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

	-4900 Jan 15 j 08:12	15°♏		
retrograde	-4900 Apr 08 j 02:53	20°♏12'12		
opposition	-4900 Jun 17 j 11:35	16°♏46'47	0°19'50	
min. Earth dist.	-4900 Jun 17 j 22:05	16°♏44'45	8.53040 AU	
	-4900 Jul 11 j 18:41	15°℞♏		
direct	-4900 Aug 24 j 15:50	13°♏25'40		
	-4900 Oct 06 j 04:19	15°♏		
evening set	-4900 Dec 02 j 10:35	20°♏51'51		
conjunction	-4900 Dec 19 j 11:01	22°♏59'13	0°00'26	
minimum elong	-4900 Dec 19 j 11:01	22°♏59'13	0°00'15	
behind sun begin	-4900 Dec 19 j 03:58	22°♏57'02		
behind sun end	-4900 Dec 19 j 18:04	23°♏01'25		
max. Earth dist.	-4900 Dec 18 j 22:34	22°♏55'20	10.45293 AU	
desc. node	-4900 Dec 24 j 12:01	23°♏37'13		
morning rise	-4899 Jan 05 j 16:25	25°♏08'13		
	-4899 Feb 18 j 19:22	0°♐		
retrograde	-4899 Apr 21 j 23:39	3°♐03'59		
	-4899 Jun 26 j 00:07	30°℞♏		
opposition	-4899 Jun 30 j 22:30	29°♏36'49	-0°20'09	
min. Earth dist.	-4899 Jul 01 j 06:53	29°♏35'11	8.37361 AU	
direct	-4899 Sep 06 j 11:08	26°♏14'32		
	-4899 Nov 12 j 06:13	0°♐		
evening set	-4899 Dec 15 j 14:04	3°♐51'11		
conjunction	-4898 Jan 01 j 18:51	6°♐02'02	-0°32'10	
minimum elong	-4898 Jan 01 j 18:50	6°♐02'01	0°32'24	
max. Earth dist.	-4898 Jan 01 j 09:40	5°♐59'06	10.29806 AU	
morning rise	-4898 Jan 19 j 05:03	8°♐14'37		
retrograde	-4898 May 06 j 07:09	16°♐23'14		
opposition	-4898 Jul 14 j 18:04	12°♐54'28	-1°00'35	
min. Earth dist.	-4898 Jul 14 j 23:33	12°♐53'22	8.22301 AU	
direct	-4898 Sep 19 j 16:44	9°♐30'55		
evening set	-4898 Dec 29 j 07:45	17°♐18'49		
conjunction	-4897 Jan 15 j 16:52	19°♐33'04	-1°04'01	
minimum elong	-4897 Jan 15 j 16:50	19°♐33'03	1°04'16	
max. Earth dist.	-4897 Jan 15 j 12:09	19°♐31'32	10.15319 AU	
morning rise	-4897 Feb 02 j 07:25	21°♐49'06		
	-4897 May 07 j 12:33	0°♑		
retrograde	-4897 May 21 j 00:52	0°♑09'41		
	-4897 Jun 03 j 14:11	30°℞♐		
opposition	-4897 Jul 28 j 21:42	26°♐39'35	-1°39'04	
min. Earth dist.	-4897 Jul 28 j 23:31	26°♐39'13	8.08710 AU	
direct	-4897 Oct 03 j 07:38	23°♐14'43		
	-4896 Jan 02 j 22:00	0°♑		
evening set	-4896 Jan 12 j 15:42	1°♑14'01		
conjunction	-4896 Jan 30 j 04:59	3°♑31'24	-1°33'05	
minimum elong	-4896 Jan 30 j 04:55	3°♑31'22	1°33'20	
max. Earth dist.	-4896 Jan 30 j 05:30	3°♑31'34	10.02708 AU	
morning rise	-4896 Feb 16 j 23:22	5°♑50'30		
retrograde	-4896 Jun 04 j 02:24	14°♑21'13		
opposition	-4896 Aug 11 j 08:38	10°♑50'05	-2°12'48	
min. Earth dist.	-4896 Aug 11 j 06:09	10°♑50'35	7.97444 AU	
direct	-4896 Oct 16 j 08:49	7°♑23'56		
evening set	-4895 Jan 26 j 12:57	15°♑33'54		
conjunction	-4895 Feb 13 j 06:05	17°♑53'57	-1°57'09	
minimum elong	-4895 Feb 13 j 06:01	17°♑53'56	1°57'23	
max. Earth dist.	-4895 Feb 13 j 11:42	17°♑55'49	9.92813 AU	
morning rise	-4895 Mar 03 j 03:45	20°♑15'32		
retrograde	-4895 Jun 19 j 09:04	28°♑53'23		
opposition	-4895 Aug 26 j 01:02	25°♑21'38	-2°38'58	
min. Earth dist.	-4895 Aug 25 j 18:35	25°♑22'58	7.89264 AU	
direct	-4895 Oct 30 j 19:15	21°♑54'16		
	-4894 Feb 09 j 05:04	0°♒		
evening set	-4894 Feb 10 j 21:33	0°♒13'13		
conjunction	-4894 Feb 28 j 18:03	2°♒35'16	-2°14'08	
minimum elong	-4894 Feb 28 j 18:01	2°♒35'16	2°14'21	
max. Earth dist.	-4894 Mar 01 j 04:17	2°♒38'41	9.86338 AU	
morning rise	-4894 Mar 18 j 18:18	4°♒58'34		
retrograde	-4894 Jul 04 j 17:15	13°♒39'34		
opposition	-4894 Sep 09 j 20:33	10°♒07'41	-2°55'07	
min. Earth dist.	-4894 Sep 09 j 10:57	10°♒09'42	7.84755 AU	
direct	-4894 Nov 14 j 13:00	6°♒39'15		
evening set	-4893 Feb 26 j 13:46	15°♒04'29		
	-4893 Feb 26 j 00:05	15°♒		
conjunction	-4893 Mar 16 j 13:09	17°♒27'45	-2°22'29	
minimum elong	-4893 Mar 16 j 13:08	17°♒27'44	2°22'39	
max. Earth dist.	-4893 Mar 17 j 03:21	17°♒32'30	9.83770 AU	
morning rise	-4893 Apr 03 j 15:15	19°♒51'51		
retrograde	-4893 Jul 19 j 23:24	28°♒31'30		
opposition	-4893 Sep 24 j 16:41	24°♒59'58	-2°59'38	
min. Earth dist.	-4893 Sep 24 j 04:44	25°♒02'29	7.84247 AU	
direct	-4893 Nov 29 j 12:07	21°♒30'40		
evening set	-4892 Mar 13 j 09:06	29°♒58'45		
	-4892 Mar 13 j 12:57	0°♓		
conjunction	-4892 Mar 31 j 10:47	2°♓22'19	-2°21'21	
minimum elong	-4892 Mar 31 j 10:48	2°♓22'19	2°21'29	
max. Earth dist.	-4892 Apr 01 j 03:51	2°♓28'00	9.85284 AU	
morning rise	-4892 Apr 18 j 13:59	4°♓46'17		
retrograde	-4892 Aug 03 j 00:06	13°♓20'09		
opposition	-4892 Oct 08 j 10:31	9°♓49'24	-2°52'06	
min. Earth dist.	-4892 Oct 07 j 21:17	9°♓52'11	7.87721 AU	
direct	-4892 Dec 13 j 14:12	6°♓19'30		
evening set	-4891 Mar 29 j 03:23	14°♓46'49		
conjunction	-4891 Apr 16 j 06:35	17°♓09'46	-2°10'57	
minimum elong	-4891 Apr 16 j 06:38	17°♓09'48	2°11'00	
max. Earth dist.	-4891 Apr 17 j 00:50	17°♓15'48	9.90675 AU	
morning rise	-4891 May 04 j 09:56	19°♓32'40		
retrograde	-4891 Aug 17 j 16:11	27°♓57'01		
opposition	-4891 Oct 22 j 23:25	24°♓27'28	-2°33'25	
min. Earth dist.	-4891 Oct 22 j 09:46	24°♓30'19	7.94803 AU	
direct	-4891 Dec 28 j 15:34	20°♓57'19		
evening set	-4890 Apr 13 j 16:18	29°♓20'37		
	-4890 Apr 18 j 18:40	0°♈		
conjunction	-4890 May 01 j 20:00	1°♈42'08	-1°52'17	
minimum elong	-4890 May 01 j 20:04	1°♈42'09	1°52'17	
max. Earth dist.	-4890 May 02 j 14:09	1°♈48'04	9.99416 AU	
morning rise	-4890 May 19 j 22:25	4°♈03'09		
retrograde	-4890 Aug 31 j 22:08	12°♈15'32		
opposition	-4890 Nov 06 j 05:49	8°♈47'32	-2°05'28	
min. Earth dist.	-4890 Nov 05 j 16:04	8°♈50'22	8.04899 AU	
direct	-4889 Jan 12 j 13:22	5°♈17'34		
evening set	-4889 Apr 28 j 20:28	13°♈34'11		
conjunction	-4889 May 16 j 23:30	15°♈53'33	-1°27'07	
minimum elong	-4889 May 16 j 23:34	15°♈53'34	1°27'03	
max. Earth dist.	-4889 May 17 j 17:03	15°♈59'13	10.10873 AU	
morning rise	-4889 Jun 03 j 23:53	18°♈12'00		
retrograde	-4889 Sep 14 j 16:50	26°♈11'08		
opposition	-4889 Nov 20 j 04:24	22°♈44'53	-1°30'46	
min. Earth dist.	-4889 Nov 19 j 14:59	22°♈47'38	8.17396 AU	
direct	-4888 Jan 27 j 04:33	19°♈15'28		

Attention, astronomical year style is used: The year -4888 in astronomical counting style is the year 4889 BCE in historical counting style.

evening set	-4888 May 12 j 14:01	27°♈23'26	
conjunction	-4888 May 30 j 15:08	29°♈40'03	-0°57'31
minimum elong	-4888 May 30 j 15:11	29°♈40'04	0°57'24
max. Earth dist.	-4888 May 31 j 07:27	29°♈45'14	10.24398 AU
	-4888 Jun 02 j 05:56	0°♉	
morning rise	-4888 Jun 17 j 12:22	1°♉55'24	
retrograde	-4888 Sep 27 j 01:43	9°♉40'53	
opposition	-4888 Dec 02 j 18:23	6°♉16'28	-0°52'05
min. Earth dist.	-4888 Dec 02 j 06:06	6°♉18'57	8.31616 AU
direct	-4887 Feb 09 j 10:58	2°♉47'50	
evening set	-4887 May 26 j 19:29	10°♉45'58	
conjunction	-4887 Jun 13 j 17:24	12°♉59'23	-0°25'38
minimum elong	-4887 Jun 13 j 17:25	12°♉59'24	0°25'28
max. Earth dist.	-4887 Jun 14 j 07:46	13°♉03'52	10.39240 AU
	-4887 Jun 29 j 21:33	15°♉	
morning rise	-4887 Jul 01 j 10:30	15°♉11'19	
retrograde	-4887 Oct 09 j 23:53	22°♉43'36	
opposition	-4887 Dec 15 j 23:57	19°♉21'02	-0°12'02
min. Earth dist.	-4887 Dec 15 j 13:56	19°♉23'01	8.46790 AU
direct	-4886 Feb 23 j 08:54	15°♉53'24	
asc. node	-4886 Apr 09 j 11:01	17°♉33'03	
evening set	-4886 Jun 09 j 12:03	23°♉41'09	
conjunction	-4886 Jun 27 j 05:40	25°♉51'08	0°06'41
minimum elong	-4886 Jun 27 j 05:39	25°♉51'08	0°06'53
behind sun begin	-4886 Jun 26 j 22:57	25°♉49'06	
behind sun end	-4886 Jun 27 j 12:21	25°♉53'10	
max. Earth dist.	-4886 Jun 27 j 17:00	25°♉54'37	10.54606 AU
morning rise	-4886 Jul 14 j 18:01	27°♉59'32	
	-4886 Jul 31 j 23:16	0°♊	
retrograde	-4886 Oct 22 j 10:35	5°♊19'47	
opposition	-4886 Dec 28 j 21:11	1°♊58'58	0°27'09
min. Earth dist.	-4886 Dec 28 j 13:54	2°♊00'23	8.62140 AU
	-4885 Jan 24 j 23:38	30°℞♉	
direct	-4885 Mar 08 j 22:19	28°♉32'28	
	-4885 Apr 20 j 11:40	0°♊	
evening set	-4885 Jun 22 j 16:03	6°♊09'58	
conjunction	-4885 Jul 10 j 04:39	8°♊16'30	0°37'36
minimum elong	-4885 Jul 10 j 04:38	8°♊16'29	0°37'50
max. Earth dist.	-4885 Jul 10 j 11:57	8°♊18'42	10.69740 AU
morning rise	-4885 Jul 27 j 12:01	10°♊21'26	
retrograde	-4885 Nov 03 j 12:51	17°♊31'12	
opposition	-4884 Jan 10 j 10:31	14°♊11'56	1°03'43
min. Earth dist.	-4884 Jan 10 j 05:46	14°♊12'51	8.76930 AU
direct	-4884 Mar 21 j 02:22	10°♊46'40	
evening set	-4884 Jul 04 j 08:08	18°♊14'31	
conjunction	-4884 Jul 21 j 15:30	20°♊17'45	1°06'01
minimum elong	-4884 Jul 21 j 15:28	20°♊17'44	1°06'15
max. Earth dist.	-4884 Jul 21 j 19:04	20°♊18'49	10.83952 AU
morning rise	-4884 Aug 07 j 17:44	22°♊19'26	
retrograde	-4884 Nov 14 j 07:49	29°♊20'33	
opposition	-4883 Jan 21 j 17:12	26°♊02'34	1°36'21
min. Earth dist.	-4883 Jan 21 j 14:31	26°♊03'04	8.90505 AU
direct	-4883 Apr 02 j 20:51	22°♊38'35	
evening set	-4883 Jul 16 j 13:21	29°♊57'39	
	-4883 Jul 16 j 21:28	0°♋	
conjunction	-4883 Aug 02 j 15:33	1°♋57'54	1°30'54
minimum elong	-4883 Aug 02 j 15:30	1°♋57'53	1°31'10
max. Earth dist.	-4883 Aug 02 j 16:32	1°♋58'11	10.96651 AU
morning rise	-4883 Aug 19 j 12:42	3°♋56'43	
retrograde	-4883 Nov 25 j 21:57	10°♋51'05	
opposition	-4882 Feb 02 j 18:23	7°♋34'08	2°04'09
min. Earth dist.	-4882 Feb 02 j 18:22	7°♋34'08	9.02330 AU
direct	-4882 Apr 15 j 07:20	4°♋11'23	
evening set	-4882 Jul 28 j 09:15	11°♋22'50	
conjunction	-4882 Aug 14 j 06:33	13°♋20'30	1°51'37
minimum elong	-4882 Aug 14 j 06:30	13°♋20'29	1°51'53
max. Earth dist.	-4882 Aug 14 j 04:36	13°♋19'56	11.07372 AU
morning rise	-4882 Aug 30 j 23:08	15°♋16'53	
retrograde	-4882 Dec 07 j 08:20	22°♋06'22	
opposition	-4881 Feb 14 j 15:09	18°♋50'12	2°26'28
min. Earth dist.	-4881 Feb 14 j 18:28	18°♋49'35	9.11995 AU
direct	-4881 Apr 27 j 08:46	15°♋28'37	
evening set	-4881 Aug 08 j 21:21	22°♋33'42	
conjunction	-4881 Aug 25 j 14:10	24°♋29'18	2°07'41
minimum elong	-4881 Aug 25 j 14:08	24°♋29'17	2°07'56
max. Earth dist.	-4881 Aug 25 j 08:22	24°♋27'37	11.15761 AU
morning rise	-4881 Sep 11 j 03:07	26°♋23'48	
	-4881 Oct 15 j 15:15	0°♌	
retrograde	-4881 Dec 18 j 13:51	3°♌10'17	
	-4880 Feb 25 j 03:30	30°℞♋	
opposition	-4880 Feb 26 j 08:48	29°♋54'37	2°42'55
min. Earth dist.	-4880 Feb 26 j 15:05	29°♋53'28	9.19169 AU
direct	-4880 May 08 j 06:09	26°♋34'04	
	-4880 Jul 15 j 21:17	0°♌	
evening set	-4880 Aug 19 j 03:15	3°♌34'12	
conjunction	-4880 Sep 04 j 16:25	5°♌28'13	2°18'48
minimum elong	-4880 Sep 04 j 16:23	5°♌28'13	2°19'02
max. Earth dist.	-4880 Sep 04 j 07:28	5°♌25'38	11.21549 AU
morning rise	-4880 Sep 21 j 02:30	7°♌21'23	
retrograde	-4880 Dec 28 j 21:18	14°♌06'46	
opposition	-4879 Mar 09 j 00:37	10°♌51'16	2°53'16
min. Earth dist.	-4879 Mar 09 j 08:35	10°♌49'49	9.23617 AU
direct	-4879 May 19 j 23:35	7°♌31'41	
evening set	-4879 Aug 30 j 04:40	14°♌28'10	
	-4879 Sep 03 j 20:46	15°♌	
conjunction	-4879 Sep 15 j 15:15	16°♌21'15	2°24'47
minimum elong	-4879 Sep 15 j 15:14	16°♌21'15	2°24'58
max. Earth dist.	-4879 Sep 15 j 04:48	16°♌18'14	11.24553 AU
morning rise	-4879 Oct 01 j 23:19	18°♌13'41	
retrograde	-4878 Jan 09 j 04:35	24°♌59'42	
opposition	-4878 Mar 20 j 16:05	21°♌44'05	2°57'21
min. Earth dist.	-4878 Mar 21 j 01:44	21°♌42'20	9.25204 AU
direct	-4878 May 31 j 11:10	18°♌25'17	
evening set	-4878 Sep 10 j 03:20	25°♌19'33	
conjunction	-4878 Sep 26 j 12:13	27°♌12'15	2°25'32
minimum elong	-4878 Sep 26 j 12:13	27°♌12'15	2°25'41
max. Earth dist.	-4878 Sep 25 j 23:49	27°♌08'40	11.24679 AU
morning rise	-4878 Oct 12 j 19:25	29°♌04'34	
	-4878 Oct 21 j 02:05	0°♍	
retrograde	-4877 Jan 20 j 14:56	5°♍52'58	
opposition	-4877 Apr 01 j 08:25	2°♍36'57	2°55'07
min. Earth dist.	-4877 Apr 01 j 20:22	2°♍34'47	9.23874 AU
	-4877 May 12 j 21:58	30°℞♌	
direct	-4877 Jun 11 j 22:25	29°♌18'42	
	-4877 Jul 11 j 11:03	0°♍	
evening set	-4877 Sep 21 j 01:17	6°♍12'12	
conjunction	-4877 Oct 07 j 09:20	8°♍05'07	2°21'01
minimum elong	-4877 Oct 07 j 09:21	8°♍05'08	2°21'08
max. Earth dist.	-4877 Oct 06 j 18:18	8°♍00'46	11.21920 AU
morning rise	-4877 Oct 23 j 16:51	9°♍57'56	
retrograde	-4876 Feb 01 j 03:16	16°♍50'22	
opposition	-4876 Apr 12 j 02:46	13°♍33'40	2°46'34

Attention, astronomical year style is used: The year -4876 in astronomical counting style is the year 4877 BCE in historical counting style.

min. Earth dist.	-4876 Apr 12 j 16:31	13°♍31'09	9.19667 AU
direct	-4876 Jun 22 j 08:28	10°♍15'45	
evening set	-4876 Oct 01 j 00:06	17°♍09'58	
conjunction	-4876 Oct 17 j 08:29	19°♍03'40	2°11'18
minimum elong	-4876 Oct 17 j 08:31	19°♍03'41	2°11'23
max. Earth dist.	-4876 Oct 16 j 16:40	18°♍59'03	11.16360 AU
morning rise	-4876 Nov 02 j 17:16	20°♍57'34	
retrograde	-4875 Feb 11 j 22:32	27°♍55'45	
opposition	-4875 Apr 24 j 00:34	24°♍38'02	2°31'48
min. Earth dist.	-4875 Apr 24 j 14:34	24°♍35'28	9.12711 AU
direct	-4875 Jul 03 j 21:42	21°♍20'13	
evening set	-4875 Oct 12 j 01:35	28°♍16'35	
	-4875 Oct 26 j 19:42	0°♎	
conjunction	-4875 Oct 28 j 11:23	0°♎11'42	1°56'32
minimum elong	-4875 Oct 28 j 11:26	0°♎11'42	1°56'34
max. Earth dist.	-4875 Oct 27 j 19:49	0°♎07'06	11.08159 AU
morning rise	-4875 Nov 13 j 22:18	2°♎07'14	
retrograde	-4874 Feb 24 j 01:07	9°♎12'44	
opposition	-4874 May 06 j 02:52	5°♎53'46	2°11'00
min. Earth dist.	-4874 May 06 j 16:32	5°♎51'14	9.03219 AU
direct	-4874 Jul 15 j 11:26	2°♎35'49	
evening set	-4874 Oct 23 j 08:03	9°♎35'52	
conjunction	-4874 Nov 08 j 19:59	11°♎32'53	1°36'59
minimum elong	-4874 Nov 08 j 20:02	11°♎32'53	1°36'56
max. Earth dist.	-4874 Nov 08 j 03:54	11°♎28'05	10.97573 AU
morning rise	-4874 Nov 25 j 10:02	13°♎30'38	
retrograde	-4873 Mar 08 j 10:16	20°♎44'55	
opposition	-4873 May 18 j 10:37	17°♎24'28	1°44'30
min. Earth dist.	-4873 May 19 j 00:25	17°♎21'54	8.91497 AU
direct	-4873 Jul 27 j 04:50	14°♎06'06	
evening set	-4873 Nov 03 j 21:12	21°♎11'25	
conjunction	-4873 Nov 20 j 11:57	23°♎10'50	1°13'03
minimum elong	-4873 Nov 20 j 12:00	23°♎10'51	1°12'57
max. Earth dist.	-4873 Nov 19 j 19:35	23°♎05'54	10.84949 AU
morning rise	-4873 Dec 07 j 05:55	25°♎11'16	
	-4872 Jan 22 j 08:06	0°♏	
retrograde	-4872 Mar 20 j 04:56	2°♏35'47	
	-4872 May 19 j 16:44	30°℞♎	
opposition	-4872 May 30 j 01:09	29°♎13'41	1°12'53
min. Earth dist.	-4872 May 30 j 14:42	29°♎11'08	8.77939 AU
direct	-4872 Aug 07 j 04:58	25°♎54'36	
	-4872 Oct 18 j 03:06	0°♏	
evening set	-4872 Nov 14 j 18:45	3°♏06'44	
conjunction	-4872 Dec 01 j 13:05	5°♏08'59	0°45'21
minimum elong	-4872 Dec 01 j 13:07	5°♏09'00	0°45'13
max. Earth dist.	-4872 Nov 30 j 21:58	5°♏04'21	10.70696 AU
morning rise	-4872 Dec 18 j 11:25	7°♏12'31	
retrograde	-4871 Apr 02 j 08:50	14°♏48'31	
opposition	-4871 Jun 11 j 23:08	11°♏24'37	0°36'59
min. Earth dist.	-4871 Jun 12 j 11:23	11°♏22'17	8.63007 AU
direct	-4871 Aug 19 j 11:39	8°♏04'37	
	-4871 Nov 23 j 15:47	15°♏	
evening set	-4871 Nov 27 j 02:59	15°♏25'10	
conjunction	-4871 Dec 14 j 01:26	17°♏30'37	0°14'49
minimum elong	-4871 Dec 14 j 01:27	17°♏30'37	0°14'38
behind sun begin	-4871 Dec 13 j 22:21	17°♏29'40	
behind sun end	-4871 Dec 14 j 04:33	17°♏31'34	
max. Earth dist.	-4871 Dec 13 j 12:38	17°♏26'39	10.55315 AU
morning rise	-4871 Dec 31 j 04:21	19°♏37'33	
retrograde	-4870 Apr 16 j 00:12	27°♏26'01	
desc. node	-4870 Jun 06 j 10:04	25°♏25'05	
opposition	-4870 Jun 25 j 05:06	24°♏00'18	-0°01'59
min. Earth dist.	-4870 Jun 25 j 14:50	23°♏58'25	8.47294 AU
direct	-4870 Sep 01 j 02:32	20°♏39'12	
evening set	-4870 Dec 09 j 23:36	28°♏09'37	
	-4870 Dec 24 j 15:48	0°♐	
conjunction	-4870 Dec 27 j 02:19	0°♐18'30	-0°17'28
minimum elong	-4870 Dec 27 j 02:18	0°♐18'30	0°17'41
max. Earth dist.	-4870 Dec 26 j 15:50	0°♐15'12	10.39503 AU
morning rise	-4869 Jan 13 j 09:57	2°♐29'02	
retrograde	-4869 Apr 30 j 03:26	10°♐30'24	
opposition	-4869 Jul 08 j 19:48	7°♐02'56	-0°42'21
min. Earth dist.	-4869 Jul 09 j 02:35	7°♐01'36	8.31604 AU
direct	-4869 Sep 14 j 01:19	3°♐40'32	
evening set	-4869 Dec 23 j 09:46	11°♐21'53	
conjunction	-4868 Jan 09 j 16:41	13°♐34'13	-0°49'47
minimum elong	-4868 Jan 09 j 16:39	13°♐34'12	0°50'01
max. Earth dist.	-4868 Jan 09 j 09:06	13°♐31'47	10.24134 AU
morning rise	-4868 Jan 27 j 04:57	15°♐48'19	
retrograde	-4868 May 13 j 16:41	24°♐02'14	
opposition	-4868 Jul 21 j 19:03	20°♐33'10	-1°21'55
min. Earth dist.	-4868 Jul 21 j 22:47	20°♐32'25	8.16853 AU
direct	-4868 Sep 26 j 10:03	17°♐09'18	
evening set	-4867 Jan 05 j 10:14	25°♐02'08	
conjunction	-4867 Jan 22 j 21:19	27°♐17'45	-1°20'18
minimum elong	-4867 Jan 22 j 21:16	27°♐17'44	1°20'33
max. Earth dist.	-4867 Jan 22 j 17:22	27°♐16'28	10.10136 AU
morning rise	-4867 Feb 09 j 13:52	29°♐35'10	
	-4867 Feb 12 j 20:01	0°♑	
retrograde	-4867 May 28 j 13:14	8°♑00'15	
opposition	-4867 Aug 05 j 01:53	4°♑29'50	-1°58'05
min. Earth dist.	-4867 Aug 05 j 02:35	4°♑29'41	8.03949 AU
direct	-4867 Oct 10 j 06:36	1°♑04'27	
evening set	-4866 Jan 20 j 00:34	9°♑08'30	
conjunction	-4866 Feb 06 j 15:39	11°♑27'05	-1°46'52
minimum elong	-4866 Feb 06 j 15:35	11°♑27'04	1°47'07
max. Earth dist.	-4866 Feb 06 j 16:13	11°♑27'16	9.98388 AU
morning rise	-4866 Feb 24 j 11:52	13°♑47'20	
retrograde	-4866 Jun 12 j 15:57	22°♑21'12	
opposition	-4866 Aug 19 j 15:07	18°♑49'46	-2°28'01
min. Earth dist.	-4866 Aug 19 j 12:31	18°♑50'18	7.93716 AU
direct	-4866 Oct 24 j 12:50	15°♑22'54	
evening set	-4865 Feb 04 j 03:03	23°♑37'00	
conjunction	-4865 Feb 21 j 21:47	25°♑57'59	-2°07'20
minimum elong	-4865 Feb 21 j 21:45	25°♑57'58	2°07'34
max. Earth dist.	-4865 Feb 22 j 03:28	25°♑59'52	9.89674 AU
morning rise	-4865 Mar 11 j 20:55	28°♑20'23	
	-4865 Mar 24 j 20:53	0°♒	
retrograde	-4865 Jun 27 j 22:01	6°♒59'37	
opposition	-4865 Sep 03 j 08:37	3°♒27'37	-2°49'04
min. Earth dist.	-4865 Sep 03 j 02:24	3°♒28'55	7.86841 AU
	-4865 Nov 04 j 23:13	30°℞♑	
direct	-4865 Nov 08 j 02:54	29°♑59'25	
	-4865 Nov 11 j 06:24	0°♒	
evening set	-4864 Feb 19 j 15:00	8°♒21'23	
conjunction	-4864 Mar 08 j 13:02	10°♒44'04	-2°19'51
minimum elong	-4864 Mar 08 j 13:00	10°♒44'03	2°20'03
max. Earth dist.	-4864 Mar 08 j 23:36	10°♒47'36	9.84617 AU
morning rise	-4864 Mar 26 j 14:22	13°♒07'48	
	-4864 Apr 10 j 05:20	15°♒	
retrograde	-4864 Jul 12 j 04:30	21°♒48'12	
opposition	-4864 Sep 17 j 04:01	18°♒16'08	-2°59'11

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

min. Earth dist.	-4864 Sep 16 j 18:27	18°♒18'08	7.83806 AU
	-4864 Nov 06 j 20:38	15°℞♒	
direct	-4864 Nov 21 j 22:50	14°♒46'48	
	-4864 Dec 07 j 00:12	15°♒	
evening set	-4863 Mar 06 j 08:36	23°♒13'38	
conjunction	-4863 Mar 24 j 09:24	25°♒37'11	-2°23'12
minimum elong	-4863 Mar 24 j 09:25	25°♒37'11	2°23'21
max. Earth dist.	-4863 Mar 25 j 00:04	25°♒42'05	9.83574 AU
morning rise	-4863 Apr 11 j 12:12	28°♒01'21	
	-4863 Apr 27 j 00:16	0°♓	
retrograde	-4863 Jul 27 j 08:17	6°♓38'26	
opposition	-4863 Oct 01 j 22:41	3°♓06'48	-2°57'19
min. Earth dist.	-4863 Oct 01 j 10:29	3°♓09'22	7.84803 AU
	-4863 Nov 16 j 18:24	30°℞♒	
direct	-4863 Dec 06 j 23:05	29°♒36'39	
	-4863 Dec 27 j 03:23	0°♓	
evening set	-4862 Mar 22 j 03:30	8°♓04'51	
conjunction	-4862 Apr 09 j 06:17	10°♓28'19	-2°17'05
minimum elong	-4862 Apr 09 j 06:20	10°♓28'20	2°17'10
max. Earth dist.	-4862 Apr 09 j 23:55	10°♓34'11	9.86596 AU
morning rise	-4862 Apr 27 j 09:36	12°♓51'57	
retrograde	-4862 Aug 11 j 05:10	21°♓21'36	
opposition	-4862 Oct 16 j 13:58	17°♓50'53	-2°43'44
min. Earth dist.	-4862 Oct 16 j 00:09	17°♓53'47	7.89739 AU
direct	-4862 Dec 22 j 00:18	14°♓20'17	
evening set	-4861 Apr 06 j 19:14	22°♓46'16	
conjunction	-4861 Apr 24 j 23:01	25°♓08'46	-2°02'08
minimum elong	-4861 Apr 24 j 23:05	25°♓08'47	2°02'09
max. Earth dist.	-4861 Apr 25 j 18:13	25°♓15'05	9.93447 AU
morning rise	-4861 May 13 j 01:57	27°♓30'56	
	-4861 Jun 02 j 01:00	0°♈	
retrograde	-4861 Aug 25 j 16:37	5°♈49'52	
opposition	-4861 Oct 30 j 23:44	2°♈20'29	-2°19'50
min. Earth dist.	-4861 Oct 30 j 09:35	2°♈23'27	7.98254 AU
	-4861 Nov 30 j 20:05	30°℞♓	
direct	-4860 Jan 05 j 23:22	28°♓49'51	
	-4860 Feb 10 j 23:50	0°♈	
evening set	-4860 Apr 21 j 03:55	7°♈10'25	
conjunction	-4860 May 09 j 07:35	9°♈31'05	-1°39'46
minimum elong	-4860 May 09 j 07:39	9°♈31'07	1°39'44
max. Earth dist.	-4860 May 10 j 02:37	9°♈37'16	10.03618 AU
morning rise	-4860 May 27 j 09:07	11°♈51'01	
retrograde	-4860 Sep 07 j 17:04	19°♈57'06	
opposition	-4860 Nov 13 j 02:14	16°♈29'24	-1°47'57
min. Earth dist.	-4860 Nov 12 j 12:38	16°♈32'13	8.09742 AU
direct	-4859 Jan 19 j 17:39	12°♈59'06	
evening set	-4859 May 06 j 02:56	21°♈11'48	
conjunction	-4859 May 24 j 05:09	23°♈29'57	-1°11'59
minimum elong	-4859 May 24 j 05:12	23°♈29'58	1°11'53
max. Earth dist.	-4859 May 24 j 22:39	23°♈35'33	10.16396 AU
morning rise	-4859 Jun 11 j 04:06	25°♈47'00	
	-4859 Jul 17 j 17:14	0°♉	
retrograde	-4859 Sep 21 j 06:27	3°♉39'18	
opposition	-4859 Nov 26 j 20:24	0°♉13'30	-1°10'46
min. Earth dist.	-4859 Nov 26 j 07:47	0°♉16'04	8.23455 AU
	-4859 Nov 29 j 14:45	30°℞♈	
direct	-4858 Feb 03 j 04:45	26°♈43'56	
	-4858 Apr 07 j 16:35	0°♉	
evening set	-4858 May 20 j 14:12	4°♉47'09	
conjunction	-4858 Jun 07 j 13:42	7°♉02'14	-0°40'53
minimum elong	-4858 Jun 07 j 13:44	7°♉02'15	0°40'45
max. Earth dist.	-4858 Jun 08 j 04:58	7°♉07'03	10.30978 AU
morning rise	-4858 Jun 25 j 09:05	9°♉15'57	
	-4858 Aug 18 j 19:39	15°♉	
retrograde	-4858 Oct 04 j 08:26	16°♉54'39	
	-4858 Nov 21 j 01:19	15°℞♉	
opposition	-4858 Dec 10 j 05:55	13°♉30'49	-0°31'01
min. Earth dist.	-4858 Dec 09 j 18:19	13°♉33'08	8.38577 AU
direct	-4857 Feb 17 j 07:58	10°♉02'19	
	-4857 May 09 j 06:34	15°♉	
evening set	-4857 Jun 03 j 12:39	17°♉55'12	
conjunction	-4857 Jun 21 j 08:28	20°♉06'56	-0°08'36
minimum elong	-4857 Jun 21 j 08:28	20°♉06'56	0°08'25
behind sun begin	-4857 Jun 21 j 02:08	20°♉04'59	
behind sun end	-4857 Jun 21 j 14:47	20°♉08'52	
max. Earth dist.	-4857 Jun 21 j 21:20	20°♉10'54	10.46522 AU
morning rise	-4857 Jul 08 j 23:24	22°♉17'06	
asc. node	-4857 Sep 29 j 15:38	29°♉26'38	
retrograde	-4857 Oct 17 j 00:07	29°♉43'07	
opposition	-4857 Dec 23 j 06:53	26°♉21'13	0°08'52
min. Earth dist.	-4857 Dec 22 j 20:47	26°♉23'13	8.54272 AU
direct	-4856 Mar 02 j 01:41	22°♉54'00	
	-4856 Jun 10 j 19:31	0°♊	
evening set	-4856 Jun 15 j 22:40	0°♊36'30	
conjunction	-4856 Jul 03 j 13:55	2°♊44'44	0°23'15
minimum elong	-4856 Jul 03 j 13:54	2°♊44'43	0°23'28
max. Earth dist.	-4856 Jul 04 j 00:27	2°♊47'56	10.62203 AU
morning rise	-4856 Jul 20 j 23:45	4°♊51'21	
retrograde	-4856 Oct 28 j 08:13	12°♊06'05	
opposition	-4855 Jan 03 j 23:53	8°♊46'01	0°46'54
min. Earth dist.	-4855 Jan 03 j 16:26	8°♊47'28	8.69756 AU
direct	-4855 Mar 15 j 08:40	5°♊20'12	
evening set	-4855 Jun 28 j 20:37	12°♊52'42	
conjunction	-4855 Jul 16 j 06:40	14°♊57'32	0°53'01
minimum elong	-4855 Jul 16 j 06:38	14°♊57'31	0°53'16
max. Earth dist.	-4855 Jul 16 j 13:58	14°♊59'43	10.77277 AU
morning rise	-4855 Aug 02 j 11:14	17°♊00'45	
retrograde	-4855 Nov 09 j 07:13	24°♊05'55	
opposition	-4854 Jan 16 j 10:03	20°♊47'29	1°21'34
min. Earth dist.	-4854 Jan 16 j 05:52	20°♊48'17	8.84332 AU
direct	-4854 Mar 28 j 06:28	17°♊23'06	
evening set	-4854 Jul 11 j 07:12	24°♊46'22	
conjunction	-4854 Jul 28 j 11:50	26°♊48'01	1°19'42
minimum elong	-4854 Jul 28 j 11:47	26°♊48'00	1°19'57
max. Earth dist.	-4854 Jul 28 j 14:59	26°♊48'57	10.91102 AU
morning rise	-4854 Aug 14 j 11:21	28°♊48'10	
	-4854 Aug 24 j 23:08	0°♋	
retrograde	-4854 Nov 20 j 22:55	5°♋45'39	
opposition	-4853 Jan 28 j 14:05	2°♋28'32	1°51'45
min. Earth dist.	-4853 Jan 28 j 12:56	2°♋28'45	8.97388 AU
	-4853 Mar 06 j 14:35	30°℞♊	
direct	-4853 Apr 09 j 21:45	29°♊05'32	
	-4853 May 13 j 20:36	0°♋	
evening set	-4853 Jul 23 j 07:53	6°♋20'37	
conjunction	-4853 Aug 09 j 07:21	8°♋19'26	1°42'28
minimum elong	-4853 Aug 09 j 07:18	8°♋19'25	1°42'43
max. Earth dist.	-4853 Aug 09 j 06:27	8°♋19'11	11.03127 AU
morning rise	-4853 Aug 26 j 02:12	10°♋16'55	
retrograde	-4853 Dec 02 j 11:10	17°♋08'35	
opposition	-4852 Feb 09 j 12:57	13°♋52'29	2°16'42
min. Earth dist.	-4852 Feb 09 j 14:12	13°♋52'15	9.08397 AU
direct	-4852 Apr 21 j 04:36	10°♋30'47	
evening set	-4852 Aug 03 j 00:00	17°♋38'50	

Attention, astronomical year style is used: The year -4852 in astronomical counting style is the year 4853 BCE in historical counting style.

conjunction	-4852 Aug 19 j 18:53	19°♋35'20	2°00'45
minimum elong	-4852 Aug 19 j 18:50	19°♋35'19	2°01'00
max. Earth dist.	-4852 Aug 19 j 15:12	19°♋34'15	11.12879 AU
morning rise	-4852 Sep 05 j 09:29	21°♋30'38	
retrograde	-4852 Dec 12 j 20:02	28°♋18'22	
opposition	-4851 Feb 20 j 08:21	25°♋02'56	2°35'55
min. Earth dist.	-4851 Feb 20 j 12:18	25°♋02'12	9.16921 AU
direct	-4851 May 03 j 04:27	21°♋42'23	
evening set	-4851 Aug 14 j 09:03	28°♋44'45	
	-4851 Aug 25 j 07:43	0°♌	
conjunction	-4851 Aug 30 j 23:57	0°♌39'25	2°14'12
minimum elong	-4851 Aug 30 j 23:55	0°♌39'25	2°14'26
max. Earth dist.	-4851 Aug 30 j 17:18	0°♌37'30	11.19969 AU
morning rise	-4851 Sep 16 j 11:07	2°♌33'06	
retrograde	-4851 Dec 24 j 03:50	9°♌18'51	
opposition	-4850 Mar 04 j 01:27	6°♌03'46	2°49'08
min. Earth dist.	-4850 Mar 04 j 08:58	6°♌02'23	9.22625 AU
direct	-4850 May 14 j 22:42	2°♌44'11	
evening set	-4850 Aug 25 j 12:58	9°♌42'18	
conjunction	-4850 Sep 11 j 00:36	11°♌35'45	2°22'35
minimum elong	-4850 Sep 11 j 00:35	11°♌35'45	2°22'47
max. Earth dist.	-4850 Sep 10 j 13:54	11°♌32'39	11.24141 AU
morning rise	-4850 Sep 27 j 09:30	13°♌28'27	
	-4850 Oct 11 j 05:33	15°♌	
retrograde	-4849 Jan 04 j 09:28	20°♌14'04	
opposition	-4849 Mar 15 j 17:19	16°♌58'58	2°56'08
min. Earth dist.	-4849 Mar 16 j 03:51	16°♌57'02	9.25324 AU
	-4849 Apr 13 j 22:40	15°℞♌	
direct	-4849 May 26 j 12:42	13°♌40'08	
	-4849 Jul 07 j 03:26	15°♌	
evening set	-4849 Sep 05 j 13:19	20°♌35'32	
conjunction	-4849 Sep 21 j 22:46	22°♌28'20	2°25'45
minimum elong	-4849 Sep 21 j 22:46	22°♌28'20	2°25'55
max. Earth dist.	-4849 Sep 21 j 09:20	22°♌24'27	11.25301 AU
morning rise	-4849 Oct 08 j 06:23	24°♌20'40	
	-4849 Dec 09 j 02:24	0°♍	
retrograde	-4848 Jan 15 j 19:10	1°♍07'58	
	-4848 Feb 23 j 11:50	30°℞♌	
opposition	-4848 Mar 26 j 09:28	27°♌52'29	2°56'49
min. Earth dist.	-4848 Mar 26 j 21:39	27°♌50'16	9.24977 AU
direct	-4848 Jun 06 j 02:53	24°♌34'12	
	-4848 Sep 02 j 04:44	0°♍	
evening set	-4848 Sep 15 j 11:46	1°♍28'13	
conjunction	-4848 Oct 01 j 20:10	3°♍21'01	2°23'40
minimum elong	-4848 Oct 01 j 20:11	3°♍21'02	2°23'47
max. Earth dist.	-4848 Oct 01 j 05:38	3°♍16'49	11.23459 AU
morning rise	-4848 Oct 18 j 03:22	5°♍13'34	
retrograde	-4847 Jan 26 j 07:17	12°♍04'16	
opposition	-4847 Apr 07 j 03:14	8°♍48'02	2°51'12
min. Earth dist.	-4847 Apr 07 j 16:26	8°♍45'38	9.21644 AU
direct	-4847 Jun 17 j 13:20	5°♍30'03	
evening set	-4847 Sep 26 j 10:22	12°♍24'08	
conjunction	-4847 Oct 12 j 18:37	14°♍17'30	2°16'20
minimum elong	-4847 Oct 12 j 18:39	14°♍17'30	2°16'26
max. Earth dist.	-4847 Oct 12 j 02:33	14°♍12'49	11.18717 AU
morning rise	-4847 Oct 29 j 02:37	16°♍10'54	
retrograde	-4846 Feb 07 j 00:19	23°♍06'36	
opposition	-4846 Apr 18 j 23:43	19°♍49'19	2°39'17
min. Earth dist.	-4846 Apr 19 j 14:29	19°♍46'37	9.15470 AU
direct	-4846 Jun 29 j 00:47	16°♍31'21	
evening set	-4846 Oct 07 j 10:45	23°♍26'58	

conjunction	-4846 Oct 23 j 19:47	25°♍21'29	2°03'52
minimum elong	-4846 Oct 23 j 19:49	25°♍21'30	2°03'55
max. Earth dist.	-4846 Oct 23 j 02:05	25°♍16'18	11.11250 AU
morning rise	-4846 Nov 09 j 05:44	27°♍16'20	
	-4846 Dec 04 j 06:12	0°♎	
retrograde	-4845 Feb 18 j 21:40	4°♎18'39	
opposition	-4845 May 01 j 00:04	1°♎00'03	2°21'14
min. Earth dist.	-4845 May 01 j 15:49	0°♎57'10	9.06664 AU
	-4845 May 14 j 19:36	30°℞♍	
direct	-4845 Jul 10 j 13:45	27°♍41'50	
	-4845 Sep 02 j 14:56	0°♎	
evening set	-4845 Oct 18 j 14:51	4°♎40'32	
max. Earth dist.	-4845 Nov 03 j 08:00	6°♎31'30	11.01296 AU
conjunction	-4845 Nov 04 j 01:40	6°♎36'45	1°46'28
minimum elong	-4845 Nov 04 j 01:43	6°♎36'45	1°46'27
morning rise	-4845 Nov 20 j 14:19	8°♎33'34	
retrograde	-4844 Mar 02 j 02:42	15°♎44'08	
opposition	-4844 May 12 j 05:23	12°♎23'58	1°57'18
min. Earth dist.	-4844 May 12 j 20:38	12°♎21'08	8.95521 AU
direct	-4844 Jul 21 j 07:32	9°♎05'18	
evening set	-4844 Oct 29 j 00:39	16°♎08'37	
conjunction	-4844 Nov 14 j 14:12	18°♎07'04	1°24'28
minimum elong	-4844 Nov 14 j 14:15	18°♎07'05	1°24'24
max. Earth dist.	-4844 Nov 13 j 21:49	18°♎02'09	10.89192 AU
morning rise	-4844 Dec 01 j 06:16	20°♎06'23	
retrograde	-4843 Mar 14 j 18:49	27°♎26'40	
opposition	-4843 May 24 j 16:53	24°♎04'46	1°27'56
min. Earth dist.	-4843 May 25 j 06:35	24°♎02'12	8.82439 AU
direct	-4843 Aug 02 j 05:07	20°♎45'29	
evening set	-4843 Nov 09 j 18:13	27°♎54'57	
conjunction	-4843 Nov 26 j 11:02	29°♎56'05	0°58'23
minimum elong	-4843 Nov 26 j 11:05	29°♎56'06	0°58'16
max. Earth dist.	-4843 Nov 25 j 19:30	29°♎51'21	10.75376 AU
	-4843 Nov 26 j 23:55	0°♏	
morning rise	-4843 Dec 13 j 07:17	1°♏58'22	
retrograde	-4842 Mar 27 j 18:51	9°♏29'40	
opposition	-4842 Jun 06 j 11:33	6°♏05'59	0°53'49
min. Earth dist.	-4842 Jun 06 j 23:50	6°♏03'39	8.67904 AU
direct	-4842 Aug 14 j 06:35	2°♏45'50	
evening set	-4842 Nov 21 j 21:39	10°♏03'05	
conjunction	-4842 Dec 08 j 18:10	12°♏07'16	0°29'00
minimum elong	-4842 Dec 08 j 18:11	12°♏07'16	0°28'50
max. Earth dist.	-4842 Dec 08 j 03:34	12°♏02'45	10.60376 AU
morning rise	-4842 Dec 25 j 19:04	14°♏12'51	
	-4841 Jan 01 j 08:18	15°♏	
retrograde	-4841 Apr 10 j 04:40	21°♏56'13	
opposition	-4841 Jun 19 j 14:02	18°♏30'43	0°16'01
min. Earth dist.	-4841 Jun 20 j 00:49	18°♏28'38	8.52513 AU
direct	-4841 Aug 26 j 18:10	15°♏09'31	
desc. node	-4841 Nov 19 j 22:44	20°♏51'18	
evening set	-4841 Dec 04 j 12:30	22°♏36'00	
conjunction	-4841 Dec 21 j 13:10	24°♏43'30	-0°02'45
minimum elong	-4841 Dec 21 j 13:10	24°♏43'30	0°02'57
behind sun begin	-4841 Dec 21 j 06:05	24°♏41'17	
behind sun end	-4841 Dec 21 j 20:15	24°♏45'42	
max. Earth dist.	-4841 Dec 21 j 01:08	24°♏39'44	10.44834 AU
morning rise	-4840 Jan 07 j 18:50	26°♏52'36	
	-4840 Feb 03 j 13:30	0°♐	
retrograde	-4840 Apr 23 j 02:03	4°♐48'41	
opposition	-4840 Jul 02 j 01:06	1°♐21'26	-0°24'00
min. Earth dist.	-4840 Jul 02 j 09:28	1°♐19'47	8.36974 AU
	-4840 Jul 19 j 19:53	30°℞♏	

