Attention, astronomical year style is used: The year -900 in astronomical counting style is the year 901 BCE in historical counting style.

direct	-900 Mar 09 j 08:09	22♊55'56		
evening set	-900 Jun 12 j 08:27	26♊20'28		
max. Earth dist.	-900 Jun 27 j 23:15	27♊17'43	19.53163 AU	
conjunction	-900 Jun 29 j 03:13	27♊22'02	0°20'47	
minimum elong	-900 Jun 29 j 03:13	27♊22'02	0°20'49	
morning rise	-900 Jul 15 j 19:29	28♊23'16		
	-900 Aug 13 j 16:59	0♋		
retrograde	-900 Oct 16 j 03:17	1♋43'36		
	-900 Dec 21 j 11:14	30℞♊		
opposition	-900 Dec 28 j 17:17	29♊41'03	0°24'53	
min. Earth dist.	-900 Dec 29 j 17:42	29♊38'22	17.50591 AU	
direct	-899 Mar 14 j 05:35	27♊35'30		
	-899 May 30 j 22:12	0♋		
evening set	-899 Jun 17 j 12:00	1♋01'09		
max. Earth dist.	-899 Jul 03 j 00:56	1♋58'20	19.48084 AU	
conjunction	-899 Jul 04 j 06:07	2♋02'50	0°23'56	
minimum elong	-899 Jul 04 j 06:06	2♋02'50	0°23'56	
morning rise	-899 Jul 20 j 21:42	3♋04'11		
retrograde	-899 Oct 21 j 02:49	6♋24'55		
opposition	-898 Jan 02 j 14:01	4♋22'18	0°28'19	
min. Earth dist.	-898 Jan 03 j 14:05	4♋19'39	17.45754 AU	
direct	-898 Mar 19 j 06:45	2♋16'27		
evening set	-898 Jun 22 j 15:54	5♋43'07		
max. Earth dist.	-898 Jul 08 j 04:50	6♋40'29	19.43489 AU	
conjunction	-898 Jul 09 j 09:30	6♋44'56	0°26'55	
minimum elong	-898 Jul 09 j 09:30	6♋44'56	0°26'56	
morning rise	-898 Jul 26 j 00:02	7♋46'20		
retrograde	-898 Oct 26 j 00:21	11♋07'26		
opposition	-897 Jan 07 j 11:35	9♋04'47	0°31'34	
min. Earth dist.	-897 Jan 08 j 12:37	9♋02'02	17.41439 AU	
direct	-897 Mar 24 j 06:16	6♋58'41		
evening set	-897 Jun 27 j 20:13	10♋26'18		
max. Earth dist.	-897 Jul 13 j 07:13	11♋23'34	19.39459 AU	
conjunction	-897 Jul 14 j 12:59	11♋28'12	0°29'44	
minimum elong	-897 Jul 14 j 12:59	11♋28'12	0°29'45	
morning rise	-897 Jul 31 j 02:46	12♋29'41		
retrograde	-897 Oct 31 j 00:20	15♋51'07		
opposition	-896 Jan 12 j 09:45	13♋48'27	0°34'36	
min. Earth dist.	-896 Jan 13 j 10:16	13♋45'46	17.37705 AU	
direct	-896 Mar 28 j 08:17	11♋42'08		
evening set	-896 Jul 02 j 00:50	15♋10'38		
conjunction	-896 Jul 18 j 16:57	16♋12'37	0°32'22	
minimum elong	-896 Jul 18 j 16:57	16♋12'37	0°32'22	
max. Earth dist.	-896 Jul 17 j 12:19	16♋08'09	19.36013 AU	
morning rise	-896 Aug 04 j 05:31	17♋14'07		
retrograde	-896 Nov 03 j 23:45	20♋35'50		
opposition	-895 Jan 16 j 08:41	18♋33'15	0°37'26	
min. Earth dist.	-895 Jan 17 j 09:37	18♋30'31	17.34558 AU	
direct	-895 Apr 02 j 09:17	16♋26'48		
evening set	-895 Jul 07 j 05:51	19♋56'06		
conjunction	-895 Jul 23 j 20:53	20♋58'06	0°34'47	
minimum elong	-895 Jul 23 j 20:53	20♋58'06	0°34'48	
max. Earth dist.	-895 Jul 22 j 15:21	20♋53'29	19.33174 AU	
morning rise	-895 Aug 09 j 08:32	21♋59'38		
retrograde	-895 Nov 09 j 00:38	25♋21'37		
opposition	-894 Jan 21 j 08:16	23♋19'06	0°40'01	
min. Earth dist.	-894 Jan 22 j 08:45	23♋16'25	17.32024 AU	
direct	-894 Apr 07 j 11:32	21♋12'33		
evening set	-894 Jul 12 j 10:41	24♋42'33		
max. Earth dist.	-894 Jul 27 j 20:59	25♋40'11	19.30923 AU	
conjunction	-894 Jul 29 j 00:57	25♋44'34	0°36'59	
minimum elong	-894 Jul 29 j 00:56	25♋44'34	0°36'59	
morning rise	-894 Aug 14 j 11:20	26♋46'05		
	-894 Oct 27 j 23:30	0♌		
retrograde	-894 Nov 14 j 01:41	0♌08'16		
	-894 Dec 01 j 07:17	30℞♋		
opposition	-893 Jan 26 j 08:31	28♋05'52	0°42'20	
min. Earth dist.	-893 Jan 27 j 08:56	28♋03'12	17.30048 AU	
direct	-893 Apr 12 j 13:28	25♋59'17		
evening set	-893 Jul 17 j 16:00	29♋29'51		
	-893 Jul 25 j 18:18	0♌		
max. Earth dist.	-893 Aug 02 j 00:22	0♌27'21	19.29220 AU	
conjunction	-893 Aug 03 j 05:03	0♌31'52	0°38'55	
minimum elong	-893 Aug 03 j 05:03	0♌31'52	0°38'56	
morning rise	-893 Aug 19 j 14:24	1♌33'20		
retrograde	-893 Nov 19 j 02:39	4♌55'41		
opposition	-892 Jan 31 j 09:12	2♌53'22	0°44'22	
min. Earth dist.	-892 Feb 01 j 09:32	2♌50'43	17.28620 AU	
direct	-892 Apr 16 j 16:19	0♌46'44		
evening set	-892 Jul 21 j 21:11	4♌17'48		
max. Earth dist.	-892 Aug 06 j 06:03	5♌15'28	19.28044 AU	
conjunction	-892 Aug 07 j 09:17	5♌19'45	0°40'36	
minimum elong	-892 Aug 07 j 09:16	5♌19'45	0°40'37	
morning rise	-892 Aug 23 j 17:19	6♌21'09		
retrograde	-892 Nov 23 j 04:10	9♌43'36		
opposition	-891 Feb 04 j 10:37	7♌41'23	0°46'06	
min. Earth dist.	-891 Feb 05 j 10:18	7♌38'48	17.27688 AU	
direct	-891 Apr 21 j 19:44	5♌34'45		
evening set	-891 Jul 27 j 02:15	9♌06'07		
max. Earth dist.	-891 Aug 11 j 09:41	10♌03'41	19.27360 AU	
conjunction	-891 Aug 12 j 13:04	10♌08'00	0°42'00	
minimum elong	-891 Aug 12 j 13:04	10♌08'00	0°42'00	
morning rise	-891 Aug 28 j 19:56	11♌09'18		
retrograde	-891 Nov 28 j 04:37	14♌31'48		
opposition	-890 Feb 09 j 12:29	12♌29'39	0°47'30	
min. Earth dist.	-890 Feb 10 j 12:04	12♌27'05	17.27262 AU	
direct	-890 Apr 26 j 23:37	10♌23'01		
evening set	-890 Aug 01 j 07:01	13♌54'35		
conjunction	-890 Aug 17 j 16:45	14♌56'22	0°43'06	
minimum elong	-890 Aug 17 j 16:45	14♌56'22	0°43'07	
max. Earth dist.	-890 Aug 16 j 14:47	14♌52'15	19.27181 AU	
	-890 Aug 18 j 15:46	15♌		
morning rise	-890 Sep 02 j 22:22	15♌57'32		
retrograde	-890 Dec 03 j 05:45	19♌20'00		
opposition	-889 Feb 14 j 14:30	17♌17'55	0°48'34	
min. Earth dist.	-889 Feb 15 j 12:47	17♌15'30	17.27319 AU	
direct	-889 May 02 j 04:35	15♌11'20		
evening set	-889 Aug 06 j 11:32	18♌42'57		
conjunction	-889 Aug 22 j 20:02	19♌44'35	0°43'54	
minimum elong	-889 Aug 22 j 20:02	19♌44'35	0°43'54	
max. Earth dist.	-889 Aug 21 j 18:37	19♌40'34	19.27486 AU	
morning rise	-889 Sep 08 j 00:27	20♌45'38		
retrograde	-889 Dec 08 j 05:24	24♌08'00		
opposition	-888 Feb 19 j 16:58	22♌05'58	0°49'17	
min. Earth dist.	-888 Feb 20 j 15:09	22♌03'34	17.27880 AU	
direct	-888 May 06 j 08:49	19♌59'26		
evening set	-888 Aug 10 j 15:31	23♌30'58		

Attention, astronomical year style is used: The year -888 in astronomical counting style is the year 889 BCE in historical counting style.

conjunction	-888 Aug 26 j 22:48	24°♌32'27	0°44'24
minimum elong	-888 Aug 26 j 22:48	24°♌32'27	0°44'25
max. Earth dist.	-888 Aug 25 j 22:46	24°♌28'38	19.28306 AU
morning rise	-888 Sep 12 j 02:01	25°♌33'20	
retrograde	-888 Dec 12 j 06:14	28°♌55'33	
opposition	-887 Feb 23 j 19:29	26°♌53'34	0°49'40
min. Earth dist.	-887 Feb 24 j 15:42	26°♌51'23	17.28948 AU
direct	-887 May 11 j 14:48	24°♌47'07	
evening set	-887 Aug 15 j 18:54	28°♌18'24	
max. Earth dist.	-887 Aug 31 j 02:34	29°♌16'10	19.29646 AU
conjunction	-887 Sep 01 j 00:59	29°♌19'42	0°44'35
minimum elong	-887 Sep 01 j 00:59	29°♌19'42	0°44'36
	-887 Sep 11 j 15:58	0°♍	
morning rise	-887 Sep 17 j 02:57	0°♍20'25	
retrograde	-887 Dec 17 j 05:04	3°♍42'26	
opposition	-886 Feb 28 j 22:12	1°♍40'30	0°49'41
min. Earth dist.	-886 Mar 01 j 18:04	1°♍38'21	17.30568 AU
	-886 Apr 14 j 20:31	30°℞♌	
direct	-886 May 16 j 18:59	29°♌34'08	
	-886 Jun 17 j 05:09	0°♍	
evening set	-886 Aug 20 j 21:30	3°♍05'05	
max. Earth dist.	-886 Sep 05 j 05:19	4°♍02'51	19.31556 AU
conjunction	-886 Sep 06 j 02:20	4°♍06'10	0°44'27
minimum elong	-886 Sep 06 j 02:20	4°♍06'10	0°44'27
morning rise	-886 Sep 22 j 03:17	5°♍06'41	
retrograde	-886 Dec 22 j 05:17	8°♍28'27	
opposition	-885 Mar 06 j 00:46	6°♍26'33	0°49'22
min. Earth dist.	-885 Mar 06 j 18:04	6°♍24'42	17.32754 AU
direct	-885 May 22 j 00:50	4°♍20'20	
evening set	-885 Aug 25 j 23:26	7°♍50'48	
max. Earth dist.	-885 Sep 10 j 08:37	8°♍48'45	19.34035 AU
conjunction	-885 Sep 11 j 03:08	8°♍51'41	0°44'01
minimum elong	-885 Sep 11 j 03:08	8°♍51'41	0°44'01
morning rise	-885 Sep 27 j 02:49	9°♍51'59	
retrograde	-885 Dec 27 j 03:18	13°♍13'26	
opposition	-884 Mar 10 j 03:21	11°♍11'38	0°48'43
min. Earth dist.	-884 Mar 10 j 19:55	11°♍09'51	17.35536 AU
direct	-884 May 26 j 04:12	9°♍05'36	
evening set	-884 Aug 30 j 00:42	12°♍35'30	
max. Earth dist.	-884 Sep 14 j 09:56	13°♍33'25	19.37134 AU
conjunction	-884 Sep 15 j 03:04	13°♍36'07	0°43'17
minimum elong	-884 Sep 15 j 03:04	13°♍36'07	0°43'16
morning rise	-884 Oct 01 j 01:48	14°♍36'12	
retrograde	-884 Dec 31 j 03:17	17°♍57'20	
opposition	-883 Mar 15 j 05:49	15°♍55'37	0°47'44
min. Earth dist.	-883 Mar 15 j 19:22	15°♍54'10	17.38935 AU
direct	-883 May 31 j 09:02	13°♍49'50	
evening set	-883 Sep 04 j 00:55	17°♍19'03	
conjunction	-883 Sep 20 j 02:15	18°♍19'26	0°42'16
minimum elong	-883 Sep 20 j 02:15	18°♍19'26	0°42'16
max. Earth dist.	-883 Sep 19 j 12:20	18°♍17'14	19.40838 AU
morning rise	-883 Oct 05 j 23:48	19°♍19'17	
retrograde	-882 Jan 05 j 00:55	22°♍40'03	
opposition	-882 Mar 20 j 08:14	20°♍38'29	0°46'26
min. Earth dist.	-882 Mar 20 j 20:38	20°♍37'10	17.42931 AU
direct	-882 Jun 05 j 10:50	18°♍33'02	
evening set	-882 Sep 09 j 00:35	22°♍01'29	
max. Earth dist.	-882 Sep 24 j 11:58	22°♍59'36	19.45133 AU
conjunction	-882 Sep 25 j 00:39	23°♍01'35	0°40'58
minimum elong	-882 Sep 25 j 00:39	23°♍01'35	0°40'58
morning rise	-882 Oct 10 j 21:24	24°♍01'12	
retrograde	-881 Jan 10 j 00:37	27°♍21'34	
opposition	-881 Mar 25 j 10:06	25°♍20'10	0°44'50
min. Earth dist.	-881 Mar 25 j 19:38	25°♍19'09	17.47488 AU
direct	-881 Jun 10 j 14:07	23°♍15'04	
evening set	-881 Sep 13 j 23:19	26°♍42'41	
conjunction	-881 Sep 29 j 22:27	27°♍42'32	0°39'25
minimum elong	-881 Sep 29 j 22:27	27°♍42'32	0°39'24
max. Earth dist.	-881 Sep 29 j 13:07	27°♍41'03	19.49945 AU
morning rise	-881 Oct 15 j 18:08	28°♍41'53	
	-881 Nov 07 j 03:35	0°♎	
retrograde	-880 Jan 14 j 22:04	2°♎01'49	
opposition	-880 Mar 29 j 12:03	0°♎00'37	0°42'56
	-880 Mar 29 j 17:56	30°℞♍	
min. Earth dist.	-880 Mar 29 j 20:18	29°♍59'45	17.52523 AU
direct	-880 Jun 14 j 15:05	27°♍55'55	
	-880 Aug 25 j 00:52	0°♎	
evening set	-880 Sep 17 j 21:16	1°♎22'36	
conjunction	-880 Oct 03 j 19:09	2°♎22'09	0°37'36
minimum elong	-880 Oct 03 j 19:10	2°♎22'09	0°37'37
max. Earth dist.	-880 Oct 03 j 10:59	2°♎20'52	19.55204 AU
morning rise	-880 Oct 19 j 14:09	3°♎21'15	
retrograde	-879 Jan 18 j 20:46	6°♎40'45	
opposition	-879 Apr 03 j 13:36	4°♎39'43	0°40'46
min. Earth dist.	-879 Apr 03 j 19:14	4°♎39'08	17.57979 AU
direct	-879 Jun 19 j 17:41	2°♎35'26	
evening set	-879 Sep 22 j 18:15	6°♎01'06	
conjunction	-879 Oct 08 j 15:19	7°♎00'21	0°35'33
minimum elong	-879 Oct 08 j 15:19	7°♎00'21	0°35'33
max. Earth dist.	-879 Oct 08 j 10:26	6°♎59'35	19.60837 AU
morning rise	-879 Oct 24 j 09:22	7°♎59'11	
retrograde	-878 Jan 23 j 17:16	11°♎18'11	
opposition	-878 Apr 08 j 14:46	9°♎17'20	0°38'21
min. Earth dist.	-878 Apr 08 j 18:52	9°♎16'54	17.63762 AU
direct	-878 Jun 24 j 18:46	7°♎13'28	
evening set	-878 Sep 27 j 14:28	10°♎38'03	
conjunction	-878 Oct 13 j 10:26	11°♎36'59	0°33'17
minimum elong	-878 Oct 13 j 10:26	11°♎36'59	0°33'17
max. Earth dist.	-878 Oct 13 j 06:32	11°♎36'22	19.66766 AU
morning rise	-878 Oct 29 j 03:57	12°♎35'33	
retrograde	-877 Jan 28 j 14:02	15°♎54'02	
opposition	-877 Apr 13 j 15:27	13°♎53'20	0°35'41
min. Earth dist.	-877 Apr 13 j 17:24	13°♎53'08	17.69814 AU
direct	-877 Jun 29 j 20:11	11°♎49'53	
evening set	-877 Oct 02 j 09:38	15°♎13'17	
conjunction	-877 Oct 18 j 04:52	16°♎11'56	0°30'48
minimum elong	-877 Oct 18 j 04:52	16°♎11'56	0°30'48
max. Earth dist.	-877 Oct 18 j 03:58	16°♎11'47	19.72919 AU
morning rise	-877 Nov 02 j 21:34	17°♎10'13	
retrograde	-876 Feb 02 j 09:19	20°♎28'08	
opposition	-876 Apr 17 j 15:41	18°♎27'35	0°32'49
min. Earth dist.	-876 Apr 17 j 15:47	18°♎27'34	17.76045 AU
direct	-876 Jul 03 j 21:14	16°♎24'32	
evening set	-876 Oct 06 j 04:03	19°♎46'43	
conjunction	-876 Oct 21 j 22:18	20°♎45'02	0°28'09
minimum elong	-876 Oct 21 j 22:18	20°♎45'02	0°28'08
max. Earth dist.	-876 Oct 21 j 22:27	20°♎45'03	19.79233 AU
morning rise	-876 Nov 06 j 14:34	21°♎43'03	
retrograde	-875 Feb 06 j 03:43	25°♎00'23	
opposition	-875 Apr 22 j 15:23	22°♎59'57	0°29'46
min. Earth dist.	-875 Apr 22 j 13:40	23°♎00'07	17.82432 AU
direct	-875 Jul 08 j 20:43	20°♎57'16	

Attention, astronomical year style is used: The year -875 in astronomical counting style is the year 876 BCE in historical counting style.

evening set	-875 Oct 10 j 21:11	24°♎18'10	
conjunction	-875 Oct 26 j 14:52	25°♎16'11	0°25'20
minimum elong	-875 Oct 26 j 14:52	25°♎16'11	0°25'20
max. Earth dist.	-875 Oct 26 j 17:50	25°♎16'38	19.85675 AU
morning rise	-875 Nov 11 j 06:34	26°♎13'56	
retrograde	-874 Feb 10 j 21:56	29°♎30'39	
opposition	-874 Apr 27 j 14:19	27°♎30'17	0°26'32
min. Earth dist.	-874 Apr 27 j 10:27	27°♎30'41	17.88908 AU
direct	-874 Jul 13 j 20:30	25°♎27'59	
evening set	-874 Oct 15 j 13:33	28°♎47'34	
conjunction	-874 Oct 31 j 06:27	29°♎45'15	0°22'23
minimum elong	-874 Oct 31 j 06:27	29°♎45'15	0°22'22
max. Earth dist.	-874 Oct 31 j 10:37	29°♎45'53	19.92196 AU
	-874 Nov 04 j 06:03	0°♏	
morning rise	-874 Nov 15 j 21:52	0°♏42'44	
retrograde	-873 Feb 15 j 14:18	3°♏58'49	
opposition	-873 May 02 j 12:27	1°♏58'31	0°23'10
min. Earth dist.	-873 May 02 j 07:11	1°♏59'04	17.95476 AU
	-873 Jul 07 j 01:28	30°℞♎	
direct	-873 Jul 18 j 17:28	29°♎56'32	
	-873 Jul 30 j 06:15	0°♏	
evening set	-873 Oct 20 j 04:46	3°♏14'47	
conjunction	-873 Nov 04 j 21:11	4°♏12'10	0°19'19
minimum elong	-873 Nov 04 j 21:11	4°♏12'10	0°19'19
max. Earth dist.	-873 Nov 05 j 04:02	4°♏13'13	19.98808 AU
morning rise	-873 Nov 20 j 12:11	5°♏09'23	
retrograde	-872 Feb 20 j 07:18	8°♏24'48	
opposition	-872 May 06 j 09:55	6°♏24'34	0°19'42
min. Earth dist.	-872 May 06 j 02:04	6°♏25'22	18.02120 AU
direct	-872 Jul 22 j 15:21	4°♏22'56	
evening set	-872 Oct 23 j 18:56	7°♏39'48	
conjunction	-872 Nov 08 j 10:43	8°♏36'53	0°16'10
minimum elong	-872 Nov 08 j 10:43	8°♏36'53	0°16'09
behind sun begin	-872 Nov 08 j 09:52	8°♏36'46	
behind sun end	-872 Nov 08 j 11:33	8°♏37'01	
max. Earth dist.	-872 Nov 08 j 19:12	8°♏38'10	20.05500 AU
morning rise	-872 Nov 24 j 01:34	9°♏33'51	
retrograde	-871 Feb 23 j 22:21	12°♏48'37	
opposition	-871 May 11 j 06:43	10°♏48'26	0°16'09
min. Earth dist.	-871 May 10 j 21:29	10°♏49'22	18.08875 AU
direct	-871 Jul 27 j 10:14	8°♏47'08	
evening set	-871 Oct 28 j 08:10	12°♏02'39	
conjunction	-871 Nov 12 j 23:35	12°♏59'27	0°12'57
minimum elong	-871 Nov 12 j 23:35	12°♏59'27	0°12'56
behind sun begin	-871 Nov 12 j 19:28	12°♏58'51	
behind sun end	-871 Nov 13 j 03:41	13°♏00'04	
max. Earth dist.	-871 Nov 13 j 10:36	13°♏01'07	20.12304 AU
morning rise	-871 Nov 28 j 14:12	13°♏56'10	
	-871 Dec 17 j 06:37	15°♏	
retrograde	-870 Feb 28 j 14:15	17°♏10'17	
opposition	-870 May 16 j 02:22	15°♏10'11	0°12'32
min. Earth dist.	-870 May 15 j 14:18	15°♏11'25	18.15723 AU
	-870 May 20 j 05:58	15°℞♏	
direct	-870 Aug 01 j 05:40	13°♏09'16	
	-870 Oct 07 j 18:33	15°♏	
evening set	-870 Nov 01 j 20:32	16°♏23'28	
conjunction	-870 Nov 17 j 11:30	17°♏19'59	0°09'41
minimum elong	-870 Nov 17 j 11:30	17°♏19'59	0°09'41
behind sun begin	-870 Nov 17 j 06:04	17°♏19'11	
behind sun end	-870 Nov 17 j 16:56	17°♏20'47	
max. Earth dist.	-870 Nov 18 j 00:13	17°♏21'54	20.19192 AU
morning rise	-870 Dec 03 j 02:04	18°♏16'27	
retrograde	-869 Mar 05 j 04:10	21°♏29'58	
opposition	-869 May 20 j 21:31	19°♏29'58	0°08'53
min. Earth dist.	-869 May 20 j 08:18	19°♏31'18	18.22657 AU
direct	-869 Aug 05 j 22:24	17°♏29'26	
evening set	-869 Nov 06 j 07:54	20°♏42'21	
conjunction	-869 Nov 21 j 22:36	21°♏38'36	0°06'24
minimum elong	-869 Nov 21 j 22:37	21°♏38'36	0°06'23
behind sun begin	-869 Nov 21 j 16:27	21°♏37'42	
behind sun end	-869 Nov 22 j 04:47	21°♏39'31	
max. Earth dist.	-869 Nov 22 j 13:32	21°♏40'51	20.26153 AU
morning rise	-869 Dec 07 j 13:07	22°♏34'51	
retrograde	-868 Mar 08 j 19:18	25°♏47'47	
opposition	-868 May 24 j 15:48	23°♏47'54	0°05'12
min. Earth dist.	-868 May 23 j 23:42	23°♏49'32	18.29624 AU
direct	-868 Aug 09 j 15:51	21°♏47'48	
evening set	-868 Nov 09 j 18:37	24°♏59'27	
conjunction	-868 Nov 25 j 09:03	25°♏55'27	0°03'06
minimum elong	-868 Nov 25 j 09:02	25°♏55'27	0°03'06
behind sun begin	-868 Nov 25 j 02:32	25°♏54'30	
behind sun end	-868 Nov 25 j 15:33	25°♏56'25	
max. Earth dist.	-868 Nov 26 j 01:41	25°♏57'57	20.33115 AU
morning rise	-868 Dec 10 j 23:38	26°♏51'30	
	-867 Mar 01 j 02:53	0°♐	
retrograde	-867 Mar 13 j 08:15	0°♐03'52	
	-867 Mar 25 j 18:34	30°℞♏	
opposition	-867 May 29 j 09:28	28°♏04'08	0°01'31
min. Earth dist.	-867 May 28 j 16:37	28°♏05'51	18.36581 AU
direct	-867 Aug 14 j 06:35	26°♏04'28	
desc. node	-867 Oct 29 j 10:41	28°♏21'34	
evening set	-867 Nov 14 j 04:27	29°♏14'54	
	-867 Nov 26 j 19:49	0°♐	
conjunction	-867 Nov 29 j 18:47	0°♐10'40	-0°00'18
minimum elong	-867 Nov 29 j 18:48	0°♐10'40	0°00'19
behind sun begin	-867 Nov 29 j 12:18	0°♐09'43	
behind sun end	-867 Nov 30 j 01:17	0°♐11'36	
max. Earth dist.	-867 Nov 30 j 13:10	0°♐13'25	20.40039 AU
morning rise	-867 Dec 15 j 09:31	1°♐06'29	
retrograde	-866 Mar 17 j 22:58	4°♐18'20	
min. Earth dist.	-866 Jun 02 j 06:50	2°♐20'43	18.43444 AU
opposition	-866 Jun 03 j 02:15	2°♐18'45	-0°02'09
direct	-866 Aug 18 j 22:14	0°♐19'30	
evening set	-866 Nov 18 j 13:46	3°♐28'46	
conjunction	-866 Dec 04 j 03:59	4°♐24'18	-0°03'39
minimum elong	-866 Dec 04 j 03:58	4°♐24'18	0°03'39
behind sun begin	-866 Dec 03 j 21:29	4°♐23'22	
behind sun end	-866 Dec 04 j 10:26	4°♐25'15	
max. Earth dist.	-866 Dec 04 j 23:51	4°♐27'16	20.46820 AU
morning rise	-866 Dec 19 j 18:52	5°♐19'57	
retrograde	-865 Mar 22 j 10:34	8°♐31'17	
opposition	-865 Jun 07 j 18:25	6°♐31'51	-0°05'47
min. Earth dist.	-865 Jun 06 j 22:46	6°♐33'50	18.50147 AU
direct	-865 Aug 23 j 11:28	4°♐33'01	
evening set	-865 Nov 22 j 22:27	7°♐41'09	
conjunction	-865 Dec 08 j 12:38	8°♐36'27	-0°06'53
minimum elong	-865 Dec 08 j 12:38	8°♐36'27	0°06'54
behind sun begin	-865 Dec 08 j 06:33	8°♐35'34	
behind sun end	-865 Dec 08 j 18:43	8°♐37'20	
max. Earth dist.	-865 Dec 09 j 09:44	8°♐39'36	20.53421 AU
morning rise	-865 Dec 24 j 03:46	9°♐31'55	
retrograde	-864 Mar 26 j 00:57	12°♐42'46	
min. Earth dist.	-864 Jun 10 j 11:58	10°♐45'41	18.56625 AU

Attention, astronomical year style is used: The year -864 in astronomical counting style is the year 865 BCE in historical counting style.

opposition	-864 Jun 11 j 09:53	10°♐43'28	-0°09'22
direct	-864 Aug 27 j 01:45	8°♐45'01	
evening set	-864 Nov 26 j 06:30	11°♐52'03	
conjunction	-864 Dec 11 j 20:42	12°♐47'09	-0°10'05
minimum elong	-864 Dec 11 j 20:43	12°♐47'10	0°10'06
behind sun begin	-864 Dec 11 j 15:25	12°♐46'24	
behind sun end	-864 Dec 12 j 02:00	12°♐47'55	
max. Earth dist.	-864 Dec 12 j 19:09	12°♐50'29	20.59748 AU
morning rise	-864 Dec 27 j 12:10	13°♐42'28	
retrograde	-863 Mar 30 j 11:25	16°♐52'51	
min. Earth dist.	-863 Jun 15 j 03:00	14°♐55'50	18.62806 AU
opposition	-863 Jun 16 j 00:47	14°♐53'39	-0°12'52
direct	-863 Aug 31 j 13:31	12°♐55'33	
evening set	-863 Nov 30 j 14:07	16°♐01'31	
conjunction	-863 Dec 16 j 04:29	16°♐56'26	-0°13'12
minimum elong	-863 Dec 16 j 04:28	16°♐56'26	0°13'13
behind sun begin	-863 Dec 16 j 00:32	16°♐55'52	
behind sun end	-863 Dec 16 j 08:25	16°♐57'00	
max. Earth dist.	-863 Dec 17 j 03:32	16°♐59'51	20.65756 AU
morning rise	-863 Dec 31 j 20:19	17°♐51'35	
retrograde	-862 Apr 04 j 00:31	21°♐01'30	
opposition	-862 Jun 20 j 14:36	19°♐02'23	-0°16'18
min. Earth dist.	-862 Jun 19 j 15:04	19°♐04'45	18.68629 AU
direct	-862 Sep 05 j 02:55	17°♐04'35	
evening set	-862 Dec 04 j 21:12	20°♐09'32	
conjunction	-862 Dec 20 j 11:44	21°♐04'17	-0°16'15
minimum elong	-862 Dec 20 j 11:44	21°♐04'17	0°16'16
max. Earth dist.	-862 Dec 21 j 11:48	21°♐07'50	20.71371 AU
morning rise	-861 Jan 05 j 03:59	21°♐59'18	
retrograde	-861 Apr 08 j 09:58	25°♐08'46	
min. Earth dist.	-861 Jun 24 j 04:54	23°♐12'00	18.74051 AU
opposition	-861 Jun 25 j 04:03	23°♐09'41	-0°19'37
direct	-861 Sep 09 j 13:08	21°♐12'08	
evening set	-861 Dec 09 j 03:35	24°♐16'06	
conjunction	-861 Dec 24 j 18:22	25°♐10'41	-0°19'11
minimum elong	-861 Dec 24 j 18:22	25°♐10'41	0°19'11
max. Earth dist.	-861 Dec 25 j 18:51	25°♐14'17	20.76594 AU
morning rise	-860 Jan 09 j 11:09	26°♐05'34	
retrograde	-860 Apr 11 j 21:20	29°♐14'35	
opposition	-860 Jun 28 j 16:39	27°♐15'31	-0°22'49
min. Earth dist.	-860 Jun 27 j 15:52	27°♐18'00	18.79071 AU
direct	-860 Sep 13 j 01:36	25°♐18'10	
evening set	-860 Dec 12 j 09:33	28°♐21'11	
conjunction	-860 Dec 28 j 00:40	29°♐15'38	-0°22'01
minimum elong	-860 Dec 28 j 00:40	29°♐15'38	0°22'02
max. Earth dist.	-860 Dec 29 j 02:13	29°♐19'22	20.81409 AU
	-859 Jan 09 j 17:25	0°♑	
morning rise	-859 Jan 12 j 17:59	0°♑10'25	
retrograde	-859 Apr 16 j 05:51	3°♑19'00	
min. Earth dist.	-859 Jul 02 j 04:12	1°♑22'20	18.83709 AU
opposition	-859 Jul 03 j 04:31	1°♑19'54	-0°25'52
	-859 Aug 08 j 18:37	30°℞♐	
direct	-859 Sep 17 j 10:36	29°♐22'44	
	-859 Oct 25 j 19:59	0°♑	
evening set	-859 Dec 16 j 14:59	2°♑24'51	
conjunction	-858 Jan 01 j 06:30	3°♑19'10	-0°24'43
minimum elong	-858 Jan 01 j 06:30	3°♑19'10	0°24'43
max. Earth dist.	-858 Jan 02 j 08:21	3°♑22'57	20.85871 AU
morning rise	-858 Jan 17 j 00:28	4°♑13'51	
retrograde	-858 Apr 20 j 15:47	7°♑22'03	
opposition	-858 Jul 07 j 15:35	5°♑22'54	-0°28'46
min. Earth dist.	-858 Jul 06 j 13:45	5°♑25'29	18.88001 AU
direct	-858 Sep 21 j 20:58	3°♑25'53	
evening set	-858 Dec 20 j 20:00	6°♑27'11	
conjunction	-857 Jan 05 j 11:55	7°♑21'24	-0°27'16
minimum elong	-857 Jan 05 j 11:55	7°♑21'24	0°27'18
max. Earth dist.	-857 Jan 06 j 14:52	7°♑25'19	20.89984 AU
morning rise	-857 Jan 21 j 06:27	8°♑15'59	
retrograde	-857 Apr 24 j 23:31	11°♑23'50	
min. Earth dist.	-857 Jul 11 j 00:38	9°♑27'13	18.91967 AU
opposition	-857 Jul 12 j 02:07	9°♑24'40	-0°31'31
direct	-857 Sep 26 j 04:50	7°♑27'48	
evening set	-857 Dec 25 j 00:43	10°♑28'21	
conjunction	-856 Jan 09 j 17:07	11°♑22'28	-0°29'41
minimum elong	-856 Jan 09 j 17:07	11°♑22'28	0°29'42
max. Earth dist.	-856 Jan 10 j 20:13	11°♑26'24	20.93804 AU
morning rise	-856 Jan 25 j 12:23	12°♑17'00	
retrograde	-856 Apr 28 j 08:35	15°♑24'32	
min. Earth dist.	-856 Jul 14 j 09:04	13°♑28'01	18.95639 AU
opposition	-856 Jul 15 j 11:57	13°♑25'20	-0°34'06
direct	-856 Sep 29 j 13:08	11°♑28'37	
evening set	-856 Dec 28 j 05:07	14°♑28'30	
conjunction	-855 Jan 12 j 22:05	15°♑22'33	-0°31'56
minimum elong	-855 Jan 12 j 22:05	15°♑22'33	0°31'57
max. Earth dist.	-855 Jan 14 j 02:09	15°♑26'36	20.97310 AU
morning rise	-855 Jan 28 j 18:04	16°♑17'02	
retrograde	-855 May 02 j 16:02	19°♑24'18	
opposition	-855 Jul 19 j 21:20	17°♑25'07	-0°36'29
min. Earth dist.	-855 Jul 18 j 18:58	17°♑27'45	18.98990 AU
direct	-855 Oct 03 j 19:38	15°♑28'33	
evening set	-854 Jan 01 j 09:25	18°♑27'51	
conjunction	-854 Jan 17 j 02:58	19°♑21'50	-0°34'02
minimum elong	-854 Jan 17 j 02:58	19°♑21'50	0°34'03
max. Earth dist.	-854 Jan 18 j 06:49	19°♑25'51	21.00500 AU
morning rise	-854 Feb 01 j 23:45	20°♑16'17	
retrograde	-854 May 07 j 00:50	23°♑23'20	
min. Earth dist.	-854 Jul 23 j 02:38	21°♑26'53	19.02009 AU
opposition	-854 Jul 24 j 05:57	21°♑24'10	-0°38'42
direct	-854 Oct 08 j 02:28	19°♑27'44	
evening set	-853 Jan 05 j 13:36	22°♑26'32	
conjunction	-853 Jan 21 j 07:48	23°♑20'30	-0°35'58
minimum elong	-853 Jan 21 j 07:48	23°♑20'30	0°35'58
max. Earth dist.	-853 Jan 22 j 12:20	23°♑24'36	21.03330 AU
morning rise	-853 Feb 06 j 05:20	24°♑14'55	
retrograde	-853 May 11 j 07:56	27°♑21'49	
min. Earth dist.	-853 Jul 27 j 11:53	25°♑25'19	19.04653 AU
opposition	-853 Jul 28 j 14:25	25°♑22'40	-0°40'44
direct	-853 Oct 12 j 07:52	23°♑26'23	
evening set	-852 Jan 09 j 17:35	26°♑24'45	
conjunction	-852 Jan 25 j 12:29	27°♑18'42	-0°37'43
minimum elong	-852 Jan 25 j 12:29	27°♑18'42	0°37'44
max. Earth dist.	-852 Jan 26 j 16:33	27°♑22'43	21.05784 AU
morning rise	-852 Feb 10 j 10:55	28°♑13'07	
	-852 Mar 16 j 19:59	0°♒	
retrograde	-852 May 14 j 17:17	1°♒19'54	
	-852 Jul 15 j 06:34	30°℞♑	
opposition	-852 Jul 31 j 22:26	29°♑20'47	-0°42'34
min. Earth dist.	-852 Jul 30 j 19:23	29°♑23'29	19.06896 AU
direct	-852 Oct 15 j 13:53	27°♑24'37	
	-851 Jan 06 j 01:29	0°♒	
evening set	-851 Jan 12 j 21:49	0°♒22'39	

Attention, astronomical year style is used: The year -851 in astronomical counting style is the year 852 BCE in historical counting style.

conjunction	-851 Jan 28 j 17:29	1°♒16'36	-0°39'17
minimum elong	-851 Jan 28 j 17:29	1°♒16'36	0°39'17
max. Earth dist.	-851 Jan 29 j 21:51	1°♒20'39	21.07793 AU
morning rise	-851 Feb 13 j 16:44	2°♒11'03	
retrograde	-851 May 19 j 00:01	5°♒17'44	
min. Earth dist.	-851 Aug 04 j 04:17	3°♒21'13	19.08669 AU
opposition	-851 Aug 05 j 06:02	3°♒18'38	-0°44'12
direct	-851 Oct 19 j 18:41	1°♒22'35	
evening set	-850 Jan 17 j 02:10	4°♒20'21	
conjunction	-850 Feb 01 j 22:35	5°♒14'19	-0°40'40
minimum elong	-850 Feb 01 j 22:35	5°♒14'19	0°40'41
max. Earth dist.	-850 Feb 03 j 01:54	5°♒18'13	21.09322 AU
morning rise	-850 Feb 17 j 22:48	6°♒08'48	
retrograde	-850 May 23 j 09:34	9°♒15'27	
min. Earth dist.	-850 Aug 08 j 11:41	7°♒18'56	19.09935 AU
opposition	-850 Aug 09 j 13:23	7°♒16'21	-0°45'37
direct	-850 Oct 24 j 00:06	5°♒20'22	
evening set	-849 Jan 21 j 06:33	8°♒17'55	
conjunction	-849 Feb 06 j 03:48	9°♒11'56	-0°41'52
minimum elong	-849 Feb 06 j 03:48	9°♒11'56	0°41'52
max. Earth dist.	-849 Feb 07 j 06:58	9°♒15'49	21.10298 AU
morning rise	-849 Feb 22 j 04:50	10°♒06'28	
retrograde	-849 May 27 j 16:09	13°♒13'07	
opposition	-849 Aug 13 j 20:38	11°♒14'01	-0°46'49
min. Earth dist.	-849 Aug 12 j 20:24	11°♒16'26	19.10626 AU
direct	-849 Oct 28 j 04:52	9°♒18'03	
evening set	-848 Jan 25 j 11:13	12°♒15'28	
conjunction	-848 Feb 10 j 09:19	13°♒09'31	-0°42'51
minimum elong	-848 Feb 10 j 09:19	13°♒09'31	0°42'51
max. Earth dist.	-848 Feb 11 j 11:00	13°♒13'11	21.10710 AU
morning rise	-848 Feb 26 j 11:22	14°♒04'08	
	-848 Mar 14 j 21:41	15°♒	
retrograde	-848 May 31 j 01:23	17°♒10'48	
min. Earth dist.	-848 Aug 16 j 03:40	15°♒14'01	19.10742 AU
opposition	-848 Aug 17 j 03:30	15°♒11'37	-0°47'48
	-848 Aug 21 j 23:28	15°℞♒	
direct	-848 Oct 31 j 09:55	13°♒15'37	
	-847 Jan 05 j 10:08	15°♒	
evening set	-847 Jan 28 j 16:00	16°♒12'57	
conjunction	-847 Feb 13 j 15:04	17°♒07'06	-0°43'38
minimum elong	-847 Feb 13 j 15:04	17°♒07'06	0°43'39
max. Earth dist.	-847 Feb 14 j 16:17	17°♒10'41	21.10526 AU
morning rise	-847 Mar 01 j 18:03	18°♒01'47	
retrograde	-847 Jun 04 j 08:07	21°♒08'29	
min. Earth dist.	-847 Aug 20 j 12:00	19°♒11'27	19.10268 AU
opposition	-847 Aug 21 j 10:12	19°♒09'13	-0°48'32
direct	-847 Nov 04 j 14:36	17°♒13'09	
evening set	-846 Feb 01 j 20:59	20°♒10'27	
conjunction	-846 Feb 17 j 20:57	21°♒04'41	-0°44'12
minimum elong	-846 Feb 17 j 20:57	21°♒04'41	0°44'12
max. Earth dist.	-846 Feb 18 j 20:30	21°♒08'02	21.09789 AU
morning rise	-846 Mar 06 j 00:58	21°♒59'28	
retrograde	-846 Jun 08 j 16:51	25°♒06'14	
opposition	-846 Aug 25 j 16:29	23°♒06'51	-0°49'03
min. Earth dist.	-846 Aug 24 j 18:49	23°♒09'02	19.09267 AU
direct	-846 Nov 08 j 19:26	21°♒10'39	
evening set	-845 Feb 06 j 02:09	24°♒08'00	
conjunction	-845 Feb 22 j 03:06	25°♒02'21	-0°44'33
minimum elong	-845 Feb 22 j 03:06	25°♒02'21	0°44'35
max. Earth dist.	-845 Feb 23 j 02:15	25°♒05'38	21.08538 AU
morning rise	-845 Mar 10 j 08:02	25°♒57'15	
retrograde	-845 Jun 12 j 23:45	29°♒04'06	
opposition	-845 Aug 29 j 22:45	27°♒04'35	-0°49'20
min. Earth dist.	-845 Aug 29 j 02:34	27°♒06'38	19.07783 AU
direct	-845 Nov 12 j 23:35	25°♒08'16	
evening set	-844 Feb 10 j 07:30	28°♒05'44	
conjunction	-844 Feb 26 j 09:26	29°♒00'12	-0°44'42
minimum elong	-844 Feb 26 j 09:26	29°♒00'12	0°44'42
max. Earth dist.	-844 Feb 27 j 06:57	29°♒03'15	21.06850 AU
morning rise	-844 Mar 13 j 15:27	29°♒55'13	
	-844 Mar 15 j 02:00	0°♓	
retrograde	-844 Jun 16 j 08:56	3°♓02'14	
min. Earth dist.	-844 Sep 01 j 09:12	1°♓04'34	19.05887 AU
opposition	-844 Sep 02 j 04:49	1°♓02'35	-0°49'22
	-844 Sep 29 j 08:16	30°℞♒	
direct	-844 Nov 16 j 04:27	29°♒06'05	
	-843 Jan 01 j 12:39	0°♓	
evening set	-843 Feb 13 j 13:22	2°♓03'46	
conjunction	-843 Mar 01 j 16:20	2°♓58'23	-0°44'38
minimum elong	-843 Mar 01 j 16:20	2°♓58'23	0°44'38
max. Earth dist.	-843 Mar 02 j 13:24	3°♓01'22	21.04747 AU
morning rise	-843 Mar 17 j 23:15	3°♓53'33	
retrograde	-843 Jun 20 j 16:11	7°♓00'43	
opposition	-843 Sep 06 j 10:43	5°♓00'58	-0°49'11
min. Earth dist.	-843 Sep 05 j 16:37	5°♓02'48	19.03593 AU
direct	-843 Nov 20 j 08:00	3°♓04'19	
evening set	-842 Feb 17 j 19:37	6°♓02'17	
conjunction	-842 Mar 05 j 23:33	6°♓57'03	-0°44'21
minimum elong	-842 Mar 05 j 23:33	6°♓57'03	0°44'21
max. Earth dist.	-842 Mar 06 j 18:47	6°♓59'47	21.02285 AU
morning rise	-842 Mar 22 j 07:32	7°♓52'23	
retrograde	-842 Jun 25 j 02:00	10°♓59'47	
opposition	-842 Sep 10 j 16:43	8°♓59'54	-0°48'45
min. Earth dist.	-842 Sep 09 j 23:19	9°♓01'41	19.00954 AU
direct	-842 Nov 24 j 13:05	7°♓03'06	
evening set	-841 Feb 22 j 02:09	10°♓01'26	
conjunction	-841 Mar 10 j 07:10	10°♓56'23	-0°43'51
minimum elong	-841 Mar 10 j 07:10	10°♓56'23	0°43'51
max. Earth dist.	-841 Mar 11 j 01:57	10°♓59'03	20.99468 AU
morning rise	-841 Mar 26 j 16:01	11°♓51'53	
retrograde	-841 Jun 29 j 10:19	14°♓59'34	
opposition	-841 Sep 14 j 22:52	12°♓59'36	-0°48'06
min. Earth dist.	-841 Sep 14 j 06:59	13°♓01'13	18.97965 AU
direct	-841 Nov 28 j 16:50	11°♓02'38	
evening set	-840 Feb 26 j 09:25	14°♓01'24	
conjunction	-840 Mar 13 j 15:26	14°♓56'32	-0°43'09
minimum elong	-840 Mar 13 j 15:26	14°♓56'32	0°43'10
max. Earth dist.	-840 Mar 14 j 08:12	14°♓58'55	20.96328 AU
morning rise	-840 Mar 30 j 01:23	15°♓52'14	
retrograde	-840 Jul 02 j 20:39	19°♓00'14	
opposition	-840 Sep 18 j 05:00	17°♓00'10	-0°47'12
min. Earth dist.	-840 Sep 17 j 14:10	17°♓01'41	18.94653 AU
direct	-840 Dec 01 j 22:06	15°♓03'02	
evening set	-839 Mar 01 j 17:20	18°♓02'20	
conjunction	-839 Mar 18 j 00:28	18°♓57'42	-0°42'14
minimum elong	-839 Mar 18 j 00:28	18°♓57'42	0°42'14
max. Earth dist.	-839 Mar 18 j 16:29	18°♓59'59	20.92839 AU
morning rise	-839 Apr 03 j 11:16	19°♓53'35	
retrograde	-839 Jul 07 j 06:22	23°♓01'56	
opposition	-839 Sep 22 j 11:27	21°♓01'49	-0°46'05
min. Earth dist.	-839 Sep 21 j 22:22	21°♓03'10	18.90980 AU
direct	-839 Dec 06 j 02:56	19°♓04'31	

Attention, astronomical year style is used: The year -838 in astronomical counting style is the year 839 BCE in historical counting style.

