55		min. Earth dist.	-4635 Jun 26 j 20:21	28°M45'08	19.05496 AU
min. Earth dist.	-4640 Jun 05 j 22:46	8°M43'17	18.87669 AU	opposition	-4635 Jun 28 j 02:04	28°M42'10	-0°18'13
opposition	-4640 Jun 07 j 03:52	8°M40'23	0°01'03	direct	-4635 Sep 11 j 13:06	26°M46'18	
direct	-4640 Aug 22 j 02:12	6°M43'35		evening set	-4635 Dec 09 j 17:44	29°M44'11	
desc. node	-4640 Sep 12 j 20:28	6°M55'48			-4635 Dec 14 j 10:08	0°X	
evening set	-4640 Nov 19 j 18:40	9°M44'17					
				conjunction	-4635 Dec 25 j 13:46	0°X38'14	-0°18'07
conjunction	-4640 Dec 05 j 11:12	10°M38'31	-0°00'50	minimum elong	-4635 Dec 25 j 13:46	0°X38'14	0°18'19
minimum elong	-4640 Dec 05 j 11:12	10°M38'31	0°00'59	max. Earth dist.	-4635 Dec 26 j 20:17	0°X42'36	21.06625 AU
behind sun begin	-4640 Dec 05 j 04:39	10°M37'36		morning rise	-4634 Jan 10 j 13:54	1°X32'50	
behind sun end	-4640 Dec 05 j 17:45	10°M39'27		retrograde	-4634 Apr 15 j 02:31	4°X40'09	
max. Earth dist.	-4640 Dec 06 j 18:31	10°M43'04	20.89812 AU	min. Earth dist.	-4634 Jul 01 j 05:37	2°X43'45	19.07708 AU
morning rise	-4640 Dec 21 j 06:43	11°M33'13		opposition	-4634 Jul 02 j 10:03	2°X40'55	-0°21'52
retrograde	-4639 Mar 25 j 08:03	14°M41'40		direct	-4634 Sep 15 j 17:22	0°X45'08	
min. Earth dist.	-4639 Jun 10 j 08:14	12°M45'11	18.91956 AU	evening set	-4634 Dec 13 j 22:12	3°X42'40	
opposition	-4639 Jun 11 j 14:11	12°M42'11	-0°02'54				
direct	-4639 Aug 26 j 11:03	10°M45'37		conjunction	-4634 Dec 29 j 19:14	4°X36'44	-0°21'22
evening set	-4639 Nov 23 j 23:34	13°M45'36		minimum elong	-4634 Dec 29 j 19:14	4°X36'44	0°21'34
				max. Earth dist.	-4634 Dec 31 j 02:12	4°X41'09	21.08547 AU
conjunction	-4639 Dec 09 j 16:35	14°M39'46	-0°04'25	morning rise	-4633 Jan 14 j 20:08	5°X31'21	
minimum elong	-4639 Dec 09 j 16:35	14°M39'46	0°04'34	retrograde	-4633 Apr 19 j 10:46	8°X38'31	
behind sun begin	-4639 Dec 09 j 10:09	14°M38'52		opposition	-4633 Jul 06 j 17:34	6°X39'17	-0°25'23
behind sun end	-4639 Dec 09 j 23:01	14°M40'40		min. Earth dist.	-4633 Jul 05 j 13:19	6°X42'07	19.09334 AU
max. Earth dist.	-4639 Dec 10 j 23:15	14°M44'12	20.93947 AU	direct	-4633 Sep 20 j 00:09	4°X43'33	
	-4639 Dec 15 j 12:28	15°M		evening set	-4633 Dec 18 j 03:00	7°X40'48	
morning rise	-4639 Dec 25 j 13:06	15°M34'25					
retrograde	-4638 Mar 29 j 17:05	18°M42'34		conjunction	-4632 Jan 03 j 00:46	8°X34'53	-0°24'30
opposition	-4638 Jun 15 j 23:51	16°M43'08	-0°06'48	minimum elong	-4632 Jan 03 j 00:46	8°X34'53	0°24'43
min. Earth dist.	-4638 Jun 14 j 18:03	16°M46'07	18.95937 AU	max. Earth dist.	-4632 Jan 04 j 05:47	8°X39'01	21.09883 AU
	-4638 Aug 07 j 15:40	15°RM		morning rise	-4632 Jan 19 j 02:49	9°X29'33	
direct	-4638 Aug 30 j 17:25	14°M46'46		retrograde	-4632 Apr 22 j 18:40	12°X36'36	
	-4638 Sep 22 j 08:49	15°M		min. Earth dist.	-4632 Jul 08 j 22:12	10°X39'58	19.10381 AU
evening set	-4638 Nov 28 j 04:06	17°M46'07		opposition	-4632 Jul 10 j 00:48	10°X37'18	-0°28'47
				direct	-4632 Sep 23 j 04:11	8°X41'33	
conjunction	-4638 Dec 13 j 21:57	18°M40'14	-0°07'55	evening set	-4632 Dec 21 j 07:41	11°X38'34	
minimum elong	-4638 Dec 13 j 21:58	18°M40'14	0°08'05				
behind sun begin	-4638 Dec 13 j 16:06	18°M39'25		conjunction	-4631 Jan 06 j 06:35	12°X32'42	-0°27'31
behind sun end	-4638 Dec 14 j 03:50	18°M41'04		minimum elong	-4631 Jan 06 j 06:35	12°X32'42	0°27'43
max. Earth dist.	-4638 Dec 15 j 06:03	18°M44'52	20.97751 AU	max. Earth dist.	-4631 Jan 07 j 11:44	12°X36'51	21.10636 AU
morning rise	-4638 Dec 29 j 19:10	19°M34'51		morning rise	-4631 Jan 22 j 09:30	13°X27'25	
retrograde	-4637 Apr 03 j 01:13	22°M42'44		retrograde	-4631 Apr 27 j 02:49	16°X34'22	
min. Earth dist.	-4637 Jun 19 j 02:43	20°M46'24	18.99550 AU	min. Earth dist.	-4631 Jul 13 j 05:17	14°X37'38	19.10839 AU
opposition	-4637 Jun 20 j 09:03	20°M43'23	-0°10'41	opposition	-4631 Jul 14 j 07:33	14°X35'00	-0°32'03
direct	-4637 Sep 04 j 00:55	18°M47'12		direct	-4631 Sep 27 j 10:24	12°X39'11	
evening set	-4637 Dec 02 j 08:35	21°M45'59		evening set	-4631 Dec 25 j 12:40	15°X36'03	
conjunction	-4637 Dec 18 j 03:01	22°M40'03	-0°11'23	conjunction	-4630 Jan 10 j 12:19	16°X30'14	-0°30'23
minimum elong	-4637 Dec 18 j 03:01	22°M40'03	0°11'33	minimum elong	-4630 Jan 10 j 12:19	16°X30'14	0°30'37
behind sun begin	-4637 Dec 17 j 22:16	22°M39'23		max. Earth dist.	-4630 Jan 11 j 15:23	16°X34'05	21.10823 AU
behind sun end	-4637 Dec 18 j 07:46	22°M40'43		morning rise	-4630 Jan 26 j 16:23	17°X25'02	
max. Earth dist.	-4637 Dec 19 j 10:10	22°M44'32	21.01169 AU	retrograde	-4630 May 01 j 10:15	20°X31'54	
morning rise	-4636 Jan 03 j 01:18	23°M34'39		opposition	-4630 Jul 18 j 13:59	18°X32'26	-0°35'08
retrograde	-4636 Apr 06 j 10:04	26°M42'20		min. Earth dist.	-4630 Jul 17 j 13:29	18°X34'54	19.10771 AU
opposition	-4636 Jun 23 j 17:56	24°M43'01	-0°14'29	direct	-4630 Oct 01 j 14:29	16°X36'30	
min. Earth dist.	-4636 Jun 22 j 12:16	24°M45'59	19.02763 AU	evening set	-4630 Dec 29 j 17:35	19°X33'17	
direct	-4636 Sep 07 j 06:13	22°M47'01					

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Attention, astronomical year style is used: The year -4629 in astronomical counting style is the year 4630 BCE in historical counting style.

conjunction	-4629 Jan 14 j 18:22	20° $\mathring{\text{A}}$ 27'34	-0°33'07	retrograde	-4623 May 29 j 22:09	18° $\mathring{\text{Z}}$ 19'27	
minimum elong	-4629 Jan 14 j 18:22	20° $\mathring{\text{A}}$ 27'34	0°33'20	opposition	-4623 Aug 15 j 06:08	16° $\mathring{\text{Z}}$ 19'31	-0°51'26
max. Earth dist.	-4629 Jan 15 j 21:34	20° $\mathring{\text{A}}$ 31'26	21.10513 AU	min. Earth dist.	-4623 Aug 14 j 13:20	16° $\mathring{\text{Z}}$ 21'14	18.98725 AU
morning rise	-4629 Jan 30 j 23:15	21° $\mathring{\text{A}}$ 22'26		direct	-4623 Oct 28 j 21:36	14° $\mathring{\text{Z}}$ 22'38	
retrograde	-4629 May 05 j 18:16	24° $\mathring{\text{A}}$ 29'16		evening set	-4622 Jan 26 j 14:11	17° $\mathring{\text{Z}}$ 21'19	
opposition	-4629 Jul 22 j 20:04	22° $\mathring{\text{A}}$ 29'42	-0°38'04				
min. Earth dist.	-4629 Jul 21 j 19:48	22° $\mathring{\text{A}}$ 32'09	19.10225 AU	conjunction	-4622 Feb 11 j 21:56	18° $\mathring{\text{Z}}$ 16'37	-0°47'11
direct	-4629 Oct 05 j 19:44	20° $\mathring{\text{A}}$ 33'40		minimum elong	-4622 Feb 11 j 21:56	18° $\mathring{\text{Z}}$ 16'37	0°47'24
evening set	-4628 Jan 02 j 22:46	23° $\mathring{\text{A}}$ 30'27		max. Earth dist.	-4622 Feb 12 j 14:56	18° $\mathring{\text{Z}}$ 19'02	20.97110 AU
				morning rise	-4622 Feb 28 j 09:46	19° $\mathring{\text{Z}}$ 12'29	
conjunction	-4628 Jan 19 j 00:24	24° $\mathring{\text{A}}$ 24'49	-0°35'40	retrograde	-4622 Jun 03 j 06:35	22° $\mathring{\text{Z}}$ 20'27	
minimum elong	-4628 Jan 19 j 00:23	24° $\mathring{\text{A}}$ 24'49	0°35'54	opposition	-4622 Aug 19 j 12:03	20° $\mathring{\text{Z}}$ 20'29	-0°52'52
max. Earth dist.	-4628 Jan 20 j 01:33	24° $\mathring{\text{A}}$ 28'23	21.09751 AU	min. Earth dist.	-4622 Aug 18 j 21:55	20° $\mathring{\text{Z}}$ 21'56	18.95446 AU
morning rise	-4628 Feb 04 j 06:28	25° $\mathring{\text{A}}$ 19'47		direct	-4622 Nov 02 j 00:54	18° $\mathring{\text{Z}}$ 23'25	
retrograde	-4628 May 09 j 01:46	28° $\mathring{\text{A}}$ 26'39		evening set	-4621 Jan 30 j 22:44	21° $\mathring{\text{Z}}$ 22'42	
min. Earth dist.	-4628 Jul 25 j 03:35	26° $\mathring{\text{A}}$ 29'14	19.09259 AU				
opposition	-4628 Jul 26 j 02:04	26° $\mathring{\text{A}}$ 26'58	-0°40'48	conjunction	-4621 Feb 16 j 07:40	22° $\mathring{\text{Z}}$ 18'13	-0°48'21
direct	-4628 Oct 08 j 23:36	24° $\mathring{\text{A}}$ 30'47		minimum elong	-4621 Feb 16 j 07:40	22° $\mathring{\text{Z}}$ 18'13	0°48'35
evening set	-4627 Jan 06 j 04:13	27° $\mathring{\text{A}}$ 27'40		max. Earth dist.	-4621 Feb 16 j 23:40	22° $\mathring{\text{Z}}$ 20'30	20.93613 AU
				morning rise	-4621 Mar 04 j 20:13	23° $\mathring{\text{Z}}$ 14'17	
conjunction	-4627 Jan 22 j 07:02	28° $\mathring{\text{A}}$ 22'09	-0°38'04	retrograde	-4621 Jun 07 j 17:59	26° $\mathring{\text{Z}}$ 22'33	
minimum elong	-4627 Jan 22 j 07:02	28° $\mathring{\text{A}}$ 22'09	0°38'18	opposition	-4621 Aug 23 j 18:02	24° $\mathring{\text{Z}}$ 22'32	-0°54'03
max. Earth dist.	-4627 Jan 23 j 08:10	28° $\mathring{\text{A}}$ 25'43	21.08582 AU	min. Earth dist.	-4621 Aug 23 j 04:57	24° $\mathring{\text{Z}}$ 23'53	18.91712 AU
morning rise	-4627 Feb 07 j 13:56	29° $\mathring{\text{A}}$ 17'14		direct	-4621 Nov 06 j 07:32	22° $\mathring{\text{Z}}$ 25'16	
	-4627 Feb 20 j 19:42	0° $\mathring{\text{Z}}$		evening set	-4620 Feb 04 j 08:08	25° $\mathring{\text{Z}}$ 25'12	
retrograde	-4627 May 13 j 10:08	2° $\mathring{\text{Z}}$ 24'09					
min. Earth dist.	-4627 Jul 29 j 09:26	0° $\mathring{\text{Z}}$ 26'38	19.07891 AU	conjunction	-4620 Feb 20 j 17:56	26° $\mathring{\text{Z}}$ 20'56	-0°49'18
opposition	-4627 Jul 30 j 07:35	0° $\mathring{\text{Z}}$ 24'23	-0°43'21	minimum elong	-4620 Feb 20 j 17:56	26° $\mathring{\text{Z}}$ 20'56	0°49'31
	-4627 Aug 09 j 10:02	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$		max. Earth dist.	-4620 Feb 21 j 06:40	26° $\mathring{\text{Z}}$ 22'45	20.89641 AU
direct	-4627 Oct 13 j 04:25	28° $\mathring{\text{A}}$ 28'05		morning rise	-4620 Mar 08 j 07:32	27° $\mathring{\text{Z}}$ 17'13	
	-4627 Dec 13 j 18:17	0° $\mathring{\text{Z}}$			-4620 May 09 j 12:25	0° $\mathring{\text{Z}}$	
evening set	-4626 Jan 10 j 10:09	1° $\mathring{\text{Z}}$ 25'09		retrograde	-4620 Jun 11 j 03:27	0° $\mathring{\text{Z}}$ 25'50	
					-4620 Jul 14 j 00:32	30° $\mathring{\text{R}}$ $\mathring{\text{Z}}$	
conjunction	-4626 Jan 26 j 13:48	2° $\mathring{\text{Z}}$ 19'46	-0°40'17	opposition	-4620 Aug 27 j 00:28	28° $\mathring{\text{Z}}$ 25'44	-0°54'58
minimum elong	-4626 Jan 26 j 13:48	2° $\mathring{\text{Z}}$ 19'46	0°40'30	min. Earth dist.	-4620 Aug 26 j 14:22	28° $\mathring{\text{Z}}$ 26'46	18.87496 AU
max. Earth dist.	-4626 Jan 27 j 12:41	2° $\mathring{\text{Z}}$ 23'01	21.07028 AU	direct	-4620 Nov 09 j 12:12	26° $\mathring{\text{Z}}$ 28'11	
morning rise	-4626 Feb 11 j 21:50	3° $\mathring{\text{Z}}$ 14'59		evening set	-4619 Feb 07 j 18:11	29° $\mathring{\text{Z}}$ 28'50	
retrograde	-4626 May 17 j 17:50	6° $\mathring{\text{Z}}$ 22'01			-4619 Feb 16 j 23:18	0° $\mathring{\text{Z}}$	
opposition	-4626 Aug 03 j 13:17	4° $\mathring{\text{Z}}$ 22'11	-0°45'42				
min. Earth dist.	-4626 Aug 02 j 17:04	4° $\mathring{\text{Z}}$ 24'14	19.06157 AU	conjunction	-4619 Feb 24 j 05:09	0° $\mathring{\text{Z}}$ 24'49	-0°50'00
direct	-4626 Oct 17 j 07:41	2° $\mathring{\text{Z}}$ 25'44		minimum elong	-4619 Feb 24 j 05:09	0° $\mathring{\text{Z}}$ 24'49	0°50'12
evening set	-4625 Jan 14 j 16:08	5° $\mathring{\text{Z}}$ 23'04		max. Earth dist.	-4619 Feb 24 j 16:23	0° $\mathring{\text{Z}}$ 26'25	20.85184 AU
				morning rise	-4619 Mar 12 j 19:24	1° $\mathring{\text{Z}}$ 21'17	
conjunction	-4625 Jan 30 j 20:58	6° $\mathring{\text{Z}}$ 17'50	-0°42'19	retrograde	-4619 Jun 15 j 14:43	4° $\mathring{\text{Z}}$ 30'15	
minimum elong	-4625 Jan 30 j 20:57	6° $\mathring{\text{Z}}$ 17'50	0°42'33	opposition	-4619 Aug 31 j 06:53	2° $\mathring{\text{Z}}$ 30'02	-0°55'37
max. Earth dist.	-4625 Jan 31 j 19:45	6° $\mathring{\text{Z}}$ 21'04	21.05113 AU	min. Earth dist.	-4619 Aug 30 j 21:57	2° $\mathring{\text{Z}}$ 30'58	18.82789 AU
morning rise	-4625 Feb 16 j 05:48	7° $\mathring{\text{Z}}$ 13'11		direct	-4619 Nov 13 j 19:40	0° $\mathring{\text{Z}}$ 32'11	
retrograde	-4625 May 22 j 03:17	10° $\mathring{\text{Z}}$ 20'24		evening set	-4618 Feb 12 j 05:00	3° $\mathring{\text{Z}}$ 33'36	
opposition	-4625 Aug 07 j 18:51	8° $\mathring{\text{Z}}$ 20'31	-0°47'50				
min. Earth dist.	-4625 Aug 06 j 23:00	8° $\mathring{\text{Z}}$ 22'32	19.04053 AU	conjunction	-4618 Feb 28 j 16:48	4° $\mathring{\text{Z}}$ 29'49	-0°50'27
direct	-4625 Oct 21 j 12:54	6° $\mathring{\text{Z}}$ 23'56		minimum elong	-4618 Feb 28 j 16:48	4° $\mathring{\text{Z}}$ 29'49	0°50'39
evening set	-4624 Jan 18 j 22:57	9° $\mathring{\text{Z}}$ 21'38		max. Earth dist.	-4618 Mar 01 j 00:38	4° $\mathring{\text{Z}}$ 30'56	20.80250 AU
				morning rise	-4618 Mar 17 j 07:58	5° $\mathring{\text{Z}}$ 26'31	
conjunction	-4624 Feb 04 j 04:39	10° $\mathring{\text{Z}}$ 16'34	-0°44'09	retrograde	-4618 Jun 20 j 00:55	8° $\mathring{\text{Z}}$ 35'51	
minimum elong	-4624 Feb 04 j 04:39	10° $\mathring{\text{Z}}$ 16'34	0°44'22	opposition	-4618 Sep 04 j 13:49	6° $\mathring{\text{Z}}$ 35'29	-0°55'58
max. Earth dist.	-4624 Feb 05 j 01:00	10° $\mathring{\text{Z}}$ 19'27	21.02832 AU	min. Earth dist.	-4618 Sep 04 j 07:53	6° $\mathring{\text{Z}}$ 36'06	18.77639 AU
morning rise	-4624 Feb 20 j 14:39	11° $\mathring{\text{Z}}$ 12'05		direct	-4618 Nov 18 j 01:37	4° $\mathring{\text{Z}}$ 37'16	
retrograde	-4624 May 25 j 11:19	14° $\mathring{\text{Z}}$ 19'30		evening set	-4617 Feb 16 j 16:11	7° $\mathring{\text{Z}}$ 39'29	
min. Earth dist.	-4624 Aug 10 j 06:57	12° $\mathring{\text{Z}}$ 21'22	19.01588 AU				
opposition	-4624 Aug 11 j 00:29	12° $\mathring{\text{Z}}$ 19'34	-0°49'45	conjunction	-4617 Mar 05 j 05:07	8° $\mathring{\text{Z}}$ 35'58	-0°50'38
direct	-4624 Oct 24 j 15:43	10° $\mathring{\text{Z}}$ 22'51		minimum elong	-4617 Mar 05 j 05:07	8° $\mathring{\text{Z}}$ 35'58	0°50'49
evening set	-4623 Jan 22 j 06:11	13° $\mathring{\text{Z}}$ 21'00		max. Earth dist.	-4617 Mar 05 j 11:31	8° $\mathring{\text{Z}}$ 36'53	20.74906 AU
				morning rise	-4617 Mar 21 j 20:56	9° $\mathring{\text{Z}}$ 32'53	
conjunction	-4623 Feb 07 j 13:07	14° $\mathring{\text{Z}}$ 16'07	-0°45'46	retrograde	-4617 Jun 24 j 12:27	12° $\mathring{\text{Z}}$ 42'35	
minimum elong	-4623 Feb 07 j 13:07	14° $\mathring{\text{Z}}$ 16'07	0°46'00	opposition	-4617 Sep 08 j 20:52	10° $\mathring{\text{Z}}$ 42'04	-0°56'03
max. Earth dist.	-4623 Feb 08 j 08:55	14° $\mathring{\text{Z}}$ 18'55	21.00178 AU	min. Earth dist.	-4617 Sep 08 j 16:01	10° $\mathring{\text{Z}}$ 42'34	18.72099 AU
morning rise	-4623 Feb 23 j 23:54	15° $\mathring{\text{Z}}$ 11'47		direct	-4617 Nov 22 j 09:54	8° $\mathring{\text{Z}}$ 43'28	

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Attention, astronomical year style is used: The year -4616 in astronomical counting style is the year 4617 BCE in historical counting style.

