

Planetary Phenomena of Neptune from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -9900 in astronomical counting style is the year 9901 BCE in historical counting style.

opposition	-9900 Feb 01 j 17:27	1°II28'47	2°23'09	conjunction	-9894 Aug 18 j 08:03	15°II34'49	2°30'27
min. Earth dist.	-9900 Feb 02 j 04:42	1°II28'02	29.32372 AU	minimum elong	-9894 Aug 18 j 08:02	15°II34'49	2°31'01
direct	-9900 Apr 22 j 22:27	0°II04'54		max. Earth dist.	-9894 Aug 18 j 04:28	15°II34'29	31.31413 AU
evening set	-9900 Jul 21 j 01:32	1°II59'57		morning rise	-9894 Sep 02 j 07:24	16°II08'33	
				retrograde	-9894 Nov 29 j 12:11	18°II03'10	
conjunction	-9900 Aug 05 j 03:40	2°II33'51	2°15'34	opposition	-9893 Feb 17 j 10:38	16°II40'34	2°41'43
minimum elong	-9900 Aug 05 j 03:39	2°II33'51	2°16'03	min. Earth dist.	-9893 Feb 17 j 13:56	16°II40'20	29.31599 AU
max. Earth dist.	-9900 Aug 04 j 16:31	2°II32'48	31.32056 AU	direct	-9893 May 09 j 04:02	15°II17'07	
morning rise	-9900 Aug 20 j 04:31	3°II07'40		evening set	-9893 Aug 05 j 17:06	17°II11'40	
retrograde	-9900 Nov 15 j 18:33	5°II01'24					
opposition	-9899 Feb 03 j 05:53	3°II39'02	2°26'27	conjunction	-9893 Aug 20 j 16:45	17°II45'25	2°32'13
min. Earth dist.	-9899 Feb 03 j 15:26	3°II38'24	29.32084 AU	minimum elong	-9893 Aug 20 j 16:45	17°II45'25	2°32'45
direct	-9899 Apr 25 j 09:44	2°II15'10		max. Earth dist.	-9893 Aug 20 j 13:03	17°II45'04	31.31351 AU
evening set	-9899 Jul 23 j 10:42	4°II10'07		morning rise	-9893 Sep 04 j 16:10	18°II19'10	
				retrograde	-9893 Dec 02 j 00:45	20°II13'56	
conjunction	-9899 Aug 07 j 12:31	4°II43'59	2°18'33	opposition	-9892 Feb 19 j 23:39	18°II51'19	2°43'28
minimum elong	-9899 Aug 07 j 12:30	4°II43'59	2°19'02	min. Earth dist.	-9892 Feb 20 j 02:08	18°II51'09	29.31499 AU
max. Earth dist.	-9899 Aug 07 j 03:11	4°II43'06	31.31768 AU	direct	-9892 May 10 j 14:49	17°II27'57	
morning rise	-9899 Aug 22 j 12:55	5°II17'47		evening set	-9892 Aug 07 j 02:13	19°II22'27	
retrograde	-9899 Nov 18 j 02:59	7°II11'37					
opposition	-9898 Feb 05 j 18:40	5°II49'11	2°29'32	conjunction	-9892 Aug 22 j 01:48	19°II56'12	2°33'45
min. Earth dist.	-9898 Feb 06 j 04:01	5°II48'33	29.31835 AU	minimum elong	-9892 Aug 22 j 01:47	19°II56'12	2°34'18
direct	-9898 Apr 27 j 21:23	4°II25'20		max. Earth dist.	-9892 Aug 21 j 23:49	19°II56'01	31.31176 AU
evening set	-9898 Jul 25 j 19:47	6°II20'11		morning rise	-9892 Sep 06 j 00:56	20°II29'56	
				retrograde	-9892 Dec 03 j 11:01	22°II24'51	
conjunction	-9898 Aug 09 j 21:05	6°II54'02	2°21'20	opposition	-9891 Feb 21 j 12:36	21°II02'12	2°45'00
minimum elong	-9898 Aug 09 j 21:04	6°II54'02	2°21'51	min. Earth dist.	-9891 Feb 21 j 14:50	21°II02'03	29.31256 AU
max. Earth dist.	-9898 Aug 09 j 12:31	6°II53'13	31.31559 AU	direct	-9891 May 13 j 04:05	19°II38'54	
morning rise	-9898 Aug 24 j 21:18	7°II27'48		evening set	-9891 Aug 09 j 11:28	21°II33'21	
retrograde	-9898 Nov 20 j 13:53	9°II21'46					
opposition	-9897 Feb 08 j 07:20	7°II59'16	2°32'25	conjunction	-9891 Aug 24 j 10:43	22°II07'05	2°35'04
min. Earth dist.	-9897 Feb 08 j 14:24	7°II58'47	29.31675 AU	minimum elong	-9891 Aug 24 j 10:42	22°II07'05	2°35'36
direct	-9897 Apr 30 j 08:13	6°II35'28		max. Earth dist.	-9891 Aug 24 j 08:29	22°II06'53	31.30866 AU
evening set	-9897 Jul 28 j 04:53	8°II30'14		morning rise	-9891 Sep 08 j 09:56	22°II40'50	
				retrograde	-9891 Dec 05 j 23:47	24°II35'54	
conjunction	-9897 Aug 12 j 05:51	9°II04'03	2°23'56	opposition	-9890 Feb 24 j 01:41	23°II13'12	2°46'17
minimum elong	-9897 Aug 12 j 05:50	9°II04'03	2°24'26	min. Earth dist.	-9890 Feb 24 j 02:24	23°II13'09	29.30875 AU
max. Earth dist.	-9897 Aug 11 j 22:35	9°II03'22	31.31435 AU	direct	-9890 May 15 j 15:20	21°II49'57	
morning rise	-9897 Aug 27 j 05:49	9°II37'49		evening set	-9890 Aug 11 j 20:28	23°II44'19	
retrograde	-9897 Nov 23 j 00:49	11°II31'56					
opposition	-9896 Feb 10 j 20:03	10°II09'23	2°35'04	conjunction	-9890 Aug 26 j 19:40	24°II18'02	2°36'09
min. Earth dist.	-9896 Feb 11 j 03:00	10°II08'55	29.31610 AU	minimum elong	-9890 Aug 26 j 19:39	24°II18'02	2°36'44
direct	-9896 May 01 j 17:31	8°II45'39		max. Earth dist.	-9890 Aug 26 j 18:46	24°II17'57	31.30400 AU
evening set	-9896 Jul 29 j 13:54	10°II40'21		morning rise	-9890 Sep 10 j 18:47	24°II51'48	
				retrograde	-9890 Dec 08 j 08:54	26°II47'00	
conjunction	-9896 Aug 13 j 14:34	11°II14'09	2°26'19	opposition	-9889 Feb 26 j 14:56	25°II24'13	2°47'20
minimum elong	-9896 Aug 13 j 14:34	11°II14'09	2°26'51	min. Earth dist.	-9889 Feb 26 j 15:50	25°II24'10	29.30341 AU
max. Earth dist.	-9896 Aug 13 j 08:43	11°II13'36	31.31408 AU	direct	-9889 May 18 j 03:13	24°II01'00	
morning rise	-9896 Aug 28 j 14:19	11°II47'54		evening set	-9889 Aug 14 j 05:35	25°II55'16	
retrograde	-9896 Nov 24 j 12:13	13°II42'10					
opposition	-9895 Feb 12 j 08:45	12°II19'36	2°37'31	conjunction	-9889 Aug 29 j 04:38	26°II28'59	2°37'02
min. Earth dist.	-9895 Feb 12 j 13:39	12°II19'16	29.31604 AU	minimum elong	-9889 Aug 29 j 04:38	26°II28'59	2°37'36
direct	-9895 May 04 j 05:48	10°II55'58		max. Earth dist.	-9889 Aug 29 j 04:14	26°II28'57	31.29810 AU
evening set	-9895 Jul 31 j 22:57	12°II50'37		morning rise	-9889 Sep 13 j 03:51	27°II02'45	
				retrograde	-9889 Dec 10 j 20:02	28°II58'04	
conjunction	-9895 Aug 15 j 23:10	13°II24'24	2°28'30	opposition	-9888 Feb 29 j 03:47	27°II35'12	2°48'09
minimum elong	-9895 Aug 15 j 23:10	13°II24'24	2°29'02	min. Earth dist.	-9888 Feb 29 j 02:54	27°II35'16	29.29695 AU
max. Earth dist.	-9895 Aug 15 j 17:44	13°II23'53	31.31409 AU	direct	-9888 May 19 j 14:23	26°II12'00	
morning rise	-9895 Aug 30 j 22:49	13°II58'08		evening set	-9888 Aug 15 j 14:35	28°II06'09	
retrograde	-9895 Nov 27 j 01:21	15°II52'34					
opposition	-9894 Feb 14 j 21:41	14°II29'59	2°39'44	conjunction	-9888 Aug 30 j 13:32	28°II39'53	2°37'41
min. Earth dist.	-9894 Feb 15 j 02:10	14°II29'41	29.31621 AU	minimum elong	-9888 Aug 30 j 13:32	28°II39'53	2°38'16
direct	-9894 May 06 j 15:47	13°II06'27		max. Earth dist.	-9888 Aug 30 j 13:56	28°II39'55	31.29114 AU
evening set	-9894 Aug 03 j 07:58	15°II01'03		morning rise	-9888 Sep 14 j 12:51	29°II13'39	
					-9888 Oct 06 j 18:09	0°☾	

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Attention, astronomical year style is used: The year -9888 in astronomical counting style is the year 9889 BCE in historical counting style.

retrograde	-9888 Dec 12 j 07:02	1°☾09'05		conjunction	-9881 Sep 15 j 04:00	13°☾55'54	2°35'53
	-9887 Feb 22 j 01:14	30°♈II		minimum elong	-9881 Sep 15 j 04:01	13°☾55'55	2°36'27
opposition	-9887 Mar 02 j 16:54	29°♈II46'07	2°48'44	max. Earth dist.	-9881 Sep 15 j 12:19	13°☾56'42	31.25167 AU
min. Earth dist.	-9887 Mar 02 j 16:09	29°♈II46'10	29.28981 AU	morning rise	-9881 Sep 30 j 04:41	14°☾29'50	
direct	-9887 May 22 j 00:09	28°♈II22'56		retrograde	-9881 Dec 28 j 18:25	16°☾26'11	
	-9887 Aug 10 j 04:12	0°☾		opposition	-9880 Mar 18 j 11:57	15°☾02'47	2°45'58
evening set	-9887 Aug 17 j 23:22	0°☾16'58		min. Earth dist.	-9880 Mar 18 j 03:37	15°☾03'21	29.25135 AU
				direct	-9880 Jun 06 j 07:10	13°☾39'54	
conjunction	-9887 Sep 01 j 22:20	0°☾50'41	2°38'06	evening set	-9880 Sep 01 j 13:40	15°☾33'24	
minimum elong	-9887 Sep 01 j 22:20	0°☾50'41	2°38'41				
max. Earth dist.	-9887 Sep 02 j 00:17	0°☾50'52	31.28392 AU	conjunction	-9880 Sep 16 j 13:16	16°☾07'12	2°34'43
morning rise	-9887 Sep 16 j 21:39	1°☾24'28		minimum elong	-9880 Sep 16 j 13:16	16°☾07'12	2°35'18
retrograde	-9887 Dec 14 j 18:14	3°☾20'01		max. Earth dist.	-9880 Sep 16 j 22:11	16°☾08'03	31.24635 AU
opposition	-9886 Mar 05 j 05:54	1°☾56'57	2°49'04	morning rise	-9880 Oct 01 j 14:17	16°☾41'09	
min. Earth dist.	-9886 Mar 05 j 03:04	1°☾57'09	29.28261 AU	retrograde	-9880 Dec 30 j 06:37	18°☾37'39	
direct	-9886 May 24 j 12:36	0°☾33'46		opposition	-9879 Mar 21 j 01:01	17°☾14'12	2°44'36
evening set	-9886 Aug 20 j 08:20	2°☾27'43		min. Earth dist.	-9879 Mar 20 j 14:58	17°☾14'53	29.24542 AU
				direct	-9879 Jun 08 j 18:43	15°☾51'22	
conjunction	-9886 Sep 04 j 07:08	3°☾01'25	2°38'18	evening set	-9879 Sep 03 j 22:44	17°☾44'48	
minimum elong	-9886 Sep 04 j 07:08	3°☾01'25	2°38'54				
max. Earth dist.	-9886 Sep 04 j 09:26	3°☾01'38	31.27693 AU	conjunction	-9879 Sep 18 j 22:29	18°☾18'37	2°33'19
morning rise	-9886 Sep 19 j 06:42	3°☾35'13		minimum elong	-9879 Sep 18 j 22:29	18°☾18'37	2°33'53
retrograde	-9886 Dec 17 j 07:27	5°☾30'54		max. Earth dist.	-9879 Sep 19 j 07:52	18°☾19'31	31.23974 AU
opposition	-9885 Mar 07 j 18:57	4°☾07'44	2°49'10	morning rise	-9879 Oct 03 j 23:54	18°☾52'36	
min. Earth dist.	-9885 Mar 07 j 15:31	4°☾07'58	29.27610 AU	retrograde	-9878 Jan 01 j 18:14	20°☾49'14	
direct	-9885 May 26 j 21:47	2°☾44'34		opposition	-9878 Mar 23 j 14:20	19°☾25'43	2°43'00
evening set	-9885 Aug 22 j 17:03	4°☾38'25		min. Earth dist.	-9878 Mar 23 j 04:40	19°☾26'23	29.23818 AU
				direct	-9878 Jun 11 j 04:49	18°☾02'55	
conjunction	-9885 Sep 06 j 16:04	5°☾12'09	2°38'17	evening set	-9878 Sep 06 j 07:51	19°☾56'16	
minimum elong	-9885 Sep 06 j 16:04	5°☾12'09	2°38'51				
max. Earth dist.	-9885 Sep 06 j 20:32	5°☾12'34	31.27078 AU	conjunction	-9878 Sep 21 j 08:00	20°☾30'06	2°31'43
morning rise	-9885 Sep 21 j 15:40	5°☾45'57		minimum elong	-9878 Sep 21 j 08:00	20°☾30'06	2°32'17
retrograde	-9885 Dec 19 j 18:11	7°☾41'45		max. Earth dist.	-9878 Sep 21 j 18:35	20°☾31'07	31.23187 AU
opposition	-9884 Mar 09 j 07:54	6°☾18'32	2°49'01	morning rise	-9878 Oct 06 j 09:44	21°☾04'08	
min. Earth dist.	-9884 Mar 09 j 02:55	6°☾18'52	29.27027 AU	retrograde	-9877 Jan 04 j 05:42	23°☾00'53	
direct	-9884 May 28 j 09:29	4°☾55'24		opposition	-9877 Mar 26 j 03:24	21°☾37'17	2°41'10
evening set	-9884 Aug 24 j 02:00	6°☾49'11		min. Earth dist.	-9877 Mar 25 j 16:11	21°☾38'03	29.22948 AU
				direct	-9877 Jun 13 j 16:44	20°☾14'29	
conjunction	-9884 Sep 08 j 00:54	7°☾22'54	2°38'01	evening set	-9877 Sep 08 j 17:03	22°☾07'45	
minimum elong	-9884 Sep 08 j 00:54	7°☾22'54	2°38'36				
max. Earth dist.	-9884 Sep 08 j 05:29	7°☾23'20	31.26541 AU	conjunction	-9877 Sep 23 j 17:23	22°☾41'37	2°29'53
morning rise	-9884 Sep 23 j 00:51	7°☾56'44		minimum elong	-9877 Sep 23 j 17:24	22°☾41'37	2°30'26
retrograde	-9884 Dec 21 j 07:30	9°☾52'40		max. Earth dist.	-9877 Sep 24 j 03:40	22°☾42'35	31.22251 AU
opposition	-9883 Mar 11 j 20:47	8°☾29'23	2°48'38	morning rise	-9877 Oct 08 j 19:45	23°☾15'40	
min. Earth dist.	-9883 Mar 11 j 14:39	8°☾29'48	29.26532 AU	retrograde	-9876 Jan 06 j 18:47	25°☾12'32	
direct	-9883 May 30 j 20:03	7°☾06'18		opposition	-9876 Mar 27 j 16:34	23°☾48'50	2°39'05
evening set	-9883 Aug 26 j 10:46	9°☾00'01		min. Earth dist.	-9876 Mar 27 j 05:21	23°☾49'35	29.21949 AU
				direct	-9876 Jun 15 j 01:57	22°☾26'02	
conjunction	-9883 Sep 10 j 09:55	9°☾33'46	2°37'32	evening set	-9876 Sep 10 j 02:04	24°☾19'11	
minimum elong	-9883 Sep 10 j 09:55	9°☾33'46	2°38'07				
max. Earth dist.	-9883 Sep 10 j 16:39	9°☾34'24	31.26071 AU	conjunction	-9876 Sep 25 j 02:54	24°☾53'05	2°27'50
morning rise	-9883 Sep 25 j 09:56	10°☾07'37		minimum elong	-9876 Sep 25 j 02:54	24°☾53'05	2°28'24
retrograde	-9883 Dec 23 j 19:05	12°☾03'42		max. Earth dist.	-9876 Sep 25 j 14:54	24°☾54'13	31.21200 AU
opposition	-9882 Mar 14 j 09:53	10°☾40'22	2°47'59	morning rise	-9876 Oct 10 j 05:32	25°☾27'11	
min. Earth dist.	-9882 Mar 14 j 03:02	10°☾40'50	29.26076 AU	retrograde	-9875 Jan 08 j 05:50	27°☾24'07	
direct	-9882 Jun 02 j 08:47	9°☾17'22		opposition	-9875 Mar 30 j 05:31	26°☾00'20	2°36'48
evening set	-9882 Aug 28 j 19:38	11°☾11'00		min. Earth dist.	-9875 Mar 29 j 17:12	26°☾01'10	29.20847 AU
				direct	-9875 Jun 17 j 13:45	24°☾37'31	
conjunction	-9882 Sep 12 j 18:48	11°☾44'45	2°36'50	evening set	-9875 Sep 12 j 11:12	26°☾30'34	
minimum elong	-9882 Sep 12 j 18:48	11°☾44'45	2°37'25				
max. Earth dist.	-9882 Sep 13 j 01:46	11°☾45'25	31.25636 AU	conjunction	-9875 Sep 27 j 12:14	27°☾04'29	2°25'35
morning rise	-9882 Sep 27 j 19:15	12°☾18'38		minimum elong	-9875 Sep 27 j 12:15	27°☾04'30	2°26'07
retrograde	-9882 Dec 26 j 08:20	14°☾14'52		max. Earth dist.	-9875 Sep 28 j 00:08	27°☾05'37	31.20093 AU
opposition	-9881 Mar 16 j 22:57	12°☾51'30	2°47'06	morning rise	-9875 Oct 12 j 15:33	27°☾38'38	
min. Earth dist.	-9881 Mar 16 j 14:25	12°☾52'04	29.25634 AU	retrograde	-9874 Jan 10 j 19:42	29°☾35'40	
direct	-9881 Jun 04 j 19:27	11°☾28'33		opposition	-9874 Apr 01 j 18:33	28°☾11'45	2°34'16
evening set	-9881 Aug 31 j 04:36	13°☾22'08		min. Earth dist.	-9874 Apr 01 j 05:22	28°☾12'38	29.19738 AU

Attention, astronomical year style is used: The year -9874 in astronomical counting style is the year 9875 BCE in historical counting style.

direct	-9874 Jun 20 j 00:16	26° Ω 48'55		minimum elong	-9868 Oct 12 j 07:39	12° Ω 25'32	2°04'32
evening set	-9874 Sep 14 j 20:06	28° Ω 41'52		max. Earth dist.	-9868 Oct 13 j 02:09	12° Ω 27'17	31.14125 AU
				morning rise	-9868 Oct 27 j 15:09	13° Ω 00'02	
conjunction	-9874 Sep 29 j 21:41	29° Ω 15'50	2°23'07	retrograde	-9867 Jan 26 j 08:58	14° Ω 57'50	
minimum elong	-9874 Sep 29 j 21:42	29° Ω 15'50	2°23'39	opposition	-9867 Apr 17 j 12:25	13° Ω 33'33	2°10'31
max. Earth dist.	-9874 Sep 30 j 11:34	29° Ω 17'09	31.18994 AU	min. Earth dist.	-9867 Apr 16 j 17:25	13° Ω 34'51	29.13921 AU
morning rise	-9874 Oct 15 j 01:24	29° Ω 50'01		direct	-9867 Jul 05 j 03:51	12° Ω 10'57	
	-9874 Oct 19 j 14:36	0° Ω		evening set	-9867 Sep 29 j 12:46	14° Ω 03'30	
retrograde	-9873 Jan 13 j 07:39	1° Ω 47'08					
opposition	-9873 Apr 04 j 07:32	0° Ω 23'07	2°31'32	conjunction	-9867 Oct 14 j 17:52	14° Ω 37'46	2°00'12
min. Earth dist.	-9873 Apr 03 j 17:42	0° Ω 24'03	29.18661 AU	minimum elong	-9867 Oct 14 j 17:53	14° Ω 37'47	2°00'39
	-9873 Apr 18 j 17:08	30° Ω		max. Earth dist.	-9867 Oct 15 j 13:58	14° Ω 39'41	31.13383 AU
direct	-9873 Jun 22 j 12:42	29° Ω 00'17			-9867 Oct 24 j 13:13	15° Ω	
	-9873 Aug 22 j 06:59	0° Ω		morning rise	-9867 Oct 30 j 01:53	15° Ω 12'20	
evening set	-9873 Sep 17 j 05:15	0° Ω 53'10		retrograde	-9866 Jan 28 j 20:56	17° Ω 10'14	
				min. Earth dist.	-9866 Apr 19 j 05:23	15° Ω 47'16	29.13125 AU
conjunction	-9873 Oct 02 j 07:11	1° Ω 27'09	2°20'27	opposition	-9866 Apr 20 j 01:13	15° Ω 45'55	2°06'18
minimum elong	-9873 Oct 02 j 07:11	1° Ω 27'10	2°20'57		-9866 May 19 j 18:40	15° Ω	
max. Earth dist.	-9873 Oct 02 j 21:21	1° Ω 28'30	31.17970 AU	direct	-9866 Jul 07 j 15:07	14° Ω 23'20	
morning rise	-9873 Oct 17 j 11:32	2° Ω 01'23			-9866 Aug 23 j 10:33	15° Ω	
retrograde	-9872 Jan 15 j 20:59	3° Ω 58'36		evening set	-9866 Oct 01 j 22:27	16° Ω 15'51	
opposition	-9872 Apr 05 j 20:12	2° Ω 34'30	2°28'34				
min. Earth dist.	-9872 Apr 05 j 04:39	2° Ω 35'33	29.17683 AU	conjunction	-9866 Oct 17 j 04:02	16° Ω 50'09	1°56'10
direct	-9872 Jun 23 j 23:06	1° Ω 11'40		minimum elong	-9866 Oct 17 j 04:02	16° Ω 50'09	1°56'37
evening set	-9872 Sep 18 j 14:21	3° Ω 04'29		max. Earth dist.	-9866 Oct 17 j 23:33	16° Ω 52'00	31.12549 AU
				morning rise	-9866 Nov 01 j 12:55	17° Ω 24'47	
conjunction	-9872 Oct 03 j 16:45	3° Ω 38'31	2°17'34	retrograde	-9865 Jan 31 j 11:21	19° Ω 22'46	
minimum elong	-9872 Oct 03 j 16:45	3° Ω 38'31	2°18'05	opposition	-9865 Apr 22 j 14:06	17° Ω 58'23	2°01'54
max. Earth dist.	-9872 Oct 04 j 08:18	3° Ω 40'00	31.17041 AU	min. Earth dist.	-9865 Apr 21 j 17:59	17° Ω 59'45	29.12228 AU
morning rise	-9872 Oct 18 j 21:38	4° Ω 12'48		direct	-9865 Jul 10 j 01:08	16° Ω 35'48	
retrograde	-9871 Jan 17 j 07:47	6° Ω 10'07		evening set	-9865 Oct 04 j 08:14	18° Ω 28'15	
opposition	-9871 Apr 08 j 09:07	4° Ω 45'58	2°25'23				
min. Earth dist.	-9871 Apr 07 j 17:23	4° Ω 47'02	29.16805 AU	conjunction	-9865 Oct 19 j 14:32	19° Ω 02'37	1°51'58
direct	-9871 Jun 26 j 10:51	3° Ω 23'11		minimum elong	-9865 Oct 19 j 14:33	19° Ω 02'37	1°52'23
evening set	-9871 Sep 20 j 23:19	5° Ω 15'55		max. Earth dist.	-9865 Oct 20 j 11:16	19° Ω 04'35	31.11588 AU
				morning rise	-9865 Nov 04 j 00:01	19° Ω 37'18	
conjunction	-9871 Oct 06 j 02:14	5° Ω 50'00	2°14'29	retrograde	-9864 Feb 02 j 23:41	21° Ω 35'21	
minimum elong	-9871 Oct 06 j 02:15	5° Ω 50'00	2°14'59	min. Earth dist.	-9864 Apr 23 j 06:44	20° Ω 12'15	29.11196 AU
max. Earth dist.	-9871 Oct 06 j 18:55	5° Ω 51'35	31.16232 AU	opposition	-9864 Apr 24 j 02:47	20° Ω 10'53	1°57'19
morning rise	-9871 Oct 21 j 07:42	6° Ω 24'20		direct	-9864 Jul 11 j 12:46	18° Ω 48'18	
retrograde	-9870 Jan 19 j 20:53	8° Ω 21'46		evening set	-9864 Oct 05 j 18:02	20° Ω 40'40	
opposition	-9870 Apr 10 j 21:57	6° Ω 57'34	2°21'59				
min. Earth dist.	-9870 Apr 10 j 04:10	6° Ω 58'46	29.16031 AU	conjunction	-9864 Oct 21 j 00:55	21° Ω 15'05	1°47'36
direct	-9870 Jun 28 j 22:28	5° Ω 34'49		minimum elong	-9864 Oct 21 j 00:56	21° Ω 15'05	1°48'02
evening set	-9870 Sep 23 j 08:35	7° Ω 27'31		max. Earth dist.	-9864 Oct 21 j 21:23	21° Ω 17'01	31.10523 AU
				morning rise	-9864 Nov 05 j 11:12	21° Ω 49'49	
conjunction	-9870 Oct 08 j 11:55	8° Ω 01'39	2°11'12	retrograde	-9863 Feb 04 j 13:33	23° Ω 47'55	
minimum elong	-9870 Oct 08 j 11:56	8° Ω 01'39	2°11'43	opposition	-9863 Apr 26 j 15:30	22° Ω 23'21	1°52'34
max. Earth dist.	-9870 Oct 09 j 05:13	8° Ω 03'17	31.15499 AU	min. Earth dist.	-9863 Apr 25 j 18:23	22° Ω 24'48	29.10077 AU
morning rise	-9870 Oct 23 j 18:07	8° Ω 36'02		direct	-9863 Jul 13 j 23:15	21° Ω 00'44	
retrograde	-9869 Jan 22 j 08:39	10° Ω 33'36		evening set	-9863 Oct 08 j 03:43	22° Ω 53'01	
opposition	-9869 Apr 13 j 10:49	9° Ω 09'22	2°18'22				
min. Earth dist.	-9869 Apr 12 j 17:18	9° Ω 10'33	29.15327 AU	conjunction	-9863 Oct 23 j 11:15	23° Ω 27'29	1°43'05
direct	-9869 Jul 01 j 08:11	7° Ω 46'40		minimum elong	-9863 Oct 23 j 11:16	23° Ω 27'29	1°43'28
evening set	-9869 Sep 25 j 17:48	9° Ω 39'19		max. Earth dist.	-9863 Oct 24 j 08:32	23° Ω 29'30	31.09375 AU
				morning rise	-9863 Nov 07 j 22:16	24° Ω 02'17	
conjunction	-9869 Oct 10 j 21:50	10° Ω 13'29	2°07'44	retrograde	-9862 Feb 07 j 01:43	26° Ω 00'25	
minimum elong	-9869 Oct 10 j 21:50	10° Ω 13'29	2°08'12	min. Earth dist.	-9862 Apr 28 j 07:31	24° Ω 37'10	29.08909 AU
max. Earth dist.	-9869 Oct 11 j 16:37	10° Ω 15'16	31.14820 AU	opposition	-9862 Apr 29 j 04:17	24° Ω 35'45	1°47'39
morning rise	-9869 Oct 26 j 04:33	10° Ω 47'56		direct	-9862 Jul 16 j 11:38	23° Ω 13'05	
retrograde	-9868 Jan 24 j 20:01	12° Ω 45'36		evening set	-9862 Oct 10 j 13:33	25° Ω 05'17	
opposition	-9868 Apr 14 j 23:32	11° Ω 21'21	2°14'33				
min. Earth dist.	-9868 Apr 14 j 04:26	11° Ω 22'39	29.14637 AU	conjunction	-9862 Oct 25 j 21:49	25° Ω 39'48	1°38'25
direct	-9868 Jul 02 j 19:31	9° Ω 58'43		minimum elong	-9862 Oct 25 j 21:49	25° Ω 39'48	1°38'48
evening set	-9868 Sep 27 j 03:16	11° Ω 51'19		max. Earth dist.	-9862 Oct 26 j 19:51	25° Ω 41'53	31.08225 AU
				morning rise	-9862 Nov 10 j 09:33	26° Ω 14'39	
conjunction	-9868 Oct 12 j 07:38	12° Ω 25'32	2°04'03	retrograde	-9861 Feb 09 j 15:39	28° Ω 12'49	

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Attention, astronomical year style is used: The year -9861 in astronomical counting style is the year 9862 BCE in historical counting style.

opposition	-9861 May 01 j 16:41	26° Ω 48'02	1°42'35	direct	-9855 Jul 31 j 13:39	8° η 40'31	
min. Earth dist.	-9861 Apr 30 j 18:23	26° Ω 49'34	29.07767 AU	evening set	-9855 Oct 25 j 12:44	10° η 32'33	
direct	-9861 Jul 18 j 23:53	25° Ω 25'20					
evening set	-9861 Oct 12 j 23:31	27° Ω 17'29		conjunction	-9855 Nov 10 j 01:42	11° η 07'26	1°01'58
				minimum elong	-9855 Nov 10 j 01:43	11° η 07'26	1°02'13
conjunction	-9861 Oct 28 j 08:20	27° Ω 52'02	1°33'36	max. Earth dist.	-9855 Nov 11 j 03:26	11° η 09'51	31.02444 AU
minimum elong	-9861 Oct 28 j 08:21	27° Ω 52'02	1°33'57	morning rise	-9855 Nov 25 j 18:44	11° η 42'42	
max. Earth dist.	-9861 Oct 29 j 06:37	27° Ω 54'09	31.07114 AU	retrograde	-9854 Feb 25 j 08:37	13° η 41'21	
morning rise	-9861 Nov 12 j 20:55	28° Ω 26'57		min. Earth dist.	-9854 May 16 j 06:13	12° η 18'06	29.02158 AU
	-9860 Jan 03 j 07:49	0° η		opposition	-9854 May 17 j 07:32	12° η 16'21	1°03'10
retrograde	-9860 Feb 12 j 03:09	0° η 25'09		direct	-9854 Aug 02 j 23:38	10° η 53'44	
	-9860 Mar 23 j 21:49	30° κ δ		evening set	-9854 Oct 27 j 23:36	12° η 45'47	
min. Earth dist.	-9860 May 02 j 07:22	29° Ω 01'48	29.06701 AU				
opposition	-9860 May 03 j 05:15	29° Ω 00'18	1°37'22	conjunction	-9854 Nov 12 j 13:15	13° η 20'44	0°56'19
direct	-9860 Jul 20 j 10:11	27° Ω 37'34		minimum elong	-9854 Nov 12 j 13:16	13° η 20'44	0°56'33
evening set	-9860 Oct 14 j 09:19	29° Ω 29'39		max. Earth dist.	-9854 Nov 13 j 15:16	13° η 23'11	31.01717 AU
	-9860 Oct 27 j 21:53	0° η		morning rise	-9854 Nov 28 j 07:01	13° η 56'04	
				retrograde	-9853 Feb 27 j 22:00	15° η 54'47	
conjunction	-9860 Oct 29 j 18:56	0° η 04'15	1°28'39	opposition	-9853 May 19 j 19:50	14° η 29'45	0°57'03
minimum elong	-9860 Oct 29 j 18:57	0° η 04'15	1°29'00	min. Earth dist.	-9853 May 18 j 19:28	14° η 31'26	29.01381 AU
max. Earth dist.	-9860 Oct 30 j 18:44	0° η 06'30	31.06106 AU	direct	-9853 Aug 05 j 11:30	13° η 07'09	
morning rise	-9860 Nov 14 j 08:06	0° η 39'13		evening set	-9853 Oct 30 j 10:34	14° η 59'13	
retrograde	-9859 Feb 13 j 14:39	2° η 37'29					
opposition	-9859 May 05 j 17:38	1° η 12'34	1°32'00	conjunction	-9853 Nov 15 j 00:59	15° η 34'13	0°50'34
min. Earth dist.	-9859 May 04 j 18:06	1° η 14'11	29.05740 AU	minimum elong	-9853 Nov 15 j 01:00	15° η 34'13	0°50'46
	-9859 Jun 28 j 03:51	30° κ δ		max. Earth dist.	-9853 Nov 16 j 03:02	15° η 36'40	31.00898 AU
direct	-9859 Jul 22 j 21:55	29° Ω 49'50		morning rise	-9853 Nov 30 j 19:25	16° η 09'36	
	-9859 Aug 16 j 02:00	0° η		retrograde	-9852 Mar 01 j 13:11	18° η 08'21	
evening set	-9859 Oct 16 j 19:26	1° η 41'52		min. Earth dist.	-9852 May 20 j 06:51	16° η 45'03	29.00492 AU
				opposition	-9852 May 21 j 08:07	16° η 43'18	0°50'52
conjunction	-9859 Nov 01 j 05:33	2° η 16'32	1°23'33	direct	-9852 Aug 06 j 23:57	15° η 20'41	
minimum elong	-9859 Nov 01 j 05:34	2° η 16'32	1°23'53	evening set	-9852 Oct 31 j 21:35	17° η 12'44	
max. Earth dist.	-9859 Nov 02 j 05:04	2° η 18'45	31.05215 AU				
morning rise	-9859 Nov 16 j 19:39	2° η 51'33		conjunction	-9852 Nov 16 j 12:33	17° η 47'47	0°44'44
retrograde	-9858 Feb 16 j 03:34	4° η 49'53		minimum elong	-9852 Nov 16 j 12:33	17° η 47'47	0°44'56
min. Earth dist.	-9858 May 07 j 06:36	3° η 26'32	29.04910 AU	max. Earth dist.	-9852 Nov 17 j 14:04	17° η 50'11	30.99948 AU
opposition	-9858 May 08 j 06:07	3° η 24'55	1°26'29	morning rise	-9852 Dec 02 j 07:47	18° η 23'14	
direct	-9858 Jul 25 j 06:40	2° η 02'12		retrograde	-9851 Mar 04 j 01:21	20° η 22'01	
evening set	-9858 Oct 19 j 05:27	3° η 54'13		opposition	-9851 May 23 j 20:30	18° η 56'55	0°44'36
				min. Earth dist.	-9851 May 22 j 20:22	18° η 58'35	28.99488 AU
conjunction	-9858 Nov 03 j 16:27	4° η 28'56	1°18'20	direct	-9851 Aug 09 j 10:34	17° η 34'16	
minimum elong	-9858 Nov 03 j 16:28	4° η 28'56	1°18'39	evening set	-9851 Nov 03 j 08:37	19° η 26'17	
max. Earth dist.	-9858 Nov 04 j 17:42	4° η 31'19	31.04443 AU				
morning rise	-9858 Nov 19 j 07:09	5° η 04'01		conjunction	-9851 Nov 19 j 00:25	20° η 01'23	0°38'51
retrograde	-9857 Feb 18 j 15:25	7° η 02'26		minimum elong	-9851 Nov 19 j 00:26	20° η 01'23	0°39'00
opposition	-9857 May 10 j 18:28	5° η 37'27	1°20'50	max. Earth dist.	-9851 Nov 20 j 02:44	20° η 03'52	30.98912 AU
min. Earth dist.	-9857 May 09 j 18:02	5° η 39'08	29.04169 AU	morning rise	-9851 Dec 04 j 20:14	20° η 36'53	
direct	-9857 Jul 27 j 17:50	4° η 14'45		retrograde	-9850 Mar 06 j 14:03	22° η 35'41	
evening set	-9857 Oct 21 j 15:49	6° η 06'46		min. Earth dist.	-9850 May 25 j 07:36	21° η 12'14	28.98409 AU
				opposition	-9850 May 26 j 08:33	21° η 10'30	0°38'16
conjunction	-9857 Nov 06 j 03:23	6° η 41'32	1°13'00	direct	-9850 Aug 11 j 23:04	19° η 47'48	
minimum elong	-9857 Nov 06 j 03:23	6° η 41'32	1°13'16	evening set	-9850 Nov 05 j 19:54	21° η 39'49	
max. Earth dist.	-9857 Nov 07 j 04:08	6° η 43'52	31.03752 AU				
morning rise	-9857 Nov 21 j 18:58	7° η 16'41		conjunction	-9850 Nov 21 j 12:14	22° η 14'58	0°32'54
retrograde	-9856 Feb 21 j 05:23	9° η 15'10		minimum elong	-9850 Nov 21 j 12:14	22° η 14'58	0°33'03
min. Earth dist.	-9856 May 11 j 06:03	7° η 51'52	29.03501 AU	max. Earth dist.	-9850 Nov 22 j 13:33	22° η 17'21	30.97821 AU
opposition	-9856 May 12 j 06:45	7° η 50'10	1°15'04	morning rise	-9850 Dec 07 j 08:55	22° η 50'31	
direct	-9856 Jul 29 j 03:00	6° η 27'30		retrograde	-9849 Mar 09 j 03:27	24° η 49'18	
evening set	-9856 Oct 23 j 02:12	8° η 19'32		opposition	-9849 May 28 j 20:41	23° η 24'03	0°31'53
				min. Earth dist.	-9849 May 27 j 20:26	23° η 25'44	28.97317 AU
conjunction	-9856 Nov 07 j 14:32	8° η 54'22	1°07'32	direct	-9849 Aug 14 j 08:53	22° η 01'17	
minimum elong	-9856 Nov 07 j 14:33	8° η 54'22	1°07'49	evening set	-9849 Nov 08 j 07:06	23° η 53'17	
max. Earth dist.	-9856 Nov 08 j 16:37	8° η 56'49	31.03097 AU				
morning rise	-9856 Nov 23 j 06:45	9° η 29'34		conjunction	-9849 Nov 24 j 00:14	24° η 28'29	0°26'54
retrograde	-9855 Feb 22 j 17:48	11° η 28'08		minimum elong	-9849 Nov 24 j 00:14	24° η 28'29	0°27'00
opposition	-9855 May 14 j 19:09	10° η 03'08	1°09'10	max. Earth dist.	-9849 Nov 25 j 02:47	24° η 30'58	30.96738 AU
min. Earth dist.	-9855 May 13 j 18:32	10° η 04'50	29.02841 AU	morning rise	-9849 Dec 09 j 21:24	25° η 04'04	

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Attention, astronomical year style is used: The year -9848 in astronomical counting style is the year 9849 BCE in historical counting style.

retrograde	-9848 Mar 10 j 14:20	27° <u>02</u> '51		conjunction	-9843 Dec 07 j 01:36	7° <u>50</u> '13	-0°09'44
min. Earth dist.	-9848 May 29 j 07:42	25° <u>03</u> '16	28.96255 AU	minimum elong	-9843 Dec 07 j 01:36	7° <u>50</u> '13	0°09'45
opposition	-9848 May 30 j 08:30	25° <u>03</u> '33	0°25'27	behind sun begin	-9843 Dec 06 j 20:16	7° <u>49</u> '44	
direct	-9848 Aug 15 j 20:47	24° <u>06</u> '43		behind sun end	-9843 Dec 07 j 06:56	7° <u>50</u> '42	
evening set	-9848 Nov 09 j 18:30	26° <u>06</u> '43		max. Earth dist.	-9843 Dec 08 j 04:06	7° <u>52</u> '42	30.92229 AU
				morning rise	-9843 Dec 23 j 02:33	8° <u>26</u> '04	
conjunction	-9848 Nov 25 j 12:08	26° <u>04</u> '57	0°20'52	retrograde	-9842 Mar 24 j 21:22	10° <u>24</u> '58	
minimum elong	-9848 Nov 25 j 12:08	26° <u>04</u> '57	0°20'59	min. Earth dist.	-9842 Jun 12 j 07:13	9° <u>01</u> '13	28.91991 AU
max. Earth dist.	-9848 Nov 26 j 13:55	26° <u>04</u> '22	30.95728 AU	opposition	-9842 Jun 13 j 07:22	8° <u>59</u> '32	-0°13'43
morning rise	-9848 Dec 11 j 10:06	27° <u>01</u> '35		direct	-9842 Aug 29 j 12:12	7° <u>36</u> '34	
retrograde	-9847 Mar 13 j 03:03	29° <u>01</u> '23		evening set	-9842 Nov 23 j 17:09	9° <u>28</u> '49	
opposition	-9847 Jun 01 j 20:27	27° <u>01</u> '00	0°18'59				
min. Earth dist.	-9847 May 31 j 19:32	27° <u>02</u> '44	28.95301 AU	conjunction	-9842 Dec 09 j 14:32	10° <u>04</u> '19	-0°15'50
direct	-9847 Aug 18 j 06:12	26° <u>02</u> '08		minimum elong	-9842 Dec 09 j 14:32	10° <u>04</u> '19	0°15'52
evening set	-9847 Nov 12 j 05:48	28° <u>02</u> '08		behind sun begin	-9842 Dec 09 j 13:58	10° <u>04</u> '16	
				behind sun end	-9842 Dec 09 j 15:06	10° <u>04</u> '22	
conjunction	-9847 Nov 28 j 00:10	28° <u>05</u> '25	0°14'49	max. Earth dist.	-9842 Dec 10 j 17:28	10° <u>06</u> '50	30.91673 AU
minimum elong	-9847 Nov 28 j 00:11	28° <u>05</u> '25	0°14'53	morning rise	-9842 Dec 25 j 15:52	10° <u>40</u> '13	
behind sun begin	-9847 Nov 27 j 21:43	28° <u>05</u> '12		retrograde	-9841 Mar 27 j 11:43	12° <u>39</u> '06	
behind sun end	-9847 Nov 28 j 02:38	28° <u>05</u> '38		opposition	-9841 Jun 15 j 19:01	11° <u>13</u> '41	-0°20'15
max. Earth dist.	-9847 Nov 29 j 03:09	28° <u>05</u> '57	30.94822 AU	min. Earth dist.	-9841 Jun 14 j 18:27	11° <u>15</u> '24	28.91403 AU
morning rise	-9847 Dec 13 j 22:40	29° <u>03</u> '06		direct	-9841 Sep 01 j 01:00	9° <u>50</u> '42	
	-9847 Dec 27 j 12:13	0° <u>29</u> '54		evening set	-9841 Nov 26 j 05:41	11° <u>43</u> '01	
retrograde	-9846 Mar 15 j 14:36	1° <u>29</u> '54					
min. Earth dist.	-9846 Jun 03 j 07:35	0° <u>06</u> '13	28.94451 AU	conjunction	-9841 Dec 12 j 03:24	12° <u>18</u> '33	-0°21'56
opposition	-9846 Jun 04 j 08:21	0° <u>04</u> '29	0°12'28	minimum elong	-9841 Dec 12 j 03:24	12° <u>18</u> '33	0°22'00
	-9846 Jun 07 j 00:45	30° <u>04</u> '13		max. Earth dist.	-9841 Dec 13 j 04:47	12° <u>20</u> '56	30.91042 AU
direct	-9846 Aug 20 j 16:32	28° <u>04</u> '13		morning rise	-9841 Dec 28 j 05:22	12° <u>54</u> '29	
	-9846 Oct 29 j 19:14	0° <u>33</u> '36		retrograde	-9840 Mar 29 j 01:47	14° <u>53</u> '23	
evening set	-9846 Nov 14 j 17:25	0° <u>33</u> '36		min. Earth dist.	-9840 Jun 16 j 07:24	13° <u>29</u> '36	28.90736 AU
				opposition	-9840 Jun 17 j 06:46	13° <u>27</u> '58	-0°26'45
conjunction	-9846 Nov 30 j 12:23	1° <u>08</u> '56	0°08'44	direct	-9840 Sep 02 j 11:24	12° <u>04</u> '56	
minimum elong	-9846 Nov 30 j 12:23	1° <u>08</u> '56	0°08'48	evening set	-9840 Nov 27 j 18:10	13° <u>57</u> '19	
behind sun begin	-9846 Nov 30 j 06:47	1° <u>08</u> '26					
behind sun end	-9846 Nov 30 j 18:00	1° <u>09</u> '26		conjunction	-9840 Dec 13 j 16:34	14° <u>32</u> '53	-0°27'59
max. Earth dist.	-9846 Dec 01 j 14:54	1° <u>11</u> '25	30.94044 AU	minimum elong	-9840 Dec 13 j 16:34	14° <u>32</u> '53	0°28'03
morning rise	-9846 Dec 16 j 11:35	1° <u>44</u> '39		max. Earth dist.	-9840 Dec 14 j 18:28	14° <u>35</u> '19	30.90323 AU
retrograde	-9845 Mar 18 j 04:49	3° <u>43</u> '29		morning rise	-9840 Dec 29 j 18:50	15° <u>08</u> '51	
opposition	-9845 Jun 06 j 20:02	2° <u>18</u> '03	0°05'56	retrograde	-9839 Mar 31 j 13:31	17° <u>07</u> '45	
min. Earth dist.	-9845 Jun 05 j 18:35	2° <u>19</u> '49	28.93729 AU	opposition	-9839 Jun 19 j 18:23	15° <u>42</u> '18	-0°33'13
direct	-9845 Aug 23 j 02:30	0° <u>55</u> '06		min. Earth dist.	-9839 Jun 18 j 19:06	15° <u>43</u> '56	28.89965 AU
evening set	-9845 Nov 17 j 05:09	2° <u>47</u> '10		direct	-9839 Sep 04 j 23:41	14° <u>19</u> '13	
				evening set	-9839 Nov 30 j 06:48	16° <u>11</u> '39	
conjunction	-9845 Dec 03 j 00:44	3° <u>22</u> '33	0°02'38				
minimum elong	-9845 Dec 03 j 00:43	3° <u>22</u> '33	0°02'40	conjunction	-9839 Dec 16 j 05:37	16° <u>47</u> '15	-0°34'01
behind sun begin	-9845 Dec 02 j 18:12	3° <u>21</u> '58		minimum elong	-9839 Dec 16 j 05:36	16° <u>47</u> '15	0°34'07
behind sun end	-9845 Dec 03 j 07:13	3° <u>23</u> '08		max. Earth dist.	-9839 Dec 17 j 05:54	16° <u>49</u> '32	30.89515 AU
max. Earth dist.	-9845 Dec 04 j 03:34	3° <u>25</u> '04	30.93366 AU	morning rise	-9838 Jan 01 j 08:31	17° <u>23</u> '15	
morning rise	-9845 Dec 19 j 00:29	3° <u>58</u> '19		retrograde	-9838 Apr 03 j 02:43	19° <u>22</u> '07	
retrograde	-9844 Mar 19 j 17:33	5° <u>57</u> '09		min. Earth dist.	-9838 Jun 21 j 07:25	17° <u>58</u> '14	28.89122 AU
desc. node	-9844 May 05 j 18:17	5° <u>23</u> '52		opposition	-9838 Jun 22 j 06:02	17° <u>56</u> '39	-0°39'38
min. Earth dist.	-9844 Jun 07 j 07:14	4° <u>33</u> '26	28.93098 AU	direct	-9838 Sep 07 j 09:49	16° <u>33</u> '29	
opposition	-9844 Jun 08 j 07:53	4° <u>31</u> '43	-0°00'37	evening set	-9838 Dec 02 j 19:33	18° <u>25</u> '58	
direct	-9844 Aug 24 j 13:57	3° <u>08</u> '46					
evening set	-9844 Nov 18 j 16:48	5° <u>00</u> '53		conjunction	-9838 Dec 18 j 18:57	19° <u>01</u> '36	-0°39'59
				minimum elong	-9838 Dec 18 j 18:57	19° <u>01</u> '36	0°40'06
conjunction	-9844 Dec 04 j 13:01	5° <u>36</u> '18	-0°03'38	max. Earth dist.	-9838 Dec 19 j 19:41	19° <u>03</u> '55	30.88636 AU
minimum elong	-9844 Dec 04 j 13:01	5° <u>36</u> '18	0°03'37	morning rise	-9837 Jan 03 j 22:09	19° <u>37</u> '38	
behind sun begin	-9844 Dec 04 j 06:34	5° <u>35</u> '43		retrograde	-9837 Apr 05 j 14:09	21° <u>36</u> '27	
behind sun end	-9844 Dec 04 j 19:29	5° <u>36</u> '53		opposition	-9837 Jun 24 j 17:25	20° <u>10</u> '57	-0°45'59
max. Earth dist.	-9844 Dec 05 j 16:05	5° <u>38</u> '50	30.92783 AU	min. Earth dist.	-9837 Jun 23 j 19:37	20° <u>12</u> '29	28.88233 AU
morning rise	-9844 Dec 20 j 13:19	6° <u>12</u> '06		direct	-9837 Sep 09 j 20:36	18° <u>47</u> '42	
retrograde	-9843 Mar 22 j 08:10	8° <u>10</u> '58		evening set	-9837 Dec 05 j 08:22	20° <u>40</u> '14	
opposition	-9843 Jun 10 j 19:36	6° <u>45</u> '32	-0°07'10				
min. Earth dist.	-9843 Jun 09 j 18:04	6° <u>47</u> '19	28.92536 AU	conjunction	-9837 Dec 21 j 08:10	21° <u>15</u> '54	-0°45'53
direct	-9843 Aug 27 j 01:53	5° <u>22</u> '34		minimum elong	-9837 Dec 21 j 08:09	21° <u>15</u> '54	0°46'03
evening set	-9843 Nov 21 j 04:56	7° <u>14</u> '45		max. Earth dist.	-9837 Dec 22 j 07:51	21° <u>18</u> '07	30.87759 AU

Attention, astronomical year style is used: The year -9836 in astronomical counting style is the year 9837 BCE in historical counting style.