evening set	-838 Mar 06 j 01:57	22°♓04'25	
conjunction	-838 Mar 22 j 10:00	22°♓59'59	-0°41'06
minimum elong	-838 Mar 22 j 10:00	22°♓59'59	0°41'07
max. Earth dist.	-838 Mar 22 j 23:35	23°♓01'56	20.88998 AU
morning rise	-838 Apr 07 j 21:49	23°♓56'06	
retrograde	-838 Jul 11 j 17:12	27°♓04'51	
opposition	-838 Sep 26 j 18:03	25°♓04'39	-0°44'43
min. Earth dist.	-838 Sep 26 j 06:23	25°♓05'51	18.86946 AU
direct	-838 Dec 10 j 08:20	23°♓07'10	
evening set	-837 Mar 10 j 11:18	26°♓07'44	
conjunction	-837 Mar 26 j 20:28	27°♓03'33	-0°39'46
minimum elong	-837 Mar 26 j 20:28	27°♓03'33	0°39'46
max. Earth dist.	-837 Mar 27 j 09:00	27°♓05'21	20.84764 AU
morning rise	-837 Apr 12 j 09:02	27°♓59'53	
	-837 May 22 j 23:18	0°♈	
retrograde	-837 Jul 16 j 04:02	1°♈09'03	
	-837 Sep 09 j 15:38	30°℞♓	
opposition	-837 Oct 01 j 01:01	29°♓08'47	-0°43'08
min. Earth dist.	-837 Sep 30 j 15:20	29°♓09'47	18.82504 AU
direct	-837 Dec 14 j 14:41	27°♓11'04	
	-836 Mar 10 j 04:17	0°♈	
evening set	-836 Mar 13 j 21:32	0°♈12'23	
conjunction	-836 Mar 30 j 07:38	1°♈08'27	-0°38'13
minimum elong	-836 Mar 30 j 07:38	1°♈08'27	0°38'13
max. Earth dist.	-836 Mar 30 j 17:10	1°♈09'49	20.80121 AU
morning rise	-836 Apr 15 j 21:14	2°♈05'01	
retrograde	-836 Jul 19 j 15:30	5°♈14'38	
opposition	-836 Oct 04 j 08:21	3°♈14'15	-0°41'19
min. Earth dist.	-836 Oct 04 j 00:29	3°♈15'04	18.77638 AU
direct	-836 Dec 17 j 21:03	1°♈16'16	
evening set	-835 Mar 18 j 08:35	4°♈18'22	
conjunction	-835 Apr 03 j 19:47	5°♈14'42	-0°36'28
minimum elong	-835 Apr 03 j 19:47	5°♈14'42	0°36'27
max. Earth dist.	-835 Apr 04 j 03:52	5°♈15'52	20.75026 AU
morning rise	-835 Apr 20 j 10:03	6°♈11'31	
retrograde	-835 Jul 24 j 03:00	9°♈21'33	
opposition	-835 Oct 08 j 15:57	7°♈21'03	-0°39'16
min. Earth dist.	-835 Oct 08 j 10:09	7°♈21'39	18.72317 AU
direct	-835 Dec 22 j 04:46	5°♈22'46	
evening set	-834 Mar 22 j 20:27	8°♈25'42	
conjunction	-834 Apr 08 j 08:31	9°♈22'18	-0°34'31
minimum elong	-834 Apr 08 j 08:31	9°♈22'18	0°34'30
max. Earth dist.	-834 Apr 08 j 13:18	9°♈23'00	20.69512 AU
morning rise	-834 Apr 24 j 23:43	10°♈19'22	
retrograde	-834 Jul 28 j 15:02	13°♈29'52	
opposition	-834 Oct 13 j 00:02	11°♈29'12	-0°37'01
min. Earth dist.	-834 Oct 12 j 20:10	11°♈29'36	18.66603 AU
direct	-834 Dec 26 j 12:39	9°♈30'33	
evening set	-833 Mar 27 j 08:49	12°♈34'22	
conjunction	-833 Apr 12 j 21:59	13°♈31'15	-0°32'22
minimum elong	-833 Apr 12 j 21:59	13°♈31'15	0°32'22
max. Earth dist.	-833 Apr 13 j 01:33	13°♈31'46	20.63613 AU
morning rise	-833 Apr 29 j 13:47	14°♈28'34	
retrograde	-833 Aug 02 j 03:10	17°♈39'32	
opposition	-833 Oct 17 j 08:28	15°♈38'42	-0°34'32
min. Earth dist.	-833 Oct 17 j 06:27	15°♈38'54	18.60529 AU
direct	-833 Dec 30 j 21:12	13°♈39'40	
evening set	-832 Mar 30 j 22:17	16°♈44'25	
conjunction	-832 Apr 16 j 12:14	17°♈41'36	-0°30'02
minimum elong	-832 Apr 16 j 12:14	17°♈41'36	0°30'01
max. Earth dist.	-832 Apr 16 j 12:33	17°♈41'39	20.57406 AU
morning rise	-832 May 03 j 04:54	18°♈39'11	
retrograde	-832 Aug 05 j 16:15	21°♈50'38	
opposition	-832 Oct 20 j 17:11	19°♈49'36	-0°31'52
min. Earth dist.	-832 Oct 20 j 17:12	19°♈49'36	18.54192 AU
direct	-831 Jan 03 j 06:32	17°♈50'09	
evening set	-831 Apr 04 j 12:28	20°♈55'55	
conjunction	-831 Apr 21 j 03:26	21°♈53'24	-0°27'32
minimum elong	-831 Apr 21 j 03:26	21°♈53'24	0°27'32
max. Earth dist.	-831 Apr 21 j 02:41	21°♈53'18	20.50951 AU
morning rise	-831 May 07 j 20:32	22°♈51'14	
retrograde	-831 Aug 10 j 05:06	26°♈03'12	
opposition	-831 Oct 25 j 02:26	24°♈01'59	-0°29'01
min. Earth dist.	-831 Oct 25 j 04:02	24°♈01'49	18.47638 AU
direct	-830 Jan 07 j 15:59	22°♈02'09	
evening set	-830 Apr 09 j 03:27	25°♈08'58	
conjunction	-830 Apr 25 j 19:02	26°♈06'44	-0°24'52
minimum elong	-830 Apr 25 j 19:02	26°♈06'44	0°24'51
max. Earth dist.	-830 Apr 25 j 15:11	26°♈06'11	20.44328 AU
morning rise	-830 May 12 j 12:52	27°♈04'51	
	-830 Jul 19 j 15:52	0°♉	
retrograde	-830 Aug 14 j 19:15	0°♉17'21	
	-830 Sep 10 j 00:46	30°℞♈	
opposition	-830 Oct 29 j 12:13	28°♈15'57	-0°25'59
min. Earth dist.	-830 Oct 29 j 15:44	28°♈15'35	18.40960 AU
direct	-829 Jan 12 j 02:40	26°♈15'42	
evening set	-829 Apr 13 j 19:14	29°♈23'38	
	-829 Apr 24 j 07:07	0°♉	
conjunction	-829 Apr 30 j 11:46	0°♉21'44	-0°22'03
minimum elong	-829 Apr 30 j 11:46	0°♉21'44	0°22'03
max. Earth dist.	-829 Apr 30 j 07:06	0°♉21'03	20.37600 AU
morning rise	-829 May 17 j 05:53	1°♉20'06	
retrograde	-829 Aug 19 j 09:14	4°♉33'10	
opposition	-829 Nov 02 j 22:27	2°♉31'37	-0°22'48
min. Earth dist.	-829 Nov 03 j 03:16	2°♉31'07	18.34199 AU
direct	-828 Jan 16 j 13:35	0°♉30'59	
evening set	-828 Apr 17 j 12:07	3°♉40'05	
conjunction	-828 May 04 j 05:11	4°♉38'28	-0°19'06
minimum elong	-828 May 04 j 05:11	4°♉38'28	0°19'06
max. Earth dist.	-828 May 03 j 21:23	4°♉37'20	20.30827 AU
morning rise	-828 May 20 j 23:55	5°♉37'07	
retrograde	-828 Aug 23 j 00:18	8°♉50'46	
opposition	-828 Nov 06 j 09:25	6°♉49'06	-0°19'28
min. Earth dist.	-828 Nov 06 j 16:16	6°♉48'22	18.27423 AU
direct	-827 Jan 20 j 01:30	4°♉48'04	
evening set	-827 Apr 22 j 05:47	7°♉58'24	
conjunction	-827 May 08 j 23:38	8°♉57'06	-0°16'02
minimum elong	-827 May 08 j 23:38	8°♉57'06	0°16'01
max. Earth dist.	-827 May 08 j 15:04	8°♉55'51	20.24046 AU
morning rise	-827 May 25 j 18:29	9°♉56'00	
retrograde	-827 Aug 27 j 16:01	13°♉10'15	
opposition	-827 Nov 10 j 20:56	11°♉08'30	-0°16'00
min. Earth dist.	-827 Nov 11 j 04:52	11°♉07'39	18.20647 AU
direct	-826 Jan 24 j 14:20	9°♉07'07	
evening set	-826 Apr 27 j 00:34	12°♉18'43	
conjunction	-826 May 13 j 18:47	13°♉17'44	-0°12'51
minimum elong	-826 May 13 j 18:47	13°♉17'44	0°12'51
behind sun begin	-826 May 13 j 14:44	13°♉17'09	
behind sun end	-826 May 13 j 22:50	13°♉18'19	
max. Earth dist.	-826 May 13 j 07:09	13°♉16'01	20.17296 AU
morning rise	-826 May 30 j 14:03	14°♉16'54	

Attention, astronomical year style is used: The year -826 in astronomical counting style is the year 827 BCE in historical counting style.

	-826 Jun 12 j 08:31	15°♉	
retrograde	-826 Sep 01 j 08:09	17°♉31'47	
opposition	-826 Nov 15 j 09:17	15°♉29'58	-0°12'24
min. Earth dist.	-826 Nov 15 j 19:22	15°♉28'53	18.13924 AU
	-826 Nov 27 j 04:02	15°℞♉	
direct	-825 Jan 29 j 03:21	13°♉28'13	
	-825 Mar 31 j 00:53	15°♉	
evening set	-825 May 01 j 20:05	16°♉41'09	
conjunction	-825 May 18 j 14:58	17°♉40'28	-0°09'34
minimum elong	-825 May 18 j 14:58	17°♉40'28	0°09'33
behind sun begin	-825 May 18 j 09:24	17°♉39'39	
behind sun end	-825 May 18 j 20:33	17°♉41'16	
max. Earth dist.	-825 May 18 j 02:34	17°♉38'38	20.10589 AU
morning rise	-825 Jun 04 j 10:16	18°♉39'54	
retrograde	-825 Sep 06 j 02:06	21°♉55'24	
opposition	-825 Nov 19 j 22:18	19°♉53'33	-0°08'42
min. Earth dist.	-825 Nov 20 j 09:28	19°♉52'21	18.07226 AU
direct	-824 Feb 02 j 18:13	17°♉51'29	
evening set	-824 May 05 j 17:01	21°♉05'44	
conjunction	-824 May 22 j 12:07	22°♉05'21	-0°06'12
minimum elong	-824 May 22 j 12:07	22°♉05'21	0°06'12
behind sun begin	-824 May 22 j 05:42	22°♉04'25	
behind sun end	-824 May 22 j 18:32	22°♉06'17	
max. Earth dist.	-824 May 21 j 20:33	22°♉03'03	20.03904 AU
morning rise	-824 Jun 08 j 07:35	23°♉05'03	
retrograde	-824 Sep 09 j 19:38	26°♉21'11	
opposition	-824 Nov 23 j 12:08	24°♉19'18	-0°04'55
min. Earth dist.	-824 Nov 24 j 01:50	24°♉17'50	18.00559 AU
direct	-823 Feb 06 j 08:43	22°♉16'51	
evening set	-823 May 10 j 14:46	25°♉32'29	
conjunction	-823 May 27 j 10:18	26°♉32'24	-0°02'46
minimum elong	-823 May 27 j 10:18	26°♉32'24	0°02'45
behind sun begin	-823 May 27 j 03:31	26°♉31'24	
behind sun end	-823 May 27 j 17:04	26°♉33'23	
max. Earth dist.	-823 May 26 j 17:38	26°♉29'55	19.97237 AU
morning rise	-823 Jun 13 j 05:35	27°♉32'20	
	-823 Aug 02 j 02:10	0°♊	
retrograde	-823 Sep 14 j 15:32	0°♊49'04	
	-823 Oct 28 j 21:21	30°℞♉	
opposition	-823 Nov 28 j 02:48	28°♉47'09	-0°01'04
min. Earth dist.	-823 Nov 28 j 17:26	28°♉45'34	17.93897 AU
direct	-822 Feb 11 j 01:27	26°♉44'21	
asc. node	-822 Mar 10 j 10:58	27°♉04'14	
evening set	-822 May 15 j 13:26	0°♊01'18	
	-822 May 15 j 04:29	0°♊	
conjunction	-822 Jun 01 j 09:01	1°♊01'30	0°00'49
minimum elong	-822 Jun 01 j 09:00	1°♊01'30	0°00'50
behind sun begin	-822 Jun 01 j 02:13	1°♊00'30	
behind sun end	-822 Jun 01 j 15:47	1°♊02'29	
max. Earth dist.	-822 May 31 j 13:23	0°♊58'33	19.90579 AU
morning rise	-822 Jun 18 j 04:14	2°♊01'40	
retrograde	-822 Sep 19 j 10:34	5°♊19'01	
opposition	-822 Dec 02 j 18:25	3°♊17'00	0°02'49
min. Earth dist.	-822 Dec 03 j 11:33	3°♊15'09	17.87266 AU
direct	-821 Feb 15 j 17:56	1°♊13'49	
evening set	-821 May 20 j 12:59	4°♊32'06	
max. Earth dist.	-821 Jun 05 j 11:56	5°♊29'24	19.83970 AU
conjunction	-821 Jun 06 j 08:48	5°♊32'33	0°04'22
minimum elong	-821 Jun 06 j 08:47	5°♊32'33	0°04'22
behind sun begin	-821 Jun 06 j 02:07	5°♊31'34	
behind sun end	-821 Jun 06 j 15:27	5°♊33'32	
morning rise	-821 Jun 23 j 03:44	6°♊32'57	
retrograde	-821 Sep 24 j 07:25	9°♊50'50	
opposition	-821 Dec 07 j 10:31	7°♊48'45	0°06'43
min. Earth dist.	-821 Dec 08 j 04:23	7°♊46'48	17.80689 AU
direct	-820 Feb 20 j 12:22	5°♊45'09	
evening set	-820 May 24 j 13:32	9°♊04'43	
max. Earth dist.	-820 Jun 09 j 09:53	10°♊01'53	19.77438 AU
conjunction	-820 Jun 10 j 09:16	10°♊05'26	0°07'51
minimum elong	-820 Jun 10 j 09:16	10°♊05'26	0°07'51
behind sun begin	-820 Jun 10 j 03:11	10°♊04'32	
behind sun end	-820 Jun 10 j 15:20	10°♊06'19	
morning rise	-820 Jun 27 j 03:54	11°♊06'02	
retrograde	-820 Sep 28 j 03:32	14°♊24'26	
opposition	-820 Dec 11 j 03:39	12°♊22'15	0°10'36
min. Earth dist.	-820 Dec 11 j 23:55	12°♊20'03	17.74235 AU
direct	-819 Feb 24 j 06:42	10°♊18'13	
evening set	-819 May 29 j 14:38	13°♊39'04	
max. Earth dist.	-819 Jun 14 j 09:46	14°♊36'17	19.71070 AU
conjunction	-819 Jun 15 j 10:17	14°♊40'01	0°11'18
minimum elong	-819 Jun 15 j 10:17	14°♊40'00	0°11'19
behind sun begin	-819 Jun 15 j 05:24	14°♊39'17	
behind sun end	-819 Jun 15 j 15:10	14°♊40'44	
morning rise	-819 Jul 02 j 04:28	15°♊40'47	
retrograde	-819 Oct 03 j 01:04	18°♊59'42	
opposition	-819 Dec 15 j 21:21	16°♊57'24	0°14'26
min. Earth dist.	-819 Dec 16 j 17:53	16°♊55'09	17.67972 AU
direct	-818 Mar 01 j 03:26	14°♊52'58	
evening set	-818 Jun 03 j 16:28	18°♊15'02	
max. Earth dist.	-818 Jun 19 j 09:49	19°♊12'12	19.64924 AU
conjunction	-818 Jun 20 j 11:53	19°♊16'11	0°14'43
minimum elong	-818 Jun 20 j 11:53	19°♊16'11	0°14'43
behind sun begin	-818 Jun 20 j 09:23	19°♊15'49	
behind sun end	-818 Jun 20 j 14:23	19°♊16'33	
morning rise	-818 Jul 07 j 05:31	20°♊17'08	
retrograde	-818 Oct 07 j 21:28	23°♊36'31	
opposition	-818 Dec 20 j 15:53	21°♊34'05	0°18'12
min. Earth dist.	-818 Dec 21 j 14:29	21°♊31'37	17.61986 AU
direct	-817 Mar 05 j 23:19	19°♊29'15	
evening set	-817 Jun 08 j 18:51	22°♊52'30	
max. Earth dist.	-817 Jun 24 j 10:48	23°♊49'41	19.59104 AU
conjunction	-817 Jun 25 j 13:58	23°♊53'51	0°18'03
minimum elong	-817 Jun 25 j 13:58	23°♊53'51	0°18'04
morning rise	-817 Jul 12 j 07:05	24°♊54'57	
retrograde	-817 Oct 12 j 19:43	28°♊14'46	
opposition	-817 Dec 25 j 11:03	26°♊12'14	0°21'52
min. Earth dist.	-817 Dec 26 j 09:33	26°♊09'47	17.56345 AU
direct	-816 Mar 09 j 22:14	24°♊07'01	
evening set	-816 Jun 12 j 21:52	27°♊31'25	
conjunction	-816 Jun 29 j 16:36	28°♊32'56	0°21'17
minimum elong	-816 Jun 29 j 16:36	28°♊32'56	0°21'17
max. Earth dist.	-816 Jun 28 j 12:51	28°♊28'40	19.53649 AU
morning rise	-816 Jul 16 j 08:52	29°♊34'08	
	-816 Jul 23 j 15:17	0°♋	
retrograde	-816 Oct 16 j 16:52	2°♋54'22	
opposition	-816 Dec 29 j 07:06	0°♋51'46	0°25'25
min. Earth dist.	-816 Dec 30 j 07:12	0°♋49'08	17.51121 AU
	-815 Jan 18 j 15:06	30°℞♊	
direct	-815 Mar 14 j 19:59	28°♊46'13	
	-815 May 07 j 17:57	0°♋	
evening set	-815 Jun 18 j 01:23	2°♋11'42	
conjunction	-815 Jul 04 j 19:29	3°♋13'21	0°24'23
minimum elong	-815 Jul 04 j 19:29	3°♋13'21	0°24'24

Attention, astronomical year style is used: The year -815 in astronomical counting style is the year 816 BCE in historical counting style.

max. Earth dist.	-815 Jul	03 j 14:43	3°♋08'54	19.48665 AU
morning rise	-815 Jul	21 j 11:05	4°♋14'40	
retrograde	-815 Oct	21 j 15:53	7°♋35'17	
opposition	-814 Jan	03 j 03:48	5°♋32'38	0°28'48
min. Earth dist.	-814 Jan	04 j 03:22	5°♋30'03	17.46395 AU
direct	-814 Mar	19 j 20:28	3°♋26'47	
evening set	-814 Jun	23 j 05:05	6°♋53'18	
conjunction	-814 Jul	09 j 22:42	7°♋55'05	0°27'20
minimum elong	-814 Jul	09 j 22:42	7°♋55'05	0°27'20
max. Earth dist.	-814 Jul	08 j 18:20	7°♋50'41	19.44193 AU
morning rise	-814 Jul	26 j 13:17	8°♋56'28	
retrograde	-814 Oct	26 j 14:08	12°♋17'28	
opposition	-813 Jan	08 j 01:22	10°♋14'49	0°32'00
min. Earth dist.	-813 Jan	09 j 01:59	10°♋12'07	17.42206 AU
direct	-813 Mar	24 j 19:34	8°♋08'44	
evening set	-813 Jun	28 j 09:29	11°♋36'13	
max. Earth dist.	-813 Jul	13 j 20:50	12°♋33'31	19.40290 AU
conjunction	-813 Jul	15 j 02:15	12°♋38'05	0°30'07
minimum elong	-813 Jul	15 j 02:15	12°♋38'05	0°30'07
morning rise	-813 Jul	31 j 16:03	13°♋39'32	
retrograde	-813 Oct	31 j 14:07	17°♋00'52	
opposition	-812 Jan	12 j 23:22	14°♋58'16	0°35'01
min. Earth dist.	-812 Jan	13 j 23:27	14°♋55'38	17.38590 AU
direct	-812 Mar	28 j 21:29	12°♋52'01	
evening set	-812 Jul	02 j 14:07	16°♋20'24	
max. Earth dist.	-812 Jul	18 j 01:51	17°♋17'55	19.36951 AU
conjunction	-812 Jul	19 j 06:15	17°♋22'21	0°32'43
minimum elong	-812 Jul	19 j 06:15	17°♋22'21	0°32'43
morning rise	-812 Aug	04 j 18:51	18°♋23'50	
retrograde	-812 Nov	04 j 13:33	21°♋45'29	
opposition	-811 Jan	16 j 22:21	19°♋42'58	0°37'48
min. Earth dist.	-811 Jan	17 j 23:08	19°♋40'15	17.35531 AU
direct	-811 Apr	02 j 22:07	17°♋36'36	
evening set	-811 Jul	07 j 19:02	21°♋05'48	
max. Earth dist.	-811 Jul	23 j 04:43	22°♋03'12	19.34169 AU
conjunction	-811 Jul	24 j 10:05	22°♋07'47	0°35'06
minimum elong	-811 Jul	24 j 10:05	22°♋07'47	0°35'06
morning rise	-811 Aug	09 j 21:46	23°♋09'17	
retrograde	-811 Nov	09 j 14:18	26°♋31'13	
opposition	-810 Jan	21 j 21:54	24°♋28'47	0°40'20
min. Earth dist.	-810 Jan	22 j 22:14	24°♋26'07	17.33024 AU
direct	-810 Apr	08 j 00:52	22°♋22'21	
evening set	-810 Jul	13 j 00:03	25°♋52'16	
max. Earth dist.	-810 Jul	28 j 10:19	26°♋49'52	19.31914 AU
conjunction	-810 Jul	29 j 14:19	26°♋54'16	0°37'15
minimum elong	-810 Jul	29 j 14:19	26°♋54'16	0°37'16
morning rise	-810 Aug	15 j 00:44	27°♋55'45	
	-810 Sep	21 j 20:54	0°♌	
retrograde	-810 Nov	14 j 15:01	1°♌17'53	
	-809 Jan	09 j 13:35	30°℞♋	
opposition	-809 Jan	26 j 22:03	29°♋15'34	0°42'37
min. Earth dist.	-809 Jan	27 j 22:40	29°♋12'53	17.31019 AU
direct	-809 Apr	13 j 03:05	27°♋09'04	
	-809 Jul	07 j 05:32	0°♌	
evening set	-809 Jul	18 j 05:24	0°♌39'35	
conjunction	-809 Aug	03 j 18:29	1°♌41'33	0°39'09
minimum elong	-809 Aug	03 j 18:29	1°♌41'33	0°39'09
max. Earth dist.	-809 Aug	02 j 13:33	1°♌37'00	19.30155 AU
morning rise	-809 Aug	20 j 03:53	2°♌43'00	
retrograde	-809 Nov	19 j 16:03	6°♌05'18	
opposition	-808 Jan	31 j 22:52	4°♌03'04	0°44'35
min. Earth dist.	-808 Feb	01 j 23:14	4°♌00'25	17.29510 AU
direct	-808 Apr	17 j 05:50	1°♌56'32	
evening set	-808 Jul	22 j 10:30	5°♌27'30	
conjunction	-808 Aug	07 j 22:37	6°♌29'27	0°40'47
minimum elong	-808 Aug	07 j 22:37	6°♌29'27	0°40'47
max. Earth dist.	-808 Aug	06 j 19:11	6°♌25'07	19.28877 AU
morning rise	-808 Aug	24 j 06:40	7°♌30'49	
retrograde	-808 Nov	23 j 17:49	10°♌53'13	
opposition	-807 Feb	05 j 00:13	8°♌51'03	0°46'15
min. Earth dist.	-807 Feb	06 j 00:08	8°♌48'27	17.28464 AU
direct	-807 Apr	22 j 09:43	6°♌44'30	
evening set	-807 Jul	27 j 15:36	10°♌15'47	
max. Earth dist.	-807 Aug	11 j 22:41	11°♌13'16	19.28074 AU
conjunction	-807 Aug	13 j 02:27	11°♌17'39	0°42'07
minimum elong	-807 Aug	13 j 02:27	11°♌17'39	0°42'08
morning rise	-807 Aug	29 j 09:23	12°♌18'56	
	-807 Oct	21 j 04:41	15°♌	
retrograde	-807 Nov	28 j 18:04	15°♌41'22	
	-806 Jan	07 j 06:57	15°℞♌	
opposition	-806 Feb	10 j 01:56	13°♌39'16	0°47'36
min. Earth dist.	-806 Feb	11 j 01:39	13°♌36'41	17.27915 AU
direct	-806 Apr	27 j 12:17	11°♌32'41	
	-806 Jul	31 j 17:06	15°♌	
evening set	-806 Aug	01 j 20:10	15°♌04'10	
max. Earth dist.	-806 Aug	17 j 03:49	16°♌01'47	19.27771 AU
conjunction	-806 Aug	18 j 05:59	16°♌05'56	0°43'10
minimum elong	-806 Aug	18 j 05:59	16°♌05'56	0°43'10
morning rise	-806 Sep	03 j 11:40	17°♌07'06	
retrograde	-806 Dec	03 j 19:54	20°♌29'29	
opposition	-805 Feb	15 j 03:55	18°♌27'26	0°48'36
min. Earth dist.	-805 Feb	16 j 02:28	18°♌24'59	17.27848 AU
direct	-805 May	02 j 17:51	16°♌20'53	
evening set	-805 Aug	07 j 00:34	19°♌52'23	
max. Earth dist.	-805 Aug	22 j 07:24	20°♌49'57	19.27961 AU
conjunction	-805 Aug	23 j 09:08	20°♌54'01	0°43'55
minimum elong	-805 Aug	23 j 09:07	20°♌54'01	0°43'56
morning rise	-805 Sep	08 j 13:36	21°♌55'03	
retrograde	-805 Dec	08 j 18:40	25°♌17'21	
opposition	-804 Feb	20 j 06:09	23°♌15'20	0°49'16
min. Earth dist.	-804 Feb	21 j 04:29	23°♌12'54	17.28307 AU
direct	-804 May	06 j 21:17	21°♌08'47	
evening set	-804 Aug	11 j 04:24	24°♌40'13	
max. Earth dist.	-804 Aug	26 j 11:43	25°♌37'53	19.28698 AU
conjunction	-804 Aug	27 j 11:46	25°♌41'41	0°44'21
minimum elong	-804 Aug	27 j 11:46	25°♌41'41	0°44'21
morning rise	-804 Sep	12 j 15:04	26°♌42'33	
	-804 Nov	29 j 22:06	0°♍	
retrograde	-804 Dec	12 j 19:40	0°♍04'42	
	-804 Dec	25 j 17:45	30°℞♌	
opposition	-803 Feb	24 j 08:32	28°♌02'42	0°49'35
min. Earth dist.	-803 Feb	25 j 04:54	28°♌00'29	17.29310 AU
direct	-803 May	12 j 04:01	25°♌56'13	
evening set	-803 Aug	16 j 07:29	29°♌27'24	
	-803 Aug	25 j 00:16	0°♍	
conjunction	-803 Sep	01 j 13:38	0°♍28'41	0°44'29
minimum elong	-803 Sep	01 j 13:38	0°♍28'41	0°44'29
max. Earth dist.	-803 Aug	31 j 15:09	0°♍25'08	19.29991 AU
morning rise	-803 Sep	17 j 15:42	1°♍29'23	
retrograde	-803 Dec	17 j 17:31	4°♍51'19	
opposition	-802 Mar	01 j 11:05	2°♍49'20	0°49'33
min. Earth dist.	-802 Mar	02 j 06:57	2°♍47'12	17.30906 AU

Attention, astronomical year style is used: The year -802 in astronomical counting style is the year 803 BCE in historical counting style.

direct	-802 May 17 j 07:34	0°♍42'57	
evening set	-802 Aug 21 j 10:02	4°♍13'47	
conjunction	-802 Sep 06 j 14:56	5°♍14'51	0°44'18
minimum elong	-802 Sep 06 j 14:56	5°♍14'51	0°44'18
max. Earth dist.	-802 Sep 05 j 18:06	5°♍11'34	19.31896 AU
morning rise	-802 Sep 22 j 15:56	6°♍15'21	
retrograde	-802 Dec 22 j 17:52	9°♍37'01	
opposition	-801 Mar 06 j 13:22	7°♍35'06	0°49'10
min. Earth dist.	-801 Mar 07 j 06:38	7°♍33'14	17.33111 AU
direct	-801 May 22 j 13:54	5°♍28'51	
evening set	-801 Aug 26 j 11:55	8°♍59'13	
conjunction	-801 Sep 11 j 15:39	10°♍00'04	0°43'49
minimum elong	-801 Sep 11 j 15:40	10°♍00'04	0°43'48
max. Earth dist.	-801 Sep 10 j 21:13	9°♍57'09	19.34417 AU
morning rise	-801 Sep 27 j 15:25	11°♍00'21	
retrograde	-801 Dec 27 j 15:31	14°♍21'43	
opposition	-800 Mar 10 j 15:56	12°♍19'53	0°48'28
min. Earth dist.	-800 Mar 11 j 08:23	12°♍18'07	17.35950 AU
direct	-800 May 26 j 16:47	10°♍13'51	
evening set	-800 Aug 30 j 13:01	13°♍43'38	
conjunction	-800 Sep 15 j 15:27	14°♍44'15	0°43'02
minimum elong	-800 Sep 15 j 15:27	14°♍44'15	0°43'03
max. Earth dist.	-800 Sep 14 j 22:35	14°♍41'35	19.37580 AU
morning rise	-800 Oct 01 j 14:14	15°♍44'19	
retrograde	-800 Dec 31 j 15:35	19°♍05'21	
opposition	-799 Mar 15 j 18:15	17°♍03'39	0°47'26
min. Earth dist.	-799 Mar 16 j 07:41	17°♍02'13	17.39411 AU
direct	-799 May 31 j 21:20	14°♍57'52	
evening set	-799 Sep 04 j 13:18	18°♍27'00	
conjunction	-799 Sep 20 j 14:42	19°♍27'22	0°41'59
minimum elong	-799 Sep 20 j 14:42	19°♍27'22	0°41'59
max. Earth dist.	-799 Sep 20 j 00:51	19°♍25'11	19.41343 AU
morning rise	-799 Oct 06 j 12:20	20°♍27'12	
retrograde	-798 Jan 05 j 13:23	23°♍47'52	
opposition	-798 Mar 20 j 20:28	21°♍46'19	0°46'05
min. Earth dist.	-798 Mar 21 j 08:57	21°♍44'59	17.43454 AU
direct	-798 Jun 05 j 23:18	19°♍40'52	
evening set	-798 Sep 09 j 12:54	23°♍09'15	
conjunction	-798 Sep 25 j 13:03	24°♍09'21	0°40'39
minimum elong	-798 Sep 25 j 13:03	24°♍09'21	0°40'39
max. Earth dist.	-798 Sep 25 j 00:27	24°♍07'22	19.45663 AU
morning rise	-798 Oct 11 j 09:54	25°♍08'57	
retrograde	-797 Jan 10 j 12:52	28°♍29'13	
opposition	-797 Mar 25 j 22:24	26°♍27'50	0°44'26
min. Earth dist.	-797 Mar 26 j 08:01	26°♍26'49	17.48010 AU
direct	-797 Jun 11 j 02:22	24°♍22'45	
evening set	-797 Sep 14 j 11:36	27°♍50'17	
conjunction	-797 Sep 30 j 10:47	28°♍50'06	0°39'03
minimum elong	-797 Sep 30 j 10:47	28°♍50'06	0°39'03
max. Earth dist.	-797 Sep 30 j 01:22	28°♍48'38	19.50446 AU
morning rise	-797 Oct 16 j 06:31	29°♍49'27	
	-797 Oct 19 j 03:35	0°♎	
retrograde	-796 Jan 15 j 10:04	3°♎09'18	
opposition	-796 Mar 30 j 00:17	1°♎08'06	0°42'30
min. Earth dist.	-796 Mar 30 j 08:48	1°♎07'12	17.52996 AU
	-796 Apr 27 j 09:12	30°℞♍	
direct	-796 Jun 15 j 04:11	29°♍03'24	
	-796 Aug 01 j 07:06	0°♎	
evening set	-796 Sep 18 j 09:38	2°♎30'00	
conjunction	-796 Oct 04 j 07:36	3°♎29'32	0°37'12
minimum elong	-796 Oct 04 j 07:36	3°♎29'32	0°37'11
max. Earth dist.	-796 Oct 03 j 23:13	3°♎28'13	19.55635 AU
morning rise	-796 Oct 20 j 02:39	4°♎28'37	
retrograde	-795 Jan 19 j 08:35	7°♎48'02	
opposition	-795 Apr 04 j 01:46	5°♎47'00	0°40'18
min. Earth dist.	-795 Apr 04 j 07:35	5°♎46'23	17.58361 AU
direct	-795 Jun 20 j 06:04	3°♎42'41	
evening set	-795 Sep 23 j 06:31	7°♎08'16	
conjunction	-795 Oct 09 j 03:40	8°♎07'30	0°35'07
minimum elong	-795 Oct 09 j 03:40	8°♎07'30	0°35'07
max. Earth dist.	-795 Oct 08 j 22:28	8°♎06'42	19.61155 AU
morning rise	-795 Oct 24 j 21:46	9°♎06'20	
retrograde	-794 Jan 24 j 04:53	12°♎25'14	
opposition	-794 Apr 09 j 02:56	10°♎24'22	0°37'50
min. Earth dist.	-794 Apr 09 j 07:27	10°♎23'54	17.64011 AU
direct	-794 Jun 25 j 07:33	8°♎20'28	
evening set	-794 Sep 28 j 02:49	11°♎44'58	
conjunction	-794 Oct 13 j 22:51	12°♎43'54	0°32'48
minimum elong	-794 Oct 13 j 22:51	12°♎43'54	0°32'47
max. Earth dist.	-794 Oct 13 j 18:29	12°♎43'13	19.66935 AU
morning rise	-794 Oct 29 j 16:24	13°♎42'27	
retrograde	-793 Jan 29 j 01:49	17°♎00'50	
opposition	-793 Apr 14 j 03:26	15°♎00'06	0°35'09
min. Earth dist.	-793 Apr 14 j 05:42	14°♎59'52	17.69902 AU
direct	-793 Jun 30 j 08:20	12°♎56'35	
evening set	-793 Oct 02 j 22:01	16°♎19'57	
conjunction	-793 Oct 18 j 17:19	17°♎18'34	0°30'18
minimum elong	-793 Oct 18 j 17:19	17°♎18'34	0°30'18
max. Earth dist.	-793 Oct 18 j 15:59	17°♎18'22	19.72923 AU
morning rise	-793 Nov 03 j 10:04	18°♎16'51	
retrograde	-792 Feb 02 j 20:55	21°♎34'41	
opposition	-792 Apr 18 j 03:40	19°♎34'05	0°32'15
min. Earth dist.	-792 Apr 18 j 04:16	19°♎34'01	17.75966 AU
direct	-792 Jul 04 j 09:16	17°♎30'58	
evening set	-792 Oct 06 j 16:16	20°♎53'05	
conjunction	-792 Oct 22 j 10:37	21°♎51'25	0°27'38
minimum elong	-792 Oct 22 j 10:37	21°♎51'25	0°27'38
max. Earth dist.	-792 Oct 22 j 10:15	21°♎51'21	19.79073 AU
morning rise	-792 Nov 07 j 02:58	22°♎49'26	
retrograde	-791 Feb 06 j 16:19	26°♎06'41	
opposition	-791 Apr 23 j 03:14	24°♎06'11	0°29'10
min. Earth dist.	-791 Apr 23 j 01:49	24°♎06'19	17.82194 AU
direct	-791 Jul 09 j 08:36	22°♎03'25	
evening set	-791 Oct 11 j 09:25	25°♎24'17	
conjunction	-791 Oct 27 j 03:11	26°♎22'18	0°24'48
minimum elong	-791 Oct 27 j 03:11	26°♎22'18	0°24'47
max. Earth dist.	-791 Oct 27 j 05:47	26°♎22'42	19.85370 AU
morning rise	-791 Nov 11 j 18:57	27°♎20'03	
	-790 Jan 05 j 04:25	0°♏	
retrograde	-790 Feb 11 j 09:32	0°♏36'41	
	-790 Mar 21 j 20:57	30°℞♎	
opposition	-790 Apr 28 j 01:54	28°♎36'16	0°25'56
min. Earth dist.	-790 Apr 27 j 22:30	28°♎36'37	17.88546 AU
direct	-790 Jul 14 j 08:22	26°♎33'51	
evening set	-790 Oct 16 j 01:40	29°♎53'26	
	-790 Oct 17 j 21:15	0°♏	
conjunction	-790 Oct 31 j 18:38	0°♏51'08	0°21'50
minimum elong	-790 Oct 31 j 18:39	0°♏51'08	0°21'50
max. Earth dist.	-790 Oct 31 j 22:25	0°♏51'43	19.91796 AU
morning rise	-790 Nov 16 j 10:09	1°♏48'37	
retrograde	-789 Feb 16 j 02:56	5°♏04'39	

Attention, astronomical year style is used: The year -789 in astronomical counting style is the year 790 BCE in historical counting style.

opposition	-789 May 03 j 00:05	3°♏04'16	0°22'34
min. Earth dist.	-789 May 02 j 18:53	3°♏04'49	17.95050 AU
direct	-789 Jul 19 j 05:33	1°♏02'13	
evening set	-789 Oct 20 j 16:40	4°♏20'28	
conjunction	-789 Nov 05 j 09:09	5°♏17'52	0°18'46
minimum elong	-789 Nov 05 j 09:09	5°♏17'52	0°18'45
max. Earth dist.	-789 Nov 05 j 15:57	5°♏18'54	19.98371 AU
morning rise	-789 Nov 21 j 00:12	6°♏15'05	
retrograde	-788 Feb 20 j 18:54	9°♏30'29	
opposition	-788 May 06 j 21:28	7°♏30'12	0°19'05
min. Earth dist.	-788 May 06 j 13:41	7°♏31'00	18.01695 AU
direct	-788 Jul 23 j 03:28	5°♏28'30	
evening set	-788 Oct 24 j 06:54	8°♏45'25	
conjunction	-788 Nov 08 j 22:43	9°♏42'31	0°15'36
minimum elong	-788 Nov 08 j 22:43	9°♏42'31	0°15'36
behind sun begin	-788 Nov 08 j 20:48	9°♏42'14	
behind sun end	-788 Nov 09 j 00:39	9°♏42'49	
max. Earth dist.	-788 Nov 09 j 07:04	9°♏43'47	20.05098 AU
morning rise	-788 Nov 24 j 13:37	10°♏39'30	
retrograde	-787 Feb 24 j 10:27	13°♏54'17	
opposition	-787 May 11 j 18:08	11°♏54'04	0°15'32
min. Earth dist.	-787 May 11 j 08:43	11°♏55'02	18.08513 AU
direct	-787 Jul 27 j 21:46	9°♏52'45	
evening set	-787 Oct 28 j 20:01	13°♏08'21	
conjunction	-787 Nov 13 j 11:31	14°♏05'11	0°12'23
minimum elong	-787 Nov 13 j 11:31	14°♏05'11	0°12'23
behind sun begin	-787 Nov 13 j 07:07	14°♏04'31	
behind sun end	-787 Nov 13 j 15:54	14°♏05'50	
max. Earth dist.	-787 Nov 13 j 22:37	14°♏06'52	20.11987 AU
	-787 Nov 28 j 13:23	15°♏	
morning rise	-787 Nov 29 j 02:10	15°♏01'54	
retrograde	-786 Mar 01 j 01:54	18°♏16'04	
opposition	-786 May 16 j 13:54	16°♏15'59	0°11'55
min. Earth dist.	-786 May 16 j 01:44	16°♏17'14	18.15455 AU
	-786 Jun 19 j 00:45	15°℞♏	
direct	-786 Aug 01 j 17:38	14°♏15'05	
	-786 Sep 12 j 18:11	15°♏	
evening set	-786 Nov 02 j 08:25	17°♏29'23	
conjunction	-786 Nov 17 j 23:24	18°♏25'56	0°09'08
minimum elong	-786 Nov 17 j 23:25	18°♏25'56	0°09'07
behind sun begin	-786 Nov 17 j 17:49	18°♏25'06	
behind sun end	-786 Nov 18 j 05:00	18°♏26'45	
max. Earth dist.	-786 Nov 18 j 12:07	18°♏27'51	20.18977 AU
morning rise	-786 Dec 03 j 14:01	19°♏22'25	
retrograde	-785 Mar 05 j 16:05	22°♏36'00	
opposition	-785 May 21 j 09:02	20°♏36'03	0°08'15
min. Earth dist.	-785 May 20 j 19:39	20°♏37'25	18.22492 AU
direct	-785 Aug 06 j 09:22	18°♏35'34	
evening set	-785 Nov 06 j 19:55	21°♏48'36	
conjunction	-785 Nov 22 j 10:41	22°♏44'53	0°05'51
minimum elong	-785 Nov 22 j 10:41	22°♏44'53	0°05'50
behind sun begin	-785 Nov 22 j 04:25	22°♏43'57	
behind sun end	-785 Nov 22 j 16:56	22°♏45'48	
max. Earth dist.	-785 Nov 23 j 01:46	22°♏47'09	20.26040 AU
morning rise	-785 Dec 08 j 01:12	23°♏41'09	
retrograde	-784 Mar 09 j 07:15	26°♏54'09	
min. Earth dist.	-784 May 24 j 11:19	24°♏55'59	18.29552 AU
opposition	-784 May 25 j 03:25	24°♏54'21	0°04'34
direct	-784 Aug 10 j 03:24	22°♏54'19	
evening set	-784 Nov 10 j 06:38	26°♏06'05	
conjunction	-784 Nov 25 j 21:04	27°♏02'06	0°02'32
minimum elong	-784 Nov 25 j 21:05	27°♏02'06	0°02'31
behind sun begin	-784 Nov 25 j 14:33	27°♏01'09	
behind sun end	-784 Nov 26 j 03:37	27°♏03'03	
max. Earth dist.	-784 Nov 26 j 13:43	27°♏04'36	20.33082 AU
morning rise	-784 Dec 11 j 11:44	27°♏58'09	
	-783 Jan 19 j 14:33	0°♐	
retrograde	-783 Mar 13 j 20:35	1°♐10'36	
	-783 May 09 j 02:35	30°℞♏	
opposition	-783 May 29 j 21:12	29°♏10'57	0°00'53
min. Earth dist.	-783 May 29 j 04:23	29°♏12'39	18.36572 AU
direct	-783 Aug 14 j 17:37	27°♏11'20	
desc. node	-783 Aug 27 j 16:24	27°♏15'37	
	-783 Nov 08 j 09:18	0°♐	
evening set	-783 Nov 14 j 16:41	0°♐21'53	
conjunction	-783 Nov 30 j 07:03	1°♐17'40	-0°00'53
minimum elong	-783 Nov 30 j 07:03	1°♐17'40	0°00'53
behind sun begin	-783 Nov 30 j 00:31	1°♐16'42	
behind sun end	-783 Nov 30 j 13:34	1°♐18'37	
max. Earth dist.	-783 Dec 01 j 01:29	1°♐20'25	20.40049 AU
morning rise	-783 Dec 15 j 21:45	2°♐13'30	
retrograde	-782 Mar 18 j 10:49	5°♐25'24	
opposition	-782 Jun 03 j 13:54	3°♐25'54	-0°02'46
min. Earth dist.	-782 Jun 02 j 18:45	3°♐27'50	18.43462 AU
direct	-782 Aug 19 j 10:00	1°♐26'42	
evening set	-782 Nov 19 j 02:10	4°♐36'04	
conjunction	-782 Dec 04 j 16:21	5°♐31'36	-0°04'12
minimum elong	-782 Dec 04 j 16:21	5°♐31'36	0°04'13
behind sun begin	-782 Dec 04 j 09:55	5°♐30'40	
behind sun end	-782 Dec 04 j 22:47	5°♐32'33	
max. Earth dist.	-782 Dec 05 j 12:02	5°♐34'33	20.46840 AU
morning rise	-782 Dec 20 j 07:15	6°♐27'15	
retrograde	-781 Mar 22 j 23:25	9°♐38'38	
min. Earth dist.	-781 Jun 07 j 10:53	7°♐41'13	18.50157 AU
opposition	-781 Jun 08 j 06:17	7°♐39'15	-0°06'24
direct	-781 Aug 23 j 23:04	5°♐40'27	
evening set	-781 Nov 23 j 10:50	8°♐48'38	
conjunction	-781 Dec 09 j 01:02	9°♐43'58	-0°07'27
minimum elong	-781 Dec 09 j 01:02	9°♐43'57	0°07'27
behind sun begin	-781 Dec 08 j 19:03	9°♐43'05	
behind sun end	-781 Dec 09 j 07:00	9°♐44'49	
max. Earth dist.	-781 Dec 09 j 22:02	9°♐47'05	20.53406 AU
morning rise	-781 Dec 24 j 16:08	10°♐39'26	
retrograde	-780 Mar 26 j 12:31	13°♐50'17	
opposition	-780 Jun 11 j 21:49	11°♐51'01	-0°09'58
min. Earth dist.	-780 Jun 11 j 00:16	11°♐53'11	18.56577 AU
direct	-780 Aug 27 j 14:04	9°♐52'34	
evening set	-780 Nov 26 j 19:06	12°♐59'38	
conjunction	-780 Dec 12 j 09:18	13°♐54'45	-0°10'37
minimum elong	-780 Dec 12 j 09:17	13°♐54'45	0°10'38
behind sun begin	-780 Dec 12 j 04:10	13°♐54'01	
behind sun end	-780 Dec 12 j 14:24	13°♐55'29	
max. Earth dist.	-780 Dec 13 j 07:16	13°♐58'00	20.59656 AU
morning rise	-780 Dec 28 j 00:44	14°♐50'03	
retrograde	-779 Mar 30 j 23:51	18°♐00'25	
opposition	-779 Jun 16 j 12:38	16°♐01'13	-0°13'28
min. Earth dist.	-779 Jun 15 j 15:17	16°♐03'21	18.62667 AU
direct	-779 Sep 01 j 02:05	14°♐03'04	
evening set	-779 Dec 01 j 02:40	17°♐09'03	
conjunction	-779 Dec 16 j 17:03	18°♐03'59	-0°13'44
minimum elong	-779 Dec 16 j 17:03	18°♐03'59	0°13'45
behind sun begin	-779 Dec 16 j 13:26	18°♐03'27	
behind sun end	-779 Dec 16 j 20:40	18°♐04'30	

Attention, astronomical year style is used: The year -779 in astronomical counting style is the year 780 BCE in historical counting style.