evening set	-4616 Feb 21 j 04:27	11° \approx 46'32		conjunction	-4610 Apr 04 j 16:33	7° \approx 57'30	-0°44'37
				minimum elong	-4610 Apr 04 j 16:33	7° \approx 57'30	0°44'43
conjunction	-4616 Mar 08 j 18:10	12° \approx 43'17	-0°50'34	max. Earth dist.	-4610 Apr 04 j 06:57	7° \approx 56'05	20.31116 AU
minimum elong	-4616 Mar 08 j 18:10	12° \approx 43'17	0°50'45	morning rise	-4610 Apr 21 j 11:55	8° \approx 56'09	
max. Earth dist.	-4616 Mar 08 j 21:21	12° \approx 43'45	20.69199 AU	retrograde	-4610 Jul 24 j 06:39	12° \approx 09'16	
morning rise	-4616 Mar 25 j 10:48	13° \approx 40'27		opposition	-4610 Oct 07 j 10:45	10° \approx 07'50	-0°48'28
	-4616 Apr 19 j 14:39	15° \approx		min. Earth dist.	-4610 Oct 07 j 19:47	10° \approx 06'52	18.27822 AU
retrograde	-4616 Jun 27 j 23:08	16° \approx 50'33		direct	-4610 Dec 21 j 04:12	8° \approx 06'30	
	-4616 Sep 08 j 02:58	15° \approx		evening set	-4609 Mar 23 j 16:19	11° \approx 17'22	
opposition	-4616 Sep 12 j 04:17	14° \approx 49'50	-0°55'51				
min. Earth dist.	-4616 Sep 12 j 02:24	14° \approx 50'02	18.66245 AU	conjunction	-4609 Apr 09 j 11:13	12° \approx 16'09	-0°42'42
direct	-4616 Nov 25 j 17:11	12° \approx 50'49		minimum elong	-4609 Apr 09 j 11:14	12° \approx 16'09	0°42'47
	-4615 Feb 07 j 19:55	15° \approx		max. Earth dist.	-4609 Apr 08 j 23:39	12° \approx 14'27	20.24520 AU
evening set	-4615 Feb 24 j 17:19	15° \approx 54'50		morning rise	-4609 Apr 26 j 06:52	13° \approx 15'04	
				retrograde	-4609 Jul 28 j 23:47	16° \approx 28'47	
conjunction	-4615 Mar 13 j 08:04	16° \approx 51'52	-0°50'14	opposition	-4609 Oct 11 j 21:58	14° \approx 27'18	-0°46'12
minimum elong	-4615 Mar 13 j 08:04	16° \approx 51'52	0°50'24	min. Earth dist.	-4609 Oct 12 j 08:00	14° \approx 26'14	18.21194 AU
max. Earth dist.	-4615 Mar 13 j 09:47	16° \approx 52'07	20.63218 AU	direct	-4609 Dec 25 j 18:02	12° \approx 25'38	
morning rise	-4615 Mar 30 j 01:14	17° \approx 49'15		evening set	-4608 Mar 27 j 11:40	15° \approx 37'50	
retrograde	-4615 Jul 02 j 11:29	20° \approx 59'46					
opposition	-4615 Sep 16 j 12:00	18° \approx 58'53	-0°55'21	conjunction	-4608 Apr 13 j 07:00	16° \approx 36'55	-0°40'31
min. Earth dist.	-4615 Sep 16 j 11:04	18° \approx 58'59	18.60141 AU	minimum elong	-4608 Apr 13 j 07:00	16° \approx 36'55	0°40'35
direct	-4615 Nov 30 j 02:21	16° \approx 59'28		max. Earth dist.	-4608 Apr 12 j 16:58	16° \approx 34'51	20.17851 AU
evening set	-4614 Mar 01 j 06:58	20° \approx 04'28		morning rise	-4608 Apr 30 j 02:42	17° \approx 36'05	
				retrograde	-4608 Aug 01 j 15:16	20° \approx 50'24	
conjunction	-4614 Mar 17 j 22:23	21° \approx 01'46	-0°49'38	opposition	-4608 Oct 15 j 10:02	18° \approx 48'53	-0°43'40
minimum elong	-4614 Mar 17 j 22:23	21° \approx 01'46	0°49'47	min. Earth dist.	-4608 Oct 15 j 23:04	18° \approx 47'30	18.14497 AU
max. Earth dist.	-4614 Mar 17 j 21:13	21° \approx 01'36	20.57011 AU	direct	-4608 Dec 29 j 06:14	16° \approx 46'52	
morning rise	-4614 Apr 03 j 16:11	21° \approx 59'25		evening set	-4607 Apr 01 j 08:00	20° \approx 00'25	
retrograde	-4614 Jul 06 j 22:56	25° \approx 10'23		max. Earth dist.	-4607 Apr 17 j 11:08	20° \approx 57'20	20.11124 AU
opposition	-4614 Sep 20 j 20:20	23° \approx 09'21	-0°54'33				
min. Earth dist.	-4614 Sep 20 j 22:10	23° \approx 09'09	18.53856 AU	conjunction	-4607 Apr 18 j 03:41	20° \approx 59'47	-0°38'06
direct	-4614 Dec 04 j 10:37	21° \approx 09'30		minimum elong	-4607 Apr 18 j 03:41	20° \approx 59'47	0°38'08
evening set	-4613 Mar 05 j 21:21	24° \approx 15'34		morning rise	-4607 May 04 j 23:28	21° \approx 59'13	
				retrograde	-4607 Aug 06 j 09:37	25° \approx 14'08	
conjunction	-4613 Mar 22 j 13:42	25° \approx 13'09	-0°48'47	opposition	-4607 Oct 19 j 22:54	23° \approx 12'34	-0°40'51
minimum elong	-4613 Mar 22 j 13:42	25° \approx 13'09	0°48'56	min. Earth dist.	-4607 Oct 20 j 13:01	23° \approx 11'03	18.07734 AU
max. Earth dist.	-4613 Mar 22 j 11:03	25° \approx 12'46	20.50663 AU	direct	-4606 Jan 02 j 21:49	21° \approx 10'10	
morning rise	-4613 Apr 08 j 07:57	26° \approx 11'02		evening set	-4606 Apr 06 j 05:03	24° \approx 25'03	
retrograde	-4613 Jul 11 j 12:38	29° \approx 22'30		max. Earth dist.	-4606 Apr 22 j 06:25	25° \approx 21'57	20.04317 AU
opposition	-4613 Sep 25 j 04:55	27° \approx 21'19	-0°53'28				
min. Earth dist.	-4613 Sep 25 j 07:34	27° \approx 21'02	18.47448 AU	conjunction	-4606 Apr 23 j 01:03	25° \approx 24'43	-0°35'25
direct	-4613 Dec 08 j 21:00	25° \approx 21'04		minimum elong	-4606 Apr 23 j 01:04	25° \approx 24'43	0°35'27
evening set	-4612 Mar 09 j 12:47	28° \approx 28'15		morning rise	-4606 May 09 j 20:41	26° \approx 24'23	
				retrograde	-4606 Aug 11 j 02:43	29° \approx 39'54	
conjunction	-4612 Mar 26 j 05:47	29° \approx 26'08	-0°47'39	opposition	-4606 Oct 24 j 12:42	27° \approx 38'15	-0°37'45
minimum elong	-4612 Mar 26 j 05:47	29° \approx 26'08	0°47'46	min. Earth dist.	-4606 Oct 25 j 05:33	27° \approx 36'26	18.00907 AU
max. Earth dist.	-4612 Mar 26 j 00:23	29° \approx 25'21	20.44204 AU	direct	-4605 Jan 07 j 12:05	25° \approx 35'28	
	-4612 Apr 04 j 23:09	0° \approx		evening set	-4605 Apr 11 j 03:10	28° \approx 51'42	
morning rise	-4612 Apr 12 j 00:33	0° \approx 24'16					
retrograde	-4612 Jul 15 j 01:18	3° \approx 36'15		conjunction	-4605 Apr 27 j 23:19	29° \approx 51'38	-0°32'31
opposition	-4612 Sep 28 j 14:19	1° \approx 34'57	-0°52'06	minimum elong	-4605 Apr 27 j 23:20	29° \approx 51'38	0°32'31
min. Earth dist.	-4612 Sep 28 j 19:45	1° \approx 34'23	18.40955 AU	max. Earth dist.	-4605 Apr 27 j 01:57	29° \approx 48'27	19.97484 AU
	-4612 Nov 10 j 13:58	30° \approx			-4605 Apr 30 j 07:12	0° \approx	
direct	-4612 Dec 12 j 06:01	29° \approx 34'19		morning rise	-4605 May 14 j 18:56	0° \approx 51'33	
	-4611 Jan 12 j 16:03	0° \approx		retrograde	-4605 Aug 15 j 22:09	4° \approx 07'37	
evening set	-4611 Mar 14 j 05:00	2° \approx 42'41		opposition	-4605 Oct 29 j 02:59	2° \approx 05'53	-0°34'25
				min. Earth dist.	-4605 Oct 29 j 20:55	2° \approx 03'57	17.94071 AU
conjunction	-4611 Mar 30 j 22:45	3° \approx 40'52	-0°46'16	direct	-4604 Jan 12 j 05:25	0° \approx 02'41	
minimum elong	-4611 Mar 30 j 22:46	3° \approx 40'52	0°46'23	evening set	-4604 Apr 15 j 02:08	3° \approx 20'14	
max. Earth dist.	-4611 Mar 30 j 15:41	3° \approx 39'50	20.37686 AU				
morning rise	-4611 Apr 16 j 17:51	4° \approx 39'15		conjunction	-4604 May 01 j 22:29	4° \approx 20'27	-0°29'23
retrograde	-4611 Jul 19 j 16:44	7° \approx 51'47		minimum elong	-4604 May 01 j 22:30	4° \approx 20'27	0°29'23
opposition	-4611 Oct 03 j 00:05	5° \approx 50'24	-0°50'25	max. Earth dist.	-4604 Apr 30 j 23:30	4° \approx 17'00	19.90653 AU
min. Earth dist.	-4611 Oct 03 j 06:19	5° \approx 49'44	18.34407 AU	morning rise	-4604 May 18 j 17:42	5° \approx 20'35	
direct	-4611 Dec 16 j 18:04	3° \approx 49'25		retrograde	-4604 Aug 19 j 16:33	8° \approx 37'12	
evening set	-4610 Mar 18 j 22:15	6° \approx 59'01		opposition	-4604 Nov 01 j 18:17	6° \approx 35'22	-0°30'51

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Attention, astronomical year style is used: The year -4604 in astronomical counting style is the year 4605 BCE in historical counting style.

min. Earth dist.	-4604 Nov 02 j 14:37	6° Υ 33'09	17.87274 AU	retrograde	-4598 Sep 16 j 19:55	6° \mathcal{B} 09'50	
direct	-4603 Jan 15 j 21:22	4° Υ 31'45		opposition	-4598 Nov 29 j 06:00	4° \mathcal{B} 07'31	-0°05'44
evening set	-4603 Apr 20 j 01:50	7° Υ 50'36		min. Earth dist.	-4598 Nov 30 j 07:57	4° \mathcal{B} 04'40	17.51820 AU
				direct	-4597 Feb 13 j 00:03	2° \mathcal{B} 01'49	
conjunction	-4603 May 06 j 22:03	8° Υ 51'05	-0°26'04	evening set	-4597 May 19 j 13:27	5° \mathcal{B} 27'52	
minimum elong	-4603 May 06 j 22:03	8° Υ 51'05	0°26'03	max. Earth dist.	-4597 Jun 03 j 23:32	6° \mathcal{B} 24'34	19.49509 AU
max. Earth dist.	-4603 May 05 j 20:27	8° Υ 47'13	19.83913 AU				
morning rise	-4603 May 23 j 17:03	9° Υ 51'25		conjunction	-4597 Jun 05 j 07:26	6° \mathcal{B} 29'30	-0°03'08
retrograde	-4603 Aug 24 j 12:48	13° Υ 08'35		minimum elong	-4597 Jun 05 j 07:26	6° \mathcal{B} 29'30	0°03'01
opposition	-4603 Nov 06 j 10:11	11° Υ 06'37	-0°27'04	behind sun begin	-4597 Jun 05 j 00:41	6° \mathcal{B} 28'29	
min. Earth dist.	-4603 Nov 07 j 07:23	11° Υ 04'18	17.80611 AU	behind sun end	-4597 Jun 05 j 14:11	6° \mathcal{B} 30'31	
direct	-4602 Jan 20 j 16:26	9° Υ 02'34		morning rise	-4597 Jun 21 j 22:21	7° \mathcal{B} 30'42	
evening set	-4602 Apr 25 j 02:10	12° Υ 22'43		retrograde	-4597 Sep 21 j 18:02	10° \mathcal{B} 50'43	
				opposition	-4597 Dec 04 j 02:43	8° \mathcal{B} 48'25	-0°01'09
conjunction	-4602 May 11 j 22:25	13° Υ 23'26	-0°22'34	min. Earth dist.	-4597 Dec 05 j 05:21	8° \mathcal{B} 45'30	17.47383 AU
minimum elong	-4602 May 11 j 22:25	13° Υ 23'27	0°22'31	direct	-4596 Feb 18 j 00:03	6° \mathcal{B} 42'31	
max. Earth dist.	-4602 May 10 j 20:04	13° Υ 19'27	19.77333 AU	asc. node	-4596 Mar 05 j 07:53	6° \mathcal{B} 49'37	
morning rise	-4602 May 28 j 16:48	14° Υ 23'58		evening set	-4596 May 23 j 17:18	10° \mathcal{B} 09'37	
retrograde	-4602 Aug 29 j 08:13	17° Υ 41'38		max. Earth dist.	-4596 Jun 08 j 03:30	11° \mathcal{B} 06'32	19.45310 AU
opposition	-4602 Nov 11 j 02:56	15° Υ 39'34	-0°23'05				
min. Earth dist.	-4602 Nov 12 j 01:57	15° Υ 37'03	17.74148 AU	conjunction	-4596 Jun 09 j 10:41	11° \mathcal{B} 11'22	0°01'06
direct	-4601 Jan 25 j 10:01	13° Υ 35'08		minimum elong	-4596 Jun 09 j 10:41	11° \mathcal{B} 11'22	0°01'14
evening set	-4601 Apr 30 j 03:14	16° Υ 56'32		behind sun begin	-4596 Jun 09 j 03:55	11° \mathcal{B} 10'20	
				behind sun end	-4596 Jun 09 j 17:26	11° \mathcal{B} 12'23	
conjunction	-4601 May 16 j 23:09	17° Υ 57'29	-0°18'54	morning rise	-4596 Jun 26 j 00:30	12° \mathcal{B} 12'38	
minimum elong	-4601 May 16 j 23:10	17° Υ 57'29	0°18'51		-4596 Aug 22 j 04:22	15° \mathcal{B}	
max. Earth dist.	-4601 May 15 j 18:24	17° Υ 53'06	19.71007 AU	retrograde	-4596 Sep 25 j 17:21	15° \mathcal{B} 33'03	
morning rise	-4601 Jun 02 j 17:13	18° Υ 58'11			-4596 Oct 30 j 21:09	15° \mathcal{B}	
retrograde	-4601 Sep 03 j 05:03	22° Υ 16'21		opposition	-4596 Dec 08 j 00:23	13° \mathcal{B} 30'49	0°03'28
opposition	-4601 Nov 15 j 20:25	20° Υ 14'10	-0°18'56	min. Earth dist.	-4596 Dec 09 j 03:05	13° \mathcal{B} 27'54	17.43417 AU
min. Earth dist.	-4601 Nov 16 j 20:10	20° Υ 11'34	17.67977 AU	direct	-4595 Feb 22 j 00:36	11° \mathcal{B} 24'46	
direct	-4600 Jan 30 j 07:03	18° Υ 09'20		evening set	-4595 May 28 j 21:35	14° \mathcal{B} 52'49	
evening set	-4600 May 04 j 04:55	21° Υ 31'58			-4595 May 30 j 20:47	15° \mathcal{B}	
max. Earth dist.	-4600 May 19 j 19:53	22° Υ 28'44	19.64990 AU	max. Earth dist.	-4595 Jun 13 j 05:40	15° \mathcal{B} 49'37	19.41576 AU
conjunction	-4600 May 21 j 00:40	22° Υ 33'08	-0°15'07	conjunction	-4595 Jun 14 j 13:58	15° \mathcal{B} 54'39	0°05'16
minimum elong	-4600 May 21 j 00:40	22° Υ 33'08	0°15'01	minimum elong	-4595 Jun 14 j 13:58	15° \mathcal{B} 54'39	0°05'26
behind sun begin	-4600 May 20 j 22:33	22° Υ 32'49		behind sun begin	-4595 Jun 14 j 07:27	15° \mathcal{B} 53'39	
behind sun end	-4600 May 21 j 02:46	22° Υ 33'26		behind sun end	-4595 Jun 14 j 20:29	15° \mathcal{B} 55'38	
morning rise	-4600 Jun 06 j 17:53	23° Υ 33'59		morning rise	-4595 Jul 01 j 02:47	16° \mathcal{B} 55'59	
retrograde	-4600 Sep 07 j 01:09	26° Υ 52'38		retrograde	-4595 Sep 30 j 16:18	20° \mathcal{B} 16'47	
opposition	-4600 Nov 19 j 14:46	24° Υ 50'22	-0°14'39	opposition	-4595 Dec 12 j 22:55	18° \mathcal{B} 14'36	0°08'05
min. Earth dist.	-4600 Nov 20 j 15:42	24° Υ 47'39	17.62148 AU	min. Earth dist.	-4595 Dec 14 j 02:25	18° \mathcal{B} 11'36	17.39925 AU
direct	-4599 Feb 03 j 02:49	22° Υ 45'13		direct	-4594 Feb 27 j 01:17	16° \mathcal{B} 08'25	
evening set	-4599 May 09 j 07:20	26° Υ 09'02		evening set	-4594 Jun 03 j 02:09	19° \mathcal{B} 37'21	
max. Earth dist.	-4599 May 24 j 19:39	27° Υ 05'38	19.59369 AU	max. Earth dist.	-4594 Jun 18 j 10:02	20° \mathcal{B} 34'17	19.38302 AU
conjunction	-4599 May 26 j 02:28	27° Υ 10'22	-0°11'12	conjunction	-4594 Jun 19 j 17:41	20° \mathcal{B} 39'14	0°09'23
minimum elong	-4599 May 26 j 02:28	27° Υ 10'22	0°11'07	minimum elong	-4594 Jun 19 j 17:41	20° \mathcal{B} 39'14	0°09'33
behind sun begin	-4599 May 25 j 21:29	27° Υ 09'37		behind sun begin	-4594 Jun 19 j 12:07	20° \mathcal{B} 38'23	
behind sun end	-4599 May 26 j 07:26	27° Υ 11'06		behind sun end	-4594 Jun 19 j 23:15	20° \mathcal{B} 40'05	
morning rise	-4599 Jun 11 j 19:06	28° Υ 11'21		morning rise	-4594 Jul 06 j 05:21	21° \mathcal{B} 40'36	
	-4599 Jul 14 j 22:28	0° \mathcal{B}		retrograde	-4594 Oct 05 j 17:19	25° \mathcal{B} 01'42	
retrograde	-4599 Sep 11 j 22:38	1° \mathcal{B} 30'29		opposition	-4594 Dec 17 j 22:01	22° \mathcal{B} 59'36	0°12'40
	-4599 Nov 12 j 02:59	30° $\mathcal{R}\Upsilon$		min. Earth dist.	-4594 Dec 19 j 01:09	22° \mathcal{B} 56'38	17.36864 AU
opposition	-4599 Nov 24 j 09:58	29° Υ 28'09	-0°10'14	direct	-4593 Mar 04 j 03:41	20° \mathcal{B} 53'18	
min. Earth dist.	-4599 Nov 25 j 11:25	29° Υ 25'23	17.56757 AU	evening set	-4593 Jun 08 j 07:05	24° \mathcal{B} 22'59	
direct	-4598 Feb 08 j 01:44	27° Υ 22'42					
	-4598 Apr 30 j 19:09	0° \mathcal{B}		conjunction	-4593 Jun 24 j 21:33	25° \mathcal{B} 24'54	0°13'27
evening set	-4598 May 14 j 09:56	0° \mathcal{B} 47'39		minimum elong	-4593 Jun 24 j 21:33	25° \mathcal{B} 24'54	0°13'38
max. Earth dist.	-4598 May 29 j 22:29	1° \mathcal{B} 44'30	19.54199 AU	behind sun begin	-4593 Jun 24 j 17:59	25° \mathcal{B} 24'21	
				behind sun end	-4593 Jun 25 j 01:08	25° \mathcal{B} 25'27	
conjunction	-4598 May 31 j 04:43	1° \mathcal{B} 49'09	-0°07'12	max. Earth dist.	-4593 Jun 23 j 13:16	25° \mathcal{B} 19'51	19.35448 AU
minimum elong	-4598 May 31 j 04:43	1° \mathcal{B} 49'09	0°07'06	morning rise	-4593 Jul 11 j 08:02	26° \mathcal{B} 26'16	
behind sun begin	-4598 May 30 j 22:29	1° \mathcal{B} 48'13		retrograde	-4593 Oct 10 j 16:33	29° \mathcal{B} 47'39	
behind sun end	-4598 May 31 j 10:57	1° \mathcal{B} 50'05		opposition	-4593 Dec 22 j 22:04	27° \mathcal{B} 45'36	0°17'11
morning rise	-4598 Jun 16 j 20:24	2° \mathcal{B} 50'15		min. Earth dist.	-4593 Dec 24 j 02:05	27° \mathcal{B} 42'33	17.34232 AU

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Attention, astronomical year style is used: The year -4592 in astronomical counting style is the year 4593 BCE in historical counting style.

direct	-4592 Mar 08 j 05:09	25° 8 39'12		morning rise	-4586 Aug 13 j 20:57	29° II 57'14	
evening set	-4592 Jun 12 j 12:05	29° 8 09'32			-4586 Aug 14 j 14:52	0° ☿	
	-4592 Jun 26 j 00:41	0° II		retrograde	-4586 Nov 12 j 19:35	3° ☿ 19'05	
max. Earth dist.	-4592 Jun 27 j 17:37	0° II 06'26	19.33025 AU	opposition	-4585 Jan 25 j 11:08	1° ☿ 17'12	0°43'55
				min. Earth dist.	-4585 Jan 26 j 08:38	1° ☿ 14'53	17.29419 AU
conjunction	-4592 Jun 29 j 01:26	0° II 11'26	0°17'27		-4585 Feb 26 j 13:44	30° R II	
minimum elong	-4592 Jun 29 j 01:26	0° II 11'26	0°17'39	direct	-4585 Apr 12 j 11:47	29° II 10'44	
morning rise	-4592 Jul 15 j 10:41	1° II 12'47			-4585 May 26 j 04:14	0° ☿	
retrograde	-4592 Oct 14 j 18:26	4° II 34'23		evening set	-4585 Jul 17 j 16:21	2° ☿ 42'04	
opposition	-4592 Dec 26 j 22:39	2° II 32'22	0°21'36				
min. Earth dist.	-4592 Dec 28 j 01:41	2° II 29'26	17.32017 AU	conjunction	-4585 Aug 02 j 20:52	3° ☿ 43'12	0°40'40
direct	-4591 Mar 13 j 09:16	0° II 25'54		minimum elong	-4585 Aug 02 j 20:52	3° ☿ 43'12	0°40'54
evening set	-4591 Jun 17 j 17:05	3° II 56'44		max. Earth dist.	-4585 Aug 01 j 22:10	3° ☿ 39'36	19.30144 AU
max. Earth dist.	-4591 Jul 02 j 21:48	4° II 53'40	19.31027 AU	morning rise	-4585 Aug 18 j 21:01	4° ☿ 43'44	
				retrograde	-4585 Nov 17 j 18:34	8° ☿ 05'27	
conjunction	-4591 Jul 04 j 05:18	4° II 58'38	0°21'20	opposition	-4584 Jan 30 j 14:12	6° ☿ 03'40	0°46'42
minimum elong	-4591 Jul 04 j 05:17	4° II 58'38	0°21'32	min. Earth dist.	-4584 Jan 31 j 10:33	6° ☿ 01'29	17.31118 AU
morning rise	-4591 Jul 20 j 13:12	5° II 59'55		direct	-4584 Apr 16 j 16:24	3° ☿ 57'23	
retrograde	-4591 Oct 19 j 17:46	9° II 21'42		evening set	-4584 Jul 21 j 18:30	7° ☿ 28'23	
opposition	-4591 Dec 31 j 23:53	7° II 19'43	0°25'52				
min. Earth dist.	-4590 Jan 02 j 03:34	7° II 16'42	17.30256 AU	conjunction	-4584 Aug 06 j 21:30	8° ☿ 29'18	0°43'01
direct	-4590 Mar 18 j 11:36	5° II 13'09		minimum elong	-4584 Aug 06 j 21:30	8° ☿ 29'18	0°43'14
evening set	-4590 Jun 22 j 21:50	8° II 44'24		max. Earth dist.	-4584 Aug 05 j 23:52	8° ☿ 25'52	19.32183 AU
max. Earth dist.	-4590 Jul 08 j 01:46	9° II 41'19	19.29505 AU	morning rise	-4584 Aug 22 j 20:35	9° ☿ 29'38	
				retrograde	-4584 Nov 21 j 18:35	12° ☿ 51'13	
conjunction	-4590 Jul 09 j 08:48	9° II 46'13	0°25'05	opposition	-4583 Feb 03 j 17:16	10° ☿ 49'32	0°49'09
minimum elong	-4590 Jul 09 j 08:48	9° II 46'13	0°25'18	min. Earth dist.	-4583 Feb 04 j 11:05	10° ☿ 47'38	17.33482 AU
morning rise	-4590 Jul 25 j 15:34	10° II 47'27		direct	-4583 Apr 21 j 21:17	8° ☿ 43'29	
retrograde	-4590 Oct 24 j 19:37	14° II 09'20		evening set	-4583 Jul 26 j 19:53	12° ☿ 14'02	
opposition	-4589 Jan 06 j 01:25	12° II 07'22	0°29'58				
min. Earth dist.	-4589 Jan 07 j 03:35	12° II 04'31	17.28967 AU	conjunction	-4583 Aug 11 j 21:45	13° ☿ 14'44	0°45'03
direct	-4589 Mar 23 j 16:36	10° II 00'46		minimum elong	-4583 Aug 11 j 21:45	13° ☿ 14'44	0°45'17
evening set	-4589 Jun 28 j 02:26	13° II 32'16		max. Earth dist.	-4583 Aug 11 j 03:32	13° ☿ 11'51	19.34863 AU
max. Earth dist.	-4589 Jul 13 j 06:32	14° II 29'20	19.28462 AU	morning rise	-4583 Aug 27 j 19:32	14° ☿ 14'52	
				retrograde	-4583 Nov 26 j 17:52	17° ☿ 36'14	
conjunction	-4589 Jul 14 j 12:14	14° II 34'01	0°28'39	opposition	-4582 Feb 08 j 20:19	15° ☿ 34'43	0°51'15
minimum elong	-4589 Jul 14 j 12:13	14° II 34'01	0°28'52	min. Earth dist.	-4582 Feb 09 j 12:31	15° ☿ 32'59	17.36453 AU
morning rise	-4589 Jul 30 j 17:33	15° II 35'09		direct	-4582 Apr 27 j 00:58	13° ☿ 28'57	
retrograde	-4589 Oct 29 j 18:50	18° II 57'06		evening set	-4582 Jul 31 j 20:44	16° ☿ 58'56	
opposition	-4588 Jan 11 j 03:27	16° II 55'09	0°33'50				
min. Earth dist.	-4588 Jan 12 j 05:54	16° II 52'16	17.28191 AU	conjunction	-4582 Aug 16 j 21:12	17° ☿ 59'24	0°46'47
direct	-4588 Mar 27 j 19:48	14° II 48'30		minimum elong	-4582 Aug 16 j 21:11	17° ☿ 59'24	0°47'02
evening set	-4588 Jul 02 j 06:45	18° II 20'10		max. Earth dist.	-4582 Aug 16 j 04:09	17° ☿ 56'42	19.38126 AU
max. Earth dist.	-4588 Jul 17 j 10:02	19° II 17'11	19.27969 AU	morning rise	-4582 Sep 01 j 18:01	18° ☿ 59'19	
				retrograde	-4582 Dec 01 j 17:55	22° ☿ 20'28	
conjunction	-4588 Jul 18 j 15:07	19° II 21'48	0°32'01	opposition	-4581 Feb 13 j 23:21	20° ☿ 19'05	0°53'00
minimum elong	-4588 Jul 18 j 15:07	19° II 21'48	0°32'14	min. Earth dist.	-4581 Feb 14 j 13:25	20° ☿ 17'35	17.39984 AU
morning rise	-4588 Aug 03 j 19:17	20° II 22'48		direct	-4581 May 02 j 04:24	18° ☿ 13'37	
retrograde	-4588 Nov 02 j 20:17	23° II 44'46		evening set	-4581 Aug 05 j 20:44	21° ☿ 42'57	
opposition	-4587 Jan 15 j 05:48	21° II 42'49	0°37'28				
min. Earth dist.	-4587 Jan 16 j 06:09	21° II 40'11	17.27980 AU	conjunction	-4581 Aug 21 j 20:04	22° ☿ 43'09	0°48'12
direct	-4587 Apr 02 j 01:41	19° II 36'12		minimum elong	-4581 Aug 21 j 20:04	22° ☿ 43'09	0°48'25
evening set	-4587 Jul 07 j 10:20	23° II 07'51		max. Earth dist.	-4581 Aug 21 j 06:16	22° ☿ 40'58	19.41906 AU
				morning rise	-4581 Sep 06 j 15:42	23° ☿ 42'50	
conjunction	-4587 Jul 23 j 17:31	24° II 09'21	0°35'09	retrograde	-4581 Dec 06 j 17:14	27° ☿ 03'41	
minimum elong	-4587 Jul 23 j 17:31	24° II 09'21	0°35'23	opposition	-4580 Feb 19 j 02:21	25° ☿ 02'28	0°54'23
max. Earth dist.	-4587 Jul 22 j 14:55	24° II 05'08	19.28053 AU	min. Earth dist.	-4580 Feb 19 j 14:22	25° ☿ 01'12	17.43984 AU
morning rise	-4587 Aug 08 j 20:13	25° II 10'13		direct	-4580 May 06 j 07:37	22° ☿ 57'21	
retrograde	-4587 Nov 07 j 19:07	28° II 32'09		evening set	-4580 Aug 09 j 20:10	26° ☿ 25'54	
opposition	-4586 Jan 20 j 08:32	26° II 30'13	0°40'51				
min. Earth dist.	-4586 Jan 21 j 08:26	26° II 27'38	17.28374 AU	conjunction	-4580 Aug 25 j 18:10	27° ☿ 25'50	0°49'17
direct	-4586 Apr 07 j 05:53	24° II 23'39		minimum elong	-4580 Aug 25 j 18:10	27° ☿ 25'50	0°49'30
evening set	-4586 Jul 12 j 13:40	27° II 55'12		max. Earth dist.	-4580 Aug 25 j 05:47	27° ☿ 23'52	19.46131 AU
				morning rise	-4580 Sep 10 j 12:54	28° ☿ 25'15	
conjunction	-4586 Jul 28 j 19:21	28° II 56'31	0°38'03		-4580 Oct 08 j 02:18	0° ♂	
minimum elong	-4586 Jul 28 j 19:21	28° II 56'31	0°38'16	retrograde	-4580 Dec 10 j 16:42	1° ♂ 45'48	
max. Earth dist.	-4586 Jul 27 j 17:35	28° II 52'26	19.28771 AU		-4579 Feb 17 j 04:04	30° R ☿	

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Attention, astronomical year style is used: The year -4579 in astronomical counting style is the year 4580 BCE in historical counting style.

