

Planetary Phenomena of Jupiter from -900 through -400 (UT), Astrodienst AG 14-Nov-2015 16:11, page 1

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

retrograde	-900 Feb 06 j 00:29	12°♄44'59		evening set	-894 Apr 03 j 23:42	14°♃40'04	
opposition	-900 Apr 06 j 20:03	7°♄53'24	1°36'49				
min. Earth dist.	-900 Apr 08 j 06:40	7°♄42'22	4.36119 AU	conjunction	-894 Apr 17 j 16:02	17°♃51'32	0°-58'-45
direct	-900 Jun 08 j 09:38	2°♄53'24		minimum elong	-894 Apr 17 j 16:05	17°♃51'34	0°58'46
evening set	-900 Oct 12 j 09:09	20°♄50'53		max. Earth dist.	-894 Apr 19 j 19:26	18°♃21'32	6.06544 AU
max. Earth dist.	-900 Oct 23 j 01:14	23°♄14'42	6.30930 AU	morning rise	-894 May 01 j 10:31	21°♃03'50	
					-894 Jun 11 j 00:17	0°♃	
conjunction	-900 Oct 24 j 23:46	23°♄40'56	0°54'44	retrograde	-894 Sep 07 j 12:14	10°♃35'32	
minimum elong	-900 Oct 24 j 23:49	23°♄40'58	0°54'43	min. Earth dist.	-894 Nov 04 j 18:57	5°♃41'14	4.12366 AU
morning rise	-900 Nov 06 j 13:00	26°♄30'34		opposition	-894 Nov 06 j 01:23	5°♃30'51	-1°-3'-33
	-900 Nov 22 j 07:38	0°♄		direct	-893 Jan 03 j 19:17	0°♃31'12	
retrograde	-899 Mar 10 j 03:06	14°♄22'05			-893 Apr 20 j 20:10	15°♃	
opposition	-899 May 10 j 03:00	9°♄29'35	0°57'16	evening set	-893 May 10 j 10:11	19°♃20'37	
min. Earth dist.	-899 May 11 j 09:30	9°♄19'52	4.24940 AU				
direct	-899 Jul 10 j 18:53	4°♄32'21		conjunction	-893 May 24 j 04:45	22°♃27'40	0°-23'-38
	-899 Oct 07 j 22:25	15°♄		minimum elong	-893 May 24 j 04:47	22°♃27'41	0°23'39
evening set	-899 Nov 13 j 03:00	22°♄56'04		max. Earth dist.	-893 May 25 j 20:27	22°♃50'10	6.18760 AU
max. Earth dist.	-899 Nov 24 j 07:41	25°♄31'23	6.18498 AU	morning rise	-893 Jun 06 j 23:16	25°♃34'26	
					-893 Jun 27 j 00:49	0°♄	
conjunction	-899 Nov 25 j 18:32	25°♄51'37	0°19'34	retrograde	-893 Oct 10 j 12:48	14°♄01'17	
minimum elong	-899 Nov 25 j 18:34	25°♄51'38	0°19'33	min. Earth dist.	-893 Dec 08 j 08:19	9°♄05'27	4.25132 AU
morning rise	-899 Dec 08 j 10:25	28°♄47'36		opposition	-893 Dec 09 j 02:08	8°♄59'26	0°-4'-13
	-899 Dec 13 j 16:27	0°♄		asc. node	-892 Jan 05 j 11:56	5°♄38'10	
retrograde	-898 Apr 14 j 11:06	17°♄39'05		direct	-892 Feb 07 j 02:52	3°♄57'20	
desc. node	-898 May 27 j 01:28	14°♄59'31		evening set	-892 Jun 13 j 05:41	22°♄15'04	
opposition	-898 Jun 14 j 07:01	12°♄44'05	0°-2'-57				
min. Earth dist.	-898 Jun 15 j 00:39	12°♄38'24	4.12058 AU	conjunction	-892 Jun 26 j 20:30	25°♄15'16	0°17'54
direct	-898 Aug 13 j 16:23	7°♄49'23		minimum elong	-892 Jun 26 j 20:28	25°♄15'15	0°17'55
evening set	-898 Dec 16 j 11:46	26°♄44'52		max. Earth dist.	-892 Jun 27 j 11:56	25°♄23'47	6.31114 AU
				morning rise	-892 Jul 10 j 09:25	28°♄14'20	
conjunction	-898 Dec 29 j 07:27	29°♄47'22	0°-23'-30		-892 Jul 18 j 11:20	0°♄	
minimum elong	-898 Dec 29 j 07:25	29°♄47'21	0°23'33	retrograde	-892 Nov 09 j 18:57	15°♄45'40	
max. Earth dist.	-898 Dec 28 j 20:27	29°♄40'50	6.06350 AU	opposition	-891 Jan 08 j 15:13	10°♄47'41	0°53'12
	-898 Dec 30 j 04:43	0°♄		min. Earth dist.	-891 Jan 08 j 13:22	10°♄48'18	4.36094 AU
morning rise	-897 Jan 11 j 04:58	2°♄51'03		direct	-891 Mar 10 j 22:27	5°♄44'24	
retrograde	-897 May 21 j 12:37	22°♄43'25		evening set	-891 Jul 16 j 06:45	23°♄37'58	
opposition	-897 Jul 21 j 01:15	17°♄44'45	-1°-5'-33				
min. Earth dist.	-897 Jul 20 j 21:49	17°♄45'53	4.01757 AU	conjunction	-891 Jul 29 j 13:46	26°♄31'21	0°52'39
direct	-897 Sep 18 j 00:40	12°♄51'29		minimum elong	-891 Jul 29 j 13:43	26°♄31'19	0°52'40
	-896 Jan 11 j 10:29	0°♄		max. Earth dist.	-891 Jul 29 j 02:37	26°♄25'16	6.39848 AU
evening set	-896 Jan 20 j 19:44	2°♄13'44		morning rise	-891 Aug 11 j 17:46	29°♄23'11	
					-891 Aug 14 j 13:58	0°♄	
conjunction	-896 Feb 02 j 21:40	5°♄22'18	0°-59'-28		-891 Nov 10 j 16:52	15°♄	
minimum elong	-896 Feb 02 j 21:38	5°♄22'17	0°59'30	retrograde	-891 Dec 10 j 07:07	16°♄21'45	
max. Earth dist.	-896 Feb 03 j 16:12	5°♄33'27	5.98798 AU		-890 Jan 08 j 20:04	15°♄	
morning rise	-896 Feb 16 j 02:45	8°♄32'36		opposition	-890 Feb 08 j 11:24	11°♄27'19	1°33'30
	-896 Mar 14 j 22:12	15°♄		min. Earth dist.	-890 Feb 09 j 02:53	11°♄22'17	4.42137 AU
retrograde	-896 Jun 27 j 09:02	29°♄01'41		direct	-890 Apr 11 j 18:43	6°♄24'13	
opposition	-896 Aug 26 j 10:31	23°♄59'03	-1°-45'-5		-890 Jul 03 j 00:40	15°♄	
min. Earth dist.	-896 Aug 25 j 12:02	24°♄06'36	3.97888 AU	evening set	-890 Aug 16 j 22:00	24°♄06'04	
direct	-896 Oct 23 j 12:31	19°♄05'03		max. Earth dist.	-890 Aug 28 j 10:46	26°♄36'25	6.42647 AU
	-895 Jan 18 j 21:36	0°♄					
evening set	-895 Feb 25 j 16:42	8°♄36'46		conjunction	-890 Aug 29 j 20:40	26°♄54'54	1°11'58
				minimum elong	-890 Aug 29 j 20:39	26°♄54'53	1°11'58
conjunction	-895 Mar 11 j 02:33	11°♄48'46	-1°-13'-10	morning rise	-890 Sep 11 j 16:24	29°♄42'17	
minimum elong	-895 Mar 11 j 02:33	11°♄48'46	1°13'11		-890 Sep 13 j 01:09	0°♄	
max. Earth dist.	-895 Mar 12 j 23:16	12°♄15'29	5.98865 AU	retrograde	-889 Jan 09 j 21:40	16°♄34'57	
morning rise	-895 Mar 24 j 15:23	15°♄02'19		opposition	-889 Mar 11 j 10:53	11°♄42'42	1°47'57
	-895 Jun 04 j 02:54	0°♄		min. Earth dist.	-889 Mar 12 j 15:27	11°♄33'33	4.41667 AU
retrograde	-895 Aug 03 j 10:32	5°♄23'11		direct	-889 May 13 j 04:11	6°♄40'50	
min. Earth dist.	-895 Sep 30 j 18:42	0°♄29'01	4.01997 AU	evening set	-889 Sep 16 j 19:14	24°♄25'13	
opposition	-895 Oct 02 j 02:33	0°♄18'10	-1°-43'-32	max. Earth dist.	-889 Sep 27 j 15:15	26°♄48'18	6.38854 AU
	-895 Oct 04 j 07:58	30°♄					
direct	-895 Nov 29 j 02:28	25°♄21'40		conjunction	-889 Sep 29 j 12:03	27°♄13'03	1°11'27
	-894 Jan 22 j 12:32	0°♄		minimum elong	-889 Sep 29 j 12:04	27°♄13'04	1°11'27

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Attention, astronomical year style is used: The year -889 in astronomical counting style is the year 890 BCE in historical counting style.

morning rise	-889 Oct 12 j 02:21	29°♄59'51		retrograde	-883 Aug 08 j 08:40	10°♃26'13	
	-889 Oct 12 j 02:37	0°♄		min. Earth dist.	-883 Oct 05 j 15:50	5°♃32'18	4.03003 AU
retrograde	-888 Feb 10 j 12:16	17°♄13'25		opposition	-883 Oct 07 j 00:42	5°♃21'05	-1°-39'-57
opposition	-888 Apr 11 j 09:23	12°♄21'46	1°32'51	direct	-883 Dec 04 j 01:32	0°♃24'08	
min. Earth dist.	-888 Apr 12 j 19:13	12°♄11'01	4.34799 AU	evening set	-882 Apr 09 j 02:08	19°♃39'48	
direct	-888 Jun 12 j 19:58	7°♄22'10					
evening set	-888 Oct 16 j 18:15	25°♄22'29		conjunction	-882 Apr 22 j 19:13	22°♃50'59	0°-54'-49
max. Earth dist.	-888 Oct 27 j 10:49	27°♄47'09	6.29421 AU	minimum elong	-882 Apr 22 j 19:16	22°♃51'01	0°54'49
				max. Earth dist.	-882 Apr 24 j 21:53	23°♃20'28	6.07879 AU
conjunction	-888 Oct 29 j 08:37	28°♄13'05	0°50'39	morning rise	-882 May 06 j 14:00	26°♃02'49	
minimum elong	-888 Oct 29 j 08:40	28°♄13'06	0°50'38		-882 May 23 j 23:45	0°♃	
	-888 Nov 06 j 05:37	0°♄			-882 Aug 26 j 19:19	15°♃	
morning rise	-888 Nov 10 j 22:05	1°♄03'24		retrograde	-882 Sep 12 j 06:20	15°♃26'42	
	-887 Jan 21 j 07:43	15°♄			-882 Sep 28 j 12:45	15°♃	
retrograde	-887 Mar 14 j 23:18	19°♄01'58		opposition	-882 Nov 10 j 17:55	10°♃22'18	0°-55'-56
	-887 May 08 j 06:02	15°♄		min. Earth dist.	-882 Nov 09 j 13:37	10°♃31'56	4.13859 AU
opposition	-887 May 14 j 22:17	14°♄09'09	0°49'44	direct	-881 Jan 08 j 16:08	5°♃22'15	
min. Earth dist.	-887 May 16 j 04:01	13°♄59'39	4.23309 AU		-881 Apr 02 j 13:28	15°♃	
direct	-887 Jul 15 j 11:32	9°♄12'13		evening set	-881 May 15 j 08:39	24°♃08'03	
	-887 Sep 17 j 08:14	15°♄					
evening set	-887 Nov 17 j 16:00	27°♄39'28		conjunction	-881 May 29 j 03:09	27°♃14'24	0°-17'-53
	-887 Nov 27 j 18:22	0°♄		minimum elong	-881 May 29 j 03:10	27°♃14'25	0°17'53
max. Earth dist.	-887 Nov 29 j 00:15	0°♄17'23	6.16887 AU	max. Earth dist.	-881 May 30 j 16:32	27°♃35'31	6.20295 AU
					-881 Jun 10 j 09:01	0°♃	
conjunction	-887 Nov 30 j 08:01	0°♄35'52	0°13'44	morning rise	-881 Jun 11 j 21:17	0°♃20'20	
minimum elong	-887 Nov 30 j 08:02	0°♄35'53	0°13'44	retrograde	-881 Oct 14 j 22:57	18°♃39'33	
behind sun begin	-887 Nov 30 j 03:35	0°♄33'18		asc. node	-881 Nov 15 j 09:39	17°♃03'58	
behind sun end	-887 Nov 30 j 12:28	0°♄38'27		opposition	-881 Dec 13 j 13:38	13°♃38'13	0°04'21
morning rise	-887 Dec 13 j 00:25	3°♄32'46		min. Earth dist.	-881 Dec 12 j 20:56	13°♃43'50	4.26578 AU
desc. node	-886 Apr 06 j 03:22	22°♄15'26		direct	-880 Feb 11 j 17:16	8°♃35'55	
retrograde	-886 Apr 19 j 10:57	22°♄32'08		evening set	-880 Jun 17 j 23:14	26°♃50'41	
opposition	-886 Jun 19 j 07:22	17°♄36'40	0°-12'-4				
min. Earth dist.	-886 Jun 19 j 21:57	17°♄31'57	4.10589 AU	conjunction	-880 Jul 01 j 13:07	29°♃50'00	0°23'26
direct	-886 Aug 18 j 11:29	12°♄42'15		minimum elong	-880 Jul 01 j 13:05	29°♃49'59	0°23'27
	-886 Dec 14 j 02:29	0°♄		max. Earth dist.	-880 Jul 02 j 00:35	29°♃56'19	6.32377 AU
evening set	-886 Dec 21 j 06:34	1°♄41'12			-880 Jul 02 j 07:16	0°♃	
				morning rise	-880 Jul 15 j 00:58	2°♃48'06	
conjunction	-885 Jan 03 j 02:51	4°♄44'29	0°-29'-18	retrograde	-880 Nov 14 j 04:00	20°♃14'12	
minimum elong	-885 Jan 03 j 02:49	4°♄44'28	0°29'19	opposition	-879 Jan 13 j 00:03	15°♃16'49	1°00'11
max. Earth dist.	-885 Jan 02 j 19:07	4°♄39'54	6.05138 AU	min. Earth dist.	-879 Jan 13 j 01:03	15°♃16'30	4.37105 AU
morning rise	-885 Jan 16 j 01:19	7°♄49'06		direct	-879 Mar 15 j 11:29	10°♃13'35	
retrograde	-885 May 26 j 17:38	27°♄47'47		evening set	-879 Jul 20 j 19:36	28°♃05'18	
opposition	-885 Jul 26 j 04:49	22°♄48'30	-1°-12'-56		-879 Jul 29 j 15:04	0°♃	
min. Earth dist.	-885 Jul 25 j 22:46	22°♄50'30	4.00917 AU	max. Earth dist.	-879 Aug 02 j 11:17	0°♃50'13	6.40541 AU
direct	-885 Sep 23 j 01:19	17°♄55'12					
	-885 Dec 25 j 03:11	0°♄		conjunction	-879 Aug 03 j 01:28	0°♃57'56	0°56'27
evening set	-884 Jan 25 j 19:47	7°♄19'28		minimum elong	-879 Aug 03 j 01:26	0°♃57'55	0°56'28
				morning rise	-879 Aug 16 j 04:16	3°♃49'01	
conjunction	-884 Feb 07 j 22:52	10°♄28'41	-1°-2'-56		-879 Oct 12 j 00:48	15°♃	
minimum elong	-884 Feb 07 j 22:49	10°♄28'39	1°02'58	retrograde	-879 Dec 14 j 13:56	20°♃45'20	
max. Earth dist.	-884 Feb 08 j 22:25	10°♄42'51	5.98407 AU	opposition	-878 Feb 12 j 19:45	15°♃51'18	1°37'13
morning rise	-884 Feb 21 j 04:54	13°♄39'34		min. Earth dist.	-878 Feb 13 j 12:19	15°♃45'55	4.42524 AU
	-884 Feb 26 j 20:10	15°♄			-878 Feb 19 j 10:45	15°♃	
	-884 May 10 j 21:15	0°♄		direct	-878 Apr 16 j 04:25	10°♃48'23	
retrograde	-884 Jul 02 j 14:00	4°♄10'06			-878 Jun 10 j 11:47	15°♃	
	-884 Aug 24 j 23:13	30°♄		evening set	-878 Aug 21 j 07:12	28°♃29'28	
opposition	-884 Aug 31 j 13:21	29°♄07'03	-1°-47'-28		-878 Aug 28 j 06:04	0°♄	
min. Earth dist.	-884 Aug 30 j 13:32	29°♄15'04	3.98012 AU	max. Earth dist.	-878 Sep 01 j 18:35	0°♄59'09	6.42716 AU
direct	-884 Oct 28 j 13:35	24°♄12'48					
	-884 Dec 28 j 13:33	0°♄		conjunction	-878 Sep 03 j 04:53	1°♄17'51	1°13'08
evening set	-883 Mar 02 j 20:01	13°♄43'58		minimum elong	-878 Sep 03 j 04:52	1°♄17'51	1°13'08
				morning rise	-878 Sep 15 j 23:31	4°♄04'49	
conjunction	-883 Mar 16 j 06:44	16°♄56'08	-1°-12'-47	retrograde	-877 Jan 14 j 06:07	20°♄58'03	
minimum elong	-883 Mar 16 j 06:45	16°♄56'08	1°12'48	opposition	-877 Mar 15 j 20:54	16°♄06'02	1°47'35
max. Earth dist.	-883 Mar 18 j 03:56	17°♄23'05	5.99461 AU	min. Earth dist.	-877 Mar 17 j 02:14	15°♄56'40	4.41427 AU
morning rise	-883 Mar 29 j 20:43	20°♄09'50		direct	-877 May 17 j 14:36	11°♄04'33	
	-883 May 12 j 20:09	0°♄		evening set	-877 Sep 21 j 02:33	28°♄49'00	

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Attention, astronomical year style is used: The year -877 in astronomical counting style is the year 878 BCE in historical counting style.

	-877 Sep 26 j 11:36	0°♁		conjunction	-871 Mar 21 j 08:27	21°♁57'13	-1°-11'-53
max. Earth dist.	-877 Oct 01 j 20:19	1°♁11'09	6.38315 AU	minimum elong	-871 Mar 21 j 08:29	21°♁57'14	1°11'54
				max. Earth dist.	-871 Mar 23 j 07:37	22°♁25'17	5.99788 AU
conjunction	-877 Oct 03 j 18:36	1°♁36'46	1°09'43	morning rise	-871 Apr 03 j 23:17	25°♁11'10	
minimum elong	-877 Oct 03 j 18:37	1°♁36'47	1°09'42		-871 Apr 24 j 18:13	0°♁	
morning rise	-877 Oct 16 j 08:36	4°♁23'39		retrograde	-871 Aug 13 j 07:07	15°♁24'21	
retrograde	-876 Feb 15 j 00:37	21°♁40'28		opposition	-871 Oct 11 j 20:42	10°♁19'08	-1°-35'-46
opposition	-876 Apr 15 j 22:26	16°♁48'44	1°28'23	min. Earth dist.	-871 Oct 10 j 12:43	10°♁30'03	4.03697 AU
min. Earth dist.	-876 Apr 17 j 08:15	16°♁37'59	4.33984 AU	direct	-871 Dec 08 j 23:41	5°♁21'45	
direct	-876 Jun 17 j 07:41	11°♁49'29		evening set	-870 Apr 14 j 02:51	24°♁35'54	
evening set	-876 Oct 21 j 01:46	29°♁50'58					
	-876 Oct 21 j 17:49	0°♁		conjunction	-870 Apr 27 j 20:36	27°♁46'56	0°-50'-33
max. Earth dist.	-876 Oct 31 j 20:40	2°♁17'16	6.28408 AU	minimum elong	-870 Apr 27 j 20:40	27°♁46'58	0°50'34
				max. Earth dist.	-870 Apr 29 j 23:17	28°♁16'19	6.08894 AU
conjunction	-876 Nov 02 j 16:12	2°♁41'59	0°46'22		-870 May 07 j 10:21	0°♁	
minimum elong	-876 Nov 02 j 16:15	2°♁42'00	0°46'22	morning rise	-870 May 11 j 15:49	0°♁58'29	
morning rise	-876 Nov 15 j 05:36	5°♁32'44			-870 Jul 19 j 08:21	15°♁	
	-876 Dec 29 j 19:52	15°♁		retrograde	-870 Sep 16 j 21:22	20°♁15'38	
retrograde	-875 Mar 19 j 14:47	23°♁36'48		min. Earth dist.	-870 Nov 14 j 04:55	15°♁21'07	4.15093 AU
opposition	-875 May 19 j 15:10	18°♁43'44	0°42'04	opposition	-870 Nov 15 j 09:11	15°♁11'30	0°-48'-5
min. Earth dist.	-875 May 20 j 19:20	18°♁34'44	4.22148 AU		-870 Nov 16 j 18:58	15°♁	
	-875 Jun 21 j 19:30	15°♁		direct	-869 Jan 13 j 09:11	10°♁11'05	
direct	-875 Jul 20 j 00:47	13°♁47'12			-869 Mar 11 j 07:04	15°♁	
	-875 Aug 17 j 02:58	15°♁		evening set	-869 May 20 j 06:31	28°♁54'04	
	-875 Nov 12 j 04:08	0°♁			-869 May 25 j 04:04	0°♁	
evening set	-875 Nov 22 j 02:24	2°♁16'40					
				conjunction	-869 Jun 03 j 00:40	1°♁59'43	0°-12'-5
conjunction	-875 Dec 04 j 18:35	5°♁13'41	0°08'00	minimum elong	-869 Jun 03 j 00:41	1°♁59'44	0°12'06
minimum elong	-875 Dec 04 j 18:36	5°♁13'41	0°07'59	behind sun begin	-869 Jun 02 j 19:10	1°♁56'38	
behind sun begin	-875 Dec 04 j 11:26	5°♁09'32		behind sun end	-869 Jun 03 j 06:13	2°♁02'49	
behind sun end	-875 Dec 05 j 01:46	5°♁17'51		max. Earth dist.	-869 Jun 04 j 10:31	2°♁18'47	6.21663 AU
max. Earth dist.	-875 Dec 03 j 12:10	4°♁55'56	6.15670 AU	morning rise	-869 Jun 16 j 18:23	5°♁04'50	
morning rise	-875 Dec 17 j 11:41	8°♁11'23		asc. node	-869 Sep 25 j 13:09	22°♁21'48	
desc. node	-874 Feb 15 j 23:51	20°♁52'57		retrograde	-869 Oct 19 j 10:11	23°♁16'52	
retrograde	-874 Apr 24 j 08:28	27°♁17'39		min. Earth dist.	-869 Dec 17 j 10:36	18°♁20'41	4.27947 AU
opposition	-874 Jun 24 j 04:22	22°♁21'41	0°-20'-49	opposition	-869 Dec 18 j 00:42	18°♁15'57	0°12'49
min. Earth dist.	-874 Jun 24 j 16:58	22°♁17'36	4.09393 AU	direct	-868 Feb 16 j 09:33	13°♁13'23	
direct	-874 Aug 23 j 05:13	17°♁27'26			-868 Jun 16 j 03:38	0°♁	
	-874 Nov 27 j 16:02	0°♁		evening set	-868 Jun 22 j 15:54	1°♁24'59	
evening set	-874 Dec 25 j 21:39	6°♁29'15					
				conjunction	-868 Jul 06 j 04:58	4°♁23'24	0°28'47
conjunction	-873 Jan 07 j 18:47	9°♁33'20	0°-34'-41	minimum elong	-868 Jul 06 j 04:56	4°♁23'23	0°28'48
minimum elong	-873 Jan 07 j 18:45	9°♁33'19	0°34'42	max. Earth dist.	-868 Jul 06 j 14:33	4°♁28'39	6.33639 AU
max. Earth dist.	-873 Jan 07 j 15:13	9°♁31'13	6.04081 AU	morning rise	-868 Jul 19 j 15:36	7°♁20'28	
morning rise	-873 Jan 20 j 18:02	12°♁38'47		retrograde	-868 Nov 18 j 09:42	24°♁41'06	
	-873 Apr 19 j 11:42	0°♁		opposition	-867 Jan 17 j 08:11	19°♁44'07	1°06'44
retrograde	-873 May 31 j 19:28	2°♁43'20		min. Earth dist.	-867 Jan 17 j 10:11	19°♁43'27	4.38165 AU
	-873 Jul 13 j 07:07	30°♁		direct	-867 Mar 19 j 22:18	14°♁40'48	
opposition	-873 Jul 31 j 04:14	27°♁43'35	-1°-19'-32		-867 Jul 13 j 14:21	0°♁	
min. Earth dist.	-873 Jul 30 j 20:38	27°♁46'06	4.00123 AU	evening set	-867 Jul 25 j 07:02	2°♁30'00	
direct	-873 Sep 27 j 21:04	22°♁50'17					
	-873 Dec 05 j 18:31	0°♁		conjunction	-867 Aug 07 j 11:35	5°♁21'48	0°59'53
evening set	-872 Jan 30 j 16:42	12°♁16'56		minimum elong	-867 Aug 07 j 11:33	5°♁21'46	0°59'53
	-872 Feb 11 j 00:08	15°♁		max. Earth dist.	-867 Aug 06 j 18:09	5°♁12'19	6.41288 AU
				morning rise	-867 Aug 20 j 13:10	8°♁12'03	
conjunction	-872 Feb 12 j 20:37	15°♁26'47	-1°-5'-50		-867 Sep 22 j 05:45	15°♁	
minimum elong	-872 Feb 12 j 20:35	15°♁26'45	1°05'51	retrograde	-867 Dec 18 j 20:34	25°♁05'54	
max. Earth dist.	-872 Feb 13 j 21:29	15°♁41'45	5.97928 AU	opposition	-866 Feb 17 j 03:15	20°♁12'10	1°40'21
morning rise	-872 Feb 26 j 03:55	18°♁38'24		min. Earth dist.	-866 Feb 17 j 22:31	20°♁05'56	4.42889 AU
	-872 Apr 17 j 04:39	0°♁		direct	-866 Apr 20 j 15:26	15°♁09'20	
retrograde	-872 Jul 07 j 13:19	9°♁10'49			-866 Aug 12 j 10:01	0°♁	
min. Earth dist.	-872 Sep 04 j 10:18	4°♁16'07	3.97928 AU	evening set	-866 Aug 25 j 14:51	2°♁49'25	
opposition	-872 Sep 05 j 12:12	4°♁07'22	-1°-49'00	max. Earth dist.	-866 Sep 05 j 22:36	5°♁17'16	6.42626 AU
	-872 Oct 12 j 00:54	30°♁					
direct	-872 Nov 02 j 10:21	29°♁12'49		conjunction	-866 Sep 07 j 11:34	5°♁37'26	1°13'53
	-872 Nov 23 j 21:45	0°♁		minimum elong	-866 Sep 07 j 11:33	5°♁37'25	1°13'53
evening set	-871 Mar 07 j 20:30	18°♁44'40		morning rise	-866 Sep 20 j 05:20	8°♁24'04	

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Attention, astronomical year style is used: The year -865 in astronomical counting style is the year 866 BCE in historical counting style.

retrograde	-865 Jan 18 j 13:16	25°♏18'27		min. Earth dist.	-860 Sep 09 j 13:51	9°♋30'49	3.98162 AU
opposition	-865 Mar 20 j 05:57	20°♏26'30	1°46'38	direct	-860 Nov 07 j 15:05	4°♋26'55	
min. Earth dist.	-865 Mar 21 j 12:05	20°♏16'52	4.40883 AU	evening set	-859 Mar 13 j 02:46	23°♋57'59	
direct	-865 May 21 j 23:10	15°♏25'12					
	-865 Sep 10 j 17:16	0°♌		conjunction	-859 Mar 26 j 15:43	27°♋10'36	-1°-10'-24
evening set	-865 Sep 25 j 09:03	3°♌10'46		minimum elong	-859 Mar 26 j 15:45	27°♋10'38	1°10'24
max. Earth dist.	-865 Oct 06 j 03:01	5°♌33'22	6.37349 AU	max. Earth dist.	-859 Mar 28 j 17:29	27°♋40'08	6.00651 AU
					-859 Apr 07 j 13:48	0°♍	
conjunction	-865 Oct 08 j 00:43	5°♌58'44	1°07'35	morning rise	-859 Apr 09 j 07:30	0°♍24'33	
minimum elong	-865 Oct 08 j 00:45	5°♌58'45	1°07'34	retrograde	-859 Aug 18 j 06:34	20°♍31'28	
morning rise	-865 Oct 20 j 14:14	8°♌45'51		min. Earth dist.	-859 Oct 15 j 10:35	15°♍37'39	4.05121 AU
retrograde	-864 Feb 19 j 13:11	26°♌07'28		opposition	-859 Oct 16 j 19:50	15°♍26'18	-1°-30'-43
opposition	-864 Apr 20 j 11:50	21°♌15'40	1°23'24	direct	-859 Dec 13 j 23:47	10°♍28'32	
min. Earth dist.	-864 Apr 21 j 22:00	21°♌04'49	4.32629 AU	evening set	-858 Apr 19 j 06:48	29°♍38'24	
direct	-864 Jun 21 j 19:23	16°♌16'47			-858 Apr 20 j 20:23	0°♎	
	-864 Oct 05 j 17:27	0°♎					
evening set	-864 Oct 25 j 10:16	4°♎21'21		conjunction	-858 May 03 j 00:49	2°♎48'45	0°-45'-52
max. Earth dist.	-864 Nov 05 j 04:33	6°♎47'56	6.26766 AU	minimum elong	-858 May 03 j 00:52	2°♎48'47	0°45'52
				max. Earth dist.	-858 May 05 j 01:30	3°♎16'52	6.10759 AU
conjunction	-864 Nov 07 j 00:37	7°♎13'01	0°41'44	morning rise	-858 May 16 j 20:13	5°♎59'29	
minimum elong	-864 Nov 07 j 00:39	7°♎13'02	0°41'44		-858 Jun 27 j 06:47	15°♎	
morning rise	-864 Nov 19 j 14:28	10°♎04'37		retrograde	-858 Sep 21 j 12:45	25°♎06'33	
	-864 Dec 11 j 19:28	15°♎		min. Earth dist.	-858 Nov 18 j 22:46	20°♎11'42	4.17186 AU
retrograde	-863 Mar 24 j 10:17	28°♎16'41		opposition	-858 Nov 20 j 01:10	20°♎02'43	0°-39'-52
opposition	-863 May 24 j 10:36	23°♎23'16	0°33'57	direct	-857 Jan 18 j 06:29	15°♎01'56	
min. Earth dist.	-863 May 25 j 13:12	23°♎14'45	4.20309 AU		-857 May 08 j 13:24	0°♏	
direct	-863 Jul 24 j 16:11	18°♎27'03		evening set	-857 May 25 j 03:47	3°♏39'04	
	-863 Oct 26 j 06:34	0°♏					
evening set	-863 Nov 26 j 15:58	7°♏01'12		conjunction	-857 Jun 07 j 21:37	6°♏43'36	0°-6'-17
max. Earth dist.	-863 Dec 08 j 06:17	9°♏43'42	6.13812 AU	minimum elong	-857 Jun 07 j 21:39	6°♏43'36	0°06'17
				behind sun begin	-857 Jun 07 j 13:47	6°♏39'13	
conjunction	-863 Dec 09 j 08:52	9°♏59'16	0°02'00	behind sun end	-857 Jun 08 j 05:30	6°♏47'59	
minimum elong	-863 Dec 09 j 08:52	9°♏59'16	0°01'59	max. Earth dist.	-857 Jun 09 j 05:58	7°♏01'43	6.23824 AU
behind sun begin	-863 Dec 09 j 00:51	9°♏54'36		morning rise	-857 Jun 21 j 14:26	9°♏47'25	
behind sun end	-863 Dec 09 j 16:53	10°♏03'57		asc. node	-857 Aug 06 j 04:10	19°♏18'43	
morning rise	-863 Dec 22 j 02:32	12°♏58'03		retrograde	-857 Oct 23 j 17:35	27°♏49'49	
desc. node	-863 Dec 27 j 06:01	14°♏09'40		opposition	-857 Dec 22 j 10:02	22°♏49'27	0°21'01
	-862 Mar 22 j 04:10	0°♐		min. Earth dist.	-857 Dec 21 j 21:22	22°♏53'41	4.29979 AU
retrograde	-862 Apr 29 j 12:00	2°♐13'31		direct	-856 Feb 20 j 22:52	17°♏46'43	
	-862 Jun 07 j 01:08	30°♑			-856 May 30 j 10:27	0°♑	
opposition	-862 Jun 29 j 05:47	27°♑17'10	0°-29'-49	evening set	-856 Jun 27 j 05:53	5°♑53'11	
min. Earth dist.	-862 Jun 29 j 16:27	27°♑13'43	4.07675 AU				
direct	-862 Aug 28 j 01:53	22°♑23'11		conjunction	-856 Jul 10 j 17:40	8°♑50'22	0°33'49
	-862 Nov 08 j 07:13	0°♑		minimum elong	-856 Jul 10 j 17:38	8°♑50'21	0°33'50
evening set	-862 Dec 30 j 18:34	11°♑29'53		max. Earth dist.	-856 Jul 10 j 21:47	8°♑52'37	6.35369 AU
				morning rise	-856 Jul 24 j 03:10	11°♑46'14	
conjunction	-861 Jan 12 j 16:26	14°♑34'58	0°-40'-5	retrograde	-856 Nov 22 j 14:13	29°♑00'30	
minimum elong	-861 Jan 12 j 16:23	14°♑34'57	0°40'07	opposition	-855 Jan 21 j 13:29	24°♑04'02	1°12'40
max. Earth dist.	-861 Jan 12 j 15:17	14°♑34'17	6.02651 AU	min. Earth dist.	-855 Jan 21 j 19:07	24°♑02'10	4.39479 AU
morning rise	-861 Jan 25 j 16:54	17°♑41'33		direct	-855 Mar 24 j 08:59	19°♑00'38	
	-861 Mar 23 j 01:18	0°♒			-855 Jun 26 j 22:49	0°♒	
retrograde	-861 Jun 06 j 01:09	7°♒53'08		evening set	-855 Jul 29 j 14:49	6°♒46'52	
opposition	-861 Aug 05 j 09:17	2°♒52'51	-1°-25'-55				
min. Earth dist.	-861 Aug 04 j 22:04	2°♒56'35	3.99156 AU	conjunction	-855 Aug 11 j 18:20	9°♒37'54	1°02'52
	-861 Aug 28 j 15:57	30°♒		minimum elong	-855 Aug 11 j 18:18	9°♒37'52	1°02'52
direct	-861 Oct 02 j 21:29	27°♒59'33		max. Earth dist.	-855 Aug 10 j 22:01	9°♒26'51	6.42064 AU
	-861 Nov 06 j 19:01	0°♒		morning rise	-855 Aug 24 j 18:34	12°♒27'20	
	-860 Jan 25 j 08:42	15°♒			-855 Sep 05 j 16:03	15°♒	
evening set	-860 Feb 04 j 19:59	17°♒29'13		retrograde	-855 Dec 22 j 22:04	29°♒19'08	
				opposition	-854 Feb 21 j 07:32	24°♒25'43	1°42'51
conjunction	-860 Feb 18 j 01:10	20°♒39'46	-1°-8'-23	min. Earth dist.	-854 Feb 22 j 04:18	24°♒19'00	4.43101 AU
minimum elong	-860 Feb 18 j 01:08	20°♒39'45	1°08'23	direct	-854 Apr 24 j 20:38	19°♒22'59	
max. Earth dist.	-860 Feb 19 j 07:06	20°♒57'47	5.97524 AU		-854 Jul 26 j 21:06	0°♓	
morning rise	-860 Mar 02 j 09:28	23°♒52'03		evening set	-854 Aug 29 j 19:23	7°♓02'54	
	-860 Mar 28 j 18:05	0°♓		max. Earth dist.	-854 Sep 09 j 23:33	9°♓29'01	6.42235 AU
retrograde	-860 Jul 12 j 20:40	14°♓25'29					
opposition	-860 Sep 10 j 16:44	9°♓21'42	-1°-49'-44	conjunction	-854 Sep 11 j 15:09	9°♓50'41	1°14'12

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Attention, astronomical year style is used: The year -854 in astronomical counting style is the year 855 BCE in historical counting style.

minimum elong	-854 Sep 11 j 15:09	9°♄50'41	1°14'13	morning rise	-848 Mar 07 j 17:57	29°♁11'31	
morning rise	-854 Sep 24 j 08:10	12°♄37'11			-848 Mar 11 j 03:26	0°♁	
retrograde	-853 Jan 22 j 20:14	29°♄34'04		retrograde	-848 Jul 18 j 02:52	19°♁43'35	
opposition	-853 Mar 24 j 13:11	24°♄42'16	1°45'11	opposition	-848 Sep 15 j 22:08	14°♁39'23	-1°-49'-33
min. Earth dist.	-853 Mar 25 j 21:42	24°♄31'54	4.39907 AU	min. Earth dist.	-848 Sep 14 j 16:35	14°♁49'24	3.98824 AU
direct	-853 May 26 j 07:12	19°♄41'12		direct	-848 Nov 12 j 19:19	9°♁44'12	
	-853 Aug 25 j 00:24	0°♁		evening set	-847 Mar 18 j 10:06	29°♁12'42	
evening set	-853 Sep 29 j 13:42	7°♁29'24			-847 Mar 21 j 18:24	0°♁	
max. Earth dist.	-853 Oct 10 j 05:08	9°♁51'10	6.35844 AU				
				conjunction	-847 Mar 31 j 23:53	2°♁25'07	-1°-8'-20
conjunction	-853 Oct 12 j 05:01	10°♁17'49	1°05'07	minimum elong	-847 Mar 31 j 23:55	2°♁25'08	1°08'21
minimum elong	-853 Oct 12 j 05:03	10°♁17'50	1°05'07	max. Earth dist.	-847 Apr 03 j 02:11	2°♁54'52	6.01935 AU
morning rise	-853 Oct 24 j 18:29	13°♁05'30		morning rise	-847 Apr 14 j 16:27	5°♁38'46	
	-852 Feb 04 j 23:13	0°♄		retrograde	-847 Aug 23 j 05:08	25°♁37'40	
retrograde	-852 Feb 24 j 01:22	0°♄33'59		min. Earth dist.	-847 Oct 20 j 10:05	20°♁43'35	4.06846 AU
	-852 Mar 14 j 05:18	30°♄		opposition	-847 Oct 21 j 18:44	20°♁32'25	-1°-24'-57
opposition	-852 Apr 25 j 00:47	25°♁42'01	1°18'01	direct	-847 Dec 19 j 02:12	15°♁34'10	
min. Earth dist.	-852 Apr 26 j 10:16	25°♁31'22	4.30689 AU		-846 Apr 03 j 18:04	0°♁	
direct	-852 Jun 26 j 04:36	20°♁43'25		evening set	-846 Apr 24 j 09:56	4°♁38'41	
	-852 Sep 18 j 04:50	0°♄					
evening set	-852 Oct 29 j 18:55	8°♄53'11		conjunction	-846 May 08 j 04:23	7°♁48'17	0°-40'-50
max. Earth dist.	-852 Nov 09 j 15:58	11°♄22'02	6.24560 AU	minimum elong	-846 May 08 j 04:26	7°♁48'18	0°40'50
				max. Earth dist.	-846 May 10 j 05:00	8°♁16'13	6.12776 AU
conjunction	-852 Nov 11 j 09:37	11°♄45'52	0°36'53	morning rise	-846 May 21 j 23:36	10°♁58'03	
minimum elong	-852 Nov 11 j 09:39	11°♄45'53	0°36'53		-846 Jun 08 j 23:22	15°♁	
morning rise	-852 Nov 23 j 23:45	14°♄38'32		retrograde	-846 Sep 26 j 03:43	29°♁54'46	
	-852 Nov 25 j 13:31	15°♄		opposition	-846 Nov 24 j 16:28	24°♁51'23	0°-31'-24
	-851 Feb 12 j 07:50	0°♁		min. Earth dist.	-846 Nov 23 j 15:30	24°♁59'51	4.19277 AU
retrograde	-851 Mar 29 j 08:47	3°♁00'36		direct	-845 Jan 23 j 01:55	19°♁50'18	
	-851 May 14 j 04:19	30°♄			-845 Apr 20 j 13:37	0°♁	
opposition	-851 May 29 j 07:24	28°♄06'54	0°25'34	evening set	-845 May 30 j 00:40	8°♁21'53	
min. Earth dist.	-851 May 30 j 08:56	27°♄58'43	4.17987 AU				
direct	-851 Jul 29 j 08:38	23°♄11'02		conjunction	-845 Jun 12 j 17:44	11°♁25'17	0°00'-21
	-851 Oct 06 j 12:18	0°♁		minimum elong	-845 Jun 12 j 17:44	11°♁25'17	0°00'22
desc. node	-851 Nov 06 j 10:48	6°♁12'31		behind sun begin	-845 Jun 12 j 09:26	11°♁20'40	
evening set	-851 Dec 01 j 07:43	11°♁51'35		behind sun end	-845 Jun 13 j 02:03	11°♁29'54	
max. Earth dist.	-851 Dec 13 j 00:31	14°♁36'23	6.11579 AU	max. Earth dist.	-845 Jun 13 j 20:59	11°♁40'29	6.25819 AU
				asc. node	-845 Jun 16 j 01:36	12°♁09'51	
conjunction	-851 Dec 14 j 01:09	14°♁50'52	0°-4'-10	morning rise	-845 Jun 26 j 09:52	14°♁27'55	
minimum elong	-851 Dec 14 j 01:08	14°♁50'51	0°04'11		-845 Sep 19 j 01:51	0°♁	
behind sun begin	-851 Dec 13 j 17:13	14°♁46'13		retrograde	-845 Oct 28 j 02:01	2°♁21'45	
behind sun end	-851 Dec 14 j 09:02	14°♁55'29			-845 Dec 05 j 23:39	30°♄	
morning rise	-851 Dec 26 j 19:53	17°♁51'02		opposition	-845 Dec 26 j 19:27	27°♁21'56	0°29'07
	-850 Feb 21 j 14:12	0°♁		min. Earth dist.	-845 Dec 26 j 09:51	27°♁25'09	4.31727 AU
retrograde	-850 May 04 j 17:04	7°♁17'03		direct	-844 Feb 25 j 13:49	22°♁19'01	
opposition	-850 Jul 04 j 09:57	2°♁20'07	0°-38'-45		-844 May 11 j 12:25	0°♁	
min. Earth dist.	-850 Jul 04 j 16:27	2°♁18'00	4.05745 AU	evening set	-844 Jul 01 j 19:58	10°♁21'30	
	-850 Jul 23 j 02:48	30°♄					
direct	-850 Sep 01 j 23:50	27°♁26'20		conjunction	-844 Jul 15 j 06:49	13°♁17'43	0°38'43
	-850 Oct 12 j 03:27	0°♁		minimum elong	-844 Jul 15 j 06:47	13°♁17'41	0°38'43
evening set	-849 Jan 04 j 18:24	16°♁38'28		max. Earth dist.	-844 Jul 15 j 08:17	13°♁18'31	6.36750 AU
				morning rise	-844 Jul 28 j 14:53	16°♁12'28	
conjunction	-849 Jan 17 j 17:21	19°♁44'37	0°-45'-16		-844 Oct 10 j 10:49	0°♁	
minimum elong	-849 Jan 17 j 17:18	19°♁44'36	0°45'18	retrograde	-844 Nov 26 j 18:46	3°♁21'49	
max. Earth dist.	-849 Jan 17 j 22:24	19°♁47'39	6.01209 AU		-843 Jan 13 j 15:27	30°♄	
morning rise	-849 Jan 30 j 18:47	22°♁52'17		opposition	-843 Jan 25 j 20:02	28°♁25'54	1°18'20
	-849 Mar 02 j 16:55	0°♁		min. Earth dist.	-843 Jan 26 j 03:34	28°♁23'26	4.40419 AU
retrograde	-849 Jun 11 j 11:40	13°♁10'26		direct	-843 Mar 28 j 18:12	23°♁22'36	
opposition	-849 Aug 10 j 17:10	8°♁09'33	-1°-31'-42		-843 Jun 07 j 13:28	0°♁	
min. Earth dist.	-849 Aug 10 j 03:35	8°♁14'04	3.98376 AU	evening set	-843 Aug 03 j 00:01	11°♁07'03	
direct	-849 Oct 08 j 02:58	3°♁16'09		max. Earth dist.	-843 Aug 15 j 01:14	13°♁43'50	6.42481 AU
	-848 Jan 07 j 06:53	15°♁					
evening set	-848 Feb 10 j 02:10	22°♁47'38		conjunction	-843 Aug 16 j 02:11	13°♁57'24	1°05'36
				minimum elong	-843 Aug 16 j 02:09	13°♁57'22	1°05'36
conjunction	-848 Feb 23 j 08:25	25°♁58'43	-1°-10'-24		-843 Aug 20 j 21:21	15°♁	
minimum elong	-848 Feb 23 j 08:24	25°♁58'42	1°10'25	morning rise	-843 Aug 29 j 01:26	16°♁46'15	
max. Earth dist.	-848 Feb 24 j 18:39	26°♁19'18	5.97451 AU		-843 Nov 07 j 16:17	0°♁	

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Attention, astronomical year style is used: The year -843 in astronomical counting style is the year 844 BCE in historical counting style.