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

direct	-4840 Sep 07 j 13:57	27°♏59'04		
	-4840 Oct 25 j 09:51	0°♐		
evening set	-4840 Dec 16 j 16:17	5°♐35'54		
conjunction	-4839 Jan 02 j 21:21	7°♐46'50	-0°35'13	
minimum elong	-4839 Jan 02 j 21:20	7°♐46'49	0°35'26	
max. Earth dist.	-4839 Jan 02 j 13:16	7°♐44'15	10.29490 AU	
morning rise	-4839 Jan 20 j 07:39	9°♐59'30		
retrograde	-4839 May 07 j 10:19	18°♐08'18		
opposition	-4839 Jul 15 j 20:38	14°♐39'26	-1°04'15	
min. Earth dist.	-4839 Jul 16 j 01:31	14°♐38'27	8.22070 AU	
direct	-4839 Sep 20 j 18:53	11°♐15'48		
evening set	-4839 Dec 30 j 10:20	19°♐03'49		
conjunction	-4838 Jan 16 j 19:43	21°♐18'07	-1°06'49	
minimum elong	-4838 Jan 16 j 19:40	21°♐18'06	1°07'03	
max. Earth dist.	-4838 Jan 16 j 16:00	21°♐16'54	10.15160 AU	
morning rise	-4838 Feb 03 j 10:19	23°♐34'10		
	-4838 Apr 04 j 14:01	0°♑		
retrograde	-4838 May 22 j 03:35	1°♑54'47		
	-4838 Jul 09 j 14:09	30°℞♐		
opposition	-4838 Jul 30 j 00:06	28°♐24'34	-1°42'19	
min. Earth dist.	-4838 Jul 30 j 01:04	28°♐24'22	8.08639 AU	
direct	-4838 Oct 04 j 10:18	24°♐59'37		
	-4838 Dec 20 j 10:44	0°♑		
evening set	-4837 Jan 13 j 18:35	2°♑58'57		
conjunction	-4837 Jan 31 j 07:59	5°♑16'21	-1°35'27	
minimum elong	-4837 Jan 31 j 07:56	5°♑16'20	1°35'42	
max. Earth dist.	-4837 Jan 31 j 08:48	5°♑16'37	10.02706 AU	
morning rise	-4837 Feb 18 j 02:26	7°♑35'26		
retrograde	-4837 Jun 06 j 04:52	16°♑05'59		
opposition	-4837 Aug 13 j 10:49	12°♑34'45	-2°15'25	
min. Earth dist.	-4837 Aug 13 j 07:50	12°♑35'22	7.97524 AU	
direct	-4837 Oct 18 j 10:59	9°♑08'31		
evening set	-4836 Jan 28 j 15:51	17°♑18'25		
conjunction	-4836 Feb 15 j 08:58	19°♑38'26	-1°58'55	
minimum elong	-4836 Feb 15 j 08:55	19°♑38'25	1°59'09	
max. Earth dist.	-4836 Feb 15 j 14:14	19°♑40'11	9.92960 AU	
morning rise	-4836 Mar 04 j 06:44	21°♑59'59		
	-4836 May 25 j 05:01	0°♒		
retrograde	-4836 Jun 20 j 11:20	0°♒37'29		
	-4836 Jul 16 j 18:32	30°℞♑		
opposition	-4836 Aug 27 j 02:58	27°♑05'41	-2°40'45	
min. Earth dist.	-4836 Aug 26 j 20:38	27°♑07'00	7.89485 AU	
direct	-4836 Oct 31 j 20:45	23°♑38'13		
	-4835 Jan 27 j 17:08	0°♒		
evening set	-4835 Feb 12 j 00:17	1°♒57'00		
conjunction	-4835 Mar 01 j 20:46	4°♒19'00	-2°15'12	
minimum elong	-4835 Mar 01 j 20:44	4°♒18'59	2°15'25	
max. Earth dist.	-4835 Mar 02 j 06:17	4°♒22'10	9.86625 AU	
morning rise	-4835 Mar 19 j 21:10	6°♒42'15		
	-4835 Jun 15 j 13:36	15°♒		
retrograde	-4835 Jul 05 j 19:18	15°♒22'43		
	-4835 Jul 25 j 23:49	15°℞♒		
opposition	-4835 Sep 10 j 22:05	11°♒50'51	-2°55'56	
min. Earth dist.	-4835 Sep 10 j 13:04	11°♒52'44	7.85105 AU	
direct	-4835 Nov 15 j 14:25	8°♒22'18		
	-4834 Feb 13 j 17:03	15°♒		
evening set	-4834 Feb 27 j 16:15	16°♒47'19		
conjunction	-4834 Mar 17 j 15:39	19°♒10'29	-2°22'46	
minimum elong	-4834 Mar 17 j 15:39	19°♒10'29	2°22'56	
max. Earth dist.	-4834 Mar 18 j 05:02	19°♒14'58	9.84177 AU	
morning rise	-4834 Apr 04 j 17:54	21°♒34'32		
	-4834 Jul 05 j 12:41	0°♓		
retrograde	-4834 Jul 21 j 01:11	0°♓13'32		
	-4834 Aug 05 j 11:54	30°℞♒		
opposition	-4834 Sep 25 j 17:47	26°♒42'03	-2°59'28	
min. Earth dist.	-4834 Sep 25 j 06:26	26°♒44'26	7.84706 AU	
direct	-4834 Nov 30 j 14:24	23°♒12'42		
	-4833 Mar 02 j 08:53	0°♓		
evening set	-4833 Mar 15 j 11:12	1°♓40'29		
conjunction	-4833 Apr 02 j 12:55	4°♓03'57	-2°20'52	
minimum elong	-4833 Apr 02 j 12:57	4°♓03'58	2°20'59	
max. Earth dist.	-4833 Apr 03 j 05:25	4°♓09'27	9.85798 AU	
morning rise	-4833 Apr 20 j 16:11	6°♓27'50		
retrograde	-4833 Aug 05 j 00:28	15°♓01'00		
opposition	-4833 Oct 10 j 11:07	11°♓30'20	-2°51'00	
min. Earth dist.	-4833 Oct 09 j 22:00	11°♓33'05	7.88291 AU	
direct	-4833 Dec 15 j 16:38	8°♓00'27		
evening set	-4832 Mar 30 j 04:54	16°♓27'22		
conjunction	-4832 Apr 17 j 08:11	18°♓50'13	-2°09'44	
minimum elong	-4832 Apr 17 j 08:15	18°♓50'15	2°09'47	
max. Earth dist.	-4832 Apr 18 j 02:30	18°♓56'16	9.91317 AU	
morning rise	-4832 May 05 j 11:32	21°♓13'00		
retrograde	-4832 Aug 18 j 15:08	29°♓36'35		
opposition	-4832 Oct 23 j 23:29	26°♓07'08	-2°31'30	
min. Earth dist.	-4832 Oct 23 j 09:19	26°♓10'05	7.95516 AU	
direct	-4832 Dec 29 j 17:18	22°♓37'02		
	-4831 Apr 06 j 20:18	0°♈		
evening set	-4831 Apr 14 j 17:11	0°♈59'46		
conjunction	-4831 May 02 j 21:00	3°♈21'10	-1°50'29	
minimum elong	-4831 May 02 j 21:04	3°♈21'11	1°50'29	
max. Earth dist.	-4831 May 03 j 15:44	3°♈27'17	10.00207 AU	
morning rise	-4831 May 20 j 23:20	5°♈42'00		
retrograde	-4831 Sep 01 j 20:33	13°♈53'32		
opposition	-4831 Nov 07 j 05:13	10°♈25'37	-2°02'54	
min. Earth dist.	-4831 Nov 06 j 14:59	10°♈28'34	8.05736 AU	
direct	-4830 Jan 13 j 13:26	6°♈55'42		
evening set	-4830 Apr 29 j 20:43	15°♈11'40		
conjunction	-4830 May 17 j 23:46	17°♈30'53	-1°24'53	
minimum elong	-4830 May 17 j 23:50	17°♈30'54	1°24'49	
max. Earth dist.	-4830 May 18 j 17:51	17°♈36'42	10.11737 AU	
morning rise	-4830 Jun 04 j 23:56	19°♈49'08		
retrograde	-4830 Sep 15 j 16:22	27°♈47'26		
opposition	-4830 Nov 21 j 03:13	24°♈21'17	-1°27'46	
min. Earth dist.	-4830 Nov 20 j 13:57	24°♈24'00	8.18243 AU	
direct	-4829 Jan 28 j 02:42	20°♈51'55		
evening set	-4829 May 14 j 13:32	28°♈59'18		
	-4829 May 22 j 15:19	0°♉		
conjunction	-4829 Jun 01 j 14:32	1°♉15'46	-0°55'00	
minimum elong	-4829 Jun 01 j 14:35	1°♉15'47	0°54'53	
max. Earth dist.	-4829 Jun 02 j 06:53	1°♉20'57	10.25210 AU	
morning rise	-4829 Jun 19 j 11:31	3°♉30'57		
retrograde	-4829 Sep 29 j 00:38	11°♉15'44		
opposition	-4829 Dec 04 j 16:47	7°♉51'28	-0°48'51	
min. Earth dist.	-4829 Dec 04 j 05:24	7°♉53'46	8.32370 AU	
direct	-4828 Feb 11 j 09:37	4°♉22'53		
evening set	-4828 May 27 j 18:21	12°♉20'35		
conjunction	-4828 Jun 14 j 16:02	14°♉33'51	-0°22'59	
minimum elong	-4828 Jun 14 j 16:03	14°♉33'52	0°22'49	
max. Earth dist.	-4828 Jun 15 j 05:34	14°♉38'04	10.39914 AU	
	-4828 Jun 18 j 03:45	15°♉		
morning rise	-4828 Jul 02 j 08:59	16°♉45'39		
retrograde	-4828 Oct 10 j 20:54	24°♉17'28		

Attention, astronomical year style is used: The year -4828 in astronomical counting style is the year 4829 BCE in historical counting style.

opposition	-4828 Dec 16 j 22:01	20°♉55'03	-0°08'43
min. Earth dist.	-4828 Dec 16 j 13:02	20°♉56'50	8.47380 AU
direct	-4827 Feb 24 j 08:13	17°♉27'29	
asc. node	-4827 Mar 09 j 17:41	17°♉36'42	
evening set	-4827 Jun 10 j 10:35	25°♉14'59	
conjunction	-4827 Jun 28 j 03:54	27°♉24'51	0°09'20
minimum elong	-4827 Jun 28 j 03:53	27°♉24'51	0°09'33
behind sun begin	-4827 Jun 27 j 21:55	27°♉23'02	
behind sun end	-4827 Jun 28 j 09:50	27°♉26'39	
max. Earth dist.	-4827 Jun 28 j 13:41	27°♉27'51	10.55088 AU
morning rise	-4827 Jul 15 j 16:08	29°♉33'08	
	-4827 Jul 19 j 09:56	0°♊	
retrograde	-4827 Oct 23 j 07:58	6°♊53'09	
opposition	-4827 Dec 29 j 19:02	3°♊32'27	0°30'24
min. Earth dist.	-4827 Dec 29 j 12:07	3°♊33'47	8.62520 AU
direct	-4826 Mar 09 j 21:08	0°♊06'02	
evening set	-4826 Jun 23 j 14:17	7°♊43'26	
conjunction	-4826 Jul 11 j 02:40	9°♊49'53	0°40'10
minimum elong	-4826 Jul 11 j 02:38	9°♊49'53	0°40'24
max. Earth dist.	-4826 Jul 11 j 09:04	9°♊51'50	10.70000 AU
morning rise	-4826 Jul 28 j 09:49	11°♊54'44	
retrograde	-4826 Nov 04 j 10:26	19°♊04'30	
opposition	-4825 Jan 11 j 08:28	15°♊45'18	1°06'46
min. Earth dist.	-4825 Jan 11 j 03:31	15°♊46'15	8.77077 AU
direct	-4825 Mar 23 j 00:23	12°♊20'08	
evening set	-4825 Jul 06 j 06:07	19°♊47'59	
conjunction	-4825 Jul 23 j 13:22	21°♊51'12	1°08'22
minimum elong	-4825 Jul 23 j 13:19	21°♊51'11	1°08'37
max. Earth dist.	-4825 Jul 23 j 17:04	21°♊52'18	10.83976 AU
morning rise	-4825 Aug 09 j 15:17	23°♊52'51	
	-4825 Oct 14 j 20:01	0°♋	
retrograde	-4825 Nov 16 j 06:23	0°♋54'08	
	-4825 Dec 19 j 06:38	30°℞♊	
opposition	-4824 Jan 23 j 15:21	27°♊36'12	1°39'06
min. Earth dist.	-4824 Jan 23 j 12:54	27°♊36'40	8.90411 AU
direct	-4824 Apr 03 j 19:20	24°♊12'16	
	-4824 Jul 03 j 23:22	0°♋	
evening set	-4824 Jul 17 j 11:28	1°♋31'30	
conjunction	-4824 Aug 03 j 13:29	3°♋31'45	1°32'59
minimum elong	-4824 Aug 03 j 13:26	3°♋31'44	1°33'15
max. Earth dist.	-4824 Aug 03 j 14:22	3°♋32'00	10.96431 AU
morning rise	-4824 Aug 20 j 10:20	5°♋30'32	
retrograde	-4824 Nov 26 j 21:12	12°♋25'12	
opposition	-4823 Feb 03 j 16:48	9°♋08'17	2°06'30
min. Earth dist.	-4823 Feb 03 j 17:48	9°♋08'06	9.01998 AU
direct	-4823 Apr 16 j 04:32	5°♋45'34	
evening set	-4823 Jul 29 j 07:35	12°♋57'17	
conjunction	-4823 Aug 15 j 04:34	14°♋54'58	1°53'21
minimum elong	-4823 Aug 15 j 04:31	14°♋54'58	1°53'36
max. Earth dist.	-4823 Aug 15 j 01:31	14°♋54'05	11.06917 AU
morning rise	-4823 Aug 31 j 21:03	16°♋51'24	
retrograde	-4823 Dec 08 j 05:30	23°♋41'18	
opposition	-4822 Feb 15 j 14:04	20°♋25'07	2°28'21
min. Earth dist.	-4822 Feb 15 j 18:00	20°♋24'24	9.11435 AU
direct	-4822 Apr 28 j 07:25	17°♋03'31	
evening set	-4822 Aug 09 j 19:46	24°♋08'58	
conjunction	-4822 Aug 26 j 12:22	26°♋04'35	2°08'59
minimum elong	-4822 Aug 26 j 12:19	26°♋04'35	2°09'14
max. Earth dist.	-4822 Aug 26 j 05:56	26°♋02'43	11.15087 AU
morning rise	-4822 Sep 12 j 01:14	27°♋59'09	
	-4822 Sep 30 j 09:23	0°♌	

retrograde	-4822 Dec 19 j 13:50	4°♌46'13	
opposition	-4821 Feb 27 j 08:09	1°♌30'27	2°44'16
min. Earth dist.	-4821 Feb 27 j 14:04	1°♌29'22	9.18394 AU
	-4821 Mar 20 j 14:36	30°℞♋	
direct	-4821 May 10 j 06:16	28°♋09'53	
	-4821 Jun 28 j 09:13	0°♌	
evening set	-4821 Aug 21 j 01:56	5°♌10'23	
conjunction	-4821 Sep 06 j 15:05	7°♌04'31	2°19'38
minimum elong	-4821 Sep 06 j 15:03	7°♌04'30	2°19'51
max. Earth dist.	-4821 Sep 06 j 06:40	7°♌02'05	11.20671 AU
morning rise	-4821 Sep 23 j 01:00	8°♌57'46	
	-4821 Nov 30 j 22:58	15°♌	
retrograde	-4821 Dec 30 j 20:53	15°♌43'46	
	-4820 Jan 30 j 08:24	15°℞♌	
opposition	-4820 Mar 10 j 00:24	12°♌28'08	2°54'01
min. Earth dist.	-4820 Mar 10 j 08:08	12°♌26'44	9.22646 AU
direct	-4820 May 20 j 22:01	9°♌08'29	
	-4820 Aug 21 j 08:29	15°♌	
evening set	-4820 Aug 31 j 03:47	16°♌05'26	
conjunction	-4820 Sep 16 j 14:18	17°♌58'37	2°25'07
minimum elong	-4820 Sep 16 j 14:17	17°♌58'37	2°25'17
max. Earth dist.	-4820 Sep 16 j 03:53	17°♌55'36	11.23494 AU
morning rise	-4820 Oct 02 j 22:18	19°♌51'11	
retrograde	-4819 Jan 10 j 05:48	26°♌37'53	
opposition	-4819 Mar 21 j 16:33	23°♌22'09	2°57'28
min. Earth dist.	-4819 Mar 22 j 02:45	23°♌20'17	9.24069 AU
direct	-4819 Jun 01 j 11:13	20°♌03'14	
evening set	-4819 Sep 11 j 02:55	26°♌58'00	
conjunction	-4819 Sep 27 j 11:40	28°♌50'50	2°25'19
minimum elong	-4819 Sep 27 j 11:41	28°♌50'50	2°25'27
max. Earth dist.	-4819 Sep 26 j 22:33	28°♌47'02	11.23479 AU
	-4819 Oct 07 j 11:17	0°♍	
morning rise	-4819 Oct 13 j 19:01	0°♍43'19	
retrograde	-4818 Jan 21 j 14:46	7°♍32'28	
opposition	-4818 Apr 02 j 09:34	4°♍16'17	2°54'34
min. Earth dist.	-4818 Apr 02 j 21:54	4°♍14'02	9.22619 AU
direct	-4818 Jun 12 j 22:06	0°♍57'54	
evening set	-4818 Sep 22 j 01:17	7°♍51'57	
conjunction	-4818 Oct 08 j 09:24	9°♍45'02	2°20'15
minimum elong	-4818 Oct 08 j 09:26	9°♍45'02	2°20'21
max. Earth dist.	-4818 Oct 07 j 18:39	9°♍40'45	11.20622 AU
morning rise	-4818 Oct 24 j 17:06	11°♍38'02	
retrograde	-4817 Feb 02 j 04:59	18°♍31'19	
opposition	-4817 Apr 14 j 04:25	15°♍14'23	2°45'20
min. Earth dist.	-4817 Apr 14 j 17:33	15°♍12'00	9.18330 AU
direct	-4817 Jun 24 j 10:30	11°♍56'21	
evening set	-4817 Oct 03 j 00:36	18°♍51'08	
conjunction	-4817 Oct 19 j 09:15	20°♍45'03	2°09'58
minimum elong	-4817 Oct 19 j 09:18	20°♍45'04	2°10'03
max. Earth dist.	-4817 Oct 18 j 18:22	20°♍40'42	11.14995 AU
morning rise	-4817 Nov 04 j 18:09	22°♍39'09	
retrograde	-4816 Feb 14 j 01:54	29°♍38'11	
opposition	-4816 Apr 25 j 02:49	26°♍20'16	2°29'53
min. Earth dist.	-4816 Apr 25 j 16:03	26°♍17'51	9.11326 AU
direct	-4816 Jul 04 j 22:39	23°♍02'22	
evening set	-4816 Oct 13 j 02:45	29°♍59'18	
	-4816 Oct 13 j 05:10	0°♎	
conjunction	-4816 Oct 29 j 12:43	1°♎54'38	1°54'40
minimum elong	-4816 Oct 29 j 12:46	1°♎54'39	1°54'41
max. Earth dist.	-4816 Oct 28 j 21:18	1°♎50'05	11.06774 AU
morning rise	-4816 Nov 14 j 23:53	3°♎50'25	

Attention, astronomical year style is used: The year -4815 in astronomical counting style is the year 4816 BCE in historical counting style.

retrograde	-4815 Feb 25 j 03:58	10°♎56'48	
opposition	-4815 May 07 j 05:53	7°♎37'38	2°08'25
min. Earth dist.	-4815 May 07 j 19:26	7°♎35'08	9.01841 AU
direct	-4815 Jul 16 j 12:42	4°♎19'35	
evening set	-4815 Oct 24 j 09:54	11°♎20'16	
conjunction	-4815 Nov 09 j 21:58	13°♎17'30	1°34'36
minimum elong	-4815 Nov 09 j 22:01	13°♎17'31	1°34'34
max. Earth dist.	-4815 Nov 09 j 05:43	13°♎12'40	10.96235 AU
morning rise	-4815 Nov 26 j 12:26	15°♎15'31	
retrograde	-4814 Mar 09 j 14:15	22°♎30'42	
opposition	-4814 May 19 j 14:23	19°♎10'06	1°41'20
min. Earth dist.	-4814 May 20 j 04:16	19°♎07'30	8.90200 AU
direct	-4814 Jul 28 j 07:45	15°♎51'37	
evening set	-4814 Nov 04 j 23:40	22°♎57'34	
conjunction	-4814 Nov 21 j 14:46	24°♎57'13	1°10'14
minimum elong	-4814 Nov 21 j 14:48	24°♎57'14	1°10'08
max. Earth dist.	-4814 Nov 20 j 23:20	24°♎52'34	10.83722 AU
morning rise	-4814 Dec 08 j 09:06	26°♎57'55	
	-4813 Jan 04 j 13:04	0°♏	
retrograde	-4813 Mar 22 j 08:44	4°♏23'18	
opposition	-4813 Jun 01 j 05:26	1°♏01'03	1°09'13
min. Earth dist.	-4813 Jun 01 j 18:16	0°♏58'38	8.76796 AU
	-4813 Jun 14 j 22:24	30°℞♎	
direct	-4813 Aug 09 j 08:08	27°♎41'55	
	-4813 Oct 01 j 01:30	0°♏	
evening set	-4813 Nov 16 j 22:01	4°♏54'39	
conjunction	-4813 Dec 03 j 16:45	6°♏57'08	0°42'12
minimum elong	-4813 Dec 03 j 16:46	6°♏57'09	0°42'04
max. Earth dist.	-4813 Dec 03 j 03:11	6°♏52'59	10.69657 AU
morning rise	-4813 Dec 20 j 15:18	9°♏00'53	
	-4812 Feb 18 j 14:04	15°♏	
retrograde	-4812 Apr 03 j 14:16	16°♏37'41	
	-4812 May 19 j 17:18	15°℞♏	
opposition	-4812 Jun 13 j 03:53	13°♏13'39	0°32'57
min. Earth dist.	-4812 Jun 13 j 14:43	13°♏11'35	8.62100 AU
direct	-4812 Aug 20 j 16:12	9°♏53'38	
	-4812 Nov 09 j 03:45	15°♏	
evening set	-4812 Nov 28 j 07:01	17°♏14'39	
conjunction	-4812 Dec 15 j 05:44	19°♏20'18	0°11'29
minimum elong	-4812 Dec 15 j 05:44	19°♏20'18	0°11'18
behind sun begin	-4812 Dec 15 j 00:30	19°♏18'41	
behind sun end	-4812 Dec 15 j 10:58	19°♏21'54	
max. Earth dist.	-4812 Dec 14 j 17:52	19°♏16'37	10.54548 AU
morning rise	-4811 Jan 01 j 08:54	21°♏27'25	
retrograde	-4811 Apr 17 j 07:12	29°♏16'29	
desc. node	-4811 Apr 29 j 04:18	29°♏09'20	
opposition	-4811 Jun 26 j 10:20	25°♏50'41	-0°06'10
min. Earth dist.	-4811 Jun 26 j 18:57	25°♏49'00	8.46681 AU
direct	-4811 Sep 02 j 05:57	22°♏29'33	
evening set	-4811 Dec 11 j 04:17	0°♐00'20	
	-4811 Dec 11 j 03:12	0°♐	
conjunction	-4811 Dec 28 j 07:09	2°♐09'20	-0°20'50
minimum elong	-4811 Dec 28 j 07:07	2°♐09'20	0°21'03
max. Earth dist.	-4811 Dec 27 j 20:49	2°♐06'05	10.39032 AU
morning rise	-4810 Jan 14 j 15:07	4°♐20'01	
retrograde	-4810 May 01 j 10:09	12°♐21'46	
opposition	-4810 Jul 10 j 01:16	8°♐54'17	-0°46'27
min. Earth dist.	-4810 Jul 10 j 07:46	8°♐53'00	8.31277 AU
direct	-4810 Sep 15 j 05:12	5°♐31'52	
evening set	-4810 Dec 24 j 15:05	13°♐13'32	
conjunction	-4809 Jan 10 j 22:08	15°♐25'56	-0°52'59
minimum elong	-4809 Jan 10 j 22:06	15°♐25'56	0°53'13
max. Earth dist.	-4809 Jan 10 j 14:38	15°♐23'32	10.23938 AU
morning rise	-4809 Jan 28 j 10:41	17°♐40'07	
retrograde	-4809 May 15 j 21:44	25°♐54'13	
opposition	-4809 Jul 24 j 00:29	22°♐25'11	-1°25'42
min. Earth dist.	-4809 Jul 24 j 04:21	22°♐24'24	8.16794 AU
direct	-4809 Sep 28 j 16:01	19°♐01'20	
evening set	-4808 Jan 07 j 15:55	26°♐54'21	
conjunction	-4808 Jan 25 j 03:10	29°♐10'01	-1°23'08
minimum elong	-4808 Jan 25 j 03:07	29°♐10'00	1°23'23
max. Earth dist.	-4808 Jan 24 j 23:48	29°♐08'56	10.10200 AU
	-4808 Jan 31 j 12:40	0°♑	
morning rise	-4808 Feb 11 j 19:51	1°♑27'26	
retrograde	-4808 May 29 j 17:56	9°♑52'31	
opposition	-4808 Aug 06 j 07:16	6°♑22'09	-2°01'17
min. Earth dist.	-4808 Aug 06 j 07:50	6°♑22'02	8.04150 AU
direct	-4808 Oct 11 j 12:18	2°♑56'49	
evening set	-4807 Jan 21 j 06:23	11°♑00'53	
conjunction	-4807 Feb 07 j 21:40	13°♑19'28	-1°49'08
minimum elong	-4807 Feb 07 j 21:36	13°♑19'26	1°49'23
max. Earth dist.	-4807 Feb 07 j 23:19	13°♑20'00	9.98706 AU
morning rise	-4807 Feb 25 j 17:53	15°♑39'39	
retrograde	-4807 Jun 13 j 20:59	24°♑13'16	
opposition	-4807 Aug 20 j 20:10	20°♑41'55	-2°30'24
min. Earth dist.	-4807 Aug 20 j 17:00	20°♑42'34	7.94164 AU
direct	-4807 Oct 25 j 17:44	17°♑15'07	
evening set	-4806 Feb 05 j 09:00	25°♑29'03	
conjunction	-4806 Feb 23 j 03:56	27°♑49'58	-2°08'52
minimum elong	-4806 Feb 23 j 03:53	27°♑49'57	2°09'06
max. Earth dist.	-4806 Feb 23 j 10:38	27°♑52'11	9.90229 AU
	-4806 Mar 11 j 13:21	0°♒	
morning rise	-4806 Mar 13 j 02:59	0°♒12'16	
retrograde	-4806 Jun 29 j 03:18	8°♒50'56	
opposition	-4806 Sep 04 j 13:07	5°♒19'02	-2°50'28
min. Earth dist.	-4806 Sep 04 j 06:11	5°♒20'29	7.87509 AU
direct	-4806 Nov 09 j 07:15	1°♒50'54	
evening set	-4805 Feb 20 j 20:46	10°♒12'32	
conjunction	-4805 Mar 10 j 18:54	12°♒35'06	-2°20'34
minimum elong	-4805 Mar 10 j 18:52	12°♒35'05	2°20'45
max. Earth dist.	-4805 Mar 11 j 06:05	12°♒38'50	9.85378 AU
morning rise	-4805 Mar 28 j 20:07	14°♒58'41	
	-4805 Mar 29 j 00:09	15°♒	
retrograde	-4805 Jul 14 j 09:46	23°♒38'16	
opposition	-4805 Sep 19 j 07:58	20°♒06'19	-2°59'30
min. Earth dist.	-4805 Sep 18 j 21:58	20°♒08'25	7.84657 AU
direct	-4805 Nov 24 j 03:21	16°♒37'03	
evening set	-4804 Mar 07 j 13:47	25°♒03'22	
conjunction	-4804 Mar 25 j 14:36	27°♒26'44	-2°23'04
minimum elong	-4804 Mar 25 j 14:37	27°♒26'44	2°23'12
max. Earth dist.	-4804 Mar 26 j 05:23	27°♒31'40	9.84500 AU
morning rise	-4804 Apr 12 j 17:19	29°♒50'43	
	-4804 Apr 13 j 21:49	0°♓	
retrograde	-4804 Jul 28 j 12:13	8°♓26'48	
opposition	-4804 Oct 03 j 01:58	4°♓55'18	-2°56'35
min. Earth dist.	-4804 Oct 02 j 13:56	4°♓57'49	7.85789 AU
direct	-4804 Dec 08 j 03:12	1°♓25'12	
evening set	-4803 Mar 23 j 08:02	9°♓52'44	
conjunction	-4803 Apr 10 j 10:47	12°♓16'01	-2°16'09
minimum elong	-4803 Apr 10 j 10:49	12°♓16'02	2°16'13
max. Earth dist.	-4803 Apr 11 j 03:51	12°♓21'40	9.87632 AU
morning rise	-4803 Apr 28 j 14:06	14°♓39'26	

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

retrograde	-4803 Aug 12 j 07:25	23°♓07'56	
opposition	-4803 Oct 17 j 16:28	19°♓37'23	-2°42'03
min. Earth dist.	-4803 Oct 17 j 03:29	19°♓40'06	7.90798 AU
direct	-4803 Dec 23 j 03:40	16°♓06'49	
evening set	-4802 Apr 07 j 22:57	24°♓32'02	
conjunction	-4802 Apr 26 j 02:40	26°♓54'20	-2°00'29
minimum elong	-4802 Apr 26 j 02:44	26°♓54'22	2°00'30
max. Earth dist.	-4802 Apr 26 j 20:38	27°♓00'15	9.94519 AU
morning rise	-4802 May 14 j 05:37	29°♓16'18	
	-4802 May 19 j 22:33	0°♈	
retrograde	-4802 Aug 26 j 17:48	7°♈34'04	
opposition	-4802 Nov 01 j 01:32	4°♈04'51	-2°17'23
min. Earth dist.	-4802 Oct 31 j 12:19	4°♈07'36	7.99312 AU
direct	-4801 Jan 07 j 02:08	0°♈34'13	
evening set	-4801 Apr 23 j 06:38	8°♈53'59	
conjunction	-4801 May 11 j 10:10	11°♈14'28	-1°37'35
minimum elong	-4801 May 11 j 10:14	11°♈14'29	1°37'33
max. Earth dist.	-4801 May 12 j 03:49	11°♈20'11	10.04652 AU
morning rise	-4801 May 29 j 11:41	13°♈34'11	
retrograde	-4801 Sep 09 j 17:35	21°♈39'12	
opposition	-4801 Nov 15 j 03:16	18°♈11'37	-1°44'56
min. Earth dist.	-4801 Nov 14 j 14:10	18°♈14'19	8.10730 AU
direct	-4800 Jan 21 j 19:52	14°♈41'20	
evening set	-4800 May 07 j 04:41	22°♈53'17	
conjunction	-4800 May 25 j 06:48	25°♈11'14	-1°09'25
minimum elong	-4800 May 25 j 06:51	25°♈11'15	1°09'19
max. Earth dist.	-4800 May 25 j 23:17	25°♈16'31	10.17326 AU
morning rise	-4800 Jun 12 j 05:42	27°♈28'05	
	-4800 Jul 03 j 06:10	0°♉	
retrograde	-4800 Sep 22 j 05:50	5°♉19'29	
opposition	-4800 Nov 27 j 20:41	1°♉53'45	-1°07'25
min. Earth dist.	-4800 Nov 27 j 08:06	1°♉56'19	8.24305 AU
	-4800 Dec 22 j 13:28	30°℞♈	
direct	-4799 Feb 04 j 07:12	28°♈24'12	
	-4799 Mar 19 j 15:49	0°♉	
evening set	-4799 May 21 j 15:09	6°♉26'46	
conjunction	-4799 Jun 08 j 14:36	8°♉41'41	-0°38'07
minimum elong	-4799 Jun 08 j 14:38	8°♉41'42	0°37'59
max. Earth dist.	-4799 Jun 09 j 05:29	8°♉46'22	10.31739 AU
morning rise	-4799 Jun 26 j 09:46	10°♉55'14	
	-4799 Aug 01 j 09:04	15°♉	
retrograde	-4799 Oct 05 j 07:23	18°♉33'14	
opposition	-4799 Dec 11 j 05:42	15°♉09'25	-0°27'31
min. Earth dist.	-4799 Dec 10 j 18:11	15°♉11'44	8.39230 AU
	-4799 Dec 13 j 04:46	15°℞♉	
direct	-4798 Feb 18 j 09:08	11°♉40'56	
	-4798 Apr 24 j 03:28	15°♉	
evening set	-4798 Jun 04 j 12:59	19°♉33'19	
conjunction	-4798 Jun 22 j 08:40	21°♉44'53	-0°05'47
minimum elong	-4798 Jun 22 j 08:39	21°♉44'53	0°05'36
behind sun begin	-4798 Jun 22 j 01:43	21°♉42'46	
behind sun end	-4798 Jun 22 j 15:36	21°♉47'01	
max. Earth dist.	-4798 Jun 22 j 21:37	21°♉48'53	10.47063 AU
morning rise	-4798 Jul 09 j 23:14	23°♉54'54	
asc. node	-4798 Aug 28 j 11:17	29°♉08'28	
	-4798 Sep 09 j 00:16	0°♊	
retrograde	-4798 Oct 18 j 00:15	1°♊20'28	
	-4798 Nov 26 j 17:06	30°℞♉	
opposition	-4798 Dec 24 j 06:25	27°♉58'35	0°12'21
min. Earth dist.	-4798 Dec 23 j 21:02	28°♉00'26	8.54696 AU
direct	-4797 Mar 04 j 00:56	24°♉31'21	
	-4797 May 29 j 15:24	0°♊	
evening set	-4797 Jun 17 j 22:30	2°♊13'30	
conjunction	-4797 Jul 05 j 13:29	4°♊21'38	0°26'01
minimum elong	-4797 Jul 05 j 13:28	4°♊21'37	0°26'13
max. Earth dist.	-4797 Jul 05 j 23:35	4°♊24'42	10.62502 AU
morning rise	-4797 Jul 22 j 23:02	6°♊28'08	
retrograde	-4797 Oct 30 j 07:12	13°♊42'37	
opposition	-4796 Jan 05 j 23:15	10°♊22'33	0°50'13
min. Earth dist.	-4796 Jan 05 j 16:56	10°♊23'47	8.69941 AU
direct	-4796 Mar 16 j 07:40	6°♊56'42	
evening set	-4796 Jun 29 j 20:09	14°♊29'05	
conjunction	-4796 Jul 17 j 05:51	16°♊33'49	0°55'37
minimum elong	-4796 Jul 17 j 05:49	16°♊33'48	0°55'51
max. Earth dist.	-4796 Jul 17 j 11:50	16°♊35'37	10.77328 AU
morning rise	-4796 Aug 03 j 10:15	18°♊36'59	
retrograde	-4796 Nov 10 j 05:21	25°♊42'08	
opposition	-4795 Jan 17 j 09:19	22°♊23'41	1°24'36
min. Earth dist.	-4795 Jan 17 j 05:49	22°♊24'21	8.84268 AU
direct	-4795 Mar 29 j 07:14	18°♊59'15	
evening set	-4795 Jul 12 j 06:36	26°♊22'36	
conjunction	-4795 Jul 29 j 10:56	28°♊24'12	1°22'01
minimum elong	-4795 Jul 29 j 10:53	28°♊24'11	1°22'16
max. Earth dist.	-4795 Jul 29 j 13:03	28°♊24'50	10.90906 AU
	-4795 Aug 11 j 22:57	0°♋	
morning rise	-4795 Aug 15 j 10:16	0°♋24'18	
retrograde	-4795 Nov 21 j 22:23	7°♋22'00	
opposition	-4794 Jan 29 j 13:29	4°♋04'51	1°54'24
min. Earth dist.	-4794 Jan 29 j 12:07	4°♋05'06	8.97078 AU
direct	-4794 Apr 10 j 21:28	0°♋41'50	
evening set	-4794 Jul 24 j 07:13	7°♋57'07	
conjunction	-4794 Aug 10 j 06:31	9°♋55'57	1°44'27
minimum elong	-4794 Aug 10 j 06:28	9°♋55'56	1°44'42
max. Earth dist.	-4794 Aug 10 j 05:53	9°♋55'46	11.02702 AU
morning rise	-4794 Aug 27 j 01:04	11°♋53'26	
retrograde	-4794 Dec 03 j 10:48	18°♋45'30	
opposition	-4793 Feb 10 j 12:46	15°♋29'21	2°18'54
min. Earth dist.	-4793 Feb 10 j 13:56	15°♋29'08	9.07873 AU
direct	-4793 Apr 23 j 03:58	12°♋07'39	
evening set	-4793 Aug 04 j 23:26	19°♋16'02	
conjunction	-4793 Aug 21 j 18:10	21°♋12'34	2°02'20
minimum elong	-4793 Aug 21 j 18:07	21°♋12'33	2°02'35
max. Earth dist.	-4793 Aug 21 j 14:43	21°♋11'34	11.12261 AU
morning rise	-4793 Sep 07 j 08:32	23°♋07'55	
retrograde	-4793 Dec 14 j 21:09	29°♋56'11	
opposition	-4792 Feb 22 j 08:37	26°♋40'43	2°37'35
min. Earth dist.	-4792 Feb 22 j 13:11	26°♋39'53	9.16236 AU
direct	-4792 May 04 j 03:38	23°♋20'10	
	-4792 Aug 11 j 23:32	0°♌	
evening set	-4792 Aug 15 j 08:51	0°♌22'56	
conjunction	-4792 Aug 31 j 23:29	2°♌17'41	2°15'19
minimum elong	-4792 Aug 31 j 23:27	2°♌17'40	2°15'32
max. Earth dist.	-4792 Aug 31 j 16:09	2°♌15'34	11.19220 AU
morning rise	-4792 Sep 17 j 10:36	4°♌11'27	
retrograde	-4792 Dec 25 j 03:06	10°♌57'48	
opposition	-4791 Mar 05 j 02:12	7°♌42'39	2°50'12
min. Earth dist.	-4791 Mar 05 j 10:06	7°♌41'12	9.21837 AU
direct	-4791 May 15 j 22:20	4°♌23'03	
evening set	-4791 Aug 26 j 13:02	11°♌21'38	
conjunction	-4791 Sep 12 j 00:30	13°♌15'09	2°23'10
minimum elong	-4791 Sep 12 j 00:29	13°♌15'09	2°23'22
max. Earth dist.	-4791 Sep 11 j 13:39	13°♌12'01	11.23310 AU

Attention, astronomical year style is used: The year -4791 in astronomical counting style is the year 4792 BCE in historical counting style.

	-4791 Sep 27 j 05:18	15°♌	
morning rise	-4791 Sep 28 j 09:24	15°♌07'58	
retrograde	-4790 Jan 05 j 11:27	21°♌54'16	
opposition	-4790 Mar 16 j 18:39	18°♌39'04	2°56'32
min. Earth dist.	-4790 Mar 17 j 04:36	18°♌37'16	9.24453 AU
direct	-4790 May 27 j 15:00	15°♌20'15	
evening set	-4790 Sep 06 j 13:34	22°♌16'05	
conjunction	-4790 Sep 22 j 23:04	24°♌09'01	2°25'47
minimum elong	-4790 Sep 22 j 23:05	24°♌09'01	2°25'56
max. Earth dist.	-4790 Sep 22 j 10:31	24°♌05'23	11.24386 AU
morning rise	-4790 Oct 09 j 06:37	26°♌01'28	
	-4790 Nov 17 j 02:57	0°♍	
retrograde	-4789 Jan 16 j 21:14	2°♍49'31	
	-4789 Mar 22 j 11:41	30°℞♌	
opposition	-4789 Mar 28 j 11:24	29°♌33'56	2°56'33
min. Earth dist.	-4789 Mar 28 j 22:56	29°♌31'51	9.24017 AU
direct	-4789 Jun 08 j 02:52	26°♌15'41	
	-4789 Aug 18 j 13:49	0°♍	
evening set	-4789 Sep 17 j 12:35	3°♍10'11	
conjunction	-4789 Oct 03 j 21:01	5°♍03'08	2°23'07
minimum elong	-4789 Oct 03 j 21:02	5°♍03'09	2°23'14
max. Earth dist.	-4789 Oct 03 j 06:43	4°♍58'59	11.22458 AU
morning rise	-4789 Oct 20 j 04:16	6°♍55'51	
retrograde	-4788 Jan 28 j 10:18	13°♍47'19	
opposition	-4788 Apr 08 j 05:46	10°♍31'02	2°50'13
min. Earth dist.	-4788 Apr 08 j 19:11	10°♍28'36	9.20604 AU
direct	-4788 Jun 18 j 14:43	7°♍13'04	
evening set	-4788 Sep 27 j 11:45	14°♍07'42	
conjunction	-4788 Oct 13 j 20:00	16°♍01'14	2°15'12
minimum elong	-4788 Oct 13 j 20:02	16°♍01'14	2°15'17
max. Earth dist.	-4788 Oct 13 j 03:23	15°♍56'23	11.17651 AU
morning rise	-4788 Oct 30 j 04:15	17°♍54'49	
retrograde	-4787 Feb 08 j 03:09	24°♍51'22	
opposition	-4787 Apr 20 j 03:02	21°♍34'01	2°37'35
min. Earth dist.	-4787 Apr 20 j 18:04	21°♍31'17	9.14375 AU
direct	-4787 Jun 30 j 02:37	18°♍16'04	
evening set	-4787 Oct 08 j 12:39	25°♍12'14	
conjunction	-4787 Oct 24 j 21:51	27°♍06'57	2°02'10
minimum elong	-4787 Oct 24 j 21:54	27°♍06'57	2°02'12
max. Earth dist.	-4787 Oct 24 j 04:39	27°♍01'53	11.10144 AU
morning rise	-4787 Nov 10 j 08:04	29°♍02'00	
	-4787 Nov 18 j 20:25	0°♎	
retrograde	-4786 Feb 20 j 01:21	6°♎05'14	
opposition	-4786 May 02 j 04:04	2°♎46'32	2°18'50
min. Earth dist.	-4786 May 02 j 19:11	2°♎43'45	9.05542 AU
	-4786 Jun 15 j 23:14	30°℞♍	
direct	-4786 Jul 11 j 17:24	29°♍28'19	
	-4786 Aug 06 j 01:25	0°♎	
evening set	-4786 Oct 19 j 17:26	6°♎27'34	
conjunction	-4786 Nov 05 j 04:36	8°♎24'01	1°44'13
minimum elong	-4786 Nov 05 j 04:39	8°♎24'01	1°44'12
max. Earth dist.	-4786 Nov 04 j 12:03	8°♎19'06	11.00177 AU
morning rise	-4786 Nov 21 j 17:28	10°♎21'03	
retrograde	-4785 Mar 04 j 09:08	17°♎32'30	
opposition	-4785 May 14 j 09:55	14°♎12'13	1°54'16
min. Earth dist.	-4785 May 15 j 00:10	14°♎09'35	8.94404 AU
direct	-4785 Jul 23 j 11:11	10°♎53'34	
evening set	-4785 Oct 31 j 04:04	17°♎57'24	
conjunction	-4785 Nov 16 j 17:52	19°♎56'05	1°21'45
minimum elong	-4785 Nov 16 j 17:54	19°♎56'06	1°21'40
max. Earth dist.	-4785 Nov 16 j 01:43	19°♎51'14	10.88096 AU
morning rise	-4785 Dec 03 j 10:15	21°♎55'39	
retrograde	-4784 Mar 16 j 00:21	29°♎16'45	
opposition	-4784 May 25 j 22:07	25°♎54'45	1°24'20
min. Earth dist.	-4784 May 26 j 11:27	25°♎52'15	8.81365 AU
direct	-4784 Aug 03 j 07:42	22°♎35'26	
evening set	-4784 Nov 10 j 22:21	29°♎45'26	
	-4784 Nov 12 j 23:06	0°♏	
conjunction	-4784 Nov 27 j 15:21	1°♏46'47	0°55'16
minimum elong	-4784 Nov 27 j 15:23	1°♏46'47	0°55'09
max. Earth dist.	-4784 Nov 26 j 23:38	1°♏42'00	10.74350 AU
morning rise	-4784 Dec 14 j 12:02	3°♏49'18	
retrograde	-4783 Mar 29 j 00:28	11°♏21'23	
opposition	-4783 Jun 07 j 17:25	7°♏57'34	0°49'48
min. Earth dist.	-4783 Jun 08 j 05:48	7°♏55'13	8.66926 AU
direct	-4783 Aug 15 j 12:09	4°♏37'21	
evening set	-4783 Nov 23 j 02:28	11°♏55'06	
conjunction	-4783 Dec 09 j 23:18	13°♏59'29	0°25'37
minimum elong	-4783 Dec 09 j 23:19	13°♏59'29	0°25'27
max. Earth dist.	-4783 Dec 09 j 09:18	13°♏55'10	10.59469 AU
	-4783 Dec 18 j 03:06	15°♏	
morning rise	-4783 Dec 27 j 00:36	16°♏05'17	
retrograde	-4782 Apr 11 j 11:28	23°♏49'20	
opposition	-4782 Jun 20 j 20:19	20°♏23'43	0°11'45
min. Earth dist.	-4782 Jun 21 j 06:55	20°♏21'39	8.51681 AU
direct	-4782 Aug 27 j 23:41	17°♏02'25	
desc. node	-4782 Oct 11 j 01:50	18°♏43'56	
evening set	-4782 Dec 05 j 18:03	24°♏29'20	
conjunction	-4782 Dec 22 j 19:06	26°♏37'01	-0°06'15
minimum elong	-4782 Dec 22 j 19:06	26°♏37'01	0°06'26
behind sun begin	-4782 Dec 22 j 12:24	26°♏34'56	
behind sun end	-4782 Dec 23 j 01:48	26°♏39'06	
max. Earth dist.	-4782 Dec 22 j 08:23	26°♏33'39	10.44081 AU
morning rise	-4781 Jan 09 j 01:01	28°♏46'18	
	-4781 Jan 19 j 04:16	0°♐	
retrograde	-4781 Apr 25 j 08:55	6°♐42'56	
opposition	-4781 Jul 04 j 07:35	3°♐15'32	-0°28'19
min. Earth dist.	-4781 Jul 04 j 15:08	3°♐14'03	8.36317 AU
	-4781 Aug 29 j 13:23	30°℞♏	
direct	-4781 Sep 09 j 19:55	29°♏53'05	
	-4781 Sep 21 j 00:34	0°♐	
evening set	-4781 Dec 18 j 22:31	7°♐30'18	
conjunction	-4780 Jan 05 j 03:52	9°♐41'22	-0°38'39
minimum elong	-4780 Jan 05 j 03:50	9°♐41'22	0°38'51
max. Earth dist.	-4780 Jan 04 j 20:50	9°♐39'08	10.28921 AU
morning rise	-4780 Jan 22 j 14:18	11°♐54'09	
retrograde	-4780 May 08 j 17:07	20°♐03'21	
opposition	-4780 Jul 17 j 03:18	16°♐34'20	-1°08'22
min. Earth dist.	-4780 Jul 17 j 07:08	16°♐33'34	8.21615 AU
direct	-4780 Sep 22 j 01:32	13°♐10'37	
evening set	-4780 Dec 31 j 17:08	20°♐58'54	
conjunction	-4779 Jan 18 j 02:38	23°♐13'18	-1°09'58
minimum elong	-4779 Jan 18 j 02:35	23°♐13'17	1°10'11
max. Earth dist.	-4779 Jan 17 j 23:16	23°♐12'12	10.14807 AU
morning rise	-4779 Feb 04 j 17:25	25°♐29'26	
	-4779 Mar 15 j 11:11	0°♑	
retrograde	-4779 May 23 j 11:19	3°♑50'13	
opposition	-4779 Jul 31 j 06:51	0°♑19'53	-1°45'57
min. Earth dist.	-4779 Jul 31 j 07:14	0°♑19'48	8.08409 AU
	-4779 Aug 04 j 09:03	30°℞♐	
direct	-4779 Oct 05 j 15:48	26°♐54'49	
	-4779 Dec 03 j 16:05	0°♑	
evening set	-4778 Jan 15 j 01:47	4°♑54'20	

Attention, astronomical year style is used: The year -4778 in astronomical counting style is the year 4779 BCE in historical counting style.

