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

direct	-4900 Feb 20 j 08:14	18°♉16'04		
	-4900 May 28 j 10:01	0°♊		
evening set	-4900 Jun 27 j 08:00	6°♊18'13		
max. Earth dist.	-4900 Jul 09 j 09:46	8°♊56'56	6.37661 AU	
conjunction	-4900 Jul 10 j 11:24	9°♊11'01	0°52'11	
minimum elong	-4900 Jul 10 j 11:21	9°♊11'00	0°52'25	
morning rise	-4900 Jul 23 j 11:17	12°♊02'07		
retrograde	-4900 Nov 20 j 18:24	29°♊05'56		
opposition	-4899 Jan 19 j 23:18	24°♊13'13	1°39'16	
min. Earth dist.	-4899 Jan 20 j 22:16	24°♊05'49	4.38415 AU	
direct	-4899 Mar 23 j 11:39	19°♊10'44		
	-4899 Jun 25 j 03:12	0°♋		
evening set	-4899 Jul 28 j 23:12	7°♋06'54		
max. Earth dist.	-4899 Aug 09 j 02:04	9°♋34'05	6.37592 AU	
conjunction	-4899 Aug 10 j 17:26	9°♋55'51	1°19'46	
minimum elong	-4899 Aug 10 j 17:23	9°♋55'50	1°20'02	
morning rise	-4899 Aug 23 j 08:53	12°♋43'27		
retrograde	-4899 Dec 22 j 06:46	29°♋54'44		
opposition	-4898 Feb 20 j 22:50	25°♋03'16	2°04'36	
min. Earth dist.	-4898 Feb 22 j 04:15	24°♋53'54	4.35667 AU	
direct	-4898 Apr 24 j 13:16	20°♋03'00		
	-4898 Jul 22 j 00:36	0°♌		
evening set	-4898 Aug 29 j 02:02	8°♌03'37		
max. Earth dist.	-4898 Sep 08 j 23:16	10°♌29'59	6.32286 AU	
conjunction	-4898 Sep 10 j 14:53	10°♌52'15	1°24'48	
minimum elong	-4898 Sep 10 j 14:54	10°♌52'16	1°25'00	
morning rise	-4898 Sep 23 j 01:52	13°♌40'11		
	-4898 Sep 29 j 01:15	15°♌		
	-4898 Dec 25 j 02:10	0°♍		
retrograde	-4897 Jan 24 j 00:02	1°♍21'59		
	-4897 Feb 23 j 03:19	30°℞♌		
opposition	-4897 Mar 26 j 01:32	26°♌29'55	1°54'25	
min. Earth dist.	-4897 Mar 27 j 04:16	26°♌21'26	4.28145 AU	
direct	-4897 May 27 j 01:05	21°♌32'32		
	-4897 Aug 14 j 11:28	0°♍		
evening set	-4897 Sep 29 j 11:03	9°♍46'36		
conjunction	-4897 Oct 11 j 23:23	12°♍38'44	1°04'48	
minimum elong	-4897 Oct 11 j 23:27	12°♍38'46	1°04'54	
max. Earth dist.	-4897 Oct 10 j 16:21	12°♍20'54	6.23164 AU	
morning rise	-4897 Oct 24 j 11:53	15°♍31'06		
	-4896 Jan 05 j 22:41	0°♎		
retrograde	-4896 Feb 27 j 12:04	4°♎00'46		
	-4896 Apr 21 j 14:31	30°℞♍		
opposition	-4896 Apr 28 j 15:20	29°♍06'17	1°08'17	
min. Earth dist.	-4896 Apr 29 j 07:24	29°♍01'08	4.17940 AU	
direct	-4896 Jun 28 j 12:05	24°♍11'35		
	-4896 Aug 30 j 17:36	0°♎		
evening set	-4896 Oct 30 j 21:02	12°♎45'34		
conjunction	-4896 Nov 12 j 13:52	15°♎43'58	0°23'36	
minimum elong	-4896 Nov 12 j 13:54	15°♎43'59	0°23'32	
max. Earth dist.	-4896 Nov 12 j 03:14	15°♎37'45	6.12862 AU	
morning rise	-4896 Nov 25 j 08:20	18°♎43'27		
	-4895 Jan 16 j 15:16	0°♏		
retrograde	-4895 Apr 03 j 13:58	8°♏06'55		
desc. node	-4895 May 18 j 10:35	5°♏10'47		
opposition	-4895 Jun 03 j 13:13	3°♏08'45	-0°03'07	
min. Earth dist.	-4895 Jun 03 j 11:53	3°♏09'11	4.08308 AU	
	-4895 Jun 29 j 20:32	30°℞♎		
direct	-4895 Aug 02 j 00:43	28°♎15'43		
	-4895 Sep 03 j 21:18	0°♏		
	-4895 Nov 24 j 15:07	15°♏		
evening set	-4895 Dec 03 j 23:27	17°♏11'30		
conjunction	-4895 Dec 16 j 23:07	20°♏16'26	-0°27'01	
minimum elong	-4895 Dec 16 j 23:05	20°♏16'24	0°27'12	
max. Earth dist.	-4895 Dec 17 j 12:24	20°♏24'19	6.04797 AU	
morning rise	-4895 Dec 30 j 01:56	23°♏23'06		
	-4894 Jan 27 j 23:24	0°♐		
retrograde	-4894 May 10 j 15:19	13°♐28'05		
min. Earth dist.	-4894 Jul 09 j 09:37	8°♐32'01	4.02641 AU	
opposition	-4894 Jul 10 j 03:45	8°♐25'59	-1°15'58	
direct	-4894 Sep 06 j 14:02	3°♐32'29		
evening set	-4893 Jan 08 j 20:08	22°♐44'34		
conjunction	-4893 Jan 22 j 03:26	25°♐53'59	-1°08'42	
minimum elong	-4893 Jan 22 j 03:23	25°♐53'57	1°08'57	
max. Earth dist.	-4893 Jan 23 j 15:54	26°♐15'39	6.01964 AU	
morning rise	-4893 Feb 04 j 13:55	29°♐05'07		
	-4893 Feb 08 j 11:20	0°♑		
retrograde	-4893 Jun 16 j 14:12	19°♑19'54		
min. Earth dist.	-4893 Aug 14 j 08:45	14°♑24'23	4.03117 AU	
opposition	-4893 Aug 15 j 11:54	14°♑15'11	-2°00'57	
direct	-4893 Oct 12 j 12:33	9°♑19'20		
evening set	-4892 Feb 14 j 18:37	28°♑33'49		
	-4892 Feb 20 j 22:11	0°♒		
conjunction	-4892 Feb 28 j 08:24	1°♒44'23	-1°24'42	
minimum elong	-4892 Feb 28 j 08:24	1°♒44'23	1°24'55	
max. Earth dist.	-4892 Mar 01 j 04:53	2°♒10'26	6.05558 AU	
morning rise	-4892 Mar 13 j 00:51	4°♒56'08		
	-4892 Apr 28 j 00:26	15°♒		
retrograde	-4892 Jul 21 j 03:18	24°♒42'14		
opposition	-4892 Sep 18 j 16:05	19°♒37'16	-2°00'10	
min. Earth dist.	-4892 Sep 17 j 12:43	19°♒46'37	4.09527 AU	
	-4892 Nov 01 j 11:59	15°℞♒		
direct	-4892 Nov 16 j 02:11	14°♒38'04		
	-4892 Nov 30 j 19:51	15°♒		
	-4891 Mar 06 j 08:45	0°♓		
evening set	-4891 Mar 22 j 14:26	3°♓39'02		
conjunction	-4891 Apr 05 j 08:29	6°♓47'37	-1°09'32	
minimum elong	-4891 Apr 05 j 08:34	6°♓47'40	1°09'39	
max. Earth dist.	-4891 Apr 06 j 21:24	7°♓08'45	6.14230 AU	
morning rise	-4891 Apr 19 j 03:08	9°♓56'19		
retrograde	-4891 Aug 23 j 23:29	28°♓48'22		
opposition	-4891 Oct 22 j 07:06	23°♓45'43	-1°17'25	
min. Earth dist.	-4891 Oct 21 j 14:07	23°♓51'29	4.19505 AU	
direct	-4891 Dec 20 j 19:50	18°♓43'39		
	-4890 Mar 23 j 22:34	0°♈		
evening set	-4890 Apr 27 j 06:34	7°♈21'15		
conjunction	-4890 May 10 j 23:57	10°♈25'08	-0°31'06	
minimum elong	-4890 May 10 j 23:59	10°♈25'09	0°31'04	
max. Earth dist.	-4890 May 11 j 16:42	10°♈34'30	6.24806 AU	
morning rise	-4890 May 24 j 15:48	13°♈28'04		
	-4890 Aug 26 j 11:03	0°♉		
retrograde	-4890 Sep 25 j 01:24	1°♉24'06		
	-4890 Oct 24 j 12:36	30°℞♈		
opposition	-4890 Nov 23 j 13:13	26°♈25'09	-0°11'48	
min. Earth dist.	-4890 Nov 23 j 09:39	26°♈26'20	4.29667 AU	
direct	-4889 Jan 23 j 08:20	21°♈21'32		
asc. node	-4889 Jan 29 j 18:14	21°♈25'26		
	-4889 Apr 14 j 13:33	0°♉		
evening set	-4889 May 31 j 07:32	9°♉35'49		

Attention, astronomical year style is used: The year -4889 in astronomical counting style is the year 4890 BCE in historical counting style.

conjunction	-4889 Jun 13 j 18:43	12°♉33'27	0°15'54	
minimum elong	-4889 Jun 13 j 18:42	12°♉33'26	0°16'04	
max. Earth dist.	-4889 Jun 13 j 10:56	12°♉29'10	6.33821 AU	
	-4889 Jun 24 j 21:04	15°♉		
morning rise	-4889 Jun 27 j 02:58	15°♉29'30		
	-4889 Sep 13 j 16:44	0°♊		
retrograde	-4889 Oct 26 j 04:36	2°♊45'52		
	-4889 Dec 07 j 22:46	30°℞♉		
opposition	-4889 Dec 25 j 00:03	27°♉50'41	0°54'45	
min. Earth dist.	-4889 Dec 25 j 12:27	27°♉46'37	4.36863 AU	
direct	-4888 Feb 24 j 23:17	22°♉47'03		
	-4888 May 09 j 02:14	0°♊		
evening set	-4888 Jul 01 j 19:52	10°♊45'42		
conjunction	-4888 Jul 14 j 21:47	13°♊37'32	0°57'06	
minimum elong	-4888 Jul 14 j 21:44	13°♊37'30	0°57'20	
max. Earth dist.	-4888 Jul 13 j 17:20	13°♊21'54	6.38566 AU	
morning rise	-4888 Jul 27 j 20:19	16°♊27'41		
	-4888 Oct 07 j 18:23	0°♋		
retrograde	-4888 Nov 25 j 01:27	3°♋28'59		
	-4887 Jan 13 j 09:28	30°℞♊		
opposition	-4887 Jan 24 j 08:50	28°♊36'29	1°44'31	
min. Earth dist.	-4887 Jan 25 j 08:52	28°♊28'44	4.38987 AU	
direct	-4887 Mar 27 j 22:50	23°♊34'09		
	-4887 Jun 05 j 15:20	0°♋		
evening set	-4887 Aug 02 j 06:29	11°♋28'09		
max. Earth dist.	-4887 Aug 13 j 08:33	13°♋54'53	6.37774 AU	
conjunction	-4887 Aug 14 j 23:43	14°♋16'33	1°21'49	
minimum elong	-4887 Aug 14 j 23:41	14°♋16'32	1°22'05	
morning rise	-4887 Aug 27 j 14:01	17°♋03'39		
	-4887 Nov 02 j 12:50	0°♌		
retrograde	-4887 Dec 26 j 14:57	4°♌15'47		
	-4886 Feb 20 j 17:00	30°℞♋		
opposition	-4886 Feb 25 j 09:23	29°♋24'21	2°05'14	
min. Earth dist.	-4886 Feb 26 j 15:17	29°♋14'51	4.35438 AU	
direct	-4886 Apr 28 j 23:21	24°♋24'26		
	-4886 Jul 02 j 00:17	0°♌		
evening set	-4886 Sep 02 j 07:20	12°♌24'35		
max. Earth dist.	-4886 Sep 13 j 02:33	14°♌50'08	6.31645 AU	
	-4886 Sep 13 j 20:04	15°♌		
conjunction	-4886 Sep 14 j 19:36	15°♌13'16	1°23'29	
minimum elong	-4886 Sep 14 j 19:37	15°♌13'16	1°23'40	
morning rise	-4886 Sep 27 j 06:34	18°♌01'24		
	-4886 Nov 25 j 12:13	0°♍		
retrograde	-4885 Jan 28 j 13:27	5°♍47'39		
opposition	-4885 Mar 30 j 15:18	0°♍55'19	1°50'05	
min. Earth dist.	-4885 Mar 31 j 18:02	0°♍46'49	4.27105 AU	
	-4885 Apr 06 j 22:12	30°℞♌		
direct	-4885 May 31 j 12:21	25°♌58'13		
	-4885 Jul 23 j 08:54	0°♍		
evening set	-4885 Oct 03 j 17:40	14°♍14'04		
max. Earth dist.	-4885 Oct 15 j 01:35	16°♍50'15	6.21827 AU	
conjunction	-4885 Oct 16 j 06:32	17°♍06'56	1°00'17	
minimum elong	-4885 Oct 16 j 06:35	17°♍06'58	1°00'21	
morning rise	-4885 Oct 28 j 19:27	20°♍00'05		
	-4885 Dec 14 j 10:50	0°♎		
retrograde	-4884 Mar 03 j 06:14	8°♎37'04		
opposition	-4884 May 03 j 09:28	3°♎42'11	0°59'45	
min. Earth dist.	-4884 May 04 j 00:10	3°♎37'29	4.16389 AU	
	-4884 Jun 05 j 05:04	30°℞♍		
direct	-4884 Jul 03 j 01:20	28°♍47'47		
	-4884 Jul 30 j 17:24	0°♎		
evening set	-4884 Nov 04 j 09:02	17°♎25'39		

conjunction	-4884 Nov 17 j 02:36	20°♎25'06	0°16'59	
minimum elong	-4884 Nov 17 j 02:37	20°♎25'07	0°16'55	
max. Earth dist.	-4884 Nov 16 j 17:06	20°♎19'31	6.11237 AU	
morning rise	-4884 Nov 29 j 22:17	23°♎25'49		
	-4884 Dec 28 j 21:48	0°♏		
desc. node	-4883 Mar 30 j 12:53	12°♏49'54		
retrograde	-4883 Apr 08 j 14:15	12°♏57'44		
opposition	-4883 Jun 08 j 11:59	7°♏59'02	-0°13'31	
min. Earth dist.	-4883 Jun 08 j 08:34	8°♏00'09	4.06743 AU	
direct	-4883 Aug 06 j 19:12	3°♏06'01		
	-4883 Nov 07 j 16:32	15°♏		
evening set	-4883 Dec 08 j 18:50	22°♏06'44		
conjunction	-4883 Dec 21 j 19:50	25°♏12'49	-0°33'37	
minimum elong	-4883 Dec 21 j 19:47	25°♏12'47	0°33'50	
max. Earth dist.	-4883 Dec 22 j 13:25	25°♏23'17	6.03453 AU	
morning rise	-4882 Jan 03 j 23:47	28°♏20'37		
	-4882 Jan 11 j 00:47	0°♐		
retrograde	-4882 May 15 j 21:07	18°♐31'50		
min. Earth dist.	-4882 Jul 14 j 10:12	13°♐35'48	4.01680 AU	
opposition	-4882 Jul 15 j 05:33	13°♐29'20	-1°24'21	
direct	-4882 Sep 11 j 12:44	8°♐35'41		
evening set	-4881 Jan 13 j 22:58	27°♐51'37		
	-4881 Jan 22 j 23:25	0°♑		
conjunction	-4881 Jan 27 j 07:13	1°♑01'43	-1°12'39	
minimum elong	-4881 Jan 27 j 07:09	1°♑01'41	1°12'54	
max. Earth dist.	-4881 Jan 28 j 20:55	1°♑24'07	6.01453 AU	
morning rise	-4881 Feb 09 j 18:58	4°♑13'33		
retrograde	-4881 Jun 21 j 16:27	24°♑29'06		
min. Earth dist.	-4881 Aug 19 j 08:00	19°♑34'02	4.03141 AU	
opposition	-4881 Aug 20 j 13:02	19°♑24'09	-2°03'39	
direct	-4881 Oct 17 j 12:14	14°♑27'54		
	-4880 Feb 03 j 20:05	0°♒		
evening set	-4880 Feb 20 j 00:55	3°♒43'21		
conjunction	-4880 Mar 04 j 15:41	6°♒54'06	-1°24'17	
minimum elong	-4880 Mar 04 j 15:42	6°♒54'06	1°24'30	
max. Earth dist.	-4880 Mar 06 j 13:21	7°♒20'48	6.06113 AU	
morning rise	-4880 Mar 18 j 08:40	10°♒05'49		
	-4880 Apr 08 j 22:33	15°♒		
retrograde	-4880 Jul 26 j 03:08	29°♒46'42		
min. Earth dist.	-4880 Sep 22 j 11:33	24°♒50'48	4.10527 AU	
opposition	-4880 Sep 23 j 13:43	24°♒41'51	-1°56'12	
direct	-4880 Nov 21 j 03:19	19°♒42'11		
	-4879 Feb 15 j 18:09	0°♓		
evening set	-4879 Mar 27 j 18:56	8°♓40'49		
conjunction	-4879 Apr 10 j 13:17	11°♓48'58	-1°05'05	
minimum elong	-4879 Apr 10 j 13:22	11°♓49'00	1°05'11	
max. Earth dist.	-4879 Apr 12 j 01:21	12°♓09'32	6.15577 AU	
morning rise	-4879 Apr 24 j 07:55	14°♓57'03		
	-4879 Jul 10 j 14:11	0°♈		
retrograde	-4879 Aug 28 j 15:04	3°♈40'47		
	-4879 Oct 16 j 20:33	30°℞♓		
opposition	-4879 Oct 26 j 23:41	28°♓38'32	-1°08'50	
min. Earth dist.	-4879 Oct 26 j 07:07	28°♓44'09	4.21029 AU	
direct	-4879 Dec 25 j 15:52	23°♓36'08		
	-4878 Mar 03 j 00:21	0°♈		
evening set	-4878 May 02 j 05:40	12°♈09'50		
conjunction	-4878 May 15 j 22:21	15°♈12'48	-0°24'32	
minimum elong	-4878 May 15 j 22:23	15°♈12'49	0°24'29	
max. Earth dist.	-4878 May 16 j 11:18	15°♈20'01	6.26362 AU	
morning rise	-4878 May 29 j 13:24	18°♈14'44		
	-4878 Jul 26 j 21:54	0°♉		
retrograde	-4878 Sep 29 j 13:56	6°♉03'21		

Attention, astronomical year style is used: The year -4878 in astronomical counting style is the year 4879 BCE in historical counting style.

opposition	-4878 Nov 28 j 01:41	1°♉04'55	-0°01'52
min. Earth dist.	-4878 Nov 28 j 01:06	1°♉05'07	4.31082 AU
	-4878 Dec 06 j 05:55	30°℞♈	
asc. node	-4878 Dec 08 j 17:22	29°♈40'50	
direct	-4877 Jan 28 j 02:23	26°♈01'11	
	-4877 Mar 21 j 22:37	0°♉	
evening set	-4877 Jun 05 j 00:24	14°♉12'02	
	-4877 Jun 08 j 16:07	15°♉	
conjunction	-4877 Jun 18 j 10:27	17°♉08'42	0°22'24
minimum elong	-4877 Jun 18 j 10:26	17°♉08'41	0°22'35
max. Earth dist.	-4877 Jun 17 j 23:55	17°♉02'55	6.34958 AU
morning rise	-4877 Jul 01 j 17:17	20°♉03'44	
	-4877 Aug 19 j 14:42	0°♊	
retrograde	-4877 Oct 30 j 12:25	7°♊15'50	
opposition	-4877 Dec 29 j 10:16	2°♊21'05	1°03'10
min. Earth dist.	-4877 Dec 29 j 23:58	2°♊16'37	4.37655 AU
	-4876 Jan 17 j 04:25	30°℞♉	
direct	-4876 Feb 29 j 11:24	27°♉17'33	
	-4876 Apr 13 j 02:22	0°♊	
evening set	-4876 Jul 06 j 07:52	15°♊14'26	
max. Earth dist.	-4876 Jul 18 j 01:43	17°♊48'41	6.38934 AU
conjunction	-4876 Jul 19 j 08:22	18°♊05'31	1°01'48
minimum elong	-4876 Jul 19 j 08:19	18°♊05'29	1°02'03
morning rise	-4876 Aug 01 j 05:34	20°♊54'58	
	-4876 Sep 14 j 13:03	0°♋	
retrograde	-4876 Nov 29 j 11:53	7°♋55'53	
opposition	-4875 Jan 28 j 20:00	3°♋03'42	1°49'24
min. Earth dist.	-4875 Jan 29 j 22:07	2°♋55'19	4.38915 AU
	-4875 Feb 23 j 12:44	30°℞♊	
direct	-4875 Apr 01 j 11:38	28°♊01'40	
	-4875 May 08 j 12:32	0°♋	
evening set	-4875 Aug 06 j 15:41	15°♋55'41	
max. Earth dist.	-4875 Aug 17 j 14:39	18°♋20'59	6.37241 AU
conjunction	-4875 Aug 19 j 07:54	18°♋43'52	1°23'33
minimum elong	-4875 Aug 19 j 07:53	18°♋43'51	1°23'47
morning rise	-4875 Aug 31 j 21:31	21°♋30'51	
	-4875 Oct 11 j 12:55	0°♌	
retrograde	-4875 Dec 31 j 04:08	8°♌46'29	
opposition	-4874 Mar 01 j 23:48	3°♌55'01	2°05'20
min. Earth dist.	-4874 Mar 03 j 05:45	3°♌45'29	4.34490 AU
	-4874 Apr 06 j 13:29	30°℞♋	
direct	-4874 May 03 j 11:35	28°♋55'25	
	-4874 May 30 j 11:15	0°♌	
	-4874 Aug 28 j 21:30	15°♌	
evening set	-4874 Sep 06 j 16:49	16°♌57'30	
max. Earth dist.	-4874 Sep 17 j 13:53	19°♌24'30	6.30364 AU
conjunction	-4874 Sep 19 j 04:58	19°♌46'36	1°21'40
minimum elong	-4874 Sep 19 j 05:00	19°♌46'37	1°21'51
morning rise	-4874 Oct 01 j 15:45	22°♌35'13	
	-4874 Nov 05 j 01:00	0°♍	
retrograde	-4873 Feb 02 j 08:45	10°♍28'02	
opposition	-4873 Apr 04 j 10:45	5°♍35'30	1°44'57
min. Earth dist.	-4873 Apr 05 j 12:47	5°♍27'13	4.25565 AU
direct	-4873 Jun 05 j 04:23	0°♍38'50	
evening set	-4873 Oct 08 j 06:36	18°♍58'00	
conjunction	-4873 Oct 20 j 19:47	21°♍51'44	0°55'09
minimum elong	-4873 Oct 20 j 19:51	21°♍51'46	0°55'11
max. Earth dist.	-4873 Oct 19 j 15:41	21°♍35'28	6.20166 AU
morning rise	-4873 Nov 02 j 09:38	24°♍45'58	
	-4873 Nov 25 j 16:45	0°♎	
retrograde	-4872 Mar 08 j 07:29	13°♎31'20	
opposition	-4872 May 08 j 10:37	8°♎35'57	0°50'17
min. Earth dist.	-4872 May 08 j 22:40	8°♎32'04	4.14727 AU
direct	-4872 Jul 07 j 21:31	3°♎41'50	
evening set	-4872 Nov 09 j 03:39	22°♎23'38	
conjunction	-4872 Nov 21 j 22:22	25°♎24'12	0°09'50
minimum elong	-4872 Nov 21 j 22:23	25°♎24'12	0°09'45
behind sun begin	-4872 Nov 21 j 15:44	25°♎20'18	
behind sun end	-4872 Nov 22 j 05:01	25°♎28'06	
max. Earth dist.	-4872 Nov 21 j 17:54	25°♎21'35	6.09760 AU
morning rise	-4872 Dec 04 j 19:04	28°♎26'03	
	-4872 Dec 11 j 12:10	0°♏	
desc. node	-4871 Feb 06 j 16:23	11°♏52'39	
	-4871 Feb 27 j 09:25	15°♏	
retrograde	-4871 Apr 13 j 22:05	18°♏05'23	
	-4871 May 29 j 20:22	15°℞♏	
opposition	-4871 Jun 13 j 17:15	13°♏06'11	-0°24'28
min. Earth dist.	-4871 Jun 13 j 11:44	13°♏08'00	4.05614 AU
direct	-4871 Aug 11 j 20:46	8°♏13'16	
	-4871 Oct 18 j 02:20	15°♏	
evening set	-4871 Dec 13 j 20:31	27°♏16'59	
	-4871 Dec 25 j 06:30	0°♐	
conjunction	-4871 Dec 26 j 22:24	0°♐23'47	-0°40'20
minimum elong	-4871 Dec 26 j 22:20	0°♐23'45	0°40'32
max. Earth dist.	-4871 Dec 27 j 18:41	0°♐35'52	6.02779 AU
morning rise	-4870 Jan 09 j 03:41	3°♐32'24	
retrograde	-4870 May 21 j 02:54	23°♐46'22	
opposition	-4870 Jul 20 j 10:45	18°♐43'21	-1°32'25
min. Earth dist.	-4870 Jul 19 j 12:18	18°♐50'53	4.01584 AU
direct	-4870 Sep 16 j 14:57	13°♐49'26	
	-4869 Jan 05 j 22:55	0°♑	
evening set	-4869 Jan 19 j 04:54	3°♑05'45	
conjunction	-4869 Feb 01 j 14:13	6°♑16'03	-1°16'11
minimum elong	-4869 Feb 01 j 14:10	6°♑16'01	1°16'27
max. Earth dist.	-4869 Feb 03 j 07:12	6°♑40'22	6.01933 AU
morning rise	-4869 Feb 15 j 02:41	9°♑27'58	
retrograde	-4869 Jun 26 j 19:39	29°♑39'42	
min. Earth dist.	-4869 Aug 24 j 09:43	24°♑44'19	4.04149 AU
opposition	-4869 Aug 25 j 14:24	24°♑34'33	-2°05'25
direct	-4869 Oct 22 j 15:54	19°♑37'47	
	-4868 Jan 16 j 08:26	0°♒	
evening set	-4868 Feb 25 j 06:22	8°♒50'24	
conjunction	-4868 Mar 09 j 21:49	12°♒00'47	-1°23'18
minimum elong	-4868 Mar 09 j 21:50	12°♒00'47	1°23'30
max. Earth dist.	-4868 Mar 11 j 19:45	12°♒27'31	6.07541 AU
	-4868 Mar 22 j 18:27	15°♒	
morning rise	-4868 Mar 23 j 15:15	15°♒12'01	
	-4868 Jun 04 j 16:20	0°♓	
retrograde	-4868 Jul 30 j 21:49	4°♓44'14	
	-4868 Sep 25 j 20:47	30°℞♒	
min. Earth dist.	-4868 Sep 27 j 06:33	29°♒48'29	4.12217 AU
opposition	-4868 Sep 28 j 08:32	29°♒39'36	-1°51'29
direct	-4868 Nov 26 j 00:54	24°♒39'29	
	-4867 Jan 24 j 20:53	0°♓	
evening set	-4867 Apr 01 j 19:58	13°♓33'33	
conjunction	-4867 Apr 15 j 14:15	16°♓40'55	-1°00'21
minimum elong	-4867 Apr 15 j 14:19	16°♓40'57	1°00'24
max. Earth dist.	-4867 Apr 16 j 22:05	16°♓59'00	6.17381 AU
morning rise	-4867 Apr 29 j 08:43	19°♓48'06	
	-4867 Jun 16 j 17:16	0°♈	
retrograde	-4867 Sep 02 j 04:03	8°♈22'35	
opposition	-4867 Oct 31 j 12:25	3°♈20'47	-1°00'07
min. Earth dist.	-4867 Oct 30 j 22:56	3°♈25'21	4.22752 AU
	-4867 Nov 27 j 17:14	30°℞♓	

Attention, astronomical year style is used: The year -4866 in astronomical counting style is the year 4867 BCE in historical counting style.

direct	-4867 Dec 30 j 10:16	28°♓18'02	
	-4866 Feb 01 j 12:58	0°♈	
evening set	-4866 May 07 j 00:24	16°♈47'34	
conjunction	-4866 May 20 j 16:35	19°♈49'38	-0°18'03
minimum elong	-4866 May 20 j 16:36	19°♈49'39	0°17'58
max. Earth dist.	-4866 May 21 j 02:44	19°♈55'16	6.27880 AU
morning rise	-4866 Jun 03 j 06:35	22°♈50'32	
	-4866 Jul 06 j 23:36	0°♉	
retrograde	-4866 Oct 03 j 20:54	10°♉32'26	
asc. node	-4866 Oct 19 j 07:58	10°♉08'53	
opposition	-4866 Dec 02 j 10:29	5°♉34'35	0°07'43
min. Earth dist.	-4866 Dec 02 j 11:34	5°♉34'13	4.32278 AU
direct	-4865 Feb 01 j 13:51	0°♉30'47	
	-4865 May 23 j 13:28	15°♉	
evening set	-4865 Jun 09 j 13:43	18°♉39'12	
conjunction	-4865 Jun 22 j 22:26	21°♉35'02	0°28'35
minimum elong	-4865 Jun 22 j 22:23	21°♉35'01	0°28'46
max. Earth dist.	-4865 Jun 22 j 07:00	21°♉26'33	6.35733 AU
morning rise	-4865 Jul 06 j 04:06	24°♉29'14	
	-4865 Aug 01 j 02:34	0°♊	
retrograde	-4865 Nov 03 j 20:56	11°♊38'45	
opposition	-4864 Jan 02 j 18:38	6°♊44'29	1°11'01
min. Earth dist.	-4864 Jan 03 j 11:35	6°♊38'58	4.37972 AU
direct	-4864 Mar 04 j 23:16	1°♊41'04	
evening set	-4864 Jul 10 j 17:36	19°♊37'44	
max. Earth dist.	-4864 Jul 22 j 08:13	22°♊10'23	6.38748 AU
conjunction	-4864 Jul 23 j 17:00	22°♊28'24	1°06'02
minimum elong	-4864 Jul 23 j 16:56	22°♊28'22	1°06'18
morning rise	-4864 Aug 05 j 12:56	25°♊17'26	
	-4864 Aug 27 j 13:23	0°♋	
retrograde	-4864 Dec 03 j 20:24	12°♋20'00	
opposition	-4863 Feb 02 j 06:33	7°♋28'01	1°53'38
min. Earth dist.	-4863 Feb 03 j 09:05	7°♋19'31	4.38279 AU
direct	-4863 Apr 05 j 21:02	2°♋26'18	
evening set	-4863 Aug 11 j 00:42	20°♋22'12	
max. Earth dist.	-4863 Aug 21 j 22:47	22°♋47'28	6.36197 AU
conjunction	-4863 Aug 23 j 16:05	23°♋10'27	1°24'44
minimum elong	-4863 Aug 23 j 16:04	23°♋10'26	1°24'58
morning rise	-4863 Sep 05 j 05:00	25°♋57'35	
	-4863 Sep 23 j 18:54	0°♌	
retrograde	-4862 Jan 04 j 19:44	13°♌18'25	
opposition	-4862 Mar 06 j 15:20	8°♌27'00	2°04'39
min. Earth dist.	-4862 Mar 07 j 21:53	8°♌17'17	4.33113 AU
direct	-4862 May 08 j 01:45	3°♌27'52	
	-4862 Aug 11 j 22:15	15°♌	
evening set	-4862 Sep 11 j 03:24	21°♌33'06	
max. Earth dist.	-4862 Sep 22 j 00:30	24°♌00'44	6.28764 AU
conjunction	-4862 Sep 23 j 15:25	24°♌22'49	1°19'17
minimum elong	-4862 Sep 23 j 15:27	24°♌22'50	1°19'27
morning rise	-4862 Oct 06 j 02:28	27°♌12'12	
	-4862 Oct 18 j 14:59	0°♍	
retrograde	-4861 Feb 07 j 05:28	15°♍12'47	
opposition	-4861 Apr 09 j 08:25	10°♍19'55	1°39'00
min. Earth dist.	-4861 Apr 10 j 07:54	10°♍12'26	4.23855 AU
direct	-4861 Jun 09 j 21:13	5°♍23'42	
evening set	-4861 Oct 12 j 21:15	23°♍46'32	
max. Earth dist.	-4861 Oct 24 j 11:36	26°♍27'35	6.18520 AU
conjunction	-4861 Oct 25 j 11:08	26°♍41'14	0°49'32
minimum elong	-4861 Oct 25 j 11:11	26°♍41'16	0°49'33
morning rise	-4861 Nov 07 j 01:37	29°♍36'30	
	-4861 Nov 08 j 18:24	0°♎	
retrograde	-4860 Mar 13 j 11:48	18°♎30'04	
opposition	-4860 May 13 j 13:44	13°♎34'14	0°40'14
min. Earth dist.	-4860 May 13 j 23:42	13°♎31'02	4.13266 AU
direct	-4860 Jul 12 j 21:01	8°♎40'27	
evening set	-4860 Nov 14 j 00:12	27°♎25'20	
	-4860 Nov 24 j 22:23	0°♏	
conjunction	-4860 Nov 26 j 19:41	0°♏26'47	0°02'32
minimum elong	-4860 Nov 26 j 19:42	0°♏26'48	0°02'25
behind sun begin	-4860 Nov 26 j 11:38	0°♏22'03	
behind sun end	-4860 Nov 27 j 03:47	0°♏31'33	
max. Earth dist.	-4860 Nov 26 j 18:05	0°♏25'53	6.08613 AU
morning rise	-4860 Dec 09 j 17:42	3°♏29'41	
desc. node	-4860 Dec 16 j 05:39	5°♏00'50	
	-4859 Jan 31 j 17:06	15°♏	
retrograde	-4859 Apr 19 j 03:47	23°♏14'51	
opposition	-4859 Jun 18 j 22:41	18°♏15'02	-0°35'18
min. Earth dist.	-4859 Jun 18 j 13:20	18°♏18'07	4.04897 AU
	-4859 Jul 16 j 02:02	15°℞♏	
direct	-4859 Aug 16 j 21:33	13°♏22'07	
	-4859 Sep 17 j 11:02	15°♏	
	-4859 Dec 08 j 11:28	0°♐	
evening set	-4859 Dec 18 j 22:23	2°♐27'27	
conjunction	-4858 Jan 01 j 01:23	5°♐34'48	-0°46'44
minimum elong	-4858 Jan 01 j 01:19	5°♐34'46	0°46'57
max. Earth dist.	-4858 Jan 02 j 02:09	5°♐49'34	6.02531 AU
morning rise	-4858 Jan 14 j 07:34	8°♐43'57	
retrograde	-4858 May 26 j 09:19	28°♐58'57	
opposition	-4858 Jul 25 j 14:59	23°♐55'30	-1°39'42
min. Earth dist.	-4858 Jul 24 j 15:50	24°♐03'17	4.01836 AU
direct	-4858 Sep 21 j 18:41	19°♐01'17	
	-4858 Dec 18 j 18:15	0°♑	
evening set	-4857 Jan 24 j 09:46	8°♑16'59	
conjunction	-4857 Feb 06 j 19:56	11°♑27'20	-1°19'07
minimum elong	-4857 Feb 06 j 19:54	11°♑27'18	1°19'22
max. Earth dist.	-4857 Feb 08 j 14:50	11°♑52'42	6.02632 AU
morning rise	-4857 Feb 20 j 09:14	14°♑39'13	
	-4857 May 06 j 05:19	0°♒	
retrograde	-4857 Jul 01 j 20:01	4°♒46'19	
	-4857 Aug 28 j 06:18	30°℞♑	
min. Earth dist.	-4857 Aug 29 j 08:20	29°♑51'08	4.05249 AU
opposition	-4857 Aug 30 j 13:41	29°♑41'09	-2°06'15
direct	-4857 Oct 27 j 15:44	24°♑43'57	
	-4857 Dec 25 j 03:56	0°♒	
evening set	-4856 Mar 01 j 10:30	13°♒53'53	
	-4856 Mar 06 j 04:52	15°♒	
conjunction	-4856 Mar 15 j 02:24	17°♒03'52	-1°21'44
minimum elong	-4856 Mar 15 j 02:27	17°♒03'53	1°21'56
max. Earth dist.	-4856 Mar 16 j 21:55	17°♒29'07	6.08930 AU
morning rise	-4856 Mar 28 j 20:16	20°♒14'37	
	-4856 May 12 j 18:30	0°♓	
retrograde	-4856 Aug 04 j 15:56	9°♓38'47	
min. Earth dist.	-4856 Oct 02 j 01:55	4°♓42'36	4.13744 AU
opposition	-4856 Oct 03 j 01:49	4°♓34'26	-1°46'07
	-4856 Nov 14 j 20:28	30°℞♒	
direct	-4856 Nov 30 j 22:36	29°♒33'50	
	-4856 Dec 17 j 03:03	0°♓	
evening set	-4855 Apr 06 j 19:43	18°♓24'16	
conjunction	-4855 Apr 20 j 14:12	21°♓31'00	-0°55'15
minimum elong	-4855 Apr 20 j 14:16	21°♓31'03	0°55'19
max. Earth dist.	-4855 Apr 21 j 20:21	21°♓48'05	6.18949 AU
morning rise	-4855 May 04 j 08:13	24°♓37'21	
	-4855 May 28 j 20:51	0°♈	

Attention, astronomical year style is used: The year -4855 in astronomical counting style is the year 4856 BCE in historical counting style.

retrograde	-4855 Sep 06 j 15:49	13°♈03'42	
opposition	-4855 Nov 05 j 00:40	8°♈02'27	-0°51'07
min. Earth dist.	-4855 Nov 04 j 12:53	8°♈06'26	4.24212 AU
direct	-4854 Jan 04 j 01:47	2°♈59'30	
evening set	-4854 May 11 j 18:53	21°♈25'46	
conjunction	-4854 May 25 j 10:08	24°♈27'00	-0°11'28
minimum elong	-4854 May 25 j 10:08	24°♈27'00	0°11'22
behind sun begin	-4854 May 25 j 04:12	24°♈23'44	
behind sun end	-4854 May 25 j 16:04	24°♈30'17	
max. Earth dist.	-4854 May 25 j 14:59	24°♈29'41	6.29122 AU
morning rise	-4854 Jun 07 j 23:20	27°♈27'00	
	-4854 Jun 19 j 15:40	0°♉	
asc. node	-4854 Aug 29 j 13:18	12°♉36'39	
	-4854 Oct 02 j 09:15	15°♉	
retrograde	-4854 Oct 08 j 06:09	15°♉03'25	
	-4854 Oct 14 j 02:17	15°℞♉	
opposition	-4854 Dec 06 j 20:05	10°♉06'04	0°17'16
min. Earth dist.	-4854 Dec 07 j 00:20	10°♉04'39	4.33218 AU
direct	-4853 Feb 06 j 04:03	5°♉02'11	
	-4853 May 05 j 21:07	15°♉	
evening set	-4853 Jun 14 j 03:24	23°♉08'50	
conjunction	-4853 Jun 27 j 11:03	26°♉03'57	0°34'38
minimum elong	-4853 Jun 27 j 11:00	26°♉03'56	0°34'50
max. Earth dist.	-4853 Jun 26 j 17:51	25°♉54'30	6.36300 AU
morning rise	-4853 Jul 10 j 15:13	28°♉57'22	
	-4853 Jul 15 j 10:24	0°♊	
retrograde	-4853 Nov 08 j 03:47	16°♊04'56	
opposition	-4852 Jan 07 j 03:58	11°♊11'04	1°18'33
min. Earth dist.	-4852 Jan 07 j 21:54	11°♊05'14	4.38159 AU
direct	-4852 Mar 09 j 09:47	6°♊07'50	
evening set	-4852 Jul 15 j 04:21	24°♊04'27	
max. Earth dist.	-4852 Jul 26 j 14:57	26°♊35'09	6.38525 AU
conjunction	-4852 Jul 28 j 02:21	26°♊54'38	1°09'58
minimum elong	-4852 Jul 28 j 02:17	26°♊54'36	1°10'13
morning rise	-4852 Aug 09 j 21:15	29°♊43'18	
	-4852 Aug 11 j 03:48	0°♋	
retrograde	-4852 Dec 08 j 08:15	16°♋47'36	
opposition	-4851 Feb 06 j 18:48	11°♋55'50	1°57'17
min. Earth dist.	-4851 Feb 07 j 23:08	11°♋46'45	4.37684 AU
direct	-4851 Apr 10 j 10:32	6°♋54'26	
evening set	-4851 Aug 15 j 10:12	24°♋51'37	
max. Earth dist.	-4851 Aug 26 j 07:44	27°♋16'57	6.35274 AU
conjunction	-4851 Aug 28 j 00:56	27°♋39'55	1°25'29
minimum elong	-4851 Aug 28 j 00:56	27°♋39'55	1°25'43
	-4851 Sep 07 j 12:19	0°♌	
morning rise	-4851 Sep 09 j 13:15	0°♌27'10	
	-4851 Nov 26 j 11:01	15°♌	
retrograde	-4850 Jan 09 j 10:02	17°♌52'49	
	-4850 Feb 23 j 06:25	15°℞♌	
opposition	-4850 Mar 11 j 07:56	13°♌01'16	2°03'16
min. Earth dist.	-4850 Mar 12 j 12:48	12°♌52'05	4.31949 AU
direct	-4850 May 12 j 15:16	8°♌02'35	
	-4850 Jul 23 j 10:03	15°♌	
evening set	-4850 Sep 15 j 14:21	26°♌09'55	
max. Earth dist.	-4850 Sep 26 j 14:01	28°♌39'28	6.27476 AU
conjunction	-4850 Sep 28 j 02:17	29°♌00'07	1°16'27
minimum elong	-4850 Sep 28 j 02:20	29°♌00'09	1°16'36
	-4850 Oct 02 j 11:29	0°♍	
morning rise	-4850 Oct 10 j 13:27	1°♍50'06	
retrograde	-4849 Feb 12 j 03:19	19°♍57'12	
opposition	-4849 Apr 14 j 06:05	15°♍04'01	1°32'27
min. Earth dist.	-4849 Apr 15 j 04:33	14°♍56'51	4.22520 AU
direct	-4849 Jun 14 j 16:28	10°♍08'12	
evening set	-4849 Oct 17 j 11:27	28°♍33'14	
	-4849 Oct 23 j 17:17	0°♎	
max. Earth dist.	-4849 Oct 29 j 04:34	1°♎16'20	6.17269 AU
conjunction	-4849 Oct 30 j 01:51	1°♎28'43	0°43'40
minimum elong	-4849 Oct 30 j 01:55	1°♎28'45	0°43'41
morning rise	-4849 Nov 11 j 17:18	4°♎24'55	
retrograde	-4848 Mar 18 j 12:21	23°♎25'02	
opposition	-4848 May 18 j 15:09	18°♎28'39	0°30'05
min. Earth dist.	-4848 May 18 j 21:23	18°♎26'38	4.12196 AU
direct	-4848 Jul 17 j 17:08	13°♎35'06	
desc. node	-4848 Oct 25 j 22:01	26°♎53'11	
	-4848 Nov 08 j 15:44	0°♏	
evening set	-4848 Nov 18 j 18:56	2°♏21'46	
conjunction	-4848 Dec 01 j 15:24	5°♏23'59	-0°04'45
minimum elong	-4848 Dec 01 j 15:24	5°♏23'58	0°04'53
behind sun begin	-4848 Dec 01 j 07:31	5°♏19'20	
behind sun end	-4848 Dec 01 j 23:17	5°♏28'37	
max. Earth dist.	-4848 Dec 01 j 18:21	5°♏25'41	6.07822 AU
morning rise	-4848 Dec 14 j 14:22	8°♏27'40	
	-4847 Jan 12 j 06:28	15°♏	
retrograde	-4847 Apr 24 j 08:29	28°♏17'18	
opposition	-4847 Jun 24 j 01:26	23°♏16'54	-0°45'36
min. Earth dist.	-4847 Jun 23 j 14:40	23°♏20'28	4.04452 AU
direct	-4847 Aug 21 j 22:02	18°♏23'55	
	-4847 Nov 21 j 01:11	0°♐	
evening set	-4847 Dec 23 j 21:52	7°♐30'06	
conjunction	-4846 Jan 06 j 01:47	10°♐37'52	-0°52'37
minimum elong	-4846 Jan 06 j 01:43	10°♐37'50	0°52'50
max. Earth dist.	-4846 Jan 07 j 05:19	10°♐54'16	6.02455 AU
morning rise	-4846 Jan 19 j 09:02	13°♐47'28	
	-4846 Apr 09 j 10:05	0°♑	
retrograde	-4846 May 31 j 10:42	4°♑02'32	
	-4846 Jul 23 j 00:10	30°℞♐	
opposition	-4846 Jul 30 j 15:21	28°♐58'46	-1°46'00
min. Earth dist.	-4846 Jul 29 j 14:31	29°♐07'07	4.02170 AU
direct	-4846 Sep 26 j 17:14	24°♐04'14	
	-4846 Nov 27 j 18:05	0°♑	
evening set	-4845 Jan 29 j 11:52	13°♑19'23	
conjunction	-4845 Feb 11 j 22:49	16°♑29'45	-1°21'22
minimum elong	-4845 Feb 11 j 22:47	16°♑29'44	1°21'36
max. Earth dist.	-4845 Feb 13 j 17:17	16°♑54'50	6.03311 AU
morning rise	-4845 Feb 25 j 12:55	19°♑41'39	
	-4845 Apr 13 j 07:57	0°♒	
retrograde	-4845 Jul 06 j 17:12	9°♒44'20	
min. Earth dist.	-4845 Sep 03 j 05:04	4°♒48'52	4.06200 AU
opposition	-4845 Sep 04 j 09:37	4°♒39'07	-2°06'08
	-4845 Oct 19 j 04:26	30°℞♑	
direct	-4845 Nov 01 j 14:03	29°♑41'26	
	-4845 Nov 15 j 00:15	0°♒	
	-4844 Feb 18 j 15:34	15°♒	
evening set	-4844 Mar 06 j 11:37	18°♒49'27	
conjunction	-4844 Mar 20 j 04:19	21°♒59'14	-1°19'38
minimum elong	-4844 Mar 20 j 04:22	21°♒59'16	1°19'48
max. Earth dist.	-4844 Mar 21 j 23:38	22°♒24'18	6.10084 AU
morning rise	-4844 Apr 02 j 22:23	25°♒09'35	
	-4844 Apr 24 j 11:07	0°♓	
retrograde	-4844 Aug 09 j 08:15	14°♓26'46	
opposition	-4844 Oct 07 j 16:53	9°♓22'49	-1°40'10
min. Earth dist.	-4844 Oct 06 j 18:31	9°♓30'27	4.14977 AU
direct	-4844 Dec 05 j 16:21	4°♓21'54	
evening set	-4843 Apr 11 j 17:46	23°♓09'52	

Attention, astronomical year style is used: The year -4843 in astronomical counting style is the year 4844 BCE in historical counting style.

conjunction	-4843 Apr 25 j 12:03	26°♓16'04	-0°49'54
minimum elong	-4843 Apr 25 j 12:07	26°♓16'06	0°49'56
max. Earth dist.	-4843 Apr 26 j 13:39	26°♓30'31	6.20170 AU
morning rise	-4843 May 09 j 05:56	29°♓21'49	
	-4843 May 12 j 02:15	0°♈	
retrograde	-4843 Sep 11 j 02:37	17°♈41'32	
opposition	-4843 Nov 09 j 11:55	12°♈40'49	-0°41'57
min. Earth dist.	-4843 Nov 09 j 02:26	12°♈44'01	4.25318 AU
direct	-4842 Jan 08 j 17:01	7°♈37'40	
evening set	-4842 May 16 j 12:34	26°♈01'59	
conjunction	-4842 May 30 j 03:13	29°♈02'34	-0°04'54
minimum elong	-4842 May 30 j 03:13	29°♈02'34	0°04'47
behind sun begin	-4842 May 29 j 19:09	28°♈58'07	
behind sun end	-4842 May 30 j 11:16	29°♈07'00	
max. Earth dist.	-4842 May 30 j 06:03	29°♈04'06	6.30061 AU
	-4842 Jun 03 j 10:50	0°♉	
morning rise	-4842 Jun 12 j 15:16	2°♉01'45	
asc. node	-4842 Jul 09 j 19:18	7°♉50'23	
	-4842 Aug 18 j 04:52	15°♉	
retrograde	-4842 Oct 12 j 14:38	19°♉33'47	
	-4842 Dec 08 j 08:06	15°℞♉	
opposition	-4842 Dec 11 j 05:40	14°♉37'02	0°26'39
min. Earth dist.	-4842 Dec 11 j 11:28	14°♉35'07	4.33930 AU
direct	-4841 Feb 10 j 16:39	9°♉33'15	
	-4841 Apr 14 j 18:59	15°♉	
evening set	-4841 Jun 18 j 17:05	27°♉38'45	
	-4841 Jun 29 j 10:59	0°♊	
conjunction	-4841 Jul 01 j 23:20	0°♊33'09	0°40'28
minimum elong	-4841 Jul 01 j 23:17	0°♊33'08	0°40'42
max. Earth dist.	-4841 Jul 01 j 02:16	0°♊21'35	6.36723 AU
morning rise	-4841 Jul 15 j 02:23	3°♊25'54	
retrograde	-4841 Nov 12 j 13:13	20°♊32'09	
opposition	-4840 Jan 11 j 14:18	15°♊38'39	1°25'38
min. Earth dist.	-4840 Jan 12 j 10:13	15°♊32'11	4.38293 AU
direct	-4840 Mar 13 j 22:51	10°♊35'37	
evening set	-4840 Jul 19 j 14:50	28°♊31'59	
	-4840 Jul 26 j 07:21	0°♋	
max. Earth dist.	-4840 Jul 31 j 00:34	1°♋02'21	6.38346 AU
conjunction	-4840 Aug 01 j 11:47	1°♋21'46	1°13'29
minimum elong	-4840 Aug 01 j 11:44	1°♋21'44	1°13'44
morning rise	-4840 Aug 14 j 05:22	4°♋10'00	
retrograde	-4840 Dec 12 j 17:51	21°♋15'53	
opposition	-4839 Feb 11 j 07:14	16°♋24'13	2°00'14
min. Earth dist.	-4839 Feb 12 j 11:03	16°♋15'20	4.37220 AU
direct	-4839 Apr 14 j 22:18	11°♋23'12	
evening set	-4839 Aug 19 j 19:29	29°♋20'59	
	-4839 Aug 22 j 17:47	0°♌	
max. Earth dist.	-4839 Aug 30 j 15:46	1°♌46'00	6.34535 AU
conjunction	-4839 Sep 01 j 09:21	2°♌09'14	1°25'43
minimum elong	-4839 Sep 01 j 09:21	2°♌09'14	1°25'57
morning rise	-4839 Sep 13 j 21:15	4°♌56'35	
	-4839 Nov 01 j 13:59	15°♌	
retrograde	-4838 Jan 14 j 01:50	22°♌26'27	
opposition	-4838 Mar 16 j 00:14	17°♌34'45	2°01'06
min. Earth dist.	-4838 Mar 17 j 05:27	17°♌25'28	4.30953 AU
	-4838 Apr 06 j 08:52	15°℞♌	
direct	-4838 May 17 j 06:48	12°♌36'24	
	-4838 Jun 26 j 17:17	15°♌	
	-4838 Sep 16 j 15:58	0°♍	
evening set	-4838 Sep 20 j 00:06	0°♍45'13	
max. Earth dist.	-4838 Oct 01 j 01:19	3°♍16'03	6.26291 AU
conjunction	-4838 Oct 02 j 12:10	3°♍35'56	1°13'10
minimum elong	-4838 Oct 02 j 12:13	3°♍35'57	1°13'17
morning rise	-4838 Oct 14 j 23:36	6°♍26'32	
retrograde	-4837 Feb 16 j 22:11	24°♍39'58	
opposition	-4837 Apr 19 j 02:40	19°♍46'23	1°25'19
min. Earth dist.	-4837 Apr 19 j 22:29	19°♍40'03	4.21208 AU
direct	-4837 Jun 19 j 08:11	14°♍50'55	
	-4837 Oct 07 j 13:19	0°♎	
evening set	-4837 Oct 22 j 00:37	3°♎18'19	
conjunction	-4837 Nov 03 j 15:38	6°♎14'38	0°37'33
minimum elong	-4837 Nov 03 j 15:41	6°♎14'39	0°37'32
max. Earth dist.	-4837 Nov 02 j 21:26	6°♎04'01	6.15943 AU
morning rise	-4837 Nov 16 j 07:54	9°♎11'47	
retrograde	-4836 Mar 23 j 15:01	28°♎19'06	
opposition	-4836 May 23 j 15:48	23°♎22'08	0°19'44
min. Earth dist.	-4836 May 23 j 20:37	23°♎20'35	4.10939 AU
direct	-4836 Jul 22 j 14:20	18°♎28'43	
desc. node	-4836 Sep 04 j 18:52	21°♎31'37	
	-4836 Oct 22 j 08:50	0°♏	
evening set	-4836 Nov 23 j 13:41	7°♏18'17	
conjunction	-4836 Dec 06 j 11:11	10°♏21'23	-0°11'52
minimum elong	-4836 Dec 06 j 11:09	10°♏21'22	0°12'01
behind sun begin	-4836 Dec 06 j 05:32	10°♏18'03	
behind sun end	-4836 Dec 06 j 16:47	10°♏24'41	
max. Earth dist.	-4836 Dec 06 j 17:12	10°♏24'56	6.06751 AU
morning rise	-4836 Dec 19 j 11:20	13°♏26'03	
	-4836 Dec 26 j 03:40	15°♏	
	-4835 Mar 13 j 02:44	0°♐	
retrograde	-4835 Apr 29 j 11:57	3°♐21'07	
	-4835 Jun 16 j 08:02	30°℞♏	
opposition	-4835 Jun 29 j 03:53	28°♏20'12	-0°55'38
min. Earth dist.	-4835 Jun 28 j 14:29	28°♏24'38	4.03693 AU
direct	-4835 Aug 26 j 19:56	23°♏27'06	
	-4835 Oct 31 j 13:27	0°♐	
evening set	-4835 Dec 28 j 22:37	12°♐35'42	
conjunction	-4834 Jan 11 j 03:31	15°♐44'05	-0°58'09
minimum elong	-4834 Jan 11 j 03:27	15°♐44'03	0°58'24
max. Earth dist.	-4834 Jan 12 j 08:47	16°♐01'32	6.02046 AU
morning rise	-4834 Jan 24 j 11:53	18°♐54'18	
	-4834 Mar 15 j 19:40	0°♑	
retrograde	-4834 Jun 05 j 14:18	9°♑10'44	
opposition	-4834 Aug 04 j 17:04	4°♑06'34	-1°51'37
min. Earth dist.	-4834 Aug 03 j 15:21	4°♑15'15	4.02162 AU
	-4834 Sep 10 j 00:26	30°℞♐	
direct	-4834 Oct 01 j 18:33	29°♐11'35	
	-4834 Oct 23 j 12:51	0°♑	
evening set	-4833 Feb 03 j 16:13	18°♑27'31	
conjunction	-4833 Feb 17 j 04:17	21°♑38'09	-1°23'02
minimum elong	-4833 Feb 17 j 04:16	21°♑38'08	1°23'16
max. Earth dist.	-4833 Feb 19 j 01:04	22°♑04'32	6.03697 AU
morning rise	-4833 Mar 02 j 19:04	24°♑50'09	
	-4833 Mar 25 j 08:51	0°♒	
retrograde	-4833 Jul 11 j 18:07	14°♒49'08	
min. Earth dist.	-4833 Sep 08 j 03:59	9°♒53'30	4.06946 AU
opposition	-4833 Sep 09 j 07:58	9°♒43'56	-2°05'07
direct	-4833 Nov 06 j 13:27	4°♒45'48	
	-4832 Jan 31 j 03:58	15°♒	
evening set	-4832 Mar 11 j 16:16	23°♒52'34	
conjunction	-4832 Mar 25 j 09:22	27°♒02'07	-1°16'53
minimum elong	-4832 Mar 25 j 09:25	27°♒02'09	1°17'02
max. Earth dist.	-4832 Mar 27 j 02:13	27°♒25'41	6.11119 AU
	-4832 Apr 07 j 06:40	0°♓	
morning rise	-4832 Apr 08 j 03:56	0°♓12'10	