max. Earth dist.	-779 Dec 17 j 15:46	18°♐07'20	20.65559 AU
morning rise	-778 Jan 01 j 08:52	18°♐59'07	
retrograde	-778 Apr 04 j 11:55	22°♐08'59	
min. Earth dist.	-778 Jun 20 j 03:25	20°♐12'09	18.68374 AU
opposition	-778 Jun 21 j 02:37	20°♐09'50	-0°16'53
direct	-778 Sep 05 j 15:10	18°♐11'57	
evening set	-778 Dec 05 j 09:39	21°♐16'53	
conjunction	-778 Dec 21 j 00:10	22°♐11'38	-0°16'46
minimum elong	-778 Dec 21 j 00:10	22°♐11'38	0°16'46
max. Earth dist.	-778 Dec 21 j 23:46	22°♐15'07	20.71062 AU
morning rise	-777 Jan 05 j 16:24	23°♐06'39	
retrograde	-777 Apr 08 j 21:24	26°♐16'02	
opposition	-777 Jun 25 j 16:02	24°♐16'53	-0°20'10
min. Earth dist.	-777 Jun 24 j 17:10	24°♐19'11	18.73694 AU
direct	-777 Sep 10 j 02:17	22°♐19'15	
evening set	-777 Dec 09 j 16:04	25°♐23'10	
conjunction	-777 Dec 25 j 06:51	26°♐17'46	-0°19'41
minimum elong	-777 Dec 25 j 06:51	26°♐17'46	0°19'42
max. Earth dist.	-777 Dec 26 j 07:08	26°♐21'20	20.76203 AU
morning rise	-776 Jan 09 j 23:36	27°♐12'38	
	-776 Mar 13 j 17:05	0°♑	
retrograde	-776 Apr 12 j 08:50	0°♑21'35	
	-776 May 12 j 13:39	30°℞♐	
min. Earth dist.	-776 Jun 28 j 03:53	28°♐24'53	18.78659 AU
opposition	-776 Jun 29 j 04:32	28°♐22'25	-0°23'20
direct	-776 Sep 13 j 13:29	26°♐24'58	
evening set	-776 Dec 12 j 21:54	29°♐27'58	
	-776 Dec 22 j 03:41	0°♑	
conjunction	-776 Dec 28 j 13:00	0°♑22'24	-0°22'29
minimum elong	-776 Dec 28 j 13:00	0°♑22'24	0°22'29
max. Earth dist.	-776 Dec 29 j 14:18	0°♑26'06	20.80988 AU
morning rise	-775 Jan 13 j 06:19	1°♑17'11	
retrograde	-775 Apr 16 j 17:00	4°♑25'43	
opposition	-775 Jul 03 j 16:26	2°♑26'32	-0°26'22
min. Earth dist.	-775 Jul 02 j 16:09	2°♑28'57	18.83291 AU
direct	-775 Sep 17 j 22:59	0°♑29'16	
evening set	-775 Dec 17 j 03:23	3°♑31'23	
conjunction	-774 Jan 01 j 18:52	4°♑25'42	-0°25'09
minimum elong	-774 Jan 01 j 18:52	4°♑25'42	0°25'10
max. Earth dist.	-774 Jan 02 j 20:42	4°♑29'28	20.85466 AU
morning rise	-774 Jan 17 j 12:44	5°♑20'22	
retrograde	-774 Apr 21 j 03:49	8°♑28'32	
min. Earth dist.	-774 Jul 07 j 01:25	6°♑31'56	18.87623 AU
opposition	-774 Jul 08 j 03:21	6°♑29'20	-0°29'14
direct	-774 Sep 22 j 08:41	4°♑32'15	
evening set	-774 Dec 21 j 08:29	7°♑33'36	
conjunction	-773 Jan 06 j 00:20	8°♑27'49	-0°27'41
minimum elong	-773 Jan 06 j 00:20	8°♑27'49	0°27'41
max. Earth dist.	-773 Jan 07 j 03:09	8°♑31'43	20.89641 AU
morning rise	-773 Jan 21 j 18:50	9°♑22'24	
retrograde	-773 Apr 25 j 11:12	12°♑30'15	
opposition	-773 Jul 12 j 13:58	10°♑31'04	-0°31'57
min. Earth dist.	-773 Jul 11 j 12:25	10°♑33'37	18.91662 AU
direct	-773 Sep 26 j 16:14	8°♑34'11	
evening set	-773 Dec 25 j 13:06	11°♑34'48	
conjunction	-772 Jan 10 j 05:30	12°♑28'55	-0°30'04
minimum elong	-772 Jan 10 j 05:29	12°♑28'55	0°30'04
max. Earth dist.	-772 Jan 11 j 08:42	12°♑32'52	20.93536 AU
morning rise	-772 Jan 26 j 00:42	13°♑23'27	
retrograde	-772 Apr 28 j 21:36	16°♑31'02	
opposition	-772 Jul 15 j 23:54	14°♑31'52	-0°34'30
min. Earth dist.	-772 Jul 14 j 20:56	14°♑34'34	18.95404 AU
direct	-772 Sep 30 j 00:53	12°♑35'10	
evening set	-772 Dec 28 j 17:40	15°♑35'09	
conjunction	-771 Jan 13 j 10:36	16°♑29'13	-0°32'18
minimum elong	-771 Jan 13 j 10:36	16°♑29'13	0°32'18
max. Earth dist.	-771 Jan 14 j 14:34	16°♑33'16	20.97107 AU
morning rise	-771 Jan 29 j 06:32	17°♑23'42	
retrograde	-771 May 03 j 04:36	20°♑31'03	
min. Earth dist.	-771 Jul 19 j 07:02	18°♑34'33	18.98813 AU
opposition	-771 Jul 20 j 09:16	18°♑31'56	-0°36'52
direct	-771 Oct 04 j 06:57	16°♑35'25	
evening set	-770 Jan 01 j 22:01	19°♑34'51	
conjunction	-770 Jan 17 j 15:35	20°♑28'52	-0°34'22
minimum elong	-770 Jan 17 j 15:34	20°♑28'52	0°34'22
max. Earth dist.	-770 Jan 18 j 19:30	20°♑32'53	21.00344 AU
morning rise	-770 Feb 02 j 12:18	21°♑23'19	
retrograde	-770 May 07 j 14:25	24°♑30'29	
opposition	-770 Jul 24 j 18:11	22°♑31'24	-0°39'03
min. Earth dist.	-770 Jul 23 j 14:57	22°♑34'07	19.01860 AU
direct	-770 Oct 08 j 14:27	20°♑35'04	
evening set	-769 Jan 06 j 02:13	23°♑34'01	
conjunction	-769 Jan 21 j 20:23	24°♑28'00	-0°36'16
minimum elong	-769 Jan 21 j 20:23	24°♑28'00	0°36'17
max. Earth dist.	-769 Jan 23 j 00:49	24°♑32'05	21.03181 AU
morning rise	-769 Feb 06 j 17:53	25°♑22'27	
retrograde	-769 May 11 j 21:29	28°♑29'28	
min. Earth dist.	-769 Jul 28 j 00:37	26°♑33'03	19.04491 AU
opposition	-769 Jul 29 j 02:51	26°♑30'26	-0°41'03
direct	-769 Oct 12 j 19:56	24°♑34'16	
evening set	-768 Jan 10 j 06:30	27°♑32'48	
conjunction	-768 Jan 26 j 01:23	28°♑26'46	-0°37'59
minimum elong	-768 Jan 26 j 01:22	28°♑26'46	0°37'59
max. Earth dist.	-768 Jan 27 j 05:21	28°♑30'47	21.05599 AU
morning rise	-768 Feb 10 j 23:45	29°♑21'13	
	-768 Feb 22 j 19:54	0°♒	
retrograde	-768 May 15 j 06:41	2°♒28'09	
min. Earth dist.	-768 Jul 31 j 08:14	0°♒31'48	19.06674 AU
opposition	-768 Aug 01 j 10:58	0°♒29'08	-0°42'51
	-768 Aug 13 j 17:35	30°℞♑	
direct	-768 Oct 16 j 02:23	28°♑33'04	
	-768 Dec 14 j 19:43	0°♒	
evening set	-767 Jan 13 j 10:53	1°♒31'16	
conjunction	-767 Jan 29 j 06:30	2°♒25'15	-0°39'31
minimum elong	-767 Jan 29 j 06:30	2°♒25'15	0°39'33
max. Earth dist.	-767 Jan 30 j 10:26	2°♒29'15	21.07519 AU
morning rise	-767 Feb 14 j 05:43	3°♒19'44	
retrograde	-767 May 19 j 14:03	6°♒26'35	
opposition	-767 Aug 05 j 18:52	4°♒27'35	-0°44'26
min. Earth dist.	-767 Aug 04 j 17:34	4°♒30'06	19.08333 AU
direct	-767 Oct 20 j 07:20	2°♒31'36	
evening set	-766 Jan 17 j 15:22	5°♒29'31	
conjunction	-766 Feb 02 j 11:44	6°♒23'31	-0°40'52
minimum elong	-766 Feb 02 j 11:44	6°♒23'31	0°40'53
max. Earth dist.	-766 Feb 03 j 14:38	6°♒27'22	21.08905 AU
morning rise	-766 Feb 18 j 11:51	7°♒18'02	
retrograde	-766 May 23 j 22:37	10°♒24'50	
min. Earth dist.	-766 Aug 09 j 00:57	8°♒28'21	19.09433 AU
opposition	-766 Aug 10 j 02:19	8°♒25'48	-0°45'49
direct	-766 Oct 24 j 13:19	6°♒29'51	
evening set	-765 Jan 21 j 19:58	9°♒27'34	

Attention, astronomical year style is used: The year -765 in astronomical counting style is the year 766 BCE in historical counting style.

conjunction	-765 Feb 06 j 17:10	10°♒21'36	-0°42'01
minimum elong	-765 Feb 06 j 17:10	10°♒21'36	0°42'02
max. Earth dist.	-765 Feb 07 j 19:38	10°♒25'22	21.09708 AU
morning rise	-765 Feb 22 j 18:09	11°♒16'09	
retrograde	-765 May 28 j 05:45	14°♒22'56	
min. Earth dist.	-765 Aug 13 j 09:53	12°♒26'13	19.09945 AU
opposition	-765 Aug 14 j 09:41	12°♒23'50	-0°46'58
direct	-765 Oct 28 j 17:47	10°♒27'52	
evening set	-764 Jan 26 j 00:33	13°♒25'24	
conjunction	-764 Feb 10 j 22:39	14°♒19'29	-0°42'58
minimum elong	-764 Feb 10 j 22:39	14°♒19'29	0°42'58
max. Earth dist.	-764 Feb 11 j 23:52	14°♒23'05	21.09944 AU
	-764 Feb 22 j 19:47	15°♒	
morning rise	-764 Feb 27 j 00:40	15°♒14'06	
retrograde	-764 May 31 j 14:28	18°♒20'52	
opposition	-764 Aug 17 j 16:38	16°♒21'40	-0°47'54
min. Earth dist.	-764 Aug 16 j 17:02	16°♒24'02	19.09892 AU
	-764 Sep 24 j 05:17	15°℞♒	
direct	-764 Oct 31 j 23:33	14°♒25'37	
	-764 Dec 07 j 17:10	15°♒	
evening set	-763 Jan 29 j 05:23	17°♒23'02	
conjunction	-763 Feb 14 j 04:24	18°♒17'12	-0°43'42
minimum elong	-763 Feb 14 j 04:24	18°♒17'12	0°43'42
max. Earth dist.	-763 Feb 15 j 05:08	18°♒20'43	21.09612 AU
morning rise	-763 Mar 02 j 07:21	19°♒11'55	
retrograde	-763 Jun 04 j 21:03	22°♒18'40	
opposition	-763 Aug 21 j 23:12	20°♒19'21	-0°48'36
min. Earth dist.	-763 Aug 21 j 01:17	20°♒21'33	19.09301 AU
direct	-763 Nov 05 j 03:39	18°♒23'11	
evening set	-762 Feb 02 j 10:20	21°♒20'34	
conjunction	-762 Feb 18 j 10:17	22°♒14'49	-0°44'13
minimum elong	-762 Feb 18 j 10:17	22°♒14'49	0°44'14
max. Earth dist.	-762 Feb 19 j 09:43	22°♒18'09	21.08791 AU
morning rise	-762 Mar 06 j 14:14	23°♒09'37	
retrograde	-762 Jun 09 j 05:59	26°♒16'25	
min. Earth dist.	-762 Aug 25 j 07:56	24°♒19'08	19.08248 AU
opposition	-762 Aug 26 j 05:36	24°♒16'57	-0°49'03
direct	-762 Nov 09 j 08:54	22°♒20'40	
evening set	-761 Feb 06 j 15:22	25°♒18'04	
conjunction	-761 Feb 22 j 16:15	26°♒12'25	-0°44'32
minimum elong	-761 Feb 22 j 16:15	26°♒12'25	0°44'32
max. Earth dist.	-761 Feb 23 j 15:22	26°♒15'43	21.07513 AU
morning rise	-761 Mar 10 j 21:09	27°♒07'20	
	-761 May 20 j 06:35	0°♓	
retrograde	-761 Jun 13 j 12:47	0°♓14'15	
	-761 Jul 08 j 03:22	30°℞♒	
opposition	-761 Aug 30 j 11:55	28°♒14'38	-0°49'17
min. Earth dist.	-761 Aug 29 j 15:47	28°♒16'40	19.06765 AU
direct	-761 Nov 13 j 13:01	26°♒18'12	
evening set	-760 Feb 10 j 20:50	29°♒15'43	
	-760 Feb 23 j 23:04	0°♓	
conjunction	-760 Feb 26 j 22:42	0°♓10'12	-0°44'38
minimum elong	-760 Feb 26 j 22:42	0°♓10'12	0°44'39
max. Earth dist.	-760 Feb 27 j 20:27	0°♓13'18	21.05847 AU
morning rise	-760 Mar 14 j 04:39	1°♓05'15	
retrograde	-760 Jun 16 j 21:57	4°♓12'17	
opposition	-760 Sep 02 j 17:56	2°♓12'33	-0°49'16
min. Earth dist.	-760 Sep 01 j 22:12	2°♓14'33	19.04911 AU
direct	-760 Nov 16 j 17:43	0°♓15'58	
evening set	-759 Feb 14 j 02:42	3°♓13'42	
conjunction	-759 Mar 02 j 05:36	4°♓08'19	-0°44'31
minimum elong	-759 Mar 02 j 05:36	4°♓08'19	0°44'31
max. Earth dist.	-759 Mar 03 j 02:47	4°♓11'20	21.03801 AU
morning rise	-759 Mar 18 j 12:28	5°♓03'31	
retrograde	-759 Jun 21 j 05:25	8°♓10'44	
min. Earth dist.	-759 Sep 06 j 05:53	6°♓12'43	19.02684 AU
opposition	-759 Sep 07 j 00:02	6°♓10'53	-0°49'02
direct	-759 Nov 20 j 21:56	4°♓14'10	
evening set	-758 Feb 18 j 08:52	7°♓12'11	
conjunction	-758 Mar 06 j 12:45	8°♓06'58	-0°44'12
minimum elong	-758 Mar 06 j 12:45	8°♓06'58	0°44'12
max. Earth dist.	-758 Mar 07 j 08:19	8°♓09'45	21.01411 AU
morning rise	-758 Mar 22 j 20:39	9°♓02'19	
retrograde	-758 Jun 25 j 15:06	12°♓09'47	
opposition	-758 Sep 11 j 06:05	10°♓09'50	-0°48'34
min. Earth dist.	-758 Sep 10 j 12:28	10°♓11'38	19.00119 AU
direct	-758 Nov 25 j 02:35	8°♓12'58	
evening set	-757 Feb 22 j 15:38	11°♓11'22	
conjunction	-757 Mar 10 j 20:34	12°♓06'20	-0°43'40
minimum elong	-757 Mar 10 j 20:34	12°♓06'20	0°43'40
max. Earth dist.	-757 Mar 11 j 15:28	12°♓09'01	20.98671 AU
morning rise	-757 Mar 27 j 05:23	13°♓01'51	
retrograde	-757 Jun 29 j 23:18	16°♓09'37	
opposition	-757 Sep 15 j 12:18	14°♓09'36	-0°47'52
min. Earth dist.	-757 Sep 14 j 20:24	14°♓11'13	18.97201 AU
direct	-757 Nov 29 j 06:57	12°♓12'36	
evening set	-756 Feb 26 j 22:57	15°♓11'27	
conjunction	-756 Mar 14 j 04:56	16°♓06'37	-0°42'55
minimum elong	-756 Mar 14 j 04:56	16°♓06'37	0°42'55
max. Earth dist.	-756 Mar 14 j 21:51	16°♓09'01	20.95593 AU
morning rise	-756 Mar 30 j 14:50	17°♓02'20	
retrograde	-756 Jul 03 j 10:12	20°♓10'25	
opposition	-756 Sep 18 j 18:37	18°♓10'21	-0°46'55
min. Earth dist.	-756 Sep 18 j 03:39	18°♓11'53	18.93933 AU
direct	-756 Dec 02 j 12:11	16°♓13'12	
evening set	-755 Mar 02 j 07:03	19°♓12'36	
conjunction	-755 Mar 18 j 14:06	20°♓07'58	-0°41'57
minimum elong	-755 Mar 18 j 14:06	20°♓07'58	0°41'58
max. Earth dist.	-755 Mar 19 j 06:00	20°♓10'14	20.92127 AU
morning rise	-755 Apr 04 j 00:50	21°♓03'54	
retrograde	-755 Jul 07 j 19:11	24°♓12'21	
opposition	-755 Sep 23 j 01:05	22°♓12'13	-0°45'45
min. Earth dist.	-755 Sep 22 j 12:07	22°♓13'33	18.90265 AU
direct	-755 Dec 06 j 16:41	20°♓14'56	
evening set	-754 Mar 06 j 15:51	23°♓14'56	
conjunction	-754 Mar 22 j 23:52	24°♓10'33	-0°40'47
minimum elong	-754 Mar 22 j 23:52	24°♓10'33	0°40'47
max. Earth dist.	-754 Mar 23 j 13:19	24°♓12'28	20.88269 AU
morning rise	-754 Apr 08 j 11:37	25°♓06'40	
retrograde	-754 Jul 12 j 07:11	28°♓15'33	
opposition	-754 Sep 27 j 07:53	26°♓15'21	-0°44'21
min. Earth dist.	-754 Sep 26 j 20:15	26°♓16'33	18.86190 AU
direct	-754 Dec 10 j 22:55	24°♓17'51	
evening set	-753 Mar 11 j 01:16	27°♓18'33	
conjunction	-753 Mar 27 j 10:23	28°♓14'24	-0°39'24
minimum elong	-753 Mar 27 j 10:23	28°♓14'24	0°39'24
max. Earth dist.	-753 Mar 27 j 22:33	28°♓16'08	20.83965 AU
morning rise	-753 Apr 12 j 22:56	29°♓10'46	
	-753 Apr 28 j 03:19	0°♈	
retrograde	-753 Jul 16 j 17:18	2°♈20'03	
opposition	-753 Oct 01 j 15:04	0°♈19'46	-0°42'42
min. Earth dist.	-753 Oct 01 j 05:37	0°♈20'45	18.81652 AU

Attention, astronomical year style is used: The year -753 in astronomical counting style is the year 754 BCE in historical counting style.

	-753 Oct 09 j 15:23	30°℞♓	
direct	-753 Dec 15 j 04:06	28°♓22'02	
	-752 Feb 16 j 19:01	0°♈	
evening set	-752 Mar 14 j 11:39	1°♈23'28	
conjunction	-752 Mar 30 j 21:44	2°♈19'34	-0°37'49
minimum elong	-752 Mar 30 j 21:44	2°♈19'34	0°37'48
max. Earth dist.	-752 Mar 31 j 06:58	2°♈20'53	20.79212 AU
morning rise	-752 Apr 16 j 11:17	3°♈16'10	
retrograde	-752 Jul 20 j 05:52	6°♈25'53	
opposition	-752 Oct 04 j 22:23	4°♈25'29	-0°40'51
min. Earth dist.	-752 Oct 04 j 14:39	4°♈26'17	18.76668 AU
direct	-752 Dec 18 j 11:41	2°♈27'27	
evening set	-751 Mar 18 j 22:43	5°♈29'40	
conjunction	-751 Apr 04 j 09:54	6°♈26'02	-0°36'01
minimum elong	-751 Apr 04 j 09:54	6°♈26'02	0°36'01
max. Earth dist.	-751 Apr 04 j 17:40	6°♈27'09	20.74003 AU
morning rise	-751 Apr 21 j 00:09	7°♈22'52	
retrograde	-751 Jul 24 j 16:50	10°♈33'02	
opposition	-751 Oct 09 j 06:10	8°♈32'29	-0°38'46
min. Earth dist.	-751 Oct 09 j 00:33	8°♈33'04	18.71244 AU
direct	-751 Dec 22 j 18:17	6°♈34'08	
evening set	-750 Mar 23 j 10:24	9°♈37'10	
conjunction	-750 Apr 08 j 22:27	10°♈33'48	-0°34'02
minimum elong	-750 Apr 08 j 22:27	10°♈33'48	0°34'02
max. Earth dist.	-750 Apr 09 j 03:17	10°♈34'29	20.68404 AU
morning rise	-750 Apr 25 j 13:38	11°♈30'53	
retrograde	-750 Jul 29 j 05:31	14°♈41'31	
opposition	-750 Oct 13 j 14:14	12°♈40'46	-0°36'28
min. Earth dist.	-750 Oct 13 j 10:19	12°♈41'11	18.65468 AU
direct	-750 Dec 27 j 02:40	10°♈42'03	
evening set	-749 Mar 27 j 22:53	13°♈45'58	
conjunction	-749 Apr 13 j 12:00	14°♈42'53	-0°31'51
minimum elong	-749 Apr 13 j 12:00	14°♈42'53	0°31'51
max. Earth dist.	-749 Apr 13 j 15:39	14°♈43'25	20.62470 AU
morning rise	-749 Apr 30 j 03:47	15°♈40'14	
retrograde	-749 Aug 02 j 17:31	18°♈51'19	
opposition	-749 Oct 17 j 22:35	16°♈50'23	-0°33'58
min. Earth dist.	-749 Oct 17 j 20:36	16°♈50'36	18.59392 AU
direct	-749 Dec 31 j 11:07	14°♈51'18	
evening set	-748 Mar 31 j 12:16	17°♈56'09	
conjunction	-748 Apr 17 j 02:12	18°♈53'21	-0°29'30
minimum elong	-748 Apr 17 j 02:12	18°♈53'21	0°29'30
max. Earth dist.	-748 Apr 17 j 02:49	18°♈53'26	20.56288 AU
morning rise	-748 May 03 j 18:51	19°♈50'58	
retrograde	-748 Aug 06 j 06:20	23°♈02'32	
opposition	-748 Oct 21 j 07:23	21°♈01'25	-0°31'16
min. Earth dist.	-748 Oct 21 j 07:08	21°♈01'26	18.53107 AU
direct	-747 Jan 03 j 20:02	19°♈01'55	
evening set	-747 Apr 05 j 02:21	22°♈07'46	
conjunction	-747 Apr 21 j 17:15	23°♈05'16	-0°26'58
minimum elong	-747 Apr 21 j 17:15	23°♈05'16	0°26'57
max. Earth dist.	-747 Apr 21 j 16:53	23°♈05'13	20.49906 AU
morning rise	-747 May 08 j 10:19	24°♈03'08	
retrograde	-747 Aug 10 j 19:42	27°♈15'12	
opposition	-747 Oct 25 j 16:36	25°♈13'55	-0°28'23
min. Earth dist.	-747 Oct 25 j 17:58	25°♈13'46	18.46653 AU
direct	-746 Jan 08 j 06:19	23°♈14'02	
evening set	-746 Apr 09 j 17:22	26°♈20'55	
conjunction	-746 Apr 26 j 08:56	27°♈18'43	-0°24'17
minimum elong	-746 Apr 26 j 08:56	27°♈18'43	0°24'17
max. Earth dist.	-746 Apr 26 j 05:34	27°♈18'14	20.43411 AU
morning rise	-746 May 13 j 02:43	28°♈16'51	
	-746 Jun 15 j 04:58	0°♉	
retrograde	-746 Aug 15 j 08:51	1°♉29'28	
	-746 Oct 17 j 08:12	30°℞♈	
opposition	-746 Oct 30 j 02:22	29°♈28'01	-0°25'21
min. Earth dist.	-746 Oct 30 j 05:26	29°♈27'41	18.40124 AU
direct	-745 Jan 12 j 16:17	27°♈27'43	
	-745 Apr 03 j 16:56	0°♉	
evening set	-745 Apr 14 j 09:04	0°♉35'44	
conjunction	-745 May 01 j 01:35	1°♉33'50	-0°21'28
minimum elong	-745 May 01 j 01:35	1°♉33'50	0°21'27
max. Earth dist.	-745 Apr 30 j 21:24	1°♉33'14	20.36848 AU
morning rise	-745 May 17 j 19:42	2°♉32'14	
retrograde	-745 Aug 19 j 23:38	5°♉45'24	
opposition	-745 Nov 03 j 12:45	3°♉43'49	-0°22'09
min. Earth dist.	-745 Nov 03 j 17:11	3°♉43'21	18.33538 AU
direct	-744 Jan 17 j 04:00	1°♉43'10	
evening set	-744 Apr 18 j 02:00	4°♉52'19	
conjunction	-744 May 04 j 19:03	5°♉50'44	-0°18'30
minimum elong	-744 May 04 j 19:03	5°♉50'44	0°18'29
max. Earth dist.	-744 May 04 j 11:46	5°♉49'40	20.30261 AU
morning rise	-744 May 21 j 13:45	6°♉49'24	
retrograde	-744 Aug 23 j 14:06	10°♉03'08	
opposition	-744 Nov 06 j 23:39	8°♉01'27	-0°18'48
min. Earth dist.	-744 Nov 07 j 05:57	8°♉00'47	18.26953 AU
direct	-743 Jan 20 j 15:30	6°♉00'25	
evening set	-743 Apr 22 j 19:44	9°♉10'48	
conjunction	-743 May 09 j 13:34	10°♉09'31	-0°15'25
minimum elong	-743 May 09 j 13:34	10°♉09'31	0°15'25
behind sun begin	-743 May 09 j 12:11	10°♉09'20	
behind sun end	-743 May 09 j 14:57	10°♉09'43	
max. Earth dist.	-743 May 09 j 05:32	10°♉08'21	20.23677 AU
morning rise	-743 May 26 j 08:25	11°♉08'27	
retrograde	-743 Aug 28 j 06:23	14°♉22'46	
opposition	-743 Nov 11 j 11:20	12°♉21'02	-0°15'19
min. Earth dist.	-743 Nov 11 j 18:52	12°♉20'14	18.20370 AU
direct	-742 Jan 25 j 04:30	10°♉19'40	
evening set	-742 Apr 27 j 14:29	13°♉31'18	
conjunction	-742 May 14 j 08:41	14°♉30'19	-0°12'14
minimum elong	-742 May 14 j 08:41	14°♉30'19	0°12'13
behind sun begin	-742 May 14 j 04:15	14°♉29'41	
behind sun end	-742 May 14 j 13:06	14°♉30'58	
max. Earth dist.	-742 May 13 j 21:33	14°♉28'41	20.17106 AU
	-742 May 22 j 17:36	15°♉	
morning rise	-742 May 31 j 03:56	15°♉29'31	
retrograde	-742 Sep 01 j 22:37	18°♉44'28	
opposition	-742 Nov 15 j 23:46	16°♉42'39	-0°11'43
min. Earth dist.	-742 Nov 16 j 09:25	16°♉41'37	18.13808 AU
	-741 Jan 02 j 15:25	15°℞♉	
direct	-741 Jan 29 j 17:33	14°♉40'57	
	-741 Feb 25 j 14:30	15°♉	
evening set	-741 May 02 j 10:16	17°♉53'53	
conjunction	-741 May 19 j 05:07	18°♉53'13	-0°08'56
minimum elong	-741 May 19 j 05:07	18°♉53'13	0°08'56
behind sun begin	-741 May 18 j 23:21	18°♉52'23	
behind sun end	-741 May 19 j 10:53	18°♉54'03	
max. Earth dist.	-741 May 18 j 17:06	18°♉51'26	20.10537 AU
morning rise	-741 Jun 05 j 00:22	19°♉52'39	
retrograde	-741 Sep 06 j 16:40	23°♉08'12	
opposition	-741 Nov 20 j 12:47	21°♉06'22	-0°08'00
min. Earth dist.	-741 Nov 20 j 23:45	21°♉05'11	18.07228 AU

Attention, astronomical year style is used: The year -740 in astronomical counting style is the year 741 BCE in historical counting style.

direct	-740 Feb 03 j 08:17	19°♉04'19	
evening set	-740 May 06 j 07:20	22°♉18'35	
max. Earth dist.	-740 May 22 j 11:00	23°♉15'54	20.03946 AU
conjunction	-740 May 23 j 02:24	23°♉18'11	-0°05'35
minimum elong	-740 May 23 j 02:23	23°♉18'11	0°05'34
behind sun begin	-740 May 22 j 19:52	23°♉17'14	
behind sun end	-740 May 23 j 08:55	23°♉19'08	
morning rise	-740 Jun 08 j 21:50	24°♉17'53	
retrograde	-740 Sep 10 j 10:19	27°♉34'02	
opposition	-740 Nov 24 j 02:49	25°♉32'08	-0°04'13
min. Earth dist.	-740 Nov 24 j 16:13	25°♉30'42	18.00633 AU
direct	-739 Feb 06 j 23:10	23°♉29'43	
evening set	-739 May 11 j 05:04	26°♉45'18	
max. Earth dist.	-739 May 27 j 08:04	27°♉42'44	19.97330 AU
conjunction	-739 May 28 j 00:33	27°♉45'12	-0°02'08
minimum elong	-739 May 28 j 00:32	27°♉45'12	0°02'07
behind sun begin	-739 May 27 j 17:45	27°♉44'12	
behind sun end	-739 May 28 j 07:19	27°♉46'11	
morning rise	-739 Jun 13 j 19:47	28°♉45'07	
	-739 Jul 06 j 08:14	0°♊	
retrograde	-739 Sep 15 j 05:57	2°♊01'51	
opposition	-739 Nov 28 j 17:31	29°♉59'54	-0°00'22
	-739 Nov 28 j 16:32	30°℞♉	
min. Earth dist.	-739 Nov 29 j 07:57	29°♉58'20	17.94010 AU
asc. node	-738 Jan 03 j 12:14	28°♉35'55	
direct	-738 Feb 11 j 16:10	27°♉57'05	
	-738 Apr 23 j 23:16	0°♊	
evening set	-738 May 16 j 03:52	1°♊13'58	
conjunction	-738 Jun 01 j 23:23	2°♊14'08	0°01'27
minimum elong	-738 Jun 01 j 23:24	2°♊14'08	0°01'27
behind sun begin	-738 Jun 01 j 16:36	2°♊13'09	
behind sun end	-738 Jun 02 j 06:12	2°♊15'08	
max. Earth dist.	-738 Jun 01 j 03:50	2°♊11'12	19.90710 AU
morning rise	-738 Jun 18 j 18:37	3°♊14'18	
retrograde	-738 Sep 20 j 00:22	6°♊31'36	
opposition	-738 Dec 03 j 09:00	4°♊29'33	0°03'30
min. Earth dist.	-738 Dec 04 j 01:55	4°♊27'43	17.87416 AU
direct	-737 Feb 16 j 08:33	2°♊26'19	
evening set	-737 May 21 j 03:21	5°♊44'30	
conjunction	-737 Jun 06 j 23:08	6°♊44'57	0°04'58
minimum elong	-737 Jun 06 j 23:09	6°♊44'57	0°04'59
behind sun begin	-737 Jun 06 j 16:33	6°♊43'59	
behind sun end	-737 Jun 07 j 05:44	6°♊45'55	
max. Earth dist.	-737 Jun 06 j 02:30	6°♊41'50	19.84143 AU
morning rise	-737 Jun 23 j 18:05	7°♊45'19	
retrograde	-737 Sep 24 j 21:43	11°♊03'08	
opposition	-737 Dec 08 j 01:10	9°♊01'00	0°07'23
min. Earth dist.	-737 Dec 08 j 18:50	8°♊59'05	17.80887 AU
direct	-736 Feb 21 j 03:48	6°♊57'22	
evening set	-736 May 25 j 03:49	10°♊16'50	
conjunction	-736 Jun 10 j 23:29	11°♊17'31	0°08'26
minimum elong	-736 Jun 10 j 23:29	11°♊17'31	0°08'26
behind sun begin	-736 Jun 10 j 17:34	11°♊16'38	
behind sun end	-736 Jun 11 j 05:24	11°♊18'23	
max. Earth dist.	-736 Jun 10 j 00:19	11°♊14'01	19.77670 AU
morning rise	-736 Jun 27 j 18:06	12°♊18'06	
retrograde	-736 Sep 28 j 16:42	15°♊36'25	
opposition	-736 Dec 11 j 18:08	13°♊34'11	0°11'15
min. Earth dist.	-736 Dec 12 j 14:08	13°♊32'01	17.74507 AU
direct	-735 Feb 24 j 21:35	11°♊30'08	
evening set	-735 May 30 j 04:49	14°♊50'51	
max. Earth dist.	-735 Jun 15 j 00:24	15°♊48'07	19.71392 AU
conjunction	-735 Jun 16 j 00:27	15°♊51'46	0°11'52
minimum elong	-735 Jun 16 j 00:27	15°♊51'46	0°11'53
behind sun begin	-735 Jun 15 j 19:51	15°♊51'05	
behind sun end	-735 Jun 16 j 05:04	15°♊52'27	
morning rise	-735 Jul 02 j 18:38	16°♊52'32	
retrograde	-735 Oct 03 j 15:21	20°♊11'21	
opposition	-735 Dec 16 j 11:45	18°♊09'00	0°15'03
min. Earth dist.	-735 Dec 17 j 07:59	18°♊06'48	17.68349 AU
direct	-734 Mar 01 j 18:24	16°♊04'34	
evening set	-734 Jun 04 j 06:24	19°♊26'30	
max. Earth dist.	-734 Jun 20 j 00:08	20°♊23'43	19.65364 AU
conjunction	-734 Jun 21 j 01:48	20°♊27'38	0°15'15
minimum elong	-734 Jun 21 j 01:48	20°♊27'38	0°15'16
behind sun begin	-734 Jun 21 j 00:05	20°♊27'23	
behind sun end	-734 Jun 21 j 03:31	20°♊27'53	
morning rise	-734 Jul 07 j 19:28	21°♊28'34	
retrograde	-734 Oct 08 j 11:11	24°♊47'51	
opposition	-734 Dec 21 j 06:15	22°♊45'25	0°18'47
min. Earth dist.	-734 Dec 22 j 04:29	22°♊43'00	17.62490 AU
direct	-733 Mar 06 j 13:49	20°♊40'35	
evening set	-733 Jun 09 j 08:43	24°♊03'43	
max. Earth dist.	-733 Jun 25 j 01:16	25°♊00'58	19.59681 AU
conjunction	-733 Jun 26 j 03:50	25°♊05'03	0°18'33
minimum elong	-733 Jun 26 j 03:49	25°♊05'03	0°18'34
morning rise	-733 Jul 12 j 20:55	26°♊06'07	
retrograde	-733 Oct 13 j 10:20	29°♊25'51	
opposition	-733 Dec 26 j 01:13	27°♊23'21	0°22'25
min. Earth dist.	-733 Dec 26 j 23:19	27°♊20'56	17.57003 AU
direct	-732 Mar 10 j 12:16	25°♊18'10	
evening set	-732 Jun 13 j 11:38	28°♊42'27	
max. Earth dist.	-732 Jun 29 j 03:05	29°♊39'45	19.54393 AU
conjunction	-732 Jun 30 j 06:21	29°♊43'57	0°21'45
minimum elong	-732 Jun 30 j 06:20	29°♊43'57	0°21'46
	-732 Jul 04 j 14:36	0°♋	
morning rise	-732 Jul 16 j 22:38	0°♋45'08	
retrograde	-732 Oct 17 j 06:53	4°♋05'18	
opposition	-732 Dec 29 j 21:16	2°♋02'45	0°25'55
min. Earth dist.	-732 Dec 30 j 20:56	2°♋00'10	17.51957 AU
	-731 Mar 05 j 08:09	30°℞♊	
direct	-731 Mar 15 j 09:24	29°♊57'16	
	-731 Mar 25 j 12:55	0°♋	
evening set	-731 Jun 18 j 14:53	3°♋22'39	
max. Earth dist.	-731 Jul 04 j 04:57	4°♋19'57	19.49592 AU
conjunction	-731 Jul 05 j 09:00	4°♋24'17	0°24'49
minimum elong	-731 Jul 05 j 09:00	4°♋24'17	0°24'49
morning rise	-731 Jul 22 j 00:36	5°♋25'35	
retrograde	-731 Oct 22 j 06:37	8°♋46'10	
opposition	-730 Jan 03 j 17:53	6°♋43'36	0°29'16
min. Earth dist.	-730 Jan 04 j 16:58	6°♋41'05	17.47412 AU
direct	-730 Mar 20 j 09:47	4°♋37'53	
evening set	-730 Jun 23 j 18:41	8°♋04'18	
max. Earth dist.	-730 Jul 09 j 08:26	9°♋01'45	19.45299 AU
conjunction	-730 Jul 10 j 12:17	9°♋06'04	0°27'44
minimum elong	-730 Jul 10 j 12:17	9°♋06'04	0°27'44
morning rise	-730 Jul 27 j 02:53	10°♋07'26	
retrograde	-730 Oct 27 j 04:05	13°♋28'23	
opposition	-729 Jan 08 j 15:15	11°♋25'52	0°32'26
min. Earth dist.	-729 Jan 09 j 15:36	11°♋23'12	17.43392 AU
direct	-729 Mar 25 j 08:53	9°♋19'57	
evening set	-729 Jun 28 j 23:02	12°♋47'22	
max. Earth dist.	-729 Jul 14 j 10:57	13°♋44'44	19.41547 AU

Attention, astronomical year style is used: The year -729 in astronomical counting style is the year 730 BCE in historical counting style.

conjunction	-729 Jul	15 j 15:50	13°♋49'13	0°30'29
minimum elong	-729 Jul	15 j 15:50	13°♋49'13	0°30'30
morning rise	-729 Aug	01 j 05:39	14°♋50'39	
retrograde	-729 Nov	01 j 04:22	18°♋11'57	
opposition	-728 Jan	13 j 13:19	16°♋09'30	0°35'24
min. Earth dist.	-728 Jan	14 j 13:08	16°♋06'53	17.39899 AU
direct	-728 Mar	29 j 10:43	14°♋03'26	
evening set	-728 Jul	03 j 03:37	17°♋31'45	
conjunction	-728 Jul	19 j 19:43	18°♋33'40	0°33'03
minimum elong	-728 Jul	19 j 19:43	18°♋33'40	0°33'03
max. Earth dist.	-728 Jul	18 j 15:39	18°♋29'17	19.38297 AU
morning rise	-728 Aug	05 j 08:20	19°♋35'07	
retrograde	-728 Nov	05 j 03:27	22°♋56'43	
opposition	-727 Jan	17 j 12:17	20°♋54'22	0°38'09
min. Earth dist.	-727 Jan	18 j 13:00	20°♋51'39	17.36900 AU
direct	-727 Apr	03 j 11:46	18°♋48'11	
evening set	-727 Jul	08 j 08:37	22°♋17'17	
conjunction	-727 Jul	24 j 23:40	23°♋19'14	0°35'23
minimum elong	-727 Jul	24 j 23:40	23°♋19'14	0°35'25
max. Earth dist.	-727 Jul	23 j 18:29	23°♋14'40	19.35544 AU
morning rise	-727 Aug	10 j 11:23	24°♋20'42	
retrograde	-727 Nov	10 j 04:25	27°♋42'34	
opposition	-726 Jan	22 j 11:44	25°♋40'17	0°40'39
min. Earth dist.	-726 Jan	23 j 12:01	25°♋37'38	17.34394 AU
direct	-726 Apr	08 j 14:31	23°♋33'59	
evening set	-726 Jul	13 j 13:34	27°♋03'46	
max. Earth dist.	-726 Jul	28 j 23:50	28°♋01'21	19.33258 AU
conjunction	-726 Jul	30 j 03:51	28°♋05'44	0°37'30
minimum elong	-726 Jul	30 j 03:51	28°♋05'44	0°37'30
morning rise	-726 Aug	15 j 14:18	29°♋07'11	
	-726 Aug	30 j 10:13	0°♌	
retrograde	-726 Nov	15 j 04:45	2°♌29'14	
opposition	-725 Jan	27 j 12:00	0°♌27'01	0°42'52
min. Earth dist.	-725 Jan	28 j 12:43	0°♌24'19	17.32332 AU
	-725 Feb	06 j 21:12	30°℞♋	
direct	-725 Apr	13 j 16:34	28°♋20'38	
	-725 Jun	15 j 18:06	0°♌	
evening set	-725 Jul	18 j 18:54	1°♌50'59	
max. Earth dist.	-725 Aug	03 j 02:56	2°♌48'21	19.31425 AU
conjunction	-725 Aug	04 j 07:59	2°♌52'55	0°39'21
minimum elong	-725 Aug	04 j 07:59	2°♌52'55	0°39'22
morning rise	-725 Aug	20 j 17:23	3°♌54'20	
retrograde	-725 Nov	20 j 05:59	7°♌16'30	
opposition	-724 Feb	01 j 12:39	5°♌14'20	0°44'48
min. Earth dist.	-724 Feb	02 j 13:02	5°♌11'40	17.30735 AU
direct	-724 Apr	17 j 20:01	3°♌07'51	
evening set	-724 Jul	22 j 23:58	6°♌38'39	
max. Earth dist.	-724 Aug	07 j 08:35	7°♌36'12	19.30055 AU
conjunction	-724 Aug	08 j 12:07	7°♌40'32	0°40'56
minimum elong	-724 Aug	08 j 12:07	7°♌40'32	0°40'56
morning rise	-724 Aug	24 j 20:12	8°♌41'52	
retrograde	-724 Nov	24 j 06:47	12°♌04'06	
opposition	-723 Feb	05 j 13:56	10°♌01'59	0°46'24
min. Earth dist.	-723 Feb	06 j 14:01	9°♌59'21	17.29595 AU
direct	-723 Apr	22 j 23:03	7°♌55'27	
evening set	-723 Jul	28 j 04:49	11°♌26'31	
max. Earth dist.	-723 Aug	12 j 11:47	12°♌23'56	19.29160 AU
conjunction	-723 Aug	13 j 15:43	12°♌28'20	0°42'14
minimum elong	-723 Aug	13 j 15:43	12°♌28'20	0°42'14
morning rise	-723 Aug	29 j 22:43	13°♌29'35	
	-723 Sep	25 j 02:29	15°♌	
retrograde	-723 Nov	29 j 07:29	16°♌51'50	
	-722 Feb	06 j 16:47	15°℞♌	
opposition	-722 Feb	10 j 15:30	14°♌49'43	0°47'41
min. Earth dist.	-722 Feb	11 j 15:13	14°♌47'08	17.28956 AU
direct	-722 Apr	28 j 03:06	12°♌43'08	
	-722 Jul	12 j 05:52	15°♌	
evening set	-722 Aug	02 j 09:21	16°♌14'22	
conjunction	-722 Aug	18 j 19:14	17°♌16'05	0°43'14
minimum elong	-722 Aug	18 j 19:13	17°♌16'05	0°43'14
max. Earth dist.	-722 Aug	17 j 17:01	17°♌11'57	19.28776 AU
morning rise	-722 Sep	04 j 00:57	18°♌17'13	
retrograde	-722 Dec	04 j 07:52	21°♌39'23	
opposition	-721 Feb	15 j 17:11	19°♌37'19	0°48'38
min. Earth dist.	-721 Feb	16 j 15:52	19°♌34'51	17.28821 AU
direct	-721 May	03 j 07:21	17°♌30'44	
evening set	-721 Aug	07 j 13:38	21°♌01'59	
conjunction	-721 Aug	23 j 22:14	22°♌03'34	0°43'55
minimum elong	-721 Aug	23 j 22:13	22°♌03'34	0°43'55
max. Earth dist.	-721 Aug	22 j 20:23	21°♌59'29	19.28916 AU
morning rise	-721 Sep	09 j 02:47	23°♌04'33	
retrograde	-721 Dec	09 j 07:40	26°♌26'38	
opposition	-720 Feb	20 j 19:18	24°♌24'34	0°49'14
min. Earth dist.	-720 Feb	21 j 17:33	24°♌22'09	17.29249 AU
direct	-720 May	07 j 11:32	22°♌17'59	
evening set	-720 Aug	11 j 17:09	25°♌49'09	
max. Earth dist.	-720 Aug	27 j 00:43	26°♌46'48	19.29637 AU
conjunction	-720 Aug	28 j 00:34	26°♌50'34	0°44'18
minimum elong	-720 Aug	28 j 00:34	26°♌50'34	0°44'19
morning rise	-720 Sep	13 j 03:54	27°♌51'24	
	-720 Oct	22 j 08:31	0°♍	
retrograde	-720 Dec	13 j 07:50	1°♍13'19	
	-719 Feb	05 j 14:20	30°℞♌	
opposition	-719 Feb	24 j 21:31	29°♌11'16	0°49'30
min. Earth dist.	-719 Feb	25 j 17:47	29°♌09'05	17.30259 AU
direct	-719 May	12 j 16:48	27°♌04'46	
	-719 Aug	07 j 00:13	0°♍	
evening set	-719 Aug	16 j 20:12	0°♍35'42	
max. Earth dist.	-719 Sep	01 j 03:57	1°♍33'24	19.30958 AU
conjunction	-719 Sep	02 j 02:23	1°♍36'56	0°44'23
minimum elong	-719 Sep	02 j 02:23	1°♍36'56	0°44'23
morning rise	-719 Sep	18 j 04:31	2°♍37'35	
retrograde	-719 Dec	18 j 06:33	5°♍59'19	
opposition	-718 Mar	01 j 23:47	3°♍57'19	0°49'25
min. Earth dist.	-718 Mar	02 j 19:24	3°♍55'12	17.31907 AU
direct	-718 May	17 j 20:37	1°♍50'55	
evening set	-718 Aug	21 j 22:36	5°♍21'32	
max. Earth dist.	-718 Sep	06 j 07:00	6°♍19'19	19.32933 AU
conjunction	-718 Sep	07 j 03:34	6°♍22'34	0°44'09
minimum elong	-718 Sep	07 j 03:34	6°♍22'34	0°44'09
morning rise	-718 Sep	23 j 04:37	7°♍23'02	
retrograde	-718 Dec	23 j 06:24	10°♍44'31	
opposition	-717 Mar	07 j 02:03	8°♍42'36	0°48'59
min. Earth dist.	-717 Mar	07 j 19:03	8°♍40'46	17.34188 AU
direct	-717 May	23 j 01:56	6°♍36'23	
evening set	-717 Aug	27 j 00:22	10°♍06'35	
max. Earth dist.	-717 Sep	11 j 09:46	11°♍04'30	19.35534 AU
conjunction	-717 Sep	12 j 04:08	11°♍07'24	0°43'38
minimum elong	-717 Sep	12 j 04:08	11°♍07'24	0°43'38
morning rise	-717 Sep	28 j 03:57	12°♍07'39	
retrograde	-717 Dec	28 j 04:27	15°♍28'52	
opposition	-716 Mar	11 j 04:27	13°♍27'06	0°48'14

Attention, astronomical year style is used: The year -716 in astronomical counting style is the year 717 BCE in historical counting style.

