Attention, astronomical year style is used: The year -12900 in astronomical counting style is the year 12901 BCE in historical counting style.

evening set	-12900 Feb 07 j 04:00	27°♏31'02		
max. Earth dist.	-12900 Feb 17 j 08:58	27°♏45'15	47.54595 AU	
conjunction	-12900 Feb 19 j 07:18	27°♏47'57	-9°58'13	
minimum elong	-12900 Feb 19 j 07:27	27°♏47'58	9°58'57	
morning rise	-12900 Mar 02 j 09:55	28°♏04'52		
retrograde	-12900 May 29 j 23:47	29°♏19'01		
opposition	-12900 Aug 18 j 15:44	28°♏18'57	-10°17'08	
min. Earth dist.	-12900 Aug 20 j 09:43	28°♏16'54	45.50204 AU	
direct	-12900 Nov 09 j 09:16	27°♏17'25		
evening set	-12899 Feb 07 j 06:22	28°♏32'00		
max. Earth dist.	-12899 Feb 17 j 14:01	28°♏46'25	47.39574 AU	
conjunction	-12899 Feb 19 j 14:51	28°♏49'17	-9°44'04	
minimum elong	-12899 Feb 19 j 14:59	28°♏49'17	9°44'49	
morning rise	-12899 Mar 03 j 22:46	29°♏06'33		
	-12899 Apr 17 j 17:09	0°♐		
retrograde	-12899 May 31 j 08:30	0°♐20'35		
	-12899 Jul 14 j 03:17	30°℞♏		
opposition	-12899 Aug 19 j 21:36	29°♏20'27	-10°02'19	
min. Earth dist.	-12899 Aug 21 j 17:30	29°♏18'18	45.34830 AU	
direct	-12899 Nov 10 j 14:32	28°♏18'47		
evening set	-12898 Feb 08 j 08:54	29°♏33'21		
max. Earth dist.	-12898 Feb 18 j 21:19	29°♏48'05	47.24105 AU	
conjunction	-12898 Feb 20 j 22:40	29°♏50'59	-9°29'39	
minimum elong	-12898 Feb 20 j 22:49	29°♏50'59	9°30'23	
	-12898 Feb 27 j 08:11	0°♐		
morning rise	-12898 Mar 05 j 11:29	0°♐08'36		
retrograde	-12898 Jun 01 j 13:18	1°♐22'33		
opposition	-12898 Aug 21 j 03:42	0°♐22'18	-9°47'14	
min. Earth dist.	-12898 Aug 23 j 01:02	0°♐20'05	45.18963 AU	
	-12898 Sep 09 j 12:32	30°℞♏		
direct	-12898 Nov 11 j 23:20	29°♏20'30		
	-12897 Jan 13 j 09:35	0°♐		
evening set	-12897 Feb 09 j 11:58	0°♐35'03		
max. Earth dist.	-12897 Feb 20 j 02:48	0°♐49'58	47.08141 AU	
conjunction	-12897 Feb 22 j 06:33	0°♐53'01	-9°14'58	
minimum elong	-12897 Feb 22 j 06:41	0°♐53'02	9°15'43	
morning rise	-12897 Mar 07 j 00:25	1°♐10'58		
retrograde	-12897 Jun 02 j 18:53	2°♐24'51		
opposition	-12897 Aug 22 j 09:49	1°♐24'29	-9°31'52	
min. Earth dist.	-12897 Aug 24 j 08:08	1°♐22'12	45.02604 AU	
direct	-12897 Nov 13 j 07:14	0°♐22'31		
evening set	-12896 Feb 10 j 15:08	1°♐37'02		
max. Earth dist.	-12896 Feb 21 j 09:28	1°♐52'12	46.91671 AU	
conjunction	-12896 Feb 23 j 14:42	1°♐55'21	-9°00'02	
minimum elong	-12896 Feb 23 j 14:51	1°♐55'22	9°00'47	
morning rise	-12896 Mar 07 j 13:15	2°♐13'38		
retrograde	-12896 Jun 03 j 02:45	3°♐27'27		
opposition	-12896 Aug 22 j 16:17	2°♐26'57	-9°16'13	
min. Earth dist.	-12896 Aug 24 j 16:49	2°♐24'33	44.85755 AU	
direct	-12896 Nov 13 j 13:08	1°♐24'48		
evening set	-12895 Feb 10 j 18:25	2°♐39'18		
max. Earth dist.	-12895 Feb 21 j 16:29	2°♐54'44	46.74748 AU	
conjunction	-12895 Feb 23 j 22:41	2°♐57'57	-8°44'49	
minimum elong	-12895 Feb 23 j 22:49	2°♐57'57	8°45'34	
morning rise	-12895 Mar 09 j 01:52	3°♐16'34		
retrograde	-12895 Jun 04 j 11:22	4°♐30'18		
opposition	-12895 Aug 23 j 22:39	3°♐29'39	-9°00'17	
min. Earth dist.	-12895 Aug 25 j 23:29	3°♐27'14	44.68468 AU	
direct	-12895 Nov 14 j 18:25	2°♐27'18		
evening set	-12894 Feb 11 j 22:06	3°♐41'49		
max. Earth dist.	-12894 Feb 22 j 22:29	3°♐57'27	46.57403 AU	
conjunction	-12894 Feb 25 j 06:54	4°♐00'48	-8°29'19	
minimum elong	-12894 Feb 25 j 07:03	4°♐00'49	8°30'06	
morning rise	-12894 Mar 10 j 14:44	4°♐19'45		
retrograde	-12894 Jun 05 j 19:43	5°♐33'26		
opposition	-12894 Aug 25 j 05:06	4°♐32'37	-8°44'03	
min. Earth dist.	-12894 Aug 27 j 07:53	4°♐30'06	44.50807 AU	
direct	-12894 Nov 16 j 01:01	3°♐30'04		
evening set	-12893 Feb 13 j 02:00	4°♐44'37		
max. Earth dist.	-12893 Feb 24 j 06:52	5°♐00'33	46.39708 AU	
conjunction	-12893 Feb 26 j 15:25	5°♐03'55	-8°13'33	
minimum elong	-12893 Feb 26 j 15:33	5°♐03'56	8°14'19	
morning rise	-12893 Mar 12 j 03:27	5°♐23'11		
retrograde	-12893 Jun 07 j 00:59	6°♐36'50		
opposition	-12893 Aug 26 j 11:52	5°♐35'52	-8°27'32	
min. Earth dist.	-12893 Aug 28 j 15:29	5°♐33'18	44.32816 AU	
direct	-12893 Nov 17 j 11:08	4°♐33'07		
evening set	-12892 Feb 14 j 06:11	5°♐47'43		
max. Earth dist.	-12892 Feb 25 j 13:19	6°♐03'50	46.21723 AU	
conjunction	-12892 Feb 27 j 23:44	6°♐07'21	-7°57'29	
minimum elong	-12892 Feb 27 j 23:52	6°♐07'21	7°58'16	
morning rise	-12892 Mar 12 j 16:09	6°♐26'56		
retrograde	-12892 Jun 07 j 08:19	7°♐40'34		
opposition	-12892 Aug 26 j 18:42	6°♐39'27	-8°10'41	
min. Earth dist.	-12892 Aug 28 j 22:44	6°♐36'51	44.14573 AU	
direct	-12892 Nov 17 j 18:55	5°♐36'30		
evening set	-12891 Feb 14 j 10:31	6°♐51'10		
max. Earth dist.	-12891 Feb 25 j 21:22	7°♐07'34	46.03488 AU	
conjunction	-12891 Feb 28 j 08:24	7°♐11'07	-7°41'08	
minimum elong	-12891 Feb 28 j 08:32	7°♐11'08	7°41'54	
morning rise	-12891 Mar 14 j 04:49	7°♐31'01		
retrograde	-12891 Jun 08 j 15:51	8°♐44'41		
opposition	-12891 Aug 28 j 01:46	7°♐43'25	-7°53'32	
min. Earth dist.	-12891 Aug 30 j 07:28	7°♐40'44	43.96102 AU	
direct	-12891 Nov 19 j 02:00	6°♐40'18		
evening set	-12890 Feb 15 j 15:15	7°♐55'03		
max. Earth dist.	-12890 Feb 27 j 05:33	8°♐11'43	45.85050 AU	
conjunction	-12890 Mar 01 j 17:10	8°♐15'19	-7°24'28	
minimum elong	-12890 Mar 01 j 17:18	8°♐15'20	7°25'16	
morning rise	-12890 Mar 15 j 17:36	8°♐35'32		
retrograde	-12890 Jun 10 j 01:28	9°♐49'15		
opposition	-12890 Aug 29 j 08:56	8°♐47'51	-7°36'03	
min. Earth dist.	-12890 Aug 31 j 14:34	8°♐45'10	43.77414 AU	
direct	-12890 Nov 20 j 08:09	7°♐44'33		
evening set	-12889 Feb 16 j 20:22	8°♐59'27		
max. Earth dist.	-12889 Feb 28 j 12:38	9°♐16'18	45.66375 AU	
conjunction	-12889 Mar 03 j 02:10	9°♐20'02	-7°07'31	
minimum elong	-12889 Mar 03 j 02:18	9°♐20'03	7°08'18	
morning rise	-12889 Mar 17 j 06:29	9°♐40'34		
retrograde	-12889 Jun 11 j 12:49	10°♐54'21		
opposition	-12889 Aug 30 j 16:20	9°♐52'49	-7°18'16	
min. Earth dist.	-12889 Sep 01 j 23:40	9°♐50'02	43.58492 AU	
direct	-12889 Nov 21 j 13:25	8°♐49'21		
evening set	-12888 Feb 18 j 01:46	10°♐04'25		
max. Earth dist.	-12888 Feb 29 j 21:59	10°♐21'35	45.47444 AU	
conjunction	-12888 Mar 03 j 11:28	10°♐25'20	-6°50'16	
minimum elong	-12888 Mar 03 j 11:36	10°♐25'20	6°51'05	

Attention, astronomical year style is used: The year -12888 in astronomical counting style is the year 12889 BCE in historical counting style.

morning rise	-12888 Mar 17 j 19:19	10°↗46'10		
retrograde	-12888 Jun 11 j 20:38	12°↗00'02		
opposition	-12888 Aug 31 j 00:02	10°↗58'23	-7°00'10	
min. Earth dist.	-12888 Sep 02 j 08:05	10°↗55'34	43.39279 AU	
direct	-12888 Nov 21 j 22:42	9°↗54'46		
evening set	-12887 Feb 18 j 07:31	11°↗10'01		
max. Earth dist.	-12887 Mar 02 j 05:10	11°↗27'20	45.28198 AU	
conjunction	-12887 Mar 04 j 20:40	11°↗31'14	-6°32'43	
minimum elong	-12887 Mar 04 j 20:48	11°↗31'14	6°33'31	
morning rise	-12887 Mar 19 j 08:15	11°↗52'22		
retrograde	-12887 Jun 13 j 04:35	13°↗06'22		
opposition	-12887 Sep 01 j 07:50	12°↗04'35	-6°41'45	
min. Earth dist.	-12887 Sep 03 j 16:55	12°↗01'42	43.19728 AU	
direct	-12887 Nov 23 j 07:37	11°↗00'47		
evening set	-12886 Feb 19 j 13:40	12°↗16'13		
max. Earth dist.	-12886 Mar 03 j 13:58	12°↗33'46	45.08556 AU	
conjunction	-12886 Mar 06 j 06:28	12°↗37'45	-6°14'53	
minimum elong	-12886 Mar 06 j 06:36	12°↗37'45	6°15'42	
morning rise	-12886 Mar 20 j 21:17	12°↗59'12		
retrograde	-12886 Jun 14 j 12:32	14°↗13'19		
opposition	-12886 Sep 02 j 15:56	13°↗11'24	-6°23'01	
min. Earth dist.	-12886 Sep 05 j 03:04	13°↗08'24	42.99758 AU	
direct	-12886 Nov 24 j 16:40	12°↗07'24		
evening set	-12885 Feb 20 j 20:24	13°↗23'02		
max. Earth dist.	-12885 Mar 04 j 22:36	13°↗40'48	44.88493 AU	
conjunction	-12885 Mar 07 j 16:27	13°↗44'52	-5°56'45	
minimum elong	-12885 Mar 07 j 16:34	13°↗44'53	5°57'34	
morning rise	-12885 Mar 22 j 10:33	14°↗06'37		
retrograde	-12885 Jun 15 j 23:22	15°↗20'53		
opposition	-12885 Sep 04 j 00:16	14°↗18'47	-6°03'59	
min. Earth dist.	-12885 Sep 06 j 11:43	14°↗15'46	42.79352 AU	
direct	-12885 Nov 25 j 23:08	13°↗14'34		
evening set	-12884 Feb 22 j 03:19	14°↗30'26		
max. Earth dist.	-12884 Mar 05 j 06:33	14°↗48'20	44.67976 AU	
conjunction	-12884 Mar 08 j 02:31	14°↗52'33	-5°38'20	
minimum elong	-12884 Mar 08 j 02:38	14°↗52'33	5°39'10	
morning rise	-12884 Mar 22 j 23:42	15°↗14'35		
retrograde	-12884 Jun 16 j 10:44	16°↗29'00		
opposition	-12884 Sep 04 j 08:54	15°↗26'44	-5°44'38	
min. Earth dist.	-12884 Sep 06 j 22:32	15°↗23'35	42.58518 AU	
direct	-12884 Nov 26 j 06:08	14°↗22'17		
evening set	-12883 Feb 22 j 10:35	15°↗38'22		
max. Earth dist.	-12883 Mar 06 j 16:42	15°↗56'31	44.47051 AU	
conjunction	-12883 Mar 09 j 12:55	16°↗00'46	-5°19'37	
minimum elong	-12883 Mar 09 j 13:02	16°↗00'47	5°20'27	
morning rise	-12883 Mar 24 j 12:55	16°↗23'05		
retrograde	-12883 Jun 17 j 20:30	17°↗37'39		
opposition	-12883 Sep 05 j 17:34	16°↗35'11	-5°24'58	
min. Earth dist.	-12883 Sep 08 j 07:52	16°↗31'59	42.37288 AU	
direct	-12883 Nov 27 j 16:42	15°↗30'29		
evening set	-12882 Feb 23 j 18:18	16°↗46'48		
max. Earth dist.	-12882 Mar 08 j 00:51	17°↗05'05	44.25757 AU	
conjunction	-12882 Mar 10 j 23:22	17°↗09'30	-5°00'36	
minimum elong	-12882 Mar 10 j 23:28	17°↗09'31	5°01'26	
morning rise	-12882 Mar 26 j 02:19	17°↗32'06		
retrograde	-12882 Jun 19 j 06:54	18°↗46'50		
opposition	-12882 Sep 07 j 02:31	17°↗44'09	-5°04'58	
min. Earth dist.	-12882 Sep 09 j 17:50	17°↗40'53	42.15729 AU	
direct	-12882 Nov 29 j 02:54	16°↗39'11		
evening set	-12881 Feb 25 j 02:16	17°↗55'46		
max. Earth dist.	-12881 Mar 09 j 11:18	18°↗14'17	44.04138 AU	
conjunction	-12881 Mar 12 j 10:10	18°↗18'45	-4°41'17	
minimum elong	-12881 Mar 12 j 10:17	18°↗18'45	4°42'07	
morning rise	-12881 Mar 27 j 15:32	18°↗41'37		
retrograde	-12881 Jun 20 j 14:38	19°↗56'33		
opposition	-12881 Sep 08 j 11:47	18°↗53'38	-4°44'39	
min. Earth dist.	-12881 Sep 11 j 04:36	18°↗50'17	41.93881 AU	
direct	-12881 Nov 30 j 14:04	17°↗48'24		
evening set	-12880 Feb 26 j 10:44	19°↗05'16		
max. Earth dist.	-12880 Mar 09 j 21:16	19°↗23'58	43.82278 AU	
conjunction	-12880 Mar 12 j 21:01	19°↗28'31	-4°21'40	
minimum elong	-12880 Mar 12 j 21:07	19°↗28'31	4°22'29	
morning rise	-12880 Mar 28 j 04:55	19°↗51'39		
retrograde	-12880 Jun 21 j 00:27	21°↗06'48		
opposition	-12880 Sep 08 j 21:16	20°↗03'40	-4°24'00	
min. Earth dist.	-12880 Sep 11 j 13:56	20°↗00'19	41.71825 AU	
direct	-12880 Nov 30 j 23:41	18°↗58'10		
evening set	-12879 Feb 26 j 19:23	20°↗15'20		
max. Earth dist.	-12879 Mar 11 j 06:56	20°↗34'12	43.60210 AU	
conjunction	-12879 Mar 14 j 08:02	20°↗38'51	-4°01'44	
minimum elong	-12879 Mar 14 j 08:08	20°↗38'52	4°02'34	
morning rise	-12879 Mar 29 j 18:08	21°↗02'15		
retrograde	-12879 Jun 22 j 13:31	22°↗17'40		
opposition	-12879 Sep 10 j 07:05	21°↗14'18	-4°03'02	
min. Earth dist.	-12879 Sep 13 j 01:24	21°↗10'51	41.49592 AU	
direct	-12879 Dec 02 j 06:27	20°↗08'33		
evening set	-12878 Feb 28 j 04:36	21°↗26'03		
max. Earth dist.	-12878 Mar 12 j 18:36	21°↗45'10	43.37979 AU	
conjunction	-12878 Mar 15 j 19:30	21°↗49'50	-3°41'29	
minimum elong	-12878 Mar 15 j 19:35	21°↗49'50	3°42'19	
morning rise	-12878 Mar 31 j 07:36	22°↗13'29		
retrograde	-12878 Jun 24 j 01:03	23°↗29'10		
opposition	-12878 Sep 11 j 17:02	22°↗25'36	-3°41'43	
min. Earth dist.	-12878 Sep 14 j 11:18	22°↗22'09	41.27192 AU	
direct	-12878 Dec 03 j 16:04	21°↗19'36		
evening set	-12877 Mar 01 j 14:30	22°↗37'28		
max. Earth dist.	-12877 Mar 14 j 04:30	22°↗56'42	43.15580 AU	
conjunction	-12877 Mar 17 j 07:13	23°↗01'31	-3°20'56	
minimum elong	-12877 Mar 17 j 07:18	23°↗01'31	3°21'48	
morning rise	-12877 Apr 01 j 21:18	23°↗25'26		
retrograde	-12877 Jun 25 j 13:51	24°↗41'26		
opposition	-12877 Sep 13 j 03:24	23°↗37'39	-3°20'04	
min. Earth dist.	-12877 Sep 15 j 22:47	23°↗34'07	41.04633 AU	
direct	-12877 Dec 05 j 02:07	22°↗31'24		
evening set	-12876 Mar 02 j 00:36	23°↗49'41		
max. Earth dist.	-12876 Mar 14 j 16:34	24°↗09'09	42.92983 AU	
conjunction	-12876 Mar 17 j 19:14	24°↗13'59	-3°00'05	
minimum elong	-12876 Mar 17 j 19:18	24°↗14'00	3°00'56	
morning rise	-12876 Apr 02 j 10:49	24°↗38'08		
retrograde	-12876 Jun 25 j 23:42	25°↗54'29		
opposition	-12876 Sep 13 j 14:11	24°↗50'31	-2°58'06	
min. Earth dist.	-12876 Sep 16 j 10:42	24°↗46'54	40.81850 AU	
direct	-12876 Dec 05 j 15:21	23°↗44'00		
evening set	-12875 Mar 03 j 11:28	25°↗02'44		
max. Earth dist.	-12875 Mar 16 j 03:29	25°↗22'20	42.70146 AU	
conjunction	-12875 Mar 19 j 07:31	25°↗27'18	-2°38'55	
minimum elong	-12875 Mar 19 j 07:36	25°↗27'18	2°39'47	
morning rise	-12875 Apr 04 j 00:45	25°↗51'41		
retrograde	-12875 Jun 27 j 11:47	27°↗08'24		
opposition	-12875 Sep 15 j 01:01	26°↗04'13	-2°35'47	
min. Earth dist.	-12875 Sep 17 j 21:51	26°↗00'35	40.58806 AU	
direct	-12875 Dec 07 j 02:20	24°↗57'27		

Attention, astronomical year style is used: The year -12874 in astronomical counting style is the year 12875 BCE in historical counting style.

evening set	-12874 Mar 04 j 22:49	26°♐16'40	
max. Earth dist.	-12874 Mar 17 j 14:53	26°♐36'22	42.46986 AU
conjunction	-12874 Mar 20 j 20:20	26°♐41'27	-2°17'28
minimum elong	-12874 Mar 20 j 20:24	26°♐41'28	2°18'18
morning rise	-12874 Apr 05 j 14:44	27°♐06'06	
retrograde	-12874 Jun 29 j 00:35	28°♐23'13	
opposition	-12874 Sep 16 j 12:31	27°♐18'48	-2°13'09
min. Earth dist.	-12874 Sep 19 j 11:30	27°♐15'02	40.35421 AU
direct	-12874 Dec 08 j 12:16	26°♐11'46	
evening set	-12873 Mar 06 j 10:47	27°♐31'28	
max. Earth dist.	-12873 Mar 19 j 03:34	27°♐51'21	42.23469 AU
conjunction	-12873 Mar 22 j 09:26	27°♐56'29	-1°55'41
minimum elong	-12873 Mar 22 j 09:29	27°♐56'29	1°56'32
morning rise	-12873 Apr 07 j 04:53	28°♐21'21	
retrograde	-12873 Jun 30 j 14:29	29°♐38'54	
opposition	-12873 Sep 18 j 00:16	28°♐34'15	-1°50'11
min. Earth dist.	-12873 Sep 20 j 23:31	28°♐30'27	40.11663 AU
direct	-12873 Dec 09 j 23:26	27°♐26'55	
evening set	-12872 Mar 06 j 23:22	28°♐47'08	
max. Earth dist.	-12872 Mar 19 j 14:37	29°♐07'03	41.99572 AU
conjunction	-12872 Mar 22 j 22:51	29°♐12'22	-1°33'37
minimum elong	-12872 Mar 22 j 22:54	29°♐12'23	1°34'28
morning rise	-12872 Apr 07 j 19:13	29°♐37'27	
	-12872 Apr 22 j 20:53	0°♑	
retrograde	-12872 Jul 01 j 06:30	0°♑55'26	
	-12872 Sep 11 j 02:53	30°℞♐	
opposition	-12872 Sep 18 j 12:24	29°♐50'31	-1°26'53
min. Earth dist.	-12872 Sep 21 j 13:17	29°♐46'38	39.87555 AU
direct	-12872 Dec 10 j 09:44	28°♐42'53	
	-12871 Mar 06 j 03:53	0°♑	
evening set	-12871 Mar 08 j 12:10	0°♑03'38	
max. Earth dist.	-12871 Mar 21 j 04:15	0°♑23'44	41.75320 AU
conjunction	-12871 Mar 24 j 12:33	0°♑29'06	-1°11'15
minimum elong	-12871 Mar 24 j 12:35	0°♑29'06	1°12'06
morning rise	-12871 Apr 09 j 09:25	0°♑54'23	
retrograde	-12871 Jul 02 j 18:55	2°♑12'50	
opposition	-12871 Sep 20 j 00:53	1°♑07'39	-1°03'16
min. Earth dist.	-12871 Sep 23 j 02:42	1°♑03'40	39.63103 AU
	-12871 Dec 06 j 21:21	30°℞♐	
direct	-12871 Dec 11 j 23:36	29°♐59'41	
	-12871 Dec 17 j 02:35	0°♑	
evening set	-12870 Mar 10 j 01:51	1°♑21'00	
max. Earth dist.	-12870 Mar 22 j 16:35	1°♑41'08	41.50759 AU
conjunction	-12870 Mar 26 j 02:32	1°♑46'39	-0°48'35
minimum elong	-12870 Mar 26 j 02:34	1°♑46'39	0°49'25
morning rise	-12870 Apr 10 j 23:58	2°♑12'08	
retrograde	-12870 Jul 04 j 07:48	3°♑31'04	
opposition	-12870 Sep 21 j 13:29	2°♑25'36	-0°39'19
min. Earth dist.	-12870 Sep 24 j 15:52	2°♑21'34	39.38388 AU
direct	-12870 Dec 13 j 13:40	1°♑17'17	
evening set	-12869 Mar 11 j 15:58	2°♑39'12	
max. Earth dist.	-12869 Mar 24 j 06:21	2°♑59'27	41.25936 AU
conjunction	-12869 Mar 27 j 17:01	3°♑05'03	-0°25'38
minimum elong	-12869 Mar 27 j 17:01	3°♑05'03	0°26'29
morning rise	-12869 Apr 12 j 14:26	3°♑30'43	
retrograde	-12869 Jul 05 j 20:41	4°♑50'11	
opposition	-12869 Sep 23 j 02:47	3°♑44'24	-0°15'02
min. Earth dist.	-12869 Sep 26 j 06:44	3°♑40'17	39.13460 AU
direct	-12869 Dec 15 j 02:55	2°♑35'46	
evening set	-12868 Mar 12 j 06:32	3°♑58'17	
max. Earth dist.	-12868 Mar 24 j 20:42	4°♑18'40	41.00942 AU
conjunction	-12868 Mar 28 j 07:30	4°♑24'19	-0°02'26
minimum elong	-12868 Mar 28 j 07:30	4°♑24'19	0°03'16
behind sun begin	-12868 Mar 28 j 01:03	4°♑23'55	
behind sun end	-12868 Mar 28 j 13:57	4°♑24'44	
morning rise	-12868 Apr 13 j 04:55	4°♑50'10	
asc. node	-12868 May 04 j 07:09	5°♑21'55	
retrograde	-12868 Jul 06 j 11:20	6°♑10'12	
opposition	-12868 Sep 23 j 16:19	5°♑04'07	0°09'33
min. Earth dist.	-12868 Sep 26 j 19:44	5°♑00'00	38.88397 AU
direct	-12868 Dec 15 j 15:10	3°♑55'07	
evening set	-12867 Mar 13 j 21:51	5°♑18'18	
max. Earth dist.	-12867 Mar 26 j 10:19	5°♑38'43	40.75824 AU
conjunction	-12867 Mar 29 j 22:29	5°♑44'31	0°21'12
minimum elong	-12867 Mar 29 j 22:28	5°♑44'31	0°20'22
morning rise	-12867 Apr 14 j 19:33	6°♑10'31	
retrograde	-12867 Jul 08 j 04:16	7°♑31'10	
opposition	-12867 Sep 25 j 06:11	6°♑24'46	0°34'27
min. Earth dist.	-12867 Sep 28 j 11:00	6°♑20'34	38.63261 AU
direct	-12867 Dec 17 j 02:50	5°♑15'26	
evening set	-12866 Mar 15 j 13:44	6°♑39'20	
max. Earth dist.	-12866 Mar 28 j 02:27	6°♑59'55	40.50644 AU
conjunction	-12866 Mar 31 j 13:57	7°♑05'42	0°45'01
minimum elong	-12866 Mar 31 j 13:55	7°♑05'42	0°44'10
morning rise	-12866 Apr 16 j 10:19	7°♑31'51	
retrograde	-12866 Jul 09 j 20:57	8°♑53'09	
opposition	-12866 Sep 26 j 20:37	7°♑46'28	0°59'39
min. Earth dist.	-12866 Sep 30 j 01:21	7°♑42'14	38.38070 AU
direct	-12866 Dec 18 j 17:29	6°♑36'47	
evening set	-12865 Mar 17 j 06:27	8°♑01'28	
max. Earth dist.	-12865 Mar 29 j 16:45	8°♑22'03	40.25419 AU
conjunction	-12865 Apr 02 j 05:39	8°♑27'58	1°09'06
minimum elong	-12865 Apr 02 j 05:37	8°♑27'58	1°08'15
morning rise	-12865 Apr 18 j 01:15	8°♑54'15	
retrograde	-12865 Jul 11 j 15:08	10°♑16'15	
opposition	-12865 Sep 28 j 11:26	9°♑09'16	1°25'09
min. Earth dist.	-12865 Oct 01 j 16:32	9°♑05'00	38.12856 AU
direct	-12865 Dec 20 j 07:27	7°♑59'15	
evening set	-12864 Mar 17 j 23:44	9°♑24'45	
max. Earth dist.	-12864 Mar 30 j 09:17	9°♑45'26	40.00137 AU
conjunction	-12864 Apr 02 j 21:58	9°♑51'24	1°33'27
minimum elong	-12864 Apr 02 j 21:55	9°♑51'23	1°32'36
morning rise	-12864 Apr 18 j 16:15	10°♑17'49	
retrograde	-12864 Jul 12 j 05:32	11°♑40'32	
opposition	-12864 Sep 29 j 02:50	10°♑33'17	1°50'57
min. Earth dist.	-12864 Oct 02 j 08:57	10°♑28'55	37.87579 AU
direct	-12864 Dec 20 j 23:45	9°♑22'56	
evening set	-12863 Mar 19 j 17:48	10°♑49'17	
max. Earth dist.	-12863 Apr 01 j 01:20	11°♑10'00	39.74777 AU
conjunction	-12863 Apr 04 j 14:30	11°♑16'03	1°58'03
minimum elong	-12863 Apr 04 j 14:27	11°♑16'02	1°57'13
morning rise	-12863 Apr 20 j 07:29	11°♑42'34	
retrograde	-12863 Jul 13 j 21:31	13°♑06'05	
opposition	-12863 Sep 30 j 18:35	11°♑58'32	2°17'02
min. Earth dist.	-12863 Oct 04 j 00:31	11°♑54'10	37.62199 AU
direct	-12863 Dec 22 j 15:47	10°♑47'51	
evening set	-12862 Mar 21 j 12:47	12°♑15'05	
max. Earth dist.	-12862 Apr 02 j 17:24	12°♑35'46	39.49255 AU
conjunction	-12862 Apr 06 j 07:47	12°♑41'57	2°22'55
minimum elong	-12862 Apr 06 j 07:42	12°♑41'57	2°22'05
morning rise	-12862 Apr 21 j 22:53	13°♑08'35	
retrograde	-12862 Jul 15 j 15:19	14°♑32'55	

Attention, astronomical year style is used: The year -12862 in astronomical counting style is the year 12863 BCE in historical counting style.

opposition	-12862 Oct 02 j 10:57	13°♑25'03	2°43'24	
min. Earth dist.	-12862 Oct 05 j 18:40	13°♑20'34	37.36657 AU	
direct	-12862 Dec 24 j 05:06	12°♑14'01		
evening set	-12861 Mar 23 j 08:37	13°♑42'11		
max. Earth dist.	-12861 Apr 04 j 11:22	14°♑02'54	39.23552 AU	
conjunction	-12861 Apr 08 j 01:34	14°♑09'08	2°48'01	
minimum elong	-12861 Apr 08 j 01:29	14°♑09'07	2°47'12	
morning rise	-12861 Apr 23 j 14:34	14°♑35'50		
retrograde	-12861 Jul 17 j 09:36	16°♑01'02		
opposition	-12861 Oct 04 j 03:57	14°♑52'50	3°10'02	
min. Earth dist.	-12861 Oct 07 j 11:27	14°♑48'20	37.10921 AU	
direct	-12861 Dec 25 j 21:32	13°♑41'25		
evening set	-12860 Mar 24 j 05:12	15°♑10'34		
max. Earth dist.	-12860 Apr 05 j 03:41	15°♑31'09	38.97639 AU	
conjunction	-12860 Apr 08 j 19:38	15°♑37'33	3°13'21	
minimum elong	-12860 Apr 08 j 19:32	15°♑37'32	3°12'32	
morning rise	-12860 Apr 24 j 06:17	16°♑04'18		
retrograde	-12860 Jul 18 j 06:54	17°♑30'25		
opposition	-12860 Oct 04 j 21:26	16°♑21'51	3°36'55	
min. Earth dist.	-12860 Oct 08 j 06:08	16°♑17'16	36.85004 AU	
direct	-12860 Dec 26 j 12:52	15°♑10'02		
evening set	-12859 Mar 26 j 02:35	16°♑40'11		
max. Earth dist.	-12859 Apr 06 j 22:55	17°♑00'48	38.71537 AU	
conjunction	-12859 Apr 10 j 14:27	17°♑07'13	3°38'55	
minimum elong	-12859 Apr 10 j 14:20	17°♑07'12	3°38'06	
morning rise	-12859 Apr 25 j 22:12	17°♑33'59		
retrograde	-12859 Jul 20 j 02:19	19°♑01'02		
opposition	-12859 Oct 06 j 15:20	17°♑52'06	4°04'03	
min. Earth dist.	-12859 Oct 10 j 00:43	17°♑47'26	36.58919 AU	
direct	-12859 Dec 28 j 07:44	16°♑39'52		
evening set	-12858 Mar 28 j 01:00	18°♑11'04		
max. Earth dist.	-12858 Apr 08 j 16:50	18°♑31'32	38.45296 AU	
conjunction	-12858 Apr 12 j 09:37	18°♑38'06	4°04'41	
minimum elong	-12858 Apr 12 j 09:28	18°♑38'05	4°03'52	
morning rise	-12858 Apr 27 j 14:26	19°♑04'53		
retrograde	-12858 Jul 21 j 22:49	20°♑32'54		
opposition	-12858 Oct 08 j 09:48	19°♑23'34	4°31'25	
min. Earth dist.	-12858 Oct 11 j 19:10	19°♑18'53	36.32739 AU	
direct	-12858 Dec 30 j 01:56	18°♑10'54		
evening set	-12857 Mar 30 j 00:02	19°♑43'13		
max. Earth dist.	-12857 Apr 10 j 12:23	20°♑03'35	38.18958 AU	
conjunction	-12857 Apr 14 j 05:18	20°♑10'13	4°30'38	
minimum elong	-12857 Apr 14 j 05:09	20°♑10'13	4°29'50	
morning rise	-12857 Apr 29 j 06:30	20°♑36'59		
retrograde	-12857 Jul 23 j 16:48	22°♑06'01		
opposition	-12857 Oct 10 j 05:00	20°♑56'18	4°59'00	
min. Earth dist.	-12857 Oct 13 j 15:28	20°♑51'31	36.06517 AU	
direct	-12857 Dec 31 j 21:37	19°♑43'12		
evening set	-12856 Mar 31 j 00:05	21°♑16'39		
max. Earth dist.	-12856 Apr 11 j 08:51	21°♑36'57	37.92625 AU	
conjunction	-12856 Apr 15 j 01:23	21°♑43'37	4°56'44	
minimum elong	-12856 Apr 15 j 01:13	21°♑43'36	4°55'57	
morning rise	-12856 Apr 29 j 22:49	22°♑10'20		
retrograde	-12856 Jul 24 j 12:41	23°♑40'27		
opposition	-12856 Oct 11 j 00:37	22°♑30'20	5°26'45	
min. Earth dist.	-12856 Oct 14 j 10:10	22°♑25'34	35.80350 AU	
direct	-12855 Jan 01 j 16:44	21°♑16'47		
evening set	-12855 Apr 02 j 00:53	22°♑51'26		
max. Earth dist.	-12855 Apr 13 j 04:41	23°♑11'34	37.66354 AU	
conjunction	-12855 Apr 16 j 21:56	23°♑18'20	5°22'59	
minimum elong	-12855 Apr 16 j 21:45	23°♑18'20	5°22'14	
morning rise	-12855 May 01 j 15:09	23°♑44'59		
retrograde	-12855 Jul 26 j 10:39	25°♑16'16		
opposition	-12855 Oct 12 j 20:55	24°♑05'44	5°54'39	
min. Earth dist.	-12855 Oct 16 j 07:25	24°♑00'54	35.54297 AU	
direct	-12854 Jan 03 j 09:38	22°♑51'45		
evening set	-12854 Apr 04 j 02:46	24°♑27'42		
max. Earth dist.	-12854 Apr 15 j 03:10	24°♑47'44	37.40219 AU	
conjunction	-12854 Apr 18 j 19:11	24°♑54'29	5°49'20	
minimum elong	-12854 Apr 18 j 18:59	24°♑54'28	5°48'34	
morning rise	-12854 May 03 j 07:38	25°♑21'02		
retrograde	-12854 Jul 28 j 08:41	26°♑53'32		
opposition	-12854 Oct 14 j 17:49	25°♑42'37	6°22'40	
min. Earth dist.	-12854 Oct 18 j 03:26	25°♑37'48	35.28408 AU	
direct	-12853 Jan 05 j 06:17	24°♑28'12		
evening set	-12853 Apr 06 j 05:46	26°♑05'31		
max. Earth dist.	-12853 Apr 17 j 00:07	26°♑25'18	37.14264 AU	
conjunction	-12853 Apr 20 j 16:56	26°♑32'10	6°15'47	
minimum elong	-12853 Apr 20 j 16:42	26°♑32'09	6°15'02	
morning rise	-12853 May 05 j 00:26	26°♑58'35		
retrograde	-12853 Jul 30 j 10:20	28°♑32'23		
opposition	-12853 Oct 16 j 15:27	27°♑21'05	6°50'47	
min. Earth dist.	-12853 Oct 20 j 01:01	27°♑16'15	35.02734 AU	
direct	-12852 Jan 07 j 01:36	26°♑06'16		
evening set	-12852 Apr 07 j 09:32	27°♑45'01		
max. Earth dist.	-12852 Apr 17 j 23:48	28°♑04'41	36.88499 AU	
conjunction	-12852 Apr 21 j 15:18	28°♑11'31	6°42'16	
minimum elong	-12852 Apr 21 j 15:04	28°♑11'30	6°41'31	
morning rise	-12852 May 05 j 17:09	28°♑37'45		
	-12852 Jul 01 j 14:34	0°♒		
retrograde	-12852 Jul 31 j 09:53	0°♒12'56		
	-12852 Aug 30 j 15:01	30°℞♑		
opposition	-12852 Oct 17 j 13:50	29°♑01'16	7°18'58	
min. Earth dist.	-12852 Oct 20 j 23:31	28°♑56'23	34.77249 AU	
direct	-12851 Jan 07 j 23:17	27°♑46'04		
evening set	-12851 Apr 09 j 14:42	29°♑26'20		
max. Earth dist.	-12851 Apr 19 j 22:36	29°♑45'42	36.62915 AU	
conjunction	-12851 Apr 23 j 14:17	29°♑52'37	7°08'47	
minimum elong	-12851 Apr 23 j 14:01	29°♑52'36	7°08'04	
	-12851 Apr 27 j 11:53	0°♒		
morning rise	-12851 May 07 j 10:20	0°♒18'39		
retrograde	-12851 Aug 02 j 10:41	1°♒55'17		
opposition	-12851 Oct 19 j 12:38	0°♒43'15	7°47'12	
min. Earth dist.	-12851 Oct 22 j 21:39	0°♒38'23	34.51938 AU	
	-12851 Nov 20 j 10:10	30°℞♑		
direct	-12850 Jan 09 j 21:39	29°♑27'40		
	-12850 Feb 27 j 23:46	0°♒		
evening set	-12850 Apr 11 j 20:57	1°♒09'31		
max. Earth dist.	-12850 Apr 21 j 22:33	1°♒28'35	36.37447 AU	
conjunction	-12850 Apr 25 j 14:09	1°♒35'33	7°35'19	
minimum elong	-12850 Apr 25 j 13:52	1°♒35'32	7°34'35	
morning rise	-12850 May 09 j 03:38	2°♒01'21		
retrograde	-12850 Aug 04 j 10:53	3°♒39'29		
opposition	-12850 Oct 21 j 12:35	2°♒27'06	8°15'26	
min. Earth dist.	-12850 Oct 24 j 22:31	2°♒22'08	34.26741 AU	
direct	-12849 Jan 11 j 20:13	1°♒11'07		
evening set	-12849 Apr 14 j 04:26	2°♒54'36		
max. Earth dist.	-12849 Apr 23 j 23:35	3°♒13'21	36.12080 AU	
conjunction	-12849 Apr 27 j 14:30	3°♒20'21	8°01'50	
minimum elong	-12849 Apr 27 j 14:12	3°♒20'20	8°01'08	
morning rise	-12849 May 10 j 21:04	3°♒45'51		

Attention, astronomical year style is used: The year -12849 in astronomical counting style is the year 12850 BCE in historical counting style.

retrograde	-12849 Aug 06 j 12:18	5°♒25'35	
opposition	-12849 Oct 23 j 13:14	4°♒12'48	8°43'40
min. Earth dist.	-12849 Oct 26 j 22:04	4°♒07'53	34.01636 AU
direct	-12848 Jan 13 j 19:18	2°♒56'24	
evening set	-12848 Apr 15 j 13:08	4°♒41'37	
max. Earth dist.	-12848 Apr 25 j 00:03	4°♒59'53	35.86779 AU
conjunction	-12848 Apr 28 j 15:40	5°♒07'01	8°28'17
minimum elong	-12848 Apr 28 j 15:21	5°♒06'59	8°27'35
morning rise	-12848 May 11 j 14:49	5°♒32'11	
retrograde	-12848 Aug 07 j 15:09	7°♒13'34	
opposition	-12848 Oct 24 j 14:39	6°♒00'22	9°11'51
min. Earth dist.	-12848 Oct 28 j 00:22	5°♒55'22	33.76625 AU
direct	-12847 Jan 14 j 17:25	4°♒43'33	
evening set	-12847 Apr 17 j 23:01	6°♒30'31	
max. Earth dist.	-12847 Apr 27 j 03:12	6°♒48'26	35.61569 AU
conjunction	-12847 Apr 30 j 17:31	6°♒55'31	8°54'39
minimum elong	-12847 Apr 30 j 17:11	6°♒55'30	8°53'59
morning rise	-12847 May 13 j 08:35	7°♒20'17	
retrograde	-12847 Aug 09 j 18:24	9°♒03'24	
opposition	-12847 Oct 26 j 16:52	7°♒49'46	9°39'57
min. Earth dist.	-12847 Oct 30 j 01:51	7°♒44'47	33.51711 AU
direct	-12846 Jan 16 j 18:12	6°♒32'30	
evening set	-12846 Apr 20 j 10:18	8°♒21'19	
max. Earth dist.	-12846 Apr 29 j 04:54	8°♒38'38	35.36475 AU
conjunction	-12846 May 02 j 20:00	8°♒45'52	9°20'54
minimum elong	-12846 May 02 j 19:39	8°♒45'50	9°20'14
morning rise	-12846 May 15 j 02:38	9°♒10'10	
retrograde	-12846 Aug 12 j 00:13	10°♒55'04	
opposition	-12846 Oct 28 j 19:46	9°♒41'00	10°07'53
min. Earth dist.	-12846 Nov 01 j 04:39	9°♒35'59	33.26964 AU
direct	-12845 Jan 18 j 18:09	8°♒23'15	
evening set	-12845 Apr 22 j 22:44	10°♒13'59	
max. Earth dist.	-12845 May 01 j 09:39	10°♒30'50	35.11558 AU
conjunction	-12845 May 04 j 23:19	10°♒38'00	9°46'57
minimum elong	-12845 May 04 j 22:57	10°♒37'59	9°46'19
morning rise	-12845 May 16 j 20:39	11°♒01'49	
retrograde	-12845 Aug 14 j 04:39	12°♒48'34	
opposition	-12845 Oct 30 j 23:43	11°♒34'02	10°35'38
min. Earth dist.	-12845 Nov 03 j 08:18	11°♒29'01	33.02437 AU
direct	-12844 Jan 20 j 21:11	10°♒15'50	
evening set	-12844 Apr 24 j 12:27	12°♒08'31	
max. Earth dist.	-12844 May 02 j 13:41	12°♒24'46	34.86909 AU
conjunction	-12844 May 06 j 02:58	12°♒31'58	10°12'45
minimum elong	-12844 May 06 j 02:35	12°♒31'56	10°12'08
morning rise	-12844 May 17 j 14:41	12°♒55'12	
retrograde	-12844 Aug 15 j 11:58	14°♒43'53	
opposition	-12844 Nov 01 j 04:16	13°♒28'53	11°03'07
min. Earth dist.	-12844 Nov 04 j 11:31	13°♒23'55	32.78230 AU
direct	-12843 Jan 22 j 02:06	12°♒10'12	
evening set	-12843 Apr 27 j 03:28	14°♒04'58	
max. Earth dist.	-12843 May 04 j 19:25	14°♒20'35	34.62588 AU
conjunction	-12843 May 08 j 07:35	14°♒27'46	10°38'16
minimum elong	-12843 May 08 j 07:11	14°♒27'44	10°37'40
morning rise	-12843 May 19 j 08:47	14°♒50'21	
	-12843 May 24 j 03:54	15°♒	
retrograde	-12843 Aug 17 j 18:29	16°♒41'04	
opposition	-12843 Nov 03 j 09:41	15°♒25'36	11°30'15
min. Earth dist.	-12843 Nov 06 j 17:00	15°♒20'35	32.54408 AU
	-12843 Nov 20 j 13:32	15°℞♒	
direct	-12842 Jan 24 j 06:26	14°♒06'27	
	-12842 Mar 26 j 23:39	15°♒	
evening set	-12842 Apr 29 j 20:08	16°♒03'23	
max. Earth dist.	-12842 May 07 j 02:13	16°♒18'19	34.38703 AU
conjunction	-12842 May 10 j 12:50	16°♒25'27	11°03'24
minimum elong	-12842 May 10 j 12:26	16°♒25'25	11°02'48
morning rise	-12842 May 21 j 02:56	16°♒47'19	
retrograde	-12842 Aug 20 j 00:39	18°♒40'09	
opposition	-12842 Nov 05 j 16:00	17°♒24'14	11°57'00
min. Earth dist.	-12842 Nov 08 j 21:06	17°♒19'20	32.31055 AU
direct	-12841 Jan 26 j 12:04	16°♒04'39	
evening set	-12841 May 02 j 13:58	18°♒03'49	
max. Earth dist.	-12841 May 09 j 08:49	18°♒17'56	34.15300 AU
conjunction	-12841 May 12 j 18:46	18°♒25'05	11°28'05
minimum elong	-12841 May 12 j 18:21	18°♒25'03	11°27'32
morning rise	-12841 May 22 j 21:05	18°♒46'09	
retrograde	-12841 Aug 22 j 07:56	20°♒41'14	
opposition	-12841 Nov 07 j 23:21	19°♒24'52	12°23'15
min. Earth dist.	-12841 Nov 11 j 04:07	19°♒19'57	32.08227 AU
direct	-12840 Jan 28 j 16:00	18°♒04'51	
evening set	-12840 May 04 j 09:35	20°♒06'24	
max. Earth dist.	-12840 May 10 j 18:10	20°♒19'46	33.92443 AU
conjunction	-12840 May 14 j 01:35	20°♒26'46	11°52'17
minimum elong	-12840 May 14 j 01:10	20°♒26'43	11°51'44
morning rise	-12840 May 23 j 15:13	20°♒46'56	
retrograde	-12840 Aug 23 j 16:02	22°♒44'22	
opposition	-12840 Nov 09 j 07:25	21°♒27'36	12°48'57
min. Earth dist.	-12840 Nov 12 j 10:05	21°♒22'47	31.85941 AU
direct	-12839 Jan 29 j 21:46	20°♒07'10	
evening set	-12839 May 07 j 06:41	22°♒11'12	
max. Earth dist.	-12839 May 13 j 02:04	22°♒23'32	33.70123 AU
conjunction	-12839 May 16 j 09:04	22°♒30'33	12°15'55
minimum elong	-12839 May 16 j 08:38	22°♒30'31	12°15'24
morning rise	-12839 May 25 j 09:23	22°♒49'45	
retrograde	-12839 Aug 26 j 02:54	24°♒49'39	
opposition	-12839 Nov 11 j 16:27	23°♒32'28	13°14'02
min. Earth dist.	-12839 Nov 14 j 18:24	23°♒27'41	31.64197 AU
direct	-12838 Feb 01 j 02:59	22°♒11'40	
evening set	-12838 May 10 j 05:38	24°♒18'17	
max. Earth dist.	-12838 May 15 j 13:04	24°♒29'40	33.48320 AU
conjunction	-12838 May 18 j 17:29	24°♒36'32	12°38'55
minimum elong	-12838 May 18 j 17:04	24°♒36'30	12°38'26
morning rise	-12838 May 27 j 03:15	24°♒54'38	
retrograde	-12838 Aug 28 j 13:16	26°♒57'08	
opposition	-12838 Nov 14 j 02:33	25°♒39'33	13°38'27
min. Earth dist.	-12838 Nov 17 j 03:08	25°♒34'49	31.42949 AU
direct	-12837 Feb 03 j 11:25	24°♒18'23	
evening set	-12837 May 13 j 06:31	26°♒27'42	
max. Earth dist.	-12837 May 17 j 22:46	26°♒37'50	33.27020 AU
conjunction	-12837 May 21 j 02:38	26°♒44'43	13°01'15
minimum elong	-12837 May 21 j 02:11	26°♒44'41	13°00'48
morning rise	-12837 May 28 j 21:01	27°♒01'36	
retrograde	-12837 Aug 31 j 02:48	29°♒06'48	
opposition	-12837 Nov 16 j 13:34	27°♒48'49	14°02'07
min. Earth dist.	-12837 Nov 19 j 12:30	27°♒44'11	31.22205 AU
direct	-12836 Feb 05 j 19:35	26°♒27'16	
evening set	-12836 May 15 j 09:20	28°♒39'26	
max. Earth dist.	-12836 May 19 j 10:58	28°♒48'21	33.06199 AU
conjunction	-12836 May 22 j 12:38	28°♒55'05	13°22'50
minimum elong	-12836 May 22 j 12:12	28°♒55'03	13°22'24
morning rise	-12836 May 29 j 14:13	29°♒10'37	
	-12836 Jun 22 j 02:01	0°♓	