conjunction	-4778 Feb 01 j 15:15	7°♑11'45	-1°38'06
minimum elong	-4778 Feb 01 j 15:12	7°♑11'44	1°38'20
max. Earth dist.	-4778 Feb 01 j 15:44	7°♑11'55	10.02584 AU
morning rise	-4778 Feb 19 j 09:55	9°♑30'53	
retrograde	-4778 Jun 07 j 12:55	18°♑01'20	
opposition	-4778 Aug 14 j 17:24	14°♑30'02	-2°18'19
min. Earth dist.	-4778 Aug 14 j 14:34	14°♑30'37	7.97520 AU
direct	-4778 Oct 19 j 16:48	11°♑03'39	
evening set	-4777 Jan 29 j 23:15	19°♑13'38	
conjunction	-4777 Feb 16 j 16:24	21°♑33'37	-2°00'54
minimum elong	-4777 Feb 16 j 16:21	21°♑33'36	2°01'08
max. Earth dist.	-4777 Feb 16 j 21:09	21°♑35'12	9.93061 AU
morning rise	-4777 Mar 06 j 14:19	23°♑55'09	
	-4777 Apr 29 j 10:40	0°♒	
retrograde	-4777 Jun 22 j 18:25	2°♒32'17	
	-4777 Aug 17 j 06:33	30°℞♑	
opposition	-4777 Aug 29 j 09:13	29°♑00'29	-2°42'42
min. Earth dist.	-4777 Aug 29 j 03:22	29°♑01'41	7.89696 AU
direct	-4777 Nov 03 j 03:38	25°♑32'53	
	-4776 Jan 13 j 18:58	0°♒	
evening set	-4776 Feb 14 j 07:30	3°♒51'35	
conjunction	-4776 Mar 03 j 04:03	6°♒13'31	-2°16'21
minimum elong	-4776 Mar 03 j 04:01	6°♒13'30	2°16'34
max. Earth dist.	-4776 Mar 03 j 13:20	6°♒16'37	9.86934 AU
morning rise	-4776 Mar 21 j 04:33	8°♒36'41	
	-4776 May 17 j 03:29	15°♒	
retrograde	-4776 Jul 07 j 01:02	17°♒16'36	
	-4776 Aug 27 j 19:47	15°℞♒	
opposition	-4776 Sep 12 j 03:52	13°♒44'44	-2°56'48
min. Earth dist.	-4776 Sep 11 j 19:07	13°♒46'34	7.85513 AU
direct	-4776 Nov 16 j 22:04	10°♒16'07	
	-4775 Jan 30 j 02:49	15°♒	
evening set	-4775 Feb 28 j 23:05	18°♒40'52	
conjunction	-4775 Mar 18 j 22:38	21°♒03'58	-2°23'01
minimum elong	-4775 Mar 18 j 22:38	21°♒03'58	2°23'11
max. Earth dist.	-4775 Mar 19 j 12:07	21°♒08'28	9.84671 AU
morning rise	-4775 Apr 06 j 00:56	23°♒27'54	
	-4775 Jun 03 j 16:52	0°♓	
retrograde	-4775 Jul 22 j 05:12	2°♓06'10	
	-4775 Sep 09 j 12:31	30°℞♒	
opposition	-4775 Sep 26 j 22:55	28°♒34'44	-2°59'12
min. Earth dist.	-4775 Sep 26 j 11:28	28°♒37'09	7.85277 AU
direct	-4775 Dec 01 j 21:07	25°♒05'21	
	-4774 Feb 15 j 23:53	0°♓	
evening set	-4774 Mar 16 j 17:40	3°♓32'46	
conjunction	-4774 Apr 03 j 19:34	5°♓56'09	-2°20'15
minimum elong	-4774 Apr 03 j 19:36	5°♓56'09	2°20'21
max. Earth dist.	-4774 Apr 04 j 12:25	6°♓01'45	9.86441 AU
morning rise	-4774 Apr 21 j 22:46	8°♓19'52	
retrograde	-4774 Aug 06 j 03:52	16°♓52'12	
opposition	-4774 Oct 11 j 15:33	13°♓21'38	-2°49'40
min. Earth dist.	-4774 Oct 11 j 02:00	13°♓24'28	7.88998 AU
direct	-4774 Dec 16 j 21:32	9°♓51'46	
evening set	-4773 Apr 01 j 10:46	18°♓18'13	
conjunction	-4773 Apr 19 j 14:11	20°♓40'57	-2°08'18
minimum elong	-4773 Apr 19 j 14:14	20°♓40'59	2°08'21
max. Earth dist.	-4773 Apr 20 j 09:10	20°♓47'13	9.92097 AU
morning rise	-4773 May 07 j 17:22	23°♓03'33	
	-4773 Jul 12 j 05:13	0°♈	
retrograde	-4773 Aug 20 j 19:19	1°♈26'16	
	-4773 Sep 29 j 19:25	30°℞♓	
opposition	-4773 Oct 26 j 03:21	27°♓56'55	-2°29'14
min. Earth dist.	-4773 Oct 25 j 12:42	27°♓59'58	7.96363 AU
direct	-4773 Dec 31 j 21:03	24°♓26'54	
	-4772 Mar 23 j 23:29	0°♈	
evening set	-4772 Apr 15 j 22:17	2°♈49'01	
conjunction	-4772 May 04 j 02:08	5°♈10'16	-1°48'24
minimum elong	-4772 May 04 j 02:13	5°♈10'17	1°48'23
max. Earth dist.	-4772 May 04 j 21:37	5°♈16'38	10.01142 AU
morning rise	-4772 May 22 j 04:17	7°♈30'55	
retrograde	-4772 Sep 03 j 00:46	15°♈41'27	
opposition	-4772 Nov 08 j 08:28	12°♈13'39	-1°59'56
min. Earth dist.	-4772 Nov 07 j 18:17	12°♈16'35	8.06741 AU
direct	-4771 Jan 14 j 16:54	8°♈43'48	
evening set	-4771 May 01 j 01:05	16°♈59'01	
conjunction	-4771 May 19 j 04:03	19°♈18'02	-1°22'18
minimum elong	-4771 May 19 j 04:07	19°♈18'03	1°22'14
max. Earth dist.	-4771 May 19 j 22:10	19°♈23'52	10.12808 AU
morning rise	-4771 Jun 06 j 04:01	21°♈36'04	
retrograde	-4771 Sep 16 j 18:52	29°♈33'17	
opposition	-4771 Nov 22 j 05:44	26°♈07'17	-1°24'20
min. Earth dist.	-4771 Nov 21 j 17:14	26°♈09'51	8.19339 AU
direct	-4770 Jan 29 j 06:51	22°♈37'58	
	-4770 May 09 j 16:03	0°♉	
evening set	-4770 May 15 j 17:01	0°♉44'36	
conjunction	-4770 Jun 02 j 17:46	3°♉00'49	-0°52'08
minimum elong	-4770 Jun 02 j 17:48	3°♉00'50	0°52'01
max. Earth dist.	-4770 Jun 03 j 09:11	3°♉05'42	10.26300 AU
morning rise	-4770 Jun 20 j 14:34	5°♉15'47	
retrograde	-4770 Sep 30 j 01:15	12°♉59'37	
opposition	-4770 Dec 05 j 18:44	9°♉35'31	-0°45'11
min. Earth dist.	-4770 Dec 05 j 08:11	9°♉37'38	8.33426 AU
direct	-4769 Feb 12 j 13:02	6°♉07'01	
evening set	-4769 May 29 j 20:49	14°♉04'00	
	-4769 Jun 06 j 10:44	15°♉	
conjunction	-4769 Jun 16 j 18:11	16°♉17'04	-0°19'59
minimum elong	-4769 Jun 16 j 18:12	16°♉17'04	0°19'49
max. Earth dist.	-4769 Jun 17 j 06:22	16°♉20'52	10.40905 AU
morning rise	-4769 Jul 04 j 10:59	18°♉28'39	
retrograde	-4769 Oct 12 j 21:48	25°♉59'45	
opposition	-4769 Dec 18 j 23:20	22°♉37'29	-0°05'01
min. Earth dist.	-4769 Dec 18 j 14:40	22°♉39'12	8.48293 AU
asc. node	-4768 Feb 04 j 11:39	19°♉34'26	
direct	-4768 Feb 26 j 10:22	19°♉10'00	
evening set	-4768 Jun 11 j 12:19	26°♉56'58	
conjunction	-4768 Jun 29 j 05:23	29°♉06'40	0°12'19
minimum elong	-4768 Jun 29 j 05:22	29°♉06'39	0°12'31
behind sun begin	-4768 Jun 29 j 00:46	29°♉05'15	
behind sun end	-4768 Jun 29 j 09:59	29°♉08'03	
max. Earth dist.	-4768 Jun 29 j 14:17	29°♉09'23	10.55898 AU
	-4768 Jul 06 j 11:12	0°♊	
morning rise	-4768 Jul 16 j 17:25	1°♊14'46	
retrograde	-4768 Oct 24 j 08:13	8°♊34'18	
opposition	-4768 Dec 30 j 19:54	5°♊13'42	0°33'59
min. Earth dist.	-4768 Dec 30 j 12:54	5°♊15'04	8.63218 AU
direct	-4767 Mar 10 j 22:55	1°♊47'23	
evening set	-4767 Jun 24 j 15:32	9°♊24'26	
conjunction	-4767 Jul 12 j 03:43	11°♊30'45	0°43'00
minimum elong	-4767 Jul 12 j 03:41	11°♊30'44	0°43'14
max. Earth dist.	-4767 Jul 12 j 10:06	11°♊32'41	10.70572 AU
morning rise	-4767 Jul 29 j 10:30	13°♊35'27	
retrograde	-4767 Nov 05 j 11:14	20°♊44'59	
opposition	-4766 Jan 12 j 09:18	17°♊25'52	1°10'06

Attention, astronomical year style is used: The year -4766 in astronomical counting style is the year 4767 BCE in historical counting style.

min. Earth dist.	-4766 Jan 12 j 04:42	17°♊26'45	8.77518 AU
direct	-4766 Mar 24 j 02:10	14°♊00'48	
evening set	-4766 Jul 07 j 07:02	21°♊28'28	
conjunction	-4766 Jul 24 j 14:00	23°♊31'34	1°10'58
minimum elong	-4766 Jul 24 j 13:57	23°♊31'33	1°11'12
max. Earth dist.	-4766 Jul 24 j 17:35	23°♊32'38	10.84277 AU
morning rise	-4766 Aug 10 j 15:32	25°♊33'06	
	-4766 Sep 22 j 06:58	0°♋	
retrograde	-4766 Nov 17 j 07:49	2°♋34'21	
	-4765 Jan 15 j 01:09	30°℞♊	
opposition	-4765 Jan 24 j 16:18	29°♊16'30	1°42'04
min. Earth dist.	-4765 Jan 24 j 14:55	29°♊16'46	8.90582 AU
direct	-4765 Apr 05 j 18:49	25°♊52'38	
	-4765 Jun 20 j 00:55	0°♋	
evening set	-4765 Jul 19 j 12:17	3°♋11'51	
conjunction	-4765 Aug 05 j 13:56	5°♋12'02	1°35'14
minimum elong	-4765 Aug 05 j 13:53	5°♋12'01	1°35'29
max. Earth dist.	-4765 Aug 05 j 13:40	5°♋11'57	10.96456 AU
morning rise	-4765 Aug 22 j 10:35	7°♋10'47	
retrograde	-4765 Nov 28 j 20:28	14°♋05'34	
opposition	-4764 Feb 05 j 17:49	10°♋48'42	2°09'01
min. Earth dist.	-4764 Feb 05 j 19:40	10°♋48'21	9.01894 AU
direct	-4764 Apr 17 j 05:35	7°♋25'59	
evening set	-4764 Jul 30 j 08:23	14°♋37'52	
conjunction	-4764 Aug 16 j 05:03	16°♋35'31	1°55'11
minimum elong	-4764 Aug 16 j 05:00	16°♋35'30	1°55'26
max. Earth dist.	-4764 Aug 16 j 00:56	16°♋34'19	11.06663 AU
morning rise	-4764 Sep 01 j 21:24	18°♋31'56	
retrograde	-4764 Dec 09 j 07:11	25°♋22'11	
opposition	-4763 Feb 16 j 15:19	22°♋05'58	2°30'20
min. Earth dist.	-4763 Feb 16 j 19:14	22°♋05'14	9.11044 AU
direct	-4763 Apr 29 j 10:11	18°♋44'22	
evening set	-4763 Aug 10 j 20:38	25°♋50'03	
conjunction	-4763 Aug 27 j 13:05	27°♋45'43	2°10'22
minimum elong	-4763 Aug 27 j 13:03	27°♋45'42	2°10'36
max. Earth dist.	-4763 Aug 27 j 06:48	27°♋43'53	11.14552 AU
morning rise	-4763 Sep 13 j 01:43	29°♋40'18	
	-4763 Sep 15 j 23:14	0°♌	
retrograde	-4763 Dec 20 j 15:27	6°♌27'51	
opposition	-4762 Feb 28 j 09:54	3°♌12'00	2°45'39
min. Earth dist.	-4762 Feb 28 j 15:42	3°♌10'56	9.17723 AU
	-4762 Apr 27 j 18:15	30°℞♋	
direct	-4762 May 11 j 06:57	29°♋51'25	
	-4762 May 24 j 18:05	0°♌	
evening set	-4762 Aug 22 j 03:02	6°♌52'14	
conjunction	-4762 Sep 07 j 16:04	8°♌46'26	2°20'30
minimum elong	-4762 Sep 07 j 16:02	8°♌46'25	2°20'42
max. Earth dist.	-4762 Sep 07 j 07:48	8°♌44'02	11.19867 AU
morning rise	-4762 Sep 24 j 01:49	10°♌39'46	
	-4762 Nov 06 j 03:02	15°♌	
retrograde	-4762 Dec 31 j 23:41	17°♌26'22	
	-4761 Feb 28 j 18:00	15°℞♌	
opposition	-4761 Mar 12 j 02:44	14°♌10'39	2°54'45
min. Earth dist.	-4761 Mar 12 j 11:09	14°♌09'06	9.21722 AU
direct	-4761 May 22 j 23:43	10°♌50'55	
	-4761 Aug 06 j 23:44	15°♌	
evening set	-4761 Sep 02 j 05:14	17°♌48'17	
conjunction	-4761 Sep 18 j 15:36	19°♌41'35	2°25'25
minimum elong	-4761 Sep 18 j 15:35	19°♌41'35	2°25'34
max. Earth dist.	-4761 Sep 18 j 04:16	19°♌38'18	11.22450 AU
morning rise	-4761 Oct 04 j 23:40	21°♌34'17	

retrograde	-4760 Jan 12 j 07:23	28°♌21'41	
opposition	-4760 Mar 22 j 19:25	25°♌05'47	2°57'31
min. Earth dist.	-4760 Mar 23 j 06:19	25°♌03'48	9.22918 AU
direct	-4760 Jun 02 j 12:42	21°♌46'47	
evening set	-4760 Sep 12 j 04:46	28°♌42'04	
	-4760 Sep 23 j 12:28	0°♍	
conjunction	-4760 Sep 28 j 13:29	0°♍35'03	2°25'02
minimum elong	-4760 Sep 28 j 13:30	0°♍35'03	2°25'10
max. Earth dist.	-4760 Sep 28 j 00:02	0°♍31'09	11.22225 AU
morning rise	-4760 Oct 14 j 20:57	2°♍27'42	
retrograde	-4759 Jan 22 j 18:19	9°♍17'43	
opposition	-4759 Apr 03 j 13:03	6°♍01'20	2°53'54
min. Earth dist.	-4759 Apr 04 j 01:07	5°♍59'08	9.21269 AU
direct	-4759 Jun 14 j 02:03	2°♍42'50	
evening set	-4759 Sep 23 j 03:34	9°♍37'29	
conjunction	-4759 Oct 09 j 11:52	11°♍30'46	2°19'22
minimum elong	-4759 Oct 09 j 11:54	11°♍30'46	2°19'28
max. Earth dist.	-4759 Oct 08 j 21:54	11°♍26'42	11.19188 AU
morning rise	-4759 Oct 25 j 19:37	13°♍23'58	
retrograde	-4758 Feb 03 j 10:20	20°♍18'12	
opposition	-4758 Apr 15 j 08:43	17°♍01'03	2°43'56
min. Earth dist.	-4758 Apr 15 j 21:09	16°♍58'47	9.16818 AU
direct	-4758 Jun 25 j 13:37	13°♍42'55	
evening set	-4758 Oct 04 j 03:29	20°♍38'20	
conjunction	-4758 Oct 20 j 12:19	22°♍32'30	2°08'29
minimum elong	-4758 Oct 20 j 12:22	22°♍32'31	2°08'33
max. Earth dist.	-4758 Oct 19 j 21:34	22°♍28'11	11.13423 AU
morning rise	-4758 Nov 05 j 21:26	24°♍26'52	
	-4757 Jan 03 j 08:42	0°♎	
retrograde	-4757 Feb 15 j 06:54	1°♎26'56	
	-4757 Mar 31 j 11:06	30°℞♍	
opposition	-4757 Apr 27 j 07:55	28°♍08'47	2°27'45
min. Earth dist.	-4757 Apr 27 j 21:12	28°♍06'21	9.09697 AU
direct	-4757 Jul 07 j 01:36	24°♍50'45	
	-4757 Sep 29 j 03:12	0°♎	
evening set	-4757 Oct 15 j 06:27	1°♎48'27	
conjunction	-4757 Oct 31 j 16:34	3°♎44'03	1°52'36
minimum elong	-4757 Oct 31 j 16:36	3°♎44'03	1°52'36
max. Earth dist.	-4757 Oct 31 j 00:38	3°♎39'20	11.05112 AU
morning rise	-4757 Nov 17 j 04:09	5°♎40'07	
retrograde	-4756 Feb 27 j 10:13	12°♎47'36	
opposition	-4756 May 08 j 11:45	9°♎28'15	2°05'35
min. Earth dist.	-4756 May 09 j 01:39	9°♎25'40	9.00147 AU
direct	-4756 Jul 17 j 17:17	6°♎10'03	
evening set	-4756 Oct 25 j 14:20	13°♎11'33	
max. Earth dist.	-4756 Nov 10 j 10:54	15°♎04'22	10.94538 AU
conjunction	-4756 Nov 11 j 02:42	15°♎09'05	1°31'59
minimum elong	-4756 Nov 11 j 02:45	15°♎09'06	1°31'56
morning rise	-4756 Nov 27 j 17:33	17°♎07'25	
retrograde	-4755 Mar 10 j 20:28	24°♎23'48	
opposition	-4755 May 20 j 21:10	21°♎02'58	1°37'51
min. Earth dist.	-4755 May 21 j 10:34	21°♎00'28	8.88505 AU
direct	-4755 Jul 29 j 13:16	17°♎44'24	
evening set	-4755 Nov 06 j 04:58	24°♎51'12	
conjunction	-4755 Nov 22 j 20:30	26°♎51'10	1°07'09
minimum elong	-4755 Nov 22 j 20:33	26°♎51'11	1°07'02
max. Earth dist.	-4755 Nov 22 j 06:22	26°♎46'54	10.82055 AU
morning rise	-4755 Dec 09 j 15:09	28°♎52'11	
	-4755 Dec 19 j 07:42	0°♏	
retrograde	-4754 Mar 23 j 17:21	6°♏18'49	
opposition	-4754 Jun 02 j 13:02	2°♏56'21	1°05'11

Attention, astronomical year style is used: The year -4754 in astronomical counting style is the year 4755 BCE in historical counting style.

min. Earth dist.	-4754 Jun 03 j 00:40	2°♏54'09	8.75173 AU	
	-4754 Jul 20 j 08:18	30°℞♎		
direct	-4754 Aug 10 j 15:20	29°♎37'09		
	-4754 Aug 31 j 13:41	0°♏		
evening set	-4754 Nov 18 j 04:30	6°♏50'45		
conjunction	-4754 Dec 04 j 23:36	8°♏53'33	0°38'45	
minimum elong	-4754 Dec 04 j 23:37	8°♏53'34	0°38'36	
max. Earth dist.	-4754 Dec 04 j 10:48	8°♏49'38	10.68103 AU	
morning rise	-4754 Dec 21 j 22:31	10°♏57'39		
	-4753 Jan 27 j 13:13	15°♏		
retrograde	-4753 Apr 06 j 00:56	18°♏35'34		
opposition	-4753 Jun 15 j 12:12	15°♏11'24	0°28'32	
min. Earth dist.	-4753 Jun 15 j 22:03	15°♏09'31	8.60646 AU	
	-4753 Jun 17 j 23:48	15°℞♏		
direct	-4753 Aug 22 j 21:44	11°♏51'19		
	-4753 Oct 23 j 11:39	15°♏		
evening set	-4753 Nov 30 j 14:39	19°♏13'13		
conjunction	-4753 Dec 17 j 13:35	21°♏19'07	0°07'48	
minimum elong	-4753 Dec 17 j 13:36	21°♏19'07	0°07'37	
behind sun begin	-4753 Dec 17 j 07:09	21°♏17'08		
behind sun end	-4753 Dec 17 j 20:02	21°♏21'06		
max. Earth dist.	-4753 Dec 17 j 01:53	21°♏15'29	10.53220 AU	
morning rise	-4752 Jan 03 j 17:13	23°♏26'33		
	-4752 Mar 10 j 06:26	0°♐		
desc. node	-4752 Mar 18 j 00:40	0°♐26'39		
retrograde	-4752 Apr 18 j 16:51	1°♐16'36		
	-4752 May 28 j 17:39	30°℞♏		
opposition	-4752 Jun 27 j 19:27	27°♏50'41	-0°10'47	
min. Earth dist.	-4752 Jun 28 j 03:40	27°♏49'05	8.45502 AU	
direct	-4752 Sep 03 j 13:23	24°♏29'29		
	-4752 Nov 25 j 17:38	0°♐		
evening set	-4752 Dec 12 j 12:49	2°♐01'02		
conjunction	-4752 Dec 29 j 15:55	4°♐10'16	-0°24'34	
minimum elong	-4752 Dec 29 j 15:54	4°♐10'15	0°24'46	
max. Earth dist.	-4752 Dec 29 j 06:05	4°♐07'09	10.38008 AU	
morning rise	-4751 Jan 16 j 00:19	6°♐21'11		
retrograde	-4751 May 02 j 19:17	14°♐23'44		
opposition	-4751 Jul 11 j 10:57	10°♐56'10	-0°51'01	
min. Earth dist.	-4751 Jul 11 j 17:20	10°♐54'54	8.30413 AU	
direct	-4751 Sep 16 j 14:54	7°♐33'40		
evening set	-4751 Dec 26 j 00:35	15°♐16'00		
conjunction	-4750 Jan 12 j 07:59	17°♐28'36	-0°56'32	
minimum elong	-4750 Jan 12 j 07:56	17°♐28'35	0°56'45	
max. Earth dist.	-4750 Jan 12 j 01:32	17°♐26'32	10.23222 AU	
morning rise	-4750 Jan 29 j 20:48	19°♐42'57		
retrograde	-4750 May 17 j 07:55	27°♐57'38		
opposition	-4750 Jul 25 j 10:23	24°♐28'33	-1°29'54	
min. Earth dist.	-4750 Jul 25 j 13:49	24°♐27'52	8.16239 AU	
direct	-4750 Sep 30 j 01:20	21°♐04'39		
evening set	-4749 Jan 09 j 02:15	28°♐58'14		
	-4749 Jan 17 j 02:17	0°♑		
conjunction	-4749 Jan 26 j 13:50	1°♑14'02	-1°26'16	
minimum elong	-4749 Jan 26 j 13:46	1°♑14'01	1°26'30	
max. Earth dist.	-4749 Jan 26 j 11:49	1°♑13'22	10.09785 AU	
morning rise	-4749 Feb 13 j 06:37	3°♑31'34		
retrograde	-4749 Jun 01 j 05:22	11°♑56'59		
opposition	-4749 Aug 08 j 17:20	8°♑26'36	-2°04'50	
min. Earth dist.	-4749 Aug 08 j 17:00	8°♑26'40	8.03901 AU	
direct	-4749 Oct 13 j 21:41	5°♑01'15		
evening set	-4748 Jan 23 j 17:17	13°♑05'43		
conjunction	-4748 Feb 10 j 08:48	15°♑24'21	-1°51'38	
minimum elong	-4748 Feb 10 j 08:44	15°♑24'20	1°51'52	
max. Earth dist.	-4748 Feb 10 j 11:37	15°♑25'17	9.98601 AU	
morning rise	-4748 Feb 28 j 05:03	17°♑44'35		
retrograde	-4748 Jun 15 j 08:23	26°♑18'14		
opposition	-4748 Aug 22 j 06:15	22°♑46'54	-2°33'02	
min. Earth dist.	-4748 Aug 22 j 02:05	22°♑47'46	7.94230 AU	
direct	-4748 Oct 27 j 03:43	19°♑20'07		
evening set	-4747 Feb 06 j 20:18	27°♑34'13		
conjunction	-4747 Feb 24 j 15:23	29°♑55'08	-2°10'33	
minimum elong	-4747 Feb 24 j 15:21	29°♑55'08	2°10'46	
max. Earth dist.	-4747 Feb 24 j 22:42	29°♑57'34	9.90449 AU	
	-4747 Feb 25 j 06:01	0°♒		
morning rise	-4747 Mar 14 j 14:30	2°♒17'24		
retrograde	-4747 Jun 30 j 14:10	10°♒55'45		
opposition	-4747 Sep 05 j 23:01	7°♒23'56	-2°51'57	
min. Earth dist.	-4747 Sep 05 j 15:34	7°♒25'29	7.87894 AU	
direct	-4747 Nov 10 j 17:27	3°♒55'48		
evening set	-4746 Feb 22 j 08:12	12°♒17'21		
conjunction	-4746 Mar 12 j 06:24	14°♒39'51	-2°21'18	
minimum elong	-4746 Mar 12 j 06:23	14°♒39'51	2°21'28	
max. Earth dist.	-4746 Mar 12 j 17:32	14°♒43'34	9.85913 AU	
	-4746 Mar 14 j 18:52	15°♒		
morning rise	-4746 Mar 30 j 07:42	17°♒03'20		
retrograde	-4746 Jul 15 j 19:34	25°♒42'13		
opposition	-4746 Sep 20 j 17:29	22°♒10'23	-2°59'45	
min. Earth dist.	-4746 Sep 20 j 07:38	22°♒12'27	7.85338 AU	
direct	-4746 Nov 25 j 13:08	18°♒41'08		
evening set	-4745 Mar 10 j 00:53	27°♒07'04		
conjunction	-4745 Mar 28 j 01:40	29°♒30'19	-2°22'48	
minimum elong	-4745 Mar 28 j 01:42	29°♒30'19	2°22'56	
max. Earth dist.	-4745 Mar 28 j 15:57	29°♒35'04	9.85322 AU	
	-4745 Mar 31 j 18:51	0°♓		
morning rise	-4745 Apr 15 j 04:27	1°♓54'08		
retrograde	-4745 Jul 30 j 21:03	10°♓29'12		
opposition	-4745 Oct 05 j 10:54	6°♓57'51	-2°55'36	
min. Earth dist.	-4745 Oct 04 j 23:22	7°♓00'17	7.86735 AU	
direct	-4745 Dec 10 j 12:27	3°♓27'47		
evening set	-4744 Mar 24 j 18:25	11°♓54'40		
conjunction	-4744 Apr 11 j 21:08	14°♓17'46	-2°14'56	
minimum elong	-4744 Apr 11 j 21:11	14°♓17'47	2°15'00	
max. Earth dist.	-4744 Apr 12 j 13:28	14°♓23'11	9.88697 AU	
morning rise	-4744 Apr 30 j 00:32	16°♓40'59		
retrograde	-4744 Aug 13 j 15:42	25°♓08'14		
opposition	-4744 Oct 19 j 00:35	21°♓37'51	-2°39'58	
min. Earth dist.	-4744 Oct 18 j 12:05	21°♓40'28	7.91954 AU	
direct	-4744 Dec 24 j 13:07	18°♓07'18		
evening set	-4743 Apr 09 j 08:27	26°♓31'42		
conjunction	-4743 Apr 27 j 12:09	28°♓53'46	-1°58'28	
minimum elong	-4743 Apr 27 j 12:13	28°♓53'47	1°58'29	
max. Earth dist.	-4743 Apr 28 j 05:22	28°♓59'25	9.95758 AU	
	-4743 May 05 j 22:18	0°♈		
morning rise	-4743 May 15 j 15:07	1°♈15'29		
retrograde	-4743 Aug 28 j 00:30	9°♈31'53		
opposition	-4743 Nov 02 j 08:41	6°♈02'49	-2°14'25	
min. Earth dist.	-4743 Nov 01 j 19:38	6°♈05'32	8.00597 AU	
direct	-4742 Jan 08 j 11:36	2°♈32'15		
evening set	-4742 Apr 24 j 15:08	10°♈51'04		
conjunction	-4742 May 12 j 18:37	13°♈11'17	-1°34'57	
minimum elong	-4742 May 12 j 18:41	13°♈11'18	1°34'54	
max. Earth dist.	-4742 May 13 j 11:51	13°♈16'52	10.05975 AU	
morning rise	-4742 May 30 j 19:58	15°♈30'43		

Attention, astronomical year style is used: The year -4742 in astronomical counting style is the year 4743 BCE in historical counting style.

retrograde	-4742 Sep 10 j 22:30	23°♈34'24	
opposition	-4742 Nov 16 j 09:29	20°♈06'57	-1°41'20
min. Earth dist.	-4742 Nov 15 j 20:09	20°♈09'42	8.12055 AU
direct	-4741 Jan 23 j 04:40	16°♈36'45	
evening set	-4741 May 09 j 11:58	24°♈47'41	
conjunction	-4741 May 27 j 14:01	27°♈05'22	-1°06'22
minimum elong	-4741 May 27 j 14:04	27°♈05'23	1°06'16
max. Earth dist.	-4741 May 28 j 06:37	27°♈10'40	10.18648 AU
morning rise	-4741 Jun 14 j 12:36	29°♈21'55	
	-4741 Jun 19 j 15:24	0°♉	
retrograde	-4741 Sep 24 j 10:11	7°♉12'06	
opposition	-4741 Nov 30 j 02:00	3°♉46'29	-1°03'27
min. Earth dist.	-4741 Nov 29 j 13:25	3°♉49'02	8.25589 AU
direct	-4740 Feb 06 j 13:39	0°♉16'59	
evening set	-4740 May 22 j 21:20	8°♉18'35	
conjunction	-4740 Jun 09 j 20:38	10°♉33'15	-0°34'52
minimum elong	-4740 Jun 09 j 20:40	10°♉33'15	0°34'43
max. Earth dist.	-4740 Jun 10 j 11:38	10°♉37'58	10.32975 AU
morning rise	-4740 Jun 27 j 15:25	12°♉46'30	
	-4740 Jul 16 j 08:25	15°♉	
retrograde	-4740 Oct 06 j 12:40	20°♉23'26	
opposition	-4740 Dec 12 j 10:15	16°♉59'44	-0°23'26
min. Earth dist.	-4740 Dec 11 j 23:26	17°♉01'54	8.40394 AU
	-4739 Jan 08 j 01:38	15°℞♉	
direct	-4739 Feb 19 j 13:33	13°♉31'16	
	-4739 Apr 02 j 19:40	15°♉	
evening set	-4739 Jun 05 j 18:18	21°♉22'50	
conjunction	-4739 Jun 23 j 13:38	23°♉34'10	-0°02'29
minimum elong	-4739 Jun 23 j 13:38	23°♉34'10	0°02'18
behind sun begin	-4739 Jun 23 j 06:24	23°♉31'57	
behind sun end	-4739 Jun 23 j 20:52	23°♉36'23	
max. Earth dist.	-4739 Jun 24 j 02:02	23°♉37'59	10.48136 AU
morning rise	-4739 Jul 11 j 03:50	25°♉43'55	
asc. node	-4739 Jul 22 j 02:48	27°♉02'06	
	-4739 Aug 18 j 21:47	0°♊	
retrograde	-4739 Oct 19 j 03:16	3°♊08'36	
	-4739 Dec 22 j 15:27	30°℞♉	
opposition	-4739 Dec 25 j 10:21	29°♉46'49	0°16'21
min. Earth dist.	-4739 Dec 25 j 02:10	29°♉48'26	8.55676 AU
direct	-4738 Mar 05 j 05:52	26°♉19'36	
	-4738 May 13 j 12:34	0°♊	
evening set	-4738 Jun 19 j 02:55	4°♊01'07	
conjunction	-4738 Jul 06 j 17:27	6°♊09'00	0°29'11
minimum elong	-4738 Jul 06 j 17:25	6°♊09'00	0°29'23
max. Earth dist.	-4738 Jul 07 j 02:07	6°♊11'38	10.63361 AU
morning rise	-4738 Jul 24 j 02:42	8°♊15'18	
retrograde	-4738 Oct 31 j 08:54	15°♊29'11	
opposition	-4737 Jan 07 j 02:41	12°♊09'11	0°53'58
min. Earth dist.	-4737 Jan 06 j 21:02	12°♊10'16	8.70690 AU
direct	-4737 Mar 18 j 13:08	8°♊43'19	
evening set	-4737 Jul 01 j 23:40	16°♊15'14	
conjunction	-4737 Jul 19 j 08:59	18°♊19'47	0°58'32
minimum elong	-4737 Jul 19 j 08:56	18°♊19'46	0°58'46
max. Earth dist.	-4737 Jul 19 j 13:46	18°♊21'14	10.77938 AU
morning rise	-4737 Aug 05 j 13:07	20°♊22'46	
retrograde	-4737 Nov 12 j 07:58	27°♊27'35	
opposition	-4736 Jan 19 j 12:18	24°♊09'09	1°27'59
min. Earth dist.	-4736 Jan 19 j 08:47	24°♊09'49	8.84746 AU
direct	-4736 Mar 30 j 10:44	20°♊44'44	
evening set	-4736 Jul 13 j 09:33	28°♊07'47	
	-4736 Jul 29 j 06:26	0°♋	

conjunction	-4736 Jul 30 j 13:38	0°♋09'16	1°24'36
minimum elong	-4736 Jul 30 j 13:35	0°♋09'15	1°24'51
max. Earth dist.	-4736 Jul 30 j 15:34	0°♋09'51	10.91234 AU
morning rise	-4736 Aug 16 j 12:36	2°♋09'16	
retrograde	-4736 Nov 23 j 00:46	9°♋06'50	
opposition	-4735 Jan 30 j 16:18	5°♋49'42	1°57'19
min. Earth dist.	-4735 Jan 30 j 15:05	5°♋49'56	8.97261 AU
direct	-4735 Apr 12 j 00:52	2°♋26'43	
evening set	-4735 Jul 25 j 09:52	9°♋41'53	
conjunction	-4735 Aug 11 j 08:55	11°♋40'39	1°46'36
minimum elong	-4735 Aug 11 j 08:52	11°♋40'38	1°46'51
max. Earth dist.	-4735 Aug 11 j 08:17	11°♋40'28	11.02731 AU
morning rise	-4735 Aug 28 j 03:04	13°♋38'03	
retrograde	-4735 Dec 04 j 14:29	20°♋30'15	
opposition	-4734 Feb 11 j 15:49	17°♋14'06	2°21'15
min. Earth dist.	-4734 Feb 11 j 17:51	17°♋13'43	9.07767 AU
direct	-4734 Apr 24 j 06:38	13°♋52'25	
evening set	-4734 Aug 06 j 01:53	21°♋00'52	
conjunction	-4734 Aug 22 j 20:15	22°♋57'22	2°04'00
minimum elong	-4734 Aug 22 j 20:13	22°♋57'21	2°04'15
max. Earth dist.	-4734 Aug 22 j 15:55	22°♋56'06	11.12011 AU
morning rise	-4734 Sep 08 j 10:27	24°♋52'42	
	-4734 Oct 31 j 07:00	0°♌	
retrograde	-4734 Dec 15 j 22:31	1°♌41'18	
	-4733 Feb 01 j 06:19	30°℞♋	
opposition	-4733 Feb 23 j 11:54	28°♋25'49	2°39'20
min. Earth dist.	-4733 Feb 23 j 17:12	28°♋24'50	9.15869 AU
direct	-4733 May 06 j 05:40	25°♋05'16	
	-4733 Jul 28 j 21:42	0°♌	
evening set	-4733 Aug 17 j 11:20	2°♌08'16	
conjunction	-4733 Sep 03 j 01:42	4°♌03'01	2°16'27
minimum elong	-4733 Sep 03 j 01:40	4°♌03'00	2°16'40
max. Earth dist.	-4733 Sep 02 j 17:37	4°♌00'40	11.18732 AU
morning rise	-4733 Sep 19 j 12:46	5°♌56'50	
retrograde	-4733 Dec 27 j 06:44	12°♌43'40	
opposition	-4732 Mar 06 j 05:38	9°♌28'27	2°51'16
min. Earth dist.	-4732 Mar 06 j 13:21	9°♌27'03	9.21248 AU
direct	-4732 May 17 j 02:52	6°♌08'52	
evening set	-4732 Aug 27 j 15:35	13°♌07'45	
	-4732 Sep 12 j 22:23	15°♌	
conjunction	-4732 Sep 13 j 03:01	15°♌01'21	2°23'45
minimum elong	-4732 Sep 13 j 03:00	15°♌01'20	2°23'55
max. Earth dist.	-4732 Sep 12 j 16:40	14°♌58'21	11.22622 AU
morning rise	-4732 Sep 29 j 11:45	16°♌54'13	
retrograde	-4731 Jan 06 j 15:33	23°♌41'06	
opposition	-4731 Mar 17 j 22:36	20°♌25'49	2°56'54
min. Earth dist.	-4731 Mar 18 j 08:04	20°♌24'06	9.23670 AU
direct	-4731 May 28 j 17:49	17°♌07'01	
evening set	-4731 Sep 07 j 16:24	24°♌03'11	
conjunction	-4731 Sep 24 j 01:52	25°♌56'14	2°25'46
minimum elong	-4731 Sep 24 j 01:53	25°♌56'14	2°25'54
max. Earth dist.	-4731 Sep 23 j 13:34	25°♌52'40	11.23509 AU
morning rise	-4731 Oct 10 j 09:21	27°♌48'48	
	-4731 Oct 30 j 11:17	0°♍	
retrograde	-4730 Jan 18 j 02:15	4°♍37'33	
opposition	-4730 Mar 29 j 16:01	1°♍21'53	2°56'10
min. Earth dist.	-4730 Mar 30 j 03:52	1°♍19'44	9.23045 AU
	-4730 Apr 18 j 00:15	30°℞♌	
direct	-4730 Jun 09 j 06:24	28°♌03'37	
	-4730 Jul 29 j 13:57	0°♍	
evening set	-4730 Sep 18 j 15:54	4°♍58'35	
max. Earth dist.	-4730 Oct 04 j 09:13	6°♍47'18	11.21397 AU

Attention, astronomical year style is used: The year -4730 in astronomical counting style is the year 4731 BCE in historical counting style.

conjunction	-4730 Oct 05 j 00:16	6°♑51'40	2°22'28
minimum elong	-4730 Oct 05 j 00:18	6°♑51'41	2°22'34
morning rise	-4730 Oct 21 j 07:44	8°♑44'34	
retrograde	-4729 Jan 29 j 15:04	15°♑36'50	
opposition	-4729 Apr 10 j 10:57	12°♑20'28	2°49'04
min. Earth dist.	-4729 Apr 11 j 01:01	12°♑17'54	9.19450 AU
direct	-4729 Jun 20 j 18:12	9°♑02'28	
evening set	-4729 Sep 29 j 15:36	15°♑57'40	
conjunction	-4729 Oct 15 j 23:57	17°♑51'24	2°13'55
minimum elong	-4729 Oct 15 j 23:59	17°♑51'24	2°14'00
max. Earth dist.	-4729 Oct 15 j 07:14	17°♑46'30	11.16414 AU
morning rise	-4729 Nov 01 j 08:27	19°♑45'13	
retrograde	-4728 Feb 10 j 08:12	26°♑42'42	
opposition	-4728 Apr 21 j 08:54	23°♑25'15	2°35'41
min. Earth dist.	-4728 Apr 21 j 23:43	23°♑22'32	9.13049 AU
direct	-4728 Jul 01 j 07:49	20°♑07'15	
evening set	-4728 Oct 09 j 17:09	27°♑04'07	
max. Earth dist.	-4728 Oct 25 j 10:14	28°♑54'14	11.08747 AU
conjunction	-4728 Oct 26 j 02:39	28°♑59'04	2°00'16
minimum elong	-4728 Oct 26 j 02:42	28°♑59'05	2°00'17
	-4728 Nov 03 j 17:57	0°♎	
morning rise	-4728 Nov 11 j 13:02	0°♎54'22	
retrograde	-4727 Feb 21 j 10:15	7°♎58'40	
opposition	-4727 May 03 j 10:51	4°♎39'50	2°16'11
min. Earth dist.	-4727 May 04 j 01:13	4°♎37'12	9.04074 AU
direct	-4727 Jul 12 j 23:38	1°♎21'37	
evening set	-4727 Oct 20 j 22:51	8°♎21'35	
conjunction	-4727 Nov 06 j 10:19	10°♎18'19	1°41'44
minimum elong	-4727 Nov 06 j 10:21	10°♎18'20	1°41'42
max. Earth dist.	-4727 Nov 05 j 18:00	10°♎13'28	10.98663 AU
morning rise	-4727 Nov 22 j 23:30	12°♎15'40	
retrograde	-4726 Mar 05 j 17:20	19°♎28'14	
opposition	-4726 May 15 j 17:43	16°♎07'49	1°50'54
min. Earth dist.	-4726 May 16 j 07:42	16°♎05'13	8.92846 AU
direct	-4726 Jul 24 j 16:02	12°♎49'07	
evening set	-4726 Nov 01 j 10:29	19°♎53'47	
max. Earth dist.	-4726 Nov 17 j 07:56	21°♎47'45	10.86524 AU
conjunction	-4726 Nov 18 j 00:33	21°♎52'45	1°18'43
minimum elong	-4726 Nov 18 j 00:36	21°♎52'46	1°18'38
morning rise	-4726 Dec 04 j 17:28	23°♎52'39	
	-4725 Feb 06 j 21:05	0°♏	
retrograde	-4725 Mar 18 j 09:10	1°♏14'56	
	-4725 Apr 27 j 17:32	30°℞♎	
opposition	-4725 May 28 j 06:52	27°♎52'47	1°20'21
min. Earth dist.	-4725 May 28 j 20:32	27°♎50'13	8.79776 AU
direct	-4725 Aug 05 j 15:20	24°♎33'22	
	-4725 Oct 29 j 06:42	0°♏	
evening set	-4725 Nov 13 j 05:50	1°♏44'16	
conjunction	-4725 Nov 29 j 23:11	3°♏45'55	0°51'49
minimum elong	-4725 Nov 29 j 23:13	3°♏45'56	0°51'41
max. Earth dist.	-4725 Nov 29 j 07:51	3°♏41'14	10.72778 AU
morning rise	-4725 Dec 16 j 20:21	5°♏48'47	
retrograde	-4724 Mar 30 j 10:51	13°♏22'04	
opposition	-4724 Jun 09 j 03:05	9°♏58'05	0°45'20
min. Earth dist.	-4724 Jun 09 j 15:18	9°♏55'45	8.65376 AU
direct	-4724 Aug 16 j 20:28	6°♏37'46	
evening set	-4724 Nov 24 j 11:01	13°♏56'25	
	-4724 Dec 03 j 02:53	15°♏	
conjunction	-4724 Dec 11 j 08:19	16°♏01'07	0°21'50
minimum elong	-4724 Dec 11 j 08:20	16°♏01'07	0°21'40
max. Earth dist.	-4724 Dec 10 j 19:36	15°♏57'11	10.57964 AU
morning rise	-4724 Dec 28 j 09:58	18°♏07'14	
retrograde	-4723 Apr 12 j 22:14	25°♏52'29	
opposition	-4723 Jun 22 j 06:52	22°♏26'39	0°06'57
min. Earth dist.	-4723 Jun 22 j 16:30	22°♏24'47	8.50243 AU
desc. node	-4723 Aug 27 j 13:24	19°♏05'27	
direct	-4723 Aug 29 j 09:22	19°♏05'17	
evening set	-4723 Dec 07 j 03:49	26°♏33'04	
conjunction	-4723 Dec 24 j 05:18	28°♏41'03	-0°10'09
minimum elong	-4723 Dec 24 j 05:17	28°♏41'03	0°10'20
behind sun begin	-4723 Dec 23 j 23:39	28°♏39'18	
behind sun end	-4723 Dec 24 j 10:56	28°♏42'48	
max. Earth dist.	-4723 Dec 23 j 19:39	28°♏38'02	10.42718 AU
	-4722 Jan 03 j 16:30	0°♐	
morning rise	-4722 Jan 10 j 11:32	0°♐50'38	
retrograde	-4722 Apr 26 j 21:20	8°♐48'20	
opposition	-4722 Jul 05 j 18:50	5°♐20'45	-0°33'10
min. Earth dist.	-4722 Jul 06 j 01:14	5°♐19'30	8.35061 AU
direct	-4722 Sep 11 j 06:07	1°♐58'11	
evening set	-4722 Dec 20 j 09:34	9°♐36'15	
conjunction	-4721 Jan 06 j 15:10	11°♐47'35	-0°42'29
minimum elong	-4721 Jan 06 j 15:08	11°♐47'34	0°42'42
max. Earth dist.	-4721 Jan 06 j 08:26	11°♐45'26	10.27771 AU
morning rise	-4721 Jan 24 j 01:58	14°♐00'38	
retrograde	-4721 May 11 j 06:53	22°♐10'41	
opposition	-4721 Jul 19 j 15:06	18°♐41'32	-1°13'00
min. Earth dist.	-4721 Jul 19 j 18:20	18°♐40'53	8.20606 AU
direct	-4721 Sep 24 j 11:20	15°♐17'41	
evening set	-4720 Jan 03 j 05:11	23°♐06'44	
conjunction	-4720 Jan 20 j 14:52	25°♐21'18	-1°13'30
minimum elong	-4720 Jan 20 j 14:49	25°♐21'17	1°13'44
max. Earth dist.	-4720 Jan 20 j 11:29	25°♐20'13	10.13937 AU
morning rise	-4720 Feb 07 j 05:59	27°♐37'39	
	-4720 Feb 26 j 13:25	0°♑	
retrograde	-4720 May 25 j 01:18	5°♑59'03	
opposition	-4720 Aug 01 j 19:07	2°♑28'36	-1°50'04
min. Earth dist.	-4720 Aug 01 j 19:24	2°♑28'33	8.07708 AU
	-4720 Sep 04 j 22:32	30°℞♐	
direct	-4720 Oct 07 j 03:06	29°♐03'23	
	-4720 Nov 07 j 21:13	0°♑	
evening set	-4719 Jan 16 j 14:33	7°♑03'31	
conjunction	-4719 Feb 03 j 04:14	9°♑21'04	-1°41'05
minimum elong	-4719 Feb 03 j 04:10	9°♑21'03	1°41'19
max. Earth dist.	-4719 Feb 03 j 04:56	9°♑21'18	10.02045 AU
morning rise	-4719 Feb 20 j 23:11	11°♑40'19	
retrograde	-4719 Jun 09 j 01:39	20°♑11'02	
opposition	-4719 Aug 16 j 05:47	16°♑39'41	-2°21'35
min. Earth dist.	-4719 Aug 16 j 02:59	16°♑40'15	7.97166 AU
direct	-4719 Oct 21 j 05:56	13°♑13'09	
evening set	-4718 Jan 31 j 12:39	21°♑23'32	
conjunction	-4718 Feb 18 j 06:02	23°♑43'35	-2°03'06
minimum elong	-4718 Feb 18 j 05:59	23°♑43'34	2°03'19
max. Earth dist.	-4718 Feb 18 j 11:21	23°♑45'21	9.92876 AU
morning rise	-4718 Mar 08 j 04:06	26°♑05'09	
	-4718 Apr 09 j 07:50	0°♒	
retrograde	-4718 Jun 24 j 05:56	4°♒42'10	
opposition	-4718 Aug 30 j 21:18	1°♒10'19	-2°44'52
min. Earth dist.	-4718 Aug 30 j 15:16	1°♒11'35	7.89697 AU
	-4718 Sep 14 j 06:20	30°℞♑	
direct	-4718 Nov 04 j 16:50	27°♑42'37	
	-4718 Dec 24 j 14:31	0°♒	
evening set	-4717 Feb 15 j 21:01	6°♒01'26	

Attention, astronomical year style is used: The year -4717 in astronomical counting style is the year 4718 BCE in historical counting style.