morning rise	-9836 Jan 06 j 11:50	21° <u>♏</u> 51'57		opposition	-9830 Jul 09 j 23:49	5° <u>♍</u> 51'29	-1°28'00
retrograde	-9836 Apr 07 j 03:32	23° <u>♏</u> 50'44		min. Earth dist.	-9830 Jul 09 j 04:01	5° <u>♍</u> 52'53	28.84733 AU
min. Earth dist.	-9836 Jun 25 j 06:43	22° <u>♏</u> 26'44	28.87383 AU	direct	-9830 Sep 25 j 05:14	4° <u>♍</u> 27'54	
opposition	-9836 Jun 26 j 04:47	22° <u>♏</u> 25'11	-0°52'16	evening set	-9830 Dec 21 j 04:34	6° <u>♍</u> 21'08	
direct	-9836 Sep 11 j 07:09	21° <u>♏</u> 01'51					
evening set	-9836 Dec 06 j 21:04	22° <u>♏</u> 54'27		conjunction	-9829 Jan 06 j 06:55	6° <u>♍</u> 56'59	-1°24'50
				minimum elong	-9829 Jan 06 j 06:54	6° <u>♍</u> 56'59	1°25'08
conjunction	-9836 Dec 22 j 21:17	23° <u>♏</u> 30'09	-0°51'43	max. Earth dist.	-9829 Jan 07 j 03:48	6° <u>♍</u> 58'57	30.84584 AU
minimum elong	-9836 Dec 22 j 21:16	23° <u>♏</u> 30'09	0°51'53	morning rise	-9829 Jan 22 j 12:36	7° <u>♍</u> 33'09	
max. Earth dist.	-9836 Dec 23 j 21:03	23° <u>♏</u> 32'22	30.86930 AU	retrograde	-9829 Apr 24 j 01:03	9° <u>♍</u> 31'46	
morning rise	-9835 Jan 08 j 01:17	24° <u>♏</u> 06'13		opposition	-9829 Jul 12 j 10:52	8° <u>♍</u> 06'22	-1°33'33
retrograde	-9835 Apr 09 j 15:05	26° <u>♏</u> 04'58		min. Earth dist.	-9829 Jul 11 j 15:54	8° <u>♍</u> 07'43	28.84603 AU
opposition	-9835 Jun 28 j 16:10	24° <u>♏</u> 39'23	-0°58'28	direct	-9829 Sep 27 j 15:37	6° <u>♍</u> 42'46	
min. Earth dist.	-9835 Jun 27 j 19:09	24° <u>♏</u> 40'52	28.86611 AU	evening set	-9829 Dec 23 j 18:21	8° <u>♍</u> 36'08	
direct	-9835 Sep 13 j 18:42	23° <u>♏</u> 15'59					
evening set	-9835 Dec 09 j 09:58	25° <u>♏</u> 08'40		conjunction	-9828 Jan 08 j 21:05	9° <u>♍</u> 12'01	-1°29'58
				minimum elong	-9828 Jan 08 j 21:04	9° <u>♍</u> 12'01	1°30'17
conjunction	-9835 Dec 25 j 10:40	25° <u>♏</u> 44'23	-0°57'29	max. Earth dist.	-9828 Jan 09 j 18:11	9° <u>♍</u> 13'59	30.84426 AU
minimum elong	-9835 Dec 25 j 10:40	25° <u>♏</u> 44'23	0°57'41	morning rise	-9828 Jan 25 j 02:47	9° <u>♍</u> 48'11	
max. Earth dist.	-9835 Dec 26 j 10:16	25° <u>♏</u> 46'35	30.86221 AU	retrograde	-9828 Apr 25 j 13:11	11° <u>♍</u> 46'46	
morning rise	-9834 Jan 10 j 15:00	26° <u>♏</u> 20'28		opposition	-9828 Jul 13 j 22:02	10° <u>♍</u> 21'25	-1°38'57
retrograde	-9834 Apr 12 j 04:56	28° <u>♏</u> 19'11		min. Earth dist.	-9828 Jul 13 j 04:13	10° <u>♍</u> 22'41	28.84426 AU
min. Earth dist.	-9834 Jun 30 j 05:30	26° <u>♏</u> 55'08	28.85972 AU	direct	-9828 Sep 29 j 02:33	8° <u>♍</u> 57'47	
opposition	-9834 Jul 01 j 03:14	26° <u>♏</u> 53'36	-1°04'35	evening set	-9828 Dec 25 j 08:11	10° <u>♍</u> 51'16	
direct	-9834 Sep 16 j 06:34	25° <u>♏</u> 30'07					
evening set	-9834 Dec 11 j 23:07	27° <u>♏</u> 22'54		conjunction	-9827 Jan 10 j 11:07	11° <u>♍</u> 27'08	-1°34'58
				minimum elong	-9827 Jan 10 j 11:06	11° <u>♍</u> 27'08	1°35'17
conjunction	-9834 Dec 28 j 00:06	27° <u>♏</u> 58'39	-1°03'09	max. Earth dist.	-9827 Jan 11 j 06:30	11° <u>♍</u> 28'57	30.84218 AU
minimum elong	-9834 Dec 28 j 00:05	27° <u>♏</u> 58'39	1°03'21	morning rise	-9827 Jan 26 j 17:06	12° <u>♍</u> 03'20	
max. Earth dist.	-9834 Dec 28 j 23:02	28° <u>♏</u> 00'47	30.85640 AU	retrograde	-9827 Apr 28 j 02:16	14° <u>♍</u> 01'51	
morning rise	-9833 Jan 13 j 04:48	28° <u>♏</u> 34'45		opposition	-9827 Jul 16 j 09:11	12° <u>♍</u> 36'32	-1°44'13
	-9833 Feb 27 j 22:18	0° <u>♍</u>		min. Earth dist.	-9827 Jul 15 j 15:40	12° <u>♍</u> 37'47	28.84185 AU
retrograde	-9833 Apr 14 j 17:49	0° <u>♍</u> 33'27		direct	-9827 Oct 01 j 13:42	11° <u>♍</u> 12'50	
	-9833 May 31 j 10:50	30° <u>♏</u>		evening set	-9827 Dec 27 j 22:17	13° <u>♍</u> 06'26	
opposition	-9833 Jul 03 j 14:31	29° <u>♏</u> 07'52	-1°10'36				
min. Earth dist.	-9833 Jul 02 j 18:03	29° <u>♏</u> 09'18	28.85476 AU	conjunction	-9826 Jan 13 j 01:30	13° <u>♍</u> 42'19	-1°39'49
direct	-9833 Sep 18 j 16:59	27° <u>♏</u> 44'21		minimum elong	-9826 Jan 13 j 01:29	13° <u>♍</u> 42'19	1°40'10
evening set	-9833 Dec 14 j 12:08	29° <u>♏</u> 37'13		max. Earth dist.	-9826 Jan 13 j 20:14	13° <u>♍</u> 44'04	30.83916 AU
	-9833 Dec 24 j 18:49	0° <u>♍</u>		morning rise	-9826 Jan 29 j 07:33	14° <u>♍</u> 18'30	
					-9826 Feb 18 j 06:12	15° <u>♍</u>	
conjunction	-9833 Dec 30 j 13:37	0° <u>♍</u> 13'00	-1°08'44	retrograde	-9826 Apr 30 j 13:10	16° <u>♍</u> 16'58	
minimum elong	-9833 Dec 30 j 13:37	0° <u>♍</u> 13'00	1°08'59		-9826 Jul 13 j 22:31	15° <u>♏</u>	
max. Earth dist.	-9833 Dec 31 j 13:04	0° <u>♍</u> 15'11	30.85212 AU	opposition	-9826 Jul 18 j 20:15	14° <u>♍</u> 51'40	-1°49'19
morning rise	-9832 Jan 15 j 18:28	0° <u>♍</u> 49'07		min. Earth dist.	-9826 Jul 18 j 04:29	14° <u>♍</u> 52'47	28.83849 AU
retrograde	-9832 Apr 16 j 08:16	2° <u>♍</u> 47'47		direct	-9826 Oct 04 j 00:57	13° <u>♍</u> 27'53	
min. Earth dist.	-9832 Jul 04 j 04:30	1° <u>♍</u> 23'43	28.85118 AU		-9826 Dec 20 j 10:04	15° <u>♍</u>	
opposition	-9832 Jul 05 j 01:34	1° <u>♍</u> 22'14	-1°16'31	evening set	-9826 Dec 30 j 12:25	15° <u>♍</u> 21'34	
	-9832 Sep 11 j 14:18	30° <u>♏</u>					
direct	-9832 Sep 20 j 06:11	29° <u>♏</u> 58'42		conjunction	-9825 Jan 15 j 15:55	15° <u>♍</u> 57'28	-1°44'30
	-9832 Sep 28 j 19:58	0° <u>♍</u>		minimum elong	-9825 Jan 15 j 15:54	15° <u>♍</u> 57'28	1°44'52
evening set	-9832 Dec 16 j 01:28	1° <u>♍</u> 51'41		max. Earth dist.	-9825 Jan 16 j 09:30	15° <u>♍</u> 59'06	30.83551 AU
				morning rise	-9825 Jan 31 j 22:06	16° <u>♍</u> 33'38	
conjunction	-9831 Jan 01 j 03:08	2° <u>♍</u> 27'29	-1°14'13	retrograde	-9825 May 03 j 02:51	18° <u>♍</u> 32'00	
minimum elong	-9831 Jan 01 j 03:07	2° <u>♍</u> 27'29	1°14'28	opposition	-9825 Jul 21 j 07:12	17° <u>♍</u> 06'42	-1°54'16
max. Earth dist.	-9831 Jan 02 j 01:15	2° <u>♍</u> 29'33	30.84917 AU	min. Earth dist.	-9825 Jul 20 j 15:20	17° <u>♍</u> 07'50	28.83462 AU
morning rise	-9831 Jan 17 j 08:24	3° <u>♍</u> 03'37		direct	-9825 Oct 06 j 12:50	15° <u>♍</u> 42'49	
retrograde	-9831 Apr 18 j 22:19	5° <u>♍</u> 02'17		evening set	-9824 Jan 02 j 02:32	17° <u>♍</u> 36'36	
opposition	-9831 Jul 07 j 12:44	3° <u>♍</u> 36'46	-1°22'19				
min. Earth dist.	-9831 Jul 06 j 16:46	3° <u>♍</u> 38'10	28.84893 AU	conjunction	-9824 Jan 18 j 06:08	18° <u>♍</u> 12'30	-1°49'03
direct	-9831 Sep 22 j 16:58	2° <u>♍</u> 13'12		minimum elong	-9824 Jan 18 j 06:07	18° <u>♍</u> 12'30	1°49'26
evening set	-9831 Dec 18 j 14:47	4° <u>♍</u> 06'18		max. Earth dist.	-9824 Jan 18 j 22:36	18° <u>♍</u> 14'03	30.83138 AU
				morning rise	-9824 Feb 03 j 12:25	18° <u>♍</u> 48'41	
conjunction	-9830 Jan 03 j 16:59	4° <u>♍</u> 42'08	-1°19'35	retrograde	-9824 May 04 j 14:25	20° <u>♍</u> 46'57	
minimum elong	-9830 Jan 03 j 16:58	4° <u>♍</u> 42'08	1°19'52	opposition	-9824 Jul 22 j 18:12	19° <u>♍</u> 21'38	-1°59'01
max. Earth dist.	-9830 Jan 04 j 15:41	4° <u>♍</u> 44'16	30.84729 AU	min. Earth dist.	-9824 Jul 22 j 04:06	19° <u>♍</u> 22'39	28.83068 AU
morning rise	-9830 Jan 19 j 22:20	5° <u>♍</u> 18'18		direct	-9824 Oct 07 j 23:57	17° <u>♍</u> 57'39	
retrograde	-9830 Apr 21 j 10:44	7° <u>♍</u> 16'56		evening set	-9823 Jan 03 j 16:36	19° <u>♍</u> 51'31	

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Attention, astronomical year style is used: The year -9823 in astronomical counting style is the year 9824 BCE in historical counting style.

conjunction	-9823 Jan 19 j 20:32	20° M 27'26	-1°53'25	retrograde	-9817 May 21 j 08:07	6° 7 30'27	
minimum elong	-9823 Jan 19 j 20:31	20° M 27'26	1°53'49	opposition	-9817 Aug 07 j 21:21	5° 7 05'31	-2°26'53
max. Earth dist.	-9823 Jan 20 j 12:55	20° M 28'58	30.82763 AU	min. Earth dist.	-9817 Aug 07 j 11:55	5° 7 06'11	28.83272 AU
morning rise	-9823 Feb 05 j 02:47	21° M 03'35		direct	-9817 Oct 24 j 10:48	3° 7 41'11	
retrograde	-9823 May 07 j 03:45	23° M 01'46		evening set	-9816 Jan 20 j 21:21	5° 7 35'59	
opposition	-9823 Jul 25 j 04:54	21° M 36'27	-2°03'36				
min. Earth dist.	-9823 Jul 24 j 14:38	21° M 37'28	28.82730 AU	conjunction	-9816 Feb 06 j 02:08	6° 7 11'56	-2°18'49
direct	-9823 Oct 10 j 13:44	20° M 12'22		minimum elong	-9816 Feb 06 j 02:07	6° 7 11'56	2°19'19
evening set	-9822 Jan 06 j 06:53	22° M 06'20		max. Earth dist.	-9816 Feb 06 j 12:38	6° 7 12'55	30.83272 AU
				morning rise	-9816 Feb 22 j 08:18	6° 7 48'02	
conjunction	-9822 Jan 22 j 10:52	22° M 42'15	-1°57'36	retrograde	-9816 May 22 j 21:59	8° 7 45'41	
minimum elong	-9822 Jan 22 j 10:51	22° M 42'15	1°58'02	opposition	-9816 Aug 09 j 08:01	7° 7 20'51	-2°30'01
max. Earth dist.	-9822 Jan 23 j 01:37	22° M 43'38	30.82460 AU	min. Earth dist.	-9816 Aug 08 j 22:37	7° 7 21'31	28.83616 AU
morning rise	-9822 Feb 07 j 17:19	23° M 18'24		direct	-9816 Oct 25 j 22:03	5° 7 56'29	
retrograde	-9822 May 09 j 16:50	25° M 16'29		evening set	-9815 Jan 22 j 12:15	7° 7 51'26	
opposition	-9822 Jul 27 j 15:47	23° M 51'11	-2°07'59				
min. Earth dist.	-9822 Jul 27 j 02:48	23° M 52'06	28.82497 AU	conjunction	-9815 Feb 07 j 17:02	8° 7 27'24	-2°21'38
direct	-9822 Oct 13 j 01:17	22° M 27'00		minimum elong	-9815 Feb 07 j 17:01	8° 7 27'24	2°22'08
evening set	-9821 Jan 08 j 21:05	24° M 21'05		max. Earth dist.	-9815 Feb 08 j 02:10	8° 7 28'15	30.83576 AU
				morning rise	-9815 Feb 23 j 23:07	9° 7 03'30	
conjunction	-9821 Jan 25 j 01:23	24° M 57'01	-2°01'37	retrograde	-9815 May 25 j 09:07	11° 7 01'04	
minimum elong	-9821 Jan 25 j 01:21	24° M 57'01	2°02'03	opposition	-9815 Aug 11 j 18:49	9° 7 36'18	-2°32'55
max. Earth dist.	-9821 Jan 25 j 16:29	24° M 58'25	30.82278 AU	min. Earth dist.	-9815 Aug 11 j 11:35	9° 7 36'49	28.83898 AU
morning rise	-9821 Feb 10 j 07:39	25° M 33'09		direct	-9815 Oct 28 j 09:02	8° 7 11'54	
retrograde	-9821 May 12 j 05:23	27° M 31'08		evening set	-9814 Jan 25 j 03:08	10° 7 07'00	
opposition	-9821 Jul 30 j 02:25	26° M 05'52	-2°12'11				
min. Earth dist.	-9821 Jul 29 j 13:34	26° M 06'47	28.82387 AU	conjunction	-9814 Feb 10 j 08:07	10° 7 42'57	-2°24'14
direct	-9821 Oct 15 j 14:05	24° M 41'38		minimum elong	-9814 Feb 10 j 08:06	10° 7 42'57	2°24'46
evening set	-9820 Jan 11 j 11:27	26° M 35'50		max. Earth dist.	-9814 Feb 10 j 16:21	10° 7 43'44	30.83809 AU
				morning rise	-9814 Feb 26 j 14:04	11° 7 19'03	
conjunction	-9820 Jan 27 j 15:43	27° M 11'46	-2°05'27	retrograde	-9814 May 27 j 22:08	13° 7 16'30	
minimum elong	-9820 Jan 27 j 15:42	27° M 11'46	2°05'54	opposition	-9814 Aug 14 j 05:32	11° 7 51'49	-2°35'35
max. Earth dist.	-9820 Jan 28 j 05:03	27° M 13'00	30.82241 AU	min. Earth dist.	-9814 Aug 13 j 22:39	11° 7 52'18	28.84077 AU
morning rise	-9820 Feb 12 j 22:09	27° M 47'54		direct	-9814 Oct 30 j 23:02	10° 7 27'21	
retrograde	-9820 May 13 j 19:48	29° M 45'48		evening set	-9813 Jan 27 j 18:10	12° 7 22'34	
opposition	-9820 Jul 31 j 13:12	28° M 20'35	-2°16'11				
min. Earth dist.	-9820 Jul 31 j 00:55	28° M 21'27	28.82441 AU	conjunction	-9813 Feb 12 j 23:03	12° 7 58'32	-2°26'37
direct	-9820 Oct 17 j 01:19	26° M 56'18		minimum elong	-9813 Feb 12 j 23:02	12° 7 58'32	2°27'09
evening set	-9819 Jan 13 j 01:35	28° M 50'38		max. Earth dist.	-9813 Feb 13 j 05:07	12° 7 59'06	30.83930 AU
				morning rise	-9813 Mar 01 j 04:58	13° 7 34'35	
conjunction	-9819 Jan 29 j 06:08	29° M 26'35	-2°09'06	retrograde	-9813 May 30 j 10:40	15° 7 31'56	
minimum elong	-9819 Jan 29 j 06:07	29° M 26'34	2°09'33	opposition	-9813 Aug 16 j 16:18	14° 7 07'17	-2°38'01
max. Earth dist.	-9819 Jan 29 j 19:58	29° M 27'52	30.82355 AU	min. Earth dist.	-9813 Aug 16 j 11:12	14° 7 07'39	28.84169 AU
	-9819 Feb 13 j 06:43	0° 7		direct	-9813 Nov 02 j 10:50	12° 7 42'44	
morning rise	-9819 Feb 14 j 12:25	0° 7 02'42		evening set	-9812 Jan 30 j 08:58	14° 7 38'04	
retrograde	-9819 May 16 j 07:33	2° 7 00'32					
opposition	-9819 Aug 02 j 23:57	0° 7 35'24	-2°19'58	conjunction	-9812 Feb 15 j 14:04	15° 7 14'01	-2°28'47
min. Earth dist.	-9819 Aug 02 j 12:37	0° 7 36'12	28.82624 AU	minimum elong	-9812 Feb 15 j 14:04	15° 7 14'01	2°29'20
	-9819 Aug 24 j 08:33	30° R M		max. Earth dist.	-9812 Feb 15 j 19:51	15° 7 14'34	30.83987 AU
direct	-9819 Oct 19 j 12:54	29° M 11'06		morning rise	-9812 Mar 02 j 19:44	15° 7 50'04	
	-9819 Dec 13 j 07:11	0° 7		retrograde	-9812 May 31 j 23:16	17° 7 47'16	
evening set	-9818 Jan 15 j 16:07	1° 7 05'34		opposition	-9812 Aug 18 j 02:55	16° 7 22'39	-2°40'12
				min. Earth dist.	-9812 Aug 17 j 22:26	16° 7 22'58	28.84203 AU
conjunction	-9818 Jan 31 j 20:41	1° 7 41'31	-2°12'32	direct	-9812 Nov 04 j 00:14	14° 7 58'01	
minimum elong	-9818 Jan 31 j 20:41	1° 7 41'31	2°13'01	evening set	-9811 Jan 31 j 23:48	16° 7 53'26	
max. Earth dist.	-9818 Feb 01 j 08:52	1° 7 42'39	30.82601 AU				
morning rise	-9818 Feb 17 j 03:05	2° 7 17'39		conjunction	-9811 Feb 17 j 04:47	17° 7 29'23	-2°30'43
retrograde	-9818 May 18 j 20:50	4° 7 15'24		minimum elong	-9811 Feb 17 j 04:46	17° 7 29'23	2°31'16
opposition	-9818 Aug 05 j 10:32	2° 7 50'22	-2°23'32	max. Earth dist.	-9811 Feb 17 j 08:18	17° 7 29'43	30.84015 AU
min. Earth dist.	-9818 Aug 04 j 23:24	2° 7 51'09	28.82924 AU	morning rise	-9811 Mar 05 j 10:32	18° 7 05'25	
direct	-9818 Oct 22 j 00:07	1° 7 26'02		retrograde	-9811 Jun 03 j 13:31	20° 7 02'28	
evening set	-9817 Jan 18 j 06:46	3° 7 20'41		opposition	-9811 Aug 20 j 13:30	18° 7 37'52	-2°42'09
				min. Earth dist.	-9811 Aug 20 j 10:03	18° 7 38'07	28.84245 AU
conjunction	-9817 Feb 03 j 11:29	3° 7 56'38	-2°15'47	direct	-9811 Nov 06 j 13:11	17° 7 13'07	
minimum elong	-9817 Feb 03 j 11:28	3° 7 56'38	2°16'16	evening set	-9810 Feb 03 j 14:35	19° 7 08'38	
max. Earth dist.	-9817 Feb 03 j 23:19	3° 7 57'44	30.82920 AU				
morning rise	-9817 Feb 19 j 17:42	4° 7 32'45		conjunction	-9810 Feb 19 j 19:46	19° 7 44'35	-2°32'25

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Attention, astronomical year style is used: The year -9810 in astronomical counting style is the year 9811 BCE in historical counting style.

minimum elong	-9810 Feb 19 j 19:46	19° $\overline{\text{A}}$ 44'35	2°32'58	opposition	-9804 Sep 04 j 14:49	4° $\overline{\text{B}}$ 21'39	-2°48'41
max. Earth dist.	-9810 Feb 19 j 23:23	19° $\overline{\text{A}}$ 44'56	30.84062 AU	min. Earth dist.	-9804 Sep 04 j 17:16	4° $\overline{\text{B}}$ 21'29	28.87277 AU
morning rise	-9810 Mar 08 j 01:12	20° $\overline{\text{A}}$ 20'35		direct	-9804 Nov 22 j 00:12	2° $\overline{\text{B}}$ 56'32	
retrograde	-9810 Jun 06 j 00:26	22° $\overline{\text{A}}$ 17'29		evening set	-9803 Feb 19 j 21:36	4° $\overline{\text{B}}$ 52'48	
opposition	-9810 Aug 22 j 23:59	20° $\overline{\text{A}}$ 52'55	-2°43'50				
min. Earth dist.	-9810 Aug 22 j 21:45	20° $\overline{\text{A}}$ 53'05	28.84323 AU	conjunction	-9803 Mar 08 j 02:47	5° $\overline{\text{B}}$ 28'42	-2°37'42
direct	-9810 Nov 09 j 02:18	19° $\overline{\text{A}}$ 28'05		minimum elong	-9803 Mar 08 j 02:47	5° $\overline{\text{B}}$ 28'42	2°38'17
evening set	-9809 Feb 06 j 05:27	21° $\overline{\text{A}}$ 23'42		max. Earth dist.	-9803 Mar 07 j 23:55	5° $\overline{\text{B}}$ 28'26	30.87402 AU
				morning rise	-9803 Mar 24 j 07:05	6° $\overline{\text{B}}$ 04'35	
conjunction	-9809 Feb 22 j 10:31	21° $\overline{\text{A}}$ 59'38	-2°33'53	retrograde	-9803 Jun 21 j 11:41	8° $\overline{\text{B}}$ 00'33	
minimum elong	-9809 Feb 22 j 10:30	21° $\overline{\text{A}}$ 59'38	2°34'27	opposition	-9803 Sep 07 j 01:21	6° $\overline{\text{B}}$ 36'33	-2°48'35
max. Earth dist.	-9809 Feb 22 j 12:16	21° $\overline{\text{A}}$ 59'47	30.84188 AU	min. Earth dist.	-9803 Sep 07 j 04:32	6° $\overline{\text{B}}$ 36'19	28.87964 AU
morning rise	-9809 Mar 10 j 15:58	22° $\overline{\text{A}}$ 35'37		direct	-9803 Nov 24 j 13:46	5° $\overline{\text{B}}$ 11'24	
retrograde	-9809 Jun 08 j 13:41	24° $\overline{\text{A}}$ 32'21		evening set	-9802 Feb 22 j 12:36	7° $\overline{\text{B}}$ 07'47	
opposition	-9809 Aug 25 j 10:29	23° $\overline{\text{A}}$ 07'49	-2°45'17				
min. Earth dist.	-9809 Aug 25 j 08:22	23° $\overline{\text{A}}$ 07'58	28.84510 AU	conjunction	-9802 Mar 10 j 17:34	7° $\overline{\text{B}}$ 43'41	-2°37'30
direct	-9809 Nov 11 j 14:31	21° $\overline{\text{A}}$ 42'54		minimum elong	-9802 Mar 10 j 17:34	7° $\overline{\text{B}}$ 43'41	2°38'04
evening set	-9808 Feb 08 j 19:59	23° $\overline{\text{A}}$ 38'36		max. Earth dist.	-9802 Mar 10 j 12:12	7° $\overline{\text{B}}$ 43'11	30.88057 AU
				morning rise	-9802 Mar 26 j 21:49	8° $\overline{\text{B}}$ 19'32	
conjunction	-9808 Feb 25 j 01:08	24° $\overline{\text{A}}$ 14'32	-2°35'08	retrograde	-9802 Jun 24 j 01:12	10° $\overline{\text{B}}$ 15'23	
minimum elong	-9808 Feb 25 j 01:08	24° $\overline{\text{A}}$ 14'32	2°35'41	opposition	-9802 Sep 09 j 11:52	8° $\overline{\text{B}}$ 51'27	-2°48'14
max. Earth dist.	-9808 Feb 25 j 02:53	24° $\overline{\text{A}}$ 14'42	30.84423 AU	min. Earth dist.	-9802 Sep 09 j 16:13	8° $\overline{\text{B}}$ 51'08	28.88586 AU
morning rise	-9808 Mar 12 j 06:18	24° $\overline{\text{A}}$ 50'29		direct	-9802 Nov 27 j 02:34	7° $\overline{\text{B}}$ 26'15	
retrograde	-9808 Jun 10 j 00:46	26° $\overline{\text{A}}$ 47'06		evening set	-9801 Feb 25 j 03:22	9° $\overline{\text{B}}$ 22'44	
opposition	-9808 Aug 26 j 21:04	25° $\overline{\text{A}}$ 22'37	-2°46'29				
min. Earth dist.	-9808 Aug 26 j 20:23	25° $\overline{\text{A}}$ 22'40	28.84821 AU	conjunction	-9801 Mar 13 j 08:28	9° $\overline{\text{B}}$ 58'38	-2°37'03
direct	-9808 Nov 13 j 01:56	23° $\overline{\text{A}}$ 57'38		minimum elong	-9801 Mar 13 j 08:28	9° $\overline{\text{B}}$ 58'38	2°37'38
evening set	-9807 Feb 10 j 10:41	25° $\overline{\text{A}}$ 53'25		max. Earth dist.	-9801 Mar 13 j 02:53	9° $\overline{\text{B}}$ 58'07	30.88629 AU
				morning rise	-9801 Mar 29 j 12:20	10° $\overline{\text{B}}$ 34'28	
conjunction	-9807 Feb 26 j 15:49	26° $\overline{\text{A}}$ 29'20	-2°36'07	retrograde	-9801 Jun 26 j 12:16	12° $\overline{\text{B}}$ 30'10	
minimum elong	-9807 Feb 26 j 15:49	26° $\overline{\text{A}}$ 29'20	2°36'42	opposition	-9801 Sep 11 j 22:31	11° $\overline{\text{B}}$ 06'18	-2°47'38
max. Earth dist.	-9807 Feb 26 j 16:16	26° $\overline{\text{A}}$ 29'23	30.84812 AU	min. Earth dist.	-9801 Sep 12 j 04:21	11° $\overline{\text{B}}$ 05'54	28.89107 AU
morning rise	-9807 Mar 14 j 20:55	27° $\overline{\text{A}}$ 05'17		direct	-9801 Nov 29 j 16:01	9° $\overline{\text{B}}$ 41'04	
retrograde	-9807 Jun 12 j 13:37	29° $\overline{\text{A}}$ 01'45		evening set	-9800 Feb 27 j 18:02	11° $\overline{\text{B}}$ 37'37	
opposition	-9807 Aug 29 j 07:21	27° $\overline{\text{A}}$ 37'20	-2°47'25				
min. Earth dist.	-9807 Aug 29 j 06:24	27° $\overline{\text{A}}$ 37'24	28.85281 AU	conjunction	-9800 Mar 14 j 22:57	12° $\overline{\text{B}}$ 13'31	-2°36'22
direct	-9807 Nov 15 j 13:34	26° $\overline{\text{A}}$ 12'17		minimum elong	-9800 Mar 14 j 22:57	12° $\overline{\text{B}}$ 13'31	2°36'57
evening set	-9806 Feb 13 j 01:28	28° $\overline{\text{A}}$ 08'11		max. Earth dist.	-9800 Mar 14 j 15:07	12° $\overline{\text{B}}$ 12'47	30.89120 AU
				morning rise	-9800 Mar 31 j 02:48	12° $\overline{\text{B}}$ 49'19	
conjunction	-9806 Mar 01 j 06:36	28° $\overline{\text{A}}$ 44'07	-2°36'53	retrograde	-9800 Jun 28 j 01:39	14° $\overline{\text{B}}$ 44'52	
minimum elong	-9806 Mar 01 j 06:36	28° $\overline{\text{A}}$ 44'07	2°37'28	opposition	-9800 Sep 13 j 09:00	13° $\overline{\text{B}}$ 21'03	-2°46'46
max. Earth dist.	-9806 Mar 01 j 06:14	28° $\overline{\text{A}}$ 44'05	30.85333 AU	min. Earth dist.	-9800 Sep 13 j 15:16	13° $\overline{\text{B}}$ 20'37	28.89567 AU
morning rise	-9806 Mar 17 j 11:30	29° $\overline{\text{A}}$ 20'03		direct	-9800 Dec 01 j 04:52	11° $\overline{\text{B}}$ 55'45	
	-9806 Apr 05 j 17:11	0° $\overline{\text{B}}$		evening set	-9799 Mar 01 j 08:38	13° $\overline{\text{B}}$ 52'22	
retrograde	-9806 Jun 14 j 23:38	1° $\overline{\text{B}}$ 16'23					
	-9806 Aug 27 j 02:22	30° $\overline{\text{R}}$ $\overline{\text{A}}$		conjunction	-9799 Mar 17 j 13:39	14° $\overline{\text{B}}$ 28'15	-2°35'27
opposition	-9806 Aug 31 j 17:56	29° $\overline{\text{A}}$ 52'03	-2°48'06	minimum elong	-9799 Mar 17 j 13:39	14° $\overline{\text{B}}$ 28'15	2°36'02
min. Earth dist.	-9806 Aug 31 j 18:43	29° $\overline{\text{A}}$ 52'00	28.85870 AU	max. Earth dist.	-9799 Mar 17 j 05:31	14° $\overline{\text{B}}$ 27'30	30.89551 AU
direct	-9806 Nov 18 j 00:38	28° $\overline{\text{A}}$ 26'59		morning rise	-9799 Apr 02 j 17:11	15° $\overline{\text{B}}$ 04'02	
	-9805 Feb 04 j 20:22	0° $\overline{\text{B}}$		retrograde	-9799 Jun 30 j 12:44	16° $\overline{\text{B}}$ 59'24	
evening set	-9805 Feb 15 j 16:09	0° $\overline{\text{B}}$ 23'00		opposition	-9799 Sep 15 j 19:26	15° $\overline{\text{B}}$ 35'39	-2°45'40
				min. Earth dist.	-9799 Sep 16 j 03:34	15° $\overline{\text{B}}$ 35'04	28.89983 AU
conjunction	-9805 Mar 03 j 21:19	0° $\overline{\text{B}}$ 58'55	-2°37'24	direct	-9799 Dec 03 j 17:12	14° $\overline{\text{B}}$ 10'16	
minimum elong	-9805 Mar 03 j 21:18	0° $\overline{\text{B}}$ 58'55	2°37'59	evening set	-9798 Mar 03 j 23:17	16° $\overline{\text{B}}$ 06'56	
max. Earth dist.	-9805 Mar 03 j 20:23	0° $\overline{\text{B}}$ 58'50	30.85979 AU				
morning rise	-9805 Mar 20 j 02:00	1° $\overline{\text{B}}$ 34'49		conjunction	-9798 Mar 20 j 04:11	16° $\overline{\text{B}}$ 42'49	-2°34'19
retrograde	-9805 Jun 17 j 11:42	3° $\overline{\text{B}}$ 31'02		minimum elong	-9798 Mar 20 j 04:11	16° $\overline{\text{B}}$ 42'49	2°34'53
opposition	-9805 Sep 03 j 04:19	2° $\overline{\text{B}}$ 06'49	-2°48'31	max. Earth dist.	-9798 Mar 19 j 18:21	16° $\overline{\text{B}}$ 41'54	30.89980 AU
min. Earth dist.	-9805 Sep 03 j 05:08	2° $\overline{\text{B}}$ 06'46	28.86549 AU	morning rise	-9798 Apr 05 j 07:38	17° $\overline{\text{B}}$ 18'35	
direct	-9805 Nov 20 j 13:31	0° $\overline{\text{B}}$ 41'43		retrograde	-9798 Jul 03 j 01:04	19° $\overline{\text{B}}$ 13'47	
evening set	-9804 Feb 18 j 06:58	2° $\overline{\text{B}}$ 37'52		opposition	-9798 Sep 18 j 05:48	17° $\overline{\text{B}}$ 50'04	-2°44'19
				min. Earth dist.	-9798 Sep 18 j 13:49	17° $\overline{\text{B}}$ 49'30	28.90418 AU
conjunction	-9804 Mar 05 j 11:59	3° $\overline{\text{B}}$ 13'47	-2°37'40	direct	-9798 Dec 06 j 05:49	16° $\overline{\text{B}}$ 24'37	
minimum elong	-9804 Mar 05 j 11:59	3° $\overline{\text{B}}$ 13'47	2°38'15	evening set	-9797 Mar 06 j 13:40	18° $\overline{\text{B}}$ 21'20	
max. Earth dist.	-9804 Mar 05 j 09:25	3° $\overline{\text{B}}$ 13'32	30.86683 AU				
morning rise	-9804 Mar 21 j 16:34	3° $\overline{\text{B}}$ 49'40		conjunction	-9797 Mar 22 j 18:30	18° $\overline{\text{B}}$ 57'13	-2°32'56
retrograde	-9804 Jun 18 j 23:40	5° $\overline{\text{B}}$ 45'46		minimum elong	-9797 Mar 22 j 18:30	18° $\overline{\text{B}}$ 57'13	2°33'30

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Attention, astronomical year style is used: The year -9797 in astronomical counting style is the year 9798 BCE in historical counting style.

max. Earth dist.	-9797 Mar 22 j 08:01	18° $\overline{35}$ 6'14	30.90434 AU	retrograde	-9791 Jul 18 j 07:28	4° \approx 51'29	
morning rise	-9797 Apr 07 j 21:39	19° $\overline{33}$ 2'57		opposition	-9791 Oct 03 j 06:38	3° \approx 28'22	-2°28'06
retrograde	-9797 Jul 05 j 10:24	21° $\overline{32}$ 7'59		min. Earth dist.	-9791 Oct 03 j 19:34	3° \approx 27'27	28.96388 AU
opposition	-9797 Sep 20 j 16:18	20° $\overline{30}$ 4'19	-2°42'43	direct	-9791 Dec 21 j 19:24	2° \approx 02'47	
min. Earth dist.	-9797 Sep 21 j 02:00	20° $\overline{30}$ 3'38	28.90917 AU	evening set	-9790 Mar 22 j 16:38	3° \approx 59'57	
direct	-9797 Dec 08 j 17:17	18° $\overline{33}$ 8'49					
evening set	-9796 Mar 08 j 03:56	20° $\overline{33}$ 5'34		conjunction	-9790 Apr 07 j 20:56	4° \approx 35'46	-2°17'00
				minimum elong	-9790 Apr 07 j 20:57	4° \approx 35'46	2°17'30
conjunction	-9796 Mar 24 j 08:44	21° $\overline{31}$ 1'26	-2°31'20	max. Earth dist.	-9790 Apr 07 j 05:31	4° \approx 34'20	30.96735 AU
minimum elong	-9796 Mar 24 j 08:45	21° $\overline{31}$ 1'26	2°31'53	morning rise	-9790 Apr 23 j 22:27	5° \approx 11'22	
max. Earth dist.	-9796 Mar 23 j 21:41	21° $\overline{31}$ 0'25	30.90994 AU	retrograde	-9790 Jul 20 j 18:48	7° \approx 05'26	
morning rise	-9796 Apr 09 j 11:41	21° $\overline{30}$ 4'10		opposition	-9790 Oct 05 j 17:21	5° \approx 42'24	-2°24'51
retrograde	-9796 Jul 06 j 21:40	23° $\overline{34}$ 2'01		min. Earth dist.	-9790 Oct 06 j 08:05	5° \approx 41'22	28.97432 AU
opposition	-9796 Sep 22 j 02:33	22° $\overline{31}$ 8'25	-2°40'53	direct	-9790 Dec 24 j 08:35	4° \approx 16'50	
min. Earth dist.	-9796 Sep 22 j 12:04	22° $\overline{31}$ 7'45	28.91528 AU	evening set	-9789 Mar 25 j 06:37	6° \approx 14'02	
direct	-9796 Dec 10 j 05:48	20° $\overline{35}$ 2'51					
evening set	-9795 Mar 10 j 18:10	22° $\overline{34}$ 9'40		conjunction	-9789 Apr 10 j 10:40	6° \approx 49'50	-2°13'51
				minimum elong	-9789 Apr 10 j 10:41	6° \approx 49'50	2°14'22
conjunction	-9795 Mar 26 j 22:51	23° $\overline{32}$ 5'32	-2°29'29	max. Earth dist.	-9789 Apr 09 j 17:29	6° \approx 48'14	30.97748 AU
minimum elong	-9795 Mar 26 j 22:51	23° $\overline{32}$ 5'32	2°30'03	morning rise	-9789 Apr 26 j 12:03	7° \approx 25'25	
max. Earth dist.	-9795 Mar 26 j 10:36	23° $\overline{32}$ 4'24	30.91673 AU	retrograde	-9789 Jul 23 j 06:57	9° \approx 19'20	
morning rise	-9795 Apr 12 j 01:38	24° $\overline{30}$ 1'14		opposition	-9789 Oct 08 j 03:55	7° \approx 56'23	-2°21'24
retrograde	-9795 Jul 09 j 08:23	25° $\overline{35}$ 5'57		min. Earth dist.	-9789 Oct 08 j 18:33	7° \approx 55'21	28.98390 AU
opposition	-9795 Sep 24 j 13:00	24° $\overline{33}$ 2'25	-2°38'48	direct	-9789 Dec 26 j 22:05	6° \approx 30'48	
min. Earth dist.	-9795 Sep 24 j 23:42	24° $\overline{33}$ 1'40	28.92283 AU	evening set	-9788 Mar 26 j 20:33	8° \approx 28'02	
direct	-9795 Dec 12 j 16:01	23° $\overline{30}$ 6'49		max. Earth dist.	-9788 Apr 11 j 06:35	9° \approx 02'09	30.98658 AU
evening set	-9794 Mar 13 j 08:18	25° $\overline{30}$ 3'42					
				conjunction	-9788 Apr 12 j 00:31	9° \approx 03'49	-2°10'32
conjunction	-9794 Mar 29 j 13:01	25° $\overline{33}$ 9'33	-2°27'26	minimum elong	-9788 Apr 12 j 00:32	9° \approx 03'49	2°11'01
minimum elong	-9794 Mar 29 j 13:02	25° $\overline{33}$ 9'33	2°27'58	morning rise	-9788 Apr 28 j 01:33	9° \approx 39'22	
max. Earth dist.	-9794 Mar 29 j 00:55	25° $\overline{33}$ 8'25	30.92504 AU	retrograde	-9788 Jul 24 j 16:56	11° \approx 33'08	
morning rise	-9794 Apr 14 j 15:29	26° $\overline{31}$ 5'14		opposition	-9788 Oct 09 j 14:33	10° \approx 10'15	-2°17'44
retrograde	-9794 Jul 11 j 18:53	28° $\overline{30}$ 9'48		min. Earth dist.	-9788 Oct 10 j 07:06	10° \approx 09'05	28.99255 AU
opposition	-9794 Sep 26 j 23:21	26° $\overline{34}$ 6'22	-2°36'29	direct	-9788 Dec 28 j 09:39	8° \approx 44'38	
min. Earth dist.	-9794 Sep 27 j 10:16	26° $\overline{34}$ 5'36	28.93169 AU	evening set	-9787 Mar 29 j 10:22	10° \approx 41'51	
direct	-9794 Dec 15 j 05:38	25° $\overline{32}$ 0'46					
evening set	-9793 Mar 15 j 22:31	27° $\overline{31}$ 7'43		conjunction	-9787 Apr 14 j 14:13	11° \approx 17'38	-2°07'00
				minimum elong	-9787 Apr 14 j 14:14	11° \approx 17'38	2°07'30
conjunction	-9793 Apr 01 j 02:59	27° $\overline{35}$ 3'33	-2°25'09	max. Earth dist.	-9787 Apr 13 j 19:17	11° \approx 15'52	30.99494 AU
minimum elong	-9793 Apr 01 j 03:00	27° $\overline{35}$ 3'33	2°25'42	morning rise	-9787 Apr 30 j 15:04	11° \approx 53'09	
max. Earth dist.	-9793 Mar 31 j 13:09	27° $\overline{35}$ 2'16	30.93469 AU	retrograde	-9787 Jul 27 j 04:19	13° \approx 46'45	
morning rise	-9793 Apr 17 j 05:22	28° $\overline{32}$ 9'13		opposition	-9787 Oct 12 j 01:05	12° \approx 23'55	-2°13'52
	-9793 Jun 06 j 21:58	0° \approx		min. Earth dist.	-9787 Oct 12 j 17:44	12° \approx 22'45	29.00036 AU
retrograde	-9793 Jul 14 j 07:24	0° \approx 23'40		direct	-9787 Dec 30 j 22:48	10° \approx 58'15	
	-9793 Aug 21 j 06:35	30° \overline{R} $\overline{3}$		evening set	-9786 Apr 01 j 00:08	12° \approx 55'28	
opposition	-9793 Sep 29 j 09:48	29° $\overline{30}$ 0'19	-2°33'55	max. Earth dist.	-9786 Apr 16 j 07:36	13° \approx 29'21	31.00252 AU
min. Earth dist.	-9793 Sep 29 j 21:15	28° $\overline{35}$ 9'31	28.94195 AU				
direct	-9793 Dec 17 j 17:48	27° $\overline{33}$ 4'43		conjunction	-9786 Apr 17 j 03:46	13° \approx 31'14	-2°03'18
evening set	-9792 Mar 17 j 12:21	29° $\overline{33}$ 1'45		minimum elong	-9786 Apr 17 j 03:47	13° \approx 31'14	2°03'45
	-9792 Mar 30 j 07:23	0° \approx		morning rise	-9786 May 03 j 04:19	14° \approx 06'44	
					-9786 May 29 j 12:56	15° \approx	
conjunction	-9792 Apr 02 j 16:55	0° \approx 07'35	-2°22'39	retrograde	-9786 Jul 29 j 14:06	16° \approx 00'10	
minimum elong	-9792 Apr 02 j 16:56	0° \approx 07'35	2°23'10		-9786 Sep 30 j 22:19	15° \overline{R} \overline{R}	
max. Earth dist.	-9792 Apr 02 j 03:31	0° \approx 06'20	30.94542 AU	opposition	-9786 Oct 14 j 11:42	14° \approx 37'22	-2°09'49
morning rise	-9792 Apr 18 j 18:55	0° \approx 43'13		min. Earth dist.	-9786 Oct 15 j 05:42	14° \approx 36'06	29.00782 AU
retrograde	-9792 Jul 15 j 18:00	2° \approx 37'33		direct	-9785 Jan 02 j 09:33	13° \approx 11'39	
opposition	-9792 Sep 30 j 20:17	1° \approx 14'19	-2°31'07		-9785 Mar 30 j 10:58	15° \approx	
min. Earth dist.	-9792 Oct 01 j 08:56	1° \approx 13'26	28.95283 AU	evening set	-9785 Apr 03 j 13:39	15° \approx 08'52	
	-9792 Nov 22 j 22:38	30° \overline{R} $\overline{3}$					
direct	-9792 Dec 19 j 06:28	29° $\overline{34}$ 8'44		conjunction	-9785 Apr 19 j 17:13	15° \approx 44'36	-1°59'25
	-9791 Jan 14 j 11:05	0° \approx		minimum elong	-9785 Apr 19 j 17:13	15° \approx 44'36	1°59'53
evening set	-9791 Mar 20 j 02:32	1° \approx 45'50		max. Earth dist.	-9785 Apr 18 j 21:07	15° \approx 42'44	31.01006 AU
				morning rise	-9785 May 05 j 17:25	16° \approx 20'05	
conjunction	-9791 Apr 05 j 06:50	2° \approx 21'39	-2°19'55	retrograde	-9785 Jul 31 j 23:29	18° \approx 13'21	
minimum elong	-9791 Apr 05 j 06:50	2° \approx 21'40	2°20'27	opposition	-9785 Oct 16 j 22:18	16° \approx 50'35	-2°05'34
max. Earth dist.	-9791 Apr 04 j 15:27	2° \approx 20'14	30.95654 AU	min. Earth dist.	-9785 Oct 17 j 16:33	16° \approx 49'18	29.01530 AU
morning rise	-9791 Apr 21 j 08:46	2° \approx 57'17		direct	-9784 Jan 04 j 23:18	15° \approx 24'50	

Attention, astronomical year style is used: The year -9784 in astronomical counting style is the year 9785 BCE in historical counting style.

evening set	-9784 Apr 05 j 02:59	17° \approx 22'01		minimum elong	-9778 May 05 j 11:21	1° \mathbb{H} 14'44	1°28'01
max. Earth dist.	-9784 Apr 20 j 08:38	17° \approx 55'44	31.01785 AU	morning rise	-9778 May 21 j 09:20	1° \mathbb{H} 50'01	
				retrograde	-9778 Aug 16 j 05:14	3° \mathbb{H} 42'33	
conjunction	-9784 Apr 21 j 06:14	17° \approx 57'45	-1°55'22	opposition	-9778 Nov 01 j 00:57	2° \mathbb{H} 20'20	-1°31'05
minimum elong	-9784 Apr 21 j 06:15	17° \approx 57'45	1°55'47	min. Earth dist.	-9778 Nov 01 j 21:59	2° \mathbb{H} 18'52	29.09001 AU
morning rise	-9784 May 07 j 06:18	18° \approx 33'12		direct	-9777 Jan 20 j 15:04	0° \mathbb{H} 54'45	
retrograde	-9784 Aug 02 j 10:38	20° \approx 26'19		evening set	-9777 Apr 21 j 22:30	2° \mathbb{H} 52'03	
opposition	-9784 Oct 18 j 08:51	19° \approx 03'35	-2°01'09				
min. Earth dist.	-9784 Oct 19 j 03:28	19° \approx 02'17	29.02343 AU	conjunction	-9777 May 07 j 23:57	3° \mathbb{H} 27'39	-1°22'35
direct	-9783 Jan 06 j 10:49	17° \approx 37'48		minimum elong	-9777 May 07 j 23:58	3° \mathbb{H} 27'39	1°22'55
evening set	-9783 Apr 07 j 16:13	19° \approx 34'59		max. Earth dist.	-9777 May 06 j 23:35	3° \mathbb{H} 25'23	31.09466 AU
				morning rise	-9777 May 23 j 21:33	4° \mathbb{H} 02'55	
conjunction	-9783 Apr 23 j 19:25	20° \approx 10'42	-1°51'08	retrograde	-9777 Aug 18 j 15:06	5° \mathbb{H} 55'23	
minimum elong	-9783 Apr 23 j 19:26	20° \approx 10'42	1°51'34	opposition	-9777 Nov 03 j 11:54	4° \mathbb{H} 33'14	-1°25'34
max. Earth dist.	-9783 Apr 22 j 22:27	20° \approx 08'45	31.02642 AU	min. Earth dist.	-9777 Nov 04 j 10:08	4° \mathbb{H} 31'41	29.10090 AU
morning rise	-9783 May 09 j 19:01	20° \approx 46'07		direct	-9776 Jan 23 j 01:39	3° \mathbb{H} 07'41	
retrograde	-9783 Aug 04 j 20:15	22° \approx 39'06		evening set	-9776 Apr 23 j 11:12	5° \mathbb{H} 04'58	
opposition	-9783 Oct 20 j 19:25	21° \approx 16'26	-1°56'33				
min. Earth dist.	-9783 Oct 21 j 14:54	21° \approx 15'03	29.03237 AU	conjunction	-9776 May 09 j 12:26	5° \mathbb{H} 40'33	-1°17'22
direct	-9782 Jan 08 j 23:21	19° \approx 50'38		minimum elong	-9776 May 09 j 12:26	5° \mathbb{H} 40'33	1°17'39
evening set	-9782 Apr 10 j 05:34	21° \approx 47'49		max. Earth dist.	-9776 May 08 j 12:06	5° \mathbb{H} 38'17	31.10498 AU
max. Earth dist.	-9782 Apr 25 j 09:57	22° \approx 21'25	31.03608 AU	morning rise	-9776 May 25 j 09:38	6° \mathbb{H} 15'48	
				retrograde	-9776 Aug 20 j 00:02	8° \mathbb{H} 08'10	
conjunction	-9782 Apr 26 j 08:21	22° \approx 23'30	-1°46'45	opposition	-9776 Nov 04 j 22:52	6° \mathbb{H} 46'05	-1°19'55
minimum elong	-9782 Apr 26 j 08:22	22° \approx 23'30	1°47'09	min. Earth dist.	-9776 Nov 05 j 21:28	6° \mathbb{H} 44'30	29.11039 AU
morning rise	-9782 May 12 j 07:47	22° \approx 58'54		direct	-9775 Jan 24 j 15:10	5° \mathbb{H} 20'33	
retrograde	-9782 Aug 07 j 08:45	24° \approx 51'46		evening set	-9775 Apr 26 j 00:04	7° \mathbb{H} 17'48	
opposition	-9782 Oct 23 j 06:02	23° \approx 29'10	-1°51'46	max. Earth dist.	-9775 May 10 j 22:49	7° \mathbb{H} 50'56	31.11392 AU
min. Earth dist.	-9782 Oct 24 j 01:05	23° \approx 27'49	29.04259 AU				
direct	-9781 Jan 11 j 12:19	22° \approx 03'23		conjunction	-9775 May 12 j 00:49	7° \mathbb{H} 53'22	-1°12'01
evening set	-9781 Apr 12 j 18:29	24° \approx 00'35		minimum elong	-9775 May 12 j 00:50	7° \mathbb{H} 53'22	1°12'19
				morning rise	-9775 May 27 j 21:43	8° \mathbb{H} 28'34	
conjunction	-9781 Apr 28 j 21:11	24° \approx 36'15	-1°42'13	retrograde	-9775 Aug 22 j 10:46	10° \mathbb{H} 20'51	
minimum elong	-9781 Apr 28 j 21:11	24° \approx 36'15	1°42'37	opposition	-9775 Nov 07 j 09:44	8° \mathbb{H} 58'48	-1°14'10
max. Earth dist.	-9781 Apr 27 j 23:33	24° \approx 34'15	31.04691 AU	min. Earth dist.	-9775 Nov 08 j 08:49	8° \mathbb{H} 57'11	29.11875 AU
morning rise	-9781 May 14 j 20:07	25° \approx 11'37		direct	-9774 Jan 27 j 01:51	7° \mathbb{H} 33'15	
retrograde	-9781 Aug 09 j 19:19	27° \approx 04'24		evening set	-9774 Apr 28 j 12:40	9° \mathbb{H} 30'28	
opposition	-9781 Oct 25 j 16:48	25° \approx 41'52	-1°46'50	max. Earth dist.	-9774 May 13 j 11:44	10° \mathbb{H} 03'38	31.12178 AU
min. Earth dist.	-9781 Oct 26 j 13:02	25° \approx 40'27	29.05389 AU				
direct	-9780 Jan 14 j 01:22	24° \approx 16'08		conjunction	-9774 May 14 j 13:12	10° \mathbb{H} 06'00	-1°06'36
evening set	-9780 Apr 14 j 07:34	26° \approx 13'22		minimum elong	-9774 May 14 j 13:13	10° \mathbb{H} 06'00	1°06'51
max. Earth dist.	-9780 Apr 29 j 11:10	26° \approx 46'54	31.05883 AU	morning rise	-9774 May 30 j 09:33	10° \mathbb{H} 41'11	
				retrograde	-9774 Aug 24 j 19:55	12° \mathbb{H} 33'22	
conjunction	-9780 Apr 30 j 09:53	26° \approx 49'01	-1°37'31	opposition	-9774 Nov 09 j 20:50	11° \mathbb{H} 11'19	-1°08'18
minimum elong	-9780 Apr 30 j 09:54	26° \approx 49'01	1°37'53	min. Earth dist.	-9774 Nov 10 j 20:53	11° \mathbb{H} 09'39	29.12605 AU
morning rise	-9780 May 16 j 08:40	27° \approx 24'21		direct	-9773 Jan 29 j 14:11	9° \mathbb{H} 45'46	
retrograde	-9780 Aug 11 j 07:15	29° \approx 17'03		evening set	-9773 May 01 j 01:05	11° \mathbb{H} 42'56	
opposition	-9780 Oct 27 j 03:16	27° \approx 54'37	-1°41'44	max. Earth dist.	-9773 May 15 j 22:13	12° \mathbb{H} 15'55	31.12888 AU
min. Earth dist.	-9780 Oct 27 j 22:56	27° \approx 53'15	29.06600 AU				
direct	-9779 Jan 15 j 14:29	26° \approx 28'56		conjunction	-9773 May 17 j 01:05	12° \mathbb{H} 18'25	-1°01'04
evening set	-9779 Apr 16 j 20:33	28° \approx 26'12		minimum elong	-9773 May 17 j 01:05	12° \mathbb{H} 18'25	1°01'19
				morning rise	-9773 Jun 01 j 21:11	12° \mathbb{H} 53'35	
conjunction	-9779 May 02 j 22:42	29° \approx 01'50	-1°32'40	retrograde	-9773 Aug 27 j 07:26	14° \mathbb{H} 45'39	
minimum elong	-9779 May 02 j 22:43	29° \approx 01'50	1°33'02	opposition	-9773 Nov 12 j 07:44	13° \mathbb{H} 23'37	-1°02'22
max. Earth dist.	-9779 May 01 j 23:53	28° \approx 59'43	31.07113 AU	min. Earth dist.	-9773 Nov 13 j 07:24	13° \mathbb{H} 21'58	29.13291 AU
morning rise	-9779 May 18 j 21:02	29° \approx 37'09		direct	-9772 Feb 01 j 03:23	11° \mathbb{H} 58'02	
	-9779 May 29 j 14:52	0° \mathbb{H}		evening set	-9772 May 02 j 13:16	13° \mathbb{H} 55'09	
retrograde	-9779 Aug 13 j 17:36	1° \mathbb{H} 29'46		max. Earth dist.	-9772 May 17 j 11:00	14° \mathbb{H} 28'11	31.13564 AU
opposition	-9779 Oct 29 j 14:07	0° \mathbb{H} 07'27	-1°36'29				
min. Earth dist.	-9779 Oct 30 j 11:19	0° \mathbb{H} 05'58	29.07828 AU	conjunction	-9772 May 18 j 13:03	14° \mathbb{H} 30'36	-0°55'28
	-9779 Nov 03 j 00:44	30° \mathbb{R}		minimum elong	-9772 May 18 j 13:03	14° \mathbb{H} 30'37	0°55'41
direct	-9778 Jan 18 j 01:59	28° \approx 41'49		morning rise	-9772 Jun 03 j 08:33	15° \mathbb{H} 05'43	
	-9778 Mar 31 j 13:21	0° \mathbb{H}		retrograde	-9772 Aug 28 j 17:00	16° \mathbb{H} 57'42	
evening set	-9778 Apr 19 j 09:32	0° \mathbb{H} 39'06		opposition	-9772 Nov 13 j 18:38	15° \mathbb{H} 35'39	-0°56'20
max. Earth dist.	-9778 May 04 j 11:55	1° \mathbb{H} 12'33	31.08333 AU	min. Earth dist.	-9772 Nov 14 j 19:28	15° \mathbb{H} 33'56	29.13967 AU
				direct	-9771 Feb 02 j 16:23	14° \mathbb{H} 10'03	
conjunction	-9778 May 05 j 11:20	1° \mathbb{H} 14'43	-1°27'42	evening set	-9771 May 05 j 01:29	16° \mathbb{H} 07'07	