Attention, astronomical year style is used: The year -12836 in astronomical counting style is the year 12837 BCE in historical counting style.

retrograde	-12836 Sep 01 j 14:57	1°♓18'40	
opposition	-12836 Nov 18 j 01:39	0°♓00'16	14°24'59
	-12836 Nov 18 j 05:36	30°℞♒	
min. Earth dist.	-12836 Nov 20 j 23:53	29°♒55'38	31.01932 AU
direct	-12835 Feb 07 j 05:27	28°♒38'21	
	-12835 Apr 23 j 07:32	0°♓	
evening set	-12835 May 18 j 14:43	0°♓53'29	
max. Earth dist.	-12835 May 21 j 23:02	1°♓00'54	32.85877 AU
conjunction	-12835 May 24 j 23:25	1°♓07'35	13°43'36
minimum elong	-12835 May 24 j 22:58	1°♓07'33	13°43'12
morning rise	-12835 May 31 j 06:41	1°♓21'34	
retrograde	-12835 Sep 04 j 05:57	3°♓32'37	
opposition	-12835 Nov 20 j 14:22	2°♓13'48	14°46'57
min. Earth dist.	-12835 Nov 23 j 10:19	2°♓09'18	30.82164 AU
direct	-12834 Feb 09 j 17:47	0°♓51'31	
evening set	-12834 May 21 j 22:51	3°♓09'51	
max. Earth dist.	-12834 May 24 j 12:21	3°♓15'34	32.66068 AU
conjunction	-12834 May 27 j 11:05	3°♓22'10	14°03'29
minimum elong	-12834 May 27 j 10:39	3°♓22'07	14°03'05
morning rise	-12834 Jun 01 j 21:58	3°♓34'22	
retrograde	-12834 Sep 06 j 20:26	5°♓48'38	
opposition	-12834 Nov 23 j 04:19	4°♓29'24	15°07'55
min. Earth dist.	-12834 Nov 25 j 23:41	4°♓24'55	30.62933 AU
direct	-12833 Feb 12 j 05:31	3°♓06'44	
evening set	-12833 May 25 j 10:45	5°♓28'31	
max. Earth dist.	-12833 May 27 j 02:55	5°♓32'18	32.46850 AU
conjunction	-12833 May 29 j 23:14	5°♓38'44	14°22'22
minimum elong	-12833 May 29 j 22:48	5°♓38'42	14°22'01
morning rise	-12833 Jun 03 j 10:36	5°♓48'50	
retrograde	-12833 Sep 09 j 10:46	8°♓06'36	
opposition	-12833 Nov 25 j 19:04	6°♓46'57	15°27'49
min. Earth dist.	-12833 Nov 28 j 11:28	6°♓42'39	30.44307 AU
direct	-12832 Feb 14 j 19:26	5°♓23'56	
evening set	-12832 May 28 j 04:43	7°♓49'41	
max. Earth dist.	-12832 May 28 j 17:20	7°♓50'53	32.28274 AU
conjunction	-12832 May 31 j 12:11	7°♓57'14	14°40'12
minimum elong	-12832 May 31 j 11:46	7°♓57'12	14°39'52
morning rise	-12832 Jun 03 j 18:41	8°♓04'41	
retrograde	-12832 Sep 11 j 01:58	10°♓26'29	
opposition	-12832 Nov 27 j 10:34	9°♓06'25	15°46'32
min. Earth dist.	-12832 Nov 30 j 01:50	9°♓02'09	30.26371 AU
direct	-12831 Feb 16 j 07:34	7°♓43'02	
max. Earth dist.	-12831 May 31 j 10:19	10°♓11'31	32.10444 AU
evening set	-12831 Jun 01 j 16:40	10°♓14'25	
conjunction	-12831 Jun 03 j 01:46	10°♓17'36	14°56'51
minimum elong	-12831 Jun 03 j 01:21	10°♓17'33	14°56'34
morning rise	-12831 Jun 04 j 10:03	10°♓20'41	
retrograde	-12831 Sep 13 j 17:31	12°♓48'11	
opposition	-12831 Nov 30 j 03:00	11°♓27'42	16°03'57
min. Earth dist.	-12831 Dec 02 j 15:11	11°♓23'38	30.09193 AU
direct	-12830 Feb 18 j 22:09	10°♓03'59	
max. Earth dist.	-12830 Jun 03 j 02:10	12°♓33'48	31.93435 AU
conjunction	-12830 Jun 05 j 15:52	12°♓39'46	15°12'15
minimum elong	-12830 Jun 05 j 15:29	12°♓39'43	15°11'59
retrograde	-12830 Sep 16 j 10:28	15°♓11'40	
opposition	-12830 Dec 02 j 20:19	13°♓50'48	16°19'58
min. Earth dist.	-12830 Dec 05 j 06:17	13°♓46'51	29.92882 AU
direct	-12829 Feb 21 j 12:04	12°♓26'46	
max. Earth dist.	-12829 Jun 05 j 21:08	14°♓58'06	31.77345 AU
conjunction	-12829 Jun 08 j 06:48	15°♓03'42	15°26'17
minimum elong	-12829 Jun 08 j 06:25	15°♓03'40	15°26'04
retrograde	-12829 Sep 19 j 02:37	17°♓36'53	
opposition	-12829 Dec 05 j 14:29	16°♓15'39	16°34'30
min. Earth dist.	-12829 Dec 07 j 21:27	16°♓11'54	29.77495 AU
direct	-12828 Feb 24 j 04:00	14°♓51'22	
max. Earth dist.	-12828 Jun 07 j 14:33	17°♓23'58	31.62240 AU
conjunction	-12828 Jun 09 j 22:07	17°♓29'25	15°38'53
minimum elong	-12828 Jun 09 j 21:46	17°♓29'23	15°38'41
retrograde	-12828 Sep 20 j 22:16	20°♓03'50	
opposition	-12828 Dec 07 j 09:18	18°♓42'16	16°47'26
min. Earth dist.	-12828 Dec 09 j 13:02	18°♓38'44	29.63093 AU
direct	-12827 Feb 25 j 18:51	17°♓17'45	
max. Earth dist.	-12827 Jun 10 j 10:41	19°♓51'46	31.48133 AU
conjunction	-12827 Jun 12 j 14:18	19°♓56'51	15°49'57
minimum elong	-12827 Jun 12 j 13:58	19°♓56'49	15°49'49
retrograde	-12827 Sep 23 j 16:21	22°♓32'28	
opposition	-12827 Dec 10 j 04:55	21°♓10'37	16°58'43
min. Earth dist.	-12827 Dec 12 j 06:14	21°♓07'14	29.49662 AU
direct	-12826 Feb 28 j 12:03	19°♓45'55	
max. Earth dist.	-12826 Jun 13 j 05:56	22°♓21'08	31.35041 AU
conjunction	-12826 Jun 15 j 06:55	22°♓26'00	15°59'27
minimum elong	-12826 Jun 15 j 06:38	22°♓25'58	15°59'20
retrograde	-12826 Sep 26 j 13:52	25°♓02'44	
opposition	-12826 Dec 13 j 01:19	23°♓40'37	17°08'16
min. Earth dist.	-12826 Dec 14 j 22:49	23°♓37'29	29.37214 AU
direct	-12825 Mar 03 j 07:01	22°♓15'45	
max. Earth dist.	-12825 Jun 16 j 02:48	24°♓52'13	31.22924 AU
conjunction	-12825 Jun 18 j 00:08	24°♓56'45	16°07'19
minimum elong	-12825 Jun 17 j 23:51	24°♓56'43	16°07'15
retrograde	-12825 Sep 29 j 09:27	27°♓34'33	
opposition	-12825 Dec 15 j 22:36	26°♓12'10	17°16'02
min. Earth dist.	-12825 Dec 17 j 18:06	26°♓09'10	29.25707 AU
direct	-12824 Mar 05 j 01:07	24°♓47'11	
max. Earth dist.	-12824 Jun 17 j 23:40	27°♓24'43	31.11782 AU
conjunction	-12824 Jun 19 j 17:53	27°♓28'57	16°13'30
minimum elong	-12824 Jun 19 j 17:39	27°♓28'56	16°13'27
	-12824 Sep 10 j 11:11	0°♈	
retrograde	-12824 Oct 01 j 07:35	0°♈07'43	
	-12824 Oct 22 j 13:39	30°℞♓	
opposition	-12824 Dec 17 j 20:10	28°♓45'06	17°21'58
min. Earth dist.	-12824 Dec 19 j 11:36	28°♓42'23	29.15130 AU
direct	-12823 Mar 07 j 21:50	27°♓19'59	
max. Earth dist.	-12823 Jun 20 j 20:52	29°♓58'31	31.01577 AU
	-12823 Jun 21 j 11:40	0°♈	
conjunction	-12823 Jun 22 j 12:10	0°♈02'28	16°17'57
minimum elong	-12823 Jun 22 j 11:58	0°♈02'27	16°17'58
retrograde	-12823 Oct 04 j 05:22	2°♈42'06	
opposition	-12823 Dec 20 j 18:37	1°♈19'15	17°26'01
min. Earth dist.	-12823 Dec 22 j 08:00	1°♈16'39	29.05469 AU
	-12822 Feb 19 j 18:30	30°℞♓	
direct	-12822 Mar 10 j 18:09	29°♓54'02	
	-12822 Mar 29 j 11:09	0°♈	
max. Earth dist.	-12822 Jun 23 j 19:11	2°♈33'29	30.92334 AU
conjunction	-12822 Jun 25 j 06:44	2°♈37'05	16°20'39
minimum elong	-12822 Jun 25 j 06:35	2°♈37'04	16°20'40
retrograde	-12822 Oct 07 j 02:54	5°♈17'29	
opposition	-12822 Dec 23 j 17:28	3°♈54'24	17°28'08
min. Earth dist.	-12822 Dec 25 j 02:35	3°♈52'06	28.96733 AU
direct	-12821 Mar 13 j 16:42	2°♈29'05	
max. Earth dist.	-12821 Jun 26 j 16:48	5°♈09'15	30.84058 AU

Attention, astronomical year style is used: The year -12821 in astronomical counting style is the year 12822 BCE in historical counting style.

conjunction	-12821 Jun 28 j 01:41	5°♈12'35	16°21'31
minimum elong	-12821 Jun 28 j 01:33	5°♈12'35	16°21'36
retrograde	-12821 Oct 10 j 00:28	7°♈53'38	
opposition	-12821 Dec 26 j 16:47	6°♈30'21	17°28'17
min. Earth dist.	-12821 Dec 27 j 23:27	6°♈28'13	28.88967 AU
direct	-12820 Mar 15 j 13:01	5°♈04'57	
conjunction	-12820 Jun 29 j 20:51	7°♈48'47	16°20'33
minimum elong	-12820 Jun 29 j 20:46	7°♈48'46	16°20'39
max. Earth dist.	-12820 Jun 28 j 16:23	7°♈45'53	30.76806 AU
retrograde	-12820 Oct 11 j 22:10	10°♈30'22	
opposition	-12820 Dec 28 j 16:18	9°♈06'52	17°26'25
min. Earth dist.	-12820 Dec 29 j 18:54	9°♈05'01	28.82194 AU
direct	-12819 Mar 18 j 12:20	7°♈41'25	
conjunction	-12819 Jul 02 j 16:02	10°♈25'27	16°17'41
minimum elong	-12819 Jul 02 j 15:59	10°♈25'27	16°17'51
max. Earth dist.	-12819 Jul 01 j 14:16	10°♈22'49	30.70610 AU
retrograde	-12819 Oct 14 j 19:49	13°♈07'28	
opposition	-12819 Dec 31 j 16:03	11°♈43'48	17°22'29
min. Earth dist.	-12818 Jan 01 j 15:22	11°♈42'10	28.76496 AU
direct	-12818 Mar 21 j 09:28	10°♈18'19	
conjunction	-12818 Jul 05 j 11:28	13°♈02'26	16°12'54
minimum elong	-12818 Jul 05 j 11:28	13°♈02'26	16°13'05
max. Earth dist.	-12818 Jul 04 j 14:40	13°♈00'18	30.65553 AU
retrograde	-12818 Oct 17 j 15:55	15°♈44'47	
opposition	-12817 Jan 03 j 16:08	14°♈20'57	17°16'29
min. Earth dist.	-12817 Jan 04 j 11:25	14°♈19'36	28.71928 AU
direct	-12817 Mar 24 j 08:46	12°♈55'29	
conjunction	-12817 Jul 08 j 06:39	15°♈39'34	16°06'12
minimum elong	-12817 Jul 08 j 06:42	15°♈39'34	16°06'26
max. Earth dist.	-12817 Jul 07 j 12:53	15°♈37'44	30.61700 AU
retrograde	-12817 Oct 20 j 14:28	18°♈22'09	
opposition	-12816 Jan 06 j 16:13	16°♈58'13	17°08'23
min. Earth dist.	-12816 Jan 07 j 07:11	16°♈57'10	28.68571 AU
direct	-12816 Mar 26 j 05:56	15°♈32'47	
conjunction	-12816 Jul 10 j 02:09	18°♈16'45	15°57'33
minimum elong	-12816 Jul 10 j 02:13	18°♈16'46	15°57'48
max. Earth dist.	-12816 Jul 09 j 13:28	18°♈15'27	30.59101 AU
retrograde	-12816 Oct 22 j 10:37	20°♈59'29	
opposition	-12815 Jan 08 j 16:16	19°♈35'29	16°58'11
min. Earth dist.	-12815 Jan 09 j 03:41	19°♈34'41	28.66443 AU
direct	-12815 Mar 29 j 04:15	18°♈10'09	
conjunction	-12815 Jul 12 j 21:25	20°♈53'54	15°46'59
minimum elong	-12815 Jul 12 j 21:32	20°♈53'55	15°47'17
max. Earth dist.	-12815 Jul 12 j 12:00	20°♈52'56	30.57787 AU
retrograde	-12815 Oct 25 j 08:51	23°♈36'41	
opposition	-12814 Jan 11 j 16:20	22°♈12'40	16°45'55
min. Earth dist.	-12814 Jan 11 j 22:54	22°♈12'13	28.65570 AU
direct	-12814 Apr 01 j 02:34	20°♈47'30	
conjunction	-12814 Jul 15 j 16:35	23°♈30'56	15°34'32
minimum elong	-12814 Jul 15 j 16:43	23°♈30'57	15°34'51
max. Earth dist.	-12814 Jul 15 j 12:04	23°♈30'29	30.57733 AU
retrograde	-12814 Oct 28 j 05:16	26°♈13'41	
opposition	-12813 Jan 14 j 16:34	24°♈49'41	16°31'38
min. Earth dist.	-12813 Jan 14 j 19:59	24°♈49'27	28.65911 AU
direct	-12813 Apr 04 j 00:06	23°♈24'43	
conjunction	-12813 Jul 18 j 11:38	26°♈07'44	15°20'15
minimum elong	-12813 Jul 18 j 11:49	26°♈07'45	15°20'37
max. Earth dist.	-12813 Jul 18 j 10:39	26°♈07'38	30.58917 AU
retrograde	-12813 Oct 31 j 03:45	28°♈50'19	
opposition	-12812 Jan 17 j 16:21	27°♈26'24	16°15'23
min. Earth dist.	-12812 Jan 17 j 14:51	27°♈26'30	28.67434 AU
direct	-12812 Apr 05 j 22:28	26°♈01'38	
conjunction	-12812 Jul 20 j 06:31	28°♈44'09	15°04'11
minimum elong	-12812 Jul 20 j 06:43	28°♈44'10	15°04'35
max. Earth dist.	-12812 Jul 20 j 09:36	28°♈44'28	30.61261 AU
	-12812 Aug 21 j 11:30	0°♉	
retrograde	-12812 Nov 02 j 00:39	1°♉26'30	
opposition	-12811 Jan 19 j 16:09	0°♉02'39	15°57'16
min. Earth dist.	-12811 Jan 19 j 11:55	0°♉02'57	28.70070 AU
	-12811 Jan 21 j 06:29	30°♓℞	
direct	-12811 Apr 08 j 20:57	28°♈38'08	
	-12811 Jun 18 j 18:01	0°♉	
evening set	-12811 Jul 20 j 10:33	1°♉13'39	
conjunction	-12811 Jul 23 j 01:09	1°♉20'01	14°46'25
minimum elong	-12811 Jul 23 j 01:24	1°♉20'03	14°46'52
max. Earth dist.	-12811 Jul 23 j 07:58	1°♉20'43	30.64723 AU
morning rise	-12811 Jul 25 j 16:17	1°♉26'27	
retrograde	-12811 Nov 04 j 22:02	4°♉02'00	
opposition	-12810 Jan 22 j 15:30	2°♉38'16	15°37'21
min. Earth dist.	-12810 Jan 22 j 06:39	2°♉38'52	28.73765 AU
direct	-12810 Apr 11 j 20:15	1°♉14'00	
evening set	-12810 Jul 21 j 17:28	3°♉45'13	
conjunction	-12810 Jul 25 j 19:32	3°♉55'09	14°27'02
minimum elong	-12810 Jul 25 j 19:48	3°♉55'10	14°27'29
max. Earth dist.	-12810 Jul 26 j 05:40	3°♉56'11	30.69238 AU
morning rise	-12810 Jul 29 j 22:09	4°♉05'09	
retrograde	-12810 Nov 07 j 18:21	6°♉36'40	
opposition	-12809 Jan 25 j 14:45	5°♉13'02	15°15'42
min. Earth dist.	-12809 Jan 25 j 03:11	5°♉13'50	28.78493 AU
direct	-12809 Apr 14 j 17:17	3°♉49'02	
evening set	-12809 Jul 23 j 08:41	6°♉16'43	
conjunction	-12809 Jul 28 j 13:35	6°♉29'20	14°06'05
minimum elong	-12809 Jul 28 j 13:53	6°♉29'22	14°06'35
max. Earth dist.	-12809 Jul 29 j 03:49	6°♉30'47	30.74790 AU
morning rise	-12809 Aug 02 j 19:03	6°♉42'01	
retrograde	-12809 Nov 10 j 14:58	9°♉10'16	
opposition	-12808 Jan 28 j 13:23	7°♉46'45	14°52'25
min. Earth dist.	-12808 Jan 27 j 21:41	7°♉47'50	28.84206 AU
direct	-12808 Apr 16 j 17:22	6°♉23'01	
evening set	-12808 Jul 24 j 03:22	8°♉47'32	
conjunction	-12808 Jul 30 j 07:09	9°♉02'23	13°43'40
minimum elong	-12808 Jul 30 j 07:27	9°♉02'25	13°44'11
max. Earth dist.	-12808 Jul 31 j 00:01	9°♉04'05	30.81331 AU
morning rise	-12808 Aug 05 j 11:38	9°♉17'18	
retrograde	-12808 Nov 12 j 10:30	11°♉42'38	
opposition	-12807 Jan 30 j 11:24	10°♉19'14	14°27'35
min. Earth dist.	-12807 Jan 29 j 16:38	10°♉20'31	28.90911 AU
direct	-12807 Apr 19 j 14:24	8°♉55'45	
evening set	-12807 Jul 26 j 00:08	11°♉17'18	
conjunction	-12807 Aug 02 j 00:17	11°♉34'06	13°19'51
minimum elong	-12807 Aug 02 j 00:37	11°♉34'08	13°20'24
max. Earth dist.	-12807 Aug 02 j 21:31	11°♉36'14	30.88879 AU
morning rise	-12807 Aug 09 j 01:06	11°♉50'59	
retrograde	-12807 Nov 15 j 03:29	14°♉13'34	
min. Earth dist.	-12806 Feb 01 j 10:35	12°♉51'50	28.98601 AU
opposition	-12806 Feb 02 j 08:56	12°♉50'18	14°01'18
direct	-12806 Apr 22 j 12:37	11°♉27'06	
evening set	-12806 Jul 27 j 21:57	13°♉45'46	
conjunction	-12806 Aug 04 j 16:33	14°♉04'19	12°54'43

Attention, astronomical year style is used: The year -12806 in astronomical counting style is the year 12807 BCE in historical counting style.

minimum elong	-12806 Aug 04 j 16:52	14°♉04'21	12°55'18
max. Earth dist.	-12806 Aug 05 j 16:17	14°♉06'41	30.97442 AU
morning rise	-12806 Aug 12 j 12:03	14°♉22'57	
	-12806 Aug 28 j 11:51	15°♉	
retrograde	-12806 Nov 17 j 22:04	16°♉42'56	
min. Earth dist.	-12805 Feb 04 j 03:43	15°♉21'35	29.07334 AU
opposition	-12805 Feb 05 j 05:54	15°♉19'48	13°33'38
	-12805 Feb 17 j 11:40	15°℞♉	
direct	-12805 Apr 25 j 09:01	13°♉56'52	
	-12805 Jun 26 j 10:01	15°♉	
evening set	-12805 Jul 29 j 20:45	16°♉12'49	
conjunction	-12805 Aug 07 j 08:30	16°♉32'56	12°28'20
minimum elong	-12805 Aug 07 j 08:51	16°♉32'58	12°28'56
max. Earth dist.	-12805 Aug 08 j 12:56	16°♉35'45	31.07058 AU
morning rise	-12805 Aug 15 j 21:04	16°♉53'08	
retrograde	-12805 Nov 20 j 13:25	19°♉10'37	
min. Earth dist.	-12804 Feb 06 j 20:52	17°♉49'37	29.17124 AU
opposition	-12804 Feb 08 j 02:01	17°♉47'39	13°04'40
direct	-12804 Apr 27 j 05:38	16°♉25'01	
evening set	-12804 Jul 30 j 20:13	18°♉38'20	
conjunction	-12804 Aug 08 j 23:39	18°♉59'51	12°00'49
minimum elong	-12804 Aug 08 j 23:59	18°♉59'53	12°01'26
max. Earth dist.	-12804 Aug 10 j 06:39	19°♉02'54	31.17762 AU
morning rise	-12804 Aug 18 j 04:09	19°♉21'28	
retrograde	-12804 Nov 22 j 05:22	21°♉36'33	
min. Earth dist.	-12803 Feb 08 j 11:51	20°♉16'03	29.28013 AU
opposition	-12803 Feb 09 j 21:26	20°♉13'47	12°34'31
direct	-12803 Apr 30 j 00:16	18°♉51'29	
evening set	-12803 Aug 01 j 20:00	21°♉02'16	
conjunction	-12803 Aug 11 j 14:13	21°♉25'04	11°32'13
minimum elong	-12803 Aug 11 j 14:35	21°♉25'06	11°32'52
max. Earth dist.	-12803 Aug 13 j 01:43	21°♉28'32	31.29552 AU
morning rise	-12803 Aug 21 j 09:32	21°♉47'59	
retrograde	-12803 Nov 24 j 18:55	24°♉00'45	
min. Earth dist.	-12802 Feb 11 j 04:02	22°♉40'39	29.39984 AU
opposition	-12802 Feb 12 j 16:15	22°♉38'13	12°03'17
direct	-12802 May 02 j 18:12	21°♉16'17	
evening set	-12802 Aug 03 j 20:19	23°♉24'37	
conjunction	-12802 Aug 14 j 04:09	23°♉48'34	11°02'40
minimum elong	-12802 Aug 14 j 04:30	23°♉48'36	11°03'20
max. Earth dist.	-12802 Aug 15 j 18:21	23°♉52'17	31.42431 AU
morning rise	-12802 Aug 24 j 13:15	24°♉12'39	
retrograde	-12802 Nov 27 j 10:32	26°♉23'13	
min. Earth dist.	-12801 Feb 13 j 17:28	25°♉03'40	29.53021 AU
opposition	-12801 Feb 15 j 10:12	25°♉00'57	11°31'04
direct	-12801 May 05 j 11:12	23°♉39'24	
evening set	-12801 Aug 05 j 20:46	25°♉45'24	
conjunction	-12801 Aug 16 j 17:27	26°♉10'24	10°32'15
minimum elong	-12801 Aug 16 j 17:48	26°♉10'26	10°32'57
max. Earth dist.	-12801 Aug 18 j 11:20	26°♉14'26	31.56326 AU
morning rise	-12801 Aug 27 j 15:32	26°♉35'32	
retrograde	-12801 Nov 29 j 23:44	28°♉43'58	
min. Earth dist.	-12800 Feb 16 j 08:44	27°♉24'50	29.67052 AU
opposition	-12800 Feb 18 j 03:33	27°♉21'59	10°58'00
direct	-12800 May 07 j 03:35	26°♉00'51	
evening set	-12800 Aug 06 j 21:39	28°♉04'35	
conjunction	-12800 Aug 18 j 06:11	28°♉30'32	10°01'06
minimum elong	-12800 Aug 18 j 06:31	28°♉30'34	10°01'48
max. Earth dist.	-12800 Aug 20 j 03:00	28°♉34'49	31.71174 AU
morning rise	-12800 Aug 29 j 16:10	28°♉56'37	
	-12800 Sep 28 j 23:05	0°♊	

retrograde	-12800 Dec 01 j 13:43	1°♊02'59	
	-12799 Feb 07 j 23:29	30°℞♉	
min. Earth dist.	-12799 Feb 17 j 21:16	29°♉44'24	29.81991 AU
opposition	-12799 Feb 19 j 19:49	29°♉41'19	10°24'12
direct	-12799 May 09 j 20:07	28°♉20'36	
	-12799 Jul 29 j 20:41	0°♊	
evening set	-12799 Aug 08 j 22:41	0°♊22'11	
conjunction	-12799 Aug 20 j 18:11	0°♊48'57	9°29'17
minimum elong	-12799 Aug 20 j 18:31	0°♊48'59	9°30'00
max. Earth dist.	-12799 Aug 22 j 17:39	0°♊53'28	31.86873 AU
morning rise	-12799 Sep 01 j 15:27	1°♊15'53	
retrograde	-12799 Dec 04 j 02:58	3°♊20'17	
min. Earth dist.	-12798 Feb 20 j 11:02	2°♊02'08	29.97771 AU
opposition	-12798 Feb 22 j 11:40	1°♊58'56	9°49'46
direct	-12798 May 12 j 10:09	0°♊38'39	
evening set	-12798 Aug 10 j 23:47	2°♊38'08	
conjunction	-12798 Aug 23 j 05:36	3°♊05'39	8°56'56
minimum elong	-12798 Aug 23 j 05:55	3°♊05'40	8°57'40
max. Earth dist.	-12798 Aug 25 j 08:16	3°♊10'25	32.03360 AU
morning rise	-12798 Sep 04 j 13:04	3°♊33'19	
retrograde	-12798 Dec 06 j 15:10	5°♊35'47	
min. Earth dist.	-12797 Feb 22 j 23:07	4°♊18'09	30.14294 AU
opposition	-12797 Feb 25 j 02:36	4°♊14'47	9°14'49
direct	-12797 May 15 j 02:51	2°♊54'55	
evening set	-12797 Aug 13 j 01:15	4°♊52'24	
conjunction	-12797 Aug 25 j 16:21	5°♊20'33	8°24'07
minimum elong	-12797 Aug 25 j 16:40	5°♊20'34	8°24'51
max. Earth dist.	-12797 Aug 27 j 20:34	5°♊25'25	32.20540 AU
morning rise	-12797 Sep 07 j 09:34	5°♊48'53	
retrograde	-12797 Dec 09 j 04:17	7°♊49'29	
min. Earth dist.	-12796 Feb 25 j 10:48	6°♊32'19	30.31511 AU
opposition	-12796 Feb 27 j 16:39	6°♊28'48	8°39'27
direct	-12796 May 16 j 16:52	5°♊09'21	
evening set	-12796 Aug 14 j 02:36	7°♊04'53	
conjunction	-12796 Aug 27 j 02:35	7°♊33'36	7°50'56
minimum elong	-12796 Aug 27 j 02:52	7°♊33'38	7°51'42
max. Earth dist.	-12796 Aug 29 j 09:57	7°♊38'44	32.38363 AU
morning rise	-12796 Sep 09 j 04:27	8°♊02'30	
retrograde	-12796 Dec 10 j 13:17	10°♊01'19	
min. Earth dist.	-12795 Feb 26 j 22:21	8°♊44'33	30.49347 AU
opposition	-12795 Mar 01 j 05:56	8°♊40'57	8°03'44
direct	-12795 May 19 j 07:33	7°♊21'54	
evening set	-12795 Aug 16 j 03:59	9°♊15'34	
conjunction	-12795 Aug 29 j 11:46	9°♊44'44	7°17'28
minimum elong	-12795 Aug 29 j 12:02	9°♊44'46	7°18'15
max. Earth dist.	-12795 Aug 31 j 20:19	9°♊49'56	32.56783 AU
morning rise	-12795 Sep 11 j 21:52	10°♊14'08	
retrograde	-12795 Dec 12 j 22:58	12°♊11'12	
min. Earth dist.	-12794 Mar 01 j 07:54	10°♊54'56	30.67801 AU
opposition	-12794 Mar 03 j 18:24	10°♊51'09	7°27'48
direct	-12794 May 21 j 20:12	9°♊32'29	
evening set	-12794 Aug 18 j 05:15	11°♊24'20	
conjunction	-12794 Aug 31 j 20:26	11°♊53'55	6°43'47
minimum elong	-12794 Aug 31 j 20:40	11°♊53'56	6°44'35
max. Earth dist.	-12794 Sep 03 j 08:13	11°♊59'22	32.75794 AU
morning rise	-12794 Sep 14 j 13:52	12°♊23'43	
retrograde	-12794 Dec 15 j 05:44	14°♊19'07	
min. Earth dist.	-12793 Mar 03 j 18:19	13°♊03'12	30.86869 AU
opposition	-12793 Mar 06 j 06:00	12°♊59'22	6°51'41
direct	-12793 May 24 j 08:48	11°♊41'05	
evening set	-12793 Aug 20 j 06:30	13°♊31'11	

Attention, astronomical year style is used: The year -12793 in astronomical counting style is the year 12794 BCE in historical counting style.

conjunction	-12793 Sep 03 j 04:14	14°♊01'05	6°09'58
minimum elong	-12793 Sep 03 j 04:28	14°♊01'07	6°10'46
max. Earth dist.	-12793 Sep 05 j 17:25	14°♊06'37	32.95422 AU
morning rise	-12793 Sep 17 j 04:27	14°♊31'13	
retrograde	-12793 Dec 17 j 13:46	16°♊25'01	
min. Earth dist.	-12792 Mar 05 j 01:39	15°♊09'36	31.06582 AU
opposition	-12792 Mar 07 j 16:36	15°♊05'34	6°15'29
direct	-12792 May 25 j 19:42	13°♊47'40	
evening set	-12792 Aug 21 j 07:39	15°♊36'07	
conjunction	-12792 Sep 04 j 11:18	16°♊06'16	5°36'04
minimum elong	-12792 Sep 04 j 11:30	16°♊06'18	5°36'52
max. Earth dist.	-12792 Sep 07 j 03:11	16°♊12'00	33.15673 AU
morning rise	-12792 Sep 18 j 17:36	16°♊36'41	
retrograde	-12792 Dec 18 j 19:02	18°♊28'57	
min. Earth dist.	-12791 Mar 07 j 10:16	17°♊13'53	31.26965 AU
opposition	-12791 Mar 10 j 02:22	17°♊09'49	5°39'15
direct	-12791 May 28 j 05:04	15°♊52'18	
evening set	-12791 Aug 23 j 08:41	17°♊39'10	
conjunction	-12791 Sep 06 j 17:42	18°♊09'31	5°02'10
minimum elong	-12791 Sep 06 j 17:54	18°♊09'32	5°02'58
max. Earth dist.	-12791 Sep 09 j 11:43	18°♊15'23	33.36599 AU
morning rise	-12791 Sep 21 j 05:20	18°♊40'07	
retrograde	-12791 Dec 21 j 01:30	20°♊30'56	
min. Earth dist.	-12790 Mar 09 j 16:11	19°♊16'23	31.48032 AU
opposition	-12790 Mar 12 j 11:16	19°♊12'08	5°03'04
direct	-12790 May 30 j 13:41	17°♊55'01	
evening set	-12790 Aug 25 j 09:37	19°♊40'24	
conjunction	-12790 Sep 08 j 23:14	20°♊10'54	4°28'19
minimum elong	-12790 Sep 08 j 23:24	20°♊10'55	4°29'08
max. Earth dist.	-12790 Sep 11 j 19:12	20°♊16'53	33.58175 AU
morning rise	-12790 Sep 23 j 15:51	20°♊41'39	
retrograde	-12790 Dec 23 j 07:55	22°♊31'05	
min. Earth dist.	-12789 Mar 11 j 22:51	21°♊16'57	31.69773 AU
opposition	-12789 Mar 14 j 19:32	21°♊12'39	4°27'00
direct	-12789 Jun 01 j 20:01	19°♊55'56	
evening set	-12789 Aug 27 j 10:26	21°♊39'55	
conjunction	-12789 Sep 11 j 04:22	22°♊10'30	3°54'34
minimum elong	-12789 Sep 11 j 04:31	22°♊10'31	3°55'24
max. Earth dist.	-12789 Sep 14 j 03:00	22°♊16'39	33.80384 AU
morning rise	-12789 Sep 26 j 01:04	22°♊41'20	
retrograde	-12789 Dec 25 j 13:05	24°♊29'28	
min. Earth dist.	-12788 Mar 13 j 04:05	23°♊15'48	31.92118 AU
opposition	-12788 Mar 16 j 02:42	23°♊11'24	3°51'07
direct	-12788 Jun 03 j 05:19	21°♊55'07	
evening set	-12788 Aug 28 j 11:20	23°♊37'46	
conjunction	-12788 Sep 12 j 08:39	24°♊08'23	3°21'00
minimum elong	-12788 Sep 12 j 08:47	24°♊08'24	3°21'50
max. Earth dist.	-12788 Sep 15 j 08:08	24°♊14'34	34.03146 AU
morning rise	-12788 Sep 27 j 09:10	24°♊39'16	
retrograde	-12788 Dec 26 j 19:54	26°♊26'08	
min. Earth dist.	-12787 Mar 15 j 08:39	25°♊12'58	32.15018 AU
opposition	-12787 Mar 18 j 09:18	25°♊08'27	3°15'28
direct	-12787 Jun 05 j 11:49	23°♊52'36	
evening set	-12787 Aug 30 j 11:53	25°♊34'00	
conjunction	-12787 Sep 14 j 12:20	26°♊04'37	2°47'39
minimum elong	-12787 Sep 14 j 12:26	26°♊04'37	2°48'29
max. Earth dist.	-12787 Sep 17 j 14:34	26°♊10'58	34.26392 AU
morning rise	-12787 Sep 29 j 15:47	26°♊35'29	
retrograde	-12787 Dec 28 j 22:25	28°♊21'11	
min. Earth dist.	-12786 Mar 17 j 13:53	27°♊08'25	32.38370 AU
opposition	-12786 Mar 20 j 15:12	27°♊03'53	2°40'06
direct	-12786 Jun 07 j 18:56	25°♊48'28	
evening set	-12786 Sep 01 j 12:39	27°♊28'40	
conjunction	-12786 Sep 16 j 15:31	27°♊59'13	2°14'34
minimum elong	-12786 Sep 16 j 15:36	27°♊59'13	2°15'24
max. Earth dist.	-12786 Sep 19 j 18:11	28°♊05'33	34.50039 AU
morning rise	-12786 Oct 01 j 21:38	28°♊30'02	
	-12786 Nov 29 j 05:21	0°♋	
retrograde	-12786 Dec 31 j 01:22	0°♋14'36	
	-12785 Feb 01 j 13:31	30°℞♊	
min. Earth dist.	-12785 Mar 19 j 16:45	29°♊02'19	32.62109 AU
opposition	-12785 Mar 22 j 20:16	28°♊57'41	2°05'05
direct	-12785 Jun 10 j 00:50	27°♊42'41	
evening set	-12785 Sep 03 j 13:18	29°♊21'45	
conjunction	-12785 Sep 18 j 18:10	29°♊52'12	1°41'48
minimum elong	-12785 Sep 18 j 18:14	29°♊52'12	1°42'37
max. Earth dist.	-12785 Sep 21 j 22:52	29°♊58'40	34.73993 AU
	-12785 Sep 22 j 14:49	0°♋	
morning rise	-12785 Oct 04 j 02:19	0°♋22'55	
retrograde	-12784 Jan 02 j 02:03	2°♋06'26	
min. Earth dist.	-12784 Mar 20 j 21:15	0°♋54'29	32.86137 AU
opposition	-12784 Mar 24 j 00:45	0°♋49'53	1°30'26
	-12784 Apr 30 j 04:48	30°℞♊	
direct	-12784 Jun 11 j 06:18	29°♊35'17	
	-12784 Jul 21 j 18:49	0°♋	
evening set	-12784 Sep 04 j 13:51	1°♋13'16	
conjunction	-12784 Sep 19 j 20:15	1°♋43'34	1°09'22
minimum elong	-12784 Sep 19 j 20:17	1°♋43'34	1°10'11
max. Earth dist.	-12784 Sep 23 j 01:25	1°♋50'01	34.98191 AU
morning rise	-12784 Oct 05 j 05:52	2°♋14'09	
retrograde	-12783 Jan 03 j 03:20	3°♋56'38	
min. Earth dist.	-12783 Mar 22 j 22:59	2°♋45'09	33.10387 AU
opposition	-12783 Mar 26 j 04:19	2°♋40'26	0°56'12
direct	-12783 Jun 13 j 10:30	1°♋26'13	
evening set	-12783 Sep 06 j 14:21	3°♋03'10	
conjunction	-12783 Sep 21 j 21:39	3°♋33'18	0°37'19
minimum elong	-12783 Sep 21 j 21:40	3°♋33'18	0°38'09
max. Earth dist.	-12783 Sep 25 j 03:43	3°♋39'46	35.22569 AU
morning rise	-12783 Oct 07 j 08:28	4°♋03'42	
retrograde	-12782 Jan 05 j 04:18	5°♋45'13	
min. Earth dist.	-12782 Mar 25 j 01:58	4°♋34'02	33.34841 AU
opposition	-12782 Mar 28 j 07:27	4°♋29'21	0°22'25
direct	-12782 Jun 15 j 12:50	3°♋15'30	
evening set	-12782 Sep 08 j 14:26	4°♋51'28	
conjunction	-12782 Sep 23 j 22:30	5°♋21'23	0°05'44
minimum elong	-12782 Sep 23 j 22:31	5°♋21'23	0°06'33
behind sun begin	-12782 Sep 23 j 16:30	5°♋20'55	
behind sun end	-12782 Sep 24 j 04:31	5°♋21'51	
max. Earth dist.	-12782 Sep 27 j 05:59	5°♋27'54	35.47128 AU
morning rise	-12782 Oct 09 j 09:49	5°♋51'34	
desc. node	-12782 Nov 29 j 08:13	7°♋11'07	
retrograde	-12781 Jan 07 j 04:56	7°♋32'09	
min. Earth dist.	-12781 Mar 27 j 03:11	6°♋21'20	33.59470 AU
opposition	-12781 Mar 30 j 09:42	6°♋16'37	-0°10'54
direct	-12781 Jun 17 j 15:47	5°♋03'05	
evening set	-12781 Sep 10 j 14:37	6°♋38'08	
conjunction	-12781 Sep 25 j 22:41	7°♋07'48	-0°25'34
minimum elong	-12781 Sep 25 j 22:40	7°♋07'48	0°24'44
max. Earth dist.	-12781 Sep 29 j 06:17	7°♋14'16	35.71854 AU
morning rise	-12781 Oct 11 j 10:21	7°♋37'45	
retrograde	-12780 Jan 09 j 06:10	9°♋17'26	
min. Earth dist.	-12780 Mar 28 j 03:36	8°♋06'58	33.84322 AU

Attention, astronomical year style is used: The year -12780 in astronomical counting style is the year 12781 BCE in historical counting style.