min. Earth dist.	-716 Mar 11 j 20:39	13°♑25'21	17.37104 AU
direct	-716 May 27 j 05:09	11°♑21'08	
evening set	-716 Aug 31 j 01:27	14°♑50'47	
max. Earth dist.	-716 Sep 15 j 11:13	15°♑48'44	19.38768 AU
conjunction	-716 Sep 16 j 03:58	15°♑51'22	0°42'48
minimum elong	-716 Sep 16 j 03:58	15°♑51'22	0°42'48
morning rise	-716 Oct 02 j 02:49	16°♑51'25	
retrograde	-715 Jan 01 j 04:11	20°♑12'20	
opposition	-715 Mar 16 j 06:37	18°♑10'43	0°47'09
min. Earth dist.	-715 Mar 16 j 19:57	18°♑09'17	17.40617 AU
direct	-715 Jun 01 j 09:46	16°♑05'03	
evening set	-715 Sep 05 j 01:36	19°♑34'05	
conjunction	-715 Sep 21 j 03:05	20°♑34'25	0°41'42
minimum elong	-715 Sep 21 j 03:05	20°♑34'25	0°41'43
max. Earth dist.	-715 Sep 20 j 13:05	20°♑32'13	19.42556 AU
morning rise	-715 Oct 07 j 00:48	21°♑34'14	
retrograde	-714 Jan 06 j 01:42	24°♑54'49	
opposition	-714 Mar 21 j 08:49	22°♑53'23	0°45'45
min. Earth dist.	-714 Mar 21 j 21:22	22°♑52'03	17.44656 AU
direct	-714 Jun 06 j 11:33	20°♑48'03	
evening set	-714 Sep 10 j 01:14	24°♑16'21	
conjunction	-714 Sep 26 j 01:26	25°♑16'26	0°40'20
minimum elong	-714 Sep 26 j 01:26	25°♑16'26	0°40'20
max. Earth dist.	-714 Sep 25 j 12:39	25°♑14'25	19.46841 AU
morning rise	-714 Oct 11 j 22:19	26°♑16'00	
retrograde	-713 Jan 11 j 01:11	29°♑36'12	
opposition	-713 Mar 26 j 10:35	27°♑34'57	0°44'04
min. Earth dist.	-713 Mar 26 j 20:23	27°♑33'55	17.49152 AU
direct	-713 Jun 11 j 14:55	25°♑29'59	
evening set	-713 Sep 14 j 23:58	28°♑57'27	
conjunction	-713 Sep 30 j 23:13	29°♑57'16	0°38'41
minimum elong	-713 Sep 30 j 23:13	29°♑57'16	0°38'41
max. Earth dist.	-713 Sep 30 j 13:24	29°♑55'43	19.51540 AU
	-713 Oct 01 j 16:39	0°♎	
morning rise	-713 Oct 16 j 19:00	0°♎56'35	
retrograde	-712 Jan 15 j 22:24	4°♎16'22	
opposition	-712 Mar 30 j 12:27	2°♎15'17	0°42'05
min. Earth dist.	-712 Mar 30 j 21:21	2°♎14'21	17.54033 AU
direct	-712 Jun 15 j 15:49	0°♎10'41	
evening set	-712 Sep 18 j 21:51	3°♎37'14	
conjunction	-712 Oct 04 j 19:52	4°♎36'44	0°36'48
minimum elong	-712 Oct 04 j 19:52	4°♎36'44	0°36'48
max. Earth dist.	-712 Oct 04 j 11:04	4°♎35'22	19.56600 AU
morning rise	-712 Oct 20 j 14:59	5°♎35'49	
retrograde	-711 Jan 19 j 20:53	8°♎55'09	
opposition	-711 Apr 04 j 13:50	6°♎54'12	0°39'50
min. Earth dist.	-711 Apr 04 j 20:03	6°♎53'33	17.59245 AU
direct	-711 Jun 20 j 18:13	4°♎49'58	
evening set	-711 Sep 23 j 18:48	8°♎15'30	
conjunction	-711 Oct 09 j 16:01	9°♎14'44	0°34'41
minimum elong	-711 Oct 09 j 16:01	9°♎14'44	0°34'40
max. Earth dist.	-711 Oct 09 j 10:15	9°♎13'50	19.61949 AU
morning rise	-711 Oct 25 j 10:10	10°♎13'32	
retrograde	-710 Jan 24 j 17:15	13°♎32'21	
opposition	-710 Apr 09 j 14:46	11°♎31'33	0°37'20
min. Earth dist.	-710 Apr 09 j 19:57	11°♎31'01	17.64714 AU
direct	-710 Jun 25 j 18:54	9°♎27'41	
evening set	-710 Sep 28 j 15:02	12°♎52'07	
conjunction	-710 Oct 14 j 11:09	13°♎51'02	0°32'20
minimum elong	-710 Oct 14 j 11:09	13°♎51'02	0°32'21
max. Earth dist.	-710 Oct 14 j 06:11	13°♎50'16	19.67540 AU
morning rise	-710 Oct 30 j 04:46	14°♎49'35	
retrograde	-709 Jan 29 j 13:57	18°♎07'52	
opposition	-709 Apr 14 j 15:17	16°♎07'10	0°34'37
min. Earth dist.	-709 Apr 14 j 18:01	16°♎06'53	17.70409 AU
direct	-709 Jun 30 j 20:15	14°♎03'39	
evening set	-709 Oct 03 j 10:02	17°♎26'55	
conjunction	-709 Oct 19 j 05:25	18°♎25'32	0°29'49
minimum elong	-709 Oct 19 j 05:25	18°♎25'32	0°29'49
max. Earth dist.	-709 Oct 19 j 03:34	18°♎25'15	19.73332 AU
morning rise	-709 Nov 03 j 22:13	19°♎23'48	
retrograde	-708 Feb 03 j 09:01	22°♎41'32	
opposition	-708 Apr 18 j 15:22	20°♎40'55	0°31'42
min. Earth dist.	-708 Apr 18 j 16:34	20°♎40'47	17.76285 AU
direct	-708 Jul 04 j 21:06	18°♎37'44	
evening set	-708 Oct 07 j 04:13	21°♎59'47	
conjunction	-708 Oct 22 j 22:38	22°♎58'05	0°27'07
minimum elong	-708 Oct 22 j 22:39	22°♎58'05	0°27'07
max. Earth dist.	-708 Oct 22 j 21:48	22°♎57'57	19.79310 AU
morning rise	-708 Nov 07 j 15:04	23°♎56'05	
retrograde	-707 Feb 07 j 03:19	27°♎13'13	
opposition	-707 Apr 23 j 14:40	25°♎12'38	0°28'35
min. Earth dist.	-707 Apr 23 j 13:38	25°♎12'45	17.82360 AU
direct	-707 Jul 09 j 20:39	23°♎09'47	
evening set	-707 Oct 11 j 21:07	26°♎30'33	
conjunction	-707 Oct 27 j 14:59	27°♎28'33	0°24'16
minimum elong	-707 Oct 27 j 14:59	27°♎28'33	0°24'16
max. Earth dist.	-707 Oct 27 j 17:20	27°♎28'55	19.85476 AU
morning rise	-707 Nov 12 j 06:49	28°♎26'17	
	-707 Dec 10 j 04:30	0°♏	
retrograde	-706 Feb 11 j 21:04	1°♏42'47	
	-706 Apr 21 j 09:52	30°℞♎	
opposition	-706 Apr 28 j 13:19	29°♎42'17	0°25'20
min. Earth dist.	-706 Apr 28 j 10:18	29°♎42'35	17.88608 AU
direct	-706 Jul 14 j 20:10	27°♎39'46	
	-706 Sep 29 j 11:29	0°♏	
evening set	-706 Oct 16 j 13:12	0°♏59'13	
conjunction	-706 Nov 01 j 06:13	1°♏56'55	0°21'18
minimum elong	-706 Nov 01 j 06:13	1°♏56'55	0°21'16
max. Earth dist.	-706 Nov 01 j 09:50	1°♏57'28	19.91825 AU
morning rise	-706 Nov 16 j 21:45	2°♏54'23	
retrograde	-705 Feb 16 j 13:21	6°♏10'16	
opposition	-705 May 03 j 11:16	4°♏09'48	0°21'58
min. Earth dist.	-705 May 03 j 06:08	4°♏10'20	17.95066 AU
direct	-705 Jul 19 j 17:15	2°♏07'38	
evening set	-705 Oct 21 j 04:10	5°♏25'47	
conjunction	-705 Nov 05 j 20:42	6°♏23'11	0°18'13
minimum elong	-705 Nov 05 j 20:43	6°♏23'11	0°18'13
max. Earth dist.	-705 Nov 06 j 03:33	6°♏24'13	19.98386 AU
morning rise	-705 Nov 21 j 11:46	7°♏20'23	
retrograde	-704 Feb 21 j 05:58	10°♏35'39	
opposition	-704 May 07 j 08:32	8°♏35'17	0°18'29
min. Earth dist.	-704 May 07 j 00:54	8°♏36'04	18.01722 AU
direct	-704 Jul 23 j 14:43	6°♏33'30	
evening set	-704 Oct 24 j 18:14	9°♏50'20	
conjunction	-704 Nov 09 j 10:07	10°♏47'26	0°15'04
minimum elong	-704 Nov 09 j 10:07	10°♏47'26	0°15'03
behind sun begin	-704 Nov 09 j 07:32	10°♏47'03	
behind sun end	-704 Nov 09 j 12:41	10°♏47'49	
max. Earth dist.	-704 Nov 09 j 18:24	10°♏48'41	20.05139 AU
morning rise	-704 Nov 25 j 01:04	11°♏44'23	

Attention, astronomical year style is used: The year -703 in astronomical counting style is the year 704 BCE in historical counting style.

retrograde	-703 Feb 24 j 21:21	14°♏59'04	
opposition	-703 May 12 j 05:06	12°♏58'48	0°14'56
min. Earth dist.	-703 May 11 j 19:39	12°♏59'46	18.08570 AU
direct	-703 Jul 28 j 09:19	10°♏57'25	
evening set	-703 Oct 29 j 07:24	14°♏12'58	
	-703 Nov 11 j 06:48	15°♏	
conjunction	-703 Nov 13 j 22:57	15°♏09'47	0°11'51
minimum elong	-703 Nov 13 j 22:57	15°♏09'47	0°11'51
behind sun begin	-703 Nov 13 j 18:18	15°♏09'06	
behind sun end	-703 Nov 14 j 03:35	15°♏10'28	
max. Earth dist.	-703 Nov 14 j 10:04	15°♏11'28	20.12059 AU
morning rise	-703 Nov 29 j 13:36	16°♏06'30	
retrograde	-702 Mar 01 j 12:59	19°♏20'34	
opposition	-702 May 17 j 00:42	17°♏20'28	0°11'18
min. Earth dist.	-702 May 16 j 12:43	17°♏21'41	18.15536 AU
direct	-702 Aug 02 j 04:34	15°♏19'32	
evening set	-702 Nov 02 j 19:51	18°♏33'48	
conjunction	-702 Nov 18 j 10:53	19°♏30'21	0°08'35
minimum elong	-702 Nov 18 j 10:53	19°♏30'21	0°08'35
behind sun begin	-702 Nov 18 j 05:09	19°♏29'30	
behind sun end	-702 Nov 18 j 16:36	19°♏31'12	
max. Earth dist.	-702 Nov 18 j 23:22	19°♏32'14	20.19069 AU
morning rise	-702 Dec 04 j 01:32	20°♏26'50	
retrograde	-701 Mar 06 j 03:27	23°♏40'21	
opposition	-701 May 21 j 19:56	21°♏40'23	0°07'39
min. Earth dist.	-701 May 21 j 06:37	21°♏41'45	18.22580 AU
direct	-701 Aug 06 j 21:13	19°♏39'54	
evening set	-701 Nov 07 j 07:15	22°♏52'56	
conjunction	-701 Nov 22 j 22:04	23°♏49'12	0°05'18
minimum elong	-701 Nov 22 j 22:05	23°♏49'12	0°05'18
behind sun begin	-701 Nov 22 j 15:45	23°♏48'16	
behind sun end	-701 Nov 23 j 04:25	23°♏50'08	
max. Earth dist.	-701 Nov 23 j 13:04	23°♏51'28	20.26118 AU
morning rise	-701 Dec 08 j 12:37	24°♏45'28	
retrograde	-700 Mar 09 j 18:28	27°♏58'26	
opposition	-700 May 25 j 14:21	25°♏58'39	0°03'59
min. Earth dist.	-700 May 24 j 22:32	26°♏00'15	18.29609 AU
direct	-700 Aug 10 j 14:47	23°♏58'36	
evening set	-700 Nov 10 j 18:11	27°♏10'24	
conjunction	-700 Nov 26 j 08:39	28°♏06'26	0°01'59
minimum elong	-700 Nov 26 j 08:39	28°♏06'26	0°01'59
behind sun begin	-700 Nov 26 j 02:07	28°♏05'28	
behind sun end	-700 Nov 26 j 15:11	28°♏07'23	
max. Earth dist.	-700 Nov 27 j 00:52	28°♏08'52	20.33112 AU
morning rise	-700 Dec 11 j 23:19	29°♏02'29	
	-700 Dec 28 j 22:04	0°♐	
retrograde	-699 Mar 14 j 07:47	2°♐14'55	
opposition	-699 May 30 j 08:02	0°♐15'17	0°00'18
min. Earth dist.	-699 May 29 j 15:31	0°♐16'58	18.36566 AU
	-699 Jun 05 j 15:12	30°℞♏	
desc. node	-699 Jun 29 j 08:46	29°♏06'40	
direct	-699 Aug 15 j 05:22	28°♏15'41	
	-699 Oct 19 j 19:26	0°♐	
evening set	-699 Nov 15 j 04:17	1°♐26'17	
conjunction	-699 Nov 30 j 18:40	2°♐22'04	-0°01'26
minimum elong	-699 Nov 30 j 18:41	2°♐22'04	0°01'27
behind sun begin	-699 Nov 30 j 12:09	2°♐21'07	
behind sun end	-699 Dec 01 j 01:12	2°♐23'01	
max. Earth dist.	-699 Dec 01 j 12:46	2°♐24'47	20.39994 AU
morning rise	-699 Dec 16 j 09:22	3°♐17'55	
retrograde	-698 Mar 18 j 22:09	6°♐29'49	
min. Earth dist.	-698 Jun 03 j 06:13	4°♐32'15	18.43353 AU
opposition	-698 Jun 04 j 00:58	4°♐30'21	-0°03'22
direct	-698 Aug 19 j 21:30	2°♐31'09	
evening set	-698 Nov 19 j 13:48	5°♐40'35	
conjunction	-698 Dec 05 j 03:59	6°♐36'08	-0°04'44
minimum elong	-698 Dec 05 j 03:58	6°♐36'08	0°04'44
behind sun begin	-698 Dec 04 j 21:34	6°♐35'13	
behind sun end	-698 Dec 05 j 10:21	6°♐37'04	
max. Earth dist.	-698 Dec 05 j 23:04	6°♐38'59	20.46664 AU
morning rise	-698 Dec 20 j 18:52	7°♐31'48	
retrograde	-697 Mar 23 j 10:10	10°♐43'12	
opposition	-697 Jun 08 j 17:23	8°♐43'51	-0°06'59
min. Earth dist.	-697 Jun 07 j 22:22	8°♐45'46	18.49914 AU
direct	-697 Aug 24 j 10:27	6°♐45'02	
evening set	-697 Nov 23 j 22:38	9°♐53'20	
conjunction	-697 Dec 09 j 12:51	10°♐48'40	-0°07'57
minimum elong	-697 Dec 09 j 12:51	10°♐48'40	0°07'58
behind sun begin	-697 Dec 09 j 06:59	10°♐47'49	
behind sun end	-697 Dec 09 j 18:43	10°♐49'31	
max. Earth dist.	-697 Dec 10 j 09:22	10°♐51'43	20.53087 AU
morning rise	-697 Dec 25 j 03:55	11°♐44'08	
retrograde	-696 Mar 27 j 00:01	14°♐55'02	
min. Earth dist.	-696 Jun 11 j 11:50	12°♐57'54	18.56184 AU
opposition	-696 Jun 12 j 08:53	12°♐55'47	-0°10'32
direct	-696 Aug 28 j 01:18	10°♐57'18	
evening set	-696 Nov 27 j 06:52	14°♐04'29	
conjunction	-696 Dec 12 j 21:05	14°♐59'37	-0°11'07
minimum elong	-696 Dec 12 j 21:05	14°♐59'37	0°11'08
behind sun begin	-696 Dec 12 j 16:09	14°♐58'54	
behind sun end	-696 Dec 13 j 02:01	15°♐00'19	
max. Earth dist.	-696 Dec 13 j 18:24	15°♐02'46	20.59187 AU
morning rise	-696 Dec 28 j 12:33	15°♐54'56	
retrograde	-695 Mar 31 j 10:42	19°♐05'20	
opposition	-695 Jun 16 j 23:49	17°♐06'08	-0°14'01
min. Earth dist.	-695 Jun 16 j 02:52	17°♐08'14	18.62125 AU
direct	-695 Sep 01 j 12:43	15°♐07'57	
evening set	-695 Dec 01 j 14:26	18°♐14'02	
conjunction	-695 Dec 17 j 04:50	19°♐08'59	-0°14'13
minimum elong	-695 Dec 17 j 04:50	19°♐08'59	0°14'13
behind sun begin	-695 Dec 17 j 01:33	19°♐08'30	
behind sun end	-695 Dec 17 j 08:07	19°♐09'27	
max. Earth dist.	-695 Dec 18 j 03:13	19°♐12'17	20.64957 AU
morning rise	-694 Jan 01 j 20:36	20°♐04'08	
retrograde	-694 Apr 04 j 23:09	23°♐14'02	
opposition	-694 Jun 21 j 13:40	21°♐14'52	-0°17'24
min. Earth dist.	-694 Jun 20 j 14:52	21°♐17'10	18.67721 AU
direct	-694 Sep 06 j 02:36	19°♐16'56	
evening set	-694 Dec 05 j 21:27	22°♐21'58	
conjunction	-694 Dec 21 j 11:57	23°♐16'45	-0°17'13
minimum elong	-694 Dec 21 j 11:57	23°♐16'45	0°17'14
max. Earth dist.	-694 Dec 22 j 11:14	23°♐20'10	20.70384 AU
morning rise	-693 Jan 06 j 04:12	24°♐11'46	
retrograde	-693 Apr 09 j 08:56	27°♐21'12	
min. Earth dist.	-693 Jun 25 j 04:29	25°♐24'17	18.73004 AU
opposition	-693 Jun 26 j 03:08	25°♐22'01	-0°20'40
direct	-693 Sep 10 j 12:28	23°♐24'19	
evening set	-693 Dec 10 j 03:41	26°♐28'20	
conjunction	-693 Dec 25 j 18:30	27°♐22'57	-0°20'07
minimum elong	-693 Dec 25 j 18:30	27°♐22'57	0°20'07
max. Earth dist.	-693 Dec 26 j 18:53	27°♐26'31	20.75520 AU
morning rise	-692 Jan 10 j 11:13	28°♐17'50	
	-692 Feb 12 j 04:16	0°♑	

Attention, astronomical year style is used: The year -692 in astronomical counting style is the year 693 BCE in historical counting style.

retrograde	-692 Apr 12 j 19:52	1°♉26'50	
	-692 Jun 16 j 00:24	30°℞♐	
opposition	-692 Jun 29 j 15:38	29°♐27'38	-0°23'48
min. Earth dist.	-692 Jun 28 j 15:03	29°♐30'06	18.77997 AU
direct	-692 Sep 14 j 01:05	27°♐30'09	
	-692 Dec 03 j 11:48	0°♉	
evening set	-692 Dec 13 j 09:38	0°♉33'14	
conjunction	-692 Dec 29 j 00:42	1°♉27'42	-0°22'53
minimum elong	-692 Dec 29 j 00:42	1°♉27'42	0°22'54
max. Earth dist.	-692 Dec 30 j 02:00	1°♉31'24	20.80364 AU
morning rise	-691 Jan 13 j 17:59	2°♉22'29	
retrograde	-691 Apr 17 j 04:58	5°♉31'03	
min. Earth dist.	-691 Jul 03 j 03:07	3°♉34'18	18.82722 AU
opposition	-691 Jul 04 j 03:24	3°♉31'52	-0°26'48
direct	-691 Sep 18 j 09:34	1°♉34'34	
evening set	-691 Dec 17 j 15:05	4°♉36'48	
conjunction	-690 Jan 02 j 06:33	5°♉31'08	-0°25'32
minimum elong	-690 Jan 02 j 06:33	5°♉31'08	0°25'32
max. Earth dist.	-690 Jan 03 j 08:39	5°♉34'56	20.84956 AU
morning rise	-690 Jan 18 j 00:23	6°♉25'49	
retrograde	-690 Apr 21 j 14:53	9°♉34'01	
opposition	-690 Jul 08 j 14:30	7°♉34'51	-0°29'38
min. Earth dist.	-690 Jul 07 j 12:25	7°♉37'27	18.87178 AU
direct	-690 Sep 22 j 19:58	5°♉37'46	
evening set	-690 Dec 21 j 20:05	8°♉39'12	
conjunction	-689 Jan 06 j 11:55	9°♉33'26	-0°28'02
minimum elong	-689 Jan 06 j 11:55	9°♉33'26	0°28'03
max. Earth dist.	-689 Jan 07 j 14:50	9°♉37'21	20.89261 AU
morning rise	-689 Jan 22 j 06:24	10°♉28'02	
retrograde	-689 Apr 25 j 23:15	13°♉35'56	
min. Earth dist.	-689 Jul 11 j 23:33	11°♉39'21	18.91348 AU
opposition	-689 Jul 13 j 01:14	11°♉36'46	-0°32'19
direct	-689 Sep 27 j 03:35	9°♉39'54	
evening set	-689 Dec 26 j 00:51	12°♉40'37	
conjunction	-688 Jan 10 j 17:14	13°♉34'46	-0°30'23
minimum elong	-688 Jan 10 j 17:14	13°♉34'46	0°30'24
max. Earth dist.	-688 Jan 11 j 20:40	13°♉38'44	20.93284 AU
morning rise	-688 Jan 26 j 12:23	14°♉29'18	
retrograde	-688 Apr 29 j 08:51	17°♉36'56	
min. Earth dist.	-688 Jul 15 j 08:02	15°♉40'31	18.95207 AU
opposition	-688 Jul 16 j 11:09	15°♉37'48	-0°34'51
direct	-688 Sep 30 j 11:57	13°♉41'08	
evening set	-688 Dec 29 j 05:27	16°♉41'13	
conjunction	-687 Jan 13 j 22:21	17°♉35'17	-0°32'36
minimum elong	-687 Jan 13 j 22:21	17°♉35'17	0°32'36
max. Earth dist.	-687 Jan 15 j 02:16	17°♉39'19	20.96958 AU
morning rise	-687 Jan 29 j 18:16	18°♉29'47	
retrograde	-687 May 03 j 16:34	21°♉37'10	
opposition	-687 Jul 20 j 20:45	19°♉38'06	-0°37'11
min. Earth dist.	-687 Jul 19 j 18:28	19°♉40'44	18.98700 AU
direct	-687 Oct 04 j 18:32	17°♉41'38	
evening set	-686 Jan 02 j 09:53	20°♉41'08	
conjunction	-686 Jan 18 j 03:23	21°♉35'10	-0°34'38
minimum elong	-686 Jan 18 j 03:23	21°♉35'10	0°34'39
max. Earth dist.	-686 Jan 19 j 07:23	21°♉39'12	21.00255 AU
morning rise	-686 Feb 03 j 00:01	22°♉29'37	
retrograde	-686 May 08 j 02:08	25°♉36'50	
min. Earth dist.	-686 Jul 24 j 02:28	23°♉40'32	19.01785 AU
opposition	-686 Jul 25 j 05:45	23°♉37'48	-0°39'21
direct	-686 Oct 09 j 01:50	21°♉41'30	
evening set	-685 Jan 06 j 14:21	24°♉40'32	
conjunction	-685 Jan 22 j 08:27	25°♉34'31	-0°36'31
minimum elong	-685 Jan 22 j 08:27	25°♉34'31	0°36'31
max. Earth dist.	-685 Jan 23 j 12:37	25°♉38'34	21.03110 AU
morning rise	-685 Feb 07 j 05:53	26°♉28'58	
retrograde	-685 May 12 j 09:25	29°♉36'02	
opposition	-685 Jul 29 j 14:34	27°♉37'03	-0°41'19
min. Earth dist.	-685 Jul 28 j 12:30	27°♉39'39	19.04411 AU
direct	-685 Oct 13 j 07:25	25°♉40'54	
evening set	-684 Jan 10 j 18:44	28°♉39'30	
conjunction	-684 Jan 26 j 13:34	29°♉33'28	-0°38'12
minimum elong	-684 Jan 26 j 13:34	29°♉33'28	0°38'13
max. Earth dist.	-684 Jan 27 j 17:21	29°♉37'28	21.05492 AU
	-684 Feb 03 j 06:32	0°♒	
morning rise	-684 Feb 11 j 11:51	0°♒27'56	
retrograde	-684 May 15 j 19:18	3°♒34'53	
opposition	-684 Aug 01 j 22:52	1°♒35'55	-0°43'05
min. Earth dist.	-684 Jul 31 j 20:21	1°♒38'34	19.06526 AU
	-684 Sep 17 j 22:09	30°℞♉	
direct	-684 Oct 16 j 14:10	29°♉39'51	
	-684 Nov 13 j 14:28	0°♒	
evening set	-683 Jan 13 j 23:21	2°♒38'07	
conjunction	-683 Jan 29 j 18:52	3°♒32'06	-0°39'43
minimum elong	-683 Jan 29 j 18:52	3°♒32'06	0°39'43
max. Earth dist.	-683 Jan 30 j 22:17	3°♒36'01	21.07317 AU
morning rise	-683 Feb 14 j 18:01	4°♒26'34	
retrograde	-683 May 20 j 01:57	7°♒33'27	
min. Earth dist.	-683 Aug 05 j 05:54	5°♒36'57	19.08070 AU
opposition	-683 Aug 06 j 06:48	5°♒34'27	-0°44'38
direct	-683 Oct 20 j 19:09	3°♒38'28	
evening set	-682 Jan 18 j 03:54	6°♒36'26	
conjunction	-682 Feb 03 j 00:15	7°♒30'26	-0°41'02
minimum elong	-682 Feb 03 j 00:15	7°♒30'26	0°41'02
max. Earth dist.	-682 Feb 04 j 02:48	7°♒34'14	21.08578 AU
morning rise	-682 Feb 19 j 00:16	8°♒24'57	
retrograde	-682 May 24 j 11:36	11°♒31'45	
opposition	-682 Aug 10 j 14:26	9°♒32'43	-0°45'58
min. Earth dist.	-682 Aug 09 j 13:22	9°♒35'13	19.09034 AU
direct	-682 Oct 25 j 01:30	7°♒36'43	
evening set	-681 Jan 22 j 08:23	10°♒34'27	
conjunction	-681 Feb 07 j 05:32	11°♒28'30	-0°42'09
minimum elong	-681 Feb 07 j 05:32	11°♒28'30	0°42'09
max. Earth dist.	-681 Feb 08 j 07:36	11°♒32'13	21.09246 AU
morning rise	-681 Feb 23 j 06:30	12°♒23'04	
	-681 Apr 23 j 09:10	15°♒	
retrograde	-681 May 28 j 17:57	15°♒29'51	
	-681 Jul 03 j 20:21	15°℞♒	
opposition	-681 Aug 14 j 21:53	13°♒30'42	-0°47'05
min. Earth dist.	-681 Aug 13 j 22:29	13°♒33'03	19.09421 AU
direct	-681 Oct 29 j 06:18	11°♒34'41	
evening set	-680 Jan 26 j 13:03	14°♒32'14	
	-680 Feb 03 j 18:25	15°♒	
conjunction	-680 Feb 11 j 11:07	15°♒26'20	-0°43'03
minimum elong	-680 Feb 11 j 11:07	15°♒26'20	0°43'03
max. Earth dist.	-680 Feb 12 j 12:13	15°♒29'55	21.09375 AU
morning rise	-680 Feb 27 j 13:03	16°♒20'58	
retrograde	-680 Jun 01 j 03:00	19°♒27'44	
min. Earth dist.	-680 Aug 17 j 05:19	17°♒30'50	19.09290 AU
opposition	-680 Aug 18 j 04:41	17°♒28'29	-0°47'58
direct	-680 Nov 01 j 12:07	15°♒32'22	
evening set	-679 Jan 29 j 17:51	18°♒29'50	
conjunction	-679 Feb 14 j 16:48	19°♒24'00	-0°43'45

Attention, astronomical year style is used: The year -679 in astronomical counting style is the year 680 BCE in historical counting style.

minimum elong	-679 Feb 14 j 16:47	19°♒24'00	0°43'45
max. Earth dist.	-679 Feb 15 j 17:22	19°♒27'30	21.08992 AU
morning rise	-679 Mar 02 j 19:41	20°♒18'43	
retrograde	-679 Jun 05 j 09:31	23°♒25'31	
opposition	-679 Aug 22 j 11:25	21°♒26'08	-0°48'37
min. Earth dist.	-679 Aug 21 j 13:40	21°♒28'20	19.08676 AU
direct	-679 Nov 05 j 16:23	19°♒29'57	
evening set	-678 Feb 02 j 22:41	22°♒27'22	
conjunction	-678 Feb 18 j 22:34	23°♒21'38	-0°44'14
minimum elong	-678 Feb 18 j 22:34	23°♒21'38	0°44'14
max. Earth dist.	-678 Feb 19 j 22:09	23°♒24'59	21.08170 AU
morning rise	-678 Mar 07 j 02:25	24°♒16'27	
retrograde	-678 Jun 09 j 18:10	27°♒23'19	
opposition	-678 Aug 26 j 17:51	25°♒23'49	-0°49'02
min. Earth dist.	-678 Aug 25 j 20:04	25°♒26'01	19.07647 AU
direct	-678 Nov 09 j 21:49	23°♒27'30	
evening set	-677 Feb 07 j 03:54	26°♒25'00	
conjunction	-677 Feb 23 j 04:42	27°♒19'22	-0°44'30
minimum elong	-677 Feb 23 j 04:42	27°♒19'22	0°44'31
max. Earth dist.	-677 Feb 24 j 03:46	27°♒22'39	21.06937 AU
morning rise	-677 Mar 11 j 09:31	28°♒14'18	
	-677 Apr 15 j 13:05	0°♓	
retrograde	-677 Jun 14 j 01:12	1°♓21'17	
	-677 Aug 14 j 21:59	30°℞♒	
min. Earth dist.	-677 Aug 30 j 03:58	29°♒23'43	19.06228 AU
opposition	-677 Aug 31 j 00:11	29°♒21'40	-0°49'13
direct	-677 Nov 14 j 01:28	27°♒25'15	
	-676 Feb 04 j 10:17	0°♓	
evening set	-676 Feb 11 j 09:21	0°♓22'53	
conjunction	-676 Feb 27 j 11:11	1°♓17'23	-0°44'34
minimum elong	-676 Feb 27 j 11:11	1°♓17'23	0°44'34
max. Earth dist.	-676 Feb 28 j 09:04	1°♓20'29	21.05346 AU
morning rise	-676 Mar 14 j 17:03	2°♓12'26	
retrograde	-676 Jun 17 j 10:26	5°♓19'36	
min. Earth dist.	-676 Sep 02 j 10:19	3°♓21'54	19.04450 AU
opposition	-676 Sep 03 j 06:22	3°♓19'53	-0°49'11
direct	-676 Nov 17 j 06:41	1°♓23'20	
evening set	-675 Feb 14 j 15:18	4°♓21'11	
conjunction	-675 Mar 02 j 18:06	5°♓15'50	-0°44'25
minimum elong	-675 Mar 02 j 18:06	5°♓15'50	0°44'25
max. Earth dist.	-675 Mar 03 j 15:17	5°♓18'51	21.03380 AU
morning rise	-675 Mar 19 j 00:54	6°♓11'03	
retrograde	-675 Jun 21 j 17:50	9°♓18'24	
opposition	-675 Sep 07 j 12:30	7°♓18'36	-0°48'54
min. Earth dist.	-675 Sep 06 j 18:11	7°♓20'28	19.02304 AU
direct	-675 Nov 21 j 10:02	5°♓21'57	
evening set	-674 Feb 18 j 21:36	8°♓20'06	
conjunction	-674 Mar 07 j 01:26	9°♓14'55	-0°44'03
minimum elong	-674 Mar 07 j 01:26	9°♓14'55	0°44'03
max. Earth dist.	-674 Mar 07 j 21:11	9°♓17'43	21.01073 AU
morning rise	-674 Mar 23 j 09:16	10°♓10'17	
retrograde	-674 Jun 26 j 03:58	13°♓17'54	
opposition	-674 Sep 11 j 18:42	11°♓18'02	-0°48'23
min. Earth dist.	-674 Sep 11 j 00:50	11°♓19'51	18.99813 AU
direct	-674 Nov 25 j 15:17	9°♓21'15	
evening set	-673 Feb 23 j 04:22	12°♓19'47	
conjunction	-673 Mar 11 j 09:15	13°♓14'47	-0°43'29
minimum elong	-673 Mar 11 j 09:15	13°♓14'47	0°43'28
max. Earth dist.	-673 Mar 12 j 04:10	13°♓17'28	20.98394 AU
morning rise	-673 Mar 27 j 18:02	14°♓10'19	
retrograde	-673 Jun 30 j 12:29	17°♓18'14	
min. Earth dist.	-673 Sep 15 j 09:12	15°♓19'56	18.96938 AU
opposition	-673 Sep 16 j 01:06	15°♓18'18	-0°47'38
direct	-673 Nov 29 j 19:09	13°♓21'24	
evening set	-672 Feb 27 j 11:54	16°♓20'23	
conjunction	-672 Mar 14 j 17:50	17°♓15'34	-0°42'41
minimum elong	-672 Mar 14 j 17:50	17°♓15'34	0°42'42
max. Earth dist.	-672 Mar 15 j 10:52	17°♓18'00	20.95336 AU
morning rise	-672 Mar 31 j 03:39	18°♓11'18	
retrograde	-672 Jul 03 j 23:13	21°♓19'33	
opposition	-672 Sep 19 j 07:26	19°♓19'33	-0°46'39
min. Earth dist.	-672 Sep 18 j 16:31	19°♓21'05	18.93668 AU
direct	-672 Dec 03 j 00:37	17°♓22'29	
evening set	-671 Mar 02 j 20:09	20°♓22'01	
conjunction	-671 Mar 19 j 03:07	21°♓17'25	-0°41'41
minimum elong	-671 Mar 19 j 03:07	21°♓17'25	0°41'41
max. Earth dist.	-671 Mar 19 j 18:53	21°♓19'40	20.91842 AU
morning rise	-671 Apr 04 j 13:48	22°♓13'21	
retrograde	-671 Jul 08 j 08:59	25°♓21'56	
opposition	-671 Sep 23 j 14:10	23°♓21'52	-0°45'26
min. Earth dist.	-671 Sep 23 j 01:31	23°♓23'10	18.89946 AU
direct	-671 Dec 07 j 05:36	21°♓24'37	
evening set	-670 Mar 07 j 04:55	24°♓24'44	
conjunction	-670 Mar 23 j 12:54	25°♓20'21	-0°40'29
minimum elong	-670 Mar 23 j 12:54	25°♓20'21	0°40'29
max. Earth dist.	-670 Mar 24 j 02:17	25°♓22'16	20.87900 AU
morning rise	-670 Apr 09 j 00:34	26°♓16'30	
retrograde	-670 Jul 12 j 20:17	29°♓25'29	
opposition	-670 Sep 27 j 21:09	27°♓25'18	-0°43'59
min. Earth dist.	-670 Sep 27 j 09:44	27°♓26'29	18.85761 AU
direct	-670 Dec 11 j 11:40	25°♓27'49	
evening set	-669 Mar 11 j 14:33	28°♓28'34	
conjunction	-669 Mar 27 j 23:36	29°♓24'26	-0°39'03
minimum elong	-669 Mar 27 j 23:36	29°♓24'26	0°39'02
max. Earth dist.	-669 Mar 28 j 11:26	29°♓26'07	20.83470 AU
	-669 Apr 07 j 08:26	0°♈	
morning rise	-669 Apr 13 j 12:07	0°♈20'48	
retrograde	-669 Jul 17 j 06:42	3°♈30'10	
opposition	-669 Oct 02 j 04:20	1°♈29'51	-0°42'18
min. Earth dist.	-669 Oct 01 j 19:16	1°♈30'47	18.81090 AU
	-669 Nov 12 j 09:42	30°℞♓	
direct	-669 Dec 15 j 18:03	29°♓32'04	
	-668 Jan 17 j 15:55	0°♈	
evening set	-668 Mar 15 j 00:54	2°♈33'31	
conjunction	-668 Mar 31 j 10:57	3°♈29'38	-0°37'25
minimum elong	-668 Mar 31 j 10:57	3°♈29'38	0°37'25
max. Earth dist.	-668 Mar 31 j 19:59	3°♈30'55	20.78586 AU
morning rise	-668 Apr 17 j 00:28	4°♈26'14	
retrograde	-668 Jul 20 j 18:35	7°♈36'00	
opposition	-668 Oct 05 j 11:47	5°♈35'30	-0°40'23
min. Earth dist.	-668 Oct 05 j 04:10	5°♈36'17	18.75980 AU
direct	-668 Dec 19 j 01:11	3°♈37'23	
evening set	-667 Mar 19 j 11:51	6°♈39'36	
conjunction	-667 Apr 04 j 22:57	7°♈35'58	-0°35'35
minimum elong	-667 Apr 04 j 22:57	7°♈35'58	0°35'35
max. Earth dist.	-667 Apr 05 j 06:31	7°♈37'03	20.73267 AU
morning rise	-667 Apr 21 j 13:10	8°♈32'48	
retrograde	-667 Jul 25 j 05:16	11°♈42'58	
opposition	-667 Oct 09 j 19:28	9°♈42'18	-0°38'16
min. Earth dist.	-667 Oct 09 j 14:02	9°♈42'52	18.70470 AU
direct	-667 Dec 23 j 08:30	7°♈43'50	
evening set	-666 Mar 23 j 23:33	10°♈46'50	

Attention, astronomical year style is used: The year -666 in astronomical counting style is the year 667 BCE in historical counting style.

conjunction	-666 Apr 09 j 11:34	11°♈43'28	-0°33'34
minimum elong	-666 Apr 09 j 11:34	11°♈43'28	0°33'34
max. Earth dist.	-666 Apr 09 j 16:23	11°♈44'10	20.67610 AU
morning rise	-666 Apr 26 j 02:41	12°♈40'34	
retrograde	-666 Jul 29 j 17:52	15°♈51'11	
opposition	-666 Oct 14 j 03:27	13°♈50'17	-0°35'56
min. Earth dist.	-666 Oct 13 j 23:26	13°♈50'43	18.64665 AU
direct	-666 Dec 27 j 16:49	11°♈51'27	
evening set	-665 Mar 28 j 11:53	14°♈55'19	
conjunction	-665 Apr 14 j 00:57	15°♈52'14	-0°31'21
minimum elong	-665 Apr 14 j 00:57	15°♈52'14	0°31'22
max. Earth dist.	-665 Apr 14 j 04:35	15°♈52'46	20.61667 AU
morning rise	-665 Apr 30 j 16:43	16°♈49'35	
retrograde	-665 Aug 03 j 05:25	20°♈00'39	
opposition	-665 Oct 18 j 11:50	17°♈59'35	-0°33'24
min. Earth dist.	-665 Oct 18 j 09:46	17°♈59'48	18.58601 AU
direct	-664 Jan 01 j 00:37	16°♈00'22	
evening set	-664 Apr 01 j 01:13	19°♈05'11	
conjunction	-664 Apr 17 j 15:05	20°♈02'23	-0°28'59
minimum elong	-664 Apr 17 j 15:06	20°♈02'23	0°28'57
max. Earth dist.	-664 Apr 17 j 15:53	20°♈02'30	20.55516 AU
morning rise	-664 May 04 j 07:40	20°♈59'59	
retrograde	-664 Aug 06 j 19:05	24°♈11'33	
opposition	-664 Oct 21 j 20:29	22°♈10'18	-0°30'41
min. Earth dist.	-664 Oct 21 j 19:55	22°♈10'22	18.52366 AU
direct	-663 Jan 04 j 10:16	20°♈10'42	
evening set	-663 Apr 05 j 15:17	23°♈16'31	
conjunction	-663 Apr 22 j 06:07	24°♈14'02	-0°26'26
minimum elong	-663 Apr 22 j 06:07	24°♈14'02	0°26'26
max. Earth dist.	-663 Apr 22 j 05:55	24°♈14'00	20.49204 AU
morning rise	-663 May 08 j 23:09	25°♈11'54	
retrograde	-663 Aug 11 j 07:38	28°♈23'58	
opposition	-663 Oct 26 j 05:47	26°♈22'35	-0°27'47
min. Earth dist.	-663 Oct 26 j 06:53	26°♈22'28	18.45997 AU
direct	-662 Jan 08 j 18:53	24°♈22'37	
evening set	-662 Apr 10 j 06:06	27°♈29'30	
conjunction	-662 Apr 26 j 21:38	28°♈27'18	-0°23'44
minimum elong	-662 Apr 26 j 21:38	28°♈27'18	0°23'43
max. Earth dist.	-662 Apr 26 j 18:39	28°♈26'52	20.42803 AU
morning rise	-662 May 13 j 15:24	29°♈25'26	
	-662 May 23 j 23:19	0°♉	
retrograde	-662 Aug 15 j 22:34	2°♉38'05	
opposition	-662 Oct 30 j 15:37	0°♉36'34	-0°24'43
min. Earth dist.	-662 Oct 30 j 18:14	0°♉36'17	18.39564 AU
	-662 Nov 14 j 06:37	30°℞♈	
direct	-661 Jan 13 j 05:48	28°♈36'14	
	-661 Mar 12 j 09:14	0°♉	
evening set	-661 Apr 14 j 21:57	1°♉44'14	
conjunction	-661 May 01 j 14:24	2°♉42'22	-0°20'53
minimum elong	-661 May 01 j 14:25	2°♉42'22	0°20'53
max. Earth dist.	-661 May 01 j 10:33	2°♉41'48	20.36339 AU
morning rise	-661 May 18 j 08:30	3°♉40'46	
retrograde	-661 Aug 20 j 12:29	6°♉53'59	
opposition	-661 Nov 04 j 01:57	4°♉52'23	-0°21'30
min. Earth dist.	-661 Nov 04 j 06:10	4°♉51'56	18.33075 AU
direct	-660 Jan 17 j 16:13	2°♉51'43	
evening set	-660 Apr 18 j 14:56	6°♉00'55	
conjunction	-660 May 05 j 07:57	6°♉59'21	-0°17'55
minimum elong	-660 May 05 j 07:57	6°♉59'21	0°17'55
max. Earth dist.	-660 May 05 j 01:03	6°♉58'20	20.29845 AU
morning rise	-660 May 22 j 02:38	7°♉58'02	
retrograde	-660 Aug 24 j 04:17	11°♉11'51	
opposition	-660 Nov 07 j 13:01	9°♉10'11	-0°18'08
min. Earth dist.	-660 Nov 07 j 19:01	9°♉09'32	18.26570 AU
direct	-659 Jan 21 j 04:12	7°♉09'11	
evening set	-659 Apr 23 j 08:40	10°♉19'38	
conjunction	-659 May 10 j 02:26	11°♉18'23	-0°14'49
minimum elong	-659 May 10 j 02:26	11°♉18'23	0°14'48
behind sun begin	-659 May 10 j 00:03	11°♉18'02	
behind sun end	-659 May 10 j 04:49	11°♉18'43	
max. Earth dist.	-659 May 09 j 18:42	11°♉17'15	20.23317 AU
morning rise	-659 May 26 j 21:15	12°♉17'19	
	-659 Jul 24 j 14:48	15°♉	
retrograde	-659 Aug 28 j 20:04	15°♉31'46	
	-659 Oct 03 j 09:22	15°℞♉	
opposition	-659 Nov 12 j 00:45	13°♉30'03	-0°14'38
min. Earth dist.	-659 Nov 12 j 08:17	13°♉29'15	18.20020 AU
direct	-658 Jan 25 j 16:58	11°♉28'45	
evening set	-658 Apr 28 j 03:40	14°♉40'29	
	-658 May 03 j 18:01	15°♉	
conjunction	-658 May 14 j 21:48	15°♉39'31	-0°11'36
minimum elong	-658 May 14 j 21:48	15°♉39'31	0°11'37
behind sun begin	-658 May 14 j 17:04	15°♉38'50	
behind sun end	-658 May 15 j 02:32	15°♉40'12	
max. Earth dist.	-658 May 14 j 10:48	15°♉37'54	20.16753 AU
morning rise	-658 May 31 j 17:02	16°♉38'44	
retrograde	-658 Sep 02 j 12:35	19°♉53'49	
opposition	-658 Nov 16 j 13:11	17°♉52'03	-0°11'01
min. Earth dist.	-658 Nov 16 j 22:52	17°♉51'00	18.13438 AU
direct	-657 Jan 30 j 06:21	15°♉50'23	
evening set	-657 May 02 j 23:32	19°♉03'26	
conjunction	-657 May 19 j 18:21	20°♉02'46	-0°08'19
minimum elong	-657 May 19 j 18:21	20°♉02'46	0°08'17
behind sun begin	-657 May 19 j 12:24	20°♉01'55	
behind sun end	-657 May 20 j 00:18	20°♉03'38	
max. Earth dist.	-657 May 19 j 06:17	20°♉01'00	20.10132 AU
morning rise	-657 Jun 05 j 13:35	21°♉02'14	
retrograde	-657 Sep 07 j 06:18	24°♉17'55	
opposition	-657 Nov 21 j 02:26	22°♉16'06	-0°07'18
min. Earth dist.	-657 Nov 21 j 13:36	22°♉14'54	18.06780 AU
direct	-656 Feb 03 j 21:33	20°♉14'05	
evening set	-656 May 06 j 20:38	23°♉28'26	
conjunction	-656 May 23 j 15:37	24°♉28'05	-0°04'57
minimum elong	-656 May 23 j 15:38	24°♉28'05	0°04'56
behind sun begin	-656 May 23 j 09:01	24°♉27'07	
behind sun end	-656 May 23 j 22:14	24°♉29'02	
max. Earth dist.	-656 May 23 j 00:05	24°♉25'46	20.03443 AU
morning rise	-656 Jun 09 j 11:02	25°♉27'48	
retrograde	-656 Sep 10 j 23:49	28°♉44'04	
opposition	-656 Nov 24 j 16:26	26°♉42'10	-0°03'30
min. Earth dist.	-656 Nov 25 j 05:56	26°♉40'43	18.00077 AU
direct	-655 Feb 07 j 12:45	24°♉39'45	
evening set	-655 May 11 j 18:24	27°♉55'25	
conjunction	-655 May 28 j 13:52	28°♉55'20	-0°01'29
minimum elong	-655 May 28 j 13:52	28°♉55'20	0°01'28
behind sun begin	-655 May 28 j 07:04	28°♉54'21	
behind sun end	-655 May 28 j 20:39	28°♉56'19	
max. Earth dist.	-655 May 27 j 21:18	28°♉52'52	19.96723 AU
morning rise	-655 Jun 14 j 09:06	29°♉55'17	
	-655 Jun 15 j 17:26	0°♊	
retrograde	-655 Sep 15 j 19:06	3°♊12'07	
asc. node	-655 Oct 28 j 09:46	2°♊26'24	
opposition	-655 Nov 29 j 07:09	1°♊10'08	0°00'20

Attention, astronomical year style is used: The year -655 in astronomical counting style is the year 656 BCE in historical counting style.