retrograde	-843 Dec 27 j 05:05	3°♃37'21			-837 Apr 30 j 09:09	15°♁	
	-842 Feb 15 j 16:41	30°♃♂		retrograde	-837 Jun 16 j 17:51	18°♁23'52	
opposition	-842 Feb 25 j 14:42	28°♂44'18	1°44'54		-837 Aug 03 j 12:57	15°♃♁	
min. Earth dist.	-842 Feb 26 j 14:31	28°♂36'38	4.42990 AU	opposition	-837 Aug 15 j 22:43	13°♁22'28	-1°-36'-37
direct	-842 Apr 29 j 06:28	23°♂41'45		min. Earth dist.	-837 Aug 15 j 05:28	13°♁28'13	3.98234 AU
	-842 Jul 07 j 08:03	0°♃		direct	-837 Oct 13 j 05:14	8°♁28'57	
evening set	-842 Sep 03 j 02:11	11°♃22'21			-837 Dec 17 j 09:51	15°♁	
max. Earth dist.	-842 Sep 14 j 04:04	13°♃47'30	6.41594 AU	evening set	-836 Feb 15 j 06:02	28°♁00'12	
					-836 Feb 23 j 14:09	0°♃	
conjunction	-842 Sep 15 j 21:17	14°♃10'04	1°14'09				
minimum elong	-842 Sep 15 j 21:17	14°♃10'04	1°14'09	conjunction	-836 Feb 28 j 13:13	1°♃11'29	-1°-11'-48
morning rise	-842 Sep 28 j 13:29	16°♃56'32		minimum elong	-836 Feb 28 j 13:12	1°♃11'28	1°11'50
	-842 Dec 06 j 05:29	0°♁		max. Earth dist.	-836 Mar 01 j 02:07	1°♃33'38	5.97917 AU
retrograde	-841 Jan 27 j 04:43	3°♁56'49		morning rise	-836 Mar 12 j 23:46	4°♃24'29	
	-841 Mar 21 j 18:23	30°♃♃		retrograde	-836 Jul 23 j 04:37	24°♃53'16	
opposition	-841 Mar 28 j 23:35	29°♃05'07	1°43'07	opposition	-836 Sep 20 j 23:40	19°♃48'42	-1°-48'-27
min. Earth dist.	-841 Mar 30 j 08:03	28°♃54'46	4.38792 AU	min. Earth dist.	-836 Sep 19 j 17:16	19°♃59'02	3.99841 AU
direct	-841 May 30 j 15:24	24°♃04'24		direct	-836 Nov 17 j 21:58	14°♃53'06	
	-841 Aug 04 j 23:20	0°♁			-835 Mar 04 j 22:27	0°♃	
evening set	-841 Oct 03 j 21:26	11°♁55'35		evening set	-835 Mar 23 j 13:22	4°♃18'03	
max. Earth dist.	-841 Oct 14 j 12:57	14°♁17'55	6.34347 AU				
				conjunction	-835 Apr 06 j 04:06	7°♃30'11	-1°-5'-49
conjunction	-841 Oct 16 j 12:25	14°♁44'28	1°02'13	minimum elong	-835 Apr 06 j 04:08	7°♃30'12	1°05'49
minimum elong	-841 Oct 16 j 12:27	14°♁44'29	1°02'13	max. Earth dist.	-835 Apr 08 j 08:23	8°♃00'59	6.03405 AU
morning rise	-841 Oct 29 j 01:44	17°♁32'43		morning rise	-835 Apr 19 j 21:08	10°♃43'22	
	-841 Dec 30 j 19:18	0°♃			-835 Aug 09 j 11:19	0°♃	
retrograde	-840 Feb 28 j 18:50	5°♃08'10		retrograde	-835 Aug 28 j 00:17	0°♃33'46	
opposition	-840 Apr 29 j 17:24	0°♃16'09	1°11'58		-835 Sep 15 j 08:19	30°♃♃	
min. Earth dist.	-840 May 01 j 03:11	0°♃05'24	4.28892 AU	min. Earth dist.	-835 Oct 25 j 05:21	25°♃39'31	4.08598 AU
	-840 May 01 j 20:11	30°♃♁		opposition	-835 Oct 26 j 13:09	25°♃28'40	-1°-18'-46
direct	-840 Jun 30 j 18:56	25°♁18'00		direct	-835 Dec 23 j 23:41	20°♃30'00	
	-840 Aug 27 j 07:14	0°♃			-834 Mar 16 j 10:05	0°♃	
evening set	-840 Nov 03 j 06:18	13°♃32'17		evening set	-834 Apr 29 j 09:13	9°♃29'30	
	-840 Nov 09 j 15:42	15°♃					
max. Earth dist.	-840 Nov 14 j 04:33	16°♃02'30	6.22633 AU	conjunction	-834 May 13 j 03:39	12°♃38'18	0°-35'-42
				minimum elong	-834 May 13 j 03:42	12°♃38'20	0°35'42
conjunction	-840 Nov 15 j 21:11	16°♃25'51	0°31'40	max. Earth dist.	-834 May 15 j 00:35	13°♃04'00	6.14648 AU
minimum elong	-840 Nov 15 j 21:13	16°♃25'52	0°31'38		-834 May 23 j 11:49	15°♃	
morning rise	-840 Nov 28 j 11:54	19°♃19'34		morning rise	-834 May 26 j 22:55	15°♃47'13	
	-839 Jan 17 j 19:52	0°♃			-834 Aug 06 j 07:24	0°♃	
retrograde	-839 Apr 03 j 08:08	7°♃50'49		retrograde	-834 Sep 30 j 14:14	4°♃34'35	
opposition	-839 Jun 03 j 06:51	2°♃56'47	0°16'47		-834 Nov 25 j 16:03	30°♃♃	
min. Earth dist.	-839 Jun 04 j 05:00	2°♃49'40	4.16088 AU	min. Earth dist.	-834 Nov 28 j 04:59	29°♃39'23	4.21088 AU
	-839 Jun 27 j 22:00	30°♃♃		opposition	-834 Nov 29 j 03:59	29°♃31'35	0°-23'-2
direct	-839 Aug 03 j 02:00	28°♃01'21		direct	-833 Jan 27 j 18:00	24°♃30'08	
	-839 Sep 07 j 20:34	0°♃			-833 Mar 30 j 13:30	0°♃	
desc. node	-839 Sep 16 j 00:15	0°♃57'26		asc. node	-833 Apr 27 j 03:58	4°♃59'34	
evening set	-839 Dec 06 j 01:18	16°♃46'43		evening set	-833 Jun 03 j 17:56	12°♃57'23	
conjunction	-839 Dec 18 j 19:23	19°♃46'59	0°-10'-17	conjunction	-833 Jun 17 j 10:34	15°♃59'53	0°05'25
minimum elong	-839 Dec 18 j 19:23	19°♃46'59	0°10'18	minimum elong	-833 Jun 17 j 10:33	15°♃59'52	0°05'26
behind sun begin	-839 Dec 18 j 12:58	19°♃43'13		behind sun begin	-833 Jun 17 j 02:33	15°♃55'26	
behind sun end	-839 Dec 19 j 01:48	19°♃50'46		behind sun end	-833 Jun 17 j 18:33	16°♃04'18	
max. Earth dist.	-839 Dec 17 j 23:57	19°♃35'31	6.09906 AU	max. Earth dist.	-833 Jun 18 j 10:49	16°♃13'23	6.27447 AU
morning rise	-839 Dec 31 j 14:49	22°♃48'13		morning rise	-833 Jul 01 j 01:41	19°♃01'26	
	-838 Feb 01 j 08:59	0°♃			-833 Aug 24 j 02:22	0°♃	
retrograde	-838 May 09 j 23:56	12°♃22'36		retrograde	-833 Nov 01 j 09:12	6°♃48'17	
opposition	-838 Jul 09 j 14:44	7°♃25'11	0°-47'-28	opposition	-833 Dec 31 j 02:40	1°♃49'04	0°36'50
min. Earth dist.	-838 Jul 09 j 18:53	7°♃23'49	4.04463 AU	min. Earth dist.	-833 Dec 30 j 19:38	1°♃51'25	4.33050 AU
direct	-838 Sep 07 j 00:56	2°♃31'38			-832 Jan 14 j 02:12	30°♃♃	
evening set	-837 Jan 09 j 18:26	21°♃46'51		direct	-832 Mar 01 j 01:05	26°♃46'02	
					-832 Apr 17 j 07:37	0°♃	
conjunction	-837 Jan 22 j 18:12	24°♃53'43	0°-50'-5	evening set	-832 Jul 06 j 08:04	14°♃45'55	
minimum elong	-837 Jan 22 j 18:10	24°♃53'42	0°50'06				
max. Earth dist.	-837 Jan 23 j 03:29	24°♃59'18	6.00436 AU	conjunction	-832 Jul 19 j 17:43	17°♃41'17	0°43'17
morning rise	-837 Feb 04 j 20:45	28°♃02'12		minimum elong	-832 Jul 19 j 17:40	17°♃41'15	0°43'17
	-837 Feb 13 j 03:31	0°♁		max. Earth dist.	-832 Jul 19 j 14:02	17°♃39'16	6.37658 AU

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Attention, astronomical year style is used: The year -832 in astronomical counting style is the year 833 BCE in historical counting style.

morning rise	-832 Aug 02 j 00:45	20°♄35'12			-826 Jan 15 j 04:50	0°♃	
	-832 Sep 17 j 09:14	0°♄		retrograde	-826 May 15 j 03:02	17°♃23'54	
retrograde	-832 Dec 01 j 00:10	7°♄41'19		opposition	-826 Jul 14 j 17:45	12°♃25'56	0°-55'-46
opposition	-831 Jan 30 j 01:55	2°♄45'50	1°23'29	min. Earth dist.	-826 Jul 14 j 18:15	12°♃25'46	4.03405 AU
min. Earth dist.	-831 Jan 30 j 12:14	2°♄42'27	4.40897 AU	direct	-826 Sep 11 j 22:40	7°♃32'32	
	-831 Feb 21 j 12:41	30°♃		evening set	-825 Jan 14 j 17:01	26°♃50'19	
direct	-831 Apr 02 j 03:09	27°♃42'30					
	-831 May 12 j 01:51	0°♄		conjunction	-825 Jan 27 j 17:38	29°♃57'51	0°-54'-29
	-831 Aug 05 j 07:18	15°♄		minimum elong	-825 Jan 27 j 17:35	29°♃57'50	0°54'30
evening set	-831 Aug 07 j 08:31	15°♄26'31			-825 Jan 27 j 21:12	0°♃	
max. Earth dist.	-831 Aug 19 j 07:23	18°♄02'04	6.42495 AU	max. Earth dist.	-825 Jan 28 j 06:33	0°♃05'38	5.99786 AU
				morning rise	-825 Feb 09 j 21:12	3°♃07'03	
conjunction	-831 Aug 20 j 09:47	18°♄16'26	1°07'55		-825 Apr 04 j 16:42	15°♃	
minimum elong	-831 Aug 20 j 09:45	18°♄16'25	1°07'56	retrograde	-825 Jun 21 j 22:51	23°♃31'59	
morning rise	-831 Sep 02 j 07:47	21°♄04'49		min. Earth dist.	-825 Aug 20 j 07:02	18°♃36'28	3.98072 AU
	-831 Oct 16 j 04:51	0°♄		opposition	-825 Aug 21 j 02:13	18°♃30'02	-1°-40'-46
retrograde	-831 Dec 31 j 10:40	7°♄56'22			-825 Sep 19 j 08:43	15°♃	
opposition	-830 Mar 01 j 22:04	3°♄03'36	1°46'22	direct	-825 Oct 18 j 07:15	13°♃36'19	
min. Earth dist.	-830 Mar 02 j 22:39	2°♄55'42	4.42573 AU		-825 Nov 16 j 02:00	15°♃	
	-830 Mar 27 j 13:36	30°♃			-824 Feb 07 j 02:17	0°♃	
direct	-830 May 03 j 13:39	28°♄01'16		evening set	-824 Feb 20 j 08:32	3°♃07'48	
	-830 Jun 09 j 18:11	0°♄					
evening set	-830 Sep 07 j 09:25	15°♄43'12		conjunction	-824 Mar 04 j 16:56	6°♃19'27	-1°-12'-40
max. Earth dist.	-830 Sep 18 j 08:13	18°♄07'04	6.40767 AU	minimum elong	-824 Mar 04 j 16:55	6°♃19'27	1°12'41
				max. Earth dist.	-824 Mar 06 j 09:47	6°♃43'55	5.98254 AU
conjunction	-830 Sep 20 j 03:38	18°♄30'55	1°13'40	morning rise	-824 Mar 18 j 04:24	9°♃32'42	
minimum elong	-830 Sep 20 j 03:38	18°♄30'56	1°13'40	retrograde	-824 Jul 28 j 06:19	29°♃58'38	
morning rise	-830 Oct 02 j 19:22	21°♄17'29		opposition	-824 Sep 25 j 23:30	24°♃53'54	-1°-46'-37
	-830 Nov 14 j 01:21	0°♄		min. Earth dist.	-824 Sep 24 j 16:41	25°♃04'23	4.00652 AU
retrograde	-829 Jan 31 j 16:57	8°♄21'38		direct	-824 Nov 22 j 21:49	19°♃57'57	
opposition	-829 Apr 02 j 11:22	3°♄29'59	1°40'25		-823 Feb 14 j 16:11	0°♃	
min. Earth dist.	-829 Apr 03 j 21:05	3°♄19'14	4.37609 AU	evening set	-823 Mar 28 j 16:17	9°♃20'34	
	-829 May 02 j 23:45	30°♃					
direct	-829 Jun 04 j 02:49	28°♄29'33		conjunction	-823 Apr 11 j 07:41	12°♃32'31	-1°-2'-50
	-829 Jul 06 j 04:56	0°♄		minimum elong	-823 Apr 11 j 07:44	12°♃32'32	1°02'51
evening set	-829 Oct 08 j 05:29	16°♄23'25		max. Earth dist.	-823 Apr 13 j 10:41	13°♃02'26	6.04592 AU
max. Earth dist.	-829 Oct 18 j 21:38	18°♄46'35	6.32906 AU	morning rise	-823 Apr 25 j 01:34	15°♃45'28	
					-823 Jul 02 j 22:15	0°♃	
conjunction	-829 Oct 20 j 20:21	19°♄12'48	0°58'54	retrograde	-823 Sep 01 j 17:50	5°♃28'35	
minimum elong	-829 Oct 20 j 20:24	19°♄12'49	0°58'54	min. Earth dist.	-823 Oct 29 j 23:42	0°♃34'23	4.10023 AU
morning rise	-829 Nov 02 j 09:35	22°♄01'36		opposition	-823 Oct 31 j 07:09	0°♃23'39	-1°-12'-7
	-829 Dec 09 j 20:28	0°♄			-823 Nov 03 j 04:32	30°♃	
retrograde	-828 Mar 04 j 10:37	9°♄43'37		direct	-823 Dec 28 j 20:21	25°♃24'33	
opposition	-828 May 04 j 10:37	4°♄51'22	1°05'24		-822 Feb 21 j 18:08	0°♃	
min. Earth dist.	-828 May 05 j 18:13	4°♄41'18	4.27284 AU	evening set	-822 May 04 j 08:40	14°♃20'28	
	-828 Jun 27 j 00:28	30°♃			-822 May 07 j 06:22	15°♃	
direct	-828 Jul 05 j 07:29	29°♄53'36					
	-828 Jul 13 j 15:10	0°♄		conjunction	-822 May 18 j 03:22	17°♃28'40	0°-30'-18
	-828 Oct 24 j 14:41	15°♄		minimum elong	-822 May 18 j 03:24	17°♃28'41	0°30'19
evening set	-828 Nov 07 j 17:59	18°♄11'27		max. Earth dist.	-822 May 19 j 22:26	17°♃53'13	6.16210 AU
max. Earth dist.	-828 Nov 18 j 19:27	20°♄44'04	6.20992 AU	morning rise	-822 May 31 j 22:20	20°♃36'47	
					-822 Jul 14 j 22:07	0°♄	
conjunction	-828 Nov 20 j 09:04	21°♄05'46	0°26'13	retrograde	-822 Oct 05 j 04:06	9°♄16'09	
minimum elong	-828 Nov 20 j 09:06	21°♄05'47	0°26'12	opposition	-822 Dec 03 j 16:38	4°♄13'41	0°-14'-28
morning rise	-828 Dec 03 j 00:12	24°♄00'22		min. Earth dist.	-822 Dec 02 j 20:09	4°♄20'36	4.22616 AU
	-828 Dec 29 j 21:05	0°♄			-821 Jan 10 j 05:59	30°♃	
retrograde	-827 Apr 08 j 08:57	12°♄39'36		direct	-821 Feb 01 j 11:15	29°♃11'58	
opposition	-827 Jun 08 j 05:55	7°♄45'08	0°07'51		-821 Feb 23 j 21:20	0°♄	
min. Earth dist.	-827 Jun 09 j 02:42	7°♄38'27	4.14505 AU	asc. node	-821 Mar 07 j 05:37	0°♄58'05	
desc. node	-827 Jul 27 j 00:02	3°♄03'35		evening set	-821 Jun 08 j 12:39	17°♄35'54	
direct	-827 Aug 07 j 21:48	2°♄49'59					
evening set	-827 Dec 10 j 18:06	21°♄39'01		conjunction	-821 Jun 22 j 04:33	20°♄37'32	0°11'10
				minimum elong	-821 Jun 22 j 04:32	20°♄37'32	0°11'11
conjunction	-827 Dec 23 j 12:50	24°♄40'09	0°-16'-18	behind sun begin	-821 Jun 21 j 22:29	20°♄34'11	
minimum elong	-827 Dec 23 j 12:48	24°♄40'08	0°16'20	behind sun end	-821 Jun 22 j 10:35	20°♄40'52	
max. Earth dist.	-827 Dec 22 j 20:37	24°♄30'34	6.08515 AU	max. Earth dist.	-821 Jun 23 j 00:56	20°♄48'51	6.28823 AU
morning rise	-826 Jan 05 j 09:09	27°♄42'22		morning rise	-821 Jul 05 j 18:52	23°♄38'09	

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Attention, astronomical year style is used: The year -821 in astronomical counting style is the year 822 BCE in historical counting style.

	-821 Aug 04 j 15:35	0°♄		max. Earth dist.	-815 Dec 27 j 13:50	29°♁18'20	6.07431 AU
retrograde	-821 Nov 05 j 16:54	11°♄18'58			-815 Dec 30 j 12:03	0°♁	
opposition	-820 Jan 04 j 11:33	6°♄20'18	0°44'29	morning rise	-814 Jan 10 j 00:29	2°♁29'23	
min. Earth dist.	-820 Jan 04 j 06:23	6°♄22'01	4.34194 AU	retrograde	-814 May 20 j 03:28	22°♁17'03	
direct	-820 Mar 05 j 13:10	1°♄17'10		opposition	-814 Jul 19 j 16:48	17°♁18'32	-1°-3'-24
evening set	-820 Jul 10 j 21:53	19°♄15'03		min. Earth dist.	-814 Jul 19 j 15:30	17°♁18'58	4.02520 AU
				direct	-814 Sep 16 j 19:17	12°♁25'06	
conjunction	-820 Jul 24 j 06:29	22°♄09'38	0°47'43		-813 Jan 12 j 03:17	0°♁	
minimum elong	-820 Jul 24 j 06:26	22°♄09'36	0°47'43	evening set	-813 Jan 19 j 12:16	1°♁45'13	
max. Earth dist.	-820 Jul 24 j 00:22	22°♄06'17	6.38505 AU				
morning rise	-820 Aug 06 j 12:11	25°♄02'42		conjunction	-813 Feb 01 j 13:57	4°♁53'27	0°-58'-21
	-820 Aug 29 j 21:42	0°♄		minimum elong	-813 Feb 01 j 13:54	4°♁53'25	0°58'22
retrograde	-820 Dec 05 j 07:28	12°♄05'46		max. Earth dist.	-813 Feb 02 j 06:56	5°♁03'40	5.99186 AU
opposition	-819 Feb 03 j 09:55	7°♄10'50	1°28'18	morning rise	-813 Feb 14 j 18:27	8°♁03'20	
min. Earth dist.	-819 Feb 03 j 22:06	7°♄06'52	4.41424 AU		-813 Mar 16 j 18:59	15°♁	
direct	-819 Apr 06 j 13:32	2°♄07'42		retrograde	-813 Jun 27 j 00:23	28°♁31'08	
	-819 Jul 19 j 18:43	15°♄		min. Earth dist.	-813 Aug 25 j 05:01	23°♁35'38	3.97853 AU
evening set	-819 Aug 11 j 18:31	19°♄50'49		opposition	-813 Aug 26 j 01:30	23°♁28'46	-1°-44'-3
				direct	-813 Oct 23 j 03:56	18°♁34'50	
conjunction	-819 Aug 24 j 18:33	22°♄40'13	1°09'56		-812 Jan 20 j 21:13	0°♁	
minimum elong	-819 Aug 24 j 18:32	22°♄40'12	1°09'56	evening set	-812 Feb 25 j 08:01	8°♁07'11	
max. Earth dist.	-819 Aug 23 j 12:47	22°♄24'00	6.42666 AU				
morning rise	-819 Sep 06 j 15:38	25°♄28'08		conjunction	-812 Mar 09 j 17:20	11°♁19'12	-1°-12'-59
	-819 Sep 28 j 00:47	0°♄		minimum elong	-812 Mar 09 j 17:20	11°♁19'12	1°12'59
retrograde	-818 Jan 04 j 19:34	12°♄19'43		max. Earth dist.	-812 Mar 11 j 10:28	11°♁43'49	5.98412 AU
opposition	-818 Mar 06 j 07:26	7°♄27'13	1°47'18	morning rise	-812 Mar 23 j 06:03	14°♁32'53	
min. Earth dist.	-818 Mar 07 j 09:29	7°♄18'51	4.42417 AU		-812 Jun 05 j 14:59	0°♁	
direct	-818 May 08 j 00:03	2°♄25'08		retrograde	-812 Aug 02 j 03:06	4°♁56'43	
evening set	-818 Sep 11 j 17:11	20°♄07'12			-812 Sep 29 j 19:54	30°♁	
max. Earth dist.	-818 Sep 22 j 16:11	22°♄31'22	6.40312 AU	opposition	-812 Sep 30 j 20:01	29°♁51'47	-1°-44'-5
				min. Earth dist.	-812 Sep 29 j 12:06	0°♁02'39	4.01184 AU
conjunction	-818 Sep 24 j 10:48	22°♄54'49	1°12'49	direct	-812 Nov 27 j 18:33	24°♁55'24	
minimum elong	-818 Sep 24 j 10:49	22°♄54'50	1°12'48		-811 Jan 23 j 21:25	0°♁	
morning rise	-818 Oct 07 j 01:44	25°♄41'18		evening set	-811 Apr 02 j 16:47	14°♁16'58	
	-818 Oct 27 j 03:43	0°♄					
retrograde	-817 Feb 05 j 02:50	12°♄48'04		conjunction	-811 Apr 16 j 09:09	17°♁28'54	0°-59'-29
opposition	-817 Apr 06 j 23:25	7°♄56'26	1°37'10	minimum elong	-811 Apr 16 j 09:12	17°♁28'56	0°59'29
min. Earth dist.	-817 Apr 08 j 08:27	7°♄45'55	4.36885 AU	max. Earth dist.	-811 Apr 18 j 12:23	17°♁58'54	6.05473 AU
direct	-817 Jun 08 j 12:47	2°♄56'24		morning rise	-811 Apr 30 j 03:28	20°♁41'41	
evening set	-817 Oct 12 j 13:16	20°♄51'18			-811 Jun 11 j 09:58	0°♁	
max. Earth dist.	-817 Oct 23 j 05:20	23°♄14'49	6.31972 AU	retrograde	-811 Sep 06 j 12:03	10°♁18'45	
				opposition	-811 Nov 04 j 23:19	5°♁14'01	-1°-5'-7
conjunction	-817 Oct 25 j 03:43	23°♄40'55	0°55'19	min. Earth dist.	-811 Nov 03 j 17:32	5°♁24'11	4.11144 AU
minimum elong	-817 Oct 25 j 03:45	23°♄40'56	0°55'18	direct	-810 Jan 02 j 16:09	0°♁14'31	
morning rise	-817 Nov 06 j 16:59	26°♄30'06			-810 Apr 20 j 17:47	15°♁	
	-817 Nov 22 j 13:20	0°♄		evening set	-810 May 09 j 07:09	19°♁07'56	
retrograde	-816 Mar 09 j 03:18	14°♄17'04					
opposition	-816 May 09 j 02:51	9°♄24'35	0°58'32	conjunction	-810 May 23 j 01:54	22°♁15'37	0°-24'-48
min. Earth dist.	-816 May 10 j 10:13	9°♄14'35	4.26168 AU	minimum elong	-810 May 23 j 01:56	22°♁15'39	0°24'49
direct	-816 Jul 09 j 21:50	4°♄27'09		max. Earth dist.	-810 May 24 j 19:11	22°♁39'05	6.17495 AU
	-816 Oct 07 j 14:20	15°♄		morning rise	-810 Jun 05 j 20:44	25°♁23'05	
evening set	-816 Nov 12 j 03:35	22°♄46'51			-810 Jun 26 j 18:00	0°♁	
max. Earth dist.	-816 Nov 23 j 07:37	25°♄21'20	6.19798 AU	retrograde	-810 Oct 09 j 14:35	13°♁55'11	
				min. Earth dist.	-810 Dec 07 j 08:22	8°♁59'49	4.23953 AU
conjunction	-816 Nov 24 j 19:00	25°♄41'48	0°20'45	opposition	-810 Dec 08 j 04:09	8°♁53'08	0°-5'-57
minimum elong	-816 Nov 24 j 19:01	25°♄41'48	0°20'44	asc. node	-809 Jan 15 j 16:47	4°♁35'39	
morning rise	-816 Dec 07 j 10:31	28°♄37'04		direct	-809 Feb 06 j 01:34	3°♁51'08	
	-816 Dec 13 j 11:20	0°♁		evening set	-809 Jun 13 j 06:40	22°♁12'13	
retrograde	-815 Apr 13 j 03:54	17°♁22'46					
desc. node	-815 Jun 07 j 16:33	13°♁09'28		conjunction	-809 Jun 26 j 21:48	25°♁12'58	0°16'47
opposition	-815 Jun 13 j 02:09	12°♁27'52	0°00'-51	minimum elong	-809 Jun 26 j 21:46	25°♁12'58	0°16'48
min. Earth dist.	-815 Jun 13 j 20:17	12°♁22'02	4.13317 AU	max. Earth dist.	-809 Jun 27 j 14:51	25°♁22'25	6.30120 AU
direct	-815 Aug 12 j 13:11	7°♁33'01		morning rise	-809 Jul 10 j 11:09	28°♁12'38	
evening set	-815 Dec 15 j 08:10	26°♁24'33			-809 Jul 18 j 15:53	0°♁	
				retrograde	-809 Nov 10 j 01:37	15°♁47'30	
conjunction	-815 Dec 28 j 03:22	29°♁26'22	0°-22'-1	opposition	-808 Jan 08 j 20:12	10°♁49'20	0°51'47
minimum elong	-815 Dec 28 j 03:21	29°♁26'21	0°22'04	min. Earth dist.	-808 Jan 08 j 17:38	10°♁50'11	4.35342 AU

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Attention, astronomical year style is used: The year -808 in astronomical counting style is the year 809 BCE in historical counting style.

direct	-808 Mar 10 j 02:23	5°♄46'07		conjunction	-802 Jan 01 j 22:10	4°♃22'29	0°-27'-49
evening set	-808 Jul 15 j 10:41	23°♄41'25		minimum elong	-802 Jan 01 j 22:08	4°♃22'28	0°27'50
				max. Earth dist.	-802 Jan 01 j 13:06	4°♃17'06	6.05818 AU
conjunction	-808 Jul 28 j 18:07	26°♄35'09	0°51'49	morning rise	-802 Jan 14 j 20:09	7°♃26'37	
minimum elong	-808 Jul 28 j 18:04	26°♄35'08	0°51'50	retrograde	-802 May 25 j 10:08	27°♃22'23	
max. Earth dist.	-808 Jul 28 j 08:54	26°♄30'08	6.39389 AU	opposition	-802 Jul 24 j 20:43	22°♃23'25	-1°-10'-56
morning rise	-808 Aug 10 j 22:35	29°♄27'21		min. Earth dist.	-802 Jul 24 j 16:55	22°♃24'40	4.01272 AU
	-808 Aug 13 j 10:59	0°♃		direct	-802 Sep 21 j 18:30	17°♃30'06	
	-808 Nov 08 j 23:26	15°♃			-802 Dec 25 j 19:09	0°♂	
retrograde	-808 Dec 09 j 12:49	16°♃27'08		evening set	-801 Jan 24 j 13:15	6°♂53'56	
	-807 Jan 09 j 01:43	15°♃♂					
opposition	-807 Feb 07 j 17:06	11°♃32'31	1°32'34	conjunction	-801 Feb 06 j 15:48	10°♂02'58	-1°-1'-57
min. Earth dist.	-807 Feb 08 j 06:43	11°♃28'05	4.41994 AU	minimum elong	-801 Feb 06 j 15:45	10°♂02'56	1°01'59
direct	-807 Apr 10 j 22:45	6°♃29'24		max. Earth dist.	-801 Feb 07 j 11:25	10°♂14'47	5.98400 AU
	-807 Jul 01 j 18:04	15°♃		morning rise	-801 Feb 19 j 21:37	13°♂13'45	
evening set	-807 Aug 16 j 03:10	24°♃11'14			-801 Feb 27 j 08:26	15°♂	
max. Earth dist.	-807 Aug 27 j 19:08	26°♃43'12	6.42845 AU		-801 May 13 j 12:18	0°♂	
				retrograde	-801 Jul 02 j 05:31	3°♂44'51	
conjunction	-807 Aug 29 j 02:10	27°♃00'06	1°11'32		-801 Aug 21 j 11:52	30°♂♂	
minimum elong	-807 Aug 29 j 02:09	27°♃00'06	1°11'32	min. Earth dist.	-801 Aug 30 j 06:41	28°♂49'55	3.97651 AU
morning rise	-807 Sep 10 j 22:04	29°♃47'30		opposition	-801 Aug 31 j 06:07	28°♂42'02	-1°-46'-42
	-807 Sep 11 j 21:10	0°♂		direct	-801 Oct 28 j 05:49	23°♂47'55	
retrograde	-806 Jan 09 j 02:18	16°♂39'04			-801 Dec 30 j 14:39	0°♂	
opposition	-806 Mar 10 j 15:34	11°♂46'46	1°47'38	evening set	-800 Mar 01 j 13:22	13°♂20'57	
min. Earth dist.	-806 Mar 11 j 19:07	11°♂37'57	4.42175 AU				
direct	-806 May 12 j 09:03	6°♂44'56		conjunction	-800 Mar 14 j 23:57	16°♂33'20	-1°-12'-45
evening set	-806 Sep 15 j 23:44	24°♂27'27		minimum elong	-800 Mar 14 j 23:58	16°♂33'20	1°12'45
max. Earth dist.	-806 Sep 26 j 19:23	26°♂50'08	6.39626 AU	max. Earth dist.	-800 Mar 16 j 21:00	17°♂00'14	5.98833 AU
				morning rise	-800 Mar 28 j 13:31	19°♂47'13	
conjunction	-806 Sep 28 j 16:34	27°♂15'03	1°11'33		-800 May 13 j 07:11	0°♂	
minimum elong	-806 Sep 28 j 16:35	27°♂15'03	1°11'34	retrograde	-800 Aug 07 j 06:26	10°♂07'14	
morning rise	-806 Oct 11 j 07:09	0°♂01'38		opposition	-800 Oct 05 j 21:00	5°♂02'11	-1°-40'-39
	-806 Oct 11 j 04:11	0°♂		min. Earth dist.	-800 Oct 04 j 13:06	5°♂13'04	4.02199 AU
retrograde	-805 Feb 09 j 14:21	17°♂12'05		direct	-800 Dec 02 j 21:46	0°♂05'26	
opposition	-805 Apr 11 j 11:10	12°♂20'24	1°33'23	evening set	-799 Apr 07 j 21:41	19°♂23'51	
min. Earth dist.	-805 Apr 12 j 20:59	12°♂09'38	4.35778 AU				
direct	-805 Jun 12 j 23:06	7°♂20'40		conjunction	-799 Apr 21 j 14:41	22°♂35'25	0°-55'-36
evening set	-805 Oct 16 j 20:28	25°♂18'01		minimum elong	-799 Apr 21 j 14:44	22°♂35'26	0°55'36
max. Earth dist.	-805 Oct 27 j 14:04	27°♂42'51	6.30531 AU	max. Earth dist.	-799 Apr 23 j 18:40	23°♂05'42	6.07009 AU
				morning rise	-799 May 05 j 09:30	25°♂47'40	
conjunction	-805 Oct 29 j 10:59	28°♂08'12	0°51'23		-799 May 23 j 21:33	0°♂	
minimum elong	-805 Oct 29 j 11:01	28°♂08'14	0°51'22		-799 Aug 29 j 16:41	15°♂	
	-805 Nov 06 j 17:04	0°♂		retrograde	-799 Sep 11 j 05:28	15°♂15'36	
morning rise	-805 Nov 11 j 00:11	0°♂58'00			-799 Sep 23 j 16:35	15°♂♂	
	-804 Jan 22 j 08:07	15°♂		min. Earth dist.	-799 Nov 08 j 11:25	10°♂21'22	4.13045 AU
retrograde	-804 Mar 13 j 19:35	18°♂51'59		opposition	-799 Nov 09 j 17:35	10°♂11'05	0°-57'-32
	-804 May 05 j 19:56	15°♂♂		direct	-798 Jan 07 j 12:52	5°♂11'13	
opposition	-804 May 13 j 19:55	13°♂59'17	0°51'15		-798 Apr 02 j 07:40	15°♂	
min. Earth dist.	-804 May 15 j 01:58	13°♂49'42	4.24474 AU	evening set	-798 May 14 j 06:46	23°♂59'06	
direct	-804 Jul 14 j 10:41	9°♂02'15					
	-804 Sep 17 j 10:15	15°♂		conjunction	-798 May 28 j 01:14	27°♂05'45	0°-19'-6
evening set	-804 Nov 16 j 15:08	27°♂26'10		minimum elong	-798 May 28 j 01:15	27°♂05'46	0°19'06
	-804 Nov 27 j 16:54	0°♂♂		max. Earth dist.	-798 May 29 j 15:18	27°♂27'17	6.19611 AU
max. Earth dist.	-804 Nov 27 j 20:40	0°♂02'11	6.17990 AU		-798 Jun 09 j 22:07	0°♂	
				morning rise	-798 Jun 10 j 19:35	0°♂12'03	
conjunction	-804 Nov 29 j 06:46	0°♂21'59	0°15'02	retrograde	-798 Oct 14 j 01:32	18°♂34'06	
minimum elong	-804 Nov 29 j 06:47	0°♂22'00	0°15'02	asc. node	-798 Nov 26 j 07:53	15°♂40'04	
behind sun begin	-804 Nov 29 j 03:36	0°♂20'10		opposition	-798 Dec 12 j 15:41	13°♂32'29	0°02'31
behind sun end	-804 Nov 29 j 09:58	0°♂23'50		min. Earth dist.	-798 Dec 11 j 22:39	13°♂38'13	4.26068 AU
morning rise	-804 Dec 11 j 22:59	3°♂18'19		direct	-797 Feb 10 j 19:03	8°♂30'12	
retrograde	-803 Apr 18 j 04:23	22°♂13'02		evening set	-797 Jun 17 j 22:51	26°♂45'35	
desc. node	-803 Apr 18 j 02:29	22°♂13'02					
opposition	-803 Jun 18 j 01:20	17°♂17'43	0°-9'-52	conjunction	-797 Jul 01 j 13:07	29°♂45'08	0°22'13
min. Earth dist.	-803 Jun 18 j 17:34	17°♂12'28	4.11520 AU	minimum elong	-797 Jul 01 j 13:06	29°♂45'07	0°22'13
direct	-803 Aug 17 j 08:25	12°♂23'07		max. Earth dist.	-797 Jul 02 j 03:32	29°♂53'05	6.32066 AU
	-803 Dec 14 j 10:43	0°♂			-797 Jul 02 j 16:05	0°♂	
evening set	-803 Dec 20 j 02:02	1°♂19'35		morning rise	-797 Jul 15 j 01:12	2°♂43'28	

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Attention, astronomical year style is used: The year -797 in astronomical counting style is the year 798 BCE in historical counting style.

retrograde	-797 Nov 14 j 04:54	20°♄10'36		direct	-791 Aug 22 j 04:31	17°♃18'09	
opposition	-796 Jan 13 j 02:20	15°♄12'54	0°58'33		-791 Nov 27 j 08:48	0°♃	
min. Earth dist.	-796 Jan 13 j 01:22	15°♄13'14	4.36980 AU	evening set	-791 Dec 24 j 22:54	6°♃20'54	
direct	-796 Mar 14 j 11:51	10°♄09'35					
evening set	-796 Jul 19 j 20:10	28°♄00'53		conjunction	-790 Jan 06 j 19:44	9°♃24'57	0°-33'-29
	-796 Jul 28 j 23:50	0°♄		minimum elong	-790 Jan 06 j 19:41	9°♃24'56	0°33'30
				max. Earth dist.	-790 Jan 06 j 13:44	9°♃21'23	6.03955 AU
conjunction	-796 Aug 02 j 02:16	0°♄53'35	0°55'30	morning rise	-790 Jan 19 j 18:56	12°♃30'24	
minimum elong	-796 Aug 02 j 02:13	0°♄53'34	0°55'31		-790 Apr 19 j 15:15	0°♃	
max. Earth dist.	-796 Aug 01 j 12:43	0°♄46'13	6.40581 AU	retrograde	-790 May 30 j 17:36	2°♃34'54	
morning rise	-796 Aug 15 j 05:28	3°♄44'47			-790 Jul 11 j 01:36	30°♃	
	-796 Oct 11 j 13:13	15°♄		opposition	-790 Jul 30 j 03:25	27°♃35'19	-1°-18'-1
retrograde	-796 Dec 13 j 16:14	20°♄40'48		min. Earth dist.	-790 Jul 29 j 19:26	27°♃37'57	3.99958 AU
opposition	-795 Feb 11 j 21:20	15°♄46'34	1°36'10	direct	-790 Sep 26 j 20:19	22°♃42'02	
min. Earth dist.	-795 Feb 12 j 14:18	15°♄41'04	4.42663 AU		-790 Dec 05 j 12:02	0°♃	
	-795 Feb 17 j 21:26	15°♄		evening set	-789 Jan 29 j 17:38	12°♃09'37	
direct	-795 Apr 15 j 06:57	10°♄43'30			-789 Feb 10 j 13:09	15°♃	
	-795 Jun 10 j 02:56	15°♄					
evening set	-795 Aug 20 j 07:52	28°♄23'47		conjunction	-789 Feb 11 j 21:26	15°♃19'27	-1°-5'-6
	-795 Aug 27 j 17:17	0°♄		minimum elong	-789 Feb 11 j 21:24	15°♃19'26	1°05'08
max. Earth dist.	-795 Aug 31 j 19:09	0°♄53'17	6.42908 AU	max. Earth dist.	-789 Feb 12 j 23:15	15°♃35'00	5.97758 AU
				morning rise	-789 Feb 25 j 04:15	18°♃30'59	
conjunction	-795 Sep 02 j 05:53	1°♄12'12	1°12'42		-789 Apr 17 j 19:09	0°♃	
minimum elong	-795 Sep 02 j 05:51	1°♄12'12	1°12'42	retrograde	-789 Jul 07 j 14:54	9°♃03'58	
morning rise	-795 Sep 15 j 00:52	3°♄59'13		min. Earth dist.	-789 Sep 04 j 11:58	4°♃09'06	3.97763 AU
retrograde	-794 Jan 13 j 06:04	20°♄51'36		opposition	-789 Sep 05 j 13:00	4°♃00'39	-1°-48'-28
opposition	-794 Mar 14 j 21:05	15°♄59'25	1°47'24		-789 Oct 10 j 13:52	30°♃	
min. Earth dist.	-794 Mar 16 j 02:07	15°♄50'07	4.41640 AU	direct	-789 Nov 02 j 12:29	29°♃06'15	
direct	-794 May 16 j 14:20	10°♄57'42			-789 Nov 25 j 09:53	0°♃	
evening set	-794 Sep 20 j 03:21	28°♄41'42		evening set	-788 Mar 06 j 20:59	18°♃38'24	
	-794 Sep 26 j 01:47	0°♄					
max. Earth dist.	-794 Sep 30 j 22:12	1°♄04'18	6.38524 AU	conjunction	-788 Mar 20 j 08:34	21°♃50'52	-1°-11'-54
				minimum elong	-788 Mar 20 j 08:35	21°♃50'52	1°11'55
conjunction	-794 Oct 02 j 19:45	1°♄29'30	1°09'56	max. Earth dist.	-788 Mar 22 j 08:28	22°♃19'22	5.99645 AU
minimum elong	-794 Oct 02 j 19:46	1°♄29'31	1°09'56	morning rise	-788 Apr 02 j 23:11	25°♃04'47	
morning rise	-794 Oct 15 j 09:48	4°♄16'21			-788 Apr 24 j 05:11	0°♃	
retrograde	-793 Feb 13 j 23:52	21°♄32'03		retrograde	-788 Aug 12 j 07:52	15°♃18'44	
opposition	-793 Apr 15 j 21:16	16°♄40'21	1°29'11	opposition	-788 Oct 10 j 22:28	10°♃13'34	-1°-36'-22
min. Earth dist.	-793 Apr 17 j 07:56	16°♄29'19	4.34162 AU	min. Earth dist.	-788 Oct 09 j 13:02	10°♃24'58	4.03606 AU
direct	-793 Jun 17 j 07:30	11°♄40'55		direct	-788 Dec 08 j 00:06	5°♃16'22	
evening set	-793 Oct 21 j 02:51	29°♄42'31		evening set	-787 Apr 13 j 02:59	24°♃30'15	
	-793 Oct 22 j 09:55	0°♄					
max. Earth dist.	-793 Oct 31 j 19:08	2°♄07'21	6.28523 AU	conjunction	-787 Apr 26 j 20:23	27°♃41'10	0°-51'-16
				minimum elong	-787 Apr 26 j 20:26	27°♃41'12	0°51'17
conjunction	-793 Nov 02 j 17:15	2°♄33'30	0°47'13	max. Earth dist.	-787 Apr 28 j 22:40	28°♃10'21	6.08848 AU
minimum elong	-793 Nov 02 j 17:17	2°♄33'31	0°47'13		-787 May 06 j 20:03	0°♃	
morning rise	-793 Nov 15 j 06:53	5°♄24'16		morning rise	-787 May 10 j 15:29	0°♃52'40	
	-793 Dec 30 j 15:17	15°♄			-787 Jul 18 j 21:59	15°♃	
retrograde	-792 Mar 18 j 13:39	23°♄27'23		retrograde	-787 Sep 15 j 23:05	20°♃10'37	
opposition	-792 May 18 j 13:22	18°♄34'22	0°43'41	min. Earth dist.	-787 Nov 13 j 07:20	15°♃15'58	4.15087 AU
min. Earth dist.	-792 May 19 j 18:15	18°♄25'08	4.22192 AU	opposition	-787 Nov 14 j 11:30	15°♃06'22	0°-49'-32
	-792 Jun 18 j 21:22	15°♄			-787 Nov 15 j 06:11	15°♃	
direct	-792 Jul 18 j 23:52	13°♄37'39		direct	-786 Jan 12 j 11:55	10°♃06'05	
	-792 Aug 17 j 22:05	15°♄			-786 Mar 10 j 21:19	15°♃	
	-792 Nov 11 j 20:51	0°♄		evening set	-786 May 19 j 06:01	28°♃48'21	
evening set	-792 Nov 21 j 03:26	2°♄07'48			-786 May 24 j 13:46	0°♄	
conjunction	-792 Dec 03 j 19:46	5°♄04'51	0°09'14	conjunction	-786 Jun 02 j 00:17	1°♄53'59	0°-13'-15
minimum elong	-792 Dec 03 j 19:47	5°♄04'52	0°09'13	minimum elong	-786 Jun 02 j 00:18	1°♄54'00	0°13'15
behind sun begin	-792 Dec 03 j 13:00	5°♄00'55		behind sun begin	-786 Jun 01 j 19:38	1°♄51'23	
behind sun end	-792 Dec 04 j 02:35	5°♄08'49		behind sun end	-786 Jun 02 j 04:58	1°♄56'36	
max. Earth dist.	-792 Dec 02 j 13:23	4°♄47'07	6.15650 AU	max. Earth dist.	-786 Jun 03 j 12:38	2°♄14'27	6.21696 AU
morning rise	-792 Dec 16 j 12:37	8°♄02'29		morning rise	-786 Jun 15 j 17:53	4°♄59'05	
desc. node	-791 Feb 26 j 17:24	22°♄37'56		asc. node	-786 Oct 06 j 02:27	22°♄56'35	
retrograde	-791 Apr 23 j 07:50	27°♄08'09		retrograde	-786 Oct 18 j 11:05	23°♄11'37	
opposition	-791 Jun 23 j 02:48	22°♄12'26	0°-18'-54	min. Earth dist.	-786 Dec 16 j 11:16	18°♄15'48	4.28015 AU
min. Earth dist.	-791 Jun 23 j 16:39	22°♄07'57	4.09321 AU	opposition	-786 Dec 17 j 02:45	18°♄10'36	0°11'01

Planetary Phenomena of Jupiter from -900 through -400 (UT), Astrodienst AG 14-Nov-2015 16:11, page 11

Attention, astronomical year style is used: The year -785 in astronomical counting style is the year 786 BCE in historical counting style.

direct	-785 Feb 15 j 09:44	13°♄08'09		desc. node	-779 Jan 06 j 06:31	16°♃36'04	
	-785 Jun 16 j 14:07	0°♄			-779 Mar 21 j 19:05	0°♃	
evening set	-785 Jun 22 j 15:19	1°♄18'55		retrograde	-779 Apr 28 j 11:47	2°♃09'38	
					-779 Jun 05 j 11:01	30°R♃	
conjunction	-785 Jul 06 j 04:24	4°♄17'21	0°27'34	opposition	-779 Jun 28 j 06:07	27°♃13'24	0°-28'-1
minimum elong	-785 Jul 06 j 04:22	4°♄17'20	0°27'35	min. Earth dist.	-779 Jun 28 j 15:59	27°♃10'11	4.07725 AU
max. Earth dist.	-785 Jul 06 j 13:17	4°♄22'13	6.33721 AU	direct	-779 Aug 27 j 02:12	22°♃19'22	
morning rise	-785 Jul 19 j 15:27	7°♄14'32			-779 Nov 07 j 17:17	0°♃	
retrograde	-785 Nov 18 j 11:59	24°♄35'27		evening set	-779 Dec 29 j 21:02	11°♃26'10	
opposition	-784 Jan 17 j 09:44	19°♄38'19	1°05'08				
min. Earth dist.	-784 Jan 17 j 12:24	19°♄37'27	4.38243 AU	conjunction	-778 Jan 11 j 18:51	14°♃31'07	0°-38'-57
direct	-784 Mar 19 j 00:30	14°♄34'58		minimum elong	-778 Jan 11 j 18:49	14°♃31'06	0°38'59
	-784 Jul 13 j 01:57	0°♄		max. Earth dist.	-778 Jan 11 j 18:57	14°♃31'11	6.02799 AU
evening set	-784 Jul 24 j 06:39	2°♄23'40		morning rise	-778 Jan 24 j 18:54	17°♃37'29	
					-778 Mar 22 j 12:32	0°♃	
conjunction	-784 Aug 06 j 11:42	5°♄15'37	0°58'59	retrograde	-778 Jun 05 j 02:03	7°♃47'39	
minimum elong	-784 Aug 06 j 11:40	5°♄15'35	0°58'59	opposition	-778 Aug 04 j 09:43	2°♃47'29	-1°-24'-29
max. Earth dist.	-784 Aug 05 j 19:25	5°♄06'45	6.41350 AU	min. Earth dist.	-778 Aug 03 j 23:29	2°♃50'52	3.99384 AU
morning rise	-784 Aug 19 j 13:32	8°♄05'59			-778 Aug 26 j 20:41	30°R♃	
	-784 Sep 21 j 18:50	15°♄		direct	-778 Oct 01 j 23:58	27°♃54'10	
retrograde	-784 Dec 17 j 20:05	24°♄59'53			-778 Nov 06 j 16:23	0°♃	
opposition	-783 Feb 16 j 03:50	20°♄06'03	1°39'24		-777 Jan 24 j 20:36	15°♃	
min. Earth dist.	-783 Feb 16 j 22:10	20°♄00'06	4.42927 AU	evening set	-777 Feb 03 j 20:53	17°♃22'41	
direct	-783 Apr 19 j 14:28	15°♄03'09					
	-783 Aug 11 j 21:57	0°♄		conjunction	-777 Feb 17 j 01:37	20°♃32'56	-1°-7'-43
evening set	-783 Aug 24 j 15:18	2°♄43'17		minimum elong	-777 Feb 17 j 01:35	20°♃32'54	1°07'44
max. Earth dist.	-783 Sep 04 j 23:04	5°♄11'07	6.42638 AU	max. Earth dist.	-777 Feb 18 j 07:05	20°♃50'39	5.97794 AU
				morning rise	-777 Mar 02 j 09:38	23°♃44'55	
conjunction	-783 Sep 06 j 12:17	5°♄31'25	1°13'32		-777 Mar 29 j 07:20	0°♄	
minimum elong	-783 Sep 06 j 12:16	5°♄31'25	1°13'32	retrograde	-777 Jul 12 j 19:00	14°♄16'45	
morning rise	-783 Sep 19 j 06:24	8°♄18'11		opposition	-777 Sep 10 j 16:36	9°♄13'00	-1°-49'-17
retrograde	-782 Jan 17 j 14:45	25°♄12'32		min. Earth dist.	-777 Sep 09 j 12:53	9°♄22'22	3.98436 AU
opposition	-782 Mar 19 j 06:06	20°♄20'35	1°46'36	direct	-777 Nov 07 j 14:43	4°♄18'16	
min. Earth dist.	-782 Mar 20 j 13:21	20°♄10'36	4.40858 AU	evening set	-776 Mar 12 j 01:24	23°♄47'43	
direct	-782 May 21 j 00:26	15°♄19'10					
	-782 Sep 10 j 04:42	0°♄		conjunction	-776 Mar 25 j 13:52	27°♄00'01	-1°-10'-31
evening set	-782 Sep 24 j 10:20	3°♄05'19		minimum elong	-776 Mar 25 j 13:54	27°♄00'02	1°10'31
max. Earth dist.	-782 Oct 05 j 02:44	5°♄27'04	6.37279 AU	max. Earth dist.	-776 Mar 27 j 14:32	27°♄28'54	6.00862 AU
					-776 Apr 07 j 06:01	0°♄	
conjunction	-782 Oct 07 j 02:16	5°♄53'26	1°07'53	morning rise	-776 Apr 08 j 05:17	0°♄13'41	
minimum elong	-782 Oct 07 j 02:17	5°♄53'27	1°07'53	retrograde	-776 Aug 17 j 05:01	20°♄20'17	
morning rise	-782 Oct 19 j 16:08	8°♄40'42		min. Earth dist.	-776 Oct 14 j 10:54	15°♄26'09	4.05211 AU
retrograde	-781 Feb 18 j 13:13	26°♄02'16		opposition	-776 Oct 15 j 19:32	15°♄15'00	-1°-31'-29
opposition	-781 Apr 20 j 11:35	21°♄10'28	1°24'18	direct	-776 Dec 13 j 00:22	10°♄17'18	
min. Earth dist.	-781 Apr 21 j 21:33	20°♄59'39	4.32536 AU	evening set	-775 Apr 18 j 03:58	29°♄26'15	
direct	-781 Jun 21 j 18:39	16°♄11'25			-775 Apr 20 j 14:39	0°♄	
	-781 Oct 06 j 03:45	0°♄					
evening set	-781 Oct 25 j 12:34	4°♄17'08		conjunction	-775 May 01 j 21:57	2°♄36'34	0°-46'-43
max. Earth dist.	-781 Nov 05 j 07:41	6°♄44'09	6.26665 AU	minimum elong	-775 May 01 j 22:00	2°♄36'35	0°46'44
				max. Earth dist.	-775 May 04 j 00:10	3°♄05'34	6.10709 AU
conjunction	-781 Nov 07 j 03:10	7°♄08'55	0°42'37	morning rise	-775 May 15 j 17:03	5°♄47'14	
minimum elong	-781 Nov 07 j 03:13	7°♄08'56	0°42'37		-775 Jun 27 j 04:03	15°♄	
morning rise	-781 Nov 19 j 16:56	10°♄00'33		retrograde	-775 Sep 20 j 12:41	24°♄55'25	
	-781 Dec 12 j 05:23	15°♄		min. Earth dist.	-775 Nov 17 j 22:30	20°♄00'39	4.17001 AU
retrograde	-780 Mar 23 j 11:38	28°♄12'22		opposition	-775 Nov 19 j 01:18	19°♄51'33	0°-41'-30
opposition	-780 May 23 j 10:36	23°♄19'09	0°35'32		-774 Jan 07 j 16:42	15°R♄	
min. Earth dist.	-780 May 24 j 14:16	23°♄10'18	4.20234 AU	direct	-774 Jan 17 j 05:15	14°♄50'55	
direct	-780 Jul 23 j 17:16	18°♄22'53			-774 Jan 26 j 19:41	15°♄	
	-780 Oct 25 j 15:46	0°♄			-774 May 08 j 07:12	0°♄	
evening set	-780 Nov 25 j 18:58	6°♄58'00		evening set	-774 May 24 j 01:21	3°♄28'12	
max. Earth dist.	-780 Dec 07 j 07:16	9°♄39'25	6.13781 AU				
				conjunction	-774 Jun 06 j 19:04	6°♄32'51	0°-7'-31
conjunction	-780 Dec 08 j 11:41	9°♄56'03	0°03'12	minimum elong	-774 Jun 06 j 19:05	6°♄32'52	0°07'32
minimum elong	-780 Dec 08 j 11:41	9°♄56'03	0°03'11	behind sun begin	-774 Jun 06 j 11:32	6°♄28'39	
behind sun begin	-780 Dec 08 j 03:42	9°♄51'24		behind sun end	-774 Jun 07 j 02:38	6°♄37'04	
behind sun end	-780 Dec 08 j 19:39	10°♄00'42		max. Earth dist.	-774 Jun 08 j 02:16	6°♄50'21	6.23506 AU
morning rise	-780 Dec 21 j 05:25	12°♄54'51		morning rise	-774 Jun 20 j 12:13	9°♄36'56	