opposition	-12780 Mar 31 j 11:09	8°♋02'13	-0°43'42
direct	-12780 Jun 18 j 16:19	6°♋49'01	
evening set	-12780 Sep 11 j 14:26	8°♋23'11	
conjunction	-12780 Sep 26 j 22:21	8°♋52'36	-0°56'18
minimum elong	-12780 Sep 26 j 22:19	8°♋52'35	0°55'29
max. Earth dist.	-12780 Sep 30 j 07:57	8°♋59'10	35.96796 AU
morning rise	-12780 Oct 12 j 09:36	9°♋22'16	
retrograde	-12779 Jan 10 j 04:08	11°♋01'07	
min. Earth dist.	-12779 Mar 30 j 04:12	9°♋50'57	34.09412 AU
opposition	-12779 Apr 02 j 12:00	9°♋46'12	-1°15'59
direct	-12779 Jun 20 j 19:23	8°♋33'22	
evening set	-12779 Sep 13 j 14:02	10°♋06'43	
conjunction	-12779 Sep 28 j 21:11	10°♋35'49	-1°26'34
minimum elong	-12779 Sep 28 j 21:08	10°♋35'49	1°25'45
max. Earth dist.	-12779 Oct 02 j 06:49	10°♋42'21	36.21988 AU
morning rise	-12779 Oct 14 j 07:51	11°♋05'12	
retrograde	-12778 Jan 12 j 03:07	12°♋43'15	
min. Earth dist.	-12778 Apr 01 j 02:32	11°♋33'31	34.34788 AU
opposition	-12778 Apr 04 j 12:15	11°♋28'41	-1°47'43
direct	-12778 Jun 22 j 20:56	10°♋16'11	
evening set	-12778 Sep 15 j 13:36	11°♋48'47	
conjunction	-12778 Sep 30 j 19:42	12°♋17'34	-1°56'19
minimum elong	-12778 Sep 30 j 19:38	12°♋17'34	1°55'31
max. Earth dist.	-12778 Oct 04 j 07:17	12°♋24'12	36.47444 AU
morning rise	-12778 Oct 16 j 05:17	12°♋46'38	
retrograde	-12777 Jan 13 j 23:58	14°♋23'59	
min. Earth dist.	-12777 Apr 03 j 02:18	13°♋14'33	34.60443 AU
opposition	-12777 Apr 06 j 11:50	13°♋09'44	-2°18'53
direct	-12777 Jun 24 j 21:41	11°♋57'37	
evening set	-12777 Sep 17 j 12:57	13°♋29'31	
conjunction	-12777 Oct 02 j 17:43	13°♋57'58	-2°25'34
minimum elong	-12777 Oct 02 j 17:38	13°♋57'57	2°24'45
max. Earth dist.	-12777 Oct 06 j 05:43	14°♋04'34	36.73167 AU
morning rise	-12777 Oct 18 j 01:49	14°♋26'41	
retrograde	-12776 Jan 15 j 20:30	16°♋03'21	
min. Earth dist.	-12776 Apr 03 j 23:27	14°♋54'22	34.86345 AU
opposition	-12776 Apr 07 j 10:45	14°♋49'29	-2°49'27
direct	-12776 Jun 25 j 21:20	13°♋37'44	
evening set	-12776 Sep 18 j 12:13	15°♋08'59	
conjunction	-12776 Oct 03 j 15:03	15°♋37'05	-2°54'16
minimum elong	-12776 Oct 03 j 14:57	15°♋37'04	2°53'28
max. Earth dist.	-12776 Oct 07 j 03:51	15°♋43'42	36.99089 AU
morning rise	-12776 Oct 18 j 21:27	16°♋05'26	
retrograde	-12775 Jan 16 j 17:58	17°♋41'31	
min. Earth dist.	-12775 Apr 05 j 21:53	16°♋32'52	35.12452 AU
opposition	-12775 Apr 09 j 09:12	16°♋28'00	-3°19'26
direct	-12775 Jun 27 j 18:19	15°♋16'38	
evening set	-12775 Sep 20 j 11:14	16°♋47'18	
conjunction	-12775 Oct 05 j 12:06	17°♋15'00	-3°22'26
minimum elong	-12775 Oct 05 j 12:00	17°♋15'00	3°21'37
max. Earth dist.	-12775 Oct 09 j 02:03	17°♋21'40	37.25181 AU
morning rise	-12775 Oct 20 j 16:11	17°♋42'58	
retrograde	-12774 Jan 18 j 15:10	19°♋18'29	
min. Earth dist.	-12774 Apr 07 j 19:08	18°♋10'13	35.38686 AU
opposition	-12774 Apr 11 j 06:59	18°♋05'21	-3°48'49
direct	-12774 Jun 29 j 15:25	16°♋54'21	
evening set	-12774 Sep 22 j 10:18	18°♋24'28	
conjunction	-12774 Oct 07 j 08:34	18°♋51'47	-3°50'02
minimum elong	-12774 Oct 07 j 08:27	18°♋51'47	3°49'16
max. Earth dist.	-12774 Oct 10 j 22:11	18°♋58'22	37.51348 AU
morning rise	-12774 Oct 22 j 10:21	19°♋19'21	
retrograde	-12773 Jan 20 j 13:16	20°♋54'21	
min. Earth dist.	-12773 Apr 09 j 15:58	19°♋46'26	35.64985 AU
opposition	-12773 Apr 13 j 04:23	19°♋41'35	-4°17'35
direct	-12773 Jul 01 j 11:41	18°♋30'56	
evening set	-12773 Sep 24 j 09:16	20°♋00'33	
conjunction	-12773 Oct 09 j 04:53	20°♋27'28	-4°17'06
minimum elong	-12773 Oct 09 j 04:45	20°♋27'27	4°16'19
max. Earth dist.	-12773 Oct 12 j 19:46	20°♋34'05	37.77516 AU
morning rise	-12773 Oct 24 j 03:42	20°♋54'37	
retrograde	-12772 Jan 22 j 08:51	22°♋29'06	
min. Earth dist.	-12772 Apr 10 j 13:22	21°♋21'29	35.91247 AU
opposition	-12772 Apr 14 j 01:02	21°♋16'41	-4°45'45
direct	-12772 Jul 02 j 10:32	20°♋06'23	
evening set	-12772 Sep 25 j 08:11	21°♋35'32	
conjunction	-12772 Oct 10 j 00:40	22°♋02'01	-4°43'36
minimum elong	-12772 Oct 10 j 00:31	22°♋02'00	4°42'51
max. Earth dist.	-12772 Oct 13 j 14:32	22°♋08'31	38.03614 AU
morning rise	-12772 Oct 24 j 20:23	22°♋28'44	
retrograde	-12771 Jan 23 j 05:28	24°♋02'44	
min. Earth dist.	-12771 Apr 12 j 08:44	22°♋55'29	36.17423 AU
opposition	-12771 Apr 15 j 21:19	22°♋50'39	-5°13'19
direct	-12771 Jul 04 j 07:53	21°♋40'41	
evening set	-12771 Sep 27 j 06:49	23°♋09'22	
conjunction	-12771 Oct 11 j 19:55	23°♋35'25	-5°09'33
minimum elong	-12771 Oct 11 j 19:46	23°♋35'24	5°08'47
max. Earth dist.	-12771 Oct 15 j 10:29	23°♋41'55	38.29581 AU
morning rise	-12771 Oct 26 j 12:15	24°♋01'41	
retrograde	-12770 Jan 24 j 22:06	25°♋35'15	
min. Earth dist.	-12770 Apr 14 j 05:52	24°♋28'13	36.43463 AU
opposition	-12770 Apr 17 j 17:15	24°♋23'28	-5°40'16
direct	-12770 Jul 06 j 05:12	23°♋13'49	
evening set	-12770 Sep 29 j 05:22	24°♋42'04	
conjunction	-12770 Oct 13 j 14:57	25°♋07'38	-5°34'57
minimum elong	-12770 Oct 13 j 14:47	25°♋07'38	5°34'12
max. Earth dist.	-12770 Oct 17 j 05:13	25°♋14'05	38.55408 AU
morning rise	-12770 Oct 28 j 03:29	25°♋33'27	
retrograde	-12769 Jan 26 j 14:21	27°♋06'35	
min. Earth dist.	-12769 Apr 16 j 00:25	25°♋59'51	36.69355 AU
opposition	-12769 Apr 19 j 12:22	25°♋55'05	-6°06'37
direct	-12769 Jul 08 j 02:11	24°♋45'42	
evening set	-12769 Oct 01 j 03:52	26°♋13'33	
conjunction	-12769 Oct 15 j 09:25	26°♋38'40	-5°59'47
minimum elong	-12769 Oct 15 j 09:14	26°♋38'39	5°59'02
max. Earth dist.	-12769 Oct 18 j 23:18	26°♋45'02	38.81079 AU
morning rise	-12769 Oct 29 j 18:08	27°♋04'00	
retrograde	-12768 Jan 28 j 08:57	28°♋36'43	
min. Earth dist.	-12768 Apr 16 j 19:43	27°♋30'12	36.95135 AU
opposition	-12768 Apr 20 j 07:12	27°♋25'30	-6°32'22
direct	-12768 Jul 08 j 19:35	26°♋16'23	
evening set	-12768 Oct 02 j 01:55	27°♋43'50	
conjunction	-12768 Oct 16 j 03:25	28°♋08'28	-6°24'04
minimum elong	-12768 Oct 16 j 03:14	28°♋08'27	6°23'21
max. Earth dist.	-12768 Oct 19 j 18:07	28°♋14'51	39.06650 AU
morning rise	-12768 Oct 30 j 07:41	28°♋33'18	
	-12767 Jan 08 j 03:04	0°♌	
retrograde	-12767 Jan 29 j 01:29	0°♌05'39	
	-12767 Feb 19 j 07:21	30°℞♋	
min. Earth dist.	-12767 Apr 18 j 14:05	28°♋59'22	37.20829 AU
opposition	-12767 Apr 22 j 01:21	28°♋54'41	-6°57'29
direct	-12767 Jul 10 j 14:42	27°♋45'50	

Attention, astronomical year style is used: The year -12767 in astronomical counting style is the year 12768 BCE in historical counting style.

evening set	-12767 Oct 03 j 24:00	29°♋12'57	
conjunction	-12767 Oct 17 j 20:56	29°♋37'05	-6°47'45
minimum elong	-12767 Oct 17 j 20:44	29°♋37'04	6°47'02
max. Earth dist.	-12767 Oct 21 j 10:47	29°♋43'21	39.32165 AU
morning rise	-12767 Oct 31 j 20:48	0°♌01'26	
	-12767 Oct 31 j 00:50	0°♌	
retrograde	-12766 Jan 30 j 20:36	1°♌33'24	
min. Earth dist.	-12766 Apr 20 j 07:10	0°♌27'24	37.46512 AU
opposition	-12766 Apr 23 j 19:07	0°♌22'43	-7°21'59
	-12766 May 11 j 00:30	30°℞♋	
direct	-12766 Jul 12 j 07:49	29°♋14'07	
	-12766 Sep 10 j 01:31	0°♌	
evening set	-12766 Oct 05 j 21:46	0°♌40'55	
conjunction	-12766 Oct 19 j 14:08	1°♌04'34	-7°10'53
minimum elong	-12766 Oct 19 j 13:56	1°♌04'33	7°10'11
max. Earth dist.	-12766 Oct 23 j 05:17	1°♌10'53	39.57665 AU
morning rise	-12766 Nov 02 j 09:12	1°♌28'24	
retrograde	-12765 Feb 01 j 12:47	3°♌00'04	
min. Earth dist.	-12765 Apr 22 j 01:22	1°♌54'16	37.72182 AU
opposition	-12765 Apr 25 j 12:28	1°♌49'39	-7°45'51
direct	-12765 Jul 14 j 03:01	0°♌41'19	
evening set	-12765 Oct 07 j 19:33	2°♌07'51	
conjunction	-12765 Oct 21 j 06:59	2°♌30'59	-7°33'25
minimum elong	-12765 Oct 21 j 06:47	2°♌30'59	7°32'43
max. Earth dist.	-12765 Oct 24 j 21:23	2°♌37'13	39.83161 AU
morning rise	-12765 Nov 03 j 21:01	2°♌54'19	
retrograde	-12764 Feb 03 j 04:59	4°♌25'41	
min. Earth dist.	-12764 Apr 22 j 17:00	3°♌20'14	37.97845 AU
opposition	-12764 Apr 26 j 05:09	3°♌15'34	-8°09'06
direct	-12764 Jul 14 j 20:49	2°♌07'30	
evening set	-12764 Oct 08 j 17:07	3°♌33'49	
conjunction	-12764 Oct 21 j 23:22	3°♌56'26	-7°55'23
minimum elong	-12764 Oct 21 j 23:09	3°♌56'25	7°54'42
max. Earth dist.	-12764 Oct 25 j 14:09	4°♌02'39	40.08629 AU
morning rise	-12764 Nov 04 j 08:16	4°♌19'14	
retrograde	-12763 Feb 03 j 18:54	5°♌50'23	
min. Earth dist.	-12763 Apr 24 j 10:31	4°♌45'09	38.23479 AU
opposition	-12763 Apr 27 j 21:43	4°♌40'33	-8°31'44
direct	-12763 Jul 16 j 14:24	3°♌32'47	
evening set	-12763 Oct 10 j 14:21	4°♌58'53	
conjunction	-12763 Oct 23 j 15:24	5°♌20'59	-8°16'47
minimum elong	-12763 Oct 23 j 15:11	5°♌20'58	8°16'06
max. Earth dist.	-12763 Oct 27 j 06:29	5°♌27'11	40.34050 AU
morning rise	-12763 Nov 05 j 18:43	5°♌43'16	
retrograde	-12762 Feb 05 j 09:26	7°♌14'13	
min. Earth dist.	-12762 Apr 26 j 02:20	6°♌09'16	38.49023 AU
opposition	-12762 Apr 29 j 13:45	6°♌04'41	-8°53'46
direct	-12762 Jul 18 j 07:22	4°♌57'12	
evening set	-12762 Oct 12 j 11:51	6°♌23'08	
conjunction	-12762 Oct 25 j 07:10	6°♌44'43	-8°37'38
minimum elong	-12762 Oct 25 j 06:56	6°♌44'42	8°36'58
max. Earth dist.	-12762 Oct 28 j 21:20	6°♌50'48	40.59343 AU
morning rise	-12762 Nov 07 j 04:59	7°♌06'27	
retrograde	-12761 Feb 07 j 02:53	8°♌37'14	
min. Earth dist.	-12761 Apr 27 j 18:19	7°♌32'32	38.74432 AU
opposition	-12761 May 01 j 05:24	7°♌28'00	-9°15'13
direct	-12761 Jul 19 j 20:40	6°♌20'48	
evening set	-12761 Oct 14 j 09:08	7°♌46'36	
conjunction	-12761 Oct 26 j 22:50	8°♌07'39	-8°57'56
minimum elong	-12761 Oct 26 j 22:37	8°♌07'38	8°57'17
max. Earth dist.	-12761 Oct 30 j 13:34	8°♌13'44	40.84457 AU
morning rise	-12761 Nov 08 j 14:38	8°♌28'51	
retrograde	-12760 Feb 08 j 17:43	9°♌59'28	
min. Earth dist.	-12760 Apr 28 j 10:50	8°♌54'59	38.99614 AU
opposition	-12760 May 01 j 20:43	8°♌50'32	-9°36'05
direct	-12760 Jul 20 j 12:57	7°♌43'36	
evening set	-12760 Oct 15 j 06:22	9°♌09'18	
conjunction	-12760 Oct 27 j 13:57	9°♌29'48	-9°17'42
minimum elong	-12760 Oct 27 j 13:43	9°♌29'47	9°17'04
max. Earth dist.	-12760 Oct 31 j 03:04	9°♌35'45	41.09318 AU
morning rise	-12760 Nov 08 j 23:40	9°♌50'28	
retrograde	-12759 Feb 09 j 09:42	11°♌20'56	
min. Earth dist.	-12759 Apr 30 j 01:34	10°♌16'44	39.24526 AU
opposition	-12759 May 03 j 11:40	10°♌12'17	-9°56'23
direct	-12759 Jul 22 j 04:18	9°♌05'37	
evening set	-12759 Oct 17 j 03:30	10°♌31'13	
conjunction	-12759 Oct 29 j 04:56	10°♌51'11	-9°36'57
minimum elong	-12759 Oct 29 j 04:43	10°♌51'10	9°36'19
max. Earth dist.	-12759 Nov 01 j 18:14	10°♌57'06	41.33874 AU
morning rise	-12759 Nov 10 j 08:25	11°♌11'17	
retrograde	-12758 Feb 10 j 23:12	12°♌41'39	
min. Earth dist.	-12758 May 01 j 18:00	11°♌37'35	39.49120 AU
opposition	-12758 May 05 j 02:21	11°♌33'15	-10°16'08
direct	-12758 Jul 23 j 20:43	10°♌26'49	
evening set	-12758 Oct 19 j 00:33	11°♌52'20	
conjunction	-12758 Oct 30 j 19:40	12°♌11'45	-9°55'41
minimum elong	-12758 Oct 30 j 19:25	12°♌11'44	9°55'04
max. Earth dist.	-12758 Nov 03 j 07:53	12°♌17'33	41.58114 AU
morning rise	-12758 Nov 11 j 16:31	12°♌31'17	
retrograde	-12757 Feb 12 j 11:11	14°♌01'32	
min. Earth dist.	-12757 May 03 j 08:06	12°♌57'43	39.73377 AU
opposition	-12757 May 06 j 16:33	12°♌53'23	-10°35'20
direct	-12757 Jul 25 j 13:08	11°♌47'11	
evening set	-12757 Oct 20 j 21:32	13°♌12'37	
conjunction	-12757 Nov 01 j 09:57	13°♌31'28	-10°13'54
minimum elong	-12757 Nov 01 j 09:43	13°♌31'27	10°13'19
max. Earth dist.	-12757 Nov 04 j 21:08	13°♌37'10	41.82017 AU
morning rise	-12757 Nov 13 j 00:14	13°♌50'26	
	-12756 Jan 03 j 07:40	15°♌	
retrograde	-12756 Feb 14 j 00:25	15°♌20'36	
	-12756 Mar 27 j 12:51	15°℞♌	
min. Earth dist.	-12756 May 03 j 23:07	14°♌16'56	39.97338 AU
opposition	-12756 May 07 j 06:23	14°♌12'40	-10°54'00
direct	-12756 Jul 26 j 03:02	13°♌06'41	
evening set	-12756 Oct 21 j 18:14	14°♌32'03	
conjunction	-12756 Nov 01 j 23:58	14°♌50'20	-10°31'37
minimum elong	-12756 Nov 01 j 23:44	14°♌50'19	10°31'01
max. Earth dist.	-12756 Nov 05 j 11:28	14°♌56'02	42.05653 AU
	-12756 Nov 07 j 21:52	15°♌	
morning rise	-12756 Nov 13 j 07:12	15°♌08'44	
retrograde	-12755 Feb 14 j 13:57	16°♌38'49	
min. Earth dist.	-12755 May 05 j 13:15	15°♌35'18	40.21045 AU
opposition	-12755 May 08 j 19:49	15°♌31'06	-11°12'07
	-12755 Jun 02 j 23:41	15°℞♌	
direct	-12755 Jul 27 j 16:16	14°♌25'18	
	-12755 Sep 18 j 17:42	15°♌	
evening set	-12755 Oct 23 j 14:48	15°♌50'38	
conjunction	-12755 Nov 03 j 13:24	16°♌08'21	-10°48'48
minimum elong	-12755 Nov 03 j 13:11	16°♌08'21	10°48'14
max. Earth dist.	-12755 Nov 06 j 23:32	16°♌13'55	42.29070 AU
morning rise	-12755 Nov 14 j 13:38	16°♌26'11	

Attention, astronomical year style is used: The year -12754 in astronomical counting style is the year 12755 BCE in historical counting style.

retrograde	-12754 Feb 16 j 04:57	17°♌56'12	
min. Earth dist.	-12754 May 07 j 02:11	16°♌52'53	40.44572 AU
opposition	-12754 May 10 j 08:58	16°♌48'42	-11°29'40
direct	-12754 Jul 29 j 03:43	15°♌43'06	
evening set	-12754 Oct 25 j 11:20	17°♌08'26	
conjunction	-12754 Nov 05 j 02:51	17°♌25'34	-11°05'28
minimum elong	-12754 Nov 05 j 02:37	17°♌25'33	11°04'54
max. Earth dist.	-12754 Nov 08 j 13:34	17°♌31'08	42.52319 AU
morning rise	-12754 Nov 15 j 19:46	17°♌42'48	
retrograde	-12753 Feb 17 j 16:48	19°♌12'47	
min. Earth dist.	-12753 May 08 j 16:19	18°♌09'37	40.67944 AU
opposition	-12753 May 11 j 21:42	18°♌05'30	-11°46'41
direct	-12753 Jul 30 j 18:19	17°♌00'07	
evening set	-12753 Oct 27 j 07:52	18°♌25'28	
conjunction	-12753 Nov 06 j 15:59	18°♌42'02	-11°21'37
minimum elong	-12753 Nov 06 j 15:45	18°♌42'01	11°21'04
max. Earth dist.	-12753 Nov 10 j 01:40	18°♌47'30	42.75439 AU
morning rise	-12753 Nov 17 j 01:18	18°♌58'40	
retrograde	-12752 Feb 19 j 04:12	20°♌28'38	
min. Earth dist.	-12752 May 09 j 04:12	19°♌25'43	40.91184 AU
opposition	-12752 May 12 j 10:07	19°♌21'35	-12°03'08
direct	-12752 Jul 31 j 09:01	18°♌16'25	
evening set	-12752 Oct 28 j 04:06	19°♌41'50	
conjunction	-12752 Nov 07 j 04:35	19°♌57'47	-11°37'15
minimum elong	-12752 Nov 07 j 04:21	19°♌57'47	11°36'42
max. Earth dist.	-12752 Nov 10 j 14:06	20°♌03'13	42.98415 AU
morning rise	-12752 Nov 17 j 06:21	20°♌13'50	
retrograde	-12751 Feb 19 j 15:06	21°♌43'50	
min. Earth dist.	-12751 May 10 j 17:37	20°♌41'05	41.14283 AU
opposition	-12751 May 13 j 22:26	20°♌37'02	-12°19'04
direct	-12751 Aug 01 j 22:27	19°♌32'04	
evening set	-12751 Oct 30 j 00:22	20°♌57'33	
conjunction	-12751 Nov 08 j 17:13	21°♌12'55	-11°52'23
minimum elong	-12751 Nov 08 j 16:58	21°♌12'54	11°51'52
max. Earth dist.	-12751 Nov 12 j 02:47	21°♌18'20	43.21250 AU
morning rise	-12751 Nov 18 j 10:59	21°♌28'22	
retrograde	-12750 Feb 21 j 01:25	22°♌58'25	
min. Earth dist.	-12750 May 12 j 05:44	21°♌55'53	41.37200 AU
opposition	-12750 May 15 j 10:14	21°♌51'51	-12°34'27
direct	-12750 Aug 03 j 11:49	20°♌47'07	
evening set	-12750 Oct 31 j 20:47	22°♌12'42	
conjunction	-12750 Nov 10 j 05:30	22°♌27'28	-12°07'02
minimum elong	-12750 Nov 10 j 05:16	22°♌27'27	12°06'31
max. Earth dist.	-12750 Nov 13 j 13:30	22°♌32'45	43.43879 AU
morning rise	-12750 Nov 19 j 15:17	22°♌42'19	
retrograde	-12749 Feb 22 j 15:43	24°♌12'26	
min. Earth dist.	-12749 May 13 j 17:55	23°♌10'06	41.59894 AU
opposition	-12749 May 16 j 21:56	23°♌06'07	-12°49'21
direct	-12749 Aug 04 j 21:21	22°♌01'36	
evening set	-12749 Nov 02 j 17:07	23°♌27'17	
conjunction	-12749 Nov 11 j 17:45	23°♌41'28	-12°21'12
minimum elong	-12749 Nov 11 j 17:31	23°♌41'27	12°20'44
max. Earth dist.	-12749 Nov 15 j 02:07	23°♌46'44	43.66242 AU
morning rise	-12749 Nov 20 j 19:10	23°♌55'42	
retrograde	-12748 Feb 24 j 04:20	25°♌25'54	
min. Earth dist.	-12748 May 14 j 06:58	24°♌23'42	41.82280 AU
opposition	-12748 May 17 j 09:14	24°♌19'49	-13°03'45
direct	-12748 Aug 05 j 08:08	23°♌15'31	
evening set	-12748 Nov 03 j 13:39	24°♌41'21	
conjunction	-12748 Nov 12 j 05:43	24°♌54'55	-12°34'55
minimum elong	-12748 Nov 12 j 05:29	24°♌54'54	12°34'26
max. Earth dist.	-12748 Nov 15 j 12:15	25°♌00'02	43.88283 AU
morning rise	-12748 Nov 20 j 22:31	25°♌08'30	
retrograde	-12747 Feb 24 j 16:37	26°♌38'49	
min. Earth dist.	-12747 May 15 j 18:01	25°♌36'50	42.04315 AU
opposition	-12747 May 18 j 20:22	25°♌32'58	-13°17'40
direct	-12747 Aug 06 j 19:07	24°♌28'52	
evening set	-12747 Nov 05 j 09:59	25°♌54'52	
conjunction	-12747 Nov 13 j 17:25	26°♌07'47	-12°48'12
minimum elong	-12747 Nov 13 j 17:10	26°♌07'46	12°47'44
max. Earth dist.	-12747 Nov 16 j 23:18	26°♌12'51	44.09934 AU
morning rise	-12747 Nov 22 j 01:32	26°♌20'45	
retrograde	-12746 Feb 26 j 01:50	27°♌51'11	
min. Earth dist.	-12746 May 17 j 07:10	26°♌49'18	42.25940 AU
opposition	-12746 May 20 j 07:26	26°♌45'33	-13°31'09
direct	-12746 Aug 08 j 08:49	25°♌41'37	
evening set	-12746 Nov 07 j 06:43	27°♌07'47	
conjunction	-12746 Nov 15 j 05:10	27°♌20'04	-13°01'02
minimum elong	-12746 Nov 15 j 04:57	27°♌20'04	13°00'35
max. Earth dist.	-12746 Nov 18 j 10:03	27°♌25'03	44.31173 AU
morning rise	-12746 Nov 23 j 04:05	27°♌32'24	
retrograde	-12745 Feb 27 j 10:08	29°♌02'56	
min. Earth dist.	-12745 May 18 j 18:18	28°♌01'13	42.47127 AU
opposition	-12745 May 21 j 17:58	27°♌57'30	-13°44'10
direct	-12745 Aug 09 j 22:16	26°♌53'45	
evening set	-12745 Nov 09 j 03:25	28°♌20'06	
conjunction	-12745 Nov 16 j 16:29	28°♌31'43	-13°13'28
minimum elong	-12745 Nov 16 j 16:15	28°♌31'43	13°13'01
max. Earth dist.	-12745 Nov 19 j 19:34	28°♌36'33	44.51982 AU
morning rise	-12745 Nov 24 j 06:05	28°♌43'23	
	-12744 Jan 24 j 16:07	0°♍	
retrograde	-12744 Feb 28 j 21:26	0°♍14'05	
	-12744 Apr 04 j 13:13	30°℞♌	
min. Earth dist.	-12744 May 19 j 05:53	29°♌12'28	42.67915 AU
opposition	-12744 May 22 j 04:27	29°♌08'49	-13°56'45
direct	-12744 Aug 10 j 08:14	28°♌05'13	
evening set	-12744 Nov 10 j 00:01	29°♌31'46	
conjunction	-12744 Nov 17 j 03:31	29°♌42'44	-13°25'27
minimum elong	-12744 Nov 17 j 03:18	29°♌42'43	13°25'02
max. Earth dist.	-12744 Nov 20 j 06:43	29°♌47'32	44.72411 AU
morning rise	-12744 Nov 24 j 07:19	29°♌53'43	
	-12744 Nov 28 j 10:22	0°♍	
retrograde	-12743 Mar 01 j 07:25	1°♍24'35	
min. Earth dist.	-12743 May 20 j 17:23	0°♍23'03	42.88334 AU
opposition	-12743 May 23 j 14:35	0°♍19'29	-14°08'53
	-12743 Jun 08 j 14:30	30°℞♌	
direct	-12743 Aug 11 j 19:14	29°♌16'02	
	-12743 Oct 12 j 23:29	0°♍	
evening set	-12743 Nov 11 j 20:59	0°♍42'49	
conjunction	-12743 Nov 18 j 14:19	0°♍53'05	-13°37'01
minimum elong	-12743 Nov 18 j 14:05	0°♍53'04	13°36'37
max. Earth dist.	-12743 Nov 21 j 15:37	0°♍57'45	44.92520 AU
morning rise	-12743 Nov 25 j 07:55	1°♍03'23	
retrograde	-12742 Mar 02 j 19:35	2°♍34'27	
min. Earth dist.	-12742 May 22 j 03:10	1°♍33'04	43.08467 AU
opposition	-12742 May 25 j 00:21	1°♍29'31	-14°20'34
direct	-12742 Aug 13 j 04:02	0°♍26'12	
evening set	-12742 Nov 13 j 18:06	1°♍53'17	
conjunction	-12742 Nov 20 j 00:59	2°♍02'51	-13°48'09
minimum elong	-12742 Nov 20 j 00:47	2°♍02'50	13°47'46
max. Earth dist.	-12742 Nov 23 j 02:17	2°♍07'30	45.12356 AU

Attention, astronomical year style is used: The year -12742 in astronomical counting style is the year 12743 BCE in historical counting style.

morning rise	-12742 Nov 26 j 08:05	2°♑12'25	
retrograde	-12741 Mar 04 j 05:24	3°♑43'44	
min. Earth dist.	-12741 May 23 j 14:38	2°♑42'26	43.28346 AU
opposition	-12741 May 26 j 10:05	2°♑38'59	-14°31'47
direct	-12741 Aug 14 j 14:28	1°♑35'50	
evening set	-12741 Nov 15 j 15:37	3°♑03'14	
conjunction	-12741 Nov 21 j 11:26	3°♑12'03	-13°58'50
minimum elong	-12741 Nov 21 j 11:12	3°♑12'02	13°58'27
max. Earth dist.	-12741 Nov 24 j 11:53	3°♑16'38	45.31968 AU
morning rise	-12741 Nov 27 j 07:17	3°♑20'53	
retrograde	-12740 Mar 04 j 12:11	4°♑52'29	
min. Earth dist.	-12740 May 23 j 23:44	3°♑51'23	43.47995 AU
opposition	-12740 May 26 j 19:20	3°♑47'56	-14°42'33
direct	-12740 Aug 15 j 02:40	2°♑44'57	
evening set	-12740 Nov 16 j 13:26	4°♑12'44	
conjunction	-12740 Nov 21 j 21:32	4°♑20'47	-14°09'06
minimum elong	-12740 Nov 21 j 21:19	4°♑20'46	14°08'44
max. Earth dist.	-12740 Nov 24 j 20:46	4°♑25'16	45.51359 AU
morning rise	-12740 Nov 27 j 05:43	4°♑28'51	
retrograde	-12739 Mar 05 j 21:17	6°♑00'48	
min. Earth dist.	-12739 May 25 j 10:04	4°♑59'50	43.67434 AU
opposition	-12739 May 28 j 04:37	4°♑56'27	-14°52'51
direct	-12739 Aug 16 j 12:26	3°♑53'38	
evening set	-12739 Nov 18 j 11:54	5°♑21'52	
conjunction	-12739 Nov 23 j 07:34	5°♑29'06	-14°18'56
minimum elong	-12739 Nov 23 j 07:22	5°♑29'06	14°18'35
max. Earth dist.	-12739 Nov 26 j 07:02	5°♑33'35	45.70534 AU
morning rise	-12739 Nov 28 j 03:08	5°♑36'21	
retrograde	-12738 Mar 07 j 06:49	7°♑08'43	
min. Earth dist.	-12738 May 26 j 20:11	6°♑07'54	43.86614 AU
opposition	-12738 May 29 j 13:37	6°♑04'34	-15°02'44
direct	-12738 Aug 17 j 21:17	5°♑01'57	
evening set	-12738 Nov 20 j 11:33	6°♑30'43	
conjunction	-12738 Nov 24 j 17:29	6°♑37'04	-14°28'21
minimum elong	-12738 Nov 24 j 17:17	6°♑37'03	14°28'02
morning rise	-12738 Nov 28 j 23:19	6°♑43'25	
max. Earth dist.	-12738 Nov 27 j 15:01	6°♑41'24	45.89439 AU
retrograde	-12737 Mar 08 j 18:36	8°♑16'17	
min. Earth dist.	-12737 May 28 j 05:09	7°♑15'39	44.05507 AU
opposition	-12737 May 30 j 22:19	7°♑12'21	-15°12'12
direct	-12737 Aug 19 j 04:01	6°♑09'54	
evening set	-12737 Nov 22 j 12:37	7°♑39'18	
conjunction	-12737 Nov 26 j 03:20	7°♑44'42	-14°37'24
minimum elong	-12737 Nov 26 j 03:08	7°♑44'41	14°37'04
morning rise	-12737 Nov 29 j 17:53	7°♑50'04	
max. Earth dist.	-12737 Nov 29 j 00:37	7°♑49'00	46.08018 AU
retrograde	-12736 Mar 09 j 03:58	9°♑23'32	
min. Earth dist.	-12736 May 28 j 15:58	8°♑22'59	44.24039 AU
opposition	-12736 May 31 j 07:03	8°♑19'48	-15°21'16
direct	-12736 Aug 19 j 13:28	7°♑17'32	
evening set	-12736 Nov 23 j 16:21	8°♑47'45	
conjunction	-12736 Nov 26 j 12:55	8°♑52'00	-14°46'03
minimum elong	-12736 Nov 26 j 12:43	8°♑52'00	14°45'46
morning rise	-12736 Nov 29 j 09:14	8°♑56'14	
max. Earth dist.	-12736 Nov 29 j 08:42	8°♑56'12	46.26220 AU
retrograde	-12735 Mar 10 j 11:52	10°♑30'28	
min. Earth dist.	-12735 May 30 j 00:50	9°♑30'05	44.42150 AU
opposition	-12735 Jun 01 j 15:29	9°♑26'56	-15°29'57
direct	-12735 Aug 21 j 00:05	8°♑24'49	
evening set	-12735 Nov 26 j 01:55	9°♑56'13	

conjunction	-12735 Nov 27 j 22:28	9°♑58'58	-14°54'21
minimum elong	-12735 Nov 27 j 22:16	9°♑58'58	14°54'03
morning rise	-12735 Nov 29 j 18:42	10°♑01'42	
max. Earth dist.	-12735 Nov 30 j 16:34	10°♑03'03	46.43966 AU
retrograde	-12734 Mar 11 j 19:45	11°♑37'03	
min. Earth dist.	-12734 May 31 j 11:06	10°♑36'45	44.59793 AU
opposition	-12734 Jun 02 j 23:51	10°♑33'42	-15°38'16
direct	-12734 Aug 22 j 09:48	9°♑31'44	
conjunction	-12734 Nov 29 j 08:04	11°♑05'33	-15°02'18
minimum elong	-12734 Nov 29 j 07:52	11°♑05'32	15°02'02
max. Earth dist.	-12734 Dec 02 j 01:29	11°♑09'34	46.61233 AU
retrograde	-12733 Mar 13 j 02:21	12°♑43'15	
min. Earth dist.	-12733 Jun 01 j 20:38	11°♑43'02	44.76920 AU
opposition	-12733 Jun 04 j 08:00	11°♑40'03	-15°46'13
direct	-12733 Aug 23 j 20:13	10°♑38'13	
conjunction	-12733 Nov 30 j 17:14	12°♑11'41	-15°09'55
minimum elong	-12733 Nov 30 j 17:04	12°♑11'41	15°09'39
max. Earth dist.	-12733 Dec 03 j 08:05	12°♑15'32	46.77996 AU
retrograde	-12732 Mar 13 j 13:19	13°♑49'00	
min. Earth dist.	-12732 Jun 02 j 05:19	12°♑48'53	44.93567 AU
opposition	-12732 Jun 04 j 15:55	12°♑45'57	-15°53'50
direct	-12732 Aug 24 j 02:13	11°♑44'12	
conjunction	-12732 Dec 01 j 02:19	13°♑17'21	-15°17'10
minimum elong	-12732 Dec 01 j 02:07	13°♑17'20	15°16'56
max. Earth dist.	-12732 Dec 03 j 16:53	13°♑21'10	46.94298 AU
retrograde	-12731 Mar 14 j 22:57	14°♑54'16	
min. Earth dist.	-12731 Jun 03 j 15:16	13°♑54'09	45.09773 AU
opposition	-12731 Jun 05 j 23:43	13°♑51'20	-16°01'04
direct	-12731 Aug 25 j 09:10	12°♑49'41	
conjunction	-12731 Dec 02 j 11:08	14°♑22'30	-15°24'05
minimum elong	-12731 Dec 02 j 10:58	14°♑22'29	15°23'52
max. Earth dist.	-12731 Dec 05 j 00:05	14°♑26'12	47.10209 AU
retrograde	-12730 Mar 16 j 06:02	15°♑59'01	
min. Earth dist.	-12730 Jun 04 j 22:49	14°♑59'01	45.25605 AU
opposition	-12730 Jun 07 j 07:13	14°♑56'13	-16°07'56
direct	-12730 Aug 26 j 18:18	13°♑54'39	
conjunction	-12730 Dec 03 j 19:50	15°♑27'08	-15°30'38
minimum elong	-12730 Dec 03 j 19:38	15°♑27'08	15°30'26
max. Earth dist.	-12730 Dec 06 j 07:31	15°♑30'45	47.25763 AU
retrograde	-12729 Mar 17 j 11:42	17°♑03'18	
min. Earth dist.	-12729 Jun 06 j 07:54	16°♑03'19	45.41121 AU
opposition	-12729 Jun 08 j 14:35	16°♑00'36	-16°14'26
direct	-12729 Aug 28 j 04:25	14°♑59'09	
conjunction	-12729 Dec 05 j 04:28	16°♑31'19	-15°36'49
minimum elong	-12729 Dec 05 j 04:19	16°♑31'19	15°36'37
max. Earth dist.	-12729 Dec 07 j 15:58	16°♑34'55	47.41036 AU
retrograde	-12728 Mar 17 j 16:41	18°♑07'07	
min. Earth dist.	-12728 Jun 06 j 15:48	17°♑07'15	45.56348 AU
opposition	-12728 Jun 08 j 21:47	17°♑04'33	-16°20'33
direct	-12728 Aug 28 j 14:33	16°♑03'12	
conjunction	-12728 Dec 05 j 12:34	17°♑35'05	-15°42'38
minimum elong	-12728 Dec 05 j 12:24	17°♑35'04	15°42'27
max. Earth dist.	-12728 Dec 07 j 22:11	17°♑38'33	47.56042 AU
retrograde	-12727 Mar 19 j 01:36	19°♑10'34	
min. Earth dist.	-12727 Jun 07 j 23:21	18°♑10'47	45.71322 AU
opposition	-12727 Jun 10 j 04:54	18°♑08'08	-16°26'18
direct	-12727 Aug 29 j 20:40	17°♑06'54	
conjunction	-12727 Dec 06 j 20:52	18°♑38'30	-15°48'06
minimum elong	-12727 Dec 06 j 20:44	18°♑38'29	15°47'56

Attention, astronomical year style is used: The year -12727 in astronomical counting style is the year 12728 BCE in historical counting style.

max. Earth dist.	-12727 Dec 09 j 06:32	18°♑41'57	47.70787 AU
retrograde	-12726 Mar 20 j 09:56	20°♑13'39	
min. Earth dist.	-12726 Jun 09 j 08:02	19°♑13'56	45.86013 AU
opposition	-12726 Jun 11 j 11:48	19°♑11'23	-16°31'40
direct	-12726 Aug 31 j 03:18	18°♑10'16	
conjunction	-12726 Dec 08 j 05:03	19°♑41'36	-15°53'13
minimum elong	-12726 Dec 08 j 04:53	19°♑41'36	15°53'03
max. Earth dist.	-12726 Dec 10 j 12:59	19°♑44'57	47.85255 AU
retrograde	-12725 Mar 21 j 18:45	21°♑16'27	
min. Earth dist.	-12725 Jun 10 j 14:54	20°♑16'53	46.00395 AU
opposition	-12725 Jun 12 j 18:31	20°♑14'20	-16°36'42
direct	-12725 Sep 01 j 09:45	19°♑13'21	
conjunction	-12725 Dec 09 j 13:00	20°♑44'28	-15°58'00
minimum elong	-12725 Dec 09 j 12:52	20°♑44'28	15°57'53
max. Earth dist.	-12725 Dec 11 j 19:51	20°♑47'44	47.99375 AU
retrograde	-12724 Mar 22 j 01:32	22°♑19'02	
min. Earth dist.	-12724 Jun 10 j 23:39	21°♑19'31	46.14414 AU
opposition	-12724 Jun 13 j 01:14	21°♑17'04	-16°41'23
direct	-12724 Sep 01 j 17:21	20°♑16'13	
conjunction	-12724 Dec 09 j 21:02	21°♑47'06	-16°02'28
minimum elong	-12724 Dec 09 j 20:54	21°♑47'05	16°02'20
max. Earth dist.	-12724 Dec 12 j 03:08	21°♑50'19	48.13119 AU
retrograde	-12723 Mar 23 j 05:53	23°♑21'24	
min. Earth dist.	-12723 Jun 12 j 07:01	22°♑21'59	46.28005 AU
opposition	-12723 Jun 14 j 07:40	22°♑19'35	-16°45'45
direct	-12723 Sep 03 j 02:49	21°♑18'51	
conjunction	-12723 Dec 11 j 04:51	22°♑49'31	-16°06'37
minimum elong	-12723 Dec 11 j 04:42	22°♑49'30	16°06'32
max. Earth dist.	-12723 Dec 13 j 08:24	22°♑52'34	48.26409 AU
retrograde	-12722 Mar 24 j 14:11	24°♑23'33	
min. Earth dist.	-12722 Jun 13 j 14:49	23°♑24'12	46.41121 AU
opposition	-12722 Jun 15 j 14:10	23°♑21'53	-16°49'48
direct	-12722 Sep 04 j 08:47	22°♑21'15	
conjunction	-12722 Dec 12 j 12:50	23°♑51'41	-16°10'29
minimum elong	-12722 Dec 12 j 12:42	23°♑51'41	16°10'23
max. Earth dist.	-12722 Dec 14 j 15:49	23°♑54'42	48.39197 AU
retrograde	-12721 Mar 25 j 22:20	25°♑25'27	
min. Earth dist.	-12721 Jun 14 j 23:20	24°♑26'07	46.53713 AU
opposition	-12721 Jun 16 j 20:28	24°♑23'54	-16°53'34
direct	-12721 Sep 05 j 14:25	23°♑23'22	
conjunction	-12721 Dec 13 j 20:33	24°♑53'35	-16°14'04
minimum elong	-12721 Dec 13 j 20:25	24°♑53'35	16°13'59
max. Earth dist.	-12721 Dec 15 j 21:16	24°♑56'27	48.51486 AU
retrograde	-12720 Mar 26 j 06:27	26°♑27'03	
min. Earth dist.	-12720 Jun 15 j 05:54	25°♑27'49	46.65809 AU
opposition	-12720 Jun 17 j 02:38	25°♑25'38	-16°57'01
direct	-12720 Sep 05 j 19:51	24°♑25'10	
conjunction	-12720 Dec 14 j 03:56	25°♑55'09	-16°17'21
minimum elong	-12720 Dec 14 j 03:49	25°♑55'09	16°17'16
max. Earth dist.	-12720 Dec 16 j 03:17	25°♑57'56	48.63287 AU
retrograde	-12719 Mar 27 j 11:34	27°♑28'21	
min. Earth dist.	-12719 Jun 16 j 14:12	26°♑29'06	46.77450 AU
opposition	-12719 Jun 18 j 08:47	26°♑27'01	-17°00'11
direct	-12719 Sep 07 j 04:27	25°♑26'38	
conjunction	-12719 Dec 15 j 11:26	26°♑56'24	-16°20'20
minimum elong	-12719 Dec 15 j 11:19	26°♑56'23	16°20'17
max. Earth dist.	-12719 Dec 17 j 10:05	26°♑59'08	48.74675 AU
retrograde	-12718 Mar 28 j 14:30	28°♑29'18	
min. Earth dist.	-12718 Jun 17 j 20:44	27°♑30'07	46.88688 AU
opposition	-12718 Jun 19 j 14:31	27°♑28'04	-17°03'02
direct	-12718 Sep 08 j 14:15	26°♑27'45	
conjunction	-12718 Dec 16 j 18:42	27°♑57'18	-16°23'00
minimum elong	-12718 Dec 16 j 18:36	27°♑57'17	16°22'58
max. Earth dist.	-12718 Dec 18 j 15:11	27°♑59'54	48.85694 AU
retrograde	-12717 Mar 29 j 21:22	29°♑29'57	
min. Earth dist.	-12717 Jun 19 j 03:27	28°♑30'48	46.99597 AU
opposition	-12717 Jun 20 j 20:19	28°♑28'49	-17°05'33
direct	-12717 Sep 09 j 20:12	27°♑28'33	
conjunction	-12717 Dec 18 j 01:51	28°♑57'53	-16°25'22
minimum elong	-12717 Dec 18 j 01:44	28°♑57'53	16°25'21
max. Earth dist.	-12717 Dec 19 j 22:16	29°♑00'29	48.96402 AU
	-12716 Feb 04 j 14:50	0°♎	
retrograde	-12716 Mar 30 j 03:50	0°♎30'18	
	-12716 May 24 j 09:53	30°℞♑	
min. Earth dist.	-12716 Jun 19 j 10:39	29°♑31'10	47.10200 AU
opposition	-12716 Jun 21 j 01:58	29°♑29'16	-17°07'45
direct	-12716 Sep 10 j 02:18	28°♑29'05	
conjunction	-12716 Dec 18 j 08:50	29°♑58'13	-16°27'25
minimum elong	-12716 Dec 18 j 08:45	29°♑58'13	16°27'24
	-12716 Dec 19 j 15:24	0°♎	
max. Earth dist.	-12716 Dec 20 j 03:31	0°♎00'42	49.06845 AU
retrograde	-12715 Mar 31 j 12:45	1°♎30'23	
min. Earth dist.	-12715 Jun 20 j 16:09	0°♎31'22	47.20540 AU
opposition	-12715 Jun 22 j 07:25	0°♎29'27	-17°09'38
	-12715 Jul 18 j 17:06	30°℞♑	
direct	-12715 Sep 11 j 05:45	29°♑29'21	
	-12715 Nov 04 j 03:42	0°♎	
conjunction	-12715 Dec 19 j 15:45	0°♎58'20	-16°29'09
minimum elong	-12715 Dec 19 j 15:38	0°♎58'20	16°29'09
max. Earth dist.	-12715 Dec 21 j 09:33	1°♎00'45	49.17014 AU
retrograde	-12714 Apr 01 j 20:12	2°♎30'16	
min. Earth dist.	-12714 Jun 21 j 23:38	1°♎31'16	47.30599 AU
opposition	-12714 Jun 23 j 12:59	1°♎29'27	-17°11'11
direct	-12714 Sep 12 j 10:44	0°♎29'26	
conjunction	-12714 Dec 20 j 22:45	1°♎58'15	-16°30'35
minimum elong	-12714 Dec 20 j 22:41	1°♎58'15	16°30'37
max. Earth dist.	-12714 Dec 22 j 15:53	2°♎00'39	49.26903 AU
retrograde	-12713 Apr 02 j 22:52	3°♎29'58	
min. Earth dist.	-12713 Jun 23 j 05:23	2°♎31'04	47.40340 AU
opposition	-12713 Jun 24 j 18:13	2°♎29'17	-17°12'26
direct	-12713 Sep 13 j 19:35	1°♎29'22	
conjunction	-12713 Dec 22 j 05:32	2°♎58'02	-16°31'43
minimum elong	-12713 Dec 22 j 05:26	2°♎58'01	16°31'45
max. Earth dist.	-12713 Dec 23 j 20:26	3°♎00'17	49.36457 AU
retrograde	-12712 Apr 03 j 03:55	4°♎29'33	
opposition	-12712 Jun 24 j 23:34	3°♎29'00	-17°13'23
min. Earth dist.	-12712 Jun 23 j 12:00	3°♎30'43	47.49732 AU
direct	-12712 Sep 14 j 02:16	2°♎29'09	
conjunction	-12712 Dec 22 j 12:16	3°♎57'41	-16°32'35
minimum elong	-12712 Dec 22 j 12:12	3°♎57'40	16°32'38
max. Earth dist.	-12712 Dec 24 j 02:59	3°♎59'55	49.45624 AU
retrograde	-12711 Apr 04 j 10:07	5°♎29'01	
min. Earth dist.	-12711 Jun 24 j 19:16	4°♎30'11	47.58689 AU
opposition	-12711 Jun 26 j 04:51	4°♎28'34	-17°14'04
direct	-12711 Sep 15 j 07:56	3°♎28'49	
conjunction	-12711 Dec 23 j 19:04	4°♎57'11	-16°33'10
minimum elong	-12711 Dec 23 j 19:00	4°♎57'11	16°33'14
max. Earth dist.	-12711 Dec 25 j 07:20	4°♎59'17	49.54342 AU