min. Earth dist.	-655 Nov 29 j 21:46	1°♊08'34	17.93355 AU	
	-655 Dec 28 j 03:43	30°℞♉		
direct	-654 Feb 12 j 05:47	29°♉07'19		
	-654 Mar 29 j 11:20	0°♊		
evening set	-654 May 16 j 17:04	2°♊24'15		
conjunction	-654 Jun 02 j 12:36	3°♊24'27	0°02'06	
minimum elong	-654 Jun 02 j 12:36	3°♊24'27	0°02'07	
behind sun begin	-654 Jun 02 j 05:49	3°♊23'27		
behind sun end	-654 Jun 02 j 19:24	3°♊25'26		
max. Earth dist.	-654 Jun 01 j 16:57	3°♊21'30	19.90018 AU	
morning rise	-654 Jun 19 j 07:52	4°♊24'38		
retrograde	-654 Sep 20 j 14:00	7°♊42'01		
opposition	-654 Dec 03 j 22:41	5°♊39'54	0°04'12	
min. Earth dist.	-654 Dec 04 j 15:35	5°♊38'05	17.86691 AU	
direct	-653 Feb 16 j 22:37	3°♊36'38		
evening set	-653 May 21 j 16:34	6°♊54'52		
conjunction	-653 Jun 07 j 12:23	7°♊55'19	0°05'35	
minimum elong	-653 Jun 07 j 12:22	7°♊55'19	0°05'35	
behind sun begin	-653 Jun 07 j 05:52	7°♊54'22		
behind sun end	-653 Jun 07 j 18:53	7°♊56'17		
max. Earth dist.	-653 Jun 06 j 15:51	7°♊52'14	19.83401 AU	
morning rise	-653 Jun 24 j 07:19	8°♊55'43		
retrograde	-653 Sep 25 j 10:27	12°♊13'36		
opposition	-653 Dec 08 j 14:43	10°♊11'24	0°08'04	
min. Earth dist.	-653 Dec 09 j 08:21	10°♊09'29	17.80139 AU	
direct	-652 Feb 21 j 17:10	8°♊07'42		
evening set	-652 May 25 j 16:59	11°♊27'11		
conjunction	-652 Jun 11 j 12:39	12°♊27'53	0°09'02	
minimum elong	-652 Jun 11 j 12:39	12°♊27'53	0°09'03	
behind sun begin	-652 Jun 11 j 06:55	12°♊27'02		
behind sun end	-652 Jun 11 j 18:24	12°♊28'44		
max. Earth dist.	-652 Jun 10 j 13:36	12°♊24'24	19.76935 AU	
morning rise	-652 Jun 28 j 07:20	13°♊28'29		
retrograde	-652 Sep 29 j 06:34	16°♊46'52		
opposition	-652 Dec 12 j 07:44	14°♊44'32	0°11'54	
min. Earth dist.	-652 Dec 13 j 03:28	14°♊42'23	17.73795 AU	
direct	-651 Feb 25 j 11:25	12°♊40'24		
evening set	-651 May 30 j 17:45	16°♊01'08		
conjunction	-651 Jun 16 j 13:25	17°♊02'03	0°12'27	
minimum elong	-651 Jun 16 j 13:25	17°♊02'03	0°12'27	
behind sun begin	-651 Jun 16 j 09:07	17°♊01'25		
behind sun end	-651 Jun 16 j 17:43	17°♊02'42		
max. Earth dist.	-651 Jun 15 j 13:48	16°♊58'28	19.70716 AU	
morning rise	-651 Jul 03 j 07:37	18°♊02'50		
retrograde	-651 Oct 04 j 03:59	21°♊21'42		
opposition	-651 Dec 17 j 01:20	19°♊19'15	0°15'41	
min. Earth dist.	-651 Dec 17 j 21:13	19°♊17'05	17.67723 AU	
direct	-650 Mar 02 j 07:54	17°♊14'44		
evening set	-650 Jun 04 j 19:25	20°♊36'39		
conjunction	-650 Jun 21 j 14:49	21°♊37'47	0°15'49	
minimum elong	-650 Jun 21 j 14:49	21°♊37'47	0°15'49	
max. Earth dist.	-650 Jun 20 j 13:30	21°♊33'56	19.64800 AU	
morning rise	-650 Jul 08 j 08:31	22°♊38'44		
retrograde	-650 Oct 09 j 00:28	25°♊58'03		
opposition	-650 Dec 21 j 19:41	23°♊55'31	0°19'24	
min. Earth dist.	-650 Dec 22 j 17:27	23°♊53'09	17.62005 AU	
direct	-649 Mar 07 j 03:20	21°♊50'37		
evening set	-649 Jun 09 j 21:41	25°♊13'43		
conjunction	-649 Jun 26 j 16:49	26°♊15'03	0°19'05	
minimum elong	-649 Jun 26 j 16:49	26°♊15'03	0°19'06	
max. Earth dist.	-649 Jun 25 j 14:53	26°♊11'05	19.59279 AU	
morning rise	-649 Jul 13 j 09:55	27°♊16'08		
	-649 Sep 07 j 12:37	0°♋		
retrograde	-649 Oct 13 j 23:01	0°♋35'53		
	-649 Nov 19 j 19:51	30°℞♊		
opposition	-649 Dec 26 j 14:48	28°♊33'18	0°23'00	
min. Earth dist.	-649 Dec 27 j 12:18	28°♊30'57	17.56696 AU	
direct	-648 Mar 11 j 01:59	26°♊28'05		
evening set	-648 Jun 14 j 00:32	29°♊52'20		
	-648 Jun 16 j 03:29	0°♋		
conjunction	-648 Jun 30 j 19:12	0°♋53'49	0°22'15	
minimum elong	-648 Jun 30 j 19:12	0°♋53'49	0°22'15	
max. Earth dist.	-648 Jun 29 j 16:27	0°♋49'42	19.54183 AU	
morning rise	-648 Jul 17 j 11:31	1°♋55'01		
retrograde	-648 Oct 17 j 20:11	5°♋15'11		
opposition	-648 Dec 30 j 10:49	3°♋12'36	0°26'28	
min. Earth dist.	-648 Dec 31 j 09:51	3°♋10'05	17.51849 AU	
direct	-647 Mar 15 j 22:57	1°♋07'07		
evening set	-647 Jun 19 j 03:54	4°♋32'28		
conjunction	-647 Jul 05 j 22:02	5°♋34'06	0°25'18	
minimum elong	-647 Jul 05 j 22:02	5°♋34'06	0°25'18	
max. Earth dist.	-647 Jul 04 j 18:36	5°♋29'52	19.49584 AU	
morning rise	-647 Jul 22 j 13:39	6°♋35'23		
retrograde	-647 Oct 22 j 19:43	9°♋55'59		
opposition	-646 Jan 04 j 07:23	7°♋53'25	0°29'47	
min. Earth dist.	-646 Jan 05 j 05:55	7°♋50'57	17.47495 AU	
direct	-646 Mar 20 j 23:13	5°♋47'43		
evening set	-646 Jun 24 j 07:45	9°♋14'07		
max. Earth dist.	-646 Jul 09 j 21:51	10°♋11'37	19.45464 AU	
conjunction	-646 Jul 11 j 01:22	10°♋15'53	0°28'11	
minimum elong	-646 Jul 11 j 01:22	10°♋15'53	0°28'12	
morning rise	-646 Jul 27 j 16:02	11°♋17'15		
retrograde	-646 Oct 27 j 18:02	14°♋38'13		
opposition	-645 Jan 09 j 04:55	12°♋35'44	0°32'55	
min. Earth dist.	-645 Jan 10 j 04:54	12°♋33'06	17.43617 AU	
direct	-645 Mar 25 j 21:46	10°♋29'51		
evening set	-645 Jun 29 j 12:15	13°♋57'15		
max. Earth dist.	-645 Jul 15 j 00:29	14°♋54'39	19.41819 AU	
conjunction	-645 Jul 16 j 05:02	14°♋59'06	0°30'55	
minimum elong	-645 Jul 16 j 05:02	14°♋59'06	0°30'55	
morning rise	-645 Aug 01 j 18:53	16°♋00'31		
retrograde	-645 Nov 01 j 18:31	19°♋21'51		
opposition	-644 Jan 14 j 03:00	17°♋19'26	0°35'52	
min. Earth dist.	-644 Jan 15 j 02:34	17°♋16'51	17.40199 AU	
direct	-644 Mar 30 j 00:03	15°♋13'25		
evening set	-644 Jul 03 j 17:01	18°♋41'43		
max. Earth dist.	-644 Jul 19 j 05:04	19°♋39'15	19.38610 AU	
conjunction	-644 Jul 20 j 09:08	19°♋43'38	0°33'26	
minimum elong	-644 Jul 20 j 09:07	19°♋43'38	0°33'27	
morning rise	-644 Aug 05 j 21:46	20°♋45'05		
retrograde	-644 Nov 05 j 17:37	24°♋06'42		
opposition	-643 Jan 18 j 02:06	22°♋04'23	0°38'34	
min. Earth dist.	-643 Jan 19 j 02:48	22°♋01'41	17.37213 AU	
direct	-643 Apr 04 j 00:23	19°♋58'15		
evening set	-643 Jul 08 j 21:59	23°♋27'20		
max. Earth dist.	-643 Jul 24 j 07:52	24°♋24'43	19.35838 AU	
conjunction	-643 Jul 25 j 13:04	24°♋29'17	0°35'45	
minimum elong	-643 Jul 25 j 13:04	24°♋29'17	0°35'44	
morning rise	-643 Aug 11 j 00:49	25°♋30'45		
retrograde	-643 Nov 10 j 18:33	28°♋52'38		
opposition	-642 Jan 23 j 01:40	26°♋50'22	0°41'01	
min. Earth dist.	-642 Jan 24 j 01:55	26°♋47'43	17.34656 AU	

Attention, astronomical year style is used: The year -642 in astronomical counting style is the year 643 BCE in historical counting style.

direct	-642 Apr 09 j 04:03	24°♋44'07	
evening set	-642 Jul 14 j 03:08	28°♋13'53	
conjunction	-642 Jul 30 j 17:26	29°♋15'51	0°37'49
minimum elong	-642 Jul 30 j 17:26	29°♋15'51	0°37'49
max. Earth dist.	-642 Jul 29 j 13:13	29°♋11'26	19.33482 AU
	-642 Aug 11 j 11:40	0°♌	
morning rise	-642 Aug 16 j 03:54	0°♌17'18	
retrograde	-642 Nov 15 j 18:31	3°♌39'21	
opposition	-641 Jan 28 j 01:50	1°♌37'10	0°43'11
min. Earth dist.	-641 Jan 29 j 02:46	1°♌34'27	17.32514 AU
	-641 Mar 11 j 11:28	30°℞♋	
direct	-641 Apr 14 j 06:15	29°♋30'49	
	-641 May 17 j 13:29	0°♌	
evening set	-641 Jul 19 j 08:30	3°♌01'09	
conjunction	-641 Aug 04 j 21:36	4°♌03'05	0°39'37
minimum elong	-641 Aug 04 j 21:36	4°♌03'05	0°39'37
max. Earth dist.	-641 Aug 03 j 16:22	3°♌58'30	19.31563 AU
morning rise	-641 Aug 21 j 07:04	5°♌04'30	
retrograde	-641 Nov 20 j 19:27	8°♌26'42	
opposition	-640 Feb 02 j 02:33	6°♌24'32	0°45'04
min. Earth dist.	-640 Feb 03 j 02:59	6°♌21'52	17.30827 AU
direct	-640 Apr 18 j 09:51	4°♌18'05	
evening set	-640 Jul 23 j 13:26	7°♌48'51	
max. Earth dist.	-640 Aug 07 j 21:59	8°♌46'24	19.30104 AU
conjunction	-640 Aug 09 j 01:38	8°♌50'45	0°41'09
minimum elong	-640 Aug 09 j 01:38	8°♌50'45	0°41'09
morning rise	-640 Aug 25 j 09:45	9°♌52'05	
retrograde	-640 Nov 24 j 20:34	13°♌14'21	
opposition	-639 Feb 06 j 03:46	11°♌12'14	0°46'37
min. Earth dist.	-639 Feb 07 j 04:02	11°♌09'36	17.29605 AU
direct	-639 Apr 23 j 13:21	9°♌05'43	
evening set	-639 Jul 28 j 18:23	12°♌36'47	
max. Earth dist.	-639 Aug 13 j 01:15	13°♌34'11	19.29142 AU
conjunction	-639 Aug 14 j 05:19	13°♌38'36	0°42'24
minimum elong	-639 Aug 14 j 05:19	13°♌38'36	0°42'24
morning rise	-639 Aug 30 j 12:23	14°♌39'52	
	-639 Sep 05 j 00:28	15°♌	
retrograde	-639 Nov 29 j 20:51	18°♌02'08	
opposition	-638 Feb 11 j 05:08	16°♌00'01	0°47'51
min. Earth dist.	-638 Feb 12 j 04:53	15°♌57'26	17.28915 AU
	-638 Mar 07 j 04:02	15°℞♌	
direct	-638 Apr 28 j 16:12	13°♌53'27	
	-638 Jun 18 j 17:14	15°♌	
evening set	-638 Aug 02 j 22:52	17°♌24'41	
max. Earth dist.	-638 Aug 18 j 06:40	18°♌22'17	19.28722 AU
conjunction	-638 Aug 19 j 08:49	18°♌26'25	0°43'21
minimum elong	-638 Aug 19 j 08:49	18°♌26'25	0°43'21
morning rise	-638 Sep 04 j 14:35	19°♌27'33	
retrograde	-638 Dec 04 j 22:26	22°♌49'45	
opposition	-637 Feb 16 j 06:56	20°♌47'40	0°48'44
min. Earth dist.	-637 Feb 17 j 05:41	20°♌45'11	17.28765 AU
direct	-637 May 03 j 21:04	18°♌41'05	
evening set	-637 Aug 08 j 03:03	22°♌12'21	
max. Earth dist.	-637 Aug 23 j 09:57	23°♌09'52	19.28868 AU
conjunction	-637 Aug 24 j 11:40	23°♌13'56	0°43'59
minimum elong	-637 Aug 24 j 11:40	23°♌13'56	0°44'00
morning rise	-637 Sep 09 j 16:17	24°♌14'56	
retrograde	-637 Dec 09 j 21:19	27°♌37'02	
opposition	-636 Feb 21 j 08:58	25°♌34'58	0°49'17
min. Earth dist.	-636 Feb 22 j 07:02	25°♌32'34	17.29225 AU
direct	-636 May 08 j 00:16	23°♌28'24	

evening set	-636 Aug 12 j 06:37	26°♌59'35	
conjunction	-636 Aug 28 j 14:06	28°♌01'00	0°44'19
minimum elong	-636 Aug 28 j 14:06	28°♌01'00	0°44'19
max. Earth dist.	-636 Aug 27 j 14:36	27°♌57'17	19.29646 AU
morning rise	-636 Sep 13 j 17:29	29°♌01'50	
	-636 Sep 29 j 23:54	0°♍	
retrograde	-636 Dec 13 j 22:16	2°♍23'47	
opposition	-635 Feb 25 j 11:08	0°♍21'46	0°49'29
min. Earth dist.	-635 Feb 26 j 07:15	0°♍19'35	17.30318 AU
	-635 Mar 05 j 21:08	30°℞♌	
direct	-635 May 13 j 06:09	28°♌15'17	
	-635 Jul 17 j 04:10	0°♍	
evening set	-635 Aug 17 j 09:35	1°♍46'14	
conjunction	-635 Sep 02 j 15:50	2°♍47'29	0°44'21
minimum elong	-635 Sep 02 j 15:50	2°♍47'29	0°44'21
max. Earth dist.	-635 Sep 01 j 17:37	2°♍43'59	19.31071 AU
morning rise	-635 Sep 18 j 18:03	3°♍48'09	
retrograde	-635 Dec 18 j 20:13	7°♍09'54	
opposition	-634 Mar 02 j 13:27	5°♍07'57	0°49'21
min. Earth dist.	-634 Mar 03 j 08:45	5°♍05'52	17.32077 AU
direct	-634 May 18 j 09:25	3°♍01'36	
evening set	-634 Aug 22 j 12:04	6°♍32'15	
conjunction	-634 Sep 07 j 17:06	7°♍33'18	0°44'04
minimum elong	-634 Sep 07 j 17:06	7°♍33'18	0°44'05
max. Earth dist.	-634 Sep 06 j 20:54	7°♍30'07	19.33164 AU
morning rise	-634 Sep 23 j 18:11	8°♍33'46	
retrograde	-634 Dec 23 j 20:32	11°♍55'17	
opposition	-633 Mar 07 j 15:38	9°♍53'27	0°48'52
min. Earth dist.	-633 Mar 08 j 08:28	9°♍51'38	17.34476 AU
direct	-633 May 23 j 15:30	7°♍47'19	
evening set	-633 Aug 27 j 13:54	11°♍17'33	
conjunction	-633 Sep 12 j 17:45	12°♍18'22	0°43'30
minimum elong	-633 Sep 12 j 17:45	12°♍18'22	0°43'30
max. Earth dist.	-633 Sep 11 j 23:34	12°♍15'30	19.35881 AU
morning rise	-633 Sep 28 j 17:39	13°♍18'38	
retrograde	-633 Dec 28 j 18:13	16°♍39'53	
opposition	-632 Mar 11 j 18:06	14°♍38'12	0°48'04
min. Earth dist.	-632 Mar 12 j 10:08	14°♍36'29	17.37495 AU
direct	-632 May 27 j 18:07	12°♍32'20	
evening set	-632 Aug 31 j 14:55	16°♍02'01	
conjunction	-632 Sep 16 j 17:32	17°♍02'36	0°42'38
minimum elong	-632 Sep 16 j 17:32	17°♍02'36	0°42'39
max. Earth dist.	-632 Sep 16 j 01:07	17°♍00'01	19.39193 AU
morning rise	-632 Oct 02 j 16:28	18°♍02'39	
retrograde	-631 Jan 01 j 18:25	21°♍23'36	
opposition	-631 Mar 16 j 20:22	19°♍22'04	0°46'56
min. Earth dist.	-631 Mar 17 j 09:41	19°♍20'39	17.41059 AU
direct	-631 Jun 01 j 23:03	17°♍16'30	
evening set	-631 Sep 05 j 15:20	20°♍45'32	
conjunction	-631 Sep 21 j 16:52	21°♍45'53	0°41'29
minimum elong	-631 Sep 21 j 16:52	21°♍45'53	0°41'29
max. Earth dist.	-631 Sep 21 j 02:53	21°♍43'41	19.43007 AU
morning rise	-631 Oct 07 j 14:39	22°♍45'41	
retrograde	-630 Jan 06 j 15:53	26°♍06'17	
opposition	-630 Mar 21 j 22:31	24°♍04'55	0°45'29
min. Earth dist.	-630 Mar 22 j 11:13	24°♍03'34	17.45104 AU
direct	-630 Jun 07 j 00:58	21°♍59'40	
evening set	-630 Sep 10 j 15:07	25°♍27'58	
conjunction	-630 Sep 26 j 15:24	26°♍28'02	0°40'04
minimum elong	-630 Sep 26 j 15:24	26°♍28'02	0°40'04

Attention, astronomical year style is used: The year -630 in astronomical counting style is the year 631 BCE in historical counting style.

max. Earth dist.	-630 Sep 26 j 02:38	26°♍26'02	19.47275 AU	
morning rise	-630 Oct 12 j 12:20	27°♍27'37		
	-630 Nov 30 j 18:45	0°♎		
retrograde	-629 Jan 11 j 15:30	0°♎47'48		
	-629 Feb 24 j 02:05	30°℞♍		
opposition	-629 Mar 27 j 00:32	28°♍46'36	0°43'44	
min. Earth dist.	-629 Mar 27 j 10:28	28°♍45'32	17.49560 AU	
direct	-629 Jun 12 j 04:45	26°♍41'40		
	-629 Sep 13 j 02:10	0°♎		
evening set	-629 Sep 15 j 13:53	0°♎09'07		
conjunction	-629 Oct 01 j 13:10	1°♎08'55	0°38'22	
minimum elong	-629 Oct 01 j 13:10	1°♎08'55	0°38'23	
max. Earth dist.	-629 Oct 01 j 03:12	1°♎07'21	19.51911 AU	
morning rise	-629 Oct 17 j 09:01	2°♎08'14		
retrograde	-628 Jan 16 j 12:17	5°♎28'00		
opposition	-628 Mar 31 j 02:29	3°♎26'56	0°41'42	
min. Earth dist.	-628 Mar 31 j 11:37	3°♎25'58	17.54363 AU	
direct	-628 Jun 16 j 06:13	1°♎22'21		
evening set	-628 Sep 19 j 11:59	4°♎48'51		
conjunction	-628 Oct 05 j 10:04	5°♎48'21	0°36'26	
minimum elong	-628 Oct 05 j 10:04	5°♎48'21	0°36'25	
max. Earth dist.	-628 Oct 05 j 01:03	5°♎46'56	19.56879 AU	
morning rise	-628 Oct 21 j 05:13	6°♎47'25		
retrograde	-627 Jan 20 j 10:54	10°♎06'42		
opposition	-627 Apr 05 j 03:47	8°♎05'45	0°39'24	
min. Earth dist.	-627 Apr 05 j 10:12	8°♎05'04	17.59474 AU	
direct	-627 Jun 21 j 08:41	6°♎01'30		
evening set	-627 Sep 24 j 08:57	9°♎26'58		
conjunction	-627 Oct 10 j 06:14	10°♎26'11	0°34'16	
minimum elong	-627 Oct 10 j 06:14	10°♎26'11	0°34'16	
max. Earth dist.	-627 Oct 10 j 00:07	10°♎25'14	19.62120 AU	
morning rise	-627 Oct 26 j 00:27	11°♎24'59		
retrograde	-626 Jan 25 j 06:30	14°♎43'45		
opposition	-626 Apr 10 j 04:51	12°♎42'55	0°36'52	
min. Earth dist.	-626 Apr 10 j 10:16	12°♎42'21	17.64829 AU	
direct	-626 Jun 26 j 09:30	10°♎39'00		
evening set	-626 Sep 29 j 05:08	14°♎03'22		
conjunction	-626 Oct 15 j 01:18	15°♎02'17	0°31'53	
minimum elong	-626 Oct 15 j 01:18	15°♎02'17	0°31'53	
max. Earth dist.	-626 Oct 14 j 20:03	15°♎01'28	19.67600 AU	
morning rise	-626 Oct 30 j 18:58	16°♎00'49		
retrograde	-625 Jan 30 j 03:42	19°♎19'02		
opposition	-625 Apr 15 j 05:15	17°♎18'17	0°34'06	
min. Earth dist.	-625 Apr 15 j 08:04	17°♎17'59	17.70420 AU	
direct	-625 Jul 01 j 10:48	15°♎14'41		
evening set	-625 Oct 04 j 00:08	18°♎37'54		
conjunction	-625 Oct 19 j 19:35	19°♎36'30	0°29'19	
minimum elong	-625 Oct 19 j 19:35	19°♎36'30	0°29'19	
max. Earth dist.	-625 Oct 19 j 17:31	19°♎36'11	19.73308 AU	
morning rise	-625 Nov 04 j 12:27	20°♎34'46		
retrograde	-624 Feb 03 j 22:03	23°♎52'24		
opposition	-624 Apr 19 j 05:14	21°♎51'43	0°31'08	
min. Earth dist.	-624 Apr 19 j 06:36	21°♎51'35	17.76233 AU	
direct	-624 Jul 05 j 10:45	19°♎48'28		
evening set	-624 Oct 07 j 18:06	23°♎10'25		
conjunction	-624 Oct 23 j 12:35	24°♎08'44	0°26'36	
minimum elong	-624 Oct 23 j 12:35	24°♎08'44	0°26'35	
max. Earth dist.	-624 Oct 23 j 11:39	24°♎08'35	19.79244 AU	
morning rise	-624 Nov 08 j 05:06	25°♎06'44		
retrograde	-623 Feb 07 j 17:37	28°♎23'47		
opposition	-623 Apr 24 j 04:26	26°♎23'08	0°28'00	
min. Earth dist.	-623 Apr 24 j 03:19	26°♎23'15	17.82290 AU	
direct	-623 Jul 10 j 10:31	24°♎20'13		
evening set	-623 Oct 12 j 10:59	27°♎40'55		
conjunction	-623 Oct 28 j 04:54	28°♎38'55	0°23'43	
minimum elong	-623 Oct 28 j 04:53	28°♎38'55	0°23'42	
max. Earth dist.	-623 Oct 28 j 07:16	28°♎39'17	19.85418 AU	
morning rise	-623 Nov 12 j 20:44	29°♎36'39		
	-623 Nov 19 j 09:25	0°♏		
retrograde	-622 Feb 12 j 10:11	2°♏53'04		
opposition	-622 Apr 29 j 02:53	0°♏52'31	0°24'43	
min. Earth dist.	-622 Apr 28 j 23:51	0°♏52'50	17.88578 AU	
	-622 May 20 j 22:26	30°℞♎		
direct	-622 Jul 15 j 09:26	28°♎49'57		
	-622 Sep 06 j 05:20	0°♏		
evening set	-622 Oct 17 j 03:04	2°♏09'23		
conjunction	-622 Nov 01 j 20:06	3°♏07'04	0°20'44	
minimum elong	-622 Nov 01 j 20:06	3°♏07'04	0°20'43	
max. Earth dist.	-622 Nov 01 j 23:45	3°♏07'38	19.91836 AU	
morning rise	-622 Nov 17 j 11:41	4°♏04'33		
retrograde	-621 Feb 17 j 04:02	7°♏20'23		
opposition	-621 May 04 j 00:48	5°♏19'54	0°21'19	
min. Earth dist.	-621 May 03 j 19:23	5°♏20'28	17.95127 AU	
direct	-621 Jul 20 j 06:55	3°♏17'43		
evening set	-621 Oct 21 j 17:53	6°♏35'52		
conjunction	-621 Nov 06 j 10:28	7°♏33'16	0°17'38	
minimum elong	-621 Nov 06 j 10:28	7°♏33'16	0°17'37	
max. Earth dist.	-621 Nov 06 j 17:27	7°♏34'20	19.98500 AU	
morning rise	-621 Nov 22 j 01:33	8°♏30'28		
retrograde	-620 Feb 21 j 19:39	11°♏45'43		
opposition	-620 May 07 j 22:02	9°♏45'22	0°17'50	
min. Earth dist.	-620 May 07 j 14:16	9°♏46'10	18.01889 AU	
direct	-620 Jul 24 j 04:08	7°♏43'37		
evening set	-620 Oct 25 j 08:02	11°♏00'29		
conjunction	-620 Nov 09 j 23:56	11°♏57'35	0°14'28	
minimum elong	-620 Nov 09 j 23:57	11°♏57'35	0°14'28	
behind sun begin	-620 Nov 09 j 20:51	11°♏57'07		
behind sun end	-620 Nov 10 j 03:03	11°♏58'02		
max. Earth dist.	-620 Nov 10 j 08:14	11°♏58'50	20.05361 AU	
morning rise	-620 Nov 25 j 14:56	12°♏54'33		
	-619 Jan 04 j 09:48	15°♏		
retrograde	-619 Feb 25 j 11:35	16°♏09'12		
	-619 Apr 21 j 09:29	15°℞♏		
opposition	-619 May 12 j 18:23	14°♏09'00	0°14'15	
min. Earth dist.	-619 May 12 j 08:46	14°♏09'59	18.08838 AU	
direct	-619 Jul 28 j 22:43	12°♏07'41		
	-619 Oct 23 j 06:41	15°♏		
evening set	-619 Oct 29 j 21:09	15°♏23'16		
conjunction	-619 Nov 14 j 12:46	16°♏20'06	0°11'14	
minimum elong	-619 Nov 14 j 12:46	16°♏20'06	0°11'14	
behind sun begin	-619 Nov 14 j 07:52	16°♏19'22		
behind sun end	-619 Nov 14 j 17:39	16°♏20'50		
max. Earth dist.	-619 Nov 14 j 23:58	16°♏21'48	20.12368 AU	
morning rise	-619 Nov 30 j 03:26	17°♏16'49		
retrograde	-618 Mar 02 j 02:47	20°♏30'54		
opposition	-618 May 17 j 14:07	18°♏30'52	0°10'37	
min. Earth dist.	-618 May 17 j 02:12	18°♏32'05	18.15875 AU	
direct	-618 Aug 02 j 18:10	16°♏30'00		
evening set	-618 Nov 03 j 09:32	19°♏44'20		
conjunction	-618 Nov 19 j 00:34	20°♏40'52	0°07'58	
minimum elong	-618 Nov 19 j 00:34	20°♏40'52	0°07'58	
behind sun begin	-618 Nov 18 j 18:41	20°♏40'00		

Attention, astronomical year style is used: The year -618 in astronomical counting style is the year 619 BCE in historical counting style.

behind sun end	-618 Nov 19 j 06:27	20°♏41'44	
max. Earth dist.	-618 Nov 19 j 13:01	20°♏42'45	20.19429 AU
morning rise	-618 Dec 04 j 15:15	21°♏37'22	
retrograde	-617 Mar 06 j 17:16	24°♏50'53	
opposition	-617 May 22 j 09:17	22°♏51'01	0°06'57
min. Earth dist.	-617 May 21 j 20:01	22°♏52'22	18.22952 AU
direct	-617 Aug 07 j 10:18	20°♏50'35	
evening set	-617 Nov 07 j 21:04	24°♏03'40	
conjunction	-617 Nov 23 j 11:56	24°♏59'57	0°04'41
minimum elong	-617 Nov 23 j 11:55	24°♏59'57	0°04'41
behind sun begin	-617 Nov 23 j 05:32	24°♏59'00	
behind sun end	-617 Nov 23 j 18:19	25°♏00'53	
max. Earth dist.	-617 Nov 24 j 02:54	25°♏02'12	20.26491 AU
morning rise	-617 Dec 09 j 02:27	25°♏56'12	
retrograde	-616 Mar 10 j 08:00	29°♏09'10	
opposition	-616 May 26 j 03:38	27°♏09'28	0°03'17
min. Earth dist.	-616 May 25 j 12:09	27°♏11'02	18.29976 AU
direct	-616 Aug 11 j 04:07	25°♏09'29	
evening set	-616 Nov 11 j 07:56	28°♏21'19	
conjunction	-616 Nov 26 j 22:24	29°♏17'20	0°01'20
minimum elong	-616 Nov 26 j 22:26	29°♏17'20	0°01'19
behind sun begin	-616 Nov 26 j 15:54	29°♏16'23	
behind sun end	-616 Nov 27 j 04:58	29°♏18'17	
max. Earth dist.	-616 Nov 27 j 14:23	29°♏19'44	20.33457 AU
	-616 Dec 08 j 18:36	0°♐	
morning rise	-616 Dec 12 j 13:07	0°♐13'23	
retrograde	-615 Mar 14 j 21:28	3°♐25'48	
desc. node	-615 Apr 20 j 06:52	2°♐54'09	
opposition	-615 May 30 j 21:23	1°♐26'14	-0°00'24
min. Earth dist.	-615 May 30 j 05:09	1°♐27'53	18.36882 AU
	-615 Jul 09 j 11:03	30°℞♏	
direct	-615 Aug 15 j 18:41	29°♏26'39	
	-615 Sep 21 j 00:08	0°♐	
evening set	-615 Nov 15 j 18:04	2°♐37'16	
conjunction	-615 Dec 01 j 08:29	3°♐33'03	-0°02'04
minimum elong	-615 Dec 01 j 08:29	3°♐33'03	0°02'05
behind sun begin	-615 Dec 01 j 01:57	3°♐32'06	
behind sun end	-615 Dec 01 j 15:00	3°♐34'00	
max. Earth dist.	-615 Dec 02 j 02:22	3°♐35'44	20.40266 AU
morning rise	-615 Dec 16 j 23:08	4°♐28'53	
retrograde	-614 Mar 19 j 11:19	7°♐40'45	
opposition	-614 Jun 04 j 14:15	5°♐41'19	-0°04'03
min. Earth dist.	-614 Jun 03 j 19:56	5°♐43'10	18.43578 AU
direct	-614 Aug 20 j 10:53	3°♐42'07	
evening set	-614 Nov 20 j 03:40	6°♐51'32	
conjunction	-614 Dec 05 j 17:50	7°♐47'05	-0°05'21
minimum elong	-614 Dec 05 j 17:51	7°♐47'05	0°05'22
behind sun begin	-614 Dec 05 j 11:32	7°♐46'10	
behind sun end	-614 Dec 06 j 00:10	7°♐48'00	
max. Earth dist.	-614 Dec 06 j 12:29	7°♐49'51	20.46837 AU
morning rise	-614 Dec 21 j 08:45	8°♐42'44	
retrograde	-613 Mar 23 j 23:51	11°♐54'04	
min. Earth dist.	-613 Jun 08 j 12:00	9°♐56'35	18.50029 AU
opposition	-613 Jun 09 j 06:41	9°♐54'42	-0°07'40
direct	-613 Aug 25 j 00:21	7°♐55'50	
evening set	-613 Nov 24 j 12:21	11°♐04'05	
conjunction	-613 Dec 10 j 02:37	11°♐59'24	-0°08'34
minimum elong	-613 Dec 10 j 02:37	11°♐59'24	0°08'34
behind sun begin	-613 Dec 09 j 20:53	11°♐58'34	
behind sun end	-613 Dec 10 j 08:20	12°♐00'14	
max. Earth dist.	-613 Dec 10 j 22:50	12°♐02'25	20.53143 AU
morning rise	-613 Dec 25 j 17:42	12°♐54'52	
retrograde	-612 Mar 27 j 12:39	16°♐05'40	
opposition	-612 Jun 12 j 22:10	14°♐06'22	-0°11'12
min. Earth dist.	-612 Jun 12 j 01:29	14°♐08'27	18.56179 AU
direct	-612 Aug 28 j 15:07	12°♐07'48	
evening set	-612 Nov 27 j 20:34	15°♐14'54	
conjunction	-612 Dec 13 j 10:48	16°♐10'01	-0°11'43
minimum elong	-612 Dec 13 j 10:48	16°♐10'01	0°11'43
behind sun begin	-612 Dec 13 j 06:06	16°♐09'20	
behind sun end	-612 Dec 13 j 15:29	16°♐10'42	
max. Earth dist.	-612 Dec 14 j 07:40	16°♐13'06	20.59134 AU
morning rise	-612 Dec 29 j 02:17	17°♐05'19	
retrograde	-611 Mar 31 j 23:38	20°♐15'35	
opposition	-611 Jun 17 j 12:49	18°♐16'18	-0°14'40
min. Earth dist.	-611 Jun 16 j 16:09	18°♐18'22	18.62030 AU
direct	-611 Sep 02 j 03:13	16°♐17'59	
evening set	-611 Dec 02 j 03:58	19°♐23'59	
conjunction	-611 Dec 17 j 18:24	20°♐18'55	-0°14'47
minimum elong	-611 Dec 17 j 18:24	20°♐18'55	0°14'48
behind sun begin	-611 Dec 17 j 15:36	20°♐18'31	
behind sun end	-611 Dec 17 j 21:13	20°♐19'19	
max. Earth dist.	-611 Dec 18 j 16:40	20°♐22'12	20.64839 AU
morning rise	-610 Jan 02 j 10:10	21°♐14'03	
retrograde	-610 Apr 05 j 11:25	24°♐23'48	
min. Earth dist.	-610 Jun 21 j 04:00	22°♐26'48	18.67592 AU
opposition	-610 Jun 22 j 02:41	22°♐24'32	-0°18'01
direct	-610 Sep 06 j 16:13	20°♐26'28	
evening set	-610 Dec 06 j 10:44	23°♐31'24	
conjunction	-610 Dec 22 j 01:14	24°♐26'08	-0°17'46
minimum elong	-610 Dec 22 j 01:13	24°♐26'08	0°17'46
max. Earth dist.	-610 Dec 23 j 00:24	24°♐29'33	20.70261 AU
morning rise	-609 Jan 06 j 17:29	25°♐21'09	
retrograde	-609 Apr 09 j 20:49	28°♐30'26	
opposition	-609 Jun 26 j 16:01	26°♐31'09	-0°21'15
min. Earth dist.	-609 Jun 25 j 17:18	26°♐33'26	18.72905 AU
direct	-609 Sep 11 j 02:54	24°♐33'19	
evening set	-609 Dec 10 j 16:58	27°♐37'15	
conjunction	-609 Dec 26 j 07:47	28°♐31'51	-0°20'38
minimum elong	-609 Dec 26 j 07:47	28°♐31'51	0°20'39
max. Earth dist.	-609 Dec 27 j 08:17	28°♐35'27	20.75454 AU
morning rise	-608 Jan 11 j 00:27	29°♐26'43	
	-608 Jan 20 j 21:50	0°♑	
retrograde	-608 Apr 13 j 08:16	2°♑35'34	
min. Earth dist.	-608 Jun 29 j 03:35	0°♑38'47	18.77983 AU
opposition	-608 Jun 30 j 04:18	0°♑36'18	-0°24'21
	-608 Jul 15 j 12:38	30°℞♐	
direct	-608 Sep 14 j 13:57	28°♐38'42	
	-608 Nov 11 j 03:49	0°♑	
evening set	-608 Dec 13 j 22:48	1°♑41'44	
conjunction	-608 Dec 29 j 13:50	2°♑36'11	-0°23'22
minimum elong	-608 Dec 29 j 13:50	2°♑36'11	0°23'22
max. Earth dist.	-608 Dec 30 j 15:08	2°♑39'52	20.80405 AU
morning rise	-607 Jan 14 j 07:06	3°♑30'56	
retrograde	-607 Apr 17 j 16:33	6°♑39'25	
opposition	-607 Jul 04 j 16:08	4°♑40'10	-0°27'19
min. Earth dist.	-607 Jul 03 j 15:36	4°♑42'38	18.82825 AU
direct	-607 Sep 18 j 22:42	2°♑42'50	
evening set	-607 Dec 18 j 04:06	5°♑45'00	
conjunction	-606 Jan 02 j 19:33	6°♑39'20	-0°25'59
minimum elong	-606 Jan 02 j 19:33	6°♑39'20	0°26'00
max. Earth dist.	-606 Jan 03 j 21:54	6°♑43'11	20.85120 AU
morning rise	-606 Jan 18 j 13:19	7°♑34'00	

Attention, astronomical year style is used: The year -606 in astronomical counting style is the year 607 BCE in historical counting style.

retrograde	-606 Apr 22 j 03:40	10°♉42'08	
min. Earth dist.	-606 Jul 08 j 00:51	8°♉45'35	18.87406 AU
opposition	-606 Jul 09 j 03:11	8°♉42'57	-0°30'08
direct	-606 Sep 23 j 08:33	6°♉45'51	
evening set	-606 Dec 22 j 09:12	9°♉47'16	
conjunction	-605 Jan 07 j 00:59	10°♉41'29	-0°28'28
minimum elong	-605 Jan 07 j 00:59	10°♉41'29	0°28'28
max. Earth dist.	-605 Jan 08 j 03:59	10°♉45'25	20.89555 AU
morning rise	-605 Jan 22 j 19:26	11°♉36'05	
retrograde	-605 Apr 26 j 11:34	14°♉43'56	
opposition	-605 Jul 13 j 13:53	12°♉44'49	-0°32'48
min. Earth dist.	-605 Jul 12 j 12:02	12°♉47'24	18.91702 AU
direct	-605 Sep 27 j 15:25	10°♉47'58	
evening set	-605 Dec 26 j 13:53	13°♉48'41	
conjunction	-604 Jan 11 j 06:16	14°♉42'49	-0°30'48
minimum elong	-604 Jan 11 j 06:16	14°♉42'48	0°30'49
max. Earth dist.	-604 Jan 12 j 09:58	14°♉46'50	20.93693 AU
morning rise	-604 Jan 27 j 01:22	15°♉37'20	
retrograde	-604 Apr 29 j 22:05	18°♉44'56	
opposition	-604 Jul 16 j 23:53	16°♉45'54	-0°35'17
min. Earth dist.	-604 Jul 15 j 20:40	16°♉48'37	18.95661 AU
direct	-604 Oct 01 j 00:36	14°♉49'17	
evening set	-604 Dec 29 j 18:37	17°♉49'23	
conjunction	-603 Jan 14 j 11:26	18°♉43'27	-0°32'59
minimum elong	-603 Jan 14 j 11:26	18°♉43'27	0°32'59
max. Earth dist.	-603 Jan 15 j 15:22	18°♉47'29	20.97453 AU
morning rise	-603 Jan 30 j 07:17	19°♉37'56	
retrograde	-603 May 04 j 05:50	22°♉45'19	
min. Earth dist.	-603 Jul 20 j 07:11	20°♉48'58	18.99227 AU
opposition	-603 Jul 21 j 09:24	20°♉46'21	-0°37'35
direct	-603 Oct 05 j 06:17	18°♉49'57	
evening set	-602 Jan 02 j 23:06	21°♉49'30	
conjunction	-602 Jan 18 j 16:34	22°♉43'31	-0°34'59
minimum elong	-602 Jan 18 j 16:34	22°♉43'31	0°35'00
max. Earth dist.	-602 Jan 19 j 20:41	22°♉47'34	21.00808 AU
morning rise	-602 Feb 03 j 13:07	23°♉37'58	
retrograde	-602 May 08 j 15:34	26°♉45'11	
opposition	-602 Jul 25 j 18:29	24°♉46'16	-0°39'43
min. Earth dist.	-602 Jul 24 j 15:20	24°♉48'59	19.02351 AU
direct	-602 Oct 09 j 14:33	22°♉50'03	
evening set	-601 Jan 07 j 03:33	25°♉49'07	
conjunction	-601 Jan 22 j 21:34	26°♉43'06	-0°36'50
minimum elong	-601 Jan 22 j 21:34	26°♉43'06	0°36'51
max. Earth dist.	-601 Jan 24 j 01:34	26°♉47'08	21.03676 AU
morning rise	-601 Feb 07 j 18:57	27°♉37'33	
	-601 Mar 30 j 13:54	0°♒	
retrograde	-601 May 12 j 23:18	0°♒44'38	
	-601 Jun 26 j 14:30	30°℞♉	
min. Earth dist.	-601 Jul 29 j 01:32	28°♉48'19	19.04967 AU
opposition	-601 Jul 30 j 03:21	28°♉45'44	-0°41'39
direct	-601 Oct 13 j 19:59	26°♉49'40	
evening set	-600 Jan 11 j 08:02	29°♉48'18	
	-600 Jan 14 j 19:06	0°♒	
conjunction	-600 Jan 27 j 02:49	0°♒42'16	-0°38'30
minimum elong	-600 Jan 27 j 02:49	0°♒42'16	0°38'29
max. Earth dist.	-600 Jan 28 j 06:26	0°♒46'14	21.06024 AU
morning rise	-600 Feb 12 j 01:00	1°♒36'43	
retrograde	-600 May 16 j 08:18	4°♒43'40	
min. Earth dist.	-600 Aug 01 j 09:14	2°♒47'24	19.07031 AU
opposition	-600 Aug 02 j 11:30	2°♒44'47	-0°43'22
direct	-600 Oct 17 j 03:06	0°♒48'47	

evening set	-599 Jan 14 j 12:35	3°♒47'04	
conjunction	-599 Jan 30 j 08:03	4°♒41'02	-0°39'58
minimum elong	-599 Jan 30 j 08:03	4°♒41'02	0°39'58
max. Earth dist.	-599 Jan 31 j 11:02	4°♒44'54	21.07787 AU
morning rise	-599 Feb 15 j 07:09	5°♒35'30	
retrograde	-599 May 20 j 15:35	8°♒42'21	
opposition	-599 Aug 06 j 19:33	6°♒43'24	-0°44'53
min. Earth dist.	-599 Aug 05 j 18:54	6°♒45'52	19.08503 AU
direct	-599 Oct 21 j 08:16	4°♒47'27	
evening set	-598 Jan 18 j 16:54	7°♒45'24	
conjunction	-598 Feb 03 j 13:13	8°♒39'24	-0°41'14
minimum elong	-598 Feb 03 j 13:13	8°♒39'24	0°41'14
max. Earth dist.	-598 Feb 04 j 15:36	8°♒43'10	21.08978 AU
morning rise	-598 Feb 19 j 13:10	9°♒33'53	
retrograde	-598 May 24 j 23:56	12°♒40'39	
min. Earth dist.	-598 Aug 10 j 02:08	10°♒44'08	19.09407 AU
opposition	-598 Aug 11 j 03:07	10°♒41'38	-0°46'11
direct	-598 Oct 25 j 14:46	8°♒45'39	
evening set	-597 Jan 22 j 21:25	11°♒43'21	
conjunction	-597 Feb 07 j 18:30	12°♒37'22	-0°42'19
minimum elong	-597 Feb 07 j 18:30	12°♒37'22	0°42'19
max. Earth dist.	-597 Feb 08 j 20:19	12°♒41'03	21.09607 AU
morning rise	-597 Feb 23 j 19:25	13°♒31'55	
	-597 Mar 24 j 06:27	15°♒	
retrograde	-597 May 29 j 06:40	16°♒38'37	
	-597 Aug 06 j 20:43	15°℞♒	
min. Earth dist.	-597 Aug 14 j 11:04	14°♒41'49	19.09781 AU
opposition	-597 Aug 15 j 10:24	14°♒39'29	-0°47'15
direct	-597 Oct 29 j 19:17	12°♒43'27	
	-596 Jan 14 j 11:20	15°♒	
evening set	-596 Jan 27 j 01:54	15°♒40'57	
conjunction	-596 Feb 11 j 23:55	16°♒35'01	-0°43'11
minimum elong	-596 Feb 11 j 23:55	16°♒35'01	0°43'11
max. Earth dist.	-596 Feb 13 j 01:06	16°♒38'37	21.09746 AU
morning rise	-596 Feb 28 j 01:47	17°♒29'38	
retrograde	-596 Jun 01 j 15:15	20°♒36'19	
opposition	-596 Aug 18 j 17:13	18°♒37'03	-0°48'05
min. Earth dist.	-596 Aug 17 j 17:41	18°♒39'25	19.09681 AU
direct	-596 Nov 02 j 01:10	16°♒40'56	
evening set	-595 Jan 30 j 06:37	19°♒38'20	
conjunction	-595 Feb 15 j 05:27	20°♒32'29	-0°43'50
minimum elong	-595 Feb 15 j 05:27	20°♒32'29	0°43'50
max. Earth dist.	-595 Feb 16 j 06:02	20°♒35'59	21.09411 AU
morning rise	-595 Mar 03 j 08:15	21°♒27'10	
retrograde	-595 Jun 05 j 21:30	24°♒33'52	
opposition	-595 Aug 22 j 23:49	22°♒34'29	-0°48'42
min. Earth dist.	-595 Aug 22 j 01:55	22°♒36'42	19.09139 AU
direct	-595 Nov 06 j 05:03	20°♒38'17	
evening set	-594 Feb 03 j 11:25	23°♒35'39	
conjunction	-594 Feb 19 j 11:14	24°♒29'53	-0°44'17
minimum elong	-594 Feb 19 j 11:14	24°♒29'53	0°44'18
max. Earth dist.	-594 Feb 20 j 11:05	24°♒33'17	21.08679 AU
morning rise	-594 Mar 07 j 14:59	25°♒24'40	
retrograde	-594 Jun 10 j 06:41	28°♒31'27	
min. Earth dist.	-594 Aug 26 j 08:10	26°♒34'10	19.08209 AU
opposition	-594 Aug 27 j 06:13	26°♒31'57	-0°49'05
direct	-594 Nov 10 j 10:16	24°♒35'39	
evening set	-593 Feb 07 j 16:28	27°♒33'04	
conjunction	-593 Feb 23 j 17:12	28°♒27'25	-0°44'31
minimum elong	-593 Feb 23 j 17:12	28°♒27'25	0°44'31

Attention, astronomical year style is used: The year -593 in astronomical counting style is the year 594 BCE in historical counting style.

max. Earth dist.	-593 Feb 24 j 16:25	28°♒30'43	21.07551 AU
morning rise	-593 Mar 11 j 21:58	29°♒22'19	
	-593 Mar 23 j 12:07	0°♓	
retrograde	-593 Jun 14 j 13:20	2°♓29'13	
opposition	-593 Aug 31 j 12:37	0°♓29'38	-0°49'13
min. Earth dist.	-593 Aug 30 j 16:16	0°♓31'41	19.06892 AU
	-593 Sep 12 j 20:44	30°℞♒	
direct	-593 Nov 14 j 14:02	28°♒33'14	
	-592 Jan 13 j 06:14	0°♓	
evening set	-592 Feb 11 j 21:56	1°♓30'47	
conjunction	-592 Feb 27 j 23:43	2°♓25'16	-0°44'33
minimum elong	-592 Feb 27 j 23:43	2°♓25'16	0°44'33
max. Earth dist.	-592 Feb 28 j 21:53	2°♓28'25	21.06058 AU
morning rise	-592 Mar 15 j 05:29	3°♓20'18	
retrograde	-592 Jun 17 j 22:58	6°♓27'22	
opposition	-592 Sep 03 j 18:40	4°♓27'42	-0°49'08
min. Earth dist.	-592 Sep 02 j 22:29	4°♓29'44	19.05206 AU
direct	-592 Nov 17 j 18:56	2°♓31'12	
evening set	-591 Feb 15 j 03:50	5°♓28'59	
conjunction	-591 Mar 03 j 06:35	6°♓23'37	-0°44'22
minimum elong	-591 Mar 03 j 06:35	6°♓23'37	0°44'21
max. Earth dist.	-591 Mar 04 j 03:51	6°♓26'38	21.04178 AU
morning rise	-591 Mar 19 j 13:20	7°♓18'47	
retrograde	-591 Jun 22 j 06:24	10°♓26'04	
min. Earth dist.	-591 Sep 07 j 06:40	8°♓28'12	19.03133 AU
opposition	-591 Sep 08 j 00:59	8°♓26'20	-0°48'49
direct	-591 Nov 21 j 22:44	6°♓29'46	
evening set	-590 Feb 19 j 10:01	9°♓27'51	
conjunction	-590 Mar 07 j 13:49	10°♓22'38	-0°43'58
minimum elong	-590 Mar 07 j 13:49	10°♓22'38	0°43'58
max. Earth dist.	-590 Mar 08 j 09:48	10°♓25'28	21.01924 AU
morning rise	-590 Mar 23 j 21:34	11°♓17'58	
retrograde	-590 Jun 26 j 16:41	14°♓25'32	
opposition	-590 Sep 12 j 07:17	12°♓25'45	-0°48'16
min. Earth dist.	-590 Sep 11 j 13:23	12°♓27'34	19.00671 AU
direct	-590 Nov 26 j 04:02	10°♓29'03	
evening set	-589 Feb 23 j 17:01	13°♓27'32	
conjunction	-589 Mar 11 j 21:49	14°♓22'30	-0°43'21
minimum elong	-589 Mar 11 j 21:49	14°♓22'30	0°43'22
max. Earth dist.	-589 Mar 12 j 16:36	14°♓25'10	20.99249 AU
morning rise	-589 Mar 28 j 06:32	15°♓18'01	
retrograde	-589 Jul 01 j 00:59	18°♓25'53	
opposition	-589 Sep 16 j 13:40	16°♓26'02	-0°47'29
min. Earth dist.	-589 Sep 15 j 22:00	16°♓27'38	18.97775 AU
direct	-589 Nov 30 j 08:03	14°♓29'13	
evening set	-588 Feb 28 j 00:38	17°♓28'10	
conjunction	-588 Mar 15 j 06:29	18°♓23'20	-0°42'32
minimum elong	-588 Mar 15 j 06:30	18°♓23'20	0°42'32
max. Earth dist.	-588 Mar 15 j 23:23	18°♓25'44	20.96137 AU
morning rise	-588 Mar 31 j 16:13	19°♓19'03	
retrograde	-588 Jul 04 j 12:07	22°♓27'16	
opposition	-588 Sep 19 j 20:11	20°♓27'20	-0°46'27
min. Earth dist.	-588 Sep 19 j 05:25	20°♓28'51	18.94419 AU
direct	-588 Dec 03 j 14:04	18°♓30'21	
evening set	-587 Mar 03 j 08:54	21°♓29'50	
conjunction	-587 Mar 19 j 15:45	22°♓25'13	-0°41'29
minimum elong	-587 Mar 19 j 15:45	22°♓25'13	0°41'30
max. Earth dist.	-587 Mar 20 j 07:02	22°♓27'24	20.92525 AU
morning rise	-587 Apr 05 j 02:20	23°♓21'08	
retrograde	-587 Jul 08 j 20:59	26°♓29'42	
opposition	-587 Sep 24 j 03:00	24°♓29'41	-0°45'11
min. Earth dist.	-587 Sep 23 j 14:37	24°♓30'58	18.90555 AU
direct	-587 Dec 07 j 18:35	22°♓32'30	
evening set	-586 Mar 07 j 17:47	25°♓32'34	
conjunction	-586 Mar 24 j 01:41	26°♓28'10	-0°40'14
minimum elong	-586 Mar 24 j 01:41	26°♓28'10	0°40'14
max. Earth dist.	-586 Mar 24 j 14:40	26°♓30'01	20.88428 AU
morning rise	-586 Apr 09 j 13:16	27°♓24'18	
	-586 Jun 06 j 06:23	0°♈	
retrograde	-586 Jul 13 j 08:52	0°♈33'15	
	-586 Aug 19 j 22:24	30°℞♓	
opposition	-586 Sep 28 j 09:55	28°♓33'06	-0°43'41
min. Earth dist.	-586 Sep 27 j 22:40	28°♓34'16	18.86206 AU
direct	-586 Dec 12 j 01:29	26°♓35'38	
evening set	-585 Mar 12 j 03:17	29°♓36'21	
	-585 Mar 19 j 02:59	0°♈	
conjunction	-585 Mar 28 j 12:16	0°♈32'12	-0°38'46
minimum elong	-585 Mar 28 j 12:16	0°♈32'12	0°38'47
max. Earth dist.	-585 Mar 28 j 23:35	0°♈33'49	20.83836 AU
morning rise	-585 Apr 14 j 00:44	1°♈28'33	
retrograde	-585 Jul 17 j 18:32	4°♈37'53	
opposition	-585 Oct 02 j 17:08	2°♈37'35	-0°41'58
min. Earth dist.	-585 Oct 02 j 08:20	2°♈38'30	18.81378 AU
direct	-585 Dec 16 j 06:50	0°♈39'49	
evening set	-584 Mar 15 j 13:33	3°♈41'14	
conjunction	-584 Mar 31 j 23:32	4°♈37'19	-0°37'06
minimum elong	-584 Mar 31 j 23:33	4°♈37'19	0°37'06
max. Earth dist.	-584 Apr 01 j 08:24	4°♈38'35	20.78813 AU
morning rise	-584 Apr 17 j 12:57	5°♈33'55	
retrograde	-584 Jul 21 j 06:41	8°♈43'38	
opposition	-584 Oct 06 j 00:22	6°♈43'09	-0°40'01
min. Earth dist.	-584 Oct 05 j 16:49	6°♈43'56	18.76154 AU
direct	-584 Dec 19 j 14:31	4°♈45'03	
evening set	-583 Mar 20 j 00:26	7°♈47'13	
conjunction	-583 Apr 05 j 11:27	8°♈43'34	-0°35'14
minimum elong	-583 Apr 05 j 11:27	8°♈43'34	0°35'14
max. Earth dist.	-583 Apr 05 j 18:51	8°♈44'38	20.73409 AU
morning rise	-583 Apr 22 j 01:36	9°♈40'24	
retrograde	-583 Jul 25 j 17:27	12°♈50'33	
opposition	-583 Oct 10 j 08:03	10°♈49'53	-0°37'51
min. Earth dist.	-583 Oct 10 j 02:43	10°♈50'26	18.70589 AU
direct	-583 Dec 23 j 20:58	8°♈51'25	
evening set	-582 Mar 24 j 11:53	11°♈54'24	
conjunction	-582 Apr 09 j 23:51	12°♈51'01	-0°33'11
minimum elong	-582 Apr 09 j 23:51	12°♈51'01	0°33'11
max. Earth dist.	-582 Apr 10 j 04:53	12°♈51'44	20.67718 AU
morning rise	-582 Apr 26 j 14:55	13°♈48'06	
retrograde	-582 Jul 30 j 06:05	16°♈58'43	
opposition	-582 Oct 14 j 16:00	14°♈57'50	-0°35'30
min. Earth dist.	-582 Oct 14 j 11:52	14°♈58'16	18.64770 AU
direct	-582 Dec 28 j 05:08	12°♈59'00	
evening set	-581 Mar 29 j 00:16	16°♈02'52	
conjunction	-581 Apr 14 j 13:14	16°♈59'46	-0°30'57
minimum elong	-581 Apr 14 j 13:15	16°♈59'46	0°30'56
max. Earth dist.	-581 Apr 14 j 17:01	17°♈00'19	20.61782 AU
morning rise	-581 May 01 j 04:57	17°♈57'06	
retrograde	-581 Aug 03 j 18:07	21°♈08'11	
opposition	-581 Oct 19 j 00:16	19°♈07'08	-0°32'56
min. Earth dist.	-581 Oct 18 j 22:12	19°♈07'21	18.58737 AU
direct	-580 Jan 01 j 13:09	17°♈07'56	
evening set	-580 Apr 01 j 13:30	20°♈12'44	