conjunction	-4717 Mar 05 j 17:49	8°♒23'22	-2°17'36
minimum elong	-4717 Mar 05 j 17:48	8°♒23'22	2°17'48
max. Earth dist.	-4717 Mar 06 j 03:59	8°♒26'46	9.87102 AU
morning rise	-4717 Mar 23 j 18:20	10°♒46'29	
	-4717 Apr 27 j 12:59	15°♒	
retrograde	-4717 Jul 09 j 12:01	19°♒25'55	
opposition	-4717 Sep 14 j 15:33	15°♒54'03	-2°57'42
min. Earth dist.	-4717 Sep 14 j 06:11	15°♒56'00	7.85856 AU
	-4717 Sep 25 j 12:43	15°℞♒	
direct	-4717 Nov 19 j 10:17	12°♒25'21	
	-4716 Jan 11 j 15:50	15°♒	
evening set	-4716 Mar 02 j 12:16	20°♒49'54	
conjunction	-4716 Mar 20 j 12:03	23°♒12'56	-2°23'14
minimum elong	-4716 Mar 20 j 12:04	23°♒12'56	2°23'23
max. Earth dist.	-4716 Mar 21 j 02:34	23°♒17'47	9.85172 AU
morning rise	-4716 Apr 07 j 14:18	25°♒36'45	
	-4716 May 13 j 20:21	0°♓	
retrograde	-4716 Jul 23 j 16:10	4°♓14'13	
opposition	-4716 Sep 28 j 09:56	0°♓42'48	-2°58'46
min. Earth dist.	-4716 Sep 27 j 21:46	0°♓45'21	7.85930 AU
	-4716 Oct 06 j 23:22	30°℞♒	
direct	-4716 Dec 03 j 08:08	27°♒13'23	
	-4715 Jan 28 j 00:40	0°♓	
evening set	-4715 Mar 18 j 06:23	5°♓40'20	
conjunction	-4715 Apr 05 j 08:28	8°♓03'35	-2°19'25
minimum elong	-4715 Apr 05 j 08:31	8°♓03'36	2°19'31
max. Earth dist.	-4715 Apr 06 j 02:06	8°♓09'27	9.87238 AU
morning rise	-4715 Apr 23 j 11:35	10°♓27'09	
retrograde	-4715 Aug 07 j 15:15	18°♓58'22	
min. Earth dist.	-4715 Oct 12 j 11:51	15°♓30'48	7.89916 AU
opposition	-4715 Oct 13 j 01:46	15°♓27'53	-2°47'59
direct	-4715 Dec 18 j 08:17	11°♓58'02	
evening set	-4714 Apr 02 j 22:45	20°♓23'49	
conjunction	-4714 Apr 21 j 02:13	22°♓46'23	-2°06'33
minimum elong	-4714 Apr 21 j 02:17	22°♓46'24	2°06'35
max. Earth dist.	-4714 Apr 21 j 21:35	22°♓52'46	9.93139 AU
morning rise	-4714 May 09 j 05:17	25°♓08'46	
	-4714 Jun 19 j 13:55	0°♈	
retrograde	-4714 Aug 22 j 05:36	3°♈30'12	
opposition	-4714 Oct 27 j 12:49	0°♈01'01	-2°26'30
min. Earth dist.	-4714 Oct 26 j 22:20	0°♈04'02	7.97508 AU
	-4714 Oct 27 j 17:42	30°℞♓	
direct	-4713 Jan 02 j 07:48	26°♓31'03	
	-4713 Mar 07 j 09:26	0°♈	
evening set	-4713 Apr 18 j 09:11	4°♈52'20	
conjunction	-4713 May 06 j 12:57	7°♈13'20	-1°45'53
minimum elong	-4713 May 06 j 13:01	7°♈13'22	1°45'52
max. Earth dist.	-4713 May 07 j 08:23	7°♈19'40	10.02403 AU
morning rise	-4713 May 24 j 14:58	9°♈33'44	
retrograde	-4713 Sep 05 j 08:46	17°♈42'55	
opposition	-4713 Nov 10 j 17:05	14°♈15'19	-1°56'24
min. Earth dist.	-4713 Nov 10 j 03:26	14°♈18'08	8.08102 AU
direct	-4712 Jan 17 j 03:15	10°♈45'32	
evening set	-4712 May 02 j 10:53	18°♈59'44	
conjunction	-4712 May 20 j 13:38	21°♈18'27	-1°19'16
minimum elong	-4712 May 20 j 13:41	21°♈18'29	1°19'11
max. Earth dist.	-4712 May 21 j 07:05	21°♈24'03	10.14275 AU
morning rise	-4712 Jun 07 j 13:28	23°♈36'11	
	-4712 Aug 07 j 20:18	0°♉	
retrograde	-4712 Sep 18 j 01:03	1°♉31'58	
	-4712 Oct 29 j 21:03	30°℞♈	
opposition	-4712 Nov 23 j 13:17	28°♈06'09	-1°20'19
min. Earth dist.	-4712 Nov 23 j 01:16	28°♈08'36	8.20878 AU
direct	-4711 Jan 30 j 16:09	24°♈36'54	
	-4711 Apr 24 j 07:10	0°♉	
evening set	-4711 May 17 j 01:33	2°♉42'22	
conjunction	-4711 Jun 04 j 02:00	4°♉58'16	-0°48'47
minimum elong	-4711 Jun 04 j 02:03	4°♉58'17	0°48'40
max. Earth dist.	-4711 Jun 04 j 16:24	5°♉02'49	10.27882 AU
morning rise	-4711 Jun 21 j 22:37	7°♉12'53	
retrograde	-4711 Oct 01 j 07:04	14°♉55'21	
opposition	-4711 Dec 07 j 01:17	11°♉31'24	-0°40'56
min. Earth dist.	-4711 Dec 06 j 14:50	11°♉33'30	8.35001 AU
direct	-4710 Feb 13 j 21:02	8°♉03'00	
	-4710 May 23 j 00:29	15°♉	
evening set	-4710 May 31 j 04:00	15°♉58'51	
conjunction	-4710 Jun 18 j 01:04	18°♉11'36	-0°16'33
minimum elong	-4710 Jun 18 j 01:05	18°♉11'36	0°16'23
max. Earth dist.	-4710 Jun 18 j 12:37	18°♉15'11	10.42441 AU
morning rise	-4710 Jul 05 j 17:32	20°♉22'51	
retrograde	-4710 Oct 14 j 01:58	27°♉52'48	
opposition	-4710 Dec 20 j 05:00	24°♉30'40	-0°00'47
min. Earth dist.	-4710 Dec 19 j 20:10	24°♉32'25	8.49755 AU
asc. node	-4710 Dec 27 j 16:32	23°♉55'19	
direct	-4709 Feb 27 j 18:10	21°♉03'19	
evening set	-4709 Jun 13 j 18:20	28°♉49'18	
	-4709 Jun 23 j 11:37	0°♊	
conjunction	-4709 Jul 01 j 11:08	0°♊58'41	0°15'40
minimum elong	-4709 Jul 01 j 11:07	0°♊58'41	0°15'51
behind sun begin	-4709 Jul 01 j 10:31	0°♊58'30	
behind sun end	-4709 Jul 01 j 11:43	0°♊58'52	
max. Earth dist.	-4709 Jul 01 j 20:02	1°♊01'25	10.57261 AU
morning rise	-4709 Jul 18 j 22:41	3°♊06'30	
retrograde	-4709 Oct 26 j 12:41	10°♊25'09	
opposition	-4708 Jan 02 j 00:49	7°♊04'42	0°38'00
min. Earth dist.	-4708 Jan 01 j 18:15	7°♊05'59	8.64461 AU
direct	-4708 Mar 12 j 05:03	3°♊38'31	
evening set	-4708 Jun 25 j 20:44	11°♊14'48	
conjunction	-4708 Jul 13 j 08:34	13°♊20'52	0°46'10
minimum elong	-4708 Jul 13 j 08:32	13°♊20'51	0°46'22
max. Earth dist.	-4708 Jul 13 j 14:42	13°♊22'43	10.71673 AU
morning rise	-4708 Jul 30 j 14:52	15°♊25'18	
retrograde	-4708 Nov 06 j 16:06	22°♊34'13	
opposition	-4707 Jan 13 j 13:48	19°♊15'15	1°13'47
min. Earth dist.	-4707 Jan 13 j 10:23	19°♊15'54	8.78475 AU
direct	-4707 Mar 25 j 06:03	15°♊50'17	
evening set	-4707 Jul 08 j 11:41	23°♊17'25	
conjunction	-4707 Jul 25 j 18:08	25°♊20'19	1°13'48
minimum elong	-4707 Jul 25 j 18:06	25°♊20'18	1°14'02
max. Earth dist.	-4707 Jul 25 j 20:28	25°♊21'01	10.85061 AU
morning rise	-4707 Aug 11 j 19:18	27°♊21'40	
	-4707 Sep 04 j 12:25	0°♋	
retrograde	-4707 Nov 18 j 10:08	4°♋22'35	
opposition	-4706 Jan 25 j 20:36	1°♋04'50	1°45'18
min. Earth dist.	-4706 Jan 25 j 20:16	1°♋04'54	8.91212 AU
	-4706 Feb 09 j 08:53	30°℞♊	
direct	-4706 Apr 07 j 00:03	27°♊41'03	
	-4706 Jun 01 j 02:21	0°♋	
evening set	-4706 Jul 20 j 16:27	4°♋59'59	
conjunction	-4706 Aug 06 j 17:37	7°♋00'00	1°37'40
minimum elong	-4706 Aug 06 j 17:34	6°♋59'59	1°37'55
max. Earth dist.	-4706 Aug 06 j 16:00	6°♋59'32	10.96902 AU
morning rise	-4706 Aug 23 j 14:02	8°♋58'38	

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

retrograde	-4706 Nov 30 j 00:23	15°♋53'22	
opposition	-4705 Feb 06 j 22:00	12°♋36'33	2°11'42
min. Earth dist.	-4705 Feb 07 j 00:03	12°♋36'10	9.02172 AU
direct	-4705 Apr 19 j 11:04	9°♋13'54	
evening set	-4705 Aug 01 j 12:11	16°♋25'40	
conjunction	-4705 Aug 18 j 08:36	18°♋23'16	1°57'09
minimum elong	-4705 Aug 18 j 08:33	18°♋23'15	1°57'23
max. Earth dist.	-4705 Aug 18 j 04:11	18°♋21'58	11.06751 AU
morning rise	-4705 Sep 04 j 00:39	20°♋19'36	
retrograde	-4705 Dec 11 j 11:13	27°♋10'01	
opposition	-4704 Feb 18 j 19:35	23°♋53'48	2°32'25
min. Earth dist.	-4704 Feb 18 j 23:35	23°♋53'04	9.10949 AU
direct	-4704 Apr 30 j 13:55	20°♋32'15	
evening set	-4704 Aug 12 j 00:26	27°♋38'02	
conjunction	-4704 Aug 28 j 16:41	29°♋33'40	2°11'48
minimum elong	-4704 Aug 28 j 16:39	29°♋33'39	2°12'01
max. Earth dist.	-4704 Aug 28 j 10:19	29°♋31'49	11.14265 AU
	-4704 Sep 01 j 11:07	0°♌	
morning rise	-4704 Sep 14 j 05:00	1°♌28'15	
retrograde	-4704 Dec 21 j 20:45	8°♌16'10	
opposition	-4703 Mar 01 j 14:35	5°♌00'19	2°47'04
min. Earth dist.	-4703 Mar 01 j 21:13	4°♌59'06	9.17258 AU
direct	-4703 May 12 j 11:21	1°♌39'43	
evening set	-4703 Aug 23 j 07:00	8°♌40'49	
conjunction	-4703 Sep 08 j 19:45	10°♌35'03	2°21'21
minimum elong	-4703 Sep 08 j 19:44	10°♌35'02	2°21'32
max. Earth dist.	-4703 Sep 08 j 10:28	10°♌32'21	11.19219 AU
morning rise	-4703 Sep 25 j 05:25	12°♌28'27	
	-4703 Oct 18 j 14:12	15°♌	
retrograde	-4702 Jan 02 j 03:57	19°♌15'37	
opposition	-4702 Mar 13 j 08:01	15°♌59'49	2°55'27
min. Earth dist.	-4702 Mar 13 j 17:25	15°♌58'06	9.20911 AU
	-4702 Mar 27 j 03:52	15°℞♌	
direct	-4702 May 24 j 03:28	12°♌40'03	
	-4702 Jul 18 j 19:37	15°♌	
evening set	-4702 Sep 03 j 09:21	19°♌37'50	
conjunction	-4702 Sep 19 j 19:33	21°♌31'13	2°25'39
minimum elong	-4702 Sep 19 j 19:33	21°♌31'13	2°25'48
max. Earth dist.	-4702 Sep 19 j 07:24	21°♌27'42	11.21472 AU
morning rise	-4702 Oct 06 j 03:42	23°♌24'03	
	-4702 Dec 28 j 18:03	0°♍	
retrograde	-4701 Jan 13 j 12:37	0°♍12'15	
	-4701 Jan 29 j 12:10	30°℞♌	
opposition	-4701 Mar 25 j 01:10	26°♌56'12	2°57'28
min. Earth dist.	-4701 Mar 25 j 12:09	26°♌54'12	9.21783 AU
direct	-4701 Jun 04 j 18:38	23°♌37'07	
	-4701 Sep 09 j 12:11	0°♍	
evening set	-4701 Sep 14 j 09:15	0°♍32'58	
conjunction	-4701 Sep 30 j 18:04	2°♍26'07	2°24'38
minimum elong	-4701 Sep 30 j 18:05	2°♍26'07	2°24'45
max. Earth dist.	-4701 Sep 30 j 04:55	2°♍22'18	11.20937 AU
morning rise	-4701 Oct 17 j 01:31	4°♍18'57	
retrograde	-4700 Jan 25 j 01:36	11°♍09'52	
opposition	-4700 Apr 04 j 19:23	7°♍53'19	2°53'04
min. Earth dist.	-4700 Apr 05 j 07:04	7°♍51'11	9.19837 AU
direct	-4700 Jun 15 j 07:27	4°♍34'46	
evening set	-4700 Sep 24 j 08:36	11°♍30'03	
conjunction	-4700 Oct 10 j 17:03	13°♍23'34	2°18'19
minimum elong	-4700 Oct 10 j 17:05	13°♍23'34	2°18'24
max. Earth dist.	-4700 Oct 10 j 03:11	13°♍19'31	11.17627 AU
morning rise	-4700 Oct 27 j 00:54	15°♍17'00	

retrograde	-4699 Feb 04 j 17:41	22°♍12'19	
opposition	-4699 Apr 16 j 16:02	18°♍54'59	2°42'18
min. Earth dist.	-4699 Apr 17 j 04:37	18°♍52'41	9.15136 AU
direct	-4699 Jun 26 j 18:56	15°♍36'44	
evening set	-4699 Oct 05 j 09:14	22°♍32'56	
conjunction	-4699 Oct 21 j 18:09	24°♍27'22	2°06'47
minimum elong	-4699 Oct 21 j 18:12	24°♍27'23	2°06'50
max. Earth dist.	-4699 Oct 21 j 02:42	24°♍22'50	11.11647 AU
morning rise	-4699 Nov 07 j 03:39	26°♍22'02	
	-4699 Dec 11 j 11:50	0°♎	
retrograde	-4698 Feb 16 j 15:39	3°♎23'19	
opposition	-4698 Apr 28 j 16:11	0°♎04'58	2°25'20
min. Earth dist.	-4698 Apr 29 j 06:00	0°♎02'26	9.07828 AU
	-4698 Apr 29 j 19:13	30°℞♍	
direct	-4698 Jul 08 j 08:37	26°♍46'48	
	-4698 Sep 11 j 01:54	0°♎	
evening set	-4698 Oct 16 j 13:04	3°♎45'23	
conjunction	-4698 Nov 01 j 23:27	5°♎41'18	1°50'16
minimum elong	-4698 Nov 01 j 23:29	5°♎41'19	1°50'15
max. Earth dist.	-4698 Nov 01 j 07:30	5°♎36'34	11.03180 AU
morning rise	-4698 Nov 18 j 11:27	7°♎37'44	
retrograde	-4697 Feb 28 j 18:29	14°♎46'32	
opposition	-4697 May 10 j 20:48	11°♎26'56	2°02'25
min. Earth dist.	-4697 May 11 j 10:34	11°♎24'23	8.98150 AU
direct	-4697 Jul 20 j 00:38	8°♎08'36	
evening set	-4697 Oct 27 j 21:53	15°♎11'06	
conjunction	-4697 Nov 13 j 10:43	17°♎09'00	1°29'04
minimum elong	-4697 Nov 13 j 10:46	17°♎09'01	1°29'00
max. Earth dist.	-4697 Nov 12 j 19:54	17°♎04'34	10.92505 AU
morning rise	-4697 Nov 30 j 01:54	19°♎07'42	
retrograde	-4696 Mar 12 j 07:55	26°♎25'31	
opposition	-4696 May 22 j 07:14	23°♎04'26	1°33'59
min. Earth dist.	-4696 May 22 j 19:40	23°♎02'07	8.86443 AU
direct	-4696 Jul 30 j 22:46	19°♎45'44	
evening set	-4696 Nov 07 j 13:41	26°♎53'36	
conjunction	-4696 Nov 24 j 05:38	28°♎53'58	1°03'43
minimum elong	-4696 Nov 24 j 05:40	28°♎53'58	1°03'36
max. Earth dist.	-4696 Nov 23 j 16:07	28°♎49'52	10.79997 AU
	-4696 Dec 03 j 07:44	0°♏	
morning rise	-4696 Dec 11 j 00:41	0°♏55'23	
retrograde	-4695 Mar 25 j 06:43	8°♏23'29	
opposition	-4695 Jun 04 j 00:17	5°♏00'48	1°00'43
min. Earth dist.	-4695 Jun 04 j 11:07	4°♏58'45	8.73137 AU
direct	-4695 Aug 11 j 23:46	1°♏41'29	
evening set	-4695 Nov 19 j 14:37	8°♏56'12	
conjunction	-4695 Dec 06 j 10:03	10°♏59'23	0°34'55
minimum elong	-4695 Dec 06 j 10:04	10°♏59'24	0°34'46
max. Earth dist.	-4695 Dec 05 j 21:17	10°♏55'28	10.66129 AU
morning rise	-4695 Dec 23 j 09:34	13°♏03'54	
	-4694 Jan 08 j 22:39	15°♏	
retrograde	-4694 Apr 07 j 13:34	20°♏43'17	
opposition	-4694 Jun 17 j 00:31	17°♏18'54	0°23'38
min. Earth dist.	-4694 Jun 17 j 10:07	17°♏17'04	8.58754 AU
	-4694 Jul 20 j 09:03	15°℞♏	
direct	-4694 Aug 24 j 08:00	13°♏58'41	
	-4694 Sep 27 j 12:49	15°♏	
evening set	-4694 Dec 02 j 02:07	21°♏21'45	
conjunction	-4694 Dec 19 j 01:28	23°♏28'02	0°03'44
minimum elong	-4694 Dec 19 j 01:27	23°♏28'02	0°03'34
behind sun begin	-4694 Dec 18 j 18:25	23°♏25'52	
behind sun end	-4694 Dec 19 j 08:29	23°♏30'12	

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

max. Earth dist.	-4694 Dec 18 j 14:14	23°♏24'33	10.51449 AU
morning rise	-4693 Jan 05 j 05:38	25°♏35'51	
desc. node	-4693 Jan 31 j 09:05	28°♏37'53	
	-4693 Feb 13 j 18:44	0°♐	
retrograde	-4693 Apr 21 j 06:37	3°♐27'15	
opposition	-4693 Jun 30 j 08:46	0°♐01'09	-0°15'54
	-4693 Jun 30 j 14:41	30°℞♏	
min. Earth dist.	-4693 Jun 30 j 16:42	29°♏59'36	8.43880 AU
direct	-4693 Sep 06 j 01:58	26°♏39'49	
	-4693 Nov 07 j 21:59	0°♐	
evening set	-4693 Dec 15 j 01:35	4°♐12'25	
conjunction	-4692 Jan 01 j 05:07	6°♐21'58	-0°28'40
minimum elong	-4692 Jan 01 j 05:06	6°♐21'58	0°28'53
max. Earth dist.	-4693 Dec 31 j 20:45	6°♐19'20	10.36557 AU
morning rise	-4692 Jan 18 j 13:53	8°♐33'13	
retrograde	-4692 May 04 j 10:27	16°♐36'54	
opposition	-4692 Jul 13 j 01:02	13°♐09'09	-0°56'03
min. Earth dist.	-4692 Jul 13 j 06:35	13°♐08'03	8.29159 AU
direct	-4692 Sep 18 j 03:49	9°♐46'32	
evening set	-4692 Dec 27 j 14:33	17°♐29'45	
conjunction	-4691 Jan 13 j 22:23	19°♐42'36	-1°00'27
minimum elong	-4691 Jan 13 j 22:20	19°♐42'35	1°00'39
max. Earth dist.	-4691 Jan 13 j 17:41	19°♐41'06	10.22148 AU
morning rise	-4691 Jan 31 j 11:27	21°♐57'13	
	-4691 May 03 j 10:40	0°♑	
retrograde	-4691 May 18 j 23:57	0°♑12'44	
	-4691 Jun 03 j 14:32	30°℞♐	
opposition	-4691 Jul 27 j 01:01	26°♐43'31	-1°34'31
min. Earth dist.	-4691 Jul 27 j 03:13	26°♐43'05	8.15369 AU
direct	-4691 Oct 01 j 15:02	23°♐19'32	
	-4691 Dec 31 j 22:26	0°♑	
evening set	-4690 Jan 10 j 17:23	1°♑13'52	
conjunction	-4690 Jan 28 j 05:18	3°♑29'51	-1°29'43
minimum elong	-4690 Jan 28 j 05:15	3°♑29'50	1°29'56
max. Earth dist.	-4690 Jan 28 j 04:29	3°♑29'35	10.09090 AU
morning rise	-4690 Feb 14 j 22:18	5°♑47'33	
retrograde	-4690 Jun 02 j 21:23	14°♑13'29	
opposition	-4690 Aug 10 j 08:16	10°♑43'02	-2°08'42
min. Earth dist.	-4690 Aug 10 j 06:52	10°♑43'20	8.03413 AU
direct	-4690 Oct 15 j 12:14	7°♑17'38	
evening set	-4689 Jan 25 j 09:18	15°♑22'39	
conjunction	-4689 Feb 12 j 01:00	17°♑41'24	-1°54'21
minimum elong	-4689 Feb 12 j 00:57	17°♑41'23	1°54'35
max. Earth dist.	-4689 Feb 12 j 04:20	17°♑42'30	9.98296 AU
morning rise	-4689 Mar 01 j 21:26	20°♑01'43	
retrograde	-4689 Jun 18 j 00:26	28°♑35'30	
opposition	-4689 Aug 24 j 21:21	25°♑04'11	-2°35'51
min. Earth dist.	-4689 Aug 24 j 16:36	25°♑05'10	7.94135 AU
direct	-4689 Oct 29 j 17:56	21°♑37'22	
evening set	-4688 Feb 09 j 12:50	29°♑51'46	
	-4688 Feb 10 j 14:08	0°♒	
conjunction	-4688 Feb 27 j 08:01	2°♒12'43	-2°12'20
minimum elong	-4688 Feb 27 j 07:59	2°♒12'42	2°12'32
max. Earth dist.	-4688 Feb 27 j 15:19	2°♒15'08	9.90549 AU
morning rise	-4688 Mar 16 j 07:20	4°♒34'59	
retrograde	-4688 Jul 02 j 06:17	13°♒13'02	
opposition	-4688 Sep 07 j 14:01	9°♒41'17	-2°53'29
min. Earth dist.	-4688 Sep 07 j 06:35	9°♒42'50	7.88203 AU
direct	-4688 Nov 12 j 07:55	6°♒13'07	
evening set	-4687 Feb 24 j 00:52	14°♒34'40	
	-4687 Feb 27 j 06:13	15°♒	

conjunction	-4687 Mar 13 j 23:10	16°♒57'06	-2°21'59
minimum elong	-4687 Mar 13 j 23:09	16°♒57'06	2°22'09
max. Earth dist.	-4687 Mar 14 j 09:59	17°♒00'42	9.86419 AU
morning rise	-4687 Apr 01 j 00:40	19°♒20'31	
retrograde	-4687 Jul 17 j 11:02	27°♒58'39	
opposition	-4687 Sep 22 j 08:03	24°♒26'57	-2°59'52
min. Earth dist.	-4687 Sep 21 j 22:32	24°♒28'57	7.86036 AU
direct	-4687 Nov 27 j 04:15	20°♒57'42	
evening set	-4686 Mar 11 j 17:21	29°♒23'18	
	-4686 Mar 16 j 09:24	0°♓	
conjunction	-4686 Mar 29 j 18:14	1°♓46'24	-2°22'22
minimum elong	-4686 Mar 29 j 18:15	1°♓46'24	2°22'29
max. Earth dist.	-4686 Mar 30 j 08:10	1°♓51'02	9.86200 AU
morning rise	-4686 Apr 16 j 21:06	4°♓10'04	
retrograde	-4686 Aug 01 j 11:16	12°♓43'59	
opposition	-4686 Oct 07 j 00:44	9°♓12'49	-2°54'19
min. Earth dist.	-4686 Oct 06 j 13:21	9°♓15'12	7.87778 AU
direct	-4686 Dec 12 j 04:21	5°♓42'47	
evening set	-4685 Mar 27 j 10:07	14°♓09'00	
conjunction	-4685 Apr 14 j 12:55	16°♓31'53	-2°13'27
minimum elong	-4685 Apr 14 j 12:58	16°♓31'54	2°13'31
max. Earth dist.	-4685 Apr 15 j 05:09	16°♓37'16	9.89897 AU
morning rise	-4685 May 02 j 16:17	18°♓54'53	
retrograde	-4685 Aug 16 j 03:47	27°♓20'44	
opposition	-4685 Oct 21 j 13:31	23°♓50'32	-2°37'27
min. Earth dist.	-4685 Oct 21 j 00:47	23°♓53'12	7.93282 AU
direct	-4685 Dec 27 j 04:34	20°♓20'05	
evening set	-4684 Apr 10 j 23:03	28°♓43'31	
	-4684 Apr 20 j 19:15	0°♈	
conjunction	-4684 Apr 29 j 02:50	1°♈05'20	-1°56'05
minimum elong	-4684 Apr 29 j 02:54	1°♈05'21	1°56'05
max. Earth dist.	-4684 Apr 29 j 20:15	1°♈11'02	9.97205 AU
morning rise	-4684 May 17 j 05:39	3°♈26'45	
retrograde	-4684 Aug 29 j 11:04	11°♈41'37	
opposition	-4684 Nov 03 j 20:32	8°♈12'46	-2°10'56
min. Earth dist.	-4684 Nov 03 j 07:03	8°♈15'34	8.02122 AU
direct	-4683 Jan 10 j 01:11	4°♈42'18	
evening set	-4683 Apr 26 j 04:36	12°♈59'59	
conjunction	-4683 May 14 j 08:06	15°♈19'55	-1°31'53
minimum elong	-4683 May 14 j 08:10	15°♈19'56	1°31'50
max. Earth dist.	-4683 May 15 j 01:43	15°♈25'37	10.07572 AU
morning rise	-4683 Jun 01 j 09:09	17°♈39'01	
retrograde	-4683 Sep 12 j 09:02	25°♈41'08	
opposition	-4683 Nov 17 j 20:15	22°♈13'53	-1°37'11
min. Earth dist.	-4683 Nov 17 j 06:53	22°♈16'38	8.13680 AU
direct	-4682 Jan 24 j 16:11	18°♈43'48	
evening set	-4682 May 11 j 00:09	26°♈53'33	
conjunction	-4682 May 29 j 02:01	29°♈10'55	-1°02'52
minimum elong	-4682 May 29 j 02:04	29°♈10'56	1°02'46
max. Earth dist.	-4682 May 29 j 18:49	29°♈16'16	10.20294 AU
	-4682 Jun 04 j 12:03	0°♉	
morning rise	-4682 Jun 16 j 00:13	1°♉27'06	
retrograde	-4682 Sep 25 j 20:30	9°♉15'49	
opposition	-4682 Dec 01 j 11:50	5°♉50'23	-0°58'56
min. Earth dist.	-4682 Nov 30 j 23:53	5°♉52'49	8.27222 AU
direct	-4681 Feb 07 j 23:56	2°♉21'00	
evening set	-4681 May 25 j 08:03	10°♉21'26	
conjunction	-4681 Jun 12 j 07:01	12°♉35'46	-0°31'10
minimum elong	-4681 Jun 12 j 07:03	12°♉35'46	0°31'01
max. Earth dist.	-4681 Jun 12 j 21:30	12°♉40'18	10.34577 AU
morning rise	-4681 Jun 30 j 01:26	14°♉48'40	

Attention, astronomical year style is used: The year -4681 in astronomical counting style is the year 4682 BCE in historical counting style.

	-4681 Jul 01 j 14:26	15°♉		
retrograde	-4681 Oct 08 j 20:16	22°♉24'17		
opposition	-4681 Dec 14 j 19:07	19°♉00'47	-0°18'49	
min. Earth dist.	-4681 Dec 14 j 09:20	19°♉02'44	8.41945 AU	
direct	-4680 Feb 22 j 00:27	15°♉32'23		
evening set	-4680 Jun 07 j 03:50	23°♉22'54		
asc. node	-4680 Jun 09 j 23:39	23°♉43'28		
conjunction	-4680 Jun 24 j 22:39	25°♉33'53	0°01'19	
minimum elong	-4680 Jun 24 j 22:41	25°♉33'53	0°01'30	
behind sun begin	-4680 Jun 24 j 15:27	25°♉31'41		
behind sun end	-4680 Jun 25 j 05:55	25°♉36'06		
max. Earth dist.	-4680 Jun 25 j 09:44	25°♉37'17	10.49609 AU	
morning rise	-4680 Jul 12 j 12:33	27°♉43'20		
	-4680 Aug 01 j 01:37	0°♊		
retrograde	-4680 Oct 20 j 09:47	5°♊06'55		
opposition	-4680 Dec 26 j 18:15	1°♊45'17	0°20'49	
min. Earth dist.	-4680 Dec 26 j 10:47	1°♊46'45	8.57063 AU	
	-4679 Jan 19 j 05:05	30°℞♉		
direct	-4679 Mar 06 j 15:48	28°♉18'07		
	-4679 Apr 21 j 13:07	0°♊		
evening set	-4679 Jun 20 j 11:17	5°♊58'43		
conjunction	-4679 Jul 08 j 01:19	8°♊06'19	0°32'42	
minimum elong	-4679 Jul 08 j 01:18	8°♊06'18	0°32'54	
max. Earth dist.	-4679 Jul 08 j 08:43	8°♊08'34	10.64631 AU	
morning rise	-4679 Jul 25 j 10:12	10°♊12'18		
retrograde	-4679 Nov 01 j 15:19	17°♊25'21		
opposition	-4678 Jan 08 j 09:57	14°♊05'26	0°58'07	
min. Earth dist.	-4678 Jan 08 j 04:17	14°♊06'32	8.71842 AU	
direct	-4678 Mar 19 j 21:32	10°♊39'40		
evening set	-4678 Jul 03 j 06:52	18°♊10'47		
conjunction	-4678 Jul 20 j 15:48	20°♊15'06	1°01'45	
minimum elong	-4678 Jul 20 j 15:46	20°♊15'05	1°01'59	
max. Earth dist.	-4678 Jul 20 j 20:21	20°♊16'28	10.78948 AU	
morning rise	-4678 Aug 06 j 19:28	22°♊17'50		
retrograde	-4678 Nov 13 j 13:27	29°♊22'05		
opposition	-4677 Jan 20 j 19:01	26°♊03'42	1°31'40	
min. Earth dist.	-4677 Jan 20 j 15:37	26°♊04'21	8.85613 AU	
direct	-4677 Apr 01 j 18:43	22°♊39'21		
evening set	-4677 Jul 15 j 16:00	0°♋01'49		
	-4677 Jul 15 j 09:43	0°♋		
conjunction	-4677 Aug 01 j 19:43	2°♋03'06	1°27'24	
minimum elong	-4677 Aug 01 j 19:40	2°♋03'05	1°27'39	
max. Earth dist.	-4677 Aug 01 j 21:37	2°♋03'39	10.91940 AU	
morning rise	-4677 Aug 18 j 18:11	4°♋02'53		
retrograde	-4677 Nov 25 j 07:33	11°♋00'08		
opposition	-4676 Feb 01 j 22:37	7°♋43'02	2°00'27	
min. Earth dist.	-4676 Feb 01 j 22:19	7°♋43'06	8.97814 AU	
direct	-4676 Apr 13 j 06:59	4°♋20'05		
evening set	-4676 Jul 26 j 15:49	11°♋34'54		
conjunction	-4676 Aug 12 j 14:24	13°♋33'31	1°48'55	
minimum elong	-4676 Aug 12 j 14:21	13°♋33'30	1°49'10	
max. Earth dist.	-4676 Aug 12 j 12:49	13°♋33'03	11.03111 AU	
morning rise	-4676 Aug 29 j 08:13	15°♋30'48		
retrograde	-4676 Dec 05 j 18:51	22°♋22'52		
opposition	-4675 Feb 12 j 22:02	19°♋06'45	2°23'45	
min. Earth dist.	-4675 Feb 13 j 01:06	19°♋06'10	9.07991 AU	
direct	-4675 Apr 25 j 12:10	15°♋45'05		
evening set	-4675 Aug 07 j 07:25	22°♋53'22		
conjunction	-4675 Aug 24 j 01:21	24°♋49'46	2°05'46	
minimum elong	-4675 Aug 24 j 01:18	24°♋49'46	2°06'00	
max. Earth dist.	-4675 Aug 23 j 19:50	24°♋48'10	11.12065 AU	

morning rise	-4675 Sep 09 j 15:20	26°♋45'03		
	-4675 Oct 10 j 04:32	0°♌		
retrograde	-4675 Dec 17 j 04:07	3°♌33'49		
opposition	-4674 Feb 24 j 18:07	0°♌18'17	2°41'08	
min. Earth dist.	-4674 Feb 24 j 23:33	0°♌17'17	9.15771 AU	
	-4674 Feb 28 j 21:31	30°℞♋		
direct	-4674 May 07 j 13:33	26°♋57'45		
	-4674 Jul 10 j 16:44	0°♌		
evening set	-4674 Aug 18 j 16:36	4°♌00'46		
conjunction	-4674 Sep 04 j 06:47	5°♌55'30	2°17'38	
minimum elong	-4674 Sep 04 j 06:45	5°♌55'29	2°17'49	
max. Earth dist.	-4674 Sep 03 j 22:45	5°♌53'10	11.18479 AU	
morning rise	-4674 Sep 20 j 17:38	7°♌49'18		
retrograde	-4674 Dec 28 j 13:04	14°♌36'29		
opposition	-4673 Mar 08 j 11:59	11°♌21'13	2°52'20	
min. Earth dist.	-4673 Mar 08 j 19:23	11°♌19'51	9.20854 AU	
direct	-4673 May 19 j 08:18	8°♌01'39		
evening set	-4673 Aug 29 j 20:53	15°♌00'40		
	-4673 Aug 29 j 18:33	15°♌		
conjunction	-4673 Sep 15 j 08:13	16°♌54'17	2°24'17	
minimum elong	-4673 Sep 15 j 08:13	16°♌54'17	2°24'27	
max. Earth dist.	-4673 Sep 14 j 22:12	16°♌51'23	11.22095 AU	
morning rise	-4673 Oct 01 j 16:47	18°♌47'13		
retrograde	-4672 Jan 08 j 22:07	25°♌34'35		
opposition	-4672 Mar 19 j 05:20	22°♌19'14	2°57'12	
min. Earth dist.	-4672 Mar 19 j 15:11	22°♌17'26	9.23022 AU	
direct	-4672 May 29 j 23:41	19°♌00'25		
evening set	-4672 Sep 08 j 21:56	25°♌56'50		
conjunction	-4672 Sep 25 j 07:15	27°♌49'57	2°25'39	
minimum elong	-4672 Sep 25 j 07:15	27°♌49'57	2°25'46	
max. Earth dist.	-4672 Sep 24 j 18:16	27°♌46'12	11.22746 AU	
morning rise	-4672 Oct 11 j 14:46	29°♌42'37		
	-4672 Oct 14 j 04:16	0°♍		
retrograde	-4671 Jan 19 j 09:12	6°♍31'59		
opposition	-4671 Mar 30 j 23:20	3°♍16'13	2°55'39	
min. Earth dist.	-4671 Mar 31 j 11:54	3°♍13'56	9.22168 AU	
	-4671 Jun 03 j 21:37	30°℞♌		
direct	-4671 Jun 10 j 12:44	29°♌57'55		
	-4671 Jun 17 j 03:15	0°♍		
evening set	-4671 Sep 19 j 21:42	6°♍53'14		
conjunction	-4671 Oct 06 j 06:03	8°♍46'27	2°21'41	
minimum elong	-4671 Oct 06 j 06:04	8°♍46'28	2°21'47	
max. Earth dist.	-4671 Oct 05 j 14:33	8°♍41'57	11.20406 AU	
morning rise	-4671 Oct 22 j 13:41	10°♍39'31		
retrograde	-4670 Jan 30 j 21:55	17°♍32'35		
opposition	-4670 Apr 11 j 18:50	14°♍16'04	2°47'44	
min. Earth dist.	-4670 Apr 12 j 08:56	14°♍13'30	9.18339 AU	
direct	-4670 Jun 22 j 01:22	10°♍58'01		
evening set	-4670 Sep 30 j 21:48	17°♍53'44		
conjunction	-4670 Oct 17 j 06:24	19°♍47'40	2°12'28	
minimum elong	-4670 Oct 17 j 06:27	19°♍47'40	2°12'32	
max. Earth dist.	-4670 Oct 16 j 14:17	19°♍42'57	11.15187 AU	
morning rise	-4670 Nov 02 j 15:03	21°♍41'41		
retrograde	-4669 Feb 11 j 18:15	28°♍40'08		
opposition	-4669 Apr 23 j 17:26	25°♍22'32	2°33'32	
min. Earth dist.	-4669 Apr 24 j 07:38	25°♍19'56	9.11703 AU	
direct	-4669 Jul 03 j 15:56	22°♍04'31		
evening set	-4669 Oct 12 j 00:09	29°♍02'00		
	-4669 Oct 20 j 07:28	0°♎		
conjunction	-4669 Oct 28 j 09:54	0°♎57'13	1°58'09	
minimum elong	-4669 Oct 28 j 09:57	0°♎57'14	1°58'10	

Attention, astronomical year style is used: The year -4669 in astronomical counting style is the year 4670 BCE in historical counting style.

max. Earth dist.	-4669 Oct 27 j 17:38	0°♎52'25	11.07295 AU
morning rise	-4669 Nov 13 j 20:31	2°♎52'48	
retrograde	-4668 Feb 23 j 19:48	9°♎58'11	
opposition	-4668 May 04 j 20:17	6°♎39'13	2°13'15
min. Earth dist.	-4668 May 05 j 10:34	6°♎36'35	9.02518 AU
direct	-4668 Jul 14 j 06:09	3°♎20'58	
evening set	-4668 Oct 22 j 06:47	10°♎21'44	
conjunction	-4668 Nov 07 j 18:26	12°♎18'44	1°39'00
minimum elong	-4668 Nov 07 j 18:29	12°♎18'45	1°38'58
max. Earth dist.	-4668 Nov 07 j 01:31	12°♎13'42	10.97031 AU
morning rise	-4668 Nov 24 j 08:06	14°♎16'25	
retrograde	-4667 Mar 07 j 04:24	21°♎30'14	
opposition	-4667 May 17 j 04:17	18°♎09'41	1°47'14
min. Earth dist.	-4667 May 17 j 18:42	18°♎07'00	8.91136 AU
direct	-4667 Jul 26 j 01:16	14°♎50'54	
evening set	-4667 Nov 02 j 19:25	21°♎56'29	
conjunction	-4667 Nov 19 j 09:49	23°♎55'48	1°15'26
minimum elong	-4667 Nov 19 j 09:52	23°♎55'49	1°15'20
max. Earth dist.	-4667 Nov 18 j 17:12	23°♎50'47	10.84768 AU
morning rise	-4667 Dec 06 j 03:16	25°♎56'04	
	-4666 Jan 12 j 20:19	0°♏	
retrograde	-4666 Mar 19 j 21:14	3°♏19'42	
opposition	-4666 May 29 j 18:26	29°♎57'24	1°16'02
	-4666 May 29 j 04:38	30°℞♎	
min. Earth dist.	-4666 May 30 j 08:10	29°♎54'49	8.77972 AU
direct	-4666 Aug 07 j 01:15	26°♎37'54	
	-4666 Oct 10 j 18:41	0°♏	
evening set	-4666 Nov 14 j 16:01	3°♏49'50	
conjunction	-4666 Dec 01 j 09:53	5°♏51'51	0°48'03
minimum elong	-4666 Dec 01 j 09:55	5°♏51'52	0°47'55
max. Earth dist.	-4666 Nov 30 j 19:27	5°♏47'26	10.70951 AU
morning rise	-4666 Dec 18 j 07:27	7°♏55'06	
	-4665 Mar 08 j 11:09	15°♏	
retrograde	-4665 Apr 01 j 23:38	15°♏29'49	
	-4665 Apr 26 j 19:09	15°℞♏	
opposition	-4665 Jun 11 j 15:34	12°♏05'39	0°40'29
min. Earth dist.	-4665 Jun 12 j 03:04	12°♏03'27	8.63541 AU
direct	-4665 Aug 19 j 07:54	8°♏45'14	
	-4665 Nov 17 j 21:20	15°♏	
evening set	-4665 Nov 26 j 22:36	16°♏05'00	
conjunction	-4665 Dec 13 j 20:22	18°♏10'06	0°17'46
minimum elong	-4665 Dec 13 j 20:23	18°♏10'06	0°17'36
max. Earth dist.	-4665 Dec 13 j 08:27	18°♏06'24	10.56141 AU
morning rise	-4665 Dec 30 j 22:23	20°♏16'36	
retrograde	-4664 Apr 14 j 13:58	28°♏03'18	
opposition	-4664 Jun 23 j 20:29	24°♏37'18	0°01'48
min. Earth dist.	-4664 Jun 24 j 05:10	24°♏35'37	8.48458 AU
desc. node	-4664 Jul 10 j 22:27	23°♏19'49	
direct	-4664 Aug 30 j 21:22	21°♏15'49	
evening set	-4664 Dec 08 j 16:51	28°♏44'46	
	-4664 Dec 18 j 18:05	0°♐	
conjunction	-4664 Dec 25 j 18:41	0°♐53'07	-0°14'21
minimum elong	-4664 Dec 25 j 18:40	0°♐53'07	0°14'33
behind sun begin	-4664 Dec 25 j 15:30	0°♐52'08	
behind sun end	-4664 Dec 25 j 21:50	0°♐54'06	
max. Earth dist.	-4664 Dec 25 j 09:11	0°♐50'08	10.40991 AU
morning rise	-4663 Jan 12 j 01:25	3°♐03'05	
retrograde	-4663 Apr 28 j 14:31	11°♐02'11	
opposition	-4663 Jul 07 j 09:33	7°♐34'26	-0°38'24
min. Earth dist.	-4663 Jul 07 j 15:27	7°♐33'16	8.33417 AU
direct	-4663 Sep 12 j 18:02	4°♐11'44	
evening set	-4663 Dec 22 j 00:11	11°♐51'00	

conjunction	-4662 Jan 08 j 06:06	14°♐02'39	-0°46'37
minimum elong	-4662 Jan 08 j 06:04	14°♐02'39	0°46'50
max. Earth dist.	-4662 Jan 07 j 23:13	14°♐00'27	10.26229 AU
morning rise	-4662 Jan 25 j 17:25	16°♐16'04	
retrograde	-4662 May 12 j 23:45	24°♐27'19	
opposition	-4662 Jul 21 j 06:36	20°♐58'02	-1°17'59
min. Earth dist.	-4662 Jul 21 j 09:53	20°♐57'22	8.19192 AU
direct	-4662 Sep 26 j 01:39	17°♐34'00	
evening set	-4661 Jan 04 j 21:09	25°♐24'14	
conjunction	-4661 Jan 22 j 07:10	27°♐39'06	-1°17'17
minimum elong	-4661 Jan 22 j 07:07	27°♐39'05	1°17'30
max. Earth dist.	-4661 Jan 22 j 04:10	27°♐38'07	10.12660 AU
morning rise	-4661 Feb 08 j 22:41	29°♐55'44	
	-4661 Feb 09 j 12:08	0°♑	
retrograde	-4661 May 27 j 17:33	8°♑18'05	
opposition	-4661 Aug 04 j 11:19	4°♑47'31	-1°54'27
min. Earth dist.	-4661 Aug 04 j 11:32	4°♑47'29	8.06599 AU
direct	-4661 Oct 09 j 19:35	1°♑22'09	
evening set	-4660 Jan 19 j 07:34	9°♑23'15	
conjunction	-4660 Feb 05 j 21:37	11°♑41'03	-1°44'15
minimum elong	-4660 Feb 05 j 21:34	11°♑41'02	1°44'28
max. Earth dist.	-4660 Feb 05 j 23:21	11°♑41'37	10.01102 AU
morning rise	-4660 Feb 23 j 16:49	14°♑00'30	
retrograde	-4660 Jun 10 j 18:14	22°♑31'52	
opposition	-4660 Aug 17 j 22:23	19°♑00'24	-2°25'02
min. Earth dist.	-4660 Aug 17 j 19:03	19°♑01'05	7.96423 AU
direct	-4660 Oct 22 j 22:07	15°♑33'44	
evening set	-4659 Feb 02 j 06:34	23°♑44'49	
conjunction	-4659 Feb 20 j 00:21	26°♑05'03	-2°05'23
minimum elong	-4659 Feb 20 j 00:19	26°♑05'02	2°05'36
max. Earth dist.	-4659 Feb 20 j 06:58	26°♑07'15	9.92320 AU
morning rise	-4659 Mar 09 j 22:34	28°♑26'44	
	-4659 Mar 22 j 03:10	0°♒	
retrograde	-4659 Jun 25 j 23:39	7°♒03'57	
opposition	-4659 Sep 01 j 13:56	3°♒32'01	-2°47'06
min. Earth dist.	-4659 Sep 01 j 07:01	3°♒33'28	7.89354 AU
direct	-4659 Nov 06 j 08:59	0°♒04'11	
evening set	-4658 Feb 17 j 15:29	8°♒23'25	
conjunction	-4658 Mar 07 j 12:37	10°♒45'26	-2°18'50
minimum elong	-4658 Mar 07 j 12:36	10°♒45'26	2°19'01
max. Earth dist.	-4658 Mar 07 j 23:58	10°♒49'13	9.86954 AU
morning rise	-4658 Mar 25 j 13:11	13°♒08'35	
	-4658 Apr 09 j 02:36	15°♒	
retrograde	-4658 Jul 11 j 05:57	21°♒47'44	
opposition	-4658 Sep 16 j 08:01	18°♒15'49	-2°58'30
min. Earth dist.	-4658 Sep 15 j 21:45	18°♒17'58	7.85916 AU
	-4658 Nov 06 j 03:12	15°℞♒	
direct	-4658 Nov 21 j 02:47	14°♒47'01	
	-4658 Dec 06 j 01:33	15°♒	
evening set	-4657 Mar 05 j 06:41	23°♒11'37	
conjunction	-4657 Mar 23 j 06:42	25°♒34'38	-2°23'18
minimum elong	-4657 Mar 23 j 06:42	25°♒34'39	2°23'27
max. Earth dist.	-4657 Mar 23 j 22:01	25°♒39'45	9.85431 AU
morning rise	-4657 Apr 10 j 08:57	27°♒58'24	
	-4657 Apr 26 j 07:17	0°♓	
retrograde	-4657 Jul 26 j 09:30	6°♓35'09	
opposition	-4657 Oct 01 j 01:59	3°♓03'45	-2°58'06
min. Earth dist.	-4657 Sep 30 j 13:23	3°♓06'24	7.86381 AU
	-4657 Nov 14 j 19:39	30°℞♒	
direct	-4657 Dec 06 j 01:05	29°♒34'15	
	-4657 Dec 27 j 05:57	0°♓	
evening set	-4656 Mar 20 j 00:26	8°♓00'54	

Attention, astronomical year style is used: The year -4656 in astronomical counting style is the year 4657 BCE in historical counting style.

conjunction	-4656 Apr 07 j 02:38	10°♓24'03	-2°18'20
minimum elong	-4656 Apr 07 j 02:41	10°♓24'04	2°18'25
max. Earth dist.	-4656 Apr 07 j 20:30	10°♓29'59	9.87880 AU
morning rise	-4656 Apr 25 j 05:47	12°♓47'29	
retrograde	-4656 Aug 09 j 06:58	21°♓17'38	
opposition	-4656 Oct 14 j 17:07	17°♓47'13	-2°45'56
min. Earth dist.	-4656 Oct 14 j 03:24	17°♓50'06	7.90726 AU
direct	-4656 Dec 20 j 01:02	14°♓17'19	
evening set	-4655 Apr 04 j 16:08	22°♓42'31	
conjunction	-4655 Apr 22 j 19:36	25°♓04'54	-2°04'27
minimum elong	-4655 Apr 22 j 19:40	25°♓04'55	2°04'28
max. Earth dist.	-4655 Apr 23 j 14:36	25°♓11'09	9.94121 AU
morning rise	-4655 May 10 j 22:41	27°♓27'05	
	-4655 May 31 j 10:43	0°♈	
retrograde	-4655 Aug 23 j 19:31	5°♈47'11	
opposition	-4655 Oct 29 j 03:23	2°♈18'09	-2°23'16
min. Earth dist.	-4655 Oct 28 j 13:25	2°♈21'03	7.98630 AU
	-4655 Nov 28 j 10:09	30°℞♓	
direct	-4654 Jan 03 j 23:33	28°♓48'10	
	-4654 Feb 09 j 10:00	0°♈	
evening set	-4654 Apr 20 j 01:35	7°♈08'37	
conjunction	-4654 May 08 j 05:12	9°♈29'23	-1°42'57
minimum elong	-4654 May 08 j 05:16	9°♈29'24	1°42'54
max. Earth dist.	-4654 May 08 j 23:58	9°♈35'29	10.03675 AU
morning rise	-4654 May 26 j 07:08	11°♈49'30	
retrograde	-4654 Sep 06 j 21:53	19°♈57'14	
opposition	-4654 Nov 12 j 06:44	16°♈29'49	-1°52'17
min. Earth dist.	-4654 Nov 11 j 17:17	16°♈32'35	8.09503 AU
direct	-4653 Jan 18 j 18:23	13°♈00'06	
evening set	-4653 May 05 j 01:59	21°♈13'14	
conjunction	-4653 May 23 j 04:32	23°♈31'39	-1°15'44
minimum elong	-4653 May 23 j 04:35	23°♈31'41	1°15'39
max. Earth dist.	-4653 May 23 j 21:34	23°♈37'07	10.15818 AU
morning rise	-4653 Jun 10 j 04:13	25°♈49'04	
	-4653 Jul 16 j 07:39	0°♉	
retrograde	-4653 Sep 20 j 12:47	3°♉43'17	
opposition	-4653 Nov 26 j 01:50	0°♉17'38	-1°15'39
min. Earth dist.	-4653 Nov 25 j 13:26	0°♉20'10	8.22539 AU
	-4653 Nov 29 j 16:39	30°℞♈	
direct	-4652 Feb 02 j 06:54	26°♈48'29	
	-4652 Apr 04 j 20:35	0°♉	
evening set	-4652 May 18 j 15:15	4°♉52'41	
conjunction	-4652 Jun 05 j 15:29	7°♉08'14	-0°44'56
minimum elong	-4652 Jun 05 j 15:31	7°♉08'14	0°44'48
max. Earth dist.	-4652 Jun 06 j 05:57	7°♉12'48	10.29654 AU
morning rise	-4652 Jun 23 j 11:46	9°♉22'28	
	-4652 Aug 15 j 08:53	15°♉	
retrograde	-4652 Oct 02 j 16:45	17°♉03'20	
	-4652 Nov 21 j 08:34	15°℞♉	
opposition	-4652 Dec 08 j 12:40	13°♉39'32	-0°36'04
min. Earth dist.	-4652 Dec 08 j 01:45	13°♉41'44	8.36832 AU
direct	-4651 Feb 15 j 11:19	10°♉11'15	
	-4651 May 05 j 20:49	15°♉	
evening set	-4651 Jun 01 j 16:17	18°♉05'46	
conjunction	-4651 Jun 19 j 13:02	20°♉18'06	-0°12'37
minimum elong	-4651 Jun 19 j 13:03	20°♉18'06	0°12'28
behind sun begin	-4651 Jun 19 j 08:25	20°♉16'40	
behind sun end	-4651 Jun 19 j 17:41	20°♉19'31	
max. Earth dist.	-4651 Jun 20 j 00:58	20°♉21'47	10.44300 AU
morning rise	-4651 Jul 07 j 04:57	22°♉28'56	
retrograde	-4651 Oct 15 j 11:44	29°♉57'26	
asc. node	-4651 Nov 13 j 12:45	29°♉12'53	
opposition	-4651 Dec 21 j 15:20	26°♉35'28	0°04'01
min. Earth dist.	-4651 Dec 21 j 06:38	26°♉37'11	8.51595 AU
direct	-4650 Mar 01 j 05:44	23°♉08'15	
	-4650 Jun 07 j 18:33	0°♊	
evening set	-4650 Jun 15 j 05:11	0°♊52'56	
conjunction	-4650 Jul 02 j 21:32	3°♊01'57	0°19'28
minimum elong	-4650 Jul 02 j 21:31	3°♊01'57	0°19'39
max. Earth dist.	-4650 Jul 03 j 06:31	3°♊04'41	10.59050 AU
morning rise	-4650 Jul 20 j 08:31	5°♊09'21	
retrograde	-4650 Oct 27 j 21:57	12°♊26'46	
opposition	-4649 Jan 03 j 10:17	9°♊06'30	0°42'32
min. Earth dist.	-4649 Jan 03 j 04:39	9°♊07'36	8.66178 AU
direct	-4649 Mar 14 j 14:32	5°♊40'27	
evening set	-4649 Jun 28 j 06:19	13°♊15'38	
conjunction	-4649 Jul 15 j 17:35	15°♊21'21	0°49'41
minimum elong	-4649 Jul 15 j 17:33	15°♊21'20	0°49'54
max. Earth dist.	-4649 Jul 15 j 22:45	15°♊22'54	10.73277 AU
morning rise	-4649 Aug 01 j 23:25	17°♊25'27	
retrograde	-4649 Nov 08 j 22:31	24°♊33'23	
opposition	-4648 Jan 15 j 22:28	21°♊14'36	1°17'52
min. Earth dist.	-4648 Jan 15 j 20:01	21°♊15'04	8.79967 AU
direct	-4648 Mar 26 j 16:10	17°♊49'45	
evening set	-4648 Jul 09 j 20:19	25°♊16'03	
conjunction	-4648 Jul 27 j 02:11	27°♊18'38	1°16'55
minimum elong	-4648 Jul 27 j 02:08	27°♊18'37	1°17'09
max. Earth dist.	-4648 Jul 27 j 03:05	27°♊18'54	10.86397 AU
morning rise	-4648 Aug 13 j 02:57	29°♊19'42	
	-4648 Aug 18 j 22:17	0°♋	
retrograde	-4648 Nov 19 j 17:24	6°♋19'57	
opposition	-4647 Jan 27 j 04:39	3°♋02'21	1°48'49
min. Earth dist.	-4647 Jan 27 j 04:36	3°♋02'22	8.92397 AU
	-4647 Mar 18 j 06:43	30°℞♊	
direct	-4647 Apr 08 j 09:59	29°♊38'42	
	-4647 Apr 29 j 10:07	0°♋	
evening set	-4647 Jul 22 j 00:12	6°♋56'58	
conjunction	-4647 Aug 08 j 00:56	8°♋56'46	1°40'18
minimum elong	-4647 Aug 08 j 00:53	8°♋56'45	1°40'33
max. Earth dist.	-4647 Aug 07 j 22:48	8°♋56'08	10.97906 AU
morning rise	-4647 Aug 24 j 20:53	10°♋55'09	
retrograde	-4647 Dec 01 j 07:26	17°♋49'32	
opposition	-4646 Feb 08 j 05:50	14°♋32'48	2°14'34
min. Earth dist.	-4646 Feb 08 j 07:52	14°♋32'26	9.02999 AU
direct	-4646 Apr 20 j 19:00	11°♋10'19	
evening set	-4646 Aug 02 j 19:15	18°♋21'37	
conjunction	-4646 Aug 19 j 15:21	20°♋19'02	1°59'13
minimum elong	-4646 Aug 19 j 15:19	20°♋19'02	1°59'28
max. Earth dist.	-4646 Aug 19 j 10:59	20°♋17'46	11.07377 AU
morning rise	-4646 Sep 05 j 06:57	22°♋15'14	
retrograde	-4646 Dec 12 j 18:53	29°♋05'33	
opposition	-4645 Feb 20 j 03:19	25°♋49'25	2°34'35
min. Earth dist.	-4645 Feb 20 j 08:06	25°♋48'32	9.11382 AU
direct	-4645 May 02 j 21:43	22°♋27'59	
evening set	-4645 Aug 14 j 07:15	29°♋33'31	
	-4645 Aug 18 j 03:49	0°♌	
conjunction	-4645 Aug 30 j 23:08	1°♌29'04	2°13'16
minimum elong	-4645 Aug 30 j 23:06	1°♌29'03	2°13'29
max. Earth dist.	-4645 Aug 30 j 15:47	1°♌26'56	11.14485 AU
morning rise	-4645 Sep 16 j 11:11	3°♌23'34	
retrograde	-4645 Dec 24 j 03:25	10°♌11'37	
opposition	-4644 Mar 02 j 22:18	6°♌55'48	2°48'29
min. Earth dist.	-4644 Mar 03 j 06:08	6°♌54'21	9.17279 AU