Attention, astronomical year style is used: The year -12710 in astronomical counting style is the year 12711 BCE in historical counting style.

retrograde	-12710 Apr 05 j 18:31	6°♎28'20		
min. Earth dist.	-12710 Jun 26 j 00:53	5°♎29'35	47.67164 AU	
opposition	-12710 Jun 27 j 09:53	5°♎27'59	-17°14'29	
direct	-12710 Sep 16 j 11:10	4°♎28'18		
conjunction	-12710 Dec 25 j 01:54	5°♎56'32	-16°33'31	
minimum elong	-12710 Dec 25 j 01:50	5°♎56'32	16°33'36	
max. Earth dist.	-12710 Dec 26 j 12:36	5°♎58'32	49.62542 AU	
retrograde	-12709 Apr 07 j 00:39	7°♎27'28		
min. Earth dist.	-12709 Jun 27 j 08:40	6°♎28'41	47.75110 AU	
opposition	-12709 Jun 28 j 15:09	6°♎27'13	-17°14'38	
direct	-12709 Sep 17 j 17:03	5°♎27'35		
conjunction	-12709 Dec 26 j 08:34	6°♎55'40	-16°33'37	
minimum elong	-12709 Dec 26 j 08:30	6°♎55'40	16°33'42	
max. Earth dist.	-12709 Dec 27 j 18:04	6°♎57'36	49.70224 AU	
retrograde	-12708 Apr 07 j 03:49	8°♎26'23		
opposition	-12708 Jun 28 j 20:05	7°♎26'13	-17°14'32	
min. Earth dist.	-12708 Jun 27 j 14:27	7°♎27'38	47.82522 AU	
direct	-12708 Sep 18 j 01:18	6°♎26'37		
conjunction	-12708 Dec 26 j 15:02	7°♎54'33	-16°33'27	
minimum elong	-12708 Dec 26 j 14:58	7°♎54'33	16°33'34	
max. Earth dist.	-12708 Dec 27 j 21:59	7°♎56'20	49.77394 AU	
retrograde	-12707 Apr 08 j 08:54	9°♎25'04		
min. Earth dist.	-12707 Jun 28 j 20:53	8°♎26'18	47.89459 AU	
opposition	-12707 Jun 30 j 00:59	8°♎24'57	-17°14'11	
direct	-12707 Sep 19 j 07:29	7°♎25'23		
conjunction	-12707 Dec 27 j 21:36	8°♎53'10	-16°33'03	
minimum elong	-12707 Dec 27 j 21:33	8°♎53'10	16°33'10	
max. Earth dist.	-12707 Dec 29 j 04:07	8°♎54'55	49.84110 AU	
retrograde	-12706 Apr 09 j 13:05	10°♎23'30		
min. Earth dist.	-12706 Jun 30 j 03:27	9°♎24'42	47.95950 AU	
opposition	-12706 Jul 01 j 05:49	9°♎23'26	-17°13'34	
direct	-12706 Sep 20 j 14:16	8°♎23'54		
conjunction	-12706 Dec 29 j 03:59	9°♎51'32	-16°32'22	
minimum elong	-12706 Dec 29 j 03:55	9°♎51'32	16°32'30	
max. Earth dist.	-12706 Dec 30 j 08:21	9°♎53'09	49.90426 AU	
retrograde	-12705 Apr 10 j 20:39	11°♎21'40		
min. Earth dist.	-12705 Jul 01 j 08:26	10°♎22'55	48.02071 AU	
opposition	-12705 Jul 02 j 10:24	10°♎21'41	-17°12'39	
direct	-12705 Sep 21 j 17:26	9°♎22'10		
conjunction	-12705 Dec 30 j 10:17	10°♎49'41	-16°31'25	
minimum elong	-12705 Dec 30 j 10:15	10°♎49'41	16°31'33	
max. Earth dist.	-12705 Dec 31 j 13:44	10°♎51'15	49.96387 AU	
retrograde	-12704 Apr 11 j 03:42	12°♎19'39		
opposition	-12704 Jul 02 j 15:11	11°♎19'43	-17°11'28	
min. Earth dist.	-12704 Jul 01 j 15:09	11°♎20'52	48.07863 AU	
direct	-12704 Sep 21 j 21:15	10°♎20'15		
conjunction	-12704 Dec 30 j 16:23	11°♎47'40	-16°30'11	
minimum elong	-12704 Dec 30 j 16:20	11°♎47'40	16°30'20	
max. Earth dist.	-12704 Dec 31 j 19:05	11°♎49'11	50.02052 AU	
retrograde	-12703 Apr 12 j 06:39	13°♎17'28		
opposition	-12703 Jul 03 j 19:45	12°♎17'37	-17°10'00	
min. Earth dist.	-12703 Jul 02 j 20:00	12°♎18'45	48.13347 AU	
direct	-12703 Sep 23 j 04:31	11°♎18'11		
conjunction	-12703 Dec 31 j 22:31	12°♎45'31	-16°28'40	
minimum elong	-12703 Dec 31 j 22:30	12°♎45'31	16°28'50	
max. Earth dist.	-12702 Jan 01 j 23:09	12°♎46'55	50.07413 AU	
retrograde	-12702 Apr 13 j 10:42	14°♎15'11		
min. Earth dist.	-12702 Jul 04 j 01:51	13°♎16'29	48.18534 AU	
opposition	-12702 Jul 05 j 00:15	13°♎15'25	-17°08'15	
direct	-12702 Sep 24 j 10:43	12°♎16'03		
conjunction	-12701 Jan 02 j 04:48	13°♎43'18	-16°26'53	
minimum elong	-12701 Jan 02 j 04:46	13°♎43'18	16°27'04	
max. Earth dist.	-12701 Jan 03 j 05:16	13°♎44'42	50.12468 AU	
retrograde	-12701 Apr 14 j 15:31	15°♎12'51		
min. Earth dist.	-12701 Jul 05 j 07:56	14°♎14'11	48.23383 AU	
opposition	-12701 Jul 06 j 04:48	14°♎13'11	-17°06'13	
direct	-12701 Sep 25 j 16:26	13°♎13'53		
conjunction	-12700 Jan 03 j 10:45	14°♎41'04	-16°24'51	
minimum elong	-12700 Jan 03 j 10:45	14°♎41'04	16°25'03	
max. Earth dist.	-12700 Jan 04 j 09:06	14°♎42'20	50.17179 AU	
retrograde	-12700 Apr 14 j 23:40	16°♎10'30		
opposition	-12700 Jul 06 j 09:11	15°♎10'56	-17°03'55	
min. Earth dist.	-12700 Jul 05 j 12:44	15°♎11'54	48.27863 AU	
direct	-12700 Sep 25 j 18:17	14°♎11'42		
conjunction	-12699 Jan 03 j 16:52	15°♎38'50	-16°22'33	
minimum elong	-12699 Jan 03 j 16:51	15°♎38'50	16°22'45	
max. Earth dist.	-12699 Jan 04 j 13:58	15°♎40'01	50.21484 AU	
retrograde	-12699 Apr 16 j 05:56	17°♎08'10		
opposition	-12699 Jul 07 j 13:36	16°♎08'41	-17°01'22	
min. Earth dist.	-12699 Jul 06 j 19:37	16°♎09'32	48.31909 AU	
direct	-12699 Sep 26 j 22:10	15°♎09'30		
conjunction	-12698 Jan 04 j 23:05	16°♎36'35	-16°20'01	
minimum elong	-12698 Jan 04 j 23:05	16°♎36'35	16°20'15	
max. Earth dist.	-12698 Jan 05 j 18:58	16°♎37'43	50.25335 AU	
retrograde	-12698 Apr 17 j 09:36	18°♎05'48		
opposition	-12698 Jul 08 j 17:58	17°♎06'24	-16°58'35	
min. Earth dist.	-12698 Jul 08 j 00:52	17°♎07'13	48.35449 AU	
direct	-12698 Sep 28 j 05:21	16°♎07'15		
conjunction	-12697 Jan 06 j 05:12	17°♎34'18	-16°17'15	
minimum elong	-12697 Jan 06 j 05:11	17°♎34'18	16°17'29	
max. Earth dist.	-12697 Jan 06 j 22:17	17°♎35'16	50.28653 AU	
retrograde	-12697 Apr 18 j 13:41	19°♎03'24		
opposition	-12697 Jul 09 j 22:21	18°♎04'04	-16°55'34	
min. Earth dist.	-12697 Jul 09 j 07:02	18°♎04'47	48.38456 AU	
direct	-12697 Sep 29 j 11:43	17°♎04'56		
conjunction	-12696 Jan 07 j 11:23	18°♎31'55	-16°14'16	
minimum elong	-12696 Jan 07 j 11:23	18°♎31'55	16°14'31	
max. Earth dist.	-12696 Jan 08 j 03:44	18°♎32'50	50.31434 AU	
retrograde	-12696 Apr 18 j 16:53	20°♎00'55		
opposition	-12696 Jul 10 j 02:44	19°♎01'36	-16°52'20	
min. Earth dist.	-12696 Jul 09 j 13:18	19°♎02'15	48.40913 AU	
direct	-12696 Sep 29 j 18:30	18°♎02'29		
conjunction	-12695 Jan 07 j 17:13	19°♎29'23	-16°11'03	
minimum elong	-12695 Jan 07 j 17:13	19°♎29'23	16°11'18	
max. Earth dist.	-12695 Jan 08 j 07:08	19°♎30'10	50.33698 AU	
retrograde	-12695 Apr 19 j 23:54	20°♎58'15		
opposition	-12695 Jul 11 j 06:57	19°♎58'59	-16°48'51	
min. Earth dist.	-12695 Jul 10 j 18:13	19°♎59'35	48.42871 AU	
direct	-12695 Sep 30 j 21:36	18°♎59'51		
conjunction	-12694 Jan 08 j 23:13	20°♎26'41	-16°07'36	
minimum elong	-12694 Jan 08 j 23:12	20°♎26'41	16°07'53	
max. Earth dist.	-12694 Jan 09 j 11:48	20°♎27'23	50.35475 AU	
retrograde	-12694 Apr 21 j 07:24	21°♎55'25		
opposition	-12694 Jul 12 j 11:07	20°♎56'10	-16°45'08	
min. Earth dist.	-12694 Jul 12 j 00:43	20°♎56'39	48.44376 AU	
direct	-12694 Oct 02 j 00:14	19°♎57'01		
conjunction	-12693 Jan 10 j 05:10	21°♎23'47	-16°03'54	

Attention, astronomical year style is used: The year -12693 in astronomical counting style is the year 12694 BCE in historical counting style.

minimum elong	-12693 Jan	10 j 05:11	21°♎23'47	16°04'11
max. Earth dist.	-12693 Jan	10 j 16:45	21°♎24'26	50.36847 AU
retrograde	-12693 Apr	22 j 11:12	22°♎52'23	
opposition	-12693 Jul	13 j 15:12	21°♎53'09	-16°41'09
min. Earth dist.	-12693 Jul	13 j 05:10	21°♎53'38	48.45492 AU
direct	-12693 Oct	03 j 05:55	20°♎53'59	
conjunction	-12692 Jan	11 j 10:44	22°♎20'42	-15°59'57
minimum elong	-12692 Jan	11 j 10:44	22°♎20'42	16°00'16
max. Earth dist.	-12692 Jan	11 j 20:14	22°♎21'14	50.37854 AU
retrograde	-12692 Apr	22 j 14:05	23°♎49'12	
opposition	-12692 Jul	13 j 19:21	22°♎49'59	-16°36'54
min. Earth dist.	-12692 Jul	13 j 10:43	22°♎50'23	48.46283 AU
direct	-12692 Oct	03 j 12:17	21°♎50'48	
conjunction	-12691 Jan	11 j 16:32	23°♎17'28	-15°55'45
minimum elong	-12691 Jan	11 j 16:34	23°♎17'28	15°56'03
max. Earth dist.	-12691 Jan	12 j 01:59	23°♎18'00	50.38559 AU
retrograde	-12691 Apr	23 j 16:08	24°♎45'52	
opposition	-12691 Jul	14 j 23:20	23°♎46'41	-16°32'23
min. Earth dist.	-12691 Jul	14 j 15:58	23°♎47'02	48.46769 AU
direct	-12691 Oct	04 j 19:38	22°♎47'30	
conjunction	-12690 Jan	12 j 22:13	24°♎14'07	-15°51'16
minimum elong	-12690 Jan	12 j 22:13	24°♎14'07	15°51'36
max. Earth dist.	-12690 Jan	13 j 05:34	24°♎14'32	50.38986 AU
retrograde	-12690 Apr	24 j 22:54	25°♎42'28	
opposition	-12690 Jul	16 j 03:20	24°♎43'18	-16°27'36
min. Earth dist.	-12690 Jul	15 j 20:13	24°♎43'38	48.46973 AU
direct	-12690 Oct	05 j 22:22	23°♎44'08	
conjunction	-12689 Jan	14 j 03:58	25°♎10'44	-15°46'32
minimum elong	-12689 Jan	14 j 04:01	25°♎10'44	15°46'53
max. Earth dist.	-12689 Jan	14 j 10:26	25°♎11'06	50.39110 AU
retrograde	-12689 Apr	26 j 05:12	26°♎39'01	
opposition	-12689 Jul	17 j 07:23	25°♎39'54	-16°22'32
min. Earth dist.	-12689 Jul	17 j 02:24	25°♎40'08	48.46867 AU
direct	-12689 Oct	07 j 01:08	24°♎40'45	
conjunction	-12688 Jan	15 j 09:44	26°♎07'22	-15°41'33
minimum elong	-12688 Jan	15 j 09:46	26°♎07'22	15°41'54
max. Earth dist.	-12688 Jan	15 j 15:21	26°♎07'41	50.38930 AU
retrograde	-12688 Apr	26 j 09:29	27°♎35'35	
opposition	-12688 Jul	17 j 11:20	26°♎36'32	-16°17'14
min. Earth dist.	-12688 Jul	17 j 06:44	26°♎36'45	48.46419 AU
direct	-12688 Oct	07 j 06:41	25°♎37'23	
conjunction	-12687 Jan	15 j 15:19	27°♎04'02	-15°36'19
minimum elong	-12687 Jan	15 j 15:22	27°♎04'02	15°36'41
max. Earth dist.	-12687 Jan	15 j 18:35	27°♎04'13	50.38373 AU
retrograde	-12687 Apr	27 j 13:45	28°♎32'13	
opposition	-12687 Jul	18 j 15:23	27°♎33'13	-16°11'41
min. Earth dist.	-12687 Jul	18 j 12:32	27°♎33'21	48.45570 AU
direct	-12687 Oct	08 j 12:06	26°♎34'05	
conjunction	-12686 Jan	16 j 21:16	28°♎00'45	-15°30'51
minimum elong	-12686 Jan	16 j 21:19	28°♎00'46	15°31'13
max. Earth dist.	-12686 Jan	16 j 23:57	28°♎00'54	50.37377 AU
retrograde	-12686 Apr	28 j 16:49	29°♎28'55	
opposition	-12686 Jul	19 j 19:21	28°♎29'58	-16°05'53
min. Earth dist.	-12686 Jul	19 j 18:18	28°♎30'01	48.44237 AU
direct	-12686 Oct	09 j 18:35	27°♎30'51	
conjunction	-12685 Jan	18 j 03:08	28°♎57'32	-15°25'10
minimum elong	-12685 Jan	18 j 03:11	28°♎57'32	15°25'33
max. Earth dist.	-12685 Jan	18 j 03:16	28°♎57'32	50.35887 AU
	-12685 Mar	10 j 12:11	0°♏	

retrograde	-12685 Apr	29 j 23:21	0°♏25'41	
	-12685 Jun	19 j 20:20	30°℞♎	
opposition	-12685 Jul	20 j 23:25	29°♎26'45	-15°59'53
min. Earth dist.	-12685 Jul	20 j 23:14	29°♎26'45	48.42392 AU
direct	-12685 Oct	10 j 21:46	28°♎27'38	
conjunction	-12684 Jan	19 j 08:52	29°♎54'20	-15°19'16
minimum elong	-12684 Jan	19 j 08:56	29°♎54'20	15°19'39
max. Earth dist.	-12684 Jan	19 j 07:29	29°♎54'16	50.33861 AU
	-12684 Jan	23 j 13:52	0°♏	
retrograde	-12684 Apr	30 j 06:24	1°♏22'27	
opposition	-12684 Jul	21 j 03:34	0°♏23'32	-15°53'39
min. Earth dist.	-12684 Jul	21 j 05:45	0°♏23'26	48.40012 AU
	-12684 Aug	11 j 10:06	30°℞♎	
direct	-12684 Oct	11 j 00:27	29°♎24'24	
	-12684 Dec	10 j 00:29	0°♏	
conjunction	-12683 Jan	19 j 14:43	0°♏51'08	-15°13'08
minimum elong	-12683 Jan	19 j 14:47	0°♏51'08	15°13'33
max. Earth dist.	-12683 Jan	19 j 12:01	0°♏50'59	50.31332 AU
retrograde	-12683 May	01 j 11:10	2°♏19'12	
opposition	-12683 Jul	22 j 07:24	1°♏20'17	-15°47'11
min. Earth dist.	-12683 Jul	22 j 10:18	1°♏20'09	48.37130 AU
direct	-12683 Oct	12 j 05:15	0°♏21'07	
conjunction	-12682 Jan	20 j 20:30	1°♏47'53	-15°06'47
minimum elong	-12682 Jan	20 j 20:34	1°♏47'53	15°07'12
max. Earth dist.	-12682 Jan	20 j 15:20	1°♏47'36	50.28320 AU
retrograde	-12682 May	02 j 14:52	3°♏15'55	
opposition	-12682 Jul	23 j 11:26	2°♏17'00	-15°40'28
min. Earth dist.	-12682 Jul	23 j 16:06	2°♏16'47	48.33804 AU
direct	-12682 Oct	13 j 11:01	1°♏17'47	
conjunction	-12681 Jan	22 j 02:20	2°♏44'35	-15°00'11
minimum elong	-12681 Jan	22 j 02:24	2°♏44'35	15°00'38
max. Earth dist.	-12681 Jan	21 j 20:48	2°♏44'16	50.24888 AU
retrograde	-12681 May	03 j 16:11	4°♏12'35	
opposition	-12681 Jul	24 j 15:22	3°♏13'40	-15°33'31
min. Earth dist.	-12681 Jul	24 j 21:24	3°♏13'23	48.30078 AU
direct	-12681 Oct	14 j 19:00	2°♏14'25	
evening set	-12680 Jan	21 j 09:59	3°♏38'39	
conjunction	-12680 Jan	23 j 07:58	3°♏41'14	-14°53'21
minimum elong	-12680 Jan	23 j 08:03	3°♏41'14	14°53'47
max. Earth dist.	-12680 Jan	23 j 00:22	3°♏40'48	50.21106 AU
morning rise	-12680 Jan	25 j 06:10	3°♏43'50	
retrograde	-12680 May	03 j 22:42	5°♏09'14	
opposition	-12680 Jul	24 j 19:17	4°♏10'19	-15°26'19
min. Earth dist.	-12680 Jul	25 j 01:39	4°♏10'00	48.26031 AU
direct	-12680 Oct	14 j 21:50	3°♏11'01	
evening set	-12679 Jan	20 j 18:20	4°♏34'07	
conjunction	-12679 Jan	23 j 13:35	4°♏37'53	-14°46'16
minimum elong	-12679 Jan	23 j 13:39	4°♏37'53	14°46'43
max. Earth dist.	-12679 Jan	23 j 05:06	4°♏37'24	50.17007 AU
morning rise	-12679 Jan	26 j 09:00	4°♏41'40	
retrograde	-12679 May	05 j 05:38	6°♏05'53	
opposition	-12679 Jul	25 j 23:21	5°♏06'57	-15°18'50
min. Earth dist.	-12679 Jul	26 j 07:44	5°♏06'34	48.21681 AU
direct	-12679 Oct	15 j 23:42	4°♏07'38	
evening set	-12678 Jan	21 j 07:49	5°♏29'52	
conjunction	-12678 Jan	24 j 19:22	5°♏34'33	-14°38'55
minimum elong	-12678 Jan	24 j 19:28	5°♏34'34	14°39'22
max. Earth dist.	-12678 Jan	24 j 10:09	5°♏34'02	50.12633 AU
morning rise	-12678 Jan	28 j 07:08	5°♏39'15	
retrograde	-12678 May	06 j 10:07	7°♏02'33	

Attention, astronomical year style is used: The year -12678 in astronomical counting style is the year 12679 BCE in historical counting style.

opposition	-12678 Jul 27 j 03:12	6°♏03'39	-15°11'06
min. Earth dist.	-12678 Jul 27 j 11:46	6°♏03'14	48.17043 AU
direct	-12678 Oct 17 j 05:01	5°♏04'18	
evening set	-12677 Jan 21 j 23:31	6°♏25'50	
conjunction	-12677 Jan 26 j 01:05	6°♏31'19	-14°31'18
minimum elong	-12677 Jan 26 j 01:09	6°♏31'19	14°31'46
max. Earth dist.	-12677 Jan 25 j 13:40	6°♏30'40	50.07968 AU
morning rise	-12677 Jan 30 j 02:51	6°♏36'47	
retrograde	-12677 May 07 j 14:20	7°♏59'19	
opposition	-12677 Jul 28 j 07:19	7°♏00'26	-15°03'06
min. Earth dist.	-12677 Jul 28 j 17:20	6°♏59'57	48.12118 AU
direct	-12677 Oct 18 j 10:24	6°♏01'04	
evening set	-12676 Jan 22 j 16:47	7°♏21'59	
conjunction	-12676 Jan 27 j 06:47	7°♏28'10	-14°23'27
minimum elong	-12676 Jan 27 j 06:53	7°♏28'11	14°23'57
max. Earth dist.	-12676 Jan 26 j 19:19	7°♏27'32	50.02995 AU
morning rise	-12676 Jan 31 j 21:00	7°♏34'21	
retrograde	-12676 May 07 j 16:48	8°♏56'14	
opposition	-12676 Jul 28 j 11:23	7°♏57'21	-14°54'50
min. Earth dist.	-12676 Jul 28 j 22:47	7°♏56'49	48.06846 AU
direct	-12676 Oct 18 j 17:29	6°♏57'58	
evening set	-12675 Jan 22 j 11:10	8°♏18'21	
conjunction	-12675 Jan 27 j 12:34	8°♏25'10	-14°15'21
minimum elong	-12675 Jan 27 j 12:39	8°♏25'10	14°15'51
max. Earth dist.	-12675 Jan 26 j 22:52	8°♏24'24	49.97664 AU
morning rise	-12675 Feb 01 j 14:11	8°♏32'01	
retrograde	-12675 May 08 j 22:30	9°♏53'17	
opposition	-12675 Jul 29 j 15:18	8°♏54'25	-14°46'20
min. Earth dist.	-12675 Jul 30 j 03:27	8°♏53'51	48.01185 AU
direct	-12675 Oct 19 j 21:22	7°♏55'01	
evening set	-12674 Jan 23 j 06:32	9°♏14'54	
conjunction	-12674 Jan 28 j 18:37	9°♏22'19	-14°07'01
minimum elong	-12674 Jan 28 j 18:43	9°♏22'20	14°07'33
max. Earth dist.	-12674 Jan 28 j 03:28	9°♏21'28	49.91888 AU
morning rise	-12674 Feb 03 j 06:54	9°♏29'46	
retrograde	-12674 May 10 j 05:50	10°♏50'30	
opposition	-12674 Jul 30 j 19:34	9°♏51'38	-14°37'36
min. Earth dist.	-12674 Jul 31 j 10:09	9°♏50'56	47.95045 AU
direct	-12674 Oct 21 j 00:06	8°♏52'12	
evening set	-12673 Jan 24 j 02:39	10°♏11'37	
max. Earth dist.	-12673 Jan 29 j 08:11	10°♏18'41	49.85619 AU
conjunction	-12673 Jan 30 j 00:39	10°♏19'36	-13°58'28
minimum elong	-12673 Jan 30 j 00:45	10°♏19'37	13°58'59
morning rise	-12673 Feb 04 j 22:49	10°♏27'36	
retrograde	-12673 May 11 j 12:35	11°♏47'49	
opposition	-12673 Jul 31 j 23:44	10°♏48'57	-14°28'38
min. Earth dist.	-12673 Aug 01 j 15:00	10°♏48'13	47.88376 AU
direct	-12673 Oct 22 j 03:40	9°♏49'27	
evening set	-12672 Jan 24 j 23:13	11°♏08'27	
max. Earth dist.	-12672 Jan 30 j 11:30	11°♏15'54	49.78807 AU
conjunction	-12672 Jan 31 j 06:41	11°♏16'59	-13°49'41
minimum elong	-12672 Jan 31 j 06:47	11°♏16'59	13°50'14
morning rise	-12672 Feb 06 j 14:24	11°♏25'30	
retrograde	-12672 May 11 j 17:40	12°♏45'13	
opposition	-12672 Aug 01 j 04:02	11°♏46'20	-14°19'26
min. Earth dist.	-12672 Aug 01 j 21:23	11°♏45'30	47.81174 AU
direct	-12672 Oct 22 j 08:40	10°♏46'46	
evening set	-12671 Jan 24 j 20:15	12°♏05'21	
conjunction	-12671 Jan 31 j 12:48	12°♏14'23	-13°40'42
minimum elong	-12671 Jan 31 j 12:54	12°♏14'23	13°41'13
max. Earth dist.	-12671 Jan 30 j 16:55	12°♏13'16	49.71465 AU
morning rise	-12671 Feb 07 j 05:27	12°♏23'26	
retrograde	-12671 May 12 j 18:57	13°♏42'40	
opposition	-12671 Aug 02 j 08:19	12°♏43'44	-14°10'01
min. Earth dist.	-12671 Aug 03 j 03:12	12°♏42'50	47.73436 AU
direct	-12671 Oct 23 j 17:14	11°♏44'05	
evening set	-12670 Jan 25 j 17:49	13°♏02'17	
conjunction	-12670 Feb 01 j 18:54	13°♏11'48	-13°31'28
minimum elong	-12670 Feb 01 j 19:00	13°♏11'49	13°32'01
max. Earth dist.	-12670 Jan 31 j 20:30	13°♏10'32	49.63623 AU
morning rise	-12670 Feb 08 j 20:13	13°♏21'21	
retrograde	-12670 May 14 j 00:13	14°♏40'08	
opposition	-12670 Aug 03 j 12:27	13°♏41'09	-14°00'21
min. Earth dist.	-12670 Aug 04 j 08:12	13°♏40'12	47.65229 AU
direct	-12670 Oct 24 j 22:05	12°♏41'24	
evening set	-12669 Jan 26 j 15:34	13°♏59'14	
max. Earth dist.	-12669 Feb 02 j 01:33	14°♏07'54	49.55325 AU
conjunction	-12669 Feb 03 j 01:05	14°♏09'14	-13°22'00
minimum elong	-12669 Feb 03 j 01:13	14°♏09'14	13°22'33
morning rise	-12669 Feb 10 j 10:46	14°♏19'15	
	-12669 Mar 14 j 19:05	15°♏	
retrograde	-12669 May 15 j 06:59	15°♏37'37	
	-12669 Jul 16 j 12:47	15°℞♏	
opposition	-12669 Aug 04 j 16:53	14°♏38'34	-13°50'26
min. Earth dist.	-12669 Aug 05 j 14:48	14°♏37'31	47.56603 AU
direct	-12669 Oct 26 j 01:07	13°♏38'45	
evening set	-12668 Jan 27 j 13:32	14°♏56'13	
	-12668 Jan 30 j 08:50	15°♏	
max. Earth dist.	-12668 Feb 03 j 06:38	15°♏05'18	49.46654 AU
conjunction	-12668 Feb 04 j 07:03	15°♏06'41	-13°12'17
minimum elong	-12668 Feb 04 j 07:09	15°♏06'41	13°12'51
morning rise	-12668 Feb 12 j 00:39	15°♏17'10	
retrograde	-12668 May 15 j 12:04	16°♏35'07	
opposition	-12668 Aug 04 j 21:09	15°♏36'02	-13°40'15
min. Earth dist.	-12668 Aug 05 j 19:15	15°♏34'58	47.47620 AU
	-12668 Sep 07 j 14:25	15°℞♏	
direct	-12668 Oct 26 j 06:11	14°♏36'07	
	-12668 Dec 13 j 16:44	15°♏	
evening set	-12667 Jan 27 j 11:47	15°♏53'16	
max. Earth dist.	-12667 Feb 03 j 10:33	16°♏02'41	49.37646 AU
conjunction	-12667 Feb 04 j 13:06	16°♏04'11	-13°02'19
minimum elong	-12667 Feb 04 j 13:14	16°♏04'12	13°02'53
morning rise	-12667 Feb 12 j 14:40	16°♏15'07	
retrograde	-12667 May 16 j 17:16	17°♏32'42	
opposition	-12667 Aug 06 j 01:28	16°♏33'34	-13°29'49
min. Earth dist.	-12667 Aug 07 j 01:10	16°♏32'26	47.38333 AU
direct	-12667 Oct 27 j 11:24	15°♏33'34	
evening set	-12666 Jan 28 j 10:24	16°♏50'26	
conjunction	-12666 Feb 05 j 19:25	17°♏01'48	-12°52'06
minimum elong	-12666 Feb 05 j 19:32	17°♏01'49	12°52'41
max. Earth dist.	-12666 Feb 04 j 16:47	17°♏00'18	49.28346 AU
morning rise	-12666 Feb 14 j 04:25	17°♏13'11	
retrograde	-12666 May 17 j 19:58	18°♏30'25	
opposition	-12666 Aug 07 j 05:58	17°♏31'15	-13°19'06
min. Earth dist.	-12666 Aug 08 j 06:44	17°♏30'04	47.28745 AU
direct	-12666 Oct 28 j 19:12	16°♏31'11	
evening set	-12665 Jan 29 j 09:16	17°♏47'48	
max. Earth dist.	-12665 Feb 05 j 20:56	17°♏57'58	49.18763 AU
conjunction	-12665 Feb 07 j 01:32	17°♏59'35	-12°41'36
minimum elong	-12665 Feb 07 j 01:40	17°♏59'36	12°42'12
morning rise	-12665 Feb 15 j 17:59	18°♏11'24	

Attention, astronomical year style is used: The year -12665 in astronomical counting style is the year 12666 BCE in historical counting style.

retrograde	-12665 May 19 j 01:45	19°♏28'20	
opposition	-12665 Aug 08 j 10:25	18°♏29'08	-13°08'06
min. Earth dist.	-12665 Aug 09 j 11:36	18°♏27'56	47.18876 AU
direct	-12665 Oct 29 j 23:39	17°♏29'01	
evening set	-12664 Jan 30 j 08:16	18°♏45'23	
max. Earth dist.	-12664 Feb 07 j 02:16	18°♏55'55	49.08875 AU
conjunction	-12664 Feb 08 j 07:53	18°♏57'36	-12°30'52
minimum elong	-12664 Feb 08 j 08:00	18°♏57'37	12°31'28
morning rise	-12664 Feb 17 j 07:30	19°♏09'51	
retrograde	-12664 May 19 j 08:54	20°♏26'30	
opposition	-12664 Aug 08 j 15:02	19°♏27'17	-12°56'51
min. Earth dist.	-12664 Aug 09 j 18:14	19°♏25'58	47.08686 AU
direct	-12664 Oct 30 j 02:53	18°♏27'06	
evening set	-12663 Jan 30 j 07:37	19°♏43'15	
max. Earth dist.	-12663 Feb 07 j 07:45	19°♏54'10	48.98656 AU
conjunction	-12663 Feb 08 j 14:13	19°♏55'54	-12°19'51
minimum elong	-12663 Feb 08 j 14:22	19°♏55'54	12°20'29
morning rise	-12663 Feb 17 j 20:48	20°♏08'33	
retrograde	-12663 May 20 j 16:51	21°♏24'56	
opposition	-12663 Aug 09 j 19:36	20°♏25'42	-12°45'20
min. Earth dist.	-12663 Aug 10 j 23:18	20°♏24'22	46.98115 AU
direct	-12663 Oct 31 j 06:06	19°♏25'27	
evening set	-12662 Jan 31 j 07:19	20°♏41'25	
max. Earth dist.	-12662 Feb 08 j 11:48	20°♏52'36	48.88012 AU
conjunction	-12662 Feb 09 j 20:46	20°♏54'29	-12°08'36
minimum elong	-12662 Feb 09 j 20:53	20°♏54'29	12°09'13
morning rise	-12662 Feb 19 j 10:17	21°♏07'33	
retrograde	-12662 May 21 j 23:43	22°♏23'40	
opposition	-12662 Aug 11 j 00:20	21°♏24'24	-12°33'34
min. Earth dist.	-12662 Aug 12 j 06:06	21°♏22'58	46.87105 AU
direct	-12662 Nov 01 j 10:34	20°♏24'05	
evening set	-12661 Feb 01 j 07:18	21°♏39'52	
max. Earth dist.	-12661 Feb 09 j 17:55	21°♏51'25	48.76896 AU
conjunction	-12661 Feb 11 j 03:32	21°♏53'20	-11°57'07
minimum elong	-12661 Feb 11 j 03:40	21°♏53'21	11°57'45
morning rise	-12661 Feb 20 j 23:33	22°♏06'48	
retrograde	-12661 May 23 j 02:03	23°♏22'41	
opposition	-12661 Aug 12 j 05:16	22°♏23'22	-12°21'33
min. Earth dist.	-12661 Aug 13 j 12:25	22°♏21'52	46.75585 AU
direct	-12661 Nov 02 j 19:12	21°♏22'58	
evening set	-12660 Feb 02 j 07:25	22°♏38'34	
max. Earth dist.	-12660 Feb 10 j 21:55	22°♏50'21	48.65272 AU
conjunction	-12660 Feb 12 j 10:01	22°♏52'26	-11°45'23
minimum elong	-12660 Feb 12 j 10:10	22°♏52'26	11°46'00
morning rise	-12660 Feb 22 j 12:38	23°♏06'17	
retrograde	-12660 May 23 j 07:07	24°♏21'56	
opposition	-12660 Aug 12 j 10:12	23°♏22'33	-12°09'16
min. Earth dist.	-12660 Aug 13 j 18:19	23°♏21'00	46.63557 AU
direct	-12660 Nov 03 j 01:35	22°♏22'02	
evening set	-12659 Feb 02 j 07:46	23°♏37'28	
max. Earth dist.	-12659 Feb 11 j 03:25	23°♏49'33	48.53126 AU
conjunction	-12659 Feb 12 j 16:53	23°♏51'43	-11°33'24
minimum elong	-12659 Feb 12 j 17:02	23°♏51'43	11°34'03
morning rise	-12659 Feb 23 j 01:48	24°♏05'57	
retrograde	-12659 May 24 j 14:21	25°♏21'22	
opposition	-12659 Aug 13 j 15:10	24°♏21'54	-11°56'45
min. Earth dist.	-12659 Aug 15 j 01:42	24°♏20'14	46.51018 AU
direct	-12659 Nov 04 j 05:30	23°♏21'16	
evening set	-12658 Feb 03 j 08:33	24°♏36'31	
max. Earth dist.	-12658 Feb 12 j 09:04	24°♏48'54	48.40508 AU
conjunction	-12658 Feb 13 j 23:49	24°♏51'08	-11°21'11
minimum elong	-12658 Feb 13 j 23:58	24°♏51'09	11°21'50
morning rise	-12658 Feb 24 j 14:50	25°♏05'46	
retrograde	-12658 May 25 j 21:11	26°♏20'56	
opposition	-12658 Aug 14 j 20:10	25°♏21'23	-11°43'58
min. Earth dist.	-12658 Aug 16 j 07:03	25°♏19'42	46.38022 AU
direct	-12658 Nov 05 j 10:07	24°♏20'36	
evening set	-12657 Feb 04 j 09:18	25°♏35'41	
max. Earth dist.	-12657 Feb 13 j 13:36	25°♏48'20	48.27449 AU
conjunction	-12657 Feb 15 j 06:37	25°♏50'41	-11°08'43
minimum elong	-12657 Feb 15 j 06:45	25°♏50'42	11°09'23
morning rise	-12657 Feb 26 j 03:47	26°♏05'42	
retrograde	-12657 May 27 j 04:16	27°♏20'38	
opposition	-12657 Aug 16 j 01:19	26°♏20'58	-11°30'55
min. Earth dist.	-12657 Aug 17 j 14:05	26°♏19'12	46.24633 AU
direct	-12657 Nov 06 j 15:28	25°♏20'04	
evening set	-12656 Feb 05 j 10:16	26°♏34'59	
max. Earth dist.	-12656 Feb 14 j 20:33	26°♏48'00	48.14030 AU
conjunction	-12656 Feb 16 j 13:38	26°♏50'22	-10°55'59
minimum elong	-12656 Feb 16 j 13:47	26°♏50'23	10°56'39
morning rise	-12656 Feb 27 j 16:32	27°♏05'45	
retrograde	-12656 May 27 j 07:27	28°♏20'28	
opposition	-12656 Aug 16 j 06:30	27°♏20'42	-11°17'35
min. Earth dist.	-12656 Aug 17 j 20:12	27°♏18'52	46.10904 AU
direct	-12656 Nov 07 j 00:22	26°♏19'39	
evening set	-12655 Feb 05 j 11:27	27°♏34'27	
max. Earth dist.	-12655 Feb 15 j 01:22	27°♏47'41	48.00309 AU
conjunction	-12655 Feb 16 j 20:30	27°♏50'12	-10°42'58
minimum elong	-12655 Feb 16 j 20:38	27°♏50'12	10°43'39
morning rise	-12655 Feb 28 j 05:19	28°♏05'56	
retrograde	-12655 May 28 j 13:09	29°♏20'28	
opposition	-12655 Aug 17 j 11:46	28°♏20'36	-11°03'58
min. Earth dist.	-12655 Aug 19 j 01:58	28°♏18'44	45.96898 AU
direct	-12655 Nov 08 j 06:35	27°♏19'24	
evening set	-12654 Feb 06 j 12:50	28°♏34'06	
max. Earth dist.	-12654 Feb 16 j 07:49	28°♏47'39	47.86306 AU
conjunction	-12654 Feb 18 j 03:42	28°♏50'12	-10°29'41
minimum elong	-12654 Feb 18 j 03:52	28°♏50'12	10°30'22
morning rise	-12654 Mar 01 j 18:04	29°♏06'18	
	-12654 Apr 15 j 23:40	0°♐	
retrograde	-12654 May 29 j 18:59	0°♐20'41	
	-12654 Jul 13 j 00:34	30°℞♏	
opposition	-12654 Aug 18 j 17:13	29°♏20'43	-10°50'04
min. Earth dist.	-12654 Aug 20 j 09:11	29°♏18'46	45.82626 AU
direct	-12654 Nov 09 j 12:40	28°♏19'23	
evening set	-12653 Feb 07 j 14:35	29°♏33'58	
max. Earth dist.	-12653 Feb 17 j 14:22	29°♏47'51	47.72069 AU
conjunction	-12653 Feb 19 j 10:56	29°♏50'26	-10°16'07
minimum elong	-12653 Feb 19 j 11:04	29°♏50'27	10°16'49
	-12653 Feb 26 j 07:07	0°♐	
morning rise	-12653 Mar 03 j 06:45	0°♐06'54	
retrograde	-12653 May 31 j 03:26	1°♐21'08	
opposition	-12653 Aug 19 j 22:45	0°♐21'05	-10°35'52
min. Earth dist.	-12653 Aug 21 j 14:41	0°♐19'08	45.68109 AU
	-12653 Sep 07 j 07:32	30°℞♏	
direct	-12653 Nov 10 j 16:42	29°♏19'38	
	-12652 Jan 13 j 03:40	0°♐	
evening set	-12652 Feb 08 j 16:18	0°♐34'10	
max. Earth dist.	-12652 Feb 18 j 19:37	0°♐48'17	47.57566 AU
conjunction	-12652 Feb 20 j 18:05	0°♐50'59	-10°02'17
minimum elong	-12652 Feb 20 j 18:14	0°♐51'00	10°02'59

Attention, astronomical year style is used: The year -12652 in astronomical counting style is the year 12653 BCE in historical counting style.