Attention, astronomical year style is used: The year -4832 in astronomical counting style is the year 4833 BCE in historical counting style.

retrograde	-4832 Aug 14 j 01:32	19°♓22'22	
opposition	-4832 Oct 12 j 10:40	14°♓18'45	-1°33'23
min. Earth dist.	-4832 Oct 11 j 13:11	14°♓26'04	4.16202 AU
direct	-4832 Dec 10 j 13:23	9°♓17'26	
evening set	-4831 Apr 16 j 18:54	28°♓02'48	
	-4831 Apr 25 j 11:43	0°♈	
conjunction	-4831 Apr 30 j 13:08	1°♈08'23	-0°44'03
minimum elong	-4831 Apr 30 j 13:12	1°♈08'25	0°44'04
max. Earth dist.	-4831 May 01 j 13:09	1°♈21'54	6.21540 AU
morning rise	-4831 May 14 j 06:26	4°♈13'20	
retrograde	-4831 Sep 15 j 16:48	22°♈25'37	
opposition	-4831 Nov 14 j 01:57	17°♈25'29	-0°32'18
min. Earth dist.	-4831 Nov 13 j 18:21	17°♈28'03	4.26719 AU
direct	-4830 Jan 13 j 11:59	12°♈22'14	
asc. node	-4830 May 18 j 19:24	0°♉09'45	
	-4830 May 18 j 01:33	0°♉	
evening set	-4830 May 21 j 08:17	0°♉43'07	
conjunction	-4830 Jun 03 j 21:50	3°♉42'42	0°01'58
minimum elong	-4830 Jun 03 j 21:51	3°♉42'43	0°02'05
behind sun begin	-4830 Jun 03 j 13:36	3°♉38'10	
behind sun end	-4830 Jun 04 j 06:07	3°♉47'15	
max. Earth dist.	-4830 Jun 03 j 21:29	3°♉42'31	6.31412 AU
morning rise	-4830 Jun 17 j 08:52	6°♉40'54	
	-4830 Jul 27 j 05:44	15°♉	
retrograde	-4830 Oct 16 j 23:37	24°♉07'03	
opposition	-4830 Dec 15 j 16:52	19°♉10'45	0°35'57
min. Earth dist.	-4830 Dec 16 j 00:08	19°♉08'22	4.35159 AU
	-4829 Jan 22 j 08:28	15°℞♉	
direct	-4829 Feb 15 j 07:55	14°♉07'00	
	-4829 Mar 11 j 14:13	15°♉	
	-4829 Jun 13 j 07:35	0°♊	
evening set	-4829 Jun 23 j 06:58	2°♊09'13	
conjunction	-4829 Jul 06 j 11:53	5°♊02'37	0°46'03
minimum elong	-4829 Jul 06 j 11:49	5°♊02'35	0°46'17
max. Earth dist.	-4829 Jul 05 j 14:05	4°♊50'40	6.37749 AU
morning rise	-4829 Jul 19 j 13:18	7°♊54'19	
retrograde	-4829 Nov 16 j 20:17	24°♊57'12	
opposition	-4828 Jan 16 j 00:01	20°♊04'04	1°32'05
min. Earth dist.	-4828 Jan 16 j 20:54	19°♊57'19	4.39056 AU
direct	-4828 Mar 18 j 11:16	15°♊01'17	
	-4828 Jul 10 j 11:17	0°♋	
evening set	-4828 Jul 23 j 23:46	2°♋55'07	
max. Earth dist.	-4828 Aug 04 j 05:22	5°♋23'16	6.38763 AU
conjunction	-4828 Aug 05 j 19:17	5°♋44'10	1°16'29
minimum elong	-4828 Aug 05 j 19:14	5°♋44'09	1°16'44
morning rise	-4828 Aug 18 j 11:53	8°♋31'47	
retrograde	-4828 Dec 17 j 02:41	25°♋37'30	
opposition	-4827 Feb 15 j 17:38	20°♋45'56	2°02'19
min. Earth dist.	-4827 Feb 16 j 22:48	20°♋36'37	4.37263 AU
direct	-4827 Apr 19 j 09:52	15°♋45'10	
	-4827 Aug 07 j 02:33	0°♌	
evening set	-4827 Aug 24 j 01:10	3°♌41'52	
max. Earth dist.	-4827 Sep 03 j 21:46	6°♌07'10	6.34192 AU
conjunction	-4827 Sep 05 j 14:33	6°♌30'00	1°25'25
minimum elong	-4827 Sep 05 j 14:34	6°♌30'00	1°25'38
morning rise	-4827 Sep 18 j 01:50	9°♌17'16	
	-4827 Oct 14 j 11:16	15°♌	
retrograde	-4826 Jan 18 j 11:51	26°♌50'17	
opposition	-4826 Mar 20 j 12:48	21°♌58'28	1°58'14
min. Earth dist.	-4826 Mar 21 j 17:15	21°♌49'26	4.30230 AU
direct	-4826 May 21 j 16:41	17°♌00'31	
	-4826 Aug 31 j 21:04	0°♍	
evening set	-4826 Sep 24 j 06:11	5°♍10'11	
max. Earth dist.	-4826 Oct 05 j 07:34	7°♍41'30	6.25246 AU
conjunction	-4826 Oct 06 j 18:12	8°♍01'19	1°09'33
minimum elong	-4826 Oct 06 j 18:15	8°♍01'21	1°09'39
morning rise	-4826 Oct 19 j 06:03	10°♍52'32	
retrograde	-4825 Feb 21 j 15:44	29°♍12'08	
opposition	-4825 Apr 23 j 19:06	24°♍18'14	1°17'54
min. Earth dist.	-4825 Apr 24 j 14:45	24°♍11'57	4.19875 AU
direct	-4825 Jun 23 j 21:41	19°♍23'01	
	-4825 Sep 20 j 20:27	0°♎	
evening set	-4825 Oct 26 j 10:15	7°♎53'24	
max. Earth dist.	-4825 Nov 07 j 09:59	10°♎41'16	6.14462 AU
conjunction	-4825 Nov 08 j 02:07	10°♎50'42	0°31'25
minimum elong	-4825 Nov 08 j 02:10	10°♎50'43	0°31'23
morning rise	-4825 Nov 20 j 19:19	13°♎48'56	
	-4824 Feb 12 j 01:35	0°♏	
retrograde	-4824 Mar 28 j 12:38	3°♏04'08	
	-4824 May 13 j 14:12	30°℞♎	
opposition	-4824 May 28 j 12:35	28°♎06'46	0°09'36
min. Earth dist.	-4824 May 28 j 15:16	28°♎05'53	4.09429 AU
desc. node	-4824 Jul 17 j 18:38	23°♎22'21	
direct	-4824 Jul 27 j 05:14	23°♎13'31	
	-4824 Oct 02 j 23:01	0°♏	
evening set	-4824 Nov 28 j 06:03	12°♏07'32	
	-4824 Dec 10 j 08:49	15°♏	
conjunction	-4824 Dec 11 j 04:30	15°♏11'42	-0°18'41
minimum elong	-4824 Dec 11 j 04:29	15°♏11'41	0°18'50
max. Earth dist.	-4824 Dec 11 j 12:29	15°♏16'26	6.05349 AU
morning rise	-4824 Dec 24 j 05:56	18°♏17'33	
	-4823 Feb 15 j 21:55	0°♐	
retrograde	-4823 May 04 j 14:17	8°♐19'42	
opposition	-4823 Jul 04 j 04:03	3°♐18'18	-1°04'59
min. Earth dist.	-4823 Jul 03 j 12:55	3°♐23'19	4.02540 AU
	-4823 Jul 31 j 14:47	30°℞♏	
direct	-4823 Aug 31 j 17:03	28°♏25'04	
	-4823 Oct 01 j 13:58	0°♐	
evening set	-4822 Jan 02 j 22:24	17°♐38'00	
conjunction	-4822 Jan 16 j 04:35	20°♐47'17	-1°03'06
minimum elong	-4822 Jan 16 j 04:32	20°♐47'14	1°03'20
max. Earth dist.	-4822 Jan 17 j 13:49	21°♐07'05	6.01261 AU
morning rise	-4822 Jan 29 j 13:59	23°♐58'19	
	-4822 Feb 24 j 18:01	0°♑	
retrograde	-4822 Jun 10 j 18:48	14°♑17'20	
opposition	-4822 Aug 09 j 17:44	9°♑12'57	-1°56'14
min. Earth dist.	-4822 Aug 08 j 15:17	9°♑21'54	4.01859 AU
direct	-4822 Oct 06 j 17:45	4°♑17'39	
evening set	-4821 Feb 08 j 21:10	23°♑35'41	
conjunction	-4821 Feb 22 j 10:05	26°♑46'39	-1°23'59
minimum elong	-4821 Feb 22 j 10:04	26°♑46'39	1°24'13
max. Earth dist.	-4821 Feb 24 j 06:44	27°♑12'56	6.03885 AU
morning rise	-4821 Mar 08 j 01:53	29°♑58'57	
	-4821 Mar 08 j 03:42	0°♒	
	-4821 May 20 j 08:31	15°♒	
retrograde	-4821 Jul 16 j 16:23	19°♒54'32	
	-4821 Sep 12 j 22:52	15°℞♒	
min. Earth dist.	-4821 Sep 13 j 01:12	14°♒59'12	4.07609 AU
opposition	-4821 Sep 14 j 05:59	14°♒49'21	-2°03'03
direct	-4821 Nov 11 j 12:27	9°♒50'44	
	-4820 Jan 08 j 15:52	15°♒	
evening set	-4820 Mar 16 j 21:03	28°♒56'26	
	-4820 Mar 21 j 12:03	0°♓	

Attention, astronomical year style is used: The year -4820 in astronomical counting style is the year 4821 BCE in historical counting style.

conjunction	-4820 Mar 30 j 14:47	2°♓05'46	-1°13'31
minimum elong	-4820 Mar 30 j 14:51	2°♓05'48	1°13'39
max. Earth dist.	-4820 Apr 01 j 07:20	2°♓29'05	6.12209 AU
morning rise	-4820 Apr 13 j 09:27	5°♓15'22	
retrograde	-4820 Aug 18 j 20:35	24°♓18'06	
min. Earth dist.	-4820 Oct 16 j 08:42	19°♓21'32	4.17559 AU
opposition	-4820 Oct 17 j 04:25	19°♓14'49	-1°25'53
direct	-4820 Dec 15 j 11:54	14°♓13'08	
	-4819 Apr 08 j 14:31	0°♈	
evening set	-4819 Apr 21 j 19:30	2°♈55'01	
conjunction	-4819 May 05 j 13:24	5°♈59'51	-0°37'54
minimum elong	-4819 May 05 j 13:27	5°♈59'53	0°37'53
max. Earth dist.	-4819 May 06 j 10:54	6°♈11'55	6.23037 AU
morning rise	-4819 May 19 j 06:09	9°♈03'54	
retrograde	-4819 Sep 20 j 03:55	27°♈08'16	
opposition	-4819 Nov 18 j 15:02	22°♈08'35	-0°22'29
min. Earth dist.	-4819 Nov 18 j 08:32	22°♈10'46	4.28189 AU
direct	-4818 Jan 18 j 05:08	17°♈05'05	
asc. node	-4818 Mar 27 j 11:02	23°♈28'34	
	-4818 Apr 30 j 23:27	0°♉	
evening set	-4818 May 26 j 02:54	5°♉22'20	
conjunction	-4818 Jun 08 j 15:23	8°♉20'56	0°08'40
minimum elong	-4818 Jun 08 j 15:23	8°♉20'55	0°08'49
behind sun begin	-4818 Jun 08 j 08:20	8°♉17'03	
behind sun end	-4818 Jun 08 j 22:26	8°♉24'48	
max. Earth dist.	-4818 Jun 08 j 11:53	8°♉19'01	6.32723 AU
morning rise	-4818 Jun 22 j 01:07	11°♉18'02	
	-4818 Jul 09 j 04:30	15°♉	
retrograde	-4818 Oct 21 j 09:20	28°♉38'44	
opposition	-4818 Dec 20 j 03:18	23°♉42'56	0°45'01
min. Earth dist.	-4818 Dec 20 j 13:08	23°♉39'43	4.36190 AU
direct	-4817 Feb 19 j 22:52	18°♉39'12	
	-4817 May 27 j 03:09	0°♊	
evening set	-4817 Jun 27 j 19:57	6°♊38'55	
conjunction	-4817 Jul 10 j 23:29	9°♊31'29	0°51'25
minimum elong	-4817 Jul 10 j 23:25	9°♊31'27	0°51'39
max. Earth dist.	-4817 Jul 09 j 22:05	9°♊17'34	6.38382 AU
morning rise	-4817 Jul 23 j 23:37	12°♊22'22	
retrograde	-4817 Nov 21 j 04:46	29°♊23'36	
opposition	-4816 Jan 20 j 10:24	24°♊30'44	1°38'09
min. Earth dist.	-4816 Jan 21 j 08:47	24°♊23'30	4.39273 AU
direct	-4816 Mar 22 j 23:00	19°♊28'05	
	-4816 Jun 23 j 05:49	0°♋	
evening set	-4816 Jul 28 j 09:11	7°♋21'17	
max. Earth dist.	-4816 Aug 08 j 13:31	9°♋48'52	6.38530 AU
conjunction	-4816 Aug 10 j 03:40	10°♋09'56	1°19'10
minimum elong	-4816 Aug 10 j 03:37	10°♋09'55	1°19'25
morning rise	-4816 Aug 22 j 19:05	12°♋57'11	
	-4816 Dec 14 j 06:04	0°♌	
retrograde	-4816 Dec 21 j 13:33	0°♌05'03	
	-4816 Dec 28 j 21:16	30°℞♋	
opposition	-4815 Feb 20 j 06:21	25°♋13'35	2°03'55
min. Earth dist.	-4815 Feb 21 j 12:06	25°♋04'06	4.36603 AU
direct	-4815 Apr 23 j 21:51	20°♋13'10	
	-4815 Jul 20 j 14:59	0°♌	
evening set	-4815 Aug 28 j 10:00	8°♌11'03	
max. Earth dist.	-4815 Sep 08 j 04:36	10°♌35'42	6.33139 AU
conjunction	-4815 Sep 09 j 22:44	10°♌59'21	1°24'41
minimum elong	-4815 Sep 09 j 22:45	10°♌59'22	1°24'53
morning rise	-4815 Sep 22 j 09:54	13°♌46'58	
	-4815 Sep 27 j 21:15	15°♌	
	-4815 Dec 23 j 14:27	0°♍	
retrograde	-4814 Jan 23 j 05:13	1°♍25'35	
	-4814 Feb 23 j 00:17	30°℞♌	
opposition	-4814 Mar 25 j 06:08	26°♌33'32	1°54'40
min. Earth dist.	-4814 Mar 26 j 10:24	26°♌24'33	4.28845 AU
direct	-4814 May 26 j 07:14	21°♌35'54	
	-4814 Aug 13 j 11:58	0°♍	
evening set	-4814 Sep 28 j 17:02	9°♍48'26	
max. Earth dist.	-4814 Oct 09 j 21:34	12°♍22'02	6.23658 AU
conjunction	-4814 Oct 11 j 05:31	12°♍40'22	1°05'21
minimum elong	-4814 Oct 11 j 05:34	12°♍40'24	1°05'27
morning rise	-4814 Oct 23 j 17:45	15°♍32'27	
	-4813 Jan 05 j 03:44	0°♎	
retrograde	-4813 Feb 26 j 14:37	4°♎00'03	
	-4813 Apr 21 j 15:22	30°℞♍	
opposition	-4813 Apr 28 j 18:03	29°♍05'44	1°09'35
min. Earth dist.	-4813 Apr 29 j 11:36	29°♍00'08	4.18195 AU
direct	-4813 Jun 28 j 15:25	24°♍10'55	
	-4813 Aug 30 j 23:53	0°♎	
evening set	-4813 Oct 31 j 02:26	12°♎45'08	
conjunction	-4813 Nov 12 j 18:59	15°♎43'27	0°24'42
minimum elong	-4813 Nov 12 j 19:01	15°♎43'28	0°24'38
max. Earth dist.	-4813 Nov 12 j 05:10	15°♎35'20	6.12849 AU
morning rise	-4813 Nov 25 j 13:22	18°♎42'53	
	-4812 Jan 16 j 21:02	0°♏	
retrograde	-4812 Apr 02 j 17:30	8°♏06'20	
desc. node	-4812 May 27 j 03:25	3°♏59'14	
opposition	-4812 Jun 02 j 16:20	3°♏08'22	-0°01'15
min. Earth dist.	-4812 Jun 02 j 16:15	3°♏08'24	4.08030 AU
	-4812 Jun 28 j 22:22	30°℞♎	
direct	-4812 Aug 01 j 04:45	28°♎15'16	
	-4812 Sep 03 j 02:37	0°♏	
	-4812 Nov 23 j 18:38	15°♏	
evening set	-4812 Dec 03 j 05:04	17°♏12'57	
conjunction	-4812 Dec 16 j 04:46	20°♏18'05	-0°25'47
minimum elong	-4812 Dec 16 j 04:43	20°♏18'04	0°25'58
max. Earth dist.	-4812 Dec 16 j 18:05	20°♏26'01	6.04326 AU
morning rise	-4812 Dec 29 j 07:16	23°♏24'53	
	-4811 Jan 27 j 00:25	0°♐	
retrograde	-4811 May 09 j 22:48	13°♐31'49	
opposition	-4811 Jul 09 j 09:32	8°♐29'57	-1°14'21
min. Earth dist.	-4811 Jul 08 j 16:21	8°♐35'40	4.02049 AU
direct	-4811 Sep 05 j 19:41	3°♐36'36	
evening set	-4810 Jan 08 j 03:13	22°♐51'03	
conjunction	-4810 Jan 21 j 10:14	26°♐00'41	-1°07'49
minimum elong	-4810 Jan 21 j 10:10	26°♐00'39	1°08'03
max. Earth dist.	-4810 Jan 22 j 21:24	26°♐21'37	6.01328 AU
morning rise	-4810 Feb 03 j 20:48	29°♐12'07	
	-4810 Feb 07 j 06:06	0°♑	
retrograde	-4810 Jun 15 j 21:50	19°♑29'36	
opposition	-4810 Aug 14 j 20:32	14°♑24'53	-2°00'04
min. Earth dist.	-4810 Aug 13 j 16:00	14°♑34'34	4.02516 AU
direct	-4810 Oct 11 j 19:41	9°♑29'10	
evening set	-4809 Feb 14 j 03:04	28°♑45'25	
	-4809 Feb 19 j 10:42	0°♒	
conjunction	-4809 Feb 27 j 16:51	1°♒56'12	-1°24'21
minimum elong	-4809 Feb 27 j 16:51	1°♒56'12	1°24'34
max. Earth dist.	-4809 Mar 01 j 15:00	2°♒23'16	6.05059 AU
morning rise	-4809 Mar 13 j 09:04	5°♒08'07	
	-4809 Apr 27 j 07:08	15°♒	
retrograde	-4809 Jul 21 j 14:52	24°♒56'21	
min. Earth dist.	-4809 Sep 17 j 23:38	20°♒00'37	4.09155 AU
opposition	-4809 Sep 19 j 02:59	19°♒51'15	-2°00'06

Attention, astronomical year style is used: The year -4809 in astronomical counting style is the year 4810 BCE in historical counting style.

	-4809 Nov 07 j 19:41	15°℞♒	
direct	-4809 Nov 16 j 13:19	14°♒52'10	
	-4809 Nov 25 j 07:34	15°♒	
	-4808 Mar 04 j 15:50	0°♓	
evening set	-4808 Mar 21 j 23:34	3°♓53'33	
conjunction	-4808 Apr 04 j 17:33	7°♓02'13	-1°09'44
minimum elong	-4808 Apr 04 j 17:38	7°♓02'15	1°09'51
max. Earth dist.	-4808 Apr 06 j 08:27	7°♓24'28	6.13986 AU
morning rise	-4808 Apr 18 j 12:14	10°♓11'01	
retrograde	-4808 Aug 23 j 09:30	29°♓04'08	
opposition	-4808 Oct 21 j 18:33	24°♓01'18	-1°18'03
min. Earth dist.	-4808 Oct 20 j 23:46	24°♓07'40	4.19381 AU
direct	-4808 Dec 20 j 05:44	18°♓59'16	
	-4807 Mar 22 j 01:35	0°♈	
evening set	-4807 Apr 26 j 15:55	7°♈36'31	
conjunction	-4807 May 10 j 09:16	10°♈40'25	-0°31'44
minimum elong	-4807 May 10 j 09:19	10°♈40'26	0°31'42
max. Earth dist.	-4807 May 11 j 02:10	10°♈49'52	6.24763 AU
morning rise	-4807 May 24 j 01:19	13°♈43'25	
	-4807 Aug 23 j 03:31	0°♉	
retrograde	-4807 Sep 24 j 13:46	1°♉39'58	
	-4807 Oct 26 j 18:28	30°℞♈	
opposition	-4807 Nov 23 j 00:35	26°♈40'52	-0°12'54
min. Earth dist.	-4807 Nov 22 j 21:32	26°♈41'53	4.29655 AU
direct	-4806 Jan 22 j 20:12	21°♈37'14	
asc. node	-4806 Feb 04 j 19:20	21°♈53'07	
	-4806 Apr 12 j 13:26	0°♉	
evening set	-4806 May 30 j 17:00	9°♉51'10	
conjunction	-4806 Jun 13 j 04:30	12°♉48'54	0°15'04
minimum elong	-4806 Jun 13 j 04:28	12°♉48'53	0°15'14
behind sun begin	-4806 Jun 13 j 02:09	12°♉47'37	
behind sun end	-4806 Jun 13 j 06:48	12°♉50'09	
max. Earth dist.	-4806 Jun 12 j 21:35	12°♉45'06	6.33808 AU
	-4806 Jun 23 j 02:43	15°♉	
morning rise	-4806 Jun 26 j 12:56	15°♉45'03	
	-4806 Sep 11 j 01:16	0°♊	
retrograde	-4806 Oct 25 j 14:45	3°♊01'46	
	-4806 Dec 09 j 15:02	30°℞♉	
opposition	-4806 Dec 24 j 10:50	28°♉06'28	0°53'33
min. Earth dist.	-4806 Dec 24 j 22:18	28°♉02'43	4.36842 AU
direct	-4805 Feb 24 j 08:12	23°♉02'49	
	-4805 May 07 j 23:22	0°♊	
evening set	-4805 Jul 02 j 05:57	11°♊01'32	
max. Earth dist.	-4805 Jul 14 j 03:55	13°♊38'01	6.38542 AU
conjunction	-4805 Jul 15 j 08:08	13°♊53'30	0°56'20
minimum elong	-4805 Jul 15 j 08:04	13°♊53'28	0°56'34
morning rise	-4805 Jul 28 j 06:58	16°♊43'47	
	-4805 Oct 06 j 06:03	0°♋	
retrograde	-4805 Nov 25 j 13:26	3°♋45'17	
	-4804 Jan 16 j 00:26	30°℞♊	
opposition	-4804 Jan 24 j 19:17	28°♊52'48	1°43'34
min. Earth dist.	-4804 Jan 25 j 20:02	28°♊44'50	4.38950 AU
direct	-4804 Mar 27 j 09:28	23°♊50'27	
	-4804 Jun 03 j 09:53	0°♋	
evening set	-4804 Aug 01 j 17:24	11°♋44'52	
max. Earth dist.	-4804 Aug 12 j 18:26	14°♋11'02	6.37725 AU
conjunction	-4804 Aug 14 j 10:53	14°♋33'25	1°21'21
minimum elong	-4804 Aug 14 j 10:51	14°♋33'24	1°21'35
morning rise	-4804 Aug 27 j 01:35	17°♋20'40	
	-4804 Oct 31 j 02:23	0°♌	
retrograde	-4804 Dec 26 j 01:53	4°♌32'49	
	-4803 Feb 22 j 09:02	30°℞♋	
opposition	-4803 Feb 24 j 19:30	29°♋41'23	2°04'48
min. Earth dist.	-4803 Feb 26 j 01:21	29°♋31'53	4.35394 AU
direct	-4803 Apr 28 j 08:37	24°♋41'21	
	-4803 Jun 29 j 15:39	0°♌	
evening set	-4803 Sep 01 j 19:02	12°♌42'13	
	-4803 Sep 12 j 00:34	15°♌	
max. Earth dist.	-4803 Sep 12 j 15:35	15°♌08'27	6.31628 AU
conjunction	-4803 Sep 14 j 07:35	15°♌31'00	1°23'24
minimum elong	-4803 Sep 14 j 07:36	15°♌31'01	1°23'35
morning rise	-4803 Sep 26 j 18:30	18°♌19'10	
	-4803 Nov 23 j 05:36	0°♍	
retrograde	-4802 Jan 28 j 00:22	6°♍05'03	
opposition	-4802 Mar 30 j 01:21	1°♍12'52	1°50'18
min. Earth dist.	-4802 Mar 31 j 04:36	1°♍04'12	4.27130 AU
	-4802 Apr 08 j 16:55	30°℞♌	
direct	-4802 May 30 j 22:49	26°♌15'45	
	-4802 Jul 20 j 17:57	0°♍	
evening set	-4802 Oct 03 j 05:55	14°♍32'04	
max. Earth dist.	-4802 Oct 14 j 11:59	17°♍07'13	6.21896 AU
conjunction	-4802 Oct 15 j 18:37	17°♍24'53	1°00'39
minimum elong	-4802 Oct 15 j 18:41	17°♍24'55	1°00'42
morning rise	-4802 Oct 28 j 07:40	20°♍18'02	
	-4802 Dec 12 j 09:46	0°♎	
retrograde	-4801 Mar 03 j 15:52	8°♎54'11	
opposition	-4801 May 03 j 19:15	3°♎59'24	1°00'35
min. Earth dist.	-4801 May 04 j 09:52	3°♎54'42	4.16510 AU
	-4801 Jun 09 j 06:37	30°℞♍	
direct	-4801 Jul 03 j 11:42	29°♍04'55	
	-4801 Jul 27 j 14:41	0°♎	
evening set	-4801 Nov 04 j 20:48	17°♎42'49	
conjunction	-4801 Nov 17 j 14:24	20°♎42'11	0°17'42
minimum elong	-4801 Nov 17 j 14:26	20°♎42'12	0°17'37
max. Earth dist.	-4801 Nov 17 j 05:58	20°♎37'13	6.11417 AU
morning rise	-4801 Nov 30 j 09:43	23°♎42'41	
	-4801 Dec 28 j 02:20	0°♏	
desc. node	-4800 Apr 05 j 02:54	13°♏12'26	
retrograde	-4800 Apr 08 j 00:26	13°♏13'14	
opposition	-4800 Jun 07 j 21:33	8°♏14'44	-0°12'16
min. Earth dist.	-4800 Jun 07 j 19:01	8°♏15'34	4.06981 AU
direct	-4800 Aug 06 j 06:22	3°♏21'45	
	-4800 Nov 05 j 23:10	15°♏	
evening set	-4800 Dec 08 j 05:32	22°♏21'42	
conjunction	-4800 Dec 21 j 06:04	25°♏27'30	-0°32'45
minimum elong	-4800 Dec 21 j 06:01	25°♏27'28	0°32'58
max. Earth dist.	-4800 Dec 21 j 22:06	25°♏37'02	6.03724 AU
morning rise	-4799 Jan 03 j 09:52	28°♏35'04	
	-4799 Jan 09 j 10:11	0°♐	
retrograde	-4799 May 15 j 04:11	18°♐44'47	
opposition	-4799 Jul 14 j 14:35	13°♐42'20	-1°23'07
min. Earth dist.	-4799 Jul 13 j 18:20	13°♐49'06	4.01969 AU
direct	-4799 Sep 10 j 21:45	8°♐48'45	
evening set	-4798 Jan 13 j 07:40	28°♐03'20	
	-4798 Jan 21 j 12:36	0°♑	
conjunction	-4798 Jan 26 j 15:44	1°♑13'10	-1°11'59
minimum elong	-4798 Jan 26 j 15:41	1°♑13'08	1°12'14
max. Earth dist.	-4798 Jan 28 j 06:18	1°♑36'06	6.01746 AU
morning rise	-4798 Feb 09 j 03:00	4°♑24'42	
retrograde	-4798 Jun 21 j 00:53	24°♑39'10	
opposition	-4798 Aug 19 j 21:42	19°♑34'13	-2°02'58
min. Earth dist.	-4798 Aug 18 j 17:35	19°♑43'47	4.03394 AU
direct	-4798 Oct 16 j 22:35	14°♑38'03	
	-4797 Feb 02 j 11:31	0°♒	

Attention, astronomical year style is used: The year -4797 in astronomical counting style is the year 4798 BCE in historical counting style.

evening set	-4797 Feb 19 j 07:55	3°♒52'03	
conjunction	-4797 Mar 04 j 22:23	7°♒02'34	-1°24'08
minimum elong	-4797 Mar 04 j 22:24	7°♒02'35	1°24'19
max. Earth dist.	-4797 Mar 06 j 20:33	7°♒29'32	6.06302 AU
morning rise	-4797 Mar 18 j 15:11	10°♒14'07	
	-4797 Apr 08 j 14:17	15°♒	
retrograde	-4797 Jul 26 j 10:06	29°♒54'42	
opposition	-4797 Sep 23 j 22:00	24°♒49'49	-1°56'23
min. Earth dist.	-4797 Sep 22 j 18:47	24°♒59'07	4.10646 AU
direct	-4797 Nov 21 j 10:32	19°♒50'16	
	-4796 Feb 15 j 09:48	0°♓	
evening set	-4796 Mar 27 j 00:52	8°♓47'55	
conjunction	-4796 Apr 09 j 18:59	11°♓55'57	-1°05'31
minimum elong	-4796 Apr 09 j 19:03	11°♓55'59	1°05'36
max. Earth dist.	-4796 Apr 11 j 05:59	12°♓15'55	6.15605 AU
morning rise	-4796 Apr 23 j 13:39	15°♓04'00	
	-4796 Jul 08 j 23:43	0°♈	
retrograde	-4796 Aug 27 j 23:48	3°♈48'30	
	-4796 Oct 17 j 03:59	30°♋℞♓	
opposition	-4796 Oct 26 j 08:07	28°♓46'06	-1°09'50
min. Earth dist.	-4796 Oct 25 j 16:16	28°♓51'29	4.20959 AU
direct	-4796 Dec 25 j 00:36	23°♓43'43	
	-4795 Mar 01 j 13:17	0°♈	
evening set	-4795 May 01 j 11:42	12°♈17'15	
conjunction	-4795 May 15 j 04:41	15°♈20'21	-0°25'24
minimum elong	-4795 May 15 j 04:43	15°♈20'22	0°25'21
max. Earth dist.	-4795 May 15 j 19:03	15°♈28'22	6.26198 AU
morning rise	-4795 May 28 j 19:48	18°♈22'25	
	-4795 Jul 25 j 09:26	0°♉	
retrograde	-4795 Sep 28 j 21:44	6°♉12'14	
opposition	-4795 Nov 27 j 10:12	1°♉13'41	-0°03'15
min. Earth dist.	-4795 Nov 27 j 08:39	1°♉14'12	4.30841 AU
	-4795 Dec 06 j 17:36	30°♋℞♈	
asc. node	-4795 Dec 16 j 00:43	28°♈51'01	
direct	-4794 Jan 27 j 08:36	26°♈09'58	
	-4794 Mar 20 j 04:13	0°♉	
evening set	-4794 Jun 04 j 07:51	14°♉21'29	
	-4794 Jun 07 j 06:17	15°♉	
conjunction	-4794 Jun 17 j 18:02	17°♉18'22	0°21'26
minimum elong	-4794 Jun 17 j 18:01	17°♉18'21	0°21'37
max. Earth dist.	-4794 Jun 17 j 06:25	17°♉11'59	6.34656 AU
morning rise	-4794 Jul 01 j 01:20	20°♉13'41	
	-4794 Aug 17 j 23:40	0°♊	
retrograde	-4794 Oct 29 j 23:40	7°♊27'10	
opposition	-4794 Dec 28 j 19:37	2°♊32'20	1°01'52
min. Earth dist.	-4794 Dec 29 j 10:13	2°♊27'34	4.37312 AU
	-4793 Jan 18 j 04:46	30°♋℞♉	
direct	-4793 Feb 28 j 20:49	27°♉28'45	
	-4793 Apr 11 j 19:15	0°♊	
evening set	-4793 Jul 06 j 16:47	15°♊26'48	
max. Earth dist.	-4793 Jul 18 j 11:39	18°♊01'39	6.38578 AU
conjunction	-4793 Jul 19 j 17:49	18°♊18'13	1°01'00
minimum elong	-4793 Jul 19 j 17:45	18°♊18'12	1°01'15
morning rise	-4793 Aug 01 j 15:20	21°♊07'59	
	-4793 Sep 13 j 17:59	0°♋	
retrograde	-4793 Nov 29 j 21:40	8°♋10'06	
opposition	-4792 Jan 29 j 05:48	3°♋17'51	1°48'30
min. Earth dist.	-4792 Jan 30 j 06:55	3°♋09'47	4.38589 AU
	-4792 Feb 26 j 07:33	30°♋℞♊	
direct	-4792 Mar 31 j 19:25	28°♊15'47	
	-4792 May 05 j 12:21	0°♋	
evening set	-4792 Aug 06 j 02:37	16°♋11'13	
max. Earth dist.	-4792 Aug 17 j 02:35	18°♋37'08	6.36991 AU
conjunction	-4792 Aug 18 j 19:07	18°♋59'38	1°23'06
minimum elong	-4792 Aug 18 j 19:06	18°♋59'37	1°23'20
morning rise	-4792 Aug 31 j 08:59	21°♋46'50	
	-4792 Oct 09 j 14:32	0°♌	
retrograde	-4792 Dec 30 j 16:06	9°♌02'59	
opposition	-4791 Mar 01 j 10:08	4°♌11'38	2°05'00
min. Earth dist.	-4791 Mar 02 j 16:38	4°♌01'56	4.34350 AU
	-4791 Apr 09 j 18:54	30°♋℞♋	
direct	-4791 May 02 j 22:34	29°♋12'03	
	-4791 May 26 j 02:11	0°♌	
	-4791 Aug 27 j 01:51	15°♌	
evening set	-4791 Sep 06 j 04:57	17°♌15'00	
max. Earth dist.	-4791 Sep 17 j 01:15	19°♌41'37	6.30366 AU
conjunction	-4791 Sep 18 j 17:11	20°♌04'11	1°21'39
minimum elong	-4791 Sep 18 j 17:13	20°♌04'12	1°21'50
morning rise	-4791 Oct 01 j 04:11	22°♌52'53	
	-4791 Nov 03 j 02:33	0°♍	
retrograde	-4790 Feb 01 j 18:46	10°♍45'07	
opposition	-4790 Apr 03 j 21:00	5°♍52'37	1°45'15
min. Earth dist.	-4790 Apr 04 j 21:57	5°♍44'41	4.25750 AU
direct	-4790 Jun 04 j 14:22	0°♍55'56	
evening set	-4790 Oct 07 j 18:32	19°♍14'48	
max. Earth dist.	-4790 Oct 19 j 05:25	21°♍53'08	6.20541 AU
conjunction	-4790 Oct 20 j 07:48	22°♍08'23	0°55'35
minimum elong	-4790 Oct 20 j 07:51	22°♍08'25	0°55'38
morning rise	-4790 Nov 01 j 21:21	25°♍02'23	
	-4790 Nov 23 j 22:48	0°♎	
retrograde	-4789 Mar 08 j 16:57	13°♎45'35	
opposition	-4789 May 08 j 19:44	8°♎50'21	0°51'16
min. Earth dist.	-4789 May 09 j 08:28	8°♎46'16	4.15272 AU
direct	-4789 Jul 08 j 08:50	3°♎56'14	
evening set	-4789 Nov 09 j 13:59	22°♎36'17	
conjunction	-4789 Nov 22 j 08:17	25°♎36'26	0°10'42
minimum elong	-4789 Nov 22 j 08:17	25°♎36'26	0°10'37
behind sun begin	-4789 Nov 22 j 02:00	25°♎32'45	
behind sun end	-4789 Nov 22 j 14:34	25°♎40'08	
max. Earth dist.	-4789 Nov 22 j 02:15	25°♎32'54	6.10406 AU
morning rise	-4789 Dec 05 j 04:48	28°♎37'53	
	-4789 Dec 11 j 01:39	0°♏	
desc. node	-4788 Feb 14 j 07:05	13°♏14'04	
	-4788 Feb 26 j 12:30	15°♏	
retrograde	-4788 Apr 13 j 02:55	18°♏13'58	
	-4788 May 30 j 07:45	15°♋℞♏	
opposition	-4788 Jun 13 j 00:06	13°♏14'52	-0°22'56
min. Earth dist.	-4788 Jun 12 j 17:57	13°♏16'53	4.06295 AU
direct	-4788 Aug 11 j 04:24	8°♏21'56	
	-4788 Oct 16 j 17:08	15°♏	
evening set	-4788 Dec 13 j 03:39	27°♏23'14	
	-4788 Dec 24 j 03:33	0°♐	
conjunction	-4788 Dec 26 j 05:15	0°♐29'36	-0°39'18
minimum elong	-4788 Dec 26 j 05:12	0°♐29'34	0°39'30
max. Earth dist.	-4788 Dec 27 j 01:41	0°♐41'46	6.03415 AU
morning rise	-4787 Jan 08 j 09:56	3°♐37'43	
retrograde	-4787 May 20 j 08:09	23°♐49'06	
opposition	-4787 Jul 19 j 16:05	18°♐46'13	-1°30'58
min. Earth dist.	-4787 Jul 18 j 19:15	18°♐53'11	4.02078 AU
direct	-4787 Sep 15 j 22:15	13°♐52'22	
	-4786 Jan 05 j 01:12	0°♑	
evening set	-4786 Jan 18 j 09:10	3°♑06'48	
conjunction	-4786 Jan 31 j 18:07	6°♑16'49	-1°15'28

Attention, astronomical year style is used: The year -4786 in astronomical counting style is the year 4787 BCE in historical counting style.

minimum elong	-4786 Jan 31 j 18:04	6°♑16'47	1°15'44	
max. Earth dist.	-4786 Feb 02 j 10:11	6°♑40'34	6.02233 AU	
morning rise	-4786 Feb 14 j 06:19	9°♑28'28		
retrograde	-4786 Jun 25 j 23:23	29°♑39'37		
opposition	-4786 Aug 24 j 19:05	24°♑34'36	-2°04'50	
min. Earth dist.	-4786 Aug 23 j 14:13	24°♑44'25	4.04232 AU	
direct	-4786 Oct 21 j 19:41	19°♑38'01		
	-4785 Jan 15 j 12:12	0°♒		
evening set	-4785 Feb 24 j 09:30	8°♒50'16		
conjunction	-4785 Mar 10 j 00:35	12°♒00'35	-1°23'17	
minimum elong	-4785 Mar 10 j 00:37	12°♒00'36	1°23'29	
max. Earth dist.	-4785 Mar 11 j 20:44	12°♒26'18	6.07397 AU	
	-4785 Mar 22 j 21:25	15°♒		
morning rise	-4785 Mar 23 j 17:56	15°♒11'51		
	-4785 Jun 04 j 17:32	0°♓		
retrograde	-4785 Jul 31 j 03:49	4°♓45'51		
	-4785 Sep 26 j 07:19	30°℞♒		
opposition	-4785 Sep 28 j 14:19	29°♒41'12	-1°52'00	
min. Earth dist.	-4785 Sep 27 j 13:07	29°♒49'49	4.11871 AU	
direct	-4785 Nov 26 j 06:46	24°♒41'12		
	-4784 Jan 24 j 20:16	0°♓		
evening set	-4784 Mar 31 j 23:37	13°♓36'18		
conjunction	-4784 Apr 14 j 18:06	16°♓43'56	-1°00'58	
minimum elong	-4784 Apr 14 j 18:10	16°♓43'58	1°01'02	
max. Earth dist.	-4784 Apr 16 j 03:41	17°♓03'02	6.16889 AU	
morning rise	-4784 Apr 28 j 12:31	19°♓51'22		
	-4784 Jun 15 j 12:31	0°♈		
retrograde	-4784 Sep 01 j 11:40	8°♈28'41		
opposition	-4784 Oct 30 j 19:51	3°♈26'50	-1°01'21	
min. Earth dist.	-4784 Oct 30 j 05:32	3°♈31'41	4.22180 AU	
	-4784 Nov 28 j 00:57	30°℞♓		
direct	-4784 Dec 29 j 15:08	28°♓24'15		
	-4783 Jan 30 j 16:30	0°♈		
evening set	-4783 May 06 j 06:23	16°♈55'29		
conjunction	-4783 May 19 j 22:38	19°♈57'54	-0°18'59	
minimum elong	-4783 May 19 j 22:40	19°♈57'55	0°18'55	
max. Earth dist.	-4783 May 20 j 08:00	20°♈03'06	6.27275 AU	
morning rise	-4783 Jun 02 j 13:09	22°♈59'14		
	-4783 Jul 05 j 11:43	0°♉		
retrograde	-4783 Oct 03 j 07:24	10°♉43'50		
asc. node	-4783 Oct 26 j 18:52	9°♉49'48		
opposition	-4783 Dec 01 j 19:46	5°♉45'50	0°06'18	
min. Earth dist.	-4783 Dec 01 j 21:06	5°♉45'23	4.31700 AU	
direct	-4782 Jan 31 j 22:24	0°♉42'03		
	-4782 May 21 j 21:41	15°♉		
evening set	-4782 Jun 08 j 21:59	18°♉52'07		
conjunction	-4782 Jun 22 j 07:14	21°♉48'20	0°27'39	
minimum elong	-4782 Jun 22 j 07:12	21°♉48'19	0°27'49	
max. Earth dist.	-4782 Jun 21 j 18:15	21°♉41'12	6.35246 AU	
morning rise	-4782 Jul 05 j 13:07	24°♉42'52		
	-4782 Jul 30 j 08:28	0°♊		
retrograde	-4782 Nov 03 j 06:38	11°♊54'04		
opposition	-4781 Jan 02 j 04:55	6°♊59'41	1°09'48	
min. Earth dist.	-4781 Jan 02 j 20:13	6°♊54'41	4.37619 AU	
direct	-4781 Mar 05 j 07:28	1°♊56'18		
evening set	-4781 Jul 11 j 03:51	19°♊53'52		
max. Earth dist.	-4781 Jul 22 j 18:49	22°♊26'47	6.38569 AU	
conjunction	-4781 Jul 24 j 03:26	22°♊44'44	1°05'19	
minimum elong	-4781 Jul 24 j 03:23	22°♊44'42	1°05'34	
morning rise	-4781 Aug 05 j 23:51	25°♊34'00		
	-4781 Aug 26 j 16:18	0°♋		
retrograde	-4781 Dec 04 j 08:20	12°♋36'49		
opposition	-4780 Feb 02 j 17:04	7°♋44'47	1°52'48	
min. Earth dist.	-4780 Feb 03 j 19:56	7°♋36'10	4.38280 AU	
direct	-4780 Apr 05 j 08:31	2°♋42'59		
evening set	-4780 Aug 10 j 11:39	20°♋38'48		
max. Earth dist.	-4780 Aug 21 j 10:48	23°♋04'33	6.36384 AU	
conjunction	-4780 Aug 23 j 03:23	23°♋27'06	1°24'23	
minimum elong	-4780 Aug 23 j 03:22	23°♋27'06	1°24'36	
morning rise	-4780 Sep 04 j 16:29	26°♋14'14		
	-4780 Sep 21 j 23:25	0°♌		
retrograde	-4779 Jan 04 j 04:07	13°♌33'50		
opposition	-4779 Mar 06 j 00:43	8°♌42'20	2°04'25	
min. Earth dist.	-4779 Mar 07 j 05:53	8°♌33'04	4.33483 AU	
direct	-4779 May 07 j 10:47	3°♌43'07		
	-4779 Aug 10 j 04:10	15°♌		
evening set	-4779 Sep 10 j 14:01	21°♌47'15		
max. Earth dist.	-4779 Sep 21 j 12:00	24°♌15'12	6.29294 AU	
conjunction	-4779 Sep 23 j 02:02	24°♌36'45	1°19'24	
minimum elong	-4779 Sep 23 j 02:05	24°♌36'47	1°19'34	
morning rise	-4779 Oct 05 j 13:00	27°♌25'54		
	-4779 Oct 17 j 01:08	0°♍		
retrograde	-4778 Feb 06 j 13:37	15°♍23'52		
opposition	-4778 Apr 08 j 16:05	10°♍31'03	1°39'33	
min. Earth dist.	-4778 Apr 09 j 16:37	10°♍23'15	4.24500 AU	
direct	-4778 Jun 09 j 07:25	5°♍34'43		
evening set	-4778 Oct 12 j 06:12	23°♍55'36		
conjunction	-4778 Oct 24 j 19:52	26°♍49'56	0°50'13	
minimum elong	-4778 Oct 24 j 19:56	26°♍49'58	0°50'14	
max. Earth dist.	-4778 Oct 23 j 18:45	26°♍35'23	6.19219 AU	
morning rise	-4778 Nov 06 j 10:16	29°♍44'50		
	-4778 Nov 07 j 12:37	0°♎		
retrograde	-4777 Mar 13 j 15:03	18°♎34'59		
opposition	-4777 May 13 j 18:43	13°♎39'13	0°41'38	
min. Earth dist.	-4777 May 14 j 04:19	13°♎36'08	4.13964 AU	
direct	-4777 Jul 13 j 02:36	8°♎45'18		
evening set	-4777 Nov 14 j 06:37	27°♎28'07		
	-4777 Nov 25 j 00:31	0°♏		
conjunction	-4777 Nov 27 j 01:55	0°♏29'11	0°03'41	
minimum elong	-4777 Nov 27 j 01:54	0°♏29'10	0°03'34	
behind sun begin	-4777 Nov 26 j 17:54	0°♏24'28		
behind sun end	-4777 Nov 27 j 09:54	0°♏33'52		
max. Earth dist.	-4777 Nov 26 j 23:55	0°♏28'02	6.09237 AU	
morning rise	-4777 Dec 09 j 23:24	3°♏31'35		
desc. node	-4777 Dec 25 j 12:09	7°♏07'18		
	-4776 Jan 31 j 20:44	15°♏		
retrograde	-4776 Apr 18 j 07:19	23°♏13'52		
opposition	-4776 Jun 18 j 01:59	18°♏14'11	-0°33'27	
min. Earth dist.	-4776 Jun 17 j 18:36	18°♏16'36	4.05362 AU	
	-4776 Jul 15 j 02:24	15°℞♏		
direct	-4776 Aug 16 j 03:23	13°♏21'11		
	-4776 Sep 16 j 20:09	15°♏		
	-4776 Dec 07 j 19:18	0°♐		
evening set	-4776 Dec 18 j 02:13	2°♐25'03		
conjunction	-4776 Dec 31 j 04:49	5°♐32'07	-0°45'34	
minimum elong	-4776 Dec 31 j 04:46	5°♐32'05	0°45'46	
max. Earth dist.	-4775 Jan 01 j 03:48	5°♐45'49	6.02790 AU	
morning rise	-4775 Jan 13 j 10:44	8°♐41'01		
retrograde	-4775 May 25 j 11:03	28°♐55'02		
opposition	-4775 Jul 24 j 17:51	23°♐51'44	-1°38'14	
min. Earth dist.	-4775 Jul 23 j 18:53	23°♐59'26	4.01856 AU	
direct	-4775 Sep 20 j 21:10	18°♐57'35		
	-4775 Dec 18 j 04:21	0°♑		
evening set	-4774 Jan 23 j 12:27	8°♑13'19		