Attention, astronomical year style is used: The year -4644 in astronomical counting style is the year 4645 BCE in historical counting style.

direct	-4644 May 13 j 17:51	3°♌35'16	
evening set	-4644 Aug 24 j 13:39	10°♌36'21	
conjunction	-4644 Sep 10 j 02:05	12°♌30'33	2°22'11
minimum elong	-4644 Sep 10 j 02:04	12°♌30'33	2°22'21
max. Earth dist.	-4644 Sep 09 j 15:32	12°♌27'29	11.19026 AU
morning rise	-4644 Sep 26 j 11:41	14°♌23'58	
	-4644 Oct 01 j 19:36	15°♌	
retrograde	-4643 Jan 03 j 10:57	21°♌11'32	
opposition	-4643 Mar 14 j 15:59	17°♌55'41	2°56'05
min. Earth dist.	-4643 Mar 15 j 01:51	17°♌53'53	9.20511 AU
	-4643 May 02 j 17:23	15°℞♌	
direct	-4643 May 25 j 11:57	14°♌35'56	
	-4643 Jun 17 j 00:47	15°♌	
evening set	-4643 Sep 04 j 15:53	21°♌33'54	
conjunction	-4643 Sep 21 j 02:00	23°♌27'20	2°25'49
minimum elong	-4643 Sep 21 j 02:00	23°♌27'20	2°25'57
max. Earth dist.	-4643 Sep 20 j 13:45	23°♌23'47	11.20862 AU
morning rise	-4643 Oct 07 j 10:03	25°♌20'14	
	-4643 Nov 23 j 11:00	0°♍	
retrograde	-4642 Jan 14 j 21:41	2°♍09'03	
	-4642 Mar 10 j 18:18	30°℞♌	
opposition	-4642 Mar 26 j 09:30	28°♌52'54	2°57'16
min. Earth dist.	-4642 Mar 26 j 20:16	28°♌50'56	9.20967 AU
direct	-4642 Jun 06 j 02:46	25°♌33'49	
	-4642 Aug 23 j 13:57	0°♍	
evening set	-4642 Sep 15 j 16:03	2°♍29'59	
max. Earth dist.	-4642 Oct 01 j 11:47	4°♍19'27	11.19922 AU
conjunction	-4642 Oct 02 j 00:55	4°♍23'16	2°24'07
minimum elong	-4642 Oct 02 j 00:57	4°♍23'17	2°24'13
morning rise	-4642 Oct 18 j 08:21	6°♍16'15	
retrograde	-4641 Jan 26 j 10:13	13°♍07'59	
opposition	-4641 Apr 07 j 04:11	9°♍51'17	2°52'03
min. Earth dist.	-4641 Apr 07 j 16:17	9°♍49'05	9.18626 AU
direct	-4641 Jun 17 j 14:13	6°♍32'40	
evening set	-4641 Sep 26 j 15:55	13°♍28'31	
max. Earth dist.	-4641 Oct 12 j 09:31	15°♍17'53	11.16237 AU
conjunction	-4641 Oct 13 j 00:22	15°♍22'13	2°17'06
minimum elong	-4641 Oct 13 j 00:24	15°♍22'13	2°17'11
morning rise	-4641 Oct 29 j 08:26	17°♍15'53	
retrograde	-4640 Feb 07 j 03:33	24°♍12'11	
opposition	-4640 Apr 18 j 01:35	20°♍54'41	2°40'27
min. Earth dist.	-4640 Apr 18 j 15:07	20°♍52'12	9.13568 AU
direct	-4640 Jun 28 j 03:14	17°♍36'20	
evening set	-4640 Oct 06 j 17:06	24°♍33'14	
max. Earth dist.	-4640 Oct 22 j 10:05	26°♍23'13	11.09926 AU
conjunction	-4640 Oct 23 j 02:10	26°♍27'56	2°04'54
minimum elong	-4640 Oct 23 j 02:12	26°♍27'57	2°04'56
morning rise	-4640 Nov 08 j 12:00	28°♍22'54	
	-4640 Nov 22 j 22:14	0°♎	
retrograde	-4639 Feb 18 j 00:57	5°♎25'23	
opposition	-4639 Apr 30 j 02:36	2°♎06'48	2°22'40
min. Earth dist.	-4639 Apr 30 j 16:41	2°♎04'13	9.05951 AU
	-4639 May 31 j 06:47	30°℞♍	
direct	-4639 Jul 09 j 17:26	28°♍48'30	
	-4639 Aug 17 j 03:05	0°♎	
evening set	-4639 Oct 17 j 21:43	5°♎47'59	
conjunction	-4639 Nov 03 j 08:30	7°♎44'13	1°47'43
minimum elong	-4639 Nov 03 j 08:33	7°♎44'14	1°47'42
max. Earth dist.	-4639 Nov 02 j 17:03	7°♎39'38	11.01177 AU
morning rise	-4639 Nov 19 j 20:50	9°♎41'00	
retrograde	-4638 Mar 02 j 07:14	16°♎51'13	
opposition	-4638 May 12 j 08:07	13°♎31'20	1°58'58
min. Earth dist.	-4638 May 12 j 21:22	13°♎28'52	8.96021 AU
direct	-4638 Jul 21 j 11:52	10°♎12'51	
evening set	-4638 Oct 29 j 07:39	17°♎16'23	
conjunction	-4638 Nov 14 j 20:56	19°♎14'42	1°25'55
minimum elong	-4638 Nov 14 j 20:59	19°♎14'43	1°25'51
max. Earth dist.	-4638 Nov 14 j 06:26	19°♎10'21	10.90277 AU
morning rise	-4638 Dec 01 j 12:31	21°♎13'49	
retrograde	-4637 Mar 14 j 22:12	28°♎33'09	
opposition	-4637 May 24 j 19:40	25°♎11'49	1°29'48
min. Earth dist.	-4637 May 25 j 07:41	25°♎09'34	8.84127 AU
direct	-4637 Aug 02 j 08:13	21°♎52'56	
evening set	-4637 Nov 10 j 00:47	29°♎02'01	
	-4637 Nov 18 j 02:05	0°♏	
conjunction	-4637 Nov 26 j 17:04	1°♏02'48	1°00'02
minimum elong	-4637 Nov 26 j 17:07	1°♏02'49	0°59'55
max. Earth dist.	-4637 Nov 26 j 03:07	0°♏58'34	10.77631 AU
morning rise	-4637 Dec 13 j 12:42	3°♏04'41	
retrograde	-4636 Mar 26 j 20:42	10°♏34'27	
opposition	-4636 Jun 05 j 14:04	7°♏11'30	0°55'56
min. Earth dist.	-4636 Jun 06 j 01:00	7°♏09'25	8.70732 AU
direct	-4636 Aug 13 j 11:10	3°♏51'58	
evening set	-4636 Nov 21 j 03:10	11°♏08'06	
conjunction	-4636 Dec 07 j 23:00	13°♏11'44	0°30'49
minimum elong	-4636 Dec 07 j 23:02	13°♏11'44	0°30'40
max. Earth dist.	-4636 Dec 07 j 10:16	13°♏07'48	10.63732 AU
	-4636 Dec 22 j 15:54	15°♏	
morning rise	-4636 Dec 24 j 23:09	15°♏16'43	
retrograde	-4635 Apr 09 j 05:23	22°♏57'53	
opposition	-4635 Jun 18 j 15:41	19°♏33'14	0°18'23
min. Earth dist.	-4635 Jun 19 j 01:19	19°♏31'23	8.56385 AU
direct	-4635 Aug 25 j 22:05	16°♏12'49	
evening set	-4635 Dec 03 j 16:18	23°♏37'21	
desc. node	-4635 Dec 12 j 14:00	24°♏43'23	
conjunction	-4635 Dec 20 j 16:12	25°♏44'06	-0°00'43
minimum elong	-4635 Dec 20 j 16:12	25°♏44'06	0°00'54
behind sun begin	-4635 Dec 20 j 09:06	25°♏41'54	
behind sun end	-4635 Dec 20 j 23:18	25°♏46'17	
max. Earth dist.	-4635 Dec 20 j 06:05	25°♏40'57	10.49148 AU
morning rise	-4634 Jan 06 j 20:55	27°♏52'24	
	-4634 Jan 24 j 18:42	0°♐	
retrograde	-4634 Apr 23 j 00:35	5°♐45'33	
opposition	-4634 Jul 02 j 01:08	2°♐19'13	-0°21'22
min. Earth dist.	-4634 Jul 02 j 08:23	2°♐17'48	8.41691 AU
	-4634 Aug 03 j 20:55	30°℞♏	
direct	-4634 Sep 07 j 16:18	28°♏57'42	
	-4634 Oct 11 j 17:28	0°♐	
evening set	-4634 Dec 16 j 17:36	6°♐31'48	
conjunction	-4633 Jan 02 j 21:41	8°♐41'46	-0°33'04
minimum elong	-4633 Jan 02 j 21:40	8°♐41'46	0°33'16
max. Earth dist.	-4633 Jan 02 j 15:00	8°♐39'39	10.34504 AU
morning rise	-4633 Jan 20 j 06:50	10°♐53'26	
retrograde	-4633 May 07 j 05:12	18°♐58'43	
opposition	-4633 Jul 15 j 18:32	15°♐30'44	-1°01'26
min. Earth dist.	-4633 Jul 15 j 22:42	15°♐29'55	8.27300 AU
direct	-4633 Sep 20 j 20:08	12°♐07'58	
evening set	-4633 Dec 30 j 08:18	19°♐52'32	
conjunction	-4632 Jan 16 j 16:33	22°♐05'45	-1°04'37
minimum elong	-4632 Jan 16 j 16:30	22°♐05'44	1°04'49
max. Earth dist.	-4632 Jan 16 j 13:05	22°♐04'38	10.20478 AU
morning rise	-4632 Feb 03 j 05:58	24°♐20'42	

Attention, astronomical year style is used: The year -4632 in astronomical counting style is the year 4633 BCE in historical counting style.

	-4632 Mar 25 j 10:02	0°♑		
retrograde	-4632 May 20 j 19:47	2°♑37'31		
	-4632 Jul 17 j 23:01	30°℞♐		
opposition	-4632 Jul 28 j 19:33	29°♐08'06	-1°39'28	
min. Earth dist.	-4632 Jul 28 j 20:30	29°♐07'55	8.13929 AU	
direct	-4632 Oct 03 j 08:26	25°♐43'58		
	-4632 Dec 12 j 23:45	0°♑		
evening set	-4631 Jan 12 j 12:43	3°♑39'29		
conjunction	-4631 Jan 30 j 00:56	5°♑55'46	-1°33'21	
minimum elong	-4631 Jan 30 j 00:52	5°♑55'45	1°33'35	
max. Earth dist.	-4631 Jan 30 j 00:38	5°♑55'40	10.07857 AU	
morning rise	-4631 Feb 16 j 18:19	8°♑13'45		
retrograde	-4631 Jun 04 j 18:26	16°♑40'35		
opposition	-4631 Aug 12 j 03:34	13°♑10'03	-2°12'49	
min. Earth dist.	-4631 Aug 12 j 01:34	13°♑10'27	8.02419 AU	
direct	-4631 Oct 17 j 05:42	9°♑44'30		
evening set	-4630 Jan 27 j 06:04	17°♑50'32		
conjunction	-4630 Feb 13 j 21:59	20°♑09'29	-1°57'12	
minimum elong	-4630 Feb 13 j 21:56	20°♑09'28	1°57'25	
max. Earth dist.	-4630 Feb 14 j 01:25	20°♑10'37	9.97523 AU	
morning rise	-4630 Mar 03 j 18:45	22°♑30'00		
	-4630 May 16 j 04:53	0°♒		
retrograde	-4630 Jun 19 j 22:18	1°♒04'14		
	-4630 Jul 24 j 18:36	30°℞♑		
opposition	-4630 Aug 26 j 17:03	27°♑32'55	-2°38'47	
min. Earth dist.	-4630 Aug 26 j 12:13	27°♑33'55	7.93615 AU	
direct	-4630 Oct 31 j 12:49	24°♑05'58		
	-4629 Jan 23 j 18:37	0°♒		
evening set	-4629 Feb 11 j 10:27	2°♒21'07		
conjunction	-4629 Mar 01 j 05:52	4°♒42'10	-2°14'07	
minimum elong	-4629 Mar 01 j 05:49	4°♒42'09	2°14'19	
max. Earth dist.	-4629 Mar 01 j 13:18	4°♒44'38	9.90270 AU	
morning rise	-4629 Mar 19 j 05:26	7°♒04'32		
	-4629 Jun 07 j 05:56	15°♒		
retrograde	-4629 Jul 05 j 03:39	15°♒42'32		
	-4629 Aug 02 j 01:01	15°℞♒		
opposition	-4629 Sep 10 j 09:55	12°♒10'52	-2°54'58	
min. Earth dist.	-4629 Sep 10 j 02:26	12°♒12'25	7.88187 AU	
direct	-4629 Nov 15 j 04:35	8°♒42'39		
	-4628 Feb 10 j 14:54	15°♒		
evening set	-4628 Feb 26 j 22:49	17°♒04'31		
conjunction	-4628 Mar 15 j 21:23	19°♒26'58	-2°22'34	
minimum elong	-4628 Mar 15 j 21:23	19°♒26'58	2°22'43	
max. Earth dist.	-4628 Mar 16 j 08:39	19°♒30'43	9.86654 AU	
morning rise	-4628 Apr 02 j 23:03	21°♒50'23		
	-4628 Jun 26 j 22:04	0°♓		
retrograde	-4628 Jul 19 j 06:55	0°♓27'56		
	-4628 Aug 10 j 15:56	30°℞♒		
opposition	-4628 Sep 24 j 03:41	26°♒56'22	-2°59'46	
min. Earth dist.	-4628 Sep 23 j 17:50	26°♒58'26	7.86527 AU	
direct	-4628 Nov 29 j 01:40	23°♒27'07		
	-4627 Feb 26 j 21:26	0°♓		
evening set	-4627 Mar 13 j 15:19	1°♓52'37		
conjunction	-4627 Mar 31 j 16:28	4°♓15'38	-2°21'42	
minimum elong	-4627 Mar 31 j 16:30	4°♓15'39	2°21'48	
max. Earth dist.	-4627 Apr 01 j 07:04	4°♓20'29	9.86937 AU	
morning rise	-4627 Apr 18 j 19:23	6°♓39'10		
retrograde	-4627 Aug 03 j 05:34	15°♓12'02		
opposition	-4627 Oct 08 j 19:42	11°♓41'02	-2°52'41	
min. Earth dist.	-4627 Oct 08 j 07:41	11°♓43'33	7.88745 AU	
direct	-4627 Dec 14 j 01:04	8°♓11'04		
evening set	-4626 Mar 29 j 07:29	16°♓36'43		
conjunction	-4626 Apr 16 j 10:30	18°♓59'27	-2°11'36	
minimum elong	-4626 Apr 16 j 10:33	18°♓59'28	2°11'40	
max. Earth dist.	-4626 Apr 17 j 03:34	19°♓05'05	9.91087 AU	
morning rise	-4626 May 04 j 13:45	21°♓22'11		
retrograde	-4626 Aug 17 j 21:15	29°♓46'37		
opposition	-4626 Oct 23 j 07:39	26°♓16'37	-2°34'27	
min. Earth dist.	-4626 Oct 22 j 18:12	26°♓19'26	7.94663 AU	
direct	-4626 Dec 28 j 23:25	22°♓46'18		
	-4625 Apr 04 j 17:50	0°♈		
evening set	-4625 Apr 13 j 19:15	1°♈08'44		
conjunction	-4625 May 01 j 23:07	3°♈30'19	-1°53'16	
minimum elong	-4625 May 01 j 23:12	3°♈30'20	1°53'15	
max. Earth dist.	-4625 May 02 j 17:23	3°♈36'17	9.98775 AU	
morning rise	-4625 May 20 j 01:43	5°♈51'25		
retrograde	-4625 Sep 01 j 04:46	14°♈04'36		
opposition	-4625 Nov 06 j 13:35	10°♈35'59	-2°06'51	
min. Earth dist.	-4625 Nov 05 j 23:49	10°♈38'50	8.03831 AU	
direct	-4624 Jan 12 j 18:50	7°♈05'39		
evening set	-4624 Apr 27 j 23:32	15°♈22'06		
conjunction	-4624 May 16 j 02:56	17°♈41'42	-1°28'20	
minimum elong	-4624 May 16 j 03:00	17°♈41'44	1°28'16	
max. Earth dist.	-4624 May 16 j 20:55	17°♈47'31	10.09418 AU	
morning rise	-4624 Jun 03 j 03:41	20°♈00'25		
retrograde	-4624 Sep 14 j 01:13	28°♈00'43		
opposition	-4624 Nov 19 j 12:04	24°♈33'45	-1°32'23	
min. Earth dist.	-4624 Nov 18 j 23:10	24°♈36'24	8.15609 AU	
direct	-4623 Jan 26 j 09:36	21°♈03'47		
evening set	-4623 May 12 j 17:35	29°♈12'10		
	-4623 May 19 j 02:08	0°♉		
conjunction	-4623 May 30 j 19:09	1°♉29'09	-0°58'52	
minimum elong	-4623 May 30 j 19:12	1°♉29'10	0°58'45	
max. Earth dist.	-4623 May 31 j 11:30	1°♉34'21	10.22295 AU	
morning rise	-4623 Jun 17 j 17:00	3°♉44'55		
retrograde	-4623 Sep 27 j 09:50	11°♉31'50		
opposition	-4623 Dec 03 j 02:31	8°♉06'41	-0°53'47	
min. Earth dist.	-4623 Dec 02 j 15:23	8°♉08'56	8.29252 AU	
direct	-4622 Feb 09 j 17:11	4°♉37'26		
evening set	-4622 May 26 j 23:45	12°♉36'26		
conjunction	-4622 Jun 13 j 22:13	14°♉50'19	-0°26'58	
minimum elong	-4622 Jun 13 j 22:15	14°♉50'20	0°26'49	
max. Earth dist.	-4622 Jun 14 j 11:35	14°♉54'30	10.36613 AU	
	-4622 Jun 15 j 05:09	15°♉		
morning rise	-4622 Jul 01 j 16:16	17°♉02'48		
retrograde	-4622 Oct 10 j 07:57	24°♉36'48		
opposition	-4622 Dec 16 j 08:32	21°♉13'30	-0°13'38	
min. Earth dist.	-4622 Dec 15 j 23:16	21°♉15'21	8.43960 AU	
direct	-4621 Feb 23 j 16:03	17°♉45'15		
asc. node	-4621 Apr 24 j 13:37	20°♉36'29		
evening set	-4621 Jun 09 j 17:49	25°♉34'22		
conjunction	-4621 Jun 27 j 12:11	27°♉44'56	0°05'28	
minimum elong	-4621 Jun 27 j 12:11	27°♉44'56	0°05'39	
behind sun begin	-4621 Jun 27 j 05:15	27°♉42'49		
behind sun end	-4621 Jun 27 j 19:07	27°♉47'02		
max. Earth dist.	-4621 Jun 27 j 22:09	27°♉47'59	10.51570 AU	
morning rise	-4621 Jul 15 j 01:39	29°♉53'57		
	-4621 Jul 15 j 21:46	0°♊		
retrograde	-4621 Oct 22 j 20:43	7°♊16'06		
opposition	-4621 Dec 29 j 06:23	3°♊54'38	0°25'47	
min. Earth dist.	-4621 Dec 28 j 22:54	3°♊56'06	8.58949 AU	
direct	-4620 Mar 08 j 05:36	0°♊27'36		
evening set	-4620 Jun 21 j 23:44	8°♊06'55		

Attention, astronomical year style is used: The year -4620 in astronomical counting style is the year 4621 BCE in historical counting style.

conjunction	-4620 Jul 09 j 13:20	10°♊14'07	0°36'36
minimum elong	-4620 Jul 09 j 13:19	10°♊14'06	0°36'48
max. Earth dist.	-4620 Jul 09 j 20:22	10°♊16'15	10.66411 AU
morning rise	-4620 Jul 26 j 21:40	12°♊19'42	
retrograde	-4620 Nov 03 j 00:54	19°♊31'35	
opposition	-4619 Jan 09 j 21:06	16°♊11'48	1°02'40
min. Earth dist.	-4619 Jan 09 j 15:34	16°♊12'52	8.73499 AU
direct	-4619 Mar 21 j 10:45	12°♊46'08	
evening set	-4619 Jul 04 j 18:00	20°♊16'08	
conjunction	-4619 Jul 22 j 02:27	22°♊20'04	1°05'15
minimum elong	-4619 Jul 22 j 02:25	22°♊20'04	1°05'28
max. Earth dist.	-4619 Jul 22 j 07:01	22°♊21'27	10.80458 AU
morning rise	-4619 Aug 08 j 05:28	24°♊22'27	
	-4619 Oct 04 j 22:18	0°♋	
retrograde	-4619 Nov 14 j 23:46	1°♋25'49	
	-4619 Dec 27 j 01:18	30°℞♊	
opposition	-4618 Jan 22 j 05:28	28°♊07'31	1°35'39
min. Earth dist.	-4618 Jan 22 j 02:56	28°♊08'00	8.86976 AU
direct	-4618 Apr 03 j 05:58	24°♊43'16	
	-4618 Jun 28 j 12:28	0°♋	
evening set	-4618 Jul 17 j 02:00	2°♋04'48	
conjunction	-4618 Aug 03 j 05:10	4°♋05'46	1°30'25
minimum elong	-4618 Aug 03 j 05:07	4°♋05'46	1°30'39
max. Earth dist.	-4618 Aug 03 j 06:14	4°♋06'05	10.93127 AU
morning rise	-4618 Aug 20 j 03:09	6°♋05'17	
retrograde	-4618 Nov 26 j 15:18	13°♋01'53	
opposition	-4617 Feb 03 j 08:23	9°♋44'51	2°03'46
min. Earth dist.	-4617 Feb 03 j 09:15	9°♋44'41	8.98838 AU
direct	-4617 Apr 15 j 16:32	6°♋21'56	
evening set	-4617 Jul 29 j 00:55	13°♋36'04	
conjunction	-4617 Aug 14 j 22:57	15°♋34'27	1°51'22
minimum elong	-4617 Aug 14 j 22:54	15°♋34'26	1°51'36
max. Earth dist.	-4617 Aug 14 j 19:57	15°♋33'34	11.03938 AU
morning rise	-4617 Aug 31 j 16:28	17°♋31'32	
retrograde	-4617 Dec 08 j 02:40	24°♋23'15	
opposition	-4616 Feb 15 j 07:19	21°♋07'08	2°26'21
min. Earth dist.	-4616 Feb 15 j 10:53	21°♋06'29	9.08637 AU
direct	-4616 Apr 26 j 23:25	17°♋45'30	
evening set	-4616 Aug 08 j 15:52	24°♋53'21	
conjunction	-4616 Aug 25 j 09:26	26°♋49'36	2°07'35
minimum elong	-4616 Aug 25 j 09:23	26°♋49'35	2°07'49
max. Earth dist.	-4616 Aug 25 j 03:25	26°♋47'51	11.12506 AU
morning rise	-4616 Sep 10 j 23:05	28°♋44'43	
	-4616 Sep 22 j 03:58	0°♌	
retrograde	-4616 Dec 18 j 13:06	5°♌33'25	
opposition	-4615 Feb 26 j 03:16	2°♌17'51	2°42'57
min. Earth dist.	-4615 Feb 26 j 08:37	2°♌16'52	9.16019 AU
	-4615 Apr 01 j 14:57	30°℞♋	
direct	-4615 May 08 j 22:59	28°♋57'23	
	-4615 Jun 14 j 15:08	0°♌	
evening set	-4615 Aug 20 j 00:37	6°♌00'07	
conjunction	-4615 Sep 05 j 14:35	7°♌54'47	2°18'47
minimum elong	-4615 Sep 05 j 14:33	7°♌54'46	2°18'58
max. Earth dist.	-4615 Sep 05 j 06:44	7°♌52'30	11.18530 AU
morning rise	-4615 Sep 22 j 01:05	9°♌48'31	
	-4615 Nov 15 j 06:01	15°♌	
retrograde	-4615 Dec 29 j 21:59	16°♌35'53	
	-4614 Feb 14 j 02:41	15°℞♌	
opposition	-4614 Mar 09 j 21:19	13°♌20'34	2°53'20
min. Earth dist.	-4614 Mar 10 j 05:08	13°♌19'08	9.20725 AU
direct	-4614 May 20 j 16:59	10°♌01'01	
	-4614 Aug 12 j 22:02	15°♌	
evening set	-4614 Aug 31 j 04:47	16°♌59'59	
conjunction	-4614 Sep 16 j 15:54	18°♌53'37	2°24'45
minimum elong	-4614 Sep 16 j 15:53	18°♌53'36	2°24'54
max. Earth dist.	-4614 Sep 16 j 05:15	18°♌50'31	11.21790 AU
morning rise	-4614 Oct 03 j 00:22	20°♌46'33	
retrograde	-4613 Jan 10 j 07:18	27°♌34'18	
opposition	-4613 Mar 21 j 14:56	24°♌18'53	2°57'21
min. Earth dist.	-4613 Mar 22 j 01:42	24°♌16'56	9.22561 AU
direct	-4613 Jun 01 j 08:13	21°♌00'04	
evening set	-4613 Sep 11 j 05:57	27°♌56'37	
conjunction	-4613 Sep 27 j 15:05	29°♌49'47	2°25'24
minimum elong	-4613 Sep 27 j 15:06	29°♌49'47	2°25'31
max. Earth dist.	-4613 Sep 27 j 01:15	29°♌45'46	11.22133 AU
	-4613 Sep 29 j 02:19	0°♍	
morning rise	-4613 Oct 13 j 22:42	1°♍42'33	
retrograde	-4612 Jan 21 j 17:14	8°♍32'28	
opposition	-4612 Apr 01 j 09:13	5°♍16'35	2°54'57
min. Earth dist.	-4612 Apr 01 j 22:03	5°♍14'15	9.21409 AU
direct	-4612 Jun 11 j 21:51	1°♍58'15	
evening set	-4612 Sep 21 j 05:53	8°♍53'52	
conjunction	-4612 Oct 07 j 14:18	10°♍47'12	2°20'44
minimum elong	-4612 Oct 07 j 14:20	10°♍47'12	2°20'50
max. Earth dist.	-4612 Oct 06 j 23:05	10°♍42'46	11.19502 AU
morning rise	-4612 Oct 23 j 22:00	12°♍40'24	
retrograde	-4611 Feb 01 j 09:32	19°♍34'15	
opposition	-4611 Apr 13 j 05:20	16°♍17'35	2°46'10
min. Earth dist.	-4611 Apr 13 j 18:58	16°♍15'06	9.17284 AU
direct	-4611 Jun 23 j 12:02	12°♍59'32	
evening set	-4611 Oct 02 j 06:22	19°♍55'39	
conjunction	-4611 Oct 18 j 15:10	21°♍49'47	2°10'48
minimum elong	-4611 Oct 18 j 15:12	21°♍49'48	2°10'52
max. Earth dist.	-4611 Oct 17 j 23:22	21°♍45'10	11.13987 AU
morning rise	-4611 Nov 03 j 23:57	23°♍44'02	
	-4610 Jan 14 j 03:37	0°♎	
retrograde	-4610 Feb 13 j 05:39	0°♎43'27	
	-4610 Mar 15 j 19:57	30°℞♍	
opposition	-4610 Apr 25 j 04:39	27°♍25'43	2°31'07
min. Earth dist.	-4610 Apr 25 j 18:46	27°♍23'07	9.10355 AU
direct	-4610 Jul 05 j 00:35	24°♍07'41	
	-4610 Oct 03 j 17:48	0°♎	
evening set	-4610 Oct 13 j 09:33	1°♎05'49	
conjunction	-4610 Oct 29 j 19:28	3°♎01'17	1°55'48
minimum elong	-4610 Oct 29 j 19:31	3°♎01'17	1°55'48
max. Earth dist.	-4610 Oct 29 j 02:29	2°♎56'16	11.05818 AU
morning rise	-4610 Nov 15 j 06:28	4°♎57'09	
retrograde	-4609 Feb 25 j 08:07	12°♎03'42	
opposition	-4609 May 07 j 08:20	8°♎44'37	2°10'01
min. Earth dist.	-4609 May 07 j 23:13	8°♎41'52	9.00908 AU
direct	-4609 Jul 16 j 16:42	5°♎26'19	
evening set	-4609 Oct 24 j 17:06	12°♎27'56	
max. Earth dist.	-4609 Nov 09 j 11:40	14°♎20'06	10.95318 AU
conjunction	-4609 Nov 10 j 05:01	14°♎25'16	1°36'00
minimum elong	-4609 Nov 10 j 05:04	14°♎25'17	1°35'57
morning rise	-4609 Nov 26 j 19:10	16°♎23'19	
retrograde	-4608 Mar 08 j 17:38	23°♎38'29	
opposition	-4608 May 18 j 17:25	20°♎17'48	1°43'13
min. Earth dist.	-4608 May 19 j 08:06	20°♎15'04	8.89314 AU
direct	-4608 Jul 27 j 12:21	16°♎58'59	
evening set	-4608 Nov 04 j 06:47	24°♎05'35	
conjunction	-4608 Nov 20 j 21:40	26°♎05'16	1°11'51

Attention, astronomical year style is used: The year -4608 in astronomical counting style is the year 4609 BCE in historical counting style.

minimum elong	-4608 Nov 20 j 21:43	26°♎05'17	1°11'45
max. Earth dist.	-4608 Nov 20 j 05:46	26°♎00'28	10.82873 AU
morning rise	-4608 Dec 07 j 15:32	28°♎05'56	
	-4608 Dec 24 j 04:34	0°♏	
retrograde	-4607 Mar 21 j 11:53	5°♏31'08	
opposition	-4607 May 31 j 08:42	2°♏08'39	1°11'21
min. Earth dist.	-4607 May 31 j 21:50	2°♏06'10	8.76005 AU
	-4607 Jul 01 j 05:36	30°℞♎	
direct	-4607 Aug 08 j 14:22	28°♎49'06	
	-4607 Sep 14 j 20:57	0°♏	
evening set	-4607 Nov 16 j 04:52	6°♏02'12	
conjunction	-4607 Dec 02 j 23:16	8°♏04'39	0°44'01
minimum elong	-4607 Dec 02 j 23:18	8°♏04'39	0°43'52
max. Earth dist.	-4607 Dec 02 j 09:31	8°♏00'26	10.68944 AU
morning rise	-4607 Dec 19 j 21:16	10°♏08'19	
	-4606 Feb 03 j 12:21	15°♏	
retrograde	-4606 Apr 03 j 17:16	17°♏44'39	
	-4606 Jun 04 j 14:11	15°℞♏	
opposition	-4606 Jun 13 j 06:55	14°♏20'19	0°35'17
min. Earth dist.	-4606 Jun 13 j 17:36	14°♏18'17	8.61508 AU
direct	-4606 Aug 20 j 21:27	10°♏59'51	
	-4606 Oct 30 j 03:47	15°♏	
evening set	-4606 Nov 28 j 13:05	18°♏20'55	
conjunction	-4606 Dec 15 j 11:15	20°♏26'25	0°13'24
minimum elong	-4606 Dec 15 j 11:16	20°♏26'25	0°13'14
behind sun begin	-4606 Dec 15 j 07:03	20°♏25'08	
behind sun end	-4606 Dec 15 j 15:28	20°♏27'43	
max. Earth dist.	-4606 Dec 14 j 23:17	20°♏22'43	10.54113 AU
morning rise	-4605 Jan 01 j 13:50	22°♏33'24	
	-4605 Mar 27 j 13:15	0°♐	
retrograde	-4605 Apr 17 j 08:58	0°♐21'43	
	-4605 May 08 j 05:00	30°℞♏	
desc. node	-4605 May 22 j 09:28	29°♏22'15	
opposition	-4605 Jun 26 j 13:07	26°♏55'34	-0°03'43
min. Earth dist.	-4605 Jun 26 j 21:28	26°♏53'56	8.46455 AU
direct	-4605 Sep 02 j 10:36	23°♏33'58	
	-4605 Dec 02 j 13:52	0°♐	
evening set	-4605 Dec 11 j 08:56	1°♐04'19	
conjunction	-4605 Dec 28 j 11:07	3°♐13'05	-0°18'50
minimum elong	-4605 Dec 28 j 11:06	3°♐13'04	0°19'02
max. Earth dist.	-4605 Dec 28 j 01:29	3°♐10'02	10.39045 AU
morning rise	-4604 Jan 14 j 18:26	5°♐23'29	
retrograde	-4604 Apr 30 j 09:07	13°♐24'10	
opposition	-4604 Jul 09 j 03:24	9°♐56'16	-0°43'57
min. Earth dist.	-4604 Jul 09 j 09:21	9°♐55'06	8.31555 AU
direct	-4604 Sep 14 j 10:39	6°♐33'25	
evening set	-4604 Dec 23 j 17:54	14°♐14'06	
conjunction	-4603 Jan 10 j 00:16	16°♐26'09	-0°50'59
minimum elong	-4603 Jan 10 j 00:14	16°♐26'09	0°51'12
max. Earth dist.	-4603 Jan 09 j 17:56	16°♐24'07	10.24474 AU
morning rise	-4603 Jan 27 j 12:06	18°♐39'57	
retrograde	-4603 May 14 j 19:09	26°♐52'38	
opposition	-4603 Jul 23 j 01:26	23°♐23'12	-1°23'15
min. Earth dist.	-4603 Jul 23 j 04:35	23°♐22'34	8.17577 AU
direct	-4603 Sep 27 j 19:56	19°♐59'00	
evening set	-4602 Jan 06 j 16:29	27°♐50'34	
	-4602 Jan 23 j 09:16	0°♑	
conjunction	-4602 Jan 24 j 03:01	0°♑05'47	-1°21'15
minimum elong	-4602 Jan 24 j 02:57	0°♑05'46	1°21'28
max. Earth dist.	-4602 Jan 24 j 01:12	0°♑05'11	10.11190 AU
morning rise	-4602 Feb 10 j 18:53	2°♑22'45	
retrograde	-4602 May 29 j 14:17	10°♑46'14	
opposition	-4602 Aug 06 j 06:53	7°♑15'32	-1°59'02
min. Earth dist.	-4602 Aug 06 j 06:27	7°♑15'37	8.05317 AU
direct	-4602 Oct 11 j 14:09	3°♑50'00	
evening set	-4601 Jan 21 j 04:17	11°♑52'15	
conjunction	-4601 Feb 07 j 18:46	14°♑10'18	-1°47'31
minimum elong	-4601 Feb 07 j 18:43	14°♑10'17	1°47'44
max. Earth dist.	-4601 Feb 07 j 21:55	14°♑11'21	10.00000 AU
morning rise	-4601 Feb 25 j 14:10	16°♑30'01	
retrograde	-4601 Jun 13 j 16:12	25°♑02'07	
opposition	-4601 Aug 20 j 18:28	21°♑30'31	-2°28'35
min. Earth dist.	-4601 Aug 20 j 14:05	21°♑31'25	7.95547 AU
direct	-4601 Oct 25 j 17:26	18°♑03'41	
evening set	-4600 Feb 05 j 04:20	26°♑15'39	
conjunction	-4600 Feb 22 j 22:28	28°♑36'03	-2°07'42
minimum elong	-4600 Feb 22 j 22:26	28°♑36'03	2°07'54
max. Earth dist.	-4600 Feb 23 j 06:18	28°♑38'39	9.91656 AU
	-4600 Mar 04 j 11:58	0°♒	
morning rise	-4600 Mar 11 j 20:51	0°♒57'53	
retrograde	-4600 Jun 27 j 21:50	9°♒35'21	
opposition	-4600 Sep 03 j 10:15	6°♒03'19	-2°49'17
min. Earth dist.	-4600 Sep 03 j 02:24	6°♒04'57	7.88934 AU
direct	-4600 Nov 08 j 05:21	2°♒35'19	
evening set	-4599 Feb 19 j 13:57	10°♒55'03	
conjunction	-4599 Mar 09 j 11:21	13°♒17'10	-2°19'59
minimum elong	-4599 Mar 09 j 11:20	13°♒17'09	2°20'09
max. Earth dist.	-4599 Mar 09 j 23:19	13°♒21'09	9.86763 AU
	-4599 Mar 22 j 09:02	15°♒	
morning rise	-4599 Mar 27 j 12:04	15°♒40'21	
retrograde	-4599 Jul 13 j 03:14	24°♒19'11	
opposition	-4599 Sep 18 j 04:13	20°♒47'13	-2°59'09
min. Earth dist.	-4599 Sep 17 j 17:35	20°♒49'27	7.85965 AU
direct	-4599 Nov 22 j 23:28	17°♒18'16	
evening set	-4598 Mar 07 j 05:19	25°♒42'58	
conjunction	-4598 Mar 25 j 05:27	28°♒05'58	-2°23'12
minimum elong	-4598 Mar 25 j 05:28	28°♒05'58	2°23'20
max. Earth dist.	-4598 Mar 25 j 20:48	28°♒11'05	9.85708 AU
	-4598 Apr 08 j 13:15	0°♓	
morning rise	-4598 Apr 12 j 07:50	0°♓29'39	
retrograde	-4598 Jul 28 j 05:35	9°♓05'34	
opposition	-4598 Oct 02 j 21:44	5°♓34'12	-2°57'09
min. Earth dist.	-4598 Oct 02 j 09:18	5°♓36'49	7.86882 AU
direct	-4598 Dec 07 j 21:39	2°♓04'34	
evening set	-4597 Mar 22 j 22:33	10°♓30'53	
conjunction	-4597 Apr 10 j 00:48	12°♓53'55	-2°17'00
minimum elong	-4597 Apr 10 j 00:51	12°♓53'56	2°17'05
max. Earth dist.	-4597 Apr 10 j 18:18	12°♓59'43	9.88599 AU
morning rise	-4597 Apr 28 j 04:03	15°♓17'12	
retrograde	-4597 Aug 12 j 01:48	23°♓46'05	
opposition	-4597 Oct 17 j 12:09	20°♓15'46	-2°43'30
min. Earth dist.	-4597 Oct 16 j 22:49	20°♓18'33	7.91640 AU
direct	-4597 Dec 22 j 21:07	16°♓45'46	
evening set	-4596 Apr 06 j 13:20	25°♓10'15	
conjunction	-4596 Apr 24 j 16:50	27°♓32'27	-2°02'00
minimum elong	-4596 Apr 24 j 16:54	27°♓32'29	2°02'02
max. Earth dist.	-4596 Apr 25 j 11:15	27°♓38'30	9.95225 AU
morning rise	-4596 May 12 j 19:58	29°♓54'25	
	-4596 May 13 j 13:21	0°♈	
retrograde	-4596 Aug 25 j 13:24	8°♈12'59	
opposition	-4596 Oct 30 j 21:24	4°♈44'04	-2°19'36
min. Earth dist.	-4596 Oct 30 j 07:36	4°♈46'56	7.99890 AU
direct	-4595 Jan 05 j 19:29	1°♈14'04	

Attention, astronomical year style is used: The year -4595 in astronomical counting style is the year 4596 BCE in historical counting style.

evening set	-4595 Apr 21 j 21:42	9°♈33'34		
conjunction	-4595 May 10 j 01:16	11°♈54'03	-1°39'38	
minimum elong	-4595 May 10 j 01:21	11°♈54'05	1°39'36	
max. Earth dist.	-4595 May 10 j 19:37	12°♈00'01	10.05091 AU	
morning rise	-4595 May 28 j 03:06	14°♈13'53		
retrograde	-4595 Sep 08 j 13:56	22°♈19'57		
opposition	-4595 Nov 13 j 23:39	18°♈52'42	-1°47'43	
min. Earth dist.	-4595 Nov 13 j 09:53	18°♈55'32	8.11043 AU	
direct	-4594 Jan 20 j 14:11	15°♈23'03		
evening set	-4594 May 06 j 20:42	23°♈35'02		
conjunction	-4594 May 24 j 23:07	25°♈53'07	-1°11'50	
minimum elong	-4594 May 24 j 23:11	25°♈53'09	1°11'44	
max. Earth dist.	-4594 May 25 j 16:22	25°♈58'39	10.17492 AU	
morning rise	-4594 Jun 11 j 22:29	28°♈10'10		
	-4594 Jun 26 j 22:10	0°♉		
retrograde	-4594 Sep 22 j 03:08	6°♉02'45		
opposition	-4594 Nov 27 j 17:41	2°♉37'17	-1°10'32	
min. Earth dist.	-4594 Nov 27 j 04:37	2°♉39'57	8.24320 AU	
	-4593 Jan 03 j 10:48	30°℞♈		
direct	-4593 Feb 04 j 01:13	29°♈08'16		
	-4593 Mar 07 j 13:06	0°♉		
evening set	-4593 May 21 j 08:24	7°♉11'08		
conjunction	-4593 Jun 08 j 08:25	9°♉26'17	-0°40'43	
minimum elong	-4593 Jun 08 j 08:27	9°♉26'17	0°40'35	
max. Earth dist.	-4593 Jun 08 j 23:41	9°♉31'05	10.31552 AU	
morning rise	-4593 Jun 26 j 04:13	11°♉40'05		
	-4593 Jul 24 j 20:49	15°♉		
retrograde	-4593 Oct 05 j 06:49	19°♉19'19		
opposition	-4593 Dec 11 j 03:22	15°♉55'43	-0°30'45	
min. Earth dist.	-4593 Dec 10 j 16:19	15°♉57'56	8.38811 AU	
	-4593 Dec 22 j 21:12	15°℞♉		
direct	-4592 Feb 18 j 03:16	12°♉27'34		
	-4592 Apr 14 j 04:30	15°♉		
evening set	-4592 Jun 03 j 08:00	20°♉20'37		
conjunction	-4592 Jun 21 j 04:21	22°♉32'32	-0°08'22	
minimum elong	-4592 Jun 21 j 04:21	22°♉32'32	0°08'12	
behind sun begin	-4592 Jun 20 j 21:57	22°♉30'34		
behind sun end	-4592 Jun 21 j 10:45	22°♉34'30		
max. Earth dist.	-4592 Jun 21 j 16:38	22°♉36'20	10.46340 AU	
morning rise	-4592 Jul 08 j 19:41	24°♉42'55		
	-4592 Aug 27 j 22:33	0°♊		
asc. node	-4592 Sep 26 j 13:52	1°♊47'08		
retrograde	-4592 Oct 17 j 01:00	2°♊09'48		
	-4592 Dec 07 j 15:51	30°℞♉		
opposition	-4592 Dec 23 j 04:53	28°♉48'03	0°09'13	
min. Earth dist.	-4592 Dec 22 j 20:52	28°♉49'38	8.53651 AU	
direct	-4591 Mar 02 j 19:54	25°♉20'58		
	-4591 May 20 j 16:41	0°♊		
evening set	-4591 Jun 16 j 19:22	3°♊04'16		
conjunction	-4591 Jul 04 j 11:07	5°♊12'50	0°23'34	
minimum elong	-4591 Jul 04 j 11:06	5°♊12'50	0°23'45	
max. Earth dist.	-4591 Jul 04 j 19:23	5°♊15'21	10.61081 AU	
morning rise	-4591 Jul 21 j 21:33	7°♊19'49		
retrograde	-4591 Oct 29 j 08:17	14°♊35'50		
opposition	-4590 Jan 04 j 22:53	11°♊15'47	0°47'22	
min. Earth dist.	-4590 Jan 04 j 18:01	11°♊16'44	8.68162 AU	
direct	-4590 Mar 16 j 05:20	7°♊49'54		
evening set	-4590 Jun 29 j 18:55	15°♊23'49		
conjunction	-4590 Jul 17 j 05:32	17°♊29'07	0°53'27	
minimum elong	-4590 Jul 17 j 05:29	17°♊29'06	0°53'39	
max. Earth dist.	-4590 Jul 17 j 09:27	17°♊30'18	10.75166 AU	
morning rise	-4590 Aug 03 j 10:55	19°♊32'50		
retrograde	-4590 Nov 10 j 08:43	26°♊39'41		
opposition	-4589 Jan 17 j 10:04	23°♊21'05	1°22'11	
min. Earth dist.	-4589 Jan 17 j 07:48	23°♊21'31	8.81754 AU	
direct	-4589 Mar 29 j 05:46	19°♊56'26		
evening set	-4589 Jul 12 j 07:38	27°♊21'39		
conjunction	-4589 Jul 29 j 12:59	29°♊23'53	1°20'13	
minimum elong	-4589 Jul 29 j 12:57	29°♊23'52	1°20'27	
max. Earth dist.	-4589 Jul 29 j 13:18	29°♊23'59	10.88042 AU	
	-4589 Aug 03 j 14:18	0°♋		
morning rise	-4589 Aug 15 j 13:16	1°♋24'36		
retrograde	-4589 Nov 22 j 03:07	8°♋24'03		
opposition	-4588 Jan 29 j 15:25	5°♋06'37	1°52'30	
min. Earth dist.	-4588 Jan 29 j 15:20	5°♋06'38	8.93895 AU	
direct	-4588 Apr 09 j 21:24	1°♋43'12		
evening set	-4588 Jul 23 j 10:31	9°♋00'36		
conjunction	-4588 Aug 09 j 10:51	11°♋00'06	1°43'03	
minimum elong	-4588 Aug 09 j 10:48	11°♋00'05	1°43'17	
max. Earth dist.	-4588 Aug 09 j 08:43	10°♋59'29	10.99227 AU	
morning rise	-4588 Aug 26 j 06:13	12°♋58'13		
retrograde	-4588 Dec 02 j 17:47	19°♋52'05		
opposition	-4587 Feb 09 j 16:15	16°♋35'32	2°17'31	
min. Earth dist.	-4587 Feb 09 j 18:53	16°♋35'02	9.04143 AU	
direct	-4587 Apr 22 j 06:04	13°♋13'14		
evening set	-4587 Aug 04 j 04:49	20°♋23'53		
conjunction	-4587 Aug 21 j 00:26	22°♋21'06	2°01'20	
minimum elong	-4587 Aug 21 j 00:23	22°♋21'05	2°01'34	
max. Earth dist.	-4587 Aug 20 j 19:25	22°♋19'38	11.08323 AU	
morning rise	-4587 Sep 06 j 15:36	24°♋17'05		
	-4587 Nov 07 j 07:52	0°♌		
retrograde	-4587 Dec 14 j 04:08	1°♌07'08		
	-4586 Jan 20 j 21:20	30°℞♋		
opposition	-4586 Feb 21 j 13:31	27°♋51'09	2°36'45	
min. Earth dist.	-4586 Feb 21 j 19:29	27°♋50'02	9.12140 AU	
direct	-4586 May 04 j 06:55	24°♋29'52		
	-4586 Aug 01 j 09:47	0°♌		
evening set	-4586 Aug 15 j 16:17	1°♌34'59		
conjunction	-4586 Sep 01 j 07:43	3°♌30'23	2°14'43	
minimum elong	-4586 Sep 01 j 07:41	3°♌30'22	2°14'55	
max. Earth dist.	-4586 Aug 31 j 22:57	3°♌27'50	11.15031 AU	
morning rise	-4586 Sep 17 j 19:36	5°♌24'47		
retrograde	-4586 Dec 25 j 11:29	12°♌12'50		
opposition	-4585 Mar 05 j 08:15	8°♌57'04	2°49'49	
min. Earth dist.	-4585 Mar 05 j 16:42	8°♌55'30	9.17619 AU	
direct	-4585 May 16 j 04:12	5°♌36'38		
evening set	-4585 Aug 26 j 22:17	12°♌37'32		
conjunction	-4585 Sep 12 j 10:29	14°♌31'40	2°22'56	
minimum elong	-4585 Sep 12 j 10:28	14°♌31'40	2°23'06	
max. Earth dist.	-4585 Sep 11 j 23:27	14°♌28'28	11.19144 AU	
	-4585 Sep 16 j 12:09	15°♌		
morning rise	-4585 Sep 28 j 19:56	16°♌25'02		
retrograde	-4584 Jan 05 j 21:22	23°♌12'51		
opposition	-4584 Mar 16 j 01:59	19°♌57'00	2°56'35	
min. Earth dist.	-4584 Mar 16 j 11:49	19°♌55'12	9.20407 AU	
direct	-4584 May 26 j 22:17	16°♌37'20		
evening set	-4584 Sep 06 j 00:22	23°♌35'15		
conjunction	-4584 Sep 22 j 10:26	25°♌28'43	2°25'51	
minimum elong	-4584 Sep 22 j 10:26	25°♌28'43	2°25'59	
max. Earth dist.	-4584 Sep 21 j 22:19	25°♌25'12	11.20535 AU	
morning rise	-4584 Oct 08 j 18:19	27°♌21'39		
	-4584 Nov 02 j 05:47	0°♍		