Attention, astronomical year style is used: The year -9771 in astronomical counting style is the year 9772 BCE in historical counting style.

max. Earth dist.	-9771 May 19 j 21:51	16° \mathring{H} 40'02	31.14268 AU	max. Earth dist.	-9765 Jun 02 j 19:00	29° \mathring{H} 49'14	31.20046 AU
					-9765 Jun 07 j 14:20	0° \mathring{Y}	
conjunction	-9771 May 21 j 00:43	16° \mathring{H} 42'32	-0°49'47	morning rise	-9765 Jun 19 j 12:35	0° \mathring{Y} 26'28	
minimum elong	-9771 May 21 j 00:43	16° \mathring{H} 42'32	0°50'00	retrograde	-9765 Sep 13 j 15:34	2° \mathring{Y} 18'11	
morning rise	-9771 Jun 05 j 19:56	17° \mathring{H} 17'37		opposition	-9765 Nov 30 j 00:38	0° \mathring{Y} 56'24	-0°12'25
retrograde	-9771 Aug 31 j 04:13	19° \mathring{H} 09'30		min. Earth dist.	-9765 Dec 01 j 01:17	0° \mathring{Y} 54'42	29.20558 AU
opposition	-9771 Nov 16 j 05:35	17° \mathring{H} 47'27	-0°50'14		-9764 Jan 06 j 08:04	30° \mathring{R} \mathring{H}	
min. Earth dist.	-9771 Nov 17 j 05:24	17° \mathring{H} 45'48	29.14692 AU	direct	-9764 Feb 19 j 06:02	29° \mathring{H} 31'06	
direct	-9770 Feb 05 j 05:40	16° \mathring{H} 21'51			-9764 Apr 02 j 04:19	0° \mathring{Y}	
evening set	-9770 May 07 j 13:25	18° \mathring{H} 18'51		evening set	-9764 May 20 j 11:46	1° \mathring{Y} 27'56	
max. Earth dist.	-9770 May 22 j 09:54	18° \mathring{H} 51'47	31.15030 AU	max. Earth dist.	-9764 Jun 04 j 04:46	2° \mathring{Y} 00'37	31.20979 AU
conjunction	-9770 May 23 j 12:15	18° \mathring{H} 54'14	-0°44'03	conjunction	-9764 Jun 05 j 07:28	2° \mathring{Y} 03'06	-0°08'36
minimum elong	-9770 May 23 j 12:16	18° \mathring{H} 54'14	0°44'13	minimum elong	-9764 Jun 05 j 07:28	2° \mathring{Y} 03'06	0°08'38
morning rise	-9770 Jun 08 j 06:52	19° \mathring{H} 29'17		behind sun begin	-9764 Jun 05 j 01:49	2° \mathring{Y} 02'36	
retrograde	-9770 Sep 02 j 14:19	21° \mathring{H} 21'06		behind sun end	-9764 Jun 05 j 13:06	2° \mathring{Y} 03'36	
opposition	-9770 Nov 18 j 16:43	19° \mathring{H} 59'04	-0°44'03	morning rise	-9764 Jun 20 j 23:13	2° \mathring{Y} 37'56	
min. Earth dist.	-9770 Nov 19 j 17:23	19° \mathring{H} 57'21	29.15508 AU	retrograde	-9764 Sep 15 j 02:54	4° \mathring{Y} 29'38	
direct	-9769 Feb 07 j 18:10	18° \mathring{H} 33'29		opposition	-9764 Dec 01 j 11:50	3° \mathring{Y} 07'54	-0°06'00
evening set	-9769 May 10 j 01:18	20° \mathring{H} 30'26		min. Earth dist.	-9764 Dec 02 j 11:58	3° \mathring{Y} 06'14	29.21433 AU
				direct	-9763 Feb 20 j 17:54	1° \mathring{Y} 42'38	
conjunction	-9769 May 25 j 23:39	21° \mathring{H} 05'47	-0°38'15	evening set	-9763 May 22 j 23:18	3° \mathring{Y} 39'26	
minimum elong	-9769 May 25 j 23:40	21° \mathring{H} 05'47	0°38'25				
max. Earth dist.	-9769 May 24 j 21:26	21° \mathring{H} 03'20	31.15911 AU	conjunction	-9763 Jun 07 j 18:35	4° \mathring{Y} 14'35	-0°02'37
morning rise	-9769 Jun 10 j 17:52	21° \mathring{H} 40'47		minimum elong	-9763 Jun 07 j 18:35	4° \mathring{Y} 14'35	0°02'39
retrograde	-9769 Sep 05 j 01:22	23° \mathring{H} 32'33		behind sun begin	-9763 Jun 07 j 12:07	4° \mathring{Y} 14'00	
opposition	-9769 Nov 21 j 03:42	22° \mathring{H} 10'33	-0°37'49	behind sun end	-9763 Jun 08 j 01:03	4° \mathring{Y} 15'09	
min. Earth dist.	-9769 Nov 22 j 03:27	22° \mathring{H} 08'54	29.16432 AU	max. Earth dist.	-9763 Jun 06 j 16:41	4° \mathring{Y} 12'10	31.21782 AU
direct	-9768 Feb 10 j 08:00	20° \mathring{H} 44'59		morning rise	-9763 Jun 23 j 09:37	4° \mathring{Y} 49'22	
evening set	-9768 May 11 j 13:04	22° \mathring{H} 41'55		retrograde	-9763 Sep 17 j 12:38	6° \mathring{Y} 41'05	
max. Earth dist.	-9768 May 26 j 08:34	23° \mathring{H} 14'46	31.16890 AU	asc. node	-9763 Nov 10 j 23:41	5° \mathring{Y} 55'55	
				opposition	-9763 Dec 03 j 23:25	5° \mathring{Y} 19'20	0°00'25
conjunction	-9768 May 27 j 10:56	23° \mathring{H} 17'14	-0°32'23	min. Earth dist.	-9763 Dec 05 j 00:41	5° \mathring{Y} 17'36	29.22173 AU
minimum elong	-9768 May 27 j 10:56	23° \mathring{H} 17'14	0°32'31	direct	-9762 Feb 23 j 06:01	3° \mathring{Y} 54'08	
morning rise	-9768 Jun 12 j 04:41	23° \mathring{H} 52'12		evening set	-9762 May 25 j 10:46	5° \mathring{Y} 50'53	
retrograde	-9768 Sep 06 j 10:56	25° \mathring{H} 43'56		max. Earth dist.	-9762 Jun 09 j 02:41	6° \mathring{Y} 23'29	31.22465 AU
opposition	-9768 Nov 22 j 14:47	24° \mathring{H} 21'58	-0°31'32				
min. Earth dist.	-9768 Nov 23 j 15:01	24° \mathring{H} 20'18	29.17457 AU	conjunction	-9762 Jun 10 j 05:20	6° \mathring{Y} 25'58	0°03'32
direct	-9767 Feb 11 j 18:52	22° \mathring{H} 56'28		minimum elong	-9762 Jun 10 j 05:19	6° \mathring{Y} 25'58	0°03'32
evening set	-9767 May 14 j 00:46	24° \mathring{H} 53'23		behind sun begin	-9762 Jun 09 j 22:54	6° \mathring{Y} 25'24	
				behind sun end	-9762 Jun 10 j 11:44	6° \mathring{Y} 26'32	
conjunction	-9767 May 29 j 22:13	25° \mathring{H} 28'39	-0°26'29	morning rise	-9762 Jun 25 j 19:56	7° \mathring{Y} 00'43	
minimum elong	-9767 May 29 j 22:14	25° \mathring{H} 28'40	0°26'36	retrograde	-9762 Sep 19 j 23:52	8° \mathring{Y} 52'25	
max. Earth dist.	-9767 May 28 j 20:41	25° \mathring{H} 26'17	31.17949 AU	opposition	-9762 Dec 06 j 10:53	7° \mathring{Y} 30'41	0°06'49
morning rise	-9767 Jun 14 j 15:25	26° \mathring{H} 03'35		min. Earth dist.	-9762 Dec 07 j 11:08	7° \mathring{Y} 29'02	29.22793 AU
retrograde	-9767 Sep 08 j 19:41	27° \mathring{H} 55'18		direct	-9761 Feb 25 j 18:52	6° \mathring{Y} 05'30	
opposition	-9767 Nov 25 j 01:55	26° \mathring{H} 33'25	-0°25'11	evening set	-9761 May 27 j 22:02	8° \mathring{Y} 02'12	
min. Earth dist.	-9767 Nov 26 j 01:58	26° \mathring{H} 31'45	29.18515 AU				
direct	-9766 Feb 14 j 07:50	25° \mathring{H} 07'59		conjunction	-9761 Jun 12 j 16:06	8° \mathring{Y} 37'14	0°09'30
evening set	-9766 May 16 j 12:35	27° \mathring{H} 04'52		minimum elong	-9761 Jun 12 j 16:06	8° \mathring{Y} 37'14	0°09'30
max. Earth dist.	-9766 May 31 j 06:54	27° \mathring{H} 37'39	31.19017 AU	behind sun begin	-9761 Jun 12 j 10:42	8° \mathring{Y} 36'45	
				behind sun end	-9761 Jun 12 j 21:30	8° \mathring{Y} 37'43	
conjunction	-9766 Jun 01 j 09:23	27° \mathring{H} 40'07	-0°20'32	max. Earth dist.	-9761 Jun 11 j 13:48	8° \mathring{Y} 34'47	31.23032 AU
minimum elong	-9766 Jun 01 j 09:23	27° \mathring{H} 40'07	0°20'37	morning rise	-9761 Jun 28 j 06:05	9° \mathring{Y} 11'57	
morning rise	-9766 Jun 17 j 02:10	28° \mathring{H} 15'01		retrograde	-9761 Sep 22 j 10:15	11° \mathring{Y} 03'39	
	-9766 Aug 22 j 13:59	0° \mathring{Y}		opposition	-9761 Dec 08 j 22:22	9° \mathring{Y} 41'54	0°13'12
retrograde	-9766 Sep 11 j 06:35	0° \mathring{Y} 06'43		min. Earth dist.	-9761 Dec 09 j 23:36	9° \mathring{Y} 40'10	29.23330 AU
	-9766 Oct 01 j 04:47	30° \mathring{R} \mathring{H}		direct	-9760 Feb 28 j 07:32	8° \mathring{Y} 16'43	
opposition	-9766 Nov 27 j 13:12	28° \mathring{H} 44'53	-0°18'49	evening set	-9760 May 29 j 09:09	10° \mathring{Y} 13'21	
min. Earth dist.	-9766 Nov 28 j 13:08	28° \mathring{H} 43'14	29.19578 AU	max. Earth dist.	-9760 Jun 13 j 00:30	10° \mathring{Y} 45'54	31.23542 AU
direct	-9765 Feb 16 j 17:56	27° \mathring{H} 19'31					
evening set	-9765 May 19 j 00:02	29° \mathring{H} 16'23		conjunction	-9760 Jun 14 j 02:37	10° \mathring{Y} 48'21	0°15'26
				minimum elong	-9760 Jun 14 j 02:37	10° \mathring{Y} 48'21	0°15'30
conjunction	-9765 Jun 03 j 20:27	29° \mathring{H} 51'36	-0°14'34	behind sun begin	-9760 Jun 14 j 00:49	10° \mathring{Y} 48'11	
minimum elong	-9765 Jun 03 j 20:27	29° \mathring{H} 51'36	0°14'39	behind sun end	-9760 Jun 14 j 04:24	10° \mathring{Y} 48'30	
behind sun begin	-9765 Jun 03 j 17:44	29° \mathring{H} 51'21		morning rise	-9760 Jun 29 j 16:07	11° \mathring{Y} 23'01	
behind sun end	-9765 Jun 03 j 23:11	29° \mathring{H} 51'51		retrograde	-9760 Sep 23 j 21:11	13° \mathring{Y} 14'41	

Attention, astronomical year style is used: The year -9760 in astronomical counting style is the year 9761 BCE in historical counting style.

opposition	-9760 Dec 10 j 09:47	11° Υ 52'55	0°19'34	minimum elong	-9753 Jun 30 j 00:50	26° Υ 03'07	0°56'11
min. Earth dist.	-9760 Dec 11 j 10:08	11° Υ 51'15	29.23811 AU	morning rise	-9753 Jul 15 j 10:21	26° Υ 37'31	
direct	-9759 Mar 01 j 21:56	10° Υ 27'45		retrograde	-9753 Oct 09 j 17:21	28° Υ 29'29	
evening set	-9759 May 31 j 20:09	12° Υ 24'19		opposition	-9753 Dec 26 j 19:21	27° Υ 07'47	1°02'44
max. Earth dist.	-9759 Jun 15 j 10:48	12° Υ 56'50	31.24016 AU	min. Earth dist.	-9753 Dec 27 j 16:11	27° Υ 06'22	29.28831 AU
				direct	-9752 Mar 17 j 06:03	25° Υ 43'02	
				evening set	-9752 Jun 15 j 22:25	27° Υ 39'16	
conjunction	-9759 Jun 16 j 12:57	12° Υ 59'16	0°21'22				
minimum elong	-9759 Jun 16 j 12:57	12° Υ 59'16	0°21'26				
morning rise	-9759 Jul 02 j 01:52	13° Υ 33'54		conjunction	-9752 Jul 01 j 10:44	28° Υ 13'54	1°01'32
retrograde	-9759 Sep 26 j 06:29	15° Υ 25'34		minimum elong	-9752 Jul 01 j 10:43	28° Υ 13'54	1°01'46
opposition	-9759 Dec 12 j 21:20	14° Υ 03'47	0°25'54	max. Earth dist.	-9752 Jun 30 j 12:43	28° Υ 11'50	31.29148 AU
min. Earth dist.	-9759 Dec 13 j 21:51	14° Υ 02'06	29.24310 AU	morning rise	-9752 Jul 16 j 19:34	28° Υ 48'15	
direct	-9758 Mar 04 j 09:14	12° Υ 38'38			-9752 Aug 22 j 22:12	0° \mathcal{B}	
evening set	-9758 Jun 03 j 06:59	14° Υ 35'07		retrograde	-9752 Oct 11 j 04:31	0° \mathcal{B} 40'18	
					-9752 Dec 01 j 16:35	30° $\mathcal{R}\Upsilon$	
conjunction	-9758 Jun 18 j 23:14	15° Υ 10'02	0°27'16	opposition	-9752 Dec 28 j 07:26	29° Υ 18'36	1°08'36
minimum elong	-9758 Jun 18 j 23:14	15° Υ 10'02	0°27'22	min. Earth dist.	-9752 Dec 29 j 04:59	29° Υ 17'08	29.29561 AU
max. Earth dist.	-9758 Jun 17 j 22:24	15° Υ 07'42	31.24539 AU	direct	-9751 Mar 19 j 18:14	27° Υ 53'56	
morning rise	-9758 Jul 04 j 11:31	15° Υ 44'37		evening set	-9751 Jun 18 j 08:53	29° Υ 50'07	
retrograde	-9758 Sep 28 j 14:45	17° Υ 36'17			-9751 Jun 22 j 20:29	0° \mathcal{B}	
opposition	-9758 Dec 15 j 08:56	16° Υ 14'29	0°32'11				
min. Earth dist.	-9758 Dec 16 j 08:43	16° Υ 12'52	29.24866 AU	conjunction	-9751 Jul 03 j 20:30	0° \mathcal{B} 24'41	1°06'59
direct	-9757 Mar 06 j 22:41	14° Υ 49'22		minimum elong	-9751 Jul 03 j 20:29	0° \mathcal{B} 24'41	1°07'13
evening set	-9757 Jun 05 j 17:40	16° Υ 45'47		max. Earth dist.	-9751 Jul 02 j 22:55	0° \mathcal{B} 22'40	31.29810 AU
max. Earth dist.	-9757 Jun 20 j 07:59	17° Υ 18'18	31.25144 AU	morning rise	-9751 Jul 19 j 04:45	0° \mathcal{B} 59'00	
				retrograde	-9751 Oct 13 j 15:45	2° \mathcal{B} 51'07	
conjunction	-9757 Jun 21 j 09:09	17° Υ 20'39	0°33'07	opposition	-9751 Dec 30 j 19:30	1° \mathcal{B} 29'25	1°14'23
minimum elong	-9757 Jun 21 j 09:09	17° Υ 20'39	0°33'13	min. Earth dist.	-9751 Dec 31 j 16:03	1° \mathcal{B} 28'01	29.30149 AU
morning rise	-9757 Jul 06 j 20:59	17° Υ 55'12		direct	-9750 Mar 22 j 08:00	0° \mathcal{B} 04'49	
retrograde	-9757 Oct 01 j 01:14	19° Υ 46'54		evening set	-9750 Jun 20 j 19:23	2° \mathcal{B} 00'56	
opposition	-9757 Dec 17 j 20:28	18° Υ 25'06	0°38'25	max. Earth dist.	-9750 Jul 05 j 08:29	2° \mathcal{B} 33'25	31.30321 AU
min. Earth dist.	-9757 Dec 18 j 19:24	18° Υ 23'32	29.25535 AU				
direct	-9756 Mar 08 j 09:03	17° Υ 00'02		conjunction	-9750 Jul 06 j 06:16	2° \mathcal{B} 35'27	1°12'21
evening set	-9756 Jun 07 j 04:16	18° Υ 56'24		minimum elong	-9750 Jul 06 j 06:16	2° \mathcal{B} 35'27	1°12'36
				morning rise	-9750 Jul 21 j 13:59	3° \mathcal{B} 09'44	
conjunction	-9756 Jun 22 j 19:17	19° Υ 31'13	0°38'56	retrograde	-9750 Oct 16 j 02:06	5° \mathcal{B} 01'55	
minimum elong	-9756 Jun 22 j 19:17	19° Υ 31'13	0°39'04	opposition	-9749 Jan 02 j 07:42	3° \mathcal{B} 40'11	1°20'03
max. Earth dist.	-9756 Jun 21 j 19:45	19° Υ 29'01	31.25859 AU	min. Earth dist.	-9749 Jan 03 j 04:26	3° \mathcal{B} 38'47	29.30609 AU
morning rise	-9756 Jul 08 j 06:23	20° Υ 05'43		direct	-9749 Mar 24 j 19:09	2° \mathcal{B} 15'37	
retrograde	-9756 Oct 02 j 09:34	21° Υ 57'28		evening set	-9749 Jun 23 j 05:35	4° \mathcal{B} 11'39	
opposition	-9756 Dec 19 j 08:02	20° Υ 35'41	0°44'36				
min. Earth dist.	-9756 Dec 20 j 07:00	20° Υ 34'07	29.26296 AU	conjunction	-9749 Jul 08 j 15:56	4° \mathcal{B} 46'08	1°17'35
direct	-9755 Mar 10 j 21:12	19° Υ 10'41		minimum elong	-9749 Jul 08 j 15:55	4° \mathcal{B} 46'08	1°17'51
evening set	-9755 Jun 09 j 14:59	21° Υ 07'01		max. Earth dist.	-9749 Jul 07 j 19:21	4° \mathcal{B} 44'12	31.30703 AU
max. Earth dist.	-9755 Jun 24 j 05:15	21° Υ 39'33	31.26670 AU	morning rise	-9749 Jul 23 j 23:01	5° \mathcal{B} 20'22	
				retrograde	-9749 Oct 18 j 11:09	7° \mathcal{B} 12'36	
conjunction	-9755 Jun 25 j 05:10	21° Υ 41'47	0°44'41	opposition	-9748 Jan 04 j 19:51	5° \mathcal{B} 50'51	1°25'36
minimum elong	-9755 Jun 25 j 05:10	21° Υ 41'47	0°44'49	min. Earth dist.	-9748 Jan 05 j 16:06	5° \mathcal{B} 49'28	29.30919 AU
morning rise	-9755 Jul 10 j 15:51	22° Υ 16'15		direct	-9748 Mar 26 j 09:20	4° \mathcal{B} 26'19	
retrograde	-9755 Oct 04 j 20:19	24° Υ 08'04		evening set	-9748 Jun 24 j 15:54	6° \mathcal{B} 22'16	
opposition	-9755 Dec 21 j 19:41	22° Υ 46'18	0°50'43	max. Earth dist.	-9748 Jul 09 j 04:14	6° \mathcal{B} 54'42	31.30953 AU
min. Earth dist.	-9755 Dec 22 j 17:20	22° Υ 44'50	29.27142 AU				
direct	-9754 Mar 13 j 07:49	21° Υ 21'24		conjunction	-9748 Jul 10 j 01:27	6° \mathcal{B} 56'42	1°22'43
evening set	-9754 Jun 12 j 01:21	23° Υ 17'41		minimum elong	-9748 Jul 10 j 01:26	6° \mathcal{B} 56'42	1°23'01
				morning rise	-9748 Jul 25 j 08:07	7° \mathcal{B} 30'53	
conjunction	-9754 Jun 27 j 15:02	23° Υ 52'25	0°50'22	retrograde	-9748 Oct 19 j 22:02	9° \mathcal{B} 23'10	
minimum elong	-9754 Jun 27 j 15:02	23° Υ 52'25	0°50'33	opposition	-9747 Jan 06 j 07:51	8° \mathcal{B} 01'22	1°31'02
max. Earth dist.	-9754 Jun 26 j 16:39	23° Υ 50'19	31.27525 AU	min. Earth dist.	-9747 Jan 07 j 03:27	8° \mathcal{B} 00'02	29.31134 AU
morning rise	-9754 Jul 13 j 00:59	24° Υ 26'51		direct	-9747 Mar 28 j 20:46	6° \mathcal{B} 36'51	
retrograde	-9754 Oct 07 j 05:57	26° Υ 18'44		evening set	-9747 Jun 27 j 01:55	8° \mathcal{B} 32'43	
opposition	-9754 Dec 24 j 07:39	24° Υ 57'00	0°56'46				
min. Earth dist.	-9754 Dec 25 j 05:50	24° Υ 55'30	29.28005 AU	conjunction	-9747 Jul 12 j 10:59	9° \mathcal{B} 07'06	1°27'44
direct	-9753 Mar 15 j 18:17	23° Υ 32'11		minimum elong	-9747 Jul 12 j 10:59	9° \mathcal{B} 07'06	1°28'03
evening set	-9753 Jun 14 j 11:57	25° Υ 28'27		max. Earth dist.	-9747 Jul 11 j 15:25	9° \mathcal{B} 05'15	31.31125 AU
max. Earth dist.	-9753 Jun 29 j 02:20	26° Υ 01'01	31.28378 AU	morning rise	-9747 Jul 27 j 16:56	9° \mathcal{B} 41'14	
				retrograde	-9747 Oct 22 j 06:17	11° \mathcal{B} 33'36	
conjunction	-9753 Jun 30 j 00:51	26° Υ 03'07	0°56'00	opposition	-9746 Jan 08 j 20:10	10° \mathcal{B} 11'44	1°36'19




























































































































Attention, astronomical year style is used: The year -9746 in astronomical counting style is the year 9747 BCE in historical counting style.

min. Earth dist.	-9746 Jan 09 j 15:43	10°8'10"24	29.31288 AU	conjunction	-9740 Jul 27 j 02:44	24°8'18"39	1°58'55
direct	-9746 Mar 31 j 09:35	8°8'47"14		minimum elong	-9740 Jul 27 j 02:44	24°8'18"39	1°59'21
evening set	-9746 Jun 29 j 11:51	10°8'43"00		max. Earth dist.	-9740 Jul 26 j 13:16	24°8'17"23	31.33195 AU
				morning rise	-9740 Aug 11 j 05:15	24°8'52"35	
conjunction	-9746 Jul 14 j 20:06	11°8'17"20	1°32'37	retrograde	-9740 Nov 06 j 09:06	26°8'45"45	
minimum elong	-9746 Jul 14 j 20:06	11°8'17"20	1°32'57	opposition	-9739 Jan 24 j 10:27	25°8'23"46	2°09'05
max. Earth dist.	-9746 Jul 14 j 00:24	11°8'15"29	31.31275 AU	min. Earth dist.	-9739 Jan 24 j 23:56	25°8'22"52	29.33472 AU
morning rise	-9746 Jul 30 j 01:42	11°8'51"26		direct	-9739 Apr 15 j 18:16	23°8'59"48	
retrograde	-9746 Oct 24 j 16:37	13°8'43"52		evening set	-9739 Jul 14 j 07:44	25°8'55"14	
opposition	-9745 Jan 11 j 08:22	12°8'21"57	1°41'28				
min. Earth dist.	-9745 Jan 12 j 02:17	12°8'20"44	29.31458 AU	conjunction	-9739 Jul 29 j 11:46	26°8'29"17	2°02'44
direct	-9745 Apr 02 j 20:32	10°8'57"29		minimum elong	-9739 Jul 29 j 11:45	26°8'29"17	2°03'10
evening set	-9745 Jul 01 j 21:40	12°8'53"10		max. Earth dist.	-9739 Jul 28 j 21:52	26°8'27"58	31.33441 AU
max. Earth dist.	-9745 Jul 16 j 11:24	13°8'25"46	31.31452 AU	morning rise	-9739 Aug 13 j 14:00	27°8'03"11	
				retrograde	-9739 Nov 08 j 21:23	28°8'56"30	
conjunction	-9745 Jul 17 j 05:24	13°8'27"27	1°37'22	opposition	-9738 Jan 26 j 23:09	27°8'34"30	2°13'05
minimum elong	-9745 Jul 17 j 05:24	13°8'27"27	1°37'42	min. Earth dist.	-9738 Jan 27 j 11:43	27°8'33"39	29.33670 AU
morning rise	-9745 Aug 01 j 10:19	14°8'01"31		direct	-9738 Apr 18 j 05:43	26°8'10"36	
	-9745 Aug 30 j 11:05	15°8'		evening set	-9738 Jul 16 j 17:11	28°8'05"58	
retrograde	-9745 Oct 27 j 01:55	15°8'54"03					
	-9745 Dec 27 j 07:05	15°8'		conjunction	-9738 Jul 31 j 20:52	28°8'39"59	2°06'23
opposition	-9744 Jan 13 j 20:32	14°8'32"05	1°46'28	minimum elong	-9738 Jul 31 j 20:51	28°8'39"59	2°06'51
min. Earth dist.	-9744 Jan 14 j 14:36	14°8'30"51	29.31681 AU	max. Earth dist.	-9738 Jul 31 j 08:34	28°8'38"49	31.33552 AU
direct	-9744 Apr 04 j 06:54	13°8'07"39		morning rise	-9738 Aug 15 j 22:33	29°8'13"51	
	-9744 Jul 01 j 19:37	15°8'			-9738 Sep 07 j 03:37	0°II	
evening set	-9744 Jul 03 j 07:29	15°8'03"16		retrograde	-9738 Nov 11 j 06:09	1°II07'18	
					-9737 Jan 20 j 07:38	30°8'	
conjunction	-9744 Jul 18 j 14:32	15°8'37"31	1°41'59	opposition	-9737 Jan 29 j 11:58	29°8'45"16	2°16'53
minimum elong	-9744 Jul 18 j 14:31	15°8'37"31	1°42'21	min. Earth dist.	-9737 Jan 30 j 00:34	29°8'44"25	29.33708 AU
max. Earth dist.	-9744 Jul 17 j 20:58	15°8'35"52	31.31713 AU	direct	-9737 Apr 20 j 18:22	28°8'21"26	
morning rise	-9744 Aug 02 j 19:02	16°8'11"33			-9737 Jul 11 j 09:50	0°II	
retrograde	-9744 Oct 28 j 13:02	18°8'04"11		evening set	-9737 Jul 19 j 02:53	0°II16'43	
opposition	-9743 Jan 15 j 08:43	16°8'42"12	1°51'19				
min. Earth dist.	-9743 Jan 16 j 00:43	16°8'41"07	29.31984 AU	conjunction	-9737 Aug 03 j 05:55	0°II50'42	2°09'51
direct	-9743 Apr 06 j 18:26	15°8'17"51		minimum elong	-9737 Aug 03 j 05:54	0°II50'42	2°10'19
evening set	-9743 Jul 05 j 17:08	17°8'13"25		max. Earth dist.	-9737 Aug 02 j 17:15	0°II49'30	31.33512 AU
				morning rise	-9737 Aug 18 j 07:23	1°II24'33	
conjunction	-9743 Jul 20 j 23:35	17°8'47"37	1°46'27	retrograde	-9737 Nov 13 j 16:33	3°II18'06	
minimum elong	-9743 Jul 20 j 23:34	17°8'47"37	1°46'49	opposition	-9736 Feb 01 j 00:28	1°II56'01	2°20'30
max. Earth dist.	-9743 Jul 20 j 07:04	17°8'46"03	31.32043 AU	min. Earth dist.	-9736 Feb 01 j 11:43	1°II55'16	29.33597 AU
morning rise	-9743 Aug 05 j 03:32	18°8'21"37		direct	-9736 Apr 22 j 05:36	0°II32'13	
retrograde	-9743 Oct 31 j 00:25	20°8'14"23		evening set	-9736 Jul 20 j 12:22	2°II27'25	
opposition	-9742 Jan 17 j 21:10	18°8'52"23	1°56'01				
min. Earth dist.	-9742 Jan 18 j 13:09	18°8'51"18	29.32361 AU	conjunction	-9736 Aug 04 j 15:02	3°II01'22	2°13'09
direct	-9742 Apr 09 j 05:34	17°8'28"07		minimum elong	-9736 Aug 04 j 15:01	3°II01'22	2°13'38
evening set	-9742 Jul 08 j 02:47	19°8'23"39		max. Earth dist.	-9736 Aug 04 j 03:38	3°II00'17	31.33312 AU
				morning rise	-9736 Aug 19 j 16:02	3°II35'12	
conjunction	-9742 Jul 23 j 08:40	19°8'57"49	1°50'46	retrograde	-9736 Nov 15 j 02:12	5°II28'52	
minimum elong	-9742 Jul 23 j 08:39	19°8'57"49	1°51'10	opposition	-9735 Feb 02 j 13:19	4°II06'42	2°23'55
max. Earth dist.	-9742 Jul 22 j 17:22	19°8'56"22	31.32444 AU	min. Earth dist.	-9735 Feb 03 j 00:56	4°II05'55	29.33340 AU
morning rise	-9742 Aug 07 j 12:08	20°8'31'47		direct	-9735 Apr 24 j 16:31	2°II42'55	
retrograde	-9742 Nov 02 j 12:02	22°8'24'41		evening set	-9735 Jul 22 j 21:42	4°II38'00	
opposition	-9741 Jan 20 j 09:30	21°8'02'42	2°00'33				
min. Earth dist.	-9741 Jan 20 j 23:55	21°8'01'43	29.32771 AU	conjunction	-9735 Aug 06 j 23:50	5°II11'55	2°16'14
direct	-9741 Apr 11 j 18:00	19°8'38'32		minimum elong	-9735 Aug 06 j 23:50	5°II11'55	2°16'44
evening set	-9741 Jul 10 j 12:24	21°8'34'02		max. Earth dist.	-9735 Aug 06 j 12:56	5°II10'53	31.33002 AU
				morning rise	-9735 Aug 22 j 00:36	5°II45'44	
conjunction	-9741 Jul 25 j 17:38	22°8'08'09	1°54'55	retrograde	-9735 Nov 17 j 13:05	7°II39'30	
minimum elong	-9741 Jul 25 j 17:37	22°8'08'09	1°55'20	opposition	-9734 Feb 05 j 02:03	6°II17'15	2°27'07
max. Earth dist.	-9741 Jul 25 j 02:33	22°8'06'44	31.32844 AU	min. Earth dist.	-9734 Feb 05 j 11:44	6°II16'36	29.32988 AU
morning rise	-9741 Aug 09 j 20:44	22°8'42'07		direct	-9734 Apr 27 j 04:32	4°II53'28	
retrograde	-9741 Nov 04 j 23:08	24°8'35'09		evening set	-9734 Jul 25 j 06:58	6°II48'26	
opposition	-9740 Jan 22 j 21:58	23°8'13'10	2°04'54				
min. Earth dist.	-9740 Jan 23 j 12:11	23°8'12'12	29.33168 AU	conjunction	-9734 Aug 09 j 08:41	7°II22'19	2°19'08
direct	-9740 Apr 13 j 04:23	21°8'49'06		minimum elong	-9734 Aug 09 j 08:41	7°II22'19	2°19'39
evening set	-9740 Jul 11 j 21:58	23°8'44'34		max. Earth dist.	-9734 Aug 08 j 22:35	7°II21'22	31.32614 AU
				morning rise	-9734 Aug 24 j 09:09	7°II56'06	

Attention, astronomical year style is used: The year -9734 in astronomical counting style is the year 9735 BCE in historical counting style.

retrograde	-9734 Nov 20 j 00:15	9°II49'59		minimum elong	-9727 Aug 23 j 21:42	22°II33'59	2°34'14
opposition	-9733 Feb 07 j 14:50	8°II27'38	2°30'07	max. Earth dist.	-9727 Aug 23 j 19:30	22°II33'47	31.31089 AU
min. Earth dist.	-9733 Feb 08 j 00:31	8°II26'58	29.32608 AU	morning rise	-9727 Sep 07 j 20:55	23°II07'43	
direct	-9733 Apr 29 j 15:05	7°II03'51		retrograde	-9727 Dec 05 j 05:18	25°II02'35	
evening set	-9733 Jul 27 j 16:03	8°II58'43		opposition	-9726 Feb 23 j 08:35	23°II39'53	2°44'53
				min. Earth dist.	-9726 Feb 23 j 10:56	23°II39'43	29.31195 AU
conjunction	-9733 Aug 11 j 17:27	9°II32'34	2°21'50	direct	-9726 May 14 j 23:45	22°II16'32	
minimum elong	-9733 Aug 11 j 17:26	9°II32'34	2°22'21	evening set	-9726 Aug 11 j 07:18	24°II10'55	
max. Earth dist.	-9733 Aug 11 j 08:51	9°II31'45	31.32235 AU				
morning rise	-9733 Aug 26 j 17:36	10°II06'20		conjunction	-9726 Aug 26 j 06:38	24°II44'39	2°34'54
retrograde	-9733 Nov 22 j 11:13	12°II00'19		minimum elong	-9726 Aug 26 j 06:38	24°II44'38	2°35'28
opposition	-9732 Feb 10 j 03:30	10°II37'52	2°32'54	max. Earth dist.	-9726 Aug 26 j 05:03	24°II44'29	31.30839 AU
min. Earth dist.	-9732 Feb 10 j 11:19	10°II37'20	29.32244 AU	morning rise	-9726 Sep 10 j 05:49	25°II18'23	
direct	-9732 May 01 j 02:55	9°II14'06		retrograde	-9726 Dec 07 j 16:47	27°II13'24	
evening set	-9732 Jul 29 j 01:12	11°II08'53		opposition	-9725 Feb 25 j 21:26	25°II50'40	2°46'04
				min. Earth dist.	-9725 Feb 25 j 21:58	25°II50'38	29.30886 AU
conjunction	-9732 Aug 13 j 02:04	11°II42'42	2°24'20	direct	-9725 May 17 j 11:06	24°II27'22	
minimum elong	-9732 Aug 13 j 02:04	11°II42'42	2°24'52	evening set	-9725 Aug 13 j 16:23	26°II21'41	
max. Earth dist.	-9732 Aug 12 j 17:53	11°II41'55	31.31893 AU				
morning rise	-9732 Aug 28 j 02:04	12°II16'27		conjunction	-9725 Aug 28 j 15:32	26°II55'25	2°35'54
retrograde	-9732 Nov 23 j 22:39	14°II10'33		minimum elong	-9725 Aug 28 j 15:32	26°II55'25	2°36'28
opposition	-9731 Feb 11 j 16:14	12°II48'01	2°35'28	max. Earth dist.	-9725 Aug 28 j 14:19	26°II55'18	31.30454 AU
min. Earth dist.	-9731 Feb 11 j 23:20	12°II47'33	29.31959 AU	morning rise	-9725 Sep 12 j 14:46	27°II29'10	
direct	-9731 May 03 j 13:28	11°II24'18		retrograde	-9725 Dec 10 j 04:36	29°II24'20	
evening set	-9731 Jul 31 j 10:12	13°II19'00		opposition	-9724 Feb 28 j 10:32	28°II01'32	2°47'01
				min. Earth dist.	-9724 Feb 28 j 11:17	28°II01'29	29.30440 AU
conjunction	-9731 Aug 15 j 10:53	13°II52'47	2°26'38	direct	-9724 May 18 j 20:59	26°II38'17	
minimum elong	-9731 Aug 15 j 10:52	13°II52'47	2°27'09	evening set	-9724 Aug 15 j 01:23	28°II32'31	
max. Earth dist.	-9731 Aug 15 j 04:52	13°II52'13	31.31647 AU				
morning rise	-9731 Aug 30 j 10:31	14°II26'31		conjunction	-9724 Aug 30 j 00:30	29°II06'15	2°36'41
retrograde	-9731 Nov 26 j 09:21	16°II20'45		minimum elong	-9724 Aug 30 j 00:30	29°II06'15	2°37'16
opposition	-9730 Feb 14 j 05:03	14°II58'10	2°37'48	max. Earth dist.	-9724 Aug 30 j 00:35	29°II06'15	31.29937 AU
min. Earth dist.	-9730 Feb 14 j 10:45	14°II57'47	29.31754 AU	morning rise	-9724 Sep 13 j 23:39	29°II40'00	
direct	-9730 May 06 j 02:49	13°II34'30			-9724 Sep 23 j 04:40	0°☾	
evening set	-9730 Aug 02 j 19:12	15°II29'08		retrograde	-9724 Dec 11 j 16:04	1°☾35'18	
				opposition	-9723 Mar 01 j 23:32	0°☾12'26	2°47'44
conjunction	-9730 Aug 17 j 19:25	16°II02'54	2°28'43	min. Earth dist.	-9723 Mar 01 j 22:44	0°☾12'29	29.29848 AU
minimum elong	-9730 Aug 17 j 19:24	16°II02'54	2°29'16		-9723 Mar 09 j 17:09	30°☾II	
max. Earth dist.	-9730 Aug 17 j 13:32	16°II02'21	31.31483 AU	direct	-9723 May 21 j 08:16	28°II49'13	
morning rise	-9730 Sep 01 j 19:05	16°II36'38			-9723 Jul 27 j 16:56	0°☾	
retrograde	-9730 Nov 28 j 22:01	18°II31'01		evening set	-9723 Aug 17 j 10:28	0°☾43'22	
opposition	-9729 Feb 16 j 17:51	17°II08'23	2°39'55				
min. Earth dist.	-9729 Feb 16 j 22:07	17°II08'06	29.31630 AU	conjunction	-9723 Sep 01 j 09:22	1°☾17'05	2°37'14
direct	-9729 May 08 j 13:43	15°II44'48		minimum elong	-9723 Sep 01 j 09:22	1°☾17'05	2°37'48
evening set	-9729 Aug 05 j 04:09	17°II39'22		max. Earth dist.	-9723 Sep 01 j 09:25	1°☾17'05	31.29289 AU
				morning rise	-9723 Sep 16 j 08:44	1°☾50'51	
conjunction	-9729 Aug 20 j 04:15	18°II13'07	2°30'35	retrograde	-9723 Dec 14 j 04:30	3°☾46'16	
minimum elong	-9729 Aug 20 j 04:14	18°II13'07	2°31'08	opposition	-9722 Mar 04 j 12:39	2°☾23'19	2°48'13
max. Earth dist.	-9729 Aug 20 j 00:22	18°II12'45	31.31367 AU	min. Earth dist.	-9722 Mar 04 j 11:31	2°☾23'23	29.29162 AU
morning rise	-9729 Sep 04 j 03:37	18°II46'51		direct	-9722 May 23 j 18:41	1°☾00'07	
retrograde	-9729 Dec 01 j 07:23	20°II41'23		evening set	-9722 Aug 19 j 19:13	2°☾54'09	
opposition	-9728 Feb 19 j 06:35	19°II18'44	2°41'48				
min. Earth dist.	-9728 Feb 19 j 10:30	19°II18'28	29.31520 AU	conjunction	-9722 Sep 03 j 18:17	3°☾27'52	2°37'34
direct	-9728 May 10 j 01:45	17°II55'13		minimum elong	-9722 Sep 03 j 18:17	3°☾27'52	2°38'09
evening set	-9728 Aug 06 j 13:16	19°II49'44		max. Earth dist.	-9722 Sep 03 j 20:18	3°☾28'04	31.28563 AU
				morning rise	-9722 Sep 18 j 17:37	4°☾01'39	
conjunction	-9728 Aug 21 j 12:57	20°II23'29	2°32'15	retrograde	-9722 Dec 16 j 16:02	5°☾57'11	
minimum elong	-9728 Aug 21 j 12:57	20°II23'28	2°32'48	opposition	-9721 Mar 07 j 01:39	4°☾34'08	2°48'27
max. Earth dist.	-9728 Aug 21 j 09:17	20°II23'08	31.31257 AU	min. Earth dist.	-9721 Mar 06 j 23:26	4°☾34'17	29.28405 AU
morning rise	-9728 Sep 05 j 12:20	20°II57'13		direct	-9721 May 26 j 07:54	3°☾10'56	
retrograde	-9728 Dec 02 j 18:46	22°II51'54		evening set	-9721 Aug 22 j 04:11	5°☾04'53	
opposition	-9727 Feb 20 j 19:27	21°II29'14	2°43'27				
min. Earth dist.	-9727 Feb 20 j 21:37	21°II29'05	29.31396 AU	conjunction	-9721 Sep 06 j 03:04	5°☾38'36	2°37'41
direct	-9727 May 12 j 12:57	20°II05'48		minimum elong	-9721 Sep 06 j 03:04	5°☾38'36	2°38'15
evening set	-9727 Aug 08 j 22:11	22°II00'15		max. Earth dist.	-9721 Sep 06 j 05:02	5°☾38'47	31.27805 AU
				morning rise	-9721 Sep 21 j 02:42	6°☾12'23	
conjunction	-9727 Aug 23 j 21:43	22°II33'59	2°33'41	retrograde	-9721 Dec 19 j 05:07	8°☾08'02	

Attention, astronomical year style is used: The year -9720 in astronomical counting style is the year 9721 BCE in historical counting style.

opposition	-9720 Mar 08 j 14:27	6°  44'52	2°48'27	max. Earth dist.	-9714 Sep 21 j 03:21	20°  55'42	31.24141 AU
min. Earth dist.	-9720 Mar 08 j 10:54	6°  45'06	29.27663 AU	morning rise	-9714 Oct 05 j 19:24	21°  28'47	
direct	-9720 May 27 j 18:37	5°  21'41		retrograde	-9713 Jan 03 j 13:29	23°  25'23	
evening set	-9720 Aug 23 j 12:56	7°  15'32		opposition	-9713 Mar 25 j 09:34	22°  01'52	2°41'40
				min. Earth dist.	-9713 Mar 24 j 23:06	22°  02'34	29.24085 AU
conjunction	-9720 Sep 07 j 11:59	7°  49'15	2°37'34	direct	-9713 Jun 12 j 22:43	20°  39'03	
minimum elong	-9720 Sep 07 j 11:59	7°  49'15	2°38'09	evening set	-9713 Sep 08 j 03:03	22°  32'23	
max. Earth dist.	-9720 Sep 07 j 16:00	7°  49'38	31.27079 AU				
morning rise	-9720 Sep 22 j 11:37	8°  23'04		conjunction	-9713 Sep 23 j 03:17	23°  06'14	2°30'26
retrograde	-9720 Dec 20 j 14:49	10°  18'49		minimum elong	-9713 Sep 23 j 03:18	23°  06'14	2°30'58
opposition	-9719 Mar 11 j 03:29	8°  55'35	2°48'12	max. Earth dist.	-9713 Sep 23 j 14:29	23°  07'17	31.23559 AU
min. Earth dist.	-9719 Mar 10 j 23:15	8°  55'52	29.26974 AU	morning rise	-9713 Oct 08 j 05:05	23°  40'15	
direct	-9719 May 30 j 06:46	7°  32'25		retrograde	-9712 Jan 06 j 01:41	25°  36'58	
evening set	-9719 Aug 25 j 21:41	9°  26'11		opposition	-9712 Mar 26 j 22:32	24°  13'24	2°39'45
				min. Earth dist.	-9712 Mar 26 j 11:19	24°  14'09	29.23428 AU
conjunction	-9719 Sep 09 j 20:41	9°  59'54	2°37'13	direct	-9712 Jun 14 j 10:41	22°  50'37	
minimum elong	-9719 Sep 09 j 20:41	9°  59'54	2°37'47	evening set	-9712 Sep 09 j 12:17	24°  43'52	
max. Earth dist.	-9719 Sep 10 j 01:19	10°  00'21	31.26445 AU				
morning rise	-9719 Sep 24 j 20:39	10°  33'44		conjunction	-9712 Sep 24 j 12:41	25°  17'45	2°28'31
retrograde	-9719 Dec 23 j 02:38	12°  29'37		minimum elong	-9712 Sep 24 j 12:41	25°  17'45	2°29'04
opposition	-9718 Mar 13 j 16:27	11°  06'18	2°47'43	max. Earth dist.	-9712 Sep 24 j 23:26	25°  18'46	31.22847 AU
min. Earth dist.	-9718 Mar 13 j 10:06	11°  06'44	29.26390 AU	morning rise	-9712 Oct 09 j 15:04	25°  51'48	
direct	-9718 Jun 01 j 18:41	9°  43'11		retrograde	-9711 Jan 07 j 15:33	27°  48'38	
evening set	-9718 Aug 28 j 06:29	11°  36'51		opposition	-9711 Mar 29 j 11:42	26°  24'59	2°37'35
				min. Earth dist.	-9711 Mar 28 j 23:35	26°  25'48	29.22645 AU
conjunction	-9718 Sep 12 j 05:39	12°  10'36	2°36'39	direct	-9711 Jun 16 j 20:52	25°  02'13	
minimum elong	-9718 Sep 12 j 05:39	12°  10'36	2°37'14	evening set	-9711 Sep 11 j 21:18	26°  55'23	
max. Earth dist.	-9718 Sep 12 j 11:51	12°  11'12	31.25902 AU				
morning rise	-9718 Sep 27 j 05:49	12°  44'28		conjunction	-9711 Sep 26 j 22:10	27°  29'18	2°26'24
retrograde	-9718 Dec 25 j 13:46	14°  40'29		minimum elong	-9711 Sep 26 j 22:10	27°  29'18	2°26'56
opposition	-9717 Mar 16 j 05:23	13°  17'07	2°47'00	max. Earth dist.	-9711 Sep 27 j 10:22	27°  30'27	31.21991 AU
min. Earth dist.	-9717 Mar 15 j 22:55	13°  17'33	29.25895 AU	morning rise	-9711 Oct 12 j 00:55	28°  03'23	
direct	-9717 Jun 04 j 05:36	11°  54'03			-9710 Jan 05 j 15:43	0°  00'00	
evening set	-9717 Aug 30 j 15:16	13°  47'39		retrograde	-9710 Jan 10 j 02:44	0°  00'19	
					-9710 Jan 14 j 13:32	30°  R 	
conjunction	-9717 Sep 14 j 14:36	14°  21'25	2°35'51	opposition	-9710 Apr 01 j 00:52	28°  36'35	2°35'13
minimum elong	-9717 Sep 14 j 14:36	14°  21'25	2°36'26	min. Earth dist.	-9710 Mar 31 j 12:40	28°  37'24	29.21716 AU
max. Earth dist.	-9717 Sep 14 j 21:56	14°  22'06	31.25453 AU	direct	-9710 Jun 19 j 09:10	27°  13'49	
morning rise	-9717 Sep 29 j 15:03	14°  55'18		evening set	-9710 Sep 14 j 06:30	29°  06'53	
retrograde	-9717 Dec 28 j 00:50	16°  51'27					
opposition	-9716 Mar 17 j 18:16	15°  28'03	2°46'02	conjunction	-9710 Sep 29 j 07:41	29°  40'49	2°24'04
min. Earth dist.	-9716 Mar 17 j 09:37	15°  28'38	29.25462 AU	minimum elong	-9710 Sep 29 j 07:42	29°  40'49	2°24'36
direct	-9716 Jun 05 j 16:47	14°  05'04		max. Earth dist.	-9710 Sep 29 j 20:02	29°  41'59	31.21025 AU
evening set	-9716 Sep 01 j 00:04	15°  58'35			-9710 Oct 07 j 18:39	0°  00'00	
				morning rise	-9710 Oct 14 j 11:02	0°  14'57	
conjunction	-9716 Sep 15 j 23:28	16°  32'22	2°34'50	retrograde	-9709 Jan 12 j 15:53	2°  11'58	
minimum elong	-9716 Sep 15 j 23:29	16°  32'22	2°35'25	opposition	-9709 Apr 03 j 13:41	0°  48'07	2°32'37
max. Earth dist.	-9716 Sep 16 j 07:26	16°  33'07	31.25032 AU	min. Earth dist.	-9709 Apr 03 j 00:04	0°  49'02	29.20700 AU
morning rise	-9716 Oct 01 j 00:17	17°  06'17			-9709 May 05 j 03:18	30°  R 	
retrograde	-9716 Dec 29 j 12:22	19°  02'36		direct	-9709 Jun 21 j 21:14	29°  25'21	
opposition	-9715 Mar 20 j 07:24	17°  39'10	2°44'49		-9709 Aug 06 j 12:51	0°  00'00	
min. Earth dist.	-9715 Mar 19 j 22:42	17°  39'45	29.25050 AU	evening set	-9709 Sep 16 j 15:37	1°  18'18	
direct	-9715 Jun 08 j 02:10	16°  16'15					
evening set	-9715 Sep 03 j 08:56	18°  09'42		conjunction	-9709 Oct 01 j 17:14	1°  52'17	2°21'32
				minimum elong	-9709 Oct 01 j 17:14	1°  52'17	2°22'03
conjunction	-9715 Sep 18 j 08:40	18°  43'30	2°33'35	max. Earth dist.	-9709 Oct 02 j 06:34	1°  53'32	31.19977 AU
minimum elong	-9715 Sep 18 j 08:40	18°  43'30	2°34'09	morning rise	-9709 Oct 16 j 21:06	2°  12'62	
max. Earth dist.	-9715 Sep 18 j 18:19	18°  44'25	31.24618 AU	retrograde	-9708 Jan 15 j 03:24	4°  12'33	
morning rise	-9715 Oct 03 j 09:42	19°  17'27		opposition	-9708 Apr 05 j 02:43	2°  59'36	2°29'47
retrograde	-9714 Jan 01 j 00:05	21°  13'55		min. Earth dist.	-9708 Apr 04 j 13:18	3°  10'30	29.19639 AU
opposition	-9714 Mar 22 j 20:25	19°  50'26	2°43'22	direct	-9708 Jun 23 j 08:37	1°  13'64	
min. Earth dist.	-9714 Mar 22 j 10:06	19°  51'08	29.24605 AU	evening set	-9708 Sep 18 j 00:34	3°  12'40	
direct	-9714 Jun 10 j 12:49	18°  27'35					
evening set	-9714 Sep 05 j 17:59	20°  20'58		conjunction	-9708 Oct 03 j 02:38	4°  10'34	2°18'47
				minimum elong	-9708 Oct 03 j 02:39	4°  10'34	2°19'18
conjunction	-9714 Sep 20 j 17:49	20°  54'48	2°32'07	max. Earth dist.	-9708 Oct 03 j 17:08	4°  10'53	31.18933 AU
minimum elong	-9714 Sep 20 j 17:49	20°  54'48	2°32'41	morning rise	-9708 Oct 18 j 07:00	4°  13'54	