opposition	-4579 Feb 23 j 05:14	29° 5 44'42	0°55'23	evening set	-4573 Sep 11 j 13:20	28° 8 41'38	
min. Earth dist.	-4579 Feb 23 j 15:25	29° 5 43'37	17.48420 AU				
direct	-4579 May 11 j 10:24	27° 5 39'54		conjunction	-4573 Sep 27 j 04:59	29° 8 39'27	0°47'36
	-4579 Jul 26 j 15:16	0° 8		minimum elong	-4573 Sep 27 j 04:59	29° 8 39'27	0°47'44
evening set	-4579 Aug 14 j 18:29	1° 8 07'35		max. Earth dist.	-4573 Sep 27 j 09:04	29° 8 40'05	19.84306 AU
					-4573 Oct 02 j 17:32	0° 8	
conjunction	-4579 Aug 30 j 15:28	2° 8 07'13	0°50'02	morning rise	-4573 Oct 12 j 19:10	0° 8 37'02	
minimum elong	-4579 Aug 30 j 15:28	2° 8 07'13	0°50'14	retrograde	-4572 Jan 12 j 14:14	3° 8 54'06	
max. Earth dist.	-4579 Aug 30 j 06:01	2° 8 05'43	19.50752 AU	opposition	-4572 Mar 28 j 12:29	1° 8 53'26	0°52'10
morning rise	-4579 Sep 15 j 09:14	3° 8 06'23		min. Earth dist.	-4572 Mar 28 j 06:19	1° 8 54'04	17.87513 AU
retrograde	-4579 Dec 15 j 15:08	6° 8 26'33			-4572 May 25 j 21:28	30° 8 8	
opposition	-4578 Feb 28 j 07:45	4° 8 25'35	0°56'01	direct	-4572 Jun 13 j 19:14	29° 8 51'00	
min. Earth dist.	-4578 Feb 28 j 15:26	4° 8 24'46	17.53199 AU		-4572 Jul 02 j 08:07	0° 8	
direct	-4578 May 16 j 13:42	2° 8 21'08		evening set	-4572 Sep 15 j 04:55	3° 8 10'17	
evening set	-4578 Aug 19 j 16:11	5° 8 47'49					
				conjunction	-4572 Sep 30 j 20:01	4° 8 07'48	0°46'09
conjunction	-4578 Sep 04 j 12:01	6° 8 47'09	0°50'26	minimum elong	-4572 Sep 30 j 20:01	4° 8 07'48	0°46'16
minimum elong	-4578 Sep 04 j 12:01	6° 8 47'09	0°50'37	max. Earth dist.	-4572 Oct 01 j 03:08	4° 8 08'54	19.90781 AU
max. Earth dist.	-4578 Sep 04 j 04:11	6° 8 45'55	19.55689 AU	morning rise	-4572 Oct 16 j 09:49	5° 8 05'08	
morning rise	-4578 Sep 20 j 04:59	7° 8 46'04		retrograde	-4571 Jan 16 j 06:30	8° 8 21'38	
retrograde	-4578 Dec 20 j 12:46	11° 8 05'48		opposition	-4571 Apr 02 j 11:00	6° 8 21'02	0°50'22
opposition	-4577 Mar 05 j 09:53	9° 8 04'55	0°56'16	min. Earth dist.	-4571 Apr 02 j 03:23	6° 8 21'49	17.94123 AU
min. Earth dist.	-4577 Mar 05 j 16:07	9° 8 04'16	17.58288 AU	direct	-4571 Jun 18 j 15:32	4° 8 19'00	
direct	-4577 May 21 j 15:39	7° 8 00'48		evening set	-4571 Sep 19 j 19:30	7° 8 36'57	
evening set	-4577 Aug 24 j 12:53	10° 8 26'25					
				conjunction	-4571 Oct 05 j 10:03	8° 8 34'10	0°44'25
conjunction	-4577 Sep 09 j 07:46	11° 8 25'27	0°50'31	minimum elong	-4571 Oct 05 j 10:03	8° 8 34'10	0°44'31
minimum elong	-4577 Sep 09 j 07:46	11° 8 25'27	0°50'42	max. Earth dist.	-4571 Oct 05 j 19:05	8° 8 35'33	19.97518 AU
max. Earth dist.	-4577 Sep 09 j 02:29	11° 8 24'38	19.60921 AU	morning rise	-4571 Oct 20 j 23:46	9° 8 31'15	
morning rise	-4577 Sep 24 j 23:57	12° 8 24'06		retrograde	-4570 Jan 21 j 00:35	12° 8 47'11	
	-4577 Nov 15 j 06:01	15° 8		opposition	-4570 Apr 07 j 08:36	10° 8 46'41	0°48'18
retrograde	-4577 Dec 25 j 10:00	15° 8 43'21		min. Earth dist.	-4570 Apr 06 j 21:30	10° 8 47'50	18.00962 AU
	-4576 Feb 05 j 01:25	15° 8 8		direct	-4570 Jun 23 j 12:36	8° 8 45'05	
opposition	-4576 Mar 09 j 11:37	13° 8 42'33	0°56'09	evening set	-4570 Sep 24 j 09:10	12° 8 01'42	
min. Earth dist.	-4576 Mar 09 j 14:55	13° 8 42'12	17.63636 AU				
direct	-4576 May 25 j 18:43	11° 8 38'47		conjunction	-4570 Oct 09 j 23:22	12° 8 58'38	0°42'27
	-4576 Aug 27 j 11:25	15° 8		minimum elong	-4570 Oct 09 j 23:22	12° 8 58'38	0°42'32
evening set	-4576 Aug 28 j 08:31	15° 8 03'13		max. Earth dist.	-4570 Oct 10 j 11:30	13° 8 00'30	20.04445 AU
				morning rise	-4570 Oct 25 j 12:50	13° 8 55'29	
conjunction	-4576 Sep 13 j 02:27	16° 8 01'57	0°50'15	retrograde	-4569 Jan 25 j 15:36	17° 8 10'51	
minimum elong	-4576 Sep 13 j 02:28	16° 8 01'57	0°50'25	opposition	-4569 Apr 12 j 05:35	15° 8 10'30	0°45'57
max. Earth dist.	-4576 Sep 12 j 23:21	16° 8 01'28	19.66395 AU	min. Earth dist.	-4569 Apr 11 j 17:12	15° 8 11'46	18.07971 AU
morning rise	-4576 Sep 28 j 18:00	17° 8 00'20		direct	-4569 Jun 28 j 06:55	13° 8 09'21	
retrograde	-4576 Dec 29 j 05:33	20° 8 19'06		evening set	-4569 Sep 28 j 22:04	16° 8 24'39	
opposition	-4575 Mar 14 j 12:58	18° 8 18'20	0°55'40				
min. Earth dist.	-4575 Mar 14 j 14:55	18° 8 18'07	17.69238 AU	conjunction	-4569 Oct 14 j 11:50	17° 8 21'19	0°40'15
direct	-4575 May 30 j 19:27	16° 8 14'53		minimum elong	-4569 Oct 14 j 11:50	17° 8 21'19	0°40'18
evening set	-4575 Sep 02 j 03:11	19° 8 38'05		max. Earth dist.	-4569 Oct 15 j 01:31	17° 8 23'24	20.11528 AU
				morning rise	-4569 Oct 30 j 01:23	18° 8 17'56	
conjunction	-4575 Sep 17 j 20:19	20° 8 36'31	0°49'40	retrograde	-4568 Jan 30 j 08:47	21° 8 32'45	
minimum elong	-4575 Sep 17 j 20:19	20° 8 36'31	0°49'50	min. Earth dist.	-4568 Apr 15 j 10:17	19° 8 34'07	18.15098 AU
max. Earth dist.	-4575 Sep 17 j 19:33	20° 8 36'24	19.72125 AU	opposition	-4568 Apr 16 j 01:48	19° 8 32'32	0°43'22
morning rise	-4575 Oct 03 j 11:21	21° 8 34'38		direct	-4568 Jul 02 j 01:31	17° 8 31'51	
retrograde	-4574 Jan 03 j 01:34	24° 8 52'50		evening set	-4568 Oct 02 j 09:58	20° 8 45'51	
opposition	-4574 Mar 19 j 13:19	22° 8 52'06	0°54'50				
min. Earth dist.	-4574 Mar 19 j 12:05	22° 8 52'14	17.75076 AU	conjunction	-4568 Oct 17 j 23:36	21° 8 42'14	0°37'50
direct	-4574 Jun 04 j 20:54	20° 8 48'58		minimum elong	-4568 Oct 17 j 23:36	21° 8 42'15	0°37'53
evening set	-4574 Sep 06 j 20:48	24° 8 10'55		max. Earth dist.	-4568 Oct 18 j 16:19	21° 8 44'47	20.18674 AU
				morning rise	-4568 Nov 02 j 13:07	22° 8 38'38	
conjunction	-4574 Sep 22 j 13:12	25° 8 09'02	0°48'47	retrograde	-4567 Feb 02 j 23:18	25° 8 52'55	
minimum elong	-4574 Sep 22 j 13:12	25° 8 09'02	0°48'55	opposition	-4567 Apr 20 j 21:24	23° 8 52'51	0°40'32
max. Earth dist.	-4574 Sep 22 j 15:02	25° 8 09'19	19.78084 AU	min. Earth dist.	-4567 Apr 20 j 04:51	23° 8 54'32	18.22250 AU
morning rise	-4574 Oct 08 j 03:43	26° 8 06'53		direct	-4567 Jul 06 j 18:25	21° 8 52'38	
retrograde	-4573 Jan 07 j 19:18	29° 8 24'31		evening set	-4567 Oct 06 j 21:21	25° 8 05'20	
opposition	-4573 Mar 24 j 13:19	27° 8 23'49	0°53'39				
min. Earth dist.	-4573 Mar 24 j 10:44	27° 8 24'05	17.81166 AU	conjunction	-4567 Oct 22 j 10:42	26° 8 01'28	0°35'12
direct	-4573 Jun 09 j 19:36	25° 8 21'01		minimum elong	-4567 Oct 22 j 10:42	26° 8 01'28	0°35'14

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Attention, astronomical year style is used: The year -4567 in astronomical counting style is the year 4568 BCE in historical counting style.

max. Earth dist.	-4567 Oct 23 j 04:24	26° <u>04</u> '09	20.25816 AU	retrograde	-4560 Mar 04 j 20:36	25° <u>26</u> '53	
morning rise	-4567 Nov 07 j 00:28	26° <u>05</u> '40		opposition	-4560 May 21 j 15:53	23° <u>27</u> '16	0°16'06
	-4566 Jan 17 j 13:54	0° <u>00</u> '		min. Earth dist.	-4560 May 20 j 13:41	23° <u>29</u> '54	18.67527 AU
retrograde	-4566 Feb 07 j 15:11	0° <u>11</u> '24		direct	-4560 Aug 05 j 23:14	21° <u>29</u> '29	
	-4566 Mar 01 j 01:19	30° <u>08</u> '		evening set	-4560 Nov 04 j 09:07	24° <u>33</u> '47	
opposition	-4566 Apr 25 j 15:56	28° <u>11</u> '28	0°37'30				
min. Earth dist.	-4566 Apr 24 j 20:52	28° <u>13</u> '24	18.29360 AU	conjunction	-4560 Nov 19 j 23:36	25° <u>28</u> '29	0°12'52
direct	-4566 Jul 11 j 10:42	26° <u>11</u> '42		minimum elong	-4560 Nov 19 j 23:36	25° <u>28</u> '29	0°12'46
evening set	-4566 Oct 11 j 07:54	29° <u>23</u> '08		behind sun begin	-4560 Nov 19 j 19:25	25° <u>27</u> '53	
	-4566 Oct 21 j 15:05	0° <u>00</u> '		behind sun end	-4560 Nov 20 j 03:47	25° <u>29</u> '05	
				max. Earth dist.	-4560 Nov 21 j 03:29	25° <u>32</u> '35	20.70247 AU
conjunction	-4566 Oct 26 j 21:16	0° <u>19</u> '02	0°32'24	morning rise	-4560 Dec 05 j 16:11	26° <u>23</u> '31	
minimum elong	-4566 Oct 26 j 21:16	0° <u>19</u> '02	0°32'24	retrograde	-4559 Mar 09 j 05:48	29° <u>33</u> '31	
max. Earth dist.	-4566 Oct 27 j 17:38	0° <u>22</u> '06	20.32862 AU	min. Earth dist.	-4559 May 25 j 01:56	27° <u>36</u> '36	18.72954 AU
morning rise	-4566 Nov 11 j 11:06	1° <u>15</u> '01		opposition	-4559 May 26 j 04:58	27° <u>33</u> '53	0°12'13
retrograde	-4565 Feb 12 j 04:52	4° <u>28</u> '12		direct	-4559 Aug 10 j 11:05	25° <u>36</u> '21	
opposition	-4565 Apr 30 j 10:00	2° <u>28</u> '24	0°34'17	evening set	-4559 Nov 08 j 15:20	28° <u>39</u> '37	
min. Earth dist.	-4565 Apr 29 j 14:05	2° <u>30</u> '25	18.36336 AU				
direct	-4565 Jul 16 j 02:52	0° <u>29</u> '04		conjunction	-4559 Nov 24 j 06:04	29° <u>34</u> '10	0°09'21
evening set	-4565 Oct 15 j 17:48	3° <u>39</u> '14		minimum elong	-4559 Nov 24 j 06:04	29° <u>34</u> '10	0°09'15
				behind sun begin	-4559 Nov 24 j 00:31	29° <u>33</u> '23	
conjunction	-4565 Oct 31 j 07:00	4° <u>34</u> '54	0°29'26	behind sun end	-4559 Nov 24 j 11:37	29° <u>34</u> '58	
minimum elong	-4565 Oct 31 j 07:00	4° <u>34</u> '54	0°29'26	max. Earth dist.	-4559 Nov 25 j 09:54	29° <u>38</u> '15	20.75557 AU
max. Earth dist.	-4565 Nov 01 j 03:54	4° <u>38</u> '02	20.39751 AU		-4559 Dec 01 j 14:20	0° <u>00</u> '	
morning rise	-4565 Nov 15 j 21:14	5° <u>30</u> '42		morning rise	-4559 Dec 09 j 23:26	0° <u>29</u> '06	
retrograde	-4564 Feb 16 j 19:49	8° <u>43</u> '22		retrograde	-4558 Mar 13 j 16:43	3° <u>38</u> '37	
min. Earth dist.	-4564 May 03 j 05:17	6° <u>45</u> '52	18.43126 AU	opposition	-4558 May 30 j 17:12	1° <u>39</u> '00	0°08'18
opposition	-4564 May 04 j 03:15	6° <u>43</u> '39	0°30'53	min. Earth dist.	-4558 May 29 j 13:12	1° <u>41</u> '48	18.78159 AU
direct	-4564 Jul 19 j 17:26	4° <u>44</u> '42			-4558 Jul 18 j 13:46	30° <u>00</u> '	
evening set	-4564 Oct 19 j 02:59	7° <u>53</u> '38		direct	-4558 Aug 14 j 20:42	29° <u>41</u> '41	
					-4558 Sep 10 j 13:10	0° <u>00</u> '	
conjunction	-4564 Nov 03 j 16:24	8° <u>49</u> '05	0°26'19	evening set	-4558 Nov 12 j 20:56	2° <u>44</u> '01	
minimum elong	-4564 Nov 03 j 16:24	8° <u>49</u> '05	0°26'17				
max. Earth dist.	-4564 Nov 04 j 15:39	8° <u>52</u> '33	20.46410 AU	conjunction	-4558 Nov 28 j 12:17	3° <u>38</u> '27	0°05'50
morning rise	-4564 Nov 19 j 06:51	9° <u>44</u> '42		minimum elong	-4558 Nov 28 j 12:17	3° <u>38</u> '27	0°05'43
retrograde	-4563 Feb 20 j 08:04	12° <u>56</u> '48		behind sun begin	-4558 Nov 28 j 06:00	3° <u>37</u> '33	
opposition	-4563 May 08 j 19:37	10° <u>57</u> '10	0°27'21	behind sun end	-4558 Nov 28 j 18:34	3° <u>39</u> '20	
min. Earth dist.	-4563 May 07 j 20:57	10° <u>59</u> '28	18.49653 AU	max. Earth dist.	-4558 Nov 29 j 18:13	3° <u>42</u> '49	20.80639 AU
direct	-4563 Jul 24 j 08:39	8° <u>58</u> '35		morning rise	-4558 Dec 14 j 06:11	4° <u>33</u> '16	
evening set	-4563 Oct 23 j 11:36	12° <u>06</u> '18		retrograde	-4557 Mar 18 j 01:17	7° <u>42</u> '22	
				min. Earth dist.	-4557 Jun 02 j 23:57	5° <u>45</u> '40	18.83122 AU
conjunction	-4563 Nov 08 j 01:04	13° <u>01</u> '32	0°23'05	opposition	-4557 Jun 04 j 04:49	5° <u>42</u> '46	0°04'22
minimum elong	-4563 Nov 08 j 01:04	13° <u>01</u> '32	0°23'03	direct	-4557 Aug 19 j 06:31	3° <u>45</u> '42	
max. Earth dist.	-4563 Nov 09 j 00:24	13° <u>05</u> '01	20.52800 AU	evening set	-4557 Nov 17 j 02:11	6° <u>47</u> '09	
morning rise	-4563 Nov 23 j 16:07	13° <u>57</u> '00					
retrograde	-4562 Feb 24 j 21:43	17° <u>08</u> '34		conjunction	-4557 Dec 02 j 17:54	7° <u>41</u> '28	0°02'16
min. Earth dist.	-4562 May 12 j 10:59	15° <u>11</u> '23	18.55900 AU	minimum elong	-4557 Dec 02 j 17:55	7° <u>41</u> '28	0°02'08
opposition	-4562 May 13 j 11:10	15° <u>08</u> '57	0°23'41	behind sun begin	-4557 Dec 02 j 11:22	7° <u>40</u> '32	
direct	-4562 Jul 28 j 21:51	13° <u>10</u> '40		behind sun end	-4557 Dec 03 j 00:27	7° <u>42</u> '23	
evening set	-4562 Oct 27 j 19:21	16° <u>17</u> '12		max. Earth dist.	-4557 Dec 03 j 23:39	7° <u>45</u> '48	20.85483 AU
				morning rise	-4557 Dec 18 j 12:44	8° <u>36</u> '12	
conjunction	-4562 Nov 12 j 09:09	17° <u>12</u> '15	0°19'45	retrograde	-4556 Mar 21 j 11:14	11° <u>44</u> '56	
minimum elong	-4562 Nov 12 j 09:09	17° <u>12</u> '15	0°19'41	min. Earth dist.	-4556 Jun 06 j 10:26	9° <u>48</u> '19	18.87844 AU
max. Earth dist.	-4562 Nov 13 j 10:41	17° <u>16</u> '02	20.58888 AU	opposition	-4556 Jun 07 j 15:52	9° <u>45</u> '23	0°00'26
morning rise	-4562 Nov 28 j 00:32	18° <u>07</u> '33		desc. node	-4556 Jul 17 j 12:46	8° <u>19</u> '51	
retrograde	-4561 Mar 01 j 08:20	21° <u>18</u> '34		direct	-4556 Aug 22 j 14:32	7° <u>48</u> '33	
min. Earth dist.	-4561 May 17 j 01:00	19° <u>21</u> '29	18.61841 AU	evening set	-4556 Nov 20 j 07:07	10° <u>49</u> '12	
opposition	-4561 May 18 j 01:56	19° <u>18</u> '59	0°19'56				
direct	-4561 Aug 02 j 11:41	17° <u>20</u> '58		conjunction	-4556 Dec 05 j 23:36	11° <u>43</u> '26	-0°01'24
evening set	-4561 Nov 01 j 02:38	20° <u>26</u> '21		minimum elong	-4556 Dec 05 j 23:36	11° <u>43</u> '26	0°01'31
				behind sun begin	-4556 Dec 05 j 17:03	11° <u>42</u> '31	
conjunction	-4561 Nov 16 j 16:35	21° <u>21</u> '13	0°16'20	behind sun end	-4556 Dec 06 j 06:10	11° <u>44</u> '22	
minimum elong	-4561 Nov 16 j 16:35	21° <u>21</u> '13	0°16'16	max. Earth dist.	-4556 Dec 07 j 07:08	11° <u>48</u> '01	20.90056 AU
behind sun begin	-4561 Nov 16 j 16:30	21° <u>21</u> '12		morning rise	-4556 Dec 21 j 19:05	12° <u>38</u> '06	
behind sun end	-4561 Nov 16 j 16:40	21° <u>21</u> '14			-4555 Feb 09 j 17:03	15° <u>00</u> '	
max. Earth dist.	-4561 Nov 17 j 18:13	21° <u>25</u> '00	20.64698 AU	retrograde	-4555 Mar 25 j 20:00	15° <u>46</u> '29	
morning rise	-4561 Dec 02 j 08:41	22° <u>16</u> '23			-4555 May 10 j 08:31	15° <u>00</u> '	

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Attention, astronomical year style is used: The year -4555 in astronomical counting style is the year 4556 BCE in historical counting style.

min. Earth dist.	-4555 Jun 10 j 20:04	13° \mathbb{M} .50'00	18.92261 AU	conjunction	-4550 Dec 30 j 07:39	5° \mathbb{A} .41'03	-0°21'48
opposition	-4555 Jun 12 j 02:02	13° \mathbb{M} .47'00	-0°03'30	minimum elong	-4550 Dec 30 j 07:39	5° \mathbb{A} .41'03	0°22'00
direct	-4555 Aug 26 j 22:53	11° \mathbb{M} .50'25		max. Earth dist.	-4550 Dec 31 j 14:21	5° \mathbb{A} .45'27	21.08976 AU
evening set	-4555 Nov 24 j 11:57	14° \mathbb{M} .50'22		morning rise	-4549 Jan 15 j 08:27	6° \mathbb{A} .35'39	
	-4555 Nov 27 j 07:57	15° \mathbb{M} .		retrograde	-4549 Apr 19 j 22:46	9° \mathbb{A} .42'45	
				min. Earth dist.	-4549 Jul 06 j 01:31	7° \mathbb{A} .46'20	19.09744 AU
conjunction	-4555 Dec 10 j 04:57	15° \mathbb{M} .44'31	-0°04'57	opposition	-4549 Jul 07 j 05:36	7° \mathbb{A} .43'32	-0°25'51
minimum elong	-4555 Dec 10 j 04:56	15° \mathbb{M} .44'31	0°05'06	direct	-4549 Sep 20 j 12:41	5° \mathbb{A} .47'48	
behind sun begin	-4555 Dec 09 j 22:34	15° \mathbb{M} .43'37		evening set	-4549 Dec 18 j 15:16	8° \mathbb{A} .44'59	
behind sun end	-4555 Dec 10 j 11:19	15° \mathbb{M} .45'25					
max. Earth dist.	-4555 Dec 11 j 11:48	15° \mathbb{M} .48'59	20.94312 AU	conjunction	-4548 Jan 03 j 12:59	9° \mathbb{A} .39'03	-0°24'54
morning rise	-4555 Dec 26 j 01:24	16° \mathbb{M} .39'08		minimum elong	-4548 Jan 03 j 12:59	9° \mathbb{A} .39'03	0°25'06
retrograde	-4554 Mar 30 j 04:58	19° \mathbb{M} .47'13		max. Earth dist.	-4548 Jan 04 j 17:49	9° \mathbb{A} .43'10	21.10282 AU
min. Earth dist.	-4554 Jun 15 j 05:54	17° \mathbb{M} .50'48	18.96348 AU	morning rise	-4548 Jan 19 j 14:58	10° \mathbb{A} .33'42	
opposition	-4554 Jun 16 j 11:51	17° \mathbb{M} .47'49	-0°07'24	retrograde	-4548 Apr 23 j 06:36	13° \mathbb{A} .40'40	
direct	-4554 Aug 31 j 05:29	15° \mathbb{M} .51'27		min. Earth dist.	-4548 Jul 09 j 10:05	11° \mathbb{A} .44'03	19.10774 AU
evening set	-4554 Nov 28 j 16:23	18° \mathbb{M} .50'46		opposition	-4548 Jul 10 j 12:47	11° \mathbb{A} .41'22	-0°29'13
				direct	-4548 Sep 23 j 17:16	9° \mathbb{A} .45'37	
conjunction	-4554 Dec 14 j 10:12	19° \mathbb{M} .44'51	-0°08'26	evening set	-4548 Dec 21 j 19:53	12° \mathbb{A} .42'34	
minimum elong	-4554 Dec 14 j 10:11	19° \mathbb{M} .44'51	0°08'36				
behind sun begin	-4554 Dec 14 j 04:27	19° \mathbb{M} .44'03		conjunction	-4547 Jan 06 j 18:41	13° \mathbb{A} .36'41	-0°27'53
behind sun end	-4554 Dec 14 j 15:56	19° \mathbb{M} .45'40		minimum elong	-4547 Jan 06 j 18:41	13° \mathbb{A} .36'41	0°28'06
max. Earth dist.	-4554 Dec 15 j 18:29	19° \mathbb{M} .49'31	20.98201 AU	max. Earth dist.	-4547 Jan 07 j 23:49	13° \mathbb{A} .40'50	21.11041 AU
morning rise	-4554 Dec 30 j 07:20	20° \mathbb{M} .39'27		morning rise	-4547 Jan 22 j 21:29	14° \mathbb{A} .31'23	
retrograde	-4553 Apr 03 j 13:52	23° \mathbb{M} .47'17		retrograde	-4547 Apr 27 j 14:02	17° \mathbb{A} .38'14	
opposition	-4553 Jun 20 j 21:07	21° \mathbb{M} .47'57	-0°11'15	opposition	-4547 Jul 14 j 19:15	15° \mathbb{A} .38'52	-0°32'25
min. Earth dist.	-4553 Jun 19 j 14:53	21° \mathbb{M} .50'58	19.00029 AU	min. Earth dist.	-4547 Jul 13 j 16:55	15° \mathbb{A} .41'31	19.11270 AU
direct	-4553 Sep 04 j 13:04	19° \mathbb{M} .51'48		direct	-4547 Sep 27 j 22:57	13° \mathbb{A} .43'03	
evening set	-4553 Dec 02 j 21:03	22° \mathbb{M} .50'33		evening set	-4547 Dec 26 j 00:40	16° \mathbb{A} .39'51	
conjunction	-4553 Dec 18 j 15:24	23° \mathbb{M} .44'36	-0°11'53	conjunction	-4546 Jan 11 j 00:14	17° \mathbb{A} .34'01	-0°30'43
minimum elong	-4553 Dec 18 j 15:24	23° \mathbb{M} .44'36	0°12'03	minimum elong	-4546 Jan 11 j 00:14	17° \mathbb{A} .34'01	0°30'56
behind sun begin	-4553 Dec 18 j 10:53	23° \mathbb{M} .43'58		max. Earth dist.	-4546 Jan 12 j 03:27	17° \mathbb{A} .37'53	21.11299 AU
behind sun end	-4553 Dec 18 j 19:56	23° \mathbb{M} .45'14		morning rise	-4546 Jan 27 j 04:11	18° \mathbb{A} .28'47	
max. Earth dist.	-4553 Dec 19 j 22:35	23° \mathbb{M} .49'05	21.01668 AU	retrograde	-4546 May 01 j 21:28	21° \mathbb{A} .35'34	
morning rise	-4552 Jan 03 j 13:36	24° \mathbb{M} .39'11		min. Earth dist.	-4546 Jul 18 j 00:47	19° \mathbb{A} .38'36	19.11303 AU
retrograde	-4552 Apr 06 j 22:15	27° \mathbb{M} .46'48		opposition	-4546 Jul 19 j 01:38	19° \mathbb{A} .36'07	-0°35'29
min. Earth dist.	-4552 Jun 23 j 00:20	25° \mathbb{M} .50'29	19.03274 AU	direct	-4546 Oct 02 j 02:21	17° \mathbb{A} .40'12	
opposition	-4552 Jun 24 j 05:55	25° \mathbb{M} .47'31	-0°15'02	evening set	-4546 Dec 30 j 05:19	20° \mathbb{A} .36'55	
direct	-4552 Sep 07 j 18:42	23° \mathbb{M} .51'33					
evening set	-4552 Dec 06 j 01:31	26° \mathbb{M} .49'49		conjunction	-4545 Jan 15 j 06:00	21° \mathbb{A} .31'10	-0°33'24
				minimum elong	-4545 Jan 15 j 06:00	21° \mathbb{A} .31'10	0°33'37
conjunction	-4552 Dec 21 j 20:50	27° \mathbb{M} .43'51	-0°15'16	max. Earth dist.	-4545 Jan 16 j 09:34	21° \mathbb{A} .35'05	21.11107 AU
minimum elong	-4552 Dec 21 j 20:50	27° \mathbb{M} .43'51	0°15'27	morning rise	-4545 Jan 31 j 10:47	22° \mathbb{A} .26'00	
behind sun begin	-4552 Dec 21 j 18:53	27° \mathbb{M} .43'35		retrograde	-4545 May 06 j 05:16	25° \mathbb{A} .32'46	
behind sun end	-4552 Dec 21 j 22:47	27° \mathbb{M} .44'07		min. Earth dist.	-4545 Jul 22 j 07:06	23° \mathbb{A} .35'42	19.10895 AU
max. Earth dist.	-4552 Dec 23 j 04:49	27° \mathbb{M} .48'26	21.04655 AU	opposition	-4545 Jul 26 j 07:39	23° \mathbb{A} .33'14	-0°38'21
morning rise	-4551 Jan 06 j 19:47	28° \mathbb{M} .38'25		direct	-4545 Oct 03 j 08:01	21° \mathbb{A} .37'13	
	-4551 Feb 01 j 19:24	0° \mathbb{A} .		evening set	-4544 Jan 03 j 10:29	24° \mathbb{A} .33'57	
retrograde	-4551 Apr 11 j 06:49	1° \mathbb{A} .45'50					
	-4551 Jun 23 j 00:07	30° \mathbb{R} .		conjunction	-4544 Jan 19 j 12:00	25° \mathbb{A} .28'18	-0°35'56
min. Earth dist.	-4551 Jun 27 j 08:45	29° \mathbb{M} .49'34	19.05993 AU	minimum elong	-4544 Jan 19 j 12:00	25° \mathbb{A} .28'18	0°36'09
opposition	-4551 Jun 28 j 14:12	29° \mathbb{M} .46'37	-0°18'45	max. Earth dist.	-4544 Jan 20 j 13:32	25° \mathbb{A} .31'55	21.10500 AU
direct	-4551 Sep 12 j 01:29	27° \mathbb{M} .50'47		morning rise	-4544 Feb 04 j 17:58	26° \mathbb{A} .23'14	
	-4551 Nov 25 j 05:51	0° \mathbb{A} .		retrograde	-4544 May 09 j 12:49	29° \mathbb{A} .30'01	
evening set	-4551 Dec 10 j 06:12	0° \mathbb{A} .48'38		opposition	-4544 Jul 26 j 13:27	27° \mathbb{A} .30'24	-0°41'04
				min. Earth dist.	-4544 Jul 25 j 14:35	27° \mathbb{A} .32'43	19.10096 AU
conjunction	-4551 Dec 26 j 02:08	1° \mathbb{A} .42'39	-0°18'35	direct	-4544 Oct 09 j 10:40	25° \mathbb{A} .34'17	
minimum elong	-4551 Dec 26 j 02:08	1° \mathbb{A} .42'39	0°18'46	evening set	-4543 Jan 06 j 15:49	28° \mathbb{A} .31'06	
max. Earth dist.	-4551 Dec 27 j 08:25	1° \mathbb{A} .47'00	21.07099 AU				
morning rise	-4550 Jan 11 j 02:09	2° \mathbb{A} .37'14		conjunction	-4543 Jan 22 j 18:31	29° \mathbb{A} .25'34	-0°38'17
retrograde	-4550 Apr 15 j 14:51	5° \mathbb{A} .44'29		minimum elong	-4543 Jan 22 j 18:31	29° \mathbb{A} .25'34	0°38'30
opposition	-4550 Jul 02 j 22:08	3° \mathbb{A} .45'17	-0°22'21	max. Earth dist.	-4543 Jan 23 j 20:06	29° \mathbb{A} .29'12	21.09502 AU
min. Earth dist.	-4550 Jul 01 j 17:46	3° \mathbb{A} .48'07	19.08161 AU		-4543 Feb 01 j 21:35	0° \mathbb{B} .	
direct	-4550 Sep 16 j 06:37	1° \mathbb{A} .49'31		morning rise	-4543 Feb 08 j 01:18	0° \mathbb{B} .20'37	
evening set	-4550 Dec 14 j 10:42	4° \mathbb{A} .47'01		retrograde	-4543 May 13 j 21:11	3° \mathbb{B} .27'28	
				opposition	-4543 Jul 30 j 19:04	1° \mathbb{B} .27'47	-0°43'34