Attention, astronomical year style is used: The year -4583 in astronomical counting style is the year 4584 BCE in historical counting style.

retrograde	-4583 Jan 16 j 07:27	4°♍10'56	
opposition	-4583 Mar 27 j 19:54	0°♍54'43	2°56'55
min. Earth dist.	-4583 Mar 28 j 07:01	0°♍52'41	9.20421 AU
	-4583 Apr 09 j 11:36	30°℞♌	
direct	-4583 Jun 07 j 11:35	27°♌35'40	
	-4583 Aug 02 j 19:14	0°♍	
evening set	-4583 Sep 17 j 00:42	4°♍32'00	
conjunction	-4583 Oct 03 j 09:30	6°♍25'22	2°23'26
minimum elong	-4583 Oct 03 j 09:31	6°♍25'23	2°23'32
max. Earth dist.	-4583 Oct 02 j 19:35	6°♍21'20	11.19165 AU
morning rise	-4583 Oct 19 j 17:02	8°♍18'28	
retrograde	-4582 Jan 27 j 21:29	15°♍10'52	
opposition	-4582 Apr 08 j 15:03	11°♍54'04	2°50'49
min. Earth dist.	-4582 Apr 09 j 04:08	11°♍51'40	9.17662 AU
direct	-4582 Jun 19 j 00:29	8°♍35'24	
evening set	-4582 Sep 28 j 00:54	15°♍31'36	
conjunction	-4582 Oct 14 j 09:22	17°♍25'28	2°15'43
minimum elong	-4582 Oct 14 j 09:24	17°♍25'28	2°15'47
max. Earth dist.	-4582 Oct 13 j 17:33	17°♍20'50	11.15078 AU
morning rise	-4582 Oct 30 j 17:44	19°♍19'21	
retrograde	-4581 Feb 08 j 13:26	26°♍16'31	
opposition	-4581 Apr 20 j 12:57	22°♍58'50	2°38'22
min. Earth dist.	-4581 Apr 21 j 03:06	22°♍56'14	9.12211 AU
direct	-4581 Jun 30 j 12:54	19°♍40'22	
evening set	-4581 Oct 09 j 02:33	26°♍37'52	
conjunction	-4581 Oct 25 j 11:52	28°♍32'48	2°02'49
minimum elong	-4581 Oct 25 j 11:54	28°♍32'48	2°02'51
max. Earth dist.	-4581 Oct 24 j 19:56	28°♍28'06	11.08391 AU
	-4581 Nov 06 j 21:10	0°♎	
morning rise	-4581 Nov 10 j 21:56	0°♎28'01	
retrograde	-4580 Feb 20 j 13:34	7°♎31'38	
opposition	-4580 May 01 j 14:40	4°♎12'48	2°19'45
min. Earth dist.	-4580 May 02 j 04:27	4°♎10'16	9.04235 AU
direct	-4580 Jul 11 j 05:29	0°♎54'21	
evening set	-4580 Oct 19 j 07:56	7°♎54'36	
conjunction	-4580 Nov 04 j 19:04	9°♎51'09	1°44'59
minimum elong	-4580 Nov 04 j 19:07	9°♎51'10	1°44'57
max. Earth dist.	-4580 Nov 04 j 03:56	9°♎46'39	10.99307 AU
morning rise	-4580 Nov 21 j 07:42	11°♎48'16	
retrograde	-4579 Mar 03 j 21:47	18°♎59'47	
opposition	-4579 May 13 j 21:11	15°♎39'37	1°55'15
min. Earth dist.	-4579 May 14 j 10:08	15°♎37'13	8.94002 AU
direct	-4579 Jul 22 j 22:41	12°♎20'59	
evening set	-4579 Oct 30 j 18:54	19°♎25'28	
conjunction	-4579 Nov 16 j 08:30	21°♎24'08	1°22'34
minimum elong	-4579 Nov 16 j 08:33	21°♎24'09	1°22'30
max. Earth dist.	-4579 Nov 15 j 17:26	21°♎19'37	10.88141 AU
morning rise	-4579 Dec 03 j 00:37	23°♎23'40	
	-4578 Feb 14 j 05:34	0°♏	
retrograde	-4578 Mar 16 j 12:17	0°♏44'30	
	-4578 Apr 16 j 05:21	30°℞♎	
opposition	-4578 May 26 j 09:48	27°♎22'51	1°25'23
min. Earth dist.	-4578 May 26 j 22:09	27°♎20'32	8.81875 AU
direct	-4578 Aug 03 j 20:01	24°♎03'46	
	-4578 Nov 01 j 00:14	0°♏	
evening set	-4578 Nov 11 j 13:20	1°♏14'01	
conjunction	-4578 Nov 28 j 05:59	3°♏15'14	0°56'09
minimum elong	-4578 Nov 28 j 06:01	3°♏15'14	0°56'02
max. Earth dist.	-4578 Nov 27 j 15:32	3°♏10'50	10.75302 AU
morning rise	-4578 Dec 15 j 02:14	5°♏17'34	
retrograde	-4577 Mar 29 j 12:42	12°♏48'59	

opposition	-4577 Jun 08 j 05:20	9°♏25'44	0°50'55
min. Earth dist.	-4577 Jun 08 j 16:41	9°♏23'35	8.68333 AU
direct	-4577 Aug 16 j 01:11	6°♏05'58	
evening set	-4577 Nov 23 j 17:07	13°♏23'27	
	-4577 Dec 06 j 20:25	15°♏	
conjunction	-4577 Dec 10 j 13:29	15°♏27'33	0°26'33
minimum elong	-4577 Dec 10 j 13:30	15°♏27'33	0°26'23
max. Earth dist.	-4577 Dec 10 j 01:21	15°♏23'48	10.61303 AU
morning rise	-4577 Dec 27 j 14:09	17°♏33'02	
retrograde	-4576 Apr 10 j 23:05	25°♏15'59	
opposition	-4576 Jun 20 j 08:17	21°♏51'03	0°12'57
min. Earth dist.	-4576 Jun 20 j 17:30	21°♏49'16	8.53949 AU
direct	-4576 Aug 27 j 12:47	18°♏30'24	
desc. node	-4576 Oct 22 j 08:40	21°♏08'55	
evening set	-4576 Dec 05 j 07:57	25°♏56'26	
conjunction	-4576 Dec 22 j 08:26	28°♏03'40	-0°05'15
minimum elong	-4576 Dec 22 j 08:26	28°♏03'40	0°05'26
behind sun begin	-4576 Dec 22 j 01:35	28°♏01'32	
behind sun end	-4576 Dec 22 j 15:17	28°♏05'48	
max. Earth dist.	-4576 Dec 21 j 23:30	28°♏00'53	10.46738 AU
	-4575 Jan 06 j 21:07	0°♐	
morning rise	-4575 Jan 08 j 13:37	0°♐12'28	
retrograde	-4575 Apr 24 j 19:31	8°♐07'29	
opposition	-4575 Jul 03 j 19:04	4°♐40'51	-0°27'00
min. Earth dist.	-4575 Jul 04 j 01:13	4°♐39'39	8.39350 AU
direct	-4575 Sep 09 j 08:59	1°♐19'09	
evening set	-4575 Dec 18 j 11:19	8°♐54'51	
conjunction	-4574 Jan 04 j 15:53	11°♐05'18	-0°37'34
minimum elong	-4574 Jan 04 j 15:51	11°♐05'18	0°37'46
max. Earth dist.	-4574 Jan 04 j 10:03	11°♐03'27	10.32261 AU
morning rise	-4574 Jan 22 j 01:29	13°♐17'27	
retrograde	-4574 May 09 j 02:33	21°♐24'28	
opposition	-4574 Jul 17 j 13:41	17°♐56'15	-1°06'56
min. Earth dist.	-4574 Jul 17 j 16:45	17°♐55'39	8.25218 AU
direct	-4574 Sep 22 j 13:13	14°♐33'17	
evening set	-4573 Jan 01 j 03:57	22°♐19'25	
conjunction	-4573 Jan 18 j 12:32	24°♐33'03	-1°08'51
minimum elong	-4573 Jan 18 j 12:29	24°♐33'02	1°09'03
max. Earth dist.	-4573 Jan 18 j 09:30	24°♐32'04	10.18575 AU
morning rise	-4573 Feb 05 j 02:26	26°♐48'26	
	-4573 Mar 03 j 15:55	0°♑	
retrograde	-4573 May 23 j 18:46	5°♑06'42	
opposition	-4573 Jul 31 j 15:55	1°♑37'06	-1°44'27
min. Earth dist.	-4573 Jul 31 j 16:14	1°♑37'02	8.12250 AU
	-4573 Aug 21 j 13:40	30°℞♐	
direct	-4573 Oct 06 j 02:27	28°♐12'46	
	-4573 Nov 19 j 09:08	0°♑	
evening set	-4572 Jan 15 j 09:58	6°♑09'41	
conjunction	-4572 Feb 01 j 22:30	8°♑26'17	-1°37'01
minimum elong	-4572 Feb 01 j 22:26	8°♑26'16	1°37'14
max. Earth dist.	-4572 Feb 01 j 22:27	8°♑26'16	10.06393 AU
morning rise	-4572 Feb 19 j 16:19	10°♑44'37	
retrograde	-4572 Jun 06 j 17:54	19°♑12'32	
opposition	-4572 Aug 14 j 00:49	15°♑41'53	-2°16'55
min. Earth dist.	-4572 Aug 13 j 22:41	15°♑42'19	8.01194 AU
direct	-4572 Oct 19 j 01:59	12°♑16'10	
evening set	-4571 Jan 29 j 04:49	20°♑23'26	
conjunction	-4571 Feb 15 j 21:06	22°♑42'38	-1°59'59
minimum elong	-4571 Feb 15 j 21:03	22°♑42'37	2°00'11
max. Earth dist.	-4571 Feb 16 j 00:57	22°♑43'54	9.96523 AU
morning rise	-4571 Mar 05 j 18:14	25°♑03'24	

Attention, astronomical year style is used: The year -4571 in astronomical counting style is the year 4572 BCE in historical counting style.

	-4571 Apr 16 j 18:57	0°♒	
retrograde	-4571 Jun 21 j 21:16	3°♒38'16	
opposition	-4571 Aug 28 j 14:47	0°♒06'56	-2°41'37
min. Earth dist.	-4571 Aug 28 j 09:51	0°♒07'58	7.92863 AU
	-4571 Aug 30 j 00:19	30°℞♑	
direct	-4571 Nov 02 j 11:12	26°♑39'53	
	-4570 Jan 02 j 15:03	0°♒	
evening set	-4570 Feb 13 j 10:19	4°♒55'58	
conjunction	-4570 Mar 03 j 06:06	7°♒17'13	-2°15'48
minimum elong	-4570 Mar 03 j 06:04	7°♒17'13	2°15'58
max. Earth dist.	-4570 Mar 03 j 14:18	7°♒19'57	9.89754 AU
morning rise	-4570 Mar 21 j 05:53	9°♒39'44	
	-4570 May 05 j 21:20	15°♒	
retrograde	-4570 Jul 07 j 01:43	18°♒17'54	
	-4570 Sep 09 j 14:12	15°℞♒	
opposition	-4570 Sep 12 j 07:57	14°♒46'17	-2°56'17
min. Earth dist.	-4570 Sep 11 j 23:59	14°♒47'57	7.87927 AU
direct	-4570 Nov 17 j 03:13	11°♒18'02	
	-4569 Jan 20 j 21:19	15°♒	
evening set	-4569 Feb 28 j 23:13	19°♒40'26	
conjunction	-4569 Mar 18 j 22:09	22°♒03'00	-2°22'58
minimum elong	-4569 Mar 18 j 22:09	22°♒03'00	2°23'06
max. Earth dist.	-4569 Mar 19 j 10:33	22°♒07'08	9.86645 AU
morning rise	-4569 Apr 05 j 23:55	24°♒26'26	
	-4569 May 23 j 20:02	0°♓	
retrograde	-4569 Jul 22 j 05:01	3°♓03'40	
	-4569 Sep 21 j 12:41	30°℞♒	
opposition	-4569 Sep 27 j 01:39	29°♒32'13	-2°59'25
min. Earth dist.	-4569 Sep 26 j 14:57	29°♒34'28	7.86774 AU
direct	-4569 Dec 01 j 23:50	26°♒02'59	
	-4568 Feb 07 j 09:50	0°♓	
evening set	-4568 Mar 15 j 15:53	4°♓28'34	
conjunction	-4568 Apr 02 j 17:23	6°♓51'36	-2°20'47
minimum elong	-4568 Apr 02 j 17:25	6°♓51'37	2°20'53
max. Earth dist.	-4568 Apr 03 j 09:10	6°♓56'51	9.87439 AU
morning rise	-4568 Apr 20 j 20:19	9°♓15'03	
retrograde	-4568 Aug 05 j 03:56	17°♓47'04	
opposition	-4568 Oct 10 j 17:15	14°♓16'15	-2°50'42
min. Earth dist.	-4568 Oct 10 j 04:26	14°♓18'56	7.89484 AU
direct	-4568 Dec 15 j 22:43	10°♓46'20	
evening set	-4567 Mar 31 j 07:48	19°♓11'39	
conjunction	-4567 Apr 18 j 11:01	21°♓34'16	-2°09'28
minimum elong	-4567 Apr 18 j 11:05	21°♓34'17	2°09'30
max. Earth dist.	-4567 Apr 19 j 05:01	21°♓40'12	9.92068 AU
morning rise	-4567 May 06 j 14:11	23°♓56'50	
	-4567 Jun 29 j 16:40	0°♈	
retrograde	-4567 Aug 19 j 19:31	2°♈19'58	
	-4567 Oct 10 j 23:57	30°℞♓	
opposition	-4567 Oct 25 j 04:37	28°♓50'12	-2°31'03
min. Earth dist.	-4567 Oct 24 j 14:51	28°♓53'05	7.95849 AU
direct	-4567 Dec 30 j 21:09	25°♓19'58	
	-4566 Mar 16 j 02:22	0°♈	
evening set	-4566 Apr 15 j 18:43	3°♈41'41	
conjunction	-4566 May 03 j 22:34	6°♈03'00	-1°50'05
minimum elong	-4566 May 03 j 22:38	6°♈03'02	1°50'04
max. Earth dist.	-4566 May 04 j 17:15	6°♈09'06	10.00173 AU
morning rise	-4566 May 22 j 00:58	8°♈23'50	
retrograde	-4566 Sep 03 j 01:16	16°♈35'27	
opposition	-4566 Nov 08 j 09:42	13°♈07'05	-2°02'20
min. Earth dist.	-4566 Nov 07 j 20:11	13°♈09'53	8.05399 AU
direct	-4565 Jan 14 j 16:56	9°♈36'52	
evening set	-4565 Apr 30 j 21:45	17°♈52'16	
conjunction	-4565 May 19 j 00:57	20°♈11'32	-1°24'24
minimum elong	-4565 May 19 j 01:01	20°♈11'33	1°24'20
max. Earth dist.	-4565 May 19 j 18:40	20°♈17'14	10.11155 AU
morning rise	-4565 Jun 06 j 01:29	22°♈29'54	
	-4565 Aug 25 j 05:49	0°♉	
retrograde	-4565 Sep 16 j 19:05	0°♉28'27	
	-4565 Oct 09 j 09:56	30°℞♈	
opposition	-4565 Nov 22 j 07:03	27°♈01'46	-1°27'09
min. Earth dist.	-4565 Nov 21 j 18:44	27°♈04'18	8.17470 AU
direct	-4564 Jan 29 j 06:49	23°♈31'56	
	-4564 May 01 j 00:35	0°♉	
evening set	-4564 May 14 j 14:20	1°♉39'02	
conjunction	-4564 Jun 01 j 15:33	3°♉55'36	-0°54'29
minimum elong	-4564 Jun 01 j 15:36	3°♉55'37	0°54'22
max. Earth dist.	-4564 Jun 02 j 07:01	4°♉00'31	10.24266 AU
morning rise	-4564 Jun 19 j 13:07	6°♉10'58	
retrograde	-4564 Sep 29 j 02:24	13°♉56'06	
opposition	-4564 Dec 04 j 20:15	10°♉31'14	-0°48'11
min. Earth dist.	-4564 Dec 04 j 09:27	10°♉33'25	8.31292 AU
direct	-4563 Feb 11 j 13:06	7°♉02'07	
evening set	-4563 May 28 j 18:53	14°♉59'43	
	-4563 May 28 j 19:50	15°♉	
conjunction	-4563 Jun 15 j 16:52	17°♉13'09	-0°22'26
minimum elong	-4563 Jun 15 j 16:54	17°♉13'10	0°22'16
max. Earth dist.	-4563 Jun 16 j 05:28	17°♉17'05	10.38702 AU
morning rise	-4563 Jul 03 j 10:29	19°♉25'10	
retrograde	-4563 Oct 11 j 23:17	26°♉57'29	
opposition	-4563 Dec 18 j 01:03	23°♉34'25	-0°08'02
min. Earth dist.	-4563 Dec 17 j 15:34	23°♉36'18	8.46063 AU
direct	-4562 Feb 25 j 10:46	20°♉06'19	
asc. node	-4562 Mar 04 j 04:24	20°♉08'40	
evening set	-4562 Jun 11 j 11:09	27°♉53'58	
	-4562 Jun 28 j 15:47	0°♊	
conjunction	-4562 Jun 29 j 05:04	0°♊04'05	0°09'55
minimum elong	-4562 Jun 29 j 05:03	0°♊04'04	0°10'05
behind sun begin	-4562 Jun 28 j 23:17	0°♊02'19	
behind sun end	-4562 Jun 29 j 10:48	0°♊05'49	
max. Earth dist.	-4562 Jun 29 j 14:59	0°♊07'07	10.53666 AU
morning rise	-4562 Jul 16 j 17:56	2°♊12'38	
retrograde	-4562 Oct 24 j 10:12	9°♊33'16	
opposition	-4562 Dec 30 j 21:40	6°♊11'58	0°31'07
min. Earth dist.	-4562 Dec 30 j 14:05	6°♊13'27	8.61008 AU
direct	-4561 Mar 10 j 23:33	2°♊45'04	
evening set	-4561 Jun 24 j 15:25	10°♊22'57	
conjunction	-4561 Jul 12 j 04:31	12°♊29'42	0°40'46
minimum elong	-4561 Jul 12 j 04:29	12°♊29'42	0°40'57
max. Earth dist.	-4561 Jul 12 j 11:46	12°♊31'54	10.68408 AU
morning rise	-4561 Jul 29 j 12:10	14°♊34'51	
retrograde	-4561 Nov 05 j 14:57	21°♊45'23	
opposition	-4560 Jan 12 j 11:19	18°♊25'45	1°07'31
min. Earth dist.	-4560 Jan 12 j 06:26	18°♊26'42	8.75416 AU
direct	-4560 Mar 23 j 01:53	15°♊00'12	
evening set	-4560 Jul 06 j 08:18	22°♊28'53	
conjunction	-4560 Jul 23 j 16:07	24°♊32'26	1°08'58
minimum elong	-4560 Jul 23 j 16:04	24°♊32'25	1°09'11
max. Earth dist.	-4560 Jul 23 j 20:09	24°♊33'38	10.82263 AU
morning rise	-4560 Aug 09 j 18:29	26°♊34'23	
	-4560 Sep 10 j 05:34	0°♋	
retrograde	-4560 Nov 16 j 11:18	3°♋36'36	
opposition	-4559 Jan 23 j 18:47	0°♋18'26	1°39'51
min. Earth dist.	-4559 Jan 23 j 17:18	0°♋18'43	8.88673 AU
	-4559 Jan 27 j 19:47	30°℞♊	

Attention, astronomical year style is used: The year -4559 in astronomical counting style is the year 4560 BCE in historical counting style.

direct	-4559 Apr 04 j 19:42	26°♊54'15		
	-4559 Jun 08 j 02:30	0°♋		
evening set	-4559 Jul 18 j 14:57	4°♋14'39		
conjunction	-4559 Aug 04 j 17:24	6°♋15'15	1°33'34	
minimum elong	-4559 Aug 04 j 17:21	6°♋15'14	1°33'48	
max. Earth dist.	-4559 Aug 04 j 17:11	6°♋15'11	10.94677 AU	
morning rise	-4559 Aug 21 j 14:55	8°♋14'25		
retrograde	-4559 Nov 28 j 01:30	15°♋10'09		
opposition	-4558 Feb 04 j 20:55	11°♋53'10	2°07'13	
min. Earth dist.	-4558 Feb 04 j 22:13	11°♋52'55	9.00253 AU	
direct	-4558 Apr 17 j 07:31	8°♋30'19		
evening set	-4558 Jul 30 j 12:33	15°♋43'29		
conjunction	-4558 Aug 16 j 10:04	17°♋41'34	1°53'52	
minimum elong	-4558 Aug 16 j 10:01	17°♋41'33	1°54'07	
max. Earth dist.	-4558 Aug 16 j 06:25	17°♋40'29	11.05181 AU	
morning rise	-4558 Sep 02 j 03:11	19°♋38'21		
retrograde	-4558 Dec 09 j 13:42	26°♋29'29		
opposition	-4557 Feb 16 j 19:07	23°♋13'22	2°28'59	
min. Earth dist.	-4557 Feb 16 j 22:32	23°♋12'44	9.09711 AU	
direct	-4557 Apr 29 j 11:58	19°♋51'49		
evening set	-4557 Aug 11 j 02:35	26°♋58'52		
conjunction	-4557 Aug 27 j 19:49	28°♋54'54	2°09'25	
minimum elong	-4557 Aug 27 j 19:47	28°♋54'53	2°09'38	
max. Earth dist.	-4557 Aug 27 j 13:58	28°♋53'12	11.13389 AU	
	-4557 Sep 06 j 03:40	0°♌		
morning rise	-4557 Sep 13 j 09:00	0°♌49'49		
retrograde	-4557 Dec 20 j 23:18	7°♌38'09		
opposition	-4556 Feb 28 j 14:39	4°♌22'35	2°44'44	
min. Earth dist.	-4556 Feb 28 j 20:24	4°♌21'32	9.16716 AU	
direct	-4556 May 10 j 10:20	1°♌02'10		
evening set	-4556 Aug 21 j 10:43	8°♌04'22		
conjunction	-4556 Sep 07 j 00:20	9°♌58'52	2°19'53	
minimum elong	-4556 Sep 07 j 00:18	9°♌58'52	2°20'04	
max. Earth dist.	-4556 Sep 06 j 15:55	9°♌56'26	11.19030 AU	
morning rise	-4556 Sep 23 j 10:33	11°♌52'29		
	-4556 Oct 22 j 21:01	15°♌		
retrograde	-4556 Dec 31 j 08:53	18°♌39'45		
opposition	-4555 Mar 11 j 08:41	15°♌24'25	2°54'14	
min. Earth dist.	-4555 Mar 11 j 17:27	15°♌22'49	9.21042 AU	
	-4555 Mar 16 j 22:24	15°℞♌		
direct	-4555 May 22 j 04:06	12°♌04'55		
	-4555 Jul 23 j 22:03	15°♌		
evening set	-4555 Sep 01 j 14:23	19°♌03'32		
conjunction	-4555 Sep 18 j 01:11	20°♌57'05	2°25'07	
minimum elong	-4555 Sep 18 j 01:11	20°♌57'05	2°25'16	
max. Earth dist.	-4555 Sep 17 j 13:29	20°♌53'42	11.21920 AU	
morning rise	-4555 Oct 04 j 09:39	22°♌50'00		
retrograde	-4554 Jan 11 j 16:33	29°♌37'55		
opposition	-4554 Mar 23 j 02:15	26°♌22'26	2°57'21	
min. Earth dist.	-4554 Mar 23 j 13:30	26°♌20'23	9.22517 AU	
direct	-4554 Jun 02 j 18:58	23°♌03'39		
evening set	-4554 Sep 12 j 15:20	0°♍00'04		
	-4554 Sep 12 j 15:05	0°♍		
max. Earth dist.	-4554 Sep 28 j 10:31	1°♍49'12	11.21921 AU	
conjunction	-4554 Sep 29 j 00:25	1°♍53'14	2°25'02	
minimum elong	-4554 Sep 29 j 00:26	1°♍53'15	2°25'08	
morning rise	-4554 Oct 15 j 08:02	3°♍46'02		
retrograde	-4553 Jan 23 j 04:54	10°♍36'20		
opposition	-4553 Apr 03 j 20:31	7°♍20'22	2°54'04	
min. Earth dist.	-4553 Apr 04 j 09:01	7°♍18'05	9.21030 AU	
direct	-4553 Jun 14 j 09:48	4°♍02'04		

evening set	-4553 Sep 23 j 15:17	10°♍57'42		
conjunction	-4553 Oct 09 j 23:48	12°♍51'07	2°19'37	
minimum elong	-4553 Oct 09 j 23:50	12°♍51'08	2°19'42	
max. Earth dist.	-4553 Oct 09 j 09:00	12°♍46'48	11.18965 AU	
morning rise	-4553 Oct 26 j 07:31	14°♍44'25		
retrograde	-4552 Feb 03 j 20:56	21°♍38'49		
opposition	-4552 Apr 14 j 17:04	18°♍22'03	2°44'24	
min. Earth dist.	-4552 Apr 15 j 06:36	18°♍19'35	9.16576 AU	
direct	-4552 Jun 24 j 21:43	15°♍04'03		
evening set	-4552 Oct 03 j 16:04	22°♍00'22		
max. Earth dist.	-4552 Oct 19 j 08:34	23°♍49'51	11.13121 AU	
conjunction	-4552 Oct 20 j 00:56	23°♍54'39	2°08'59	
minimum elong	-4552 Oct 20 j 00:58	23°♍54'39	2°09'02	
morning rise	-4552 Nov 05 j 09:58	25°♍49'04		
	-4552 Dec 15 j 22:04	0°♎		
retrograde	-4551 Feb 14 j 18:05	2°♎49'17		
	-4551 Apr 20 j 04:42	30°℞♍		
opposition	-4551 Apr 26 j 17:01	29°♍31'26	2°28'30	
min. Earth dist.	-4551 Apr 27 j 07:49	29°♍28'43	9.09315 AU	
direct	-4551 Jul 06 j 11:36	26°♍13'25		
	-4551 Sep 15 j 04:25	0°♎		
evening set	-4551 Oct 14 j 19:49	3°♎12'00		
conjunction	-4551 Oct 31 j 05:54	5°♎07'41	1°53'18	
minimum elong	-4551 Oct 31 j 05:57	5°♎07'42	1°53'18	
max. Earth dist.	-4551 Oct 30 j 12:05	5°♎02'25	11.04627 AU	
morning rise	-4551 Nov 16 j 17:20	7°♎03'49		
retrograde	-4550 Feb 26 j 20:54	14°♎11'24		
opposition	-4550 May 08 j 21:16	10°♎52'12	2°06'35	
min. Earth dist.	-4550 May 09 j 12:48	10°♎49'20	8.99548 AU	
direct	-4550 Jul 18 j 03:56	7°♎33'54		
evening set	-4550 Oct 26 j 04:08	14°♎36'14		
conjunction	-4550 Nov 11 j 16:27	16°♎33'51	1°32'52	
minimum elong	-4550 Nov 11 j 16:30	16°♎33'52	1°32'48	
max. Earth dist.	-4550 Nov 10 j 23:18	16°♎28'44	10.93813 AU	
morning rise	-4550 Nov 28 j 06:59	18°♎32'13		
retrograde	-4549 Mar 11 j 07:21	25°♎48'41		
opposition	-4549 May 21 j 07:12	22°♎27'51	1°39'03	
min. Earth dist.	-4549 May 21 j 21:40	22°♎25'09	8.87656 AU	
direct	-4549 Jul 30 j 01:10	19°♎09'01		
evening set	-4549 Nov 06 j 18:52	26°♎16'34		
conjunction	-4549 Nov 23 j 10:13	28°♎16'37	1°08'10	
minimum elong	-4549 Nov 23 j 10:15	28°♎16'38	1°08'03	
max. Earth dist.	-4549 Nov 22 j 18:45	28°♎11'56	10.81090 AU	
	-4549 Dec 07 j 17:04	0°♏		
morning rise	-4549 Dec 10 j 04:27	0°♏17'39		
retrograde	-4548 Mar 23 j 05:15	7°♏44'21		
opposition	-4548 Jun 01 j 23:36	4°♏21'44	1°06'32	
min. Earth dist.	-4548 Jun 02 j 12:10	4°♏19'21	8.74103 AU	
direct	-4548 Aug 10 j 03:21	1°♏02'09		
evening set	-4548 Nov 17 j 18:22	8°♏16'23		
conjunction	-4548 Dec 04 j 13:10	10°♏19'15	0°39'52	
minimum elong	-4548 Dec 04 j 13:11	10°♏19'15	0°39'44	
max. Earth dist.	-4548 Dec 03 j 23:08	10°♏14'56	10.66957 AU	
morning rise	-4548 Dec 21 j 11:43	12°♏23'22		
	-4547 Jan 13 j 03:53	15°♏		
retrograde	-4547 Apr 05 j 11:18	20°♏01'20		
opposition	-4547 Jun 14 j 23:04	16°♏36'52	0°29'59	
min. Earth dist.	-4547 Jun 15 j 09:42	16°♏34'50	8.59446 AU	
	-4547 Jul 06 j 22:27	15°℞♏		
direct	-4547 Aug 22 j 10:13	13°♏16'18		
	-4547 Oct 06 j 07:23	15°♏		

Attention, astronomical year style is used: The year -4547 in astronomical counting style is the year 4548 BCE in historical counting style.

evening set	-4547 Nov 30 j 04:10	20°♏38'44	
conjunction	-4547 Dec 17 j 02:45	22°♏44'41	0°08'59
minimum elong	-4547 Dec 17 j 02:45	22°♏44'41	0°08'49
behind sun begin	-4547 Dec 16 j 20:37	22°♏42'47	
behind sun end	-4547 Dec 17 j 08:52	22°♏46'34	
max. Earth dist.	-4547 Dec 16 j 14:14	22°♏40'47	10.52012 AU
morning rise	-4546 Jan 03 j 05:58	24°♏52'07	
	-4546 Feb 19 j 19:36	0°♐	
desc. node	-4546 Apr 01 j 10:55	2°♐26'26	
retrograde	-4546 Apr 19 j 02:46	2°♐42'11	
	-4546 Jun 18 j 17:54	30°℞♏	
opposition	-4546 Jun 28 j 06:31	29°♏15'52	-0°09'18
min. Earth dist.	-4546 Jun 28 j 15:15	29°♏14'10	8.44331 AU
direct	-4546 Sep 04 j 02:32	25°♏54'08	
	-4546 Nov 13 j 11:55	0°♐	
evening set	-4546 Dec 13 j 01:44	3°♐26'01	
conjunction	-4546 Dec 30 j 04:23	5°♐35'13	-0°23'22
minimum elong	-4546 Dec 30 j 04:22	5°♐35'13	0°23'33
max. Earth dist.	-4546 Dec 29 j 18:58	5°♐32'15	10.36931 AU
morning rise	-4545 Jan 16 j 12:15	7°♐46'06	
retrograde	-4545 May 03 j 04:52	15°♐48'33	
opposition	-4545 Jul 11 j 22:05	12°♐20'29	-0°49'33
min. Earth dist.	-4545 Jul 12 j 04:04	12°♐19'18	8.29482 AU
direct	-4545 Sep 17 j 04:04	8°♐57'28	
evening set	-4545 Dec 26 j 12:30	16°♐39'43	
conjunction	-4544 Jan 12 j 19:24	18°♐52'14	-0°55'22
minimum elong	-4544 Jan 12 j 19:22	18°♐52'13	0°55'35
max. Earth dist.	-4544 Jan 12 j 14:10	18°♐50'33	10.22463 AU
morning rise	-4544 Jan 30 j 07:38	21°♐06'29	
retrograde	-4544 May 16 j 17:06	29°♐20'50	
opposition	-4544 Jul 24 j 21:20	25°♐51'13	-1°28'31
min. Earth dist.	-4544 Jul 24 j 23:51	25°♐50'42	8.15676 AU
direct	-4544 Sep 29 j 14:01	22°♐26'50	
	-4543 Jan 05 j 22:11	0°♑	
evening set	-4543 Jan 08 j 12:59	0°♑19'57	
conjunction	-4543 Jan 26 j 00:02	2°♑35'35	-1°25'12
minimum elong	-4543 Jan 25 j 23:58	2°♑35'34	1°25'25
max. Earth dist.	-4543 Jan 25 j 23:29	2°♑35'24	10.09403 AU
morning rise	-4543 Feb 12 j 16:13	4°♑52'57	
retrograde	-4543 May 31 j 13:20	13°♑17'52	
opposition	-4543 Aug 08 j 03:48	9°♑46'59	-2°03'36
min. Earth dist.	-4543 Aug 08 j 02:19	9°♑47'17	8.03700 AU
direct	-4543 Oct 13 j 09:55	6°♑21'15	
evening set	-4542 Jan 23 j 02:37	14°♑24'57	
conjunction	-4542 Feb 09 j 17:29	16°♑43'21	-1°50'44
minimum elong	-4542 Feb 09 j 17:26	16°♑43'20	1°50'57
max. Earth dist.	-4542 Feb 09 j 21:30	16°♑44'41	9.98547 AU
morning rise	-4542 Feb 27 j 13:09	19°♑03'22	
retrograde	-4542 Jun 15 j 15:41	27°♑36'30	
opposition	-4542 Aug 22 j 16:11	24°♑04'45	-2°32'03
min. Earth dist.	-4542 Aug 22 j 10:56	24°♑05'50	7.94312 AU
direct	-4542 Oct 27 j 14:41	20°♑37'44	
evening set	-4541 Feb 07 j 04:03	28°♑50'52	
	-4541 Feb 15 j 22:42	0°♒	
conjunction	-4541 Feb 24 j 22:27	1°♒11'32	-2°09'54
minimum elong	-4541 Feb 24 j 22:25	1°♒11'31	2°10'06
max. Earth dist.	-4541 Feb 25 j 06:41	1°♒14'16	9.90635 AU
morning rise	-4541 Mar 14 j 21:05	3°♒33'35	
retrograde	-4541 Jun 30 j 21:15	12°♒11'34	
opposition	-4541 Sep 06 j 08:32	8°♒39'26	-2°51'20
min. Earth dist.	-4541 Sep 06 j 00:18	8°♒41'09	7.88165 AU
direct	-4541 Nov 11 j 02:54	5°♒11'13	
evening set	-4540 Feb 22 j 14:32	13°♒31'45	
	-4540 Mar 04 j 17:58	15°♒	
conjunction	-4540 Mar 11 j 12:10	15°♒54'01	-2°20'58
minimum elong	-4540 Mar 11 j 12:09	15°♒54'01	2°21'08
max. Earth dist.	-4540 Mar 12 j 00:11	15°♒58'01	9.86242 AU
morning rise	-4540 Mar 29 j 13:10	18°♒17'20	
retrograde	-4540 Jul 15 j 02:49	26°♒56'05	
opposition	-4540 Sep 20 j 02:39	23°♒24'05	-2°59'33
min. Earth dist.	-4540 Sep 19 j 16:05	23°♒26'18	7.85707 AU
direct	-4540 Nov 24 j 21:42	19°♒54'55	
evening set	-4539 Mar 09 j 06:23	28°♒19'59	
	-4539 Mar 21 j 21:28	0°♓	
conjunction	-4539 Mar 27 j 06:43	0°♓43'02	-2°22'52
minimum elong	-4539 Mar 27 j 06:44	0°♓43'02	2°22'59
max. Earth dist.	-4539 Mar 27 j 21:50	0°♓48'04	9.85709 AU
morning rise	-4539 Apr 14 j 09:18	3°♓06'44	
retrograde	-4539 Jul 30 j 04:40	11°♓41'58	
opposition	-4539 Oct 04 j 19:52	8°♓10'36	-2°55'53
min. Earth dist.	-4539 Oct 04 j 07:35	8°♓13'11	7.87138 AU
direct	-4539 Dec 09 j 20:53	4°♓40'47	
evening set	-4538 Mar 24 j 23:21	13°♓07'01	
conjunction	-4538 Apr 12 j 01:46	15°♓29'59	-2°15'23
minimum elong	-4538 Apr 12 j 01:49	15°♓30'00	2°15'27
max. Earth dist.	-4538 Apr 12 j 19:06	15°♓35'44	9.89108 AU
morning rise	-4538 Apr 30 j 05:06	17°♓53'09	
retrograde	-4538 Aug 13 j 23:29	26°♓20'54	
opposition	-4538 Oct 19 j 09:42	22°♓50'37	-2°40'42
min. Earth dist.	-4538 Oct 18 j 20:09	22°♓53'27	7.92381 AU
direct	-4538 Dec 24 j 20:59	19°♓20'32	
evening set	-4537 Apr 09 j 13:17	27°♓44'27	
	-4537 Apr 26 j 21:10	0°♈	
conjunction	-4537 Apr 27 j 16:55	0°♈06'29	-1°59'15
minimum elong	-4537 Apr 27 j 16:59	0°♈06'30	1°59'16
max. Earth dist.	-4537 Apr 28 j 11:31	0°♈12'35	9.96199 AU
morning rise	-4537 May 15 j 20:00	2°♈28'14	
retrograde	-4537 Aug 28 j 09:06	10°♈45'20	
opposition	-4537 Nov 02 j 18:01	7°♈16'31	-2°15'32
min. Earth dist.	-4537 Nov 02 j 03:40	7°♈19'30	8.01057 AU
direct	-4536 Jan 08 j 19:05	3°♈46'30	
evening set	-4536 Apr 23 j 20:37	12°♈05'06	
conjunction	-4536 May 12 j 00:15	14°♈25'20	-1°36'00
minimum elong	-4536 May 12 j 00:19	14°♈25'21	1°35'56
max. Earth dist.	-4536 May 12 j 19:06	14°♈31'27	10.06458 AU
morning rise	-4536 May 30 j 01:51	16°♈44'51	
retrograde	-4536 Sep 10 j 08:12	24°♈49'17	
opposition	-4536 Nov 15 j 19:10	21°♈22'11	-1°42'44
min. Earth dist.	-4536 Nov 15 j 04:49	21°♈25'08	8.12561 AU
direct	-4535 Jan 22 j 11:36	17°♈52'35	
evening set	-4535 May 08 j 18:21	26°♈03'26	
conjunction	-4535 May 26 j 20:39	28°♈21'12	-1°07'35
minimum elong	-4535 May 26 j 20:42	28°♈21'13	1°07'29
max. Earth dist.	-4535 May 27 j 14:38	28°♈26'56	10.19174 AU
	-4535 Jun 08 j 19:04	0°♉	
morning rise	-4535 Jun 13 j 19:35	0°♉37'51	
retrograde	-4535 Sep 23 j 21:50	8°♉28'45	
opposition	-4535 Nov 29 j 12:15	5°♉03'30	-1°05'01
min. Earth dist.	-4535 Nov 28 j 22:59	5°♉06'12	8.26125 AU
direct	-4534 Feb 05 j 20:34	1°♉34'36	
evening set	-4534 May 23 j 04:28	9°♉36'08	

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

conjunction	-4534 Jun 10 j 04:09	11°♉50'54	-0°36'11	
minimum elong	-4534 Jun 10 j 04:11	11°♉50'55	0°36'02	
max. Earth dist.	-4534 Jun 10 j 20:01	11°♉55'53	10.33495 AU	
morning rise	-4534 Jun 27 j 23:26	14°♉04'17		
	-4534 Jul 05 j 14:48	15°♉		
retrograde	-4534 Oct 07 j 00:01	21°♉41'49		
opposition	-4534 Dec 12 j 20:50	18°♉18'28	-0°25'05	
min. Earth dist.	-4534 Dec 12 j 10:06	18°♉20'36	8.40865 AU	
	-4533 Feb 06 j 08:56	15°℞♉		
direct	-4533 Feb 19 j 21:57	14°♉50'28		
	-4533 Mar 05 j 12:29	15°♉		
evening set	-4533 Jun 06 j 02:29	22°♉42'05		
conjunction	-4533 Jun 23 j 22:17	24°♉53'32	-0°03'50	
minimum elong	-4533 Jun 23 j 22:18	24°♉53'32	0°03'40	
behind sun begin	-4533 Jun 23 j 15:08	24°♉51'20		
behind sun end	-4533 Jun 24 j 05:28	24°♉55'44		
max. Earth dist.	-4533 Jun 24 j 10:22	24°♉57'15	10.48497 AU	
morning rise	-4533 Jul 11 j 13:08	27°♉03'27		
	-4533 Aug 06 j 03:41	0°♊		
asc. node	-4533 Aug 07 j 05:31	0°♊06'52		
retrograde	-4533 Oct 19 j 14:56	4°♊28'39		
opposition	-4533 Dec 25 j 21:04	1°♊07'09	0°14'43	
min. Earth dist.	-4533 Dec 25 j 13:31	1°♊08'38	8.55879 AU	
	-4532 Jan 09 j 08:40	30°℞♉		
direct	-4532 Mar 04 j 14:51	27°♉40'14		
	-4532 Apr 27 j 18:49	0°♊		
evening set	-4532 Jun 18 j 12:10	5°♊22'02		
conjunction	-4532 Jul 06 j 03:15	7°♊30'06	0°27'54	
minimum elong	-4532 Jul 06 j 03:13	7°♊30'06	0°28'05	
max. Earth dist.	-4532 Jul 06 j 10:37	7°♊32'21	10.63332 AU	
morning rise	-4532 Jul 23 j 13:11	9°♊36'36		
retrograde	-4532 Oct 30 j 21:49	16°♊51'06		
opposition	-4531 Jan 06 j 13:50	13°♊31'17	0°52'27	
min. Earth dist.	-4531 Jan 06 j 09:01	13°♊32'13	8.70402 AU	
direct	-4531 Mar 17 j 22:20	10°♊05'37		
evening set	-4531 Jul 01 j 09:55	17°♊38'04		
conjunction	-4531 Jul 18 j 19:55	19°♊42'54	0°57'22	
minimum elong	-4531 Jul 18 j 19:52	19°♊42'53	0°57'34	
max. Earth dist.	-4531 Jul 18 j 23:23	19°♊43'57	10.77348 AU	
morning rise	-4531 Aug 05 j 00:42	21°♊46'10		
retrograde	-4531 Nov 11 j 21:01	28°♊51'45		
opposition	-4530 Jan 18 j 23:55	25°♊33'21	1°26'39	
min. Earth dist.	-4530 Jan 18 j 21:22	25°♊33'50	8.83855 AU	
direct	-4530 Mar 30 j 20:59	22°♊08'57		
evening set	-4530 Jul 13 j 21:06	29°♊32'51		
	-4530 Jul 17 j 18:05	0°♋		
conjunction	-4530 Jul 31 j 01:57	1°♋34'40	1°23'37	
minimum elong	-4530 Jul 31 j 01:54	1°♋34'40	1°23'50	
max. Earth dist.	-4530 Jul 31 j 02:29	1°♋34'50	10.90023 AU	
morning rise	-4530 Aug 17 j 01:33	3°♋35'00		
retrograde	-4530 Nov 23 j 15:04	10°♋33'26		
opposition	-4529 Jan 31 j 04:18	7°♋16'13	1°56'15	
min. Earth dist.	-4529 Jan 31 j 04:39	7°♋16'08	8.95744 AU	
direct	-4529 Apr 12 j 11:39	3°♋53'00		
evening set	-4529 Jul 25 j 22:48	11°♋09'20		
conjunction	-4529 Aug 11 j 22:34	13°♋08'29	1°45'49	
minimum elong	-4529 Aug 11 j 22:31	13°♋08'28	1°46'03	
max. Earth dist.	-4529 Aug 11 j 20:00	13°♋07'44	11.00907 AU	
morning rise	-4529 Aug 28 j 17:22	15°♋06'16		
retrograde	-4529 Dec 05 j 05:14	21°♋59'22		
opposition	-4528 Feb 12 j 04:28	18°♋43'00	2°20'29	
min. Earth dist.	-4528 Feb 12 j 08:15	18°♋42'18	9.05658 AU	

direct	-4528 Apr 23 j 17:38	15°♋20'55		
evening set	-4528 Aug 05 j 16:10	22°♋30'43		
conjunction	-4528 Aug 22 j 11:10	24°♋27'38	2°03'26	
minimum elong	-4528 Aug 22 j 11:08	24°♋27'38	2°03'40	
max. Earth dist.	-4528 Aug 22 j 04:48	24°♋25'47	11.09638 AU	
morning rise	-4528 Sep 08 j 01:58	26°♋23'23		
	-4528 Oct 12 j 09:45	0°♌		
retrograde	-4528 Dec 15 j 13:32	3°♌12'58		
	-4527 Feb 22 j 09:40	30°℞♋		
opposition	-4527 Feb 23 j 01:16	29°♋57'07	2°38'51	
min. Earth dist.	-4527 Feb 23 j 08:01	29°♋55'52	9.13264 AU	
direct	-4527 May 05 j 19:31	26°♋36'00		
	-4527 Jul 12 j 23:11	0°♌		
evening set	-4527 Aug 17 j 02:48	3°♌40'30		
conjunction	-4527 Sep 02 j 17:49	5°♌35'41	2°16'06	
minimum elong	-4527 Sep 02 j 17:47	5°♌35'41	2°16'18	
max. Earth dist.	-4527 Sep 02 j 08:17	5°♌32'55	11.15936 AU	
morning rise	-4527 Sep 19 j 05:26	7°♌29'55		
retrograde	-4527 Dec 26 j 23:00	14°♌17'46		
opposition	-4526 Mar 06 j 19:39	11°♌02'04	2°51'03	
min. Earth dist.	-4526 Mar 07 j 04:09	11°♌00'31	9.18308 AU	
direct	-4526 May 17 j 16:56	7°♌41'48		
evening set	-4526 Aug 28 j 08:12	14°♌42'15		
	-4526 Aug 30 j 22:35	15°♌		
conjunction	-4526 Sep 13 j 20:16	16°♌36'17	2°23'35	
minimum elong	-4526 Sep 13 j 20:15	16°♌36'17	2°23'45	
max. Earth dist.	-4526 Sep 13 j 09:14	16°♌33'05	11.19599 AU	
morning rise	-4526 Sep 30 j 05:26	18°♌29'34		
retrograde	-4525 Jan 07 j 07:49	25°♌17'24		
opposition	-4525 Mar 18 j 13:17	22°♌01'34	2°56'55	
min. Earth dist.	-4525 Mar 18 j 23:27	21°♌59'43	9.20628 AU	
direct	-4525 May 29 j 08:16	18°♌42'01		
evening set	-4525 Sep 08 j 10:07	25°♌39'43		
conjunction	-4525 Sep 24 j 20:01	27°♌33'09	2°25'46	
minimum elong	-4525 Sep 24 j 20:01	27°♌33'09	2°25'53	
max. Earth dist.	-4525 Sep 24 j 07:13	27°♌29'26	11.20517 AU	
morning rise	-4525 Oct 11 j 03:49	29°♌26'04		
	-4525 Oct 16 j 04:12	0°♍		
retrograde	-4524 Jan 18 j 18:57	6°♍15'38		
opposition	-4524 Mar 29 j 07:24	2°♍59'23	2°56'22	
min. Earth dist.	-4524 Mar 29 j 19:38	2°♍57'09	9.20167 AU	
	-4524 May 19 j 10:55	30°℞♌		
direct	-4524 Jun 08 j 22:37	29°♌40'21		
	-4524 Jun 29 j 05:47	0°♍		
evening set	-4524 Sep 18 j 10:25	6°♍36'41		
conjunction	-4524 Oct 04 j 19:05	8°♍30'07	2°22'37	
minimum elong	-4524 Oct 04 j 19:06	8°♍30'07	2°22'42	
max. Earth dist.	-4524 Oct 04 j 03:52	8°♍25'41	11.18684 AU	
morning rise	-4524 Oct 21 j 02:47	10°♍23'18		
retrograde	-4523 Jan 29 j 07:39	17°♍16'13		
opposition	-4523 Apr 10 j 02:57	13°♍59'17	2°49'24	
min. Earth dist.	-4523 Apr 10 j 16:52	13°♍56'45	9.16952 AU	
direct	-4523 Jun 20 j 11:00	10°♍40'35		
evening set	-4523 Sep 29 j 10:40	17°♍37'00		
conjunction	-4523 Oct 15 j 19:17	19°♍31'00	2°14'10	
minimum elong	-4523 Oct 15 j 19:19	19°♍31'00	2°14'14	
max. Earth dist.	-4523 Oct 15 j 03:13	19°♍26'18	11.14151 AU	
morning rise	-4523 Nov 01 j 03:52	21°♍25'03		
retrograde	-4522 Feb 10 j 01:58	28°♍23'01		
opposition	-4522 Apr 22 j 01:14	25°♍05'07	2°36'05	
min. Earth dist.	-4522 Apr 22 j 15:21	25°♍02'32	9.11061 AU	