Planetary Phenomena of Jupiter from -900 through -400 (UT), Astrodienst AG 14-Nov-2015 16:11, page 12

Attention, astronomical year style is used: The year -774 in astronomical counting style is the year 775 BCE in historical counting style.

asc. node	-774 Aug 17 j 03:24	21°II18'52		desc. node	-768 Nov 16 j 03:53	8°♁30'03	
retrograde	-774 Oct 22 j 18:55	27°II41'25		evening set	-768 Nov 30 j 10:10	11°♁46'59	
opposition	-774 Dec 21 j 11:12	22°II40'54	0°19'11	max. Earth dist.	-768 Dec 12 j 03:47	14°♁31'59	6.12256 AU
min. Earth dist.	-774 Dec 20 j 22:47	22°II45'03	4.29574 AU				
direct	-773 Feb 19 j 23:29	17°II38'13		conjunction	-768 Dec 13 j 03:30	14°♁45'55	0°-2'-59
	-773 May 31 j 00:45	0°☾		minimum elong	-768 Dec 13 j 03:29	14°♁45'55	0°03'00
evening set	-773 Jun 27 j 04:47	5°☾45'39		behind sun begin	-768 Dec 12 j 19:29	14°♁41'14	
				behind sun end	-768 Dec 13 j 11:28	14°♁50'35	
conjunction	-773 Jul 10 j 17:06	8°☾43'12	0°32'38	morning rise	-768 Dec 25 j 21:49	17°♁45'39	
minimum elong	-773 Jul 10 j 17:04	8°☾43'11	0°32'39				
max. Earth dist.	-773 Jul 10 j 23:18	8°☾46'36	6.34925 AU	retrograde	-767 Feb 21 j 06:38	0°♁	
morning rise	-773 Jul 24 j 02:50	11°☾39'23		opposition	-767 Jul 03 j 08:37	2°♁11'34	0°-36'-53
retrograde	-773 Nov 22 j 16:04	28°☾55'43		min. Earth dist.	-767 Jul 03 j 16:36	2°♁08'58	4.06455 AU
opposition	-772 Jan 21 j 15:31	23°☾59'08	1°11'13				
min. Earth dist.	-772 Jan 21 j 20:00	23°☾57'40	4.39036 AU	direct	-767 Jul 20 j 19:59	30°♁♁	
direct	-772 Mar 23 j 08:49	18°☾55'49			-767 Sep 01 j 01:04	27°♁17'46	
	-772 Jun 26 j 07:52	0°♁		evening set	-767 Oct 12 j 08:38	0°♁	
evening set	-772 Jul 28 j 16:07	6°♁43'21			-766 Jan 03 j 18:08	16°♁27'36	
				conjunction	-766 Jan 16 j 16:40	19°♁33'18	0°-44'-6
conjunction	-772 Aug 10 j 19:53	9°♁34'41	1°02'04	minimum elong	-766 Jan 16 j 16:38	19°♁33'16	0°44'08
minimum elong	-772 Aug 10 j 19:50	9°♁34'39	1°02'04	max. Earth dist.	-766 Jan 16 j 20:01	19°♁35'18	6.01882 AU
max. Earth dist.	-772 Aug 09 j 22:56	9°♁23'17	6.41667 AU	morning rise	-766 Jan 29 j 17:48	22°♁40'31	
morning rise	-772 Aug 23 j 20:45	12°♁24'30			-766 Mar 02 j 14:29	0°≈	
	-772 Sep 04 j 23:19	15°♁		retrograde	-766 Jun 10 j 06:10	12°≈55'21	
retrograde	-772 Dec 22 j 02:55	29°♁17'44		opposition	-766 Aug 09 j 13:34	7°≈54'41	-1°-30'-14
opposition	-771 Feb 20 j 10:32	24°♁24'16	1°42'04	min. Earth dist.	-766 Aug 08 j 23:51	7°≈59'14	3.98947 AU
min. Earth dist.	-771 Feb 21 j 07:46	24°♁17'24	4.42780 AU	direct	-766 Oct 06 j 23:57	3°≈01'20	
direct	-771 Apr 23 j 23:52	19°♁21'31			-765 Jan 07 j 09:33	15°≈	
	-771 Jul 26 j 01:16	0°♁		evening set	-765 Feb 08 j 22:46	22°≈30'50	
evening set	-771 Aug 28 j 22:23	7°♁02'30					
max. Earth dist.	-771 Sep 09 j 04:07	9°♁29'29	6.42033 AU	conjunction	-765 Feb 22 j 04:30	25°≈41'30	-1°-9'-48
				minimum elong	-765 Feb 22 j 04:29	25°≈41'29	1°09'49
conjunction	-771 Sep 10 j 18:40	9°♁50'33	1°13'56	max. Earth dist.	-765 Feb 23 j 12:48	26°≈00'55	5.97855 AU
minimum elong	-771 Sep 10 j 18:39	9°♁50'33	1°13'56	morning rise	-765 Mar 07 j 13:32	28°≈53'54	
morning rise	-771 Sep 23 j 11:56	12°♁37'16			-765 Mar 12 j 04:50	0°✕	
retrograde	-770 Jan 21 j 22:52	29°♁34'37		retrograde	-765 Jul 17 j 21:32	19°✕24'43	
opposition	-770 Mar 23 j 16:11	24°♁42'46	1°45'12	opposition	-765 Sep 15 j 17:57	14°✕20'36	-1°-49'-18
min. Earth dist.	-770 Mar 24 j 23:10	24°♁32'53	4.39857 AU	min. Earth dist.	-765 Sep 14 j 13:29	14°✕30'15	3.98994 AU
direct	-770 May 25 j 08:38	19°♁41'42		direct	-765 Nov 12 j 16:36	9°✕25'30	
	-770 Aug 24 j 02:21	0°♁		evening set	-764 Mar 17 j 04:29	28°✕53'14	
evening set	-770 Sep 28 j 17:58	7°♁30'21			-764 Mar 21 j 21:43	0°♁	
max. Earth dist.	-770 Oct 09 j 10:34	9°♁52'42	6.35967 AU				
				conjunction	-764 Mar 30 j 18:02	2°♁05'32	-1°-8'-38
conjunction	-770 Oct 11 j 09:27	10°♁18'49	1°05'25	minimum elong	-764 Mar 30 j 18:04	2°♁05'33	1°08'39
minimum elong	-770 Oct 11 j 09:29	10°♁18'50	1°05'24	max. Earth dist.	-764 Apr 01 j 20:58	2°♁35'40	6.01864 AU
morning rise	-770 Oct 23 j 23:04	13°♁06'31		morning rise	-764 Apr 13 j 10:09	5°♁19'04	
	-769 Feb 04 j 01:12	0°♁		retrograde	-764 Aug 22 j 01:59	25°♁19'16	
retrograde	-769 Feb 23 j 05:03	0°♁34'03		min. Earth dist.	-764 Oct 19 j 07:09	20°♁25'06	4.06542 AU
	-769 Mar 14 j 08:28	30°♁♁		opposition	-764 Oct 20 j 15:27	20°♁14'05	-1°-26'-2
opposition	-769 Apr 25 j 03:07	25°♁42'13	1°18'50	direct	-764 Dec 17 j 22:02	15°♁16'00	
min. Earth dist.	-769 Apr 26 j 13:19	25°♁31'20	4.30981 AU		-763 Apr 03 j 20:54	0°♁	
direct	-769 Jun 26 j 08:31	20°♁43'34		evening set	-763 Apr 23 j 04:46	4°♁21'22	
	-769 Sep 18 j 08:41	0°♁					
evening set	-769 Oct 29 j 23:02	8°♁52'49		conjunction	-763 May 06 j 22:55	7°♁31'07	0°-41'-53
max. Earth dist.	-769 Nov 09 j 19:03	11°♁20'57	6.25001 AU	minimum elong	-763 May 06 j 22:58	7°♁31'08	0°41'52
				max. Earth dist.	-763 May 08 j 21:59	7°♁58'12	6.12240 AU
conjunction	-769 Nov 11 j 13:43	11°♁45'19	0°37'42	morning rise	-763 May 20 j 18:18	10°♁41'10	
minimum elong	-769 Nov 11 j 13:45	11°♁45'20	0°37'42		-763 Jun 09 j 00:09	15°♁	
morning rise	-769 Nov 24 j 03:55	14°♁37'49		retrograde	-763 Sep 25 j 01:52	29°♁41'04	
	-769 Nov 25 j 18:58	15°♁		opposition	-763 Nov 23 j 15:07	24°♁37'33	0°-33'-13
	-768 Feb 12 j 18:19	0°♁		min. Earth dist.	-763 Nov 22 j 14:00	24°♁46'04	4.18573 AU
retrograde	-768 Mar 28 j 08:28	2°♁57'31		direct	-762 Jan 21 j 23:21	19°♁36'31	
	-768 May 12 j 18:48	30°♁♁			-762 Apr 20 j 11:54	0°♁	
opposition	-768 May 28 j 08:03	28°♁03'55	0°27'06	evening set	-762 May 28 j 21:25	8°♁10'13	
min. Earth dist.	-768 May 29 j 08:40	27°♁56'02	4.18567 AU				
direct	-768 Jul 28 j 09:24	23°♁08'01		conjunction	-762 Jun 11 j 14:50	11°♁14'05	0°-1'-41
	-768 Oct 05 j 22:41	0°♁		minimum elong	-762 Jun 11 j 14:51	11°♁14'05	0°01'42

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Attention, astronomical year style is used: The year -762 in astronomical counting style is the year 763 BCE in historical counting style.

behind sun begin	-762 Jun 11 j 06:30	11°II09'26		max. Earth dist.	-757 Nov 14 j 07:11	15°ML56'40	6.23821 AU
behind sun end	-762 Jun 11 j 23:11	11°II18'43					
max. Earth dist.	-762 Jun 12 j 19:43	11°II30'14	6.25012 AU	conjunction	-757 Nov 15 j 23:12	16°ML19'36	0°32'40
morning rise	-762 Jun 25 j 07:06	14°II17'10		minimum elong	-757 Nov 15 j 23:14	16°ML19'37	0°32'39
asc. node	-762 Jun 27 j 08:44	14°II44'38		morning rise	-757 Nov 28 j 13:37	19°ML12'43	
	-762 Sep 19 j 04:53	0°☾			-756 Jan 18 j 16:35	0°♁	
retrograde	-762 Oct 27 j 04:31	2°☾14'38		retrograde	-756 Apr 02 j 05:25	7°♁38'38	
	-762 Dec 03 j 23:44	30°RII		opposition	-756 Jun 02 j 03:51	2°♁44'40	0°18'39
opposition	-762 Dec 25 j 20:38	27°II14'43	0°27'19	min. Earth dist.	-756 Jun 03 j 03:38	2°♁37'02	4.17349 AU
min. Earth dist.	-762 Dec 25 j 10:28	27°II18'07	4.30888 AU		-756 Jun 24 j 20:59	30°RML	
direct	-761 Feb 24 j 13:01	22°II11'54		direct	-756 Aug 02 j 02:40	27°ML49'03	
	-761 May 12 j 01:23	0°☾			-756 Sep 08 j 18:37	0°♁	
evening set	-761 Jul 01 j 19:54	10°☾16'48		desc. node	-756 Sep 27 j 14:19	2°♁31'42	
				evening set	-756 Dec 04 j 23:20	16°♁30'21	
conjunction	-761 Jul 15 j 07:03	13°☾13'30	0°37'36				
minimum elong	-761 Jul 15 j 07:00	13°☾13'28	0°37'36	conjunction	-756 Dec 17 j 17:05	19°♁29'57	0°-8'-51
max. Earth dist.	-761 Jul 15 j 08:24	13°☾14'14	6.35939 AU	minimum elong	-756 Dec 17 j 17:05	19°♁29'56	0°08'52
morning rise	-761 Jul 28 j 15:46	16°☾08'49		behind sun begin	-756 Dec 17 j 10:08	19°♁25'52	
	-761 Oct 10 j 17:45	0°♁		behind sun end	-756 Dec 18 j 00:01	19°♁34'01	
retrograde	-761 Nov 26 j 23:26	3°♁21'11		max. Earth dist.	-756 Dec 16 j 19:38	19°♁17'19	6.11112 AU
	-760 Jan 13 j 16:24	30°R☾		morning rise	-756 Dec 30 j 12:11	22°♁30'29	
opposition	-760 Jan 25 j 23:20	28°☾25'06	1°17'02		-755 Feb 01 j 17:42	0°♁	
min. Earth dist.	-760 Jan 26 j 06:24	28°☾22'47	4.39720 AU	retrograde	-755 May 08 j 14:30	11°♁59'23	
direct	-760 Mar 27 j 20:07	23°☾21'46		opposition	-755 Jul 08 j 07:26	7°♁02'08	0°-45'-14
	-760 Jun 06 j 15:22	0°♁		min. Earth dist.	-755 Jul 08 j 12:13	7°♁00'34	4.05495 AU
evening set	-760 Aug 02 j 02:55	11°♁08'15		direct	-755 Sep 05 j 18:50	2°♁08'28	
max. Earth dist.	-760 Aug 14 j 07:38	13°♁47'00	6.41981 AU	evening set	-754 Jan 08 j 12:16	21°♁20'33	
conjunction	-760 Aug 15 j 05:42	13°♁59'01	1°04'54	conjunction	-754 Jan 21 j 11:35	24°♁26'53	0°-48'-46
minimum elong	-760 Aug 15 j 05:40	13°♁59'00	1°04'54	minimum elong	-754 Jan 21 j 11:33	24°♁26'51	0°48'47
	-760 Aug 19 j 21:45	15°♁		max. Earth dist.	-754 Jan 21 j 18:13	24°♁30'52	6.01183 AU
morning rise	-760 Aug 28 j 05:13	16°♁48'13		morning rise	-754 Feb 03 j 13:38	27°♁34'48	
	-760 Nov 06 j 12:15	0°♁			-754 Feb 13 j 19:27	0°♁	
retrograde	-760 Dec 26 j 09:18	3°♁40'43			-754 May 02 j 19:28	15°♁	
	-759 Feb 15 j 07:53	30°R♁		retrograde	-754 Jun 15 j 07:59	17°♁53'31	
opposition	-759 Feb 24 j 19:00	28°♁47'35	1°44'16		-754 Jul 29 j 01:07	15°R♁	
min. Earth dist.	-759 Feb 25 j 16:50	28°♁40'34	4.42751 AU	opposition	-754 Aug 14 j 13:24	12°♁52'19	-1°-35'-8
direct	-759 Apr 28 j 08:50	23°♁45'05		min. Earth dist.	-754 Aug 13 j 22:21	12°♁57'20	3.98585 AU
	-759 Jul 06 j 03:22	0°♁		direct	-754 Oct 11 j 22:15	7°♁58'46	
evening set	-759 Sep 02 j 07:01	11°♁26'14			-754 Dec 18 j 20:25	15°♁	
max. Earth dist.	-759 Sep 13 j 09:37	13°♁51'47	6.41669 AU	evening set	-753 Feb 13 j 21:03	27°♁29'18	
					-753 Feb 24 j 08:35	0°♁	
conjunction	-759 Sep 15 j 02:14	14°♁14'02	1°13'58	conjunction	-753 Feb 27 j 03:58	0°♁40'27	-1°-11'-18
minimum elong	-759 Sep 15 j 02:14	14°♁14'02	1°13'58	minimum elong	-753 Feb 27 j 03:57	0°♁40'26	1°11'19
morning rise	-759 Sep 27 j 18:52	17°♁00'35		max. Earth dist.	-753 Feb 28 j 15:41	1°♁01'54	5.97865 AU
	-759 Dec 05 j 00:32	0°♁		morning rise	-753 Mar 12 j 14:00	3°♁53'17	
retrograde	-758 Jan 26 j 10:05	4°♁00'01		retrograde	-753 Jul 22 j 21:13	24°♁23'12	
	-758 Mar 21 j 08:14	30°R♁		min. Earth dist.	-753 Sep 19 j 10:24	19°♁28'46	3.99397 AU
opposition	-758 Mar 28 j 03:30	29°♁08'16	1°43'14	opposition	-753 Sep 20 j 15:33	19°♁18'53	-1°-48'-32
min. Earth dist.	-758 Mar 29 j 11:50	28°♁57'58	4.39195 AU	direct	-753 Nov 17 j 13:01	14°♁23'28	
direct	-758 May 29 j 20:32	24°♁07'28			-752 Mar 05 j 15:26	0°♁	
	-758 Aug 03 j 21:00	0°♁		evening set	-752 Mar 22 j 04:51	3°♁50'23	
evening set	-758 Oct 03 j 01:50	11°♁57'12					
max. Earth dist.	-758 Oct 13 j 18:44	14°♁20'02	6.35065 AU	conjunction	-752 Apr 04 j 19:11	7°♁02'45	-1°-6'-20
				minimum elong	-752 Apr 04 j 19:14	7°♁02'46	1°06'20
conjunction	-758 Oct 15 j 17:02	14°♁45'52	1°02'36	max. Earth dist.	-752 Apr 06 j 20:53	7°♁32'05	6.02613 AU
minimum elong	-758 Oct 15 j 17:04	14°♁45'54	1°02'37	morning rise	-752 Apr 18 j 12:17	10°♁16'18	
morning rise	-758 Oct 28 j 06:22	17°♁33'50			-752 Aug 16 j 05:35	0°♁	
	-758 Dec 30 j 01:02	0°♁		retrograde	-752 Aug 26 j 19:05	0°♁11'12	
retrograde	-757 Feb 27 j 18:19	5°ML05'53			-752 Sep 06 j 08:32	30°R♁	
opposition	-757 Apr 29 j 18:25	0°ML13'50	1°12'57	min. Earth dist.	-752 Oct 24 j 00:23	25°♁17'04	4.07557 AU
min. Earth dist.	-757 May 01 j 02:45	0°ML03'33	4.29892 AU	opposition	-752 Oct 25 j 08:29	25°♁06'06	-1°-20'-11
direct	-757 May 01 j 13:54	30°R♁		direct	-752 Dec 22 j 17:11	20°♁07'35	
	-757 Jun 30 j 20:09	25°♁15'33			-751 Mar 16 j 21:36	0°♁	
	-757 Aug 27 j 18:17	0°♁		evening set	-751 Apr 28 j 03:38	9°♁10'47	
evening set	-757 Nov 03 j 08:29	13°ML26'36					
	-757 Nov 10 j 04:16	15°ML					

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Attention, astronomical year style is used: The year -751 in astronomical counting style is the year 752 BCE in historical counting style.

conjunction	-751 May 11 j 22:17	12°♄20'11	0°-36'-51		-746 Jul 05 j 05:42	0°♌	
minimum elong	-751 May 11 j 22:20	12°♄20'12	0°36'51	evening set	-746 Oct 07 j 08:36	16°♌21'46	
max. Earth dist.	-751 May 13 j 20:22	12°♄46'38	6.13472 AU	max. Earth dist.	-746 Oct 18 j 00:24	18°♌44'28	6.33856 AU
	-751 May 23 j 13:25	15°♄					
morning rise	-751 May 25 j 17:34	15°♄29'41		conjunction	-746 Oct 19 j 23:21	19°♌10'46	0°59'27
	-751 Aug 06 j 17:12	0°♄		minimum elong	-746 Oct 19 j 23:24	19°♌10'47	0°59'26
retrograde	-751 Sep 29 j 16:00	4°♄22'28		morning rise	-746 Nov 01 j 12:40	21°♌59'12	
	-751 Nov 23 j 03:33	30°♄♌			-746 Dec 09 j 06:45	0°♌	
min. Earth dist.	-751 Nov 27 j 04:35	29°♄27'15	4.19886 AU	retrograde	-745 Mar 04 j 10:32	9°♌37'14	
opposition	-751 Nov 28 j 03:43	29°♄19'25	0°-24'-54	opposition	-745 May 04 j 09:45	4°♌45'02	1°06'37
direct	-750 Jan 26 j 16:06	24°♄18'07		min. Earth dist.	-745 May 05 j 18:30	4°♌34'36	4.28357 AU
	-750 Mar 30 j 14:09	0°♄			-745 Jun 23 j 13:31	30°♄♌	
asc. node	-750 May 08 j 02:53	7°♄17'04		direct	-745 Jul 05 j 09:16	29°♌47'05	
evening set	-750 Jun 02 j 16:25	12°♄49'01			-745 Jul 17 j 04:45	0°♌	
					-745 Oct 25 j 07:36	15°♌	
conjunction	-750 Jun 16 j 09:17	15°♄52'07	0°04'10	evening set	-745 Nov 07 j 18:12	18°♌01'44	
minimum elong	-750 Jun 16 j 09:16	15°♄52'07	0°04'11	max. Earth dist.	-745 Nov 18 j 18:45	20°♌33'26	6.22094 AU
behind sun begin	-750 Jun 16 j 01:04	15°♄47'34					
behind sun end	-750 Jun 16 j 17:27	15°♄56'39		conjunction	-745 Nov 20 j 09:14	20°♌55'35	0°27'22
max. Earth dist.	-750 Jun 17 j 10:49	16°♄06'21	6.26312 AU	minimum elong	-745 Nov 20 j 09:16	20°♌55'36	0°27'22
morning rise	-750 Jun 30 j 00:54	18°♄54'21		morning rise	-745 Dec 03 j 00:05	23°♌49'36	
	-750 Aug 23 j 13:57	0°♄			-745 Dec 30 j 18:53	0°♄	
retrograde	-750 Oct 31 j 12:24	6°♄45'36		retrograde	-744 Apr 07 j 02:00	12°♄23'59	
opposition	-750 Dec 30 j 05:42	1°♄46'10	0°35'11	opposition	-744 Jun 07 j 01:00	7°♄29'38	0°09'55
min. Earth dist.	-750 Dec 29 j 21:01	1°♄49'03	4.32082 AU	min. Earth dist.	-744 Jun 07 j 22:11	7°♄22'50	4.15555 AU
	-749 Jan 12 j 19:35	30°♄♌		direct	-744 Aug 06 j 18:04	2°♄34'22	
direct	-749 Mar 01 j 01:30	26°♄43'11		desc. node	-744 Aug 08 j 01:25	2°♄34'32	
	-749 Apr 17 j 15:53	0°♄		evening set	-744 Dec 09 j 14:52	21°♄20'21	
evening set	-749 Jul 06 j 10:02	14°♄45'39					
				conjunction	-744 Dec 22 j 09:12	24°♄20'57	0°-14'-48
conjunction	-749 Jul 19 j 20:10	17°♄41'30	0°42'17	minimum elong	-744 Dec 22 j 09:11	24°♄20'56	0°14'50
minimum elong	-749 Jul 19 j 20:08	17°♄41'28	0°42'17	behind sun begin	-744 Dec 22 j 05:47	24°♄18'56	
max. Earth dist.	-749 Jul 19 j 19:21	17°♄41'03	6.36944 AU	behind sun end	-744 Dec 22 j 12:35	24°♄22'56	
morning rise	-749 Aug 02 j 03:33	20°♄35'53		max. Earth dist.	-744 Dec 21 j 14:52	24°♄10'06	6.09404 AU
	-749 Sep 17 j 08:54	0°♄		morning rise	-743 Jan 04 j 05:09	27°♄22'36	
retrograde	-749 Dec 01 j 05:47	7°♄44'15			-743 Jan 15 j 11:34	0°♄	
opposition	-748 Jan 30 j 06:36	2°♄48'39	1°22'20	retrograde	-743 May 13 j 19:07	17°♄00'15	
min. Earth dist.	-748 Jan 30 j 15:31	2°♄45'44	4.40462 AU	opposition	-743 Jul 13 j 10:04	12°♄02'27	0°-53'-34
	-748 Feb 22 j 03:11	30°♄♌		min. Earth dist.	-743 Jul 13 j 12:45	12°♄01'35	4.04022 AU
direct	-748 Apr 01 j 06:23	27°♄45'23		direct	-743 Sep 10 j 18:12	7°♄08'54	
	-748 May 10 j 18:19	0°♄		evening set	-742 Jan 13 j 10:45	26°♄25'09	
evening set	-748 Aug 04 j 04:31	15°♄					
	-748 Aug 06 j 12:42	15°♄30'16		conjunction	-742 Jan 26 j 11:08	29°♄32'26	0°-53'-16
conjunction	-748 Aug 19 j 14:12	18°♄20'23	1°07'19	minimum elong	-742 Jan 26 j 11:05	29°♄32'24	0°53'17
minimum elong	-748 Aug 19 j 14:10	18°♄20'22	1°07'20	max. Earth dist.	-742 Jan 26 j 22:33	29°♄39'17	6.00084 AU
max. Earth dist.	-748 Aug 18 j 12:15	18°♄06'16	6.42367 AU		-742 Jan 28 j 09:02	0°♄	
morning rise	-748 Sep 01 j 12:43	21°♄08'59		morning rise	-742 Feb 08 j 14:13	2°♄41'18	
	-748 Oct 15 j 00:39	0°♄			-742 Apr 05 j 16:13	15°♄	
retrograde	-748 Dec 30 j 16:26	8°♄00'34		retrograde	-742 Jun 20 j 15:02	23°♄05'06	
opposition	-747 Mar 01 j 02:45	3°♄07'41	1°45'50	opposition	-742 Aug 19 j 18:05	18°♄03'26	-1°-39'-32
min. Earth dist.	-747 Mar 02 j 02:35	3°♄00'00	4.42749 AU	min. Earth dist.	-742 Aug 19 j 00:34	18°♄09'17	3.98020 AU
	-747 Mar 27 j 10:22	30°♄♌			-742 Sep 13 j 12:41	15°♄	
direct	-747 May 02 j 18:10	28°♄05'18		direct	-742 Oct 16 j 23:21	13°♄09'48	
	-747 Jun 08 j 06:37	0°♄			-742 Nov 19 j 04:10	15°♄	
evening set	-747 Sep 06 j 13:44	15°♄46'22		evening set	-741 Feb 07 j 15:23	0°♄	
max. Earth dist.	-747 Sep 17 j 15:33	18°♄11'39	6.41247 AU		-741 Feb 19 j 01:20	2°♄42'04	
				conjunction	-741 Mar 04 j 09:12	5°♄53'41	-1°-12'-19
conjunction	-747 Sep 19 j 08:19	18°♄34'01	1°13'36	minimum elong	-741 Mar 04 j 09:11	5°♄53'41	1°12'20
minimum elong	-747 Sep 19 j 08:19	18°♄34'01	1°13'35	max. Earth dist.	-741 Mar 05 j 22:46	6°♄16'14	5.97865 AU
morning rise	-747 Oct 02 j 00:04	21°♄20'26		morning rise	-741 Mar 17 j 20:30	9°♄07'02	
	-747 Nov 13 j 01:26	0°♄		retrograde	-741 Jul 27 j 23:28	29°♄35'26	
retrograde	-746 Jan 30 j 18:28	8°♄22'25		min. Earth dist.	-741 Sep 24 j 10:44	24°♄41'23	3.99996 AU
opposition	-746 Apr 01 j 13:54	3°♄30'44	1°40'41	opposition	-741 Sep 25 j 17:47	24°♄30'49	-1°-46'-54
min. Earth dist.	-746 Apr 02 j 22:14	3°♄20'26	4.38357 AU	direct	-741 Nov 22 j 15:17	19°♄35'02	
	-746 May 02 j 05:46	30°♄♌			-740 Feb 16 j 04:13	0°♄	
direct	-746 Jun 03 j 05:02	28°♄30'17		evening set	-740 Mar 27 j 10:12	9°♄00'07	

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

conjunction	-740 Apr 10 j 01:35	12°♃12'23	-1°-3'-26	morning rise	-735 Oct 06 j 02:13	23°♃32'03	
minimum elong	-740 Apr 10 j 01:37	12°♃12'25	1°03'27		-735 Oct 26 j 22:19	0°♌	
max. Earth dist.	-740 Apr 12 j 05:24	12°♃42'53	6.03787 AU	retrograde	-734 Feb 04 j 02:18	12°♌37'36	
morning rise	-740 Apr 23 j 19:10	15°♃25'39		opposition	-734 Apr 05 j 21:43	7°♌45'55	1°37'41
	-740 Jul 03 j 11:50	0°♌		min. Earth dist.	-734 Apr 07 j 07:41	7°♌35'06	4.37136 AU
retrograde	-740 Aug 31 j 17:23	5°♌12'57		direct	-734 Jun 07 j 11:43	2°♌45'40	
min. Earth dist.	-740 Oct 28 j 21:59	0°♌18'38	4.09180 AU	evening set	-734 Oct 11 j 13:01	20°♌40'23	
opposition	-740 Oct 30 j 05:15	0°♌07'58	-1°-13'-33	max. Earth dist.	-734 Oct 22 j 05:20	23°♌03'54	6.32158 AU
	-740 Oct 31 j 04:36	30°♌♃					
direct	-740 Dec 27 j 17:48	25°♃09'03		conjunction	-734 Oct 24 j 03:49	23°♌30'02	0°56'02
	-739 Feb 22 j 05:06	0°♌		minimum elong	-734 Oct 24 j 03:51	23°♌30'03	0°56'01
evening set	-739 May 03 j 05:19	14°♌07'22		morning rise	-734 Nov 05 j 17:02	26°♌19'09	
	-739 May 07 j 01:51	15°♌			-734 Nov 22 j 09:57	0°♍	
				retrograde	-733 Mar 09 j 00:20	14°♍05'01	
conjunction	-739 May 17 j 00:00	17°♌15'55	0°-31'-29	opposition	-733 May 08 j 23:53	9°♍12'38	1°00'02
minimum elong	-739 May 17 j 00:02	17°♌15'57	0°31'29	min. Earth dist.	-733 May 10 j 07:46	9°♍02'29	4.26278 AU
max. Earth dist.	-739 May 18 j 20:50	17°♌41'31	6.15418 AU	direct	-733 Jul 09 j 18:53	4°♍15'04	
morning rise	-739 May 30 j 19:09	20°♌24'27			-733 Oct 08 j 12:44	15°♍	
	-739 Jul 14 j 18:16	0°♎		evening set	-733 Nov 12 j 03:38	22°♍35'24	
retrograde	-739 Oct 04 j 03:42	9°♎07'10		max. Earth dist.	-733 Nov 23 j 05:22	25°♍08'35	6.19806 AU
opposition	-739 Dec 02 j 17:18	4°♎04'28	0°-16'-22				
min. Earth dist.	-739 Dec 01 j 18:43	4°♎12'07	4.21973 AU	conjunction	-733 Nov 24 j 18:55	25°♍30'18	0°21'58
	-738 Jan 07 j 04:48	30°♎♌		minimum elong	-733 Nov 24 j 18:56	25°♍30'19	0°21'58
direct	-738 Jan 31 j 09:23	29°♎02'51		morning rise	-733 Dec 07 j 10:29	28°♍25'35	
	-738 Feb 24 j 22:20	0°♎			-733 Dec 14 j 07:31	0°♏	
asc. node	-738 Mar 18 j 15:56	2°♎15'39		retrograde	-732 Apr 12 j 02:09	17°♏10'46	
evening set	-738 Jun 07 j 11:23	17°♎28'00		opposition	-732 Jun 11 j 23:16	12°♏16'01	0°01'08
				min. Earth dist.	-732 Jun 12 j 18:44	12°♏09'45	4.13215 AU
conjunction	-738 Jun 21 j 03:26	20°♎29'53	0°09'51	desc. node	-732 Jun 19 j 00:38	11°♏21'44	
minimum elong	-738 Jun 21 j 03:25	20°♎29'52	0°09'52	direct	-732 Aug 11 j 11:46	7°♏21'03	
behind sun begin	-738 Jun 20 j 20:44	20°♎26'11		evening set	-732 Dec 14 j 08:11	26°♏13'49	
behind sun end	-738 Jun 21 j 10:06	20°♎33'34					
max. Earth dist.	-738 Jun 22 j 01:34	20°♎42'10	6.28382 AU	conjunction	-732 Dec 27 j 03:28	29°♏15'43	0°-20'-42
morning rise	-738 Jul 04 j 18:00	23°♎30'46		minimum elong	-732 Dec 27 j 03:27	29°♏15'43	0°20'43
	-738 Aug 04 j 04:46	0°♐		max. Earth dist.	-732 Dec 26 j 13:36	29°♏07'30	6.07242 AU
retrograde	-738 Nov 04 j 19:37	11°♐13'14			-732 Dec 30 j 06:03	0°♑	
opposition	-737 Jan 03 j 13:30	6°♐14'18	0°42'41	morning rise	-731 Jan 09 j 00:20	2°♑18'45	
min. Earth dist.	-737 Jan 03 j 07:47	6°♐16'12	4.33958 AU	retrograde	-731 May 19 j 02:41	22°♑06'37	
direct	-737 Mar 05 j 14:50	1°♐11'10		opposition	-731 Jul 18 j 14:58	17°♑08'22	-1°-1'-37
evening set	-737 Jul 10 j 21:35	19°♐08'49		min. Earth dist.	-731 Jul 18 j 14:28	17°♑08'32	4.02271 AU
				direct	-731 Sep 15 j 17:35	12°♑15'00	
conjunction	-737 Jul 24 j 06:31	22°♐03'32	0°46'36		-730 Jan 11 j 18:31	0°♒	
minimum elong	-737 Jul 24 j 06:28	22°♐03'30	0°46'36	evening set	-730 Jan 18 j 12:45	1°♒36'32	
max. Earth dist.	-737 Jul 24 j 01:42	22°♐00'54	6.38460 AU				
morning rise	-737 Aug 06 j 12:37	24°♐56'45		conjunction	-730 Jan 31 j 14:04	4°♒44'48	0°-57'-23
	-737 Aug 30 j 10:00	0°♑		minimum elong	-730 Jan 31 j 14:01	4°♒44'46	0°57'24
retrograde	-737 Dec 05 j 08:07	11°♑59'52		max. Earth dist.	-730 Feb 01 j 05:04	4°♒53'50	5.98892 AU
opposition	-736 Feb 03 j 11:09	7°♑04'37	1°26'58	morning rise	-730 Feb 13 j 18:30	7°♒54'46	
min. Earth dist.	-736 Feb 03 j 22:11	7°♑01'01	4.41534 AU		-730 Mar 16 j 09:50	15°♒	
direct	-736 Apr 05 j 13:38	2°♑01'20		retrograde	-730 Jun 25 j 23:08	28°♒23'32	
	-736 Jul 19 j 08:27	15°♑		min. Earth dist.	-730 Aug 24 j 04:15	23°♒28'22	3.97539 AU
evening set	-736 Aug 10 j 18:31	19°♑43'36		opposition	-730 Aug 25 j 01:21	23°♒21'18	-1°-43'-9
				direct	-730 Oct 22 j 03:23	18°♒27'29	
conjunction	-736 Aug 23 j 18:56	22°♑33'02	1°09'17		-729 Jan 20 j 10:10	0°♓	
minimum elong	-736 Aug 23 j 18:55	22°♑33'01	1°09'17	evening set	-729 Feb 24 j 08:25	8°♓00'55	
max. Earth dist.	-736 Aug 22 j 14:44	22°♑17'41	6.42896 AU				
morning rise	-736 Sep 05 j 16:13	25°♑20'58		conjunction	-729 Mar 09 j 17:37	11°♓12'59	-1°-12'-44
	-736 Sep 27 j 15:49	0°♔		minimum elong	-729 Mar 09 j 17:37	11°♓12'59	1°12'44
retrograde	-735 Jan 03 j 19:24	12°♔11'34		max. Earth dist.	-729 Mar 11 j 12:24	11°♓38'37	5.98131 AU
opposition	-735 Mar 05 j 07:14	7°♔18'57	1°46'47	morning rise	-729 Mar 23 j 05:51	14°♓26'38	
min. Earth dist.	-735 Mar 06 j 09:15	7°♔10'36	4.42702 AU		-729 Jun 06 j 04:41	0°♕	
direct	-735 May 07 j 00:01	2°♔16'44		retrograde	-729 Aug 02 j 05:41	4°♕51'49	
evening set	-735 Sep 10 j 17:09	19°♔57'59			-729 Sep 29 j 07:22	30°♕♓	
max. Earth dist.	-735 Sep 21 j 14:28	22°♔21'09	6.40598 AU	opposition	-729 Sep 30 j 21:48	29°♕46'55	-1°-44'-20
				min. Earth dist.	-729 Sep 29 j 14:15	29°♕57'40	4.00956 AU
conjunction	-735 Sep 23 j 10:53	22°♔45'34	1°12'49	direct	-729 Nov 27 j 21:03	24°♕50'43	
minimum elong	-735 Sep 23 j 10:54	22°♔45'34	1°12'50		-728 Jan 24 j 09:56	0°♖	

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Attention, astronomical year style is used: The year -728 in astronomical counting style is the year 729 BCE in historical counting style.

evening set	-728 Apr 01 j 17:10	14°♃12'28		morning rise	-723 Oct 10 j 07:51	29°♃54'11	
					-723 Oct 10 j 18:28	0°♃	
conjunction	-728 Apr 15 j 09:13	17°♃24'21	-1°00'00	retrograde	-722 Feb 08 j 13:57	17°♃04'17	
minimum elong	-728 Apr 15 j 09:16	17°♃24'23	1°00'00	opposition	-722 Apr 10 j 10:12	12°♃12'38	1°34'01
max. Earth dist.	-728 Apr 17 j 13:45	17°♃55'07	6.05312 AU	min. Earth dist.	-722 Apr 11 j 20:44	12°♃01'39	4.35761 AU
morning rise	-728 Apr 29 j 03:27	20°♃37'09		direct	-722 Jun 11 j 22:43	7°♃12'45	
	-728 Jun 10 j 18:23	0°♃		evening set	-722 Oct 15 j 21:40	25°♃10'51	
retrograde	-728 Sep 05 j 13:11	10°♃15'14		max. Earth dist.	-722 Oct 26 j 12:50	27°♃34'23	6.30447 AU
min. Earth dist.	-728 Nov 02 j 18:15	5°♃21'11	4.11074 AU				
opposition	-728 Nov 04 j 01:51	5°♃10'25	-1°-6'-19	conjunction	-722 Oct 28 j 12:13	28°♃01'07	0°52'08
direct	-727 Jan 01 j 16:55	0°♃11'04		minimum elong	-722 Oct 28 j 12:16	28°♃01'09	0°52'07
	-727 Apr 20 j 01:21	15°♃			-722 Nov 06 j 06:57	0°♃	
evening set	-727 May 08 j 07:17	19°♃03'55		morning rise	-722 Nov 10 j 01:43	0°♃51'02	
					-721 Jan 22 j 05:09	15°♃	
conjunction	-727 May 22 j 01:52	22°♃11'32	0°-25'-50	retrograde	-721 Mar 13 j 19:31	18°♃44'50	
minimum elong	-727 May 22 j 01:54	22°♃11'33	0°25'51		-721 May 04 j 20:11	15°♃	
max. Earth dist.	-727 May 23 j 19:23	22°♃35'08	6.17508 AU	opposition	-721 May 13 j 18:51	13°♃52'11	0°52'43
morning rise	-727 Jun 04 j 20:41	25°♃18'58		min. Earth dist.	-721 May 15 j 01:34	13°♃42'23	4.24339 AU
	-727 Jun 26 j 01:35	0°♃		direct	-721 Jul 14 j 10:17	8°♃54'58	
retrograde	-727 Oct 08 j 17:19	13°♃51'37			-721 Sep 18 j 03:02	15°♃	
min. Earth dist.	-727 Dec 06 j 11:16	8°♃56'02	4.24033 AU	evening set	-721 Nov 16 j 17:04	27°♃20'12	
opposition	-727 Dec 07 j 06:54	8°♃49'24	0°-7'-41	max. Earth dist.	-721 Nov 27 j 23:07	29°♃56'31	6.17838 AU
asc. node	-726 Jan 26 j 04:57	3°♃57'16			-721 Nov 28 j 05:07	0°♃	
direct	-726 Feb 05 j 04:39	3°♃47'29					
evening set	-726 Jun 12 j 06:10	22°♃07'25		conjunction	-721 Nov 29 j 08:55	0°♃16'08	0°16'12
				minimum elong	-721 Nov 29 j 08:56	0°♃16'09	0°16'11
conjunction	-726 Jun 25 j 21:30	25°♃08'11	0°15'33	behind sun begin	-721 Nov 29 j 07:59	0°♃15'36	
minimum elong	-726 Jun 25 j 21:29	25°♃08'11	0°15'34	behind sun end	-721 Nov 29 j 09:52	0°♃16'42	
behind sun begin	-726 Jun 25 j 20:07	25°♃07'25		morning rise	-721 Dec 12 j 00:57	3°♃12'29	
behind sun end	-726 Jun 25 j 22:51	25°♃08'56		retrograde	-720 Apr 17 j 04:51	22°♃07'02	
max. Earth dist.	-726 Jun 26 j 16:36	25°♃18'45	6.30251 AU	desc. node	-720 Apr 28 j 11:54	21°♃55'02	
morning rise	-726 Jul 09 j 10:58	28°♃07'51		opposition	-720 Jun 17 j 01:01	17°♃11'55	0°-8'00
	-726 Jul 18 j 00:37	0°♃		min. Earth dist.	-720 Jun 17 j 17:53	17°♃06'29	4.11397 AU
retrograde	-726 Nov 09 j 01:48	15°♃42'47		direct	-720 Aug 16 j 08:38	12°♃17'19	
opposition	-725 Jan 07 j 22:02	10°♃44'25	0°50'03		-720 Dec 13 j 21:28	0°♃	
min. Earth dist.	-725 Jan 07 j 18:00	10°♃45'45	4.35511 AU	evening set	-720 Dec 19 j 04:29	1°♃14'44	
direct	-725 Mar 10 j 02:19	5°♃41'13					
evening set	-725 Jul 15 j 10:11	23°♃35'26		conjunction	-719 Jan 01 j 00:20	4°♃17'35	0°-26'-36
				minimum elong	-719 Jan 01 j 00:18	4°♃17'34	0°26'38
conjunction	-725 Jul 28 j 17:50	26°♃29'11	0°50'46	max. Earth dist.	-720 Dec 31 j 13:37	4°♃11'12	6.05746 AU
minimum elong	-725 Jul 28 j 17:47	26°♃29'09	0°50'47	morning rise	-719 Jan 13 j 22:18	7°♃21'42	
max. Earth dist.	-725 Jul 28 j 08:36	26°♃24'09	6.39582 AU	retrograde	-719 May 24 j 09:16	27°♃16'59	
morning rise	-725 Aug 10 j 22:40	29°♃21'26		opposition	-719 Jul 23 j 21:04	22°♃18'05	-1°-9'-18
	-725 Aug 13 j 22:07	0°♃		min. Earth dist.	-719 Jul 23 j 16:35	22°♃19'34	4.01272 AU
	-725 Nov 10 j 03:42	15°♃		direct	-719 Sep 20 j 19:20	17°♃24'46	
retrograde	-725 Dec 09 j 14:28	16°♃20'54			-719 Dec 25 j 06:35	0°♃	
	-724 Jan 07 j 22:38	15°♃		evening set	-718 Jan 23 j 15:00	6°♃48'35	
opposition	-724 Feb 07 j 17:54	11°♃26'09	1°31'20				
min. Earth dist.	-724 Feb 08 j 08:13	11°♃21'29	4.42172 AU	conjunction	-718 Feb 05 j 17:26	9°♃57'29	-1°-1'-5
direct	-724 Apr 10 j 00:18	6°♃22'58		minimum elong	-718 Feb 05 j 17:23	9°♃57'27	1°01'08
	-724 Jul 01 j 08:34	15°♃		max. Earth dist.	-718 Feb 06 j 14:32	10°♃10'11	5.98486 AU
	-724 Aug 15 j 02:50	24°♃04'06		morning rise	-718 Feb 18 j 22:44	13°♃08'02	
max. Earth dist.	-724 Aug 26 j 18:23	26°♃35'45	6.42984 AU		-718 Feb 26 j 19:19	15°♃	
					-718 May 13 j 06:39	0°♃	
conjunction	-724 Aug 28 j 02:13	26°♃53'04	1°10'59	retrograde	-718 Jul 01 j 06:35	3°♃38'11	
minimum elong	-724 Aug 28 j 02:11	26°♃53'04	1°10'58		-718 Aug 19 j 15:41	30°♃	
morning rise	-724 Sep 09 j 22:31	29°♃40'34		min. Earth dist.	-718 Aug 29 j 08:14	28°♃43'02	3.97796 AU
	-724 Sep 11 j 10:28	0°♃		opposition	-718 Aug 30 j 06:50	28°♃35'26	-1°-45'-54
retrograde	-723 Jan 08 j 01:58	16°♃31'44		direct	-718 Oct 27 j 08:24	23°♃41'22	
opposition	-723 Mar 09 j 15:17	11°♃39'18	1°47'16		-718 Dec 30 j 07:27	0°♃	
min. Earth dist.	-723 Mar 10 j 18:42	11°♃30'30	4.42265 AU	evening set	-717 Mar 01 j 13:33	13°♃13'18	
direct	-723 May 11 j 08:01	6°♃37'16					
evening set	-723 Sep 14 j 23:56	24°♃19'51		conjunction	-717 Mar 14 j 23:38	16°♃25'24	-1°-12'-35
max. Earth dist.	-723 Sep 25 j 20:36	26°♃42'59	6.39665 AU	minimum elong	-717 Mar 14 j 23:38	16°♃25'24	1°12'36
				max. Earth dist.	-717 Mar 16 j 20:37	16°♃52'15	5.98990 AU
conjunction	-723 Sep 27 j 17:09	27°♃07'33	1°11'39	morning rise	-717 Mar 28 j 12:56	19°♃39'03	
minimum elong	-723 Sep 27 j 17:10	27°♃07'34	1°11'39		-717 May 13 j 23:03	0°♃	

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Attention, astronomical year style is used: The year -717 in astronomical counting style is the year 718 BCE in historical counting style.