Attention, astronomical year style is used: The year -4774 in astronomical counting style is the year 4775 BCE in historical counting style.

conjunction	-4774 Feb 05 j 22:17	11°♑23'38	-1°18'27
minimum elong	-4774 Feb 05 j 22:15	11°♑23'36	1°18'41
max. Earth dist.	-4774 Feb 07 j 14:55	11°♑47'41	6.02400 AU
morning rise	-4774 Feb 19 j 11:24	14°♑35'33	
	-4774 May 05 j 14:36	0°♒	
retrograde	-4774 Jul 01 j 00:05	4°♒44'24	
	-4774 Aug 27 j 05:05	30°℞♑	
opposition	-4774 Aug 29 j 18:00	29°♑39'15	-2°05'51
min. Earth dist.	-4774 Aug 28 j 13:29	29°♑48'58	4.04769 AU
direct	-4774 Oct 26 j 20:26	24°♑42'08	
	-4774 Dec 24 j 11:00	0°♒	
evening set	-4773 Mar 01 j 13:51	13°♒53'46	
	-4773 Mar 06 j 08:14	15°♒	
conjunction	-4773 Mar 15 j 05:51	17°♒04'04	-1°21'48
minimum elong	-4773 Mar 15 j 05:53	17°♒04'05	1°22'00
max. Earth dist.	-4773 Mar 17 j 02:42	17°♒30'08	6.08265 AU
morning rise	-4773 Mar 28 j 23:33	20°♒15'06	
	-4773 May 12 j 18:45	0°♓	
retrograde	-4773 Aug 04 j 23:57	9°♓42'49	
min. Earth dist.	-4773 Oct 02 j 08:39	4°♓46'46	4.12976 AU
opposition	-4773 Oct 03 j 08:55	4°♓38'29	-1°46'44
	-4773 Nov 16 j 10:50	30°℞♒	
direct	-4773 Dec 01 j 03:38	29°♒38'06	
	-4773 Dec 15 j 23:19	0°♓	
evening set	-4772 Apr 06 j 01:38	18°♓31'02	
conjunction	-4772 Apr 19 j 20:03	21°♓38'09	-0°55'52
minimum elong	-4772 Apr 19 j 20:07	21°♓38'11	0°55'56
max. Earth dist.	-4772 Apr 21 j 01:53	21°♓55'04	6.18149 AU
morning rise	-4772 May 03 j 14:28	24°♓45'00	
	-4772 May 27 j 11:35	0°♈	
retrograde	-4772 Sep 06 j 01:47	13°♈15'02	
opposition	-4772 Nov 04 j 10:30	8°♈13'41	-0°52'15
min. Earth dist.	-4772 Nov 03 j 21:58	8°♈17'55	4.23488 AU
direct	-4771 Jan 03 j 09:59	3°♈10'52	
evening set	-4771 May 11 j 03:32	21°♈39'15	
conjunction	-4771 May 24 j 19:12	24°♈40'52	-0°12'19
minimum elong	-4771 May 24 j 19:14	24°♈40'53	0°12'13
behind sun begin	-4771 May 24 j 13:49	24°♈37'53	
behind sun end	-4771 May 25 j 00:39	24°♈43'52	
max. Earth dist.	-4771 May 25 j 03:18	24°♈45'21	6.28584 AU
morning rise	-4771 Jun 07 j 08:34	27°♈41'13	
	-4771 Jun 17 j 22:26	0°♉	
asc. node	-4771 Sep 05 j 07:02	13°♉39'53	
	-4771 Sep 23 j 13:13	15°♉	
retrograde	-4771 Oct 07 j 17:34	15°♉19'39	
	-4771 Oct 21 j 20:19	15°℞♉	
opposition	-4771 Dec 06 j 07:24	10°♉22'15	0°15'59
min. Earth dist.	-4771 Dec 06 j 09:54	10°♉21'25	4.32931 AU
direct	-4770 Feb 05 j 13:52	5°♉18'33	
	-4770 May 03 j 20:24	15°♉	
evening set	-4770 Jun 13 j 13:52	23°♉25'37	
conjunction	-4770 Jun 26 j 21:37	26°♉20'50	0°33'45
minimum elong	-4770 Jun 26 j 21:34	26°♉20'48	0°33'57
max. Earth dist.	-4770 Jun 26 j 05:03	26°♉11'45	6.36313 AU
morning rise	-4770 Jul 10 j 02:14	29°♉14'23	
	-4770 Jul 13 j 14:02	0°♊	
retrograde	-4770 Nov 07 j 15:18	16°♊21'43	
opposition	-4769 Jan 06 j 15:07	11°♊27'44	1°17'19
min. Earth dist.	-4769 Jan 07 j 08:23	11°♊22'06	4.38478 AU
direct	-4769 Mar 09 j 21:28	6°♊24'30	
evening set	-4769 Jul 15 j 14:18	24°♊19'34	
max. Earth dist.	-4769 Jul 27 j 04:01	26°♊51'42	6.39143 AU
conjunction	-4769 Jul 28 j 12:41	27°♊09'39	1°09'13
minimum elong	-4769 Jul 28 j 12:38	27°♊09'37	1°09'28
morning rise	-4769 Aug 10 j 07:37	29°♊58'08	
	-4769 Aug 10 j 11:03	0°♋	
retrograde	-4769 Dec 08 j 15:09	16°♋59'56	
opposition	-4768 Feb 07 j 03:17	12°♋08'05	1°56'19
min. Earth dist.	-4768 Feb 08 j 06:00	11°♋59'32	4.38546 AU
direct	-4768 Apr 09 j 19:07	7°♋06'39	
evening set	-4768 Aug 14 j 18:32	25°♋00'55	
max. Earth dist.	-4768 Aug 25 j 15:29	27°♋25'38	6.36300 AU
conjunction	-4768 Aug 27 j 09:12	27°♋48'50	1°25'06
minimum elong	-4768 Aug 27 j 09:11	27°♋48'50	1°25'20
	-4768 Sep 06 j 05:08	0°♌	
morning rise	-4768 Sep 08 j 21:40	0°♌35'44	
	-4768 Nov 24 j 23:57	15°♌	
retrograde	-4767 Jan 08 j 15:13	17°♌57'24	
	-4767 Feb 23 j 02:43	15°℞♌	
opposition	-4767 Mar 10 j 12:49	13°♌05'52	2°03'02
min. Earth dist.	-4767 Mar 11 j 19:03	12°♌56'15	4.33034 AU
direct	-4767 May 11 j 23:06	8°♌06'59	
	-4767 Jul 22 j 08:37	15°♌	
evening set	-4767 Sep 14 j 19:47	26°♌11'10	
max. Earth dist.	-4767 Sep 25 j 18:05	28°♌39'34	6.28514 AU
conjunction	-4767 Sep 27 j 07:45	29°♌00'56	1°16'44
minimum elong	-4767 Sep 27 j 07:47	29°♌00'58	1°16'53
	-4767 Oct 01 j 15:47	0°♍	
morning rise	-4767 Oct 09 j 18:46	1°♍50'27	
retrograde	-4766 Feb 11 j 02:37	19°♍53'24	
opposition	-4766 Apr 13 j 07:03	15°♍00'18	1°33'23
min. Earth dist.	-4766 Apr 14 j 05:51	14°♍53'02	4.23426 AU
direct	-4766 Jun 13 j 18:16	10°♍04'18	
evening set	-4766 Oct 16 j 14:15	28°♍27'10	
	-4766 Oct 23 j 06:48	0°♎	
max. Earth dist.	-4766 Oct 28 j 05:22	1°♎08'52	6.17949 AU
conjunction	-4766 Oct 29 j 04:26	1°♎22'16	0°44'42
minimum elong	-4766 Oct 29 j 04:30	1°♎22'18	0°44'43
morning rise	-4766 Nov 10 j 19:33	4°♎18'03	
retrograde	-4765 Mar 18 j 12:38	23°♎15'25	
opposition	-4765 May 18 j 13:59	18°♎19'14	0°32'04
min. Earth dist.	-4765 May 18 j 23:01	18°♎16'19	4.12565 AU
direct	-4765 Jul 17 j 18:29	13°♎25'29	
desc. node	-4765 Nov 06 j 11:16	29°♎19'18	
	-4765 Nov 09 j 09:53	0°♏	
evening set	-4765 Nov 18 j 20:01	2°♏11'56	
conjunction	-4765 Dec 01 j 16:15	5°♏14'01	-0°03'16
minimum elong	-4765 Dec 01 j 16:15	5°♏14'01	0°03'25
behind sun begin	-4765 Dec 01 j 08:13	5°♏09'17	
behind sun end	-4765 Dec 02 j 00:17	5°♏18'45	
max. Earth dist.	-4765 Dec 01 j 16:21	5°♏14'04	6.07848 AU
morning rise	-4765 Dec 14 j 14:59	8°♏17'35	
	-4764 Jan 13 j 01:21	15°♏	
retrograde	-4764 Apr 23 j 07:13	28°♏07'06	
opposition	-4764 Jun 23 j 00:32	23°♏06'57	-0°43'25
min. Earth dist.	-4764 Jun 22 j 14:40	23°♏10'12	4.04134 AU
direct	-4764 Aug 20 j 20:21	18°♏13'58	
	-4764 Nov 20 j 18:24	0°♐	
evening set	-4764 Dec 22 j 23:01	7°♐22'05	
conjunction	-4763 Jan 05 j 02:41	10°♐30'04	-0°51'19
minimum elong	-4763 Jan 05 j 02:37	10°♐30'01	0°51'32
max. Earth dist.	-4763 Jan 06 j 03:40	10°♐44'58	6.01828 AU
morning rise	-4763 Jan 18 j 09:46	13°♐39'52	
	-4763 Apr 09 j 02:20	0°♑	

Attention, astronomical year style is used: The year -4763 in astronomical counting style is the year 4764 BCE in historical counting style.

retrograde	-4763 May 30 j 13:32	3°♑58'01	
	-4763 Jul 21 j 13:12	30°℞♐	
opposition	-4763 Jul 29 j 17:40	28°♐54'20	-1°44'35
min. Earth dist.	-4763 Jul 28 j 17:43	29°♐02'25	4.01278 AU
direct	-4763 Sep 25 j 19:44	23°♐59'51	
	-4763 Nov 27 j 04:18	0°♑	
evening set	-4762 Jan 28 j 15:02	13°♑18'28	
conjunction	-4762 Feb 11 j 02:07	16°♑29'21	-1°20'43
minimum elong	-4762 Feb 11 j 02:05	16°♑29'20	1°20'56
max. Earth dist.	-4762 Feb 12 j 21:45	16°♑55'10	6.02268 AU
morning rise	-4762 Feb 24 j 16:06	19°♑41'43	
	-4762 Apr 12 j 07:44	0°♒	
retrograde	-4762 Jul 06 j 01:36	9°♒49'05	
min. Earth dist.	-4762 Sep 02 j 11:40	4°♒53'41	4.05113 AU
opposition	-4762 Sep 03 j 16:23	4°♒43'53	-2°05'49
	-4762 Oct 20 j 07:12	30°℞♑	
direct	-4762 Oct 31 j 18:54	29°♑46'21	
	-4762 Nov 12 j 07:35	0°♒	
	-4761 Feb 17 j 08:02	15°♒	
evening set	-4761 Mar 06 j 18:17	18°♒57'55	
conjunction	-4761 Mar 20 j 10:50	22°♒08'09	-1°19'40
minimum elong	-4761 Mar 20 j 10:53	22°♒08'11	1°19'49
max. Earth dist.	-4761 Mar 22 j 06:13	22°♒33'18	6.09043 AU
morning rise	-4761 Apr 03 j 05:12	25°♒19'03	
	-4761 Apr 23 j 23:22	0°♓	
retrograde	-4761 Aug 09 j 17:55	14°♓40'31	
min. Earth dist.	-4761 Oct 07 j 03:30	9°♓44'31	4.14088 AU
opposition	-4761 Oct 08 j 03:24	9°♓36'21	-1°40'38
direct	-4761 Dec 06 j 01:10	4°♓35'31	
evening set	-4760 Apr 11 j 03:11	23°♓25'46	
conjunction	-4760 Apr 24 j 21:43	26°♓32'19	-0°50'22
minimum elong	-4760 Apr 24 j 21:47	26°♓32'22	0°50'24
max. Earth dist.	-4760 Apr 26 j 02:30	26°♓48'36	6.19521 AU
morning rise	-4760 May 08 j 15:39	29°♓38'23	
	-4760 May 10 j 06:15	0°♈	
retrograde	-4760 Sep 10 j 15:53	18°♈00'27	
opposition	-4760 Nov 09 j 00:32	12°♈59'32	-0°42'50
min. Earth dist.	-4760 Nov 08 j 13:54	13°♈03'07	4.24941 AU
direct	-4759 Jan 08 j 05:10	7°♈56'27	
evening set	-4759 May 15 j 23:38	26°♈21'05	
conjunction	-4759 May 29 j 14:21	29°♈21'44	-0°05'36
minimum elong	-4759 May 29 j 14:21	29°♈21'44	0°05'30
behind sun begin	-4759 May 29 j 06:24	29°♈17'21	
behind sun end	-4759 May 29 j 22:19	29°♈26'07	
max. Earth dist.	-4759 May 29 j 18:39	29°♈24'05	6.29972 AU
	-4759 Jun 01 j 11:25	0°♉	
morning rise	-4759 Jun 12 j 02:45	2°♉21'04	
asc. node	-4759 Jul 15 j 10:24	9°♉24'19	
	-4759 Aug 15 j 14:09	15°♉	
retrograde	-4759 Oct 12 j 02:13	19°♉53'10	
opposition	-4759 Dec 10 j 18:11	14°♉56'10	0°25'31
	-4759 Dec 10 j 06:37	15°℞♉	
min. Earth dist.	-4759 Dec 10 j 22:37	14°♉54'42	4.34123 AU
direct	-4758 Feb 10 j 04:54	9°♉52'21	
	-4758 Apr 12 j 05:57	15°♉	
evening set	-4758 Jun 18 j 03:54	27°♉56'25	
	-4758 Jun 27 j 14:00	0°♊	
conjunction	-4758 Jul 01 j 10:25	0°♊50'43	0°39'39
minimum elong	-4758 Jul 01 j 10:22	0°♊50'41	0°39'52
max. Earth dist.	-4758 Jun 30 j 16:12	0°♊40'43	6.37196 AU
morning rise	-4758 Jul 14 j 13:30	3°♊43'18	
retrograde	-4758 Nov 11 j 22:53	20°♊47'42	

opposition	-4757 Jan 11 j 00:54	15°♊54'05	1°24'25
min. Earth dist.	-4757 Jan 11 j 19:40	15°♊48'00	4.38986 AU
direct	-4757 Mar 14 j 09:52	10°♊51'02	
evening set	-4757 Jul 20 j 00:16	28°♊44'42	
	-4757 Jul 25 j 17:52	0°♋	
max. Earth dist.	-4757 Jul 31 j 09:09	1°♋14'20	6.39204 AU
conjunction	-4757 Aug 01 j 21:14	1°♋34'11	1°12'47
minimum elong	-4757 Aug 01 j 21:11	1°♋34'09	1°13'01
morning rise	-4757 Aug 14 j 15:09	4°♋22'10	
retrograde	-4757 Dec 13 j 01:30	21°♋24'54	
opposition	-4756 Feb 11 j 14:41	16°♋33'11	1°59'21
min. Earth dist.	-4756 Feb 12 j 19:06	16°♋24'06	4.38169 AU
direct	-4756 Apr 14 j 07:29	11°♋31'58	
evening set	-4756 Aug 19 j 02:38	29°♋26'48	
	-4756 Aug 21 j 14:36	0°♌	
max. Earth dist.	-4756 Aug 29 j 23:39	1°♌51'50	6.35505 AU
conjunction	-4756 Aug 31 j 16:46	2°♌14'45	1°25'26
minimum elong	-4756 Aug 31 j 16:46	2°♌14'45	1°25'39
morning rise	-4756 Sep 13 j 04:33	5°♌01'43	
	-4756 Oct 31 j 13:14	15°♌	
retrograde	-4755 Jan 13 j 04:14	22°♌27'53	
opposition	-4755 Mar 15 j 03:59	17°♌36'15	2°01'03
min. Earth dist.	-4755 Mar 16 j 09:20	17°♌26'56	4.31872 AU
	-4755 Apr 05 j 18:22	15°℞♌	
direct	-4755 May 16 j 11:12	12°♌37'47	
	-4755 Jun 25 j 19:01	15°♌	
	-4755 Sep 15 j 22:39	0°♍	
evening set	-4755 Sep 19 j 05:11	0°♍44'14	
max. Earth dist.	-4755 Sep 30 j 04:04	3°♍13'29	6.27079 AU
conjunction	-4755 Oct 01 j 17:03	3°♍34'34	1°13'34
minimum elong	-4755 Oct 01 j 17:06	3°♍34'35	1°13'40
morning rise	-4755 Oct 14 j 04:27	6°♍24'49	
retrograde	-4754 Feb 16 j 00:28	24°♍35'10	
opposition	-4754 Apr 18 j 03:49	19°♍41'45	1°26'25
min. Earth dist.	-4754 Apr 19 j 01:58	19°♍34'41	4.21788 AU
direct	-4754 Jun 18 j 11:45	14°♍46'05	
	-4754 Oct 07 j 02:38	0°♎	
evening set	-4754 Oct 21 j 03:52	3°♎12'33	
conjunction	-4754 Nov 02 j 18:51	6°♎08'41	0°38'38
minimum elong	-4754 Nov 02 j 18:54	6°♎08'43	0°38'37
max. Earth dist.	-4754 Nov 01 j 22:37	5°♎56'54	6.16275 AU
morning rise	-4754 Nov 15 j 10:52	9°♎05'36	
retrograde	-4753 Mar 23 j 14:44	28°♎11'25	
opposition	-4753 May 23 j 15:46	23°♎14'46	0°21'42
min. Earth dist.	-4753 May 23 j 21:44	23°♎12'50	4.11005 AU
direct	-4753 Jul 22 j 14:10	18°♎21'19	
desc. node	-4753 Sep 15 j 14:47	22°♎57'06	
	-4753 Oct 23 j 00:08	0°♏	
evening set	-4753 Nov 23 j 16:28	7°♏11'48	
conjunction	-4753 Dec 06 j 13:39	10°♏14'54	-0°10'29
minimum elong	-4753 Dec 06 j 13:38	10°♏14'53	0°10'37
behind sun begin	-4753 Dec 06 j 07:20	10°♏11'09	
behind sun end	-4753 Dec 06 j 19:57	10°♏18'37	
max. Earth dist.	-4753 Dec 06 j 17:06	10°♏16'55	6.06555 AU
morning rise	-4753 Dec 19 j 13:35	13°♏19'34	
	-4753 Dec 26 j 16:59	15°♏	
	-4752 Mar 12 j 22:00	0°♐	
retrograde	-4752 Apr 28 j 13:46	3°♐15'35	
	-4752 Jun 14 j 16:16	30°℞♏	
opposition	-4752 Jun 28 j 05:24	28°♏14'55	-0°53'39
min. Earth dist.	-4752 Jun 27 j 17:04	28°♏19'00	4.03259 AU
direct	-4752 Aug 25 j 22:19	23°♏21'54	

Attention, astronomical year style is used: The year -4752 in astronomical counting style is the year 4753 BCE in historical counting style.

	-4752 Oct 31 j 02:01	0°♐		
evening set	-4752 Dec 28 j 01:47	12°♐32'39		
conjunction	-4751 Jan 10 j 06:38	15°♐41'17	-0°57'00	
minimum elong	-4751 Jan 10 j 06:35	15°♐41'15	0°57'14	
max. Earth dist.	-4751 Jan 11 j 12:38	15°♐59'10	6.01473 AU	
morning rise	-4751 Jan 23 j 14:43	18°♐51'42		
	-4751 Mar 15 j 01:33	0°♑		
retrograde	-4751 Jun 04 j 20:11	9°♑10'43		
opposition	-4751 Aug 03 j 21:36	4°♑06'44	-1°50'22	
min. Earth dist.	-4751 Aug 02 j 20:07	4°♑15'20	4.01534 AU	
	-4751 Sep 09 j 06:30	30°℞♐		
direct	-4751 Sep 30 j 22:27	29°♐11'58		
	-4751 Oct 22 j 14:33	0°♑		
evening set	-4750 Feb 02 j 21:04	18°♑30'04		
conjunction	-4750 Feb 16 j 08:49	21°♑40'55	-1°22'29	
minimum elong	-4750 Feb 16 j 08:47	21°♑40'54	1°22'43	
max. Earth dist.	-4750 Feb 18 j 04:47	22°♑06'51	6.03080 AU	
morning rise	-4750 Mar 01 j 23:41	24°♑53'12		
	-4750 Mar 24 j 07:01	0°♒		
retrograde	-4750 Jul 10 j 23:43	14°♒54'54		
min. Earth dist.	-4750 Sep 07 j 09:36	9°♒59'43	4.06408 AU	
opposition	-4750 Sep 08 j 15:04	9°♒49'39	-2°04'51	
direct	-4750 Nov 05 j 19:13	4°♒51'38		
	-4749 Jan 29 j 21:13	15°♒		
evening set	-4749 Mar 11 j 22:11	23°♒59'40		
conjunction	-4749 Mar 25 j 15:19	27°♒09'23	-1°17'00	
minimum elong	-4749 Mar 25 j 15:22	27°♒09'25	1°17'08	
max. Earth dist.	-4749 Mar 27 j 10:13	27°♒34'10	6.10707 AU	
	-4749 Apr 06 j 23:31	0°♓		
morning rise	-4749 Apr 08 j 09:41	0°♓19'34		
retrograde	-4749 Aug 14 j 10:56	19°♓31'38		
opposition	-4749 Oct 12 j 19:29	14°♓27'51	-1°33'58	
min. Earth dist.	-4749 Oct 11 j 21:45	14°♓35'15	4.15921 AU	
direct	-4749 Dec 10 j 22:05	9°♓26'38		
evening set	-4748 Apr 16 j 01:23	28°♓12'00		
	-4748 Apr 24 j 01:42	0°♈		
conjunction	-4748 Apr 29 j 19:37	1°♈17'40	-0°44'42	
minimum elong	-4748 Apr 29 j 19:41	1°♈17'42	0°44'42	
max. Earth dist.	-4748 Apr 30 j 20:57	1°♈31'56	6.21364 AU	
morning rise	-4748 May 13 j 13:05	4°♈22'44		
retrograde	-4748 Sep 15 j 00:16	22°♈35'57		
opposition	-4748 Nov 13 j 10:52	17°♈35'34	-0°33'30	
min. Earth dist.	-4748 Nov 13 j 01:50	17°♈38'37	4.26626 AU	
direct	-4747 Jan 12 j 19:37	12°♈32'17		
	-4747 May 16 j 14:33	0°♉		
evening set	-4747 May 20 j 15:13	0°♉52'52		
asc. node	-4747 May 25 j 22:08	2°♉02'41		
conjunction	-4747 Jun 03 j 04:59	3°♉52'34	0°01'01	
minimum elong	-4747 Jun 03 j 04:58	3°♉52'33	0°01'08	
behind sun begin	-4747 Jun 02 j 20:43	3°♉48'00		
behind sun end	-4747 Jun 03 j 13:14	3°♉57'06		
max. Earth dist.	-4747 Jun 03 j 05:24	3°♉52'46	6.31372 AU	
morning rise	-4747 Jun 16 j 16:11	6°♉50'49		
	-4747 Jul 25 j 16:33	15°♉		
retrograde	-4747 Oct 16 j 09:06	24°♉17'24		
opposition	-4747 Dec 15 j 01:29	19°♉20'59	0°34'33	
min. Earth dist.	-4747 Dec 15 j 08:56	19°♉18'32	4.35132 AU	
	-4746 Jan 24 j 03:41	15°℞♉		
direct	-4746 Feb 14 j 16:40	14°♉17'12		
	-4746 Mar 08 j 09:43	15°♉		
	-4746 Jun 11 j 20:10	0°♊		
evening set	-4746 Jun 22 j 14:24	2°♊19'16		
conjunction	-4746 Jul 05 j 19:36	5°♊12'49	0°45'08	
minimum elong	-4746 Jul 05 j 19:33	5°♊12'47	0°45'21	
max. Earth dist.	-4746 Jul 04 j 21:07	5°♊00'29	6.37711 AU	
morning rise	-4746 Jul 18 j 21:27	8°♊04'40		
retrograde	-4746 Nov 16 j 04:48	25°♊07'49		
opposition	-4745 Jan 15 j 08:14	20°♊14'34	1°30'54	
min. Earth dist.	-4745 Jan 16 j 04:57	20°♊07'51	4.39012 AU	
direct	-4745 Mar 18 j 18:30	15°♊11'38		
	-4745 Jul 09 j 23:24	0°♋		
evening set	-4745 Jul 24 j 07:56	3°♋05'46		
max. Earth dist.	-4745 Aug 04 j 15:05	5°♋34'41	6.38723 AU	
conjunction	-4745 Aug 06 j 03:54	5°♋55'00	1°15'51	
minimum elong	-4745 Aug 06 j 03:51	5°♋54'58	1°16'06	
morning rise	-4745 Aug 18 j 20:40	8°♋42'43		
retrograde	-4745 Dec 17 j 10:51	25°♋48'24		
opposition	-4744 Feb 16 j 01:23	20°♋56'52	2°01'41	
min. Earth dist.	-4744 Feb 17 j 06:36	20°♋47'32	4.37229 AU	
direct	-4744 Apr 18 j 17:15	15°♋56'02		
	-4744 Aug 05 j 14:14	0°♌		
evening set	-4744 Aug 23 j 10:25	3°♌53'17		
max. Earth dist.	-4744 Sep 03 j 05:20	6°♌17'41	6.34162 AU	
conjunction	-4744 Sep 04 j 23:52	6°♌41'29	1°25'14	
minimum elong	-4744 Sep 04 j 23:53	6°♌41'30	1°25'26	
morning rise	-4744 Sep 17 j 11:30	9°♌28'53		
	-4744 Oct 12 j 22:38	15°♌		
retrograde	-4743 Jan 17 j 21:00	27°♌01'35		
opposition	-4743 Mar 19 j 20:25	22°♌09'48	1°58'20	
min. Earth dist.	-4743 Mar 21 j 01:33	22°♌00'32	4.30219 AU	
direct	-4743 May 21 j 00:44	17°♌11'41		
	-4743 Aug 30 j 08:33	0°♍		
evening set	-4743 Sep 23 j 15:52	5°♍21'57		
max. Earth dist.	-4743 Oct 04 j 18:08	7°♍53'43	6.25273 AU	
conjunction	-4743 Oct 06 j 04:07	8°♍13'09	1°09'51	
minimum elong	-4743 Oct 06 j 04:10	8°♍13'11	1°09'58	
morning rise	-4743 Oct 18 j 15:49	11°♍04'19		
retrograde	-4742 Feb 20 j 23:11	29°♍23'11		
opposition	-4742 Apr 23 j 02:34	24°♍29'23	1°18'42	
min. Earth dist.	-4742 Apr 23 j 22:13	24°♍23'07	4.19965 AU	
direct	-4742 Jun 23 j 05:07	19°♍34'09		
	-4742 Sep 19 j 07:56	0°♎		
evening set	-4742 Oct 25 j 20:03	8°♎04'43		
conjunction	-4742 Nov 07 j 11:39	11°♎01'53	0°32'10	
minimum elong	-4742 Nov 07 j 11:42	11°♎01'54	0°32'07	
max. Earth dist.	-4742 Nov 06 j 18:19	10°♎51'44	6.14603 AU	
morning rise	-4742 Nov 20 j 04:48	14°♎00'00		
	-4741 Feb 10 j 02:26	0°♏		
retrograde	-4741 Mar 28 j 19:43	3°♏14'02		
	-4741 May 15 j 06:20	30°℞♎		
opposition	-4741 May 28 j 19:49	28°♎16'44	0°10'57	
min. Earth dist.	-4741 May 28 j 22:46	28°♎15'46	4.09615 AU	
desc. node	-4741 Jul 25 j 07:42	23°♎23'57		
direct	-4741 Jul 27 j 13:57	23°♎23'26		
	-4741 Oct 02 j 09:58	0°♏		
evening set	-4741 Nov 28 j 14:46	12°♏17'00		
	-4741 Dec 10 j 01:47	15°♏		
conjunction	-4741 Dec 11 j 13:07	15°♏21'00	-0°17'43	
minimum elong	-4741 Dec 11 j 13:06	15°♏20'59	0°17'52	
max. Earth dist.	-4741 Dec 11 j 22:10	15°♏26'22	6.05583 AU	
morning rise	-4741 Dec 24 j 14:08	18°♏26'34		
	-4740 Feb 15 j 11:52	0°♐		
retrograde	-4740 May 03 j 21:41	8°♐27'12		
opposition	-4740 Jul 03 j 11:04	3°♐25'57	-1°03'32	

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

min. Earth dist.	-4740 Jul 02 j 20:25	3°♐30'49	4.02816 AU	
	-4740 Aug 01 j 06:43	30°℞♏		
direct	-4740 Aug 31 j 01:02	28°♏32'49		
	-4740 Sep 29 j 14:33	0°♐		
evening set	-4739 Jan 02 j 05:31	17°♐44'31		
conjunction	-4739 Jan 15 j 11:10	20°♐53'28	-1°02'15	
minimum elong	-4739 Jan 15 j 11:07	20°♐53'26	1°02'29	
max. Earth dist.	-4739 Jan 16 j 19:01	21°♐12'26	6.01546 AU	
morning rise	-4739 Jan 28 j 20:24	24°♐04'16		
	-4739 Feb 23 j 14:01	0°♑		
retrograde	-4739 Jun 09 j 23:05	14°♑22'03		
min. Earth dist.	-4739 Aug 07 j 20:51	9°♑26'56	4.02130 AU	
opposition	-4739 Aug 09 j 00:13	9°♑17'40	-1°55'16	
direct	-4739 Oct 06 j 00:05	4°♑22'27		
evening set	-4738 Feb 08 j 02:13	23°♑38'59		
conjunction	-4738 Feb 21 j 14:56	26°♑49'44	-1°23'38	
minimum elong	-4738 Feb 21 j 14:56	26°♑49'44	1°23'51	
max. Earth dist.	-4738 Feb 23 j 12:33	27°♑16'35	6.04128 AU	
morning rise	-4738 Mar 07 j 06:18	0°♒01'45		
	-4738 Mar 07 j 03:18	0°♒		
	-4738 May 19 j 06:55	15°♒		
retrograde	-4738 Jul 15 j 22:45	19°♒56'54		
min. Earth dist.	-4738 Sep 12 j 08:17	15°♒01'17	4.07786 AU	
	-4738 Sep 12 j 12:03	15°℞♒		
opposition	-4738 Sep 13 j 12:19	14°♒51'42	-2°03'01	
direct	-4738 Nov 10 j 19:41	9°♒53'13		
	-4737 Jan 07 j 15:53	15°♒		
evening set	-4737 Mar 17 j 00:43	28°♒57'37		
	-4737 Mar 21 j 13:36	0°♓		
conjunction	-4737 Mar 30 j 18:14	2°♓06'49	-1°13'51	
minimum elong	-4737 Mar 30 j 18:18	2°♓06'51	1°13'59	
max. Earth dist.	-4737 Apr 01 j 11:21	2°♓30'27	6.12298 AU	
morning rise	-4737 Apr 13 j 12:50	5°♓16'21		
retrograde	-4737 Aug 19 j 00:59	24°♓19'34		
opposition	-4737 Oct 17 j 10:27	19°♓16'11	-1°26'49	
min. Earth dist.	-4737 Oct 16 j 13:33	19°♓23'18	4.17569 AU	
direct	-4737 Dec 15 j 16:23	14°♓14'37		
	-4736 Apr 07 j 16:08	0°♈		
evening set	-4736 Apr 20 j 22:52	2°♈55'58		
conjunction	-4736 May 04 j 16:45	6°♈00'50	-0°38'48	
minimum elong	-4736 May 04 j 16:48	6°♈00'52	0°38'46	
max. Earth dist.	-4736 May 05 j 13:47	6°♈12'38	6.22960 AU	
morning rise	-4736 May 18 j 09:40	9°♈04'58		
retrograde	-4736 Sep 19 j 11:21	27°♈10'32		
opposition	-4736 Nov 17 j 21:19	22°♈10'44	-0°24'00	
min. Earth dist.	-4736 Nov 17 j 15:35	22°♈12'39	4.28024 AU	
direct	-4735 Jan 17 j 11:29	17°♈07'16		
asc. node	-4735 Apr 04 j 21:37	25°♈07'33		
	-4735 Apr 29 j 23:00	0°♉		
evening set	-4735 May 25 j 07:05	5°♉24'49		
conjunction	-4735 Jun 07 j 19:57	8°♉23'40	0°07'34	
minimum elong	-4735 Jun 07 j 19:57	8°♉23'40	0°07'42	
behind sun begin	-4735 Jun 07 j 12:32	8°♉19'35		
behind sun end	-4735 Jun 08 j 03:22	8°♉27'44		
max. Earth dist.	-4735 Jun 07 j 17:06	8°♉22'07	6.32473 AU	
morning rise	-4735 Jun 21 j 05:59	11°♉21'01		
	-4735 Jul 08 j 03:39	15°♉		
retrograde	-4735 Oct 20 j 15:28	28°♉43'08		
opposition	-4735 Dec 19 j 09:50	23°♉47'13	0°43'27	
min. Earth dist.	-4735 Dec 19 j 18:47	23°♉44'17	4.35882 AU	
direct	-4734 Feb 19 j 03:06	18°♉43'29		
	-4734 May 25 j 22:39	0°♊		
evening set	-4734 Jun 27 j 01:48	6°♊44'15		
max. Earth dist.	-4734 Jul 09 j 04:30	9°♊23'18	6.38050 AU	
conjunction	-4734 Jul 10 j 05:40	9°♊37'07	0°50'26	
minimum elong	-4734 Jul 10 j 05:37	9°♊37'05	0°50'39	
morning rise	-4734 Jul 23 j 06:13	12°♊28'18		
retrograde	-4734 Nov 20 j 13:46	29°♊30'51		
opposition	-4733 Jan 19 j 17:36	24°♊38'00	1°36'59	
min. Earth dist.	-4733 Jan 20 j 16:32	24°♊30'36	4.38934 AU	
direct	-4733 Mar 23 j 05:55	19°♊35'22		
	-4733 Jun 22 j 20:22	0°♋		
evening set	-4733 Jul 28 j 16:54	7°♋29'57		
max. Earth dist.	-4733 Aug 08 j 20:42	9°♋57'20	6.38214 AU	
conjunction	-4733 Aug 10 j 11:46	10°♋18'54	1°18'34	
minimum elong	-4733 Aug 10 j 11:43	10°♋18'53	1°18'48	
morning rise	-4733 Aug 23 j 03:39	13°♋06'27		
	-4733 Dec 09 j 06:11	0°♌		
retrograde	-4733 Dec 21 j 22:16	0°♌15'13		
	-4732 Jan 03 j 14:44	30°℞♋		
opposition	-4732 Feb 20 j 13:58	25°♋23'47	2°03'24	
min. Earth dist.	-4732 Feb 21 j 19:20	25°♋14'24	4.36355 AU	
direct	-4732 Apr 23 j 04:15	20°♋23'19		
	-4732 Jul 19 j 00:55	0°♌		
evening set	-4732 Aug 27 j 19:20	8°♌22'34		
max. Earth dist.	-4732 Sep 07 j 15:53	10°♌48'17	6.33007 AU	
conjunction	-4732 Sep 09 j 08:26	11°♌11'03	1°24'34	
minimum elong	-4732 Sep 09 j 08:27	11°♌11'04	1°24'45	
morning rise	-4732 Sep 21 j 19:38	13°♌58'47		
	-4732 Sep 26 j 09:41	15°♌		
	-4732 Dec 20 j 21:09	0°♍		
retrograde	-4731 Jan 22 j 14:00	1°♍37'20		
	-4731 Feb 24 j 12:26	30°℞♌		
opposition	-4731 Mar 24 j 14:02	26°♌45'28	1°54'52	
min. Earth dist.	-4731 Mar 25 j 18:14	26°♌36'31	4.28869 AU	
direct	-4731 May 25 j 15:18	21°♌47'53		
	-4731 Aug 11 j 19:15	0°♍		
evening set	-4731 Sep 28 j 03:06	10°♍00'47		
max. Earth dist.	-4731 Oct 09 j 06:29	12°♍33'44	6.23853 AU	
conjunction	-4731 Oct 10 j 15:25	12°♍52'38	1°05'45	
minimum elong	-4731 Oct 10 j 15:28	12°♍52'40	1°05'50	
morning rise	-4731 Oct 23 j 03:46	15°♍44'39		
	-4730 Jan 03 j 05:21	0°♎		
retrograde	-4730 Feb 25 j 21:48	4°♎10'50		
	-4730 Apr 22 j 09:17	30°℞♍		
opposition	-4730 Apr 28 j 01:24	29°♍16'36	1°10'31	
min. Earth dist.	-4730 Apr 28 j 18:26	29°♍11'09	4.18572 AU	
direct	-4730 Jun 27 j 23:33	24°♍21'45		
	-4730 Aug 29 j 07:29	0°♎		
evening set	-4730 Oct 30 j 11:24	12°♎54'55		
conjunction	-4730 Nov 12 j 03:55	15°♎52'57	0°25'34	
minimum elong	-4730 Nov 12 j 03:57	15°♎52'58	0°25'30	
max. Earth dist.	-4730 Nov 11 j 15:29	15°♎45'40	6.13386 AU	
morning rise	-4730 Nov 24 j 21:51	18°♎52'00		
	-4729 Jan 15 j 12:02	0°♏		
retrograde	-4729 Apr 02 j 22:50	8°♏12'28		
opposition	-4729 Jun 02 j 21:57	3°♏14'41	0°00'19	
min. Earth dist.	-4729 Jun 02 j 22:36	3°♏14'28	4.08683 AU	
desc. node	-4729 Jun 04 j 12:50	3°♏02'03		
	-4729 Jun 30 j 06:25	30°℞♎		
direct	-4729 Aug 01 j 12:33	28°♎21'35		
	-4729 Sep 02 j 09:53	0°♏		
	-4729 Nov 23 j 17:48	15°♏		
evening set	-4729 Dec 03 j 11:31	17°♏16'57		

Attention, astronomical year style is used: The year -4729 in astronomical counting style is the year 4730 BCE in historical counting style.

conjunction	-4729 Dec 16 j 10:38	20°♏21'35	-0°24'40
minimum elong	-4729 Dec 16 j 10:36	20°♏21'33	0°24'51
max. Earth dist.	-4729 Dec 16 j 21:57	20°♏28'18	6.05001 AU
morning rise	-4729 Dec 29 j 12:53	23°♏27'55	
	-4728 Jan 27 j 01:31	0°♐	
retrograde	-4728 May 09 j 00:04	13°♐31'39	
opposition	-4728 Jul 08 j 13:05	8°♐29'52	-1°12'40
min. Earth dist.	-4728 Jul 07 j 19:34	8°♐35'41	4.02658 AU
direct	-4728 Sep 05 j 00:06	3°♐36'31	
evening set	-4727 Jan 07 j 06:10	22°♐48'37	
conjunction	-4727 Jan 20 j 12:54	25°♐57'52	-1°06'53
minimum elong	-4727 Jan 20 j 12:50	25°♐57'50	1°07'07
max. Earth dist.	-4727 Jan 22 j 00:14	26°♐18'53	6.01806 AU
morning rise	-4727 Feb 02 j 22:52	29°♐08'52	
	-4727 Feb 06 j 13:48	0°♑	
retrograde	-4727 Jun 15 j 00:14	19°♑24'50	
opposition	-4727 Aug 13 j 23:11	14°♑20'12	-1°59'07
min. Earth dist.	-4727 Aug 12 j 20:14	14°♑29'20	4.02787 AU
direct	-4727 Oct 10 j 23:56	9°♑24'35	
evening set	-4726 Feb 13 j 04:03	28°♑39'39	
	-4726 Feb 18 j 21:27	0°♒	
conjunction	-4726 Feb 26 j 17:29	1°♒50'16	-1°24'07
minimum elong	-4726 Feb 26 j 17:29	1°♒50'16	1°24'19
max. Earth dist.	-4726 Feb 28 j 14:56	2°♒16'55	6.05097 AU
morning rise	-4726 Mar 12 j 09:32	5°♒02'05	
	-4726 Apr 26 j 19:28	15°♒	
retrograde	-4726 Jul 20 j 16:40	24°♒51'04	
min. Earth dist.	-4726 Sep 17 j 01:51	19°♒55'35	4.08978 AU
opposition	-4726 Sep 18 j 05:49	19°♒46'02	-2°00'23
	-4726 Nov 04 j 10:21	15°℞♒	
direct	-4726 Nov 15 j 14:42	14°♒47'06	
	-4726 Nov 26 j 21:23	15°♒	
	-4725 Mar 05 j 01:33	0°♓	
evening set	-4725 Mar 22 j 00:31	3°♓48'55	
conjunction	-4725 Apr 04 j 18:20	6°♓57'41	-1°10'16
minimum elong	-4725 Apr 04 j 18:24	6°♓57'43	1°10'23
max. Earth dist.	-4725 Apr 06 j 07:55	7°♓19'14	6.13615 AU
morning rise	-4725 Apr 18 j 13:02	10°♓06'40	
retrograde	-4725 Aug 23 j 15:06	29°♓02'22	
opposition	-4725 Oct 21 j 23:06	23°♓59'25	-1°19'18
min. Earth dist.	-4725 Oct 21 j 05:06	24°♓05'32	4.18868 AU
direct	-4725 Dec 20 j 09:57	18°♓57'27	
	-4724 Mar 21 j 06:01	0°♈	
evening set	-4724 Apr 25 j 18:22	7°♈36'11	
conjunction	-4724 May 09 j 12:05	10°♈40'27	-0°32'46
minimum elong	-4724 May 09 j 12:08	10°♈40'28	0°32'44
max. Earth dist.	-4724 May 10 j 06:46	10°♈50'54	6.24163 AU
morning rise	-4724 May 23 j 04:17	13°♈43'49	
	-4724 Aug 21 j 21:29	0°♉	
retrograde	-4724 Sep 23 j 19:38	1°♉43'12	
	-4724 Oct 26 j 13:44	30°℞♈	
opposition	-4724 Nov 22 j 06:44	26°♈43'58	-0°14'31
min. Earth dist.	-4724 Nov 22 j 02:18	26°♈45'27	4.29042 AU
direct	-4723 Jan 21 j 23:24	21°♈40'23	
asc. node	-4723 Feb 13 j 10:55	22°♈27'06	
	-4723 Apr 11 j 09:27	0°♉	
evening set	-4723 May 29 j 22:16	9°♉56'08	
conjunction	-4723 Jun 12 j 09:59	12°♉54'13	0°13'58
minimum elong	-4723 Jun 12 j 09:57	12°♉54'12	0°14'08
behind sun begin	-4723 Jun 12 j 06:07	12°♉52'06	
behind sun end	-4723 Jun 12 j 13:47	12°♉56'19	
max. Earth dist.	-4723 Jun 12 j 02:47	12°♉50'16	6.33239 AU
	-4723 Jun 21 j 22:20	15°♉	
morning rise	-4723 Jun 25 j 18:57	15°♉50'48	
	-4723 Sep 09 j 09:47	0°♊	
retrograde	-4723 Oct 25 j 00:29	3°♊09'37	
	-4723 Dec 10 j 00:17	30°℞♉	
opposition	-4723 Dec 23 j 18:33	28°♉14'12	0°52'04
min. Earth dist.	-4723 Dec 24 j 06:23	28°♉10'19	4.36363 AU
direct	-4722 Feb 23 j 15:44	23°♉10'31	
	-4722 May 06 j 10:36	0°♊	
evening set	-4722 Jul 01 j 13:18	11°♊10'34	
conjunction	-4722 Jul 14 j 16:00	14°♊02'51	0°55'26
minimum elong	-4722 Jul 14 j 15:57	14°♊02'49	0°55'39
max. Earth dist.	-4722 Jul 13 j 13:15	13°♊48'10	6.38201 AU
morning rise	-4722 Jul 27 j 15:10	16°♊53'26	
	-4722 Oct 04 j 09:42	0°♋	
retrograde	-4722 Nov 24 j 21:14	3°♋55'47	
	-4721 Jan 16 j 17:59	30°℞♊	
opposition	-4721 Jan 24 j 03:26	29°♊03'10	1°42'31
min. Earth dist.	-4721 Jan 25 j 02:37	28°♊55'42	4.38786 AU
direct	-4721 Mar 27 j 15:48	24°♊00'45	
	-4721 Jun 02 j 16:00	0°♋	
evening set	-4721 Aug 02 j 02:11	11°♋55'39	
max. Earth dist.	-4721 Aug 13 j 04:47	14°♋22'38	6.37766 AU
conjunction	-4721 Aug 14 j 19:57	14°♋44'19	1°20'49
minimum elong	-4721 Aug 14 j 19:55	14°♋44'18	1°21'04
morning rise	-4721 Aug 27 j 10:54	17°♋31'39	
	-4721 Oct 30 j 07:39	0°♌	
retrograde	-4721 Dec 26 j 10:36	4°♌43'04	
	-4720 Feb 24 j 00:56	30°℞♋	
opposition	-4720 Feb 25 j 03:09	29°♋51'39	2°04'22
min. Earth dist.	-4720 Feb 26 j 09:17	29°♋42'04	4.35630 AU
direct	-4720 Apr 27 j 17:28	24°♋51'32	
	-4720 Jun 27 j 22:20	0°♌	
evening set	-4720 Sep 01 j 03:56	12°♌51'46	
	-4720 Sep 10 j 16:42	15°♌	
max. Earth dist.	-4720 Sep 11 j 23:41	15°♌17'26	6.32039 AU
conjunction	-4720 Sep 13 j 16:34	15°♌40'26	1°23'23
minimum elong	-4720 Sep 13 j 16:35	15°♌40'27	1°23'34
morning rise	-4720 Sep 26 j 03:39	18°♌28'29	
	-4720 Nov 21 j 18:45	0°♍	
retrograde	-4719 Jan 27 j 05:44	6°♍12'10	
opposition	-4719 Mar 29 j 07:17	1°♍19'57	1°50'40
min. Earth dist.	-4719 Mar 30 j 09:47	1°♍11'32	4.27701 AU
	-4719 Apr 08 j 22:02	30°℞♌	
direct	-4719 May 30 j 05:17	26°♌22'42	
	-4719 Jul 19 j 06:01	0°♍	
evening set	-4719 Oct 02 j 13:29	14°♍37'27	
max. Earth dist.	-4719 Oct 13 j 20:40	17°♍12'58	6.22585 AU
conjunction	-4719 Oct 15 j 02:13	17°♍29'58	1°01'14
minimum elong	-4719 Oct 15 j 02:16	17°♍30'00	1°01'18
morning rise	-4719 Oct 27 j 14:55	20°♍22'43	
	-4719 Dec 11 j 09:25	0°♎	
retrograde	-4718 Mar 02 j 19:43	8°♎55'32	
opposition	-4718 May 02 j 22:58	4°♎00'52	1°01'53
min. Earth dist.	-4718 May 03 j 14:47	3°♎55'49	4.17262 AU
	-4718 Jun 08 j 18:50	30°℞♍	
direct	-4718 Jul 02 j 17:54	29°♍06'19	
	-4718 Jul 26 j 13:10	0°♎	
evening set	-4718 Nov 04 j 02:05	17°♎42'01	
conjunction	-4718 Nov 16 j 19:15	20°♎40'55	0°18'50
minimum elong	-4718 Nov 16 j 19:16	20°♎40'56	0°18'47
max. Earth dist.	-4718 Nov 16 j 08:20	20°♎34'31	6.12148 AU

Attention, astronomical year style is used: The year -4718 in astronomical counting style is the year 4719 BCE in historical counting style.