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

direct	-4522 Jul 02 j 01:34	21°♍46'35	
evening set	-4522 Oct 10 j 12:48	28°♍44'30	
	-4522 Oct 21 j 07:50	0°♎	
conjunction	-4522 Oct 26 j 22:26	0°♎39'40	2°00'34
minimum elong	-4522 Oct 26 j 22:28	0°♎39'40	2°00'35
max. Earth dist.	-4522 Oct 26 j 06:42	0°♎35'01	11.07036 AU
morning rise	-4522 Nov 12 j 08:42	2°♎35'07	
retrograde	-4521 Feb 22 j 03:37	9°♎39'43	
opposition	-4521 May 04 j 03:33	6°♎20'40	2°16'38
min. Earth dist.	-4521 May 04 j 17:11	6°♎18'09	9.02676 AU
direct	-4521 Jul 13 j 16:32	3°♎02'07	
evening set	-4521 Oct 21 j 18:56	10°♎02'59	
conjunction	-4521 Nov 07 j 06:20	11°♎59'50	1°42'04
minimum elong	-4521 Nov 07 j 06:23	11°♎59'51	1°42'03
max. Earth dist.	-4521 Nov 06 j 14:34	11°♎55'08	10.97573 AU
morning rise	-4521 Nov 23 j 19:23	13°♎57'17	
retrograde	-4520 Mar 05 j 11:20	21°♎10'02	
opposition	-4520 May 15 j 11:07	17°♎49'36	1°51'22
min. Earth dist.	-4520 May 16 j 00:32	17°♎47'07	8.92091 AU
direct	-4520 Jul 24 j 10:09	14°♎30'48	
evening set	-4520 Nov 01 j 06:52	21°♎36'11	
conjunction	-4520 Nov 17 j 20:46	23°♎35'12	1°19'04
minimum elong	-4520 Nov 17 j 20:49	23°♎35'13	1°18'59
max. Earth dist.	-4520 Nov 17 j 04:57	23°♎30'26	10.86095 AU
morning rise	-4520 Dec 04 j 13:29	25°♎35'07	
	-4519 Jan 15 j 04:04	0°♏	
retrograde	-4519 Mar 18 j 03:59	2°♏57'26	
	-4519 May 22 j 14:06	30°℞♎	
opposition	-4519 May 28 j 00:49	29°♎35'30	1°20'48
min. Earth dist.	-4519 May 28 j 13:46	29°♎33'04	8.79689 AU
direct	-4519 Aug 05 j 09:52	26°♎16'12	
	-4519 Oct 12 j 22:42	0°♏	
evening set	-4519 Nov 13 j 02:35	3°♏27'35	
conjunction	-4519 Nov 29 j 19:44	5°♏29'13	0°52'09
minimum elong	-4519 Nov 29 j 19:46	5°♏29'14	0°52'02
max. Earth dist.	-4519 Nov 29 j 05:28	5°♏24'52	10.73016 AU
morning rise	-4519 Dec 16 j 16:31	7°♏32'01	
	-4518 Mar 21 j 02:15	15°♏	
retrograde	-4518 Mar 31 j 05:13	15°♏05'06	
	-4518 Apr 10 j 09:38	15°℞♏	
opposition	-4518 Jun 09 j 21:21	11°♏41'32	0°45'46
min. Earth dist.	-4518 Jun 10 j 08:39	11°♏39'24	8.65953 AU
direct	-4518 Aug 17 j 15:21	8°♏21'34	
	-4518 Nov 19 j 17:22	15°♏	
evening set	-4518 Nov 25 j 07:53	15°♏40'25	
conjunction	-4518 Dec 12 j 04:50	17°♏44'59	0°22'11
minimum elong	-4518 Dec 12 j 04:51	17°♏44'59	0°22'01
max. Earth dist.	-4518 Dec 11 j 17:31	17°♏41'29	10.58864 AU
morning rise	-4518 Dec 29 j 05:57	19°♏50'56	
retrograde	-4517 Apr 13 j 17:21	27°♏35'45	
opposition	-4517 Jun 23 j 01:38	24°♏10'30	0°07'24
min. Earth dist.	-4517 Jun 23 j 10:00	24°♏08'53	8.51477 AU
direct	-4517 Aug 30 j 04:47	20°♏49'40	
desc. node	-4517 Sep 01 j 14:37	20°♏49'58	
evening set	-4517 Dec 08 j 00:28	28°♏17'14	
	-4517 Dec 21 j 18:04	0°♐	
conjunction	-4517 Dec 25 j 01:26	0°♐24'58	-0°09'47
minimum elong	-4517 Dec 25 j 01:26	0°♐24'58	0°09'58
behind sun begin	-4517 Dec 24 j 19:39	0°♐23'10	
behind sun end	-4517 Dec 25 j 07:12	0°♐26'46	
max. Earth dist.	-4517 Dec 24 j 16:58	0°♐22'19	10.44266 AU
morning rise	-4516 Jan 11 j 07:07	2°♐34'17	
retrograde	-4516 Apr 26 j 16:40	10°♐31'15	
opposition	-4516 Jul 05 j 13:52	7°♐04'21	-0°32'41
min. Earth dist.	-4516 Jul 05 j 19:11	7°♐03'18	8.36921 AU
direct	-4516 Sep 11 j 01:21	3°♐42'27	
evening set	-4516 Dec 20 j 05:54	11°♐19'50	
conjunction	-4515 Jan 06 j 10:53	13°♐30'47	-0°42'06
minimum elong	-4515 Jan 06 j 10:51	13°♐30'47	0°42'18
max. Earth dist.	-4515 Jan 06 j 05:05	13°♐28'56	10.29913 AU
morning rise	-4515 Jan 23 j 21:05	15°♐43'27	
retrograde	-4515 May 11 j 01:39	23°♐52'20	
opposition	-4515 Jul 19 j 09:50	20°♐23'55	-1°12'26
min. Earth dist.	-4515 Jul 19 j 12:29	20°♐23'23	8.23003 AU
direct	-4515 Sep 24 j 06:23	17°♐00'45	
evening set	-4514 Jan 03 j 00:33	24°♐48'39	
conjunction	-4514 Jan 20 j 09:31	27°♐02'44	-1°13'04
minimum elong	-4514 Jan 20 j 09:28	27°♐02'43	1°13'16
max. Earth dist.	-4514 Jan 20 j 06:47	27°♐01'50	10.16529 AU
morning rise	-4514 Feb 06 j 23:59	29°♐18'34	
	-4514 Feb 12 j 11:40	0°♑	
retrograde	-4514 May 25 j 17:49	7°♑38'26	
opposition	-4514 Aug 02 j 13:18	4°♑08'42	-1°49'24
min. Earth dist.	-4514 Aug 02 j 13:23	4°♑08'41	8.10430 AU
direct	-4514 Oct 07 j 22:54	0°♑44'10	
evening set	-4513 Jan 17 j 08:18	8°♑42'39	
conjunction	-4513 Feb 03 j 21:15	10°♑59'38	-1°40'37
minimum elong	-4513 Feb 03 j 21:11	10°♑59'37	1°40'49
max. Earth dist.	-4513 Feb 03 j 22:09	10°♑59'56	10.04809 AU
morning rise	-4513 Feb 21 j 15:29	13°♑18'19	
retrograde	-4513 Jun 09 j 16:45	21°♑47'25	
opposition	-4513 Aug 16 j 23:08	18°♑16'40	-2°20'54
min. Earth dist.	-4513 Aug 16 j 20:35	18°♑17'12	7.99877 AU
direct	-4513 Oct 22 j 00:25	14°♑50'48	
evening set	-4512 Feb 01 j 04:37	22°♑59'19	
conjunction	-4512 Feb 18 j 21:22	25°♑18'50	-2°02'39
minimum elong	-4512 Feb 18 j 21:19	25°♑18'49	2°02'51
max. Earth dist.	-4512 Feb 19 j 02:32	25°♑20'32	9.95454 AU
morning rise	-4512 Mar 07 j 18:48	27°♑39'51	
	-4512 Mar 26 j 09:18	0°♒	
retrograde	-4512 Jun 23 j 20:28	6°♒15'26	
opposition	-4512 Aug 30 j 13:39	2°♒44'04	-2°44'17
min. Earth dist.	-4512 Aug 30 j 07:58	2°♒45'15	7.92064 AU
	-4512 Oct 07 j 17:42	30°℞♑	
direct	-4512 Nov 04 j 09:45	29°♑16'55	
	-4512 Dec 01 j 19:05	0°♒	
evening set	-4511 Feb 15 j 11:19	7°♒33'57	
conjunction	-4511 Mar 05 j 07:33	9°♒55'24	-2°17'18
minimum elong	-4511 Mar 05 j 07:32	9°♒55'24	2°17'28
max. Earth dist.	-4511 Mar 05 j 17:08	9°♒58'36	9.89205 AU
morning rise	-4511 Mar 23 j 07:31	12°♒18'04	
	-4511 Apr 13 j 19:39	15°♒	
retrograde	-4511 Jul 09 j 01:58	20°♒56'26	
opposition	-4511 Sep 14 j 07:04	17°♒24'51	-2°57'21
min. Earth dist.	-4511 Sep 13 j 22:09	17°♒26'43	7.87646 AU
	-4511 Oct 16 j 07:51	15°℞♒	
direct	-4511 Nov 19 j 01:41	13°♒56'34	
	-4511 Dec 22 j 12:03	15°♒	
evening set	-4510 Mar 03 j 00:54	22°♒19'31	
conjunction	-4510 Mar 21 j 00:10	24°♒42'11	-2°23'09
minimum elong	-4510 Mar 21 j 00:11	24°♒42'11	2°23'17
max. Earth dist.	-4510 Mar 21 j 13:50	24°♒46'44	9.86621 AU

Attention, astronomical year style is used: The year -4510 in astronomical counting style is the year 4511 BCE in historical counting style.

morning rise	-4510 Apr 08 j 02:00	27°♒05'39		
	-4510 May 01 j 07:12	0°♓		
retrograde	-4510 Jul 24 j 06:01	5°♓42'32		
opposition	-4510 Sep 29 j 00:46	2°♓11'12	-2°58'47	
min. Earth dist.	-4510 Sep 28 j 13:11	2°♓13'37	7.87014 AU	
	-4510 Oct 27 j 06:36	30°℞♒		
direct	-4510 Dec 03 j 22:59	28°♒41'58		
	-4509 Jan 10 j 07:21	0°♓		
evening set	-4509 Mar 18 j 17:41	7°♓07'40		
conjunction	-4509 Apr 05 j 19:25	9°♓30'41	-2°19'38	
minimum elong	-4509 Apr 05 j 19:27	9°♓30'41	2°19'43	
max. Earth dist.	-4509 Apr 06 j 12:06	9°♓36'13	9.87941 AU	
morning rise	-4509 Apr 23 j 22:21	11°♓54'04		
retrograde	-4509 Aug 08 j 04:16	20°♓25'12		
opposition	-4509 Oct 13 j 16:01	16°♓54'33	-2°48'26	
min. Earth dist.	-4509 Oct 13 j 02:50	16°♓57'19	7.90233 AU	
direct	-4509 Dec 18 j 22:28	13°♓24'41		
evening set	-4508 Apr 02 j 09:15	21°♓49'40		
conjunction	-4508 Apr 20 j 12:34	24°♓12'09	-2°07'04	
minimum elong	-4508 Apr 20 j 12:38	24°♓12'10	2°07'06	
max. Earth dist.	-4508 Apr 21 j 06:52	24°♓18'10	9.93065 AU	
morning rise	-4508 May 08 j 15:43	26°♓34'32		
	-4508 Jun 05 j 16:13	0°♈		
retrograde	-4508 Aug 21 j 18:02	4°♈56'20		
opposition	-4508 Oct 27 j 02:45	1°♈26'49	-2°27'20	
min. Earth dist.	-4508 Oct 26 j 13:12	1°♈29'39	7.97060 AU	
	-4508 Nov 14 j 00:24	30°℞♓		
direct	-4507 Jan 01 j 21:07	27°♓56'39		
	-4507 Feb 19 j 02:29	0°♈		
evening set	-4507 Apr 17 j 19:25	6°♈17'38		
conjunction	-4507 May 05 j 23:10	8°♈38'42	-1°46'41	
minimum elong	-4507 May 05 j 23:14	8°♈38'44	1°46'40	
max. Earth dist.	-4507 May 06 j 17:30	8°♈44'41	10.01599 AU	
morning rise	-4507 May 24 j 01:26	10°♈59'15		
retrograde	-4507 Sep 04 j 21:36	19°♈09'14		
opposition	-4507 Nov 10 j 06:55	15°♈41'09	-1°57'33	
min. Earth dist.	-4507 Nov 09 j 17:48	15°♈43'52	8.07001 AU	
direct	-4506 Jan 16 j 16:00	12°♈11'03		
evening set	-4506 May 02 j 21:08	20°♈25'21		
conjunction	-4506 May 21 j 00:05	22°♈44'17	-1°20'16	
minimum elong	-4506 May 21 j 00:09	22°♈44'18	1°20'11	
max. Earth dist.	-4506 May 21 j 17:09	22°♈49'46	10.12930 AU	
morning rise	-4506 Jun 08 j 00:24	25°♈02'17		
	-4506 Jul 21 j 23:10	0°♉		
retrograde	-4506 Sep 18 j 14:34	2°♉59'03		
	-4506 Nov 18 j 12:57	30°℞♈		
opposition	-4506 Nov 24 j 03:10	29°♈32'39	-1°21'39	
min. Earth dist.	-4506 Nov 23 j 14:56	29°♈35'09	8.19375 AU	
direct	-4505 Jan 31 j 04:41	26°♈02'58		
	-4505 Apr 11 j 08:41	0°♉		
evening set	-4505 May 17 j 12:10	4°♉08'44		
conjunction	-4505 Jun 04 j 13:03	6°♉24'54	-0°49'55	
minimum elong	-4505 Jun 04 j 13:06	6°♉24'55	0°49'47	
max. Earth dist.	-4505 Jun 05 j 04:01	6°♉29'38	10.26289 AU	
morning rise	-4505 Jun 22 j 10:17	8°♉39'50		
	-4505 Aug 23 j 13:25	15°♉		
retrograde	-4505 Oct 01 j 20:04	16°♉23'10		
	-4505 Nov 10 j 17:45	15°℞♉		
opposition	-4505 Dec 07 j 15:06	12°♉58'33	-0°42'23	
min. Earth dist.	-4505 Dec 07 j 03:57	13°♉00'48	8.33388 AU	
direct	-4504 Feb 14 j 10:37	9°♉29'36		
	-4504 May 09 j 23:29	15°♉		
evening set	-4504 May 30 j 15:09	17°♉25'44		
conjunction	-4504 Jun 17 j 12:46	19°♉38'44	-0°17'44	
minimum elong	-4504 Jun 17 j 12:47	19°♉38'45	0°17'35	
max. Earth dist.	-4504 Jun 18 j 01:23	19°♉42'40	10.40856 AU	
morning rise	-4504 Jul 05 j 05:49	21°♉50'17		
retrograde	-4504 Oct 13 j 15:11	29°♉20'52		
opposition	-4504 Dec 19 j 18:40	25°♉58'02	-0°02'16	
min. Earth dist.	-4504 Dec 19 j 08:57	25°♉59'58	8.48234 AU	
asc. node	-4503 Jan 10 j 07:51	24°♉19'37		
direct	-4503 Feb 27 j 07:13	22°♉30'07		
	-4503 Jun 10 j 23:27	0°♊		
evening set	-4503 Jun 13 j 05:47	0°♊16'16		
conjunction	-4503 Jun 30 j 23:11	2°♊25'54	0°14'28	
minimum elong	-4503 Jun 30 j 23:10	2°♊25'53	0°14'39	
behind sun begin	-4503 Jun 30 j 20:15	2°♊25'00		
behind sun end	-4503 Jul 01 j 02:05	2°♊26'46		
max. Earth dist.	-4503 Jul 01 j 09:30	2°♊29'03	10.55838 AU	
morning rise	-4503 Jul 18 j 11:20	4°♊33'57		
retrograde	-4503 Oct 26 j 02:28	11°♊53'02		
opposition	-4502 Jan 01 j 14:16	8°♊31'56	0°36'33	
min. Earth dist.	-4502 Jan 01 j 07:06	8°♊33'20	8.63156 AU	
direct	-4502 Mar 12 j 17:13	5°♊05'12		
evening set	-4502 Jun 26 j 08:20	12°♊41'36		
conjunction	-4502 Jul 13 j 20:48	14°♊47'53	0°45'00	
minimum elong	-4502 Jul 13 j 20:46	14°♊47'52	0°45'12	
max. Earth dist.	-4502 Jul 14 j 03:49	14°♊50'00	10.70501 AU	
morning rise	-4502 Jul 31 j 03:47	16°♊52'33		
retrograde	-4502 Nov 07 j 04:45	24°♊01'41		
opposition	-4501 Jan 14 j 02:48	20°♊42'14	1°12'24	
min. Earth dist.	-4501 Jan 13 j 22:50	20°♊42'59	8.77450 AU	
direct	-4501 Mar 25 j 18:10	17°♊16'47		
evening set	-4501 Jul 08 j 23:46	24°♊44'08		
conjunction	-4501 Jul 26 j 06:50	26°♊47'13	1°12'43	
minimum elong	-4501 Jul 26 j 06:48	26°♊47'13	1°12'56	
max. Earth dist.	-4501 Jul 26 j 09:42	26°♊48'04	10.84195 AU	
morning rise	-4501 Aug 12 j 08:41	28°♊48'47		
	-4501 Aug 22 j 16:44	0°♋		
retrograde	-4501 Nov 18 j 23:07	5°♋49'48		
opposition	-4500 Jan 26 j 09:09	2°♋31'45	1°44'03	
min. Earth dist.	-4500 Jan 26 j 08:10	2°♋31'56	8.90510 AU	
	-4500 Mar 04 j 02:15	30°℞♊		
direct	-4500 Apr 06 j 12:43	29°♊07'40		
	-4500 May 09 j 16:15	0°♋		
evening set	-4500 Jul 20 j 04:57	6°♋26'51		
conjunction	-4500 Aug 06 j 06:46	8°♋27'04	1°36'43	
minimum elong	-4500 Aug 06 j 06:43	8°♋27'03	1°36'56	
max. Earth dist.	-4500 Aug 06 j 05:43	8°♋26'45	10.96379 AU	
morning rise	-4500 Aug 23 j 03:46	10°♋25'51		
retrograde	-4500 Nov 29 j 14:06	17°♋20'40		
opposition	-4499 Feb 06 j 10:29	14°♋03'44	2°10'37	
min. Earth dist.	-4499 Feb 06 j 11:36	14°♋03'32	9.01824 AU	
direct	-4499 Apr 18 j 22:41	10°♋41'01		
evening set	-4499 Aug 01 j 01:08	17°♋53'06		
conjunction	-4499 Aug 17 j 22:13	19°♋50'51	1°56'20	
minimum elong	-4499 Aug 17 j 22:10	19°♋50'50	1°56'34	
max. Earth dist.	-4499 Aug 17 j 18:43	19°♋49'49	11.06593 AU	
morning rise	-4499 Sep 03 j 14:45	21°♋47'20		
retrograde	-4499 Dec 11 j 01:18	28°♋37'47		
opposition	-4498 Feb 18 j 08:00	25°♋21'42	2°31'31	
min. Earth dist.	-4498 Feb 18 j 11:33	25°♋21'03	9.10968 AU	
direct	-4498 May 01 j 01:22	22°♋00'15		

Attention, astronomical year style is used: The year -4498 in astronomical counting style is the year 4499 BCE in historical counting style.

evening set	-4498 Aug 12 j 14:13	29°♋06'26	
	-4498 Aug 20 j 08:50	0°♌	
conjunction	-4498 Aug 29 j 07:02	1°♌02'12	2°11'09
minimum elong	-4498 Aug 29 j 07:00	1°♌02'12	2°11'22
max. Earth dist.	-4498 Aug 29 j 00:57	1°♌00'26	11.14469 AU
morning rise	-4498 Sep 14 j 19:47	2°♌56'53	
retrograde	-4498 Dec 22 j 10:59	9°♌44'45	
opposition	-4497 Mar 02 j 02:56	6°♌29'14	2°46'23
min. Earth dist.	-4497 Mar 02 j 09:40	6°♌28'00	9.17629 AU
direct	-4497 May 12 j 22:37	3°♌08'54	
evening set	-4497 Aug 23 j 21:35	10°♌10'26	
conjunction	-4497 Sep 09 j 10:46	12°♌04'46	2°20'53
minimum elong	-4497 Sep 09 j 10:44	12°♌04'45	2°21'03
max. Earth dist.	-4497 Sep 09 j 01:11	12°♌01'59	11.19758 AU
morning rise	-4497 Sep 25 j 20:49	13°♌58'14	
	-4497 Oct 05 j 01:52	15°♌	
retrograde	-4496 Jan 02 j 18:13	20°♌45'16	
opposition	-4496 Mar 12 j 20:40	17°♌29'57	2°54'58
min. Earth dist.	-4496 Mar 13 j 06:09	17°♌28'13	9.21593 AU
	-4496 Apr 20 j 15:21	15℞♌	
direct	-4496 May 23 j 15:34	14°♌10'32	
	-4496 Jun 25 j 04:43	15°♌	
evening set	-4496 Sep 03 j 00:37	21°♌08'43	
conjunction	-4496 Sep 19 j 11:11	23°♌02'09	2°25'21
minimum elong	-4496 Sep 19 j 11:10	23°♌02'09	2°25'29
max. Earth dist.	-4496 Sep 18 j 23:02	22°♌58'38	11.22291 AU
morning rise	-4496 Oct 05 j 19:32	24°♌55'00	
	-4496 Nov 27 j 14:27	0°♍	
retrograde	-4495 Jan 13 j 04:19	1°♍42'58	
	-4495 Mar 02 j 12:35	30℞♌	
opposition	-4495 Mar 24 j 14:05	28°♌27'28	2°57'11
min. Earth dist.	-4495 Mar 25 j 01:08	28°♌25'27	9.22710 AU
direct	-4495 Jun 04 j 07:59	25°♌08'46	
	-4495 Aug 25 j 23:59	0°♍	
evening set	-4495 Sep 14 j 01:13	2°♍04'55	
conjunction	-4495 Sep 30 j 10:19	3°♍58'05	2°24'31
minimum elong	-4495 Sep 30 j 10:20	3°♍58'05	2°24'37
max. Earth dist.	-4495 Sep 29 j 20:54	3°♍54'11	11.21948 AU
morning rise	-4495 Oct 16 j 17:51	5°♍50'52	
retrograde	-4494 Jan 24 j 16:27	12°♍41'24	
opposition	-4494 Apr 05 j 08:20	9°♍25'24	2°52'59
min. Earth dist.	-4494 Apr 05 j 20:37	9°♍23'10	9.20894 AU
direct	-4494 Jun 15 j 20:09	6°♍07'12	
evening set	-4494 Sep 25 j 01:08	13°♍02'44	
conjunction	-4494 Oct 11 j 09:41	14°♍56'12	2°18'22
minimum elong	-4494 Oct 11 j 09:43	14°♍56'12	2°18'27
max. Earth dist.	-4494 Oct 10 j 18:37	14°♍51'48	11.18683 AU
morning rise	-4494 Oct 27 j 17:31	16°♍49'34	
retrograde	-4493 Feb 05 j 08:45	23°♍44'23	
opposition	-4493 Apr 17 j 05:06	20°♍27'34	2°42'27
min. Earth dist.	-4493 Apr 17 j 19:14	20°♍24'59	9.16143 AU
direct	-4493 Jun 27 j 08:44	17°♍09'35	
evening set	-4493 Oct 06 j 02:05	24°♍06'00	
conjunction	-4493 Oct 22 j 10:58	26°♍00'23	2°07'02
minimum elong	-4493 Oct 22 j 11:00	26°♍00'23	2°07'04
max. Earth dist.	-4493 Oct 21 j 17:46	25°♍55'20	11.12549 AU
morning rise	-4493 Nov 07 j 20:19	27°♍54'57	
	-4493 Nov 26 j 16:02	0°♎	
retrograde	-4492 Feb 17 j 05:44	4°♎55'44	
opposition	-4492 Apr 28 j 05:26	1°♎37'50	2°25'43
min. Earth dist.	-4492 Apr 28 j 20:54	1°♎35'00	9.08585 AU
	-4492 May 21 j 11:17	30℞♍	
direct	-4492 Jul 07 j 22:27	28°♍19'50	
	-4492 Aug 22 j 17:54	0°♎	
evening set	-4492 Oct 16 j 06:06	5°♎18'42	
conjunction	-4492 Nov 01 j 16:26	7°♎14'33	1°50'40
minimum elong	-4492 Nov 01 j 16:28	7°♎14'34	1°50'40
max. Earth dist.	-4492 Oct 31 j 22:41	7°♎09'18	11.03753 AU
morning rise	-4492 Nov 18 j 04:11	9°♎10'54	
retrograde	-4491 Feb 28 j 09:10	16°♎19'19	
opposition	-4491 May 10 j 10:09	13°♎00'00	2°03'01
min. Earth dist.	-4491 May 11 j 01:34	12°♎57'09	8.98515 AU
direct	-4491 Jul 19 j 16:06	9°♎41'43	
evening set	-4491 Oct 27 j 15:00	16°♎44'33	
max. Earth dist.	-4491 Nov 12 j 11:04	18°♎37'26	10.92636 AU
conjunction	-4491 Nov 13 j 03:45	18°♎42'26	1°29'38
minimum elong	-4491 Nov 13 j 03:48	18°♎42'27	1°29'35
morning rise	-4491 Nov 29 j 18:36	20°♎41'04	
retrograde	-4490 Mar 12 j 22:56	27°♎58'35	
opposition	-4490 May 22 j 20:42	24°♎37'38	1°34'47
min. Earth dist.	-4490 May 23 j 10:44	24°♎35'01	8.86329 AU
direct	-4490 Jul 31 j 13:42	21°♎18'49	
evening set	-4490 Nov 08 j 06:45	28°♎27'04	
	-4490 Nov 21 j 03:59	0°♏	
conjunction	-4490 Nov 24 j 22:26	0°♏27'26	1°04'25
minimum elong	-4490 Nov 24 j 22:29	0°♏27'27	1°04'19
max. Earth dist.	-4490 Nov 24 j 06:36	0°♏22'38	10.79636 AU
morning rise	-4490 Dec 11 j 17:08	2°♏28'49	
retrograde	-4489 Mar 25 j 20:42	9°♏56'44	
opposition	-4489 Jun 04 j 14:02	6°♏34'01	1°01'41
min. Earth dist.	-4489 Jun 05 j 02:41	6°♏31'37	8.72525 AU
direct	-4489 Aug 12 j 14:19	3°♏14'24	
evening set	-4489 Nov 20 j 07:24	10°♏29'36	
max. Earth dist.	-4489 Dec 06 j 11:43	12°♏28'15	10.65290 AU
conjunction	-4489 Dec 07 j 02:31	12°♏32'48	0°35'44
minimum elong	-4489 Dec 07 j 02:33	12°♏32'49	0°35'35
morning rise	-4489 Dec 24 j 01:41	14°♏37'18	
	-4489 Dec 27 j 05:17	15°♏	
retrograde	-4488 Apr 07 j 03:04	22°♏16'43	
opposition	-4488 Jun 16 j 14:40	18°♏52'06	0°24'42
min. Earth dist.	-4488 Jun 17 j 01:51	18°♏49'58	8.57692 AU
direct	-4488 Aug 24 j 00:25	15°♏31'27	
evening set	-4488 Dec 01 j 18:34	22°♏55'03	
conjunction	-4488 Dec 18 j 17:36	25°♏01'23	0°04'37
minimum elong	-4488 Dec 18 j 17:37	25°♏01'23	0°04'27
behind sun begin	-4488 Dec 18 j 10:39	24°♏59'14	
behind sun end	-4488 Dec 19 j 00:34	25°♏03'32	
max. Earth dist.	-4488 Dec 18 j 05:07	24°♏57'30	10.50206 AU
morning rise	-4487 Jan 04 j 21:24	27°♏09'15	
	-4487 Jan 29 j 06:28	0°♐	
desc. node	-4487 Feb 10 j 08:36	1°♐15'42	
retrograde	-4487 Apr 20 j 20:30	5°♐00'52	
opposition	-4487 Jun 29 j 23:13	1°♐34'23	-0°14'48
min. Earth dist.	-4487 Jun 30 j 08:11	1°♐32'38	8.42485 AU
	-4487 Jul 20 j 22:42	30℞♏	
direct	-4487 Sep 05 j 18:05	28°♏12'32	
	-4487 Oct 20 j 21:27	0°♐	
evening set	-4487 Dec 14 j 17:48	5°♐45'44	
conjunction	-4487 Dec 31 j 21:00	7°♐55'21	-0°27'47
minimum elong	-4487 Dec 31 j 20:58	7°♐55'20	0°27'59
max. Earth dist.	-4487 Dec 31 j 12:21	7°♐52'36	10.35069 AU
morning rise	-4486 Jan 18 j 05:16	10°♐06'39	

Attention, astronomical year style is used: The year -4486 in astronomical counting style is the year 4487 BCE in historical counting style.

retrograde	-4486 May 05 j 00:23	18°♐10'41	
opposition	-4486 Jul 13 j 15:48	14°♐42'26	-0°54'59
min. Earth dist.	-4486 Jul 13 j 21:20	14°♐41'20	8.27638 AU
direct	-4486 Sep 18 j 20:00	11°♐19'17	
evening set	-4486 Dec 28 j 06:19	19°♐02'58	
conjunction	-4485 Jan 14 j 13:42	21°♐15'52	-0°59'36
minimum elong	-4485 Jan 14 j 13:40	21°♐15'51	0°59'48
max. Earth dist.	-4485 Jan 14 j 09:19	21°♐14'28	10.20650 AU
morning rise	-4485 Feb 01 j 02:16	23°♐30'31	
	-4485 Apr 03 j 16:21	0°♑	
retrograde	-4485 May 19 j 13:32	1°♑46'24	
	-4485 Jul 05 j 06:01	30°℞♐	
opposition	-4485 Jul 27 j 16:13	28°♐16'36	-1°33'33
min. Earth dist.	-4485 Jul 27 j 17:51	28°♐16'16	8.13942 AU
direct	-4485 Oct 02 j 07:49	24°♐52'04	
	-4485 Dec 19 j 15:58	0°♑	
evening set	-4484 Jan 11 j 08:31	2°♑46'37	
conjunction	-4484 Jan 28 j 19:57	5°♑02'38	-1°28'57
minimum elong	-4484 Jan 28 j 19:53	5°♑02'37	1°29'10
max. Earth dist.	-4484 Jan 28 j 19:51	5°♑02'36	10.07755 AU
morning rise	-4484 Feb 15 j 12:30	7°♑20'21	
retrograde	-4484 Jun 02 j 10:56	15°♑46'36	
opposition	-4484 Aug 09 j 23:43	12°♑15'33	-2°07'52
min. Earth dist.	-4484 Aug 09 j 21:35	12°♑15'59	8.02185 AU
direct	-4484 Oct 15 j 04:28	8°♑49'38	
evening set	-4483 Jan 24 j 23:57	16°♑54'42	
conjunction	-4483 Feb 11 j 15:07	19°♑13'26	-1°53'43
minimum elong	-4483 Feb 11 j 15:03	19°♑13'25	1°53'55
max. Earth dist.	-4483 Feb 11 j 19:03	19°♑14'44	9.97170 AU
morning rise	-4483 Mar 01 j 11:09	21°♑33'46	
	-4483 Jun 05 j 14:52	0°♒	
retrograde	-4483 Jun 17 j 14:16	0°♒07'51	
	-4483 Jun 29 j 13:28	30°℞♑	
opposition	-4483 Aug 24 j 12:49	26°♑35'59	-2°35'12
min. Earth dist.	-4483 Aug 24 j 07:28	26°♑37'06	7.93114 AU
direct	-4483 Oct 29 j 09:56	23°♑08'45	
	-4482 Jan 29 j 07:13	0°♒	
evening set	-4482 Feb 09 j 02:41	1°♒23'05	
conjunction	-4482 Feb 26 j 21:22	3°♒43'59	-2°11'52
minimum elong	-4482 Feb 26 j 21:20	3°♒43'59	2°12'03
max. Earth dist.	-4482 Feb 27 j 05:21	3°♒46'39	9.89618 AU
morning rise	-4482 Mar 16 j 20:21	6°♒06'17	
retrograde	-4482 Jul 02 j 20:20	14°♒44'47	
opposition	-4482 Sep 08 j 05:46	11°♒12'34	-2°53'04
min. Earth dist.	-4482 Sep 07 j 21:42	11°♒14'15	7.87361 AU
direct	-4482 Nov 12 j 23:36	7°♒44'08	
	-4481 Feb 16 j 02:48	15°♒	
evening set	-4481 Feb 24 j 13:59	16°♒05'32	
conjunction	-4481 Mar 14 j 11:53	18°♒27'58	-2°21'43
minimum elong	-4481 Mar 14 j 11:53	18°♒27'58	2°21'52
max. Earth dist.	-4481 Mar 14 j 23:50	18°♒31'57	9.85652 AU
morning rise	-4481 Apr 01 j 13:11	20°♒51'26	
retrograde	-4481 Jul 18 j 01:42	29°♒30'12	
opposition	-4481 Sep 23 j 00:06	25°♒58'09	-2°59'42
min. Earth dist.	-4481 Sep 22 j 13:35	26°♒00'21	7.85345 AU
direct	-4481 Nov 27 j 20:14	22°♒28'48	
	-4480 Mar 04 j 06:04	0°♓	
evening set	-4480 Mar 11 j 06:18	0°♓54'20	
conjunction	-4480 Mar 29 j 06:57	3°♓17'28	-2°22'19
minimum elong	-4480 Mar 29 j 06:59	3°♓17'28	2°22'25
max. Earth dist.	-4480 Mar 29 j 22:14	3°♓22'33	9.85578 AU
morning rise	-4480 Apr 16 j 09:45	5°♓41'12	
retrograde	-4480 Aug 01 j 02:06	14°♓15'56	
opposition	-4480 Oct 06 j 17:05	10°♓44'35	-2°54'24
min. Earth dist.	-4480 Oct 06 j 04:33	10°♓47'13	7.87230 AU
direct	-4480 Dec 11 j 20:07	7°♓14'38	
evening set	-4479 Mar 26 j 23:14	15°♓40'53	
conjunction	-4479 Apr 14 j 01:56	18°♓03'51	-2°13'35
minimum elong	-4479 Apr 14 j 01:59	18°♓03'52	2°13'38
max. Earth dist.	-4479 Apr 14 j 19:45	18°♓09'45	9.89428 AU
morning rise	-4479 May 02 j 05:19	20°♓26'57	
retrograde	-4479 Aug 15 j 19:33	28°♓53'47	
opposition	-4479 Oct 21 j 06:32	25°♓23'33	-2°37'43
min. Earth dist.	-4479 Oct 20 j 16:19	25°♓26'32	7.92903 AU
direct	-4479 Dec 26 j 19:38	21°♓53'23	
	-4478 Apr 09 j 07:40	0°♈	
evening set	-4478 Apr 11 j 12:31	0°♈16'55	
conjunction	-4478 Apr 29 j 16:20	2°♈38'51	-1°56'22
minimum elong	-4478 Apr 29 j 16:24	2°♈38'52	1°56'21
max. Earth dist.	-4478 Apr 30 j 11:45	2°♈45'13	9.96933 AU
morning rise	-4478 May 17 j 19:17	5°♈00'25	
retrograde	-4478 Aug 30 j 04:42	13°♈16'20	
opposition	-4478 Nov 04 j 14:11	9°♈47'36	-2°11'19
min. Earth dist.	-4478 Nov 03 j 23:09	9°♈50'43	8.01967 AU
direct	-4477 Jan 10 j 16:13	6°♈17'35	
evening set	-4477 Apr 26 j 18:58	14°♈35'27	
conjunction	-4477 May 14 j 22:39	16°♈55'30	-1°32'15
minimum elong	-4477 May 14 j 22:43	16°♈55'32	1°32'11
max. Earth dist.	-4477 May 15 j 18:20	17°♈01'53	10.07555 AU
morning rise	-4477 Jun 01 j 24:00	19°♈14'46	
retrograde	-4477 Sep 13 j 04:10	27°♈17'49	
opposition	-4477 Nov 18 j 14:29	23°♈50'52	-1°37'39
min. Earth dist.	-4477 Nov 18 j 00:00	23°♈53'50	8.13800 AU
direct	-4476 Jan 25 j 07:20	20°♈21'18	
evening set	-4476 May 10 j 15:39	28°♈31'15	
	-4476 May 22 j 08:51	0°♉	
conjunction	-4476 May 28 j 17:46	0°♉48'44	-1°03'17
minimum elong	-4476 May 28 j 17:49	0°♉48'45	1°03'10
max. Earth dist.	-4476 May 29 j 12:10	0°♉54'36	10.20567 AU
morning rise	-4476 Jun 15 j 16:21	3°♉05'05	
retrograde	-4476 Sep 25 j 16:18	10°♉54'31	
opposition	-4476 Dec 01 j 06:46	7°♉29'29	-0°59'26
min. Earth dist.	-4476 Nov 30 j 17:53	7°♉32'06	8.27635 AU
direct	-4475 Feb 07 j 16:45	4°♉00'40	
evening set	-4475 May 25 j 00:31	12°♉01'11	
conjunction	-4475 Jun 11 j 23:44	14°♉15'35	-0°31'36
minimum elong	-4475 Jun 11 j 23:46	14°♉15'36	0°31'27
max. Earth dist.	-4475 Jun 12 j 15:25	14°♉20'30	10.35129 AU
	-4475 Jun 17 j 21:19	15°♉	
morning rise	-4475 Jun 29 j 18:35	16°♉28'37	
retrograde	-4475 Oct 08 j 15:54	24°♉04'43	
opposition	-4475 Dec 14 j 14:26	20°♉41'37	-0°19'22
min. Earth dist.	-4475 Dec 14 j 04:01	20°♉43'42	8.42610 AU
direct	-4474 Feb 21 j 17:58	17°♉13'45	
evening set	-4474 Jun 07 j 21:05	25°♉04'13	
asc. node	-4474 Jun 16 j 00:27	26°♉03'46	
conjunction	-4474 Jun 25 j 16:18	27°♉15'15	0°00'51
minimum elong	-4474 Jun 25 j 16:18	27°♉15'15	0°01'01
behind sun begin	-4474 Jun 25 j 09:04	27°♉13'03	
behind sun end	-4474 Jun 25 j 23:32	27°♉17'27	
max. Earth dist.	-4474 Jun 26 j 03:53	27°♉18'48	10.50351 AU
morning rise	-4474 Jul 13 j 06:42	29°♉24'46	

Attention, astronomical year style is used: The year -4474 in astronomical counting style is the year 4475 BCE in historical counting style.

	-4474 Jul 18 j 04:09	0°♊		
retrograde	-4474 Oct 21 j 06:01	6°♊48'35		
opposition	-4474 Dec 27 j 13:34	3°♊27'17	0°20'15	
min. Earth dist.	-4474 Dec 27 j 05:42	3°♊28'50	8.57829 AU	
direct	-4473 Mar 07 j 09:28	0°♊00'33		
evening set	-4473 Jun 21 j 05:15	7°♊41'03		
conjunction	-4473 Jul 08 j 19:45	9°♊48'41	0°32'14	
minimum elong	-4473 Jul 08 j 19:43	9°♊48'41	0°32'26	
max. Earth dist.	-4473 Jul 09 j 03:04	9°♊50'55	10.65353 AU	
morning rise	-4473 Jul 26 j 05:08	11°♊54'45		
retrograde	-4473 Nov 02 j 11:42	19°♊07'53		
opposition	-4472 Jan 09 j 05:13	15°♊48'15	0°57'33	
min. Earth dist.	-4472 Jan 08 j 23:51	15°♊49'18	8.72460 AU	
direct	-4472 Mar 19 j 15:28	12°♊22'47		
evening set	-4472 Jul 03 j 01:31	19°♊53'54		
conjunction	-4472 Jul 20 j 10:56	21°♊58'17	1°01'18	
minimum elong	-4472 Jul 20 j 10:54	21°♊58'16	1°01'30	
max. Earth dist.	-4472 Jul 20 j 14:56	21°♊59'29	10.79404 AU	
morning rise	-4472 Aug 06 j 15:00	24°♊01'06		
	-4472 Oct 08 j 18:55	0°♋		
retrograde	-4472 Nov 13 j 10:29	1°♋05'28		
	-4472 Dec 19 j 19:18	30°℞♊		
opposition	-4471 Jan 20 j 14:21	27°♊47'17	1°31'07	
min. Earth dist.	-4471 Jan 20 j 11:49	27°♊47'46	8.85881 AU	
direct	-4471 Apr 01 j 13:14	24°♊23'05		
	-4471 Jun 29 j 20:48	0°♋		
evening set	-4471 Jul 15 j 11:16	1°♋45'43		
conjunction	-4471 Aug 01 j 15:29	3°♋47'07	1°26'59	
minimum elong	-4471 Aug 01 j 15:27	3°♋47'06	1°27'12	
max. Earth dist.	-4471 Aug 01 j 16:13	3°♋47'20	10.91984 AU	
morning rise	-4471 Aug 18 j 14:24	5°♋47'01		
retrograde	-4471 Nov 25 j 04:06	12°♋44'25		
opposition	-4470 Feb 01 j 17:54	9°♋27'24	1°59'57	
min. Earth dist.	-4470 Feb 01 j 19:03	9°♋27'11	8.97633 AU	
direct	-4470 Apr 14 j 01:16	6°♋04'25		
evening set	-4470 Jul 27 j 11:42	13°♋19'35		
conjunction	-4470 Aug 13 j 10:47	15°♋18'23	1°48'33	
minimum elong	-4470 Aug 13 j 10:45	15°♋18'22	1°48'46	
max. Earth dist.	-4470 Aug 13 j 07:19	15°♋17'21	11.02681 AU	
morning rise	-4470 Aug 30 j 05:08	17°♋15'49		
retrograde	-4470 Dec 06 j 14:58	24°♋08'04		
opposition	-4469 Feb 13 j 17:15	20°♋51'53	2°23'20	
min. Earth dist.	-4469 Feb 13 j 21:40	20°♋51'04	9.07322 AU	
direct	-4469 Apr 26 j 07:13	17°♋29'59		
evening set	-4469 Aug 08 j 04:00	24°♋38'49		
conjunction	-4469 Aug 24 j 22:27	26°♋35'25	2°05'27	
minimum elong	-4469 Aug 24 j 22:25	26°♋35'25	2°05'40	
max. Earth dist.	-4469 Aug 24 j 15:15	26°♋33'19	11.11151 AU	
morning rise	-4469 Sep 10 j 12:53	28°♋30'53		
	-4469 Sep 23 j 20:24	0°♌		
retrograde	-4469 Dec 18 j 01:08	5°♌19'52		
opposition	-4468 Feb 25 j 13:23	2°♌04'08	2°40'50	
min. Earth dist.	-4468 Feb 25 j 20:02	2°♌02'55	9.14628 AU	
	-4468 Mar 26 j 19:48	30°℞♋		
direct	-4468 May 07 j 09:23	28°♋43'13		
	-4468 Jun 17 j 02:04	0°♌		
evening set	-4468 Aug 18 j 13:40	5°♌46'52		
conjunction	-4468 Sep 04 j 04:23	7°♌41'50	2°17'23	
minimum elong	-4468 Sep 04 j 04:21	7°♌41'50	2°17'34	
max. Earth dist.	-4468 Sep 03 j 19:01	7°♌39'07	11.17126 AU	
morning rise	-4468 Sep 20 j 15:34	9°♌35'50		
	-4468 Nov 16 j 23:03	15°♌		
retrograde	-4468 Dec 28 j 09:39	16°♌23'17		
	-4467 Feb 09 j 02:40	15°℞♌		
opposition	-4467 Mar 08 j 07:26	13°♌07'40	2°52'08	
min. Earth dist.	-4467 Mar 08 j 15:54	13°♌06'07	9.19321 AU	
direct	-4467 May 19 j 04:05	9°♌47'35		
	-4467 Aug 13 j 11:58	15°♌		
evening set	-4467 Aug 29 j 18:19	16°♌47'20		
conjunction	-4467 Sep 15 j 06:08	18°♌41'12	2°24'07	
minimum elong	-4467 Sep 15 j 06:07	18°♌41'12	2°24'16	
max. Earth dist.	-4467 Sep 14 j 18:54	18°♌37'57	11.20421 AU	
morning rise	-4467 Oct 01 j 15:03	20°♌34'21		
retrograde	-4466 Jan 08 j 19:05	27°♌21'59		
opposition	-4466 Mar 20 j 00:50	24°♌06'12	2°57'06	
min. Earth dist.	-4466 Mar 20 j 11:50	24°♌04'12	9.21257 AU	
direct	-4466 May 30 j 19:52	20°♌46'45		
evening set	-4466 Sep 09 j 19:51	27°♌43'57		
conjunction	-4466 Sep 26 j 05:30	29°♌37'18	2°25'33	
minimum elong	-4466 Sep 26 j 05:30	29°♌37'18	2°25'40	
max. Earth dist.	-4466 Sep 25 j 15:31	29°♌33'15	11.20945 AU	
	-4466 Sep 29 j 11:47	0°♍		
morning rise	-4466 Oct 12 j 13:19	1°♍30'10		
retrograde	-4465 Jan 20 j 04:28	8°♍19'42		
opposition	-4465 Mar 31 j 18:43	5°♍03'27	2°55'39	
min. Earth dist.	-4465 Apr 01 j 07:54	5°♍01'03	9.20389 AU	
direct	-4465 Jun 11 j 08:51	1°♍44'28		
evening set	-4465 Sep 20 j 19:49	8°♍40'31		
conjunction	-4465 Oct 07 j 04:25	10°♍33'55	2°21'40	
minimum elong	-4465 Oct 07 j 04:27	10°♍33'55	2°21'45	
max. Earth dist.	-4465 Oct 06 j 12:39	10°♍29'20	11.18700 AU	
morning rise	-4465 Oct 23 j 12:12	12°♍27'07		
retrograde	-4464 Jan 31 j 18:03	19°♍20'17		
opposition	-4464 Apr 11 j 14:19	16°♍03'15	2°47'49	
min. Earth dist.	-4464 Apr 12 j 04:19	16°♍00'41	9.16753 AU	
direct	-4464 Jun 21 j 22:52	12°♍44'33		
evening set	-4464 Sep 30 j 19:54	19°♍40'51		
conjunction	-4464 Oct 17 j 04:42	21°♍34'55	2°12'31	
minimum elong	-4464 Oct 17 j 04:44	21°♍34'56	2°12'34	
max. Earth dist.	-4464 Oct 16 j 12:55	21°♍30'18	11.13747 AU	
morning rise	-4464 Nov 02 j 13:21	23°♍29'03		
	-4463 Jan 18 j 17:56	0°♎		
retrograde	-4463 Feb 11 j 14:22	0°♎27'27		
	-4463 Mar 07 j 16:47	30°℞♍		
opposition	-4463 Apr 23 j 12:49	27°♍09'25	2°33'41	
min. Earth dist.	-4463 Apr 24 j 02:46	27°♍06'52	9.10444 AU	
direct	-4463 Jul 03 j 12:29	23°♍50'52		
	-4463 Oct 04 j 18:57	0°♎		
evening set	-4463 Oct 11 j 22:22	0°♎48'52		
conjunction	-4463 Oct 28 j 08:10	2°♎44'10	1°58'16	
minimum elong	-4463 Oct 28 j 08:13	2°♎44'11	1°58'16	
max. Earth dist.	-4463 Oct 27 j 15:55	2°♎39'23	11.06224 AU	
morning rise	-4463 Nov 13 j 18:43	4°♎39'48		
retrograde	-4462 Feb 23 j 15:02	11°♎45'02		
opposition	-4462 May 05 j 15:26	8°♎25'49	2°13'27	
min. Earth dist.	-4462 May 06 j 05:39	8°♎23'11	9.01661 AU	
direct	-4462 Jul 15 j 02:27	5°♎07'10		
evening set	-4462 Oct 23 j 04:59	12°♎08'25		
conjunction	-4462 Nov 08 j 16:33	14°♎05'29	1°39'09	
minimum elong	-4462 Nov 08 j 16:36	14°♎05'29	1°39'07	
max. Earth dist.	-4462 Nov 07 j 23:37	14°♎00'26	10.96382 AU	
morning rise	-4462 Nov 25 j 06:04	16°♎03'10		

Attention, astronomical year style is used: The year -4461 in astronomical counting style is the year 4462 BCE in historical counting style.