Attention, astronomical year style is used: The year -580 in astronomical counting style is the year 581 BCE in historical counting style.

conjunction	-580 Apr 18 j 03:20	21°♈09'56	-0°28'33
minimum elong	-580 Apr 18 j 03:20	21°♈09'56	0°28'33
max. Earth dist.	-580 Apr 18 j 04:29	21°♈10'06	20.55678 AU
morning rise	-580 May 04 j 19:50	22°♈07'32	
retrograde	-580 Aug 07 j 07:20	25°♈19'07	
opposition	-580 Oct 22 j 09:02	23°♈17'54	-0°30'11
min. Earth dist.	-580 Oct 22 j 08:11	23°♈17'59	18.52562 AU
direct	-579 Jan 04 j 21:52	21°♈18'20	
evening set	-579 Apr 06 j 03:23	24°♈24'08	
conjunction	-579 Apr 22 j 18:08	25°♈21'38	-0°25'58
minimum elong	-579 Apr 22 j 18:08	25°♈21'38	0°25'58
max. Earth dist.	-579 Apr 22 j 18:14	25°♈21'39	20.49435 AU
morning rise	-579 May 09 j 11:07	26°♈19'30	
retrograde	-579 Aug 11 j 20:41	29°♈31'37	
opposition	-579 Oct 26 j 18:21	27°♈30'16	-0°27'16
min. Earth dist.	-579 Oct 26 j 19:17	27°♈30'10	18.46269 AU
direct	-578 Jan 09 j 07:36	25°♈30'21	
evening set	-578 Apr 10 j 18:19	28°♈37'13	
conjunction	-578 Apr 27 j 09:48	29°♈35'01	-0°23'15
minimum elong	-578 Apr 27 j 09:48	29°♈35'01	0°23'16
max. Earth dist.	-578 Apr 27 j 07:09	29°♈34'38	20.43116 AU
	-578 May 04 j 13:11	0°♉	
morning rise	-578 May 14 j 03:30	0°♉33'09	
retrograde	-578 Aug 16 j 10:34	3°♉45'50	
opposition	-578 Oct 31 j 04:06	1°♉44'21	-0°24'10
min. Earth dist.	-578 Oct 31 j 06:25	1°♉44'07	18.39915 AU
	-578 Dec 20 j 00:15	30°℞♈	
direct	-577 Jan 13 j 17:39	29°♈44'05	
	-577 Feb 07 j 08:33	0°♉	
evening set	-577 Apr 15 j 10:09	2°♉52'06	
conjunction	-577 May 02 j 02:33	3°♉50'13	-0°20'23
minimum elong	-577 May 02 j 02:33	3°♉50'13	0°20'23
max. Earth dist.	-577 May 01 j 22:50	3°♉49'41	20.36722 AU
morning rise	-577 May 18 j 20:37	4°♉48'37	
retrograde	-577 Aug 21 j 01:21	8°♉01'52	
opposition	-577 Nov 04 j 14:33	6°♉00'19	-0°20'56
min. Earth dist.	-577 Nov 04 j 18:42	5°♉59'53	18.33481 AU
direct	-576 Jan 18 j 04:44	3°♉59'44	
evening set	-576 Apr 19 j 03:08	7°♉08'55	
conjunction	-576 May 05 j 20:04	8°♉07'20	-0°17'24
minimum elong	-576 May 05 j 20:04	8°♉07'20	0°17'23
max. Earth dist.	-576 May 05 j 13:19	8°♉06'21	20.30262 AU
morning rise	-576 May 22 j 14:41	9°♉06'01	
retrograde	-576 Aug 24 j 16:32	12°♉19'52	
opposition	-576 Nov 08 j 01:33	10°♉18'14	-0°17'32
min. Earth dist.	-576 Nov 08 j 07:26	10°♉17'37	18.26986 AU
direct	-575 Jan 21 j 16:45	8°♉17'18	
evening set	-575 Apr 23 j 21:00	11°♉27'45	
conjunction	-575 May 10 j 14:42	12°♉26'28	-0°14'17
minimum elong	-575 May 10 j 14:42	12°♉26'28	0°14'17
behind sun begin	-575 May 10 j 11:45	12°♉26'03	
behind sun end	-575 May 10 j 17:39	12°♉26'53	
max. Earth dist.	-575 May 10 j 06:52	12°♉25'20	20.23718 AU
morning rise	-575 May 27 j 09:28	13°♉25'24	
	-575 Jun 26 j 00:13	15°♉	
retrograde	-575 Aug 29 j 08:33	16°♉39'51	
	-575 Nov 03 j 23:44	15°℞♉	
opposition	-575 Nov 12 j 13:21	14°♉38'11	-0°14'01
min. Earth dist.	-575 Nov 12 j 21:02	14°♉37'21	18.20394 AU
direct	-574 Jan 26 j 05:15	12°♉36'54	
	-574 Apr 14 j 04:13	15°♉	
evening set	-574 Apr 28 j 15:57	15°♉48'35	
conjunction	-574 May 15 j 10:04	16°♉47'37	-0°11'03
minimum elong	-574 May 15 j 10:03	16°♉47'37	0°11'02
behind sun begin	-574 May 15 j 05:03	16°♉46'53	
behind sun end	-574 May 15 j 15:04	16°♉48'20	
max. Earth dist.	-574 May 14 j 22:52	16°♉45'58	20.17082 AU
morning rise	-574 Jun 01 j 05:16	17°♉46'49	
retrograde	-574 Sep 03 j 01:19	21°♉01'53	
opposition	-574 Nov 17 j 01:55	19°♉00'06	-0°10'23
min. Earth dist.	-574 Nov 17 j 11:37	18°♉59'04	18.13710 AU
direct	-573 Jan 30 j 19:17	16°♉58'27	
evening set	-573 May 03 j 11:53	20°♉11'25	
conjunction	-573 May 20 j 06:40	21°♉10'45	-0°07'45
minimum elong	-573 May 20 j 06:39	21°♉10'45	0°07'45
behind sun begin	-573 May 20 j 00:34	21°♉09'52	
behind sun end	-573 May 20 j 12:45	21°♉11'37	
max. Earth dist.	-573 May 19 j 18:16	21°♉08'55	20.10337 AU
morning rise	-573 Jun 06 j 01:51	22°♉10'12	
retrograde	-573 Sep 07 j 18:39	25°♉25'50	
opposition	-573 Nov 21 j 15:05	23°♉23'58	-0°06'40
min. Earth dist.	-573 Nov 22 j 02:28	23°♉22'45	18.06918 AU
direct	-572 Feb 04 j 09:52	21°♉21'55	
evening set	-572 May 07 j 08:54	24°♉36'10	
conjunction	-572 May 24 j 03:54	25°♉35'47	-0°04'23
minimum elong	-572 May 24 j 03:53	25°♉35'47	0°04'22
behind sun begin	-572 May 23 j 21:13	25°♉34'49	
behind sun end	-572 May 24 j 10:33	25°♉36'45	
max. Earth dist.	-572 May 23 j 12:05	25°♉33'26	20.03518 AU
morning rise	-572 Jun 09 j 23:18	26°♉35'29	
retrograde	-572 Sep 11 j 12:22	29°♉51'42	
opposition	-572 Nov 25 j 05:08	27°♉49'43	-0°02'53
min. Earth dist.	-572 Nov 25 j 18:36	27°♉48'16	18.00087 AU
direct	-571 Feb 08 j 01:33	25°♉47'14	
evening set	-571 May 12 j 06:24	29°♉02'45	
max. Earth dist.	-571 May 28 j 09:12	0°♊00'11	19.96678 AU
	-571 May 28 j 08:01	0°♊	
conjunction	-571 May 29 j 01:53	0°♊02'40	-0°00'54
minimum elong	-571 May 29 j 01:51	0°♊02'40	0°00'54
behind sun begin	-571 May 28 j 19:05	0°♊01'41	
behind sun end	-571 May 29 j 08:38	0°♊03'39	
morning rise	-571 Jun 14 j 21:05	1°♊02'36	
asc. node	-571 Aug 30 j 04:31	4°♊11'32	
retrograde	-571 Sep 16 j 07:09	4°♊19'22	
opposition	-571 Nov 29 j 19:47	2°♊17'16	0°00'57
min. Earth dist.	-571 Nov 30 j 10:27	2°♊15'41	17.93259 AU
direct	-570 Feb 12 j 18:17	0°♊14'22	
evening set	-570 May 17 j 05:04	3°♊31'10	
max. Earth dist.	-570 Jun 02 j 04:53	4°♊28'23	19.89888 AU
conjunction	-570 Jun 03 j 00:35	4°♊31'20	0°02'40
minimum elong	-570 Jun 03 j 00:35	4°♊31'20	0°02'39
behind sun begin	-570 Jun 02 j 17:48	4°♊30'21	
behind sun end	-570 Jun 03 j 07:21	4°♊32'20	
morning rise	-570 Jun 19 j 19:51	5°♊31'31	
retrograde	-570 Sep 21 j 01:33	8°♊48'49	
opposition	-570 Dec 04 j 11:04	6°♊46'36	0°04'48
min. Earth dist.	-570 Dec 05 j 03:52	6°♊44'47	17.86533 AU
direct	-569 Feb 17 j 11:16	4°♊43'14	
evening set	-569 May 22 j 04:24	8°♊01'20	
max. Earth dist.	-569 Jun 07 j 03:52	8°♊58'43	19.83229 AU
conjunction	-569 Jun 08 j 00:12	9°♊01'46	0°06'07
minimum elong	-569 Jun 08 j 00:12	9°♊01'46	0°06'08
behind sun begin	-569 Jun 07 j 17:46	9°♊00'50	
behind sun end	-569 Jun 08 j 06:37	9°♊02'43	

Attention, astronomical year style is used: The year -569 in astronomical counting style is the year 570 BCE in historical counting style.

morning rise	-569 Jun 24 j 19:07	10°♊02'09		
retrograde	-569 Sep 25 j 22:07	13°♊19'58		
opposition	-569 Dec 09 j 03:06	11°♊17'39	0°08'39	
min. Earth dist.	-569 Dec 09 j 20:38	11°♊15'44	17.79964 AU	
direct	-568 Feb 22 j 06:01	9°♊13'52		
evening set	-568 May 26 j 04:33	12°♊33'14		
max. Earth dist.	-568 Jun 11 j 01:24	13°♊30'28	19.76767 AU	
conjunction	-568 Jun 12 j 00:11	13°♊33'54	0°09'33	
minimum elong	-568 Jun 12 j 00:11	13°♊33'54	0°09'33	
behind sun begin	-568 Jun 11 j 18:36	13°♊33'05		
behind sun end	-568 Jun 12 j 05:45	13°♊34'44		
morning rise	-568 Jun 28 j 18:51	14°♊34'30		
retrograde	-568 Sep 29 j 17:15	17°♊52'50		
opposition	-568 Dec 12 j 19:56	15°♊50'24	0°12'28	
min. Earth dist.	-568 Dec 13 j 15:22	15°♊48'17	17.73649 AU	
direct	-567 Feb 26 j 00:06	13°♊46'12		
evening set	-567 May 31 j 05:18	17°♊06'50		
max. Earth dist.	-567 Jun 16 j 01:50	18°♊04'13	19.70599 AU	
conjunction	-567 Jun 17 j 00:57	18°♊07'44	0°12'57	
minimum elong	-567 Jun 17 j 00:57	18°♊07'44	0°12'57	
behind sun begin	-567 Jun 16 j 20:57	18°♊07'09		
behind sun end	-567 Jun 17 j 04:56	18°♊08'20		
morning rise	-567 Jul 03 j 19:08	19°♊08'30		
retrograde	-567 Oct 04 j 15:32	22°♊27'20		
opposition	-567 Dec 17 j 13:22	20°♊24'49	0°16'14	
min. Earth dist.	-567 Dec 18 j 09:00	20°♊22'41	17.67652 AU	
direct	-566 Mar 02 j 20:18	18°♊20'15		
evening set	-566 Jun 05 j 06:51	21°♊42'07		
max. Earth dist.	-566 Jun 21 j 01:18	22°♊39'26	19.64780 AU	
conjunction	-566 Jun 22 j 02:13	22°♊43'15	0°16'17	
minimum elong	-566 Jun 22 j 02:13	22°♊43'14	0°16'17	
morning rise	-566 Jul 08 j 19:57	23°♊44'10		
retrograde	-566 Oct 09 j 11:50	27°♊03'29		
opposition	-566 Dec 22 j 07:46	25°♊00'56	0°19'54	
min. Earth dist.	-566 Dec 23 j 05:07	24°♊58'36	17.62044 AU	
direct	-565 Mar 07 j 15:45	22°♊56'01		
evening set	-565 Jun 10 j 09:03	26°♊19'06		
max. Earth dist.	-565 Jun 26 j 02:52	27°♊16'32	19.59380 AU	
conjunction	-565 Jun 27 j 04:11	27°♊20'25	0°19'32	
minimum elong	-565 Jun 27 j 04:11	27°♊20'25	0°19'32	
morning rise	-565 Jul 13 j 21:16	28°♊21'29		
	-565 Aug 12 j 12:43	0°♋		
retrograde	-565 Oct 14 j 11:06	1°♋41'16		
	-565 Dec 18 j 22:49	30°℞♊		
opposition	-565 Dec 27 j 02:46	29°♊38'42	0°23'28	
min. Earth dist.	-565 Dec 27 j 23:53	29°♊36'24	17.56863 AU	
direct	-564 Mar 11 j 13:22	27°♊33'32		
	-564 May 28 j 20:29	0°♋		
evening set	-564 Jun 14 j 11:57	0°♋57'46		
max. Earth dist.	-564 Jun 30 j 04:16	1°♋55'13	19.54423 AU	
conjunction	-564 Jul 01 j 06:38	1°♋59'16	0°22'40	
minimum elong	-564 Jul 01 j 06:37	1°♋59'16	0°22'41	
morning rise	-564 Jul 17 j 22:59	3°♋00'28		
retrograde	-564 Oct 18 j 08:25	6°♋20'42		
opposition	-564 Dec 30 j 22:47	4°♋18'10	0°26'55	
min. Earth dist.	-564 Dec 31 j 21:28	4°♋15'41	17.52150 AU	
direct	-563 Mar 16 j 10:24	2°♋12'45		
evening set	-563 Jun 19 j 15:12	5°♋38'07		
max. Earth dist.	-563 Jul 05 j 06:32	6°♋35'37	19.49942 AU	
conjunction	-563 Jul 06 j 09:23	6°♋39'46	0°25'41	
minimum elong	-563 Jul 06 j 09:23	6°♋39'46	0°25'41	
morning rise	-563 Jul 23 j 01:03	7°♋41'04		
retrograde	-563 Oct 23 j 08:26	11°♋01'43		
opposition	-562 Jan 04 j 19:23	8°♋59'15	0°30'12	
min. Earth dist.	-562 Jan 05 j 17:41	8°♋56'48	17.47892 AU	
direct	-562 Mar 21 j 10:05	6°♋53'39		
evening set	-562 Jun 24 j 19:14	10°♋20'05		
max. Earth dist.	-562 Jul 10 j 09:34	11°♋17'37	19.45895 AU	
conjunction	-562 Jul 11 j 12:51	11°♋21'51	0°28'33	
minimum elong	-562 Jul 11 j 12:51	11°♋21'51	0°28'34	
morning rise	-562 Jul 28 j 03:33	12°♋23'13		
retrograde	-562 Oct 28 j 06:19	15°♋44'15		
opposition	-561 Jan 09 j 16:51	13°♋41'51	0°33'19	
min. Earth dist.	-561 Jan 10 j 16:46	13°♋39'14	17.44068 AU	
direct	-561 Mar 26 j 09:13	11°♋36'06		
evening set	-561 Jun 29 j 23:47	15°♋03'31		
conjunction	-561 Jul 16 j 16:37	16°♋05'21	0°31'14	
minimum elong	-561 Jul 16 j 16:36	16°♋05'21	0°31'15	
max. Earth dist.	-561 Jul 15 j 12:22	16°♋00'58	19.42279 AU	
morning rise	-561 Aug 02 j 06:29	17°♋06'47		
retrograde	-561 Nov 02 j 06:47	20°♋28'09		
opposition	-560 Jan 14 j 15:03	18°♋25'49	0°36'13	
min. Earth dist.	-560 Jan 15 j 14:32	18°♋23'15	17.40660 AU	
direct	-560 Mar 30 j 11:06	16°♋19'54		
evening set	-560 Jul 04 j 04:28	19°♋48'11		
conjunction	-560 Jul 20 j 20:35	20°♋50'06	0°33'44	
minimum elong	-560 Jul 20 j 20:35	20°♋50'06	0°33'44	
max. Earth dist.	-560 Jul 19 j 16:36	20°♋45'44	19.39060 AU	
morning rise	-560 Aug 06 j 09:16	21°♋51'32		
retrograde	-560 Nov 06 j 05:36	25°♋13'12		
opposition	-559 Jan 18 j 14:07	23°♋10'55	0°38'53	
min. Earth dist.	-559 Jan 19 j 14:50	23°♋08'13	17.37651 AU	
direct	-559 Apr 04 j 12:30	21°♋04'51		
evening set	-559 Jul 09 j 09:33	24°♋33'53		
max. Earth dist.	-559 Jul 24 j 19:34	25°♋31'16	19.36258 AU	
conjunction	-559 Jul 26 j 00:40	25°♋35'49	0°36'00	
minimum elong	-559 Jul 26 j 00:40	25°♋35'49	0°36'01	
morning rise	-559 Aug 11 j 12:28	26°♋37'17		
retrograde	-559 Nov 11 j 06:18	29°♋59'09		
opposition	-558 Jan 23 j 13:30	27°♋56'53	0°41'17	
min. Earth dist.	-558 Jan 24 j 13:40	27°♋54'15	17.35060 AU	
direct	-558 Apr 09 j 15:45	25°♋50'40		
evening set	-558 Jul 14 j 14:40	29°♋20'22		
	-558 Jul 25 j 06:38	0°♌		
max. Earth dist.	-558 Jul 30 j 00:47	0°♌17'53	19.33869 AU	
conjunction	-558 Jul 31 j 05:01	0°♌22'18	0°38'02	
minimum elong	-558 Jul 31 j 05:01	0°♌22'18	0°38'02	
morning rise	-558 Aug 16 j 15:32	1°♌23'44		
retrograde	-558 Nov 16 j 05:58	4°♌45'45		
opposition	-557 Jan 28 j 13:43	2°♌43'32	0°43'25	
min. Earth dist.	-557 Jan 29 j 14:38	2°♌40'49	17.32888 AU	
direct	-557 Apr 14 j 18:03	0°♌37'10		
evening set	-557 Jul 19 j 19:54	4°♌07'23		
max. Earth dist.	-557 Aug 04 j 03:53	5°♌04'44	19.31928 AU	
conjunction	-557 Aug 05 j 09:03	5°♌09'18	0°39'48	
minimum elong	-557 Aug 05 j 09:03	5°♌09'18	0°39'48	
morning rise	-557 Aug 21 j 18:34	6°♌10'42		
retrograde	-557 Nov 21 j 07:09	9°♌32'48		
opposition	-556 Feb 02 j 14:15	7°♌30'35	0°45'14	
min. Earth dist.	-556 Feb 03 j 14:29	7°♌27'57	17.31188 AU	
direct	-556 Apr 18 j 21:59	5°♌24'06		
evening set	-556 Jul 24 j 00:48	8°♌54'43		

Attention, astronomical year style is used: The year -556 in astronomical counting style is the year 557 BCE in historical counting style.

max. Earth dist.	-556 Aug 08 j 09:31	9°♌52'16	19.30471 AU
conjunction	-556 Aug 09 j 13:04	9°♌56'36	0°41'17
minimum elong	-556 Aug 09 j 13:04	9°♌56'36	0°41'18
morning rise	-556 Aug 25 j 21:15	10°♌57'55	
retrograde	-556 Nov 25 j 07:13	14°♌20'02	
opposition	-555 Feb 06 j 15:17	12°♌17'51	0°46'44
min. Earth dist.	-555 Feb 07 j 15:30	12°♌15'13	17.29985 AU
direct	-555 Apr 24 j 00:44	10°♌11'16	
evening set	-555 Jul 29 j 05:30	13°♌42'09	
conjunction	-555 Aug 14 j 16:32	14°♌43'57	0°42'29
minimum elong	-555 Aug 14 j 16:32	14°♌43'57	0°42'29
max. Earth dist.	-555 Aug 13 j 12:36	14°♌39'33	19.29541 AU
	-555 Aug 18 j 22:19	15°♌	
morning rise	-555 Aug 30 j 23:43	15°♌45'10	
retrograde	-555 Nov 30 j 08:07	19°♌07'17	
opposition	-554 Feb 11 j 16:35	17°♌05'06	0°47'55
min. Earth dist.	-554 Feb 12 j 16:01	17°♌02'33	17.29336 AU
	-554 Apr 21 j 13:32	15°℞♌	
direct	-554 Apr 29 j 04:49	14°♌58'27	
	-554 May 06 j 19:36	15°♌	
evening set	-554 Aug 03 j 09:50	18°♌29'29	
conjunction	-554 Aug 19 j 19:51	19°♌31'11	0°43'23
minimum elong	-554 Aug 19 j 19:51	19°♌31'11	0°43'24
max. Earth dist.	-554 Aug 18 j 18:00	19°♌27'06	19.29174 AU
morning rise	-554 Sep 05 j 01:42	20°♌32'17	
retrograde	-554 Dec 05 j 08:06	23°♌54'19	
opposition	-553 Feb 16 j 18:09	21°♌52'10	0°48'46
min. Earth dist.	-553 Feb 17 j 16:43	21°♌49'42	17.29259 AU
direct	-553 May 04 j 08:24	19°♌45'30	
evening set	-553 Aug 08 j 13:54	23°♌16'35	
conjunction	-553 Aug 24 j 22:35	24°♌18'08	0°43'59
minimum elong	-553 Aug 24 j 22:35	24°♌18'08	0°43'59
max. Earth dist.	-553 Aug 23 j 21:04	24°♌14'06	19.29411 AU
morning rise	-553 Sep 10 j 03:18	25°♌19'06	
retrograde	-553 Dec 10 j 08:23	28°♌41'03	
opposition	-552 Feb 21 j 20:07	26°♌38'56	0°49'16
min. Earth dist.	-552 Feb 22 j 17:41	26°♌36'35	17.29824 AU
direct	-552 May 08 j 12:18	24°♌32'19	
evening set	-552 Aug 12 j 17:12	28°♌03'19	
max. Earth dist.	-552 Aug 28 j 01:40	29°♌01'04	19.30303 AU
conjunction	-552 Aug 29 j 00:48	29°♌04'43	0°44'17
minimum elong	-552 Aug 29 j 00:48	29°♌04'43	0°44'17
	-552 Sep 12 j 16:28	0°♍	
morning rise	-552 Sep 14 j 04:15	0°♍05'32	
retrograde	-552 Dec 14 j 08:27	3°♍27'21	
opposition	-551 Feb 25 j 22:11	1°♍25'19	0°49'26
min. Earth dist.	-551 Feb 26 j 17:58	1°♍23'10	17.31031 AU
	-551 Apr 03 j 00:31	30°℞♌	
direct	-551 May 13 j 16:41	29°♌18'50	
	-551 Jun 22 j 12:47	0°♍	
evening set	-551 Aug 17 j 20:16	2°♍49'39	
max. Earth dist.	-551 Sep 02 j 04:28	3°♍47'24	19.31842 AU
conjunction	-551 Sep 03 j 02:34	3°♍50'53	0°44'17
minimum elong	-551 Sep 03 j 02:34	3°♍50'53	0°44'16
morning rise	-551 Sep 19 j 04:54	4°♍51'31	
retrograde	-551 Dec 19 j 07:43	8°♍13'10	
opposition	-550 Mar 03 j 00:16	6°♍11'16	0°49'15
min. Earth dist.	-550 Mar 03 j 19:14	6°♍09'13	17.32895 AU
direct	-550 May 18 j 20:08	4°♍04'58	
evening set	-550 Aug 22 j 22:45	7°♍35'32	
max. Earth dist.	-550 Sep 07 j 07:56	8°♍33'24	19.34025 AU
conjunction	-550 Sep 08 j 03:54	8°♍36'34	0°43'58
minimum elong	-550 Sep 08 j 03:54	8°♍36'34	0°43'58
morning rise	-550 Sep 24 j 05:04	9°♍37'01	
retrograde	-550 Dec 24 j 07:49	12°♍58'27	
opposition	-549 Mar 08 j 02:33	10°♍56'42	0°48'44
min. Earth dist.	-549 Mar 08 j 19:17	10°♍54'54	17.35360 AU
direct	-549 May 24 j 01:05	8°♍50'41	
evening set	-549 Aug 28 j 00:35	12°♍20'50	
max. Earth dist.	-549 Sep 12 j 10:14	13°♍18'46	19.36778 AU
conjunction	-549 Sep 13 j 04:29	13°♍21'39	0°43'22
minimum elong	-549 Sep 13 j 04:29	13°♍21'39	0°43'23
morning rise	-549 Sep 29 j 04:29	14°♍21'54	
retrograde	-549 Dec 29 j 06:13	17°♍43'07	
opposition	-548 Mar 12 j 05:01	15°♍41'32	0°47'53
min. Earth dist.	-548 Mar 12 j 21:03	15°♍39'49	17.38387 AU
direct	-548 May 28 j 04:27	13°♍35'47	
evening set	-548 Sep 01 j 01:49	17°♍05'27	
conjunction	-548 Sep 17 j 04:30	18°♍06'02	0°42'28
minimum elong	-548 Sep 17 j 04:30	18°♍06'02	0°42'28
max. Earth dist.	-548 Sep 16 j 12:01	18°♍03'26	19.40067 AU
morning rise	-548 Oct 03 j 03:29	19°♍06'04	
retrograde	-547 Jan 02 j 05:53	22°♍27'00	
opposition	-547 Mar 17 j 07:12	20°♍25'35	0°46'43
min. Earth dist.	-547 Mar 17 j 20:45	20°♍24'08	17.41903 AU
direct	-547 Jun 02 j 09:22	18°♍20'08	
evening set	-547 Sep 06 j 02:18	21°♍49'10	
conjunction	-547 Sep 22 j 03:54	22°♍49'31	0°41'17
minimum elong	-547 Sep 22 j 03:54	22°♍49'31	0°41'17
max. Earth dist.	-547 Sep 21 j 13:30	22°♍47'15	19.43805 AU
morning rise	-547 Oct 08 j 01:47	23°♍49'19	
retrograde	-546 Jan 07 j 03:25	27°♍09'55	
opposition	-546 Mar 22 j 09:31	25°♍08'40	0°45'14
min. Earth dist.	-546 Mar 22 j 22:30	25°♍07'17	17.45849 AU
direct	-546 Jun 07 j 11:43	23°♍03'32	
evening set	-546 Sep 11 j 02:07	26°♍31'51	
conjunction	-546 Sep 27 j 02:28	27°♍31'55	0°39'49
minimum elong	-546 Sep 27 j 02:28	27°♍31'55	0°39'49
max. Earth dist.	-546 Sep 26 j 13:22	27°♍29'51	19.47950 AU
morning rise	-546 Oct 12 j 23:27	28°♍31'29	
	-546 Nov 07 j 14:49	0°♎	
retrograde	-545 Jan 12 j 02:43	1°♎51'41	
	-545 Mar 23 j 18:40	30°℞♍	
opposition	-545 Mar 27 j 11:30	29°♍50'35	0°43'27
min. Earth dist.	-545 Mar 27 j 21:47	29°♍49'30	17.50164 AU
direct	-545 Jun 12 j 15:43	27°♍45'46	
	-545 Aug 26 j 02:51	0°♎	
evening set	-545 Sep 16 j 01:03	1°♎13'14	
conjunction	-545 Oct 02 j 00:24	2°♎13'02	0°38'06
minimum elong	-545 Oct 02 j 00:24	2°♎13'02	0°38'05
max. Earth dist.	-545 Oct 01 j 13:50	2°♎11'23	19.52435 AU
morning rise	-545 Oct 17 j 20:19	3°♎12'22	
retrograde	-544 Jan 16 j 23:37	6°♎32'08	
opposition	-544 Mar 31 j 13:25	4°♎31'09	0°41'23
min. Earth dist.	-544 Mar 31 j 23:00	4°♎30'09	17.54810 AU
direct	-544 Jun 16 j 16:59	2°♎26'39	
evening set	-544 Sep 19 j 23:02	5°♎53'10	
conjunction	-544 Oct 05 j 21:14	6°♎52'41	0°36'08
minimum elong	-544 Oct 05 j 21:15	6°♎52'41	0°36'08
max. Earth dist.	-544 Oct 05 j 11:46	6°♎51'12	19.57241 AU
morning rise	-544 Oct 21 j 16:29	7°♎51'45	
retrograde	-543 Jan 20 j 21:53	11°♎11'03	

Attention, astronomical year style is used: The year -543 in astronomical counting style is the year 544 BCE in historical counting style.

opposition	-543 Apr 05 j 14:43	9°♎10'10	0°39'03	
min. Earth dist.	-543 Apr 05 j 21:33	9°♎09'27	17.59748 AU	
direct	-543 Jun 21 j 19:27	7°♎05'57		
evening set	-543 Sep 24 j 20:05	10°♎31'27		
conjunction	-543 Oct 10 j 17:27	11°♎30'41	0°33'56	
minimum elong	-543 Oct 10 j 17:27	11°♎30'41	0°33'55	
max. Earth dist.	-543 Oct 10 j 10:49	11°♎29'39	19.62314 AU	
morning rise	-543 Oct 26 j 11:44	12°♎29'29		
retrograde	-542 Jan 25 j 17:58	15°♎48'14		
opposition	-542 Apr 10 j 15:38	13°♎47'27	0°36'28	
min. Earth dist.	-542 Apr 10 j 21:35	13°♎46'49	17.64949 AU	
direct	-542 Jun 26 j 20:06	11°♎43'32		
evening set	-542 Sep 29 j 16:16	15°♎07'56		
conjunction	-542 Oct 15 j 12:32	16°♎06'51	0°31'32	
minimum elong	-542 Oct 15 j 12:32	16°♎06'51	0°31'32	
max. Earth dist.	-542 Oct 15 j 06:58	16°♎05'59	19.67661 AU	
morning rise	-542 Oct 31 j 06:17	17°♎05'24		
retrograde	-541 Jan 30 j 14:35	20°♎23'35		
opposition	-541 Apr 15 j 16:02	18°♎22'50	0°33'41	
min. Earth dist.	-541 Apr 15 j 19:10	18°♎22'31	17.70426 AU	
direct	-541 Jul 01 j 21:18	16°♎19'14		
evening set	-541 Oct 04 j 11:06	19°♎42'26		
conjunction	-541 Oct 20 j 06:39	20°♎41'04	0°28'56	
minimum elong	-541 Oct 20 j 06:39	20°♎41'04	0°28'56	
max. Earth dist.	-541 Oct 20 j 04:25	20°♎40'43	19.73275 AU	
morning rise	-541 Nov 04 j 23:36	21°♎39'20		
retrograde	-540 Feb 04 j 09:21	24°♎56'56		
opposition	-540 Apr 19 j 15:59	22°♎56'14	0°30'41	
min. Earth dist.	-540 Apr 19 j 17:41	22°♎56'03	17.76176 AU	
direct	-540 Jul 05 j 21:44	20°♎52'57		
evening set	-540 Oct 08 j 05:10	24°♎14'55		
conjunction	-540 Oct 23 j 23:44	25°♎13'13	0°26'11	
minimum elong	-540 Oct 23 j 23:44	25°♎13'13	0°26'11	
max. Earth dist.	-540 Oct 23 j 22:43	25°♎13'04	19.79176 AU	
morning rise	-540 Nov 08 j 16:18	26°♎11'14		
retrograde	-539 Feb 08 j 03:54	29°♎28'14		
opposition	-539 Apr 24 j 14:58	27°♎27'34	0°27'32	
min. Earth dist.	-539 Apr 24 j 13:55	27°♎27'41	17.82227 AU	
direct	-539 Jul 10 j 21:03	25°♎24'37		
evening set	-539 Oct 12 j 22:03	28°♎45'20		
conjunction	-539 Oct 28 j 16:02	29°♎43'20	0°23'18	
minimum elong	-539 Oct 28 j 16:02	29°♎43'20	0°23'18	
max. Earth dist.	-539 Oct 28 j 18:27	29°♎43'42	19.85370 AU	
	-539 Nov 02 j 03:44	0°♏		
morning rise	-539 Nov 13 j 07:56	0°♏41'04		
retrograde	-538 Feb 12 j 21:23	3°♏57'28		
opposition	-538 Apr 29 j 13:33	1°♏56'54	0°24'15	
min. Earth dist.	-538 Apr 29 j 10:37	1°♏57'12	17.88556 AU	
	-538 Jun 30 j 20:33	30°℞♎		
direct	-538 Jul 15 j 20:13	29°♎54'19		
	-538 Jul 30 j 15:30	0°♏		
evening set	-538 Oct 17 j 14:05	3°♏13'46		
conjunction	-538 Nov 02 j 07:12	4°♏11'28	0°20'18	
minimum elong	-538 Nov 02 j 07:12	4°♏11'28	0°20'17	
max. Earth dist.	-538 Nov 02 j 10:52	4°♏12'01	19.91841 AU	
morning rise	-538 Nov 17 j 22:49	5°♏08'56		
retrograde	-537 Feb 17 j 14:22	8°♏24'45		
opposition	-537 May 04 j 11:28	6°♏24'17	0°20'50	
min. Earth dist.	-537 May 04 j 05:56	6°♏24'51	17.95160 AU	
direct	-537 Jul 20 j 17:22	4°♏22'06		
evening set	-537 Oct 22 j 05:02	7°♏40'17		

conjunction	-537 Nov 06 j 21:43	8°♏37'41	0°17'11	
minimum elong	-537 Nov 06 j 21:43	8°♏37'41	0°17'12	
max. Earth dist.	-537 Nov 07 j 04:44	8°♏38'45	19.98560 AU	
morning rise	-537 Nov 22 j 12:51	9°♏34'54		
retrograde	-536 Feb 22 j 06:50	12°♏50'07		
opposition	-536 May 08 j 08:39	10°♏49'48	0°17'19	
min. Earth dist.	-536 May 08 j 01:04	10°♏50'35	18.01969 AU	
direct	-536 Jul 24 j 14:35	8°♏48'04		
evening set	-536 Oct 25 j 19:12	12°♏04'57		
conjunction	-536 Nov 10 j 11:11	13°♏02'04	0°14'00	
minimum elong	-536 Nov 10 j 11:11	13°♏02'04	0°14'00	
behind sun begin	-536 Nov 10 j 07:44	13°♏01'33		
behind sun end	-536 Nov 10 j 14:39	13°♏02'35		
max. Earth dist.	-536 Nov 10 j 19:21	13°♏03'18	20.05453 AU	
morning rise	-536 Nov 26 j 02:15	13°♏59'02		
	-536 Dec 13 j 19:43	15°♏		
retrograde	-535 Feb 25 j 22:54	17°♏13'41		
opposition	-535 May 13 j 05:11	15°♏13'31	0°13'44	
min. Earth dist.	-535 May 12 j 19:37	15°♏14'30	18.08928 AU	
	-535 May 18 j 17:15	15°℞♏		
direct	-535 Jul 29 j 09:22	13°♏12'13		
	-535 Oct 03 j 22:18	15°♏		
evening set	-535 Oct 30 j 08:25	16°♏27'51		
conjunction	-535 Nov 15 j 00:04	17°♏24'41	0°10'46	
minimum elong	-535 Nov 15 j 00:04	17°♏24'41	0°10'45	
behind sun begin	-535 Nov 14 j 19:00	17°♏23'55		
behind sun end	-535 Nov 15 j 05:09	17°♏25'26		
max. Earth dist.	-535 Nov 15 j 11:11	17°♏26'22	20.12449 AU	
morning rise	-535 Nov 30 j 14:46	18°♏21'24		
retrograde	-534 Mar 02 j 14:12	21°♏35'28		
opposition	-534 May 18 j 00:59	19°♏35'29	0°10'05	
min. Earth dist.	-534 May 17 j 13:23	19°♏36'40	18.15937 AU	
direct	-534 Aug 03 j 04:52	17°♏34'38		
evening set	-534 Nov 03 j 21:01	20°♏49'00		
conjunction	-534 Nov 19 j 12:06	21°♏45'34	0°07'29	
minimum elong	-534 Nov 19 j 12:06	21°♏45'34	0°07'29	
behind sun begin	-534 Nov 19 j 06:07	21°♏44'40		
behind sun end	-534 Nov 19 j 18:05	21°♏46'27		
max. Earth dist.	-534 Nov 20 j 00:11	21°♏47'23	20.19465 AU	
morning rise	-534 Dec 05 j 02:49	22°♏42'03		
retrograde	-533 Mar 07 j 05:19	25°♏55'34		
opposition	-533 May 22 j 20:18	23°♏55'44	0°06'25	
min. Earth dist.	-533 May 22 j 07:14	23°♏57'04	18.22950 AU	
direct	-533 Aug 07 j 21:48	21°♏55'19		
evening set	-533 Nov 08 j 08:35	25°♏08'27		
conjunction	-533 Nov 23 j 23:29	26°♏04'44	0°04'11	
minimum elong	-533 Nov 23 j 23:30	26°♏04'44	0°04'10	
behind sun begin	-533 Nov 23 j 17:03	26°♏03'47		
behind sun end	-533 Nov 24 j 05:56	26°♏05'41		
max. Earth dist.	-533 Nov 24 j 14:08	26°♏06'56	20.26439 AU	
morning rise	-533 Dec 09 j 14:02	27°♏01'00		
	-532 Feb 16 j 13:59	0°♐		
retrograde	-532 Mar 10 j 19:41	0°♐13'58		
	-532 Apr 03 j 13:11	30°℞♏		
opposition	-532 May 26 j 14:48	28°♏14'17	0°02'43	
min. Earth dist.	-532 May 25 j 23:44	28°♏15'49	18.29865 AU	
direct	-532 Aug 11 j 15:40	26°♏14'18		
evening set	-532 Nov 11 j 19:42	29°♏26'11		
	-532 Nov 21 j 06:48	0°♐		
conjunction	-532 Nov 27 j 10:13	0°♐22'13	0°00'49	
minimum elong	-532 Nov 27 j 10:12	0°♐22'13	0°00'49	
behind sun begin	-532 Nov 27 j 03:41	0°♐21'16		

Attention, astronomical year style is used: The year -532 in astronomical counting style is the year 533 BCE in historical counting style.

behind sun end	-532 Nov 27 j 16:44	0°♐23'10	
max. Earth dist.	-532 Nov 28 j 01:31	0°♐24'31	20.33278 AU
morning rise	-532 Dec 13 j 00:54	1°♐18'16	
desc. node	-531 Feb 23 j 10:52	4°♐20'26	
retrograde	-531 Mar 15 j 09:17	4°♐30'42	
opposition	-531 May 31 j 08:29	2°♐31'08	-0°00'58
min. Earth dist.	-531 May 30 j 16:37	2°♐32'44	18.36630 AU
direct	-531 Aug 16 j 06:32	0°♐31'31	
evening set	-531 Nov 16 j 05:56	3°♐42'13	
conjunction	-531 Dec 01 j 20:23	4°♐38'00	-0°02'35
minimum elong	-531 Dec 01 j 20:23	4°♐38'00	0°02'36
behind sun begin	-531 Dec 01 j 13:52	4°♐37'03	
behind sun end	-531 Dec 02 j 02:55	4°♐38'57	
max. Earth dist.	-531 Dec 02 j 13:45	4°♐40'36	20.39936 AU
morning rise	-531 Dec 17 j 11:02	5°♐33'51	
retrograde	-530 Mar 19 j 22:48	8°♐45'43	
min. Earth dist.	-530 Jun 04 j 07:43	6°♐48'04	18.43166 AU
opposition	-530 Jun 05 j 01:31	6°♐46'16	-0°04'37
direct	-530 Aug 20 j 23:04	4°♐47'01	
evening set	-530 Nov 20 j 15:28	7°♐56'30	
conjunction	-530 Dec 06 j 05:40	8°♐52'04	-0°05'51
minimum elong	-530 Dec 06 j 05:40	8°♐52'04	0°05'51
behind sun begin	-530 Dec 05 j 23:24	8°♐51'09	
behind sun end	-530 Dec 06 j 11:55	8°♐52'58	
max. Earth dist.	-530 Dec 06 j 23:39	8°♐54'45	20.46345 AU
morning rise	-530 Dec 21 j 20:35	9°♐47'43	
retrograde	-529 Mar 24 j 10:58	12°♐59'04	
opposition	-529 Jun 09 j 17:57	10°♐59'40	-0°08'13
min. Earth dist.	-529 Jun 08 j 23:39	11°♐01'31	18.49460 AU
direct	-529 Aug 25 j 11:57	9°♐00'44	
evening set	-529 Nov 25 j 00:11	12°♐09'03	
conjunction	-529 Dec 10 j 14:30	13°♐04'23	-0°09'03
minimum elong	-529 Dec 10 j 14:30	13°♐04'23	0°09'03
behind sun begin	-529 Dec 10 j 08:54	13°♐03'34	
behind sun end	-529 Dec 10 j 20:06	13°♐05'12	
max. Earth dist.	-529 Dec 11 j 10:21	13°♐07'20	20.52507 AU
morning rise	-529 Dec 26 j 05:34	13°♐59'52	
retrograde	-528 Mar 27 j 23:38	17°♐10'40	
opposition	-528 Jun 13 j 09:15	15°♐11'18	-0°11'44
min. Earth dist.	-528 Jun 12 j 13:03	15°♐13'20	18.55488 AU
direct	-528 Aug 29 j 03:01	13°♐12'39	
evening set	-528 Nov 28 j 08:17	16°♐19'49	
conjunction	-528 Dec 13 j 22:31	17°♐14'57	-0°12'11
minimum elong	-528 Dec 13 j 22:31	17°♐14'57	0°12'12
behind sun begin	-528 Dec 13 j 18:03	17°♐14'19	
behind sun end	-528 Dec 14 j 03:00	17°♐15'36	
max. Earth dist.	-528 Dec 14 j 19:03	17°♐18'00	20.58406 AU
morning rise	-528 Dec 29 j 14:01	18°♐10'16	
retrograde	-527 Apr 01 j 10:24	21°♐20'33	
opposition	-527 Jun 17 j 23:58	19°♐21'12	-0°15'11
min. Earth dist.	-527 Jun 17 j 03:31	19°♐23'16	18.61280 AU
direct	-527 Sep 02 j 14:05	17°♐22'49	
evening set	-527 Dec 02 j 15:32	20°♐28'53	
conjunction	-527 Dec 18 j 05:58	21°♐23'49	-0°15'14
minimum elong	-527 Dec 18 j 05:58	21°♐23'49	0°15'15
behind sun begin	-527 Dec 18 j 03:36	21°♐23'29	
behind sun end	-527 Dec 18 j 08:19	21°♐24'09	
max. Earth dist.	-527 Dec 19 j 04:18	21°♐27'07	20.64081 AU
morning rise	-526 Jan 02 j 21:41	22°♐18'58	
retrograde	-526 Apr 05 j 22:02	25°♐28'45	
opposition	-526 Jun 22 j 13:46	23°♐29'26	-0°18'30
min. Earth dist.	-526 Jun 21 j 15:12	23°♐31'42	18.66848 AU
direct	-526 Sep 07 j 03:43	21°♐31'18	
evening set	-526 Dec 06 j 22:23	24°♐36'19	
conjunction	-526 Dec 22 j 12:51	25°♐31'05	-0°18'11
minimum elong	-526 Dec 22 j 12:51	25°♐31'05	0°18'12
max. Earth dist.	-526 Dec 23 j 11:59	25°♐34'29	20.69544 AU
morning rise	-525 Jan 07 j 05:04	26°♐26'06	
retrograde	-525 Apr 10 j 08:11	29°♐35'26	
min. Earth dist.	-525 Jun 26 j 04:16	27°♐38'24	18.72230 AU
opposition	-525 Jun 27 j 03:01	27°♐36'07	-0°21'43
direct	-525 Sep 11 j 13:12	25°♐38'14	
evening set	-525 Dec 11 j 04:31	28°♐42'17	
conjunction	-525 Dec 26 j 19:20	29°♐36'53	-0°21'02
minimum elong	-525 Dec 26 j 19:20	29°♐36'53	0°21'02
max. Earth dist.	-525 Dec 27 j 20:02	29°♐40'31	20.74825 AU
	-524 Jan 02 j 08:43	0°♑	
morning rise	-524 Jan 11 j 11:58	0°♑31'47	
retrograde	-524 Apr 13 j 18:52	3°♑40'41	
opposition	-524 Jun 30 j 15:22	1°♑41'25	-0°24'47
min. Earth dist.	-524 Jun 29 j 14:34	1°♑43'54	18.77403 AU
	-524 Aug 20 j 09:15	30°℞♐	
direct	-524 Sep 15 j 01:10	29°♐43'48	
	-524 Oct 10 j 04:51	0°♑	
evening set	-524 Dec 14 j 10:24	2°♑46'56	
conjunction	-524 Dec 30 j 01:23	3°♑41'24	-0°23'45
minimum elong	-524 Dec 30 j 01:23	3°♑41'24	0°23'46
max. Earth dist.	-524 Dec 31 j 02:41	3°♑45'06	20.79877 AU
morning rise	-523 Jan 14 j 18:36	4°♑36'11	
retrograde	-523 Apr 18 j 04:34	7°♑44'43	
min. Earth dist.	-523 Jul 04 j 02:29	5°♑47'58	18.82349 AU
opposition	-523 Jul 05 j 03:06	5°♑45'30	-0°27'44
direct	-523 Sep 19 j 09:23	3°♑48'09	
evening set	-523 Dec 18 j 15:46	6°♑50'27	
conjunction	-522 Jan 03 j 07:13	7°♑44'48	-0°26'21
minimum elong	-522 Jan 03 j 07:13	7°♑44'48	0°26'21
max. Earth dist.	-522 Jan 04 j 09:42	7°♑48'40	20.84697 AU
morning rise	-522 Jan 19 j 00:55	8°♑39'29	
retrograde	-522 Apr 22 j 14:37	11°♑47'40	
min. Earth dist.	-522 Jul 08 j 11:51	9°♑51'10	18.87027 AU
opposition	-522 Jul 09 j 14:15	9°♑48'32	-0°30'31
direct	-522 Sep 23 j 19:29	7°♑51'26	
evening set	-522 Dec 22 j 20:48	10°♑52'58	
conjunction	-521 Jan 07 j 12:34	11°♑47'12	-0°28'48
minimum elong	-521 Jan 07 j 12:34	11°♑47'12	0°28'49
max. Earth dist.	-521 Jan 08 j 15:29	11°♑51'07	20.89218 AU
morning rise	-521 Jan 23 j 07:00	12°♑41'48	
retrograde	-521 Apr 26 j 23:28	15°♑49'43	
min. Earth dist.	-521 Jul 12 j 23:10	13°♑53'13	18.91395 AU
opposition	-521 Jul 14 j 01:02	13°♑50'38	-0°33'09
direct	-521 Sep 28 j 03:03	11°♑53'48	
evening set	-521 Dec 27 j 01:40	14°♑54'37	
conjunction	-520 Jan 11 j 18:01	15°♑48'46	-0°31'07
minimum elong	-520 Jan 11 j 18:00	15°♑48'46	0°31'07
max. Earth dist.	-520 Jan 12 j 21:42	15°♑52'47	20.93410 AU
morning rise	-520 Jan 27 j 13:03	16°♑43'18	
retrograde	-520 Apr 30 j 09:27	19°♑50'57	
min. Earth dist.	-520 Jul 16 j 07:51	17°♑54'38	18.95391 AU
opposition	-520 Jul 17 j 10:57	17°♑51'56	-0°35'37
direct	-520 Oct 01 j 11:28	15°♑55'19	
evening set	-520 Dec 30 j 06:28	18°♑55'31	
conjunction	-519 Jan 14 j 23:14	19°♑49'36	-0°33'16