Attention, astronomical year style is used: The year -9707 in astronomical counting style is the year 9708 BCE in historical counting style.

retrograde	-9707 Jan 16 j 14:33	6°Ω35'05		min. Earth dist.	-9701 Apr 21 j 01:02	18°Ω23'18	29.13846 AU
opposition	-9707 Apr 07 j 15:34	5°Ω11'02	2°26'45	direct	-9701 Jul 09 j 09:40	16°Ω59'26	
min. Earth dist.	-9707 Apr 07 j 00:05	5°Ω12'05	29.18607 AU	evening set	-9701 Oct 03 j 17:49	18°Ω51'55	
direct	-9707 Jun 25 j 20:21	3°Ω48'15					
evening set	-9707 Sep 20 j 09:45	5°Ω41'01		conjunction	-9701 Oct 18 j 23:33	19°Ω26'14	1°54'07
				minimum elong	-9701 Oct 18 j 23:34	19°Ω26'14	1°54'32
conjunction	-9707 Oct 05 j 12:10	6°Ω15'03	2°15'51	max. Earth dist.	-9701 Oct 19 j 19:30	19°Ω28'07	31.13309 AU
minimum elong	-9707 Oct 05 j 12:11	6°Ω15'03	2°16'20	morning rise	-9701 Nov 03 j 08:28	20°Ω00'51	
max. Earth dist.	-9707 Oct 06 j 03:06	6°Ω16'28	31.17937 AU	retrograde	-9700 Feb 02 j 09:00	21°Ω58'49	
morning rise	-9707 Oct 20 j 17:13	6°Ω49'20		opposition	-9700 Apr 23 j 09:16	20°Ω34'28	1°59'41
retrograde	-9706 Jan 19 j 02:02	8°Ω46'37		min. Earth dist.	-9700 Apr 22 j 12:40	20°Ω35'52	29.13015 AU
opposition	-9706 Apr 10 j 04:30	7°Ω22'29	2°23'30	direct	-9700 Jul 10 j 21:40	19°Ω11'56	
min. Earth dist.	-9706 Apr 09 j 12:58	7°Ω23'33	29.17658 AU	evening set	-9700 Oct 05 j 03:29	21°Ω04'23	
direct	-9706 Jun 28 j 05:56	5°Ω59'43					
evening set	-9706 Sep 22 j 18:48	7°Ω52'25		conjunction	-9700 Oct 20 j 09:47	21°Ω38'45	1°49'52
				minimum elong	-9700 Oct 20 j 09:49	21°Ω38'45	1°50'17
conjunction	-9706 Oct 07 j 21:53	8°Ω26'29	2°12'42	max. Earth dist.	-9700 Oct 21 j 06:17	21°Ω40'41	31.12416 AU
minimum elong	-9706 Oct 07 j 21:54	8°Ω26'29	2°13'12	morning rise	-9700 Nov 04 j 19:25	22°Ω13'26	
max. Earth dist.	-9706 Oct 08 j 14:39	8°Ω28'05	31.17041 AU	retrograde	-9699 Feb 03 j 21:34	24°Ω11'29	
morning rise	-9706 Oct 23 j 03:24	9°Ω00'49		opposition	-9699 Apr 25 j 22:15	22°Ω47'05	1°55'03
retrograde	-9705 Jan 21 j 13:38	10°Ω58'12		min. Earth dist.	-9699 Apr 25 j 02:20	22°Ω48'26	29.12056 AU
opposition	-9705 Apr 12 j 17:15	9°Ω34'01	2°20'02	direct	-9699 Jul 13 j 08:53	21°Ω24'33	
min. Earth dist.	-9705 Apr 11 j 23:55	9°Ω35'12	29.16795 AU	evening set	-9699 Oct 07 j 13:19	23°Ω16'56	
direct	-9705 Jun 30 j 16:37	8°Ω11'17					
evening set	-9705 Sep 25 j 04:05	10°Ω03'55		conjunction	-9699 Oct 22 j 20:21	23°Ω51'21	1°45'27
				minimum elong	-9699 Oct 22 j 20:22	23°Ω51'22	1°45'51
conjunction	-9705 Oct 10 j 07:29	10°Ω38'02	2°09'22	max. Earth dist.	-9699 Oct 23 j 17:24	23°Ω53'21	31.11407 AU
minimum elong	-9705 Oct 10 j 07:30	10°Ω38'02	2°09'50	morning rise	-9699 Nov 07 j 06:39	24°Ω26'06	
max. Earth dist.	-9705 Oct 11 j 00:15	10°Ω39'37	31.16230 AU	retrograde	-9698 Feb 06 j 09:46	26°Ω24'13	
morning rise	-9705 Oct 25 j 13:47	11°Ω12'26		opposition	-9698 Apr 28 j 10:56	24°Ω59'44	1°50'15
retrograde	-9704 Jan 24 j 02:52	13°Ω09'56		min. Earth dist.	-9698 Apr 27 j 13:41	25°Ω01'11	29.10969 AU
opposition	-9704 Apr 14 j 06:03	11°Ω45'42	2°16'22	direct	-9698 Jul 15 j 20:59	23°Ω37'11	
min. Earth dist.	-9704 Apr 13 j 12:22	11°Ω46'54	29.16023 AU	evening set	-9698 Oct 09 j 23:17	25°Ω29'30	
direct	-9704 Jul 02 j 01:59	10°Ω23'01					
evening set	-9704 Sep 26 j 13:16	12°Ω15'36		conjunction	-9698 Oct 25 j 06:51	26°Ω03'58	1°40'53
				minimum elong	-9698 Oct 25 j 06:52	26°Ω03'58	1°41'17
conjunction	-9704 Oct 11 j 17:22	12°Ω49'46	2°05'50	max. Earth dist.	-9698 Oct 26 j 03:32	26°Ω05'55	31.10263 AU
minimum elong	-9704 Oct 11 j 17:23	12°Ω49'46	2°06'19	morning rise	-9698 Nov 09 j 18:02	26°Ω38'47	
max. Earth dist.	-9704 Oct 12 j 12:07	12°Ω51'33	31.15495 AU	retrograde	-9697 Feb 08 j 21:59	28°Ω36'56	
morning rise	-9704 Oct 27 j 00:08	13°Ω24'13		opposition	-9697 Apr 30 j 23:44	27°Ω12'21	1°45'17
	-9704 Dec 19 j 18:19	15°Ω		min. Earth dist.	-9697 Apr 30 j 03:10	27°Ω13'45	29.09768 AU
retrograde	-9703 Jan 25 j 15:23	15°Ω21'50		direct	-9697 Jul 18 j 07:36	25°Ω49'46	
	-9703 Mar 04 j 15:26	15°℞Ω		evening set	-9697 Oct 12 j 09:05	27°Ω42'00	
opposition	-9703 Apr 16 j 18:53	13°Ω57'35	2°12'29				
min. Earth dist.	-9703 Apr 16 j 00:13	13°Ω58'51	29.15299 AU	conjunction	-9697 Oct 27 j 17:27	28°Ω16'31	1°36'10
direct	-9703 Jul 04 j 12:57	12°Ω34'56		minimum elong	-9697 Oct 27 j 17:28	28°Ω16'31	1°36'32
evening set	-9703 Sep 28 j 22:36	14°Ω27'30		max. Earth dist.	-9697 Oct 28 j 15:28	28°Ω18'36	31.09033 AU
	-9703 Oct 13 j 09:05	15°Ω		morning rise	-9697 Nov 12 j 05:12	28°Ω51'22	
					-9697 Dec 16 j 21:12	0°℞	
conjunction	-9703 Oct 14 j 03:08	15°Ω01'42	2°02'07	retrograde	-9696 Feb 11 j 09:32	0°℞49'34	
minimum elong	-9703 Oct 14 j 03:09	15°Ω01'43	2°02'34		-9696 Apr 10 j 10:52	30°℞Ω	
max. Earth dist.	-9703 Oct 14 j 21:42	15°Ω03'28	31.14800 AU	opposition	-9696 May 02 j 12:14	29°Ω24'53	1°40'10
morning rise	-9703 Oct 29 j 10:45	15°Ω36'12		min. Earth dist.	-9696 May 01 j 14:25	29°Ω26'23	29.08500 AU
retrograde	-9702 Jan 28 j 05:39	17°Ω33'57		direct	-9696 Jul 19 j 19:26	28°Ω02'15	
opposition	-9702 Apr 19 j 07:46	16°Ω09'41	2°08'25	evening set	-9696 Oct 13 j 19:04	29°Ω54'24	
min. Earth dist.	-9702 Apr 18 j 12:14	16°Ω11'00	29.14598 AU		-9696 Oct 16 j 07:38	0°℞	
	-9702 Jun 08 j 20:49	15°℞Ω					
direct	-9702 Jul 06 j 22:07	14°Ω47'05		conjunction	-9696 Oct 29 j 03:56	0°℞28'58	1°31'19
	-9702 Aug 03 j 11:49	15°Ω		minimum elong	-9696 Oct 29 j 03:57	0°℞28'58	1°31'40
evening set	-9702 Oct 01 j 08:08	16°Ω39'36		max. Earth dist.	-9696 Oct 30 j 01:32	0°℞31'00	31.07774 AU
				morning rise	-9696 Nov 13 j 16:35	1°℞03'53	
conjunction	-9702 Oct 16 j 13:19	17°Ω13'52	1°58'12	retrograde	-9695 Feb 12 j 21:43	3°℞02'07	
minimum elong	-9702 Oct 16 j 13:20	17°Ω13'52	1°58'39	min. Earth dist.	-9695 May 04 j 03:04	1°℞38'48	29.07256 AU
max. Earth dist.	-9702 Oct 17 j 09:15	17°Ω15'45	31.14083 AU	opposition	-9695 May 05 j 00:51	1°℞37'19	1°34'55
morning rise	-9702 Oct 31 j 21:31	17°Ω48'26		direct	-9695 Jul 22 j 05:08	0°℞14'38	
retrograde	-9701 Jan 30 j 18:01	19°Ω46'17		evening set	-9695 Oct 16 j 04:54	2°℞06'43	
opposition	-9701 Apr 21 j 20:28	18°Ω21'59	2°04'08				

Attention, astronomical year style is used: The year -9695 in astronomical counting style is the year 9696 BCE in historical counting style.

conjunction	-9695 Oct 31 j 14:36	2° $\mathring{\text{M}}$ 41'19	1°26'20	direct	-9688 Aug 06 j 08:14	15° $\mathring{\text{M}}$ 42'56	
minimum elong	-9695 Oct 31 j 14:37	2° $\mathring{\text{M}}$ 41'19	1°26'39	evening set	-9688 Oct 31 j 05:37	17° $\mathring{\text{M}}$ 34'56	
max. Earth dist.	-9695 Nov 01 j 13:59	2° $\mathring{\text{M}}$ 43'32	31.06559 AU				
morning rise	-9695 Nov 16 j 03:52	3° $\mathring{\text{M}}$ 16'17		conjunction	-9688 Nov 15 j 20:04	18° $\mathring{\text{M}}$ 09'56	0°48'11
retrograde	-9694 Feb 15 j 08:50	5° $\mathring{\text{M}}$ 14'34		minimum elong	-9688 Nov 15 j 20:04	18° $\mathring{\text{M}}$ 09'56	0°48'22
opposition	-9694 May 07 j 13:17	3° $\mathring{\text{M}}$ 49'40	1°29'31	max. Earth dist.	-9688 Nov 16 j 22:40	18° $\mathring{\text{M}}$ 12'26	31.00568 AU
min. Earth dist.	-9694 May 06 j 14:42	3° $\mathring{\text{M}}$ 51'13	29.06072 AU	morning rise	-9688 Dec 01 j 14:27	18° $\mathring{\text{M}}$ 45'19	
direct	-9694 Jul 24 j 16:09	2° $\mathring{\text{M}}$ 26'57		retrograde	-9687 Mar 03 j 06:26	20° $\mathring{\text{M}}$ 44'01	
evening set	-9694 Oct 18 j 15:04	4° $\mathring{\text{M}}$ 18'58		min. Earth dist.	-9687 May 22 j 01:53	19° $\mathring{\text{M}}$ 20'40	29.00208 AU
				opposition	-9687 May 23 j 03:12	19° $\mathring{\text{M}}$ 18'55	0°48'19
				direct	-9687 Aug 08 j 19:57	17° $\mathring{\text{M}}$ 56'16	
				evening set	-9687 Nov 02 j 16:42	19° $\mathring{\text{M}}$ 48'17	
conjunction	-9694 Nov 03 j 01:19	4° $\mathring{\text{M}}$ 53'38	1°21'13				
minimum elong	-9694 Nov 03 j 01:19	4° $\mathring{\text{M}}$ 53'38	1°21'31				
max. Earth dist.	-9694 Nov 04 j 00:21	4° $\mathring{\text{M}}$ 55'48	31.05438 AU				
morning rise	-9694 Nov 18 j 15:27	5° $\mathring{\text{M}}$ 28'39		conjunction	-9687 Nov 18 j 07:42	20° $\mathring{\text{M}}$ 23'20	0°42'21
retrograde	-9693 Feb 17 j 22:39	7° $\mathring{\text{M}}$ 26'58		minimum elong	-9687 Nov 18 j 07:42	20° $\mathring{\text{M}}$ 23'20	0°42'30
min. Earth dist.	-9693 May 09 j 02:09	6° $\mathring{\text{M}}$ 03'36	29.05008 AU	max. Earth dist.	-9687 Nov 19 j 09:13	20° $\mathring{\text{M}}$ 25'44	30.99721 AU
opposition	-9693 May 10 j 01:31	6° $\mathring{\text{M}}$ 02'00	1°23'59	morning rise	-9687 Dec 04 j 02:59	20° $\mathring{\text{M}}$ 58'47	
direct	-9693 Jul 27 j 01:13	4° $\mathring{\text{M}}$ 39'15		retrograde	-9686 Mar 05 j 19:08	22° $\mathring{\text{M}}$ 57'32	
evening set	-9693 Oct 21 j 01:09	6° $\mathring{\text{M}}$ 31'15		opposition	-9686 May 25 j 15:32	21° $\mathring{\text{M}}$ 32'24	0°42'03
				min. Earth dist.	-9686 May 24 j 14:57	21° $\mathring{\text{M}}$ 34'06	28.99308 AU
				direct	-9686 Aug 11 j 05:40	20° $\mathring{\text{M}}$ 09'44	
				evening set	-9686 Nov 05 j 03:51	22° $\mathring{\text{M}}$ 01'45	
conjunction	-9693 Nov 05 j 12:08	7° $\mathring{\text{M}}$ 05'57	1°15'59				
minimum elong	-9693 Nov 05 j 12:09	7° $\mathring{\text{M}}$ 05'58	1°16'16				
max. Earth dist.	-9693 Nov 06 j 12:34	7° $\mathring{\text{M}}$ 08'16	31.04431 AU	conjunction	-9686 Nov 20 j 19:39	22° $\mathring{\text{M}}$ 36'51	0°36'28
morning rise	-9693 Nov 21 j 02:55	7° $\mathring{\text{M}}$ 41'02		minimum elong	-9686 Nov 20 j 19:40	22° $\mathring{\text{M}}$ 36'51	0°36'36
retrograde	-9692 Feb 20 j 10:46	9° $\mathring{\text{M}}$ 39'24		max. Earth dist.	-9686 Nov 21 j 22:06	22° $\mathring{\text{M}}$ 39'20	30.98765 AU
opposition	-9692 May 11 j 13:52	8° $\mathring{\text{M}}$ 14'23	1°18'19	morning rise	-9686 Dec 06 j 15:28	23° $\mathring{\text{M}}$ 12'21	
min. Earth dist.	-9692 May 10 j 14:21	8° $\mathring{\text{M}}$ 16'00	29.04056 AU	retrograde	-9685 Mar 08 j 06:25	25° $\mathring{\text{M}}$ 11'08	
direct	-9692 Jul 28 j 12:27	6° $\mathring{\text{M}}$ 51'38		min. Earth dist.	-9685 May 27 j 02:58	23° $\mathring{\text{M}}$ 47'40	28.98291 AU
evening set	-9692 Oct 22 j 11:14	8° $\mathring{\text{M}}$ 43'36		opposition	-9685 May 28 j 03:35	23° $\mathring{\text{M}}$ 45'57	0°35'43
				direct	-9685 Aug 13 j 16:36	22° $\mathring{\text{M}}$ 23'15	
				evening set	-9685 Nov 07 j 15:06	24° $\mathring{\text{M}}$ 15'16	
conjunction	-9692 Nov 06 j 22:54	9° $\mathring{\text{M}}$ 18'22	1°10'38				
minimum elong	-9692 Nov 06 j 22:54	9° $\mathring{\text{M}}$ 18'22	1°10'54				
max. Earth dist.	-9692 Nov 07 j 23:38	9° $\mathring{\text{M}}$ 20'42	31.03557 AU	conjunction	-9685 Nov 23 j 07:28	24° $\mathring{\text{M}}$ 50'24	0°30'31
morning rise	-9692 Nov 22 j 14:28	9° $\mathring{\text{M}}$ 53'31		minimum elong	-9685 Nov 23 j 07:28	24° $\mathring{\text{M}}$ 50'24	0°30'38
retrograde	-9691 Feb 22 j 01:45	11° $\mathring{\text{M}}$ 51'56		max. Earth dist.	-9685 Nov 24 j 08:51	24° $\mathring{\text{M}}$ 52'48	30.97723 AU
min. Earth dist.	-9691 May 13 j 01:21	10° $\mathring{\text{M}}$ 28'35	29.03227 AU	morning rise	-9685 Dec 09 j 04:06	25° $\mathring{\text{M}}$ 25'57	
opposition	-9691 May 14 j 02:12	10° $\mathring{\text{M}}$ 26'53	1°12'32	retrograde	-9684 Mar 09 j 20:27	27° $\mathring{\text{M}}$ 24'45	
direct	-9691 Jul 30 j 23:41	9° $\mathring{\text{M}}$ 04'09		opposition	-9684 May 29 j 15:42	25° $\mathring{\text{M}}$ 59'31	0°29'21
evening set	-9691 Oct 24 j 21:37	10° $\mathring{\text{M}}$ 56'07		min. Earth dist.	-9684 May 28 j 15:00	26° $\mathring{\text{M}}$ 01'14	28.97220 AU
				direct	-9684 Aug 15 j 01:54	24° $\mathring{\text{M}}$ 36'45	
				evening set	-9684 Nov 09 j 02:12	26° $\mathring{\text{M}}$ 28'45	
conjunction	-9691 Nov 09 j 09:56	11° $\mathring{\text{M}}$ 30'56	1°05'10				
minimum elong	-9691 Nov 09 j 09:57	11° $\mathring{\text{M}}$ 30'56	1°05'25				
max. Earth dist.	-9691 Nov 10 j 11:18	11° $\mathring{\text{M}}$ 33'20	31.02770 AU	conjunction	-9684 Nov 24 j 19:18	27° $\mathring{\text{M}}$ 03'57	0°24'32
morning rise	-9691 Nov 25 j 02:17	12° $\mathring{\text{M}}$ 06'09		minimum elong	-9684 Nov 24 j 19:18	27° $\mathring{\text{M}}$ 03'57	0°24'38
retrograde	-9690 Feb 24 j 14:24	14° $\mathring{\text{M}}$ 04'39		max. Earth dist.	-9684 Nov 25 j 21:31	27° $\mathring{\text{M}}$ 06'24	30.96634 AU
opposition	-9690 May 16 j 14:29	12° $\mathring{\text{M}}$ 39'34	1°06'37	morning rise	-9684 Dec 10 j 16:32	27° $\mathring{\text{M}}$ 39'32	
min. Earth dist.	-9690 May 15 j 14:18	12° $\mathring{\text{M}}$ 41'14	29.02473 AU	retrograde	-9683 Mar 12 j 08:01	29° $\mathring{\text{M}}$ 38'21	
direct	-9690 Aug 02 j 10:05	11° $\mathring{\text{M}}$ 16'51		min. Earth dist.	-9683 May 31 j 03:29	28° $\mathring{\text{M}}$ 14'43	28.96128 AU
evening set	-9690 Oct 27 j 08:06	13° $\mathring{\text{M}}$ 08'50		opposition	-9683 Jun 01 j 03:46	28° $\mathring{\text{M}}$ 13'02	0°22'55
				direct	-9683 Aug 17 j 13:30	26° $\mathring{\text{M}}$ 50'13	
				evening set	-9683 Nov 11 j 13:35	28° $\mathring{\text{M}}$ 42'13	
conjunction	-9690 Nov 11 j 21:13	13° $\mathring{\text{M}}$ 43'43	0°59'36				
minimum elong	-9690 Nov 11 j 21:14	13° $\mathring{\text{M}}$ 43'43	0°59'50				
max. Earth dist.	-9690 Nov 12 j 23:16	13° $\mathring{\text{M}}$ 46'10	31.02052 AU	conjunction	-9683 Nov 27 j 07:19	29° $\mathring{\text{M}}$ 17'27	0°18'31
morning rise	-9690 Nov 27 j 14:14	14° $\mathring{\text{M}}$ 18'59		minimum elong	-9683 Nov 27 j 07:19	29° $\mathring{\text{M}}$ 17'27	0°18'36
retrograde	-9689 Feb 27 j 04:11	16° $\mathring{\text{M}}$ 17'33		max. Earth dist.	-9683 Nov 28 j 09:18	29° $\mathring{\text{M}}$ 19'53	30.95573 AU
min. Earth dist.	-9689 May 18 j 01:16	14° $\mathring{\text{M}}$ 54'13	29.01753 AU	morning rise	-9683 Dec 13 j 05:15	29° $\mathring{\text{M}}$ 53'05	
opposition	-9689 May 19 j 02:40	14° $\mathring{\text{M}}$ 52'28	1°00'37		-9683 Dec 16 j 09:11	0° $\mathring{\text{A}}$	
direct	-9689 Aug 04 j 21:57	13° $\mathring{\text{M}}$ 29'47		retrograde	-9682 Mar 14 j 22:27	1° $\mathring{\text{A}}$ 51'54	
evening set	-9689 Oct 29 j 18:49	15° $\mathring{\text{M}}$ 21'46		opposition	-9682 Jun 03 j 15:31	0° $\mathring{\text{A}}$ 26'31	0°16'28
				min. Earth dist.	-9682 Jun 02 j 14:27	0° $\mathring{\text{A}}$ 28'15	28.95098 AU
					-9682 Jun 19 j 19:05	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
conjunction	-9689 Nov 14 j 08:26	15° $\mathring{\text{M}}$ 56'42	0°53'56	direct	-9682 Aug 20 j 00:52	29° $\mathring{\text{M}}$ 03'37	
minimum elong	-9689 Nov 14 j 08:26	15° $\mathring{\text{M}}$ 56'42	0°54'07		-9682 Oct 17 j 13:12	0° $\mathring{\text{A}}$	
max. Earth dist.	-9689 Nov 15 j 10:02	15° $\mathring{\text{M}}$ 59'07	31.01326 AU	evening set	-9682 Nov 14 j 01:06	0° $\mathring{\text{A}}$ 55'38	
morning rise	-9689 Nov 30 j 02:16	16° $\mathring{\text{M}}$ 32'02					
retrograde	-9688 Feb 29 j 17:45	18° $\mathring{\text{M}}$ 30'41		conjunction	-9682 Nov 29 j 19:24	1° $\mathring{\text{A}}$ 30'55	0°12'29
opposition	-9688 May 20 j 15:00	17° $\mathring{\text{M}}$ 05'35	0°54'31				
min. Earth dist.	-9688 May 19 j 14:28	17° $\mathring{\text{M}}$ 07'17	29.01014 AU				

Attention, astronomical year style is used: The year -9682 in astronomical counting style is the year 9683 BCE in historical counting style.

minimum elong	-9682 Nov 29 j 19:25	1° <u>♁</u> 30'55	0°12'32	direct	-9676 Sep 01 j 19:39	12° <u>♁</u> 25'44	
behind sun begin	-9682 Nov 29 j 15:14	1° <u>♁</u> 30'33		evening set	-9676 Nov 27 j 00:18	14° <u>♁</u> 18'02	
behind sun end	-9682 Nov 29 j 23:35	1° <u>♁</u> 31'18					
max. Earth dist.	-9682 Nov 30 j 21:39	1° <u>♁</u> 33'23	30.94577 AU	conjunction	-9676 Dec 12 j 22:01	14° <u>♁</u> 53'34	-0°24'04
morning rise	-9682 Dec 15 j 17:59	2° <u>♁</u> 06'36		minimum elong	-9676 Dec 12 j 22:01	14° <u>♁</u> 53'34	0°24'09
retrograde	-9681 Mar 17 j 10:37	4° <u>♁</u> 05'25		max. Earth dist.	-9676 Dec 14 j 00:03	14° <u>♁</u> 56'01	30.90954 AU
min. Earth dist.	-9681 Jun 05 j 03:11	2° <u>♁</u> 41'40	28.94162 AU	morning rise	-9676 Dec 28 j 23:56	15° <u>♁</u> 29'30	
opposition	-9681 Jun 06 j 03:26	2° <u>♁</u> 39'59	0°09'59	retrograde	-9675 Mar 30 j 19:23	17° <u>♁</u> 28'25	
direct	-9681 Aug 22 j 11:09	1° <u>♁</u> 17'03		min. Earth dist.	-9675 Jun 18 j 01:16	16° <u>♁</u> 04'41	28.90750 AU
evening set	-9681 Nov 16 j 12:28	3° <u>♁</u> 09'05		opposition	-9675 Jun 19 j 01:34	16° <u>♁</u> 02'59	-0°29'01
				direct	-9675 Sep 04 j 05:22	14° <u>♁</u> 39'58	
conjunction	-9681 Dec 02 j 07:29	3° <u>♁</u> 44'24	0°06'26	evening set	-9675 Nov 29 j 12:56	16° <u>♁</u> 32'21	
minimum elong	-9681 Dec 02 j 07:28	3° <u>♁</u> 44'24	0°06'28				
behind sun begin	-9681 Dec 02 j 01:21	3° <u>♁</u> 43'51		conjunction	-9675 Dec 15 j 11:14	17° <u>♁</u> 07'55	-0°30'05
behind sun end	-9681 Dec 02 j 13:36	3° <u>♁</u> 44'57		minimum elong	-9675 Dec 15 j 11:14	17° <u>♁</u> 07'55	0°30'11
max. Earth dist.	-9681 Dec 03 j 10:18	3° <u>♁</u> 46'55	30.93709 AU	max. Earth dist.	-9675 Dec 16 j 13:27	17° <u>♁</u> 10'23	30.90442 AU
morning rise	-9681 Dec 18 j 06:33	4° <u>♁</u> 20'08		morning rise	-9675 Dec 31 j 13:30	17° <u>♁</u> 43'53	
retrograde	-9680 Mar 19 j 00:58	6° <u>♁</u> 18'57		retrograde	-9674 Apr 02 j 06:35	19° <u>♁</u> 42'48	
opposition	-9680 Jun 07 j 15:08	4° <u>♁</u> 53'29	0°03'29	opposition	-9674 Jun 21 j 13:10	18° <u>♁</u> 17'23	-0°35'26
min. Earth dist.	-9680 Jun 06 j 13:39	4° <u>♁</u> 55'15	28.93356 AU	min. Earth dist.	-9674 Jun 20 j 13:55	18° <u>♁</u> 19'01	28.90196 AU
direct	-9680 Aug 23 j 23:42	3° <u>♁</u> 30'31		direct	-9674 Sep 06 j 16:31	16° <u>♁</u> 54'20	
evening set	-9680 Nov 18 j 00:10	5° <u>♁</u> 22'34		evening set	-9674 Dec 02 j 01:42	18° <u>♁</u> 46'47	
conjunction	-9680 Dec 03 j 19:37	5° <u>♁</u> 57'57	0°00'18	conjunction	-9674 Dec 18 j 00:30	19° <u>♁</u> 22'23	-0°36'04
minimum elong	-9680 Dec 03 j 19:38	5° <u>♁</u> 57'57	0°00'19	minimum elong	-9674 Dec 18 j 00:29	19° <u>♁</u> 22'23	0°36'11
behind sun begin	-9680 Dec 03 j 13:09	5° <u>♁</u> 57'22		max. Earth dist.	-9674 Dec 19 j 01:34	19° <u>♁</u> 24'44	30.89845 AU
behind sun end	-9680 Dec 04 j 02:07	5° <u>♁</u> 58'32		morning rise	-9673 Jan 03 j 03:15	19° <u>♁</u> 58'22	
max. Earth dist.	-9680 Dec 04 j 21:59	6° <u>♁</u> 00'25	30.92969 AU	retrograde	-9673 Apr 04 j 20:49	21° <u>♁</u> 57'16	
morning rise	-9680 Dec 19 j 19:26	6° <u>♁</u> 33'43		min. Earth dist.	-9673 Jun 23 j 01:24	20° <u>♁</u> 33'29	28.89548 AU
desc. node	-9680 Dec 21 j 08:58	6° <u>♁</u> 37'08		opposition	-9673 Jun 24 j 00:47	20° <u>♁</u> 31'51	-0°41'49
retrograde	-9679 Mar 21 j 15:12	8° <u>♁</u> 32'33		direct	-9673 Sep 09 j 03:39	19° <u>♁</u> 08'44	
min. Earth dist.	-9679 Jun 09 j 02:17	7° <u>♁</u> 08'47	28.92691 AU	evening set	-9673 Dec 04 j 14:26	21° <u>♁</u> 01'15	
opposition	-9679 Jun 10 j 02:57	7° <u>♁</u> 07'04	-0°03'02				
direct	-9679 Aug 26 j 10:35	5° <u>♁</u> 44'04		conjunction	-9673 Dec 20 j 13:39	21° <u>♁</u> 36'53	-0°42'00
evening set	-9679 Nov 20 j 11:51	7° <u>♁</u> 36'11		minimum elong	-9673 Dec 20 j 13:38	21° <u>♁</u> 36'53	0°42'09
				max. Earth dist.	-9673 Dec 21 j 14:17	21° <u>♁</u> 39'11	30.89134 AU
conjunction	-9679 Dec 06 j 08:06	8° <u>♁</u> 11'36	-0°05'52	morning rise	-9672 Jan 05 j 16:49	22° <u>♁</u> 12'54	
minimum elong	-9679 Dec 06 j 08:05	8° <u>♁</u> 11'36	0°05'53	retrograde	-9672 Apr 06 j 08:52	24° <u>♁</u> 11'47	
behind sun begin	-9679 Dec 06 j 01:52	8° <u>♁</u> 11'02		opposition	-9672 Jun 25 j 12:28	22° <u>♁</u> 46'19	-0°48'07
behind sun end	-9679 Dec 06 j 14:19	8° <u>♁</u> 12'10		min. Earth dist.	-9672 Jun 24 j 14:37	22° <u>♁</u> 47'52	28.88800 AU
max. Earth dist.	-9679 Dec 07 j 11:29	8° <u>♁</u> 14'10	30.92367 AU	direct	-9672 Sep 10 j 14:09	21° <u>♁</u> 23'09	
morning rise	-9679 Dec 22 j 08:19	8° <u>♁</u> 47'25		evening set	-9672 Dec 06 j 03:16	23° <u>♁</u> 15'43	
retrograde	-9678 Mar 24 j 03:55	10° <u>♁</u> 46'15					
opposition	-9678 Jun 12 j 14:35	9° <u>♁</u> 20'47	-0°09'33	conjunction	-9672 Dec 22 j 03:03	23° <u>♁</u> 51'23	-0°47'52
min. Earth dist.	-9678 Jun 11 j 13:06	9° <u>♁</u> 22'33	28.92134 AU	minimum elong	-9672 Dec 22 j 03:02	23° <u>♁</u> 51'22	0°48'02
direct	-9678 Aug 28 j 22:49	7° <u>♁</u> 57'47		max. Earth dist.	-9672 Dec 23 j 03:24	23° <u>♁</u> 53'39	30.88364 AU
evening set	-9678 Nov 22 j 23:55	9° <u>♁</u> 49'57		morning rise	-9671 Jan 07 j 06:34	24° <u>♁</u> 27'25	
				retrograde	-9671 Apr 08 j 23:11	26° <u>♁</u> 26'15	
conjunction	-9678 Dec 08 j 20:32	10° <u>♁</u> 25'24	-0°11'56	opposition	-9671 Jun 27 j 23:49	25° <u>♁</u> 00'45	-0°54'21
minimum elong	-9678 Dec 08 j 20:32	10° <u>♁</u> 25'24	0°11'58	min. Earth dist.	-9671 Jun 27 j 01:32	25° <u>♁</u> 02'19	28.88009 AU
behind sun begin	-9678 Dec 08 j 16:05	10° <u>♁</u> 25'00		direct	-9671 Sep 13 j 03:15	23° <u>♁</u> 37'29	
behind sun end	-9678 Dec 09 j 01:00	10° <u>♁</u> 25'48		evening set	-9671 Dec 08 j 16:19	25° <u>♁</u> 30'07	
max. Earth dist.	-9678 Dec 09 j 22:53	10° <u>♁</u> 27'52	30.91855 AU				
morning rise	-9678 Dec 24 j 21:28	11° <u>♁</u> 01'16		conjunction	-9671 Dec 24 j 16:26	26° <u>♁</u> 05'49	-0°53'39
retrograde	-9677 Mar 26 j 17:04	13° <u>♁</u> 00'08		minimum elong	-9671 Dec 24 j 16:25	26° <u>♁</u> 05'49	0°53'51
min. Earth dist.	-9677 Jun 14 j 01:30	11° <u>♁</u> 36'23	28.91662 AU	max. Earth dist.	-9671 Dec 25 j 15:39	26° <u>♁</u> 07'59	30.87560 AU
opposition	-9677 Jun 15 j 02:14	11° <u>♁</u> 34'40	-0°16'03	morning rise	-9670 Jan 09 j 20:26	26° <u>♁</u> 41'53	
direct	-9677 Aug 31 j 08:29	10° <u>♁</u> 11'40		retrograde	-9670 Apr 11 j 12:47	28° <u>♁</u> 40'40	
evening set	-9677 Nov 25 j 12:00	12° <u>♁</u> 03'54		opposition	-9670 Jun 30 j 11:17	27° <u>♁</u> 15'08	-1°00'31
				min. Earth dist.	-9670 Jun 29 j 14:24	27° <u>♁</u> 16'36	28.87226 AU
conjunction	-9677 Dec 11 j 09:19	12° <u>♁</u> 39'24	-0°18'00	direct	-9670 Sep 15 j 14:44	25° <u>♁</u> 51'47	
minimum elong	-9677 Dec 11 j 09:18	12° <u>♁</u> 39'24	0°18'04	evening set	-9670 Dec 11 j 05:17	27° <u>♁</u> 44'29	
max. Earth dist.	-9677 Dec 12 j 12:39	12° <u>♁</u> 41'58	30.91401 AU				
morning rise	-9677 Dec 27 j 10:34	13° <u>♁</u> 15'17		conjunction	-9670 Dec 27 j 05:56	28° <u>♁</u> 20'13	-0°59'22
retrograde	-9676 Mar 28 j 05:18	15° <u>♁</u> 14'10		minimum elong	-9670 Dec 27 j 05:56	28° <u>♁</u> 20'13	0°59'35
opposition	-9676 Jun 16 j 13:52	13° <u>♁</u> 48'44	-0°22'33	max. Earth dist.	-9670 Dec 28 j 05:40	28° <u>♁</u> 22'26	30.86795 AU
min. Earth dist.	-9676 Jun 15 j 13:13	13° <u>♁</u> 50'28	28.91214 AU	morning rise	-9669 Jan 12 j 10:06	28° <u>♁</u> 56'17	

Attention, astronomical year style is used: The year -9669 in astronomical counting style is the year 9670 BCE in historical counting style.

	-9669 Feb 13 j 09:40	0° \mathbb{M}	evening set	-9663 Dec 27 j 03:29	13° \mathbb{M} 27'08	
retrograde	-9669 Apr 14 j 01:36	0° \mathbb{M} 55'01				
	-9669 Jun 14 j 11:38	30° \mathbb{R} $\underline{\mathbb{A}}$	conjunction	-9662 Jan 12 j 06:25	14° \mathbb{M} 03'01	-1°36'24
opposition	-9669 Jul 02 j 22:26	29° $\underline{\mathbb{A}}$ 29'29	minimum elong	-9662 Jan 12 j 06:24	14° \mathbb{M} 03'00	1°36'45
min. Earth dist.	-9669 Jul 02 j 01:05	29° $\underline{\mathbb{A}}$ 30'59	max. Earth dist.	-9662 Jan 13 j 02:26	14° \mathbb{M} 04'53	30.84281 AU
direct	-9669 Sep 18 j 03:37	28° $\underline{\mathbb{A}}$ 06'04	morning rise	-9662 Jan 28 j 12:15	14° \mathbb{M} 39'11	
evening set	-9669 Dec 13 j 18:28	29° $\underline{\mathbb{A}}$ 58'50		-9662 Feb 07 j 05:27	15° \mathbb{M}	
	-9669 Dec 14 j 07:11	0° \mathbb{M}	retrograde	-9662 Apr 29 j 19:58	16° \mathbb{M} 37'44	
			min. Earth dist.	-9662 Jul 17 j 10:43	15° \mathbb{M} 13'43	28.84274 AU
conjunction	-9669 Dec 29 j 19:19	0° \mathbb{M} 34'35	opposition	-9662 Jul 18 j 04:29	15° \mathbb{M} 12'27	-1°45'44
minimum elong	-9669 Dec 29 j 19:19	0° \mathbb{M} 34'35		-9662 Jul 25 j 12:44	15° \mathbb{R} \mathbb{M}	
max. Earth dist.	-9669 Dec 30 j 17:43	0° \mathbb{M} 36'41	direct	-9662 Oct 03 j 08:28	13° \mathbb{M} 48'46	
morning rise	-9668 Jan 14 j 23:57	1° \mathbb{M} 10'41		-9662 Dec 09 j 06:17	15° \mathbb{M}	
retrograde	-9668 Apr 15 j 15:16	3° \mathbb{M} 09'23	evening set	-9662 Dec 29 j 17:37	15° \mathbb{M} 42'24	
opposition	-9668 Jul 04 j 09:44	1° \mathbb{M} 43'50				
min. Earth dist.	-9668 Jul 03 j 13:14	1° \mathbb{M} 45'16	conjunction	-9661 Jan 14 j 20:39	16° \mathbb{M} 18'17	-1°41'11
direct	-9668 Sep 19 j 14:00	0° \mathbb{M} 20'21	minimum elong	-9661 Jan 14 j 20:38	16° \mathbb{M} 18'17	1°41'33
evening set	-9668 Dec 15 j 07:29	2° \mathbb{M} 13'13	max. Earth dist.	-9661 Jan 15 j 15:04	16° \mathbb{M} 20'00	30.84031 AU
			morning rise	-9661 Jan 31 j 02:39	16° \mathbb{M} 54'27	
conjunction	-9668 Dec 31 j 08:54	2° \mathbb{M} 48'59	retrograde	-9661 May 02 j 08:50	18° \mathbb{M} 52'58	
minimum elong	-9668 Dec 31 j 08:53	2° \mathbb{M} 48'59	opposition	-9661 Jul 20 j 15:39	17° \mathbb{M} 27'42	-1°50'45
max. Earth dist.	-9667 Jan 01 j 08:10	2° \mathbb{M} 51'10	min. Earth dist.	-9661 Jul 19 j 23:44	17° \mathbb{M} 28'50	28.83997 AU
morning rise	-9667 Jan 16 j 13:40	3° \mathbb{M} 25'06	direct	-9661 Oct 05 j 19:53	16° \mathbb{M} 03'58	
retrograde	-9667 Apr 18 j 04:00	5° \mathbb{M} 23'46	evening set	-9660 Jan 01 j 07:40	17° \mathbb{M} 57'42	
opposition	-9667 Jul 06 j 20:56	3° \mathbb{M} 58'14				
min. Earth dist.	-9667 Jul 06 j 00:32	3° \mathbb{M} 59'40	conjunction	-9660 Jan 17 j 11:05	18° \mathbb{M} 33'36	-1°45'48
direct	-9667 Sep 22 j 01:55	2° \mathbb{M} 34'43	minimum elong	-9660 Jan 17 j 11:05	18° \mathbb{M} 33'36	1°46'11
evening set	-9667 Dec 17 j 20:54	4° \mathbb{M} 27'40	max. Earth dist.	-9660 Jan 18 j 05:13	18° \mathbb{M} 35'18	30.83706 AU
			morning rise	-9660 Feb 02 j 17:04	19° \mathbb{M} 09'47	
conjunction	-9666 Jan 02 j 22:33	5° \mathbb{M} 03'28	retrograde	-9660 May 03 j 22:14	21° \mathbb{M} 08'13	
minimum elong	-9666 Jan 02 j 22:32	5° \mathbb{M} 03'28	min. Earth dist.	-9660 Jul 21 j 10:50	19° \mathbb{M} 44'05	28.83629 AU
max. Earth dist.	-9666 Jan 03 j 20:22	5° \mathbb{M} 05'31	opposition	-9660 Jul 22 j 02:37	19° \mathbb{M} 42'58	-1°55'36
morning rise	-9666 Jan 19 j 03:44	5° \mathbb{M} 39'36	direct	-9660 Oct 07 j 09:03	18° \mathbb{M} 19'08	
retrograde	-9666 Apr 20 j 17:22	7° \mathbb{M} 38'15	evening set	-9659 Jan 02 j 21:55	20° \mathbb{M} 12'58	
min. Earth dist.	-9666 Jul 08 j 11:53	6° \mathbb{M} 14'10				
opposition	-9666 Jul 09 j 08:01	6° \mathbb{M} 12'44	conjunction	-9659 Jan 19 j 01:25	20° \mathbb{M} 48'53	-1°50'16
direct	-9666 Sep 24 j 12:01	4° \mathbb{M} 49'11	minimum elong	-9659 Jan 19 j 01:24	20° \mathbb{M} 48'53	1°50'40
evening set	-9666 Dec 20 j 10:19	6° \mathbb{M} 42'16	max. Earth dist.	-9659 Jan 19 j 17:29	20° \mathbb{M} 50'23	30.83298 AU
			morning rise	-9659 Feb 04 j 07:41	21° \mathbb{M} 25'03	
conjunction	-9665 Jan 05 j 12:23	7° \mathbb{M} 18'05	retrograde	-9659 May 06 j 12:21	23° \mathbb{M} 23'24	
minimum elong	-9665 Jan 05 j 12:22	7° \mathbb{M} 18'05	opposition	-9659 Jul 24 j 13:42	21° \mathbb{M} 58'08	-2°00'17
max. Earth dist.	-9665 Jan 06 j 10:37	7° \mathbb{M} 20'10	min. Earth dist.	-9659 Jul 23 j 23:23	21° \mathbb{M} 59'09	28.83204 AU
morning rise	-9665 Jan 21 j 17:40	7° \mathbb{M} 54'14	direct	-9659 Oct 09 j 20:45	20° \mathbb{M} 34'12	
retrograde	-9665 Apr 23 j 04:15	9° \mathbb{M} 52'51	evening set	-9658 Jan 05 j 12:09	22° \mathbb{M} 28'08	
opposition	-9665 Jul 11 j 19:13	8° \mathbb{M} 27'24				
min. Earth dist.	-9665 Jul 10 j 23:56	8° \mathbb{M} 28'46	conjunction	-9658 Jan 21 j 16:01	23° \mathbb{M} 04'03	-1°54'33
direct	-9665 Sep 26 j 22:59	7° \mathbb{M} 03'50	minimum elong	-9658 Jan 21 j 16:00	23° \mathbb{M} 04'03	1°54'58
evening set	-9665 Dec 22 j 23:45	8° \mathbb{M} 57'02	max. Earth dist.	-9658 Jan 22 j 08:16	23° \mathbb{M} 05'34	30.82847 AU
			morning rise	-9658 Feb 06 j 22:10	23° \mathbb{M} 40'13	
conjunction	-9664 Jan 08 j 02:04	9° \mathbb{M} 32'52	retrograde	-9658 May 09 j 01:03	25° \mathbb{M} 38'27	
minimum elong	-9664 Jan 08 j 02:03	9° \mathbb{M} 32'52	min. Earth dist.	-9658 Jul 26 j 10:50	24° \mathbb{M} 14'09	28.82752 AU
max. Earth dist.	-9664 Jan 08 j 23:16	9° \mathbb{M} 34'51	opposition	-9658 Jul 27 j 00:28	24° \mathbb{M} 13'11	-2°04'47
morning rise	-9664 Jan 24 j 07:38	10° \mathbb{M} 09'02	direct	-9658 Oct 12 j 10:14	22° \mathbb{M} 49'09	
retrograde	-9664 Apr 24 j 18:23	12° \mathbb{M} 07'39	evening set	-9657 Jan 08 j 02:31	24° \mathbb{M} 43'09	
min. Earth dist.	-9664 Jul 12 j 10:52	10° \mathbb{M} 43'37				
opposition	-9664 Jul 13 j 06:19	10° \mathbb{M} 42'15	conjunction	-9657 Jan 24 j 06:24	25° \mathbb{M} 19'05	-1°58'40
direct	-9664 Sep 28 j 09:28	9° \mathbb{M} 18'39	minimum elong	-9657 Jan 24 j 06:23	25° \mathbb{M} 19'05	1°59'07
evening set	-9664 Dec 24 j 13:32	11° \mathbb{M} 12'00	max. Earth dist.	-9657 Jan 24 j 20:44	25° \mathbb{M} 20'25	30.82410 AU
			morning rise	-9657 Feb 09 j 12:45	25° \mathbb{M} 55'15	
conjunction	-9663 Jan 09 j 16:07	11° \mathbb{M} 47'51	retrograde	-9657 May 11 j 13:58	27° \mathbb{M} 53'22	
minimum elong	-9663 Jan 09 j 16:06	11° \mathbb{M} 47'51	opposition	-9657 Jul 29 j 11:19	26° \mathbb{M} 28'05	-2°09'05
max. Earth dist.	-9663 Jan 10 j 12:54	11° \mathbb{M} 49'48	min. Earth dist.	-9657 Jul 28 j 22:15	26° \mathbb{M} 29'01	28.82358 AU
morning rise	-9663 Jan 25 j 21:50	12° \mathbb{M} 24'01	direct	-9657 Oct 14 j 21:38	25° \mathbb{M} 03'57	
retrograde	-9663 Apr 27 j 06:05	14° \mathbb{M} 22'37	evening set	-9656 Jan 10 j 16:35	26° \mathbb{M} 58'03	
opposition	-9663 Jul 15 j 17:25	12° \mathbb{M} 57'17				
min. Earth dist.	-9663 Jul 14 j 23:44	12° \mathbb{M} 58'32	conjunction	-9656 Jan 26 j 20:44	27° \mathbb{M} 33'59	-2°02'36
direct	-9663 Sep 30 j 19:05	11° \mathbb{M} 33'38	minimum elong	-9656 Jan 26 j 20:44	27° \mathbb{M} 33'58	2°03'02

Attention, astronomical year style is used: The year -9656 in astronomical counting style is the year 9657 BCE in historical counting style.