morning rise	-12652 Mar 03 j 19:23	1°↗07'48	
retrograde	-12652 May 31 j 12:26	2°↗21'56	
opposition	-12652 Aug 20 j 04:26	1°↗21'48	-10°21'22
min. Earth dist.	-12652 Aug 21 j 22:09	1°↗19'46	45.53323 AU
direct	-12652 Nov 10 j 20:26	0°↗20'13	
evening set	-12651 Feb 08 j 18:28	1°↗34'44	
max. Earth dist.	-12651 Feb 19 j 03:01	1°↗49'11	47.42768 AU
conjunction	-12651 Feb 21 j 01:40	1°↗51'54	-9°48'10
minimum elong	-12651 Feb 21 j 01:48	1°↗51'55	9°48'52
morning rise	-12651 Mar 05 j 08:03	2°↗09'04	
retrograde	-12651 Jun 01 j 17:10	3°↗23'06	
opposition	-12651 Aug 21 j 10:06	2°↗22'53	-10°06'35
min. Earth dist.	-12651 Aug 23 j 04:47	2°↗20'48	45.38197 AU
direct	-12651 Nov 12 j 04:49	1°↗21'12	
evening set	-12650 Feb 09 j 21:07	2°↗35'41	
max. Earth dist.	-12650 Feb 20 j 08:23	2°↗50'21	47.27606 AU
conjunction	-12650 Feb 22 j 09:20	2°↗53'13	-9°33'47
minimum elong	-12650 Feb 22 j 09:29	2°↗53'14	9°34'30
morning rise	-12650 Mar 06 j 20:59	3°↗10'44	
retrograde	-12650 Jun 02 j 23:14	4°↗24'41	
opposition	-12650 Aug 22 j 16:02	3°↗24'24	-9°51'32
min. Earth dist.	-12650 Aug 24 j 11:47	3°↗22'15	45.22684 AU
direct	-12650 Nov 13 j 12:13	2°↗22'35	
evening set	-12649 Feb 10 j 23:48	3°↗37'04	
max. Earth dist.	-12649 Feb 21 j 15:11	3°↗52'00	47.12003 AU
conjunction	-12649 Feb 23 j 17:12	3°↗54'57	-9°19'07
minimum elong	-12649 Feb 23 j 17:20	3°↗54'58	9°19'50
morning rise	-12649 Mar 08 j 09:41	4°↗12'48	
retrograde	-12649 Jun 04 j 06:18	5°↗26'41	
opposition	-12649 Aug 23 j 22:17	4°↗26'19	-9°36'11
min. Earth dist.	-12649 Aug 25 j 20:12	4°↗24'03	45.06706 AU
direct	-12649 Nov 14 j 18:30	3°↗24'22	
evening set	-12648 Feb 12 j 02:57	4°↗38'51	
max. Earth dist.	-12648 Feb 22 j 21:43	4°↗54'01	46.95937 AU
conjunction	-12648 Feb 25 j 01:10	4°↗57'04	-9°04'12
minimum elong	-12648 Feb 25 j 01:19	4°↗57'05	9°04'56
morning rise	-12648 Mar 08 j 22:31	5°↗15'16	
retrograde	-12648 Jun 04 j 14:51	6°↗29'06	
opposition	-12648 Aug 24 j 04:27	5°↗28'37	-9°20'34
min. Earth dist.	-12648 Aug 26 j 02:47	5°↗26'20	44.90249 AU
direct	-12648 Nov 14 j 23:27	4°↗26'30	
evening set	-12647 Feb 12 j 06:17	5°↗41'00	
max. Earth dist.	-12647 Feb 23 j 03:26	5°↗56'22	46.79379 AU
conjunction	-12647 Feb 25 j 09:17	5°↗59'34	-8°49'01
minimum elong	-12647 Feb 25 j 09:26	5°↗59'34	8°49'44
morning rise	-12647 Mar 10 j 11:26	6°↗18'06	
retrograde	-12647 Jun 06 j 00:06	7°↗31'52	
opposition	-12647 Aug 25 j 10:55	6°↗31'16	-9°04'40
min. Earth dist.	-12647 Aug 27 j 11:28	6°↗28'52	44.73313 AU
direct	-12647 Nov 16 j 05:11	5°↗28'59	
evening set	-12646 Feb 13 j 09:54	6°↗43'30	
max. Earth dist.	-12646 Feb 24 j 11:24	6°↗59'11	46.62356 AU
conjunction	-12646 Feb 26 j 17:40	7°↗02'24	-8°33'34
minimum elong	-12646 Feb 26 j 17:49	7°↗02'25	8°34'18
morning rise	-12646 Mar 12 j 00:13	7°↗21'16	
retrograde	-12646 Jun 07 j 06:00	8°↗34'59	
opposition	-12646 Aug 26 j 17:24	7°↗34'15	-8°48'28
min. Earth dist.	-12646 Aug 28 j 18:57	7°↗31'47	44.55926 AU
direct	-12646 Nov 17 j 14:34	6°↗31'48	
evening set	-12645 Feb 14 j 13:52	7°↗46'21	
max. Earth dist.	-12645 Feb 25 j 17:23	8°↗02'12	46.44919 AU
conjunction	-12645 Feb 28 j 01:58	8°↗05'35	-8°17'50
minimum elong	-12645 Feb 28 j 02:07	8°↗05'35	8°18'34
morning rise	-12645 Mar 13 j 13:07	8°↗24'46	
retrograde	-12645 Jun 08 j 13:37	9°↗38'27	
opposition	-12645 Aug 28 j 00:05	8°↗37'34	-8°31'59
min. Earth dist.	-12645 Aug 30 j 02:31	8°↗35'04	44.38169 AU
direct	-12645 Nov 18 j 22:09	7°↗34'56	
evening set	-12644 Feb 15 j 17:42	8°↗49'32	
max. Earth dist.	-12644 Feb 27 j 01:09	9°↗05'39	46.27119 AU
conjunction	-12644 Feb 29 j 10:21	9°↗09'05	-8°01'49
minimum elong	-12644 Feb 29 j 10:30	9°↗09'06	8°02'34
morning rise	-12644 Mar 14 j 01:40	9°↗28'36	
retrograde	-12644 Jun 08 j 19:19	10°↗42'17	
opposition	-12644 Aug 28 j 06:58	9°↗41'15	-8°15'12
min. Earth dist.	-12644 Aug 30 j 11:08	9°↗38'39	44.20077 AU
direct	-12644 Nov 19 j 06:39	8°↗38'25	
evening set	-12643 Feb 15 j 22:06	9°↗53'05	
max. Earth dist.	-12643 Feb 27 j 08:50	10°↗09'27	46.09027 AU
conjunction	-12643 Mar 01 j 18:55	10°↗12'57	-7°45'31
minimum elong	-12643 Mar 01 j 19:04	10°↗12'58	7°46'15
morning rise	-12643 Mar 15 j 14:27	10°↗32'47	
retrograde	-12643 Jun 10 j 04:32	11°↗46'29	
opposition	-12643 Aug 29 j 13:47	10°↗45'18	-7°58'06
min. Earth dist.	-12643 Aug 31 j 18:00	10°↗42'41	44.01713 AU
direct	-12643 Nov 20 j 12:26	9°↗42'17	
evening set	-12642 Feb 17 j 02:50	10°↗57'01	
max. Earth dist.	-12642 Feb 28 j 15:53	11°↗13'36	45.90666 AU
conjunction	-12642 Mar 03 j 03:45	11°↗17'13	-7°28'55
minimum elong	-12642 Mar 03 j 03:53	11°↗17'14	7°29'40
morning rise	-12642 Mar 17 j 03:19	11°↗37'22	
retrograde	-12642 Jun 11 j 16:12	12°↗51'06	
opposition	-12642 Aug 30 j 21:04	11°↗49'46	-7°40'42
min. Earth dist.	-12642 Sep 02 j 03:02	11°↗47'04	43.83112 AU
direct	-12642 Nov 21 j 16:09	10°↗46'34	
evening set	-12641 Feb 18 j 07:41	12°↗01'26	
max. Earth dist.	-12641 Mar 02 j 00:54	12°↗18'19	45.72080 AU
conjunction	-12641 Mar 04 j 12:39	12°↗21'56	-7°12'01
minimum elong	-12641 Mar 04 j 12:48	12°↗21'57	7°12'47
morning rise	-12641 Mar 18 j 15:57	12°↗42'23	
retrograde	-12641 Jun 12 j 23:33	13°↗56'11	
opposition	-12641 Sep 01 j 04:28	12°↗54'43	-7°22'58
min. Earth dist.	-12641 Sep 03 j 10:41	12°↗52'00	43.64275 AU
direct	-12641 Nov 23 j 01:10	11°↗51'20	
evening set	-12640 Feb 19 j 13:04	13°↗06'21	
max. Earth dist.	-12640 Mar 02 j 07:59	13°↗23'25	45.53263 AU
conjunction	-12640 Mar 04 j 21:42	13°↗27'10	-6°54'49
minimum elong	-12640 Mar 04 j 21:50	13°↗27'11	6°55'36
morning rise	-12640 Mar 19 j 04:55	13°↗47'56	
retrograde	-12640 Jun 13 j 07:30	15°↗01'47	
opposition	-12640 Sep 01 j 11:54	14°↗00'12	-7°04'56
min. Earth dist.	-12640 Sep 03 j 19:07	13°↗57'25	43.45208 AU
direct	-12640 Nov 23 j 10:09	12°↗56'38	
evening set	-12639 Feb 19 j 18:39	14°↗11'49	
max. Earth dist.	-12639 Mar 03 j 17:00	14°↗29'09	45.34171 AU
conjunction	-12639 Mar 06 j 07:09	14°↗32'57	-6°37'20
minimum elong	-12639 Mar 06 j 07:18	14°↗32'58	6°38'07
morning rise	-12639 Mar 20 j 17:49	14°↗54'01	
retrograde	-12639 Jun 14 j 14:19	16°↗07'59	
opposition	-12639 Sep 02 j 19:46	15°↗06'15	-6°46'34
min. Earth dist.	-12639 Sep 05 j 04:41	15°↗03'23	43.25833 AU
direct	-12639 Nov 24 j 20:08	14°↗02'31	

Attention, astronomical year style is used: The year -12638 in astronomical counting style is the year 12639 BCE in historical counting style.

evening set	-12638 Feb 21 j 00:50	15°♐17'53	
max. Earth dist.	-12638 Mar 05 j 01:12	15°♐35'25	45.14754 AU
conjunction	-12638 Mar 07 j 16:45	15°♐39'19	-6°19'33
minimum elong	-12638 Mar 07 j 16:53	15°♐39'20	6°20'19
morning rise	-12638 Mar 22 j 06:56	16°♐00'42	
retrograde	-12638 Jun 15 j 23:47	17°♐14'47	
opposition	-12638 Sep 04 j 03:41	16°♐12'55	-6°27'54
min. Earth dist.	-12638 Sep 06 j 12:55	16°♐10'00	43.06101 AU
direct	-12638 Nov 26 j 03:35	15°♐08'59	
evening set	-12637 Feb 22 j 07:22	16°♐24'32	
max. Earth dist.	-12637 Mar 06 j 09:10	16°♐42'14	44.94929 AU
conjunction	-12637 Mar 09 j 02:39	16°♐46'17	-6°01'28
minimum elong	-12637 Mar 09 j 02:47	16°♐46'17	6°02'15
morning rise	-12637 Mar 23 j 20:05	17°♐07'57	
retrograde	-12637 Jun 17 j 11:09	18°♐22'11	
opposition	-12637 Sep 05 j 12:05	17°♐20'09	-6°08'55
min. Earth dist.	-12637 Sep 07 j 23:35	17°♐17'07	42.85953 AU
direct	-12637 Nov 27 j 09:47	16°♐16'01	
evening set	-12636 Feb 23 j 14:04	17°♐31'46	
max. Earth dist.	-12636 Mar 06 j 18:46	17°♐49'44	44.74672 AU
conjunction	-12636 Mar 09 j 12:41	17°♐53'49	-5°43'06
minimum elong	-12636 Mar 09 j 12:48	17°♐53'49	5°43'52
morning rise	-12636 Mar 24 j 09:10	18°♐15'46	
retrograde	-12636 Jun 17 j 21:58	19°♐30'08	
opposition	-12636 Sep 05 j 20:37	18°♐27'55	-5°49'37
min. Earth dist.	-12636 Sep 08 j 08:47	18°♐24'51	42.65346 AU
direct	-12636 Nov 27 j 18:25	17°♐23'34	
evening set	-12635 Feb 23 j 21:27	18°♐39'33	
max. Earth dist.	-12635 Mar 08 j 02:25	18°♐57'37	44.53954 AU
conjunction	-12635 Mar 10 j 22:59	19°♐01'53	-5°24'26
minimum elong	-12635 Mar 10 j 23:06	19°♐01'53	5°25'13
morning rise	-12635 Mar 25 j 22:35	19°♐24'07	
retrograde	-12635 Jun 19 j 09:10	20°♐38'38	
opposition	-12635 Sep 07 j 05:13	19°♐36'13	-5°30'01
min. Earth dist.	-12635 Sep 09 j 18:55	19°♐33'04	42.44300 AU
direct	-12635 Nov 29 j 03:06	18°♐31'37	
evening set	-12634 Feb 25 j 05:05	19°♐47'50	
max. Earth dist.	-12634 Mar 09 j 12:31	20°♐06'07	44.32793 AU
conjunction	-12634 Mar 12 j 09:42	20°♐10'27	-5°05'29
minimum elong	-12634 Mar 12 j 09:49	20°♐10'27	5°06'15
morning rise	-12634 Mar 27 j 11:55	20°♐32'58	
retrograde	-12634 Jun 20 j 16:20	21°♐47'38	
opposition	-12634 Sep 08 j 14:16	20°♐45'01	-5°10'05
min. Earth dist.	-12634 Sep 11 j 05:32	20°♐41'46	42.22830 AU
direct	-12634 Nov 30 j 14:41	19°♐40'09	
evening set	-12633 Feb 26 j 13:04	20°♐56'36	
max. Earth dist.	-12633 Mar 10 j 21:41	21°♐15'03	44.11251 AU
conjunction	-12633 Mar 13 j 20:16	21°♐19'30	-4°46'13
minimum elong	-12633 Mar 13 j 20:22	21°♐19'31	4°47'01
morning rise	-12633 Mar 29 j 01:15	21°♐42'18	
retrograde	-12633 Jun 22 j 01:21	22°♐57'09	
opposition	-12633 Sep 09 j 23:23	21°♐54'18	-4°49'50
min. Earth dist.	-12633 Sep 12 j 14:58	21°♐51'01	42.01017 AU
direct	-12633 Dec 02 j 00:55	20°♐49'09	
evening set	-12632 Feb 27 j 21:23	22°♐05'53	
max. Earth dist.	-12632 Mar 11 j 07:12	22°♐24'30	43.89373 AU
conjunction	-12632 Mar 14 j 07:12	22°♐29'04	-4°26'40
minimum elong	-12632 Mar 14 j 07:19	22°♐29'04	4°27'27
morning rise	-12632 Mar 29 j 14:36	22°♐52'07	
retrograde	-12632 Jun 22 j 12:54	24°♐07'11	
opposition	-12632 Sep 10 j 08:44	23°♐04'06	-4°29'15
min. Earth dist.	-12632 Sep 13 j 02:16	23°♐00'43	41.78917 AU
direct	-12632 Dec 02 j 08:14	21°♐58'41	
evening set	-12631 Feb 28 j 06:03	23°♐15'42	
max. Earth dist.	-12631 Mar 12 j 18:13	23°♐34'33	43.67244 AU
conjunction	-12631 Mar 15 j 18:20	23°♐39'09	-4°06'48
minimum elong	-12631 Mar 15 j 18:26	23°♐39'09	4°07'36
morning rise	-12631 Mar 31 j 04:01	24°♐02'28	
retrograde	-12631 Jun 23 j 23:48	25°♐17'46	
opposition	-12631 Sep 11 j 18:24	24°♐14'28	-4°08'21
min. Earth dist.	-12631 Sep 14 j 11:50	24°♐11'04	41.56583 AU
direct	-12631 Dec 03 j 17:57	23°♐08'46	
evening set	-12630 Mar 01 j 15:17	24°♐26'07	
max. Earth dist.	-12630 Mar 14 j 03:40	24°♐45'06	43.44898 AU
conjunction	-12630 Mar 17 j 05:38	24°♐49'49	-3°46'37
minimum elong	-12630 Mar 17 j 05:44	24°♐49'50	3°47'24
morning rise	-12630 Apr 01 j 17:30	25°♐13'24	
retrograde	-12630 Jun 25 j 12:28	26°♐28'58	
opposition	-12630 Sep 13 j 04:20	25°♐25'26	-3°47'06
min. Earth dist.	-12630 Sep 15 j 22:57	25°♐21'58	41.34077 AU
direct	-12630 Dec 05 j 03:19	24°♐19'29	
evening set	-12629 Mar 03 j 00:47	25°♐37'12	
max. Earth dist.	-12629 Mar 15 j 15:38	25°♐56'26	43.22386 AU
conjunction	-12629 Mar 18 j 17:19	26°♐01'10	-3°26'08
minimum elong	-12629 Mar 18 j 17:24	26°♐01'11	3°26'57
morning rise	-12629 Apr 03 j 06:56	26°♐25'00	
retrograde	-12629 Jun 26 j 22:14	27°♐40'52	
opposition	-12629 Sep 14 j 14:40	26°♐37'08	-3°25'32
min. Earth dist.	-12629 Sep 17 j 10:01	26°♐33'36	41.11414 AU
direct	-12629 Dec 06 j 15:56	25°♐30'55	
evening set	-12628 Mar 03 j 10:45	26°♐49'02	
max. Earth dist.	-12628 Mar 16 j 02:01	27°♐08'25	42.99732 AU
conjunction	-12628 Mar 19 j 04:59	27°♐13'16	-3°05'21
minimum elong	-12628 Mar 19 j 05:03	27°♐13'16	3°06'09
morning rise	-12628 Apr 03 j 20:31	27°♐37'21	
retrograde	-12628 Jun 27 j 09:53	28°♐53'33	
opposition	-12628 Sep 15 j 01:07	27°♐49'37	-3°03'38
min. Earth dist.	-12628 Sep 17 j 20:33	27°♐46'04	40.88606 AU
direct	-12628 Dec 07 j 02:35	26°♐43'09	
evening set	-12627 Mar 04 j 21:18	28°♐01'42	
max. Earth dist.	-12627 Mar 17 j 13:24	28°♐21'15	42.76889 AU
conjunction	-12627 Mar 20 j 17:16	28°♐26'11	-2°44'15
minimum elong	-12627 Mar 20 j 17:20	28°♐26'12	2°45'03
morning rise	-12627 Apr 05 j 10:13	28°♐50'32	
	-12627 Jun 05 j 01:31	0°♑	
retrograde	-12627 Jun 28 j 21:17	0°♑07'06	
	-12627 Jul 23 j 00:10	30°℞♐	
opposition	-12627 Sep 16 j 11:56	29°♐02'58	-2°41'23
min. Earth dist.	-12627 Sep 19 j 09:13	28°♐59'18	40.65597 AU
direct	-12627 Dec 08 j 12:33	27°♐56'15	
evening set	-12626 Mar 06 j 08:30	29°♐15'16	
max. Earth dist.	-12626 Mar 19 j 01:45	29°♐35'01	42.53829 AU
conjunction	-12626 Mar 22 j 05:51	29°♐40'00	-2°22'51
minimum elong	-12626 Mar 22 j 05:55	29°♐40'00	2°23'39
	-12626 Apr 04 j 00:45	0°♑	
morning rise	-12626 Apr 07 j 00:10	0°♑04'35	
retrograde	-12626 Jun 30 j 11:14	1°♑21'34	
opposition	-12626 Sep 17 j 23:09	0°♑17'12	-2°18'49
min. Earth dist.	-12626 Sep 20 j 20:30	0°♑13'32	40.42341 AU
	-12626 Oct 01 j 15:14	30°℞♐	
direct	-12626 Dec 09 j 22:03	29°♐10'15	

Attention, astronomical year style is used: The year -12625 in astronomical counting style is the year 12626 BCE in historical counting style.

	-12625 Feb 15 j 07:50	0°♑		
evening set	-12625 Mar 07 j 20:10	0°♑29'46		
max. Earth dist.	-12625 Mar 20 j 12:27	0°♑49'35	42.30473 AU	
conjunction	-12625 Mar 23 j 18:37	0°♑54'44	-2°01'09	
minimum elong	-12625 Mar 23 j 18:41	0°♑54'44	2°01'56	
morning rise	-12625 Apr 08 j 14:05	1°♑19'32		
retrograde	-12625 Jul 02 j 03:03	2°♑36'58		
opposition	-12625 Sep 19 j 10:47	1°♑32'22	-1°55'55	
min. Earth dist.	-12625 Sep 22 j 09:54	1°♑28'36	40.18786 AU	
direct	-12625 Dec 11 j 06:31	0°♑25'08		
evening set	-12624 Mar 08 j 08:23	1°♑45'11		
max. Earth dist.	-12624 Mar 21 j 01:41	2°♑05'11	42.06787 AU	
conjunction	-12624 Mar 24 j 07:58	2°♑10'22	-1°39'08	
minimum elong	-12624 Mar 24 j 08:01	2°♑10'22	1°39'56	
morning rise	-12624 Apr 09 j 04:12	2°♑35'24		
retrograde	-12624 Jul 02 j 15:21	3°♑53'16		
opposition	-12624 Sep 19 j 22:41	2°♑48'26	-1°32'41	
min. Earth dist.	-12624 Sep 22 j 22:38	2°♑44'35	39.94882 AU	
direct	-12624 Dec 11 j 19:56	1°♑40'55		
evening set	-12623 Mar 09 j 21:21	3°♑01'30		
max. Earth dist.	-12623 Mar 22 j 13:15	3°♑21'32	41.82754 AU	
conjunction	-12623 Mar 25 j 21:33	3°♑26'54	-1°16'49	
minimum elong	-12623 Mar 25 j 21:36	3°♑26'54	1°17'37	
morning rise	-12623 Apr 10 j 18:39	3°♑52'08		
retrograde	-12623 Jul 04 j 04:29	5°♑10'27		
opposition	-12623 Sep 21 j 10:57	4°♑05'22	-1°09'08	
min. Earth dist.	-12623 Sep 24 j 11:43	4°♑01'27	39.70644 AU	
direct	-12623 Dec 13 j 09:59	2°♑57'31		
evening set	-12622 Mar 11 j 10:44	4°♑18'40		
max. Earth dist.	-12622 Mar 24 j 02:31	4°♑38'50	41.58370 AU	
conjunction	-12622 Mar 27 j 11:35	4°♑44'17	-0°54'13	
minimum elong	-12622 Mar 27 j 11:37	4°♑44'17	0°55'01	
morning rise	-12622 Apr 12 j 08:57	5°♑09'42		
retrograde	-12622 Jul 05 j 16:33	6°♑28'31		
opposition	-12622 Sep 22 j 23:42	5°♑23'08	-0°45'15	
min. Earth dist.	-12622 Sep 26 j 02:14	5°♑19'07	39.46085 AU	
direct	-12622 Dec 14 j 23:50	4°♑14'58		
evening set	-12621 Mar 13 j 00:44	5°♑36'41		
max. Earth dist.	-12621 Mar 25 j 16:04	5°♑56'57	41.33706 AU	
conjunction	-12621 Mar 29 j 01:49	6°♑02'29	-0°31'19	
minimum elong	-12621 Mar 29 j 01:50	6°♑02'29	0°32'07	
morning rise	-12621 Apr 13 j 23:30	6°♑28'06		
retrograde	-12621 Jul 07 j 06:03	7°♑47'25		
opposition	-12621 Sep 24 j 12:39	6°♑41'45	-0°21'03	
min. Earth dist.	-12621 Sep 27 j 14:59	6°♑37'43	39.21283 AU	
direct	-12621 Dec 16 j 12:35	5°♑33'13		
evening set	-12620 Mar 13 j 15:08	6°♑55'32		
max. Earth dist.	-12620 Mar 26 j 04:58	7°♑15'51	41.08804 AU	
conjunction	-12620 Mar 29 j 16:16	7°♑21'31	-0°08'10	
minimum elong	-12620 Mar 29 j 16:16	7°♑21'31	0°08'58	
behind sun begin	-12620 Mar 29 j 10:44	7°♑21'10		
behind sun end	-12620 Mar 29 j 21:49	7°♑21'52		
morning rise	-12620 Apr 14 j 13:56	7°♑47'19		
retrograde	-12620 Jul 07 j 21:55	9°♑07'11		
asc. node	-12620 Aug 04 j 09:28	8°♑57'35		
opposition	-12620 Sep 25 j 02:03	8°♑01'11	0°03'28	
min. Earth dist.	-12620 Sep 28 j 06:02	7°♑57'03	38.96292 AU	
direct	-12620 Dec 16 j 23:36	6°♑52'18		
evening set	-12619 Mar 15 j 06:12	8°♑15'15		
max. Earth dist.	-12619 Mar 27 j 20:26	8°♑35'44	40.83739 AU	
conjunction	-12619 Mar 31 j 07:14	8°♑41'25	0°15'24	
minimum elong	-12619 Mar 31 j 07:13	8°♑41'25	0°14'37	
behind sun begin	-12619 Mar 31 j 04:38	8°♑41'15		
behind sun end	-12619 Mar 31 j 09:48	8°♑41'35		
morning rise	-12619 Apr 16 j 04:32	9°♑07'22		
retrograde	-12619 Jul 09 j 13:59	10°♑27'48		
opposition	-12619 Sep 26 j 15:46	9°♑21'30	0°28'18	
min. Earth dist.	-12619 Sep 29 j 19:45	9°♑17'20	38.71172 AU	
direct	-12619 Dec 18 j 12:52	8°♑12'14		
evening set	-12618 Mar 16 j 22:05	9°♑35'53		
max. Earth dist.	-12618 Mar 29 j 10:08	9°♑56'23	40.58575 AU	
conjunction	-12618 Apr 01 j 22:26	10°♑02'12	0°39'08	
minimum elong	-12618 Apr 01 j 22:25	10°♑02'12	0°38'21	
morning rise	-12618 Apr 17 j 19:19	10°♑28'19		
retrograde	-12618 Jul 11 j 07:03	11°♑49'22		
opposition	-12618 Sep 28 j 06:00	10°♑42'44	0°53'26	
min. Earth dist.	-12618 Oct 01 j 10:29	10°♑38'32	38.46005 AU	
direct	-12618 Dec 20 j 01:39	9°♑33'07		
evening set	-12617 Mar 18 j 14:17	10°♑57'30		
max. Earth dist.	-12617 Mar 31 j 02:08	11°♑18'07	40.33360 AU	
conjunction	-12617 Apr 03 j 14:03	11°♑23'58	1°03'09	
minimum elong	-12617 Apr 03 j 14:01	11°♑23'58	1°02'23	
morning rise	-12617 Apr 19 j 09:55	11°♑50'12		
retrograde	-12617 Jul 12 j 21:01	13°♑11'56		
opposition	-12617 Sep 29 j 20:46	12°♑04'59	1°18'53	
min. Earth dist.	-12617 Oct 03 j 01:56	12°♑00'43	38.20807 AU	
direct	-12617 Dec 21 j 18:15	10°♑55'02		
evening set	-12616 Mar 19 j 07:28	12°♑20'12		
max. Earth dist.	-12616 Mar 31 j 17:37	12°♑40'52	40.08137 AU	
conjunction	-12616 Apr 04 j 06:02	12°♑46'47	1°27'27	
minimum elong	-12616 Apr 04 j 06:00	12°♑46'47	1°26'39	
morning rise	-12616 Apr 20 j 00:59	13°♑13'09		
retrograde	-12616 Jul 13 j 12:37	14°♑35'35		
opposition	-12616 Sep 30 j 11:40	13°♑28'21	1°44'36	
min. Earth dist.	-12616 Oct 03 j 16:27	13°♑24'04	37.95610 AU	
direct	-12616 Dec 22 j 09:51	12°♑18'03		
evening set	-12615 Mar 21 j 01:21	13°♑44'03		
max. Earth dist.	-12615 Apr 02 j 09:29	14°♑04'44	39.82875 AU	
conjunction	-12615 Apr 05 j 22:40	14°♑10'46	1°51'59	
minimum elong	-12615 Apr 05 j 22:37	14°♑10'46	1°51'13	
morning rise	-12615 Apr 21 j 16:08	14°♑37'15		
retrograde	-12615 Jul 15 j 05:21	16°♑00'27		
opposition	-12615 Oct 02 j 03:21	14°♑52'55	2°10'37	
min. Earth dist.	-12615 Oct 05 j 09:41	14°♑48'32	37.70373 AU	
direct	-12615 Dec 23 j 23:17	13°♑42'17		
evening set	-12614 Mar 22 j 20:00	15°♑09'10		
max. Earth dist.	-12614 Apr 04 j 02:49	15°♑29'56	39.57550 AU	
conjunction	-12614 Apr 07 j 15:39	15°♑35'59	2°16'47	
minimum elong	-12614 Apr 07 j 15:35	15°♑35'58	2°16'00	
morning rise	-12614 Apr 23 j 07:24	16°♑02'34		
retrograde	-12614 Jul 16 j 22:51	17°♑26'35		
opposition	-12614 Oct 03 j 19:29	16°♑18'46	2°36'54	
min. Earth dist.	-12614 Oct 07 j 01:26	16°♑14'22	37.45048 AU	
direct	-12614 Dec 25 j 14:48	15°♑07'47		
evening set	-12613 Mar 24 j 15:34	16°♑35'36		
max. Earth dist.	-12613 Apr 05 j 18:38	16°♑56'17	39.32097 AU	
conjunction	-12613 Apr 09 j 09:08	17°♑02'30	2°41'49	
minimum elong	-12613 Apr 09 j 09:03	17°♑02'29	2°41'04	
morning rise	-12613 Apr 24 j 22:57	17°♑29'10		
retrograde	-12613 Jul 18 j 19:40	18°♑54'03		
opposition	-12613 Oct 05 j 12:11	17°♑45'55	3°03'27	

Attention, astronomical year style is used: The year -12613 in astronomical counting style is the year 12614 BCE in historical counting style.

min. Earth dist.	-12613 Oct 08 j 19:24	17°♑41'27	37.19598 AU
direct	-12613 Dec 27 j 04:29	16°♑34'36	
evening set	-12612 Mar 25 j 11:44	18°♑03'23	
max. Earth dist.	-12612 Apr 06 j 13:06	18°♑24'07	39.06473 AU
conjunction	-12612 Apr 10 j 03:09	18°♑30'21	3°07'06
minimum elong	-12612 Apr 10 j 03:03	18°♑30'20	3°06'20
morning rise	-12612 Apr 25 j 14:30	18°♑57'04	
retrograde	-12612 Jul 19 j 14:33	20°♑22'52	
opposition	-12612 Oct 06 j 05:30	19°♑14'24	3°30'16
min. Earth dist.	-12612 Oct 09 j 13:21	19°♑09'52	36.93956 AU
direct	-12612 Dec 27 j 22:00	18°♑02'43	
evening set	-12611 Mar 27 j 09:04	19°♑32'32	
max. Earth dist.	-12611 Apr 08 j 06:06	19°♑53'08	38.80654 AU
conjunction	-12611 Apr 11 j 21:40	19°♑59'32	3°32'35
minimum elong	-12611 Apr 11 j 21:32	19°♑59'31	3°31'51
morning rise	-12611 Apr 27 j 06:29	20°♑26'18	
retrograde	-12611 Jul 21 j 10:33	21°♑53'01	
opposition	-12611 Oct 07 j 23:12	20°♑44'14	3°57'20
min. Earth dist.	-12611 Oct 11 j 07:24	20°♑39'39	36.68136 AU
direct	-12611 Dec 29 j 15:15	19°♑32'09	
evening set	-12610 Mar 29 j 07:09	21°♑03'02	
max. Earth dist.	-12610 Apr 10 j 00:53	21°♑23'34	38.54637 AU
conjunction	-12610 Apr 13 j 16:52	21°♑30'03	3°58'18
minimum elong	-12610 Apr 13 j 16:44	21°♑30'02	3°57'33
morning rise	-12610 Apr 28 j 22:31	21°♑56'49	
retrograde	-12610 Jul 23 j 04:19	23°♑24'32	
opposition	-12610 Oct 09 j 17:44	22°♑15'23	4°24'38
min. Earth dist.	-12610 Oct 13 j 03:16	22°♑10'41	36.42150 AU
direct	-12610 Dec 31 j 10:25	21°♑02'54	
evening set	-12609 Mar 31 j 06:01	22°♑34'52	
max. Earth dist.	-12609 Apr 11 j 20:09	22°♑55'19	38.28483 AU
conjunction	-12609 Apr 15 j 12:16	23°♑01'53	4°24'12
minimum elong	-12609 Apr 15 j 12:07	23°♑01'52	4°23'27
morning rise	-12609 Apr 30 j 14:38	23°♑28'39	
retrograde	-12609 Jul 24 j 23:40	24°♑57'23	
opposition	-12609 Oct 11 j 12:37	23°♑47'52	4°52'09
min. Earth dist.	-12609 Oct 14 j 21:37	23°♑43'10	36.16059 AU
direct	-12608 Jan 02 j 04:48	22°♑34'57	
evening set	-12608 Apr 01 j 05:51	24°♑08'05	
max. Earth dist.	-12608 Apr 12 j 15:11	24°♑28'22	38.02228 AU
conjunction	-12608 Apr 16 j 08:21	24°♑35'03	4°50'16
minimum elong	-12608 Apr 16 j 08:11	24°♑35'02	4°49'32
morning rise	-12608 May 01 j 06:57	25°♑01'47	
retrograde	-12608 Jul 25 j 20:37	26°♑31'36	
opposition	-12608 Oct 12 j 08:00	25°♑21'41	5°19'51
min. Earth dist.	-12608 Oct 15 j 18:26	25°♑16'53	35.89929 AU
direct	-12607 Jan 02 j 21:18	24°♑08'21	
evening set	-12607 Apr 03 j 06:35	25°♑42'40	
max. Earth dist.	-12607 Apr 14 j 12:41	26°♑02'53	37.75960 AU
conjunction	-12607 Apr 18 j 04:59	26°♑09'35	5°16'29
minimum elong	-12607 Apr 18 j 04:47	26°♑09'34	5°15'46
morning rise	-12607 May 02 j 23:23	26°♑36'14	
retrograde	-12607 Jul 27 j 18:05	28°♑07'12	
opposition	-12607 Oct 14 j 04:09	26°♑56'53	5°47'44
min. Earth dist.	-12607 Oct 17 j 13:58	26°♑52'05	35.63823 AU
direct	-12606 Jan 04 j 17:01	25°♑43'06	
evening set	-12606 Apr 05 j 08:17	27°♑18'42	
max. Earth dist.	-12606 Apr 16 j 08:37	27°♑38'41	37.49744 AU
conjunction	-12606 Apr 20 j 01:56	27°♑45'31	5°42'50
minimum elong	-12606 Apr 20 j 01:44	27°♑45'30	5°42'07
morning rise	-12606 May 04 j 15:53	28°♑12'04	
retrograde	-12606 Jul 29 j 18:50	29°♑44'14	
opposition	-12606 Oct 16 j 00:54	28°♑33'30	6°15'44
min. Earth dist.	-12606 Oct 19 j 10:55	28°♑28'41	35.37833 AU
direct	-12605 Jan 06 j 11:24	27°♑19'18	
evening set	-12605 Apr 07 j 10:51	28°♑56'14	
max. Earth dist.	-12605 Apr 18 j 07:29	29°♑16'07	37.23652 AU
conjunction	-12605 Apr 21 j 23:39	29°♑22'55	6°09'16
minimum elong	-12605 Apr 21 j 23:25	29°♑22'54	6°08'34
morning rise	-12605 May 06 j 08:27	29°♑49'21	
	-12605 May 12 j 07:05	0°♒	
retrograde	-12605 Jul 31 j 16:58	1°♒22'47	
opposition	-12605 Oct 17 j 22:21	0°♒11'40	6°43'51
min. Earth dist.	-12605 Oct 21 j 08:22	0°♒06'48	35.12004 AU
	-12605 Oct 26 j 03:40	30°♑℞	
direct	-12604 Jan 08 j 08:06	28°♑57'02	
	-12604 Mar 19 j 05:11	0°♒	
evening set	-12604 Apr 08 j 14:33	0°♒35'22	
max. Earth dist.	-12604 Apr 19 j 05:25	0°♒55'01	36.97748 AU
conjunction	-12604 Apr 22 j 21:44	1°♒01'53	6°35'45
minimum elong	-12604 Apr 22 j 21:30	1°♒01'52	6°35'04
morning rise	-12604 May 07 j 01:19	1°♒28'10	
retrograde	-12604 Aug 01 j 16:52	3°♒02'56	
opposition	-12604 Oct 18 j 20:20	1°♒51'25	7°12'02
min. Earth dist.	-12604 Oct 22 j 05:33	1°♒46'35	34.86380 AU
direct	-12603 Jan 09 j 06:29	0°♒36'23	
evening set	-12603 Apr 10 j 19:16	2°♒16'12	
max. Earth dist.	-12603 Apr 21 j 04:37	2°♒35'36	36.72020 AU
conjunction	-12603 Apr 24 j 20:41	2°♒42'31	7°02'17
minimum elong	-12603 Apr 24 j 20:25	2°♒42'30	7°01'37
morning rise	-12603 May 08 j 18:16	3°♒08'36	
retrograde	-12603 Aug 03 j 16:13	4°♒44'47	
opposition	-12603 Oct 20 j 19:09	3°♒32'54	7°40'16
min. Earth dist.	-12603 Oct 24 j 05:07	3°♒27'58	34.60946 AU
direct	-12602 Jan 11 j 04:36	2°♒17'27	
evening set	-12602 Apr 13 j 01:17	3°♒58'49	
max. Earth dist.	-12602 Apr 23 j 04:57	4°♒17'59	36.46479 AU
conjunction	-12602 Apr 26 j 20:12	4°♒24'54	7°28'50
minimum elong	-12602 Apr 26 j 19:56	4°♒24'53	7°28'10
morning rise	-12602 May 10 j 11:30	4°♒50'45	
retrograde	-12602 Aug 05 j 16:32	6°♒28'25	
opposition	-12602 Oct 22 j 18:42	5°♒16'10	8°08'31
min. Earth dist.	-12602 Oct 26 j 03:28	5°♒11'17	34.35690 AU
direct	-12601 Jan 13 j 03:05	4°♒00'19	
evening set	-12601 Apr 15 j 08:16	5°♒43'18	
max. Earth dist.	-12601 Apr 25 j 04:28	6°♒02'03	36.21071 AU
conjunction	-12601 Apr 28 j 20:17	6°♒09'06	7°55'21
minimum elong	-12601 Apr 28 j 19:59	6°♒09'05	7°54'43
morning rise	-12601 May 12 j 04:48	6°♒34'40	
retrograde	-12601 Aug 07 j 17:59	8°♒13'54	
opposition	-12601 Oct 24 j 19:04	7°♒01'15	8°36'46
min. Earth dist.	-12601 Oct 28 j 04:45	6°♒56'17	34.10571 AU
direct	-12600 Jan 15 j 00:06	5°♒45'00	
evening set	-12600 Apr 16 j 16:38	7°♒29'40	
max. Earth dist.	-12600 Apr 26 j 06:45	7°♒48'07	35.95770 AU
conjunction	-12600 Apr 29 j 21:17	7°♒55'08	8°21'50
minimum elong	-12600 Apr 29 j 20:59	7°♒55'07	8°21'13
morning rise	-12600 May 12 j 22:22	8°♒20'22	
retrograde	-12600 Aug 08 j 20:04	10°♒01'14	
opposition	-12600 Oct 25 j 20:04	8°♒48'11	9°04'58
min. Earth dist.	-12600 Oct 29 j 05:11	8°♒43'13	33.85546 AU

Attention, astronomical year style is used: The year -12599 in astronomical counting style is the year 12600 BCE in historical counting style.

direct	-12599 Jan 15 j 23:19	7°♒31'29	
evening set	-12599 Apr 19 j 02:22	9°♒17'55	
max. Earth dist.	-12599 Apr 28 j 07:24	9°♒35'51	35.70553 AU
conjunction	-12599 May 01 j 22:55	9°♒43'00	8°48'14
minimum elong	-12599 May 01 j 22:35	9°♒42'59	8°47'37
morning rise	-12599 May 14 j 16:16	10°♒07'51	
retrograde	-12599 Aug 11 j 00:50	11°♒50'25	
opposition	-12599 Oct 27 j 22:00	10°♒36'56	9°33'05
min. Earth dist.	-12599 Oct 31 j 07:14	10°♒31'57	33.60629 AU
direct	-12598 Jan 17 j 21:55	9°♒19'48	
evening set	-12598 Apr 21 j 13:10	11°♒08'03	
max. Earth dist.	-12598 Apr 30 j 10:55	11°♒25'33	35.45427 AU
conjunction	-12598 May 04 j 01:19	11°♒32'41	9°14'32
minimum elong	-12598 May 04 j 00:59	11°♒32'40	9°13'56
morning rise	-12598 May 16 j 10:03	11°♒57'06	
retrograde	-12598 Aug 13 j 04:34	13°♒41'26	
opposition	-12598 Oct 30 j 00:53	12°♒27'31	10°01'06
min. Earth dist.	-12598 Nov 02 j 10:05	12°♒22'29	33.35823 AU
direct	-12597 Jan 20 j 00:27	11°♒09'55	
evening set	-12597 Apr 24 j 01:25	13°♒00'03	
max. Earth dist.	-12597 May 02 j 13:47	13°♒16'58	35.20447 AU
conjunction	-12597 May 06 j 04:16	13°♒24'11	9°40'39
minimum elong	-12597 May 06 j 03:54	13°♒24'09	9°40'03
morning rise	-12597 May 18 j 04:08	13°♒48'06	
	-12597 Jun 28 j 15:40	15°♒	
retrograde	-12597 Aug 15 j 10:59	15°♒34'16	
	-12597 Oct 03 j 20:04	15°℞♒	
opposition	-12597 Nov 01 j 04:15	14°♒19'53	10°28'55
min. Earth dist.	-12597 Nov 04 j 12:30	14°♒14'53	33.11204 AU
direct	-12596 Jan 22 j 03:54	13°♒01'48	
evening set	-12596 Apr 25 j 14:44	14°♒53'54	
	-12596 Apr 28 j 16:00	15°♒	
max. Earth dist.	-12596 May 03 j 18:12	15°♒10'15	34.95653 AU
conjunction	-12596 May 07 j 08:00	15°♒17'29	10°06'33
minimum elong	-12596 May 07 j 07:38	15°♒17'27	10°05'59
morning rise	-12596 May 18 j 22:10	15°♒40'50	
retrograde	-12596 Aug 16 j 16:05	17°♒28'55	
opposition	-12596 Nov 02 j 08:39	16°♒14'03	10°56'30
min. Earth dist.	-12596 Nov 05 j 17:22	16°♒09'00	32.86816 AU
	-12595 Jan 05 j 14:04	15°℞♒	
direct	-12595 Jan 23 j 07:09	14°♒55'30	
	-12595 Feb 09 j 19:41	15°♒	
evening set	-12595 Apr 28 j 05:36	16°♒49'38	
max. Earth dist.	-12595 May 05 j 23:43	17°♒05'23	34.71138 AU
conjunction	-12595 May 09 j 12:18	17°♒12'35	10°32'10
minimum elong	-12595 May 09 j 11:54	17°♒12'33	10°31'38
morning rise	-12595 May 20 j 16:11	17°♒35'18	
retrograde	-12595 Aug 18 j 21:03	19°♒25'23	
opposition	-12595 Nov 04 j 13:44	18°♒10'03	11°23'47
min. Earth dist.	-12595 Nov 07 j 20:38	18°♒05'04	32.62753 AU
direct	-12594 Jan 25 j 11:55	16°♒51'01	
evening set	-12594 Apr 30 j 21:42	18°♒47'18	
max. Earth dist.	-12594 May 08 j 05:05	19°♒02'17	34.46973 AU
conjunction	-12594 May 11 j 17:21	19°♒09'32	10°57'27
minimum elong	-12594 May 11 j 16:57	19°♒09'29	10°56'56
morning rise	-12594 May 22 j 10:19	19°♒31'33	
retrograde	-12594 Aug 21 j 03:18	21°♒23'44	
opposition	-12594 Nov 06 j 19:52	20°♒07'56	11°50'41
min. Earth dist.	-12594 Nov 10 j 02:41	20°♒02'55	32.39109 AU
direct	-12593 Jan 27 j 14:48	18°♒48'26	
evening set	-12593 May 03 j 15:13	20°♒46'56	
max. Earth dist.	-12593 May 10 j 13:08	21°♒01'15	34.23266 AU
conjunction	-12593 May 13 j 22:59	21°♒08'22	11°22'19
minimum elong	-12593 May 13 j 22:34	21°♒08'20	11°21'49
morning rise	-12593 May 24 j 04:10	21°♒29'36	
retrograde	-12593 Aug 23 j 10:00	23°♒24'00	
opposition	-12593 Nov 09 j 02:46	22°♒07'44	12°17'07
min. Earth dist.	-12593 Nov 12 j 07:34	22°♒02'50	32.15950 AU
direct	-12592 Jan 29 j 19:44	20°♒47'48	
evening set	-12592 May 05 j 10:19	22°♒48'38	
max. Earth dist.	-12592 May 11 j 19:58	23°♒02'02	34.00075 AU
conjunction	-12592 May 15 j 05:27	23°♒09'11	11°46'42
minimum elong	-12592 May 15 j 05:02	23°♒09'09	11°46'14
morning rise	-12592 May 24 j 22:18	23°♒29'33	
retrograde	-12592 Aug 24 j 19:28	25°♒26'17	
opposition	-12592 Nov 10 j 10:23	24°♒09'35	12°43'01
min. Earth dist.	-12592 Nov 13 j 14:23	24°♒04'42	31.93352 AU
direct	-12591 Jan 30 j 23:56	22°♒49'14	
evening set	-12591 May 08 j 07:06	24°♒52'31	
max. Earth dist.	-12591 May 14 j 05:58	25°♒05'07	33.77452 AU
conjunction	-12591 May 17 j 12:50	25°♒12'06	12°10'32
minimum elong	-12591 May 17 j 12:24	25°♒12'04	12°10'04
morning rise	-12591 May 26 j 16:15	25°♒31'30	
retrograde	-12591 Aug 27 j 04:57	27°♒30'40	
opposition	-12591 Nov 12 j 19:11	26°♒13'33	13°08'20
min. Earth dist.	-12591 Nov 15 j 21:43	26°♒08'44	31.71322 AU
direct	-12590 Feb 02 j 07:07	24°♒52'49	
evening set	-12590 May 11 j 05:28	26°♒58'41	
max. Earth dist.	-12590 May 16 j 14:40	27°♒10'11	33.55414 AU
conjunction	-12590 May 19 j 20:43	27°♒17'11	12°33'45
minimum elong	-12590 May 19 j 20:17	27°♒17'08	12°33'19
morning rise	-12590 May 28 j 10:03	27°♒35'31	
retrograde	-12590 Aug 29 j 17:09	29°♒37'15	
opposition	-12590 Nov 15 j 04:48	28°♒19'44	13°32'57
min. Earth dist.	-12590 Nov 18 j 05:31	28°♒15'01	31.49883 AU
direct	-12589 Feb 04 j 13:55	26°♒58'37	
evening set	-12589 May 14 j 05:44	29°♒07'11	
max. Earth dist.	-12589 May 19 j 01:48	29°♒17'38	33.33938 AU
conjunction	-12589 May 22 j 05:40	29°♒24'29	12°56'17
minimum elong	-12589 May 22 j 05:13	29°♒24'27	12°55'51
morning rise	-12589 May 30 j 03:39	29°♒41'39	
	-12589 Jun 07 j 18:00	0°♓	
retrograde	-12589 Sep 01 j 04:23	1°♓46'04	
opposition	-12589 Nov 17 j 15:24	0°♓28'10	13°56'51
min. Earth dist.	-12589 Nov 20 j 15:26	0°♓23'27	31.28995 AU
	-12589 Dec 05 j 22:29	30°℞♒	
direct	-12588 Feb 06 j 22:24	29°♒06'42	
	-12588 Apr 06 j 22:39	0°♓	
evening set	-12588 May 16 j 08:07	1°♓18'04	
max. Earth dist.	-12588 May 20 j 12:52	1°♓27'15	33.13018 AU
conjunction	-12588 May 23 j 15:16	1°♓34'02	13°18'05
minimum elong	-12588 May 23 j 14:50	1°♓34'00	13°17'42
morning rise	-12588 May 30 j 20:48	1°♓49'52	
retrograde	-12588 Sep 02 j 18:30	3°♓57'06	
opposition	-12588 Nov 19 j 02:53	2°♓38'49	14°19'56
min. Earth dist.	-12588 Nov 22 j 00:40	2°♓34'14	31.08642 AU
direct	-12587 Feb 08 j 09:30	1°♓16'59	
evening set	-12587 May 19 j 12:41	3°♓31'21	
max. Earth dist.	-12587 May 23 j 00:49	3°♓39'05	32.92611 AU
conjunction	-12587 May 26 j 01:46	3°♓45'48	13°39'04
minimum elong	-12587 May 26 j 01:19	3°♓45'45	13°38'43