retrograde	-4461 Mar 07 j 23:51	23°♎16'48	
opposition	-4461 May 17 j 23:36	19°♎56'10	1°47'28
min. Earth dist.	-4461 May 18 j 13:56	19°♎53'30	8.90711 AU
direct	-4461 Jul 26 j 21:43	16°♎37'14	
evening set	-4461 Nov 03 j 17:30	23°♎43'13	
conjunction	-4461 Nov 20 j 07:46	25°♎42'31	1°15'37
minimum elong	-4461 Nov 20 j 07:49	25°♎42'32	1°15'32
max. Earth dist.	-4461 Nov 19 j 15:44	25°♎37'41	10.84560 AU
morning rise	-4461 Dec 07 j 00:55	27°♎42'46	
	-4461 Dec 27 j 03:37	0°♏	
retrograde	-4460 Mar 19 j 16:53	5°♏06'13	
opposition	-4460 May 29 j 14:01	1°♏44'02	1°16'18
min. Earth dist.	-4460 May 30 j 03:10	1°♏41'33	8.77991 AU
	-4460 Jun 22 j 19:05	30°℞♎	
direct	-4460 Aug 06 j 21:37	28°♎24'35	
	-4460 Sep 19 j 10:52	0°♏	
evening set	-4460 Nov 14 j 14:10	5°♏36'50	
conjunction	-4460 Dec 01 j 07:52	7°♏38'50	0°48'16
minimum elong	-4460 Dec 01 j 07:54	7°♏38'50	0°48'08
max. Earth dist.	-4460 Nov 30 j 18:02	7°♏34'36	10.71186 AU
morning rise	-4460 Dec 18 j 05:03	9°♏41'59	
	-4459 Feb 07 j 05:26	15°♏	
retrograde	-4459 Apr 01 j 20:06	17°♏16'28	
	-4459 May 27 j 11:04	15°℞♏	
opposition	-4459 Jun 11 j 11:21	13°♏52'38	0°40'46
min. Earth dist.	-4459 Jun 11 j 22:13	13°♏50'34	8.63997 AU
direct	-4459 Aug 19 j 04:40	10°♏32'29	
	-4459 Nov 01 j 22:00	15°♏	
evening set	-4459 Nov 26 j 20:49	17°♏52'28	
conjunction	-4459 Dec 13 j 18:15	19°♏57'28	0°18'00
minimum elong	-4459 Dec 13 j 18:16	19°♏57'28	0°17'50
max. Earth dist.	-4459 Dec 13 j 06:53	19°♏53'56	10.56807 AU
morning rise	-4459 Dec 30 j 19:50	22°♏03'51	
retrograde	-4458 Apr 15 j 10:57	29°♏50'14	
opposition	-4458 Jun 24 j 16:42	26°♏24'44	0°02'06
min. Earth dist.	-4458 Jun 25 j 00:46	26°♏23'10	8.49338 AU
desc. node	-4458 Jul 14 j 16:43	24°♏55'08	
direct	-4458 Aug 31 j 17:24	23°♏03'42	
	-4458 Dec 05 j 04:16	0°♐	
evening set	-4458 Dec 09 j 14:56	0°♐32'40	
conjunction	-4458 Dec 26 j 16:16	2°♐40'50	-0°14'06
minimum elong	-4458 Dec 26 j 16:15	2°♐40'50	0°14'17
behind sun begin	-4458 Dec 26 j 12:50	2°♐39'46	
behind sun end	-4458 Dec 26 j 19:40	2°♐41'54	
max. Earth dist.	-4458 Dec 26 j 07:11	2°♐37'59	10.42078 AU
morning rise	-4457 Jan 12 j 22:31	4°♐50'37	
retrograde	-4457 Apr 29 j 11:16	12°♐49'19	
opposition	-4457 Jul 08 j 06:14	9°♐22'12	-0°38'03
min. Earth dist.	-4457 Jul 08 j 11:42	9°♐21'07	8.34713 AU
direct	-4457 Sep 13 j 14:55	6°♐00'05	
evening set	-4457 Dec 22 j 22:03	13°♐39'06	
conjunction	-4456 Jan 09 j 03:26	15°♐50'30	-0°46'20
minimum elong	-4456 Jan 09 j 03:24	15°♐50'29	0°46'32
max. Earth dist.	-4456 Jan 08 j 21:23	15°♐48'34	10.27724 AU
morning rise	-4456 Jan 26 j 14:14	18°♐03'39	
retrograde	-4456 May 12 j 20:17	26°♐14'20	
opposition	-4456 Jul 21 j 03:34	22°♐45'43	-1°17'35
min. Earth dist.	-4456 Jul 21 j 06:27	22°♐45'09	8.20873 AU
direct	-4456 Sep 25 j 23:09	19°♐22'22	
evening set	-4455 Jan 04 j 18:37	27°♐11'59	
conjunction	-4455 Jan 22 j 04:05	29°♐26'32	-1°16'58
minimum elong	-4455 Jan 22 j 04:02	29°♐26'31	1°17'10
max. Earth dist.	-4455 Jan 22 j 01:57	29°♐25'50	10.14495 AU
	-4455 Jan 26 j 11:16	0°♑	
morning rise	-4455 Feb 08 j 19:02	1°♑42'49	
retrograde	-4455 May 27 j 13:32	10°♑04'22	
opposition	-4455 Aug 04 j 08:14	6°♑34'29	-1°53'58
min. Earth dist.	-4455 Aug 04 j 08:05	6°♑34'31	8.08550 AU
direct	-4455 Oct 09 j 16:56	3°♑09'48	
evening set	-4454 Jan 19 j 04:16	11°♑09'55	
conjunction	-4454 Feb 05 j 17:42	13°♑27'19	-1°43'54
minimum elong	-4454 Feb 05 j 17:38	13°♑27'17	1°44'06
max. Earth dist.	-4454 Feb 05 j 20:02	13°♑28'05	10.03105 AU
morning rise	-4454 Feb 23 j 12:14	15°♑46'22	
retrograde	-4454 Jun 11 j 14:12	24°♑16'49	
opposition	-4454 Aug 18 j 19:05	20°♑45'56	-2°24'31
min. Earth dist.	-4454 Aug 18 j 15:39	20°♑46'39	7.98408 AU
direct	-4454 Oct 23 j 19:07	17°♑19'54	
evening set	-4453 Feb 03 j 02:09	25°♑29'48	
conjunction	-4453 Feb 20 j 19:21	27°♑49'37	-2°05'02
minimum elong	-4453 Feb 20 j 19:18	27°♑49'37	2°05'13
max. Earth dist.	-4453 Feb 21 j 02:04	27°♑51'51	9.94203 AU
	-4453 Mar 09 j 07:18	0°♒	
morning rise	-4453 Mar 10 j 16:58	0°♒10'56	
retrograde	-4453 Jun 26 j 19:13	8°♒47'24	
opposition	-4453 Sep 02 j 10:20	5°♒15'57	-2°46'36
min. Earth dist.	-4453 Sep 02 j 03:33	5°♒17'21	7.91061 AU
direct	-4453 Nov 07 j 05:22	1°♒48'39	
evening set	-4452 Feb 18 j 10:05	10°♒06'47	
conjunction	-4452 Mar 07 j 06:43	12°♒28'28	-2°18'32
minimum elong	-4452 Mar 07 j 06:41	12°♒28'27	2°18'42
max. Earth dist.	-4452 Mar 07 j 17:24	12°♒32'01	9.88425 AU
morning rise	-4452 Mar 25 j 06:51	14°♒51'19	
	-4452 Mar 26 j 09:32	15°♒	
retrograde	-4452 Jul 11 j 01:26	23°♒30'04	
opposition	-4452 Sep 16 j 04:12	19°♒58'29	-2°58'08
min. Earth dist.	-4452 Sep 15 j 18:31	20°♒00'30	7.87106 AU
direct	-4452 Nov 20 j 22:41	16°♒30'06	
evening set	-4451 Mar 05 j 00:39	24°♒53'50	
conjunction	-4451 Mar 23 j 00:11	27°♒16'38	-2°23'07
minimum elong	-4451 Mar 23 j 00:12	27°♒16'38	2°23'14
max. Earth dist.	-4451 Mar 23 j 14:23	27°♒21'21	9.86311 AU
morning rise	-4451 Apr 10 j 02:09	29°♒40'12	
	-4451 Apr 12 j 15:05	0°♓	
retrograde	-4451 Jul 26 j 04:51	8°♓16'57	
opposition	-4451 Sep 30 j 22:04	4°♓45'41	-2°57'55
min. Earth dist.	-4451 Sep 30 j 10:15	4°♓48'10	7.86941 AU
direct	-4451 Dec 05 j 20:42	1°♓16'25	
evening set	-4450 Mar 20 j 17:44	9°♓42'28	
conjunction	-4450 Apr 07 j 19:37	12°♓05'32	-2°18'18
minimum elong	-4450 Apr 07 j 19:40	12°♓05'32	2°18'22
max. Earth dist.	-4450 Apr 08 j 12:22	12°♓11'05	9.88109 AU
morning rise	-4450 Apr 25 j 22:41	14°♓28'54	
retrograde	-4450 Aug 10 j 02:00	22°♓59'26	
opposition	-4450 Oct 15 j 13:16	19°♓28'57	-2°45'58
min. Earth dist.	-4450 Oct 15 j 00:17	19°♓31'40	7.90633 AU
direct	-4450 Dec 20 j 20:15	15°♓59'04	
evening set	-4449 Apr 05 j 09:07	24°♓23'58	
conjunction	-4449 Apr 23 j 12:30	26°♓46'23	-2°04'33
minimum elong	-4449 Apr 23 j 12:34	26°♓46'24	2°04'34
max. Earth dist.	-4449 Apr 24 j 06:27	26°♓52'18	9.93703 AU
morning rise	-4449 May 11 j 15:44	29°♓08'40	

Attention, astronomical year style is used: The year -4449 in astronomical counting style is the year 4450 BCE in historical counting style.

	-4449 May 18 j 08:33	0°♈	
retrograde	-4449 Aug 24 j 14:57	7°♈29'27	
opposition	-4449 Oct 29 j 23:36	4°♈00'08	-2°23'31
min. Earth dist.	-4449 Oct 29 j 10:19	4°♈02'55	7.97911 AU
direct	-4448 Jan 04 j 19:02	0°♈30'00	
evening set	-4448 Apr 19 j 18:48	8°♈50'30	
conjunction	-4448 May 07 j 22:31	11°♈11'25	-1°43'11
minimum elong	-4448 May 07 j 22:35	11°♈11'27	1°43'09
max. Earth dist.	-4448 May 08 j 16:21	11°♈17'14	10.02668 AU
morning rise	-4448 May 26 j 00:46	13°♈31'45	
retrograde	-4448 Sep 06 j 17:36	21°♈40'24	
opposition	-4448 Nov 12 j 03:05	18°♈12'33	-1°52'40
min. Earth dist.	-4448 Nov 11 j 13:51	18°♈15'17	8.08251 AU
direct	-4447 Jan 18 j 13:57	14°♈42'32	
evening set	-4447 May 04 j 19:34	22°♈56'01	
conjunction	-4447 May 22 j 22:23	25°♈14'41	-1°16'03
minimum elong	-4447 May 22 j 22:27	25°♈14'42	1°15'59
max. Earth dist.	-4447 May 23 j 15:18	25°♈20'07	10.14364 AU
morning rise	-4447 Jun 09 j 22:28	27°♈32'23	
	-4447 Jun 30 j 06:05	0°♉	
retrograde	-4447 Sep 20 j 09:01	5°♉27'40	
opposition	-4447 Nov 25 j 22:33	2°♉01'29	-1°16'07
min. Earth dist.	-4447 Nov 25 j 09:44	2°♉04'06	8.20953 AU
	-4447 Dec 22 j 11:24	30°℞♈	
direct	-4446 Feb 02 j 02:53	28°♈31'56	
	-4446 Mar 15 j 11:16	0°♉	
evening set	-4446 May 19 j 09:13	6°♉36'35	
conjunction	-4446 Jun 06 j 09:55	8°♉52'25	-0°45'19
minimum elong	-4446 Jun 06 j 09:57	8°♉52'25	0°45'11
max. Earth dist.	-4446 Jun 07 j 01:19	8°♉57'17	10.28011 AU
morning rise	-4446 Jun 24 j 06:42	11°♉06'58	
	-4446 Jul 28 j 03:17	15°♉	
retrograde	-4446 Oct 03 j 13:10	18°♉48'47	
opposition	-4446 Dec 09 j 09:31	15°♉24'22	-0°36'34
min. Earth dist.	-4446 Dec 08 j 21:51	15°♉26'43	8.35208 AU
	-4446 Dec 14 j 10:56	15°℞♉	
direct	-4445 Feb 16 j 07:15	11°♉55'36	
	-4445 Apr 19 j 05:04	15°♉	
evening set	-4445 Jun 02 j 10:54	19°♉50'27	
conjunction	-4445 Jun 20 j 08:10	22°♉03'03	-0°13'03
minimum elong	-4445 Jun 20 j 08:11	22°♉03'03	0°12'53
behind sun begin	-4445 Jun 20 j 03:48	22°♉01'43	
behind sun end	-4445 Jun 20 j 12:33	22°♉04'24	
max. Earth dist.	-4445 Jun 20 j 21:27	22°♉07'10	10.42769 AU
morning rise	-4445 Jul 08 j 00:37	24°♉14'10	
	-4445 Sep 02 j 01:05	0°♊	
retrograde	-4445 Oct 16 j 08:31	1°♊43'13	
asc. node	-4445 Nov 19 j 10:22	0°♊42'30	
	-4445 Nov 30 j 15:54	30°℞♉	
opposition	-4445 Dec 22 j 12:04	28°♉20'37	0°03'29
min. Earth dist.	-4445 Dec 22 j 02:31	28°♉22'30	8.50200 AU
direct	-4444 Mar 01 j 01:30	24°♉52'51	
	-4444 May 23 j 02:53	0°♊	
evening set	-4444 Jun 15 j 00:07	2°♊37'39	
conjunction	-4444 Jul 02 j 16:57	4°♊46'51	0°19'01
minimum elong	-4444 Jul 02 j 16:56	4°♊46'51	0°19'12
max. Earth dist.	-4444 Jul 03 j 03:22	4°♊50'02	10.57840 AU
morning rise	-4444 Jul 20 j 04:28	6°♊54'27	
retrograde	-4444 Oct 27 j 17:52	14°♊12'05	
opposition	-4443 Jan 03 j 06:47	10°♊51'12	0°41'57
min. Earth dist.	-4443 Jan 03 j 00:16	10°♊52'28	8.65174 AU
direct	-4443 Mar 14 j 10:43	7°♊24'37	
evening set	-4443 Jun 28 j 01:05	14°♊59'39	
conjunction	-4443 Jul 15 j 12:49	17°♊05'29	0°49'11
minimum elong	-4443 Jul 15 j 12:47	17°♊05'28	0°49'23
max. Earth dist.	-4443 Jul 15 j 19:06	17°♊07'23	10.72503 AU
morning rise	-4443 Aug 01 j 19:14	19°♊09'44	
retrograde	-4443 Nov 08 j 17:39	26°♊17'34	
opposition	-4442 Jan 15 j 18:16	22°♊58'16	1°17'14
min. Earth dist.	-4442 Jan 15 j 14:38	22°♊58'58	8.79430 AU
direct	-4442 Mar 27 j 12:19	19°♊32'58	
evening set	-4442 Jul 10 j 14:57	26°♊58'59	
conjunction	-4442 Jul 27 j 21:22	29°♊01'39	1°16'24
minimum elong	-4442 Jul 27 j 21:19	29°♊01'38	1°16'36
max. Earth dist.	-4442 Jul 27 j 23:30	29°♊02'17	10.86114 AU
	-4442 Aug 05 j 01:26	0°♋	
morning rise	-4442 Aug 13 j 22:41	1°♋02'47	
retrograde	-4442 Nov 20 j 12:11	8°♋02'41	
opposition	-4441 Jan 27 j 23:29	4°♋44'45	1°48'09
min. Earth dist.	-4441 Jan 27 j 22:12	4°♋45'00	8.92362 AU
direct	-4441 Apr 09 j 04:39	1°♋20'49	
evening set	-4441 Jul 22 j 18:44	8°♋38'46	
conjunction	-4441 Aug 08 j 20:01	10°♋38'35	1°39'46
minimum elong	-4441 Aug 08 j 19:58	10°♋38'34	1°39'59
max. Earth dist.	-4441 Aug 08 j 19:09	10°♋38'20	10.98132 AU
morning rise	-4441 Aug 25 j 16:23	12°♋36'59	
retrograde	-4441 Dec 02 j 01:56	19°♋30'52	
opposition	-4440 Feb 08 j 23:58	16°♋14'02	2°13'54
min. Earth dist.	-4440 Feb 09 j 01:01	16°♋13'50	9.03470 AU
direct	-4440 Apr 20 j 13:07	12°♋51'28	
evening set	-4440 Aug 02 j 13:41	20°♋02'25	
conjunction	-4440 Aug 19 j 10:14	21°♋59'50	1°58'42
minimum elong	-4440 Aug 19 j 10:11	21°♋59'49	1°58'55
max. Earth dist.	-4440 Aug 19 j 06:54	21°♋58'51	11.08110 AU
morning rise	-4440 Sep 05 j 02:11	23°♋55'59	
	-4440 Nov 12 j 07:10	0°♌	
retrograde	-4440 Dec 12 j 13:36	0°♌45'41	
	-4439 Jan 12 j 07:21	30°℞♋	
opposition	-4439 Feb 19 j 20:49	27°♋29'42	2°33'55
min. Earth dist.	-4439 Feb 20 j 01:05	27°♋28'55	9.12359 AU
direct	-4439 May 02 j 14:45	24°♋08'22	
	-4439 Aug 03 j 01:55	0°♌	
evening set	-4439 Aug 14 j 01:42	1°♌13'35	
conjunction	-4439 Aug 30 j 17:59	3°♌09'05	2°12'47
minimum elong	-4439 Aug 30 j 17:56	3°♌09'05	2°12'58
max. Earth dist.	-4439 Aug 30 j 11:02	3°♌07'04	11.15710 AU
morning rise	-4439 Sep 16 j 06:25	5°♌03'32	
retrograde	-4439 Dec 23 j 20:30	11°♌50'50	
opposition	-4438 Mar 03 j 15:02	8°♌35'22	2°47'52
min. Earth dist.	-4438 Mar 03 j 22:32	8°♌34'00	9.18725 AU
direct	-4438 May 14 j 10:25	5°♌15'08	
evening set	-4438 Aug 25 j 08:09	12°♌15'55	
conjunction	-4438 Sep 10 j 20:56	14°♌10'02	2°21'45
minimum elong	-4438 Sep 10 j 20:55	14°♌10'01	2°21'55
max. Earth dist.	-4438 Sep 10 j 10:34	14°♌07'02	11.20688 AU
	-4438 Sep 18 j 01:38	15°♌	
morning rise	-4438 Sep 27 j 06:48	16°♌03'20	
retrograde	-4437 Jan 04 j 04:47	22°♌50'04	
opposition	-4437 Mar 15 j 08:09	19°♌34'45	2°55'32
min. Earth dist.	-4437 Mar 15 j 17:38	19°♌33'01	9.22356 AU
direct	-4437 May 26 j 04:44	16°♌15'26	
evening set	-4437 Sep 05 j 10:27	23°♌13'02	

Attention, astronomical year style is used: The year -4437 in astronomical counting style is the year 4438 BCE in historical counting style.

conjunction	-4437 Sep 21 j 20:52	25°♌06'21	2°25'28
minimum elong	-4437 Sep 21 j 20:52	25°♌06'21	2°25'36
max. Earth dist.	-4437 Sep 21 j 08:59	25°♌02'55	11.22879 AU
morning rise	-4437 Oct 08 j 05:00	26°♌59'05	
	-4437 Nov 05 j 13:46	0°♍	
retrograde	-4436 Jan 15 j 15:00	3°♍46'57	
opposition	-4436 Mar 26 j 01:20	0°♍31'26	2°56'51
min. Earth dist.	-4436 Mar 26 j 12:11	0°♍29'28	9.23124 AU
	-4436 Apr 02 j 06:47	30°℞♌	
direct	-4436 Jun 05 j 18:28	27°♌12'51	
	-4436 Aug 05 j 18:36	0°♍	
evening set	-4436 Sep 15 j 10:37	4°♍08'35	
conjunction	-4436 Oct 01 j 19:38	6°♍01'42	2°23'53
minimum elong	-4436 Oct 01 j 19:39	6°♍01'42	2°23'59
max. Earth dist.	-4436 Oct 01 j 06:12	5°♍57'48	11.22196 AU
morning rise	-4436 Oct 18 j 03:06	7°♍54'28	
retrograde	-4435 Jan 26 j 03:15	14°♍45'06	
opposition	-4435 Apr 06 j 19:34	11°♍29'05	2°51'47
min. Earth dist.	-4435 Apr 07 j 08:21	11°♍26'46	9.20981 AU
direct	-4435 Jun 17 j 06:35	8°♍10'57	
evening set	-4435 Sep 26 j 10:19	15°♍06'16	
conjunction	-4435 Oct 12 j 18:49	16°♍59'45	2°17'02
minimum elong	-4435 Oct 12 j 18:50	16°♍59'46	2°17'06
max. Earth dist.	-4435 Oct 12 j 02:50	16°♍55'06	11.18627 AU
morning rise	-4435 Oct 29 j 02:51	18°♍53'11	
retrograde	-4434 Feb 06 j 19:18	25°♍48'14	
opposition	-4434 Apr 18 j 16:21	22°♍31'23	2°40'24
min. Earth dist.	-4434 Apr 19 j 07:13	22°♍28'40	9.15941 AU
direct	-4434 Jun 28 j 19:03	19°♍13'27	
evening set	-4434 Oct 07 j 11:14	26°♍09'48	
conjunction	-4434 Oct 23 j 20:14	28°♍04'15	2°05'00
minimum elong	-4434 Oct 23 j 20:17	28°♍04'16	2°05'02
max. Earth dist.	-4434 Oct 23 j 02:52	27°♍59'09	11.12216 AU
morning rise	-4434 Nov 09 j 05:50	29°♍58'56	
	-4434 Nov 09 j 09:34	0°♎	
retrograde	-4433 Feb 18 j 15:48	7°♎00'10	
opposition	-4433 Apr 30 j 16:45	3°♎42'09	2°22'51
min. Earth dist.	-4433 May 01 j 08:13	3°♎39'19	9.08104 AU
direct	-4433 Jul 10 j 09:14	0°♎24'11	
evening set	-4433 Oct 18 j 15:23	7°♎23'09	
max. Earth dist.	-4433 Nov 03 j 08:49	9°♎14'03	11.03132 AU
conjunction	-4433 Nov 04 j 02:02	9°♎19'09	1°48'01
minimum elong	-4433 Nov 04 j 02:05	9°♎19'10	1°48'00
morning rise	-4433 Nov 20 j 13:59	11°♎15'38	
retrograde	-4432 Mar 01 j 22:21	18°♎24'42	
opposition	-4432 May 11 j 21:54	15°♎05'18	1°59'25
min. Earth dist.	-4432 May 12 j 12:50	15°♎02'32	8.97739 AU
direct	-4432 Jul 21 j 03:16	11°♎47'02	
evening set	-4432 Oct 29 j 00:47	18°♎50'09	
conjunction	-4432 Nov 14 j 13:50	20°♎48'14	1°26'26
minimum elong	-4432 Nov 14 j 13:53	20°♎48'15	1°26'22
max. Earth dist.	-4432 Nov 13 j 20:56	20°♎43'10	10.91720 AU
morning rise	-4432 Dec 01 j 05:03	22°♎47'06	
	-4431 Mar 03 j 22:30	0°♏	
retrograde	-4431 Mar 14 j 11:51	0°♏05'27	
	-4431 Mar 25 j 01:20	30°℞♎	
opposition	-4431 May 24 j 09:01	26°♎44'25	1°30'33
min. Earth dist.	-4431 May 24 j 23:10	26°♎41'46	8.85264 AU
direct	-4431 Aug 01 j 23:10	23°♎25'35	
	-4431 Nov 04 j 20:39	0°♏	
evening set	-4431 Nov 09 j 17:26	0°♏34'25	
conjunction	-4431 Nov 26 j 09:23	2°♏35'01	1°00'44
minimum elong	-4431 Nov 26 j 09:25	2°♏35'02	1°00'37
max. Earth dist.	-4431 Nov 25 j 16:36	2°♏29'56	10.78448 AU
morning rise	-4431 Dec 13 j 04:36	4°♏36'41	
retrograde	-4430 Mar 27 j 09:30	12°♏05'39	
opposition	-4430 Jun 06 j 03:01	8°♏42'49	0°56'56
min. Earth dist.	-4430 Jun 06 j 16:22	8°♏40'18	8.71206 AU
direct	-4430 Aug 14 j 02:19	5°♏23'09	
evening set	-4430 Nov 21 j 19:04	12°♏39'11	
conjunction	-4430 Dec 08 j 14:34	14°♏42'42	0°31'42
minimum elong	-4430 Dec 08 j 14:35	14°♏42'42	0°31'33
max. Earth dist.	-4430 Dec 07 j 23:26	14°♏38'02	10.63873 AU
	-4430 Dec 10 j 22:42	15°♏	
morning rise	-4430 Dec 25 j 14:13	16°♏47'31	
retrograde	-4429 Apr 09 j 18:05	24°♏28'10	
opposition	-4429 Jun 19 j 04:36	21°♏03'27	0°19'34
min. Earth dist.	-4429 Jun 19 j 16:09	21°♏01'14	8.56177 AU
direct	-4429 Aug 26 j 12:55	17°♏42'43	
evening set	-4429 Dec 04 j 07:26	25°♏07'19	
conjunction	-4429 Dec 21 j 06:59	27°♏14'01	0°00'20
minimum elong	-4429 Dec 21 j 06:59	27°♏14'00	0°00'09
behind sun begin	-4429 Dec 20 j 23:59	27°♏11'50	
behind sun end	-4429 Dec 21 j 13:59	27°♏16'10	
max. Earth dist.	-4429 Dec 20 j 19:07	27°♏10'18	10.48623 AU
desc. node	-4429 Dec 25 j 02:09	27°♏42'35	
morning rise	-4428 Jan 07 j 11:10	29°♏22'14	
	-4428 Jan 12 j 15:19	0°♐	
retrograde	-4428 Apr 22 j 12:31	7°♐15'14	
opposition	-4428 Jul 01 j 14:07	3°♐48'37	-0°20'05
min. Earth dist.	-4428 Jul 01 j 22:44	3°♐46'56	8.40852 AU
direct	-4428 Sep 07 j 07:25	0°♐26'40	
evening set	-4428 Dec 16 j 08:18	8°♐01'04	
conjunction	-4427 Jan 02 j 11:59	10°♐11'04	-0°32'01
minimum elong	-4427 Jan 02 j 11:58	10°♐11'03	0°32'13
max. Earth dist.	-4427 Jan 02 j 03:53	10°♐08'29	10.33405 AU
morning rise	-4427 Jan 19 j 20:38	12°♐22'44	
retrograde	-4427 May 06 j 17:27	20°♐28'12	
opposition	-4427 Jul 15 j 07:38	16°♐59'47	-1°00'09
min. Earth dist.	-4427 Jul 15 j 12:29	16°♐58'50	8.25978 AU
direct	-4427 Sep 20 j 10:48	13°♐36'32	
evening set	-4427 Dec 29 j 22:31	21°♐21'33	
conjunction	-4426 Jan 16 j 06:17	23°♐34'50	-1°03'35
minimum elong	-4426 Jan 16 j 06:14	23°♐34'49	1°03'48
max. Earth dist.	-4426 Jan 16 j 01:53	23°♐33'25	10.19008 AU
morning rise	-4426 Feb 02 j 19:15	25°♐49'51	
	-4426 Mar 10 j 10:16	0°♑	
retrograde	-4426 May 21 j 08:30	4°♑07'07	
opposition	-4426 Jul 29 j 09:10	0°♑37'10	-1°38'17
min. Earth dist.	-4426 Jul 29 j 10:24	0°♑36'55	8.12359 AU
	-4426 Aug 06 j 02:31	30°℞♐	
direct	-4426 Oct 03 j 22:42	27°♐12'30	
	-4426 Nov 28 j 23:18	0°♑	
evening set	-4425 Jan 13 j 02:19	5°♑08'25	
conjunction	-4425 Jan 30 j 14:02	7°♑24'47	-1°32'27
minimum elong	-4425 Jan 30 j 13:58	7°♑24'45	1°32'39
max. Earth dist.	-4425 Jan 30 j 13:34	7°♑24'38	10.06248 AU
morning rise	-4425 Feb 17 j 07:01	9°♑42'51	
retrograde	-4425 Jun 05 j 07:36	18°♑10'19	
opposition	-4425 Aug 12 j 17:41	14°♑39'10	-2°11'50
min. Earth dist.	-4425 Aug 12 j 15:38	14°♑39'35	8.00793 AU
direct	-4425 Oct 17 j 20:28	11°♑13'04	
evening set	-4424 Jan 27 j 19:17	19°♑19'28	

Attention, astronomical year style is used: The year -4424 in astronomical counting style is the year 4425 BCE in historical counting style.

conjunction	-4424 Feb 14 j 10:46	21°♓38'30	-1°56'27
minimum elong	-4424 Feb 14 j 10:43	21°♓38'29	1°56'38
max. Earth dist.	-4424 Feb 14 j 14:25	21°♓39'42	9.95908 AU
morning rise	-4424 Mar 03 j 07:15	23°♓59'08	
	-4424 Apr 25 j 15:24	0°♒	
retrograde	-4424 Jun 19 j 11:08	2°♒34'07	
	-4424 Aug 14 j 12:42	30°℞♓	
opposition	-4424 Aug 26 j 07:34	29°♓02'11	-2°38'02
min. Earth dist.	-4424 Aug 26 j 02:31	29°♓03'14	7.92014 AU
direct	-4424 Oct 31 j 04:18	25°♓34'45	
	-4423 Jan 10 j 13:33	0°♒	
evening set	-4423 Feb 10 j 23:20	3°♒50'15	
conjunction	-4423 Feb 28 j 18:23	6°♒11'25	-2°13'35
minimum elong	-4423 Feb 28 j 18:20	6°♒11'24	2°13'45
max. Earth dist.	-4423 Mar 01 j 02:28	6°♒14'06	9.88687 AU
morning rise	-4423 Mar 18 j 17:41	8°♒33'56	
	-4423 May 15 j 09:47	15°♒	
retrograde	-4423 Jul 04 j 16:39	17°♒12'54	
	-4423 Aug 24 j 19:27	15°℞♒	
opposition	-4423 Sep 10 j 01:02	13°♒40'39	-2°54'30
min. Earth dist.	-4423 Sep 09 j 16:59	13°♒42'20	7.86625 AU
direct	-4423 Nov 14 j 19:57	10°♒12'04	
	-4422 Jan 28 j 13:32	15°♒	
evening set	-4422 Feb 26 j 11:25	18°♒34'19	
conjunction	-4422 Mar 16 j 09:42	20°♒56'55	-2°22'15
minimum elong	-4422 Mar 16 j 09:41	20°♒56'55	2°22'23
max. Earth dist.	-4422 Mar 16 j 22:15	21°♒01'06	9.85115 AU
morning rise	-4422 Apr 03 j 11:11	23°♒20'30	
	-4422 Jun 02 j 16:17	0°♓	
retrograde	-4422 Jul 19 j 21:01	1°♓59'19	
	-4422 Sep 05 j 17:59	30°℞♒	
opposition	-4422 Sep 24 j 19:33	28°♒27'15	-2°59'35
min. Earth dist.	-4422 Sep 24 j 08:35	28°♒29'33	7.85022 AU
direct	-4422 Nov 29 j 16:51	24°♒57'47	
	-4421 Feb 14 j 18:22	0°♓	
evening set	-4421 Mar 14 j 04:05	3°♓23'44	
conjunction	-4421 Apr 01 j 05:08	5°♓46'58	-2°21'36
minimum elong	-4421 Apr 01 j 05:10	5°♓46'59	2°21'41
max. Earth dist.	-4421 Apr 01 j 21:21	5°♓52'22	9.85471 AU
morning rise	-4421 Apr 19 j 08:02	8°♓10'45	
retrograde	-4421 Aug 03 j 21:07	16°♓45'04	
opposition	-4421 Oct 09 j 12:23	13°♓13'42	-2°52'43
min. Earth dist.	-4421 Oct 08 j 23:07	13°♓16'30	7.87332 AU
direct	-4421 Dec 14 j 15:43	9°♓43'40	
evening set	-4420 Mar 28 j 21:00	18°♓09'56	
conjunction	-4420 Apr 16 j 00:01	20°♓32'55	-2°11'40
minimum elong	-4420 Apr 16 j 00:05	20°♓32'56	2°11'43
max. Earth dist.	-4420 Apr 16 j 18:49	20°♓39'08	9.89744 AU
morning rise	-4420 May 04 j 03:24	22°♓55'57	
	-4420 Jul 10 j 01:49	0°♈	
retrograde	-4420 Aug 17 j 15:11	1°♈21'57	
	-4420 Sep 25 j 12:54	30°℞♓	
min. Earth dist.	-4420 Oct 22 j 10:38	27°♓54'51	7.93407 AU
opposition	-4420 Oct 23 j 01:26	27°♓51'46	-2°34'38
direct	-4420 Dec 28 j 14:48	24°♓21'32	
	-4419 Mar 22 j 04:02	0°♈	
evening set	-4419 Apr 13 j 09:49	2°♈44'43	
conjunction	-4419 May 01 j 13:45	5°♈06'33	-1°53'26
minimum elong	-4419 May 01 j 13:49	5°♈06'34	1°53'25
max. Earth dist.	-4419 May 02 j 09:57	5°♈13'10	9.97634 AU
morning rise	-4419 May 19 j 16:33	7°♈27'58	
retrograde	-4419 Sep 01 j 00:04	15°♈42'45	
opposition	-4419 Nov 06 j 08:31	12°♈14'06	-2°07'07
min. Earth dist.	-4419 Nov 05 j 17:22	12°♈17'15	8.02831 AU
direct	-4418 Jan 12 j 11:22	8°♈44'03	
evening set	-4418 Apr 28 j 15:21	17°♈01'17	
conjunction	-4418 May 16 j 18:56	19°♈21'08	-1°28'32
minimum elong	-4418 May 16 j 19:00	19°♈21'09	1°28'28
max. Earth dist.	-4418 May 17 j 14:56	19°♈27'36	10.08591 AU
morning rise	-4418 Jun 03 j 20:04	21°♈40'10	
retrograde	-4418 Sep 14 j 21:42	29°♈41'55	
opposition	-4418 Nov 20 j 08:02	26°♈15'06	-1°32'39
min. Earth dist.	-4418 Nov 19 j 17:56	26°♈18'00	8.14972 AU
direct	-4417 Jan 27 j 02:55	22°♈45'34	
	-4417 May 06 j 01:44	0°♉	
evening set	-4417 May 13 j 10:56	0°♉54'40	
conjunction	-4417 May 31 j 12:46	3°♉11'52	-0°59'03
minimum elong	-4417 May 31 j 12:49	3°♉11'53	0°58'57
max. Earth dist.	-4417 Jun 01 j 06:46	3°♉17'35	10.21874 AU
morning rise	-4417 Jun 18 j 11:06	5°♉27'55	
retrograde	-4417 Sep 28 j 07:27	13°♉16'00	
opposition	-4417 Dec 03 j 23:25	9°♉51'09	-0°54'00
min. Earth dist.	-4417 Dec 03 j 10:58	9°♉53'40	8.29048 AU
direct	-4416 Feb 10 j 11:35	6°♉22'25	
evening set	-4416 May 26 j 18:38	14°♉21'57	
	-4416 May 31 j 22:00	15°♉	
conjunction	-4416 Jun 13 j 17:25	16°♉36'01	-0°27'09
minimum elong	-4416 Jun 13 j 17:26	16°♉36'02	0°27'00
max. Earth dist.	-4416 Jun 14 j 08:23	16°♉40'42	10.36644 AU
morning rise	-4416 Jul 01 j 11:56	18°♉48'42	
retrograde	-4416 Oct 10 j 06:50	26°♉23'29	
opposition	-4416 Dec 16 j 06:10	23°♉00'35	-0°13'51
min. Earth dist.	-4416 Dec 15 j 19:35	23°♉02'41	8.44209 AU
direct	-4415 Feb 23 j 11:16	19°♉32'52	
asc. node	-4415 Apr 26 j 10:40	22°♉35'17	
evening set	-4415 Jun 09 j 13:49	27°♉22'14	
conjunction	-4415 Jun 27 j 08:34	29°♉32'55	0°05'18
minimum elong	-4415 Jun 27 j 08:34	29°♉32'55	0°05'28
behind sun begin	-4415 Jun 27 j 01:36	29°♉30'47	
behind sun end	-4415 Jun 27 j 15:31	29°♉35'02	
max. Earth dist.	-4415 Jun 27 j 20:03	29°♉36'26	10.52034 AU
	-4415 Jul 01 j 00:26	0°♊	
morning rise	-4415 Jul 14 j 22:29	1°♊42'03	
retrograde	-4415 Oct 22 j 19:34	9°♊04'36	
opposition	-4415 Dec 29 j 04:24	5°♊43'30	0°25'34
min. Earth dist.	-4415 Dec 28 j 19:47	5°♊45'12	8.59587 AU
direct	-4414 Mar 09 j 02:07	2°♊16'57	
evening set	-4414 Jun 22 j 20:33	9°♊56'15	
conjunction	-4414 Jul 10 j 10:36	12°♊03'30	0°36'24
minimum elong	-4414 Jul 10 j 10:34	12°♊03'29	0°36'36
max. Earth dist.	-4414 Jul 10 j 18:43	12°♊05'57	10.67181 AU
morning rise	-4414 Jul 27 j 19:21	14°♊09'09	
retrograde	-4414 Nov 04 j 00:15	21°♊21'05	
opposition	-4413 Jan 10 j 19:08	18°♊01'38	1°02'24
min. Earth dist.	-4413 Jan 10 j 13:27	18°♊02'44	8.74336 AU
direct	-4413 Mar 22 j 07:29	14°♊36'20	
evening set	-4413 Jul 05 j 15:33	22°♊06'12	
conjunction	-4413 Jul 23 j 00:26	24°♊10'10	1°05'02
minimum elong	-4413 Jul 23 j 00:23	24°♊10'09	1°05'14
max. Earth dist.	-4413 Jul 23 j 04:59	24°♊11'32	10.81300 AU
morning rise	-4413 Aug 09 j 03:49	26°♊12'34	
	-4413 Sep 13 j 08:47	0°♋	
retrograde	-4413 Nov 15 j 23:12	3°♋15'46	

Attention, astronomical year style is used: The year -4412 in astronomical counting style is the year 4413 BCE in historical counting style.

	-4412 Jan 22 j 15:42	30°℞♊		
opposition	-4412 Jan 23 j 03:24	29°♊57'46	1°35'20	
min. Earth dist.	-4412 Jan 23 j 01:24	29°♊58'09	8.87776 AU	
direct	-4412 Apr 03 j 02:08	26°♊33'45		
	-4412 Jun 10 j 02:25	0°♋		
evening set	-4412 Jul 17 j 00:02	3°♋55'10		
conjunction	-4412 Aug 03 j 03:34	5°♋56'10	1°30'10	
minimum elong	-4412 Aug 03 j 03:31	5°♋56'09	1°30'22	
max. Earth dist.	-4412 Aug 03 j 03:46	5°♋56'14	10.93835 AU	
morning rise	-4412 Aug 20 j 01:57	7°♋55'42		
retrograde	-4412 Nov 26 j 13:39	14°♋52'05		
opposition	-4411 Feb 03 j 06:14	11°♋35'15	2°03'25	
min. Earth dist.	-4411 Feb 03 j 07:53	11°♋34'56	8.99437 AU	
direct	-4411 Apr 15 j 14:31	8°♋12'26		
evening set	-4411 Jul 28 j 23:08	15°♋26'29		
conjunction	-4411 Aug 14 j 21:35	17°♋24'54	1°51'05	
minimum elong	-4411 Aug 14 j 21:33	17°♋24'53	1°51'18	
max. Earth dist.	-4411 Aug 14 j 17:21	17°♋23'39	11.04394 AU	
morning rise	-4411 Aug 31 j 15:32	19°♋22'00		
retrograde	-4411 Dec 08 j 01:19	26°♋13'29		
opposition	-4410 Feb 15 j 04:44	22°♋57'25	2°25'59	
min. Earth dist.	-4410 Feb 15 j 08:58	22°♋56'38	9.08944 AU	
direct	-4410 Apr 27 j 21:06	19°♋35'43		
evening set	-4410 Aug 09 j 14:22	26°♋43'33		
conjunction	-4410 Aug 26 j 08:24	28°♋39'51	2°07'18	
minimum elong	-4410 Aug 26 j 08:22	28°♋39'51	2°07'30	
max. Earth dist.	-4410 Aug 26 j 01:21	28°♋37'48	11.12647 AU	
	-4410 Sep 06 j 20:16	0°♌		
morning rise	-4410 Sep 11 j 22:23	0°♌35'01		
retrograde	-4410 Dec 19 j 10:52	7°♌23'22		
opposition	-4409 Feb 27 j 00:11	4°♌07'46	2°42'36	
min. Earth dist.	-4409 Feb 27 j 06:37	4°♌06'35	9.15996 AU	
direct	-4409 May 09 j 20:00	0°♌47'03		
evening set	-4409 Aug 20 j 23:13	7°♌49'50		
conjunction	-4409 Sep 06 j 13:36	9°♌44'34	2°18'30	
minimum elong	-4409 Sep 06 j 13:34	9°♌44'34	2°18'41	
max. Earth dist.	-4409 Sep 06 j 04:24	9°♌41'54	11.18346 AU	
morning rise	-4409 Sep 23 j 00:24	11°♌38'21		
	-4409 Oct 24 j 22:23	15°♌		
retrograde	-4409 Dec 30 j 19:33	18°♌25'21		
opposition	-4408 Mar 09 j 17:58	15°♌09'52	2°53'01	
min. Earth dist.	-4408 Mar 10 j 03:00	15°♌08'12	9.20391 AU	
	-4408 Mar 11 j 23:45	15°℞♌		
direct	-4408 May 20 j 14:44	11°♌49'56		
	-4408 Jul 25 j 04:59	15°♌		
evening set	-4408 Aug 31 j 03:13	18°♌48'59		
conjunction	-4408 Sep 16 j 14:40	20°♌42'40	2°24'30	
minimum elong	-4408 Sep 16 j 14:39	20°♌42'40	2°24'39	
max. Earth dist.	-4408 Sep 16 j 02:33	20°♌39'10	11.21331 AU	
morning rise	-4408 Oct 02 j 23:27	22°♌35'40		
retrograde	-4407 Jan 10 j 03:43	29°♌23'02		
opposition	-4407 Mar 21 j 11:06	26°♌07'20	2°57'06	
min. Earth dist.	-4407 Mar 21 j 22:57	26°♌05'10	9.22005 AU	
direct	-4407 Jun 01 j 05:30	22°♌48'01		
evening set	-4407 Sep 11 j 04:15	29°♌44'40		
	-4407 Sep 13 j 10:12	0°♍		
conjunction	-4407 Sep 27 j 13:42	1°♍37'54	2°25'13	
minimum elong	-4407 Sep 27 j 13:43	1°♍37'54	2°25'19	
max. Earth dist.	-4407 Sep 26 j 23:00	1°♍33'38	11.21524 AU	
morning rise	-4407 Oct 13 j 21:32	3°♍30'42		
retrograde	-4406 Jan 21 j 13:13	10°♍20'10		
opposition	-4406 Apr 02 j 04:36	7°♍03'55	2°54'48	
min. Earth dist.	-4406 Apr 02 j 17:56	7°♍01'29	9.20790 AU	
direct	-4406 Jun 12 j 19:22	3°♍45'01		
evening set	-4406 Sep 22 j 03:49	10°♍40'42		
conjunction	-4406 Oct 08 j 12:30	12°♍34'04	2°20'38	
minimum elong	-4406 Oct 08 j 12:32	12°♍34'05	2°20'42	
max. Earth dist.	-4406 Oct 07 j 21:01	12°♍29'34	11.18923 AU	
morning rise	-4406 Oct 24 j 20:15	14°♍27'15		
retrograde	-4405 Feb 02 j 04:21	21°♍20'31		
opposition	-4405 Apr 14 j 00:08	18°♍03'27	2°46'08	
min. Earth dist.	-4405 Apr 14 j 13:50	18°♍00'57	9.16786 AU	
direct	-4405 Jun 24 j 08:27	14°♍44'50		
evening set	-4405 Oct 03 j 03:50	21°♍40'54		
conjunction	-4405 Oct 19 j 12:42	23°♍35'01	2°10'49	
minimum elong	-4405 Oct 19 j 12:45	23°♍35'01	2°10'51	
max. Earth dist.	-4405 Oct 18 j 20:45	23°♍30'21	11.13605 AU	
morning rise	-4405 Nov 04 j 21:27	25°♍29'12		
	-4405 Dec 19 j 09:37	0°♎		
retrograde	-4404 Feb 13 j 23:31	2°♎27'54		
	-4404 Apr 13 j 10:11	30°℞♍		
opposition	-4404 Apr 24 j 22:49	29°♍09'47	2°31'13	
min. Earth dist.	-4404 Apr 25 j 13:12	29°♍07'09	9.10118 AU	
direct	-4404 Jul 04 j 20:37	25°♍51'15		
	-4404 Sep 17 j 09:32	0°♎		
evening set	-4404 Oct 13 j 06:25	2°♎49'14		
conjunction	-4404 Oct 29 j 16:17	4°♎44'38	1°55'56	
minimum elong	-4404 Oct 29 j 16:20	4°♎44'39	1°55'56	
max. Earth dist.	-4404 Oct 28 j 23:04	4°♎39'33	11.05738 AU	
morning rise	-4404 Nov 15 j 03:12	6°♎40'24		
retrograde	-4403 Feb 25 j 01:19	13°♎46'06		
opposition	-4403 May 07 j 01:38	10°♎26'46	2°10'15	
min. Earth dist.	-4403 May 07 j 16:44	10°♎23'59	9.01000 AU	
direct	-4403 Jul 16 j 12:00	7°♎08'05		
evening set	-4403 Oct 24 j 13:16	14°♎09'32		
max. Earth dist.	-4403 Nov 09 j 07:43	16°♎01'34	10.95571 AU	
conjunction	-4403 Nov 10 j 01:05	16°♎06'45	1°36'16	
minimum elong	-4403 Nov 10 j 01:08	16°♎06'46	1°36'13	
morning rise	-4403 Nov 26 j 14:59	18°♎04'39		
retrograde	-4402 Mar 09 j 09:29	25°♎18'56		
opposition	-4402 May 19 j 10:01	21°♎58'10	1°43'38	
min. Earth dist.	-4402 May 20 j 00:44	21°♎55'25	8.89734 AU	
direct	-4402 Jul 28 j 07:05	18°♎39'09		
evening set	-4402 Nov 05 j 02:14	25°♎45'33		
conjunction	-4402 Nov 21 j 16:54	27°♎45'05	1°12'15	
minimum elong	-4402 Nov 21 j 16:57	27°♎45'06	1°12'10	
max. Earth dist.	-4402 Nov 21 j 01:19	27°♎40'23	10.83441 AU	
morning rise	-4402 Dec 08 j 10:21	29°♎45'33		
	-4402 Dec 10 j 11:20	0°♏		
retrograde	-4401 Mar 22 j 04:06	7°♏09'56		
opposition	-4401 Jun 01 j 00:54	3°♏47'33	1°11'55	
min. Earth dist.	-4401 Jun 01 j 13:40	3°♏45'08	8.76729 AU	
direct	-4401 Aug 09 j 08:18	0°♏28'00		
evening set	-4401 Nov 16 j 23:40	7°♏40'53		
conjunction	-4401 Dec 03 j 17:43	9°♏43'09	0°44'32	
minimum elong	-4401 Dec 03 j 17:45	9°♏43'10	0°44'24	
max. Earth dist.	-4401 Dec 03 j 03:55	9°♏38'56	10.69803 AU	
morning rise	-4401 Dec 20 j 15:17	11°♏46'37		
	-4400 Jan 18 j 04:03	15°♏		
retrograde	-4400 Apr 03 j 10:04	19°♏22'11		
opposition	-4400 Jun 12 j 22:58	15°♏58'09	0°36'00	
min. Earth dist.	-4400 Jun 13 j 09:35	15°♏56'07	8.62501 AU	

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

	-4400 Jun 25 j 19:55	15°℞♏	
direct	-4400 Aug 20 j 13:58	12°♏37'53	
	-4400 Oct 12 j 14:42	15°♏	
evening set	-4400 Nov 28 j 07:20	19°♏58'42	
conjunction	-4400 Dec 15 j 05:05	22°♏04'01	0°14'01
minimum elong	-4400 Dec 15 j 05:05	22°♏04'01	0°13'52
behind sun begin	-4400 Dec 15 j 01:20	22°♏02'51	
behind sun end	-4400 Dec 15 j 08:51	22°♏05'10	
max. Earth dist.	-4400 Dec 14 j 16:55	22°♏00'14	10.55223 AU
morning rise	-4399 Jan 01 j 07:12	24°♏10'45	
	-4399 Feb 26 j 13:03	0°♐	
retrograde	-4399 Apr 17 j 00:18	1°♐58'22	
desc. node	-4399 May 29 j 21:03	0°♐31'34	
	-4399 Jun 06 j 18:56	30°℞♏	
opposition	-4399 Jun 26 j 05:06	28°♏32'41	-0°02'53
min. Earth dist.	-4399 Jun 26 j 13:34	28°♏31'02	8.47674 AU
direct	-4399 Sep 02 j 03:32	25°♏11'28	
	-4399 Nov 18 j 07:10	0°♐	
evening set	-4399 Dec 11 j 02:42	2°♐41'34	
conjunction	-4399 Dec 28 j 04:22	4°♐50'05	-0°18'08
minimum elong	-4399 Dec 28 j 04:20	4°♐50'04	0°18'19
max. Earth dist.	-4399 Dec 27 j 18:40	4°♐47'01	10.40364 AU