max. Earth dist.	-9656 Jan 27 j 11:20	27° \mathbb{M} 35'20	30.82040 AU	retrograde	-9650 May 27 j 05:23	13° \mathbb{A} 36'58	
morning rise	-9656 Feb 12 j 02:58	28° \mathbb{M} 10'08		opposition	-9650 Aug 13 j 14:04	12° \mathbb{A} 12'07	-2°33'19
	-9656 Apr 20 j 22:05	0° \mathbb{A}		min. Earth dist.	-9650 Aug 13 j 06:19	12° \mathbb{A} 12'41	28.82926 AU
retrograde	-9656 May 13 j 01:07	0° \mathbb{A} 08'08		direct	-9650 Oct 30 j 06:28	10° \mathbb{A} 47'38	
	-9656 Jun 04 j 06:38	30° \mathbb{R} \mathbb{M}		evening set	-9649 Jan 26 j 22:18	12° \mathbb{A} 42'43	
opposition	-9656 Jul 30 j 22:08	28° \mathbb{M} 42'52	-2°13'11				
min. Earth dist.	-9656 Jul 30 j 10:05	28° \mathbb{M} 43'44	28.82049 AU	conjunction	-9649 Feb 12 j 03:14	13° \mathbb{A} 18'41	-2°24'34
direct	-9656 Oct 16 j 09:27	27° \mathbb{M} 18'38		minimum elong	-9649 Feb 12 j 03:14	13° \mathbb{A} 18'41	2°25'06
evening set	-9655 Jan 12 j 06:55	29° \mathbb{M} 12'50		max. Earth dist.	-9649 Feb 12 j 12:03	13° \mathbb{A} 19'30	30.82887 AU
				morning rise	-9649 Feb 28 j 09:06	13° \mathbb{A} 54'46	
conjunction	-9655 Jan 28 j 11:11	29° \mathbb{M} 48'46	-2°06'20	retrograde	-9649 May 29 j 18:22	15° \mathbb{A} 52'13	
minimum elong	-9655 Jan 28 j 11:10	29° \mathbb{M} 48'46	2°06'48	opposition	-9649 Aug 16 j 00:49	14° \mathbb{A} 27'27	-2°35'53
max. Earth dist.	-9655 Jan 29 j 00:22	29° \mathbb{M} 50'00	30.81797 AU	min. Earth dist.	-9649 Aug 15 j 17:58	14° \mathbb{A} 27'56	28.83220 AU
	-9655 Feb 02 j 11:25	0° \mathbb{A}		direct	-9649 Nov 01 j 20:06	13° \mathbb{A} 02'56	
morning rise	-9655 Feb 13 j 17:32	0° \mathbb{A} 24'55		evening set	-9648 Jan 29 j 13:05	14° \mathbb{A} 58'09	
retrograde	-9655 May 15 j 14:49	2° \mathbb{A} 22'49					
opposition	-9655 Aug 02 j 08:42	0° \mathbb{A} 57'35	-2°17'05	conjunction	-9648 Feb 14 j 17:57	15° \mathbb{A} 34'07	-2°26'51
min. Earth dist.	-9655 Aug 01 j 20:32	0° \mathbb{A} 58'27	28.81884 AU	minimum elong	-9648 Feb 14 j 17:56	15° \mathbb{A} 34'07	2°27'23
	-9655 Sep 08 j 10:09	30° \mathbb{R} \mathbb{M}		max. Earth dist.	-9648 Feb 15 j 00:22	15° \mathbb{A} 34'43	30.83144 AU
direct	-9655 Oct 18 j 20:31	29° \mathbb{M} 33'15		morning rise	-9648 Mar 01 j 23:54	16° \mathbb{A} 10'11	
	-9655 Nov 27 j 17:19	0° \mathbb{A}		retrograde	-9648 May 31 j 07:51	18° \mathbb{A} 07'32	
evening set	-9654 Jan 14 j 21:21	1° \mathbb{A} 27'35		opposition	-9648 Aug 17 j 11:34	16° \mathbb{A} 42'51	-2°38'13
				min. Earth dist.	-9648 Aug 17 j 05:41	16° \mathbb{A} 43'16	28.83447 AU
conjunction	-9654 Jan 31 j 01:45	2° \mathbb{A} 03'31	-2°09'53	direct	-9648 Nov 03 j 07:56	15° \mathbb{A} 18'16	
minimum elong	-9654 Jan 31 j 01:45	2° \mathbb{A} 03'31	2°10'21	evening set	-9647 Jan 31 j 03:58	17° \mathbb{A} 13'37	
max. Earth dist.	-9654 Jan 31 j 14:39	2° \mathbb{A} 04'44	30.81688 AU				
morning rise	-9654 Feb 16 j 08:01	2° \mathbb{A} 39'39		conjunction	-9647 Feb 16 j 09:02	17° \mathbb{A} 49'35	-2°28'55
retrograde	-9654 May 18 j 01:25	4° \mathbb{A} 37'28		minimum elong	-9647 Feb 16 j 09:01	17° \mathbb{A} 49'34	2°29'28
opposition	-9654 Aug 04 j 19:30	3° \mathbb{A} 12'17	-2°20'46	max. Earth dist.	-9647 Feb 16 j 15:06	17° \mathbb{A} 50'09	30.83318 AU
min. Earth dist.	-9654 Aug 04 j 08:50	3° \mathbb{A} 13'02	28.81863 AU	morning rise	-9647 Mar 04 j 14:43	18° \mathbb{A} 25'38	
direct	-9654 Oct 21 j 06:41	1° \mathbb{A} 47'54		retrograde	-9647 Jun 02 j 19:55	20° \mathbb{A} 22'51	
evening set	-9653 Jan 17 j 11:39	3° \mathbb{A} 42'21		opposition	-9647 Aug 19 j 22:12	18° \mathbb{A} 58'13	-2°40'18
				min. Earth dist.	-9647 Aug 19 j 17:56	18° \mathbb{A} 58'31	28.83585 AU
conjunction	-9653 Feb 02 j 16:12	4° \mathbb{A} 18'17	-2°13'14	direct	-9647 Nov 05 j 20:30	17° \mathbb{A} 33'34	
minimum elong	-9653 Feb 02 j 16:11	4° \mathbb{A} 18'17	2°13'44	evening set	-9646 Feb 02 j 18:56	19° \mathbb{A} 29'01	
max. Earth dist.	-9653 Feb 03 j 04:28	4° \mathbb{A} 19'26	30.81744 AU				
morning rise	-9653 Feb 18 j 22:25	4° \mathbb{A} 54'25		conjunction	-9646 Feb 18 j 23:57	20° \mathbb{A} 04'59	-2°30'45
retrograde	-9653 May 20 j 14:06	6° \mathbb{A} 52'09		minimum elong	-9646 Feb 18 j 23:57	20° \mathbb{A} 04'59	2°31'18
opposition	-9653 Aug 07 j 06:05	5° \mathbb{A} 27'02	-2°24'15	max. Earth dist.	-9646 Feb 19 j 03:52	20° \mathbb{A} 05'21	30.83434 AU
min. Earth dist.	-9653 Aug 06 j 19:02	5° \mathbb{A} 27'49	28.81994 AU	morning rise	-9646 Mar 07 j 05:40	20° \mathbb{A} 41'01	
direct	-9653 Oct 23 j 19:32	4° \mathbb{A} 02'36		retrograde	-9646 Jun 05 j 09:48	22° \mathbb{A} 38'06	
evening set	-9652 Jan 20 j 02:10	5° \mathbb{A} 57'13		opposition	-9646 Aug 22 j 08:47	21° \mathbb{A} 13'30	-2°42'08
				min. Earth dist.	-9646 Aug 22 j 04:48	21° \mathbb{A} 13'47	28.83687 AU
conjunction	-9652 Feb 05 j 06:44	6° \mathbb{A} 33'09	-2°16'23	direct	-9646 Nov 08 j 08:24	19° \mathbb{A} 48'46	
minimum elong	-9652 Feb 05 j 06:43	6° \mathbb{A} 33'09	2°16'53	evening set	-9645 Feb 05 j 09:39	21° \mathbb{A} 44'18	
max. Earth dist.	-9652 Feb 05 j 17:53	6° \mathbb{A} 34'12	30.81932 AU				
morning rise	-9652 Feb 21 j 12:58	7° \mathbb{A} 09'16		conjunction	-9645 Feb 21 j 14:44	22° \mathbb{A} 20'16	-2°32'22
retrograde	-9652 May 22 j 02:11	9° \mathbb{A} 06'56		minimum elong	-9645 Feb 21 j 14:44	22° \mathbb{A} 20'16	2°32'56
opposition	-9652 Aug 08 j 16:47	7° \mathbb{A} 41'54	-2°27'30	max. Earth dist.	-9645 Feb 21 j 18:07	22° \mathbb{A} 20'35	30.83518 AU
min. Earth dist.	-9652 Aug 08 j 07:22	7° \mathbb{A} 42'34	28.82254 AU	morning rise	-9645 Mar 09 j 20:12	22° \mathbb{A} 56'17	
direct	-9652 Oct 25 j 06:06	6° \mathbb{A} 17'27		retrograde	-9645 Jun 07 j 19:39	24° \mathbb{A} 53'14	
evening set	-9651 Jan 21 j 16:40	8° \mathbb{A} 12'13		opposition	-9645 Aug 24 j 19:26	23° \mathbb{A} 28'40	-2°43'44
				min. Earth dist.	-9645 Aug 24 j 17:18	23° \mathbb{A} 28'49	28.83788 AU
conjunction	-9651 Feb 06 j 21:29	8° \mathbb{A} 48'10	-2°19'20	direct	-9645 Nov 10 j 19:24	22° \mathbb{A} 03'50	
minimum elong	-9651 Feb 06 j 21:28	8° \mathbb{A} 48'10	2°19'51	evening set	-9644 Feb 08 j 00:24	23° \mathbb{A} 59'28	
max. Earth dist.	-9651 Feb 07 j 08:25	8° \mathbb{A} 49'11	30.82235 AU				
morning rise	-9651 Feb 23 j 03:35	9° \mathbb{A} 24'16		conjunction	-9644 Feb 24 j 05:31	24° \mathbb{A} 35'25	-2°33'44
retrograde	-9651 May 24 j 15:28	11° \mathbb{A} 21'52		minimum elong	-9644 Feb 24 j 05:31	24° \mathbb{A} 35'25	2°34'18
opposition	-9651 Aug 11 j 03:23	9° \mathbb{A} 56'56	-2°30'31	max. Earth dist.	-9644 Feb 24 j 07:47	24° \mathbb{A} 35'38	30.83649 AU
min. Earth dist.	-9651 Aug 10 j 18:04	9° \mathbb{A} 57'36	28.82581 AU	morning rise	-9644 Mar 11 j 10:55	25° \mathbb{A} 11'25	
direct	-9651 Oct 27 j 18:54	8° \mathbb{A} 32'28		retrograde	-9644 Jun 09 j 07:30	27° \mathbb{A} 08'12	
evening set	-9650 Jan 24 j 07:32	10° \mathbb{A} 27'24		opposition	-9644 Aug 26 j 05:45	25° \mathbb{A} 43'41	-2°45'05
				min. Earth dist.	-9644 Aug 26 j 03:32	25° \mathbb{A} 43'50	28.83954 AU
conjunction	-9650 Feb 09 j 12:15	11° \mathbb{A} 03'21	-2°22'03	direct	-9644 Nov 12 j 08:27	24° \mathbb{A} 18'46	
minimum elong	-9650 Feb 09 j 12:14	11° \mathbb{A} 03'21	2°22'34	evening set	-9643 Feb 09 j 15:11	26° \mathbb{A} 14'29	
max. Earth dist.	-9650 Feb 09 j 21:08	11° \mathbb{A} 04'10	30.82567 AU				
morning rise	-9650 Feb 25 j 18:23	11° \mathbb{A} 39'26		conjunction	-9643 Feb 25 j 20:18	26° \mathbb{A} 50'26	-2°34'53

Attention, astronomical year style is used: The year -9643 in astronomical counting style is the year 9644 BCE in historical counting style.

minimum elong	-9643 Feb 25 j 20:18	26° \nearrow 50'26	2°35'28	opposition	-9637 Sep 11 j 07:11	11° \searrow 27'25	-2°47'21
max. Earth dist.	-9643 Feb 25 j 21:26	26° \nearrow 50'32	30.83851 AU	min. Earth dist.	-9637 Sep 11 j 10:41	11° \searrow 27'10	28.88270 AU
morning rise	-9643 Mar 14 j 01:34	27° \nearrow 26'24		direct	-9637 Nov 28 j 22:49	10° \searrow 02'15	
retrograde	-9643 Jun 11 j 18:41	29° \nearrow 23'03		evening set	-9636 Feb 26 j 22:16	11° \searrow 58'44	
opposition	-9643 Aug 28 j 16:20	27° \nearrow 58'34	-2°46'10				
min. Earth dist.	-9643 Aug 28 j 15:46	27° \nearrow 58'37	28.84222 AU	conjunction	-9636 Mar 14 j 03:23	12° \searrow 34'39	-2°36'11
direct	-9643 Nov 14 j 18:43	26° \nearrow 33'34		minimum elong	-9636 Mar 14 j 03:23	12° \searrow 34'39	2°36'45
evening set	-9642 Feb 12 j 05:53	28° \nearrow 29'23		max. Earth dist.	-9636 Mar 13 j 22:06	12° \searrow 34'10	30.88412 AU
				morning rise	-9636 Mar 30 j 07:22	13° \searrow 10'30	
conjunction	-9642 Feb 28 j 11:05	29° \nearrow 05'19	-2°35'47	retrograde	-9636 Jun 27 j 08:23	15° \searrow 06'13	
minimum elong	-9642 Feb 28 j 11:05	29° \nearrow 05'19	2°36'21	opposition	-9636 Sep 12 j 17:46	13° \searrow 42'23	-2°46'39
max. Earth dist.	-9642 Feb 28 j 11:54	29° \nearrow 05'24	30.84181 AU	min. Earth dist.	-9636 Sep 12 j 23:26	13° \searrow 41'59	28.88987 AU
morning rise	-9642 Mar 16 j 16:07	29° \nearrow 41'17		direct	-9636 Nov 30 j 10:24	12° \searrow 17'10	
	-9642 Mar 25 j 10:13	0° \searrow		evening set	-9635 Feb 28 j 13:09	14° \searrow 13'45	
retrograde	-9642 Jun 14 j 06:13	1° \searrow 37'46					
opposition	-9642 Aug 31 j 02:42	0° \searrow 13'21	-2°47'01	conjunction	-9635 Mar 16 j 18:13	14° \searrow 49'40	-2°35'25
min. Earth dist.	-9642 Aug 31 j 02:01	0° \searrow 13'24	28.84618 AU	minimum elong	-9635 Mar 16 j 18:13	14° \searrow 49'40	2°36'00
	-9642 Sep 07 j 22:25	30° \nearrow		max. Earth dist.	-9635 Mar 16 j 11:10	14° \searrow 49'00	30.89087 AU
direct	-9642 Nov 17 j 07:49	28° \nearrow 48'17		morning rise	-9635 Apr 01 j 22:06	15° \searrow 25'29	
	-9641 Jan 24 j 09:11	0° \searrow		retrograde	-9635 Jun 29 j 20:56	17° \searrow 21'03	
evening set	-9641 Feb 14 j 20:39	0° \searrow 44'13		opposition	-9635 Sep 15 j 04:20	15° \searrow 57'17	-2°45'42
				min. Earth dist.	-9635 Sep 15 j 10:13	15° \searrow 56'52	28.89600 AU
conjunction	-9641 Mar 03 j 01:42	1° \searrow 20'08	-2°36'27	direct	-9635 Dec 02 j 23:31	14° \searrow 32'02	
minimum elong	-9641 Mar 03 j 01:42	1° \searrow 20'08	2°37'02	evening set	-9634 Mar 03 j 03:57	16° \searrow 28'40	
max. Earth dist.	-9641 Mar 03 j 00:52	1° \searrow 20'03	30.84650 AU				
morning rise	-9641 Mar 19 j 06:41	1° \searrow 56'04		conjunction	-9634 Mar 19 j 08:57	17° \searrow 04'35	-2°34'25
retrograde	-9641 Jun 16 j 18:30	3° \searrow 52'26		minimum elong	-9634 Mar 19 j 08:57	17° \searrow 04'35	2°34'59
opposition	-9641 Sep 02 j 13:13	2° \searrow 28'05	-2°47'36	max. Earth dist.	-9634 Mar 19 j 00:34	17° \searrow 03'48	30.89645 AU
min. Earth dist.	-9641 Sep 02 j 13:39	2° \searrow 28'03	28.85176 AU	morning rise	-9634 Apr 04 j 12:35	17° \searrow 40'23	
direct	-9641 Nov 19 j 19:37	1° \searrow 02'58		retrograde	-9634 Jul 02 j 07:50	19° \searrow 35'48	
evening set	-9640 Feb 17 j 11:06	2° \searrow 59'00		opposition	-9634 Sep 17 j 14:59	18° \searrow 12'06	-2°44'30
				min. Earth dist.	-9634 Sep 17 j 22:52	18° \searrow 11'32	28.90122 AU
conjunction	-9640 Mar 04 j 16:22	3° \searrow 34'56	-2°36'53	direct	-9634 Dec 05 j 10:00	16° \searrow 46'46	
minimum elong	-9640 Mar 04 j 16:21	3° \searrow 34'56	2°37'27	evening set	-9633 Mar 05 j 18:33	18° \searrow 43'28	
max. Earth dist.	-9640 Mar 04 j 15:49	3° \searrow 34'53	30.85278 AU				
morning rise	-9640 Mar 20 j 21:03	4° \searrow 10'51		conjunction	-9633 Mar 21 j 23:35	19° \searrow 19'22	-2°33'11
retrograde	-9640 Jun 18 j 06:19	6° \searrow 07'05		minimum elong	-9633 Mar 21 j 23:36	19° \searrow 19'22	2°33'45
opposition	-9640 Sep 03 j 23:41	4° \searrow 42'49	-2°47'55	max. Earth dist.	-9633 Mar 21 j 14:23	19° \searrow 18'30	30.90144 AU
min. Earth dist.	-9640 Sep 04 j 00:43	4° \searrow 42'45	28.85858 AU	morning rise	-9633 Apr 07 j 03:01	19° \searrow 55'09	
direct	-9640 Nov 21 j 09:21	3° \searrow 17'41		retrograde	-9633 Jul 04 j 18:37	21° \searrow 50'23	
evening set	-9639 Feb 19 j 01:57	5° \searrow 13'50		opposition	-9633 Sep 20 j 01:26	20° \searrow 26'44	-2°43'04
				min. Earth dist.	-9633 Sep 20 j 09:33	20° \searrow 26'10	28.90589 AU
conjunction	-9639 Mar 07 j 07:02	5° \searrow 49'46	-2°37'04	direct	-9633 Dec 07 j 23:32	19° \searrow 01'21	
minimum elong	-9639 Mar 07 j 07:02	5° \searrow 49'46	2°37'40	evening set	-9632 Mar 07 j 09:03	20° \searrow 58'06	
max. Earth dist.	-9639 Mar 07 j 04:28	5° \searrow 49'31	30.86023 AU				
morning rise	-9639 Mar 23 j 11:44	6° \searrow 25'40		conjunction	-9632 Mar 23 j 13:57	21° \searrow 33'59	-2°31'43
retrograde	-9639 Jun 20 j 19:44	8° \searrow 21'46		minimum elong	-9632 Mar 23 j 13:58	21° \searrow 33'59	2°32'16
opposition	-9639 Sep 06 j 10:04	6° \searrow 57'37	-2°47'59	max. Earth dist.	-9632 Mar 23 j 02:55	21° \searrow 32'57	30.90605 AU
min. Earth dist.	-9639 Sep 06 j 11:49	6° \searrow 57'30	28.86650 AU	morning rise	-9632 Apr 08 j 17:18	22° \searrow 09'45	
direct	-9639 Nov 23 j 20:55	5° \searrow 32'28		retrograde	-9632 Jul 06 j 05:47	24° \searrow 04'49	
evening set	-9638 Feb 21 j 16:43	7° \searrow 28'44		opposition	-9632 Sep 21 j 11:57	22° \searrow 41'12	-2°41'23
				min. Earth dist.	-9632 Sep 21 j 21:27	22° \searrow 40'32	28.91056 AU
conjunction	-9638 Mar 09 j 21:56	8° \searrow 04'40	-2°37'01	direct	-9632 Dec 09 j 11:21	21° \searrow 15'44	
minimum elong	-9638 Mar 09 j 21:56	8° \searrow 04'40	2°37'35	evening set	-9631 Mar 09 j 23:26	23° \searrow 12'32	
max. Earth dist.	-9638 Mar 09 j 19:26	8° \searrow 04'26	30.86835 AU				
morning rise	-9638 Mar 26 j 02:16	8° \searrow 40'32		conjunction	-9631 Mar 26 j 04:26	23° \searrow 48'25	-2°30'01
retrograde	-9638 Jun 23 j 08:06	10° \searrow 36'31		minimum elong	-9631 Mar 26 j 04:26	23° \searrow 48'25	2°30'35
opposition	-9638 Sep 08 j 20:40	9° \searrow 12'29	-2°47'48	max. Earth dist.	-9631 Mar 25 j 17:26	23° \searrow 47'24	30.91088 AU
min. Earth dist.	-9638 Sep 08 j 23:53	9° \searrow 12'16	28.87469 AU	morning rise	-9631 Apr 11 j 07:27	24° \searrow 24'09	
direct	-9638 Nov 26 j 10:11	7° \searrow 47'20		retrograde	-9631 Jul 08 j 16:30	26° \searrow 19'03	
evening set	-9637 Feb 24 j 07:28	9° \searrow 43'43		opposition	-9631 Sep 23 j 22:20	24° \searrow 55'30	-2°39'27
				min. Earth dist.	-9631 Sep 24 j 08:32	24° \searrow 54'47	28.91554 AU
conjunction	-9637 Mar 12 j 12:30	10° \searrow 19'38	-2°36'43	direct	-9631 Dec 12 j 01:04	23° \searrow 29'58	
minimum elong	-9637 Mar 12 j 12:31	10° \searrow 19'38	2°37'18	evening set	-9630 Mar 12 j 13:52	25° \searrow 26'50	
max. Earth dist.	-9637 Mar 12 j 07:52	10° \searrow 19'12	30.87655 AU				
morning rise	-9637 Mar 28 j 16:48	10° \searrow 55'30		conjunction	-9630 Mar 28 j 18:37	26° \searrow 02'41	-2°28'07
retrograde	-9637 Jun 25 j 21:41	12° \searrow 51'22		minimum elong	-9630 Mar 28 j 18:37	26° \searrow 02'41	2°28'38

Attention, astronomical year style is used: The year -9630 in astronomical counting style is the year 9631 BCE in historical counting style.

max. Earth dist.	-9630 Mar 28 j 05:47	26°30'13"0	30.91634 AU	min. Earth dist.	-9624 Oct 09 j 14:34	10°32'45"	28.97785 AU
morning rise	-9630 Apr 13 j 21:34	26°38'24"		direct	-9624 Dec 27 j 16:33	9°08'13"	
retrograde	-9630 Jul 11 j 05:00	28°33'09"		evening set	-9623 Mar 28 j 16:14	11°05'28"	
opposition	-9630 Sep 26 j 08:50	27°30'38"	-2°37'17"				
min. Earth dist.	-9630 Sep 26 j 19:26	27°30'53"	28.92156 AU	conjunction	-9623 Apr 13 j 20:17	11°41'17"	-2°08'39"
direct	-9630 Dec 14 j 12:49	25°34'03"		minimum elong	-9623 Apr 13 j 20:18	11°41'17"	2°09'07"
evening set	-9629 Mar 15 j 03:49	27°34'05"		max. Earth dist.	-9623 Apr 13 j 01:58	11°39'35"	30.98080 AU
				morning rise	-9623 Apr 29 j 21:31	12°16'52"	
conjunction	-9629 Mar 31 j 08:39	28°31'49"	-2°25'58"	retrograde	-9623 Jul 26 j 12:04	14°10'40"	
minimum elong	-9629 Mar 31 j 08:40	28°31'49"	2°26'31"	opposition	-9623 Oct 11 j 10:28	12°47'48"	-2°15'41"
max. Earth dist.	-9629 Mar 30 j 20:21	28°31'54"	30.92291 AU	min. Earth dist.	-9623 Oct 12 j 02:38	12°46'40"	28.98689 AU
morning rise	-9629 Apr 16 j 11:13	28°35'23"		direct	-9623 Dec 30 j 03:30	11°22'12"	
	-9629 May 20 j 23:53	0°		evening set	-9622 Mar 31 j 06:07	13°19'28"	
retrograde	-9629 Jul 13 j 16:28	0°47'07"					
	-9629 Sep 06 j 17:27	30°33'00"		conjunction	-9622 Apr 16 j 10:08	13°55'17"	-2°05'04"
opposition	-9629 Sep 28 j 19:21	29°32'40"	-2°34'53"	minimum elong	-9622 Apr 16 j 10:09	13°55'17"	2°05'31"
min. Earth dist.	-9629 Sep 29 j 06:59	29°32'51"	28.92871 AU	max. Earth dist.	-9622 Apr 15 j 15:39	13°53'34"	30.98940 AU
direct	-9629 Dec 17 j 02:54	27°35'04"		morning rise	-9622 May 02 j 11:00	14°30'50"	
evening set	-9628 Mar 16 j 18:00	29°35'02"			-9622 May 16 j 06:58	15°	
	-9628 Mar 19 j 00:47	0°		retrograde	-9622 Jul 28 j 22:17	16°24'29"	
				opposition	-9622 Oct 13 j 21:13	15°01'41"	-2°11'45"
conjunction	-9628 Apr 01 j 22:37	0°30'53"	-2°23'37"		-9622 Oct 14 j 21:06	15°	
minimum elong	-9628 Apr 01 j 22:38	0°30'53"	2°24'08"	min. Earth dist.	-9622 Oct 14 j 14:11	15°00'29"	28.99483 AU
max. Earth dist.	-9628 Apr 01 j 08:35	0°29'34"	30.93088 AU	direct	-9621 Jan 01 j 16:26	13°36'03"	
morning rise	-9628 Apr 18 j 01:08	1°06'33"			-9621 Mar 17 j 21:47	15°	
retrograde	-9628 Jul 15 j 05:09	3°01'00"		evening set	-9621 Apr 02 j 19:51	15°33'19"	
opposition	-9628 Sep 30 j 05:37	1°37'38"	-2°32'14"				
min. Earth dist.	-9628 Sep 30 j 17:02	1°36'50"	28.93729 AU	conjunction	-9621 Apr 18 j 23:33	16°09'06"	-2°01'17"
direct	-9628 Dec 18 j 15:57	0°12'01"		minimum elong	-9621 Apr 18 j 23:34	16°09'06"	2°01'45"
evening set	-9627 Mar 19 j 08:07	2°09'04"		max. Earth dist.	-9621 Apr 18 j 03:07	16°07'12"	30.99701 AU
				morning rise	-9621 May 05 j 00:18	16°44'38"	
conjunction	-9627 Apr 04 j 12:46	2°44'54"	-2°21'02"	retrograde	-9621 Jul 31 j 09:46	18°38'08"	
minimum elong	-9627 Apr 04 j 12:46	2°44'54"	2°21'34"	opposition	-9621 Oct 16 j 07:50	17°15'22"	-2°07'38"
max. Earth dist.	-9627 Apr 03 j 22:48	2°43'36"	30.94009 AU	min. Earth dist.	-9621 Oct 17 j 01:24	17°14'07"	29.00206 AU
morning rise	-9627 Apr 20 j 14:54	3°20'33"		direct	-9620 Jan 04 j 04:28	15°49'40"	
retrograde	-9627 Jul 17 j 15:45	5°14'53"		evening set	-9620 Apr 04 j 09:25	17°46'56"	
opposition	-9627 Oct 02 j 16:13	3°51'38"	-2°29'22"				
min. Earth dist.	-9627 Oct 03 j 05:14	3°50'42"	28.94698 AU	conjunction	-9620 Apr 20 j 13:08	18°22'42"	-1°57'21"
direct	-9627 Dec 21 j 03:52	2°26'01"		minimum elong	-9620 Apr 20 j 13:09	18°22'42"	1°57'47"
evening set	-9626 Mar 21 j 22:10	4°23'07"		max. Earth dist.	-9620 Apr 19 j 17:00	18°20'50"	31.00397 AU
max. Earth dist.	-9626 Apr 06 j 11:29	4°57'33"	30.95033 AU	morning rise	-9620 May 06 j 13:27	18°58'12"	
				retrograde	-9620 Aug 01 j 19:56	20°51'33"	
conjunction	-9626 Apr 07 j 02:37	4°58'58"	-2°18'15"	opposition	-9620 Oct 17 j 18:23	19°28'47"	-2°03'20"
minimum elong	-9626 Apr 07 j 02:37	4°58'58"	2°18'46"	min. Earth dist.	-9620 Oct 18 j 13:17	19°27'28"	29.00871 AU
morning rise	-9626 Apr 23 j 04:37	5°34'35"		direct	-9619 Jan 05 j 18:45	18°03'03"	
retrograde	-9626 Jul 20 j 04:25	7°28'47"		evening set	-9619 Apr 06 j 23:04	20°00'18"	
opposition	-9626 Oct 05 j 02:38	6°05'39"	-2°26'17"	max. Earth dist.	-9619 Apr 22 j 04:31	20°34'00"	31.01071 AU
min. Earth dist.	-9626 Oct 05 j 15:26	6°04'45"	28.95737 AU				
direct	-9626 Dec 23 j 16:46	4°40'04"		conjunction	-9619 Apr 23 j 02:26	20°36'03"	-1°53'14"
evening set	-9625 Mar 24 j 12:13	6°37'13"		minimum elong	-9619 Apr 23 j 02:27	20°36'03"	1°53'39"
				morning rise	-9619 May 09 j 02:38	21°11'31"	
conjunction	-9625 Apr 09 j 16:33	7°13'04"	-2°15'15"	retrograde	-9619 Aug 04 j 07:49	23°04'42"	
minimum elong	-9625 Apr 09 j 16:34	7°13'04"	2°15'46"	opposition	-9619 Oct 20 j 04:57	21°41'58"	-1°58'51"
max. Earth dist.	-9625 Apr 09 j 00:45	7°11'35"	30.96088 AU	min. Earth dist.	-9619 Oct 20 j 23:36	21°40'39"	29.01546 AU
morning rise	-9625 Apr 25 j 18:15	7°48'40"		direct	-9618 Jan 08 j 08:05	20°16'10"	
retrograde	-9625 Jul 22 j 15:22	9°42'45"		evening set	-9618 Apr 09 j 12:17	22°13'24"	
opposition	-9625 Oct 07 j 13:13	8°19'43"	-2°22'57"				
min. Earth dist.	-9625 Oct 08 j 03:48	8°18'41"	28.96793 AU	conjunction	-9618 Apr 25 j 15:33	22°49'08"	-1°48'58"
direct	-9625 Dec 26 j 02:53	6°54'08"		minimum elong	-9618 Apr 25 j 15:34	22°49'08"	1°49'22"
evening set	-9624 Mar 26 j 02:08	8°51'21"		max. Earth dist.	-9618 Apr 24 j 18:00	22°47'07"	31.01765 AU
				morning rise	-9618 May 11 j 15:16	23°24'34"	
conjunction	-9624 Apr 11 j 06:25	9°27'11"	-2°12'03"	retrograde	-9618 Aug 06 j 17:54	25°17'36"	
minimum elong	-9624 Apr 11 j 06:26	9°27'11"	2°12'31"	opposition	-9618 Oct 22 j 15:40	23°54'53"	-1°54'12"
max. Earth dist.	-9624 Apr 10 j 13:52	9°25'38"	30.97131 AU	min. Earth dist.	-9618 Oct 23 j 11:43	23°53'29"	29.02270 AU
morning rise	-9624 Apr 27 j 07:54	10°02'47"		direct	-9617 Jan 10 j 20:46	22°29'04"	
retrograde	-9624 Jul 24 j 01:29	11°56'43"		evening set	-9617 Apr 12 j 01:30	24°26'17"	
opposition	-9624 Oct 08 j 23:48	10°33'48"	-2°19'26"	max. Earth dist.	-9617 Apr 27 j 06:00	24°59'53"	31.02549 AU

Attention, astronomical year style is used: The year -9617 in astronomical counting style is the year 9618 BCE in historical counting style.

conjunction	-9617 Apr 28 j 04:27	25° \approx 01'59	-1°44'32	opposition	-9611 Nov 06 j 18:44	9° \approx 23'15	-1°17'21
minimum elong	-9617 Apr 28 j 04:29	25° \approx 01'59	1°44'55	min. Earth dist.	-9611 Nov 07 j 17:22	9° \approx 21'41	29.09880 AU
morning rise	-9617 May 14 j 04:00	25° \approx 37'23		direct	-9610 Jan 26 j 09:34	7° \approx 57'40	
retrograde	-9617 Aug 09 j 05:52	27° \approx 30'16		evening set	-9610 Apr 27 j 19:35	9° \approx 54'56	
opposition	-9617 Oct 25 j 02:07	26° \approx 07'36	-1°49'23				
min. Earth dist.	-9617 Oct 25 j 21:31	26° \approx 06'14	29.03100 AU	conjunction	-9610 May 13 j 20:25	10° \approx 30'30	-1°09'37
direct	-9616 Jan 13 j 10:29	24° \approx 41'46		minimum elong	-9610 May 13 j 20:25	10° \approx 30'30	1°09'52
evening set	-9616 Apr 13 j 14:32	26° \approx 38'58		max. Earth dist.	-9610 May 12 j 19:01	10° \approx 28'08	31.10332 AU
				morning rise	-9610 May 29 j 17:26	11° \approx 05'44	
conjunction	-9616 Apr 29 j 17:19	27° \approx 14'39	-1°39'57	retrograde	-9610 Aug 24 j 07:06	12° \approx 58'03	
minimum elong	-9616 Apr 29 j 17:20	27° \approx 14'39	1°40'19	opposition	-9610 Nov 09 j 05:41	11° \approx 35'56	-1°11'34
max. Earth dist.	-9616 Apr 28 j 18:48	27° \approx 12'33	31.03442 AU	min. Earth dist.	-9610 Nov 10 j 03:58	11° \approx 34'23	29.10903 AU
morning rise	-9616 May 15 j 16:28	27° \approx 50'02		direct	-9609 Jan 28 j 21:58	10° \approx 10'22	
retrograde	-9616 Aug 10 j 16:02	29° \approx 42'48		evening set	-9609 Apr 30 j 08:10	12° \approx 07'37	
opposition	-9616 Oct 26 j 12:49	28° \approx 20'11	-1°44'24	max. Earth dist.	-9609 May 15 j 07:39	12° \approx 40'49	31.11299 AU
min. Earth dist.	-9616 Oct 27 j 09:22	28° \approx 18'45	29.04057 AU				
direct	-9615 Jan 14 j 21:38	26° \approx 54'21		conjunction	-9609 May 16 j 08:47	12° \approx 43'09	-1°04'10
evening set	-9615 Apr 16 j 03:32	28° \approx 51'34		minimum elong	-9609 May 16 j 08:48	12° \approx 43'10	1°04'24
max. Earth dist.	-9615 May 01 j 07:29	29° \approx 25'07	31.04477 AU	morning rise	-9609 Jun 01 j 05:13	13° \approx 18'22	
				retrograde	-9609 Aug 26 j 17:24	15° \approx 10'35	
conjunction	-9615 May 02 j 06:03	29° \approx 27'14	-1°35'13	opposition	-9609 Nov 11 j 16:40	13° \approx 48'31	-1°05'42
minimum elong	-9615 May 02 j 06:04	29° \approx 27'14	1°35'34	min. Earth dist.	-9609 Nov 12 j 16:31	13° \approx 46'52	29.11814 AU
	-9615 May 17 j 00:27	0° \approx		direct	-9608 Jan 31 j 10:45	12° \approx 22'58	
morning rise	-9615 May 18 j 04:53	0° \approx 02'35		evening set	-9608 May 01 j 20:46	14° \approx 20'11	
retrograde	-9615 Aug 13 j 01:44	1° \approx 55'14					
opposition	-9615 Oct 28 j 23:25	0° \approx 32'43	-1°39'16	conjunction	-9608 May 17 j 20:54	14° \approx 55'42	-0°58'37
min. Earth dist.	-9615 Oct 29 j 19:29	0° \approx 31'18	29.05135 AU	minimum elong	-9608 May 17 j 20:55	14° \approx 55'42	0°58'51
	-9615 Nov 17 j 22:06	30° \approx		max. Earth dist.	-9608 May 16 j 18:39	14° \approx 53'15	31.12173 AU
direct	-9614 Jan 17 j 10:59	29° \approx 06'55		morning rise	-9608 Jun 02 j 17:04	15° \approx 30'51	
	-9614 Mar 17 j 03:20	0° \approx		retrograde	-9608 Aug 28 j 05:35	17° \approx 23'00	
evening set	-9614 Apr 18 j 16:29	1° \approx 04'08		opposition	-9608 Nov 13 j 03:36	16° \approx 00'57	-0°59'44
				min. Earth dist.	-9608 Nov 14 j 02:57	15° \approx 59'20	29.12631 AU
conjunction	-9614 May 04 j 18:40	1° \approx 39'47	-1°30'21	direct	-9607 Feb 02 j 01:21	14° \approx 35'24	
minimum elong	-9614 May 04 j 18:41	1° \approx 39'47	1°30'41	evening set	-9607 May 04 j 09:08	16° \approx 32'34	
max. Earth dist.	-9614 May 03 j 19:16	1° \approx 37'36	31.05621 AU	max. Earth dist.	-9607 May 19 j 06:35	17° \approx 05'36	31.12957 AU
morning rise	-9614 May 20 j 17:10	2° \approx 15'07					
retrograde	-9614 Aug 15 j 12:08	4° \approx 07'42		conjunction	-9607 May 20 j 08:55	17° \approx 08'03	-0°53'00
opposition	-9614 Oct 31 j 10:10	2° \approx 45'16	-1°33'59	minimum elong	-9607 May 20 j 08:55	17° \approx 08'03	0°53'12
min. Earth dist.	-9614 Nov 01 j 06:54	2° \approx 43'49	29.06327 AU	morning rise	-9607 Jun 05 j 04:32	17° \approx 43'10	
direct	-9613 Jan 19 j 21:01	1° \approx 19'31		retrograde	-9607 Aug 30 j 15:34	19° \approx 35'13	
evening set	-9613 Apr 21 j 05:07	3° \approx 16'45		opposition	-9607 Nov 15 j 14:41	18° \approx 13'11	-0°53'41
max. Earth dist.	-9613 May 06 j 08:17	3° \approx 50'15	31.06850 AU	min. Earth dist.	-9607 Nov 16 j 15:16	18° \approx 11'29	29.13396 AU
				direct	-9606 Feb 04 j 13:36	16° \approx 47'38	
conjunction	-9613 May 07 j 07:08	3° \approx 52'23	-1°25'21	evening set	-9606 May 06 j 21:21	18° \approx 44'45	
minimum elong	-9613 May 07 j 07:09	3° \approx 52'23	1°25'40				
morning rise	-9613 May 23 j 05:13	4° \approx 27'42		conjunction	-9606 May 22 j 20:42	19° \approx 20'11	-0°47'19
retrograde	-9613 Aug 17 j 21:54	6° \approx 20'12		minimum elong	-9606 May 22 j 20:43	19° \approx 20'11	0°47'29
opposition	-9613 Nov 02 j 20:57	4° \approx 57'52	-1°28'34	max. Earth dist.	-9606 May 21 j 18:25	19° \approx 17'44	31.13723 AU
min. Earth dist.	-9613 Nov 03 j 18:08	4° \approx 56'23	29.07549 AU	morning rise	-9606 Jun 07 j 15:55	19° \approx 55'16	
direct	-9612 Jan 22 j 09:00	3° \approx 32'11		retrograde	-9606 Sep 02 j 00:48	21° \approx 47'14	
evening set	-9612 Apr 22 j 18:03	5° \approx 29'26		opposition	-9606 Nov 18 j 01:41	20° \approx 25'12	-0°47'34
				min. Earth dist.	-9606 Nov 19 j 01:41	20° \approx 23'32	29.14153 AU
conjunction	-9612 May 08 j 19:36	6° \approx 05'03	-1°20'13	direct	-9605 Feb 07 j 03:20	18° \approx 59'38	
minimum elong	-9612 May 08 j 19:37	6° \approx 05'03	1°20'30	evening set	-9605 May 09 j 09:19	20° \approx 56'41	
max. Earth dist.	-9612 May 07 j 19:15	6° \approx 02'47	31.08077 AU	max. Earth dist.	-9605 May 24 j 05:21	21° \approx 29'36	31.14498 AU
morning rise	-9612 May 24 j 17:26	6° \approx 40'21					
retrograde	-9612 Aug 19 j 09:11	8° \approx 32'47		conjunction	-9605 May 25 j 08:11	21° \approx 32'06	-0°41'34
opposition	-9612 Nov 04 j 07:39	7° \approx 10'33	-1°23'01	minimum elong	-9605 May 25 j 08:12	21° \approx 32'06	0°41'43
min. Earth dist.	-9612 Nov 05 j 05:07	7° \approx 09'03	29.08758 AU	morning rise	-9605 Jun 10 j 02:59	22° \approx 07'09	
direct	-9611 Jan 23 j 20:12	5° \approx 44'55		retrograde	-9605 Sep 04 j 10:51	23° \approx 59'01	
evening set	-9611 Apr 25 j 06:50	7° \approx 42'11		opposition	-9605 Nov 20 j 12:44	22° \approx 37'00	-0°41'24
max. Earth dist.	-9611 May 10 j 08:25	8° \approx 15'34	31.09252 AU	min. Earth dist.	-9605 Nov 21 j 13:06	22° \approx 35'19	29.14961 AU
				direct	-9604 Feb 09 j 14:21	21° \approx 11'26	
conjunction	-9611 May 11 j 08:12	8° \approx 17'47	-1°14'58	evening set	-9604 May 10 j 21:13	23° \approx 08'26	
minimum elong	-9611 May 11 j 08:13	8° \approx 17'47	1°15'14				
morning rise	-9611 May 27 j 05:28	8° \approx 53'02		conjunction	-9604 May 26 j 19:43	23° \approx 43'48	-0°35'46
retrograde	-9611 Aug 21 j 19:18	10° \approx 45'25		minimum elong	-9604 May 26 j 19:43	23° \approx 43'48	0°35'53

Planetary Phenomena of Neptune from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -9604 in astronomical counting style is the year 9605 BCE in historical counting style.

max. Earth dist.	-9604 May 25 j 17:47	23° \mathbf{H} 41'23	31.15344 AU	conjunction	-9598 Jun 09 j 14:33	6° \mathbf{Y} 52'46	-0°00'09
morning rise	-9604 Jun 11 j 13:56	24° \mathbf{H} 18'49		minimum elong	-9598 Jun 09 j 14:34	6° \mathbf{Y} 52'46	0°00'09
retrograde	-9604 Sep 05 j 19:32	26° \mathbf{H} 10'37		behind sun begin	-9598 Jun 09 j 08:11	6° \mathbf{Y} 52'12	
opposition	-9604 Nov 21 j 23:45	24° \mathbf{H} 48'37	-0°35'10	behind sun end	-9598 Jun 09 j 20:56	6° \mathbf{Y} 53'20	
min. Earth dist.	-9604 Nov 23 j 00:04	24° \mathbf{H} 46'56	29.15840 AU	max. Earth dist.	-9598 Jun 08 j 12:42	6° \mathbf{Y} 50'21	31.21656 AU
direct	-9603 Feb 11 j 02:59	23° \mathbf{H} 23'04		asc. node	-9598 Jun 18 j 04:39	7° \mathbf{Y} 12'00	
evening set	-9603 May 13 j 09:12	25° \mathbf{H} 20'01		morning rise	-9598 Jun 25 j 05:40	7° \mathbf{Y} 27'34	
max. Earth dist.	-9603 May 28 j 04:18	25° \mathbf{H} 52'51	31.16283 AU	retrograde	-9598 Sep 19 j 10:44	9° \mathbf{Y} 19'18	
				opposition	-9598 Dec 05 j 19:32	7° \mathbf{Y} 57'34	0°02'58
conjunction	-9603 May 29 j 07:03	25° \mathbf{H} 55'21	-0°29'55	min. Earth dist.	-9598 Dec 06 j 20:17	7° \mathbf{Y} 55'53	29.22144 AU
minimum elong	-9603 May 29 j 07:03	25° \mathbf{H} 55'21	0°30'01	direct	-9597 Feb 25 j 02:52	6° \mathbf{Y} 32'23	
morning rise	-9603 Jun 14 j 00:53	26° \mathbf{H} 30'20		evening set	-9597 May 27 j 06:44	8° \mathbf{Y} 29'10	
retrograde	-9603 Sep 08 j 05:42	28° \mathbf{H} 22'05		max. Earth dist.	-9597 Jun 10 j 23:38	9° \mathbf{Y} 01'52	31.22520 AU
opposition	-9603 Nov 24 j 10:54	27° \mathbf{H} 00'07	-0°28'53				
min. Earth dist.	-9603 Nov 25 j 10:41	26° \mathbf{H} 58'29	29.16837 AU	conjunction	-9597 Jun 12 j 01:25	9° \mathbf{Y} 04'16	0°05'55
direct	-9602 Feb 13 j 14:02	25° \mathbf{H} 34'36		minimum elong	-9597 Jun 12 j 01:24	9° \mathbf{Y} 04'16	0°05'56
evening set	-9602 May 15 j 20:45	27° \mathbf{H} 31'31		behind sun begin	-9597 Jun 11 j 19:14	9° \mathbf{Y} 03'43	
				behind sun end	-9597 Jun 12 j 07:35	9° \mathbf{Y} 04'49	
conjunction	-9602 May 31 j 18:16	28° \mathbf{H} 06'49	-0°24'01	morning rise	-9597 Jun 27 j 16:00	9° \mathbf{Y} 39'01	
minimum elong	-9602 May 31 j 18:16	28° \mathbf{H} 06'49	0°24'07	retrograde	-9597 Sep 21 j 20:32	11° \mathbf{Y} 30'45	
max. Earth dist.	-9602 May 30 j 16:55	28° \mathbf{H} 04'27	31.17329 AU	opposition	-9597 Dec 08 j 07:02	10° \mathbf{Y} 09'03	0°09'22
morning rise	-9602 Jun 16 j 11:27	28° \mathbf{H} 41'45		min. Earth dist.	-9597 Dec 09 j 07:15	10° \mathbf{Y} 07'23	29.22923 AU
	-9602 Jul 28 j 02:38	0° \mathbf{Y}		direct	-9596 Feb 27 j 16:45	8° \mathbf{Y} 43'54	
retrograde	-9602 Sep 10 j 14:35	0° \mathbf{Y} 33'29		evening set	-9596 May 28 j 18:12	10° \mathbf{Y} 40'38	
	-9602 Oct 26 j 16:13	30° \mathbf{R} \mathbf{H}		max. Earth dist.	-9596 Jun 12 j 09:41	11° \mathbf{Y} 13'13	31.23225 AU
opposition	-9602 Nov 26 j 22:09	29° \mathbf{H} 11'34	-0°22'34				
min. Earth dist.	-9602 Nov 27 j 22:26	29° \mathbf{H} 09'54	29.17917 AU	conjunction	-9596 Jun 13 j 12:12	11° \mathbf{Y} 15'42	0°11'51
direct	-9601 Feb 16 j 01:55	27° \mathbf{H} 46'07		minimum elong	-9596 Jun 13 j 12:12	11° \mathbf{Y} 15'42	0°11'54
evening set	-9601 May 18 j 08:31	29° \mathbf{H} 43'00		behind sun begin	-9596 Jun 13 j 07:41	11° \mathbf{Y} 15'17	
	-9601 May 26 j 01:31	0° \mathbf{Y}		behind sun end	-9596 Jun 13 j 16:42	11° \mathbf{Y} 16'06	
max. Earth dist.	-9601 Jun 02 j 03:08	0° \mathbf{Y} 15'49	31.18452 AU	morning rise	-9596 Jun 29 j 02:15	11° \mathbf{Y} 50'25	
				retrograde	-9596 Sep 23 j 07:04	13° \mathbf{Y} 42'08	
conjunction	-9601 Jun 03 j 05:22	0° \mathbf{Y} 18'15	-0°18'05	opposition	-9596 Dec 09 j 18:35	12° \mathbf{Y} 20'26	0°15'44
minimum elong	-9601 Jun 03 j 05:22	0° \mathbf{Y} 18'15	0°18'09	min. Earth dist.	-9596 Dec 10 j 19:14	12° \mathbf{Y} 18'45	29.23572 AU
morning rise	-9601 Jun 18 j 22:13	0° \mathbf{Y} 53'10		direct	-9595 Mar 01 j 04:23	10° \mathbf{Y} 55'19	
retrograde	-9601 Sep 13 j 02:03	2° \mathbf{Y} 44'53		evening set	-9595 May 31 j 05:27	12° \mathbf{Y} 52'00	
opposition	-9601 Nov 29 j 09:09	1° \mathbf{Y} 23'01	-0°16'12				
min. Earth dist.	-9601 Nov 30 j 08:33	1° \mathbf{Y} 21'25	29.19054 AU	conjunction	-9595 Jun 15 j 22:58	13° \mathbf{Y} 27'00	0°17'47
	-9600 Feb 06 j 10:33	30° \mathbf{R} \mathbf{H}		minimum elong	-9595 Jun 15 j 22:58	13° \mathbf{Y} 27'00	0°17'51
direct	-9600 Feb 18 j 12:54	29° \mathbf{H} 57'38		max. Earth dist.	-9595 Jun 14 j 21:18	13° \mathbf{Y} 24'36	31.23814 AU
	-9600 Mar 01 j 17:00	0° \mathbf{Y}		morning rise	-9595 Jul 01 j 12:22	14° \mathbf{Y} 01'41	
evening set	-9600 May 19 j 20:08	1° \mathbf{Y} 54'31		retrograde	-9595 Sep 25 j 15:51	15° \mathbf{Y} 53'24	
				opposition	-9595 Dec 12 j 06:17	14° \mathbf{Y} 31'42	0°22'04
conjunction	-9600 Jun 04 j 16:35	2° \mathbf{Y} 29'44	-0°12'08	min. Earth dist.	-9595 Dec 13 j 06:57	14° \mathbf{Y} 30'00	29.24101 AU
minimum elong	-9600 Jun 04 j 16:35	2° \mathbf{Y} 29'44	0°12'11	direct	-9594 Mar 03 j 17:40	13° \mathbf{Y} 06'36	
behind sun begin	-9600 Jun 04 j 12:14	2° \mathbf{Y} 29'20		evening set	-9594 Jun 02 j 16:32	15° \mathbf{Y} 03'11	
behind sun end	-9600 Jun 04 j 20:57	2° \mathbf{Y} 30'07		max. Earth dist.	-9594 Jun 17 j 06:51	15° \mathbf{Y} 35'41	31.24307 AU
max. Earth dist.	-9600 Jun 03 j 15:11	2° \mathbf{Y} 27'22	31.19585 AU				
morning rise	-9600 Jun 20 j 08:46	3° \mathbf{Y} 04'36		conjunction	-9594 Jun 18 j 09:17	15° \mathbf{Y} 38'09	0°23'42
retrograde	-9600 Sep 14 j 12:15	4° \mathbf{Y} 56'20		minimum elong	-9594 Jun 18 j 09:17	15° \mathbf{Y} 38'09	0°23'47
opposition	-9600 Nov 30 j 20:34	3° \mathbf{Y} 34'31	-0°09'49	morning rise	-9594 Jul 03 j 22:16	16° \mathbf{Y} 12'47	
min. Earth dist.	-9600 Dec 01 j 21:06	3° \mathbf{Y} 32'50	29.20171 AU	retrograde	-9594 Sep 28 j 01:46	18° \mathbf{Y} 04'30	
direct	-9599 Feb 20 j 01:18	2° \mathbf{Y} 09'13		opposition	-9594 Dec 14 j 17:52	16° \mathbf{Y} 42'47	0°28'22
evening set	-9599 May 22 j 07:46	4° \mathbf{Y} 06'04		min. Earth dist.	-9594 Dec 15 j 18:01	16° \mathbf{Y} 41'07	29.24576 AU
max. Earth dist.	-9599 Jun 06 j 01:32	4° \mathbf{Y} 38'49	31.20675 AU	direct	-9593 Mar 06 j 04:52	15° \mathbf{Y} 17'41	
				evening set	-9593 Jun 05 j 03:26	17° \mathbf{Y} 14'12	
conjunction	-9599 Jun 07 j 03:32	4° \mathbf{Y} 41'14	-0°06'11				
minimum elong	-9599 Jun 07 j 03:31	4° \mathbf{Y} 41'14	0°06'12	conjunction	-9593 Jun 20 j 19:43	17° \mathbf{Y} 49'08	0°29'34
behind sun begin	-9599 Jun 06 j 21:23	4° \mathbf{Y} 40'41		minimum elong	-9593 Jun 20 j 19:43	17° \mathbf{Y} 49'08	0°29'41
behind sun end	-9599 Jun 07 j 09:40	4° \mathbf{Y} 41'47		max. Earth dist.	-9593 Jun 19 j 18:44	17° \mathbf{Y} 46'47	31.24760 AU
morning rise	-9599 Jun 22 j 19:16	5° \mathbf{Y} 16'04		morning rise	-9593 Jul 06 j 07:58	18° \mathbf{Y} 23'43	
retrograde	-9599 Sep 17 j 00:15	7° \mathbf{Y} 07'48		retrograde	-9593 Sep 30 j 10:03	20° \mathbf{Y} 15'27	
opposition	-9599 Dec 03 j 07:58	5° \mathbf{Y} 46'03	-0°03'25	opposition	-9593 Dec 17 j 05:24	18° \mathbf{Y} 53'41	0°34'37
min. Earth dist.	-9599 Dec 04 j 07:40	5° \mathbf{Y} 44'25	29.21212 AU	min. Earth dist.	-9593 Dec 18 j 05:58	18° \mathbf{Y} 52'00	29.25027 AU
direct	-9598 Feb 22 j 15:06	4° \mathbf{Y} 20'48		direct	-9592 Mar 07 j 16:35	17° \mathbf{Y} 28'37	
evening set	-9598 May 24 j 19:20	6° \mathbf{Y} 17'38		evening set	-9592 Jun 06 j 14:23	19° \mathbf{Y} 25'04	
				max. Earth dist.	-9592 Jun 21 j 04:21	19° \mathbf{Y} 57'32	31.25228 AU

Attention, astronomical year style is used: The year -9592 in astronomical counting style is the year 9593 BCE in historical counting style.