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Attention, astronomical year style is used: The year -4543 in astronomical counting style is the year 4544 BCE in historical counting style.

min. Earth dist.	-4543 Jul 29 j 20:38	1° Z 30'03	19.08896 AU	minimum elong	-4536 Feb 21 j 05:18	27° Z 23'58	0°49'29
	-4543 Sep 09 j 16:32	30° R 27		max. Earth dist.	-4536 Feb 21 j 17:38	27° Z 25'44	20.90786 AU
direct	-4543 Oct 13 j 16:01	29° Z 31'34		morning rise	-4536 Mar 08 j 18:48	28° Z 20'12	
	-4543 Nov 15 j 23:38	0° Z			-4536 Apr 10 j 12:49	0° Z	
evening set	-4542 Jan 10 j 21:34	2° Z 28'34		retrograde	-4536 Jun 11 j 14:08	1° Z 28'41	
					-4536 Aug 14 j 15:24	30° R 28	
conjunction	-4542 Jan 27 j 01:05	3° Z 23'09	-0°40'28	opposition	-4536 Aug 27 j 11:57	29° Z 28'36	-0°54'55
minimum elong	-4542 Jan 27 j 01:05	3° Z 23'09	0°40'42	min. Earth dist.	-4536 Aug 27 j 01:58	29° Z 29'38	18.88570 AU
max. Earth dist.	-4542 Jan 28 j 00:24	3° Z 26'27	21.08111 AU	direct	-4536 Nov 10 j 00:20	27° Z 31'04	
morning rise	-4542 Feb 12 j 09:01	4° Z 18'20			-4535 Jan 29 j 14:24	0° Z	
retrograde	-4542 May 18 j 05:19	7° Z 25'18		evening set	-4535 Feb 08 j 05:29	0° Z 31'33	
min. Earth dist.	-4542 Aug 03 j 04:10	5° Z 27'40	19.07316 AU				
opposition	-4542 Aug 04 j 00:45	5° Z 25'34	-0°45'53	conjunction	-4535 Feb 24 j 16:23	1° Z 27'29	-0°49'57
direct	-4542 Oct 17 j 19:07	3° Z 29'14		minimum elong	-4535 Feb 24 j 16:23	1° Z 27'29	0°50'09
evening set	-4541 Jan 15 j 03:39	6° Z 26'30		max. Earth dist.	-4535 Feb 25 j 03:26	1° Z 29'04	20.86193 AU
				morning rise	-4535 Mar 13 j 06:34	2° Z 23'55	
conjunction	-4541 Jan 31 j 08:22	7° Z 21'14	-0°42'28	retrograde	-4535 Jun 16 j 01:40	5° Z 32'43	
minimum elong	-4541 Jan 31 j 08:22	7° Z 21'14	0°42'41	opposition	-4535 Aug 31 j 18:25	3° Z 32'30	-0°55'31
max. Earth dist.	-4541 Feb 01 j 07:30	7° Z 24'31	21.06338 AU	min. Earth dist.	-4535 Aug 31 j 09:38	3° Z 33'25	18.83735 AU
morning rise	-4541 Feb 16 j 17:06	8° Z 16'33		direct	-4535 Nov 14 j 07:42	1° Z 34'39	
retrograde	-4541 May 22 j 14:13	11° Z 23'41		evening set	-4534 Feb 12 j 16:01	4° Z 35'52	
min. Earth dist.	-4541 Aug 07 j 10:18	9° Z 25'57	19.05337 AU				
opposition	-4541 Aug 08 j 06:16	9° Z 23'56	-0°47'59	conjunction	-4534 Mar 01 j 03:43	5° Z 32'03	-0°50'21
direct	-4541 Oct 21 j 23:56	7° Z 27'28		minimum elong	-4534 Mar 01 j 03:43	5° Z 32'03	0°50'32
evening set	-4540 Jan 19 j 10:24	10° Z 25'06		max. Earth dist.	-4534 Mar 01 j 11:28	5° Z 33'09	20.81148 AU
				morning rise	-4534 Mar 17 j 18:50	6° Z 28'42	
conjunction	-4540 Feb 04 j 16:01	11° Z 19'59	-0°44'16	retrograde	-4534 Jun 20 j 11:05	9° Z 37'53	
minimum elong	-4540 Feb 04 j 16:01	11° Z 19'59	0°44'30	opposition	-4534 Sep 05 j 01:14	7° Z 37'29	-0°55'51
max. Earth dist.	-4540 Feb 05 j 12:31	11° Z 22'54	21.04162 AU	min. Earth dist.	-4534 Sep 04 j 19:19	7° Z 38'06	18.78494 AU
morning rise	-4540 Feb 21 j 01:55	12° Z 15'28		direct	-4534 Nov 18 j 13:08	5° Z 39'16	
retrograde	-4540 May 25 j 23:21	15° Z 22'49		evening set	-4533 Feb 17 j 03:11	8° Z 41'18	
opposition	-4540 Aug 11 j 12:00	13° Z 23'01	-0°49'52				
min. Earth dist.	-4540 Aug 10 j 18:19	13° Z 24'49	19.02947 AU	conjunction	-4533 Mar 05 j 16:01	9° Z 37'44	-0°50'30
direct	-4540 Oct 25 j 03:48	11° Z 26'24		minimum elong	-4533 Mar 05 j 16:01	9° Z 37'44	0°50'42
evening set	-4539 Jan 22 j 17:42	14° Z 24'28		max. Earth dist.	-4533 Mar 05 j 22:35	9° Z 38'40	20.75733 AU
				morning rise	-4533 Mar 22 j 07:45	10° Z 34'36	
conjunction	-4539 Feb 08 j 00:29	15° Z 19'33	-0°45'52	retrograde	-4533 Jun 24 j 23:33	13° Z 44'10	
minimum elong	-4539 Feb 08 j 00:29	15° Z 19'33	0°46'05	opposition	-4533 Sep 09 j 08:05	11° Z 43'37	-0°55'53
max. Earth dist.	-4539 Feb 08 j 20:21	15° Z 22'22	21.01549 AU	min. Earth dist.	-4533 Sep 09 j 03:15	11° Z 44'07	18.72911 AU
morning rise	-4539 Feb 24 j 11:08	16° Z 15'12		direct	-4533 Nov 22 j 21:34	9° Z 45'00	
retrograde	-4539 May 30 j 08:44	19° Z 22'46		evening set	-4532 Feb 21 j 15:16	12° Z 47'55	
opposition	-4539 Aug 15 j 17:34	17° Z 22'57	-0°51'31				
min. Earth dist.	-4539 Aug 15 j 00:52	17° Z 24'39	19.00096 AU	conjunction	-4532 Mar 09 j 04:53	13° Z 44'37	-0°50'24
direct	-4539 Oct 29 j 08:47	15° Z 26'11		minimum elong	-4532 Mar 09 j 04:53	13° Z 44'37	0°50'34
evening set	-4538 Jan 27 j 01:45	18° Z 24'46		max. Earth dist.	-4532 Mar 09 j 08:13	13° Z 45'06	20.70007 AU
				morning rise	-4532 Mar 25 j 21:27	14° Z 41'44	
conjunction	-4538 Feb 12 j 09:23	19° Z 20'02	-0°47'14		-4532 Mar 31 j 09:06	15° Z	
minimum elong	-4538 Feb 12 j 09:23	19° Z 20'02	0°47'27	retrograde	-4532 Jun 28 j 09:36	17° Z 51'42	
max. Earth dist.	-4538 Feb 13 j 02:10	19° Z 22'25	20.98465 AU	opposition	-4532 Sep 12 j 15:28	15° Z 50'59	-0°55'38
morning rise	-4538 Feb 28 j 21:06	20° Z 15'51		min. Earth dist.	-4532 Sep 12 j 13:27	15° Z 51'12	18.67059 AU
retrograde	-4538 Jun 03 j 18:18	23° Z 23'43			-4532 Oct 03 j 15:15	15° R 22	
opposition	-4538 Aug 19 j 23:34	21° Z 23'50	-0°52'54	direct	-4532 Nov 26 j 03:50	13° Z 51'59	
min. Earth dist.	-4538 Aug 19 j 09:29	21° Z 25'17	18.96769 AU		-4531 Jan 17 j 10:20	15° Z	
direct	-4538 Nov 02 j 13:13	19° Z 26'52		evening set	-4531 Feb 25 j 03:55	16° Z 55'51	
evening set	-4537 Jan 31 j 10:09	22° Z 26'01					
				conjunction	-4531 Mar 13 j 18:33	17° Z 52'49	-0°50'02
conjunction	-4537 Feb 16 j 19:01	23° Z 21'30	-0°48'23	minimum elong	-4531 Mar 13 j 18:33	17° Z 52'49	0°50'11
minimum elong	-4537 Feb 16 j 19:00	23° Z 21'30	0°48'35	max. Earth dist.	-4531 Mar 13 j 20:40	17° Z 53'07	20.64041 AU
max. Earth dist.	-4537 Feb 17 j 10:46	23° Z 23'44	20.94886 AU	morning rise	-4531 Mar 30 j 11:36	18° Z 50'11	
morning rise	-4537 Mar 05 j 07:29	24° Z 17'31		retrograde	-4531 Jul 02 j 22:40	22° Z 00'36	
retrograde	-4537 Jun 08 j 04:41	27° Z 25'41		opposition	-4531 Sep 16 j 23:02	19° Z 59'44	-0°55'06
opposition	-4537 Aug 24 j 05:39	25° Z 25'43	-0°54'03	min. Earth dist.	-4531 Sep 16 j 21:54	19° Z 59'51	18.60989 AU
min. Earth dist.	-4537 Aug 23 j 16:44	25° Z 27'02	18.92923 AU	direct	-4531 Nov 30 j 13:22	18° Z 00'21	
direct	-4537 Nov 06 j 19:23	23° Z 28'30		evening set	-4530 Mar 01 j 17:30	21° Z 05'13	
evening set	-4536 Feb 04 j 19:35	26° Z 28'17					
				conjunction	-4530 Mar 18 j 08:49	22° Z 02'29	-0°49'24
conjunction	-4536 Feb 21 j 05:18	27° Z 23'58	-0°49'17	minimum elong	-4530 Mar 18 j 08:49	22° Z 02'29	0°49'33

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Attention, astronomical year style is used: The year -4530 in astronomical counting style is the year 4531 BCE in historical counting style.

max. Earth dist.	-4530 Mar 18 j 07:54	22° \approx 02'21	20.57888 AU	min. Earth dist.	-4524 Oct 16 j 10:08	19° \approx 48'45	18.15355 AU
morning rise	-4530 Apr 04 j 02:34	23° \approx 00'05		direct	-4524 Dec 29 j 17:00	17° \approx 48'13	
retrograde	-4530 Jul 07 j 09:44	26° \approx 11'00		evening set	-4523 Apr 01 j 18:11	21° \approx 01'40	
opposition	-4530 Sep 21 j 07:15	24° \approx 09'59	-0°54'16				
min. Earth dist.	-4530 Sep 21 j 08:50	24° \approx 09'49	18.54771 AU	conjunction	-4523 Apr 18 j 13:50	22° \approx 01'01	-0°37'39
direct	-4530 Dec 04 j 20:43	22° \approx 10'13		minimum elong	-4523 Apr 18 j 13:50	22° \approx 01'01	0°37'42
evening set	-4529 Mar 06 j 07:41	25° \approx 16'10		max. Earth dist.	-4523 Apr 17 j 21:09	21° \approx 58'33	20.11900 AU
				morning rise	-4523 May 05 j 09:34	23° \approx 00'25	
conjunction	-4529 Mar 22 j 23:58	26° \approx 13'43	-0°48'31	retrograde	-4523 Aug 06 j 20:18	26° \approx 15'18	
minimum elong	-4529 Mar 22 j 23:58	26° \approx 13'43	0°48'38	opposition	-4523 Oct 20 j 09:45	24° \approx 13'45	-0°40'20
max. Earth dist.	-4529 Mar 22 j 21:44	26° \approx 13'24	20.51613 AU	min. Earth dist.	-4523 Oct 20 j 23:56	24° \approx 12'14	18.08425 AU
morning rise	-4529 Apr 08 j 18:10	27° \approx 11'35		direct	-4522 Jan 03 j 08:36	22° \approx 11'24	
	-4529 Jun 11 j 18:24	0° \approx		evening set	-4522 Apr 06 j 15:17	25° \approx 26'10	
retrograde	-4529 Jul 11 j 23:51	0° \approx 23'00					
	-4529 Aug 11 j 08:18	30° \approx		conjunction	-4522 Apr 23 j 11:14	26° \approx 25'48	-0°34'57
opposition	-4529 Sep 25 j 15:52	28° \approx 21'54	-0°53'09	minimum elong	-4522 Apr 23 j 11:14	26° \approx 25'48	0°34'58
min. Earth dist.	-4529 Sep 25 j 18:14	28° \approx 21'39	18.48432 AU	max. Earth dist.	-4522 Apr 22 j 16:11	26° \approx 22'58	20.04928 AU
direct	-4529 Dec 09 j 07:18	26° \approx 21'46		morning rise	-4522 May 10 j 06:52	27° \approx 25'26	
evening set	-4528 Mar 09 j 23:06	29° \approx 28'51			-4522 Jul 02 j 21:39	0° \approx	
	-4528 Mar 19 j 00:14	0° \approx		retrograde	-4522 Aug 11 j 12:48	0° \approx 40'52	
					-4522 Sep 20 j 17:18	30° \approx	
conjunction	-4528 Mar 26 j 16:01	0° \approx 26'42	-0°47'21	opposition	-4522 Oct 24 j 23:22	28° \approx 39'13	-0°37'14
minimum elong	-4528 Mar 26 j 16:01	0° \approx 26'42	0°47'29	min. Earth dist.	-4522 Oct 25 j 16:23	28° \approx 37'23	18.01438 AU
max. Earth dist.	-4528 Mar 26 j 10:47	0° \approx 25'57	20.45223 AU	direct	-4521 Jan 07 j 22:47	26° \approx 36'25	
morning rise	-4528 Apr 12 j 10:44	1° \approx 24'50		evening set	-4521 Apr 11 j 13:12	29° \approx 52'29	
retrograde	-4528 Jul 15 j 12:15	4° \approx 36'47			-4521 Apr 13 j 16:39	0° \approx	
opposition	-4528 Sep 29 j 01:07	2° \approx 35'35	-0°51'44	max. Earth dist.	-4521 Apr 27 j 11:53	0° \approx 49'12	19.97944 AU
min. Earth dist.	-4528 Sep 29 j 06:19	2° \approx 35'02	18.42002 AU				
direct	-4528 Dec 12 j 16:21	0° \approx 35'06		conjunction	-4521 Apr 28 j 09:22	0° \approx 52'24	-0°32'02
evening set	-4527 Mar 14 j 15:17	3° \approx 43'24		minimum elong	-4521 Apr 28 j 09:22	0° \approx 52'24	0°32'03
				morning rise	-4521 May 15 j 04:59	1° \approx 52'17	
conjunction	-4527 Mar 31 j 09:00	4° \approx 41'33	-0°45'56	retrograde	-4521 Aug 16 j 08:18	5° \approx 08'16	
minimum elong	-4527 Mar 31 j 09:00	4° \approx 41'33	0°46'02	opposition	-4521 Oct 29 j 13:36	3° \approx 06'28	-0°33'53
max. Earth dist.	-4527 Mar 31 j 02:13	4° \approx 40'34	20.38759 AU	min. Earth dist.	-4521 Oct 30 j 07:34	3° \approx 04'31	17.94463 AU
morning rise	-4527 Apr 17 j 04:02	5° \approx 39'56		direct	-4520 Jan 12 j 16:02	1° \approx 03'13	
retrograde	-4527 Jul 20 j 03:34	8° \approx 52'28		evening set	-4520 Apr 15 j 11:59	4° \approx 20'36	
opposition	-4527 Oct 03 j 10:57	6° \approx 51'13	-0°50'02	max. Earth dist.	-4520 May 01 j 09:10	5° \approx 17'19	19.90990 AU
min. Earth dist.	-4527 Oct 03 j 17:00	6° \approx 50'34	18.35490 AU				
direct	-4527 Dec 17 j 04:00	4° \approx 50'23		conjunction	-4520 May 02 j 08:19	5° \approx 20'47	-0°28'54
evening set	-4526 Mar 19 j 08:25	7° \approx 59'55		minimum elong	-4520 May 02 j 08:19	5° \approx 20'47	0°28'53
				morning rise	-4520 May 19 j 03:33	6° \approx 20'53	
conjunction	-4526 Apr 05 j 02:38	8° \approx 58'23	-0°44'15	retrograde	-4520 Aug 20 j 02:05	9° \approx 37'23	
minimum elong	-4526 Apr 05 j 02:39	8° \approx 58'23	0°44'21	opposition	-4520 Nov 02 j 04:41	7° \approx 35'27	-0°30'18
max. Earth dist.	-4526 Apr 04 j 17:05	8° \approx 56'59	20.32201 AU	min. Earth dist.	-4520 Nov 03 j 01:06	7° \approx 33'14	17.87567 AU
morning rise	-4526 Apr 21 j 22:01	9° \approx 57'01		direct	-4519 Jan 16 j 08:16	5° \approx 31'46	
retrograde	-4526 Jul 24 j 17:38	13° \approx 10'09		evening set	-4519 Apr 20 j 11:31	8° \approx 50'26	
opposition	-4526 Oct 07 j 21:39	11° \approx 08'50	-0°48'02	max. Earth dist.	-4519 May 06 j 06:20	9° \approx 47'03	19.84176 AU
min. Earth dist.	-4526 Oct 08 j 06:38	11° \approx 07'52	18.28890 AU				
direct	-4526 Dec 21 j 14:58	9° \approx 07'40		conjunction	-4519 May 07 j 07:46	9° \approx 50'52	-0°25'34
evening set	-4525 Mar 24 j 02:39	12° \approx 18'29		minimum elong	-4519 May 07 j 07:46	9° \approx 50'52	0°25'33
				morning rise	-4519 May 24 j 02:48	10° \approx 51'11	
conjunction	-4525 Apr 09 j 21:30	13° \approx 17'14	-0°42'18	retrograde	-4519 Aug 24 j 22:10	14° \approx 08'13	
minimum elong	-4525 Apr 09 j 21:30	13° \approx 17'14	0°42'23	opposition	-4519 Nov 06 j 20:27	12° \approx 06'08	-0°26'31
max. Earth dist.	-4525 Apr 09 j 09:59	13° \approx 15'33	20.25555 AU	min. Earth dist.	-4519 Nov 07 j 17:31	12° \approx 03'51	17.80851 AU
morning rise	-4525 Apr 26 j 17:05	14° \approx 16'08		direct	-4518 Jan 21 j 02:55	10° \approx 02'02	
retrograde	-4525 Jul 29 j 10:25	17° \approx 29'51		evening set	-4518 Apr 25 j 11:32	13° \approx 21'58	
opposition	-4525 Oct 12 j 08:47	15° \approx 28'29	-0°45'45	max. Earth dist.	-4518 May 11 j 05:39	14° \approx 18'42	19.77563 AU
min. Earth dist.	-4525 Oct 12 j 18:53	15° \approx 27'24	18.22183 AU				
direct	-4525 Dec 26 j 04:25	13° \approx 26'57		conjunction	-4518 May 12 j 07:49	14° \approx 22'40	-0°22'05
evening set	-4524 Mar 27 j 22:02	16° \approx 39'05		minimum elong	-4518 May 12 j 07:49	14° \approx 22'40	0°22'02
				morning rise	-4518 May 29 j 02:18	15° \approx 23'09	
conjunction	-4524 Apr 13 j 17:18	17° \approx 38'08	-0°40'06	retrograde	-4518 Aug 29 j 17:18	18° \approx 40'42	
minimum elong	-4524 Apr 13 j 17:18	17° \approx 38'08	0°40'09	opposition	-4518 Nov 11 j 13:08	16° \approx 38'31	-0°22'33
max. Earth dist.	-4524 Apr 13 j 02:57	17° \approx 36'02	20.18780 AU	min. Earth dist.	-4518 Nov 12 j 12:06	16° \approx 36'01	17.74375 AU
morning rise	-4524 Apr 30 j 12:59	18° \approx 37'18		direct	-4517 Jan 25 j 21:08	14° \approx 34'00	
retrograde	-4524 Aug 02 j 01:53	21° \approx 51'36		evening set	-4517 Apr 30 j 12:31	17° \approx 55'12	
opposition	-4524 Oct 15 j 20:59	19° \approx 50'09	-0°43'11	max. Earth dist.	-4517 May 16 j 04:07	18° \approx 51'48	19.71242 AU

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Attention, astronomical year style is used: The year -4517 in astronomical counting style is the year 4518 BCE in historical counting style.