retrograde	-717 Aug 07 j 05:14	9°Υ58'26		direct	-711 May 15 j 17:56	10°η58'20	
opposition	-717 Oct 05 j 21:32	4°Υ53'22	-1°-41'-1	evening set	-711 Sep 19 j 07:19	28°η43'05	
min. Earth dist.	-717 Oct 04 j 12:33	5°Υ04'36	4.02334 AU		-711 Sep 25 j 03:12	0°ϰ	
	-717 Nov 27 j 06:30	30°Rκ		max. Earth dist.	-711 Sep 30 j 01:42	1°ϰ05'27	6.38502 AU
direct	-717 Dec 02 j 21:28	29°κ56'42					
	-717 Dec 08 j 12:42	0°Υ		conjunction	-711 Oct 01 j 23:59	1°ϰ31'02	1°10'03
evening set	-716 Apr 06 j 20:11	19°Υ14'00		minimum elong	-711 Oct 02 j 00:00	1°ϰ31'02	1°10'03
				morning rise	-711 Oct 14 j 14:23	4°ϰ18'00	
conjunction	-716 Apr 20 j 12:48	22°Υ25'22	0°-56'-13	retrograde	-710 Feb 13 j 02:43	21°ϰ33'23	
minimum elong	-716 Apr 20 j 12:51	22°Υ25'23	0°56'14	opposition	-710 Apr 14 j 23:53	16°ϰ41'41	1°29'45
max. Earth dist.	-716 Apr 22 j 15:53	22°Υ55'09	6.07066 AU	min. Earth dist.	-710 Apr 16 j 09:41	16°ϰ30'56	4.34290 AU
morning rise	-716 May 04 j 07:25	25°Υ37'29		direct	-710 Jun 16 j 09:44	11°ϰ42'11	
	-716 May 23 j 13:42	0°ϣ		evening set	-710 Oct 20 j 07:15	29°ϰ43'52	
	-716 Sep 02 j 11:05	15°ϣ			-710 Oct 21 j 11:58	0°η	
retrograde	-716 Sep 10 j 05:53	15°ϣ06'05		max. Earth dist.	-710 Oct 31 j 01:14	2°η09'30	6.28804 AU
	-716 Sep 17 j 23:29	15°Rϣ					
opposition	-716 Nov 08 j 18:21	10°ϣ01'27	0°-58'-54	conjunction	-710 Nov 01 j 21:53	2°η34'49	0°47'53
min. Earth dist.	-716 Nov 07 j 12:55	10°ϣ11'30	4.12991 AU	minimum elong	-710 Nov 01 j 21:56	2°η34'50	0°47'52
direct	-715 Jan 06 j 14:09	5°ϣ01'40		morning rise	-710 Nov 14 j 11:24	5°η25'27	
	-715 Apr 02 j 02:09	15°ϣ			-710 Dec 29 j 18:17	15°η	
evening set	-715 May 13 j 04:47	23°ϣ49'15		retrograde	-709 Mar 18 j 15:35	23°η26'50	
				opposition	-709 May 18 j 14:51	18°η34'00	0°45'00
conjunction	-715 May 26 j 23:20	26°ϣ55'59	0°-20'-14	min. Earth dist.	-709 May 19 j 20:19	18°η24'36	4.22620 AU
minimum elong	-715 May 26 j 23:22	26°ϣ56'00	0°20'14		-709 Jun 18 j 21:32	15°Rη	
max. Earth dist.	-715 May 28 j 15:04	27°ϣ18'28	6.19439 AU	direct	-709 Jul 19 j 02:55	13°η37'15	
morning rise	-715 Jun 09 j 17:37	0°Π02'22			-709 Aug 18 j 02:59	15°η	
	-715 Jun 09 j 13:25	0°Π			-709 Nov 12 j 02:36	0°ϛ	
retrograde	-715 Oct 13 j 01:59	18°Π25'58		evening set	-709 Nov 21 j 07:04	2°ϛ06'25	
asc. node	-715 Dec 07 j 01:17	14°Π01'46					
opposition	-715 Dec 11 j 16:51	13°Π24'17	0°00'43	conjunction	-709 Dec 03 j 23:09	5°ϛ03'11	0°10'18
min. Earth dist.	-715 Dec 10 j 22:48	13°Π30'22	4.25807 AU	minimum elong	-709 Dec 03 j 23:10	5°ϛ03'12	0°10'17
direct	-714 Feb 09 j 17:52	8°Π22'09		behind sun begin	-709 Dec 03 j 16:46	4°ϛ59'29	
evening set	-714 Jun 16 j 21:52	26°Π38'05		behind sun end	-709 Dec 04 j 05:33	5°ϛ06'54	
				max. Earth dist.	-709 Dec 02 j 15:08	4°ϛ44'31	6.16186 AU
conjunction	-714 Jun 30 j 12:11	29°Π37'51	0°21'00	morning rise	-709 Dec 16 j 15:59	8°ϛ00'33	
minimum elong	-714 Jun 30 j 12:10	29°Π37'50	0°20'59	desc. node	-708 Mar 08 j 05:17	24°ϛ01'22	
max. Earth dist.	-714 Jul 01 j 01:40	29°Π45'17	6.31731 AU	retrograde	-708 Apr 22 j 06:38	27°ϛ03'21	
	-714 Jul 02 j 04:20	0°Ϟ		opposition	-708 Jun 22 j 02:32	22°ϛ07'44	0°-17'-7
morning rise	-714 Jul 14 j 00:44	2°Ϟ36'29		min. Earth dist.	-708 Jun 22 j 15:53	22°ϛ03'24	4.09931 AU
retrograde	-714 Nov 13 j 08:23	20°Ϟ05'32		direct	-708 Aug 21 j 05:08	17°ϛ13'22	
opposition	-713 Jan 12 j 04:26	15°Ϟ07'44	0°56'57		-708 Nov 26 j 21:11	0°Ϟ	
min. Earth dist.	-713 Jan 12 j 04:08	15°Ϟ07'50	4.36607 AU	evening set	-708 Dec 24 j 00:11	6°Ϟ14'16	
direct	-713 Mar 14 j 13:50	10°Ϟ04'28					
evening set	-713 Jul 19 j 20:43	27°Ϟ56'48		conjunction	-707 Jan 05 j 20:54	9°Ϟ17'57	0°-32'-18
	-713 Jul 29 j 07:46	0°Ϸ		minimum elong	-707 Jan 05 j 20:52	9°Ϟ17'56	0°32'18
				max. Earth dist.	-707 Jan 05 j 15:40	9°Ϟ14'50	6.04599 AU
conjunction	-713 Aug 02 j 03:24	0°Ϸ49'53	0°54'34	morning rise	-707 Jan 18 j 19:36	12°Ϟ22'56	
minimum elong	-713 Aug 02 j 03:21	0°Ϸ49'52	0°54'34		-707 Apr 20 j 00:04	0°≈	
max. Earth dist.	-713 Aug 01 j 15:21	0°Ϸ43'20	6.40208 AU	retrograde	-707 May 29 j 15:44	2°≈24'10	
morning rise	-713 Aug 15 j 06:57	3°Ϸ41'24			-707 Jul 08 j 09:36	30°RϞ	
	-713 Oct 11 j 21:40	15°Ϸ		opposition	-707 Jul 29 j 01:22	27°Ϟ24'45	-1°-16'-23
retrograde	-713 Dec 13 j 18:15	20°Ϸ38'59		min. Earth dist.	-707 Jul 28 j 18:59	27°Ϟ26'52	4.00561 AU
opposition	-712 Feb 11 j 23:54	15°Ϸ44'39	1°35'09	direct	-707 Sep 25 j 20:30	22°Ϟ31'28	
min. Earth dist.	-712 Feb 12 j 15:34	15°Ϸ39'34	4.42330 AU		-707 Dec 05 j 11:33	0°≈	
	-712 Feb 17 j 17:59	15°RϷ		evening set	-706 Jan 28 j 16:04	11°≈56'54	
direct	-712 Apr 14 j 07:12	10°Ϸ41'37					
	-712 Jun 09 j 09:00	15°Ϸ		conjunction	-706 Feb 10 j 19:21	15°≈06'18	-1°-4'-18
evening set	-712 Aug 19 j 10:32	28°Ϸ23'06		minimum elong	-706 Feb 10 j 19:19	15°≈06'17	1°04'19
	-712 Aug 26 j 21:09	0°η			-706 Feb 10 j 08:52	15°≈	
max. Earth dist.	-712 Aug 30 j 22:40	0°η53'08	6.42659 AU	max. Earth dist.	-706 Feb 11 j 19:12	15°≈20'40	5.98253 AU
				morning rise	-706 Feb 24 j 01:53	18°≈17'27	
conjunction	-712 Sep 01 j 08:52	1°η11'47	1°12'15		-706 Apr 17 j 21:54	0°κ	
minimum elong	-712 Sep 01 j 08:51	1°η11'46	1°12'15	retrograde	-706 Jul 06 j 09:57	8°κ48'12	
morning rise	-712 Sep 14 j 04:16	3°η59'03		min. Earth dist.	-706 Sep 03 j 08:19	3°κ53'33	3.98098 AU
retrograde	-711 Jan 12 j 10:33	20°η52'11		opposition	-706 Sep 04 j 09:37	3°κ45'02	-1°-47'-47
opposition	-711 Mar 14 j 00:06	16°η00'02	1°47'09		-706 Oct 06 j 06:31	30°R≈	
min. Earth dist.	-711 Mar 15 j 05:32	15°η50'36	4.41494 AU	direct	-706 Nov 01 j 09:08	28°≈50'42	

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Attention, astronomical year style is used: The year -706 in astronomical counting style is the year 707 BCE in historical counting style.

	-706 Nov 27 j 12:14	0°♃		conjunction	-700 Sep 05 j 17:06	5°♃34'34	1°13'11
evening set	-705 Mar 06 j 16:51	18°♃21'28		minimum elong	-700 Sep 05 j 17:06	5°♃34'33	1°13'11
				morning rise	-700 Sep 18 j 11:30	8°♃21'34	
conjunction	-705 Mar 20 j 03:57	21°♃33'39	-1°-11'-54	retrograde	-699 Jan 16 j 18:39	25°♃16'14	
minimum elong	-705 Mar 20 j 03:58	21°♃33'39	1°11'55	opposition	-699 Mar 18 j 10:30	20°♃24'13	1°46'28
max. Earth dist.	-705 Mar 22 j 02:13	22°♃01'12	5.99782 AU	min. Earth dist.	-699 Mar 19 j 15:39	20°♃14'54	4.40920 AU
morning rise	-705 Apr 02 j 18:09	24°♃47'19		direct	-699 May 20 j 03:20	15°♃22'49	
	-705 Apr 25 j 07:07	0°♃			-699 Sep 09 j 03:13	0°♃	
retrograde	-705 Aug 12 j 04:08	15°♃01'32		evening set	-699 Sep 23 j 15:31	3°♃08'42	
min. Earth dist.	-705 Oct 09 j 11:08	10°♃07'21	4.03512 AU	max. Earth dist.	-699 Oct 04 j 09:56	5°♃31'25	6.37660 AU
opposition	-705 Oct 10 j 19:27	9°♃56'20	-1°-37'-3				
direct	-705 Dec 07 j 21:52	4°♃59'12		conjunction	-699 Oct 06 j 07:35	5°♃56'44	1°08'05
evening set	-704 Apr 11 j 21:56	24°♃13'05		minimum elong	-699 Oct 06 j 07:37	5°♃56'45	1°08'04
				morning rise	-699 Oct 18 j 21:33	8°♃43'53	
conjunction	-704 Apr 25 j 15:17	27°♃24'05	0°-52'-6	retrograde	-698 Feb 17 j 16:53	26°♃03'26	
minimum elong	-704 Apr 25 j 15:20	27°♃24'06	0°52'07	opposition	-698 Apr 19 j 14:35	21°♃11'41	1°24'59
max. Earth dist.	-704 Apr 27 j 18:43	27°♃53'57	6.08538 AU	min. Earth dist.	-698 Apr 21 j 00:42	21°♃00'50	4.33221 AU
	-704 May 06 j 20:18	0°♃		direct	-698 Jun 20 j 23:35	16°♃12'34	
morning rise	-704 May 09 j 10:08	0°♃35'38			-698 Oct 05 j 08:35	0°♃	
	-704 Jul 19 j 09:27	15°♃		evening set	-698 Oct 24 j 16:31	4°♃16'04	
retrograde	-704 Sep 14 j 21:20	19°♃55'49		max. Earth dist.	-698 Nov 04 j 10:57	6°♃42'25	6.27598 AU
min. Earth dist.	-704 Nov 12 j 05:19	15°♃01'13	4.14595 AU				
	-704 Nov 12 j 08:53	15°♃		conjunction	-698 Nov 06 j 07:02	7°♃07'28	0°43'24
opposition	-704 Nov 13 j 09:49	14°♃51'31	0°-51'-11	minimum elong	-698 Nov 06 j 07:04	7°♃07'29	0°43'24
direct	-703 Jan 11 j 08:30	9°♃51'21		morning rise	-698 Nov 18 j 20:48	9°♃58'42	
	-703 Mar 11 j 06:42	15°♃			-698 Dec 11 j 13:58	15°♃	
evening set	-703 May 18 j 02:26	28°♃34'58		retrograde	-697 Mar 23 j 09:27	28°♃06'11	
	-703 May 24 j 09:45	0°♃		opposition	-697 May 23 j 10:00	23°♃13'00	0°37'06
				min. Earth dist.	-697 May 24 j 12:50	23°♃04'25	4.21351 AU
conjunction	-703 May 31 j 20:37	1°♃40'53	0°-14'-30	direct	-697 Jul 23 j 17:45	18°♃16'35	
minimum elong	-703 May 31 j 20:39	1°♃40'54	0°14'30		-697 Oct 26 j 08:53	0°♃	
behind sun begin	-703 May 31 j 17:18	1°♃39'01		evening set	-697 Nov 25 j 19:35	6°♃48'09	
behind sun end	-703 May 31 j 23:59	1°♃42'46		max. Earth dist.	-697 Dec 07 j 08:19	9°♃29'21	6.14972 AU
max. Earth dist.	-703 Jun 02 j 07:39	2°♃00'38	6.21043 AU				
morning rise	-703 Jun 14 j 14:36	4°♃46'23		conjunction	-697 Dec 08 j 12:08	9°♃45'36	0°04'29
retrograde	-703 Oct 17 j 12:10	23°♃02'12		minimum elong	-697 Dec 08 j 12:08	9°♃45'36	0°04'28
asc. node	-703 Oct 17 j 08:23	23°♃02'12		behind sun begin	-697 Dec 08 j 04:17	9°♃41'02	
opposition	-703 Dec 16 j 03:20	18°♃00'59	0°09'09	behind sun end	-697 Dec 08 j 19:59	9°♃50'10	
min. Earth dist.	-703 Dec 15 j 12:07	18°♃06'06	4.27264 AU	morning rise	-697 Dec 21 j 05:21	12°♃43'41	
direct	-702 Feb 14 j 09:36	12°♃58'33		desc. node	-696 Jan 18 j 09:43	19°♃05'00	
	-702 Jun 16 j 02:58	0°♃			-696 Mar 23 j 02:23	0°♃	
evening set	-702 Jun 21 j 14:03	1°♃11'25		retrograde	-696 Apr 27 j 07:20	1°♃53'07	
					-696 Jun 01 j 14:30	30°♃	
conjunction	-702 Jul 05 j 03:42	4°♃10'21	0°26'22	opposition	-696 Jun 27 j 01:36	26°♃57'02	0°-25'-52
minimum elong	-702 Jul 05 j 03:40	4°♃10'20	0°26'23	min. Earth dist.	-696 Jun 27 j 13:31	26°♃53'10	4.08861 AU
max. Earth dist.	-702 Jul 05 j 14:53	4°♃16'30	6.32943 AU	direct	-696 Aug 26 j 01:00	22°♃02'54	
morning rise	-702 Jul 18 j 15:00	7°♃08'00			-696 Nov 08 j 04:23	0°♃	
retrograde	-702 Nov 17 j 14:31	24°♃32'01		evening set	-696 Dec 28 j 17:23	11°♃06'04	
opposition	-701 Jan 16 j 12:17	19°♃34'46	1°03'38				
min. Earth dist.	-701 Jan 16 j 13:31	19°♃34'21	4.37503 AU	conjunction	-695 Jan 10 j 14:41	14°♃10'24	0°-37'-35
direct	-701 Mar 19 j 00:29	14°♃31'28		minimum elong	-695 Jan 10 j 14:39	14°♃10'22	0°37'36
	-701 Jul 13 j 06:46	0°♃		max. Earth dist.	-695 Jan 10 j 11:50	14°♃08'42	6.03756 AU
evening set	-701 Jul 24 j 08:40	2°♃22'18		morning rise	-695 Jan 23 j 14:24	17°♃16'09	
					-695 Mar 23 j 09:37	0°♃	
conjunction	-701 Aug 06 j 14:01	5°♃14'39	0°58'08	retrograde	-695 Jun 03 j 16:09	7°♃22'09	
minimum elong	-701 Aug 06 j 13:58	5°♃14'38	0°58'08	opposition	-695 Aug 03 j 01:56	2°♃22'13	-1°-22'-41
max. Earth dist.	-701 Aug 05 j 21:33	5°♃05'42	6.40717 AU	min. Earth dist.	-695 Aug 02 j 16:18	2°♃25'25	4.00055 AU
morning rise	-701 Aug 19 j 16:30	8°♃05'30			-695 Aug 21 j 19:18	30°♃	
	-701 Sep 21 j 21:47	15°♃		direct	-695 Sep 30 j 16:53	27°♃28'55	
retrograde	-701 Dec 18 j 02:13	25°♃01'29			-695 Nov 09 j 00:52	0°♃	
opposition	-700 Feb 16 j 07:59	20°♃07'33	1°38'33		-694 Jan 25 j 11:16	15°♃	
min. Earth dist.	-700 Feb 17 j 02:22	20°♃01'36	4.42461 AU	evening set	-694 Feb 02 j 13:42	16°♃55'33	
direct	-700 Apr 18 j 18:36	15°♃04'39					
	-700 Aug 10 j 21:01	0°♃		conjunction	-694 Feb 15 j 17:58	20°♃05'27	-1°-6'-55
evening set	-700 Aug 23 j 19:37	2°♃46'09		minimum elong	-694 Feb 15 j 17:56	20°♃05'25	1°06'56
max. Earth dist.	-700 Sep 04 j 05:46	5°♃15'17	6.42409 AU	max. Earth dist.	-694 Feb 16 j 20:48	20°♃21'35	5.98114 AU
				morning rise	-694 Mar 01 j 01:26	23°♃17'04	

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Attention, astronomical year style is used: The year -694 in astronomical counting style is the year 695 BCE in historical counting style.

	-694 Mar 30 j 01:18	0°♄			-688 Jul 24 j 20:14	0°♃		
retrograde	-694 Jul 11 j 10:40	13°♄48'19		evening set	-688 Aug 28 j 03:12	7°♃07'04		
min. Earth dist.	-694 Sep 08 j 06:47	8°♄53'30	3.98350 AU	max. Earth dist.	-688 Sep 08 j 09:28	9°♃34'17	6.42228 AU	
opposition	-694 Sep 09 j 08:35	8°♄44'47	-1°-48'-50					
direct	-694 Nov 06 j 08:14	3°♄50'08		conjunction	-688 Sep 09 j 23:35	9°♃55'07	1°13'41	
evening set	-693 Mar 11 j 16:58	23°♄20'20		minimum elong	-688 Sep 09 j 23:34	9°♃55'07	1°13'41	
				morning rise	-688 Sep 22 j 17:14	12°♃41'51		
conjunction	-693 Mar 25 j 05:11	26°♄32'43	-1°-10'-43	retrograde	-687 Jan 21 j 03:55	29°♃37'59		
minimum elong	-693 Mar 25 j 05:13	26°♄32'44	1°10'44	opposition	-687 Mar 22 j 20:04	24°♃46'05	1°45'11	
max. Earth dist.	-693 Mar 27 j 05:35	27°♄01'28	6.00406 AU	min. Earth dist.	-687 Mar 24 j 03:12	24°♃36'09	4.40326 AU	
morning rise	-693 Apr 07 j 20:13	29°♄46'29		direct	-687 May 24 j 13:56	19°♃44'53		
	-693 Apr 08 j 19:11	0°♃			-687 Aug 23 j 01:49	0°♂		
retrograde	-693 Aug 17 j 00:11	19°♃56'14		evening set	-687 Sep 27 j 22:03	7°♂31'54		
min. Earth dist.	-693 Oct 14 j 05:45	15°♃02'07	4.04453 AU	max. Earth dist.	-687 Oct 08 j 15:41	9°♂54'32	6.36675 AU	
opposition	-693 Oct 15 j 14:04	14°♃51'05	-1°-32'-33					
direct	-693 Dec 12 j 17:01	9°♃53'38		conjunction	-687 Oct 10 j 13:46	10°♂20'09	1°05'44	
evening set	-692 Apr 16 j 21:28	29°♃05'23		minimum elong	-687 Oct 10 j 13:48	10°♂20'10	1°05'44	
	-692 Apr 20 j 20:09	0°♂		morning rise	-687 Oct 23 j 03:23	13°♂07'34		
					-686 Feb 03 j 16:45	0°♃		
conjunction	-692 Apr 30 j 15:13	2°♂16'05	0°-47'-45	retrograde	-686 Feb 22 j 04:37	0°♃31'56		
minimum elong	-692 Apr 30 j 15:16	2°♂16'07	0°47'46		-686 Mar 12 j 18:40	30°♃		
max. Earth dist.	-692 May 02 j 15:53	2°♂44'16	6.09713 AU	opposition	-686 Apr 24 j 04:04	25°♂40'02	1°19'43	
morning rise	-692 May 14 j 10:33	5°♂27'18		min. Earth dist.	-686 Apr 25 j 13:06	25°♂29'32	4.31887 AU	
	-692 Jun 27 j 10:40	15°♂		direct	-686 Jun 25 j 09:33	20°♂41'15		
retrograde	-692 Sep 19 j 10:59	24°♂40'33			-686 Sep 17 j 18:37	0°♃		
opposition	-692 Nov 17 j 23:35	19°♂36'34	0°-43'-20	evening set	-686 Oct 29 j 01:10	8°♃47'44		
min. Earth dist.	-692 Nov 16 j 20:30	19°♂45'47	4.15882 AU	max. Earth dist.	-686 Nov 08 j 21:26	11°♃15'38	6.26023 AU	
	-692 Dec 31 j 15:21	15°♃						
direct	-691 Jan 16 j 01:50	14°♂36'03		conjunction	-686 Nov 10 j 15:44	11°♃39'46	0°38'39	
	-691 Jan 31 j 15:29	15°♂		minimum elong	-686 Nov 10 j 15:46	11°♃39'48	0°38'39	
	-691 May 08 j 02:02	0°♂		morning rise	-686 Nov 23 j 05:43	14°♃31'46		
evening set	-691 May 22 j 22:22	3°♂16'56			-686 Nov 25 j 07:35	15°♃		
					-685 Feb 13 j 00:15	0°♂		
conjunction	-691 Jun 05 j 16:29	6°♂22'13	0°-8'-48	retrograde	-685 Mar 28 j 06:37	2°♂46'57		
minimum elong	-691 Jun 05 j 16:30	6°♂22'14	0°08'49		-685 May 11 j 03:31	30°♃		
behind sun begin	-691 Jun 05 j 09:22	6°♂18'14		opposition	-685 May 28 j 05:30	27°♃53'27	0°28'53	
behind sun end	-691 Jun 05 j 23:38	6°♂26'13		min. Earth dist.	-685 May 29 j 07:57	27°♃44'59	4.19609 AU	
max. Earth dist.	-691 Jun 07 j 02:05	6°♂41'07	6.22372 AU	direct	-685 Jul 28 j 10:04	22°♃57'20		
morning rise	-691 Jun 19 j 09:46	9°♂26'54			-685 Oct 07 j 00:30	0°♂		
asc. node	-691 Aug 28 j 07:40	23°♂09'22		desc. node	-685 Nov 28 j 21:19	11°♂12'24		
retrograde	-691 Oct 21 j 22:10	27°♂36'05		evening set	-685 Nov 30 j 09:03	11°♂33'10		
opposition	-691 Dec 20 j 13:07	22°♂35'26	0°17'23	max. Earth dist.	-685 Dec 12 j 00:05	14°♂16'19	6.13220 AU	
min. Earth dist.	-691 Dec 19 j 23:36	22°♂39'58	4.28522 AU					
direct	-690 Feb 18 j 23:17	17°♂32'53		conjunction	-685 Dec 13 j 02:06	14°♂31'35	0°-1'-34	
	-690 May 30 j 07:39	0°♂		minimum elong	-685 Dec 13 j 02:04	14°♂31'34	0°01'35	
evening set	-690 Jun 26 j 05:38	5°♂43'14		behind sun begin	-685 Dec 12 j 18:02	14°♂26'53		
				behind sun end	-685 Dec 13 j 10:06	14°♂36'15		
conjunction	-690 Jul 09 j 18:11	8°♂41'18	0°31'30	morning rise	-685 Dec 25 j 20:09	17°♂30'45		
minimum elong	-690 Jul 09 j 18:09	8°♂41'17	0°31'31		-684 Feb 22 j 18:10	0°♂		
max. Earth dist.	-690 Jul 10 j 01:01	8°♂45'03	6.34030 AU	retrograde	-684 May 02 j 08:10	6°♂48'57		
morning rise	-690 Jul 23 j 04:33	11°♂38'04		opposition	-684 Jul 02 j 02:38	1°♂52'21	0°-34'-40	
retrograde	-690 Nov 21 j 21:28	28°♂57'31		min. Earth dist.	-684 Jul 02 j 11:06	1°♂49'35	4.07252 AU	
opposition	-689 Jan 20 j 19:48	24°♂00'43	1°09'51		-684 Jul 16 j 21:30	30°♃		
min. Earth dist.	-689 Jan 20 j 23:26	23°♂59'31	4.38361 AU	direct	-684 Aug 30 j 20:00	26°♂58'25		
direct	-689 Mar 23 j 11:58	18°♂57'22			-684 Oct 13 j 18:31	0°♂		
	-689 Jun 26 j 05:32	0°♂		evening set	-683 Jan 02 j 13:45	16°♂05'59		
evening set	-689 Jul 28 j 19:33	6°♂46'31						
				conjunction	-683 Jan 15 j 11:56	19°♂11'16	0°-42'-45	
conjunction	-689 Aug 10 j 23:54	9°♂38'11	1°01'19	minimum elong	-683 Jan 15 j 11:53	19°♂11'14	0°42'47	
minimum elong	-689 Aug 10 j 23:51	9°♂38'10	1°01'19	max. Earth dist.	-683 Jan 15 j 13:16	19°♂12'04	6.02434 AU	
max. Earth dist.	-689 Aug 10 j 06:16	9°♂28'35	6.41272 AU	morning rise	-683 Jan 28 j 12:35	22°♂18'02		
morning rise	-689 Aug 24 j 01:00	12°♂28'18			-683 Mar 03 j 03:33	0°♂		
	-689 Sep 04 j 20:22	15°♂		retrograde	-683 Jun 08 j 22:59	12°♂30'33		
retrograde	-689 Dec 22 j 07:14	29°♂22'28		opposition	-683 Aug 08 j 06:15	7°♂30'03	-1°-28'-37	
opposition	-688 Feb 20 j 15:18	24°♂28'52	1°41'19	min. Earth dist.	-683 Aug 07 j 18:44	7°♂33'53	3.99163 AU	
min. Earth dist.	-688 Feb 21 j 10:30	24°♂22'40	4.42676 AU	direct	-683 Oct 05 j 19:00	2°♂36'38		
direct	-688 Apr 23 j 03:01	19°♂26'07			-682 Jan 08 j 00:51	15°♂		

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Attention, astronomical year style is used: The year -682 in astronomical counting style is the year 683 BCE in historical counting style.

evening set	-682 Feb 07 j 16:20	22°≈05'55		conjunction	-677 Aug 15 j 06:19	13°Ω53'29	1°04'04
				minimum elong	-677 Aug 15 j 06:17	13°Ω53'28	1°04'05
conjunction	-682 Feb 20 j 21:48	25°≈16'30	-1°-9'-8		-677 Aug 20 j 08:41	15°Ω	
minimum elong	-682 Feb 20 j 21:47	25°≈16'29	1°09'10	morning rise	-677 Aug 28 j 06:20	16°Ω42'45	
max. Earth dist.	-682 Feb 22 j 04:59	25°≈35'15	5.97736 AU		-677 Nov 07 j 07:12	0°η	
morning rise	-682 Mar 06 j 06:25	28°≈28'48		retrograde	-677 Dec 26 j 10:41	3°η34'22	
	-682 Mar 12 j 16:01	0°κ			-676 Feb 14 j 11:37	30°RΩ	
retrograde	-682 Jul 16 j 16:06	19°κ00'40		opposition	-676 Feb 24 j 19:40	28°Ω41'04	1°43'26
min. Earth dist.	-682 Sep 13 j 08:18	14°κ06'10	3.98567 AU	min. Earth dist.	-676 Feb 25 j 17:41	28°Ω33'58	4.43077 AU
opposition	-682 Sep 14 j 11:59	13°κ56'48	-1°-49'-6	direct	-676 Apr 27 j 09:46	23°Ω38'22	
direct	-682 Nov 11 j 09:38	9°κ01'53			-676 Jul 05 j 20:35	0°η	
evening set	-681 Mar 16 j 22:29	28°κ31'27		evening set	-676 Sep 01 j 07:03	11°η18'25	
	-681 Mar 23 j 04:18	0°ρ		max. Earth dist.	-676 Sep 12 j 11:17	13°η44'37	6.42046 AU
conjunction	-681 Mar 30 j 11:36	1°ρ43'56	-1°-8'-57	conjunction	-676 Sep 14 j 02:43	14°η06'12	1°13'45
minimum elong	-681 Mar 30 j 11:38	1°ρ43'57	1°08'57	minimum elong	-676 Sep 14 j 02:43	14°η06'12	1°13'45
max. Earth dist.	-681 Apr 01 j 12:19	2°ρ12'48	6.01189 AU	morning rise	-676 Sep 26 j 19:26	16°η52'40	
morning rise	-681 Apr 13 j 03:42	4°ρ57'44			-676 Dec 05 j 02:06	0°ϰ	
retrograde	-681 Aug 21 j 22:30	25°ρ01'44		retrograde	-675 Jan 25 j 08:11	3°ϰ50'39	
min. Earth dist.	-681 Oct 19 j 03:50	20°ρ07'48	4.05732 AU		-675 Mar 19 j 01:02	30°Rη	
opposition	-681 Oct 20 j 12:45	19°ρ56'33	-1°-27'-10	opposition	-675 Mar 27 j 02:14	28°η58'52	1°43'23
direct	-681 Dec 17 j 18:04	14°ρ58'39		min. Earth dist.	-675 Mar 28 j 10:12	28°η48'41	4.39568 AU
	-680 Apr 03 j 20:43	0°ϱ		direct	-675 May 28 j 18:39	23°η57'56	
evening set	-680 Apr 22 j 00:54	4°ϱ06'39			-675 Aug 03 j 20:21	0°ϰ	
				evening set	-675 Oct 02 j 01:35	11°ϰ46'57	
conjunction	-680 May 05 j 19:12	7°ϱ16'48	0°-42'-54	max. Earth dist.	-675 Oct 12 j 16:58	14°ϰ08'50	6.35380 AU
minimum elong	-680 May 05 j 19:15	7°ϱ16'49	0°42'54	conjunction	-675 Oct 14 j 16:50	14°ϰ35'32	1°03'06
max. Earth dist.	-680 May 07 j 20:20	7°ϱ45'08	6.11422 AU	minimum elong	-675 Oct 14 j 16:52	14°ϰ35'33	1°03'06
morning rise	-680 May 19 j 14:27	10°ϱ27'13		morning rise	-675 Oct 27 j 06:24	17°ϰ23'27	
	-680 Jun 08 j 20:52	15°ϱ			-675 Dec 30 j 05:19	0°η	
retrograde	-680 Sep 24 j 03:43	29°ϱ30'58		retrograde	-674 Feb 26 j 17:28	4°η54'09	
opposition	-680 Nov 22 j 15:40	24°ϱ27'21	0°-35'-1	opposition	-674 Apr 28 j 15:42	0°η02'10	1°14'10
min. Earth dist.	-680 Nov 21 j 13:57	24°ϱ36'05	4.17844 AU		-674 Apr 28 j 22:31	30°Rϰ	
direct	-679 Jan 20 j 22:48	19°ϱ26'31		min. Earth dist.	-674 Apr 30 j 01:58	29°ϰ51'16	4.30106 AU
	-679 Apr 20 j 04:38	0°ϱ		direct	-674 Jun 29 j 18:58	25°ϰ03'40	
evening set	-679 May 27 j 20:06	8°ϱ01'55			-674 Aug 27 j 23:46	0°η	
conjunction	-679 Jun 10 j 13:35	11°ϱ06'05	0°-3'00	evening set	-674 Nov 02 j 08:00	13°η14'56	
minimum elong	-679 Jun 10 j 13:35	11°ϱ06'05	0°03'00		-674 Nov 10 j 00:14	15°η	
behind sun begin	-679 Jun 10 j 05:16	11°ϱ01'27		max. Earth dist.	-674 Nov 13 j 05:12	15°η44'04	6.23904 AU
behind sun end	-679 Jun 10 j 21:54	11°ϱ10'43		conjunction	-674 Nov 14 j 22:53	16°η07'57	0°33'46
max. Earth dist.	-679 Jun 11 j 19:54	11°ϱ23'03	6.24435 AU	minimum elong	-674 Nov 14 j 22:55	16°η07'58	0°33'45
morning rise	-679 Jun 24 j 06:12	14°ϱ09'32		morning rise	-674 Nov 27 j 13:18	19°η01'01	
asc. node	-679 Jul 08 j 17:30	17°ϱ20'00			-673 Jan 18 j 18:08	0°ϱ	
	-679 Sep 19 j 02:20	0°ϱ		retrograde	-673 Apr 02 j 01:35	7°ϱ26'08	
retrograde	-679 Oct 26 j 05:58	2°ϱ09'20		opposition	-673 Jun 02 j 00:21	2°ϱ32'20	0°20'36
	-679 Dec 02 j 06:03	30°Rϱ		min. Earth dist.	-673 Jun 03 j 00:31	2°ϱ24'35	4.17305 AU
opposition	-679 Dec 24 j 22:50	27°ϱ09'09	0°25'27		-673 Jun 22 j 19:42	30°Rη	
min. Earth dist.	-679 Dec 24 j 10:59	27°ϱ13'08	4.30516 AU	direct	-673 Aug 01 j 22:39	27°η36'36	
direct	-678 Feb 23 j 13:34	22°ϱ06'22			-673 Sep 10 j 11:54	0°ϱ	
	-678 May 11 j 13:30	0°ϱ		desc. node	-673 Oct 10 j 03:19	4°ϱ26'11	
evening set	-678 Jun 30 j 19:49	10°ϱ11'33		evening set	-673 Dec 04 j 23:08	16°ϱ19'05	
conjunction	-678 Jul 14 j 07:20	13°ϱ08'26	0°36'23	conjunction	-673 Dec 17 j 16:47	19°ϱ18'44	0°-7'-29
minimum elong	-678 Jul 14 j 07:18	13°ϱ08'24	0°36'24	minimum elong	-673 Dec 17 j 16:47	19°ϱ18'44	0°07'30
max. Earth dist.	-678 Jul 14 j 11:27	13°ϱ10'41	6.35804 AU	behind sun begin	-673 Dec 17 j 09:27	19°ϱ14'26	
morning rise	-678 Jul 27 j 16:16	16°ϱ03'54		behind sun end	-673 Dec 18 j 00:06	19°ϱ23'02	
	-678 Oct 10 j 08:53	0°Ω		max. Earth dist.	-673 Dec 16 j 17:53	19°ϱ05'14	6.10933 AU
retrograde	-678 Nov 26 j 01:36	3°Ω16'45		morning rise	-673 Dec 30 j 11:45	22°ϱ19'18	
	-677 Jan 12 j 03:44	30°Rϱ			-672 Feb 02 j 13:51	0°ϱ	
opposition	-677 Jan 25 j 01:27	28°ϱ20'27	1°15'30	retrograde	-672 May 07 j 13:24	11°ϱ48'31	
min. Earth dist.	-677 Jan 25 j 07:25	28°ϱ18'30	4.39786 AU	opposition	-672 Jul 07 j 05:05	6°ϱ51'26	0°-43'-16
direct	-677 Mar 27 j 21:32	23°ϱ17'07		min. Earth dist.	-672 Jul 07 j 11:27	6°ϱ49'21	4.05184 AU
	-677 Jun 07 j 03:56	0°Ω		direct	-672 Sep 04 j 18:15	1°ϱ57'43	
evening set	-677 Aug 02 j 03:20	11°Ω02'42		evening set	-671 Jan 07 j 12:27	21°ϱ11'35	
max. Earth dist.	-677 Aug 14 j 07:47	13°Ω41'14	6.42208 AU				

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Attention, astronomical year style is used: The year -671 in astronomical counting style is the year 672 BCE in historical counting style.

conjunction	-671 Jan 20 j 11:45	24°☾18'05	0°-47'-38	evening set	-666 Jul 05 j 10:43	14°☾42'32	
minimum elong	-671 Jan 20 j 11:42	24°☾18'04	0°47'39				
max. Earth dist.	-671 Jan 20 j 18:09	24°☾21'56	6.00783 AU	conjunction	-666 Jul 18 j 21:04	17°☾38'20	0°41'10
morning rise	-671 Feb 02 j 13:35	27°☾26'07		minimum elong	-666 Jul 18 j 21:02	17°☾38'19	0°41'10
	-671 Feb 13 j 09:54	0°≈		max. Earth dist.	-666 Jul 18 j 20:51	17°☾38'13	6.37218 AU
	-671 May 02 j 19:20	15°≈		morning rise	-666 Aug 01 j 04:47	20°☾32'44	
retrograde	-671 Jun 14 j 08:30	17°≈46'06			-666 Sep 16 j 18:18	0°♈	
	-671 Jul 27 j 00:32	15°≈		retrograde	-666 Nov 30 j 07:03	7°♈40'28	
opposition	-671 Aug 13 j 13:04	12°≈45'06	-1°-33'-53	opposition	-665 Jan 29 j 08:40	2°♈44'38	1°20'55
min. Earth dist.	-671 Aug 12 j 22:13	12°≈50'02	3.98143 AU	min. Earth dist.	-665 Jan 29 j 16:54	2°♈41'56	4.40761 AU
direct	-671 Oct 10 j 21:18	7°≈51'40			-665 Feb 20 j 14:17	30°♈	
	-671 Dec 18 j 11:08	15°≈		direct	-665 Apr 01 j 07:23	27°☾41'16	
evening set	-670 Feb 12 j 22:11	27°≈23'58			-665 May 11 j 10:58	0°♈	
	-670 Feb 23 j 18:10	0°♁			-665 Aug 04 j 14:50	15°♈	
				evening set	-665 Aug 06 j 13:04	15°♈24'52	
conjunction	-670 Feb 26 j 04:42	0°♁35'12	-1°-10'-48				
minimum elong	-670 Feb 26 j 04:41	0°♁35'12	1°10'49	conjunction	-665 Aug 19 j 14:58	18°♈15'00	1°06'35
max. Earth dist.	-670 Feb 27 j 15:04	0°♁55'52	5.97413 AU	minimum elong	-665 Aug 19 j 14:56	18°♈14'59	1°06'35
morning rise	-670 Mar 11 j 14:38	3°♁48'11		max. Earth dist.	-665 Aug 18 j 14:05	18°♈01'28	6.42670 AU
retrograde	-670 Jul 21 j 21:41	24°♁19'56		morning rise	-665 Sep 01 j 13:42	21°♈03'35	
min. Earth dist.	-670 Sep 18 j 11:23	19°♁25'50	3.98983 AU		-665 Oct 15 j 14:38	0°♉	
opposition	-670 Sep 19 j 17:30	19°♁15'37	-1°-48'-24	retrograde	-665 Dec 30 j 17:02	7°♉54'15	
direct	-670 Nov 16 j 14:38	14°♁20'18		opposition	-664 Feb 29 j 03:13	3°♉01'16	1°45'09
	-669 Mar 05 j 21:10	0°♉		min. Earth dist.	-664 Mar 01 j 03:17	2°♉53'32	4.43015 AU
evening set	-669 Mar 22 j 06:19	3°♉48'15			-664 Mar 25 j 08:57	30°♉	
				direct	-664 May 01 j 18:42	27°♈58'47	
conjunction	-669 Apr 04 j 20:33	7°♉00'41	-1°-6'-34		-664 Jun 08 j 08:59	0°♉	
minimum elong	-669 Apr 04 j 20:36	7°♉00'42	1°06'35	evening set	-664 Sep 05 j 14:14	15°♉39'10	
max. Earth dist.	-669 Apr 07 j 00:26	7°♉31'20	6.02291 AU	max. Earth dist.	-664 Sep 16 j 14:07	18°♉03'20	6.41443 AU
morning rise	-669 Apr 18 j 13:15	10°♉14'15					
	-669 Aug 16 j 14:47	0°♊		conjunction	-664 Sep 18 j 08:58	18°♉26'50	1°13'28
retrograde	-669 Aug 26 j 23:36	0°♊10'41		minimum elong	-664 Sep 18 j 08:59	18°♉26'50	1°13'27
	-669 Sep 06 j 06:15	30°♊		morning rise	-664 Oct 01 j 01:10	21°♉13'19	
min. Earth dist.	-669 Oct 24 j 04:01	25°♉16'32	4.07349 AU		-664 Nov 12 j 18:28	0°♊	
opposition	-669 Oct 25 j 12:18	25°♉05'30	-1°-21'-3	retrograde	-663 Jan 29 j 19:10	8°♊14'32	
direct	-669 Dec 22 j 21:14	20°♉07'08		opposition	-663 Mar 31 j 13:19	3°♊22'48	1°40'59
	-668 Mar 16 j 00:52	0°♊		min. Earth dist.	-663 Apr 01 j 22:43	3°♊12'08	4.38466 AU
evening set	-668 Apr 27 j 05:17	9°♊10'07			-663 Apr 29 j 17:47	30°♊	
				direct	-663 Jun 02 j 04:56	28°♉22'06	
conjunction	-668 May 10 j 23:44	12°♊19'29	0°-37'-42		-663 Jul 05 j 16:36	0°♊	
minimum elong	-668 May 10 j 23:46	12°♊19'30	0°37'42	evening set	-663 Oct 06 j 09:24	16°♊13'52	
max. Earth dist.	-668 May 12 j 23:14	12°♊46'44	6.13377 AU	max. Earth dist.	-663 Oct 17 j 01:28	18°♊36'37	6.33872 AU
	-668 May 22 j 16:07	15°♊					
morning rise	-668 May 24 j 19:04	15°♊29'01		conjunction	-663 Oct 19 j 00:33	19°♊02'58	0°59'59
	-668 Aug 05 j 20:05	0°♋		minimum elong	-663 Oct 19 j 00:36	19°♊03'00	0°59'59
retrograde	-668 Sep 28 j 18:19	4°♋22'28		morning rise	-663 Oct 31 j 13:54	21°♊51'26	
	-668 Nov 22 j 07:08	30°♊			-663 Dec 09 j 00:03	0°♋	
min. Earth dist.	-668 Nov 26 j 06:51	29°♊27'39	4.19915 AU	retrograde	-662 Mar 03 j 09:19	9°♋29'01	
opposition	-668 Nov 27 j 07:46	29°♊19'12	0°-26'-25	opposition	-662 May 03 j 08:26	4°♋36'54	1°07'52
direct	-667 Jan 25 j 18:33	24°♊17'59		min. Earth dist.	-662 May 04 j 17:31	4°♋26'22	4.28287 AU
	-667 Mar 29 j 17:35	0°♋			-662 Jun 19 j 03:45	30°♊	
asc. node	-667 May 18 j 00:58	9°♋34'38		direct	-662 Jul 04 j 07:36	29°♊38'49	
evening set	-667 Jun 01 j 17:44	12°♋47'50			-662 Jul 19 j 12:29	0°♋	
					-662 Oct 24 j 22:04	15°♋	
conjunction	-667 Jun 15 j 10:36	15°♋50'52	0°03'01	evening set	-662 Nov 06 j 19:59	17°♋54'41	
minimum elong	-667 Jun 15 j 10:36	15°♋50'51	0°03'02	max. Earth dist.	-662 Nov 17 j 18:35	20°♋25'20	6.21937 AU
behind sun begin	-667 Jun 15 j 02:19	15°♋46'15					
behind sun end	-667 Jun 15 j 18:53	15°♋55'27		conjunction	-662 Nov 19 j 10:58	20°♋48'36	0°28'26
max. Earth dist.	-667 Jun 16 j 13:17	16°♋05'44	6.26454 AU	minimum elong	-662 Nov 19 j 11:00	20°♋48'37	0°28'26
morning rise	-667 Jun 29 j 02:17	18°♋53'03		morning rise	-662 Dec 02 j 01:57	23°♋42'42	
	-667 Aug 22 j 19:03	0°♌			-662 Dec 30 j 09:25	0°♌	
retrograde	-667 Oct 30 j 16:13	6°♌44'11		retrograde	-661 Apr 07 j 02:54	12°♌17'11	
opposition	-667 Dec 29 j 09:14	1°♌44'33	0°33'28	opposition	-661 Jun 07 j 00:23	7°♌22'59	0°11'44
min. Earth dist.	-667 Dec 29 j 00:30	1°♌47'28	4.32306 AU	min. Earth dist.	-661 Jun 07 j 22:46	7°♌15'47	4.15329 AU
	-666 Jan 11 j 17:39	30°♊		direct	-661 Aug 06 j 18:41	2°♌27'37	
direct	-666 Feb 28 j 05:14	26°♋41'36		desc. node	-661 Aug 19 j 11:00	2°♌43'05	
	-666 Apr 16 j 23:39	0°♌		evening set	-661 Dec 09 j 17:18	21°♌15'14	

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Attention, astronomical year style is used: The year -661 in astronomical counting style is the year 662 BCE in historical counting style.

conjunction	-661 Dec 22 j 11:44	24°♄15'57	0°-13'-34	conjunction	-655 Jun 20 j 03:45	20°♃25'50	0°08'42
minimum elong	-661 Dec 22 j 11:43	24°♄15'57	0°13'36	minimum elong	-655 Jun 20 j 03:44	20°♃25'49	0°08'43
behind sun begin	-661 Dec 22 j 07:10	24°♄13'16		behind sun begin	-655 Jun 19 j 20:36	20°♃21'52	
behind sun end	-661 Dec 22 j 16:17	24°♄18'38		behind sun end	-655 Jun 20 j 10:52	20°♃29'46	
max. Earth dist.	-661 Dec 21 j 17:18	24°♄05'04	6.09160 AU	max. Earth dist.	-655 Jun 21 j 03:04	20°♃38'47	6.28170 AU
morning rise	-660 Jan 04 j 07:30	27°♄17'40		morning rise	-655 Jul 03 j 18:28	23°♃26'55	
	-660 Jan 15 j 22:18	0°♃			-655 Aug 03 j 12:32	0°♃	
retrograde	-660 May 12 j 20:15	16°♃55'34		retrograde	-655 Nov 03 j 21:39	11°♃10'53	
opposition	-660 Jul 12 j 10:42	11°♃58'01	0°-51'-50	opposition	-654 Jan 02 j 16:29	6°♃11'50	0°41'03
min. Earth dist.	-660 Jul 12 j 13:33	11°♃57'05	4.03817 AU	min. Earth dist.	-654 Jan 02 j 09:36	6°♃14'07	4.33695 AU
direct	-660 Sep 09 j 18:47	7°♃04'31		direct	-654 Mar 04 j 15:11	1°♃08'47	
evening set	-659 Jan 12 j 13:43	26°♃21'51		evening set	-654 Jul 09 j 22:53	19°♃07'04	
conjunction	-659 Jan 25 j 13:45	29°♃29'06	0°-52'-16	conjunction	-654 Jul 23 j 08:05	22°♃02'02	0°45'36
minimum elong	-659 Jan 25 j 13:42	29°♃29'04	0°52'17	minimum elong	-654 Jul 23 j 08:02	22°♃02'01	0°45'36
max. Earth dist.	-659 Jan 25 j 23:49	29°♃35'09	5.99942 AU	max. Earth dist.	-654 Jul 23 j 03:17	21°♃59'25	6.38177 AU
	-659 Jan 27 j 17:10	0°♃		morning rise	-654 Aug 05 j 14:36	24°♃55'33	
morning rise	-659 Feb 07 j 16:44	2°♃37'58			-654 Aug 29 j 14:01	0°♃	
	-659 Apr 05 j 01:09	15°♃		retrograde	-654 Dec 04 j 13:18	12°♃00'05	
retrograde	-659 Jun 19 j 15:31	23°♃01'46		opposition	-653 Feb 02 j 14:45	7°♃04'47	1°25'47
opposition	-659 Aug 18 j 19:44	18°♃00'10	-1°-38'-26	min. Earth dist.	-653 Feb 03 j 02:16	7°♃01'01	4.41250 AU
min. Earth dist.	-659 Aug 18 j 01:34	18°♃06'15	3.97949 AU	direct	-653 Apr 05 j 17:07	2°♃01'31	
	-659 Sep 12 j 02:16	15°♃			-653 Jul 19 j 09:25	15°♃	
direct	-659 Oct 16 j 01:23	13°♃06'34		evening set	-653 Aug 10 j 21:30	19°♃44'43	
	-659 Nov 18 j 18:28	15°♃					
evening set	-658 Feb 06 j 23:11	0°♃		conjunction	-653 Aug 23 j 22:21	22°♃34'26	1°08'41
	-658 Feb 18 j 03:29	2°♃38'50		minimum elong	-653 Aug 23 j 22:20	22°♃34'25	1°08'42
conjunction	-658 Mar 03 j 11:12	5°♃50'21	-1°-11'-54	max. Earth dist.	-653 Aug 22 j 17:54	22°♃18'57	6.42636 AU
minimum elong	-658 Mar 03 j 11:12	5°♃50'21	1°11'55	morning rise	-653 Sep 05 j 20:05	25°♃22'38	
max. Earth dist.	-658 Mar 05 j 02:36	6°♃14'00	5.97877 AU		-653 Sep 27 j 16:17	0°♃	
morning rise	-658 Mar 16 j 21:59	9°♃03'30		retrograde	-652 Jan 03 j 23:38	12°♃14'09	
retrograde	-658 Jul 27 j 02:14	29°♃31'40		opposition	-652 Mar 04 j 10:59	7°♃21'26	1°46'18
opposition	-658 Sep 24 j 20:09	24°♃27'04	-1°-46'-51	min. Earth dist.	-652 Mar 05 j 12:24	7°♃13'16	4.42502 AU
min. Earth dist.	-658 Sep 23 j 13:38	24°♃37'26	4.00055 AU	direct	-652 May 06 j 02:25	2°♃19'09	
direct	-658 Nov 21 j 18:44	19°♃31'23		evening set	-652 Sep 09 j 21:40	20°♃01'20	
	-657 Feb 15 j 13:45	0°♃		max. Earth dist.	-652 Sep 20 j 20:57	22°♃25'32	6.40494 AU
evening set	-657 Mar 27 j 11:00	8°♃55'34		conjunction	-652 Sep 22 j 15:49	22°♃49'06	1°12'45
conjunction	-657 Apr 10 j 01:56	12°♃07'38	-1°-3'-46	minimum elong	-652 Sep 22 j 15:50	22°♃49'06	1°12'45
minimum elong	-657 Apr 10 j 01:59	12°♃07'39	1°03'47	morning rise	-652 Oct 05 j 07:17	25°♃35'43	
max. Earth dist.	-657 Apr 12 j 06:00	12°♃38'14	6.03841 AU		-652 Oct 25 j 20:22	0°♃	
morning rise	-657 Apr 23 j 19:22	15°♃20'46		retrograde	-651 Feb 03 j 06:36	12°♃41'17	
	-657 Jul 04 j 00:16	0°♃		opposition	-651 Apr 05 j 01:28	7°♃49'39	1°37'58
retrograde	-657 Aug 31 j 17:59	5°♃08'16		min. Earth dist.	-651 Apr 06 j 11:16	7°♃38'53	4.37149 AU
min. Earth dist.	-657 Oct 28 j 23:02	0°♃14'19	4.09202 AU	direct	-651 Jun 06 j 15:39	2°♃49'22	
opposition	-657 Oct 30 j 07:32	0°♃03'13	-1°-14'-33	evening set	-651 Oct 10 j 18:24	20°♃44'25	
	-657 Oct 30 j 16:59	30°♃		max. Earth dist.	-651 Oct 21 j 09:27	23°♃07'13	6.32289 AU
direct	-657 Dec 27 j 18:51	25°♃04'25		conjunction	-651 Oct 23 j 09:13	23°♃34'04	0°56'29
	-656 Feb 22 j 18:32	0°♃		minimum elong	-651 Oct 23 j 09:15	23°♃34'05	0°56'28
evening set	-656 May 02 j 05:16	14°♃02'05		morning rise	-651 Nov 04 j 22:44	26°♃23'13	
	-656 May 06 j 11:04	15°♃			-651 Nov 21 j 08:12	0°♃	
conjunction	-656 May 15 j 23:46	17°♃10'36	0°-32'-25	retrograde	-650 Mar 08 j 04:03	14°♃08'01	
minimum elong	-656 May 15 j 23:48	17°♃10'37	0°32'25	opposition	-650 May 08 j 02:57	9°♃15'40	1°01'03
max. Earth dist.	-656 May 17 j 20:05	17°♃35'55	6.15374 AU	min. Earth dist.	-650 May 09 j 10:53	9°♃05'29	4.26534 AU
morning rise	-656 May 29 j 18:52	20°♃19'07		direct	-650 Jul 08 j 23:01	4°♃17'58	
	-656 Jul 14 j 04:43	0°♃			-650 Oct 07 j 12:11	15°♃	
retrograde	-656 Oct 03 j 06:54	9°♃02'55		evening set	-650 Nov 11 j 08:40	22°♃37'54	
opposition	-656 Dec 01 j 19:56	4°♃00'07	0°-17'-58	max. Earth dist.	-650 Nov 22 j 11:29	25°♃11'31	6.20177 AU
min. Earth dist.	-656 Nov 30 j 22:06	4°♃07'31	4.21844 AU	conjunction	-650 Nov 24 j 00:06	25°♃32'41	0°22'52
	-655 Jan 05 j 08:59	30°♃		minimum elong	-650 Nov 24 j 00:08	25°♃32'42	0°22'52
direct	-655 Jan 30 j 12:10	28°♃58'36		morning rise	-650 Dec 06 j 15:25	28°♃27'43	
	-655 Feb 24 j 21:42	0°♃			-650 Dec 13 j 08:50	0°♃	
asc. node	-655 Mar 28 j 16:06	3°♃44'22		retrograde	-649 Apr 12 j 03:31	17°♃10'36	
evening set	-655 Jun 06 j 11:28	17°♃23'47		opposition	-649 Jun 12 j 00:56	12°♃16'01	0°02'43
				min. Earth dist.	-649 Jun 12 j 20:44	12°♃09'39	4.13697 AU