conjunction	-9592 Jun 22 j 05:51	19° Υ 59'56	0°35'23	opposition	-9585 Jan 01 j 16:13	4° S 08'45	1°16'26
minimum elong	-9592 Jun 22 j 05:51	19° Υ 59'56	0°35'30	min. Earth dist.	-9585 Jan 02 j 13:05	4° S 07'20	29.29643 AU
morning rise	-9592 Jul 07 j 17:41	20° Υ 34'29		direct	-9585 Mar 24 j 06:03	2° S 44'09	
retrograde	-9592 Oct 01 j 20:58	22° Υ 26'13		evening set	-9585 Jun 22 j 15:59	4° S 40'18	
opposition	-9592 Dec 18 j 17:00	21° Υ 04'27	0°40'49	max. Earth dist.	-9585 Jul 07 j 04:56	5° S 12'46	31.29841 AU
min. Earth dist.	-9592 Dec 19 j 16:07	21° Υ 02'52	29.25526 AU				
direct	-9591 Mar 10 j 03:18	19° Υ 39'24		conjunction	-9585 Jul 08 j 02:48	5° S 14'50	1°14'13
evening set	-9591 Jun 09 j 00:59	21° Υ 35'47		minimum elong	-9585 Jul 08 j 02:47	5° S 14'50	1°14'30
				morning rise	-9585 Jul 23 j 10:32	5° S 49'06	
conjunction	-9591 Jun 24 j 15:55	22° Υ 10'36	0°41'09	retrograde	-9585 Oct 17 j 21:51	7° S 41'19	
minimum elong	-9591 Jun 24 j 15:55	22° Υ 10'36	0°41'18	opposition	-9584 Jan 04 j 04:07	6° S 19'35	1°22'02
max. Earth dist.	-9591 Jun 23 j 15:48	22° Υ 08'21	31.25753 AU	min. Earth dist.	-9584 Jan 05 j 00:22	6° S 18'13	29.30152 AU
morning rise	-9591 Jul 10 j 02:59	22° Υ 45'07		direct	-9584 Mar 25 j 17:07	4° S 55'02	
retrograde	-9591 Oct 04 j 06:43	24° Υ 36'54		evening set	-9584 Jun 24 j 02:19	6° S 51'06	
opposition	-9591 Dec 21 j 04:51	23° Υ 15'06	0°46'57				
min. Earth dist.	-9591 Dec 22 j 04:21	23° Υ 13'30	29.26104 AU	conjunction	-9584 Jul 09 j 12:37	7° S 25'36	1°19'24
direct	-9590 Mar 12 j 15:35	21° Υ 50'06		minimum elong	-9584 Jul 09 j 12:36	7° S 25'36	1°19'41
evening set	-9590 Jun 11 j 11:40	23° Υ 46'26		max. Earth dist.	-9584 Jul 08 j 16:07	7° S 23'41	31.30267 AU
max. Earth dist.	-9590 Jun 26 j 01:57	24° Υ 18'58	31.26385 AU	morning rise	-9584 Jul 24 j 19:35	7° S 59'50	
				retrograde	-9584 Oct 19 j 06:21	9° S 52'07	
conjunction	-9590 Jun 27 j 01:51	24° Υ 21'13	0°46'51	opposition	-9583 Jan 05 j 16:24	8° S 30'22	1°27'30
minimum elong	-9590 Jun 27 j 01:51	24° Υ 21'13	0°47'01	min. Earth dist.	-9583 Jan 06 j 13:03	8° S 28'58	29.30511 AU
morning rise	-9590 Jul 12 j 12:27	24° Υ 55'41		direct	-9583 Mar 28 j 05:12	7° S 05'51	
retrograde	-9590 Oct 06 j 18:28	26° Υ 47'31		evening set	-9583 Jun 26 j 12:36	9° S 01'50	
opposition	-9590 Dec 23 j 16:27	25° Υ 25'43	0°53'01				
min. Earth dist.	-9590 Dec 24 j 14:22	25° Υ 24'14	29.26781 AU	conjunction	-9583 Jul 11 j 22:04	9° S 36'16	1°24'28
direct	-9589 Mar 15 j 04:20	24° Υ 00'48		minimum elong	-9583 Jul 11 j 22:04	9° S 36'16	1°24'47
evening set	-9589 Jun 13 j 22:09	25° Υ 57'06		max. Earth dist.	-9583 Jul 11 j 01:04	9° S 34'18	31.30558 AU
				morning rise	-9583 Jul 27 j 04:40	10° S 10'28	
conjunction	-9589 Jun 29 j 11:45	26° Υ 31'49	0°52'30	retrograde	-9583 Oct 21 j 17:22	12° S 02'49	
minimum elong	-9589 Jun 29 j 11:44	26° Υ 31'49	0°52'42	opposition	-9582 Jan 08 j 04:35	10° S 41'01	1°32'52
max. Earth dist.	-9589 Jun 28 j 12:35	26° Υ 29'39	31.27094 AU	min. Earth dist.	-9582 Jan 08 j 23:49	10° S 39'43	29.30746 AU
morning rise	-9589 Jul 14 j 21:44	27° Υ 06'15		direct	-9582 Mar 30 j 16:27	9° S 16'31	
retrograde	-9589 Oct 09 j 05:00	28° Υ 58'10		evening set	-9582 Jun 28 j 22:40	11° S 12'25	
opposition	-9589 Dec 26 j 04:16	27° Υ 36'23	0°59'00	max. Earth dist.	-9582 Jul 13 j 11:45	11° S 44'56	31.30727 AU
min. Earth dist.	-9589 Dec 27 j 02:32	27° Υ 34'52	29.27528 AU				
direct	-9588 Mar 16 j 15:12	26° Υ 11'32		conjunction	-9582 Jul 14 j 07:38	11° S 46'48	1°29'25
evening set	-9588 Jun 15 j 08:38	28° Υ 07'49		minimum elong	-9582 Jul 14 j 07:38	11° S 46'48	1°29'44
				morning rise	-9582 Jul 29 j 13:33	12° S 20'57	
conjunction	-9588 Jun 30 j 21:34	28° Υ 42'29	0°58'04	retrograde	-9582 Oct 24 j 02:44	14° S 13'22	
minimum elong	-9588 Jun 30 j 21:34	28° Υ 42'29	0°58'17	opposition	-9581 Jan 10 j 16:45	12° S 51'30	1°38'04
max. Earth dist.	-9588 Jun 29 j 23:19	28° Υ 40'24	31.27855 AU	min. Earth dist.	-9581 Jan 11 j 12:36	12° S 50'09	29.30882 AU
morning rise	-9588 Jul 16 j 06:57	29° Υ 16'52		direct	-9581 Apr 02 j 04:06	11° S 27'01	
	-9588 Aug 06 j 01:24	0° S		evening set	-9581 Jul 01 j 08:39	13° S 22'49	
retrograde	-9588 Oct 10 j 15:05	1° S 08'51					
	-9588 Dec 19 j 17:59	30° R Υ		conjunction	-9581 Jul 16 j 16:56	13° S 57'09	1°34'13
opposition	-9588 Dec 27 j 16:04	29° Υ 47'07	1°04'54	minimum elong	-9581 Jul 16 j 16:55	13° S 57'09	1°34'35
min. Earth dist.	-9588 Dec 28 j 13:15	29° Υ 45'40	29.28283 AU	max. Earth dist.	-9581 Jul 15 j 21:19	13° S 55'18	31.30832 AU
direct	-9587 Mar 19 j 04:56	28° Υ 22'21		morning rise	-9581 Jul 31 j 22:26	14° S 31'16	
	-9587 Jun 09 j 03:40	0° S			-9581 Aug 14 j 09:54	15° S	
evening set	-9587 Jun 17 j 19:11	0° S 18'36		retrograde	-9581 Oct 26 j 13:45	16° S 23'44	
max. Earth dist.	-9587 Jul 02 j 08:55	0° S 51'07	31.28596 AU	opposition	-9580 Jan 13 j 04:53	15° S 01'48	1°43'09
				min. Earth dist.	-9580 Jan 13 j 23:06	15° S 00'34	29.30966 AU
conjunction	-9587 Jul 03 j 07:21	0° S 53'13	1°03'32		-9580 Jan 14 j 07:29	15° R S	
minimum elong	-9587 Jul 03 j 07:21	0° S 53'13	1°03'47	direct	-9580 Apr 03 j 16:16	13° S 37'19	
morning rise	-9587 Jul 18 j 16:13	1° S 27'34			-9580 Jun 17 j 03:15	15° S	
retrograde	-9587 Oct 13 j 02:47	3° S 19'38		evening set	-9580 Jul 02 j 18:28	15° S 33'02	
opposition	-9587 Dec 30 j 04:07	1° S 57'55	1°10'43	max. Earth dist.	-9580 Jul 17 j 07:18	16° S 05'33	31.30900 AU
min. Earth dist.	-9587 Dec 31 j 01:11	1° S 56'29	29.29015 AU				
direct	-9586 Mar 21 j 16:46	0° S 33'14		conjunction	-9580 Jul 18 j 02:06	16° S 07'19	1°38'54
evening set	-9586 Jun 20 j 05:27	2° S 29'26		minimum elong	-9580 Jul 18 j 02:05	16° S 07'19	1°39'16
				morning rise	-9580 Aug 02 j 07:02	16° S 41'24	
conjunction	-9586 Jul 05 j 17:05	3° S 04'01	1°08'56	retrograde	-9580 Oct 28 j 00:13	18° S 33'56	
minimum elong	-9586 Jul 05 j 17:05	3° S 04'01	1°09'11	opposition	-9579 Jan 14 j 17:11	17° S 11'56	1°48'04
max. Earth dist.	-9586 Jul 04 j 19:58	3° S 02'02	31.29278 AU	min. Earth dist.	-9579 Jan 15 j 11:27	17° S 10'42	29.31065 AU
morning rise	-9586 Jul 21 j 01:15	3° S 38'20		direct	-9579 Apr 06 j 02:57	15° S 47'29	
retrograde	-9586 Oct 15 j 11:46	5° S 30'28		evening set	-9579 Jul 05 j 04:13	17° S 43'07	

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Attention, astronomical year style is used: The year -9579 in astronomical counting style is the year 9580 BCE in historical counting style.

conjunction	-9579 Jul 20 j 11:15	18°8'17"21	1°43'26	retrograde	-9573 Nov 13 j 00:56	3°II45'43	
minimum elong	-9579 Jul 20 j 11:14	18°8'17"21	1°43'49	opposition	-9572 Jan 31 j 08:08	2°II23'38	2°17'49
max. Earth dist.	-9579 Jul 19 j 17:53	18°8'15"43	31.31023 AU	min. Earth dist.	-9572 Jan 31 j 20:29	2°II22'48	29.33272 AU
morning rise	-9579 Aug 04 j 15:38	18°8'51"23		direct	-9572 Apr 21 j 12:56	0°II59'46	
retrograde	-9579 Oct 30 j 10:24	20°8'44"00		evening set	-9572 Jul 19 j 23:07	2°II55'02	
opposition	-9578 Jan 17 j 05:28	19°8'21"57	1°52'50				
min. Earth dist.	-9578 Jan 17 j 22:03	19°8'20"50	29.31228 AU	conjunction	-9572 Aug 04 j 02:10	3°II29'01	2°10'41
direct	-9578 Apr 08 j 16:40	17°8'57"33		minimum elong	-9572 Aug 04 j 02:09	3°II29'01	2°11'10
evening set	-9578 Jul 07 j 13:51	19°8'53"06		max. Earth dist.	-9572 Aug 03 j 14:27	3°II27'55	31.33182 AU
				morning rise	-9572 Aug 19 j 03:31	4°II02'52	
conjunction	-9578 Jul 22 j 20:11	20°8'27"18	1°47'49	retrograde	-9572 Nov 14 j 12:31	5°II56'27	
minimum elong	-9578 Jul 22 j 20:10	20°8'27"18	1°48'12	opposition	-9571 Feb 01 j 20:50	4°II34'21	2°21'20
max. Earth dist.	-9578 Jul 22 j 03:04	20°8'25"41	31.31226 AU	min. Earth dist.	-9571 Feb 02 j 07:33	4°II33'38	29.33377 AU
morning rise	-9578 Aug 07 j 00:11	21°8'01"18		direct	-9571 Apr 24 j 00:03	3°II10'32	
retrograde	-9578 Nov 01 j 22:10	22°8'54"02		evening set	-9571 Jul 22 j 08:41	5°II05'45	
opposition	-9577 Jan 19 j 17:45	21°8'31"57	1°57'26				
min. Earth dist.	-9577 Jan 20 j 09:34	21°8'30"53	29.31498 AU	conjunction	-9571 Aug 06 j 11:14	5°II39'42	2°13'53
direct	-9577 Apr 11 j 04:06	20°8'07"36		minimum elong	-9571 Aug 06 j 11:13	5°II39'42	2°14'23
evening set	-9577 Jul 09 j 23:24	22°8'03"06		max. Earth dist.	-9571 Aug 05 j 23:54	5°II38'38	31.33203 AU
				morning rise	-9571 Aug 21 j 12:15	6°II13'32	
conjunction	-9577 Jul 25 j 05:18	22°8'37"15	1°52'02	retrograde	-9571 Nov 16 j 23:56	8°II07'15	
minimum elong	-9577 Jul 25 j 05:17	22°8'37"15	1°52'27	opposition	-9570 Feb 04 j 09:41	6°II45'06	2°24'39
max. Earth dist.	-9577 Jul 24 j 14:05	22°8'35"49	31.31534 AU	min. Earth dist.	-9570 Feb 04 j 20:41	6°II44'21	29.33342 AU
morning rise	-9577 Aug 09 j 08:40	23°8'11"13		direct	-9570 Apr 26 j 09:57	5°II21'20	
retrograde	-9577 Nov 04 j 07:18	25°8'04"04		evening set	-9570 Jul 24 j 18:02	7°II16'27	
opposition	-9576 Jan 22 j 05:58	23°8'41"59	2°01'52				
min. Earth dist.	-9576 Jan 22 j 20:56	23°8'40"59	29.31844 AU	conjunction	-9570 Aug 08 j 20:13	7°II50'22	2°16'53
direct	-9576 Apr 12 j 16:50	22°8'17"44		minimum elong	-9570 Aug 08 j 20:13	7°II50'22	2°17'23
evening set	-9576 Jul 11 j 09:05	24°8'13"12		max. Earth dist.	-9570 Aug 08 j 10:08	7°II49'25	31.33092 AU
				morning rise	-9570 Aug 23 j 20:52	8°II24'11	
conjunction	-9576 Jul 26 j 14:13	24°8'47"19	1°56'06	retrograde	-9570 Nov 19 j 10:58	10°II18'00	
minimum elong	-9576 Jul 26 j 14:12	24°8'47"18	1°56'32	opposition	-9569 Feb 06 j 22:24	8°II55'47	2°27'45
max. Earth dist.	-9576 Jul 25 j 22:59	24°8'45"52	31.31916 AU	min. Earth dist.	-9569 Feb 07 j 08:04	8°II55'08	29.33158 AU
morning rise	-9576 Aug 10 j 17:18	25°8'21"15		direct	-9569 Apr 28 j 23:46	7°II32'02	
retrograde	-9576 Nov 05 j 18:07	27°8'14"14		evening set	-9569 Jul 27 j 03:27	9°II27'04	
opposition	-9575 Jan 23 j 18:23	25°8'52"10	2°06'08				
min. Earth dist.	-9575 Jan 24 j 08:00	25°8'51"15	29.32259 AU	conjunction	-9569 Aug 11 j 05:05	10°II00'57	2°19'41
direct	-9575 Apr 15 j 03:39	24°8'28"00		minimum elong	-9569 Aug 11 j 05:04	10°II00'57	2°20'13
evening set	-9575 Jul 13 j 18:27	26°8'23"25		max. Earth dist.	-9569 Aug 10 j 18:47	9°II59'59	31.32846 AU
				morning rise	-9569 Aug 26 j 05:34	10°II34'45	
conjunction	-9575 Jul 28 j 23:11	26°8'57"31	2°00'01	retrograde	-9569 Nov 21 j 23:43	12°II28'40	
minimum elong	-9575 Jul 28 j 23:10	26°8'57"31	2°00'28	opposition	-9568 Feb 09 j 11:04	11°II06'21	2°30'39
max. Earth dist.	-9575 Jul 28 j 09:56	26°8'56"16	31.32326 AU	min. Earth dist.	-9568 Feb 09 j 20:15	11°II05'44	29.32881 AU
morning rise	-9575 Aug 13 j 01:39	27°8'31'26		direct	-9568 Apr 30 j 11:07	9°II42'38	
retrograde	-9575 Nov 08 j 03:17	29°8'24'34		evening set	-9568 Jul 28 j 12:37	11°II37'34	
opposition	-9574 Jan 26 j 07:01	28°8'02'30	2°10'13				
min. Earth dist.	-9574 Jan 26 j 20:34	28°8'01'35	29.32666 AU	conjunction	-9568 Aug 12 j 14:00	12°II11'25	2°22'18
direct	-9574 Apr 17 j 15:23	26°8'38'27		minimum elong	-9568 Aug 12 j 14:00	12°II11'25	2°22'49
evening set	-9574 Jul 16 j 04:05	28°8'33'50		max. Earth dist.	-9568 Aug 12 j 05:38	12°II10'38	31.32532 AU
				morning rise	-9568 Aug 27 j 14:04	12°II45'11	
conjunction	-9574 Jul 31 j 08:07	29°8'07'53	2°03'45	retrograde	-9568 Nov 23 j 08:58	14°II39'12	
minimum elong	-9574 Jul 31 j 08:06	29°8'07'53	2°04'12	opposition	-9567 Feb 10 j 23:54	13°II16'49	2°33'20
max. Earth dist.	-9574 Jul 30 j 18:50	29°8'06'37	31.32712 AU	min. Earth dist.	-9567 Feb 11 j 08:11	13°II16'15	29.32553 AU
morning rise	-9574 Aug 15 j 10:20	29°8'41'47		direct	-9567 May 02 j 23:57	11°II53'06	
	-9574 Aug 23 j 20:07	0°II		evening set	-9567 Jul 30 j 21:43	13°II47'56	
retrograde	-9574 Nov 10 j 14:51	1°II35'04					
opposition	-9573 Jan 28 j 19:23	0°II13'00	2°14'07	conjunction	-9567 Aug 14 j 22:34	14°II21'45	2°24'42
min. Earth dist.	-9573 Jan 29 j 07:18	0°II12'12	29.33026 AU	minimum elong	-9567 Aug 14 j 22:33	14°II21'45	2°25'14
	-9573 Feb 05 j 21:19	30°8'8		max. Earth dist.	-9567 Aug 14 j 14:18	14°II20'58	31.32206 AU
direct	-9573 Apr 20 j 02:03	28°8'49'03		morning rise	-9567 Aug 29 j 22:35	14°II55'30	
	-9573 Jun 27 j 05:19	0°II		retrograde	-9567 Nov 25 j 20:07	16°II49'37	
evening set	-9573 Jul 18 j 13:35	0°II44'23		opposition	-9566 Feb 13 j 12:40	15°II27'08	2°35'48
				min. Earth dist.	-9566 Feb 13 j 19:25	15°II26'41	29.32256 AU
conjunction	-9573 Aug 02 j 17:12	1°II18'24	2°07'18	direct	-9566 May 05 j 11:45	14°II03'27	
minimum elong	-9573 Aug 02 j 17:11	1°II18'24	2°07'47	evening set	-9566 Aug 02 j 06:44	15°II58'10	
max. Earth dist.	-9573 Aug 02 j 05:01	1°II17'15	31.33005 AU				
morning rise	-9573 Aug 17 j 18:55	1°II52'16		conjunction	-9566 Aug 17 j 07:24	16°II31'58	2°26'54

Attention, astronomical year style is used: The year -9566 in astronomical counting style is the year 9567 BCE in historical counting style.

minimum elong	-9566 Aug 17 j 07:24	16°II31'58	2°27'26			-9559 Mar 27 j 13:40	30°RII		
max. Earth dist.	-9566 Aug 17 j 01:14	16°II31'23	31.31923 AU	direct		-9559 May 20 j 16:50	29°II17'22		
morning rise	-9566 Sep 01 j 07:04	17°II05'43				-9559 Jul 11 j 05:19	0°Θ		
retrograde	-9566 Nov 28 j 05:31	18°II59'57		evening set		-9559 Aug 16 j 21:45	1°Θ11'37		
opposition	-9565 Feb 16 j 01:21	17°II37'24	2°38'02						
min. Earth dist.	-9565 Feb 16 j 07:42	17°II36'58	29.32016 AU	conjunction		-9559 Aug 31 j 20:55	1°Θ45'20	2°36'18	
direct	-9565 May 08 j 00:17	16°II13'45		minimum elong		-9559 Aug 31 j 20:55	1°Θ45'20	2°36'52	
evening set	-9565 Aug 04 j 15:50	18°II08'23		max. Earth dist.		-9559 Aug 31 j 21:30	1°Θ45'23	31.30695 AU	
				morning rise		-9559 Sep 15 j 20:05	2°Θ19'05		
conjunction	-9565 Aug 19 j 16:04	18°II42'09	2°28'54	retrograde		-9559 Dec 13 j 13:51	4°Θ14'22		
minimum elong	-9565 Aug 19 j 16:03	18°II42'09	2°29'27	opposition		-9558 Mar 03 j 20:07	2°Θ51'33	2°47'16	
max. Earth dist.	-9565 Aug 19 j 10:18	18°II41'37	31.31727 AU	min. Earth dist.		-9558 Mar 03 j 19:31	2°Θ51'35	29.30671 AU	
morning rise	-9565 Sep 03 j 15:41	19°II15'53		direct		-9558 May 23 j 05:09	1°Θ28'23		
retrograde	-9565 Nov 30 j 16:55	21°II10'15		evening set		-9558 Aug 19 j 06:57	3°Θ22'32		
opposition	-9564 Feb 18 j 14:04	19°II47'39	2°40'04						
min. Earth dist.	-9564 Feb 18 j 18:11	19°II47'22	29.31861 AU	conjunction		-9558 Sep 03 j 05:55	3°Θ56'15	2°36'45	
direct	-9564 May 09 j 11:25	18°II24'03		minimum elong		-9558 Sep 03 j 05:55	3°Θ56'15	2°37'19	
evening set	-9564 Aug 06 j 00:42	20°II18'36		max. Earth dist.		-9558 Sep 03 j 06:09	3°Θ56'17	31.30165 AU	
				morning rise		-9558 Sep 18 j 05:19	4°Θ30'01		
conjunction	-9564 Aug 21 j 00:42	20°II52'22	2°30'40	retrograde		-9558 Dec 16 j 02:24	6°Θ25'26		
minimum elong	-9564 Aug 21 j 00:42	20°II52'22	2°31'14	opposition		-9557 Mar 06 j 09:02	5°Θ02'32	2°47'39	
max. Earth dist.	-9564 Aug 20 j 20:28	20°II51'58	31.31596 AU	min. Earth dist.		-9557 Mar 06 j 07:23	5°Θ02'39	29.30068 AU	
morning rise	-9564 Sep 05 j 00:07	21°II26'06		direct		-9557 May 25 j 16:47	3°Θ39'23		
retrograde	-9564 Dec 02 j 02:36	23°II20'37		evening set		-9557 Aug 21 j 15:56	5°Θ33'28		
opposition	-9563 Feb 20 j 03:04	21°II57'58	2°41'51						
min. Earth dist.	-9563 Feb 20 j 07:02	21°II57'42	29.31767 AU	conjunction		-9557 Sep 05 j 15:00	6°Θ07'11	2°36'59	
direct	-9563 May 11 j 22:03	20°II34'27		minimum elong		-9557 Sep 05 j 14:59	6°Θ07'11	2°37'35	
evening set	-9563 Aug 08 j 09:41	22°II28'56		max. Earth dist.		-9557 Sep 05 j 16:47	6°Θ07'21	31.29482 AU	
				morning rise		-9557 Sep 20 j 14:23	6°Θ40'58		
conjunction	-9563 Aug 23 j 09:27	23°II02'41	2°32'14	retrograde		-9557 Dec 18 j 12:59	8°Θ36'29		
minimum elong	-9563 Aug 23 j 09:27	23°II02'40	2°32'49	opposition		-9556 Mar 07 j 22:11	7°Θ13'31	2°47'47	
max. Earth dist.	-9563 Aug 23 j 06:21	23°II02'23	31.31527 AU	min. Earth dist.		-9556 Mar 07 j 20:31	7°Θ13'37	29.29321 AU	
morning rise	-9563 Sep 07 j 08:46	23°II36'24		direct		-9556 May 27 j 05:34	5°Θ50'23		
retrograde	-9563 Dec 04 j 13:59	25°II31'04		evening set		-9556 Aug 23 j 00:48	7°Θ44'21		
opposition	-9562 Feb 22 j 15:52	24°II08'24	2°43'24						
min. Earth dist.	-9562 Feb 22 j 17:49	24°II08'16	29.31701 AU	conjunction		-9556 Sep 06 j 23:47	8°Θ18'04	2°37'00	
direct	-9562 May 14 j 08:41	22°II44'58		minimum elong		-9556 Sep 06 j 23:47	8°Θ18'04	2°37'35	
evening set	-9562 Aug 10 j 18:39	24°II39'23		max. Earth dist.		-9556 Sep 07 j 01:54	8°Θ18'16	31.28698 AU	
				morning rise		-9556 Sep 21 j 23:24	8°Θ51'52		
conjunction	-9562 Aug 25 j 18:10	25°II13'07	2°33'35	retrograde		-9556 Dec 20 j 00:43	10°Θ47'30		
minimum elong	-9562 Aug 25 j 18:10	25°II13'07	2°34'09	opposition		-9555 Mar 10 j 11:14	9°Θ24'25	2°47'41	
max. Earth dist.	-9562 Aug 25 j 15:41	25°II12'53	31.31445 AU	min. Earth dist.		-9555 Mar 10 j 07:38	9°Θ24'40	29.28501 AU	
morning rise	-9562 Sep 09 j 17:30	25°II46'51		direct		-9555 May 29 j 17:13	8°Θ01'18		
retrograde	-9562 Dec 07 j 02:00	27°II41'41		evening set		-9555 Aug 25 j 09:41	9°Θ55'09		
opposition	-9561 Feb 25 j 04:53	26°II18'59	2°44'43						
min. Earth dist.	-9561 Feb 25 j 06:52	26°II18'51	29.31608 AU	conjunction		-9555 Sep 09 j 08:43	10°Θ28'53	2°36'48	
direct	-9561 May 16 j 18:07	24°II55'38		minimum elong		-9555 Sep 09 j 08:43	10°Θ28'53	2°37'23	
evening set	-9561 Aug 13 j 03:38	26°II50'00		max. Earth dist.		-9555 Sep 09 j 12:01	10°Θ29'11	31.27854 AU	
				morning rise		-9555 Sep 24 j 08:30	11°Θ02'42		
conjunction	-9561 Aug 28 j 03:03	27°II23'43	2°34'43	retrograde		-9555 Dec 22 j 10:16	12°Θ58'27		
minimum elong	-9561 Aug 28 j 03:03	27°II23'43	2°35'17	opposition		-9554 Mar 13 j 00:16	11°Θ35'16	2°47'20	
max. Earth dist.	-9561 Aug 28 j 02:08	27°II23'38	31.31312 AU	min. Earth dist.		-9554 Mar 12 j 20:40	11°Θ35'30	29.27666 AU	
morning rise	-9561 Sep 12 j 02:12	27°II57'27		direct		-9554 Jun 01 j 04:11	10°Θ12'09		
retrograde	-9561 Dec 09 j 13:36	29°II52'27		evening set		-9554 Aug 27 j 18:28	12°Θ05'53		
opposition	-9560 Feb 27 j 17:47	28°II29'43	2°45'49						
min. Earth dist.	-9560 Feb 27 j 18:20	28°II29'41	29.31422 AU	conjunction		-9554 Sep 11 j 17:37	12°Θ39'37	2°36'22	
direct	-9560 May 18 j 06:37	27°II06'27		minimum elong		-9554 Sep 11 j 17:38	12°Θ39'37	2°36'56	
evening set	-9560 Aug 14 j 12:48	29°II00'45		max. Earth dist.		-9554 Sep 11 j 22:14	12°Θ40'04	31.27039 AU	
				morning rise		-9554 Sep 26 j 17:36	13°Θ13'27		
conjunction	-9560 Aug 29 j 11:55	29°II34'28	2°35'37	retrograde		-9554 Dec 24 j 21:16	15°Θ09'19		
minimum elong	-9560 Aug 29 j 11:55	29°II34'28	2°36'11	opposition		-9553 Mar 15 j 13:08	13°Θ46'03	2°46'46	
max. Earth dist.	-9560 Aug 29 j 10:46	29°II34'22	31.31070 AU	min. Earth dist.		-9553 Mar 15 j 07:21	13°Θ46'26	29.26872 AU	
	-9560 Sep 09 j 18:44	0°Θ		direct		-9553 Jun 03 j 15:07	12°Θ22'56		
morning rise	-9560 Sep 13 j 11:12	0°Θ08'13		evening set		-9553 Aug 30 j 03:18	14°Θ16'36		
retrograde	-9560 Dec 11 j 03:22	2°Θ03'21							
opposition	-9559 Mar 01 j 06:57	0°Θ40'35	2°46'39	conjunction		-9553 Sep 14 j 02:26	14°Θ50'20	2°35'43	
min. Earth dist.	-9559 Mar 01 j 06:59	0°Θ40'35	29.31128 AU	minimum elong		-9553 Sep 14 j 02:26	14°Θ50'20	2°36'17	

Attention, astronomical year style is used: The year -9553 in astronomical counting style is the year 9554 BCE in historical counting style.

max. Earth dist.	-9553 Sep 14 j 07:42	14°☾50'50	31.26277 AU	direct	-9546 Jun 18 j 19:06	27°☾41'16	
morning rise	-9553 Sep 29 j 02:43	15°☾24'12		evening set	-9546 Sep 13 j 17:43	29°☾34'26	
retrograde	-9553 Dec 27 j 09:05	17°☾20'12			-9546 Sep 25 j 02:38	0°♈	
opposition	-9552 Mar 17 j 02:07	15°☾56'50	2°45'56				
min. Earth dist.	-9552 Mar 16 j 20:01	15°☾57'15	29.26162 AU	conjunction	-9546 Sep 28 j 18:38	0°♈08'20	2°24'53
direct	-9552 Jun 05 j 00:30	14°☾33'46		minimum elong	-9546 Sep 28 j 18:38	0°♈08'20	2°25'24
evening set	-9552 Aug 31 j 12:01	16°☾27'20		max. Earth dist.	-9546 Sep 29 j 06:31	0°♈09'28	31.21995 AU
				morning rise	-9546 Oct 13 j 21:34	0°♈42'27	
conjunction	-9552 Sep 15 j 11:26	17°☾01'06	2°34'50	retrograde	-9545 Jan 11 j 22:59	2°♈39'21	
minimum elong	-9552 Sep 15 j 11:27	17°☾01'06	2°35'24	opposition	-9545 Apr 02 j 21:06	1°♈15'37	2°33'33
max. Earth dist.	-9552 Sep 15 j 18:44	17°☾01'47	31.25619 AU	min. Earth dist.	-9545 Apr 02 j 09:01	1°♈16'26	29.21758 AU
morning rise	-9552 Sep 30 j 11:52	17°☾34'59			-9545 May 31 j 08:38	30°♈☊	
retrograde	-9552 Dec 28 j 20:44	19°☾31'07		direct	-9545 Jun 21 j 06:30	29°☊52'52	
opposition	-9551 Mar 19 j 15:03	18°☾07'42	2°44'53		-9545 Jul 11 j 17:56	0°♈	
min. Earth dist.	-9551 Mar 19 j 07:03	18°☾08'14	29.25540 AU	evening set	-9545 Sep 16 j 02:46	1°♈45'56	
direct	-9551 Jun 07 j 12:14	16°☾44'40					
evening set	-9551 Sep 02 j 20:50	18°☾38'10		conjunction	-9545 Oct 01 j 04:07	2°♈19'52	2°22'28
				minimum elong	-9545 Oct 01 j 04:08	2°♈19'52	2°23'00
conjunction	-9551 Sep 17 j 20:18	19°☾11'57	2°33'43	max. Earth dist.	-9545 Oct 01 j 16:59	2°♈21'05	31.21092 AU
minimum elong	-9551 Sep 17 j 20:18	19°☾11'57	2°34'18	morning rise	-9545 Oct 16 j 07:28	2°♈54'01	
max. Earth dist.	-9551 Sep 18 j 03:42	19°☾12'39	31.25043 AU	retrograde	-9544 Jan 14 j 10:44	4°♈51'01	
morning rise	-9551 Oct 02 j 21:14	19°☾45'52		opposition	-9544 Apr 04 j 10:03	3°♈27'12	2°30'52
retrograde	-9551 Dec 31 j 10:42	21°☾42'08		min. Earth dist.	-9544 Apr 03 j 20:19	3°♈28'08	29.20781 AU
opposition	-9550 Mar 22 j 04:03	20°☾18'41	2°43'35	direct	-9544 Jun 22 j 18:21	2°♈04'26	
min. Earth dist.	-9550 Mar 21 j 19:14	20°☾19'16	29.24995 AU	evening set	-9544 Sep 17 j 11:58	3°♈57'23	
direct	-9550 Jun 09 j 21:08	18°☾55'42					
evening set	-9550 Sep 05 j 05:37	20°☾49'09		conjunction	-9544 Oct 02 j 13:36	4°♈31'22	2°19'51
				minimum elong	-9544 Oct 02 j 13:37	4°♈31'22	2°20'22
conjunction	-9550 Sep 20 j 05:27	21°☾22'57	2°32'24	max. Earth dist.	-9544 Oct 03 j 02:31	4°♈32'35	31.20072 AU
minimum elong	-9550 Sep 20 j 05:28	21°☾22'57	2°32'57	morning rise	-9544 Oct 17 j 17:37	5°♈05'34	
max. Earth dist.	-9550 Sep 20 j 14:55	21°☾23'50	31.24514 AU	retrograde	-9543 Jan 15 j 22:33	7°♈02'39	
morning rise	-9550 Oct 05 j 06:34	21°☾56'53		opposition	-9543 Apr 06 j 23:08	5°♈38'43	2°27'58
retrograde	-9549 Jan 02 j 21:34	23°☾53'18		min. Earth dist.	-9543 Apr 06 j 09:38	5°♈39'38	29.19724 AU
opposition	-9549 Mar 24 j 16:51	22°☾29'48	2°42'02	direct	-9543 Jun 25 j 04:12	4°♈15'56	
min. Earth dist.	-9549 Mar 24 j 07:11	22°☾30'27	29.24466 AU	evening set	-9543 Sep 19 j 20:56	6°♈08'47	
direct	-9549 Jun 12 j 08:31	21°☾06'54					
evening set	-9549 Sep 07 j 14:36	23°☾00'16		conjunction	-9543 Oct 04 j 23:11	6°♈42'47	2°17'02
				minimum elong	-9543 Oct 04 j 23:12	6°♈42'47	2°17'33
conjunction	-9549 Sep 22 j 14:32	23°☾34'06	2°30'50	max. Earth dist.	-9543 Oct 05 j 13:50	6°♈44'10	31.18998 AU
minimum elong	-9549 Sep 22 j 14:32	23°☾34'06	2°31'24	morning rise	-9543 Oct 20 j 03:38	7°♈17'01	
max. Earth dist.	-9549 Sep 23 j 00:00	23°☾34'59	31.23994 AU	retrograde	-9542 Jan 18 j 09:36	9°♈14'11	
morning rise	-9549 Oct 07 j 16:10	24°☾08'05		opposition	-9542 Apr 09 j 11:59	7°♈50'09	2°24'51
retrograde	-9548 Jan 05 j 11:42	26°☾04'38		min. Earth dist.	-9542 Apr 08 j 21:01	7°♈51'10	29.18627 AU
opposition	-9548 Mar 26 j 05:52	24°☾41'05	2°40'16	direct	-9542 Jun 27 j 15:58	6°♈27'21	
min. Earth dist.	-9548 Mar 25 j 18:59	24°☾41'49	29.23928 AU	evening set	-9542 Sep 22 j 06:09	8°♈20'06	
direct	-9548 Jun 13 j 19:42	23°☾18'14					
evening set	-9548 Sep 08 j 23:26	25°☾11'33		conjunction	-9542 Oct 07 j 08:41	8°♈54'08	2°14'02
				minimum elong	-9542 Oct 07 j 08:42	8°♈54'08	2°14'30
conjunction	-9548 Sep 23 j 23:44	25°☾45'24	2°29'04	max. Earth dist.	-9542 Oct 07 j 23:08	8°♈55'30	31.17916 AU
minimum elong	-9548 Sep 23 j 23:44	25°☾45'24	2°29'36	morning rise	-9542 Oct 22 j 13:52	9°♈28'25	
max. Earth dist.	-9548 Sep 24 j 10:50	25°☾46'27	31.23423 AU	retrograde	-9541 Jan 20 j 22:52	11°♈25'39	
morning rise	-9548 Oct 09 j 01:40	26°☾19'25		min. Earth dist.	-9541 Apr 11 j 09:10	10°♈02'34	29.17570 AU
retrograde	-9547 Jan 06 j 23:44	28°☾16'07		opposition	-9541 Apr 12 j 00:43	10°♈01'31	2°21'32
opposition	-9547 Mar 28 j 19:03	26°☾52'31	2°38'15	direct	-9541 Jun 30 j 00:50	8°♈38'42	
min. Earth dist.	-9547 Mar 28 j 08:08	26°☾53'15	29.23316 AU	evening set	-9541 Sep 24 j 15:12	10°♈31'22	
direct	-9547 Jun 16 j 07:52	25°☾29'43					
evening set	-9547 Sep 11 j 08:34	27°☾22'57		conjunction	-9541 Oct 09 j 18:21	11°♈05'27	2°10'50
				minimum elong	-9541 Oct 09 j 18:22	11°♈05'27	2°11'18
conjunction	-9547 Sep 26 j 09:08	27°☾56'50	2°27'05	max. Earth dist.	-9541 Oct 10 j 10:51	11°♈07'00	31.16895 AU
minimum elong	-9547 Sep 26 j 09:08	27°☾56'50	2°27'37	morning rise	-9541 Oct 24 j 23:58	11°♈39'46	
max. Earth dist.	-9547 Sep 26 j 20:28	27°☾57'54	31.22774 AU	retrograde	-9540 Jan 23 j 10:07	13°♈37'06	
morning rise	-9547 Oct 11 j 11:34	28°☾30'54		opposition	-9540 Apr 13 j 13:32	12°♈12'53	2°18'00
	-9547 Nov 28 j 21:40	0°♈		min. Earth dist.	-9540 Apr 12 j 20:56	12°♈14'00	29.16588 AU
retrograde	-9546 Jan 09 j 12:21	0°♈27'42		direct	-9540 Jul 01 j 12:12	10°♈50'05	
	-9546 Feb 21 j 11:44	30°♈☊		evening set	-9540 Sep 26 j 00:18	12°♈42'40	
opposition	-9546 Mar 31 j 07:57	29°☊04'03	2°36'01				
min. Earth dist.	-9546 Mar 30 j 19:28	29°☊04'53	29.22606 AU	conjunction	-9540 Oct 11 j 03:50	13°♈16'47	2°07'26

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Attention, astronomical year style is used: The year -9540 in astronomical counting style is the year 9541 BCE in historical counting style.

minimum elong	-9540 Oct 11 j 03:51	13°Ω16'47	2°07'53	min. Earth dist.	-9533 Apr 29 j 09:12	27°Ω38'27	29.11298 AU
max. Earth dist.	-9540 Oct 11 j 20:33	13°Ω18'22	31.15983 AU	opposition	-9533 Apr 30 j 06:36	27°Ω37'00	1°47'52
morning rise	-9540 Oct 26 j 10:13	13°Ω51'10		direct	-9533 Jul 17 j 16:26	26°Ω14'29	
	-9540 Nov 30 j 04:47	15°Ω		evening set	-9533 Oct 11 j 19:04	28°Ω06'47	
retrograde	-9539 Jan 25 j 00:38	15°Ω48'36					
	-9539 Mar 24 j 11:54	15°℞Ω		conjunction	-9533 Oct 27 j 02:41	28°Ω41'16	1°38'38
min. Earth dist.	-9539 Apr 15 j 08:22	14°Ω25'32	29.15727 AU	minimum elong	-9533 Oct 27 j 02:41	28°Ω41'16	1°39'00
opposition	-9539 Apr 16 j 02:20	14°Ω24'19	2°14'17	max. Earth dist.	-9533 Oct 27 j 23:40	28°Ω43'15	31.10708 AU
direct	-9539 Jul 03 j 22:48	13°Ω01'32		morning rise	-9533 Nov 11 j 13:54	29°Ω16'04	
evening set	-9539 Sep 28 j 09:30	14°Ω54'04			-9533 Dec 02 j 13:46	0°℞	
	-9539 Oct 01 j 01:33	15°Ω		retrograde	-9532 Feb 10 j 16:24	1°℞14'14	
					-9532 Apr 25 j 12:09	30°℞Ω	
conjunction	-9539 Oct 13 j 13:39	15°Ω28'15	2°03'51	opposition	-9532 May 01 j 19:25	29°Ω49'42	1°42'51
minimum elong	-9539 Oct 13 j 13:40	15°Ω28'15	2°04'19	min. Earth dist.	-9532 Apr 30 j 22:04	29°Ω51'10	29.10313 AU
max. Earth dist.	-9539 Oct 14 j 08:01	15°Ω29'59	31.15171 AU	direct	-9532 Jul 19 j 01:03	28°Ω27'10	
morning rise	-9539 Oct 28 j 20:37	16°Ω02'41			-9532 Oct 04 j 05:40	0°℞	
retrograde	-9538 Jan 27 j 13:03	18°Ω00'13		evening set	-9532 Oct 13 j 04:52	0°℞19'25	
opposition	-9538 Apr 18 j 15:01	16°Ω35'53	2°10'21				
min. Earth dist.	-9538 Apr 17 j 20:54	16°Ω37'07	29.14958 AU	conjunction	-9532 Oct 28 j 13:18	0°℞53'57	1°33'53
direct	-9538 Jul 06 j 10:05	15°Ω13'10		minimum elong	-9532 Oct 28 j 13:19	0°℞53'57	1°34'13
evening set	-9538 Sep 30 j 18:46	17°Ω05'39		max. Earth dist.	-9532 Oct 29 j 11:39	0°℞56'03	31.09665 AU
				morning rise	-9532 Nov 13 j 01:08	1°℞28'48	
conjunction	-9538 Oct 15 j 23:29	17°Ω39'52	2°00'05	retrograde	-9531 Feb 12 j 04:03	3°℞27'02	
minimum elong	-9538 Oct 15 j 23:30	17°Ω39'52	2°00'31	min. Earth dist.	-9531 May 03 j 10:29	2°℞03'54	29.09202 AU
max. Earth dist.	-9538 Oct 16 j 18:23	17°Ω41'40	31.14460 AU	opposition	-9531 May 04 j 08:08	2°℞02'25	1°37'42
morning rise	-9538 Oct 31 j 07:08	18°Ω14'22		direct	-9531 Jul 21 j 12:46	0°℞39'52	
retrograde	-9537 Jan 30 j 02:27	20°Ω12'01		evening set	-9531 Oct 15 j 14:58	2°℞32'02	
min. Earth dist.	-9537 Apr 20 j 07:48	18°Ω49'01	29.14267 AU				
opposition	-9537 Apr 21 j 03:41	18°Ω47'40	2°06'13	conjunction	-9531 Oct 30 j 23:59	3°℞06'36	1°28'59
direct	-9537 Jul 08 j 20:54	17°Ω24'59		minimum elong	-9531 Oct 30 j 23:59	3°℞06'36	1°29'19
evening set	-9537 Oct 03 j 04:05	19°Ω17'27		max. Earth dist.	-9531 Oct 31 j 21:51	3°℞08'40	31.08533 AU
				morning rise	-9531 Nov 15 j 12:42	3°℞41'31	
conjunction	-9537 Oct 18 j 09:17	19°Ω51'43	1°56'08	retrograde	-9530 Feb 14 j 18:29	5°℞39'47	
minimum elong	-9537 Oct 18 j 09:18	19°Ω51'43	1°56'34	opposition	-9530 May 06 j 20:34	4°℞15'04	1°32'24
max. Earth dist.	-9537 Oct 19 j 04:56	19°Ω53'34	31.13787 AU	min. Earth dist.	-9530 May 05 j 22:20	4°℞16'35	29.08037 AU
morning rise	-9537 Nov 02 j 17:38	20°Ω26'17		direct	-9530 Jul 23 j 23:19	2°℞52'28	
retrograde	-9536 Feb 01 j 14:15	22°Ω24'03		evening set	-9530 Oct 18 j 01:00	4°℞44'34	
opposition	-9536 Apr 22 j 16:33	20°Ω59'40	2°01'54				
min. Earth dist.	-9536 Apr 21 j 20:59	21°Ω01'00	29.13600 AU	conjunction	-9530 Nov 02 j 10:43	5°℞19'12	1°23'58
direct	-9536 Jul 10 j 07:57	19°Ω37'04		minimum elong	-9530 Nov 02 j 10:44	5°℞19'12	1°24'16
evening set	-9536 Oct 04 j 13:34	21°Ω29'29		max. Earth dist.	-9530 Nov 03 j 09:41	5°℞21'22	31.07352 AU
				morning rise	-9530 Nov 18 j 00:07	5°℞54'10	
conjunction	-9536 Oct 19 j 19:27	22°Ω03'48	1°52'00	retrograde	-9529 Feb 17 j 06:25	7°℞52'27	
minimum elong	-9536 Oct 19 j 19:28	22°Ω03'48	1°52'24	min. Earth dist.	-9529 May 08 j 11:07	6°℞29'09	29.06856 AU
max. Earth dist.	-9536 Oct 20 j 16:14	22°Ω05'46	31.13134 AU	opposition	-9529 May 09 j 09:07	6°℞27'38	1°26'58
morning rise	-9536 Nov 04 j 04:24	22°Ω38'25		direct	-9529 Jul 26 j 10:23	5°℞05'00	
retrograde	-9535 Feb 03 j 03:32	24°Ω36'19		evening set	-9529 Oct 20 j 10:57	6°℞57'02	
min. Earth dist.	-9535 Apr 24 j 08:07	23°Ω13'21	29.12919 AU				
opposition	-9535 Apr 25 j 05:11	23°Ω11'55	1°57'24	conjunction	-9529 Nov 04 j 21:20	7°℞31'43	1°18'50
direct	-9535 Jul 12 j 19:31	21°Ω49'21		minimum elong	-9529 Nov 04 j 21:21	7°℞31'43	1°19'07
evening set	-9535 Oct 06 j 23:17	23°Ω41'44		max. Earth dist.	-9529 Nov 05 j 20:42	7°℞33'55	31.06208 AU
				morning rise	-9529 Nov 20 j 11:28	8°℞06'44	
conjunction	-9535 Oct 22 j 05:39	24°Ω16'07	1°47'42	retrograde	-9528 Feb 19 j 20:17	10°℞05'04	
minimum elong	-9535 Oct 22 j 05:40	24°Ω16'07	1°48'06	opposition	-9528 May 10 j 21:32	8°℞40'09	1°21'24
max. Earth dist.	-9535 Oct 23 j 02:12	24°Ω18'04	31.12427 AU	min. Earth dist.	-9528 May 09 j 22:01	8°℞41'46	29.05741 AU
morning rise	-9535 Nov 06 j 15:28	24°Ω50'48		direct	-9528 Jul 27 j 21:44	7°℞17'28	
retrograde	-9534 Feb 05 j 15:36	26°Ω48'48		evening set	-9528 Oct 21 j 21:10	9°℞09'28	
opposition	-9534 Apr 27 j 18:01	25°Ω24'23	1°52'43				
min. Earth dist.	-9534 Apr 26 j 21:33	25°Ω25'46	29.12170 AU	conjunction	-9528 Nov 06 j 08:09	9°℞44'11	1°13'34
direct	-9534 Jul 15 j 05:04	24°Ω01'51		minimum elong	-9528 Nov 06 j 08:10	9°℞44'11	1°13'50
evening set	-9534 Oct 09 j 09:04	25°Ω54'12		max. Earth dist.	-9528 Nov 07 j 07:59	9°℞46'26	31.05135 AU
				morning rise	-9528 Nov 21 j 23:04	10°℞19'16	
conjunction	-9534 Oct 24 j 16:13	26°Ω28'37	1°43'15	retrograde	-9527 Feb 21 j 09:04	12°℞17'38	
minimum elong	-9534 Oct 24 j 16:14	26°Ω28'37	1°43'36	min. Earth dist.	-9527 May 12 j 10:50	10°℞54'14	29.04721 AU
max. Earth dist.	-9534 Oct 25 j 14:02	26°Ω30'41	31.11628 AU	opposition	-9527 May 13 j 09:56	10°℞52'39	1°15'43
morning rise	-9534 Nov 09 j 02:32	27°Ω03'22		direct	-9527 Jul 30 j 09:14	9°℞29'57	
retrograde	-9533 Feb 08 j 02:49	29°Ω01'27		evening set	-9527 Oct 24 j 07:21	11°℞21'54	

Attention, astronomical year style is used: The year -9527 in astronomical counting style is the year 9528 BCE in historical counting style.