Attention, astronomical year style is used: The year -12587 in astronomical counting style is the year 12588 BCE in historical counting style.

morning rise	-12587 Jun 01 j 13:19	4°♓00'07	
retrograde	-12587 Sep 05 j 07:58	6°♓10'21	
opposition	-12587 Nov 21 j 15:32	4°♓51'40	14°42'08
min. Earth dist.	-12587 Nov 24 j 12:53	4°♓47'05	30.88809 AU
direct	-12586 Feb 10 j 19:40	3°♓29'29	
evening set	-12586 May 22 j 20:12	5°♓46'59	
max. Earth dist.	-12586 May 25 j 14:24	5°♓53'08	32.72753 AU
conjunction	-12586 May 28 j 13:05	5°♓59'42	13°59'11
minimum elong	-12586 May 28 j 12:39	5°♓59'40	13°58'51
morning rise	-12586 Jun 03 j 04:37	6°♓12'18	
retrograde	-12586 Sep 07 j 20:57	8°♓25'42	
opposition	-12586 Nov 24 j 05:01	7°♓06'37	15°03'22
min. Earth dist.	-12586 Nov 26 j 23:42	7°♓02'11	30.69521 AU
direct	-12585 Feb 13 j 08:05	5°♓44'04	
evening set	-12585 May 26 j 06:58	8°♓04'58	
max. Earth dist.	-12585 May 28 j 03:19	8°♓09'08	32.53454 AU
conjunction	-12585 May 31 j 01:01	8°♓15'40	14°18'21
minimum elong	-12585 May 31 j 00:35	8°♓15'38	14°18'02
morning rise	-12585 Jun 04 j 17:54	8°♓26'15	
retrograde	-12585 Sep 10 j 11:24	10°♓43'06	
opposition	-12585 Nov 26 j 19:26	9°♓23'36	15°23'34
min. Earth dist.	-12585 Nov 29 j 13:12	9°♓19'12	30.50812 AU
direct	-12584 Feb 15 j 18:55	8°♓00'41	
evening set	-12584 May 28 j 23:31	10°♓25'26	
max. Earth dist.	-12584 May 29 j 19:11	10°♓27'18	32.34772 AU
conjunction	-12584 Jun 01 j 13:50	10°♓33'37	14°36'28
minimum elong	-12584 Jun 01 j 13:25	10°♓33'34	14°36'11
morning rise	-12584 Jun 05 j 03:08	10°♓41'41	
retrograde	-12584 Sep 12 j 01:44	13°♓02'25	
opposition	-12584 Nov 28 j 10:34	11°♓42'30	15°42'36
min. Earth dist.	-12584 Dec 01 j 01:51	11°♓38'15	30.32728 AU
direct	-12583 Feb 17 j 08:17	10°♓19'14	
max. Earth dist.	-12583 Jun 01 j 09:48	12°♓47'11	32.16769 AU
evening set	-12583 Jun 02 j 04:43	12°♓48'59	
conjunction	-12583 Jun 04 j 03:13	12°♓53'26	14°53'27
minimum elong	-12583 Jun 04 j 02:48	12°♓53'23	14°53'12
morning rise	-12583 Jun 06 j 00:50	12°♓57'47	
retrograde	-12583 Sep 14 j 17:47	15°♓23'35	
opposition	-12583 Dec 01 j 02:43	14°♓03'15	16°00'24
min. Earth dist.	-12583 Dec 03 j 16:09	13°♓59'06	30.15365 AU
direct	-12582 Feb 19 j 21:17	12°♓39'38	
max. Earth dist.	-12582 Jun 04 j 03:30	15°♓09'06	31.99531 AU
conjunction	-12582 Jun 06 j 17:13	15°♓15'02	15°09'13
minimum elong	-12582 Jun 06 j 16:50	15°♓15'00	15°09'00
retrograde	-12582 Sep 17 j 08:55	17°♓46'30	
opposition	-12582 Dec 03 j 19:47	16°♓25'45	16°16'50
min. Earth dist.	-12582 Dec 06 j 06:46	16°♓21'45	29.98787 AU
direct	-12581 Feb 22 j 12:16	15°♓01'49	
max. Earth dist.	-12581 Jun 06 j 19:56	17°♓32'34	31.83153 AU
conjunction	-12581 Jun 09 j 07:47	17°♓38'23	15°23'39
minimum elong	-12581 Jun 09 j 07:24	17°♓38'21	15°23'28
retrograde	-12581 Sep 20 j 03:28	20°♓11'06	
opposition	-12581 Dec 06 j 13:22	18°♓49'58	16°31'48
min. Earth dist.	-12581 Dec 08 j 21:15	18°♓46'10	29.83104 AU
direct	-12580 Feb 25 j 02:31	17°♓25'43	
max. Earth dist.	-12580 Jun 08 j 14:58	19°♓57'55	31.67708 AU
conjunction	-12580 Jun 10 j 23:08	20°♓03'25	15°36'41
minimum elong	-12580 Jun 10 j 22:48	20°♓03'23	15°36'32
retrograde	-12580 Sep 21 j 20:41	22°♓37'22	
opposition	-12580 Dec 08 j 08:01	21°♓15'53	16°45'13
min. Earth dist.	-12580 Dec 10 j 13:39	21°♓12'13	29.68359 AU
direct	-12579 Feb 26 j 19:09	19°♓51'23	
max. Earth dist.	-12579 Jun 11 j 09:27	22°♓24'51	31.53271 AU
conjunction	-12579 Jun 13 j 14:52	22°♓30'06	15°48'13
minimum elong	-12579 Jun 13 j 14:32	22°♓30'04	15°48'06
retrograde	-12579 Sep 24 j 17:05	25°♓05'15	
opposition	-12579 Dec 11 j 03:21	23°♓43'26	16°57'00
min. Earth dist.	-12579 Dec 13 j 05:00	23°♓40'02	29.54617 AU
direct	-12578 Mar 01 j 13:20	22°♓18'44	
max. Earth dist.	-12578 Jun 14 j 05:29	24°♓53'31	31.39859 AU
conjunction	-12578 Jun 16 j 07:25	24°♓58'27	15°58'10
minimum elong	-12578 Jun 16 j 07:07	24°♓58'26	15°58'06
retrograde	-12578 Sep 27 j 12:05	27°♓34'44	
opposition	-12578 Dec 13 j 23:34	26°♓12'39	17°07'02
min. Earth dist.	-12578 Dec 15 j 23:10	26°♓09'22	29.41885 AU
direct	-12577 Mar 04 j 06:23	24°♓47'46	
max. Earth dist.	-12577 Jun 17 j 01:50	27°♓23'47	31.27492 AU
conjunction	-12577 Jun 19 j 00:20	27°♓28'25	16°06'30
minimum elong	-12577 Jun 19 j 00:03	27°♓28'23	16°06'27
	-12577 Sep 12 j 07:50	0°♈	
retrograde	-12577 Sep 30 j 09:19	0°♈05'46	
	-12577 Oct 18 j 17:15	30°℞♓	
opposition	-12577 Dec 16 j 20:18	28°♓43'26	17°15'19
min. Earth dist.	-12577 Dec 18 j 15:46	28°♓40'26	29.30146 AU
direct	-12576 Mar 06 j 02:13	27°♓18'26	
max. Earth dist.	-12576 Jun 18 j 22:14	29°♓55'33	31.16116 AU
conjunction	-12576 Jun 20 j 17:54	29°♓59'55	16°13'09
minimum elong	-12576 Jun 20 j 17:40	29°♓59'54	16°13'09
	-12576 Jun 20 j 18:44	0°♈	
retrograde	-12576 Oct 02 j 06:46	2°♈38'16	
opposition	-12576 Dec 18 j 17:48	1°♈15'42	17°21'45
min. Earth dist.	-12576 Dec 20 j 11:14	1°♈12'50	29.19370 AU
	-12575 Feb 12 j 19:54	30°℞♓	
direct	-12575 Mar 08 j 21:03	29°♓50'36	
	-12575 Apr 01 j 10:19	0°♈	
max. Earth dist.	-12575 Jun 21 j 20:13	2°♈28'49	31.05731 AU
conjunction	-12575 Jun 23 j 12:00	2°♈32'50	16°18'05
minimum elong	-12575 Jun 23 j 11:47	2°♈32'49	16°18'07
retrograde	-12575 Oct 05 j 03:41	5°♈12'06	
opposition	-12575 Dec 21 j 16:00	3°♈49'19	17°26'19
min. Earth dist.	-12575 Dec 23 j 05:22	3°♈46'44	29.09533 AU
direct	-12574 Mar 11 j 18:23	2°♈24'08	
max. Earth dist.	-12574 Jun 24 j 17:05	5°♈03'13	30.96303 AU
conjunction	-12574 Jun 26 j 06:23	5°♈07'00	16°21'16
minimum elong	-12574 Jun 26 j 06:14	5°♈06'59	16°21'19
retrograde	-12574 Oct 08 j 01:14	7°♈47'05	
opposition	-12574 Dec 24 j 14:47	6°♈24'07	17°28'58
min. Earth dist.	-12574 Dec 26 j 01:43	6°♈21'42	29.00633 AU
direct	-12573 Mar 14 j 13:49	4°♈58'52	
max. Earth dist.	-12573 Jun 27 j 16:20	7°♈38'53	30.87840 AU
conjunction	-12573 Jun 29 j 01:23	7°♈42'14	16°22'38
minimum elong	-12573 Jun 29 j 01:14	7°♈42'13	16°22'44
retrograde	-12573 Oct 10 j 22:20	10°♈23'02	
opposition	-12573 Dec 27 j 13:48	8°♈59'53	17°29'40
min. Earth dist.	-12573 Dec 28 j 21:10	8°♈57'42	28.92655 AU
direct	-12572 Mar 16 j 11:40	7°♈34'34	
conjunction	-12572 Jun 30 j 20:29	10°♈18'20	16°22'11
minimum elong	-12572 Jun 30 j 20:24	10°♈18'20	16°22'18
max. Earth dist.	-12572 Jun 29 j 13:45	10°♈15'12	30.80347 AU

Attention, astronomical year style is used: The year -12572 in astronomical counting style is the year 12573 BCE in historical counting style.

retrograde	-12572 Oct 12 j 20:33	12°♈59'44		
opposition	-12572 Dec 29 j 13:18	11°♈36'24	17°28'22	
min. Earth dist.	-12572 Dec 30 j 17:29	11°♈34'26	28.85640 AU	
direct	-12571 Mar 19 j 08:18	10°♈11'02		
conjunction	-12571 Jul 03 j 15:49	12°♈55'04	16°19'52	
minimum elong	-12571 Jul 03 j 15:46	12°♈55'04	16°20'02	
max. Earth dist.	-12571 Jul 02 j 13:38	12°♈52'24	30.73860 AU	
retrograde	-12571 Oct 15 j 16:25	15°♈36'57		
opposition	-12570 Jan 01 j 13:13	14°♈13'27	17°25'03	
min. Earth dist.	-12570 Jan 02 j 14:01	14°♈11'43	28.79609 AU	
direct	-12570 Mar 22 j 07:04	12°♈48'04		
max. Earth dist.	-12570 Jul 05 j 11:41	15°♈29'50	30.68432 AU	
conjunction	-12570 Jul 06 j 11:10	15°♈32'14	16°15'39	
minimum elong	-12570 Jul 06 j 11:10	15°♈32'14	16°15'51	
retrograde	-12570 Oct 18 j 15:15	18°♈14'30		
opposition	-12569 Jan 04 j 13:07	16°♈50'50	17°19'40	
min. Earth dist.	-12569 Jan 05 j 09:47	16°♈49'24	28.74648 AU	
direct	-12569 Mar 25 j 04:09	15°♈25'27		
max. Earth dist.	-12569 Jul 08 j 11:53	18°♈07'43	30.64121 AU	
conjunction	-12569 Jul 09 j 06:39	18°♈09'38	16°09'32	
minimum elong	-12569 Jul 09 j 06:40	18°♈09'38	16°09'47	
retrograde	-12569 Oct 21 j 11:26	20°♈52'10		
opposition	-12568 Jan 07 j 13:17	19°♈28'22	17°12'12	
min. Earth dist.	-12568 Jan 08 j 06:51	19°♈27'09	28.70795 AU	
direct	-12568 Mar 27 j 02:17	18°♈03'00		
max. Earth dist.	-12568 Jul 10 j 10:33	20°♈45'30	30.60996 AU	
conjunction	-12568 Jul 11 j 01:58	20°♈47'05	16°01'29	
minimum elong	-12568 Jul 11 j 02:03	20°♈47'06	16°01'45	
retrograde	-12568 Oct 23 j 09:42	23°♈29'47		
opposition	-12567 Jan 09 j 13:18	22°♈05'53	17°02'40	
min. Earth dist.	-12567 Jan 10 j 01:58	22°♈05'00	28.68130 AU	
direct	-12567 Mar 30 j 01:36	20°♈40'35		
conjunction	-12567 Jul 13 j 21:24	23°♈24'28	15°51'31	
minimum elong	-12567 Jul 13 j 21:29	23°♈24'29	15°51'50	
max. Earth dist.	-12567 Jul 13 j 10:37	23°♈23'22	30.59106 AU	
retrograde	-12567 Oct 26 j 06:17	26°♈07'14		
opposition	-12566 Jan 12 j 13:36	24°♈43'17	16°51'03	
min. Earth dist.	-12566 Jan 12 j 23:08	24°♈42'37	28.66692 AU	
direct	-12566 Apr 01 j 23:05	23°♈18'05		
conjunction	-12566 Jul 16 j 16:35	26°♈01'40	15°39'39	
minimum elong	-12566 Jul 16 j 16:44	26°♈01'41	15°39'59	
max. Earth dist.	-12566 Jul 16 j 09:42	26°♈00'58	30.58499 AU	
retrograde	-12566 Oct 29 j 04:50	28°♈44'24		
opposition	-12565 Jan 15 j 13:36	27°♈20'27	16°37'23	
min. Earth dist.	-12565 Jan 15 j 17:55	27°♈20'09	28.66494 AU	
direct	-12565 Apr 04 j 22:21	25°♈55'24		
conjunction	-12565 Jul 19 j 11:44	28°♈38'36	15°25'56	
minimum elong	-12565 Jul 19 j 11:54	28°♈38'37	15°26'18	
max. Earth dist.	-12565 Jul 19 j 08:52	28°♈38'18	30.59138 AU	
	-12565 Aug 23 j 04:36	0°♉		
retrograde	-12565 Nov 01 j 02:19	1°♉21'11		
	-12564 Jan 16 j 21:57	30°℞♈		
opposition	-12564 Jan 18 j 13:27	29°♈57'16	16°21'44	
min. Earth dist.	-12564 Jan 18 j 14:50	29°♈57'10	28.67511 AU	
direct	-12564 Apr 06 j 20:48	28°♈32'25		
	-12564 Jun 19 j 09:14	0°♉		
conjunction	-12564 Jul 21 j 06:41	1°♉15'07	15°10'24	
minimum elong	-12564 Jul 21 j 06:54	1°♉15'08	15°10'47	
max. Earth dist.	-12564 Jul 21 j 08:03	1°♉15'15	30.61009 AU	

retrograde	-12564 Nov 02 j 23:57	3°♉57'28		
opposition	-12563 Jan 20 j 13:10	2°♉33'37	16°04'11	
min. Earth dist.	-12563 Jan 20 j 09:44	2°♉33'51	28.69691 AU	
direct	-12563 Apr 09 j 20:34	1°♉08'59		
evening set	-12563 Jul 22 j 05:21	3°♉46'37		
conjunction	-12563 Jul 24 j 01:14	3°♉51'05	14°53'07	
minimum elong	-12563 Jul 24 j 01:28	3°♉51'06	14°53'34	
max. Earth dist.	-12563 Jul 24 j 06:01	3°♉51'34	30.64031 AU	
morning rise	-12563 Jul 25 j 21:36	3°♉55'36		
retrograde	-12563 Nov 05 j 20:58	6°♉33'06		
opposition	-12562 Jan 23 j 12:49	5°♉09'20	15°44'46	
min. Earth dist.	-12562 Jan 23 j 06:23	5°♉09'47	28.72993 AU	
direct	-12562 Apr 12 j 17:49	3°♉44'58		
evening set	-12562 Jul 23 j 05:01	6°♉17'33		
conjunction	-12562 Jul 26 j 19:46	6°♉26'21	14°34'11	
minimum elong	-12562 Jul 26 j 20:02	6°♉26'23	14°34'38	
max. Earth dist.	-12562 Jul 27 j 05:01	6°♉27'17	30.68171 AU	
morning rise	-12562 Jul 30 j 11:03	6°♉35'13		
retrograde	-12562 Nov 08 j 17:59	9°♉07'55		
opposition	-12561 Jan 26 j 11:54	7°♉44'15	15°23'36	
min. Earth dist.	-12561 Jan 26 j 01:23	7°♉44'59	28.77349 AU	
direct	-12561 Apr 15 j 18:02	6°♉20'08		
evening set	-12561 Jul 24 j 17:52	8°♉49'00		
conjunction	-12561 Jul 29 j 13:49	9°♉00'43	14°13'41	
minimum elong	-12561 Jul 29 j 14:06	9°♉00'45	14°14'10	
max. Earth dist.	-12561 Jul 30 j 01:42	9°♉01'55	30.73356 AU	
morning rise	-12561 Aug 03 j 10:24	9°♉12'30		
retrograde	-12561 Nov 11 j 14:17	11°♉41'45		
opposition	-12560 Jan 29 j 10:42	10°♉18'12	15°00'47	
min. Earth dist.	-12560 Jan 28 j 20:52	10°♉19'09	28.82725 AU	
direct	-12560 Apr 17 j 15:19	8°♉54'20		
evening set	-12560 Jul 25 j 11:26	11°♉19'54		
conjunction	-12560 Jul 31 j 07:34	11°♉34'01	13°51'40	
minimum elong	-12560 Jul 31 j 07:53	11°♉34'03	13°52'10	
max. Earth dist.	-12560 Jul 31 j 23:52	11°♉35'39	30.79552 AU	
morning rise	-12560 Aug 06 j 04:18	11°♉48'11		
retrograde	-12560 Nov 13 j 08:03	14°♉14'23		
opposition	-12559 Jan 31 j 09:01	12°♉50'58	14°36'22	
min. Earth dist.	-12559 Jan 30 j 15:46	12°♉52'09	28.89067 AU	
direct	-12559 Apr 20 j 14:06	11°♉27'22		
evening set	-12559 Jul 27 j 07:29	13°♉49'53		
conjunction	-12559 Aug 03 j 00:45	14°♉06'03	13°28'13	
minimum elong	-12559 Aug 03 j 01:04	14°♉06'05	13°28'46	
max. Earth dist.	-12559 Aug 03 j 19:23	14°♉07'55	30.86736 AU	
morning rise	-12559 Aug 09 j 18:49	14°♉22'16		
	-12559 Aug 25 j 21:34	15°♉		
retrograde	-12559 Nov 16 j 03:29	16°♉45'41		
min. Earth dist.	-12558 Feb 02 j 09:42	15°♉23'50	28.96397 AU	
opposition	-12558 Feb 03 j 06:48	15°♉22'23	14°10'29	
	-12558 Feb 17 j 02:15	15°℞♉		
direct	-12558 Apr 23 j 10:51	13°♉59'03		
	-12558 Jun 23 j 05:09	15°♉		
evening set	-12558 Jul 29 j 04:55	16°♉18'41		
conjunction	-12558 Aug 05 j 17:28	16°♉36'39	13°03'27	
minimum elong	-12558 Aug 05 j 17:48	16°♉36'41	13°04'00	
max. Earth dist.	-12558 Aug 06 j 16:34	16°♉38'58	30.94904 AU	
morning rise	-12558 Aug 13 j 06:44	16°♉54'42		
retrograde	-12558 Nov 18 j 19:42	19°♉15'28		
min. Earth dist.	-12557 Feb 05 j 04:10	17°♉53'55	29.04696 AU	
opposition	-12557 Feb 06 j 03:59	17°♉52'18	13°43'11	
direct	-12557 Apr 26 j 08:03	16°♉29'15		

Attention, astronomical year style is used: The year -12557 in astronomical counting style is the year 12558 BCE in historical counting style.

evening set	-12557 Jul 31 j 03:30	18°♉46'06	
conjunction	-12557 Aug 08 j 09:30	19°♉05'41	12°37'24
minimum elong	-12557 Aug 08 j 09:51	19°♉05'43	12°38'00
max. Earth dist.	-12557 Aug 09 j 11:08	19°♉08'14	31.04072 AU
morning rise	-12557 Aug 16 j 16:26	19°♉25'22	
retrograde	-12557 Nov 21 j 12:30	21°♉43'36	
min. Earth dist.	-12556 Feb 07 j 20:05	20°♉22'30	29.14011 AU
opposition	-12556 Feb 09 j 00:12	20°♉20'35	13°14'35
direct	-12556 Apr 28 j 03:49	18°♉57'49	
evening set	-12556 Aug 01 j 02:36	21°♉12'00	
conjunction	-12556 Aug 10 j 00:56	21°♉33'03	12°10'12
minimum elong	-12556 Aug 10 j 01:18	21°♉33'05	12°10'48
max. Earth dist.	-12556 Aug 11 j 06:54	21°♉36'01	31.14265 AU
morning rise	-12556 Aug 19 j 00:12	21°♉54'13	
retrograde	-12556 Nov 23 j 03:09	24°♉10'01	
opposition	-12555 Feb 10 j 20:01	22°♉47'10	12°44'46
min. Earth dist.	-12555 Feb 09 j 13:18	22°♉49'15	29.24374 AU
direct	-12555 Apr 30 j 22:28	21°♉24'43	
evening set	-12555 Aug 03 j 02:15	23°♉36'19	
conjunction	-12555 Aug 12 j 15:34	23°♉58'42	11°41'54
minimum elong	-12555 Aug 12 j 15:56	23°♉58'44	11°42'32
max. Earth dist.	-12555 Aug 14 j 00:36	24°♉01'56	31.25537 AU
morning rise	-12555 Aug 22 j 05:59	24°♉21'12	
retrograde	-12555 Nov 25 j 19:15	26°♉34'40	
min. Earth dist.	-12554 Feb 12 j 03:34	25°♉14'25	29.35820 AU
opposition	-12554 Feb 13 j 14:58	25°♉12'01	12°13'49
direct	-12554 May 03 j 16:45	23°♉49'54	
evening set	-12554 Aug 05 j 02:18	25°♉59'03	
conjunction	-12554 Aug 15 j 05:43	26°♉22'38	11°12'36
minimum elong	-12554 Aug 15 j 06:05	26°♉22'40	11°13'14
max. Earth dist.	-12554 Aug 16 j 18:27	26°♉26'12	31.37884 AU
morning rise	-12554 Aug 25 j 10:23	26°♉46'20	
retrograde	-12554 Nov 28 j 09:45	28°♉57'33	
min. Earth dist.	-12553 Feb 14 j 19:15	27°♉37'42	29.48355 AU
opposition	-12553 Feb 16 j 09:09	27°♉35'10	11°41'52
direct	-12553 May 06 j 10:12	26°♉13'25	
evening set	-12553 Aug 07 j 02:43	28°♉20'11	
conjunction	-12553 Aug 17 j 19:14	28°♉44'51	10°42'24
minimum elong	-12553 Aug 17 j 19:36	28°♉44'53	10°43'05
max. Earth dist.	-12553 Aug 19 j 11:26	28°♉48'44	31.51314 AU
morning rise	-12553 Aug 28 j 13:00	29°♉09'39	
	-12553 Sep 20 j 16:28	0°♊	
retrograde	-12553 Dec 01 j 00:46	1°♊18'42	
	-12552 Feb 16 j 23:27	30°℞♉	
min. Earth dist.	-12552 Feb 17 j 08:28	29°♉59'24	29.61935 AU
opposition	-12552 Feb 19 j 02:29	29°♉56'36	11°09'01
direct	-12552 May 08 j 03:55	28°♉35'15	
	-12552 Jul 20 j 22:15	0°♊	
evening set	-12552 Aug 08 j 03:15	0°♊39'45	
conjunction	-12552 Aug 19 j 07:52	1°♊05'23	10°11'25
minimum elong	-12552 Aug 19 j 08:13	1°♊05'25	10°12'06
max. Earth dist.	-12552 Aug 21 j 02:58	1°♊09'31	31.65750 AU
morning rise	-12552 Aug 30 j 14:04	1°♊31'11	
retrograde	-12552 Dec 02 j 14:47	3°♊38'09	
min. Earth dist.	-12551 Feb 18 j 22:34	2°♊19'19	29.76519 AU
opposition	-12551 Feb 20 j 19:16	2°♊16'22	10°35'22
direct	-12551 May 10 j 18:53	0°♊55'27	
evening set	-12551 Aug 10 j 04:04	2°♊57'44	
conjunction	-12551 Aug 21 j 20:07	3°♊24'15	9°39'44
minimum elong	-12551 Aug 21 j 20:27	3°♊24'17	9°40'27
max. Earth dist.	-12551 Aug 23 j 19:00	3°♊28'43	31.81146 AU
morning rise	-12551 Sep 02 j 13:37	3°♊50'55	
retrograde	-12551 Dec 05 j 04:02	5°♊55'53	
min. Earth dist.	-12550 Feb 21 j 11:17	4°♊37'35	29.92016 AU
opposition	-12550 Feb 23 j 11:07	4°♊34'25	10°01'03
direct	-12550 May 13 j 12:26	3°♊13'57	
evening set	-12550 Aug 12 j 05:07	5°♊14'08	
conjunction	-12550 Aug 24 j 07:31	5°♊41'25	9°07'28
minimum elong	-12550 Aug 24 j 07:51	5°♊41'27	9°08'10
max. Earth dist.	-12550 Aug 26 j 08:16	5°♊46'01	31.97402 AU
morning rise	-12550 Sep 05 j 11:49	6°♊08'52	
retrograde	-12550 Dec 07 j 18:20	8°♊11'54	
min. Earth dist.	-12549 Feb 23 j 23:33	6°♊54'06	30.08357 AU
opposition	-12549 Feb 26 j 02:16	6°♊50'47	9°26'10
direct	-12549 May 16 j 03:25	5°♊30'44	
evening set	-12549 Aug 14 j 06:16	7°♊28'54	
conjunction	-12549 Aug 26 j 18:32	7°♊56'51	8°34'43
minimum elong	-12549 Aug 26 j 18:51	7°♊56'53	8°35'26
max. Earth dist.	-12549 Aug 28 j 22:50	8°♊01'45	32.14432 AU
morning rise	-12549 Sep 08 j 08:31	8°♊24'59	
retrograde	-12549 Dec 10 j 04:04	10°♊26'09	
min. Earth dist.	-12548 Feb 26 j 11:54	9°♊08'48	30.25434 AU
opposition	-12548 Feb 28 j 16:28	9°♊05'22	8°50'50
direct	-12548 May 17 j 18:35	7°♊45'46	
evening set	-12548 Aug 15 j 07:40	9°♊41'58	
conjunction	-12548 Aug 28 j 04:42	10°♊10'30	8°01'33
minimum elong	-12548 Aug 28 j 05:00	10°♊10'32	8°02'17
max. Earth dist.	-12548 Aug 30 j 10:21	10°♊15'29	32.32160 AU
morning rise	-12548 Sep 10 j 03:51	10°♊39'14	
retrograde	-12548 Dec 11 j 14:57	12°♊38'36	
min. Earth dist.	-12547 Feb 27 j 22:18	11°♊21'46	30.43202 AU
opposition	-12547 Mar 02 j 06:00	11°♊18'09	8°15'08
direct	-12547 May 20 j 08:13	9°♊58'57	
evening set	-12547 Aug 17 j 08:52	11°♊53'15	
conjunction	-12547 Aug 30 j 14:15	12°♊22'18	7°28'06
minimum elong	-12547 Aug 30 j 14:32	12°♊22'20	7°28'50
max. Earth dist.	-12547 Sep 01 j 23:08	12°♊27'33	32.50518 AU
morning rise	-12547 Sep 12 j 21:41	12°♊51'33	
retrograde	-12547 Dec 13 j 23:19	14°♊49'10	
min. Earth dist.	-12546 Mar 02 j 09:57	13°♊32'43	30.61586 AU
opposition	-12546 Mar 04 j 18:49	13°♊29'02	7°39'10
direct	-12546 May 22 j 21:33	12°♊10'15	
evening set	-12546 Aug 19 j 10:19	14°♊02'43	
conjunction	-12546 Sep 01 j 23:08	14°♊32'11	6°54'24
minimum elong	-12546 Sep 01 j 23:24	14°♊32'12	6°55'08
max. Earth dist.	-12546 Sep 04 j 09:23	14°♊37'30	32.69470 AU
morning rise	-12546 Sep 15 j 14:14	15°♊01'51	
retrograde	-12546 Dec 16 j 08:08	16°♊57'47	
min. Earth dist.	-12545 Mar 04 j 18:27	15°♊41'50	30.80567 AU
opposition	-12545 Mar 07 j 06:28	15°♊37'58	7°03'01
direct	-12545 May 25 j 09:36	14°♊19'33	
evening set	-12545 Aug 21 j 11:36	16°♊10'16	
conjunction	-12545 Sep 04 j 07:14	16°♊40'05	6°20'33
minimum elong	-12545 Sep 04 j 07:29	16°♊40'06	6°21'19
max. Earth dist.	-12545 Sep 06 j 19:56	16°♊45'35	32.88982 AU
morning rise	-12545 Sep 18 j 05:20	17°♊10'07	
retrograde	-12545 Dec 18 j 14:39	19°♊04'24	
min. Earth dist.	-12544 Mar 06 j 04:28	17°♊48'48	31.00143 AU
opposition	-12544 Mar 08 j 17:32	17°♊44'53	6°26'46
direct	-12544 May 26 j 20:05	16°♊26'52	
evening set	-12544 Aug 22 j 12:38	18°♊15'52	

Attention, astronomical year style is used: The year -12544 in astronomical counting style is the year 12545 BCE in historical counting style.

conjunction	-12544 Sep 05 j 14:29	18°♊45'57	5°46'36
minimum elong	-12544 Sep 05 j 14:42	18°♊45'59	5°47'22
max. Earth dist.	-12544 Sep 08 j 05:20	18°♊51'36	33.09089 AU
morning rise	-12544 Sep 19 j 18:45	19°♊16'16	
retrograde	-12544 Dec 19 j 21:45	21°♊09'00	
min. Earth dist.	-12543 Mar 08 j 11:40	19°♊53'52	31.20331 AU
opposition	-12543 Mar 11 j 03:36	19°♊49'48	5°50'28
direct	-12543 May 29 j 06:13	18°♊32'08	
evening set	-12543 Aug 24 j 13:47	20°♊19'31	
conjunction	-12543 Sep 07 j 21:01	20°♊49'50	5°12'38
minimum elong	-12543 Sep 07 j 21:14	20°♊49'51	5°13'25
max. Earth dist.	-12543 Sep 10 j 13:47	20°♊55'35	33.29797 AU
morning rise	-12543 Sep 22 j 07:05	21°♊20'22	
retrograde	-12543 Dec 22 j 04:53	23°♊11'36	
min. Earth dist.	-12542 Mar 10 j 19:18	21°♊56'51	31.41179 AU
opposition	-12542 Mar 13 j 12:55	21°♊52'42	5°14'13
direct	-12542 May 31 j 14:23	20°♊35'26	
evening set	-12542 Aug 26 j 14:42	22°♊21'17	
conjunction	-12542 Sep 10 j 03:01	22°♊51'45	4°38'42
minimum elong	-12542 Sep 10 j 03:12	22°♊51'46	4°39'28
max. Earth dist.	-12542 Sep 12 j 22:38	22°♊57'43	33.51151 AU
morning rise	-12542 Sep 24 j 17:55	23°♊22'27	
retrograde	-12542 Dec 24 j 10:49	25°♊12'16	
min. Earth dist.	-12541 Mar 13 j 01:31	23°♊57'58	31.62669 AU
opposition	-12541 Mar 15 j 21:18	23°♊53'42	4°38'03
direct	-12541 Jun 03 j 00:51	22°♊36'49	
evening set	-12541 Aug 28 j 15:43	24°♊21'14	
conjunction	-12541 Sep 12 j 08:08	24°♊51'48	4°04'52
minimum elong	-12541 Sep 12 j 08:18	24°♊51'49	4°05'39
max. Earth dist.	-12541 Sep 15 j 04:49	24°♊57'48	33.73122 AU
morning rise	-12541 Sep 27 j 03:36	25°♊22'36	
retrograde	-12541 Dec 26 j 17:58	27°♊11'04	
min. Earth dist.	-12540 Mar 14 j 06:41	25°♊57'15	31.84804 AU
opposition	-12540 Mar 17 j 04:52	25°♊52'52	4°02'02
direct	-12540 Jun 04 j 08:19	24°♊36'24	
evening set	-12540 Aug 29 j 16:27	26°♊19'28	
conjunction	-12540 Sep 13 j 12:45	26°♊50'04	3°31'11
minimum elong	-12540 Sep 13 j 12:53	26°♊50'05	3°31'57
max. Earth dist.	-12540 Sep 16 j 12:26	26°♊56'17	33.95698 AU
morning rise	-12540 Sep 28 j 11:54	27°♊20'56	
retrograde	-12540 Dec 27 j 21:06	29°♊08'08	
min. Earth dist.	-12539 Mar 16 j 12:33	27°♊54'44	32.07525 AU
opposition	-12539 Mar 19 j 11:46	27°♊50'18	3°26'15
direct	-12539 Jun 06 j 16:17	26°♊34'16	
evening set	-12539 Aug 31 j 17:08	28°♊16'03	
conjunction	-12539 Sep 15 j 16:33	28°♊46'39	2°57'42
minimum elong	-12539 Sep 15 j 16:40	28°♊46'40	2°58'30
max. Earth dist.	-12539 Sep 18 j 17:05	28°♊52'53	34.18814 AU
morning rise	-12539 Sep 30 j 19:05	29°♊17'32	
	-12539 Oct 23 j 07:00	0°♋	
retrograde	-12539 Dec 30 j 01:08	1°♋03'32	
	-12538 Mar 12 j 08:04	30°℞♊	
min. Earth dist.	-12538 Mar 18 j 16:05	29°♊50'39	32.30772 AU
opposition	-12538 Mar 21 j 17:54	29°♊46'05	2°50'44
direct	-12538 Jun 08 j 23:05	28°♊30'30	
	-12538 Aug 28 j 02:51	0°♋	
evening set	-12538 Sep 02 j 17:52	0°♋11'04	
conjunction	-12538 Sep 17 j 19:56	0°♋41'38	2°24'29
minimum elong	-12538 Sep 17 j 20:01	0°♋41'38	2°25'15
max. Earth dist.	-12538 Sep 20 j 22:52	0°♋48'01	34.42378 AU
morning rise	-12538 Oct 03 j 01:10	1°♋12'28	
retrograde	-12537 Jan 01 j 03:02	2°♋57'20	
min. Earth dist.	-12537 Mar 20 j 21:07	1°♋44'51	32.54451 AU
opposition	-12537 Mar 23 j 23:13	1°♋40'18	2°15'32
direct	-12537 Jun 11 j 04:47	0°♋25'08	
evening set	-12537 Sep 04 j 18:29	2°♋04'34	
conjunction	-12537 Sep 19 j 22:44	2°♋35'03	1°51'33
minimum elong	-12537 Sep 19 j 22:48	2°♋35'03	1°52'21
max. Earth dist.	-12537 Sep 23 j 02:31	2°♋41'27	34.66319 AU
morning rise	-12537 Oct 05 j 06:07	3°♋05'48	
retrograde	-12536 Jan 03 j 05:31	4°♋49'36	
min. Earth dist.	-12536 Mar 21 j 23:37	3°♋37'37	32.78473 AU
opposition	-12536 Mar 25 j 03:49	3°♋32'58	1°40'43
direct	-12536 Jun 12 j 09:34	2°♋18'14	
evening set	-12536 Sep 05 j 19:01	3°♋56'35	
conjunction	-12536 Sep 21 j 00:45	4°♋26'56	1°18'58
minimum elong	-12536 Sep 21 j 00:48	4°♋26'56	1°19'44
max. Earth dist.	-12536 Sep 24 j 05:41	4°♋33'22	34.90532 AU
morning rise	-12536 Oct 06 j 09:56	4°♋57'33	
retrograde	-12535 Jan 04 j 07:48	6°♋40'22	
min. Earth dist.	-12535 Mar 24 j 03:27	5°♋28'45	33.02768 AU
opposition	-12535 Mar 27 j 07:57	5°♋24'06	1°06'18
direct	-12535 Jun 14 j 12:33	4°♋09'47	
evening set	-12535 Sep 07 j 19:29	5°♋47'06	
conjunction	-12535 Sep 23 j 02:32	6°♋17'17	0°46'45
minimum elong	-12535 Sep 23 j 02:34	6°♋17'18	0°47'32
max. Earth dist.	-12535 Sep 26 j 08:52	6°♋23'47	35.14967 AU
morning rise	-12535 Oct 08 j 12:46	6°♋47'45	
retrograde	-12534 Jan 06 j 09:54	8°♋29'35	
min. Earth dist.	-12534 Mar 26 j 05:38	7°♋18'23	33.27251 AU
opposition	-12534 Mar 29 j 11:07	7°♋13'42	0°32'19
direct	-12534 Jun 16 j 15:55	5°♋59'45	
evening set	-12534 Sep 09 j 19:59	7°♋36'07	
conjunction	-12534 Sep 25 j 03:37	8°♋06'06	0°14'56
minimum elong	-12534 Sep 25 j 03:37	8°♋06'06	0°15'42
behind sun begin	-12534 Sep 25 j 02:02	8°♋05'59	
behind sun end	-12534 Sep 25 j 05:12	8°♋06'14	
max. Earth dist.	-12534 Sep 28 j 09:56	8°♋12'33	35.39547 AU
morning rise	-12534 Oct 10 j 14:46	8°♋36'22	
retrograde	-12533 Jan 08 j 12:03	10°♋17'17	
desc. node	-12533 Mar 18 j 06:56	9°♋20'42	
min. Earth dist.	-12533 Mar 28 j 07:19	9°♋06'26	33.51896 AU
opposition	-12533 Mar 31 j 13:46	9°♋01'44	-0°01'12
direct	-12533 Jun 18 j 17:21	7°♋48'09	
evening set	-12533 Sep 11 j 20:06	9°♋23'35	
conjunction	-12533 Sep 27 j 04:07	9°♋53'21	-0°16'31
minimum elong	-12533 Sep 27 j 04:06	9°♋53'21	0°15'44
behind sun begin	-12533 Sep 27 j 02:35	9°♋53'13	
behind sun end	-12533 Sep 27 j 05:37	9°♋53'28	
max. Earth dist.	-12533 Sep 30 j 12:13	9°♋59'52	35.64254 AU
morning rise	-12533 Oct 12 j 15:24	10°♋23'22	
retrograde	-12532 Jan 10 j 11:16	12°♋03'23	
min. Earth dist.	-12532 Mar 29 j 09:03	10°♋52'52	33.76671 AU
opposition	-12532 Apr 01 j 15:34	10°♋48'10	-0°34'14
direct	-12532 Jun 19 j 21:47	9°♋34'57	
evening set	-12532 Sep 12 j 20:08	11°♋09'30	
conjunction	-12532 Sep 28 j 03:55	11°♋38'59	-0°47'27
minimum elong	-12532 Sep 28 j 03:53	11°♋38'59	0°46'41
max. Earth dist.	-12532 Oct 01 j 11:47	11°♋45'27	35.89102 AU
morning rise	-12532 Oct 13 j 15:11	12°♋08'45	
retrograde	-12531 Jan 11 j 11:32	13°♋47'55	
min. Earth dist.	-12531 Mar 31 j 08:33	12°♋37'47	34.01630 AU

Attention, astronomical year style is used: The year -12531 in astronomical counting style is the year 12532 BCE in historical counting style.