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Attention, astronomical year style is used: The year -649 in astronomical counting style is the year 650 BCE in historical counting style.

desc. node	-649 Jun 28 j 22:36	10°♁09'40		conjunction	-643 Jun 24 j 20:46	25°♃01'09	0°14'20
direct	-649 Aug 11 j 14:46	7°♁21'00		minimum elong	-643 Jun 24 j 20:45	25°♃01'09	0°14'20
evening set	-649 Dec 14 j 11:53	26°♁12'24		behind sun begin	-643 Jun 24 j 17:12	24°♃59'11	
				behind sun end	-643 Jun 25 j 00:19	25°♃03'07	
conjunction	-649 Dec 27 j 06:46	29°♁13'57	0°-19'-34	max. Earth dist.	-643 Jun 25 j 15:00	25°♃11'16	6.29584 AU
minimum elong	-649 Dec 27 j 06:44	29°♁13'56	0°19'36	morning rise	-643 Jul 08 j 10:42	28°♃01'16	
max. Earth dist.	-649 Dec 26 j 15:10	29°♁04'42	6.07782 AU		-643 Jul 17 j 12:11	0°♄	
	-649 Dec 30 j 12:25	0°♄		retrograde	-643 Nov 08 j 06:20	15°♄39'12	
morning rise	-648 Jan 09 j 03:29	2°♄16'38		opposition	-642 Jan 07 j 00:59	10°♄40'41	0°48'27
retrograde	-648 May 18 j 01:20	22°♄01'34		min. Earth dist.	-642 Jan 06 j 21:31	10°♄41'49	4.34813 AU
opposition	-648 Jul 17 j 15:04	17°♄03'23	0°-59'-57	direct	-642 Mar 09 j 04:52	5°♄37'30	
min. Earth dist.	-648 Jul 17 j 14:28	17°♄03'35	4.02819 AU	evening set	-642 Jul 14 j 11:50	23°♄33'43	
direct	-648 Sep 14 j 19:06	12°♄09'56					
	-647 Jan 11 j 07:08	0°♁		conjunction	-642 Jul 27 j 20:03	26°♄27'58	0°49'49
evening set	-647 Jan 17 j 13:42	1°♁29'33		minimum elong	-642 Jul 27 j 20:01	26°♄27'56	0°49'49
				max. Earth dist.	-642 Jul 27 j 12:42	26°♄23'57	6.38914 AU
conjunction	-647 Jan 30 j 14:49	4°♁37'27	0°-56'-28	morning rise	-642 Aug 10 j 01:16	29°♄20'40	
minimum elong	-647 Jan 30 j 14:46	4°♁37'25	0°56'29		-642 Aug 13 j 02:02	0°♅	
max. Earth dist.	-647 Jan 31 j 06:28	4°♁46'52	5.99409 AU		-642 Nov 09 j 01:54	15°♅	
morning rise	-647 Feb 12 j 18:40	7°♁46'58		retrograde	-642 Dec 08 j 18:25	16°♅22'35	
	-647 Mar 16 j 00:58	15°♁			-641 Jan 07 j 10:56	15°♅♁	
retrograde	-647 Jun 24 j 22:04	28°♁13'13		opposition	-641 Feb 06 j 22:13	11°♅27'43	1°30'17
min. Earth dist.	-647 Aug 23 j 04:37	23°♁17'40	3.97959 AU	min. Earth dist.	-641 Feb 07 j 10:55	11°♅23'35	4.41598 AU
opposition	-647 Aug 24 j 00:12	23°♁11'06	-1°-42'-10	direct	-641 Apr 10 j 01:58	6°♅24'34	
direct	-647 Oct 21 j 04:21	18°♁17'19			-641 Jul 01 j 06:37	15°♅	
	-646 Jan 20 j 06:08	0°♁		evening set	-641 Aug 15 j 07:18	24°♅07'33	
evening set	-646 Feb 23 j 06:53	7°♁49'02		max. Earth dist.	-641 Aug 27 j 00:17	26°♅40'06	6.42576 AU
conjunction	-646 Mar 08 j 15:31	11°♁00'44	-1°-12'-28	conjunction	-641 Aug 28 j 07:01	26°♅56'50	1°10'28
minimum elong	-646 Mar 08 j 15:30	11°♁00'44	1°12'28	minimum elong	-641 Aug 28 j 06:59	26°♅56'49	1°10'28
max. Earth dist.	-646 Mar 10 j 08:42	11°♁25'24	5.98397 AU	morning rise	-641 Sep 10 j 03:45	29°♅44'40	
morning rise	-646 Mar 22 j 03:28	14°♁14'06			-641 Sep 11 j 08:07	0°♆	
	-646 Jun 06 j 11:47	0°♆		retrograde	-640 Jan 08 j 08:46	16°♆37'00	
retrograde	-646 Aug 01 j 02:23	4°♆38'27		opposition	-640 Mar 08 j 20:37	11°♆44'36	1°46'54
	-646 Sep 26 j 14:34	30°♆♁		min. Earth dist.	-640 Mar 09 j 23:52	11°♆35'51	4.42066 AU
opposition	-646 Sep 29 j 20:12	29°♆33'37	-1°-44'-33	direct	-640 May 10 j 13:38	6°♆42'38	
min. Earth dist.	-646 Sep 28 j 12:06	29°♆44'32	4.01049 AU	evening set	-640 Sep 14 j 05:57	24°♆25'53	
direct	-646 Nov 26 j 18:49	24°♆37'31		max. Earth dist.	-640 Sep 25 j 03:00	26°♆49'14	6.39722 AU
	-645 Jan 24 j 16:39	0°♆					
evening set	-645 Apr 01 j 14:01	13°♆58'36		conjunction	-640 Sep 26 j 23:24	27°♆13'42	1°11'40
				minimum elong	-640 Sep 26 j 23:25	27°♆13'42	1°11'40
conjunction	-645 Apr 15 j 05:43	17°♆10'22	-1°00'-33	morning rise	-640 Oct 09 j 14:25	0°♇00'26	
minimum elong	-645 Apr 15 j 05:46	17°♆10'24	1°00'33		-640 Oct 09 j 13:39	0°♇	
max. Earth dist.	-645 Apr 17 j 09:05	17°♆40'28	6.05215 AU	retrograde	-639 Feb 07 j 18:48	17°♇09'50	
morning rise	-645 Apr 28 j 23:40	20°♆23'05		opposition	-639 Apr 09 j 15:02	12°♇18'10	1°34'24
	-645 Jun 11 j 18:00	0°♇		min. Earth dist.	-639 Apr 11 j 00:06	12°♇07'38	4.36105 AU
retrograde	-645 Sep 05 j 12:39	10°♇02'35		direct	-639 Jun 11 j 03:18	7°♇18'16	
min. Earth dist.	-645 Nov 02 j 18:44	5°♇08'06	4.10785 AU	evening set	-639 Oct 15 j 03:31	25°♇15'22	
opposition	-645 Nov 04 j 01:16	4°♇57'40	-1°-7'-39	max. Earth dist.	-639 Oct 25 j 21:06	27°♇40'00	6.31078 AU
	-645 Dec 28 j 17:34	30°♇♁					
direct	-644 Jan 01 j 16:42	29°♇58'23		conjunction	-639 Oct 27 j 18:14	28°♇05'26	0°52'41
	-644 Jan 05 j 15:57	0°♇		minimum elong	-639 Oct 27 j 18:17	28°♇05'28	0°52'40
	-644 Apr 19 j 20:58	15°♇			-639 Nov 05 j 05:30	0°♈	
evening set	-644 May 07 j 04:23	18°♇51'51		morning rise	-639 Nov 09 j 07:34	0°♈55'04	
					-638 Jan 21 j 04:05	15°♈	
conjunction	-644 May 20 j 23:04	21°♇59'41	0°-26'-57	retrograde	-638 Mar 12 j 21:38	18°♈45'48	
minimum elong	-644 May 20 j 23:06	21°♇59'42	0°26'58		-638 May 04 j 01:52	15°♈♁	
max. Earth dist.	-644 May 22 j 17:59	22°♇24'06	6.17049 AU	opposition	-638 May 12 j 21:19	13°♈53'16	0°53'55
morning rise	-644 Jun 03 j 17:53	25°♇07'21		min. Earth dist.	-638 May 14 j 04:08	13°♈43'27	4.25220 AU
	-644 Jun 25 j 19:56	0°♉		direct	-638 Jul 13 j 14:38	8°♈56'02	
retrograde	-644 Oct 07 j 17:42	13°♉42'38			-638 Sep 17 j 06:43	15°♈	
min. Earth dist.	-644 Dec 05 j 11:12	8°♉47'15	4.23451 AU	evening set	-638 Nov 15 j 20:49	27°♈18'29	
opposition	-644 Dec 06 j 07:48	8°♉40'18	0°-9'-28	max. Earth dist.	-638 Nov 27 j 01:03	29°♈53'27	6.18875 AU
direct	-643 Feb 04 j 03:00	3°♉38'29			-638 Nov 27 j 12:21	0°♉	
asc. node	-643 Feb 05 j 22:21	3°♉38'48					
evening set	-643 Jun 11 j 05:20	22°♉00'03		conjunction	-638 Nov 28 j 12:20	0°♉13'54	0°17'16
				minimum elong	-638 Nov 28 j 12:21	0°♉13'54	0°17'15

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Attention, astronomical year style is used: The year -638 in astronomical counting style is the year 639 BCE in historical counting style.

morning rise	-638 Dec 11 j 04:17	3°♂09'44		asc. node	-632 Dec 17 j 23:07	12°♂20'15	
retrograde	-637 Apr 17 j 02:08	21°♂59'30		direct	-631 Feb 08 j 18:34	8°♂16'00	
desc. node	-637 May 09 j 19:40	21°♂11'34		evening set	-631 Jun 15 j 22:12	26°♂34'55	
opposition	-637 Jun 16 j 23:48	17°♂04'28	0°-6'-7				
min. Earth dist.	-637 Jun 17 j 16:33	16°♂59'04	4.12492 AU	conjunction	-631 Jun 29 j 13:04	29°♂35'16	0°19'48
direct	-637 Aug 16 j 09:18	12°♂09'44		minimum elong	-631 Jun 29 j 13:02	29°♂35'15	0°19'48
	-637 Dec 14 j 15:56	0°♂		max. Earth dist.	-631 Jun 30 j 05:34	29°♂44'24	6.30771 AU
evening set	-637 Dec 19 j 04:13	1°♂03'36			-631 Jul 01 j 09:47	0°♂	
				morning rise	-631 Jul 13 j 01:51	2°♂34'27	
conjunction	-637 Dec 31 j 23:52	4°♂05'52	0°-25'-17	retrograde	-631 Nov 12 j 12:30	20°♂07'01	
minimum elong	-637 Dec 31 j 23:50	4°♂05'51	0°25'18	opposition	-630 Jan 11 j 08:46	15°♂09'01	0°55'27
max. Earth dist.	-637 Dec 31 j 13:16	3°♂59'35	6.06791 AU	min. Earth dist.	-630 Jan 11 j 06:32	15°♂09'46	4.35805 AU
morning rise	-636 Jan 13 j 21:13	7°♂09'18		direct	-630 Mar 13 j 15:40	10°♂05'48	
retrograde	-636 May 23 j 04:42	26°♂59'56		evening set	-630 Jul 19 j 00:14	28°♂00'08	
opposition	-636 Jul 22 j 16:33	22°♂01'16	-1°-7'-23		-630 Jul 28 j 04:53	0°♂	
min. Earth dist.	-636 Jul 22 j 14:14	22°♂02'02	4.02141 AU				
direct	-636 Sep 19 j 17:17	17°♂07'55		conjunction	-630 Aug 01 j 07:10	0°♂53'35	0°53'42
	-636 Dec 25 j 12:55	0°♂		minimum elong	-630 Aug 01 j 07:07	0°♂53'33	0°53'42
evening set	-635 Jan 22 j 10:56	6°♂28'58		max. Earth dist.	-630 Jul 31 j 19:37	0°♂47'17	6.39624 AU
				morning rise	-630 Aug 14 j 11:19	3°♂45'32	
conjunction	-635 Feb 04 j 12:47	9°♂37'22	-1°00'-6		-630 Oct 10 j 14:14	15°♂	
minimum elong	-635 Feb 04 j 12:45	9°♂37'21	1°00'07	retrograde	-630 Dec 13 j 01:29	20°♂44'50	
max. Earth dist.	-635 Feb 05 j 06:30	9°♂48'01	5.99082 AU	opposition	-629 Feb 11 j 05:38	15°♂50'19	1°34'13
morning rise	-635 Feb 17 j 17:48	12°♂47'29		min. Earth dist.	-629 Feb 11 j 21:03	15°♂45'19	4.41990 AU
	-635 Feb 27 j 01:23	15°♂			-629 Feb 17 j 17:07	15°♂♂	
	-635 May 14 j 17:56	0°♂		direct	-629 Apr 14 j 13:15	10°♂47'12	
retrograde	-635 Jun 29 j 22:33	3°♂15'24			-629 Jun 08 j 21:21	15°♂	
	-635 Aug 15 j 10:19	30°♂♂		evening set	-629 Aug 19 j 15:49	28°♂29'18	
min. Earth dist.	-635 Aug 28 j 02:19	28°♂20'20	3.98050 AU		-629 Aug 26 j 15:05	0°♂	
opposition	-635 Aug 29 j 00:32	28°♂12'53	-1°-44'-59	max. Earth dist.	-629 Aug 31 j 06:29	1°♂00'39	6.42591 AU
direct	-635 Oct 26 j 02:11	23°♂18'54					
	-635 Dec 31 j 04:21	0°♂		conjunction	-629 Sep 01 j 14:38	1°♂18'10	1°11'50
evening set	-634 Feb 28 j 07:08	12°♂50'19		minimum elong	-629 Sep 01 j 14:37	1°♂18'09	1°11'50
				morning rise	-629 Sep 14 j 10:16	4°♂05'34	
conjunction	-634 Mar 13 j 16:50	16°♂02'17	-1°-12'-28	retrograde	-628 Jan 12 j 14:53	20°♂58'23	
minimum elong	-634 Mar 13 j 16:51	16°♂02'17	1°12'29	opposition	-628 Mar 13 j 05:20	16°♂06'05	1°46'53
max. Earth dist.	-634 Mar 15 j 11:37	16°♂27'50	5.98889 AU	min. Earth dist.	-628 Mar 14 j 08:48	15°♂57'16	4.41700 AU
morning rise	-634 Mar 27 j 05:41	19°♂15'49		direct	-628 May 14 j 22:06	11°♂04'17	
	-634 May 14 j 13:07	0°♂		evening set	-628 Sep 18 j 12:59	28°♂48'10	
retrograde	-634 Aug 06 j 00:40	9°♂36'48			-628 Sep 23 j 23:50	0°♂	
min. Earth dist.	-634 Oct 03 j 09:17	4°♂42'32	4.01883 AU	max. Earth dist.	-628 Sep 29 j 09:00	1°♂11'15	6.38974 AU
opposition	-634 Oct 04 j 16:41	4°♂31'50	-1°-41'-36				
	-634 Nov 16 j 06:18	30°♂♂		conjunction	-628 Oct 01 j 05:46	1°♂35'59	1°10'10
direct	-634 Dec 01 j 17:13	29°♂35'19		minimum elong	-628 Oct 01 j 05:47	1°♂36'00	1°10'09
	-634 Dec 17 j 04:09	0°♂		morning rise	-628 Oct 13 j 20:15	4°♂22'48	
evening set	-633 Apr 06 j 14:04	18°♂54'20		retrograde	-627 Feb 12 j 06:38	21°♂35'55	
				opposition	-627 Apr 14 j 03:24	16°♂44'12	1°30'18
conjunction	-633 Apr 20 j 06:38	22°♂06'00	0°-57'00	min. Earth dist.	-627 Apr 15 j 13:38	16°♂33'19	4.34986 AU
minimum elong	-633 Apr 20 j 06:41	22°♂06'01	0°57'00	direct	-627 Jun 15 j 15:13	11°♂44'34	
max. Earth dist.	-633 Apr 22 j 10:33	22°♂36'19	6.06329 AU	evening set	-627 Oct 19 j 11:27	29°♂44'00	
morning rise	-633 May 04 j 01:05	25°♂18'26			-627 Oct 20 j 15:58	0°♂	
	-633 May 24 j 16:52	0°♂		max. Earth dist.	-627 Oct 30 j 04:23	2°♂08'47	6.29657 AU
retrograde	-633 Sep 10 j 04:15	14°♂51'09					
min. Earth dist.	-633 Nov 07 j 10:30	9°♂56'45	4.12069 AU	conjunction	-627 Nov 01 j 02:03	2°♂34'36	0°48'35
opposition	-633 Nov 08 j 16:31	9°♂46'31	-1°00'-31	minimum elong	-627 Nov 01 j 02:05	2°♂34'37	0°48'35
direct	-632 Jan 06 j 09:46	4°♂46'55		morning rise	-627 Nov 13 j 15:37	5°♂24'53	
	-632 Apr 02 j 01:07	15°♂			-627 Dec 29 j 02:20	15°♂	
evening set	-632 May 12 j 01:41	23°♂37'31		retrograde	-626 Mar 17 j 14:35	23°♂22'27	
				opposition	-626 May 17 j 15:04	18°♂29'35	0°46'25
conjunction	-632 May 25 j 20:13	26°♂44'43	0°-21'-27	min. Earth dist.	-626 May 18 j 20:03	18°♂20'20	4.23572 AU
minimum elong	-632 May 25 j 20:14	26°♂44'44	0°21'27		-626 Jun 17 j 01:57	15°♂♂	
max. Earth dist.	-632 May 27 j 11:03	27°♂06'45	6.18404 AU	direct	-626 Jul 18 j 04:03	13°♂32'38	
morning rise	-632 Jun 08 j 14:54	29°♂51'43			-626 Aug 18 j 02:10	15°♂	
	-632 Jun 09 j 05:39	0°♂			-626 Nov 11 j 16:49	0°♂	
retrograde	-632 Oct 12 j 04:27	18°♂19'56		evening set	-626 Nov 20 j 08:37	1°♂58'57	
opposition	-632 Dec 10 j 18:32	13°♂18'04	0°-1'-6	max. Earth dist.	-626 Dec 01 j 16:59	4°♂36'51	6.17147 AU
min. Earth dist.	-632 Dec 10 j 00:26	13°♂24'10	4.24761 AU				

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Attention, astronomical year style is used: The year -626 in astronomical counting style is the year 627 BCE in historical counting style.

conjunction	-626 Dec 03 j 00:38	4°♌55'15	0°11'31	minimum elong	-620 May 30 j 20:18	1°♋35'01	0°15'42
minimum elong	-626 Dec 03 j 00:39	4°♌55'15	0°11'30	behind sun begin	-620 May 30 j 19:43	1°♋34'41	
behind sun begin	-626 Dec 02 j 18:48	4°♌51'53		behind sun end	-620 May 30 j 20:53	1°♋35'20	
behind sun end	-626 Dec 03 j 06:29	4°♌58'38		max. Earth dist.	-620 Jun 01 j 10:30	1°♋56'35	6.20373 AU
morning rise	-626 Dec 15 j 17:01	7°♌52'03		morning rise	-620 Jun 13 j 14:17	4°♋40'51	
desc. node	-625 Mar 20 j 05:55	25°♌11'18		retrograde	-620 Oct 16 j 15:55	22°♋59'33	
retrograde	-625 Apr 22 j 04:01	26°♌50'27		asc. node	-620 Oct 28 j 03:33	22°♋46'26	
opposition	-625 Jun 21 j 23:27	21°♌54'59	0°-15'-4	opposition	-620 Dec 15 j 06:37	17°♋58'14	0°07'21
min. Earth dist.	-625 Jun 22 j 14:56	21°♌49'58	4.10807 AU	min. Earth dist.	-620 Dec 14 j 13:55	18°♋03'51	4.26778 AU
direct	-625 Aug 21 j 04:59	17°♌00'29		direct	-619 Feb 13 j 11:24	12°♋55'59	
	-625 Nov 27 j 22:31	0°♌			-619 Jun 15 j 07:39	0°♌	
evening set	-625 Dec 23 j 22:31	5°♌58'47		evening set	-619 Jun 20 j 15:21	1°♌09'36	
conjunction	-624 Jan 05 j 18:48	9°♌01'59	0°-30'-56	conjunction	-619 Jul 04 j 05:04	4°♌08'43	0°25'09
minimum elong	-624 Jan 05 j 18:46	9°♌01'58	0°30'57	minimum elong	-619 Jul 04 j 05:02	4°♌08'42	0°25'10
max. Earth dist.	-624 Jan 05 j 10:31	8°♌57'04	6.05294 AU	max. Earth dist.	-619 Jul 04 j 17:04	4°♌15'20	6.32675 AU
morning rise	-624 Jan 18 j 17:16	12°♌06'31		morning rise	-619 Jul 17 j 16:50	7°♌06'38	
	-624 Apr 21 j 15:11	0°♌		retrograde	-619 Nov 16 j 18:27	24°♌31'42	
retrograde	-624 May 28 j 08:34	2°♌04'35		opposition	-618 Jan 15 j 16:04	19°♌34'12	1°02'01
	-624 Jul 04 j 04:33	30°♌		min. Earth dist.	-618 Jan 15 j 16:31	19°♌34'03	4.37461 AU
opposition	-624 Jul 27 j 20:02	27°♌05'21	-1°-14'-33	direct	-618 Mar 18 j 04:00	14°♌30'53	
min. Earth dist.	-624 Jul 27 j 14:04	27°♌07'19	4.01001 AU		-618 Jul 12 j 10:39	0°♌	
direct	-624 Sep 24 j 15:34	22°♌12'01		evening set	-618 Jul 23 j 10:19	2°♌21'04	
	-624 Dec 06 j 01:39	0°♌					
evening set	-623 Jan 27 j 11:48	11°♌36'26		conjunction	-618 Aug 05 j 16:09	5°♌13'30	0°57'11
conjunction	-623 Feb 09 j 14:47	14°♌45'37	-1°-3'-24	minimum elong	-618 Aug 05 j 16:06	5°♌13'29	0°57'11
minimum elong	-623 Feb 09 j 14:44	14°♌45'36	1°03'25	max. Earth dist.	-618 Aug 05 j 02:35	5°♌06'07	6.40898 AU
	-623 Feb 10 j 14:40	15°♌		morning rise	-618 Aug 18 j 18:47	8°♌04'23	
max. Earth dist.	-623 Feb 10 j 12:48	14°♌58'52	5.98396 AU		-618 Sep 21 j 03:05	15°♌	
morning rise	-623 Feb 22 j 20:49	17°♌56'30		retrograde	-618 Dec 17 j 03:27	24°♌59'37	
	-623 Apr 18 j 12:01	0°♌		opposition	-617 Feb 15 j 10:19	20°♌05'31	1°37'28
retrograde	-623 Jul 05 j 05:13	8°♌27'11		min. Earth dist.	-617 Feb 16 j 03:12	20°♌00'03	4.42808 AU
min. Earth dist.	-623 Sep 02 j 05:15	3°♌32'05	3.97904 AU	direct	-617 Apr 18 j 19:59	15°♌02'33	
opposition	-623 Sep 03 j 04:40	3°♌24'12	-1°-47'-7		-617 Aug 11 j 04:38	0°♌	
	-623 Oct 01 j 06:10	30°♌		evening set	-617 Aug 23 j 21:03	2°♌42'37	
direct	-623 Oct 31 j 05:37	28°♌29'57		max. Earth dist.	-617 Sep 04 j 06:31	5°♌11'13	6.42864 AU
	-623 Nov 30 j 01:43	0°♌					
evening set	-622 Mar 05 j 11:59	18°♌01'51		conjunction	-617 Sep 05 j 18:40	5°♌30'56	1°12'44
conjunction	-622 Mar 18 j 22:53	21°♌14'09	-1°-11'-54	minimum elong	-617 Sep 05 j 18:39	5°♌30'55	1°12'44
minimum elong	-622 Mar 18 j 22:54	21°♌14'10	1°11'55	morning rise	-617 Sep 18 j 13:28	8°♌17'52	
max. Earth dist.	-622 Mar 20 j 20:59	21°♌41'38	5.99298 AU	retrograde	-616 Jan 16 j 20:06	25°♌10'50	
morning rise	-622 Apr 01 j 12:46	24°♌27'57		opposition	-616 Mar 17 j 10:55	20°♌18'45	1°46'15
	-622 Apr 25 j 11:26	0°♌		min. Earth dist.	-616 Mar 18 j 17:14	20°♌09'03	4.41402 AU
retrograde	-622 Aug 11 j 02:24	14°♌45'08		direct	-616 May 19 j 05:19	15°♌17'08	
min. Earth dist.	-622 Oct 08 j 08:37	9°♌51'11	4.02827 AU		-616 Sep 08 j 16:30	0°♌	
opposition	-622 Oct 09 j 17:08	9°♌40'06	-1°-37'-46	evening set	-616 Sep 22 j 16:02	3°♌01'42	
direct	-622 Dec 06 j 17:35	4°♌43'15		max. Earth dist.	-616 Oct 03 j 10:00	5°♌23'58	6.38107 AU
evening set	-621 Apr 11 j 18:53	23°♌59'38					
conjunction	-621 Apr 25 j 11:57	27°♌10'55	0°-52'-54	conjunction	-616 Oct 05 j 08:25	5°♌49'39	1°08'19
minimum elong	-621 Apr 25 j 12:00	27°♌10'57	0°52'55	minimum elong	-616 Oct 05 j 08:27	5°♌49'40	1°08'18
max. Earth dist.	-621 Apr 27 j 14:26	27°♌40'18	6.07739 AU	morning rise	-616 Oct 17 j 22:30	8°♌36'41	
	-621 May 07 j 15:16	0°♌		retrograde	-615 Feb 16 j 14:21	25°♌54'25	
morning rise	-621 May 09 j 06:57	0°♌22'55		opposition	-615 Apr 18 j 12:44	21°♌02'39	1°25'49
	-621 Jul 20 j 09:34	15°♌		min. Earth dist.	-615 Apr 19 j 22:44	20°♌51'50	4.33588 AU
retrograde	-621 Sep 14 j 22:03	19°♌47'11		direct	-615 Jun 19 j 21:18	16°♌03'19	
	-621 Nov 11 j 08:24	15°♌			-615 Oct 05 j 02:23	0°♌	
min. Earth dist.	-621 Nov 12 j 05:39	14°♌52'46	4.13805 AU	evening set	-615 Oct 23 j 16:37	4°♌06'23	
opposition	-621 Nov 13 j 10:51	14°♌42'49	0°-52'-45	max. Earth dist.	-615 Nov 03 j 10:17	6°♌32'10	6.27839 AU
direct	-620 Jan 11 j 08:14	9°♌42'50					
	-620 Mar 11 j 01:42	15°♌		conjunction	-615 Nov 05 j 07:13	6°♌57'42	0°44'18
evening set	-620 May 17 j 01:48	28°♌28'41		minimum elong	-615 Nov 05 j 07:16	6°♌57'43	0°44'18
	-620 May 23 j 20:03	0°♌		morning rise	-615 Nov 17 j 20:58	9°♌48'50	
conjunction	-620 May 30 j 20:17	1°♋35'00	0°-15'-42		-615 Dec 11 j 08:53	15°♌	
				retrograde	-614 Mar 22 j 08:33	27°♌55'02	
				opposition	-614 May 22 j 07:04	23°♌01'59	0°38'50
				min. Earth dist.	-614 May 23 j 12:20	22°♌52'37	4.21425 AU
				direct	-614 Jul 22 j 16:38	18°♌05'20	

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Attention, astronomical year style is used: The year -614 in astronomical counting style is the year 615 BCE in historical counting style.

	-614 Oct 26 j 04:50	0°♌				-608 May 06 j 22:25	0°♈	
evening set	-614 Nov 24 j 19:39	6°♌37'41			evening set	-608 May 22 j 02:13	3°♈20'55	
max. Earth dist.	-614 Dec 06 j 05:29	9°♌17'14	6.14862 AU					
conjunction	-614 Dec 07 j 12:09	9°♌35'10	0°05'48		conjunction	-608 Jun 04 j 20:10	6°♈26'08	0°-9'-46
minimum elong	-614 Dec 07 j 12:09	9°♌35'10	0°05'47		minimum elong	-608 Jun 04 j 20:11	6°♈26'08	0°09'47
behind sun begin	-614 Dec 07 j 04:29	9°♌30'42			behind sun begin	-608 Jun 04 j 13:26	6°♈22'22	
behind sun end	-614 Dec 07 j 19:50	9°♌39'37			behind sun end	-608 Jun 05 j 02:56	6°♈29'55	
morning rise	-614 Dec 20 j 05:25	12°♌33'17			max. Earth dist.	-608 Jun 06 j 06:40	6°♈45'31	6.22427 AU
desc. node	-613 Jan 29 j 18:14	21°♌30'04			morning rise	-608 Jun 18 j 13:39	9°♈30'49	
	-613 Mar 24 j 18:25	0°♌			asc. node	-608 Sep 06 j 05:04	24°♈34'35	
retrograde	-613 Apr 27 j 04:07	1°♌42'35			retrograde	-608 Oct 21 j 02:30	27°♈39'59	
	-613 May 30 j 17:43	30°♌			opposition	-608 Dec 19 j 18:52	22°♈39'06	0°15'51
opposition	-613 Jun 26 j 22:59	26°♌46'40	0°-23'-51		min. Earth dist.	-608 Dec 19 j 04:08	22°♈44'03	4.28716 AU
min. Earth dist.	-613 Jun 27 j 11:09	26°♌42'43	4.08578 AU		direct	-607 Feb 18 j 04:19	17°♈36'33	
direct	-613 Aug 25 j 21:41	21°♌52'26				-607 May 29 j 05:58	0°♌	
	-613 Nov 09 j 00:23	0°♌			evening set	-607 Jun 25 j 08:45	5°♌45'24	
evening set	-613 Dec 28 j 17:57	10°♌57'28			conjunction	-607 Jul 08 j 21:30	8°♌43'23	0°30'27
					minimum elong	-607 Jul 08 j 21:28	8°♌43'22	0°30'27
conjunction	-612 Jan 10 j 15:12	14°♌01'57	0°-36'-20		max. Earth dist.	-607 Jul 09 j 06:21	8°♌48'14	6.34349 AU
minimum elong	-612 Jan 10 j 15:09	14°♌01'55	0°36'22		morning rise	-607 Jul 22 j 07:54	11°♌40'04	
max. Earth dist.	-612 Jan 10 j 11:34	13°♌59'47	6.03329 AU		retrograde	-607 Nov 21 j 01:37	28°♌58'38	
morning rise	-612 Jan 23 j 14:40	17°♌07'49			opposition	-606 Jan 20 j 00:16	24°♌01'42	1°08'24
	-612 Mar 23 j 02:09	0°♌			min. Earth dist.	-606 Jan 20 j 03:17	24°♌00'42	4.38759 AU
retrograde	-612 Jun 02 j 17:15	7°♌15'15			direct	-606 Mar 22 j 16:09	18°♌58'21	
opposition	-612 Aug 02 j 01:39	2°♌15'27	-1°-21'-11			-606 Jun 25 j 08:32	0°♌	
min. Earth dist.	-612 Aug 01 j 17:25	2°♌18'11	3.99505 AU		evening set	-606 Jul 27 j 21:54	6°♌45'42	
	-612 Aug 19 j 19:39	30°♌			max. Earth dist.	-606 Aug 09 j 07:41	9°♌27'08	6.41702 AU
direct	-612 Sep 29 j 18:05	27°♌22'07						
	-612 Nov 08 j 22:23	0°♌			conjunction	-606 Aug 10 j 02:22	9°♌37'17	1°00'29
evening set	-611 Jan 24 j 20:55	15°♌			minimum elong	-606 Aug 10 j 02:20	9°♌37'16	1°00'29
	-611 Feb 01 j 15:28	16°♌51'07			morning rise	-606 Aug 23 j 03:55	12°♌27'22	
						-606 Sep 04 j 01:19	15°♌	
conjunction	-611 Feb 14 j 19:39	20°♌01'15	-1°-6'-12		retrograde	-606 Dec 21 j 10:25	29°♌20'18	
minimum elong	-611 Feb 14 j 19:37	20°♌01'14	1°06'12		opposition	-605 Feb 19 j 17:55	24°♌26'33	1°40'23
max. Earth dist.	-611 Feb 15 j 22:46	20°♌17'35	5.97509 AU		min. Earth dist.	-605 Feb 20 j 13:41	24°♌20'10	4.43097 AU
morning rise	-611 Feb 28 j 02:57	23°♌13'05			direct	-605 Apr 23 j 05:59	19°♌23'38	
	-611 Mar 29 j 08:49	0°♌				-605 Jul 25 j 04:45	0°♌	
retrograde	-611 Jul 10 j 13:42	13°♌46'33			evening set	-605 Aug 28 j 04:57	7°♌03'18	
min. Earth dist.	-611 Sep 07 j 08:48	8°♌51'59	3.97761 AU		max. Earth dist.	-605 Sep 08 j 12:29	9°♌30'59	6.42608 AU
opposition	-611 Sep 08 j 11:05	8°♌43'07	-1°-48'-20					
direct	-611 Nov 05 j 09:23	3°♌48'36			conjunction	-605 Sep 10 j 01:47	9°♌51'21	1°13'20
evening set	-610 Mar 10 j 20:07	23°♌20'42			minimum elong	-605 Sep 10 j 01:46	9°♌51'20	1°13'20
					morning rise	-605 Sep 22 j 19:32	12°♌38'00	
conjunction	-610 Mar 24 j 07:58	26°♌33'12	-1°-10'-42		retrograde	-604 Jan 21 j 03:59	29°♌32'52	
minimum elong	-610 Mar 24 j 07:59	26°♌33'13	1°10'43		opposition	-604 Mar 21 j 20:45	24°♌40'56	1°45'07
max. Earth dist.	-610 Mar 26 j 07:36	27°♌01'33	5.99876 AU		min. Earth dist.	-604 Mar 23 j 03:42	24°♌31'03	4.40631 AU
morning rise	-610 Apr 06 j 22:58	29°♌47'10			direct	-604 May 23 j 13:57	19°♌39'37	
	-610 Apr 07 j 20:45	0°♌				-604 Aug 22 j 14:31	0°♌	
retrograde	-610 Aug 16 j 03:48	19°♌59'05			evening set	-604 Sep 26 j 23:51	7°♌26'13	
min. Earth dist.	-610 Oct 13 j 09:38	15°♌05'14	4.04035 AU		max. Earth dist.	-604 Oct 07 j 15:46	9°♌47'52	6.36872 AU
opposition	-610 Oct 14 j 19:04	14°♌53'49	-1°-33'-2					
direct	-610 Dec 11 j 21:48	9°♌56'26			conjunction	-604 Oct 09 j 15:37	10°♌14'27	1°06'03
evening set	-609 Apr 17 j 01:06	29°♌08'51			minimum elong	-604 Oct 09 j 15:38	10°♌14'28	1°06'03
	-609 Apr 20 j 17:45	0°♌			morning rise	-604 Oct 22 j 05:30	13°♌01'53	
						-603 Feb 04 j 17:38	0°♌	
conjunction	-609 Apr 30 j 18:52	2°♌19'38	0°-48'-20		retrograde	-603 Feb 21 j 06:22	0°♌25'25	
minimum elong	-609 Apr 30 j 18:55	2°♌19'39	0°48'21			-603 Mar 09 j 18:06	30°♌	
max. Earth dist.	-609 May 02 j 22:19	2°♌49'27	6.09453 AU		opposition	-603 Apr 23 j 03:51	25°♌33'36	1°20'38
morning rise	-609 May 14 j 13:56	5°♌30'52			min. Earth dist.	-603 Apr 24 j 14:52	25°♌22'28	4.31953 AU
	-609 Jun 27 j 06:19	15°♌			direct	-603 Jun 24 j 10:40	20°♌34'36	
retrograde	-609 Sep 19 j 17:36	24°♌45'17				-603 Sep 17 j 08:52	0°♌	
min. Earth dist.	-609 Nov 17 j 01:58	19°♌50'37	4.15788 AU		evening set	-603 Oct 28 j 03:08	8°♌41'49	
opposition	-609 Nov 18 j 05:49	19°♌41'09	0°-44'-31		max. Earth dist.	-603 Nov 07 j 21:56	11°♌08'53	6.25946 AU
	-608 Jan 02 j 10:51	15°♌						
direct	-608 Jan 16 j 07:57	14°♌40'45			conjunction	-603 Nov 09 j 17:56	11°♌33'59	0°39'33
	-608 Jan 30 j 06:41	15°♌			minimum elong	-603 Nov 09 j 17:58	11°♌34'00	0°39'32

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Attention, astronomical year style is used: The year -603 in astronomical counting style is the year 604 BCE in historical counting style.

morning rise	-603 Nov 22 j 07:58	14°♄26'02		retrograde	-597 Sep 24 j 06:55	29°♄32'50	
	-603 Nov 24 j 19:57	15°♄		opposition	-597 Nov 22 j 20:22	24°♄29'05	0°-36'-18
	-602 Feb 12 j 20:44	0°♄		min. Earth dist.	-597 Nov 21 j 17:32	24°♄38'12	4.17810 AU
retrograde	-602 Mar 27 j 06:09	2°♄41'06		direct	-596 Jan 21 j 02:07	19°♄28'18	
	-602 May 09 j 07:26	30°♄			-596 Apr 19 j 04:21	0°♄	
opposition	-602 May 27 j 05:01	27°♄47'46	0°30'31	evening set	-596 May 26 j 22:24	8°♄03'16	
min. Earth dist.	-602 May 28 j 07:39	27°♄39'14	4.19415 AU				
direct	-602 Jul 27 j 08:44	22°♄51'34		conjunction	-596 Jun 09 j 15:56	11°♄07'28	0°-4'00
	-602 Oct 06 j 13:30	0°♄		minimum elong	-596 Jun 09 j 15:57	11°♄07'28	0°04'01
evening set	-602 Nov 29 j 12:00	11°♄29'12		behind sun begin	-596 Jun 09 j 07:44	11°♄02'53	
desc. node	-602 Dec 08 j 23:23	13°♄42'09		behind sun end	-596 Jun 10 j 00:10	11°♄12'03	
max. Earth dist.	-602 Dec 11 j 02:01	14°♄11'52	6.12927 AU	max. Earth dist.	-596 Jun 10 j 22:38	11°♄24'39	6.24357 AU
				morning rise	-596 Jun 23 j 08:37	14°♄10'59	
conjunction	-602 Dec 12 j 05:01	14°♄27'43	0°00'-21	asc. node	-596 Jul 17 j 15:31	19°♄26'53	
minimum elong	-602 Dec 12 j 05:00	14°♄27'43	0°00'22		-596 Sep 17 j 22:08	0°♄	
behind sun begin	-602 Dec 11 j 21:00	14°♄23'03		retrograde	-596 Oct 25 j 11:56	2°♄11'48	
behind sun end	-602 Dec 12 j 12:59	14°♄32'23			-596 Dec 01 j 19:56	30°♄	
morning rise	-602 Dec 24 j 22:59	17°♄27'00		opposition	-596 Dec 24 j 03:53	27°♄11'30	0°23'56
	-601 Feb 22 j 04:00	0°♄		min. Earth dist.	-596 Dec 23 j 16:24	27°♄15'21	4.30383 AU
retrograde	-601 May 02 j 10:52	6°♄45'55		direct	-595 Feb 22 j 18:16	22°♄08'48	
opposition	-601 Jul 02 j 03:37	1°♄49'32	0°-32'-54		-595 May 10 j 11:11	0°♄	
min. Earth dist.	-601 Jul 02 j 13:31	1°♄46'19	4.06897 AU	evening set	-595 Jun 29 j 22:39	10°♄14'00	
	-601 Jul 16 j 13:00	30°♄					
direct	-601 Aug 30 j 22:24	26°♄55'36		conjunction	-595 Jul 13 j 10:23	13°♄11'03	0°35'24
	-601 Oct 14 j 04:10	0°♄		minimum elong	-595 Jul 13 j 10:21	13°♄11'02	0°35'24
evening set	-600 Jan 02 j 17:27	16°♄05'07		max. Earth dist.	-595 Jul 13 j 14:36	13°♄13'22	6.35618 AU
				morning rise	-595 Jul 26 j 19:42	16°♄06'46	
conjunction	-600 Jan 15 j 15:36	19°♄10'34	0°-41'-41		-595 Oct 09 j 02:32	0°♄	
minimum elong	-600 Jan 15 j 15:33	19°♄10'32	0°41'42	retrograde	-595 Nov 25 j 06:39	3°♄20'44	
max. Earth dist.	-600 Jan 15 j 16:56	19°♄11'22	6.02079 AU		-594 Jan 11 j 21:37	30°♄	
morning rise	-600 Jan 28 j 16:06	22°♄17'26		opposition	-594 Jan 24 j 06:37	28°♄24'17	1°14'15
	-600 Mar 02 j 07:13	0°♄		min. Earth dist.	-594 Jan 24 j 11:59	28°♄22'31	4.39576 AU
retrograde	-600 Jun 08 j 02:19	12°♄30'50		direct	-594 Mar 27 j 00:48	23°♄20'55	
opposition	-600 Aug 07 j 09:02	7°♄30'32	-1°-27'-20		-594 Jun 05 j 22:07	0°♄	
min. Earth dist.	-600 Aug 06 j 21:12	7°♄34'27	3.98872 AU	evening set	-594 Aug 01 j 07:23	11°♄07'02	
direct	-600 Oct 04 j 21:17	2°♄37'14					
	-599 Jan 07 j 02:33	15°♄		conjunction	-594 Aug 14 j 10:49	13°♄58'04	1°03'22
evening set	-599 Feb 06 j 20:33	22°♄07'37		minimum elong	-594 Aug 14 j 10:46	13°♄58'02	1°03'22
				max. Earth dist.	-594 Aug 13 j 13:37	13°♄46'32	6.42009 AU
conjunction	-599 Feb 20 j 01:40	25°♄18'10	-1°-8'-32		-594 Aug 19 j 04:42	15°♄	
minimum elong	-599 Feb 20 j 01:38	25°♄18'09	1°08'33	morning rise	-594 Aug 27 j 11:06	16°♄47'32	
max. Earth dist.	-599 Feb 21 j 07:59	25°♄36'25	5.97527 AU		-594 Nov 05 j 21:05	0°♄	
morning rise	-599 Mar 05 j 10:08	28°♄30'29		retrograde	-594 Dec 25 j 16:42	3°♄39'57	
	-599 Mar 11 j 16:47	0°♄			-593 Feb 14 j 10:47	30°♄	
retrograde	-599 Jul 15 j 18:40	19°♄02'55		opposition	-593 Feb 24 j 00:55	28°♄46'36	1°42'44
min. Earth dist.	-599 Sep 12 j 11:38	14°♄08'39	3.98441 AU	min. Earth dist.	-593 Feb 24 j 22:42	28°♄39'34	4.42901 AU
opposition	-599 Sep 13 j 16:05	13°♄59'01	-1°-48'-41	direct	-593 Apr 27 j 14:14	23°♄43'53	
direct	-599 Nov 10 j 13:53	9°♄04'11			-593 Jul 05 j 11:31	0°♄	
evening set	-598 Mar 16 j 01:56	28°♄33'37		evening set	-593 Sep 01 j 12:37	11°♄24'36	
	-598 Mar 22 j 04:06	0°♄		max. Earth dist.	-593 Sep 12 j 15:47	13°♄50'17	6.41911 AU
conjunction	-598 Mar 29 j 14:54	1°♄46'00	-1°-9'00	conjunction	-593 Sep 14 j 08:29	14°♄12'33	1°13'31
minimum elong	-598 Mar 29 j 14:56	1°♄46'01	1°09'00	minimum elong	-593 Sep 14 j 08:29	14°♄12'33	1°13'30
max. Earth dist.	-598 Mar 31 j 17:41	2°♄16'07	6.01148 AU	morning rise	-593 Sep 27 j 01:41	16°♄59'14	
morning rise	-598 Apr 12 j 06:31	4°♄59'39			-593 Dec 04 j 13:13	0°♄	
retrograde	-598 Aug 21 j 03:39	25°♄03'56		retrograde	-592 Jan 25 j 15:04	3°♄57'28	
min. Earth dist.	-598 Oct 18 j 08:46	20°♄09'52	4.05737 AU		-592 Mar 19 j 04:11	30°♄	
opposition	-598 Oct 19 j 17:32	19°♄58'42	-1°-27'-44	opposition	-592 Mar 26 j 07:37	29°♄05'38	1°43'23
direct	-598 Dec 16 j 23:19	15°♄00'55		min. Earth dist.	-592 Mar 27 j 15:54	28°♄55'19	4.39496 AU
	-597 Apr 03 j 20:39	0°♄		direct	-592 May 28 j 00:02	24°♄04'34	
evening set	-597 Apr 22 j 03:30	4°♄08'05			-592 Aug 02 j 09:07	0°♄	
				evening set	-592 Oct 01 j 08:01	11°♄54'06	
conjunction	-597 May 05 j 21:28	7°♄18'06	0°-43'-34	max. Earth dist.	-592 Oct 12 j 00:52	14°♄16'44	6.35396 AU
minimum elong	-597 May 05 j 21:31	7°♄18'08	0°43'34				
max. Earth dist.	-597 May 07 j 22:48	7°♄46'32	6.11417 AU	conjunction	-592 Oct 13 j 23:38	14°♄42'49	1°03'21
morning rise	-597 May 19 j 16:45	10°♄28'30		minimum elong	-592 Oct 13 j 23:40	14°♄42'50	1°03'21
	-597 Jun 08 j 20:47	15°♄		morning rise	-592 Oct 26 j 13:14	17°♄30'45	