morning rise	-4718 Nov 29 j 14:24	23°♎40'59		
	-4718 Dec 27 j 11:13	0°♏		
retrograde	-4717 Apr 07 j 23:46	13°♏08'03		
desc. node	-4717 Apr 15 j 05:25	13°♏03'06		
opposition	-4717 Jun 07 j 22:44	8°♏09'41	-0°10'17	
min. Earth dist.	-4717 Jun 07 j 20:12	8°♏10'30	4.07618 AU	
direct	-4717 Aug 06 j 08:31	3°♏16'38		
	-4717 Nov 06 j 13:32	15°♏		
evening set	-4717 Dec 08 j 07:44	22°♏14'41		
conjunction	-4717 Dec 21 j 08:01	25°♏20'07	-0°31'25	
minimum elong	-4717 Dec 21 j 07:58	25°♏20'05	0°31'37	
max. Earth dist.	-4717 Dec 21 j 23:38	25°♏29'24	6.04205 AU	
morning rise	-4716 Jan 03 j 11:13	28°♏27'15		
	-4716 Jan 10 j 01:05	0°♐		
retrograde	-4716 May 14 j 04:53	18°♐35'00		
opposition	-4716 Jul 13 j 14:50	13°♐32'44	-1°21'16	
min. Earth dist.	-4716 Jul 12 j 20:38	13°♐38'48	4.02219 AU	
direct	-4716 Sep 09 j 23:55	8°♐39'11		
evening set	-4715 Jan 12 j 07:45	27°♐52'59		
	-4715 Jan 21 j 05:56	0°♑		
conjunction	-4715 Jan 25 j 15:25	1°♑02'41	-1°11'02	
minimum elong	-4715 Jan 25 j 15:22	1°♑02'39	1°11'16	
max. Earth dist.	-4715 Jan 27 j 04:19	1°♑24'37	6.01739 AU	
morning rise	-4715 Feb 08 j 02:30	4°♑14'08		
retrograde	-4715 Jun 20 j 00:54	24°♑29'13		
opposition	-4715 Aug 18 j 22:32	19°♑24'25	-2°02'09	
min. Earth dist.	-4715 Aug 17 j 18:18	19°♑34'00	4.03126 AU	
direct	-4715 Oct 15 j 22:07	14°♑28'23		
	-4714 Feb 02 j 03:19	0°♒		
evening set	-4714 Feb 18 j 07:53	3°♒43'25		
conjunction	-4714 Mar 03 j 22:08	6°♒54'05	-1°23'59	
minimum elong	-4714 Mar 03 j 22:09	6°♒54'05	1°24'10	
max. Earth dist.	-4714 Mar 05 j 18:38	7°♒20'08	6.05791 AU	
morning rise	-4714 Mar 17 j 14:52	10°♒05'51		
	-4714 Apr 08 j 04:03	15°♒		
retrograde	-4714 Jul 25 j 14:02	29°♒49'38		
min. Earth dist.	-4714 Sep 21 j 22:53	24°♒53'46	4.09934 AU	
opposition	-4714 Sep 23 j 01:18	24°♒44'44	-1°56'51	
direct	-4714 Nov 20 j 13:43	19°♒45'20		
	-4713 Feb 14 j 18:56	0°♓		
evening set	-4713 Mar 27 j 02:39	8°♓45'22		
conjunction	-4713 Apr 09 j 20:58	11°♓53'51	-1°06'07	
minimum elong	-4713 Apr 09 j 21:03	11°♓53'53	1°06'12	
max. Earth dist.	-4713 Apr 11 j 09:59	12°♓15'00	6.14776 AU	
morning rise	-4713 Apr 23 j 15:38	15°♓02'20		
	-4713 Jul 09 j 00:21	0°♈		
retrograde	-4713 Aug 28 j 06:33	3°♈50'55		
	-4713 Oct 17 j 17:34	30°℞♓		
opposition	-4713 Oct 26 j 14:19	28°♓48'29	-1°11'04	
min. Earth dist.	-4713 Oct 25 j 21:16	28°♓54'16	4.20116 AU	
direct	-4713 Dec 25 j 03:54	23°♓46'19		
	-4712 Feb 29 j 09:23	0°♈		
evening set	-4712 Apr 30 j 16:44	12°♈22'29		
conjunction	-4712 May 14 j 09:48	15°♈26'01	-0°26'21	
minimum elong	-4712 May 14 j 09:50	15°♈26'02	0°26'18	
max. Earth dist.	-4712 May 15 j 00:11	15°♈34'03	6.25427 AU	
morning rise	-4712 May 28 j 01:26	18°♈28'36		
	-4712 Jul 23 j 21:35	0°♉		
retrograde	-4712 Sep 28 j 07:43	6°♉21'39		
opposition	-4712 Nov 26 j 18:52	1°♉23'00	-0°04'44	
min. Earth dist.	-4712 Nov 26 j 16:55	1°♉23'39	4.30238 AU	
	-4712 Dec 07 j 06:48	30°℞♈		
asc. node	-4712 Dec 23 j 20:12	28°♈05'09		
direct	-4711 Jan 26 j 16:13	26°♈19'23		
	-4711 Mar 18 j 06:18	0°♉		
evening set	-4711 Jun 03 j 15:23	14°♉32'29		
	-4711 Jun 05 j 17:43	15°♉		
conjunction	-4711 Jun 17 j 02:07	17°♉29'42	0°20'26	
minimum elong	-4711 Jun 17 j 02:05	17°♉29'41	0°20'36	
max. Earth dist.	-4711 Jun 16 j 18:00	17°♉25'15	6.34315 AU	
morning rise	-4711 Jun 30 j 09:36	20°♉25'17		
	-4711 Aug 16 j 05:41	0°♊		
retrograde	-4711 Oct 29 j 08:14	7°♊39'49		
opposition	-4711 Dec 28 j 04:58	2°♊44'54	1°00'28	
min. Earth dist.	-4711 Dec 28 j 17:14	2°♊40'53	4.37274 AU	
	-4710 Jan 19 j 11:31	30°℞♉		
direct	-4710 Feb 28 j 04:16	27°♉41'26		
	-4710 Apr 09 j 06:35	0°♊		
evening set	-4710 Jul 06 j 01:24	15°♊39'03		
max. Earth dist.	-4710 Jul 17 j 21:21	18°♊14'26	6.38875 AU	
conjunction	-4710 Jul 19 j 02:32	18°♊30'27	1°00'08	
minimum elong	-4710 Jul 19 j 02:28	18°♊30'25	1°00'22	
morning rise	-4710 Aug 01 j 00:27	21°♊20'13		
	-4710 Sep 12 j 01:50	0°♋		
retrograde	-4710 Nov 29 j 06:35	8°♋20'56		
opposition	-4709 Jan 28 j 13:59	3°♋28'36	1°47'23	
min. Earth dist.	-4709 Jan 29 j 14:58	3°♋20'34	4.39190 AU	
	-4709 Feb 27 j 13:31	30°℞♊		
direct	-4709 Apr 01 j 05:02	28°♊26'29		
	-4709 May 04 j 00:04	0°♋		
evening set	-4709 Aug 06 j 10:06	16°♋19'34		
max. Earth dist.	-4709 Aug 17 j 11:21	18°♋45'53	6.37851 AU	
conjunction	-4709 Aug 19 j 02:53	19°♋07'46	1°22'34	
minimum elong	-4709 Aug 19 j 02:51	19°♋07'45	1°22'47	
morning rise	-4709 Aug 31 j 16:50	21°♋54'41		
	-4709 Oct 09 j 08:23	0°♌		
retrograde	-4709 Dec 30 j 19:11	9°♌07'17		
opposition	-4708 Feb 29 j 14:47	4°♌15'50	2°04'30	
min. Earth dist.	-4708 Mar 01 j 20:03	4°♌06'31	4.35398 AU	
	-4708 Apr 10 j 01:16	30°℞♋		
direct	-4708 May 02 j 03:43	29°♋16'06		
	-4708 May 24 j 08:46	0°♌		
	-4708 Aug 26 j 04:55	15°♌		
evening set	-4708 Sep 05 j 10:06	17°♌15'45		
max. Earth dist.	-4708 Sep 16 j 06:31	19°♌42'01	6.31506 AU	
conjunction	-4708 Sep 17 j 22:18	20°♌04'27	1°21'44	
minimum elong	-4708 Sep 17 j 22:19	20°♌04'28	1°21'54	
morning rise	-4708 Sep 30 j 09:08	22°♌52'38		
	-4708 Nov 02 j 10:20	0°♍		
retrograde	-4707 Jan 31 j 19:28	10°♍40'15		
opposition	-4707 Apr 02 j 21:44	5°♍47'50	1°45'52	
min. Earth dist.	-4707 Apr 04 j 00:30	5°♍39'20	4.26865 AU	
direct	-4707 Jun 03 j 18:22	0°♍50'57		
evening set	-4707 Oct 06 j 20:30	19°♍06'38		
max. Earth dist.	-4707 Oct 18 j 04:10	21°♍42'49	6.21519 AU	
conjunction	-4707 Oct 19 j 09:29	21°♍59'43	0°56'29	
minimum elong	-4707 Oct 19 j 09:33	21°♍59'45	0°56'31	
morning rise	-4707 Oct 31 j 22:53	24°♍53'13		
	-4707 Nov 23 j 18:23	0°♎		
retrograde	-4706 Mar 07 j 12:28	13°♎32'18		
opposition	-4706 May 07 j 16:53	8°♎37'11	0°53'07	
min. Earth dist.	-4706 May 08 j 06:17	8°♎32'53	4.16026 AU	
direct	-4706 Jul 07 j 07:01	3°♎42'51		
evening set	-4706 Nov 08 j 13:16	22°♎21'14		

Attention, astronomical year style is used: The year -4706 in astronomical counting style is the year 4707 BCE in historical counting style.

conjunction	-4706 Nov 21 j 07:21	25°♎21'03	0°12'13
minimum elong	-4706 Nov 21 j 07:22	25°♎21'03	0°12'08
behind sun begin	-4706 Nov 21 j 01:50	25°♎17'49	
behind sun end	-4706 Nov 21 j 12:53	25°♎24'18	
max. Earth dist.	-4706 Nov 20 j 23:44	25°♎16'35	6.10865 AU
morning rise	-4706 Dec 04 j 03:21	28°♎22'06	
	-4706 Dec 11 j 03:38	0°♏	
desc. node	-4705 Feb 25 j 16:04	14°♏44'53	
	-4705 Feb 27 j 15:14	15°♏	
retrograde	-4705 Apr 13 j 00:01	17°♏56'15	
	-4705 May 27 j 17:00	15°℞♏	
opposition	-4705 Jun 12 j 20:05	12°♏57'22	-0°20'29
min. Earth dist.	-4705 Jun 12 j 16:50	12°♏58'26	4.06391 AU
direct	-4705 Aug 11 j 02:38	8°♏04'20	
	-4705 Oct 18 j 05:35	15°♏	
evening set	-4705 Dec 13 j 01:35	27°♏06'07	
	-4705 Dec 25 j 05:56	0°♐	
conjunction	-4705 Dec 26 j 02:50	0°♐12'27	-0°37'44
minimum elong	-4705 Dec 26 j 02:47	0°♐12'26	0°37'56
max. Earth dist.	-4705 Dec 26 j 20:16	0°♐22'50	6.03149 AU
morning rise	-4704 Jan 08 j 07:20	3°♐20'36	
retrograde	-4704 May 19 j 05:10	23°♐33'18	
opposition	-4704 Jul 18 j 13:44	18°♐30'37	-1°29'03
min. Earth dist.	-4704 Jul 17 j 17:15	18°♐37'28	4.01478 AU
direct	-4704 Sep 14 j 18:50	13°♐36'50	
	-4703 Jan 04 j 23:02	0°♑	
evening set	-4703 Jan 17 j 07:56	2°♑53'51	
conjunction	-4703 Jan 30 j 16:41	6°♑04'11	-1°14'31
minimum elong	-4703 Jan 30 j 16:38	6°♑04'09	1°14'46
max. Earth dist.	-4703 Feb 01 j 06:55	6°♑26'55	6.01367 AU
morning rise	-4703 Feb 13 j 04:46	9°♑16'12	
retrograde	-4703 Jun 25 j 01:40	29°♑31'37	
opposition	-4703 Aug 23 j 20:49	24°♑26'36	-2°04'10
min. Earth dist.	-4703 Aug 22 j 16:32	24°♑36'14	4.03174 AU
direct	-4703 Oct 20 j 21:17	19°♑30'06	
	-4702 Jan 15 j 01:05	0°♒	
evening set	-4702 Feb 23 j 11:09	8°♒46'02	
conjunction	-4702 Mar 09 j 02:23	11°♒56'54	-1°23'10
minimum elong	-4702 Mar 09 j 02:25	11°♒56'55	1°23'21
max. Earth dist.	-4702 Mar 11 j 00:38	12°♒23'55	6.06269 AU
morning rise	-4702 Mar 22 j 19:40	15°♒08'42	
	-4702 Mar 22 j 04:39	15°♒	
	-4702 Jun 03 j 20:34	0°♓	
retrograde	-4702 Jul 30 j 10:51	4°♓47'38	
	-4702 Sep 25 j 18:17	30°℞♒	
opposition	-4702 Sep 27 j 20:20	29°♒42'54	-1°52'25
min. Earth dist.	-4702 Sep 26 j 18:06	29°♒51'52	4.10791 AU
direct	-4702 Nov 25 j 10:24	24°♒43'04	
	-4701 Jan 23 j 17:59	0°♓	
evening set	-4701 Apr 01 j 04:55	13°♓41'22	
conjunction	-4701 Apr 14 j 23:18	16°♓49'25	-1°01'27
minimum elong	-4701 Apr 14 j 23:23	16°♓49'28	1°01'31
max. Earth dist.	-4701 Apr 16 j 09:23	17°♓08'51	6.15937 AU
morning rise	-4701 Apr 28 j 18:05	19°♓57'23	
	-4701 Jun 15 j 02:35	0°♈	
retrograde	-4701 Sep 01 j 20:43	8°♈38'29	
opposition	-4701 Oct 31 j 05:06	3°♈36'22	-1°02'21
min. Earth dist.	-4701 Oct 30 j 13:36	3°♈41'38	4.21441 AU
	-4701 Nov 30 j 01:46	30°℞♓	
direct	-4701 Dec 29 j 23:06	28°♓33'50	
	-4700 Jan 29 j 06:29	0°♈	
evening set	-4700 May 05 j 14:04	17°♈06'42	
conjunction	-4700 May 19 j 06:42	20°♈09'26	-0°19'47
minimum elong	-4700 May 19 j 06:44	20°♈09'27	0°19'43
max. Earth dist.	-4700 May 19 j 19:51	20°♈16'45	6.26817 AU
morning rise	-4700 Jun 01 j 21:18	23°♈11'00	
	-4700 Jul 03 j 19:54	0°♉	
retrograde	-4700 Oct 02 j 17:26	10°♉57'08	
asc. node	-4700 Nov 02 j 08:51	9°♉26'39	
opposition	-4700 Dec 01 j 06:05	5°♉58'56	0°05'02
min. Earth dist.	-4700 Dec 01 j 05:32	5°♉59'07	4.31537 AU
direct	-4699 Jan 31 j 07:30	0°♉55'14	
	-4699 May 20 j 05:43	15°♉	
evening set	-4699 Jun 08 j 06:56	19°♉05'02	
conjunction	-4699 Jun 21 j 16:14	22°♉01'15	0°26'44
minimum elong	-4699 Jun 21 j 16:12	22°♉01'14	0°26'55
max. Earth dist.	-4699 Jun 21 j 03:51	21°♉54'27	6.35378 AU
morning rise	-4699 Jul 04 j 22:32	24°♉55'52	
	-4699 Jul 28 j 17:00	0°♊	
retrograde	-4699 Nov 02 j 16:19	12°♊06'23	
opposition	-4698 Jan 01 j 14:29	7°♊11'49	1°08'29
min. Earth dist.	-4698 Jan 02 j 05:17	7°♊06'59	4.38020 AU
direct	-4698 Mar 04 j 17:43	2°♊08'23	
evening set	-4698 Jul 10 j 12:00	20°♊04'07	
max. Earth dist.	-4698 Jul 22 j 05:52	22°♊38'19	6.39219 AU
conjunction	-4698 Jul 23 j 11:58	22°♊54'50	1°04'30
minimum elong	-4698 Jul 23 j 11:54	22°♊54'48	1°04'44
morning rise	-4698 Aug 05 j 08:24	25°♊43'54	
	-4698 Aug 25 j 06:48	0°♋	
retrograde	-4698 Dec 03 j 13:41	12°♋44'15	
opposition	-4697 Feb 01 j 23:56	7°♋52'08	1°51'45
min. Earth dist.	-4697 Feb 03 j 01:21	7°♋43'59	4.39121 AU
direct	-4697 Apr 05 j 15:16	2°♋50'19	
evening set	-4697 Aug 10 j 18:11	20°♋43'21	
max. Earth dist.	-4697 Aug 21 j 16:37	23°♋08'24	6.37349 AU
conjunction	-4697 Aug 23 j 09:54	23°♋31'18	1°23'55
minimum elong	-4697 Aug 23 j 09:53	23°♋31'18	1°24'08
morning rise	-4697 Sep 04 j 23:12	26°♋18'08	
	-4697 Sep 21 j 23:43	0°♌	
retrograde	-4696 Jan 04 j 08:10	13°♌34'07	
opposition	-4696 Mar 05 j 04:10	8°♌42'40	2°04'05
min. Earth dist.	-4696 Mar 06 j 10:45	8°♌32'57	4.34486 AU
direct	-4696 May 06 j 16:54	3°♌43'17	
	-4696 Aug 09 j 11:36	15°♌	
evening set	-4696 Sep 09 j 18:07	21°♌44'38	
max. Earth dist.	-4696 Sep 20 j 14:53	24°♌11'33	6.30253 AU
conjunction	-4696 Sep 22 j 06:13	24°♌33'47	1°19'36
minimum elong	-4696 Sep 22 j 06:15	24°♌33'48	1°19'46
morning rise	-4696 Oct 04 j 17:05	27°♌22'31	
	-4696 Oct 16 j 11:55	0°♍	
retrograde	-4695 Feb 05 j 11:58	15°♍16'41	
opposition	-4695 Apr 07 j 15:54	10°♍24'00	1°40'22
min. Earth dist.	-4695 Apr 08 j 16:39	10°♍16'08	4.25350 AU
direct	-4695 Jun 08 j 07:55	5°♍27'32	
evening set	-4695 Oct 11 j 08:03	23°♍46'31	
conjunction	-4695 Oct 23 j 21:33	26°♍40'31	0°51'11
minimum elong	-4695 Oct 23 j 21:36	26°♍40'32	0°51'13
max. Earth dist.	-4695 Oct 22 j 19:01	26°♍25'09	6.19885 AU
morning rise	-4695 Nov 05 j 11:38	29°♍35'01	
	-4695 Nov 07 j 07:09	0°♎	
retrograde	-4694 Mar 12 j 14:25	18°♎22'29	
opposition	-4694 May 12 j 16:33	13°♎26'58	0°43'34
min. Earth dist.	-4694 May 13 j 04:49	13°♎23'01	4.14375 AU
direct	-4694 Jul 12 j 02:59	8°♎32'56	

Attention, astronomical year style is used: The year -4694 in astronomical counting style is the year 4695 BCE in historical counting style.

evening set	-4694 Nov 13 j 06:49	27°♎15'26	
	-4694 Nov 24 j 22:10	0°♏	
conjunction	-4694 Nov 26 j 01:52	0°♏16'21	0°05'10
minimum elong	-4694 Nov 26 j 01:52	0°♏16'21	0°05'03
behind sun begin	-4694 Nov 25 j 18:01	0°♏11'44	
behind sun end	-4694 Nov 26 j 09:42	0°♏20'57	
max. Earth dist.	-4694 Nov 25 j 21:09	0°♏13'36	6.09368 AU
morning rise	-4694 Dec 08 j 23:08	3°♏18'37	
desc. node	-4693 Jan 05 j 07:41	9°♏32'53	
	-4693 Feb 01 j 00:03	15°♏	
retrograde	-4693 Apr 18 j 04:38	23°♏00'19	
opposition	-4693 Jun 17 j 23:43	18°♏00'57	-0°31'09
min. Earth dist.	-4693 Jun 17 j 16:57	18°♏03'10	4.05218 AU
	-4693 Jul 12 j 19:40	15°℞♏	
direct	-4693 Aug 16 j 00:15	13°♏08'03	
	-4693 Sep 18 j 21:17	15°♏	
	-4693 Dec 08 j 15:32	0°♐	
evening set	-4693 Dec 18 j 02:05	2°♐13'18	
conjunction	-4693 Dec 31 j 04:24	5°♐20'27	-0°44'09
minimum elong	-4693 Dec 31 j 04:21	5°♐20'25	0°44'21
max. Earth dist.	-4692 Jan 01 j 01:32	5°♐33'04	6.02415 AU
morning rise	-4692 Jan 13 j 10:02	8°♐29'25	
retrograde	-4692 May 24 j 11:28	28°♐45'22	
opposition	-4692 Jul 23 j 18:01	23°♐42'16	-1°36'34
min. Earth dist.	-4692 Jul 22 j 19:48	23°♐49'43	4.01299 AU
direct	-4692 Sep 19 j 22:00	18°♐48'15	
	-4692 Dec 17 j 20:16	0°♑	
evening set	-4691 Jan 22 j 13:06	8°♑06'07	
conjunction	-4691 Feb 04 j 22:56	11°♑16'43	-1°17'38
minimum elong	-4691 Feb 04 j 22:53	11°♑16'41	1°17'52
max. Earth dist.	-4691 Feb 06 j 16:59	11°♑41'39	6.01771 AU
morning rise	-4691 Feb 18 j 11:49	14°♑28'53	
	-4691 May 05 j 04:02	0°♒	
retrograde	-4691 Jun 30 j 04:22	4°♒40'40	
	-4691 Aug 25 j 21:25	30°℞♑	
opposition	-4691 Aug 28 j 21:15	29°♑35'34	-2°05'18
min. Earth dist.	-4691 Aug 27 j 16:16	29°♑45'26	4.04151 AU
direct	-4691 Oct 25 j 22:20	24°♑38'39	
	-4691 Dec 23 j 20:41	0°♒	
evening set	-4690 Feb 28 j 16:12	13°♒51'58	
	-4690 Mar 05 j 13:29	15°♒	
conjunction	-4690 Mar 14 j 07:54	17°♒02'26	-1°21'47
minimum elong	-4690 Mar 14 j 07:57	17°♒02'27	1°21'57
max. Earth dist.	-4690 Mar 16 j 04:34	17°♒28'25	6.07705 AU
morning rise	-4690 Mar 28 j 01:45	20°♒13'45	
	-4690 May 11 j 21:58	0°♓	
retrograde	-4690 Aug 04 j 03:50	9°♓44'00	
opposition	-4690 Oct 02 j 14:21	4°♓39'28	-1°47'15
min. Earth dist.	-4690 Oct 01 j 12:47	4°♓48'12	4.12523 AU
	-4690 Nov 16 j 00:57	30°℞♒	
direct	-4690 Nov 30 j 08:00	29°♒39'10	
	-4690 Dec 14 j 18:06	0°♓	
evening set	-4689 Apr 06 j 04:49	18°♓32'42	
conjunction	-4689 Apr 19 j 23:23	21°♓39'58	-0°56'30
minimum elong	-4689 Apr 19 j 23:27	21°♓40'00	0°56'33
max. Earth dist.	-4689 Apr 21 j 07:52	21°♓58'25	6.17832 AU
morning rise	-4689 May 03 j 17:42	24°♓46'56	
	-4689 May 27 j 10:51	0°♈	
retrograde	-4689 Sep 06 j 08:23	13°♈18'27	
opposition	-4689 Nov 04 j 16:55	8°♈16'52	-0°53'31
min. Earth dist.	-4689 Nov 04 j 03:43	8°♈21'19	4.23291 AU
direct	-4688 Jan 03 j 15:59	3°♈14'05	

evening set	-4688 May 10 j 07:27	21°♈42'10	
conjunction	-4688 May 23 j 23:12	24°♈43'52	-0°13'20
minimum elong	-4688 May 23 j 23:13	24°♈43'52	0°13'14
behind sun begin	-4688 May 23 j 18:34	24°♈41'18	
behind sun end	-4688 May 24 j 03:52	24°♈46'27	
max. Earth dist.	-4688 May 24 j 07:33	24°♈48'29	6.28464 AU
morning rise	-4688 Jun 06 j 12:56	27°♈44'22	
	-4688 Jun 16 j 20:53	0°♉	
asc. node	-4688 Sep 13 j 11:46	14°♉30'11	
	-4688 Sep 21 j 11:59	15°♉	
retrograde	-4688 Oct 06 j 22:56	15°♉23'29	
	-4688 Oct 22 j 09:16	15°℞♉	
opposition	-4688 Dec 05 j 13:33	10°♉25'47	0°14'23
min. Earth dist.	-4688 Dec 05 j 15:31	10°♉25'08	4.32860 AU
direct	-4687 Feb 04 j 19:25	5°♉21'58	
	-4687 May 02 j 18:02	15°♉	
evening set	-4687 Jun 12 j 18:18	23°♉28'48	
max. Earth dist.	-4687 Jun 25 j 11:29	26°♉15'55	6.36275 AU
conjunction	-4687 Jun 26 j 02:29	26°♉24'09	0°32'40
minimum elong	-4687 Jun 26 j 02:26	26°♉24'08	0°32'51
morning rise	-4687 Jul 09 j 07:19	29°♉17'50	
	-4687 Jul 12 j 12:49	0°♊	
retrograde	-4687 Nov 06 j 20:58	16°♊25'24	
opposition	-4686 Jan 05 j 20:49	11°♊31'17	1°15'52
min. Earth dist.	-4686 Jan 06 j 13:38	11°♊25'49	4.38443 AU
direct	-4686 Mar 09 j 02:36	6°♊27'59	
evening set	-4686 Jul 14 j 19:34	24°♊23'04	
max. Earth dist.	-4686 Jul 26 j 07:57	26°♊54'29	6.39102 AU
conjunction	-4686 Jul 27 j 18:11	27°♊13'18	1°08'23
minimum elong	-4686 Jul 27 j 18:08	27°♊13'16	1°08'37
morning rise	-4686 Aug 09 j 13:40	0°♋01'58	
	-4686 Aug 09 j 10:04	0°♋	
retrograde	-4686 Dec 07 j 21:51	17°♋03'50	
opposition	-4685 Feb 06 j 08:39	12°♋11'53	1°55'26
min. Earth dist.	-4685 Feb 07 j 12:09	12°♋03'04	4.38497 AU
direct	-4685 Apr 10 j 00:53	7°♋10'15	
evening set	-4685 Aug 15 j 00:40	25°♋05'00	
max. Earth dist.	-4685 Aug 25 j 22:48	27°♋30'16	6.36255 AU
conjunction	-4685 Aug 27 j 15:50	27°♋53'06	1°24'46
minimum elong	-4685 Aug 27 j 15:49	27°♋53'05	1°24'59
	-4685 Sep 06 j 04:02	0°♌	
morning rise	-4685 Sep 09 j 04:25	0°♌40'05	
	-4685 Nov 24 j 17:12	15°♌	
retrograde	-4684 Jan 08 j 19:45	18°♌01'28	
	-4684 Feb 23 j 22:01	15°℞♌	
opposition	-4684 Mar 09 j 17:35	13°♌09'58	2°02'57
min. Earth dist.	-4684 Mar 10 j 23:24	13°♌00'30	4.33008 AU
direct	-4684 May 11 j 03:06	8°♌10'59	
	-4684 Jul 21 j 05:00	15°♌	
evening set	-4684 Sep 14 j 02:56	26°♌15'51	
max. Earth dist.	-4684 Sep 25 j 00:15	28°♌43'43	6.28511 AU
conjunction	-4684 Sep 26 j 14:53	29°♌05'39	1°16'59
minimum elong	-4684 Sep 26 j 14:56	29°♌05'41	1°17'06
	-4684 Sep 30 j 14:35	0°♍	
morning rise	-4684 Oct 09 j 02:04	1°♍55'12	
retrograde	-4683 Feb 10 j 09:20	19°♍57'36	
opposition	-4683 Apr 12 j 11:59	15°♍04'36	1°34'09
min. Earth dist.	-4683 Apr 13 j 12:00	14°♍56'57	4.23451 AU
direct	-4683 Jun 13 j 00:40	10°♍08'28	
evening set	-4683 Oct 15 j 21:29	28°♍31'50	
	-4683 Oct 22 j 05:59	0°♎	

Attention, astronomical year style is used: The year -4683 in astronomical counting style is the year 4684 BCE in historical counting style.

conjunction	-4683 Oct 28 j 11:43	1°♎26'55	0°45'28
minimum elong	-4683 Oct 28 j 11:47	1°♎26'56	0°45'29
max. Earth dist.	-4683 Oct 27 j 12:24	1°♎13'22	6.18015 AU
morning rise	-4683 Nov 10 j 02:42	4°♎22'37	
retrograde	-4682 Mar 17 j 16:39	23°♎19'00	
opposition	-4682 May 17 j 18:42	18°♎22'57	0°33'30
min. Earth dist.	-4682 May 18 j 03:22	18°♎20'10	4.12696 AU
direct	-4682 Jul 16 j 22:55	13°♎29'14	
	-4682 Nov 08 j 10:15	0°♏	
desc. node	-4682 Nov 14 j 01:20	1°♏18'29	
evening set	-4682 Nov 18 j 02:55	2°♏15'38	
conjunction	-4682 Nov 30 j 22:51	5°♏17'31	-0°02'12
minimum elong	-4682 Nov 30 j 22:52	5°♏17'32	0°02'20
behind sun begin	-4682 Nov 30 j 14:47	5°♏12'46	
behind sun end	-4682 Dec 01 j 06:57	5°♏22'18	
max. Earth dist.	-4682 Nov 30 j 22:20	5°♏17'14	6.08029 AU
morning rise	-4682 Dec 13 j 21:19	8°♏20'54	
	-4681 Jan 12 j 01:47	15°♏	
retrograde	-4681 Apr 23 j 11:30	28°♏09'09	
opposition	-4681 Jun 23 j 05:08	23°♏09'07	-0°41'45
min. Earth dist.	-4681 Jun 22 j 19:42	23°♏12'13	4.04347 AU
direct	-4681 Aug 21 j 02:49	18°♏16'09	
	-4681 Nov 20 j 20:53	0°♐	
evening set	-4681 Dec 23 j 04:19	7°♐23'30	
conjunction	-4680 Jan 05 j 07:46	10°♐31'15	-0°50'17
minimum elong	-4680 Jan 05 j 07:43	10°♐31'13	0°50'31
max. Earth dist.	-4680 Jan 06 j 09:55	10°♐46'51	6.02074 AU
morning rise	-4680 Jan 18 j 14:25	13°♐40'47	
	-4680 Apr 08 j 06:10	0°♑	
retrograde	-4680 May 29 j 17:53	3°♑57'39	
	-4680 Jul 20 j 16:34	30°℞♐	
opposition	-4680 Jul 28 j 22:08	28°♐54'07	-1°43'19
min. Earth dist.	-4680 Jul 27 j 22:15	29°♐02'09	4.01546 AU
direct	-4680 Sep 25 j 00:36	23°♐59'47	
	-4680 Nov 26 j 10:04	0°♑	
evening set	-4679 Jan 27 j 18:30	13°♑17'00	
conjunction	-4679 Feb 10 j 05:02	16°♑27'34	-1°20'09
minimum elong	-4679 Feb 10 j 05:00	16°♑27'33	1°20'23
max. Earth dist.	-4679 Feb 11 j 23:20	16°♑52'36	6.02521 AU
morning rise	-4679 Feb 23 j 18:52	19°♑39'43	
	-4679 Apr 11 j 14:53	0°♒	
retrograde	-4679 Jul 05 j 03:19	9°♒46'28	
opposition	-4679 Sep 02 j 20:26	4°♒41'15	-2°05'30
min. Earth dist.	-4679 Sep 01 j 14:51	4°♒51'20	4.05327 AU
	-4679 Oct 18 j 11:53	30°℞♑	
direct	-4679 Oct 30 j 22:47	29°♑43'50	
	-4679 Nov 12 j 11:41	0°♒	
	-4678 Feb 16 j 16:40	15°♒	
evening set	-4678 Mar 05 j 20:01	18°♒54'05	
conjunction	-4678 Mar 19 j 12:26	22°♒04'09	-1°19'50
minimum elong	-4678 Mar 19 j 12:29	22°♒04'11	1°19'59
max. Earth dist.	-4678 Mar 21 j 08:56	22°♒29'57	6.09206 AU
morning rise	-4678 Apr 02 j 06:24	25°♒14'52	
	-4678 Apr 23 j 08:21	0°♓	
retrograde	-4678 Aug 08 j 22:05	14°♓36'33	
min. Earth dist.	-4678 Oct 06 j 07:51	9°♓40'23	4.14180 AU
opposition	-4678 Oct 07 j 07:20	9°♓32'22	-1°41'25
direct	-4678 Dec 05 j 05:07	4°♓31'42	
evening set	-4677 Apr 11 j 04:10	23°♓21'04	
conjunction	-4677 Apr 24 j 22:34	26°♓27'35	-0°51'13
minimum elong	-4677 Apr 24 j 22:38	26°♓27'38	0°51'16
max. Earth dist.	-4677 Apr 26 j 03:32	26°♓43'58	6.19517 AU
morning rise	-4677 May 08 j 16:37	29°♓33'42	
	-4677 May 10 j 15:35	0°♈	
retrograde	-4677 Sep 10 j 18:12	17°♈56'44	
opposition	-4677 Nov 09 j 04:16	12°♈55'41	-0°44'26
min. Earth dist.	-4677 Nov 08 j 16:41	12°♈59'36	4.24859 AU
direct	-4676 Jan 08 j 07:22	7°♈52'41	
evening set	-4676 May 15 j 00:57	26°♈17'16	
conjunction	-4676 May 28 j 15:54	29°♈18'05	-0°06'49
minimum elong	-4676 May 28 j 15:55	29°♈18'06	0°06'43
behind sun begin	-4676 May 28 j 08:13	29°♈13'51	
behind sun end	-4676 May 28 j 23:37	29°♈22'20	
max. Earth dist.	-4676 May 28 j 20:37	29°♈20'40	6.29817 AU
	-4676 May 31 j 19:30	0°♉	
morning rise	-4676 Jun 11 j 04:33	2°♉17'36	
asc. node	-4676 Jul 24 j 22:26	11°♉22'11	
	-4676 Aug 15 j 00:06	15°♉	
retrograde	-4676 Oct 11 j 07:21	19°♉51'00	
opposition	-4676 Dec 09 j 22:07	14°♉53'56	0°23'42
	-4676 Dec 09 j 03:47	15°℞♉	
min. Earth dist.	-4676 Dec 10 j 02:56	14°♉52'21	4.33896 AU
direct	-4675 Feb 09 j 08:24	9°♉50'09	
	-4675 Apr 11 j 13:41	15°♉	
evening set	-4675 Jun 17 j 06:37	27°♉54'56	
	-4675 Jun 26 j 19:16	0°♊	
conjunction	-4675 Jun 30 j 13:30	0°♊49'31	0°38'29
minimum elong	-4675 Jun 30 j 13:27	0°♊49'30	0°38'41
max. Earth dist.	-4675 Jun 29 j 18:29	0°♊39'05	6.36901 AU
morning rise	-4675 Jul 13 j 17:06	3°♊42'26	
retrograde	-4675 Nov 11 j 03:45	20°♊48'08	
opposition	-4674 Jan 10 j 05:09	15°♊54'26	1°22'57
min. Earth dist.	-4674 Jan 10 j 23:47	15°♊48'23	4.38656 AU
direct	-4674 Mar 13 j 12:45	10°♊51'18	
evening set	-4674 Jul 19 j 04:45	28°♊46'20	
	-4674 Jul 24 j 19:23	0°♋	
max. Earth dist.	-4674 Jul 30 j 15:24	1°♋16'58	6.38879 AU
conjunction	-4674 Aug 01 j 02:15	1°♋36'09	1°11'58
minimum elong	-4674 Aug 01 j 02:12	1°♋36'07	1°12'12
morning rise	-4674 Aug 13 j 20:26	4°♋24'25	
retrograde	-4674 Dec 12 j 06:55	21°♋28'08	
opposition	-4673 Feb 10 j 19:22	16°♋36'28	1°58'34
min. Earth dist.	-4673 Feb 11 j 23:38	16°♋27'26	4.37875 AU
direct	-4673 Apr 14 j 11:21	11°♋35'15	
evening set	-4673 Aug 19 j 09:04	29°♋31'33	
	-4673 Aug 21 j 12:25	0°♌	
max. Earth dist.	-4673 Aug 30 j 04:52	1°♌56'00	6.35271 AU
conjunction	-4673 Aug 31 j 23:23	2°♌19'43	1°25'10
minimum elong	-4673 Aug 31 j 23:23	2°♌19'43	1°25'23
morning rise	-4673 Sep 13 j 11:37	5°♌06'56	
	-4673 Oct 31 j 08:08	15°♌	
retrograde	-4672 Jan 13 j 11:13	22°♌33'28	
opposition	-4672 Mar 14 j 09:08	17°♌41'55	2°01'06
min. Earth dist.	-4672 Mar 15 j 14:53	17°♌32'28	4.31738 AU
	-4672 Apr 05 j 20:35	15°℞♌	
direct	-4672 May 15 j 16:35	12°♌43'21	
	-4672 Jun 24 j 04:02	15°♌	
	-4672 Sep 14 j 18:22	0°♍	
evening set	-4672 Sep 18 j 12:41	0°♍50'51	
max. Earth dist.	-4672 Sep 29 j 13:03	3°♍20'54	6.27087 AU
conjunction	-4672 Oct 01 j 00:50	3°♍41'16	1°13'53
minimum elong	-4672 Oct 01 j 00:52	3°♍41'18	1°13'59
morning rise	-4672 Oct 13 j 12:07	6°♍31'31	
retrograde	-4671 Feb 15 j 05:30	24°♍41'02	

Attention, astronomical year style is used: The year -4671 in astronomical counting style is the year 4672 BCE in historical counting style.

opposition	-4671 Apr 17 j 08:52	19°♍47'45	1°27'17
min. Earth dist.	-4671 Apr 18 j 06:27	19°♍40'53	4.21982 AU
direct	-4671 Jun 17 j 16:44	14°♍52'07	
	-4671 Oct 05 j 23:32	0°♎	
evening set	-4671 Oct 20 j 11:22	3°♎18'18	
max. Earth dist.	-4671 Nov 01 j 05:18	6°♎02'07	6.16646 AU
conjunction	-4671 Nov 02 j 02:03	6°♎14'12	0°39'28
minimum elong	-4671 Nov 02 j 02:06	6°♎14'14	0°39'28
morning rise	-4671 Nov 14 j 17:58	9°♎10'53	
retrograde	-4670 Mar 22 j 18:28	28°♎14'23	
opposition	-4670 May 22 j 19:48	23°♎17'47	0°23'17
min. Earth dist.	-4670 May 23 j 01:55	23°♎15'48	4.11524 AU
direct	-4670 Jul 21 j 20:07	18°♎24'15	
desc. node	-4670 Sep 23 j 22:02	24°♎29'12	
	-4670 Oct 22 j 02:17	0°♏	
evening set	-4670 Nov 22 j 21:49	7°♏12'58	
conjunction	-4670 Dec 05 j 18:49	10°♏15'39	-0°09'17
minimum elong	-4670 Dec 05 j 18:48	10°♏15'39	0°09'25
behind sun begin	-4670 Dec 05 j 12:01	10°♏11'39	
behind sun end	-4670 Dec 06 j 01:36	10°♏19'40	
max. Earth dist.	-4670 Dec 05 j 23:10	10°♏18'13	6.07177 AU
morning rise	-4670 Dec 18 j 18:16	13°♏19'51	
	-4670 Dec 25 j 21:22	15°♏	
	-4669 Mar 13 j 07:25	0°♐	
retrograde	-4669 Apr 28 j 15:33	3°♐12'31	
	-4669 Jun 14 j 08:26	30°℞♏	
opposition	-4669 Jun 28 j 07:37	28°♏11'58	-0°51'46
min. Earth dist.	-4669 Jun 27 j 19:57	28°♏15'50	4.03913 AU
direct	-4669 Aug 26 j 02:12	23°♏18'58	
	-4669 Oct 31 j 14:01	0°♐	
evening set	-4669 Dec 28 j 04:00	12°♐27'08	
conjunction	-4668 Jan 10 j 08:14	15°♐35'14	-0°55'52
minimum elong	-4668 Jan 10 j 08:10	15°♐35'12	0°56'06
max. Earth dist.	-4668 Jan 11 j 11:59	15°♐51'46	6.02060 AU
morning rise	-4668 Jan 23 j 16:00	18°♐45'12	
	-4668 Mar 14 j 17:46	0°♑	
retrograde	-4668 Jun 03 j 18:26	9°♑01'46	
opposition	-4668 Aug 02 j 22:14	3°♑57'49	-1°49'01
min. Earth dist.	-4668 Aug 01 j 20:35	4°♑06'28	4.01968 AU
	-4668 Sep 06 j 08:53	30°℞♐	
direct	-4668 Sep 29 j 23:33	29°♐03'05	
	-4668 Oct 23 j 15:32	0°♑	
evening set	-4667 Feb 01 j 20:13	18°♑19'17	
conjunction	-4667 Feb 15 j 07:46	21°♑29'52	-1°21'59
minimum elong	-4667 Feb 15 j 07:44	21°♑29'52	1°22'12
max. Earth dist.	-4667 Feb 17 j 03:59	21°♑55'58	6.03326 AU
morning rise	-4667 Feb 28 j 22:07	24°♑41'52	
	-4667 Mar 24 j 02:01	0°♒	
retrograde	-4667 Jul 10 j 00:30	14°♒43'25	
min. Earth dist.	-4667 Sep 06 j 11:27	9°♒47'49	4.06425 AU
opposition	-4667 Sep 07 j 15:38	9°♒38'12	-2°04'46
direct	-4667 Nov 04 j 20:30	4°♒40'19	
	-4666 Jan 29 j 19:04	15°♒	
evening set	-4666 Mar 10 j 20:31	23°♒47'59	
conjunction	-4666 Mar 24 j 13:24	26°♒57'42	-1°17'23
minimum elong	-4666 Mar 24 j 13:27	26°♒57'43	1°17'31
max. Earth dist.	-4666 Mar 26 j 07:51	27°♒22'13	6.10494 AU
	-4666 Apr 06 j 17:53	0°♓	
morning rise	-4666 Apr 07 j 07:47	0°♓07'57	
retrograde	-4666 Aug 13 j 11:17	19°♓21'58	
opposition	-4666 Oct 11 j 21:01	14°♓18'07	-1°35'07
min. Earth dist.	-4666 Oct 10 j 22:20	14°♓25'51	4.15529 AU
direct	-4666 Dec 09 j 21:41	9°♓17'02	
evening set	-4665 Apr 16 j 00:43	28°♓03'28	
	-4665 Apr 24 j 16:01	0°♈	
conjunction	-4665 Apr 29 j 19:00	1°♈09'22	-0°45'45
minimum elong	-4665 Apr 29 j 19:04	1°♈09'25	0°45'45
max. Earth dist.	-4665 Apr 30 j 20:01	1°♈23'29	6.20840 AU
morning rise	-4665 May 13 j 12:41	4°♈14'45	
retrograde	-4665 Sep 15 j 05:20	22°♈30'54	
opposition	-4665 Nov 13 j 14:17	17°♈30'23	-0°35'16
min. Earth dist.	-4665 Nov 13 j 05:49	17°♈33'15	4.26026 AU
direct	-4664 Jan 12 j 22:24	12°♈27'10	
	-4664 May 15 j 22:38	0°♉	
evening set	-4664 May 19 j 16:54	0°♉49'28	
conjunction	-4664 Jun 02 j 07:07	3°♉49'35	-0°00'18
minimum elong	-4664 Jun 02 j 07:06	3°♉49'35	0°00'11
behind sun begin	-4664 Jun 01 j 22:54	3°♉45'04	
behind sun end	-4664 Jun 02 j 15:18	3°♉54'05	
max. Earth dist.	-4664 Jun 02 j 08:43	3°♉50'25	6.30753 AU
asc. node	-4664 Jun 04 j 17:15	4°♉21'45	
morning rise	-4664 Jun 15 j 18:42	6°♉48'17	
	-4664 Jul 24 j 23:05	15°♉	
retrograde	-4664 Oct 15 j 13:45	24°♉17'25	
opposition	-4664 Dec 14 j 06:17	19°♉20'50	0°32'47
min. Earth dist.	-4664 Dec 14 j 12:24	19°♉18'49	4.34561 AU
	-4663 Jan 23 j 06:59	15°℞♉	
direct	-4663 Feb 13 j 18:50	14°♉17'03	
	-4663 Mar 07 j 13:36	15°♉	
	-4663 Jun 10 j 21:46	0°♊	
evening set	-4663 Jun 21 j 18:48	2°♊20'51	
max. Earth dist.	-4663 Jul 04 j 02:57	5°♊02'58	6.37255 AU
conjunction	-4663 Jul 05 j 00:24	5°♊14'45	0°44'02
minimum elong	-4663 Jul 05 j 00:21	5°♊14'44	0°44'15
morning rise	-4663 Jul 18 j 02:41	8°♊06'59	
retrograde	-4663 Nov 15 j 12:25	25°♊11'35	
opposition	-4662 Jan 14 j 14:12	20°♊18'17	1°29'34
min. Earth dist.	-4662 Jan 15 j 10:49	20°♊11'36	4.38696 AU
direct	-4662 Mar 18 j 00:11	15°♊15'22	
	-4662 Jul 08 j 20:49	0°♋	
evening set	-4662 Jul 23 j 14:05	3°♋10'25	
max. Earth dist.	-4662 Aug 03 j 21:36	5°♋39'34	6.38581 AU
conjunction	-4662 Aug 05 j 10:25	5°♋59'52	1°15'08
minimum elong	-4662 Aug 05 j 10:22	5°♋59'50	1°15'23
morning rise	-4662 Aug 18 j 03:38	8°♋47'49	
retrograde	-4662 Dec 16 j 17:15	25°♋53'34	
opposition	-4661 Feb 15 j 07:13	21°♋01'57	2°01'00
min. Earth dist.	-4661 Feb 16 j 11:35	20°♋52'53	4.37283 AU
direct	-4661 Apr 18 j 22:23	16°♋01'01	
	-4661 Aug 05 j 11:33	0°♌	
evening set	-4661 Aug 23 j 17:20	3°♌58'17	
max. Earth dist.	-4661 Sep 03 j 14:30	6°♌23'47	6.34424 AU
conjunction	-4661 Sep 05 j 07:07	6°♌46'30	1°25'04
minimum elong	-4661 Sep 05 j 07:07	6°♌46'31	1°25'15
morning rise	-4661 Sep 17 j 18:44	9°♌33'50	
	-4661 Oct 12 j 20:51	15°♌	
retrograde	-4660 Jan 18 j 01:38	27°♌04'54	
opposition	-4660 Mar 19 j 00:54	22°♌13'12	1°58'29
min. Earth dist.	-4660 Mar 20 j 05:56	22°♌03'59	4.30676 AU
direct	-4660 May 20 j 06:03	17°♌15'04	
	-4660 Aug 29 j 09:50	0°♍	
evening set	-4660 Sep 22 j 22:12	5°♍24'11	
max. Earth dist.	-4660 Oct 03 j 22:52	7°♍54'53	6.25881 AU

Attention, astronomical year style is used: The year -4660 in astronomical counting style is the year 4661 BCE in historical counting style.

conjunction	-4660 Oct 05 j 10:15	8°♍15'06	1°10'20	
minimum elong	-4660 Oct 05 j 10:18	8°♍15'08	1°10'26	
morning rise	-4660 Oct 17 j 22:00	11°♍06'00		
retrograde	-4659 Feb 20 j 01:24	29°♍21'55		
opposition	-4659 Apr 22 j 05:01	24°♍28'12	1°19'52	
min. Earth dist.	-4659 Apr 23 j 00:45	24°♍21'54	4.20681 AU	
direct	-4659 Jun 22 j 09:03	19°♍32'51		
	-4659 Sep 18 j 16:54	0°♎		
evening set	-4659 Oct 25 j 00:04	8°♎01'25		
conjunction	-4659 Nov 06 j 15:36	10°♎58'10	0°33'16	
minimum elong	-4659 Nov 06 j 15:38	10°♎58'11	0°33'13	
max. Earth dist.	-4659 Nov 05 j 22:50	10°♎48'23	6.15371 AU	
morning rise	-4659 Nov 19 j 08:15	13°♎55'47		
	-4658 Feb 10 j 01:06	0°♏		
retrograde	-4658 Mar 27 j 19:14	3°♏06'08		
	-4658 May 13 j 04:17	30°℞♎		
opposition	-4658 May 27 j 19:45	28°♎09'03	0°12'57	
min. Earth dist.	-4658 May 27 j 23:55	28°♎07'42	4.10370 AU	
direct	-4658 Jul 26 j 16:05	23°♎15'45		
desc. node	-4658 Aug 04 j 07:57	23°♎23'07		
	-4658 Oct 02 j 06:49	0°♏		
evening set	-4658 Nov 27 j 15:58	12°♏07'02		
	-4658 Dec 09 j 19:59	15°♏		
conjunction	-4658 Dec 10 j 13:44	15°♏10'32	-0°16'16	
minimum elong	-4658 Dec 10 j 13:43	15°♏10'31	0°16'25	
max. Earth dist.	-4658 Dec 10 j 19:54	15°♏14'11	6.06231 AU	
morning rise	-4658 Dec 23 j 14:27	18°♏15'39		
	-4657 Feb 15 j 13:08	0°♐		
retrograde	-4657 May 03 j 17:40	8°♐13'23		
opposition	-4657 Jul 03 j 08:58	3°♐12'18	-1°01'23	
min. Earth dist.	-4657 Jul 02 j 18:36	3°♐17'03	4.03280 AU	
	-4657 Jul 29 j 20:35	30°℞♏		
direct	-4657 Aug 31 j 00:05	28°♏19'09		
	-4657 Oct 01 j 21:44	0°♐		
evening set	-4656 Jan 02 j 03:38	17°♐29'23		
conjunction	-4656 Jan 15 j 09:02	20°♐38'05	-1°01'02	
minimum elong	-4656 Jan 15 j 08:58	20°♐38'03	1°01'16	
max. Earth dist.	-4656 Jan 16 j 16:37	20°♐56'54	6.01787 AU	
morning rise	-4656 Jan 28 j 17:39	23°♐48'33		
	-4656 Feb 24 j 15:41	0°♑		
retrograde	-4656 Jun 08 j 21:30	14°♑05'52		
opposition	-4656 Aug 07 j 22:15	9°♑01'37	-1°53'59	
min. Earth dist.	-4656 Aug 06 j 20:42	9°♑10'15	4.02098 AU	
direct	-4656 Oct 04 j 23:15	4°♑06'32		
evening set	-4655 Feb 06 j 23:07	23°♑23'08		
conjunction	-4655 Feb 20 j 11:29	26°♑33'53	-1°23'13	
minimum elong	-4655 Feb 20 j 11:29	26°♑33'53	1°23'26	
max. Earth dist.	-4655 Feb 22 j 07:54	27°♑00'02	6.03818 AU	
morning rise	-4655 Mar 06 j 02:46	29°♑46'00		
	-4655 Mar 07 j 02:45	0°♒		
	-4655 May 19 j 17:03	15°♒		
retrograde	-4655 Jul 14 j 21:27	19°♒43'25		
	-4655 Sep 09 j 20:09	15°℞♒		
min. Earth dist.	-4655 Sep 11 j 07:13	14°♒48'02	4.07236 AU	
opposition	-4655 Sep 12 j 11:51	14°♒38'15	-2°03'10	
direct	-4655 Nov 09 j 17:15	9°♒39'56		
	-4654 Jan 07 j 21:53	15°♒		
evening set	-4654 Mar 15 j 22:52	28°♒46'13		
	-4654 Mar 21 j 07:26	0°♓		
conjunction	-4654 Mar 29 j 16:16	1°♓55'42	-1°14'20	
minimum elong	-4654 Mar 29 j 16:19	1°♓55'44	1°14'28	
max. Earth dist.	-4654 Mar 31 j 08:26	2°♓18'51	6.11551 AU	
morning rise	-4654 Apr 12 j 10:54	5°♓05'36		
retrograde	-4654 Aug 18 j 05:04	24°♓12'52		
opposition	-4654 Oct 16 j 13:01	19°♓09'25	-1°28'04	
min. Earth dist.	-4654 Oct 15 j 16:45	19°♓16'19	4.16702 AU	
direct	-4654 Dec 14 j 18:21	14°♓07'58		
	-4653 Apr 08 j 00:57	0°♈		
evening set	-4653 Apr 20 j 23:44	2°♈52'03		
conjunction	-4653 May 04 j 17:57	5°♈57'25	-0°39'50	
minimum elong	-4653 May 04 j 18:00	5°♈57'27	0°39'49	
max. Earth dist.	-4653 May 05 j 17:16	6°♈10'32	6.22062 AU	
morning rise	-4653 May 18 j 11:03	9°♈02'04		
retrograde	-4653 Sep 19 j 16:36	27°♈11'33		
opposition	-4653 Nov 18 j 02:33	22°♈11'38	-0°25'40	
min. Earth dist.	-4653 Nov 17 j 18:59	22°♈14'11	4.27205 AU	
direct	-4652 Jan 17 j 13:26	17°♈08'19		
asc. node	-4652 Apr 13 j 21:50	27°♈00'16		
	-4652 Apr 28 j 21:35	0°♉		
evening set	-4652 May 24 j 11:22	5°♉28'15		
conjunction	-4652 Jun 07 j 00:28	8°♉27'30	0°06'25	
minimum elong	-4652 Jun 07 j 00:27	8°♉27'29	0°06'33	
behind sun begin	-4652 Jun 06 j 16:45	8°♉23'15		
behind sun end	-4652 Jun 07 j 08:10	8°♉31'44		
max. Earth dist.	-4652 Jun 06 j 22:21	8°♉26'21	6.31831 AU	
morning rise	-4652 Jun 20 j 11:01	11°♉25'19		
	-4652 Jul 07 j 00:00	15°♉		
retrograde	-4652 Oct 20 j 00:33	28°♉49'44		
opposition	-4652 Dec 18 j 16:58	23°♉53'42	0°41'51	
min. Earth dist.	-4652 Dec 19 j 01:36	23°♉50'52	4.35484 AU	
direct	-4651 Feb 18 j 09:52	18°♉50'01		
	-4651 May 24 j 14:24	0°♊		
evening set	-4651 Jun 26 j 08:08	6°♊51'34		
conjunction	-4651 Jul 09 j 12:28	9°♊44'38	0°49'26	
minimum elong	-4651 Jul 09 j 12:25	9°♊44'37	0°49'38	
max. Earth dist.	-4651 Jul 08 j 13:52	9°♊32'14	6.37962 AU	
morning rise	-4651 Jul 22 j 13:17	12°♊36'00		
retrograde	-4651 Nov 19 j 19:47	29°♊38'25		
opposition	-4650 Jan 19 j 00:28	24°♊45'24	1°35'41	
min. Earth dist.	-4650 Jan 19 j 21:12	24°♊38'42	4.39178 AU	
direct	-4650 Mar 22 j 11:22	19°♊42'44		
	-4650 Jun 21 j 12:59	0°♋		
evening set	-4650 Jul 27 j 23:28	7°♋36'04		
max. Earth dist.	-4650 Aug 08 j 05:26	10°♋04'25	6.38798 AU	
conjunction	-4650 Aug 09 j 18:31	10°♋24'53	1°17'52	
minimum elong	-4650 Aug 09 j 18:28	10°♋24'51	1°18'07	
morning rise	-4650 Aug 22 j 10:35	13°♋12'17		
	-4650 Dec 07 j 03:18	0°♌		
retrograde	-4650 Dec 21 j 03:07	0°♌18'23		
	-4649 Jan 04 j 01:59	30°℞♋		
opposition	-4649 Feb 19 j 18:35	25°♋26'52	2°02'40	
min. Earth dist.	-4649 Feb 20 j 23:55	25°♋17'31	4.37217 AU	
direct	-4649 Apr 23 j 10:43	20°♋26'18		
	-4649 Jul 19 j 03:02	0°♌		
evening set	-4649 Aug 28 j 00:08	8°♌22'34		
max. Earth dist.	-4649 Sep 07 j 19:44	10°♌47'25	6.34065 AU	
conjunction	-4649 Sep 09 j 13:15	11°♌10'40	1°24'27	
minimum elong	-4649 Sep 09 j 13:16	11°♌10'40	1°24'37	
morning rise	-4649 Sep 22 j 00:34	13°♌57'59		
	-4649 Sep 26 j 16:18	15°♌		
	-4649 Dec 21 j 18:50	0°♍		
retrograde	-4648 Jan 22 j 13:33	1°♍32'05		
	-4648 Feb 23 j 13:45	30°℞♌		
opposition	-4648 Mar 23 j 14:39	26°♌40'09	1°55'09	