Attention, astronomical year style is used: The year -519 in astronomical counting style is the year 520 BCE in historical counting style.

minimum elong	-519 Jan	14 j 23:14	19°♉49'36	0°33'16
max. Earth dist.	-519 Jan	16 j 02:54	19°♉53'35	20.97189 AU
morning rise	-519 Jan	30 j 19:03	20°♉44'05	
retrograde	-519 May	04 j 17:13	23°♉51'30	
opposition	-519 Jul	21 j 20:42	21°♉52'33	-0°37'53
min. Earth dist.	-519 Jul	20 j 18:38	21°♉55'09	18.98957 AU
direct	-519 Oct	05 j 18:12	19°♉56'09	
evening set	-518 Jan	03 j 10:57	22°♉55'46	
conjunction	-518 Jan	19 j 04:23	23°♉49'47	-0°35'15
minimum elong	-518 Jan	19 j 04:22	23°♉49'47	0°35'16
max. Earth dist.	-518 Jan	20 j 08:21	23°♉53'49	21.00519 AU
morning rise	-518 Feb	04 j 00:51	24°♉44'14	
retrograde	-518 May	09 j 03:16	27°♉51'28	
min. Earth dist.	-518 Jul	25 j 02:57	25°♉55'14	19.02035 AU
opposition	-518 Jul	26 j 05:55	25°♉52'33	-0°39'59
direct	-518 Oct	10 j 01:57	23°♉56'18	
evening set	-517 Jan	07 j 15:37	26°♉55'25	
conjunction	-517 Jan	23 j 09:35	27°♉49'24	-0°37'04
minimum elong	-517 Jan	23 j 09:34	27°♉49'24	0°37'03
max. Earth dist.	-517 Jan	24 j 13:08	27°♉53'21	21.03325 AU
morning rise	-517 Feb	08 j 06:55	28°♉43'50	
	-517 Mar	04 j 08:20	0°♒	
retrograde	-517 May	13 j 10:20	1°♒50'54	
	-517 Jul	27 j 06:25	30°℞♉	
opposition	-517 Jul	30 j 14:48	29°♉51'59	-0°41'53
min. Earth dist.	-517 Jul	29 j 13:15	29°♉54'32	19.04579 AU
direct	-517 Oct	14 j 07:36	27°♉55'50	
	-517 Dec	25 j 23:09	0°♒	
evening set	-516 Jan	11 j 20:04	0°♒54'30	
conjunction	-516 Jan	27 j 14:51	1°♒48'28	-0°38'41
minimum elong	-516 Jan	27 j 14:50	1°♒48'28	0°38'42
max. Earth dist.	-516 Jan	28 j 18:13	1°♒52'24	21.05593 AU
morning rise	-516 Feb	12 j 12:58	2°♒42'54	
retrograde	-516 May	16 j 20:05	5°♒49'49	
opposition	-516 Aug	02 j 23:07	3°♒50'52	-0°43'34
min. Earth dist.	-516 Aug	01 j 21:02	3°♒53'28	19.06558 AU
direct	-516 Oct	17 j 14:59	1°♒54'46	
evening set	-515 Jan	15 j 00:33	4°♒53'02	
conjunction	-515 Jan	30 j 19:58	5°♒47'00	-0°40'08
minimum elong	-515 Jan	30 j 19:58	5°♒47'00	0°40'07
max. Earth dist.	-515 Jan	31 j 22:40	5°♒50'50	21.07286 AU
morning rise	-515 Feb	15 j 18:59	6°♒41'28	
retrograde	-515 May	21 j 02:27	9°♒48'15	
min. Earth dist.	-515 Aug	06 j 06:37	7°♒51'41	19.07983 AU
opposition	-515 Aug	07 j 07:06	7°♒49'14	-0°45'03
direct	-515 Oct	21 j 19:47	5°♒53'10	
evening set	-514 Jan	19 j 04:52	8°♒51'05	
conjunction	-514 Feb	04 j 01:09	9°♒45'04	-0°41'22
minimum elong	-514 Feb	04 j 01:09	9°♒45'04	0°41'23
max. Earth dist.	-514 Feb	05 j 03:38	9°♒48'51	21.08462 AU
morning rise	-514 Feb	20 j 01:02	10°♒39'33	
retrograde	-514 May	25 j 11:38	13°♒46'15	
opposition	-514 Aug	11 j 14:37	11°♒47'08	-0°46'18
min. Earth dist.	-514 Aug	10 j 13:37	11°♒49'38	19.08909 AU
direct	-514 Oct	26 j 02:40	9°♒51'03	
evening set	-513 Jan	23 j 09:13	12°♒48'43	
conjunction	-513 Feb	08 j 06:15	13°♒42'44	-0°42'24
minimum elong	-513 Feb	08 j 06:15	13°♒42'44	0°42'24
max. Earth dist.	-513 Feb	09 j 08:09	13°♒46'26	21.09147 AU
morning rise	-513 Feb	24 j 07:07	14°♒37'16	
	-513 Mar	03 j 04:36	15°♒	
retrograde	-513 May	29 j 18:02	17°♒43'55	
opposition	-513 Aug	15 j 21:54	15°♒44'42	-0°47'19
min. Earth dist.	-513 Aug	14 j 22:28	15°♒47'03	19.09374 AU
	-513 Sep	03 j 22:56	15°℞♒	
direct	-513 Oct	30 j 06:54	13°♒48'35	
	-513 Dec	23 j 02:38	15°♒	
evening set	-512 Jan	27 j 13:41	16°♒46'03	
conjunction	-512 Feb	12 j 11:39	17°♒40'07	-0°43'14
minimum elong	-512 Feb	12 j 11:39	17°♒40'07	0°43'14
max. Earth dist.	-512 Feb	13 j 13:12	17°♒43'46	21.09404 AU
morning rise	-512 Feb	28 j 13:24	18°♒34'43	
retrograde	-512 Jun	02 j 02:44	21°♒41'22	
min. Earth dist.	-512 Aug	18 j 04:44	19°♒44'26	19.09424 AU
opposition	-512 Aug	19 j 04:32	19°♒42'03	-0°48'07
direct	-512 Nov	02 j 12:56	17°♒45'53	
evening set	-511 Jan	30 j 18:20	20°♒43'17	
conjunction	-511 Feb	15 j 17:05	21°♒37'25	-0°43'51
minimum elong	-511 Feb	15 j 17:05	21°♒37'25	0°43'51
max. Earth dist.	-511 Feb	16 j 17:56	21°♒40'57	21.09248 AU
morning rise	-511 Mar	03 j 19:50	22°♒32'06	
retrograde	-511 Jun	06 j 09:30	25°♒38'47	
opposition	-511 Aug	23 j 11:15	23°♒39'23	-0°48'42
min. Earth dist.	-511 Aug	22 j 13:00	23°♒41'37	19.09079 AU
direct	-511 Nov	06 j 16:39	21°♒43'11	
evening set	-510 Feb	03 j 22:56	24°♒40'33	
conjunction	-510 Feb	19 j 22:42	25°♒34'47	-0°44'16
minimum elong	-510 Feb	19 j 22:42	25°♒34'47	0°44'16
max. Earth dist.	-510 Feb	20 j 23:06	25°♒38'15	21.08723 AU
morning rise	-510 Mar	08 j 02:22	26°♒29'33	
retrograde	-510 Jun	10 j 18:07	29°♒36'21	
opposition	-510 Aug	27 j 17:41	27°♒36'52	-0°49'03
min. Earth dist.	-510 Aug	26 j 19:07	27°♒39'09	19.08361 AU
direct	-510 Nov	10 j 22:07	25°♒40'37	
evening set	-509 Feb	08 j 04:05	28°♒38'03	
conjunction	-509 Feb	24 j 04:44	29°♒32'24	-0°44'29
minimum elong	-509 Feb	24 j 04:44	29°♒32'24	0°44'29
max. Earth dist.	-509 Feb	25 j 04:15	29°♒35'44	21.07810 AU
	-509 Mar	04 j 07:00	0°♓	
morning rise	-509 Mar	12 j 09:26	0°♓27'18	
retrograde	-509 Jun	15 j 01:23	3°♓34'13	
opposition	-509 Aug	31 j 24:00	1°♓34'41	-0°49'09
min. Earth dist.	-509 Aug	31 j 03:15	1°♓36'47	19.07258 AU
	-509 Oct	16 j 13:07	30°℞♒	
direct	-509 Nov	15 j 01:27	29°♒38'23	
	-509 Dec	14 j 00:56	0°♓	
evening set	-508 Feb	12 j 09:30	2°♓35'58	
conjunction	-508 Feb	28 j 11:14	3°♓30'27	-0°44'29
minimum elong	-508 Feb	28 j 11:14	3°♓30'27	0°44'28
max. Earth dist.	-508 Feb	29 j 09:54	3°♓33'40	21.06524 AU
morning rise	-508 Mar	15 j 16:54	4°♓25'28	
retrograde	-508 Jun	18 j 10:37	7°♓32'34	
min. Earth dist.	-508 Sep	03 j 09:32	5°♓35'06	19.05764 AU
opposition	-508 Sep	04 j 06:13	5°♓33'00	-0°49'02
direct	-508 Nov	18 j 06:46	3°♓36'38	
evening set	-507 Feb	15 j 15:23	6°♓34'28	
conjunction	-507 Mar	03 j 18:00	7°♓29'04	-0°44'16
minimum elong	-507 Mar	03 j 18:00	7°♓29'04	0°44'17
max. Earth dist.	-507 Mar	04 j 15:33	7°♓32'08	21.04816 AU
morning rise	-507 Mar	20 j 00:39	8°♓24'15	
retrograde	-507 Jun	22 j 18:12	11°♓31'35	
opposition	-507 Sep	08 j 12:33	9°♓31'59	-0°48'41

Attention, astronomical year style is used: The year -507 in astronomical counting style is the year 508 BCE in historical counting style.

min. Earth dist.	-507 Sep 07 j 17:57	9°♓33'52	19.03842 AU
direct	-507 Nov 22 j 10:08	7°♓35'32	
evening set	-506 Feb 19 j 21:45	10°♓33'40	
conjunction	-506 Mar 08 j 01:27	11°♓28'27	-0°43'50
minimum elong	-506 Mar 08 j 01:27	11°♓28'27	0°43'50
max. Earth dist.	-506 Mar 08 j 21:46	11°♓31'20	21.02689 AU
morning rise	-506 Mar 24 j 09:04	12°♓23'46	
retrograde	-506 Jun 27 j 04:28	15°♓31'23	
opposition	-506 Sep 12 j 18:49	13°♓31'43	-0°48'06
min. Earth dist.	-506 Sep 12 j 00:45	13°♓33'34	19.01477 AU
direct	-506 Nov 26 j 15:35	11°♓35'10	
evening set	-505 Feb 24 j 04:49	14°♓33'41	
conjunction	-505 Mar 12 j 09:29	15°♓28'39	-0°43'12
minimum elong	-505 Mar 12 j 09:30	15°♓28'39	0°43'12
max. Earth dist.	-505 Mar 13 j 04:15	15°♓31'19	21.00075 AU
morning rise	-505 Mar 28 j 18:07	16°♓24'09	
retrograde	-505 Jul 01 j 12:49	19°♓32'03	
min. Earth dist.	-505 Sep 16 j 09:46	17°♓33'56	18.98608 AU
opposition	-505 Sep 17 j 01:22	17°♓32'20	-0°47'17
direct	-505 Nov 30 j 19:41	15°♓35'38	
evening set	-504 Feb 28 j 12:29	18°♓34'36	
conjunction	-504 Mar 15 j 18:14	19°♓29'45	-0°42'20
minimum elong	-504 Mar 15 j 18:14	19°♓29'45	0°42'20
max. Earth dist.	-504 Mar 16 j 11:08	19°♓32'09	20.96956 AU
morning rise	-504 Apr 01 j 03:49	20°♓25'26	
retrograde	-504 Jul 04 j 23:39	23°♓33'39	
opposition	-504 Sep 20 j 07:49	21°♓33'50	-0°46'13
min. Earth dist.	-504 Sep 19 j 17:08	21°♓35'20	18.95217 AU
direct	-504 Dec 04 j 01:31	19°♓36'56	
evening set	-503 Mar 03 j 20:46	22°♓36'24	
conjunction	-503 Mar 20 j 03:31	23°♓31'45	-0°41'16
minimum elong	-503 Mar 20 j 03:31	23°♓31'45	0°41'15
max. Earth dist.	-503 Mar 20 j 18:33	23°♓33'54	20.93295 AU
morning rise	-503 Apr 05 j 14:02	24°♓27'39	
retrograde	-503 Jul 09 j 08:48	27°♓36'11	
opposition	-503 Sep 24 j 14:42	25°♓36'14	-0°44'55
min. Earth dist.	-503 Sep 24 j 02:32	25°♓37'28	18.91291 AU
direct	-503 Dec 08 j 06:36	23°♓39'05	
evening set	-502 Mar 08 j 05:26	26°♓39'05	
conjunction	-502 Mar 24 j 13:17	27°♓34'40	-0°39'59
minimum elong	-502 Mar 24 j 13:18	27°♓34'40	0°39'59
max. Earth dist.	-502 Mar 25 j 02:17	27°♓36'31	20.89134 AU
morning rise	-502 Apr 10 j 00:48	28°♓30'46	
	-502 May 08 j 19:11	0°♈	
retrograde	-502 Jul 13 j 20:04	1°♈39'38	
	-502 Sep 20 j 13:16	30°℞♓	
opposition	-502 Sep 28 j 21:37	29°♓39'31	-0°43'23
min. Earth dist.	-502 Sep 28 j 10:26	29°♓40'39	18.86879 AU
direct	-502 Dec 12 j 13:12	27°♓42'04	
	-501 Feb 27 j 12:22	0°♈	
evening set	-501 Mar 12 j 14:56	0°♈42'40	
conjunction	-501 Mar 28 j 23:50	1°♈38'29	-0°38'29
minimum elong	-501 Mar 28 j 23:50	1°♈38'29	0°38'29
max. Earth dist.	-501 Mar 29 j 11:01	1°♈40'05	20.84494 AU
morning rise	-501 Apr 14 j 12:14	2°♈34'49	
retrograde	-501 Jul 18 j 05:37	5°♈44'01	
opposition	-501 Oct 03 j 04:39	3°♈43'43	-0°41'38
min. Earth dist.	-501 Oct 02 j 19:59	3°♈44'36	18.82027 AU
direct	-501 Dec 16 j 19:06	1°♈45'57	
evening set	-500 Mar 16 j 01:02	4°♈47'13	
conjunction	-500 Apr 01 j 10:58	5°♈43'16	-0°36'48
minimum elong	-500 Apr 01 j 10:58	5°♈43'16	0°36'48
max. Earth dist.	-500 Apr 01 j 20:01	5°♈44'34	20.79468 AU
morning rise	-500 Apr 18 j 00:17	6°♈39'49	
retrograde	-500 Jul 21 j 17:40	9°♈49'25	
opposition	-500 Oct 06 j 11:55	7°♈48'54	-0°39'40
min. Earth dist.	-500 Oct 06 j 04:12	7°♈49'42	18.76823 AU
direct	-500 Dec 20 j 02:37	5°♈50'47	
evening set	-499 Mar 20 j 11:40	8°♈52'47	
conjunction	-499 Apr 05 j 22:34	9°♈49'06	-0°34'54
minimum elong	-499 Apr 05 j 22:34	9°♈49'06	0°34'54
max. Earth dist.	-499 Apr 06 j 06:07	9°♈50'11	20.74100 AU
morning rise	-499 Apr 22 j 12:40	10°♈45'53	
retrograde	-499 Jul 26 j 03:42	13°♈55'54	
opposition	-499 Oct 10 j 19:33	11°♈55'11	-0°37'29
min. Earth dist.	-499 Oct 10 j 14:03	11°♈55'46	18.71315 AU
direct	-499 Dec 24 j 09:05	9°♈56'43	
evening set	-498 Mar 24 j 23:07	12°♈59'32	
conjunction	-498 Apr 10 j 11:00	13°♈56'06	-0°32'50
minimum elong	-498 Apr 10 j 11:00	13°♈56'06	0°32'49
max. Earth dist.	-498 Apr 10 j 16:22	13°♈56'53	20.68485 AU
morning rise	-498 Apr 27 j 01:58	14°♈53'09	
retrograde	-498 Jul 30 j 16:49	18°♈03'37	
opposition	-498 Oct 15 j 03:20	16°♈02'42	-0°35'05
min. Earth dist.	-498 Oct 14 j 22:48	16°♈03'11	18.65588 AU
direct	-498 Dec 28 j 17:34	14°♈03'52	
evening set	-497 Mar 29 j 11:23	17°♈07'34	
conjunction	-497 Apr 15 j 00:15	18°♈04'26	-0°30'34
minimum elong	-497 Apr 15 j 00:15	18°♈04'26	0°30'35
max. Earth dist.	-497 Apr 15 j 04:12	18°♈05'00	20.62651 AU
morning rise	-497 May 01 j 15:54	19°♈01'44	
retrograde	-497 Aug 04 j 03:59	22°♈12'39	
opposition	-497 Oct 19 j 11:40	20°♈11'36	-0°32'30
min. Earth dist.	-497 Oct 19 j 09:16	20°♈11'51	18.59664 AU
direct	-496 Jan 02 j 00:35	18°♈12'26	
evening set	-496 Apr 02 j 00:27	21°♈17'04	
conjunction	-496 Apr 18 j 14:10	22°♈14'13	-0°28'09
minimum elong	-496 Apr 18 j 14:10	22°♈14'13	0°28'08
max. Earth dist.	-496 Apr 18 j 15:45	22°♈14'27	20.56661 AU
morning rise	-496 May 05 j 06:35	23°♈11'46	
retrograde	-496 Aug 07 j 18:12	26°♈23'14	
opposition	-496 Oct 22 j 20:19	24°♈22'02	-0°29'44
min. Earth dist.	-496 Oct 22 j 18:57	24°♈22'11	18.53605 AU
direct	-495 Jan 05 j 10:15	22°♈22'31	
evening set	-495 Apr 06 j 14:20	25°♈28'11	
conjunction	-495 Apr 23 j 05:00	26°♈25'38	-0°25'34
minimum elong	-495 Apr 23 j 05:00	26°♈25'38	0°25'34
max. Earth dist.	-495 Apr 23 j 05:20	26°♈25'41	20.50537 AU
morning rise	-495 May 09 j 21:55	27°♈23'28	
	-495 Jul 05 j 12:51	0°♉	
retrograde	-495 Aug 12 j 06:45	0°♉35'28	
	-495 Sep 19 j 09:38	30°℞♈	
opposition	-495 Oct 27 j 05:36	28°♈34'10	-0°26'48
min. Earth dist.	-495 Oct 27 j 06:16	28°♈34'06	18.47425 AU
direct	-494 Jan 09 j 18:16	26°♈34'20	
evening set	-494 Apr 11 j 05:07	29°♈41'05	
	-494 Apr 16 j 17:17	0°♉	
conjunction	-494 Apr 27 j 20:34	0°♉38'50	-0°22'50
minimum elong	-494 Apr 27 j 20:34	0°♉38'50	0°22'49
max. Earth dist.	-494 Apr 27 j 18:20	0°♉38'31	20.44318 AU
morning rise	-494 May 14 j 14:13	1°♉36'57	

Attention, astronomical year style is used: The year -494 in astronomical counting style is the year 495 BCE in historical counting style.

retrograde	-494 Aug 16 j 22:14	4°♉49'32	
opposition	-494 Oct 31 j 15:23	2°♉48'09	-0°23'41
min. Earth dist.	-494 Oct 31 j 17:23	2°♉47'57	18.41146 AU
direct	-493 Jan 14 j 05:07	0°♉48'00	
evening set	-493 Apr 15 j 21:02	3°♉55'54	
conjunction	-493 May 02 j 13:19	4°♉53'59	-0°19'57
minimum elong	-493 May 02 j 13:19	4°♉53'59	0°19'56
max. Earth dist.	-493 May 02 j 09:48	4°♉53'28	20.37974 AU
morning rise	-493 May 19 j 07:20	5°♉52'21	
retrograde	-493 Aug 21 j 12:18	9°♉05'32	
opposition	-493 Nov 05 j 01:45	7°♉04'06	-0°20'25
min. Earth dist.	-493 Nov 05 j 05:56	7°♉03'39	18.34736 AU
direct	-492 Jan 18 j 15:11	5°♉03'38	
evening set	-492 Apr 19 j 14:00	8°♉12'45	
conjunction	-492 May 06 j 06:52	9°♉11'07	-0°16'56
minimum elong	-492 May 06 j 06:52	9°♉11'07	0°16'56
max. Earth dist.	-492 May 06 j 00:18	9°♉10'10	20.31507 AU
morning rise	-492 May 23 j 01:26	10°♉09'46	
retrograde	-492 Aug 25 j 04:30	13°♉23'34	
opposition	-492 Nov 08 j 12:50	11°♉22'04	-0°17'01
min. Earth dist.	-492 Nov 08 j 18:41	11°♉21'26	18.28201 AU
direct	-491 Jan 22 j 03:10	9°♉21'15	
evening set	-491 Apr 24 j 07:43	12°♉31'35	
conjunction	-491 May 11 j 01:20	13°♉30'17	-0°13'48
minimum elong	-491 May 11 j 01:20	13°♉30'17	0°13'47
behind sun begin	-491 May 10 j 21:57	13°♉29'48	
behind sun end	-491 May 11 j 04:43	13°♉30'46	
max. Earth dist.	-491 May 10 j 17:27	13°♉29'08	20.24886 AU
morning rise	-491 May 27 j 20:04	14°♉29'12	
	-491 Jun 05 j 22:14	15°♉	
retrograde	-491 Aug 29 j 20:12	17°♉43'36	
opposition	-491 Nov 13 j 00:42	15°♉42'01	-0°13'29
min. Earth dist.	-491 Nov 13 j 08:37	15°♉41'10	18.21502 AU
	-491 Nov 29 j 19:17	15°℞♉	
direct	-490 Jan 26 j 16:01	13°♉40'51	
	-490 Mar 23 j 23:13	15°♉	
evening set	-490 Apr 29 j 02:42	16°♉52'26	
conjunction	-490 May 15 j 20:44	17°♉51'26	-0°10'34
minimum elong	-490 May 15 j 20:45	17°♉51'26	0°10'34
behind sun begin	-490 May 15 j 15:33	17°♉50'41	
behind sun end	-490 May 16 j 01:56	17°♉52'11	
max. Earth dist.	-490 May 15 j 09:27	17°♉49'46	20.18121 AU
morning rise	-490 Jun 01 j 15:54	18°♉50'36	
retrograde	-490 Sep 03 j 12:35	22°♉05'37	
opposition	-490 Nov 17 j 13:05	20°♉03'55	-0°09'51
min. Earth dist.	-490 Nov 17 j 22:54	20°♉02'52	18.14675 AU
direct	-489 Jan 31 j 05:39	18°♉02'20	
evening set	-489 May 03 j 22:31	21°♉15'11	
conjunction	-489 May 20 j 17:12	22°♉14'29	-0°07'16
minimum elong	-489 May 20 j 17:13	22°♉14'29	0°07'15
behind sun begin	-489 May 20 j 11:00	22°♉13'35	
behind sun end	-489 May 20 j 23:25	22°♉15'23	
max. Earth dist.	-489 May 20 j 04:39	22°♉12'38	20.11228 AU
morning rise	-489 Jun 06 j 12:22	23°♉13'55	
retrograde	-489 Sep 08 j 05:42	26°♉29'29	
opposition	-489 Nov 22 j 02:15	24°♉27'40	-0°06'07
min. Earth dist.	-489 Nov 22 j 13:52	24°♉26'25	18.07736 AU
direct	-488 Feb 04 j 20:55	22°♉25'40	
evening set	-488 May 07 j 19:15	25°♉39'47	
conjunction	-488 May 24 j 14:10	26°♉39'22	-0°03'53
minimum elong	-488 May 24 j 14:10	26°♉39'22	0°03'53
behind sun begin	-488 May 24 j 07:28	26°♉38'24	
behind sun end	-488 May 24 j 20:52	26°♉40'20	
max. Earth dist.	-488 May 23 j 22:18	26°♉37'01	20.04270 AU
morning rise	-488 Jun 10 j 09:32	27°♉39'02	
	-488 Jul 27 j 12:15	0°♊	
retrograde	-488 Sep 11 j 22:43	0°♊55'11	
	-488 Oct 29 j 06:00	30°℞♉	
opposition	-488 Nov 25 j 16:03	28°♉53'13	-0°02'20
min. Earth dist.	-488 Nov 26 j 05:34	28°♉51'46	18.00778 AU
direct	-487 Feb 08 j 12:27	26°♉50'46	
	-487 May 10 j 22:22	0°♊	
evening set	-487 May 12 j 16:42	0°♊06'09	
conjunction	-487 May 29 j 12:06	1°♊06'02	-0°00'24
minimum elong	-487 May 29 j 12:06	1°♊06'02	0°00'24
behind sun begin	-487 May 29 j 05:21	1°♊05'03	
behind sun end	-487 May 29 j 18:51	1°♊07'01	
max. Earth dist.	-487 May 28 j 19:25	1°♊03'32	19.97321 AU
morning rise	-487 Jun 15 j 07:18	2°♊05'56	
asc. node	-487 Jul 09 j 05:08	3°♊25'04	
retrograde	-487 Sep 16 j 17:05	5°♊22'37	
opposition	-487 Nov 30 j 06:27	3°♊20'31	0°01'30
min. Earth dist.	-487 Nov 30 j 21:17	3°♊18'55	17.93863 AU
direct	-486 Feb 13 j 05:18	1°♊17'37	
evening set	-486 May 17 j 15:09	4°♊34'16	
conjunction	-486 Jun 03 j 10:37	5°♊34'25	0°03'09
minimum elong	-486 Jun 03 j 10:37	5°♊34'25	0°03'10
behind sun begin	-486 Jun 03 j 03:52	5°♊33'26	
behind sun end	-486 Jun 03 j 17:23	5°♊35'24	
max. Earth dist.	-486 Jun 02 j 14:56	5°♊31'28	19.90461 AU
morning rise	-486 Jun 20 j 05:53	6°♊34'33	
retrograde	-486 Sep 21 j 11:32	9°♊51'46	
opposition	-486 Dec 04 j 21:39	7°♊49'31	0°05'20
min. Earth dist.	-486 Dec 05 j 14:20	7°♊47'43	17.87082 AU
direct	-485 Feb 17 j 22:15	5°♊46'09	
evening set	-485 May 22 j 14:16	9°♊04'06	
conjunction	-485 Jun 08 j 10:01	10°♊04'30	0°06'35
minimum elong	-485 Jun 08 j 10:01	10°♊04'30	0°06'36
behind sun begin	-485 Jun 08 j 03:40	10°♊03'34	
behind sun end	-485 Jun 08 j 16:22	10°♊05'26	
max. Earth dist.	-485 Jun 07 j 13:51	10°♊01'28	19.83760 AU
morning rise	-485 Jun 25 j 04:54	11°♊04'51	
retrograde	-485 Sep 26 j 07:24	14°♊22'35	
opposition	-485 Dec 09 j 13:28	12°♊20'13	0°09'10
min. Earth dist.	-485 Dec 10 j 06:56	12°♊18'19	17.80491 AU
direct	-484 Feb 22 j 16:34	10°♊16'25	
evening set	-484 May 26 j 14:18	13°♊35'38	
max. Earth dist.	-484 Jun 11 j 11:12	14°♊32'51	19.77298 AU
conjunction	-484 Jun 12 j 09:53	14°♊36'16	0°10'00
minimum elong	-484 Jun 12 j 09:53	14°♊36'16	0°10'01
behind sun begin	-484 Jun 12 j 04:28	14°♊35'28	
behind sun end	-484 Jun 12 j 15:18	14°♊37'04	
morning rise	-484 Jun 29 j 04:34	15°♊36'50	
retrograde	-484 Sep 30 j 03:16	18°♊55'04	
opposition	-484 Dec 13 j 06:12	16°♊52'35	0°12'58
min. Earth dist.	-484 Dec 14 j 01:18	16°♊50'31	17.74192 AU
direct	-483 Feb 26 j 10:34	14°♊48'23	
evening set	-483 May 31 j 14:44	18°♊08'50	
max. Earth dist.	-483 Jun 16 j 11:33	19°♊06'15	19.71156 AU
conjunction	-483 Jun 17 j 10:24	19°♊09'43	0°13'23
minimum elong	-483 Jun 17 j 10:23	19°♊09'43	0°13'23
behind sun begin	-483 Jun 17 j 06:41	19°♊09'10	
behind sun end	-483 Jun 17 j 14:06	19°♊10'16	

Attention, astronomical year style is used: The year -483 in astronomical counting style is the year 484 BCE in historical counting style.

morning rise	-483 Jul	04 j 04:36	20°♊10'27	
retrograde	-483 Oct	05 j 00:43	23°♊29'11	
opposition	-483 Dec	17 j 23:36	21°♊26'39	0°16'42
min. Earth dist.	-483 Dec	18 j 18:56	21°♊24'33	17.68226 AU
direct	-482 Mar	03 j 06:32	19°♊22'05	
evening set	-482 Jun	05 j 16:16	22°♊43'46	
max. Earth dist.	-482 Jun	21 j 10:46	23°♊41'05	19.65376 AU
conjunction	-482 Jun	22 j 11:37	23°♊44'52	0°16'41
minimum elong	-482 Jun	22 j 11:37	23°♊44'52	0°16'42
morning rise	-482 Jul	09 j 05:22	24°♊45'46	
retrograde	-482 Oct	09 j 21:25	28°♊05'00	
opposition	-482 Dec	22 j 17:48	26°♊02'25	0°20'21
min. Earth dist.	-482 Dec	23 j 14:48	26°♊00'08	17.62658 AU
direct	-481 Mar	08 j 01:35	23°♊57'32	
evening set	-481 Jun	10 j 18:22	27°♊20'27	
conjunction	-481 Jun	27 j 13:32	28°♊21'45	0°19'55
minimum elong	-481 Jun	27 j 13:31	28°♊21'45	0°19'55
max. Earth dist.	-481 Jun	26 j 12:29	28°♊17'55	19.60013 AU
morning rise	-481 Jul	14 j 06:39	29°♊22'48	
	-481 Jul	24 j 20:33	0°♋	
retrograde	-481 Oct	14 j 20:29	2°♋42'30	
opposition	-481 Dec	27 j 12:49	0°♋39'56	0°23'54
min. Earth dist.	-481 Dec	28 j 09:43	0°♋37'39	17.57500 AU
	-480 Jan	12 j 01:06	30°℞♊	
direct	-480 Mar	11 j 23:43	28°♊34'48	
	-480 May	09 j 03:45	0°♋	
evening set	-480 Jun	14 j 21:06	1°♋58'53	
conjunction	-480 Jul	01 j 15:46	3°♋00'21	0°23'03
minimum elong	-480 Jul	01 j 15:46	3°♋00'21	0°23'02
max. Earth dist.	-480 Jun	30 j 13:27	2°♋56'18	19.55057 AU
morning rise	-480 Jul	18 j 08:11	4°♋01'32	
retrograde	-480 Oct	18 j 17:49	7°♋21'42	
opposition	-480 Dec	31 j 08:44	5°♋19'11	0°27'19
min. Earth dist.	-479 Jan	01 j 07:20	5°♋16'43	17.52764 AU
direct	-479 Mar	16 j 20:09	3°♋13'48	
evening set	-479 Jun	20 j 00:29	6°♋39'03	
conjunction	-479 Jul	06 j 18:41	7°♋40'40	0°26'02
minimum elong	-479 Jul	06 j 18:41	7°♋40'40	0°26'03
max. Earth dist.	-479 Jul	05 j 15:54	7°♋36'31	19.50521 AU
morning rise	-479 Jul	23 j 10:23	8°♋41'57	
retrograde	-479 Oct	23 j 17:58	12°♋02'32	
opposition	-478 Jan	05 j 05:12	10°♋00'04	0°30'35
min. Earth dist.	-478 Jan	06 j 03:38	9°♋57'37	17.48422 AU
direct	-478 Mar	21 j 20:20	7°♋54'30	
evening set	-478 Jun	25 j 04:33	11°♋20'49	
conjunction	-478 Jul	11 j 22:10	12°♋22'33	0°28'53
minimum elong	-478 Jul	11 j 22:10	12°♋22'33	0°28'53
max. Earth dist.	-478 Jul	10 j 18:32	12°♋18'16	19.46359 AU
morning rise	-478 Jul	28 j 12:56	13°♋23'55	
retrograde	-478 Oct	28 j 16:08	16°♋44'54	
opposition	-477 Jan	10 j 02:46	14°♋42'29	0°33'40
min. Earth dist.	-477 Jan	11 j 02:52	14°♋39'51	17.44459 AU
direct	-477 Mar	26 j 18:39	12°♋36'43	
evening set	-477 Jun	30 j 09:00	16°♋04'01	
max. Earth dist.	-477 Jul	15 j 21:23	17°♋01'25	19.42580 AU
conjunction	-477 Jul	17 j 01:51	17°♋05'51	0°31'32
minimum elong	-477 Jul	17 j 01:51	17°♋05'51	0°31'33
morning rise	-477 Aug	02 j 15:45	18°♋07'16	
retrograde	-477 Nov	02 j 16:53	21°♋28'35	
opposition	-476 Jan	15 j 00:53	19°♋26'13	0°36'32
min. Earth dist.	-476 Jan	16 j 00:33	19°♋23'38	17.40869 AU
direct	-476 Mar	30 j 21:05	17°♋20'16	
evening set	-476 Jul	04 j 13:45	20°♋48'27	
max. Earth dist.	-476 Jul	20 j 01:25	21°♋45'55	19.39174 AU
conjunction	-476 Jul	21 j 05:54	21°♋50'21	0°34'00
minimum elong	-476 Jul	21 j 05:54	21°♋50'21	0°34'01
morning rise	-476 Aug	06 j 18:40	22°♋51'48	
retrograde	-476 Nov	06 j 15:20	26°♋13'24	
opposition	-475 Jan	18 j 23:50	24°♋11'04	0°39'09
min. Earth dist.	-475 Jan	20 j 00:51	24°♋08'20	17.37674 AU
direct	-475 Apr	04 j 21:06	22°♋04'57	
evening set	-475 Jul	09 j 18:41	25°♋33'55	
max. Earth dist.	-475 Jul	25 j 04:30	26°♋31'15	19.36189 AU
conjunction	-475 Jul	26 j 09:54	26°♋35'51	0°36'14
minimum elong	-475 Jul	26 j 09:54	26°♋35'51	0°36'14
morning rise	-475 Aug	11 j 21:48	27°♋37'18	
	-475 Sep	26 j 01:36	0°♌	
retrograde	-475 Nov	11 j 16:22	0°♌59'09	
	-475 Dec	29 j 15:28	30°℞♋	
opposition	-474 Jan	23 j 23:13	28°♋56'50	0°41'31
min. Earth dist.	-474 Jan	24 j 23:34	28°♋54'10	17.34900 AU
direct	-474 Apr	10 j 01:18	26°♋50'33	
	-474 Jul	09 j 10:27	0°♌	
evening set	-474 Jul	14 j 23:44	0°♌20'10	
max. Earth dist.	-474 Jul	30 j 09:36	1°♌17'39	19.33629 AU
conjunction	-474 Jul	31 j 14:09	1°♌22'08	0°38'13
minimum elong	-474 Jul	31 j 14:09	1°♌22'08	0°38'14
morning rise	-474 Aug	17 j 00:46	2°♌23'34	
retrograde	-474 Nov	16 j 15:15	5°♌45'34	
opposition	-473 Jan	28 j 23:17	3°♌43'16	0°43'36
min. Earth dist.	-473 Jan	30 j 00:29	3°♌40'31	17.32578 AU
direct	-473 Apr	15 j 03:13	1°♌36'51	
evening set	-473 Jul	20 j 04:54	5°♌07'02	
conjunction	-473 Aug	05 j 18:09	6°♌08'57	0°39'57
minimum elong	-473 Aug	05 j 18:09	6°♌08'57	0°39'57
max. Earth dist.	-473 Aug	04 j 12:54	6°♌04'21	19.31562 AU
morning rise	-473 Aug	22 j 03:48	7°♌10'21	
retrograde	-473 Nov	21 j 16:09	10°♌32'28	
opposition	-472 Feb	02 j 23:45	8°♌30'11	0°45'23
min. Earth dist.	-472 Feb	03 j 24:00	8°♌27'32	17.30775 AU
direct	-472 Apr	19 j 07:34	6°♌23'38	
evening set	-472 Jul	24 j 09:33	9°♌54'13	
conjunction	-472 Aug	09 j 21:56	10°♌56'07	0°41'24
minimum elong	-472 Aug	09 j 21:56	10°♌56'07	0°41'24
max. Earth dist.	-472 Aug	08 j 18:27	10°♌51'47	19.30026 AU
morning rise	-472 Aug	26 j 06:15	11°♌57'27	
	-472 Oct	30 j 08:05	15°♌	
retrograde	-472 Nov	25 j 16:12	15°♌19'37	
	-472 Dec	22 j 11:00	15°℞♌	
opposition	-471 Feb	07 j 00:43	13°♌17'21	0°46'51
min. Earth dist.	-471 Feb	08 j 01:01	13°♌14'42	17.29520 AU
direct	-471 Apr	24 j 10:28	11°♌10'43	
evening set	-471 Jul	29 j 14:19	14°♌41'36	
	-471 Aug	03 j 13:09	15°♌	
max. Earth dist.	-471 Aug	13 j 21:39	15°♌39'02	19.29072 AU
conjunction	-471 Aug	15 j 01:26	15°♌43'25	0°42'34
minimum elong	-471 Aug	15 j 01:25	15°♌43'25	0°42'34
morning rise	-471 Aug	31 j 08:43	16°♌44'40	
retrograde	-471 Nov	30 j 16:47	20°♌06'49	
opposition	-470 Feb	12 j 01:49	18°♌04'35	0°47'59
min. Earth dist.	-470 Feb	13 j 01:02	18°♌02'03	17.28880 AU
direct	-470 Apr	29 j 13:56	15°♌57'53	

Attention, astronomical year style is used: The year -470 in astronomical counting style is the year 471 BCE in historical counting style.

evening set	-470 Aug 03 j 18:39	19°♌28'58	
max. Earth dist.	-470 Aug 19 j 03:17	20°♌26'39	19.28748 AU
conjunction	-470 Aug 20 j 04:46	20°♌30'41	0°43'26
minimum elong	-470 Aug 20 j 04:46	20°♌30'41	0°43'25
morning rise	-470 Sep 05 j 10:42	21°♌31'49	
retrograde	-470 Dec 05 j 17:47	24°♌53'55	
opposition	-469 Feb 17 j 03:30	22°♌51'44	0°48'48
min. Earth dist.	-469 Feb 18 j 01:52	22°♌49'18	17.28877 AU
direct	-469 May 04 j 17:35	20°♌45'05	
evening set	-469 Aug 08 j 22:41	24°♌16'12	
max. Earth dist.	-469 Aug 24 j 06:17	25°♌13'49	19.29084 AU
conjunction	-469 Aug 25 j 07:26	25°♌17'47	0°44'00
minimum elong	-469 Aug 25 j 07:26	25°♌17'47	0°44'01
morning rise	-469 Sep 10 j 12:15	26°♌18'47	
retrograde	-469 Dec 10 j 17:37	29°♌40'49	
opposition	-468 Feb 22 j 05:23	27°♌38'42	0°49'16
min. Earth dist.	-468 Feb 23 j 02:31	27°♌36'25	17.29559 AU
direct	-468 May 08 j 20:41	25°♌32'08	
evening set	-468 Aug 13 j 02:11	29°♌03'13	
max. Earth dist.	-468 Aug 28 j 11:14	0°♍01'04	19.30105 AU
	-468 Aug 28 j 04:31	0°♍	
conjunction	-468 Aug 29 j 09:53	0°♍04'39	0°44'16
minimum elong	-468 Aug 29 j 09:53	0°♍04'39	0°44'16
morning rise	-468 Sep 14 j 13:25	1°♍05'29	
retrograde	-468 Dec 14 j 18:36	4°♍27'23	
opposition	-467 Feb 26 j 07:21	2°♍25'24	0°49'23
min. Earth dist.	-467 Feb 27 j 03:00	2°♍23'16	17.30897 AU
direct	-467 May 14 j 01:11	0°♍18'59	
evening set	-467 Aug 18 j 05:21	3°♍49'54	
conjunction	-467 Sep 03 j 11:46	4°♍51'10	0°44'14
minimum elong	-467 Sep 03 j 11:46	4°♍51'10	0°44'14
max. Earth dist.	-467 Sep 02 j 13:54	4°♍47'42	19.31769 AU
morning rise	-467 Sep 19 j 14:13	5°♍51'50	
retrograde	-467 Dec 19 j 17:31	9°♍13'34	
opposition	-466 Mar 03 j 09:36	7°♍11'43	0°49'10
min. Earth dist.	-466 Mar 04 j 04:19	7°♍09'42	17.32869 AU
direct	-466 May 19 j 04:36	5°♍05'30	
evening set	-466 Aug 23 j 07:55	8°♍36'09	
conjunction	-466 Sep 08 j 13:10	9°♍37'12	0°43'53
minimum elong	-466 Sep 08 j 13:10	9°♍37'12	0°43'54
max. Earth dist.	-466 Sep 07 j 17:33	9°♍34'06	19.34035 AU
morning rise	-466 Sep 24 j 14:25	10°♍37'41	
retrograde	-466 Dec 24 j 17:50	13°♍59'13	
opposition	-465 Mar 08 j 11:57	11°♍57'32	0°48'37
min. Earth dist.	-465 Mar 09 j 04:42	11°♍55'43	17.35394 AU
direct	-465 May 24 j 10:15	9°♍51'34	
evening set	-465 Aug 28 j 09:59	13°♍21'48	
conjunction	-465 Sep 13 j 13:59	14°♍22'38	0°43'15
minimum elong	-465 Sep 13 j 13:59	14°♍22'38	0°43'15
max. Earth dist.	-465 Sep 12 j 19:41	14°♍19'45	19.36825 AU
morning rise	-465 Sep 29 j 14:06	15°♍22'54	
retrograde	-465 Dec 29 j 15:58	18°♍44'11	
opposition	-464 Mar 12 j 14:27	16°♍42'39	0°47'44
min. Earth dist.	-464 Mar 13 j 06:29	16°♍40'56	17.38436 AU
direct	-464 May 28 j 13:17	14°♍36'56	
evening set	-464 Sep 01 j 11:14	18°♍06'39	
conjunction	-464 Sep 17 j 14:04	19°♍07'15	0°42'19
minimum elong	-464 Sep 17 j 14:04	19°♍07'15	0°42'19
max. Earth dist.	-464 Sep 16 j 21:36	19°♍04'39	19.40100 AU
morning rise	-464 Oct 03 j 13:09	20°♍07'18	
retrograde	-463 Jan 02 j 15:55	23°♍28'16	
opposition	-463 Mar 17 j 16:47	21°♍26'53	0°46'32
min. Earth dist.	-463 Mar 18 j 06:30	21°♍25'25	17.41909 AU
direct	-463 Jun 02 j 18:42	19°♍21'27	
evening set	-463 Sep 06 j 11:56	22°♍50'30	
conjunction	-463 Sep 22 j 13:36	23°♍50'52	0°41'06
minimum elong	-463 Sep 22 j 13:36	23°♍50'52	0°41'05
max. Earth dist.	-463 Sep 21 j 22:53	23°♍48'32	19.43771 AU
morning rise	-463 Oct 08 j 11:34	24°♍50'41	
retrograde	-462 Jan 07 j 13:16	28°♍11'17	
opposition	-462 Mar 22 j 19:02	26°♍10'01	0°45'00
min. Earth dist.	-462 Mar 23 j 08:14	26°♍08'37	17.45771 AU
direct	-462 Jun 07 j 21:03	24°♍04'52	
evening set	-462 Sep 11 j 11:52	27°♍33'11	
conjunction	-462 Sep 27 j 12:20	28°♍33'16	0°39'36
minimum elong	-462 Sep 27 j 12:20	28°♍33'16	0°39'35
max. Earth dist.	-462 Sep 26 j 23:02	28°♍31'11	19.47818 AU
morning rise	-462 Oct 13 j 09:24	29°♍32'51	
	-462 Oct 20 j 20:27	0°♎	
retrograde	-461 Jan 12 j 12:38	2°♎53'02	
opposition	-461 Mar 27 j 21:06	0°♎51'54	0°43'11
min. Earth dist.	-461 Mar 28 j 07:39	0°♎50'47	17.49973 AU
	-461 Apr 17 j 21:36	30°℞♍	
direct	-461 Jun 13 j 01:29	28°♍47'02	
	-461 Aug 05 j 18:24	0°♎	
evening set	-461 Sep 16 j 10:45	2°♎14'30	
conjunction	-461 Oct 02 j 10:12	3°♎14'18	0°37'51
minimum elong	-461 Oct 02 j 10:12	3°♎14'18	0°37'51
max. Earth dist.	-461 Oct 01 j 23:14	3°♎12'35	19.52182 AU
morning rise	-461 Oct 18 j 06:14	4°♎13'38	
retrograde	-460 Jan 17 j 09:09	7°♎33'23	
opposition	-460 Mar 31 j 22:59	5°♎32'21	0°41'05
min. Earth dist.	-460 Apr 01 j 08:53	5°♎31'18	17.54493 AU
direct	-460 Jun 17 j 02:49	3°♎27'46	
evening set	-460 Sep 20 j 08:52	6°♎54'16	
conjunction	-460 Oct 06 j 07:11	7°♎53'48	0°35'51
minimum elong	-460 Oct 06 j 07:11	7°♎53'48	0°35'50
max. Earth dist.	-460 Oct 05 j 21:25	7°♎52'16	19.56863 AU
morning rise	-460 Oct 22 j 02:31	8°♎52'53	
retrograde	-459 Jan 21 j 07:31	12°♎12'07	
opposition	-459 Apr 06 j 00:06	10°♎11'10	0°38'43
min. Earth dist.	-459 Apr 06 j 07:13	10°♎10'25	17.59314 AU
direct	-459 Jun 22 j 05:55	8°♎06'51	
evening set	-459 Sep 25 j 05:55	11°♎32'21	
conjunction	-459 Oct 11 j 03:24	12°♎31'35	0°33'37
minimum elong	-459 Oct 11 j 03:24	12°♎31'35	0°33'38
max. Earth dist.	-459 Oct 10 j 20:24	12°♎30'30	19.61835 AU
morning rise	-459 Oct 26 j 21:48	13°♎30'25	
retrograde	-458 Jan 26 j 02:41	16°♎49'07	
opposition	-458 Apr 11 j 01:08	14°♎48'14	0°36'07
min. Earth dist.	-458 Apr 11 j 07:20	14°♎47'35	17.64434 AU
direct	-458 Jun 27 j 06:05	12°♎44'14	
evening set	-458 Sep 30 j 01:59	16°♎08'37	
conjunction	-458 Oct 15 j 22:21	17°♎07'33	0°31'12
minimum elong	-458 Oct 15 j 22:21	17°♎07'33	0°31'11
max. Earth dist.	-458 Oct 15 j 16:39	17°♎06'40	19.67121 AU
morning rise	-458 Oct 31 j 16:12	18°♎06'06	
retrograde	-457 Jan 31 j 00:02	21°♎24'17	
opposition	-457 Apr 16 j 01:30	19°♎23'27	0°33'18
min. Earth dist.	-457 Apr 16 j 04:38	19°♎23'07	17.69877 AU
direct	-457 Jul 02 j 07:43	17°♎19'45	