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Attention, astronomical year style is used: The year -581 in astronomical counting style is the year 582 BCE in historical counting style.

conjunction	-581 Sep 18 j 16:22	18°♄36'33	1°13'18	minimum elong	-575 Mar 02 j 07:21	5°♃33'59	1°11'30
minimum elong	-581 Sep 18 j 16:23	18°♄36'33	1°13'17	max. Earth dist.	-575 Mar 03 j 19:42	5°♃55'48	5.98070 AU
morning rise	-581 Oct 01 j 08:43	21°♄23'12		morning rise	-575 Mar 15 j 17:55	8°♃46'55	
	-581 Nov 12 j 04:38	0°♄		retrograde	-575 Jul 25 j 21:39	29°♃14'57	
retrograde	-580 Jan 30 j 02:15	8°♄24'38		min. Earth dist.	-575 Sep 22 j 10:23	24°♃20'50	3.99916 AU
opposition	-580 Mar 30 j 19:54	3°♄32'58	1°41'05	opposition	-575 Sep 23 j 16:52	24°♃10'30	-1°-46'-56
min. Earth dist.	-580 Apr 01 j 04:31	3°♄22'34	4.38534 AU	direct	-575 Nov 20 j 14:45	19°♃14'55	
	-580 Apr 30 j 21:07	30°♄			-574 Feb 15 j 17:09	0°♃	
direct	-580 Jun 01 j 11:21	28°♄32'21		evening set	-574 Mar 26 j 06:54	8°♃39'45	
	-580 Jul 03 j 02:46	0°♄					
evening set	-580 Oct 05 j 17:14	16°♄24'03		conjunction	-574 Apr 08 j 21:36	11°♃51'54	-1°-4'-14
max. Earth dist.	-580 Oct 16 j 08:52	18°♄46'31	6.34195 AU	minimum elong	-574 Apr 08 j 21:38	11°♃51'55	1°04'15
				max. Earth dist.	-574 Apr 11 j 00:16	12°♃21'45	6.03400 AU
conjunction	-580 Oct 18 j 08:22	19°♄13'05	1°00'19	morning rise	-574 Apr 22 j 14:45	15°♃05'08	
minimum elong	-580 Oct 18 j 08:24	19°♄13'06	1°00'19		-574 Jul 04 j 07:34	0°♃	
morning rise	-580 Oct 30 j 21:57	22°♄01'29		retrograde	-574 Aug 30 j 18:02	4°♃55'41	
	-580 Dec 07 j 12:21	0°♄		min. Earth dist.	-574 Oct 27 j 23:26	0°♃01'16	4.08510 AU
retrograde	-579 Mar 02 j 15:22	9°♄37'19			-574 Oct 28 j 03:10	30°♄	
opposition	-579 May 02 j 13:54	4°♄45'13	1°08'41	opposition	-574 Oct 29 j 06:42	29°♄50'36	-1°-15'-48
min. Earth dist.	-579 May 03 j 22:33	4°♄34'48	4.28865 AU	direct	-574 Dec 26 j 17:49	24°♄51'54	
	-579 Jun 21 j 18:32	30°♄			-573 Feb 22 j 22:20	0°♄	
direct	-579 Jul 03 j 14:19	29°♄47'03		evening set	-573 May 02 j 02:53	13°♄51'50	
	-579 Jul 15 j 10:23	0°♄			-573 May 07 j 02:24	15°♄	
	-579 Oct 23 j 16:30	15°♄					
evening set	-579 Nov 06 j 02:30	18°♄01'08		conjunction	-573 May 15 j 21:32	17°♄00'46	0°-33'-28
max. Earth dist.	-579 Nov 17 j 02:38	20°♄32'21	6.22733 AU	minimum elong	-573 May 15 j 21:35	17°♄00'48	0°33'29
				max. Earth dist.	-573 May 17 j 19:17	17°♄26'57	6.14508 AU
conjunction	-579 Nov 18 j 17:36	20°♄54'44	0°29'15	morning rise	-573 May 29 j 16:44	20°♄09'45	
minimum elong	-579 Nov 18 j 17:38	20°♄54'45	0°29'15		-573 Jul 14 j 19:32	0°♄	
morning rise	-579 Dec 01 j 08:17	23°♄48'26		retrograde	-573 Oct 03 j 08:47	8°♄57'40	
	-579 Dec 29 j 06:17	0°♄		opposition	-573 Dec 01 j 22:03	3°♄54'46	0°-19'-41
retrograde	-578 Apr 06 j 04:13	12°♄19'00		min. Earth dist.	-573 Nov 30 j 22:57	4°♄02'35	4.20906 AU
opposition	-578 Jun 06 j 02:50	7°♄24'56	0°13'15		-572 Jan 04 j 08:20	30°♄	
min. Earth dist.	-578 Jun 07 j 01:18	7°♄17'44	4.16288 AU	direct	-572 Jan 30 j 11:16	28°♄53'21	
direct	-578 Aug 05 j 22:52	2°♄29'30			-572 Feb 25 j 23:35	0°♄	
desc. node	-578 Aug 28 j 17:12	3°♄18'33		asc. node	-572 Apr 07 j 21:43	5°♄29'01	
evening set	-578 Dec 08 j 21:00	21°♄13'58		evening set	-572 Jun 05 j 12:29	17°♄21'21	
conjunction	-578 Dec 21 j 14:58	24°♄14'06	0°-12'-25	conjunction	-572 Jun 19 j 04:56	20°♄23'53	0°07'32
minimum elong	-578 Dec 21 j 14:58	24°♄14'06	0°12'26	minimum elong	-572 Jun 19 j 04:54	20°♄23'52	0°07'33
behind sun begin	-578 Dec 21 j 09:37	24°♄10'57		behind sun begin	-572 Jun 18 j 21:24	20°♄19'42	
behind sun end	-578 Dec 21 j 20:18	24°♄17'14		behind sun end	-572 Jun 19 j 12:25	20°♄28'02	
max. Earth dist.	-578 Dec 20 j 18:41	24°♄02'08	6.10166 AU	max. Earth dist.	-572 Jun 20 j 04:02	20°♄36'45	6.27237 AU
morning rise	-577 Jan 03 j 10:31	27°♄15'14		morning rise	-572 Jul 02 j 20:08	23°♄25'32	
	-577 Jan 15 j 06:04	0°♄			-572 Aug 02 j 15:26	0°♄	
retrograde	-577 May 12 j 17:55	16°♄48'28		retrograde	-572 Nov 03 j 04:23	11°♄13'11	
opposition	-577 Jul 12 j 09:44	11°♄50'59	0°-50'00	opposition	-571 Jan 01 j 21:38	6°♄13'56	0°39'31
min. Earth dist.	-577 Jul 12 j 13:08	11°♄49'52	4.04750 AU	min. Earth dist.	-571 Jan 01 j 14:51	6°♄16'12	4.32840 AU
direct	-577 Sep 09 j 20:04	6°♄57'22		direct	-571 Mar 03 j 19:52	1°♄10'54	
evening set	-576 Jan 12 j 13:17	26°♄11'35		evening set	-571 Jul 09 j 02:48	19°♄11'25	
conjunction	-576 Jan 25 j 13:05	29°♄18'19	0°-51'-12	conjunction	-571 Jul 22 j 12:33	22°♄06'51	0°44'39
minimum elong	-576 Jan 25 j 13:03	29°♄18'17	0°51'12	minimum elong	-571 Jul 22 j 12:30	22°♄06'50	0°44'40
max. Earth dist.	-576 Jan 25 j 22:54	29°♄24'12	6.00715 AU	max. Earth dist.	-571 Jul 22 j 10:20	22°♄05'39	6.37472 AU
	-576 Jan 28 j 10:32	0°♄		morning rise	-571 Aug 04 j 19:25	25°♄00'49	
morning rise	-576 Feb 07 j 15:28	2°♄26'36			-571 Aug 28 j 07:53	0°♄	
	-576 Apr 05 j 02:43	15°♄		retrograde	-571 Dec 03 j 19:10	12°♄07'38	
retrograde	-576 Jun 18 j 12:22	22°♄47'07		opposition	-570 Feb 01 j 21:24	7°♄12'06	1°24'43
opposition	-576 Aug 17 j 16:34	17°♄45'43	-1°-37'-12	min. Earth dist.	-570 Feb 02 j 06:53	7°♄09'01	4.40746 AU
min. Earth dist.	-576 Aug 17 j 00:28	17°♄51'05	3.98462 AU	direct	-570 Apr 04 j 21:25	2°♄08'50	
	-576 Sep 08 j 17:34	15°♄			-570 Jul 17 j 23:23	15°♄	
direct	-576 Oct 14 j 23:58	12°♄52'09		evening set	-570 Aug 10 j 03:49	19°♄53'11	
	-576 Nov 19 j 21:22	15°♄		max. Earth dist.	-570 Aug 22 j 01:59	22°♄28'27	6.42381 AU
	-575 Feb 06 j 23:07	0°♄					
evening set	-575 Feb 17 j 00:12	2°♄22'47		conjunction	-570 Aug 23 j 04:58	22°♄43'08	1°08'08
				minimum elong	-570 Aug 23 j 04:56	22°♄43'07	1°08'08
conjunction	-575 Mar 02 j 07:21	5°♄34'00	-1°-11'-30	morning rise	-570 Sep 05 j 03:06	25°♄31'35	

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Attention, astronomical year style is used: The year -570 in astronomical counting style is the year 571 BCE in historical counting style.

	-570 Sep 26 j 05:43	0°♃		minimum elong	-563 Mar 07 j 12:41	10°♃46'17	1°12'10
retrograde	-569 Jan 03 j 07:37	12°♃23'32		max. Earth dist.	-563 Mar 09 j 04:22	11°♃10'04	5.98140 AU
opposition	-569 Mar 04 j 17:59	7°♃30'44	1°45'49	morning rise	-563 Mar 21 j 00:13	13°♃59'37	
min. Earth dist.	-569 Mar 05 j 19:06	7°♃22'39	4.42493 AU		-563 Jun 06 j 19:29	0°♃	
direct	-569 May 06 j 10:02	2°♃28'25		retrograde	-563 Jul 31 j 01:57	4°♃26'00	
evening set	-569 Sep 10 j 04:48	20°♃10'21			-563 Sep 24 j 00:59	30°♃	
max. Earth dist.	-569 Sep 21 j 04:20	22°♃34'37	6.40730 AU	opposition	-563 Sep 28 j 19:00	29°♃21'19	-1°-44'-49
				min. Earth dist.	-563 Sep 27 j 12:21	29°♃31'45	4.00521 AU
conjunction	-569 Sep 22 j 23:10	22°♃58'08	1°12'40	direct	-563 Nov 25 j 18:18	24°♃25'23	
minimum elong	-569 Sep 22 j 23:11	22°♃58'08	1°12'40		-562 Jan 24 j 18:41	0°♃	
morning rise	-569 Oct 05 j 14:56	25°♃44'45		evening set	-562 Mar 31 j 12:18	13°♃48'36	
	-569 Oct 25 j 11:08	0°♃					
retrograde	-568 Feb 03 j 12:11	12°♃48'59		conjunction	-562 Apr 14 j 03:55	17°♃00'40	-1°-1'-4
opposition	-568 Apr 04 j 07:15	7°♃57'14	1°38'11	minimum elong	-562 Apr 14 j 03:58	17°♃00'42	1°01'04
min. Earth dist.	-568 Apr 05 j 15:54	7°♃46'50	4.37616 AU	max. Earth dist.	-562 Apr 16 j 08:22	17°♃31'28	6.04500 AU
direct	-568 Jun 05 j 21:28	2°♃56'51		morning rise	-562 Apr 27 j 21:43	20°♃13'42	
evening set	-568 Oct 10 j 00:46	20°♃50'23			-562 Jun 11 j 08:26	0°♃	
max. Earth dist.	-568 Oct 20 j 17:49	23°♃14'03	6.32957 AU	retrograde	-562 Sep 04 j 14:40	9°♃57'03	
				min. Earth dist.	-562 Nov 01 j 19:34	5°♃02'59	4.10009 AU
conjunction	-568 Oct 22 j 15:45	23°♃39'49	0°56'56	opposition	-562 Nov 03 j 03:12	4°♃52'12	-1°-8'-53
minimum elong	-568 Oct 22 j 15:48	23°♃39'51	0°56'55		-562 Dec 23 j 12:33	30°♃	
morning rise	-568 Nov 04 j 05:07	26°♃28'41		direct	-562 Dec 31 j 16:03	29°♃53'12	
	-568 Nov 20 j 05:14	0°♃			-561 Jan 08 j 21:05	0°♃	
retrograde	-567 Mar 07 j 06:54	14°♃10'28		evening set	-561 Apr 20 j 03:27	15°♃	
opposition	-567 May 07 j 06:15	9°♃18'10	1°02'05		-561 May 07 j 05:09	18°♃49'07	
min. Earth dist.	-567 May 08 j 14:31	9°♃07'54	4.27353 AU				
direct	-567 Jul 08 j 03:55	4°♃20'23		conjunction	-561 May 20 j 23:43	21°♃57'17	0°-27'-58
	-567 Oct 06 j 14:52	15°♃		minimum elong	-561 May 20 j 23:46	21°♃57'18	0°27'58
evening set	-567 Nov 10 j 13:11	22°♃37'52		max. Earth dist.	-561 May 22 j 18:35	22°♃21'43	6.16305 AU
max. Earth dist.	-567 Nov 21 j 13:49	25°♃09'59	6.21062 AU	morning rise	-561 Jun 03 j 18:50	25°♃05'24	
					-561 Jun 25 j 23:30	0°♃	
conjunction	-567 Nov 23 j 04:21	25°♃32'13	0°23'50	retrograde	-561 Oct 07 j 22:41	13°♃44'06	
minimum elong	-567 Nov 23 j 04:22	25°♃32'13	0°23'50	opposition	-561 Dec 06 j 12:30	8°♃41'37	0°-11'-5
morning rise	-567 Dec 05 j 19:40	28°♃26'50		min. Earth dist.	-561 Dec 05 j 15:25	8°♃48'45	4.22838 AU
	-567 Dec 12 j 14:55	0°♃		direct	-560 Feb 04 j 07:04	3°♃39'57	
retrograde	-566 Apr 11 j 02:34	17°♃05'43		asc. node	-560 Feb 16 j 18:48	3°♃55'07	
opposition	-566 Jun 11 j 00:56	12°♃11'13	0°04'28	evening set	-560 Jun 10 j 08:12	22°♃02'51	
min. Earth dist.	-566 Jun 11 j 21:01	12°♃04'45	4.14564 AU				
desc. node	-566 Jul 09 j 00:25	8°♃54'19		conjunction	-560 Jun 24 j 00:00	25°♃04'16	0°13'13
direct	-566 Aug 10 j 16:29	7°♃16'01		minimum elong	-560 Jun 23 j 23:59	25°♃04'16	0°13'13
evening set	-566 Dec 13 j 13:18	26°♃04'55		behind sun begin	-560 Jun 23 j 19:19	25°♃01'41	
				behind sun end	-560 Jun 24 j 04:39	25°♃06'50	
conjunction	-566 Dec 26 j 08:05	29°♃06'03	0°-18'-19	max. Earth dist.	-560 Jun 24 j 21:51	25°♃16'23	6.29180 AU
minimum elong	-566 Dec 26 j 08:04	29°♃06'02	0°18'21	morning rise	-560 Jul 07 j 14:00	28°♃04'38	
max. Earth dist.	-566 Dec 25 j 16:24	28°♃56'47	6.08554 AU		-560 Jul 16 j 09:12	0°♃	
	-566 Dec 30 j 03:10	0°♃		retrograde	-560 Nov 07 j 10:54	15°♃44'03	
morning rise	-565 Jan 08 j 04:18	2°♃08'13		opposition	-559 Jan 06 j 06:36	10°♃45'22	0°46'53
retrograde	-565 May 17 j 23:23	21°♃49'39		min. Earth dist.	-559 Jan 06 j 01:00	10°♃47'14	4.34648 AU
opposition	-565 Jul 17 j 12:42	16°♃51'41	0°-58'-5	direct	-559 Mar 08 j 08:53	5°♃42'18	
min. Earth dist.	-565 Jul 17 j 14:12	16°♃51'12	4.03407 AU	evening set	-559 Jul 13 j 15:44	23°♃38'13	
direct	-565 Sep 14 j 18:47	11°♃58'12					
	-564 Jan 12 j 04:17	0°♃		conjunction	-559 Jul 27 j 00:01	26°♃32'29	0°48'50
evening set	-564 Jan 17 j 12:24	1°♃16'13		minimum elong	-559 Jul 26 j 23:59	26°♃32'27	0°48'50
				max. Earth dist.	-559 Jul 26 j 17:12	26°♃28'45	6.38997 AU
conjunction	-564 Jan 30 j 13:02	4°♃23'47	0°-55'-26	morning rise	-559 Aug 09 j 05:41	29°♃25'18	
minimum elong	-564 Jan 30 j 12:59	4°♃23'45	0°55'27		-559 Aug 11 j 21:54	0°♃	
max. Earth dist.	-564 Jan 31 j 01:19	4°♃31'10	5.99743 AU		-559 Nov 07 j 11:57	15°♃	
morning rise	-564 Feb 12 j 16:42	7°♃33'02		retrograde	-559 Dec 08 j 00:00	16°♃26'48	
	-564 Mar 16 j 00:43	15°♃			-558 Jan 07 j 10:16	15°♃	
retrograde	-564 Jun 23 j 17:19	27°♃58'04		opposition	-558 Feb 06 j 03:14	11°♃23'44	1°29'04
opposition	-564 Aug 22 j 21:07	22°♃56'10	-1°-41'-6	min. Earth dist.	-558 Feb 06 j 15:55	11°♃27'36	4.41893 AU
min. Earth dist.	-564 Aug 22 j 01:44	23°♃02'39	3.97993 AU	direct	-558 Apr 09 j 08:08	6°♃28'29	
direct	-564 Oct 20 j 01:01	18°♃02'28			-558 Jun 30 j 03:18	15°♃	
	-563 Jan 20 j 06:47	0°♃		evening set	-558 Aug 14 j 10:40	24°♃09'54	
evening set	-563 Feb 22 j 04:19	7°♃34'35		max. Earth dist.	-558 Aug 26 j 05:27	26°♃43'11	6.43040 AU
conjunction	-563 Mar 07 j 12:41	10°♃46'17	-1°-12'-10	conjunction	-558 Aug 27 j 10:48	26°♃59'08	1°09'52

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Attention, astronomical year style is used: The year -558 in astronomical counting style is the year 559 BCE in historical counting style.

minimum elong	-558 Aug 27 j 10:46	26°♃59'07	1°09'51	opposition	-552 Aug 28 j 03:29	28°♁12'22	-1°-44'-10
morning rise	-558 Sep 09 j 07:42	29°♃46'52		direct	-552 Oct 25 j 05:54	23°♁18'25	
	-558 Sep 10 j 08:01	0°♃			-552 Dec 30 j 06:52	0°♁	
retrograde	-557 Jan 07 j 10:03	16°♃37'24		evening set	-551 Feb 27 j 11:20	12°♁52'37	
opposition	-557 Mar 08 j 23:18	11°♃44'48	1°46'22				
min. Earth dist.	-557 Mar 10 j 01:26	11°♃36'25	4.42631 AU	conjunction	-551 Mar 12 j 20:57	16°♁04'53	-1°-12'-12
direct	-557 May 10 j 15:54	6°♃42'39		minimum elong	-551 Mar 12 j 20:58	16°♁04'53	1°12'13
evening set	-557 Sep 14 j 08:30	24°♃24'03		max. Earth dist.	-551 Mar 14 j 16:54	16°♁31'11	5.98155 AU
max. Earth dist.	-557 Sep 25 j 05:44	26°♃47'16	6.40317 AU	morning rise	-551 Mar 26 j 09:41	19°♁18'43	
					-551 May 13 j 08:59	0°♃	
conjunction	-557 Sep 27 j 02:05	27°♃11'41	1°11'38	retrograde	-551 Aug 05 j 07:04	9°♃42'35	
minimum elong	-557 Sep 27 j 02:06	27°♃11'41	1°11'38	opposition	-551 Oct 03 j 22:51	4°♃37'38	-1°-41'-44
morning rise	-557 Oct 09 j 17:13	29°♃58'13		min. Earth dist.	-551 Oct 02 j 14:11	4°♃48'45	4.01247 AU
	-557 Oct 09 j 20:30	0°♃			-551 Nov 17 j 11:32	30°♁	
retrograde	-556 Feb 07 j 19:32	17°♃05'17		direct	-551 Nov 30 j 21:30	29°♁41'17	
opposition	-556 Apr 08 j 15:20	12°♃13'35	1°34'49		-551 Dec 14 j 09:35	0°♃	
min. Earth dist.	-556 Apr 10 j 01:58	12°♃02'34	4.36650 AU	evening set	-550 Apr 05 j 19:54	19°♃02'00	
direct	-556 Jun 10 j 05:37	7°♃13'27					
evening set	-556 Oct 14 j 04:57	25°♃09'15		conjunction	-550 Apr 19 j 12:10	22°♃13'47	0°-57'-20
max. Earth dist.	-556 Oct 24 j 20:00	27°♃32'19	6.31500 AU	minimum elong	-550 Apr 19 j 12:13	22°♃13'49	0°57'20
				max. Earth dist.	-550 Apr 21 j 16:05	22°♃44'09	6.05835 AU
conjunction	-556 Oct 26 j 19:43	27°♃59'11	0°53'20	morning rise	-550 May 03 j 06:39	25°♃26'25	
minimum elong	-556 Oct 26 j 19:46	27°♃59'12	0°53'20		-550 May 23 j 07:21	0°♁	
	-556 Nov 04 j 18:26	0°♃			-550 Sep 06 j 01:58	15°♁	
morning rise	-556 Nov 08 j 09:13	0°♃48'40		retrograde	-550 Sep 09 j 11:32	15°♁01'10	
	-555 Jan 21 j 03:04	15°♃			-550 Sep 12 j 21:07	15°♁	
retrograde	-555 Mar 11 j 19:47	18°♃37'30		min. Earth dist.	-550 Nov 06 j 17:48	10°♁06'56	4.11755 AU
	-555 May 01 j 21:30	15°♃		opposition	-550 Nov 08 j 00:48	9°♁56'21	-1°-1'-21
opposition	-555 May 11 j 19:37	13°♃44'58	0°55'19	direct	-549 Jan 05 j 17:51	4°♁56'50	
min. Earth dist.	-555 May 13 j 03:02	13°♃34'56	4.25479 AU		-549 Apr 01 j 11:49	15°♁	
direct	-555 Jul 12 j 13:16	8°♃47'25		evening set	-549 May 12 j 08:02	23°♁47'34	
	-555 Sep 17 j 03:03	15°♃					
evening set	-555 Nov 14 j 21:41	27°♃09'56		conjunction	-549 May 26 j 02:41	26°♁54'50	0°-22'-12
max. Earth dist.	-555 Nov 26 j 01:26	29°♃44'32	6.18936 AU	minimum elong	-549 May 26 j 02:43	26°♁54'51	0°22'11
				max. Earth dist.	-549 May 27 j 20:53	27°♁18'46	6.18303 AU
conjunction	-555 Nov 27 j 13:21	0°♁05'20	0°18'26	morning rise	-549 Jun 08 j 21:13	0°♁01'49	
minimum elong	-555 Nov 27 j 13:22	0°♁05'21	0°18'26		-549 Jun 08 j 17:58	0°♁	
	-555 Nov 27 j 04:07	0°♁		retrograde	-549 Oct 12 j 12:39	18°♁30'31	
morning rise	-555 Dec 10 j 05:05	3°♁01'05		min. Earth dist.	-549 Dec 10 j 07:35	13°♁35'04	4.24857 AU
retrograde	-554 Apr 16 j 02:08	21°♁50'07		opposition	-549 Dec 11 j 03:04	13°♁28'31	0°-2'-21
desc. node	-554 May 20 j 16:59	20°♁01'41		asc. node	-549 Dec 26 j 13:19	11°♁27'27	
opposition	-554 Jun 15 j 21:48	16°♁55'16	0°-4'-11	direct	-548 Feb 09 j 02:31	8°♁26'33	
min. Earth dist.	-554 Jun 16 j 17:02	16°♁49'04	4.12332 AU	evening set	-548 Jun 15 j 04:24	26°♁44'14	
direct	-554 Aug 15 j 08:44	12°♁00'21					
	-554 Dec 14 j 06:40	0°♁		conjunction	-548 Jun 28 j 19:09	29°♁44'27	0°18'53
evening set	-554 Dec 18 j 05:25	0°♁55'44		minimum elong	-548 Jun 28 j 19:08	29°♁44'27	0°18'53
max. Earth dist.	-554 Dec 30 j 11:08	3°♁49'57	6.06415 AU	max. Earth dist.	-548 Jun 29 j 11:52	29°♁53'41	6.31036 AU
					-548 Jun 29 j 23:17	0°♁	
conjunction	-554 Dec 31 j 00:52	3°♁58'07	0°-24'-1	morning rise	-548 Jul 12 j 08:14	2°♁43'36	
minimum elong	-554 Dec 31 j 00:51	3°♁58'06	0°24'01	retrograde	-548 Nov 11 j 19:37	20°♁15'27	
morning rise	-553 Jan 12 j 22:16	7°♁01'41		opposition	-547 Jan 10 j 16:19	15°♁17'17	0°54'06
retrograde	-553 May 23 j 03:45	26°♁53'23		min. Earth dist.	-547 Jan 10 j 13:43	15°♁18'08	4.36203 AU
opposition	-553 Jul 22 j 16:08	21°♁54'51	-1°-5'-42	direct	-547 Mar 12 j 23:36	10°♁14'02	
min. Earth dist.	-553 Jul 22 j 13:48	21°♁55'37	4.01580 AU	evening set	-547 Jul 18 j 05:10	28°♁06'26	
direct	-553 Sep 19 j 16:00	17°♁01'27			-547 Jul 26 j 22:37	0°♁	
	-553 Dec 25 j 23:15	0°♁					
evening set	-552 Jan 22 j 13:17	6°♁25'11		conjunction	-547 Jul 31 j 12:26	0°♁59'46	0°52'50
				minimum elong	-547 Jul 31 j 12:23	0°♁59'45	0°52'51
conjunction	-552 Feb 04 j 15:07	9°♁33'52	0°-59'-12	max. Earth dist.	-547 Jul 31 j 03:09	0°♁54'43	6.40128 AU
minimum elong	-552 Feb 04 j 15:05	9°♁33'51	0°59'13	morning rise	-547 Aug 13 j 16:37	3°♁51'34	
max. Earth dist.	-552 Feb 05 j 08:42	9°♁44'28	5.98405 AU		-547 Oct 09 j 07:00	15°♁	
morning rise	-552 Feb 17 j 19:52	12°♁44'13		retrograde	-547 Dec 12 j 05:31	20°♁49'25	
	-552 Feb 27 j 08:43	15°♁		opposition	-546 Feb 10 j 11:01	15°♁54'48	1°33'08
	-552 May 13 j 23:55	0°♁		min. Earth dist.	-546 Feb 11 j 01:19	15°♁50'10	4.42546 AU
retrograde	-552 Jun 29 j 02:52	3°♁14'49			-546 Feb 17 j 12:41	15°♁	
	-552 Aug 14 j 11:25	30°♁		direct	-546 Apr 13 j 17:54	10°♁51'41	
min. Earth dist.	-552 Aug 27 j 06:14	28°♁19'30	3.97302 AU		-546 Jun 07 j 14:31	15°♁	

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Attention, astronomical year style is used: The year -546 in astronomical counting style is the year 547 BCE in historical counting style.

evening set	-546 Aug 18 j 19:53	28°♃31'51		minimum elong	-540 Feb 09 j 20:13	14°♁51'14	1°02'40
	-546 Aug 25 j 14:38	0°♃			-540 Feb 10 j 10:47	15°♁	
max. Earth dist.	-546 Aug 30 j 09:18	1°♃02'22	6.43149 AU	max. Earth dist.	-540 Feb 10 j 18:48	15°♁04'49	5.97954 AU
				morning rise	-540 Feb 23 j 02:11	18°♁02'18	
conjunction	-546 Aug 31 j 18:45	1°♃20'35	1°11'19		-540 Apr 17 j 03:39	0°♃	
minimum elong	-546 Aug 31 j 18:44	1°♃20'34	1°11'19	retrograde	-540 Jul 04 j 11:15	8°♃34'21	
morning rise	-546 Sep 13 j 14:46	4°♃07'53		min. Earth dist.	-540 Sep 01 j 10:16	3°♃39'37	3.97561 AU
retrograde	-545 Jan 11 j 19:07	20°♃58'59		opposition	-540 Sep 02 j 10:33	3°♃31'27	-1°-46'-26
opposition	-545 Mar 13 j 08:31	16°♃06'40	1°46'29		-540 Oct 01 j 19:10	30°♃	
min. Earth dist.	-545 Mar 14 j 13:26	15°♃57'24	4.42203 AU	direct	-540 Oct 30 j 10:29	28°♁37'18	
direct	-545 May 15 j 02:49	11°♃04'43			-540 Nov 28 j 00:46	0°♃	
evening set	-545 Sep 18 j 16:08	28°♃47'24		evening set	-539 Mar 04 j 18:12	18°♃10'03	
	-545 Sep 24 j 04:31	0°♃					
max. Earth dist.	-545 Sep 29 j 11:30	1°♃09'56	6.39375 AU	conjunction	-539 Mar 18 j 04:42	21°♃22'18	-1°-11'-43
				minimum elong	-539 Mar 18 j 04:43	21°♃22'19	1°11'44
conjunction	-545 Oct 01 j 09:14	1°♃35'10	1°10'13	max. Earth dist.	-539 Mar 20 j 02:13	21°♃49'29	5.99060 AU
minimum elong	-545 Oct 01 j 09:16	1°♃35'10	1°10'13	morning rise	-539 Mar 31 j 18:27	24°♃36'07	
morning rise	-545 Oct 13 j 23:51	4°♃21'53			-539 Apr 24 j 02:06	0°♃	
retrograde	-544 Feb 12 j 07:16	21°♃33'37		retrograde	-539 Aug 10 j 07:37	14°♃54'06	
opposition	-544 Apr 13 j 04:41	16°♃41'55	1°30'49	min. Earth dist.	-539 Oct 07 j 14:57	10°♃00'16	4.02689 AU
min. Earth dist.	-544 Apr 14 j 14:52	16°♃31'02	4.35259 AU	opposition	-539 Oct 09 j 00:13	9°♃48'55	-1°-37'-56
direct	-544 Jun 14 j 15:53	11°♃42'08		direct	-539 Dec 06 j 01:03	4°♃52'06	
evening set	-544 Oct 18 j 14:25	29°♃41'31		evening set	-538 Apr 11 j 00:21	24°♃08'05	
	-544 Oct 19 j 23:24	0°♃					
max. Earth dist.	-544 Oct 29 j 06:39	2°♃05'49	6.29774 AU	conjunction	-538 Apr 24 j 17:22	27°♃19'19	0°-53'-17
				minimum elong	-538 Apr 24 j 17:25	27°♃19'20	0°53'19
conjunction	-544 Oct 31 j 05:08	2°♃32'06	0°49'15	max. Earth dist.	-538 Apr 26 j 22:06	27°♃50'01	6.07687 AU
minimum elong	-544 Oct 31 j 05:10	2°♃32'07	0°49'15		-538 May 06 j 06:00	0°♃	
morning rise	-544 Nov 12 j 18:43	5°♃22'22		morning rise	-538 May 08 j 11:59	0°♃31'11	
	-544 Dec 28 j 11:01	15°♃			-538 Jul 18 j 17:21	15°♃	
retrograde	-543 Mar 16 j 17:16	23°♃19'21		retrograde	-538 Sep 14 j 05:43	19°♃55'53	
opposition	-543 May 16 j 15:46	18°♃26'40	0°47'47		-538 Nov 11 j 17:00	15°♃	
min. Earth dist.	-543 May 17 j 23:02	18°♃16'41	4.23514 AU	opposition	-538 Nov 12 j 18:21	14°♃51'23	0°-53'-40
	-543 Jun 15 j 13:29	15°♃		min. Earth dist.	-538 Nov 11 j 12:52	15°♃01'25	4.13798 AU
direct	-543 Jul 17 j 06:11	13°♃29'33		direct	-537 Jan 10 j 15:46	9°♃51'28	
	-543 Aug 17 j 16:45	15°♃			-537 Mar 10 j 10:53	15°♃	
	-543 Nov 10 j 23:36	0°♃		evening set	-537 May 17 j 06:48	28°♃36'28	
evening set	-543 Nov 19 j 12:06	1°♃57'09			-537 May 23 j 11:10	0°♃	
max. Earth dist.	-543 Nov 30 j 17:43	4°♃33'34	6.16914 AU				
				conjunction	-537 May 31 j 01:05	1°♃42'44	0°-16'-29
conjunction	-543 Dec 02 j 04:07	4°♃53'35	0°12'35	minimum elong	-537 May 31 j 01:07	1°♃42'44	0°16'30
minimum elong	-543 Dec 02 j 04:08	4°♃53'35	0°12'34	max. Earth dist.	-537 Jun 01 j 15:06	2°♃04'11	6.20354 AU
behind sun begin	-543 Dec 01 j 22:53	4°♃50'33		morning rise	-537 Jun 13 j 19:17	4°♃48'37	
behind sun end	-543 Dec 02 j 09:23	4°♃56'38		retrograde	-537 Oct 16 j 22:12	23°♃07'54	
morning rise	-543 Dec 14 j 20:37	7°♃50'30		asc. node	-537 Nov 05 j 18:38	22°♃29'00	
desc. node	-542 Mar 29 j 19:03	26°♃02'25		opposition	-537 Dec 15 j 13:54	18°♃06'22	0°06'04
retrograde	-542 Apr 21 j 05:07	26°♃49'25		min. Earth dist.	-537 Dec 14 j 20:37	18°♃12'11	4.26736 AU
opposition	-542 Jun 21 j 00:45	21°♃54'08	0°-13'-22	direct	-536 Feb 13 j 17:49	13°♃04'05	
min. Earth dist.	-542 Jun 21 j 16:15	21°♃49'07	4.10439 AU		-536 Jun 13 j 22:25	0°♃	
direct	-542 Aug 20 j 05:15	16°♃59'36		evening set	-536 Jun 19 j 20:21	1°♃17'20	
	-542 Nov 27 j 01:19	0°♃					
evening set	-542 Dec 23 j 03:04	6°♃00'11		conjunction	-536 Jul 03 j 10:20	4°♃16'32	0°24'15
				minimum elong	-536 Jul 03 j 10:18	4°♃16'31	0°24'16
conjunction	-541 Jan 04 j 23:21	9°♃03'35	0°-29'-50	max. Earth dist.	-536 Jul 03 j 23:38	4°♃23'52	6.32607 AU
minimum elong	-541 Jan 04 j 23:19	9°♃03'34	0°29'51	morning rise	-536 Jul 16 j 22:10	7°♃14'32	
max. Earth dist.	-541 Jan 04 j 14:55	8°♃58'34	6.04845 AU	retrograde	-536 Nov 16 j 02:03	24°♃40'17	
morning rise	-541 Jan 17 j 21:35	12°♃08'16		opposition	-535 Jan 14 j 23:20	19°♃42'41	1°00'47
	-541 Apr 21 j 08:21	0°♃		min. Earth dist.	-535 Jan 14 j 23:27	19°♃42'39	4.37364 AU
retrograde	-541 May 28 j 13:44	2°♃07'50		direct	-535 Mar 17 j 10:20	14°♃39'24	
	-541 Jul 04 j 20:49	30°♃			-535 Jul 11 j 00:16	0°♃	
opposition	-541 Jul 27 j 23:46	27°♃08'46	-1°-13'-9	evening set	-535 Jul 22 j 16:08	2°♃29'36	
min. Earth dist.	-541 Jul 27 j 18:58	27°♃10'21	4.00520 AU				
direct	-541 Sep 24 j 20:44	22°♃15'29		conjunction	-535 Aug 04 j 22:07	5°♃22'11	0°56'27
	-541 Dec 05 j 21:39	0°♃		minimum elong	-535 Aug 04 j 22:04	5°♃22'09	0°56'26
evening set	-540 Jan 27 j 17:23	11°♃41'54		max. Earth dist.	-535 Aug 04 j 07:27	5°♃14'12	6.40775 AU
				morning rise	-535 Aug 18 j 01:15	8°♃13'16	
conjunction	-540 Feb 09 j 20:15	14°♃51'15	-1°-2'-40		-535 Sep 19 j 15:17	15°♃	

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Attention, astronomical year style is used: The year -535 in astronomical counting style is the year 536 BCE in historical counting style.

retrograde	-535 Dec 16 j 11:52	25°♃09'11		-529 Nov 08 j 13:49	0°♁	
opposition	-534 Feb 14 j 17:36	20°♃14'57	1°36'38	-528 Jan 24 j 20:16	15°♁	
min. Earth dist.	-534 Feb 15 j 10:53	20°♃09'20	4.42677 AU	evening set	-528 Feb 01 j 20:37	16°♁54'26
direct	-534 Apr 18 j 02:47	15°♃11'52				
	-534 Aug 09 j 17:02	0°♃		conjunction	-528 Feb 15 j 00:22	20°♁04'13 -1°-5'-35
evening set	-534 Aug 23 j 03:52	2°♃52'23		minimum elong	-528 Feb 15 j 00:20	20°♁04'12 1°05'36
max. Earth dist.	-534 Sep 03 j 15:18	5°♃21'59	6.42751 AU	max. Earth dist.	-528 Feb 16 j 01:54	20°♁19'36 5.97863 AU
				morning rise	-528 Feb 28 j 07:23	23°♁15'46
conjunction	-534 Sep 05 j 01:59	5°♃40'54	1°12'22		-528 Mar 28 j 08:51	0°♃
minimum elong	-534 Sep 05 j 01:58	5°♃40'53	1°12'22	retrograde	-528 Jul 09 j 16:01	13°♃47'44
morning rise	-534 Sep 17 j 20:57	8°♃27'59		opposition	-528 Sep 07 j 14:55	8°♃44'22 -1°-47'-49
retrograde	-533 Jan 16 j 02:53	25°♃21'14		min. Earth dist.	-528 Sep 06 j 12:47	8°♃53'11 3.98032 AU
opposition	-533 Mar 17 j 17:55	20°♃29'07	1°46'01	direct	-528 Nov 04 j 14:07	3°♃49'54
min. Earth dist.	-533 Mar 18 j 23:25	20°♃19'40	4.41324 AU	evening set	-527 Mar 09 j 23:07	23°♃20'51
direct	-533 May 19 j 10:59	15°♃27'27				
	-533 Sep 08 j 04:03	0°♃		conjunction	-527 Mar 23 j 10:48	26°♃33'09 -1°-10'-41
evening set	-533 Sep 23 j 00:09	3°♃12'34		minimum elong	-527 Mar 23 j 10:49	26°♃33'10 1°10'41
max. Earth dist.	-533 Oct 03 j 17:34	5°♃34'34	6.38080 AU	max. Earth dist.	-527 Mar 25 j 11:29	27°♃02'08 6.00051 AU
				morning rise	-527 Apr 06 j 01:17	29°♃46'51
conjunction	-533 Oct 05 j 16:37	6°♃00'36	1°08'23		-527 Apr 06 j 23:36	0°♃
minimum elong	-533 Oct 05 j 16:38	6°♃00'37	1°08'22	retrograde	-527 Aug 15 j 08:08	19°♃58'38
morning rise	-533 Oct 18 j 07:00	8°♃47'44		opposition	-527 Oct 13 j 22:58	14°♃53'26 -1°-33'-30
retrograde	-532 Feb 16 j 23:12	26°♃05'15		min. Earth dist.	-527 Oct 12 j 14:13	15°♃04'36 4.04086 AU
opposition	-532 Apr 17 j 19:47	21°♃13'31	1°26'14	direct	-527 Dec 11 j 01:57	9°♃56'13
min. Earth dist.	-532 Apr 19 j 06:48	21°♃02'22	4.33622 AU	evening set	-526 Apr 16 j 03:03	29°♃08'06
direct	-532 Jun 19 j 05:28	16°♃14'05			-526 Apr 19 j 20:55	0°♃
	-532 Oct 03 j 14:13	0°♃				
evening set	-532 Oct 23 j 01:10	4°♃17'26		conjunction	-526 Apr 29 j 20:27	2°♃18'48 0°-48'-57
max. Earth dist.	-532 Nov 02 j 18:44	6°♃43'07	6.27946 AU	minimum elong	-526 Apr 29 j 20:30	2°♃18'49 0°48'57
				max. Earth dist.	-526 May 01 j 23:07	2°♃48'09 6.09356 AU
conjunction	-532 Nov 04 j 15:59	7°♃08'48	0°44'48	morning rise	-526 May 13 j 15:32	5°♃30'04
minimum elong	-532 Nov 04 j 16:01	7°♃08'49	0°44'48		-526 Jun 26 j 08:59	15°♃
morning rise	-532 Nov 17 j 05:46	9°♃59'54		retrograde	-526 Sep 18 j 20:41	24°♃45'46
	-532 Dec 09 j 21:13	15°♃		min. Earth dist.	-526 Nov 16 j 05:32	19°♃51'20 4.15566 AU
retrograde	-531 Mar 21 j 14:10	28°♃05'07		opposition	-526 Nov 17 j 10:10	19°♃41'35 0°-45'-45
opposition	-531 May 21 j 13:22	23°♃12'08	0°39'49		-525 Jan 01 j 19:56	15°♃
min. Earth dist.	-531 May 22 j 17:48	23°♃03'03	4.21626 AU	direct	-525 Jan 15 j 10:52	14°♃41'17
direct	-531 Jul 21 j 22:22	18°♃15'27			-525 Jan 29 j 04:49	15°♃
	-531 Oct 24 j 18:06	0°♃			-525 May 06 j 23:10	0°♃
evening set	-531 Nov 24 j 04:05	6°♃47'36		evening set	-525 May 22 j 04:27	3°♃21'55
conjunction	-531 Dec 06 j 20:30	9°♃44'56	0°06'36	conjunction	-525 Jun 04 j 22:31	6°♃27'19 0°-10'-44
minimum elong	-531 Dec 06 j 20:31	9°♃44'56	0°06'35	minimum elong	-525 Jun 04 j 22:32	6°♃27'19 0°10'45
behind sun begin	-531 Dec 06 j 13:00	9°♃40'34		behind sun begin	-525 Jun 04 j 16:14	6°♃23'47
behind sun end	-531 Dec 07 j 04:01	9°♃49'18		behind sun end	-525 Jun 05 j 04:50	6°♃30'51
max. Earth dist.	-531 Dec 05 j 13:58	9°♃27'05	6.15140 AU	max. Earth dist.	-525 Jun 06 j 09:14	6°♃46'51 6.22096 AU
morning rise	-531 Dec 19 j 13:37	12°♃42'53		morning rise	-525 Jun 18 j 16:03	9°♃32'11
desc. node	-530 Feb 05 j 19:17	23°♃10'38		asc. node	-525 Sep 15 j 22:02	25°♃45'09
	-530 Mar 22 j 16:50	0°♃		retrograde	-525 Oct 21 j 09:26	27°♃43'27
retrograde	-530 Apr 26 j 10:37	1°♃50'28		min. Earth dist.	-525 Dec 19 j 10:07	22°♃47'16 4.28293 AU
	-530 May 31 j 07:28	30°♃		opposition	-525 Dec 20 j 00:22	22°♃42'30 0°14'23
opposition	-530 Jun 26 j 04:36	26°♃54'40	0°-22'-31	direct	-524 Feb 18 j 09:09	17°♃40'02
min. Earth dist.	-530 Jun 26 j 17:56	26°♃50'21	4.08910 AU		-524 May 28 j 01:19	0°♃
direct	-530 Aug 25 j 05:29	22°♃00'24		evening set	-524 Jun 24 j 12:33	5°♃50'04
	-530 Nov 07 j 15:38	0°♃				
evening set	-530 Dec 28 j 01:01	11°♃04'32		conjunction	-524 Jul 08 j 01:35	8°♃48'22 0°29'29
				minimum elong	-524 Jul 08 j 01:33	8°♃48'21 0°29'30
conjunction	-529 Jan 09 j 22:06	14°♃08'47	0°-35'-27	max. Earth dist.	-524 Jul 08 j 10:26	8°♃53'14 6.33854 AU
minimum elong	-529 Jan 09 j 22:03	14°♃08'46	0°35'28	morning rise	-524 Jul 21 j 12:24	11°♃45'25
max. Earth dist.	-529 Jan 09 j 18:06	14°♃06'24	6.03696 AU	retrograde	-524 Nov 20 j 08:32	29°♃06'14
morning rise	-529 Jan 22 j 21:19	17°♃14'22		opposition	-523 Jan 19 j 06:57	24°♃09'10 1°07'11
	-529 Mar 22 j 19:47	0°♃		min. Earth dist.	-523 Jan 19 j 09:19	24°♃08'23 4.38241 AU
retrograde	-529 Jun 02 j 21:06	7°♃19'41		direct	-523 Mar 21 j 20:27	19°♃05'50
opposition	-529 Aug 02 j 06:15	2°♃20'04	-1°-19'-58		-523 Jun 23 j 20:39	0°♃
min. Earth dist.	-529 Aug 01 j 21:52	2°♃22'50	3.99888 AU	evening set	-523 Jul 27 j 03:43	6°♃54'46
	-529 Aug 20 j 16:28	30°♃				
direct	-529 Sep 29 j 22:57	27°♃26'48		conjunction	-523 Aug 09 j 08:40	9°♃46'44 0°59'47

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Attention, astronomical year style is used: The year -523 in astronomical counting style is the year 524 BCE in historical counting style.

minimum elong	-523 Aug 09 j 08:37	9°Ω46'42	0°59'47	max. Earth dist.	-517 Jan 14 j 18:03	19°☾08'47	6.02928 AU
max. Earth dist.	-523 Aug 08 j 15:34	9°Ω37'26	6.41216 AU	morning rise	-517 Jan 27 j 19:02	22°☾15'36	
morning rise	-523 Aug 22 j 10:30	12°Ω37'09			-517 Mar 02 j 15:09	0°≈	
	-523 Sep 02 j 13:16	15°Ω		retrograde	-517 Jun 08 j 00:53	12°≈25'09	
retrograde	-523 Dec 20 j 19:19	29°Ω31'53		opposition	-517 Aug 07 j 09:17	7°≈24'55	-1°-25'-56
opposition	-522 Feb 19 j 01:40	24°Ω38'07	1°39'40	min. Earth dist.	-517 Aug 06 j 22:24	7°≈28'32	3.99539 AU
min. Earth dist.	-522 Feb 19 j 20:54	24°Ω31'53	4.42680 AU	direct	-517 Oct 04 j 23:35	2°≈31'32	
direct	-522 Apr 22 j 12:26	19°Ω35'15			-516 Jan 07 j 16:29	15°≈	
	-522 Jul 23 j 10:31	0°♄		evening set	-516 Feb 06 j 20:43	21°≈59'36	
evening set	-522 Aug 27 j 13:02	7°♄16'20					
max. Earth dist.	-522 Sep 07 j 20:04	9°♄43'53	6.42302 AU	conjunction	-516 Feb 20 j 01:36	25°≈09'48	-1°-7'-55
				minimum elong	-516 Feb 20 j 01:34	25°≈09'47	1°07'56
conjunction	-522 Sep 09 j 10:05	10°♄04'38	1°13'01	max. Earth dist.	-516 Feb 21 j 07:39	25°≈27'53	5.97958 AU
minimum elong	-522 Sep 09 j 10:05	10°♄04'38	1°13'01	morning rise	-516 Mar 04 j 09:30	28°≈21'42	
morning rise	-522 Sep 22 j 04:22	12°♄51'36			-516 Mar 11 j 07:09	0°✠	
retrograde	-521 Jan 20 j 14:03	29°♄47'17		retrograde	-516 Jul 14 j 18:27	18°✠52'43	
opposition	-521 Mar 22 j 05:04	24°♄55'21	1°44'59	opposition	-516 Sep 12 j 15:31	13°✠48'59	-1°-48'-19
min. Earth dist.	-521 Mar 23 j 11:54	24°♄45'29	4.40486 AU	min. Earth dist.	-516 Sep 11 j 12:50	13°✠58'00	3.98579 AU
direct	-521 May 23 j 21:54	19°♄53'59		direct	-516 Nov 09 j 14:27	8°✠54'13	
	-521 Aug 21 j 16:55	0°♁		evening set	-515 Mar 15 j 00:41	28°✠23'18	
evening set	-521 Sep 27 j 09:07	7°♁41'15			-515 Mar 21 j 20:06	0°Υ	
max. Earth dist.	-521 Oct 08 j 03:18	10°♁04'03	6.36936 AU				
				conjunction	-515 Mar 28 j 13:09	1°Υ35'34	-1°-9'-10
conjunction	-521 Oct 10 j 01:17	10°♁29'35	1°06'10	minimum elong	-515 Mar 28 j 13:11	1°Υ35'35	1°09'10
minimum elong	-521 Oct 10 j 01:19	10°♁29'36	1°06'10	max. Earth dist.	-515 Mar 30 j 13:42	2°Υ04'21	6.00974 AU
morning rise	-521 Oct 22 j 15:11	13°♁17'02		morning rise	-515 Apr 11 j 04:39	4°Υ49'13	
	-520 Jan 31 j 21:20	0°♂		retrograde	-515 Aug 20 j 03:02	24°Υ55'09	
retrograde	-520 Feb 21 j 13:45	0°♂39'47		min. Earth dist.	-515 Oct 17 j 08:58	20°Υ01'15	4.05294 AU
	-520 Mar 13 j 07:44	30°♂♁		opposition	-515 Oct 18 j 18:05	19°Υ49'57	-1°-28'-34
opposition	-520 Apr 22 j 11:43	25°♁48'00	1°21'07	direct	-515 Dec 15 j 22:31	14°Υ52'17	
min. Earth dist.	-520 Apr 23 j 21:20	25°♁37'18	4.32262 AU		-514 Apr 03 j 09:32	0°♁	
direct	-520 Jun 23 j 17:54	20°♁49'01		evening set	-514 Apr 21 j 02:50	4°♁01'00	
	-520 Sep 15 j 12:47	0°♂					
evening set	-520 Oct 27 j 12:21	8°♂55'19		conjunction	-514 May 04 j 20:45	7°♁11'17	0°-44'-24
max. Earth dist.	-520 Nov 07 j 07:09	11°♂22'15	6.26486 AU	minimum elong	-514 May 04 j 20:48	7°♁11'19	0°44'24
				max. Earth dist.	-514 May 06 j 21:37	7°♁39'30	6.10764 AU
conjunction	-520 Nov 09 j 03:01	11°♂47'15	0°40'07	morning rise	-514 May 18 j 15:57	10°♁21'58	
minimum elong	-520 Nov 09 j 03:03	11°♂47'16	0°40'06		-514 Jun 08 j 07:02	15°♁	
morning rise	-520 Nov 21 j 17:07	14°♂39'04		retrograde	-514 Sep 23 j 11:43	29°♁29'55	
	-520 Nov 23 j 06:06	15°♂		opposition	-514 Nov 21 j 23:44	24°♁26'04	0°-37'-47
	-519 Feb 10 j 16:36	0°♁		min. Earth dist.	-514 Nov 20 j 21:43	24°♁34'55	4.17017 AU
retrograde	-519 Mar 26 j 12:33	2°♁51'24		direct	-513 Jan 20 j 04:53	19°♁25'24	
	-519 May 10 j 00:59	30°♂♂			-513 Apr 19 j 09:07	0°♂	
opposition	-519 May 26 j 11:06	27°♂58'04	0°31'40	evening set	-513 May 27 j 00:14	8°♂02'47	
min. Earth dist.	-519 May 27 j 14:09	27°♂49'24	4.20149 AU				
direct	-519 Jul 26 j 17:09	23°♂01'44		conjunction	-513 Jun 09 j 18:02	11°♂07'28	0°-5'-4
	-519 Oct 05 j 00:16	0°♁		minimum elong	-513 Jun 09 j 18:02	11°♂07'28	0°05'05
evening set	-519 Nov 28 j 19:04	11°♁36'54		behind sun begin	-513 Jun 09 j 09:57	11°♂02'57	
max. Earth dist.	-519 Dec 10 j 09:06	14°♁19'16	6.13788 AU	behind sun end	-513 Jun 10 j 02:08	11°♂11'59	
				max. Earth dist.	-513 Jun 11 j 02:05	11°♂25'26	6.23495 AU
conjunction	-519 Dec 11 j 11:59	14°♁35'00	0°00'37	morning rise	-513 Jun 23 j 11:00	14°♂11'30	
minimum elong	-519 Dec 11 j 11:59	14°♁35'00	0°00'37	asc. node	-513 Jul 27 j 22:59	21°♂33'56	
behind sun begin	-519 Dec 11 j 03:58	14°♁30'20			-513 Sep 17 j 14:20	0°♁	
behind sun end	-519 Dec 11 j 19:59	14°♁39'40		retrograde	-513 Oct 25 j 17:20	2°♁15'58	
desc. node	-519 Dec 17 j 00:42	15°♁52'44			-513 Dec 02 j 16:56	30°♂♂	
morning rise	-519 Dec 24 j 05:40	17°♁33'47		opposition	-513 Dec 24 j 09:45	27°♂15'31	0°22'26
	-518 Feb 20 j 23:06	0°♁		min. Earth dist.	-513 Dec 23 j 20:49	27°♂19'51	4.29542 AU
retrograde	-518 May 01 j 12:01	6°♁48'22		direct	-512 Feb 22 j 21:09	22°♂12'52	
opposition	-518 Jul 01 j 06:28	1°♁52'05	0°-31'-18		-512 May 09 j 04:09	0°♁	
min. Earth dist.	-518 Jul 01 j 16:28	1°♁48'51	4.07810 AU	evening set	-512 Jun 29 j 03:39	10°♁20'30	
	-518 Jul 16 j 00:48	30°♂♂♁					
direct	-518 Aug 30 j 02:44	26°♁58'04		conjunction	-512 Jul 12 j 15:40	13°♁17'59	0°34'27
	-518 Oct 13 j 03:17	0°♁		minimum elong	-512 Jul 12 j 15:38	13°♁17'58	0°34'27
evening set	-517 Jan 01 j 21:13	16°♁04'26		max. Earth dist.	-512 Jul 12 j 20:47	13°♁20'47	6.34873 AU
				morning rise	-512 Jul 26 j 01:23	16°♁14'09	
conjunction	-517 Jan 14 j 18:53	19°♁09'17	0°-40'-38		-512 Oct 07 j 05:41	0°♂	
minimum elong	-517 Jan 14 j 18:50	19°♁09'16	0°40'40	retrograde	-512 Nov 24 j 16:22	3°♂30'47	

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Attention, astronomical year style is used: The year -511 in astronomical counting style is the year 512 BCE in historical counting style.