conjunction	-4517 May 17 j 08:28	18° Υ 56'07	-0°18'25			-4512 Jul 29 j 13:04	15° \mathcal{B}	
minimum elong	-4517 May 17 j 08:28	18° Υ 56'07	0°18'21	retrograde		-4512 Sep 26 j 03:20	16° \mathcal{B} 30'35	
morning rise	-4517 Jun 03 j 02:34	19° Υ 56'48				-4512 Nov 26 j 05:29	15° $\mathcal{R}\mathcal{B}$	
retrograde	-4517 Sep 03 j 13:59	23° Υ 14'51		opposition		-4512 Dec 08 j 10:06	14° \mathcal{B} 28'24	0°03'56
opposition	-4517 Nov 16 j 06:23	21° Υ 12'34	-0°18'24	min. Earth dist.		-4512 Dec 09 j 12:53	14° \mathcal{B} 25'28	17.43848 AU
min. Earth dist.	-4517 Nov 17 j 05:51	21° Υ 10'01	17.68228 AU	direct		-4511 Feb 22 j 09:35	12° \mathcal{B} 22'26	
direct	-4516 Jan 30 j 17:12	19° Υ 07'41				-4511 May 14 j 23:45	15° \mathcal{B}	
evening set	-4516 May 04 j 14:05	22° Υ 30'08		evening set		-4511 May 29 j 06:44	15° \mathcal{B} 50'28	
max. Earth dist.	-4516 May 20 j 05:26	23° Υ 26'56	19.65268 AU					
conjunction	-4516 May 21 j 09:51	23° Υ 31'16	-0°14'38	conjunction		-4511 Jun 14 j 23:09	16° \mathcal{B} 52'17	0°05'41
minimum elong	-4516 May 21 j 09:51	23° Υ 31'16	0°14'34	minimum elong		-4511 Jun 14 j 23:10	16° \mathcal{B} 52'17	0°05'50
behind sun begin	-4516 May 21 j 07:11	23° Υ 30'52		behind sun begin		-4511 Jun 14 j 16:42	16° \mathcal{B} 51'19	
behind sun end	-4516 May 21 j 12:31	23° Υ 31'40		behind sun end		-4511 Jun 15 j 05:37	16° \mathcal{B} 53'16	
morning rise	-4516 Jun 07 j 03:08	24° Υ 32'06		max. Earth dist.		-4511 Jun 13 j 14:48	16° \mathcal{B} 47'15	19.41976 AU
retrograde	-4516 Sep 07 j 10:44	27° Υ 50'39		morning rise		-4511 Jul 01 j 12:04	17° \mathcal{B} 53'38	
opposition	-4516 Nov 20 j 00:46	25° Υ 48'20	-0°14'07	retrograde		-4511 Oct 01 j 02:02	21° \mathcal{B} 14'28	
min. Earth dist.	-4516 Nov 21 j 01:28	25° Υ 45'38	17.62458 AU	opposition		-4511 Dec 13 j 08:34	19° \mathcal{B} 12'19	0°08'32
direct	-4515 Feb 03 j 13:29	23° Υ 43'08		min. Earth dist.		-4511 Dec 14 j 12:04	19° \mathcal{B} 09'19	17.40287 AU
evening set	-4515 May 09 j 16:14	27° Υ 06'48		direct		-4510 Feb 27 j 10:26	17° \mathcal{B} 06'13	
max. Earth dist.	-4515 May 25 j 05:05	28° Υ 03'27	19.59714 AU	evening set		-4510 Jun 03 j 11:16	20° \mathcal{B} 35'07	
				max. Earth dist.		-4510 Jun 18 j 19:12	21° \mathcal{B} 32'04	19.38613 AU
conjunction	-4515 May 26 j 11:24	28° Υ 08'06	-0°10'44	conjunction		-4510 Jun 20 j 02:55	21° \mathcal{B} 37'01	0°09'46
minimum elong	-4515 May 26 j 11:24	28° Υ 08'06	0°10'39	minimum elong		-4510 Jun 20 j 02:54	21° \mathcal{B} 37'01	0°09'57
behind sun begin	-4515 May 26 j 06:13	28° Υ 07'20		behind sun begin		-4510 Jun 19 j 21:28	21° \mathcal{B} 36'11	
behind sun end	-4515 May 26 j 16:34	28° Υ 08'53		behind sun end		-4510 Jun 20 j 08:20	21° \mathcal{B} 37'50	
morning rise	-4515 Jun 12 j 04:07	29° Υ 09'05		morning rise		-4510 Jul 06 j 14:39	22° \mathcal{B} 38'23	
	-4515 Jun 26 j 18:52	0° \mathcal{B}		retrograde		-4510 Oct 06 j 02:34	25° \mathcal{B} 59'32	
retrograde	-4515 Sep 12 j 07:56	2° \mathcal{B} 28'09		opposition		-4510 Dec 18 j 07:47	23° \mathcal{B} 57'28	0°13'06
opposition	-4515 Nov 24 j 19:49	0° \mathcal{B} 25'48	-0°09'43	min. Earth dist.		-4510 Dec 19 j 11:03	23° \mathcal{B} 54'29	17.37120 AU
min. Earth dist.	-4515 Nov 25 j 20:52	0° \mathcal{B} 23'04	17.57134 AU	direct		-4509 Mar 04 j 13:13	21° \mathcal{B} 51'14	
	-4515 Dec 04 j 17:47	30° $\mathcal{R}\Upsilon$		evening set		-4509 Jun 08 j 16:17	25° \mathcal{B} 20'53	
direct	-4514 Feb 08 j 10:53	28° Υ 20'21		max. Earth dist.		-4509 Jun 23 j 22:13	26° \mathcal{B} 17'42	19.35648 AU
	-4514 Apr 12 j 22:33	0° \mathcal{B}						
evening set	-4514 May 14 j 18:56	1° \mathcal{B} 45'11		conjunction		-4509 Jun 25 j 06:49	26° \mathcal{B} 22'49	0°13'49
max. Earth dist.	-4514 May 30 j 07:55	2° \mathcal{B} 42'05	19.54610 AU	minimum elong		-4509 Jun 25 j 06:48	26° \mathcal{B} 22'49	0°14'00
				behind sun begin		-4509 Jun 25 j 03:31	26° \mathcal{B} 22'18	
conjunction	-4514 May 31 j 13:45	2° \mathcal{B} 46'40	-0°06'46	behind sun end		-4509 Jun 25 j 10:05	26° \mathcal{B} 23'19	
minimum elong	-4514 May 31 j 13:45	2° \mathcal{B} 46'40	0°06'39	morning rise		-4509 Jul 11 j 17:23	27° \mathcal{B} 24'11	
behind sun begin	-4514 May 31 j 07:25	2° \mathcal{B} 45'43				-4509 Aug 31 j 12:45	0° \mathcal{I}	
behind sun end	-4514 May 31 j 20:04	2° \mathcal{B} 47'37		retrograde		-4509 Oct 11 j 02:09	0° \mathcal{I} 45'36	
morning rise	-4514 Jun 17 j 05:30	3° \mathcal{B} 47'46				-4509 Nov 21 j 18:00	30° $\mathcal{R}\mathcal{B}$	
retrograde	-4514 Sep 17 j 06:08	7° \mathcal{B} 07'19		opposition		-4509 Dec 23 j 07:41	28° \mathcal{B} 43'34	0°17'35
opposition	-4514 Nov 29 j 15:40	5° \mathcal{B} 05'00	-0°05'14	min. Earth dist.		-4509 Dec 24 j 11:43	28° \mathcal{B} 40'31	17.34378 AU
min. Earth dist.	-4514 Nov 30 j 17:31	5° \mathcal{B} 02'10	17.52257 AU	direct		-4508 Mar 08 j 14:58	26° \mathcal{B} 37'12	
direct	-4513 Feb 13 j 09:19	2° \mathcal{B} 59'21				-4508 Jun 10 j 19:58	0° \mathcal{I}	
evening set	-4513 May 19 j 22:27	6° \mathcal{B} 25'19		evening set		-4508 Jun 12 j 21:17	0° \mathcal{I} 07'31	
max. Earth dist.	-4513 Jun 04 j 08:52	7° \mathcal{B} 22'04	19.49964 AU	max. Earth dist.		-4508 Jun 28 j 02:53	1° \mathcal{I} 04'26	19.33123 AU
conjunction	-4513 Jun 05 j 16:28	7° \mathcal{B} 26'57	-0°02'42	conjunction		-4508 Jun 29 j 10:45	1° \mathcal{I} 09'26	0°17'47
minimum elong	-4513 Jun 05 j 16:29	7° \mathcal{B} 26'57	0°02'35	minimum elong		-4508 Jun 29 j 10:45	1° \mathcal{I} 09'26	0°17'58
behind sun begin	-4513 Jun 05 j 09:43	7° \mathcal{B} 25'56		morning rise		-4508 Jul 15 j 20:06	2° \mathcal{I} 10'47	
behind sun end	-4513 Jun 05 j 23:14	7° \mathcal{B} 27'58		retrograde		-4508 Oct 15 j 03:34	5° \mathcal{I} 32'25	
morning rise	-4513 Jun 22 j 07:30	8° \mathcal{B} 28'09		opposition		-4508 Dec 27 j 08:14	3° \mathcal{I} 30'24	0°21'58
retrograde	-4513 Sep 22 j 03:59	11° \mathcal{B} 48'10		min. Earth dist.		-4508 Dec 28 j 11:18	3° \mathcal{I} 27'27	17.32072 AU
opposition	-4513 Dec 04 j 12:26	9° \mathcal{B} 45'54	-0°00'40	direct		-4507 Mar 13 j 18:49	1° \mathcal{I} 23'56	
min. Earth dist.	-4513 Dec 05 j 14:53	9° \mathcal{B} 43'01	17.47842 AU	evening set		-4507 Jun 18 j 02:06	4° \mathcal{I} 54'44	
asc. node	-4512 Jan 26 j 19:34	7° \mathcal{B} 53'24		max. Earth dist.		-4507 Jul 03 j 06:45	5° \mathcal{I} 51'39	19.31051 AU
direct	-4512 Feb 18 j 08:39	7° \mathcal{B} 40'04						
evening set	-4512 May 24 j 02:17	11° \mathcal{B} 07'08		conjunction		-4507 Jul 04 j 14:25	5° \mathcal{I} 56'38	0°21'39
				minimum elong		-4507 Jul 04 j 14:24	5° \mathcal{I} 56'38	0°21'51
conjunction	-4512 Jun 09 j 19:41	12° \mathcal{B} 08'52	0°01'32	morning rise		-4507 Jul 20 j 22:28	6° \mathcal{I} 57'57	
minimum elong	-4512 Jun 09 j 19:42	12° \mathcal{B} 08'52	0°01'41	retrograde		-4507 Oct 20 j 03:20	10° \mathcal{I} 19'43	
behind sun begin	-4512 Jun 09 j 12:56	12° \mathcal{B} 07'51		opposition		-4506 Jan 01 j 09:21	8° \mathcal{I} 17'43	0°26'11
behind sun end	-4512 Jun 10 j 02:28	12° \mathcal{B} 09'53		min. Earth dist.		-4506 Jan 02 j 12:57	8° \mathcal{I} 14'43	17.30254 AU
max. Earth dist.	-4512 Jun 08 j 12:46	12° \mathcal{B} 04'04	19.45759 AU	direct		-4506 Mar 18 j 20:51	6° \mathcal{I} 11'09	
morning rise	-4512 Jun 26 j 09:35	13° \mathcal{B} 10'09		evening set		-4506 Jun 23 j 06:53	9° \mathcal{I} 42'21	

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Attention, astronomical year style is used: The year -4506 in astronomical counting style is the year 4507 BCE in historical counting style.

max. Earth dist.	-4506 Jul 08 j 11:04	10° Π 39'18	19.29492 AU	opposition	-4499 Feb 04 j 01:57	11° Θ 46'10	0°49'11
				min. Earth dist.	-4499 Feb 04 j 19:34	11° Θ 44'17	17.34148 AU
conjunction	-4506 Jul 09 j 17:58	10° Π 44'11	0°25'21	direct	-4499 Apr 22 j 05:36	9° Θ 40'09	
minimum elong	-4506 Jul 09 j 17:58	10° Π 44'11	0°25'33	evening set	-4499 Jul 27 j 04:36	13° Θ 10'38	
morning rise	-4506 Jul 26 j 00:50	11° Π 45'25					
retrograde	-4506 Oct 25 j 04:54	15° Π 07'17		conjunction	-4499 Aug 12 j 06:37	14° Θ 11'20	0°45'05
opposition	-4505 Jan 06 j 10:39	13° Π 05'16	0°30'14	minimum elong	-4499 Aug 12 j 06:37	14° Θ 11'20	0°45'18
min. Earth dist.	-4505 Jan 07 j 12:44	13° Π 02'26	17.28952 AU	max. Earth dist.	-4499 Aug 11 j 12:23	14° Θ 08'27	19.35557 AU
direct	-4505 Mar 24 j 01:55	10° Π 58'38		morning rise	-4499 Aug 28 j 04:31	15° Θ 11'27	
evening set	-4505 Jun 28 j 11:25	14° Π 30'05		retrograde	-4499 Nov 27 j 03:08	18° Θ 32'44	
				opposition	-4498 Feb 09 j 05:05	16° Θ 31'16	0°51'15
conjunction	-4505 Jul 14 j 21:19	15° Π 31'50	0°28'53	min. Earth dist.	-4498 Feb 09 j 21:27	16° Θ 29'31	17.37154 AU
minimum elong	-4505 Jul 14 j 21:19	15° Π 31'50	0°29'06	direct	-4498 Apr 27 j 09:28	14° Θ 25'33	
max. Earth dist.	-4505 Jul 13 j 15:39	15° Π 27'09	19.28464 AU	evening set	-4498 Aug 01 j 05:35	17° Θ 55'29	
morning rise	-4505 Jul 31 j 02:46	16° Π 32'58					
retrograde	-4505 Oct 30 j 04:03	19° Π 54'52		conjunction	-4498 Aug 17 j 06:08	18° Θ 55'56	0°46'47
opposition	-4504 Jan 11 j 12:39	17° Π 52'52	0°34'04	minimum elong	-4498 Aug 17 j 06:08	18° Θ 55'56	0°46'59
min. Earth dist.	-4504 Jan 12 j 14:53	17° Π 50'01	17.28221 AU	max. Earth dist.	-4498 Aug 16 j 12:52	18° Θ 53'12	19.38819 AU
direct	-4504 Mar 28 j 04:50	15° Π 46'11		morning rise	-4498 Sep 02 j 03:03	19° Θ 55'50	
evening set	-4504 Jul 02 j 15:31	19° Π 17'45		retrograde	-4498 Dec 02 j 02:58	23° Θ 16'54	
				opposition	-4497 Feb 14 j 08:01	21° Θ 15'34	0°52'58
conjunction	-4504 Jul 18 j 24:00	20° Π 19'23	0°32'12	min. Earth dist.	-4497 Feb 14 j 22:14	21° Θ 14'04	17.40653 AU
minimum elong	-4504 Jul 18 j 23:59	20° Π 19'23	0°32'26	direct	-4497 May 02 j 13:06	19° Θ 10'09	
max. Earth dist.	-4504 Jul 17 j 19:17	20° Π 14'50	19.28038 AU	evening set	-4497 Aug 06 j 05:42	22° Θ 39'27	
morning rise	-4504 Aug 04 j 04:15	21° Π 20'23					
retrograde	-4504 Nov 03 j 05:07	24° Π 42'17		conjunction	-4497 Aug 22 j 05:09	23° Θ 39'38	0°48'10
opposition	-4503 Jan 15 j 14:52	22° Π 40'17	0°37'40	minimum elong	-4497 Aug 22 j 05:09	23° Θ 39'38	0°48'23
min. Earth dist.	-4503 Jan 16 j 14:51	22° Π 37'41	17.28103 AU	max. Earth dist.	-4497 Aug 21 j 15:04	23° Θ 37'25	19.42538 AU
direct	-4503 Apr 02 j 10:53	20° Π 33'37		morning rise	-4497 Sep 07 j 00:52	24° Θ 39'18	
evening set	-4503 Jul 07 j 19:10	24° Π 05'11		retrograde	-4497 Dec 07 j 02:15	28° Θ 00'05	
max. Earth dist.	-4503 Jul 23 j 00:03	25° Π 02'30	19.28238 AU	opposition	-4496 Feb 19 j 11:08	25° Θ 58'55	0°54'19
				min. Earth dist.	-4496 Feb 19 j 23:35	25° Θ 57'36	17.44568 AU
conjunction	-4503 Jul 24 j 02:27	25° Π 06'40	0°35'19	direct	-4496 May 06 j 17:02	23° Θ 53'50	
minimum elong	-4503 Jul 24 j 02:26	25° Π 06'40	0°35'31	evening set	-4496 Aug 10 j 05:06	27° Θ 22'21	
morning rise	-4503 Aug 09 j 05:15	26° Π 07'32					
retrograde	-4503 Nov 08 j 03:54	29° Π 29'22		conjunction	-4496 Aug 26 j 03:12	28° Θ 22'16	0°49'13
opposition	-4502 Jan 20 j 17:21	27° Π 27'25	0°41'00	minimum elong	-4496 Aug 26 j 03:12	28° Θ 22'16	0°49'24
min. Earth dist.	-4502 Jan 21 j 16:55	27° Π 24'52	17.28637 AU	max. Earth dist.	-4496 Aug 25 j 14:19	28° Θ 20'14	19.46651 AU
direct	-4502 Apr 07 j 14:29	25° Π 20'49		morning rise	-4496 Sep 10 j 22:02	29° Θ 21'42	
evening set	-4502 Jul 12 j 22:26	28° Π 52'16			-4496 Sep 21 j 11:49	0° Ω	
max. Earth dist.	-4502 Jul 28 j 02:46	29° Π 49'33	19.29112 AU	retrograde	-4496 Dec 11 j 01:03	2° Ω 42'10	
				opposition	-4495 Feb 23 j 14:01	0° Ω 41'07	0°55'17
conjunction	-4502 Jul 29 j 04:15	29° Π 53'35	0°38'10	min. Earth dist.	-4495 Feb 24 j 00:31	0° Ω 40'01	17.48870 AU
minimum elong	-4502 Jul 29 j 04:15	29° Π 53'35	0°38'24		-4495 Mar 12 j 02:10	30° κ Θ	
	-4502 Jul 30 j 20:44	0° Θ		direct	-4495 May 11 j 19:02	28° Θ 36'21	
morning rise	-4502 Aug 14 j 05:57	0° Θ 54'17			-4495 Jul 08 j 12:48	0° Ω	
retrograde	-4502 Nov 13 j 04:41	4° Θ 16'02		evening set	-4495 Aug 15 j 03:37	2° Ω 04'00	
opposition	-4501 Jan 25 j 20:00	2° Θ 14'09	0°44'02				
min. Earth dist.	-4501 Jan 26 j 17:01	2° Θ 11'52	17.29837 AU	conjunction	-4495 Aug 31 j 00:43	3° Ω 03'39	0°49'55
direct	-4501 Apr 12 j 20:42	0° Θ 07'40		minimum elong	-4495 Aug 31 j 00:43	3° Ω 03'39	0°50'06
evening set	-4501 Jul 18 j 01:05	3° Θ 38'55		max. Earth dist.	-4495 Aug 30 j 14:49	3° Ω 02'05	19.51122 AU
max. Earth dist.	-4501 Aug 02 j 07:13	4° Θ 36'29	19.30638 AU	morning rise	-4495 Sep 15 j 18:32	4° Ω 02'49	
				retrograde	-4495 Dec 16 j 00:10	7° Ω 22'55	
conjunction	-4501 Aug 03 j 05:43	4° Θ 40'03	0°40'45	opposition	-4494 Feb 28 j 16:24	5° Ω 21'59	0°55'53
minimum elong	-4501 Aug 03 j 05:42	4° Θ 40'03	0°40'58	min. Earth dist.	-4494 Mar 01 j 00:43	5° Ω 21'06	17.53487 AU
morning rise	-4501 Aug 19 j 05:58	5° Θ 40'34		direct	-4494 May 16 j 22:49	3° Ω 17'33	
retrograde	-4501 Nov 18 j 03:24	9° Θ 02'12		evening set	-4494 Aug 20 j 01:23	6° Ω 44'14	
opposition	-4500 Jan 30 j 22:59	7° Θ 00'26	0°46'47				
min. Earth dist.	-4500 Jan 31 j 19:06	6° Θ 58'16	17.31681 AU	conjunction	-4494 Sep 04 j 21:19	7° Ω 43'35	0°50'18
direct	-4500 Apr 17 j 00:31	4° Θ 54'10		minimum elong	-4494 Sep 04 j 21:19	7° Ω 43'35	0°50'29
evening set	-4500 Jul 22 j 03:18	8° Θ 25'05		max. Earth dist.	-4494 Sep 04 j 12:51	7° Ω 42'15	19.55894 AU
max. Earth dist.	-4500 Aug 06 j 08:56	9° Θ 22'35	19.32806 AU	morning rise	-4494 Sep 20 j 14:23	8° Ω 42'30	
				retrograde	-4494 Dec 20 j 21:20	12° Ω 02'11	
conjunction	-4500 Aug 07 j 06:26	9° Θ 26'00	0°43'04	opposition	-4493 Mar 05 j 18:37	10° Ω 01'20	0°56'06
minimum elong	-4500 Aug 07 j 06:26	9° Θ 25'59	0°43'17	min. Earth dist.	-4493 Mar 06 j 01:18	10° Ω 00'38	17.58410 AU
morning rise	-4500 Aug 23 j 05:38	10° Θ 26'19		direct	-4493 May 21 j 23:45	7° Ω 57'13	
retrograde	-4500 Nov 22 j 04:07	13° Θ 47'48		evening set	-4493 Aug 24 j 22:00	11° Ω 22'50	

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Attention, astronomical year style is used: The year -4493 in astronomical counting style is the year 4494 BCE in historical counting style.

conjunction	-4493 Sep 09 j 17:01	12°Ω21'53	0°50'20	minimum elong	-4487 Oct 05 j 19:28	9°♊31'36	0°44'12
minimum elong	-4493 Sep 09 j 17:01	12°Ω21'53	0°50'30	max. Earth dist.	-4487 Oct 06 j 04:30	9°♊32'59	19.97422 AU
max. Earth dist.	-4493 Sep 09 j 11:23	12°Ω21'01	19.60962 AU	morning rise	-4487 Oct 21 j 09:11	10°♊28'43	
morning rise	-4493 Sep 25 j 09:15	13°Ω20'33		retrograde	-4486 Jan 21 j 09:45	13°♊44'42	
	-4493 Oct 24 j 17:25	15°Ω		opposition	-4486 Apr 07 j 17:11	11°♊44'18	0°47'56
retrograde	-4493 Dec 25 j 19:30	16°Ω39'46		min. Earth dist.	-4486 Apr 07 j 06:14	11°♊45'26	18.00878 AU
	-4492 Mar 01 j 10:40	15°♊Ω		direct	-4486 Jun 23 j 21:17	9°♊42'46	
opposition	-4492 Mar 09 j 20:20	14°Ω38'59	0°55'56	evening set	-4486 Sep 24 j 18:42	12°♊59'33	
min. Earth dist.	-4492 Mar 10 j 00:13	14°Ω38'34	17.63604 AU				
direct	-4492 May 26 j 03:21	12°Ω35'12		conjunction	-4486 Oct 10 j 08:57	13°♊56'30	0°42'07
	-4492 Aug 11 j 19:45	15°Ω		minimum elong	-4486 Oct 10 j 08:57	13°♊56'30	0°42'11
evening set	-4492 Aug 28 j 17:44	15°Ω59'40		max. Earth dist.	-4486 Oct 10 j 20:50	13°♊58'19	20.04373 AU
				morning rise	-4486 Oct 25 j 22:28	14°♊53'22	
conjunction	-4492 Sep 13 j 11:46	16°Ω58'25	0°50'03	retrograde	-4485 Jan 26 j 01:17	18°♊08'48	
minimum elong	-4492 Sep 13 j 11:46	16°Ω58'25	0°50'13	opposition	-4485 Apr 12 j 14:24	16°♊08'33	0°45'34
max. Earth dist.	-4492 Sep 13 j 08:10	16°Ω57'51	19.66304 AU	min. Earth dist.	-4485 Apr 12 j 02:15	16°♊09'47	18.07895 AU
morning rise	-4492 Sep 29 j 03:25	17°Ω56'49		direct	-4485 Jun 28 j 15:28	14°♊07'28	
retrograde	-4492 Dec 29 j 14:46	21°Ω15'33		evening set	-4485 Sep 29 j 07:38	17°♊22'54	
opposition	-4491 Mar 14 j 21:30	19°Ω14'47	0°55'25				
min. Earth dist.	-4491 Mar 14 j 23:52	19°Ω14'32	17.69098 AU	conjunction	-4485 Oct 14 j 21:27	18°♊19'35	0°39'53
direct	-4491 May 31 j 03:08	17°Ω11'18		minimum elong	-4485 Oct 14 j 21:27	18°♊19'35	0°39'57
evening set	-4491 Sep 02 j 12:17	20°Ω34'34		max. Earth dist.	-4485 Oct 15 j 10:58	18°♊21'39	20.11440 AU
				morning rise	-4485 Oct 30 j 11:01	19°♊16'13	
conjunction	-4491 Sep 18 j 05:32	21°Ω33'01	0°49'26	retrograde	-4484 Jan 30 j 18:34	22°♊31'07	
minimum elong	-4491 Sep 18 j 05:32	21°Ω33'01	0°49'35	opposition	-4484 Apr 16 j 10:46	20°♊30'59	0°42'57
max. Earth dist.	-4491 Sep 18 j 04:37	21°Ω32'52	19.71947 AU	min. Earth dist.	-4484 Apr 15 j 19:30	20°♊32'32	18.14983 AU
morning rise	-4491 Oct 03 j 20:37	22°Ω31'09		direct	-4484 Jul 02 j 10:44	18°♊30'21	
retrograde	-4490 Jan 03 j 11:04	25°Ω49'21		evening set	-4484 Oct 02 j 19:51	21°♊44'29	
opposition	-4490 Mar 19 j 21:57	23°Ω48'37	0°54'33				
min. Earth dist.	-4490 Mar 19 j 21:02	23°Ω48'43	17.74875 AU	conjunction	-4484 Oct 18 j 09:30	22°♊40'54	0°37'26
direct	-4490 Jun 05 j 05:41	21°Ω45'29		minimum elong	-4484 Oct 18 j 09:30	22°♊40'54	0°37'29
evening set	-4490 Sep 07 j 05:54	25°Ω07'29		max. Earth dist.	-4484 Oct 19 j 01:43	22°♊43'21	20.18526 AU
				morning rise	-4484 Nov 02 j 23:02	23°♊37'19	
conjunction	-4490 Sep 22 j 22:20	26°Ω05'37	0°48'32	retrograde	-4483 Feb 03 j 08:56	26°♊51'38	
minimum elong	-4490 Sep 22 j 22:20	26°Ω05'37	0°48'40	opposition	-4483 Apr 21 j 06:23	24°♊51'38	0°40'06
max. Earth dist.	-4490 Sep 22 j 23:57	26°Ω05'52	19.77871 AU	min. Earth dist.	-4483 Apr 20 j 14:18	24°♊53'16	18.22059 AU
morning rise	-4490 Oct 08 j 12:54	27°Ω03'29		direct	-4483 Jul 07 j 03:17	22°♊51'27	
	-4490 Dec 11 j 02:23	0°♊		evening set	-4483 Oct 07 j 07:21	26°♊04'16	
retrograde	-4489 Jan 08 j 04:32	0°♊21'09					
	-4489 Feb 05 j 23:53	30°♊Ω		conjunction	-4483 Oct 22 j 20:44	27°♊00'25	0°34'48
opposition	-4489 Mar 24 j 21:52	28°Ω20'28	0°53'22	minimum elong	-4483 Oct 22 j 20:45	27°♊00'25	0°34'49
min. Earth dist.	-4489 Mar 24 j 19:23	28°Ω20'43	17.80960 AU	max. Earth dist.	-4483 Oct 23 j 13:57	27°♊03'01	20.25568 AU
direct	-4489 Jun 10 j 03:54	26°Ω17'41		morning rise	-4483 Nov 07 j 10:30	27°♊56'37	
evening set	-4489 Sep 11 j 22:32	29°Ω38'24			-4483 Dec 16 j 21:34	0°♊	
	-4489 Sep 17 j 20:13	0°♊		retrograde	-4482 Feb 08 j 01:18	1°♊10'24	
					-4482 Apr 05 j 02:45	30°♊♊	
conjunction	-4489 Sep 27 j 14:16	0°♊36'13	0°47'20	min. Earth dist.	-4482 Apr 25 j 06:30	29°♊12'23	18.29048 AU
minimum elong	-4489 Sep 27 j 14:16	0°♊36'13	0°47'27	opposition	-4482 Apr 26 j 01:11	29°♊10'30	0°37'02
max. Earth dist.	-4489 Sep 27 j 18:23	0°♊36'52	19.84115 AU	direct	-4482 Jul 11 j 20:55	27°♊10'43	
morning rise	-4489 Oct 13 j 04:28	1°♊33'50			-4482 Oct 05 j 08:59	0°♊	
retrograde	-4488 Jan 12 j 23:31	4°♊50'56		evening set	-4482 Oct 11 j 18:00	0°♊22'15	
opposition	-4488 Mar 28 j 21:03	2°♊50'19	0°51'51				
min. Earth dist.	-4488 Mar 28 j 14:56	2°♊50'57	17.87346 AU	conjunction	-4482 Oct 27 j 07:22	1°♊18'10	0°31'58
direct	-4488 Jun 14 j 03:52	0°♊47'56		minimum elong	-4482 Oct 27 j 07:22	1°♊18'10	0°31'58
evening set	-4488 Sep 15 j 14:05	4°♊07'20		max. Earth dist.	-4482 Oct 28 j 03:02	1°♊21'08	20.32473 AU
				morning rise	-4482 Nov 11 j 21:11	2°♊14'10	
conjunction	-4488 Oct 01 j 05:15	5°♊04'52	0°45'51	retrograde	-4481 Feb 12 j 14:29	5°♊27'23	
minimum elong	-4488 Oct 01 j 05:15	5°♊04'52	0°45'57	opposition	-4481 Apr 30 j 19:24	3°♊27'35	0°33'47
max. Earth dist.	-4488 Oct 01 j 12:15	5°♊05'57	19.90641 AU	min. Earth dist.	-4481 Apr 30 j 00:03	3°♊29'32	18.35869 AU
morning rise	-4488 Oct 16 j 19:07	6°♊02'13		direct	-4481 Jul 16 j 12:12	1°♊28'12	
retrograde	-4487 Jan 16 j 15:52	9°♊18'47		evening set	-4481 Oct 16 j 04:05	4°♊38'27	
opposition	-4487 Apr 02 j 19:38	7°♊18'15	0°50'02				
min. Earth dist.	-4487 Apr 02 j 12:04	7°♊19'02	17.94006 AU	conjunction	-4481 Oct 31 j 17:20	5°♊34'07	0°28'59
direct	-4487 Jun 19 j 00:05	5°♊16'17		minimum elong	-4481 Oct 31 j 17:20	5°♊34'07	0°28'58
evening set	-4487 Sep 20 j 04:50	8°♊34'22		max. Earth dist.	-4481 Nov 01 j 13:36	5°♊37'10	20.39200 AU
				morning rise	-4481 Nov 16 j 07:33	6°♊29'56	
conjunction	-4487 Oct 05 j 19:28	9°♊31'36	0°44'06	retrograde	-4480 Feb 17 j 05:19	9°♊42'36	