conjunction	-9527 Nov 08 j 19:09	11° \mathring{M} 56'41	1°08'12	direct	-9520 Aug 14 j 10:55	25° \mathring{M} 01'19	
minimum elong	-9527 Nov 08 j 19:10	11° \mathring{M} 56'41	1°08'27	evening set	-9520 Nov 08 j 11:02	26° \mathring{M} 53'19	
max. Earth dist.	-9527 Nov 09 j 20:07	11° \mathring{M} 59'02	31.04182 AU				
morning rise	-9527 Nov 24 j 10:44	12° \mathring{M} 31'49		conjunction	-9520 Nov 24 j 03:29	27° \mathring{M} 28'28	0°28'02
retrograde	-9526 Feb 23 j 22:52	14° \mathring{M} 30'13		minimum elong	-9520 Nov 24 j 03:29	27° \mathring{M} 28'28	0°28'08
opposition	-9526 May 15 j 22:11	13° \mathring{M} 05'11	1°09'55	max. Earth dist.	-9520 Nov 25 j 05:26	27° \mathring{M} 30'55	30.98487 AU
min. Earth dist.	-9526 May 14 j 21:31	13° \mathring{M} 06'53	29.03809 AU	morning rise	-9520 Dec 10 j 00:04	28° \mathring{M} 04'01	
direct	-9526 Aug 01 j 21:26	11° \mathring{M} 42'29			-9519 Feb 26 j 12:08	0° \mathring{A}	
evening set	-9526 Oct 26 j 17:46	13° \mathring{M} 34'25		retrograde	-9519 Mar 11 j 17:28	0° \mathring{A} 02'50	
					-9519 Mar 25 j 00:36	30° \mathring{R} \mathring{M}	
conjunction	-9526 Nov 11 j 06:05	14° \mathring{M} 09'15	1°02'43	min. Earth dist.	-9519 May 30 j 10:47	28° \mathring{M} 39'22	28.97988 AU
minimum elong	-9526 Nov 11 j 06:06	14° \mathring{M} 09'15	1°02'56	opposition	-9519 May 31 j 11:47	28° \mathring{M} 37'38	0°26'41
max. Earth dist.	-9526 Nov 12 j 06:50	14° \mathring{M} 11'35	31.03321 AU	direct	-9519 Aug 16 j 22:24	27° \mathring{M} 14'55	
morning rise	-9526 Nov 26 j 22:31	14° \mathring{M} 44'27		evening set	-9519 Nov 10 j 22:30	29° \mathring{M} 06'56	
retrograde	-9525 Feb 26 j 10:45	16° \mathring{M} 42'55					
min. Earth dist.	-9525 May 17 j 10:19	15° \mathring{M} 19'31	29.02997 AU	conjunction	-9519 Nov 26 j 15:32	29° \mathring{M} 42'08	0°22'04
opposition	-9525 May 18 j 10:30	15° \mathring{M} 17'51	1°04'00	minimum elong	-9519 Nov 26 j 15:32	29° \mathring{M} 42'08	0°22'09
direct	-9525 Aug 04 j 07:00	13° \mathring{M} 55'10		max. Earth dist.	-9519 Nov 27 j 17:05	29° \mathring{M} 44'32	30.97390 AU
evening set	-9525 Oct 29 j 04:08	15° \mathring{M} 47'05			-9519 Dec 04 j 13:41	0° \mathring{A}	
				morning rise	-9519 Dec 12 j 12:50	0° \mathring{A} 17'44	
conjunction	-9525 Nov 13 j 17:18	16° \mathring{M} 21'58	0°57'08	retrograde	-9518 Mar 14 j 06:54	2° \mathring{A} 16'33	
minimum elong	-9525 Nov 13 j 17:19	16° \mathring{M} 21'58	0°57'21	opposition	-9518 Jun 02 j 23:55	0° \mathring{A} 51'17	0°20'16
max. Earth dist.	-9525 Nov 14 j 19:34	16° \mathring{M} 24'27	31.02557 AU	min. Earth dist.	-9518 Jun 02 j 00:04	0° \mathring{A} 52'57	28.96853 AU
morning rise	-9525 Nov 29 j 10:18	16° \mathring{M} 57'14			-9518 Jul 06 j 02:46	30° \mathring{R} \mathring{M}	
retrograde	-9524 Feb 28 j 22:36	18° \mathring{M} 55'45		direct	-9518 Aug 19 j 10:15	29° \mathring{M} 28'31	
opposition	-9524 May 19 j 22:43	17° \mathring{M} 30'41	0°57'59		-9518 Oct 01 j 10:46	0° \mathring{A}	
min. Earth dist.	-9524 May 18 j 21:32	17° \mathring{M} 32'25	29.02251 AU	evening set	-9518 Nov 13 j 09:48	1° \mathring{A} 20'32	
direct	-9524 Aug 05 j 18:27	16° \mathring{M} 08'00					
evening set	-9524 Oct 30 j 14:47	17° \mathring{M} 59'56		conjunction	-9518 Nov 29 j 03:35	1° \mathring{A} 55'47	0°16'03
				minimum elong	-9518 Nov 29 j 03:35	1° \mathring{A} 55'47	0°16'05
conjunction	-9524 Nov 15 j 04:29	18° \mathring{M} 34'52	0°51'28	max. Earth dist.	-9518 Nov 30 j 05:40	1° \mathring{A} 58'14	30.96240 AU
minimum elong	-9524 Nov 15 j 04:29	18° \mathring{M} 34'52	0°51'38	morning rise	-9518 Dec 15 j 01:24	2° \mathring{A} 31'25	
max. Earth dist.	-9524 Nov 16 j 06:00	18° \mathring{M} 37'17	31.01841 AU	retrograde	-9517 Mar 16 j 20:52	4° \mathring{A} 30'14	
morning rise	-9524 Nov 30 j 22:24	19° \mathring{M} 10'12		min. Earth dist.	-9517 Jun 04 j 10:55	3° \mathring{A} 06'38	28.95690 AU
retrograde	-9523 Mar 02 j 12:27	21° \mathring{M} 08'48		opposition	-9517 Jun 05 j 11:44	3° \mathring{A} 04'54	0°13'49
min. Earth dist.	-9523 May 21 j 10:05	19° \mathring{M} 45'26	29.01540 AU	direct	-9517 Aug 21 j 23:08	1° \mathring{A} 42'04	
opposition	-9523 May 22 j 11:04	19° \mathring{M} 43'43	0°51'52	evening set	-9517 Nov 15 j 21:22	3° \mathring{A} 34'05	
direct	-9523 Aug 08 j 03:13	18° \mathring{M} 21'03					
evening set	-9523 Nov 02 j 01:37	20° \mathring{M} 13'00		conjunction	-9517 Dec 01 j 15:36	4° \mathring{A} 09'22	0°10'02
				minimum elong	-9517 Dec 01 j 15:36	4° \mathring{A} 09'22	0°10'03
conjunction	-9523 Nov 17 j 16:07	20° \mathring{M} 48'00	0°45'42	behind sun begin	-9517 Dec 01 j 10:22	4° \mathring{A} 08'54	
minimum elong	-9523 Nov 17 j 16:07	20° \mathring{M} 48'00	0°45'52	behind sun end	-9517 Dec 01 j 20:50	4° \mathring{A} 09'51	
max. Earth dist.	-9523 Nov 18 j 18:48	20° \mathring{M} 50'31	31.01118 AU	max. Earth dist.	-9517 Dec 02 j 17:01	4° \mathring{A} 11'46	30.95090 AU
morning rise	-9523 Dec 03 j 10:35	21° \mathring{M} 23'23		morning rise	-9517 Dec 17 j 14:12	4° \mathring{A} 45'04	
retrograde	-9522 Mar 05 j 00:08	23° \mathring{M} 22'03		retrograde	-9516 Mar 18 j 09:02	6° \mathring{A} 43'53	
opposition	-9522 May 24 j 23:09	21° \mathring{M} 56'57	0°45'40	opposition	-9516 Jun 06 j 23:41	5° \mathring{A} 18'29	0°07'21
min. Earth dist.	-9522 May 23 j 22:11	21° \mathring{M} 58'41	29.00788 AU	min. Earth dist.	-9516 Jun 05 j 23:45	5° \mathring{A} 20'09	28.94577 AU
direct	-9522 Aug 10 j 14:21	20° \mathring{M} 34'19		direct	-9516 Aug 23 j 09:17	3° \mathring{A} 55'35	
evening set	-9522 Nov 04 j 12:43	22° \mathring{M} 26'18		evening set	-9516 Nov 17 j 08:49	5° \mathring{A} 47'36	
conjunction	-9522 Nov 20 j 03:46	23° \mathring{M} 01'20	0°39'53	conjunction	-9516 Dec 03 j 03:51	6° \mathring{A} 22'56	0°04'00
minimum elong	-9522 Nov 20 j 03:47	23° \mathring{M} 01'20	0°40'00	minimum elong	-9516 Dec 03 j 03:50	6° \mathring{A} 22'56	0°03'59
max. Earth dist.	-9522 Nov 21 j 05:37	23° \mathring{M} 03'46	31.00346 AU	behind sun begin	-9516 Dec 02 j 21:25	6° \mathring{A} 22'21	
morning rise	-9522 Dec 05 j 23:02	23° \mathring{M} 36'46		behind sun end	-9516 Dec 03 j 10:16	6° \mathring{A} 23'31	
retrograde	-9521 Mar 07 j 14:36	25° \mathring{M} 35'30		max. Earth dist.	-9516 Dec 04 j 06:28	6° \mathring{A} 25'26	30.94019 AU
min. Earth dist.	-9521 May 26 j 10:14	24° \mathring{M} 12'08	28.99971 AU	morning rise	-9516 Dec 19 j 02:54	6° \mathring{A} 58'40	
opposition	-9521 May 27 j 11:25	24° \mathring{M} 10'24	0°39'24	retrograde	-9515 Mar 20 j 21:35	8° \mathring{A} 57'28	
direct	-9521 Aug 13 j 00:19	22° \mathring{M} 47'45		min. Earth dist.	-9515 Jun 08 j 10:43	7° \mathring{A} 33'45	28.93551 AU
evening set	-9521 Nov 06 j 23:45	24° \mathring{M} 39'45		opposition	-9515 Jun 09 j 11:24	7° \mathring{A} 32'01	0°00'53
				desc. node	-9515 Jul 28 j 11:47	6° \mathring{A} 22'35	
conjunction	-9521 Nov 22 j 15:29	25° \mathring{M} 14'51	0°33'59	direct	-9515 Aug 25 j 21:39	6° \mathring{A} 09'04	
minimum elong	-9521 Nov 22 j 15:30	25° \mathring{M} 14'51	0°34'07	evening set	-9515 Nov 19 j 20:38	8° \mathring{A} 01'07	
max. Earth dist.	-9521 Nov 23 j 17:52	25° \mathring{M} 17'19	30.99468 AU				
morning rise	-9521 Dec 08 j 11:23	25° \mathring{M} 50'20		conjunction	-9515 Dec 05 j 16:05	8° \mathring{A} 36'30	-0°02'12
retrograde	-9520 Mar 09 j 02:46	27° \mathring{M} 49'08		minimum elong	-9515 Dec 05 j 16:05	8° \mathring{A} 36'30	0°02'12
opposition	-9520 May 28 j 23:44	26° \mathring{M} 23'59	0°33'04	behind sun begin	-9515 Dec 05 j 09:34	8° \mathring{A} 35'54	
min. Earth dist.	-9520 May 27 j 23:23	26° \mathring{M} 25'40	28.99033 AU	behind sun end	-9515 Dec 05 j 22:36	8° \mathring{A} 37'05	

Attention, astronomical year style is used: The year -9515 in astronomical counting style is the year 9516 BCE in historical counting style.

max. Earth dist.	-9515 Dec 06 j 17:43	8° <u>♂</u> 38'54	30.93055 AU	opposition	-9508 Jun 24 j 20:42	23° <u>♂</u> 09'42	-0°44'06
morning rise	-9515 Dec 21 j 15:52	9° <u>♂</u> 12'16		min. Earth dist.	-9508 Jun 23 j 21:02	23° <u>♂</u> 11'21	28.89174 AU
retrograde	-9514 Mar 23 j 11:05	11° <u>♂</u> 11'05		direct	-9508 Sep 10 j 00:43	21° <u>♂</u> 46'34	
opposition	-9514 Jun 11 j 23:03	9° <u>♂</u> 45'35	-0°05'36	evening set	-9508 Dec 05 j 10:24	23° <u>♂</u> 39'05	
min. Earth dist.	-9514 Jun 10 j 22:39	9° <u>♂</u> 47'18	28.92660 AU				
direct	-9514 Aug 28 j 06:59	8° <u>♂</u> 22'36		conjunction	-9508 Dec 21 j 09:31	24° <u>♂</u> 14'44	-0°44'07
evening set	-9514 Nov 22 j 08:21	10° <u>♂</u> 14'41		minimum elong	-9508 Dec 21 j 09:31	24° <u>♂</u> 14'44	0°44'18
				max. Earth dist.	-9508 Dec 22 j 09:57	24° <u>♂</u> 17'01	30.88810 AU
conjunction	-9514 Dec 08 j 04:31	10° <u>♂</u> 50'06	-0°08'15	morning rise	-9507 Jan 06 j 12:42	24° <u>♂</u> 50'45	
minimum elong	-9514 Dec 08 j 04:31	10° <u>♂</u> 50'06	0°08'18	retrograde	-9507 Apr 08 j 06:29	26° <u>♂</u> 49'38	
behind sun begin	-9514 Dec 07 j 22:45	10° <u>♂</u> 49'35		min. Earth dist.	-9507 Jun 26 j 10:17	25° <u>♂</u> 25'43	28.88522 AU
behind sun end	-9514 Dec 08 j 10:16	10° <u>♂</u> 50'37		opposition	-9507 Jun 27 j 08:23	25° <u>♂</u> 24'10	-0°50'21
max. Earth dist.	-9514 Dec 09 j 07:20	10° <u>♂</u> 52'37	30.92225 AU	direct	-9507 Sep 12 j 11:21	24° <u>♂</u> 00'59	
morning rise	-9514 Dec 24 j 04:42	11° <u>♂</u> 25'55		evening set	-9507 Dec 07 j 23:17	25° <u>♂</u> 53'34	
retrograde	-9513 Mar 25 j 21:53	13° <u>♂</u> 24'44					
min. Earth dist.	-9513 Jun 13 j 10:07	12° <u>♂</u> 00'57	28.91898 AU	conjunction	-9507 Dec 23 j 23:02	26° <u>♂</u> 29'14	-0°49'56
opposition	-9513 Jun 14 j 10:44	11° <u>♂</u> 59'14	-0°12'05	minimum elong	-9507 Dec 23 j 23:01	26° <u>♂</u> 29'14	0°50'07
direct	-9513 Aug 30 j 18:23	10° <u>♂</u> 36'13		max. Earth dist.	-9507 Dec 24 j 23:48	26° <u>♂</u> 31'33	30.88108 AU
evening set	-9513 Nov 24 j 20:08	12° <u>♂</u> 28'21		morning rise	-9506 Jan 09 j 02:25	27° <u>♂</u> 05'16	
				retrograde	-9506 Apr 10 j 20:12	29° <u>♂</u> 04'07	
conjunction	-9513 Dec 10 j 16:46	13° <u>♂</u> 03'48	-0°14'17	opposition	-9506 Jun 29 j 19:44	27° <u>♂</u> 38'38	-0°56'32
minimum elong	-9513 Dec 10 j 16:46	13° <u>♂</u> 03'48	0°14'20	min. Earth dist.	-9506 Jun 28 j 21:37	27° <u>♂</u> 40'11	28.87777 AU
behind sun begin	-9513 Dec 10 j 13:49	13° <u>♂</u> 03'32		direct	-9506 Sep 15 j 00:37	26° <u>♂</u> 15'22	
behind sun end	-9513 Dec 10 j 19:44	13° <u>♂</u> 04'04		evening set	-9506 Dec 10 j 12:20	28° <u>♂</u> 08'01	
max. Earth dist.	-9513 Dec 11 j 18:55	13° <u>♂</u> 06'15	30.91539 AU				
morning rise	-9513 Dec 26 j 17:38	13° <u>♂</u> 39'39		conjunction	-9506 Dec 26 j 12:20	28° <u>♂</u> 43'42	-0°55'40
retrograde	-9512 Mar 27 j 11:14	15° <u>♂</u> 38'30		minimum elong	-9506 Dec 26 j 12:20	28° <u>♂</u> 43'42	0°55'53
opposition	-9512 Jun 15 j 22:25	14° <u>♂</u> 13'00	-0°18'33	max. Earth dist.	-9506 Dec 27 j 11:23	28° <u>♂</u> 45'52	30.87338 AU
min. Earth dist.	-9512 Jun 14 j 21:29	14° <u>♂</u> 14'44	28.91273 AU	morning rise	-9505 Jan 11 j 16:16	29° <u>♂</u> 19'46	
direct	-9512 Sep 01 j 03:55	12° <u>♂</u> 49'57			-9505 Jan 30 j 22:26	0° <u>♂</u>	
evening set	-9512 Nov 26 j 08:13	14° <u>♂</u> 42'10		retrograde	-9505 Apr 13 j 09:38	1° <u>♂</u> 18'34	
					-9505 Jun 28 j 04:16	30° <u>♂</u> 18'42	
conjunction	-9512 Dec 12 j 05:27	15° <u>♂</u> 17'39	-0°20'19	min. Earth dist.	-9505 Jul 01 j 09:58	29° <u>♂</u> 54'32	28.87004 AU
minimum elong	-9512 Dec 12 j 05:26	15° <u>♂</u> 17'39	0°20'24	opposition	-9505 Jul 02 j 07:12	29° <u>♂</u> 53'02	-1°02'37
max. Earth dist.	-9512 Dec 13 j 08:15	15° <u>♂</u> 20'10	30.90956 AU	direct	-9505 Sep 17 j 11:10	28° <u>♂</u> 29'42	
morning rise	-9512 Dec 28 j 06:45	15° <u>♂</u> 53'33			-9505 Dec 02 j 13:41	0° <u>♂</u>	
retrograde	-9511 Mar 29 j 23:13	17° <u>♂</u> 52'25		evening set	-9505 Dec 13 j 01:10	0° <u>♂</u> 22'24	
min. Earth dist.	-9511 Jun 17 j 09:55	16° <u>♂</u> 28'37	28.90732 AU				
opposition	-9511 Jun 18 j 10:00	16° <u>♂</u> 26'55	-0°25'00	conjunction	-9505 Dec 29 j 01:44	0° <u>♂</u> 58'07	-1°01'19
direct	-9511 Sep 03 j 13:32	15° <u>♂</u> 03'52		minimum elong	-9505 Dec 29 j 01:43	0° <u>♂</u> 58'07	1°01'33
evening set	-9511 Nov 28 j 20:29	16° <u>♂</u> 56'09		max. Earth dist.	-9505 Dec 30 j 01:25	1° <u>♂</u> 00'20	30.86556 AU
				morning rise	-9504 Jan 14 j 05:51	1° <u>♂</u> 34'12	
conjunction	-9511 Dec 14 j 18:16	17° <u>♂</u> 31'41	-0°26'19	retrograde	-9504 Apr 14 j 20:49	3° <u>♂</u> 32'57	
minimum elong	-9511 Dec 14 j 18:16	17° <u>♂</u> 31'41	0°26'25	opposition	-9504 Jul 03 j 18:31	2° <u>♂</u> 07'23	-1°08'37
max. Earth dist.	-9511 Dec 15 j 20:37	17° <u>♂</u> 34'09	30.90452 AU	min. Earth dist.	-9504 Jul 02 j 21:39	2° <u>♂</u> 08'51	28.86236 AU
morning rise	-9511 Dec 30 j 20:05	18° <u>♂</u> 07'36		direct	-9504 Sep 18 j 23:21	0° <u>♂</u> 43'58	
retrograde	-9510 Apr 01 j 13:34	20° <u>♂</u> 06'30		evening set	-9504 Dec 14 j 14:22	2° <u>♂</u> 36'43	
opposition	-9510 Jun 20 j 21:33	18° <u>♂</u> 41'01	-0°31'25				
min. Earth dist.	-9510 Jun 19 j 20:56	18° <u>♂</u> 42'45	28.90242 AU	conjunction	-9504 Dec 30 j 15:13	3° <u>♂</u> 12'28	-1°06'52
direct	-9510 Sep 06 j 00:50	17° <u>♂</u> 17'57		minimum elong	-9504 Dec 30 j 15:13	3° <u>♂</u> 12'28	1°07'08
evening set	-9510 Dec 01 j 08:56	19° <u>♂</u> 10'19		max. Earth dist.	-9504 Dec 31 j 13:35	3° <u>♂</u> 14'34	30.85821 AU
				morning rise	-9503 Jan 15 j 19:47	3° <u>♂</u> 48'34	
conjunction	-9510 Dec 17 j 07:06	19° <u>♂</u> 45'53	-0°32'18	retrograde	-9503 Apr 17 j 10:02	5° <u>♂</u> 47'15	
minimum elong	-9510 Dec 17 j 07:06	19° <u>♂</u> 45'53	0°32'26	min. Earth dist.	-9503 Jul 05 j 08:53	4° <u>♂</u> 23'09	28.85553 AU
max. Earth dist.	-9510 Dec 18 j 08:58	19° <u>♂</u> 48'19	30.89949 AU	opposition	-9503 Jul 06 j 05:37	4° <u>♂</u> 21'41	-1°14'31
morning rise	-9509 Jan 02 j 09:23	20° <u>♂</u> 21'51		direct	-9503 Sep 21 j 09:33	2° <u>♂</u> 58'10	
retrograde	-9509 Apr 04 j 02:40	22° <u>♂</u> 20'46		evening set	-9503 Dec 17 j 03:35	4° <u>♂</u> 51'01	
min. Earth dist.	-9509 Jun 22 j 09:59	20° <u>♂</u> 56'55	28.89736 AU				
opposition	-9509 Jun 23 j 09:13	20° <u>♂</u> 55'18	-0°37'47	conjunction	-9502 Jan 02 j 04:51	5° <u>♂</u> 26'47	-1°12'20
direct	-9509 Sep 08 j 12:06	19° <u>♂</u> 32'12		minimum elong	-9502 Jan 02 j 04:50	5° <u>♂</u> 26'47	1°12'36
evening set	-9509 Dec 03 j 21:31	21° <u>♂</u> 24'39		max. Earth dist.	-9502 Jan 03 j 03:36	5° <u>♂</u> 28'55	30.85174 AU
				morning rise	-9502 Jan 18 j 09:35	6° <u>♂</u> 02'53	
conjunction	-9509 Dec 19 j 20:18	22° <u>♂</u> 00'16	-0°38'14	retrograde	-9502 Apr 19 j 21:30	8° <u>♂</u> 01'33	
minimum elong	-9509 Dec 19 j 20:17	22° <u>♂</u> 00'15	0°38'22	opposition	-9502 Jul 08 j 16:49	6° <u>♂</u> 35'58	-1°20'17
max. Earth dist.	-9509 Dec 20 j 22:09	22° <u>♂</u> 02'41	30.89422 AU	min. Earth dist.	-9502 Jul 07 j 21:03	6° <u>♂</u> 37'22	28.84976 AU
morning rise	-9508 Jan 04 j 22:54	22° <u>♂</u> 36'15		direct	-9502 Sep 23 j 19:35	5° <u>♂</u> 12'24	
retrograde	-9508 Apr 05 j 16:55	24° <u>♂</u> 35'09		evening set	-9502 Dec 19 j 16:44	7° <u>♂</u> 05'21	

Attention, astronomical year style is used: The year -9501 in astronomical counting style is the year 9502 BCE in historical counting style.

conjunction	-9501 Jan 04 j 18:20	7°M.41'07	-1°17'41	retrograde	-9495 May 05 j 19:16	23°M.44'58	
minimum elong	-9501 Jan 04 j 18:19	7°M.41'07	1°17'59	opposition	-9495 Jul 23 j 22:14	22°M.19'45	-1°56'56
max. Earth dist.	-9501 Jan 05 j 16:28	7°M.43'12	30.84667 AU	min. Earth dist.	-9495 Jul 23 j 06:28	22°M.20'52	28.83817 AU
morning rise	-9501 Jan 20 j 23:20	8°M.17'15		direct	-9495 Oct 09 j 05:43	20°M.55'58	
retrograde	-9501 Apr 22 j 10:42	10°M.15'52		evening set	-9494 Jan 04 j 17:41	22°M.49'50	
min. Earth dist.	-9501 Jul 10 j 07:32	8°M.51'45	28.84550 AU				
opposition	-9501 Jul 11 j 03:54	8°M.50'18	-1°25'57	conjunction	-9494 Jan 20 j 21:07	23°M.25'45	-1°51'28
direct	-9501 Sep 26 j 07:07	7°M.26'41		minimum elong	-9494 Jan 20 j 21:06	23°M.25'45	1°51'52
evening set	-9501 Dec 22 j 06:08	9°M.19'45		max. Earth dist.	-9494 Jan 21 j 13:43	23°M.27'18	30.83589 AU
				morning rise	-9494 Feb 06 j 03:15	24°M.01'56	
conjunction	-9500 Jan 07 j 08:00	9°M.55'33	-1°22'55	retrograde	-9494 May 08 j 09:41	26°M.00'18	
minimum elong	-9500 Jan 07 j 07:59	9°M.55'33	1°23'13	opposition	-9494 Jul 26 j 09:20	24°M.35'07	-2°01'31
max. Earth dist.	-9500 Jan 08 j 05:45	9°M.57'35	30.84302 AU	min. Earth dist.	-9494 Jul 25 j 18:14	24°M.36'11	28.83589 AU
morning rise	-9500 Jan 23 j 13:15	10°M.31'41		direct	-9494 Oct 11 j 16:51	23°M.11'15	
retrograde	-9500 Apr 23 j 22:50	12°M.30'17		evening set	-9493 Jan 07 j 07:50	25°M.05'14	
opposition	-9500 Jul 12 j 15:01	11°M.04'45	-1°31'29				
min. Earth dist.	-9500 Jul 11 j 19:57	11°M.06'06	28.84269 AU	conjunction	-9493 Jan 23 j 11:33	25°M.41'09	-1°55'40
direct	-9500 Sep 27 j 17:57	9°M.41'06		minimum elong	-9493 Jan 23 j 11:32	25°M.41'09	1°56'07
evening set	-9500 Dec 23 j 19:35	11°M.34'17		max. Earth dist.	-9493 Jan 24 j 03:56	25°M.42'41	30.83302 AU
				morning rise	-9493 Feb 08 j 17:38	26°M.17'20	
conjunction	-9499 Jan 08 j 21:55	12°M.10'07	-1°28'01	retrograde	-9493 May 10 j 20:52	28°M.15'37	
minimum elong	-9499 Jan 08 j 21:54	12°M.10'07	1°28'22	opposition	-9493 Jul 28 j 20:24	26°M.50'26	-2°05'56
max. Earth dist.	-9499 Jan 09 j 19:36	12°M.12'09	30.84090 AU	min. Earth dist.	-9493 Jul 28 j 06:52	26°M.51'24	28.83274 AU
morning rise	-9499 Jan 25 j 03:19	12°M.46'15		direct	-9493 Oct 14 j 03:48	25°M.26'30	
retrograde	-9499 Apr 26 j 12:48	14°M.44'50		evening set	-9492 Jan 09 j 22:11	27°M.20'33	
min. Earth dist.	-9499 Jul 14 j 06:25	13°M.20'45	28.84114 AU				
opposition	-9499 Jul 15 j 02:02	13°M.19'22	-1°36'52	conjunction	-9492 Jan 26 j 02:04	27°M.56'29	-1°59'42
direct	-9499 Sep 30 j 06:18	11°M.55'41		minimum elong	-9492 Jan 26 j 02:03	27°M.56'29	2°00'09
evening set	-9499 Dec 26 j 09:22	13°M.49'01		max. Earth dist.	-9492 Jan 26 j 16:59	27°M.57'53	30.82970 AU
				morning rise	-9492 Feb 11 j 08:18	28°M.32'39	
conjunction	-9498 Jan 11 j 11:48	14°M.24'52	-1°33'00		-9492 Mar 29 j 16:14	0°M.00'00	
minimum elong	-9498 Jan 11 j 11:47	14°M.24'52	1°33'21	retrograde	-9492 May 12 j 09:14	0°M.30'50	
max. Earth dist.	-9498 Jan 12 j 08:16	14°M.26'47	30.83973 AU		-9492 Jun 25 j 16:27	30°M.00'00	
morning rise	-9498 Jan 27 j 17:29	15°M.01'01		opposition	-9492 Jul 30 j 07:10	29°M.05'39	-2°10'09
	-9498 Jan 27 j 06:17	15°M.00'00		min. Earth dist.	-9492 Jul 29 j 17:44	29°M.06'37	28.82938 AU
retrograde	-9498 Apr 29 j 02:25	16°M.59'35		direct	-9492 Oct 15 j 16:03	27°M.41'36	
opposition	-9498 Jul 17 j 13:06	15°M.34'11	-1°42'08	evening set	-9491 Jan 11 j 12:38	29°M.35'46	
min. Earth dist.	-9498 Jul 16 j 19:00	15°M.35'28	28.84049 AU		-9491 Jan 22 j 11:22	0°M.00'00	
	-9498 Aug 07 j 05:44	15°M.00'00					
direct	-9498 Oct 02 j 16:42	14°M.10'30		conjunction	-9491 Jan 27 j 16:40	0°M.11'41	-2°03'33
	-9498 Nov 26 j 14:05	15°M.00'00		minimum elong	-9491 Jan 27 j 16:40	0°M.11'41	2°04'02
evening set	-9498 Dec 28 j 23:07	16°M.03'58		max. Earth dist.	-9491 Jan 28 j 06:45	0°M.13'00	30.82622 AU
				morning rise	-9491 Feb 12 j 22:55	0°M.47'51	
conjunction	-9497 Jan 14 j 01:59	16°M.39'50	-1°37'51	retrograde	-9491 May 14 j 20:20	2°M.45'55	
minimum elong	-9497 Jan 14 j 01:58	16°M.39'50	1°38'14	opposition	-9491 Aug 01 j 18:06	1°M.20'44	-2°14'09
max. Earth dist.	-9497 Jan 14 j 22:46	16°M.41'47	30.83928 AU	min. Earth dist.	-9491 Aug 01 j 06:24	1°M.21'34	28.82618 AU
morning rise	-9497 Jan 30 j 07:39	17°M.16'00			-9491 Oct 04 j 01:32	30°M.00'00	
retrograde	-9497 May 01 j 17:01	19°M.14'32		direct	-9491 Oct 18 j 02:59	29°M.56'35	
min. Earth dist.	-9497 Jul 19 j 06:06	17°M.50'29	28.84015 AU		-9491 Nov 01 j 05:28	0°M.00'00	
opposition	-9497 Jul 20 j 00:06	17°M.49'12	-1°47'14	evening set	-9490 Jan 14 j 02:58	1°M.50'50	
direct	-9497 Oct 05 j 06:10	16°M.25'30					
evening set	-9497 Dec 31 j 13:07	18°M.19'07		conjunction	-9490 Jan 30 j 07:12	2°M.26'46	-2°07'13
				minimum elong	-9490 Jan 30 j 07:12	2°M.26'46	2°07'41
conjunction	-9496 Jan 16 j 16:04	18°M.55'01	-1°42'33	max. Earth dist.	-9490 Jan 30 j 20:42	2°M.28'02	30.82327 AU
minimum elong	-9496 Jan 16 j 16:03	18°M.55'00	1°42'55	morning rise	-9490 Feb 15 j 13:24	3°M.02'54	
max. Earth dist.	-9496 Jan 17 j 10:53	18°M.56'46	30.83883 AU	retrograde	-9490 May 17 j 09:12	5°M.00'52	
morning rise	-9496 Feb 01 j 22:03	19°M.31'11		opposition	-9490 Aug 04 j 04:45	3°M.35'42	-2°17'58
retrograde	-9496 May 03 j 06:46	21°M.29'42		min. Earth dist.	-9490 Aug 03 j 16:43	3°M.36'34	28.82368 AU
opposition	-9496 Jul 21 j 11:15	20°M.04'25	-1°52'10	direct	-9490 Oct 20 j 15:21	2°M.11'26	
min. Earth dist.	-9496 Jul 20 j 18:32	20°M.05'36	28.83962 AU	evening set	-9489 Jan 16 j 17:25	4°M.05'49	
direct	-9496 Oct 06 j 17:14	18°M.40'41					
evening set	-9495 Jan 02 j 03:17	20°M.34'26		conjunction	-9489 Feb 01 j 21:40	4°M.41'44	-2°10'40
				minimum elong	-9489 Feb 01 j 21:39	4°M.41'44	2°11'10
conjunction	-9495 Jan 18 j 06:38	21°M.10'20	-1°47'05	max. Earth dist.	-9489 Feb 02 j 09:51	4°M.42'52	30.82120 AU
minimum elong	-9495 Jan 18 j 06:37	21°M.10'20	1°47'29	morning rise	-9489 Feb 18 j 03:55	5°M.17'52	
max. Earth dist.	-9495 Jan 19 j 01:25	21°M.12'06	30.83779 AU	retrograde	-9489 May 19 j 21:17	7°M.15'44	
morning rise	-9495 Feb 03 j 12:33	21°M.46'31		opposition	-9489 Aug 06 j 15:33	5°M.50'34	-2°21'34

Attention, astronomical year style is used: The year -9489 in astronomical counting style is the year 9490 BCE in historical counting style.

min. Earth dist.	-9489 Aug 06 j 05:01	5°♂51'20	28.82241 AU	morning rise	-9482 Mar 06 j 10:39	21°♂03'41	
direct	-9489 Oct 23 j 02:32	4°♂26'14		retrograde	-9482 Jun 04 j 14:59	23°♂00'55	
evening set	-9488 Jan 19 j 07:40	6°♂20'43		opposition	-9482 Aug 21 j 18:24	21°♂36'19	-2°40'23
				min. Earth dist.	-9482 Aug 21 j 14:13	21°♂36'36	28.83750 AU
conjunction	-9488 Feb 04 j 12:14	6°♂56'39	-2°13'56	direct	-9482 Nov 07 j 14:12	20°♂11'41	
minimum elong	-9488 Feb 04 j 12:13	6°♂56'38	2°14'26	evening set	-9481 Feb 04 j 14:55	22°♂07'08	
max. Earth dist.	-9488 Feb 05 j 00:38	6°♂57'48	30.82052 AU				
morning rise	-9488 Feb 20 j 18:21	7°♂32'45		conjunction	-9481 Feb 20 j 19:58	22°♂43'06	-2°30'48
retrograde	-9488 May 21 j 10:20	9°♂30'31		minimum elong	-9481 Feb 20 j 19:57	22°♂43'06	2°31'21
opposition	-9488 Aug 08 j 02:13	8°♂05'24	-2°24'56	max. Earth dist.	-9481 Feb 21 j 00:29	22°♂43'32	30.83608 AU
min. Earth dist.	-9488 Aug 07 j 15:40	8°♂06'09	28.82238 AU	morning rise	-9481 Mar 09 j 01:33	23°♂19'09	
direct	-9488 Oct 24 j 16:23	6°♂41'00		retrograde	-9481 Jun 07 j 03:36	25°♂16'15	
evening set	-9487 Jan 20 j 22:18	8°♂35'36		opposition	-9481 Aug 24 j 04:58	23°♂51'42	-2°42'07
				min. Earth dist.	-9481 Aug 24 j 00:55	23°♂52'00	28.83863 AU
conjunction	-9487 Feb 06 j 02:48	9°♂11'33	-2°17'00	direct	-9481 Nov 10 j 02:26	22°♂26'59	
minimum elong	-9487 Feb 06 j 02:47	9°♂11'33	2°17'30	evening set	-9480 Feb 07 j 05:51	24°♂22'34	
max. Earth dist.	-9487 Feb 06 j 13:22	9°♂12'32	30.82113 AU				
morning rise	-9487 Feb 22 j 09:02	9°♂47'39		conjunction	-9480 Feb 23 j 10:53	24°♂58'31	-2°32'18
retrograde	-9487 May 23 j 23:36	11°♂45'19		minimum elong	-9480 Feb 23 j 10:52	24°♂58'31	2°32'52
opposition	-9487 Aug 10 j 12:52	10°♂20'16	-2°28'06	max. Earth dist.	-9480 Feb 23 j 13:38	24°♂58'47	30.83682 AU
min. Earth dist.	-9487 Aug 10 j 03:21	10°♂20'57	28.82378 AU	morning rise	-9480 Mar 10 j 16:26	25°♂34'33	
direct	-9487 Oct 27 j 03:41	8°♂55'48		retrograde	-9480 Jun 08 j 14:43	27°♂31'32	
evening set	-9486 Jan 23 j 12:49	10°♂50'34		opposition	-9480 Aug 25 j 15:42	26°♂07'01	-2°43'37
				min. Earth dist.	-9480 Aug 25 j 13:36	26°♂07'10	28.83921 AU
conjunction	-9486 Feb 08 j 17:35	11°♂26'30	-2°19'51	direct	-9480 Nov 11 j 14:13	24°♂42'12	
minimum elong	-9486 Feb 08 j 17:34	11°♂26'30	2°20'21	evening set	-9479 Feb 08 j 20:43	26°♂37'53	
max. Earth dist.	-9486 Feb 09 j 04:27	11°♂27'31	30.82305 AU				
morning rise	-9486 Feb 24 j 23:35	12°♂02'36		conjunction	-9479 Feb 25 j 01:54	27°♂13'50	-2°33'35
retrograde	-9486 May 26 j 12:22	14°♂00'11		minimum elong	-9479 Feb 25 j 01:54	27°♂13'50	2°34'09
opposition	-9486 Aug 12 j 23:34	12°♂35'13	-2°31'01	max. Earth dist.	-9479 Feb 25 j 04:16	27°♂14'03	30.83727 AU
min. Earth dist.	-9486 Aug 12 j 14:43	12°♂35'51	28.82622 AU	morning rise	-9479 Mar 13 j 07:13	27°♂49'50	
direct	-9486 Oct 29 j 16:25	11°♂10'44		retrograde	-9479 Jun 11 j 02:43	29°♂46'40	
evening set	-9485 Jan 26 j 03:22	13°♂05'38		opposition	-9479 Aug 28 j 02:08	28°♂22'11	-2°44'51
				min. Earth dist.	-9479 Aug 28 j 00:27	28°♂22'18	28.83962 AU
conjunction	-9485 Feb 11 j 08:04	13°♂41'35	-2°22'29	direct	-9479 Nov 14 j 04:22	26°♂57'17	
minimum elong	-9485 Feb 11 j 08:03	13°♂41'35	2°23'01	evening set	-9478 Feb 11 j 11:38	28°♂53'03	
max. Earth dist.	-9485 Feb 11 j 17:00	13°♂42'25	30.82594 AU				
morning rise	-9485 Feb 27 j 14:10	14°♂17'40		conjunction	-9478 Feb 27 j 16:41	29°♂29'00	-2°34'37
retrograde	-9485 May 29 j 02:57	16°♂15'10		minimum elong	-9478 Feb 27 j 16:41	29°♂29'00	2°35'12
opposition	-9485 Aug 15 j 10:14	14°♂50'18	-2°33'43	max. Earth dist.	-9478 Feb 27 j 17:03	29°♂29'02	30.83785 AU
min. Earth dist.	-9485 Aug 15 j 01:55	14°♂50'54	28.82948 AU		-9478 Mar 13 j 15:20	0°♂	
direct	-9485 Nov 01 j 04:00	13°♂25'48		morning rise	-9478 Mar 15 j 22:00	0°♂04'59	
evening set	-9484 Jan 28 j 18:08	15°♂20'51		retrograde	-9478 Jun 13 j 15:15	2°♂01'40	
				opposition	-9478 Aug 30 j 12:42	0°♂37'12	-2°45'51
conjunction	-9484 Feb 13 j 23:01	15°♂56'48	-2°24'54	min. Earth dist.	-9478 Aug 30 j 12:11	0°♂37'15	28.84064 AU
minimum elong	-9484 Feb 13 j 23:00	15°♂56'48	2°25'26		-9478 Sep 22 j 00:04	30°♂♂	
max. Earth dist.	-9484 Feb 14 j 07:49	15°♂57'38	30.82918 AU	direct	-9478 Nov 16 j 15:52	29°♂12'13	
morning rise	-9484 Mar 01 j 04:54	16°♂32'53			-9477 Jan 10 j 05:40	0°♂	
retrograde	-9484 May 30 j 14:23	18°♂30'19		evening set	-9477 Feb 14 j 02:07	1°♂08'04	
opposition	-9484 Aug 16 j 20:53	17°♂05'32	-2°36'11				
min. Earth dist.	-9484 Aug 16 j 14:20	17°♂06'00	28.83274 AU	conjunction	-9477 Mar 02 j 07:22	1°♂44'01	-2°35'26
direct	-9484 Nov 02 j 15:18	15°♂41'01		minimum elong	-9477 Mar 02 j 07:22	1°♂44'01	2°36'00
evening set	-9483 Jan 30 j 09:07	17°♂36'13		max. Earth dist.	-9477 Mar 02 j 07:59	1°♂44'04	30.83922 AU
				morning rise	-9477 Mar 18 j 12:24	2°♂19'58	
conjunction	-9483 Feb 15 j 14:00	18°♂12'10	-2°27'05	retrograde	-9477 Jun 16 j 03:25	4°♂16'30	
minimum elong	-9483 Feb 15 j 14:00	18°♂12'10	2°27'38	opposition	-9477 Sep 01 j 23:11	2°♂52'05	-2°46'35
max. Earth dist.	-9483 Feb 15 j 20:54	18°♂12'49	30.83228 AU	min. Earth dist.	-9477 Sep 01 j 23:22	2°♂52'04	28.84250 AU
morning rise	-9483 Mar 03 j 19:53	18°♂48'15		direct	-9477 Nov 19 j 05:36	1°♂27'01	
retrograde	-9483 Jun 02 j 03:35	20°♂45'34		evening set	-9476 Feb 16 j 16:54	3°♂22'58	
opposition	-9483 Aug 19 j 07:35	19°♂20'54	-2°38'24				
min. Earth dist.	-9483 Aug 19 j 01:20	19°♂21'20	28.83557 AU	conjunction	-9476 Mar 03 j 22:01	3°♂58'54	-2°36'00
direct	-9483 Nov 05 j 03:31	17°♂56'19		minimum elong	-9476 Mar 03 j 22:01	3°♂58'54	2°36'35
evening set	-9482 Feb 02 j 00:02	19°♂51'40		max. Earth dist.	-9476 Mar 03 j 20:37	3°♂58'46	30.84174 AU
				morning rise	-9476 Mar 20 j 03:05	4°♂34'50	
conjunction	-9482 Feb 18 j 04:58	20°♂27'38	-2°29'03	retrograde	-9476 Jun 17 j 17:19	6°♂31'13	
minimum elong	-9482 Feb 18 j 04:57	20°♂27'38	2°29'36	opposition	-9476 Sep 03 j 09:31	5°♂06'50	-2°47'04
max. Earth dist.	-9482 Feb 18 j 10:48	20°♂28'10	30.83454 AU	min. Earth dist.	-9476 Sep 03 j 10:02	5°♂06'48	28.84579 AU

Attention, astronomical year style is used: The year -9476 in astronomical counting style is the year 9477 BCE in historical counting style.

direct	-9476 Nov 20 j 18:30	3° $\overline{3}$ 41'42		retrograde	-9469 Jul 04 j 02:57	22° $\overline{3}$ 13'54	
evening set	-9475 Feb 18 j 07:34	5° $\overline{3}$ 37'45		opposition	-9469 Sep 19 j 11:02	20° $\overline{3}$ 50'10	-2°43'18
				min. Earth dist.	-9469 Sep 19 j 18:16	20° $\overline{3}$ 49'39	28.89354 AU
conjunction	-9475 Mar 06 j 12:50	6° $\overline{3}$ 13'41	-2°36'20	direct	-9469 Dec 07 j 05:41	19° $\overline{3}$ 24'48	
minimum elong	-9475 Mar 06 j 12:50	6° $\overline{3}$ 13'41	2°36'55	evening set	-9468 Mar 06 j 14:12	21° $\overline{3}$ 21'31	
max. Earth dist.	-9475 Mar 06 j 11:38	6° $\overline{3}$ 13'35	30.84568 AU				
morning rise	-9475 Mar 22 j 17:34	6° $\overline{3}$ 49'36		conjunction	-9468 Mar 22 j 19:22	21° $\overline{3}$ 57'26	-2°32'00
retrograde	-9475 Jun 20 j 04:00	8° $\overline{3}$ 45'51		minimum elong	-9468 Mar 22 j 19:23	21° $\overline{3}$ 57'26	2°32'33
opposition	-9475 Sep 05 j 20:03	7° $\overline{3}$ 21'32	-2°47'18	max. Earth dist.	-9468 Mar 22 j 10:45	21° $\overline{3}$ 56'38	30.89425 AU
min. Earth dist.	-9475 Sep 05 j 21:54	7° $\overline{3}$ 21'24	28.85048 AU	morning rise	-9468 Apr 07 j 22:52	22° $\overline{3}$ 33'14	
direct	-9475 Nov 23 j 06:53	5° $\overline{3}$ 56'21		retrograde	-9468 Jul 05 j 14:12	24° $\overline{3}$ 28'29	
evening set	-9474 Feb 20 j 22:10	7° $\overline{3}$ 52'30		opposition	-9468 Sep 20 j 21:30	23° $\overline{3}$ 04'49	-2°41'45
				min. Earth dist.	-9468 Sep 21 j 05:51	23° $\overline{3}$ 04'14	28.89909 AU
conjunction	-9474 Mar 09 j 03:19	8° $\overline{3}$ 28'26	-2°36'26	direct	-9468 Dec 08 j 19:52	21° $\overline{3}$ 39'24	
minimum elong	-9474 Mar 09 j 03:19	8° $\overline{3}$ 28'26	2°37'01	evening set	-9467 Mar 09 j 04:57	23° $\overline{3}$ 36'11	
max. Earth dist.	-9474 Mar 09 j 00:37	8° $\overline{3}$ 28'11	30.85120 AU				
morning rise	-9474 Mar 25 j 08:00	9° $\overline{3}$ 04'20		conjunction	-9467 Mar 25 j 09:54	24° $\overline{3}$ 12'05	-2°30'27
retrograde	-9474 Jun 22 j 17:14	11° $\overline{3}$ 00'26		minimum elong	-9467 Mar 25 j 09:55	24° $\overline{3}$ 12'05	2°30'59
opposition	-9474 Sep 08 j 06:27	9° $\overline{3}$ 36'13	-2°47'16	max. Earth dist.	-9467 Mar 24 j 22:54	24° $\overline{3}$ 11'03	30.89964 AU
min. Earth dist.	-9474 Sep 08 j 08:06	9° $\overline{3}$ 36'06	28.85670 AU	morning rise	-9467 Apr 10 j 13:22	24° $\overline{3}$ 47'51	
direct	-9474 Nov 25 j 19:14	8° $\overline{3}$ 11'00		retrograde	-9467 Jul 08 j 03:18	26° $\overline{3}$ 42'57	
evening set	-9473 Feb 23 j 12:46	10° $\overline{3}$ 07'15		opposition	-9467 Sep 23 j 08:02	25° $\overline{3}$ 19'19	-2°39'59
				min. Earth dist.	-9467 Sep 23 j 16:58	25° $\overline{3}$ 18'41	28.90432 AU
conjunction	-9473 Mar 11 j 17:58	10° $\overline{3}$ 43'12	-2°36'17	direct	-9467 Dec 11 j 09:09	23° $\overline{3}$ 53'50	
minimum elong	-9473 Mar 11 j 17:58	10° $\overline{3}$ 43'12	2°36'52	evening set	-9466 Mar 11 j 19:14	25° $\overline{3}$ 50'40	
max. Earth dist.	-9473 Mar 11 j 14:56	10° $\overline{3}$ 42'55	30.85800 AU				
morning rise	-9473 Mar 27 j 22:24	11° $\overline{3}$ 19'05		conjunction	-9466 Mar 28 j 00:17	26° $\overline{3}$ 26'33	-2°28'40
retrograde	-9473 Jun 25 j 04:45	13° $\overline{3}$ 15'03		minimum elong	-9466 Mar 28 j 00:17	26° $\overline{3}$ 26'33	2°29'13
opposition	-9473 Sep 10 j 16:53	11° $\overline{3}$ 50'56	-2°46'59	max. Earth dist.	-9466 Mar 27 j 13:23	26° $\overline{3}$ 25'32	30.90477 AU
min. Earth dist.	-9473 Sep 10 j 20:18	11° $\overline{3}$ 50'42	28.86406 AU	morning rise	-9466 Apr 13 j 03:22	27° $\overline{3}$ 02'18	
direct	-9473 Nov 28 j 05:48	10° $\overline{3}$ 25'43		retrograde	-9466 Jul 10 j 13:42	28° $\overline{3}$ 57'14	
evening set	-9472 Feb 26 j 03:24	12° $\overline{3}$ 22'04		opposition	-9466 Sep 25 j 18:35	27° $\overline{3}$ 33'39	-2°37'58
				min. Earth dist.	-9466 Sep 26 j 05:03	27° $\overline{3}$ 32'54	28.90947 AU
conjunction	-9472 Mar 13 j 08:38	12° $\overline{3}$ 58'00	-2°35'54	direct	-9466 Dec 13 j 22:11	26° $\overline{3}$ 08'06	
minimum elong	-9472 Mar 13 j 08:38	12° $\overline{3}$ 58'00	2°36'29	evening set	-9465 Mar 14 j 09:37	28° $\overline{3}$ 04'58	
max. Earth dist.	-9472 Mar 13 j 04:27	12° $\overline{3}$ 57'37	30.86582 AU				
morning rise	-9472 Mar 29 j 12:58	13° $\overline{3}$ 33'52		conjunction	-9465 Mar 30 j 14:29	28° $\overline{3}$ 40'51	-2°26'40
retrograde	-9472 Jun 26 j 16:48	15° $\overline{3}$ 29'43		minimum elong	-9465 Mar 30 j 14:30	28° $\overline{3}$ 40'51	2°27'12
opposition	-9472 Sep 12 j 03:18	14° $\overline{3}$ 05'43	-2°46'26	max. Earth dist.	-9465 Mar 30 j 01:52	28° $\overline{3}$ 39'40	30.91026 AU
min. Earth dist.	-9472 Sep 12 j 06:41	14° $\overline{3}$ 05'29	28.87198 AU	morning rise	-9465 Apr 15 j 17:32	29° $\overline{3}$ 16'34	
direct	-9472 Nov 29 j 18:03	12° $\overline{3}$ 40'28			-9465 May 06 j 18:50	0° \approx	
evening set	-9471 Feb 27 j 18:13	14° $\overline{3}$ 36'56		retrograde	-9465 Jul 13 j 02:40	1° \approx 11'19	
					-9465 Sep 21 j 00:26	30° \overline{R} $\overline{3}$	
conjunction	-9471 Mar 15 j 23:20	15° $\overline{3}$ 12'52	-2°35'17	opposition	-9465 Sep 28 j 04:50	29° $\overline{3}$ 47'47	-2°35'42
minimum elong	-9471 Mar 15 j 23:20	15° $\overline{3}$ 12'52	2°35'51	min. Earth dist.	-9465 Sep 28 j 15:14	29° $\overline{3}$ 47'03	28.91522 AU
max. Earth dist.	-9471 Mar 15 j 17:43	15° $\overline{3}$ 12'21	30.87371 AU	direct	-9465 Dec 16 j 11:20	28° $\overline{3}$ 22'11	
morning rise	-9471 Apr 01 j 03:28	15° $\overline{3}$ 48'44			-9464 Mar 07 j 01:02	0° \approx	
retrograde	-9471 Jun 29 j 03:19	17° $\overline{3}$ 44'26		evening set	-9464 Mar 15 j 23:51	0° \approx 19'06	
opposition	-9471 Sep 14 j 13:51	16° $\overline{3}$ 20'33	-2°45'38				
min. Earth dist.	-9471 Sep 14 j 19:10	16° $\overline{3}$ 20'10	28.87984 AU	conjunction	-9464 Apr 01 j 04:45	0° \approx 54'58	-2°24'28
direct	-9471 Dec 02 j 05:16	14° $\overline{3}$ 55'17		minimum elong	-9464 Apr 01 j 04:46	0° \approx 54'58	2°25'00
evening set	-9470 Mar 02 j 08:54	16° $\overline{3}$ 51'51		max. Earth dist.	-9464 Mar 31 j 15:58	0° \approx 53'47	30.91640 AU
				morning rise	-9464 Apr 17 j 07:29	1° \approx 30'40	
conjunction	-9470 Mar 18 j 14:06	17° $\overline{3}$ 27'46	-2°34'25	retrograde	-9464 Jul 14 j 13:42	3° \approx 25'16	
minimum elong	-9470 Mar 18 j 14:06	17° $\overline{3}$ 27'46	2°34'59	opposition	-9464 Sep 29 j 15:23	2° \approx 01'47	-2°33'13
max. Earth dist.	-9470 Mar 18 j 07:52	17° $\overline{3}$ 27'11	30.88136 AU	min. Earth dist.	-9464 Sep 30 j 03:23	2° \approx 00'56	28.92188 AU
morning rise	-9470 Apr 03 j 17:58	18° $\overline{3}$ 03'36		direct	-9464 Dec 17 j 22:59	0° \approx 36'09	
retrograde	-9470 Jul 01 j 14:56	19° $\overline{3}$ 59'11		evening set	-9463 Mar 18 j 14:00	2° \approx 33'06	
opposition	-9470 Sep 17 j 00:25	18° $\overline{3}$ 35'23	-2°44'35				
min. Earth dist.	-9470 Sep 17 j 06:13	18° $\overline{3}$ 34'58	28.88707 AU	conjunction	-9463 Apr 03 j 18:47	3° \approx 08'58	-2°22'02
direct	-9470 Dec 04 j 18:23	17° $\overline{3}$ 10'05		minimum elong	-9463 Apr 03 j 18:47	3° \approx 08'58	2°22'32
evening set	-9469 Mar 04 j 23:34	19° $\overline{3}$ 06'44		max. Earth dist.	-9463 Apr 03 j 05:03	3° \approx 07'41	30.92374 AU
				morning rise	-9463 Apr 19 j 21:20	3° \approx 44'39	
conjunction	-9469 Mar 21 j 04:36	19° $\overline{3}$ 42'39	-2°33'19	retrograde	-9463 Jul 17 j 00:56	5° \approx 39'05	
minimum elong	-9469 Mar 21 j 04:37	19° $\overline{3}$ 42'39	2°33'52	opposition	-9463 Oct 02 j 01:46	4° \approx 15'41	-2°30'31
max. Earth dist.	-9469 Mar 20 j 20:14	19° $\overline{3}$ 41'52	30.88821 AU	min. Earth dist.	-9463 Oct 02 j 13:17	4° \approx 14'52	28.92978 AU
morning rise	-9469 Apr 06 j 08:25	20° $\overline{3}$ 18'28		direct	-9463 Dec 20 j 11:49	2° \approx 50'02	

Attention, astronomical year style is used: The year -9462 in astronomical counting style is the year 9463 BCE in historical counting style.