Attention, astronomical year style is used: The year -4648 in astronomical counting style is the year 4649 BCE in historical counting style.

min. Earth dist.	-4648 Mar 24 j 18:35	26°♌31'16	4.30031 AU	
direct	-4648 May 24 j 17:25	21°♌42'19		
	-4648 Aug 11 j 12:50	0°♍		
evening set	-4648 Sep 27 j 04:49	9°♍51'43		
max. Earth dist.	-4648 Oct 08 j 08:19	12°♍24'17	6.25015 AU	
conjunction	-4648 Oct 09 j 17:05	12°♍43'03	1°06'25	
minimum elong	-4648 Oct 09 j 17:08	12°♍43'05	1°06'31	
morning rise	-4648 Oct 22 j 05:01	15°♍34'26		
	-4647 Jan 03 j 18:26	0°♎		
retrograde	-4647 Feb 24 j 18:04	3°♎55'41		
	-4647 Apr 19 j 05:52	30°℞♍		
opposition	-4647 Apr 26 j 22:03	29°♍01'36	1°12'06	
min. Earth dist.	-4647 Apr 27 j 17:04	28°♍55'31	4.19620 AU	
direct	-4647 Jun 26 j 23:11	24°♍06'33		
	-4647 Aug 29 j 20:57	0°♎		
evening set	-4647 Oct 29 j 09:52	12°♎36'52		
max. Earth dist.	-4647 Nov 10 j 09:41	15°♎24'54	6.14214 AU	
conjunction	-4647 Nov 11 j 01:54	15°♎34'23	0°27'01	
minimum elong	-4647 Nov 11 j 01:57	15°♎34'24	0°26'58	
morning rise	-4647 Nov 23 j 19:39	18°♎32'56		
	-4646 Jan 16 j 05:11	0°♏		
retrograde	-4646 Apr 01 j 15:12	7°♏49'50		
opposition	-4646 Jun 01 j 15:46	2°♏52'13	0°02'51	
min. Earth dist.	-4646 Jun 01 j 17:26	2°♏51'40	4.09201 AU	
desc. node	-4646 Jun 16 j 15:45	0°♏58'27		
	-4646 Jun 25 j 07:23	30°℞♎		
direct	-4646 Jul 31 j 07:33	27°♎58'57		
	-4646 Sep 04 j 20:28	0°♏		
	-4646 Nov 24 j 06:04	15°♏		
evening set	-4646 Dec 02 j 07:18	16°♏53'24		
conjunction	-4646 Dec 15 j 06:14	19°♏57'49	-0°22'55	
minimum elong	-4646 Dec 15 j 06:12	19°♏57'47	0°23'06	
max. Earth dist.	-4646 Dec 15 j 16:06	20°♏03'40	6.05172 AU	
morning rise	-4646 Dec 28 j 07:54	23°♏03'52		
	-4645 Jan 27 j 16:33	0°♐		
retrograde	-4645 May 08 j 19:21	13°♐07'06		
opposition	-4645 Jul 08 j 07:12	8°♐05'33	-1°10'17	
min. Earth dist.	-4645 Jul 07 j 16:18	8°♐10'30	4.02443 AU	
direct	-4645 Sep 04 j 19:42	3°♐12'15		
evening set	-4644 Jan 07 j 01:21	22°♐25'40		
conjunction	-4644 Jan 20 j 07:44	25°♐35'03	-1°05'36	
minimum elong	-4644 Jan 20 j 07:40	25°♐35'01	1°05'50	
max. Earth dist.	-4644 Jan 21 j 16:30	25°♐54'34	6.01239 AU	
morning rise	-4644 Feb 02 j 17:36	28°♐46'16		
	-4644 Feb 07 j 22:50	0°♑		
retrograde	-4644 Jun 13 j 20:49	19°♑05'13		
opposition	-4644 Aug 12 j 20:09	14°♑00'44	-1°57'58	
min. Earth dist.	-4644 Aug 11 j 16:56	14°♑09'57	4.01935 AU	
direct	-4644 Oct 09 j 18:59	9°♑05'16		
evening set	-4643 Feb 12 j 01:08	28°♑23'33		
	-4643 Feb 18 j 21:38	0°♒		
conjunction	-4643 Feb 25 j 14:28	1°♒34'37	-1°23'46	
minimum elong	-4643 Feb 25 j 14:28	1°♒34'37	1°23'57	
max. Earth dist.	-4643 Feb 27 j 11:01	2°♒00'50	6.04052 AU	
morning rise	-4643 Mar 11 j 06:30	4°♒46'56		
	-4643 Apr 26 j 19:26	15°♒		
retrograde	-4643 Jul 19 j 19:08	24°♒41'03		
min. Earth dist.	-4643 Sep 16 j 03:39	19°♒45'22	4.07836 AU	
opposition	-4643 Sep 17 j 07:12	19°♒35'57	-2°00'37	
	-4643 Oct 30 j 17:15	15°℞♒		
direct	-4643 Nov 14 j 15:37	14°♒37'08		
	-4643 Nov 29 j 14:44	15°♒		
	-4642 Mar 04 j 14:30	0°♓		
evening set	-4642 Mar 21 j 01:01	3°♓42'40		
conjunction	-4642 Apr 03 j 19:04	6°♓52'01	-1°10'43	
minimum elong	-4642 Apr 03 j 19:08	6°♓52'03	1°10'50	
max. Earth dist.	-4642 Apr 05 j 11:29	7°♓15'14	6.12492 AU	
morning rise	-4642 Apr 17 j 13:51	10°♓01'34		
retrograde	-4642 Aug 22 j 20:50	29°♓02'04		
min. Earth dist.	-4642 Oct 20 j 08:35	24°♓05'44	4.17874 AU	
opposition	-4642 Oct 21 j 04:25	23°♓58'59	-1°20'23	
direct	-4642 Dec 19 j 12:19	18°♓57'13		
	-4641 Mar 21 j 06:48	0°♈		
evening set	-4641 Apr 25 j 22:22	7°♈38'38		
conjunction	-4641 May 09 j 16:07	10°♈43'18	-0°33'38	
minimum elong	-4641 May 09 j 16:10	10°♈43'20	0°33'36	
max. Earth dist.	-4641 May 10 j 11:35	10°♈54'14	6.23371 AU	
morning rise	-4641 May 23 j 08:48	13°♈47'11		
	-4641 Aug 21 j 04:52	0°♉		
retrograde	-4641 Sep 24 j 04:18	1°♉49'36		
	-4641 Oct 27 j 22:29	30°℞♈		
opposition	-4641 Nov 22 j 14:28	26°♈50'08	-0°15'56	
min. Earth dist.	-4641 Nov 22 j 09:21	26°♈51'51	4.28506 AU	
direct	-4640 Jan 22 j 06:20	21°♈46'37		
asc. node	-4640 Feb 22 j 03:44	23°♈13'42		
	-4640 Apr 10 j 00:30	0°♉		
evening set	-4640 May 29 j 04:17	10°♉03'20		
conjunction	-4640 Jun 11 j 16:29	13°♉01'41	0°12'57	
minimum elong	-4640 Jun 11 j 16:28	13°♉01'40	0°13'07	
behind sun begin	-4640 Jun 11 j 11:43	12°♉59'04		
behind sun end	-4640 Jun 11 j 21:13	13°♉04'17		
max. Earth dist.	-4640 Jun 11 j 13:01	12°♉59'47	6.33004 AU	
	-4640 Jun 20 j 15:07	15°♉		
morning rise	-4640 Jun 25 j 01:37	15°♉58'28		
	-4640 Sep 07 j 16:30	0°♊		
retrograde	-4640 Oct 24 j 07:21	3°♊17'56		
	-4640 Dec 10 j 11:03	30°℞♉		
opposition	-4640 Dec 23 j 02:20	28°♉22'21	0°50'36	
min. Earth dist.	-4640 Dec 23 j 11:53	28°♉19'13	4.36427 AU	
direct	-4639 Feb 22 j 21:44	23°♉18'43		
	-4639 May 04 j 22:33	0°♊		
evening set	-4639 Jun 30 j 20:03	11°♊17'59		
conjunction	-4639 Jul 13 j 22:52	14°♊10'12	0°54'30	
minimum elong	-4639 Jul 13 j 22:48	14°♊10'11	0°54'43	
max. Earth dist.	-4639 Jul 12 j 20:47	13°♊55'54	6.38561 AU	
morning rise	-4639 Jul 26 j 22:26	17°♊00'47		
	-4639 Oct 02 j 22:55	0°♋		
retrograde	-4639 Nov 24 j 04:29	4°♋01'40		
	-4638 Jan 16 j 18:34	30°℞♊		
opposition	-4638 Jan 23 j 09:53	29°♊08'57	1°41'17	
min. Earth dist.	-4638 Jan 24 j 09:06	29°♊01'28	4.39393 AU	
direct	-4638 Mar 26 j 23:27	24°♊06'30		
	-4638 Jun 01 j 09:28	0°♋		
evening set	-4638 Aug 01 j 07:38	11°♋59'08		
max. Earth dist.	-4638 Aug 12 j 11:26	14°♋26'28	6.38575 AU	
conjunction	-4638 Aug 14 j 01:43	14°♋47'36	1°20'12	
minimum elong	-4638 Aug 14 j 01:41	14°♋47'35	1°20'26	
morning rise	-4638 Aug 26 j 16:48	17°♋34'42		
	-4638 Oct 29 j 09:54	0°♌		
retrograde	-4638 Dec 25 j 12:32	4°♌43'01		
	-4637 Feb 23 j 03:45	30°℞♋		
opposition	-4637 Feb 24 j 06:18	29°♋51'32	2°03'46	
min. Earth dist.	-4637 Feb 25 j 11:16	29°♋42'18	4.36583 AU	
direct	-4637 Apr 27 j 20:39	24°♋51'20		

Attention, astronomical year style is used: The year -4637 in astronomical counting style is the year 4638 BCE in historical counting style.

	-4637 Jun 28 j 04:46	0°♌	
evening set	-4637 Sep 01 j 07:31	12°♌48'43	
	-4637 Sep 11 j 02:16	15°♌	
max. Earth dist.	-4637 Sep 12 j 03:25	15°♌14'08	6.33062 AU
conjunction	-4637 Sep 13 j 20:10	15°♌37'01	1°23'23
minimum elong	-4637 Sep 13 j 20:11	15°♌37'01	1°23'34
morning rise	-4637 Sep 26 j 07:11	18°♌24'38	
	-4637 Nov 22 j 11:33	0°♍	
retrograde	-4636 Jan 27 j 05:33	6°♍04'17	
opposition	-4636 Mar 28 j 06:47	1°♍12'12	1°51'10
min. Earth dist.	-4636 Mar 29 j 11:02	1°♍03'14	4.28703 AU
	-4636 Apr 06 j 20:19	30°℞♌	
direct	-4636 May 29 j 07:35	26°♌14'48	
	-4636 Jul 19 j 07:41	0°♍	
evening set	-4636 Oct 01 j 14:30	14°♍26'56	
max. Earth dist.	-4636 Oct 12 j 18:40	17°♍00'27	6.23475 AU
conjunction	-4636 Oct 14 j 03:01	17°♍19'01	1°02'03
minimum elong	-4636 Oct 14 j 03:04	17°♍19'03	1°02'07
morning rise	-4636 Oct 26 j 15:38	20°♍11'21	
	-4636 Dec 11 j 12:08	0°♎	
retrograde	-4635 Mar 01 j 14:39	8°♎40'28	
opposition	-4635 May 01 j 19:18	3°♎45'57	1°03'38
min. Earth dist.	-4635 May 02 j 11:37	3°♎40'44	4.17975 AU
	-4635 Jun 04 j 10:19	30°℞♍	
direct	-4635 Jul 01 j 15:15	28°♍51'14	
	-4635 Jul 28 j 16:49	0°♎	
evening set	-4635 Nov 03 j 00:37	17°♎25'29	
conjunction	-4635 Nov 15 j 17:38	20°♎24'05	0°20'19
minimum elong	-4635 Nov 15 j 17:40	20°♎24'06	0°20'16
max. Earth dist.	-4635 Nov 15 j 05:40	20°♎17'04	6.12624 AU
morning rise	-4635 Nov 28 j 12:17	23°♎23'46	
	-4635 Dec 27 j 17:29	0°♏	
retrograde	-4634 Apr 06 j 20:25	12°♏48'52	
desc. node	-4634 Apr 26 j 18:38	12°♏11'25	
opposition	-4634 Jun 06 j 17:58	7°♏50'46	-0°07'49
min. Earth dist.	-4634 Jun 06 j 18:05	7°♏50'43	4.07804 AU
direct	-4634 Aug 05 j 05:58	2°♏57'40	
	-4634 Nov 06 j 21:41	15°♏	
evening set	-4634 Dec 07 j 05:01	21°♏55'58	
conjunction	-4634 Dec 20 j 04:55	25°♏01'19	-0°29'47
minimum elong	-4634 Dec 20 j 04:53	25°♏01'17	0°29'59
max. Earth dist.	-4634 Dec 20 j 17:40	25°♏08'54	6.04102 AU
morning rise	-4633 Jan 02 j 07:56	28°♏08'24	
	-4633 Jan 10 j 05:51	0°♐	
retrograde	-4633 May 14 j 00:13	18°♐16'42	
opposition	-4633 Jul 13 j 11:07	13°♐14'42	-1°19'10
min. Earth dist.	-4633 Jul 12 j 16:53	13°♐20'47	4.01867 AU
direct	-4633 Sep 09 j 19:10	8°♐21'18	
evening set	-4632 Jan 12 j 05:07	27°♐36'47	
	-4632 Jan 22 j 06:15	0°♑	
conjunction	-4632 Jan 25 j 12:32	0°♑46'38	-1°09'56
minimum elong	-4632 Jan 25 j 12:29	0°♑46'36	1°10'10
max. Earth dist.	-4632 Jan 27 j 00:24	1°♑07'59	6.01214 AU
morning rise	-4632 Feb 07 j 23:20	3°♑58'13	
retrograde	-4632 Jun 19 j 00:30	24°♑16'02	
opposition	-4632 Aug 17 j 21:53	19°♑11'16	-2°01'13
min. Earth dist.	-4632 Aug 16 j 18:05	19°♑20'43	4.02497 AU
direct	-4632 Oct 14 j 21:59	14°♑15'23	
	-4631 Feb 01 j 22:13	0°♒	
evening set	-4631 Feb 17 j 06:28	3°♒32'18	
conjunction	-4631 Mar 02 j 20:42	6°♒43'14	-1°23'45
minimum elong	-4631 Mar 02 j 20:42	6°♒43'14	1°23'56
max. Earth dist.	-4631 Mar 04 j 19:27	7°♒10'37	6.05157 AU
morning rise	-4631 Mar 16 j 13:15	9°♒55'15	
	-4631 Apr 07 j 20:48	15°♒	
retrograde	-4631 Jul 24 j 16:24	29°♒41'59	
min. Earth dist.	-4631 Sep 20 j 23:47	24°♒46'25	4.09370 AU
opposition	-4631 Sep 22 j 03:23	24°♒37'00	-1°57'11
direct	-4631 Nov 19 j 13:55	19°♒37'44	
	-4630 Feb 14 j 09:08	0°♓	
evening set	-4630 Mar 26 j 02:55	8°♓38'54	
conjunction	-4630 Apr 08 j 21:00	11°♓47'30	-1°06'41
minimum elong	-4630 Apr 08 j 21:04	11°♓47'33	1°06'46
max. Earth dist.	-4630 Apr 10 j 10:10	12°♓08'47	6.14308 AU
morning rise	-4630 Apr 22 j 15:52	14°♓56'14	
	-4630 Jul 08 j 14:55	0°♈	
retrograde	-4630 Aug 27 j 09:18	3°♈46'57	
	-4630 Oct 16 j 08:30	30°℞♓	
opposition	-4630 Oct 25 j 17:59	28°♓44'12	-1°12'21
min. Earth dist.	-4630 Oct 25 j 00:10	28°♓50'16	4.19770 AU
direct	-4630 Dec 24 j 06:57	23°♓42'02	
	-4629 Feb 28 j 20:59	0°♈	
evening set	-4629 Apr 30 j 17:42	12°♈18'19	
conjunction	-4629 May 14 j 11:04	15°♈22'00	-0°27'26
minimum elong	-4629 May 14 j 11:06	15°♈22'01	0°27'23
max. Earth dist.	-4629 May 15 j 04:29	15°♈31'44	6.25211 AU
morning rise	-4629 May 28 j 02:44	18°♈24'42	
	-4629 Jul 24 j 07:37	0°♉	
retrograde	-4629 Sep 28 j 11:01	6°♉18'45	
opposition	-4629 Nov 26 j 22:42	1°♉19'49	-0°06'29
min. Earth dist.	-4629 Nov 26 j 19:33	1°♉20'52	4.30119 AU
	-4629 Dec 07 j 00:43	30°℞♈	
asc. node	-4628 Jan 03 j 04:39	27°♈08'47	
direct	-4628 Jan 26 j 18:51	26°♈16'11	
	-4628 Mar 17 j 18:17	0°♉	
evening set	-4628 Jun 02 j 17:10	14°♉28'56	
	-4628 Jun 05 j 02:00	15°♉	
conjunction	-4628 Jun 16 j 04:03	17°♉26'15	0°19'12
minimum elong	-4628 Jun 16 j 04:01	17°♉26'14	0°19'21
max. Earth dist.	-4628 Jun 15 j 19:14	17°♉21'25	6.34249 AU
morning rise	-4628 Jun 29 j 12:05	20°♉22'01	
	-4628 Aug 15 j 15:31	0°♊	
retrograde	-4628 Oct 28 j 12:12	7°♊36'55	
opposition	-4628 Dec 27 j 08:22	2°♊41'46	0°58'45
min. Earth dist.	-4628 Dec 27 j 21:05	2°♊37'36	4.37228 AU
	-4627 Jan 18 j 02:59	30°℞♉	
direct	-4627 Feb 27 j 07:52	27°♉38'07	
	-4627 Apr 08 j 20:45	0°♊	
evening set	-4627 Jul 05 j 03:48	15°♊35'41	
max. Earth dist.	-4627 Jul 17 j 01:39	18°♊12'00	6.38840 AU
conjunction	-4627 Jul 18 j 05:30	18°♊27'17	0°59'06
minimum elong	-4627 Jul 18 j 05:26	18°♊27'15	0°59'20
morning rise	-4627 Jul 31 j 03:38	21°♊17'12	
	-4627 Sep 11 j 11:53	0°♋	
retrograde	-4627 Nov 28 j 08:47	8°♋17'57	
opposition	-4626 Jan 27 j 16:40	3°♋25'31	1°46'11
min. Earth dist.	-4626 Jan 28 j 16:48	3°♋17'45	4.39154 AU
	-4626 Feb 26 j 02:12	30°℞♊	
direct	-4626 Mar 31 j 06:27	28°♊23'18	
	-4626 May 03 j 16:03	0°♋	
evening set	-4626 Aug 05 j 13:35	16°♋16'46	
max. Earth dist.	-4626 Aug 16 j 13:50	18°♋42'32	6.37814 AU
conjunction	-4626 Aug 18 j 06:34	19°♋05'05	1°22'02

Attention, astronomical year style is used: The year -4626 in astronomical counting style is the year 4627 BCE in historical counting style.

minimum elong	-4626	Aug	18	j 06:33	19°♋05'04	1°22'15	retrograde	-4620	Jun 24	j 03:44	29°♌25'30	
morning rise	-4626	Aug	30	j 20:58	21°♋52'10		opposition	-4620	Aug 22	j 23:09	24°♌20'36	-2°03'31
	-4626	Oct	08	j 17:50	0°♌		min. Earth dist.	-4620	Aug 21	j 18:28	24°♌30'20	4.03402 AU
retrograde	-4626	Dec	29	j 23:27	9°♌04'35		direct	-4620	Oct 19	j 23:26	19°♌24'18	
opposition	-4625	Feb	28	j 17:07	4°♌13'10	2°04'11		-4619	Jan 14	j 15:01	0°♒	
min. Earth dist.	-4625	Mar	01	j 23:47	4°♌03'24	4.35353 AU	evening set	-4619	Feb 22	j 11:34	8°♒38'50	
	-4625	Apr	09	j 10:05	30°℞♋							
direct	-4625	May	02	j 07:15	29°♋13'15		conjunction	-4619	Mar 08	j 02:18	11°♒49'26	-1°23'08
	-4625	May	25	j 04:01	0°♌		minimum elong	-4619	Mar 08	j 02:19	11°♒49'26	1°23'19
	-4625	Aug	26	j 13:02	15°♌		max. Earth dist.	-4619	Mar 09	j 23:21	12°♒15'44	6.06466 AU
evening set	-4625	Sep	05	j 14:24	17°♌13'42		morning rise	-4619	Mar 21	j 19:29	15°♒01'04	
max. Earth dist.	-4625	Sep	16	j 10:19	19°♌39'40	6.31458 AU		-4619	Mar 21	j 17:39	15°♒	
								-4619	Jun 03	j 16:45	0°♓	
conjunction	-4625	Sep	18	j 02:54	20°♌02'32	1°21'51	retrograde	-4619	Jul 29	j 10:47	4°♓39'56	
minimum elong	-4625	Sep	18	j 02:56	20°♌02'33	1°22'01		-4619	Sep 23	j 21:33	30°℞♒	
morning rise	-4625	Sep	30	j 13:54	22°♌50'49		opposition	-4619	Sep 26	j 22:19	29°♒35'08	-1°52'59
	-4625	Nov	02	j 18:38	0°♍		min. Earth dist.	-4619	Sep 25	j 19:34	29°♒44'17	4.10939 AU
retrograde	-4624	Jan	31	j 21:09	10°♍38'00		direct	-4619	Nov 24	j 12:12	24°♒35'25	
opposition	-4624	Apr	01	j 23:43	5°♍45'41	1°46'31		-4618	Jan 23	j 14:14	0°♓	
min. Earth dist.	-4624	Apr	03	j 01:58	5°♍37'20	4.26839 AU	evening set	-4618	Mar 31	j 04:00	13°♓32'37	
direct	-4624	Jun	02	j 19:40	0°♍48'42							
evening set	-4624	Oct	06	j 01:30	19°♍05'17		conjunction	-4618	Apr 13	j 22:24	16°♓40'35	-1°02'13
max. Earth dist.	-4624	Oct	17	j 09:15	21°♍41'30	6.21523 AU	minimum elong	-4618	Apr 13	j 22:28	16°♓40'37	1°02'17
							max. Earth dist.	-4618	Apr 15	j 10:07	17°♓00'57	6.16029 AU
conjunction	-4624	Oct	18	j 14:29	21°♍58'22	0°57'12	morning rise	-4618	Apr 27	j 16:56	19°♓48'27	
minimum elong	-4624	Oct	18	j 14:32	21°♍58'24	0°57'14		-4618	Jun 14	j 20:30	0°♈	
morning rise	-4624	Oct	31	j 03:44	24°♍51'48		retrograde	-4618	Aug 31	j 22:40	8°♈30'10	
	-4624	Nov	23	j 01:43	0°♎		opposition	-4618	Oct 30	j 07:00	3°♈27'59	-1°03'55
retrograde	-4623	Mar	06	j 16:35	13°♎30'15		min. Earth dist.	-4618	Oct 29	j 15:22	3°♈33'17	4.21467 AU
opposition	-4623	May	06	j 19:12	8°♎35'20	0°54'34		-4618	Nov 27	j 16:19	30°℞♓	
min. Earth dist.	-4623	May	07	j 10:01	8°♎30'34	4.16065 AU	direct	-4618	Dec 29	j 00:16	28°♓25'36	
direct	-4623	Jul	06	j 11:14	3°♎40'57			-4617	Jan 29	j 18:33	0°♈	
evening set	-4623	Nov	07	j 18:08	22°♎19'49		evening set	-4617	May 05	j 13:01	16°♈57'51	
conjunction	-4623	Nov	20	j 12:02	25°♎19'32	0°13'21	conjunction	-4617	May 19	j 05:40	20°♈00'38	-0°21'04
minimum elong	-4623	Nov	20	j 12:03	25°♎19'33	0°13'16	minimum elong	-4617	May 19	j 05:42	20°♈00'39	0°20'59
behind sun begin	-4623	Nov	20	j 07:15	25°♎16'44		max. Earth dist.	-4617	May 19	j 18:15	20°♈07'38	6.26752 AU
behind sun end	-4623	Nov	20	j 16:51	25°♎22'22		morning rise	-4617	Jun 01	j 20:38	23°♈02'22	
max. Earth dist.	-4623	Nov	20	j 03:25	25°♎14'28	6.10945 AU		-4617	Jul 04	j 12:17	0°♉	
morning rise	-4623	Dec	03	j 07:56	28°♎20'29		retrograde	-4617	Oct 02	j 18:30	10°♉49'34	
	-4623	Dec	10	j 10:54	0°♏		asc. node	-4617	Nov 13	j 18:57	8°♉06'06	
	-4622	Feb	27	j 01:58	15°♏		opposition	-4617	Dec 01	j 07:48	5°♉51'12	0°03'03
desc. node	-4622	Mar	06	j 02:55	15°♏49'19		min. Earth dist.	-4617	Dec 01	j 07:04	5°♉51'27	4.31397 AU
retrograde	-4622	Apr	12	j 01:18	17°♏53'36		direct	-4616	Jan 31	j 08:20	0°♉47'28	
	-4622	May	26	j 10:57	15°℞♏			-4616	May 19	j 20:02	15°♉	
opposition	-4622	Jun	11	j 22:19	12°♏54'55	-0°18'39	evening set	-4616	Jun 07	j 06:47	18°♉57'32	
min. Earth dist.	-4622	Jun	11	j 18:22	12°♏56'13	4.06527 AU						
direct	-4622	Aug	10	j 04:21	8°♏01'57		conjunction	-4616	Jun 20	j 16:35	21°♉54'01	0°25'24
	-4622	Oct	17	j 14:50	15°♏		minimum elong	-4616	Jun 20	j 16:33	21°♉54'00	0°25'34
evening set	-4622	Dec	12	j 05:32	27°♏03'33		max. Earth dist.	-4616	Jun 20	j 05:25	21°♉47'53	6.35178 AU
	-4622	Dec	24	j 14:15	0°♐		morning rise	-4616	Jul 03	j 23:09	24°♉48'51	
								-4616	Jul 28	j 07:05	0°♊	
conjunction	-4622	Dec	25	j 06:29	0°♐09'41	-0°36'33	retrograde	-4616	Nov 01	j 18:22	12°♊00'27	
minimum elong	-4622	Dec	25	j 06:26	0°♐09'39	0°36'45	opposition	-4616	Dec 31	j 16:11	7°♊05'49	1°06'42
max. Earth dist.	-4622	Dec	25	j 23:44	0°♐19'57	6.03330 AU	min. Earth dist.	-4615	Jan 01	j 06:42	7°♊01'05	4.37765 AU
morning rise	-4621	Jan	07	j 10:35	3°♐17'35		direct	-4615	Mar 03	j 18:24	2°♊02'22	
retrograde	-4621	May	19	j 07:02	23°♐29'14		evening set	-4615	Jul 09	j 13:37	19°♊59'03	
opposition	-4621	Jul	18	j 16:10	18°♐26'41	-1°27'30	max. Earth dist.	-4615	Jul 21	j 06:04	22°♊32'35	6.38920 AU
min. Earth dist.	-4621	Jul	17	j 20:08	18°♐33'23	4.01679 AU						
direct	-4621	Sep	14	j 23:02	13°♐33'01		conjunction	-4615	Jul 22	j 13:53	22°♊50'03	1°03'29
	-4620	Jan	05	j 09:27	0°♑		minimum elong	-4615	Jul 22	j 13:50	22°♊50'02	1°03'43
evening set	-4620	Jan	17	j 09:57	2°♑49'00		morning rise	-4615	Aug 04	j 10:58	25°♊39'28	
								-4615	Aug 24	j 17:37	0°♋	
conjunction	-4620	Jan	30	j 18:26	5°♑59'06	-1°13'45	retrograde	-4615	Dec 02	j 17:38	12°♋40'49	
minimum elong	-4620	Jan	30	j 18:22	5°♑59'04	1°13'59	opposition	-4614	Feb 01	j 02:11	7°♋48'39	1°50'39
max. Earth dist.	-4620	Feb	01	j 09:59	6°♑22'36	6.01588 AU	min. Earth dist.	-4614	Feb 02	j 04:23	7°♋40'14	4.38806 AU
morning rise	-4620	Feb	13	j 06:05	9°♑10'52		direct	-4614	Apr 04	j 17:34	2°♋46'39	

Attention, astronomical year style is used: The year -4614 in astronomical counting style is the year 4615 BCE in historical counting style.

evening set	-4614 Aug 09 j 21:28	20°♋41'07	
max. Earth dist.	-4614 Aug 20 j 21:24	23°♋07'00	6.37054 AU
conjunction	-4614 Aug 22 j 13:46	23°♋29'24	1°23'28
minimum elong	-4614 Aug 22 j 13:44	23°♋29'23	1°23'41
morning rise	-4614 Sep 04 j 03:16	26°♋16'27	
	-4614 Sep 21 j 06:51	0°♌	
retrograde	-4613 Jan 03 j 10:37	13°♌33'02	
opposition	-4613 Mar 05 j 06:39	8°♌41'38	2°03'55
min. Earth dist.	-4613 Mar 06 j 12:31	8°♌32'08	4.34253 AU
direct	-4613 May 06 j 18:14	3°♌42'10	
	-4613 Aug 09 j 16:20	15°♌	
evening set	-4613 Sep 09 j 23:15	21°♌44'56	
max. Earth dist.	-4613 Sep 20 j 19:33	24°♌11'39	6.30112 AU
conjunction	-4613 Sep 22 j 11:24	24°♌34'11	1°19'48
minimum elong	-4613 Sep 22 j 11:26	24°♌34'13	1°19'57
morning rise	-4613 Oct 04 j 22:29	27°♌23'02	
	-4613 Oct 16 j 16:16	0°♍	
retrograde	-4612 Feb 05 j 16:50	15°♍17'00	
opposition	-4612 Apr 06 j 18:49	10°♍24'27	1°41'08
min. Earth dist.	-4612 Apr 07 j 20:30	10°♍16'17	4.25337 AU
direct	-4612 Jun 07 j 12:20	5°♍27'51	
evening set	-4612 Oct 10 j 13:38	23°♍47'25	
max. Earth dist.	-4612 Oct 22 j 00:49	26°♍26'07	6.20027 AU
conjunction	-4612 Oct 23 j 03:09	26°♍41'21	0°51'59
minimum elong	-4612 Oct 23 j 03:13	26°♍41'22	0°52'01
morning rise	-4612 Nov 04 j 17:06	29°♍35'44	
	-4612 Nov 06 j 11:22	0°♎	
retrograde	-4611 Mar 11 j 15:56	18°♎21'38	
opposition	-4611 May 11 j 19:03	13°♎26'13	0°45'07
min. Earth dist.	-4611 May 12 j 06:27	13°♎22'34	4.14706 AU
direct	-4611 Jul 11 j 05:26	8°♎32'10	
evening set	-4611 Nov 12 j 11:21	27°♎13'42	
	-4611 Nov 24 j 05:55	0°♏	
conjunction	-4611 Nov 25 j 06:04	0°♏14'15	0°06'23
minimum elong	-4611 Nov 25 j 06:04	0°♏14'15	0°06'16
behind sun begin	-4611 Nov 24 j 22:27	0°♏09'47	
behind sun end	-4611 Nov 25 j 13:42	0°♏18'44	
max. Earth dist.	-4611 Nov 25 j 01:21	0°♏11'30	6.09849 AU
morning rise	-4611 Dec 08 j 03:00	3°♏16'08	
desc. node	-4610 Jan 14 j 07:01	11°♏35'54	
	-4610 Jan 31 j 10:58	15°♏	
retrograde	-4610 Apr 17 j 05:19	22°♏55'02	
opposition	-4610 Jun 17 j 00:57	17°♏55'43	-0°29'10
min. Earth dist.	-4610 Jun 16 j 18:48	17°♏57'44	4.05791 AU
	-4610 Jul 11 j 01:19	15°℞♏	
direct	-4610 Aug 15 j 04:10	13°♏02'45	
	-4610 Sep 18 j 20:44	15°♏	
	-4610 Dec 08 j 06:03	0°♐	
evening set	-4610 Dec 17 j 03:47	2°♐05'43	
conjunction	-4610 Dec 30 j 05:46	5°♐12'25	-0°42'52
minimum elong	-4610 Dec 30 j 05:43	5°♐12'23	0°43'04
max. Earth dist.	-4610 Dec 31 j 03:28	5°♐25'21	6.03012 AU
morning rise	-4609 Jan 12 j 10:52	8°♐20'53	
retrograde	-4609 May 24 j 10:17	28°♐33'52	
opposition	-4609 Jul 23 j 17:37	23°♐30'52	-1°34'52
min. Earth dist.	-4609 Jul 22 j 19:48	23°♐38'11	4.01843 AU
direct	-4609 Sep 19 j 22:29	18°♐36'56	
	-4609 Dec 18 j 19:38	0°♑	
evening set	-4608 Jan 22 j 11:36	7°♑52'24	
conjunction	-4608 Feb 04 j 20:48	11°♑02'33	-1°16'52
minimum elong	-4608 Feb 04 j 20:45	11°♑02'32	1°17'05
max. Earth dist.	-4608 Feb 06 j 12:37	11°♑26'09	6.02173 AU
morning rise	-4608 Feb 18 j 09:24	14°♑14'23	
	-4608 May 05 j 17:38	0°♒	
retrograde	-4608 Jun 29 j 00:49	4°♒25'05	
	-4608 Aug 22 j 22:12	30°℞♑	
opposition	-4608 Aug 27 j 20:00	29°♑19'58	-2°04'47
min. Earth dist.	-4608 Aug 26 j 14:54	29°♑29'53	4.04352 AU
direct	-4608 Oct 24 j 21:16	24°♑23'09	
	-4608 Dec 24 j 08:48	0°♒	
evening set	-4607 Feb 27 j 12:38	13°♒35'23	
	-4607 Mar 05 j 14:30	15°♒	
conjunction	-4607 Mar 13 j 04:14	16°♒45'45	-1°21'55
minimum elong	-4607 Mar 13 j 04:16	16°♒45'46	1°22'05
max. Earth dist.	-4607 Mar 15 j 01:27	17°♒12'05	6.07699 AU
morning rise	-4607 Mar 26 j 21:41	19°♒56'57	
	-4607 May 12 j 03:40	0°♓	
retrograde	-4607 Aug 03 j 03:51	9°♓28'27	
opposition	-4607 Oct 01 j 13:47	4°♓23'55	-1°48'09
min. Earth dist.	-4607 Sep 30 j 12:59	4°♓32'23	4.12309 AU
	-4607 Nov 10 j 08:49	30°℞♒	
direct	-4607 Nov 29 j 06:57	29°♒23'48	
	-4607 Dec 18 j 08:42	0°♓	
evening set	-4606 Apr 05 j 01:39	18°♓17'45	
conjunction	-4606 Apr 18 j 20:05	21°♓25'10	-0°57'29
minimum elong	-4606 Apr 18 j 20:09	21°♓25'13	0°57'32
max. Earth dist.	-4606 Apr 20 j 04:10	21°♓43'24	6.17424 AU
morning rise	-4606 May 02 j 14:36	24°♓32'24	
	-4606 May 27 j 10:30	0°♈	
retrograde	-4606 Sep 05 j 08:10	13°♈06'37	
opposition	-4606 Nov 03 j 17:40	8°♈04'54	-0°55'20
min. Earth dist.	-4606 Nov 03 j 03:35	8°♈09'40	4.22761 AU
direct	-4605 Jan 02 j 14:38	3°♈02'14	
evening set	-4605 May 10 j 06:08	21°♈31'53	
conjunction	-4605 May 23 j 22:11	24°♈33'57	-0°14'42
minimum elong	-4605 May 23 j 22:13	24°♈33'58	0°14'37
behind sun begin	-4605 May 23 j 19:00	24°♈32'11	
behind sun end	-4605 May 24 j 01:26	24°♈35'44	
max. Earth dist.	-4605 May 24 j 07:28	24°♈39'05	6.27876 AU
morning rise	-4605 Jun 06 j 12:14	27°♈34'51	
	-4605 Jun 17 j 13:31	0°♉	
	-4605 Sep 24 j 00:38	15°♉	
asc. node	-4605 Sep 25 j 03:01	15°♉02'41	
retrograde	-4605 Oct 07 j 02:56	15°♉16'48	
	-4605 Oct 20 j 03:22	15°℞♉	
opposition	-4605 Dec 05 j 16:00	10°♉19'02	0°12'23
min. Earth dist.	-4605 Dec 05 j 17:54	10°♉18'24	4.32265 AU
direct	-4604 Feb 04 j 20:41	5°♉15'18	
	-4604 May 02 j 06:51	15°♉	
evening set	-4604 Jun 11 j 19:40	23°♉23'55	
conjunction	-4604 Jun 25 j 04:16	26°♉19'42	0°31'23
minimum elong	-4604 Jun 25 j 04:14	26°♉19'40	0°31'33
max. Earth dist.	-4604 Jun 24 j 13:17	26°♉11'28	6.35722 AU
morning rise	-4604 Jul 08 j 09:42	29°♉13'50	
	-4604 Jul 11 j 22:26	0°♊	
retrograde	-4604 Nov 06 j 01:17	16°♊23'28	
opposition	-4603 Jan 05 j 00:27	11°♊29'14	1°14'14
min. Earth dist.	-4603 Jan 05 j 16:34	11°♊23'59	4.37988 AU
direct	-4603 Mar 08 j 04:42	6°♊25'55	
evening set	-4603 Jul 13 j 23:14	24°♊22'29	
conjunction	-4603 Jul 26 j 22:23	27°♊13'02	1°07'28
minimum elong	-4603 Jul 26 j 22:20	27°♊13'00	1°07'42
max. Earth dist.	-4603 Jul 25 j 14:19	26°♊55'24	6.38807 AU

Attention, astronomical year style is used: The year -4603 in astronomical counting style is the year 4604 BCE in historical counting style.

morning rise	-4603 Aug 08 j 18:08	0°♋01'58	
	-4603 Aug 08 j 14:32	0°♋	
retrograde	-4603 Dec 07 j 02:10	17°♋04'33	
opposition	-4602 Feb 05 j 12:41	12°♋12'38	1°54'29
min. Earth dist.	-4602 Feb 06 j 15:21	12°♋04'05	4.38382 AU
direct	-4602 Apr 09 j 04:14	7°♋11'01	
evening set	-4602 Aug 14 j 05:46	25°♋06'17	
max. Earth dist.	-4602 Aug 25 j 03:23	27°♋31'17	6.36337 AU
conjunction	-4602 Aug 26 j 21:05	27°♋54'28	1°24'25
minimum elong	-4602 Aug 26 j 21:04	27°♋54'27	1°24'37
	-4602 Sep 05 j 07:00	0°♌	
morning rise	-4602 Sep 08 j 10:05	0°♌41'34	
	-4602 Nov 23 j 19:26	15°♌	
retrograde	-4601 Jan 08 j 00:20	18°♌02'06	
	-4601 Feb 23 j 03:25	15°℞♌	
opposition	-4601 Mar 09 j 20:56	13°♌10'38	2°02'52
min. Earth dist.	-4601 Mar 11 j 02:53	13°♌01'06	4.33285 AU
direct	-4601 May 11 j 07:23	8°♌11'32	
	-4601 Jul 21 j 08:21	15°♌	
evening set	-4601 Sep 14 j 07:54	26°♌15'52	
max. Earth dist.	-4601 Sep 25 j 06:40	28°♌44'21	6.28974 AU
conjunction	-4601 Sep 26 j 20:05	29°♌05'34	1°17'17
minimum elong	-4601 Sep 26 j 20:07	29°♌05'35	1°17'24
	-4601 Sep 30 j 20:02	0°♍	
morning rise	-4601 Oct 09 j 07:06	1°♍54'54	
retrograde	-4600 Feb 10 j 10:06	19°♍54'48	
opposition	-4600 Apr 11 j 13:28	15°♍01'57	1°35'05
min. Earth dist.	-4600 Apr 12 j 13:02	14°♍54'27	4.24081 AU
direct	-4600 Jun 12 j 02:40	10°♍05'48	
evening set	-4600 Oct 15 j 01:03	28°♍27'28	
	-4600 Oct 21 j 17:18	0°♎	
conjunction	-4600 Oct 27 j 14:56	1°♎22'08	0°46'27
minimum elong	-4600 Oct 27 j 14:59	1°♎22'09	0°46'28
max. Earth dist.	-4600 Oct 26 j 14:31	1°♎07'58	6.18751 AU
morning rise	-4600 Nov 09 j 05:43	4°♎17'25	
retrograde	-4599 Mar 16 j 15:40	23°♎10'17	
opposition	-4599 May 16 j 17:56	18°♎14'22	0°35'24
min. Earth dist.	-4599 May 17 j 03:26	18°♎11'18	4.13469 AU
direct	-4599 Jul 16 j 00:26	13°♎20'32	
	-4599 Nov 08 j 05:42	0°♏	
evening set	-4599 Nov 17 j 03:31	2°♏04'37	
desc. node	-4599 Nov 24 j 17:22	3°♏51'40	
conjunction	-4599 Nov 29 j 23:13	5°♏06'02	-0°00'41
minimum elong	-4599 Nov 29 j 23:14	5°♏06'03	0°00'49
behind sun begin	-4599 Nov 29 j 15:09	5°♏01'18	
behind sun end	-4599 Nov 30 j 07:19	5°♏10'48	
max. Earth dist.	-4599 Nov 29 j 22:29	5°♏05'39	6.08776 AU
morning rise	-4599 Dec 12 j 21:09	8°♏08'52	
	-4598 Jan 12 j 00:53	15°♏	
retrograde	-4598 Apr 22 j 07:33	27°♏53'31	
opposition	-4598 Jun 22 j 01:59	22°♏53'43	-0°39'25
min. Earth dist.	-4598 Jun 21 j 17:39	22°♏56'28	4.04993 AU
direct	-4598 Aug 20 j 01:19	18°♏00'47	
	-4598 Nov 21 j 01:50	0°♐	
evening set	-4598 Dec 22 j 01:49	7°♐05'59	
conjunction	-4597 Jan 04 j 04:39	10°♐13'17	-0°48'51
minimum elong	-4597 Jan 04 j 04:35	10°♐13'15	0°49'04
max. Earth dist.	-4597 Jan 05 j 03:50	10°♐27'07	6.02537 AU
morning rise	-4597 Jan 17 j 10:56	13°♐22'26	
	-4597 Apr 10 j 09:34	0°♑	
retrograde	-4597 May 29 j 11:56	3°♑37'32	
	-4597 Jul 17 j 22:52	30°℞♐	
opposition	-4597 Jul 28 j 18:01	28°♐34'06	-1°41'35
min. Earth dist.	-4597 Jul 27 j 18:27	28°♐42'01	4.01757 AU
direct	-4597 Sep 24 j 21:13	23°♐39'49	
	-4597 Nov 28 j 04:22	0°♑	
evening set	-4596 Jan 27 j 13:25	12°♑56'09	
conjunction	-4596 Feb 09 j 23:46	16°♑06'37	-1°19'26
minimum elong	-4596 Feb 09 j 23:43	16°♑06'36	1°19'39
max. Earth dist.	-4596 Feb 11 j 18:14	16°♑31'46	6.02473 AU
morning rise	-4596 Feb 23 j 13:04	19°♑18'37	
	-4596 Apr 12 j 03:05	0°♒	
retrograde	-4596 Jul 04 j 00:42	9°♒26'30	
opposition	-4596 Sep 01 j 17:22	4°♒21'19	-2°05'12
min. Earth dist.	-4596 Aug 31 j 13:09	4°♒30'56	4.05005 AU
	-4596 Oct 11 j 03:06	30°℞♑	
direct	-4596 Oct 29 j 19:53	29°♑24'03	
	-4596 Nov 17 j 14:16	0°♒	
	-4595 Feb 16 j 21:58	15°♒	
evening set	-4595 Mar 04 j 15:09	18°♒35'12	
conjunction	-4595 Mar 18 j 07:19	21°♒45'26	-1°20'07
minimum elong	-4595 Mar 18 j 07:22	21°♒45'28	1°20'15
max. Earth dist.	-4595 Mar 20 j 03:00	22°♒10'47	6.08627 AU
morning rise	-4595 Apr 01 j 01:22	24°♒56'26	
	-4595 Apr 23 j 12:08	0°♓	
retrograde	-4595 Aug 07 j 20:16	14°♓21'30	
min. Earth dist.	-4595 Oct 05 j 06:01	9°♓25'34	4.13415 AU
opposition	-4595 Oct 06 j 06:25	9°♓17'14	-1°42'31
direct	-4595 Dec 04 j 02:00	4°♓16'41	
evening set	-4594 Apr 10 j 01:34	23°♓08'27	
conjunction	-4594 Apr 23 j 20:04	26°♓15'23	-0°52'15
minimum elong	-4594 Apr 23 j 20:08	26°♓15'26	0°52'17
max. Earth dist.	-4594 Apr 25 j 01:07	26°♓31'51	6.18636 AU
morning rise	-4594 May 07 j 14:19	29°♓21'59	
	-4594 May 10 j 10:08	0°♈	
retrograde	-4594 Sep 09 j 22:26	17°♈49'13	
opposition	-4594 Nov 08 j 06:31	12°♈48'02	-0°46'13
min. Earth dist.	-4594 Nov 07 j 19:12	12°♈51'52	4.23950 AU
direct	-4593 Jan 07 j 08:32	7°♈45'08	
evening set	-4593 May 15 j 01:32	26°♈12'22	
conjunction	-4593 May 28 j 16:56	29°♈13'42	-0°08'06
minimum elong	-4593 May 28 j 16:57	29°♈13'43	0°08'00
behind sun begin	-4593 May 28 j 09:35	29°♈09'39	
behind sun end	-4593 May 29 j 00:19	29°♈17'47	
max. Earth dist.	-4593 May 28 j 23:30	29°♈17'20	6.28967 AU
	-4593 Jun 01 j 04:19	0°♉	
morning rise	-4593 Jun 11 j 06:01	2°♉13'46	
asc. node	-4593 Aug 04 j 20:59	13°♉17'15	
	-4593 Aug 15 j 07:33	15°♉	
retrograde	-4593 Oct 11 j 11:43	19°♉50'29	
	-4593 Dec 09 j 06:08	15°℞♉	
opposition	-4593 Dec 10 j 02:35	14°♉53'13	0°21'53
min. Earth dist.	-4593 Dec 10 j 05:30	14°♉52'15	4.33208 AU
direct	-4592 Feb 09 j 10:02	9°♉49'29	
	-4592 Apr 10 j 16:41	15°♉	
evening set	-4592 Jun 16 j 10:26	27°♉56'07	
	-4592 Jun 25 j 20:49	0°♊	
conjunction	-4592 Jun 29 j 17:43	0°♊51'03	0°37'19
minimum elong	-4592 Jun 29 j 17:40	0°♊51'02	0°37'31
max. Earth dist.	-4592 Jun 29 j 00:44	0°♊41'43	6.36473 AU
morning rise	-4592 Jul 12 j 21:45	3°♊44'19	
retrograde	-4592 Nov 10 j 10:37	20°♊51'11	
opposition	-4591 Jan 09 j 10:38	15°♊57'23	1°21'27
min. Earth dist.	-4591 Jan 10 j 04:31	15°♊51'35	4.38527 AU

Attention, astronomical year style is used: The year -4591 in astronomical counting style is the year 4592 BCE in historical counting style.