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Attention, astronomical year style is used: The year -4480 in astronomical counting style is the year 4481 BCE in historical counting style.

opposition	-4480 May 04 j 12:41	7° <u>♂</u> 42'51	0°30'23	morning rise	-4475 Dec 10 j 09:39	1° <u>♂</u> 27'48	
min. Earth dist.	-4480 May 03 j 15:11	7° <u>♂</u> 45'01	18.42489 AU	retrograde	-4474 Mar 14 j 02:18	4° <u>♂</u> 37'24	
direct	-4480 Jul 20 j 04:18	5° <u>♂</u> 43'49		min. Earth dist.	-4474 May 29 j 22:41	2° <u>♂</u> 40'34	18.77337 AU
evening set	-4480 Oct 19 j 13:16	8° <u>♂</u> 52'48		opposition	-4474 May 31 j 02:51	2° <u>♂</u> 37'45	0°07'49
				direct	-4474 Aug 15 j 05:55	0° <u>♂</u> 40'24	
conjunction	-4480 Nov 04 j 02:43	9° <u>♂</u> 48'16	0°25'51	evening set	-4474 Nov 13 j 07:08	3° <u>♂</u> 42'51	
minimum elong	-4480 Nov 04 j 02:43	9° <u>♂</u> 48'16	0°25'50				
max. Earth dist.	-4480 Nov 05 j 01:17	9° <u>♂</u> 51'39	20.45690 AU	conjunction	-4474 Nov 28 j 22:26	4° <u>♂</u> 37'19	0°05'24
morning rise	-4480 Nov 19 j 17:12	10° <u>♂</u> 43'54		minimum elong	-4474 Nov 28 j 22:26	4° <u>♂</u> 37'19	0°05'17
retrograde	-4479 Feb 20 j 17:31	13° <u>♂</u> 56'01		behind sun begin	-4474 Nov 28 j 16:06	4° <u>♂</u> 36'24	
min. Earth dist.	-4479 May 08 j 07:09	11° <u>♂</u> 58'31	18.48852 AU	behind sun end	-4474 Nov 29 j 04:47	4° <u>♂</u> 38'13	
opposition	-4479 May 09 j 05:13	11° <u>♂</u> 56'18	0°26'50	max. Earth dist.	-4474 Nov 30 j 04:28	4° <u>♂</u> 41'42	20.79866 AU
direct	-4479 Jul 24 j 18:14	9° <u>♂</u> 57'35		morning rise	-4474 Dec 14 j 16:18	5° <u>♂</u> 32'09	
evening set	-4479 Oct 23 j 21:53	13° <u>♂</u> 05'21		retrograde	-4473 Mar 18 j 11:45	8° <u>♂</u> 41'21	
				min. Earth dist.	-4473 Jun 03 j 09:44	6° <u>♂</u> 44'40	18.82398 AU
conjunction	-4479 Nov 08 j 11:22	14° <u>♂</u> 00'36	0°22'37	opposition	-4473 Jun 04 j 14:36	6° <u>♂</u> 41'46	0°03'53
minimum elong	-4479 Nov 08 j 11:22	14° <u>♂</u> 00'36	0°22'34	direct	-4473 Aug 19 j 16:09	4° <u>♂</u> 44'43	
max. Earth dist.	-4479 Nov 09 j 10:16	14° <u>♂</u> 04'01	20.51932 AU	evening set	-4473 Nov 17 j 12:32	7° <u>♂</u> 46'18	
morning rise	-4479 Nov 24 j 02:24	14° <u>♂</u> 56'05					
retrograde	-4478 Feb 25 j 06:29	18° <u>♂</u> 07'37		conjunction	-4473 Dec 03 j 04:15	8° <u>♂</u> 40'39	0°01'50
opposition	-4478 May 13 j 20:42	16° <u>♂</u> 07'55	0°23'10	minimum elong	-4473 Dec 03 j 04:14	8° <u>♂</u> 40'39	0°01'43
min. Earth dist.	-4478 May 12 j 20:52	16° <u>♂</u> 10'19	18.54973 AU	behind sun begin	-4473 Dec 02 j 21:41	8° <u>♂</u> 39'44	
direct	-4478 Jul 29 j 08:19	14° <u>♂</u> 09'30		behind sun end	-4473 Dec 03 j 10:47	8° <u>♂</u> 41'35	
evening set	-4478 Oct 28 j 05:40	17° <u>♂</u> 16'05		max. Earth dist.	-4473 Dec 04 j 10:01	8° <u>♂</u> 45'00	20.84807 AU
				morning rise	-4473 Dec 18 j 23:00	9° <u>♂</u> 35'25	
conjunction	-4478 Nov 12 j 19:29	18° <u>♂</u> 11'09	0°19'17	retrograde	-4472 Mar 21 j 22:02	12° <u>♂</u> 44'16	
minimum elong	-4478 Nov 12 j 19:29	18° <u>♂</u> 11'09	0°19'14	desc. node	-4472 Jun 03 j 18:31	10° <u>♂</u> 55'03	
max. Earth dist.	-4478 Nov 13 j 20:43	18° <u>♂</u> 14'53	20.57927 AU	min. Earth dist.	-4472 Jun 06 j 20:02	10° <u>♂</u> 47'42	18.87209 AU
morning rise	-4478 Nov 28 j 10:52	19° <u>♂</u> 06'27		opposition	-4472 Jun 08 j 01:36	10° <u>♂</u> 44'45	-0°00'03
retrograde	-4477 Mar 01 j 17:40	22° <u>♂</u> 17'28		direct	-4472 Aug 23 j 00:04	8° <u>♂</u> 47'57	
min. Earth dist.	-4477 May 17 j 10:59	20° <u>♂</u> 20'14	18.60858 AU	evening set	-4472 Nov 20 j 17:30	11° <u>♂</u> 48'46	
opposition	-4477 May 18 j 11:32	20° <u>♂</u> 17'46	0°19'25				
direct	-4477 Aug 02 j 21:06	18° <u>♂</u> 19'37		conjunction	-4472 Dec 06 j 09:58	12° <u>♂</u> 43'02	-0°01'50
evening set	-4477 Nov 01 j 12:50	21° <u>♂</u> 25'03		minimum elong	-4472 Dec 06 j 09:57	12° <u>♂</u> 43'02	0°01'58
				behind sun begin	-4472 Dec 06 j 03:24	12° <u>♂</u> 42'06	
conjunction	-4477 Nov 17 j 02:48	22° <u>♂</u> 19'56	0°15'52	behind sun end	-4472 Dec 06 j 16:31	12° <u>♂</u> 43'57	
minimum elong	-4477 Nov 17 j 02:47	22° <u>♂</u> 19'56	0°15'47	max. Earth dist.	-4472 Dec 07 j 17:26	12° <u>♂</u> 47'36	20.89456 AU
behind sun begin	-4477 Nov 17 j 01:10	22° <u>♂</u> 19'42		morning rise	-4472 Dec 22 j 05:22	13° <u>♂</u> 37'44	
behind sun end	-4477 Nov 17 j 04:25	22° <u>♂</u> 20'10			-4471 Jan 17 j 03:07	15° <u>♂</u>	
max. Earth dist.	-4477 Nov 18 j 04:24	22° <u>♂</u> 23'43	20.63712 AU	retrograde	-4471 Mar 26 j 06:30	16° <u>♂</u> 46'14	
morning rise	-4477 Dec 02 j 18:52	23° <u>♂</u> 15'07			-4471 Jun 07 j 00:04	15° <u>♂</u>	
retrograde	-4476 Mar 05 j 05:23	26° <u>♂</u> 25'38		min. Earth dist.	-4471 Jun 11 j 06:08	14° <u>♂</u> 49'48	18.91687 AU
min. Earth dist.	-4476 May 20 j 23:20	24° <u>♂</u> 28'33	18.66550 AU	opposition	-4471 Jun 12 j 12:01	14° <u>♂</u> 46'49	-0°03'58
opposition	-4476 May 22 j 01:30	24° <u>♂</u> 25'55	0°15'36	direct	-4471 Aug 27 j 08:55	12° <u>♂</u> 50'17	
direct	-4476 Aug 06 j 08:54	22° <u>♂</u> 28'02			-4471 Nov 09 j 12:39	15° <u>♂</u>	
evening set	-4476 Nov 04 j 19:26	25° <u>♂</u> 32'24		evening set	-4471 Nov 24 j 22:25	15° <u>♂</u> 50'24	
conjunction	-4476 Nov 20 j 09:53	26° <u>♂</u> 27'08	0°12'24	conjunction	-4471 Dec 10 j 15:19	16° <u>♂</u> 44'34	-0°05'22
minimum elong	-4476 Nov 20 j 09:52	26° <u>♂</u> 27'08	0°12'19	minimum elong	-4471 Dec 10 j 15:19	16° <u>♂</u> 44'34	0°05'31
behind sun begin	-4476 Nov 20 j 05:28	26° <u>♂</u> 26'30		behind sun begin	-4471 Dec 10 j 09:00	16° <u>♂</u> 43'41	
behind sun end	-4476 Nov 20 j 14:17	26° <u>♂</u> 27'46		behind sun end	-4471 Dec 10 j 21:39	16° <u>♂</u> 45'28	
max. Earth dist.	-4476 Nov 21 j 13:45	26° <u>♂</u> 31'14	20.69293 AU	max. Earth dist.	-4471 Dec 11 j 22:06	16° <u>♂</u> 49'02	20.93755 AU
morning rise	-4476 Dec 06 j 02:24	27° <u>♂</u> 22'11		morning rise	-4471 Dec 26 j 11:41	17° <u>♂</u> 39'13	
	-4475 Feb 01 j 09:23	0° <u>♂</u>		retrograde	-4470 Mar 30 j 16:31	20° <u>♂</u> 47'27	
retrograde	-4475 Mar 09 j 15:35	0° <u>♂</u> 32'12		opposition	-4470 Jun 16 j 21:53	18° <u>♂</u> 48'06	-0°07'51
	-4475 Apr 15 j 20:44	30° <u>♂</u>		min. Earth dist.	-4470 Jun 15 j 15:53	18° <u>♂</u> 51'05	18.95798 AU
min. Earth dist.	-4475 May 25 j 11:35	28° <u>♂</u> 35'13	18.72038 AU	direct	-4470 Aug 31 j 15:42	16° <u>♂</u> 51'47	
opposition	-4475 May 26 j 14:29	28° <u>♂</u> 32'31	0°11'43	evening set	-4470 Nov 29 j 03:06	19° <u>♂</u> 51'16	
direct	-4475 Aug 10 j 20:18	26° <u>♂</u> 34'54					
evening set	-4475 Nov 09 j 01:38	29° <u>♂</u> 38'17		conjunction	-4470 Dec 14 j 20:48	20° <u>♂</u> 45'23	-0°08'50
	-4475 Nov 15 j 07:59	0° <u>♂</u>		minimum elong	-4470 Dec 14 j 20:48	20° <u>♂</u> 45'23	0°09'01
				behind sun begin	-4470 Dec 14 j 15:11	20° <u>♂</u> 44'36	
conjunction	-4475 Nov 24 j 16:20	0° <u>♂</u> 32'52	0°08'55	behind sun end	-4470 Dec 15 j 02:26	20° <u>♂</u> 46'11	
minimum elong	-4475 Nov 24 j 16:20	0° <u>♂</u> 32'52	0°08'49	max. Earth dist.	-4470 Dec 16 j 04:53	20° <u>♂</u> 50'01	20.97649 AU
behind sun begin	-4475 Nov 24 j 10:40	0° <u>♂</u> 32'03		morning rise	-4470 Dec 30 j 17:51	21° <u>♂</u> 40'00	
behind sun end	-4475 Nov 24 j 22:00	0° <u>♂</u> 33'40		retrograde	-4469 Apr 04 j 00:07	24° <u>♂</u> 47'57	
max. Earth dist.	-4475 Nov 25 j 20:16	0° <u>♂</u> 36'58	20.74686 AU	min. Earth dist.	-4469 Jun 20 j 01:17	22° <u>♂</u> 51'40	18.99468 AU

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Attention, astronomical year style is used: The year -4469 in astronomical counting style is the year 4470 BCE in historical counting style.

opposition	-4469 Jun 21 j 07:16	22° \mathbb{M} 48'41	-0°11'41	opposition	-4463 Jul 15 j 05:37	16° \mathbb{A} 39'40	-0°32'42
direct	-4469 Sep 04 j 23:19	20° \mathbb{M} 52'34		direct	-4463 Sep 28 j 09:45	14° \mathbb{A} 43'44	
evening set	-4469 Dec 03 j 07:48	23° \mathbb{M} 51'28		evening set	-4463 Dec 26 j 11:11	17° \mathbb{A} 40'31	
conjunction	-4469 Dec 19 j 02:07	24° \mathbb{M} 45'32	-0°12'16	conjunction	-4462 Jan 11 j 10:39	18° \mathbb{A} 34'41	-0°30'56
minimum elong	-4469 Dec 19 j 02:06	24° \mathbb{M} 45'32	0°12'27	minimum elong	-4462 Jan 11 j 10:39	18° \mathbb{A} 34'41	0°31'10
behind sun begin	-4469 Dec 18 j 21:46	24° \mathbb{M} 44'56		max. Earth dist.	-4462 Jan 12 j 14:10	18° \mathbb{A} 38'36	21.10581 AU
behind sun end	-4469 Dec 19 j 06:27	24° \mathbb{M} 46'09		morning rise	-4462 Jan 27 j 14:30	19° \mathbb{A} 29'26	
max. Earth dist.	-4469 Dec 20 j 09:00	24° \mathbb{M} 49'59	21.01083 AU	retrograde	-4462 May 02 j 07:34	22° \mathbb{A} 36'12	
morning rise	-4468 Jan 04 j 00:13	25° \mathbb{M} 40'08		min. Earth dist.	-4462 Jul 18 j 10:48	20° \mathbb{A} 39'10	19.10661 AU
retrograde	-4468 Apr 07 j 09:35	28° \mathbb{M} 47'52		opposition	-4462 Jul 19 j 12:01	20° \mathbb{A} 36'38	-0°35'43
min. Earth dist.	-4468 Jun 23 j 10:44	26° \mathbb{M} 51'33	19.02653 AU	direct	-4462 Oct 02 j 13:53	18° \mathbb{A} 40'37	
opposition	-4468 Jun 24 j 16:13	26° \mathbb{M} 48'37	-0°15'27	evening set	-4462 Dec 30 j 15:55	21° \mathbb{A} 37'20	
direct	-4468 Sep 08 j 05:15	24° \mathbb{M} 52'38		conjunction	-4461 Jan 15 j 16:30	22° \mathbb{A} 31'35	-0°33'36
evening set	-4468 Dec 06 j 12:26	27° \mathbb{M} 51'02		minimum elong	-4461 Jan 15 j 16:30	22° \mathbb{A} 31'35	0°33'49
conjunction	-4468 Dec 22 j 07:39	28° \mathbb{M} 45'06	-0°15'39	max. Earth dist.	-4461 Jan 16 j 20:25	22° \mathbb{A} 35'33	21.10546 AU
minimum elong	-4468 Dec 22 j 07:39	28° \mathbb{M} 45'06	0°15'49	morning rise	-4461 Jan 31 j 21:11	23° \mathbb{A} 26'25	
behind sun begin	-4468 Dec 22 j 06:19	28° \mathbb{M} 44'54		retrograde	-4461 May 06 j 15:16	26° \mathbb{A} 33'09	
behind sun end	-4468 Dec 22 j 08:59	28° \mathbb{M} 45'17		opposition	-4461 Jul 23 j 18:00	24° \mathbb{A} 33'32	-0°38'34
max. Earth dist.	-4468 Dec 23 j 15:15	28° \mathbb{M} 49'38	21.03991 AU	min. Earth dist.	-4461 Jul 22 j 17:09	24° \mathbb{A} 36'03	19.10432 AU
morning rise	-4467 Jan 07 j 06:29	29° \mathbb{M} 39'40		direct	-4461 Oct 06 j 18:35	22° \mathbb{A} 37'28	
	-4467 Jan 13 j 09:23	0° \mathbb{A}		evening set	-4460 Jan 03 j 21:02	25° \mathbb{A} 34'11	
retrograde	-4467 Apr 11 j 16:58	2° \mathbb{A} 47'10		conjunction	-4460 Jan 19 j 22:28	26° \mathbb{A} 28'31	-0°36'06
min. Earth dist.	-4467 Jun 27 j 19:22	0° \mathbb{A} 50'51	19.05283 AU	minimum elong	-4460 Jan 19 j 22:28	26° \mathbb{A} 28'31	0°36'19
opposition	-4467 Jun 29 j 00:27	0° \mathbb{A} 47'56	-0°19'09	max. Earth dist.	-4460 Jan 21 j 00:22	26° \mathbb{A} 32'12	21.10135 AU
	-4467 Jul 19 j 14:31	30° \mathbb{R} \mathbb{M}		morning rise	-4460 Feb 05 j 04:20	27° \mathbb{A} 23'27	
direct	-4467 Sep 12 j 12:07	28° \mathbb{M} 52'04			-4460 Apr 04 j 07:53	0° \mathbb{B}	
	-4467 Nov 03 j 19:50	0° \mathbb{A}		retrograde	-4460 May 09 j 23:09	0° \mathbb{B} 30'14	
evening set	-4467 Dec 10 j 17:07	1° \mathbb{A} 50'01			-4460 Jun 15 j 05:09	30° \mathbb{R} \mathbb{A}	
conjunction	-4467 Dec 26 j 13:00	2° \mathbb{A} 44'03	-0°18'56	opposition	-4460 Jul 26 j 23:57	28° \mathbb{A} 30'34	-0°41'14
minimum elong	-4467 Dec 26 j 13:00	2° \mathbb{A} 44'03	0°19'07	min. Earth dist.	-4460 Jul 26 j 00:30	28° \mathbb{A} 32'56	19.09835 AU
max. Earth dist.	-4467 Dec 27 j 18:57	2° \mathbb{A} 48'20	21.06347 AU	direct	-4460 Oct 09 j 22:21	26° \mathbb{A} 34'25	
morning rise	-4466 Jan 11 j 12:56	3° \mathbb{A} 38'39		evening set	-4459 Jan 07 j 02:21	29° \mathbb{A} 31'15	
retrograde	-4466 Apr 16 j 01:22	6° \mathbb{A} 45'56			-4459 Jan 15 j 15:46	0° \mathbb{B}	
min. Earth dist.	-4466 Jul 02 j 04:17	4° \mathbb{A} 49'30	19.07364 AU	conjunction	-4459 Jan 23 j 04:56	0° \mathbb{B} 25'42	-0°38'26
opposition	-4466 Jul 03 j 08:30	4° \mathbb{A} 46'40	-0°22'44	minimum elong	-4459 Jan 23 j 04:56	0° \mathbb{B} 25'42	0°38'39
direct	-4466 Sep 16 j 17:11	2° \mathbb{A} 50'50		max. Earth dist.	-4459 Jan 24 j 06:57	0° \mathbb{B} 29'23	21.09342 AU
evening set	-4466 Dec 14 j 21:26	5° \mathbb{A} 48'22		morning rise	-4459 Feb 08 j 11:36	1° \mathbb{B} 20'44	
conjunction	-4466 Dec 30 j 18:20	6° \mathbb{A} 42'26	-0°22'07	retrograde	-4459 May 14 j 07:17	4° \mathbb{B} 27'35	
minimum elong	-4466 Dec 30 j 18:20	6° \mathbb{A} 42'26	0°22'18	min. Earth dist.	-4459 Jul 30 j 06:39	2° \mathbb{B} 30'14	19.08842 AU
max. Earth dist.	-4465 Jan 01 j 00:53	6° \mathbb{A} 46'48	21.08148 AU	opposition	-4459 Jul 31 j 05:32	2° \mathbb{B} 27'55	-0°43'43
morning rise	-4465 Jan 15 j 19:05	7° \mathbb{A} 37'02		direct	-4459 Oct 14 j 02:52	0° \mathbb{B} 31'42	
retrograde	-4465 Apr 20 j 08:55	10° \mathbb{A} 44'09		evening set	-4458 Jan 11 j 08:10	3° \mathbb{B} 28'43	
opposition	-4465 Jul 07 j 16:01	8° \mathbb{A} 44'49	-0°26'11	conjunction	-4458 Jan 27 j 11:36	4° \mathbb{B} 23'18	-0°40'36
min. Earth dist.	-4465 Jul 06 j 12:11	8° \mathbb{A} 47'37	19.08890 AU	minimum elong	-4458 Jan 27 j 11:36	4° \mathbb{B} 23'18	0°40'48
direct	-4465 Sep 20 j 23:42	6° \mathbb{A} 48'59		max. Earth dist.	-4458 Jan 28 j 11:21	4° \mathbb{B} 26'40	21.08164 AU
evening set	-4465 Dec 19 j 02:02	9° \mathbb{A} 46'11		morning rise	-4458 Feb 12 j 19:26	5° \mathbb{B} 18'28	
conjunction	-4464 Jan 03 j 23:41	10° \mathbb{A} 40'16	-0°25'11	retrograde	-4458 May 18 j 15:33	8° \mathbb{B} 25'28	
minimum elong	-4464 Jan 03 j 23:41	10° \mathbb{A} 40'16	0°25'24	opposition	-4458 Aug 04 j 11:19	6° \mathbb{B} 25'46	-0°46'00
max. Earth dist.	-4464 Jan 05 j 04:30	10° \mathbb{A} 44'22	21.09425 AU	min. Earth dist.	-4458 Aug 03 j 14:09	6° \mathbb{B} 27'55	19.07467 AU
morning rise	-4464 Jan 20 j 01:36	11° \mathbb{A} 34'54		direct	-4458 Oct 18 j 06:02	4° \mathbb{B} 29'28	
retrograde	-4464 Apr 23 j 16:34	14° \mathbb{A} 41'52		evening set	-4457 Jan 15 j 14:11	7° \mathbb{B} 26'46	
opposition	-4464 Jul 10 j 23:02	12° \mathbb{A} 42'27	-0°29'31	conjunction	-4457 Jan 31 j 18:49	8° \mathbb{B} 21'30	-0°42'34
min. Earth dist.	-4464 Jul 09 j 20:20	12° \mathbb{A} 45'08	19.09927 AU	minimum elong	-4457 Jan 31 j 18:49	8° \mathbb{B} 21'30	0°42'47
direct	-4464 Sep 24 j 04:10	10° \mathbb{A} 46'34		max. Earth dist.	-4457 Feb 01 j 18:26	8° \mathbb{B} 24'51	21.06580 AU
evening set	-4464 Dec 22 j 06:33	13° \mathbb{A} 43'31		morning rise	-4457 Feb 17 j 03:29	9° \mathbb{B} 16'49	
conjunction	-4463 Jan 07 j 05:16	14° \mathbb{A} 37'38	-0°28'08	retrograde	-4457 May 23 j 00:42	12° \mathbb{B} 23'59	
minimum elong	-4463 Jan 07 j 05:16	14° \mathbb{A} 37'38	0°28'20	opposition	-4457 Aug 08 j 16:58	10° \mathbb{B} 24'17	-0°48'04
max. Earth dist.	-4463 Jan 08 j 10:33	14° \mathbb{A} 41'48	21.10221 AU	min. Earth dist.	-4457 Aug 07 j 20:41	10° \mathbb{B} 26'21	19.05656 AU
morning rise	-4463 Jan 23 j 07:59	15° \mathbb{A} 32'20		direct	-4457 Oct 22 j 11:07	8° \mathbb{B} 27'54	
retrograde	-4463 Apr 28 j 00:04	18° \mathbb{A} 39'09		evening set	-4456 Jan 19 j 21:06	11° \mathbb{B} 25'34	
min. Earth dist.	-4463 Jul 14 j 03:17	16° \mathbb{A} 42'19	19.10496 AU				