	-511 Jan 12 j 13:30	30°♁♄		morning rise	-507 Dec 28 j 21:46	22°♁23'19	
opposition	-511 Jan 23 j 14:38	28°♁34'13	1°13'06		-506 Jan 31 j 18:30	0°♁	
min. Earth dist.	-511 Jan 23 j 19:49	28°♁32'31	4.38973 AU	retrograde	-506 May 06 j 15:23	11°♁46'28	
direct	-511 Mar 26 j 08:21	23°♁30'54		opposition	-506 Jul 06 j 08:31	6°♁49'41	0°-39'-58
	-511 Jun 04 j 03:30	0°♁		min. Earth dist.	-506 Jul 06 j 15:51	6°♁47'18	4.06305 AU
evening set	-511 Jul 31 j 14:43	11°♁18'32		direct	-506 Sep 04 j 00:37	1°♁55'50	
				evening set	-505 Jan 06 j 18:24	21°♁06'20	
conjunction	-511 Aug 13 j 18:32	14°♁09'53	1°02'43				
minimum elong	-511 Aug 13 j 18:30	14°♁09'52	1°02'44	conjunction	-505 Jan 19 j 17:06	24°♁12'08	0°-45'-37
max. Earth dist.	-511 Aug 12 j 22:22	13°♁58'55	6.41593 AU	minimum elong	-505 Jan 19 j 17:03	24°♁12'06	0°45'38
	-511 Aug 17 j 14:40	15°♁		max. Earth dist.	-505 Jan 19 j 21:22	24°♁14'41	6.01729 AU
morning rise	-511 Aug 26 j 19:16	16°♁59'42		morning rise	-505 Feb 01 j 18:09	27°♁19'24	
	-511 Nov 03 j 16:36	0°♁			-505 Feb 13 j 02:26	0°♁	
retrograde	-511 Dec 25 j 01:32	3°♁53'16			-505 May 03 j 06:40	15°♁	
	-510 Feb 15 j 13:45	30°♁♁		retrograde	-505 Jun 13 j 08:25	17°♁34'57	
opposition	-510 Feb 23 j 09:35	28°♁59'46	1°42'05		-505 Jul 24 j 11:29	15°♁	
min. Earth dist.	-510 Feb 24 j 06:03	28°♁53'09	4.42703 AU	opposition	-505 Aug 12 j 14:09	12°♁34'14	-1°-31'-25
direct	-510 Apr 26 j 21:29	23°♁57'01		min. Earth dist.	-505 Aug 12 j 01:18	12°♁38'30	3.98789 AU
	-510 Jul 03 j 10:48	0°♁		direct	-505 Oct 10 j 00:48	7°♁40'50	
evening set	-510 Aug 31 j 21:20	11°♁38'10			-505 Dec 18 j 15:08	15°♁	
max. Earth dist.	-510 Sep 12 j 03:17	14°♁05'17	6.41957 AU	evening set	-504 Feb 11 j 23:55	27°♁11'08	
					-504 Feb 23 j 17:18	0°♁	
conjunction	-510 Sep 13 j 17:34	14°♁26'15	1°13'15	conjunction	-504 Feb 25 j 05:44	0°♁21'55	-1°-9'-47
minimum elong	-510 Sep 13 j 17:34	14°♁26'14	1°13'15	minimum elong	-504 Feb 25 j 05:43	0°♁21'54	1°09'48
morning rise	-510 Sep 26 j 10:53	17°♁12'59		max. Earth dist.	-504 Feb 26 j 13:44	0°♁41'09	5.97699 AU
	-510 Dec 02 j 09:04	0°♁		morning rise	-504 Mar 09 j 14:57	3°♁34'26	
retrograde	-509 Jan 24 j 23:09	4°♁10'36		retrograde	-504 Jul 19 j 22:09	24°♁05'38	
	-509 Mar 21 j 05:55	30°♁♁		opposition	-504 Sep 17 j 18:42	19°♁01'36	-1°-48'-1
opposition	-509 Mar 26 j 15:38	29°♁18'46	1°43'19	min. Earth dist.	-504 Sep 16 j 13:41	19°♁11'26	3.98864 AU
min. Earth dist.	-509 Mar 27 j 23:12	29°♁08'42	4.39772 AU	direct	-504 Nov 14 j 16:19	14°♁06'31	
direct	-509 May 28 j 08:09	24°♁17'43			-503 Mar 04 j 21:01	0°♁	
	-509 Aug 01 j 09:39	0°♁		evening set	-503 Mar 20 j 06:18	3°♁34'56	
evening set	-509 Oct 01 j 16:47	12°♁06'23					
max. Earth dist.	-509 Oct 12 j 08:48	14°♁28'27	6.35875 AU	conjunction	-503 Apr 02 j 19:54	6°♁47'19	-1°-7'-4
				minimum elong	-503 Apr 02 j 19:56	6°♁47'21	1°07'05
conjunction	-509 Oct 14 j 08:22	14°♁54'56	1°03'34	max. Earth dist.	-503 Apr 04 j 21:59	7°♁16'58	6.01782 AU
minimum elong	-509 Oct 14 j 08:24	14°♁54'57	1°03'34	morning rise	-503 Apr 16 j 12:08	10°♁00'57	
morning rise	-509 Oct 26 j 22:11	17°♁42'44			-503 Aug 21 j 17:03	0°♁	
	-509 Dec 27 j 22:51	0°♁		retrograde	-503 Aug 25 j 03:42	0°♁01'11	
retrograde	-508 Feb 26 j 04:57	5°♁10'40			-503 Aug 28 j 13:52	30°♁♁	
opposition	-508 Apr 27 j 02:52	0°♁18'43	1°15'32	min. Earth dist.	-503 Oct 22 j 08:32	25°♁07'02	4.06529 AU
min. Earth dist.	-508 Apr 28 j 12:25	0°♁08'02	4.30881 AU	opposition	-503 Oct 23 j 16:41	24°♁56'03	-1°-22'-49
	-508 Apr 29 j 13:39	30°♁♁		direct	-503 Dec 21 j 00:14	19°♁58'00	
direct	-508 Jun 28 j 07:03	25°♁20'03			-502 Mar 15 j 18:27	0°♁	
	-508 Aug 24 j 19:19	0°♁		evening set	-502 Apr 26 j 06:30	9°♁03'24	
evening set	-508 Oct 31 j 22:07	13°♁29'24					
	-508 Nov 07 j 13:28	15°♁		conjunction	-502 May 10 j 00:52	12°♁13'12	0°-39'-22
max. Earth dist.	-508 Nov 11 j 19:31	15°♁58'18	6.24901 AU	minimum elong	-502 May 10 j 00:54	12°♁13'13	0°39'22
				max. Earth dist.	-502 May 12 j 01:44	12°♁41'18	6.12348 AU
conjunction	-508 Nov 13 j 13:02	16°♁22'02	0°35'11		-502 May 22 j 03:30	15°♁	
minimum elong	-508 Nov 13 j 13:04	16°♁22'03	0°35'10	morning rise	-502 May 23 j 20:09	15°♁23'12	
morning rise	-508 Nov 26 j 03:16	19°♁14'37			-502 Aug 05 j 05:29	0°♁	
	-507 Jan 16 j 05:56	0°♁		retrograde	-502 Sep 28 j 03:06	4°♁22'20	
retrograde	-507 Mar 31 j 08:43	7°♁34'39			-502 Nov 21 j 14:48	30°♁♁	
opposition	-507 May 31 j 07:44	2°♁41'02	0°23'17	opposition	-502 Nov 26 j 16:13	29°♁18'55	0°-29'-20
min. Earth dist.	-507 Jun 01 j 08:57	2°♁32'57	4.18453 AU	min. Earth dist.	-502 Nov 25 j 14:22	29°♁27'41	4.18817 AU
	-507 Jun 22 j 11:37	30°♁♁		direct	-501 Jan 25 j 00:07	24°♁17'59	
direct	-507 Jul 31 j 09:11	27°♁45'07			-501 Mar 28 j 20:31	0°♁	
	-507 Sep 07 j 18:05	0°♁		evening set	-501 May 31 j 22:43	12°♁50'42	
desc. node	-507 Oct 27 j 04:35	8°♁08'36		asc. node	-501 Jun 06 j 13:42	14°♁05'50	
evening set	-507 Dec 03 j 09:58	16°♁24'29					
max. Earth dist.	-507 Dec 15 j 02:16	19°♁08'48	6.12122 AU	conjunction	-501 Jun 14 j 15:51	15°♁54'18	0°00'52
				minimum elong	-501 Jun 14 j 15:51	15°♁54'19	0°00'53
conjunction	-507 Dec 16 j 03:15	19°♁23'29	0°-5'-25	behind sun begin	-501 Jun 14 j 07:31	15°♁49'41	
minimum elong	-507 Dec 16 j 03:13	19°♁23'28	0°05'26	behind sun end	-501 Jun 15 j 00:11	15°♁58'57	
behind sun begin	-507 Dec 15 j 19:29	19°♁18'57		max. Earth dist.	-501 Jun 15 j 20:14	16°♁10'10	6.25398 AU
behind sun end	-507 Dec 16 j 10:58	19°♁28'00					

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Attention, astronomical year style is used: The year -501 in astronomical counting style is the year 502 BCE in historical counting style.

morning rise	-501 Jun 28 j 08:04	18° Υ 57'11		morning rise	-496 Nov 30 j 10:34	23° \mathbb{M} 42'52	
	-501 Aug 21 j 11:41	0° \mathfrak{E}			-496 Dec 28 j 19:33	0° \mathfrak{A}	
retrograde	-501 Oct 30 j 04:00	6° \mathfrak{E} 53'01		retrograde	-495 Apr 05 j 03:45	12° \mathfrak{A} 12'01	
opposition	-501 Dec 28 j 20:48	1° \mathfrak{E} 53'06	0°30'27	opposition	-495 Jun 05 j 01:58	7° \mathfrak{A} 18'00	0°14'58
min. Earth dist.	-501 Dec 28 j 10:37	1° \mathfrak{E} 56'30	4.31398 AU	min. Earth dist.	-495 Jun 06 j 01:41	7° \mathfrak{A} 10'23	4.16338 AU
	-500 Jan 12 j 08:21	30° \mathbb{R} \mathbb{I}		direct	-495 Aug 04 j 22:57	2° \mathfrak{A} 22'18	
direct	-500 Feb 27 j 14:08	26° \mathbb{I} 50'17		desc. node	-495 Sep 07 j 23:10	4° \mathfrak{A} 09'54	
	-500 Apr 14 j 03:43	0° \mathfrak{E}		evening set	-495 Dec 07 j 22:53	21° \mathfrak{A} 07'38	
evening set	-500 Jul 03 j 19:12	14° \mathfrak{E} 53'09					
conjunction	-500 Jul 17 j 06:12	17° \mathfrak{E} 49'30	0°39'14	conjunction	-495 Dec 20 j 17:00	24° \mathfrak{A} 07'51	0°-11'-11
minimum elong	-500 Jul 17 j 06:09	17° \mathfrak{E} 49'29	0°39'14	minimum elong	-495 Dec 20 j 16:59	24° \mathfrak{A} 07'51	0°11'13
max. Earth dist.	-500 Jul 17 j 09:11	17° \mathfrak{E} 51'08	6.36547 AU	behind sun begin	-495 Dec 20 j 10:59	24° \mathfrak{A} 04'19	
morning rise	-500 Jul 30 j 14:30	20° \mathfrak{E} 44'25		behind sun end	-495 Dec 20 j 22:59	24° \mathfrak{A} 11'23	
	-500 Sep 14 j 00:54	0° Ω		max. Earth dist.	-495 Dec 19 j 19:56	23° \mathfrak{A} 55'26	6.09963 AU
retrograde	-500 Nov 28 j 20:07	7° Ω 54'42		morning rise	-494 Jan 02 j 12:15	27° \mathfrak{A} 08'59	
opposition	-499 Jan 27 j 21:39	2° Ω 58'34	1°18'30		-494 Jan 14 j 18:36	0° \mathfrak{C}	
min. Earth dist.	-499 Jan 28 j 04:00	2° Ω 56'29	4.40369 AU	retrograde	-494 May 11 j 19:41	16° \mathfrak{C} 42'41	
	-499 Feb 21 j 06:41	30° \mathbb{R} \mathfrak{E}		opposition	-494 Jul 11 j 09:48	11° \mathfrak{C} 45'26	0°-48'-15
direct	-499 Mar 30 j 18:25	27° \mathfrak{E} 55'15		min. Earth dist.	-494 Jul 11 j 15:16	11° \mathfrak{C} 43'39	4.04302 AU
	-499 May 07 j 17:07	0° Ω		direct	-494 Sep 08 j 20:43	6° \mathfrak{C} 51'45	
	-499 Aug 01 j 22:49	15° Ω		evening set	-493 Jan 11 j 16:13	26° \mathfrak{C} 08'26	
evening set	-499 Aug 04 j 23:56	15° Ω 39'17		conjunction	-493 Jan 24 j 15:47	29° \mathfrak{C} 15'24	0°-50'-11
max. Earth dist.	-499 Aug 17 j 03:06	18° Ω 17'02	6.42589 AU	minimum elong	-493 Jan 24 j 15:45	29° \mathfrak{C} 15'23	0°50'11
				max. Earth dist.	-493 Jan 24 j 22:43	29° \mathfrak{C} 19'34	6.00057 AU
conjunction	-499 Aug 18 j 02:25	18° Ω 29'42	1°05'15		-493 Jan 27 j 17:57	0° \approx	
minimum elong	-499 Aug 18 j 02:23	18° Ω 29'41	1°05'16	morning rise	-493 Feb 06 j 18:13	2° \approx 23'59	
morning rise	-499 Aug 31 j 01:55	21° Ω 18'37			-493 Apr 05 j 08:03	15° \approx	
	-499 Oct 12 j 18:28	0° \mathbb{M}		retrograde	-493 Jun 18 j 14:51	22° \approx 47'09	
retrograde	-499 Dec 29 j 06:00	8° \mathbb{M} 09'19		opposition	-493 Aug 17 j 19:35	17° \approx 45'52	-1°-36'-8
opposition	-498 Feb 27 j 15:27	3° \mathbb{M} 16'07	1°43'49	min. Earth dist.	-493 Aug 17 j 03:00	17° \approx 51'24	3.97656 AU
min. Earth dist.	-498 Feb 28 j 14:36	3° \mathbb{M} 08'39	4.43234 AU		-493 Sep 08 j 21:17	15° \mathbb{R} \approx	
	-498 Mar 27 j 08:12	30° \mathbb{R} Ω		direct	-493 Oct 15 j 01:44	12° \approx 52'21	
direct	-498 May 01 j 06:40	28° Ω 13'29			-493 Nov 19 j 22:35	15° \approx	
	-498 Jun 05 j 09:49	0° \mathbb{M}			-492 Feb 06 j 22:31	0° \mathfrak{K}	
evening set	-498 Sep 05 j 02:07	15° \mathbb{M} 52'59		evening set	-492 Feb 17 j 05:04	2° \mathfrak{K} 26'21	
max. Earth dist.	-498 Sep 16 j 03:56	18° \mathbb{M} 17'57	6.41951 AU				
				conjunction	-492 Mar 01 j 12:15	5° \mathfrak{K} 37'57	-1°-11'-2
conjunction	-498 Sep 17 j 21:27	18° \mathbb{M} 40'40	1°13'04	minimum elong	-492 Mar 01 j 12:14	5° \mathfrak{K} 37'56	1°11'03
minimum elong	-498 Sep 17 j 21:27	18° \mathbb{M} 40'40	1°13'03	max. Earth dist.	-492 Mar 03 j 01:02	6° \mathfrak{K} 00'04	5.97210 AU
morning rise	-498 Sep 30 j 14:03	21° \mathbb{M} 27'07		morning rise	-492 Mar 14 j 22:35	8° \mathfrak{K} 51'13	
	-498 Nov 11 j 03:33	0° \mathfrak{L}		retrograde	-492 Jul 25 j 05:57	29° \mathfrak{K} 22'59	
retrograde	-497 Jan 29 j 04:40	8° \mathfrak{L} 25'57		opposition	-492 Sep 22 j 23:53	24° \mathfrak{K} 18'33	-1°-46'-46
opposition	-497 Mar 30 j 22:51	3° \mathfrak{L} 34'07	1°41'06	min. Earth dist.	-492 Sep 21 j 17:53	24° \mathfrak{K} 28'44	3.99074 AU
min. Earth dist.	-497 Apr 01 j 07:22	3° \mathfrak{L} 23'44	4.39226 AU	direct	-492 Nov 19 j 22:05	19° \mathfrak{K} 23'05	
	-497 May 01 j 04:46	30° \mathbb{R} \mathbb{M}			-491 Feb 14 j 05:30	0° \mathbb{Y}	
direct	-497 Jun 01 j 14:58	28° \mathbb{M} 33'13		evening set	-491 Mar 25 j 14:08	8° \mathbb{Y} 50'43	
	-497 Jul 03 j 03:13	0° \mathfrak{L}					
evening set	-497 Oct 05 j 20:38	16° \mathfrak{L} 22'57		conjunction	-491 Apr 08 j 04:46	12° \mathbb{Y} 03'10	-1°-4'-20
max. Earth dist.	-497 Oct 16 j 12:42	18° \mathfrak{L} 45'23	6.34825 AU	minimum elong	-491 Apr 08 j 04:48	12° \mathbb{Y} 03'12	1°04'21
				max. Earth dist.	-491 Apr 10 j 09:41	12° \mathbb{Y} 34'23	6.02658 AU
conjunction	-497 Oct 18 j 11:58	19° \mathfrak{L} 11'46	1°00'41	morning rise	-491 Apr 21 j 21:52	15° \mathbb{Y} 16'45	
minimum elong	-497 Oct 18 j 12:00	19° \mathfrak{L} 11'47	1°00'42		-491 Jul 02 j 05:14	0° \mathfrak{C}	
morning rise	-497 Oct 31 j 01:26	21° \mathfrak{L} 59'54		retrograde	-491 Aug 30 j 03:37	5° \mathfrak{C} 10'16	
	-497 Dec 07 j 20:44	0° \mathbb{M}		min. Earth dist.	-491 Oct 27 j 07:29	0° \mathfrak{C} 16'26	4.07952 AU
retrograde	-496 Mar 01 j 15:34	9° \mathbb{M} 33'10		opposition	-491 Oct 28 j 16:38	0° \mathfrak{C} 05'08	-1°-16'-19
opposition	-496 May 01 j 14:21	4° \mathbb{M} 41'05	1°09'41		-491 Oct 29 j 07:40	30° \mathbb{R} \mathbb{Y}	
min. Earth dist.	-496 May 03 j 00:26	4° \mathbb{M} 30'14	4.29364 AU	direct	-491 Dec 26 j 01:41	25° \mathbb{Y} 06'38	
	-496 Jun 18 j 22:32	30° \mathbb{R} \mathfrak{L}			-490 Feb 20 j 17:20	0° \mathfrak{C}	
direct	-496 Jul 02 j 16:08	29° \mathfrak{L} 42'42		evening set	-490 May 01 j 11:40	14° \mathfrak{C} 07'44	
	-496 Jul 16 j 09:32	0° \mathbb{M}			-490 May 05 j 07:18	15° \mathfrak{C}	
	-496 Oct 23 j 03:57	15° \mathbb{M}					
evening set	-496 Nov 05 j 04:46	17° \mathbb{M} 55'51		conjunction	-490 May 15 j 06:06	17° \mathfrak{C} 16'46	0°-33'-58
max. Earth dist.	-496 Nov 16 j 01:29	20° \mathbb{M} 25'02	6.23029 AU	minimum elong	-490 May 15 j 06:09	17° \mathfrak{C} 16'47	0°33'59
				max. Earth dist.	-490 May 17 j 04:30	17° \mathfrak{C} 43'20	6.14164 AU
conjunction	-496 Nov 17 j 19:44	20° \mathbb{M} 49'17	0°30'13	morning rise	-490 May 29 j 01:26	20° \mathfrak{C} 25'55	
minimum elong	-496 Nov 17 j 19:46	20° \mathbb{M} 49'18	0°30'12		-490 Jul 12 j 17:50	0° \mathbb{I}	

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Attention, astronomical year style is used: The year -490 in astronomical counting style is the year 491 BCE in historical counting style.

retrograde	-490 Oct 02 j 19:36	9°♃15'15		max. Earth dist.	-484 Nov 20 j 17:54	25°♃10'48	6.21021 AU
min. Earth dist.	-490 Nov 30 j 09:33	4°♃20'11	4.20791 AU				
opposition	-490 Dec 01 j 09:16	4°♃12'09	0°-20'-37	conjunction	-484 Nov 22 j 08:55	25°♃33'18	0°24'45
	-489 Jan 07 j 13:04	30°♃8		minimum elong	-484 Nov 22 j 08:56	25°♃33'19	0°24'45
direct	-489 Jan 29 j 22:37	29°♃10'49		morning rise	-484 Dec 05 j 00:04	28°♃27'55	
	-489 Feb 21 j 14:02	0°♃			-484 Dec 11 j 17:27	0°♃	
asc. node	-489 Apr 15 j 03:02	6°♃58'34		retrograde	-483 Apr 10 j 06:48	17°♃06'40	
evening set	-489 Jun 05 j 21:19	17°♃38'14		opposition	-483 Jun 10 j 03:06	12°♃12'22	0°06'01
				min. Earth dist.	-483 Jun 11 j 01:24	12°♃05'12	4.14320 AU
conjunction	-489 Jun 19 j 13:58	20°♃40'46	0°06'48	desc. node	-483 Jul 17 j 22:33	8°♃06'22	
minimum elong	-489 Jun 19 j 13:57	20°♃40'46	0°06'49	direct	-483 Aug 09 j 19:38	7°♃17'04	
behind sun begin	-489 Jun 19 j 06:15	20°♃36'29		evening set	-483 Dec 12 j 18:35	26°♃07'51	
behind sun end	-489 Jun 19 j 21:40	20°♃45'02					
max. Earth dist.	-489 Jun 20 j 16:34	20°♃55'34	6.27356 AU	conjunction	-483 Dec 25 j 13:14	29°♃09'08	0°-17'-15
morning rise	-489 Jul 03 j 05:06	23°♃42'22		minimum elong	-483 Dec 25 j 13:13	29°♃09'07	0°17'17
	-489 Aug 01 j 15:37	0°♃		max. Earth dist.	-483 Dec 24 j 18:40	28°♃58'08	6.08132 AU
retrograde	-489 Nov 03 j 13:14	11°♃29'42			-483 Dec 29 j 03:03	0°♃	
opposition	-488 Jan 02 j 08:06	6°♃30'19	0°38'22	morning rise	-482 Jan 07 j 09:33	2°♃11'30	
min. Earth dist.	-488 Jan 01 j 23:27	6°♃33'12	4.33161 AU	retrograde	-482 May 17 j 02:55	21°♃54'15	
direct	-488 Mar 03 j 05:24	1°♃27'24		opposition	-482 Jul 16 j 16:38	16°♃56'27	0°-56'-37
evening set	-488 Jul 08 j 11:00	19°♃26'05		min. Earth dist.	-482 Jul 16 j 17:51	16°♃56'03	4.02864 AU
				direct	-482 Sep 13 j 21:37	12°♃02'57	
conjunction	-488 Jul 21 j 20:39	22°♃21'20	0°43'52		-481 Jan 10 j 22:41	0°♃	
minimum elong	-488 Jul 21 j 20:36	22°♃21'18	0°43'52	evening set	-481 Jan 16 j 18:58	1°♃23'32	
max. Earth dist.	-488 Jul 21 j 18:24	22°♃20'06	6.37959 AU				
morning rise	-488 Aug 04 j 03:49	25°♃15'10		conjunction	-481 Jan 29 j 19:37	4°♃31'22	0°-54'-36
	-488 Aug 26 j 12:59	0°♃		minimum elong	-481 Jan 29 j 19:34	4°♃31'20	0°54'37
retrograde	-488 Dec 03 j 04:07	12°♃20'33		max. Earth dist.	-481 Jan 30 j 08:33	4°♃39'09	5.99165 AU
opposition	-487 Feb 01 j 06:12	7°♃24'54	1°23'38	morning rise	-481 Feb 11 j 23:00	7°♃40'47	
min. Earth dist.	-487 Feb 01 j 16:01	7°♃21'42	4.41344 AU		-481 Mar 15 j 15:39	15°♃	
direct	-487 Apr 04 j 07:37	2°♃21'37		retrograde	-481 Jun 24 j 01:40	28°♃07'57	
	-487 Jul 16 j 08:27	15°♃		min. Earth dist.	-481 Aug 22 j 09:23	23°♃12'22	3.97438 AU
evening set	-487 Aug 09 j 10:24	20°♃03'37		opposition	-481 Aug 23 j 04:02	23°♃06'07	-1°-40'-14
max. Earth dist.	-487 Aug 21 j 09:54	22°♃39'18	6.43040 AU	direct	-481 Oct 20 j 09:02	18°♃12'26	
					-480 Jan 19 j 18:08	0°♃	
conjunction	-487 Aug 22 j 11:53	22°♃53'25	1°07'32	evening set	-480 Feb 22 j 12:15	7°♃46'24	
minimum elong	-487 Aug 22 j 11:51	22°♃53'24	1°07'32				
morning rise	-487 Sep 04 j 10:07	25°♃41'41		conjunction	-480 Mar 06 j 20:29	10°♃58'16	-1°-11'-48
	-487 Sep 24 j 18:05	0°♃		minimum elong	-480 Mar 06 j 20:29	10°♃58'16	1°11'48
retrograde	-486 Jan 02 j 12:09	12°♃31'36		max. Earth dist.	-480 Mar 08 j 13:18	11°♃22'45	5.97673 AU
opposition	-486 Mar 04 j 00:00	7°♃38'42	1°45'10	morning rise	-480 Mar 20 j 07:55	14°♃11'46	
min. Earth dist.	-486 Mar 05 j 00:16	7°♃30'53	4.43159 AU		-480 Jun 04 j 16:42	0°♃	
direct	-486 May 05 j 15:37	2°♃36'17		retrograde	-480 Jul 30 j 10:36	4°♃39'38	
evening set	-486 Sep 09 j 10:15	20°♃16'15		min. Earth dist.	-480 Sep 25 j 02:02	30°♃8	
max. Earth dist.	-486 Sep 20 j 09:38	22°♃40'12	6.41350 AU	opposition	-480 Sep 26 j 19:56	29°♃45'47	4.00190 AU
				direct	-480 Sep 28 j 03:56	29°♃34'54	-1°-44'-41
conjunction	-486 Sep 22 j 04:45	23°♃03'51	1°12'31		-480 Nov 25 j 01:46	24°♃39'03	
minimum elong	-486 Sep 22 j 04:45	23°♃03'52	1°12'31	evening set	-479 Jan 22 j 18:23	0°♃	
morning rise	-486 Oct 04 j 20:39	25°♃50'17			-479 Mar 30 j 20:44	14°♃02'43	
	-486 Oct 24 j 06:56	0°♃					
retrograde	-485 Feb 02 j 16:21	12°♃52'28		conjunction	-479 Apr 13 j 12:00	17°♃14'44	-1°-1'-12
opposition	-485 Apr 04 j 10:58	8°♃00'46	1°38'20	minimum elong	-479 Apr 13 j 12:03	17°♃14'46	1°01'13
min. Earth dist.	-485 Apr 05 j 21:16	7°♃49'50	4.38125 AU	max. Earth dist.	-479 Apr 15 j 16:02	17°♃45'19	6.04296 AU
direct	-485 Jun 06 j 03:01	3°♃00'13		morning rise	-479 Apr 27 j 05:45	20°♃27'47	
evening set	-485 Oct 10 j 05:18	20°♃52'42			-479 Jun 09 j 11:53	0°♃	
max. Earth dist.	-485 Oct 20 j 19:46	23°♃14'48	6.33305 AU	retrograde	-479 Sep 03 j 23:15	10°♃11'51	
				min. Earth dist.	-479 Nov 01 j 05:00	5°♃17'44	4.09908 AU
conjunction	-485 Oct 22 j 20:22	23°♃42'02	0°57'21	opposition	-479 Nov 02 j 13:07	5°♃06'46	-1°-9'-26
minimum elong	-485 Oct 22 j 20:24	23°♃42'03	0°57'20	direct	-479 Dec 31 j 02:26	0°♃07'45	
morning rise	-485 Nov 04 j 09:55	26°♃30'48			-478 Apr 18 j 09:56	15°♃	
	-485 Nov 20 j 06:22	0°♃		evening set	-478 May 06 j 12:55	19°♃03'04	
retrograde	-484 Mar 06 j 08:56	14°♃11'15					
opposition	-484 May 06 j 08:22	9°♃19'00	1°03'06	conjunction	-478 May 20 j 07:34	22°♃11'12	0°-28'-31
min. Earth dist.	-484 May 07 j 17:15	9°♃08'31	4.27512 AU	minimum elong	-478 May 20 j 07:36	22°♃11'13	0°28'32
direct	-484 Jul 07 j 06:14	4°♃21'00		max. Earth dist.	-478 May 22 j 04:53	22°♃37'02	6.16280 AU
	-484 Oct 05 j 17:06	15°♃		morning rise	-478 Jun 03 j 02:27	25°♃19'15	
evening set	-484 Nov 09 j 17:33	22°♃38'54			-478 Jun 24 j 05:28	0°♃	

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Attention, astronomical year style is used: The year -478 in astronomical counting style is the year 479 BCE in historical counting style.

retrograde	-478 Oct 07 j 08:15	13°♄58'17				-472 Sep 15 j 00:14	15°♄		
opposition	-478 Dec 05 j 22:23	8°♄55'39	0°-12'-6	evening set		-472 Nov 14 j 08:06	27°♄25'29		
min. Earth dist.	-478 Dec 05 j 00:30	9°♄03'03	4.22849 AU	max. Earth dist.		-472 Nov 25 j 10:25	29°♄59'14	6.19097 AU	
direct	-477 Feb 03 j 16:24	3°♄54'01				-472 Nov 25 j 11:45	0°♄		
asc. node	-477 Feb 23 j 03:17	4°♄30'15							
evening set	-477 Jun 10 j 15:56	22°♄16'12		conjunction		-472 Nov 26 j 23:44	0°♄20'50	0°19'03	
				minimum elong		-472 Nov 26 j 23:45	0°♄20'51	0°19'02	
conjunction	-477 Jun 24 j 07:39	25°♄17'37	0°12'27	morning rise		-472 Dec 09 j 15:34	3°♄16'32		
minimum elong	-477 Jun 24 j 07:38	25°♄17'36	0°12'27	retrograde		-471 Apr 15 j 09:09	22°♄04'25		
behind sun begin	-477 Jun 24 j 02:23	25°♄14'42		desc. node		-471 May 26 j 17:58	19°♄33'35		
behind sun end	-477 Jun 24 j 12:53	25°♄20'30		opposition		-471 Jun 15 j 05:43	17°♄09'40	0°-3'-6	
max. Earth dist.	-477 Jun 25 j 04:40	25°♄29'15	6.29181 AU	min. Earth dist.		-471 Jun 16 j 00:11	17°♄03'42	4.12559 AU	
morning rise	-477 Jul 07 j 21:59	28°♄18'03		direct		-471 Aug 14 j 16:16	12°♄14'43		
	-477 Jul 15 j 16:23	0°♄				-471 Dec 12 j 16:21	0°♄		
retrograde	-477 Nov 07 j 20:34	15°♄57'53		evening set		-471 Dec 17 j 15:13	1°♄09'49		
opposition	-476 Jan 06 j 16:12	10°♄59'01	0°45'46						
min. Earth dist.	-476 Jan 06 j 10:49	11°♄00'48	4.34629 AU	conjunction		-471 Dec 30 j 10:36	4°♄12'02	0°-23'-14	
direct	-476 Mar 07 j 18:28	5°♄55'53		minimum elong		-471 Dec 30 j 10:34	4°♄12'01	0°23'15	
evening set	-476 Jul 12 j 23:35	23°♄51'33		max. Earth dist.		-471 Dec 29 j 21:26	4°♄04'13	6.06692 AU	
				morning rise		-470 Jan 12 j 07:39	7°♄15'22		
conjunction	-476 Jul 26 j 08:18	26°♄45'57	0°48'07	retrograde		-470 May 22 j 11:50	27°♄05'28		
minimum elong	-476 Jul 26 j 08:15	26°♄45'56	0°48'08	opposition		-470 Jul 21 j 23:32	22°♄07'06	-1°-4'-33	
max. Earth dist.	-476 Jul 26 j 03:09	26°♄43'09	6.38961 AU	min. Earth dist.		-470 Jul 21 j 22:28	22°♄07'27	4.01882 AU	
morning rise	-476 Aug 08 j 14:02	29°♄38'51		direct		-470 Sep 19 j 01:39	17°♄13'44		
	-476 Aug 10 j 05:08	0°♄				-470 Dec 24 j 10:47	0°♄		
	-476 Nov 04 j 10:38	15°♄		evening set		-469 Jan 21 j 21:30	6°♄36'30		
retrograde	-476 Dec 07 j 08:43	16°♄40'48							
	-475 Jan 09 j 07:06	15°♄		conjunction		-469 Feb 03 j 23:04	9°♄44'56	0°-58'-33	
opposition	-475 Feb 05 j 12:32	11°♄45'38	1°28'12	minimum elong		-469 Feb 03 j 23:01	9°♄44'55	0°58'34	
min. Earth dist.	-475 Feb 06 j 00:15	11°♄41'49	4.41844 AU	max. Earth dist.		-469 Feb 04 j 16:17	9°♄55'18	5.98708 AU	
direct	-475 Apr 08 j 15:55	6°♄42'24		morning rise		-469 Feb 17 j 03:34	12°♄55'02		
	-475 Jun 28 j 04:49	15°♄				-469 Feb 25 j 22:04	15°♄		
evening set	-475 Aug 13 j 19:21	24°♄23'56				-469 May 13 j 01:49	0°♄		
				retrograde		-469 Jun 29 j 08:55	3°♄24'04		
conjunction	-475 Aug 26 j 19:37	27°♄13'18	1°09'24			-469 Aug 15 j 23:50	30°♄		
minimum elong	-475 Aug 26 j 19:35	27°♄13'17	1°09'24	opposition		-469 Aug 28 j 10:12	28°♄21'47	-1°-43'-27	
max. Earth dist.	-475 Aug 25 j 13:11	26°♄56'45	6.42984 AU	min. Earth dist.		-469 Aug 27 j 12:35	28°♄29'01	3.97590 AU	
morning rise	-475 Sep 08 j 16:59	0°♄01'12		direct		-469 Oct 25 j 12:27	23°♄27'56		
	-475 Sep 08 j 14:45	0°♄				-469 Dec 29 j 18:01	0°♄		
retrograde	-474 Jan 06 j 20:50	16°♄52'02		evening set		-468 Feb 27 j 17:48	13°♄00'58		
opposition	-474 Mar 08 j 08:28	11°♄59'25	1°45'57						
min. Earth dist.	-474 Mar 09 j 11:36	11°♄50'42	4.42575 AU	conjunction		-468 Mar 12 j 02:59	16°♄12'57	-1°-11'-59	
direct	-474 May 10 j 01:44	6°♄57'11		minimum elong		-468 Mar 12 j 02:59	16°♄12'57	1°12'00	
evening set	-474 Sep 13 j 18:01	24°♄39'04		max. Earth dist.		-468 Mar 13 j 21:21	16°♄38'19	5.98386 AU	
max. Earth dist.	-474 Sep 24 j 15:38	27°♄02'27	6.40274 AU	morning rise		-468 Mar 25 j 15:28	19°♄26'33		
						-468 May 11 j 23:27	0°♄		
conjunction	-474 Sep 26 j 12:00	27°♄26'51	1°11'33	retrograde		-468 Aug 04 j 11:45	9°♄49'50		
minimum elong	-474 Sep 26 j 12:00	27°♄26'51	1°11'33	min. Earth dist.		-468 Oct 01 j 20:49	4°♄55'57	4.01382 AU	
	-474 Oct 08 j 02:40	0°♄		opposition		-468 Oct 03 j 05:16	4°♄44'53	-1°-41'-50	
morning rise	-474 Oct 09 j 03:19	0°♄13'29				-468 Nov 19 j 18:19	30°♄		
retrograde	-473 Feb 07 j 03:54	17°♄20'32		direct		-468 Nov 30 j 04:37	29°♄48'37		
opposition	-473 Apr 09 j 00:04	12°♄28'51	1°34'58			-468 Dec 10 j 16:02	0°♄		
min. Earth dist.	-473 Apr 10 j 09:51	12°♄18'05	4.36645 AU	evening set		-467 Apr 05 j 00:47	19°♄08'33		
direct	-473 Jun 10 j 13:10	7°♄28'39							
evening set	-473 Oct 14 j 15:18	25°♄25'00		conjunction		-467 Apr 18 j 16:57	22°♄20'13	0°-57'-41	
max. Earth dist.	-473 Oct 25 j 07:02	27°♄48'25	6.31547 AU	minimum elong		-467 Apr 18 j 17:00	22°♄20'15	0°57'41	
				max. Earth dist.		-467 Apr 20 j 22:09	22°♄51'20	6.05872 AU	
conjunction	-473 Oct 27 j 06:12	28°♄14'58	0°53'38	morning rise		-467 May 02 j 11:02	25°♄32'43		
minimum elong	-473 Oct 27 j 06:15	28°♄15'00	0°53'37			-467 May 22 j 00:27	0°♄		
	-473 Nov 04 j 00:46	0°♄				-467 Aug 30 j 18:45	15°♄		
morning rise	-473 Nov 08 j 19:45	1°♄04'29		retrograde		-467 Sep 08 j 18:38	15°♄08'03		
	-472 Jan 19 j 16:35	15°♄				-467 Sep 17 j 17:20	15°♄		
retrograde	-472 Mar 11 j 05:55	18°♄52'47		min. Earth dist.		-467 Nov 06 j 00:43	10°♄13'46	4.11688 AU	
	-472 May 03 j 07:42	15°♄		opposition		-467 Nov 07 j 07:34	10°♄03'15	-1°-2'-13	
opposition	-472 May 11 j 04:16	14°♄00'23	0°56'00	direct		-466 Jan 05 j 00:19	5°♄03'53		
min. Earth dist.	-472 May 12 j 12:50	13°♄50'00	4.25585 AU			-466 Mar 31 j 03:00	15°♄		
direct	-472 Jul 11 j 23:16	9°♄02'48		evening set		-466 May 11 j 12:41	23°♄54'25		

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Attention, astronomical year style is used: The year -466 in astronomical counting style is the year 467 BCE in historical counting style.

conjunction	-466 May 25 j 07:08	27°♄01'43	0°-22'-58	min. Earth dist.	-460 May 17 j 06:33	18°♃33'55	4.24012 AU
minimum elong	-466 May 25 j 07:10	27°♄01'44	0°22'58		-460 Jun 18 j 03:44	15°♃♃	
max. Earth dist.	-466 May 27 j 00:27	27°♄25'10	6.18116 AU	direct	-460 Jul 16 j 14:49	13°♃♃46'17	
	-466 Jun 07 j 10:08	0°♃			-460 Aug 14 j 00:06	15°♃	
morning rise	-466 Jun 08 j 01:52	0°♃08'51			-460 Nov 09 j 06:51	0°♄	
retrograde	-466 Oct 11 j 19:22	18°♃39'03		evening set	-460 Nov 18 j 22:25	2°♄12'16	
opposition	-466 Dec 10 j 10:24	13°♃36'55	0°-3'-36	max. Earth dist.	-460 Nov 30 j 04:36	4°♄48'46	6.17595 AU
min. Earth dist.	-466 Dec 09 j 14:34	13°♃43'36	4.24575 AU				
asc. node	-465 Jan 03 j 03:38	10°♃38'24		conjunction	-460 Dec 01 j 14:18	5°♄08'21	0°13'18
direct	-465 Feb 08 j 08:47	8°♃34'58		minimum elong	-460 Dec 01 j 14:18	5°♄08'21	0°13'16
evening set	-465 Jun 15 j 09:50	26°♃53'18		behind sun begin	-460 Dec 01 j 09:32	5°♄05'36	
				behind sun end	-460 Dec 01 j 19:05	5°♄11'07	
conjunction	-465 Jun 29 j 00:55	29°♃53'47	0°18'00	morning rise	-460 Dec 14 j 06:34	8°♄04'53	
minimum elong	-465 Jun 29 j 00:54	29°♃53'46	0°18'00	desc. node	-459 Apr 05 j 16:20	26°♄39'43	
	-465 Jun 29 j 12:10	0°♄		retrograde	-459 Apr 20 j 11:58	27°♄00'20	
max. Earth dist.	-465 Jun 29 j 18:46	0°♄03'39	6.30683 AU	opposition	-459 Jun 20 j 07:24	22°♄05'06	0°-12'-4
morning rise	-465 Jul 12 j 14:07	2°♄53'09		min. Earth dist.	-459 Jun 21 j 00:00	21°♄59'43	4.11232 AU
retrograde	-465 Nov 12 j 04:43	20°♄26'47		direct	-459 Aug 19 j 14:46	17°♄10'26	
opposition	-464 Jan 11 j 00:34	15°♄28'32	0°52'55		-459 Nov 25 j 16:56	0°♄	
min. Earth dist.	-464 Jan 10 j 21:44	15°♄29'28	4.35798 AU	evening set	-459 Dec 22 j 10:35	6°♄08'15	
direct	-464 Mar 12 j 06:35	10°♄25'21					
evening set	-464 Jul 17 j 12:23	28°♄18'51		conjunction	-458 Jan 04 j 06:36	9°♄11'10	0°-28'-55
	-464 Jul 25 j 06:46	0°♃		minimum elong	-458 Jan 04 j 06:34	9°♄11'09	0°28'56
				max. Earth dist.	-458 Jan 03 j 21:12	9°♄05'35	6.05663 AU
conjunction	-464 Jul 30 j 19:51	1°♃12'29	0°52'07	morning rise	-458 Jan 17 j 04:32	12°♄15'19	
minimum elong	-464 Jul 30 j 19:48	1°♃12'28	0°52'07		-458 Apr 19 j 23:18	0°♃	
max. Earth dist.	-464 Jul 30 j 09:32	1°♃06'52	6.39692 AU	retrograde	-458 May 27 j 15:55	2°♃10'49	
morning rise	-464 Aug 13 j 00:33	4°♃04'39			-458 Jul 04 j 11:41	30°♃	
	-464 Oct 07 j 05:56	15°♃		opposition	-458 Jul 27 j 03:32	27°♄11'53	-1°-11'-46
retrograde	-464 Dec 11 j 16:11	21°♃04'11		min. Earth dist.	-458 Jul 26 j 22:57	27°♄13'24	4.01276 AU
opposition	-463 Feb 09 j 20:19	16°♃09'28	1°32'19	direct	-458 Sep 24 j 01:25	22°♄18'34	
min. Earth dist.	-463 Feb 10 j 10:51	16°♃04'44	4.42122 AU		-458 Dec 04 j 22:42	0°♃	
	-463 Feb 18 j 19:40	15°♃♃		evening set	-457 Jan 26 j 21:29	11°♃42'19	
direct	-463 Apr 13 j 02:15	11°♃06'16					
	-463 Jun 05 j 03:37	15°♃		conjunction	-457 Feb 08 j 23:51	14°♃51'11	-1°-1'-56
evening set	-463 Aug 18 j 04:54	28°♃47'47		minimum elong	-457 Feb 08 j 23:49	14°♃51'09	1°01'56
	-463 Aug 23 j 18:18	0°♄			-457 Feb 09 j 14:31	15°♃	
max. Earth dist.	-463 Aug 29 j 20:45	1°♄19'38	6.42787 AU	max. Earth dist.	-457 Feb 09 j 20:05	15°♃03'21	5.98550 AU
				morning rise	-457 Feb 22 j 05:23	18°♃01'46	
conjunction	-463 Aug 31 j 04:19	1°♄36'50	1°10'55		-457 Apr 17 j 09:43	0°♄	
minimum elong	-463 Aug 31 j 04:18	1°♄36'49	1°10'55	retrograde	-457 Jul 04 j 12:01	8°♄31'30	
morning rise	-463 Sep 13 j 00:32	4°♄24'24		opposition	-457 Sep 02 j 12:44	3°♄28'41	-1°-45'-44
retrograde	-462 Jan 11 j 04:55	21°♄16'34		min. Earth dist.	-457 Sep 01 j 13:28	3°♄36'31	3.97908 AU
opposition	-462 Mar 12 j 18:19	16°♄24'13	1°46'10		-457 Oct 01 j 10:05	30°♄	
min. Earth dist.	-462 Mar 13 j 22:01	16°♄15'20	4.41946 AU	direct	-457 Oct 30 j 14:09	28°♄34'33	
direct	-462 May 14 j 10:52	11°♄22'17			-457 Nov 28 j 15:57	0°♄	
evening set	-462 Sep 18 j 03:01	29°♄05'57		evening set	-456 Mar 03 j 19:51	18°♄06'10	
	-462 Sep 22 j 05:37	0°♄					
max. Earth dist.	-462 Sep 28 j 22:27	1°♄28'35	6.39266 AU	conjunction	-456 Mar 17 j 06:10	21°♄18'17	-1°-11'-36
				minimum elong	-456 Mar 17 j 06:11	21°♄18'17	1°11'37
conjunction	-462 Sep 30 j 20:13	1°♄53'51	1°10'11	max. Earth dist.	-456 Mar 19 j 03:46	21°♄45'30	5.99144 AU
minimum elong	-462 Sep 30 j 20:14	1°♄53'52	1°10'10	morning rise	-456 Mar 30 j 19:25	24°♄31'53	
morning rise	-462 Oct 13 j 11:11	4°♄40'44			-456 Apr 23 j 10:35	0°♄	
retrograde	-461 Feb 11 j 19:11	21°♄52'24		retrograde	-456 Aug 09 j 11:02	14°♄50'19	
opposition	-461 Apr 13 j 14:49	17°♄00'45	1°31'02	min. Earth dist.	-456 Oct 06 j 18:42	9°♄56'13	4.02504 AU
min. Earth dist.	-461 Apr 15 j 01:26	16°♄49'43	4.35329 AU	opposition	-456 Oct 08 j 02:48	9°♄45'18	-1°-38'-20
direct	-461 Jun 15 j 02:59	12°♄00'54		direct	-456 Dec 05 j 03:34	4°♄48'38	
evening set	-461 Oct 19 j 01:42	0°♃00'11		evening set	-455 Apr 10 j 01:56	24°♄05'22	
	-461 Oct 19 j 01:23	0°♃					
max. Earth dist.	-461 Oct 29 j 18:37	2°♃24'45	6.30050 AU	conjunction	-455 Apr 23 j 18:35	27°♄16'41	0°-53'-51
				minimum elong	-455 Apr 23 j 18:38	27°♄16'43	0°53'53
conjunction	-461 Oct 31 j 16:35	2°♃50'43	0°49'35	max. Earth dist.	-455 Apr 25 j 21:42	27°♄46'28	6.07246 AU
minimum elong	-461 Oct 31 j 16:37	2°♃50'45	0°49'35		-455 May 05 j 11:31	0°♄	
morning rise	-461 Nov 13 j 06:11	5°♃40'53		morning rise	-455 May 07 j 13:16	0°♄28'46	
	-461 Dec 27 j 08:22	15°♃			-455 Jul 17 j 21:20	15°♄	
retrograde	-460 Mar 16 j 01:08	23°♃36'07		retrograde	-455 Sep 13 j 09:24	19°♄56'16	
opposition	-460 May 16 j 00:43	18°♃43'26	0°48'34		-455 Nov 10 j 22:35	15°♄	