opposition	-12531 Apr 03 j 16:44	12°♋33'01	-1°06'44
direct	-12531 Jun 22 j 00:29	11°♋20'08	
evening set	-12531 Sep 14 j 19:53	12°♋53'50	
conjunction	-12531 Sep 30 j 03:08	13°♋23'03	-1°17'55
minimum elong	-12531 Sep 30 j 03:05	13°♋23'03	1°17'09
max. Earth dist.	-12531 Oct 03 j 12:52	13°♋29'36	36.14117 AU
morning rise	-12531 Oct 15 j 13:50	13°♋52'31	
retrograde	-12530 Jan 13 j 08:53	15°♋30'54	
min. Earth dist.	-12530 Apr 02 j 09:25	14°♋21'02	34.26792 AU
opposition	-12530 Apr 05 j 17:18	14°♋16'18	-1°38'42
direct	-12530 Jun 24 j 02:30	13°♋03'46	
evening set	-12530 Sep 16 j 19:34	14°♋36'40	
conjunction	-12530 Oct 02 j 01:55	15°♋05'34	-1°47'53
minimum elong	-12530 Oct 02 j 01:51	15°♋05'34	1°47'09
max. Earth dist.	-12530 Oct 05 j 12:03	15°♋12'06	36.39347 AU
morning rise	-12530 Oct 17 j 11:36	15°♋34'44	
retrograde	-12529 Jan 15 j 05:10	17°♋12'21	
min. Earth dist.	-12529 Apr 04 j 07:14	16°♋02'54	34.52187 AU
opposition	-12529 Apr 07 j 16:55	15°♋58'04	-2°10'06
direct	-12529 Jun 26 j 03:28	14°♋45'52	
evening set	-12529 Sep 18 j 19:07	16°♋18'03	
conjunction	-12529 Oct 04 j 00:00	16°♋46'36	-2°17'21
minimum elong	-12529 Oct 03 j 23:56	16°♋46'36	2°16'36
max. Earth dist.	-12529 Oct 07 j 11:06	16°♋53'10	36.64795 AU
morning rise	-12529 Oct 19 j 08:27	17°♋15'26	
retrograde	-12528 Jan 17 j 02:39	18°♋52'22	
min. Earth dist.	-12528 Apr 05 j 06:20	17°♋43'14	34.77835 AU
opposition	-12528 Apr 08 j 16:14	17°♋38'25	-2°40'55
direct	-12528 Jun 27 j 01:36	16°♋26'34	
evening set	-12528 Sep 19 j 18:12	17°♋58'04	
conjunction	-12528 Oct 04 j 21:34	18°♋26'16	-2°46'17
minimum elong	-12528 Oct 04 j 21:28	18°♋26'16	2°45'32
max. Earth dist.	-12528 Oct 08 j 10:01	18°♋32'53	36.90483 AU
morning rise	-12528 Oct 20 j 04:09	18°♋54'43	
retrograde	-12527 Jan 17 j 23:39	20°♋31'02	
min. Earth dist.	-12527 Apr 07 j 04:00	19°♋22'16	35.03699 AU
opposition	-12527 Apr 10 j 14:51	19°♋17'25	-3°11'09
direct	-12527 Jun 28 j 23:59	18°♋05'55	
evening set	-12527 Sep 21 j 17:29	19°♋36'48	
conjunction	-12527 Oct 06 j 18:39	20°♋04'38	-3°14'40
minimum elong	-12527 Oct 06 j 18:33	20°♋04'37	3°13'55
max. Earth dist.	-12527 Oct 10 j 07:04	20°♋11'11	37.16356 AU
morning rise	-12527 Oct 21 j 23:21	20°♋32'42	
retrograde	-12526 Jan 19 j 22:25	22°♋08'25	
min. Earth dist.	-12526 Apr 09 j 01:14	21°♋00'00	35.29756 AU
opposition	-12526 Apr 12 j 12:54	20°♋55'09	-3°40'46
direct	-12526 Jun 30 j 21:04	19°♋44'00	
evening set	-12526 Sep 23 j 16:29	21°♋14'19	
conjunction	-12526 Oct 08 j 15:26	21°♋41'45	-3°42'30
minimum elong	-12526 Oct 08 j 15:19	21°♋41'44	3°41'46
max. Earth dist.	-12526 Oct 12 j 05:33	21°♋48'23	37.42370 AU
morning rise	-12526 Oct 23 j 17:37	22°♋09'26	
retrograde	-12525 Jan 21 j 19:06	23°♋44'34	
min. Earth dist.	-12525 Apr 10 j 23:03	22°♋36'28	35.55916 AU
opposition	-12525 Apr 14 j 10:24	22°♋31'40	-4°09'47
direct	-12525 Jul 02 j 20:00	21°♋20'52	
evening set	-12525 Sep 25 j 15:26	22°♋50'39	
conjunction	-12525 Oct 10 j 11:35	23°♋17'41	-4°09'47
minimum elong	-12525 Oct 10 j 11:27	23°♋17'40	4°09'04
max. Earth dist.	-12525 Oct 14 j 01:03	23°♋24'13	37.68448 AU
morning rise	-12525 Oct 25 j 11:04	23°♋44'57	
retrograde	-12524 Jan 23 j 16:39	25°♋19'34	
min. Earth dist.	-12524 Apr 11 j 18:45	24°♋11'52	35.82122 AU
opposition	-12524 Apr 15 j 07:18	24°♋07'00	-4°38'12
direct	-12524 Jul 03 j 17:12	22°♋56'33	
evening set	-12524 Sep 26 j 14:19	24°♋25'51	
conjunction	-12524 Oct 11 j 07:27	24°♋52'27	-4°36'31
minimum elong	-12524 Oct 11 j 07:18	24°♋52'26	4°35'48
max. Earth dist.	-12524 Oct 14 j 21:56	24°♋59'01	37.94516 AU
morning rise	-12524 Oct 26 j 03:52	25°♋19'17	
retrograde	-12523 Jan 24 j 09:49	26°♋53'26	
min. Earth dist.	-12523 Apr 13 j 16:21	25°♋45'59	36.08302 AU
opposition	-12523 Apr 17 j 03:51	25°♋41'12	-5°05'59
direct	-12523 Jul 05 j 15:14	24°♋31'05	
evening set	-12523 Sep 28 j 13:01	25°♋59'55	
conjunction	-12523 Oct 13 j 02:58	26°♋26'04	-5°02'41
minimum elong	-12523 Oct 13 j 02:49	26°♋26'03	5°01'59
max. Earth dist.	-12523 Oct 16 j 17:11	26°♋32'35	38.20522 AU
morning rise	-12523 Oct 27 j 19:58	26°♋52'28	
retrograde	-12522 Jan 26 j 03:10	28°♋26'10	
min. Earth dist.	-12522 Apr 15 j 11:33	27°♋19'03	36.34379 AU
opposition	-12522 Apr 18 j 23:45	27°♋14'14	-5°33'11
direct	-12522 Jul 07 j 12:56	26°♋04'26	
evening set	-12522 Sep 30 j 11:49	27°♋32'50	
conjunction	-12522 Oct 14 j 22:03	27°♋58'33	-5°28'18
minimum elong	-12522 Oct 14 j 21:52	27°♋58'32	5°27'36
max. Earth dist.	-12522 Oct 18 j 11:57	28°♋04'58	38.46381 AU
morning rise	-12522 Oct 29 j 11:32	28°♋24'28	
retrograde	-12521 Jan 27 j 22:01	29°♋57'45	
min. Earth dist.	-12521 Apr 17 j 07:38	28°♋50'52	36.60322 AU
opposition	-12521 Apr 20 j 19:12	28°♋46'07	-5°59'46
direct	-12521 Jul 09 j 07:17	27°♋36'36	
evening set	-12521 Oct 02 j 10:12	29°♋04'36	
conjunction	-12521 Oct 16 j 16:45	29°♋29'50	-5°53'21
minimum elong	-12521 Oct 16 j 16:35	29°♋29'50	5°52'39
max. Earth dist.	-12521 Oct 20 j 07:11	29°♋36'15	38.72096 AU
morning rise	-12521 Oct 31 j 02:08	29°♋55'18	
	-12521 Nov 02 j 19:21	0°♌	
retrograde	-12520 Jan 29 j 15:18	1°♌28'09	
min. Earth dist.	-12520 Apr 18 j 02:45	0°♌21'32	36.86105 AU
opposition	-12520 Apr 21 j 14:07	0°♌16'49	-6°25'44
	-12520 May 04 j 02:40	30°℞♋	
direct	-12520 Jul 10 j 03:26	29°♋07'34	
	-12520 Sep 11 j 19:06	0°♌	
evening set	-12520 Oct 03 j 08:25	0°♌35'11	
conjunction	-12520 Oct 17 j 10:42	0°♌59'57	-6°17'50
minimum elong	-12520 Oct 17 j 10:31	0°♌59'56	6°17'09
max. Earth dist.	-12520 Oct 21 j 00:09	1°♌06'14	38.97659 AU
morning rise	-12520 Oct 31 j 16:03	1°♌24'55	
retrograde	-12519 Jan 30 j 11:04	2°♌57'24	
min. Earth dist.	-12519 Apr 19 j 20:54	1°♌51'01	37.11778 AU
opposition	-12519 Apr 23 j 08:38	1°♌46'19	-6°51'06
direct	-12519 Jul 11 j 21:03	0°♌37'20	
evening set	-12519 Oct 05 j 06:29	2°♌04'36	
conjunction	-12519 Oct 19 j 04:31	2°♌28'52	-6°41'45
minimum elong	-12519 Oct 19 j 04:19	2°♌28'51	6°41'06
max. Earth dist.	-12519 Oct 22 j 19:10	2°♌35'12	39.23117 AU
morning rise	-12519 Nov 02 j 05:19	2°♌53'21	
retrograde	-12518 Feb 01 j 03:50	4°♌25'28	
min. Earth dist.	-12518 Apr 21 j 15:43	3°♌19'17	37.37370 AU
opposition	-12518 Apr 25 j 02:29	3°♌14'39	-7°15'50

Attention, astronomical year style is used: The year -12518 in astronomical counting style is the year 12519 BCE in historical counting style.

direct	-12518 Jul 13 j 16:38	2°♌05'56	
evening set	-12518 Oct 07 j 04:28	3°♌32'53	
conjunction	-12518 Oct 20 j 21:50	3°♌56'39	-7°05'06
minimum elong	-12518 Oct 20 j 21:37	3°♌56'38	7°04'27
max. Earth dist.	-12518 Oct 24 j 11:42	4°♌02'54	39.48522 AU
morning rise	-12518 Nov 03 j 17:55	4°♌20'37	
retrograde	-12517 Feb 02 j 20:23	5°♌52'25	
min. Earth dist.	-12517 Apr 23 j 07:58	4°♌46'33	37.62936 AU
opposition	-12517 Apr 26 j 19:51	4°♌41'53	-7°39'57
direct	-12517 Jul 15 j 10:58	3°♌33'25	
evening set	-12517 Oct 09 j 02:10	5°♌00'05	
conjunction	-12517 Oct 22 j 14:36	5°♌23'21	-7°27'52
minimum elong	-12517 Oct 22 j 14:23	5°♌23'21	7°27'14
max. Earth dist.	-12517 Oct 26 j 05:06	5°♌29'36	39.73901 AU
morning rise	-12517 Nov 05 j 05:47	5°♌46'49	
retrograde	-12516 Feb 04 j 10:16	7°♌18'20	
min. Earth dist.	-12516 Apr 24 j 01:51	6°♌12'41	37.88505 AU
opposition	-12516 Apr 27 j 12:55	6°♌08'04	-8°03'26
direct	-12516 Jul 16 j 05:44	4°♌59'54	
evening set	-12516 Oct 09 j 23:42	6°♌26'19	
conjunction	-12516 Oct 23 j 07:10	6°♌49'05	-7°50'03
minimum elong	-12516 Oct 23 j 06:56	6°♌49'04	7°49'25
max. Earth dist.	-12516 Oct 26 j 21:56	6°♌55'19	39.99299 AU
morning rise	-12516 Nov 05 j 17:01	7°♌12'01	
retrograde	-12515 Feb 05 j 01:04	8°♌43'18	
min. Earth dist.	-12515 Apr 25 j 17:45	7°♌37'58	38.14076 AU
opposition	-12515 Apr 29 j 05:24	7°♌33'20	-8°26'18
direct	-12515 Jul 17 j 23:09	6°♌25'26	
evening set	-12515 Oct 11 j 21:13	7°♌51'39	
conjunction	-12515 Oct 24 j 23:14	8°♌13'54	-8°11'40
minimum elong	-12515 Oct 24 j 23:01	8°♌13'53	8°11'03
max. Earth dist.	-12515 Oct 28 j 13:33	8°♌20'03	40.24682 AU
morning rise	-12515 Nov 07 j 03:52	8°♌36'19	
retrograde	-12514 Feb 06 j 18:26	10°♌07'23	
min. Earth dist.	-12514 Apr 27 j 10:04	9°♌02'19	38.39633 AU
opposition	-12514 Apr 30 j 21:40	8°♌57'43	-8°48'33
direct	-12514 Jul 19 j 13:10	7°♌50'07	
evening set	-12514 Oct 13 j 18:33	9°♌16'10	
conjunction	-12514 Oct 26 j 15:11	9°♌37'53	-8°32'42
minimum elong	-12514 Oct 26 j 14:58	9°♌37'52	8°32'05
max. Earth dist.	-12514 Oct 30 j 06:23	9°♌44'03	40.50019 AU
morning rise	-12514 Nov 08 j 14:02	9°♌59'46	
retrograde	-12513 Feb 08 j 10:02	11°♌30'40	
min. Earth dist.	-12513 Apr 29 j 02:25	10°♌25'51	38.65107 AU
opposition	-12513 May 02 j 13:18	10°♌21'18	-9°10'12
direct	-12513 Jul 21 j 05:35	9°♌14'00	
evening set	-12513 Oct 15 j 15:54	10°♌39'55	
conjunction	-12513 Oct 28 j 06:40	11°♌01'06	-8°53'11
minimum elong	-12513 Oct 28 j 06:27	11°♌01'05	8°52'36
max. Earth dist.	-12513 Oct 31 j 20:36	11°♌07'09	40.75254 AU
morning rise	-12513 Nov 09 j 23:44	11°♌22'27	
retrograde	-12512 Feb 10 j 03:32	12°♌53'11	
min. Earth dist.	-12512 Apr 29 j 17:22	11°♌48'40	38.90459 AU
opposition	-12512 May 03 j 04:43	11°♌44'08	-9°31'15
direct	-12512 Jul 21 j 20:17	10°♌37'06	
evening set	-12512 Oct 16 j 12:57	12°♌02'55	
conjunction	-12512 Oct 28 j 21:50	12°♌23'34	-9°13'07
minimum elong	-12512 Oct 28 j 21:36	12°♌23'33	9°12'32
max. Earth dist.	-12512 Nov 01 j 12:23	12°♌29'37	41.00316 AU
morning rise	-12512 Nov 10 j 08:52	12°♌44'21	
retrograde	-12511 Feb 10 j 18:23	14°♌14'58	
min. Earth dist.	-12511 May 01 j 10:08	13°♌10'39	39.15606 AU
opposition	-12511 May 04 j 19:53	13°♌06'12	-9°51'43
direct	-12511 Jul 23 j 12:23	11°♌59'28	
evening set	-12511 Oct 18 j 10:12	13°♌25'11	
conjunction	-12511 Oct 30 j 12:58	13°♌45'17	-9°32'31
minimum elong	-12511 Oct 30 j 12:44	13°♌45'16	9°31'58
max. Earth dist.	-12511 Nov 03 j 02:32	13°♌51'14	41.25146 AU
morning rise	-12511 Nov 11 j 17:39	14°♌05'31	
	-12511 Dec 18 j 18:24	15°♌	
retrograde	-12510 Feb 12 j 06:26	15°♌36'01	
	-12510 Apr 10 j 09:12	15°℞♌	
min. Earth dist.	-12510 May 03 j 00:31	14°♌31'58	39.40481 AU
opposition	-12510 May 06 j 10:27	14°♌27'32	-10°11'38
direct	-12510 Jul 25 j 05:23	13°♌21'03	
evening set	-12510 Oct 20 j 07:25	14°♌46'41	
	-12510 Oct 28 j 09:35	15°♌	
conjunction	-12510 Nov 01 j 03:44	15°♌06'14	-9°51'24
minimum elong	-12510 Nov 01 j 03:30	15°♌06'13	9°50'50
max. Earth dist.	-12510 Nov 04 j 16:21	15°♌12'05	41.49665 AU
morning rise	-12510 Nov 13 j 02:04	15°♌25'55	
retrograde	-12509 Feb 13 j 19:33	16°♌56'18	
min. Earth dist.	-12509 May 04 j 16:19	15°♌52'26	39.65041 AU
opposition	-12509 May 08 j 00:58	15°♌48'05	-10°31'00
	-12509 Jun 18 j 10:54	15°℞♌	
direct	-12509 Jul 26 j 20:34	14°♌41'50	
	-12509 Sep 02 j 09:16	15°♌	
evening set	-12509 Oct 22 j 04:16	16°♌07'23	
conjunction	-12509 Nov 02 j 18:10	16°♌26'23	-10°09'47
minimum elong	-12509 Nov 02 j 17:55	16°♌26'22	10°09'14
max. Earth dist.	-12509 Nov 06 j 06:46	16°♌32'12	41.73859 AU
morning rise	-12509 Nov 14 j 09:40	16°♌45'30	
retrograde	-12508 Feb 15 j 08:43	18°♌15'47	
min. Earth dist.	-12508 May 05 j 07:08	17°♌12'06	39.89253 AU
opposition	-12508 May 08 j 14:59	17°♌07'48	-10°49'49
direct	-12508 Jul 27 j 10:58	16°♌01'46	
evening set	-12508 Oct 23 j 01:14	17°♌27'15	
conjunction	-12508 Nov 03 j 08:13	17°♌45'41	-10°27'39
minimum elong	-12508 Nov 03 j 07:59	17°♌45'40	10°27'06
max. Earth dist.	-12508 Nov 06 j 19:10	17°♌51'21	41.97723 AU
morning rise	-12508 Nov 14 j 16:57	18°♌04'13	
retrograde	-12507 Feb 15 j 23:57	19°♌34'26	
min. Earth dist.	-12507 May 06 j 20:59	18°♌30'56	40.13167 AU
opposition	-12507 May 10 j 04:40	18°♌26'40	-11°08'06
direct	-12507 Jul 28 j 23:26	17°♌20'49	
evening set	-12507 Oct 24 j 21:55	18°♌46'15	
conjunction	-12507 Nov 04 j 22:04	19°♌04'07	-10°45'00
minimum elong	-12507 Nov 04 j 21:50	19°♌04'06	10°44'29
max. Earth dist.	-12507 Nov 08 j 09:30	19°♌09'46	42.21297 AU
morning rise	-12507 Nov 15 j 23:43	19°♌22'04	
retrograde	-12506 Feb 17 j 13:09	20°♌52'12	
min. Earth dist.	-12506 May 08 j 11:52	19°♌48'48	40.36806 AU
opposition	-12506 May 11 j 18:00	19°♌44'38	-11°25'51
direct	-12506 Jul 30 j 13:56	18°♌38'59	
evening set	-12506 Oct 26 j 18:41	20°♌04'24	
conjunction	-12506 Nov 06 j 11:34	20°♌21'40	-11°01'50
minimum elong	-12506 Nov 06 j 11:20	20°♌21'40	11°01'20
max. Earth dist.	-12506 Nov 09 j 21:39	20°♌27'13	42.44636 AU
morning rise	-12506 Nov 17 j 05:51	20°♌39'02	
retrograde	-12505 Feb 19 j 02:14	22°♌09'06	
min. Earth dist.	-12505 May 10 j 00:11	21°♌05'56	40.60237 AU

Attention, astronomical year style is used: The year -12505 in astronomical counting style is the year 12506 BCE in historical counting style.

opposition	-12505 May 13 j 06:47	21°♌01'45	-11°43'02
direct	-12505 Aug 01 j 04:06	19°♌56'18	
evening set	-12505 Oct 28 j 15:11	21°♌21'43	
conjunction	-12505 Nov 08 j 00:41	21°♌38'24	-11°18'10
minimum elong	-12505 Nov 08 j 00:26	21°♌38'23	11°17'41
max. Earth dist.	-12505 Nov 11 j 10:45	21°♌43'55	42.67782 AU
morning rise	-12505 Nov 18 j 11:37	21°♌55'10	
retrograde	-12504 Feb 20 j 13:11	23°♌25'13	
min. Earth dist.	-12504 May 10 j 14:12	22°♌22'11	40.83507 AU
opposition	-12504 May 13 j 19:32	22°♌18'05	-11°59'41
direct	-12504 Aug 01 j 18:08	21°♌12'50	
evening set	-12504 Oct 29 j 11:31	22°♌38'16	
conjunction	-12504 Nov 08 j 13:33	22°♌54'22	-11°33'59
minimum elong	-12504 Nov 08 j 13:19	22°♌54'21	11°33'30
max. Earth dist.	-12504 Nov 11 j 23:37	22°♌59'51	42.90789 AU
morning rise	-12504 Nov 18 j 16:40	23°♌10'32	
retrograde	-12503 Feb 20 j 22:57	24°♌40'35	
min. Earth dist.	-12503 May 12 j 02:26	23°♌37'46	41.06619 AU
opposition	-12503 May 15 j 07:49	23°♌33'41	-12°15'48
direct	-12503 Aug 03 j 08:42	22°♌28'38	
evening set	-12503 Oct 31 j 08:00	23°♌54'08	
conjunction	-12503 Nov 10 j 02:10	24°♌09'38	-11°49'17
minimum elong	-12503 Nov 10 j 01:55	24°♌09'37	11°48'49
max. Earth dist.	-12503 Nov 13 j 10:56	24°♌15'00	43.13638 AU
morning rise	-12503 Nov 19 j 21:32	24°♌25'12	
retrograde	-12502 Feb 22 j 12:40	25°♌55'17	
min. Earth dist.	-12502 May 13 j 14:52	24°♌52'40	41.29581 AU
opposition	-12502 May 16 j 19:50	24°♌48'37	-12°31'22
direct	-12502 Aug 04 j 19:09	23°♌43'47	
evening set	-12502 Nov 02 j 04:22	25°♌09'22	
conjunction	-12502 Nov 11 j 14:42	25°♌24'17	-12°04'06
minimum elong	-12502 Nov 11 j 14:29	25°♌24'16	12°03'38
max. Earth dist.	-12502 Nov 15 j 00:03	25°♌29'39	43.36318 AU
morning rise	-12502 Nov 21 j 01:57	25°♌39'15	
retrograde	-12501 Feb 24 j 00:49	27°♌09'24	
min. Earth dist.	-12501 May 15 j 03:57	26°♌06'56	41.52335 AU
opposition	-12501 May 18 j 07:37	26°♌02'58	-12°46'26
direct	-12501 Aug 06 j 06:40	24°♌58'22	
evening set	-12501 Nov 04 j 00:42	26°♌24'04	
conjunction	-12501 Nov 13 j 02:44	26°♌38'22	-12°18'25
minimum elong	-12501 Nov 13 j 02:29	26°♌38'21	12°17'59
max. Earth dist.	-12501 Nov 16 j 10:33	26°♌43'37	43.58780 AU
morning rise	-12501 Nov 22 j 05:37	26°♌52'43	
retrograde	-12500 Feb 25 j 13:53	28°♌22'58	
min. Earth dist.	-12500 May 15 j 15:12	27°♌20'45	41.74849 AU
opposition	-12500 May 18 j 19:07	27°♌16'47	-13°00'59
direct	-12500 Aug 06 j 17:39	26°♌12'24	
evening set	-12500 Nov 04 j 21:07	27°♌38'16	
conjunction	-12500 Nov 13 j 14:46	27°♌51'57	-12°32'17
minimum elong	-12500 Nov 13 j 14:32	27°♌51'56	12°31'52
max. Earth dist.	-12500 Nov 16 j 22:26	27°♌57'09	43.80960 AU
morning rise	-12500 Nov 22 j 09:15	28°♌05'40	
retrograde	-12499 Feb 26 j 00:17	29°♌36'02	
min. Earth dist.	-12499 May 17 j 04:26	28°♌33'57	41.97053 AU
opposition	-12499 May 20 j 06:25	28°♌30'06	-13°15'04
direct	-12499 Aug 08 j 06:53	27°♌25'56	
evening set	-12499 Nov 06 j 17:47	28°♌51'59	
conjunction	-12499 Nov 15 j 02:45	29°♌05'01	-12°45'42
minimum elong	-12499 Nov 15 j 02:31	29°♌05'01	12°45'17
max. Earth dist.	-12499 Nov 18 j 09:18	29°♌10'09	44.02807 AU
morning rise	-12499 Nov 23 j 12:18	29°♌18'07	
	-12499 Dec 22 j 05:08	0°♍	
retrograde	-12498 Feb 27 j 09:35	0°♍48'37	
	-12498 May 07 j 21:01	30°℞♌	
min. Earth dist.	-12498 May 18 j 15:49	29°♌46'45	42.18872 AU
opposition	-12498 May 21 j 17:23	29°♌42'55	-13°28'40
direct	-12498 Aug 09 j 20:21	28°♌38'58	
	-12498 Nov 05 j 05:28	0°♍	
evening set	-12498 Nov 08 j 14:30	0°♍05'12	
conjunction	-12498 Nov 16 j 14:24	0°♍17'36	-12°58'41
minimum elong	-12498 Nov 16 j 14:11	0°♍17'35	12°58'18
max. Earth dist.	-12498 Nov 19 j 19:18	0°♍22'35	44.24234 AU
morning rise	-12498 Nov 24 j 14:59	0°♍30'04	
retrograde	-12497 Feb 28 j 20:57	2°♍00'43	
min. Earth dist.	-12497 May 20 j 04:04	0°♍58'59	42.40265 AU
opposition	-12497 May 23 j 04:12	0°♍55'14	-13°41'50
	-12497 Jul 15 j 16:39	30°℞♌	
direct	-12497 Aug 11 j 06:55	29°♌51'28	
	-12497 Sep 06 j 12:44	0°♍	
evening set	-12497 Nov 10 j 11:15	1°♍17'54	
conjunction	-12497 Nov 18 j 01:59	1°♍29'39	-13°11'14
minimum elong	-12497 Nov 18 j 01:45	1°♍29'38	13°10'50
max. Earth dist.	-12497 Nov 21 j 06:37	1°♍34'36	44.45229 AU
morning rise	-12497 Nov 25 j 17:06	1°♍41'27	
retrograde	-12496 Mar 01 j 07:42	3°♍12'17	
min. Earth dist.	-12496 May 20 j 16:01	2°♍10'39	42.61200 AU
opposition	-12496 May 23 j 14:46	2°♍07'00	-13°54'34
direct	-12496 Aug 11 j 17:55	1°♍03'24	
evening set	-12496 Nov 11 j 08:08	2°♍30'02	
conjunction	-12496 Nov 18 j 13:06	2°♍41'08	-13°23'22
minimum elong	-12496 Nov 18 j 12:53	2°♍41'07	13°23'00
max. Earth dist.	-12496 Nov 21 j 15:31	2°♍45'54	44.65784 AU
morning rise	-12496 Nov 25 j 18:29	2°♍52'15	
retrograde	-12495 Mar 02 j 21:14	4°♍23'15	
min. Earth dist.	-12495 May 22 j 02:43	3°♍21'46	42.81712 AU
opposition	-12495 May 25 j 01:05	3°♍18'09	-14°06'51
direct	-12495 Aug 13 j 02:15	2°♍14'42	
evening set	-12495 Nov 13 j 05:10	3°♍41'36	
conjunction	-12495 Nov 20 j 00:11	3°♍52'00	-13°35'05
minimum elong	-12495 Nov 19 j 23:58	3°♍51'59	13°34'43
max. Earth dist.	-12495 Nov 23 j 02:23	3°♍56'44	44.85926 AU
morning rise	-12495 Nov 26 j 19:30	4°♍02'24	
retrograde	-12494 Mar 04 j 07:28	5°♍33'37	
min. Earth dist.	-12494 May 23 j 14:47	4°♍32'12	43.01838 AU
opposition	-12494 May 26 j 11:04	4°♍28'41	-14°18'41
direct	-12494 Aug 14 j 12:37	3°♍25'23	
evening set	-12494 Nov 15 j 02:33	4°♍52'33	
conjunction	-12494 Nov 21 j 11:00	5°♍02'14	-13°46'23
minimum elong	-12494 Nov 21 j 10:47	5°♍02'14	13°46'03
max. Earth dist.	-12494 Nov 24 j 12:02	5°♍06'53	45.05729 AU
morning rise	-12494 Nov 27 j 19:36	5°♍11'56	
retrograde	-12493 Mar 05 j 14:34	6°♍43'22	
min. Earth dist.	-12493 May 25 j 00:25	5°♍42'07	43.21644 AU
opposition	-12493 May 27 j 20:45	5°♍38'36	-14°30'05
direct	-12493 Aug 16 j 01:53	4°♍35'27	
evening set	-12493 Nov 16 j 23:54	6°♍02'55	
conjunction	-12493 Nov 22 j 21:17	6°♍11'52	-13°57'14
minimum elong	-12493 Nov 22 j 21:04	6°♍11'51	13°56'54
max. Earth dist.	-12493 Nov 25 j 21:16	6°♍16'26	45.25236 AU
morning rise	-12493 Nov 28 j 18:50	6°♍20'50	
retrograde	-12492 Mar 05 j 22:34	7°♍52'32	

Attention, astronomical year style is used: The year -12492 in astronomical counting style is the year 12493 BCE in historical counting style.

min. Earth dist.	-12492 May 25 j 11:13	6°♑51'22	43.41194 AU
opposition	-12492 May 28 j 06:23	6°♑47'56	-14°41'02
direct	-12492 Aug 16 j 13:20	5°♑44'56	
evening set	-12492 Nov 17 j 21:56	7°♑12'46	
conjunction	-12492 Nov 23 j 07:41	7°♑20'56	-14°07'40
minimum elong	-12492 Nov 23 j 07:27	7°♑20'55	14°07'22
max. Earth dist.	-12492 Nov 26 j 07:47	7°♑25'29	45.44516 AU
morning rise	-12492 Nov 28 j 17:24	7°♑29'07	
retrograde	-12491 Mar 07 j 06:45	9°♑01'10	
min. Earth dist.	-12491 May 26 j 21:16	8°♑00'07	43.60506 AU
opposition	-12491 May 29 j 15:35	7°♑56'44	-14°51'31
direct	-12491 Aug 17 j 23:59	6°♑53'52	
evening set	-12491 Nov 19 j 20:36	8°♑22'08	
conjunction	-12491 Nov 24 j 17:45	8°♑29'29	-14°17'40
minimum elong	-12491 Nov 24 j 17:33	8°♑29'28	14°17'22
max. Earth dist.	-12491 Nov 27 j 16:06	8°♑33'54	45.63574 AU
morning rise	-12491 Nov 29 j 14:54	8°♑36'50	
retrograde	-12490 Mar 08 j 18:26	10°♑09'17	
min. Earth dist.	-12490 May 28 j 06:29	9°♑08'24	43.79602 AU
opposition	-12490 May 31 j 00:42	9°♑05'02	-15°01'34
direct	-12490 Aug 19 j 07:27	8°♑02'20	
evening set	-12490 Nov 21 j 20:05	9°♑31'06	
conjunction	-12490 Nov 26 j 03:41	9°♑37'34	-14°27'15
minimum elong	-12490 Nov 26 j 03:28	9°♑37'34	14°26'58
max. Earth dist.	-12490 Nov 29 j 02:14	9°♑41'59	45.82400 AU
morning rise	-12490 Nov 30 j 11:09	9°♑44'02	
retrograde	-12489 Mar 10 j 04:48	11°♑16'57	
min. Earth dist.	-12489 May 29 j 17:05	10°♑16'10	43.98447 AU
opposition	-12489 Jun 01 j 09:35	10°♑12'53	-15°11'11
direct	-12489 Aug 20 j 15:52	9°♑10'21	
evening set	-12489 Nov 23 j 21:08	10°♑39'44	
conjunction	-12489 Nov 27 j 13:26	10°♑45'15	-14°36'25
minimum elong	-12489 Nov 27 j 13:15	10°♑45'14	14°36'09
max. Earth dist.	-12489 Nov 30 j 10:34	10°♑49'33	46.00983 AU
morning rise	-12489 Dec 01 j 05:34	10°♑50'44	
retrograde	-12488 Mar 10 j 14:54	12°♑24'12	
min. Earth dist.	-12488 May 30 j 01:38	11°♑23'36	44.17016 AU
opposition	-12488 Jun 01 j 18:11	11°♑20'21	-15°20'23
direct	-12488 Aug 21 j 00:46	10°♑17'58	
evening set	-12488 Nov 25 j 00:28	11°♑48'09	
conjunction	-12488 Nov 27 j 22:57	11°♑52'31	-14°45'12
minimum elong	-12488 Nov 27 j 22:44	11°♑52'30	14°44'57
morning rise	-12488 Nov 30 j 21:09	11°♑56'52	
max. Earth dist.	-12488 Nov 30 j 19:04	11°♑56'45	46.19254 AU
retrograde	-12487 Mar 11 j 22:20	13°♑31'06	
min. Earth dist.	-12487 May 31 j 12:09	12°♑30'35	44.35250 AU
opposition	-12487 Jun 03 j 02:49	12°♑27'26	-15°29'11
direct	-12487 Aug 22 j 10:54	11°♑25'13	
evening set	-12487 Nov 27 j 09:41	12°♑56'31	
conjunction	-12487 Nov 29 j 08:39	12°♑59'25	-14°53'36
minimum elong	-12487 Nov 29 j 08:29	12°♑59'25	14°53'22
morning rise	-12487 Dec 01 j 07:21	13°♑02'19	
max. Earth dist.	-12487 Dec 02 j 04:16	13°♑03'36	46.37163 AU
retrograde	-12486 Mar 13 j 04:12	14°♑37'38	
min. Earth dist.	-12486 Jun 01 j 21:22	13°♑37'15	44.53070 AU
opposition	-12486 Jun 04 j 11:00	13°♑34'08	-15°37'35
direct	-12486 Aug 23 j 22:11	12°♑32'04	
conjunction	-12486 Nov 30 j 18:03	14°♑05'57	-15°01'38
minimum elong	-12486 Nov 30 j 17:51	14°♑05'56	15°01'25
max. Earth dist.	-12486 Dec 03 j 11:11	14°♑09'58	46.54637 AU
retrograde	-12485 Mar 14 j 14:43	15°♑43'47	
min. Earth dist.	-12485 Jun 03 j 06:33	14°♑43'30	44.70443 AU
opposition	-12485 Jun 05 j 19:15	14°♑40'27	-15°45'38
direct	-12485 Aug 25 j 05:04	13°♑38'32	
conjunction	-12485 Dec 02 j 03:16	15°♑12'05	-15°09'20
minimum elong	-12485 Dec 02 j 03:06	15°♑12'04	15°09'07
max. Earth dist.	-12485 Dec 04 j 20:07	15°♑16'03	46.71641 AU
retrograde	-12484 Mar 14 j 23:40	16°♑49'32	
min. Earth dist.	-12484 Jun 03 j 16:51	15°♑49'17	44.87323 AU
opposition	-12484 Jun 06 j 03:23	15°♑46'21	-15°53'19
direct	-12484 Aug 25 j 13:04	14°♑44'33	
conjunction	-12484 Dec 02 j 12:25	16°♑17'46	-15°16'41
minimum elong	-12484 Dec 02 j 12:14	16°♑17'45	15°16'28
max. Earth dist.	-12484 Dec 05 j 03:11	16°♑21'36	46.88176 AU
retrograde	-12483 Mar 16 j 08:27	17°♑54'49	
min. Earth dist.	-12483 Jun 05 j 00:52	16°♑54'41	45.03737 AU
opposition	-12483 Jun 07 j 11:05	16°♑51'47	-16°00'39
direct	-12483 Aug 26 j 21:23	15°♑50'04	
conjunction	-12483 Dec 03 j 21:23	17°♑22'58	-15°23'41
minimum elong	-12483 Dec 03 j 21:13	17°♑22'57	15°23'30
max. Earth dist.	-12483 Dec 06 j 10:55	17°♑26'43	47.04253 AU
retrograde	-12482 Mar 17 j 15:22	18°♑59'38	
min. Earth dist.	-12482 Jun 06 j 10:38	17°♑59'32	45.19724 AU
opposition	-12482 Jun 08 j 18:49	17°♑56'44	-16°07'37
direct	-12482 Aug 28 j 07:08	16°♑55'08	
conjunction	-12482 Dec 05 j 06:10	18°♑27'42	-15°30'19
minimum elong	-12482 Dec 05 j 06:00	18°♑27'41	15°30'09
max. Earth dist.	-12482 Dec 07 j 19:04	18°♑31'24	47.19943 AU
retrograde	-12481 Mar 18 j 20:20	20°♑04'00	
min. Earth dist.	-12481 Jun 07 j 18:36	19°♑03'59	45.35337 AU
opposition	-12481 Jun 10 j 02:08	19°♑01'13	-16°14'13
direct	-12481 Aug 29 j 17:43	17°♑59'43	
conjunction	-12481 Dec 06 j 14:38	19°♑31'58	-15°36'37
minimum elong	-12481 Dec 06 j 14:28	19°♑31'58	15°36'28
max. Earth dist.	-12481 Dec 09 j 01:39	19°♑35'33	47.35299 AU
retrograde	-12480 Mar 19 j 04:49	21°♑07'56	
min. Earth dist.	-12480 Jun 08 j 02:40	20°♑08'00	45.50656 AU
opposition	-12480 Jun 10 j 09:25	20°♑05'17	-16°20'27
direct	-12480 Aug 30 j 00:36	19°♑03'53	
conjunction	-12480 Dec 06 j 23:04	20°♑35'51	-15°42'32
minimum elong	-12480 Dec 06 j 22:54	20°♑35'50	15°42'23
max. Earth dist.	-12480 Dec 09 j 10:14	20°♑39'25	47.50378 AU
retrograde	-12479 Mar 20 j 13:12	22°♑11'29	
min. Earth dist.	-12479 Jun 09 j 11:19	21°♑11'37	45.65694 AU
opposition	-12479 Jun 11 j 16:35	21°♑08'58	-16°26'18
direct	-12479 Aug 31 j 07:31	20°♑07'41	
conjunction	-12479 Dec 08 j 07:23	21°♑39'23	-15°48'06
minimum elong	-12479 Dec 08 j 07:13	21°♑39'22	15°47'59
max. Earth dist.	-12479 Dec 10 j 16:45	21°♑42'50	47.65205 AU
retrograde	-12478 Mar 21 j 23:16	23°♑14'41	
min. Earth dist.	-12478 Jun 10 j 18:08	22°♑14'58	45.80480 AU
opposition	-12478 Jun 12 j 23:24	22°♑12'20	-16°31'46
direct	-12478 Sep 01 j 12:49	21°♑11'10	
conjunction	-12478 Dec 09 j 15:31	22°♑42'37	-15°53'18
minimum elong	-12478 Dec 09 j 15:23	22°♑42'37	15°53'11
max. Earth dist.	-12478 Dec 12 j 00:15	22°♑46'01	47.79770 AU
retrograde	-12477 Mar 23 j 06:14	24°♑17'38	
min. Earth dist.	-12477 Jun 12 j 02:54	23°♑17'58	45.95000 AU
opposition	-12477 Jun 14 j 06:22	23°♑15'26	-16°36'52

Attention, astronomical year style is used: The year -12477 in astronomical counting style is the year 12478 BCE in historical counting style.

direct	-12477 Sep 02 j 20:12	22°♑14'25	
conjunction	-12477 Dec 10 j 23:27	23°♑45'37	-15°58'10
minimum elong	-12477 Dec 10 j 23:18	23°♑45'37	15°58'04
max. Earth dist.	-12477 Dec 13 j 07:39	23°♑48'59	47.94071 AU
retrograde	-12476 Mar 23 j 10:05	25°♑20'21	
min. Earth dist.	-12476 Jun 12 j 10:02	24°♑20'50	46.09213 AU
opposition	-12476 Jun 14 j 13:02	24°♑18'19	-16°41'38
direct	-12476 Sep 03 j 06:36	23°♑17'26	
conjunction	-12476 Dec 11 j 07:22	24°♑48'25	-16°02'41
minimum elong	-12476 Dec 11 j 07:14	24°♑48'24	16°02'35
max. Earth dist.	-12476 Dec 13 j 13:28	24°♑51'39	48.08042 AU
retrograde	-12475 Mar 24 j 17:34	26°♑22'53	
min. Earth dist.	-12475 Jun 13 j 17:48	25°♑23'28	46.23079 AU
opposition	-12475 Jun 15 j 19:34	25°♑21'01	-16°46'03
direct	-12475 Sep 04 j 13:32	24°♑20'16	
conjunction	-12475 Dec 12 j 15:26	25°♑51'02	-16°06'53
minimum elong	-12475 Dec 12 j 15:17	25°♑51'01	16°06'49
max. Earth dist.	-12475 Dec 14 j 21:14	25°♑54'14	48.21629 AU
retrograde	-12474 Mar 26 j 01:02	27°♑25'14	
min. Earth dist.	-12474 Jun 15 j 02:19	26°♑25'52	46.36511 AU
opposition	-12474 Jun 17 j 02:06	26°♑23'31	-16°50'09
direct	-12474 Sep 05 j 20:04	25°♑22'54	
conjunction	-12474 Dec 13 j 23:12	26°♑53'27	-16°10'48
minimum elong	-12474 Dec 13 j 23:05	26°♑53'26	16°10'45
max. Earth dist.	-12474 Dec 16 j 02:41	26°♑56'29	48.34764 AU
retrograde	-12473 Mar 27 j 10:30	28°♑27'22	
min. Earth dist.	-12473 Jun 16 j 09:07	27°♑28'07	46.49464 AU
opposition	-12473 Jun 18 j 08:25	27°♑25'49	-16°53'57
direct	-12473 Sep 07 j 00:41	26°♑25'17	
conjunction	-12473 Dec 15 j 06:56	27°♑55'37	-16°14'25
minimum elong	-12473 Dec 15 j 06:48	27°♑55'37	16°14'22
max. Earth dist.	-12473 Dec 17 j 09:06	27°♑58'35	48.47393 AU
retrograde	-12472 Mar 27 j 17:58	29°♑29'16	
min. Earth dist.	-12472 Jun 16 j 17:53	28°♑30'01	46.61901 AU
opposition	-12472 Jun 18 j 14:47	28°♑27'50	-16°57'27
direct	-12472 Sep 07 j 07:42	27°♑27'24	
conjunction	-12472 Dec 15 j 14:38	28°♑57'30	-16°17'44
minimum elong	-12472 Dec 15 j 14:32	28°♑57'30	16°17'43
max. Earth dist.	-12472 Dec 17 j 15:30	29°♑00'23	48.59520 AU
	-12471 Feb 01 j 23:36	0°♎	
retrograde	-12471 Mar 28 j 22:15	0°♎30'52	
	-12471 May 23 j 14:23	30°℞♑	
min. Earth dist.	-12471 Jun 18 j 00:50	29°♑31'41	46.73813 AU
opposition	-12471 Jun 19 j 20:53	29°♑29'32	-17°00'39
direct	-12471 Sep 08 j 17:01	28°♑29'10	
conjunction	-12471 Dec 16 j 22:08	29°♑59'03	-16°20'47
minimum elong	-12471 Dec 16 j 22:01	29°♑59'02	16°20'46
	-12471 Dec 17 j 14:20	0°♎	
max. Earth dist.	-12471 Dec 18 j 20:37	0°♎01'47	48.71137 AU
retrograde	-12470 Mar 30 j 04:01	1°♎32'08	
min. Earth dist.	-12470 Jun 19 j 08:20	0°♎32'57	46.85255 AU
opposition	-12470 Jun 21 j 02:51	0°♎30'53	-17°03'34
	-12470 Jul 18 j 19:17	30°℞♑	
direct	-12470 Sep 10 j 00:18	29°♑30'35	
	-12470 Nov 01 j 09:36	0°♎	
conjunction	-12470 Dec 18 j 05:37	1°♎00'13	-16°23'32
minimum elong	-12470 Dec 18 j 05:31	1°♎00'13	16°23'33
max. Earth dist.	-12470 Dec 20 j 03:50	1°♎02'56	48.82312 AU
retrograde	-12469 Mar 31 j 08:55	2°♎33'01	
min. Earth dist.	-12469 Jun 20 j 15:49	1°♎33'51	46.96269 AU
opposition	-12469 Jun 22 j 08:43	1°♎31'52	-17°06'11
direct	-12469 Sep 11 j 08:15	0°♎31'37	
conjunction	-12469 Dec 19 j 12:39	2°♎01'01	-16°25'59
minimum elong	-12469 Dec 19 j 12:33	2°♎01'01	16°26'00
max. Earth dist.	-12469 Dec 21 j 08:44	2°♎03'36	48.93106 AU
retrograde	-12468 Mar 31 j 17:56	3°♎33'33	
min. Earth dist.	-12468 Jun 20 j 21:46	2°♎34'27	47.06930 AU
opposition	-12468 Jun 22 j 14:25	2°♎32'29	-17°08'29
direct	-12468 Sep 11 j 12:01	1°♎32'17	
conjunction	-12468 Dec 19 j 19:49	3°♎01'29	-16°28'08
minimum elong	-12468 Dec 19 j 19:44	3°♎01'29	16°28'10
max. Earth dist.	-12468 Dec 21 j 15:15	3°♎04'01	49.03559 AU
retrograde	-12467 Apr 02 j 01:26	4°♎33'45	
min. Earth dist.	-12467 Jun 22 j 05:29	3°♎34'38	47.17270 AU
opposition	-12467 Jun 23 j 20:03	3°♎32'46	-17°10'27
direct	-12467 Sep 12 j 16:42	2°♎32'38	
conjunction	-12467 Dec 21 j 02:58	4°♎01'39	-16°29'58
minimum elong	-12467 Dec 21 j 02:53	4°♎01'38	16°29'59
max. Earth dist.	-12467 Dec 22 j 21:29	4°♎04'07	49.13723 AU
retrograde	-12466 Apr 03 j 05:04	5°♎33'39	
min. Earth dist.	-12466 Jun 23 j 11:08	4°♎34'38	47.27308 AU
opposition	-12466 Jun 25 j 01:32	4°♎32'47	-17°12'07
direct	-12466 Sep 14 j 01:25	3°♎32'43	
conjunction	-12466 Dec 22 j 09:44	5°♎01'33	-16°31'30
minimum elong	-12466 Dec 22 j 09:39	5°♎01'33	16°31'33
max. Earth dist.	-12466 Dec 24 j 02:20	5°♎03'55	49.23586 AU
retrograde	-12465 Apr 04 j 09:52	6°♎33'21	
min. Earth dist.	-12465 Jun 24 j 17:54	5°♎34'22	47.37054 AU
opposition	-12465 Jun 26 j 07:01	5°♎32'34	-17°13'28
direct	-12465 Sep 15 j 08:31	4°♎32'36	
conjunction	-12465 Dec 23 j 16:39	6°♎01'16	-16°32'43
minimum elong	-12465 Dec 23 j 16:35	6°♎01'16	16°32'47
max. Earth dist.	-12465 Dec 25 j 09:14	6°♎03'37	49.33155 AU
retrograde	-12464 Apr 04 j 14:49	7°♎32'52	
min. Earth dist.	-12464 Jun 25 j 00:41	6°♎33'56	47.46469 AU
opposition	-12464 Jun 26 j 12:19	6°♎32'12	-17°14'30
direct	-12464 Sep 15 j 15:19	5°♎32'19	
conjunction	-12464 Dec 23 j 23:25	7°♎00'50	-16°33'39
minimum elong	-12464 Dec 23 j 23:20	7°♎00'50	16°33'45
max. Earth dist.	-12464 Dec 25 j 13:47	7°♎03'03	49.42386 AU
retrograde	-12463 Apr 05 j 23:06	8°♎32'14	
min. Earth dist.	-12463 Jun 26 j 06:25	7°♎33'24	47.55518 AU
opposition	-12463 Jun 27 j 17:33	7°♎31'43	-17°15'15
direct	-12463 Sep 16 j 18:59	6°♎31'55	
conjunction	-12463 Dec 25 j 06:17	8°♎00'18	-16°34'19
minimum elong	-12463 Dec 25 j 06:14	8°♎00'18	16°34'25
max. Earth dist.	-12463 Dec 26 j 19:37	8°♎02'27	49.51204 AU
retrograde	-12462 Apr 07 j 06:16	9°♎31'31	
opposition	-12462 Jun 28 j 22:45	8°♎31'07	-17°15'44
min. Earth dist.	-12462 Jun 27 j 14:01	8°♎32'41	47.64126 AU
direct	-12462 Sep 17 j 23:47	7°♎31'24	
conjunction	-12462 Dec 26 j 13:08	8°♎59'41	-16°34'43
minimum elong	-12462 Dec 26 j 13:03	8°♎59'40	16°34'50
max. Earth dist.	-12462 Dec 28 j 01:00	9°♎01'44	49.59571 AU
retrograde	-12461 Apr 08 j 11:12	10°♎30'42	
min. Earth dist.	-12461 Jun 28 j 19:51	9°♎31'57	47.72240 AU
opposition	-12461 Jun 30 j 03:52	9°♎30'24	-17°15'56
direct	-12461 Sep 19 j 06:44	8°♎30'46	