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Attention, astronomical year style is used: The year -4456 in astronomical counting style is the year 4457 BCE in historical counting style.

conjunction	-4456 Feb 05 j 02:36	12°♁20'27	-0°44'20	retrograde	-4450 Jun 20 j 22:11	10°♁38'52	
minimum elong	-4456 Feb 05 j 02:36	12°♁20'27	0°44'32	opposition	-4450 Sep 05 j 11:50	8°♁38'30	-0°55'41
max. Earth dist.	-4456 Feb 05 j 23:27	12°♁23'24	21.04550 AU	min. Earth dist.	-4450 Sep 05 j 05:35	8°♁39'09	18.79105 AU
morning rise	-4456 Feb 21 j 12:24	13°♁15'55		direct	-4450 Nov 19 j 00:10	6°♁40'18	
retrograde	-4456 May 26 j 09:25	16°♁23'18		evening set	-4449 Feb 17 j 13:27	9°♁42'15	
opposition	-4456 Aug 11 j 22:39	14°♁23'36	-0°49'55				
min. Earth dist.	-4456 Aug 11 j 04:41	14°♁25'26	19.03390 AU	conjunction	-4449 Mar 06 j 02:12	10°♁38'39	-0°50'21
direct	-4456 Oct 25 j 14:02	12°♁27'05		minimum elong	-4449 Mar 06 j 02:12	10°♁38'39	0°50'30
evening set	-4455 Jan 23 j 04:27	15°♁25'11		max. Earth dist.	-4449 Mar 06 j 09:07	10°♁39'39	20.76393 AU
				morning rise	-4449 Mar 22 j 17:51	11°♁35'30	
conjunction	-4455 Feb 08 j 11:08	16°♁20'15	-0°45'54	retrograde	-4449 Jun 25 j 09:09	14°♁44'59	
minimum elong	-4455 Feb 08 j 11:08	16°♁20'15	0°46'07	opposition	-4449 Sep 09 j 18:41	12°♁44'27	-0°55'41
max. Earth dist.	-4455 Feb 09 j 07:16	16°♁23'07	21.02031 AU	min. Earth dist.	-4449 Sep 09 j 13:29	12°♁45'00	18.73629 AU
morning rise	-4455 Feb 24 j 21:41	17°♁15'53		direct	-4449 Nov 23 j 07:42	10°♁45'53	
retrograde	-4455 May 30 j 19:32	20°♁23'31		evening set	-4448 Feb 22 j 01:27	13°♁48'41	
min. Earth dist.	-4455 Aug 15 j 11:41	18°♁25'30	19.00606 AU				
opposition	-4455 Aug 16 j 04:25	18°♁23'47	-0°51'31	conjunction	-4448 Mar 09 j 14:57	14°♁45'21	-0°50'13
direct	-4455 Oct 29 j 19:53	16°♁27'07		minimum elong	-4448 Mar 09 j 14:57	14°♁45'21	0°50'22
evening set	-4454 Jan 27 j 12:24	19°♁25'43		max. Earth dist.	-4448 Mar 09 j 18:37	14°♁45'52	20.70790 AU
					-4448 Mar 13 j 20:53	15°♁	
conjunction	-4454 Feb 12 j 19:56	20°♁20'58	-0°47'14	morning rise	-4448 Mar 26 j 07:26	15°♁42'26	
minimum elong	-4454 Feb 12 j 19:56	20°♁20'58	0°47'26	retrograde	-4448 Jun 28 j 20:07	18°♁52'20	
max. Earth dist.	-4454 Feb 13 j 12:52	20°♁23'22	20.98986 AU	opposition	-4448 Sep 13 j 01:54	16°♁51'38	-0°55'24
morning rise	-4454 Mar 01 j 07:33	21°♁16'47		min. Earth dist.	-4448 Sep 12 j 23:23	16°♁51'54	18.67916 AU
retrograde	-4454 Jun 04 j 04:43	24°♁24'41			-4448 Nov 09 j 21:16	15°♁	
opposition	-4454 Aug 20 j 10:32	22°♁24'53	-0°52'53	direct	-4448 Nov 26 j 14:45	14°♁52'40	
min. Earth dist.	-4454 Aug 19 j 20:21	22°♁26'20	18.97293 AU		-4448 Dec 13 j 08:14	15°♁	
direct	-4454 Nov 02 j 23:44	20°♁27'59		evening set	-4447 Feb 25 j 14:00	17°♁56'25	
evening set	-4453 Jan 31 j 20:56	23°♁27'08					
				conjunction	-4447 Mar 14 j 04:33	18°♁53'21	-0°49'49
conjunction	-4453 Feb 17 j 05:40	24°♁22'36	-0°48'21	minimum elong	-4447 Mar 14 j 04:33	18°♁53'21	0°49'58
minimum elong	-4453 Feb 17 j 05:40	24°♁22'36	0°48'33	max. Earth dist.	-4447 Mar 14 j 07:10	18°♁53'44	20.64975 AU
max. Earth dist.	-4453 Feb 17 j 21:31	24°♁24'51	20.95403 AU	morning rise	-4447 Mar 30 j 21:32	19°♁50'40	
morning rise	-4453 Mar 05 j 18:02	25°♁18'36		retrograde	-4447 Jul 03 j 08:23	23°♁01'00	
retrograde	-4453 Jun 08 j 15:12	28°♁26'46		opposition	-4447 Sep 17 j 09:32	21°♁00'10	-0°54'51
opposition	-4453 Aug 24 j 16:31	26°♁26'53	-0°53'59	min. Earth dist.	-4447 Sep 17 j 07:52	21°♁00'20	18.62004 AU
min. Earth dist.	-4453 Aug 24 j 03:41	26°♁28'12	18.93434 AU	direct	-4447 Nov 30 j 23:29	19°♁00'51	
direct	-4453 Nov 07 j 06:03	24°♁29'43		evening set	-4446 Mar 02 j 03:21	22°♁05'34	
evening set	-4452 Feb 05 j 06:14	27°♁29'29					
				conjunction	-4446 Mar 18 j 18:35	23°♁02'47	-0°49'10
conjunction	-4452 Feb 21 j 15:52	28°♁25'09	-0°49'13	minimum elong	-4446 Mar 18 j 18:35	23°♁02'47	0°49'18
minimum elong	-4452 Feb 21 j 15:52	28°♁25'09	0°49'25	max. Earth dist.	-4446 Mar 18 j 18:09	23°♁02'43	20.58985 AU
max. Earth dist.	-4452 Feb 22 j 04:14	28°♁26'55	20.91294 AU	morning rise	-4446 Apr 04 j 12:18	24°♁00'22	
morning rise	-4452 Mar 09 j 05:17	29°♁21'21		retrograde	-4446 Jul 07 j 19:58	27°♁11'10	
	-4452 Mar 21 j 02:04	0°♁		opposition	-4446 Sep 21 j 17:47	25°♁10'13	-0°53'59
retrograde	-4452 Jun 12 j 01:08	2°♁29'50		min. Earth dist.	-4446 Sep 21 j 18:46	25°♁10'07	18.55946 AU
opposition	-4452 Aug 27 j 22:51	0°♁29'48	-0°54'50	direct	-4446 Dec 05 j 07:18	23°♁10'32	
min. Earth dist.	-4452 Aug 27 j 12:46	0°♁30'50	18.89078 AU	evening set	-4445 Mar 06 j 17:35	26°♁16'19	
	-4452 Sep 09 j 03:05	30°♁					
direct	-4452 Nov 10 j 11:19	28°♁32'19		conjunction	-4445 Mar 23 j 09:49	27°♁13'50	-0°48'15
	-4451 Jan 09 j 11:00	0°♁		minimum elong	-4445 Mar 23 j 09:49	27°♁13'50	0°48'23
evening set	-4451 Feb 08 j 15:59	1°♁32'44		max. Earth dist.	-4445 Mar 23 j 08:12	27°♁13'36	20.52864 AU
				morning rise	-4445 Apr 09 j 03:57	28°♁11'39	
conjunction	-4451 Feb 25 j 02:45	2°♁28'39	-0°49'51		-4445 May 14 j 11:30	0°♁	
minimum elong	-4451 Feb 25 j 02:45	2°♁28'39	0°50'02	retrograde	-4445 Jul 12 j 09:54	1°♁22'58	
max. Earth dist.	-4451 Feb 25 j 14:00	2°♁30'15	20.86707 AU		-4445 Sep 10 j 19:03	30°♁	
morning rise	-4451 Mar 13 j 16:49	3°♁25'03		opposition	-4445 Sep 26 j 02:16	29°♁21'55	-0°52'51
retrograde	-4451 Jun 16 j 11:31	6°♁33'50		min. Earth dist.	-4445 Sep 26 j 04:15	29°♁21'43	18.49751 AU
opposition	-4451 Sep 01 j 05:09	4°♁33'39	-0°55'24	direct	-4445 Dec 09 j 17:30	27°♁21'53	
min. Earth dist.	-4451 Aug 31 j 20:15	4°♁34'34	18.84269 AU		-4444 Mar 01 j 17:55	0°♁	
direct	-4451 Nov 14 j 17:57	2°♁35'50		evening set	-4444 Mar 10 j 09:00	0°♁28'49	
evening set	-4450 Feb 13 j 02:29	5°♁36'58					
				conjunction	-4444 Mar 27 j 01:49	1°♁26'38	-0°47'04
conjunction	-4450 Mar 01 j 14:04	6°♁33'07	-0°50'13	minimum elong	-4444 Mar 27 j 01:49	1°♁26'38	0°47'11
minimum elong	-4450 Mar 01 j 14:04	6°♁33'07	0°50'25	max. Earth dist.	-4444 Mar 26 j 21:02	1°♁25'56	20.46608 AU
max. Earth dist.	-4450 Mar 01 j 22:01	6°♁34'15	20.81715 AU	morning rise	-4444 Apr 12 j 20:31	2°♁24'43	
morning rise	-4450 Mar 18 j 05:06	7°♁29'45		retrograde	-4444 Jul 15 j 22:36	5°♁36'34	

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Attention, astronomical year style is used: The year -4444 in astronomical counting style is the year 4445 BCE in historical counting style.

opposition	-4444 Sep 29 j 11:37	3° $\mathbf{\text{X}}$ 35'27	-0°51'25	conjunction	-4437 Apr 28 j 18:31	1° $\mathbf{\text{Y}}$ 50'14	-0°31'36
min. Earth dist.	-4444 Sep 29 j 16:28	3° $\mathbf{\text{X}}$ 34'56	18.43435 AU	minimum elong	-4437 Apr 28 j 18:31	1° $\mathbf{\text{Y}}$ 50'14	0°31'36
direct	-4444 Dec 13 j 02:15	1° $\mathbf{\text{X}}$ 35'05		max. Earth dist.	-4437 Apr 27 j 21:14	1° $\mathbf{\text{Y}}$ 47'04	19.99055 AU
evening set	-4443 Mar 15 j 01:04	4° $\mathbf{\text{X}}$ 43'12		morning rise	-4437 May 15 j 14:08	2° $\mathbf{\text{Y}}$ 50'04	
				retrograde	-4437 Aug 16 j 17:01	6° $\mathbf{\text{Y}}$ 05'54	
conjunction	-4443 Mar 31 j 18:41	5° $\mathbf{\text{X}}$ 41'18	-0°45'38	opposition	-4437 Oct 29 j 23:23	4° $\mathbf{\text{Y}}$ 04'05	-0°33'24
minimum elong	-4443 Mar 31 j 18:42	5° $\mathbf{\text{X}}$ 41'18	0°45'44	min. Earth dist.	-4437 Oct 30 j 17:12	4° $\mathbf{\text{Y}}$ 02'10	17.95553 AU
max. Earth dist.	-4443 Mar 31 j 12:28	5° $\mathbf{\text{X}}$ 40'24	20.40227 AU	direct	-4436 Jan 13 j 02:28	2° $\mathbf{\text{Y}}$ 00'53	
morning rise	-4443 Apr 17 j 13:40	6° $\mathbf{\text{X}}$ 39'38		evening set	-4436 Apr 15 j 20:55	5° $\mathbf{\text{Y}}$ 18'02	
retrograde	-4443 Jul 20 j 14:11	9° $\mathbf{\text{X}}$ 52'04					
opposition	-4443 Oct 03 j 21:25	7° $\mathbf{\text{X}}$ 50'54	-0°49'41	conjunction	-4436 May 02 j 17:13	6° $\mathbf{\text{Y}}$ 18'10	-0°28'28
min. Earth dist.	-4443 Oct 04 j 03:20	7° $\mathbf{\text{X}}$ 50'16	18.36978 AU	minimum elong	-4436 May 02 j 17:13	6° $\mathbf{\text{Y}}$ 18'10	0°28'28
direct	-4443 Dec 17 j 14:20	5° $\mathbf{\text{X}}$ 50'11		max. Earth dist.	-4436 May 01 j 18:09	6° $\mathbf{\text{Y}}$ 14'43	19.92073 AU
evening set	-4442 Mar 19 j 18:22	8° $\mathbf{\text{X}}$ 59'33		morning rise	-4436 May 19 j 12:30	7° $\mathbf{\text{Y}}$ 18'13	
				retrograde	-4436 Aug 20 j 10:25	10° $\mathbf{\text{Y}}$ 34'35	
conjunction	-4442 Apr 05 j 12:29	9° $\mathbf{\text{X}}$ 57'57	-0°43'55	opposition	-4436 Nov 02 j 14:21	8° $\mathbf{\text{Y}}$ 32'39	-0°29'49
minimum elong	-4442 Apr 05 j 12:29	9° $\mathbf{\text{X}}$ 57'57	0°44'00	min. Earth dist.	-4436 Nov 03 j 10:35	8° $\mathbf{\text{Y}}$ 30'28	17.88648 AU
max. Earth dist.	-4442 Apr 05 j 03:04	9° $\mathbf{\text{X}}$ 56'35	20.33693 AU	direct	-4435 Jan 16 j 18:01	6° $\mathbf{\text{Y}}$ 29'01	
morning rise	-4442 Apr 22 j 07:49	10° $\mathbf{\text{X}}$ 56'33		evening set	-4435 Apr 20 j 20:01	9° $\mathbf{\text{Y}}$ 47'27	
retrograde	-4442 Jul 25 j 03:55	14° $\mathbf{\text{X}}$ 09'34					
opposition	-4442 Oct 08 j 08:00	12° $\mathbf{\text{X}}$ 08'20	-0°47'39	conjunction	-4435 May 07 j 16:16	10° $\mathbf{\text{Y}}$ 47'51	-0°25'09
min. Earth dist.	-4442 Oct 08 j 17:01	12° $\mathbf{\text{X}}$ 07'22	18.30373 AU	minimum elong	-4435 May 07 j 16:16	10° $\mathbf{\text{Y}}$ 47'51	0°25'07
direct	-4442 Dec 22 j 00:31	10° $\mathbf{\text{X}}$ 07'15		max. Earth dist.	-4435 May 06 j 15:16	10° $\mathbf{\text{Y}}$ 44'05	19.85264 AU
evening set	-4441 Mar 24 j 12:31	13° $\mathbf{\text{X}}$ 17'53		morning rise	-4435 May 24 j 11:20	11° $\mathbf{\text{Y}}$ 48'07	
				retrograde	-4435 Aug 25 j 07:00	15° $\mathbf{\text{Y}}$ 05'01	
conjunction	-4441 Apr 10 j 07:20	14° $\mathbf{\text{X}}$ 16'36	-0°41'57	opposition	-4435 Nov 07 j 05:54	13° $\mathbf{\text{Y}}$ 02'57	-0°26'02
minimum elong	-4441 Apr 10 j 07:20	14° $\mathbf{\text{X}}$ 16'36	0°42'01	min. Earth dist.	-4435 Nov 08 j 02:35	13° $\mathbf{\text{Y}}$ 00'43	17.81952 AU
max. Earth dist.	-4441 Apr 09 j 19:57	14° $\mathbf{\text{X}}$ 14'56	20.27009 AU	direct	-4434 Jan 21 j 13:00	10° $\mathbf{\text{Y}}$ 58'53	
morning rise	-4441 Apr 27 j 02:52	15° $\mathbf{\text{X}}$ 15'27		evening set	-4434 Apr 25 j 19:59	14° $\mathbf{\text{Y}}$ 18'37	
retrograde	-4441 Jul 29 j 20:59	18° $\mathbf{\text{X}}$ 29'02					
opposition	-4441 Oct 12 j 19:14	16° $\mathbf{\text{X}}$ 27'43	-0°45'20	conjunction	-4434 May 12 j 16:14	15° $\mathbf{\text{Y}}$ 19'16	-0°21'39
min. Earth dist.	-4441 Oct 13 j 05:24	16° $\mathbf{\text{X}}$ 26'38	18.23598 AU	minimum elong	-4434 May 12 j 16:14	15° $\mathbf{\text{Y}}$ 19'16	0°21'36
direct	-4441 Dec 26 j 14:41	14° $\mathbf{\text{X}}$ 26'16		max. Earth dist.	-4434 May 11 j 14:17	15° $\mathbf{\text{Y}}$ 15'20	19.78684 AU
evening set	-4440 Mar 28 j 07:48	17° $\mathbf{\text{X}}$ 38'12		morning rise	-4434 May 29 j 10:44	16° $\mathbf{\text{Y}}$ 19'44	
				retrograde	-4434 Aug 30 j 01:35	19° $\mathbf{\text{Y}}$ 37'09	
conjunction	-4440 Apr 14 j 02:59	18° $\mathbf{\text{X}}$ 37'12	-0°39'43	opposition	-4434 Nov 11 j 22:18	17° $\mathbf{\text{Y}}$ 35'00	-0°22'04
minimum elong	-4440 Apr 14 j 02:59	18° $\mathbf{\text{X}}$ 37'12	0°39'46	min. Earth dist.	-4434 Nov 12 j 20:57	17° $\mathbf{\text{Y}}$ 32'32	17.75526 AU
max. Earth dist.	-4440 Apr 13 j 12:27	18° $\mathbf{\text{X}}$ 35'04	20.20146 AU	direct	-4433 Jan 26 j 05:51	15° $\mathbf{\text{Y}}$ 30'32	
morning rise	-4440 Apr 30 j 22:39	19° $\mathbf{\text{X}}$ 36'18		evening set	-4433 Apr 30 j 20:47	18° $\mathbf{\text{Y}}$ 51'33	
retrograde	-4440 Aug 02 j 11:46	22° $\mathbf{\text{X}}$ 50'28					
opposition	-4440 Oct 16 j 07:18	20° $\mathbf{\text{X}}$ 49'03	-0°42'44	conjunction	-4433 May 17 j 16:44	19° $\mathbf{\text{Y}}$ 52'25	-0°18'00
min. Earth dist.	-4440 Oct 16 j 20:32	20° $\mathbf{\text{X}}$ 47'38	18.16670 AU	minimum elong	-4433 May 17 j 16:44	19° $\mathbf{\text{Y}}$ 52'25	0°17'57
direct	-4440 Dec 30 j 03:01	18° $\mathbf{\text{X}}$ 47'11		max. Earth dist.	-4433 May 16 j 12:45	19° $\mathbf{\text{Y}}$ 48'10	19.72423 AU
evening set	-4439 Apr 02 j 03:49	22° $\mathbf{\text{X}}$ 00'25		morning rise	-4433 Jun 03 j 10:52	20° $\mathbf{\text{Y}}$ 53'04	
				retrograde	-4433 Sep 03 j 23:15	24° $\mathbf{\text{Y}}$ 11'01	
conjunction	-4439 Apr 18 j 23:27	22° $\mathbf{\text{X}}$ 59'42	-0°37'15	opposition	-4433 Nov 16 j 15:29	22° $\mathbf{\text{Y}}$ 08'46	-0°17'56
minimum elong	-4439 Apr 18 j 23:27	22° $\mathbf{\text{X}}$ 59'43	0°37'16	min. Earth dist.	-4433 Nov 17 j 14:26	22° $\mathbf{\text{Y}}$ 06'16	17.69443 AU
max. Earth dist.	-4439 Apr 18 j 06:48	22° $\mathbf{\text{X}}$ 57'15	20.13166 AU	direct	-4432 Jan 31 j 02:25	20° $\mathbf{\text{Y}}$ 03'59	
morning rise	-4439 May 05 j 19:10	23° $\mathbf{\text{X}}$ 59'03		evening set	-4432 May 04 j 22:08	23° $\mathbf{\text{Y}}$ 26'14	
retrograde	-4439 Aug 07 j 05:46	27° $\mathbf{\text{X}}$ 13'47					
opposition	-4439 Oct 20 j 19:56	25° $\mathbf{\text{X}}$ 12'15	-0°39'53	conjunction	-4432 May 21 j 17:53	24° $\mathbf{\text{Y}}$ 27'20	-0°14'14
min. Earth dist.	-4439 Oct 21 j 10:08	25° $\mathbf{\text{X}}$ 10'44	18.09642 AU	minimum elong	-4432 May 21 j 17:53	24° $\mathbf{\text{Y}}$ 27'20	0°14'09
direct	-4438 Jan 03 j 18:48	23° $\mathbf{\text{X}}$ 09'57		behind sun begin	-4432 May 21 j 14:47	24° $\mathbf{\text{Y}}$ 26'52	
evening set	-4438 Apr 07 j 00:36	26° $\mathbf{\text{X}}$ 24'29		behind sun end	-4432 May 21 j 20:58	24° $\mathbf{\text{Y}}$ 27'47	
				max. Earth dist.	-4432 May 20 j 13:43	24° $\mathbf{\text{Y}}$ 23'02	19.66514 AU
conjunction	-4438 Apr 23 j 20:32	27° $\mathbf{\text{X}}$ 24'04	-0°34'32	morning rise	-4432 Jun 07 j 11:12	25° $\mathbf{\text{Y}}$ 28'08	
minimum elong	-4438 Apr 23 j 20:32	27° $\mathbf{\text{X}}$ 24'04	0°34'34	retrograde	-4432 Sep 07 j 18:59	28° $\mathbf{\text{Y}}$ 46'35	
max. Earth dist.	-4438 Apr 23 j 01:23	27° $\mathbf{\text{X}}$ 21'13	20.06105 AU	opposition	-4432 Nov 20 j 09:39	26° $\mathbf{\text{Y}}$ 44'20	-0°13'40
morning rise	-4438 May 10 j 16:13	28° $\mathbf{\text{X}}$ 23'40		min. Earth dist.	-4432 Nov 21 j 10:04	26° $\mathbf{\text{Y}}$ 41'40	17.63733 AU
	-4438 Jun 09 j 14:13	0° $\mathbf{\text{Y}}$		direct	-4431 Feb 03 j 21:13	24° $\mathbf{\text{Y}}$ 39'15	
retrograde	-4438 Aug 11 j 21:54	1° $\mathbf{\text{Y}}$ 38'57		evening set	-4431 May 10 j 00:16	28° $\mathbf{\text{Y}}$ 02'44	
	-4438 Oct 16 j 13:09	30° $\mathbf{\text{X}}$					
opposition	-4438 Oct 25 j 09:26	29° $\mathbf{\text{X}}$ 37'17	-0°36'46	conjunction	-4431 May 26 j 19:27	29° $\mathbf{\text{Y}}$ 04'00	-0°10'20
min. Earth dist.	-4438 Oct 26 j 02:27	29° $\mathbf{\text{X}}$ 35'27	18.02576 AU	minimum elong	-4431 May 26 j 19:27	29° $\mathbf{\text{Y}}$ 04'01	0°10'15
direct	-4437 Jan 08 j 09:04	27° $\mathbf{\text{X}}$ 34'32		behind sun begin	-4431 May 26 j 14:07	29° $\mathbf{\text{Y}}$ 03'13	
	-4437 Mar 28 j 01:02	0° $\mathbf{\text{Y}}$		behind sun end	-4431 May 27 j 00:47	29° $\mathbf{\text{Y}}$ 04'48	
evening set	-4437 Apr 11 j 22:20	0° $\mathbf{\text{Y}}$ 50'22		max. Earth dist.	-4431 May 25 j 13:24	28° $\mathbf{\text{Y}}$ 59'24	19.61015 AU

Attention, astronomical year style is used: The year -4431 in astronomical counting style is the year 4432 BCE in historical counting style.