direct	-4591 Mar 12 j 18:04	10°♊54'17	
evening set	-4591 Jul 18 j 09:57	28°♊49'14	
	-4591 Jul 23 j 19:20	0°♋	
max. Earth dist.	-4591 Jul 29 j 21:50	1°♋20'28	6.39083 AU
conjunction	-4591 Jul 31 j 07:45	1°♋39'07	1°11'08
minimum elong	-4591 Jul 31 j 07:42	1°♋39'05	1°11'21
morning rise	-4591 Aug 13 j 02:21	4°♋27'27	
retrograde	-4591 Dec 11 j 11:14	21°♋29'52	
opposition	-4590 Feb 09 j 23:47	16°♋38'02	1°57'38
min. Earth dist.	-4590 Feb 11 j 02:43	16°♋29'24	4.38407 AU
direct	-4590 Apr 13 j 15:40	11°♋36'41	
evening set	-4590 Aug 18 j 13:30	29°♋31'00	
	-4590 Aug 20 j 18:01	0°♌	
max. Earth dist.	-4590 Aug 29 j 11:57	1°♌56'34	6.36105 AU
conjunction	-4590 Aug 31 j 04:06	2°♌18'55	1°24'51
minimum elong	-4590 Aug 31 j 04:06	2°♌18'55	1°25'04
morning rise	-4590 Sep 12 j 16:17	5°♌05'48	
	-4590 Oct 30 j 18:20	15°♌	
retrograde	-4589 Jan 12 j 11:36	22°♌28'39	
opposition	-4589 Mar 14 j 10:18	17°♌37'05	2°01'04
min. Earth dist.	-4589 Mar 15 j 15:50	17°♌27'43	4.32797 AU
	-4589 Apr 05 j 03:39	15°℞♌	
direct	-4589 May 15 j 19:19	12°♌38'23	
	-4589 Jun 25 j 02:10	15°♌	
	-4589 Sep 15 j 11:05	0°♍	
evening set	-4589 Sep 18 j 14:50	0°♍42'34	
max. Earth dist.	-4589 Sep 29 j 13:06	3°♍11'04	6.28259 AU
conjunction	-4589 Oct 01 j 02:43	3°♍32'27	1°14'20
minimum elong	-4589 Oct 01 j 02:46	3°♍32'28	1°14'26
morning rise	-4589 Oct 13 j 14:00	6°♍22'09	
retrograde	-4588 Feb 15 j 01:57	24°♍26'42	
opposition	-4588 Apr 16 j 05:50	19°♍33'27	1°28'31
min. Earth dist.	-4588 Apr 17 j 04:16	19°♍26'18	4.23158 AU
direct	-4588 Jun 16 j 16:11	14°♍37'34	
	-4588 Oct 06 j 05:11	0°♎	
evening set	-4588 Oct 19 j 09:49	3°♎00'25	
max. Earth dist.	-4588 Oct 31 j 02:59	5°♎43'19	6.17718 AU
conjunction	-4588 Nov 01 j 00:23	5°♎55'45	0°40'46
minimum elong	-4588 Nov 01 j 00:26	5°♎55'47	0°40'46
morning rise	-4588 Nov 13 j 15:45	8°♎51'47	
retrograde	-4587 Mar 21 j 11:18	27°♎50'39	
opposition	-4587 May 21 j 13:13	22°♎54'17	0°25'42
min. Earth dist.	-4587 May 21 j 21:15	22°♎51'42	4.12394 AU
direct	-4587 Jul 20 j 15:45	18°♎00'40	
desc. node	-4587 Oct 06 j 14:24	26°♎38'40	
	-4587 Oct 22 j 20:25	0°♏	
evening set	-4587 Nov 21 j 17:01	6°♏47'10	
conjunction	-4587 Dec 04 j 13:28	9°♏49'24	-0°07'30
minimum elong	-4587 Dec 04 j 13:27	9°♏49'24	0°07'37
behind sun begin	-4587 Dec 04 j 06:06	9°♏45'04	
behind sun end	-4587 Dec 04 j 20:48	9°♏53'44	
max. Earth dist.	-4587 Dec 04 j 13:45	9°♏49'35	6.07748 AU
morning rise	-4587 Dec 17 j 12:37	12°♏53'11	
	-4587 Dec 26 j 13:49	15°♏	
	-4586 Mar 15 j 18:11	0°♐	
retrograde	-4586 Apr 27 j 06:03	2°♐43'34	
	-4586 Jun 09 j 00:03	30°℞♏	
opposition	-4586 Jun 26 j 23:26	27°♏43'15	-0°49'05
min. Earth dist.	-4586 Jun 26 j 12:58	27°♏46'42	4.04112 AU
direct	-4586 Aug 24 j 19:09	22°♏50'12	
	-4586 Nov 01 j 22:09	0°♐	
evening set	-4586 Dec 26 j 21:02	11°♐58'24	
conjunction	-4585 Jan 09 j 01:05	15°♐06'29	-0°54'19
minimum elong	-4585 Jan 09 j 01:02	15°♐06'26	0°54'32
max. Earth dist.	-4585 Jan 10 j 03:54	15°♐22'28	6.01891 AU
morning rise	-4585 Jan 22 j 08:19	18°♐16'21	
	-4585 Mar 16 j 20:27	0°♑	
retrograde	-4585 Jun 03 j 13:24	8°♑34'18	
opposition	-4585 Aug 02 j 15:47	3°♑30'34	-1°47'21
min. Earth dist.	-4585 Aug 01 j 16:12	3°♑38'31	4.01435 AU
	-4585 Aug 31 j 19:43	30°℞♐	
direct	-4585 Sep 29 j 17:35	28°♐36'00	
	-4585 Oct 28 j 13:50	0°♑	
evening set	-4584 Feb 01 j 13:49	17°♑54'25	
conjunction	-4584 Feb 15 j 01:03	21°♑05'18	-1°21'19
minimum elong	-4584 Feb 15 j 01:01	21°♑05'17	1°21'32
max. Earth dist.	-4584 Feb 16 j 19:41	21°♑30'31	6.02492 AU
morning rise	-4584 Feb 28 j 15:26	24°♑17'42	
	-4584 Mar 24 j 13:34	0°♒	
retrograde	-4584 Jul 08 j 21:15	14°♒23'38	
min. Earth dist.	-4584 Sep 05 j 07:45	9°♒28'23	4.05390 AU
opposition	-4584 Sep 06 j 12:48	9°♒18'28	-2°04'40
direct	-4584 Nov 03 j 15:02	4°♒20'47	
	-4583 Jan 30 j 01:30	15°♒	
evening set	-4583 Mar 09 j 17:00	23°♒32'04	
conjunction	-4583 Mar 23 j 09:54	26°♒42'19	-1°17'42
minimum elong	-4583 Mar 23 j 09:57	26°♒42'21	1°17'49
max. Earth dist.	-4583 Mar 25 j 04:28	27°♒06'59	6.09361 AU
morning rise	-4583 Apr 06 j 04:22	29°♒53'10	
	-4583 Apr 06 j 16:17	0°♓	
retrograde	-4583 Aug 12 j 14:39	19°♓12'31	
opposition	-4583 Oct 10 j 22:37	14°♓08'34	-1°36'11
min. Earth dist.	-4583 Oct 10 j 00:09	14°♓16'14	4.14398 AU
direct	-4583 Dec 08 j 22:30	9°♓07'37	
evening set	-4582 Apr 15 j 00:52	27°♓57'27	
	-4582 Apr 24 j 02:20	0°♈	
conjunction	-4582 Apr 28 j 19:28	1°♈03'56	-0°46'40
minimum elong	-4582 Apr 28 j 19:32	1°♈03'58	0°46'40
max. Earth dist.	-4582 Apr 29 j 23:28	1°♈19'45	6.19811 AU
morning rise	-4582 May 12 j 13:21	4°♈09'52	
retrograde	-4582 Sep 14 j 09:50	22°♈30'09	
opposition	-4582 Nov 12 j 18:58	17°♈29'28	-0°36'49
min. Earth dist.	-4582 Nov 12 j 08:13	17°♈33'05	4.25194 AU
direct	-4581 Jan 11 j 24:00	12°♈26'22	
	-4581 May 15 j 23:44	0°♉	
evening set	-4581 May 19 j 20:14	0°♉50'44	
conjunction	-4581 Jun 02 j 10:38	3°♉51'12	-0°01'26
minimum elong	-4581 Jun 02 j 10:38	3°♉51'12	0°01'20
behind sun begin	-4581 Jun 02 j 02:21	3°♉46'38	
behind sun end	-4581 Jun 02 j 18:55	3°♉55'46	
max. Earth dist.	-4581 Jun 02 j 13:30	3°♉52'44	6.30181 AU
asc. node	-4581 Jun 14 j 08:47	6°♉29'26	
morning rise	-4581 Jun 15 j 22:44	6°♉50'19	
	-4581 Jul 24 j 21:52	15°♉	
retrograde	-4581 Oct 15 j 21:35	24°♉21'24	
opposition	-4581 Dec 14 j 12:26	19°♉24'39	0°31'10
min. Earth dist.	-4581 Dec 14 j 18:07	19°♉22'46	4.34268 AU
	-4580 Jan 24 j 11:40	15°℞♉	
direct	-4580 Feb 14 j 00:43	14°♉20'52	
	-4580 Mar 05 j 17:44	15°♉	
	-4580 Jun 09 j 18:58	0°♊	
evening set	-4580 Jun 20 j 23:38	2°♊24'56	
max. Earth dist.	-4580 Jul 03 j 10:44	5°♊08'37	6.37261 AU
conjunction	-4580 Jul 04 j 05:42	5°♊19'01	0°42'59

Attention, astronomical year style is used: The year -4580 in astronomical counting style is the year 4581 BCE in historical counting style.

minimum elong	-4580 Jul	04 j 05:39	5°♊18'59	0°43'11
morning rise	-4580 Jul	17 j 08:17	8°♊11'22	
retrograde	-4580 Nov	14 j 17:02	25°♊15'37	
opposition	-4579 Jan	13 j 19:37	20°♊22'08	1°28'11
min. Earth dist.	-4579 Jan	14 j 14:14	20°♊16'06	4.38988 AU
direct	-4579 Mar	17 j 04:10	15°♊19'11	
	-4579 Jul	07 j 20:26	0°♋	
evening set	-4579 Jul	22 j 18:55	3°♋12'54	
max. Earth dist.	-4579 Aug	03 j 04:13	5°♋42'48	6.39148 AU
conjunction	-4579 Aug	04 j 15:27	6°♋02'13	1°14'23
minimum elong	-4579 Aug	04 j 15:24	6°♋02'11	1°14'37
morning rise	-4579 Aug	17 j 08:53	8°♋50'02	
retrograde	-4579 Dec	15 j 20:52	25°♋53'23	
opposition	-4578 Feb	14 j 10:25	21°♋01'44	2°00'11
min. Earth dist.	-4578 Feb	15 j 14:53	20°♋52'39	4.38062 AU
direct	-4578 Apr	18 j 02:57	16°♋00'44	
	-4578 Aug	04 j 19:10	0°♌	
evening set	-4578 Aug	22 j 20:39	3°♌55'25	
max. Earth dist.	-4578 Sep	02 j 16:44	6°♌20'02	6.35351 AU
conjunction	-4578 Sep	04 j 10:31	6°♌43'21	1°24'52
minimum elong	-4578 Sep	04 j 10:31	6°♌43'21	1°25'03
morning rise	-4578 Sep	16 j 22:20	9°♌30'22	
	-4578 Oct	12 j 08:36	15°♌	
retrograde	-4577 Jan	17 j 00:50	26°♌57'37	
opposition	-4577 Mar	19 j 00:29	22°♌05'54	1°58'39
min. Earth dist.	-4577 Mar	20 j 05:21	21°♌56'44	4.31680 AU
direct	-4577 May	20 j 06:43	17°♌07'33	
	-4577 Aug	30 j 04:48	0°♍	
evening set	-4577 Sep	22 j 23:07	5°♍13'53	
max. Earth dist.	-4577 Oct	04 j 00:01	7°♍44'19	6.26881 AU
conjunction	-4577 Oct	05 j 11:12	8°♍04'23	1°10'55
minimum elong	-4577 Oct	05 j 11:15	8°♍04'24	1°11'01
morning rise	-4577 Oct	17 j 22:38	10°♍54'46	
retrograde	-4576 Feb	19 j 21:16	29°♍06'24	
opposition	-4576 Apr	21 j 01:07	24°♍12'51	1°21'19
min. Earth dist.	-4576 Apr	21 j 22:35	24°♍06'00	4.21594 AU
direct	-4576 Jun	21 j 07:40	19°♍17'21	
	-4576 Sep	19 j 00:07	0°♎	
evening set	-4576 Oct	23 j 22:19	7°♎43'36	
conjunction	-4576 Nov	05 j 13:25	10°♎39'54	0°34'38
minimum elong	-4576 Nov	05 j 13:28	10°♎39'56	0°34'36
max. Earth dist.	-4576 Nov	04 j 17:10	10°♎28'06	6.16107 AU
morning rise	-4576 Nov	18 j 05:55	13°♎37'05	
	-4575 Feb	11 j 16:24	0°♏	
retrograde	-4575 Mar	26 j 11:43	2°♏44'12	
	-4575 May	08 j 19:40	30°℞♎	
opposition	-4575 May	26 j 13:31	27°♎47'18	0°15'24
min. Earth dist.	-4575 May	26 j 18:31	27°♎45'40	4.10859 AU
direct	-4575 Jul	25 j 11:09	22°♎53'50	
desc. node	-4575 Aug	16 j 11:30	23°♎40'56	
	-4575 Oct	03 j 03:44	0°♏	
evening set	-4575 Nov	26 j 11:57	11°♏44'19	
conjunction	-4575 Dec	09 j 09:35	14°♏47'36	-0°14'32
minimum elong	-4575 Dec	09 j 09:33	14°♏47'36	0°14'41
behind sun begin	-4575 Dec	09 j 06:01	14°♏45'30	
behind sun end	-4575 Dec	09 j 13:05	14°♏49'41	
max. Earth dist.	-4575 Dec	09 j 14:47	14°♏50'41	6.06448 AU
	-4575 Dec	10 j 06:28	15°♏	
morning rise	-4575 Dec	22 j 09:43	17°♏52'26	
	-4574 Feb	16 j 10:13	0°♐	
retrograde	-4574 May	02 j 12:41	7°♐49'15	
opposition	-4574 Jul	02 j 02:47	2°♐48'28	-0°58'56
min. Earth dist.	-4574 Jul	01 j 14:44	2°♐52'27	4.03200 AU
	-4574 Jul	24 j 18:38	30°℞♏	
direct	-4574 Aug	29 j 19:25	27°♏55'22	
	-4574 Oct	04 j 09:16	0°♐	
evening set	-4574 Dec	31 j 22:54	17°♐06'29	
conjunction	-4573 Jan	14 j 03:52	20°♐15'11	-0°59'40
minimum elong	-4573 Jan	14 j 03:49	20°♐15'09	0°59'53
max. Earth dist.	-4573 Jan	15 j 08:57	20°♐32'32	6.01449 AU
morning rise	-4573 Jan	27 j 12:21	23°♐25'44	
	-4573 Feb	25 j 02:53	0°♑	
retrograde	-4573 Jun	08 j 16:25	13°♑44'49	
opposition	-4573 Aug	07 j 18:15	8°♑40'45	-1°52'36
min. Earth dist.	-4573 Aug	06 j 16:03	8°♑49'36	4.01576 AU
direct	-4573 Oct	04 j 17:54	3°♑45'51	
evening set	-4572 Feb	06 j 19:01	23°♑04'16	
conjunction	-4572 Feb	20 j 07:12	26°♑15'13	-1°22'43
minimum elong	-4572 Feb	20 j 07:11	26°♑15'13	1°22'56
max. Earth dist.	-4572 Feb	22 j 03:34	26°♑41'24	6.03206 AU
morning rise	-4572 Mar	04 j 22:15	29°♑27'34	
	-4572 Mar	07 j 05:50	0°♒	
	-4572 May	20 j 08:22	15°♒	
retrograde	-4572 Jul	13 j 21:05	19°♒28'08	
	-4572 Sep	06 j 22:15	15°℞♒	
min. Earth dist.	-4572 Sep	10 j 06:38	14°♒32'37	4.06607 AU
opposition	-4572 Sep	11 j 11:02	14°♒22'55	-2°03'13
direct	-4572 Nov	08 j 16:46	9°♒24'44	
	-4571 Jan	08 j 07:34	15°♒	
evening set	-4571 Mar	14 j 20:21	28°♒32'33	
	-4571 Mar	21 j 04:25	0°♓	
conjunction	-4571 Mar	28 j 13:46	1°♓42'17	-1°14'46
minimum elong	-4571 Mar	28 j 13:49	1°♓42'19	1°14'53
max. Earth dist.	-4571 Mar	30 j 08:43	2°♓07'03	6.10981 AU
morning rise	-4571 Apr	11 j 08:19	4°♓52'25	
retrograde	-4571 Aug	17 j 05:42	24°♓02'18	
opposition	-4571 Oct	15 j 14:11	18°♓58'40	-1°29'15
min. Earth dist.	-4571 Oct	14 j 16:10	19°♓06'10	4.16249 AU
direct	-4571 Dec	13 j 17:21	13°♓57'21	
	-4570 Apr	07 j 18:14	0°♈	
evening set	-4570 Apr	19 j 22:39	2°♈42'03	
conjunction	-4570 May	03 j 16:45	5°♈47'31	-0°40'54
minimum elong	-4570 May	03 j 16:49	5°♈47'33	0°40'53
max. Earth dist.	-4570 May	04 j 16:21	6°♈00'48	6.21735 AU
morning rise	-4570 May	17 j 10:10	8°♈52'23	
retrograde	-4570 Sep	18 j 18:58	27°♈03'25	
opposition	-4570 Nov	17 j 04:40	22°♈03'12	-0°27'30
min. Earth dist.	-4570 Nov	16 j 20:58	22°♈05'48	4.27001 AU
direct	-4569 Jan	16 j 15:25	16°♈59'51	
asc. node	-4569 Apr	25 j 06:07	29°♈06'48	
	-4569 Apr	29 j 13:48	0°♉	
evening set	-4569 May	24 j 10:47	5°♉19'33	
conjunction	-4569 Jun	07 j 00:20	8°♉18'59	0°05'04
minimum elong	-4569 Jun	07 j 00:20	8°♉18'59	0°05'12
behind sun begin	-4569 Jun	06 j 16:21	8°♉14'35	
behind sun end	-4569 Jun	07 j 08:18	8°♉23'22	
max. Earth dist.	-4569 Jun	07 j 00:51	8°♉19'15	6.31728 AU
morning rise	-4569 Jun	20 j 11:04	11°♉16'56	
	-4569 Jul	07 j 16:03	15°♉	
retrograde	-4569 Oct	20 j 01:09	28°♉41'54	
opposition	-4569 Dec	18 j 18:31	23°♉45'38	0°39'55
min. Earth dist.	-4569 Dec	19 j 01:44	23°♉43'15	4.35447 AU
direct	-4568 Feb	18 j 09:36	18°♉41'52	
	-4568 May	24 j 07:21	0°♊	

Attention, astronomical year style is used: The year -4568 in astronomical counting style is the year 4569 BCE in historical counting style.

evening set	-4568 Jun 25 j 08:28	6°♊43'12		
conjunction	-4568 Jul 08 j 13:03	9°♊36'24	0°48'12	
minimum elong	-4568 Jul 08 j 12:59	9°♊36'22	0°48'24	
max. Earth dist.	-4568 Jul 07 j 13:40	9°♊23'35	6.37956 AU	
morning rise	-4568 Jul 21 j 14:24	12°♊27'57		
retrograde	-4568 Nov 18 j 22:20	29°♊30'25		
opposition	-4567 Jan 18 j 01:26	24°♊37'18	1°34'12	
min. Earth dist.	-4567 Jan 18 j 23:10	24°♊30'16	4.39169 AU	
direct	-4567 Mar 21 j 12:54	19°♊34'30		
	-4567 Jun 21 j 06:25	0°♋		
evening set	-4567 Jul 27 j 00:29	7°♋28'02		
max. Earth dist.	-4567 Aug 07 j 06:43	9°♋56'29	6.38770 AU	
conjunction	-4567 Aug 08 j 20:02	10°♋17'03	1°17'08	
minimum elong	-4567 Aug 08 j 20:00	10°♋17'02	1°17'22	
morning rise	-4567 Aug 21 j 12:26	13°♋04'37		
	-4567 Dec 09 j 13:40	0°♌		
retrograde	-4567 Dec 20 j 03:30	0°♌10'37		
	-4567 Dec 30 j 17:33	30°℞♋		
opposition	-4566 Feb 18 j 18:50	25°♋19'04	2°02'03	
min. Earth dist.	-4566 Feb 19 j 23:33	25°♋09'53	4.37177 AU	
direct	-4566 Apr 22 j 09:36	20°♋18'21		
	-4566 Jul 18 j 19:52	0°♌		
evening set	-4566 Aug 27 j 02:11	8°♌15'24		
max. Earth dist.	-4566 Sep 06 j 22:00	10°♌40'22	6.34015 AU	
conjunction	-4566 Sep 08 j 15:33	11°♌03'38	1°24'23	
minimum elong	-4566 Sep 08 j 15:34	11°♌03'38	1°24'34	
morning rise	-4566 Sep 21 j 03:02	13°♌51'03		
	-4566 Sep 26 j 07:23	15°♌		
	-4566 Dec 22 j 03:30	0°♍		
retrograde	-4565 Jan 21 j 15:21	1°♍24'54		
	-4565 Feb 21 j 06:30	30°℞♌		
opposition	-4565 Mar 23 j 14:40	26°♌33'05	1°55'36	
min. Earth dist.	-4565 Mar 24 j 20:04	26°♌23'45	4.29971 AU	
direct	-4565 May 24 j 18:34	21°♌35'09		
	-4565 Aug 12 j 04:49	0°♍		
evening set	-4565 Sep 27 j 07:44	9°♍45'39		
max. Earth dist.	-4565 Oct 08 j 09:14	12°♍17'08	6.24941 AU	
conjunction	-4565 Oct 09 j 20:01	12°♍37'02	1°07'04	
minimum elong	-4565 Oct 09 j 20:04	12°♍37'04	1°07'10	
morning rise	-4565 Oct 22 j 08:05	15°♍28'30		
	-4564 Jan 04 j 14:00	0°♎		
retrograde	-4564 Feb 24 j 17:56	3°♎49'21		
	-4564 Apr 17 j 10:16	30°℞♍		
opposition	-4564 Apr 25 j 22:04	28°♍55'24	1°13'31	
min. Earth dist.	-4564 Apr 26 j 16:44	28°♍49'27	4.19562 AU	
direct	-4564 Jun 25 j 23:06	24°♍00'18		
	-4564 Aug 29 j 12:52	0°♎		
evening set	-4564 Oct 28 j 13:01	12°♎31'39		
conjunction	-4564 Nov 10 j 05:03	15°♎29'09	0°28'10	
minimum elong	-4564 Nov 10 j 05:05	15°♎29'10	0°28'08	
max. Earth dist.	-4564 Nov 09 j 13:37	15°♎20'07	6.14185 AU	
morning rise	-4564 Nov 22 j 22:26	18°♎27'36		
	-4563 Jan 15 j 19:12	0°♏		
retrograde	-4563 Mar 31 j 17:34	7°♏43'58		
opposition	-4563 May 31 j 16:27	2°♏46'34	0°04'46	
min. Earth dist.	-4563 May 31 j 19:25	2°♏45'36	4.09212 AU	
	-4563 Jun 23 j 10:54	30°℞♎		
desc. node	-4563 Jun 25 j 20:39	29°♎45'02		
direct	-4563 Jul 30 j 10:00	27°♎53'20		
	-4563 Sep 04 j 18:42	0°♏		
	-4563 Nov 23 j 17:54	15°♏		
evening set	-4563 Dec 01 j 10:06	16°♏48'08		
conjunction	-4563 Dec 14 j 08:40	19°♏52'25	-0°21'38	
minimum elong	-4563 Dec 14 j 08:38	19°♏52'24	0°21'48	
max. Earth dist.	-4563 Dec 14 j 17:18	19°♏57'33	6.05222 AU	
morning rise	-4563 Dec 27 j 10:12	22°♏58'22		
	-4562 Jan 27 j 04:51	0°♐		
retrograde	-4562 May 07 j 18:50	13°♐00'48		
opposition	-4562 Jul 07 j 08:06	7°♐59'26	-1°08'29	
min. Earth dist.	-4562 Jul 06 j 16:12	8°♐04'43	4.02543 AU	
direct	-4562 Sep 03 j 19:57	3°♐06'15		
evening set	-4561 Jan 06 j 02:47	22°♐19'11		
conjunction	-4561 Jan 19 j 08:50	25°♐28'21	-1°04'38	
minimum elong	-4561 Jan 19 j 08:46	25°♐28'19	1°04'50	
max. Earth dist.	-4561 Jan 20 j 17:53	25°♐48'04	6.01385 AU	
morning rise	-4561 Feb 01 j 18:14	28°♐39'19		
	-4561 Feb 07 j 11:23	0°♑		
retrograde	-4561 Jun 13 j 21:26	18°♑57'40		
opposition	-4561 Aug 12 j 21:26	13°♑53'13	-1°56'58	
min. Earth dist.	-4561 Aug 11 j 18:35	14°♑02'19	4.02102 AU	
direct	-4561 Oct 09 j 21:54	8°♑57'54		
evening set	-4560 Feb 12 j 00:44	28°♑14'55		
	-4560 Feb 19 j 11:57	0°♒		
conjunction	-4560 Feb 25 j 13:48	1°♒25'46	-1°23'30	
minimum elong	-4560 Feb 25 j 13:48	1°♒25'45	1°23'41	
max. Earth dist.	-4560 Feb 27 j 12:06	1°♒52'58	6.04236 AU	
morning rise	-4560 Mar 10 j 05:29	4°♒37'52		
	-4560 Apr 26 j 13:14	15°♒		
retrograde	-4560 Jul 18 j 19:40	24°♒31'39		
min. Earth dist.	-4560 Sep 15 j 03:51	19°♒36'17	4.08026 AU	
opposition	-4560 Sep 16 j 08:21	19°♒26'33	-2°00'50	
	-4560 Oct 26 j 23:30	15°℞♒		
direct	-4560 Nov 13 j 15:50	14°♒27'55		
	-4560 Dec 01 j 11:42	15°♒		
	-4559 Mar 04 j 07:53	0°♓		
evening set	-4559 Mar 19 j 23:24	3°♓32'00		
conjunction	-4559 Apr 02 j 17:01	6°♓41'08	-1°11'18	
minimum elong	-4559 Apr 02 j 17:05	6°♓41'10	1°11'24	
max. Earth dist.	-4559 Apr 04 j 08:35	7°♓03'52	6.12649 AU	
morning rise	-4559 Apr 16 j 11:49	9°♓50'34		
retrograde	-4559 Aug 21 j 20:23	28°♓51'21		
min. Earth dist.	-4559 Oct 19 j 09:22	23°♓54'52	4.17984 AU	
opposition	-4559 Oct 20 j 05:16	23°♓48'05	-1°21'47	
direct	-4559 Dec 18 j 13:07	18°♓46'23		
	-4558 Mar 21 j 03:45	0°♈		
evening set	-4558 Apr 24 j 19:50	7°♈26'43		
conjunction	-4558 May 08 j 13:47	10°♈31'23	-0°34'53	
minimum elong	-4558 May 08 j 13:50	10°♈31'24	0°34'51	
max. Earth dist.	-4558 May 09 j 11:23	10°♈43'30	6.23428 AU	
morning rise	-4558 May 22 j 06:22	13°♈35'14		
	-4558 Aug 22 j 01:25	0°♉		
retrograde	-4558 Sep 23 j 04:09	1°♉38'19		
	-4558 Oct 25 j 01:42	30°℞♈		
opposition	-4558 Nov 21 j 14:55	26°♈38'41	-0°17'59	
min. Earth dist.	-4558 Nov 21 j 08:59	26°♈40'40	4.28503 AU	
direct	-4557 Jan 21 j 05:21	21°♈35'14		
asc. node	-4557 Mar 05 j 08:50	24°♈19'59		
	-4557 Apr 11 j 00:14	0°♉		
evening set	-4557 May 29 j 02:16	9°♉51'29		
conjunction	-4557 Jun 11 j 14:36	12°♉49'57	0°11'30	
minimum elong	-4557 Jun 11 j 14:35	12°♉49'57	0°11'39	
behind sun begin	-4557 Jun 11 j 08:49	12°♉46'47		
behind sun end	-4557 Jun 11 j 20:20	12°♉53'06		
max. Earth dist.	-4557 Jun 11 j 09:53	12°♉47'22	6.32925 AU	

Attention, astronomical year style is used: The year -4557 in astronomical counting style is the year 4558 BCE in historical counting style.

	-4557 Jun 21 j 10:41	15°♉	
morning rise	-4557 Jun 25 j 00:18	15°♉46'57	
	-4557 Sep 09 j 01:40	0°♊	
retrograde	-4557 Oct 24 j 08:14	3°♊07'15	
	-4557 Dec 08 j 23:55	30°℞♉	
opposition	-4557 Dec 23 j 02:33	28°♉11'29	0°48'35
min. Earth dist.	-4557 Dec 23 j 12:46	28°♉08'07	4.36275 AU
direct	-4556 Feb 22 j 21:52	23°♉07'44	
	-4556 May 04 j 22:53	0°♊	
evening set	-4556 Jun 29 j 19:07	11°♊07'25	
conjunction	-4556 Jul 12 j 22:35	13°♊59'57	0°53'17
minimum elong	-4556 Jul 12 j 22:31	13°♊59'55	0°53'29
max. Earth dist.	-4556 Jul 11 j 21:35	13°♊46'15	6.38350 AU
morning rise	-4556 Jul 25 j 22:27	16°♊50'46	
	-4556 Oct 03 j 02:20	0°♋	
retrograde	-4556 Nov 23 j 04:18	3°♋52'27	
	-4555 Jan 14 j 13:33	30°℞♊	
opposition	-4555 Jan 22 j 09:58	28°♊59'39	1°39'52
min. Earth dist.	-4555 Jan 23 j 08:24	28°♊52'25	4.39134 AU
direct	-4555 Mar 25 j 21:53	23°♊57'06	
	-4555 Jun 01 j 07:39	0°♋	
evening set	-4555 Jul 31 j 08:35	11°♋50'52	
max. Earth dist.	-4555 Aug 11 j 11:27	14°♋17'46	6.38292 AU
conjunction	-4555 Aug 13 j 02:57	14°♋39'35	1°19'33
minimum elong	-4555 Aug 13 j 02:54	14°♋39'34	1°19'46
morning rise	-4555 Aug 25 j 18:32	17°♋26'58	
	-4555 Oct 29 j 06:55	0°♌	
retrograde	-4555 Dec 24 j 15:15	4°♌36'00	
	-4554 Feb 21 j 06:19	30°℞♋	
opposition	-4554 Feb 23 j 06:54	29°♋44'32	2°03'19
min. Earth dist.	-4554 Feb 24 j 13:10	29°♋34'53	4.36296 AU
direct	-4554 Apr 26 j 22:07	24°♋44'09	
	-4554 Jun 27 j 23:16	0°♌	
evening set	-4554 Aug 31 j 10:09	12°♌43'04	
	-4554 Sep 10 j 14:54	15°♌	
max. Earth dist.	-4554 Sep 11 j 05:54	15°♌08'26	6.32802 AU
conjunction	-4554 Sep 12 j 23:11	15°♌31'36	1°23'26
minimum elong	-4554 Sep 12 j 23:12	15°♌31'37	1°23'36
morning rise	-4554 Sep 25 j 10:25	18°♌19'26	
	-4554 Nov 22 j 02:24	0°♍	
retrograde	-4553 Jan 26 j 06:15	5°♍59'20	
opposition	-4553 Mar 28 j 07:36	1°♍07'19	1°51'45
min. Earth dist.	-4553 Mar 29 j 11:01	0°♍58'37	4.28525 AU
	-4553 Apr 06 j 05:24	30°℞♌	
direct	-4553 May 29 j 07:26	26°♌09'50	
	-4553 Jul 19 j 23:21	0°♍	
evening set	-4553 Oct 01 j 18:30	14°♍23'17	
max. Earth dist.	-4553 Oct 12 j 23:23	16°♍57'13	6.23413 AU
conjunction	-4553 Oct 14 j 07:03	17°♍15'25	1°02'45
minimum elong	-4553 Oct 14 j 07:07	17°♍15'27	1°02'48
morning rise	-4553 Oct 26 j 19:34	20°♍07'43	
	-4553 Dec 11 j 23:30	0°♎	
retrograde	-4552 Feb 29 j 17:41	8°♎36'13	
opposition	-4552 Apr 30 j 20:40	3°♎41'53	1°05'06
min. Earth dist.	-4552 May 01 j 14:00	3°♎36'20	4.18057 AU
	-4552 Jun 02 j 16:02	30°℞♍	
direct	-4552 Jun 30 j 18:32	28°♍47'07	
	-4552 Jul 28 j 14:50	0°♎	
evening set	-4552 Nov 02 j 04:28	17°♎21'27	
conjunction	-4552 Nov 14 j 21:15	20°♎19'52	0°21'31
minimum elong	-4552 Nov 14 j 21:16	20°♎19'53	0°21'27
max. Earth dist.	-4552 Nov 14 j 08:43	20°♎12'31	6.12859 AU
morning rise	-4552 Nov 27 j 15:45	23°♎19'22	
	-4552 Dec 27 j 05:28	0°♏	
retrograde	-4551 Apr 05 j 19:33	12°♏42'31	
desc. node	-4551 May 06 j 03:38	11°♏17'57	
opposition	-4551 Jun 05 j 18:42	7°♏44'31	-0°05'49
min. Earth dist.	-4551 Jun 05 j 17:45	7°♏44'50	4.08196 AU
direct	-4551 Aug 04 j 06:45	2°♏51'26	
	-4551 Nov 06 j 13:07	15°♏	
evening set	-4551 Dec 06 j 07:07	21°♏48'18	
conjunction	-4551 Dec 19 j 06:39	24°♏53'15	-0°28'26
minimum elong	-4551 Dec 19 j 06:37	24°♏53'14	0°28'38
max. Earth dist.	-4551 Dec 19 j 19:42	25°♏01'01	6.04602 AU
morning rise	-4550 Jan 01 j 09:09	27°♏59'54	
	-4550 Jan 09 j 21:54	0°♐	
retrograde	-4550 May 12 j 22:56	18°♐05'32	
opposition	-4550 Jul 12 j 10:38	13°♐03'36	-1°17'15
min. Earth dist.	-4550 Jul 11 j 17:14	13°♐09'23	4.02389 AU
direct	-4550 Sep 08 j 21:14	8°♐10'12	
evening set	-4549 Jan 11 j 04:01	27°♐23'22	
	-4549 Jan 22 j 03:53	0°♑	
conjunction	-4549 Jan 24 j 11:02	0°♑32'48	-1°08'56
minimum elong	-4549 Jan 24 j 10:58	0°♑32'46	1°09'10
max. Earth dist.	-4549 Jan 25 j 23:16	0°♑54'21	6.01688 AU
morning rise	-4549 Feb 06 j 21:20	3°♑43'58	
retrograde	-4549 Jun 18 j 21:58	23°♑59'56	
opposition	-4549 Aug 17 j 20:18	18°♑55'16	-2°00'16
min. Earth dist.	-4549 Aug 16 j 16:27	19°♑04'42	4.02857 AU
direct	-4549 Oct 14 j 20:22	13°♑59'33	
	-4548 Feb 03 j 01:19	0°♒	
evening set	-4548 Feb 17 j 02:45	3°♒14'41	
conjunction	-4548 Mar 01 j 16:26	6°♒25'19	-1°23'36
minimum elong	-4548 Mar 01 j 16:26	6°♒25'19	1°23'47
max. Earth dist.	-4548 Mar 03 j 13:05	6°♒51'29	6.05335 AU
morning rise	-4548 Mar 15 j 08:49	9°♒37'10	
	-4548 Apr 08 j 01:09	15°♒	
retrograde	-4548 Jul 23 j 13:00	29°♒24'18	
min. Earth dist.	-4548 Sep 19 j 22:10	24°♒28'41	4.09344 AU
opposition	-4548 Sep 21 j 01:42	24°♒19'16	-1°57'42
direct	-4548 Nov 18 j 12:06	19°♒20'09	
	-4547 Feb 14 j 16:24	0°♓	
evening set	-4547 Mar 24 j 22:24	8°♓21'05	
conjunction	-4547 Apr 07 j 16:31	11°♓29'46	-1°07'28
minimum elong	-4547 Apr 07 j 16:35	11°♓29'48	1°07'33
max. Earth dist.	-4547 Apr 09 j 06:54	11°♓51'45	6.14091 AU
morning rise	-4547 Apr 21 j 11:09	14°♓38'33	
	-4547 Jul 09 j 10:28	0°♈	
retrograde	-4547 Aug 26 j 09:08	3°♈31'24	
	-4547 Oct 13 j 07:54	30°℞♓	
opposition	-4547 Oct 24 j 17:15	28°♓28'38	-1°14'02
min. Earth dist.	-4547 Oct 23 j 23:25	28°♓34'42	4.19398 AU
direct	-4547 Dec 23 j 04:34	23°♓26'41	
	-4546 Mar 01 j 05:33	0°♈	
evening set	-4546 Apr 29 j 14:31	12°♈03'59	
conjunction	-4546 May 13 j 07:54	15°♈07'56	-0°28'48
minimum elong	-4546 May 13 j 07:57	15°♈07'57	0°28'46
max. Earth dist.	-4546 May 14 j 00:36	15°♈17'16	6.24706 AU
morning rise	-4546 May 27 j 00:00	18°♈11'01	
	-4546 Jul 24 j 10:57	0°♉	
retrograde	-4546 Sep 27 j 11:35	6°♉07'54	
opposition	-4546 Nov 25 j 23:23	1°♉08'49	-0°08'36
min. Earth dist.	-4546 Nov 25 j 19:54	1°♉09'59	4.29554 AU
	-4546 Dec 04 j 15:05	30°℞♈	

Attention, astronomical year style is used: The year -4545 in astronomical counting style is the year 4546 BCE in historical counting style.

asc. node	-4545 Jan 14 j 10:59	26°♈17'29		
direct	-4545 Jan 25 j 17:57	26°♈05'15		
	-4545 Mar 18 j 23:40	0°♉		
evening set	-4545 Jun 02 j 16:11	14°♉19'43		
	-4545 Jun 05 j 17:47	15°♉		
conjunction	-4545 Jun 16 j 03:38	17°♉17'29	0°17'46	
minimum elong	-4545 Jun 16 j 03:36	17°♉17'28	0°17'55	
max. Earth dist.	-4545 Jun 15 j 20:44	17°♉13'41	6.33689 AU	
morning rise	-4545 Jun 29 j 11:59	20°♉13'40		
	-4545 Aug 16 j 08:25	0°♊		
retrograde	-4545 Oct 28 j 14:43	7°♊30'55		
opposition	-4545 Dec 27 j 10:16	2°♊35'41	0°56'52	
min. Earth dist.	-4545 Dec 27 j 22:06	2°♊31'49	4.36719 AU	
	-4544 Jan 17 j 06:20	30℞♉		
direct	-4544 Feb 27 j 07:59	27°♉32'07		
	-4544 Apr 08 j 18:04	0°♊		
evening set	-4544 Jul 04 j 05:33	15°♊31'19		
max. Earth dist.	-4544 Jul 16 j 02:57	18°♊07'34	6.38426 AU	
conjunction	-4544 Jul 17 j 07:35	18°♊23'17	0°58'00	
minimum elong	-4544 Jul 17 j 07:31	18°♊23'15	0°58'13	
morning rise	-4544 Jul 30 j 06:23	21°♊13'36		
	-4544 Sep 10 j 21:27	0°♋		
retrograde	-4544 Nov 27 j 13:12	8°♋15'38		
opposition	-4543 Jan 26 j 19:27	3°♋23'08	1°44'58	
min. Earth dist.	-4543 Jan 27 j 19:46	3°♋15'18	4.38874 AU	
	-4543 Feb 24 j 18:15	30℞♊		
direct	-4543 Mar 30 j 09:19	28°♊20'51		
	-4543 May 03 j 04:01	0°♋		
evening set	-4543 Aug 04 j 17:02	16°♋15'22		
max. Earth dist.	-4543 Aug 15 j 19:45	18°♋42'26	6.37712 AU	
conjunction	-4543 Aug 17 j 10:35	19°♋03'56	1°21'29	
minimum elong	-4543 Aug 17 j 10:33	19°♋03'55	1°21'41	
morning rise	-4543 Aug 30 j 01:09	21°♋51'10		
	-4543 Oct 08 j 00:12	0°♌		
retrograde	-4543 Dec 29 j 01:18	9°♌03'25		
opposition	-4542 Feb 27 j 19:36	4°♌12'00	2°03'50	
min. Earth dist.	-4542 Mar 01 j 00:59	4°♌02'39	4.35450 AU	
	-4542 Apr 08 j 05:38	30℞♋		
direct	-4542 May 01 j 08:54	29°♋12'03		
	-4542 May 24 j 14:03	0°♌		
	-4542 Aug 25 j 19:13	15°♌		
evening set	-4542 Sep 04 j 18:41	17°♌12'30		
max. Earth dist.	-4542 Sep 15 j 14:36	19°♌38'23	6.31750 AU	
conjunction	-4542 Sep 17 j 07:14	20°♌01'16	1°21'58	
minimum elong	-4542 Sep 17 j 07:15	20°♌01'17	1°22'07	
morning rise	-4542 Sep 29 j 18:24	22°♌49'29		
	-4542 Nov 02 j 02:29	0°♍		
retrograde	-4541 Jan 30 j 23:49	10°♍34'53		
opposition	-4541 Apr 02 j 01:05	5°♍42'39	1°47'11	
min. Earth dist.	-4541 Apr 03 j 04:14	5°♍34'01	4.27306 AU	
direct	-4541 Jun 02 j 23:19	0°♍45'31		
evening set	-4541 Oct 06 j 04:50	19°♍00'58		
conjunction	-4541 Oct 18 j 17:48	21°♍53'47	0°58'02	
minimum elong	-4541 Oct 18 j 17:51	21°♍53'49	0°58'04	
max. Earth dist.	-4541 Oct 17 j 12:22	21°♍36'50	6.22131 AU	
morning rise	-4541 Oct 31 j 06:52	24°♍46'53		
	-4541 Nov 23 j 14:45	0°♎		
retrograde	-4540 Mar 05 j 14:23	13°♎22'06		
opposition	-4540 May 05 j 18:19	8°♎27'18	0°56'16	
min. Earth dist.	-4540 May 06 j 08:39	8°♎22'43	4.16787 AU	
direct	-4540 Jul 05 j 10:55	3°♎32'52		
evening set	-4540 Nov 06 j 19:13	22°♎09'35		
conjunction	-4540 Nov 19 j 12:45	25°♎08'50	0°14'45	
minimum elong	-4540 Nov 19 j 12:46	25°♎08'50	0°14'41	
behind sun begin	-4540 Nov 19 j 09:11	25°♎06'45		
behind sun end	-4540 Nov 19 j 16:20	25°♎10'56		
max. Earth dist.	-4540 Nov 19 j 03:31	25°♎03'25	6.11710 AU	
morning rise	-4540 Dec 02 j 08:12	28°♎09'15		
	-4540 Dec 10 j 06:58	0°♏		
	-4539 Feb 27 j 22:07	15°♏		
desc. node	-4539 Mar 16 j 22:21	16°♏40'44		
retrograde	-4539 Apr 10 j 21:58	17°♏38'40		
	-4539 May 23 j 04:10	15℞♏		
opposition	-4539 Jun 10 j 19:16	12°♏40'06	-0°16'19	
min. Earth dist.	-4539 Jun 10 j 16:45	12°♏40'55	4.07249 AU	
direct	-4539 Aug 09 j 04:10	7°♏47'02		
	-4539 Oct 17 j 23:42	15°♏		
evening set	-4539 Dec 11 j 03:15	26°♏46'12		
conjunction	-4539 Dec 24 j 03:51	29°♏51'53	-0°35'00	
minimum elong	-4539 Dec 24 j 03:48	29°♏51'51	0°35'11	
	-4539 Dec 24 j 17:29	0°♐		
max. Earth dist.	-4539 Dec 24 j 20:28	0°♐01'46	6.03943 AU	
morning rise	-4538 Jan 06 j 07:27	2°♐59'17		
retrograde	-4538 May 18 j 01:34	23°♐08'06		
opposition	-4538 Jul 17 j 11:28	18°♐05'44	-1°25'25	
min. Earth dist.	-4538 Jul 16 j 16:10	18°♐12'10	4.02114 AU	
direct	-4538 Sep 13 j 19:07	13°♐12'07		
	-4537 Jan 05 j 19:03	0°♑		
evening set	-4537 Jan 16 j 04:48	2°♑26'25		
conjunction	-4537 Jan 29 j 12:41	5°♑36'11	-1°12'44	
minimum elong	-4537 Jan 29 j 12:37	5°♑36'09	1°12'57	
max. Earth dist.	-4537 Jan 31 j 01:32	5°♑58'05	6.01788 AU	
morning rise	-4537 Feb 12 j 00:02	8°♑47'42		
retrograde	-4537 Jun 23 j 21:20	29°♑02'08		
opposition	-4537 Aug 22 j 18:29	23°♑57'13	-2°02'43	
min. Earth dist.	-4537 Aug 21 j 14:07	24°♑06'52	4.03327 AU	
direct	-4537 Oct 19 j 18:57	19°♑00'59		
	-4536 Jan 16 j 06:14	0°♒		
evening set	-4536 Feb 22 j 05:04	8°♒15'29		
conjunction	-4536 Mar 06 j 19:45	11°♒26'09	-1°23'07	
minimum elong	-4536 Mar 06 j 19:46	11°♒26'10	1°23'18	
max. Earth dist.	-4536 Mar 08 j 17:24	11°♒52'51	6.06136 AU	
morning rise	-4536 Mar 20 j 12:34	14°♒37'49		
	-4536 Mar 22 j 02:53	15°♒		
	-4536 Jun 04 j 20:25	0°♓		
retrograde	-4536 Jul 28 j 08:43	4°♓19'11		
	-4536 Sep 20 j 05:19	30℞♒		
opposition	-4536 Sep 25 j 19:27	29°♒14'20	-1°53'45	
min. Earth dist.	-4536 Sep 24 j 17:23	29°♒23'14	4.10376 AU	
direct	-4536 Nov 23 j 08:23	24°♒14'46		
	-4535 Jan 24 j 10:46	0°♓		
evening set	-4535 Mar 29 j 23:03	13°♓13'36		
conjunction	-4535 Apr 12 j 17:22	16°♓21'53	-1°03'08	
minimum elong	-4535 Apr 12 j 17:26	16°♓21'56	1°03'11	
max. Earth dist.	-4535 Apr 14 j 04:24	16°♓41'54	6.15266 AU	
morning rise	-4535 Apr 26 j 12:11	19°♓30'12		
	-4535 Jun 15 j 04:01	0°♈		
retrograde	-4535 Aug 30 j 21:44	8°♈15'51		
opposition	-4535 Oct 29 j 06:42	3°♈13'30	-1°05'42	
min. Earth dist.	-4535 Oct 28 j 14:08	3°♈19'07	4.20592 AU	
	-4535 Nov 24 j 05:17	30℞♓		
direct	-4535 Dec 27 j 21:43	28°♓11'11		
	-4534 Jan 31 j 01:35	0°♈		
evening set	-4534 May 04 j 10:58	16°♈46'05		

Attention, astronomical year style is used: The year -4534 in astronomical counting style is the year 4535 BCE in historical counting style.

conjunction	-4534 May 18 j 03:59	19°♈49'23	-0°22'24
minimum elong	-4534 May 18 j 04:00	19°♈49'24	0°22'20
max. Earth dist.	-4534 May 18 j 17:58	19°♈57'11	6.25855 AU
morning rise	-4534 May 31 j 19:15	22°♈51'39	
	-4534 Jul 04 j 06:39	0°♉	
retrograde	-4534 Oct 01 j 22:42	10°♉42'41	
asc. node	-4534 Nov 24 j 08:50	6°♉32'28	
opposition	-4534 Nov 30 j 10:16	5°♉44'12	0°01'03
min. Earth dist.	-4534 Nov 30 j 09:04	5°♉44'36	4.30560 AU
direct	-4533 Jan 30 j 09:09	0°♉40'35	
	-4533 May 20 j 06:34	15°♉	
evening set	-4533 Jun 07 j 08:12	18°♉53'02	
conjunction	-4533 Jun 20 j 18:27	21°♉50'00	0°24'05
minimum elong	-4533 Jun 20 j 18:25	21°♉49'59	0°24'15
max. Earth dist.	-4533 Jun 20 j 08:02	21°♉44'17	6.34486 AU
morning rise	-4533 Jul 04 j 01:39	24°♉45'22	
	-4533 Jul 28 j 15:38	0°♊	
retrograde	-4533 Nov 01 j 23:06	11°♊59'21	
opposition	-4533 Dec 31 j 20:17	7°♊04'33	1°05'01
min. Earth dist.	-4532 Jan 01 j 09:32	7°♊00'13	4.37299 AU
direct	-4532 Mar 02 j 20:54	2°♊01'06	
evening set	-4532 Jul 08 j 17:30	19°♊59'00	
conjunction	-4532 Jul 21 j 18:18	22°♊50'16	1°02'29
minimum elong	-4532 Jul 21 j 18:15	22°♊50'15	1°02'43
max. Earth dist.	-4532 Jul 20 j 13:34	22°♊34'29	6.38765 AU
morning rise	-4532 Aug 03 j 15:38	25°♊39'53	
	-4532 Aug 23 j 21:31	0°♋	
retrograde	-4532 Dec 01 j 21:35	12°♋41'17	
opposition	-4531 Jan 31 j 06:18	7°♋49'03	1°49'31
min. Earth dist.	-4531 Feb 01 j 06:59	7°♋41'07	4.38976 AU
direct	-4531 Apr 03 j 21:14	2°♋47'06	
evening set	-4531 Aug 09 j 01:54	20°♋40'44	
max. Earth dist.	-4531 Aug 20 j 01:59	23°♋06'35	6.37553 AU
conjunction	-4531 Aug 21 j 18:17	23°♋28'54	1°22'59
minimum elong	-4531 Aug 21 j 18:16	23°♋28'54	1°23'11
morning rise	-4531 Sep 03 j 08:10	26°♋15'53	
	-4531 Sep 20 j 13:19	0°♌	
retrograde	-4530 Jan 02 j 13:21	13°♌30'04	
opposition	-4530 Mar 04 j 08:50	8°♌38'36	2°03'36
min. Earth dist.	-4530 Mar 05 j 14:33	8°♌29'09	4.35040 AU
direct	-4530 May 05 j 22:05	3°♌38'59	
	-4530 Aug 09 j 04:29	15°♌	
evening set	-4530 Sep 09 j 02:02	21°♌39'13	
max. Earth dist.	-4530 Sep 19 j 23:44	24°♌06'20	6.31125 AU
conjunction	-4530 Sep 21 j 14:23	24°♌28'08	1°20'01
minimum elong	-4530 Sep 21 j 14:25	24°♌28'09	1°20'09
morning rise	-4530 Oct 04 j 01:15	27°♌16'31	
	-4530 Oct 16 j 07:41	0°♍	
retrograde	-4529 Feb 04 j 13:25	15°♍06'00	
opposition	-4529 Apr 06 j 16:59	10°♍13'32	1°41'58
min. Earth dist.	-4529 Apr 07 j 18:22	10°♍05'28	4.26492 AU
direct	-4529 Jun 07 j 11:46	5°♍16'49	
evening set	-4529 Oct 10 j 13:27	23°♍33'00	
max. Earth dist.	-4529 Oct 21 j 22:29	26°♍10'05	6.21198 AU
conjunction	-4529 Oct 23 j 02:36	26°♍26'19	0°53'02
minimum elong	-4529 Oct 23 j 02:39	26°♍26'21	0°53'04
morning rise	-4529 Nov 04 j 16:17	29°♍20'05	
	-4529 Nov 07 j 14:03	0°♎	
retrograde	-4528 Mar 10 j 10:08	18°♎01'00	
opposition	-4528 May 10 j 13:24	13°♎05'45	0°47'13
min. Earth dist.	-4528 May 11 j 02:33	13°♎01'31	4.15769 AU
direct	-4528 Jul 10 j 02:48	8°♎11'31	
evening set	-4528 Nov 11 j 07:13	26°♎50'06	
conjunction	-4528 Nov 24 j 01:40	29°♎50'08	0°08'05
minimum elong	-4528 Nov 24 j 01:40	29°♎50'08	0°07'58
behind sun begin	-4528 Nov 23 j 18:27	29°♎45'55	
behind sun end	-4528 Nov 24 j 08:53	29°♎54'22	
max. Earth dist.	-4528 Nov 23 j 19:22	29°♎46'27	6.10712 AU
	-4528 Nov 24 j 18:25	0°♏	
morning rise	-4528 Dec 06 j 22:03	2°♏51'26	
desc. node	-4527 Jan 26 j 22:41	13°♏56'39	
	-4527 Feb 01 j 14:25	15°♏	
retrograde	-4527 Apr 15 j 20:05	22°♏26'39	
opposition	-4527 Jun 15 j 16:38	17°♏27'38	-0°26'25
min. Earth dist.	-4527 Jun 15 j 12:07	17°♏29'06	4.06367 AU
	-4527 Jul 05 j 09:54	15°℞♏	
direct	-4527 Aug 13 j 21:12	12°♏34'39	
	-4527 Sep 21 j 17:26	15°♏	
	-4527 Dec 09 j 01:15	0°♐	
evening set	-4527 Dec 15 j 20:50	1°♐36'20	
conjunction	-4527 Dec 28 j 22:16	4°♐42'43	-0°41'09
minimum elong	-4527 Dec 28 j 22:13	4°♐42'41	0°41'20
max. Earth dist.	-4527 Dec 29 j 16:05	4°♐53'20	6.03240 AU
morning rise	-4526 Jan 11 j 03:02	7°♐50'55	
retrograde	-4526 May 23 j 00:54	28°♐03'25	
opposition	-4526 Jul 22 j 09:13	23°♐00'38	-1°32'46
min. Earth dist.	-4526 Jul 21 j 12:30	23°♐07'35	4.01680 AU
direct	-4526 Sep 18 j 14:55	18°♐06'45	
	-4526 Dec 19 j 18:51	0°♑	
evening set	-4525 Jan 21 j 03:31	7°♑23'17	
conjunction	-4525 Feb 03 j 12:35	10°♑33'35	-1°15'53
minimum elong	-4525 Feb 03 j 12:32	10°♑33'33	1°16'06
max. Earth dist.	-4525 Feb 05 j 04:16	10°♑57'09	6.01668 AU
morning rise	-4525 Feb 17 j 00:44	13°♑45'31	
	-4525 May 08 j 10:30	0°♒	
retrograde	-4525 Jun 28 j 20:38	3°♒59'21	
	-4525 Aug 19 j 12:07	30°℞♑	
min. Earth dist.	-4525 Aug 26 j 10:46	29°♑03'49	4.03554 AU
opposition	-4525 Aug 27 j 14:34	28°♑54'21	-2°04'14
direct	-4525 Oct 24 j 15:10	23°♑57'45	
	-4525 Dec 26 j 12:12	0°♒	
evening set	-4524 Feb 27 j 06:21	13°♒12'50	
	-4524 Mar 05 j 22:27	15°♒	
conjunction	-4524 Mar 11 j 21:43	16°♒23'37	-1°22'01
minimum elong	-4524 Mar 11 j 21:45	16°♒23'38	1°22'11
max. Earth dist.	-4524 Mar 13 j 18:12	16°♒49'34	6.06682 AU
morning rise	-4524 Mar 25 j 15:21	19°♒35'20	
	-4524 May 12 j 14:05	0°♓	
retrograde	-4524 Aug 02 j 01:41	9°♓11'55	
min. Earth dist.	-4524 Sep 29 j 10:10	4°♓16'12	4.11193 AU
opposition	-4524 Sep 30 j 12:13	4°♓07'17	-1°49'02
	-4524 Nov 05 j 07:17	30°℞♒	
direct	-4524 Nov 28 j 02:43	29°♒07'19	
	-4524 Dec 21 j 05:05	0°♓	
evening set	-4523 Apr 03 j 22:57	18°♓04'51	
conjunction	-4523 Apr 17 j 17:32	21°♓12'50	-0°58'21
minimum elong	-4523 Apr 17 j 17:36	21°♓12'52	0°58'24
max. Earth dist.	-4523 Apr 19 j 02:45	21°♓31'45	6.16313 AU
morning rise	-4523 May 01 j 12:13	24°♓20'38	
	-4523 May 27 j 04:39	0°♈	
retrograde	-4523 Sep 04 j 12:30	12°♈59'39	
opposition	-4523 Nov 02 j 19:59	7°♈57'46	-0°56'57
min. Earth dist.	-4523 Nov 02 j 05:43	8°♈02'37	4.21746 AU
direct	-4522 Jan 01 j 15:57	2°♈55'12	