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Attention, astronomical year style is used: The year -455 in astronomical counting style is the year 456 BCE in historical counting style.

opposition	-455 Nov 11 j 22:50	14°♄51'44	0°-54'-51	morning rise	-449 Nov 17 j 15:31	10°♄14'17	
min. Earth dist.	-455 Nov 10 j 16:46	15°♄01'59	4.13177 AU		-449 Dec 09 j 04:54	15°♄	
direct	-454 Jan 09 j 18:32	9°♄51'57		retrograde	-448 Mar 20 j 21:31	28°♄16'37	
	-454 Mar 09 j 11:22	15°♄		opposition	-448 May 20 j 20:02	23°♄23'40	0°40'50
evening set	-454 May 16 j 09:55	28°♄39'01		min. Earth dist.	-448 May 22 j 01:23	23°♄14'17	4.22362 AU
	-454 May 22 j 09:36	0°♄		direct	-448 Jul 21 j 07:16	18°♄26'50	
					-448 Oct 23 j 06:55	0°♄	
conjunction	-454 May 30 j 04:24	1°♄45'40	0°-17'-24	evening set	-448 Nov 23 j 11:42	6°♄56'47	
minimum elong	-454 May 30 j 04:25	1°♄45'40	0°17'25	max. Earth dist.	-448 Dec 04 j 21:01	9°♄35'38	6.15899 AU
max. Earth dist.	-454 May 31 j 18:57	2°♄07'29	6.19624 AU				
morning rise	-454 Jun 12 j 22:39	4°♄51'57		conjunction	-448 Dec 06 j 04:06	9°♄53'46	0°07'28
retrograde	-454 Oct 16 j 07:07	23°♄14'46		minimum elong	-448 Dec 06 j 04:06	9°♄53'46	0°07'28
asc. node	-454 Nov 14 j 03:08	21°♄53'36		behind sun begin	-448 Dec 05 j 20:47	9°♄49'31	
opposition	-454 Dec 14 j 21:03	18°♄13'10	0°04'41	behind sun end	-448 Dec 06 j 11:25	9°♄58'00	
min. Earth dist.	-454 Dec 14 j 03:57	18°♄18'55	4.25966 AU	morning rise	-448 Dec 18 j 20:58	12°♄51'17	
direct	-453 Feb 12 j 23:54	13°♄11'01		desc. node	-447 Feb 13 j 17:44	24°♄53'59	
	-453 Jun 13 j 11:41	0°♄			-447 Mar 21 j 00:53	0°♄	
evening set	-453 Jun 20 j 02:22	1°♄26'34		retrograde	-447 Apr 25 j 12:50	1°♄55'15	
					-447 May 31 j 06:19	30°R♄	
conjunction	-453 Jul 03 j 16:35	4°♄26'13	0°23'20	opposition	-447 Jun 25 j 08:20	26°♄59'35	0°-20'-59
minimum elong	-453 Jul 03 j 16:34	4°♄26'12	0°23'21	min. Earth dist.	-447 Jun 25 j 21:57	26°♄55'11	4.09630 AU
max. Earth dist.	-453 Jul 04 j 06:31	4°♄33'54	6.31855 AU	direct	-447 Aug 24 j 10:15	22°♄05'14	
morning rise	-453 Jul 17 j 04:52	7°♄24'43			-447 Nov 06 j 13:03	0°♄	
retrograde	-453 Nov 16 j 11:23	24°♄53'22		evening set	-447 Dec 27 j 06:06	11°♄07'14	
opposition	-452 Jan 15 j 08:26	19°♄55'38	0°59'38				
min. Earth dist.	-452 Jan 15 j 07:29	19°♄55'57	4.36701 AU	conjunction	-446 Jan 09 j 02:46	14°♄11'04	0°-34'-25
direct	-452 Mar 16 j 17:05	14°♄52'23		minimum elong	-446 Jan 09 j 02:44	14°♄11'03	0°34'27
	-452 Jul 09 j 04:59	0°♄		max. Earth dist.	-446 Jan 08 j 20:31	14°♄07'20	6.04287 AU
evening set	-452 Jul 22 j 00:39	2°♄44'28		morning rise	-446 Jan 22 j 01:42	17°♄16'15	
					-446 Mar 21 j 22:18	0°♄	
conjunction	-452 Aug 04 j 07:03	5°♄37'25	0°55'46	retrograde	-446 Jun 01 j 22:20	7°♄18'53	
minimum elong	-452 Aug 04 j 07:01	5°♄37'23	0°55'45	opposition	-446 Aug 01 j 08:12	2°♄19'23	-1°-18'-33
max. Earth dist.	-452 Aug 03 j 18:39	5°♄30'39	6.40268 AU	min. Earth dist.	-446 Aug 01 j 01:04	2°♄21'45	4.00263 AU
morning rise	-452 Aug 17 j 10:26	8°♄28'49			-446 Aug 19 j 16:36	30°R♄	
	-452 Sep 17 j 16:08	15°♄		direct	-446 Sep 29 j 02:52	27°♄26'01	
retrograde	-452 Dec 15 j 23:06	25°♄26'22			-446 Nov 07 j 20:04	0°♄	
opposition	-451 Feb 14 j 03:56	20°♄32'05	1°35'52		-445 Jan 24 j 01:57	15°♄	
min. Earth dist.	-451 Feb 14 j 20:16	20°♄26'48	4.42353 AU	evening set	-445 Jan 31 j 23:13	16°♄52'39	
direct	-451 Apr 17 j 12:02	15°♄29'04					
	-451 Aug 07 j 16:54	0°♄		conjunction	-445 Feb 14 j 02:48	20°♄02'15	-1°-4'-54
evening set	-451 Aug 22 j 14:05	3°♄10'23		minimum elong	-445 Feb 14 j 02:46	20°♄02'14	1°04'54
max. Earth dist.	-451 Sep 03 j 01:30	5°♄40'03	6.42630 AU	max. Earth dist.	-445 Feb 15 j 04:00	20°♄17'25	5.97996 AU
				morning rise	-445 Feb 27 j 09:21	23°♄13'33	
conjunction	-451 Sep 04 j 12:22	5°♄59'04	1°11'59		-445 Mar 28 j 14:46	0°♄	
minimum elong	-451 Sep 04 j 12:21	5°♄59'03	1°12'00	retrograde	-445 Jul 09 j 18:47	13°♄45'17	
morning rise	-451 Sep 17 j 07:48	8°♄46'21		opposition	-445 Sep 07 j 17:07	8°♄42'04	-1°-47'-16
retrograde	-450 Jan 15 j 14:26	25°♄39'43		min. Earth dist.	-445 Sep 06 j 16:33	8°♄50'21	3.97896 AU
opposition	-450 Mar 17 j 04:13	20°♄47'31	1°45'45	direct	-445 Nov 04 j 16:46	3°♄47'42	
min. Earth dist.	-450 Mar 18 j 09:25	20°♄38'10	4.41414 AU	evening set	-444 Mar 09 j 01:21	23°♄19'23	
direct	-450 May 18 j 21:15	15°♄45'47					
	-450 Sep 06 j 04:26	0°♄		conjunction	-444 Mar 22 j 12:37	26°♄31'44	-1°-10'-40
evening set	-450 Sep 22 j 10:46	3°♄30'37		minimum elong	-444 Mar 22 j 12:39	26°♄31'45	1°10'40
max. Earth dist.	-450 Oct 03 j 06:22	5°♄53'38	6.38380 AU	max. Earth dist.	-444 Mar 24 j 11:02	26°♄59'23	5.99650 AU
				morning rise	-444 Apr 05 j 03:05	29°♄45'34	
conjunction	-450 Oct 05 j 03:34	6°♄18'39	1°08'24		-444 Apr 06 j 03:32	0°♄	
minimum elong	-450 Oct 05 j 03:35	6°♄18'39	1°08'24	retrograde	-444 Aug 14 j 11:30	19°♄59'45	
morning rise	-450 Oct 17 j 17:55	9°♄05'41		min. Earth dist.	-444 Oct 11 j 17:54	15°♄05'57	4.03478 AU
retrograde	-449 Feb 16 j 07:13	26°♄21'38		opposition	-444 Oct 13 j 03:08	14°♄54'37	-1°-34'00
opposition	-449 Apr 18 j 04:35	21°♄29'56	1°26'33	direct	-444 Dec 10 j 04:48	9°♄57'32	
min. Earth dist.	-449 Apr 19 j 14:27	21°♄19'09	4.34118 AU	evening set	-443 Apr 15 j 06:37	29°♄11'36	
direct	-449 Jun 19 j 13:47	16°♄30'28			-443 Apr 18 j 18:20	0°♄	
	-449 Oct 02 j 19:27	0°♄					
evening set	-449 Oct 23 j 11:03	4°♄32'23		conjunction	-443 Apr 29 j 00:01	2°♄22'36	0°-49'-30
max. Earth dist.	-449 Nov 03 j 04:05	6°♄57'34	6.28590 AU	minimum elong	-443 Apr 29 j 00:04	2°♄22'38	0°49'31
				max. Earth dist.	-443 May 01 j 02:59	2°♄52'13	6.08628 AU
conjunction	-449 Nov 05 j 01:42	7°♄23'27	0°45'16	morning rise	-443 May 12 j 18:59	5°♄34'12	
minimum elong	-449 Nov 05 j 01:45	7°♄23'28	0°45'16		-443 Jun 25 j 01:56	15°♄	

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Attention, astronomical year style is used: The year -443 in astronomical counting style is the year 444 BCE in historical counting style.

retrograde	-443 Sep 18 j 05:36	24°♄53'36			-437 Sep 15 j 16:27	0°♄	
opposition	-443 Nov 16 j 17:33	19°♄49'22	0°-46'-52	evening set	-437 Oct 27 j 16:19	8°♄54'42	
min. Earth dist.	-443 Nov 15 j 13:16	19°♄58'59	4.14815 AU	max. Earth dist.	-437 Nov 07 j 10:36	11°♄21'05	6.27034 AU
	-442 Jan 04 j 09:05	15°♄					
direct	-442 Jan 14 j 17:37	14°♄49'14		conjunction	-437 Nov 09 j 07:10	11°♄46'26	0°40'50
	-442 Jan 25 j 02:35	15°♄		minimum elong	-437 Nov 09 j 07:13	11°♄46'28	0°40'49
	-442 May 05 j 11:16	0°♄		morning rise	-437 Nov 21 j 21:04	14°♄37'59	
evening set	-442 May 21 j 10:28	3°♄32'00			-437 Nov 23 j 12:01	15°♄	
					-436 Feb 11 j 04:19	0°♄	
conjunction	-442 Jun 04 j 04:43	6°♄37'46	0°-11'-34	retrograde	-436 Mar 25 j 12:55	2°♄48'02	
minimum elong	-442 Jun 04 j 04:43	6°♄37'46	0°11'35		-436 May 08 j 14:45	30°♄	
behind sun begin	-442 Jun 03 j 22:52	6°♄34'30		opposition	-436 May 25 j 11:54	27°♄54'49	0°33'05
behind sun end	-442 Jun 04 j 10:34	6°♄41'03		min. Earth dist.	-436 May 26 j 16:12	27°♄45'46	4.20482 AU
max. Earth dist.	-442 Jun 05 j 17:35	6°♄58'32	6.21424 AU	direct	-436 Jul 25 j 18:23	22°♄58'20	
morning rise	-442 Jun 17 j 22:27	9°♄43'02			-436 Oct 04 j 10:54	0°♄	
asc. node	-442 Sep 23 j 12:14	26°♄45'45		evening set	-436 Nov 27 j 22:17	11°♄33'21	
retrograde	-442 Oct 20 j 17:53	27°♄57'02		max. Earth dist.	-436 Dec 09 j 08:55	14°♄13'45	6.13852 AU
opposition	-442 Dec 19 j 09:50	22°♄55'55	0°13'07				
min. Earth dist.	-442 Dec 18 j 17:32	23°♄01'24	4.27798 AU	conjunction	-436 Dec 10 j 15:00	14°♄31'22	0°01'45
direct	-441 Feb 17 j 16:06	17°♄53'34		minimum elong	-436 Dec 10 j 15:00	14°♄31'22	0°01'45
	-441 May 27 j 05:26	0°♄		behind sun begin	-436 Dec 10 j 06:59	14°♄26'42	
evening set	-441 Jun 24 j 20:40	6°♄04'30		behind sun end	-436 Dec 10 j 23:01	14°♄36'03	
				morning rise	-436 Dec 23 j 08:42	17°♄30'06	
conjunction	-441 Jul 08 j 09:51	9°♄03'00	0°28'37	desc. node	-436 Dec 26 j 14:42	18°♄15'25	
minimum elong	-441 Jul 08 j 09:49	9°♄02'59	0°28'38		-435 Feb 20 j 10:26	0°♄	
max. Earth dist.	-441 Jul 08 j 20:25	9°♄08'48	6.33610 AU	retrograde	-435 Apr 30 j 13:21	6°♄44'17	
morning rise	-441 Jul 21 j 20:56	12°♄00'15		opposition	-435 Jun 30 j 07:01	1°♄48'10	0°-29'-34
retrograde	-441 Nov 20 j 19:32	29°♄21'49		min. Earth dist.	-435 Jun 30 j 18:40	1°♄44'23	4.07570 AU
opposition	-440 Jan 19 j 17:12	24°♄24'35	1°06'00		-435 Jul 14 j 12:18	30°♄	
min. Earth dist.	-440 Jan 19 j 18:58	24°♄24'00	4.38255 AU	direct	-435 Aug 29 j 04:26	26°♄53'58	
direct	-440 Mar 21 j 07:07	19°♄21'18			-435 Oct 12 j 16:40	0°♄	
	-440 Jun 21 j 22:41	0°♄		evening set	-434 Jan 01 j 00:34	16°♄02'17	
evening set	-440 Jul 26 j 12:10	7°♄09'19					
				conjunction	-434 Jan 13 j 22:20	19°♄07'23	0°-39'-34
conjunction	-440 Aug 08 j 17:19	10°♄01'15	0°59'03	minimum elong	-434 Jan 13 j 22:18	19°♄07'22	0°39'36
minimum elong	-440 Aug 08 j 17:17	10°♄01'14	0°59'03	max. Earth dist.	-434 Jan 13 j 20:43	19°♄06'25	6.02418 AU
max. Earth dist.	-440 Aug 08 j 01:38	9°♄52'44	6.41490 AU	morning rise	-434 Jan 26 j 22:15	22°♄13'52	
morning rise	-440 Aug 21 j 19:27	12°♄51'40			-434 Mar 01 j 20:14	0°♄	
	-440 Aug 31 j 19:01	15°♄		retrograde	-434 Jun 07 j 05:46	12°♄25'29	
retrograde	-440 Dec 20 j 03:07	29°♄45'15		opposition	-434 Aug 06 j 12:18	7°♄25'30	-1°-24'-40
opposition	-439 Feb 18 j 10:32	24°♄51'14	1°38'47	min. Earth dist.	-434 Aug 06 j 02:54	7°♄28'37	3.98799 AU
min. Earth dist.	-439 Feb 19 j 04:26	24°♄45'26	4.43183 AU	direct	-434 Oct 04 j 02:10	2°♄32'11	
direct	-439 Apr 21 j 20:55	19°♄48'16			-433 Jan 06 j 16:13	15°♄	
	-439 Jul 21 j 17:49	0°♄		evening set	-433 Feb 06 j 02:00	22°♄03'39	
evening set	-439 Aug 26 j 20:32	7°♄27'13					
max. Earth dist.	-439 Sep 07 j 05:48	9°♄55'39	6.42994 AU	conjunction	-433 Feb 19 j 06:39	25°♄14'13	-1°-7'-17
				minimum elong	-433 Feb 19 j 06:37	25°♄14'12	1°07'19
conjunction	-439 Sep 08 j 17:51	10°♄15'19	1°12'38	max. Earth dist.	-433 Feb 20 j 10:26	25°♄30'58	5.97057 AU
minimum elong	-439 Sep 08 j 17:51	10°♄15'19	1°12'37	morning rise	-433 Mar 04 j 14:40	28°♄26'33	
morning rise	-439 Sep 21 j 12:10	13°♄02'03			-433 Mar 11 j 03:39	0°♄	
retrograde	-438 Jan 19 j 19:21	29°♄55'06		retrograde	-433 Jul 15 j 00:59	19°♄01'31	
opposition	-438 Mar 21 j 11:08	25°♄03'04	1°44'42	opposition	-433 Sep 12 j 22:26	13°♄57'53	-1°-47'-54
min. Earth dist.	-438 Mar 22 j 17:49	24°♄53'15	4.41278 AU	min. Earth dist.	-433 Sep 11 j 18:46	14°♄07'14	3.97611 AU
direct	-438 May 23 j 04:52	20°♄01'34		direct	-433 Nov 09 j 19:44	9°♄03'13	
	-438 Aug 20 j 10:25	0°♄		evening set	-432 Mar 14 j 08:43	28°♄35'58	
evening set	-438 Sep 26 j 15:02	7°♄46'17			-432 Mar 20 j 06:30	0°♄	
max. Earth dist.	-438 Oct 07 j 07:05	10°♄07'41	6.37732 AU				
				conjunction	-432 Mar 27 j 21:15	1°♄48'41	-1°-9'-5
conjunction	-438 Oct 09 j 07:08	10°♄34'19	1°06'18	minimum elong	-432 Mar 27 j 21:17	1°♄48'42	1°09'05
minimum elong	-438 Oct 09 j 07:10	10°♄34'20	1°06'17	max. Earth dist.	-432 Mar 29 j 22:52	2°♄18'12	6.00045 AU
morning rise	-438 Oct 21 j 21:16	13°♄21'29		morning rise	-432 Apr 10 j 12:36	5°♄02'45	
	-437 Jan 30 j 14:54	0°♄		retrograde	-432 Aug 19 j 15:31	25°♄12'39	
retrograde	-437 Feb 20 j 17:27	0°♄41'15		min. Earth dist.	-432 Oct 16 j 19:55	20°♄18'41	4.04483 AU
	-437 Mar 13 j 19:28	30°♄		opposition	-432 Oct 18 j 04:57	20°♄07'24	-1°-28'-49
opposition	-437 Apr 22 j 14:48	25°♄49'25	1°21'42	direct	-432 Dec 15 j 09:24	15°♄09'52	
min. Earth dist.	-437 Apr 24 j 01:36	25°♄38'20	4.32969 AU		-431 Apr 01 j 08:48	0°♄	
direct	-437 Jun 23 j 22:41	20°♄50'10		evening set	-431 Apr 20 j 13:15	4°♄20'55	

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Attention, astronomical year style is used: The year -431 in astronomical counting style is the year 432 BCE in historical counting style.

conjunction	-431 May 04 j 07:11	7°♄31'30	0°-44'-42	max. Earth dist.	-426 Oct 11 j 15:38	14°♃35'50	6.36476 AU		
minimum elong	-431 May 04 j 07:14	7°♄31'31	0°44'42						
max. Earth dist.	-431 May 06 j 10:52	8°♄01'23	6.10141 AU	conjunction	-426 Oct 13 j 15:06	15°♃02'14	1°03'45		
morning rise	-431 May 18 j 02:24	10°♄42'29		minimum elong	-426 Oct 13 j 15:08	15°♃02'15	1°03'46		
	-431 Jun 06 j 03:31	15°♄		morning rise	-426 Oct 26 j 04:50	17°♃49'48			
retrograde	-431 Sep 22 j 23:41	29°♄52'44			-426 Dec 26 j 14:32	0°♃			
min. Earth dist.	-431 Nov 20 j 08:28	24°♄58'23	4.16643 AU	retrograde	-425 Feb 25 j 08:38	5°♃15'29			
opposition	-431 Nov 21 j 12:45	24°♄48'46	0°-38'-26	opposition	-425 Apr 27 j 06:51	0°♃23'36	1°16'11		
direct	-430 Jan 19 j 15:42	19°♄48'14		min. Earth dist.	-425 Apr 28 j 17:50	0°♃12'28	4.31317 AU		
	-430 Apr 16 j 22:14	0°♃			-425 Apr 30 j 09:04	30°♃♃			
evening set	-430 May 26 j 11:44	8°♃26'00		direct	-425 Jun 28 j 12:16	25°♃24'44			
					-425 Aug 24 j 12:35	0°♃			
conjunction	-430 Jun 09 j 05:27	11°♃30'43	0°-5'-37	evening set	-425 Nov 01 j 03:50	13°♃33'25			
minimum elong	-430 Jun 09 j 05:27	11°♃30'43	0°05'37		-425 Nov 07 j 12:10	15°♃			
behind sun begin	-430 Jun 08 j 21:27	11°♃26'15		max. Earth dist.	-425 Nov 11 j 21:55	16°♃00'23	6.25119 AU		
behind sun end	-430 Jun 09 j 13:26	11°♃35'11							
max. Earth dist.	-430 Jun 10 j 14:31	11°♃49'17	6.23385 AU	conjunction	-425 Nov 13 j 18:39	16°♃25'56	0°35'54		
morning rise	-430 Jun 22 j 22:34	14°♃34'50		minimum elong	-425 Nov 13 j 18:41	16°♃25'57	0°35'53		
asc. node	-430 Aug 01 j 22:32	23°♃02'36		morning rise	-425 Nov 26 j 09:03	19°♃18'28			
	-430 Sep 13 j 18:04	0°♃			-424 Jan 16 j 03:55	0°♃			
retrograde	-430 Oct 25 j 06:56	2°♃39'41		retrograde	-424 Mar 30 j 12:26	7°♃37'31			
	-430 Dec 05 j 16:25	30°♃♃		opposition	-424 May 30 j 10:50	2°♃43'57	0°24'37		
opposition	-430 Dec 23 j 23:06	27°♃39'03	0°21'32	min. Earth dist.	-424 May 31 j 13:18	2°♃35'28	4.18430 AU		
min. Earth dist.	-430 Dec 23 j 09:51	27°♃43'29	4.29678 AU		-424 Jun 22 j 01:37	30°♃♃			
direct	-429 Feb 22 j 11:11	22°♃36'27		direct	-424 Jul 30 j 13:12	27°♃47'47			
	-429 May 07 j 11:48	0°♃			-424 Sep 06 j 12:17	0°♃			
evening set	-429 Jun 29 j 14:44	10°♃42'44		desc. node	-424 Nov 04 j 12:43	10°♃07'07			
				evening set	-424 Dec 02 j 15:40	16°♃28'15			
conjunction	-429 Jul 13 j 02:57	13°♃40'07	0°33'47	max. Earth dist.	-424 Dec 14 j 07:35	19°♃12'22	6.11869 AU		
minimum elong	-429 Jul 13 j 02:55	13°♃40'06	0°33'47						
max. Earth dist.	-429 Jul 13 j 10:48	13°♃44'25	6.35235 AU	conjunction	-424 Dec 15 j 09:09	19°♃27'24	0°-4'-26		
morning rise	-429 Jul 26 j 12:41	16°♃36'10		minimum elong	-424 Dec 15 j 09:08	19°♃27'23	0°04'27		
	-429 Oct 05 j 04:06	0°♃		behind sun begin	-424 Dec 15 j 01:16	19°♃22'47			
retrograde	-429 Nov 25 j 01:53	3°♃51'32		behind sun end	-424 Dec 15 j 17:01	19°♃32'00			
	-428 Jan 15 j 18:21	30°♃♃		morning rise	-424 Dec 28 j 03:29	22°♃27'18			
opposition	-428 Jan 24 j 02:20	28°♃54'47	1°12'06		-423 Jan 30 j 16:04	0°♃			
min. Earth dist.	-428 Jan 24 j 05:43	28°♃53'41	4.39520 AU	retrograde	-423 May 05 j 21:24	11°♃51'09			
direct	-428 Mar 25 j 19:13	23°♃51'29		opposition	-423 Jul 05 j 12:41	6°♃54'35	0°-38'-30		
	-428 Jun 01 j 14:03	0°♃		min. Earth dist.	-423 Jul 05 j 21:48	6°♃51'37	4.05850 AU		
evening set	-428 Jul 31 j 00:32	11°♃36'46		direct	-423 Sep 03 j 05:02	2°♃00'41			
max. Earth dist.	-428 Aug 12 j 08:50	14°♃17'15	6.42284 AU	evening set	-422 Jan 06 j 01:30	21°♃13'40			
conjunction	-428 Aug 13 j 04:23	14°♃27'52	1°02'07	conjunction	-422 Jan 18 j 23:59	24°♃19'42	0°-44'-44		
minimum elong	-428 Aug 13 j 04:20	14°♃27'51	1°02'07	minimum elong	-422 Jan 18 j 23:57	24°♃19'40	0°44'44		
	-428 Aug 15 j 15:31	15°♃		max. Earth dist.	-422 Jan 19 j 01:47	24°♃20'46	6.01127 AU		
morning rise	-428 Aug 26 j 05:16	17°♃17'28		morning rise	-422 Feb 01 j 01:09	27°♃27'15			
	-428 Nov 01 j 04:50	0°♃			-422 Feb 11 j 19:29	0°♃			
retrograde	-428 Dec 24 j 10:47	4°♃08'48			-422 May 01 j 05:58	15°♃			
	-427 Feb 16 j 23:33	30°♃♃		retrograde	-422 Jun 12 j 14:41	17°♃45'01			
opposition	-427 Feb 22 j 18:55	29°♃15'12	1°41'19		-422 Jul 25 j 05:24	15°♃			
min. Earth dist.	-427 Feb 23 j 15:50	29°♃08'27	4.43468 AU	opposition	-422 Aug 11 j 21:02	12°♃44'25	-1°-30'-23		
direct	-427 Apr 26 j 08:24	24°♃12'23		min. Earth dist.	-422 Aug 11 j 07:28	12°♃48'56	3.98120 AU		
	-427 Jul 01 j 07:33	0°♃		direct	-422 Oct 09 j 06:43	7°♃51'03			
evening set	-427 Aug 31 j 05:17	11°♃50'54			-422 Dec 16 j 23:04	15°♃			
max. Earth dist.	-427 Sep 11 j 10:14	14°♃17'13	6.42724 AU	evening set	-421 Feb 11 j 08:39	27°♃24'02			
					-421 Feb 22 j 04:14	0°♃			
conjunction	-427 Sep 13 j 01:41	14°♃38'45	1°12'57	conjunction	-421 Feb 24 j 14:30	0°♃35'06	-1°-9'-16		
minimum elong	-427 Sep 13 j 01:41	14°♃38'44	1°12'56	minimum elong	-421 Feb 24 j 14:29	0°♃35'05	1°09'17		
morning rise	-427 Sep 25 j 19:14	17°♃25'16		max. Earth dist.	-421 Feb 25 j 23:41	0°♃55'06	5.97062 AU		
	-427 Nov 30 j 11:54	0°♃		morning rise	-421 Mar 09 j 23:28	3°♃47'51			
retrograde	-426 Jan 24 j 05:00	4°♃20'20		retrograde	-421 Jul 20 j 09:17	24°♃21'31			
	-426 Mar 21 j 18:51	30°♃♃		min. Earth dist.	-421 Sep 17 j 00:07	19°♃27'10	3.98314 AU		
opposition	-426 Mar 25 j 21:59	29°♃28'23	1°43'09	opposition	-421 Sep 18 j 04:46	19°♃17'27	-1°-47'-40		
min. Earth dist.	-426 Mar 27 j 05:39	29°♃18'16	4.40485 AU	direct	-421 Nov 15 j 03:06	14°♃22'25			
direct	-426 May 27 j 15:05	24°♃27'07			-420 Mar 03 j 01:09	0°♃			
	-426 Jul 30 j 18:14	0°♃		evening set	-420 Mar 19 j 16:25	3°♃52'20			
evening set	-426 Sep 30 j 23:18	12°♃13'52							

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

conjunction	-420 Apr 02 j 05:54	7°Υ04'52	-1°-7'-1			-415 Jun 01 j 10:27	0°η		
minimum elong	-420 Apr 02 j 05:56	7°Υ04'53	1°07'02	evening set		-415 Sep 04 j 13:11	16°η12'15		
max. Earth dist.	-420 Apr 04 j 09:49	7°Υ35'36	6.01364 AU	max. Earth dist.		-415 Sep 15 j 15:24	18°η37'26	6.41944 AU	
morning rise	-420 Apr 15 j 22:04	10°Υ18'38							
retrograde	-420 Aug 10 j 06:44	0°Ϡ		conjunction		-415 Sep 17 j 08:43	19°η00'03	1°12'51	
	-420 Aug 24 j 14:32	0°Ϡ20'17		minimum elong		-415 Sep 17 j 08:43	19°η00'03	1°12'51	
	-420 Sep 07 j 19:39	30°RΥ		morning rise		-415 Sep 30 j 01:33	21°η46'36		
min. Earth dist.	-420 Oct 21 j 18:34	25°Υ26'34	4.06268 AU			-415 Nov 08 j 21:37	0°Ϡ		
opposition	-420 Oct 23 j 04:23	25°Υ15'01	-1°-23'-5	retrograde		-414 Jan 28 j 16:26	8°Ϡ45'27		
direct	-420 Dec 20 j 10:27	20°Υ17'02		opposition		-414 Mar 30 j 09:31	3°Ϡ53'42	1°41'03	
	-419 Mar 13 j 15:08	0°Ϡ		min. Earth dist.		-414 Mar 31 j 19:00	3°Ϡ43'01	4.39226 AU	
evening set	-419 Apr 25 j 16:54	9°Ϡ22'29				-414 May 04 j 12:43	30°Rη		
				direct		-414 Jun 01 j 02:33	28°η52'47		
conjunction	-419 May 09 j 11:00	12°Ϡ32'13	0°-39'-43			-414 Jun 28 j 16:49	0°Ϡ		
minimum elong	-419 May 09 j 11:02	12°Ϡ32'14	0°39'43	evening set		-414 Oct 05 j 08:23	16°Ϡ42'59		
max. Earth dist.	-419 May 11 j 11:45	13°Ϡ00'16	6.12219 AU	max. Earth dist.		-414 Oct 15 j 23:12	19°Ϡ04'43	6.34835 AU	
	-419 May 20 j 04:20	15°Ϡ							
morning rise	-419 May 23 j 06:19	15°Ϡ42'15		conjunction		-414 Oct 17 j 23:52	19°Ϡ31'53	1°00'50	
	-419 Aug 02 j 12:48	0°Π		minimum elong		-414 Oct 17 j 23:54	19°Ϡ31'54	1°00'49	
retrograde	-419 Sep 27 j 14:46	4°Π41'59		morning rise		-414 Oct 30 j 13:36	22°Ϡ20'06		
	-419 Nov 23 j 12:38	30°RϠ				-414 Dec 05 j 15:42	0°η		
min. Earth dist.	-419 Nov 25 j 02:37	29°Ϡ47'07	4.18778 AU	retrograde		-413 Mar 02 j 01:57	9°η53'06		
opposition	-419 Nov 26 j 04:27	29°Ϡ38'20	0°-30'-4	opposition		-413 May 02 j 00:43	5°η01'04	1°10'08	
direct	-418 Jan 24 j 12:51	24°Ϡ37'24		min. Earth dist.		-413 May 03 j 10:21	4°η50'21	4.29406 AU	
	-418 Mar 26 j 07:55	0°Π		direct		-413 Jul 03 j 02:15	0°η02'38		
evening set	-418 May 31 j 08:37	13°Π09'26				-413 Oct 22 j 03:11	15°η		
asc. node	-418 Jun 11 j 19:34	15°Π42'40		evening set		-413 Nov 05 j 16:48	18°η16'11		
				max. Earth dist.		-413 Nov 16 j 14:49	20°η46'02	6.23116 AU	
conjunction	-418 Jun 14 j 01:59	16°Π13'05	0°00'15						
minimum elong	-418 Jun 14 j 01:58	16°Π13'04	0°00'16	conjunction		-413 Nov 18 j 07:57	21°η09'39	0°30'39	
behind sun begin	-418 Jun 13 j 17:40	16°Π08'28		minimum elong		-413 Nov 18 j 07:58	21°η09'40	0°30'39	
behind sun end	-418 Jun 14 j 10:15	16°Π17'40		morning rise		-413 Nov 30 j 22:36	24°η03'11		
max. Earth dist.	-418 Jun 15 j 08:43	16°Π30'14	6.25416 AU			-413 Dec 27 j 17:25	0°Ϡ		
morning rise	-418 Jun 27 j 18:07	19°Π15'55		retrograde		-412 Apr 04 j 14:58	12°Ϡ31'34		
	-418 Aug 19 j 03:32	0°Ϡ		opposition		-412 Jun 04 j 12:05	7°Ϡ37'44	0°15'50	
retrograde	-418 Oct 29 j 14:35	7°Ϡ12'01		min. Earth dist.		-412 Jun 05 j 12:48	7°Ϡ29'48	4.16479 AU	
opposition	-418 Dec 28 j 08:33	2°Ϡ11'57	0°29'30	direct		-412 Aug 04 j 10:12	2°Ϡ42'01		
min. Earth dist.	-418 Dec 27 j 21:09	2°Ϡ15'45	4.31438 AU	desc. node		-412 Sep 13 j 03:56	5°Ϡ07'24		
	-417 Jan 14 j 10:20	30°RΠ		evening set		-412 Dec 07 j 10:52	21°Ϡ27'20		
direct	-417 Feb 27 j 00:37	27°Π09'12		max. Earth dist.		-412 Dec 19 j 05:57	24°Ϡ13'59	6.10143 AU	
	-417 Apr 12 j 02:08	0°Ϡ							
evening set	-417 Jul 04 j 05:17	15°Ϡ11'32		conjunction		-412 Dec 20 j 04:46	24°Ϡ27'27	0°-10'-32	
				minimum elong		-412 Dec 20 j 04:45	24°Ϡ27'26	0°10'35	
conjunction	-417 Jul 17 j 16:17	18°Ϡ07'54	0°38'35	behind sun begin		-412 Dec 19 j 22:27	24°Ϡ23'44		
minimum elong	-417 Jul 17 j 16:14	18°Ϡ07'53	0°38'35	behind sun end		-412 Dec 20 j 11:03	24°Ϡ31'08		
max. Earth dist.	-417 Jul 17 j 18:16	18°Ϡ08'59	6.36582 AU	morning rise		-411 Jan 02 j 00:03	27°Ϡ28'29		
morning rise	-417 Jul 31 j 00:57	21°Ϡ02'55				-411 Jan 12 j 20:28	0°Ϡ		
	-417 Sep 12 j 19:07	0°Ω		retrograde		-411 May 11 j 03:57	17°Ϡ00'53		
retrograde	-417 Nov 29 j 08:33	8°Ω13'29		opposition		-411 Jul 10 j 19:13	12°Ϡ03'45	0°-47'-13	
opposition	-416 Jan 28 j 09:11	3°Ω17'16	1°17'38	min. Earth dist.		-411 Jul 11 j 00:03	12°Ϡ02'10	4.04520 AU	
min. Earth dist.	-416 Jan 28 j 16:17	3°Ω14'56	4.40383 AU	direct		-411 Sep 08 j 05:59	7°Ϡ10'03		
	-416 Feb 24 j 19:45	30°RϠ		evening set		-410 Jan 11 j 03:04	26°Ϡ26'15		
direct	-416 Mar 30 j 06:33	28°Ϡ13'56							
	-416 May 04 j 01:54	0°Ω		conjunction		-410 Jan 24 j 02:31	29°Ϡ33'02	0°-49'-33	
	-416 Jul 30 j 22:28	15°Ω		minimum elong		-410 Jan 24 j 02:29	29°Ϡ33'00	0°49'34	
evening set	-416 Aug 04 j 10:09	15°Ω57'49		max. Earth dist.		-410 Jan 24 j 10:19	29°Ϡ37'43	6.00305 AU	
						-410 Jan 25 j 23:22	0°≈		
conjunction	-416 Aug 17 j 13:03	18°Ω48'23	1°04'46	morning rise		-410 Feb 06 j 04:31	2°≈41'21		
minimum elong	-416 Aug 17 j 13:01	18°Ω48'22	1°04'46			-410 Apr 03 j 06:10	15°≈		
max. Earth dist.	-416 Aug 16 j 14:32	18°Ω36'09	6.42584 AU	retrograde		-410 Jun 18 j 00:31	23°≈03'08		
morning rise	-416 Aug 30 j 12:43	21°Ω37'24		opposition		-410 Aug 17 j 04:48	18°≈01'58	-1°-35'-19	
	-416 Oct 10 j 12:50	0°η		min. Earth dist.		-410 Aug 16 j 13:20	18°≈07'08	3.97903 AU	
retrograde	-416 Dec 28 j 16:17	8°η28'22				-410 Sep 10 j 19:22	15°R≈		
opposition	-415 Feb 27 j 02:25	3°η35'06	1°43'17	direct		-410 Oct 14 j 13:04	13°≈08'30		
min. Earth dist.	-415 Feb 28 j 00:36	3°η27'57	4.43221 AU			-410 Nov 16 j 22:55	15°≈		
	-415 Mar 30 j 04:28	30°RΩ				-409 Feb 05 j 06:00	0°✠		
direct	-415 Apr 30 j 16:09	28°Ω32'29		evening set		-409 Feb 16 j 14:18	2°✠41'27		

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Attention, astronomical year style is used: The year -409 in astronomical counting style is the year 410 BCE in historical counting style.

conjunction	-409 Mar 01 j 21:09	5°♃52'48	-1°-10'-41	morning rise	-404 Sep 03 j 20:55	26°♃00'10	
minimum elong	-409 Mar 01 j 21:08	5°♃52'47	1°10'42		-404 Sep 22 j 16:45	0°♃	
max. Earth dist.	-409 Mar 03 j 09:52	6°♃14'52	5.97434 AU	retrograde	-403 Jan 02 j 01:13	12°♃51'16	
morning rise	-409 Mar 15 j 07:15	9°♃05'51		opposition	-403 Mar 03 j 11:17	7°♃58'19	1°44'43
retrograde	-409 Jul 25 j 13:55	29°♃36'38		min. Earth dist.	-403 Mar 04 j 12:17	7°♃50'16	4.42851 AU
min. Earth dist.	-409 Sep 22 j 01:59	24°♃42'41	3.99261 AU	direct	-403 May 05 j 03:11	2°♃55'51	
opposition	-409 Sep 23 j 08:41	24°♃32'17	-1°-46'-34	evening set	-403 Sep 08 j 21:55	20°♃36'55	
direct	-409 Nov 20 j 06:08	19°♃36'55		max. Earth dist.	-403 Sep 19 j 22:24	23°♃01'29	6.41125 AU
	-408 Feb 13 j 12:27	0°♃					
evening set	-408 Mar 24 j 22:02	9°♃03'33		conjunction	-403 Sep 21 j 16:51	23°♃24'46	1°12'21
				minimum elong	-403 Sep 21 j 16:51	23°♃24'46	1°12'21
conjunction	-408 Apr 07 j 12:14	12°♃15'47	-1°-4'-28	morning rise	-403 Oct 04 j 08:58	26°♃11'23	
minimum elong	-408 Apr 07 j 12:16	12°♃15'49	1°04'29		-403 Oct 22 j 02:53	0°♃	
max. Earth dist.	-408 Apr 09 j 15:33	12°♃46'04	6.02774 AU	retrograde	-402 Feb 02 j 03:27	13°♃14'02	
morning rise	-408 Apr 21 j 05:09	15°♃29'12		opposition	-402 Apr 03 j 22:26	8°♃22'20	1°38'20
	-408 Jun 30 j 05:51	0°♃		min. Earth dist.	-402 Apr 05 j 07:24	8°♃11'49	4.38034 AU
retrograde	-408 Aug 29 j 11:03	5°♃22'45		direct	-402 Jun 05 j 13:03	3°♃21'46	
min. Earth dist.	-408 Oct 26 j 16:36	0°♃28'45	4.07978 AU	evening set	-402 Oct 09 j 18:13	21°♃14'49	
opposition	-408 Oct 28 j 01:25	0°♃17'32	-1°-16'-51	max. Earth dist.	-402 Oct 20 j 10:04	23°♃37'40	6.33385 AU
	-408 Oct 30 j 04:48	30°♃					
direct	-408 Dec 25 j 11:05	25°♃19'05		conjunction	-402 Oct 22 j 09:23	24°♃04'11	0°57'32
	-407 Feb 18 j 17:58	0°♃		minimum elong	-402 Oct 22 j 09:26	24°♃04'12	0°57'31
evening set	-407 Apr 30 j 18:33	14°♃19'39		morning rise	-402 Nov 03 j 22:59	26°♃52'57	
	-407 May 03 j 17:18	15°♃			-402 Nov 18 j 02:38	0°♃	
				retrograde	-401 Mar 06 j 21:22	14°♃32'34	
conjunction	-407 May 14 j 13:01	17°♃28'40	0°-34'-32	opposition	-401 May 06 j 19:41	9°♃40'24	1°03'36
minimum elong	-407 May 14 j 13:03	17°♃28'41	0°34'33	min. Earth dist.	-401 May 08 j 05:06	9°♃29'46	4.27785 AU
max. Earth dist.	-407 May 16 j 13:00	17°♃56'10	6.14103 AU	direct	-401 Jul 07 j 19:03	4°♃42'23	
morning rise	-407 May 28 j 08:04	20°♃37'47			-401 Oct 04 j 12:04	15°♃	
	-407 Jul 11 j 00:00	0°♃		evening set	-401 Nov 10 j 06:09	22°♃59'31	
retrograde	-407 Oct 02 j 04:40	9°♃28'00		max. Earth dist.	-401 Nov 21 j 05:46	25°♃30'53	6.21478 AU
opposition	-407 Nov 30 j 18:27	4°♃24'49	0°-21'-38				
min. Earth dist.	-407 Nov 29 j 18:16	4°♃33'00	4.20650 AU	conjunction	-401 Nov 22 j 21:26	25°♃53'44	0°25'15
	-406 Jan 10 j 01:34	30°♃		minimum elong	-401 Nov 22 j 21:27	25°♃53'45	0°25'16
direct	-406 Jan 29 j 07:01	29°♃23'35		morning rise	-401 Dec 05 j 12:37	28°♃48'09	
	-406 Feb 17 j 17:27	0°♃			-401 Dec 10 j 18:28	0°♃	
asc. node	-406 Apr 21 j 18:06	8°♃32'55		retrograde	-400 Apr 09 j 14:54	17°♃24'24	
evening set	-406 Jun 05 j 04:34	17°♃51'02		opposition	-400 Jun 09 j 12:40	12°♃30'08	0°07'01
				min. Earth dist.	-400 Jun 10 j 09:50	12°♃23'19	4.14950 AU
conjunction	-406 Jun 18 j 21:07	20°♃53'39	0°06'02	desc. node	-400 Jul 23 j 20:12	8°♃00'27	
minimum elong	-406 Jun 18 j 21:08	20°♃53'39	0°06'03	direct	-400 Aug 09 j 05:27	7°♃34'45	
behind sun begin	-406 Jun 18 j 13:15	20°♃49'17		evening set	-400 Dec 12 j 05:14	26°♃23'27	
behind sun end	-406 Jun 19 j 05:01	20°♃58'02					
max. Earth dist.	-406 Jun 19 j 22:35	21°♃07'49	6.27124 AU	conjunction	-400 Dec 24 j 23:45	29°♃24'20	0°-16'-29
morning rise	-406 Jul 02 j 12:38	23°♃55'28		minimum elong	-400 Dec 24 j 23:43	29°♃24'20	0°16'30
	-406 Jul 30 j 21:11	0°♃		max. Earth dist.	-400 Dec 24 j 06:00	29°♃13'51	6.08870 AU
retrograde	-406 Nov 02 j 23:21	11°♃44'12			-400 Dec 27 j 11:58	0°♃	
opposition	-405 Jan 01 j 17:53	6°♃44'39	0°37'15				
min. Earth dist.	-405 Jan 01 j 09:33	6°♃47'26	4.32860 AU				
direct	-405 Mar 03 j 14:51	1°♃41'40					
evening set	-405 Jul 08 j 19:22	19°♃41'06					
conjunction	-405 Jul 22 j 05:27	22°♃36'37	0°43'09				
minimum elong	-405 Jul 22 j 05:25	22°♃36'36	0°43'10				
max. Earth dist.	-405 Jul 22 j 04:50	22°♃36'17	6.37614 AU				
morning rise	-405 Aug 04 j 12:44	25°♃30'42					
	-405 Aug 25 j 15:31	0°♃					
retrograde	-405 Dec 03 j 14:18	12°♃37'29					
opposition	-404 Feb 01 j 16:36	7°♃41'46	1°22'46				
min. Earth dist.	-404 Feb 02 j 01:27	7°♃38'52	4.40980 AU				
direct	-404 Apr 03 j 16:14	2°♃38'28					
	-404 Jul 14 j 07:31	15°♃					
evening set	-404 Aug 08 j 20:35	20°♃21'35					
conjunction	-404 Aug 21 j 22:12	23°♃11'36	1°07'04				
minimum elong	-404 Aug 21 j 22:10	23°♃11'35	1°07'03				
max. Earth dist.	-404 Aug 20 j 19:19	22°♃56'59	6.42688 AU				