Attention, astronomical year style is used: The year -457 in astronomical counting style is the year 458 BCE in historical counting style.

evening set	-457 Oct 04 j 20:56	20°♎42'59		
conjunction	-457 Oct 20 j 16:34	21°♎41'37	0°28'36	
minimum elong	-457 Oct 20 j 16:34	21°♎41'37	0°28'36	
max. Earth dist.	-457 Oct 20 j 14:13	21°♎41'15	19.72729 AU	
morning rise	-457 Nov 05 j 09:36	22°♎39'55		
retrograde	-456 Feb 04 j 18:07	25°♎57'31		
opposition	-456 Apr 20 j 01:23	23°♎56'46	0°30'18	
min. Earth dist.	-456 Apr 20 j 03:07	23°♎56'35	17.75653 AU	
direct	-456 Jul 06 j 06:29	21°♎53'25		
evening set	-456 Oct 08 j 14:59	25°♎15'27		
conjunction	-456 Oct 24 j 09:39	26°♎13'47	0°25'50	
minimum elong	-456 Oct 24 j 09:39	26°♎13'47	0°25'49	
max. Earth dist.	-456 Oct 24 j 08:36	26°♎13'37	19.78680 AU	
morning rise	-456 Nov 09 j 02:18	27°♎11'49		
	-455 Jan 06 j 17:31	0°♏		
retrograde	-455 Feb 08 j 14:10	0°♏28'51		
	-455 Mar 14 j 07:29	30°℞♎		
opposition	-455 Apr 25 j 00:32	28°♎28'12	0°27'08	
min. Earth dist.	-455 Apr 24 j 23:15	28°♎28'20	17.81766 AU	
direct	-455 Jul 11 j 06:32	26°♎25'13		
evening set	-455 Oct 13 j 07:57	29°♎46'03		
	-455 Oct 17 j 03:51	0°♏		
conjunction	-455 Oct 29 j 02:01	0°♏44'05	0°22'56	
minimum elong	-455 Oct 29 j 02:01	0°♏44'05	0°22'55	
max. Earth dist.	-455 Oct 29 j 04:24	0°♏44'27	19.84946 AU	
morning rise	-455 Nov 13 j 17:58	1°♏41'51		
retrograde	-454 Feb 13 j 07:10	4°♏58'19		
opposition	-454 Apr 29 j 23:10	2°♏57'49	0°23'49	
min. Earth dist.	-454 Apr 29 j 20:14	2°♏58'07	17.88172 AU	
direct	-454 Jul 16 j 04:21	0°♏55'16		
evening set	-454 Oct 18 j 00:10	4°♏14'52		
conjunction	-454 Nov 02 j 17:22	5°♏12'36	0°19'54	
minimum elong	-454 Nov 02 j 17:22	5°♏12'36	0°19'55	
max. Earth dist.	-454 Nov 02 j 20:59	5°♏13'09	19.91498 AU	
morning rise	-454 Nov 18 j 09:04	6°♏10'06		
retrograde	-453 Feb 18 j 01:48	9°♏26'01		
opposition	-453 May 04 j 21:11	7°♏25'39	0°20'23	
min. Earth dist.	-453 May 04 j 15:33	7°♏26'14	17.94845 AU	
direct	-453 Jul 21 j 02:30	5°♏23'33		
evening set	-453 Oct 22 j 15:11	8°♏41'54		
conjunction	-453 Nov 07 j 07:58	9°♏39'21	0°16'47	
minimum elong	-453 Nov 07 j 07:57	9°♏39'21	0°16'46	
max. Earth dist.	-453 Nov 07 j 14:56	9°♏40'25	19.98268 AU	
morning rise	-453 Nov 22 j 23:10	10°♏36'36		
retrograde	-452 Feb 22 j 17:50	13°♏51'58		
opposition	-452 May 08 j 18:35	11°♏51'46	0°16'52	
min. Earth dist.	-452 May 08 j 11:14	11°♏52'31	18.01685 AU	
direct	-452 Jul 24 j 23:23	9°♏50'07		
evening set	-452 Oct 26 j 05:39	13°♏07'13		
conjunction	-452 Nov 10 j 21:41	14°♏04'22	0°13'35	
minimum elong	-452 Nov 10 j 21:42	14°♏04'22	0°13'35	
behind sun begin	-452 Nov 10 j 17:58	14°♏03'49		
behind sun end	-452 Nov 11 j 01:25	14°♏04'56		
max. Earth dist.	-452 Nov 11 j 05:38	14°♏05'34	20.05173 AU	
morning rise	-452 Nov 26 j 12:48	15°♏01'23		
	-452 Nov 26 j 03:33	15°♏		
retrograde	-451 Feb 26 j 10:23	18°♏16'11		
opposition	-451 May 13 j 15:10	16°♏16'08	0°13'15	
min. Earth dist.	-451 May 13 j 05:45	16°♏17'06	18.08637 AU	
	-451 Jun 16 j 01:48	15°℞♏		
direct	-451 Jul 29 j 19:08	14°♏14'56		
	-451 Sep 09 j 21:45	15°♏		
evening set	-451 Oct 30 j 19:08	17°♏30'47		
conjunction	-451 Nov 15 j 10:51	18°♏27'40	0°10'20	
minimum elong	-451 Nov 15 j 10:51	18°♏27'40	0°10'19	
behind sun begin	-451 Nov 15 j 05:37	18°♏26'53		
behind sun end	-451 Nov 15 j 16:04	18°♏28'26		
max. Earth dist.	-451 Nov 15 j 21:45	18°♏29'19	20.12141 AU	
morning rise	-451 Dec 01 j 01:34	19°♏24'25		
retrograde	-450 Mar 03 j 01:47	22°♏38'39		
opposition	-450 May 18 j 11:16	20°♏38'47	0°09'36	
min. Earth dist.	-450 May 18 j 00:07	20°♏39'55	18.15600 AU	
direct	-450 Aug 03 j 14:42	18°♏38'02		
evening set	-450 Nov 04 j 07:51	21°♏52'36		
conjunction	-450 Nov 19 j 22:58	22°♏49'12	0°07'02	
minimum elong	-450 Nov 19 j 22:59	22°♏49'12	0°07'02	
behind sun begin	-450 Nov 19 j 16:55	22°♏48'18		
behind sun end	-450 Nov 20 j 05:03	22°♏50'06		
max. Earth dist.	-450 Nov 20 j 10:43	22°♏50'58	20.19088 AU	
morning rise	-450 Dec 05 j 13:44	23°♏45'44		
retrograde	-449 Mar 07 j 16:33	26°♏59'25		
opposition	-449 May 23 j 06:45	24°♏59'40	0°05'54	
min. Earth dist.	-449 May 22 j 18:02	25°♏00'57	18.22524 AU	
direct	-449 Aug 08 j 08:02	22°♏59'19		
evening set	-449 Nov 08 j 19:45	26°♏12'38		
conjunction	-449 Nov 24 j 10:42	27°♏08'58	0°03'43	
minimum elong	-449 Nov 24 j 10:42	27°♏08'58	0°03'43	
behind sun begin	-449 Nov 24 j 04:14	27°♏08'01		
behind sun end	-449 Nov 24 j 17:11	27°♏09'55		
max. Earth dist.	-449 Nov 25 j 01:00	27°♏11'07	20.25953 AU	
morning rise	-449 Dec 10 j 01:15	28°♏05'16		
	-448 Jan 15 j 05:12	0°♐		
retrograde	-448 Mar 11 j 07:03	1°♐18'22		
	-448 May 09 j 18:44	30°℞♏		
min. Earth dist.	-448 May 26 j 10:51	29°♏20'12	18.29316 AU	
opposition	-448 May 27 j 01:17	29°♏18'44	0°02'12	
direct	-448 Aug 12 j 02:01	27°♏18'47		
	-448 Nov 03 j 09:26	0°♐		
evening set	-448 Nov 12 j 07:00	0°♐30'51		
conjunction	-448 Nov 27 j 21:32	1°♐26'55	0°00'20	
minimum elong	-448 Nov 27 j 21:33	1°♐26'55	0°00'19	
behind sun begin	-448 Nov 27 j 15:03	1°♐25'58		
behind sun end	-448 Nov 28 j 04:03	1°♐27'52		
max. Earth dist.	-448 Nov 28 j 12:20	1°♐29'08	20.32658 AU	
morning rise	-448 Dec 13 j 12:16	2°♐23'00		
desc. node	-447 Jan 02 j 06:58	3°♐29'35		
retrograde	-447 Mar 15 j 20:28	5°♐35'32		
opposition	-447 May 31 j 19:13	3°♐35'59	-0°01'29	
min. Earth dist.	-447 May 31 j 03:47	3°♐37'33	18.35935 AU	
direct	-447 Aug 16 j 17:26	1°♐36'22		
evening set	-447 Nov 16 j 17:15	4°♐47'12		
conjunction	-447 Dec 02 j 07:45	5°♐43'01	-0°03'04	
minimum elong	-447 Dec 02 j 07:45	5°♐43'01	0°03'03	
behind sun begin	-447 Dec 02 j 01:14	5°♐42'04		
behind sun end	-447 Dec 02 j 14:15	5°♐43'58		
max. Earth dist.	-447 Dec 03 j 00:45	5°♐45'34	20.39166 AU	
morning rise	-447 Dec 17 j 22:24	6°♐38'53		
retrograde	-446 Mar 20 j 09:49	9°♐50'50		
opposition	-446 Jun 05 j 12:20	7°♐51'21	-0°05'08	
min. Earth dist.	-446 Jun 04 j 19:03	7°♐53'06	18.42327 AU	
direct	-446 Aug 21 j 09:43	5°♐52'03		
evening set	-446 Nov 21 j 02:55	9°♐01'38		

Attention, astronomical year style is used: The year -446 in astronomical counting style is the year 447 BCE in historical counting style.

conjunction	-446 Dec 06 j 17:09	9°♐57'13	-0°06'19
minimum elong	-446 Dec 06 j 17:09	9°♐57'13	0°06'20
behind sun begin	-446 Dec 06 j 10:58	9°♐56'19	
behind sun end	-446 Dec 06 j 23:20	9°♐58'07	
max. Earth dist.	-446 Dec 07 j 10:42	9°♐59'50	20.45450 AU
morning rise	-446 Dec 22 j 08:07	10°♐52'54	
retrograde	-445 Mar 24 j 22:05	14°♐04'17	
min. Earth dist.	-445 Jun 09 j 10:42	12°♐06'38	18.48517 AU
opposition	-445 Jun 10 j 04:42	12°♐04'49	-0°08'44
direct	-445 Aug 25 j 23:39	10°♐05'46	
evening set	-445 Nov 25 j 11:32	13°♐14'09	
conjunction	-445 Dec 11 j 01:55	14°♐09'31	-0°09'31
minimum elong	-445 Dec 11 j 01:54	14°♐09'31	0°09'31
behind sun begin	-445 Dec 10 j 20:26	14°♐08'44	
behind sun end	-445 Dec 11 j 07:22	14°♐10'19	
max. Earth dist.	-445 Dec 11 j 21:34	14°♐12'27	20.51532 AU
morning rise	-445 Dec 26 j 16:59	15°♐05'01	
retrograde	-444 Mar 28 j 10:21	18°♐15'50	
opposition	-444 Jun 13 j 20:05	16°♐16'22	-0°12'15
min. Earth dist.	-444 Jun 13 j 00:08	16°♐18'23	18.54494 AU
direct	-444 Aug 29 j 14:08	14°♐17'36	
evening set	-444 Nov 28 j 19:42	17°♐24'49	
conjunction	-444 Dec 14 j 09:55	18°♐19'58	-0°12'38
minimum elong	-444 Dec 14 j 09:55	18°♐19'58	0°12'39
behind sun begin	-444 Dec 14 j 05:40	18°♐19'21	
behind sun end	-444 Dec 14 j 14:10	18°♐20'35	
max. Earth dist.	-444 Dec 15 j 06:13	18°♐22'59	20.57411 AU
morning rise	-444 Dec 30 j 01:24	19°♐15'18	
retrograde	-443 Apr 01 j 21:11	22°♐25'35	
opposition	-443 Jun 18 j 10:44	20°♐26'07	-0°15'40
min. Earth dist.	-443 Jun 17 j 14:13	20°♐28'11	18.60302 AU
direct	-443 Sep 03 j 02:13	18°♐27'36	
evening set	-443 Dec 03 j 03:02	21°♐33'44	
conjunction	-443 Dec 18 j 17:28	22°♐28'41	-0°15'40
minimum elong	-443 Dec 18 j 17:28	22°♐28'41	0°15'41
behind sun begin	-443 Dec 18 j 15:41	22°♐28'26	
behind sun end	-443 Dec 18 j 19:15	22°♐28'57	
max. Earth dist.	-443 Dec 19 j 15:48	22°♐31'59	20.63134 AU
morning rise	-442 Jan 03 j 09:09	23°♐23'51	
retrograde	-442 Apr 06 j 08:47	26°♐33'38	
min. Earth dist.	-442 Jun 22 j 01:57	24°♐36'29	18.65945 AU
opposition	-442 Jun 23 j 00:36	24°♐34'13	-0°18'59
direct	-442 Sep 07 j 15:01	22°♐35'58	
evening set	-442 Dec 07 j 09:49	25°♐41'03	
conjunction	-442 Dec 23 j 00:17	26°♐35'50	-0°18'37
minimum elong	-442 Dec 23 j 00:17	26°♐35'50	0°18'37
max. Earth dist.	-442 Dec 23 j 23:20	26°♐39'14	20.68690 AU
morning rise	-441 Jan 07 j 16:31	27°♐30'52	
	-441 Mar 01 j 07:56	0°♑	
retrograde	-441 Apr 10 j 18:39	0°♑40'13	
	-441 May 22 j 14:49	30°℞♐	
opposition	-441 Jun 27 j 13:56	28°♐40'49	-0°22'10
min. Earth dist.	-441 Jun 26 j 14:58	28°♐43'08	18.71427 AU
direct	-441 Sep 12 j 01:08	26°♐42'51	
evening set	-441 Dec 11 j 16:05	29°♐46'59	
	-441 Dec 15 j 10:31	0°♑	
conjunction	-441 Dec 27 j 06:55	0°♑41'36	-0°21'26
minimum elong	-441 Dec 27 j 06:55	0°♑41'36	0°21'27
max. Earth dist.	-441 Dec 28 j 07:42	0°♑45'15	20.74074 AU
morning rise	-440 Jan 11 j 23:30	1°♑36'30	
retrograde	-440 Apr 14 j 05:59	4°♑45'26	
min. Earth dist.	-440 Jun 30 j 01:22	2°♑48'37	18.76704 AU
opposition	-440 Jul 01 j 02:12	2°♑46'07	-0°25'14
direct	-440 Sep 15 j 12:17	0°♑48'27	
evening set	-440 Dec 14 j 22:02	3°♑51'41	
conjunction	-440 Dec 30 j 13:01	4°♑46'10	-0°24'08
minimum elong	-440 Dec 30 j 13:01	4°♑46'10	0°24'08
max. Earth dist.	-440 Dec 31 j 14:15	4°♑49'51	20.79230 AU
morning rise	-439 Jan 15 j 06:14	5°♑40'57	
retrograde	-439 Apr 18 j 14:57	8°♑49'32	
opposition	-439 Jul 05 j 14:12	6°♑50'18	-0°28'09
min. Earth dist.	-439 Jul 04 j 13:29	6°♑52'47	18.81744 AU
direct	-439 Sep 19 j 20:29	4°♑52'55	
evening set	-439 Dec 19 j 03:21	7°♑55'19	
conjunction	-438 Jan 03 j 18:48	8°♑49'41	-0°26'43
minimum elong	-438 Jan 03 j 18:48	8°♑49'41	0°26'44
max. Earth dist.	-438 Jan 04 j 21:28	8°♑53'34	20.84130 AU
morning rise	-438 Jan 19 j 12:29	9°♑44'22	
retrograde	-438 Apr 23 j 02:03	12°♑52'38	
min. Earth dist.	-438 Jul 08 j 23:09	10°♑56'08	18.86487 AU
opposition	-438 Jul 10 j 01:29	10°♑53'30	-0°30'55
direct	-438 Sep 24 j 06:40	8°♑56'24	
evening set	-438 Dec 23 j 08:39	11°♑58'03	
conjunction	-437 Jan 08 j 00:23	12°♑52'18	-0°29'09
minimum elong	-437 Jan 08 j 00:23	12°♑52'18	0°29'09
max. Earth dist.	-437 Jan 09 j 03:13	12°♑56'12	20.88700 AU
morning rise	-437 Jan 23 j 18:47	13°♑46'55	
retrograde	-437 Apr 27 j 10:42	16°♑54'54	
min. Earth dist.	-437 Jul 13 j 10:36	14°♑58'25	18.90889 AU
opposition	-437 Jul 14 j 12:18	14°♑55'51	-0°33'31
direct	-437 Sep 28 j 13:19	12°♑59'01	
evening set	-437 Dec 27 j 13:35	15°♑59'58	
conjunction	-436 Jan 12 j 05:55	16°♑54'08	-0°31'26
minimum elong	-436 Jan 12 j 05:55	16°♑54'08	0°31'27
max. Earth dist.	-436 Jan 13 j 09:36	16°♑58'09	20.92903 AU
morning rise	-436 Jan 28 j 00:54	17°♑48'41	
retrograde	-436 Apr 30 j 21:01	20°♑56'25	
opposition	-436 Jul 17 j 22:27	18°♑57'27	-0°35'57
min. Earth dist.	-436 Jul 16 j 19:36	19°♑00'08	18.94874 AU
direct	-436 Oct 01 j 22:56	17°♑00'51	
evening set	-436 Dec 30 j 18:29	20°♑01'10	
conjunction	-435 Jan 15 j 11:11	20°♑55'16	-0°33'34
minimum elong	-435 Jan 15 j 11:11	20°♑55'16	0°33'34
max. Earth dist.	-435 Jan 16 j 14:34	20°♑59'14	20.96646 AU
morning rise	-435 Jan 31 j 06:56	21°♑49'46	
retrograde	-435 May 05 j 05:36	24°♑57'18	
min. Earth dist.	-435 Jul 21 j 06:31	23°♑00'56	18.98386 AU
opposition	-435 Jul 22 j 08:17	22°♑58'22	-0°38'12
direct	-435 Oct 06 j 04:48	21°♑01'57	
evening set	-434 Jan 03 j 23:10	24°♑01'43	
conjunction	-434 Jan 19 j 16:33	24°♑55'45	-0°35'31
minimum elong	-434 Jan 19 j 16:33	24°♑55'45	0°35'31
max. Earth dist.	-434 Jan 20 j 20:17	24°♑59'45	20.99906 AU
morning rise	-434 Feb 04 j 12:57	25°♑50'14	
retrograde	-434 May 09 j 14:59	28°♑57'33	
opposition	-434 Jul 26 j 17:34	26°♑58'38	-0°40'16
min. Earth dist.	-434 Jul 25 j 14:56	27°♑01'18	19.01378 AU
direct	-434 Oct 10 j 13:35	25°♑02'22	
evening set	-433 Jan 08 j 03:46	28°♑01'35	
conjunction	-433 Jan 23 j 21:42	28°♑55'36	-0°37'18
minimum elong	-433 Jan 23 j 21:42	28°♑55'36	0°37'18
max. Earth dist.	-433 Jan 25 j 00:47	28°♑59'29	21.02620 AU

Attention, astronomical year style is used: The year -433 in astronomical counting style is the year 434 BCE in historical counting style.

morning rise	-433 Feb 08 j 19:01	29°♅50'03	
	-433 Feb 11 j 18:13	0°♒	
retrograde	-433 May 13 j 23:09	2°♒57'12	
min. Earth dist.	-433 Jul 30 j 01:17	1°♒00'47	19.03825 AU
opposition	-433 Jul 31 j 02:33	0°♒58'15	-0°42'07
	-433 Aug 25 j 13:06	30°℞♅	
direct	-433 Oct 14 j 19:18	29°♅02'04	
	-433 Dec 02 j 01:03	0°♒	
evening set	-432 Jan 12 j 08:13	2°♒00'49	
conjunction	-432 Jan 28 j 02:58	2°♒54'49	-0°38'53
minimum elong	-432 Jan 28 j 02:58	2°♒54'49	0°38'53
max. Earth dist.	-432 Jan 29 j 06:05	2°♒58'42	21.04801 AU
morning rise	-432 Feb 13 j 01:01	3°♒49'16	
retrograde	-432 May 17 j 07:38	6°♒56'14	
min. Earth dist.	-432 Aug 02 j 08:48	4°♒59'49	19.05735 AU
opposition	-432 Aug 03 j 10:42	4°♒57'14	-0°43'46
direct	-432 Oct 18 j 02:42	3°♒01'05	
evening set	-431 Jan 15 j 12:37	5°♒59'26	
conjunction	-431 Jan 31 j 07:59	6°♒53'24	-0°40'17
minimum elong	-431 Jan 31 j 07:59	6°♒53'24	0°40'18
max. Earth dist.	-431 Feb 01 j 10:26	6°♒57'12	21.06455 AU
morning rise	-431 Feb 16 j 06:59	7°♒47'53	
retrograde	-431 May 21 j 14:41	10°♒54'43	
opposition	-431 Aug 07 j 18:43	8°♒55'37	-0°45'12
min. Earth dist.	-431 Aug 06 j 18:14	8°♒58'04	19.07156 AU
direct	-431 Oct 22 j 08:04	6°♒59'29	
evening set	-430 Jan 19 j 16:43	9°♒57'28	
conjunction	-430 Feb 04 j 12:57	10°♒51'27	-0°41'29
minimum elong	-430 Feb 04 j 12:57	10°♒51'27	0°41'29
max. Earth dist.	-430 Feb 05 j 15:35	10°♒55'16	21.07654 AU
morning rise	-430 Feb 20 j 12:46	11°♒45'57	
retrograde	-430 May 25 j 23:05	14°♒52'42	
min. Earth dist.	-430 Aug 11 j 01:01	12°♒56'01	19.08136 AU
opposition	-430 Aug 12 j 02:11	12°♒53'30	-0°46'25
direct	-430 Oct 26 j 14:29	10°♒57'20	
evening set	-429 Jan 23 j 21:06	13°♒55'03	
conjunction	-429 Feb 08 j 18:03	14°♒49'05	-0°42'29
minimum elong	-429 Feb 08 j 18:03	14°♒49'05	0°42'29
max. Earth dist.	-429 Feb 09 j 20:02	14°♒52'47	21.08421 AU
	-429 Feb 11 j 22:28	15°♒	
morning rise	-429 Feb 24 j 18:51	15°♒43'38	
retrograde	-429 May 30 j 05:30	18°♒50'18	
min. Earth dist.	-429 Aug 15 j 09:39	16°♒53'23	19.08713 AU
opposition	-429 Aug 16 j 09:18	16°♒51'01	-0°47'24
	-429 Oct 16 j 12:05	15°℞♒	
direct	-429 Oct 30 j 18:51	14°♒54'50	
	-429 Nov 13 j 22:07	15°♒	
evening set	-428 Jan 28 j 01:28	17°♒52'22	
conjunction	-428 Feb 12 j 23:23	18°♒46'26	-0°43'17
minimum elong	-428 Feb 12 j 23:22	18°♒46'26	0°43'17
max. Earth dist.	-428 Feb 14 j 01:18	18°♒50'08	21.08810 AU
morning rise	-428 Feb 29 j 01:02	19°♒41'02	
retrograde	-428 Jun 02 j 14:17	22°♒47'42	
opposition	-428 Aug 19 j 16:02	20°♒48'20	-0°48'10
min. Earth dist.	-428 Aug 18 j 15:51	20°♒50'46	19.08908 AU
direct	-428 Nov 03 j 00:37	18°♒52'07	
evening set	-427 Jan 31 j 05:59	21°♒49'33	
conjunction	-427 Feb 16 j 04:38	22°♒43'41	-0°43'52
minimum elong	-427 Feb 16 j 04:38	22°♒43'41	0°43'52
max. Earth dist.	-427 Feb 17 j 05:47	22°♒47'16	21.08811 AU
morning rise	-427 Mar 04 j 07:18	23°♒38'22	
retrograde	-427 Jun 06 j 20:28	26°♒45'05	
opposition	-427 Aug 23 j 22:46	24°♒45'39	-0°48'42
min. Earth dist.	-427 Aug 23 j 00:09	24°♒47'55	19.08727 AU
direct	-427 Nov 07 j 04:12	22°♒49'25	
evening set	-426 Feb 04 j 10:43	25°♒46'48	
conjunction	-426 Feb 20 j 10:25	26°♒41'02	-0°44'15
minimum elong	-426 Feb 20 j 10:25	26°♒41'02	0°44'16
max. Earth dist.	-426 Feb 21 j 11:17	26°♒44'35	21.08456 AU
morning rise	-426 Mar 08 j 13:59	27°♒35'49	
	-426 Apr 29 j 17:37	0°♓	
retrograde	-426 Jun 11 j 05:54	0°♓42'36	
	-426 Jul 24 j 15:05	30°℞♒	
min. Earth dist.	-426 Aug 27 j 06:16	28°♒45'25	19.08179 AU
opposition	-426 Aug 28 j 05:09	28°♒43'07	-0°49'01
direct	-426 Nov 11 j 09:36	26°♒46'51	
evening set	-425 Feb 08 j 15:50	29°♒44'18	
	-425 Feb 13 j 08:06	0°♓	
conjunction	-425 Feb 24 j 16:25	0°♓38'39	-0°44'26
minimum elong	-425 Feb 24 j 16:25	0°♓38'39	0°44'26
max. Earth dist.	-425 Feb 25 j 16:12	0°♓42'02	21.07710 AU
morning rise	-425 Mar 12 j 21:04	1°♓33'32	
retrograde	-425 Jun 15 j 12:38	4°♓40'27	
opposition	-425 Sep 01 j 11:38	2°♓40'56	-0°49'05
min. Earth dist.	-425 Aug 31 j 14:40	2°♓43'03	19.07233 AU
direct	-425 Nov 15 j 12:58	0°♓44'38	
evening set	-424 Feb 12 j 21:19	3°♓42'14	
conjunction	-424 Feb 28 j 22:57	4°♓36'41	-0°44'24
minimum elong	-424 Feb 28 j 22:58	4°♓36'41	0°44'25
max. Earth dist.	-424 Feb 29 j 22:02	4°♓39'58	21.06567 AU
morning rise	-424 Mar 16 j 04:31	5°♓31'42	
retrograde	-424 Jun 18 j 22:30	8°♓38'48	
opposition	-424 Sep 04 j 17:48	6°♓39'15	-0°48'56
min. Earth dist.	-424 Sep 03 j 20:57	6°♓41'22	19.05868 AU
direct	-424 Nov 18 j 18:20	4°♓42'54	
evening set	-423 Feb 16 j 03:21	7°♓40'44	
conjunction	-423 Mar 04 j 05:52	8°♓35'20	-0°44'09
minimum elong	-423 Mar 04 j 05:52	8°♓35'20	0°44'09
max. Earth dist.	-423 Mar 05 j 03:31	8°♓38'25	21.04977 AU
morning rise	-423 Mar 20 j 12:27	9°♓30'30	
retrograde	-423 Jun 23 j 06:06	12°♓37'49	
min. Earth dist.	-423 Sep 08 j 05:39	10°♓40'07	19.04046 AU
opposition	-423 Sep 09 j 00:16	10°♓38'14	-0°48'33
direct	-423 Nov 22 j 21:54	8°♓41'48	
evening set	-422 Feb 20 j 09:42	11°♓39'55	
conjunction	-422 Mar 08 j 13:20	12°♓34'41	-0°43'42
minimum elong	-422 Mar 08 j 13:20	12°♓34'41	0°43'42
max. Earth dist.	-422 Mar 09 j 09:49	12°♓37'36	21.02921 AU
morning rise	-422 Mar 24 j 20:53	13°♓30'00	
retrograde	-422 Jun 27 j 16:28	16°♓37'35	
opposition	-422 Sep 13 j 06:40	14°♓37'57	-0°47'56
min. Earth dist.	-422 Sep 12 j 12:34	14°♓39'47	19.01726 AU
direct	-422 Nov 27 j 03:47	12°♓41'24	
evening set	-421 Feb 24 j 16:54	15°♓39'54	
conjunction	-421 Mar 12 j 21:29	16°♓34'50	-0°43'01
minimum elong	-421 Mar 12 j 21:29	16°♓34'50	0°43'01
max. Earth dist.	-421 Mar 13 j 16:03	16°♓37'29	21.00329 AU
morning rise	-421 Mar 29 j 06:02	17°♓30'20	
retrograde	-421 Jul 02 j 00:45	20°♓38'11	
opposition	-421 Sep 17 j 13:10	18°♓38'28	-0°47'04
min. Earth dist.	-421 Sep 16 j 21:39	18°♓40'03	18.98862 AU
direct	-421 Dec 01 j 07:48	16°♓41'46	

Attention, astronomical year style is used: The year -420 in astronomical counting style is the year 421 BCE in historical counting style.

evening set	-420 Feb 29 j 00:31	19°♓40'41		
conjunction	-420 Mar 16 j 06:13	20°♓35'49	-0°42'08	
minimum elong	-420 Mar 16 j 06:13	20°♓35'49	0°42'07	
max. Earth dist.	-420 Mar 16 j 23:06	20°♓38'13	20.97205 AU	
morning rise	-420 Apr 01 j 15:43	21°♓31'29		
retrograde	-420 Jul 05 j 11:24	24°♓39'38		
opposition	-420 Sep 20 j 19:45	22°♓39'48	-0°45'58	
min. Earth dist.	-420 Sep 20 j 04:57	22°♓41'18	18.95460 AU	
direct	-420 Dec 04 j 14:21	20°♓42'53		
evening set	-419 Mar 04 j 08:35	23°♓42'16		
conjunction	-419 Mar 20 j 15:15	24°♓37'36	-0°41'01	
minimum elong	-419 Mar 20 j 15:15	24°♓37'36	0°41'02	
max. Earth dist.	-419 Mar 21 j 06:12	24°♓39'44	20.93540 AU	
morning rise	-419 Apr 06 j 01:43	25°♓33'29		
retrograde	-419 Jul 09 j 19:59	28°♓41'56		
opposition	-419 Sep 25 j 02:37	26°♓41'57	-0°44'38	
min. Earth dist.	-419 Sep 24 j 14:21	26°♓43'13	18.91542 AU	
direct	-419 Dec 08 j 18:57	24°♓44'48		
evening set	-418 Mar 08 j 17:15	27°♓44'43		
conjunction	-418 Mar 25 j 01:02	28°♓40'16	-0°39'43	
minimum elong	-418 Mar 25 j 01:03	28°♓40'16	0°39'42	
max. Earth dist.	-418 Mar 25 j 14:17	28°♓42'09	20.89405 AU	
morning rise	-418 Apr 10 j 12:28	29°♓36'20		
	-418 Apr 17 j 16:32	0°♈		
retrograde	-418 Jul 14 j 07:14	2°♈45'08		
opposition	-418 Sep 29 j 09:19	0°♈44'59	-0°43'05	
min. Earth dist.	-418 Sep 28 j 21:53	0°♈46'09	18.87182 AU	
	-418 Oct 18 j 02:00	30°℞♓		
direct	-418 Dec 13 j 02:01	28°♓47'31		
	-417 Feb 05 j 02:49	0°♈		
evening set	-417 Mar 13 j 02:37	1°♈48'03		
conjunction	-417 Mar 29 j 11:25	2°♈43'50	-0°38'11	
minimum elong	-417 Mar 29 j 11:25	2°♈43'50	0°38'12	
max. Earth dist.	-417 Mar 29 j 22:47	2°♈45'28	20.84840 AU	
morning rise	-417 Apr 14 j 23:46	3°♈40'08		
retrograde	-417 Jul 18 j 16:29	6°♈49'17		
opposition	-417 Oct 03 j 16:24	4°♈48'57	-0°41'18	
min. Earth dist.	-417 Oct 03 j 07:27	4°♈49'53	18.82427 AU	
direct	-417 Dec 17 j 07:16	2°♈51'11		
evening set	-416 Mar 16 j 12:30	5°♈52'23		
conjunction	-416 Apr 01 j 22:20	6°♈48'25	-0°36'29	
minimum elong	-416 Apr 01 j 22:20	6°♈48'25	0°36'28	
max. Earth dist.	-416 Apr 02 j 07:55	6°♈49'47	20.79925 AU	
morning rise	-416 Apr 18 j 11:33	7°♈44'56		
retrograde	-416 Jul 22 j 04:20	10°♈54'29		
opposition	-416 Oct 06 j 23:30	8°♈53'59	-0°39'18	
min. Earth dist.	-416 Oct 06 j 15:21	8°♈54'49	18.77353 AU	
direct	-416 Dec 20 j 14:39	6°♈55'54		
evening set	-415 Mar 20 j 23:07	9°♈57'50		
conjunction	-415 Apr 06 j 09:55	10°♈54'07	-0°34'34	
minimum elong	-415 Apr 06 j 09:55	10°♈54'07	0°34'34	
max. Earth dist.	-415 Apr 06 j 17:50	10°♈55'16	20.74707 AU	
morning rise	-415 Apr 22 j 23:56	11°♈50'53		
retrograde	-415 Jul 26 j 14:58	15°♈00'51		
opposition	-415 Oct 11 j 07:04	13°♈00'11	-0°37'06	
min. Earth dist.	-415 Oct 11 j 01:14	13°♈00'48	18.72009 AU	
direct	-415 Dec 24 j 20:48	11°♈01'47		
evening set	-414 Mar 25 j 10:21	14°♈04'32		
conjunction	-414 Apr 10 j 22:11	15°♈01'05	-0°32'29	
minimum elong	-414 Apr 10 j 22:11	15°♈01'05	0°32'28	
max. Earth dist.	-414 Apr 11 j 04:11	15°♈01'57	20.69260 AU	
morning rise	-414 Apr 27 j 13:05	15°♈58'06		
retrograde	-414 Jul 31 j 03:41	19°♈08'32		
opposition	-414 Oct 15 j 14:53	17°♈07'42	-0°34'41	
min. Earth dist.	-414 Oct 15 j 09:52	17°♈08'14	18.66450 AU	
direct	-414 Dec 29 j 04:39	15°♈08'58		
evening set	-413 Mar 29 j 22:34	18°♈12'37		
conjunction	-413 Apr 15 j 11:20	19°♈09'27	-0°30'13	
minimum elong	-413 Apr 15 j 11:20	19°♈09'27	0°30'12	
max. Earth dist.	-413 Apr 15 j 15:43	19°♈10'05	20.63597 AU	
morning rise	-413 May 02 j 02:54	20°♈06'43		
retrograde	-413 Aug 04 j 15:40	23°♈17'38		
opposition	-413 Oct 19 j 23:05	21°♈16'41	-0°32'05	
min. Earth dist.	-413 Oct 19 j 20:22	21°♈16'58	18.60696 AU	
direct	-412 Jan 02 j 12:01	19°♈17'38		
evening set	-412 Apr 02 j 11:33	22°♈22'14		
conjunction	-412 Apr 19 j 01:13	23°♈19'21	-0°27'46	
minimum elong	-412 Apr 19 j 01:13	23°♈19'21	0°27'46	
max. Earth dist.	-412 Apr 19 j 03:24	23°♈19'40	20.57776 AU	
morning rise	-412 May 05 j 17:33	24°♈16'53		
retrograde	-412 Aug 08 j 05:27	27°♈28'19		
opposition	-412 Oct 23 j 07:48	25°♈27'16	-0°29'18	
min. Earth dist.	-412 Oct 23 j 05:59	25°♈27'27	18.54794 AU	
direct	-411 Jan 05 j 20:48	23°♈27'54		
evening set	-411 Apr 07 j 01:18	26°♈33'31		
conjunction	-411 Apr 23 j 15:53	27°♈30'56	-0°25'10	
minimum elong	-411 Apr 23 j 15:53	27°♈30'56	0°25'09	
max. Earth dist.	-411 Apr 23 j 16:37	27°♈31'02	20.51793 AU	
morning rise	-411 May 10 j 08:46	28°♈28'44		
	-411 Jun 08 j 07:15	0°♉		
retrograde	-411 Aug 12 j 18:41	1°♉40'44		
	-411 Oct 19 j 14:09	30°℞♈		
opposition	-411 Oct 27 j 17:09	29°♈39'35	-0°26'21	
min. Earth dist.	-411 Oct 27 j 17:36	29°♈39'32	18.48731 AU	
direct	-410 Jan 10 j 05:40	27°♈39'56		
	-410 Mar 28 j 13:51	0°♉		
evening set	-410 Apr 11 j 16:14	0°♉46'36		
conjunction	-410 Apr 28 j 07:36	1°♉44'20	-0°22'25	
minimum elong	-410 Apr 28 j 07:36	1°♉44'20	0°22'25	
max. Earth dist.	-410 Apr 28 j 05:44	1°♉44'04	20.45664 AU	
morning rise	-410 May 15 j 01:10	2°♉42'24		
retrograde	-410 Aug 17 j 09:31	5°♉54'58		
opposition	-410 Nov 01 j 02:49	3°♉53'44	-0°23'13	
min. Earth dist.	-410 Nov 01 j 04:37	3°♉53'33	18.42514 AU	
direct	-409 Jan 14 j 16:08	1°♉53'45		
evening set	-409 Apr 16 j 08:14	5°♉01'34		
conjunction	-409 May 03 j 00:25	5°♉59'36	-0°19'31	
minimum elong	-409 May 03 j 00:25	5°♉59'36	0°19'31	
max. Earth dist.	-409 May 02 j 20:53	5°♉59'06	20.39347 AU	
morning rise	-409 May 19 j 18:21	6°♉57'57		
retrograde	-409 Aug 21 j 23:56	10°♉11'04		
opposition	-409 Nov 05 j 13:20	8°♉09'46	-0°19'56	
min. Earth dist.	-409 Nov 05 j 17:34	8°♉09'19	18.36100 AU	
direct	-408 Jan 19 j 02:29	6°♉09'27		
evening set	-408 Apr 20 j 01:07	9°♉18'26		
conjunction	-408 May 06 j 17:53	10°♉16'46	-0°16'29	
minimum elong	-408 May 06 j 17:53	10°♉16'46	0°16'29	
max. Earth dist.	-408 May 06 j 11:18	10°♉15'49	20.32842 AU	
morning rise	-408 May 23 j 12:21	11°♉15'22		
retrograde	-408 Aug 25 j 15:46	14°♉29'06		
opposition	-408 Nov 09 j 00:26	12°♉27'40	-0°16'31	

Attention, astronomical year style is used: The year -408 in astronomical counting style is the year 409 BCE in historical counting style.

min. Earth dist.	-408 Nov 09 j 06:11	12°♉27'04	18.29499 AU
direct	-407 Jan 22 j 15:14	10°♉26'58	
evening set	-407 Apr 24 j 18:57	13°♉37'09	
conjunction	-407 May 11 j 12:28	14°♉35'48	-0°13'21
minimum elong	-407 May 11 j 12:28	14°♉35'48	0°13'21
behind sun begin	-407 May 11 j 08:46	14°♉35'16	
behind sun end	-407 May 11 j 16:11	14°♉36'20	
max. Earth dist.	-407 May 11 j 04:19	14°♉34'36	20.26137 AU
	-407 May 18 j 08:56	15°♉	
morning rise	-407 May 28 j 07:08	15°♉34'39	
retrograde	-407 Aug 30 j 06:58	18°♉48'56	
opposition	-407 Nov 13 j 12:10	16°♉47'24	-0°12'58
min. Earth dist.	-407 Nov 13 j 20:13	16°♉46'33	18.22707 AU
	-406 Jan 04 j 06:17	15°℞♉	
direct	-406 Jan 27 j 03:10	14°♉46'17	
	-406 Feb 18 j 23:07	15°♉	
evening set	-406 Apr 29 j 13:48	17°♉57'41	
conjunction	-406 May 16 j 07:48	18°♉56'37	-0°10'07
minimum elong	-406 May 16 j 07:48	18°♉56'37	0°10'06
behind sun begin	-406 May 16 j 02:25	18°♉55'51	
behind sun end	-406 May 16 j 13:10	18°♉57'24	
max. Earth dist.	-406 May 15 j 20:22	18°♉54'56	20.19280 AU
morning rise	-406 Jun 02 j 02:55	19°♉55'45	
retrograde	-406 Sep 03 j 23:59	23°♉10'36	
opposition	-406 Nov 18 j 00:33	21°♉08'54	-0°09'20
min. Earth dist.	-406 Nov 18 j 10:17	21°♉07'51	18.15788 AU
direct	-405 Jan 31 j 17:57	19°♉07'20	
evening set	-405 May 04 j 09:28	22°♉19'58	
conjunction	-405 May 21 j 04:05	23°♉19'13	-0°06'48
minimum elong	-405 May 21 j 04:05	23°♉19'13	0°06'48
behind sun begin	-405 May 20 j 21:47	23°♉18'18	
behind sun end	-405 May 21 j 10:23	23°♉20'07	
max. Earth dist.	-405 May 20 j 15:25	23°♉17'21	20.12306 AU
morning rise	-405 Jun 06 j 23:10	24°♉18'35	
retrograde	-405 Sep 08 j 16:05	27°♉33'58	
opposition	-405 Nov 22 j 13:31	25°♉32'08	-0°05'36
min. Earth dist.	-405 Nov 23 j 01:10	25°♉30'53	18.08786 AU
direct	-404 Feb 05 j 07:52	23°♉30'08	
evening set	-404 May 08 j 06:03	26°♉44'00	
max. Earth dist.	-404 May 24 j 09:10	27°♉41'12	20.05309 AU
conjunction	-404 May 25 j 00:56	27°♉43'32	-0°03'26
minimum elong	-404 May 25 j 00:55	27°♉43'32	0°03'25
behind sun begin	-404 May 24 j 18:11	27°♉42'33	
behind sun end	-404 May 25 j 07:39	27°♉44'31	
morning rise	-404 Jun 10 j 20:16	28°♉43'10	
	-404 Jul 04 j 03:11	0°♊	
retrograde	-404 Sep 12 j 09:52	1°♊59'06	
	-404 Nov 25 j 00:10	30°℞♉	
opposition	-404 Nov 26 j 03:10	29°♉57'06	-0°01'50
min. Earth dist.	-404 Nov 26 j 16:26	29°♉55'40	18.01812 AU
direct	-403 Feb 08 j 23:53	27°♉54'38	
	-403 Apr 22 j 04:07	0°♊	
evening set	-403 May 13 j 03:12	1°♊09'46	
asc. node	-403 May 22 j 10:55	1°♊42'45	
conjunction	-403 May 29 j 22:32	2°♊09'35	0°00'05
minimum elong	-403 May 29 j 22:34	2°♊09'35	0°00'05
behind sun begin	-403 May 29 j 16:08	2°♊08'39	
behind sun end	-403 May 30 j 05:00	2°♊10'31	
max. Earth dist.	-403 May 29 j 06:07	2°♊07'08	19.98360 AU
morning rise	-403 Jun 15 j 17:46	3°♊09'26	
retrograde	-403 Sep 17 j 03:31	6°♊25'55	
opposition	-403 Nov 30 j 17:30	4°♊23'47	0°01'59

min. Earth dist.	-403 Dec 01 j 08:12	4°♊22'12	17.94913 AU
direct	-402 Feb 13 j 15:56	2°♊20'52	
evening set	-402 May 18 j 01:31	5°♊37'17	
conjunction	-402 Jun 03 j 20:55	6°♊37'22	0°03'35
minimum elong	-402 Jun 03 j 20:56	6°♊37'22	0°03'35
behind sun begin	-402 Jun 03 j 14:12	6°♊36'23	
behind sun end	-402 Jun 04 j 03:40	6°♊38'21	
max. Earth dist.	-402 Jun 03 j 01:35	6°♊34'28	19.91536 AU
morning rise	-402 Jun 20 j 16:11	7°♊37'27	
retrograde	-402 Sep 21 j 21:56	10°♊54'28	
opposition	-402 Dec 05 j 08:27	8°♊52'12	0°05'49
min. Earth dist.	-402 Dec 06 j 00:46	8°♊50'26	17.88190 AU
direct	-401 Feb 18 j 09:10	6°♊48'50	
evening set	-401 May 23 j 00:27	10°♊06'32	
conjunction	-401 Jun 08 j 20:09	11°♊06'53	0°07'00
minimum elong	-401 Jun 08 j 20:09	11°♊06'53	0°07'01
behind sun begin	-401 Jun 08 j 13:54	11°♊05'58	
behind sun end	-401 Jun 09 j 02:25	11°♊07'49	
max. Earth dist.	-401 Jun 08 j 00:28	11°♊03'56	19.84911 AU
morning rise	-401 Jun 25 j 15:02	12°♊07'11	
retrograde	-401 Sep 26 j 17:27	15°♊24'44	
opposition	-401 Dec 10 j 00:15	13°♊22'22	0°09'37
min. Earth dist.	-401 Dec 10 j 17:25	13°♊20'30	17.81693 AU
direct	-400 Feb 23 j 03:09	11°♊18'37	
evening set	-400 May 27 j 00:09	14°♊37'35	
conjunction	-400 Jun 12 j 19:41	15°♊38'11	0°10'24
minimum elong	-400 Jun 12 j 19:41	15°♊38'11	0°10'24
behind sun begin	-400 Jun 12 j 14:25	15°♊37'24	
behind sun end	-400 Jun 13 j 00:57	15°♊38'57	
max. Earth dist.	-400 Jun 11 j 21:33	15°♊34'50	19.78555 AU
morning rise	-400 Jun 29 j 14:23	16°♊38'41	
retrograde	-400 Sep 30 j 12:55	19°♊56'46	
opposition	-400 Dec 13 j 16:50	17°♊54'20	0°13'24
min. Earth dist.	-400 Dec 14 j 11:28	17°♊52'19	17.75508 AU
direct	-399 Feb 26 j 21:24	15°♊50'12	
evening set	-399 Jun 01 j 00:34	19°♊10'27	
conjunction	-399 Jun 17 j 20:12	20°♊11'17	0°13'45
minimum elong	-399 Jun 17 j 20:13	20°♊11'17	0°13'46
behind sun begin	-399 Jun 17 j 16:48	20°♊10'47	
behind sun end	-399 Jun 17 j 23:37	20°♊11'48	
max. Earth dist.	-399 Jun 16 j 21:59	20°♊07'55	19.72533 AU
morning rise	-399 Jul 04 j 14:24	21°♊11'58	
retrograde	-399 Oct 05 j 10:27	24°♊30'35	
opposition	-399 Dec 18 j 10:01	22°♊28'07	0°17'07
min. Earth dist.	-399 Dec 19 j 05:06	22°♊26'03	17.69662 AU