Attention, astronomical year style is used: The year -4522 in astronomical counting style is the year 4523 BCE in historical counting style.

evening set	-4522 May 09 j 06:56	21°♈27'35	
conjunction	-4522 May 22 j 23:20	24°♈30'09	-0°15'53
minimum elong	-4522 May 22 j 23:22	24°♈30'10	0°15'48
max. Earth dist.	-4522 May 23 j 10:57	24°♈36'36	6.27033 AU
morning rise	-4522 Jun 05 j 13:46	27°♈31'34	
	-4522 Jun 16 j 20:40	0°♉	
	-4522 Sep 23 j 08:15	15°♉	
asc. node	-4522 Oct 04 j 08:09	15°♉16'11	
retrograde	-4522 Oct 06 j 06:59	15°♉16'34	
	-4522 Oct 19 j 05:35	15°℞♉	
opposition	-4522 Dec 04 j 20:27	10°♉18'32	0°10'39
min. Earth dist.	-4522 Dec 04 j 20:16	10°♉18'35	4.31662 AU
direct	-4521 Feb 03 j 22:42	5°♉14'48	
	-4521 May 02 j 09:12	15°♉	
evening set	-4521 Jun 11 j 23:00	23°♉24'41	
conjunction	-4521 Jun 25 j 07:57	26°♉20'45	0°30'14
minimum elong	-4521 Jun 25 j 07:55	26°♉20'43	0°30'24
max. Earth dist.	-4521 Jun 24 j 19:12	26°♉13'44	6.35412 AU
morning rise	-4521 Jul 08 j 13:47	29°♉15'09	
	-4521 Jul 12 j 00:07	0°♊	
retrograde	-4521 Nov 06 j 07:18	16°♊25'31	
opposition	-4520 Jan 05 j 05:22	11°♊31'08	1°12'43
min. Earth dist.	-4520 Jan 05 j 20:47	11°♊26'06	4.37962 AU
direct	-4520 Mar 07 j 09:33	6°♊27'46	
evening set	-4520 Jul 13 j 03:31	24°♊23'52	
max. Earth dist.	-4520 Jul 24 j 19:31	26°♊57'10	6.39060 AU
conjunction	-4520 Jul 26 j 02:58	27°♊14'27	1°06'36
minimum elong	-4520 Jul 26 j 02:55	27°♊14'25	1°06'49
morning rise	-4520 Aug 07 j 23:07	0°♋03'25	
	-4520 Aug 07 j 16:52	0°♋	
retrograde	-4520 Dec 06 j 05:39	17°♋04'35	
opposition	-4519 Feb 04 j 16:10	12°♋12'30	1°53'28
min. Earth dist.	-4519 Feb 05 j 17:51	12°♋04'15	4.38889 AU
direct	-4519 Apr 08 j 07:41	7°♋10'44	
evening set	-4519 Aug 13 j 09:19	25°♋04'11	
max. Earth dist.	-4519 Aug 24 j 09:14	27°♋30'07	6.37070 AU
conjunction	-4519 Aug 26 j 00:56	27°♋52'10	1°24'02
minimum elong	-4519 Aug 26 j 00:55	27°♋52'09	1°24'14
	-4519 Sep 04 j 15:21	0°♌	
morning rise	-4519 Sep 07 j 13:55	0°♌38'59	
	-4519 Nov 23 j 13:31	15°♌	
retrograde	-4518 Jan 07 j 00:21	17°♌56'18	
	-4518 Feb 21 j 08:17	15°℞♌	
opposition	-4518 Mar 08 j 21:31	13°♌04'50	2°02'44
min. Earth dist.	-4518 Mar 10 j 03:19	12°♌55'22	4.34181 AU
direct	-4518 May 10 j 09:05	8°♌05'35	
	-4518 Jul 21 j 02:18	15°♌	
evening set	-4518 Sep 13 j 09:40	26°♌07'15	
max. Earth dist.	-4518 Sep 24 j 06:17	28°♌34'14	6.29946 AU
conjunction	-4518 Sep 25 j 21:40	28°♌56'31	1°17'38
minimum elong	-4518 Sep 25 j 21:43	28°♌56'33	1°17'45
	-4518 Sep 30 j 13:51	0°♍	
morning rise	-4518 Oct 08 j 08:47	1°♍45'27	
retrograde	-4517 Feb 09 j 07:17	19°♍41'10	
opposition	-4517 Apr 11 j 10:30	14°♍48'21	1°36'10
min. Earth dist.	-4517 Apr 12 j 11:03	14°♍40'31	4.25047 AU
direct	-4517 Jun 12 j 01:58	9°♍51'56	
evening set	-4517 Oct 14 j 23:58	28°♍11'03	
	-4517 Oct 22 j 21:01	0°♎	
conjunction	-4517 Oct 27 j 13:47	1°♎05'16	0°47'37
minimum elong	-4517 Oct 27 j 13:50	1°♎05'17	0°47'39
max. Earth dist.	-4517 Oct 26 j 12:47	0°♎50'47	6.19629 AU
morning rise	-4517 Nov 09 j 04:06	4°♎00'00	
retrograde	-4516 Mar 15 j 09:07	22°♎48'53	
opposition	-4516 May 15 j 11:59	17°♎53'10	0°37'38
min. Earth dist.	-4516 May 15 j 23:04	17°♎49'37	4.14189 AU
direct	-4516 Jul 14 j 20:22	12°♎59'14	
	-4516 Nov 08 j 17:29	0°♏	
evening set	-4516 Nov 15 j 23:54	1°♏41'39	
conjunction	-4516 Nov 28 j 19:05	4°♏42'41	0°01'04
minimum elong	-4516 Nov 28 j 19:06	4°♏42'41	0°00'57
behind sun begin	-4516 Nov 28 j 11:02	4°♏37'57	
behind sun end	-4516 Nov 29 j 03:10	4°♏47'26	
max. Earth dist.	-4516 Nov 28 j 14:50	4°♏40'12	6.09261 AU
desc. node	-4516 Dec 07 j 00:03	6°♏38'54	
morning rise	-4516 Dec 11 j 16:45	7°♏45'08	
	-4515 Jan 12 j 17:11	15°♏	
retrograde	-4515 Apr 20 j 23:28	27°♏27'40	
opposition	-4515 Jun 20 j 18:51	22°♏28'04	-0°36'48
min. Earth dist.	-4515 Jun 20 j 11:36	22°♏30'28	4.05186 AU
direct	-4515 Aug 18 j 19:29	17°♏35'05	
	-4515 Nov 21 j 19:34	0°♐	
evening set	-4515 Dec 20 j 20:17	6°♐40'19	
conjunction	-4514 Jan 02 j 22:58	9°♐47'34	-0°47'17
minimum elong	-4514 Jan 02 j 22:55	9°♐47'32	0°47'30
max. Earth dist.	-4514 Jan 03 j 21:40	10°♐01'06	6.02454 AU
morning rise	-4514 Jan 16 j 04:44	12°♐56'35	
	-4514 Apr 12 j 06:12	0°♑	
retrograde	-4514 May 28 j 07:28	3°♑12'22	
	-4514 Jul 13 j 09:58	30°℞♐	
opposition	-4514 Jul 27 j 12:18	28°♐09'13	-1°39'46
min. Earth dist.	-4514 Jul 26 j 14:24	28°♐16'34	4.01416 AU
direct	-4514 Sep 23 j 16:05	23°♐15'07	
	-4514 Nov 29 j 05:11	0°♑	
evening set	-4513 Jan 26 j 08:00	12°♑32'54	
conjunction	-4513 Feb 08 j 17:55	15°♑43'29	-1°18'39
minimum elong	-4513 Feb 08 j 17:52	15°♑43'28	1°18'51
max. Earth dist.	-4513 Feb 10 j 10:55	16°♑07'47	6.01945 AU
morning rise	-4513 Feb 22 j 07:10	18°♑55'41	
	-4513 Apr 13 j 17:42	0°♒	
retrograde	-4513 Jul 03 j 20:38	9°♒06'24	
min. Earth dist.	-4513 Aug 31 j 08:56	4°♒11'20	4.04391 AU
opposition	-4513 Sep 01 j 14:23	4°♒01'17	-2°04'52
	-4513 Oct 06 j 07:51	30°℞♑	
direct	-4513 Oct 29 j 15:05	29°♑04'16	
	-4513 Nov 22 j 02:58	0°♒	
	-4512 Feb 18 j 02:23	15°♒	
evening set	-4512 Mar 03 j 11:00	18°♒17'13	
conjunction	-4512 Mar 17 j 03:04	21°♒27'42	-1°20'20
minimum elong	-4512 Mar 17 j 03:06	21°♒27'43	1°20'28
max. Earth dist.	-4512 Mar 18 j 23:41	21°♒53'38	6.08020 AU
morning rise	-4512 Mar 30 j 20:59	24°♒38'56	
	-4512 Apr 23 j 14:49	0°♓	
retrograde	-4512 Aug 06 j 20:55	14°♓07'09	
min. Earth dist.	-4512 Oct 04 j 05:50	9°♓11'05	4.12874 AU
opposition	-4512 Oct 05 j 06:12	9°♓02'46	-1°43'30
direct	-4512 Dec 03 j 01:48	4°♓02'22	
evening set	-4511 Apr 08 j 22:58	22°♓55'11	
conjunction	-4511 Apr 22 j 17:35	26°♓02'20	-0°53'14
minimum elong	-4511 Apr 22 j 17:39	26°♓02'22	0°53'15
max. Earth dist.	-4511 Apr 24 j 01:21	26°♓20'21	6.18207 AU
morning rise	-4511 May 06 j 11:54	29°♓09'09	
	-4511 May 10 j 06:32	0°♈	

Attention, astronomical year style is used: The year -4511 in astronomical counting style is the year 4512 BCE in historical counting style.

retrograde	-4511 Sep 08 j 22:19	17°♈38'26	
opposition	-4511 Nov 07 j 07:31	12°♈37'02	-0°48'01
min. Earth dist.	-4511 Nov 06 j 18:09	12°♈41'33	4.23663 AU
direct	-4510 Jan 06 j 07:18	7°♈34'12	
evening set	-4510 May 13 j 23:59	26°♈01'30	
conjunction	-4510 May 27 j 15:27	29°♈02'57	-0°09'28
minimum elong	-4510 May 27 j 15:28	29°♈02'57	0°09'22
behind sun begin	-4510 May 27 j 08:35	28°♈59'09	
behind sun end	-4510 May 27 j 22:20	29°♈06'45	
max. Earth dist.	-4510 May 27 j 22:38	29°♈06'55	6.28821 AU
	-4510 May 31 j 22:11	0°♉	
morning rise	-4510 Jun 10 j 04:54	2°♉03'11	
asc. node	-4510 Aug 15 j 15:53	15°♉02'23	
	-4510 Aug 15 j 09:38	15°♉	
retrograde	-4510 Oct 10 j 13:54	19°♉40'44	
	-4510 Dec 07 j 01:08	15°℞♉	
opposition	-4510 Dec 09 j 03:40	14°♉43'15	0°19'50
min. Earth dist.	-4510 Dec 09 j 06:48	14°♉42'13	4.33164 AU
direct	-4509 Feb 08 j 11:15	9°♉39'28	
	-4509 Apr 11 j 18:15	15°♉	
evening set	-4509 Jun 16 j 09:20	27°♉45'38	
	-4509 Jun 26 j 14:54	0°♊	
conjunction	-4509 Jun 29 j 17:06	0°♊40'44	0°35'57
minimum elong	-4509 Jun 29 j 17:03	0°♊40'43	0°36'09
max. Earth dist.	-4509 Jun 29 j 01:16	0°♊32'03	6.36491 AU
morning rise	-4509 Jul 12 j 21:30	3°♊34'09	
retrograde	-4509 Nov 10 j 10:07	20°♊41'04	
opposition	-4508 Jan 09 j 10:37	15°♊47'05	1°19'42
min. Earth dist.	-4508 Jan 10 j 03:30	15°♊41'35	4.38571 AU
direct	-4508 Mar 11 j 16:24	10°♊43'50	
evening set	-4508 Jul 17 j 09:36	28°♊38'42	
	-4508 Jul 23 j 14:18	0°♋	
max. Earth dist.	-4508 Jul 28 j 21:57	1°♋10'07	6.39131 AU
conjunction	-4508 Jul 30 j 07:47	1°♋28'44	1°10'11
minimum elong	-4508 Jul 30 j 07:43	1°♋28'42	1°10'24
morning rise	-4508 Aug 12 j 02:45	4°♋17'12	
retrograde	-4508 Dec 10 j 11:54	21°♋19'21	
opposition	-4507 Feb 08 j 23:02	16°♋27'31	1°56'41
min. Earth dist.	-4507 Feb 10 j 02:52	16°♋18'37	4.38426 AU
direct	-4507 Apr 12 j 15:13	11°♋26'03	
evening set	-4507 Aug 17 j 13:51	29°♋20'46	
	-4507 Aug 20 j 12:49	0°♌	
max. Earth dist.	-4507 Aug 28 j 10:33	1°♌45'22	6.36076 AU
conjunction	-4507 Aug 30 j 04:43	2°♌08'51	1°24'35
minimum elong	-4507 Aug 30 j 04:43	2°♌08'51	1°24'47
morning rise	-4507 Sep 11 j 17:19	4°♌55'53	
	-4507 Oct 30 j 17:30	15°♌	
retrograde	-4506 Jan 11 j 11:32	22°♌18'31	
opposition	-4506 Mar 13 j 08:59	17°♌26'57	2°01'15
min. Earth dist.	-4506 Mar 14 j 14:41	17°♌17'31	4.32728 AU
	-4506 Apr 02 j 13:00	15°℞♌	
direct	-4506 May 14 j 17:30	12°♌28'03	
	-4506 Jun 25 j 13:01	15°♌	
	-4506 Sep 15 j 04:48	0°♍	
evening set	-4506 Sep 17 j 16:07	0°♍33'20	
max. Earth dist.	-4506 Sep 28 j 15:01	3°♍02'10	6.28157 AU
conjunction	-4506 Sep 30 j 04:17	3°♍23'21	1°14'49
minimum elong	-4506 Sep 30 j 04:20	3°♍23'23	1°14'55
morning rise	-4506 Oct 12 j 15:29	6°♍13'06	
retrograde	-4505 Feb 14 j 01:44	24°♍17'23	
opposition	-4505 Apr 16 j 04:31	19°♍24'20	1°29'46
min. Earth dist.	-4505 Apr 17 j 04:04	19°♍16'50	4.23038 AU
direct	-4505 Jun 16 j 15:28	14°♍28'22	
	-4505 Oct 06 j 21:21	0°♎	
evening set	-4505 Oct 19 j 11:55	2°♎52'31	
max. Earth dist.	-4505 Oct 31 j 02:38	5°♎34'07	6.17579 AU
conjunction	-4505 Nov 01 j 02:16	5°♎47'52	0°41'52
minimum elong	-4505 Nov 01 j 02:19	5°♎47'54	0°41'52
morning rise	-4505 Nov 13 j 17:41	8°♎43'56	
retrograde	-4504 Mar 20 j 10:24	27°♎42'39	
opposition	-4504 May 20 j 12:37	22°♎46'25	0°27'38
min. Earth dist.	-4504 May 20 j 20:28	22°♎43'53	4.12260 AU
direct	-4504 Jul 19 j 15:42	17°♎52'44	
desc. node	-4504 Oct 16 j 08:44	28°♎41'41	
	-4504 Oct 22 j 11:34	0°♏	
evening set	-4504 Nov 20 j 19:03	6°♏40'15	
conjunction	-4504 Dec 03 j 15:29	9°♏42'29	-0°06'09
minimum elong	-4504 Dec 03 j 15:28	9°♏42'29	0°06'16
behind sun begin	-4504 Dec 03 j 07:49	9°♏37'58	
behind sun end	-4504 Dec 03 j 23:08	9°♏47'00	
max. Earth dist.	-4504 Dec 03 j 16:52	9°♏43'17	6.07646 AU
morning rise	-4504 Dec 16 j 14:12	12°♏46'10	
	-4504 Dec 26 j 03:29	15°♏	
	-4503 Mar 15 j 18:22	0°♐	
retrograde	-4503 Apr 26 j 07:44	2°♐36'21	
	-4503 Jun 06 j 23:46	30°℞♏	
opposition	-4503 Jun 25 j 23:57	27°♏36'13	-0°47'07
min. Earth dist.	-4503 Jun 25 j 14:22	27°♏39'22	4.04056 AU
direct	-4503 Aug 23 j 20:57	22°♏43'14	
	-4503 Nov 01 j 14:47	0°♐	
evening set	-4503 Dec 25 j 22:43	11°♐51'36	
conjunction	-4502 Jan 08 j 02:18	14°♐59'31	-0°53'10
minimum elong	-4502 Jan 08 j 02:15	14°♐59'29	0°53'23
max. Earth dist.	-4502 Jan 09 j 03:58	15°♐14'49	6.01880 AU
morning rise	-4502 Jan 21 j 09:23	18°♐09'17	
	-4502 Mar 16 j 12:05	0°♑	
retrograde	-4502 Jun 02 j 12:14	8°♑26'52	
opposition	-4502 Aug 01 j 16:49	3°♑23'13	-1°46'04
min. Earth dist.	-4502 Jul 31 j 15:52	3°♑31'36	4.01485 AU
	-4502 Aug 29 j 14:17	30°℞♐	
direct	-4502 Sep 28 j 18:03	28°♐28'46	
	-4502 Oct 28 j 21:39	0°♑	
evening set	-4501 Jan 31 j 14:05	17°♑46'26	
conjunction	-4501 Feb 14 j 01:00	20°♑57'06	-1°20'49
minimum elong	-4501 Feb 14 j 00:58	20°♑57'05	1°21'02
max. Earth dist.	-4501 Feb 15 j 20:24	21°♑22'47	6.02602 AU
morning rise	-4501 Feb 27 j 14:56	24°♑09'16	
	-4501 Mar 25 j 04:20	0°♒	
retrograde	-4501 Jul 08 j 22:19	14°♒15'02	
min. Earth dist.	-4501 Sep 05 j 09:35	9°♒19'36	4.05538 AU
opposition	-4501 Sep 06 j 14:19	9°♒09'47	-2°04'31
direct	-4501 Nov 03 j 18:01	4°♒12'14	
	-4500 Jan 30 j 19:30	15°♒	
evening set	-4500 Mar 08 j 15:42	23°♒22'00	
conjunction	-4500 Mar 22 j 08:23	26°♒32'04	-1°18'03
minimum elong	-4500 Mar 22 j 08:26	26°♒32'05	1°18'10
max. Earth dist.	-4500 Mar 24 j 05:03	26°♒57'55	6.09532 AU
morning rise	-4500 Apr 05 j 02:37	29°♒42'43	
	-4500 Apr 06 j 08:44	0°♓	
retrograde	-4500 Aug 11 j 14:19	19°♓02'01	
opposition	-4500 Oct 09 j 23:40	13°♓57'56	-1°37'17
min. Earth dist.	-4500 Oct 08 j 23:49	14°♓06'04	4.14584 AU
direct	-4500 Dec 07 j 22:07	8°♓57'07	
evening set	-4499 Apr 13 j 22:42	27°♓45'26	

Attention, astronomical year style is used: The year -4499 in astronomical counting style is the year 4500 BCE in historical counting style.

	-4499 Apr 23 j 21:28	0°♈		
conjunction	-4499 Apr 27 j 17:02	0°♈51'45	-0°47'45	
minimum elong	-4499 Apr 27 j 17:06	0°♈51'47	0°47'45	
max. Earth dist.	-4499 Apr 28 j 20:27	1°♈07'15	6.19974 AU	
morning rise	-4499 May 11 j 11:03	3°♈57'38		
retrograde	-4499 Sep 13 j 10:14	22°♈18'11		
opposition	-4499 Nov 11 j 19:31	17°♈17'16	-0°38'46	
min. Earth dist.	-4499 Nov 11 j 09:13	17°♈20'44	4.25317 AU	
direct	-4498 Jan 11 j 00:49	12°♈14'11		
	-4498 May 15 j 21:14	0°♉		
evening set	-4498 May 18 j 17:30	0°♉37'28		
conjunction	-4498 Jun 01 j 08:16	3°♉38'00	-0°02'56	
minimum elong	-4498 Jun 01 j 08:16	3°♉38'00	0°02'50	
behind sun begin	-4498 Jun 01 j 00:01	3°♉33'27		
behind sun end	-4498 Jun 01 j 16:31	3°♉42'33		
max. Earth dist.	-4498 Jun 01 j 13:04	3°♉40'37	6.30251 AU	
morning rise	-4498 Jun 14 j 20:28	6°♉37'10		
asc. node	-4498 Jun 25 j 19:18	9°♉00'22		
	-4498 Jul 24 j 23:23	15°♉		
retrograde	-4498 Oct 14 j 20:14	24°♉08'39		
opposition	-4498 Dec 13 j 12:07	19°♉11'43	0°29'01	
min. Earth dist.	-4498 Dec 13 j 16:42	19°♉10'12	4.34281 AU	
	-4497 Jan 20 j 06:18	15°℞♉		
direct	-4497 Feb 12 j 22:28	14°♉07'55		
	-4497 Mar 08 j 22:53	15°♉		
	-4497 Jun 10 j 17:35	0°♊		
evening set	-4497 Jun 20 j 21:38	2°♊11'42		
max. Earth dist.	-4497 Jul 03 j 07:53	4°♊54'56	6.37205 AU	
conjunction	-4497 Jul 04 j 03:58	5°♊05'57	0°41'37	
minimum elong	-4497 Jul 04 j 03:55	5°♊05'55	0°41'48	
morning rise	-4497 Jul 17 j 07:09	7°♊58'32		
retrograde	-4497 Nov 14 j 18:00	25°♊03'16		
opposition	-4496 Jan 13 j 18:57	20°♊09'41	1°26'28	
min. Earth dist.	-4496 Jan 14 j 14:45	20°♊03'15	4.38855 AU	
direct	-4496 Mar 16 j 03:53	15°♊06'35		
	-4496 Jul 07 j 18:21	0°♋		
evening set	-4496 Jul 21 j 18:10	3°♋00'57		
max. Earth dist.	-4496 Aug 02 j 03:40	5°♋30'57	6.38943 AU	
conjunction	-4496 Aug 03 j 15:17	5°♋50'34	1°13'30	
minimum elong	-4496 Aug 03 j 15:14	5°♋50'32	1°13'43	
morning rise	-4496 Aug 16 j 09:07	8°♋38'38		
retrograde	-4496 Dec 14 j 20:22	25°♋42'35		
opposition	-4495 Feb 13 j 09:37	20°♋50'53	1°59'24	
min. Earth dist.	-4495 Feb 14 j 13:33	20°♋41'57	4.37810 AU	
direct	-4495 Apr 17 j 00:33	15°♋49'43		
	-4495 Aug 04 j 14:24	0°♌		
evening set	-4495 Aug 21 j 21:43	3°♌45'52		
max. Earth dist.	-4495 Sep 01 j 18:14	6°♌10'46	6.35081 AU	
conjunction	-4495 Sep 03 j 11:55	6°♌34'03	1°24'42	
minimum elong	-4495 Sep 03 j 11:55	6°♌34'03	1°24'52	
morning rise	-4495 Sep 15 j 23:58	9°♌21'16		
	-4495 Oct 12 j 03:27	15°♌		
retrograde	-4494 Jan 16 j 02:31	26°♌49'03		
opposition	-4494 Mar 18 j 00:11	21°♌57'27	1°58'59	
min. Earth dist.	-4494 Mar 19 j 06:18	21°♌47'53	4.31416 AU	
direct	-4494 May 19 j 07:09	16°♌59'00		
	-4494 Aug 29 j 20:34	0°♍		
evening set	-4494 Sep 22 j 01:49	5°♍07'04		
max. Earth dist.	-4494 Oct 03 j 01:09	7°♍36'42	6.26652 AU	
conjunction	-4494 Oct 04 j 14:00	7°♍57'43	1°11'29	
minimum elong	-4494 Oct 04 j 14:03	7°♍57'44	1°11'35	

morning rise	-4494 Oct 17 j 01:38	10°♍48'16		
retrograde	-4493 Feb 18 j 21:45	29°♍00'01		
opposition	-4493 Apr 21 j 01:22	24°♍06'36	1°22'37	
min. Earth dist.	-4493 Apr 21 j 22:14	23°♍59'56	4.21452 AU	
direct	-4493 Jun 21 j 07:34	19°♍11'03		
	-4493 Sep 19 j 13:36	0°♎		
evening set	-4493 Oct 24 j 01:46	7°♎38'31		
conjunction	-4493 Nov 05 j 16:55	10°♎34'50	0°35'45	
minimum elong	-4493 Nov 05 j 16:57	10°♎34'51	0°35'43	
max. Earth dist.	-4493 Nov 04 j 22:03	10°♎23'49	6.16091 AU	
morning rise	-4493 Nov 18 j 09:03	13°♎31'54		
	-4492 Feb 12 j 13:08	0°♏		
retrograde	-4492 Mar 25 j 13:52	2°♏38'13		
	-4492 May 06 j 23:50	30°℞♎		
opposition	-4492 May 25 j 14:20	27°♎41'31	0°17'19	
min. Earth dist.	-4492 May 25 j 20:13	27°♎39'37	4.10992 AU	
direct	-4492 Jul 24 j 13:48	22°♎48'06		
desc. node	-4492 Aug 26 j 02:26	24°♎29'26		
	-4492 Oct 02 j 19:00	0°♏		
evening set	-4492 Nov 25 j 14:47	11°♏38'18		
conjunction	-4492 Dec 08 j 12:00	14°♏41'20	-0°13'11	
minimum elong	-4492 Dec 08 j 11:59	14°♏41'19	0°13'19	
behind sun begin	-4492 Dec 08 j 07:13	14°♏38'30		
behind sun end	-4492 Dec 08 j 16:45	14°♏44'08		
max. Earth dist.	-4492 Dec 08 j 16:16	14°♏43'51	6.06718 AU	
	-4492 Dec 09 j 19:29	15°♏		
morning rise	-4492 Dec 21 j 11:59	17°♏45'56		
	-4491 Feb 16 j 03:33	0°♐		
retrograde	-4491 May 01 j 11:01	7°♐40'49		
opposition	-4491 Jul 01 j 02:56	2°♐40'07	-0°56'56	
min. Earth dist.	-4491 Jun 30 j 13:45	2°♐44'28	4.03582 AU	
	-4491 Jul 22 j 12:44	30°℞♏		
direct	-4491 Aug 28 j 19:31	27°♏47'04		
	-4491 Oct 04 j 16:20	0°♐		
evening set	-4491 Dec 30 j 23:22	16°♐56'32		
conjunction	-4490 Jan 13 j 04:00	20°♐04'52	-0°58'31	
minimum elong	-4490 Jan 13 j 03:56	20°♐04'50	0°58'43	
max. Earth dist.	-4490 Jan 14 j 09:31	20°♐22'28	6.01885 AU	
morning rise	-4490 Jan 26 j 11:55	23°♐15'00		
	-4490 Feb 24 j 22:35	0°♑		
retrograde	-4490 Jun 07 j 14:55	13°♑32'06		
opposition	-4490 Aug 06 j 17:35	8°♑28'05	-1°51'18	
min. Earth dist.	-4490 Aug 05 j 16:15	8°♑36'38	4.01973 AU	
direct	-4490 Oct 03 j 19:14	3°♑33'16		
evening set	-4489 Feb 05 j 16:32	22°♑49'41		
conjunction	-4489 Feb 19 j 04:20	26°♑00'19	-1°22'17	
minimum elong	-4489 Feb 19 j 04:19	26°♑00'18	1°22'29	
max. Earth dist.	-4489 Feb 21 j 01:11	26°♑26'45	6.03503 AU	
morning rise	-4489 Mar 04 j 19:00	29°♑12'21		
	-4489 Mar 08 j 04:42	0°♒		
	-4489 May 21 j 23:17	15°♒		
retrograde	-4489 Jul 13 j 18:55	19°♒12'22		
	-4489 Sep 04 j 22:15	15°℞♒		
min. Earth dist.	-4489 Sep 10 j 04:48	14°♒17'04	4.06764 AU	
opposition	-4489 Sep 11 j 09:45	14°♒07'12	-2°03'15	
direct	-4489 Nov 08 j 14:37	9°♒09'13		
	-4488 Jan 09 j 18:49	15°♒		
evening set	-4488 Mar 13 j 16:25	28°♒16'00		
	-4488 Mar 21 j 05:08	0°♓		
conjunction	-4488 Mar 27 j 09:27	1°♓25'36	-1°15'17	
minimum elong	-4488 Mar 27 j 09:30	1°♓25'38	1°15'24	
max. Earth dist.	-4488 Mar 29 j 02:42	1°♓49'24	6.10958 AU	

Attention, astronomical year style is used: The year -4488 in astronomical counting style is the year 4489 BCE in historical counting style.

morning rise	-4488 Apr 10 j 04:00	4°♓35'44	
retrograde	-4488 Aug 16 j 04:12	23°♓47'00	
opposition	-4488 Oct 14 j 13:17	18°♓43'16	-1°30'38
min. Earth dist.	-4488 Oct 13 j 15:42	18°♓50'38	4.16052 AU
direct	-4488 Dec 12 j 16:10	13°♓42'04	
	-4487 Apr 07 j 18:02	0°♈	
evening set	-4487 Apr 18 j 18:57	2°♈27'08	
conjunction	-4487 May 02 j 13:19	5°♈32'49	-0°42'08
minimum elong	-4487 May 02 j 13:22	5°♈32'51	0°42'07
max. Earth dist.	-4487 May 03 j 14:39	5°♈47'06	6.21393 AU
morning rise	-4487 May 16 j 06:43	8°♈37'54	
retrograde	-4487 Sep 17 j 19:13	26°♈51'16	
opposition	-4487 Nov 16 j 04:50	21°♈50'58	-0°29'34
min. Earth dist.	-4487 Nov 15 j 20:16	21°♈53'51	4.26560 AU
direct	-4486 Jan 15 j 13:05	16°♈47'46	
	-4486 Apr 29 j 09:33	0°♉	
asc. node	-4486 May 06 j 16:48	1°♉32'09	
evening set	-4486 May 23 j 09:00	5°♉08'42	
conjunction	-4486 Jun 05 j 22:43	8°♉08'27	0°03'36
minimum elong	-4486 Jun 05 j 22:43	8°♉08'27	0°03'44
behind sun begin	-4486 Jun 05 j 14:33	8°♉03'57	
behind sun end	-4486 Jun 06 j 06:54	8°♉12'57	
max. Earth dist.	-4486 Jun 05 j 22:17	8°♉08'13	6.31224 AU
morning rise	-4486 Jun 19 j 10:05	11°♉06'50	
	-4486 Jul 07 j 09:39	15°♉	
retrograde	-4486 Oct 19 j 03:46	28°♉34'12	
opposition	-4486 Dec 17 j 19:58	23°♉37'46	0°37'53
min. Earth dist.	-4486 Dec 18 j 03:29	23°♉35'18	4.34936 AU
direct	-4485 Feb 17 j 10:17	18°♉34'00	
	-4485 May 24 j 21:12	0°♊	
evening set	-4485 Jun 25 j 08:59	6°♊36'54	
conjunction	-4485 Jul 08 j 14:15	9°♊30'32	0°46'58
minimum elong	-4485 Jul 08 j 14:12	9°♊30'31	0°47'09
max. Earth dist.	-4485 Jul 07 j 16:44	9°♊18'44	6.37494 AU
morning rise	-4485 Jul 21 j 15:58	12°♊22'27	
retrograde	-4485 Nov 19 j 00:16	29°♊26'29	
opposition	-4484 Jan 18 j 03:30	24°♊33'16	1°32'43
min. Earth dist.	-4484 Jan 18 j 23:50	24°♊26'42	4.38799 AU
direct	-4484 Mar 20 j 12:50	19°♊30'27	
	-4484 Jun 20 j 15:10	0°♋	
evening set	-4484 Jul 26 j 03:22	7°♋25'17	
max. Earth dist.	-4484 Aug 06 j 09:38	9°♋53'50	6.38536 AU
conjunction	-4484 Aug 07 j 23:12	10°♋14'34	1°16'23
minimum elong	-4484 Aug 07 j 23:10	10°♋14'32	1°16'37
morning rise	-4484 Aug 20 j 16:07	13°♋02'24	
	-4484 Dec 09 j 16:39	0°♌	
retrograde	-4484 Dec 19 j 07:55	0°♌08'46	
	-4484 Dec 28 j 22:05	30°℞♋	
opposition	-4483 Feb 17 j 21:25	25°♋17'12	2°01'25
min. Earth dist.	-4483 Feb 19 j 02:45	25°♋07'50	4.37096 AU
direct	-4483 Apr 21 j 13:16	20°♋16'23	
	-4483 Jul 18 j 02:40	0°♌	
evening set	-4483 Aug 26 j 06:04	8°♌13'54	
max. Earth dist.	-4483 Sep 06 j 02:32	10°♌39'08	6.34106 AU
conjunction	-4483 Sep 07 j 19:48	11°♌02'14	1°24'18
minimum elong	-4483 Sep 07 j 19:48	11°♌02'14	1°24'28
morning rise	-4483 Sep 20 j 07:28	13°♌49'42	
	-4483 Sep 25 j 14:16	15°♌	
	-4483 Dec 21 j 16:43	0°♍	
retrograde	-4482 Jan 20 j 16:11	1°♍22'27	
	-4482 Feb 19 j 21:12	30°℞♌	
opposition	-4482 Mar 22 j 16:21	26°♌30'38	1°55'57
min. Earth dist.	-4482 Mar 23 j 20:32	26°♌21'40	4.30250 AU
direct	-4482 May 23 j 19:52	21°♌32'35	
	-4482 Aug 11 j 14:08	0°♍	
evening set	-4482 Sep 26 j 11:39	9°♍42'33	
conjunction	-4482 Oct 08 j 23:56	12°♍33'45	1°07'41
minimum elong	-4482 Oct 08 j 23:59	12°♍33'47	1°07'45
max. Earth dist.	-4482 Oct 07 j 14:01	12°♍14'22	6.25390 AU
morning rise	-4482 Oct 21 j 11:50	15°♍24'58	
	-4481 Jan 04 j 07:19	0°♎	
retrograde	-4481 Feb 23 j 19:02	3°♎43'14	
	-4481 Apr 16 j 14:44	30°℞♍	
opposition	-4481 Apr 25 j 22:15	28°♍49'25	1°14'53
min. Earth dist.	-4481 Apr 26 j 18:10	28°♍43'03	4.20149 AU
direct	-4481 Jun 26 j 02:01	23°♍54'10	
	-4481 Aug 30 j 06:42	0°♎	
evening set	-4481 Oct 28 j 15:17	12°♎23'53	
conjunction	-4481 Nov 10 j 07:01	15°♎20'59	0°29'25
minimum elong	-4481 Nov 10 j 07:04	15°♎21'00	0°29'22
max. Earth dist.	-4481 Nov 09 j 14:12	15°♎11'09	6.14856 AU
morning rise	-4481 Nov 23 j 00:11	18°♎19'01	
	-4480 Jan 16 j 18:10	0°♏	
retrograde	-4480 Mar 30 j 13:35	7°♏31'50	
opposition	-4480 May 30 j 14:26	2°♏34'32	0°06'57
min. Earth dist.	-4480 May 30 j 16:55	2°♏33'44	4.09925 AU
	-4480 Jun 20 j 12:58	30°℞♎	
desc. node	-4480 Jul 06 j 12:24	28°♎31'47	
direct	-4480 Jul 29 j 08:38	27°♎41'14	
	-4480 Sep 05 j 13:57	0°♏	
	-4480 Nov 23 j 17:38	15°♏	
evening set	-4480 Nov 30 j 09:23	16°♏33'43	
conjunction	-4480 Dec 13 j 07:37	19°♏37'31	-0°20'05
minimum elong	-4480 Dec 13 j 07:35	19°♏37'29	0°20'15
max. Earth dist.	-4480 Dec 13 j 15:54	19°♏42'26	6.05905 AU
morning rise	-4480 Dec 26 j 08:34	22°♏42'55	
	-4479 Jan 27 j 08:52	0°♐	
retrograde	-4479 May 06 j 14:38	12°♐42'10	
opposition	-4479 Jul 06 j 04:23	7°♐40'54	-1°06'15
min. Earth dist.	-4479 Jul 05 j 14:05	7°♐45'39	4.03105 AU
direct	-4479 Sep 02 j 19:04	2°♐47'40	
evening set	-4478 Jan 04 j 22:55	21°♐58'30	
conjunction	-4478 Jan 18 j 04:32	25°♐07'18	-1°03'24
minimum elong	-4478 Jan 18 j 04:28	25°♐07'16	1°03'36
max. Earth dist.	-4478 Jan 19 j 12:50	25°♐26'32	6.01772 AU
morning rise	-4478 Jan 31 j 13:30	28°♐17'53	
	-4478 Feb 07 j 19:19	0°♑	
retrograde	-4478 Jun 12 j 16:01	18°♑34'47	
opposition	-4478 Aug 11 j 16:56	13°♑30'29	-1°55'43
min. Earth dist.	-4478 Aug 10 j 14:18	13°♑39'29	4.02271 AU
direct	-4478 Oct 08 j 17:10	8°♑35'17	
evening set	-4477 Feb 10 j 18:51	27°♑51'25	
	-4477 Feb 19 j 21:55	0°♒	
conjunction	-4477 Feb 24 j 07:24	1°♒02'05	-1°23'10
minimum elong	-4477 Feb 24 j 07:24	1°♒02'05	1°23'21
max. Earth dist.	-4477 Feb 26 j 03:18	1°♒27'55	6.04154 AU
morning rise	-4477 Mar 09 j 22:53	4°♒14'07	
	-4477 Apr 28 j 06:13	15°♒	
retrograde	-4477 Jul 18 j 14:53	24°♒09'20	
min. Earth dist.	-4477 Sep 15 j 00:43	19°♒13'45	4.07690 AU
opposition	-4477 Sep 16 j 04:49	19°♒04'09	-2°01'10
	-4477 Oct 21 j 09:12	15°℞♒	
direct	-4477 Nov 13 j 12:09	14°♒05'37	
	-4477 Dec 06 j 18:41	15°♒	

Attention, astronomical year style is used: The year -4476 in astronomical counting style is the year 4477 BCE in historical counting style.

	-4476 Mar 04 j 17:05	0°♓	
evening set	-4476 Mar 18 j 17:32	3°♓10'33	
conjunction	-4476 Apr 01 j 11:16	6°♓19'56	-1°11'59
minimum elong	-4476 Apr 01 j 11:19	6°♓19'58	1°12'05
max. Earth dist.	-4476 Apr 03 j 04:03	6°♓43'24	6.12097 AU
morning rise	-4476 Apr 15 j 05:53	9°♓29'36	
retrograde	-4476 Aug 20 j 19:50	28°♓33'44	
min. Earth dist.	-4476 Oct 18 j 07:53	23°♓37'12	4.17266 AU
opposition	-4476 Oct 19 j 03:53	23°♓30'24	-1°23'22
direct	-4476 Dec 17 j 09:38	18°♓28'51	
	-4475 Mar 21 j 08:14	0°♈	
evening set	-4475 Apr 23 j 16:32	7°♈11'23	
conjunction	-4475 May 07 j 10:30	10°♈16'28	-0°36'10
minimum elong	-4475 May 07 j 10:33	10°♈16'30	0°36'09
max. Earth dist.	-4475 May 08 j 07:21	10°♈28'11	6.22587 AU
morning rise	-4475 May 21 j 03:34	13°♈20'51	
	-4475 Aug 22 j 23:19	0°♉	
retrograde	-4475 Sep 22 j 05:30	1°♉27'52	
	-4475 Oct 22 j 07:26	30°℞♈	
opposition	-4475 Nov 20 j 16:04	26°♈28'04	-0°20'02
min. Earth dist.	-4475 Nov 20 j 09:43	26°♈30'12	4.27630 AU
direct	-4474 Jan 20 j 04:41	21°♈24'41	
asc. node	-4474 Mar 16 j 07:01	25°♈45'23	
	-4474 Apr 10 j 19:39	0°♉	
evening set	-4474 May 28 j 02:04	9°♉43'37	
conjunction	-4474 Jun 10 j 14:59	12°♉42'38	0°10'07
minimum elong	-4474 Jun 10 j 14:58	12°♉42'38	0°10'16
behind sun begin	-4474 Jun 10 j 08:30	12°♉39'04	
behind sun end	-4474 Jun 10 j 21:26	12°♉46'11	
max. Earth dist.	-4474 Jun 10 j 12:44	12°♉41'25	6.32116 AU
	-4474 Jun 20 j 23:53	15°♉	
morning rise	-4474 Jun 24 j 01:00	15°♉40'09	
	-4474 Sep 08 j 17:56	0°♊	
retrograde	-4474 Oct 23 j 12:11	3°♊03'34	
	-4474 Dec 07 j 15:20	30°℞♉	
opposition	-4474 Dec 22 j 05:46	28°♉07'43	0°46'44
min. Earth dist.	-4474 Dec 22 j 14:38	28°♉04'48	4.35605 AU
direct	-4473 Feb 21 j 22:48	23°♉04'06	
	-4473 May 05 j 07:34	0°♊	
evening set	-4473 Jun 29 j 22:08	11°♊05'47	
max. Earth dist.	-4473 Jul 12 j 01:00	13°♊45'01	6.37896 AU
conjunction	-4473 Jul 13 j 01:55	13°♊58'41	0°52'10
minimum elong	-4473 Jul 13 j 01:52	13°♊58'39	0°52'22
morning rise	-4473 Jul 26 j 02:28	16°♊49'56	
	-4473 Oct 03 j 06:36	0°♋	
retrograde	-4473 Nov 23 j 10:07	3°♋52'55	
	-4472 Jan 14 j 19:05	30°℞♊	
opposition	-4472 Jan 22 j 14:12	29°♊00'03	1°38'34
min. Earth dist.	-4472 Jan 23 j 12:17	28°♊52'55	4.38948 AU
direct	-4472 Mar 25 j 02:15	23°♊57'29	
	-4472 May 31 j 09:48	0°♋	
evening set	-4472 Jul 30 j 13:06	11°♋51'43	
max. Earth dist.	-4472 Aug 10 j 19:12	14°♋20'17	6.38426 AU
conjunction	-4472 Aug 12 j 07:58	14°♋40'34	1°18'54
minimum elong	-4472 Aug 12 j 07:55	14°♋40'33	1°19'06
morning rise	-4472 Aug 24 j 23:41	17°♋28'00	
	-4472 Oct 28 j 10:41	0°♌	
retrograde	-4472 Dec 23 j 17:19	4°♌35'56	
	-4471 Feb 20 j 09:17	30°℞♋	
opposition	-4471 Feb 22 j 10:08	29°♋44'26	2°02'45
min. Earth dist.	-4471 Feb 23 j 14:35	29°♋35'22	4.36751 AU
direct	-4471 Apr 26 j 00:51	24°♋44'04	
	-4471 Jun 27 j 04:17	0°♌	
evening set	-4471 Aug 30 j 14:24	12°♌41'29	
	-4471 Sep 09 j 22:19	15°♌	
max. Earth dist.	-4471 Sep 10 j 10:34	15°♌06'52	6.33550 AU
conjunction	-4471 Sep 12 j 03:24	15°♌29'46	1°23'25
minimum elong	-4471 Sep 12 j 03:25	15°♌29'46	1°23'34
morning rise	-4471 Sep 24 j 14:46	18°♌17'20	
	-4471 Nov 21 j 15:18	0°♍	
retrograde	-4470 Jan 25 j 07:25	5°♍53'47	
opposition	-4470 Mar 27 j 08:08	1°♍01'49	1°52'12
min. Earth dist.	-4470 Mar 28 j 12:24	0°♍52'51	4.29493 AU
	-4470 Apr 04 j 12:03	30°℞♌	
direct	-4470 May 28 j 11:02	26°♌04'10	
	-4470 Jul 19 j 19:08	0°♍	
evening set	-4470 Sep 30 j 20:16	14°♍14'42	
max. Earth dist.	-4470 Oct 12 j 00:25	16°♍47'50	6.24505 AU
conjunction	-4470 Oct 13 j 08:44	17°♍06'21	1°03'31
minimum elong	-4470 Oct 13 j 08:48	17°♍06'23	1°03'34
morning rise	-4470 Oct 25 j 21:01	19°♍58'07	
	-4470 Dec 12 j 00:34	0°♎	
retrograde	-4469 Feb 28 j 12:12	8°♎21'41	
opposition	-4469 Apr 30 j 17:05	3°♎27'29	1°06'47
min. Earth dist.	-4469 May 01 j 10:21	3°♎21'59	4.19182 AU
	-4469 May 30 j 18:52	30°℞♍	
direct	-4469 Jun 30 j 16:11	28°♍32'36	
	-4469 Jul 31 j 07:59	0°♎	
evening set	-4469 Nov 02 j 02:41	17°♎03'42	
conjunction	-4469 Nov 14 j 19:03	20°♎01'29	0°23'01
minimum elong	-4469 Nov 14 j 19:05	20°♎01'30	0°22'57
max. Earth dist.	-4469 Nov 14 j 05:06	19°♎53'19	6.13896 AU
morning rise	-4469 Nov 27 j 13:02	23°♎00'19	
	-4469 Dec 28 j 15:59	0°♏	
retrograde	-4468 Apr 04 j 12:55	12°♏19'00	
desc. node	-4468 May 18 j 08:24	9°♏30'17	
opposition	-4468 Jun 04 j 11:58	7°♏21'12	-0°03'14
min. Earth dist.	-4468 Jun 04 j 13:23	7°♏20'45	4.09024 AU
direct	-4468 Aug 03 j 03:05	2°♏28'01	
	-4468 Nov 07 j 05:51	15°♏	
evening set	-4468 Dec 05 j 01:36	21°♏22'34	
conjunction	-4468 Dec 18 j 00:45	24°♏27'06	-0°26'41
minimum elong	-4468 Dec 18 j 00:43	24°♏27'05	0°26'52
max. Earth dist.	-4468 Dec 18 j 11:40	24°♏33'35	6.05152 AU
morning rise	-4468 Dec 31 j 02:48	27°♏33'18	
	-4467 Jan 10 j 13:29	0°♐	
retrograde	-4467 May 11 j 13:58	17°♐36'42	
min. Earth dist.	-4467 Jul 10 j 10:16	12°♐40'25	4.02602 AU
opposition	-4467 Jul 11 j 02:27	12°♐35'02	-1°14'51
direct	-4467 Sep 07 j 13:29	7°♐41'42	
evening set	-4466 Jan 09 j 20:28	26°♐54'35	
	-4466 Jan 22 j 20:28	0°♑	
conjunction	-4466 Jan 23 j 03:00	0°♑03'53	-1°07'42
minimum elong	-4466 Jan 23 j 02:56	0°♑03'51	1°07'55
max. Earth dist.	-4466 Jan 24 j 11:58	0°♑23'31	6.01545 AU
morning rise	-4466 Feb 05 j 13:01	3°♑15'00	
retrograde	-4466 Jun 17 j 14:43	23°♑32'22	
min. Earth dist.	-4466 Aug 15 j 10:36	18°♑36'59	4.02359 AU
opposition	-4466 Aug 16 j 13:38	18°♑27'49	-1°59'13
direct	-4466 Oct 13 j 13:53	13°♑32'11	
	-4465 Feb 03 j 15:17	0°♒	
evening set	-4465 Feb 15 j 19:20	2°♒49'10	
conjunction	-4465 Mar 01 j 08:59	6°♒00'08	-1°23'24

Attention, astronomical year style is used: The year -4465 in astronomical counting style is the year 4466 BCE in historical counting style.