	-4431 Jun 11 j 03:09	0° 8		morning rise	-4426 Jul 06 j 22:27	23° 8 33'02	
morning rise	-4431 Jun 12 j 12:14	0° 8 04'57		retrograde	-4426 Oct 06 j 10:21	26° 8 54'02	
retrograde	-4431 Sep 12 j 17:22	3° 8 23'56		opposition	-4426 Dec 18 j 15:53	24° 8 51'54	0°13'27
opposition	-4431 Nov 25 j 04:29	1° 8 21'40	-0°09'16	min. Earth dist.	-4426 Dec 19 j 19:36	24° 8 48'53	17.37759 AU
min. Earth dist.	-4431 Nov 26 j 05:13	1° 8 18'57	17.58445 AU	direct	-4425 Mar 04 j 21:05	22° 8 45'38	
	-4431 Dec 29 j 04:41	30° 8 1'00		evening set	-4425 Jun 08 j 23:50	26° 8 15'04	
direct	-4430 Feb 08 j 19:36	29° 8 16'20		max. Earth dist.	-4425 Jun 24 j 05:22	27° 8 11'47	19.36182 AU
	-4430 Mar 21 j 21:43	0° 8					
evening set	-4430 May 15 j 02:50	2° 8 41'00		conjunction	-4425 Jun 25 j 14:26	27° 8 16'58	0°14'08
				minimum elong	-4425 Jun 25 j 14:26	27° 8 16'58	0°14'17
conjunction	-4430 May 31 j 21:42	3° 8 42'27	-0°06'22	behind sun begin	-4425 Jun 25 j 11:23	27° 8 16'30	
minimum elong	-4430 May 31 j 21:43	3° 8 42'27	0°06'15	behind sun end	-4425 Jun 25 j 17:28	27° 8 17'25	
behind sun begin	-4430 May 31 j 15:19	3° 8 41'30		morning rise	-4425 Jul 12 j 01:08	28° 8 18'19	
behind sun end	-4430 Jun 01 j 04:07	3° 8 43'25			-4425 Aug 11 j 02:19	0° 8	
max. Earth dist.	-4430 May 30 j 15:57	3° 8 37'53	19.55920 AU	retrograde	-4425 Oct 11 j 09:39	1° 8 39'34	
morning rise	-4430 Jun 17 j 13:33	4° 8 43'31			-4425 Dec 14 j 23:40	30° 8	
retrograde	-4430 Sep 17 j 14:11	8° 8 02'58		opposition	-4425 Dec 23 j 15:40	29° 8 37'27	0°17'54
opposition	-4430 Nov 30 j 00:20	6° 8 00'45	-0°04'47	min. Earth dist.	-4425 Dec 24 j 19:57	29° 8 34'22	17.34809 AU
min. Earth dist.	-4430 Dec 01 j 02:14	5° 8 57'55	17.53545 AU	direct	-4424 Mar 08 j 23:10	27° 8 31'00	
direct	-4429 Feb 13 j 17:01	3° 8 55'12			-4424 May 26 j 21:36	0° 8	
evening set	-4429 May 20 j 06:20	7° 8 21'01		evening set	-4424 Jun 13 j 04:32	1° 8 01'06	
max. Earth dist.	-4429 Jun 04 j 16:42	8° 8 17'42	19.51217 AU	max. Earth dist.	-4424 Jun 28 j 10:05	1° 8 57'58	19.33457 AU
conjunction	-4429 Jun 06 j 00:24	8° 8 22'36	-0°02'18	conjunction	-4424 Jun 29 j 18:07	2° 8 02'59	0°18'04
minimum elong	-4429 Jun 06 j 00:23	8° 8 22'36	0°02'10	minimum elong	-4424 Jun 29 j 18:07	2° 8 02'59	0°18'15
behind sun begin	-4429 Jun 05 j 17:37	8° 8 21'34		morning rise	-4424 Jul 16 j 03:34	3° 8 04'19	
behind sun end	-4429 Jun 06 j 07:09	8° 8 23'37		retrograde	-4424 Oct 15 j 10:35	6° 8 25'47	
morning rise	-4429 Jun 22 j 15:28	9° 8 23'46		opposition	-4424 Dec 27 j 15:58	4° 8 23'40	0°22'15
retrograde	-4429 Sep 22 j 12:56	12° 8 43'41		min. Earth dist.	-4424 Dec 28 j 19:26	4° 8 20'40	17.32316 AU
opposition	-4429 Dec 04 j 20:57	10° 8 41'29	-0°00'14	direct	-4423 Mar 14 j 02:53	2° 8 17'06	
min. Earth dist.	-4429 Dec 05 j 23:24	10° 8 38'35	17.49041 AU	evening set	-4423 Jun 18 j 09:19	5° 8 47'42	
asc. node	-4429 Dec 23 j 17:35	9° 8 53'19					
direct	-4428 Feb 18 j 17:14	8° 8 35'44		conjunction	-4423 Jul 04 j 21:43	6° 8 49'35	0°21'53
evening set	-4428 May 24 j 10:10	12° 8 02'36		minimum elong	-4423 Jul 04 j 21:43	6° 8 49'35	0°22'04
max. Earth dist.	-4428 Jun 08 j 20:29	12° 8 59'29	19.46889 AU	max. Earth dist.	-4423 Jul 03 j 13:42	6° 8 44'33	19.31218 AU
				morning rise	-4423 Jul 21 j 05:55	7° 8 50'52	
conjunction	-4428 Jun 10 j 03:39	13° 8 04'19	0°01'55	retrograde	-4423 Oct 20 j 09:54	11° 8 12'30	
minimum elong	-4428 Jun 10 j 03:38	13° 8 04'19	0°02'03	opposition	-4422 Jan 01 j 16:44	9° 8 10'22	0°26'26
behind sun begin	-4428 Jun 09 j 20:52	13° 8 03'17		min. Earth dist.	-4422 Jan 02 j 20:35	9° 8 07'20	17.30354 AU
behind sun end	-4428 Jun 10 j 10:24	13° 8 05'20		direct	-4422 Mar 19 j 05:21	7° 8 03'41	
morning rise	-4428 Jun 26 j 17:35	14° 8 05'33		evening set	-4422 Jun 23 j 13:54	10° 8 34'43	
	-4428 Jul 12 j 05:26	15° 8		max. Earth dist.	-4422 Jul 08 j 18:13	11° 8 31'39	19.29535 AU
retrograde	-4428 Sep 26 j 11:24	17° 8 25'53					
opposition	-4428 Dec 08 j 18:35	15° 8 23'43	0°04'21	conjunction	-4422 Jul 10 j 01:09	11° 8 36'32	0°25'33
min. Earth dist.	-4428 Dec 09 j 21:39	15° 8 20'45	17.44899 AU	minimum elong	-4422 Jul 10 j 01:09	11° 8 36'32	0°25'46
	-4428 Dec 17 j 20:59	15° 8		morning rise	-4422 Jul 26 j 08:08	12° 8 37'45	
direct	-4427 Feb 22 j 17:28	13° 8 17'48		retrograde	-4422 Oct 25 j 11:14	15° 8 59'29	
	-4427 Apr 27 j 23:44	15° 8		opposition	-4421 Jan 06 j 17:59	13° 8 57'22	0°30'27
evening set	-4427 May 29 j 14:23	16° 8 45'37		min. Earth dist.	-4421 Jan 07 j 20:16	13° 8 54'31	17.28952 AU
max. Earth dist.	-4427 Jun 13 j 22:08	17° 8 42'19	19.42933 AU	direct	-4421 Mar 24 j 09:40	11° 8 50'37	
				evening set	-4421 Jun 28 j 18:15	15° 8 21'56	
conjunction	-4427 Jun 15 j 06:53	17° 8 47'24	0°06'02	max. Earth dist.	-4421 Jul 13 j 22:28	16° 8 18'58	19.28431 AU
minimum elong	-4427 Jun 15 j 06:52	17° 8 47'24	0°06'12				
behind sun begin	-4427 Jun 15 j 00:28	17° 8 46'26		conjunction	-4421 Jul 15 j 04:14	16° 8 23'41	0°29'03
behind sun end	-4427 Jun 15 j 13:16	17° 8 48'22		minimum elong	-4421 Jul 15 j 04:14	16° 8 23'41	0°29'16
morning rise	-4427 Jul 01 j 19:54	18° 8 48'43		morning rise	-4421 Jul 31 j 09:50	17° 8 24'48	
retrograde	-4427 Oct 01 j 10:27	22° 8 09'25		retrograde	-4421 Oct 30 j 10:49	20° 8 46'36	
opposition	-4427 Dec 13 j 16:56	20° 8 07'16	0°08'55	opposition	-4420 Jan 11 j 19:48	18° 8 44'31	0°34'15
min. Earth dist.	-4427 Dec 14 j 20:36	20° 8 04'14	17.41142 AU	min. Earth dist.	-4420 Jan 12 j 22:02	18° 8 41'40	17.28172 AU
direct	-4426 Feb 27 j 18:50	18° 8 01'09		direct	-4420 Mar 28 j 12:39	16° 8 37'44	
evening set	-4426 Jun 03 j 18:55	21° 8 29'50		evening set	-4420 Jul 02 j 22:18	20° 8 09'14	
max. Earth dist.	-4426 Jun 19 j 02:36	22° 8 26'42	19.39360 AU	max. Earth dist.	-4420 Jul 18 j 02:24	21° 8 06'20	19.27984 AU
conjunction	-4426 Jun 20 j 10:38	22° 8 31'42	0°10'06	conjunction	-4420 Jul 19 j 06:56	21° 8 10'51	0°32'21
minimum elong	-4426 Jun 20 j 10:38	22° 8 31'42	0°10'16	minimum elong	-4420 Jul 19 j 06:55	21° 8 10'51	0°32'33
behind sun begin	-4426 Jun 20 j 05:19	22° 8 30'53		morning rise	-4420 Aug 04 j 11:19	22° 8 11'52	
behind sun end	-4426 Jun 20 j 15:57	22° 8 32'30		retrograde	-4420 Nov 03 j 12:06	25° 8 33'42	

Attention, astronomical year style is used: The year -4419 in astronomical counting style is the year 4420 BCE in historical counting style.

opposition	-4419 Jan 15 j 21:53	23° Π 31'39	0°37'48	conjunction	-4413 Aug 22 j 12:40	24° \mathfrak{D} 32'56	0°48'07
min. Earth dist.	-4419 Jan 16 j 21:46	23° Π 29'04	17.28057 AU	minimum elong	-4413 Aug 22 j 12:40	24° \mathfrak{D} 32'56	0°48'18
direct	-4419 Apr 02 j 17:26	21° Π 24'56		max. Earth dist.	-4413 Aug 21 j 22:20	24° \mathfrak{D} 30'40	19.42396 AU
evening set	-4419 Jul 08 j 01:48	24° Π 56'28		morning rise	-4413 Sep 07 j 08:28	25° \mathfrak{D} 32'37	
max. Earth dist.	-4419 Jul 23 j 06:54	25° Π 53'48	19.28206 AU	retrograde	-4413 Dec 07 j 09:34	28° \mathfrak{D} 53'29	
				opposition	-4412 Feb 19 j 18:21	26° \mathfrak{D} 52'21	0°54'15
conjunction	-4419 Jul 24 j 09:14	25° Π 57'58	0°35'25	min. Earth dist.	-4412 Feb 20 j 07:11	26° \mathfrak{D} 50'59	17.44377 AU
minimum elong	-4419 Jul 24 j 09:14	25° Π 57'58	0°35'38	direct	-4412 May 06 j 23:38	24° \mathfrak{D} 47'17	
morning rise	-4419 Aug 09 j 12:13	26° Π 58'50		evening set	-4412 Aug 10 j 12:44	28° \mathfrak{D} 15'53	
	-4419 Oct 12 j 10:10	0° \mathfrak{D}					
retrograde	-4419 Nov 08 j 11:30	0° \mathfrak{D} 20'41		conjunction	-4412 Aug 26 j 10:57	29° \mathfrak{D} 15'50	0°49'08
	-4419 Dec 06 j 00:33	30° \mathfrak{R} Π		minimum elong	-4412 Aug 26 j 10:57	29° \mathfrak{D} 15'50	0°49'20
opposition	-4418 Jan 21 j 00:23	28° Π 18'43	0°41'06	max. Earth dist.	-4412 Aug 25 j 21:36	29° \mathfrak{D} 13'44	19.46403 AU
min. Earth dist.	-4418 Jan 21 j 23:50	28° Π 16'10	17.28622 AU		-4412 Sep 07 j 03:28	0° Ω	
direct	-4418 Apr 07 j 20:56	26° Π 12'07		morning rise	-4412 Sep 11 j 05:53	0° Ω 15'17	
evening set	-4418 Jul 13 j 05:08	29° Π 43'36		retrograde	-4412 Dec 11 j 09:00	3° Ω 35'48	
	-4418 Jul 17 j 14:39	0° \mathfrak{D}		opposition	-4411 Feb 23 j 21:07	1° Ω 34'45	0°55'11
max. Earth dist.	-4418 Jul 28 j 09:51	0° \mathfrak{D} 40'56	19.29117 AU	min. Earth dist.	-4411 Feb 24 j 07:51	1° Ω 33'37	17.48568 AU
					-4411 Apr 07 j 07:02	30° \mathfrak{R} \mathfrak{D}	
conjunction	-4418 Jul 29 j 11:07	0° \mathfrak{D} 44'56	0°38'15	direct	-4411 May 12 j 02:53	29° \mathfrak{D} 29'57	
minimum elong	-4418 Jul 29 j 11:06	0° \mathfrak{D} 44'56	0°38'27		-4411 Jun 15 j 03:30	0° Ω	
morning rise	-4418 Aug 14 j 12:56	1° \mathfrak{D} 45'39		evening set	-4411 Aug 15 j 11:14	2° Ω 57'41	
retrograde	-4418 Nov 13 j 12:18	5° \mathfrak{D} 07'27					
opposition	-4417 Jan 26 j 02:54	3° \mathfrak{D} 05'36	0°44'07	conjunction	-4411 Aug 31 j 08:30	3° Ω 57'21	0°49'48
min. Earth dist.	-4417 Jan 26 j 23:49	3° \mathfrak{D} 03'20	17.29858 AU	minimum elong	-4411 Aug 31 j 08:30	3° Ω 57'21	0°49'59
direct	-4417 Apr 13 j 02:16	0° \mathfrak{D} 59'10		max. Earth dist.	-4411 Aug 30 j 22:13	3° Ω 55'44	19.50762 AU
evening set	-4417 Jul 18 j 07:54	4° \mathfrak{D} 30'30		morning rise	-4411 Sep 16 j 02:25	4° Ω 56'33	
				retrograde	-4411 Dec 16 j 07:11	8° Ω 16'39	
conjunction	-4417 Aug 03 j 12:40	5° \mathfrak{D} 31'39	0°40'49	opposition	-4410 Feb 28 j 23:37	6° Ω 15'41	0°55'44
minimum elong	-4417 Aug 03 j 12:40	5° \mathfrak{D} 31'39	0°41'02	min. Earth dist.	-4410 Mar 01 j 08:21	6° Ω 14'46	17.53073 AU
max. Earth dist.	-4417 Aug 02 j 14:14	5° \mathfrak{D} 28'06	19.30677 AU	direct	-4410 May 17 j 05:37	4° Ω 11'11	
morning rise	-4417 Aug 19 j 13:05	6° \mathfrak{D} 32'11		evening set	-4410 Aug 20 j 09:01	7° Ω 37'55	
retrograde	-4417 Nov 18 j 11:35	9° \mathfrak{D} 53'54					
opposition	-4416 Jan 31 j 05:58	7° \mathfrak{D} 52'12	0°46'50	conjunction	-4410 Sep 05 j 05:03	8° Ω 37'17	0°50'09
min. Earth dist.	-4416 Feb 01 j 02:08	7° \mathfrak{D} 50'02	17.31726 AU	minimum elong	-4410 Sep 05 j 05:03	8° Ω 37'17	0°50'19
direct	-4416 Apr 17 j 06:43	5° \mathfrak{D} 46'02		max. Earth dist.	-4410 Sep 04 j 20:05	8° Ω 35'52	19.55430 AU
evening set	-4416 Jul 22 j 10:07	9° \mathfrak{D} 17'03		morning rise	-4410 Sep 20 j 22:14	9° Ω 36'13	
				retrograde	-4410 Dec 21 j 05:02	12° Ω 55'53	
conjunction	-4416 Aug 07 j 13:24	10° \mathfrak{D} 17'59	0°43'06	opposition	-4409 Mar 06 j 01:44	10° Ω 54'58	0°55'55
minimum elong	-4416 Aug 07 j 13:24	10° \mathfrak{D} 17'59	0°43'19	min. Earth dist.	-4409 Mar 06 j 08:35	10° Ω 54'14	17.57902 AU
max. Earth dist.	-4416 Aug 06 j 15:59	10° \mathfrak{D} 14'36	19.32852 AU	direct	-4409 May 22 j 07:54	8° Ω 50'44	
morning rise	-4416 Aug 23 j 12:46	11° \mathfrak{D} 18'20		evening set	-4409 Aug 25 j 05:40	12° Ω 16'23	
retrograde	-4416 Nov 22 j 11:45	14° \mathfrak{D} 39'56					
opposition	-4415 Feb 04 j 08:59	12° \mathfrak{D} 38'23	0°49'13	conjunction	-4409 Sep 10 j 00:49	13° Ω 15'28	0°50'10
min. Earth dist.	-4415 Feb 05 j 02:36	12° \mathfrak{D} 36'30	17.34179 AU	minimum elong	-4409 Sep 10 j 00:49	13° Ω 15'28	0°50'20
direct	-4415 Apr 22 j 12:01	10° \mathfrak{D} 32'27		max. Earth dist.	-4409 Sep 09 j 18:56	13° Ω 14'32	19.60423 AU
evening set	-4415 Jul 27 j 11:44	14° \mathfrak{D} 03'04		morning rise	-4409 Sep 25 j 17:09	14° Ω 14'08	
					-4409 Oct 08 j 12:49	15° Ω	
conjunction	-4415 Aug 12 j 13:52	15° \mathfrak{D} 03'47	0°45'06	retrograde	-4409 Dec 26 j 02:07	17° Ω 33'18	
minimum elong	-4415 Aug 12 j 13:52	15° \mathfrak{D} 03'47	0°45'18	opposition	-4408 Mar 10 j 03:24	15° Ω 32'26	0°55'44
max. Earth dist.	-4415 Aug 11 j 19:32	15° \mathfrak{D} 00'53	19.35568 AU	min. Earth dist.	-4408 Mar 10 j 07:34	15° Ω 31'59	17.63043 AU
morning rise	-4415 Aug 28 j 11:53	16° \mathfrak{D} 03'56			-4408 Mar 23 j 04:22	15° \mathfrak{R} Ω	
retrograde	-4415 Nov 27 j 10:47	19° \mathfrak{D} 25'20		direct	-4408 May 26 j 10:27	13° Ω 28'31	
opposition	-4414 Feb 09 j 12:03	17° \mathfrak{D} 23'57	0°51'15		-4408 Jul 26 j 00:28	15° Ω	
min. Earth dist.	-4414 Feb 10 j 04:44	17° \mathfrak{D} 22'10	17.37139 AU	evening set	-4408 Aug 29 j 01:15	16° Ω 52'59	
direct	-4414 Apr 27 j 16:03	15° \mathfrak{D} 18'18					
evening set	-4414 Aug 01 j 12:54	18° \mathfrak{D} 48'22		conjunction	-4408 Sep 13 j 19:23	17° Ω 51'45	0°49'51
				minimum elong	-4408 Sep 13 j 19:24	17° Ω 51'45	0°49'59
conjunction	-4414 Aug 17 j 13:35	19° \mathfrak{D} 48'50	0°46'46	max. Earth dist.	-4408 Sep 13 j 15:27	17° Ω 51'08	19.65729 AU
minimum elong	-4414 Aug 17 j 13:35	19° \mathfrak{D} 48'50	0°46'59	morning rise	-4408 Sep 29 j 11:10	18° Ω 50'10	
max. Earth dist.	-4414 Aug 16 j 20:05	19° \mathfrak{D} 46'04	19.38769 AU	retrograde	-4408 Dec 29 j 21:52	22° Ω 08'51	
morning rise	-4414 Sep 02 j 10:37	20° \mathfrak{D} 48'46		opposition	-4407 Mar 15 j 04:32	20° Ω 07'59	0°55'11
retrograde	-4414 Dec 02 j 10:46	24° \mathfrak{D} 09'56		min. Earth dist.	-4407 Mar 15 j 06:54	20° Ω 07'44	17.68521 AU
opposition	-4413 Feb 14 j 15:11	22° \mathfrak{D} 08'40	0°52'56	direct	-4407 May 31 j 11:06	18° Ω 04'23	
min. Earth dist.	-4413 Feb 15 j 05:31	22° \mathfrak{D} 07'09	17.40563 AU	evening set	-4407 Sep 02 j 19:52	21° Ω 27'39	
direct	-4413 May 02 j 20:26	20° \mathfrak{D} 03'18					
evening set	-4413 Aug 06 j 13:06	23° \mathfrak{D} 32'43		conjunction	-4407 Sep 18 j 13:14	22° Ω 26'07	0°49'13

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Attention, astronomical year style is used: The year -4407 in astronomical counting style is the year 4408 BCE in historical counting style.

minimum elong	-4407 Sep 18 j 13:14	22° Ω 26'07	0°49'22	opposition	-4400 Apr 16 j 18:24	21° \mathbb{N} 25'21	0°42'35
max. Earth dist.	-4407 Sep 18 j 12:16	22° Ω 25'58	19.71376 AU	min. Earth dist.	-4400 Apr 16 j 03:38	21° \mathbb{N} 26'51	18.14506 AU
morning rise	-4407 Oct 04 j 04:21	23° Ω 24'15		direct	-4400 Jul 02 j 18:26	19° \mathbb{N} 24'46	
retrograde	-4406 Jan 03 j 17:58	26° Ω 42'24		evening set	-4400 Oct 03 j 04:26	22° \mathbb{N} 39'06	
opposition	-4406 Mar 20 j 04:49	24° Ω 41'36	0°54'18				
min. Earth dist.	-4406 Mar 20 j 04:02	24° Ω 41'41	17.74325 AU	conjunction	-4400 Oct 18 j 18:07	23° \mathbb{N} 35'34	0°37'06
direct	-4406 Jun 05 j 12:20	22° Ω 38'21		minimum elong	-4400 Oct 18 j 18:08	23° \mathbb{N} 35'34	0°37'08
evening set	-4406 Sep 07 j 13:36	26° Ω 00'24		max. Earth dist.	-4400 Oct 19 j 09:48	23° \mathbb{N} 37'57	20.17992 AU
				morning rise	-4400 Nov 03 j 07:41	24° \mathbb{N} 32'01	
conjunction	-4406 Sep 23 j 06:06	26° Ω 58'33	0°48'18	retrograde	-4399 Feb 03 j 17:34	27° \mathbb{N} 46'30	
minimum elong	-4406 Sep 23 j 06:06	26° Ω 58'33	0°48'24	opposition	-4399 Apr 21 j 14:19	25° \mathbb{N} 46'34	0°39'42
max. Earth dist.	-4406 Sep 23 j 07:28	26° Ω 58'46	19.77350 AU	min. Earth dist.	-4399 Apr 20 j 22:50	25° \mathbb{N} 48'08	18.21461 AU
morning rise	-4406 Oct 08 j 20:44	27° Ω 56'26		direct	-4399 Jul 07 j 11:35	23° \mathbb{N} 46'25	
	-4406 Nov 16 j 02:52	0° \mathbb{N}		evening set	-4399 Oct 07 j 16:10	26° \mathbb{N} 59'28	
retrograde	-4405 Jan 08 j 11:55	1° \mathbb{N} 14'03					
	-4405 Mar 05 j 23:25	30° $\mathbb{R}\Omega$		conjunction	-4399 Oct 23 j 05:35	27° \mathbb{N} 55'40	0°34'26
opposition	-4405 Mar 25 j 04:49	29° Ω 13'19	0°53'05	minimum elong	-4399 Oct 23 j 05:35	27° \mathbb{N} 55'40	0°34'27
min. Earth dist.	-4405 Mar 25 j 02:18	29° Ω 13'35	17.80473 AU	max. Earth dist.	-4399 Oct 23 j 22:21	27° \mathbb{N} 58'12	20.24892 AU
direct	-4405 Jun 10 j 10:55	27° Ω 10'28		morning rise	-4399 Nov 07 j 19:19	28° \mathbb{N} 51'54	
	-4405 Sep 03 j 12:01	0° \mathbb{N}			-4399 Nov 27 j 22:40	0° $\underline{\Omega}$	
evening set	-4405 Sep 12 j 06:11	0° \mathbb{N} 31'15					
conjunction	-4405 Sep 27 j 22:02	1° \mathbb{N} 29'06	0°47'05				
minimum elong	-4405 Sep 27 j 22:02	1° \mathbb{N} 29'06	0°47'11				
max. Earth dist.	-4405 Sep 28 j 02:10	1° \mathbb{N} 29'45	19.83663 AU				
morning rise	-4405 Oct 13 j 12:16	2° \mathbb{N} 26'43					
retrograde	-4404 Jan 13 j 07:25	5° \mathbb{N} 43'50					
opposition	-4404 Mar 29 j 04:04	3° \mathbb{N} 43'12	0°51'34				
min. Earth dist.	-4404 Mar 28 j 22:04	3° \mathbb{N} 43'50	17.86923 AU				
direct	-4404 Jun 14 j 10:31	1° \mathbb{N} 40'47					
evening set	-4404 Sep 15 j 21:58	5° \mathbb{N} 00'17					
conjunction	-4404 Oct 01 j 13:13	5° \mathbb{N} 57'51	0°45'35				
minimum elong	-4404 Oct 01 j 13:13	5° \mathbb{N} 57'51	0°45'41				
max. Earth dist.	-4404 Oct 01 j 19:55	5° \mathbb{N} 58'53	19.90247 AU				
morning rise	-4404 Oct 17 j 03:09	6° \mathbb{N} 55'14					
retrograde	-4403 Jan 16 j 23:58	10° \mathbb{N} 11'49					
opposition	-4403 Apr 03 j 02:37	8° \mathbb{N} 11'19	0°49'44				
min. Earth dist.	-4403 Apr 02 j 19:15	8° \mathbb{N} 12'05	17.93631 AU				
direct	-4403 Jun 19 j 06:47	6° \mathbb{N} 09'21					
evening set	-4403 Sep 20 j 12:50	9° \mathbb{N} 27'35					
conjunction	-4403 Oct 06 j 03:34	10° \mathbb{N} 24'51	0°43'49				
minimum elong	-4403 Oct 06 j 03:34	10° \mathbb{N} 24'51	0°43'54				
max. Earth dist.	-4403 Oct 06 j 12:29	10° \mathbb{N} 26'13	19.97059 AU				
morning rise	-4403 Oct 21 j 17:20	11° \mathbb{N} 21'59					
retrograde	-4402 Jan 21 j 18:33	14° \mathbb{N} 38'03					
opposition	-4402 Apr 08 j 00:29	12° \mathbb{N} 37'42	0°47'37				
min. Earth dist.	-4402 Apr 07 j 13:49	12° \mathbb{N} 38'48	18.00511 AU				
direct	-4402 Jun 24 j 04:27	10° \mathbb{N} 36'12					
evening set	-4402 Sep 25 j 02:49	13° \mathbb{N} 53'09					
conjunction	-4402 Oct 10 j 17:06	14° \mathbb{N} 50'08	0°41'49				
minimum elong	-4402 Oct 10 j 17:06	14° \mathbb{N} 50'08	0°41'54				
max. Earth dist.	-4402 Oct 11 j 04:37	14° \mathbb{N} 51'54	20.03995 AU				
morning rise	-4402 Oct 26 j 06:40	15° \mathbb{N} 47'02					
retrograde	-4401 Jan 26 j 09:45	19° \mathbb{N} 02'35					
opposition	-4401 Apr 12 j 21:54	17° \mathbb{N} 02'23	0°45'13				
min. Earth dist.	-4401 Apr 12 j 10:09	17° \mathbb{N} 03'35	18.07494 AU				
direct	-4401 Jun 28 j 23:07	15° \mathbb{N} 01'21					
evening set	-4401 Sep 29 j 16:03	18° \mathbb{N} 17'00					
conjunction	-4401 Oct 15 j 05:57	19° \mathbb{N} 13'43	0°39'34				
minimum elong	-4401 Oct 15 j 05:58	19° \mathbb{N} 13'43	0°39'37				
max. Earth dist.	-4401 Oct 15 j 19:12	19° \mathbb{N} 15'44	20.11006 AU				
morning rise	-4401 Oct 30 j 19:32	20° \mathbb{N} 10'23					
retrograde	-4400 Jan 31 j 03:19	23° \mathbb{N} 25'24					