Attention, astronomical year style is used: The year -12460 in astronomical counting style is the year 12461 BCE in historical counting style.

conjunction	-12461 Dec 27 j 19:38	9°♎58'55	-16°34'52
minimum elong	-12461 Dec 27 j 19:36	9°♎58'55	16°34'59
max. Earth dist.	-12461 Dec 29 j 05:09	10°♎00'50	49.67419 AU
retrograde	-12460 Apr 08 j 16:27	11°♎29'46	
min. Earth dist.	-12460 Jun 29 j 02:56	10°♎31'00	47.79830 AU
opposition	-12460 Jun 30 j 09:03	10°♎29'33	-17°15'54
direct	-12460 Sep 19 j 13:12	9°♎29'59	
conjunction	-12460 Dec 28 j 02:26	10°♎57'59	-16°34'46
minimum elong	-12460 Dec 28 j 02:22	10°♎57'59	16°34'53
max. Earth dist.	-12460 Dec 29 j 11:11	10°♎59'52	49.74740 AU
retrograde	-12459 Apr 09 j 19:52	12°♎28'40	
min. Earth dist.	-12459 Jun 30 j 09:35	11°♎29'54	47.86877 AU
opposition	-12459 Jul 01 j 13:58	11°♎28'32	-17°15'36
direct	-12459 Sep 20 j 20:58	10°♎29'00	
conjunction	-12459 Dec 29 j 09:00	11°♎56'52	-16°34'25
minimum elong	-12459 Dec 29 j 08:58	11°♎56'52	16°34'34
max. Earth dist.	-12459 Dec 30 j 15:08	11°♎58'35	49.81550 AU
retrograde	-12458 Apr 11 j 03:58	13°♎27'20	
opposition	-12458 Jul 02 j 18:49	12°♎27'17	-17°15'03
min. Earth dist.	-12458 Jul 01 j 15:12	12°♎28'36	47.93439 AU
direct	-12458 Sep 22 j 00:07	11°♎27'46	
conjunction	-12458 Dec 30 j 15:21	12°♎55'30	-16°33'49
minimum elong	-12458 Dec 30 j 15:18	12°♎55'30	16°33'59
max. Earth dist.	-12458 Dec 31 j 20:36	12°♎57'10	49.87888 AU
retrograde	-12457 Apr 12 j 11:44	14°♎25'48	
opposition	-12457 Jul 03 j 23:40	13°♎25'47	-17°14'14
min. Earth dist.	-12457 Jul 02 j 22:16	13°♎27'00	47.99561 AU
direct	-12457 Sep 23 j 03:04	12°♎26'19	
conjunction	-12457 Dec 31 j 21:40	13°♎53'55	-16°32'57
minimum elong	-12457 Dec 31 j 21:39	13°♎53'55	16°33'08
max. Earth dist.	-12456 Jan 02 j 01:47	13°♎55'31	49.93841 AU
retrograde	-12456 Apr 12 j 15:13	15°♎24'00	
min. Earth dist.	-12456 Jul 03 j 03:05	14°♎25'16	48.05315 AU
opposition	-12456 Jul 04 j 04:11	14°♎24'04	-17°13'08
direct	-12456 Sep 23 j 10:07	13°♎24'36	
conjunction	-12455 Jan 01 j 03:50	14°♎52'05	-16°31'48
minimum elong	-12455 Jan 01 j 03:48	14°♎52'05	16°31'59
max. Earth dist.	-12455 Jan 02 j 05:57	14°♎53'34	49.99448 AU
retrograde	-12455 Apr 13 j 18:34	16°♎22'00	
min. Earth dist.	-12455 Jul 04 j 09:15	15°♎23'15	48.10752 AU
opposition	-12455 Jul 05 j 08:53	15°♎22'07	-17°11'45
direct	-12455 Sep 24 j 17:22	14°♎22'42	
conjunction	-12454 Jan 02 j 10:07	15°♎50'04	-16°30'22
minimum elong	-12454 Jan 02 j 10:06	15°♎50'04	16°30'35
max. Earth dist.	-12454 Jan 03 j 12:12	15°♎51'33	50.04755 AU
retrograde	-12454 Apr 14 j 21:19	17°♎19'50	
opposition	-12454 Jul 06 j 13:22	16°♎20'01	-17°10'05
min. Earth dist.	-12454 Jul 05 j 14:57	16°♎21'05	48.15885 AU
direct	-12454 Sep 26 j 00:59	15°♎20'38	
conjunction	-12453 Jan 03 j 16:08	16°♎47'54	-16°28'40
minimum elong	-12453 Jan 03 j 16:07	16°♎47'54	16°28'52
max. Earth dist.	-12453 Jan 04 j 16:08	16°♎49'16	50.09788 AU
retrograde	-12453 Apr 16 j 04:12	18°♎17'32	
opposition	-12453 Jul 07 j 17:51	17°♎17'47	-17°08'07
min. Earth dist.	-12453 Jul 06 j 19:39	17°♎18'51	48.20747 AU
direct	-12453 Sep 27 j 04:24	16°♎18'27	
conjunction	-12452 Jan 04 j 22:05	17°♎45'37	-16°26'41
minimum elong	-12452 Jan 04 j 22:03	17°♎45'37	16°26'55
max. Earth dist.	-12452 Jan 05 j 21:27	17°♎46'57	50.14529 AU
retrograde	-12452 Apr 16 j 11:14	19°♎15'08	
opposition	-12452 Jul 07 j 22:23	18°♎15'28	-17°05'53
min. Earth dist.	-12452 Jul 07 j 02:15	18°♎16'25	48.25298 AU
direct	-12452 Sep 27 j 07:35	17°♎16'10	
conjunction	-12451 Jan 05 j 04:13	18°♎43'17	-16°24'26
minimum elong	-12451 Jan 05 j 04:13	18°♎43'17	16°24'40
max. Earth dist.	-12451 Jan 06 j 02:28	18°♎44'33	50.18961 AU
retrograde	-12451 Apr 17 j 17:14	20°♎12'39	
min. Earth dist.	-12451 Jul 08 j 06:56	19°♎14'00	48.29498 AU
opposition	-12451 Jul 09 j 02:36	19°♎13'04	-17°03'22
direct	-12451 Sep 28 j 12:09	18°♎13'49	
conjunction	-12450 Jan 06 j 10:17	19°♎40'54	-16°21'56
minimum elong	-12450 Jan 06 j 10:16	19°♎40'54	16°22'11
max. Earth dist.	-12450 Jan 07 j 06:21	19°♎42'02	50.23004 AU
retrograde	-12450 Apr 18 j 22:13	21°♎10'09	
opposition	-12450 Jul 10 j 07:03	20°♎10'39	-17°00'37
min. Earth dist.	-12450 Jul 09 j 13:16	20°♎11'29	48.33293 AU
direct	-12450 Sep 29 j 17:33	19°♎11'27	
conjunction	-12449 Jan 07 j 16:21	20°♎38'27	-16°19'11
minimum elong	-12449 Jan 07 j 16:22	20°♎38'27	16°19'27
max. Earth dist.	-12449 Jan 08 j 11:52	20°♎39'33	50.26608 AU
retrograde	-12449 Apr 20 j 00:08	22°♎07'36	
opposition	-12449 Jul 11 j 11:25	21°♎08'10	-16°57'37
min. Earth dist.	-12449 Jul 10 j 19:08	21°♎08'57	48.36600 AU
direct	-12449 Oct 01 j 01:16	20°♎09'00	
conjunction	-12448 Jan 08 j 22:21	21°♎35'57	-16°16'13
minimum elong	-12448 Jan 08 j 22:21	21°♎35'57	16°16'28
max. Earth dist.	-12448 Jan 09 j 15:08	21°♎36'54	50.29719 AU
retrograde	-12448 Apr 20 j 06:18	23°♎04'59	
opposition	-12448 Jul 11 j 15:39	22°♎05'36	-16°54'22
min. Earth dist.	-12448 Jul 11 j 00:23	22°♎06'20	48.39400 AU
direct	-12448 Oct 01 j 05:24	21°♎06'27	
conjunction	-12447 Jan 09 j 04:29	22°♎33'20	-16°13'00
minimum elong	-12447 Jan 09 j 04:31	22°♎33'20	16°13'17
max. Earth dist.	-12447 Jan 09 j 20:04	22°♎34'13	50.32299 AU
retrograde	-12447 Apr 21 j 13:34	24°♎02'15	
opposition	-12447 Jul 12 j 20:04	23°♎02'55	-16°50'54
min. Earth dist.	-12447 Jul 12 j 07:16	23°♎03'31	48.41661 AU
direct	-12447 Oct 02 j 08:25	22°♎03'46	
conjunction	-12446 Jan 10 j 10:32	23°♎30'35	-16°09'34
minimum elong	-12446 Jan 10 j 10:32	23°♎30'35	16°09'52
max. Earth dist.	-12446 Jan 11 j 00:27	23°♎31'22	50.34369 AU
retrograde	-12446 Apr 22 j 18:14	24°♎59'22	
min. Earth dist.	-12446 Jul 13 j 11:53	24°♎00'39	48.43419 AU
opposition	-12446 Jul 14 j 00:09	24°♎00'04	-16°47'12
direct	-12446 Oct 03 j 13:25	23°♎00'55	
conjunction	-12445 Jan 11 j 16:23	24°♎27'40	-16°05'54
minimum elong	-12445 Jan 11 j 16:25	24°♎27'40	16°06'13
max. Earth dist.	-12445 Jan 12 j 04:05	24°♎28'20	50.35960 AU
retrograde	-12445 Apr 23 j 22:02	25°♎56'20	
opposition	-12445 Jul 15 j 04:23	24°♎57'03	-16°43'15
min. Earth dist.	-12445 Jul 14 j 18:00	24°♎57'33	48.44742 AU
direct	-12445 Oct 04 j 19:33	23°♎57'54	
conjunction	-12444 Jan 12 j 22:11	25°♎24'36	-16°02'00
minimum elong	-12444 Jan 12 j 22:12	25°♎24'36	16°02'18
max. Earth dist.	-12444 Jan 13 j 09:39	25°♎25'14	50.37146 AU
retrograde	-12444 Apr 23 j 23:52	26°♎53'10	
opposition	-12444 Jul 15 j 08:30	25°♎53'54	-16°39'03
min. Earth dist.	-12444 Jul 14 j 23:20	25°♎54'20	48.45669 AU

Attention, astronomical year style is used: The year -12444 in astronomical counting style is the year 12445 BCE in historical counting style.

direct	-12444 Oct 05 j 03:22	24°♎54'44		
conjunction	-12443 Jan 13 j 03:57	26°♎21'23	-15°57'50	
minimum elong	-12443 Jan 13 j 03:59	26°♎21'23	15°58'10	
max. Earth dist.	-12443 Jan 13 j 13:08	26°♎21'54	50.37977 AU	
retrograde	-12443 Apr 25 j 05:45	27°♎49'52		
opposition	-12443 Jul 16 j 12:27	26°♎50'38	-16°34'35	
min. Earth dist.	-12443 Jul 16 j 03:50	26°♎51'03	48.46270 AU	
direct	-12443 Oct 06 j 06:59	25°♎51'28		
conjunction	-12442 Jan 14 j 09:48	27°♎18'05	-15°53'24	
minimum elong	-12442 Jan 14 j 09:50	27°♎18'05	15°53'44	
max. Earth dist.	-12442 Jan 14 j 18:16	27°♎18'34	50.38489 AU	
retrograde	-12442 Apr 26 j 11:57	28°♎46'30		
opposition	-12442 Jul 17 j 16:39	27°♎47'19	-16°29'50	
min. Earth dist.	-12442 Jul 17 j 09:55	27°♎47'38	48.46564 AU	
direct	-12442 Oct 07 j 10:10	26°♎48'09		
conjunction	-12441 Jan 15 j 15:23	28°♎14'46	-15°48'43	
minimum elong	-12441 Jan 15 j 15:25	28°♎14'46	15°49'04	
max. Earth dist.	-12441 Jan 15 j 22:56	28°♎15'11	50.38721 AU	
retrograde	-12441 Apr 27 j 17:37	29°♎43'06		
opposition	-12441 Jul 18 j 20:37	28°♎43'58	-16°24'50	
min. Earth dist.	-12441 Jul 18 j 14:02	28°♎44'17	48.46567 AU	
direct	-12441 Oct 08 j 14:06	27°♎44'50		
conjunction	-12440 Jan 16 j 21:01	29°♎11'28	-15°43'46	
minimum elong	-12440 Jan 16 j 21:04	29°♎11'28	15°44'07	
max. Earth dist.	-12440 Jan 17 j 02:38	29°♎11'46	50.38656 AU	
	-12440 Feb 23 j 22:29	0°♏		
retrograde	-12440 Apr 27 j 22:27	0°♏39'45		
	-12440 Jul 01 j 17:13	30°℞♎		
opposition	-12440 Jul 19 j 00:38	29°♎40'40	-16°19'34	
min. Earth dist.	-12440 Jul 18 j 19:42	29°♎40'54	48.46271 AU	
direct	-12440 Oct 08 j 18:52	28°♎41'34		
	-12439 Jan 11 j 00:21	0°♏		
conjunction	-12439 Jan 17 j 02:52	0°♏08'13	-15°38'35	
minimum elong	-12439 Jan 17 j 02:55	0°♏08'13	15°38'58	
max. Earth dist.	-12439 Jan 17 j 08:10	0°♏08'31	50.38275 AU	
retrograde	-12439 Apr 29 j 00:39	1°♏36'29		
opposition	-12439 Jul 20 j 04:39	0°♏37'28	-16°14'02	
min. Earth dist.	-12439 Jul 20 j 00:59	0°♏37'38	48.45610 AU	
	-12439 Aug 24 j 20:53	30°℞♎		
direct	-12439 Oct 10 j 01:53	29°♎38'23		
	-12439 Nov 24 j 20:29	0°♏		
conjunction	-12438 Jan 18 j 08:35	1°♏05'03	-15°33'08	
minimum elong	-12438 Jan 18 j 08:39	1°♏05'04	15°33'31	
max. Earth dist.	-12438 Jan 18 j 11:29	1°♏05'13	50.37509 AU	
retrograde	-12438 Apr 30 j 06:11	2°♏33'19		
opposition	-12438 Jul 21 j 08:36	1°♏34'21	-16°08'16	
min. Earth dist.	-12438 Jul 21 j 05:50	1°♏34'29	48.44541 AU	
direct	-12438 Oct 11 j 06:03	0°♏35'17		
conjunction	-12437 Jan 19 j 14:28	2°♏02'00	-15°27'28	
minimum elong	-12437 Jan 19 j 14:31	2°♏02'00	15°27'52	
max. Earth dist.	-12437 Jan 19 j 16:15	2°♏02'06	50.36289 AU	
retrograde	-12437 May 01 j 13:50	3°♏30'14		
opposition	-12437 Jul 22 j 12:45	2°♏31'20	-16°02'17	
min. Earth dist.	-12437 Jul 22 j 12:23	2°♏31'21	48.42985 AU	
direct	-12437 Oct 12 j 08:08	1°♏32'16		
conjunction	-12436 Jan 20 j 20:15	2°♏59'01	-15°21'35	
minimum elong	-12436 Jan 20 j 20:19	2°♏59'01	15°21'59	
max. Earth dist.	-12436 Jan 20 j 20:22	2°♏59'01	50.34572 AU	
retrograde	-12436 May 01 j 20:18	4°♏27'13		
opposition	-12436 Jul 22 j 16:47	3°♏28'21	-15°56'03	
min. Earth dist.	-12436 Jul 22 j 17:04	3°♏28'20	48.40892 AU	
direct	-12436 Oct 12 j 11:01	2°♏29'16		
conjunction	-12435 Jan 21 j 02:09	3°♏56'03	-15°15'28	
minimum elong	-12435 Jan 21 j 02:12	3°♏56'03	15°15'53	
max. Earth dist.	-12435 Jan 20 j 23:39	3°♏55'55	50.32297 AU	
retrograde	-12435 May 03 j 00:27	5°♏24'13		
opposition	-12435 Jul 23 j 20:51	4°♏25'21	-15°49'37	
min. Earth dist.	-12435 Jul 23 j 23:25	4°♏25'14	48.38249 AU	
direct	-12435 Oct 13 j 17:02	3°♏26'15		
conjunction	-12434 Jan 22 j 08:11	4°♏53'03	-15°09'09	
minimum elong	-12434 Jan 22 j 08:16	4°♏53'03	15°09'35	
max. Earth dist.	-12434 Jan 22 j 05:01	4°♏52'52	50.29485 AU	
retrograde	-12434 May 04 j 01:19	6°♏21'10		
opposition	-12434 Jul 25 j 00:57	5°♏22'18	-15°42'57	
min. Earth dist.	-12434 Jul 25 j 04:57	5°♏22'06	48.35071 AU	
direct	-12434 Oct 15 j 01:45	4°♏23'09		
conjunction	-12433 Jan 23 j 13:48	5°♏49'58	-15°02'36	
minimum elong	-12433 Jan 23 j 13:51	5°♏49'58	15°03'02	
max. Earth dist.	-12433 Jan 23 j 08:01	5°♏49'38	50.26174 AU	
retrograde	-12433 May 05 j 06:07	7°♏18'03		
opposition	-12433 Jul 26 j 04:55	6°♏19'09	-15°36'03	
min. Earth dist.	-12433 Jul 26 j 09:45	6°♏18'55	48.31428 AU	
direct	-12433 Oct 16 j 06:32	5°♏19'57		
evening set	-12432 Jan 23 j 08:00	6°♏44'46		
conjunction	-12432 Jan 24 j 19:37	6°♏46'46	-14°55'49	
minimum elong	-12432 Jan 24 j 19:43	6°♏46'47	14°56'17	
max. Earth dist.	-12432 Jan 24 j 12:56	6°♏46'24	50.22416 AU	
morning rise	-12432 Jan 26 j 07:27	6°♏48'47		
retrograde	-12432 May 05 j 11:36	8°♏14'50		
opposition	-12432 Jul 26 j 08:53	7°♏15'55	-15°28'55	
min. Earth dist.	-12432 Jul 26 j 15:56	7°♏15'35	48.27369 AU	
direct	-12432 Oct 16 j 10:31	6°♏16'40		
evening set	-12431 Jan 22 j 13:00	7°♏40'07		
conjunction	-12431 Jan 25 j 01:27	7°♏43'30	-14°48'48	
minimum elong	-12431 Jan 25 j 01:32	7°♏43'30	14°49'15	
max. Earth dist.	-12431 Jan 24 j 17:35	7°♏43'03	50.18288 AU	
morning rise	-12431 Jan 27 j 14:06	7°♏46'54		
retrograde	-12431 May 06 j 17:44	9°♏11'31		
opposition	-12431 Jul 27 j 12:49	8°♏12'35	-15°21'31	
min. Earth dist.	-12431 Jul 27 j 20:05	8°♏12'14	48.22952 AU	
direct	-12431 Oct 17 j 14:02	7°♏13'16		
evening set	-12430 Jan 23 j 01:00	8°♏35'47		
conjunction	-12430 Jan 26 j 07:08	8°♏40'09	-14°41'32	
minimum elong	-12430 Jan 26 j 07:13	8°♏40'10	14°42'00	
max. Earth dist.	-12430 Jan 25 j 21:15	8°♏39'36	50.13816 AU	
morning rise	-12430 Jan 29 j 13:30	8°♏44'33		
retrograde	-12430 May 07 j 23:20	10°♏08'09		
opposition	-12430 Jul 28 j 16:52	9°♏09'12	-15°13'51	
min. Earth dist.	-12430 Jul 29 j 01:48	9°♏08'47	48.18226 AU	
direct	-12430 Oct 18 j 18:00	8°♏09'51		
evening set	-12429 Jan 23 j 16:06	9°♏31'35		
conjunction	-12429 Jan 27 j 12:57	9°♏36'48	-14°34'00	
minimum elong	-12429 Jan 27 j 13:03	9°♏36'48	14°34'28	
max. Earth dist.	-12429 Jan 27 j 02:58	9°♏36'14	50.09056 AU	
morning rise	-12429 Jan 31 j 10:00	9°♏42'01		
retrograde	-12429 May 09 j 01:32	11°♏04'48		
opposition	-12429 Jul 29 j 20:53	10°♏05'50	-15°05'55	
min. Earth dist.	-12429 Jul 30 j 06:39	10°♏05'23	48.13202 AU	
direct	-12429 Oct 20 j 01:04	9°♏06'27		

Attention, astronomical year style is used: The year -12428 in astronomical counting style is the year 12429 BCE in historical counting style.

evening set	-12428 Jan 24 j 08:46	10°♏27'31		
conjunction	-12428 Jan 28 j 18:33	10°♏33'28	-14°26'12	
minimum elong	-12428 Jan 28 j 18:38	10°♏33'28	14°26'42	
max. Earth dist.	-12428 Jan 28 j 06:28	10°♏32'47	50.04014 AU	
morning rise	-12428 Feb 02 j 04:33	10°♏39'25		
retrograde	-12428 May 09 j 05:47	12°♏01'29		
opposition	-12428 Jul 30 j 00:54	11°♏02'32	-14°57'44	
min. Earth dist.	-12428 Jul 30 j 11:22	11°♏02'03	48.07889 AU	
direct	-12428 Oct 20 j 06:05	10°♏03'07		
evening set	-12427 Jan 24 j 02:49	11°♏23'37		
max. Earth dist.	-12427 Jan 28 j 11:36	11°♏29'30	49.98652 AU	
conjunction	-12427 Jan 29 j 00:28	11°♏30'13	-14°18'10	
minimum elong	-12427 Jan 29 j 00:35	11°♏30'13	14°18'39	
morning rise	-12427 Feb 02 j 22:19	11°♏36'51		
retrograde	-12427 May 10 j 11:57	12°♏58'18		
opposition	-12427 Jul 31 j 04:58	11°♏59'21	-14°49'17	
min. Earth dist.	-12427 Jul 31 j 17:28	11°♏58'46	48.02233 AU	
direct	-12427 Oct 21 j 09:36	10°♏59'55		
evening set	-12426 Jan 24 j 21:54	12°♏19'54		
conjunction	-12426 Jan 30 j 06:23	12°♏27'07	-14°09'53	
minimum elong	-12426 Jan 30 j 06:29	12°♏27'07	14°10'24	
max. Earth dist.	-12426 Jan 29 j 16:12	12°♏26'19	49.92941 AU	
morning rise	-12426 Feb 04 j 15:04	12°♏34'21		
retrograde	-12426 May 11 j 19:08	13°♏55'15		
opposition	-12426 Aug 01 j 09:02	12°♏56'19	-14°40'35	
min. Earth dist.	-12426 Aug 01 j 21:56	12°♏55'42	47.96188 AU	
direct	-12426 Oct 22 j 11:58	11°♏56'51		
evening set	-12425 Jan 25 j 17:25	13°♏16'23		
conjunction	-12425 Jan 31 j 12:09	13°♏24'11	-14°01'22	
minimum elong	-12425 Jan 31 j 12:16	13°♏24'11	14°01'52	
max. Earth dist.	-12425 Jan 30 j 19:47	13°♏23'16	49.86797 AU	
morning rise	-12425 Feb 06 j 07:10	13°♏32'00		
retrograde	-12425 May 13 j 00:32	14°♏52'22		
opposition	-12425 Aug 02 j 13:17	13°♏53'27	-14°31'39	
min. Earth dist.	-12425 Aug 03 j 04:21	13°♏52'44	47.89692 AU	
direct	-12425 Oct 23 j 16:33	12°♏53'57		
evening set	-12424 Jan 26 j 13:48	14°♏13'03		
conjunction	-12424 Feb 01 j 18:15	14°♏21'25	-13°52'37	
minimum elong	-12424 Feb 01 j 18:21	14°♏21'25	13°53'08	
max. Earth dist.	-12424 Feb 01 j 01:12	14°♏20'27	49.80174 AU	
morning rise	-12424 Feb 07 j 22:50	14°♏29'46		
	-12424 Mar 02 j 05:32	15°♏		
retrograde	-12424 May 13 j 02:28	15°♏49'40		
	-12424 Jul 25 j 14:00	15°℞♏		
opposition	-12424 Aug 02 j 17:25	14°♏50'44	-14°22'29	
min. Earth dist.	-12424 Aug 03 j 09:52	14°♏49'57	47.82677 AU	
direct	-12424 Oct 24 j 00:40	13°♏51'12		
	-12423 Jan 19 j 00:55	15°♏		
evening set	-12423 Jan 26 j 10:47	15°♏09'54		
max. Earth dist.	-12423 Feb 01 j 04:26	15°♏17'39	49.73031 AU	
conjunction	-12423 Feb 02 j 00:19	15°♏18'46	-13°43'38	
minimum elong	-12423 Feb 02 j 00:27	15°♏18'47	13°44'10	
morning rise	-12423 Feb 08 j 14:10	15°♏27'40		
retrograde	-12423 May 14 j 07:40	16°♏47'05		
opposition	-12423 Aug 03 j 21:41	15°♏48'08	-14°13'05	
min. Earth dist.	-12423 Aug 04 j 15:14	15°♏47'18	47.75139 AU	
	-12423 Sep 22 j 00:21	15°℞♏		
direct	-12423 Oct 25 j 05:47	14°♏48'32		
	-12423 Nov 27 j 06:01	15°♏		
evening set	-12422 Jan 27 j 08:00	16°♏06'51		
max. Earth dist.	-12422 Feb 02 j 09:24	16°♏15'02	49.65355 AU	
conjunction	-12422 Feb 03 j 06:28	16°♏16'13	-13°34'27	
minimum elong	-12422 Feb 03 j 06:35	16°♏16'14	13°34'59	
morning rise	-12422 Feb 10 j 05:06	16°♏25'37		
retrograde	-12422 May 15 j 13:20	17°♏44'36		
opposition	-12422 Aug 05 j 02:01	16°♏45'38	-14°03'27	
min. Earth dist.	-12422 Aug 05 j 21:55	16°♏44'41	47.67082 AU	
direct	-12422 Oct 26 j 10:05	15°♏45'57		
evening set	-12421 Jan 28 j 05:44	17°♏03'53		
conjunction	-12421 Feb 04 j 12:34	17°♏13'45	-13°25'01	
minimum elong	-12421 Feb 04 j 12:42	17°♏13'45	13°25'34	
max. Earth dist.	-12421 Feb 03 j 14:06	17°♏12'28	49.57205 AU	
morning rise	-12421 Feb 11 j 19:34	17°♏23'38		
retrograde	-12421 May 16 j 19:50	18°♏42'10		
opposition	-12421 Aug 06 j 06:12	17°♏43'09	-13°53'34	
min. Earth dist.	-12421 Aug 07 j 02:30	17°♏42'11	47.58571 AU	
direct	-12421 Oct 27 j 13:37	16°♏43'23		
evening set	-12420 Jan 29 j 03:30	18°♏00'59		
conjunction	-12420 Feb 05 j 18:34	18°♏11'19	-13°15'21	
minimum elong	-12420 Feb 05 j 18:40	18°♏11'19	13°15'54	
max. Earth dist.	-12420 Feb 04 j 17:52	18°♏09'55	49.48619 AU	
morning rise	-12420 Feb 13 j 09:51	18°♏21'40		
retrograde	-12420 May 17 j 02:22	19°♏39'48		
opposition	-12420 Aug 06 j 10:33	18°♏40'44	-13°43'26	
min. Earth dist.	-12420 Aug 07 j 08:46	18°♏39'40	47.49662 AU	
direct	-12420 Oct 27 j 17:38	17°♏40'52		
evening set	-12419 Jan 29 j 01:46	18°♏58'09		
max. Earth dist.	-12419 Feb 04 j 23:55	19°♏07'32	49.39664 AU	
conjunction	-12419 Feb 06 j 00:48	19°♏08'56	-13°05'25	
minimum elong	-12419 Feb 06 j 00:56	19°♏08'57	13°06'00	
morning rise	-12419 Feb 13 j 23:53	19°♏19'44		
retrograde	-12419 May 18 j 05:01	20°♏37'30		
opposition	-12419 Aug 07 j 14:50	19°♏38'22	-13°33'03	
min. Earth dist.	-12419 Aug 08 j 13:59	19°♏37'16	47.40398 AU	
direct	-12419 Oct 29 j 01:21	18°♏38'25		
evening set	-12418 Jan 30 j 00:17	19°♏55'24		
max. Earth dist.	-12418 Feb 06 j 03:54	20°♏05'06	49.30393 AU	
conjunction	-12418 Feb 07 j 06:54	20°♏06'38	-12°55'15	
minimum elong	-12418 Feb 07 j 07:02	20°♏06'38	12°55'48	
morning rise	-12418 Feb 15 j 13:43	20°♏17'52		
retrograde	-12418 May 19 j 09:01	21°♏35'16		
opposition	-12418 Aug 08 j 19:15	20°♏36'06	-13°22'23	
min. Earth dist.	-12418 Aug 09 j 19:01	20°♏34'58	47.30851 AU	
direct	-12418 Oct 30 j 07:04	19°♏36'05		
evening set	-12417 Jan 30 j 22:45	20°♏52'46		
max. Earth dist.	-12417 Feb 07 j 09:24	21°♏02'52	49.20838 AU	
conjunction	-12417 Feb 08 j 12:58	21°♏04'26	-12°44'48	
minimum elong	-12417 Feb 08 j 13:06	21°♏04'26	12°45'23	
morning rise	-12417 Feb 17 j 03:14	21°♏16'07		
retrograde	-12417 May 20 j 14:25	22°♏33'11		
opposition	-12417 Aug 09 j 23:48	21°♏33'58	-13°11'27	
min. Earth dist.	-12417 Aug 11 j 01:16	21°♏32'45	47.21026 AU	
direct	-12417 Oct 31 j 12:05	20°♏33'52		
evening set	-12416 Jan 31 j 21:47	21°♏50'17		
conjunction	-12416 Feb 09 j 19:12	22°♏02'23	-12°34'06	
minimum elong	-12416 Feb 09 j 19:21	22°♏02'24	12°34'41	
max. Earth dist.	-12416 Feb 08 j 14:39	22°♏00'46	49.11031 AU	
morning rise	-12416 Feb 18 j 16:41	22°♏14'30		
retrograde	-12416 May 20 j 22:45	23°♏31'15		
opposition	-12416 Aug 10 j 04:09	22°♏32'00	-13°00'14	
min. Earth dist.	-12416 Aug 11 j 05:41	22°♏30'47	47.10933 AU	
direct	-12416 Oct 31 j 13:59	21°♏31'50		

Attention, astronomical year style is used: The year -12415 in astronomical counting style is the year 12416 BCE in historical counting style.

evening set	-12415 Jan 31 j 21:01	22°♏48'01		
max. Earth dist.	-12415 Feb 08 j 19:06	22°♏58'49	49.00934 AU	
conjunction	-12415 Feb 10 j 01:35	23°♏00'33	-12°23'08	
minimum elong	-12415 Feb 10 j 01:42	23°♏00'33	12°23'45	
morning rise	-12415 Feb 19 j 06:16	23°♏13'05		
retrograde	-12415 May 22 j 05:39	24°♏29'33		
opposition	-12415 Aug 11 j 08:49	23°♏30'16	-12°48'45	
min. Earth dist.	-12415 Aug 12 j 12:19	23°♏28'57	47.00542 AU	
direct	-12415 Nov 01 j 17:29	22°♏30'02		
evening set	-12414 Feb 01 j 20:31	23°♏46'01		
max. Earth dist.	-12414 Feb 10 j 01:20	23°♏57'12	48.90512 AU	
conjunction	-12414 Feb 11 j 08:04	23°♏58'57	-12°11'55	
minimum elong	-12414 Feb 11 j 08:13	23°♏58'58	12°12'31	
morning rise	-12414 Feb 20 j 19:30	24°♏11'54		
retrograde	-12414 May 23 j 08:47	25°♏28'05		
opposition	-12414 Aug 12 j 13:28	24°♏28'47	-12°37'00	
min. Earth dist.	-12414 Aug 13 j 17:54	24°♏27'25	46.89781 AU	
direct	-12414 Nov 03 j 01:39	23°♏28'28		
evening set	-12413 Feb 02 j 20:21	24°♏44'16		
max. Earth dist.	-12413 Feb 11 j 05:18	24°♏55'43	48.79702 AU	
conjunction	-12413 Feb 12 j 14:32	24°♏57'37	-12°00'26	
minimum elong	-12413 Feb 12 j 14:40	24°♏57'37	12°01'03	
morning rise	-12413 Feb 22 j 08:50	25°♏10'58		
retrograde	-12413 May 24 j 13:35	26°♏26'54		
opposition	-12413 Aug 13 j 18:11	25°♏27'34	-12°24'59	
min. Earth dist.	-12413 Aug 14 j 23:43	25°♏26'08	46.78609 AU	
direct	-12413 Nov 04 j 08:05	24°♏27'10		
evening set	-12412 Feb 03 j 20:18	25°♏42'47		
max. Earth dist.	-12412 Feb 12 j 11:00	25°♏54'33	48.68427 AU	
conjunction	-12412 Feb 13 j 21:16	25°♏56'31	-11°48'43	
minimum elong	-12412 Feb 13 j 21:25	25°♏56'32	11°49'20	
morning rise	-12412 Feb 23 j 22:05	26°♏10'16		
retrograde	-12412 May 24 j 19:01	27°♏25'59		
opposition	-12412 Aug 13 j 23:12	26°♏26'35	-12°12'44	
min. Earth dist.	-12412 Aug 15 j 07:02	26°♏25'03	46.66938 AU	
direct	-12412 Nov 04 j 13:54	25°♏26'06		
evening set	-12411 Feb 03 j 20:48	26°♏41'31		
max. Earth dist.	-12411 Feb 12 j 16:09	26°♏53'35	48.56654 AU	
conjunction	-12411 Feb 14 j 04:07	26°♏55'39	-11°36'45	
minimum elong	-12411 Feb 14 j 04:15	26°♏55'39	11°37'22	
morning rise	-12411 Feb 24 j 11:17	27°♏09'48		
retrograde	-12411 May 26 j 02:13	28°♏25'15		
opposition	-12411 Aug 15 j 04:05	27°♏25'48	-12°00'13	
min. Earth dist.	-12411 Aug 16 j 12:29	27°♏24'14	46.54752 AU	
direct	-12411 Nov 05 j 18:10	26°♏25'11		
evening set	-12410 Feb 04 j 21:24	27°♏40'26		
max. Earth dist.	-12410 Feb 13 j 20:37	27°♏52'45	48.44356 AU	
conjunction	-12410 Feb 15 j 11:01	27°♏54'58	-11°24'33	
minimum elong	-12410 Feb 15 j 11:10	27°♏54'58	11°25'11	
morning rise	-12410 Feb 26 j 00:32	28°♏09'30		
retrograde	-12410 May 27 j 10:33	29°♏24'43		
opposition	-12410 Aug 16 j 09:16	28°♏25'10	-11°47'28	
min. Earth dist.	-12410 Aug 17 j 19:53	28°♏23'30	46.42065 AU	
direct	-12410 Nov 06 j 21:57	27°♏24'27		
evening set	-12409 Feb 05 j 22:01	28°♏39'32		
max. Earth dist.	-12409 Feb 15 j 03:02	28°♏52'12	48.31578 AU	
conjunction	-12409 Feb 16 j 17:51	28°♏54'26	-11°12'06	
minimum elong	-12409 Feb 16 j 17:59	28°♏54'27	11°12'45	
morning rise	-12409 Feb 27 j 13:19	29°♏09'20		
	-12409 Apr 10 j 13:28	0°♐		
retrograde	-12409 May 28 j 15:00	0°♐24'20		
	-12409 Jul 16 j 01:06	30°℞♏		
opposition	-12409 Aug 17 j 14:24	29°♏24'42	-11°34'27	
min. Earth dist.	-12409 Aug 19 j 02:00	29°♏22'58	46.28904 AU	
direct	-12409 Nov 08 j 05:44	28°♏23'50		
evening set	-12408 Feb 06 j 23:03	29°♏38'46		
max. Earth dist.	-12408 Feb 16 j 07:31	29°♏51'40	48.18361 AU	
conjunction	-12408 Feb 18 j 00:45	29°♏54'03	-10°59'24	
minimum elong	-12408 Feb 18 j 00:55	29°♏54'04	11°00'04	
	-12408 Feb 22 j 07:51	0°♐		
morning rise	-12408 Feb 29 j 02:20	0°♐09'20		
retrograde	-12408 May 28 j 20:24	1°♐24'07		
opposition	-12408 Aug 17 j 19:27	0°♐24'23	-11°21'09	
min. Earth dist.	-12408 Aug 19 j 08:11	0°♐22'36	46.15344 AU	
	-12408 Sep 08 j 08:18	30°℞♏		
direct	-12408 Nov 08 j 11:55	29°♏23'22		
	-12407 Jan 07 j 20:08	0°♐		
evening set	-12407 Feb 07 j 00:12	0°♐38'11		
max. Earth dist.	-12407 Feb 16 j 13:55	0°♐51'23	48.04754 AU	
conjunction	-12407 Feb 18 j 07:56	0°♐53'50	-10°46'26	
minimum elong	-12407 Feb 18 j 08:04	0°♐53'50	10°47'05	
morning rise	-12407 Mar 01 j 15:13	1°♐09'28		
retrograde	-12407 May 30 j 01:02	2°♐24'04		
opposition	-12407 Aug 19 j 00:51	1°♐24'14	-11°07'35	
min. Earth dist.	-12407 Aug 20 j 15:20	1°♐22'22	46.01419 AU	
direct	-12407 Nov 09 j 19:08	0°♐23'06		
evening set	-12406 Feb 08 j 01:36	1°♐37'47		
max. Earth dist.	-12406 Feb 17 j 19:51	1°♐51'17	47.90826 AU	
conjunction	-12406 Feb 19 j 14:56	1°♐53'48	-10°33'12	
minimum elong	-12406 Feb 19 j 15:05	1°♐53'48	10°33'53	
morning rise	-12406 Mar 03 j 03:53	2°♐09'48		
retrograde	-12406 May 31 j 09:08	3°♐24'14		
opposition	-12406 Aug 20 j 06:12	2°♐24'18	-10°53'44	
min. Earth dist.	-12406 Aug 21 j 20:44	2°♐22'26	45.87193 AU	
direct	-12406 Nov 10 j 23:02	1°♐23'02		
evening set	-12405 Feb 09 j 03:09	2°♐37'38		
max. Earth dist.	-12405 Feb 19 j 01:18	2°♐51'24	47.76605 AU	
conjunction	-12405 Feb 20 j 22:06	2°♐54'00	-10°19'42	
minimum elong	-12405 Feb 20 j 22:15	2°♐54'01	10°20'22	
morning rise	-12405 Mar 04 j 16:40	3°♐10'22		
retrograde	-12405 Jun 01 j 17:42	4°♐24'40		
opposition	-12405 Aug 21 j 11:43	3°♐24'39	-10°39'36	
min. Earth dist.	-12405 Aug 23 j 04:05	3°♐22'41	45.72702 AU	
direct	-12405 Nov 12 j 02:13	2°♐23'15		
evening set	-12404 Feb 10 j 04:55	3°♐37'47		
max. Earth dist.	-12404 Feb 20 j 08:32	3°♐51'54	47.62129 AU	
conjunction	-12404 Feb 22 j 05:27	3°♐54'31	-10°05'55	
minimum elong	-12404 Feb 22 j 05:36	3°♐54'32	10°06'36	
morning rise	-12404 Mar 05 j 05:19	4°♐11'15		
retrograde	-12404 Jun 01 j 22:46	5°♐25'25		
opposition	-12404 Aug 21 j 17:22	4°♐25'19	-10°25'10	
min. Earth dist.	-12404 Aug 23 j 10:12	4°♐23'19	45.57932 AU	
direct	-12404 Nov 12 j 10:35	3°♐23'49		
evening set	-12403 Feb 10 j 07:09	4°♐38'19		
max. Earth dist.	-12403 Feb 20 j 13:45	4°♐52'39	47.47372 AU	
conjunction	-12403 Feb 22 j 12:52	4°♐55'24	-9°51'51	
minimum elong	-12403 Feb 22 j 13:02	4°♐55'25	9°52'31	
morning rise	-12403 Mar 06 j 18:10	5°♐12'29		
retrograde	-12403 Jun 03 j 04:33	6°♐26'33		
opposition	-12403 Aug 22 j 23:03	5°♐26'23	-10°10'26	
min. Earth dist.	-12403 Aug 24 j 16:52	5°♐24'20	45.42880 AU	

Attention, astronomical year style is used: The year -12403 in astronomical counting style is the year 12404 BCE in historical counting style.

direct	-12403 Nov 13 j 18:00	4°↗24'46	
evening set	-12402 Feb 11 j 09:30	5°↗39'15	
max. Earth dist.	-12402 Feb 21 j 20:57	5°↗53'54	47.32296 AU
conjunction	-12402 Feb 23 j 20:36	5°↗56'42	-9°37'31
minimum elong	-12402 Feb 23 j 20:45	5°↗56'43	9°38'13
morning rise	-12402 Mar 08 j 06:55	6°↗14'08	
retrograde	-12402 Jun 04 j 10:24	7°↗28'08	
opposition	-12402 Aug 24 j 05:04	6°↗27'54	-9°55'25
min. Earth dist.	-12402 Aug 26 j 00:46	6°↗25'45	45.27479 AU
direct	-12402 Nov 15 j 01:10	5°↗26'10	
evening set	-12401 Feb 12 j 12:07	6°↗40'39	
max. Earth dist.	-12401 Feb 23 j 03:09	6°↗55'32	47.16855 AU
conjunction	-12401 Feb 25 j 04:12	6°↗58'26	-9°22'54
minimum elong	-12401 Feb 25 j 04:21	6°↗58'27	9°23'35
morning rise	-12401 Mar 09 j 19:34	7°↗16'13	
retrograde	-12401 Jun 05 j 18:44	8°↗30'09	
opposition	-12401 Aug 25 j 11:04	7°↗29'50	-9°40'07
min. Earth dist.	-12401 Aug 27 j 07:09	7°↗27'40	45.11675 AU
direct	-12401 Nov 16 j 06:07	6°↗27'59	
evening set	-12400 Feb 13 j 15:07	7°↗42'28	
max. Earth dist.	-12400 Feb 24 j 08:54	7°↗57'35	47.00960 AU
conjunction	-12400 Feb 26 j 12:11	8°↗00'36	-9°08'01
minimum elong	-12400 Feb 26 j 12:20	8°↗00'37	9°08'43
morning rise	-12400 Mar 10 j 08:30	8°↗18'43	
retrograde	-12400 Jun 06 j 04:56	9°↗32'37	
opposition	-12400 Aug 25 j 17:16	8°↗32'12	-9°24'33
min. Earth dist.	-12400 Aug 27 j 15:45	8°↗29'55	44.95402 AU
direct	-12400 Nov 16 j 10:03	7°↗30'12	
evening set	-12399 Feb 13 j 18:30	8°↗44'42	
max. Earth dist.	-12399 Feb 24 j 16:34	9°↗00'07	46.84582 AU
conjunction	-12399 Feb 26 j 20:28	9°↗03'11	-8°52'53
minimum elong	-12399 Feb 26 j 20:38	9°↗03'12	8°53'35
morning rise	-12399 Mar 11 j 21:23	9°↗21'38	
retrograde	-12399 Jun 07 j 12:45	10°↗35'28	
opposition	-12399 Aug 26 j 23:43	9°↗34'56	-9°08'41
min. Earth dist.	-12399 Aug 28 j 23:06	9°↗32'36	44.78622 AU
direct	-12399 Nov 17 j 17:35	8°↗32'47	