minimum elong	-4465 Mar 01 j 08:59	6°♒00'08	1°23'34	
max. Earth dist.	-4465 Mar 03 j 06:28	6°♒26'50	6.04563 AU	
morning rise	-4465 Mar 15 j 01:04	9°♒12'15		
	-4465 Apr 09 j 13:27	15°♒		
retrograde	-4465 Jul 23 j 11:00	29°♒03'37		
opposition	-4465 Sep 20 j 22:33	23°♒58'35	-1°58'14	
min. Earth dist.	-4465 Sep 19 j 19:22	24°♒07'53	4.08381 AU	
direct	-4465 Nov 18 j 07:17	18°♒59'40		
	-4464 Feb 16 j 00:22	0°♓		
evening set	-4464 Mar 23 j 17:58	8°♓03'41		
conjunction	-4464 Apr 06 j 12:00	11°♓12'51	-1°08'12	
minimum elong	-4464 Apr 06 j 12:04	11°♓12'53	1°08'16	
max. Earth dist.	-4464 Apr 08 j 02:02	11°♓34'40	6.13017 AU	
morning rise	-4464 Apr 20 j 06:59	14°♓22'14		
	-4464 Jul 09 j 22:15	0°♈		
retrograde	-4464 Aug 25 j 09:08	3°♈19'58		
	-4464 Oct 10 j 20:45	30°℞♓		
opposition	-4464 Oct 23 j 17:46	28°♓17'00	-1°15'34	
min. Earth dist.	-4464 Oct 22 j 22:42	28°♓23'29	4.18324 AU	
direct	-4464 Dec 22 j 02:56	23°♓15'06		
	-4463 Mar 01 j 04:16	0°♈		
evening set	-4463 Apr 28 j 13:43	11°♈55'32		
conjunction	-4463 May 12 j 07:28	15°♈00'02	-0°29'58	
minimum elong	-4463 May 12 j 07:30	15°♈00'03	0°29'56	
max. Earth dist.	-4463 May 13 j 02:24	15°♈10'38	6.23734 AU	
morning rise	-4463 May 25 j 23:47	18°♈03'38		
	-4463 Jul 24 j 00:32	0°♉		
retrograde	-4463 Sep 26 j 16:36	6°♉04'18		
opposition	-4463 Nov 25 j 02:59	1°♉05'01	-0°10'24	
min. Earth dist.	-4463 Nov 24 j 22:36	1°♉06'29	4.28750 AU	
	-4463 Dec 03 j 06:48	30°℞♈		
asc. node	-4462 Jan 23 j 23:53	26°♈01'34		
direct	-4462 Jan 24 j 20:06	26°♈01'30		
	-4462 Mar 18 j 10:44	0°♉		
evening set	-4462 Jun 01 j 18:26	14°♉17'51		
	-4462 Jun 04 j 23:17	15°♉		
conjunction	-4462 Jun 15 j 06:12	17°♉16'01	0°16'34	
minimum elong	-4462 Jun 15 j 06:11	17°♉16'00	0°16'43	
max. Earth dist.	-4462 Jun 15 j 00:27	17°♉12'51	6.33105 AU	
morning rise	-4462 Jun 28 j 15:08	20°♉12'38		
	-4462 Aug 15 j 12:37	0°♊		
retrograde	-4462 Oct 27 j 19:43	7°♊31'43		
opposition	-4462 Dec 26 j 15:06	2°♊36'13	0°55'15	
min. Earth dist.	-4462 Dec 27 j 01:37	2°♊32'45	4.36393 AU	
	-4461 Jan 16 j 12:40	30°℞♉		
direct	-4461 Feb 26 j 11:43	27°♉32'33		
	-4461 Apr 08 j 19:30	0°♊		
evening set	-4461 Jul 04 j 09:35	15°♊32'13		
max. Earth dist.	-4461 Jul 16 j 10:27	18°♊10'17	6.38392 AU	
conjunction	-4461 Jul 17 j 12:07	18°♊24'22	0°57'01	
minimum elong	-4461 Jul 17 j 12:03	18°♊24'20	0°57'15	
morning rise	-4461 Jul 30 j 11:09	21°♊14'48		
	-4461 Sep 11 j 00:06	0°♋		
retrograde	-4461 Nov 27 j 16:58	8°♋16'27		
opposition	-4460 Jan 26 j 23:38	3°♋23'49	1°43'48	
min. Earth dist.	-4460 Jan 27 j 22:40	3°♋16'24	4.39110 AU	
	-4460 Feb 25 j 00:59	30°℞♊		
direct	-4460 Mar 29 j 13:12	28°♊21'28		
	-4460 May 02 j 05:50	0°♋		
evening set	-4460 Aug 03 j 21:24	16°♋14'55		
max. Earth dist.	-4460 Aug 14 j 23:46	18°♋41'40	6.38195 AU	
conjunction	-4460 Aug 16 j 15:02	19°♋03'22	1°20'57	
minimum elong	-4460 Aug 16 j 15:00	19°♋03'21	1°21'09	
morning rise	-4460 Aug 29 j 05:59	21°♋50'32		
	-4460 Oct 07 j 07:45	0°♌		
retrograde	-4460 Dec 28 j 04:19	9°♌00'31		
opposition	-4459 Feb 26 j 21:57	4°♌09'00	2°03'25	
min. Earth dist.	-4459 Feb 28 j 03:31	3°♌59'35	4.36135 AU	
	-4459 Apr 06 j 13:55	30°℞♋		
direct	-4459 Apr 30 j 12:50	29°♋08'52		
	-4459 May 24 j 11:58	0°♌		
	-4459 Aug 25 j 07:26	15°♌		
evening set	-4459 Sep 03 j 21:33	17°♌07'09		
max. Earth dist.	-4459 Sep 14 j 18:38	19°♌33'21	6.32585 AU	
conjunction	-4459 Sep 16 j 10:20	19°♌55'40	1°22'05	
minimum elong	-4459 Sep 16 j 10:21	19°♌55'41	1°22'14	
morning rise	-4459 Sep 28 j 21:22	22°♌43'31		
	-4459 Nov 01 j 19:05	0°♍		
retrograde	-4458 Jan 29 j 21:24	10°♍25'14		
opposition	-4458 Apr 01 j 00:03	5°♍33'03	1°47'52	
min. Earth dist.	-4458 Apr 02 j 02:53	5°♍24'32	4.28233 AU	
direct	-4458 Jun 01 j 23:05	0°♍35'46		
evening set	-4458 Oct 05 j 05:36	18°♍48'40		
max. Earth dist.	-4458 Oct 16 j 11:09	21°♍23'07	6.23052 AU	
conjunction	-4458 Oct 17 j 18:16	21°♍41'01	0°58'56	
minimum elong	-4458 Oct 17 j 18:19	21°♍41'03	0°58'58	
morning rise	-4458 Oct 30 j 07:09	24°♍33'38		
	-4458 Nov 23 j 16:45	0°♎		
retrograde	-4457 Mar 05 j 10:36	13°♎04'49		
opposition	-4457 May 05 j 14:10	8°♎10'09	0°58'08	
min. Earth dist.	-4457 May 06 j 06:17	8°♎04'59	4.17613 AU	
direct	-4457 Jul 05 j 09:38	3°♎15'31		
evening set	-4457 Nov 06 j 17:00	21°♎50'11		
conjunction	-4457 Nov 19 j 10:18	24°♎49'01	0°16'18	
minimum elong	-4457 Nov 19 j 10:19	24°♎49'02	0°16'14	
behind sun begin	-4457 Nov 19 j 09:46	24°♎48'42		
behind sun end	-4457 Nov 19 j 10:53	24°♎49'21		
max. Earth dist.	-4457 Nov 18 j 23:31	24°♎42'42	6.12368 AU	
morning rise	-4457 Dec 02 j 05:19	27°♎48'59		
	-4457 Dec 11 j 15:32	0°♏		
	-4456 Mar 01 j 22:57	15°♏		
desc. node	-4456 Mar 28 j 19:01	17°♏02'14		
retrograde	-4456 Apr 09 j 15:02	17°♏15'25		
	-4456 May 18 j 11:12	15°℞♏		
opposition	-4456 Jun 09 j 13:09	12°♏17'07	-0°13'46	
min. Earth dist.	-4456 Jun 09 j 11:48	12°♏17'33	4.07684 AU	
direct	-4456 Aug 07 j 22:55	7°♏24'04		
	-4456 Oct 18 j 21:31	15°♏		
evening set	-4456 Dec 09 j 22:49	26°♏22'25		
conjunction	-4456 Dec 22 j 22:55	29°♏27'51	-0°33'22	
minimum elong	-4456 Dec 22 j 22:52	29°♏27'49	0°33'32	
max. Earth dist.	-4456 Dec 23 j 12:23	29°♏35'52	6.04110 AU	
	-4456 Dec 25 j 04:55	0°♐		
morning rise	-4455 Jan 05 j 02:13	2°♐35'02		
retrograde	-4455 May 16 j 18:55	22°♐43'28		
min. Earth dist.	-4455 Jul 15 j 11:14	17°♐47'26	4.01987 AU	
opposition	-4455 Jul 16 j 05:34	17°♐41'19	-1°23'18	
direct	-4455 Sep 12 j 14:10	12°♐47'48		
	-4454 Jan 06 j 06:13	0°♑		
evening set	-4454 Jan 14 j 23:25	2°♑03'01		
conjunction	-4454 Jan 28 j 07:10	5°♑12'53	-1°11'42	
minimum elong	-4454 Jan 28 j 07:07	5°♑12'51	1°11'55	
max. Earth dist.	-4454 Jan 29 j 20:28	5°♑35'04	6.01425 AU	
morning rise	-4454 Feb 10 j 18:05	8°♑24'26		

Attention, astronomical year style is used: The year -4454 in astronomical counting style is the year 4455 BCE in historical counting style.

retrograde	-4454 Jun 22 j 19:04	28°♑41'09	
min. Earth dist.	-4454 Aug 20 j 11:25	23°♑45'48	4.02799 AU
opposition	-4454 Aug 21 j 15:02	23°♑36'26	-2°01'57
direct	-4454 Oct 18 j 15:01	18°♑40'30	
	-4453 Jan 16 j 15:05	0°♒	
evening set	-4453 Feb 21 j 00:42	7°♒56'44	
conjunction	-4453 Mar 06 j 15:00	11°♒07'35	-1°23'04
minimum elong	-4453 Mar 06 j 15:01	11°♒07'36	1°23'14
max. Earth dist.	-4453 Mar 08 j 12:21	11°♒34'09	6.05524 AU
morning rise	-4453 Mar 20 j 07:53	14°♒19'34	
	-4453 Mar 23 j 05:40	15°♒	
	-4453 Jun 06 j 12:35	0°♓	
retrograde	-4453 Jul 28 j 06:39	4°♓04'12	
	-4453 Sep 18 j 08:05	30°℞♒	
opposition	-4453 Sep 25 j 18:40	28°♒59'18	-1°54'25
min. Earth dist.	-4453 Sep 24 j 15:03	29°♒08'45	4.09786 AU
direct	-4453 Nov 23 j 05:32	23°♒59'57	
	-4452 Jan 25 j 18:19	0°♓	
evening set	-4452 Mar 28 j 20:11	13°♓00'13	
conjunction	-4452 Apr 11 j 14:32	16°♓08'44	-1°03'56
minimum elong	-4452 Apr 11 j 14:36	16°♓08'46	1°03'59
max. Earth dist.	-4452 Apr 13 j 03:29	16°♓29'51	6.14771 AU
morning rise	-4452 Apr 25 j 09:19	19°♓17'16	
	-4452 Jun 15 j 03:09	0°♈	
retrograde	-4452 Aug 29 j 23:54	8°♈05'28	
opposition	-4452 Oct 28 j 07:52	3°♈02'57	-1°07'19
min. Earth dist.	-4452 Oct 27 j 15:03	3°♈08'40	4.20227 AU
	-4452 Nov 21 j 13:52	30°℞♓	
direct	-4452 Dec 26 j 22:39	28°♓00'47	
	-4451 Jan 31 j 17:01	0°♈	
evening set	-4451 May 03 j 09:22	16°♈35'58	
conjunction	-4451 May 17 j 02:30	19°♈39'25	-0°23'42
minimum elong	-4451 May 17 j 02:32	19°♈39'26	0°23'38
max. Earth dist.	-4451 May 17 j 18:28	19°♈48'19	6.25632 AU
morning rise	-4451 May 30 j 18:01	22°♈41'52	
	-4451 Jul 04 j 00:38	0°♉	
retrograde	-4451 Sep 30 j 22:47	10°♉34'03	
opposition	-4451 Nov 29 j 11:36	5°♉35'17	-0°00'59
min. Earth dist.	-4451 Nov 29 j 08:45	5°♉36'14	4.30481 AU
asc. node	-4451 Dec 05 j 04:27	4°♉49'47	
direct	-4450 Jan 29 j 08:55	0°♉31'38	
	-4450 May 19 j 23:20	15°♉	
evening set	-4450 Jun 06 j 07:07	18°♉43'35	
conjunction	-4450 Jun 19 j 17:38	21°♉40'38	0°22'41
minimum elong	-4450 Jun 19 j 17:37	21°♉40'37	0°22'50
max. Earth dist.	-4450 Jun 19 j 08:37	21°♉35'40	6.34534 AU
morning rise	-4450 Jul 03 j 01:10	24°♉36'06	
	-4450 Jul 28 j 09:29	0°♊	
retrograde	-4450 Nov 01 j 00:20	11°♊50'03	
opposition	-4450 Dec 30 j 20:46	6°♊55'05	1°03'06
min. Earth dist.	-4450 Dec 31 j 10:07	6°♊50'43	4.37413 AU
direct	-4449 Mar 02 j 21:31	1°♊51'31	
evening set	-4449 Jul 08 j 16:43	19°♊48'45	
conjunction	-4449 Jul 21 j 17:54	22°♊40'08	1°01'22
minimum elong	-4449 Jul 21 j 17:51	22°♊40'06	1°01'35
max. Earth dist.	-4449 Jul 20 j 12:19	22°♊23'54	6.38892 AU
morning rise	-4449 Aug 03 j 15:46	25°♊29'52	
	-4449 Aug 24 j 17:14	0°♋	
retrograde	-4449 Dec 01 j 21:22	12°♋30'46	
opposition	-4448 Jan 31 j 05:31	7°♋38'24	1°48'16
min. Earth dist.	-4448 Feb 01 j 06:21	7°♋30'25	4.39079 AU
direct	-4448 Apr 02 j 20:01	2°♋36'13	
evening set	-4448 Aug 08 j 01:37	20°♋29'50	
max. Earth dist.	-4448 Aug 19 j 02:46	22°♋56'09	6.37616 AU
conjunction	-4448 Aug 20 j 18:28	23°♋18'08	1°22'29
minimum elong	-4448 Aug 20 j 18:27	23°♋18'07	1°22'41
morning rise	-4448 Sep 02 j 08:30	26°♋05'11	
	-4448 Sep 20 j 10:05	0°♌	
retrograde	-4447 Jan 01 j 12:09	13°♌18'49	
opposition	-4447 Mar 03 j 07:08	8°♌27'23	2°03'25
min. Earth dist.	-4447 Mar 04 j 13:20	8°♌17'47	4.35044 AU
direct	-4447 May 04 j 20:09	3°♌27'37	
	-4447 Aug 09 j 02:02	15°♌	
evening set	-4447 Sep 08 j 02:40	21°♌28'33	
max. Earth dist.	-4447 Sep 18 j 21:53	23°♌54'18	6.31054 AU
conjunction	-4447 Sep 20 j 15:03	24°♌17'32	1°20'19
minimum elong	-4447 Sep 20 j 15:05	24°♌17'33	1°20'26
morning rise	-4447 Oct 03 j 02:15	27°♌06'02	
	-4447 Oct 16 j 03:42	0°♍	
retrograde	-4446 Feb 03 j 13:34	14°♍55'15	
opposition	-4446 Apr 05 j 15:08	10°♍02'49	1°42'58
min. Earth dist.	-4446 Apr 06 j 17:39	9°♍54'23	4.26347 AU
direct	-4446 Jun 06 j 10:36	5°♍05'52	
evening set	-4446 Oct 09 j 14:50	23°♍23'29	
max. Earth dist.	-4446 Oct 20 j 23:52	26°♍00'34	6.20993 AU
conjunction	-4446 Oct 22 j 04:11	26°♍16'55	0°54'01
minimum elong	-4446 Oct 22 j 04:14	26°♍16'57	0°54'03
morning rise	-4446 Nov 03 j 17:41	29°♍10'43	
	-4446 Nov 07 j 07:48	0°♎	
retrograde	-4445 Mar 10 j 09:24	17°♎51'36	
opposition	-4445 May 10 j 12:12	12°♎56'32	0°49'04
min. Earth dist.	-4445 May 11 j 01:57	12°♎52'07	4.15536 AU
direct	-4445 Jul 10 j 01:39	8°♎02'15	
evening set	-4445 Nov 11 j 09:24	26°♎42'21	
conjunction	-4445 Nov 24 j 03:33	29°♎42'25	0°09'25
minimum elong	-4445 Nov 24 j 03:33	29°♎42'25	0°09'19
behind sun begin	-4445 Nov 23 j 20:45	29°♎38'26	
behind sun end	-4445 Nov 24 j 10:21	29°♎46'24	
max. Earth dist.	-4445 Nov 23 j 19:26	29°♎37'39	6.10462 AU
	-4445 Nov 25 j 09:23	0°♏	
morning rise	-4445 Dec 06 j 23:51	2°♏43'44	
	-4444 Feb 02 j 08:04	15°♏	
desc. node	-4444 Feb 06 j 19:21	15°♏47'39	
retrograde	-4444 Apr 14 j 20:03	22°♏19'17	
opposition	-4444 Jun 14 j 16:52	17°♏20'21	-0°24'23
min. Earth dist.	-4444 Jun 14 j 12:19	17°♏21'51	4.06122 AU
	-4444 Jul 03 j 08:57	15°℞♏	
direct	-4444 Aug 12 j 22:17	12°♏27'21	
	-4444 Sep 21 j 18:20	15°♏	
	-4444 Dec 08 j 14:17	0°♐	
evening set	-4444 Dec 14 j 23:03	1°♐30'06	
conjunction	-4444 Dec 28 j 00:26	4°♐36'31	-0°39'54
minimum elong	-4444 Dec 28 j 00:23	4°♐36'29	0°40'05
max. Earth dist.	-4444 Dec 28 j 19:37	4°♐47'57	6.03043 AU
morning rise	-4443 Jan 10 j 04:47	7°♐44'39	
retrograde	-4443 May 22 j 03:26	27°♐57'24	
opposition	-4443 Jul 21 j 10:54	22°♐54'44	-1°31'14
min. Earth dist.	-4443 Jul 20 j 14:37	23°♐01'31	4.01552 AU
direct	-4443 Sep 17 j 17:14	18°♐00'58	
	-4443 Dec 19 j 07:37	0°♑	
evening set	-4442 Jan 20 j 05:23	7°♑17'33	
conjunction	-4442 Feb 02 j 13:58	10°♑27'42	-1°15'11
minimum elong	-4442 Feb 02 j 13:55	10°♑27'40	1°15'23

Attention, astronomical year style is used: The year -4442 in astronomical counting style is the year 4443 BCE in historical counting style.

max. Earth dist.	-4442 Feb 04 j 04:58	10°♉50'52	6.01610 AU
morning rise	-4442 Feb 16 j 02:00	13°♉39'34	
	-4442 May 08 j 04:06	0°♒	
retrograde	-4442 Jun 27 j 20:53	3°♒53'28	
	-4442 Aug 17 j 20:48	30°℞♉	
min. Earth dist.	-4442 Aug 25 j 11:37	28°♉58'27	4.03582 AU
opposition	-4442 Aug 26 j 17:00	28°♉48'27	-2°03'43
direct	-4442 Oct 23 j 16:58	23°♉51'58	
	-4442 Dec 26 j 03:57	0°♒	
evening set	-4441 Feb 26 j 06:54	13°♒06'05	
	-4441 Mar 06 j 10:41	15°♒	
conjunction	-4441 Mar 11 j 22:03	16°♒16'41	-1°22'05
minimum elong	-4441 Mar 11 j 22:04	16°♒16'42	1°22'15
max. Earth dist.	-4441 Mar 13 j 19:53	16°♒43'26	6.06797 AU
morning rise	-4441 Mar 25 j 15:18	19°♒28'13	
	-4441 May 13 j 04:58	0°♓	
retrograde	-4441 Aug 02 j 04:15	9°♓04'48	
opposition	-4441 Sep 30 j 14:51	4°♓00'03	-1°49'43
min. Earth dist.	-4441 Sep 29 j 13:01	4°♓08'53	4.11369 AU
	-4441 Nov 03 j 20:48	30°℞♒	
direct	-4441 Nov 28 j 06:26	29°♒00'12	
	-4441 Dec 22 j 20:20	0°♓	
evening set	-4440 Apr 02 j 22:21	17°♓56'09	
conjunction	-4440 Apr 16 j 16:50	21°♓03'57	-0°59'12
minimum elong	-4440 Apr 16 j 16:54	21°♓04'00	0°59'15
max. Earth dist.	-4440 Apr 18 j 03:53	21°♓23'54	6.16522 AU
morning rise	-4440 Apr 30 j 11:27	24°♓11'38	
	-4440 May 26 j 21:15	0°♈	
retrograde	-4440 Sep 03 j 12:24	12°♈50'31	
opposition	-4440 Nov 01 j 21:40	7°♈48'28	-0°58'37
min. Earth dist.	-4440 Nov 01 j 05:55	7°♈53'48	4.21976 AU
direct	-4440 Dec 31 j 16:07	2°♈45'59	
evening set	-4439 May 08 j 05:37	21°♈16'53	
conjunction	-4439 May 21 j 22:00	24°♈19'21	-0°17'14
minimum elong	-4439 May 21 j 22:01	24°♈19'22	0°17'10
max. Earth dist.	-4439 May 22 j 09:27	24°♈25'44	6.27253 AU
morning rise	-4439 Jun 04 j 12:39	27°♈20'45	
	-4439 Jun 16 j 15:42	0°♉	
	-4439 Sep 27 j 18:10	15°♉	
retrograde	-4439 Oct 05 j 08:42	15°♉05'42	
	-4439 Oct 12 j 22:09	15°℞♉	
asc. node	-4439 Oct 15 j 09:51	14°♉55'38	
opposition	-4439 Dec 03 j 21:22	10°♉07'31	0°08'32
min. Earth dist.	-4439 Dec 03 j 21:50	10°♉07'22	4.31844 AU
direct	-4438 Feb 03 j 00:00	5°♉03'47	
	-4438 May 02 j 08:05	15°♉	
evening set	-4438 Jun 10 j 21:17	23°♉12'41	
conjunction	-4438 Jun 24 j 06:42	26°♉08'51	0°28'48
minimum elong	-4438 Jun 24 j 06:39	26°♉08'50	0°28'58
max. Earth dist.	-4438 Jun 23 j 18:32	26°♉02'10	6.35529 AU
morning rise	-4438 Jul 07 j 12:52	29°♉03'22	
	-4438 Jul 11 j 20:54	0°♊	
retrograde	-4438 Nov 05 j 06:28	16°♊13'48	
opposition	-4437 Jan 04 j 05:04	11°♊19'16	1°10'49
min. Earth dist.	-4437 Jan 04 j 19:47	11°♊14'28	4.38008 AU
direct	-4437 Mar 07 j 07:34	6°♊15'49	
evening set	-4437 Jul 13 j 02:40	24°♊11'57	
max. Earth dist.	-4437 Jul 24 j 18:50	26°♊45'19	6.39031 AU
conjunction	-4437 Jul 26 j 02:31	27°♊02'43	1°05'32
minimum elong	-4437 Jul 26 j 02:28	27°♊02'41	1°05'45
morning rise	-4437 Aug 07 j 23:05	29°♊51'53	
	-4437 Aug 08 j 13:58	0°♋	
retrograde	-4437 Dec 06 j 06:21	16°♋53'14	
opposition	-4436 Feb 04 j 15:20	12°♋01'10	1°52'22
min. Earth dist.	-4436 Feb 05 j 18:03	11°♋52'36	4.38774 AU
direct	-4436 Apr 07 j 06:57	6°♋59'18	
evening set	-4436 Aug 12 j 09:45	24°♋53'44	
max. Earth dist.	-4436 Aug 23 j 07:49	27°♋18'42	6.36867 AU
conjunction	-4436 Aug 25 j 01:42	27°♋41'58	1°23'39
minimum elong	-4436 Aug 25 j 01:41	27°♋41'57	1°23'51
	-4436 Sep 04 j 10:36	0°♌	
morning rise	-4436 Sep 06 j 15:09	0°♌29'02	
	-4436 Nov 23 j 21:35	15°♌	
retrograde	-4435 Jan 06 j 01:09	17°♌46'50	
	-4435 Feb 18 j 22:58	15°℞♌	
opposition	-4435 Mar 07 j 20:48	12°♌55'24	2°02'44
min. Earth dist.	-4435 Mar 09 j 02:51	12°♌45'50	4.33920 AU
direct	-4435 May 09 j 07:30	7°♌55'59	
	-4435 Jul 20 j 23:04	15°♌	
evening set	-4435 Sep 12 j 11:34	25°♌59'28	
max. Earth dist.	-4435 Sep 23 j 09:07	28°♌26'59	6.29658 AU
conjunction	-4435 Sep 24 j 23:57	28°♌48'58	1°18'00
minimum elong	-4435 Sep 24 j 23:59	28°♌49'00	1°18'07
	-4435 Sep 30 j 05:22	0°♍	
morning rise	-4435 Oct 07 j 11:03	1°♍38'03	
retrograde	-4434 Feb 08 j 08:37	19°♍34'17	
opposition	-4434 Apr 10 j 10:27	14°♍41'40	1°37'13
min. Earth dist.	-4434 Apr 11 j 11:46	14°♍33'37	4.24776 AU
direct	-4434 Jun 11 j 01:55	9°♍45'14	
evening set	-4434 Oct 14 j 03:26	28°♍06'13	
	-4434 Oct 22 j 08:38	0°♎	
conjunction	-4434 Oct 26 j 17:07	1°♎00'32	0°48'36
minimum elong	-4434 Oct 26 j 17:10	1°♎00'33	0°48'37
max. Earth dist.	-4434 Oct 25 j 14:21	0°♎45'01	6.19401 AU
morning rise	-4434 Nov 08 j 07:32	3°♎55'23	
retrograde	-4433 Mar 15 j 10:14	22°♎44'23	
opposition	-4433 May 15 j 12:51	17°♎48'50	0°39'25
min. Earth dist.	-4433 May 15 j 23:33	17°♎45'23	4.14054 AU
direct	-4433 Jul 14 j 21:43	12°♎54'53	
	-4433 Nov 09 j 03:02	0°♏	
evening set	-4433 Nov 16 j 03:31	1°♏38'17	
conjunction	-4433 Nov 28 j 22:42	4°♏39'17	0°02'23
minimum elong	-4433 Nov 28 j 22:43	4°♏39'17	0°02'17
behind sun begin	-4433 Nov 28 j 14:39	4°♏34'33	
behind sun end	-4433 Nov 29 j 06:47	4°♏44'02	
max. Earth dist.	-4433 Nov 28 j 20:03	4°♏37'46	6.09256 AU
morning rise	-4433 Dec 11 j 19:57	7°♏41'36	
desc. node	-4433 Dec 17 j 11:42	9°♏00'54	
	-4432 Jan 13 j 02:52	15°♏	
retrograde	-4432 Apr 20 j 01:54	27°♏23'18	
opposition	-4432 Jun 19 j 20:26	22°♏23'53	-0°34'50
min. Earth dist.	-4432 Jun 19 j 13:41	22°♏26'06	4.05325 AU
direct	-4432 Aug 17 j 22:30	17°♏30'58	
	-4432 Nov 21 j 06:40	0°♐	
evening set	-4432 Dec 19 j 22:54	6°♐35'32	
conjunction	-4431 Jan 02 j 01:06	9°♐42'30	-0°46'04
minimum elong	-4431 Jan 02 j 01:02	9°♐42'28	0°46'16
max. Earth dist.	-4431 Jan 02 j 22:42	9°♐55'22	6.02703 AU
morning rise	-4431 Jan 15 j 06:42	12°♐51'16	
	-4431 Apr 12 j 03:03	0°♑	
retrograde	-4431 May 27 j 06:09	3°♑05'26	
	-4431 Jul 11 j 12:42	30°℞♐	
opposition	-4431 Jul 26 j 13:20	28°♐02'18	-1°38'15
min. Earth dist.	-4431 Jul 25 j 14:16	28°♐10'02	4.01733 AU

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

direct	-4431 Sep 22 j 17:01	23°♐08'16	
	-4431 Nov 28 j 22:54	0°♑	
evening set	-4430 Jan 25 j 08:08	12°♑24'19	
conjunction	-4430 Feb 07 j 17:44	15°♑34'35	-1°17'58
minimum elong	-4430 Feb 07 j 17:41	15°♑34'33	1°18'10
max. Earth dist.	-4430 Feb 09 j 11:15	15°♑59'12	6.02268 AU
morning rise	-4430 Feb 21 j 06:26	18°♑46'25	
	-4430 Apr 13 j 12:52	0°♒	
retrograde	-4430 Jul 02 j 20:43	8°♒56'05	
min. Earth dist.	-4430 Aug 30 j 10:26	4°♒00'40	4.04640 AU
opposition	-4430 Aug 31 j 14:59	3°♒50'56	-2°04'28
	-4430 Oct 03 j 05:42	30°℞♑	
direct	-4430 Oct 28 j 17:12	28°♑54'01	
	-4430 Nov 23 j 06:44	0°♒	
	-4429 Feb 17 j 21:18	15°♒	
evening set	-4429 Mar 03 j 08:58	18°♒05'22	
conjunction	-4429 Mar 17 j 00:45	21°♒15'38	-1°20'32
minimum elong	-4429 Mar 17 j 00:47	21°♒15'39	1°20'39
max. Earth dist.	-4429 Mar 18 j 22:10	21°♒42'02	6.08146 AU
morning rise	-4429 Mar 30 j 18:26	24°♒26'43	
	-4429 Apr 24 j 10:48	0°♓	
retrograde	-4429 Aug 06 j 20:11	13°♓55'20	
min. Earth dist.	-4429 Oct 04 j 05:15	8°♓59'31	4.12868 AU
opposition	-4429 Oct 05 j 06:32	8°♓50'53	-1°44'27
direct	-4429 Dec 03 j 00:35	3°♓50'37	
evening set	-4428 Apr 07 j 20:33	22°♓42'59	
conjunction	-4428 Apr 21 j 14:58	25°♓50'09	-0°54'14
minimum elong	-4428 Apr 21 j 15:02	25°♓50'11	0°54'16
max. Earth dist.	-4428 Apr 22 j 21:37	26°♓07'32	6.18052 AU
morning rise	-4428 May 05 j 09:27	28°♓57'05	
	-4428 May 10 j 01:40	0°♈	
retrograde	-4428 Sep 07 j 23:54	17°♈28'04	
opposition	-4428 Nov 06 j 08:34	12°♈26'31	-0°49'52
min. Earth dist.	-4428 Nov 05 j 19:57	12°♈30'47	4.23377 AU
direct	-4427 Jan 05 j 08:09	7°♈23'45	
evening set	-4427 May 12 j 22:28	25°♈51'39	
conjunction	-4427 May 26 j 14:21	28°♈53'24	-0°10'51
minimum elong	-4427 May 26 j 14:22	28°♈53'25	0°10'46
behind sun begin	-4427 May 26 j 08:06	28°♈49'57	
behind sun end	-4427 May 26 j 20:38	28°♈56'52	
max. Earth dist.	-4427 May 26 j 23:18	28°♈58'22	6.28436 AU
	-4427 May 31 j 14:13	0°♉	
morning rise	-4427 Jun 09 j 03:59	1°♉53'55	
	-4427 Aug 15 j 07:09	15°♉	
asc. node	-4427 Aug 26 j 14:40	16°♉34'49	
retrograde	-4427 Oct 09 j 15:16	19°♉33'32	
	-4427 Dec 05 j 04:50	15°℞♉	
opposition	-4427 Dec 08 j 05:29	14°♉35'54	0°17'47
min. Earth dist.	-4427 Dec 08 j 07:19	14°♉35'18	4.32732 AU
direct	-4426 Feb 07 j 10:24	9°♉32'09	
	-4426 Apr 11 j 12:08	15°♉	
evening set	-4426 Jun 15 j 10:00	27°♉39'34	
	-4426 Jun 26 j 02:25	0°♊	
conjunction	-4426 Jun 28 j 18:04	0°♊34'59	0°34'39
minimum elong	-4426 Jun 28 j 18:02	0°♊34'58	0°34'50
max. Earth dist.	-4426 Jun 28 j 01:43	0°♊26'00	6.36059 AU
morning rise	-4426 Jul 11 j 23:04	3°♊28'47	
retrograde	-4426 Nov 09 j 14:46	20°♊37'23	
opposition	-4425 Jan 08 j 13:22	15°♊43'17	1°18'04
min. Earth dist.	-4425 Jan 09 j 06:52	15°♊37'36	4.38171 AU
direct	-4425 Mar 11 j 19:00	10°♊39'58	
evening set	-4425 Jul 17 j 12:20	28°♊36'09	
	-4425 Jul 23 j 21:39	0°♋	
max. Earth dist.	-4425 Jul 29 j 01:50	1°♋08'13	6.38805 AU
conjunction	-4425 Jul 30 j 11:06	1°♋26'31	1°09'17
minimum elong	-4425 Jul 30 j 11:03	1°♋26'29	1°09'29
morning rise	-4425 Aug 12 j 06:29	4°♋15'17	
retrograde	-4425 Dec 10 j 15:07	21°♋18'14	
opposition	-4424 Feb 09 j 02:07	16°♋26'19	1°55'48
min. Earth dist.	-4424 Feb 10 j 04:44	16°♋17'46	4.38212 AU
direct	-4424 Apr 11 j 16:39	11°♋24'45	
evening set	-4424 Aug 16 j 18:20	29°♋20'23	
	-4424 Aug 19 j 18:02	0°♌	
max. Earth dist.	-4424 Aug 27 j 16:26	1°♌45'45	6.36014 AU
conjunction	-4424 Aug 29 j 09:29	2°♌08'37	1°24'18
minimum elong	-4424 Aug 29 j 09:29	2°♌08'36	1°24'29
morning rise	-4424 Sep 10 j 22:16	4°♌55'46	
	-4424 Oct 29 j 22:48	15°♌	
retrograde	-4423 Jan 10 j 15:46	22°♌17'58	
opposition	-4423 Mar 12 j 12:01	17°♌26'27	2°01'16
min. Earth dist.	-4423 Mar 13 j 18:14	17°♌16'51	4.32825 AU
	-4423 Apr 01 j 13:49	15°℞♌	
direct	-4423 May 13 j 21:41	12°♌27'28	
	-4423 Jun 24 j 18:49	15°♌	
	-4423 Sep 14 j 10:49	0°♍	
evening set	-4423 Sep 16 j 21:07	0°♍32'46	
max. Earth dist.	-4423 Sep 27 j 18:59	3°♍00'57	6.28408 AU
conjunction	-4423 Sep 29 j 09:19	3°♍22'43	1°15'12
minimum elong	-4423 Sep 29 j 09:22	3°♍22'45	1°15'17
morning rise	-4423 Oct 11 j 20:41	6°♍12'24	
retrograde	-4422 Feb 13 j 03:04	24°♍14'54	
opposition	-4422 Apr 15 j 06:18	19°♍21'52	1°30'47
min. Earth dist.	-4422 Apr 16 j 05:11	19°♍14'35	4.23442 AU
direct	-4422 Jun 15 j 17:46	14°♍25'47	
	-4422 Oct 06 j 07:25	0°♎	
evening set	-4422 Oct 18 j 16:02	2°♎49'01	
max. Earth dist.	-4422 Oct 30 j 07:55	5°♎31'04	6.18109 AU
conjunction	-4422 Oct 31 j 06:22	5°♎44'07	0°42'52
minimum elong	-4422 Oct 31 j 06:25	5°♎44'08	0°42'51
morning rise	-4422 Nov 12 j 21:22	8°♎39'48	
retrograde	-4421 Mar 20 j 11:09	27°♎35'33	
opposition	-4421 May 20 j 12:52	22°♎39'31	0°29'30
min. Earth dist.	-4421 May 20 j 21:57	22°♎36'35	4.12877 AU
direct	-4421 Jul 19 j 18:24	17°♎45'47	
	-4421 Oct 23 j 04:48	0°♏	
desc. node	-4421 Oct 27 j 11:28	0°♏56'11	
evening set	-4421 Nov 20 j 20:55	6°♏31'24	
conjunction	-4421 Dec 03 j 16:50	9°♏33'10	-0°04'45
minimum elong	-4421 Dec 03 j 16:50	9°♏33'10	0°04'52
behind sun begin	-4421 Dec 03 j 08:57	9°♏28'31	
behind sun end	-4421 Dec 04 j 00:43	9°♏37'48	
max. Earth dist.	-4421 Dec 03 j 16:19	9°♏32'53	6.08286 AU
morning rise	-4421 Dec 16 j 15:18	12°♏36'25	
	-4421 Dec 26 j 21:39	15°♏	
	-4420 Mar 16 j 11:16	0°♐	
retrograde	-4420 Apr 25 j 03:51	2°♐23'21	
	-4420 Jun 04 j 00:07	30°℞♏	
opposition	-4420 Jun 24 j 22:13	27°♏23'21	-0°44'56
min. Earth dist.	-4420 Jun 24 j 12:11	27°♏26'39	4.04661 AU
direct	-4420 Aug 22 j 19:49	22°♏30'22	
	-4420 Nov 01 j 19:40	0°♐	
evening set	-4420 Dec 24 j 21:29	11°♐36'37	
conjunction	-4419 Jan 07 j 00:44	14°♐44'07	-0°51'51

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

minimum elong	-4419 Jan 07 j 00:40	14°♐44'05	0°52'04
max. Earth dist.	-4419 Jan 08 j 02:14	14°♐59'19	6.02394 AU
morning rise	-4419 Jan 20 j 07:11	17°♐53'25	
	-4419 Mar 16 j 20:50	0°♑	
retrograde	-4419 Jun 01 j 09:04	8°♑08'55	
opposition	-4419 Jul 31 j 14:01	3°♑05'23	-1°44'29
min. Earth dist.	-4419 Jul 30 j 14:37	3°♑13'15	4.01825 AU
	-4419 Aug 25 j 12:53	30°℞♐	
direct	-4419 Sep 27 j 17:22	28°♐11'00	
	-4419 Oct 30 j 17:55	0°♑	
evening set	-4418 Jan 30 j 10:12	17°♑27'14	
conjunction	-4418 Feb 12 j 20:42	20°♑37'40	-1°20'12
minimum elong	-4418 Feb 12 j 20:40	20°♑37'39	1°20'24
max. Earth dist.	-4418 Feb 14 j 15:33	21°♑03'00	6.02735 AU
morning rise	-4418 Feb 26 j 10:18	23°♑49'38	
	-4418 Mar 25 j 11:22	0°♒	
retrograde	-4418 Jul 07 j 18:39	13°♒55'33	
min. Earth dist.	-4418 Sep 04 j 06:30	9°♒00'19	4.05454 AU
opposition	-4418 Sep 05 j 11:38	8°♒50'24	-2°04'21
direct	-4418 Nov 02 j 14:12	3°♒53'01	
	-4417 Jan 31 j 04:28	15°♒	
evening set	-4417 Mar 08 j 10:57	23°♒02'48	
conjunction	-4417 Mar 22 j 03:17	26°♒12'51	-1°18'25
minimum elong	-4417 Mar 22 j 03:19	26°♒12'53	1°18'32
max. Earth dist.	-4417 Mar 23 j 22:03	26°♒37'39	6.09218 AU
morning rise	-4417 Apr 04 j 21:28	29°♒23'38	
	-4417 Apr 07 j 12:53	0°♓	
retrograde	-4417 Aug 11 j 13:00	18°♓45'29	
opposition	-4417 Oct 09 j 22:31	13°♓41'18	-1°38'29
min. Earth dist.	-4417 Oct 08 j 23:14	13°♓49'15	4.14066 AU
direct	-4417 Dec 07 j 20:36	8°♓40'35	
evening set	-4416 Apr 12 j 19:14	27°♓30'28	
	-4416 Apr 23 j 20:12	0°♈	
conjunction	-4416 Apr 26 j 13:50	0°♈37'09	-0°48'53
minimum elong	-4416 Apr 26 j 13:54	0°♈37'11	0°48'53
max. Earth dist.	-4416 Apr 27 j 18:59	0°♈53'38	6.19298 AU
morning rise	-4416 May 10 j 07:52	3°♈43'23	
retrograde	-4416 Sep 12 j 11:35	22°♈07'27	
opposition	-4416 Nov 10 j 20:24	17°♈06'28	-0°40'42
min. Earth dist.	-4416 Nov 10 j 09:09	17°♈10'15	4.24550 AU
direct	-4415 Jan 09 j 22:43	12°♈03'32	
	-4415 May 15 j 11:52	0°♉	
evening set	-4415 May 17 j 17:02	0°♉29'14	
conjunction	-4415 May 31 j 07:59	3°♉30'14	-0°04'18
minimum elong	-4415 May 31 j 07:58	3°♉30'14	0°04'13
behind sun begin	-4415 May 30 j 23:50	3°♉25'44	
behind sun end	-4415 May 31 j 16:07	3°♉34'43	
max. Earth dist.	-4415 May 31 j 12:00	3°♉32'25	6.29446 AU
morning rise	-4415 Jun 13 j 20:47	6°♉29'57	
asc. node	-4415 Jul 06 j 11:37	11°♉22'22	
	-4415 Jul 24 j 12:45	15°♉	
retrograde	-4415 Oct 14 j 01:01	24°♉04'52	
opposition	-4415 Dec 12 j 15:23	19°♉07'46	0°27'06
min. Earth dist.	-4415 Dec 12 j 20:02	19°♉06'14	4.33518 AU
	-4414 Jan 18 j 10:52	15°℞♉	
direct	-4414 Feb 12 j 00:34	14°♉04'01	
	-4414 Mar 08 j 20:57	15°♉	
	-4414 Jun 09 j 23:19	0°♊	
evening set	-4414 Jun 20 j 00:05	2°♊10'10	
conjunction	-4414 Jul 03 j 07:06	5°♊04'55	0°40'25
minimum elong	-4414 Jul 03 j 07:03	5°♊04'54	0°40'36
max. Earth dist.	-4414 Jul 02 j 13:32	4°♊55'17	6.36570 AU
morning rise	-4414 Jul 16 j 10:37	7°♊57'58	
retrograde	-4414 Nov 13 j 22:31	25°♊04'51	
opposition	-4413 Jan 12 j 23:30	20°♊11'11	1°25'02
min. Earth dist.	-4413 Jan 13 j 17:22	20°♊05'23	4.38416 AU
direct	-4413 Mar 16 j 05:49	15°♊08'10	
	-4413 Jul 07 j 17:54	0°♋	
evening set	-4413 Jul 21 j 23:17	3°♋03'53	
max. Earth dist.	-4413 Aug 02 j 09:36	5°♋34'26	6.38768 AU
conjunction	-4413 Aug 03 j 20:39	5°♋53'43	1°12'44
minimum elong	-4413 Aug 03 j 20:36	5°♋53'42	1°12'57
morning rise	-4413 Aug 16 j 14:58	8°♋42'03	
retrograde	-4413 Dec 15 j 02:52	25°♋46'05	
opposition	-4412 Feb 13 j 14:27	20°♋54'22	1°58'38
min. Earth dist.	-4412 Feb 14 j 18:26	20°♋45'25	4.37920 AU
direct	-4412 Apr 16 j 06:34	15°♋53'11	
	-4412 Aug 03 j 13:53	0°♌	
evening set	-4412 Aug 21 j 03:20	3°♌48'55	
max. Earth dist.	-4412 Sep 01 j 01:09	6°♌14'22	6.35486 AU
conjunction	-4412 Sep 02 j 17:50	6°♌37'03	1°24'29
minimum elong	-4412 Sep 02 j 17:50	6°♌37'03	1°24'39
morning rise	-4412 Sep 15 j 06:00	9°♌24'10	
	-4412 Oct 11 j 04:40	15°♌	
retrograde	-4411 Jan 15 j 04:07	26°♌49'44	
opposition	-4411 Mar 17 j 03:13	21°♌58'05	1°59'05
min. Earth dist.	-4411 Mar 18 j 07:47	21°♌49'00	4.32105 AU
direct	-4411 May 18 j 10:11	16°♌59'32	
	-4411 Aug 29 j 02:47	0°♍	
evening set	-4411 Sep 21 j 06:07	5°♍05'26	
max. Earth dist.	-4411 Oct 02 j 06:29	7°♍35'21	6.27559 AU
conjunction	-4411 Oct 03 j 18:15	7°♍55'42	1°11'57
minimum elong	-4411 Oct 03 j 18:18	7°♍55'43	1°12'03
morning rise	-4411 Oct 16 j 05:41	10°♍45'48	
retrograde	-4410 Feb 17 j 21:44	28°♍53'21	
opposition	-4410 Apr 20 j 01:12	24°♍00'01	1°23'49
min. Earth dist.	-4410 Apr 20 j 23:27	23°♍52'56	4.22489 AU
direct	-4410 Jun 20 j 10:51	19°♍04'18	
	-4410 Sep 19 j 07:57	0°♎	
evening set	-4410 Oct 23 j 03:03	7°♎28'36	
conjunction	-4410 Nov 04 j 17:49	10°♎24'19	0°36'57
minimum elong	-4410 Nov 04 j 17:52	10°♎24'21	0°36'55
max. Earth dist.	-4410 Nov 03 j 20:50	10°♎12'07	6.17139 AU
morning rise	-4410 Nov 17 j 09:43	13°♎20'48	
	-4409 Feb 13 j 13:54	0°♏	
retrograde	-4409 Mar 25 j 07:51	2°♏22'18	
	-4409 May 04 j 10:51	30°℞♎	
opposition	-4409 May 25 j 10:24	27°♎25'44	0°19'33
min. Earth dist.	-4409 May 25 j 16:26	27°♎23'46	4.11956 AU
direct	-4409 Jul 24 j 11:06	22°♎32'10	
desc. node	-4409 Sep 07 j 14:30	25°♎41'36	
	-4409 Oct 04 j 06:06	0°♏	
evening set	-4409 Nov 25 j 12:14	11°♏19'29	
conjunction	-4409 Dec 08 j 09:05	14°♏21'59	-0°11'33
minimum elong	-4409 Dec 08 j 09:04	14°♏21'59	0°11'41
behind sun begin	-4409 Dec 08 j 03:16	14°♏18'34	
behind sun end	-4409 Dec 08 j 14:52	14°♏25'24	
max. Earth dist.	-4409 Dec 08 j 12:15	14°♏23'51	6.07501 AU
	-4409 Dec 11 j 01:15	15°♏	
morning rise	-4409 Dec 21 j 08:26	17°♏25'59	
	-4408 Feb 17 j 22:20	0°♐	
retrograde	-4408 Apr 30 j 05:08	7°♐17'34	
opposition	-4408 Jun 29 j 20:58	2°♐17'03	-0°54'29
min. Earth dist.	-4408 Jun 29 j 10:14	2°♐20'36	4.04082 AU

Attention, astronomical year style is used: The year -4408 in astronomical counting style is the year 4409 BCE in historical counting style.

	-4408 Jul	17 j 21:42	30°℞♏	
direct	-4408 Aug	27 j 16:18	27°♏23'57	
	-4408 Oct	06 j 17:54	0°♐	
evening set	-4408 Dec	29 j 17:49	16°♐31'58	
conjunction	-4407 Jan	11 j 22:02	19°♐40'03	-0°57'07
minimum elong	-4407 Jan	11 j 21:58	19°♐40'00	0°57'19
max. Earth dist.	-4407 Jan	13 j 01:32	19°♐56'26	6.02066 AU
morning rise	-4407 Jan	25 j 05:37	22°♐49'56	
	-4407 Feb	25 j 14:11	0°♑	
retrograde	-4407 Jun	06 j 08:25	13°♑06'42	
min. Earth dist.	-4407 Aug	04 j 10:52	8°♑11'13	4.01818 AU
opposition	-4407 Aug	05 j 11:41	8°♑02'52	-1°49'49
direct	-4407 Oct	02 j 12:40	3°♑08'10	
evening set	-4406 Feb	04 j 10:11	22°♑25'15	
conjunction	-4406 Feb	17 j 21:34	25°♑35'57	-1°21'46
minimum elong	-4406 Feb	17 j 21:33	25°♑35'56	1°21'58
max. Earth dist.	-4406 Feb	19 j 15:59	26°♑01'00	6.03031 AU
morning rise	-4406 Mar	03 j 12:04	28°♑48'08	
	-4406 Mar	08 j 15:19	0°♒	
	-4406 May	23 j 06:40	15°♒	
retrograde	-4406 Jul	12 j 15:13	18°♒51'11	
	-4406 Sep	01 j 03:27	15°℞♒	
min. Earth dist.	-4406 Sep	09 j 02:01	13°♒55'40	4.06024 AU
opposition	-4406 Sep	10 j 06:23	13°♒45'58	-2°03'21
direct	-4406 Nov	07 j 10:50	8°♒48'05	
	-4405 Jan	10 j 13:47	15°♒	
evening set	-4405 Mar	13 j 11:31	27°♒57'17	
	-4405 Mar	22 j 08:17	0°♓	
conjunction	-4405 Mar	27 j 04:42	1°♓07'19	-1°15'45
minimum elong	-4405 Mar	27 j 04:45	1°♓07'21	1°15'52
max. Earth dist.	-4405 Mar	28 j 23:40	1°♓32'10	6.10043 AU
morning rise	-4405 Apr	09 j 23:09	4°♓17'52	
retrograde	-4405 Aug	16 j 05:16	23°♓33'42	
opposition	-4405 Oct	14 j 13:26	18°♓29'52	-1°31'56
min. Earth dist.	-4405 Oct	13 j 15:15	18°♓37'26	4.15058 AU
direct	-4405 Dec	12 j 13:46	13°♓28'48	
	-4404 Apr	07 j 11:49	0°♈	
evening set	-4404 Apr	17 j 17:36	2°♈16'50	
conjunction	-4404 May	01 j 12:00	5°♈23'02	-0°43'13
minimum elong	-4404 May	01 j 12:04	5°♈23'04	0°43'12
max. Earth dist.	-4404 May	02 j 13:10	5°♈37'14	6.20392 AU
morning rise	-4404 May	15 j 05:54	8°♈28'42	
retrograde	-4404 Sep	16 j 22:37	26°♈46'18	
opposition	-4404 Nov	15 j 08:08	21°♈45'44	-0°31'19
min. Earth dist.	-4404 Nov	14 j 22:47	21°♈48'53	4.25644 AU
direct	-4403 Jan	14 j 14:52	16°♈42'33	
	-4403 Apr	28 j 17:40	0°♉	
asc. node	-4403 May	16 j 03:09	3°♉42'55	
evening set	-4403 May	22 j 10:48	5°♉05'55	
conjunction	-4403 Jun	05 j 01:04	8°♉06'10	0°02'24
minimum elong	-4403 Jun	05 j 01:02	8°♉06'09	0°02'31
behind sun begin	-4403 Jun	04 j 16:47	8°♉01'36	
behind sun end	-4403 Jun	05 j 09:18	8°♉10'42	
max. Earth dist.	-4403 Jun	05 j 03:41	8°♉07'34	6.30479 AU
morning rise	-4403 Jun	18 j 12:38	11°♉04'59	
	-4403 Jul	06 j 15:12	15°♉	
retrograde	-4403 Oct	18 j 09:10	28°♉34'58	
opposition	-4403 Dec	17 j 01:09	23°♉38'22	0°36'13
min. Earth dist.	-4403 Dec	17 j 07:00	23°♉36'26	4.34401 AU
direct	-4402 Feb	16 j 13:27	18°♉34'38	
	-4402 May	23 j 22:22	0°♊	
evening set	-4402 Jun	24 j 13:19	6°♊38'40	

conjunction	-4402 Jul	07 j 18:50	9°♊32'34	0°45'56
minimum elong	-4402 Jul	07 j 18:46	9°♊32'32	0°46'07
max. Earth dist.	-4402 Jul	06 j 21:33	9°♊20'53	6.37208 AU
morning rise	-4402 Jul	20 j 21:09	12°♊24'48	
retrograde	-4402 Nov	18 j 06:57	29°♊29'29	
opposition	-4401 Jan	17 j 09:00	24°♊36'06	1°31'27
min. Earth dist.	-4401 Jan	18 j 05:05	24°♊29'35	4.38763 AU
direct	-4401 Mar	20 j 18:47	19°♊33'10	
	-4401 Jun	20 j 14:40	0°♋	
evening set	-4401 Jul	26 j 08:31	7°♋27'48	
max. Earth dist.	-4401 Aug	06 j 17:42	9°♋57'47	6.38760 AU
conjunction	-4401 Aug	08 j 04:52	10°♋17'09	1°15'44
minimum elong	-4401 Aug	08 j 04:49	10°♋17'07	1°15'57
morning rise	-4401 Aug	20 j 21:55	13°♋04'59	
	-4401 Dec	09 j 04:02	0°♌	
retrograde	-4401 Dec	19 j 10:44	0°♌10'03	
	-4401 Dec	29 j 18:27	30°℞♋	
opposition	-4400 Feb	18 j 01:30	25°♋18'25	2°00'47
min. Earth dist.	-4400 Feb	19 j 05:18	25°♋09'32	4.37552 AU
direct	-4400 Apr	20 j 16:46	20°♋17'32	
	-4400 Jul	17 j 06:23	0°♌	
evening set	-4400 Aug	25 j 10:51	8°♌13'35	
max. Earth dist.	-4400 Sep	05 j 07:18	10°♌38'38	6.34758 AU
conjunction	-4400 Sep	07 j 00:34	11°♌01'42	1°24'12
minimum elong	-4400 Sep	07 j 00:35	11°♌01'42	1°24'22
morning rise	-4400 Sep	19 j 12:24	13°♌48'57	
	-4400 Sep	24 j 20:47	15°♌	
	-4400 Dec	21 j 10:26	0°♍	
retrograde	-4399 Jan	19 j 18:47	1°♍18'51	
	-4399 Feb	18 j 06:13	30°℞♌	
opposition	-4399 Mar	21 j 18:06	26°♌27'04	1°56'15
min. Earth dist.	-4399 Mar	22 j 23:22	26°♌17'47	4.31034 AU
direct	-4399 May	23 j 00:21	21°♌28'52	
	-4399 Aug	11 j 03:08	0°♍	
evening set	-4399 Sep	25 j 14:34	9°♍36'38	
max. Earth dist.	-4399 Oct	06 j 16:00	12°♍07'36	6.26235 AU
conjunction	-4399 Oct	08 j 02:52	12°♍27'29	1°08'18
minimum elong	-4399 Oct	08 j 02:55	12°♍27'31	1°08'23
morning rise	-4399 Oct	20 j 14:38	15°♍18'18	
	-4398 Jan	04 j 11:30	0°♎	