evening set	-9462 Mar 21 j 04:06	4°47'02		max. Earth dist.	-9456 Apr 18 j 23:39	18°45'12	30.99640 AU
				morning rise	-9456 May 05 j 20:28	19°22'36	
conjunction	-9462 Apr 06 j 08:45	5°22'54	-2°19'23	retrograde	-9456 Aug 01 j 08:05	21°16'10	
minimum elong	-9462 Apr 06 j 08:46	5°22'54	2°19'54	opposition	-9456 Oct 17 j 03:53	19°53'26	-2°05'25
max. Earth dist.	-9462 Apr 05 j 18:16	5°21'33	30.93239 AU	min. Earth dist.	-9456 Oct 17 j 20:54	19°52'14	29.00210 AU
morning rise	-9462 Apr 22 j 11:03	5°58'33		direct	-9455 Jan 05 j 02:25	18°27'49	
retrograde	-9462 Jul 19 j 10:55	7°52'51		evening set	-9455 Apr 06 j 05:24	20°25'09	
opposition	-9462 Oct 04 j 12:19	6°29'33	-2°27'34				
min. Earth dist.	-9462 Oct 05 j 01:09	6°28'39	28.93918 AU	conjunction	-9455 Apr 22 j 09:11	21°00'57	-1°55'15
direct	-9462 Dec 22 j 22:38	5°03'54		minimum elong	-9455 Apr 22 j 09:12	21°00'57	1°55'39
evening set	-9461 Mar 23 j 17:55	7°00'57		max. Earth dist.	-9455 Apr 21 j 13:02	20°59'04	31.00463 AU
				morning rise	-9455 May 08 j 09:37	21°36'27	
conjunction	-9461 Apr 08 j 22:36	7°36'49	-2°16'32	retrograde	-9455 Aug 03 j 18:46	23°29'53	
minimum elong	-9461 Apr 08 j 22:36	7°36'49	2°17'01	opposition	-9455 Oct 19 j 14:44	22°07'11	-2°01'03
max. Earth dist.	-9461 Apr 08 j 08:01	7°35'27	30.94255 AU	min. Earth dist.	-9455 Oct 20 j 09:33	22°05'52	29.00983 AU
morning rise	-9461 Apr 25 j 00:40	8°12'27		direct	-9454 Jan 07 j 15:26	20°41'33	
retrograde	-9461 Jul 21 j 21:51	10°06'38		evening set	-9454 Apr 08 j 19:02	22°38'52	
opposition	-9461 Oct 06 j 22:46	8°43'26	-2°24'24				
min. Earth dist.	-9461 Oct 07 j 11:39	8°42'32	28.94971 AU	conjunction	-9454 Apr 24 j 22:34	23°14'38	-1°51'05
direct	-9461 Dec 25 j 10:49	7°17'47		minimum elong	-9454 Apr 24 j 22:35	23°14'38	1°51'29
evening set	-9460 Mar 25 j 08:01	9°14'55		max. Earth dist.	-9454 Apr 24 j 01:13	23°12'38	31.01215 AU
				morning rise	-9454 May 10 j 22:49	23°50'07	
conjunction	-9460 Apr 10 j 12:28	9°50'46	-2°13'28	retrograde	-9454 Aug 06 j 05:49	25°43'22	
minimum elong	-9460 Apr 10 j 12:28	9°50'46	2°13'57	opposition	-9454 Oct 22 j 01:19	24°20'43	-1°56'30
max. Earth dist.	-9460 Apr 09 j 20:23	9°49'16	30.95361 AU	min. Earth dist.	-9454 Oct 22 j 19:53	24°19'25	29.01696 AU
morning rise	-9460 Apr 26 j 14:23	10°26'24		direct	-9453 Jan 10 j 05:16	22°55'01	
retrograde	-9460 Jul 23 j 09:08	12°20'28		evening set	-9453 Apr 11 j 08:25	24°52'19	
opposition	-9460 Oct 08 j 09:13	10°57'23	-2°21'01				
min. Earth dist.	-9460 Oct 08 j 23:08	10°56'24	28.96108 AU	conjunction	-9453 Apr 27 j 11:46	25°28'04	-1°46'45
direct	-9460 Dec 26 j 21:11	9°31'46		minimum elong	-9453 Apr 27 j 11:47	25°28'04	1°47'07
evening set	-9459 Mar 27 j 21:59	11°28'58		max. Earth dist.	-9453 Apr 26 j 13:40	25°26'01	31.01915 AU
max. Earth dist.	-9459 Apr 12 j 10:35	12°03'20	30.96517 AU	morning rise	-9453 May 13 j 11:43	26°03'31	
				retrograde	-9453 Aug 08 j 15:45	27°56'37	
conjunction	-9459 Apr 13 j 02:26	12°04'48	-2°10'12	opposition	-9453 Oct 24 j 12:03	26°33'59	-1°51'48
minimum elong	-9459 Apr 13 j 02:27	12°04'49	2°10'40	min. Earth dist.	-9453 Oct 25 j 08:03	26°32'35	29.02391 AU
morning rise	-9459 Apr 29 j 03:58	12°40'25		direct	-9452 Jan 12 j 16:47	25°08'15	
retrograde	-9459 Jul 25 j 19:46	14°34'22		evening set	-9452 Apr 12 j 21:43	27°05'30	
opposition	-9459 Oct 10 j 19:53	13°11'25	-2°17'25	max. Earth dist.	-9452 Apr 28 j 02:39	27°39'10	31.02627 AU
min. Earth dist.	-9459 Oct 11 j 10:41	13°10'22	28.97247 AU				
direct	-9459 Dec 29 j 10:55	11°45'49		conjunction	-9452 Apr 29 j 00:54	27°41'14	-1°42'16
evening set	-9458 Mar 30 j 11:54	13°43'04		minimum elong	-9452 Apr 29 j 00:55	27°41'14	1°42'38
				morning rise	-9452 May 15 j 00:30	28°16'40	
conjunction	-9458 Apr 15 j 16:02	14°18'54	-2°06'44		-9452 Jul 17 j 12:06	0°	
minimum elong	-9458 Apr 15 j 16:02	14°18'54	2°07'12	retrograde	-9452 Aug 10 j 01:54	0°09'36	
max. Earth dist.	-9458 Apr 14 j 22:07	14°17'14	30.97645 AU		-9452 Sep 02 j 20:20	30°	
morning rise	-9458 May 01 j 17:27	14°54'30		opposition	-9452 Oct 25 j 22:40	28°47'00	-1°46'56
	-9458 May 04 j 06:21	15°		min. Earth dist.	-9452 Oct 26 j 18:37	28°45'36	29.03107 AU
retrograde	-9458 Jul 28 j 08:24	16°48'20		direct	-9451 Jan 14 j 05:45	27°21'13	
opposition	-9458 Oct 13 j 06:32	15°25'28	-2°13'37	evening set	-9451 Apr 15 j 11:00	29°18'27	
min. Earth dist.	-9458 Oct 13 j 21:46	15°24'24	28.98343 AU				
	-9458 Oct 28 j 13:06	15°		conjunction	-9451 May 01 j 13:48	29°54'10	-1°37'38
direct	-9458 Dec 31 j 23:36	13°59'53		minimum elong	-9451 May 01 j 13:49	29°54'10	1°37'58
	-9457 Mar 04 j 13:09	15°		max. Earth dist.	-9451 Apr 30 j 14:31	29°52'00	31.03385 AU
evening set	-9457 Apr 02 j 01:44	15°57'11			-9451 May 04 j 04:30	0°	
				morning rise	-9451 May 17 j 13:08	0°29'34	
conjunction	-9457 Apr 18 j 05:54	16°33'01	-2°03'05	retrograde	-9451 Aug 12 j 11:52	2°22'22	
minimum elong	-9457 Apr 18 j 05:55	16°33'01	2°03'31	opposition	-9451 Oct 28 j 09:26	0°59'48	-1°41'54
max. Earth dist.	-9457 Apr 17 j 12:01	16°31'21	30.98695 AU	min. Earth dist.	-9451 Oct 29 j 05:55	0°58'21	29.03916 AU
morning rise	-9457 May 04 j 06:54	17°08'35			-9451 Dec 06 j 17:08	30°	
retrograde	-9457 Jul 30 j 18:51	19°02'18		direct	-9450 Jan 16 j 16:44	29°33'59	
opposition	-9457 Oct 15 j 17:13	17°39'30	-2°09'37		-9450 Feb 26 j 03:38	0°	
min. Earth dist.	-9457 Oct 16 j 10:10	17°38'19	28.99332 AU	evening set	-9450 Apr 17 j 23:49	1°31'12	
direct	-9456 Jan 03 j 12:12	16°13'55		max. Earth dist.	-9450 May 03 j 04:00	2°04'47	31.04252 AU
evening set	-9456 Apr 03 j 15:43	18°11'15					
				conjunction	-9450 May 04 j 02:31	2°06'53	-1°32'52
conjunction	-9456 Apr 19 j 19:35	18°47'03	-1°59'15	minimum elong	-9450 May 04 j 02:32	2°06'53	1°33'12
minimum elong	-9456 Apr 19 j 19:35	18°47'03	1°59'41	morning rise	-9450 May 20 j 01:23	2°42'16	

Attention, astronomical year style is used: The year -9450 in astronomical counting style is the year 9451 BCE in historical counting style.

retrograde	-9450 Aug 14 j 20:54	4° \mathbf{H} 34'57	minimum elong	-9443 May 19 j 17:39	17° \mathbf{H} 35'14	0°56'16
opposition	-9450 Oct 30 j 20:12	3° \mathbf{H} 12'25 -1°36'44	max. Earth dist.	-9443 May 18 j 15:56	17° \mathbf{H} 32'50	31.11676 AU
min. Earth dist.	-9450 Oct 31 j 16:59	3° \mathbf{H} 10'58 29.04826 AU	morning rise	-9443 Jun 04 j 13:47	18° \mathbf{H} 10'24	
direct	-9449 Jan 19 j 05:52	1° \mathbf{H} 46'37	retrograde	-9443 Aug 30 j 01:49	20° \mathbf{H} 02'35	
evening set	-9449 Apr 20 j 12:52	3° \mathbf{H} 43'49	opposition	-9443 Nov 15 j 00:29	18° \mathbf{H} 40'33	-0°57'00
			min. Earth dist.	-9443 Nov 16 j 00:04	18° \mathbf{H} 38'55	29.12133 AU
conjunction	-9449 May 06 j 15:07	4° \mathbf{H} 19'29 -1°27'58	direct	-9442 Feb 03 j 21:59	17° \mathbf{H} 15'01	
minimum elong	-9449 May 06 j 15:08	4° \mathbf{H} 19'29 1°28'16	evening set	-9442 May 06 j 05:46	19° \mathbf{H} 12'13	
max. Earth dist.	-9449 May 05 j 15:14	4° \mathbf{H} 17'16 31.05235 AU	max. Earth dist.	-9442 May 21 j 02:45	19° \mathbf{H} 45'13	31.12455 AU
morning rise	-9449 May 22 j 13:48	4° \mathbf{H} 54'50				
retrograde	-9449 Aug 17 j 08:28	6° \mathbf{H} 47'25	conjunction	-9442 May 22 j 05:33	19° \mathbf{H} 47'43	-0°50'27
opposition	-9449 Nov 02 j 06:44	5° \mathbf{H} 24'57 -1°31'25	minimum elong	-9442 May 22 j 05:33	19° \mathbf{H} 47'43	0°50'37
min. Earth dist.	-9449 Nov 03 j 03:18	5° \mathbf{H} 23'31 29.05865 AU	morning rise	-9442 Jun 07 j 01:19	20° \mathbf{H} 22'52	
direct	-9448 Jan 21 j 17:16	3° \mathbf{H} 59'11	retrograde	-9442 Sep 01 j 11:26	22° \mathbf{H} 14'57	
evening set	-9448 Apr 22 j 01:44	5° \mathbf{H} 56'24	opposition	-9442 Nov 17 j 11:33	20° \mathbf{H} 52'57	-0°50'57
max. Earth dist.	-9448 May 07 j 04:46	6° \mathbf{H} 29'54 31.06330 AU	min. Earth dist.	-9442 Nov 18 j 11:46	20° \mathbf{H} 51'16	29.12872 AU
			direct	-9441 Feb 06 j 09:18	19° \mathbf{H} 27'24	
conjunction	-9448 May 08 j 03:52	6° \mathbf{H} 32'03 -1°22'56	evening set	-9441 May 08 j 18:00	21° \mathbf{H} 24'33	
minimum elong	-9448 May 08 j 03:53	6° \mathbf{H} 32'03 1°23'14				
morning rise	-9448 May 24 j 02:00	7° \mathbf{H} 07'22	conjunction	-9441 May 24 j 17:30	22° \mathbf{H} 00'01	-0°44'45
retrograde	-9448 Aug 18 j 18:20	8° \mathbf{H} 59'52	minimum elong	-9441 May 24 j 17:30	22° \mathbf{H} 00'01	0°44'53
opposition	-9448 Nov 03 j 17:37	7° \mathbf{H} 37'29 -1°25'58	max. Earth dist.	-9441 May 23 j 15:20	21° \mathbf{H} 57'35	31.13158 AU
min. Earth dist.	-9448 Nov 04 j 15:17	7° \mathbf{H} 35'59 29.06987 AU	morning rise	-9441 Jun 09 j 12:43	22° \mathbf{H} 35'08	
direct	-9447 Jan 23 j 05:20	6° \mathbf{H} 11'46	retrograde	-9441 Sep 03 j 19:32	24° \mathbf{H} 27'08	
evening set	-9447 Apr 24 j 14:35	8° \mathbf{H} 09'00	opposition	-9441 Nov 19 j 22:30	23° \mathbf{H} 05'08	-0°44'49
			min. Earth dist.	-9441 Nov 20 j 23:13	23° \mathbf{H} 03'25	29.13534 AU
conjunction	-9447 May 10 j 16:14	8° \mathbf{H} 44'37 -1°17'46	direct	-9440 Feb 08 j 22:11	21° \mathbf{H} 39'35	
minimum elong	-9447 May 10 j 16:14	8° \mathbf{H} 44'37 1°18'02	evening set	-9440 May 10 j 06:17	23° \mathbf{H} 36'41	
max. Earth dist.	-9447 May 09 j 15:54	8° \mathbf{H} 42'21 31.07493 AU	max. Earth dist.	-9440 May 25 j 01:44	24° \mathbf{H} 09'33	31.13818 AU
morning rise	-9447 May 26 j 14:09	9° \mathbf{H} 19'55				
retrograde	-9447 Aug 21 j 07:03	11° \mathbf{H} 12'21	conjunction	-9440 May 26 j 05:10	24° \mathbf{H} 12'06	-0°38'59
opposition	-9447 Nov 06 j 04:25	9° \mathbf{H} 50'04 -1°20'23	minimum elong	-9440 May 26 j 05:10	24° \mathbf{H} 12'06	0°39'07
min. Earth dist.	-9447 Nov 07 j 01:34	9° \mathbf{H} 48'36 29.08155 AU	morning rise	-9440 Jun 11 j 00:04	24° \mathbf{H} 47'11	
direct	-9446 Jan 25 j 18:56	8° \mathbf{H} 24'24	retrograde	-9440 Sep 05 j 06:29	26° \mathbf{H} 39'06	
evening set	-9446 Apr 27 j 03:19	10° \mathbf{H} 21'39	opposition	-9440 Nov 21 j 09:34	25° \mathbf{H} 17'06	-0°38'38
max. Earth dist.	-9446 May 12 j 04:47	10° \mathbf{H} 55'02 31.08657 AU	min. Earth dist.	-9440 Nov 22 j 09:54	25° \mathbf{H} 15'25	29.14196 AU
			direct	-9439 Feb 10 j 09:01	23° \mathbf{H} 51'32	
conjunction	-9446 May 13 j 04:45	10° \mathbf{H} 57'16 -1°12'30	evening set	-9439 May 12 j 18:05	25° \mathbf{H} 48'34	
minimum elong	-9446 May 13 j 04:46	10° \mathbf{H} 57'16 1°12'46				
morning rise	-9446 May 29 j 02:07	11° \mathbf{H} 32'32	conjunction	-9439 May 28 j 16:39	26° \mathbf{H} 23'57	-0°33'11
retrograde	-9446 Aug 23 j 17:46	13° \mathbf{H} 24'55	minimum elong	-9439 May 28 j 16:39	26° \mathbf{H} 23'57	0°33'16
opposition	-9446 Nov 08 j 15:21	12° \mathbf{H} 02'42 -1°14'41	max. Earth dist.	-9439 May 27 j 14:22	26° \mathbf{H} 21'30	31.14490 AU
min. Earth dist.	-9446 Nov 09 j 14:02	12° \mathbf{H} 01'07 29.09301 AU	morning rise	-9439 Jun 13 j 10:53	26° \mathbf{H} 59'00	
direct	-9445 Jan 28 j 07:23	10° \mathbf{H} 37'05	retrograde	-9439 Sep 07 j 15:15	28° \mathbf{H} 50'51	
evening set	-9445 Apr 29 j 16:03	12° \mathbf{H} 34'22	opposition	-9439 Nov 23 j 20:47	27° \mathbf{H} 28'50	-0°32'24
			min. Earth dist.	-9439 Nov 24 j 21:51	27° \mathbf{H} 27'06	29.14892 AU
conjunction	-9445 May 15 j 17:04	13° \mathbf{H} 09'56 -1°07'07	direct	-9438 Feb 12 j 21:12	26° \mathbf{H} 03'16	
minimum elong	-9445 May 15 j 17:04	13° \mathbf{H} 09'56 1°07'20	evening set	-9438 May 15 j 05:59	28° \mathbf{H} 00'15	
max. Earth dist.	-9445 May 14 j 16:09	13° \mathbf{H} 07'37 31.09776 AU	max. Earth dist.	-9438 May 30 j 00:51	28° \mathbf{H} 33'04	31.15236 AU
morning rise	-9445 May 31 j 14:10	13° \mathbf{H} 45'11				
retrograde	-9445 Aug 26 j 05:03	15° \mathbf{H} 37'30	conjunction	-9438 May 31 j 03:53	28° \mathbf{H} 35'36	-0°27'20
opposition	-9445 Nov 11 j 02:17	14° \mathbf{H} 15'22 -1°08'53	minimum elong	-9438 May 31 j 03:54	28° \mathbf{H} 35'36	0°27'26
min. Earth dist.	-9445 Nov 12 j 00:32	14° \mathbf{H} 13'49 29.10359 AU	morning rise	-9438 Jun 15 j 21:48	29° \mathbf{H} 10'35	
direct	-9444 Jan 30 j 21:03	12° \mathbf{H} 49'48		-9438 Jul 10 j 03:07	0° \mathbf{Y}	
evening set	-9444 May 01 j 04:47	14° \mathbf{H} 47'04	retrograde	-9438 Sep 10 j 02:52	1° \mathbf{Y} 02'24	
max. Earth dist.	-9444 May 16 j 03:53	15° \mathbf{H} 20'14 31.10778 AU		-9438 Nov 14 j 09:34	30° \mathbf{R} \mathbf{H}	
			opposition	-9438 Nov 26 j 07:43	29° \mathbf{H} 40'23	-0°26'08
conjunction	-9444 May 17 j 05:25	15° \mathbf{H} 22'37 -1°01'38	min. Earth dist.	-9438 Nov 27 j 07:43	29° \mathbf{H} 38'43	29.15687 AU
minimum elong	-9444 May 17 j 05:25	15° \mathbf{H} 22'37 1°01'51	direct	-9437 Feb 15 j 10:35	28° \mathbf{H} 14'49	
morning rise	-9444 Jun 02 j 02:00	15° \mathbf{H} 57'49		-9437 May 12 j 06:43	0° \mathbf{Y}	
retrograde	-9444 Aug 27 j 15:30	17° \mathbf{H} 50'05	evening set	-9437 May 17 j 17:39	0° \mathbf{Y} 11'45	
opposition	-9444 Nov 12 j 13:23	16° \mathbf{H} 28'00 -1°02'59				
min. Earth dist.	-9444 Nov 13 j 13:00	16° \mathbf{H} 26'22 29.11307 AU	conjunction	-9437 Jun 02 j 15:11	0° \mathbf{Y} 47'04	-0°21'27
direct	-9443 Feb 01 j 08:46	15° \mathbf{H} 02'27	minimum elong	-9437 Jun 02 j 15:12	0° \mathbf{Y} 47'04	0°21'30
evening set	-9443 May 03 j 17:23	16° \mathbf{H} 59'42	max. Earth dist.	-9437 Jun 01 j 13:08	0° \mathbf{Y} 44'38	31.16083 AU
			morning rise	-9437 Jun 18 j 08:27	1° \mathbf{Y} 22'01	
conjunction	-9443 May 19 j 17:38	17° \mathbf{H} 35'14 -0°56'05	retrograde	-9437 Sep 12 j 12:48	3° \mathbf{Y} 13'47	

Attention, astronomical year style is used: The year -9437 in astronomical counting style is the year 9438 BCE in historical counting style.

opposition	-9437 Nov 28 j 18:58	1° Υ 51'48	-0°19'50	conjunction	-9431 Jun 15 j 08:41	13° Υ 55'19	0°14'15
min. Earth dist.	-9437 Nov 29 j 19:44	1° Υ 50'05	29.16593 AU	minimum elong	-9431 Jun 15 j 08:40	13° Υ 55'19	0°14'20
direct	-9436 Feb 17 j 22:32	0° Υ 26'16		behind sun begin	-9431 Jun 15 j 05:38	13° Υ 55'03	
evening set	-9436 May 19 j 05:19	2° Υ 23'10		behind sun end	-9431 Jun 15 j 11:42	13° Υ 55'36	
max. Earth dist.	-9436 Jun 03 j 00:06	2° Υ 56'00	31.17054 AU	morning rise	-9431 Jun 30 j 22:46	14° Υ 30'03	
				retrograde	-9431 Sep 25 j 02:32	16° Υ 21'49	
conjunction	-9436 Jun 04 j 02:15	2° Υ 58'26	-0°15'33	opposition	-9431 Dec 11 j 15:20	15° Υ 00'04	0°18'17
minimum elong	-9436 Jun 04 j 02:15	2° Υ 58'26	0°15'36	min. Earth dist.	-9431 Dec 12 j 15:05	14° Υ 58'27	29.22631 AU
behind sun begin	-9436 Jun 04 j 00:43	2° Υ 58'18		direct	-9430 Mar 02 j 23:52	13° Υ 34'56	
behind sun end	-9436 Jun 04 j 03:46	2° Υ 58'34		evening set	-9430 Jun 02 j 01:59	15° Υ 31'37	
morning rise	-9436 Jun 19 j 19:05	3° Υ 33'21					
retrograde	-9436 Sep 13 j 23:42	5° Υ 25'06		conjunction	-9430 Jun 17 j 19:29	16° Υ 06'38	0°20'09
opposition	-9436 Nov 30 j 06:06	4° Υ 03'09	-0°13'30	minimum elong	-9430 Jun 17 j 19:29	16° Υ 06'38	0°20'14
min. Earth dist.	-9436 Dec 01 j 05:39	4° Υ 01'31	29.17604 AU	max. Earth dist.	-9430 Jun 16 j 18:19	16° Υ 04'17	31.22958 AU
direct	-9435 Feb 19 j 11:54	2° Υ 37'41		morning rise	-9430 Jul 03 j 08:51	16° Υ 41'20	
evening set	-9435 May 21 j 16:55	4° Υ 34'33		retrograde	-9430 Sep 27 j 11:14	18° Υ 33'05	
max. Earth dist.	-9435 Jun 05 j 11:24	5° Υ 07'22	31.18111 AU	opposition	-9430 Dec 14 j 02:54	17° Υ 11'21	0°24'35
				min. Earth dist.	-9430 Dec 15 j 03:35	17° Υ 09'40	29.23334 AU
conjunction	-9435 Jun 06 j 13:19	5° Υ 09'47	-0°09'38	direct	-9429 Mar 05 j 11:59	15° Υ 46'15	
minimum elong	-9435 Jun 06 j 13:19	5° Υ 09'47	0°09'38	evening set	-9429 Jun 04 j 13:17	17° Υ 42'52	
behind sun begin	-9435 Jun 06 j 07:57	5° Υ 09'18		max. Earth dist.	-9429 Jun 19 j 03:57	18° Υ 15'24	31.23610 AU
behind sun end	-9435 Jun 06 j 18:40	5° Υ 10'16					
morning rise	-9435 Jun 22 j 05:34	5° Υ 44'40		conjunction	-9429 Jun 20 j 06:02	18° Υ 17'51	0°26'02
retrograde	-9435 Sep 16 j 10:42	7° Υ 36'24		minimum elong	-9429 Jun 20 j 06:02	18° Υ 17'50	0°26'09
opposition	-9435 Dec 02 j 17:27	6° Υ 14'30	-0°07'08	morning rise	-9429 Jul 05 j 18:59	18° Υ 52'29	
min. Earth dist.	-9435 Dec 03 j 17:38	6° Υ 12'50	29.18699 AU	retrograde	-9429 Sep 29 j 22:33	20° Υ 44'15	
direct	-9434 Feb 21 j 23:50	4° Υ 49'07		opposition	-9429 Dec 16 j 14:28	19° Υ 22'30	0°30'51
evening set	-9434 May 24 j 04:17	6° Υ 45'57		min. Earth dist.	-9429 Dec 17 j 14:10	19° Υ 20'53	29.23933 AU
max. Earth dist.	-9434 Jun 07 j 22:50	7° Υ 18'47	31.19223 AU	direct	-9428 Mar 07 j 00:30	17° Υ 57'25	
				evening set	-9428 Jun 06 j 00:16	19° Υ 53'59	
conjunction	-9434 Jun 09 j 00:10	7° Υ 21'09	-0°03'42				
minimum elong	-9434 Jun 09 j 00:10	7° Υ 21'09	0°03'42	conjunction	-9428 Jun 21 j 16:29	20° Υ 28'54	0°31'52
behind sun begin	-9434 Jun 08 j 17:45	7° Υ 20'34		minimum elong	-9428 Jun 21 j 16:28	20° Υ 28'54	0°31'59
behind sun end	-9434 Jun 09 j 06:35	7° Υ 21'43		max. Earth dist.	-9428 Jun 20 j 15:19	20° Υ 26'33	31.24159 AU
morning rise	-9434 Jun 24 j 15:54	7° Υ 55'59		morning rise	-9428 Jul 07 j 04:42	21° Υ 03'30	
retrograde	-9434 Sep 18 j 20:56	9° Υ 47'43		retrograde	-9428 Oct 01 j 08:24	22° Υ 55'17	
opposition	-9434 Dec 05 j 04:46	8° Υ 25'53	-0°00'46	opposition	-9428 Dec 18 j 02:15	21° Υ 33'30	0°37'03
min. Earth dist.	-9434 Dec 06 j 04:30	8° Υ 24'15	29.19795 AU	min. Earth dist.	-9428 Dec 19 j 02:47	21° Υ 31'50	29.24462 AU
asc. node	-9433 Jan 18 j 00:32	7° Υ 21'56		direct	-9427 Mar 09 j 12:00	20° Υ 08'26	
direct	-9433 Feb 24 j 13:30	7° Υ 00'34		evening set	-9427 Jun 08 j 11:13	22° Υ 04'56	
evening set	-9433 May 26 j 15:52	8° Υ 57'23		max. Earth dist.	-9427 Jun 23 j 01:39	22° Υ 37'27	31.24678 AU
max. Earth dist.	-9433 Jun 10 j 09:03	9° Υ 30'07	31.20299 AU				
				conjunction	-9427 Jun 24 j 02:43	22° Υ 39'48	0°37'38
conjunction	-9433 Jun 11 j 11:04	9° Υ 32'32	0°02'24	minimum elong	-9427 Jun 24 j 02:42	22° Υ 39'48	0°37'49
minimum elong	-9433 Jun 11 j 11:04	9° Υ 32'32	0°02'26	morning rise	-9427 Jul 09 j 14:28	23° Υ 14'21	
behind sun begin	-9433 Jun 11 j 04:35	9° Υ 31'58		retrograde	-9427 Oct 03 j 19:03	25° Υ 06'09	
behind sun end	-9433 Jun 11 j 17:32	9° Υ 33'07		opposition	-9427 Dec 20 j 13:51	23° Υ 44'21	0°43'12
morning rise	-9433 Jun 27 j 02:17	10° Υ 07'21		min. Earth dist.	-9427 Dec 21 j 13:02	23° Υ 42'46	29.24978 AU
retrograde	-9433 Sep 21 j 06:54	11° Υ 59'05		direct	-9426 Mar 12 j 01:23	22° Υ 19'18	
opposition	-9433 Dec 07 j 16:06	10° Υ 37'18	0°05'36	evening set	-9426 Jun 10 j 21:51	24° Υ 15'43	
min. Earth dist.	-9433 Dec 08 j 16:07	10° Υ 35'39	29.20849 AU				
direct	-9432 Feb 27 j 00:23	9° Υ 12'03		conjunction	-9426 Jun 26 j 12:44	24° Υ 50'33	0°43'22
evening set	-9432 May 28 j 03:19	11° Υ 08'50		minimum elong	-9426 Jun 26 j 12:43	24° Υ 50'33	0°43'32
				max. Earth dist.	-9426 Jun 25 j 12:05	24° Υ 48'14	31.25198 AU
conjunction	-9432 Jun 12 j 22:02	11° Υ 43'57	0°08'20	morning rise	-9426 Jul 11 j 23:52	25° Υ 25'03	
minimum elong	-9432 Jun 12 j 22:03	11° Υ 43'57	0°08'22	retrograde	-9426 Oct 06 j 06:01	27° Υ 16'52	
behind sun begin	-9432 Jun 12 j 16:21	11° Υ 43'26		opposition	-9426 Dec 23 j 01:36	25° Υ 55'03	0°49'17
behind sun end	-9432 Jun 13 j 03:44	11° Υ 44'27		min. Earth dist.	-9426 Dec 24 j 01:01	25° Υ 53'28	29.25535 AU
max. Earth dist.	-9432 Jun 11 j 21:00	11° Υ 41'36	31.21305 AU	direct	-9425 Mar 14 j 13:40	24° Υ 30'02	
morning rise	-9432 Jun 28 j 12:34	12° Υ 18'43		evening set	-9425 Jun 13 j 08:29	26° Υ 26'24	
retrograde	-9432 Sep 22 j 15:23	14° Υ 10'27					
opposition	-9432 Dec 09 j 03:45	12° Υ 48'42	0°11'57	conjunction	-9425 Jun 28 j 22:44	27° Υ 01'11	0°49'01
min. Earth dist.	-9432 Dec 10 j 04:02	12° Υ 47'02	29.21796 AU	minimum elong	-9425 Jun 28 j 22:44	27° Υ 01'11	0°49'14
direct	-9431 Feb 28 j 13:12	11° Υ 23'31		max. Earth dist.	-9425 Jun 27 j 23:10	26° Υ 58'58	31.25787 AU
evening set	-9431 May 30 j 14:44	13° Υ 20'16		morning rise	-9425 Jul 14 j 09:15	27° Υ 35'39	
max. Earth dist.	-9431 Jun 14 j 06:31	13° Υ 52'53	31.22194 AU	retrograde	-9425 Oct 08 j 15:54	29° Υ 27'30	
				opposition	-9425 Dec 25 j 13:15	28° Υ 05'41	0°55'18

Attention, astronomical year style is used: The year -9425 in astronomical counting style is the year 9426 BCE in historical counting style.

min. Earth dist.	-9425 Dec 26 j 11:37	28° Υ 04'09	29.26159 AU	conjunction	-9418 Jul 13 j 18:56	12° \mathcal{B} 16'27	1°26'13
direct	-9424 Mar 16 j 03:36	26° Υ 40'43		minimum elong	-9418 Jul 13 j 18:55	12° \mathcal{B} 16'27	1°26'32
evening set	-9424 Jun 14 j 19:09	28° Υ 37'02		max. Earth dist.	-9418 Jul 12 j 22:46	12° \mathcal{B} 14'33	31.30660 AU
max. Earth dist.	-9424 Jun 29 j 08:59	29° Υ 09'33	31.26457 AU	morning rise	-9418 Jul 29 j 01:26	12° \mathcal{B} 50'39	
				retrograde	-9418 Oct 23 j 14:53	14° \mathcal{B} 43'04	
conjunction	-9424 Jun 30 j 08:37	29° Υ 11'45	0°54'36	opposition	-9417 Jan 10 j 01:32	13° \mathcal{B} 21'20	1°34'41
minimum elong	-9424 Jun 30 j 08:36	29° Υ 11'45	0°54'49	min. Earth dist.	-9417 Jan 10 j 20:31	13° \mathcal{B} 20'03	29.30926 AU
morning rise	-9424 Jul 15 j 18:36	29° Υ 46'11		direct	-9417 Apr 01 j 11:57	11° \mathcal{B} 56'54	
	-9424 Jul 22 j 03:41	0° \mathcal{B}		evening set	-9417 Jun 30 j 19:42	13° \mathcal{B} 52'53	
retrograde	-9424 Oct 10 j 01:56	1° \mathcal{B} 38'06		max. Earth dist.	-9417 Jul 15 j 08:25	14° \mathcal{B} 25'23	31.30970 AU
opposition	-9424 Dec 27 j 01:06	0° \mathcal{B} 16'17	1°01'14				
min. Earth dist.	-9424 Dec 27 j 22:55	0° \mathcal{B} 14'48	29.26890 AU	conjunction	-9417 Jul 16 j 04:32	14° \mathcal{B} 27'16	1°31'05
	-9423 Jan 06 j 01:48	30° $\mathcal{R}\Upsilon$		minimum elong	-9417 Jul 16 j 04:31	14° \mathcal{B} 27'16	1°31'27
direct	-9423 Mar 18 j 14:18	28° Υ 51'24			-9417 Jul 30 j 18:51	15° \mathcal{B}	
	-9423 May 25 j 00:32	0° \mathcal{B}		morning rise	-9417 Jul 31 j 10:27	15° \mathcal{B} 01'26	
evening set	-9423 Jun 17 j 05:27	0° \mathcal{B} 47'41		retrograde	-9417 Oct 26 j 02:36	16° \mathcal{B} 53'55	
				opposition	-9416 Jan 12 j 13:50	15° \mathcal{B} 32'08	1°39'50
conjunction	-9423 Jul 02 j 18:24	1° \mathcal{B} 22'21	1°00'07	min. Earth dist.	-9416 Jan 13 j 09:13	15° \mathcal{B} 30'50	29.31180 AU
minimum elong	-9423 Jul 02 j 18:24	1° \mathcal{B} 22'21	1°00'21		-9416 Feb 01 j 21:07	15° $\mathcal{R}\mathcal{B}$	
max. Earth dist.	-9423 Jul 01 j 20:32	1° \mathcal{B} 20'18	31.27223 AU	direct	-9416 Apr 02 j 23:56	14° \mathcal{B} 07'44	
morning rise	-9423 Jul 18 j 03:41	1° \mathcal{B} 56'45			-9416 May 31 j 04:56	15° \mathcal{B}	
retrograde	-9423 Oct 12 j 10:14	3° \mathcal{B} 48'43		evening set	-9416 Jul 02 j 05:49	16° \mathcal{B} 03'38	
opposition	-9423 Dec 29 j 13:03	2° \mathcal{B} 26'57	1°07'04				
min. Earth dist.	-9423 Dec 30 j 10:28	2° \mathcal{B} 25'30	29.27682 AU	conjunction	-9416 Jul 17 j 14:05	16° \mathcal{B} 37'58	1°35'50
direct	-9422 Mar 21 j 03:11	1° \mathcal{B} 02'10		minimum elong	-9416 Jul 17 j 14:04	16° \mathcal{B} 37'58	1°36'12
evening set	-9422 Jun 19 j 15:59	2° \mathcal{B} 58'24		max. Earth dist.	-9416 Jul 16 j 19:00	16° \mathcal{B} 36'11	31.31156 AU
max. Earth dist.	-9422 Jul 04 j 05:47	3° \mathcal{B} 30'56	31.28035 AU	morning rise	-9416 Aug 01 j 19:25	17° \mathcal{B} 12'05	
				retrograde	-9416 Oct 27 j 12:41	19° \mathcal{B} 04'38	
conjunction	-9422 Jul 05 j 04:07	3° \mathcal{B} 33'02	1°05'32	opposition	-9415 Jan 14 j 02:12	17° \mathcal{B} 42'48	1°44'49
minimum elong	-9422 Jul 05 j 04:06	3° \mathcal{B} 33'02	1°05'47	min. Earth dist.	-9415 Jan 14 j 20:38	17° \mathcal{B} 41'33	29.31307 AU
morning rise	-9422 Jul 20 j 12:59	4° \mathcal{B} 07'23		direct	-9415 Apr 05 j 13:49	16° \mathcal{B} 18'24	
retrograde	-9422 Oct 14 j 21:41	5° \mathcal{B} 59'26		evening set	-9415 Jul 04 j 15:46	18° \mathcal{B} 14'12	
opposition	-9421 Jan 01 j 00:46	4° \mathcal{B} 37'42	1°12'49				
min. Earth dist.	-9421 Jan 01 j 21:09	4° \mathcal{B} 36'19	29.28506 AU	conjunction	-9415 Jul 19 j 23:17	18° \mathcal{B} 48'30	1°40'26
direct	-9421 Mar 23 j 13:28	3° \mathcal{B} 13'00		minimum elong	-9415 Jul 19 j 23:16	18° \mathcal{B} 48'30	1°40'50
evening set	-9421 Jun 22 j 02:21	5° \mathcal{B} 09'13		max. Earth dist.	-9415 Jul 19 j 04:02	18° \mathcal{B} 46'41	31.31237 AU
				morning rise	-9415 Aug 04 j 04:14	19° \mathcal{B} 22'34	
conjunction	-9421 Jul 07 j 13:58	5° \mathcal{B} 43'48	1°10'52	retrograde	-9415 Oct 29 j 23:11	21° \mathcal{B} 15'11	
minimum elong	-9421 Jul 07 j 13:57	5° \mathcal{B} 43'48	1°11'09	opposition	-9414 Jan 16 j 14:33	19° \mathcal{B} 53'16	1°49'40
max. Earth dist.	-9421 Jul 06 j 17:06	5° \mathcal{B} 41'50	31.28834 AU	min. Earth dist.	-9414 Jan 17 j 08:30	19° \mathcal{B} 52'03	29.31374 AU
morning rise	-9421 Jul 22 j 22:05	6° \mathcal{B} 18'07		direct	-9414 Apr 08 j 01:08	18° \mathcal{B} 28'53	
retrograde	-9421 Oct 17 j 06:20	8° \mathcal{B} 10'16		evening set	-9414 Jul 07 j 01:34	20° \mathcal{B} 24'35	
opposition	-9420 Jan 03 j 12:55	6° \mathcal{B} 48'33	1°18'28				
min. Earth dist.	-9420 Jan 04 j 09:48	6° \mathcal{B} 47'08	29.29282 AU	conjunction	-9414 Jul 22 j 08:37	20° \mathcal{B} 58'50	1°44'53
direct	-9420 Mar 25 j 01:17	5° \mathcal{B} 23'57		minimum elong	-9414 Jul 22 j 08:36	20° \mathcal{B} 58'50	1°45'17
evening set	-9420 Jun 23 j 12:47	7° \mathcal{B} 20'07		max. Earth dist.	-9414 Jul 21 j 15:11	20° \mathcal{B} 57'12	31.31277 AU
				morning rise	-9414 Aug 06 j 12:54	21° \mathcal{B} 32'52	
conjunction	-9420 Jul 08 j 23:33	7° \mathcal{B} 54'39	1°16'06	retrograde	-9414 Nov 01 j 07:40	23° \mathcal{B} 25'33	
minimum elong	-9420 Jul 08 j 23:32	7° \mathcal{B} 54'39	1°16'23	opposition	-9413 Jan 19 j 02:45	22° \mathcal{B} 03'34	1°54'21
max. Earth dist.	-9420 Jul 08 j 02:18	7° \mathcal{B} 52'39	31.29568 AU	min. Earth dist.	-9413 Jan 19 j 20:12	22° \mathcal{B} 02'23	29.31415 AU
morning rise	-9420 Jul 24 j 07:13	8° \mathcal{B} 28'56		direct	-9413 Apr 10 j 15:01	20° \mathcal{B} 39'12	
retrograde	-9420 Oct 18 j 17:33	10° \mathcal{B} 21'11		evening set	-9413 Jul 09 j 11:26	22° \mathcal{B} 34'48	
opposition	-9419 Jan 05 j 01:03	8° \mathcal{B} 59'29	1°24'00				
min. Earth dist.	-9419 Jan 05 j 20:36	8° \mathcal{B} 58'09	29.29969 AU	conjunction	-9413 Jul 24 j 17:41	23° \mathcal{B} 09'00	1°49'12
direct	-9419 Mar 27 j 12:30	7° \mathcal{B} 34'57		minimum elong	-9413 Jul 24 j 17:40	23° \mathcal{B} 09'00	1°49'37
evening set	-9419 Jun 25 j 23:08	9° \mathcal{B} 31'04		max. Earth dist.	-9413 Jul 24 j 00:05	23° \mathcal{B} 07'21	31.31331 AU
				morning rise	-9413 Aug 08 j 21:38	23° \mathcal{B} 43'00	
conjunction	-9419 Jul 11 j 09:20	10° \mathcal{B} 05'33	1°21'13	retrograde	-9413 Nov 03 j 18:57	25° \mathcal{B} 35'46	
minimum elong	-9419 Jul 11 j 09:20	10° \mathcal{B} 05'33	1°21'32	opposition	-9412 Jan 21 j 15:04	24° \mathcal{B} 13'43	1°58'52
max. Earth dist.	-9419 Jul 10 j 13:01	10° \mathcal{B} 03'39	31.30179 AU	min. Earth dist.	-9412 Jan 22 j 06:55	24° \mathcal{B} 12'39	29.31510 AU
morning rise	-9419 Jul 26 j 16:19	10° \mathcal{B} 39'48		direct	-9412 Apr 12 j 02:16	22° \mathcal{B} 49'23	
retrograde	-9419 Oct 21 j 03:47	12° \mathcal{B} 32'09		evening set	-9412 Jul 10 j 20:57	24° \mathcal{B} 44'54	
opposition	-9418 Jan 07 j 13:20	11° \mathcal{B} 10'25	1°29'24	max. Earth dist.	-9412 Jul 25 j 11:05	25° \mathcal{B} 17'35	31.31448 AU
min. Earth dist.	-9418 Jan 08 j 09:38	11° \mathcal{B} 09'03	29.30527 AU				
direct	-9418 Mar 29 j 22:32	9° \mathcal{B} 45'57		conjunction	-9412 Jul 26 j 02:45	25° \mathcal{B} 19'04	1°53'20
evening set	-9418 Jun 28 j 09:26	11° \mathcal{B} 42'00		minimum elong	-9412 Jul 26 j 02:44	25° \mathcal{B} 19'03	1°53'45
				morning rise	-9412 Aug 10 j 06:02	25° \mathcal{B} 53'02	

Attention, astronomical year style is used: The year -9412 in astronomical counting style is the year 9413 BCE in historical counting style.

retrograde	-9412 Nov 05 j 03:16	27° 8 45'54		evening set	-9405 Jul 26 j 15:27	9° II 57'39	
opposition	-9411 Jan 23 j 03:35	26° 8 23'48	2°03'13				
min. Earth dist.	-9411 Jan 23 j 19:14	26° 8 22'45	29.31676 AU	conjunction	-9405 Aug 10 j 17:38	10° II 31'34	2°17'33
direct	-9411 Apr 14 j 14:12	24° 8 59'32		minimum elong	-9405 Aug 10 j 17:37	10° II 31'34	2°18'04
evening set	-9411 Jul 13 j 06:37	26° 8 54'59		max. Earth dist.	-9405 Aug 10 j 07:46	10° II 30'39	31.32716 AU
				morning rise	-9405 Aug 25 j 18:12	11° II 05'23	
conjunction	-9411 Jul 28 j 11:43	27° 8 29'06	1°57'19	retrograde	-9405 Nov 21 j 08:43	12° II 59'13	
minimum elong	-9411 Jul 28 j 11:42	27° 8 29'06	1°57'46	opposition	-9404 Feb 08 j 19:46	11° II 37'00	2°28'25
max. Earth dist.	-9411 Jul 27 j 20:22	27° 8 27'39	31.31660 AU	min. Earth dist.	-9404 Feb 09 j 05:50	11° II 36'19	29.32807 AU
morning rise	-9411 Aug 12 j 14:42	28° 8 03'02		direct	-9404 Apr 29 j 22:52	10° II 13'16	
retrograde	-9411 Nov 07 j 14:10	29° 8 56'01		evening set	-9404 Jul 28 j 00:51	12° II 08'20	
opposition	-9410 Jan 25 j 15:50	28° 8 33'55	2°07'23				
min. Earth dist.	-9410 Jan 26 j 05:31	28° 8 33'00	29.31934 AU	conjunction	-9404 Aug 12 j 02:26	12° II 42'14	2°20'15
direct	-9410 Apr 17 j 00:48	27° 8 09'43		minimum elong	-9404 Aug 12 j 02:25	12° II 42'13	2°20'46
evening set	-9410 Jul 15 j 16:05	29° 8 05'07		max. Earth dist.	-9404 Aug 11 j 16:14	12° II 41'16	31.32508 AU
				morning rise	-9404 Aug 27 j 02:53	13° II 16'01	
conjunction	-9410 Jul 30 j 20:43	29° 8 39'12	2°01'09	retrograde	-9404 Nov 22 j 20:58	15° II 09'58	
minimum elong	-9410 Jul 30 j 20:43	29° 8 39'12	2°01'36	opposition	-9403 Feb 10 j 08:35	13° II 47'41	2°31'12
max. Earth dist.	-9410 Jul 30 j 06:46	29° 8 37'53	31.31935 AU	min. Earth dist.	-9403 Feb 10 j 17:16	13° II 47'06	29.32545 AU
	-9410 Aug 09 j 01:55	0° II		direct	-9403 May 02 j 10:26	12° II 23'58	
morning rise	-9410 Aug 14 j 23:13	0° II 13'07		evening set	-9403 Jul 30 j 10:04	14° II 18'57	
retrograde	-9410 Nov 10 j 00:35	2° II 06'14					
opposition	-9409 Jan 28 j 04:21	0° II 44'07	2°11'23	conjunction	-9403 Aug 14 j 11:26	14° II 52'48	2°22'46
min. Earth dist.	-9409 Jan 28 j 18:12	0° II 43'11	29.32236 AU	minimum elong	-9403 Aug 14 j 11:25	14° II 52'48	2°23'19
	-9409 Feb 25 j 21:05	30° 8		max. Earth dist.	-9403 Aug 14 j 02:49	14° II 51'59	31.32180 AU
direct	-9409 Apr 19 j 10:17	29° 8 20'01		morning rise	-9403 Aug 29 j 11:31	15° II 26'35	
	-9409 Jun 08 j 20:01	0° II		retrograde	-9403 Nov 25 j 05:11	17° II 20'38	
evening set	-9409 Jul 18 j 01:33	1° II 15'22		opposition	-9402 Feb 12 j 21:21	15° II 58'16	2°33'47
				min. Earth dist.	-9402 Feb 13 j 06:08	15° II 57'40	29.32180 AU
conjunction	-9409 Aug 02 j 05:36	1° II 49'25	2°04'47	direct	-9402 May 04 j 22:42	14° II 34'34	
minimum elong	-9409 Aug 02 j 05:36	1° II 49'25	2°05'16	evening set	-9402 Aug 01 j 19:16	16° II 29'26	
max. Earth dist.	-9409 Aug 01 j 16:34	1° II 48'11	31.32241 AU				
morning rise	-9409 Aug 17 j 07:41	2° II 23'19		conjunction	-9402 Aug 16 j 20:11	17° II 03'16	2°25'04
retrograde	-9409 Nov 12 j 11:51	4° II 16'35		minimum elong	-9402 Aug 16 j 20:10	17° II 03'16	2°25'37
opposition	-9408 Jan 30 j 16:48	2° II 54'28	2°15'11	max. Earth dist.	-9402 Aug 16 j 11:53	17° II 02'29	31.31789 AU
min. Earth dist.	-9408 Jan 31 j 04:50	2° II 53'40	29.32533 AU	morning rise	-9402 Aug 31 j 20:09	17° II 37'02	
direct	-9408 Apr 20 j 22:40	1° II 30'27		retrograde	-9402 Nov 27 j 15:37	19° II 31'10	
evening set	-9408 Jul 19 j 11:05	3° II 25'47		opposition	-9401 Feb 15 j 10:02	18° II 08'43	2°36'09
				min. Earth dist.	-9401 Feb 15 j 16:52	18° II 08'15	29.31777 AU
conjunction	-9408 Aug 03 j 14:34	3° II 59'47	2°08'15	direct	-9401 May 07 j 10:03	16° II 45'01	
minimum elong	-9408 Aug 03 j 14:33	3° II 59'47	2°08'44	evening set	-9401 Aug 04 j 04:15	18° II 39'46	
max. Earth dist.	-9408 Aug 03 j 01:56	3° II 58'35	31.32510 AU				
morning rise	-9408 Aug 18 j 16:18	4° II 33'39		conjunction	-9401 Aug 19 j 04:51	19° II 13'35	2°27'10
retrograde	-9408 Nov 14 j 00:32	6° II 27'05		minimum elong	-9401 Aug 19 j 04:50	19° II 13'35	2°27'44
opposition	-9407 Feb 01 j 05:34	5° II 04'58	2°18'47	max. Earth dist.	-9401 Aug 18 j 21:55	19° II 12'56	31.31375 AU
min. Earth dist.	-9407 Feb 01 j 17:34	5° II 04'09	29.32788 AU	morning rise	-9401 Sep 03 j 04:34	19° II 47'20	
direct	-9407 Apr 23 j 09:13	3° II 41'02		retrograde	-9401 Nov 30 j 01:44	21° II 41'36	
evening set	-9407 Jul 21 j 20:26	5° II 36'19		opposition	-9400 Feb 17 j 22:55	20° II 19'03	2°38'17
				min. Earth dist.	-9400 Feb 18 j 05:41	20° II 18'35	29.31395 AU
conjunction	-9407 Aug 05 j 23:32	6° II 10'18	2°11'32	direct	-9400 May 08 j 20:08	18° II 55'22	
minimum elong	-9407 Aug 05 j 23:31	6° II 10'17	2°12'03	evening set	-9400 Aug 05 j 13:16	20° II 50'01	
max. Earth dist.	-9407 Aug 05 j 12:19	6° II 09'14	31.32712 AU				
morning rise	-9407 Aug 21 j 00:48	6° II 44'08		conjunction	-9400 Aug 20 j 13:34	21° II 23'48	2°29'04
retrograde	-9407 Nov 16 j 11:21	8° II 37'43		minimum elong	-9400 Aug 20 j 13:33	21° II 23'48	2°29'37
opposition	-9406 Feb 03 j 18:15	7° II 15'35	2°22'12	max. Earth dist.	-9400 Aug 20 j 07:59	21° II 23'16	31.31029 AU
min. Earth dist.	-9406 Feb 04 j 05:11	7° II 14'51	29.32931 AU	morning rise	-9400 Sep 04 j 13:05	21° II 57'32	
direct	-9406 Apr 25 j 21:58	5° II 51'44		retrograde	-9400 Dec 01 j 12:39	23° II 51'55	
evening set	-9406 Jul 24 j 06:02	7° II 46'58		opposition	-9399 Feb 19 j 11:40	22° II 29'17	2°40'11
				min. Earth dist.	-9399 Feb 19 j 16:08	22° II 28'59	29.31092 AU
conjunction	-9406 Aug 08 j 08:30	8° II 20'54	2°14'38	direct	-9399 May 11 j 08:16	21° II 05'39	
minimum elong	-9406 Aug 08 j 08:29	8° II 20'54	2°15'08	evening set	-9399 Aug 07 j 22:11	23° II 00'12	
max. Earth dist.	-9406 Aug 07 j 20:59	8° II 19'49	31.32783 AU				
morning rise	-9406 Aug 23 j 09:34	8° II 54'44		conjunction	-9399 Aug 22 j 22:09	23° II 33'58	2°30'45
retrograde	-9406 Nov 18 j 22:58	10° II 48'27		minimum elong	-9399 Aug 22 j 22:08	23° II 33'58	2°31'19
opposition	-9405 Feb 06 j 06:53	9° II 26'17	2°25'25	max. Earth dist.	-9399 Aug 22 j 17:14	23° II 33'30	31.30767 AU
min. Earth dist.	-9405 Feb 06 j 17:22	9° II 25'34	29.32948 AU	morning rise	-9399 Sep 06 j 21:38	24° II 07'42	
direct	-9405 Apr 28 j 08:49	8° II 02'30		retrograde	-9399 Dec 04 j 01:04	26° II 02'13	